



## MINUTES OF THE KANKAKEE RIVER BASIN AND YELLOW RIVER BASIN DEVELOPMENT COMMISSION

### ***\*\*\*KRB-YRBDC Technical Advisory Committee\*\*\****

**Thursday, December 17, 2020**

**1:30 p.m. CST/2:30 p.m. EST**

**Conducted Electronically Under Executive Order 20-09**

Scott Pelath, Executive Director, called the meeting to order at 1:30 p.m.

Mr. Pelath called the roll.

#### *Members Present*

|                |            |                |
|----------------|------------|----------------|
| Kevin Breitzke | Dan Gumz   | Tony Hendricks |
| John Law       | Tom Larson | Kim Peterson   |
| Vince Urbano   |            |                |

#### *Staff Present*

Scott Pelath

Due to technical difficulties, a quorum could not be formally established at the time of the roll call. Therefore, the Committee preceded to allow a presentation until voice capability for some members was resolved.

#### **Cardno preliminary Yellow River design presentation**

The chair consented to revise the order of the agenda to allow Ross St. Clair from Cardno to present preliminary designs for Phase I of the Yellow River bank reconstruction [ATTACHMENT 1].

Mr. Pelath determined that a quorum was present to conduct business.

## **ELECTION OF OFFICERS FOR FY2021**

*Tom Larson moved that the Committee choose by acclamation Tony Hendrick as Chair, Kevin Breitzke as Vice Chair, and Vince Urbano as Secretary for Indiana State Fiscal Year 2021. Kim Peterson seconded the motion.*

MOTION ADOPTED BY VOICE VOTE.

Upon his formal re-election, Mr. Hendricks took his position as chair of the meeting.

The chair allowed questions of Mr. St. Clair's presentation.

Mr. Pelath asked Mr. St. Clair to further explain the "enhanced riffle" concept contained within the design. Mr. St. Clair said its purpose is to reduce energy, and will rely upon onsite material. It will be submerged and not generally visible or an impediment to kayakers or others.

Mr. Pelath also asked if the "M-shaped bend" in Starke County might require some specific armoring. Mr. St. Clair said they are continuing to evaluate the situation. The goal is to reduce energy through the bends, but additional adjustments may be necessary.

Mr. Breitzke asked if it was possible to have an emergency overflow through the bend. John Richardson from Cardno said the matter was discussed, and the water might take a straighter and deeper path over several years. If it steepened the channel, his concern was that more damage might occur downstream from the energy being passed to future downstream projects. Mr. Breitzke noted that the explanation was sound.

Bill Crase asked if the additional grading on the M-bend could be lined with clay to protect against pulling and erosion at flood stages. Mr. St. Clair said the priority was to protect those banks with native vegetation and erosion control blankets. He assured Mr. Crase that he would evaluate his concern fully in a site visit.

Mr. Breitzke suggested that they consider placing rock under clay. Mr. Crase agreed. Mr. St. Clair was receptive.

The chair stated that it was a nice presentation.

Mark Kingma asked if the flood bench grading can be mowed and maintained. Mr. St. Clair said he envisions a sand-gravel bar emerging that would be stabilized with wildrye. He said the maintenance should be minimal or unnecessary.

## **APPROVAL OF FEBRUARY 1 MINUTES**

*Dan Gumz moved to approve the June 25, 2020 minutes. Mr. Breitzke seconded the motion.*

MOTION ADOPTED BY VOICE VOTE.

## **EXECUTIVE DIRECTOR'S REPORT**

Mr. Pelath stated everything he has to report was already on the agenda, and he urged that the Committee simply proceed with the agenda. The chair concurred.

## **OLD BUSINESS**

### **Thayer Farm Transition**

Mr. Pelath reported that Zack DeYoung at the LaSalle Fish and Wildlife Area has attempted to engage Duck Unlimited for design work, but efforts are slowed during the pandemic. He stated that the design requirements are modest, and there are in-house options at DNR available to determine the size and width of any spill gates. He stated that efforts are proceeding.

Mr. Gumz asked if the Thayer Farm can be used for wetland mitigation. Mr. Pelath stated that DNR is on the deed as the owner despite the Commission's control of the property. He said it might qualify for some short-term mitigation needs, and the establishment of a bank would require a substantial investment from the Commission following Commission action. Mr. Pelath also has had some small-scale value for mitigation.

Mr. Gumz asked if water control structures would require human intervention. Mr. Pelath said they specifically planned for spill gates that would function without intervention.

### **Grand Marsh Park Streambank Restoration in Lake County**

Mr. Pelath reported that he is still working on budgeting for the project for next year. Bill Emerson stated that Lake County still is waiting on the issuance of permits, and that any adjustments in design probably were infeasible.

### **River's Edge Farm berm height adjacent to Jim Deardorff's property**

Mr. Pelath asked for the Committee's advice for an appropriate and cost-contained repair to the berm separating the River's Edge Farm from Mr. Deardorff's property. He suggested the two options were to raise the entire berm to 659', which would be costly, or repairing the lowest point to 658', which would reinforce the most vulnerable point of the berm. A third option was to do nothing.

*Mr. Breitzke moved that the Committee recommend to the Commission that the berm be repaired so that no point is lower than 658'. Vince Urbano seconded the motion.*

**MOTION ADOPTED BY VOICE VOTE.**

Mr. Pelath retroactively drafted a written recommendation for submission to the Commission [ATTACHMENT 2].

## **NEW BUSINESS**

### **Porter County bank access**

The chair recognized Mike Novotney for a Porter County bank access presentation. He submitted the proposal in writing prior to the meeting [ATTACHMENT 3].

*Mr. Urbano moved that the project be recommended favorably to the Commission. Mr. Gumz seconded the motion.*

Mr. Pelath stated his belief that funding by the Commission would be a virtual certainty.

MOTION ADOPTED BY VOICE VOTE.

The chair congratulated Mr. Novotney on his work.

Mr. Pelath retroactively drafted a written recommendation for submission to the Commission [ATTACHMENT 4].

### **Downstream logjam management**

Mr. Pelath noted that the Corps of Engineers had granted the Commission a ten-year permit to perform logjam management work under certain responsible guidelines, which include annual contractor training.

Mr. Pelath reported that work will soon begin on a LaSalle Fish and Wildlife Area bank, which is necessary to maintain to protect management of the waterfowl area. A logjam is also slated for removal at the Shelby railroad bridge.

Mr. Hendricks reported on logjam management work in LaPorte and Starke Counties.

### **Solicitation of county proposals for upcoming meetings**

Mr. Pelath reported on a Section 319 grant received by the Marshall County SWCD.

Dan Gumz expressed a desire for bank reseeding and the maintenance of Trap #22.

Mr. Pelath encouraged counties to bring projects soon, as there will be a greater competition for resources once work on the Yellow River begins.

Mr. Crase asked about the DNR property at 50 West in LaPorte County for possible flood storage. Mr. Pelath said the property will be evaluated in consultation with DNR and NRCS, of which the latter holds an easement on the property.

### **Tree mitigation and native vegetation reintroduction**

Mr. Pelath noted that the Commission has already committed some funds for tree planting, but there will be manpower needs. He expressed a wish that volunteers might serve in this role. He noted that funds have also been committed for seeding.

Mr. Gumz asked if many tree mitigation obligations could be met with planting on the Thayer Farm. Mr. Pelath said the permit suggested that they be planted in the general area of removal, but there is the possibility of consultation with the Corps on that point. He intended to request clarification from the Corps.

#### **OTHER BUSINESS**

None

#### **PUBLIC COMMENT**

Mr. Pelath recognized Chris Knochel for his twenty years of service to the Commission, and expressed his thanks on behalf of everyone. He particularly expressed his gratitude of his leadership during the transition on the Commission's restructuring,

#### **NEXT MEETING**

To be determined.

#### **ADJOURNMENT**

The Committee and assembled guests fully dispersed at approximately 3:13 p.m. CST.

## ATTACHMENT 1



# Yellow River Bank Reconstruction & Sediment Mitigation – Phase I

PRESENTER:  
Ross St.Clair, PE

February 22, 2021

## Topics

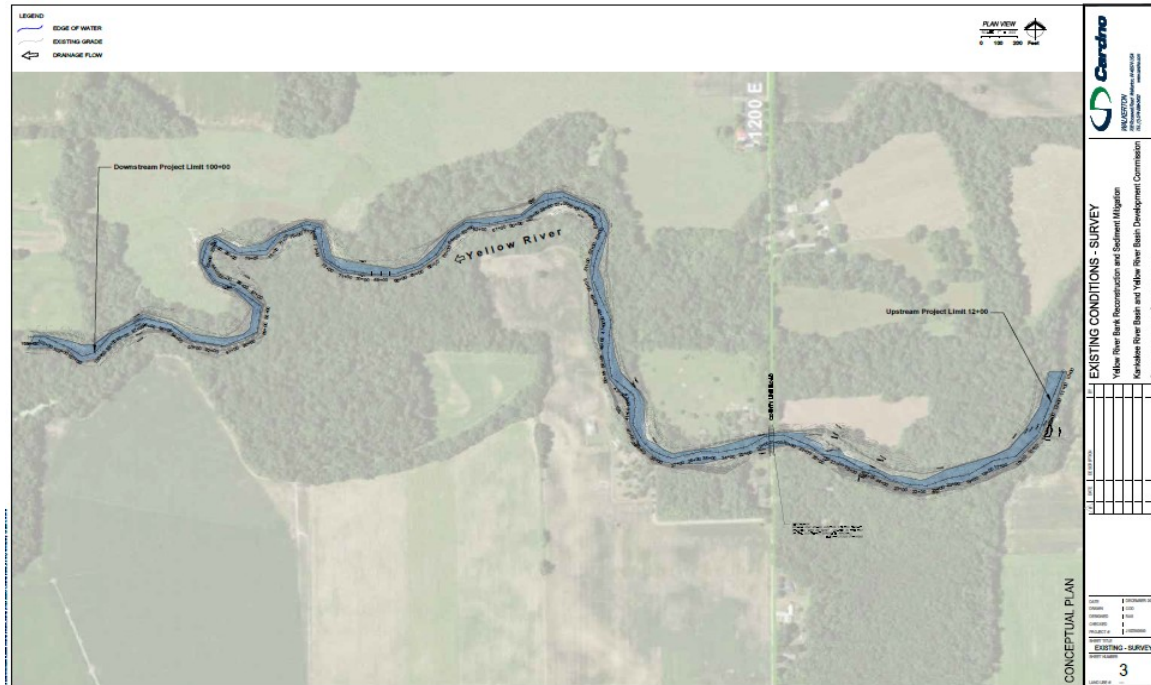
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- Review project area & goals
- Site survey, assessment & existing conditions
- Design overview
- Site Access
- Permitting overview
- Project timeline
- Questions & discussion



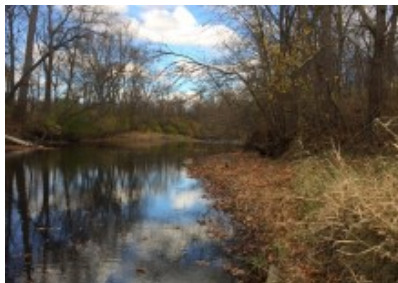
## Project Area

- > Yellow River in Marshall & Starke Counties
- > Extending 1,560 feet east & 6,212 feet west of County Line Road (1.5 miles stream centerline)



## Project Goals

- > Reduce sediment load in the Yellow River and Kankakee River.
- > Produce a design that is constructible, permittable, and cost-effective.
- > Design a high-quality project which minimizes future maintenance.
- > Develop comprehensive and appropriate construction plans and specifications that will lead to straightforward and accurate implementation.
- > Design solutions that are consistent with the natural characteristics of the Yellow River within Marshall and Starke County.





## Site Survey & Assessment

- > Project kickoff in late October 2020
- > Landowner permissions via surveyors
- > Territorial Engineering for survey & Cardno for field direction (Nov 2020)
  - 9,000 feet of stream profile
  - 80 stream cross sections
  - Identify bankfull indicators
  - River geometry post survey
  - Water surface elevations
- > Stream assessment by Cardno (Nov 2020-Jan 2021)
  - Soils assessment
  - Pebble count
  - Wetland survey
  - Vegetation inventory
- > Tree survey (potential bat roost & all trees >6")
- > Archaeological and Cultural Resources Review



 **Cardno**

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## Existing Conditions

- > F Type stream channelEntrenched meandering riffle/pool channel on low gradients with high width depthratio. High bank erosion rates
- > Stream disconnected from historic floodplain
- > Numerous high cut sand banks
- > Downstream eroded sand banks over clay layer
- > Unstable & shiftingedform(riffle, run, pool, glide)
- > Instability from log jams



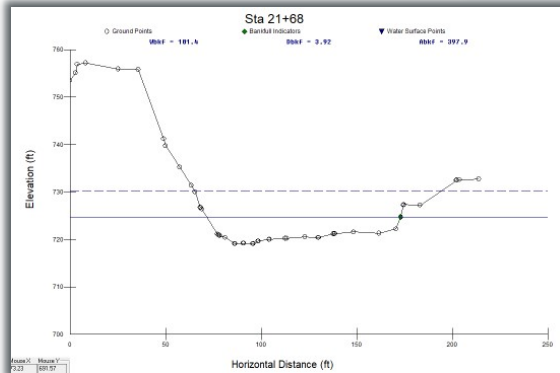
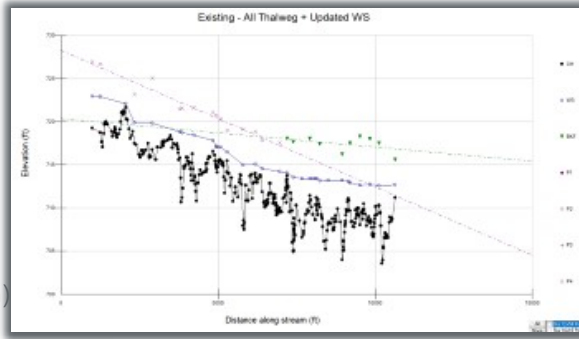
 **Cardno**

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## Design Overview – Hydrologic & Hydraulic Modeling

- > Hydrologic assessment
  - Reference data review
  - USGS Stream Gauge data
- > Existing conditions & bankfull analysis
  - River morphoanalysis
    - Cross section & profile review
    - Determine bankfull targets (width/depth)



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## Design Overview

- > Prioritize stabilization of high cut sand banks
  - Accomplish by use of structures to establish stable bedform (constructed riffle, hook, pool w/ toewood downstream glide structure)
  - 2H:1V outside bank grading, 4H:1V inside floodplain grading with native seeding, erosion control blanket/hydromulch

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## Design Overview

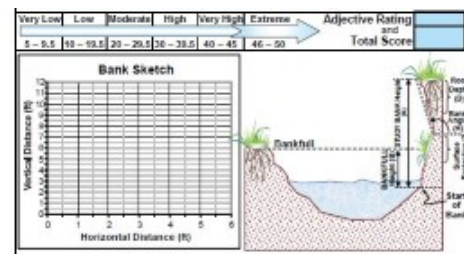
- > Stabilize downstream sand banks over clay layer
  - Selective structure placement & otwad composite (wood and rock) for "M" bend
  - Grade control at upstream and downstream end of pools w/toewood
  - 2H:1V outside bank grading, 4H:1V inside floodplairgrading with native seeding, erosion control blanket, hydromulch
  - Brush/live mattress over selective clay banks

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## Design Overview

- > Selectively reconnect stream with adjacent floodplain in a
  - Strategic placement of grade control structures
  - Inside floodplain grading minimum 4H:1V and up to 10H:1V



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River Stability Field Gok

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## Site Access

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- > All potential site access routes and staging/stockpile areas to be permitted
- > Better to permit worst case scenario than ask for permit modification

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## Permitting Overview

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- > SEA368 meeting held Dec. 18, 2020
- > Permit submittal target date early to mid March 2021
- > IDNR Construction in Floodway Permit
  - Non-modeling worksheet by showing no net fill
- > USACE 404 Permit under NWP 27
- > IDEM Individual 401 Permit
  - 30 day notification sent end of Jan. 2021

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## Permitting Overview

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- > Early to mid March- Permits submitted
- > Week of May 3- 90% design documents  
(plans, constructions specifications and cost estimate)
- > Mid June to Mid July- Permits issued  
(dependent on agencies)
- > 2 weeks after Permits issued- Final Design and  
Construction Bid Documents

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## Questions & Discussion

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## Thank you

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For more information

Ross St.Clair, PE

*Project Manager*

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[www.cardno.com](http://www.cardno.com)

## ATTACHMENT 2

### RECOMMENDATION 4-2020

To: Kankakee River Basin and Yellow River Basin Development Commission  
From: Technical Advisory Committee  
Subject: Berm Adjacent to Deardorff Property at River's Edge Farm  
Date: December 17, 2020

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**DESCRIPTION:** Jim Deardorff has requested additional repair to the berm that separates the River's Edge Farm from his property. During the 2018 flood, significant amounts of crop residue entered his property, and as a neighbor, he requested improvements to the berm height.

Porter County Surveyor Kevin Breitzke completed analysis and drawings of the berm, and found that a 2' increase would be necessary to bring the berm to uniform height, but that a 1' increase of the lowest section would require significantly less material and would provide some additional protection.

The Commission's legal predecessor, the Kankakee River Basin Commission, accepted some responsibility for the berm through its actions to improve it in the past.

**LOCATION:** Porter County, Indiana

**ISSUE:** The Committee took testimony for Mr. Deardorff and reviewed photographs of his dilemma. The Committee weighed potential costs against marginal increase in flood protection value.

**RECOMMENDATION:** The Committee recommended that the lowest section of the berm be raised to 658', or 1' foot higher than the current lowest point.

**ADOPTED BY COMMITTEE 12/17/2020.**

## ATTACHMENT 3



County Administration Center  
155 Indiana Avenue, Suite 311  
Valparaiso, IN 46383  
p: 219.465.3530  
[www.porterco.org](http://www.porterco.org)

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### MEMORANDUM

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To: Kankakee River Basin & Yellow River Basin Development Commission  
Technical Advisory Committee

From: Michael E. Novotney, PE

Date: December 15, 2020

Subject: Proposed Kankakee River Maintenance Access Route Extension  
Dunns Bridge to SR 49

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#### Committee Members,

Porter County is seeking the Technical Advisory Committee's support of a proposed extension of an existing maintenance access route located along the top of the north bank of the Kankakee River between Dunns Bridge and SR 49. As shown in the attached exhibits, two maintenance access routes currently exist along this stream reach, including a 1 MI long route located generally between the old Chicago & Indiana Coal Railroad ("Coal Road") and the Heimberg Ditch, and a 3,900 FT long access route located further downstream. There is an existing culvert in place carrying the access route over the Heimberg Ditch.

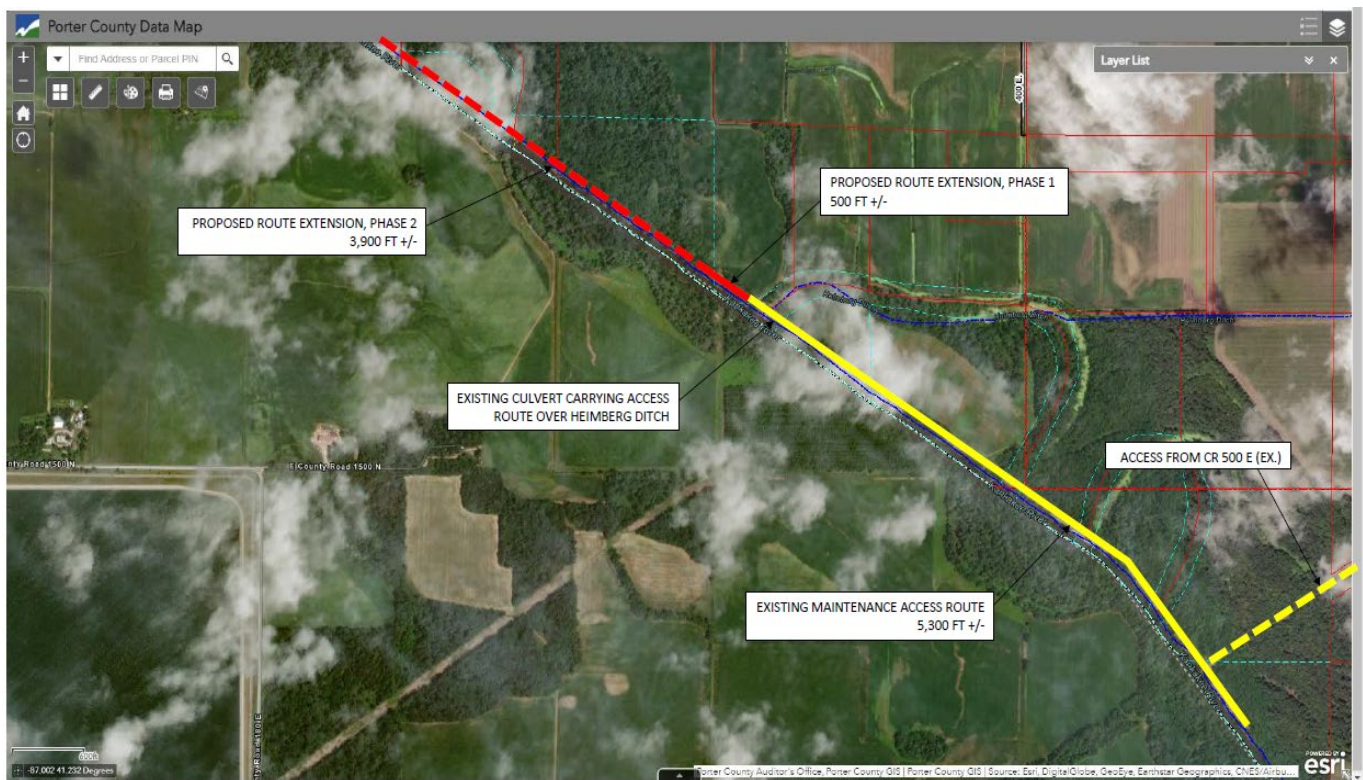
These two access routes are separated by a 4,400 FT long section of wooded, unimproved spoil pile berm. Porter County is proposing to connect the two maintenance access routes as the first step toward stabilizing significant stretches of unstable stream banks located within this stream reach, as identified in Exhibit 3 (Sheets 8 & 9) of the Work Plan (attached). These locations are currently severely eroded and appear to be contributing a significant volume of sediment to the river. Future erosion and sediment loss and, potentially, bank failures, should be anticipated in these locations until they can be stabilized. Extension of and connection of the existing access routes would allow equipment and materials to reach these locations so that they may be stabilized.

Porter County is proposing to construct the maintenance access route extension in two phases, the first of which would be approx. 600 FT long and avoids mapped wetland areas, but requires the relocation of existing utilities and associated improvements, and the second of which would be approx. 3,900 FT long and involves work within mapped wetland areas. The construction of the maintenance access route generally includes clearing and tree removal as well as grading work to level the existing unimproved spoil pile berm in order to create a 12 FT to 15 FT wide access route. Excluding the streamside improvements depicted therein, Figure 14 of the Work Plan illustrates the general stream bank cross-section that would result from the construction of the maintenance access route.

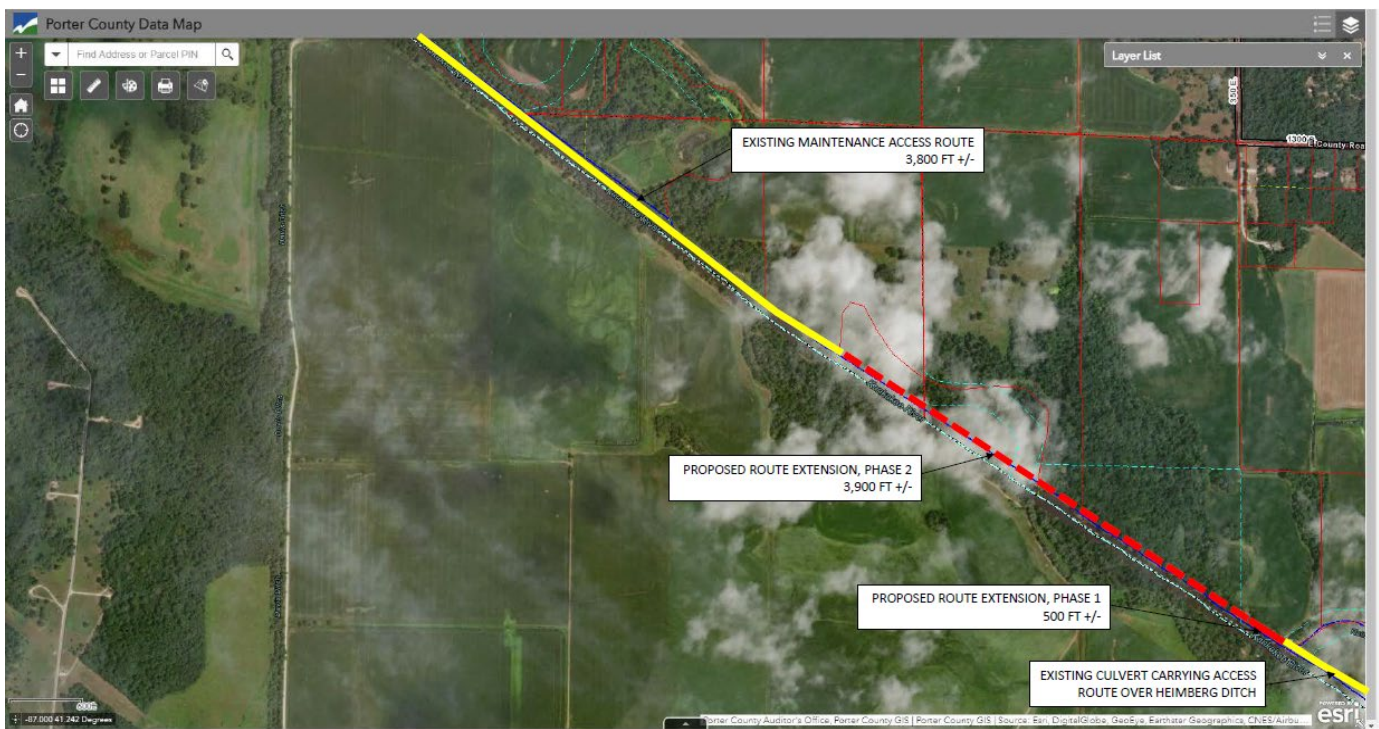
At this time, Porter County is seeking the Committee's support of the proposed maintenance access route extension. The extension of the maintenance access route will allow for the future stabilization of several lengthy reaches of severe stream bank erosion, as identified within and in accordance with the Work Plan. Porter County will also be seeking the Commission's financial support for Phase 1 of the proposed access route extension, in the amount of \$27,500.00, which is based on a preliminary opinion of probable construction cost for the project.

*Porter County is an equal opportunity employer and does not discriminate on the basis of race, color, religion, sex, age, national origin, disability, military status, genetic testing, pregnancy, sexual orientation or any other unlawful bias.*



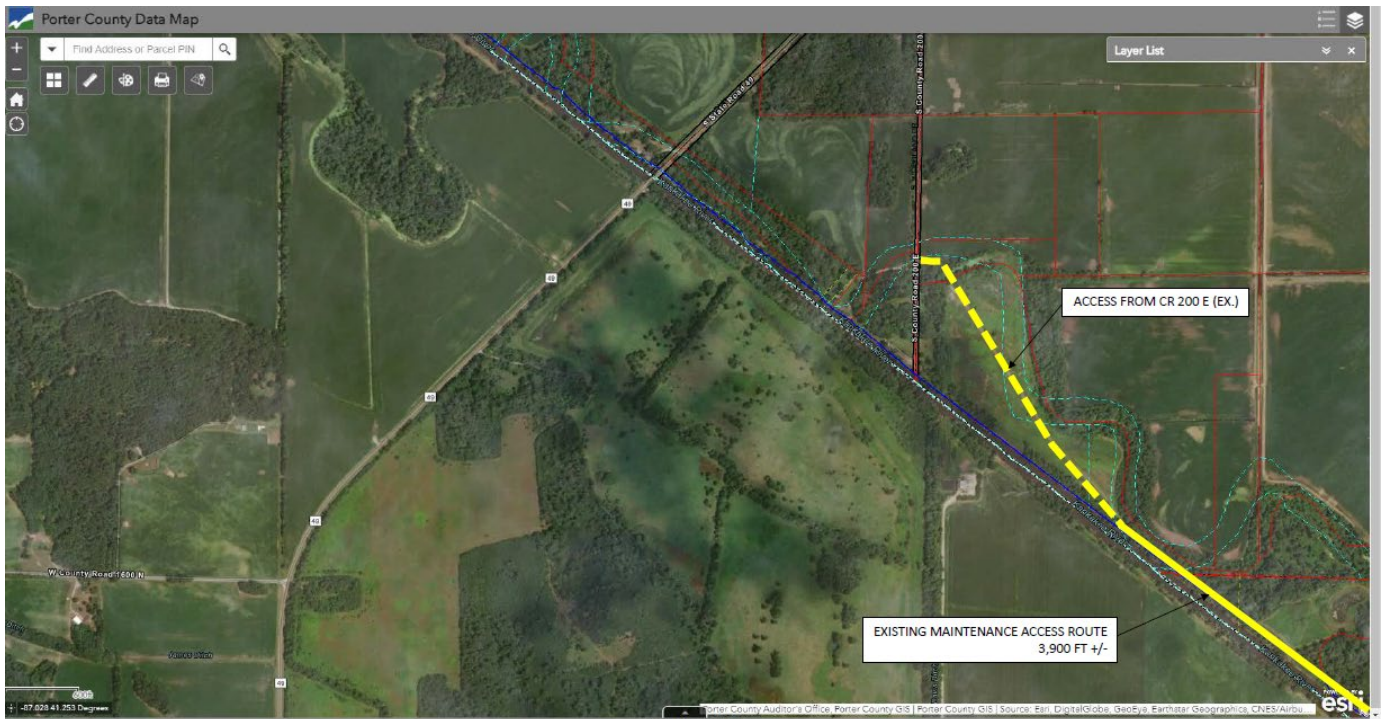


PORTER COUNTY  
PROPOSED KANKAKEE RIVER MAINTENANCE ACCESS ROUTE EXTENSION  
DUNNS BRIDGE TO SR 49

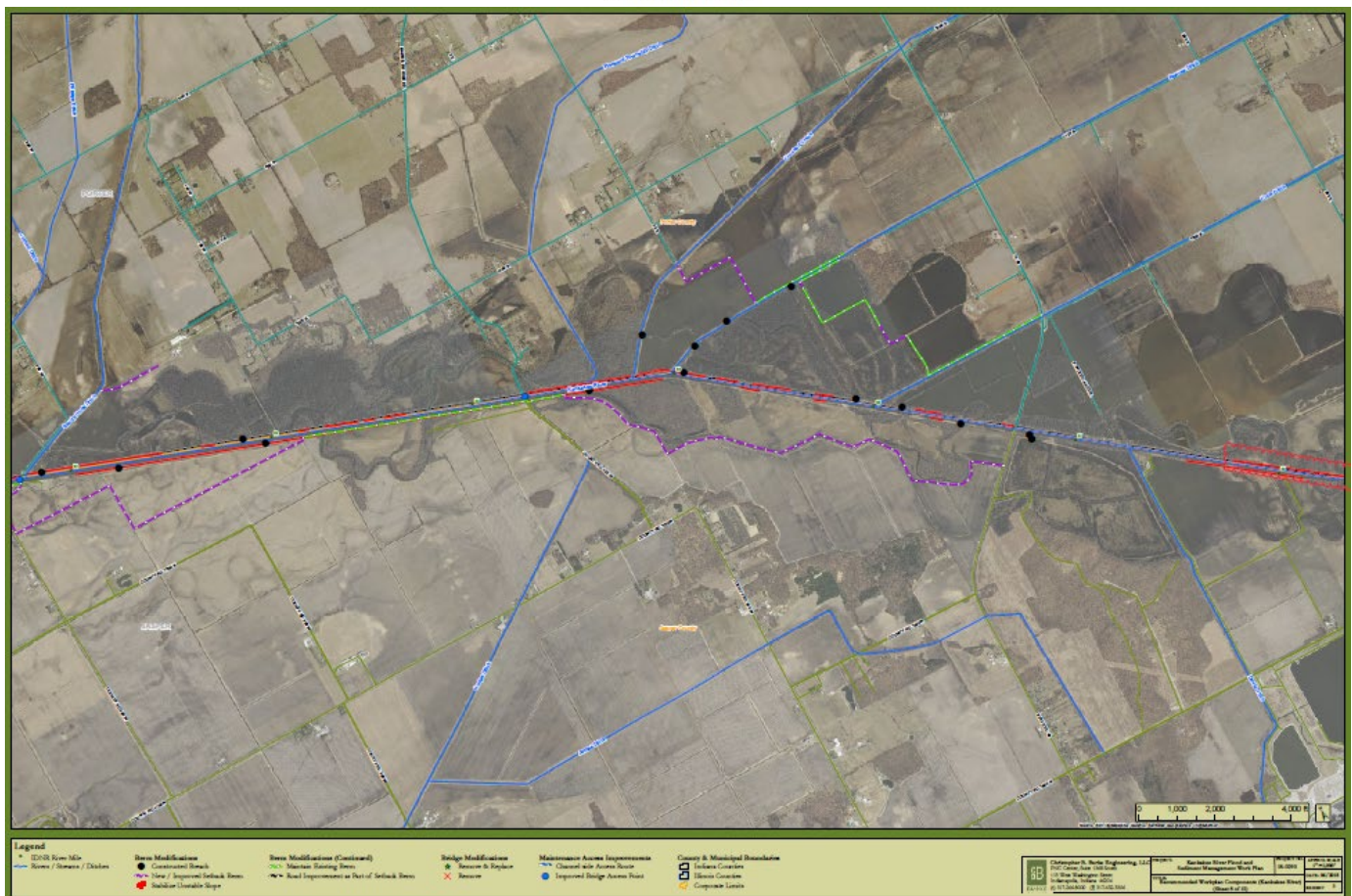


PORTER COUNTY  
PROPOSED KANKAKEE RIVER MAINTENANCE ACCESS ROUTE EXTENSION  
DUNNS BRIDGE TO SR 49





PORTER COUNTY  
PROPOSED KANKAKEE RIVER MAINTENANCE ACCESS ROUTE EXTENSION  
DUNNS BRIDGE TO SR 49







## ATTACHMENT 4

### RECOMMENDATION 5-2020

To: Kankakee River Basin and Yellow River Basin Development Commission  
From: Technical Advisory Committee  
Subject: Porter County Bank Access  
Date: December 17, 2020

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**DESCRIPTION:** Commission Secretary Mike Novotney presented a plan [ATTACHED] to improve and extend bank access in Porter County.

**LOCATION:** Porter County, Indiana

**ISSUE:** Bank access is a common barrier to maintaining the safety of the channel. The Committee considered if the proposal has lasting value for the costs cited.

**RECOMMENDATION:** The Committee strongly recommends that the Commission approve the plan and allocate the requested amount of \$27,500 for Phase I of the project.

**ADOPTED BY COMMITTEE 12/17/2020.**