

Attorney who reviewed:

# **Monroe County Board of Commissioners Agenda Request Form**

| Date to be heard                           | Formal             | Work session           | Department |          |
|--|--------------------|------------------------|------------|----------|
| Title to appear on Agenda:                 |                    | Vendor #               | ŧ          |          |
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|  |                    |                        |            |          |
| Executive Summary:                         |                    |                        |            |          |
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| Fund Name(s):                              | Fund Numbe         | r(s):                  | A          | mount(s) |
|  |                    |                        |            |          |
| Presenter:                                 |                    |                        |            |          |
| Speaker(s) for Zoom purposes:              |                    |                        |            |          |
| Name(s)                                    | Phone I            | Number(s)              |            |          |
| (the speaker phone numbers will be removed | <br>from the docur | ment prior to posting, | )          |          |

# **Monroe County Board of Commissioners Agenda Request - Grant**

| REQUIRED  |   |
|---|---|
| Federal Agency                                  | Federal Program   |
| CFDA#   | Federal Award Number and Year (or other ID)   |
| Pass Through Entity:                            |   |
| Request completed by:                           |   |
| This document is to be submitted no later the   | an the Friday at noon prior to the requested meeting date.  |
| Each agenda request and all necessary documents | s to the Auditor's Office (Anita Freeman) at: <a href="mailto:afreeman@co.monroe.in.us">afreeman@co.monroe.in.us</a> AND to |

the Commissioner's Office e-mail: <u>Commissionersoffice@co.monroe.in.us</u>

# OFFICE OF MONROE COUNTY PLAN COMMISSION 501 N Morton Street, Suite 224 BLOOMINGTON, IN 47404

TO: THE COMMISSIONERS OF MONROE COUNTY, INDIANA

### CERTIFICATION

I, Jackie N. Jelen, hereby certify that during its meeting on June 18th, 2024 the Monroe County Plan Commission considered Petition No. PUO-23-7 for a Zoning Map Amendment (Ordinance No. 2024-28) to the Monroe County Zoning Ordinance and made a positive recommendation to approve thereon, based on the findings, conditions, and Highway Department reports, with a vote of 6-2 with the following conditions of approval:

- 1. Petitioner add maximum impervious coverage standards per lot as a percentage maximum under the Summary Table by Area (Exhibit 3).
- 2. Petitioner revise the outline plan to confirm whether streets will be platted as public or private. If the streets will be private, the outline plan shall be revised to state the standards that will be followed as it relates or deviates with the "Manual for Construction Within and Adjacent to Monroe County Right-of-way".
- 3. Petitioner to implement a Bufferyard Type D on the southside and northside of the property boundary to better align with the purpose statement in Chapter 811 regarding buffering.
- 4. Change karst conservancy areas to meet the 50 ft protection requirements per Chapter 761. Relocate/remove proposed dog park illustrated on the southside between lots numbered 96 and 97 on Exhibit 4.
- 5. Petitioner change the site plan and outline plan to state that the Open Space plan for the northeast side of the property shall protect the delineated floodplain zone and not propose any structures in this area, including eliminating any proposed boardwalks.

This proposed amendment is being forwarded for your consideration pursuant to I.C. 36-7-4-605(a).

Jackie N. Jelen

Planning Director

6-24-2024

#### ORDINANCE NO. 2024-28

#### The Trails at Robertson Farms Planned Unit Development Outline Plan

The purpose of this ordinance is to adopt the Trails at Robertson Farms Planned Unit Development, Outline Plan.

An ordinance to amend the Monroe County Zoning Maps which were adopted December 1996.

WHEREAS, the Board of Commissioners adopted a comprehensive replacement Monroe County Zoning Ordinance on December 20, 1996 through the passage of Ordinance 96-36 and have subsequently amended that zoning ordinance ("Zoning Ordinance");

Whereas, certain amendments ("Amendments") to the Zoning Ordinance have been proposed to establish and regulate the Trails at Robertson Farms Planned Unit Development;

Whereas, the Plan Commission advertised for and conducted a public hearing on the proposed Amendments as petition #PUO-23-7;

Whereas, following the public hearing, the Plan Commission voted to forward the Amendments to the Board of Commissioners with a positive recommendation;

Whereas, on June 18, 2024 the Plan Commission certified the Amendments and its recommendation thereon to the Board of Commissioners for consideration pursuant to Indiana Code Sections 36-7-4-602 through 605;

Whereas, in accordance with Indiana 5-14-1.5-5, the Board of Commissioners provided public notice of its intention to consider the Amendments for the Trails at Robertson Farms Planned Unit Development in ordinance form and accepted public comment on the proposed Amendments during its August \_\_\_\_\_, 2024 meeting;

Whereas the Board of Commissioners finds that the Amendments, if adopted in ordinance form, would reasonably and efficiently advance the statutorily recognized zoning ordinance purposes, which include, among other purposes, the promotions of the health, safety, morals, convenience, order, and general welfare of the citizens of Monroe County, Indiana and that the amendments should be adopted;

Whereas the Board of Commissioners finds and confirms that the preparation and/or consideration of the Amendments, both the Board of Commissioners and the Plan Commission gave reasonable regard to: the Comprehensive Land Use Plan of Monroe County, Indiana; current conditions and the character of current structures and uses in each district; the most desirable use for which the land in each district is adapted; the conservation of property values throughout the jurisdiction; and the responsible development and growth;

Whereas petitioner submitted a PUD Outline Plan and made representations to the Plan Commission pertaining to the use and development of the real estate, which Outline Plan is made a part of the Plan Commission packet;

Now, therefore, be it resolved by the Board of Commissioners of Monroe County, Indiana, as follows:

### SECTION I.

The Monroe County Zoning Ordinance is amended to rezone one (1) 42.12 +/- acre parcels in Section 20 of Perry Township at 4691 S Victor Pike (parcel #: 53-08-20-400-102.000-008) from Estate Residential 1 (RE1) to a new Planned Unit Development (PUD) for the purposes of establishing residential lots as enumerated in the Outline Plan. The PUD must comply with all required improvement, construction standards, design standards, procedures and all other engineering standards contained within the Monroe County Code and other pertinent regulations except where specifically varied through the provisions of the ordinance.

#### SECTION II.

The Plan Commission, during their regular meeting on June 18th, 2024, voted 6-2 to forward this petition

to the Monroe County Board of Commissioners with a "positive recommendation" and the following conditions of approval:

- 1. Petitioner add maximum impervious coverage standards per lot as a percentage maximum under the Summary Table by Area (Exhibit 3).
- 2. Petitioner revise the outline plan to confirm whether streets will be platted as public or private. If the streets will be private, the outline plan shall be revised to state the standards that will be followed as it relates or deviates with the "Manual for Construction Within and Adjacent to Monroe County Right-of-way".
- 3. Petitioner to implement a Bufferyard Type D on the southside and northside of the property boundary to better align with the purpose statement in Chapter 811 regarding buffering.
- 4. Change karst conservancy areas to meet the 50 ft protection requirements per Chapter 761. Relocate/remove proposed dog park illustrated on the southside between lots numbered 96 and 97 on Exhibit 4 (*Now described as lots numbered 93 and 94 on the site plan submitted on July 15, 2024*).
- 5. Petitioner change the site plan and outline plan to state that the Open Space plan for the northeast side of the property shall protect the delineated floodplain zone and not propose any structures in this area, including eliminating any proposed boardwalks.

#### SECTION III.

This ordinance shall be in full force and effect from and after its passage and adoption by the Board of Commissioners of Monroe County, Indiana.

Passed and adopted by the Board of Commissioners of Monroe County, Indiana, this \_\_\_\_ day of \_\_\_\_\_\_, 2024.

#### BOARD OF COMMISSIONERS OF MONROE COUNTY, INDIANA

| "Yes" Votes                   |                               | "No" Votes                    |   |
|-------------------------------|-------------------------------|-------------------------------|---|
| Julie Thomas, President       |                               | Julie Thomas, President       | _ |
| Penny Githens, Vice President |                               | Penny Githens, Vice President | _ |
| Lee Jones, Commissioner       |                               | Lee Jones, Commissioner       | _ |
|                               | Attest:<br>Brianne Gregory, M | Conroe County Auditor         |   |

| MONROE COUNTY | PLAN COMMISSION JU   | une 18, 2024 |
|---------------|--|--------------|
| CASE NUMBER   | PUO-23-7   |              |
| PLANNER       | Daniel Brown   |              |
| PETITIONER    | Donald Adkins Jr & Kevin Schmidt, C/o Daniel Butler, Bynum F | anyo &       |
|               | Assoc.   |              |
| OWNER         | White Oak Endeavors LLC                                      |              |
| REQUEST       | Planned Unit Outline Plan                                    |              |
| ADDRESS       | 4691 S Victor Pike, Parcel #: 53-08-20-400-102.000-008       |              |
| ACRES         | 42.12 +/-  |              |
| ZONE          | Estate Residential 1   |              |
| TOWNSHIP      | Perry  |              |
| SECTION       | 20   |              |
| PLATS         | Unplatted  |              |
| COMP PLAN     | MCUA Mixed Residential                                       |              |
| DESIGNATION   |  |              |

#### **EXHIBITS**

- 1. New Petitioner Letter Received June 2024
- 2. New Petitioner Outline Plan Statement Received June 2024
- 3. New Summary Table by Area Received June 2024
- 4. New Petitioner Site Plan Received June 2024
- 5. New Petitioner Phase Plan Received June 2024
- 6. New Petitioner Area Plan Received June 2024
- 7. Petitioner Tree Preservation Plan Received June 2024
- 8. Capacity Letters
- 9. Water/Wetland Delineation Summary Report
- 10. Karst Report
- 11. Preliminary Drainage and Water Quality Calculations
- 12. Remonstrance for REZ-21-1
- 13. Remonstrance for PUO-23-7 Updated June 2024

#### RECOMMENDATION

The Plan Review Committee moved this petition forward without a recommendation during their meeting on December 14, 2023.

Staff recommends forwarding a "<u>positive</u> recommendation" to the County Commissioners due to the alignment of the Outline Plan with the findings per Chapter 811-6 Review Considerations, Chapter 811-1 Purpose, and Chapter 831-3 Standards for Amendments, and is subject to MS4 Coordinator and Highway Engineer reports, and includes the following conditions:

- 1. Petitioner add maximum impervious coverage standards per lot as a percentage maximum under the Summary Table by Area (Exhibit 3).
- 2. Petitioner revise the outline plan to confirm whether streets will be platted as public or private. If the streets will be private, the outline plan shall be revised to state the standards that will be followed as it relates or deviates with the "Manual for Construction Within and Adjacent to Monroe County Right-of-way".
- 3. Petitioner to implement a Bufferyard Type D on the southside and northside of the property boundary to better align with the purpose statement in Chapter 811 regarding buffering.
- 4. Change karst conservancy areas to meet the 50 ft protection requirements per Chapter 761. Relocate/remove proposed dog park illustrated on the southside between lots numbered 96 and 97 on Exhibit 4.
- 5. Petitioner change the site plan and outline plan to state that the Open Space plan for the northeast side of the property shall protect the delineated floodplain zone and not propose any structures in this area, including eliminating any proposed boardwalks.

The recommendation heavily weighed the Comprehensive Plan Designation in this area (Mixed Residential) and the fact that the current ordinance does not allow a mix of residential uses as recommended under the Comprehensive Plan in this area by-right. Currently, the only way to achieve the level of mixed residential buildings and lot size variation would be under a PUD.

#### PUBLIC HEARING TIMELINE

### PLAN REVIEW COMMITTEE – December 14, 2023

- Notes from Planning Staff:
  - o Add links to the two previous packets so the public can see what has changed or summarized succinctly.
    - Link to the packet containing 2012-PUO-06 as presented during the Plan Commission Administrative Meeting on April 6, 2021 (2012-PUO-06 begins on Page 77)
    - Link to the packet containing REZ-21-1 (given the Ordinance Number 2021-36) as presented during the County Commissioners Formal Session on September 29, 2021
      - Part A
      - Part B (REZ-21-1, given the Ordinance Number 2021-36, begins here and continues through to Part F inclusive)
      - Part C
      - Part D
      - Part E
      - Part F
  - Where is the water capacity letter? Also, fire hydrants were an issue in past projects for this site.
    - Will Serve Letter for Water is included in Exhibit 14 of this report.
  - o How close is this to annexation?
    - This site is in the proposed annexation area 1B.
  - o Sinkholes were a concern, particularly sinkhole number 6.
  - How much of the open space is on private lots compared to the amount in common/drainage areas?
    - Daniel Butler answered this in the comment below. Note this may have changed with the updated site plan:



**Daniel Butler** 

Remove Comment - Jan 5, 2024 at 12:47 pm

Hello Daniel,

Yes, on the layout we have 70% of the required 25% open space on designated lots = 7.61 acres. 61% of that open space will not be used for drainage facilities = 4.64 acres
-Daniel, Bynum Fanyo

### PLAN COMMISSION Regular – January 16, 2024 (Preliminary Hearing)

- Link to the packet for the January 16 meeting:
  - o Part 1
  - o Part 2 (The initial staff report for PUO-23-7 begins here.)
  - o Part 3

The Plan Commission requested that staff meet with the petitioner to come up with a revised Planned Unit Development Outline Plan that could better meet the requirements of Chapter 811, as well as address the fact that the original 2023 submittal was primarily a repeat of the last submittal of this project that was withdrawn in 2021. Planning Staff met with the petitioners and went through the findings under the ordinance, and discussed where improvements could be made. We do believe that the applicant has listened and has provided an edited version of the Planned Unit Outline Plan that better reflects the Chapter 811-1 purpose, and includes a proposal that is different than the original 2021 proposal that was withdrawn by the petitioner.

PLAN COMMISSION Regular – June 18, 2024 (Final Hearing) COUNTY COMMISSIONERS – Exact date TBD

#### **SUMMARY**

The petition site is located at 4691 S Victor PIKE, in Section 20 in Perry Township. The site is 42.12 +/- acres and currently contains one single-family residential structure and multiple accessory structures. The petitioner is requesting a Planned Unit Development rezone at this location in order to subdivide the property for a mix of housing types not currently permitted by-right in the Zoning Ordinance. Should this petition be approved, the petitioner will be creating 137 residential lots containing single-family residences detached, single family paired homes, and triplex/townhomes that will each be situated on their own lot with a shared wall. The densest housing type proposed under this PUO is a Tri-plex Townhome.

The petitioners are providing the required 25% open space (10.53 acres). Staff also assumes approximately 20% of the acreage being dedicated towards right-of-way/utilities/sidewalks under the subdivision process. Staff estimates that the average proposed lot size after open space and right-of-way dedication would be approximately 0.18 acres. The Current Draft Zoning Map for the County Development Ordinance lists the subject property as transitioning fully to the "Community Development Residential" (CD) zoning district (0.21-acre minimum lot size). Under the Monroe CDO draft zoning for the CD district, it is proposed that Single-Family Attached Dwellings (3+ units) be a Conditional Use, while Single-Family Detached Dwelling, Single-Family Paired Dwelling (2 units) would be permitted by-right. Per this PUO proposal, they are requesting Single-Family Detached Dwelling, Single-Family Paired Dwelling (2 units), and Single Family Attached Dwelling (3+ units) all be permitted uses by-right. Under the current zoning of Estate Residential 1, only Single-Family Detached Dwellings would be permitted and the lot size would be a minimum of 1 acre.

The proposed PUO includes an outer area (Area D in Exhibit 6) that would have a minimum lot size of 0.30 acres, which is less dense than the minimum lot size of the proposed CD district (0.21 acres) under the CDO, but more dense than under the current zoning of RE1 (1 acre minimum lot size). The innermost area (Area B) has a minimum lot size of 0.10 acres, and Areas A and C surrounding Area B have a minimum lot size of 0.12 and 0.22 acres respectively. The development generally transitions in density from the outer boundaries (least dense) to the inner most area (most dense).

Under the County Development Ordinance, the densest zoning district (High Development Residential) has a minimum lot size of 0.14 acres and would allow all housing types proposed under this PUO, as well as multi-family dwellings (not proposed under this PUO). The petitioner is proposing lot size variations that could be enforceable by Planned Unit Development zoning as it contains 4 distinct design standards within one legal lot of record proposed to be subdivided.

Two right-of-way activity permits have been submitted for this project, RW-23-359 and RW-23-360, which are pending review.

The development includes two ingress/egress points along S Victor Pike, one connection to Clear Creek Trail and one connection to Bloomington Rail Trail. Approval of this outline plan amendment will amend the zoning map and allow for the proposed single-family residential development.

### BACKGROUND

The area is zoned Estate Residential 1. There were two previous petitions for this property:

- 1. A rezone attempt to Planned Unit Development (2012-PUO-6), which was withdrawn; and
- 2. REZ-21-1, where the petition attempted to have the property rezoned from Estate Residential 1 to Medium Density Residential in order to then subdivide it into a similar residential layout to this petition. REZ-21-1 was Denied by the County Commissioners on September 29, 2021 by a vote of 3-0.

This new petition includes the following differences from the earlier 2012-PUO-6.

- 1. The replacement of proposed quad-plexes/townhomes with proposed single-family attached dwellings that appear as tri-plexes/townhomes but will have each individual unit on a separate lot.
- 2. Estimated size of some proposed housing has changed (i.e., Zone C in 2012-PUO-6 had an estimated housing size between 1500-2500 square feet, while Zone C in PUO-23-7 has an estimated housing size between 1500-3500 square feet).
- 3. The layout, purpose, and minimum lot sizes of some Areas have changed.
  - a. For 2012-PUO-6:

- i. Area 'A' (Single-family residential attached [Duplexes]) has minimum lot size of 0.14 acres.
- ii. Area 'B' (Single-family residential detached) has a minimum lot size of 0.22 acres.
- iii. Area 'C' (Option of quadplexes or single-family residential detached) has a minimum lot size of 0.16 acres.
- iv. Area 'D' (Single-family residential detached with higher density) has a minimum lot size of 0.16 acres.

#### b. For PUO-23-7:

- i. (38 lots depicted) Area 'A' (Single-family residential attached [Duplexes]) has minimum lot size of 0.12 acres.
- ii. (39 lots depicted) Area 'B' (Single-family residential attached [Triplexes]) has a minimum lot size of 0.10 acres.
- iii. (22 lots depicted) Area 'C' (Single-family residential detached with higher density) has a minimum lot size of 0.22 acres.
- iv. (38 lots depicted) Area 'D' (Single-family residential detached with lower density) has a minimum lot size of 0.30 acres.
- 4. PUO-23-7 includes standards for Parking Details and Neighborhood Signage.
- 5. 2012-PUO-6 contained a note about a proposed connection to nearby trails giving access to a nearby school: "Access to Clear Creek Elementary White Oak will also build a safe and easy access path that will allow children and families to access the Rail Trail and Clear Creek Trail thus allowing access to Clear Creek Elementary." This same note is absent in PUO-23-7.
- 6. PUO-23-7 gives an additional standard for landscaping: "When developing parks and open space, the design will take into consideration the existing landscaping and leverage it while making the space more useable." PUO-23-7 also gives the following detail about Landscaping: "Buffer yards are not planned to be installed along the North and South property lines. Type D buffer yards on the east side."
- 7. Under the section "Environmental Considerations", PUO-23-7 adds a standard regarding drainage and watershed management, as well as a not regarding tree preservation.
  - a. "Drainage development plan will REDUCE the runoff and outflow rates by more than 80% and bring the 44+ Acres into compliance with the new "critical watershed" regulations."
  - b. "A tree preservation plan has been made for the site to preserve as many mature trees as possible."
- 8. A tree preservation plan has been provided for PUO-23-7. This was absent in 2012-PUO-6.

#### COMMENTS FROM OTHER DEPARTMENTS

#### Comments from Stormwater



#### **Kelsey Thetonia**

Remove Comment . Apr 22, 2024 at 3:13 pm

This project was discussed at the Drainage Board on 2/1/2024. The Drainage Board will need to approve the final drainage plan for this project.

#### Critical Watershed and Detention Design:

- This project is located in the Clear Creek Critical Watershed and shall meet the Critical Watershed release rates of 0.25 and 0.45 cfs/acre for the 10% and 1% AEP events, unless downstream outfalls are more restrictive.
- Look at higher rain events to analyze existing conditions and find out how the detention works in the overall basin. How
  much would it raise Base Flood Elevation? Look at 500 year flood event.
- Post-development sediment storage shall provide 110% of the required storage for the 1% AEP event. Adequacy of Outlets/Receiving Infrastructure:
- Provide calculations demonstrating adequacy of existing culverts under the trails where ponds will be discharging.
- There is not a clear outlet for the pond at the northeast corner; in 2021, a stilling basin was proposed at this outlet. Karst/Sensitive Environmental Areas:
- Place sinkholes in SCAs. Provide overflow Drainage Easements for all SCAs.
- Avoid all wetlands on the property and provide additional velocity dissipation and water quality treatment for any site runoff discharging to wetlands, if the Drainage Board will allow discharges to wetlands. What other measures can we apply to the outlet of the northeast detention pond?
- Check for existing wells in the area.
- Is bedrock going to be an issue? Are significant excavations anticipated?

#### Tree Removal/Planting:

- Show number of trees to be removed in the detention pond areas. Provide tree replanting plan with a ratio of at least 1:1 tree replacement for any trees being removed as a result of detention ponds.
- New trees and shrubs cannot be placed on pond embankments, spillways, or within 10 ft. of any stormwater infrastructure.

#### **Drainage Easements:**

- All infrastructure outside the right-of-way will be placed in Drainage Easements accessible from the right-of-way.
   Ponds will be placed within Common Areas with Drainage Easements.
- All floodplain on the property shall be placed in Drainage Easements.
- Discharge from the ponds should be placed in Drainage Easements to the nearest receiving waterway (West Fork Clear Creek or Clear Creek).
- Review the site for flood routing and provide easements where necessary.

### Comments from Highway Department



Ben Ayers 💿

Remove Comment . Dec 5, 2023 at 5:32 pm

Right of way Activity permit applications have been submitted and will be approved pending approval of Development Plan. A \$30,000 Surety is required to be on file before the release of the permit. See RW-23-359 & RW-23-360.

### Comments from the Highway Engineer



Paul Satterly

Remove Comment - Nov 17, 2023 at 1.39 pm

Intersection angles should be as close to 90 degrees as possible and should notbe less than 70 degrees. Roadways shall meet the Monroe County design standards including roadway width, rolled curb and gutter, and pavement cross section.



**Daniel Butler** 

Remove Comment - Dec 20, 2023 at 4,59 pm

Thank you, Paul. We can adhere to these standards with this plan. -Daniel, Bynum Fanyo



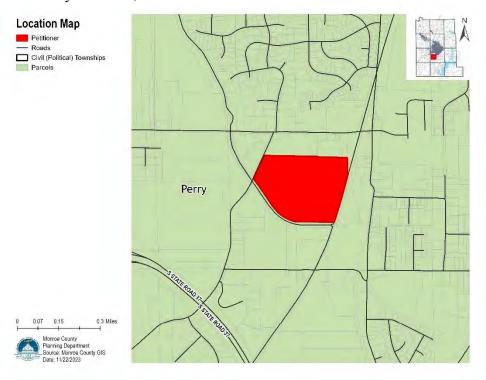
#### **Paul Satterly**

Remove Comment . May 14, 2024 at 3:58 pm

A traffic study was conducted by Southern Meadows and they determined that an all-way stop would be required at the intersection of Rogers Street and That Road once two of the three developments in the area reached full build out. The developments included Southern Meadows, the Blind Squirrel development and the Trails at Robertson Farms. Southern Meadows will be making the improvements to Rogers Street and the County will install the stop signs once the all-way stop control is warranted.

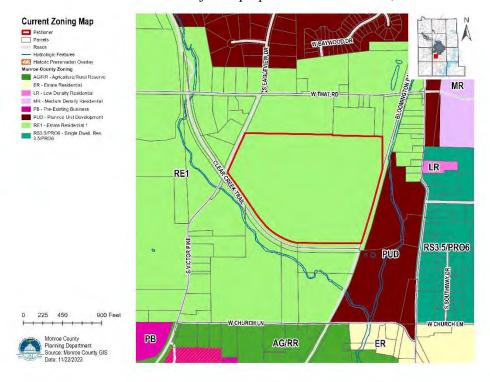
### **LOCATION MAP**

The petition site is located south of the City of Bloomington, with frontage along South Victor PIKE in Section 20 of Perry Township. The site has been surveyed as 42.12 +/- acres and currently contains one single-family residential structure and multiple accessory structures, Parcel #: 53-08-20-400-102.000-008.



### ZONING AND ADJACENT ZONING

The petition site is zoned Estate Residential 1. The adjacent properties are zoned PUD, and RE1.

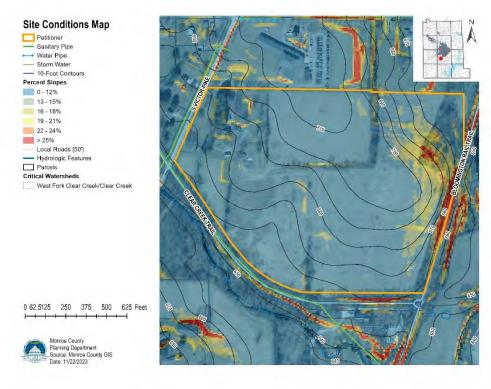


#### **INFRASTRUCTURE**

Capacity letters have been provided for this site regarding sewer, gas, electricity, and water (Exhibit 8). Right-of-Way activity permits have been submitted to the Highway Department for review (RW-23-360 and RW-23-359). A 49-page karst survey was resubmitted with this petition from 2020 (Exhibit 10), and a 7-page Water/Wetland Delineation Summary Report from 2020 (Exhibit 9) have been submitted for this project as well.

### SITE CONDITIONS

Sidewalks do not run along either side of S Victor Pike where the proposed site will have access. Should this outline plan be approved, the next step would be a major subdivision meeting all requirements, such as sidewalks along both sides of all existing and proposed rights-of-way, unless the outline plan specifically states different standards. Multiple karst features are present on the property and shown within conservancy areas. Specific drainage plans would be reviewed and approved under a PUD Development Plan. Additionally, there is a large transmission line running through the middle of the lot.



# SITE PICTURES





Figure 2. View of the property from the driveway.



Figure 3. View of the side of the property from the driveway



Figure 4. View of two accessory structures on the property.



Figure 5. View of single-family residential structure on the property.



Figure 6. View a fence and field near the two accessory structures.



Figure 7. View beyond the fence on the property.

#### COMPREHENSIVE PLAN DISCUSSION - PHASE I

The petition site is located in the MCUA Mixed Residential districts on the Monroe County Urbanizing Area Plan portion of the Monroe County Comprehensive Plan. Points that align with the proposed PUD outline plan are highlighted in green. Points that differ from the MCUA districts are highlighted in grey.

### 5.1.1 Mixed Residential

Mixed residential neighborhoods accommodate a wide array of both single-family and attached housing types, integrated into a cohesive neighborhood. They may also include neighborhood commercial uses as a local amenity.

These neighborhoods are intended to serve growing market demand for new housing choices among the full spectrum of demographic groups. Residential buildings should be compatible in height and overall scale, but with varied architectural character. These neighborhoods are often located immediately adjacent to mixed-Use districts, providing a residential base to support nearby commercial activity within a walkable or transit-accessible distance.

### • Transportation

#### Streets

Streets in mixed residential neighborhoods should be designed at a pedestrian scale. Like mixed-Use districts, the street system should be interconnected to form a block pattern, although it is not necessary to be an exact grid. An emphasis on multiple interconnected

streets which also includes alley access for services and parking, will minimize the need for collector streets, which are common in more conventional Suburban residential neighborhoods. Cul-de-sacs and dead-ends are not appropriate for this development type.

Unlike typical Suburban residential subdivisions, mixed residential development is intended to be designed as walkable neighborhoods. Most residents will likely own cars, but neighborhood design should deemphasis the automobile.

### • Bike, pedestrian, and Transit modes

Streets should have sidewalks on both sides, with tree lawns of sufficient width to support large shade trees. Arterial streets leading to or through these neighborhoods may be lined with multi-use paths. Neighborhood streets should be designed in a manner that allows for safe and comfortable bicycle travel without the need for separate on-street bicycle facilities—such as bike lanes. As with mixed-Use districts, primary streets in mixed residential—neighborhoods should be designed to accommodate transit.

#### Utilities

#### • Sewer and water

The majority of mixed residential areas designated in the land Use Plan are located within existing sewer service areas. Preliminary analysis indicates that most of these areas have sufficient capacity for additional development. Detailed capacity analyses will be necessary with individual development proposals to ensure existing infrastructure can accommodate new residential units and that agreements for extension for residential growth are in place.

#### Power

Overhead utility lines should be buried to eliminate visual clutter of public streetscapes and to minimize system disturbance from major storm events.

### • Communications

Communications needs will vary within mixed residential neighborhoods, but upgrades to infrastructure should be considered for future development sites. Creating a standard for development of communications corridors should be considered to maintain uniform and adequate capacity.

# • Open space

### • Park Types

Pocket parks, greens, squares, commons, neighborhood parks and greenways are all appropriate for mixed residential neighborhoods. Parks should be provided within a walkable distance (one-eighth to one-quarter mile) of all residential units, and should serve as an organizing element around which the neighborhood is designed.

### • Urban Agriculture

Community gardens should be encouraged within mixed residential neighborhoods. These may be designed as significant focal points and gathering spaces within larger neighborhood parks, or as dedicated plots of land solely used for community food production.

### • Public Realm Enhancements

#### Lighting

Lighting needs will vary by street type and width but safety, visibility and security are important. Lighting for neighborhood streets should be of a pedestrian scale (16 to 18 feet in height).

### • Street/Site furnishings

Public benches and seating areas are most appropriately located within neighborhood parks and open spaces, but may be also be located along sidewalks. Bicycle parking racks may be provided within the tree lawn/landscape zone at periodic intervals.

## Development Guidelines

#### Open Space

Approximately 200 square feet of publicly accessible open space per dwelling unit. Emphasis should be placed on creating well-designed and appropriately proportioned open spaces that encourage regular use and activity by area residents.

## Parking Ratios

Single-family lots will typically provide 1 to 2 spaces in a garage and/or driveway. Parking for multi-family buildings should be provided generally at 1 to 1.75 spaces per unit, depending on unit type/number of beds. On-street parking should be permitted to contribute to required parking minimums as a means to reduce surface parking and calm traffic on residential streets.

#### • Site design

Front setbacks should range from 10 to 20 feet, with porches, lawns or landscape gardens between the sidewalk and building face. Buildings should frame the street, with modest side setbacks (5 to 8 feet), creating a relatively continuous building edge. Garages and parking areas should be located to the rear of buildings, accessed from a rear lane or alley. If garages are front-loaded, they should be set back from the building face. Neighborhoods should be designed with compatible mixtures of buildings and unit types, rather than individual subareas catering to individual market segments.

#### Building form

Neighborhoods should be designed with architectural diversity in terms of building scale, form, and style. Particular architectural themes or vernaculars may be appropriate, but themes should not be overly emphasized to the point of creating monotonous or contrived streetscapes. Well-designed neighborhoods should feel as though they have evolved organically over time.

#### Materials

High quality materials, such as brick, stone, wood, and cementitious fiber should be encouraged. Vinyl and exterior insulated finishing Systems (eifS) may be appropriate as secondary materials, particularly to maintain affordability, but special attention should be paid to material specifications and installation methods to ensure durability and aesthetic quality.

### Private Signs

Mixed residential neighborhoods should not feel like a typical tract subdivision. It may be appropriate for neighborhoods to include gateway features and signs, but these should be used sparingly and in strategic locations, rather than for individual platted subareas.

### **COMPREHENSIVE PLAN DISCUSSION – PHASE II**

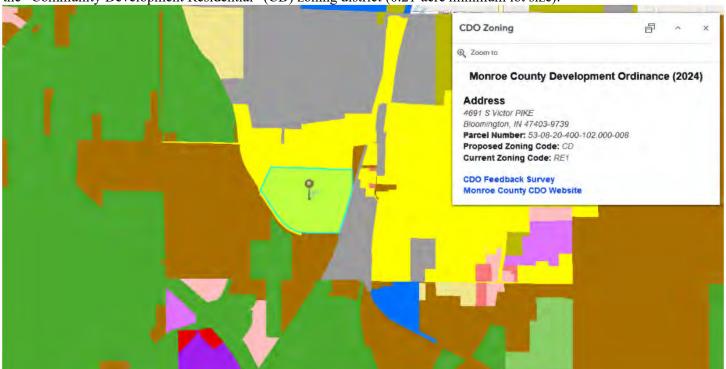
The petition site is located in the MCUA Neighborhood Development (N2) proposed neighborhood district in the Monroe County Urbanizing Area Plan Ph II of the Monroe County Comprehensive Plan. This is a further classification from the Ph I Monroe County Urbanizing Area Plan land use plan.

The Neighborhood Development District, under the MCUA Ph II plan, is described as "This district includes several existing residential subdivisions with primarily single-family lots and is intended to provide a greater opportunity for diverse housing types and densities. Mixed use nodes may be appropriate at key locations within this larger district, consistent with the recommendations of the Mixed Residential land use type designated in the Urbanizing Area Plan." The plan further states that the following uses should be permitted, which this PUD does comply with these suggested mixed residential options:

|  | GATEWAY DISTRICTS |              |               | EMP<br>DIS           | LOYM                  | ENT<br>TS | N                         |                          | ORHOO<br>RICTS           | 0                | SPECIAL<br>DISTRICTS |            |       |
|--|-------------------|--------------|---------------|----------------------|-----------------------|-----------|---------------------------|--------------------------|--------------------------|------------------|----------------------|------------|-------|
|  | GATEWAYWEST       | GATEWAYSOUTH | GATEWAY NORTH | WEST SIDE EMPLOYMENT | SOUTH SIDE EMPLOYMENT | AIRPORT   | URBAN INFILL NEIGHBORHOOD | NEIGHBORHOOD DEVELOPMENT | CONSERVATION DEVELOPMENT | RURAL TRANSITION | QUARRY LANDSCAPE     | OPEN SPACE | CIVIC |
|  | 0                 |              |               | 0                    | 0                     | El        |                           | N2                       | N9                       | NA               | 0                    | 0          | 0     |
| Single Family - Small Lot (Rear-Loaded)  |                   | +            |               |                      |                       |           | +                         |                          |                          |                  |                      |            |       |
| Single Family - Small Lot (Front-Loaded) |                   | *            |               |                      |                       |           | +                         | *                        | *                        |                  |                      |            |       |
| Single Family - Contemporary             |                   |              |               |                      |                       |           | +                         | +                        |                          |                  |                      |            |       |
| Single Family - Mid-Century              |                   |              |               |                      |                       |           | ÷.                        | ÷                        |                          |                  |                      |            |       |
| Single Family - Rural Residential        |                   |              |               |                      |                       |           |                           |                          |                          |                  |                      |            |       |
| Attached Townhome                        | *                 | +            |               | +                    |                       |           | +                         | +                        |                          |                  |                      |            |       |
| Attached Courtyard                       |                   | +            |               | +                    |                       |           |                           | 4                        |                          |                  |                      |            |       |
| Wo-Family Home (Duplex)                  |                   | +            |               |                      |                       |           | 4                         | +                        | +                        | *                |                      |            |       |
| Multi-Family                             | *                 | #            |               | +                    |                       |           |                           | +                        |                          |                  |                      |            |       |
| Commercial                               | +                 | +            | +             | +                    | +                     |           | +                         | 14                       |                          |                  |                      |            |       |
| Commercial Outlot                        | *                 | #            | *             | 4                    | *                     |           |                           |                          |                          |                  |                      |            |       |
| Veighborhood Mixed-Use                   | *                 | +            |               |                      |                       |           | +                         |                          |                          |                  |                      |            |       |
| Mixed-Use                                | +                 | 4            |               | 4                    |                       |           |                           |                          |                          |                  | 111                  |            |       |
| Office Building                          | +                 | +            | +             | +                    | *                     |           | +                         | +                        |                          |                  |                      |            |       |
| ivic/Institutional Building              | +                 | #            | *             |                      |                       |           | +                         |                          |                          |                  |                      |            | +     |
| Flex Building - Option A                 | +                 | +            | *             | +                    | +                     | *         |                           |                          |                          |                  |                      |            |       |
| Flex Building - Option B                 |                   |              |               | +                    | *                     |           |                           |                          |                          |                  |                      |            |       |
| arge-Format Flex Industrial              |                   |              |               | +                    | +                     | +         |                           |                          |                          |                  |                      |            |       |
| Re-Use/Retrofit                          | 4                 | 4            | _             | +                    | *                     | *         |                           | 4                        |                          | *                | +                    | *          | ŧ     |

# COUNTY DEVELOPMENT ORDINANCE (CDO) DISCUSSION

The Current Draft Zoning Map for the County Development Ordinance lists the subject property as transitioning fully to the "Community Development Residential" (CD) zoning district (0.21-acre minimum lot size).





#### PUD REVIEW CONSIDERATIONS

### **811-6 Review Considerations**

Section 811-6 (A) of the Monroe County Zoning Ordinance states: "The Plan Commission shall consider as many of the following as may be relevant to the specific proposal:

(1) The extent to which the Planned Unit Development meets the purposes of the Zoning Ordinance, the Comprehensive Plan, and any other adopted planning objectives of the County.

#### **Findings:**

- The Comprehensive Plan designates the property as MCUA Mixed-Residential and MCUA Open Space;
- The property is currently zoned RE1;
- The current permitted use of the site is residential;
- Adjacent properties are zoned RE1 and PUD;
- The petitioner is proposing 25% (10.53 acres) open space. Chapter 811 states: "Permanent open space shall be defined as parks, playgrounds, landscaped green space, and natural areas, not including schools, community centers or other similar areas in public ownership."
- Conclusion: the petitioner is meeting the purpose and standard of review under the PUD chapter in the zoning ordinance, and meets the intent of the Comprehensive Plan (Mixed Residential).
- (2) The extent to which the proposed plan meets the requirements, standards, and stated purpose of the Planned Unit Development regulations.

- See Findings (1);
- The stated purpose of Planned Unit Developments are as follows:
  - Reflect the policies of the Comprehensive Plan specific to the neighborhood in which the PUD is to be located; this proposal appears to mostly align with the policies of the Comprehensive Plan in this area (see above). However, no mixed-use commercial amenities are being provided, though it is stated as "may be provided" in the Comprehensive Plan. The Joseph Greene PUD/Clear Creek Urban Development at the corner of S Rogers St and W That Rd (approximately 0.25 miles away) will offer first floor commercial uses, including a possible Convenience Store, Bakery, Bike Shop, Restaurant, Tavern, and Temporary/Seasonal Activities per their approved Ordinance.
  - O Provide substantial buffers and transitions between areas of different land use and development densities; the layout of zones A, B, C, and D guides the transition of density. Area D buffers the adjacent properties to the north, south, and east, and contains the least-dense of the proposed housing types with a minimum lot size of 0.3 acres. In addition, the property is buffered by an existing bike trail on the south and east sides. The petitioner has included a landscaping plan to offer bufferyards; staff is recommending a bufferyard planting requirement of a Type D along the northside and southside of the property.
  - o Enhance the appearance of neighborhoods by conserving areas of natural beauty, and natural green spaces; they are preserving the minimum open space required. The open space being preserved is constrained due to existing environmental conditions. Open Space is defined in Chapter 801 as the following: "Open Space. Total horizontal area of all portions of the lot not covered by buildings, structures, streets, parking areas or paved walkways." Though the proposal meets the technical definition of Open Space, the area provided as open space is otherwise largely non-buildable, consisting of: floodplain, a utility easement, karst features, and areas over 15% slope. Per the PUD Chapter 811-1, advantages of PUDs are to, in part, "enhance the appearance of neighborhoods by conserving areas of natural beauty, and natural green spaces." Some of the other areas on the property would fit into this category other than, for instance, the 100' wide transmission line easement area.

- Ocunteract urban monotony and congestion on streets; they have proposed three potential housing types throughout the site. The site is accessible to W Victor Pike, as well as the Rail Trail and the Clear Creek Trail.
- O Promote architecture that is compatible with the surroundings; they have not provided architectural standards besides sample images in the Petitioner's Outline Plan. The current ordinance does not include architectural standards for new development, however the petitioner is encouraged to incorporate some level of architectural standards in the private covenants for the subdivision.
- O Buffer differing types of land use and intensities of development from each other so as to minimize any adverse impact which new development may have on existing or zoned development; the development ranges in lot sizes and density; The proposed PUO includes an outer area (Area D in Exhibit 6) that would have a minimum lot size of 0.30 acres, which is less dense than the minimum lot size of the proposed CD district (0.21 acres). Meanwhile the innermost area (Area B) has a minimum lot size of 0.10 acres. Areas A and C have a minimum lot size of 0.12 and 0.22 acres respectively, and serve as transition areas between Areas D and B.
- o Promote and protect the environmental integrity of the site and its surroundings and provide suitable design responses to the specific environmental constraints of the site and surrounding area; Staff finds that the environmental conservation meets the minimum needed to meet the terms of the PUD ordinance. Staff is proposing a condition that would require protection of the delineated floodplain and all karst conservancy areas note on the site plan (Exhibit 4). Further, the proposal will require Drainage Board approval if the PUO is enacted.
- Effectuate implementation of the Comprehensive Plan. The request for smaller lot sizes and varied housing types near a trail meets the comprehensive plan for this area.
- (3) The extent to which the proposed plan departs from the zoning and subdivision regulations otherwise applicable to the subject property, including but not limited to, the density, dimension, bulk, use, required improvements, and construction and design standards and the reasons, which such departures are or are not deemed to be in the public interest.

#### **Findings:**

- See Findings (1) and (2);
- Portions of the site have varied minimum lot sizes ranging from 0.10 acre to 0.30 acres. The current zoning designation of Estate Residential 1 requires a minimum lot size of 1 acre. The current zoning designation and the Comprehensive Plan for this area are mismatched, and therefore, staff finds that the departure of the proposal from the Comprehensive Plan for this area to be less. However, the departure from the current zoning district of RE1 without regard to the Comprehensive Plan does signify a large departure from the design standards currently permitted including primarily the lot size.
- The site has a proposed minimum lot width at building line of 50 feet, with a note stating that some of the triplex/townhomes may have a minimum lot width of 35 feet instead;
- The proposed building heights are compatible with the current zoning districts;
- (4) The proposal will not be injurious to the public health, safety and general welfare

### **Findings:**

- See Findings 1-3 above;
- (5) The physical design and the extent to which it makes adequate provision for public services, provides adequate control over vehicular traffic, provides for and protects common open space, and furthers the amenities of light, air, recreation and visual enjoyment.

- Staff will be reviewing a development plan and major subdivision if approved;
- The petition site will be subdivided and the management of common areas will remain under the control of a

- Homeowner's Association (HOA) that will be formed as part of the subdivision process;
- The petitioner is proposing 25% (10.53 acres) open space. Chapter 811 states: "Permanent open space shall be defined as parks, playgrounds, landscaped green space, and natural areas, not including schools, community centers or other similar areas in public ownership."
- (6) The relationship and compatibility of the proposal to the adjacent properties and neighborhoods, and whether the proposal would substantially interfere with the use of or diminish the value of adjacent properties and neighborhoods.

### **Findings:**

- See Findings (1), (3) & (5);
- The petitioner states in their written statement (Exhibit 1) that the development is designed to provide a mix of housing options;
- The proposed PUD outline plan would connect to two trails as well as provide access via a trail to an MCCSC elementary school (Clear Creek Elementary School);
- (7) The desirability of the proposal to the County's physical development, tax base, and economic well-being.

#### **Findings**:

- See Findings under Section (6);
- The petitioner submitted design plans that are aesthetic in nature. In addition, the petitioner highlighted some potential benefits of this project:
  - Trail connections to the Rail Trail and Clear Creek Trail
  - Fills a need for attainable middle-class housing
  - Provides a mix of housing types
- (8) The proposal will not cause undue traffic congestion and can be adequately served by existing or programmed public facilities and services.

#### **Findings:**

- See Findings under Section (5) & (6);
- Multiple road connections are proposed within the outline plan that will increase interconnectivity between the proposed neighborhood areas;
- The petitioner is proposing two points of access off S Victor Pike to serve the proposed PUD;
- A further review of traffic considerations will be reviewed at the Development Plan phase of the project by the Highway Department;
- (9) The proposal preserves significant ecological, natural, historical and architectural resources to the extent possible.

- The PUD outline plan has open space requirements that will be described legally as unbuildable;
- The petitioner states that 10.53 acres will serve as open space which is 25% of the total site acreage;
- Exhibit 1 states that the drainage/stormwater management areas will be managed by an HOA to be established during the subdivision process;
- Exhibit 1 states that street trees will be provided a minimum of every 50 ft or every lot location, whichever is greater and that there will be no buffer yard requirements along the north and south property lines. Type D buffer yards may be established on the east side.

<u>Chapter 831-3 Standards for Amendments</u>: In preparing and considering proposals to amend the text or maps of this Zoning Ordinance, the Plan Commission and the Board of County Commissioners shall pay reasonable regard to:

(A) The Comprehensive Plan;

### **Findings:**

- See Chapter 811-6(A)1 Finding above. The proposed PUO meets the intent of the Comprehensive Plan (Mixed Residential) for this area.
- (B) Current conditions and the character of current structures and uses in each district;

#### **Findings:**

- The property currently exhibits a single-family residence and accessory structures;
- The proposal includes a mix of residential uses;
- The proposal includes four Areas that have differing design standards. The outer most Area will be Single-Family Detached Dwellings, which is consistent with what is currently on the property. The innermost area will include a mix of housing types, which is consistent with the Comprehensive Plan and is meeting the purpose of the PUD chapter 811.
- (C) The most desirable use for which the land in each district is adapted;

#### **Findings:**

- The Comprehensive Plan has this area designated as Mixed Residential;
- The use of the property will be residential, which is aligned with current and proposed adjacent uses in the area;
- (D) The conservation of property values throughout the jurisdiction; and

### **Findings:**

- Property value tends to be subjective;
- The effect of the approval of the rezone on property values is difficult to determine;
- (E) Responsible development and growth.

- The proposal does include capacity letters for all utilities, including the ability to access sewer;
- The petition site is adjacent to two multi use paths;
- The property is in proximity to nearby mixed use districts and other amenities;



May 1, 2024

Monroe County Plan Commission Monroe County Planning Department Showers Building 501 N. Morton Street, Room 224 Bloomington, IN 47404

### RE: White Oak Endeavors LLC PUD Zoning Petition

Post our MR rezone petition and subsequent initial planning commission meeting, we have worked harder to understand the needs of Monroe County deeper and identify potential solutions for as many members of the community as possible. We are confident that this PUD petition offers unique solutions to help solve what has now become a longstanding issue of lack of attainable housing in Monroe County. We have developed this plan based around the specific feedback received over the last 6 months and the interactions we have had with our neighbors. With that said, we are, and will remain, very open to any and all suggestions from the County leadership, Planning Commission members and most importantly surrounding community members.

White Oak Endeavors LLC petitions for planned unit development designation to create The Trails at Robertson Farms, a family focused subdivision. The PUD is designed to create a unique housing market as a homogenous neighborhood with emphasis on leveraging existing infrastructure and community investment in our wonderful network of trails. The project location has immediate access to public infrastructure and utilities to create a wonderful neighborhood setting. The project site is located in the Bloomington urbanizing area with excellent access to the road network, including close access to I-69.

The proposed planned unit development embodies many of the objectives and policies in the developing Monroe County Comprehensive Land Use Plan. Special attention was paid to create a variety of housing stock, to leverage existing public infrastructure, and to develop an infill project in the Bloomington urbanizing area not contributing to urban sprawl.

The project is uniquely positioned to maximize single family home options adjacent to two major multi-use pathways/community trails -- the Clear Creek Trail and the Bloomington Rail Trail.

The planned unit development will be designed in three phases to allow market absorption of the homes while maintaining flexibility to modify specific home design, home type or size and home costs to meet market demands over the 6 year project.

The neighborhood is divided into five development areas -- areas A, B, C and D. Each area will offer specific features for housing with the intent to ensure there are multiple options that take advantage of local infrastructure. A brief summary of these areas is below:

- Area A: Primarily paired single family homes
- Area B: Focused on home options that best utilize the lots and provide market optionality.
- Areas C: Primarily single family homes "heart of the neighborhood"
- Areas D: Focused on premium single family home options that best utilize the trails

We have heard and are listening to the Commissioners renewed focus on providing more housing in the county as this has been a significant focus of public and political conversations over the last 4 months. We believe that we have a solution that does in fact meet the desire and reduces the need for sprawling infrastructure needs to do so.

The Trails development is focused on meeting the intent of the Monroe County Comprehensive Land Use Plan as guidance in the development of this land. The Land Use Plan outlines numerous objectives for planning development within the Bloomington Urbanizing Area, including:

- Focus on new growth and development within the core of the existing community
- Promotes a form of development that matches surrounding density
- Capitalizes on existing infrastructure designed for this use
- Maintains a distinctive edge separating urban areas from rural areas
- Encourages reinvestment, infill and redevelopment
- Provides a range of housing choice and increased affordability making options that are more attainable
- Integrates open space, local trail network, natural and historic resources into the land use and development patterns

The Trails development believes the goal of the Comprehensive Use Plan is critical to the longevity of development in the Bloomington and Monroe County area. Petitioners have researched the status of the housing market in the Monroe County area for more than 3 years. For the Monroe County area, the National Association of Realtors reports that the market supply for homes at a price up to \$400,000 is extremely low and has been for 3 straight years. The lack

of available new home inventory in this price range of \$400,000 and below has the negative effect of driving prices upward. Current data (October 2023) illustrates the current supply of homes in the Monroe County area at less than 2 months and for perspective, a "healthy market" is considered -6 months of inventory. This has led to unprecedented increases in home prices and difficulty in attracting business and individual talent to the region. The ability to develop single family homes that are attainable is critical to increase the availability and the inventory of new homes at price points below \$400,000. Without increasing the inventory of available homes, Monroe County will continue to see upward pressure driving the new home prices ever higher, increasing the difficulty for first time buyers and homeowiters.

The proposed PUD will be designed to provide housing inventory below this critical price point of \$400,000. To accomplish this goal, a specifically designed neighborhood providing multiple housing options on smaller lots is critical. Major factors in new home costs are the land costs and upfront development costs in a new neighborhood. Petitioner will accomplish two major objectives with this development. This PUD will be part of the solution to providing housing inventory that is attainable to many of our Monroe County residents. It is essential to create housing inventory at a more all'ordable price. In addition, this neighborhood will be uniquely designed to promote use of the trails and support the environmental concerns of the area. Monroe County and Bloomington have invested significantly in the development of a trail network and continue to do so. This housing project will capitalize on that investment with home products that are intended to be attractive to home buyers who will capitalize on close proximity to the trail network. Finally, the development will hring the 44+ acres into compliance with the critical watershed regulations, reduce the outflow rates by ~80%, increase the total trees on site by ~50% and preserve all the natural Karst and protected species living/migrating on the property.

Additionally, as a key consideration The Trails will serve as a buffer/transition zone from the more dense utility served neighborhoods to the north, east and west to the less dense non-utility served estates to the south. The Trails has accomplished this by focusing on low density on the exterior of the neighborhood while still offering density akin to the surrounding neighborhoods on the interior of the development. This facilities the need of a transition zone as well as increasing the attainability of the housing offerings.

The PUD capitalizes on the unique location between the juncture of the two major trails. The smaller lots and the compact form of development are geared toward increasing single family home affordability white remaining aligned with the surrounding neighborhood density. Compact development will capitalize on and leverage existing public infrastructure. The design with the interior road network bordered on two sides by the trails and on the third side by a major road ("major collector") isolates and maintains a distinctive edge to the development separating urban areas from rural areas.

Petitioner endorses the development requirements for dedicated open space. The project will include no less than 25% dedicated open space. However, Petitioner is also committed to making the open space usable. Our intent is not only to provide a dedicated open space, but to

do so in a manner that is usable by developing amenities within those areas while preserving the open space character and will be discussed below.

Part of developing a compact neighborhood with smaller tots in order to meet the market requirements for providing diverse housing options within a price point that makes it affordable or attainable is to maximize the use of the land within the neighborhood. The open spaces will also be leveraged for dual use as mentioned above to maximize the resident's enjoyment of them and may include amenities such as:

- community garden/orchard
- dog park
- trail terraced park
- children's park and a pipe park.

Back yards of selected lots adjacent to the trail and the land under the Duke Power easement will also provide open space. Restrictive covenants will prevent development or construction of improvements within that dedicated open space. The restrictive covenants would further allow limited fencing, but otherwise maintain the open space.

Unique to The Trails, a park open to not just the neighborhood but also the community will be constructed adjacent to the Rail Trail. This terraced park would take advantage of its proximity to the trail and provide both the neighborhood and community with an outdoor recreation asset.

The developers are committed to creating a unique neighborhood that capitalizes on the infrastructure and the trail network to establish a housing mix that is focused on quality and attainability for single family homes. The development is intentionally targeted to the homeowner population that sees the value in a home near or adjacent to the trail network. The developers are eager to become a long-term partner in residential development in Monroe County making a significant contribution to creating diverse housing options in a very special community.

A bit of hackground on the lead developers is below.

Kevin Schmidt was born and raised in Aurora, CO and attended the Colorado School of Mines to pursue his dreams of becoming an engineer. In 2006, he graduated with a degree in Civil Engineering and moved to Houston, TX to take an opportunity with a large international Energy company. Over the course of the next 16 years he lived in 5 countries including Doha, Qatar, St John's Newfoundland, Ulsan, Korea, Indonesia and Milan, Italy managing construction of multiple major energy projects. He has had a wonderful opportunity to work with and learn from many cultures and has used that perspective to build a family and look for ways to use this in everything he does. His in-laws are both IU alumni and his family roots in the Big Ten are strong but over the recent period he and his family have really come to enjoy and love Bloomington.

Donne Adkins was born and raised in St Louis, MO. After his one (and only) visit to Bloomington he decided IU was where he would pursue his degree. In 2001, he graduated with a degree in Astrophysics: Astronomy and was commissioned as an officer in the USAF. During the next 6 years while on active duty, he served in 3 different assignments and one deployment to Iraq during which he received several medals including a Bronze Star. In 2007, he both married and joined a large energy company after departing the USAF. Since then, he and his family have lived in 4 different locations around the world including St John's, Newfoundland, Canada, Dubai, UAE and Lagos, Nigeria while working major energy projects. Donnie's sincere love for Bloomington and IU never waned since he departed and has often brought his family back in the Summer and Winter breaks to share his love of Bloomington and the Southern Indiana outdoors with them. He currently has four children ages 12, 11, 8, 6 and all are eager to move to Bloomington in the next couple years to finally see the Hoosiers play in person.

The outline plan application includes the following items:

- outline plan/site plan (Updated based on Feedback)
- application form and application fee payment (Previously Paid)
- storm water and drainage plans (Previously Submitted)
- sample housing mixes, including single family and townhomes (No change)
- detailed commitment on lot size and custom home mixes (Updated based on Feedback)

Respectfully submitted,

Donald Adkins Jr. & Kevin Schmidt

# PUD OUTLINE PLAN

### Housing & Vision

The Trails at Robertson Farm is envisioned to be both a highly desirable and attainable neighborhood that will serve middle-class families for decades and become a true landmark in the community. Like other locations in the USA, families in Bloomington/Monroe County are struggling for attainable middle-class housing. The Trails will help solve this problem by providing families multiple housing products for various income levels where they can flourish. Complete with numerous parks, ample green space, and access to the two most popular trails and outdoor features in Monroe County, the neighborhood will become a longstanding asset to the community. Whether they commute 4 miles by bicycle to downtown or 40 miles by car to Crane, all residents will be able to enjoy the benefits of living in an environmentally connected sustainable neighborhood with great parks and easy trail accesses.

# Phasing

Three phases are envisioned with roughly a third of the lots in each phase (~40-45 homes each). The exact split will be determined by the geographic zones and housing type. Phase 1 is planned as a 3-year buildout. Phases 2 and 3 are each estimated at 2.5 year buildouts. See 402039\_Base-Phase Exhibit.PDF.

- For Phase 1, assuming board approval in Spring, 2024, development will break ground in the Summer and the first lots will be constructed by Spring, 2025.
   Final lots will be developed by Spring, 2028.
- Phase 2 will likely have some development overlap with Phase 1. Assuming start of construction (utilities) of Phase 2 in Summer, 2027 and commencing home construction in Spring, 2028, development of Phase 2 is expected to be completed by Spring, 2030.
- Phase 3 would likely have some overlap with Phase 2. Assuming start of construction (utilities) for Phase 3 in Fall, 2028 and commencing home construction in Spring, 2029, Phase 3 is expected to be completed by Summer, 2031.

The PUD will provide a mix of housing types including 1500-3500 square feet single family homes for all sizes of families and triplex/townhome options for more affordable housing options that will meet the need of young professionals that are moving to the area.

# Variety of Housing Options

## **Single Family Homes:**

- Estimated size 1500-3500 square feet
- 2-car garage
- Most homes will be 1.5-story homes with options for ranches and 2 story homes
- Phases 1 & 3 will include selected lots developed with walk-out basements (South & East side of the neighborhood along the trails). These lots could be developed with larger, premium homes that will contribute to providing a variety of housing options in this neighborhood to include homeowners desiring a larger or more versatile home in a neighborhood that leverages access to the trails. These houses will be on very large lots in many cases and preserve the aesthetics of the area.

### Example Single Family Homes





Paired Single Family Homes (adjacent lots with a zero lot line at the common property line; 2 single family homes paired with a common wall at the common property line):

- Each home estimated at 1500-2500 square feet
- · 2-car garage
- 1 ½ or 2 story homes connected with smaller yards but easy access to common green space/parks (providing a housing option for buyers who do not want maintenance obligation for larger lawns)

# Example Paired Single Family Homes



**Triplex/Town Homes:** (provides housing options responsive to market and buyer demands)

- Each home estimated at 1500-2200 square feet
- 1 or 2-car garage
- 2 or 3 story building with shared common walls at lot lines and zero lot lines for the inner lot.
- This housing option requires narrower lots; and zero lot lines. Lot width will be no less than 35 feet.
- Provide great value for smaller families in a less dense than multifamily setting.

# Examples of Triplex/Townhomes





## **Development Areas**

- Zone A Primarily paired single family homes of an estimated size ranging from 1500-2500 square feet on lots that are smaller. Lots in this area are intended to range from 0.12 to 0.36 acres and facilitate quality attainable single family homes (in many cases a zero setback lot line will be required).
- Zone B Primarily Triplex/Townhomes (three adjacent lots with common walls at the common property lines.) The density provided by the triplex home design further maximizes housing opportunities in close proximity to trails but remains concealed in the middle of the development. Townhomes would be likely 1-2 story homes with 1 or 2 car garages on the street side with an estimated 1200-1800 square feet. This allows for a more diverse home offering opportunity in the area.
- Zone C The primary area for the standard single family home in the neighborhood. Lot size between 0.22 and 0.26 acres to match or exceed surrounding neighborhoods in lots size and space for families. Housing size is estimated between 1600-2800 square feet, subject to market demand.
- Zone D Single family homes on very large lots with focused trail access and possible walkout basements. This area will serve as a "transition" buffer between the walking trails/surrounding neighbors and The Trails development. With a lost size min of 0.30 acres this area is akin to Low Density Residential and significantly less dense than the surrounding neighborhoods. By design, the houses will be the cornerstone of the neighborhood and focus on aesthetically pleasing street and trail facades. House sizes estimated at 1500-3500 square feet and could be the more premium homes in the area with a specific desire to integrate them with the natural beauty of the trails in the area.

# **Development Zones**



A detailed table that provides a summary by zone and phase is attached in appendix A.

## Construction

- Maximum building height will depend on the zone. Zone A, C & D would be no more than 2 stories and Zone B would be maximum 3 stories.
- Side setback of 5 feet on lots for building permanent structures unless a zero lot line is required for shared-wall homes.

## Summary of Design Standards

All areas will maintain a minimum 50 foot lot width at the front yard setback of 20 feet, except minimum 35 foot lots for triplex/townhome lots. All areas will maintain a 20 foot rear yard setback. All areas contain a 5 foot side yard setback with exception for zero lot lines in paired single family Home lots and triplex/townhome common property line.

- Area 'A' has minimum lot size of 0.12 acres
- Area 'B' has a minimum lot size of 0.10 acres
- Area 'C' has a minimum lot size of 0.22 acres
- Area 'D' has a minimum lot size of 0.30 acres.

No soil will be disturbed on slopes greater than 25% for any residential home building, accessory structures, driveways and utilities.

## Parking Details

Parking will be allowed both in individual lots and on neighborhood streets. The neighborhood covenant will dictate specifics around the on-street parking related to time of day and seasonal restrictions.

## Neighborhood Signage

Signs will be utilized for common area and neighborhood identification. These signs will follow the placement and setback requirements set forth in the county zoning. This PUD will allow signs that are no larger than 64 square feet with a max sign height of 8 feet. Signs will be used as required to identify the neighborhood, common areas and site safety requirements. Signage will be covered with the preliminary Plat approval where possible at the time.

#### Residential Use

This PUD community is designed solely for residential use. Home offices and working from home will be allowed but further details will be determined and managed by the neighborhood association. Restrictive covenants will be adopted to protect and preserve the residential character of the neighborhood. This will ensure the neighborhood remains current as residential needs progress over time.

## **Proposed Amenities**

Amenities will be created leveraging the dedicated open spare, thus maximizing the recreation value of the open space. As permitted, amenities will also be developed within the dedicated utility easement area. Amenities may include (Pictures of examples below):

- Children's park A sustainable and environmentally friendly park that leverages
  the history and geographical features of the site. The neighborhood will have at
  least one park with other areas dispersed throughout the neighborhood as open
  space, community areas.
- Trail Terrace Park Leveraging the designated open space near to and with access to the Bloomington Rail Trail. The terraced park would be accessible to trail users, making the park an extraordinary neighborhood amenity.
- Dog park Given the current focus on family and pets, The Trails will develop the dog park as a meaningful addition and amenity to the neighborhood and provide a public service for all owners with furry family members.
- Neighborhood Orchard/Grow Area Leveraging the designated green space and focused on dual use we plan to have a location for the neighborhood to foster a community growing area.
- Drainage areas In accordance with the approved drainage plan, dedicated drainage areas will be installed and maintained by a neighborhood owners association. To the extent not incompatible with the drainage plan and dedicated drainage facilities, the open space comprising a drainage area will be designed for dual use as an amenity area with such use compatible with the preservation of the drainage features.
- Neighborhood Access to and utilization of trails- The Trails will create responsible, aesthetically pleasing and easy access for all neighborhood residents to the Clear Creek Trail and the Bloomington Rail Trails. This amenity is critical to the success of the Trails development. The neighborhood will leverage access to the trails and incorporate the trails in design and layout of the neighborhood, sidewalks and lots. The attention to trail accessibility will be consistent with City of Bloomington and Monroe County investment in the trail network as a key centerpiece of the community. The neighborhood will have 3-4 "Open Access" areas to the trails from the inside of the neighborhood.
- Individual Access to trails Further enhancing the neighborhoods benefits and use of local infrastructure, lots on the trails may have individual trail access.





# Children's "Pipe" Park



Terrace Park Renderings





## Community Grow Area



# Open Space

The development will include 25% of the area as dedicated open space, but where possible, feasible and appropriate designed for combined use with development of the various amenities. Dedicated open space will be comprised of improved open space, undisturbed open space, parks, drainage areas and deeded portions of selected lots primarily lots adjacent to a trail spaced throughout the area.

# Example of Open Space



## <u>Drainage Plan & Karst Feature Protection</u>

Development will incorporate all features of the approved drainage plan that was certified by the Drainage Commission in 2021. For any Karst features identified in the development area, a Karst conservancy area will be dedicated and/or approved Karst protection features installed. The Karst study performed on this property identified all minor Karst structures and conservancy areas have been identified on development plans. This PUD will follow Section 829 as guidance for Karst & Sinkhole design standards.

## Traffic

Access to SR 37 and I-69 is only a half mile away by major county road. This provides convenient access from the neighborhood to major road networks and major employers. South Victor Pike is deemed a "Major Connector" per Monroe County Thoroughfare Plan Adopted Dec 12, 2018. The Trails plans for a minor expansion of S Victor Pike and except for streets interior to the neighborhood, traffic will not circulate through or intrude on established neighborhoods or other residential developments. The Trails will continue to commit to necessary development improvements adjacent to the neighborhood on S Victor Pike in accordance with the Highway guidance/requests.

## Interior Streets & Sidewalks

- The interior streets and sidewalks will follow the provided typical street profile.
- Sidewalks will be installed at the right-of-way line 5 feet off the street with a minimum 4 foot sidewalk width and on at least one side of each interior street.
- The neighborhood sidewalks will connect with the trail access ways so that easy access between the neighborhood and the trails is afforded to walkers/runners/bicyclists.

#### Landscaping

- A tree will be provided a minimum of every 50 feet or every lot location whichever is greater.
  - → Tree quantities will increase by ~50% during The Trails development.
- Buffer yards are not planned to be installed along the North and South property lines. Type D buffer yards on the east side.
- Protective covenants will be adopted to ensure homeowner association maintenance and preservation of dedicated green space, parks and amenity space.
- Existing, mature, specimen quality trees located in the development will be preserved by best efforts, subject to tree removal only as required within the footprint of a building, road or other proposed improvement footprint.
- When developing parks and open space, the design will take into consideration the existing landscaping and leverage it while making the space more useable.

## **Environmental Considerations**

Development will employ best practices for environmental protection and sensitivity during construction and long-term maintenance:

- Drainage development plan will REDUCE the runoff and outflow rates by more than 80% and bring the 44+ Acres into compliance with the new "critical watershed" regulations.
- A tree preservation plan has been made for the site to preserve as many mature trees as possible.
- Maximize use of local (Southern Indiana) contractors and material suppliers, limiting over the road travel and truck hauling
- Minimize soil disturbance during construction and employ best practices to ensure protection of disturbed soils against siltation or erosion.
- Housing to employ energy star features.
- Adopt protective covenants that restrict construction of additional improvements (after original construction) to any lot that adds additional impervious surfaces.
- Require a single vendor trash removal service to serve the entire neighborhood.
- Adopt restrictive covenants prohibiting wood burning heat features as the primary source of home heat.
- Adopt neighborhood covenants that facilitate and encourage installation and use
  of solar energy features, including options for solar panels on original
  construction.

### Homeowner Association

Lots will be developed (individual home construction) and sold. The neighborhood is intended to be owner occupied. A homeowner association will be organized with mandatory membership for each lot owner. Restrictive covenants will empower the association to assess members for expenses incurred by the association to meet common expenses. The association will be empowered and will have the duty to ensure maintenance, repair and preservation of all dedicated open spaces, drainage facilities, amenities and other common areas. The Association will be empowered to generally enforce restrictive covenants and common areas and facilities will be conveyed to this Third Party. In summary the developers have committed to:

- Fully funded reserve to cover required maintenance & capital improvements
- Robust language to ensure common areas are managed.
- Ability for third party to complete maintenance and assess liens if necessary

# Appendix A: PUD Table

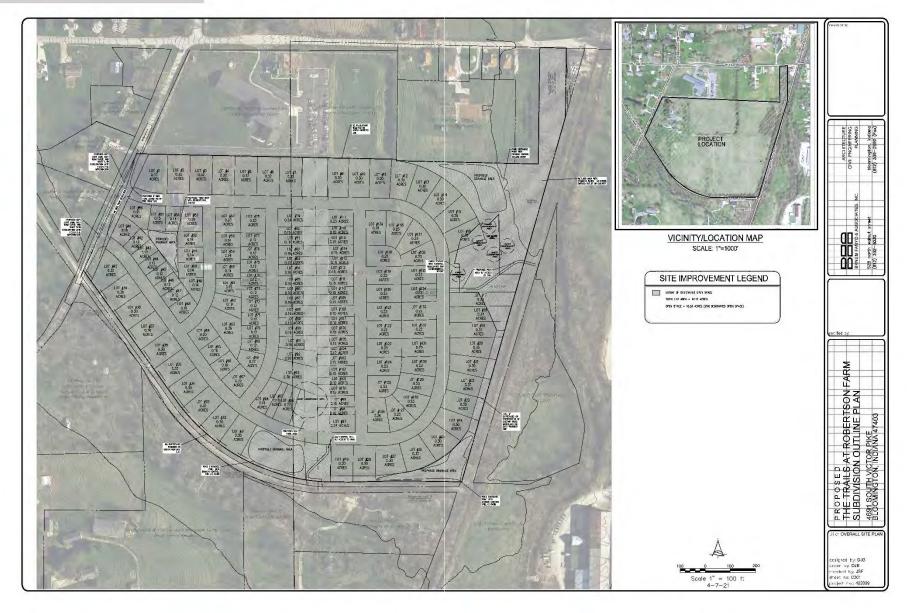
Area Table - Summarizes development details by Area

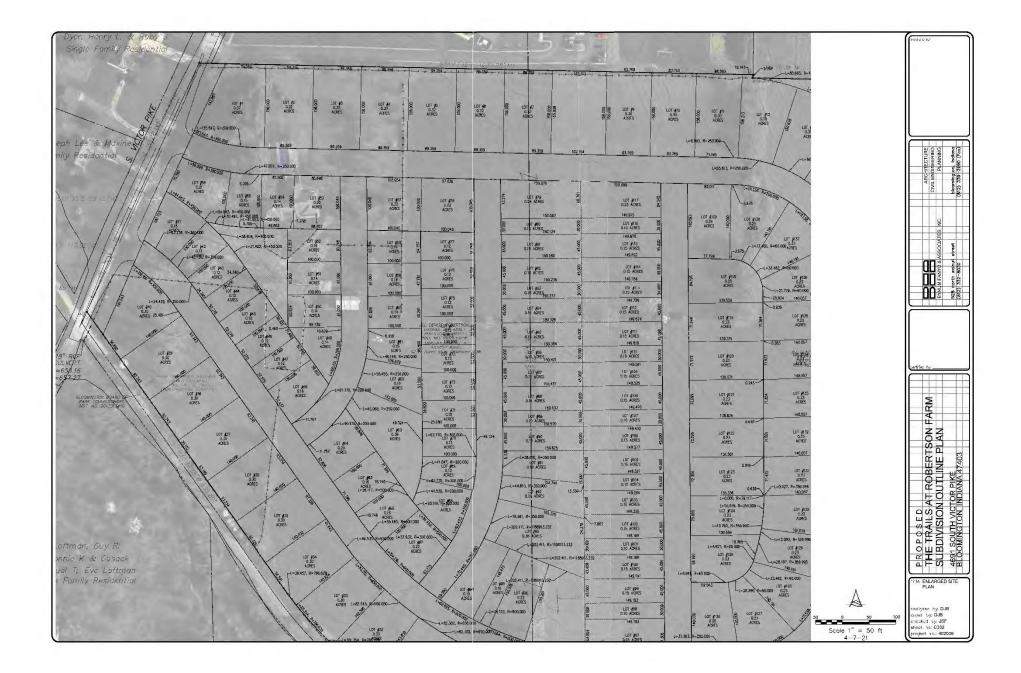
Phase Table - Summarizes scope of each Phase of the development.

# **EXHIBIT 3: New Summary Table by Area**

| Summary Table By Area                            |   |  |  |  |  |  |  |  |
|--|---|--|--|--|--|--|--|--|
| Category   | Area A  | Area B   | Area C   | Area D   |  |  |  |  |
| Estimated Area Size (Acre)                       | 6.2   | 6.38   | 5.18   | 13.36  |  |  |  |  |
| Lot Size Min (Acre)                              | 0.12  | 0.10   | 0.22   | 0.3  |  |  |  |  |
| Lot Size Avg. (Acre)                             | 0.17  | 0.17   | 0.23   | 0.32   |  |  |  |  |
| House Type                                       | Paired Single Family<br>Homes   | Single Family & Tri<br>plex/Town homes   | Single Family Homes  | Single Family Homes  |  |  |  |  |
| House Size (Sqft)                                | 1500-2500   | 1200-3000  | 1500-3500  | 1500-3500  |  |  |  |  |
| Garage Size                                      | 2 Car   | 1 or 2 Car   | 2 Car  | 2 Car  |  |  |  |  |
| Estimated Bedrooms                               | 2-3   | 2-3  | 2-4  | 2-4  |  |  |  |  |
| Occupancy Limits                                 | 6 People  | 6 People   | 8 People   | 8 People   |  |  |  |  |
| Max building height (ft)<br>(Excludes Basements) | 30  | 40   | 30   | 30   |  |  |  |  |
| Lot width Min (ft)                               | 50  | 50 (Note 1)  | 50   | 50   |  |  |  |  |
| Front Yard Setback (ft)                          | 20  | 20   | 20   | 20   |  |  |  |  |
| Side setbacks (ft)                               | 5<br>Excludes zero lot lines  | 5<br>Excludes zero lot lines   | 5  | 5  |  |  |  |  |
| Rear Setback (ft)                                | 20  | 20   | 20   | 20   |  |  |  |  |
| Number of Dwellings per<br>Acre                  | .5  | 6  | 6  | 6  |  |  |  |  |
| Phase Built                                      | 1 & 2   | 2  | 2 & 3  | 1 & 3  |  |  |  |  |
| Special Notes                                    | - Min Lots size for paired single-family home is 0.24 Acre - Zero setback lots lines required for shared walls - Community access to trails and green space | - Zero setback lot lines<br>required for shared walls<br>- Note 1: For connected<br>townhome min lot width<br>of 35ft may change lot min<br>and averages | - High quality SFH larger<br>lots<br>- Community access to<br>trails and green space<br>- Size subject to market<br>demand | - Higher scale homes on<br>very large lots to ensure<br>trail asthetics are<br>maintained.<br>- Units with possible<br>walkout basements |  |  |  |  |

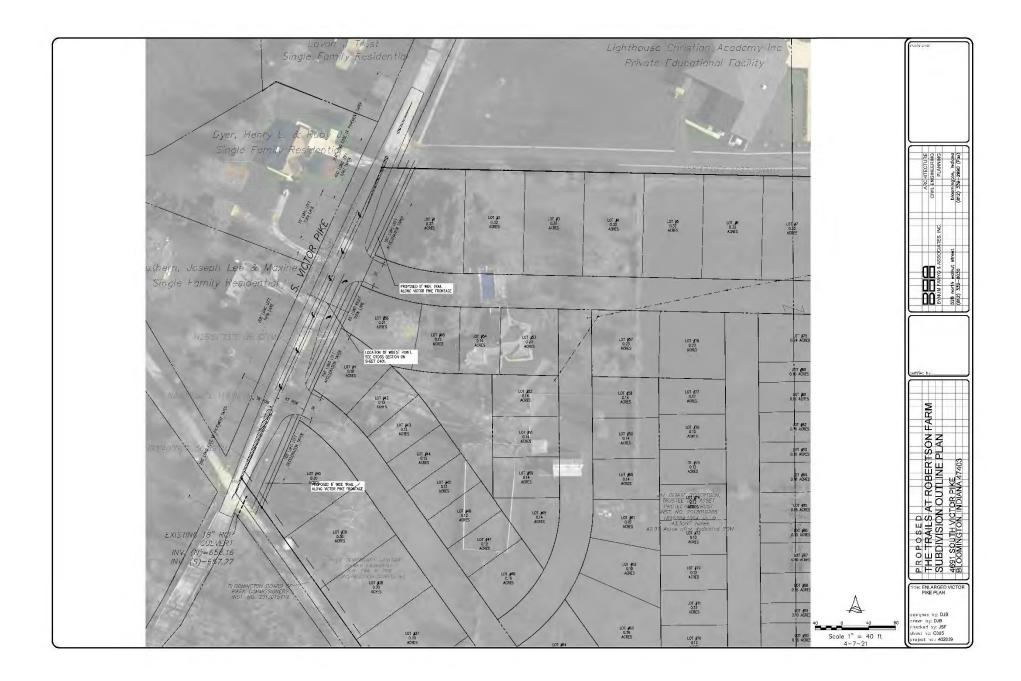
**EXHIBIT 4: New Petitioner Site Plan** 

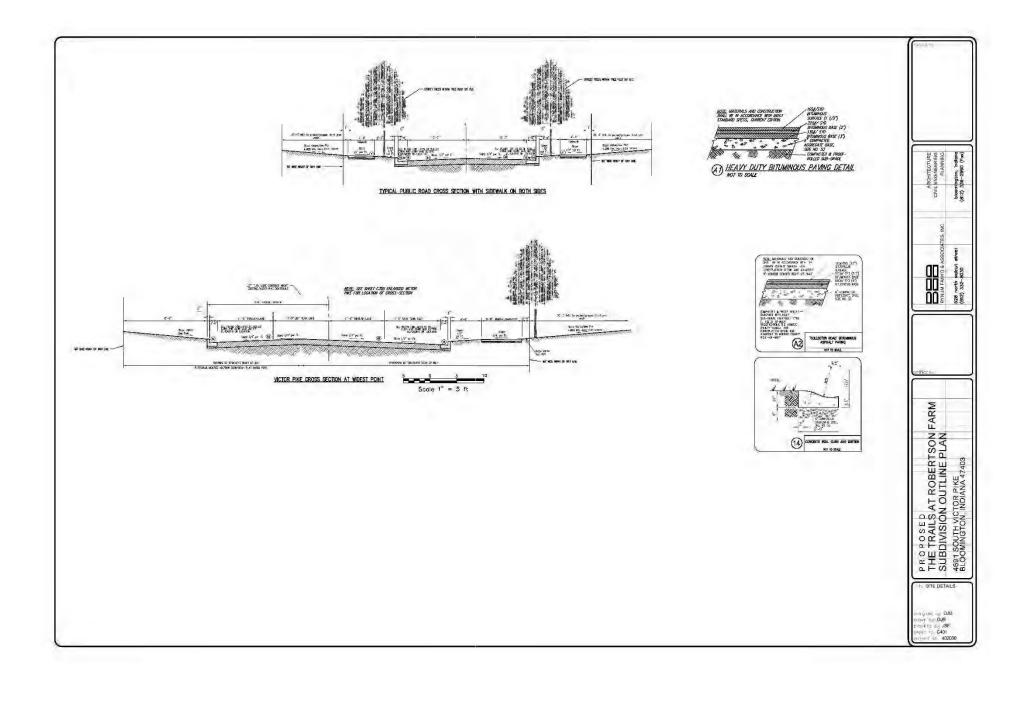




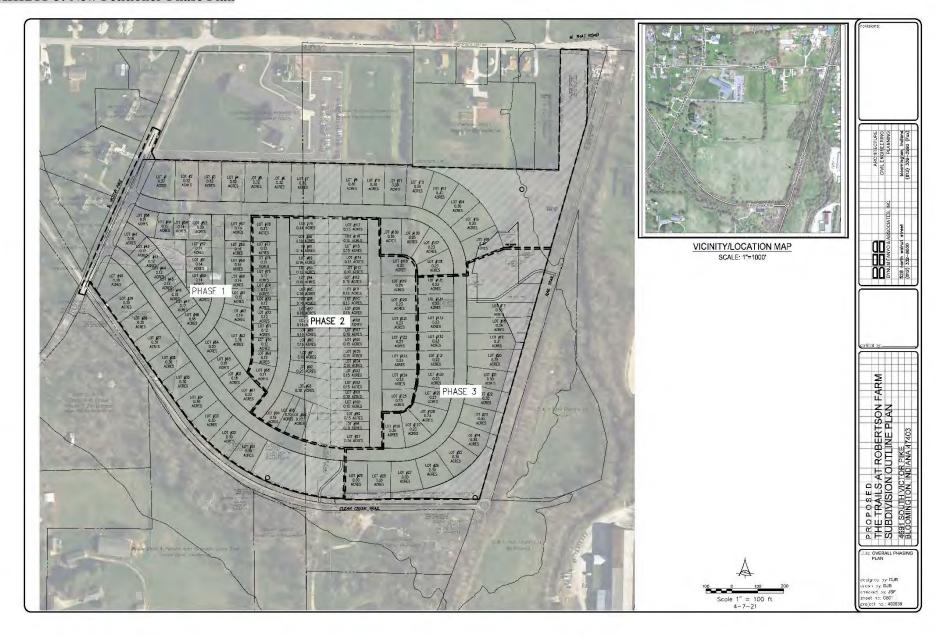




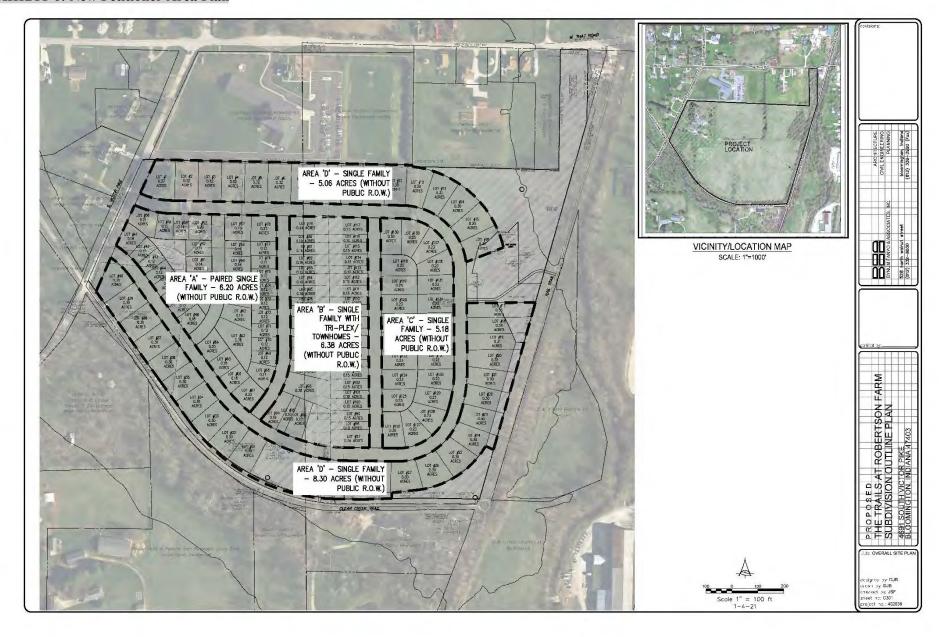




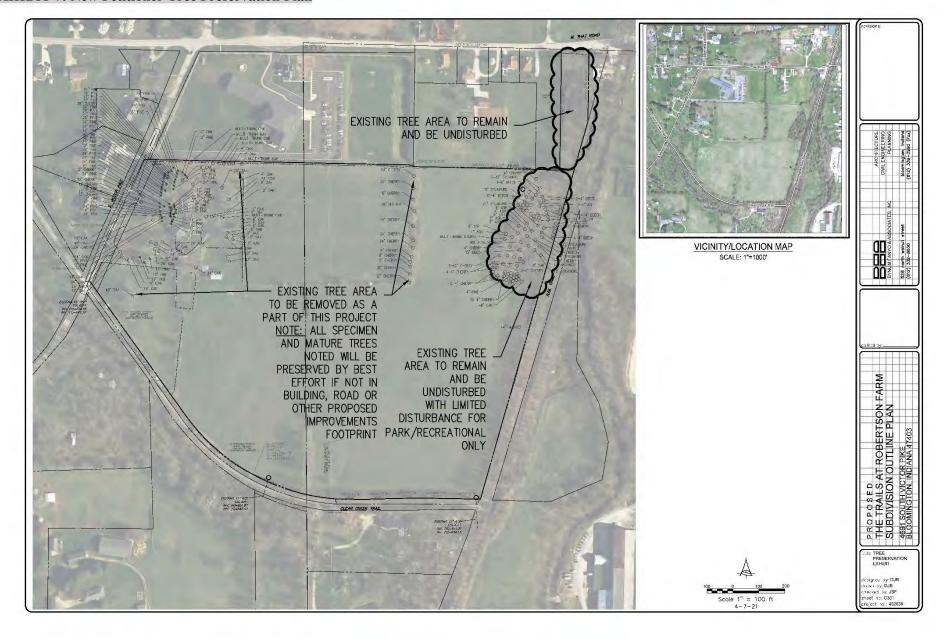
**EXHIBIT 5: New Petitioner Phase Plan** 



## **EXHIBIT 6: New Petitioner Area Plan**



**EXHIBIT 7: New Petitioner Tree Preservation Plan** 



## EXHIBIT 8: Capacity Letter - Sewer, Gas, Electricity and Water



September 11, 2023

Kevin Schmidt witwen@gmail.com Re: Will Serve; The Trails at Robertson Farm (formerly White Oak Subdivision), 4691 S Victor Pk

Dear Mr. Schmidt,

In response to your request to validate the May 27, 2021 issuance of availability of <u>Sanitary</u> <u>Sewer Service</u> to the above referenced location, please be advised that we will be able to provide service to you under our approved terms and conditions of service.

Please note, this approval is not to exceed the maximum discharge of what was originally submitted to us and what we agreed to serve; 196,000 gallons per day. Should any of the following changes occur, this approval is considered void, and a new letter must be requested:

- · Change in use type
- · Increase in maximum capacity
- · Increase in density

Please note also, this Will Scrve letter has now been renewed multiple times. If on-site construction activity, including but not limited to, the installation of what will become CBU's water and/or sewer infrastructure does not begin within 2 year of the date of this letter, the following will occur:

- · This Will Serve will expire
- Any future Will Serve letters related to this site will be reviewed and considered in accordance with the Utilities Service Board's current rules and regulations governing wastewater extensions to non-municipal customers, rather than pursuant to the rules and regulations that governed such extensions when this Will Serve was first issued

If you have any questions, please contact me.

Sincerely,

Vic Kelson Utilities Director

City of Bloomington Utilities

Office: (812)349-3650

Email: kelsonv@bloomington.in.gov





10/31/2023

Daniel Butler, P.E. Bynum Fanyo and Associates, Inc. 528 N. Walnut Street Bloomington, Indiana 47404 Phone 812.332.8030

Re: White Oaks Subdivision Bloomington, IN

Dear Kerry

Flease be advised that the proposed development, White Oaks Subdivision in Bloomington, IN. is located within the gas service territory of CenterPoint Energy.

The preliminary discussion regarding the above referenced project has determined that CenterPoint Energy has the capacity and facilities to provide adequate service to this proposed property; subject to our standard policies and procedures. Under Vectren's Terms and Conditions Applicable to Gas Service, CenterPoint Energy shall locate the point to which the service connection will be made, and subject to other provisions of CenterPoint Energy's Terms and Conditions, shall furnish, install and maintain all piping up to and including the meter set.

Once a new service request has been received, Vectren's engineering department will commence the design and engineering work necessary to extend service to the proposed site and will provide cost estimates to you. CenterPoint Energy looks forward to working with you to finalize a mutually acceptable proposal for the provision of gas service in Bloomington, IN.

Sincerely,

Kin Ketty

Kim Kelly Lead Account Manager 317-736-2915



October 31, 2023

To Whom it may concern,

We are pleased to learn of your proposed project at 4691 South Victor Pike, Bloomington, IN 47403.

Duke Energy will provide electric service within Duke Energy's service area boundaries, as prescribed by the tariffs on file with the Indiana Utility Regulatory Commission. Duke Energy will extend electric lines for your development at no cost, so long as the estimated cost to serve does not exceed the estimated revenues generated by your project.

Please call 1-800-774-0246 to set up an Engineering appointment for one of our representatives to meet with you on site to construct plans for your new service.

Sincerely,

Becca Brock Engineering Design Associate

## MSCREA & MSCREA

EDWARD F. MSCREA AARON E. MSCREA ATTORNEYS AT LAW

119 SOUTH WALNUT STREET

P.O. BOX 1310

BLOOMINGTON, INDIANA

47402-1310

TELEPHONE BIE 336-4840

FAX BIE 336-5307

ROBERT F. MCCREA 1915-1976 ELLEN A. LLOYD 1925-1991

June 4, 2021

TO: Daniel Butler, Prof. Engineer Bynum Fanyo & Associates 528 N. Walnut Street Bloomington, Indiana 47404

Via Email: dbutler@bynumfanyo.com

Re: The Trails at Robertson Farm 4691 South Victor Pike

As the attorney for Southern Monroe Water Authority, I have been asked by the Board of Directors to confirm in writing that SMWA has the capacity to serve the above proposed residential development with the following conditions:

- (1) This project is designed to have 145 building lots, and the maximum number of lots is 160.
- (2) The developer, Kevin Schmidt, will be responsible for all expenses associated with providing water as needed for the project, with the sole exception that SMWA agrees to pay the difference between the cost of a standard four-inch meter and the cost of a six-inch meter.
- (3) There will be no fire protection, and any hydrants associated with this project will be flush hydrants.

Sincerely yours,

McCREA & McCREA

Edward F. McCrea

EFMc:rb

## **EXHIBIT 9: Water/Wetland Delineation Summary Report**



1139 South Fourth Street • Louisville, KY 40203 • Phone 502.625.3009 • Fax 502.625.3077

#### VIA EMAIL

October 27, 2020

Mr. Kevin Schmidt White Oak Endeavors, LLC. witwen@gmail.com

Subject: Water/Wetland Delineation Summary Report

4691 South Victor Pike Property Monroe County, Indiana Redwing Project No.: 20-177

Dear Mr. Schmidt:

Redwing Ecological Services, Inc. (Redwing) is pleased to provide White Oak Endeavors, LLC. with this Water/Wetland Delineation Summary Report for the 45-acre site in Monroe County, Indiana. The goal of these services was to identify the location and extent of jurisdictional water/wetland features on the site in order to assist with development planning for this project.

Based on the delineation, jurisdictional water/wetland features present on the site include:

- one intermittent stream totaling 491 linear feet (0.028 acre)
- one wetland totaling 1.099 acre; consisting of 0.473 acre of emergent wetland and 0.626 acre of forested wetland

The wooded portions of the site and some isolated trees represent suitable summer roosting habitat for the federally endangered Indiana bat (*Myotis sodalis*) and the federally threatened northern long-eared bat (*Myotis septentrionalis*). This report presents the study methodology, results, and a discussion of development-related issues.

### **METHODOLOGY**

A delineation of jurisdictional waters of the U.S., including wetlands, within the project site was conducted by Redwing wetland scientists on October 19, 2020. It has not been verified by the U.S. Army Corps of Engineers (USACE) or Indiana Department of Environment (IDEM). The wetland delineation was accomplished through documentation of the presence/absence of hydric soils, wetland hydrology, and hydrophytic vegetation following the Routine On-Site Documentation Method, as defined in the Regional

Supplement to the Corps of Engineers Wetland Delineation Manual: Midwest Region Version 2.0 (August 2016). Soil, hydrology, and vegetation data were formally collected at six data points located within the project boundary. The presence of open waters, such as streams and ponds, within the site was determined based on evaluations of ordinary high-water mark (OHWM), defined bed and bank features, and flow regime. The quality of the on-site intermittent stream was assessed using the Rapid Bioassessment Protocol (RBP) developed by the U.S. Environmental Protection Agency. The boundary of delineated water/wetland areas was surveyed using Trimble, sub-meter accurate, GPS equipment.

Federally-listed species potentially present at the property include the gray bat (*Myotis grisescens*), Indiana bat, and northern long-eared bat. Suitable winter habitat for these species includes caves, abandoned mine portals, sinkholes, and other underground habitat used as hibernacula. The gray bat utilizes these features for roosting year-round. Suitable summer habitat for the Indiana bat includes forested areas comprised of trees that have a diameter-at-breast height (dbh) greater than five inches and exhibit exfoliating bark, cracks, or crevices. Areas that contain trees with a dbh greater than three inches with exfoliating bark, cracks, or crevices represent suitable summer habitat for the northern long-eared bat.

#### RESULTS

The approximately 45-acre has an address of at 4691 South Victor Pike and is located immediately southeast of the intersection of South Victor Pike and West That Road. This site consists primarily of open field, with smaller wooded areas associated with fence rows and riparian corridors. The water/wetland features delineated on site are depicted on Figure 1 and summarized in the following table.

| Feature                       | Stream<br>Length (feet) | Stream<br>Width (feet) | Area<br>(acres) | Federal Status | Wetland<br>Type |
|-------------------------------|-------------------------|------------------------|-----------------|----------------|-----------------|
| Intermittent Stream 1         | 491                     | 2.5                    | 0.028           | Jurisdictional |                 |
| Intermittent Stream Total     | 491                     |                        | 0.028           |                |                 |
| Wetland 1                     |                         |                        | 0.473           | Jurisdictional | Emergent        |
| yvedand I                     |                         |                        | 0.626           | Jurisdictional | Forested        |
| Jurisdictional Wetland Total  |                         |                        | 1.099           |                |                 |
| Jurisdictional Features Total | 491                     |                        | 1.127           |                |                 |

#### DISCUSSION

Jurisdictional waters of the U.S., including wetlands, are defined by 33 CFR Part 328.3 and are protected by Section 404 of the Clean Water Act (33 USC 1344), which is administered and entorced by the USACE. Water/wetland impacts are also regulated by the IDEM under Section 401 of the Clean Water Act and state

statues. Permit requirements will vary depending on final development plans. Under the new *Navigable Water Protection Rule: Definition of "Waters of the United States"* (NWPR), streams that exhibit only ephemeral flows, along with wetlands that do not directly abut intermittent or perennial streams, are considered federally non-jurisdictional and impacts to them are no longer regulated by the USACE. Ephemeral streams are no longer regulated by IDEM as waters of the state; however, federally non-jurisdictional wetlands are regulated by IDEM under the State Isolated Wetland Rule. Potential water/wetland permitting thresholds in Indiana are presented below.

- Avoidance of all water/wetland impacts would require no permits from, or coordination with, the USACE or IDEM. An official Jurisdictional Determination (JD) to approve the delineation can be obtained from the USACE if needed.
- Impacts to less than 0.1 acre of jurisdictional waters or 300 feet of stream do not require coordination with the USACE.
- Impacts to less than one acre of jurisdictional waters and 1,500 feet of stream can be authorized under a Regional General Permit (RGP) with the USACE.
- Impacts to greater than one acre of jurisdictional waters or 1,500 feet of stream will require a Section 404 Individual Permit with the USACE.
- Impacts to less than 0.1 acre of regulated wetlands and 150 feet of regulated stream (via culverting
  only) can be approved under an abbreviated RGP Notification process with IDEM. If IDEM has not
  responded within 30 days of notification, the project is considered approved.
- Impacts to greater than 0.1 acre of regulated wetlands and any amount of regulated stream (other than < 150 feet of culverting) will require an Individual WQC from the IDEM.</li>

The USACE typically requires compensatory mitigation if impacts to jurisdictional waters exceed 0.1 acre of total waters or 300 linear feet of stream. IDEM typically requires compensatory mitigation if impacts to jurisdictional waters exceed 150 linear feet of encapsulated stream or 0.1 acre of wetland. Mitigation can be provided through purchase of credits from either a private mitigation bank or the Indiana Stream and Wetland Mitigation Program (IN SWMP), or through permittee-responsible mitigation (PRM), which entails restoration/creation/preservation of stream or wetland habitat either on-site or within the immediate watershed. Streams must be mitigated based on type and quality, at ratios generally ranging from 0.5:1 to 3:1. Based on the RBP assessment, the on-site intermittent would likely require a 1:1 mitigation ratio. Use of the IN SWMP requires an additional 20% markup to account for temporal loss. Both bank and IN SWMP stream credits currently sell for approximately \$400 per linear foot. Wetlands must be mitigated, depending on type and quality, at ratios ranging from 2:1 for emergent wetland to 4:1 for forested wetland. Both bank and IN SWMP wetland credits currently sell for approximately \$80,000 per acre, with a 20% temporal loss markup for use of IN SWMP.

The use of permittee-responsible mitigation is only allowed as a last resort as it must be proven to be ecologically preferable over banks or the IN SWMP. This requires identification/purchase of an appropriate

site, detailed wetland/stream design plans, required construction/planting, up to ten years of monitoring, and protection of the site in perpetuity through recording of a conservation easement or deed restriction.

Under the Section 404 permitting process, the USACE determines if consultation with the U.S. Fish and Wildlife Service (USFWS) is required to address potential impacts to T/E species. The T/E species issues of concern on the property are limited to the clearing of mature trees which represent suitable Indiana and northern long-eared bat summer habitat. Consultation with the USFWS will be required to resolve potential impacts to habitat for these species and ensure compliance with the Endangered Species Act. This could involve limiting tree clearing to the unoccupied season (October 1 through March 31) or surveys to confirm the presence/absence of the species.

Under the 404 permitting process, the USACE also determines if consultation with the State Historic Preservation Office (SHPO) is required to address potential impacts to significant archaeological or cultural-historic resources. No historic structures appear to be present and we are not aware of any archeological or cultural resource surveys that have been conducted on the project site.

#### CONCLUSION

In conclusion, based on Redwing's delineation, jurisdictional water/wetland features present in the northeast corner of the site include one intermittent stream totaling 491 linear feet (0.028 acre) and one 1.099-acre wetland consisting of 0.473 acre of emergent wetland and 0.626 acre of forested wetland. This delineation has not been verified by the USACE. If impacts can be avoided by the proposed development, no permits from, or coordination with, the USACE, KDOW, USFWS or SHPO will be required. If a portion of these features must be impacted, the project can likely be authorized under a RGP with the USACE and an individual WCC with KDOW (assuming impacts total less than one acre). Impacts to greater than 0.1 acre of jurisdictional waters and 300 feet of jurisdictional stream will require mitigation. Specific permit requirements and mitigation costs can be determined once a proposed site design has been developed.

We appreciate the opportunity to assist you on this important project. Please call Rich Fangman or Ron Thomas at (502) 625-3009 with any questions on this report or the overall project.

Sincerely,

Richard Fangman (Oct 27, 2020 15:52 EDT) Richard J. Fangman

Project Aquatic Biologist

Ronald L Thomas Principal Senior Ecologist

FIN2030 Projects/2011 7-4691 Spath Victor Pive Repart Water Wetland Common Report do.

Attachments: Figure 1 – Water/Wetland Location Map

# **FIGURE**

## **EXHIBIT 10: Karst Report**

## hydrogeology inc.

1211 S Walnut St Bloomington, IN 47401

White Oak Endeavors LLC Kevin Schmidt witwen@gmail.com

Subject

4691 S. Victor Pike – Karst Survey Bloomington, IN

Dear Mr. Schmidt:

Date: November 6, 2020

Contact

Jason Krothe

Phone

1

812-219-0210

Email: jnkrothe@hydrogeologyinc.com

Hydrogeology Inc. (Hydrogeology) respectfully submits this summary report for the karst survey conducted at 4691 S. Victor Pike in Bloomington, Indiana (the Site, Figure 1)

#### 1 - Overview

The Site is located at 4691 S. Victor Pike in Bloomington, Indiana and is approximately 45-acres (Figure 2). The property currently consists of mostly open pasture and agricultural land with some areas of trees.

#### 2 - Geology / Physiography

The Site is in the Mitchell Plateau physiographic region, which is one of the primary karst forming areas in Indiana. The bedrock at the Harrodsburg Limestone (Hasenmueller, Estell, Keith, and Thompson, 2008). The Harrodsburg Limestone is composed primarily of limestone but includes small amounts of shale, dolostone, sandstone, and chert (Rexroad,1986). It is typically between 70 and 120 feet thick in the Bloomington area (Rexroad,1986). Several water wells registered with the Indiana Department of Natural Resources (IDNR) were located on or immediately adjacent to the Site (Figure 3). Based on the drilling logs for those wells, bedrock at the site is limestone with some layers of shale (Attachment A). Soil thickness was between 5 and 8 feet based on the drilling logs.

#### 3 - Sinkholes & Springs

Sinkholes are surface depressions that form in a variety of ways in karst areas (Figure 4). Sinkholes will often time have a swallow hole, which is an opening in the ground where water infiltrates. Groundwater flow in karst areas is predominantly fracture flow, meaning the bedrock itself has low permeability while the fractures in the bedrock are

1211 S Walnut St Bloomington, IN 47401

essentially open conduits that allow water, soil, and other materials to travel quickly through the subsurface. Water that drains into a sinkhole can eventually discharge at a karst spring (Figure 5).

#### 4 - Karst Field Survey

Hydrogeology conducted a karst field survey at the Site on October 22, and November 2, 2020. Prior to the field survey the area had received over 2 inches of rain in the previous week. All karst features were located with a sub-meter GPS unit. The following karst features were identified:

Sinkhole 1 - Sinkhole 1 is located on the northeast portion of the property (Figures 6 & 7) approximately 90 feet from the eastern property boundary. As defined by the outer rim, it is approximately 4-feet long by 3-feet wide and 2-feet deep. It is filled with barbed wire and other debris which prevented inspection of the bottom of the sinkhole for openings or bedrock. Photographs of Sinkhole 1 can be viewed in Attachment B, Page 20.

#### Mitigation

Due to the small size of Sinkhole 1 an aggregate cap could be installed (Attachment C). The purpose of an aggregate cap is to allow natural infiltration through the sinkhole while stabilizing the sinkhole.

Sinkhole 2 - Sinkhole 2 is located on the northeast portion of the property (Figures 6 & 7) approximately 120 feet from the eastern property boundary. As defined by the outer rim, it is approximately 6-feet long by 4-feet wide and 2-feet deep. It is filled with debris which prevented inspection of the bottom of the sinkhole for openings or bedrock. Photographs of Sinkhole 2 can be viewed in Attachment B, Page 20.

#### Mitigation

Due to the small size of Sinkhole 2 an aggregate cap could be installed (Attachment C). The purpose of an aggregate cap is to allow natural infiltration through the sinkhole while stabilizing the sinkhole.

Sinkhole 3 - Sinkhole 3 is located on the northeast portion of the property (Figures 6 & 7) approximately 250 feet from the eastern property boundary. As defined by the outer rim, it is approximately 5-feet long by 4-feet wide and 2-feet deep. It is soil filled with no visible opening or bedrock. Photographs of Sinkhole 3 can be viewed in Attachment B, Page 21.

1211 S Walnut St Bloomington, IN 47401

#### Mitigation

Due to the small size of Sinkhole 3 an aggregate cap could be installed (Attachment C). The purpose of an aggregate cap is to allow natural infiltration through the sinkhole while stabilizing the sinkhole.

Sinkhole 4 - Sinkhole 4 is located on the northeast portion of the property (Figures 6 & 7) approximately 200 feet from the eastern property boundary. As defined by the outer rim, it is approximately 10-feet long by 5-feet and 1-foot deep. It is soil filled with no visible opening or bedrock. Photographs of Sinkhole 4 can be viewed in Attachment B, Page 21.

#### Mitigation

Due to the small size of Sinkhole 4 an aggregate cap could be installed (Attachment C). The purpose of an aggregate cap is to allow natural infiltration through the sinkhole while stabilizing the sinkhole.

Sinkhole 5 - Sinkhole 5 is located on the northeast portion of the property (Figures 6 & 7) approximately 300 feet from the eastern property boundary. As defined by the outer rim, it is approximately 6-feet long by 5-feet and 1-foot deep. It is grass filled with no visible opening or bedrock. Photographs of Sinkhole 5 can be viewed in Attachment B, Page 18.

#### Mitigation

Due to the small size of Sinkhole 5 an aggregate cap could be installed (Attachment C). The purpose of an aggregate cap is to allow natural infiltration through the sinkhole while stabilizing the sinkhole.

Sinkhole 6 -Sinkhole 6 is located on the south side of the property (Figure 6 & 8) approximately 240 feet from the southern property boundary. As defined by the outer rim, it is approximately 100-feet long by 85-feet wide and 2-feet deep and approximately 0.15 acres. The sinkhole is grass filled and flat bottomed with no exposed bedrock or openings in the soil. Photographs of Sinkhole 6 can be viewed in Attachment B, Pages 13 and 14.

#### Mitigation

In accordance with Chapter 829 of the Monroe County Zoning Ordinance, Sinkhole 6 should have a Sinkhole Conversancy Area (SCA) that encompasses the entire sinkhole and all the area within twenty-five (25) feet of the sinkhole rim.

1211 S Walnut St Bloomington, IN 47401

#### 5 - Study Limitations

The identification of karst features at the Site was limited to surface inspection. No subsurface investigations were conducted. Undocumented karst features are possible in the subsurface. Dense vegetation was present in portions of the Site. Identification of karst surface features can be difficult in areas with dense ground vegetation. Clearing of ground vegetation was not within the scope of work for this survey.

#### 6 - Karst Best Management Practices

The following are karst management practices that should be considered for the Site:

#### Water Quality

Groundwater recharge in karst areas predominately occurs through sinkholes and swallets. Water infiltrates into a sinkhole or swallet, then flows along karst conduits and typically discharges to a karst spring. There is minimal filtration of the water throughout this shallow groundwater cycle. Therefore, it is critical to maintain or improve water quality at the Site.

Impacts to water quality at the Site are most likely to occur due to erosion and sediment mobilization during construction. Erosion and sediment control will be critical to preventing water quality impacts. All sinkholes should be protected with appropriate erosion and sediment controls for the duration of construction at the Site. In addition to these measures a low salt no herbicide/pesticide spray policy should be implemented for the Site.

## Drainage Alteration

Alteration of natural drainage patterns can result in the development of new sinkholes, particularly when run-off is concentrated. The drainage plan for the Site should maintain the existing drainage patterns wherever possible and prevent concentrated run-off. To prevent development of new sinkholes, detention basins should be lined with an impervious material.

#### Unknown Karst Features

Previously unknown karst features are possibly present in the subsurface at the Site. If any previously unknown karst feature is identified during development of the Site, the features should be protected with erosion and sediment control measures and inspected by a karst specialist.

1211 S Walnut St Bloomington, IN 47401

#### 7 - Summary

A desktop review and survey were conducted at the Site to identify any karst features. There was approximately 2 inches of rain at the Site in the week prior to the initial field survey on October 22, 2020. Six sinkholes were identified at the Site. Sinkholes 1-5 could receive an aggregate cap treatment to allow natural infiltration and stabilize the sinkholes. Sinkhole 6 should receive a SCA in accordance with the Monroe County Zoning Ordinance. The karst field survey was limited to surface inspection with no subsurface investigation. Unknown karst features are likely present in the subsurface at the Site. If a previously unknown karst feature is discovered during construction activities the feature should be protected with erosion and sediment control measures and inspected by a karst specialist.

Hydrogeology appreciates the opportunity to provide this summary report. If you have any questions, concerns, or comments please do not hesitate to contact me directly at (812) 219-0210.

Sincerely,

Hydrogeology Inc.

Jason N. Krothe, LPG IN-2511

President

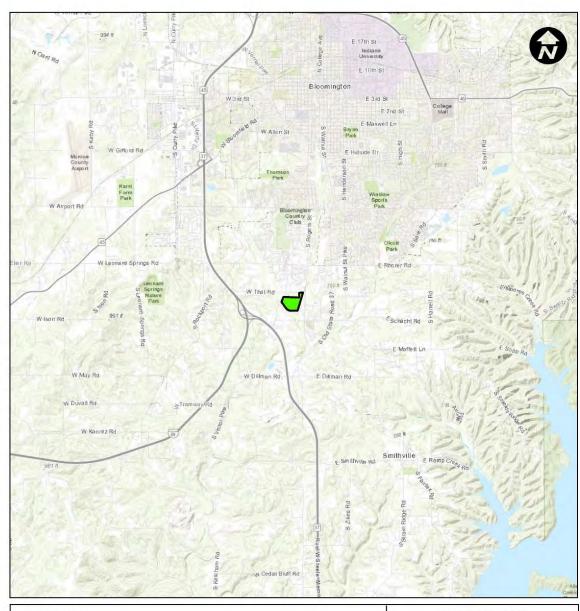


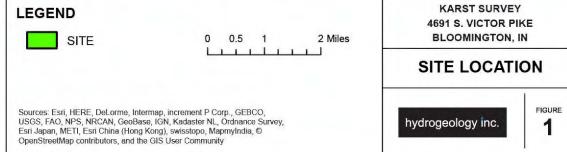
1211 S Walnut St Bloomington, IN 47401

#### References

Hasenmueller, W. A., Estell, C. M., Keith, B., and Thompson, T. A., 2009, Bedrock geologic map of Monroe County, Indiana: Indiana Geological Survey Miscellaneous Map 73, scale 1:48,000.

Rexroad, C. B., 1986, Harrodsburg Limestone, in Shaver, R. H., Ault, C. H., Burger, A. M., Carr, D. D., Droste, J. B., Eggert, D. L., Gray, H. H., Harper, Denver, Hasenmueller, N. R., Hasenmueller, W. A., Horowitz, A. S., Hutchison, H. C., Keith, B. D., Keller, S. J., Patton, J. B., Rexroad, C. B., and Wier, C. E., Compendium of Paleozoic rock-unit stratigraphy in Indiana—a revision: Indiana Geological Survey Bulletin 59, p. 57-59.









SITE BOUNDARY

0 250 500 Feet

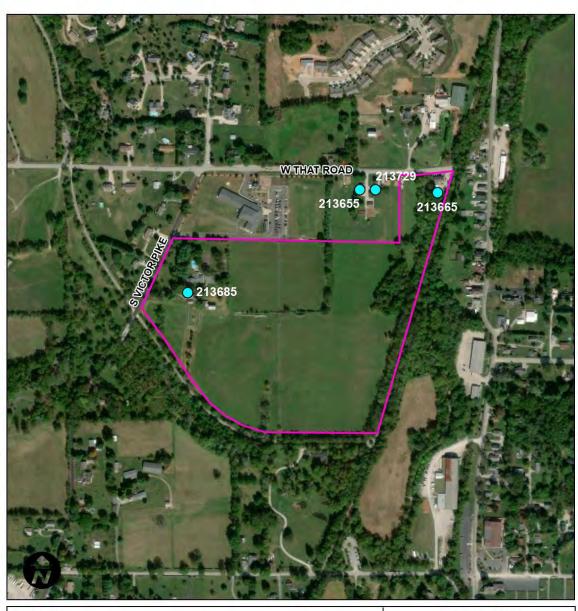
KARST SURVEY 4691 S. VICTOR PIKE BLOOMINGTON, IN

### SITE BOUNDARY

Source: Esri, DigitalGlobe, GeoEye, Earthstar Geographics, CNES/Airbus DS, USDA, USGS, AeroGRID, IGN, and the GIS User Community

hydrogeology inc.

FIGURE 2







SITE BOUNDARY



WATER WELL

0 250 500 Feet

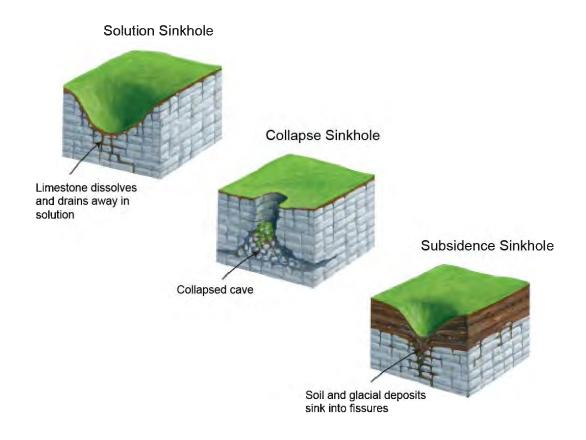
KARST SURVEY 4691 S. VICTOR PIKE BLOOMINGTON, IN

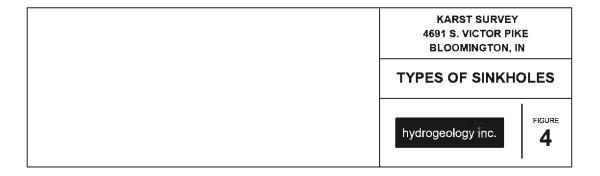
### **WATER WELLS**

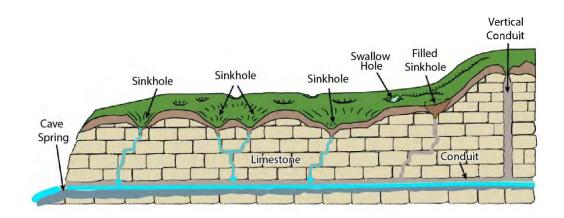
hydrogeology inc.

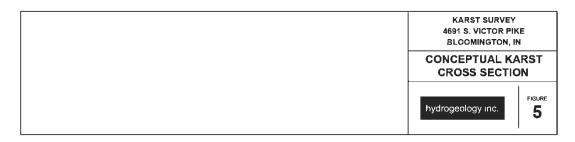
FIGURE 3

Source: Esri, DigitalGlobe, GeoEye, Earthstar Geographics, CNES/Airbus DS, USDA, USGS, AeroGRID, IGN, and the GIS User Community





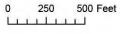








SITE BOUNDARY



KARST SURVEY 4691 S. VICTOR PIKE BLOOMINGTON, IN

### **SINKHOLES**

SINKHOLE LOCATION (size not to scale)

Source: Esri, DigitalGlobe, GeoEye, Earthstar Geographics, CNES/Airbus DS, USDA, USGS, AeroGRID, IGN, and the GIS User Community

hydrogeology inc.







SITE BOUNDARY

250 ft 125

4691 S. VICTOR PIKE **BLOOMINGTON, IN** 

## **SINKHOLES 1-5**

SINKHOLE LOCATION (size not to scale)

Source: Esri, DigitalGlobe, GeoEye, Earthstar Geographics, CNES/Airbus DS, USDA, USGS, AeroGRID, IGN, and the GIS User Community

hydrogeology inc.

FIGURE 7



SITE BOUNDARY

125 250

KARST SURVEY 4691 S. VICTOR PIKE **BLOOMINGTON, IN** 

**SINKHOLE 6** 

O SINKHOLE 6 (to scale)

hydrogeology inc.

FIGURE 8

Source: Esri, DigitalGlobe, GeoEye, Earthstar Geographics, CNES/Airbus DS, USDA, USGS, AeroGRID, IGN, and the GIS User Community

4691 S. Victor Pike – Karst Survey ATTACHMENT A - Water Wells Logs

#### Record of Water Well Indiana Department of Natural Resources

Reference Number 213655 Driving Direction to Well Date Completed ON THAT ROAD 1 BNLOCK WEST RODGERS ST. ON SO. SIDE ROAD 10/23/1973

 Owner-Contractor
 Name
 Address
 Telephone

 Owner
 ERNEST KJEFFABER #1
 R5 BLOOMINGTON, IN
 Not available

 Driller
 GEORGE SNAPP
 R5 BLOOMINGTON, IN
 Not available

 Operator
 GEORGE SNAPP
 License Not available

**Construction Details** 

Well Use: Home Drilling Method: Cable Tool Pump Type: Not available Pump Setting Depth: Not available available

Casing Length: 7.0 Material: Not available Diameter: 5.6 Screen Length: Not available Slot Size: Not available Slot Size: Not available

Well Capacity
Test
Type of Test: Not available
Test Rate: Not available
Drawdown: Not available
Static Water Level: 15.0 ft
Bail Test Rate: 1.0 gpm
Bail Test Rate: 1.0 gpm
Bail Test Rate: 1.0 gpm

Grouting Information

Material: Not available

Depth: From (not available) To (not available)

Installation Method: Not available

Number of Bags Used: Not available

Well Abandonment Sealing Material: Not available Depth: From (not available) To (not available)

Installation Method: Not available Number of Bags Used: Not available

County: MONROE

Range: 1W
Topo Map: CLEAR CREEK
Field Located By: JRD
Courthouse Location By: Not available
Location Accepted w/o Verification By: Not

Section: NW of the NW of the SE of Section 20
Grant: Not available
Field Located On: 7/27/1978
Courthouse Location On: Not available
Location Accepted w/o Verification On: Not

available

Subdivision Name: Not available

Ft W of EL: 2,050.0

Ft E of WL: Not available

Ground Elevation: 670.0

Available

available

Lot Number: Not available

Ft N of SL: 2,500.0

Ft S of NL: Not available

Depth of Bedrock: 5,0

Bedrock Elevation: 665.0 Aquifer Elevation: Not available UTM Easting: 539531 UTM Northing: 4329337

Well Log

Administrative

| Тор | Bottom | Formation                 |  |
|-----|--------|---------------------------|--|
| 0.0 | 5.0    | TOP SOIL CLAY             |  |
| 5.0 | 70.0   | LIMESTONE W/ LAYERS SHALE |  |

Township: 8N

Comments MC 665; OWNER VERIFIED; 10 FT EAST OF HOUSE THAT'S PAINTED GREEN

#### Record of Water Well Indiana Department of Natural Resources

| Reference<br>Number | Driving Direction to Well Date Complete                               | ď |
|---------------------|---|---|
| 213685              | FROM BLOOMINGTON SOUTH ROGERS STREET TOE THAT ROAD, 0.25 TO 10/5/1978 |   |

| Owner-<br>Contractor | Name             | Address                  | Telephone     |
|----------------------|------------------|--------------------------|---------------|
| Owner                | DONALD ROBERTSON | Not available            | Not available |
| Driller              | FRED SMITH       | 8565 O. S. ROAD 37 SOUTH | Not available |
| Operator             | ERED SMITH       | License Not available    | 0.1-00-00-0   |

#### **Construction Details**

| Well   | Use: Home   | <b>Drilling Method:</b> Cable Tool   | Pump Type: Not available     |
|--------|---|--------------------------------------|------------------------------|
|        | Depth: 200,0                                      | Pump Setting Depth: Not<br>available | Water Quality: Not available |
| Casing | Length: 9.0                                       | Material: Not available              | Diameter: 6.0                |
| Screen | Length: Not available<br>Slot Size: Not available | Material: Not available              | Diameter: Not available      |

| Well Capacity | Well | Capacity |
|---------------|------|----------|
|---------------|------|----------|

| Well Capacity<br>Test | Type of Test: Not available | Test Rate: Not available    | Bail Test Rate: 0,5 gpm for 1 0 hrs. |
|-----------------------|-----------------------------|-----------------------------|--------------------------------------|
|                       | Drawdown: Not available     | Static Water Level: 25.0 ft | Bailer Drawdown: 175.0 ft            |

| Grouting    |
|-------------|
| Information |

| Material: Not available | Depth: From (not available) To (not available) |
|-------------------------|--|
|                         |  |

Installation Method: Not available Number of Bags Used: Not available

#### Well **Abandonment**

Sealing Material: Not available Depth: From (not available) To (not available) Installation Method: Not available Number of Bags Used: Not available

#### Administrative County: MONROE

Range: 1W Topo Map: CLEAR CREEK Field Located By: PES Courthouse Location By: Not available

Location Accepted w/o Verification By: Not Subdivision Name: Not available

Ft W of EL: Not available Ft E of WL: 2,200.0 Ground Elevation: 679.0 Bedrock Elevation: 673.0 UTM Easting: 539189

### Township: 8N

Section: SE of the NE of the SW of Section 20

Grant: Not available Field Located On: 7/2/1980

Courthouse Location On: Not available Location Accepted w/o Verification On: Not

available Lot Number: Not available Ft N of SL: 1,900.0 Ft S of NL: Not available Depth of Bedrock: 6.0

Aquifer Elevation: Not available UTM Northing: 4329137

#### Well Log

| Тор  | Bottom | Formation |  |
|------|--------|-----------|--|
| 0,0  | 6.0    | SOIL      |  |
| 6.0  | 90.0   | LIMESTONE |  |
| 90.0 | 200.0  | SHALE     |  |

#### Comments MC 673; NEIGHBOR VERIFIED

#### Record of Water Well Indiana Department of Natural Resources

Reference Number

**Driving Direction to Well** 

**Date Completed** 

213665

CLEAR CREEK, IN

Not available

Owner-Contractor Owner

Name JACK JAMES Address **CLEAR CREEK**  Telephone

Driller Operator GEORGE SNAPP GEORGE SNAPP

R5 BNOX 86 BLOOMINGTON, IN License Not available

Not available Not available

Well

**Construction Details** Use: Home

Drilling Method: Cable Tool Pump Setting Depth: Not

Pump Type: Not available

Depth: 95.0

available

Water Quality: Not available

Casing Screen Length: 10.0

Material: Not available

Diameter: 6.0

Length: Not available Slot Size: Not available Material: Not available

Diameter: Not available

Well Capacity

Test

Type of Test: Not available

Test Rate: Not available

Bail Test Rate: 3.0 gpm

Drawdown: Not available

Static Water Level: 10 0 ft

Bailer Drawdown: 80.0 ft.

Grouting Information

Material: Not available

Depth: From (not available) To (not available)

Installation Method: Not available

Number of Bags Used: Not available

Well Abandonment

Sealing Material: Not available

Depth: From (not available) To (not available)

Installation Method: Not available

Number of Bags Used: Not available

Administrative

County: MONROE

Range: 1W

Topo Map: CLEAR CREEK

Field Located By: JRD Courthouse Location By: Not available Location Accepted w/o Verification By: Not

available

Subdivision Name: Not available Ft W of EL: 1,500.0 Pt E of WL: Not available

Ground Elevation: 655.0 Bedrock Elevation: 647.0

UTM Easting: 539684

Township: 8N

Section: NE of the NW of the SE of Section 20

Grant: Not available

Field Located On: 7/28/1977

Courthouse Location On: Not available Location Accepted w/o Verification On: Not

available

Lot Number: Not available Ft N of SL: 2,500.0 Ft S of NL: Not available Depth of Bedrock: 8.0

Aquifer Elevation: Not available

UTM Northing: 4329330

Well Log

| Тор | Bottom | Formation           |  |
|-----|--------|---------------------|--|
| 0.0 | 8.0    | TOP SOIL            |  |
| 8.0 | 95.0   | HARD BLUE LIMESTONE |  |

Comments POST OFFICE VERIFIED

#### Record of Water Well Indiana Department of Natural Resources

| Reference<br>Number | Driving Direction to Well                                | Date Completed |
|---------------------|--|----------------|
|                     | ON THAT DO AD WEST OF DOORSO STORET AT DISABORS IN ABOUT |                |

ON THAT ROAD WEST OF ROGERS STREET AT CLEAR CREEK, IN. ABOUT 213729 7/10/1979

0.25 MILE WEST ON SO. SIDE OF ROAD

Owner-Name Address Telephone Contractor Owner ERNEST M. KIEFFABER 689 WEST THAT ROAD Not available 4625 S. STANISFER LANE Driller GEORGE SNAPP Not available BLOOMINGTON, IN Operator GEORGE SNAPP License Not available

Construction Details

Use: Home Drilling Method: Cable Tool Pump Type: Not available Well Pump Setting Depth: Not Depth: 80 0 Water Quality: Not available

available Casing Length; 9.5 Material: Not available Diameter: 5.6

Screen Length: Not available Material: Not available Diameter: Not available Slot Size: Not available

Well Capacity

Type of Test; Not available Test Rate: Not available Bail Test Rate: 2.0 gpm Test

> Drawdown: Not available Static Water Level: 15 0 ft. Bailer Drawdown; 60,0 ft.

Grouting Material: Not available Depth: From (not available) To (not available) Information

Installation Method: Not available Number of Bags Used: Not available

Well Depth: From (not available) To (not available) Sealing Material: Not available

Abandonment Installation Method: Not available Number of Bags Used: Not available

County: MONROE **Administrative** Township: 8N

Range: 1W Section: SE of the SW of the NE of Section 20

Topo Map: CLEAR CREEK Grant: Not available Field Located By: PES Field Located On: 7/2/1980

Courthouse Location By; Not available Courthouse Location On: Not available Location Accepted w/o Verification By: Not Location Accepted w/o Verification On; Not

available available

Subdivision Name: Not available Lot Number: Not available Ft W of EL: 1,900.0 Ft N of SL: 2,550.0 Ft E of WL: Not available Ft S of NL: Not available

Ground Elevation: 658.0 Depth of Bedrock: 8 0 Bedrock Elevation: 650 0 Aquifer Elevation: Not available UTM Easting: 539556 **UTM Northing: 4329337** 

Well Log

| Тор | Bottom | Formation             |
|-----|--------|-----------------------|
| 0,0 | 8,0    | TOP SOIL REDICLAY     |
| 8.0 | 80.0   | IHARD WHITE LIMESTONE |

Comments VERIFIED BY MAILBOX

4691 S. Victor Pike – Karst Survey ATTACHMENT B - Field Photographs

Karst Survey, 4691 S. Victor Pike Street
Attachment B

### Photograph Number:

-

### Coordinates (UTM Meters)

NΑ

Photograph Date: 10-22-20

#### Comments:

West side of property, looking



Recommended treatment:

NA

### Photograph Number:

-

### Coordinates (UTM Meters)

NA

Photograph Date: 10-22-20

#### Comments:

Surface depression from tree roots. West side of the property.



Recommended treatment:

Karst Survey, 4691 S. Victor Pike Street
Attachment B

### Photograph Number:

1

Coordinates (UTM Meters)

NA

Photograph Date: 10-22-20

Comments:

Northwest corner of property, looking southeast.



 ${\bf Recommended\ treatment:}$ 

NA

### Photograph Number:

1

Coordinates (UTM Meters)

NA

Photograph Date: 10-22-20

Comments:

North side of property looking

west.



Recommended treatment:

Karst Survey, 4691 S. Victor Pike Street
Attachment B

### Photograph Number:

5

Coordinates (UTM Meters)

NA

Photograph Date: 10-22-20

#### Comments:

North side of property, looking southwest.



Recommended treatment:

NA

### Photograph Number:

6

### Coordinates (UTM Meters)

NA

Photograph Date: 10-22-20

### Comments:

Brush pile on north side of the property, looking south.



Recommended treatment:

Karst Survey, 4691 S. Victor Pike Attachment B

### Photograph Number:

7

Coordinates (UTM Meters)

NA

Photograph Date: 10-22-20

Comments:

North side of property, looking

south.



 ${\bf Recommended\ treatment:}$ 

NA

### Photograph Number:

8

Coordinates (UTM Meters)

NΑ

Photograph Date: 10-22-20

Comments:

North side of the property, looking southeast.



Recommended treatment:

Karst Survey, 4691 S. Victor Pike Attachment B

### Photograph Number:

9

Coordinates (UTM Meters)

NA

Photograph Date: 10-22-20

#### Comments:

Tree adjacent to abandoned well. Various debris piled in this area.



Recommended treatment:

NA

### Photograph Number:

10

### Coordinates (UTM Meters)

NΑ

Photograph Date: 10-22-20

### Comments:

Tree adjacent to abandoned well. Various debris piled in this area.



Recommended treatment:

Karst Survey, 4691 S. Victor Pike
Attachment B

### Photograph Number:

11

Coordinates (UTM Meters)

NΑ

Photograph Date: 10-22-20

Comments:

Looking south.



Recommended treatment:

NA

### Photograph Number:

12

Coordinates (UTM Meters)

NΑ

Photograph Date: 10-22-20

Comments:

South side of property, looking

southwest.



Recommended treatment:

Karst Survey, 4691 S. Victor Pike Attachment B

### Photograph Number:

13

Coordinates (UTM Meters)

NA

Photograph Date: 10-22-20

Comments:

West side of property, looking

east.



Recommended treatment:

NA

### Photograph Number:

14

Coordinates (UTM Meters)

NΑ

Photograph Date: 10-22-20

Comments:

South side of property, looking

northwest.



Recommended treatment:

Karst Survey, 4691 S. Victor Pike
Attachment B

### Photograph Number:

15

Coordinates (UTM Meters)

NA

Photograph Date: 10-22-20

Comments:

Building foundation.



Recommended treatment:

NA

### Photograph Number:

16

Coordinates (UTM Meters)

NΑ

Photograph Date: 10-22-20

Comments:

Middle of property looking

south



Recommended treatment:

Karst Survey, 4691 S. Victor Pike Attachment B

### Photograph Number:

17

Coordinates (UTM Meters)

NA

Photograph Date: 10-22-20

Comments:

South side of property, looking

east.



Recommended treatment:

NA

### Photograph Number:

18

Coordinates (UTM Meters)

NA

Photograph Date: 10-22-20

Comments:

South side of property, looking

west.



Recommended treatment:

Karst Survey, 4691 S. Victor Pike Attachment B

### Photograph Number:

10

Coordinates (UTM Meters)

NΑ

Photograph Date: 10-22-20

#### Comments:

South side of property, looking northwest.



Recommended treatment:

NA.

### Photograph Number:

20

Coordinates (UTM Meters)

NΑ

Photograph Date: 10-22-20

### Comments:

Center of the property looking

north.



Recommended treatment:

Karst Survey, 4691 S. Victor Pike Attachment B

### Photograph Number:

2

Coordinates (UTM Meters)

NΑ

Photograph Date: 10-22-20

Comments:

Center of the property looking

north.



Recommended treatment:

NA

### Photograph Number:

22

Coordinates (UTM Meters)

NA

Photograph Date: 10-22-20

Comments:

Center of the property looking

southwest.



Recommended treatment:

Karst Survey, 4691 S. Victor Pike Attachment B

### Photograph Number:

23

Coordinates (UTM Meters)

NA

Photograph Date: 10-22-20

#### Comments:

Middle of the property, looking southeast.





### Photograph Number:

24

Coordinates (UTM Meters)

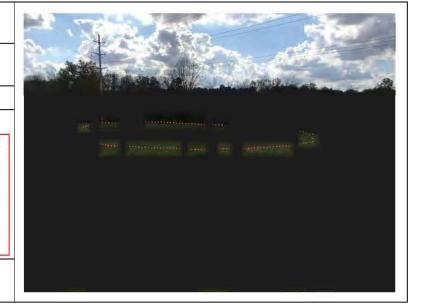
NΑ

Photograph Date: 10-22-20

### Comments:

South side of the property looking at Sinkhole 6 (circled in red)

Recommended treatment: NA



Karst Survey, 4691 S. Victor Pike Attachment B

### Photograph Number:

Coordinates (UTM Meters)

NΑ

Photograph Date: 10-22-20

#### Comments:

South side of the property looking at Sinkhole 6 (circled in red)



Recommended treatment:

### Photograph Number:

26

Coordinates (UTM Meters)

Photograph Date: 10-22-20

### Comments:

South side of property, looking

northeast.



Recommended treatment:

NΑ

Karst Survey, 4691 S. Victor Pike Attachment B

### Photograph Number:

27

Coordinates (UTM Meters)

NA

Photograph Date: 10-22-20

#### Comments:

South side of property, looking southwest at surface drainage features.



Recommended treatment:

NA.

### Photograph Number:

28

Coordinates (UTM Meters)

NA

Photograph Date: 10-22-20

### Comments:

South side of property, looking

north.



Recommended treatment:

Karst Survey, 4691 S. Victor Pike Attachment B

### Photograph Number:

20

Coordinates (UTM Meters)

NA

Photograph Date: 10-22-20

#### Comments:

South side of property, looking northwest.



Recommended treatment:

NA

### Photograph Number:

30

Coordinates (UTM Meters)

NA

Photograph Date: 10-22-20

### Comments:

South side of property, looking north.



Recommended treatment:

Karst Survey, 4691 S. Victor Pike Attachment B

### Photograph Number:

31

Coordinates (UTM Meters)

NA

Photograph Date: 10-22-20

Comments:

South side of property, looking



Recommended treatment:

NA.

### Photograph Number:

32

Coordinates (UTM Meters)

NA

Photograph Date: 10-22-20

Comments:

East side of property, looking

south.



Recommended treatment:

Karst Survey, 4691 S. Victor Pike Attachment B

### Photograph Number:

Coordinates (UTM Meters)

NA

Photograph Date: 10-22-20

Comments:

East side of property, looking south.



Recommended treatment:

### Photograph Number:

34

Coordinates (UTM Meters)

Photograph Date: 10-22-20

Comments:

East side of property, looking

south.



Recommended treatment:

Karst Survey, 4691 S. Victor Pike Attachment B

### Photograph Number:

35

Coordinates (UTM Meters)

NA

Photograph Date: 10-22-20

Comments:

Looking northeast at Sinkhole

5



Recommended treatment:

NA

### Photograph Number:

36

Coordinates (UTM Meters)

NA

Photograph Date: 10-22-20

Comments:

East side of property, looking

north.



Recommended treatment:

Karst Survey, 4691 S. Victor Pike Attachment B

### Photograph Number:

37

Coordinates (UTM Meters)

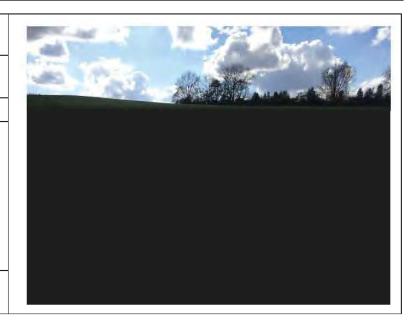
NA

Photograph Date: 10-22-20

Comments:

North side of property, looking

southwest.



Recommended treatment:

NA

### Photograph Number:

38

Coordinates (UTM Meters)

NΑ

Photograph Date: 10-22-20

Comments:

East side of property, looking

north.



Recommended treatment:

Karst Survey, 4691 S. Victor Pike Attachment B

### Photograph Number:

30

Coordinates (UTM Meters)

NA

Photograph Date: 10-22-20

Comments:

Sinkhole 1.



Recommended treatment:

NA

### Photograph Number:

40

Coordinates (UTM Meters)

NA

Photograph Date: 10-22-20

Comments:

Sinkhole 2.



Recommended treatment:

Karst Survey, 4691 S. Victor Pike Attachment B

Photograph Number:

4

Coordinates (UTM Meters)

NA

Photograph Date: 10-22-20

Comments:

Sinkhole 3.



Recommended treatment:

NA

Photograph Number:

42

Coordinates (UTM Meters)

NΑ

Photograph Date: 11-2-20

Comments:

Sinkhole 4.



Recommended treatment:

Karst Survey, 4691 S. Victor Pike Attachment B

### Photograph Number:

43

Coordinates (UTM Meters)

NA

Photograph Date: 10-22-20

Comments:

East side of the property look

northeast.



 ${\bf Recommended\ treatment:}$ 

NA.

### Photograph Number:

44

Coordinates (UTM Meters)

NA

Photograph Date: 10-22-20

Comments:

North side of the property looking northwest.



Recommended treatment:

Karst Survey, 4691 S. Victor Pike Attachment B

#### Photograph Number:

45

Coordinates (UTM Meters)

NA

Photograph Date: 10-22-20

#### Comments:

North side of the property looking southwest.



Recommended treatment:

NA

#### Photograph Number:

46

#### Coordinates (UTM Meters)

NA

Photograph Date: 10-22-20

#### Comments:

North side of the property looking south.



Recommended treatment:

Karst Survey, 4691 S. Victor Pike Attachment B

#### Photograph Number:

47

Coordinates (UTM Meters)

NA

Photograph Date: 10-22-20

Comments:

North side of the property look-

ing west.



 ${\bf Recommended\ treatment:}$ 

NA

#### Photograph Number:

48

Coordinates (UTM Meters)

NΑ

Photograph Date: 10-22-20

Comments:

North side of the property look-

ing southwest.



Recommended treatment:

Karst Survey, 4691 S. Victor Pike Attachment B

#### Photograph Number:

Coordinates (UTM Meters)

Photograph Date: 10-22-20

Comments:

North side of the property look-

ing south.



Recommended treatment:

#### Photograph Number:

50

Coordinates (UTM Meters)

Photograph Date: 10-22-20

Comments:

Northeast corner of the proper-

ty looking north.



Recommended treatment:

Karst Survey, 4691 S. Victor Pike Attachment B

#### Photograph Number:

51

Coordinates (UTM Meters)

NA

Photograph Date: 10-22-20

#### Comments:

Northeast corner of the property looking north at creek.



 ${\bf Recommended\ treatment:}$ 

NA.

#### Photograph Number:

52

Coordinates (UTM Meters)

NA

Photograph Date: 10-22-20

#### Comments:

Northeast corner of the property looking west.



Recommended treatment:

Karst Survey, 4691 S. Victor Pike
Attachment B

#### Photograph Number:

53

Coordinates (UTM Meters)

NΑ

Photograph Date: 10-22-20

#### Comments:

Northeast corner of the property looking north.





#### Photograph Number:

54

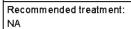
Coordinates (UTM Meters)

NA

Photograph Date: 10-22-20

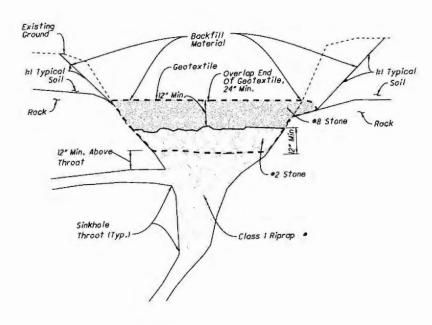
#### Comments:

Northeast corner of the property looking west.





4691 S. Victor Pike – Karst Survey ATTACHMENT C - Aggregate Cap



<u>Sinkhole Repair - Aggregate Cap</u> N.T.S.

#### **EXHIBIT 11: Preliminary Drainage and Water Quality Calculations**

#### Trails at Robertson Farm Subdivision

Preliminary Drainage & Water Quality Calculations
December 16, 2023

#### **Project Narrative:**

Located 0.14 mi south of the intersection of S. Victor Pk. and W. That Rd. and bound by a private residence to the north, the Clear Creek Trail to the south, rail road to the east and S. Victor Pk. to the west a 42.97 ac parcel of land at 4691 S. Victor Pk. will be developed into a residential neighborhood consisting of 145 lots containing a mix of duplexes and single family homes. The site currently consists of a single family home and the majority of the property is a hay field.

The site can be broken down into 3 drainage basins. The Northeast Basin drains to the northeast towards the Bloomington Rail Trail (BRT) and the adjacent Clear Creek. The Southeast Basin drains southeast also to the BRT and adjacent Clear Creek. The Central Basin is further divided in two subbasins and both generally drain southwesterly. Any existing culverts at the discharge locations for these basins will be hydraulically analyzed to check detained discharges from the project.

Due to the site's proximity within a county classified critical watershed (Clear Creek north of Jackson Creek confluence and West Fork Clear Creek) the site must meet more stringent stormwater guidelines as approved at a late 2020 meeting of the Monroe County Drainage Board.

The following are calculations that reflect these new guidelines for the design of four detention/water quality ponds where indicated in the included Post-Developed Basin Map. Calculations are included for detention, water quality, flood routing and storm sewer infrastructure design and begins with the discussion on special design criteria for the project.

#### **Design Criteria:**

Due to the project's location within a critical watershed the County is requiring more stringent post-developed drainage requirements. On behalf of the client, White Oak Endeavors, LLC, Bynum Fanyo agrees to design stormwater infrastructure in accordance with the following:

**During Construction Sediment:** It will be specified in the project plans that detention ponds are to be excavated before earth disturbing activities and that each will be outfitted with a perforated PE pipe riser surrounded with crushed stone to clean during-construction discharges prior to leaving the site. Sediment storage will be at a rate of 1,800 cf per acre.

**Post-Developed Sediment Storage:** An amount equal to 5% of the required detention volume will be added to the storage volume of each pond for post-construction sediment storage. The current requirement is 0%.

**Pre-Developed Runoff Rates:** Pre-developed 10% EP and 1% EP runoff rates will be calculated using Hydraflow's Hydrographs program using the 24-hr NRCS method with the Type II rainfall distribution as required. Runoff travel times will be generated using the TR-55 method. Results will only be used for comparison purposes to Allowable Pond Discharge Rates discussed below.

**Post-Developed Runoff Rates:** Post-developed 10% EP and 1% EP runoff rates will be calculated using Autodesk Civil 3D Hydraflow Hydrographs Extension program using the 24-hour NRCS method with the Type II rainfall distribution as required by the County MS4 Coordinator. Runoff travel times will be generated using the TR-55 method. Curve numbers will be selected based on the next less infiltrating capacity classification.

Allowable Detention Pond Discharge Rates: Per latest approved guidelines for critical watersheds detention ponds will be designed to release post-developed 10% EP runoff to a rate of 0.25 cfs/ac and 1% EP runoff to a rate of 0.45 cfs/ac. The current ordinance requires that the 10% EP post-developed runoff be released at the 10% EP predeveloped rate and the same for 1% EP storm. The Technical Standards from the most current proposed <u>draft</u> of the future ordinance require 0.50 cfs/ac and 0.90 cfs/ac respectively.

**Water Quality:** Once site improvements are complete and grass is established throughout the site, all ponds will be converted to permanent water quality/detention facilities. The ponds will be outfitted with perforated underdrain pipes contained in clean crushed stone, covered with amended soil and heavily vegetated with a water friendly variety of plantings.

**Pond Emergency Overflow:** – Emergency overflow spillways will be designed to safely handle 1.25 times the post-developed 1% EP rates plus any 1% EP offsite discharges entering the detention pond.

Offsite Runoff through the Project: Offsite runoff will either be routed around detention ponds where room allows or allowed to enter the ponds. Where offsite runoff enters a pond a secondary outlet control structure may be added in the pond with its control elevation set at the on-site 100-year pond flood elevation.

**Storm Sewerage:** Stormwater inlet pipes will be sized using the Rational Method for the 10% EP storm. Inlet piping from low points in the design and culverts will be sized for the 1% EP storm.

**Drainage Easements:** Detention ponds, their discharge pipes and overflow spillways, flood routing paths and storm sewer infrastructure will be covered by drainage easements in the County's favor where required by the County MS4 Coordinator.

**Sinkhole Conservancy:** Sinkhole conservancy easements will be recorded in the County's favor per current easement requirements.

### **Impact Statement:**

### Summary:

# Basin Characteristics (Pre-Developed Conditions)

# <u>Basin Characteristics</u> (Post-Developed Conditions)

|       | 10% EP Storm       |                    |                |               |               |            |
|-------|--------------------|--------------------|----------------|---------------|---------------|------------|
| Basin | Pre-Developed      | Post-Developed     | Post-Developed | Pre-Developed | (1) Allowable | (2) Actual |
| Area  | Drainage Area (Ac) | Drainage Area (Ac) | Q (cfs)        | Q (cfs)       | Q (cfs)       | Q (cfs)    |
| NE    | 7.10               | 7.10               |                | 1.78          | 1.78          |            |
| SE    | 5.74               | 5.74               |                | 1.44          | 1.44          | -          |
| C1    | 21.76              | 21.76              |                | 5.44          | 5.44          |            |
| C2    | 4.01               | 4.01               |                | 1.00          | 1.00          |            |

|       | 1% EP Storm        |                    |                |               |               |            |
|-------|--------------------|--------------------|----------------|---------------|---------------|------------|
| Basin | Pre-Developed      | Post-Developed     | Post-Developed | Pre-Developed | (1) Allowable | (2) Actual |
| Arca  | Drainage Area (Ac) | Drainage Area (Ac) | Q (cfs)        | Q (cfs)       | Q (cfs)       | Q (cfs)    |
| NE    | 7.10               | 7.10               |                | 3.20          | 3.20          |            |
| SE    | 5.74               | 5.74               |                | 2.58          | 2.58          | -          |
| Cl    | 21.76              | 21.76              |                | 9.79          | 9.79          |            |
| C2    | 4.01               | 4.01               |                | 1.80          | 1.80          |            |

Allowable Discharge: 10% EP at 0.25 cfs/ac and the 1% EP at 0.45 cfs/ac.
 Actual Discharge = Pond Discharge as calculated via hydrograph routing.

| 10 YEAR DETENTION/WATER QUALITY POND TABLE<br>for C1 POND |  |  |                                 |  |
|---|--|--|---------------------------------|--|
| (1) STORM DURATION (hours)                                | (2)<br>2 YR POST<br>WATERSHED<br>DISCH RATE<br>(cfs) | (3)<br>2 YR PRE<br>(ALLOWABLE<br>DISCH. RATE)<br>(cfs) | (4)<br>REQ'D<br>STORAGE<br>(cf) |  |
| 0.083   | 100.51   |  | 28,747                          |  |
| 0.166   | 76.39  |  | 42,753                          |  |
| 0.25  | 58,05  |  | 47,744                          |  |
| 0.50  | 39.71  | 5.44   | 62,200                          |  |
| 0.75  | 30,54  |  | 68,335                          |  |
| 1   | 21.37  |  | 57,826                          |  |

| for POND C1                |  |  |                                 |  |
|----------------------------|--|--|---------------------------------|--|
| (1) STORM DURATION (hours) | (2)<br>Anticip. 100 YR POST<br>WATERSHED<br>DISCH. RATE<br>(cfs) | (3)<br>100 YR PRE<br>(ALLOWABLE<br>DISCH. RATE)<br>(cfs) | (4)<br>REQ'D<br>STORAGE<br>(ti) |  |
| 0.083                      | 141.06   |  | 39,693                          |  |
| 0.166                      | 107,20   |  | 58,697                          |  |
| 0.25                       | 81,47  |  | 65,050                          |  |
| 0.50                       | 55.74  | 9.79   | 83,399                          |  |
| 0.75                       | 42.87  |  | 90,060                          |  |
| 1                          | 30.01  |  | 73.399                          |  |

Pond C1 discharge to pond number C2 before leaving the site. Using Hydruflow Hydrographs runoff from their contributing areas were routed through ponds C1 and C2 then combined

Column 3 is the max, allowed in a critical watershed at its computed time of concentration. The above table was used to determine the minimum volume required for pond C1.

This pand will have an average contour 2D area of 24,000 sq. ft. (4' deep = 96,000 provided)

| 10 YEAR DETENTION/WATER QUALITY POND TABLE<br>for C2 POND |   |  |                                 |  |
|---|---|--|---------------------------------|--|
| (1) STORM DURATION (hours)                                | (2)<br>2 YR POST<br>WATERSHED<br>DISCH. RATE<br>(cfs) | (3)<br>2 YR PRE<br>(ALLOWABLE<br>DISCH. RATE)<br>(cfs) | (4)<br>REQ'D<br>STORAGE<br>(cf) |  |
| 0.083   | 18.52   |  | 5,298                           |  |
| 0.166   | 14.07   |  | 7,876                           |  |
| 0.25  | 10.69   |  | 8.794                           |  |
| 0.50  | 7.31  | 1.00   | 11,453                          |  |
| 0.75  | 5.62  |  | 12,578                          |  |
| 1   | 3.93  |  | 10,636                          |  |

| 0 YEAR DETENTION/WATER QUALITY POND TABLE<br>for POND C2 |  |  |                                 |  |
|--|--|--|---------------------------------|--|
| (1) STORM DURATION (hours)                               | (2)<br>Anticip. 100 YR POST<br>WATERSHED<br>DISCH. RATE<br>(cfs) | (3)<br>100 YR PRE<br>(ALLOWABLE<br>DISCH. RATE)<br>(cfs) | (4)<br>REQ'D<br>STORAGE<br>(cf) |  |
| 0.083  | 25.85  |  | 7,272                           |  |
| 0.166  | 19.65  |  | 10,756                          |  |
| 0.25   | 14,93  |  | 11,915                          |  |
| 0.50   | 10,21  | 1.80   | 15,264                          |  |
| 0.75   | 8.01   |  | 16,907                          |  |
| 1  | 5.49   |  | 13,395                          |  |

Pond C1 discharge to pond number C2 before leaving the site. Using Hydraflow Hydrographs runoff from their contributing areas were routed through ponds C1 and C2 then combined

Column 3 is the max, allowed in a critical watershed at its computed time of concentration. The above table was used to determine the minimum volume required for pond C2.

This pend will have an average contour 2D area of 9,300 sq. ft. (4' deep = 37,200 provided)

| 10 YEAR DETENTION/WATER QUALITY POND TABLE<br>for NE POND |   |  |                                 |  |
|---|---|--|---------------------------------|--|
| (1) STORM DURATION (hours)                                | (2)<br>2 YR POST<br>WATERSHED<br>DISCH. RATE<br>(cfs) | (3)<br>2 YR PRE<br>(ALLOWABLE<br>DISCH. RATE)<br>(cfs) | (4)<br>REQ'D<br>STORAGE<br>(cf) |  |
| 0.083   | 32.79   |  | 9,377                           |  |
| 0.166   | 25.66   |  | 14,390                          |  |
| 0.25  | 21,30   |  | 17,714                          |  |
| 0.50  | 14.43   | 1.78   | 22,960                          |  |
| 0.75  | 11.14   |  | 25,483                          |  |
| 1   | 9.15  |  | 26,753                          |  |

| YEAR DETENTION/WATER QUALITY POND TABLE<br>for NE POND |  |  |                                 |  |
|--|--|--|---------------------------------|--|
| (1) STORM DURATION (hours)                             | (2)<br>Anticip. 100 YR POST<br>WATERSHED<br>DISCH. RATE<br>(cfs) | (3)<br>100 YR PRE<br>(ALLOWABLE<br>DISCH. RATE)<br>(cfs) | (4)<br>REQ'D<br>STORAGE<br>(cf) |  |
| 0.083  | 45.78  |  | 12,875                          |  |
| 0.166  | 35,56  |  | 19,499                          |  |
| 0.25   | 29,62  |  | 23,976                          |  |
| 0.50   | 20,64  | 3,20   | 31,654                          |  |
| 0.75   | 16,37  |  | 35,855                          |  |
| -1   | 13.77  |  | 38,369                          |  |

Pond C1 discharge to pond number C2 before leaving the site. Using Hydraflow Hydrographs runoff from their contributing areas were routed through ponds C1 and C2 then combined.

Column 3 is the max, allowed in a critical watershed at its computed time of concentration. The above table was used to determine the minimum volume required for NE POND.

This pend will have an average contour 2D area of 22,000 sq. ft. (4' deep - 88,000 provided)

| 10 YEAR DETENTION/WATER QUALITY POND TABLE<br>for SE POND |   |  |                                 |  |
|---|---|--|---------------------------------|--|
| (1) STORM DURATION (hours)                                | (2)<br>2 YR POST<br>WATERSHED<br>DISCH. RATE<br>(cfs) | (3)<br>2 YR PRE<br>(ALLOWABLE<br>DISCH. RATE)<br>(cfs) | (4)<br>REQ'D<br>STORAGE<br>(cf) |  |
| 0.083   | 26.51   |  | 7,581                           |  |
| 0.166   | 20.75   |  | 11,636                          |  |
| 0.25  | 17.22   |  | 14,320                          |  |
| 0.50  | 11,67   | 1.44   | 18,567                          |  |
| 0.75  | 9,00  |  | 20,582                          |  |
| 1   | 7.40  | 1  | 21.635                          |  |

| for SE POND                |  |  |                                 |  |
|----------------------------|--|--|---------------------------------|--|
| (I) STORM DURATION (hours) | (2)<br>Anticip. 100 VR POST<br>WATERSHED<br>DISCH. RATE<br>(cfs) | (3)<br>100 YR PRE<br>(ALLOWABLE<br>DISCH. RATE)<br>(cfs) | (4)<br>REQ'D<br>STORAGE<br>(cf) |  |
| 0.083                      | 37.61  |  | 10,411                          |  |
| 0.166                      | 28.75  |  | 15,770                          |  |
| 0.25                       | 23,95  |  | 19,393                          |  |
| 0.50                       | 16.69  | 2,58   | 25,610                          |  |
| 0.75                       | 13.20  |  | 28,913                          |  |
| 1                          | 11.14  |  | 31,073                          |  |

Pond C1 discharge to pond number C2 before leaving the site. Using Hydraflow Hydrographs runoff from their contributing areas were routed through ponds C1 and C2 then combined

Column 3 is the max, allowed in a critical watershed at its computed time of concentration. The above table was used to determine the minimum volume required for SE POND.

This pend will have an average contour 2D area of 19,500 sq. ft. (4' deep - 78,000 provided)

#### **EXHIBIT 12: Remonstrance for REZ-21-1**

December 27, 2023

#### inester@co.monroe.in.us

Subject: Remonstrance incorporating opposition to REZ-21-1 into PUO-23-7.

To the Monroe County Plan Commission: c/o Jackie N. Jelen, Director Monroe County Planning Department

We live directly south of the old Robertson Farm, located at 4691 S. Victor Pike, Bloomington, IN 47403. White Oaks Endeavors LLC, its current owner, seeks approval of PUO-23-7. In 2021 the same petitioner sought a rezone of the same land using a similar development plan, filed as REZ-21-1. (The current proposal is even denser and includes a three-story apartment style building right by the Clear Creek Trail.)

Strong public opinion was expressed against REZ-21-1, often through postcards, letters, and emails. The developers, the real estate, and the development plan are substantially identical. The impacts on the environment and neighborhood are as bad or worse. Therefore, the postcards, letters and emails opposing REZ-21-1 are also applicable to PUO-23-7. The attached Exhibit contains 125 postcards and 43 letters and emails submitted in opposition to REZ-21-1. Please consider them in full force and effect with respect to PUO-23-7.

Respectfully yours,

Guy and Connie Loftman Eve Loftman Cusack and Sam Cusack 4835 S. Victor Pike Bloomington, IN 47403

Dave and Patty Busch 1250 W. Church Lane Bloomington, IN 47403

#### **EXHIBIT 9:** Letters of Opposition

August 8, 2021

To the Monroe County Plan Commission:

 On page 231 of the July 20 Plan Commission Packet, Petitioner states, "S Victor Pike has a 90 ft ROW ...". (Exhibit A.) This is not true. The Right of Way is 53 feet by the Robertson Farm and less than 25 feet at the edge of our driveway at 4835 S. Victor Pike.

Moore's Addition sits across the street from the Robertson Farm. The Moore's Addition plat was prepared by Bynum Fanyo and recorded at Plat Hook 8 Page 183. It shows that the Victor Pike right of way expanded from 36 feet to 53 feet as part of the platting process. (Exhibit B.)

Where Victor Pike meets our driveway the right of way is less than 25 feet. This was determined when the County bought some of our land to upgrade the bridge by the Rail Trail. (Exhibit C.)

Petitioner's own plat showing Victor Pike Improvements says, in very faint print, just below "S. VICTOR PIKE", "(MAJOR COLLECTOR)(90" DESIRED ROW). The fact that the desired right of way is 90 feet should not be confused with the fact that the actual right of way is 53 feet. (Exhibit D.)

- 2. On page 231 of the July 20 Plan Commission packet Petitioner also states, "S Victor Pike ... was planned for expansion by the County. That is not true. Victor Pike is not listed as a Future Roadway Project in Monroe County's Thoroughfare Plan. (Exhibit E.)
- 3. The pavement by our driveway at 4835 S. Victor Pike is 20 feet wide. The east side has no shoulder. Much of the riprap placed by the County when it upgraded the bridge was washed away in the flood of June 18-19, 2021. Parts were washed away completely. (Exhibit F.) I requested repair, but none has occurred. Buses headed north to Batchelor Middle School and Bloomington South drive by this spot on school days. So do hig trucks from Bloomington Seal Coating. The bank drops off steeply. There is a zero margin for error. Victor Pike is a narrow, curvy country road. Petitioner's description misrepresents its character.

Petitioner has misrepresented the nature of Victor Pike. Many other problems with Petitioner's proposals and the accuracy of Petitioner's representations have been shown earlier in this process. I understand that some Commission members feel that higher density is appropriate for the Robertson Farm. But there is every reason to recommend denial of a proposal from Petitioner's who have again and again shown themselves to be irresponsible. A touchstone of the Plan Commission's task is to assure responsible development. That can't be assured in this case.

Thank you for your extensive work on this project.

Guy Loftman, 4835 S. Victor Pike, Bloomington, IN 47403



Exhibit B. Plat of Moore's Addition,

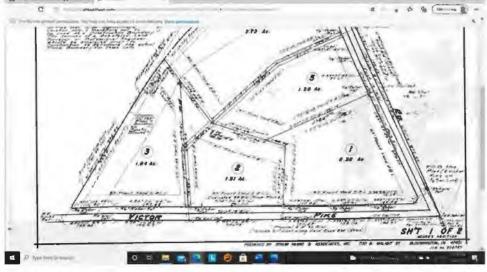
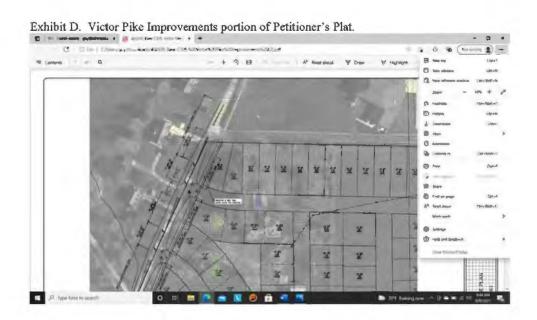


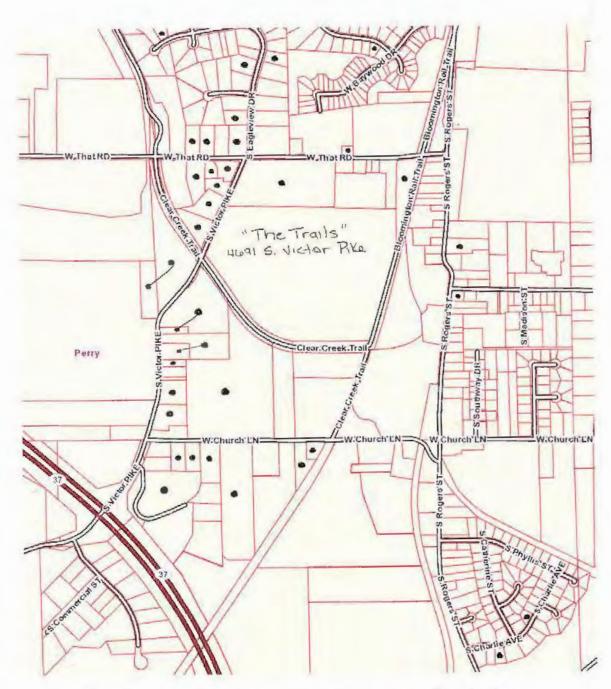
Exhibit C. Survey of portion of 4835 S. Victor Pike, Loftman real estate.



E. Future Roadway Projects, Monroe County Thoroughfare Plan, adopted Dec. 12, 2018, Table 1, Page 8.







- Parcels indicate opposition as of 7/8/21