

**Illinois Department of Natural Resources**  
**CONSERVATION PLAN**  
*(Application for an Incidental Take Authorization)*  
Per 520 ILCS 10/5.5 and 17 Ill. Adm. Code 1080

**150-day minimum required for public review, biological and legal analysis, and permitting**

PROJECT APPLICANT: The Forest Preserve District of Kane County (District)  
1996 S. Kirk Rd, Suite 320, Geneva, IL 60134

PROJECT NAME: Pingree Grove Wetland Bird Habitat Enhancement.

COUNTY: *Kane*

AREA OF IMPACT (acreage): This project will temporarily impact up to 6.5 acres of marsh through shallow excavation not to exceed 3 feet in depth.

The incidental taking of endangered and threatened species shall be authorized by the Illinois Department of Natural Resources (IDNR) only if an applicant submits a Conservation Plan to the IDNR Incidental Take Coordinator that meets the following criteria:

1. A **description of the impact likely to result** from the proposed taking of the species that would be covered by the authorization, including but not limited to -

A) identification of the **area to be affected by the proposed action**, include a legal description and a detailed description including street address, map(s), and GIS shapefile. Include an indication of ownership or control of affected property. Attach photos of the project area.

The project site is Pingree Grove Forest Preserve, which is owned by the District. The project site is located at 14N187 US Route 20 in Rutland and Plato Township, Kane County, Illinois {Sections 32 and 33, T42N, R7E and Section 3, T41N, R7E} (Figure 1). The area of the preserve is 437 acres (Figure 2). Wetland enhancements would occur within a 110.2-acre marsh complex located at Pingree Grove Forest Preserve. The marsh complex has a surface connection to Tyler Creek, which is a tributary to the Fox River. Spoil excavated from wetland scrapes will be deposited within adjacent uplands at Pingree Grove Forest Preserve.

B) **biological data** on the affected species including life history needs and habitat characteristics. Attach all biological survey reports.

The state-endangered Blanding's Turtle is known to occur within the project site. District staff has regularly monitored the population using live-trapping, mark-recapture and telemetry since 2009. The District provides reports summarizing our annual monitoring efforts to the IDNR Endangered Species Program Manager and Endangered Species Recovery Specialist for Northern Illinois.

### **Blanding's Turtle (*Emydoidea blandingii*)**

The Blanding's Turtle (*Emydoidea blandingii*) is a long-lived, semi-aquatic turtle in decline throughout much of its range. It was designated as endangered in Illinois in 2009 (ILL. ADM. CODE, CH. I, SEC. 1010), where its range is largely restricted to the northern third of the state.

Blanding's Turtles can reach ages in excess of 70 years when survival is high. They exhibit delayed sexual maturity (14-20 years) with females taking slightly longer to reach sexual maturity.

As a semi-aquatic turtle, both wetlands and uplands are crucial components of Blanding's Turtle habitat. Generally, the core of Blanding's Turtle habitat is a permanent wetland, with smaller and often more temporary wetlands being used for foraging and temporary refugia. The upland component of their habitat is vital for nesting areas and movement corridors. Nesting typically occurs from late May through June. Males and females are known to make long-distance movements through aquatic and terrestrial habitats to forage, mate, nest and select overwintering sites.

Blanding's Turtles are omnivores and have been documented to consume a wide range of food items including: crayfish and other crustaceans, insects, fish, amphibians and plant material.

C) **description of project activities** that will result in taking of an endangered or threatened species, including practices to be used, a timeline of proposed activities, and any permitting reviews, such as a USFWS biological opinion or USACE wetland review. Please consider all potential impacts such as noise, vibration, light, predator/prey alterations, habitat alterations, increased traffic, etc.

#### **Project Activities**

- 1) Equipment access for wetland enhancement project. Machinery will require access to the wetland scrape locations. Access will be gained by traveling through designated access pathways in uplands adjacent to the wetland.
- 2) Up to 6.5 acres of wetland scrapes will be created across 5 wetland scrape locations within a 110.2 acre marsh complex. The wetland scrapes will be created using amphibious or long-reach excavators. The maximum depth of the excavations will be 3 feet.
- 3) The creation of a small rock riffle will require depositing stone on a 0.01 acre area to stabilize an inflow from under Route 20.
- 4) Spoil excavated from the wetland scrapes will be transported to designated spoil respread areas in upland locations within Pingree Grove Forest Preserve. Material will be removed from the marsh with low ground pressure amphibious equipment in small quantities to limit the potential for impacts to turtles. It will be transported to the proposed disposal areas with this equipment where it will be placed as described on the plans and herein. This will include regular inspection of work areas for turtles and handling in a way to maximize the ability to identify any turtles

within the area prior to equipment being employed. All spoil areas will be restored with the native vegetation shown on the plans as soon as final placement of spoils occurs.

### **Project Timeline (2022-2023)**

October-April: no project activity.

May-July: pre-project live trapping surveys. Individuals that meet minimum size requirements will be fitted with radio transmitters.

August: monitor proposed scrape locations for the presence of Blanding's Turtles with transmitters. Install exclusion fencing, silt fencing and preparation of access pathways. Scrape creation and spoil respreading would begin if all necessary permits and clearances have been received.

September: wetland scrape creation and spoil respreading.

### **Project Timeline (2023-2026\*)**

May-July: post-project live trapping.

May-October: continued tracking of with radio transmitters.

November-December: prepare and submit annual report to ITA coordinator

\*2024-2027 if wetland scrape construction extends into 2023.

### **Additional Permit Reviews**

Jeff Mengler of Hey & Associates has submitted an application to the U.S. Army Corps of Engineers, Chicago District on behalf of the District. The request has been assigned a number (LRC-2022-00241) and project manager, Anastasia Brown.

The District began consulting with the U.S. Fish and Wildlife Service regarding endangered and threatened species. The project was assigned a project code (2022-0023857). The District received a list of federally threatened and endangered species that may occur in our proposed project location and may be affected by or proposed project. The District is working with the U.S. Fish and Wildlife Service to determine any conservation measures that will be necessary for this project.

D) Explanation of the anticipated **adverse effects on listed species**; how will the applicant's proposed actions impact each of the species' life cycle stages.

### **Equipment Access**

Individual Blanding's Turtles could be adversely impacted if they are struck by equipment while moving through, or resting in upland habitat. Equipment access could potentially degrade turtle nesting habitat if excessive soil compaction occurs.

## Wetland Scrape Creation

Individual Blanding's Turtles could be adversely impacted if they are struck by the excavator bucket in the process of removing spoil from the wetland scrape locations. Turtles could potentially be struck by equipment at the wetland scrape access points on the periphery of the wetland. If scrape creation was conducted during the inactive season Blanding's Turtles could potentially be disturbed during brumation.

## Spoil Transport and Respreading

Although unlikely, it is possible that individual turtles could be inadvertently transported from the wetland to spoil resread locations in soil within the project site. If a turtle is transported to a spoil resread location and remains in the area when spoil is being resread by machinery, the turtle could be injured or killed.

2) Measures the applicant will take to **minimize and mitigate** that impact and the **funding** that will be available to undertake those measures, including, but not limited to -

A) plans to **minimize the area affected** by the proposed action, the estimated **number of individuals** of each endangered or threatened species that will be taken, and the **amount of habitat** affected (please provide an estimate of area by habitat type for each species).

The primary objective of this project is to enhance wetland habitat at Pingree Grove Forest Preserve, therefore minimizing the area affected would not be desirable for this project. The project did consider the habitat quality and data from previous Blanding's Turtle research to select locations that are primarily cattail monocultures and have had historically low usage by Blanding's Turtles at the site.

The project will affect up to 6.5 acres of habitat within the marsh complex. The potential negative impacts to habitat will be short-term (i.e. during construction). The end result will be beneficial to Blanding's Turtles and marsh birds. Using existing data on the density of Blanding's Turtles at the site derived from 12 years of mark-recapture data it is estimated that a maximum of 4-11 individual Blanding's Turtles could be affected or "taken".

Most conservative potential take scenario: Only wild born turtles captured and marked were considered in calculating the estimate. Estimation:  $0.627 \text{ turtles/acre} * 6.5 \text{ acres} = 4 \text{ turtles}$ . This assumes that all marked turtles have survived and that turtles are uniformly distributed across the marsh.

Least conservative potential take scenario: Considers all wild born turtles marked and all head-starts released at the site. Does not account for annual mortality of the hatchlings and head-starts. This assumes that all head-started turtles have survived and that turtles are uniformly distributed across the marsh. These assumptions are unlikely to be met, therefore this estimate is likely to be inflated. Estimation:  $1.94 \text{ turtles/acre} * 6.5 \text{ acres} = 11 \text{ turtles}$ .

B) **plans for management of the area** affected by the proposed action that will **enable continued use** of the area by endangered or threatened species by maintaining/re-establishing

suitable habitat (for example, native species planting, invasive species control, use of other best management practices, restored hydrology, etc.).

This project is intended to enhance habitat conditions for wetland birds at Pingree Grove Forest Preserve, including 3 state listed species of wetland bird (Least Bittern, American Bittern and Common Gallinule). The wetland scrapes will increase the amount and interspersed of open water habitat within the marsh complex for use by marsh birds. In addition, the shallow areas that were selected for scrapes are currently dominated by dense monocultures of narrowleaf cattail (*Typha angustifolia*). The scrapes will provide deeper locations within the marsh complex where Blanding's Turtles can forage, overwinter, and take refuge in drought years when most of the marsh is likely to be dry.

In 2020 and 2021 the District invested in the chemical control of common reed (*Phragmites australis*) across 52 acres, and reed canary grass (*Phalaris arundinacea*) across 32 acres of the project area to reduce the cover of invasive species. Additionally, the District's Natural Resource Management staff conduct controlled burns within the marsh complex on a 2-3 return interval.

C) description of **all measures to be implemented to avoid, minimize, and mitigate** the effects of the proposed action on endangered or threatened species.

- Avoidance measures include working outside the species' habitat.
- Minimization measures include timing work when species is less sensitive or reducing the project footprint.
- Mitigation is additional beneficial actions that will be taken for the species such as needed research, conservation easements, propagation, habitat work, or recovery planning.
- It is the **applicant's responsibility to propose mitigation measures**. IDNR expects applicants to provide species conservation benefits 5.5 times larger than their adverse impact.

In an effort to prevent impacts caused by equipment access, wetland scrape excavation and spoil respreading, the District and contractors will use a combination of project timing, field surveys, exclusion, inspection, and education.

The following measures will be implemented to avoid, minimize and mitigate any potential effects on the Blanding's Turtle.

#### **Avoidance and Minimization**

- The project seeks to enhance habitat conditions for wetland birds and the Blanding's Turtle, therefore complete avoidance of their habitat is not desirable.
- The areas that were chosen for enhancement were specifically selected to avoid areas that are known to be regularly utilized by Blanding's Turtles.

- Equipment access pathways and spoil respread locations were selected to avoid degrading known turtle nesting habitat through soil compaction or burial with organic material. The areas selected have degraded vegetation and are not known to be frequented by the turtles.
- The project will avoid and minimize potential impacts to nesting females, nests/eggs and overwintering turtles by limiting construction to July-September.
- The section of equipment access pathway with the highest potential for impacts to Blanding's Turtles will be enclosed with exclusionary silt fencing to prevent turtle access. Silt fencing will be buried to depth of 4 inches to prevent burrowing and shall be inspected weekly or within 24 hours of a rain event.
- Machinery must be inspected by District staff prior to unloading from the trailer at the project location and be found to be clean and free of seeds, soil, and debris.
- Prior to the start of all construction activity, the project area shall be visually surveyed by District staff and contractors for the presence of Blanding's Turtles. Construction equipment will be parked on-site in an upland location when not in use. The parking area shall be inspected for the presence of turtles prior to moving.
- Prior to construction, contractors will be provided with a handout to aid in identifying Blanding's Turtle should they encounter one in the project area. Contractors will be advised that they are not authorized to handle Blanding's Turtles and that work shall be halted if a Blanding's Turtle is encountered in the project area. IDNR will be informed if a Blanding's Turtle is encountered in the project area during construction.

#### **Mitigation**

- Conservation benefits for Blanding's Turtles will be derived from the performance of the project and will serve as mitigation.

D) plans for monitoring the effects of the proposed actions on endangered or threatened species, such as species and habitat monitoring before and after construction, include a plan for follow-up reporting to IDNR.

The District will take measures to prevent the taking of Blanding's Turtles during construction and does not anticipate a negative impact on the local population. Pre and post project monitoring shall serve to prevent incidental take and measure the extent to which turtles utilize the wetland scrapes.

#### **Pre-project monitoring**

District staff will conduct live-trapping surveys in and near the areas selected for wetland scrapes. The surveys will be conducted May-July, and a traps will be deployed for a minimum of 100 trap-nights. Captured Blanding's Turtles will be individually marked and adult turtles will be fitted with VHF transmitters. This would allow staff to monitor the locations selected for scrapes prior

to construction. If the IDNR determines that it would be practicable, District staff could temporarily relocate these individuals before construction begins to avoid potential take.

#### **Post-project monitoring**

District staff will annually conduct live trapping surveys in the wetland scrape areas for a minimum of 100 trap-nights per year in May-July for 3 years post-construction. Additionally, staff will track individuals with radio-transmitters to determine if the scrapes are being utilized by Blanding's Turtles. Post-project monitoring results shall be provided annually to the IDNR Endangered Species Coordinator and the IDNR Incidental Take Authorization Coordinator.

E) **adaptive management practices** that will be used to deal with changed or unforeseen circumstances that affect on endangered or threatened species. Consider environmental variables such as flooding, drought, and species dynamics as well as other catastrophes. Management practices should include contingencies and specific triggers. Note: Not foreseeing any changes does not qualify as an adaptive management plan.

#### **Blanding's Turtle In Project Area**

If a Blanding's turtle is observed within an access pathway, wetland scrape or spoil respread location by District staff or the Contractor, work shall be suspended in that area until the turtle can be safely moved by staff with proper permits. IDNR staff shall be informed of any Blanding's observation within an access pathway, wetland scrape or spoil respread location.

#### **Flooding/High Water**

If field conditions are such that wetland scrape creation is not safely possible or effective (such as high-water levels), operations will be suspended until suitable conditions return.

#### **Winter Dormancy**

If field conditions or project delays dictate that scrape excavation cannot be completed by October 1, operations will be suspended on September 30 until the next year.

#### **Equipment Failure**

The contractor shall be required to have a spill response plan and sufficient equipment on-site to respond promptly to any equipment failure that results in the discharge of hydraulic fluid, fuel or other petroleum product into the wetland. Spills shall be immediately reported to the necessary authorities and the District.

F) **verification that adequate funding exists** to support and implement all mitigation activities described in the conservation plan. This may be in the form of bonds, certificates of insurance, escrow accounts, or other financial instruments adequate to carry out all aspects of the Conservation Plan.

The funding for this project will be provided by the District through their annual budget. The District budgeted \$350,000 in fiscal year 21/22 in its Construction and Development fund. These funds can be carried to the next fiscal year if project timing dictates.

3) A description of **alternative actions** the applicant considered that would reduce take, and the reasons that each of those alternatives was not selected. A "no-action" alternative shall be included in this description of alternatives. Please, describe the economic, social, and ecological tradeoffs of each action.

The no-action alternative would leave the marsh with dense monocultures of narrowleaf cattail, few areas with an interspersed open water and native vegetation, and limited areas where water will persist in drought conditions. This would not result in progress toward the goals of enhancing habitat condition for wetland birds and Blanding's Turtles at Pingree Grove Forest Preserve. Ultimately, land managers must strengthen the diversity and climate resiliency of wetlands where they are managing for endangered species to increase the likelihood of population persistence.

The District initially considered installing a water control structure on the outlet for the marsh to gain control of water levels in a more traditional way. Staff reached out the owner of the railroad ROW that forms the North edge of the marsh and they were not amenable to any alterations that resulted in additional water against their ballast.

The District also considered creating a berm along the North border of the marsh to gain control of water levels without placing additional water on the railroad ROW. This alternative was determined to be cost prohibitive and challenging from a regulatory perspective. This alternative would have resulted in a substantially higher level of disturbance to the wetland.

4) Data and information to indicate that the proposed taking **will not reduce the likelihood of the survival or recovery** of the endangered or threatened species in the wild within the State of Illinois, the biotic community of which the species is a part, or the habitat essential to the species existence in Illinois.

While the potential for take during project construction exists, the disturbances to Blanding's Turtles and their habitat at Pingree Grove marsh will be short-term. The project will ultimately result in conservation benefits to the species and will not reduce the resiliency, redundancy or representation of Blanding's Turtles in Illinois. The project will aid the recovery of the species in Kane County.

5) An **implementing agreement**, which shall include, but not be limited to (on a separate piece of paper containing signatures):

A) the names and signatures of all participants in the execution of the conservation plan;

Forest Preserve District of Kane County Executive Director

Signature: 

Printed Name: *Monica A. Meyers*

Date: *6/8/22*



Forest Preserve District of Kane County Director of Natural Resource Management

Signature:

Printed Name:

Date:

*B. H.*  
*BENJAMIN HARBORT*  
*6/8/22*

Forest Preserve District of Kane County Wildlife Biologist

Signature:

Printed Name:

Date:

*William Graser*  
*William Graser*

B) the obligations and responsibilities of each of the identified participants with schedules and deadlines for completion of activities included in the conservation plan and a schedule for preparation of progress reports to be provided to the IDNR;

C) certification that each participant in the execution of the conservation plan has the legal authority to carry out their respective obligations and responsibilities under the conservation plan;

D) assurance of compliance with all other federal, State and local regulations pertinent to the proposed action and to execution of the conservation plan;

The Forest Preserve District of Kane County will secure all necessary permits and maintain compliance with all permit conditions and regulations.

E) copies of any final federal authorizations for a taking already issued to the applicant, if any.

CERTIFICATION: The Forest Preserve District of Kane County (District) hereby certifies that it has the authority and funding to complete the project and to address the issues proposed in this Incidental Take Conservation Plan for the state-listed Blanding's Turtle. The District is in charge of the project and will assure that all applicable state, federal, and local laws will be adhered to during the completion of the project.

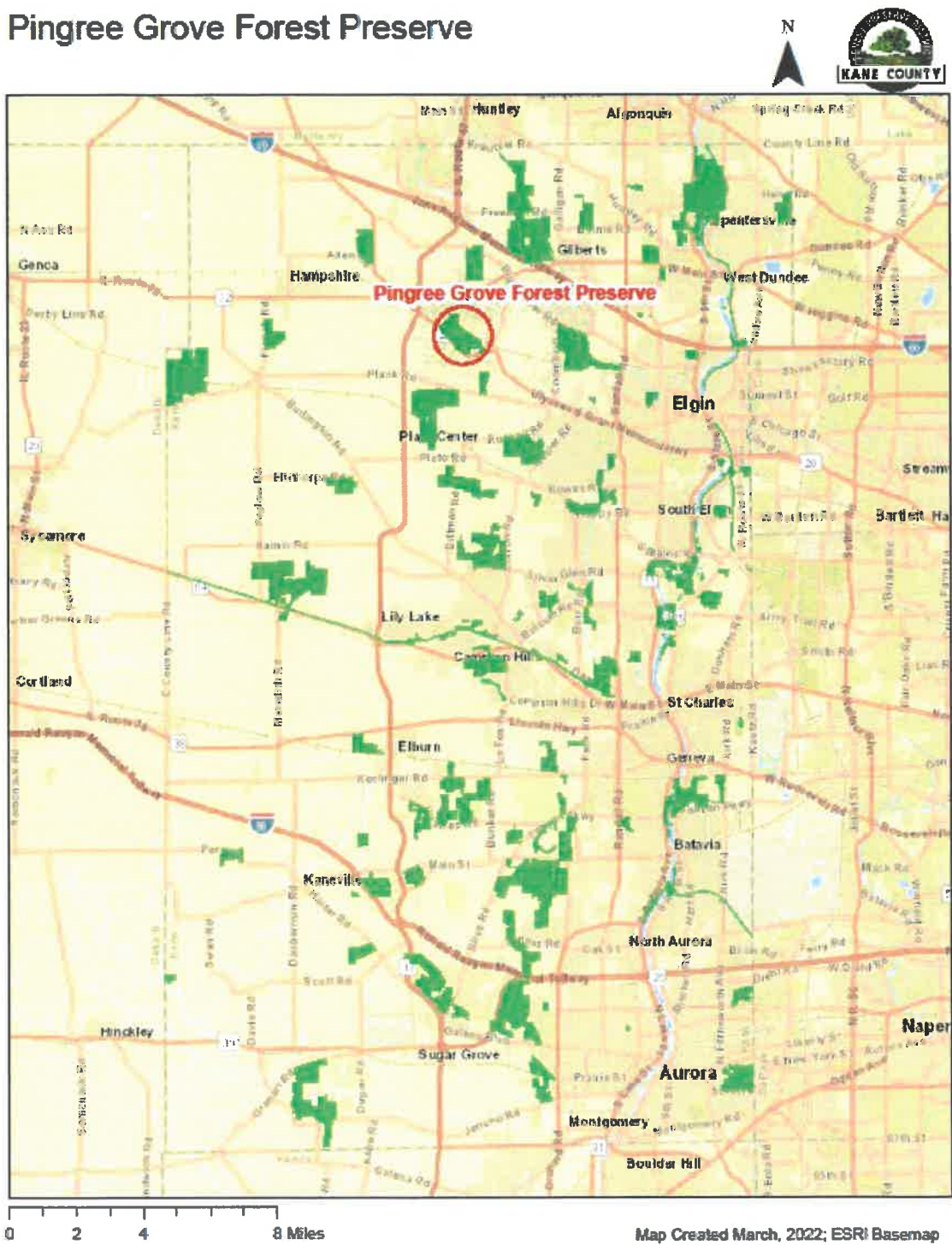
*Mia Meyer* \_\_\_\_\_ DATE: *6/8/22* \_\_\_\_\_

**PLEASE SUBMIT TO: Incidental Take Authorization Coordinator, Illinois Department of Natural Resources, Office of Resource Conservation, Division of Natural Heritage, One Natural Resources Way, Springfield, IL, 62702 OR [DNR.ITAcordinator@illinois.gov](mailto:DNR.ITAcordinator@illinois.gov)**

December 2016

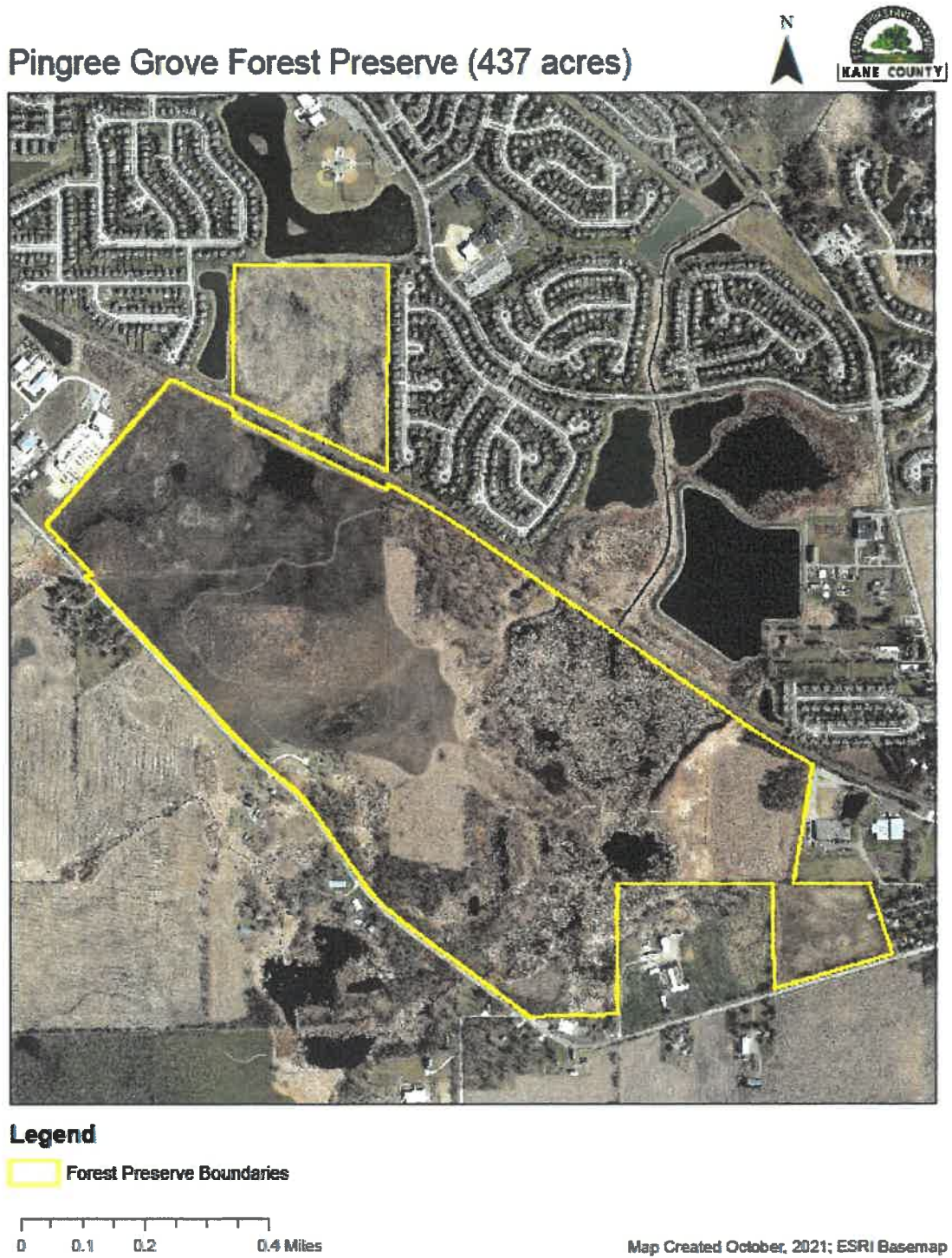
Figure 1. Pingree Grove Forest Preserve Location Map

### Pingree Grove Forest Preserve





**Figure 2. Pingree Grove Forest Preserve**



## **APPENDIX A**

Pingree Grove Wetland Bird Habitat Enhancement Project Plans



**GENERAL NOTES AND CONSTRUCTION SPECIFICATIONS**

- The "Standard Specifications for Road and Bridge Construction", State of Illinois, Department of Transportation, adopted January 2, 2022 and various sections of this project, these Improvement Plans and details shall govern applications of this project.
- The Contractor shall obtain, erect, maintain and remove all signs, barricades, flagmen and other control devices as may be necessary for the purpose of regulating, warning and controlling traffic. Placement and maintenance of all traffic control devices shall be in accordance with the "Standard Specifications for Traffic Control Devices".
- Locations of utility above ground appurtenances, such as manholes and appurtenances, shall be marked with reflective paint and shall be located at all existing underground structures, cables and pipe lines.
- If existing utility lines of any nature are encountered which conflict in location with new construction, the Contractor shall notify the Consultant and Owner so that the conflict may be resolved.
- The Contractor shall notify JULLIE (1-800-692-0123) at least ten days prior to construction so that each utility company can take out any underground appurtenances that they may have which might interfere with the proposed construction.
- The Contractor shall be required to make arrangements for the proper handling, storage, disposal and removal of all materials, debris, waste, and other materials and streets or roadways and associated structures and shall make repairs as necessary to the satisfaction of the Consultant and Owner at the owner's expense.
- The Contractor shall be responsible for the protection of all private and public utility lines through their own means on the job site. Any utility that is damaged during construction, the Contractor shall make the necessary arrangements for the Consultant and Owner by the Contractor at his own expense.
- The Contractor shall establish all plans and specifications, with the site of the work and storm lines (by with the work involved, natural and local conditions, all Federal, State and local laws, ordinances, rules and regulations and all other pertinent items which may affect the cost and time of completion of this project before starting any proposed work.
- All work and materials shall be in accordance with code requirements.
- Permits and licenses of a temporary nature necessary for the protection of the work shall be secured and paid for by the Contractor.
- Prior to submitting his bid, the Contractor shall obtain the consent of the Consultant to any material or equipment he deems inadequate and to any item of work omitted.
- The Contractor shall remove any area disturbed outside the construction site to a condition equal to or better than its original use. This shall include final grading, establishment of a vegetative cover (seeding or sod), general cleanup and permanent reclamation.
- The Contractor shall be responsible for providing safe and healthful working conditions throughout the construction of the proposed improvements.
- The Contractor shall provide a written work schedule, and shall update said schedule as required. A minimum twenty-four (24) hour notice shall be given for any item that requires approval or inspection.
- All items damaged or removed during construction of this project shall be replaced by the Contractor and said cost of replacement shall be paid by the Contractor.
- Before acceptance by the Owner and final payment, all work shall be inspected and approved by the Consultant and Owner. Final payments shall be made after all the Contractor's debts have been approved and satisfied.
- The Contractor will have in the possession on the job site a copy of the plans and specifications during construction.
- If any approved equal items are required the Contractor shall contact the Consultant for approval.
- As-built drawings shall be prepared by the Contractor and submitted to the Consultant as soon as the site improvements are completed. Any change in length, location, or quantity of work shall be noted on the as-built drawings. Final as-built drawings shall be submitted to the Consultant. Final payments will not be issued until satisfactory as-built plans have been submitted.
- All elevations are based on U.S.L.O.S. Datum.
- The Contractor is responsible for coordinating any required inspections with the owner, consultant, and other agencies.
- Special attention is drawn to the fact that Article 105.06 of the standard specifications requires the Contractor to have a competent superintendent on the job site at all times. The superintendent shall be responsible for the work and shall have full authority to execute orders to expedite the project, shall be responsible for scheduling and have control of all work on the sign of the Contractor. Failure to comply with this provision will result in a suspension of work as provided in Article 108.07.
- The Consultant and Owner are not responsible for the construction means, methods, techniques, sequences or procedures, time of performance, programs or for any safety precautions used by the Contractor. The Contractor is solely responsible for the execution of the work in accordance with the contract documents and specifications.

**SEDIMENTATION AND EROSION CONTROL NOTES**

- All soil erosion and sedimentation control measures shall be in accordance with the "Standard Specifications for Road and Bridge Construction", State of Illinois, Department of Transportation, adopted January 1, 2022. Unless otherwise indicated, all erosion control measures shall be installed and maintained in accordance with the standards and specifications in the Illinois Urban Stormwater Revised October 2017.
- Soil disturbance shall be conducted in such a manner as to minimize erosion. Soil stabilization measures shall consider the time of year, site conditions and the use of temporary or permanent measures.
- Soil erosion and sediment control features shall be constructed prior to the commencement of site disturbance.
- Temporary soil stabilization shall be applied to disturbed areas within 72 calendar days of the end of the active hydrologic disturbance. Permanent stabilization shall be applied to disturbed areas within 14 days of the end of the active hydrologic disturbance. When work has temporarily ceased for 72 days or more, temporary stabilization shall occur within 14 days after work has resumed.
- All storm sewer facilities that are or will be functioning during construction shall be protected, floored or otherwise treated to remove sediment.
- All temporary erosion and sediment control measures shall be constructed within 30 days after final site stabilization is achieved or after temporary measures are no longer needed. Trapped sediment and other disturbed soil areas shall be permanently stabilized.
- All temporary erosion control measures must be maintained and repaired as needed. The contractor shall be responsible for erosion control and repair during construction. The owner will be responsible if erosion control is required after the contractor has completed the project.
- The erosion control measures indicated on the plans are the minimum requirements. Additional measures may be required as directed by the engineer or governing agency.
- All erosion control measures must be inspected weekly and after each 0.5" rain event.
- Stockpiles of soil and other building materials to remain in place more than three (3) days shall be furnished with erosion and sediment control measures (e.g., mulch, straw, geotextiles) to remain in place for 30 days or more until receive temporary seeding.
- All adjacent streets must be kept clear of debris, impeded daily, and cleaned when necessary.
- The Runoff-By Soil and Water Conservation District (KDSWCD) must be notified of the commencement of land disturbing activities, and one week prior to the final inspection.
- A copy of the approved erosion and sediment control plan shall be maintained on the site at all times.
- Prior to commencing land-disturbing activities in areas other than indicated on these plans (including but not limited to, additional phases of development and areas not shown on the approved erosion and sedimentation control plan) shall be submitted to the owner for review by the KDSWCD.
- The contractor is responsible for installation of any additional erosion control measures necessary to prevent erosion and sedimentation as determined by the KDSWCD.
- Any additional disturbance due to excavation activities will require the installation of erosion control blankets.
- During construction operations, water will be captured in sediment basins or all traps. Dewatering directly into field files or stormwater structures prohibited.
- It is the responsibility of the Owner under General Contract to obtain any Sub-contractor(s) who perform work on the project, all the requirements in implementing and maintaining erosion control plans and National Pollutant Discharge Elimination System (NPDES) permit requirements set forth by the Illinois EPA.
- Any areas along the beneficial use/owner paths adjacent during construction shall be Erosion Control Blanket (MGS 5728M or approved equal) on slopes greater than 4:1 to 1V.
- Contractor shall provide processed project plan for work within marsh areas to Owner and KDSWCD prior to commencement of work.

**MATERIAL HANDLING AND TURTLE PROTECTION NOTES**

- Special attention is drawn to the project specifications which require additional information on these issues critical to the successful execution of the project.
- Extreme care shall be taken during construction to protect sensitive areas, in particular streams and other riparian systems that are subject to riparian or stream habitat before any issues.
- All work areas shall be visually inspected prior to commencing work each day and the Owner shall be notified if any turtles are discovered.
- All special required areas, specific locations shall be identified for placement of material removed from the marsh area. Material shall be placed in this location prior to removal. Removal areas shall be confined to be free of turtles and sloped to three-foot depth. Maximum disposal areas depth shall be approximately two-foot.
- All equipment shall be stored in upland areas overnight outside of wetlands and floodplains.

**LEGEND**

No.	Description/Name	Date

**General Notes**

**Hey and Associates, Inc.**  
 Engineering, Ecology and Landscape Architecture  
 26575 WEST COMMERCE DRIVE, SUITE 601  
 Volo, Illinois 60073  
 Chicago, Illinois 60630  
 Phone: (815) 748-2888  
 Fax: (815) 748-2888  
 You@HeyAssoc.com  
 PROFESSIONAL DESIGN FIRM  
 LICENSE NO. 184-00429

**Forest Preserve District of Kane County**  
**Pingree Grove Forest Preserve Hydrologic Restoration Project**

PROJECT NO.	18-0277	DRAWING NO.	
DESIGNED BY	DAK	CHECKED BY	JLM
DRAWN BY	BEJ	APPROVED BY	DAK
DATE	08/17/2022	SHEET NO.	2 OF 7

**For Bid**

**General Notes**

**Forest Preserve District of Kane County**  
**Pingree Grove Forest Preserve Hydrologic Restoration Project**

PROJECT NO.	18-0277	DRAWING NO.	
DESIGNED BY	DAK	CHECKED BY	JLM
DRAWN BY	BEJ	APPROVED BY	DAK
DATE	08/17/2022	SHEET NO.	2 OF 7

**For Bid**

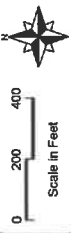
**General Notes**

**Forest Preserve District of Kane County**  
**Pingree Grove Forest Preserve Hydrologic Restoration Project**

PROJECT NO.	18-0277	DRAWING NO.	
DESIGNED BY	DAK	CHECKED BY	JLM
DRAWN BY	BEJ	APPROVED BY	DAK
DATE	08/17/2022	SHEET NO.	2 OF 7

**For Bid**





**LEGEND**

- Property Line (Kane Co GIS)
- Existing Contours (Kane Co 10)
- FEMA 100-yr Floodplain by Elevation (6060)
- Water Contour
- Access Road
- Detail Number
- Drawing Number

**NOTES:**  
Access shall only occur on identified nodes.

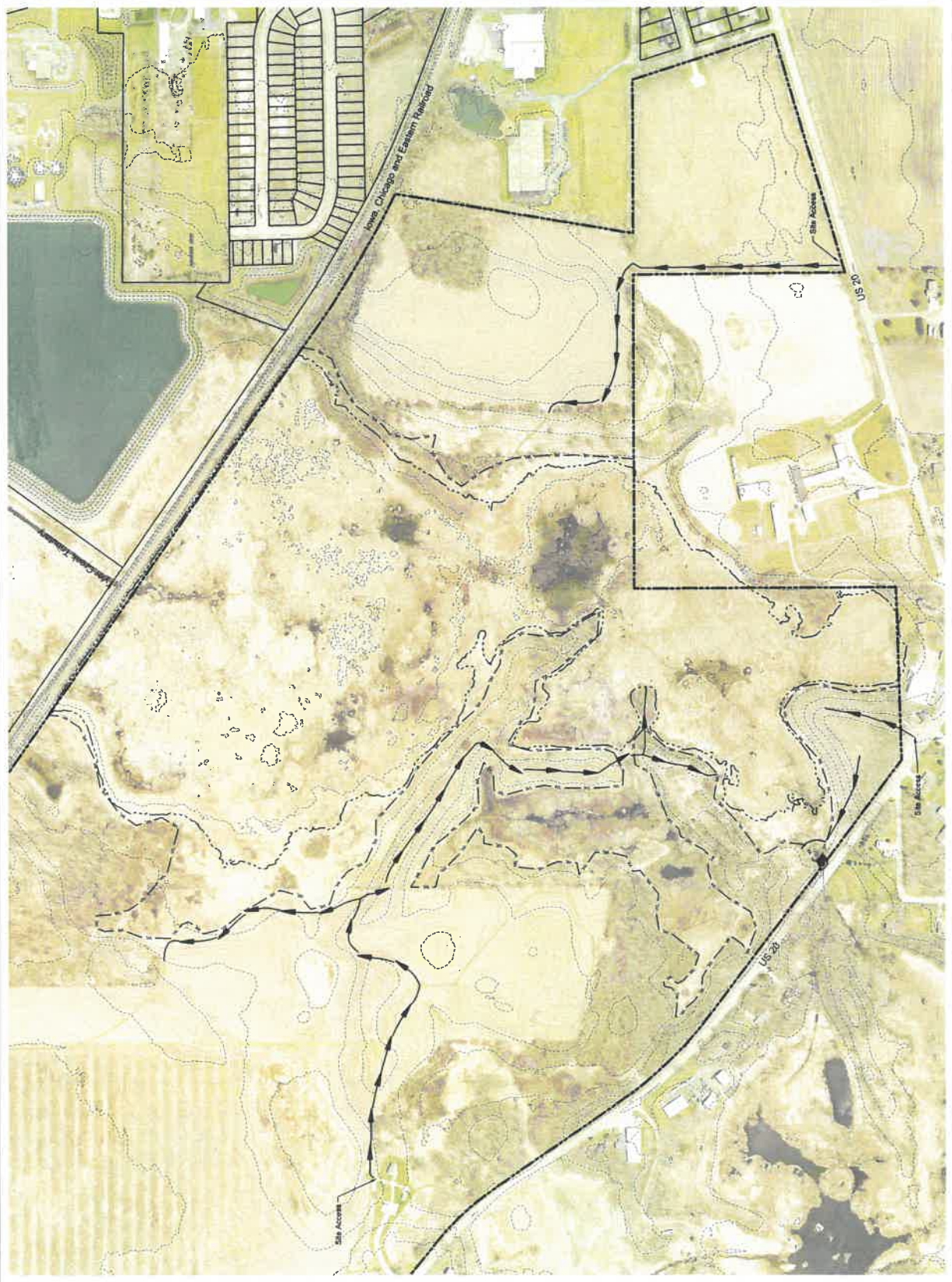
**Hey and Associates, Inc.**  
Engineering, Ecology and Landscape Architecture  
26575 WEST CONAURIE DRIVE, SUITE 601  
VALU, ILLINOIS 60073  
CONTACT: JEFFREY HEY  
PHONE: 708.283.8888  
EMAIL: JHEY@HEYUSCC.COM  
PROFESSIONAL DESIGN FIRM  
LICENSE NO. 181-002129

Forest Preserve District of  
Kane County  
Pingree Grove Forest Preserve  
Hydrologic Restoration Project

Removals and Access Plan

PROJECT NO.	18-0277	DRAWING NO.	C2.0
DESIGNED BY	DAK	CHECKED BY	JLM
DATE	08/17/2022	DATE	08/17/2022
SHEET NO.	3	TOTAL SHEETS	7

For Bid















Scale bar measures 1" at full scale

LEGEND

NO.	DESCRIPTION	DATE

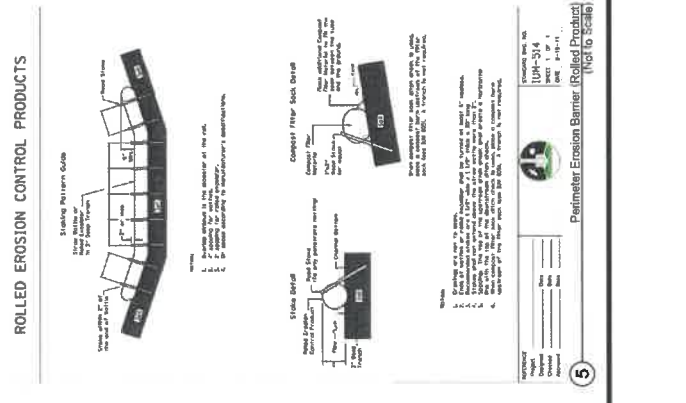
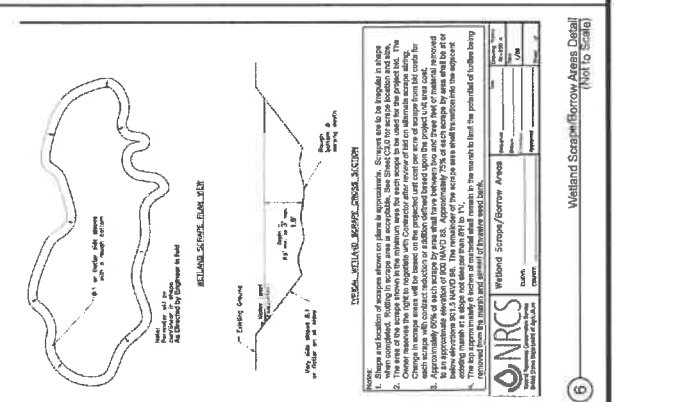
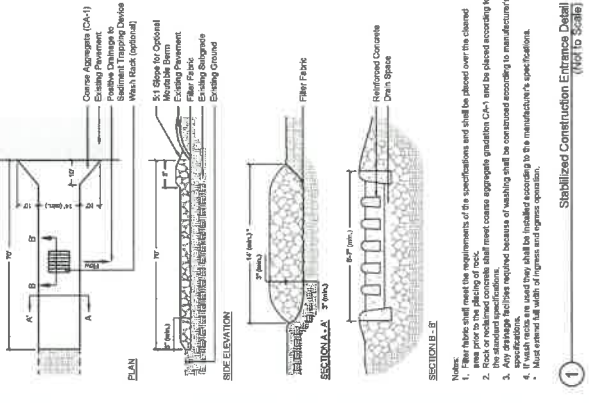
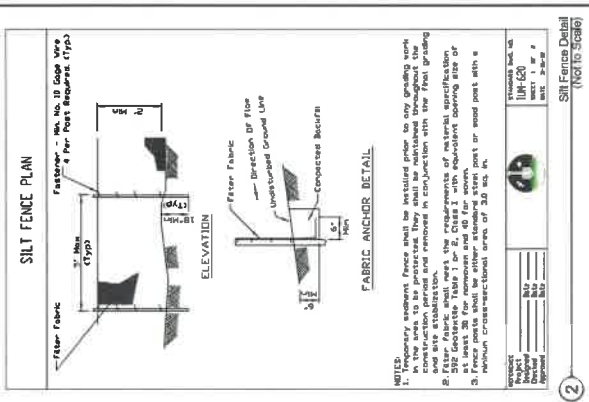
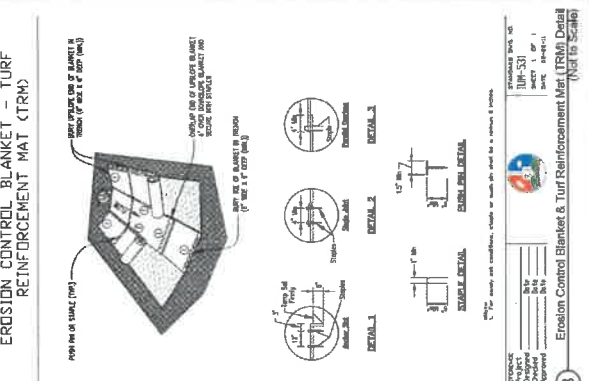
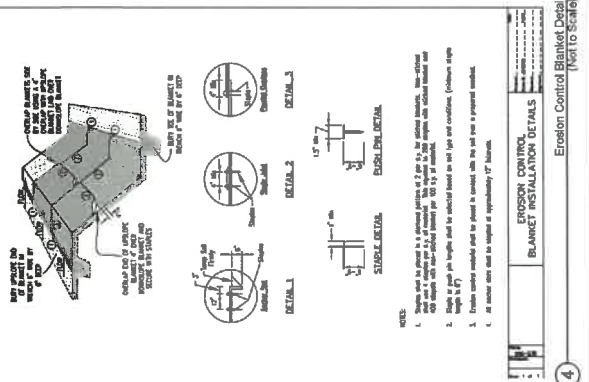
**Hey and Associates, Inc.**  
 Engineering, Ecology and Landscape Architecture  
 26575 WISY COMMERCIAL DRIVE, SUITE 601  
 Volo, ILLINOIS 60053  
 CHICAGO, ILLINOIS 60604  
 FAX: 847.748.2888  
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 PROFESSIONAL DESIGN FIRM  
 LICENSE NO. 184-006229

Forest Preserve District of Kane County  
 Pingree Grove Forest Preserve  
 Hydrologic Restoration Project

Details

DESIGNED BY	DAK	CHECKED BY	DAK
DRAWN BY	BEQ	DATE	08/17/2022
APPROVED BY	JLM	SCALE	1" = 1'-0"
DATE PLOTTED	08/17/2022	SHEET NO.	7 OF 7

For Bid



## **APPENDIX B**

Example Education and Outreach Materials



# FOREST PRESERVE DISTRICT OF KANE COUNTY

## PRECONSTRUCTION MEETING

### Blanding's Turtle Information & Instructions

According to the Illinois Department of Natural Resources, Blanding's Turtles have been known to occur in this area. Blanding's Turtles are classified in Illinois as an endangered species. Under the Illinois Endangered Species Protection Act (520 ILCS 10/), it is illegal to disturb, harass, injure, capture, or kill Blanding's Turtles or their nests.

They are known to inhabit in and near pond and wetland habitats, but they can also be encountered on land far away from water, as they forage for food or travel to nests. Adult Blanding's Turtles are generally 8-10" long and weigh 2-3 pounds. They have a long neck and a bright yellow throat or underside of their neck.

Young Blanding's Turtles also may be encountered, especially in August and September, when new hatchlings typically emerge from their nests. Juveniles are paler in color than adults, but their spots and markings are more conspicuous.

**The yellow underside of the neck is a key feature to look for.**





# CAUTION: BLANDING'S TURTLES MAY BE PRESENT



**Blanding's Turtle (*Emydoidea blandingii*)**  
*Illinois Endangered Species*

The carapace (shell) of a Blanding's Turtle is highly domed and black with yellow flecks. The body is also black with yellow flecks, while the underside of the neck and chin is bright yellow. Hatchlings are not as vividly marked. Their shell is brown or grey, and is not high-domed as in the adults. The legs are usually unmarked, but the head does have some yellow markings and the throat is pale yellow.



## OTHER COMMON TURTLE SPECIES THAT MAY BE ENCOUNTERED:

**Common Snapping Turtle**  
*(Chelydra serpentina)*

The common snapping turtle is a large turtle, ranging in size from 8-14" long, but sometimes as much as 19 inches. Their average weight is 10-35 pounds. Their color varies from tan to dark brown, to almost black in some specimens. Common snapping turtles have long tails and necks, and rough shells with three rows of carapace keels (shell ridges).



**Painted Turtle**  
*(Chrysemys picta)*

Painted turtles are relatively small turtles (5-8"), colorful with dark shells and yellow stripes on the legs, and blotches/spots on their heads. The edges of the shell are smooth, and may have red or yellow patterns on the edge.



In the event that a Blanding's turtle is found on site,

**ALL SITE WORK IN THE VICINITY MUST STOP IMMEDIATELY**  
and the Forest Preserve District contact must be notified:

**Bill Graser, Wildlife Biologist**  
**Forest Preserve District of Kane County**  
**(630)301-2228**

**Alternate Contact:** Illinois Department of Natural Resources (815) 675-2386 ext. 216