



# INDIANA DEPARTMENT OF ENVIRONMENTAL MANAGEMENT

*We Protect Hoosiers and Our Environment.*

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(800) 451-6027 • (317) 232-8603 • [www.idem.IN.gov](http://www.idem.IN.gov)

**Eric J. Holcomb**  
Governor

**Brian C. Rockensuess**  
Commissioner

## Section 401 Water Quality Certification

IDEM Number: 2023-130-29-GCW-A  
USACE Number: LRL-2023-24-sjk  
Project Name: Becker Farm  
Authority: 327 IAC 2. CWA Sections: 301, 302, 303, 306, 307, & 401  
Date of Issuance: April 21, 2023  
Impacts must be completed by: April 21, 2025

Approved:

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Brian Wolff, Branch Chief  
Surface Water and Operations  
Office of Water Quality

Applicant / Permittee: Epcon Communities  
Attention: Matt Harlan  
11555 North Meridian Street. Suite #120  
Carmel, IN 46032

Agent: Ron L. Dixon, Natural Resource Consulting, Inc  
Attention: Matt Buck  
7719 Knapp Road  
Indianapolis, IN 46259

Project Location: Hamilton County  
Latitude 39.956277, Longitude -85.874542  
West of the Intersection of Southeastern Parkway and East  
113 Street near Fishers Indiana.

Project Description: Discharge fill material into 0.66 acres of forested wetland,  
0.11 acres of emergent wetland and 6 lf of ephemeral  
stream to facilitate construction of residential development.

Temporarily impact 0.09 acres of forested wetland for the placement of utility lines. After construction the impacted area will be returned to original contours and reseeded with a forested wetland understory seed mix.

Mitigate for impacts by the purchase of 3.0 acres of forested wetland credits, 0.22 acres of emergent wetland credits, and 6 lf of ephemeral stream credits within the Upper White Service Area of the Indiana Stream and Wetland Mitigation Program (INSWMP).

### Authorized Impacts

STREAM IMPACT(S)	Length of Impact (linear feet)		
Type of Impact:	Ephemeral	Intermittent	Perennial
Fill	6		

WETLAND IMPACT(S)	Area of Impact (acres)			
Type of Impact:	Open Water	Emergent	Scrub/Shrub	Forested
Fill		0.11		0.66
Conversion				0.09

### Project Mitigation

IN-LIEU FEE	Stream (Linear Feet)		
Type of Purchase	Ephemeral	Intermittent	Perennial
In-Lieu Fee Credits:	6		

IN-LIEU FEE	Wetland (Acres)		
Type of Purchase	Emergent	Scrub/Shrub	Forested
In-Lieu Fee Credits	0.22		3.0

Mitigation Location: Upper White Service Area in INSWMP

Application Signed: February 10, 2023

Application Received: February 13, 2023

Application Amendments  
Received: February 27, 2023  
April 5, 2023

Based on available information, it is the judgment of this office that the impacts from the proposed project as outlined by this Section 401 Water Quality Certification and described in your application will comply with the applicable provisions of 327 IAC 2 and Sections 301, 302, 303, 306, and 307 of the Clean Water Act if you comply with the conditions set forth below. Therefore, subject to the following conditions, the Indiana Department of Environmental Management (IDEM) hereby grants Section 401 Water Quality Certification for the project described in your application. Any changes in project design or scope not detailed in the application described above or modified by this Section 401 Water Quality Certification are not authorized.

Failure to comply with the terms and conditions of this Section 401 Water Quality Certification may result in enforcement action against you. If an enforcement action is pursued, you could be assessed up to \$25,000 per day in civil penalties. You may also be subject to criminal liability if it is determined that the Section 401 Water Quality Certification was violated willfully or negligently.

## **Conditions of the Section 401 Water Quality Certification**

### **1.0 General**

- (a) Implement the project as depicted and described in the application for Section 401 Water Quality Certification as modified by the conditions of this certification.
- (b) Per 33 CFR 325.6(c), 327 IAC 5-2-6, IC 13-15-3-2 the federal license shall have an established timeframe. Therefore, all approved discharges must be completed within the term of the valid federal permit.
- (c) Per IC 13-14-2-2, the department may inspect public or private property to inspect for and investigate possible violations of environmental management laws. Therefore, the commissioner or an authorized representative of the commissioner (including an authorized contractor), upon the presentation of credentials must be allowed:
  - (1) to enter your property, including impact and mitigation site(s);
  - (2) to have access to and copy at reasonable times any records that must be kept under the conditions of this certification;

- (3) to inspect, at reasonable times, any monitoring or operational equipment or method; collection, treatment, pollution management or discharge facility or device; practices required by this certification; and any mitigation wetland site;
- (4) to sample or monitor any discharge of pollutants or any mitigation site.

## **2.0 Mitigation**

Per 327 IAC 2, the goal of Indiana's water quality standards is to restore and maintain the chemical, physical and biological integrity of the state's waters. Mitigation of dredge and fill impacts to Indiana's water resources is required to maintain water quality.

- (a) Mitigation via mitigation bank or ILF  
Per 33 CFR 332.3 (f); 327 IAC 2-1; 327 IAC 2-1.5 the amount of mitigation required must be listed within the permit.
  - (1) Provide to IDEM proof of the purchase of 0.77 acres of in-lieu fee wetlands credits and XX linear feet of In-lieu fee stream credits in the Upper white Service Area from the Indiana Stream and Wetland Mitigation Program(IN SWMP):
    - (A) Within one (1) year of the date of this authorization;
    - (B) Before authorized impacts to waters of the State.

Failure to purchase credits by the required date may result in additional mitigation requirements to compensate for temporal loss.

## **3.0 Erosion and Sediment Control**

Per 40 CFR 122.26, 327 IAC 15; 327 IAC 2-1; 327 IAC 2-1.5, the use of appropriate stormwater control measures and maintenance thereof will prevent any sediment laden water from migrating off site and entering waterways and wetlands, potentially impairing water quality. Therefore, the following erosion and sediment control steps must be completed.

- (a) Implement erosion and sediment control measures on the construction site prior to land disturbance to minimize soil from leaving the site or entering a waterbody. Erosion and sediment control measures shall be implemented using an appropriate order of construction (sequencing) relative to the land-disturbing activities associated with the project. Appropriate measures include, but are not limited to, silt fence, diversions, and sediment traps.

- (b) Monitor and maintain erosion control measures and devices regularly, especially after rain events, until all soils disturbed by construction activities have been permanently stabilized.
- (c) Use run-off control measures, including but not limited to diversions and slope drains. These measures are effective for directing and managing run-off to sediment control measures and for preventing direct run-off into waterbodies.
- (d) Install and make appropriate modifications to erosion and sediment control measures based on current site conditions as construction progresses on the site. The Indiana Storm Water Quality Manual or similar guidance documents are available to assist in the selection of measures that are applicable to individual project sites.
- (e) Implement appropriate erosion and sediment control measures for all temporary run-arounds, cofferdams, temporary causeways, temporary crossings, or other such structures that are to be constructed within any waters of the state. Minimize disturbance to riparian areas when constructing these structures. Structures must be included in reviewed designs or approved by IDEM prior to use. Construct temporary run-arounds, temporary cofferdams, temporary causeways, temporary crossings, or other such structures of non-erodible materials. Temporary crossings and causeways must be completely removed upon completion of the project and the affected area restored to pre-construction contours, grades, and vegetative conditions.
- (f) Ensure cut and fill slopes located adjacent to wetlands and streams (including encapsulated streams) or that directly discharge to these aquatic features are stabilized using rapid/incremental seeding or other appropriate stabilization measures.
- (g) Stabilize and re-vegetate disturbed soils as final grades are achieved. Initiation of stabilization must occur immediately or, at a minimum, within the requirements of a construction site run-off permit after work is completed. Use a mixture of herbaceous species beneficial for wildlife or an emergent wetland seed mix wherever possible and appropriate. Tall fescue may only be planted in ditch bottoms and ditch side slopes and must be a low endophyte seed mix. Stabilize the channel before releasing stream flows into the channel.
- (h) As work progresses, re-vegetate areas void of protective ground cover. Areas that are to be re-vegetated shall use seeding and anchored mulch. **If alternative methods are required to ensure stabilization, erosion control blankets may be used that are biodegradable, that use loose-woven/leno-woven netting to minimize the entrapment and snaring of small-bodied wildlife such as snakes and turtles (follow manufacturer's recommendations for selection and installation).**

Anchor mulch. Anchoring shall be appropriate for the site characteristics such as slope, slope length, and concentrated flows. **Anchoring methods may not include loose netting over straw, but can range from crimping of straw, erosion control blankets as specified above that minimize wildlife entrapment, or net free blankets.** Tackifiers with mulch and hydro-mulch are acceptable and shall be applied to the manufacturer specifications.

#### **4.0 Construction**

Per 327 IAC 2-1-6(b)(4) the protection of existing uses for aquatic life is required and, per 327 IAC 2-1.3-2 (4) the utilization of best management practices helps ensure the protection of existing uses. Therefore, the following best management practices are required.

- (a) Avoid in stream channel work during the fish spawning season (April 1 through June 30).
- (b) Clearly mark wetlands and streams that are to remain undisturbed on the project site.
- (c) Restrict channel work and vegetation clearing to the minimum necessary for the installation of any structures. Work from only one side of the stream, and, where possible, from the side of the stream which does not have adjacent wetlands. If no wetlands are present, work from the side with the fewest trees and woody vegetation.
- (d) Ensure permanent in-stream structures, including but not limited to culverts and other stream encapsulations, are embedded and sized appropriately so as not to impede surface flows or create abnormal impediments to aquatic life.
- (e) Deposit any dredged material in a contained upland (non-wetland) disposal area to prevent sediment run-off to any waterbody.
- (f) Create temporary structures constructed in streams such that near normal stream flows are maintained. (327 IAC definitions Stream Design Flow)

#### **Other Applicable Permits**

Based on the proposed land disturbance, a construction stormwater general permit is required for the project. Permit coverage must be obtained prior to the initiation of land-disturbing activities. Information related to obtaining permit coverage is available at [www.in.gov/idem/stormwater](http://www.in.gov/idem/stormwater) or by contacting the IDEM, Stormwater Program at 317-233-1864 or via email at [Stormwat@idem.IN.gov](mailto:Stormwat@idem.IN.gov).

This certification does not relieve you of the responsibility of obtaining any other permits or authorizations that may be required for this project or related activities from IDEM or any other agency or person. You may wish to contact the Indiana Department of Natural Resources at 317-232-4160 (toll free at 877-928-3755) concerning the possible requirement of natural freshwater lake or floodway permits.

This certification does not:

- (1) Authorize impacts or activities outside the scope of this certification;
- (2) Authorize any injury to persons or private property or invasion of other private rights, or any infringement of federal, state or local laws or regulations;
- (3) Convey any property rights of any sort, or any exclusive privileges;
- (4) Preempt any duty to obtain federal, state or local permits or authorizations required by law for the execution of the project or related activities; or
- (5) Authorize changes in the plan design detailed in the application.

#### **Notice of Right to Administrative Review (Permits)**

If you wish to challenge this permit, you must file a Petition for Administrative Review with the Office of Environmental Adjudication (OEA), and serve a copy of the petition upon IDEM. The requirements for filing a Petition for Administrative Review are found in IC 4-21.5-3-7, IC 13-15-6-1 and 315 IAC 1-3-2. A summary of the requirements of these laws is provided below.

A Petition for Administrative Review must be filed with the Office of Environmental Adjudication (OEA) within fifteen (15) days of the issuance of this notice (eighteen (18) days if you received this notice by U.S. Mail), and a copy must be served upon IDEM. Addresses are:

Director	Commissioner
Office of Environmental Adjudication	Indiana Dept. of Environmental Management
Indiana Government Center North	Indiana Government Center North
100 North Senate Avenue, Room N103	100 North Senate Avenue, Room 1301
Indianapolis, Indiana 46204	Indianapolis, Indiana 46204

The petition must contain the following information:

- (a) The name, address and telephone number of each petitioner.
- (b) A description of each petitioner's interest in the permit.
- (c) A statement of facts demonstrating that each petitioner is:
  - (1) a person to whom the order is directed;
  - (2) aggrieved or adversely affected by the permit; or
  - (3) entitled to administrative review under any law.
- (d) The reasons for the request for administrative review.

- (e) The particular legal issues proposed for review.
- (f) The alleged environmental concerns or technical deficiencies of the permit.
- (g) The permit terms and conditions that the petitioner believes would be appropriate and would comply with the law.
- (h) The identity of any persons represented by the petitioner.
- (i) The identity of the person against whom administrative review is sought.
- (j) A copy of the permit that is the basis of the petition.
- (k) A statement identifying petitioner's attorney or other representative, if any.

Failure to meet the requirements of the law with respect to a Petition for Administrative Review may result in a waiver of your right to seek administrative review of the permit. Examples are:

- (a) Failure to file a Petition by the applicable deadline;
- (b) Failure to serve a copy of the Petition upon IDEM when it is filed; or
- (c) Failure to include the information required by law.

If you seek to have a permit stayed during the administrative review, you may need to file a Petition for a Stay of Effectiveness. The specific requirements for such a Petition can be found in 315 IAC 1-3-2 and 315 IAC 1-3-2.1.

Pursuant to IC 4-21.5-3-17, OEA will provide all parties with notice of any pre-hearing conferences, preliminary hearings, hearings, stays, or orders disposing of the review of this action. If you are entitled to notice under IC 4-21.5-3-5(b) and would like to obtain notices of any pre-hearing conferences, preliminary hearings, hearings, stays, or orders disposing of the review of this action without intervening in the proceeding you must submit a written request to OEA at the address above.

If you have procedural or scheduling questions regarding your Petition for Administrative Review, additional information on the review process is available at the website of the Office of Environmental Adjudication at <http://www.in.gov/oea>.

If you have any questions about this certification, please contact Graham Wrin, Project Manager, by email at [GCWrin@IDEM.IN.Gov](mailto:GCWrin@IDEM.IN.Gov) or by phone at 317-605-4105.

cc: Sarah Keller USACE – Indianapolis Regulatory Office  
Sarah Harrison, USFWS  
Brian Boszor, IDNR  
Indiana Stream and Wetland Mitigation Program (Electronic)  
Matt Buck, Ron L. Dixon, Natural Resource Consulting, Inc.





**APPLICATION FOR AUTHORIZATION TO DISCHARGE DREDGED OR FILL MATERIAL TO ISOLATED WETLANDS AND/OR WATERS OF THE STATE**

State Form 51821 (R2 / 11-15)

Indiana Department of Environmental Management

- INSTRUCTIONS:** 1. Read the instruction sheet before filling out this form.  
2. You must complete all applicable sections of this form

1. Applicant Information		2. Agent Information	
Name of Applicant <b>Matt Harlan</b>		Name of Agent <b>Matt Buck</b>	
Mailing address (Street/ PO Box/ Rural Route, City, State, ZIP Code) Epcon Communities 11555 North Meridian St. #120 Carmel, IN 46032		Mailing address (Street/ PO Box/ Rural Route, City, State, ZIP Code) Ron L. Dixon, Natural Resource Consulting, Inc. 7719 Knapp Rd Indianapolis, IN 46259	
Daytime Telephone Number <b>(317) 343-0095</b>		Daytime Telephone Number <b>(317) 862-7446</b>	
Fax Number		Fax Number	
E-mail address (optional)		E-mail address (optional) <b>matt@ronldixon.com</b>	
Contact person (required) <b>Matt Harlan</b>		Contact person <b>Matt Buck</b>	
3. Project / Tract Location			
County <b>Hamilton</b>		Nearest city or town <b>Fishers</b>	
U.S.G.S. Quadrangle map name (Topographic map) <b>McCordsville and Ingalls</b>		Project street address (if applicable) <b>N/A</b>	
Quarter <b>NW</b>	Section <b>5</b>	Township <b>17N</b>	Range <b>6E</b>
Type of aquatic resource(s) to be impacted (Attach Worksheet One.) <b>Forested and emergent wetlands and ephemeral channel</b>		Project name or title (if applicable) <b>Courtyards of Fishers, aka Becker Farm</b>	
Other location descriptions or driving directions <b>Located off of N 113th Street and Southeastern Parkway.</b>			
4. Project Purpose and Description (Use additional sheet(s) if required.)			
Has any construction been started? <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No		Anticipated start date (month, day, year) <b>March 2023</b>	
If yes, how much work is completed? <b>N/A</b>			
Purpose of project and overview of activities  <b>Single-family subdivision with typical infrastructure needs. (House pads, road beds, utilities, storm water features, etc.)</b>			

**5. Avoidance, Minimization, and Mitigation Information: Applicants must answer all of the following questions**

*(Use additional sheet(s) if necessary - provide a detailed response to all applicable questions.)*

**A. For projects with Class II isolated wetlands –**

1. Is there a reasonable alternative to the proposed activity?
  
  
  
  
  
  
  
  
  
  
2. Is the proposed activity reasonably necessary or appropriate?

**B. For projects with Class III wetlands, adjacent wetlands, and/or streams, rivers, lakes or other water bodies –**

1. Is there a practicable alternative to the proposed activity?

Due to small acreage of this project, the number of proposed housing units are required to support the required infrastructure resulting in the need to impact some wetland area.

2. Have practicable and appropriate steps to minimize impacts to water resources been taken?

Yes, the original design plan would have impacted considerably more wetland and stream. The project was redesigned in order to keep the impacts to wetlands less than one acre and near total avoidance of stream channel.

Describe all compensatory mitigation required for unavoidable impacts.

Mitigation is proposed to go to the IDNR in-lieu fee program. Please see attached cover letter for more details.

**6. Drawing / Plan Requirements (Applicants must provide the following.)**

- a. Top/aerial/overhead views of the project site showing existing conditions and proposed construction.
- b. Cross sectional view of areas of fill or alterations to streams and other waters.
- c. North arrow, scale, property boundaries.
- d. Include wetland delineation boundary *(if applicable)*. Label all wetlands (jurisdictional, isolated and exempt) as I-1, I-2, I-3, etc. and the mitigation areas as M-1, M-2, etc.
- e. Location of all surface waters, including wetlands, erosion control measures, existing and proposed structures, fill and excavation locations, disposal area for excavated material, including quantities, and wetland mitigation site *(if applicable)*.
- f. Approximate water depths and bottom configurations *(if applicable)*.

**7. Supplemental Application Materials (Applicants must provide the following.)**

- a. A wetland delineation of all wetlands on the project site *(for projects with wetland impacts)*.
- b. At least three photographs of the project site. Indicate the photo locations on the project plans.
- c. If isolated wetlands are present, a letter from the Corps of Engineers verifying this statement.
- d. Wetland mitigation plan and monitoring report.
- e. Classification of all isolated wetlands on the tract *(if isolated wetlands are present onsite)*.
- f. Copies of all applicable local permits and/or resolutions pertaining to the project or tract.
- g. Tract history *(see instructions)*.

**8. Additional information that MAY be required (IDEM will notify you if needed.)**

- a. Erosion control and/or storm water management plans.
- b. Sediment analysis.
- c. Species surveys for fish, mussels, plants and threatened or endangered species.
- d. Stream habitat assessment.
- e. Any other information IDEM deems necessary to review the proposed project.

### 9. Permitting Requirements

a. Does this project require the issuance of a Department of the Army Section 404 Permit from the US Army Corps of Engineers?  Yes  No  
 If no, you do not need to answer Part b.

b. Have you applied for an Army Corps of Engineers Section 404 permit?  Yes  No  
 If yes, please supply the Corps of Engineers ID Number, the Corps of Engineers District, the project manager, and a copy of any correspondence with the Corps. **If no, contact** the Army Corps of Engineers regarding the possible need for a permit application.  
 We are submitting both IDEM 401 and Army 404 concurrently.

c. Have you applied for, received, or been denied a permit from the Department of Natural Resources for this project?  Yes  No  
 Please give the permit name, permit number, and date of application, issuance or denial.  
 The IDNR was contacted and provided an ETR review which is attached.

d. Have you applied for, received, or been denied any other federal, state, or local permits, variances, licenses, or certifications for this project?  
 Yes  No  
 Please give the permit name, agency from which it was obtained, permit number, and date of issuance or denial.  
 Can provide later when obtained if needed.

### 10. Adjoining Property Owners and Addresses

List the names and addresses of landowners adjacent to the property on which your project is located and the names and addresses of other persons (or entities) potentially affected by your project. Use additional sheet(s) if required.

Name <b>Hidden Oaks Southeastern LLC</b> Address (number and street) <b>10703 Augusta Boulevard</b> City                                      State                                      ZIP Code <b>Fishers                                      IN                                      46037</b>	Name Address (number and street) City                                      State                                      ZIP Code
Name <b>CND Grantham LLC</b> Address (number and street) <b>1111 N Post Oak Road</b> City                                      State                                      ZIP Code <b>Houston                                      TX                                      77055</b>	Name Address (number and street) City                                      State                                      ZIP Code
Name Address (number and street) City                                      State                                      ZIP Code	Name Address (number and street) City                                      State                                      ZIP Code
Name Address (number and street) City                                      State                                      ZIP Code	Name Address (number and street) City                                      State                                      ZIP Code
Name Address (number and street) City                                      State                                      ZIP Code	Name Address (number and street) City                                      State                                      ZIP Code
Name Address (number and street) City                                      State                                      ZIP Code	Name Address (number and street) City                                      State                                      ZIP Code

### 11. Signature - Statement of Affirmation

I certify that I am familiar with the information contained in this application and, to the best of my knowledge and belief, such information is true and accurate. I certify that I have the authority to undertake and will undertake the activities as described in this application. I am aware that there are penalties for submitting false information. I understand that any changes in project design subsequent to IDEM's granting of authorization to discharge to a water of the state are not authorized and I may be subject to civil and criminal penalties for proceeding without proper authorization. I agree to allow representatives of the IDEM to enter and inspect the project site. I understand that the granting of other permits by local, state, or federal agencies does not release me from the requirement of obtaining the authorization requested herein before commencing the project.

Applicant's Signature: 

Date: 03/10/2023  
(mm/dd/yyyy)

Print Name: Matt Harlan

Title: Land Development Manager



**D. Bank Stabilization – provide the following information for EACH segment (Use additional sheet(s) if required.)**

Water body name

Description of impacts

Length of shoreline or bank protection

Volume (*cubic yards*) of bank protection fill placed below the Ordinary High Water Mark per running foot

Area (*square feet*) of bank protection fill placed below the Ordinary High Water Mark

**E. Stream Relocation**

Water body name

Description of impacts 6 lineal feet of ephemeral (Channel #3) to be filled behind lot #13.

Length of existing channel to be relocated (*linear feet*) 6

Length of new channel to be constructed (*linear feet*) 6 (*via IDNR In-lieu fee*)

Existing channel to be backfilled?  Yes  No

Type of relocation  Piping  Open  Channel  Other: \_\_\_\_\_

Type of fill and volume (*cubic yards*)

**F. Open Water Fill**

Water body name

N/A

Description of impacts

Area of water body to be filled (*acres*)

Type of fill and volume (*cubic yards*)

By: mmopie  
WETLAND EXHIBIT  
Layout: 02.17.23.dwg  
Wetland Stream Length - 02.17.23.dwg  
Becker Property Design\CAD\Exhibits\21244.xBase-Aerial Overlay - Wetland Stream Length - 02.17.23.dwg  
File Name: W:\Epcor Communities\2021-244 Becker Property Design\CAD\Exhibits\21244.xBase-Aerial Overlay - Wetland Stream Length - 02.17.23.dwg  
Plot Time: 3:06pm  
Feb 17, 2023

NORTH WETLAND  
ENCROACHMENT  
28,965 SF

TOTAL  
STREAM  
AVOIDED  
2,351 LF

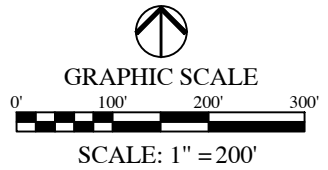
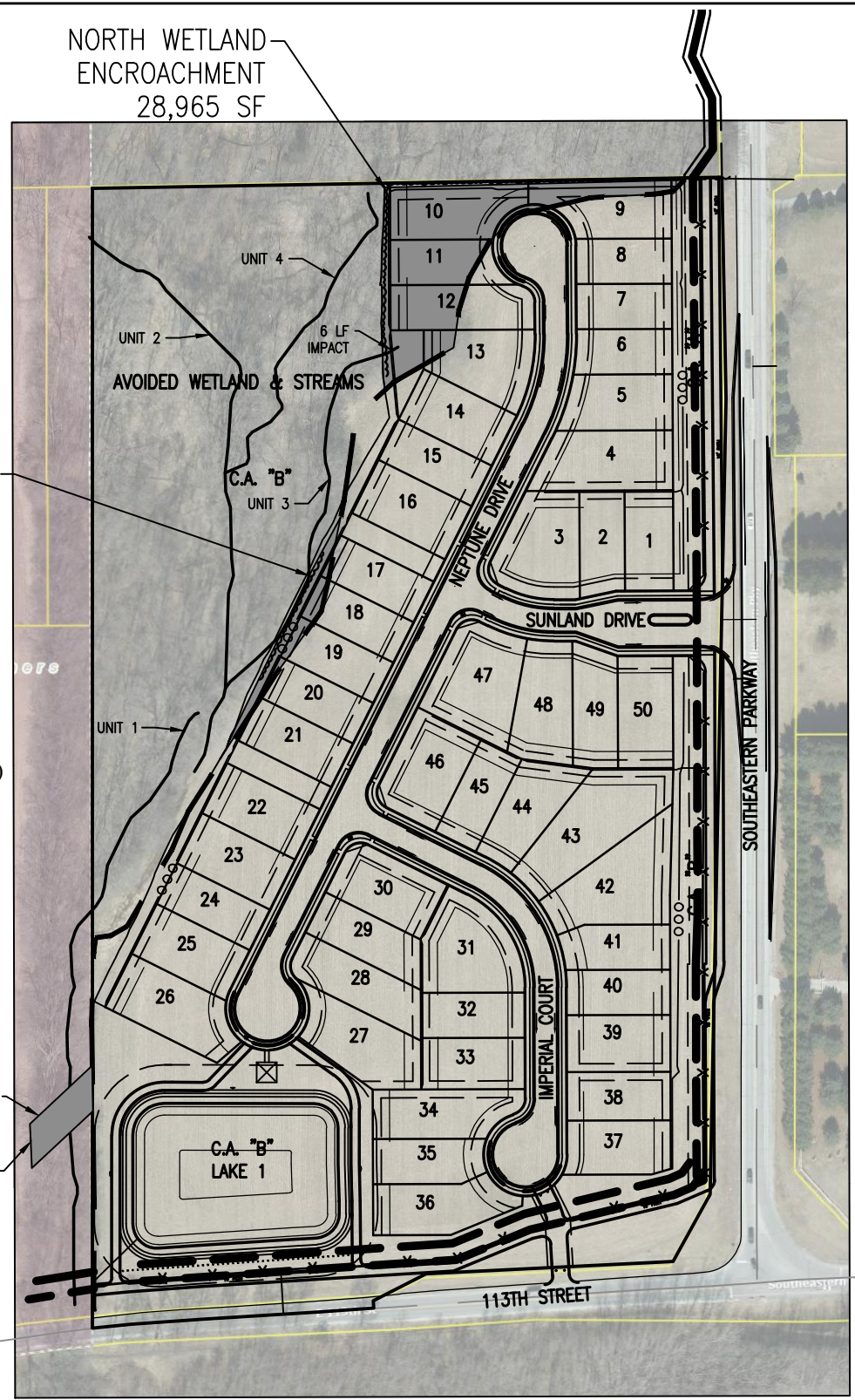
SOUTH WETLAND  
ENCROACHMENT  
4,855 SF

TOTAL  
WETLAND  
AVOIDED  
216,592 SF (4.97 Ac)

TOTAL  
WETLAND  
ENCROACHMENT  
28,965 SF  
4,855 SF  
3,832 SF  
37,652 SF (0.86 Ac)

50 LF  
IMPACT

UTILITY CUTS  
3,832 SF



### COURTYARDS OF FISHERS WETLAND ENCROACHMENT EXHIBIT

FISHERS, INDIANA  
FEBRUARY 16, 2023



# Courtyards of Fishers

## Proposed Mitigation & Restoration

The Courtyards of Fishers development project has been designed to avoid approximately 5.6 acres of wetlands and nearly all 2,300' +/- of intermittent and ephemeral channels. Total wetland impacts are 0.86 acres (0.75 acre of forested wetland and 0.11 acre of emergent wetland). The above acreage impacts include a utility line (sewer) that will need to cross Channel Unit 1 via an open ditch. Approximately 50 lineal feet of that intermittent channel will be temporarily impacted. The channel will be restored to near natural grade afterwards. In addition, 6 lineal feet of ephemeral channel will be filled at the very upper end of the Channel Unit 2.

Proposed mitigation will go to the IDNR In-lieu fee at a 4:1 ratio for forested wetland impact, 2:1 for the emergent wetland impact and 1:1 for stream impact. A 20% temporal loss will be added to the mitigation for the required temporal loss. Please note the USACE mitigation ratio for Forested wetlands is 3:1

The 50 lineal feet of channel where the sewer line was installed will be restored to near original grade and reseeded with a forested wetland understory seed mixture.

Estimated Mitigation acreage/feet/cost to IDNR In-lieu Program, allowing for the USACE 3:1 ratio difference and 20% temporal loss is:

3.0 acre Forested Wetland @ \$80,000.00 per acre = \$240,000.00

0.26 acre Emergent Wetland @ \$80,000.00 per acre = \$20,800.00

7.2 lineal feet of ephemeral channel @ \$450.00 per foot = \$3,280.00

**TOTAL: \$264,040.00.**



# Courtyards at Fishers Forested Wetland Seed Mixture From Spence Nursery, Muncie, Indiana

## Grasses and Sedges

PLS oz/acre

- 2 Carex frankii (Frank's Sedge)
- 1 Carex granularis (Meadow Sedge)
- 2.5 Carex grayi (Burr Sedge)
- 2 Carex lupulina (Common Hop Sedge)
- 1 Carex muskingumensis (Palm Sedge)
- 0.5 Carex normalis (Spreading Oval Sedge)
- 1 Carex tribuloides (Pointed Oval Sedge)
- 2 Carex vulpinoidea (Fox Sedge)
- 2 Elymus hystrix (Bottlebrush Grass)
- 16 Elymus riparius (Riverbank Wild Rye)
- 64 Elymus virginicus (Virginia Wild Rye)
- 2 Glyceria striata (Fowl Manna Grass)
- 96

## Forbs

PLS oz/acre

- 2 Actinomeris alternifolia (Wingstem)
- 0.5 Blephilia hirsuta (Hairy Wood Mint)
- 3.5 Helenium autumnale (Autumn Sneezeweed)
- 2 Heliopsis helianthoides (False Sunflower)
- 0.5 Lobelia siphilitica (Great Blue Lobelia)
- 1 Lycopus americanus (Water Horehound)
- 0.5 Mimulus ringens (Monkey Flower)
- 1 Penstemon calycosus (Smooth Penstemon)
- 1 Rudbeckia laciniata (Green-Headed Coneflower)
- 3 Silphium perfoliatum (Cupplant)
- 1.5 Solidago gigantea (Late Goldenrod)
- 2 Symphyotrichum lanceolatum (Panicked Aster)
- 2 Symphyotrichum lateriflorum (Side-Flowering Aster)
- 1 Symphyotrichum puniceum (Swamp Aster)
- 0.5 Veronicastrum virginicum (Culver's Root)
- 2 Zizia aurea (Golden Alexanders)
- 24

### Application Rate:

**1/4 acre seeding increment for channel restoration**