



2021 Trail Feasibility Study

December 10, 2021
Final Report



2021 Trail Feasibility Study

Table of Contents

▪ Acknowledgments	5
▪ Chapter 1: Introduction	
- Purpose and Background	10
- Study Area Description	10
- Planning Framework	12
- Contribution Studies and Projects	13
- Local and Regional Connectivity	14
▪ Chapter 2: Existing Conditions	
- Physical Features	16
- Study Route Maps	17
- Study Segment Descriptions	19
- Existing Utilities	25
- Existing Facilities Inventory	26
▪ Chapter 3: Proposed Network	
- Introduction	41
- Trail Section 1	43
- Trail Section 2	67
- Trail Section 3	105

Appendices:

- Appendix A: Detailed Trail Segment Alignment Sheets
- Appendix B: Field Inventory Summaries
- Appendix C: Meeting Agendas and Minutes



2021 Trail Feasibility Study

Acknowledgments

- Erlene Yentes - Executive Director

- Syracuse-Wawasee Trails Committee
 - Kay Young - President
 - Tom Edington - Treasurer
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 - Angie Racolta
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 - Sherm Goldenberg
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Prepared by:





List of Common Abbreviations

CE	Categorical Exclusion (I.E. CE-4)
CMP	Corrugated Metal Pipe
DNR	Department of Natural Resources
EOP	Edge of Pavement
ESA	Environmental Site Assessment
FM	Force Main
IDEM	Indiana Department of Environmental Management
INDOT	Indiana Department of Transportation
LUST	Leaky Underground Storage Tank
NEPA	National Environmental Policy Act
OH	Overhead (Referring to Utilities)
OHE	Overhead Electric
OHT	Overhead Telephone
RCB	Reinforced Concrete Box
RFI	Red Flag Investigation
ROW	Right-of-Way
UG	Underground (Referring to Utilities)
USACE	United States Army Corps of Engineers
WOTUS	Waters of the United States
WQC	Water Quality Certification



Chapter 1: Introduction



Chapter Contents:

- Purpose and Background
- Study Area
- Planning Framework
- Local and Regional Connectivity





PURPOSE & BACKGROUND

Syracuse-Wawasee Trails (organization) commissioned The Syracuse-Wawasee Trail Feasibility Study (study) to build upon previous planning and construction efforts and evaluate options for expansion and connection of the existing trails within the Syracuse-Wawasee area. It provides recommendations on feasibility for expanding the existing trail system, including future regional trail connections. Primary goals directing the effort included:

- *Completing existing trail segments and expanding connectivity among neighborhoods, schools, parks, and businesses.*
- *Providing safe, attractive, and comfortable routes for people to explore and enjoy all areas surrounding Lake Wawasee.*
- *Planning for future connections to regional amenities and other communities.*

The project team designed the study approach to overcome challenges resulting from a varied and complex set of existing conditions. This decision-making framework narrowed multiple options into a set of recommendations representing the most desirable blend of trail routing, user safety, and capital efficiency. In general, the study followed the following basic steps:

- *Identification of geographical areas that the organization wished connected to existing trails.*
- *Evaluation and analysis of several preliminary alignment concepts.*
- *Each desired alignment received a constructability analysis to evaluate environmental impacts, right-of-way impacts, utility infrastructure, and design costs.*
- *Evaluation also included quality of life factors like regional trail connectivity, design aesthetics, and connection to local attractions.*

Study Area Description

The project study area included the town of Syracuse in northern Indiana and areas immediately surrounding Lake Wawasee in Kosciusko County. It was divided into three primary sections to allow for more efficient route evaluation and recommendations. The three primary sections include the following general geographic areas:

- *Section 1: Western Portions of Study Area:*
 - *Kern Rd., CR 1200 N., Syracuse-Webster Rd., and West Chicago St.*
- *Section 2: Central Portions of Study Area:*
 - *SR 13, Waco Dr., Southshore Dr., Vawter Park Rd., CR 800 E., CR 1000 N., and Hatchery Rd.*
- *Section 3: Eastern and Northern Portions of Study Area:*
 - *Hatchery Rd., Turkey Creek Rd., Wawasee Dr., CR 1250 N., and Bishop Rd.*

Each study section was further subdivided into smaller segments to provide flexibility in evaluation. Each segment can be implemented individually or combined to form a larger single project should available funding allow. See the Map on the facing page for information on the specific study area locations.



Planning Framework

The Syracuse Wawasee Trails Committee (committee) oversaw the project. This group provided initial direction for project vision and desired system routing. The committee met multiple times over the course of the project to discuss progress. It provided guidance and comments for initial trail routing refinement and design alternatives. It also reviewed the final report and recommendations before publication. Below is a summary of the various project meetings and topics discussed:

- *March 29, 2021 – Project Kickoff Meeting*
 - *Study purpose*
 - *Trail section review*
 - *Site visit planning and next steps*

- *May 17, 2021 – Project Update Meeting*
 - *Initial desktop review findings*
 - *Community input and other feedback*

- *June 21, 2021 – Project Update Meeting*
 - *Field inventory results*
 - *Initial trail alignment review*

- *July 19, 2021 – Project Update Meeting*
 - *Right-of-way, Environmental, & utility coordination updates*
 - *Revised alignment alternatives discussion*
 - *Preliminary cost opinion discussion*

- *July 29, 2021 – Trails Fundraiser Meeting*
 - *Public presentation of preliminary ideas*
 - *Open questions and answer session with meeting attendees*

- *August 16, 2021 – Project Update Meeting*
 - *Trail alignment alternatives*
 - *Regional connectivity*
 - *Refinement of cost opinions*

- *September 20, 2021 – Draft Plan Review Comments*
 - *Draft feasibility study review and comments*

Contributing Studies and Projects

This study referenced many previous projects within the Syracuse-Wawasee region. References helped inform the development of initial trail routes and connections. Below is a summary of reference resources used in developing final study recommendations.

- *2007 Pickwick Corridor Feasibility Study:*
 - The organization commissioned this feasibility study to evaluate a possible pedestrian trail corridor along Pickwick Road and Cornelius Road. The Pickwick Corridor study was used as a template to help develop the current study approach. The Pickwick Corridor was previously constructed and eventually extended along Eli Lilly Road. Section 3 of this study will connect to the endpoint of the Pickwick Corridor.
- *Vawter Park Rd. Survey and Evaluation*
 - The organization commissioned a site survey and brief analysis in 2016 to determine the existing ROW conditions along Vawter Park Road and assess the potential feasibility through this area. This information was reviewed as part of the development of this report to help further develop the study approach.
- *The 2017 Town of Syracuse Comprehensive Plan:*
 - The Town of Syracuse Comprehensive Plan (comp plan) mentions the community's desire to complete more than "30 miles of interconnected multi-use trails and sidewalks." (Syracuse Comprehensive Plan pp. 29). The comp plan includes a vision for enhanced trail connections for all modes of transportation around the perimeters of lakes Syracuse and Wawasee. The current feasibility study helps the Town of Syracuse reach its trail goals.
- *2021 Kosciusko County Comprehensive Plan*
 - Kosciusko County was updating its comprehensive plan at the time of this study. The county will complete its final plan after this study, but early results from the planning process show strong support for trails and greenways throughout the county. For example, during the Public Open House the highest ranked future priority was developing a county parks and recreation board to improve parks, open space, and trail connections.

Resident Feedback

Many people have been engaged in discussion relating to the development of the trail system. Conversations occurred in many settings and included some direct comments received via e-mail correspondence. The following information summarizes some of those recommendations:

- A desire to see a new trail section along SR 13 between Waco Drive and Southshore Drive.
- Considering alternate routing for the trail on the north side of CR 1200 N. to avoid potential property impacts in the area.
- A desire to see the trail system stay south of the existing rail lines along CR 1250 N.; One routing recommendation included taking the trail through the wetlands and along the golf course to make a safer and more attractive trail.



Local and Regional Connectivity

Connection of Syracuse-Wawasee Trails to other trail systems in the region is important. As noted above, preliminary information from the Kosciusko County planning process indicates high desirability for trails and greenways. Other recent studies, including trail feasibility studies in the Town of Milford, Town of North Webster, Town of Etna Green, and the City of Warsaw, are helping to make future regional connections from Syracuse-Wawasee more feasible. Some consideration was given to future regional connections when developing current study routes, but a detailed analysis was beyond the current project scope. However, the study of other planning efforts did reveal the following possible connections for future consideration.

- *An approximately 5-mile connection west to the Town of Milford. This trail could start at Kern Rd. and run along CR 1300 N., CR 100 E., and E. Syracuse St.*
- *An approximately 4-mile connection south to the Town of North Webster along SR 13. The trail could start at Vawter Park Rd. The Town of North Webster has already completed a feasibility study for one possible connection to CR 1000 N.*
- *Connecting to future off-road greenways along stream corridors and through natural areas.*

Study Conclusions

The current study intends to provide higher-level information necessary to further conversations and decisions for future implementation. This information will be useful for future funding proposals and in determining local prioritization of future projects for design and construction.

Evaluation of the more than 12 miles of proposed trail routes with this study concludes that there are feasible options for completing a connected trail network around the entire Town of Syracuse and Lake Wawasee region. Each proposed trail corridor in the report provides a recommended alignment best matching study team findings and defined project goals. However, other options exist for each proposed segment, each with its own set of trade-offs among connectivity, land acquisition, environmental impacts, and project costs.

Chapter 2: Existing Conditions



Chapter Contents:

- Physical Features
- Study Sections
- Existing Utilities Overview
- Existing Facilities Inventory





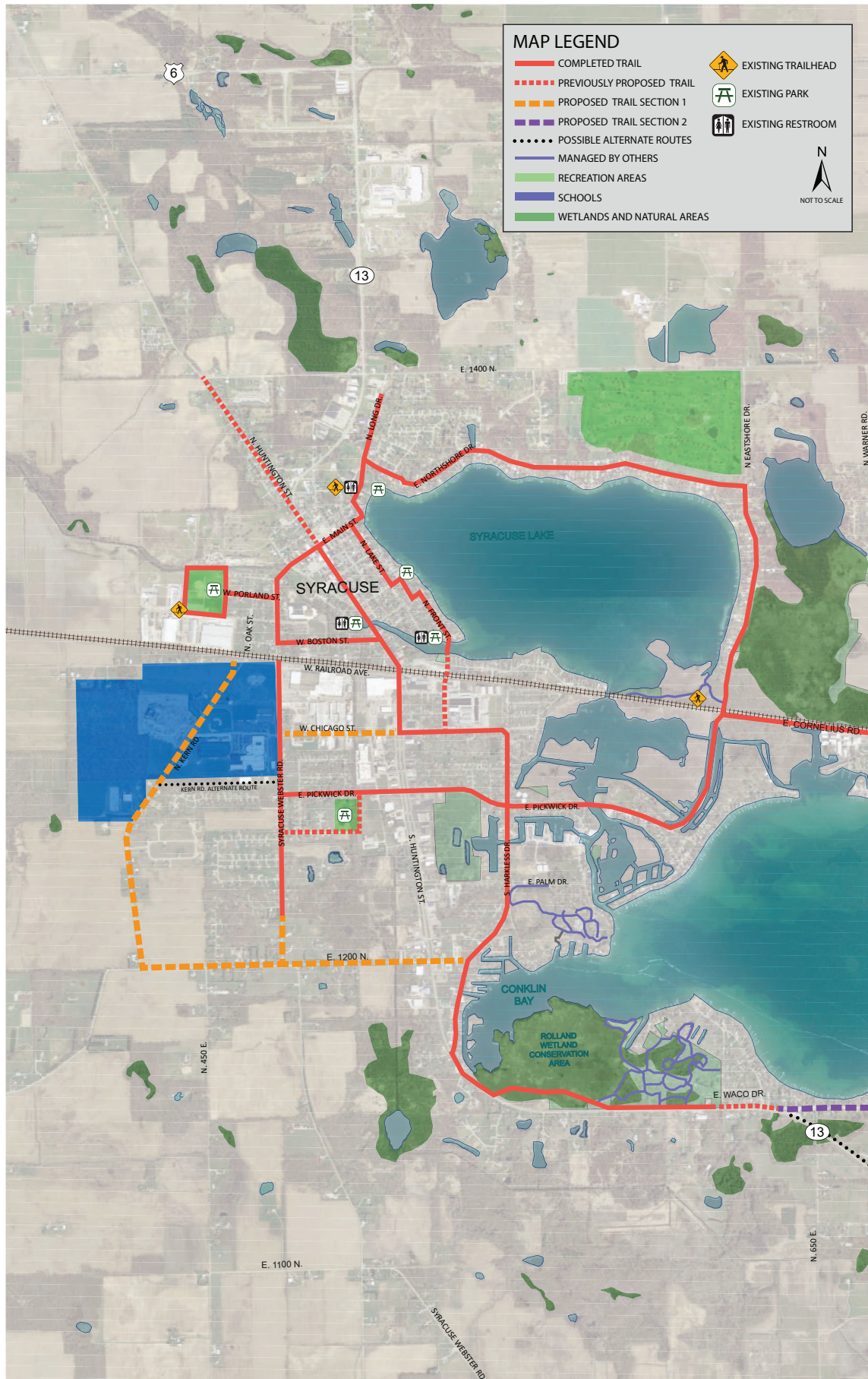
PHYSICAL FEATURES

The following chapter provides an overview of the existing conditions along the proposed trail routes. It includes the following information about existing conditions for the proposed system:

- *An overview of proposed trail routing and corridor character*
- *Field survey and desktop environmental review findings*

Physical features along the length of the trail vary considerably. The information on the following pages provides a glimpse of these features by trail segment. Additional information developed during the inventory phase of the project is in the document appendix.

Trail Section 1 Study Route



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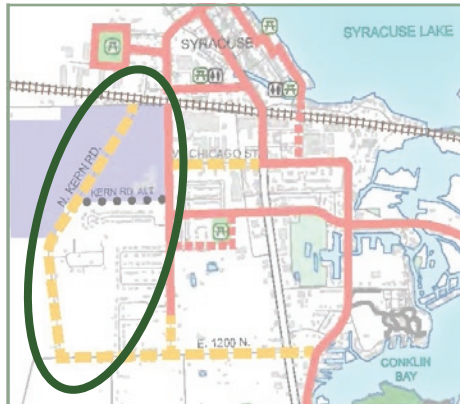
Study Segment Descriptions

The proposed trail route is approximately 12.4 miles in length with varying adjacent conditions. Three primary project sections were identified based on geographic location within the community. Each section was further divided into smaller segments with specific breakpoints allowing for more efficient evaluation and discussion. This organizational structure is for planning purposes only and is not suggestive of phasing or priority recommendations.

Trail Section 1: The route for Section 1 includes the following segments and general conditions:

Segment 1: Kern Rd. between Railroad Ave./CR 1300 N. and CR 1200 N.

- Northern portions of this area are bordered by Wawasee High School and Syracuse Parks property. Adjacent uses transition to rural residential through the middle portion with primarily rural residential and agricultural parcels on the southern end.



View facing south from intersection of CR 1300 N. and Kern

Photo Credit: USI Consultants

Segment 1a: Kern Rd. Alternate Route: between CR 1300 N. to Kerns Crossing subdivision, then horizontal connection to Syracuse-Webster Rd.

- This alternate route would mirror the northern parts of the primary Kern Rd. alignment, but would instead cross behind the Wawasee High School facility to Syracuse-Webster Road instead of continuing fully to CR 1200 N.

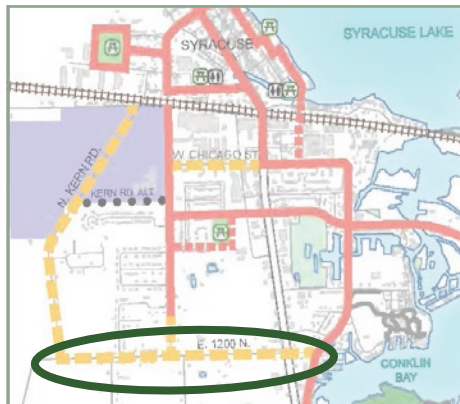


View facing south along Kern Rd. near school athletic fields.

Photo Credit: USI Consultants

Segment 2: CR 1200 N. from Kern Rd. to Harkless Dr.

- This segment is bordered by residential and agricultural properties on the western end and transitions to residential as it approaches SR 13. There are a few commercial uses and a narrow bridge crossing the Skinner Ditch located along eastern portions of the route.



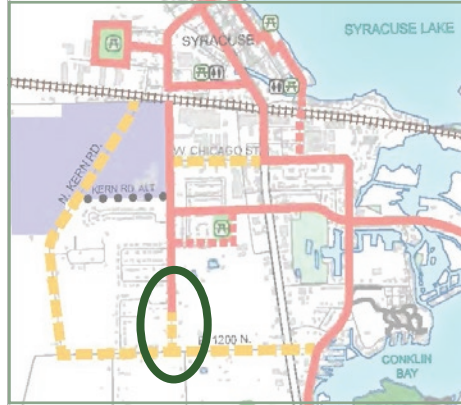
Narrow bridge crossing along CR 1200 N. approaching SR 13

Photo Credit: USI Consultants

Trail Section 1, continued: The route for Section 1 includes the following segments and general conditions:

Segment 3: Syracuse-Webster Rd. from the existing trail to CR 1200 N.

- This segment would complete the connection from the existing trail section approximately 0.16 miles north of CR 1200 N. and continue to the proposed trail along CR 1200 N. It is residential in character.

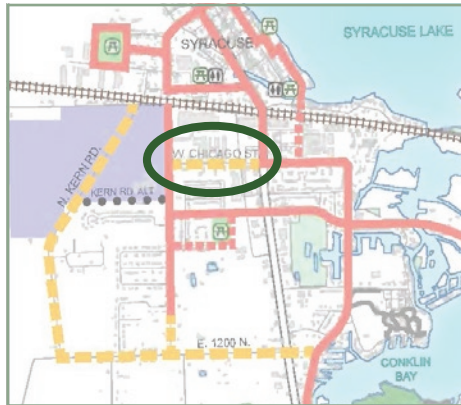


Locally named "Crazy Corners" intersection along CR 1200 N.

Photo Credit: USI Consultants

Segment 4: W. Chicago St. between Syracuse - Webster Rd. and SR 13

- This is the only portion of trail in Section 1 within the Town of Syracuse limits. This segment consist primarily of commercial and industrial uses. There is a lack of pedestrian zone definition because of major drive entrances and absence of a curb edge.



View of existing SR 13 crossing condition.

Photo Credit: USI Consultants

Trail Section 2: The route for Section 2 includes the following segments and general conditions:

Segment 1: SR 13 & Waco Dr. from Grandview Dr. to SR 13

- This segment is primarily residential in nature. A small section of trail will parallel SR 13 at the endpoint connection to the previously completed Conklin Bay Wetlands trail. There are many potential conflict points along Waco Dr. due to the large number of residential driveways and right-of-way (ROW) encroachments.



Facing east along Waco Dr.

Photo Credit: USI Consultants

Segment 2: SR 13 & Southshore Dr. From Waco Dr. to Vawter Park Rd.

- The character of this segment is defined by well shaded and narrow residential streets. There are many potential conflict points along Southshore Dr. due to the existence of residential driveways and ROW encroachments.



Typical residential character found in portions of Trail Section 2

Photo Credit: USI Consultants

Segment 1a & 2a: SR 13 Alternate Route: Primary connection with Local Routes along Waco/Southshore

- This alignment alternative would follow along SR 13 from the Grandview Dr. connection all the way down to CR 1000 N. It could connect to the trail system being evaluated by North Webster. Trail routes along Waco Dr., Southshore Dr., and Vawter Park Rd. would be signed but otherwise serve as local routes for the adjacent homes, businesses, and neighborhoods.



Typical condition long north side of SR 13.

Photo Credit: USI Consultants

Trail Section 2, continued: The route for Section 2 includes the following segments and general conditions:

Segment 3: Vawter Park Rd. between Southshore Dr. and CR 800 E.

- This segment is primarily a wooded residential area with a narrow roadway. The route is lined with many driveways, utilities, and ROW encroachments.

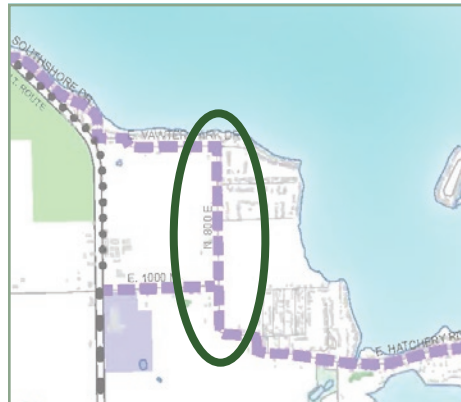


Looking south from Vawter Park Rd. along CR 800 E.

Photo Credit: USI Consultants

Segment 4: CR 800 E. & McClintic Rd. Between Vawter Park Rd. and Hatchery Rd.

- The northern portion of this segment is residential in character. The character changes near South Rd. to become heavily wooded with adjacent agricultural uses and large roadside embankments. Existing pavement conditions are in poor shape for bicycle and pedestrian uses.

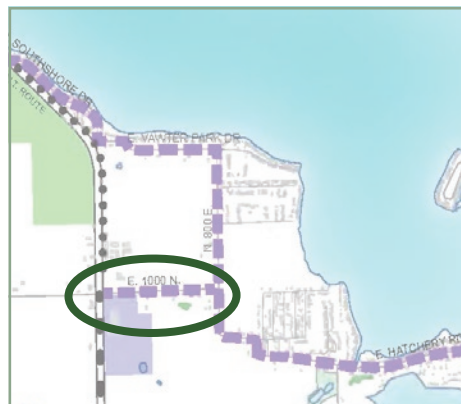


Vawter Park and CR 800 E Intersection looking north

Photo Credit: USI Consultants

Segment 5: CR 1000 N. Between SR 13 and CR 800 E.

- This segment would connect the trail system along CR 800 E. with a trail along SR 13 currently being evaluated by the Town of North Webster. It is primarily bordered by agricultural properties, with Wawasee Middle School at the west end.



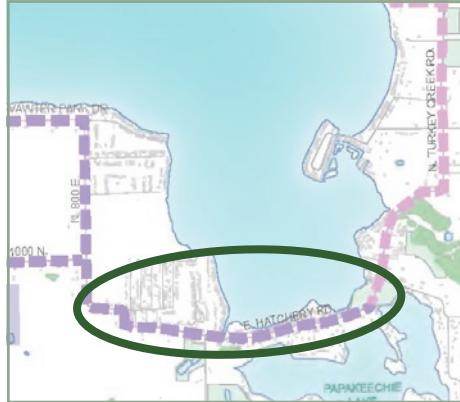
Typical narrow right of way in residential areas

Photo Credit: USI Consultants

Trail Section 2, continued: The route for Section 2 includes the following segments and general conditions:

Segment 6: Hatchery Rd. from McClintic Rd. to Hiawatha Ln.

- Western portions of this segment have commercial properties with large driveway cuts. Remaining portions of this segment are bordered by residential properties. This is a narrow roadway with tight right-of-way conditions that will require significant grading and drainage work if a separated trail is desired.



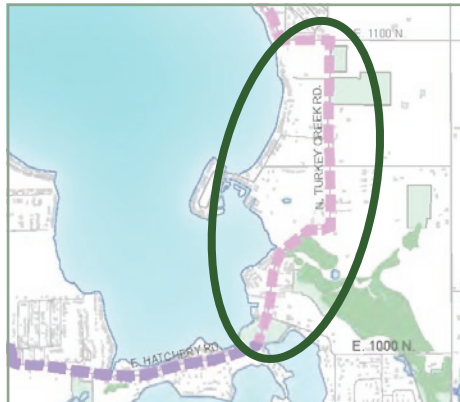
Steep embankment and driveway cuts found throughout Trail Section 2

Photo Credit: USI Consultants

Trail Section 3: The route for Section 3 includes the following segments and general conditions:

Segment 1: Turkey Creek Rd. from Hiawatha Ln. to CR 1100 N. / Wawasee Dr.

- This segment is bordered by residential and commercial properties at the southern end with numerous wide driveway cuts and other potential conflict points. It transitions into a mix of open and wooded areas with periodic residential properties. The roadway has a rural cross section with embankments and open drainage running parallel to the corridor just beyond the existing pavement edge.



Commercial uses and driveway cuts at Turkey Creek Rd. and CR 1100 N. intersection

Photo Credit: USI Consultants

Segment 2: CR 1100 N. / Wawasee Dr. from Turkey Creek Rd. to CR 1250 N.

- The CR 1100 N. segment is rural and open but transitions to a residential character near Wawasee Dr. The northern end transitions back to a rural and agricultural land uses. Roadside drainage, driveway cuts, and a railroad crossing are significant challenges to overcome along this segment.



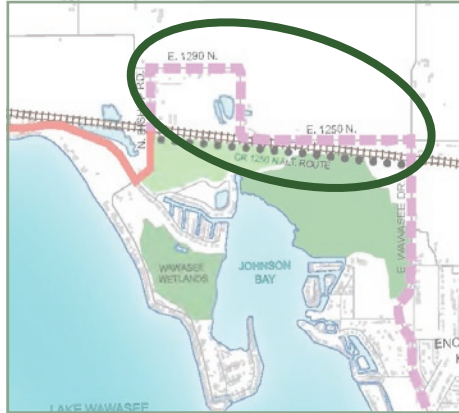
View north on Turkey Creek Rd. approaching the CR 1100 N. intersection

Photo Credit: USI Consultants

Trail Section 3, continued: The route for Section 3 includes the following segments and general conditions:

Segment 3: CR 1250N. / CR 825E. / CR 1290 N. Between Wawasee Dr. and Bishop Rd.

- This segment is primarily bordered by agricultural properties. There are woods and wetlands along significant portions of the segment with large embankments and open drainage adjacent to the roadway for most of the corridor length.

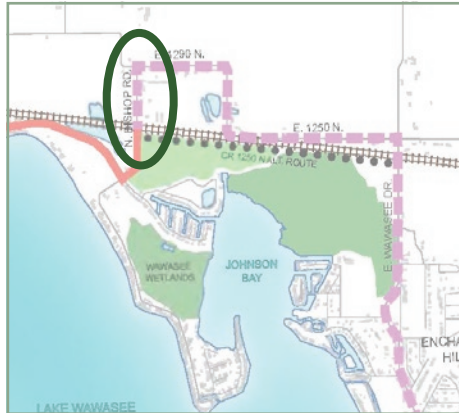


Typical rural character in northern portions to Trail Section 3

Photo Credit: USI Consultants

Segment 4: Bishop Rd. from CR 1290 N. to existing trail

- Segment 4 would tie Section 3 into the existing Syracuse-Wawasee Trail system terminus south of railroad tracks. The eastern side of this segment has a mix of commercial and residential uses with accompanying driveways. The western side of the segment is mostly agricultural in character.



Deep drainage swales found along most county roads in Trail Section 3

Photo Credit: USI Consultants

Existing Utilities

To begin the initial utility coordination process for this study, an Indiana 811 Utility Design Ticket was generated for the project study area to determine the potential utilities present. An initial notice request form was then sent to each of the utilities identified on this design ticket to identify type and approximate location of facilities each utility may maintain within the project study area. Below is a summary of the identified utilities that may be located within the project study area:

- *Kosciusko REMC*
- *Lumen National*
- *Mediacom, LLC*
- *NIPSCO Electric*
- *NIPSCO Gas*
- *Town of Syracuse*
- *Turkey Creek Regional Sewer District*
- *Wawasee Community School Corporation*

Effort was made to develop the conceptual alignments included within this report around visible facilities when feasible, and coordination should be maintained as this project progresses through design to further reduce or avoid undue utility impacts.



Existing Facilities Inventory

Information on the following pages provides a visual summary of the major factors contributing to final study recommendations for trail routing and design approach. The information is a combination of preliminary Red Flag Investigation (RFI) utilizing INDOT Environmental Services ArcMap feature layers for water resources, infrastructure or HAZMAT concerns, and results from a July 2021 field investigation to further identify potential concerns. The following preliminary RFI displays illustrate key findings. These displays were prepared prior to the development of the Kern Rd., SR 13, and CR 1250 N. potential alternate routes. Each page represents a different section of trail and summarizes important findings related to the following topics:

- *Wetlands*
- *Floodways*
- *Visible utilities*
- *Bridge structures and culverts*
- *Drainage conditions*
- *Roadway conditions*
- *Other notable features*

Photos referenced in the maps on the following pages are from the field inventory conducted at the beginning of the project. They can be found in the study Appendix.

Anticipated Project Impacts

Federal funding of the project will require preparation of a Categorical Exclusion Document in accordance with The National Environmental Policy Act (NEPA). Based on potential impacts to 4(f) resources and historic properties listed above, a CE-4 document with public involvement will likely be required.

Unavoidable Impacts to jurisdictional waterway features will require a Waters of the United States (WOTUS) determination report with wetland delineation. Permitting in accordance with IDEM 401 Individual WQC, USACE 404 Regional General Permit and an IDEM Rule 5 permit will likely be required as a result of the project. Phase I Environmental Site Assessment (ESA) may be required if properties with identified HAZMAT concerns are impacted.

The information provided is based only on desktop review and no formal consultation to agencies has begun. If the project receives federal funding, the environmental scope will be further defined at that time.

Trail Section 1 Existing Facilities



Preliminary Field Research Results
Syracuse-Wawasee Trail Study
2020-0044, Section 1
Photos Taken 5/27 & 5/28



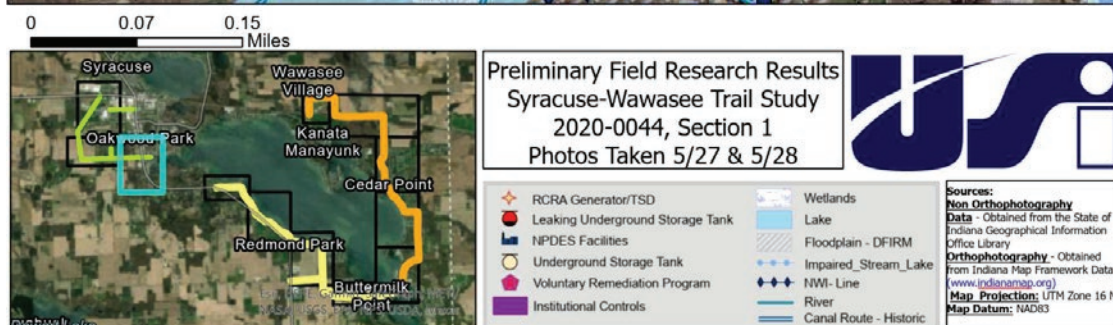
<ul style="list-style-type: none"> RCRA Generator/TSD Leaking Underground Storage Tank NPDES Facilities Underground Storage Tank Voluntary Remediation Program Institutional Controls 	<ul style="list-style-type: none"> Wetlands Lake Floodplain - DFIRM Impaired Stream Lake NWI - Line River Canal Route - Historic 	<p>Sources:</p> <p>Non Orthophotography</p> <p>Data - Obtained from the State of Indiana Geographical Information Office Library</p> <p>Orthophotography - Obtained from Indiana Map Framework Data (www.indianamap.org)</p> <p>Map Projection: UTM Zone 16 N</p> <p>Map Datum: NAD83</p>
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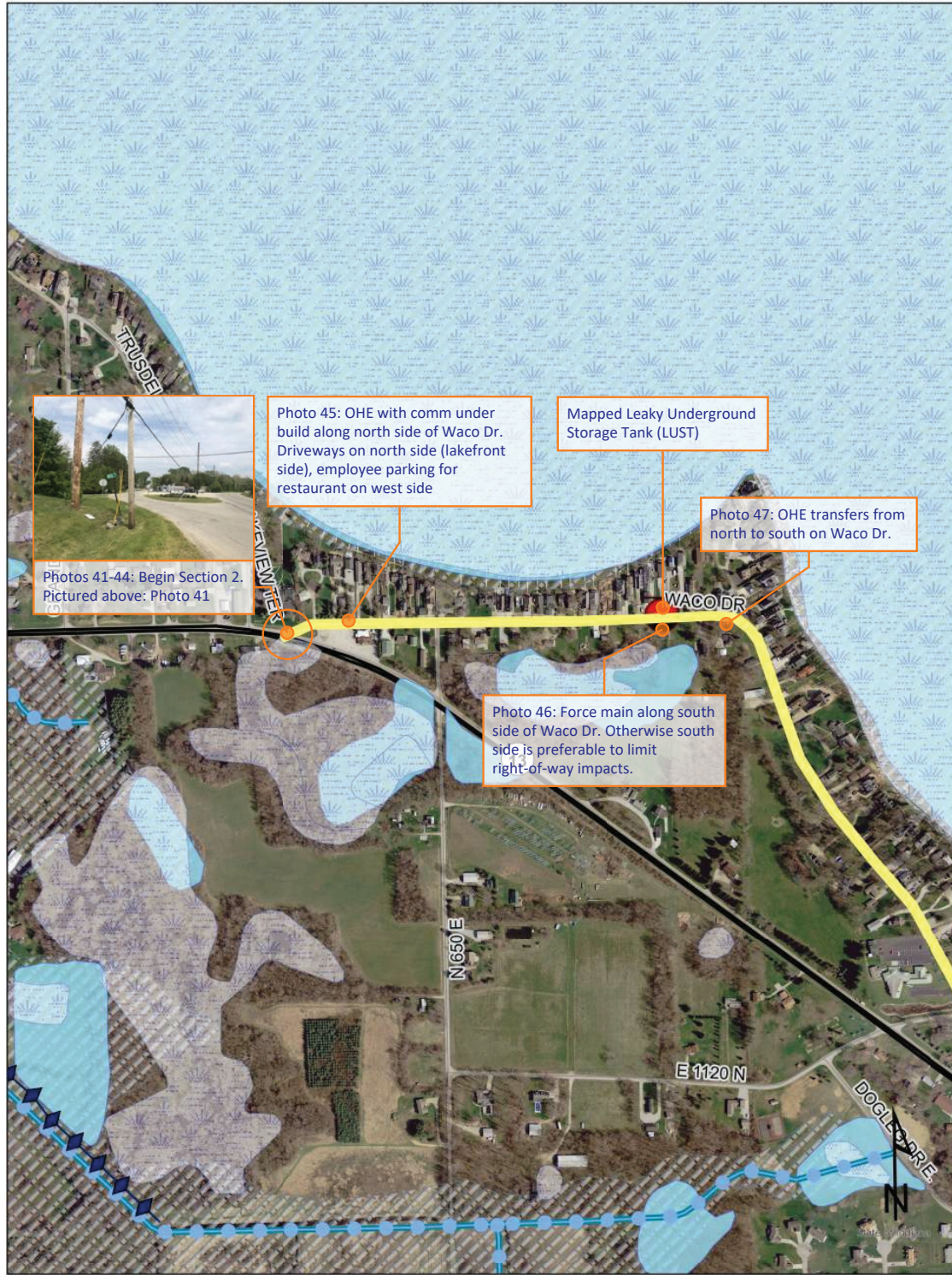


Preliminary Field Research Results
Syracuse-Wawasee Trail Study
2020-0044, Section 1
Photos Taken 5/27 & 5/28

- RCRA Generator/TSD
- Leaking Underground Storage Tank
- NPDES Facilities
- Underground Storage Tank
- Voluntary Remediation Program
- Institutional Controls
- Wetlands
- Lake
- Floodplain - DFIRM
- Impaired_Stream_Lake
- NWI-Line
- River
- Canal Route - Historic

Sources:
Non Orthophotography
Data - Obtained from the State of Indiana Geographical Information Office Library
Orthophotography - Obtained from Indiana Map Framework Data (www.indianamap.org)
Map Projection: UTM Zone 16 N
Map Datum: NAD83



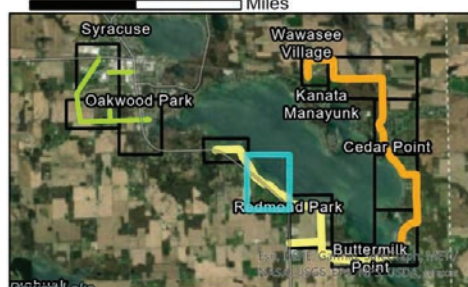
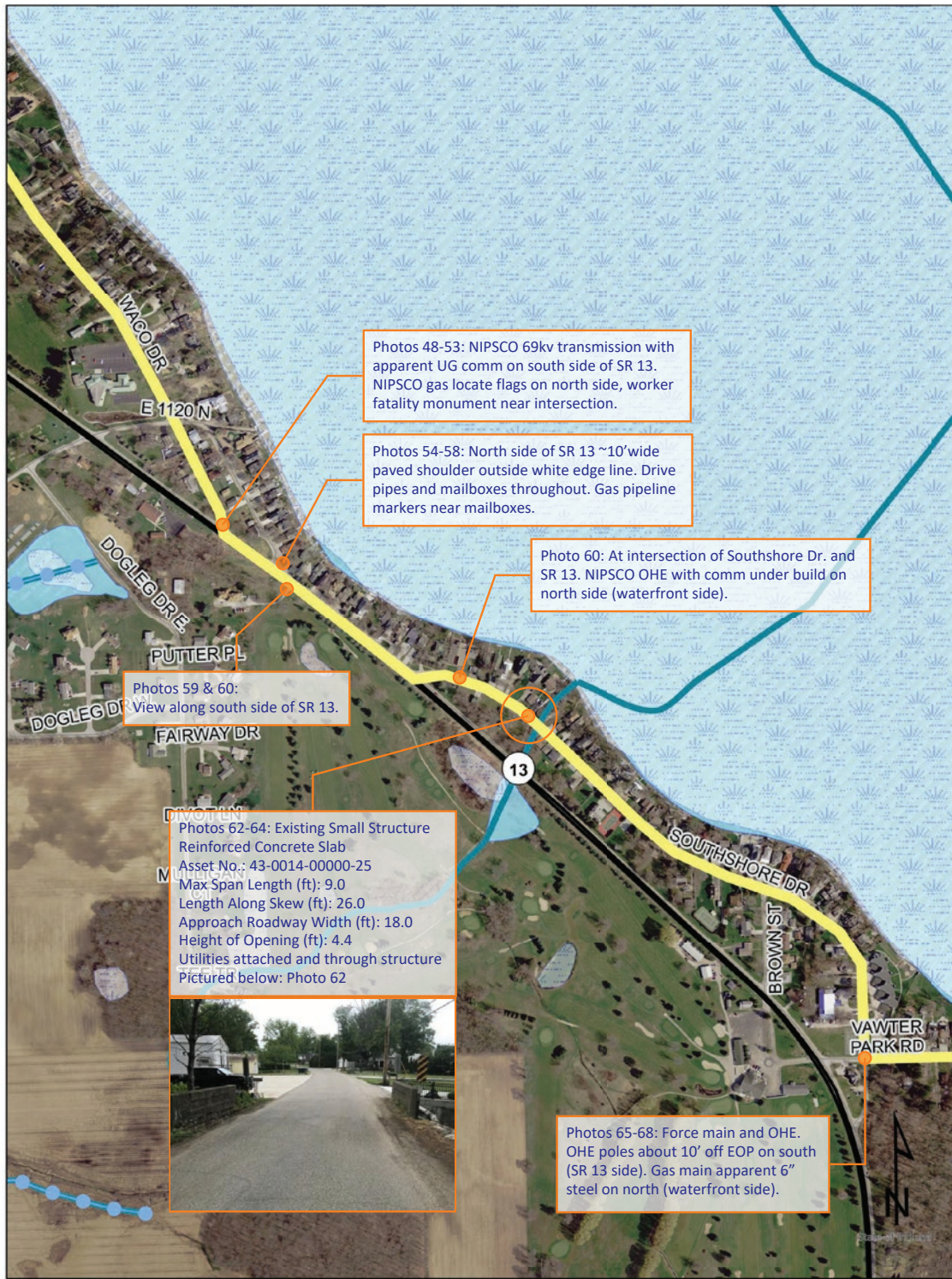


Preliminary Field Research Results
Syracuse-Wawasee Trail Study
2020-0044, Section 2
Photos Taken 5/27 & 5/28



RCRA Generator/TSD	Wetlands
Leaking Underground Storage Tank	Lake
NPDES Facilities	Floodplain - DFIRM
Underground Storage Tank	Impaired Stream/Lake
Voluntary Remediation Program	NWI- Line
Institutional Controls	River
	Canal Route - Historic

Sources:
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Preliminary Field Research Results
Syracuse-Wawasee Trail Study
2020-0044, Section 2
Photos Taken 5/27 & 5/28



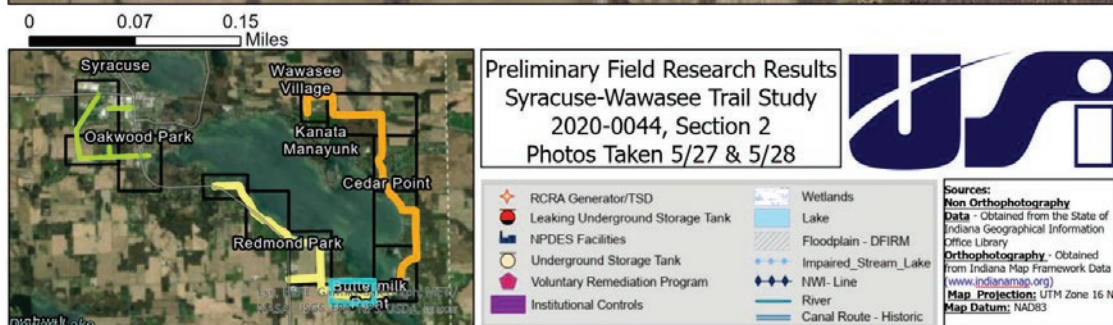
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Preliminary Field Research Results Syracuse-Wawasee Trail Study 2020-0044, Section 2 Photos Taken 5/27 & 5/28



Sources:
Non Orthophotography
 Data - Obtained from the State of Indiana Geographical Information Office Library
Orthophotography - Obtained from Indiana Map Framework Data (www.indianamap.org)
Map Projection: UTM Zone 16 N
Map Datum: NAD83





End Trail Section 2 Begin Trail Section 3 Existing Facilities

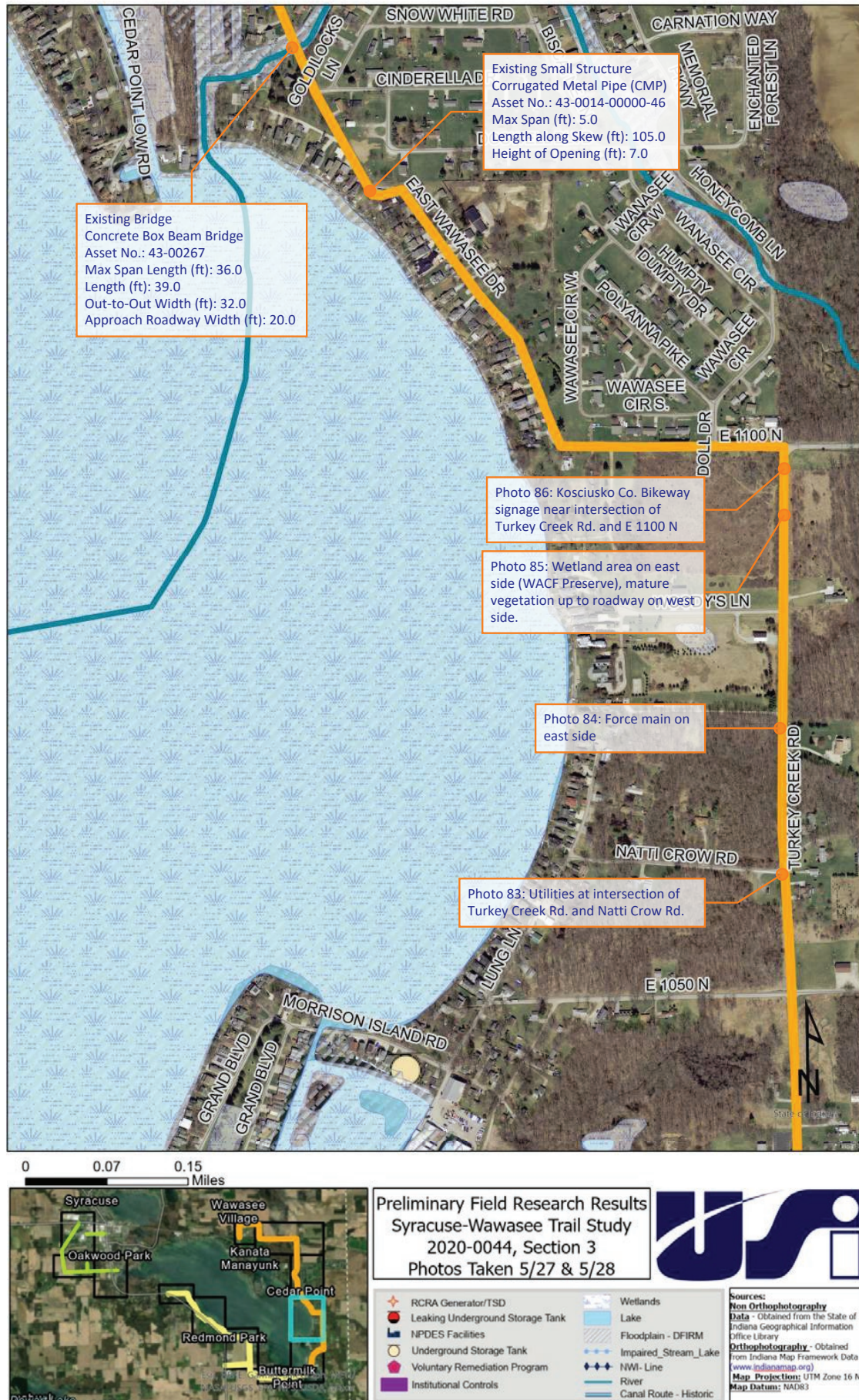


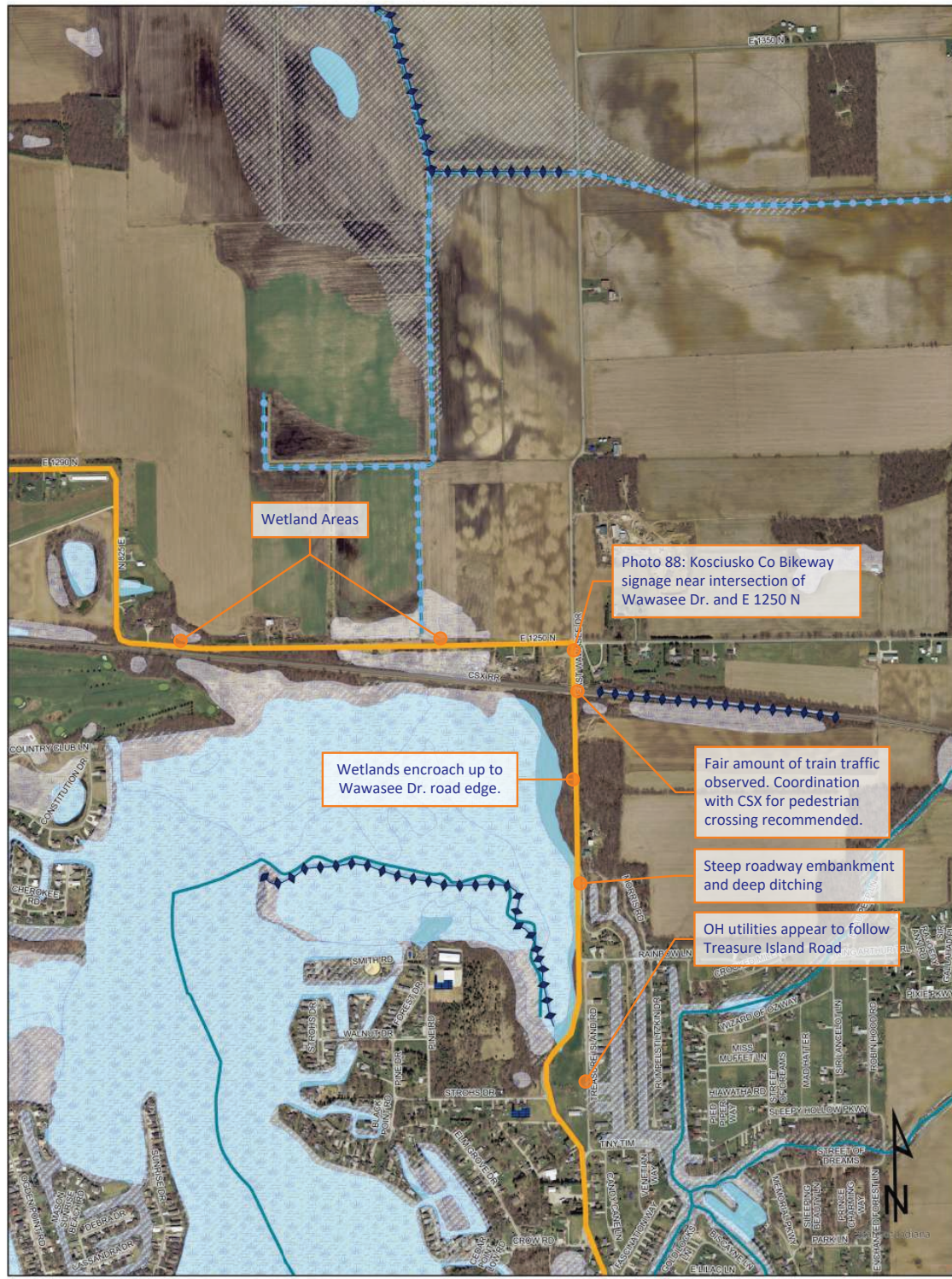
Preliminary Field Research Results
Syracuse-Wawasee Trail Study
2020-0044, Sections 2 & 3
Photos Taken 5/27 & 5/28



RCRA Generator/TSD	Wetlands
Leaking Underground Storage Tank	Lake
NPDES Facilities	Floodplain - DFIRM
Underground Storage Tank	Impaired_Stream_Lake
Voluntary Remediation Program	NWI-Line
Institutional Controls	River
	Canal Route - Historic


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Map Projection: UTM Zone 16 N
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Preliminary Field Research Results
Syracuse-Wawasee Trail Study
2020-0044, Section 3
Photos Taken 5/27 & 5/28



	RCRA Generator/TSD		Wetlands
	Leaking Underground Storage Tank		Lake
	NPDES Facilities		Floodplain - DFIRM
	Underground Storage Tank		Impaired_Stream_Lake
	Voluntary Remediation Program		NWI-Line
	Institutional Controls		River
			Canal Route - Historic

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0 0.05 0.1 Miles



Preliminary Field Research Results
Syracuse-Wawasee Trail Study
2020-0044, Section 3
Photos Taken 5/27 & 5/28



<ul style="list-style-type: none"> RCRA Generator/TSD Leaking Underground Storage Tank NPDES Facilities Underground Storage Tank Voluntary Remediation Program Institutional Controls 	<ul style="list-style-type: none"> Wetlands Lake Floodplain - DFIRM Impaired Stream/Lake NWI-Line River Canal Route - Historic 	<p>Sources: Non Orthophotography Data - Obtained from the State of Indiana Geographical Information Office Library Orthophotography - Obtained from Indiana Map Framework Data (www.indianamap.org) Map Projection: UTM Zone 16 N Map Datum: NAD83</p>
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Chapter 3: Proposed Network



Chapter Contents:

- Introduction
- Recommended Segment Routing
- Individual Segment Evaluation





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Introduction

The following pages provide more detail on the routing and recommendations for the proposed alignment segments. Understanding this information was an important step in developing the Opinion of Probable Construction Costs. Each alignment alternative is presented in a consistent format to allow quick access to the following study considerations:

- *Proposed alignment description*
- *ROW considerations and recommendations*
- *Recommended utility coordination*
- *Environmental constraints*
- *Agency coordination requirements*
- *Recommended typical cross section*
- *Notable crossing conditions*
- *And a summarized opinion of probable construction costs*

This information in this chapter is presented as an overview and is supplemented by more detailed alignment concept drawings and cost estimates located in the Appendix.

Route Alignment Notes

In many instances, recommended route alignments include a preliminary opinion on which side of existing roadways the trail should be placed. These opinions were based on preliminary findings and were used as a design basis from which to develop preliminary opinions of probable construction costs. Additional investigation is expected to occur during detailed design to provide additional information which may warrant adjustments to these preliminary opinions.

Alternate Routing Notes

A number of preliminary alignments include route alternates which may be considered as replacements, or supplements to the primary route alignments. These have been included to illustrate other feasible alternatives and, in some instances, to show additional options for consideration during local project prioritization discussions. Specific trail sections which include alternate route options include:

- *Section 1, Segment 1 - with route alternate beginning on page 49*
- *Section 2, Segments 1 & 2 - with route alternate beginning on pages 77*
- *Section 3, Segments 3 & 4 - with route alternate being shown and described on page 119*

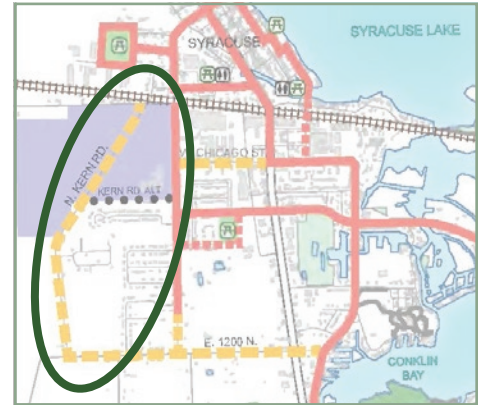


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Trail Section 1 - Segment 1: Kern Rd. between CR 1300 N. and CR 1200 N.

Trail Segment Length: +/- 1.05 miles

The proposed path begins on the northwest corner of the Kern Rd. and CR 1300 N. intersection. From there, it continues south along the west side of Kern Rd. until it connects with the existing path at Syracuse Elementary School. The trail will join Kern Rd. just south of the school and will continue along the west side of the roadway until it reaches CR 1200 N. See page 49 for a possible alternate route.



Existing Land Use

Primary land uses along the northern portion of this segment are institutional. The Syracuse Elementary campus is on the west side of Kern Rd. and the Wawasee High School campus is on the east side. School athletic facilities are located south of the school campuses and are lined with fencing, making the corridor appear narrow.

South of the primary school campuses the adjacent land uses become suburban and rural residential in nature with the notable exception of the Wawasee Schools transportation facility on the west side of the roadway. The southern half of this segment is currently surrounded by agricultural uses but there is potential for future development of housing and other uses. A new sports park is currently being constructed just south of the Kerns Crossing subdivision. This trail segment is an important connection between the future sports park, neighborhoods, and the school campus. This importance is expected to increase over time as future development potential in the area is realized.

Stormwater Management

Stormwater runoff is anticipated to be conveyed through sheet flow to the existing roadside ditches, consistent with the current conditions. Limited grading may be necessary during design and construction to ensure positive drainage.

ROW Considerations

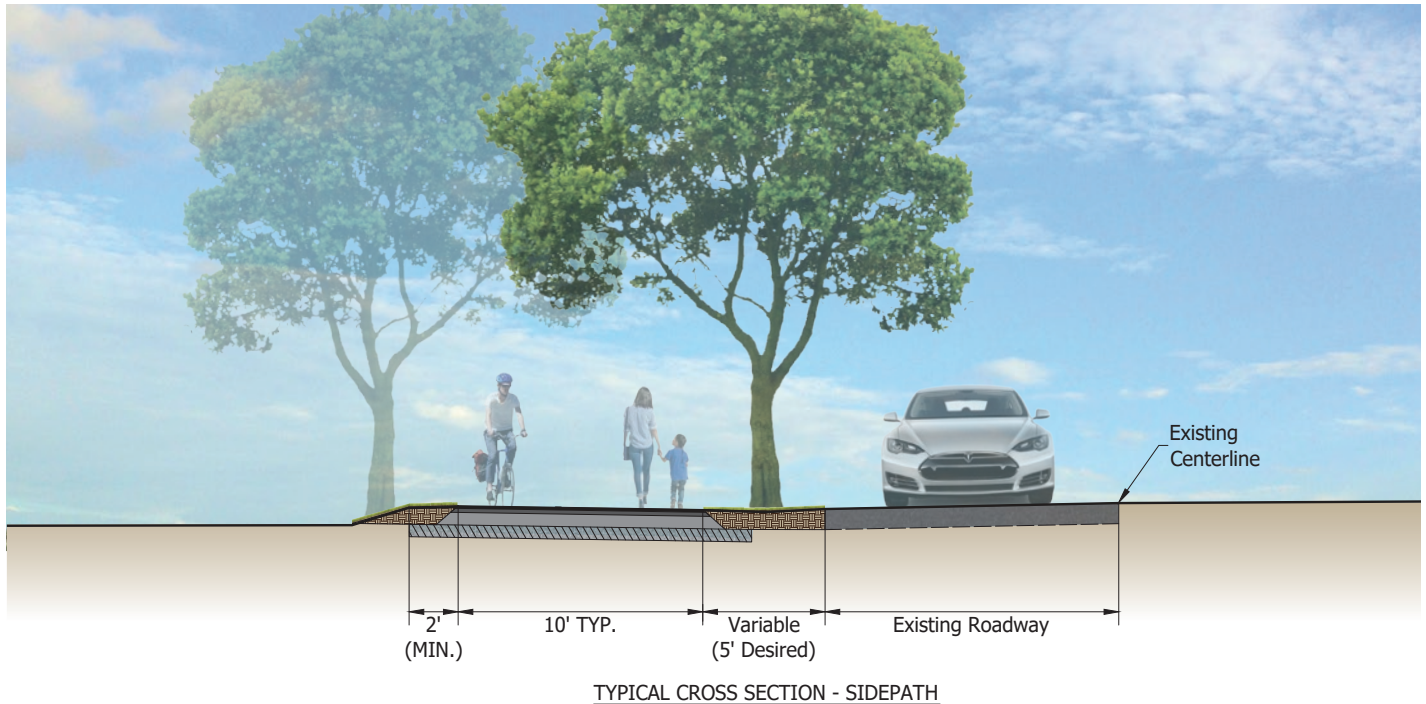
County ROW along Kern Rd. generally follows the edge of pavement of the roadway throughout the corridor. Therefore, it is anticipated that the needed area for the proposed trail section will need to be acquired either through an easement agreement or ROW acquisition. Preliminary impacts to ROW are estimated to be 2.509 acres across 16 different parcels.

Utilities

Utilities present along this alignment include NIPSCO Gas, Kosciusko County REMC, Town of Syracuse Water, and Lumen. Due to the close proximity of the Kosciusko County REMC utility poles on the west side of Kern Rd., there is potential for impacts and pole relocations. Approximately 18 poles have the potential to be impacted.

Additionally, NIPSCO Gas facilities and the Town of Syracuse water facilities were identified along the west side of the alignment. Impacts to these facilities are not anticipated at this time. However, these facilities should be noted and coordination continued as design progresses to ensure no conflicts are created.

Typical Section



Environmental Considerations

Environmental constraints along this alignment are minimal, with no streams, water bodies, or wetland complexes identified.

Agency Coordination

A majority of this proposed trail segment will be within the Kern Rd. ROW which will require coordination with the Town of Syracuse and Kosciusko County. Connection to the existing school trail will require coordination with Wawasee Community School corporation.

Crossing Conditions

The only roadway crossing for this segment is at the CR 1200 N. Intersection. Multiple other crossing concerns exist along the corridor though, most notably at the school entrances. Both the driveway crossing at the elementary school and at the transportation hub have the potential to generate significant traffic in the morning and afternoon when school is in session. It will be important to notify trail users of the potential crossing hazards in these locations of the alignment. Impacts to these facilities are not anticipated at this time. However, these facilities should be noted and coordination continued as design progresses to ensure no conflicts are created.

Trail Section 1 - Segment 1: Kern Rd. between CR 1300 N. and CR 1200 N.

Trail Alignment Overview (See page 48 for a possible alternate route.)





Trail Section 1 - Segment 1: Kern Rd. between CR 1300 N. and CR 1200 N.

Trail Alignment Overview (See page 48 for a possible alternate route.)



Trail Section 1 - Segment 1: Cost Summary

The cost table below summarizes the anticipated construction costs for this segment. It has been developed on the basis of the research and information presented within this report as well as assumptions influenced by the current trends in construction activity. Costs have been forecast at an assumed 3% per year inflation rate to the 2026 construction season in an attempt to capture anticipated inflation of labor and materials. Preliminary Engineering costs have been developed assuming several segments are designed at once, and then pro-rated across each segment based on anticipated construction cost.

Construction Costs

Pay Item	Description	Quantity	Unit	Unit Price	Extension
105-06845	CONSTRUCTION ENGINEERING	1.000	L.S.	8,200.00	\$8,200.00
110-01001	MOBILIZATION AND DEMOBILIZATION	1.000	L.S.	14,500.00	\$14,500.00
201-52370	CLEARING RIGHT OF WAY	1.000	L.S.	10,000.00	\$10,000.00
207-08266	SUBGRADE TREATMENT, TYPE III	9,155.000	S.Y.	3.00	\$27,465.00
303-01180	COMPACTED AGGREGATE NO. 53	2,395.000	TON	35.00	\$83,825.00
306-08432	MILLING, APPROACH	210.000	S.Y.	3.50	\$735.00
401-07321	QC/QA-HMA, 2, 64, SURFACE, 9.5 mm	458.000	TON	110.00	\$50,380.00
401-07390	QC/QA-HMA, 2, 64, INTERMEDIATE, 19.0 mm	736.000	TON	100.00	\$73,600.00
406-05520	ASPHALT FOR TACK COAT	3.500	TON	600.00	\$2,100.00
610-07487	HMA FOR APPROACHES, TYPE B	50.000	TON	150.00	\$7,500.00
621-01004	MOBILIZATION AND DEMOBILIZATION FOR SEEDING	1.000	EACH	750.00	\$750.00
621-06560	MULCHED SEEDING U	6,540.000	S.Y.	2.00	\$13,080.00
801-06775	MAINTAINING TRAFFIC	1.000	L.S.	8,200.00	\$8,200.00
808-10099	TRANSVERSE MARKING, MULTI-COMPONENT, CROSSWALK LINE, WHITE, 24 IN.	100.000	L.F.	11.00	\$1,100.00
Total:					\$301,435.00

Plus 25% Contingency	\$75,359
Plus 3% Per Year Inflation to 2026	\$60,260
Total Estimated 2026 Construction Costs:	\$437,054
ROW, and Utility Relocation Costs	\$279,103
Design, Coordination, Permitting, and Inspection Costs	\$329,190

Total Estimated Section 1 - Segment 1 Costs:	\$1,045,347
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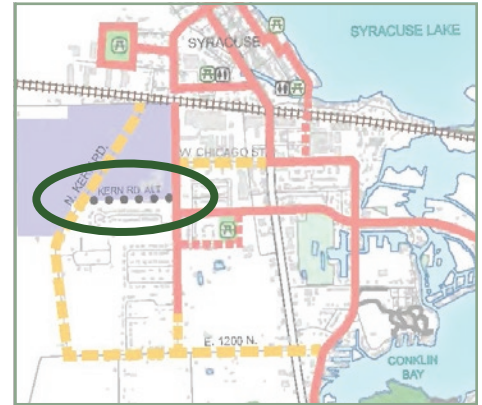


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Trail Section 1 - Segment 1a: Kern Rd. Alt. - CR 1300 N. to Syracuse-Webster Rd.

Trail Segment Length: +/- 0.60 miles

This segment is an alternate which was considered for the primary Kern Rd. alignment described above. The Kern Rd. alternate would follow the previously described alignment to Syracuse Elementary where it would cross Kern Rd. at an existing crossing to tie into an existing path around Wawasee High School. From there it would continue south along the east side of Kern Rd. to the southern end of the school athletic facilities where it would turn east and follow an existing utility easement. The proposed alignment would follow the easement and school property boundary in an off-street alignment until in connected with the existing trail along Syracuse-Webster Rd.



Existing Land Use

Land uses for the Kern Rd. alternate are like those previously described. The off-street portion of the trail would be routed through institutional and utility uses and would not connect with the residential neighborhoods and future sports park further south on Kern Rd.

Stormwater Management

Stormwater runoff is anticipated to be conveyed through sheet flow to the existing roadside ditches, consistent with the current conditions. Limited grading may be necessary during design and construction to ensure positive drainage.

ROW

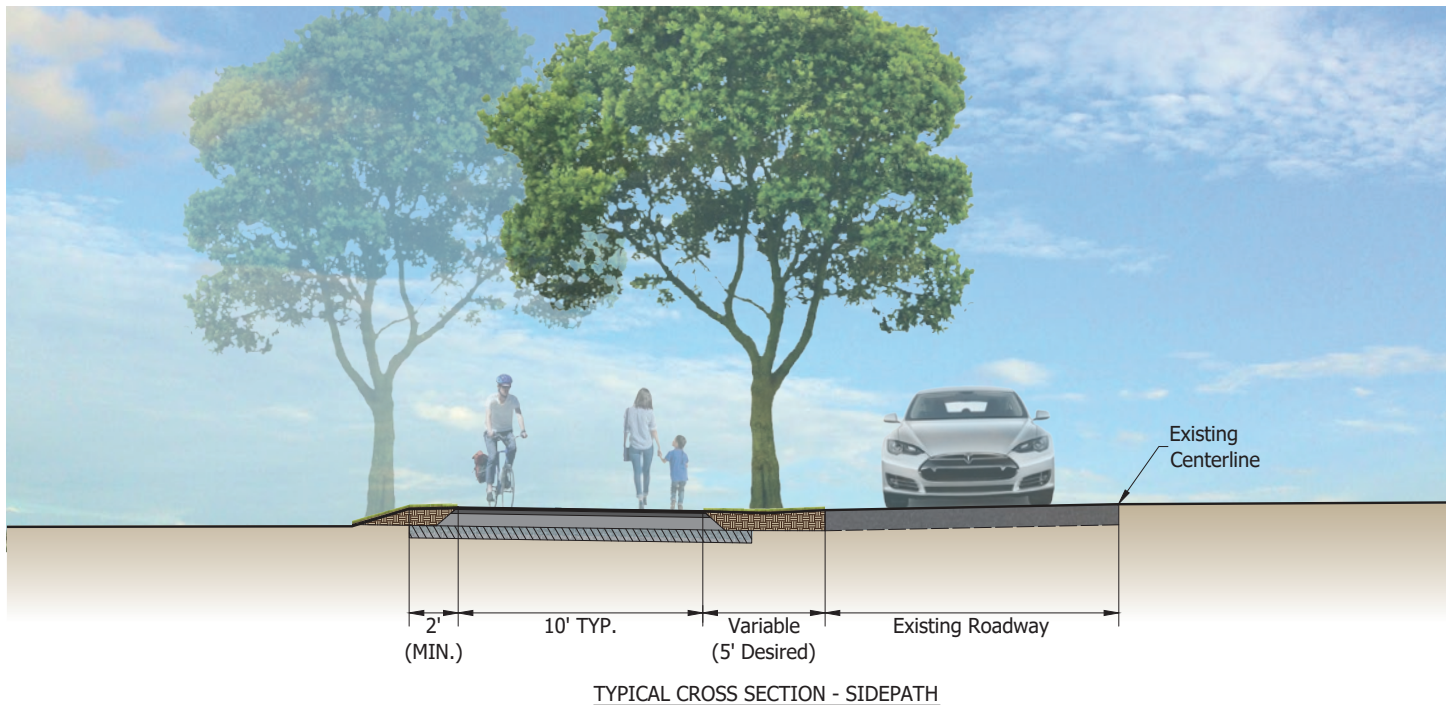
County ROW along Kern Rd. generally follows the edge of pavement of the roadway throughout the corridor. Therefore, it is anticipated that the needed area for the proposed trail section will need to be acquired either through an easement agreement or ROW acquisition. Preliminary impacts to ROW are estimated to be 1.903 acres across 14 different parcels.

Utilities

Utilities present along this alignment include *NIPSCO Gas*, *Kosciusko County REMC*, *Town of Syracuse Water*, and *Lumen*. Due to the close proximity of the Kosciusko County REMC utility poles on the west side of Kern Road, there is potential for impacts and pole relocations. Approximately 8 poles have the potential to be impacted.

Additionally, NIPSCO Gas facilities and the Town of Syracuse water facilities were identified along the west side of the alignment. Impacts to these facilities are not anticipated at this time. However, these facilities should be noted and coordination continued as design progresses to ensure no conflicts are created.

Typical Section



Environmental Considerations

Environmental constraints along this alignment are minimal, with no streams, water bodies, or wetland complexes identified.

Agency Coordination

Coordination would be required with the Town of Syracuse for portions of the segment adjacent to the roadway. Additional coordination with the Wawasee Community School Corporation and utility service providers would be required for the off-street portions.

Crossing Conditions

This alternate would require an additional Kern Rd. crossing. This is currently proposed to occur at an existing crosswalk between the elementary school and high school. Some of the other crossings required further south on Kern Rd., including across CR 1200 N., would be unnecessary with the alternate alignment.

Trail Section 1 - Segment 1a: Kern Rd. Alt. - CR 1300 N. to Syracuse-Webster Rd.



Detailed route alignment exhibits can be found in the report Appendix



Trail Section 1 - Segment 1a: Cost Summary

The cost table below summarizes the anticipated construction costs for this segment. It has been developed on the basis of the research and information presented within this report as well as assumptions influenced by the current trends in construction activity. Costs have been forecast at an assumed 3% per year inflation rate to the 2026 construction season in an attempt to capture anticipated inflation of labor and materials. Preliminary Engineering costs have been developed assuming several segments are designed at once, and then pro-rated across each segment based on anticipated construction cost.

Construction Costs

Pay Item	Description	Quantity	Unit	Unit Price	Extension
105-06845	CONSTRUCTION ENGINEERING	1.000	L.S.	6,250.00	\$6,250.00
110-01001	MOBILIZATION AND DEMOBILIZATION	1.000	L.S.	11,000.00	\$11,000.00
201-52370	CLEARING RIGHT OF WAY	1.000	L.S.	20,000.00	\$20,000.00
207-08266	SUBGRADE TREATMENT, TYPE III	6,470.000	S.Y.	3.00	\$19,410.00
303-01180	COMPACTED AGGREGATE NO. 53	1,692.000	TON	35.00	\$59,220.00
306-08432	MILLING, APPROACH	270.000	S.Y.	3.50	\$945.00
401-07321	QC/QA-HMA, 2, 64, SURFACE, 9.5 mm	324.000	TON	110.00	\$35,640.00
401-07390	QC/QA-HMA, 2, 64, INTERMEDIATE, 19.0 mm	520.000	TON	100.00	\$52,000.00
406-05520	ASPHALT FOR TACK COAT	2.500	TON	600.00	\$1,500.00
610-07487	HMA FOR APPROACHES, TYPE B	60.000	TON	150.00	\$9,000.00
621-01004	MOBILIZATION AND DEMOBILIZATION FOR SEEDING	1.000	EACH	750.00	\$750.00
621-06560	MULCHED SEEDING U	4,620.000	S.Y.	2.00	\$9,240.00
801-06775	MAINTAINING TRAFFIC	1.000	L.S.	6,250.00	\$6,250.00
Total:					\$231,205.00

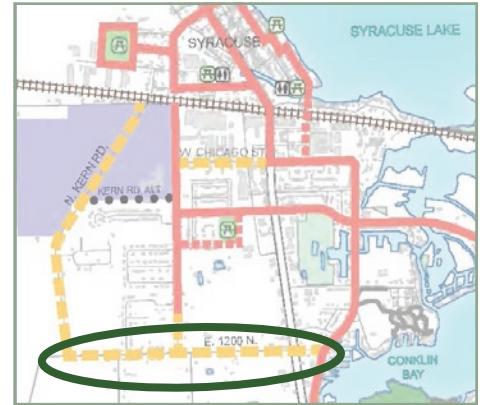
Plus 25% Contingency	\$57,801
Plus 3% Per Year Inflation to 2026	\$46,031
Total Estimated 2026 Construction Costs:	\$335,037
ROW, and Utility Relocation Costs	\$149,437
Design, Coordination, Permitting, and Inspection Costs	\$263,230

Total Estimated Section 1 - Segment 1 Costs:	\$747,705
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Trail Section 1 - Segment 2: CR 1200 N. from Kern Rd. to Harkless Dr.

Trail Segment Length: +/- 1.10 miles

The CR 1200 N. segment will begin at Kern Rd. and continue along the south side of the roadway to the Syracuse-Webster Rd. intersection. The trail will cross CR 1200 N. at this intersection and will continue along the north side of the roadway to SR 13. The route will cross SR 13 and continue along the north side of Bowser Rd. to connect with an existing trail.



Existing Land Use

Land uses at the western end of this segment are rural and rural residential. Land use intensity increases east of the Skinner Ditch crossing, at which point it becomes commercial in nature. The immediate SR 13 area consists of high traffic outlot retail and restaurant uses.

Stormwater Management

Stormwater runoff is anticipated to be conveyed through sheet flow to the existing roadside ditches, consistent with the current conditions. Limited grading may be necessary during design and construction to ensure positive drainage.

ROW

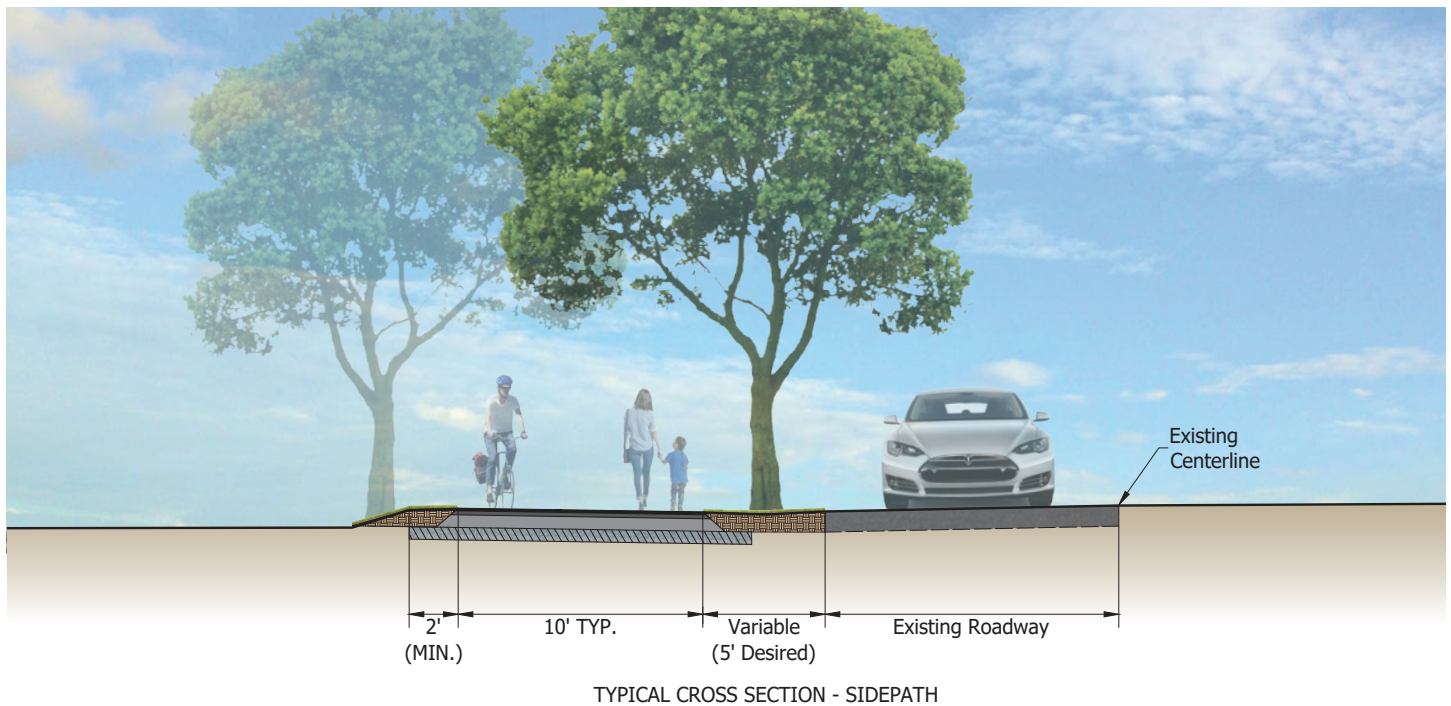
County ROW along CR 1200 N. varies from edge of pavement to 25' from centerline on each side of the roadway. Therefore, it is anticipated that the needed area for the proposed trail section will need to be acquired either through an easement agreement or ROW acquisition. Preliminary impacts to ROW are estimated to be 2.042 acres across 16 different parcels.

Utilities

Utilities present along this alignment include NIPSCO Gas, Kosciusko County REMC, Town of Syracuse Water. Due to the close proximity of the Kosciusko County REMC utility poles both the south and north sides of CR 1200 N., there is potential for impacts and pole relocations. Approximately 14 poles have the potential to be impacted.

Additionally, NIPSCO Gas facilities and the Town of Syracuse water facilities were identified along the proposed alignment. Impacts to these facilities are not anticipated at this time. However, these facilities should be noted and coordination continued as design progresses to ensure no conflicts are created.

Typical Section



Environmental Considerations

Environmental constraints along this alignment are minimal, with the only construction concern associated with the narrow bridge over the existing culvert on CR 1200 N. approximately 0.11 miles west of SR 13.

Agency Coordination

The trail corridor is being proposed adjacent to existing roadway ROW and will require coordination with both the Kosciusko County Highway Department and the Town of Syracuse. Coordination with INDOT will also be required for portions of trail and crossing within SR 13 ROW.

Crossing Conditions

Significant crossing challenges exist at both the Syracuse-Webster Rd. intersection, locally known as “Crazy Corners” and at the SR 13 intersection. Both locations will require more detailed investigation during design. There are also several wide driveway aprons lacking clearly defined boundaries which will need to be addressed during design.

Trail Section 1 - Segment 2: CR 1200 N. from Kern Rd. to Harkless Dr.





Trail Section 1 - Segment 2: CR 1200 N. from Kern Rd. to Harkless Dr.



Trail Section 1 - Segment 2: Cost Summary

The cost table below summarizes the anticipated construction costs for this segment. It has been developed on the basis of the research and information presented within this report as well as assumptions influenced by the current trends in construction activity. Costs have been forecast at an assumed 3% per year inflation rate to the 2026 construction season in an attempt to capture anticipated inflation of labor and materials. Preliminary Engineering costs have been developed assuming several segments are designed at once, and then pro-rated across each segment based on anticipated construction cost.

Construction Costs

Pay Item	Description	Quantity	Unit	Unit Price	Extension
105-06845	CONSTRUCTION ENGINEERING	1.000	L.S.	10,500.00	\$10,500.00
110-01001	MOBILIZATION AND DEMOBILIZATION	1.000	L.S.	18,500.00	\$18,500.00
201-52370	CLEARING RIGHT OF WAY	1.000	L.S.	10,000.00	\$10,000.00
207-08266	SUBGRADE TREATMENT, TYPE III	7,355.000	S.Y.	3.00	\$22,065.00
303-01180	COMPACTED AGGREGATE NO. 53	1,924.000	TON	35.00	\$67,340.00
306-08432	MILLING, APPROACH	390.000	S.Y.	3.50	\$1,365.00
401-07321	QC/QA-HMA, 2, 64, SURFACE, 9.5 mm	368.000	TON	110.00	\$40,480.00
401-07390	QC/QA-HMA, 2, 64, INTERMEDIATE, 19.0 mm	578.000	TON	100.00	\$57,800.00
406-05520	ASPHALT FOR TACK COAT	3.000	TON	600.00	\$1,800.00
604-06070	SIDEWALK, CONCRETE	930.000	S.Y.	65.00	\$60,450.00
604-08086	CURB RAMP, CONCRETE	66.000	S.Y.	175.00	\$11,550.00
604-12083	DETECTABLE WARNING SURFACES	16.500	S.Y.	275.00	\$4,537.50
605-06120	CURB, CONCRETE	1,045.000	L.F.	40.00	\$41,800.00
610-07487	HMA FOR APPROACHES, TYPE B	86.000	TON	150.00	\$12,900.00
621-01004	MOBILIZATION AND DEMOBILIZATION FOR SEEDING	1.000	EACH	750.00	\$750.00
621-06560	MULCHED SEEDING U	5,255.000	S.Y.	2.00	\$10,510.00
801-06775	MAINTAINING TRAFFIC	1.000	L.S.	10,500.00	\$10,500.00
808-10099	TRANSVERSE MARKING, MULTI-COMPONENT, CROSSWALK LINE, WHITE, 24 IN.	230.000	L.F.	11.00	\$2,530.00
Total:					\$385,377.50

Plus 25% Contingency	\$96,344
Plus 3% Per Year Inflation to 2026	\$76,727
Total Estimated 2026 Construction Costs:	\$558,449
ROW, and Utility Relocation Costs	\$206,645
Design, Coordination, Permitting, and Inspection Costs	\$330,895

Total Estimated Section 1 - Segment 2 Costs:	\$1,095,989
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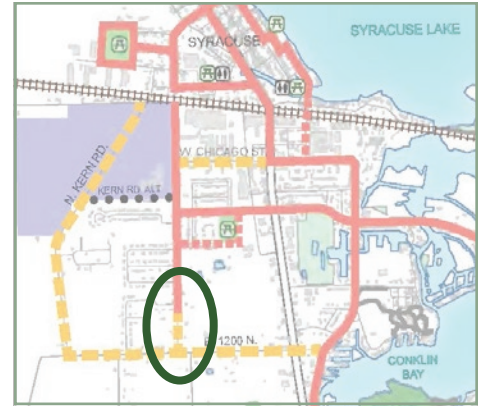
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Trail Section 1 - Segment 3: Syracuse-Webster Rd. from the existing trail to CR 1200 N.

Trail Segment Length: +/- 0.20 miles

This segment will begin at the existing trail end point just south of Woodland Acres Dr. It will continue south along the east side of Syracuse-Webster Rd. until it connects with the proposed CR 1200 N. segment.



Existing Land Use

Land uses along this segment are rural residential in nature.

Stormwater Management

Stormwater runoff is anticipated to be conveyed through sheet flow to the existing roadside ditches, consistent with the current conditions. Limited grading may be necessary during design and construction to ensure positive drainage.

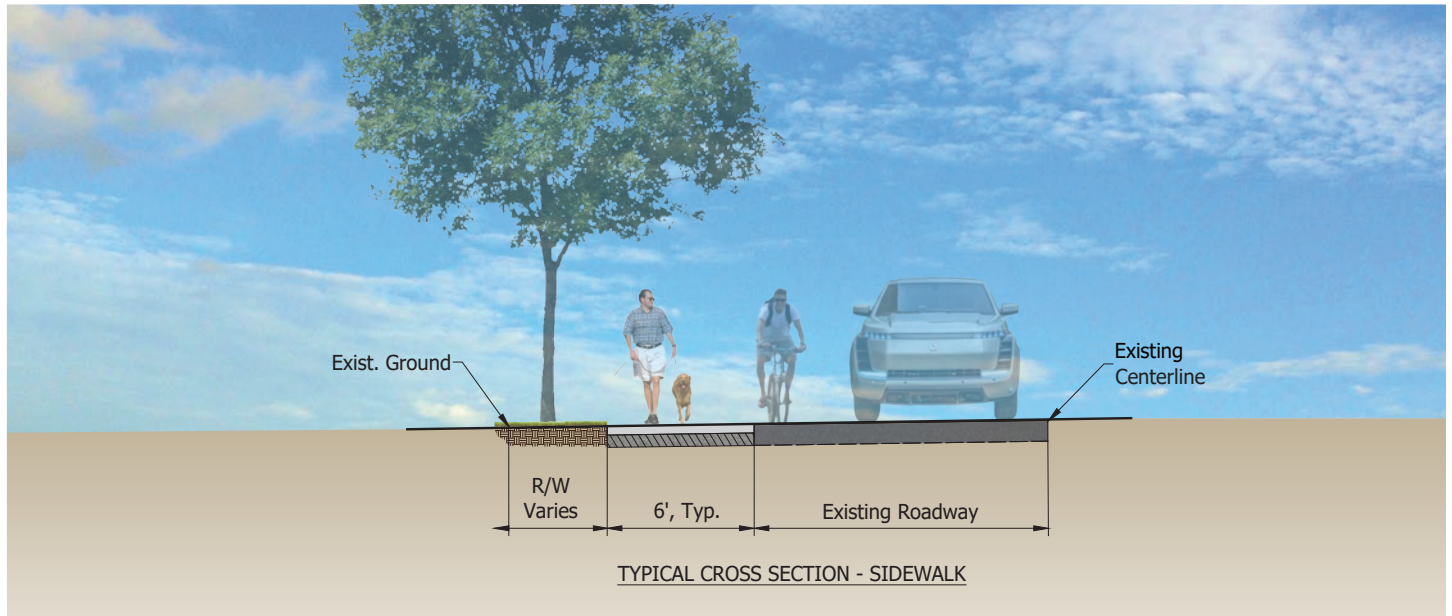
ROW

County ROW along Syracuse-Webster Road generally follows the edge of pavement throughout the corridor. Therefore, it is anticipated that the needed area for the proposed trail section will need to be acquired either through an easement agreement or ROW acquisition. Preliminary impacts to ROW are estimated to be 0.449 acres across 1 parcel.

Utilities

Utilities present along this alignment include NIPSCO Gas and Lumen. NIPSCO Gas facilities and Lumen fiber optic facilities were identified along the proposed alignment. Impacts to these facilities are not anticipated at this time. However, these facilities should be noted and coordination continued as design progresses to ensure no conflicts are created.

Typical Section



Environmental Considerations

Environmental constraints along this alignment are minimal, with no streams, water bodies, or wetland complexes identified.

Agency Coordination

This trail is being proposed adjacent to existing roadway ROW and will require coordination with the Kosciusko County Highway Department for the small section along CR 1200 N.

Crossing Conditions

Only two minor driveway crossings are present.

Trail Section 1 - Segment 3: Syracuse-Webster Rd. from the existing trail to CR 1200 N.



Detailed Route Alignment Exhibits can be found in the report Appendix



Trail Section 1 - Segment 3: Cost Summary

The cost table below summarizes the anticipated construction costs for this segment. It has been developed on the basis of the research and information presented within this report as well as assumptions influenced by the current trends in construction activity. Costs have been forecast at an assumed 3% per year inflation rate to the 2026 construction season in an attempt to capture anticipated inflation of labor and materials. Preliminary Engineering costs have been developed assuming several segments are designed at once, and then pro-rated across each segment based on anticipated construction cost.

Construction Costs

Pay Item	Description	Quantity	Unit	Unit Price	Extension
105-06845	CONSTRUCTION ENGINEERING	1.000	L.S.	1,500.00	\$1,500.00
110-01001	MOBILIZATION AND DEMOBILIZATION	1.000	L.S.	2,500.00	\$2,500.00
201-52370	CLEARING RIGHT OF WAY	1.000	L.S.	5,000.00	\$5,000.00
207-08266	SUBGRADE TREATMENT, TYPE III	1,305.000	S.Y.	3.00	\$3,915.00
303-01180	COMPACTED AGGREGATE NO. 53	342.000	TON	35.00	\$11,970.00
306-08432	MILLING, APPROACH	60.000	S.Y.	0.50	\$30.00
401-07321	QC/QA-HMA, 2, 64, SURFACE, 9.5 mm	66.000	TON	100.00	\$6,600.00
401-07390	QC/QA-HMA, 2, 64, INTERMEDIATE, 19.0 mm	103.000	TON	100.00	\$10,300.00
406-05520	ASPHALT FOR TACK COAT	0.500	TON	600.00	\$300.00
610-07487	HMA FOR APPROACHES, TYPE B	14.000	TON	150.00	\$2,100.00
621-01004	MOBILIZATION AND DEMOBILIZATION FOR SEEDING	1.000	EACH	750.00	\$750.00
621-06560	MULCHED SEEDING U	655.000	S.Y.	2.00	\$1,310.00
801-06775	MAINTAINING TRAFFIC	1.000	L.S.	1,500.00	\$1,500.00
Total:					\$47,775.00

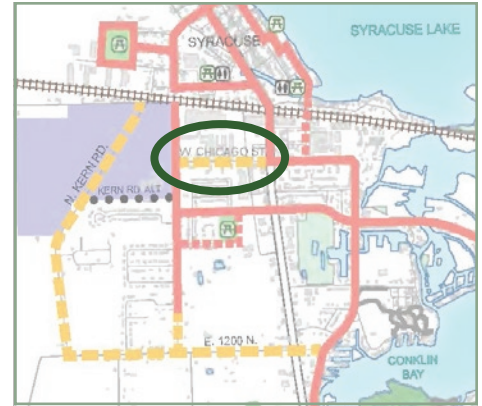
Plus 25% Contingency	\$11,944
Plus 3% Per Year Inflation to 2026	\$9,511
Total Estimated 2026 Construction Costs:	\$69,230
ROW, and Utility Relocation Costs	\$8,759
Design, Coordination, Permitting, and Inspection Costs	\$34,150

Total Estimated Section 1 - Segment 3 Costs:	\$112,139
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Trail Section 1 - Segment 4: W. Chicago St. between Syracuse-Webster Rd. and SR 13.

Trail Segment Length: +/- 0.40 miles

The segment connects to the existing trail in front of Wawasee High School on the southwest corner of Syracuse-Webster Rd. and Chicago St. From there it will cross Syracuse-Webster Rd. and continue east along the south side of Chicago St. It will cross Chicago Rd. just east of Sycamore St. and will continue to the existing curb ramp and crosswalk at SR 13.



Existing Land Use

A mix of commercial and light industrial uses dominate this segment of trail. There is a mix of driveways, wide aprons, parking, and open lots along the entire segment length. This segment will serve as a new connection between a residential neighborhood just south of Chicago St. and the school campus. It will also complete the connection between the schools and neighborhood with the SR 13 commercial corridor and existing trail along Chicago Rd. east of SR 13.

Stormwater Management

Stormwater runoff is anticipated to be conveyed through sheet flow across the sidewalk into the existing storm sewer network, consistent with the current conditions. Limited grading may be necessary during design and construction to ensure positive drainage, and there may be a need to install additional stormwater inlets in areas with ponding water.

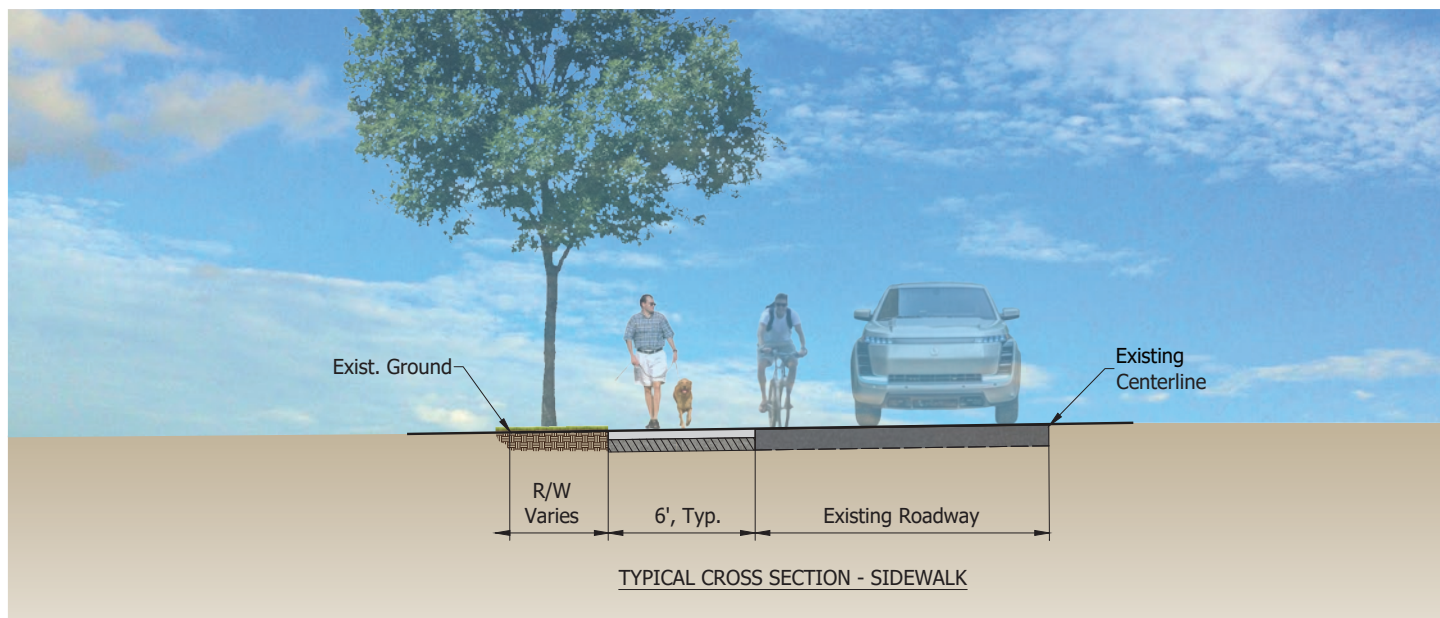
ROW

Town of Syracuse ROW along Chicago Street generally follows the back of the sidewalk throughout the corridor. It is anticipated that the majority of the trail segment could be constructed within existing ROW, with only minimal areas needing acquired either through an easement agreement or ROW acquisition. Preliminary impacts to ROW are estimated to be 0.017 acres across 7 different parcels.

Utilities

Utilities present along this alignment include Kosciusko County REMC. As the proposed segment would follow along where sidewalk exists already, impacts to the Kosciusko County REMC poles are anticipated to be minimal.

Typical Section



Environmental Considerations

Environmental constraints along this alignment are minimal, with no streams, water bodies, or wetland complexes identified.

Agency Coordination

The segment is being proposed adjacent to existing ROW so coordination with the Town of Syracuse will be required. Additional coordination efforts should occur with the Wawasee Community Schools Corporation and with INDOT for the SR 13 crossing connection.

Crossing Conditions

Significant points of potential conflict exist along the entire segment length due to adjacent land uses. Two local road crossings will be required at Sycamore St. and across Chicago St. There is an existing pedestrian crossing located

Trail Section 1 - Segment 4: W. Chicago St. between Syracuse-Webster Rd. and SR 13.



**Trail Section 1 - Segment 4: Cost Summary**

The cost table below summarizes the anticipated construction costs for this segment. It has been developed on the basis of the research and information presented within this report as well as assumptions influenced by the current trends in construction activity. Costs have been forecast at an assumed 3% per year inflation rate to the 2026 construction season in an attempt to capture anticipated inflation of labor and materials. Preliminary Engineering costs have been developed assuming several segments are designed at once, and then pro-rated across each segment based on anticipated construction cost.

Construction Costs

Pay Item	Description	Quantity	Unit	Unit Price	Extension
105-06845	CONSTRUCTION ENGINEERING	1.000	L.S.	6,200.00	\$6,200.00
110-01001	MOBILIZATION AND DEMOBILIZATION	1.000	L.S.	10,750.00	\$10,750.00
201-52370	CLEARING RIGHT OF WAY	1.000	L.S.	15,000.00	\$15,000.00
604-06070	SIDEWALK, CONCRETE	1,429.000	S.Y.	65.00	\$92,885.00
604-08086	CURB RAMP, CONCRETE	44.000	S.Y.	175.00	\$7,700.00
604-12083	DETECTABLE WARNING SURFACES	11.000	S.Y.	275.00	\$3,025.00
605-06120	CURB, CONCRETE	2,145.000	L.F.	40.00	\$85,800.00
801-06775	MAINTAINING TRAFFIC	1.000	L.S.	7,500.00	\$7,500.00
808-10099	TRANSVERSE MARKING, MULTI-COMPONENT, CROSSWALK LINE, WHITE, 24 IN.	84.000	L.F.	11.00	\$924.00
Total:					\$229,784.00

Plus 25% Contingency	\$57,446
Plus 3% Per Year Inflation to 2026	\$45,748
Total Estimated 2026 Construction Costs:	\$332,978
ROW, and Utility Relocation Costs	\$6,134
Design, Coordination, Permitting, and Inspection Costs	\$201,070

Total Estimated Section 1 - Segment 4 Costs:	\$540,182
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Trail Section 2 - Segment 1: SR 13 & Waco Dr. from Grandview Dr. to SR 13

Trail Segment Length: +/- 1.10 miles

This segment will connect with the existing trail at Grandview Dr. and will parallel the north side of SR 13 until it reaches Waco Dr. The trail will then turn east and continue along Waco Dr. until it once again reaches SR 13. See page 77 for a possible alternate route that follows SR 13.



Existing Land Use

Land uses along SR 13 are primarily residential with some wooded stretches on the south side of the highway. Commercial and restaurant uses exist at the Waco Dr. intersection. Land uses along Waco Dr. are predominantly residential on the lake side (north and east side) of the road and commercial/ institutional along the highway side (south and west side).

Stormwater Management

Stormwater runoff is anticipated to be conveyed through sheet flow into roadside ditches along SR 13, and across the roadway into shallow lawn ditches along Waco Dr., consistent with the current conditions. Limited grading may be necessary during design and construction to ensure positive drainage.

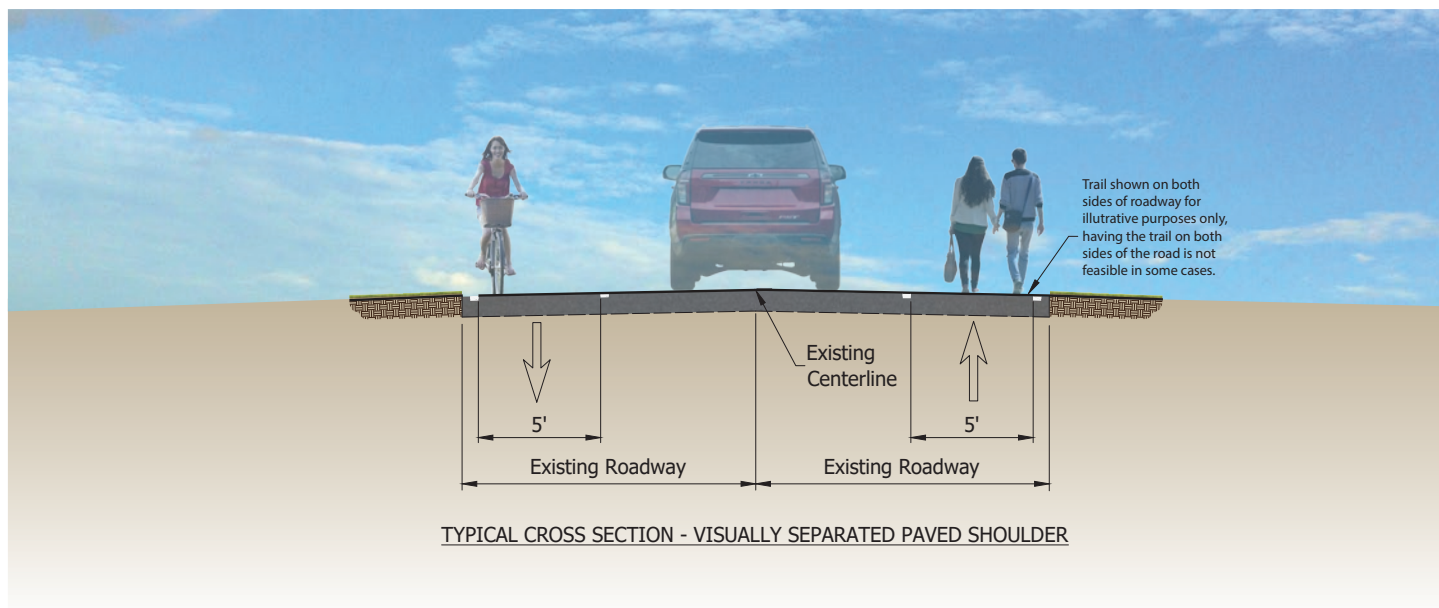
ROW

State ROW along SR 13 is generally 45' from centerline on each side of the roadway throughout the corridor. County ROW along Waco Dr. generally follows edge of pavement. It is anticipated that the majority of the trail segment could be constructed within existing ROW, with only minimal areas needing acquired either through an easement agreement or ROW acquisition. Preliminary impacts to ROW are estimated to be 0.004 acres across 1 parcel.

Utilities

Utilities present along this alignment include NIPSCO Electric, Lumen, and Turkey Creek RSD. The proposed trail segments along SR 13 and Waco Dr. are anticipated to avoid impacts with NIPSCO, Lumen, and Turkey Creek RSD facilities. However, these utilities should be noted and coordination continued as design progresses to ensure no conflicts are created.

Typical Section



Environmental Considerations

Environmental constraints along this alignment are minimal, with no streams, water bodies, or wetland complexes identified.

Agency Coordination

Portions of the segment along SR 13 are proposed within existing ROW and will require INDOT coordination. The Waco Dr. portions of the segment will be on or adjacent to the roadway and will require coordination with the Kosciusko County Highway Department.

Crossing Conditions

Three minor roadway crossings exist along the SR 13 stretch of trail. Multiple commercial and residential driveways exist along the entire Waco Dr. corridor. Fewer driveway openings exist along the south and west sides of Waco Dr. but there are still a significant number of potential conflict points which will need to be addressed during design.

Trail Section 2 - Segment 1: SR 13 & Waco Dr. from Grandview Dr. to SR 13



Detailed Route Alignment Exhibits can be found in the report Appendix



Trail Section 2 - Segment 1: SR 13 & Waco Dr. from Grandview Dr. to SR 13



Trail Section 2 - Segment 1: Cost Summary

The cost table below summarizes the anticipated construction costs for this segment. It has been developed on the basis of the research and information presented within this report as well as assumptions influenced by the current trends in construction activity. Costs have been forecast at an assumed 3% per year inflation rate to the 2026 construction season in an attempt to capture anticipated inflation of labor and materials. Preliminary Engineering costs have been developed assuming several segments are designed at once, and then pro-rated across each segment based on anticipated construction cost.

Construction Costs

Pay Item	Description	Quantity	Unit	Unit Price	Extension
105-06845	CONSTRUCTION ENGINEERING	1.000	L.S.	10,950.00	\$10,950.00
110-01001	MOBILIZATION AND DEMOBILIZATION	1.000	L.S.	19,500.00	\$19,500.00
201-52370	CLEARING RIGHT OF WAY	1.000	L.S.	10,000.00	\$10,000.00
306-08034	MILLING, ASPHALT, 1 1/2 IN.	12,125.000	S.Y.	1.50	\$18,187.50
306-08432	MILLING, APPROACH	150.000	S.Y.	3.50	\$525.00
401-07321	QC/QA-HMA, 2, 64, SURFACE, 9.5 mm	1,000.000	TON	110.00	\$110,000.00
406-05520	ASPHALT FOR TACK COAT	6.500	TON	600.00	\$3,900.00
604-06070	SIDEWALK, CONCRETE	880.000	S.Y.	65.00	\$57,200.00
604-08086	CURB RAMP, CONCRETE	42.000	S.Y.	175.00	\$7,350.00
604-12083	DETECTABLE WARNING SURFACES	10.500	S.Y.	275.00	\$2,887.50
610-08446	PCCP FOR APPROACHES, 6 IN.	150.000	S.Y.	100.00	\$15,000.00
621-01004	MOBILIZATION AND DEMOBILIZATION FOR SEEDING	1.000	EACH	750.00	\$750.00
621-06560	MULCHED SEEDING U	1,710.000	S.Y.	2.00	\$3,420.00
731-93945	FACE PANELS, CONCRETE	2,670.000	S.F.	28.00	\$74,760.00
731-93946	WALL ERECTION	2,670.000	S.F.	15.00	\$40,050.00
731-93947	LEVELING PAD, CONCRETE	382.000	L.F.	33.00	\$12,606.00
801-06775	MAINTAINING TRAFFIC	1.000	L.S.	10,950.00	\$10,950.00
808-06713	LINE, PAINT, SOLID, WHITE, 4 IN.	9,095.000	L.F.	0.20	\$1,819.00
808-10099	TRANSVERSE MARKING, MULTI-COMPONENT, CROSSWALK LINE, WHITE, 24 IN.	100.000	L.F.	11.00	\$1,100.00
808-10192	PAVEMENT MESSAGE MARKING, MULTI-COMPONENT, BIKE SYMBOL	10.000	EACH	10.00	\$100.00
Total:					\$401,055.00

Plus 25% Contingency	\$100,264
Plus 3% Per Year Inflation to 2026	\$79,839
Total Estimated 2026 Construction Costs:	\$581,158 *
ROW, and Utility Relocation Costs	\$5,908
Design, Coordination, Permitting, and Inspection Costs	\$335,580
Total Estimated Section 1 - Segment 3 Costs:	\$922,646 *

* Includes costs for resurfacing and striping E Waco Dr.



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Trail Section 2 - Segment 2: SR 13 & Southshore Dr. From Waco Dr. to Vawter Park Rd.

Trail Segment Length: +/- 0.80 miles

The trail segment will begin at Waco Dr. and parallel the eastern side of SR 13 to the intersection of Southshore Dr. It will continue along the south Southshore Dr. to the intersection of Vawter Park Rd. See page 77 for a possible alternate route that follows SR 13.



Existing Land Use

Existing adjacent land uses are predominantly residential. Some multi-family housing and one institutional use exists near the intersection of Southshore Dr. and Vawter Park Rd.

Stormwater Management

Stormwater runoff is anticipated to be conveyed through sheet flow into roadside ditches along SR 13, and across the roadway into shallow lawn ditches along Southshore Dr., consistent with the current conditions. Limited grading may be necessary during design and construction to ensure positive drainage.

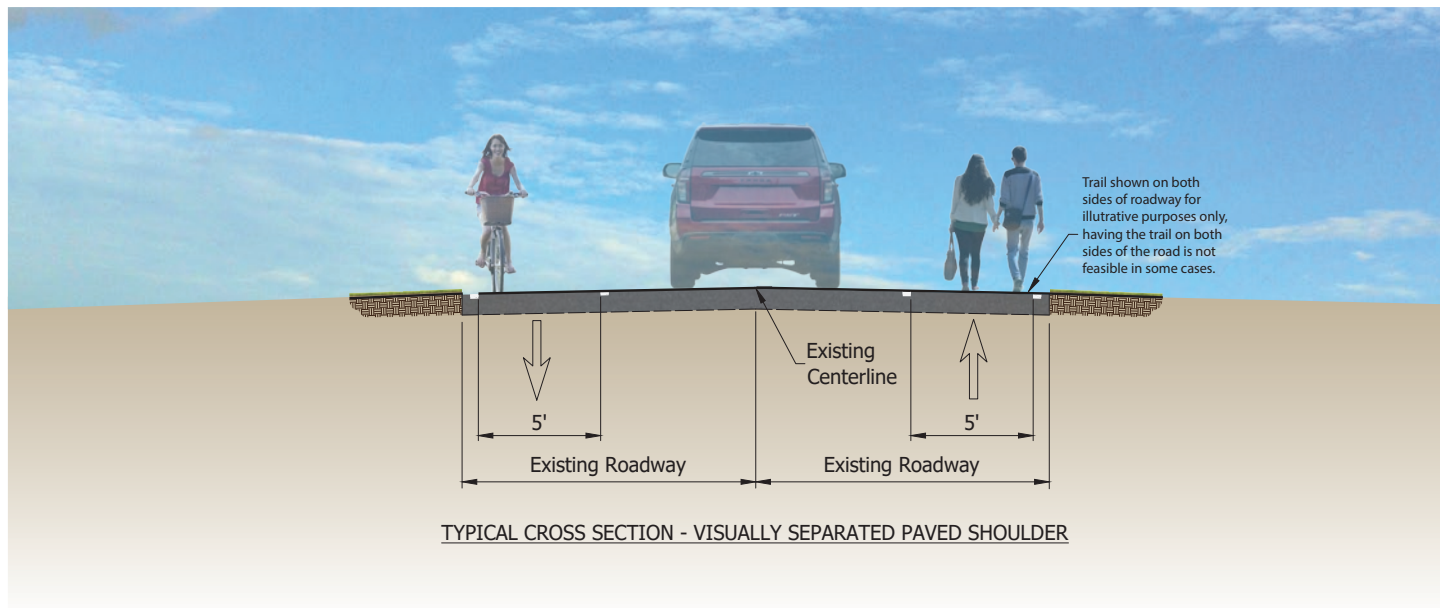
ROW

County ROW along Southshore Dr. generally follows edge of pavement. State ROW along SR 13 is generally 45' from centerline on each side of the roadway throughout the corridor. It is anticipated that all of the trail segment could be constructed within existing ROW, and therefore no acquisition is required.

Utilities

Utilities present along this alignment include NIPSCO Electric, Lumen, and Turkey Creek RSD. The proposed trail segments along Southshore Dr. and SR 13 are anticipated to avoid impacts with NIPSCO, Lumen, and Turkey Creek RSD facilities. However, these utilities should be noted and coordination continued as design progresses to ensure no conflicts are created.

Typical Section



Environmental Considerations

Environmental constraints along this alignment are minimal, with no streams, water bodies, or wetland complexes identified.

Agency Coordination

Portions of the segment along SR 13 are proposed within existing ROW and will require INDOT coordination. The Southshore Dr. portions of the segment will be on or adjacent to the roadway and will require coordination with the Kosciusko County Highway Department.

Crossing Conditions

One minor roadway crossing exists along the Southshore Dr. portion of the segment at Brown St. Multiple residential driveways exist along the entire segment length. Fewer driveway openings exist along the southwestern side of Southshore Dr. but there are still a significant number of potential conflict points which will need to be addressed during design. Crossing the trail at the Southshore Dr. and Vawter Park Rd. intersection will also need to be given consideration.

Trail Section 2 - Segment 2: SR 13 & Southshore Dr. From Waco Dr. to Vawter Park Rd.





Trail Section 2 - Segment 2: Cost Summary

The cost table below summarizes the anticipated construction costs for this segment. It has been developed on the basis of the research and information presented within this report as well as assumptions influenced by the current trends in construction activity. Costs have been forecast at an assumed 3% per year inflation rate to the 2026 construction season in an attempt to capture anticipated inflation of labor and materials. Preliminary Engineering costs have been developed assuming several segments are designed at once, and then pro-rated across each segment based on anticipated construction cost.

Construction Costs

Pay Item	Description	Quantity	Unit	Unit Price	Extension
105-06845	CONSTRUCTION ENGINEERING	1.000	L.S.	6,500.00	\$6,500.00
110-01001	MOBILIZATION AND DEMOBILIZATION	1.000	L.S.	11,000.00	\$11,000.00
201-52370	CLEARING RIGHT OF WAY	1.000	L.S.	5,000.00	\$5,000.00
306-08034	MILLING, ASPHALT, 1 1/2 IN.	7,635.000	S.Y.	1.50	\$11,452.50
306-08041	MILLING, PCCP	330.000	S.Y.	5.00	\$1,650.00
306-08432	MILLING, APPROACH	30.000	S.Y.	3.50	\$105.00
401-07321	QC/QA-HMA, 2, 64, SURFACE, 9.5 mm	630.000	TON	110.00	\$69,300.00
406-05520	ASPHALT FOR TACK COAT	4.000	TON	600.00	\$2,400.00
604-06070	SIDEWALK, CONCRETE	915.000	S.Y.	65.00	\$59,475.00
604-08086	CURB RAMP, CONCRETE	24.000	S.Y.	175.00	\$4,200.00
604-12083	DETECTABLE WARNING SURFACES	6.000	S.Y.	275.00	\$1,650.00
610-08446	PCCP FOR APPROACHES, 6 IN.	360.000	S.Y.	100.00	\$36,000.00
621-01004	MOBILIZATION AND DEMOBILIZATION FOR SEEDING	1.000	EACH	750.00	\$750.00
621-06560	MULCHED SEEDING U	1,145.000	S.Y.	2.00	\$2,290.00
801-06775	MAINTAINING TRAFFIC	1.000	L.S.	10,000.00	\$10,000.00
808-06713	LINE, PAINT, SOLID, WHITE, 4 IN.	5,730.000	L.F.	0.20	\$1,146.00
808-10099	TRANSVERSE MARKING, MULTI-COMPONENT, CROSSWALK LINE, WHITE, 24 IN.	160.000	L.F.	11.00	\$1,760.00
808-10192	PAVEMENT MESSAGE MARKING, MULTI-COMPONENT, BIKE SYMBOL	6.000	EACH	300.00	\$1,800.00
Total:					\$226,478.50

Plus 25% Contingency	\$56,687
Plus 3% Per Year Inflation to 2026	\$45,090
Total Estimated 2026 Construction Costs:	\$328,256 *
ROW, and Utility Relocation Costs	\$0
Design, Coordination, Permitting, and Inspection Costs	\$149,895

Total Estimated Section 2 - Segment 2 Costs:	\$478,151 *
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* Includes costs for resurfacing and striping E Waco Dr.

Trail Section 2 - Segment 1&2a: SR 13 Alternate Between Grandview Dr. and CR 1000 N.

Trail Segment Length: +/- 2.20 miles

The proposed segment is an alternate, or supplementary route, to the Waco Dr. and Southshore Dr. segments. It would parallel SR 13 between Grandview Dr. and CR 1000 N. This segment would serve as a direct connection to other proposed trails in the region and would eventually provide direct connection between the Town of Syracuse and the Town of North Webster once the proposed North Webster trail is completed.



Existing Land Use

Existing land uses along this segment consist of a mix of commercial and residential uses.

Stormwater Management

Stormwater runoff is anticipated to be conveyed through sheet flow into roadside ditches along SR 13 consistent with the current conditions. Limited grading may be necessary during design and construction to ensure positive drainage.

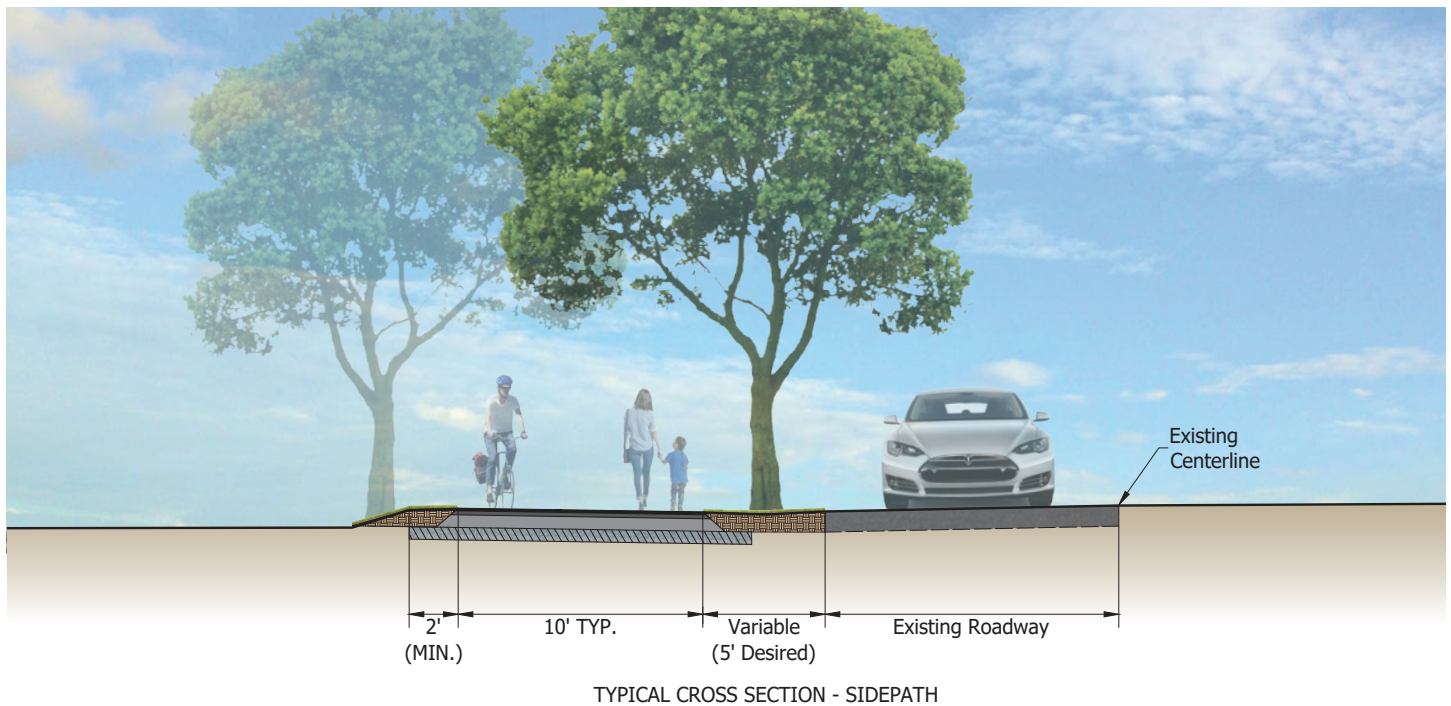
ROW

This alternate would follow State ROW which is approximately 45' from centerline on each side the of roadway. The trail is primarily constructible within existing ROW and anticipated impacts are limited to 0.05 ac across 1 parcel.

Utilities

Utilities present along this alignment include NIPSCO Electric, Lumen, and Turkey Creek RSD. The proposed trail segments along SR 13 are anticipated to avoid impacts with NIPSCO, Lumen, and Turkey Creek RSD facilities. However, these utilities should be noted and coordination continued as design progresses to ensure no conflicts are created.

Typical Section



Environmental Considerations

Environmental constraints along this alignment are minimal, with no streams, water bodies, or wetland complexes identified.

Agency Coordination

Coordination with INDOT will be required for the entire length of this proposed segment. Additional coordination with the Kosciusko County Highway Department and the Town of Syracuse are also recommended.

Crossing Conditions

Multiple commercial, institutional, and residential crossings exist for the length of this segment. Detailed analysis for all potential conflict points during design is recommended.

Trail Section 2 - Segment 1&2a: SR 13 Alternate Between Grandview Dr. and CR 1000 N.





Trail Section 2 - Segment 1&2a: SR 13 Alternate Between Grandview Dr. and CR 1000 N.



Trail Section 2 - Segment 1&2a: SR 13 Alternate Between Grandview Dr. and CR 1000 N.



Detailed Route Alignment Exhibits can be found in the report Appendix



Trail Section 2 - Segment 1&2a: SR 13 Alternate Between Grandview Dr. and CR 1000 N.



Trail Section 2 - Segment 1&2a: SR 13 Alternate Between Grandview Dr. and CR 1000 N.



Detailed Route Alignment Exhibits can be found in the report Appendix



Trail Section 2 - Segment 1 & 2a: Cost Summary

The cost table below summarizes the anticipated construction costs for this segment. It has been developed on the basis of the research and information presented within this report as well as assumptions influenced by the current trends in construction activity. Costs have been forecast at an assumed 3% per year inflation rate to the 2026 construction season in an attempt to capture anticipated inflation of labor and materials. Preliminary Engineering costs have been developed assuming several segments are designed at once, and then pro-rated across each segment based on anticipated construction cost.

Construction Costs

Pay Item	Description	Quantity	Unit	Unit Price	Extension
105-06845	CONSTRUCTION ENGINEERING	1.000	L.S.	18,000.00	\$18,000.00
110-01001	MOBILIZATION AND DEMOBILIZATION	1.000	L.S.	32,000.00	\$32,000.00
201-52370	CLEARING RIGHT OF WAY	1.000	L.S.	15,000.00	\$15,000.00
306-08432	MILLING, APPROACH	360.000	S.Y.	3.50	\$1,260.00
604-06070	SIDEWALK, CONCRETE	7,780.000	S.Y.	65.00	\$505,700.00
604-08086	CURB RAMP, CONCRETE	90.000	S.Y.	175.00	\$15,750.00
604-12083	DETECTABLE WARNING SURFACES	22.500	S.Y.	275.00	\$6,187.50
610-08446	PCCP FOR APPROACHES, 6 IN.	360.000	S.Y.	100.00	\$36,000.00
621-01004	MOBILIZATION AND DEMOBILIZATION FOR SEEDING	1.000	EACH	750.00	\$750.00
621-06560	MULCHED SEEDING U	10,510.000	S.Y.	2.00	\$21,020.00
801-06775	MAINTAINING TRAFFIC	1.000	L.S.	20,000.00	\$20,000.00

Total: \$671,667.50

Plus 25% Contingency	\$167,917
Plus 3% Per Year Inflation to 2026	\$133,724
Total Estimated 2026 Construction Costs:	\$973,309
ROW, and Utility Relocation Costs	\$21,192
Design, Coordination, Permitting, and Inspection Costs	\$262,435

Total Estimated Section 2 - Segment 1 & 2a Costs:	\$1,256,936
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Trail Section 2 - Segment 3: Vawter Park Rd. between Southshore Dr. and CR 800 E.

Trail Segment Length: +/- 0.50 miles

This segment will begin at the Southshore Dr. intersection and continue along the south side of Vawter Park Rd. The trail follows Vawter Park Rd. until it reaches CR 800 E. It is important to note that this section of roadway is very narrow, making a shoulder trail problematic. A dip in the roadway also creates potential sight distance and pedestrian visibility concerns. See page 77 for a possible alternate route that follows SR 13.



Existing Land Use

The north side of Vawter Park Rd. is primarily residential. The south side of the road contains some residential land uses but also has significant sections of wooded and open land. Setback on the eastern portion of the segment increase and, along with the wooded areas, provides a more serene setting.

Stormwater Management

Stormwater runoff is anticipated to be conveyed through sheet flow into roadside ditches along Vawter Park Rd.

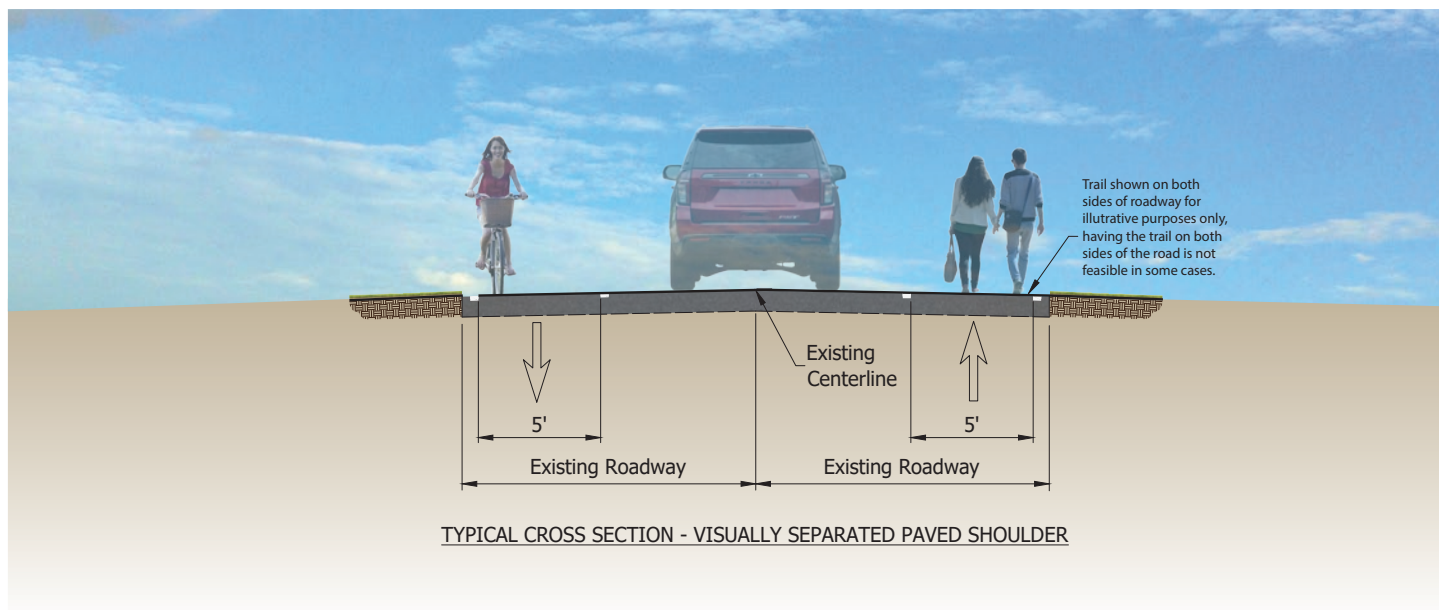
ROW

County ROW along Vawter Park Rd. is generally 20' from centerline on each side of the roadway throughout the corridor. It is anticipated that all of the trail segment could be constructed within existing ROW, and therefore no acquisition is required.

Utilities

Utilities present along this alignment include NIPSCO Electric, Lumen, Mediacom, and Turkey Creek RSD. The proposed trail segment along Vawter Park Rd. are anticipated to avoid impacts with NIPSCO, Lumen, Mediacom, and Turkey Creek RSD facilities. However, these utilities should be noted and coordination continued as design progresses to ensure no conflicts are created.

Typical Section



Environmental Considerations

Environmental constraints along this alignment are minimal, with no streams, water bodies, or wetland complexes identified.

Agency Coordination

The entire segment will be on or adjacent to the roadway and will require coordination with the Kosciusko County Highway Department.

Crossing Conditions

Multiple residential driveway crossings exist along this stretch of trail, but the frequency of those crossings is reduced compared to previously described segments. Consideration for visibility and safety at these conflict points is still warranted during design.

Trail Section 2 - Segment 3: Vawter Park Rd. between Southshore DR. and CR 800 E.



**Trail Section 2 - Segment 3: Cost Summary**

The cost table below summarizes the anticipated construction costs for this segment. It has been developed on the basis of the research and information presented within this report as well as assumptions influenced by the current trends in construction activity. Costs have been forecast at an assumed 3% per year inflation rate to the 2026 construction season in an attempt to capture anticipated inflation of labor and materials. Preliminary Engineering costs have been developed assuming several segments are designed at once, and then pro-rated across each segment based on anticipated construction cost.

Construction Costs

Pay Item	Description	Quantity	Unit	Unit Price	Extension
105-06845	CONSTRUCTION ENGINEERING	1.000	L.S.	2,600.00	\$2,600.00
110-01001	MOBILIZATION AND DEMOBILIZATION	1.000	L.S.	4,500.00	\$4,500.00
306-08034	MILLING, ASPHALT, 1 1/2 IN.	7,320.000	S.Y.	1.50	\$10,980.00
401-07321	QC/QA-HMA, 2, 64, SURFACE, 9.5 mm	604.000	TON	110.00	\$66,440.00
406-05520	ASPHALT FOR TACK COAT	4.000	TON	600.00	\$2,400.00
801-06775	MAINTAINING TRAFFIC	1.000	L.S.	3,000.00	\$3,000.00
808-06713	LINE, PAINT, SOLID, WHITE, 4 IN.	5,730.000	L.F.	0.20	\$1,146.00
808-10099	TRANSVERSE MARKING, MULTI-COMPONENT, CROSSWALK LINE, WHITE, 24 IN.	90.000	L.F.	11.00	\$990.00
808-10192	PAVEMENT MESSAGE MARKING, MULTI-COMPONENT, BIKE SYMBOL	6.000	EACH	300.00	\$1,800.00
Total:					\$93,856.00

Plus 25% Contingency	\$23,464
Plus 3% Per Year Inflation to 2026	\$18,686
Total Estimated 2026 Construction Costs:	\$136,006
ROW, and Utility Relocation Costs	\$0
Design, Coordination, Permitting, and Inspection Costs	\$60,100

Total Estimated Section 2 - Segment 3 Costs:	\$196,106
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Trail Section 2 - Segment 4: CR 800 E. & McClintic Rd. Between Vawter Park Rd. and Hatchery Rd.

Trail Segment Length: +/- 0.90 miles

The CR 800 E. segment begins at the intersection with Vawter Park Rd. The trail continues south along the west side of CR 800 E. until it reaches the CR 1000 N. intersection. At this point it crosses CR 800 E. and continues along the east side of the road to McClintic Rd. It follows along the north side of McClintic Rd. to the Hatchery Rd. intersection.



Existing Land Use

The east side of CR 800 E. has primarily rural residential adjacent uses. The west side of the road contains mostly agricultural uses until the intersection at CR 1000 N. Several ag-industrial and small commercial uses exist near the intersection of CR 800 N. and McClintic Rd. until it reaches Hatchery Rd.

Stormwater Management

Stormwater runoff is anticipated to be conveyed through sheet flow into roadside ditches along CR 800 E., consistent with the current conditions. Limited grading may be necessary during design and construction to ensure positive drainage.

ROW

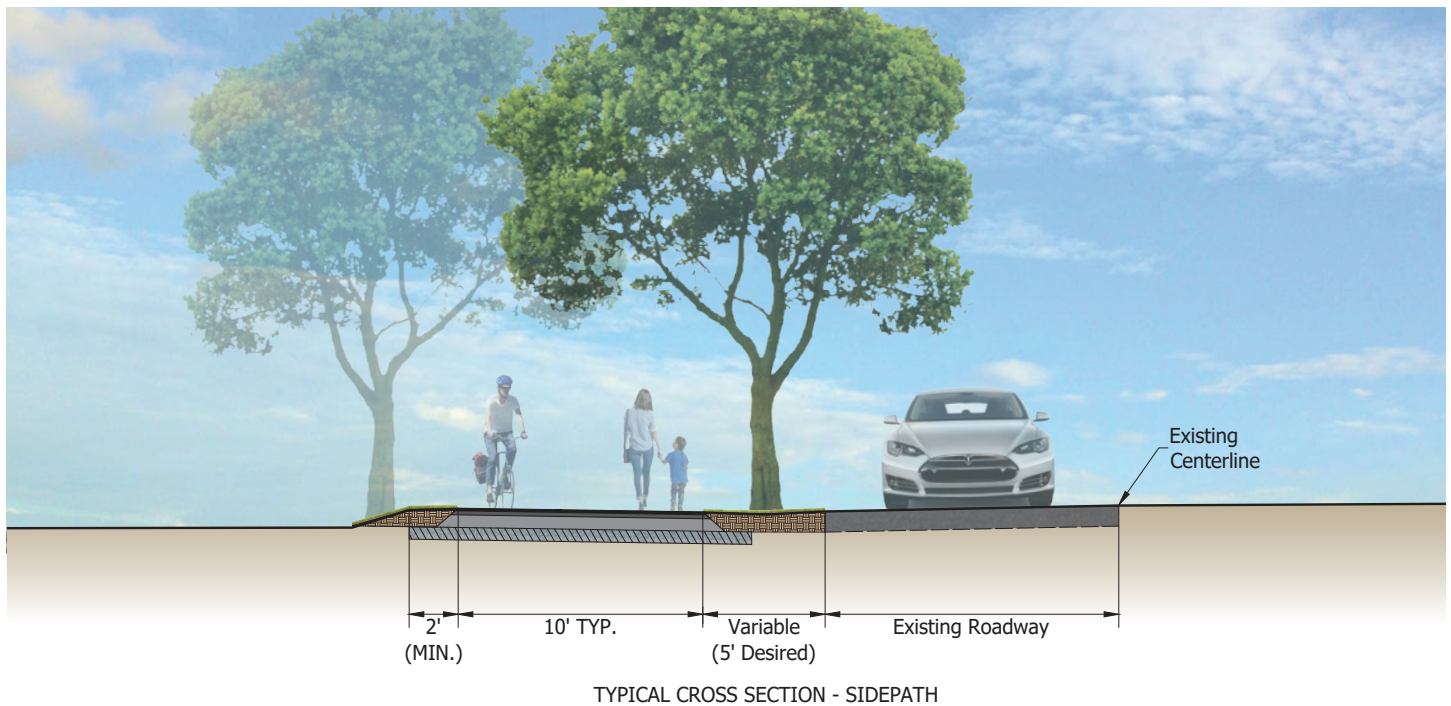
County ROW along CR 800 E. / McClintic Rd. varies from edge of pavement to 20' from centerline on either side of the roadway. Therefore, it is anticipated that the needed area for the proposed trail section will need to be acquired either through an easement agreement or ROW acquisition. Preliminary impacts to ROW are estimated to be 2.558 acres across 7 different parcels.

Utilities

Utilities present along this alignment include NIPSCO Electric, Lumen, Mediacom, Turkey Creek RSD. The proposed trail segment along CR 800 E. is anticipated to have limited impacts to NIPSCO Electric poles, which may require relocation. It is estimated that 10 poles may potentially be impacted.

Additionally, it is anticipated that the facilities maintained by Lumen, Mediacom, and Turkey Creek RSD will be avoided by the proposed alignment. However, these utilities should be noted and coordination continued as design progresses to ensure no conflicts are created.

Typical Section



Environmental Considerations

Environmental constraints along this alignment are minimal, with no streams, water bodies, or wetland complexes identified. Tree Removal/Clearing may be necessary along the northern portions of CR 800 E. during construction of the trail segment.

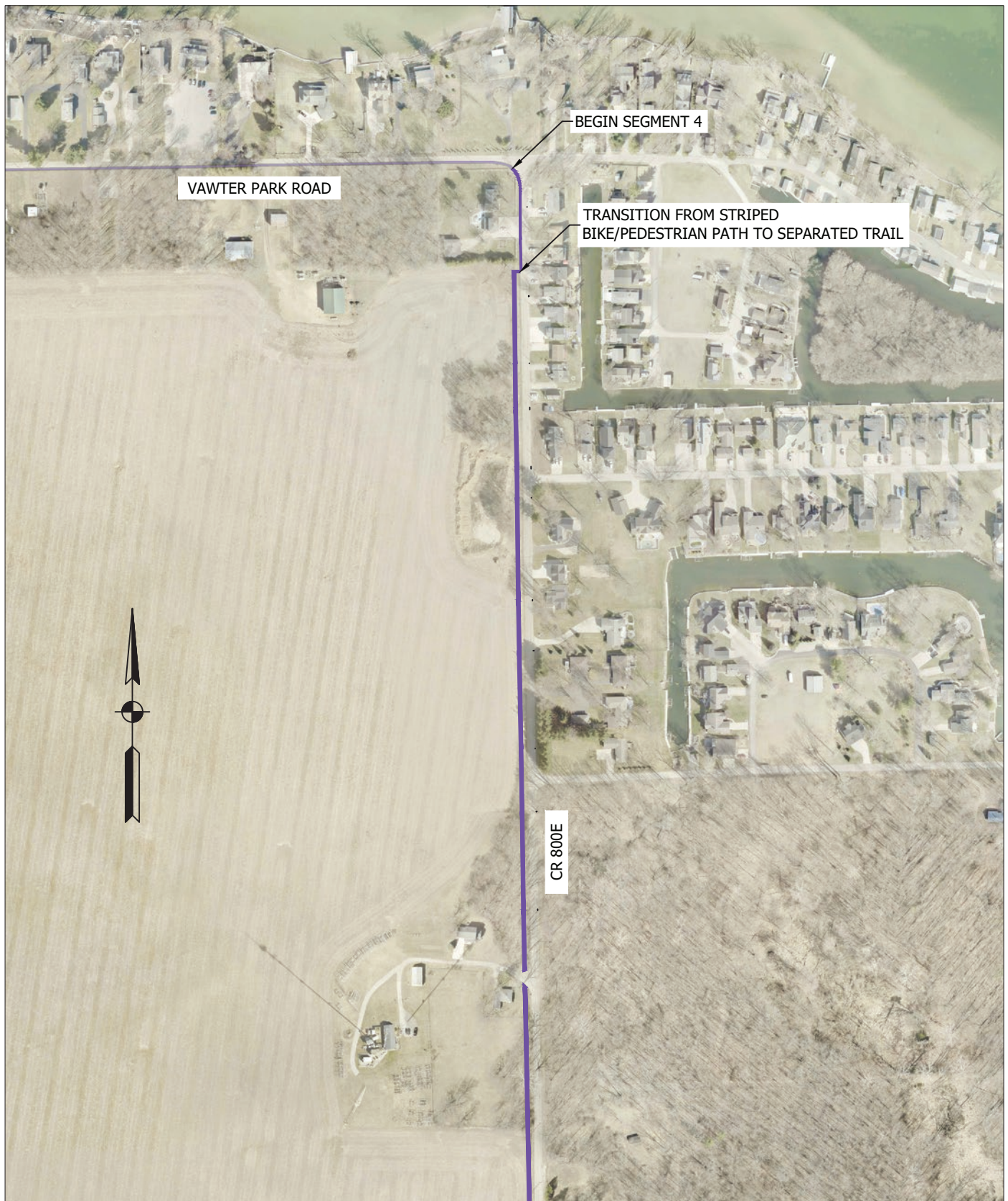
Agency Coordination

The entire segment will be on or adjacent to the roadway and will require coordination with the Kosciusko County Highway Department.

Crossing Conditions

Multiple residential driveway crossings exist along this stretch of trail, but the frequency of those crossings is reduced compared to previously described segments. Consideration for visibility and safety at these conflict points is still warranted during design.

Trail Section 2 - Segment 4: CR 800 E. & McClintic Rd. Between Vawter Park Rd. and Hatchery Rd.





Trail Section 2 - Segment 4: CR 800 E. & McClintic Rd. Between Vawter Park Rd. and Hatchery Rd.



Trail Section 2 - Segment 4: Cost Summary

The cost table below summarizes the anticipated construction costs for this segment. It has been developed on the basis of the research and information presented within this report as well as assumptions influenced by the current trends in construction activity. Costs have been forecast at an assumed 3% per year inflation rate to the 2026 construction season in an attempt to capture anticipated inflation of labor and materials. Preliminary Engineering costs have been developed assuming several segments are designed at once, and then pro-rated across each segment based on anticipated construction cost.

Construction Costs

Pay Item	Description	Quantity	Unit	Unit Price	Extension
105-06845	CONSTRUCTION ENGINEERING	1.000	L.S.	6,500.00	\$6,500.00
110-01001	MOBILIZATION AND DEMOBILIZATION	1.000	L.S.	11,500.00	\$11,500.00
201-52370	CLEARING RIGHT OF WAY	1.000	L.S.	20,000.00	\$20,000.00
207-08266	SUBGRADE TREATMENT, TYPE III	6,895.000	S.Y.	3.00	\$20,685.00
303-01180	COMPACTED AGGREGATE NO. 53	1,804.000	TON	35.00	\$63,140.00
306-08432	MILLING, APPROACH	90.000	S.Y.	3.50	\$315.00
401-07321	QC/QA-HMA, 2, 64, SURFACE, 9.5 mm	345.000	TON	110.00	\$37,950.00
401-07390	QC/QA-HMA, 2, 64, INTERMEDIATE, 19.0 mm	554.000	TON	100.00	\$55,400.00
406-05520	ASPHALT FOR TACK COAT	4.000	TON	600.00	\$2,400.00
610-07487	HMA FOR APPROACHES, TYPE B	20.000	TON	150.00	\$3,000.00
621-01004	MOBILIZATION AND DEMOBILIZATION FOR SEEDING	1.000	EACH	750.00	\$750.00
621-06559	MULCHED SEEDING R	5,910.000	S.Y.	2.00	\$11,820.00
801-06775	MAINTAINING TRAFFIC	1.000	L.S.	6,500.00	\$6,500.00
808-06713	LINE, PAINT, SOLID, WHITE, 4 IN.	565.000	L.F.	0.20	\$113.00
808-10099	TRANSVERSE MARKING, MULTI-COMPONENT, CROSSWALK LINE, WHITE, 24 IN.	110.000	L.F.	11.00	\$1,210.00
808-10192	PAVEMENT MESSAGE MARKING, MULTI-COMPONENT, BIKE SYMBOL	1.000	EACH	300.00	\$300.00
Total:					\$241,583.00

Plus 25% Contingency	\$60,396
Plus 3% Per Year Inflation to 2026	\$48,097
Total Estimated 2026 Construction Costs:	\$350,076
ROW, and Utility Relocation Costs	\$57,935
Design, Coordination, Permitting, and Inspection Costs	\$298,570

Total Estimated Section 2 - Segment 4 Costs:	\$706,581
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Trail Section 2 - Segment 5: CR 1000 N. Between SR 13 and CR 800 E.

Trail Segment Length: +/- 0.50 miles

This is a short stretch of trail connecting Wawasee Middle School at SR 13 to the CR 800 E. trail segment. The proposed trail will run along the north side of CR 1000 N. adjacent to apparent existing ROW. It provides an important connection between residents and the school and will eventually enhance access to a future trail connection to North Webster. This segment can be used as a connection to a possible SR 13 alignment which would bypass the sight distance and ROW concerns along Vawter Park Rd. See page 77 for more information



Existing Land Use

Institutional uses exist at both corners of the CR 1000 N. and SR 13 intersection. Remaining portions of this segment are mostly agricultural with a few residential areas near the CR 1000 N. and CR 800 E. intersection.

Stormwater Management

Stormwater runoff is anticipated to be conveyed through sheet flow into roadside ditches along CR 1000 N., consistent with the current conditions. Limited grading may be necessary during design and construction to ensure positive drainage.

ROW

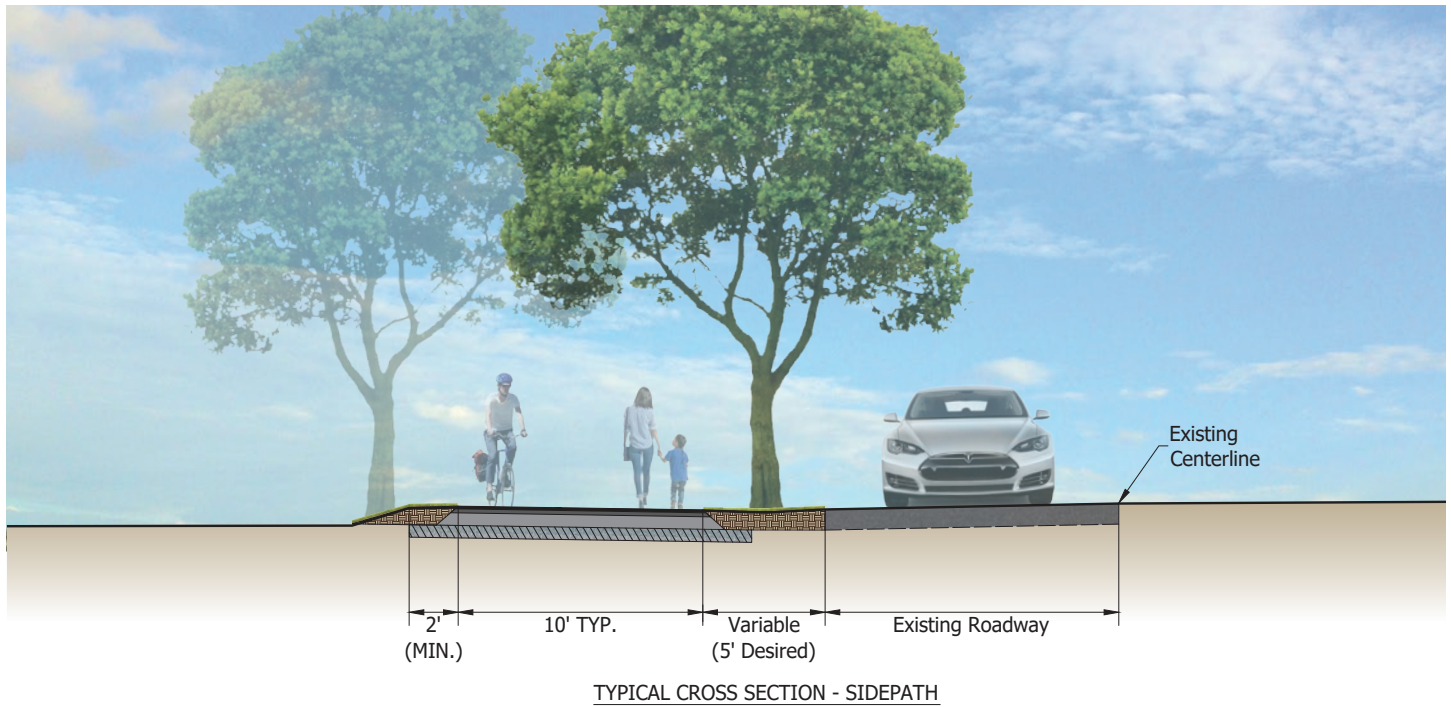
County ROW along CR 1000 N. generally follows edge of pavement throughout the corridor. Therefore, it is anticipated that the needed area for the proposed trail section will need to be acquired either through an easement agreement or ROW acquisition. Preliminary impacts to ROW are estimated to be 1.072 acres across 3 different parcels.

Utilities

Utilities present along this alignment include NIPSCO Gas, Kosciusko County REMC, Town of Syracuse Sanitary, Lumen, and Mediacom. The proposed trail segment along CR 1000 N. is anticipated to have limited impacts to Kosciusko County REMC poles, which may require relocation. It is estimated that 10 poles may potentially be impacted.

Additionally, it is anticipated that the facilities maintained by NIPSCO Gas, Lumen, Mediacom, and Town of Syracuse Sanitary will be avoided by the proposed alignment. However, these utilities should be noted and coordination continued as design progresses to ensure no conflicts are created.

Typical Section



Environmental Considerations

Environmental constraints along this alignment are minimal, with no streams, water bodies, or wetland complexes identified.

Agency Coordination

The entire segment will be on or adjacent to the roadway and will require coordination with the Kosciusko County Highway Department. Additional coordination with INDOT will be required for western portions of this segment near SR 13.

Crossing Conditions

Only one secondary school entrance and a few minor residential driveways currently exist along this proposed segment.

Trail Section 2 - Segment 5: CR 1000 N. Between SR 13 and CR 800 E.





Trail Section 2 - Segment 5: Cost Summary

The cost table below summarizes the anticipated construction costs for this segment. It has been developed on the basis of the research and information presented within this report as well as assumptions influenced by the current trends in construction activity. Costs have been forecast at an assumed 3% per year inflation rate to the 2026 construction season in an attempt to capture anticipated inflation of labor and materials. Preliminary Engineering costs have been developed assuming several segments are designed at once, and then pro-rated across each segment based on anticipated construction cost.

Construction Costs

Pay Item	Description	Quantity	Unit	Unit Price	Extension
105-06845	CONSTRUCTION ENGINEERING	1.000	L.S.	3,800.00	\$3,800.00
110-01001	MOBILIZATION AND DEMOBILIZATION	1.000	L.S.	6,700.00	\$6,700.00
201-52370	CLEARING RIGHT OF WAY	1.000	L.S.	10,000.00	\$10,000.00
207-08266	SUBGRADE TREATMENT, TYPE III	4,150.000	S.Y.	3.00	\$12,450.00
303-01180	COMPACTED AGGREGATE NO. 53	1,085.000	TON	35.00	\$37,975.00
306-08432	MILLING, APPROACH	30.000	S.Y.	3.50	\$105.00
401-07321	QC/QA-HMA, 2, 64, SURFACE, 9.5 mm	208.000	TON	110.00	\$22,880.00
401-07390	QC/QA-HMA, 2, 64, INTERMEDIATE, 19.0 mm	326.000	TON	100.00	\$32,600.00
406-05520	ASPHALT FOR TACK COAT	1.500	TON	600.00	\$900.00
610-07487	HMA FOR APPROACHES, TYPE B	7.000	TON	150.00	\$1,050.00
621-01004	MOBILIZATION AND DEMOBILIZATION FOR SEEDING	1.000	EACH	750.00	\$750.00
621-06559	MULCHED SEEDING R	3,555.000	S.Y.	2.00	\$7,110.00
801-06775	MAINTAINING TRAFFIC	1.000	L.S.	3,800.00	\$3,800.00
Total:					\$140,120.00

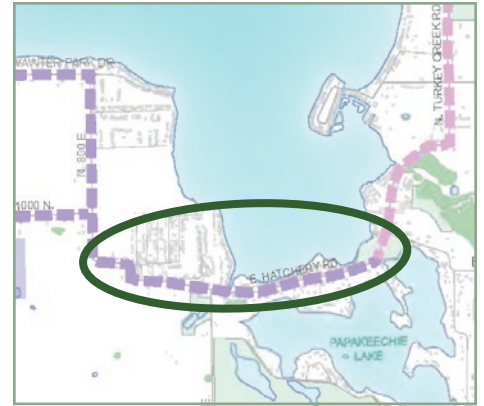
Plus 25% Contingency	\$35,030
Plus 3% Per Year Inflation to 2026	\$27,897
Total Estimated 2026 Construction Costs:	\$203,047
ROW, and Utility Relocation Costs	\$60,914
Design, Coordination, Permitting, and Inspection Costs	\$163,700

Total Estimated Section 2 - Segment 5 Costs:	\$427,661
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Trail Section 2 - Segment 6: Hatchery Rd. from McClintic Rd. to Hiawatha Ln.

Trail Segment Length: +/- 1.10 miles

The western portion of this segment begins at the McClintic Rd. intersection. The trail follows the south side of Hatchery Rd. to the intersection with Hiawatha Ln. This trail segment will help connect residential areas to the Lake Wawasee Public Access point to the east.



Existing Land Use

Land uses at the corner of Hatchery Rd. and McClintic Rd. contain a mix of ag-industrial and small commercial uses. Uses adjacent to the rest of this segment are primarily rural residential. Residential intensity increases at Bayshore Dr. and continues to Hiawatha Ln.

Stormwater Management

Stormwater runoff is anticipated to be conveyed through sheet flow into shallow lawn ditches along Hatchery Rd. consistent with the current conditions.

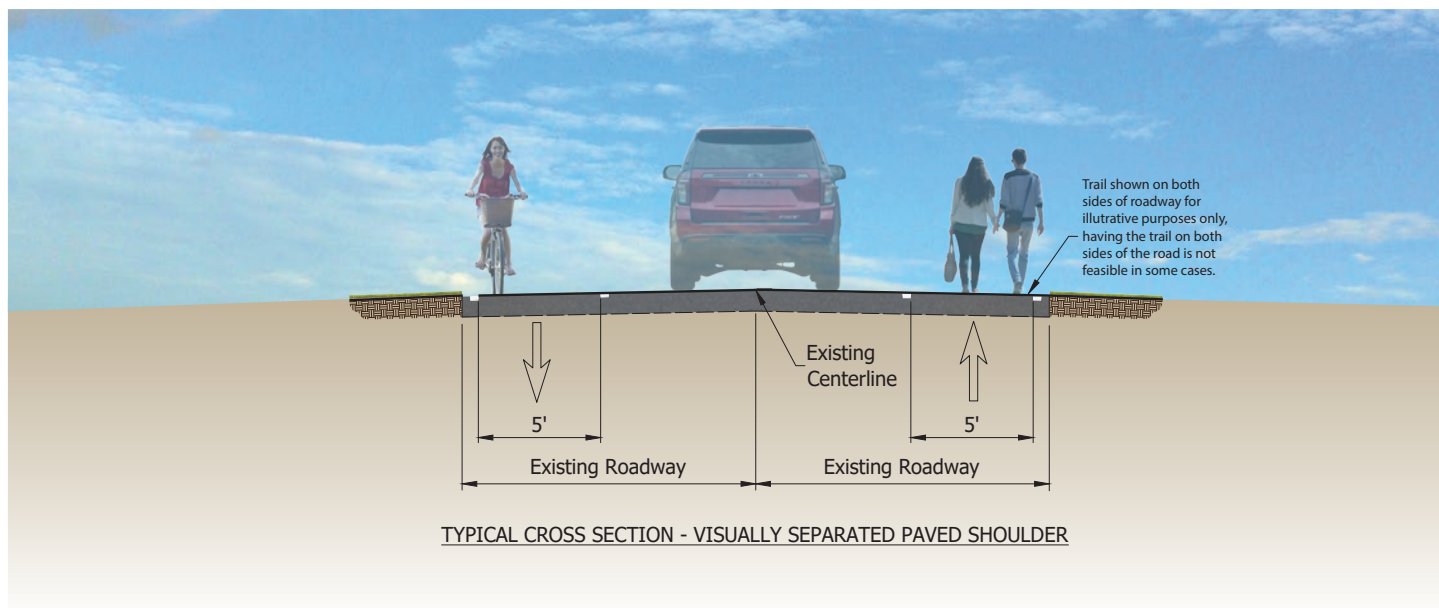
ROW

County ROW along Hatchery Road is generally 20' from centerline on either side of the roadway. It is anticipated that all of the trail segment could be constructed within existing ROW, and therefore no ROW needs to be acquired.

Utilities

Utilities present along this alignment include NIPSCO Electric, NIPSCO Gas, Lumen, Mediacom, and Turkey Creek RSD. The proposed trail segment along Hatchery Rd. are anticipated to avoid impacts with NIPSCO, Lumen, Mediacom, and Turkey Creek RSD facilities. However, these utilities should be noted and coordination continued as design progresses to ensure no conflicts are created.

Typical Section



Environmental Considerations

The Papakeeche Protective Association maintains wetlands immediately adjacent to the south side of the roadway. Trail location in relation to the public access site needs to be carefully investigated to limit potential wetland impacts.

Agency Coordination

The entire segment will be on or adjacent to the roadway and will require coordination with the Kosciusko County Highway Department.

Crossing Conditions

Crossing conditions near the existing industrial and commercial properties at the McClintic Rd. intersection will require more detailed investigation. Many other residential driveways also exist along the entire length of this segment.

Trail Section 2 - Segment 6: Hatchery Rd. from McClintic Rd. to Hiawatha Ln.





Trail Section 2 - Segment 6: Hatchery Rd. from McClintic Rd. to Hiawatha Ln.



Trail Section 2 - Segment 6: Cost Summary

The cost table below summarizes the anticipated construction costs for this segment. It has been developed on the basis of the research and information presented within this report as well as assumptions influenced by the current trends in construction activity. Costs have been forecast at an assumed 3% per year inflation rate to the 2026 construction season in an attempt to capture anticipated inflation of labor and materials. Preliminary Engineering costs have been developed assuming several segments are designed at once, and then pro-rated across each segment based on anticipated construction cost.

Construction Costs

Pay Item	Description	Quantity	Unit	Unit Price	Extension
105-06845	CONSTRUCTION ENGINEERING	1.000	L.S.	4,750.00	\$4,750.00
110-01001	MOBILIZATION AND DEMOBILIZATION	1.000	L.S.	8,200.00	\$8,200.00
306-08034	MILLING, ASPHALT, 1 1/2 IN.	13,630.000	S.Y.	1.50	\$20,445.00
401-07321	QC/QA-HMA, 2, 64, SURFACE, 9.5 mm	1,125.000	TON	110.00	\$123,750.00
406-05520	ASPHALT FOR TACK COAT	7.000	TON	600.00	\$4,200.00
801-06775	MAINTAINING TRAFFIC	1.000	L.S.	4,750.00	\$4,750.00
808-06713	LINE, PAINT, SOLID, WHITE, 4 IN.	11,155.000	L.F.	0.20	\$2,231.00
808-10192	PAVEMENT MESSAGE MARKING, MULTI-COMPONENT, BIKE SYMBOL	12.000	EACH	300.00	\$3,600.00
Total:					\$171,926.00

Plus 25% Contingency	\$42,982
Plus 3% Per Year Inflation to 2026	\$34,229
Total Estimated 2026 Construction Costs:	\$249,137 *
ROW, and Utility Relocation Costs	\$0
Design, Coordination, Permitting, and Inspection Costs	\$109,760

Total Estimated Section 2 - Segment 6 Costs:	\$358,897 *
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* Includes costs for resurfacing and striping Hatchery

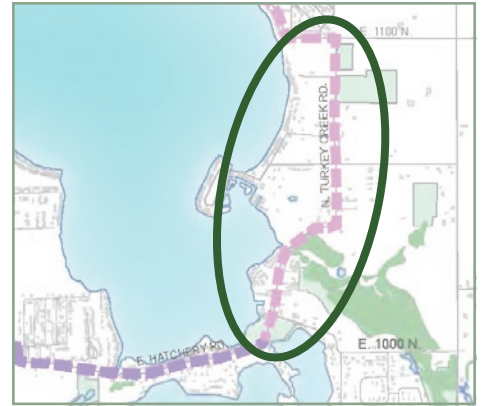


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Trail Section 3 - Segment 1: Turkey Creek Rd. from Hiawatha Ln. to CR 1100 N.

Trail Segment Length: +/- 1.40 miles

The Turkey Creek Rd. segment of trail will begin at the Hiawatha Ln. intersection and continue along the east side of the road for the entire length of the road. It would connect residents on the east and north side of Lake Wawasee with the Lake Wawasee Public Access point.



Existing Land Use

This segment is primarily rural in character with rural residential, agricultural, and natural land uses adjacent to the corridor. There are pockets of more intense residential uses, especially within the southern portion of the segment. A pocket of commercial and retail uses is present at the Turkey Creek Rd. and CR 1000 N. intersection.

Stormwater Management

Stormwater runoff is anticipated to be conveyed through sheet flow into shallow lawn ditches along Turkey Creek Rd. consistent with the current conditions.

ROW

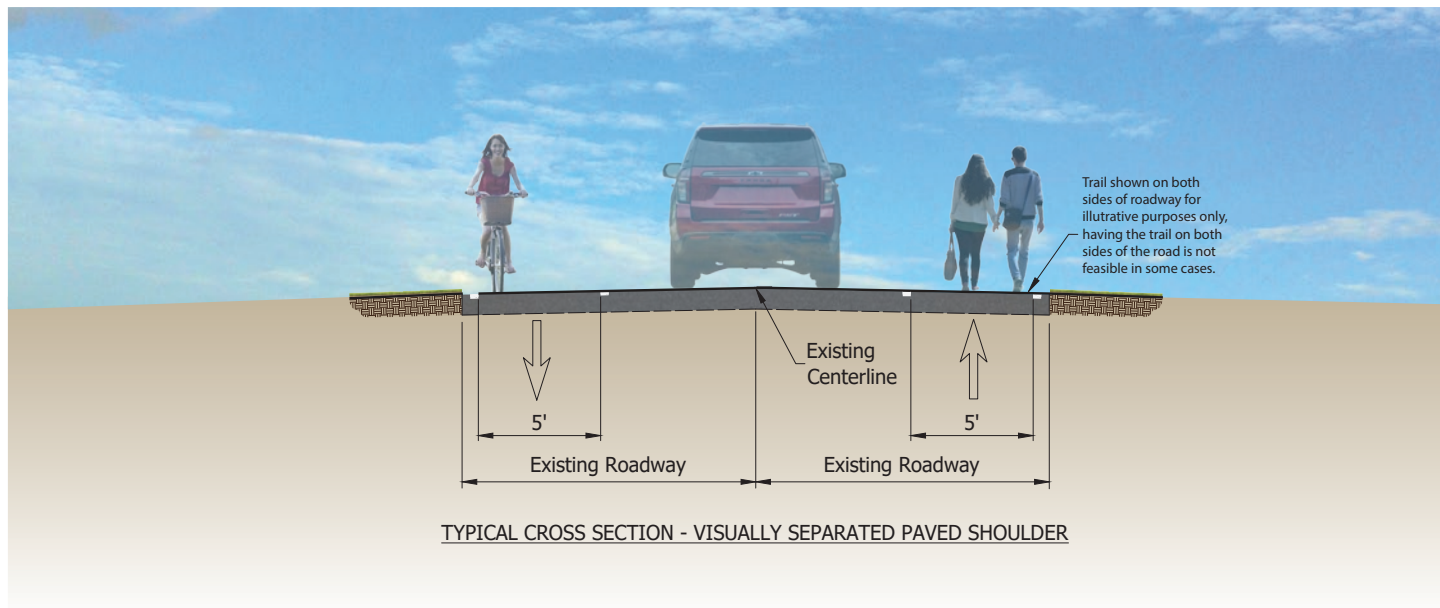
County ROW along Turkey Creek Rd. varies from edge of pavement to 40' from centerline on either side of the roadway. It is anticipated that all of the trail segment could be constructed within existing ROW, and therefore no ROW needs to be acquired.

Utilities

Utilities present along this alignment include Kosciusko County REMC, NIPSCO Gas, Lumen, Mediacom, and Turkey Creek RSD.

The proposed trail segment along Turkey Creek Rd. are anticipated to avoid impacts with NIPSCO, Lumen, Mediacom, and Turkey Creek RSD facilities. However, these utilities should be noted and coordination continued as design progresses to ensure no conflicts are created.

Typical Section



Environmental Considerations

Environmental constraints along this alignment include riparian wetlands adjacent to and under Turkey Creek Rd.

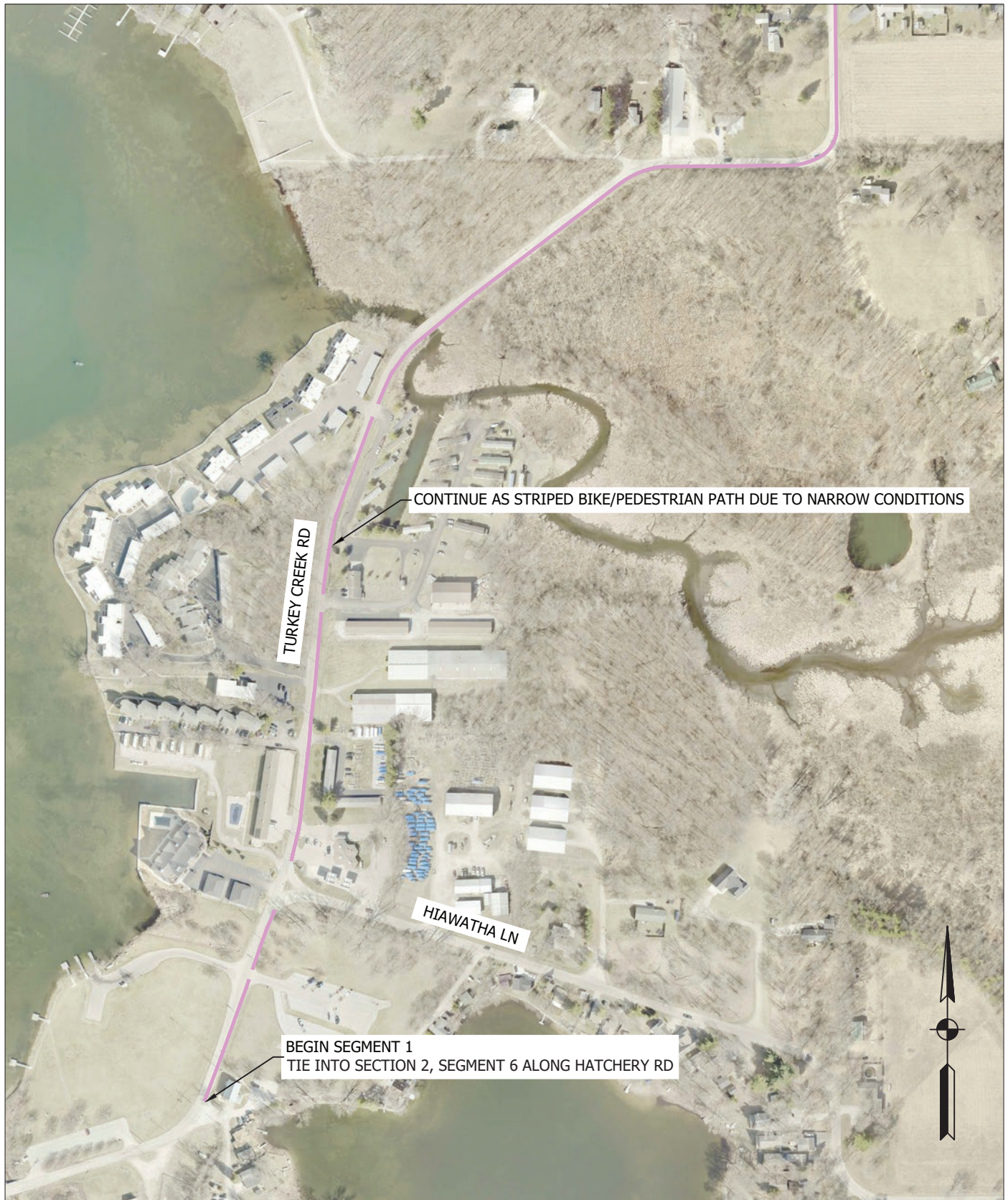
Agency Coordination

The entire segment will be on or adjacent to the roadway and will require coordination with the Kosciusko County Highway Department.

Crossing Conditions

There are two roadway crossings along this segment. One major crossing condition will need to be evaluated at the intersection of Turkey Creek Rd. and CR 1000 N. This intersection contains a series of poorly defined commercial driveways and the adjacent land uses have the potential to generate higher traffic, increasing the potential for conflicts between vehicles and trail users.

Trail Section 3 - Segment 1: Turkey Creek Rd. from Hiawatha Ln. to CR 1100 N.





Trail Section 3 - Segment 1: Turkey Creek Rd. from Hiawatha Ln. to CR 1100 N.



Trail Section 3 - Segment 1: Turkey Creek Rd. from Hiawatha Ln. to CR 1100 N.





Trail Section 3 - Segment 1: Cost Summary

The cost table below summarizes the anticipated construction costs for this segment. It has been developed on the basis of the research and information presented within this report as well as assumptions influenced by the current trends in construction activity. Costs have been forecast at an assumed 3% per year inflation rate to the 2026 construction season in an attempt to capture anticipated inflation of labor and materials. Preliminary Engineering costs have been developed assuming several segments are designed at once, and then pro-rated across each segment based on anticipated construction cost.

Construction Costs

Pay Item	Description	Quantity	Unit	Unit Price	Extension
105-06845	CONSTRUCTION ENGINEERING	1.000	L.S.	5,500.00	\$5,500.00
110-01001	MOBILIZATION AND DEMOBILIZATION	1.000	L.S.	9,700.00	\$9,700.00
306-08034	MILLING, ASPHALT, 1 1/2 IN.	15,955.000	S.Y.	1.50	\$23,932.50
401-07321	QC/QA-HMA, 2, 64, SURFACE, 9.5 mm	1,317.000	TON	110.00	\$144,870.00
406-05520	ASPHALT FOR TACK COAT	8.500	TON	600.00	\$5,100.00
801-06775	MAINTAINING TRAFFIC	1.000	L.S.	5,500.00	\$5,500.00
808-06713	LINE, PAINT, SOLID, WHITE, 4 IN.	14,360.000	L.F.	0.20	\$2,872.00
808-10099	TRANSVERSE MARKING, MULTI-COMPONENT, CROSSWALK LINE, WHITE, 24 IN.	90.000	L.F.	11.00	\$990.00
808-10192	PAVEMENT MESSAGE MARKING, MULTI-COMPONENT, BIKE SYMBOL	15.000	EACH	300.00	\$4,500.00
Total:					\$202,964.50

Plus 25% Contingency	\$50,741
Plus 3% Per Year Inflation to 2026	\$40,408
Total Estimated 2026 Construction Costs:	\$294,114 *
ROW, and Utility Relocation Costs	\$0
Design, Coordination, Permitting, and Inspection Costs	\$163,240

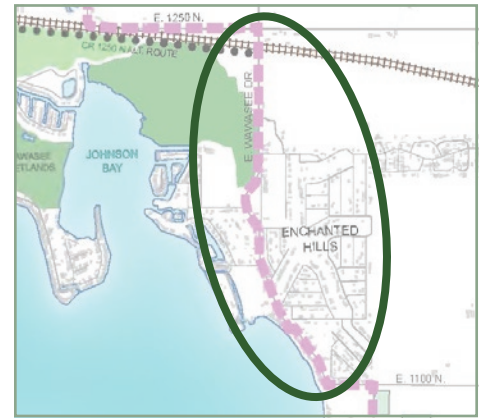
Total Estimated Section 3 - Segment 1 Costs:	\$457,354 *
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* Includes costs for resurfacing and striping Turkey Creek Rd.

Trail Section 3 - Segment 2: CR 1100 N. / Wawasee Dr. from Turkey Creek Rd. to CR 1250 N.

Trail Segment Length: +/- 1.90 miles

This segment begins at the intersection of CR 1100 N. / Wawasee Dr. and Turkey Creek Rd. It will follow the south side of CR 1100 N. east until it crosses the road where it turns north. From there it will continue to follow the east side of the road north to the intersection with CR 1250 N.



Existing Land Use

Southern stretches of this segment are defined by primarily residential adjacent land uses. North of Black Point Rd. the adjacent uses become primarily agricultural and natural with a few adjacent residential properties.

Stormwater Management

Stormwater runoff is anticipated to be conveyed through sheet flow into shallow lawn ditches along Wawasee Drive consistent with the current conditions. Limited grading may be necessary during design and construction. In areas where the proposed trail alignment would impact existing roadside swales, it may be necessary to enclose the drains with a properly sized culvert pipe and maintain flow to the outlet.

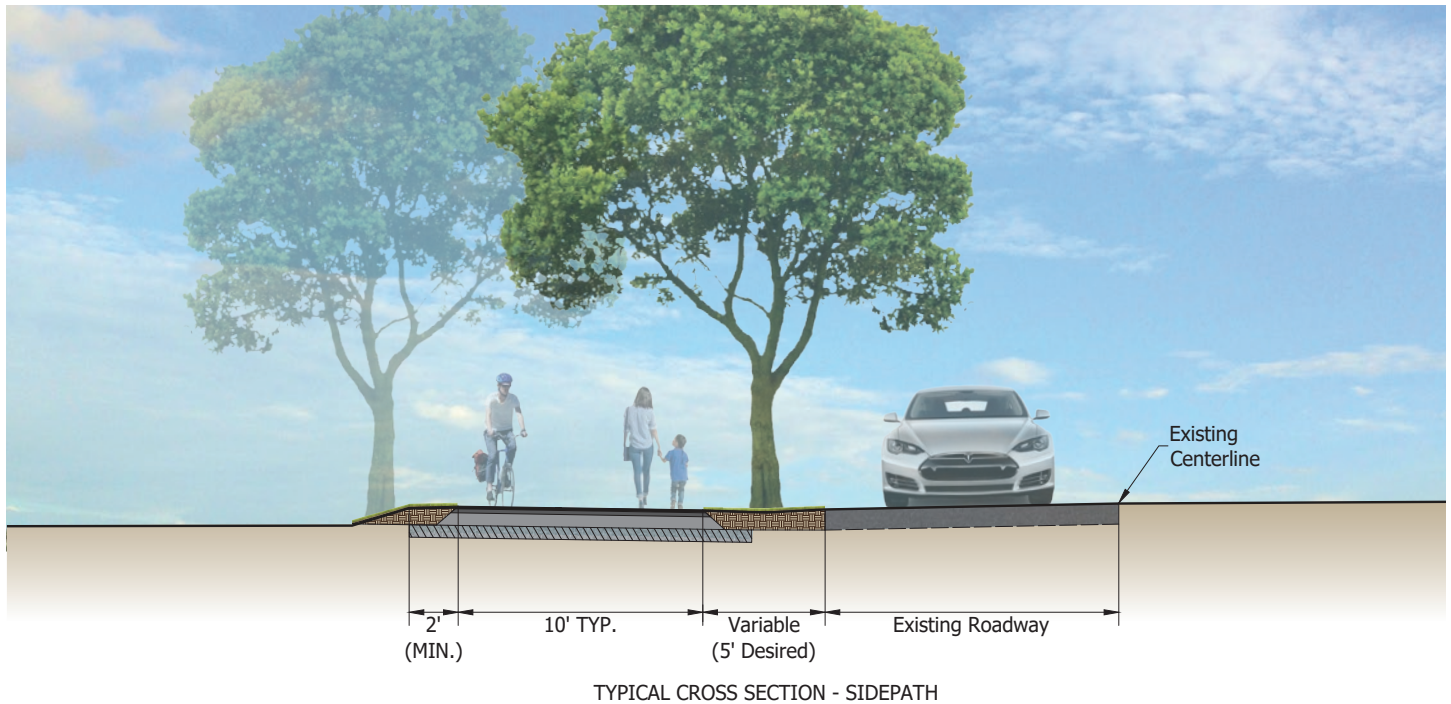
ROW

County ROW along Wawasee Dr. varies from edge of pavement to 30' from centerline on either side of the roadway. While portions of the proposed alignment may be able to be constructed within existing ROW, it is anticipated that a portion of the needed area will need to be acquired, either through an easement agreement or ROW acquisition. Preliminary impacts to ROW are estimated to be 2.698 acres across 48 different parcels.

Utilities

Utilities present along this alignment include Kosciusko County REMC, NIPSCO Gas, Lumen, Mediacom, and Turkey Creek RSD. The proposed trail segment along Wawasee Drive is anticipated to impact several utility poles maintained by Kosciusko County REMC in order to construct the separated multi-use trail. There is a potential for 46 poles to require relocation. No impacts are anticipated for NIPSCO, Lumen, Mediacom, and Turkey Creek RSD facilities, however, these utilities should be noted and coordination continued as design progresses to ensure no conflicts are created.

Typical Section



Environmental Considerations

Environmental constraints along this alignment include tall roadway embankments on the northern end of the segment, as well as various wetland complexes located west of the proposed alignment. Impacts to wetlands for this segment are not anticipated at this time, but should be monitored as the project continues into design to ensure conflicts are not created.

Agency Coordination

The entire segment will be on or adjacent to the roadway and will require coordination with the Kosciusko County Highway Department. Additional coordination will be required with CSX Railroad if rail crossing pedestrian improvements are desired.

Crossing Conditions

There are five minor roadway crossings along this segment. These occur primarily in the southern portion of the segment. There are also numerous residential driveway crossings which will need to be considered during design. The primary crossing challenge exists at the CSX rail crossing. Options under consideration during this study included at grade pedestrian improvements, alternate routing of the trail to avoid the crossing, or a potential grade separation for the trail to avoid the rail lines. This area will require detailed investigation during design.

Trail Section 3 - Segment 2: CR 1100 N. / Wawasee Dr. from Turkey Creek Rd. to CR 1250 N.



Detailed Route Alignment Exhibits can be found in the report Appendix



Trail Section 3 - Segment 2: CR 1100 N. / Wawasee Dr. from Turkey Creek Rd. to CR 1250 N.



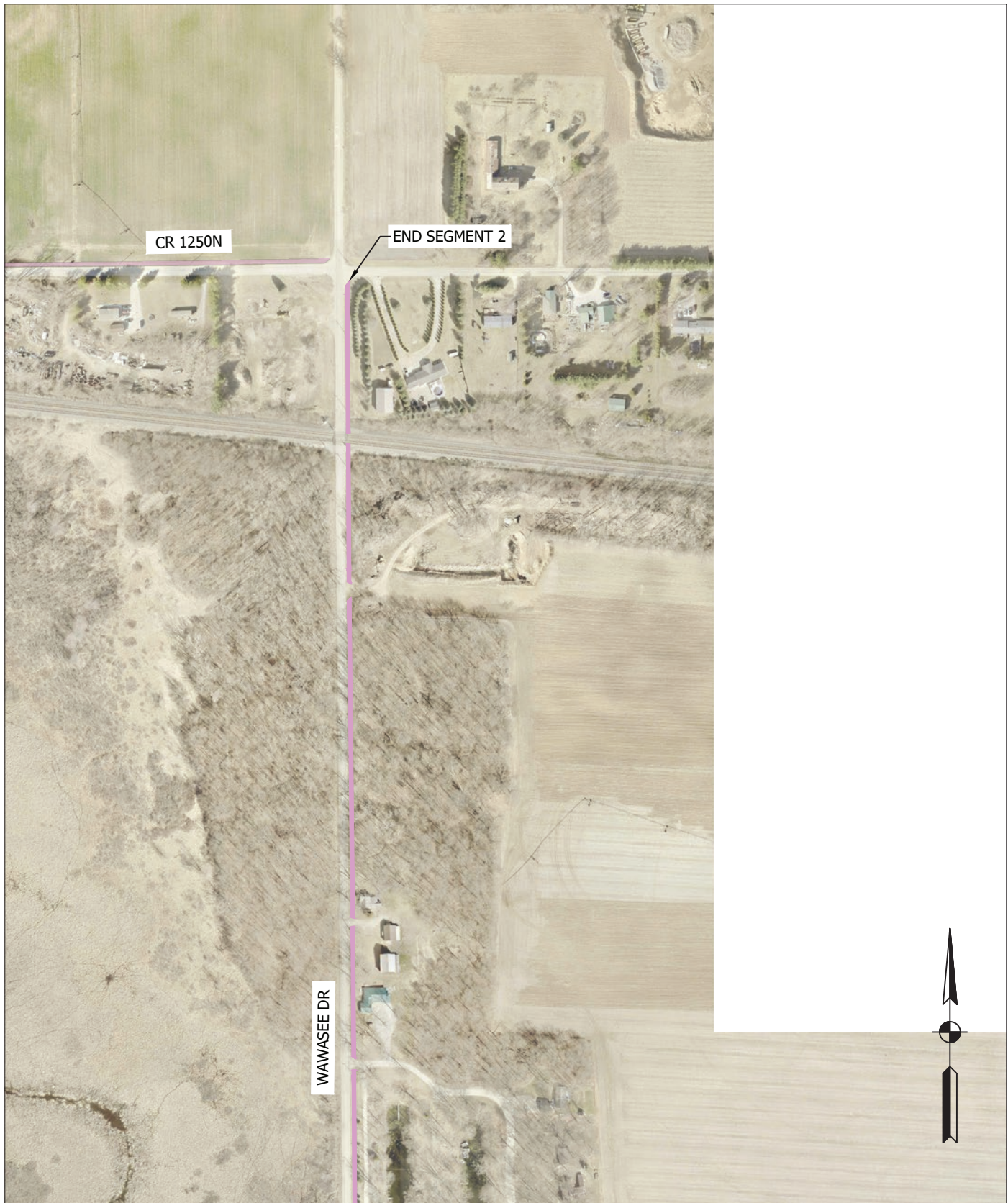
Trail Section 3 - Segment 2: CR 1100 N. / Wawasee Dr. from Turkey Creek Rd. to CR 1250 N.



Detailed Route Alignment Exhibits can be found in the report Appendix



Trail Section 3 - Segment 2: CR 1100 N. / Wawasee Dr. from Turkey Creek Rd. to CR 1250 N.



Trail Section 3 - Segment 2: Cost Summary

The cost table below summarizes the anticipated construction costs for this segment. It has been developed on the basis of the research and information presented within this report as well as assumptions influenced by the current trends in construction activity. Costs have been forecast at an assumed 3% per year inflation rate to the 2026 construction season in an attempt to capture anticipated inflation of labor and materials. Preliminary Engineering costs have been developed assuming several segments are designed at once, and then pro-rated across each segment based on anticipated construction cost.

Construction Costs

Pay Item	Description	Quantity	Unit	Unit Price	Extension
105-06845	CONSTRUCTION ENGINEERING	1.000	L.S.	13,500.00	\$13,500.00
110-01001	MOBILIZATION AND DEMOBILIZATION	1.000	L.S.	24,000.00	\$24,000.00
201-52370	CLEARING RIGHT OF WAY	1.000	L.S.	20,000.00	\$20,000.00
207-08266	SUBGRADE TREATMENT, TYPE III	15,120.000	S.Y.	3.00	\$45,360.00
303-01180	COMPACTED AGGREGATE NO. 53	3,955.000	TON	35.00	\$138,425.00
306-08432	MILLING, APPROACH	450.000	S.Y.	3.50	\$1,575.00
401-07321	QC/QA-HMA, 2, 64, SURFACE, 9.5 mm	756.000	TON	110.00	\$83,160.00
401-07390	QC/QA-HMA, 2, 64, INTERMEDIATE, 19.0 mm	1,215.000	TON	100.00	\$121,500.00
406-05520	ASPHALT FOR TACK COAT	5.500	TON	600.00	\$3,300.00
610-07487	HMA FOR APPROACHES, TYPE B	100.000	TON	150.00	\$15,000.00
621-01004	MOBILIZATION AND DEMOBILIZATION FOR SEEDING	1.000	EACH	750.00	\$750.00
621-06559	MULCHED SEEDING R	10,800.000	S.Y.	2.00	\$21,600.00
801-06775	MAINTAINING TRAFFIC	1.000	L.S.	13,500.00	\$13,500.00
808-06713	LINE, PAINT, SOLID, WHITE, 4 IN.	280.000	L.F.	0.20	\$56.00
808-10099	TRANSVERSE MARKING, MULTI-COMPONENT, CROSSWALK LINE, WHITE, 24 IN.	50.000	L.F.	11.00	\$550.00

Total:	\$502,276.00
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Plus 25% Contingency	\$125,569
Plus 3% Per Year Inflation to 2026	\$100,000
Total Estimated 2026 Construction Costs:	\$727,845
ROW, and Utility Relocation Costs	\$775,228
Design, Coordination, Permitting, and Inspection Costs	\$869,910

Total Estimated Section 3 - Segment 2 Costs:	\$2,372,983
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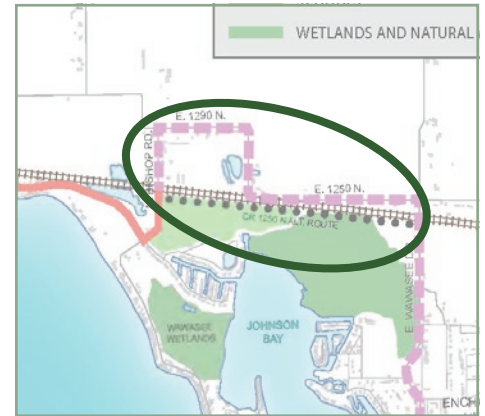


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Trail Section 3 - Segment 3: CR 1250 N. / CR 825 E. / CR 1290 N. Between Wawasee Dr. and Bishop Rd.

Trail Segment Length: +/- 1.40 miles

The east end of this segments begins at Wawasee Dr., where crossings for both Wawasee Dr. and CR 1250 N. will need to occur. The trail segment will follow the north side of CR 1250 N. to the west to the CR 825 E. intersection. At this point it will follow the east side of CR 825 E. north to the CR 1290 N. intersection. The final portion of the trail will follow the north side of CR 1290 N. to Bishop Rd. An alternate route was preliminarily evaluated that avoided the RR crossing. However, significant coordination will be necessary with property owners, the WACF conservancy, DNR, and other regulatory agencies to fully determine the feasibility of this alternative. Due to this, a detailed writeup has been excluded from the document at this time.



Existing Land Use

Existing land uses along this corridor are predominantly agricultural and rural residential.

Stormwater Management

Stormwater runoff is anticipated to be conveyed through sheet flow into shallow roadside ditches along CR 1250 N. consistent with the current conditions. Limited grading may be necessary during design and construction. In areas where the proposed trail alignment would impact existing roadside swales, it may be necessary to enclose the drains with a properly sized culvert pipe and maintain flow to the outlet.

ROW

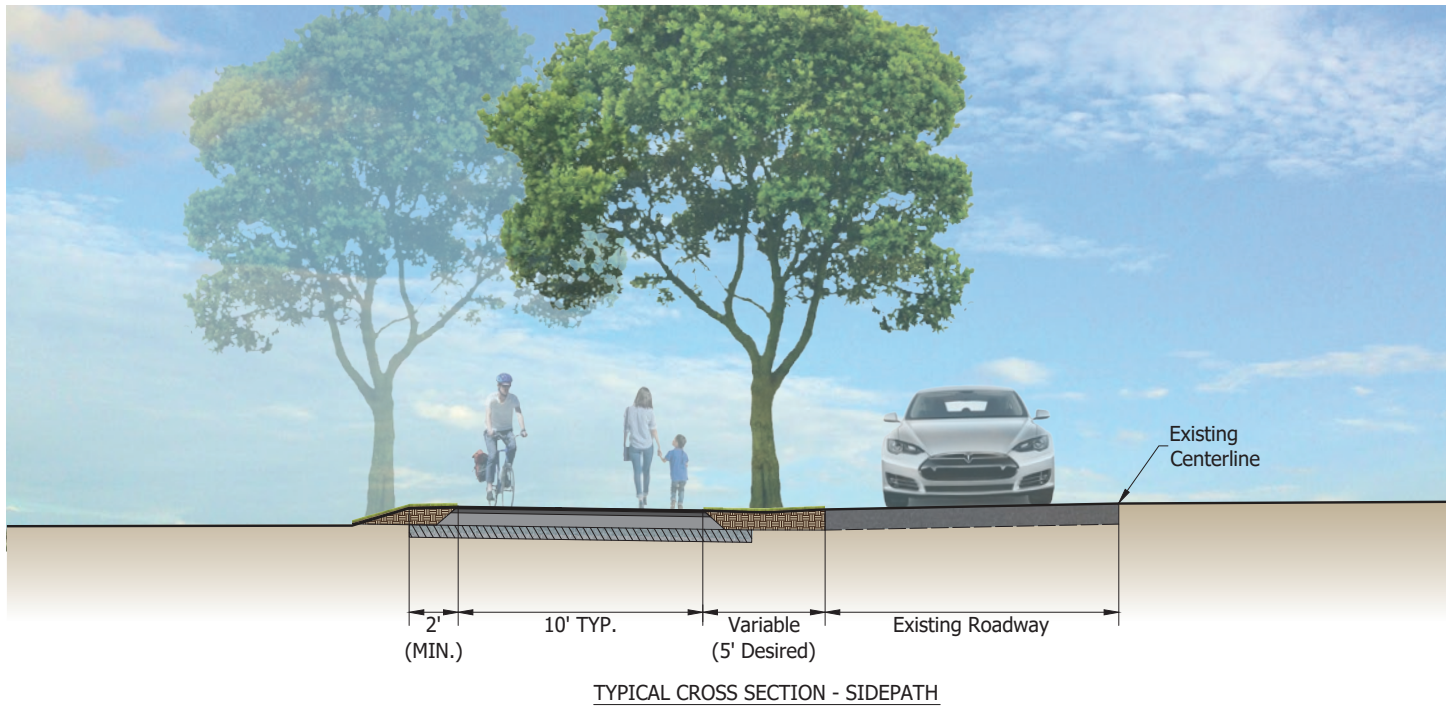
County ROW along CR 1250 N. varies from edge of pavement to 25' from centerline on either side of the roadway. While portions of the proposed alignment may be able to be constructed within existing ROW, it is anticipated that a portion of the needed area will need to be acquired, either through an easement agreement or ROW acquisition. Preliminary impacts to ROW are estimated to be 3.020 acres across 12 different parcels.

Utilities

Utilities present along this alignment include Kosciusko County REMC, NIPSCO Gas, Lumen, Mediacom, and Turkey Creek RSD.

The proposed trail segment along CR 1250 N. is anticipated to impact several utility poles maintained by Kosciusko County REMC in order to construct the separated multi-use trail. There is a potential for 16 poles to require relocation. No impacts are anticipated for NIPSCO, Lumen, Mediacom, and Turkey Creek RSD facilities, however, these utilities should be noted and coordination continued as design progresses to ensure no conflicts are created.

Typical Section



Environmental Considerations

Environmental constraints along this alignment include tall roadway embankments along either side of the segment, as well as various wetland complexes located both north and south of the proposed alignment. Impacts to wetlands for this segment are not anticipated at this time, but should be monitored as the project continues into design to ensure conflicts are not created.

Agency Coordination

The entire segment will be on or adjacent to the roadway and will require coordination with the Kosciusko County Highway Department.

Crossing Conditions

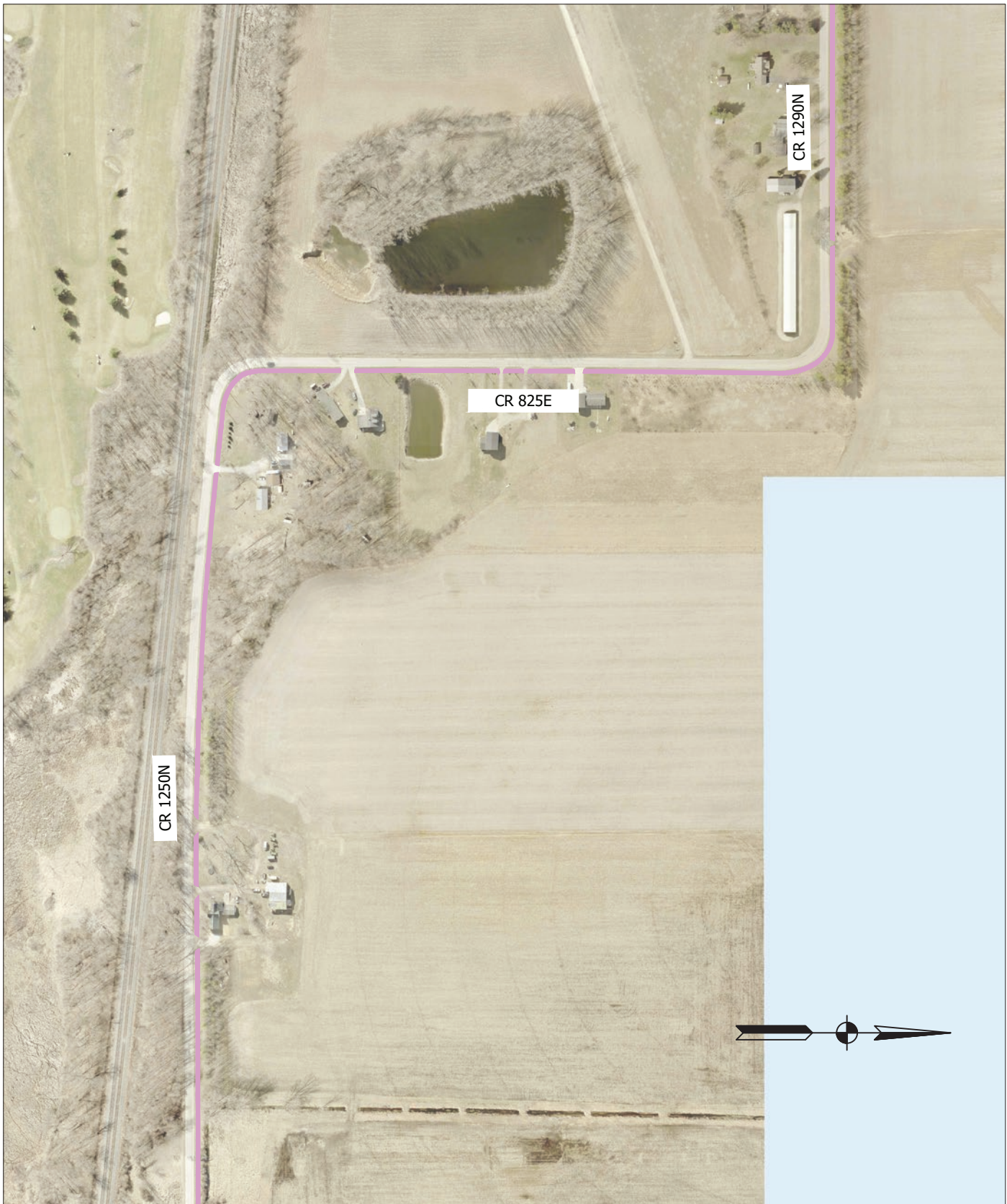
Primary points of crossing will be at the CR 1250 N. and Wawasee Dr. intersection. Remaining crossings will consist of residential and agricultural driveway entrances.

Trail Section 3 - Segment 3: CR 1250 N. / CR 825 E. / CR 1290 N. Between Wawasee Dr. and Bishop Rd.





Trail Section 3 - Segment 3: CR 1250 N. / CR 825 E. / CR 1290 N. Between Wawasee Dr. and Bishop Rd.



Trail Section 3 - Segment 3: CR 1250 N. / CR 825 E. / CR 1290 N. Between Wawasee Dr. and Bishop Rd.





Trail Section 3 - Segment 3: Cost Summary

The cost table below summarizes the anticipated construction costs for this segment. It has been developed on the basis of the research and information presented within this report as well as assumptions influenced by the current trends in construction activity. Costs have been forecast at an assumed 3% per year inflation rate to the 2026 construction season in an attempt to capture anticipated inflation of labor and materials. Preliminary Engineering costs have been developed assuming several segments are designed at once, and then pro-rated across each segment based on anticipated construction cost.

Construction Costs

Pay Item	Description	Quantity	Unit	Unit Price	Extension
105-06845	CONSTRUCTION ENGINEERING	1.000	L.S.	10,650.00	\$10,650.00
110-01001	MOBILIZATION AND DEMOBILIZATION	1.000	L.S.	18,800.00	\$18,800.00
201-52370	CLEARING RIGHT OF WAY	1.000	L.S.	20,000.00	\$20,000.00
207-08266	SUBGRADE TREATMENT, TYPE III	11,845.000	S.Y.	3.00	\$35,535.00
303-01180	COMPACTED AGGREGATE NO. 53	3,098.000	TON	35.00	\$108,430.00
306-08432	MILLING, APPROACH	330.000	S.Y.	3.50	\$1,155.00
401-07321	QC/QA-HMA, 2, 64, SURFACE, 9.5 mm	593.000	TON	110.00	\$65,230.00
401-07390	QC/QA-HMA, 2, 64, INTERMEDIATE, 19.0 mm	931.000	TON	100.00	\$93,100.00
406-05520	ASPHALT FOR TACK COAT	4.500	TON	600.00	\$2,700.00
610-07487	HMA FOR APPROACHES, TYPE B	73.000	TON	150.00	\$10,950.00
621-01004	MOBILIZATION AND DEMOBILIZATION FOR SEEDING	1.000	EACH	750.00	\$750.00
621-06559	MULCHED SEEDING R	8,460.000	S.Y.	2.00	\$16,920.00
801-06775	MAINTAINING TRAFFIC	1.000	L.S.	10,650.00	\$10,650.00
Total:					\$394,870.00

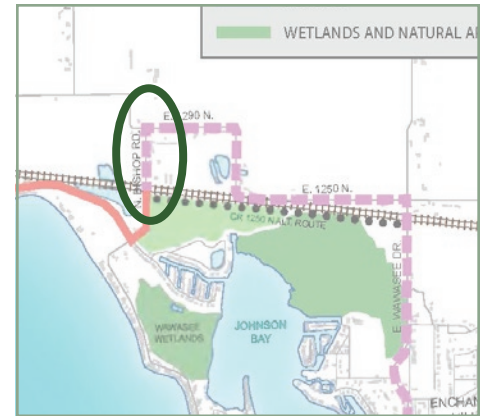
Plus 25% Contingency	\$98,718
Plus 3% Per Year Inflation to 2026	\$78,624
Total Estimated 2026 Construction Costs:	\$572,203
ROW, and Utility Relocation Costs	\$321,954
Design, Coordination, Permitting, and Inspection Costs	\$476,022

Total Estimated Section 3 - Segment 3 Costs:	\$1,370,188
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Trail Section 3 - Segment 4: Bishop Rd. from CR 1290 N. to existing trail

Trail Segment Length: +/- 0.30 miles

The Bishop Rd. segment is a short but important connection which will connect the existing end point of the Syracuse-Wawasee Trail system with CR 1290 N. The segment will begin by crossing CR 1290 N. and will continue along the west side of Bishop Rd. south to the end point of the existing trail. One possible alternate route for this segment would parallel the rail-road ROW. This alternate is briefly discussed on page 119.



Existing Land Use

Adjacent existing land uses are agricultural and rural residential.

Stormwater Management

Stormwater runoff is anticipated to be conveyed through sheet flow into shallow lawn ditches along Wawasee Drive consistent with the current conditions. Limited grading may be necessary during design and construction. In areas where the proposed trail alignment would impact existing roadside swales, it may be necessary to enclose the drains with a properly sized culvert pipe and maintain flow to the outlet.

ROW

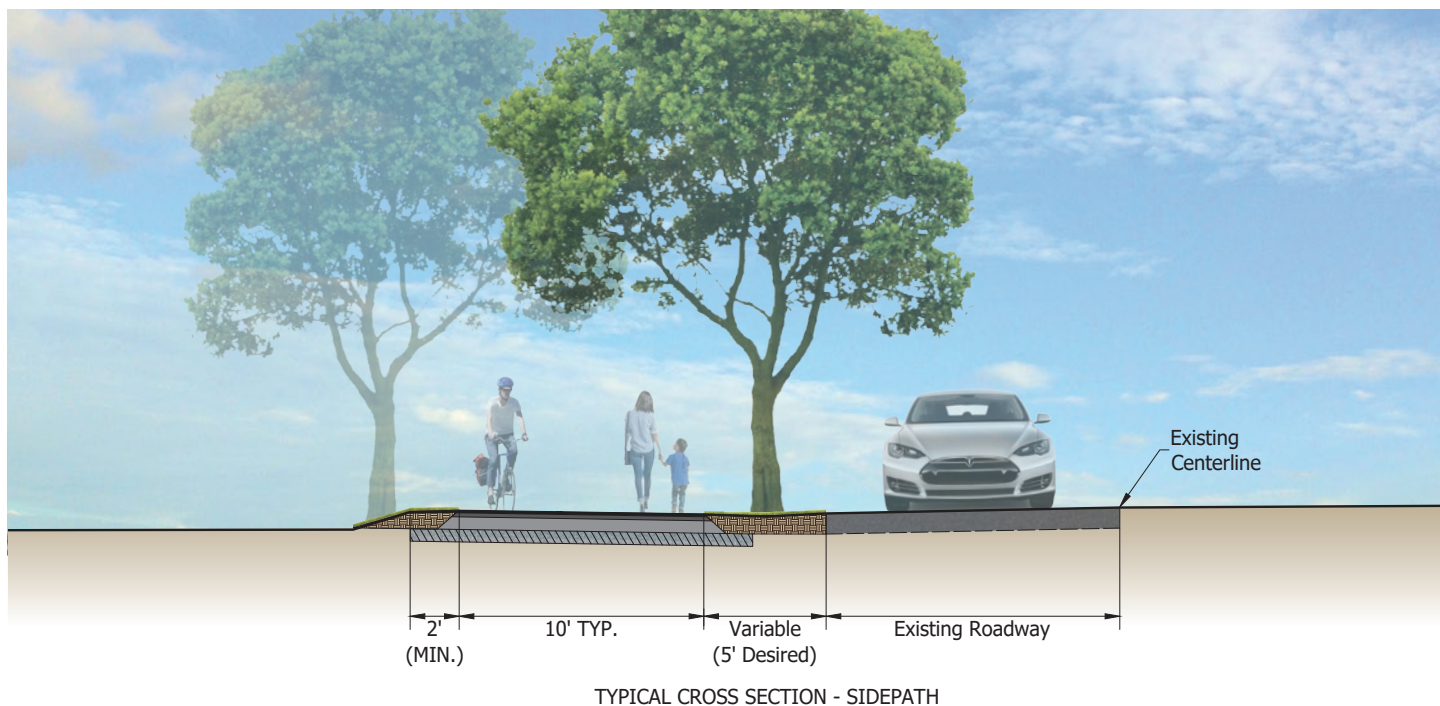
County ROW along Bishop Rd. varies from edge of pavement to 25' from centerline on either side of the roadway. While portions of the proposed alignment may be able to be constructed within ROW, it is anticipated that a portion of the needed area will need to be acquired, either through an easement agreement or ROW acquisition. Preliminary impacts to ROW are estimated to be 0.803 acres across 2 different parcels.

Utilities

Utilities present along this alignment include Kosciusko County REMC, NIPSCO Gas, Lumen, Mediacom, and Turkey Creek RSD.

The proposed trail segment along Bishop Rd. is anticipated to impact several utility poles maintained by Kosciusko County REMC in order to construct the separated multi-use trail. There is a potential for 6 poles to require relocation. No impacts are anticipated for NIPSCO, Lumen, Mediacom, and Turkey Creek RSD facilities, however, these utilities should be noted and coordination continued as design progresses to ensure no conflicts are created.

Typical Section



Environmental Considerations

Environmental constraints along this alignment include tall roadway embankments along either side of the segment, as well as various wetland complexes located east of the proposed alignment. Impacts to wetlands for this segment are not anticipated at this time, but should be monitored as the project continues into design to ensure conflicts are not created.

Agency Coordination

The entire segment will be on or adjacent to the roadway and will require coordination with the Kosciusko County Highway Department. Additional coordination will be required with CSX Railroad if rail crossing pedestrian improvements are desired.

Crossing Conditions

One CR 1290 N. pedestrian crossing will be required. The primary crossing challenge exists at the CSX rail crossing. Options under consideration during this study included at grade pedestrian improvements, alternate routing of the trail to avoid the crossing, or a potential grade separation for the trail to avoid the rail lines. This area will require detailed studied during design.

Trail Section 3 - Segment 4: Bishop Rd. from CR 1290 N. to existing trail





Trail Section 3 - Segment 4: Cost Summary

The cost table below summarizes the anticipated construction costs for this segment. It has been developed on the basis of the research and information presented within this report as well as assumptions influenced by the current trends in construction activity. Costs have been forecast at an assumed 3% per year inflation rate to the 2026 construction season in an attempt to capture anticipated inflation of labor and materials. Preliminary Engineering costs have been developed assuming several segments are designed at once, and then pro-rated across each segment based on anticipated construction cost.

Construction Costs

Pay Item	Description	Quantity	Unit	Unit Price	Extension
105-06845	CONSTRUCTION ENGINEERING	1.000	L.S.	2,200.00	\$2,200.00
110-01001	MOBILIZATION AND DEMOBILIZATION	1.000	L.S.	4,000.00	\$4,000.00
201-52370	CLEARING RIGHT OF WAY	1.000	L.S.	10,000.00	\$10,000.00
207-08266	SUBGRADE TREATMENT, TYPE III	2,205.000	S.Y.	3.00	\$6,615.00
303-01180	COMPACTED AGGREGATE NO. 53	577.000	TON	35.00	\$20,195.00
401-07321	QC/QA-HMA, 2, 64, SURFACE, 9.5 mm	111.000	TON	110.00	\$12,210.00
401-07390	QC/QA-HMA, 2, 64, INTERMEDIATE, 19.0 mm	174.000	TON	100.00	\$17,400.00
406-05520	ASPHALT FOR TACK COAT	1.000	TON	600.00	\$600.00
621-01004	MOBILIZATION AND DEMOBILIZATION FOR SEEDING	1.000	EACH	750.00	\$750.00
621-06559	MULCHED SEEDING R	1,890.000	S.Y.	2.00	\$3,780.00
801-06775	MAINTAINING TRAFFIC	1.000	L.S.	2,200.00	\$2,200.00
808-10099	TRANSVERSE MARKING, MULTI-COMPONENT, CROSSWALK LINE, WHITE, 24 IN.	90.000	L.F.	11.00	\$990.00
Total:					\$80,940.00

Plus 25% Contingency	\$20,235
Plus 3% Per Year Inflation to 2026	\$16,115
Total Estimated 2026 Construction Costs:	\$117,290
ROW, and Utility Relocation Costs	\$77,636
Design, Coordination, Permitting, and Inspection Costs	\$94,960

Total Estimated Section 3 - Segment 4 Costs:	\$289,886
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