

# Indiana Department of Transportation

County LaPorte Route Old Grand Beach Road Des. No. 1592335

## FHWA-Indiana Environmental Document CATEGORICAL EXCLUSION / ENVIRONMENTAL ASSESSMENT FORM GENERAL PROJECT INFORMATION

Road No./County:

**Old Grand Beach Road, LaPorte County**

Designation Number:

**1592335**

Project Description/Termini:

**Marquette Greenway – Singing Sands Connector Trail East/El Portal Drive to Indiana-Michigan State Line**

After completing this form, I conclude that this project qualifies for the following type of Categorical Exclusion (FHWA must review/approve if Level 4 CE):

<b>X</b>	<b>Categorical Exclusion, Level 2</b> – The proposed action meets the criteria for Categorical Exclusion Manual Level 2 - table 1, CE Level Thresholds. Required Signatories: ESM (Environmental Scoping Manager)
	<b>Categorical Exclusion, Level 3</b> – The proposed action meets the criteria for Categorical Exclusion Manual Level 3 - table 1, CE Level Thresholds. Required Signatories: ESM, ES (Environmental Services Division)
	<b>Categorical Exclusion, Level 4</b> – The proposed action meets the criteria for Categorical Exclusion Manual Level 4 - table 1, CE Level Thresholds. Required Signatories: ESM, ES, FHWA
	<b>Environmental Assessment (EA)</b> – EAs require a separate FONSI. Additional research and documentation is necessary to determine the effects on the environment. Required Signatories: ES, FHWA

Note: For documents prepared by or for Environmental Services Division, it is not necessary for the ESM of the district in which the project is located to release for public involvement or sign for approval.

Approval

ESM Signature

Date

ES Signature

Date

FHWA Signature

Date

Release for Public Involvement

N/A

ESM Initials

Date

*BDM* *REB*  
ES Initials

2/25/2021

Date

Certification of Public Involvement

Office of Public Involvement

Date

Note: Do not approve until after Section 106 public involvement and all other environmental requirements have been satisfied.

INDOT ES/District Env.

Reviewer Signature:

Date:

Name and Organization of CE/EA Preparer: Leigh Montano, VS Engineering

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### Part I - PUBLIC INVOLVEMENT

Every Federal action requires some level of public involvement, providing for early and continuous opportunities throughout the project development process. **The level of public involvement should be commensurate with the proposed action.**

Does the project have a historic bridge processed under the Historic Bridges PA*?	Yes <input type="checkbox"/>	No <input checked="" type="checkbox"/>
If No, then: Opportunity for a Public Hearing Required?	<input checked="" type="checkbox"/>	<input type="checkbox"/>

*\*A public hearing is required for all historic bridges processed under the Historic Bridges Programmatic Agreement between INDOT, FHWA, SHPO, and the ACHP.*

*Discuss what public involvement activities (legal notices, letters to affected property owners and residents (i.e. notice of entry), meetings, special purpose meetings, newspaper articles, etc.) have occurred for this project.*

Remarks:

Notice of entry letters were mailed to potentially affected property owners near the project area on April 20, 2016, notifying them about the project and that individuals responsible for land survey and field activities may be seen in the area. A sample copy of the notice of entry letter is included in Appendix G1.

The project will meet the minimum requirements described in the current *Indiana Department of Transportation (INDOT) Public Involvement Manual* which requires the project sponsor to offer the public an opportunity to submit comment and/or request a public hearing. Therefore, a legal notice will appear in a local publication contingent upon the release of this document for public involvement. This document will be revised after the public involvement requirements are fulfilled.

#### Public Controversy on Environmental Grounds

Will the project involve substantial controversy concerning community and/or natural resource impacts? Yes ☐ No ☒

Remarks:

At this time, there is no substantial public controversy concerning impacts to the community or to natural resources.

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### **Part II - General Project Identification, Description, and Design Information**

Sponsor of the Project: LaPorte County INDOT District: LaPorte  
Local Name of the Facility: Old Grand Beach Road

Funding Source (mark all that apply): Federal ☒ State ☐ Local ☒ Other\* ☐

\*If other is selected, please identify the funding source: \_\_\_\_\_

#### **PURPOSE AND NEED:**

*Describe the transportation problem that the project will address. The solution to the traffic problem should NOT be discussed in this section. (Refer to the CE Manual, Section IV.B.2. Purpose and Need)*

The project is needed because there is a lack of connectivity between Singing Sands Trail (SST) and the Indiana-Michigan state line. There currently are no facilities other than roadways for non-motorized vehicular traffic to follow. There are no sidewalks currently on Old Grand Beach Road from El Portal Drive to the Indiana-Michigan state line.

The purpose is to improve the connectivity for pedestrian and non-motorized traffic between SST and the Michigan state line.

#### **PROJECT DESCRIPTION (PREFERRED ALTERNATIVE):**

County: LaPorte Municipality: Michiana Springs

Limits of Proposed Work: From the intersection of El Portal Drive and Old Grand Beach Road to the Indiana/Michigan state line

Total Work Length: 1 Mile(s) Total Work Area: N/A Acre(s)

Is an Interchange Modification Study / Interchange Justification Study (IMS/IJS) required?  
If yes, when did the FHWA grant a conditional approval for this project?

Yes <sup>1</sup>	No
<input type="checkbox"/>	<input checked="" type="checkbox"/>
Date: _____	

<sup>1</sup>If an IMS or IJS is required; a copy of the approved CE/EA document must be submitted to the FHWA with a request for final approval of the IMS/IJS.

*In the remarks box below, describe existing conditions, provide in detail the scope of work for the project, including the preferred alternative. Include a discussion of logical termini. Discuss any major issues for the project and how the project will improve safety or roadway deficiencies if these are issues.*

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The project is located in northern LaPorte County, near Michiana Shores. The project extends northeast along Old Grand Beach Road from El Portal Drive (called Meer Road or CR 600W to the south of US 12) to the Indiana/Michigan state line.

Old Grand Beach Road is a two lane, residential road that runs parallel to US 12. There are no sidewalks currently on Old Grand Beach Road from El Portal Drive to the Indiana-Michigan state line.

The preferred alternative for this project will install a 10-foot-wide paved trail on the northern side of Old Grand Beach Road. The trail will be offset from the edge of pavement on Old Grand Beach Road by 4 to 5 feet and will connect to Old Grand Beach Road at the Indiana/Michigan state line. All construction activities will take place within 30 feet from edge of the pavement on Old Grand Beach Road. Installation will include ADA-compliant curb ramps and curbs at public road intersections. The total project length is 1.02 miles.

The maintenance of traffic (MOT) for this project will include advance warning signs and flaggers as needed to restrict traffic for construction activities. The termini for this project are at the intersection of El Portal Drive and Old Grand Beach Road to the jurisdictional limits of the funding agency, the Indiana/Michigan state line. The northern terminus of the trail will connect to Old Grand Beach Road, which will provide continuity of access and independent utility.

### OTHER ALTERNATIVES CONSIDERED:

*Describe all discarded alternatives, including the Do-Nothing Alternative and an explanation of why each discarded alternative was not selected.*

Do Nothing: This alternative would have no cost and no environmental impacts. The current area does not have pedestrian or non-motorized connectivity and this alternative would not provide that. This alternative would not meet the purpose and need of this project of providing connectivity to pedestrian and non-motorized traffic between SST and the Michigan state line. This alternative will no longer be considered.

No other alternatives were considered.

### The Do Nothing Alternative is not feasible, prudent or practicable because (Mark all that apply):

It would not correct existing capacity deficiencies;

It would not correct existing safety hazards;

It would not correct the existing roadway geometric deficiencies;

It would not correct existing deteriorated conditions and maintenance problems; or

It would result in serious impacts to the motoring public and general welfare of the economy.

Other (Describe): Pedestrian or non-motorized connectivity would not be met.

X

### ROADWAY CHARACTER: Old Grand Beach Road

Functional Classification:	<u>Minor arterial</u>		
Current ADT:	<u>VPD (20--)</u>	Design Year ADT:	<u>VPD (20--)</u>
Design Hour Volume (DHV):	<u>Truck Percentage (%)</u>		
Designed Speed (mph):	<u>35</u>	Legal Speed (mph):	<u>35</u>



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## Existing

## Proposed

Number of Lanes:	2		2	
Type of Lanes:	Travel		Travel	
Pavement Width:	20	ft.	20	ft.
Shoulder Width:	1	ft.	1	ft.
Median Width:	N/A	ft.	N/A	ft.
Sidewalk Width:	N/A	ft.	10	ft.

Setting: ☐ Urban ☒ Suburban ☐ Rural  
 Topography: ☒ Level ☐ Rolling ☐ Hilly

*If the proposed action has multiple roadways, this section should be filled out for each roadway.*

## DESIGN CRITERIA FOR BRIDGES:

Structure/NBI Number(s): N/A Sufficiency Rating: N/A  
 (Rating, Source of Information)

## Existing

## Proposed

Bridge Type:				
Number of Spans:				
Weight Restrictions:		ton		ton
Height Restrictions:		ft.		ft.
Curb to Curb Width:		ft.		ft.
Outside to Outside Width:		ft.		ft.
Shoulder Width:		ft.		ft.
Length of Channel Work:				ft.

*Describe bridges and structures; provide specific location information for small structures.*

Remarks: 

No bridges or small structures are located within the project area. No impacts are expected.

Will the structure be rehabilitated or replaced as part of the project? ☐ Yes ☐ No ☒ N/A

*If the proposed action has multiple bridges or small structures, this section should be filled out for each structure.*

## MAINTENANCE OF TRAFFIC (MOT) DURING CONSTRUCTION:

	Yes	No
Is a temporary bridge proposed?	<input type="checkbox"/>	<input checked="" type="checkbox"/>
Is a temporary roadway proposed?	<input type="checkbox"/>	<input checked="" type="checkbox"/>
Will the project involve the use of a detour or require a ramp closure? (describe in remarks)	<input type="checkbox"/>	<input checked="" type="checkbox"/>
Provisions will be made for access by local traffic and so posted.	<input checked="" type="checkbox"/>	<input type="checkbox"/>
Provisions will be made for through-traffic dependent businesses.	<input checked="" type="checkbox"/>	<input type="checkbox"/>
Provisions will be made to accommodate any local special events or festivals.	<input checked="" type="checkbox"/>	<input type="checkbox"/>
Will the proposed MOT substantially change the environmental consequences of the action?	<input type="checkbox"/>	<input checked="" type="checkbox"/>

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Is there substantial controversy associated with the proposed method for MOT? ☐ ☒

Remarks: The maintenance of traffic for this project will not require the use of a detour or of a road closure. Partial lane closures may be implemented by using advance warning signs and flaggers to restrict traffic as needed for construction activities. The traffic restrictions may pose a temporary inconvenience to traveling motorists (including school buses and emergency services); however, no significant delays are anticipated and all inconveniences will cease upon project completion. If partial lane closures are needed, the contractor must use proper traffic control guidelines as laid out in *INDOT's Work Zone Traffic Control Guidelines*.

It is the responsibility of the project sponsor to notify school corporations and emergency services at least two weeks prior to any construction that would block or limit access.

### ESTIMATED PROJECT COST AND SCHEDULE:

Engineering: \$ 129,548 (from TIP) (2020) Right-of-Way: \$ 132,275 (2021) Construction: \$ 956,748 (2023)

Anticipated Start Date of Construction: Fall, 2022

Date project incorporated into STIP July 2, 2019

Is the project in an MPO Area? ☒ Yes ☐ No

If yes,

Name of MPO Northwestern Indiana Regional Planning Commission (NIRPC)

Location of Project in TIP Amendment 20-06.3

Date of incorporation by reference into the STIP July 2, 2019

### RIGHT OF WAY:

Land Use Impacts	Amount (acres)	
	Permanent	Temporary
Residential	2.18	0
Commercial	0	0
Agricultural	0	0
Forest	0	0
Wetlands	0	0
Other: Reacquired	1.12	0
Other:	0	0
TOTAL	3.30	0

Describe both Permanent and Temporary right-of-way and describe their current use. Typical and Maximum right-of-way widths (existing and proposed) should also be discussed. Any advance acquisition or reacquisition, either known or suspected, and there impacts on the environmental analysis should be discussed.

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Remarks:

The existing right-of-way widths vary through the project corridor, from edge of pavement to 20 feet from edge of pavement. Portions of Old Grand Beach Road were not properly recorded and reacquisition will be required to establish public ownership of the existing roadway. This project will require 1.12 acres of reacquisition of apparent existing right-of-way. The project requires approximately 2.18 acres of new permanent right-of-way from residential properties. The new, permanent right-of-way limits will extend 40 feet from edge of pavement. The right-of-way totals have been refined during the development of this project and it is now expected that there will be less right-of-way taken as said in the early coordination letter that was sent to various coordinating agencies on December 20, 2019 (Appendix C1).

If the scope of work or permanent or temporary right-of-way amounts change, the INDOT Environmental Services Division (ESD) and the INDOT District Environmental Section will be contacted immediately.

### Part III – Identification and Evaluation of Impacts of the Proposed Action

#### SECTION A – ECOLOGICAL RESOURCES

	Presence	Impacts	
		Yes	No
<b>Streams, Rivers, Watercourses &amp; Jurisdictional Ditches</b>			
Federal Wild and Scenic Rivers			
State Natural, Scenic or Recreational Rivers			
Nationwide Rivers Inventory (NRI) listed			
Outstanding Rivers List for Indiana			
Navigable Waterways			

Remarks:

Based on a desktop review, a site visit on October 4, 2019, by VS Engineering, the aerial map of the project area (Appendix B3), and the water resources map in the Red Flag Investigation (RFI) report, (Appendix E9), there are 11 stream segments located within the 0.5 mile search radius of the project area. There are no streams, rivers, watercourse, jurisdictional ditches within or adjacent to the project area. No impacts are expected.

A *Waters of the U.S. Determination / Wetland Delineation Report* was completed on March 6, 2020. Please refer to Appendix F1 for the *Waters of the US Determination / Wetland Delineation Report*. It was determined that there were not any resources that are likely considered Waters of the US within the project area. The US Army Corps of Engineers (USACE) makes all final determinations regarding jurisdiction.

Early coordination letters were sent on December 20, 2019, to United States Fish and Wildlife Service (USFWS), Indiana Department of Natural Resources – Department of Fish and Wildlife (IDNR-DFW), and USACE. An example early coordination letter can be found in Appendix C1.

USFWS responded via email on January 10, 2020, but did not include any recommendations for potential water resources (Appendix C20). IDNR-DFW responded via email on January 15, 2020, but did not include any recommendations for potential water resources (Appendix C11). The USACE did not respond to the early coordination request. All applicable agency recommendations are included in the Environmental Commitments section of this CE document.

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	<u>Presence</u>	<u>Impacts</u>	
		<u>Yes</u>	<u>No</u>
<b>Other Surface Waters</b>			
Reservoirs	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Lakes	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Farm Ponds	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Detention Basins	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Storm Water Management Facilities	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Other: _____	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

**Remarks:** Based on a desktop review, a site visit on October 4, 2019, by VS Engineering, the aerial map of the project area (Appendix B3) and the water resources map in the RFI report (Appendix E9), there are five lakes located within the 0.5 mile search radius. None of these lakes are located within or adjacent to the project area. No impacts are expected.

A *Waters of the U.S. Determination / Wetland Delineation Report* was completed on March 6, 2020. Please refer to Appendix F1 for the *Waters of the US Determination / Wetland Delineation Report*. It was determined that there were no lakes, reservoirs, farm ponds or detention basins located within or adjacent to the project area. The USACE makes all final determinations regarding jurisdiction.

USFWS responded via email on January 10, 2020, but did not include any recommendations for potential surface water resources (Appendix C20). IDNR-DFW responded via email on January 15, 2020, but did not include any recommendations for potential surface water resources (Appendix C11). The USACE did not respond to the early coordination request. All applicable agency recommendations are included in the Environmental Commitments section of this CE document.

While Lake Michigan is within 0.5 mile radius of this project, this project is not subject to the Lake Michigan Federal Consistency Review as this project is not adjacent to Lake Michigan and no work will be done within Lake Michigan or the Lake Michigan coastline.

	<u>Presence</u>	<u>Impacts</u>	
		<u>Yes</u>	<u>No</u>
<b>Wetlands</b>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

Total wetland area: N/A acre(s) Total wetland area impacted: N/A acre(s)

(If a determination has not been made for non-isolated/isolated wetlands, fill in the total wetland area impacted above.)

Wetland No.	Classification	Total Size (Acres)	Impacted Acres	Comments
N/A	N/A	N/A	N/A	N/A

	<u>Documentation</u>	<u>ES Approval Dates</u>
<b>Wetlands (Mark all that apply)</b>		
Wetland Determination	<input checked="" type="checkbox"/>	<u>N/A; LPA project</u>
Wetland Delineation	<input checked="" type="checkbox"/>	<u>N/A; LPA project</u>
USACE Isolated Waters Determination	<input type="checkbox"/>	
Mitigation Plan	<input type="checkbox"/>	

**Improvements that will not result in any wetland impacts are not practicable because such avoidance would result in** (Mark all that apply and explain):

Substantial adverse impacts to adjacent homes, business or other improved properties; ☐

Substantially increased project costs; ☐

Unique engineering, traffic, maintenance, or safety problems; ☐

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Substantial adverse social, economic, or environmental impacts, or  
The project not meeting the identified needs.

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*Measures to avoid, minimize, and mitigate wetland impacts need to be discussed in the remarks box.*

Remarks:	<p>Based on a review of the National Wetlands Inventory (NWI) online mapper (<a href="https://www.fws.gov/wetlands/data/Mapper.htm">https://www.fws.gov/wetlands/data/Mapper.htm</a>), a site visit on October 4, 2019 by VS Engineering, the USGS topographic map (Appendix B2), and the RFI report (Appendix E9), there are 39 wetlands located within the 0.5 mile search radius of the project area. There are no wetlands present within or adjacent to the project area.</p> <p>A <i>Waters of the U.S. Determination / Wetland Delineation Report</i> was completed on March 6, 2020. Please refer to Appendix F1 for the <i>Waters of the US Determination / Wetland Delineation Report</i>. It was determined that there were no wetland resources within the project area. The USACE makes all final determinations regarding jurisdictional water resources.</p> <p>Early coordination letters were sent on December 20, 2019. USFWS responded via email on January 10, 2020, but did not include any recommendations for wetland (Appendix C20). IDNR-DFW responded via email on January 15, 2020, but did not include any recommendations for wetland resources (Appendix C11). The USACE did not respond to the early coordination request. All applicable agency recommendations are included in the Environmental Commitments section of this CE document.</p>
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<b>Terrestrial Habitat</b> Unique or High Quality Habitat	<u>Presence</u>	<u>Impacts</u>			
		Yes	NO		
	<table border="1" style="width: 100%;"><tr><td style="text-align: center;">X</td></tr></table>	X	<table border="1" style="width: 100%;"><tr><td style="text-align: center;">X</td></tr></table>	X	<table border="1" style="width: 100%;"><tr><td style="text-align: center;"></td></tr></table>
X					
X					

*Use the remarks box to identify each type of habitat and the acres impacted (i.e. forested, grassland, farmland, lawn, etc).*

Remarks:	<p>Based on a desktop review, a site visit on October 4, 2019, by VS Engineering, and the aerial map of the project area (Appendix B3), land use in all four quadrants of the project area is primarily forested. The project area consists of forested and roadside vegetation, dominated by Kentucky bluegrass (<i>Poa pratensis</i>), pin oak (<i>Quercus palustris</i>), white oak (<i>Quercus alba</i>), flowering dogwood (<i>Cornus florida</i>), sugar maple (<i>Acer saccharum</i>), and sassafras (<i>Sassafras albidum</i>). There will be approximately 0.6 acre of tree clearing for the installation of the trail. This project will install a 10 foot wide paved trail on the northern side of Old Grand Beach Drive. The trail will be offset from the edge of pavement on Old Grand Beach Drive by 4 to 5 feet. Approximately 0.6 acre of trees will need to be removed in a narrow strip along Old Grand Beach Drive to allow construction of the trail next to the road. The trees will be removed in the winter of 2022-2023. Excavation will be 2 to 3 feet.</p> <p>Early coordination letters were sent on December 20, 2019. USFWS responded via email on January 10, 2020, but did not include any recommendations for terrestrial habitat (Appendix C20). IDNR-DFW responded via email on January 15, 2020, but did not include any recommendations for terrestrial habitat resources (Appendix C11). All applicable agency recommendations are included in the Environmental Commitments section of this CE document.</p>
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*If there are high incidences of animal movements observed in the project area, or if bridges and other areas appear to be the sole corridor for animal movement, consideration of utilizing wildlife crossings should be taken.*

<b>Karst</b> Is the proposed project located within or adjacent to the potential Karst Area of Indiana? Are karst features located within or adjacent to the footprint of the proposed project?  If yes, will the project impact any of these karst features?	Yes	No		
	<table border="1" style="width: 100%;"><tr><td style="text-align: center;"></td></tr></table>		<table border="1" style="width: 100%;"><tr><td style="text-align: center;">X</td></tr></table>	X
X				
<table border="1" style="width: 100%;"><tr><td style="text-align: center;"></td></tr></table>		<table border="1" style="width: 100%;"><tr><td style="text-align: center;">X</td></tr></table>	X	
X				

*Use the remarks box to identify any karst features within the project area. (Karst investigation must comply with the Karst MOU, dated October 13, 1993)*

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**Remarks:**

Based on a desktop review, the project is located outside the designated karst region of Indiana as outlined in the October 13, 1993 Memorandum of Understanding. According to the topographic map of the project area (Appendix B2), the RFI report (Appendix E9), and IndianaMap, there are no karst features identified within or adjacent to the project area. In the early coordination response, the Indiana Geological Survey (IGS) did not indicate that karst features exist in the project area (Appendix C16). IGS stated that the geological hazards in the project area are a high liquefaction potential and a floodway potential. Response from IGS has been communicated with the designer on January 22, 2020. No impacts are expected.

	<u>Presence</u>	<u>Impacts</u>	
		<u>Yes</u>	<u>No</u>
<b>Threatened or Endangered Species</b>			
Within the known range of any federal species	<input checked="" type="checkbox"/>		<input checked="" type="checkbox"/>
Any critical habitat identified within project area			
Federal species found in project area (based upon informal consultation)			
State species found in project area (based upon consultation with IDNR)			

	<u>Yes</u>	<u>No</u>
Is Section 7 formal consultation required for this action?	<input type="checkbox"/>	<input checked="" type="checkbox"/>

**Remarks:**

Based on a desktop review and the RFI report (Appendix E1), completed by VS Engineering on January 8, 2020, the IDNR LaPorte County Endangered, Threatened, and Rare (ETR) Species List has been checked and is included in Appendix E12. The highlighted species on the list reflect the federal and state identified ETR species located within the county. According to the IDNR-DFW early coordination response letter dated January 15, 2020 (Appendix C11), the Natural Heritage Program's Database has been checked. IDNR-DFW stated that there are three ETR plant species located within 0.5 mile radius of the project area: Finely-nerved sedge (*Carex leptonevia*), Deep-root clubmoss (*Diphasiastrum tristachyum*), and Shining ladies'-tresses (*Spiranthes lucida*). IDNR-DFW stated that impacts are not anticipated as a result of this project.

Project information was submitted through the USFWS's Information for Planning and Consultation (IPaC) portal, and an official species list was generated (Appendix C22). The project is located within range of the federally endangered Indiana bat (*Myotis sodalis*) and the federally threatened northern long-eared bat (*Myotis septentrionalis*). No additional species were found within or adjacent to the project area other than the Indiana bat and the northern long-eared bat.

The project qualifies for the Range-wide Programmatic Informal Consultation for the Indiana bat and northern long-eared bat (NLEB), dated May 2016 (revised February 2018), between FHWA, Federal Railroad Administration (FRA), Federal Transit Administration (FTA), and USFWS. An effect determination key was completed on May 5, 2020, and based on the responses provided, the project was found to "Not Likely to Adversely Affect" the Indiana bat and/or the NLEB. INDOT reviewed and verified the effect finding on May 5, 2020, and requested USFWS's review of the finding (Appendix C28). No response was received from USFWS within the 14-day review period; therefore, it was concluded they concur with the finding. Avoidance and Mitigation Measures (AMMs) are included as firm commitments in the Environmental Commitments section of this document.

The official species list generated from IPaC indicated no other species present within the project area. This project does not qualify for the USFWS Interim Policy. Early coordination was sent to USFWS on December 20, 2019. USFWS responded on January 10, 2020, stating that the proposed project is within the range of the federally endangered piping plover (*Charadrius melodus*), Mitchell's satyr butterfly (*Neonympha mitchellii*) and the threatened eastern massasauga rattlesnake (*Sistrurus catenatus*) as well as the two previously mentioned bat species, the Indiana bat and the NLEB. USFWS stated that there is no habitat for the piping plover (*Charadrius melodus*), Mitchell's satyr butterfly (*Neonympha mitchellii*), or the eastern massasauga rattlesnake (*Sistrurus catenatus*), so there is no expected impact. This precludes the need for further consultation on this project for the piping plover, Mitchell's satyr butterfly, and eastern massasauga rattlesnake as required under Section 7 of the Endangered Species act. No further coordination is needed with the USFWS.

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## SECTION B – OTHER RESOURCES

### Drinking Water Resources

Wellhead Protection Area  
Public Water System(s)  
Residential Well(s)  
Source Water Protection Area(s)  
Sole Source Aquifer (SSA)

#### Presence

X

#### Impacts

Yes	No
	X

If a SSA is present, answer the following:

Is the Project in the St. Joseph Aquifer System?  
Is the FHWA/EPA SSA MOU Applicable?  
Initial Groundwater Assessment Required?  
Detailed Groundwater Assessment Required?

Yes	No

### Remarks:

The project is located in LaPorte County, which is not located within the area of the St. Joseph Sole Source Aquifer, the only legally designated sole source aquifer in the state of Indiana. Therefore, the FHWA/EPA Sole Source Aquifer Memorandum of Understanding (MOU) is not applicable to this project. Therefore, a detailed groundwater assessment is not needed, and no impacts are expected.

The IDEM's Wellhead Proximity Determinator website (<http://www.in.gov/idem/cleanwater/pages/wellhead>) was accessed on December 20, 2019, by VS Engineering. This project is not located within a Wellhead Protection Area or Source Water Area. No impacts are expected.

The Indiana Department of Natural Resources Water Well Record Database website (<https://www.in.gov/dnr/water/3595.htm>) was accessed on September 24, 2019, by VS Engineering. There are wells mapped adjacent to or within the project area. These wells will not be impacted as the depth of excavation will be no more than three feet. Therefore, no impacts are expected. Should it be determined during the right-of-way phase that these wells are affected, a cost to cure will likely be included in the appraisal to restore the wells.

Based on a desktop review of the INDOT MS4 website (<https://entapps.indot.in.gov/MS4/>) by VS Engineering on September 24, 2019, and the RFI report, this project is located in an Urban Area Boundary (UAB) location. An early coordination letter was sent on December 20, 2019, to the LaPorte County MS4 Coordinator. The MS4 coordinator did not respond within the 30-day time frame.

Based on a desktop review, a site visit on October 4, 2019, by VS Engineering, the aerial map of the project area (Appendix B3) no public water systems were identified. Therefore, no impacts are expected.

### Flood Plains

Longitudinal Encroachment  
Transverse Encroachment  
Project located within a regulated floodplain  
Homes located in floodplain within 1000' up/downstream from project

#### Presence


#### Impacts

Yes	No

*Discuss impacts according to classification system described in the "Procedural Manual for Preparing Environmental Studies".*

### Remarks:

The Indiana Department of Natural Resources Indiana Floodway Information Portal website (<https://dnrm.dnr.in.gov/appsphp/fdms/>) was accessed on September 26, 2019, by VS Engineering. This project is not located in a regulatory floodplain as determined from approved IDNR floodplain maps (Appendix F36). Therefore, this project does not fall within the guidelines for the implementation of 23 CFR 650, 23 CFR 771, and 44 CFR. No impacts are expected.

# Indiana Department of Transportation

County LaPorte Route Old Grand Beach Road Des. No. 1592335

Farmland	<u>Presence</u>	<u>Impacts</u>	
		Yes	No
Agricultural Lands	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Prime Farmland (per NRCS)	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

Total Points (from Section VII of CPA-106/AD-1006\* \_\_\_\_\_  
*\*If 160 or greater, see CE Manual for guidance.*

See CE Manual for guidance to determine which NRCS form is appropriate for your project.

Remarks:

Based on a desktop review, a site visit on October 15, 2019, by VS Engineering, the aerial map of the project area (Appendix B3), there is no land that meets the definition of farmland under the Farmland Protection Policy Act (FPPA) within or adjacent to the project area. The requirements of the FPPA do not apply to this project; therefore, no impacts are expected. An early coordination letter was sent on December 20, 2019, to Natural Resources Conservation Services (NRCS). NRCS responded to the early coordination request on December 30, 2019, stating that the proposed project will not cause a conversion of prime farmland (Appendix C19).

## SECTION C – CULTURAL RESOURCES

	<u>Category</u>	<u>Type</u>	<u>INDOT Approval Dates</u>	<u>N/A</u>
Minor Projects PA Clearance	<b>B</b>	<b>8</b>	<b>January 10, 2020</b>	<input type="checkbox"/>

### Eligible and/or Listed Resource Present

#### Results of Research

Archaeology	<input type="checkbox"/>
NRHP Buildings/Site(s)	<input type="checkbox"/>
NRHP District(s)	<input type="checkbox"/>
NRHP Bridge(s)	<input type="checkbox"/>

#### Project Effect

No Historic Properties Affected ☐ No Adverse Effect ☐ Adverse Effect ☐

### Documentation Prepared

**Documentation** (mark all that apply)

		<u>ES/FHWA Approval Date(s)</u>	<u>SHPO Approval Date(s)</u>
Historic Properties Short Report	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Historic Property Report	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Archaeological Records Check/ Review	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Archaeological Phase Ia Survey Report	X	January 8, 2020	N/A
Archaeological Phase Ic Survey Report	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Archaeological Phase II Investigation Report	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Archaeological Phase III Data Recovery	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
APE, Eligibility and Effect Determination	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
800.11 Documentation	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

Memorandum of Agreement (MOA)

☐

**MOA Signature Dates** (List all signatories)



# Indiana Department of Transportation

County LaPorte Route Old Grand Beach Road Des. No. 1592335

*Describe all efforts to document cultural resources, including a detailed summary of the Section 106 process, using the categories outlined in the remarks box. The completion of the Section 106 process requires that a Legal Notice be published in local newspapers. Please indicate the publication date, name of paper(s) and the comment period deadline. Likewise include any further Section 106 work which must be completed at a later date, such as mitigation or deep trenching.*

Remarks:

On January 10, 2020, the INDOT Cultural Resource Office (CRO) determined that this project falls within the guidelines of a Category B, Type 8 under the Minor Projects Programmatic Agreement (Appendix D1). This determination states that construction of pedestrian facilities that is not adjacent to or within a National Register-listed or National Register-eligible district or individual aboveground resource and that work occurring in undisturbed soils will have an archaeological investigation conducted. A Phase Ia Archaeological Records Review and Reconnaissance was conducted by Cardno on December 17, 2019. No archaeological resources were discovered during survey. INDOT-CRO stated, "if any archaeological artifacts or human remains are uncovered during construction, demolition, or earth moving activities, construction in the immediate area of the find will be stopped, and the INDOT Cultural Resources Section and the Division of Historic Preservation and Archaeology will be notified immediately." No further consultation is required. This completes the Section 106 process and the responsibilities of FHWA under Section 106 have been fulfilled.

## SECTION D – SECTION 4(f) RESOURCES/ SECTION 6(f) RESOURCES

### Section 4(f) Involvement (mark all that apply)

#### Parks & Other Recreational Land

Publicly owned park  
Publicly owned recreation area  
Other (school, state/national forest, bikeway, etc.)

#### Presence


#### Use

Yes	No

#### Evaluations Prepared

Programmatic Section 4(f)\*  
"De minimis" Impact\*  
Individual Section 4(f)


#### FHWA

#### Approval date

--

#### Wildlife & Waterfowl Refuges

National Wildlife Refuge  
National Natural Landmark  
State Wildlife Area  
State Nature Preserve

#### Presence


#### Use

Yes	No

#### Evaluations Prepared

Programmatic Section 4(f)\*  
"De minimis" Impact\*  
Individual Section 4(f)


#### FHWA

#### Approval date

--

#### Historic Properties

Sites eligible and/or listed on the NRHP

#### Presence

--

#### Use

Yes	No

## Indiana Department of Transportation

County LaPorte Route Old Grand Beach Road Des. No. 1592335

### Evaluations Prepared

Programmatic Section 4(f)\*  
"De minimis" Impact\*  
Individual Section 4(f)


### FHWA Approval date

--

*\*FHWA approval of the environmental document also serves as approval of any Section 4f Programmatic and/or De minimis evaluation(s) discussed below.*

*Discuss Programmatic Section 4(f) and "de minimis" Section 4(f) impacts in the remarks box below. Individual Section 4(f) documentation must be separate Draft and Final documents. For further discussions on Programmatic, "de minimis" and Individual Section 4(f) evaluations please refer to the "Procedural Manual for the Preparation of Environmental Studies". Discuss proposed alternatives that satisfy the requirements of Section 4(f).*

Remarks:

Section 4(f) of the US Department of Transportation Act of 1966 prohibits the use of certain public and historic lands for federally funded transportation facilities unless there is no feasible and prudent alternative. The law applies to significant publicly owned parks, recreation areas, wildlife or waterfowl refuges, and National Register of Historic Places eligible or listed historic properties regardless of ownership. Lands subject to this law are considered Section 4(f) resources.

Based on a desktop review, a site visit on October 15, 2019, by VS Engineering, the aerial map of the project area (Appendix B3), and the RFI report (Appendix E1), there four Section 4(f) resources located within the 0.5 mile search radius. There is one Section 4(f) resource adjacent to the project area, the Marquette Greenway Trail – Singing Sands Phase 3. This planned trail segment is part of the Marquette Greenway plan and as such will connect to the Singing Sands Connector segment. This connecting trail will not impede or restrict access to the planned Singing Sands Phase 3 trail segment at any point during or after construction of this project. Therefore, no use of the Section 4(f) resource is expected.

An early coordination letter was sent to Michigan City Parks, the sponsor of the Singing Sands Phase 3 segment, on December 20, 2019, but no response was received.

### Section 6(f) Involvement

#### Presence

#### Use

Yes No

### Section 6(f) Property

--

--

--

*Discuss proposed alternatives that satisfy the requirements of Section 6(f). Discuss any Section 6(f) involvement.*

Remarks:

The US Land and Water Conservation Fund Act of 1965 established the Land and Water Conservation Fund (LWCF), which was created to preserve, develop, and assure accessibility to outdoor recreation resources. Section 6(f) of this Act prohibits conversion of lands purchased with LWCF monies to a non-recreational use.

A review of Section 6(f) properties list provided by INDOT revealed a total of eleven properties in LaPorte County (Appendix I1). None of these properties are located within or adjacent to the project area. Therefore, there will be no impacts to Section 6(f) resources as a result of this project.

## Indiana Department of Transportation

County LaPorte Route Old Grand Beach Road Des. No. 1592335

### SECTION E – Air Quality

#### Air Quality

##### Conformity Status of the Project

Is the project in an air quality non-attainment or maintenance area?

Yes

No

☒

☐

If YES, then:

Is the project in the most current MPO TIP?

☒

☐

Is the project exempt from conformity?

☒

☐

If the project is NOT exempt from conformity, then:

Is the project in the Transportation Plan (TP)?

☐

☐

Is a hot spot analysis required (CO/PM)?

☐

☐

Level of MSAT Analysis required?

Level 1a ☒ Level 1b ☐ Level 2 ☐ Level 3 ☐ Level 4 ☐ Level 5 ☐

Remarks:

This project is included in Fiscal Year (FY) 2020-2024 Northwestern Indiana Regional Planning Commission (NIRPC) Transportation Improvement Program (TIP) and the 2020-2024 Statewide Transportation Improvement Program (STIP) (Appendix H1-H2).

This project is located in LaPorte County, which is currently in a maintenance area for Ozone, which was revoked in 2015 but is being evaluated for conformity due to the February 16, 2018, South Coast Air Quality Management District V. Environmental Protection Agency, Et. Al. Decision. The project's design concept and scope are accurately reflected in both the NIRPC MPO Transportation Plan (TP) and the Transportation Improvement Program (TIP) and both conform to the State Implementation Plan (SIP). Therefore, conformity requirements of 40 CFR 93 have been met.

This project is of a type qualifying as a categorical exclusion (Group 1) under 23 CFR 771.117(c), or exempt under the Clean Air Act conformity rule under 40 CFR 93.126, and as such a Mobile Source Air Toxics analysis is not required.

### SECTION F - NOISE

#### Noise

Yes

No

Is a noise analysis required in accordance with FHWA regulations and INDOT's traffic noise policy?

☐

☒

No

Yes/ Date

ES Review of Noise Analysis

☐

☐

Remarks:

This project is a Type III project. In accordance with 23 CFR 772 and the current *Indiana Department of Transportation Traffic Noise Analysis Procedure*, this action does not require a formal noise analysis.

## Indiana Department of Transportation

County LaPorte Route Old Grand Beach Road Des. No. 1592335

### SECTION G – COMMUNITY IMPACTS

#### Regional, Community & Neighborhood Factors

Will the proposed action comply with the local/regional development patterns for the area?

Yes

☒

No

☐

Will the proposed action result in substantial impacts to community cohesion?

☐

☒

Will the proposed action result in substantial impacts to local tax base or property values?

☐

☒

Will construction activities impact community events (festivals, fairs, etc.)?

☐

☒

Does the community have an approved transition plan?

☒

☐

If No, are steps being made to advance the community's transition plan?

☐

☐

Does the project comply with the transition plan? (explain in the remarks box)

☒

☐

#### Remarks:

There will be temporary impacts associated with construction activities. Advanced warning signs will be used to alert traveling motorists of the construction activities and flaggers may be used as needed to restrict traffic for construction activities.

VS Engineering researched possible fairs and festivals that may be in the area that could potentially be impacted by construction activities. Two websites were accessed, <http://fairsandfestivals.net> and <http://indianafestivals.org> were accessed on September 27, 2019, to see if construction would impact any local fairs or festivals. Construction of this project will not impact any community events (fairs, festivals, etc.).

The proposed project is to install a multi-use path adjacent to Old Grand Beach Road. This project will not have substantial impacts to property values or increase development in the area.

LaPorte County has an Americans with Disabilities Act (ADA) transition plan. This project will comply with ADA by providing ADA-compliant ramps at crosswalks, providing a paved HMA path that is level and at least 10 feet wide.

#### Indirect and Cumulative Impacts

Will the proposed action result in substantial indirect or cumulative impacts?

Yes

☐

No

☒

#### Remarks:

Indirect impacts are effects which are caused by the action and are later in time or farther removed in distance, but are still reasonably foreseeable. Indirect effects may include growth inducing efforts and other effects related to induced changes in the pattern of land use, population density, or growth rate. Cumulative impacts affect the environment which result from the incremental impact of the action when added to other past, present and reasonably foreseeable future actions regardless of what agency or person undertakes such actions.

The proposed project will have a positive community and economic impact. The proposed trail will provide pedestrian access where previously there was none. This trail is part of the Marquette Greenway project. This project, the Singing Sands Connector, will eventually connect to the proposed New Buffalo segment, which is yet to begin construction. This trail segment will connect to the residential street at the northern end of the project terminus at the Indiana/Michigan state line fulfilling independent utility requirements.

#### Public Facilities & Services

Will the proposed action result in substantial impacts on health and educational facilities, public and private utilities, emergency services, religious institutions, airports, public transportation or pedestrian and bicycle facilities? *Discuss how the maintenance of traffic will affect public facilities and services.*

Yes

☐

No

☒

#### Remarks:

Based on a desktop review, a site visit on October 15, 2019 by VS Engineering, the aerial map of the project area (Appendix B3) and the RFI report (Appendix E1) there is one public facility within the 0.5 mile search radius of the project area. There is one planned trail within the 0.5 mile search radius of this project. The Singing Sands – Lighthouse Trail segment of the Marquette Greenway Trail is planned to end at the northwestern corner of the intersection of Meer Road and US 12. An early coordination request was sent December 20, 2019, to Michigan City Parks and Recreation, the sponsor of the proposed trail segment, but no response was received. Due to the scope of both trail segments, the Singing Sands – Lighthouse Trail segment and the Singing Sands Connector segment, no impact is expected.

# Indiana Department of Transportation

County LaPorte Route Old Grand Beach Road Des. No. 1592335

There will be temporary impacts associated with construction activities. Advanced warning signs will be used to alert traveling motorists of the construction activities and flaggers may be used as needed to restrict traffic for construction activities. These impacts are temporary and will cease upon project completion.

**Environmental Justice (EJ) (Presidential EO 12898)**

During the development of the project were EJ issues identified?

Does the project require an EJ analysis?

If YES, then:

Are any EJ populations located within the project area?

Will the project result in adversely high or disproportionate impacts to EJ populations?

Yes	No
<input type="checkbox"/>	<input checked="" type="checkbox"/>
<input checked="" type="checkbox"/>	<input type="checkbox"/>
<input type="checkbox"/>	<input checked="" type="checkbox"/>
<input type="checkbox"/>	<input checked="" type="checkbox"/>

**Remarks:**

Under FHWA Order 6640.23A, FHWA and the project sponsor, as a recipient of funding from FHWA, are responsible to ensure that their programs, policies, and activities do not have a disproportionately high and adverse effect on minority or low-income populations. Per the current INDOT Categorical Exclusion Manual, an Environmental Justice (EJ) Analysis is required for any project that has two or more relocations or 0.5 acre of additional permanent right-of-way. This project will have no relocations but will require 3.3 acres of permanent right-of-way. Therefore, an EJ Analysis is required.

Potential EJ impacts are detected by locating minority and low-income populations relative to a reference population to determine if populations of EJ concern exist and whether there could be disproportionately high and adverse impacts to them. The reference populations may be a county, city, or town and is called the community of comparison (COC). In this project, the COC is LaPorte County. The community that overlaps the project area is called the affected community (AC). In this project, the AC is Census Tract 412. An AC has a population of concern for EJ if the population is more than 50% minority or low-income or if the low-income or minority population is 125% of the COC. Data was obtained from the US Census Bureau Website (<https://data.census.gov/cedsci/>) on March 2, 2020 by VS Engineering. The data collected for minority and low-income populations within the AC are summarized in the table below.

Table: Minority and Low-Income Data (2017 ACS 5-year estimates)		
	COC – Springfield Township, LaPorte County, Indiana	AC - Census Tract 412 LaPorte County, Indiana
Percent Minority	5	2
125% of COC	6.1	AC < 125% COC
EJ Population of Concern		No
Percent Low-Income	25.3	3.6
125% of COC	31.6	AC < 125% COC
EJ Population of Concern		No

AC, Census Tract 412 LaPorte County, Indiana has a percent minority of 2% which is below 50% and is below the 125% COC threshold. Therefore, the AC does not contain minority populations of EJ concern.

AC, Census Tract 412 LaPorte County, Indiana has a percent low-income of 3.6% which is below 50% and is below the 125% COC threshold. Therefore, the AC does not contain low-income populations of EJ concern.

The census data sheets, map, and calculations can be found in Appendix I2. No further environmental justice analysis is warranted.

**Relocation of People, Businesses or Farms**

Will the proposed action result in the relocation of people, businesses or farms?

Is a Business Information Survey (BIS) required?

Is a Conceptual Stage Relocation Study (CSRS) required?

Has utility relocation coordination been initiated for this project?

Yes	No
<input type="checkbox"/>	<input checked="" type="checkbox"/>
<input type="checkbox"/>	<input checked="" type="checkbox"/>
<input type="checkbox"/>	<input checked="" type="checkbox"/>
<input checked="" type="checkbox"/>	<input type="checkbox"/>

Number of relocations:      Residences: 0      Businesses: 0      Farms: 0      Other: 0

This is page 17 of 20      Project name: Marquette Greenway – Singing Sands Connector      Date: January 22, 2021

## Indiana Department of Transportation

County LaPorte Route Old Grand Beach Road Des. No. 1592335

If a BIS or CSRS is required, discuss the results in the remarks box.

Remarks: No relocations of people, businesses, or farms will take place as a result of this project.  
Utility coordination has started, is ongoing and will continue throughout the construction process.

### SECTION H – HAZARDOUS MATERIALS & REGULATED SUBSTANCES

#### Documentation

Hazardous Materials & Regulated Substances (Mark all that apply)

Red Flag Investigation

Phase I Environmental Site Assessment (Phase I ESA)

Phase II Environmental Site Assessment (Phase II ESA)

Design/Specifications for Remediation required?

X

No Yes/ Date

ES Review of Investigations

January 9, 2020

Include a summary of findings for each investigation.

Remarks: Based on a review of GIS and available public records, an RFI was completed on January 8, 2020, by VS Engineering (Appendix E1). One underground storage tank (UST) and one leaking underground storage tank (LUST) are located within 0.5 mile search radius of the project area. There are no hazardous material sites located within the project area. None of the hazardous materials identified within 0.5 mile search radius will impact the project. The UST is 0.05 mile south of the project area but due to the scope of the project and the physical barriers, no impacts are expected. The LUST is located 0.06 mile south of the project area but due to the scope of the project and the physical barriers, no impacts are expected. Further investigation for hazardous material concerns is not required at this time.

### SECTION I – PERMITS CHECKLIST

Permits (mark all that apply)

Likely Required

Army Corps of Engineers (404/Section10 Permit)

Individual Permit (IP)

Nationwide Permit (NWP)

Regional General Permit (RGP)

Pre-Construction Notification (PCN)

Other

Wetland Mitigation required

Stream Mitigation required


## Indiana Department of Transportation

County LaPorte Route Old Grand Beach Road Des. No. 1592335

**IDEM**

Section 401 WQC  
Isolated Wetlands determination  
Rule 5  
Other  
Wetland Mitigation required  
Stream Mitigation required

X

**IDNR**

Construction in a Floodway  
Navigable Waterway Permit  
Lake Preservation Permit  
Other  
Mitigation Required


**US Coast Guard Section 9 Bridge Permit**

**Others (Please discuss in the remarks box below)**

**Remarks:**

The proposed project may require a Rule 5 erosion control permit from IDEM as at least one acre of land will be disturbed.

Applicable recommendations provided by IDEM are included in the Environmental Commitments section of this document. If permits are found to be necessary, the conditions of the permit will be requirements of the project and will supersede these recommendations.

It is the responsibility of the project sponsor to identify and obtain all required permits.

### SECTION J- ENVIRONMENTAL COMMITMENTS

The following information should be provided below: List all commitments, name of agency/organization requesting the commitment(s), and indicating which are firm and which are for further consideration. The commitments should be numbered.

**Remarks:****Firm:**

1. If the scope of work or permanent or temporary right-of-way amounts change, the INDOT Environmental Services Division and INDOT District Environmental Section will be contacted immediately. (INDOT ESD and INDOT LaPorte District)
2. It is the responsibility of the project sponsor to notify school corporations and emergency services at least two weeks prior to any construction that would block or limit access. (INDOT ESD)
3. GENERAL AMM 1: Ensure all operators, employees, and contractors working in areas of known or presumed bat habitat are aware of all FHWA/FRA/FTA (Transportation Agencies) environmental commitments, including all applicable AMMS. (USFWS)
4. LIGHTING AMM 1: Direct temporary lighting away from suitable habitat during the active season. (USFWS)
5. TREE REMOVAL AMM 1: Modify all phases/aspects of the project (e.g., temporary work areas, alignments) to avoid tree removal. (USFWS)
6. TREE REMOVAL AMM 2: Apply time of year restrictions (April 1 – September 30) for tree removal when bats are not likely to be present or limit tree removal to 10 or fewer trees per project at any time of year within 100 feet of existing road/rail surface and outside of documented roosting/foraging habitat or travel corridors; visual emergency survey must be conducted with no bats observed. (USFWS, IDNR)
7. TREE REMOVAL AMM 3: Ensure tree removal is limited to that specified in project plans and ensure that contractors understand clearing limits and how they are marked in the field (e.g., install bright colored flagging/fencing prior to any tree clearing to ensure contractors stay within clearing limits). (USFWS)
8. TREE REMOVAL AMM 4: Do not removed documented Indiana bat or NLEB roosts that are still suitable for roosting, or trees within 0.25 mile of roosts or documented foraging habitat any time of year. (USFWS)

## Indiana Department of Transportation

County LaPorte Route Old Grand Beach Road Des. No. 1592335

**For Further Consideration:**

1. IDNR-DFW recommends a mitigation plan be developed (and submitted with the permit application, if required) for any unavoidable habitat impacts that will occur. Impacts to non-wetland forest of one acre or more should be mitigated at a minimum 2:1 ratio. If less than one acre of non-wetland forest is removed in a rural setting, replacement should be at a 1:1 ratio based on area. Impacts to non-wetland forest under one acre in an urban setting should be mitigated by planting five trees, at least 2 inches in diameter-at-breast height (dbh), for each tree which is removed that is 10 inches dbh or greater (5:1 mitigation based on the number of large trees). (IDNR)

### SECTION K- EARLY COORDINATION

Please list the date coordination was sent and all agencies that were contacted as a part of the development of this Environmental Study. Also, include the date of their response or indicate that no response was received. INDOT and FHWA are automatically considered early coordination participants and should only be listed if a response is received.

Remarks:

Federal Highway Administration, LaPorte District	No response
Indiana Department of Transportation, LaPorte District Office	1/2/2020
Indiana Department of Transportation, Office of Aviation	No response
Indiana Department of Transportation, Public Involvement	No response
US Fish and Wildlife Service, Northern Indiana Sub-office	1/10/2020
Indiana Department of Natural Resources, Div. of Fish and Wildlife	1/15/2020
Indiana Department of Natural Resources, Div. of Oil and Gas	No response
Indiana Department of Natural Resources, Div. of Outdoor Recreation	1/3/2020
Indiana Geological Survey	1/22/2020
Indiana Department of Environmental Management	1/22/2020
US Department of Housing and Urban Development, Region 5	No response
National Park Service, Regional Environmental Coordinator	No response
Natural Resources Conservation Service, State Conservationist	12/30/2019
Michigan City Parks and Recreation Department	No response
Michiana Shores Park Board	No response
Michiana Shores Planning and Building Commission	No response
Michiana Shores Town Clerk	No response
Michiana Shores Fire Department	No response
Long Beach Police Department	No response
LaPorte County Highway Department	No response
LaPorte County Soil and Water Conservation	No response
LaPorte County Parks and Recreation	No response
Michigan City School District	No response
Northwestern Indiana Regional Planning Commission	No response
LaPorte County MS4 Coordinator	No response



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# APPENDIX A:

## INDOT SUPPORTING DOCUMENTATION

## Categorical Exclusion Level Thresholds

	PCE	Level 1	Level 2	Level 3	Level 4 <sup>1</sup>
<b>Section 106</b>	Falls within guidelines of Minor Projects PA	"No Historic Properties Affected"	"No Adverse Effect"	-	"Adverse Effect" Or Historic Bridge involvement <sup>2</sup>
<b>Stream Impacts</b>	No construction in waterways or water bodies	< 300 linear feet of stream impacts	≥ 300 linear feet of stream impacts	-	Individual 404 Permit
<b>Wetland Impacts</b>	No adverse impacts to wetlands	< 0.1 acre	-	< 1 acre	≥ 1 acre
<b>Right-of-way<sup>3</sup></b>	Property acquisition for preservation only or none	< 0.5 acre	≥ 0.5 acre	-	-
<b>Relocations</b>	None	-	-	< 5	≥ 5
<b>Threatened/Endangered Species (Species Specific Programmatic for Indiana bat &amp; northern long eared bat)</b>	"No Effect", "Not likely to Adversely Affect" (Without AMMs <sup>4</sup> or with AMMs required for all projects <sup>5</sup> )	"Not likely to Adversely Affect" (With any other AMMs)	-	"Likely to Adversely Affect"	Project does not fall under Species Specific Programmatic
<b>Threatened/Endangered Species (Any other species)</b>	Falls within guidelines of USFWS 2013 Interim Policy	"No Effect", "Not likely to Adversely Affect"	-	-	"Likely to Adversely Affect"
<b>Environmental Justice</b>	No disproportionately high and adverse impacts	-	-	-	Potential <sup>6</sup>
<b>Sole Source Aquifer</b>	Detailed Assessment Not Required	-	-	-	Detailed Assessment
<b>Floodplain</b>	No Substantial Impacts	-	-	-	Substantial Impacts
<b>Coastal Zone Consistency</b>	Consistent	-	-	-	Not Consistent
<b>National Wild and Scenic River</b>	Not Present	-	-	-	Present
<b>New Alignment</b>	None	-	-	-	Any
<b>Section 4(f) Impacts</b>	None	-	-	-	Any
<b>Section 6(f) Impacts</b>	None	-	-	-	Any
<b>Added Through Lane</b>	None	-	-	-	Any
<b>Permanent Traffic Alteration</b>	None	-	-	-	Any
<b>Coast Guard Permit</b>	None	-	-	-	Any
<b>Noise Analysis Required</b>	No	-	-	-	Yes
<b>Air Quality Analysis Required</b>	No	-	-	-	Yes <sup>7</sup>
<b>Approval Level</b>  <ul style="list-style-type: none"> <li><b>District Env. Supervisor</b></li> <li><b>Env. Services Division</b></li> <li><b>FHWA</b></li> </ul>	Concurrence by INDOT District Environmental or Environmental Services	Yes	Yes	Yes Yes	Yes Yes Yes

<sup>1</sup>Coordinate with INDOT Environmental Services. INDOT will then coordinate with the appropriate FHWA Environmental Specialist.

<sup>2</sup>Any involvement with a bridge processed under the Historic Bridge Programmatic Agreement.

<sup>3</sup>Permanent and/or temporary right-of-way.

<sup>4</sup>AMMs = Avoidance and Mitigation Measures.

<sup>5</sup>AMMs determined by the IPAC decision key to be needed that are listed in the USFWS *User's Guide for the Range-wide Programmatic Consultation for Indiana bat and Northern long-eared bat* as "required for all projects".

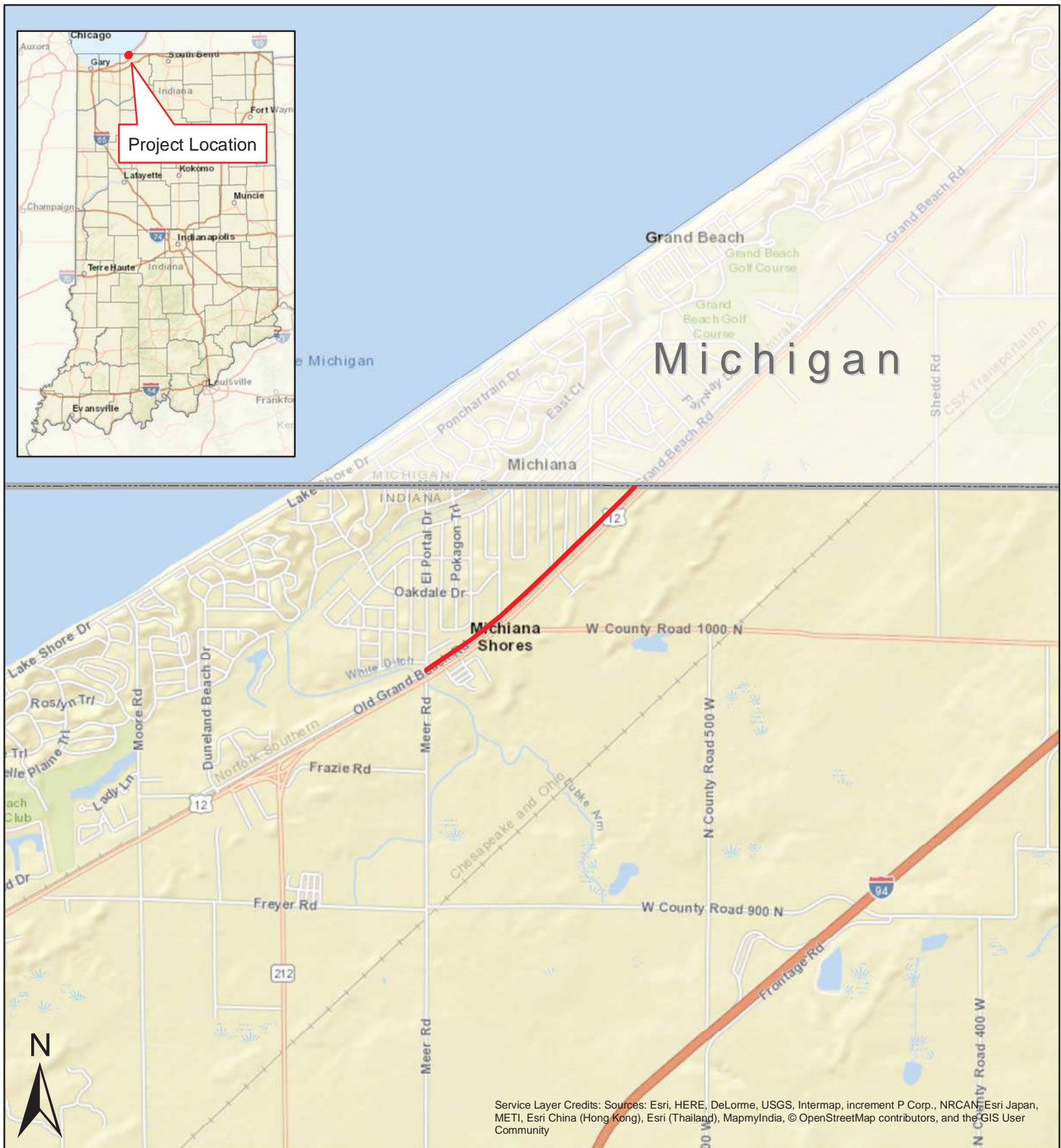
<sup>6</sup>Potential for causing a disproportionately high and adverse impact.

<sup>7</sup>Hot Spot Analysis and/or MSAT Quantitative Emission Analysis.

\*Substantial public or agency controversy may require a higher-level NEPA document.

# APPENDIX B:

## GRAPHICS



## Legend

 Project Location

0 0.25 0.5 1  
Mile

1 in = 0.5 mile



**Marquette Greenway Trail/Singing Sands Connector Trail East**  
**LaPorte County, Indiana**  
**Des. No. 1592335**

**Figure 1 - Project Location**

Drawn: 12/12/2019 AKB





## Legend

 Project Location

0 0.1 0.2 0.4  
 Mile

1 in = 0.2 mile



Marquette Greenway Trail/Singing Sands Connector Trail East  
 LaPorte County, Indiana  
 Des. No. 1592335

Figure 2 - Topographic Map

Drawn: 12/12/2019 AKB









## Legend

 Project Location

0 0.05 0.1 0.2  
Mile  
1 in = 0.1 mile



Marquette Greenway Trail/Singing Sands Connector Trail East  
LaPorte County, Indiana  
Des. No. 1592335

Figure 4 - Photo Location Map

Drawn: 12/12/2019 AKB



# Location Photographs

Photographs taken October 15, 2019



## Photo 1:

Approximately 110 ft from the corner of El Portal Drive and Grand Beach Road, looking northeast.

## Photo 2:

Approximately 475 ft south of the intersection of Shady Oak Drive and Grand Beach Road, looking northeast.





# Location Photographs

Photographs taken October 15, 2019



## Photo 3:

At the intersection of Shady Oak Drive and Grand Beach Road, looking northeast.

## Photo 4:

On Grand Beach Road, approximately 520 ft south of Chickadee Trail, looking northeast.





# Location Photographs

Photographs taken October 15, 2019



## Photo 5:

Southwest of the intersection of Grand Beach Drive and Chickadee Trail, looking northeast.

## Photo 6:

On Grand Beach Drive, looking northeast, approximately 750 ft southwest of the Indiana/Michigan state line.





PROJECT	DESIGNATION
1592335	1592335
CONTRACT	
R-38992	

# INDIANA DEPARTMENT OF TRANSPORTATION MARQUETTE GREENWAY TRAIL

PROJECT NO. 1592335 P.E.  
1592335 R/W  
1592335 CONST.

FROM RP: TO RP:

BEGIN PROJECT  
STA. STA. 860+00.00 "A"

ASPHALT PATHWAY, CURB RAMPS, AND CROSSWALK IMPROVEMENTS BOUNDED BY INTERSECTION OF EL PORTAL DRIVE AND OLD GRAND BEACH ROAD, NORTHWEST ALONG OLD GRAND BEACH ROAD TO THE INDIANA/MICHIGAN STATE LINES; ALL WITHIN SECTIONS 7 & 18 OF TOWNSHIP 38 N, RANGE 3 W, SPRINGFIELD TOWNSHIP IN THE TOWN OF MICHIANA SHORES, La PORTE COUNTY, INDIANA.

R. 3 W.

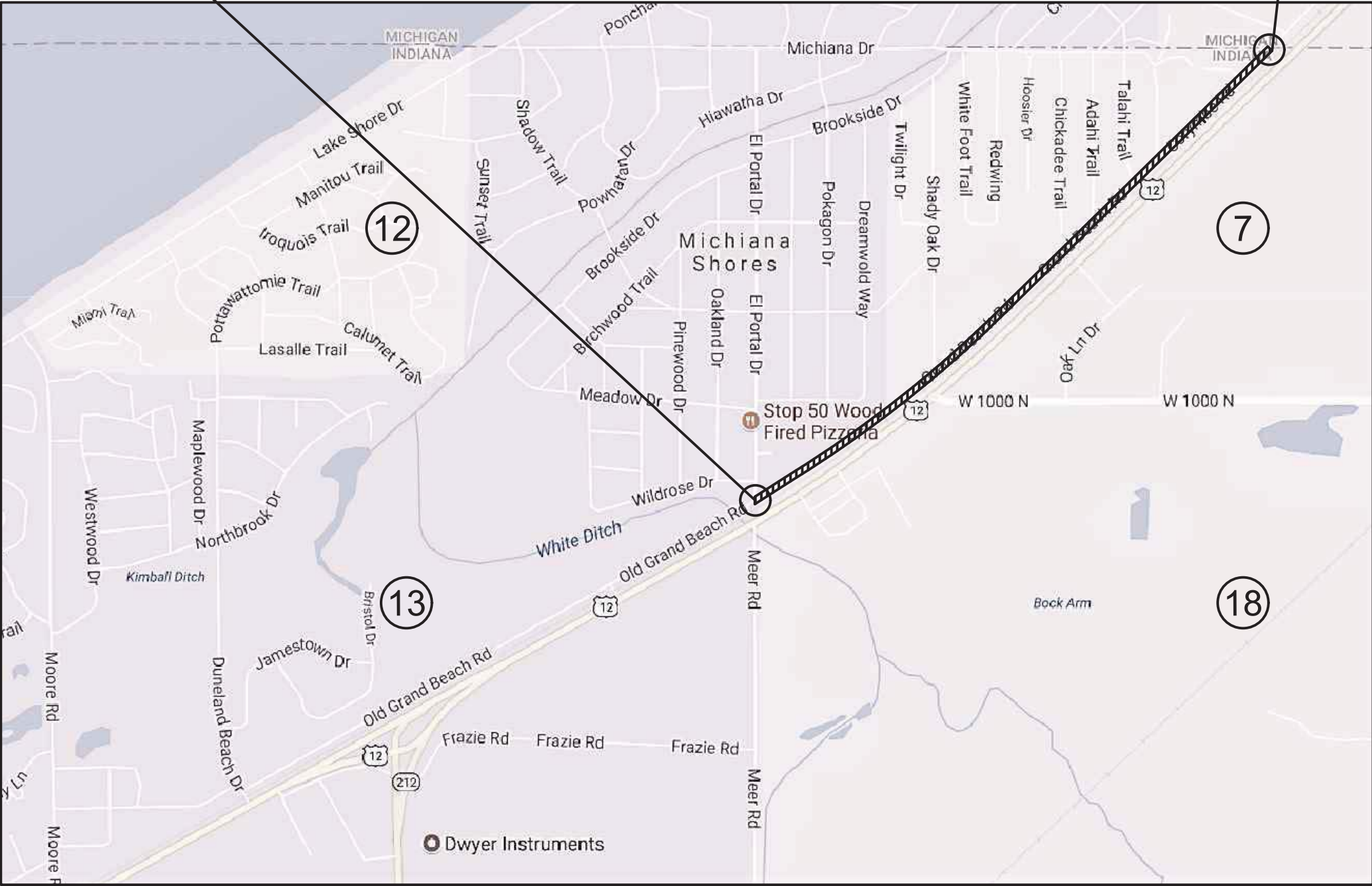
END PROJECT  
STA. STA. 913+35.00 "A"

## LAPORTE COUNTY BOARD OF COMMISSIONERS

RICHARD MROZINSKI, PRESIDENT

CONNIE GRAMAROSSA, MEMBER

VIDYA KORA, MEMBER



LOCATION MAP  
SPRINGFIELD TOWNSHIP  
La PORTE COUNTY

GROSS LENGTH: 1.010 Miles  
NET LENGTH: 0.958 Miles

### SCALES:

PLAN { LONG: 1" = 20'  
TRANS: 1" = 20' PROFILE { HORIZ: 1" = 20'  
VERT: 1" = 5'

MAX. GRADE: 3.92%

### LOCATION:

BEGINING: LATITUDE: 41° 45' 02.1" N  
LONGITUDE: 86° 48' 57.4" W  
END: LATITUDE: 41° 45' 36.6" N  
LONGITUDE: 86° 48' 5.0" W

[INDIANA DEPARTMENT OF TRANSPORTATION  
STANDARD SPECIFICATIONS DATED 2018 TO  
BE USED WITH THESE PLANS]

TRAFFIC DATA	
A.A.D.T.	V.P.D.
A.A.D.T. PROJECTED	V.P.D.
D.H.V.	V.P.H.
DIRECTIONAL DISTRIBUTION	%
TRUCKS	% A.A.D.T.
	% D.H.V.
DESIGN DATA	
DESIGN SPEED	15 MPH
PROJECT DESIGN CRITERIA	SHARED USE PATH
FUNCTIONAL CLASSIFICATION	SHARED USE PATH
RURAL/URBAN	URBAN
TERRAIN	LEVEL
ACCESS CONTROL	NONE



PROJECT LOCATION SHOWN BY

H.U.C. 14 DIGIT CODE NO.: 04040001090020

PLANS PREPARED BY:	VS ENGINEERING, INC.	TEL: (260) 489-6635 PHONE NUMBER
CERTIFIED BY:	MARK A. HERALD, P.E.	INDIANA REG. NO. 11011698
APPROVED FOR LETTING:	INDIANA DEPARTMENT OF TRANSPORTATION	DATE

**NOT FOR  
CONSTRUCTION**  
Preliminary  
9-27-18

DESIGNATION 1592335
SHEETS 1 of 63
CONTRACT R-38992
PROJECT 1592335



COMMUNICATIONS:

AT&T - DISTRIBUTION  
5858 N. College Ave.  
Indianapolis, IN 46220  
Contact: Dennis Burch  
Phone: (579) 287-8380  
Email: db2741@att.com

ACME Communications  
16 W 84th Dr.  
Merrillville, IN 46410  
Contact: William Richey  
Phone: (219) 879 6600  
Email: bwrichy@adsnet.com

CABLE TELEVISION

COMCAST  
16 W 84th Dr.  
Merrillville, IN 46410  
Contact: Larry Smith  
Phone: 574-320-8203  
Email: Larry\_Smith3@cable.comcast.com

ELECTRIC & GAS:

NIPSCO  
801 E 86th Ave  
Merrillville, IN 46410  
Contact: Michelle Voss  
Phone: 219-647-5311  
Email: Mvoss@nisource.com

SEWERS:

Michigan City Sanitary District  
1100 East 8th Street  
Michigan City, IN 46360-2567  
Contact: Melody Collier  
Phone: (219) 874 7799  
Email:

WATER:

Michigan City Water  
532 Franklin St / PO Box 888  
Michigan City, IN 46360  
Contact: Randall Russell  
Phone: (219) 874 3228  
Email: rrussell@mcwaterdept.com

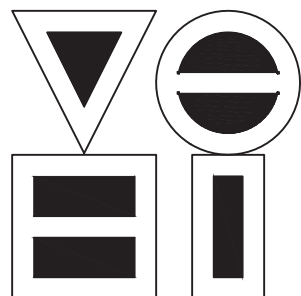
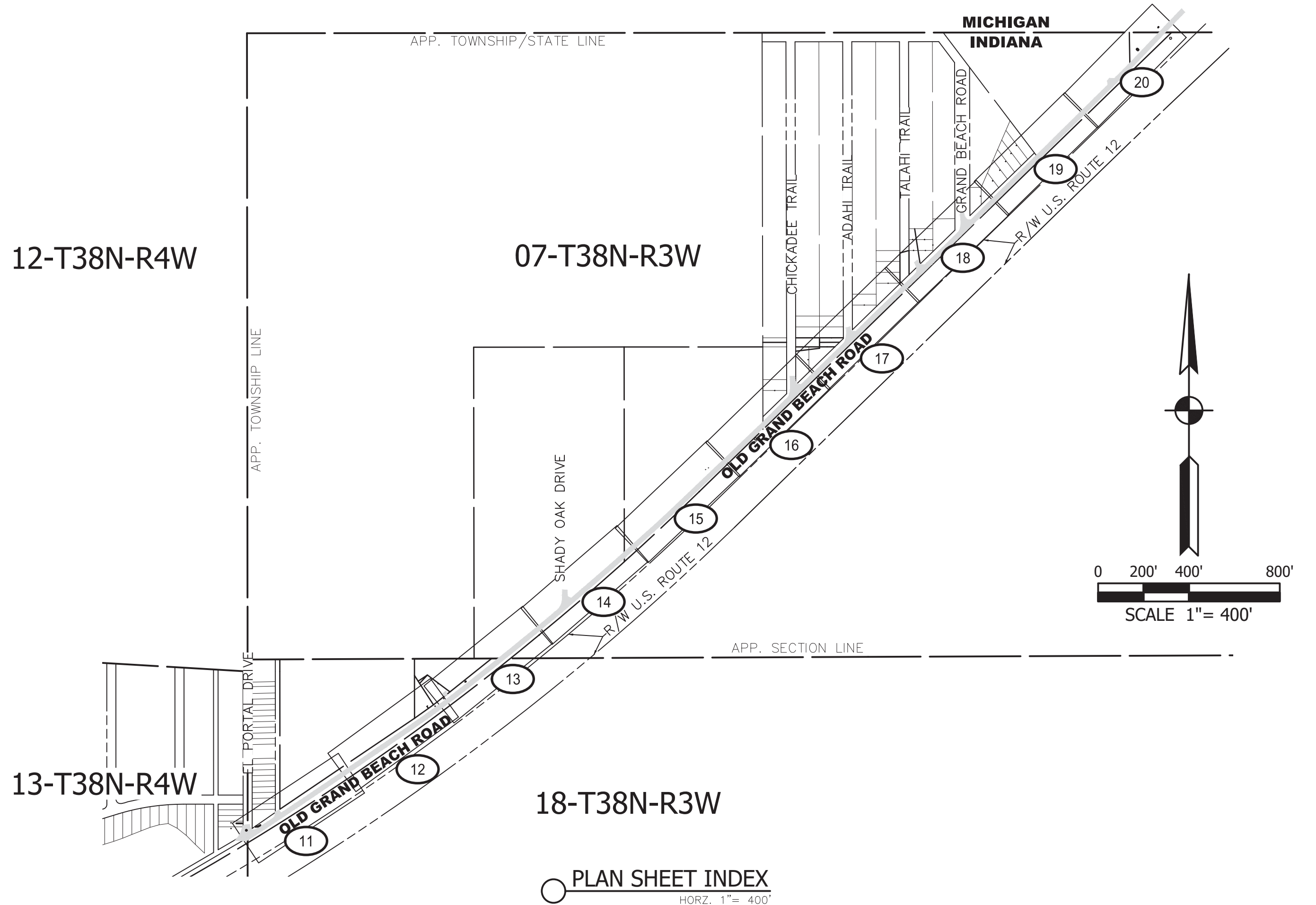
FIBER OPTICS:

RVP Fiber Company, LLC  
201 Ionia Ave SW  
Grand Rapids, MI 49503  
Contact: Ryan Miedema  
Phone: 616-233-7144  
Email: rjmiedema@ussignal.com

* *	ALL EARTH SHOULDERS, MEDIAN AREAS AND CUT AND FULL SLOPES SHALL BE PLAIN OR MULCHED SEEDED EXCEPT WHERE SODDING SPECIFIED.

NUMBER	DESCRIPTION
1	Title Sheet
2	Index & General Notes
3	Typical Sections
4 - 5	Plat No. 1
6 - 8	Survey Control
9 - 10	Maintenance Of Traffic Plan
11 - 20	Line 'A' - Plan & Profile
22 - 26	Erosion Control Plan
32	Pavement Markings & Erosion Control Table
33 - 34	Quantities-Approach Table
35 - 63	Line 'A' - Cross Sections

EXISTING 100 YR FLOODPLAIN  
 EXISTING STONE SURFACE  
 EXISTING ASPHALT ROAD  
 EXISTING SIGN  
 EXISTING UTILITY POLE  
 EXISTING GUYWIRE  
 EXISTING SANITARY MANHOLE  
 EXISTING WATER MAIN  
 EXISTING OVERHEAD UTILITY  
 EXISTING SPLIT RAIL FENCE  
 EXISTING WOOD FENCE  
 EXISTING BURIED GAS MAIN  
 EXISTING PROPERTY LINE  
 EXISTING RIGHT OF WAY  
 EXISTING TREE LINE  
 EXISTING TREE  
 CONSTRUCTION LIMITS  
 PROPOSED ROAD RIGHT-OF-WAY  
 PROPOSED SPOT ELEVATION  
 MATCH EXISTING ELEVATION  
 PROPOSED CONCRETE (ADA RAMP)  
 PROPOSED ASPHALT PATH

[illegible]

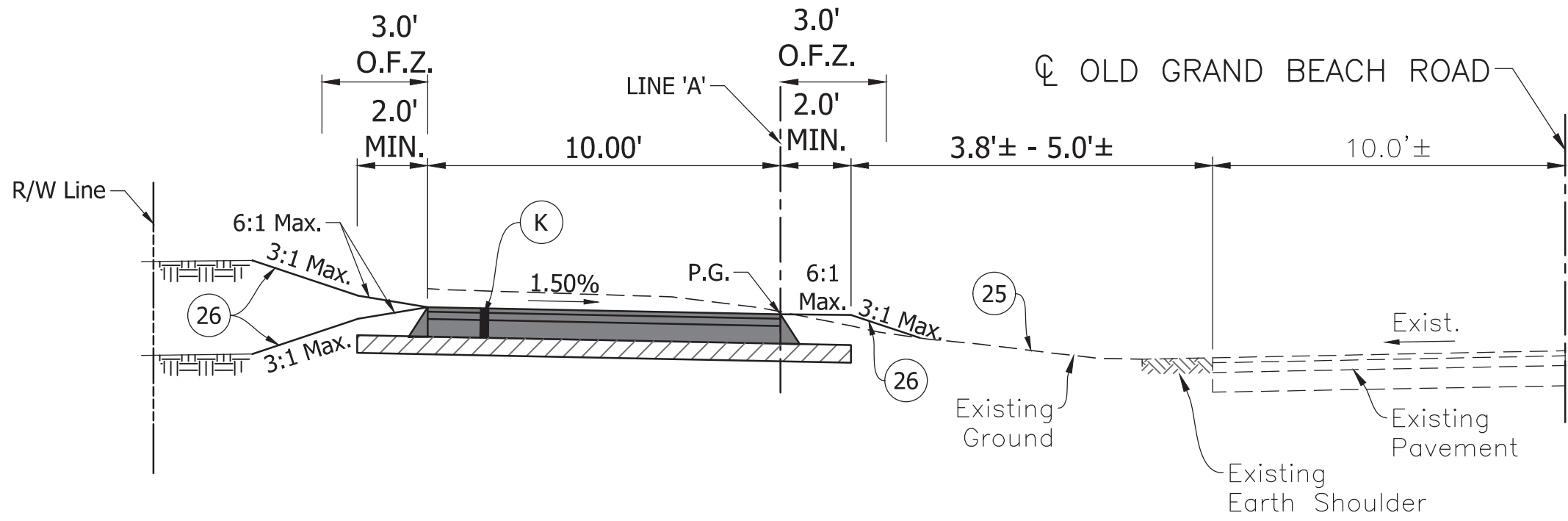
4275 North High School Road Indianapolis, Indiana 46254  
vsei@vsengineering.com www.vsengineering.com  
Phone: (317) 293-3542 Fax: (317) 293-4737

**NOT FOR  
CONSTRUCTION**  
Preliminary  
9-27-18

RECOMMENDED FOR APPROVAL		DESIGN ENGINEER	DATE
DESIGNED: JD	DRAWN: DT		
CHECKED: MH	CHECKED: MH		

# MARQUETTE TRAIL INDEX & GENERAL NOTES

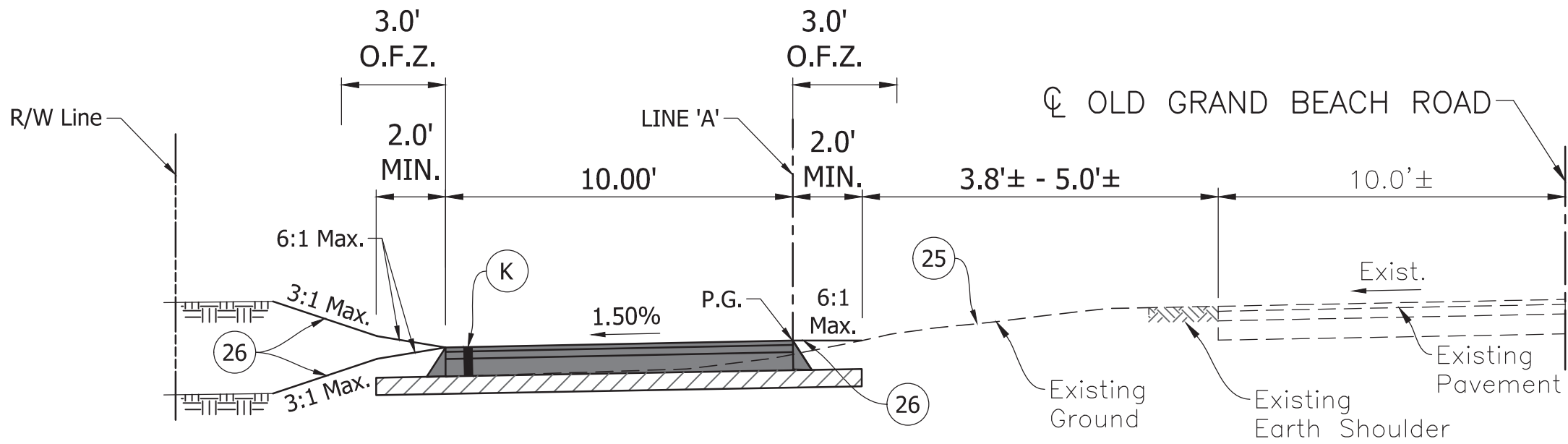
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AS NOTED	N/A		
VERTICAL SCALE	DESIGNATION		
N/A	1592335		
SURVEY BOOK	SHEETS		
	2	of	63
CONTRACT	PROJECT		
R-38992	1592335		



TYPICAL TRAIL SECTION - LINE 'A'  
General Typical Section Sloping Towards Road  
SECTION SCALE 1/4"= 1'-0"

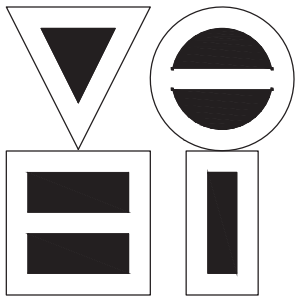
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Sta. 871+71.00 to Sta. 873+82.00  
Sta. 874+42.00 to Sta. 875+88.00  
Sta. 893+97.00 to Sta. 894+16.00  
Sta. 898+93.00 to Sta. 901+45.00

- LEGEND
- (K) 165#/Syd. QC/QA= HMA, 2, 64 Surface 9.5 mm on 220#/Syd. QC/QA= HMA, 2, 64 Intermediate, 12.5 mm on 6" Compacted Aggregate Base #53 on Subgrade Treatment Type III
  - (25) Mulched Seeding, Type U
  - (26) Sodding, Nursery



TYPICAL TRAIL SECTION - LINE 'A'  
General Typical Section Sloping Away From Road  
SECTION SCALE 1/4"= 1'-0"

Sta. 860+23.89 to Sta. 868+73.00  
Sta. 870+83.00 to Sta. 871+71.00  
Sta. 873+82.00 to Sta. 874+42.00  
Sta. 875+88.00 to Sta. 893+97.00  
Sta. 894+70.00 to Sta. 898+53.00  
Sta. 902+01.00 to Sta. 913+35.00



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Indianapolis, Indiana 46254  
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CHECKED: MH	CHECKED: MH

INDIANA  
DEPARTMENT OF TRANSPORTATION

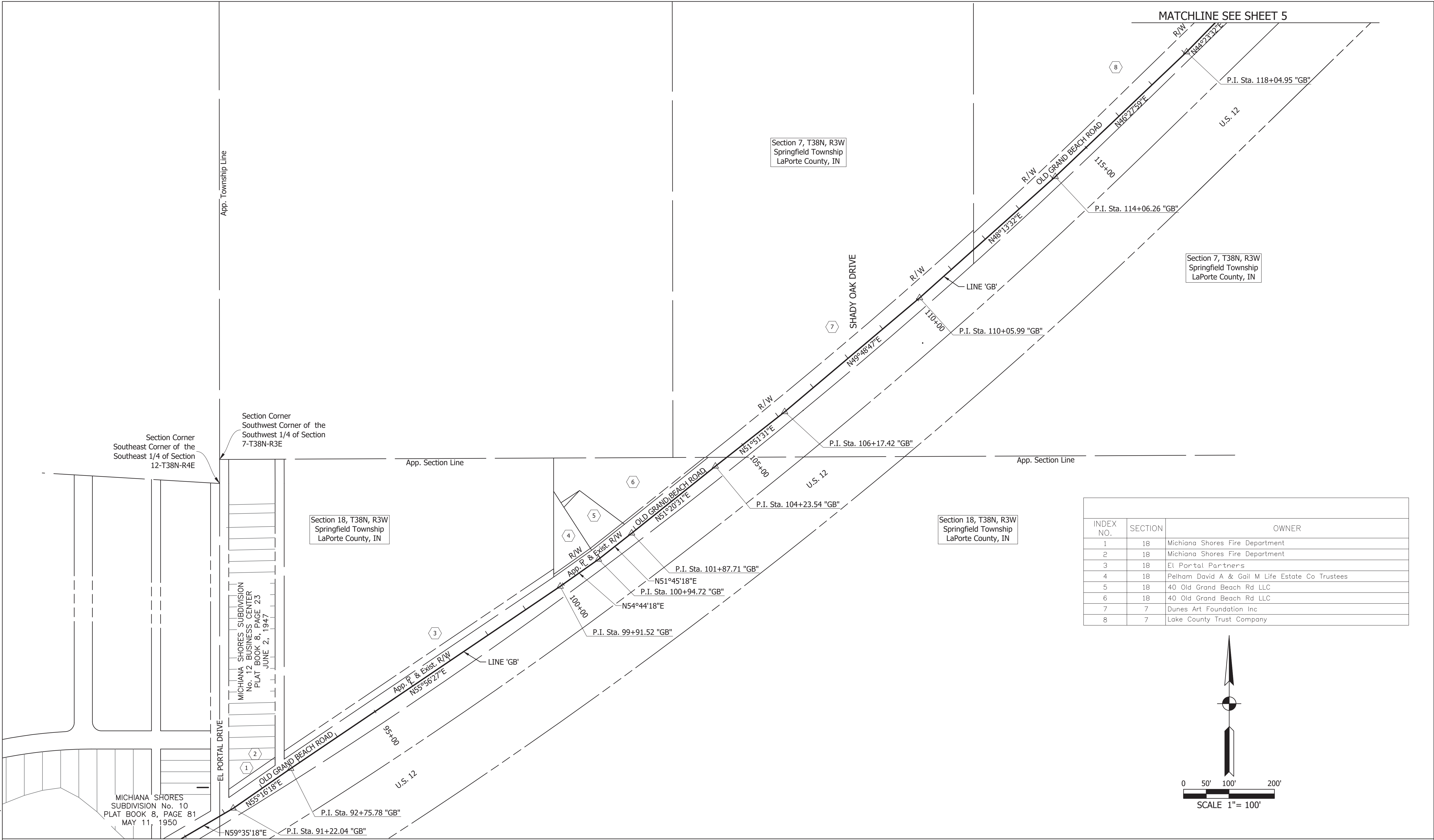
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TYPICAL SECTIONS

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SURVEY BOOK	SHEETS
	3 of 63
CONTRACT	PROJECT
R-38992	1592335

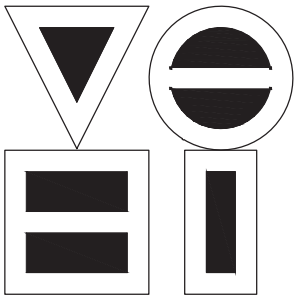
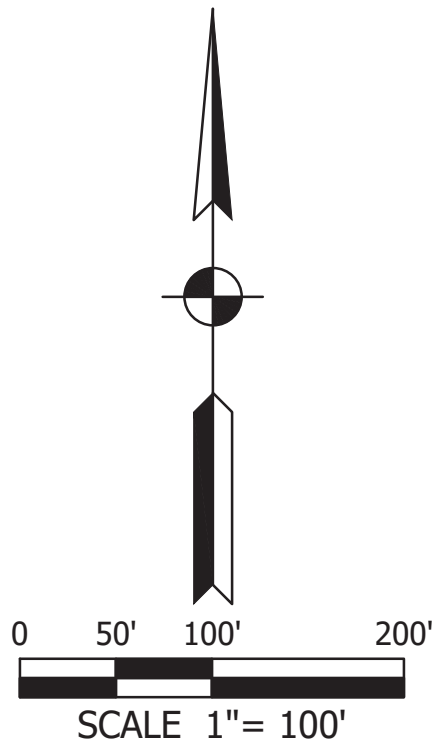
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PLOTTED BY:ccorsbie  
DATE:.....Aug 12,2019 - 6:11pm



INDEX NO.	SECTION	OWNER
1	18	Michiana Shores Fire Department
2	18	Michiana Shores Fire Department
3	18	El Portal Partners
4	18	Pelham David A & Gail M Life Estate Co Trustees
5	18	40 Old Grand Beach Rd LLC
6	18	40 Old Grand Beach Rd LLC
7	7	Dunes Art Foundation Inc
8	7	Lake County Trust Company



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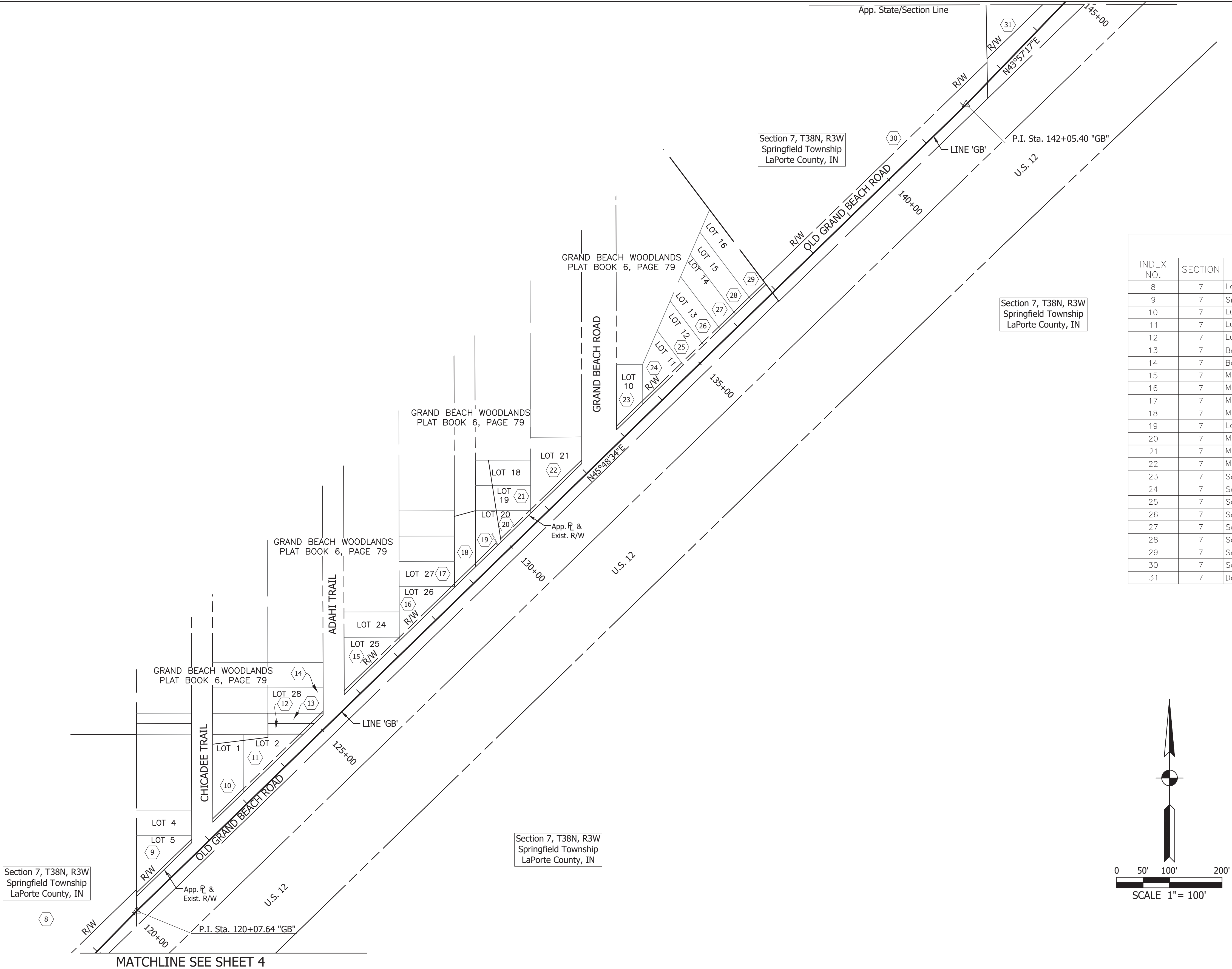
RECOMMENDED FOR APPROVAL		DESIGN ENGINEER	DATE
DESIGNED:	JD	DRAWN:	DT
CHECKED:	MH	CHECKED:	MH

INDIANA DEPARTMENT OF TRANSPORTATION	
MARQUETTE TRAIL PLAT NO. 1	

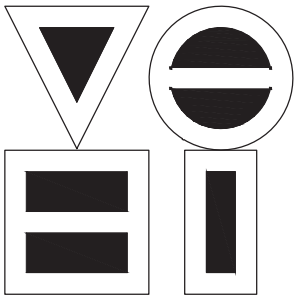
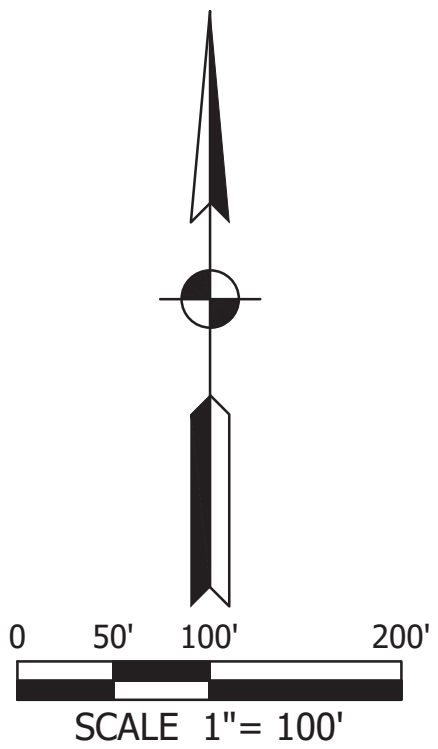
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VERTICAL SCALE N/A	DESIGNATION 1592335
SURVEY BOOK	SHEETS 4 of 63
CONTRACT R-38992	PROJECT 1592335



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FILE.....16-3509 Plat.dwg  
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PLOTTED BY:ccorsbie  
DATE.....Aug 12,2019 - 6:13pm



INDEX NO.	SECTION	OWNER
8	7	Lake County Trust Company
9	7	Smith Andrea and Kosco Ellen
10	7	Ludwig William R Life Estate rem int Christina M Kraemer
11	7	Ludwig William R Life Estate rem int Christina M Kraemer
12	7	Ludwig William R Life Estate rem int Christina M Kraemer
13	7	Barrett Mathew & Elizabeth Jtwros
14	7	Barrett Mathew & Elizabeth Jtwros
15	7	McCarthy Clare P
16	7	Meyer Linda
17	7	Meyer Linda
18	7	Meyer Linda
19	7	Laporte County Per Board Of Commissioners
20	7	Mccoll Mary I Trustee Trust
21	7	Mccoll Mary I Trustee Trust
22	7	Mccoll Mary I Trustee Trust
23	7	Schau David H & Susan K For Life Trus Ea Und $\frac{1}{2}$
24	7	Schau David H & Susan K For Life Trus Ea Und $\frac{1}{2}$
25	7	Schau David H & Susan K For Life Trus Ea Und $\frac{1}{2}$
26	7	Schau David H & Susan K For Life Trus Ea Und $\frac{1}{2}$
27	7	Schau David H & Susan K For Life Trus Ea Und $\frac{1}{2}$
28	7	Schau David H & Susan K For Life Trus Ea Und $\frac{1}{2}$
29	7	Schau David H & Susan K For Life Trus Ea Und $\frac{1}{2}$
30	7	Schau David H & Susan K For Life Trus Ea Und $\frac{1}{2}$
31	7	Demass David L Life Estate Trust



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9-27-18**

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DESIGNED: _____ JD	DRAWN: _____ DT
CHECKED: _____ MH	CHECKED: _____ MH

INDIANA  
DEPARTMENT OF TRANSPORTATION

MARQUETTE TRAIL  
PLAT NO. 1

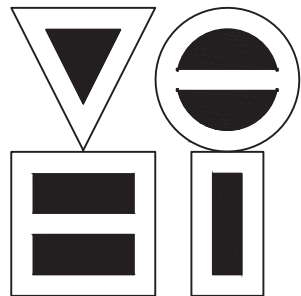
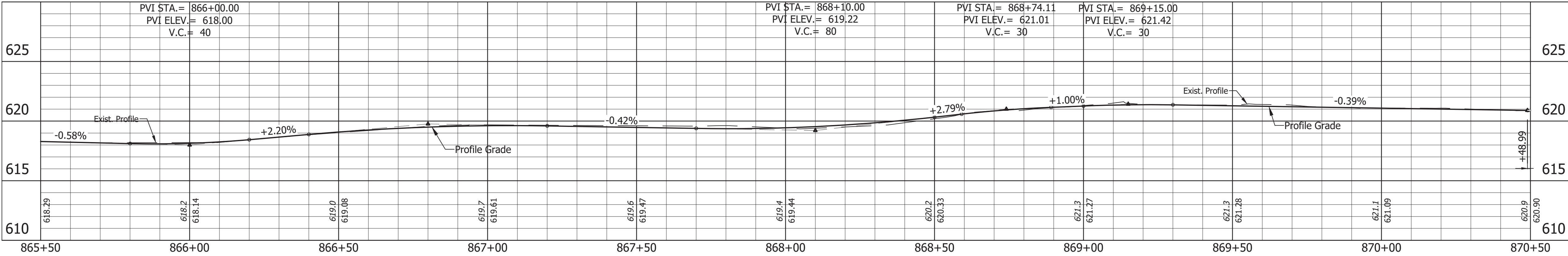
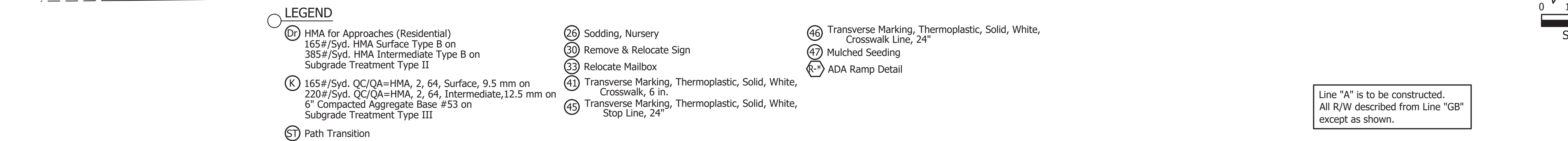
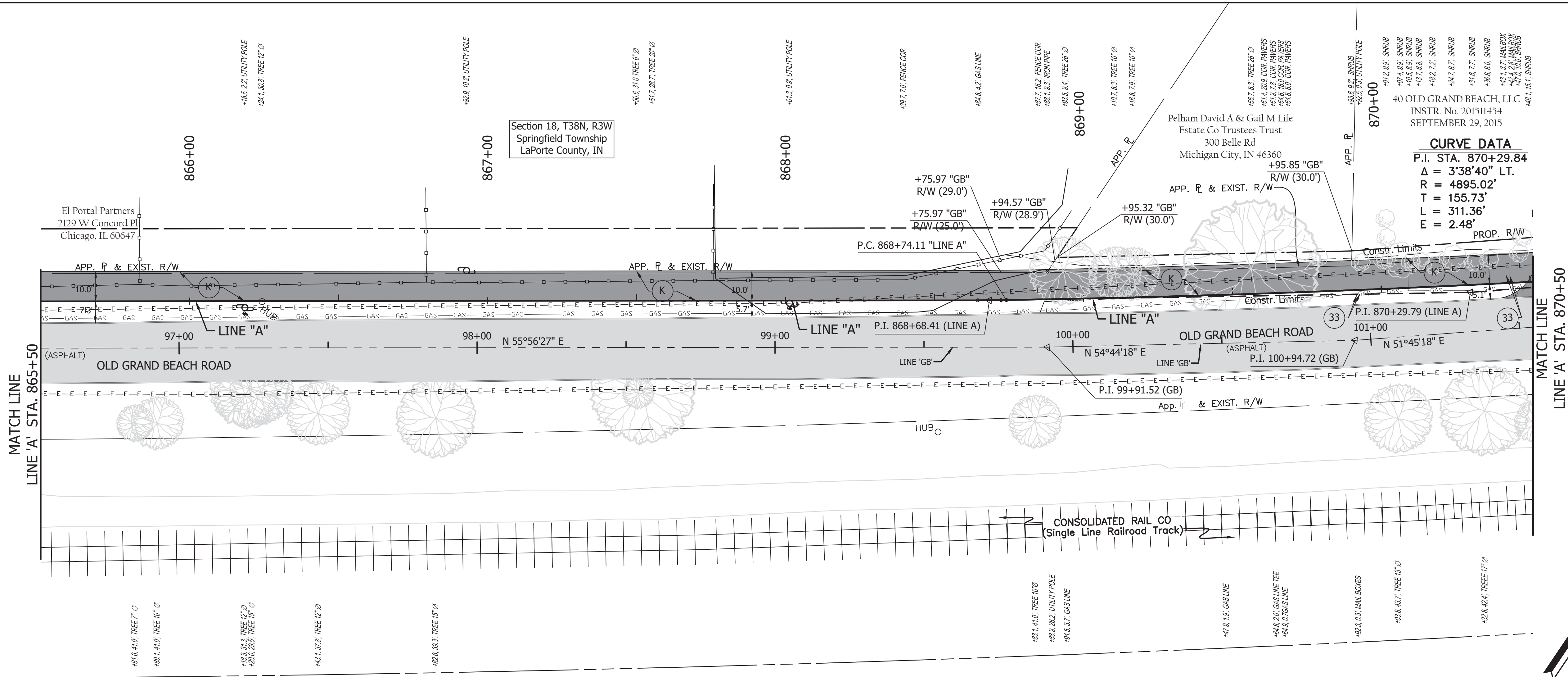
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VERTICAL SCALE N/A	DESIGNATION 1592335
SURVEY BOOK	SHEETS 5 of 63
CONTRACT R-38992	PROJECT 1592335







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FILE.....16-3509 LINE A.dwg  
DIMS.....20 LTSCALE.....1  
PLOTED BY.....amathney  
DATE.....Mar 02,2020 - 3:20pm



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4275 North High School Road  
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Indianapolis, Indiana 46254  
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Preliminary  
9-27-18

RECOMMENDED FOR APPROVAL	DESIGN ENGINEER	DATE
DESIGNED: JD	DRAWN: DT	
CHECKED: MH	CHECKED: MH	

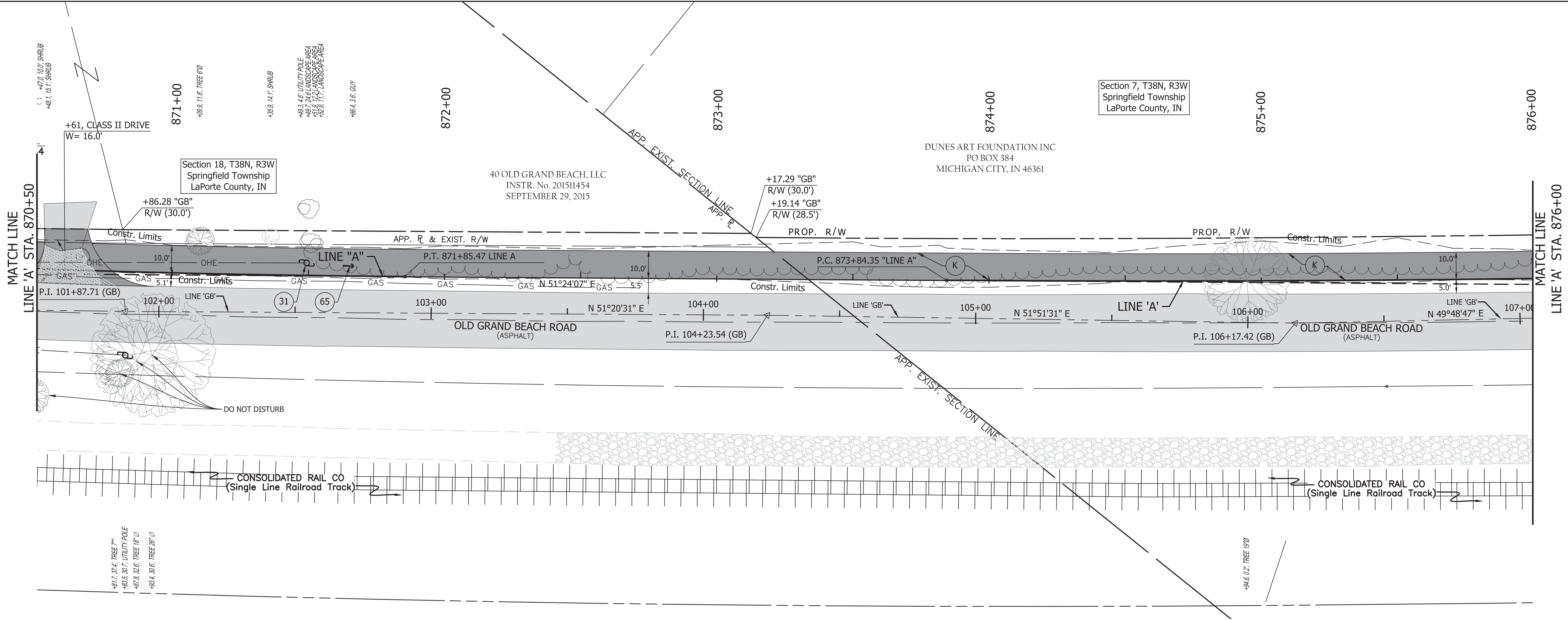
INDIANA  
DEPARTMENT OF TRANSPORTATION

MARQUETTE TRAIL  
LINE 'A' - PLAN & PROFILE

HORIZONTAL SCALE 1" = 20'	BRIDGE FILE N/A
VERTICAL SCALE 1" = 5'	DESIGNATION 1592335
SURVEY BOOK R-38992	SHEETS 12 of 63
PROJECT 1592335	



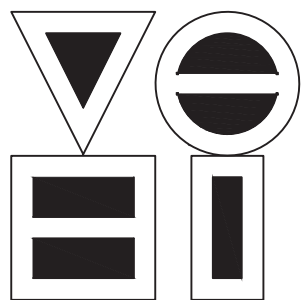
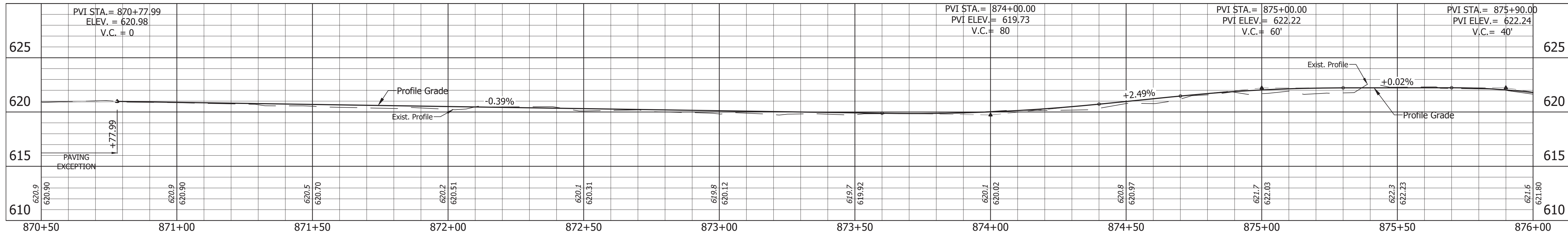
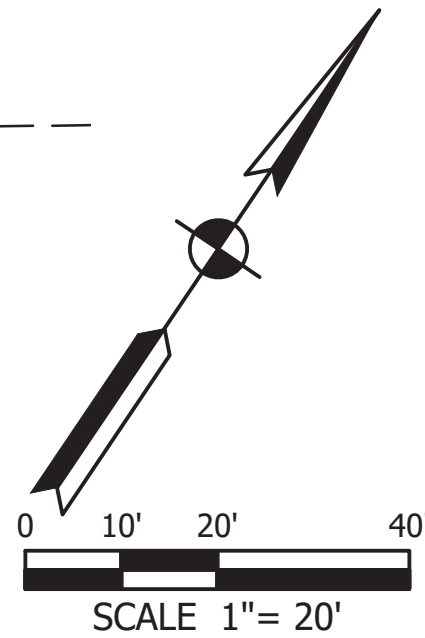
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PLOT BY.....dttianan  
DATE.....Nov 06, 2018 - 2:06pm



#### LEGEND

- (D) HMA for Approaches (Residential)  
165#/Syd. HMA Surface Type B on  
385#/Syd. HMA Intermediate Type B on  
Subgrade Treatment Type II
- (K) 165#/Syd. QC/QA=HMA, 2, 64, Surface, 9.5 mm on  
220#/Syd. QC/QA=HMA, 2, 64, Intermediate, 12.5 mm on  
6" Compacted Aggregate Base #53 on  
Subgrade Treatment Type III
- (ST) Path Transition
- (26) Sodding, Nursery
- (30) Remove & Relocate Sign
- (33) Relocate Mailbox
- (41) Transverse Marking, Thermoplastic, Solid, White,  
Crosswalk, 6 in.
- (45) Transverse Marking, Thermoplastic, Solid, White,  
Stop Line, 24"
- (46) Transverse Marking, Thermoplastic, Solid, White,  
Crosswalk Line, 24"
- (47) Mulched Seeding
- (R) ADA Ramp Detail

Line "A" is to be constructed.  
All R/W described from Line "GB"  
except as shown.



**VS ENGINEERING, INC.**

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Indianapolis, Indiana 46254  
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CONSTRUCTION**  
Preliminary  
9-27-18

RECOMMENDED FOR APPROVAL	DESIGN ENGINEER	DATE
DESIGNED: JD	DRAWN: DT	
CHECKED: MH	CHECKED: MH	

INDIANA  
DEPARTMENT OF TRANSPORTATION

MARQUETTE TRAIL  
LINE 'A' - PLAN & PROFILE

HORIZONTAL SCALE 1" = 20'	BRIDGE FILE N/A
VERTICAL SCALE 1" = 5'	DESIGNATION 1592335
SURVEY BOOK	SHEETS 13 of 63
CONTRACT R-38992	PROJECT 1592335



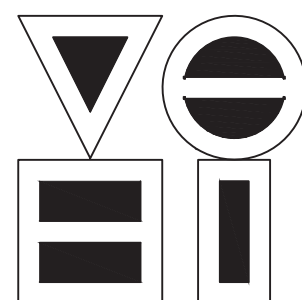
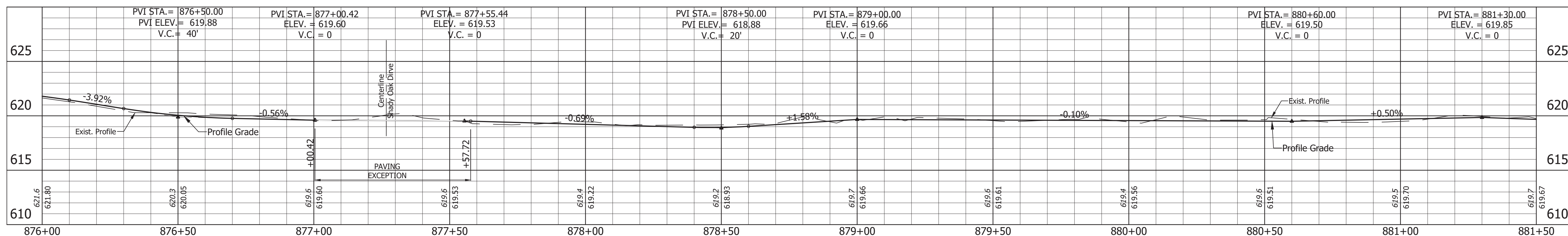
P.I. STA. 876+04.44  
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 $R = 10695.00'$   
 $T = 220.09'$   
 $L = 440.12'$   
 $E = 2.26'$

DUNES ART FOUNDATION INC  
PO BOX 384  
MICHIGAN CITY, IN 46361

Section 7, T38N, R3W  
Springfield Township  
LaPorte County, IN

DUNES ART FOUNDATION INC  
PO BOX 384  
MICHIGAN CITY, IN 46361

LAKE COUNTY TRUST #6189  
80 S DELAPLAINE RD  
RIVERSIDE, IL 60546

**VS ENGINEERING, INC.**

4275 North High School Road Indianapolis, Indiana 46254  
vsei@vsengineering.com www.vsengineering.com  
Phone: (317) 293-3542 Fax: (317) 293-4737

**NOT FOR  
CONSTRUCTION**  
Preliminary  
9-27-18

RECOMMENDED  
FOR APPROVAL

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DESIGN ENGINEER                      DATE

DESIGNED: JD	DRAWN: DT
CHECKED: MH	CHECKED: MH

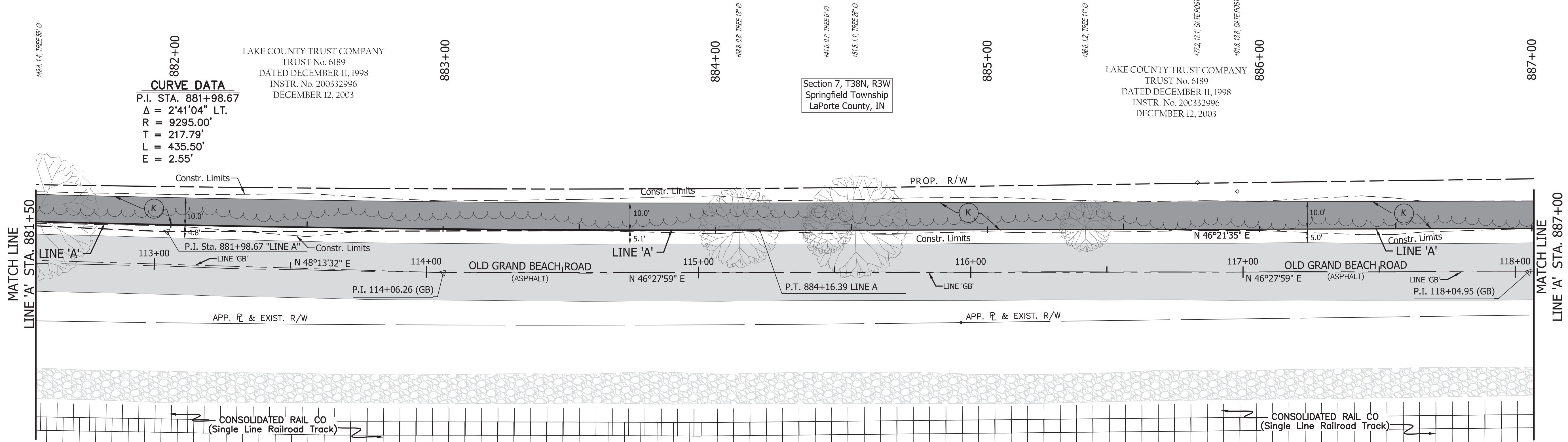
INDIANA  
DEPARTMENT OF TRANSPORTATION

MARQUETTE TRAIL  
LINE 'A' - PLAN & PROFILE

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VERTICAL SCALE	DESIGNATION		
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SURVEY BOOK		SHEETS	
	14	of	63
CONTRACT	PROJECT		
R-38992	1592335		



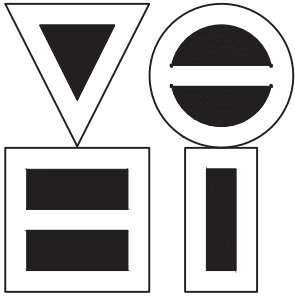
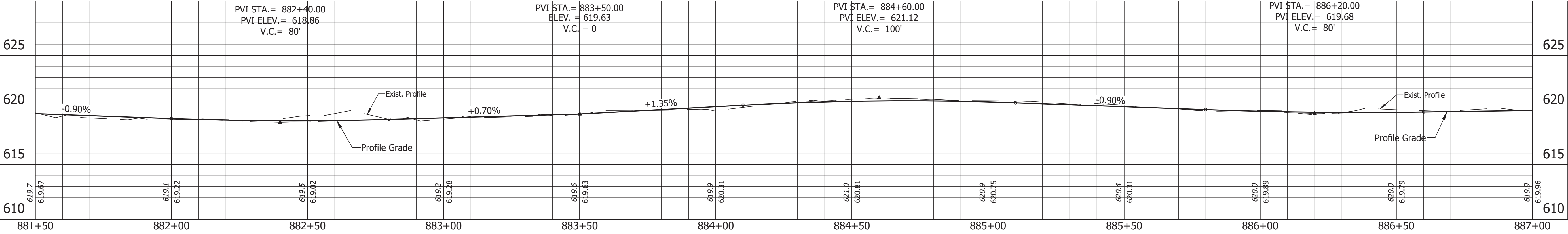
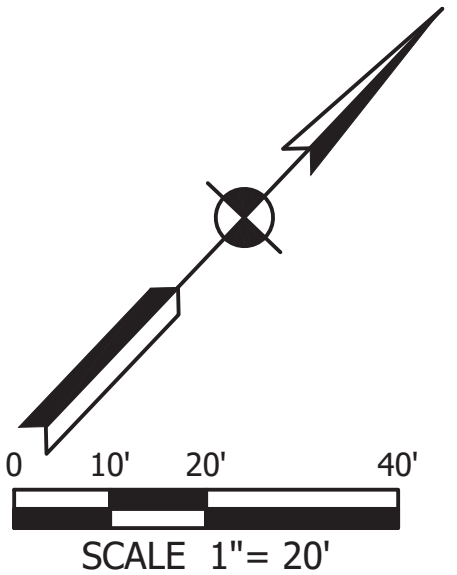
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PLOT BY: d.tienan  
DATE.....Nov 06 2018 - 2:07pm



LEGEND

- (Dr) HMA for Approaches (Residential)  
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- (R-3) ADA Ramp Detail

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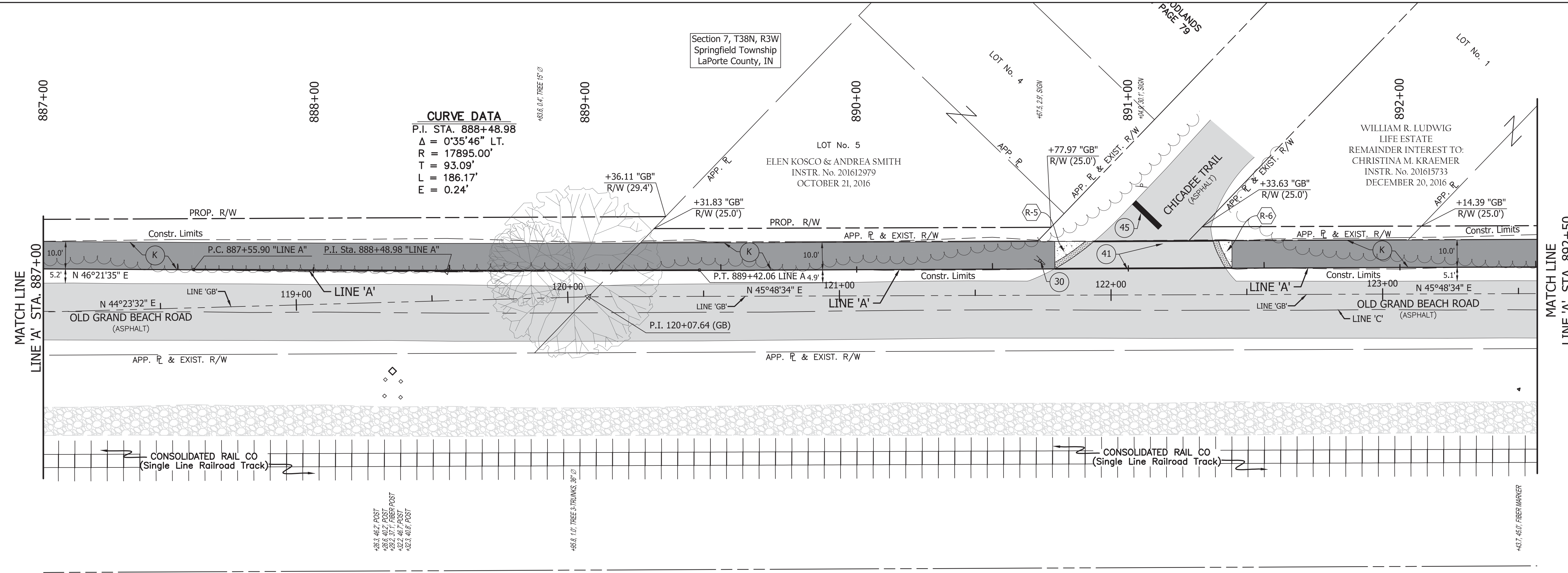
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DESIGNED: JD	DRAWN: DT	
CHECKED: MH	CHECKED: MH	

INDIANA DEPARTMENT OF TRANSPORTATION
MARQUETTE TRAIL LINE 'A' - PLAN & PROFILE

HORIZONTAL SCALE 1" = 20'	BRIDGE FILE N/A
VERTICAL SCALE 1" = 5'	DESIGNATION 1592335
SURVEY BOOK	SHEETS 15 of 63
CONTRACT R-38992	PROJECT 1592335



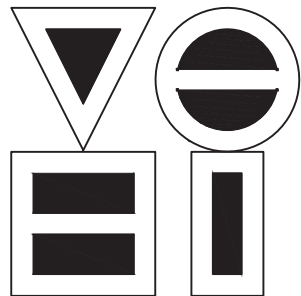
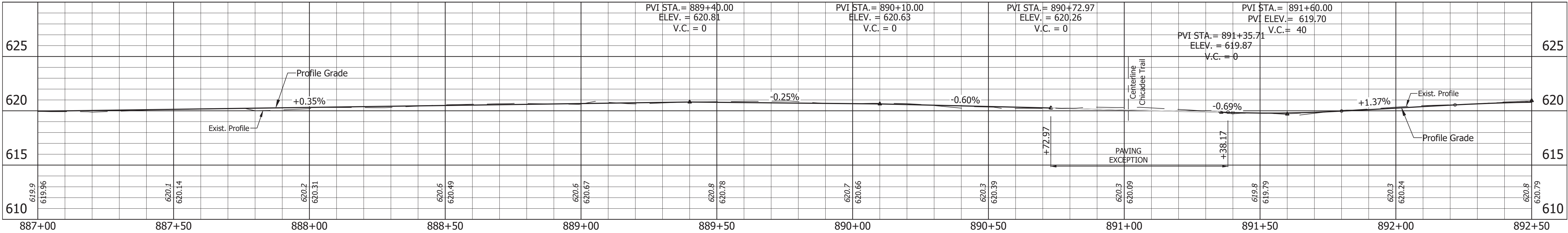
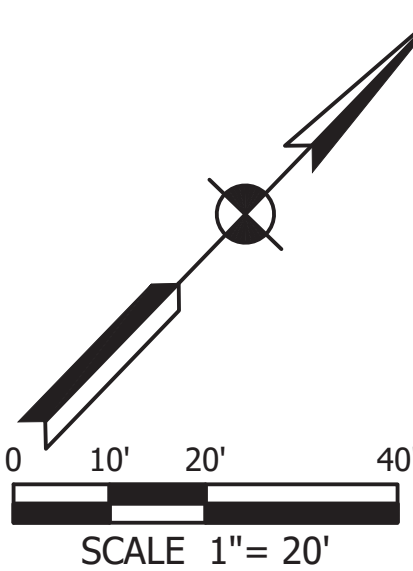
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DATE.....Nov 06, 2018 - 2:07pm



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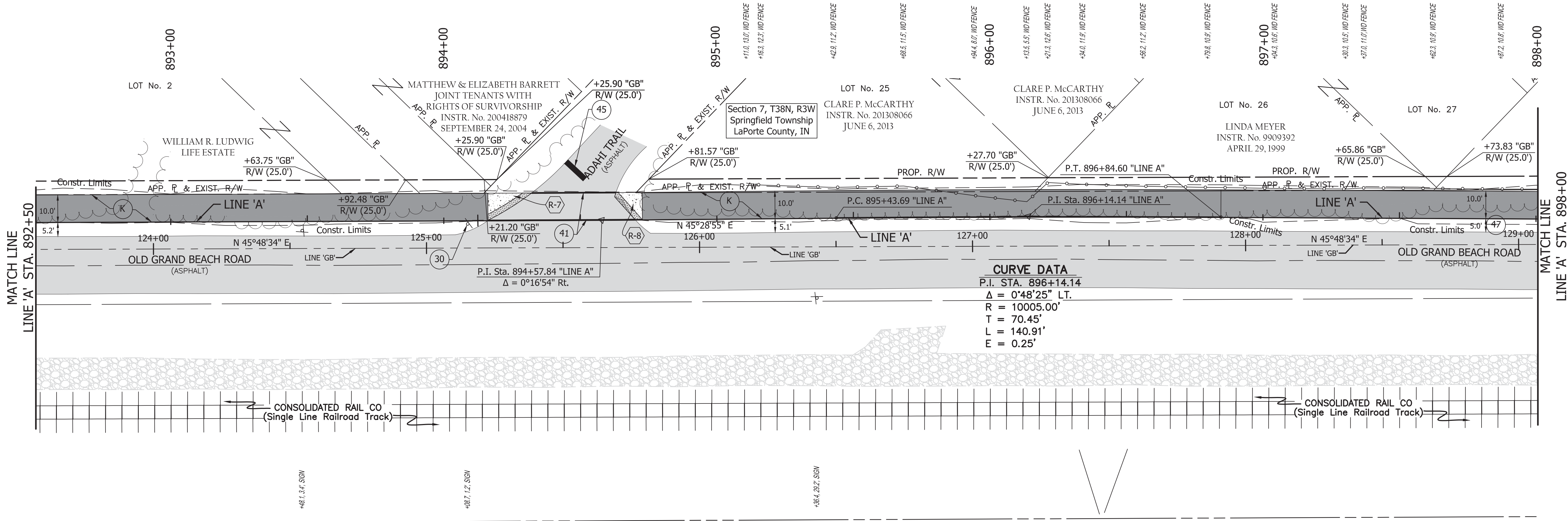
INDIANA  
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MARQUETTE TRAIL  
LINE 'A' - PLAN & PROFILE

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VERTICAL SCALE 1" = 5'	DESIGNATION 1592335
SURVEY BOOK	SHEETS 16 of 63
CONTRACT R-38992	PROJECT 1592335



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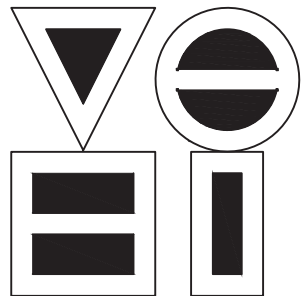
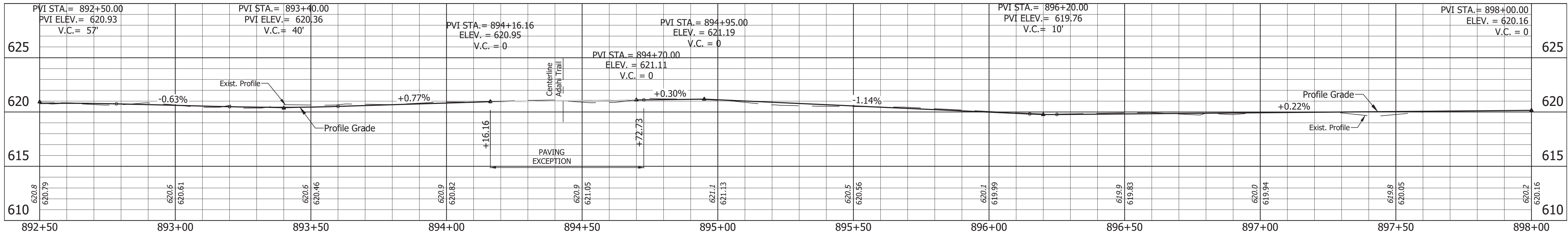
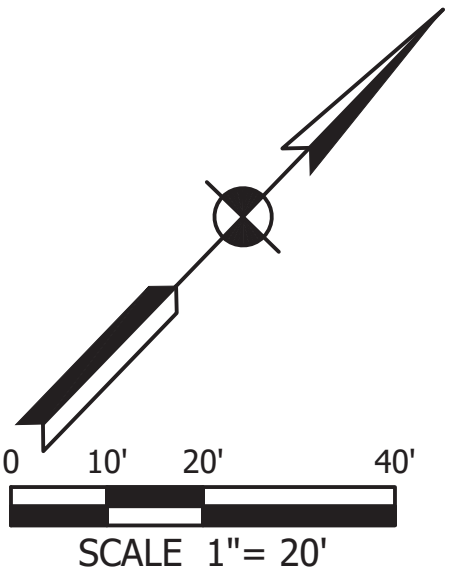


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LEGEND

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CHECKED: MH	CHECKED: MH	

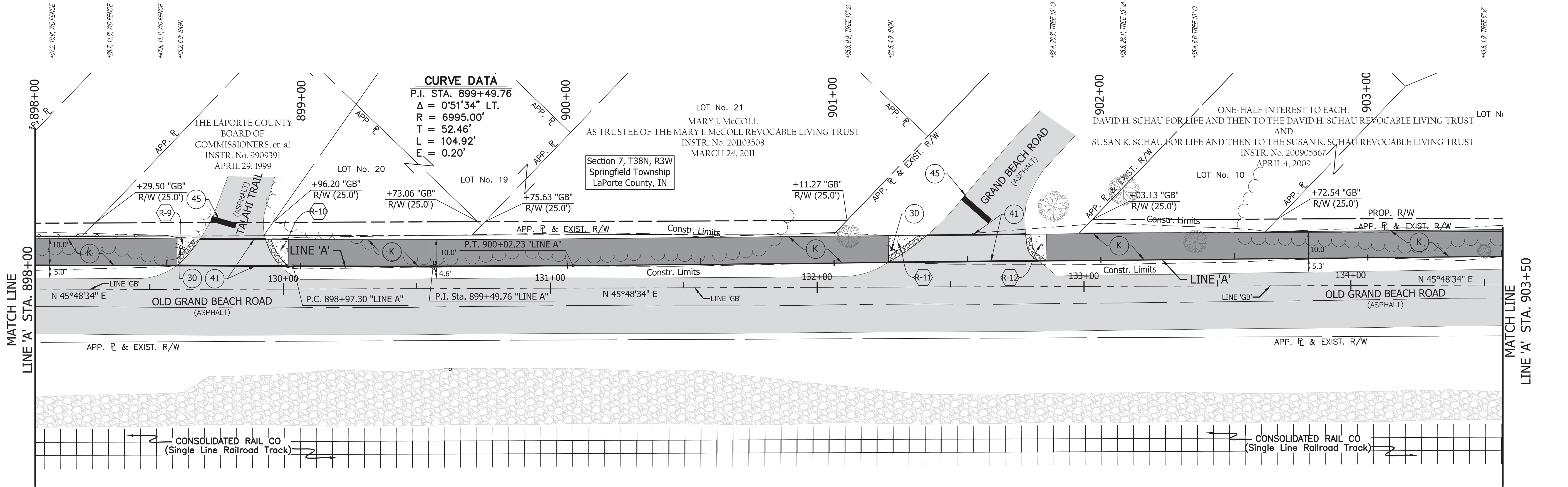
INDIANA  
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MARQUETTE TRAIL  
LINE 'A' - PLAN & PROFILE

HORIZONTAL SCALE 1" = 20'	BRIDGE FILE N/A
VERTICAL SCALE 1" = 5'	DESIGNATION 1592335
SURVEY BOOK	SHEETS 17 of 63
CONTRACT R-38992	PROJECT 1592335



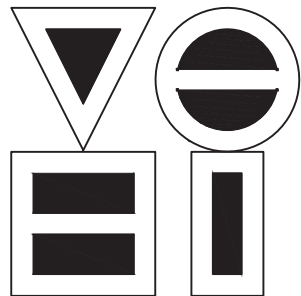
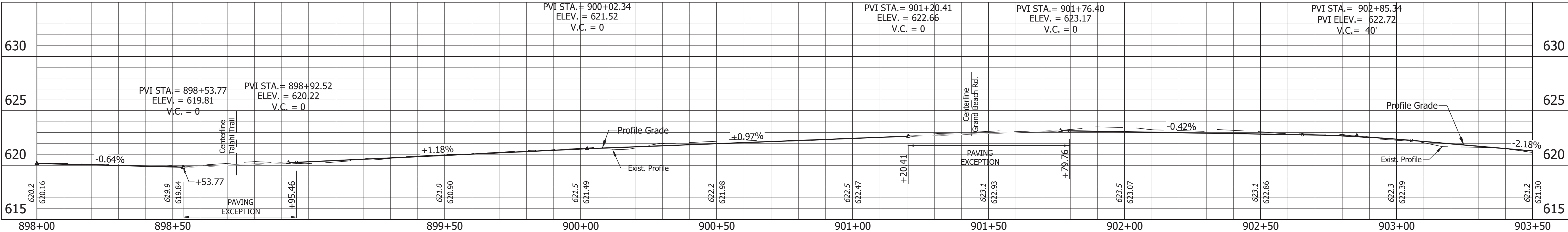
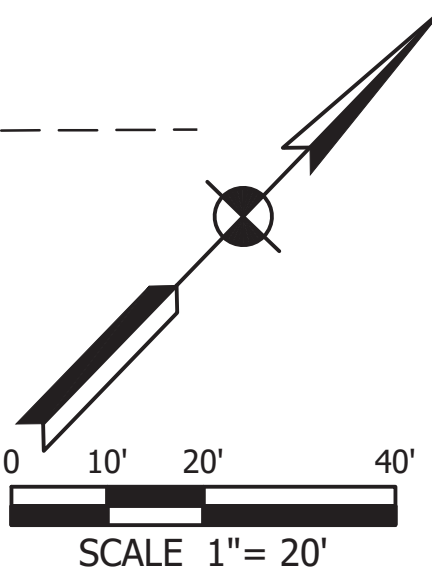
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PLOT BY.....d.tienan  
DATE.....Nov 07/2018 - 8:00am



LEGEND

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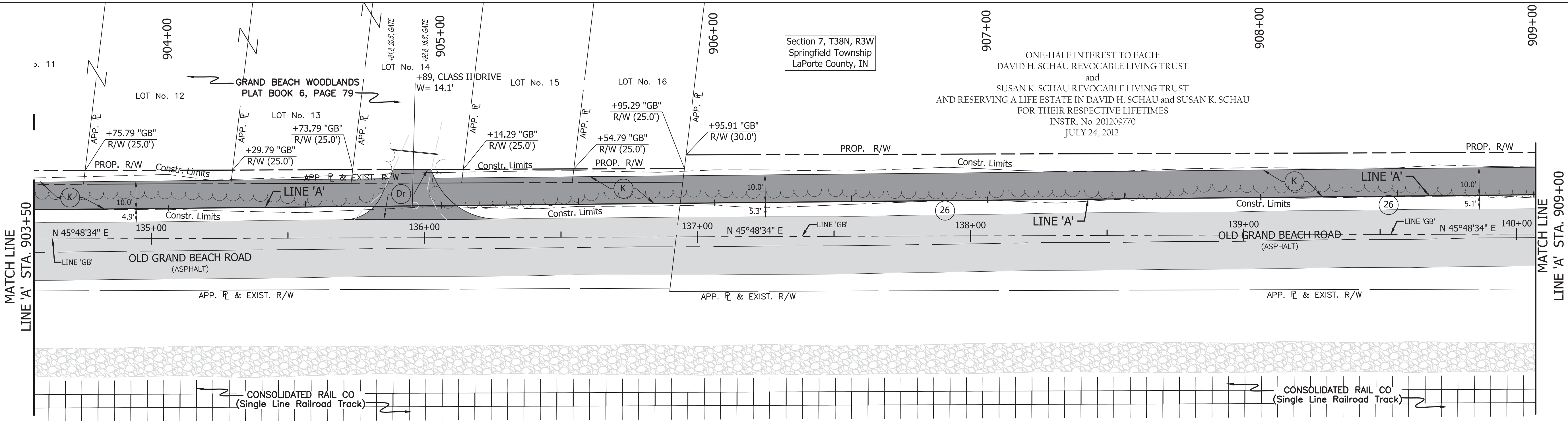
INDIANA  
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LINE 'A' - PLAN & PROFILE

HORIZONTAL SCALE 1" = 20'	BRIDGE FILE N/A
VERTICAL SCALE 1" = 5'	DESIGNATION 1592335
SURVEY BOOK	SHEETS 18 of 63
CONTRACT R-38992	PROJECT 1592335



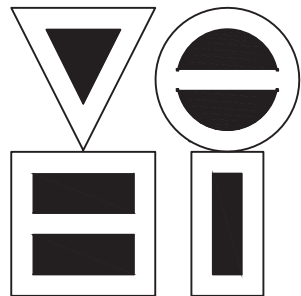
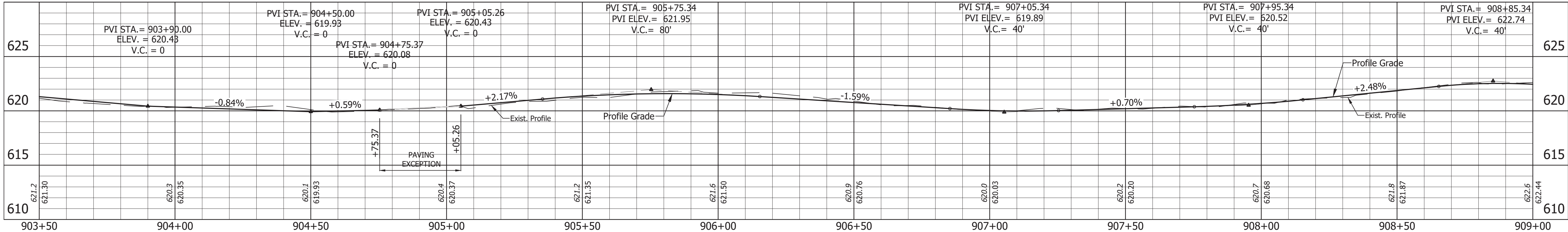
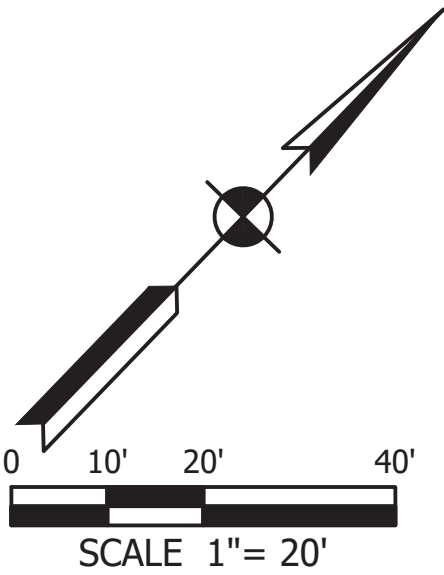
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LEGEND

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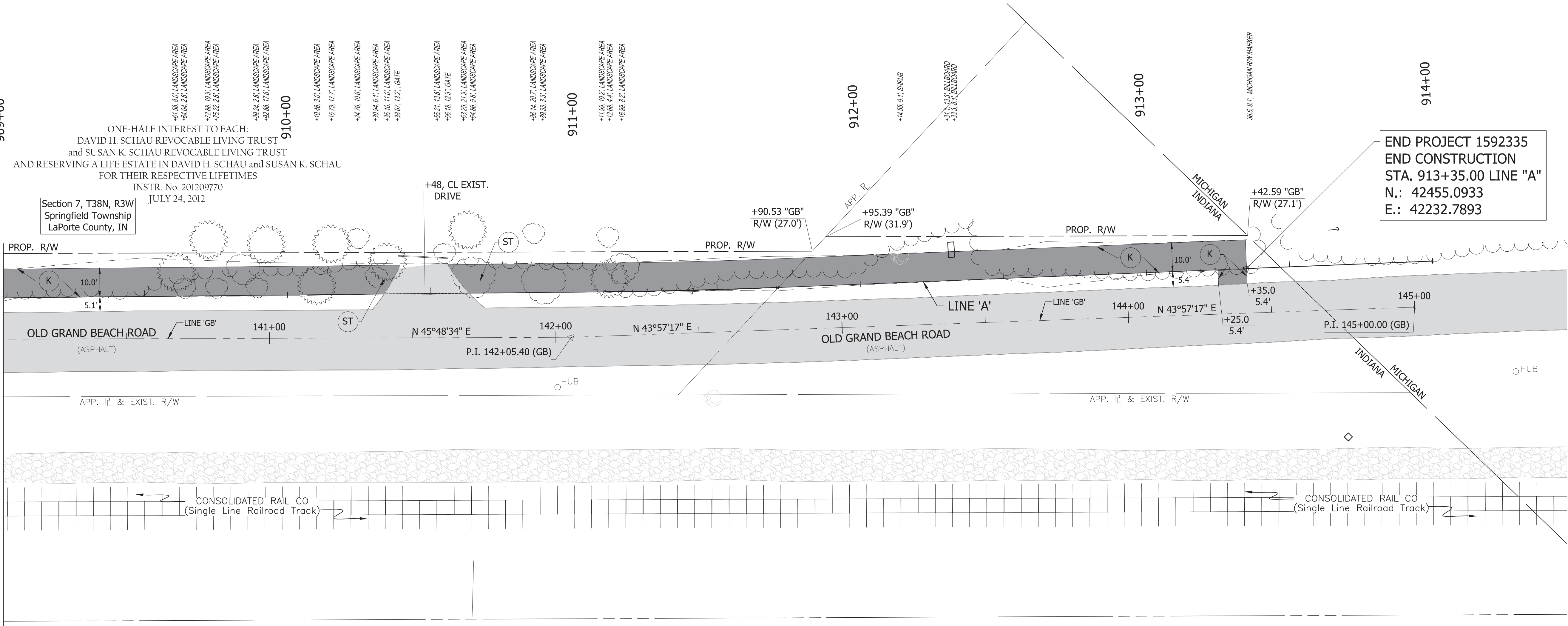
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LINE 'A' - PLAN & PROFILE

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SURVEY BOOK	SHEETS 19 of 63
CONTRACT R-38992	PROJECT 1592335



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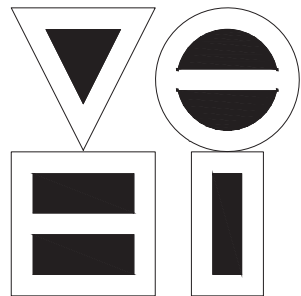
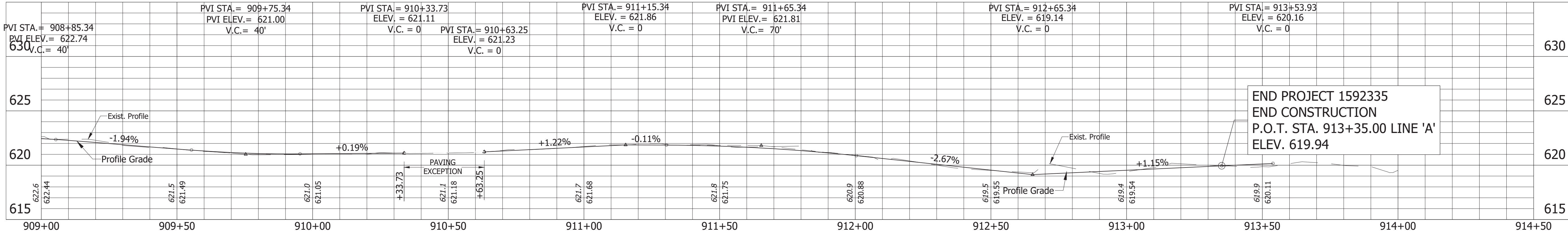
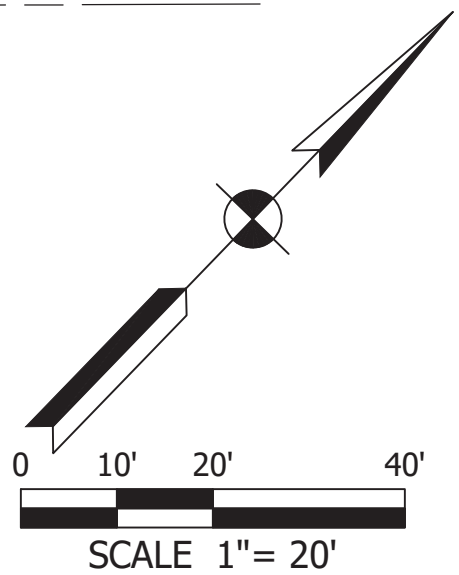
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LINE 'A' STA. 909+00



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DESIGNED: JD DRAWN: DT

CHECKED: MH CHECKED: MH

INDIANA  
DEPARTMENT OF TRANSPORTATION

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VERTICAL SCALE 1" = 5'	DESIGNATION 1592335
SURVEY BOOK	SHEETS 20 of 63
CONTRACT R-38992	PROJECT 1592335

# APPENDIX C:

## EARLY COORDINATION



## Early Coordination Letter

December 20, 2019

RE: Des. No. 1592335 Marquette Greenway Trail – Singing Sands Connector, LaPorte County, Indiana.

Dear agency personnel:

LaPorte County and the Indiana Department of Transportation (INDOT) intend to proceed with the aforementioned project. The project is located in Springfield Township of LaPorte County; in Section 7 of Township 38 North, Range 3 West. The project begins at the intersection of Grand Beach Road and El Portal Drive (Meer Road/CR 600 W) and travels northeast along Grand Beach Road to the Indiana/Michigan state line. Maps and aerial imagery of the proposed project location are attached.

This INDOT-sponsored project will use Federal-aid funding and is therefore subject to environmental review under the National Environmental Policy Act (NEPA). This letter is part of the early coordination phase of the environmental review process. We are requesting comments from your area of expertise regarding any possible environmental effects associated with this project. Please use the above designation number and description in your reply. We will incorporate your comments into a study of the project's environmental impacts.

This project is part of the regional Marquette Greenway Trail that will travel from the south side of Chicago, Illinois, through northern Indiana, and end in New Buffalo, Michigan. This portion of the trail, the Singing Sands Connector, is the Michiana Springs portion of the proposed trail. This project will install a 10'-wide paved trail on the northern side of Grand Beach Drive. The trail will be offset from the edge of Grand Beach Drive by four to five feet. The total project length is 1.02 miles. This portion of Grand Beach Road currently does not have pedestrian facilities. Installation will include an asphalt trail and ADA-compliant curb ramps and curbs at public road intersections.

Existing right-of-way widths vary through the project corridor. Portions of Grand Beach Road were not properly recorded and reacquisition will be required to establish public ownership of the existing roadway. Approximately 3.5 acres of permanent right-of-way will be acquired for this project; 1.1 acres of which is the reacquisition of the apparent existing right-of-way. Approximately 2.4 acres of new, permanent right-of-way will be acquired from the residential and commercial properties along the trail path. No relocations will be required. This project will not require a detour or closure of the road for construction, however advance warning signs will be posted and flaggers will be used as needed to restrict traffic to allow for construction activities. All inconveniences will be temporary and will cease upon project completion.

The project is located primarily in a residential area with scattered commercial properties. A waters and wetlands determination will be completed and will identify any potential waters or wetlands resources within the project area. There will be approximately 0.6 acre of tree clearing as part of this project. This project qualifies for the application of the USFWS range-wide programmatic informal consultation for the Indiana bat and northern long-eared bat. The range-wide programmatic consultation for the Indiana Bat and Northern Long-eared Bat will be completed according to "Using the USFWS's IPaC System for Listed Bat Consultation for INDOT Projects." This project appears to meet the conditions of the Minor Projects Programmatic Agreement for Section 106 resources. The proposed project is currently on the July 2022 letting schedule.

Should we not receive your response within thirty calendar days from the date of this letter, it will be assumed that your agency feels that there will be no adverse effects incurred as a result of the proposed project. However, should you find that an extension to the response time is necessary, a reasonable amount may be granted upon request. If you have any questions regarding this matter, please feel free to contact Alan Ball, VS Engineering, Inc., at [aball@vsengineering.com](mailto:aball@vsengineering.com); 317-293-3542 or Jamie Erdmann, INDOT Project Manager, at [jerdmann@indot.in.gov](mailto:jerdmann@indot.in.gov) or 219-325-7484. Thank you in advance for your input.

Sincerely,



Alan Ball  
Senior Scientist & NEPA Lead  
VS Engineering, Inc.

## Attachments:

Figure 1 Project Location Map  
Figure 2 Road Map  
Figure 3 Topographic Map  
Figure 4 Aerial Image, 2012  
Figure 5 Photo Orientation Map  
Figure 6 Project Area Photographs

Photos and figures included in Early  
Coordination can be found in Appendix B

Please note that the Seymour District  
listed here is a typo

cc: Federal Highway Administration, Seymour District (electronic communication)  
Indiana Department of Transportation, LaPorte District Office (electronic communication)  
Indiana Department of Transportation, Office of Aviation (electronic communication)  
Indiana Department of Transportation, Public Involvement (electronic communication)  
US Fish and Wildlife Service, Northern Indiana Sub-office (electronic communication)  
Indiana Department of Natural Resources, Div. of Fish and Wildlife (electronic communication)  
Indiana Department of Natural Resources, Div. of Oil and Gas (electronic communication)  
Indiana Department of Natural Resources, Div. of Outdoor Recreation (electronic communication)  
Indiana Geological Survey (electronic communication)  
Indiana Department of Environmental Management (electronic coordination)  
US Department of Housing and Urban Development, Region 5 (electronic communication)  
National Park Service, Regional Environmental Coordinator  
Natural Resources Conservation Service, State Conservationist (electronic communication)  
Michigan City Parks and Recreation Department (electronic communication)  
Michiana Shores Park Board  
Michiana Shores Planning and Building Commission (electronic communication)  
Michiana Shores Town Clerk (electronic communication)  
Michiana Shores Fire Department  
Long Beach Police Department (electronic communication)  
LaPorte County Highway Department  
LaPorte County Soil and Water Conservation (electronic communication)  
LaPorte County Parks and Recreation (electronic communication)  
Michigan City School District  
Northwestern Indiana Regional Planning Commission (electronic communication)  
LaPorte County MS4 Coordinator (electronic communication)



# Indiana Department of Environmental Management

*We Protect Hoosiers and Our Environment.*

100 North Senate Avenue - Indianapolis, IN 46204  
(800) 451-6027 - (317) 232-8603 - [www.idem.IN.gov](http://www.idem.IN.gov)

INDOT  
Jami Erdmann  
315 E. Boyd Blvd.  
LaPorte , IN 46350  
Date

VS Engineering  
Mark Herald  
4275 N High School Road  
Indianapolis , IN 46254

To Engineers and Consultants Proposing Roadway Construction Projects:

RE: Marquette Greenway Trail - Singing Sands Connector

This letter from the Indiana Department of Environmental Management (IDEM) serves as a standardized response to enquiries inviting IDEM comments on roadway construction, reconstruction, or other improvement projects within existing roadway corridors when the proposed scope of the project is beneath the threshold requiring a formal National Environmental Policy Act-mandated Environmental Assessment or Environmental Impact Statement. As the letter attempts to address all roadway-related environmental topics of potential concern, it is possible that not every topic addressed in the letter will be applicable to your particular roadway project.

For additional information on specific roadway-related topics of interest, please visit the appropriate Web pages cited below, many of which provide contact information for persons within the various program areas who can answer questions not fully addressed in this letter. Also please be mindful that some environmental requirements may be subject to change and so each person intending to include a copy of this letter in their project documentation packet is advised to download the most recently revised version of the letter; found at: <http://www.in.gov/idem/5283.htm> (<http://www.in.gov/idem/5283.htm>).

To ensure that all environmentally-related issues are adequately addressed, IDEM recommends that you read this letter in its entirety, and consider each of the following issues as you move forward with the planning of your proposed roadway construction, reconstruction, or improvement project:

## WATER AND BIOTIC QUALITY

1. Section 404 of the Clean Water Act requires that you obtain a permit from the U.S. Army Corps of Engineers (USACE) before discharging dredged or fill materials into any wetlands or other waters, such as rivers, lakes, streams, and ditches. Other activities regulated include the relocation, channelization, widening, or other such alteration of a stream, and the mechanical clearing (use of heavy construction equipment) of wetlands. Thus, as a project owner or sponsor, it is your responsibility to ensure that no wetlands are disturbed without the proper permit. Although you may initially refer to the U.S. Fish and Wildlife Service National Wetland Inventory maps as a means of identifying potential areas of concern, please be mindful that those maps do not depict jurisdictional wetlands regulated by the USACE or the Department of Environmental Management. A valid jurisdictional wetlands determination can only be made by the USACE, using the 1987 Wetland Delineation Manual.

USACE recommends that you have a consultant check to determine whether your project will abut, or lie within, a wetland area. To view a list of consultants that have requested to be included on a list posted by the USACE on their Web site, see USACE Permits and Public Notices (<http://www.lrl.usace.army.mil/orf/default.asp>) (<http://www.lrl.usace.army.mil/orf/default.asp>) and then click on "Information" from the menu on the right-hand side of that page. Their "Consultant List" is the fourth entry down on the "Information" page. Please note that the USACE posts all consultants that request to appear on the list, and that inclusion of any particular consultant on the list does not represent an endorsement of that consultant by the USACE, or by IDEM.

Much of northern Indiana (Newton, Lake, Porter, LaPorte, St. Joseph, Elkhart, LaGrange, Steuben, and Dekalb counties; large portions of Jasper, Starke, Marshall, Noble, Allen, and Adams counties; and lesser portions of Benton, White, Pulaski, Kosciusko, and Wells counties) is served by the USACE District Office in Detroit (313-226-6812). The central and southern portions of the state (large portions of Benton, White, Pulaski, Kosciusko, and Wells counties; smaller portions of Jasper, Starke, Marshall, Noble, Allen, and Adams counties; and all other Indiana counties located in north-central, central, and southern Indiana ) are served by the USACE Louisville District Office (502-315-6733).

Additional information on contacting these U.S. Army Corps of Engineers (USACE) District Offices, government agencies with jurisdiction over wetlands, and other water quality issues, can be found at <http://www.in.gov/idem/4396.htm> (<http://www.in.gov/idem/4396.htm>). IDEM recommends that impacts to wetlands and other water resources be avoided to the fullest extent.

2. In the event a Section 404 wetlands permit is required from the USACE, you also must obtain a Section 401 Water Quality Certification from the IDEM Office of Water Quality Wetlands Program. To learn more about the Wetlands Program, visit: <http://www.in.gov/idem/4384.htm> (<http://www.in.gov/idem/4384.htm>).
3. If the USACE determines that a wetland or other water body is isolated and not subject to Clean Water Act regulation, it is still regulated by the state of Indiana . A State Isolated Wetland permit from IDEM's Office of Water Quality (OWQ) is required for any activity that results in the discharge of dredged or fill materials into isolated wetlands. To learn more about isolated wetlands, contact the OWQ Wetlands Program at 317-233-8488.
4. If your project will involve over a 0.5 acre of wetland impact, stream relocation, or other large-scale alterations to water bodies such as the creation of a dam or a water diversion, you should seek additional input from the OWQ Wetlands Program staff. Consult the Web at: <http://www.in.gov/idem/4384.htm> (<http://www.in.gov/idem/4384.htm>) for the appropriate staff contact to further discuss your project.
5. Work within the one-hundred year floodway of a given water body is regulated by the Department of Natural Resources, Division of Water. The Division issues permits for activities regulated under the follow statutes:
  - IC 14-26-2 Lakes Preservation Act 312 IAC 11
  - IC 14-26-5 Lowering of Ten Acre Lakes Act No related code
  - IC 14-28-1 Flood Control Act 310 IAC 6-1
  - IC 14-29-1 Navigable Waterways Act 312 IAC 6
  - IC 14-29-3 Sand and Gravel Permits Act 312 IAC 6
  - IC 14-29-4 Construction of Channels Act No related code

For information on these Indiana (statutory) Code and Indiana Administrative Code citations, see the DNR Web site at: <http://www.in.gov/dnr/water/9451.htm> (<http://www.in.gov/dnr/water/9451.htm>) . Contact the DNR Division of Water at 317-232-4160 for further information.

The physical disturbance of the stream and riparian vegetation, especially large trees overhanging any affected water bodies should be limited to only that which is absolutely necessary to complete the project. The shade provided by the large overhanging trees helps maintain proper stream temperatures and dissolved oxygen for aquatic life.

6. For projects involving construction activity (which includes clearing, grading, excavation and other land disturbing activities) that result in the disturbance of one (1), or more, acres of total land area, contact the Office of Water Quality – Watershed Planning Branch (317/233-1864) regarding the need for of a Rule 5 Storm Water Runoff Permit. Visit the following Web page
  - <http://www.in.gov/idem/4902.htm> (<http://www.in.gov/idem/4902.htm>)

To obtain, and operate under, a Rule 5 permit you will first need to develop a Construction Plan (<http://www.in.gov/idem/4917.htm#constreq> (<http://www.in.gov/idem/4917.htm#constreq>)), and as described in 327 IAC 15-5-6.5 (<http://www.in.gov/legislative/iac/T03270/A00150> [PDF] (<http://www.in.gov/legislative/iac/T03270/A00150.PDF>), pages 16 through 19). Before you may apply for a Rule 5 Permit, or begin construction, you must submit your Construction Plan to your county Soil and Water Conservation District (SWCD) (<http://www.in.gov/isda/soil/contacts/map.html> (<http://www.in.gov/isda/soil/contacts/map.html>)).

Upon receipt of the construction plan, personnel of the SWCD or the Indiana Department of Environmental Management will review the plan to determine if it meets the requirements of 327 IAC 15-5. Plans that are deemed deficient will require re-submittal. If the plan is sufficient you will be notified and instructed to submit the verification to IDEM as part of the Rule 5 Notice of Intent (NOI) submittal. Once construction begins, staff of the SWCD or Indiana Department of Environmental Management will perform inspections of activities at the site for compliance with the regulation.

Please be mindful that approximately 149 Municipal Separate Storm Sewer System (MS4) areas are now being established by various local governmental entities throughout the state as part of the implementation of Phase II federal storm water requirements. All of these MS4 areas will eventually take responsibility for Construction Plan review, inspection, and enforcement. As these MS4 areas obtain program approval from IDEM, they will be added to a list of MS4 areas posted on the IDEM Website at: <http://www.in.gov/idem/4900.htm> (<http://www.in.gov/idem/4900.htm>).

If your project is located in an IDEM-approved MS4 area, please contact the local MS4 program about meeting their storm water requirements. Once the MS4 approves the plan, the NOI can be submitted to IDEM.

Regardless of the size of your project, or which agency you work with to meet storm water requirements, IDEM recommends that appropriate structures and techniques be utilized both during the construction phase, and after completion of the project, to minimize the impacts associated with storm water runoff. The use of appropriate planning and site development and appropriate storm water quality measures are recommended to prevent soil from leaving the construction site during active land disturbance and for post construction water quality concerns. Information and assistance regarding storm water related to construction activities are available from the Soil and Water Conservation District (SWCD) offices in each county or from IDEM.

7. For projects involving impacts to fish and botanical resources, contact the Department of Natural Resources - Division of Fish and Wildlife (317/232-4080) for addition project input.
8. For projects involving water main construction, water main extensions, and new public water supplies, contact the Office of Water Quality - Drinking Water Branch (317-308-3299) regarding the need for permits.



9. For projects involving effluent discharges to waters of the State of Indiana, contact the Office of Water Quality - Permits Branch (317-233-0468) regarding the need for a National Pollutant Discharge Elimination System (NPDES) permit.
10. For projects involving the construction of wastewater facilities and sewer lines, contact the Office of Water Quality - Permits Branch (317-232-8675) regarding the need for permits.

## AIR QUALITY

The above-noted project should be designed to minimize any impact on ambient air quality in, or near, the project area. The project must comply with all federal and state air pollution regulations. Consideration should be given to the following:

1. Regarding open burning, and disposing of organic debris generated by land clearing activities; some types of open burning are allowed (<http://www.in.gov/idem/4148.htm> (<http://www.in.gov/idem/4148.htm>)) under specific conditions. You also can seek an open burning variance from IDEM.

However, IDEM generally recommends that you take vegetative wastes to a registered yard waste composting facility or that the waste be chipped or shredded with composting on site (you must register with IDEM if more than 2,000 pounds is to be composted; contact 317/232-0066). The finished compost can then be used as a mulch or soil amendment. You also may bury any vegetative wastes (such as leaves, twigs, branches, limbs, tree trunks and stumps) onsite, although burying large quantities of such material can lead to subsidence problems, later on.

Reasonable precautions must be taken to minimize fugitive dust emissions from construction and demolition activities. For example, wetting the area with water, constructing wind barriers, or treating dusty areas with chemical stabilizers (such as calcium chloride or several other commercial products). Dirt tracked onto paved roads from unpaved areas should be minimized.

Additionally, if construction or demolition is conducted in a wooded area where blackbirds have roosted or abandoned buildings or building sections in which pigeons or bats have roosted for 3-5 years precautionary measures should be taken to avoid an outbreak of histoplasmosis. This disease is caused by the fungus *Histoplasma capsulatum*, which stems from bird or bat droppings that have accumulated in one area for 3-5 years. The spores from this fungus become airborne when the area is disturbed and can cause infections over an entire community downwind of the site. The area should be wetted down prior to cleanup or demolition of the project site. For more detailed information on histoplasmosis prevention and control, please contact the Acute Disease Control Division of the Indiana State Department of Health at (317) 233-7272.

2. The U.S. EPA and the Surgeon General recommend that people not have long-term exposure to radon at levels above 4 pCi/L. (For a county-by-county map of predicted radon levels in Indiana, visit: <http://www.in.gov/idem/4145.htm> (<http://www.in.gov/idem/4145.htm>).)

The U.S. EPA further recommends that all homes (and apartments within three stories of ground level) be tested for radon. If in-home radon levels are determined to be 4 pCi/L, or higher, EPA recommends a follow-up test. If the second test confirms that radon levels are 4 pCi/L, or higher, EPA recommends the installation of radon-reduction measures. (For a list of qualified radon testers and radon mitigation (or reduction) specialists visit: [http://www.in.gov/isdh/regsvcs/radhealth/pdfs/radon\\_testers\\_mitigators\\_list.pdf](http://www.in.gov/isdh/regsvcs/radhealth/pdfs/radon_testers_mitigators_list.pdf) ([http://www.in.gov/isdh/regsvcs/radhealth/pdfs/radon\\_testers\\_mitigators\\_list.pdf](http://www.in.gov/isdh/regsvcs/radhealth/pdfs/radon_testers_mitigators_list.pdf))). It also is recommended that radon reduction measures be built into all new homes, particularly in areas like Indiana that have moderate to high predicted radon levels.

To learn more about radon, radon risks, and ways to reduce exposure visit:

<http://www.in.gov/isdh/regsvcs/radhealth/radon.htm> (<http://www.in.gov/isdh/regsvcs/radhealth/radon.htm>),  
<http://www.in.gov/idem/4145.htm> (<http://www.in.gov/idem/4145.htm>), or <http://www.epa.gov/radon/index.html>  
(<http://www.epa.gov/radon/index.html>).

3. With respect to asbestos removal: all facilities slated for renovation or demolition (except residential buildings that have (4) four or fewer dwelling units and which will not be used for commercial purposes) must be inspected by an Indiana-licensed asbestos inspector prior to the commencement of any renovation or demolition activities. If regulated asbestos-containing material (RACM) that may become airborne is found, any subsequent demolition, renovation, or asbestos removal activities must be performed in accordance with the proper notification and emission control requirements.

If no asbestos is found where a renovation activity will occur, or if the renovation involves removal of less than 260 linear feet of RACM off of pipes, less than 160 square feet of RACM off of other facility components, or less than 35 cubic feet of RACM off of all facility components, the owner or operator of the project does not need to notify IDEM before beginning the renovation activity.

For questions on asbestos demolition and renovation activities, you can also call IDEM's Lead/Asbestos section at 1-888-574-8150.

However, in all cases where a demolition activity will occur (even if no asbestos is found), the owner or operator must still notify IDEM 10 working days prior to the demolition, using the form found at <http://www.in.gov/icpr/webfile/formsdiv/44593.pdf> (<http://www.in.gov/icpr/webfile/formsdiv/44593.pdf>).

Anyone submitting a renovation/demolition notification form will be billed a notification fee based upon the amount of friable asbestos containing material to be removed or demolished. Projects that involve the removal of more than 2,600 linear feet of friable asbestos containing materials on pipes, or 1,600 square feet or 400 cubic feet of friable asbestos containing material on other facility components, will be billed a fee of \$150 per project; projects below these amounts will be billed a fee of \$50 per project. All notification remitters will be billed on a quarterly basis.

For more information about IDEM policy regarding asbestos removal and disposal, visit:  
<http://www.in.gov/idem/4983.htm> (<http://www.in.gov/idem/4983.htm>).

4. With respect to lead-based paint removal: IDEM encourages all efforts to minimize human exposure to lead-based paint chips and dust. IDEM is particularly concerned that young children exposed to lead can suffer from learning disabilities. Although lead-based paint abatement efforts are not mandatory, any abatement that is conducted within housing built before January 1, 1978, or a child-occupied facility is required to comply with all lead-based paint work practice standards, licensing and notification requirements. For more information about lead-based paint removal visit: <http://www.in.gov/isdh/19131.htm>  
(<http://www.in.gov/isdh/19131.htm>).
5. Ensure that asphalt paving plants are permitted and operate properly. The use of cutback asphalt, or asphalt emulsion containing more than seven percent (7%) oil distillate, is prohibited during the months April through October. See 326 IAC 8-5-2, Asphalt Paving Rule  
(<http://www.ai.org/legislative/iac/T03260/A00080.PDF>  
(<http://www.ai.org/legislative/iac/T03260/A00080.PDF>)).
6. If your project involves the construction of a new source of air emissions or the modification of an existing source of air emissions or air pollution control equipment, it will need to be reviewed by the IDEM Office of Air Quality (OAQ). A registration or permit may be required under 326 IAC 2 (View at:

[www.ai.org/legislative/iac/t03260/a00020.pdf](http://www.ai.org/legislative/iac/t03260/a00020.pdf) (<http://www.ai.org/legislative/iac/t03260/a00020.pdf>.) New sources that use or emit hazardous air pollutants may be subject to Section 112 of the Clean Air Act and corresponding state air regulations governing hazardous air pollutants.

7. For more information on air permits visit: <http://www.in.gov/idem/4223.htm> (<http://www.in.gov/idem/4223.htm>), or to initiate the IDEM air permitting process, please contact the Office of Air Quality Permit Reviewer of the Day at (317) 233-0178 or OAMPROD at [adem.state.in.us](mailto:adem.state.in.us).

## LAND QUALITY

In order to maintain compliance with all applicable laws regarding contamination and/or proper waste disposal, IDEM recommends that:

1. If the site is found to contain any areas used to dispose of solid or hazardous waste, you need to contact the Office of Land Quality (OLQ) at 317-308-3103.
2. All solid wastes generated by the project, or removed from the project site, need to be taken to a properly permitted solid waste processing or disposal facility. For more information, visit <http://www.in.gov/idem/4998.htm> (<http://www.in.gov/idem/4998.htm>).
3. If any contaminated soils are discovered during this project, they may be subject to disposal as hazardous waste. Please contact the OLQ at 317-308-3103 to obtain information on proper disposal procedures.
4. If PCBs are found at this site, please contact the Industrial Waste Section of OLQ at 317-308-3103 for information regarding management of any PCB wastes from this site.
5. If there are any asbestos disposal issues related to this site, please contact the Industrial Waste Section of OLQ at 317-308-3103 for information regarding the management of asbestos wastes (Asbestos removal is addressed above, under Air Quality).
6. If the project involves the installation or removal of an underground storage tank, or involves contamination from an underground storage tank, you must contact the IDEM Underground Storage Tank program at 317/308-3039. See: <http://www.in.gov/idem/4999.htm> (<http://www.in.gov/idem/4999.htm>).

## FINAL REMARKS

Should you need to obtain any environmental permits in association with this proposed project, please be mindful that IC 13-15-8 requires that you notify all adjoining property owners and/or occupants within ten days your submittal of each permit application. However, if you are seeking multiple permits, you can still meet the notification requirement with a single notice if all required permit applications are submitted with the same ten day period.

Should the scope of the proposed project be expanded to the extent that a National Environmental Policy Act Environmental Assessment (EA) or Environmental Impact Statement (EIS) is required, IDEM will actively participate in any early interagency coordination review of the project.

Meanwhile, please note that this letter does not constitute a permit, license, endorsement or any other form of approval on the part of the Indiana Department of Environmental Management regarding any project for which a copy of this letter is used. Also note that it is the responsibility of the project engineer or consultant using this letter to ensure that the most current draft of this document, which is located at <http://www.in.gov/idem/5284.htm> (<http://www.in.gov/idem/5284.htm>), is used.

## Signature(s) of the Applicant

I acknowledge that the following proposed roadway project will be financed in part, or in whole, by public monies.

### Project Description

Marquette Greenway Trail - Singing Sands Connector

With my signature, I do hereby affirm that I have read the letter from the Indiana Department of Environment that appears directly above. In addition, I understand that in order to complete that project in which I am interested, with a minimum of impact to the environment, I must consider all the issues addressed in the aforementioned letter, and further, that I must obtain any required permits.

Date: 4/22/2020

Signature of the INDOT

Project Engineer or Other Responsible Agent



Jami Erdmann

Date: 4/22/20

Signature of the

For Hire Consultant



Mark Herald

**State of Indiana**  
**DEPARTMENT OF NATURAL RESOURCES**  
**Division of Fish and Wildlife**  
**Early Coordination/Environmental Assessment**

**DNR #:** ER-22080

**Request Received:** December 20, 2019

**Requestor:** VS Engineering, Inc  
Alan Ball  
4275 North High School Road  
Indianapolis, IN 46254

**Project:** Marquette Greenway Trail - Singing Sands Connector: construction of a 10' wide paved trail along the north side of Grand Beach Drive between El Portal Drive and the Michigan state line, Michiana Shores; Des #1592335

**County/Site info:** LaPorte

The Indiana Department of Natural Resources has reviewed the above referenced project per your request. Our agency offers the following comments for your information and in accordance with the National Environmental Policy Act of 1969.

If our agency has regulatory jurisdiction over the project, the recommendations contained in this letter may become requirements of any permit issued. If we do not have permitting authority, all recommendations are voluntary.

\*NOTE: This project is within the Lake Michigan Coastal Program's boundary; therefore, it may be subject to Federal Consistency (FC) review. Please go to <http://www.in.gov/dnr/lakemich/files/20070214-IR-312070085NRA.xml.pdf> (Section III, pages 8-16) to see the federal activities that require a project to go through the FC process which is outlined at <http://www.in.gov/dnr/lakemich/6041.htm>.

**Regulatory Assessment:** Formal approval by the Department of Natural Resources under the regulatory programs administered by the Division of Water is not required for this project.

**Natural Heritage Database:** The Natural Heritage Program's data have been checked. The plant species below have been documented within 1/2 mile of the project area. The Division of Nature Preserves does not anticipate any impacts to these plant species as a result of this project.

1. Finely-nerved Sedge (*Carex leptoneura*), state endangered
2. Deep-root Clubmoss (*Diplazium tristachyum*), state threatened
3. Shining Ladies'-tresses (*Spiranthes lucida*), state rare

**Fish & Wildlife Comments:** 1) Forested/Riparian Habitat:  
We recommend a mitigation plan be developed (and submitted with the permit application, if required) for any unavoidable habitat impacts that will occur. The DNR's Floodway Habitat Mitigation guidelines (and plant lists) can be found online at: <http://www.in.gov/legislative/iac/20190130-IR-312190041NRA.xml.pdf>.

Impacts to non-wetland forest of one (1) acre or more should be mitigated at a minimum 2:1 ratio. If less than one acre of non-wetland forest is removed in a rural setting, replacement should be at a 1:1 ratio based on area. Impacts to non-wetland forest under one (1) acre in an urban setting should be mitigated by planting five trees, at least 2 inches in diameter-at-breast height (dbh), for each tree which is removed that is 10" dbh or greater (5:1 mitigation based on the number of large trees).

THIS IS NOT A PERMIT

**State of Indiana**  
**DEPARTMENT OF NATURAL RESOURCES**  
**Division of Fish and Wildlife**  
**Early Coordination/Environmental Assessment**

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The additional measures listed below should be implemented to avoid, minimize, or compensate for impacts to fish, wildlife, and botanical resources:

1. Revegetate all bare and disturbed areas with a mixture of grasses (excluding all varieties of tall fescue) and legumes as soon as possible upon completion; low endophyte tall fescue may be used in the ditch bottom and side slopes only.
2. Do not cut any trees suitable for Indiana bat or Northern Long-eared bat roosting (greater than 5 inches dbh, living or dead, with loose hanging bark, or with cracks, crevices, or cavities) from April 1 through September 30.
3. Appropriately designed measures for controlling erosion and sediment must be implemented to prevent sediment from entering the stream or leaving the construction site; maintain these measures until construction is complete and all disturbed areas are stabilized.
4. Seed and protect all disturbed streambanks and slopes not protected by other methods that are 3:1 or steeper with erosion control blankets that are heavy-duty, biodegradable, and net free or that use loose-woven / Leno-woven netting to minimize the entrapment and snaring of small-bodied wildlife such as snakes and turtles (follow manufacturer's recommendations for selection and installation); seed and apply mulch on all other disturbed areas.
5. Do not excavate or place fill in any riparian wetland.

**Contact Staff:**

Christie L. Stanifer, Environ. Coordinator, Fish & Wildlife

Our agency appreciates this opportunity to be of service. Please contact the above staff member at (317) 232-4080 if we can be of further assistance.

*For*   
\_\_\_\_\_  
Christie L. Stanifer  
Environ. Coordinator  
Division of Fish and Wildlife

**Date:** January 15, 2020



## FW: Early Coordination, Des 1592335, Marquette Greenway – Singing Sands Connector, Michiana Shores, IN

Herber, Lisa <LHerber1@dnr.IN.gov>

Fri 1/3/2020 12:35 PM

To: Leigh Montano <LMontano@vsengineering.com>

Cc: Bronson, Bob <bbronson@dnr.IN.gov>

 2 attachments (8 MB)

1592335 ECL.pdf; Indiana as of 12-31-17.xlsx;

Ms. Montano, This project does not appear to impact a Land and Water Conservation (LWCF) site or Natural, Scenic, and Recreational River System. Our office does not need to be coordinated with if you are not directly impacting either of these resources. Attached is a list of LWCF sites by county from the National Park Service for your use and to share at your office until NPS gets their new website up. Any impacts to State properties should be coordinated with us as some of the LWCF grants covered multiple properties but they are not specifically named on the list.

*Sincerely,*

*Lisa Herber*

Grants Coordinator  
Indiana Department of Natural Resources  
Division of Outdoor Recreation  
402 W. Washington Street, W271  
Indianapolis, Indiana 46204  
Phone: 317-232-4074  
Email: [LHerber1@dnr.IN.gov](mailto:LHerber1@dnr.IN.gov)

**\* Please let us know about the quality of our service by taking this brief [customer survey](#).**

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**From:** Marisavljevic, Amy

**Sent:** Friday, December 20, 2019 11:45 AM

**To:** Herber, Lisa <LHerber1@dnr.IN.gov>

**Subject:** FW: Early Coordination, Des 1592335, Marquette Greenway – Singing Sands Connector, Michiana Shores, IN

This is NOT a NLT project. This came in from Dale, it's just a cc since this project got funded from INDOT. They are most likely just checking to make sure there are no or no significant impacts on LWCF projects. Todd told me you were the correct person to pass this along to.

**Amy Marisavljevic**

Trails Section Chief

[Division of Outdoor Recreation](#)

Indiana Department of Natural Resources

402 W. Washington St. W271

Indianapolis, IN 46204

[amarisavljevic@dnr.in.gov](mailto:amarisavljevic@dnr.in.gov)

317-232-4067

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**From:** Brier, Dale

**Sent:** Friday, December 20, 2019 11:10 AM

**To:** Marisavljevic, Amy <[AMarisavljevic@dnr.IN.gov](mailto:AMarisavljevic@dnr.IN.gov)>

**Subject:** Fw: Early Coordination, Des 1592335, Marquette Greenway – Singing Sands Connector, Michiana Shores, IN

Is this NLT? Will you forward to the right grants folks please?

Dale Brier  
Division Director  
Division of Outdoor Recreation  
Department of Natural Resources  
402 W. Washington St. W271  
Indianapolis, IN 46204  
317-232-4072  
[www.dnr.IN.gov](http://www.dnr.IN.gov)

---

**From:** Leigh Montano <[LMontano@vsengineering.com](mailto:LMontano@vsengineering.com)>

**Sent:** Friday, December 20, 2019 10:39 AM

**Subject:** Early Coordination, Des 1592335, Marquette Greenway – Singing Sands Connector, Michiana Shores, IN

\*\*\*\* This is an EXTERNAL email. Exercise caution. DO NOT open attachments or click links from unknown senders or unexpected email. \*\*\*\*

Attached is a request for early coordination for a multi-use trail project along Grand Beach Road, between El Portal Drive and the Indiana/Michigan state line in Michiana Shores, LaPorte County, Indiana (INDOT Des. # 1592335). Please let me know if you have questions or need any further information.

**LEIGH MONTANO**

*NEPA Specialist*

**P:** 317.293.3542 ext. 156

[lmontano@vsengineering.com](mailto:lmontano@vsengineering.com)



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## Organization and Project Information

**Project ID:** 16-3509  
**Des. ID:** 1592335  
**Project Title:** Marquette Greenway Trail - Singing Sands Connector  
**Name of Organization:** VS Engineering  
**Requested by:** Leigh Montano

## Environmental Assessment Report

### 1. Geological Hazards:

- High liquefaction potential
- Floodway

### 2. Mineral Resources:

- Bedrock Resource: Low Potential
- Sand and Gravel Resource: Low Potential

### 3. Active or abandoned mineral resources extraction sites:

- None documented in the area

\*All map layers from Indiana Map ([maps.indiana.edu](https://maps.indiana.edu))

### DISCLAIMER:

This document was compiled by Indiana University, Indiana Geological Survey, using data believed to be accurate; however, a degree of error is inherent in all data. This product is distributed "AS-IS" without warranties of any kind, either expressed or implied, including but not limited to warranties of suitability to a particular purpose or use. No attempt has been made in either the design or production of these data and document to define the limits or jurisdiction of any federal, state, or local government. The data used to assemble this document are intended for use only at the published scale of the source data or smaller (see the metadata links below) and are for reference purposes only. They are not to be construed as a legal document or survey instrument. A detailed on-the-ground survey and historical analysis of a single site may differ from these data and this document.

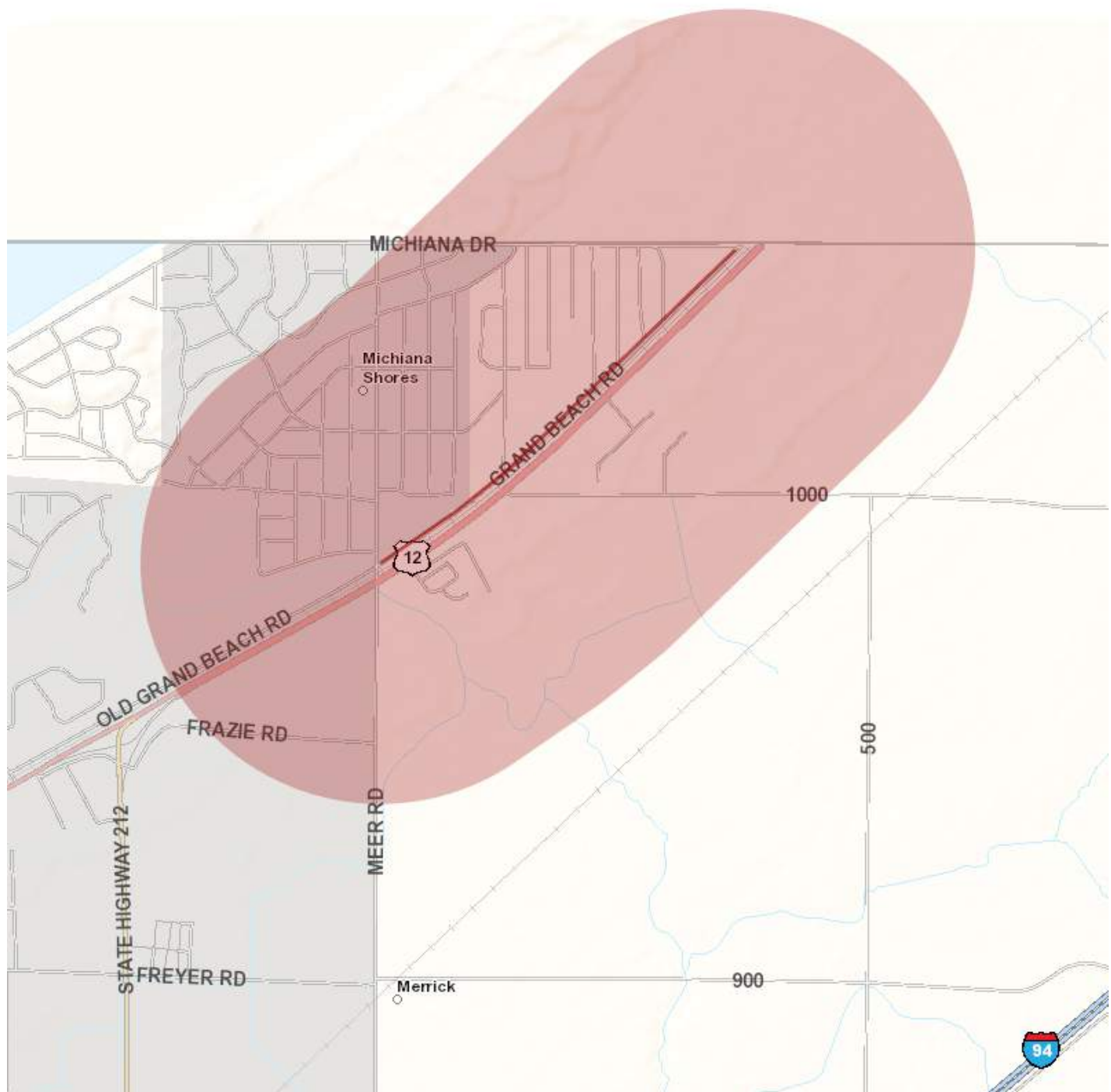
This information was furnished by Indiana Geological Survey

Address: 420 N. Walnut St., Bloomington, IN 47404

Email: [IGSEnvir@indiana.edu](mailto:IGSEnvir@indiana.edu)

Phone: 812 855-7428

Date: January 22, 2020



## Metadata:

- [https://maps.indiana.edu/metadata/Geology/Seismic\\_Earthquake\\_Liquefaction\\_Potential.html](https://maps.indiana.edu/metadata/Geology/Seismic_Earthquake_Liquefaction_Potential.html)
- [https://maps.indiana.edu/metadata/Geology/Industrial\\_Minerals\\_Sand\\_Gravel\\_Resources.html](https://maps.indiana.edu/metadata/Geology/Industrial_Minerals_Sand_Gravel_Resources.html)
- [https://maps.indiana.edu/metadata/Hydrology/Floodplains\\_FIRM.html](https://maps.indiana.edu/metadata/Hydrology/Floodplains_FIRM.html)
- [https://maps.indiana.edu/metadata/Geology/Bedrock\\_Geology.html](https://maps.indiana.edu/metadata/Geology/Bedrock_Geology.html)

RE: Early Coordination, Des 1592335, Marquette Greenway – Singing Sands Connector, Michiana Shores, IN

Sharkey, Ashley <AsSharkey@indot.IN.gov>

Thu 1/2/2020 4:25 PM

To: Leigh Montano <LMontano@vsengineering.com>

Hi Leigh –

Thank you for contacting the La Porte district environmental team. We do not have any comments on this project at this time.

Thank you,

Ashley

---

**From:** Leigh Montano [mailto:LMontano@vsengineering.com]

**Sent:** Friday, December 20, 2019 9:40 AM

**Subject:** Early Coordination, Des 1592335, Marquette Greenway – Singing Sands Connector, Michiana Shores, IN

\*\*\*\* This is an EXTERNAL email. Exercise caution. DO NOT open attachments or click links from unknown senders or unexpected email. \*\*\*\*

Attached is a request for early coordination for a multi-use trail project along Grand Beach Road, between El Portal Drive and the Indiana/Michigan state line in Michiana Shores, LaPorte County, Indiana (INDOT Des. # 1592335). Please let me know if you have questions or need any further information.

**LEIGH MONTANO**

*NEPA Specialist*

**P:** 317.293.3542 ext. 156

[lmontano@vsengineering.com](mailto:lmontano@vsengineering.com)



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December 30, 2019

Alan Ball  
VS Engineering, Inc.  
4275 North High School Road  
Indianapolis, Indiana 46254

Dear Mr. Ball:

The proposed project to proceed with the Marquette Greenway Trail – Singing Sands Connector in LaPorte County, (Des No. 1592335) as referred to in your letter received December 20, 2019, will not cause a conversion of prime farmland.

If you need additional information, please contact John Allen at 317-295-5859.

Sincerely,

JERRY RAYNOR  
State Conservationist



# United States Department of the Interior

## Fish and Wildlife Service



Indiana Field Office (ES)  
620 South Walker Street  
Bloomington, IN 47403-2121  
Phone: (812) 334-4261 Fax: (812) 334-4273

January 10, 2020

Mr. Alan Ball  
VS Engineering, Inc.  
4275 North High School Road  
Indianapolis, Indiana 46254

Project No.: Des. 1592335  
Project: Singing Sands Trail Connector  
Location: Michiana Shores, LaPorte County

Dear Mr. Ball:

This responds to your letter dated December 20, 2019, requesting our comments on the aforementioned project.

These comments have been prepared under the authority of the Fish and Wildlife Coordination Act (16 U.S.C. 661 et. seq.) and are consistent with the intent of the National Environmental Policy Act of 1969, the Endangered Species Act of 1973, and the U. S. Fish and Wildlife Service's Mitigation Policy.

The proposed project consists of the construction of approximately 1.02 miles of multiuse trail between El Portal Drive at Michiana Shores and the Michigan State Line. The 10-foot wide paved trail will follow the north side of Grand Beach Road for its entire length. Additional permanent right-of-way will be required and approximately 0.6 acre of tree clearing will be necessary due to the heavily wooded nature of the roadside habitat.

### ENDANGERED SPECIES

The proposed project is within the range of the Federally endangered Indiana bat (*Myotis sodalis*), piping plover, (*Charadrius melodus*), and Mitchell's satyr butterfly (*Neonympha mitchellii*), and the threatened northern long-eared bat (*Myotis septentrionalis*) and eastern massasauga rattlesnake (*Sistrurus catenatus*). There is no habitat for the piping plover, Mitchell's satyr, or eastern massasauga within the proposed project area; impacts to the 2 bat species will be evaluated utilizing the Range-wide Programmatic Consultation process, as determined through Section 7 consultation between the U.S. FWS and the Federal Highway Administration.

This precludes the need for further consultation on this project for the piping plover, Mitchell's satyr, and eastern massasauga as required under Section 7 of the Endangered Species Act of 1973, as amended. However, should new information arise pertaining to project plans or a revised species list be published, it will be necessary for the Federal agency to reinitiate consultation.

We appreciate the opportunity to comment on this proposed project. Please keep us informed as project planning progresses. For further discussion, please contact Elizabeth McCloskey at (219) 983-9753 or [elizabeth\\_mccloskey@fws.gov](mailto:elizabeth_mccloskey@fws.gov).

Sincerely yours,

/s/ *Elizabeth S. McCloskey*

for Scott E. Pruitt  
Supervisor

Sent via email January 10, 2020; no hard copy to follow.



## United States Department of the Interior

### FISH AND WILDLIFE SERVICE

Indiana Ecological Services Field Office

620 South Walker Street

Bloomington, IN 47403-2121

Phone: (812) 334-4261 Fax: (812) 334-4273

<http://www.fws.gov/midwest/Endangered/section7/s7process/step1.html>



In Reply Refer To:

May 05, 2020

Consultation Code: 03E12000-2020-SLI-1274

Event Code: 03E12000-2020-E-06318

Project Name: Des. 1592335, Marquette Greenway/Singing Sands Connector Trail East , LaPorte Co.

Subject: Updated list of threatened and endangered species that may occur in your proposed project location, and/or may be affected by your proposed project

To Whom It May Concern:

The attached species list identifies any federally threatened, endangered, proposed and candidate species that may occur within the boundary of your proposed project or may be affected by your proposed project. The list also includes designated critical habitat if present within your proposed project area or affected by your project. This list is provided to you as the initial step of the consultation process required under section 7(c) of the Endangered Species Act, also referred to as Section 7 Consultation.

Section 7 of the Endangered Species Act of 1973 requires that actions authorized, funded, or carried out by Federal agencies not jeopardize federally threatened or endangered species or adversely modify designated critical habitat. To fulfill this mandate, Federal agencies (or their designated non-federal representative) must consult with the Service if they determine their project “may affect” listed species or critical habitat.

Under 50 CFR 402.12(e) (the regulations that implement Section 7 of the Endangered Species Act) the accuracy of this species list should be verified after 90 days. This verification can be completed formally or informally. You may verify the list by visiting the ECOS-IPaC website <http://ecos.fws.gov/ipac/> at regular intervals during project planning and implementation and completing the same process you used to receive the attached list. As an alternative, you may contact this Ecological Services Field Office for updates.

Please use the species list provided and visit the U.S. Fish and Wildlife Service's Region 3 Section 7 Technical Assistance website at - <http://www.fws.gov/midwest/endangered/section7/s7process/index.html>. This website contains step-by-step instructions which will help you

determine if your project will have an adverse effect on listed species and will help lead you through the Section 7 process.

For all **wind energy projects** and **projects that include installing towers that use guy wires or are over 200 feet in height**, please contact this field office directly for assistance, even if no federally listed plants, animals or critical habitat are present within your proposed project or may be affected by your proposed project.

Although no longer protected under the Endangered Species Act, be aware that bald eagles are protected under the Bald and Golden Eagle Protection Act (16 U.S.C. 668 *et seq.*) and Migratory Bird Treaty Act (16 U.S.C. 703 *et seq.*), as are golden eagles. Projects affecting these species may require measures to avoid harming eagles or may require a permit. If your project is near an eagle nest or winter roost area, see our Eagle Permits website at <http://www.fws.gov/midwest/midwestbird/EaglePermits/index.html> to help you determine if you can avoid impacting eagles or if a permit may be necessary.

We appreciate your concern for threatened and endangered species. Please include the Consultation Tracking Number in the header of this letter with any request for consultation or correspondence about your project that you submit to our office.

Attachment(s):

- Official Species List

## Official Species List

This list is provided pursuant to Section 7 of the Endangered Species Act, and fulfills the requirement for Federal agencies to "request of the Secretary of the Interior information whether any species which is listed or proposed to be listed may be present in the area of a proposed action".

This species list is provided by:

**Indiana Ecological Services Field Office**

620 South Walker Street

Bloomington, IN 47403-2121

(812) 334-4261

## Project Summary

Consultation Code: 03E12000-2020-SLI-1274

Event Code: 03E12000-2020-E-06318

Project Name: Des. 1592335, Marquette Greenway/Singing Sands Connector Trail East , LaPorte Co.

Project Type: TRANSPORTATION

Project Description: The project is located in northern LaPorte County, near Michiana Shores (INDOT Des. No. 1592335). The project extends northeast along Old Grand Beach Road from El Portal Drive (called Meer Road or CR 600W to the south of US 12) to the Indiana/Michigan state line.

The purpose of the project is to link multiple phases of the Singing Sands Trail to the Indiana-Michigan state line, where the trail will continue to New Buffalo, Michigan. The Singing Sands Trail is a component of the regional Marquette Trail, which begins on the south side of Chicago and ends in southwest Michigan.

This project will install a 10'-wide paved trail on the north side of Old Grand Beach Road. The trail will be offset from the edge of Grand Beach Drive by 4 to 5 feet. All construction activities will take place within 30 feet from edge of pavement. Installation will include an asphalt trail and ADA-compliant curb ramps and curbs at public road intersections. The total project length is 1.02 miles. There will be approximately 3.5 acres of permanent right-of-way that will be acquired for this project, 1.1 acres of which is reacquisition of the apparent existing right-of-way. Suitable summer habitat is located adjacent to the project. There will be approximately 0.6 acre of tree clearing for the installation of the trail. The dominant tree species are pin oak (*Quercus palustris*), white oak (*Quercus alba*), flowering dogwood (*Cornus florida*), sugar maple (*Acer saccharum*), and sassafras (*Sassafras albidum*). The trees will be removed in the winter of 2022-2023. All work will occur outside of wetlands and waterways. Excavation will be 2 to 3 feet. Temporary lighting may be used during construction. No permanent lighting will be installed. Construction will begin in September 2022 and take approximately 9 months to complete.

The USFWS bat layer query was completed on 10/2/2019 by INDOT LaPorte District and concluded no presence of endangered bat species within 0.5 mile of the project area.



**Project Location:**

Approximate location of the project can be viewed in Google Maps: <https://www.google.com/maps/place/41.755287666273816N86.80815795276081W>



Counties: LaPorte, IN

## Endangered Species Act Species

There is a total of 2 threatened, endangered, or candidate species on this species list.

Species on this list should be considered in an effects analysis for your project and could include species that exist in another geographic area. For example, certain fish may appear on the species list because a project could affect downstream species. Note that 1 of these species should be considered only under certain conditions.

IPaC does not display listed species or critical habitats under the sole jurisdiction of NOAA Fisheries<sup>1</sup>, as USFWS does not have the authority to speak on behalf of NOAA and the Department of Commerce.

See the "Critical habitats" section below for those critical habitats that lie wholly or partially within your project area under this office's jurisdiction. Please contact the designated FWS office if you have questions.

- 
1. [NOAA Fisheries](#), also known as the National Marine Fisheries Service (NMFS), is an office of the National Oceanic and Atmospheric Administration within the Department of Commerce.

## Mammals

NAME	STATUS
<b>Indiana Bat <i>Myotis sodalis</i></b> There is <b>final</b> critical habitat for this species. Your location is outside the critical habitat. Species profile: <a href="https://ecos.fws.gov/ecp/species/5949">https://ecos.fws.gov/ecp/species/5949</a> Species survey guidelines: <a href="https://ecos.fws.gov/ipac/guideline/survey/population/1/office/31440.pdf">https://ecos.fws.gov/ipac/guideline/survey/population/1/office/31440.pdf</a>	Endangered
<b>Northern Long-eared Bat <i>Myotis septentrionalis</i></b> No critical habitat has been designated for this species. This species only needs to be considered under the following conditions: <ul style="list-style-type: none"> <li>▪ Incidental take of the NLEB is not prohibited here. Federal agencies may consult using the 4(d) rule streamlined process. Transportation projects may consult using the programmatic process. See <a href="http://www.fws.gov/midwest/endangered/mammals/nleb/index.html">www.fws.gov/midwest/endangered/mammals/nleb/index.html</a></li> </ul> Species profile: <a href="https://ecos.fws.gov/ecp/species/9045">https://ecos.fws.gov/ecp/species/9045</a>	Threatened

## Critical habitats

THERE ARE NO CRITICAL HABITATS WITHIN YOUR PROJECT AREA UNDER THIS OFFICE'S JURISDICTION.



## United States Department of the Interior

### FISH AND WILDLIFE SERVICE

Indiana Ecological Services Field Office

620 South Walker Street

Bloomington, IN 47403-2121

Phone: (812) 334-4261 Fax: (812) 334-4273

<http://www.fws.gov/midwest/Endangered/section7/s7process/step1.html>



In Reply Refer To:

May 05, 2020

Consultation Code: 03E12000-2020-I-1274

Event Code: 03E12000-2020-E-06315

Project Name: Des. 1592335, Marquette Greenway/Singing Sands Connector Trail East , LaPorte Co.

Subject: Concurrence verification letter for the 'Des. 1592335, Marquette Greenway/Singing Sands Connector Trail East , LaPorte Co.' project under the revised February 5, 2018, FHWA, FRA, FTA Programmatic Biological Opinion for Transportation Projects within the Range of the Indiana Bat and Northern Long-eared Bat.

To whom it may concern:

The U.S. Fish and Wildlife Service (Service) has received your request to verify that the **Des. 1592335, Marquette Greenway/Singing Sands Connector Trail East , LaPorte Co.** (Proposed Action) may rely on the concurrence provided in the February 5, 2018, FHWA, FRA, FTA Programmatic Biological Opinion for Transportation Projects within the Range of the Indiana Bat and Northern Long-eared Bat (PBO) to satisfy requirements under Section 7(a)(2) of the Endangered Species Act of 1973 (ESA) (87 Stat. 884, as amended; 16 U.S.C 1531 *et seq.*).

Based on the information you provided (Project Description shown below), you have determined that the Proposed Action is within the scope and adheres to the criteria of the PBO, including the adoption of applicable avoidance and minimization measures, and may affect, but is not likely to adversely affect (NLAA) the endangered Indiana bat (*Myotis sodalis*) and/or the threatened Northern long-eared bat (*Myotis septentrionalis*).

The Service has 14 calendar days to notify the lead Federal action agency or designated non-federal representative if we determine that the Proposed Action does not meet the criteria for a NLAA determination under the PBO. If we do not notify the lead Federal action agency or designated non-federal representative within that timeframe, you may proceed with the Proposed Action under the terms of the NLAA concurrence provided in the PBO. This verification period allows Service Field Offices to apply local knowledge to implementation of the PBO, as we may identify a small subset of actions having impacts that were unanticipated. In such instances,

Service Field Offices may request additional information that is necessary to verify inclusion of the proposed action under the PBO.

**For Proposed Actions that include bridge/structure removal, replacement, and/or maintenance activities:** If your initial bridge/structure assessments failed to detect Indiana bats, but you later detect bats during construction, please submit the Post Assessment Discovery of Bats at Bridge/Structure Form (User Guide Appendix E) to this Service Office. In these instances, potential incidental take of Indiana bats may be exempted provided that the take is reported to the Service.

If the Proposed Action is modified, or new information reveals that it may affect the Indiana bat and/or Northern long-eared bat in a manner or to an extent not considered in the PBO, further review to conclude the requirements of ESA Section 7(a)(2) may be required. If the Proposed Action may affect any other federally-listed or proposed species, and/or any designated critical habitat, additional consultation between the lead Federal action agency and this Service Office is required. If the proposed action has the potential to take bald or golden eagles, additional coordination with the Service under the Bald and Golden Eagle Protection Act may also be required. In either of these circumstances, please contact this Service Office.

## Project Description

The following project name and description was collected in IPaC as part of the endangered species review process.

### Name

Des. 1592335, Marquette Greenway/Singing Sands Connector Trail East , LaPorte Co.

### Description

The project is located in northern LaPorte County, near Michiana Shores (INDOT Des. No. 1592335). The project extends northeast along Old Grand Beach Road from El Portal Drive (called Meer Road or CR 600W to the south of US 12) to the Indiana/Michigan state line.

The purpose of the project is to link multiple phases of the Singing Sands Trail to the Indiana-Michigan state line, where the trail will continue to New Buffalo, Michigan. The Singing Sands Trail is a component of the regional Marquette Trail, which begins on the south side of Chicago and ends in southwest Michigan.

This project will install a 10'-wide paved trail on the north side of Old Grand Beach Road. The trail will be offset from the edge of Grand Beach Drive by 4 to 5 feet. All construction activities will take place within 30 feet from edge of pavement. Installation will include an asphalt trail and ADA-compliant curb ramps and curbs at public road intersections. The total project length is 1.02 miles. There will be approximately 3.5 acres of permanent right-of-way that will be acquired for this project, 1.1 acres of which is reacquisition of the apparent existing right-of-way. Suitable summer habitat is located adjacent to the project. There will be approximately 0.6 acre of tree clearing for the installation of the trail. The dominant tree species are pin oak (*Quercus palustris*), white oak (*Quercus alba*), flowering dogwood (*Cornus florida*), sugar maple (*Acer saccharum*), and sassafras (*Sassafras albidum*). The trees will be removed in the winter of 2022-2023. All work will occur outside of wetlands and waterways. Excavation will be 2 to 3 feet. Temporary lighting may be used during construction. No permanent lighting will be installed. Construction will begin in September 2022 and take approximately 9 months to complete.

The USFWS bat layer query was completed on 10/2/2019 by INDOT LaPorte District and concluded no presence of endangered bat species within 0.5 mile of the project area.



## Determination Key Result

Based on your answers provided, this project(s) may affect, but is not likely to adversely affect the endangered Indiana bat and/or the threatened Northern long-eared bat, therefore, consultation with the U.S. Fish and Wildlife Service pursuant to Section 7(a)(2) of the Endangered Species Act of 1973 (ESA) (87 Stat. 884, as amended 16 U.S.C. 1531 *et seq.*) is required. However, also based on your answers provided, this project may rely on the concurrence provided in the revised February 5, 2018, FHWA, FRA, FTA Programmatic Biological Opinion for Transportation Projects within the Range of the Indiana Bat and Northern Long-eared Bat.

## Qualification Interview

1. Is the project within the range of the Indiana bat<sup>[1]</sup>?

[1] See [Indiana bat species profile](#)

**Automatically answered**

Yes

2. Is the project within the range of the Northern long-eared bat<sup>[1]</sup>?

[1] See [Northern long-eared bat species profile](#)

**Automatically answered**

Yes

3. Which Federal Agency is the lead for the action?

*A) Federal Highway Administration (FHWA)*

4. Are *all* project activities limited to non-construction<sup>[1]</sup> activities only? (examples of non-construction activities include: bridge/abandoned structure assessments, surveys, planning and technical studies, property inspections, and property sales)

[1] Construction refers to activities involving ground disturbance, percussive noise, and/or lighting.

No

5. Does the project include *any* activities that are **greater than** 300 feet from existing road/rail surfaces<sup>[1]</sup>?

[1] Road surface is defined as the actively used [e.g. motorized vehicles] driving surface and shoulders [may be pavement, gravel, etc.] and rail surface is defined as the edge of the actively used rail ballast.

No

6. Does the project include *any* activities **within** 0.5 miles of a known Indiana bat and/or NLEB hibernaculum<sup>[1]</sup>?

[1] For the purpose of this consultation, a hibernaculum is a site, most often a cave or mine, where bats hibernate during the winter (see suitable habitat), but could also include bridges and structures if bats are found to be hibernating there during the winter.

No

7. Is the project located **within** a karst area?

No

8. Is there *any* suitable<sup>[1]</sup> summer habitat for Indiana Bat or NLEB **within** the project action area<sup>[2]</sup>? (includes any trees suitable for maternity, roosting, foraging, or travelling habitat)

[1] See the Service's [summer survey guidance](#) for our current definitions of suitable habitat.

[2] The action area is defined as all areas to be affected directly or indirectly by the Federal action and not merely the immediate area involved in the action (50 CFR Section 402.02). Further clarification is provided by the [national consultation FAQs](#).

Yes

9. Will the project remove *any* suitable summer habitat<sup>[1]</sup> and/or remove/trim any existing trees **within** suitable summer habitat?

[1] See the Service's [summer survey guidance](#) for our current definitions of suitable habitat.

Yes

10. Will the project clear more than 20 acres of suitable habitat per 5-mile section of road/rail?

No

11. Have presence/probable absence (P/A) summer surveys<sup>[1][2]</sup> been conducted<sup>[3][4]</sup> **within** the suitable habitat located within your project action area?

[1] See the Service's [summer survey guidance](#) for our current definitions of suitable habitat.

[2] Presence/probable absence summer surveys conducted within the fall swarming/spring emergence home range of a documented Indiana bat hibernaculum (contact local Service Field Office for appropriate distance from hibernacula) that result in a negative finding requires additional consultation with the local Service Field Office to determine if clearing of forested habitat is appropriate and/or if seasonal clearing restrictions are needed to avoid and minimize potential adverse effects on fall swarming and spring emerging Indiana bats.

[3] For projects within the range of either the Indiana bat or NLEB in which suitable habitat is present, and no bat surveys have been conducted, the transportation agency will assume presence of the appropriate species. This assumption of presence should be based upon the presence of suitable habitat and the capability of bats to occupy it because of their mobility.

[4] Negative presence/probable absence survey results obtained using the [summer survey guidance](#) are valid for a minimum of two years from the completion of the survey unless new information (e.g., other nearby surveys) suggest otherwise.

No

12. Does the project include activities **within documented Indiana bat habitat**<sup>[1][2]</sup>?

[1] Documented roosting or foraging habitat – for the purposes of this consultation, we are considering documented habitat as that where Indiana bats and/or NLEB have actually been captured and tracked using (1) radio telemetry to roosts; (2) radio telemetry triangulation/triangulation to estimate foraging areas; or (3) foraging areas with repeated use documented using acoustics. Documented roosting habitat is also considered as suitable summer habitat within 0.25 miles of documented roosts.)

[2] For the purposes of this key, we are considering documented corridors as that where Indiana bats and/or NLEB have actually been captured and tracked to using (1) radio telemetry; or (2) treed corridors located directly between documented roosting and foraging habitat.

No

13. Will the removal or trimming of habitat or trees occur **within** suitable but **undocumented Indiana bat** roosting/foraging habitat or travel corridors?

Yes

14. What time of year will the removal or trimming of habitat or trees **within** suitable but **undocumented Indiana bat** roosting/foraging habitat or travel corridors occur<sup>[1]</sup>?

[1] Coordinate with the local Service Field Office for appropriate dates.

*B) During the inactive season*

15. Does the project include activities **within documented NLEB habitat**<sup>[1][2]</sup>?

[1] Documented roosting or foraging habitat – for the purposes of this consultation, we are considering documented habitat as that where Indiana bats and/or NLEB have actually been captured and tracked using (1) radio telemetry to roosts; (2) radio telemetry triangulation/triangulation to estimate foraging areas; or (3) foraging areas with repeated use documented using acoustics. Documented roosting habitat is also considered as suitable summer habitat within 0.25 miles of documented roosts.)

[2] For the purposes of this key, we are considering documented corridors as that where Indiana bats and/or NLEB have actually been captured and tracked to using (1) radio telemetry; or (2) treed corridors located directly between documented roosting and foraging habitat.

*No*

16. Will the removal or trimming of habitat or trees occur **within** suitable but **undocumented NLEB** roosting/foraging habitat or travel corridors?

*Yes*

17. What time of year will the removal or trimming of habitat or trees **within** suitable but **undocumented NLEB** roosting/foraging habitat or travel corridors occur?

*B) During the inactive season*

18. Will *any* tree trimming or removal occur **within** 100 feet of existing road/rail surfaces?

*Yes*

19. Will *any* tree trimming or removal occur **between** 100-300 feet of existing road/rail surfaces?

*No*

20. Are *all* trees that are being removed clearly demarcated?

*Yes*

21. Will the removal of habitat or the removal/trimming of trees include installing new or replacing existing **permanent** lighting?

*No*

22. Does the project include wetland or stream protection activities associated with compensatory wetland mitigation?  
*No*
23. Does the project include slash pile burning?  
*No*
24. Does the project include *any* bridge removal, replacement, and/or maintenance activities (e.g., any bridge repair, retrofit, maintenance, and/or rehabilitation work)?  
*No*
25. Does the project include the removal, replacement, and/or maintenance of *any* structure other than a bridge? (e.g., rest areas, offices, sheds, outbuildings, barns, parking garages, etc.)  
*No*
26. Will the project involve the use of **temporary** lighting *during* the active season?  
*Yes*
27. Is there *any* suitable habitat **within** 1,000 feet of the location(s) where **temporary** lighting will be used?  
*Yes*
28. Will the project install new or replace existing **permanent** lighting?  
*No*
29. Does the project include percussives or other activities (**not including tree removal/trimming or bridge/structure work**) that will increase noise levels above existing traffic/background levels?  
*No*
30. Are *all* project activities that are **not associated with** habitat removal, tree removal/trimming, bridge and/or structure activities, temporary or permanent lighting, or use of percussives, limited to actions that DO NOT cause any additional stressors to the bat species?

Examples: lining roadways, unlighted signage , rail road crossing signals, signal lighting, and minor road repair such as asphalt fill of potholes, etc.

*Yes*



31. Will the project raise the road profile **above the tree canopy**?

No

32. Are the project activities that are not associated with habitat removal, tree removal/trimming, bridge and/or structure activities, temporary or permanent lighting, or use of percussives consistent with a No Effect determination in this key?

**Automatically answered**

*Yes, other project activities are limited to actions that DO NOT cause any additional stressors to the bat species as described in the BA/BO*

33. Is the habitat removal portion of this project consistent with a Not Likely to Adversely Affect determination in this key?

**Automatically answered**

*Yes, because the tree removal/trimming that occurs outside of the Indiana bat's active season occurs greater than 0.5 miles from the nearest hibernaculum, is less than 100 feet from the existing road/rail surface, includes clear demarcation of the trees that are to be removed, and does not alter documented roosts and/or surrounding summer habitat within 0.25 miles of a documented roost.*

34. Is the habitat removal portion of this project consistent with a Not Likely to Adversely Affect determination in this key?

**Automatically answered**

*Yes, because the tree removal/trimming that occurs outside of the NLEB's active season occurs greater than 0.5 miles from the nearest hibernaculum, is less than 100 feet from the existing road/rail surface, includes clear demarcation of the trees that are to be removed, and does not alter documented roosts and/or surrounding summer habitat within 0.25 miles of a documented roost.*

35. **General AMM 1**

Will the project ensure *all* operators, employees, and contractors working in areas of known or presumed bat habitat are aware of *all* FHWA/FRA/FTA (Transportation Agencies) environmental commitments, including all applicable Avoidance and Minimization Measures?

Yes

**36. Tree Removal AMM 1**

Can *all* phases/aspects of the project (e.g., temporary work areas, alignments) be modified, to the extent practicable, to avoid tree removal<sup>[1]</sup> in excess of what is required to implement the project safely?

Note: Tree Removal AMM 1 is a minimization measure, the full implementation of which may not always be practicable. Projects may still be NLAA as long as Tree Removal AMMs 2, 3, and 4 are implemented and LAA as long as Tree Removal AMMs 3, 5, 6, and 7 are implemented.

[1] The word “trees” as used in the AMMs refers to trees that are suitable habitat for each species within their range. See the USFWS’ current summer survey guidance for our latest definitions of suitable habitat.

Yes

**37. Tree Removal AMM 3**

Can tree removal be limited to that specified in project plans and ensure that contractors understand clearing limits and how they are marked in the field (e.g., install bright colored flagging/fencing prior to any tree clearing to ensure contractors stay within clearing limits)?

Yes

**38. Tree Removal AMM 4**

Can the project avoid cutting down/removal of *all* (1) **documented**<sup>[1]</sup> Indiana bat or NLEB roosts<sup>[2]</sup> (that are still suitable for roosting), (2) trees **within** 0.25 miles of roosts, and (3) documented foraging habitat any time of year?

[1] The word documented means habitat where bats have actually been captured and/or tracked.

[2] Documented roosting or foraging habitat – for the purposes of this consultation, we are considering documented habitat as that where Indiana bats and/or NLEB have actually been captured and tracked using (1) radio telemetry to roosts; (2) radio telemetry biangulation/triangulation to estimate foraging areas; or (3) foraging areas with repeated use documented using acoustics. Documented roosting habitat is also considered as suitable summer habitat within 0.25 miles of documented roosts.)

Yes

**39. Lighting AMM 1**

Will *all* **temporary** lighting be directed away from suitable habitat during the active season?

Yes

## Project Questionnaire

1. Have you made a No Effect determination for *all* other species indicated on the FWS IPaC generated species list?

N/A

2. Have you made a May Affect determination for *any* other species on the FWS IPaC generated species list?

N/A

3. How many acres<sup>[1]</sup> of trees are proposed for removal between 0-100 feet of the existing road/rail surface?

[1] If described as number of trees, multiply by 0.09 to convert to acreage and enter that number.

0.6

## Avoidance And Minimization Measures (AMMs)

This determination key result includes the commitment to implement the following Avoidance and Minimization Measures (AMMs):

### GENERAL AMM 1

Ensure all operators, employees, and contractors working in areas of known or presumed bat habitat are aware of all FHWA/FRA/FTA (Transportation Agencies) environmental commitments, including all applicable AMMs.

### LIGHTING AMM 1

Direct temporary lighting away from suitable habitat during the active season.

### TREE REMOVAL AMM 1

Modify all phases/aspects of the project (e.g., temporary work areas, alignments) to avoid tree removal.

### TREE REMOVAL AMM 2

Apply time of year restrictions for tree removal when bats are not likely to be present, or limit tree removal to 10 or fewer trees per project at any time of year within 100 feet of existing road/rail surface and **outside of documented** roosting/foraging habitat or travel corridors; visual emergence survey must be conducted with no bats observed.

**TREE REMOVAL AMM 3**

Ensure tree removal is limited to that specified in project plans and ensure that contractors understand clearing limits and how they are marked in the field (e.g., install bright colored flagging/fencing prior to any tree clearing to ensure contractors stay within clearing limits).

**TREE REMOVAL AMM 4**

Do not remove **documented** Indiana bat or NLEB roosts that are still suitable for roosting, or trees within 0.25 miles of roosts, or **documented** foraging habitat any time of year.

## **Determination Key Description: FHWA, FRA, FTA Programmatic Consultation For Transportation Projects Affecting NLEB Or Indiana Bat**

This key was last updated in IPaC on December 02, 2019. Keys are subject to periodic revision.

This decision key is intended for projects/activities funded or authorized by the Federal Highway Administration (FHWA), Federal Railroad Administration (FRA), and/or Federal Transit Administration (FTA), which may require consultation with the U.S. Fish and Wildlife Service (Service) under Section 7 of the Endangered Species Act (ESA) for the endangered **Indiana bat** (*Myotis sodalis*) and the threatened **Northern long-eared bat** (NLEB) (*Myotis septentrionalis*).

This decision key should only be used to verify project applicability with the Service's [February 5, 2018, FHWA, FRA, FTA Programmatic Biological Opinion for Transportation Projects](#). The programmatic biological opinion covers limited transportation activities that may affect either bat species, and addresses situations that are both likely and not likely to adversely affect either bat species. This decision key will assist in identifying the effect of a specific project/activity and applicability of the programmatic consultation. The programmatic biological opinion is not intended to cover all types of transportation actions. Activities outside the scope of the programmatic biological opinion, or that may affect ESA-listed species other than the Indiana bat or NLEB, or any designated critical habitat, may require additional ESA Section 7 consultation.



# APPENDIX D:

## MPPA DOCUMENTATION

## Minor Projects PA Project Assessment Form – Category B Projects with Archaeology Work

---

**Date:** 1/10/20

**Project Designation Number:** 1592335

**Route Number:** N/A

**Project Description:** Marquette Greenway Trail - Singing Sands Connector

The project is located in northern LaPorte County, near Michiana Shores (INDOT Des. No. 1592335). The project extends northeast along Grand Beach Drive from El Portal Drive (called Meer Road or CR 600W to the south of US 12) to the Indiana/Michigan state line.

The purpose of the project is to link multiple phases of the Singing Sands Trail to the Indiana-Michigan state line, where the trail will continue to New Buffalo, Michigan. The Singing Sands Trail is a component of the regional Marquette Trail, which begins on the south side of Chicago and ends in southwest Michigan.

This project will install a 10'-wide paved trail on the north side of Grand Beach Drive. The trail will be offset from the edge of Grand Beach Drive by 4 to 5 feet. All construction activities will take place within 30 feet from edge of pavement. Installation will include an asphalt trail and ADA-compliant curb ramps and curbs at public road intersections. The total project length is 1.02 miles. There will be approximately 3.5 acres of permanent right-of-way that will be acquired for this project, 1.1 acres of which is reacquisition of the apparent existing right-of-way. There will be no work within any water resources. There will be approximately 0.6 acre of tree clearing for the installation of the trail. Excavation will be 2 to 3 feet.

**Feature crossed (if applicable):** N/A

**Township:** Michigan Township and Springfield Township

**City/County:** Michiana Shores, LaPorte County

**Information reviewed (please check all that apply):**

General project location map ☒ USGS map ☒ Aerial photograph ☒

Written description of project area ☒ General project area photos ☐

Previously completed archaeology reports ☐ Interim Report ☒

Previously completed historic property reports ☐

Soil survey data ☐ Bridge inspection information ☐

Other (please specify): SHAARD GIS; online street-view imagery; LaPorte County property records (accessed via <https://beacon.schneidercorp.com/?site=LaPorteCountyIN>)

Okroy, Jillian and Veronica Parsell  
2020 Phase Ia Archaeological Records Review and Reconnaissance for Marquette Trail/Singing Sands Connector Trail East, LaPorte County, Indiana. Report of file, Indiana Department of Transportation, Cultural Resources Office, Indianapolis, In.

## Results of the Records Review for Above-Ground Resources:

With regard to above-ground resources, an INDOT Cultural Resources historian who meets the Secretary of the Interior's Professional Qualification Standards as per 36 CFR Part 61 performed a desktop review, checking the Indiana Register of Historic Sites and Structures (State Register) and National Register of Historic Places (National Register) lists for LaPorte County. No listed resources are located near the project area.

The *LaPorte County Interim Report* (1989; Michigan Township Scattered Sites and Springfield Township Scattered Sites) of the Indiana Historic Sites and Structures Inventory (IHSSI) was also consulted. The National Register & IHSSI information is available in the Indiana State Historic Architectural and Archaeological Research Database (SHAARD), and the Indiana Historic Buildings, Bridges, and Cemeteries Map (IHBBCM). The SHAARD and IHBBCM information was checked against the Interim Report hard copy maps. No IHSSI properties are located adjacent to the project area.

Properties adjacent to the project area consist of wooded areas, railroad right-of-way, late twentieth-century houses, and a late twentieth-century agricultural facility (Red Arrow Stables). None of the properties adjacent to the project area possess the significance, integrity, and age necessary to be considered potentially eligible for the National Register.

Based on the available information, as summarized above, no above-ground concerns exist.

## Archaeology Report Author/Date:

Jillian Okray and Veronica Parsell/January 8, 2020

## Summary of Archaeology Investigation Results:

An archaeological records check and Phase Ia reconnaissance survey of the project area were conducted by Cardno (Okray and Parsell 2020). The records check found that the project area had not been previously examined for archaeological resources and that no previously recorded sites have been identified within or adjacent to it. A 3.0 acre survey area was examined through the excavation of 125 shovel probes. Seventy-one shovel tests were negative for artifacts, sixty-two shovel tests showed evidence of previous disturbance, and twenty-two shovel tests were unexcavated due to driveways, utilities, or roads. No evidence for archaeological deposits was identified. The report was reviewed by INDOT Cultural Resources personnel who meet the Secretary of the Interior's Professional Qualification Standards as per 36 CFR Part 61. It is our opinion that the report is acceptable, and we concur with the evaluations and recommendations made by Cardno (Okray and Parsell 2020). Therefore, there are no archaeological concerns.

Does the project appear to fall under the Minor Projects PA?      yes ☒ no ☐

If yes, please specify category and number (**applicable conditions are highlighted**):

B-8. Construction of pedestrian facilities including trails, multi-use paths, greenways, and associated minor activities defined below, under the following conditions [***BOTH Condition A, which pertains to Archaeological Resources, and Condition B, which pertains to Above-Ground Resources, must be satisfied***]:

### Condition A (Archaeological Resources)

One of the two conditions listed below must be met (*EITHER Condition i or Condition ii must be satisfied*):

- i. Work occurs within areas previously disturbed by vertical and horizontal construction activities, including existing roadway, sidewalk, or rail bed, and is not on, within or adjacent to a National Register listed or eligible site; *OR*
- ii. Work occurs in undisturbed soils and an archaeological investigation conducted by the applicant and reviewed by INDOT Cultural Resources Office determines that no National Register-listed or potentially National Register-eligible archaeological resources are present within the project area. If the archaeological investigation locates National Register-listed or potentially National Register-eligible archaeological resources, then full Section 106 review will be required. Copies of any archaeological reports prepared for the project will be provided to the DHPA and any archaeological site form information will be entered directly into the SHAARD by the applicant. The archaeological reports will also be available for viewing (by Tribes only) on INSCOPE.

**Condition B (Above-Ground Resources)**

Work does not occur adjacent to or within a National Register-listed or National Register-eligible district or individual above-ground resource.

Activities associated with this category include the following:

- Pavement surface installation, replacement, rehabilitation, resurfacing, and reconstruction work, including widening, laying down of crushed stone or gravel, shoulder treatments, pavement repair, seal coating, pavement grinding, pavement marking, etc.;
- Installation of new signals, signage, and other traffic control devices;
- Installation of new safety appurtenances such as guardrails and barriers;
- Installation of plant materials and hardscape landscaping elements, including, but not limited to bike racks, benches, trash cans, lighting, and other amenities;
- Trail heads and parking lots;
- Installation of pipes, culverts, and pedestrian bridges.

**If no, please explain:**

**Additional comments:** If any archaeological artifacts or human remains are uncovered during construction, demolition, or earth moving activities, construction in the immediate area of the find will be stopped, and the INDOT Cultural Resources Section and the Division of Historic Preservation and Archaeology will be notified immediately.

**INDOT Cultural Resources staff reviewer(s):** Anthony Ross and Shaun Miller

*\*\*\*Be sure to attach this form to the National Environmental Policy Act documentation for this project. Also, the NEPA documentation shall reference and include the description of the specific stipulation in the PA that qualifies the project as exempt from further Section 106 review.*

Phase Ia Archaeological Records  
Review and Reconnaissance for  
Marquette Trail, LaPorte County,  
Indiana

INDOT Des. No. 1592335







# INDIANA ARCHAEOLOGICAL SHORT REPORT

State Form 54566 (1-11)

INDIANA DEPARTMENT OF NATURAL RESOURCES  
DIVISION OF HISTORIC PRESERVATION  
AND ARCHAEOLOGY  
402 West Washington Street, Room W274  
Indianapolis, Indiana 46204-2739  
Telephone Number: (317) 232-1646  
Fax Number: (317) 232-0693  
E-mail: dhpa@dnr.IN.gov

Where applicable, the use of this form is recommended but not required by the Division of Historic Preservation and Archaeology.

Author: Jillian Okray

Date (month, day, year): December 17, 2019

Project Title: Phase Ia Archaeological Records Review and Reconnaissance for Marquette Trail, LaPorte County, Indiana

## PROJECT OVERVIEW

Project Description:

A Phase Ia archaeological records review and reconnaissance was completed for a proposed trail segment near Michiana Shores in LaPorte County, Indiana (INDOT Des. No 1592335). The proposed trail segment is part of the Marquette Greenway Trail/Singing Sands Connector Trail East. The northern portion of the proposed trail begins at the Indiana/Michigan Border, and runs southwest, on the north side of Old Grand Beach Road, to the intersection with Meer Road in Michigan City, Indiana (Figure 1).

INDOT Designation Number/ Contract Number: 1592335

Project Number:

DHPA Number:

Approved DHPA Plan Number:

Prepared For: VS Engineering

Contact Person: Alan Ball

Address: 4275 N High School Road

City: Indianapolis

State: IN

ZIP Code: 46254

Telephone Number: 317-293-3542

E-mail Address: aball@vsengineering.com

Principal Investigator: Veronica Parsell

Signature:

Company/Institution: Cardno, Inc.

Address: 3901 Industrial Boulevard

City: Indianapolis

State: IN

ZIP Code: 46254

Telephone Number: 317-388-1982

E-mail Address: veronica.parsell@cardno.com

- ☒ The Phase Ia archaeological reconnaissance has located no archaeological sites within the project area and it is recommended that the project be allowed to proceed as planned.
- ☐ The Phase Ia archaeological reconnaissance has determined that the project area includes landforms which have the potential to contain buried archaeological deposits. It is recommended that Phase Ic archaeological subsurface reconnaissance be conducted before the project is allowed to proceed.
- ☐ The Phase Ia archaeological reconnaissance has determined that the project area is within 100 feet of a cemetery and a Cemetery Development Plan is required per IC-14-21-1-26.5.

Cemetery Name:

Other Recommendations/Commitments:

During the course of the survey, no archaeological sites were encountered. Many excavated probes showed evidence of disturbances associated with road, railway, and residence construction. Based on these findings, Cardno determines that the proposed project will have no adverse impacts to archaeological resources and recommends that no further testing of the project area be required. Should the project footprint change, additional investigation may be required.

Pursuant to IC-14-21-1, if any archaeological artifacts or human remains are uncovered during construction, demolition, or earthmoving activities, state law (Indiana Code 14-21-1-27 and 29) requires that the discovery must be reported to the Department of Natural Resources within two (2) business days. In that event, please call (317) 232-1646.

## Attachments

- ☒ Figure showing project location within Indiana.
- ☒ USGS topographic map showing the project area (1:24,000scale).
- ☒ Aerial photograph showing the project area, land use and survey methods.
- ☒ Photographs of the project area.
- ☐ Project plans (if available)

Other Attachments:

Figures 1-10.7, Project Photographs (1-12)

References Cited:

Bringelson, Dawn and Jay T. Sturdevant  
2007 An Archaeological Overview and Assessment of Indiana Dunes National Lakeshore, Indiana. Midwest Archaeological Center Technical Report No. 97. United States Department of the Interior, National Park Service, Midwest Archaeological Center. Copy on file at the Indiana Department of Natural Resources- Division of Historic Preservation and Archaeology.

Clifton, James A.  
1986 People of the Three Fires: The Ottawa, Potawatomi, and Ojibway of Michigan. Michigan Indian Press, Grand Rapids, Michigan.

Department of Natural Resources-Division of Historic Preservation and Archaeology [DNR-DHPA]  
2007 State Historic Architectural and Archaeological Research Database (SHAARD). Electronic document, <https://secure.in.gov/apps/dnr/shaard/welcome.html>, accessed November 2019.

Geil, Leamings, & Cathcart  
1862 Map of LaPorte Co., Indiana. Geil, Leamings, & Cathcart. Philadelphia, Pennsylvania.

Historic Landmarks Foundation of Indiana (HLFI)  
1989 La Porte County Interim Report: Indiana Historic Sites and Structures Inventory. Indianapolis: Historic Landmarks Foundation of Indiana.

# APPENDIX E:

## RED FLAG & HAZARDOUS MATERIALS

Date: January 8, 2020

To: Site Assessment & Management  
Environmental Policy Office - Environmental Services Division  
Indiana Department of Transportation  
100 N Senate Avenue, Room N642  
Indianapolis, IN 46204

From: Leigh Montano, Environmental Scientist  
VS Engineering, Inc.  
4275 N High School Road  
Indianapolis, IN 46254  
lmontano@vsengineering.com

Re: RED FLAG INVESTIGATION  
DES # 1592335, Local Project  
Bike/Pedestrian Facilities  
Marquette Greenway – Singing Sands Connector  
LaPorte County, Indiana

**PROJECT DESCRIPTION:** The project is located in northern LaPorte County, near Michiana Shores. The project extends northeast along Grand Beach Drive from El Portal Drive (called Meer Road or CR 600W to the south of US 12) to the Indiana/Michigan state line.

The purpose of the project is to link multiple phases of the Singing Sands Trail to the Indiana-Michigan state line, where the trail will continue to New Buffalo, Michigan. The Singing Sands Trail is a component of the regional Marquette Trail, which begins on the south side of Chicago and ends in southwest Michigan.

This project will install a 10'-wide paved trail on the north side of Grand Beach Drive. The trail will be offset from the edge of Grand Beach Drive by 4 to 5 feet. The total project length is 1.02 miles.

Bridge and/or Culvert Project: Yes ☐ No ☒ Structure # \_\_\_\_\_

If this is a bridge project, is the bridge Historical? Yes ☐ No ☐ , Select ☐ Non-Select ☐

(Note: If the project involves a historical bridge, please include the bridge information in the Recommendations Section of the report).

Proposed right of way: Temporary ☐ # Acres \_\_\_\_\_ Permanent ☒ # Acres 3.3, Not Applicable ☐

Type of excavation: Excavation will be limited to 2-3 feet for path installation.

Maintenance of traffic: This project will utilize advance warning signs as the maintenance of traffic. Flaggers may be used to restrict traffic temporarily. Two-way traffic will be maintained throughout construction.

Work in waterway: Yes ☐ No ☒ Below ordinary high water mark: Yes ☐ No ☐

State Project: ☐ LPA: ☒



Any other factors influencing recommendations: N/A

### INFRASTRUCTURE TABLE AND SUMMARY

Infrastructure			
Indicate the number of items of concern found within the 0.5 mile search radius. If there are no items, please indicate N/A:			
Religious Facilities	N/A	Recreational Facilities	2
Airports <sup>1</sup>	N/A	Pipelines	N/A
Cemeteries	N/A	Railroads	1
Hospitals	N/A	Trails	2
Schools	N/A	Managed Lands	1

<sup>1</sup>In order to complete the required airport review, a review of public airports within 3.8 miles (20,000 feet) is required.

#### Explanation:

**Recreational Facilities:** There are two recreational facilities within the 0.5 mile search radius of the project area. The nearest of these facilities, the Red Arrow Stable, is immediately adjacent to the project area. Coordination with the owner will occur.

**Railroads:** There is one railroad within the 0.5 mile search radius of the project area. The Amtrak Railroad runs adjacent to the project area. Coordination with INDOT Utilities and Railroads will occur.

**Trails:** There are two trails within the 0.5 mile search radius of the project area. The closest of these, the Singing Sands – Lighthouse Trail, is planned to end at the intersection of Meer Road and US 12. Coordination with Michigan City Parks and Recreation will occur.

**Managed Lands:** There is one managed land within the 0.5 mile search radius of the project area. This managed land, the Ambler Flatwoods, is 0.44 mile southeast of the project area. No impacts are expected.

## WATER RESOURCES TABLE AND SUMMARY

<b>Water Resources</b> Indicate the number of items of concern found within the 0.5 mile search radius. If there are no items, please indicate N/A:			
NWI - Points	N/A	Canal Routes - Historic	N/A
Karst Springs	N/A	NWI - Wetlands	39
Canal Structures – Historic	N/A	Lakes	5
NPS NRI Listed	N/A	Floodplain - DFIRM	13
NWI-Lines	4	Cave Entrance Density	N/A
IDEM 303d Listed Streams and Lakes (Impaired)	N/A	Sinkhole Areas	N/A
Rivers and Streams	11	Sinking-Stream Basins	N/A

### Explanation:

**NWI Wetlands:** There are 39 NWI wetlands located within the 0.5 mile radius of the project area. The closest of these is 0.03 mile west of the project area. A Waters of the US Report is recommended and coordination with the appropriate agency, if applicable, will occur.

**Lakes:** There are five lakes located within the 0.5 mile radius of the project area. The closest of these is 0.33 mile south of the project area. No impacts are expected.

**Floodplain – DFIRM:** There are 13 floodplains located within the 0.5 mile radius of the project area. The closest of these is immediately adjacent to the project area. Coordination with the appropriate agency, if applicable, will occur.

**NWI-Lines:** There are four NWI-lines located within the 0.5 mile radius of the project area. The closest of these is 0.02 mile southwest of the project area. A Waters of the US Report is recommended and coordination with the appropriate agency, if applicable, will occur.

**Rivers and Streams:** There are 11 river and stream segments located within the 0.5 mile search radius of the project area. The closest of these is 0.04 mile southwest of the project area. A Waters of the US Report is recommended and coordination with the appropriate agency, if applicable, will occur.

## URBANIZED AREA BOUNDARY SUMMARY

Explanation: This project lies within the Michigan City Urbanized Area Boundary. Post construction Storm Water Quality Best Management Practices (BMPs) may need to be considered. An early coordination letter with topographic and aerial maps showing the project area should be sent to the MS4 Coordinator at Michigan City Sanitary District, 1100 E 8<sup>th</sup> Street, Michigan City, IN 46360.

### **MINING AND MINERAL EXPLORATION TABLE AND SUMMARY**

<b>Mining/Mineral Exploration</b>			
Indicate the number of items of concern found within the 0.5 mile search radius. If there are no items, please indicate N/A:			
Petroleum Wells	N/A	Mineral Resources	N/A
Mines – Surface	N/A	Mines – Underground	N/A

Explanation: There are no mining or mineral exploration resources located within the 0.5 mile radius of the project area. No impacts are expected.

### **HAZARDOUS MATERIAL CONCERNS TABLE AND SUMMARY**

<b>Hazardous Material Concerns</b>			
Indicate the number of items of concern found within the 0.5 mile search radius. If there are no items, please indicate N/A:			
Superfund	N/A	Manufactured Gas Plant Sites	N/A
RCRA Generator/ TSD	N/A	Open Dump Waste Sites	N/A
RCRA Corrective Action Sites	N/A	Restricted Waste Sites	N/A
State Cleanup Sites	N/A	Waste Transfer Stations	N/A
Septage Waste Sites	N/A	Tire Waste Sites	N/A
Underground Storage Tank (UST) Sites	1	Confined Feeding Operations (CFO)	N/A
Voluntary Remediation Program	N/A	Brownfields	N/A
Construction Demolition Waste	N/A	Institutional Controls	N/A
Solid Waste Landfill	N/A	NPDES Facilities	N/A
Infectious/Medical Waste Sites	N/A	NPDES Pipe Locations	N/A
Leaking Underground Storage (LUST) Sites	1	Notice of Contamination Sites	N/A

Explanation:

**Underground Storage Tank (UST) Sites:** There is one UST site located within the 0.5 mile radius of the project area, Crazy D's, 10505 N. US Hwy 12 E, AI #35399. This UST site is 0.05 mile southeast of the project area. IDEM conducted an Underground Storage Tank Inspection on June 5, 2018 and the facility was found to be in compliance with the equipment, operating, and maintenance requirements set forth in Indiana's UST Rule 329 IAC 9. No impacts are expected.

**Leaking Underground Storage Tanks (LUST) Sites:** There is one LUST site located within the 0.5 mile search radius of the project area, Next Door Food Store #103, 10201 N. US Hwy 12 E, AI #32955. This

LUST site is 0.06 mile southeast of the project area. The site has had multiple releases of petroleum hydrocarbons and a contaminated groundwater plume extends off-site to the northwest beneath US 12, the project area, and multiple nearby residences. Depth to groundwater is sometimes less than 3 feet below ground surface. If excavation occurs in this area, proper handling, removal, and disposal of soil and/or groundwater will be necessary.

### **ECOLOGICAL INFORMATION SUMMARY**

The LaPorte County listing of the Indiana Natural Heritage Data Center information on endangered, threatened, or rare (ETR) species and high quality natural communities is attached with ETR species highlighted. A preliminary review of the Indiana Natural Heritage Database by INDOT Environmental Services did indicate the presence of ETR species. Coordination with USFWS and IDNR will occur.

A review of the USFWS database did not indicate the presence of endangered bat species in or within 0.5 mile of the project area. The range-wide programmatic consultation for the Indiana Bat and Northern Long-eared Bat will be completed according to the most recent "Using the USFWS's IPaC System for Listed Bat Consultation for INDOT Projects".

An inquiry using the USFWS Information for Planning and Consultation (IPaC) website did not indicate the presence of the federally endangered species, the Rusty Patched Bumble Bee, in or within 0.5 mile of the project area. No impact is expected.

### **RECOMMENDATIONS SECTION**

#### **Infrastructure:**

**Railroad:** The Amtrak Railroad runs adjacent to the project area. Coordination with INDOT Utilities and Railroads will occur.

**Trails:** The Singing Sands – Lighthouse Trail, is planned to end at the intersection of Meer Road and US 12. Coordination with Michigan City Parks and Recreation will occur.

**Water Resources:** The presence of the following water resources will require the preparation of a Waters of the US Report and coordination with appropriate agencies will occur:

One NWI-Line is adjacent to the project area.

One stream segment is adjacent to the project area.

One NWI-Wetland is adjacent to the project area.

This project is adjacent to a floodplain (coordination only).

**UAB:** This project lies within the Michigan City UAB. Post construction Storm Water Quality Best Management Practices (BMPs) may need to be considered. An early coordination letter with topographic and aerial maps showing the project area should be sent to the MS4 Coordinator at Michigan City Sanitary District, 1100 E 8<sup>th</sup> Street, Michigan City, IN 46360.

**Mining/Mineral Exploration:** N/A

**HazMat Concerns:** N/A



**Ecological Information:** Coordination with USFWS and IDNR will occur. The range-wide programmatic consultation for the Indiana Bat and Northern Long-eared bat will be completed according to the most recent "Using the USFWS's IPaC System for Listed Bat Consultation for INDOT Projects."

INDOT Environmental Services concurrence:

**Aaron Aldred** Digitally signed by Aaron Aldred  
Date: 2020.01.09 15:32:50 -05'00' (Signature)

Prepared by: Leigh Montano



Environmental Scientist  
VS Engineering, Inc.

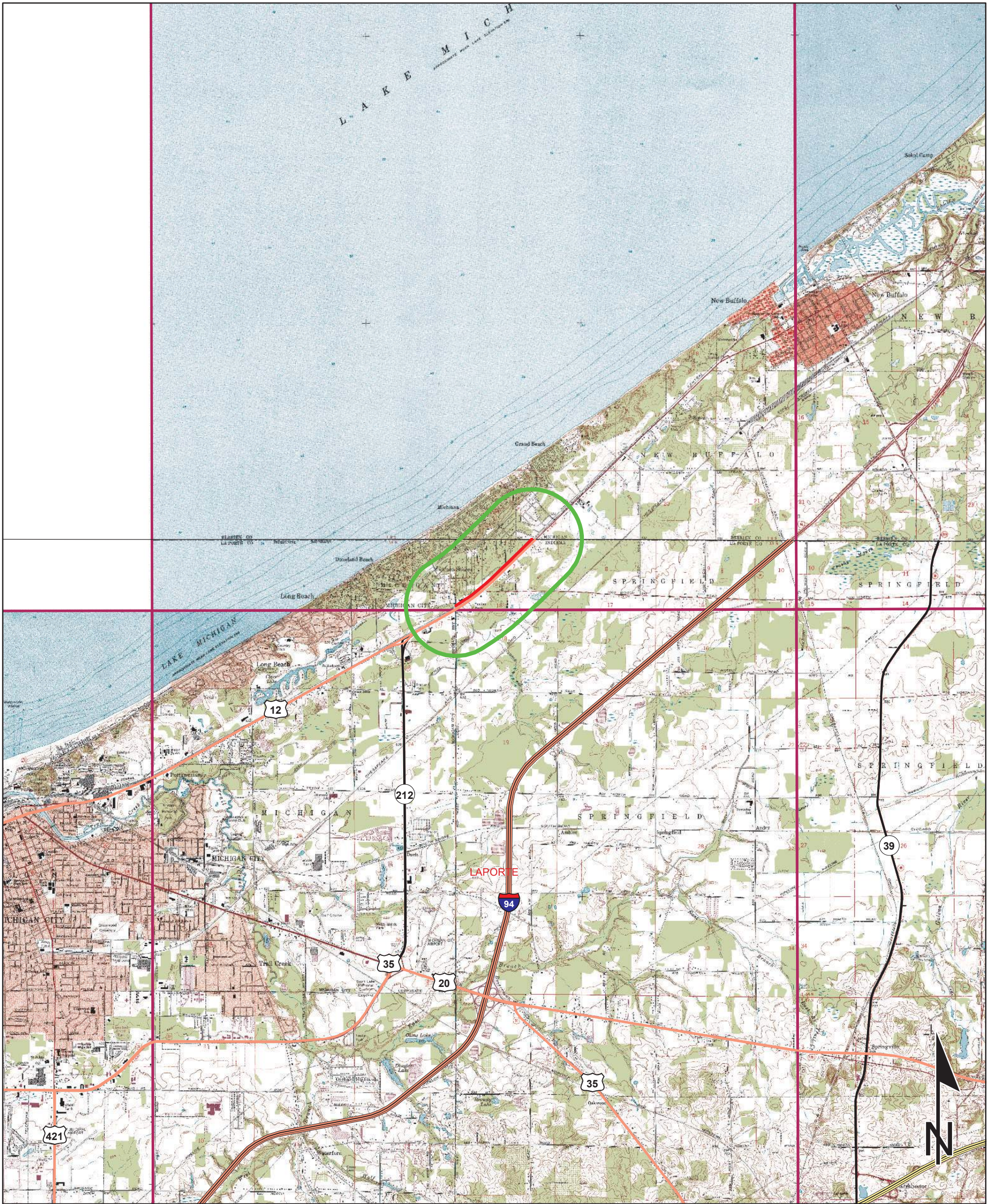
**Graphics:**

A map for each report section with a 0.5 mile search radius buffer around all project area(s) showing all items identified as possible items of concern is attached. If there is not a section map included, please change the YES to N/A:

SITE LOCATION: ..... YES  
INFRASTRUCTURE: ..... YES  
WATER RESOURCES: ..... YES  
URBANIZED AREA BOUNDARY: ..... YES  
MINING/MINERAL EXPLORATION: ..... N/A  
HAZMAT CONCERNS: ..... YES



Red Flag Investigation - Project Location  
Marquette Greenway - Singing Sands Connector  
Des. No. 1592335 - Pedestrian trail  
LaPorte County, Indiana



Sources: 1 0.5 0 1 Miles  
**Non Orthophotography**  
**Data** - Obtained from the State of Indiana Geographical Information Office Library  
**Orthophotography** - Obtained from Indiana Map Framework Data ([www.indianamap.org](http://www.indianamap.org))  
**Map Projection:** UTM Zone 16 N **Map Datum:** NAD83  
This map is intended to serve as an aid in graphic representation only. This information is not warranted for accuracy or other purposes.

NEW BUFFALO WEST AND  
MICHIGAN CITY EAST QUADRANGLES  
INDIANA  
7.5 MINUTE SERIES (TOPOGRAPHIC)



Red Flag Investigation - Infrastructure  
Marquette Greenway - Singing Sands Connector  
Des. No. 1592335 - Pedestrian trail  
LaPorte County, Indiana



Sources: 0.2 0.1 0 0.2 Miles  
**Non Orthophotography**  
Data - Obtained from the State of Indiana Geographical Information Office Library  
**Orthophotography** - Obtained from Indiana Map Framework Data ([www.indianamap.org](http://www.indianamap.org))  
Map Projection: UTM Zone 16 N Map Datum: NAD83  
This map is intended to serve as an aid in graphic representation only. This information is not warranted for accuracy or other purposes.

	Religious Facility		Recreation Facility		Project Area
	Airport		Pipeline		Half Mile Radius
	Cemeteries		Railroad		Toll
	Hospital		Trails		Interstate
	School		Managed Lands		State Route
			County Boundary		US Route
					Local Road

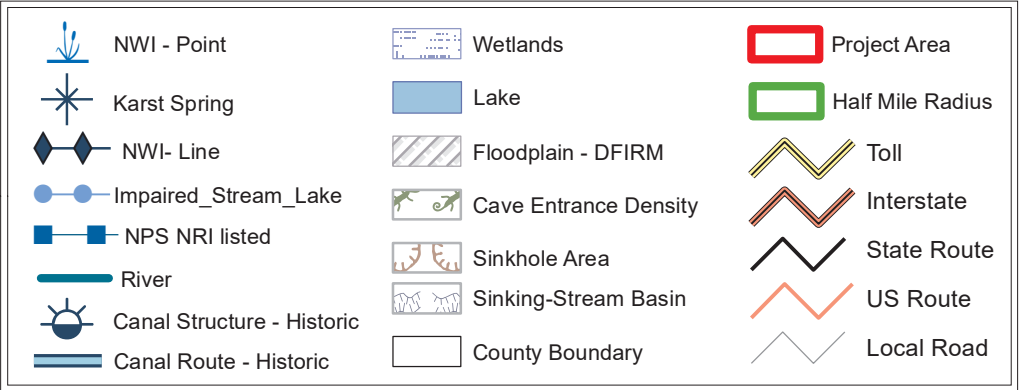


Red Flag Investigation - Water Resources  
Marquette Greenway - Singing Sands Connector  
Des. No. 1592335 - Pedestrian trail  
LaPorte County, Indiana



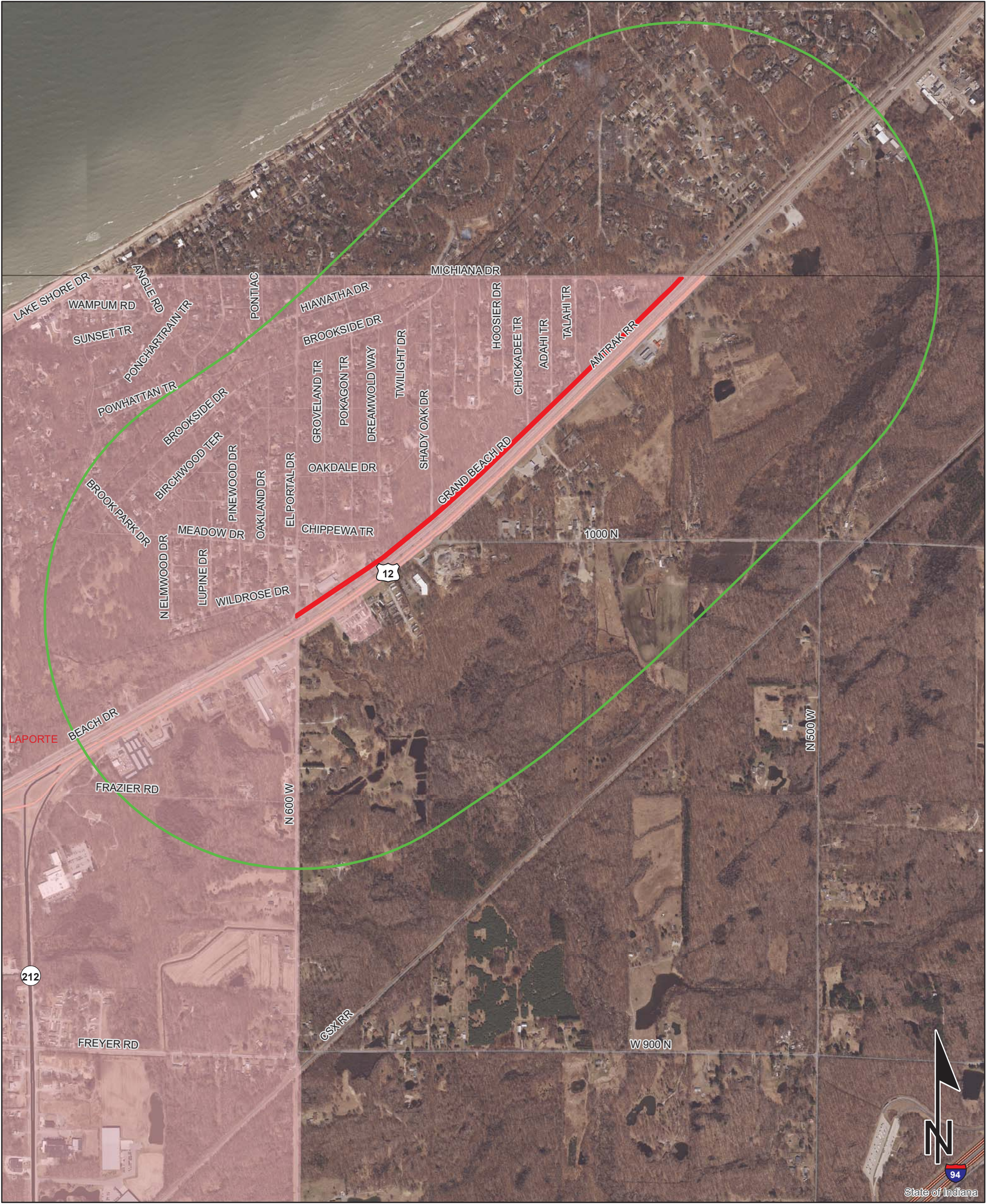
**Sources:**  
**Non Orthophotography**  
**Data** - Obtained from the State of Indiana Geographical Information Office Library  
**Orthophotography** - Obtained from Indiana Map Framework Data ([www.indianamap.org](http://www.indianamap.org))  
**Map Projection:** UTM Zone 16 N **Map Datum:** NAD83

This map is intended to serve as an aid in graphic representation only. This information is not warranted for accuracy or other purposes.

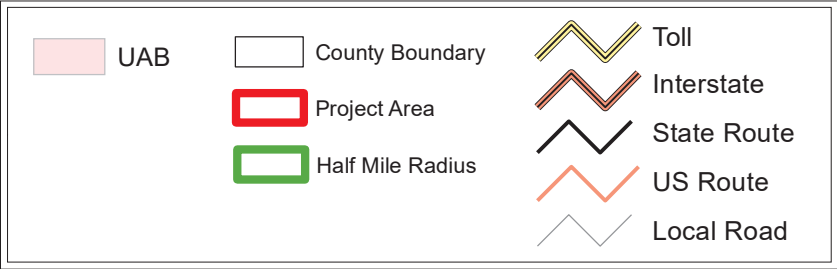




Red Flag Investigation - Urbanized Area Boundary  
Marquette Greenway - Singing Sands Connector  
Des. No. 1592335 - Pedestrian trail  
LaPorte County, Indiana



Sources: 0.25 0.125 0 0.25 Miles  
**Non Orthophotography**  
Data - Obtained from the State of Indiana Geographical Information Office Library  
**Orthophotography** - Obtained from Indiana Map Framework Data ([www.indianamap.org](http://www.indianamap.org))  
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This aerial map of Laporte, Indiana, illustrates a proposed rail alignment. The alignment is shown as a red and orange line running diagonally across the landscape. A green circle marks a 1-mile radius around a central point. The map includes numerous street names such as Lake Shore Dr, Sunset Tr, Shadow Tr, Ponchartraine Tr, Powhatan Tr, Brookside Dr, Birchwood Tr, Pinewood Dr, Meadow Dr, Oakdale Dr, Elmwood Dr, Wildrose Dr, N 600 W, N 500 W, 1000 N, Grand Beach Rd, MICHIANA DR, HOOSIER DR, CHICKADEE TR, ADAHI TR, TALAHITI TR, SHADY OAK DR, TWILIGHT DR, DREAMWOLD WAY, POKAGON TR, GROVELAND TR, BROOKSIDE DR, HIAWATHA DR, and PONTIAC. Major transportation features include the Amtrak RR, CSX RR, and I-12. A north arrow is positioned in the bottom right corner.

- 0.25 0.125 0 0.25 Miles

**CE-2 Des. No. 1592335, Marquette Greenway Trail - Singing Sands Connector, LaPorte Co.**

**Map Projection:** UTM Zone 16 N    **Map Datum:** NAD83



# Indiana County Endangered, Threatened and Rare Species List

County: La Porte

Species Name	Common Name	FED	STATE	GRANK	SRANK
<b>Mollusk: Gastropoda</b>					
Lymnaea stagnalis	Swamp Lymnaea		SSC	G5	S2
<b>Insect: Diptera</b>					
Mydas tibialis	Golden Legged Mydas Fly		ST	GNR	S1S2
<b>Insect: Homoptera</b>					
Bruchomorpha extensa	The Long-nosed Elephant Hopper		SR	GNR	S2S3
Chlorotettix dentatus			SR	GNR	SNR
Cicadula straminea			ST	GNR	S2
Cosmotettix bilineatus	Two-lined cosmotettix		ST	GNR	S1S2
Flexamia reflexus	Indiangrass Flexamia		ST	GNR	S2S3
Laevicephalus acus	a leafhopper		SR	GNR	S2S3
Mesamia nigradorsum	A Leafhopper		SR	GNR	S2S3
Mesamia stramineus	Helianthus Leafhopper		SE	GNR	S1
Paraphlepsius maculosus	Peppered Paraphlepsius		ST	GNR	S1
	Leafhopper				
Polyamia caperata	Little Bluestem Polyamia		SR	GNR	SNR
Polyamia herbida	The Prairie Panic Grass		ST	GNR	S1S3
	Leafhopper				
Polyamia obtecta	Sand Panic Grass Leafhopper		SR	GNR	S2S3
Prairiana kansana	The Kansas Prairie Leafhopper		SE	GNR	S1S2
Scaphoideus ochraceus	a leafhopper		SR	GNR	SNR
<b>Insect: Lepidoptera (Butterflies &amp; Moths)</b>					
Acronicta dactylina	Fingered Dagger Moth		SR	G5	SNR
Acronicta funeralis	Funerary Dagger Moth		SR	G5	SNR
Aethes patricia			SE	G3G4	S1
Agrotis stigmata	Spotted Dart Moth		ST	G4	S1S2
Anaplectoides prasina	Green arches		SR	G5	S1S3
Apamea burgessi	A Noctuid Moth		ST	G4	S1
Apamea indocilis	The Spastic Apamea			G5	S1S3
Apamea lignicolora	The Wood-colored Apamea		ST	G5	S1S2
Apamea lutosa	Opalescent Apamea		SE	GNR	S1
Apamea nigrior	Black-dashed Apamea		SR	G5	S2S3
Apantesis virguncula	Little Virgin Tiger Moth		SR	G5	S1S2
Atrytonopsis hianna	Dusted Skipper		SR	G4G5	S2S3
Boloria selene myrina	Silver-bordered Fritillary		SR	G5T5	S2S3
Boloria selene nebraskensis	The Nebraska Silver Bordered Fritillary		SE	G5T3T4	S2S3
Capis curvata	Curved Halter Moth		ST	G5	S2S3
Catocala abbreviatella	The Abbreviated Leadplant		SE	G4	S1
	Underwing Moth				
Catocala amestris	The Leadplant Underwing Moth		SE	G4	S1

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Catocala gracilis	Graceful Underwing		SR	G5	S2S3
Catocala praeclara	Praeclara Underwing		SR	G5	S2S3
Catocala relict	White Underwing		SR	G5	SNR
Crambus bidens	Forked Grass-veneer		SR	GNR	SNR
Crambus girardellus	Orange-striped Sedge Moth		SR	GNR	S2S3
Dargida rubripennis	The Pink Streak		ST	G3G4	S1
Erynnis martialis	Mottled Duskywing		WL	G3	S3
Eubaphe meridiana	Little Beggar Moth		SR	G4	S2
Eucosma bilineana			SR	GNR	S1S2
Eucosma bipunctella	A Moth		SR	GNR	S1S2
Eucosma giganteana	Giant Eucosma		SR	GNR	S1S2
Euphydryas phaeton	Baltimore			G5	S3S4
Fagitana littera	The Marsh Fern Moth		ST	G4	S1S2
Gabara subnivosella	A Noctuid Moth		SR	G4	S1S2
Grammia phyllira	The Sand Barrens Grammia		SR	G4	S2S3
Hesperia leonardus	Leonard's Skipper		SR	G5	S2S3
Homophoberia cristata	Waterlily Moth		SR	G4	S1S3
Hypenodes caducus	Large Hypenodes		SR	GNR	SNR
Lethe eurydice fumosus	Smoky-eyed Brown		SE	G5T3T4	S1
Leucania amygdalina	Salt Marsh Wainscot		SR	GNR	S2
Leucania inermis	Unarmed Wainscot		SR	G5	S2S3
Leucania multilinea	Many-lined Wainscot		SR	G5	S1S2
Lycaena helloides	Purplish Copper		SR	G5	S2S3
Macrochilo absorptalis	Slant-lined Owllet		SR	G4G5	S2S3
Macrochilo hypocritalis	Twin-dotted Macrochilo		SR	G4	S2
Macrochilo louisiana	Louisiana Macrochilo		ST	G4	S1S2
Melanomma auricinctaria	Huckleberry Eye-spot Moth		SR	G4	S2S3
Meropleon ambifusca	Newman's Brocade		ST	G3G4	S1S2
Meropleon diversicolor	Multicolored Sedgeminer		SR	G5	S2S3
Metanema determinata	Dark Metanema		SR	GNR	SNR
Neonympha mitchellii mitchellii	Mitchell's Satyr	LE	SE	G2T2	S1
Nola cilicoides	Blurry-patched Nola Moth		SR	G5	SNR
Notodonta scitipennis	Finned-willow Prominent			G5	S1S2
Odontosia elegans	Elegant Prominent		SR	G5	S1S2
Oligia obtusa	A Noctuid Moth		SE	G4	S1
Papaipema beeriana	Beer's Blazing Star Borer Moth		ST	G2G3	S1S3
Papaipema cerina	Golden Borer Moth		ST	G2G4	S1
Papaipema harrisii	Heracleum Stem Borer Moth		SR	G4?	S3
Papaipema limpida	The Ironweed Borer Moth		SR	G2G4	S1S2
Papaipema lysimachiae	The St. John'Swort Borer Moth		SR	G4G5	S1S3

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Papaipema maritima	The Giant Sunflower Borer Moth		ST	G3	S2
Papaipema rigida	Rigid Sunflower Borer Moth		SR	G4G5	S2S3
Papaipema rutila	Mayapple Borer Moth		SR	G4	S1S3
Papaipema sciata	The Culver's Root Borer		ST	G3	S1S2
Papaipema silphii	Silphium Borer Moth		ST	G3G4	S2
Papaipema speciosissima	The Royal Fern Borer Moth		ST	G4	S2S3
Parasa indetermina	Stinging Rose Caterpillar Moth		SR	G4	S1S2
Peoria gemmatella	Gemmed Cordgrass Borer		SR	GNR	S1
Photodes enervata	The Many-lined Cordgrass Moth		ST	G4	S1
Photodes includens	The Included Cordgrass Borer		ST	G4	S1
Photodes inops	Spartina Borer Moth		SR	G3G4	S2S3
Plagodis kuetzingi	Purple Plagodis		SR	G5	SNR
Poanes massasoit	Mulberry Wing Skipper			G4	S3S4
Poanes viator viator	Big Broad-winged Skipper		ST	G5T4	S2
Polites mystic	Long Dash Skipper			G5	S3S4
Polygonia progne	Gray Comma		SR	G5	S2S3
Problema byssus	Bunchgrass Skipper		ST	G3G4	S1S2
Pyreferra citrombra	Citrine Sallow		SR	GNR	SNR
Pyreferra hesperidago	Mustard Sallow		SR	G5	SNR
Pyreferra pettiti	A Noctuid Moth		SR	G5	SNR
Resapamea stipata	The Four-lined Cordgrass Borer		SE	G4	S1
Sciota dammersi	Leadplant Leafwebber Moth		SE	GNR	S1
Sitochroa dasconalis	Pearly Indigo Borer		ST	GNR	S1S2
Spilosoma latipennis	The Red-legged Tussock Moth		SR	G4	S2S3
Tricholita notata	Marked Noctuid		ST	G5	S1S2
Virbia opella	Tawny Virbia		SR	G5	S2S3
<b>Insect: Odonata (Dragonflies &amp; Damselflies)</b>					
Cordulegaster bilineata	Brown Spiketail		SE	G5	S3
Leucorrhinia frigida	Frosted Whiteface		ST	G5	S2S3
Nannothemis bella	Elfin Skimmer		SE	G4G5	S1S2
Rhionaeschna mutata	Spatterdock Darner		ST	G4	S2S3
Sympetrum semicinctum	Band-winged Meadowhawk		SR	G5	S2S3
<b>Insect: Orthoptera</b>					
Chloealtis conspersa	Sprinkled Locust		SR	G5	S2S3
Melanoplus gracilis	Graceful Spur-throated Grasshopper		SR	G5	S1S2
Neoconocephalus exiliscanorus	Slightly Musical Conehead		SR	GNR	SNR
Neoconocephalus nebrascensis	Nebraska Conehead		SR	GNR	S1S2
<b>Fish</b>					
Acipenser fulvescens	Lake Sturgeon		SE	G3G4	S1

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<b>Ichthyomyzon fossor</b>	<b>Northern Brook Lamprey</b>		SE	G4	S
<b>Moxostoma valenciennesi</b>	<b>Greater Redhorse</b>		SE	G4	I
Rhinichthys cataractae	Longnose Dace		SSC	G5	S
<b>Amphibian</b>					
Acris blanchardi	Blanchard's Cricket Frog		SSC	G5	S4
Hemidactylium scutatum	Four-toed Salamander		SSC	G5	S2
Necturus maculosus	Common mudpuppy		SSC	G5	S2
<b>Reptile</b>					
<b>Clemmys guttata</b>	<b>Spotted Turtle</b>	C	SE	G5	S2
<b>Clonophis kirtlandii</b>	<b>Kirtland's Snake</b>		SE	G2	S2
<b>Emydoidea blandingii</b>	<b>Blanding's Turtle</b>	C	SE	G4	S2
<b>Opheodrys vernalis</b>	<b>Smooth Green Snake</b>		SE	G5	S2
<b>Sistrurus catenatus</b>	<b>Eastern Massasauga</b>	LT	SE	G3	S2
Terrapene carolina carolina	Eastern Box Turtle		SSC	G5T5	S3
<b>Terrapene ornata ornata</b>	<b>Ornate Box Turtle</b>		SE	G5T5	S1
Thamnophis proximus proximus	Western Ribbon Snake		SSC	G5T5	S3
<b>Bird</b>					
<b>Ammodramus henslowii</b>	<b>Henslow's Sparrow</b>		SE	G4	S3B
Ardea alba	Great Egret		SSC	G5	S1B
<b>Bartramia longicauda</b>	<b>Upland Sandpiper</b>		SE	G5	S3B
<b>Botaurus lentiginosus</b>	<b>American Bittern</b>		SE	G5	S2B
Buteo platypterus	Broad-winged Hawk		SSC	G5	S3B
Certhia americana	Brown Creeper			G5	S2B
<b>Chlidonias niger</b>	<b>Black Tern</b>		SE	G4G5	S1B
<b>Circus hudsonius</b>	<b>Northern Harrier</b>		SE	G5	S2
<b>Cistothorus palustris</b>	<b>Marsh Wren</b>		SE	G5	S3B
<b>Cistothorus platensis</b>	<b>Sedge Wren</b>		SE	G5	S3B
Empidonax alnorum	Alder Flycatcher			G5	S2B
Euphagus cyanocephalus	Brewer's Blackbird			G5	SHB,S1N
Falco peregrinus	Peregrine Falcon		SSC	G4	S2B
<b>Gallinula galeata</b>	<b>Common gallinule</b>		SE	G5	S3B
Grus canadensis	Sandhill Crane		SSC	G5	S2B,S1N
Haliaeetus leucocephalus	Bald Eagle		SSC	G5	S2
<b>Ixobrychus exilis</b>	<b>Least Bittern</b>		SE	G5	S3B
<b>Lanius ludovicianus</b>	<b>Loggerhead Shrike</b>		SE	G4	S3B
Mniotilta varia	Black-and-white Warbler		SSC	G5	S1S2B
<b>Nycticorax nycticorax</b>	<b>Black-crowned Night-heron</b>		SE	G5	S1B
Pandion haliaetus	Osprey		SSC	G5	S1B
<b>Rallus elegans</b>	<b>King Rail</b>		SE	G4	S1B
<b>Rallus limicola</b>	<b>Virginia Rail</b>		SE	G5	S3B

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<b>Setophaga cerulea</b>	<b>Cerulean Warbler</b>		<b>SE</b>	<b>G4</b>	<b>S3B</b>
Setophaga citrina	Hooded Warbler		SSC	G5	S3B
Sturnella neglecta	Western Meadowlark		SSC	G5	S2B
Wilsonia canadensis	Canada Warbler			G5	S2B
<b>Xanthocephalus xanthocephalus</b>	<b>Yellow-headed Blackbird</b>		<b>SE</b>	<b>G5</b>	<b>S1B</b>
<b>Mammal</b>					
Condylura cristata	Star-nosed Mole		SSC	G5	S2?
Lasiurus borealis	Eastern Red Bat		SSC	G3G4	S4
Mustela nivalis	Least Weasel		SSC	G5	S2?
<b>Myotis lucifugus</b>	<b>Little Brown Bat</b>	<b>C</b>	<b>SE</b>	<b>G3</b>	<b>S2</b>
<b>Myotis septentrionalis</b>	<b>Northern Long Eared Bat</b>	<b>LT</b>	<b>SE</b>	<b>G1G2</b>	<b>S2S3</b>
<b>Myotis sodalis</b>	<b>Indiana Bat</b>	<b>LE</b>	<b>SE</b>	<b>G2</b>	<b>S1</b>
<b>Spermophilus franklinii</b>	<b>Franklin's Ground Squirrel</b>		<b>SE</b>	<b>G5</b>	<b>S2</b>
Taxidea taxus	American Badger		SSC	G5	S2
<b>Vascular Plant</b>					
<b>Actaea rubra</b>	<b>Red Baneberry</b>		<b>ST</b>	<b>G5</b>	<b>S2</b>
<b>Andromeda glaucophylla</b>	<b>Bog Rosemary</b>		<b>ST</b>	<b>G5T5</b>	<b>S2</b>
<b>Anticlea elegans var. glaucus</b>	<b>White Camas</b>		<b>SR</b>	<b>G5T4T5</b>	<b>S3</b>
<b>Aralia hispida</b>	<b>Bristly Sarsaparilla</b>		<b>SE</b>	<b>G5</b>	<b>S1</b>
<b>Arctostaphylos uva-ursi</b>	<b>Bearberry</b>		<b>SR</b>	<b>G5</b>	<b>S3</b>
Aristida intermedia	Slim-spike Three-awn Grass		WL	GNR	S3
<b>Aristida tuberculosa</b>	<b>Seabeach Needlegrass</b>		<b>SR</b>	<b>G5</b>	<b>S3</b>
<b>Betula papyrifera</b>	<b>Paper Birch</b>		<b>SR</b>	<b>G5</b>	<b>S3</b>
Betula populifolia	Gray Birch		WL	G5	S1
<b>Bidens beckii</b>	<b>Beck Water-marigold</b>		<b>SE</b>	<b>G5</b>	<b>S1</b>
<b>Botrychium matricariifolium</b>	<b>Chamomile Grape-fern</b>		<b>SR</b>	<b>G5</b>	<b>S3</b>
<b>Brachyelytrum aristosum</b>	<b>Northern shorthusk</b>		<b>SE</b>	<b>G5</b>	<b>S1</b>
<b>Calla palustris</b>	<b>Wild Calla</b>		<b>SE</b>	<b>G5</b>	<b>S1</b>
<b>Carex arctata</b>	<b>Black Sedge</b>		<b>ST</b>	<b>G5</b>	<b>S2</b>
<b>Carex atherodes</b>	<b>Awned Sedge</b>		<b>SE</b>	<b>G5</b>	<b>S1</b>
<b>Carex atlantica ssp. capillacea</b>	<b>Howe Sedge</b>		<b>SE</b>	<b>G5T5?</b>	<b>S1</b>
<b>Carex aurea</b>	<b>Golden-fruited Sedge</b>		<b>SR</b>	<b>G5</b>	<b>S3</b>
<b>Carex brunnescens</b>	<b>Brownish Sedge</b>		<b>ST</b>	<b>G5</b>	<b>S2</b>
<b>Carex cephaloidea</b>	<b>Thinleaf Sedge</b>		<b>ST</b>	<b>G5</b>	<b>S2</b>
<b>Carex chordorrhiza</b>	<b>Creeping Sedge</b>		<b>SE</b>	<b>G5</b>	<b>S1</b>
Carex debilis var. rudgei	White-edge Sedge		WL	G5T5	S3
<b>Carex echinata</b>	<b>Little Prickly Sedge</b>		<b>SE</b>	<b>G5</b>	<b>S1</b>
<b>Carex flava</b>	<b>Yellow Sedge</b>		<b>ST</b>	<b>G5</b>	<b>S2</b>
<b>Carex folliculata</b>	<b>Long Sedge</b>		<b>SR</b>	<b>G5</b>	<b>S3</b>
<b>Carex leptoneura</b>	<b>Finely-nerved Sedge</b>		<b>SE</b>	<b>G5</b>	<b>S1</b>

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# Indiana County Endangered, Threatened and Rare Species List

## County: La Porte

Species Name	Common Name	FED	STATE	GRANK	SRANK
Carex limosa	Mud Sedge		SE	G5	S1
Carex pedunculata	Longstalk Sedge		WL	G5	S3
Carex scabrata	Rough Sedge		SE	G5	S1
Carex seorsa	Weak Stellate Sedge		SR	G5	S3
Carex trisperma	Three-seed Sedge		WL	G5	S3
Chimaphila maculata	Spotted Wintergreen		WL	G5	S3
Chimaphila umbellata ssp. cisatlantica	Pipsissewa		SE	G5T5	S1
Chrysosplenium americanum	American Golden-saxifrage		ST	G5	S2
Circaea alpina	Small Enchanter's Nightshade		SX	G5	SX
Cirsium pitcheri	Dune Thistle	LT	SE	G2G3	S1
Clinopodium arkansanum	Calamint		ST	G5	S2
Clinopodium vulgare	American Wild Basil		WL	G5	S3
Conioselinum chinense	Hemlock Parsley		SE	G5	S1
Cornus rugosa	Roundleaf Dogwood		SR	G5	S3
Corydalis sempervirens	Pale Corydalis		SE	G5	S1
Cyperus dentatus	Toothed Sedge		SE	G4	S1
Cypripedium candidum	Small White Lady's-slipper		SR	G4	S3
Cypripedium parviflorum var. makasin	Small Yellow Lady's-slipper		SR	G5T4T5	S3
Dendrolycopodium hickeyi	Hickey's Clubmoss		SR	G5	S3
Dendrolycopodium obscurum	Tree Clubmoss		SR	G5	S3
Deschampsia cespitosa	Tufted Hairgrass		SR	G5	S3
Dichanthelium boreale	Northern Witchgrass		SR	G5	S3
Dichanthelium leibergii	Leiberg's Witchgrass		ST	G4	S2
Diervilla lonicera	Northern Bush-honeysuckle		WL	G5	S3
Diphasiastrum tristachyum	Deep-root Clubmoss		ST	G5	S2
Drosera intermedia	Spoon-leaved Sundew		SR	G5	S3
Drosera rotundifolia	Roundleaf Sundew		WL	G5	S3
Dryopteris celsa	Log Fern		SE	G4	S1
Dryopteris clintoniana	Clinton Woodfern		SE	G5	S1
Eleocharis melanocarpa	Black-fruited Spike-rush		ST	G4	S2
Epigaea repens	Trailing Arbutus		SR	G5	S3
Equisetum sylvaticum	Woodland Horsetail		SE	G5	S1
Equisetum variegatum var. variegatum	Variegated Horsetail		SE	G5T5	S1
Eriocaulon aquaticum	Pipewort		SE	G5	S1
Eriophorum angustifolium	Narrow-leaved Cotton-grass		SR	G5	S2
Eriophorum gracile	Slender Cotton-grass		ST	G5	S2
Eriophorum spissum	Dense Cotton-grass		SX	G5T5	SX
Eriophorum viridicarinarum	Green-keeled Cotton-grass		SR	G5	S2
Fallopia cilinodis	Fringed Black Bindweed		SE	G5	S1
Fragaria vesca var. americana	Woodland Strawberry		SE	G5T5	S1

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# Indiana County Endangered, Threatened and Rare Species List

County: La Porte

Species Name	Common Name	FED	STATE	GRANK	SRANK
<b>Gentiana puberulenta</b>	<b>Downy Gentian</b>		<b>SE</b>	<b>G4G5</b>	<b>S1</b>
<b>Geranium robertianum</b>	<b>Herb-robert</b>		<b>SR</b>	<b>G5</b>	<b>S3</b>
Huperzia lucidula	Shining Clubmoss		WL	G5	S3
Hydrastis canadensis	Golden Seal		WL	G3G4	S3
<b>Hypericum pyramidatum</b>	<b>Great St. John's-wort</b>		<b>ST</b>	<b>G4</b>	<b>S2</b>
<b>Ilex mucronata</b>	<b>Mountain Holly</b>		<b>SR</b>	<b>G5</b>	<b>S3</b>
<b>Juglans cinerea</b>	<b>Butternut</b>		<b>ST</b>	<b>G4</b>	<b>S2</b>
<b>Juncus articulatus</b>	<b>Jointed Rush</b>		<b>SE</b>	<b>G5</b>	<b>S1</b>
Juncus balticus var. littoralis	Baltic Rush		WL	G5T5	S3
<b>Juncus pelocarpus</b>	<b>Brown-fruited Rush</b>		<b>SE</b>	<b>G5</b>	<b>S1</b>
<b>Juncus scirpoides</b>	<b>Scirpus-like Rush</b>		<b>ST</b>	<b>G5</b>	<b>S2</b>
<b>Juniperus communis var. depressa</b>	<b>Ground Juniper</b>		<b>SR</b>	<b>G5T5</b>	<b>S3</b>
<b>Larix laricina</b>	<b>Tamarack</b>		<b>ST</b>	<b>G5</b>	<b>S2</b>
<b>Lathyrus japonicus</b>	<b>Beach Peavine</b>		<b>SE</b>	<b>G5T4T5</b>	<b>S1</b>
<b>Lathyrus venosus</b>	<b>Smooth Veiny Pea</b>		<b>SE</b>	<b>G5</b>	<b>S1</b>
Linum striatum	Ridged Yellow Flax		WL	G5	S3
<b>Lonicera canadensis</b>	<b>American Fly-honeysuckle</b>		<b>SE</b>	<b>G5</b>	<b>S1</b>
<b>Luzula acuminata</b>	<b>Hairy Woodrush</b>		<b>SE</b>	<b>G5</b>	<b>S1</b>
<b>Lycopodiella inundata</b>	<b>Northern Bog Clubmoss</b>		<b>ST</b>	<b>G5</b>	<b>S2</b>
Lycopodium clavatum	Running Pine		WL	G5	S3
<b>Malaxis unifolia</b>	<b>Green Adder's-mouth Orchid</b>		<b>SE</b>	<b>G5</b>	<b>S1</b>
<b>Matteuccia struthiopteris</b>	<b>Ostrich Fern</b>		<b>SR</b>	<b>G5</b>	<b>S3</b>
<b>Melampyrum lineare</b>	<b>American Cow-wheat</b>		<b>SE</b>	<b>G5</b>	<b>S1</b>
<b>Milium effusum</b>	<b>Tall Millet-grass</b>		<b>ST</b>	<b>G5</b>	<b>S1</b>
<b>Minuartia michauxii var. michauxii</b>	<b>Michaux's Stitchwort</b>		<b>ST</b>	<b>G5T5</b>	<b>S2</b>
<b>Myosotis laxa</b>	<b>Smaller Forget-me-not</b>		<b>ST</b>	<b>G5</b>	<b>S2</b>
<b>Myriophyllum pinnatum</b>	<b>Cutleaf Water-milfoil</b>		<b>SE</b>	<b>G5</b>	<b>S1</b>
<b>Najas gracillima</b>	<b>Thread-like Naiad</b>		<b>SR</b>	<b>G5?</b>	<b>S3</b>
<b>Oenothera perennis</b>	<b>Small Sundrops</b>		<b>SR</b>	<b>G5</b>	<b>S3</b>
Orthilia secunda	One-sided Wintergreen		SX	G5	SX
<b>Oryzopsis asperifolia</b>	<b>White-grained Mountain-ricegrass</b>		<b>SE</b>	<b>G5</b>	<b>S1</b>
Panax trifolius	Dwarf Ginseng		WL	G5	S3
<b>Panicum verrucosum</b>	<b>Warty Panic-grass</b>		<b>ST</b>	<b>G4</b>	<b>S2</b>
<b>Persicaria careyi</b>	<b>Carey's Smartweed</b>		<b>ST</b>	<b>G4</b>	<b>S2</b>
<b>Pinus banksiana</b>	<b>Jack Pine</b>		<b>SR</b>	<b>G5</b>	<b>S3</b>
<b>Pinus strobus</b>	<b>Eastern White Pine</b>		<b>SR</b>	<b>G5</b>	<b>S3</b>
Piptatherum pungens	Slender Mountain-ricegrass		SX	G5	SX
<b>Piptochaetium avenaceum</b>	<b>Blackseed Needlegrass</b>		<b>SR</b>	<b>G5</b>	<b>S3</b>
<b>Platanthera aquilonis</b>	<b>Leafy Northern Green Orchis</b>		<b>ST</b>	<b>G5</b>	<b>S2</b>
<b>Platanthera ciliaris</b>	<b>Yellow-fringe Orchis</b>		<b>SE</b>	<b>G5</b>	<b>S1</b>

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# Indiana County Endangered, Threatened and Rare Species List

## County: La Porte

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<i>Platanthera leucophaea</i>	Prairie White-fringed Orchid	LT	SE	G2G3	S1
<i>Platanthera psycodes</i>	Small Purple-fringe Orchis		SR	G5	S2
<i>Poa alsodes</i>	Grove Meadow Grass		SR	G4G5	S3
<i>Poa paludigena</i>	Bog Bluegrass		SR	G3	S3
<i>Polygonella articulata</i>	Eastern Jointweed		SR	G5	S3
<i>Polytaenia nuttallii</i>	Prairie Parsley		SE	G5	S1
<i>Potamogeton epihydrus</i>	Nuttall Pondweed		SE	G5	S1
<i>Potamogeton friesii</i>	Fries' Pondweed		SE	G5	S1
<i>Potamogeton praelongus</i>	White-stem Pondweed		ST	G5	S1
<i>Potamogeton pulcher</i>	Spotted Pondweed		ST	G5	S2
<i>Potamogeton pusillus</i>	Slender Pondweed		WL	G5	S2
<i>Potamogeton robbinsii</i>	Flatleaf Pondweed		SR	G5	S3
<i>Potamogeton strictifolius</i>	Straight-leaf Pondweed		ST	G5	S2
<i>Potamogeton vaseyi</i>	Vasey's Pondweed		SE	G4	S1
<i>Potentilla anserina</i>	Silverweed		ST	G5	S2
<i>Prenanthes aspera</i>	Rough Rattlesnake-root		SR	G4?	S3
<i>Prunus pensylvanica</i>	Fire Cherry		SR	G5	S3
<i>Pyrola americana</i>	American Wintergreen		ST	G5	S2
<i>Pyrola elliptica</i>	Elliptical-leaf Wintergreen		WL	G5	S3
<i>Rhynchospora recognita</i>	Globe Beaked-rush		SE	G5?	S1
<i>Rhynchospora scirpoides</i>	Long-beaked Baldrush		SR	G4	S3
<i>Scheuchzeria palustris</i> ssp. <i>americana</i>	American Scheuchzeria		SE	G5T5	S1
<i>Silene regia</i>	Royal Catchfly		SE	G3	S1
<i>Sisyrinchium montanum</i>	Strict Blue-eyed-grass		SE	G5	S1
<i>Solidago simplex</i> var. <i>gillmanii</i>	Sticky Goldenrod		ST	G5T3?	S2
<i>Sorbus decora</i>	Northern Mountain-ash		SX	G5	SX
<i>Sparganium androcladum</i>	Branching Bur-reed		ST	G4G5	S2
<i>Spiranthes lucida</i>	Shining Ladies'-tresses		SR	G4	S3
<i>Styrax americanus</i>	American Snowbell		SR	G5	S3
<i>Symphyotrichum boreale</i>	Rushlike Aster		ST	G5	S2
<i>Symphyotrichum sericeum</i>	Western Silvery Aster		ST	G5	S2
<i>Thuja occidentalis</i>	Northern White Cedar		SE	G5	S1
<i>Triantha glutinosa</i>	False Asphodel		ST	G5	S2
<i>Triglochin palustris</i>	Marsh Arrow-grass		ST	G5	S2
<i>Turritis glabra</i>	Tower-mustard		WL	G5	S3
<i>Utricularia geminiscapa</i>	Hidden-fruited Bladderwort		SE	G4G5	S1
<i>Utricularia minor</i>	Lesser Bladderwort		ST	G5	S1
<i>Utricularia purpurea</i>	Purple Bladderwort		SR	G5	S3
<i>Utricularia subulata</i>	Zigzag Bladderwort		ST	G5	S2
<i>Vaccinium oxycoccos</i>	Small Cranberry		ST	G5	S2

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## Indiana County Endangered, Threatened and Rare Species List

### County: La Porte

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<b>Valeriana edulis var. ciliata</b>	Hairy Valerian		SE	G5T3	S
<b>Valeriana uliginosa</b>	Marsh Valerian		SE	G4	1
Valerianella chenopodiifolia	Goose-foot Corn-salad		WL	G4	S
<b>Viburnum opulus var. americanum</b>	Highbush-cranberry		SE	G5T5	1
<b>Viola primulifolia</b>	Primrose-leaf Violet		SR	G5	S
<b>Wolffiella gladiata</b>	Sword Bogmat		SE	G5	3
<b>Xyris difformis</b>	Carolina Yellow-eyed Grass		ST	G5	S
<b>High Quality Natural Community</b>					
Forest - flatwoods boreal	Boreal Flatwoods		SG	G2?	S2
Forest - floodplain wet-mesic	Wet-mesic Floodplain Forest		SG	G3?	S3
Forest - upland dry Northwestern Morainal	Northwestern Morainal Dry Upland Forest		SG	GNR	S1
Forest - upland dry-mesic Grand Prairie	Grand Prairie Dry-mesic Upland Forest		SG	GNR	S1
Forest - upland dry-mesic Northwestern Morainal	Northwestern Morainal Dry-mesic Upland Forest		SG	GNR	S1
Forest - upland mesic Grand Prairie	Grand Prairie Mesic Upland Forest		SG	GNR	S1
Forest - upland mesic Northwestern Morainal	Northwestern Morainal Mesic Upland Forest		SG	GNR	S1
Lake - lake	Lake		SG	GNR	S2
Prairie - dry-mesic	Dry-mesic Prairie		SG	G3	S2
Prairie - mesic	Mesic Prairie		SG	G2	S2
Prairie - sand dry	Dry Sand Prairie		SG	G3	S2
Prairie - sand dry-mesic	Dry-mesic Sand Prairie		SG	G3	S3
Prairie - sand wet-mesic	Wet-mesic Sand Prairie		SG	G1?	S2
Prairie - wet	Wet Prairie		SG	G3	S1
Wetland - bog acid	Acid Bog		SG	G3	S2
Wetland - bog circumneutral	Circumneutral Bog		SG	G3	S3
Wetland - fen	Fen		SG	G3	S3
Wetland - fen forested	Forested Fen		SG	G3	S1
Wetland - marsh	Marsh		SG	GU	S4
Wetland - meadow sedge	Sedge Meadow		SG	G3?	S1
Wetland - seep circumneutral	Circumneutral Seep		SG	GU	S1
Wetland - swamp shrub	Shrub Swamp		SG	GU	S2

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# APPENDIX F:

## WATER RESOURCES





4275 North High School Road, Indianapolis, IN 46254  
317.293.3542  
www.vsenengineering.com

March 6, 2020

## WATERS DETERMINATION REPORT

Des. No. 1592335

Marquette Trail,  
Grand Beach Road,  
LaPorte County, Indiana

### I. Project Information

#### Fieldwork Dates

October 4, 2019

#### Principal Investigator

Mitchell Graham, Environmental Scientist

#### Project Locations

*New Buffalo West, Indiana Quadrangle,*

The project location is within LaPorte County, Indiana

Latitude: 41.755554°N

Longitude: -86.807745°W

HUC 12: 040400010102

#### Project Description

The project is located in northern LaPorte County, near Michiana Shores (INDOT Des. No. 1592335). The project extends northeast along Grand Beach Drive from El Portal Drive (called Meer Road or CR 600W to the south of US 12) to the Indiana/Michigan state line.

The purpose of the project is to link multiple phases of the Singing Sands Trail to the Indiana-Michigan state line, where the trail will continue to New Buffalo, Michigan. The Singing Sands Trail is a component of the regional Marquette Trail, which begins on the south side of Chicago and ends in southwest Michigan.

This project will install a 10'-wide paved trail on the north side of Grand Beach Drive. The trail will be offset from the edge of Grand Beach Drive by 4 to 5 feet. All construction activities will take place within 30 feet from edge of pavement. Installation will include an asphalt trail and ADA-compliant curb ramps and curbs at public road intersections. The total project length is 1.02 miles. There will be approximately 3.5 acres of permanent right-of-way that will be acquired for this project, 1.1 acres of which is reacquisition of the apparent existing right-of-way. There will be no work within any water resources. There will be approximately 0.6 acre of tree clearing for the installation of the trail. Excavation will be 2 to 3 feet.

## II. Office Evaluation

### Methodology

A desktop review of the study area was conducted to identify potential waters or waters of the U.S. (streams, wetlands, ponds, etc.). This included review of historic and recent aerial photography for any areas with a water signature or a sharp change in vegetation. Any such areas were flagged for field follow-up. USGS topographic mapping, NRCS mapped soil units, USGS Hydrography data, FEMA Floodplain mapping, and National Wetlands Inventory (NWI) mapping were also reviewed.

### USGS Mapping

The USGS topographic map is shown in Attachment 2a and Attachment 2b. The project is within the *New Buffalo West, Indiana Quadrangle*. The topo map shows no streams crossing the study area.

### NRCS Mapped Soil Units

The study area contains four mapped soil units (Attachment 4). The four dominant mapped soil units are Brems fine sand (BtA), Morocco loamy sand (MuuA), Oakville fine sand (OaC), and Saugatuck-Pipestone complex (Sa). Three of these soil units are included in the Indiana list of Hydric Soils within LaPorte County. Morocco loamy sand, Oakville fine sand, and Saugatuck-Pipestone complex have a very small component that is hydric. The four soil units within the study area are summarized in the table below.

**Table 1: Soils with the Study Area**

Symbol	Description	Drainage Class	Hydric Rating
BtA	Brems fine sand	Moderately well drained	0%
MuuA	Morocco loamy sand	Lake plain	5%
OaC	Oakville fine sand	Newton	10%
Sa	Saugatuck-Pipestone complex	Newton	10%

### Hydrology

The USGS National Hydrography Dataset (NHD) is shown on the map in Attachment 3. The NHD GIS layer shows no streams crossing the study area. The study area was investigated to determine if any resources will likely be considered jurisdictional.

### FEMA Floodplain Mapping

The map in Attachment 3 shows the FEMA floodplains GIS layer near the study area. The proposed project does not cross any floodplain areas.

### NWI Mapping

The National Wetland Inventory GIS layer is shown in Attachment 3. No wetlands are shown within the study area.

### **III. Field Reconnaissance**

#### **Methodology**

VS Engineering conducted fieldwork on October 4, 2019 to determine the presence of wetlands, streams, and other water resources within the project limits. The survey footprint was limited to the side of the roadway proposed for trail construction and limited to approximately 50 feet from the edge of the pavement. When observed, features located adjacent to, but outside of the project limits were also noted. Resource maps showing all delineated features are attached for reference (Attachment 5). A hand-held GPS unit (TopCon Tesla Series) was used to collect the location of delineated resources.

Photographs were taken throughout the study area and specifically for each feature identified within the project limits. A photo location map and selected photographs are included within this report for reference (Attachment 5).

The study area was examined for wetlands using the guidance provided in the 1987 Corps Manual. Vegetation, soil, and hydrology data was considered using the methods described in the Regional Supplement to the Corps of Engineers Wetland Delineation Manual: Midwest Region (Version 2.0). Wetland indicator statuses for plants were obtained from the 2018 National Wetland Plant List.

Stream boundaries were delineated in the field at the ordinary high water mark (OHWM), which was obtained using a measuring tape. Streams with an OHWM are classified as perennial, intermittent or ephemeral. Two different function and value assessment methodologies could be used, depending on the size of the stream's immediate watershed (drainage area). These methodologies include the Qualitative Habitat Evaluation Index (QHEI) for larger streams and the Primary Headwater Habitat Evaluation Index (HHEI) for smaller streams.

#### **Wetlands**

No wetland resources were identified during the field survey.

#### **Streams**

No stream resources were identified during the field survey.

#### **Open Water**

No open water resources were identified during the field survey.

#### **Roadside Ditches**

No Roadside Ditches were identified during the field survey.



#### **IV. Conclusions**

The field investigation did not identify any resources that are likely considered Waters of the U.S. within the study area. If impacts will occur to any jurisdictional resources, waterway permits may be required from IDEM and the USACE.

These waterways are likely Waters of the U.S. Every effort should be taken to avoid and minimize impacts to the waterway and wetlands. If impacts are necessary, then mitigation may be required. The INDOT Environmental Services Division should be contacted immediately if impacts will occur. The final determination of jurisdictional waters is ultimately made by the U.S. Army Corps of Engineers. This report is our best judgment based on the guidelines set forth by the USACE.

#### **V. Acknowledgement**

This waters determination has been prepared based on the best available information, interpreted in the light of the investigator's training, experience and professional judgement in conformance with the 1987 *Corps of Engineers Wetlands Delineation Manual*, the appropriate regional supplement, the *USACE Jurisdictional Determination Form Instructional Guidebook*, and other appropriate agency guidelines.

Prepared by:

Mitchell Graham

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VS Engineering, Inc.

## VI. References

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### ATTACHMENTS

**Attachment 1** Study Area Map

**Attachment 2a** USGS Topographic Map

**Attachment 2b** USGS Topographic Map (TNW Connectivity)

**Attachment 3** NWI, Hydrography, and Floodplain Map

**Attachment 4** Soils Map

**Attachment 5(a, b, c)** Delineated Features and Photo Orientation Map

**Attachment 6** Study Area Photographs

**Attachment 7** Preliminary Jurisdictional Determination Form



## Legend

Marquette Trail Study Area

0 1 2 4  
Miles  
1 in = 2 Miles

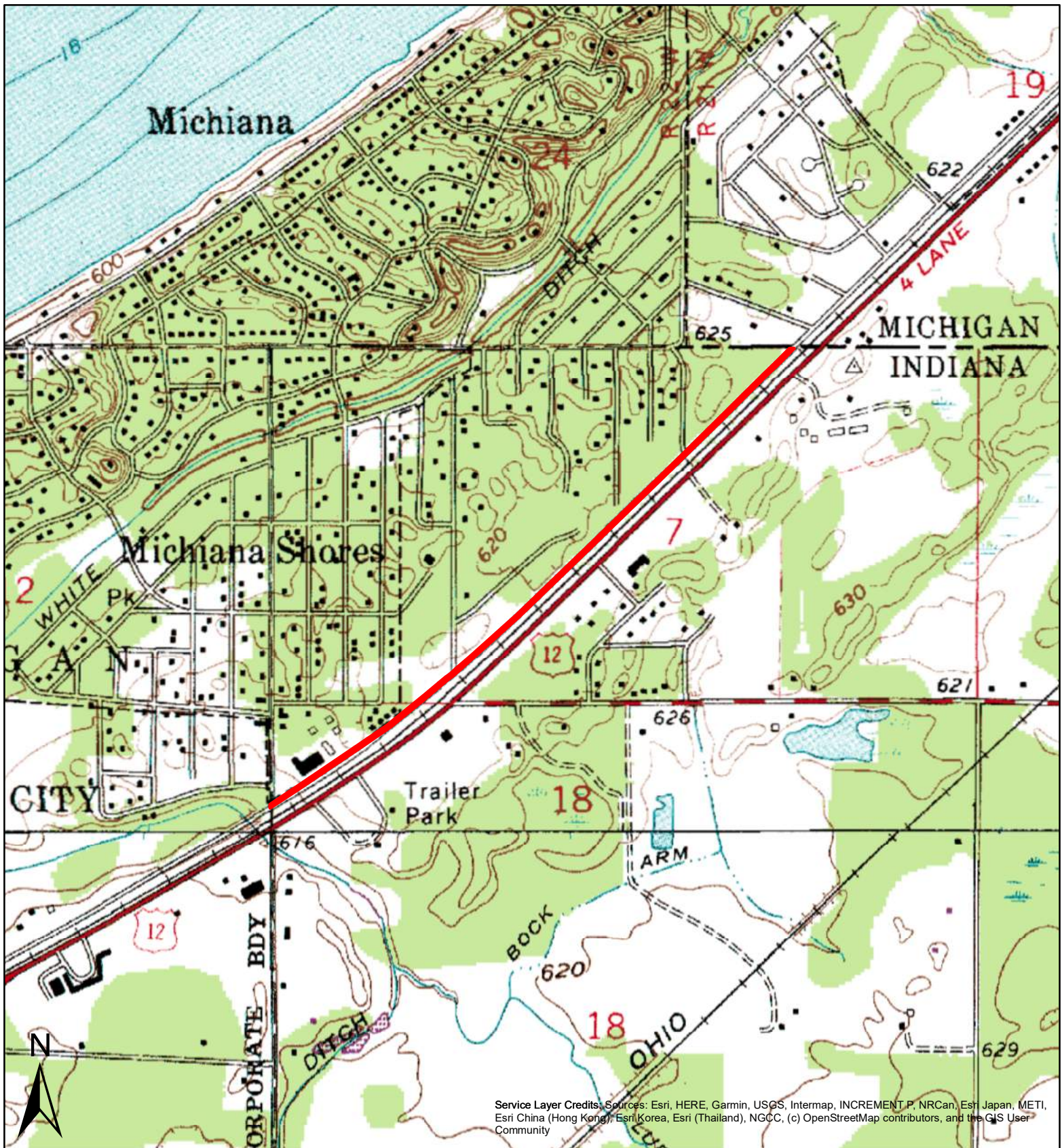
## Attachment 1 - Study Area Location Map

**Marquette Trail**  
**Grand Beach Road**  
**LaPorte County, Indiana**  
**Des. No. 1592335**



Drawn: 3/6/20 MLG





## Legend

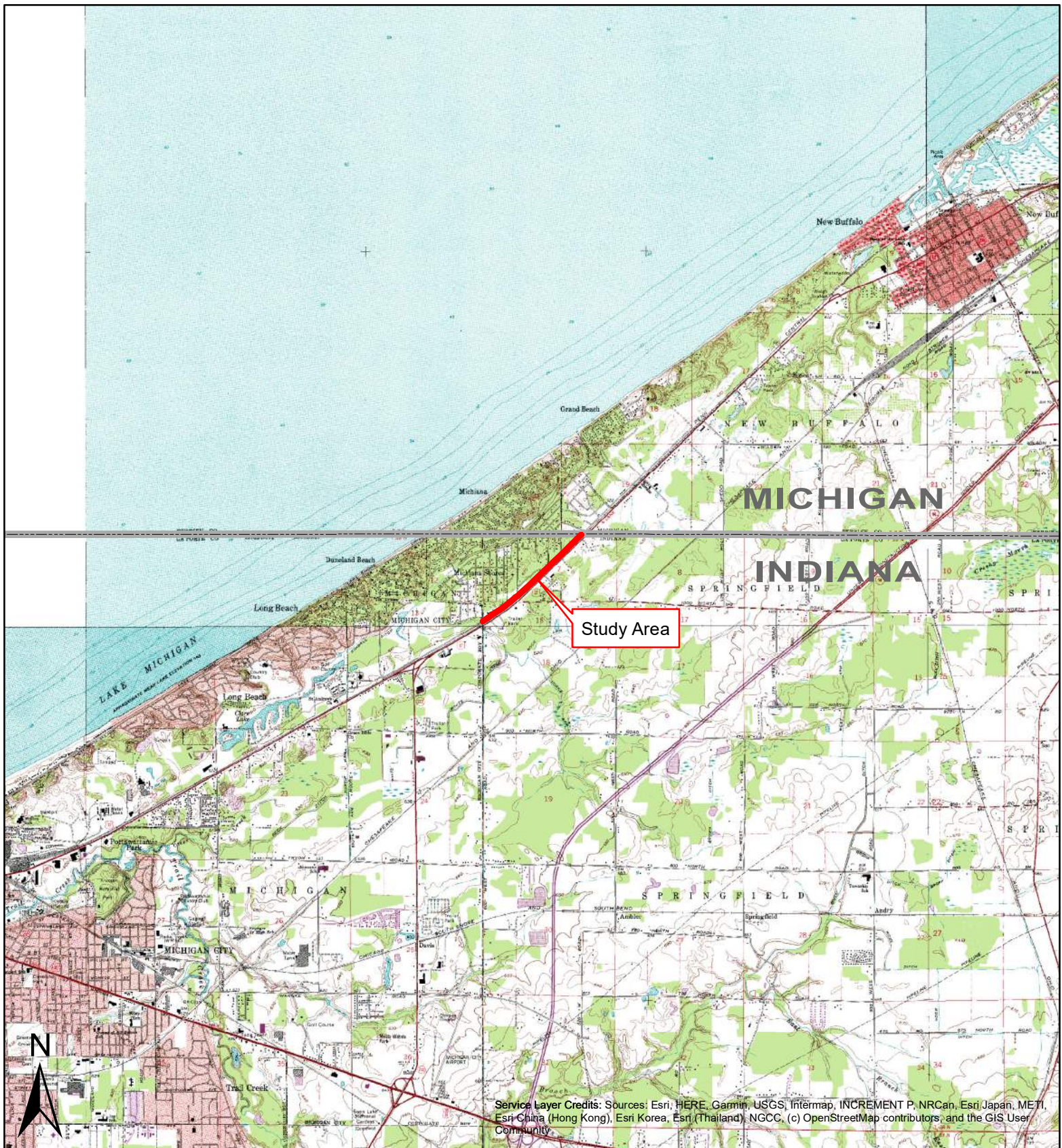
Marquette Trail Study Area

0 625 1,250 2,500  
Feet  
1 in = 1,000 feet

Attachment 2a - USGS Topographic Map  
Marquette Trail  
Grand Beach Road  
LaPorte County, Indiana  
Des. No. 1592335

**VS**  
ENGINEERING  
Drawn: 3/6/20 MLG





## Legend

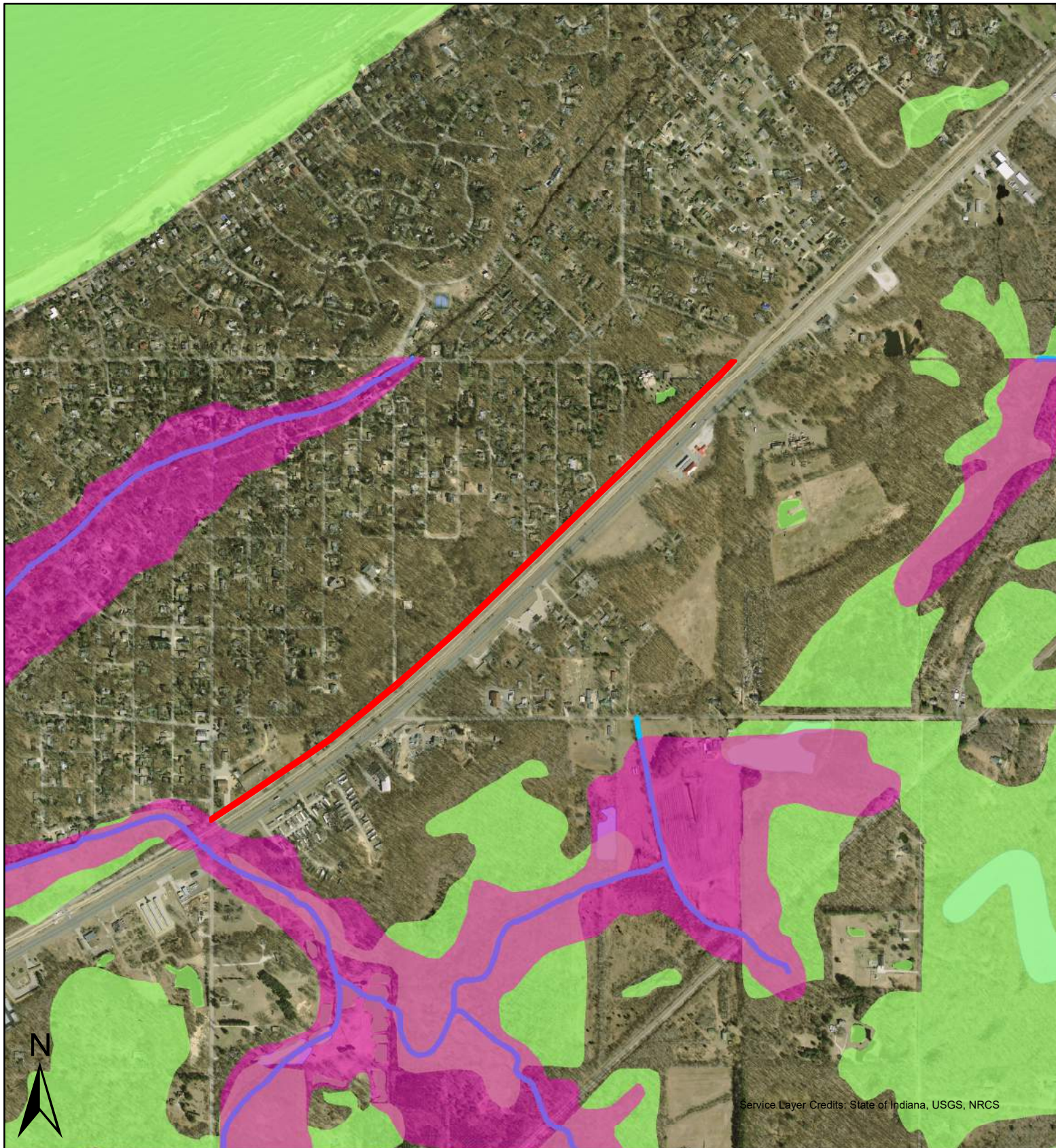
 Marquette Trail Study Area

0 0.5 1 2  
Miles  
1 in = 1 Mile

Attachment 2b - USGS Topographic Map (TNW Connectivity)  
Marquette Trail  
Grand Beach Road  
LaPorte County, Indiana  
Des. No. 1592335

**VS**  
ENGINEERING  
Drawn: 3/6/20 MLG





## Legend

- |   |   |
|---|---|
| <span style="border: 2px solid red; display: inline-block; width: 20px; height: 10px; vertical-align: middle;"></span> Marquette Trail Study Area | <span style="background-color: #90EE90; display: inline-block; width: 20px; height: 10px; vertical-align: middle;"></span> NWI Wetlands       |
| <span style="border-bottom: 2px solid blue; display: inline-block; width: 20px; vertical-align: middle;"></span> NHD Streams                      | <span style="background-color: #FF69B4; display: inline-block; width: 20px; height: 10px; vertical-align: middle;"></span> Floodplain - DFIRM |

0 500 1,000 2,000  
 Feet  
 1 in = 1,000 feet

**Attachment 3 - NWI, Hydro, Floodplain Map**  
**Marquette Trail**  
**Grand Beach Road**  
**LaPorte County, Indiana**  
**Des. No. 1592335**







## Legend

- Marquette Trail Study Area
- USDA Soil Survey

0 500 1,000 2,000  
Feet  
1 in = 1,000 feet

**Attachment 4 - Soils Map**  
**Marquette Trail**  
**Grand Beach Road**  
**LaPorte County, Indiana**  
**Des. No. 1592335**









Service Layer Credits: INDOT JCM 2011

## Legend

 Marquette Trail Study Area

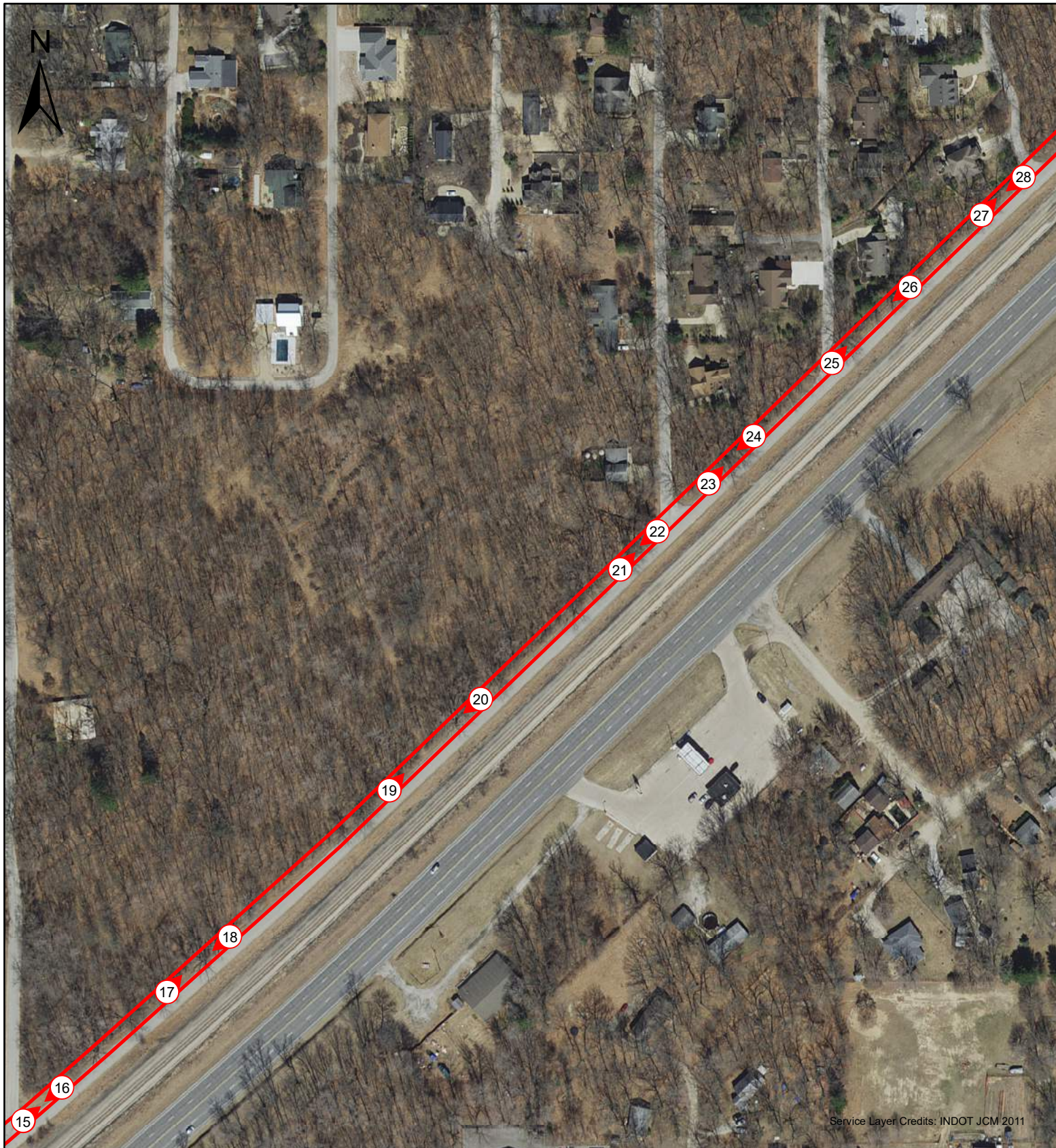
 Photo Location

0 105 210 420  
 Feet  
 1 in = 200 feet

**Attachment 5a - Delineated Features and Photo Key**  
**Marquette Trail**  
**Grand Beach Road**  
**LaPorte County, Indiana**  
**Des. No. 1592335**









## Legend

 Marquette Trail Study Area

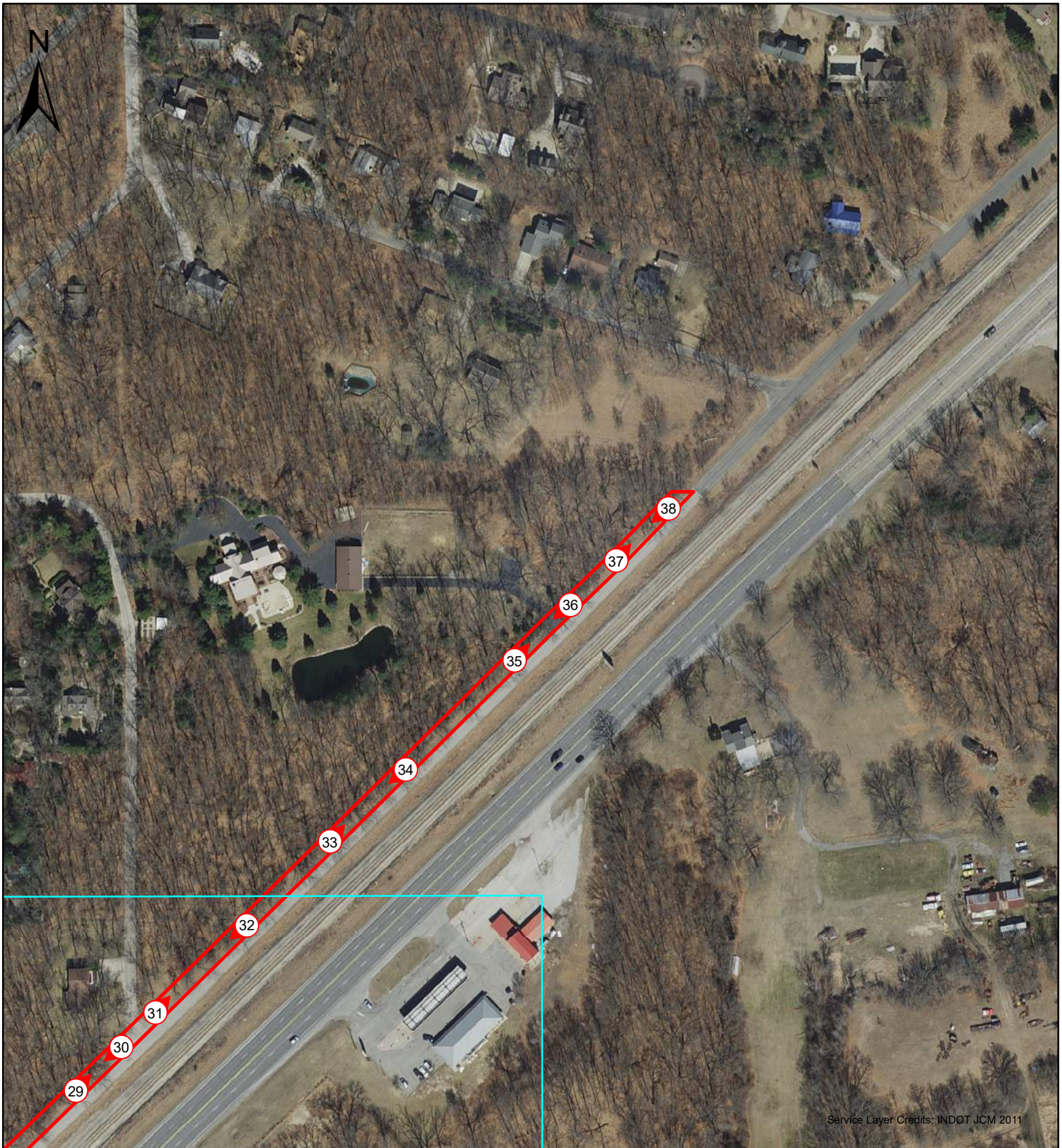
 Photo Location

0 105 210 420  
 Feet  
 1 in = 200 feet

**Attachment 5b - Delineated Features and Photo Key**  
**Marquette Trail**  
**Grand Beach Road**  
**LaPorte County, Indiana**  
**Des. No. 1592335**




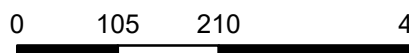




## Legend

 Marquette Trail Study Area

 Photo Location

0 105 210 420  
 Feet  
 1 in = 200 feet

Attachment 5c - Delineated Features and Photo Key  
 Marquette Trail  
 Grand Beach Road  
 LaPorte County, Indiana  
 Des. No. 1592335





# Attachment 6: Study Area Photographs

Photographs taken October 4, 2019



Photo 1:

View of the Marquette Trail study area along Grand Beach Road, looking northeast

Photo 2:

View of the Marquette Trail study area along Grand Beach Road, looking southwest





**Photo 3:**  
View of the Marquette Trail study area along Grand Beach Road, looking northeast

**Photo 4:**  
View of the Marquette Trail study area along Grand Beach Road, looking southwest







**Photo 5:**  
View of the Marquette Trail study area along Grand Beach Road, looking northeast

**Photo 6:**  
View of the Marquette Trail study area along Grand Beach Road, looking southwest





**Photo 7:**  
View of the Marquette Trail study area along Grand Beach Road, looking northeast

**Photo 8:**  
View of the Marquette Trail study area along Grand Beach Road, looking southwest







**Photo 9:**  
View of the Marquette Trail  
study area along Grand Beach  
Road, looking northeast

**Photo 10:**  
View of the Marquette Trail study  
area along Grand Beach Road,  
looking southwest







**Photo 11:**  
View of the Marquette Trail study area along Grand Beach Road, looking northeast

**Photo 12:**  
View of the Marquette Trail study area along Grand Beach Road, looking southwest







**Photo 13:**  
View of the Marquette Trail study area along Grand Beach Road, looking northeast

**Photo 14:**  
View of the Marquette Trail study area along Grand Beach Road, looking southwest







Photo 15:  
View of the Marquette Trail  
study area along Grand Beach  
Road, looking northeast

Photo 16:  
View of the Marquette Trail study  
area along Grand Beach Road,  
looking southwest







**Photo 17:**  
View of the Marquette Trail study area along Grand Beach Road, looking northeast

**Photo 18:**  
View of the Marquette Trail study area along Grand Beach Road, looking southwest







**Photo 19:**  
View of the Marquette Trail study area along Grand Beach Road, looking northeast

**Photo 20:**  
View of the Marquette Trail study area along Grand Beach Road, looking southwest







**Photo 21:**

View of the Marquette Trail study area along Grand Beach Road, looking northeast

**Photo 22:**

View of the Marquette Trail study area along Grand Beach Road, looking southwest







**Photo 23:**  
View of the Marquette Trail study area along Grand Beach Road, looking northeast

**Photo 24:**  
View of the Marquette Trail study area along Grand Beach Road, looking southwest







**Photo 25:**

View of the Marquette Trail study area along Grand Beach Road, looking northeast

**Photo 26:**

View of the Marquette Trail study area along Grand Beach Road, looking southwest







**Photo 27:**  
View of the Marquette Trail study area along Grand Beach Road, looking northeast

**Photo 28:**  
View of the Marquette Trail study area along Grand Beach Road, looking southwest







**Photo 29:**  
View of the Marquette Trail study area along Grand Beach Road, looking northeast

**Photo 30:**  
View of the Marquette Trail study area along Grand Beach Road, looking southwest







**Photo 31:**

View of the Marquette Trail study area along Grand Beach Road, looking northeast

**Photo 32:**

View of the Marquette Trail study area along Grand Beach Road, looking southwest







**Photo 33:**  
View of the Marquette Trail study area along Grand Beach Road, looking northeast

**Photo 34:**  
View of the Marquette Trail study area along Grand Beach Road, looking southwest







**Photo 35:**

View of the Marquette Trail study area along Grand Beach Road, looking northeast

**Photo 36:**

View of the Marquette Trail study area along Grand Beach Road, looking southwest





Photo 37:  
View of the Marquette Trail  
study area along Grand Beach  
Road, looking northeast

Photo 38:  
View of the Marquette Trail study  
area along Grand Beach Road,  
looking southwest





**BACKGROUND INFORMATION****A. REPORT COMPLETION DATE FOR PJD:** March 6, 2020**B. NAME AND ADDRESS OF PERSON REQUESTING PJD:** Mitchell Graham, VS Engineering, 4275 N  
High School Rd, Indianapolis, IN**C. DISTRICT OFFICE, FILE NAME, AND NUMBER:**Marquette Trail, Grand Beach Road,  
LaPorte County, Indiana**D. PROJECT LOCATION(S) AND BACKGROUND INFORMATION:** (Des. No. 1592335)**(USE THE TABLE BELOW TO DOCUMENT MULTIPLE AQUATIC RESOURCES AND/OR  
AQUATIC RESOURCES AT DIFFERENT SITES)**

State: IN County/parish/borough: LaPorte County City: N/A

Center coordinates of site (lat/long in degree decimal format):

Lat.: 41.755554°N Long.: -86.807745°W

Universal Transverse Mercator: 16N

Name of nearest waterbody: White Ditch

**E. REVIEW PERFORMED FOR SITE EVALUATION (CHECK ALL THAT APPLY):**☐ Office (Desk) Determination. Date:☐ Field Determination. Date(s):**TABLE OF AQUATIC RESOURCES IN REVIEW AREA WHICH "MAY BE" SUBJECT TO REGULATORY  
JURISDICTION.**

Site number	Latitude (decimal degrees)	Longitude (decimal degrees)	Estimated amount of aquatic resource in review area (acreage and linear feet, if applicable)	Type of aquatic resource (i.e., wetland vs. non-wetland waters)	Geographic authority to which the aquatic resource "may be" subject (i.e., Section 404 or Section 10/404)
N/A	N/A	N/A	N/A	N/A	N/A



- 1) The Corps of Engineers believes that there may be jurisdictional aquatic resources in the review area, and the requestor of this PJD is hereby advised of his or her option to request and obtain an approved JD (AJD) for that review area based on an informed decision after having discussed the various types of JDs and their characteristics and circumstances when they may be appropriate.
- 2) In any circumstance where a permit applicant obtains an individual permit, or a Nationwide General Permit (NWP) or other general permit verification requiring "pre-construction notification" (PCN), or requests verification for a non-reporting NWP or other general permit, and the permit applicant has not requested an AJD for the activity, the permit applicant is hereby made aware that: (1) the permit applicant has elected to seek a permit authorization based on a PJD, which does not make an official determination of jurisdictional aquatic resources; (2) the applicant has the option to request an AJD before accepting the terms and conditions of the permit authorization, and that basing a permit authorization on an AJD could possibly result in less compensatory mitigation being required or different special conditions; (3) the applicant has the right to request an individual permit rather than accepting the terms and conditions of the NWP or other general permit authorization; (4) the applicant can accept a permit authorization and thereby agree to comply with all the terms and conditions of that permit, including whatever mitigation requirements the Corps has determined to be necessary; (5) undertaking any activity in reliance upon the subject permit authorization without requesting an AJD constitutes the applicant's acceptance of the use of the PJD; (6) accepting a permit authorization (e.g., signing a proffered individual permit) or undertaking any activity in reliance on any form of Corps permit authorization based on a PJD constitutes agreement that all aquatic resources in the review area affected in any way by that activity will be treated as jurisdictional, and waives any challenge to such jurisdiction in any administrative or judicial compliance or enforcement action, or in any administrative appeal or in any Federal court; and (7) whether the applicant elects to use either an AJD or a PJD, the JD will be processed as soon as practicable. Further, an AJD, a proffered individual permit (and all terms and conditions contained therein), or individual permit denial can be administratively appealed pursuant to 33 C.F.R. Part 331. If, during an administrative appeal, it becomes appropriate to make an official determination whether geographic jurisdiction exists over aquatic resources in the review area, or to provide an official delineation of jurisdictional aquatic resources in the review area, the Corps will provide an AJD to accomplish that result, as soon as is practicable. This PJD finds that there "*may be*" waters of the U.S. and/or that there "*may be*" navigable waters of the U.S. on the subject review area, and identifies all aquatic features in the review area that could be affected by the proposed activity, based on the following information:

**SUPPORTING DATA. Data reviewed for PJD (check all that apply)**

Checked items should be included in subject file. Appropriately reference sources below where indicated for all checked items:

- ☒ Maps, plans, plots or plat submitted by or on behalf of the PJD requestor:

Map: Waters Report Attachments 1-6.

Data sheets prepared/submitted by or on behalf of the PJD requestor.

☐ Office concurs with data sheets/delineation report.

☐ Office does not concur with data sheets/delineation report. Rationale: \_\_\_\_\_.

☐ Data sheets prepared by the Corps: \_\_\_\_\_.

☐ Corps navigable waters' study: \_\_\_\_\_.

☐ U.S. Geological Survey Hydrologic Atlas: \_\_\_\_\_.

- ☒ USGS NHD data.

USGS 8 and 12 digit HUC maps.

☒ U.S. Geological Survey map(s). Cite scale & quad name: 7.5', New Buffalo West, Indiana Quadrangles.

☒ Natural Resources Conservation Service Soil Survey. Citation: <https://websoilsurvey.sc.egov.usda.gov/App/HomePage.htm>.

☒ National wetlands inventory map(s). Cite name: <https://www.fws.gov/wetlands/Data/Mapper.html>.

☐ State/local wetland inventory map(s): \_\_\_\_\_.

☒ FEMA/FIRM maps: \_\_\_\_\_.

☐ 100-year Floodplain Elevation is: \_\_\_\_\_.(National Geodetic Vertical Datum of 1929)

☒ Photographs: ☒ Aerial (Name & Date): Indiana orthophotography, 2012.

or ☒ Other (Name & Date): Site photos in waters report, Attachment 5, October 2019.

☐ Previous determination(s). File no. and date of response letter: \_\_\_\_\_.

☐ Other information (please specify): \_\_\_\_\_.

**IMPORTANT NOTE: The information recorded on this form has not necessarily been verified by the Corps and should not be relied upon for later jurisdictional determinations.**

\_\_\_\_\_  
Signature and date of  
Regulatory staff member  
completing PJD

Mitchell Graham 3/6/2020  
\_\_\_\_\_  
Signature and date of  
person requesting PJD  
(REQUIRED, unless obtaining  
the signature is impracticable)<sup>1</sup>

<sup>1</sup> Districts may establish timeframes for requestor to return signed PJD forms. If the requestor does not respond within the established time frame, the district may presume concurrence and no additional follow up is necessary prior to finalizing an action.



# Indiana Floodplain Information Portal Report

## Point of Interest

**Approximate Address:**  
30 MOHAWK TR  
MICHIANA SHORES, IN 46360  
**Effective Flood Zone:**  
X  
**Preliminary Flood Zone:**  
N/A  
**Best Available Flood Zone:**  
X  
**Approximate Flood Elevation:**  
621.3ft NAVD88  
**Source:**  
Zone AE Profile Delineation  
**Nearest Stream:**  
WHITE DITCH

## Map Legend

- Point of Interest
- Nearest Point on Stream

## Best Available Flood Zone

- FEMA Zone AE Floodway
- DNR Detailed Floodway
- DNR Approximate Floodway
- FEMA Zone A
- FEMA Zone AE
- DNR Detailed Fringe
- DNR Approximate Fringe
- Additional Floodplain Area
- FEMA Protected by Levee
- FEMA Floodplain - Ponding (Depth)
- FEMA Floodplain - Sheet Flow (Depth)

## Site Map with Best Available Flood Zone



Approximate scale 1:2,400

## Disclaimer

Generated on Thursday September 26th 2019 at 04:48:13pm



# APPENDIX G:

## PUBLIC INVOLVEMENT



# VS ENGINEERING, INC.

Civil • Structural • Transportation • Environmental

## NOTICE OF SURVEY

April 20, 2016

RE: Marquette Trail Project  
LaPorte County, Indiana

Dear Property Owner:

Our information indicates that you own or occupy property near this proposed highway project. Our employees will be doing a survey of the project area in the near future. It may be necessary for them to come onto your property to complete this work. This is allowed by law by Indiana Code IC 8-23-7-26. They will show you their identification, if you are available, before coming onto your property. If you have sold this property, or it is occupied by someone else, please let us know the name and address of the new owner or current occupant so we can contact them about the survey.

At this stage we generally do not know what effect, if any, our project may eventually have on your property. If we determine later that your property is involved, we will contact you with additional information.

The survey work will include mapping the location of features such as trees, buildings, fences and drives, and obtaining ground elevations. The survey work may also include the identification and mapping of wetlands, archaeological investigations (which may include excavation of small shovel test probes), and various other environmental studies. The survey is needed for the proper planning and design of this highway project. Please be assured of our sincere desire to cause you as little inconvenience as possible during this survey. If any problems do occur, please contact our field crew or contact me at the phone number or address shown herein.

Sincerely,

VS Engineering, Inc.  
Matthew R. Healy, P.S.  
Project Surveyor  
317-293-3542, x-140

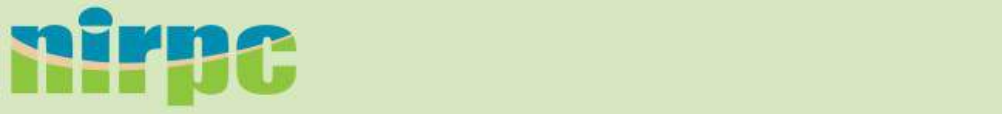
Des. No. 1592335

4275 North High School Road Indianapolis, Indiana 46254  
(317) 293-3542 Tel (317) 293-4737 Fax  
[www.vsengineering.com](http://www.vsengineering.com)

# APPENDIX H:

## AIR QUALITY



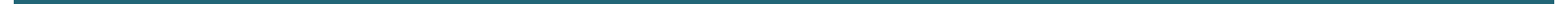


<< Go Back

Bicycle & Pedestrian Facilities at Marquette /Singing Sands Trail (LPCO) (1592335)

Des Number	1592335	Amendment	20-06.3 ADMIN MOD	Exempt Category	Non-Exempt	Est Total Project Cost	\$1,218,573
Lead Agency	LaPorte County	Contact (ERC)	Jerry Sullivan 2193622051			County	LaPorte
Project Type	Other	Letting Date	02/01/2023	Functional Classification	Not Applicable	Bike/Ped Component(s)	Yes 100%
Title	Bicycle & Pedestrian Facilities at Marquette /Singing Sands Trail (LPCO)						
Limits	Marquette /Singing Sands Trail (LPCO) from IN/MI state line to Meer Rd of Distance (mile) 1.10						
Description	Along US 12 from IN/MI State Line to Meer Rd. This project is located just northeast of Michigan City and goes to the IN/MI county line. It is expected to be substantially complete by December 1 2023.						

Phase	Fund Source	Prior SFY	SFY2020	SFY2021	SFY2022	SFY2023	SFY2024	Future SFY	Total
PE	Local Fund	-	\$25,910	-	-	-	-	-	\$25,910
PE	STBG Mich City UZA	-	\$103,638	-	-	-	-	-	\$103,638
	Total Preliminary Engineering	-	\$129,548	-	-	-	-	-	\$129,548
RW	Local Fund	-	-	\$26,455	-	-	-	-	\$26,455
RW	STBG Mich City UZA	-	-	\$105,820	-	-	-	-	\$105,820
	Total Right of Way	-	-	\$132,275	-	-	-	-	\$132,275
CN	Local Fund	-	-	-	-	\$191,351	-	-	\$191,351
CN	STBG Mich City UZA	-	-	-	-	\$765,399	-	-	\$765,399
	Total Construction	-	-	-	-	\$956,750	-	-	\$956,750
	Total Programmed	-	\$129,548	\$132,275	-	\$956,750	-	-	\$1,218,573



SPONSOR	CONTR ACT # / LEAD DES	STIP NAME	ROUTE	WORK TYPE	LOCATION	DISTRICT	MILES	FEDERAL CATEGORY	Estimated Cost left to Complete Project*	PROGRAM	PHASE	FEDERAL	MATCH	2020	2021	2022	2023	2024
---------	---------------------------------	--------------	-------	-----------	----------	----------	-------	---------------------	---	---------	-------	---------	-------	------	------	------	------	------

LaPorte County

LaPorte County	38992 / 1592335	A 04	IR 1023	Bike/Pedestrian Facilities	Marquette Greenway/Singing Sands Connector Trail East	LaPorte		1.02	STBG	\$1,194,773.00	Local Funds	PE	\$0.00	\$21,150.00	\$21,150.00				
											Local Funds	RW	\$0.00	\$26,455.00	\$26,455.00				
											Local Funds	CN	\$0.00	\$0.00	(\$191,350.00)			\$191,350.00	
											Michigan City MPO	PE	\$84,600.00	\$0.00	\$84,600.00				
											Michigan City MPO	RW	\$105,820.00	\$0.00	\$105,820.00				
											Michigan City MPO	CN	\$0.00	\$0.00	(\$765,398.00)			\$765,398.00	
Comments:NIRPC Resolution Amendment #22 Add PE and RW funds in FY20. Move CN funds from FY20 to FY23																			

LaPorte County Total

Federal: \$190,420.00      Match :\$47,605.00      2020: -\$718,723.00      2021:      2022:      2023: \$956,748.00      2024:

Indiana Department of Transportation (INDOT)  
State Preservation and Local Initiated Projects FY 2016 - 2019

SPONSOR	DES	STIP NAME	ROUTE	WORK TYPE	LOCATION	DISTRICT	MILES	FEDERAL CATEGORY	Estimated Cost left to Complete Project*	PROGRAM	PHASE	FEDERAL	MATCH	2016	2017	2018	2019
LaPorte County																	
LaPorte County	1382219	M 23	IR 1006	Other Intersection Improvement	Johnson Road at CR 400N	LaPorte	0	STP	\$1,511,800.00	100% Local Funds	RW	\$0.00	\$0.00	(\$52,860.00)	\$52,860.00		
										Michigan City MPO	RW	-\$200,000.00	\$0.00	(\$211,440.00)	\$11,440.00		
										Michigan City MPO - PYB	RW	\$200,000.00	\$0.00		\$200,000.00		
		Comments: NIRPC Admin Mod April 2016 change RW FY from 16 to 17															
LaPorte County	1592335	M 23	IR 1023	Bike/Pedestrian Facilities	Marquette Greenway/Singing Sands Connector Trail East	LaPorte	1.02	STP	\$956,748.00	Michigan City MPO	PE	-\$21,443.00	\$0.00	(\$21,443.00)			
										100% Local Funds	PE	\$0.00	\$31,411.00	\$31,411.00			
		Comments: NIRPC Admin Mod April 2016 Reduce PE award															
LaPorte County Total																	
Federal: -\$21,443.00		Match :\$31,411.00		2016: -\$254,332.00		2017: \$264,300.00		2018:		2019:							

\*Estimated Costs left to Complete Project column is for costs that may extend beyond the four years of a STIP. This column is not fiscally constrained and is for information purposes.



# APPENDIX I:

## ADDITIONAL INFORMATION

**Land and Water Conservation Fund (LWCF) LaPorte County Property List for Indiana (Last Updated July 2020)**

<b>ProjectNumber</b>	<b>SubProjectCode</b>	<b>County</b>	<b>Property</b>
1800200	1800200	LaPorte	Fox Memorial Park
1800228	1800228	LaPorte	Fox Memorial Park
1800265	1800265	LaPorte	Kesling Park
1800332	1800332	LaPorte	Rumley Park
1800351	1800351	LaPorte	Westville Park (Prairie Meadow Park)
1800373	1800373	LaPorte	Kesling Park
1800402	1800402	LaPorte	Nelson Park
1800405	1800405V	LaPorte	Galena Marsh Nature Preserve
1800453	1800453	LaPorte	Luhr Park
1800547	1800547	LaPorte	Hansen & Gifford Parks/Old Spur Trail
1800608	1800608	LaPorte	Luhr County Park

ALL TABLES **MAPS** PAGES

1 Results

Filter | Download

SELECTION MAP

HISPANIC OR LATINO ORIGIN BY RACE

Survey/Program: American Community Survey

Years:

2019,2018,2017,2016,2015,2014,2013,2012,2011,2010

Table: B03002

Census Tract Selection Map

Geographies:

Census Tract



Year:

2017



Select



Clear Geos



Identify



Filters



Download



Print



Share



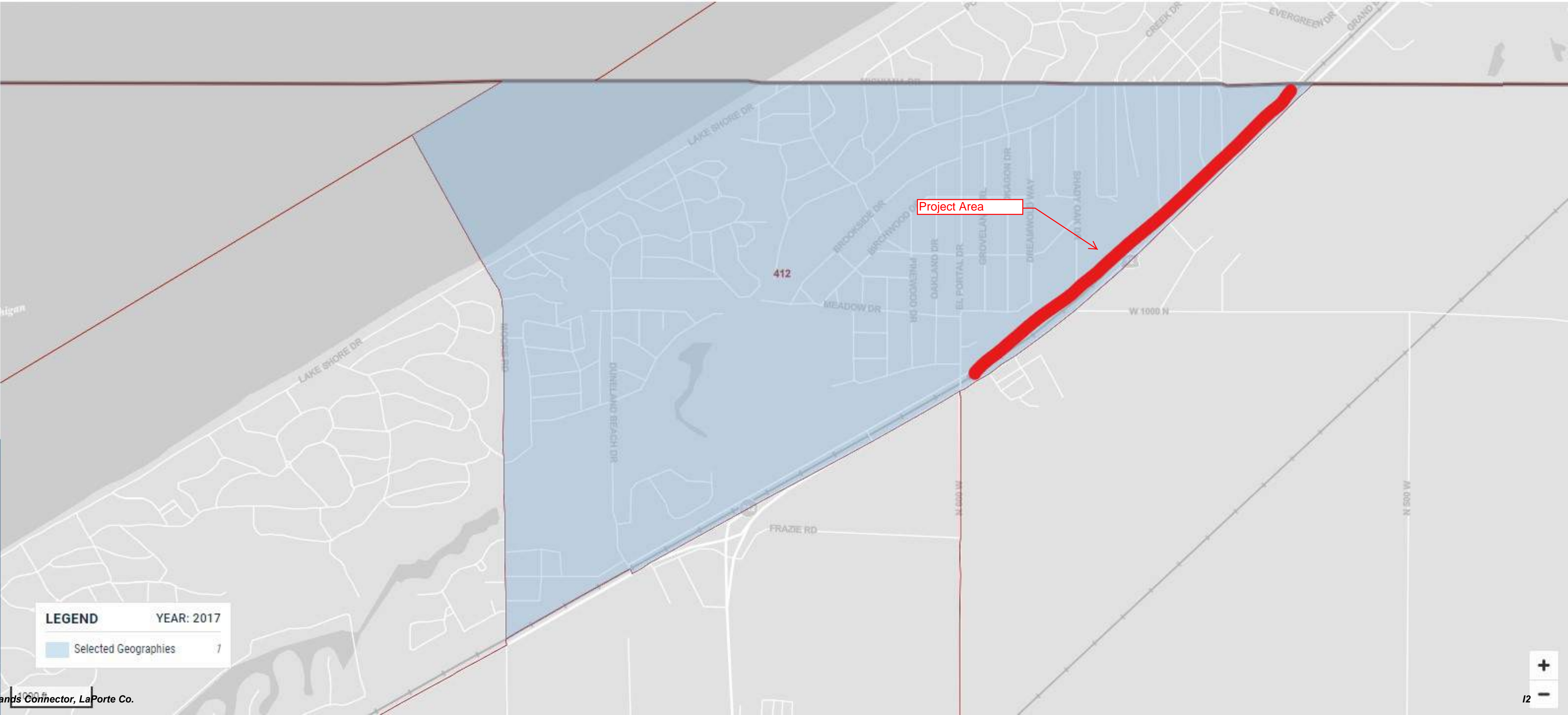
Table



Chart



Data Notes



Accessibility

Information Quality

FOIA

Data Protection and Privacy Policy

U.S. Department of Commerce

Release Notes

Send Feedback

CE-2 Des. No. 1592335, Marquette Greenway Trail - Singing Sands Connector, LaPorte Co.

People, Places and Economy



## HISPANIC OR LATINO ORIGIN BY RACE

TABLE ID: B03002  
 SURVEY/PROGRAM: American Community Survey  
 PRODUCT: ACS 5-Year Estimates Detailed Tables

**Note:** The table shown may have been modified by user selections.  
 Some information may be missing.

	Indiana		LaPorte County, Indiana		Springfield township, LaPorte County, Indiana		Census Tract 412, LaPorte County, Indiana	
Label	Estimate	Margin of Error	Estimate	Margin of Error	Estimate	Margin of Error	Estimate	Margin of Error
Total:	6,614,418	*****	110,839	*****	4,021	±42	924	±88
Not Hispanic or Latino:	6,172,450	±183	103,904	*****	3,909	±150	922	±89
White alone	5,280,583	±999	88,538	±26	3,822	±168	906	±90
Black or African American alone	604,249	±2,974	12,093	±343	0	±11	0	±11
American Indian and Alaska Native alone	12,148	±696	285	±87	0	±11	0	±11
Asian alone	136,671	±1,460	630	±118	50	±46	16	±23
Native Hawaiian and Other Pacific Islander alone	1,993	±284	13	±17	0	±11	0	±11
Some other race alone	9,179	±1,225	29	±25	0	±11	0	±11
Two or more races:	127,627	±3,638	2,316	±370	37	±42	0	±11
Two races including Some other race	3,440	±551	56	±41	0	±11	0	±11
Two races excluding Some other race, and three or more races	124,187	±3,520	2,260	±373	37	±42	0	±11
Hispanic or Latino:	441,968	±183	6,935	*****	112	±150	2	±4
White alone	266,204	±3,728	3,618	±436	0	±11	0	±11
Black or African American alone	8,811	±961	137	±48	0	±11	0	±11
American Indian and Alaska Native alone	2,879	±534	28	±35	0	±11	0	±11
Asian alone	1,009	±312	16	±24	0	±11	0	±11
Native Hawaiian and Other Pacific Islander alone	642	±288	25	±38	0	±11	0	±11
Some other race alone	136,612	±4,082	2,222	±448	49	±68	0	±11
Two or more races:	25,811	±1,429	889	±281	63	±84	2	±4
Two races including Some other race	16,364	±1,302	732	±280	63	±84	2	±4
Two races excluding Some other race, and three or more races	9,447	±975	157	±87	0	±11	0	±11

### DATA NOTES

TABLE ID: B03002  
 SURVEY/PROGRAM: American Community Survey  
 VINTAGE: 2017  
 DATASET: ACSDT5Y2017  
 PRODUCT: ACS 5-Year Estimates Detailed Tables  
 FTP URL: Download the entire table at [https://www2.census.gov/programs-surveys/acs/summary\\_file/2017/data/](https://www2.census.gov/programs-surveys/acs/summary_file/2017/data/)  
 API URL: Download the entire table at <https://api.census.gov/data/2017/acs/acs5>

### USER SELECTIONS

GEOS: Indiana; LaPorte County, Indiana; Springfield township, LaPorte County, Indiana; Census Tract 412, LaPorte County, Indiana

## POVERTY STATUS IN THE PAST 12 MONTHS BY SEX BY AGE

TABLE ID: B17001  
 SURVEY/PROGRAM: American Community Survey  
 PRODUCT: ACS 5-Year Estimates Detailed Tables

**Note:** The table shown may have been modified by user selections. Some information may be missing.

	Indiana		LaPorte County, Indiana		Springfield township, LaPorte County, Indiana		Census Tract 412, LaPorte County, Indiana	
Label	Estimate	Margin of Error	Estimate	Margin of Error	Estimate	Margin of Error	Estimate	Margin of Error
Total:	6,412,384	±1,719	102,126	±448	3,989	±55	919	±86
Income in the past 12 months below poverty level:	933,540	±11,730	16,924	±1,294	1,008	±419	33	±21
Male:	410,928	±6,296	7,206	±668	460	±216	16	±11
Under 5 years	49,152	±1,637	1,262	±218	30	±39	4	±6
5 years	8,834	±706	32	±34	0	±11	0	±11
6 to 11 years	55,274	±1,860	1,298	±282	105	±86	3	±5
12 to 14 years	24,567	±1,200	499	±146	39	±39	0	±11
15 years	7,534	±674	207	±107	41	±45	0	±11
16 and 17 years	14,131	±881	198	±77	0	±11	0	±11
18 to 24 years	63,785	±1,817	603	±156	58	±91	2	±3
25 to 34 years	48,634	±1,798	899	±187	22	±30	0	±11
35 to 44 years	40,432	±1,435	681	±149	16	±24	0	±11
45 to 54 years	39,326	±1,135	546	±157	149	±97	3	±3
55 to 64 years	36,227	±1,209	637	±142	0	±11	0	±11
65 to 74 years	13,850	±798	213	±59	0	±11	4	±6
75 years and over	9,182	±640	131	±63	0	±11	0	±11
Female:	522,612	±7,008	9,718	±772	548	±269	17	±11
Under 5 years	47,716	±1,829	959	±215	85	±90	0	±11
5 years	9,341	±756	229	±90	0	±11	0	±11
6 to 11 years	51,946	±1,724	1,095	±272	85	±76	0	±11
12 to 14 years	23,228	±1,144	606	±230	48	±72	0	±11
15 years	8,224	±586	133	±83	0	±11	0	±11
16 and 17 years	14,962	±785	286	±105	48	±47	0	±11
18 to 24 years	84,443	±1,822	1,421	±274	0	±11	0	±11
25 to 34 years	81,561	±1,741	1,573	±221	25	±33	5	±6
35 to 44 years	59,321	±1,810	1,128	±241	152	±96	0	±11
45 to 54 years	50,281	±1,594	850	±167	13	±16	3	±4
55 to 64 years	44,973	±1,321	615	±151	92	±84	1	±2
65 to 74 years	23,146	±881	486	±153	0	±11	5	±6
75 years and over	23,470	±943	337	±126	0	±11	3	±4
Income in the past 12 months at or above poverty level:	5,478,844	±12,135	85,202	±1,321	2,981	±412	886	±86
Male:	2,734,869	±6,689	41,870	±736	1,428	±246	429	±52
Under 5 years	160,714	±1,704	2,019	±216	43	±48	2	±4
5 years	32,839	±1,075	491	±168	0	±11	0	±11
6 to 11 years	211,793	±2,590	2,737	±301	31	±38	11	±9

12 to 14 years	109,186	±2,173	1,456	±220	20	±23	4	±3
15 years	39,920	±1,192	514	±125	34	±47	8	±8
16 and 17 years	75,477	±1,302	1,186	±136	28	±44	24	±19
18 to 24 years	234,867	±1,921	3,732	±221	116	±95	18	±13
25 to 34 years	361,086	±1,927	4,654	±268	85	±86	4	±4
35 to 44 years	358,032	±1,754	4,768	±237	113	±61	36	±9
45 to 54 years	388,609	±1,485	6,039	±257	215	±103	39	±22
55 to 64 years	373,801	±1,403	6,948	±172	348	±130	106	±28
65 to 74 years	243,520	±940	4,695	±120	194	±79	122	±26
75 years and over	145,025	±792	2,631	±107	201	±97	55	±17
Female:	2,743,975	±7,298	43,332	±761	1,553	±239	457	±47
Under 5 years	151,644	±1,877	2,269	±225	3	±5	3	±5
5 years	32,492	±1,284	364	±114	10	±18	0	±11
6 to 11 years	200,094	±2,296	2,556	±252	69	±56	12	±9
12 to 14 years	105,764	±2,117	1,581	±254	7	±6	14	±12
15 years	36,768	±1,197	598	±109	0	±11	0	±11
16 and 17 years	72,788	±1,264	1,171	±140	0	±11	17	±9
18 to 24 years	201,623	±1,958	2,674	±271	68	±59	26	±16
25 to 34 years	339,223	±1,717	4,507	±220	129	±99	6	±5
35 to 44 years	349,461	±2,137	5,124	±251	83	±65	25	±9
45 to 54 years	390,498	±1,672	6,458	±164	265	±103	73	±25
55 to 64 years	389,617	±1,392	7,048	±160	396	±134	108	±25
65 to 74 years	269,303	±1,170	5,102	±156	349	±113	122	±25
75 years and over	204,700	±1,162	3,880	±148	174	±102	51	±19

#### DATA NOTES

TABLE ID	B17001
SURVEY/PROGRAM	American Community Survey
VINTAGE	2017
DATASET	ACSDT5Y2017
PRODUCT:	ACS 5-Year Estimates Detailed Tables
FTP URL:	Download the entire table at <a href="https://www2.census.gov/programs-surveys/acs/summary_file/2017/data/">https://www2.census.gov/programs-surveys/acs/summary_file/2017/data/</a>
API URL:	Download the entire table at <a href="https://api.census.gov/data/2017/acs/acs5">https://api.census.gov/data/2017/acs/acs5</a>

#### USER SELECTIONS

GEOS	Indiana; LaPorte County, Indiana; Springfield township, LaPorte County, Indiana; Census Tract 412, LaPorte County, Indiana
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