

Indiana Department of Transportation

County Hamilton Route 236th Street Des. No. 1400760

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

Road No./County:

236th Street/Hamilton County

Designation Number:

1400760

Project Description/Termini:

236th Street Improvement Project - Begins just east of the bridge carrying 236th Street over Teter Branch (2.1 miles west of US 31) and extends east until it intersects with US 31, Hamilton County, Indiana

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):

	Categorical Exclusion, Level 2 – The proposed action meets the criteria for Categorical Exclusion Manual Level 2 - table 1, CE Level Thresholds. Required Signatories: ESM (Environmental Scoping Manager)
X	Categorical Exclusion, Level 3 – The proposed action meets the criteria for Categorical Exclusion Manual Level 3 - table 1, CE Level Thresholds. Required Signatories: ESM, ES (Environmental Services Division)
	Categorical Exclusion, Level 4 – The proposed action meets the criteria for Categorical Exclusion Manual Level 4 - table 1, CE Level Thresholds. Required Signatories: ESM, ES, FHWA
	Environmental Assessment (EA) – 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

[Signature] 3-29-18

FHWA Signature

Date

Release for Public Involvement

ESM Initials

Date

ES Initials

Date

REB 5-26-17

Certification of Public Involvement

Office of Public Involvement

Date

Mary Wright 12/14/17

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:

Tomas A. Beauchamp 3-29-18

Name and Organization of CE/EA Preparer: Jaime Byerly / RQAW Corporation

This is page 1 of 30 Project name: 236th Street Improvement Project Date: May 15, 2017

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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 for Survey or Investigation letters were mailed to potentially affected property owners on February 19, 2016. See example letter in Appendix G, page G-1.

A legal notice was published in the *Indianapolis Star* on February 20, 2017. The notice offered the public an opportunity to comment on the *No Adverse Effect* Section 106 finding. The public had a 30-day comment period to respond to the notice. The comment period expired on March 22, 2017 and no public comments were received. See the affidavit and legal notice in Appendix D, pages D-116 and D-117.

The project meets the minimum requirements described in the current INDOT *Public Involvement Manual* dated 2012 which requires the project sponsor to offer the public an opportunity to submit comment and/or request a public hearing. Hamilton County decided to forgo the offering of a public hearing and went straight to holding a public hearing. The announcement of the public hearing was published in the *Indianapolis Star* on September 1, 2017 and September 8, 2017. Potentially affected property owners (i.e. adjacent property owners) were also notified of the hearing via mail on August 30, 2017. The public hearing was held on September 27, 2017 at the Sheridan High School located at 24185 Hinesley Road. The public hearing began at 6:30 p.m. and allowed the public to hear information on the project and to comment on the environmental document and preliminary design plans. All comments collected before, during and within two weeks of the public hearing (ending on October 11, 2017) were taken into consideration and included in this document.

Representatives from INDOT, RQAW (project designer and preparer of the environmental document) and Hamilton County were in attendance. Several members of the public attended the hearing. The public viewed the presentation and commented on the project either at the hearing or after the hearing via e-mail, mail or comment sheet. Several comments were made and questions asked. See the public hearing legal notice and affidavit, example letter mailed to property owners, hearing handout, hearing sign-in sheets, hearing presentation and hearing transcript in Appendix G, page G-2 through G-35.

During the public hearing, several concerns/questions were raised by the public. These generally related to how water will drain post construction, what will be done about potential damage to personal property during construction, damage to personal property post construction due to being closer to the road, how to access mailboxes safely post construction, requesting data that supports the purpose and need, what the real estate process will involve, project schedule, and maintenance of traffic logistics. See all public comments/questions and responses to public comments/questions in Appendix G, pages G-36 through G-50.

Following the public hearing, the project designers and Hamilton County met to address concerns raised by the public. As a result, the project design was changed within some portions of the project area. This resulted in approximately 0.24 acre of additional temporary right-of-way being needed. Changes include: (1) constructing

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a U-shaped drive for one property owner, (2) installing mailboxes that can be accessed from both sides, (3) installing additional safety signs within and adjacent to Bakers Corner indicating *Do Not Pass* or *Reduced Speed Ahead*, (4) relocating a mailbox for one property owner, (5) constructing a drain inlet in the front yard for one property owner, (6) constructing an enclosed drainage pipe with a small swale for one property owner, and (7) constructing agricultural field entrances for multiple property owners.

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 known public controversy over community and/or natural resource impacts regarding the project.

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

Sponsor of the Project: Hamilton County, Indiana INDOT District: Greenfield

Local Name of the Facility: 236th Street

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)

In its entirety, 236th Street runs in a west to east direction and is the main corridor between Sheridan and Cicero. The roadway consists of one 11-foot wide travel lane and one 2-foot wide shoulder in each direction. The need for the undertaking is due to inadequate travel lane and shoulder widths along 236th Street. The existing travel lane and shoulder widths do not meet current design standards for this type of roadway, and thus increases the potential for collisions between large trucks and cars traveling in opposing directions. Furthermore, intersection sight distance is inadequate for current safety standards at all intersections due to the lack of apparent existing right-of-way along county roads. Lastly, the existing drainage structures within the project area are deteriorating. These deficiencies are anticipated to be problematic due to the expected increase in through traffic within the corridor from the expansion of US 31 and construction of the interchange at 236th Street.

The purpose of the project is to extend the life of 236th Street, provide adequate travel lane widths, improve drainage, and improve sight distance at the intersecting roadways.

PROJECT DESCRIPTION (PREFERRED ALTERNATIVE):

County: Hamilton Municipality: N/A

Limits of Proposed Work: Approximately 250 feet east of the bridge carrying 236th Street over Teter Branch (2.1 miles west of US 31) and extending east until it intersects with US 31

Total Work Length: 2.1 Mile(s)

Total Work Area: 15.51 Acre(s)

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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 ¹	No
<input type="checkbox"/>	<input checked="" type="checkbox"/>
Date: <input style="width: 80%;" type="text"/>	

¹If 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.

Hamilton County and the Federal Highway Administration (FHWA) propose to proceed with a road improvement project in Hamilton County, Indiana (DES Number 1400760). The project is located on 236th Street and begins just east of the bridge carrying 236th Street over Teter Branch (2.1 miles west of US 31) and extends east until it intersects with US 31. It is within Adams Township and Sheridan Quadrangle. It is within Sections 1, 2 and 3 inside Township 19 North and Range 3 East. It is also within Sections 34, 35 and 36 inside Township 20 North and Range 3 East. See maps in, pages B-1 through B-6.

Project limits (i.e. logical termini) were determined based on (1) the bridge carrying 236th Street over Teter Branch was recently replaced per another project and (2) the 236th Street/US 31 intersection will be reconstructed as an interchange in the near future. The proposed project is an independent and complete project because it can be constructed even if 236th Street east and west of the project termini are not improved. Additionally, construction of the proposed project is not dependent on other projects in the area. The proposed project will not add additional travel lanes and will not increase congestion in the area.

As part of another planned project (Des. Number 1400788), 236th Street will be rehabilitated east of US 31 from Deming Road to Tollgate Road. The 3.3-mile long project will widen the travel lanes, add 6-foot paved shoulders, improve drainage and construct a 10-foot multiuse path along the south side of the road. Construction for this project is expected to begin in August 2018. The planned project for Des. Number 1400788 will be an independent and complete project because it can be constructed even if 236th Street east and west of the project termini are not improved. Additionally, construction of the proposed project is not dependent on other projects in the area. The project for Des. Number 1400788 will not add additional travel lanes and will not increase congestion in the area.

Existing Conditions: Land use in the area consists mainly of residential and agricultural properties. In its entirety, 236th Street runs in a west to east direction from Sheridan to Cicero and is the main corridor between the towns. The roadway consists of one 11-foot travel lane and one 2-foot shoulder in each direction. Intersection sight distance is inadequate at all intersections due to the lack of apparent existing right-of-way along county roads. Drainage in the area is conveyed through a clay tile system, which is deteriorating and failing in some areas. See photograph keys and photographs in Appendix B, pages B-3 through B-25; see additional photograph keys and photographs in Appendix D, pages D-21 through D-73.

Preferred Alternative: The project will create 15-foot wide travel lanes and 4-foot wide useable (3-foot paved) shoulders in each direction. The widened travel lane will meet current design standards and allow for 236th Street to be signed as a designated bike route. In order to limit impacts through Bakers Corner, 12-foot wide travel lanes and curb with 2-foot curb offset will be provided. A storm sewer will also be constructed through Bakers Corner along the south side of the roadway, which will outlet into a legal drain, William Baker Drain (unnamed tributary [UNT] 1), to the west of Bakers Corner. The outlet of the new storm sewer line will be oversized to 36 inches in diameter to accommodate for in-line detention of storm water prior to discharging into William Baker Drain. Excavation at a maximum depth of 15 feet below ground surface (bgs) will be needed to install the storm sewer. The structure carrying 236th Street over the William Baker Legal Drain will be replaced with a 14-foot span by 6-foot rise reinforced box culvert with a 2-foot sump. New ditches will be constructed where there is a suitable outlet; however, it is anticipated that the existing drainage pattern will be maintained in several areas because there are limited locations to outlet concentrated drainage within the corridor. Permanent right-of-way will be purchased along intersecting county roads to protect line of sight and ensure intersection sight distance is improved.

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Most of the project area will involve mill/resurface or full depth replacement. The 236th Street/US 31 Intersection will only be milled and resurfaced due to construction of the future interchange; no right-of-way will be needed in this 650-foot long area. See the preliminary design plans in Appendix B, pages B-26 through B-49.

The existing right-of-way is edge of pavement; approximately 14.77 acres of permanent and 0.75 acre of temporary right-of-way will be needed. The total estimated project cost is \$7,646,300 (fiscal year [FY] 2019). An administrative modification may be needed for the INDOT Statewide Transportation Improvement Program (STIP) so that it reflects the current cost of the project. Construction is estimated to begin in March 2019 and end in October 2019. The recommended Maintenance of Traffic (MOT) will require detours, which are discussed in detail in the *Maintenance of Traffic (MOT) During Construction* section of this document. Two weeks prior to construction, Hamilton County will coordinate with school corporations and emergency response units. Access to properties will be maintained throughout construction.

The project will satisfy the project's Purpose and Need by extending the life of 236th Street, providing adequate travel lane widths to handle the anticipated increased traffic, improve drainage, and improve sight distance at the intersecting roadways. Stream and wetland impacts were noted during project development. The project will result in approximately 2,740 linear feet of stream impacts and approximately 0.003 acre of wetland impacts within the right-of-way. A US Army Corps of Engineers (USACE) Regional General Section 404 Permit and Indiana Department of Environmental Management (IDEM) Section 401 Water Quality Certification will be needed due to these impacts. The project will result in a *No Adverse Effect* Section 106 finding. No other concerns were noted during the project development that is expected to present any environmental, constructability, or engineering issues.

OTHER ALTERNATIVES CONSIDERED:

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

The Do Nothing Alternative: This alternative proposes that work not be completed. This alternative would avoid all wetland and stream impacts; however, it would not fulfill the Purpose and Need for the project. Therefore, this alternative was dismissed from further consideration.

Wetland Avoidance Alternative: This alternative is similar to that of the preferred alternative, except that it would include measures to avoid the delineated wetland (Wetland A) located north of 236th Street and approximately 45 feet west of William Baker Drain. This alternative would include adding additional guardrail along the north side of 236th and constructing a steeper side slope immediately south of the wetland in order to avoid impacts. This alternative would result in a higher cost than the preferred alternative and would result in the same amount of impacts to streams as the preferred alternative. A legal drain, William Baker Drain, is located immediately east of Wetland A and is maintained by the Hamilton County Surveyor's Office. The county accesses this legal drain from the north side of 236th Street. The increased sideslope and guardrail would potentially limit access to the legal drain, which may result in the county having to acquire additional easements or right-of-way from nearby properties, resulting in higher costs. This alternative meets the purpose and need of the project; however, due to increased costs and limited access for maintenance of the nearby legal drain, this alternative was dismissed from further consideration.

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)

X
X

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ROADWAY CHARACTER:

236th Street

Functional Classification:	<u>Local Agency Rural Major Collector</u>		
Current ADT:	<u>3,615</u>	VPD (2018)	Design Year ADT: <u>5,375</u>
Design Hour Volume (DHV):	<u>540</u>	Truck Percentage (%)	<u>5</u>
Designed Speed (mph):	<u>50 & 30</u>	Legal Speed (mph):	<u>50 & 30</u>

	Existing		Proposed
Number of Lanes:	2		2
Type of Lanes:	Travel		Travel
Pavement Width:	11	ft.	11 to 15
Shoulder Width:	2	ft.	3
Median Width:	0	ft.	0
Sidewalk Width:	0	ft.	0

Setting:	<input type="checkbox"/> Urban	<input type="checkbox"/> Suburban	<input checked="" type="checkbox"/> Rural
Topography:	<input checked="" type="checkbox"/> Level	<input type="checkbox"/> Rolling	<input type="checkbox"/> 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): <u>N/A</u>	Sufficiency Rating: <u>N/A</u>
	(Rating, Source of Information)

	Existing		Proposed
Bridge Type:	N/A (35-foot long, 15-inch diameter pipe culvert)		Reinforced box culvert (55-foot long, 14-foot span by 6-foot rise)
Number of Spans:	N/A		1
Weight Restrictions:	N/A	ton	N/A
Height Restrictions:	N/A	ft.	N/A
Curb to Curb Width:	N/A	ft.	N/A
Outside to Outside Width:	N/A	ft.	55
Shoulder Width:	N/A	ft.	4
Length of Channel Work:	N/A	ft.	90

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

Remarks: The project will not involve any work to existing bridges. One clay pipe culvert associated with a Waters of the US (i.e. jurisdictional) will be removed and the three-sided overflow culvert, which spans the clay pipe will be replaced. This stream is known as William Baker Drain (unnamed tributary [UNT] 1) and is located approximately 1,460 feet west of the 236th Street/US 31 Intersection. See Appendix B, page B-25 for a photograph of the existing clay pipe and three-sided overflow structure. The proposed structure is a 14-foot span by 6-foot rise reinforced box culvert with a 2-foot sump. A storm sewer will also be constructed through Bakers Corner along the south side of the roadway, which will discharge into UNT 1.

Approximately 90 linear feet of stream impacts to William Baker Drain are anticipated in order to replace the structure and place riprap along the banks.

Will the structure be rehabilitated or replaced as part of the project?	Yes	No	N/A
	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

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

This is page 6 of 33 Project name: 236th Street Improvement Project Date: March 22, 2018

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MAINTENANCE OF TRAFFIC (MOT) DURING CONSTRUCTION:

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 type="checkbox"/>	<input checked="" type="checkbox"/>
Will the proposed MOT substantially change the environmental consequences of the action?	<input type="checkbox"/>	<input checked="" type="checkbox"/>
Is there substantial controversy associated with the proposed method for MOT?	<input type="checkbox"/>	<input checked="" type="checkbox"/>

Remarks: The MOT will close the roadway to through traffic and have an official detour. To reduce impacts, the project will be constructed in three segments: (1) project begin east to Oak Ridge Road—1.1 mile, (2) Oak Ridge Road east to Dunbar Road—0.50 mile and (3) Dunbar Road east to US 31—0.50 mile. Each segment will use 226th Street to the south for the detour. In addition, Phase I will use Six Points Road and Dunbar Road; Phase II will use Oak Ridge Road and US 31; and Phase III will use Dunbar Road and US 31. This will likely be an inconvenience to traveling motorists, but it will not be a significant, long term disruption to them or schools and/or emergency response providers. Two weeks prior to construction, Hamilton County will coordinate with school corporations and emergency units. Access to properties within the project area will be maintained throughout construction and provisions will be made for through-traffic dependent businesses. See the MOT plans in Appendix B, pages B-33 through B-35.

There are five businesses within the project area: a gasoline station and fast food restaurant west of the 236th Street/US 31 Intersection, a long-haul truck carrier company east of the 236th Street/Dunbar Road Intersection, a paint store east of the 236th Street/Dunbar Road Intersection and an unknown commercial property in the southeast quadrant of the 236th Street/Dunbar Road Intersection. There is also a tree nursery and home gardening business located approximately 3,800 feet west of the project. Access to all businesses within the project area will be maintained during construction. Per the Fairs and Festivals website (www.fairsandfestivals.net) (accessed on September 20, 2016 by RQAW), five fairs/festivals were noted within 10 miles for zip code 46069 and nine fairs/festivals were noted within 10 miles for zip code 46030. However, the project is not expected to impact any of these events; the majority of these are events are at least seven miles away and there are several adjacent roads next to the project area that fair or festival goers can utilize.

ESTIMATED PROJECT COST AND SCHEDULE:

Engineering: \$ 741,300 (prior SFY, 2016, 2017) Right-of-Way: \$ 825,000 (2018) Construction: \$ 6,080,000 (2019)

Anticipated Start Date of Construction: March 2019

Date project incorporated into STIP February 24, 2016; Amendment 16-12 (Appendix H, pages H-1 through H-2)

Is the project in an MPO Area? Yes No

If yes, Name of MPO Indianapolis MPO

Location of Project in TIP See Appendix H, page H-3

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Date of incorporation by reference into the STIP February 24, 2016 (Appendix H, page H-3)

RIGHT OF WAY:

Land Use Impacts	Amount (acres)	
	Permanent	Temporary
Residential	3.60	0.50
Commercial	0.49	0.04
Agricultural	10.34	0.21
Forest	0.32	0
Wetlands	0.003	0
Other: Church	0.02	0
TOTAL	14.77	0.75

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.

Remarks: The existing right-of-way along 236th Street is edge of pavement. Most of the new right-of-way is approximately 40 feet from centerline; in the Bakers Corner area, the new right-of-way is approximately 15 to 25 feet from centerline. Approximately 14.77 acres of permanent and 0.75 acre of temporary right-of-way will be needed. Of the required permanent right-of-way, approximately 3.60 acres will be from residential land, 0.49 acre will be from commercial land, 10.34 acres will be from agricultural land, 0.32 acre will be from forested land, 0.003 acre will be from wetlands and 0.02 acre will be from Bakers Corner Wesleyan Church. Of the required temporary right-of-way, approximately 0.50 acre will be needed from residential land, 0.04 acre will be from commercial land and 0.21 acre will be from agricultural land. The temporary right-of-way will be needed for driveway and agricultural field entrance reconstructions, constructing one drain inlet per the request of the property owner, grading, and shoulder construction.

Because of the public hearing, approximately 0.24 acre of additional temporary right-of-way was incorporated into the design to address comments/concerns raised by the public. The financial cost associated with the slight increase in temporary right-of-way is still incorporated into the STIP and the *Indianapolis Regional Transportation Improvement Program (IRTIP)*. See aerial maps showing the change in right-of-way limits following the hearing in Appendix B, pages B-50 through B-55.

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

SECTION A – ECOLOGICAL RESOURCES

	<u>Presence</u>	<u>Impacts</u>	
		<u>Yes</u>	<u>No</u>
Streams, Rivers, Watercourses & Jurisdictional Ditches	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
Federal Wild and Scenic Rivers	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
State Natural, Scenic or Recreational Rivers	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Nationwide Rivers Inventory (NRI) listed	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Outstanding Rivers List for Indiana	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Navigable Waterways	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

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Remarks: Per review of USGS topographic maps, aerial photographs, published Geographic Information Systems (GIS) data from IndianaMap and site visits conducted on March 11, 2016 and August 26, 2016 by an RQAW ecologist, four streams were observed within the project area. Of the four streams, three are considered legal drains, of which two are encapsulated. See the *Waters of the US Determination/Wetland Delineation Report* (prepared by RQAW on September 30, 2016) in Appendix F, pages F-1 through F-18. The following summarizes the findings of the report in regards to streams.

William Baker Drain (UNT 1): This stream is a legal drain and flows in a north to south direction under 236th Street. It is approximately 1,460 feet west of the 236th Street/US 31 Intersection. This stream opens up to an open channel south of the project area, exhibits an Ordinary High Water Mark (OHWM) and flows into Hinkle Creek to the south. Based on these criteria, this stream is likely to be considered a *Waters of the United States* (jurisdictional). The upstream drainage area is 1.5 square miles. Note: the stream was not evaluated for water quality because it is encapsulated.

The pipe that carries William Baker Drain has failed under the bridge on 236th Street and is open water under the bridge. The water enters the pipe again before exiting the bridge. Impacts to William Baker Drain include replacing the existing pipe culvert with a 5-foot long, 14-foot span by 6-foot rise reinforced box culvert with a 2-foot sump and placing riprap along the banks.

Impacts to this stream did not change after project limits were modified following the public hearing. There will still be approximately 90 linear feet of stream impacts to William Baker Drain are anticipated within the permanent right-of-way limits. Please note these impacts are not considered “new” impacts because the stream is currently encapsulated. The ditch will also be converted from a tile system to an open ditch within the project area. A storm sewer will also be constructed through Bakers Corner along the south side of the roadway, which will discharge into William Baker Drain.

CB Jones Arm of William Baker Drain (UNT 2): This stream is a legal drain and flows west to east along the south side of 236th Street. It is between Oak Ridge Road and US 31. This stream connects to William Baker Drain underground and does not exhibit OHWM characteristics or a defined bed or bank; however, this stream is considered to be jurisdictional due to its mapping on the Hamilton County Legal Drain system and connectivity to William Baker Drain. Based on these criteria, this stream is likely to be considered a *Waters of the United States*. The upstream drainage area is 0.12 square mile. Note: the stream was not evaluated for water quality because it is encapsulated.

The existing clay tile carrying CB Jones Arm of William Baker Drain is approximately 12 to 15 inches in diameter; it will be replaced with a concrete storm sewer system with yard inlets to prevent pooling. Impacts to this stream did not change after project limits were modified following the public hearing. There will still be approximately 2,650 linear feet of impacts are anticipated within the permanent right-of-way limits. Please note these impacts are not considered “new” impacts because the stream is currently encapsulated

UNT 3: This stream begins at the outfall of the structure under 236th Street and flows north for approximately 60 feet before entering Teter Branch Legal Drain. It is approximately 685 feet west of Spring Mill Road. The Headwater Habitat Evaluation Index (HHEI) score was 48 (“good” water quality). The stream exhibited OHWM characteristics (4.1 feet wide, 4 inches deep) and empties into Teter Branch Legal Drain to the north. Based on these criteria, this stream is likely to be considered a *Waters of the United States*. The upstream drainage area is 0.01 square mile.

Impacts to this stream did not change after project limits were modified following the public hearing There will still not be any impacts to UNT 3. The existing structure over UNT 3 will not be modified.

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Teter Branch Legal Drain: This stream is a legal drain and flows in a south to north direction then turns east along the north side of 236th Street where it continues north until its confluence with Little Cicero Creek. The Qualitative Habitat Evaluation Index (QHEI) score was 53 (“fair” water quality). The stream exhibited OHWM characteristics (16 feet wide, 26 inches deep) and empties into Little Cicero Creek to the north. Based on these criteria, this stream is likely to be considered a *Waters of the United States*. The upstream drainage area is 3.4 square miles.

Impacts to this stream did not change after project limits were modified following the public hearing. There will still not be any impacts to Teter Branch Legal Drain. The existing structure over Teter Branch Legal Drain was recently replaced per another project.

If 300 linear feet and/or 0.1 acre of stream impacts below the OHWM occur, stream mitigation will be required. Approximately 2,740 linear feet of stream impacts are anticipated to occur below the OHWM. Because the stream impacts will exceed the 300 linear feet mitigation threshold, stream mitigation will likely be required. However, this mitigation will be in-kind, which includes replacement of existing function. Mitigation will occur on-site. If the project scope changes, INDOT Environmental Services will be contacted immediately.

During the early coordination phase of the project, the Indiana Department of Natural Resources (IDNR) Division of Fish and Wildlife, USACE, IDEM, and the Hamilton County Surveyor’s Office were consulted on August 23, 2016. See an example of the early coordination letter sent to agencies in Appendix C, pages C-1 through C-3. The USACE did not respond and the automatic generated response letter from IDEM was received on August 23, 2016. See IDEM’s response letter in Appendix C, pages C-4 through C-10.

The Hamilton County Surveyor’s Office responded to the early coordination efforts via a letter dated August 26, 2016 and stated that the project will affect one Hamilton County Regulated Drain System in three locations (William Baker Drain Main Tile, William Baker Drain C.B. Jones Arm, and William Baker Ditch Drain). The county surveyor provided five conditions (requirements) applicable to the project. The five conditions (requirements) include: 1) a requirement that the replacement structure spanning the William Baker clay tile provides for the depth and width of the new open drain and that the new structure passes the 100 year storm requirement; 2) a requirement to replace the existing clay tile that conveys the C.B. Jones Arm of William Baker Drain with a properly sized storm sewer system using reinforced concrete pipe throughout the entire length of the existing tile; 3) a requirement to replace the existing clay tile that conveys the William Baker Drain within the right-of-way with a reinforced concrete pipe, as well as installing a manhole at the connection of the new line to the existing tile; 4) a requirement to provide detention to compensate for increased impervious surface from the project; and 5) a requirement for Stormwater Pollution Prevention Plans (SWPPP) for the project since greater than one acre of ground disturbance will occur. See Hamilton County Surveyor’s Office response letter in Appendix C, pages C-26 through C-27. The proposed project design will incorporate all the above requirements and are listed as firm (required) in the *Environmental Commitments* section at the end of this document. Regarding condition 4, the outlet of the new storm sewer line will be oversized to 36 inches in diameter to accommodate for in-line detention of storm water prior to discharging into William Baker Drain.

The IDNR responded to early coordination efforts via a letter dated September 22, 2016 and stated that formal approval by the IDNR may be required (i.e. a Construction in a Floodway Permit may be needed, which is discussed in detail in the Floodplain section of this document). Per the letter, measures to minimize impacts to streams and their surrounding habitat were described and are included in the environmental commitments for this project. See IDNR’s response letter in Appendix C, pages C-15 through C-18.

The US Fish and Wildlife Service (USFWS) was not consulted during early coordination because the project meets the criteria for programmatic coordination under the *US Fish and Wildlife Service Interim Policy for the Review of Highway Transportation Projects in Indiana* dated May 29, 2013. Therefore, it is anticipated the project

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will result in minimal impacts to fish and wildlife. See all relevant measures in *Environmental Commitments* at the end of this document.

Other Surface Waters	<u>Presence</u>	<u>Impacts</u>	
		<u>Yes</u>	<u>No</u>
Reservoirs	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Lakes	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Farm Ponds	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input checked="" 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: Per review of USGS topographic maps, aerial photographs, published GIS data from IndianaMap and site visits conducted on March 11, 2016 and August 26, 2016 by an RQAW ecologist, one surface water is present in the western project area, approximately 140 feet north of 236th Street. This is a farm pond and will not be impacted. See the Topographic map in Appendix B, page B-2 and Water Resources map in the *Red Flag Investigation* in Appendix E, page E-7.

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

Total wetland area: >0.13 acre(s) Total wetland area impacted: 0.003 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
Wetland A	Palustrine Emergent	>0.13	0.003	Located north of 236 th Street, approximately 45 feet west of William Baker Drain and adjacent to a constructed berm.

Wetlands (Mark all that apply)	<u>Documentation</u>	<u>ES Approval Dates</u>
Wetland Determination	<input checked="" type="checkbox"/>	N/A/LPA Project
Wetland Delineation	<input checked="" type="checkbox"/>	N/A/LPA Project
USACE Isolated Waters Determination	<input type="checkbox"/>	<input type="checkbox"/>
Mitigation Plan	<input type="checkbox"/>	<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;
- Substantial adverse social, economic, or environmental impacts, or
- The project not meeting the identified needs.

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

Remarks: Per review of USGS topographic maps, aerial photographs, published GIS data from IndianaMap and site visits conducted on March 11, 2016 and August 26, 2016 by an RQAW ecologist, one palustrine emergent wetland was delineated within the project area. See the *Waters of the US Determination/Wetland Delineation Report* (prepared by RQAW on September 30, 2016) in Appendix F, pages F-1 through F-18. The following summarizes the findings of the report in regards to wetlands.

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According to the Soil Survey Geographic (SSURGO) Database of Hamilton County, four hydric soils are mapped within the project area. See *NRCS Soils* map and NRCS Hydric Soils List in Appendix F, pages F-21 through F-27.

Wetland A (>0.13 acre in size): This emergent wetland is located north of 236th Street, approximately 45 feet west of William Baker Drain and adjacent to a constructed berm. This wetland has developed due to the constructed berm and water control structure. Per historical aerial photography, this berm was constructed around 2006 with the wetland developing shortly thereafter. Wetland A outlets through the water control structure into William Baker Drain. This wetland met all three of the wetland criteria set forth by the USACE. The wetland is likely to be considered a *Waters of the United States* due to its connectivity to William Baker Drain. The delineation was performed in accordance with the USACE *Midwest Regional Supplement Wetlands Delineation Manual*.

Impacts to this wetland did not change after project limits were modified following the public hearing. Approximately 0.003 acre of impacts to Wetland A are anticipated within the permanent right-of-way limits.

If 0.1 acre of wetland impacts occur, wetland mitigation will likely be required. Approximately 0.003 acre of wetland impacts are anticipated to occur within the permanent right-of-way limits. The Do Nothing Alternative proposes that no work be completed. This alternative would avoid all wetland impacts; however, it would not fulfill the Purpose and Need for the project. The Wetland Avoidance Alternative proposes that additional guardrail and a steeper sideslope be installed along the north side of 236th Street in order to avoid impacts to Wetland A. This alternative would avoid wetland impacts; however, it would potentially limit access to the nearby legal drain (William Baker Drain), which is maintained by the Hamilton County Surveyor's Office. Limiting access may also result in the county having to acquire additional easements or right-of-way from nearby properties, resulting in higher costs. Due to increased costs and limited access for maintenance of the nearby legal drain, this alternative was dismissed from further consideration.

Please note that coordination has been ongoing with project designers to ensure wetland impacts have been avoided as much as possible. Because anticipated wetland impacts (0.003 acre) do not meet the mitigation threshold (0.1 acre), permitting agencies will not likely require mitigation. Wetland boundaries are identified as "WETLAND—DO NOT DISTURB OUTSIDE OF CONSTRUCTION LIMITS" on the design plans. Wetland boundaries will be identified in the field prior to construction to avoid indirect impacts. INDOT recommends orange fencing and signs to separate construction activities from Wetland A. If the project scope changes, INDOT Environmental Services will be contacted immediately.

Per early coordination efforts, the standard IDEM automatic generated response letter was received; the IDNR did not recommend specific measures to limit impacts to wetlands. Per the *US Fish and Wildlife Service Interim Policy for the Review of Highway Transportation Projects in Indiana* dated May 29, 2013, the project meets the criteria for programmatic coordination; therefore, it is anticipated the project will result in minimal impacts to fish and wildlife. The USFWS Interim Policy lists several standard recommendations to avoid impacts to environmental resources. The applicable standard recommendations for limiting wetland impacts include implementing temporary erosion and sediment control methods within areas of disturbed soils and not clearing trees or understory vegetation outside the construction zone boundaries. See all relevant measures in *Environmental Commitments* at the end of this document.

	<u>Presence</u>	<u>Impacts</u>	
		Yes	No
Terrestrial Habitat	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
Unique or High Quality Habitat	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

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

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Remarks: Adjacent land use is agricultural and residential. Per site visits conducted on March 11, 2016 and August 26, 2016 by an RQAW ecologist, dominant vegetation included tall fescue (*Schedonorus arundinaceus*), red clover (*Trifolium pratense*), common dandelion (*Taraxacum officinale*), silver maple (*Acer saccharinum*), evergreens and corn and soybean remnants.

Approximately 3.60 acres will be permanently impacted from residential land, 0.49 acre will be from commercial land, 10.34 acres will be from agricultural land, 0.32 acre will be from forested land and 0.02 acre will be from the Bakers Corner Wesleyan Church. No more than 45 trees will be removed within the project limits, particularly in the southeast quadrant of the 236th Street/Springmill Road Intersection; north of 236th Street and approximately 1,500 feet east of its junction with Springmill Road; north of 236th Street and approximately 765 feet east of its junction with Oak Ridge Road; north of 236th Street and adjacent to the Bakers Corner Wesleyan Church; and north of 236th Street, approximately 665 feet east of William Baker Drain. These trees are mostly within maintained residential areas or acting as agricultural land buffers. The project will have minimal impacts to ecological resources because the project is in an agricultural area with minimal to low quality habitat present. The project will not impact any core forest and will not have significant impacts on wildlife communities.

Per early coordination efforts, the standard IDEM automatic generated response letter was received. The IDNR recommended measures to minimize impacts to terrestrial land. Additionally, the IDNR indicated that impacts to trees and wooded areas along the project area should be minimal overall, but may still need some level of mitigation. The IDNR recommends mitigation for non-wetland forest removal. Since less than one acre of non-wetland forest will be removed in a rural setting, replacement of trees should be at a 1:1 ratio based on area. See IDEM's response letter in Appendix C, pages C-4 through C-10 and IDNR's response letter in Appendix C, pages C-15 through C-18.

Per the *US Fish and Wildlife Service Interim Policy for the Review of Highway Transportation Projects in Indiana* dated May 29, 2013, the project meets the criteria for programmatic coordination; therefore, it is anticipated that the project will result in minimal impacts to fish and wildlife. See all recommended, relevant measures in *Environmental Commitments* at the end of this document.

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.

Karst

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?

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

If yes, will the project impact any of these karst features?

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)

Remarks: The project is located within Hamilton County which is outside the designated karst area of the state as identified in the October 13, 1993 Memorandum of Understanding (MOU) between the INDOT, IDNR, IDEM and the USFWS.

No karst features are mapped within or known to exist within the project area via the Red Flag Investigation desktop review. The Indiana Geological Survey (IGS) did not note any karst concerns in their early coordination response form. See the IGS response form in Appendix C, page C-24. The project is not anticipated to impact any karst features. If karst features are encountered, INDOT Environmental Services will be contacted immediately.

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	<u>Presence</u>	<u>Impacts</u>	
		Yes	No
Threatened or Endangered Species			
Within the known range of any federal species	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
Any critical habitat identified within project area	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Federal species found in project area (based upon informal consultation)	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
State species found in project area (based upon consultation with IDNR)	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Is Section 7 formal consultation required for this action?	<input type="checkbox"/>	<input checked="" type="checkbox"/>	

Remarks: Per review of the USFWS County Distribution of Federally-Listed Threatened, Endangered, Proposed, and Candidate Species as published on the USFWS website (<https://www.fws.gov/midwest/Endangered/lists/indiana-cty.html>) on October 27, 2016 by RQAW, Hamilton County is within the range of the federally endangered Indiana bat (*Myotis sodalis*), federally threatened northern long-eared bat (*Myotis septentrionalis*) and the federally protected bald eagle (*Haliaeetus leucocephalus*). No foraging or roosting habitat for bats was noted during site visits conducted on March 11, 2016 and August 26, 2016 by an RQAW ecologist. In addition to the above species, the project is also within range of the rusty patched bumble bee (*Bombus affinis*), which was listed as federally endangered by the USFWS on March 21, 2017. Because the rusty patched bumble bee (*Bombus affinis*) was listed as a federally endangered species after the early coordination phase of the project, the USFWS was consulted via email on May 4, 2017 to determine if the proposed project could affect the species. The USFWS responded via email on May 4, 2017, stating that the rusty patched bumble bee (*Bombus affinis*) is currently only likely to be present within "high potential" zones developed by the USFWS. The USFWS stated that the proposed project appears to be located north of the nearest "high potential" zone and provided a link to an interactive map to assist in determining whether the project is within a "high potential" zone (<https://www.fws.gov/midwest/endangered/insects/rpbb/guidance.html#map>). See the USFWS response email in Appendix I, pages I-26 to I-27. On May 4, 2017, RQAW accessed this interactive map and determined that the proposed project is not located within a "high potential" zone. Therefore, the proposed project is not likely to affect the rusty patched bumble bee (*Bombus affinis*).

Per IDNR's early coordination response letter, a list of measures to minimize impacts to fish, wildlife and botanical resources were developed. The IDNR also stated no plant or animal species listed as state or federally threatened, endangered, or rare have been reported to occur in the project vicinity. Please see IDNR response letter in Appendix C, pages C-15 through C-18.

Per the *US Fish and Wildlife Service Interim Policy for the Review of Highway Transportation Projects in Indiana* dated May 29, 2013, the project meets the criteria for programmatic coordination; therefore, it is anticipated that the project will result in minimal impacts to fish and wildlife.

Per the *US Fish and Wildlife Service Range-wide Programmatic Informal Consultation for the Indiana Bat and Northern Long-eared Bat*, the project is expected to have *No Effect* on either listed species. Please see the USFWS Information for Planning and Conservation (IPaC) Database Response Letter and the *Scoping Worksheet* in Appendix I, pages I-13 through I-25. The requirements of Section 7 of the Endangered Species Act have been fulfilled. See all recommended, relevant measures in *Environmental Commitments* at the end of this document.

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SECTION B – OTHER RESOURCES

Drinking Water Resources	<u>Presence</u>	<u>Impacts</u>	
		Yes	No
Wellhead Protection Area	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Public Water System(s)	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Residential Well(s)	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
Source Water Protection Area(s)	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
Sole Source Aquifer (SSA)	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

If a SSA is present, answer the following:

	<u>Yes</u>	<u>No</u>
Is the Project in the St. Joseph Aquifer System?	<input type="checkbox"/>	<input type="checkbox"/>
Is the FHWA/EPA SSA MOU Applicable?	<input type="checkbox"/>	<input type="checkbox"/>
Initial Groundwater Assessment Required?	<input type="checkbox"/>	<input type="checkbox"/>
Detailed Groundwater Assessment Required?	<input type="checkbox"/>	<input type="checkbox"/>

Remarks: The project is located within Hamilton County which is outside the St. Joseph Aquifer System; the only legally designated Sole Source Aquifer in Indiana.

In a letter dated August 26, 2016, the IDEM Groundwater Section stated the project area is not within a Wellhead Protection Area (WHPA); however, the project is located within a Source Water Assessment Area. Citizens Water - Indianapolis was sent details on September 7, 2016 via e-mail and asked to provide comments. Citizens Water responded on September 8, 2016 and requested the project utilize best management practices to minimize and contain any leaks or spills to prevent any potential impacts. See IDEM's early coordination response letter in Appendix C, pages C-11 and C-12. See Citizens Energy Group's e-mail in Appendix C, pages C-13 and C-14. Best Management Practices are common stipulations of IDEM's Rule 5 Permit which will be required for this project. These stipulations are listed as firm commitments in *Environmental Commitments* at the end of this document.

According to the IDNR Water Wells Enhanced Web Viewer website (<http://www.in.gov/dnr/water/6604.htm>) accessed on September 15, 2016 by RQAW, 10 unconsolidated and two unspecified water well locations are mapped near the project area. The closest (unconsolidated) well is mapped approximately 15 feet from edge of pavement. This well is located in the northwest quadrant of the 236th Street/US 31 Intersection; here only mill and resurfacing work will be performed. See the *IDNR Water Well Viewer* map in Appendix I, page I-11. Impacts to private or public water wells are not expected. There are two private water wells adjacent to the project limits in the Bakers Corner area; per coordination with the project designer, the project will not impact either well. If residential wells are encountered, they will be re-drilled as part of the right-of-way agreement with the property owner. If any identified well needs to be backfilled, it will be performed according to 312 IAC 13-10. This is listed as firm (required) in the *Environmental Commitments* section at the end of this document.

Because the project area is not within an urbanized area boundary (UAB), Municipal Separated Storm Sewer System (MS4) coordination was not conducted.

Flood Plains	<u>Presence</u>	<u>Impacts</u>	
		Yes	No
Longitudinal Encroachment	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Transverse Encroachment	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
Project located within a regulated floodplain	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

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Homes located in floodplain within 1000' up/downstream from project

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

Remarks: The western project area is located within a mapped 100-year floodplain. The only structures within the mapped floodway are associated with Teter Branch Legal Drain and UNT 3. The structures associated with Teter Branch Legal Drain and UNT 3 will not be modified per this project. Their upstream drainage areas are 3.4 square miles and 0.01 square mile, respectively. Both are below the 50 square miles threshold; therefore, the project is exempt from floodplain regulations and will not require a Construction in a Floodway Permit. Please note that because an IDNR permit will not be needed, the IDNR Division of Fish and Wildlife measures are for further consideration. See the IDNR letter in Appendix C, pages C-15 through C-18.

The Hamilton County Surveyor's Office responded to the early coordination efforts via a letter dated August 26, 2016. One of the conditions provided by the county surveyor included a requirement that the replacement structure spanning the William Baker clay tile provides for the depth and width of the new open drain and that the new structure passes the 100-year storm requirement. This condition has been implemented into the project design.

See the Federal Emergency Management Agency (FEMA) maps in Appendix F, pages F-19 and F-20 and the Water Resources map in the *Red Flag Investigation* in Appendix E, page E-7. Because the portion of the project within the mapped 100-year floodplain will not involve any modifications to drainage structures, the following statement from the 2008 *Procedural Manual for Preparing Environmental Documents* applies:

Category 2 – This project will not involve the replacement or modification of any existing drainage structures or the addition of any new drainage structures. As a result, this project will not affect flood heights or floodplain limits. This project will not increase flood risks or damage. Likewise, it will not adversely affect existing emergency service or emergency routes. Therefore, it has been determined that this encroachment is not significant.

Farmland

Agricultural Lands
Prime Farmland (per NRCS)

Presence

X
X

Impacts

Yes	No
X	
X	

Total Points (from Section VII of CPA-106/AD-1006* 153
*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: The project will impact approximately 10.34 acres of agricultural land. In a letter dated September 13, 2016, the Natural Resources Conservation Service (NRCS) stated the project will cause a conversion of prime farmland and that 12.05 acres of prime farmland will be impacted. A total score of 153 was calculated for the NRCS-CPA-106 Form. Because the score is less than the 160 point threshold, no further consideration of farmland will be necessary. No alternatives will be investigated without reevaluating impacts to prime farmland. See the NRCS early coordination response letter and the completed NRCS-CPA-106 Form in Appendix C, pages C-21 and C-22. The completed form was e-mailed back to the NRCS on October 18, 2016.

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SECTION C – CULTURAL RESOURCES

	Category	Type	INDOT Approval Dates	N/A
Minor Projects PA Clearance				X

Eligible and/or Listed
Resource Present

Results of Research

Archaeology	
NRHP Buildings/Site(s)	X
NRHP District(s)	
NRHP Bridge(s)	

Project Effect

No Historic Properties Affected No Adverse Effect Adverse Effect

Documentation
Prepared

Documentation (mark all that apply)

	ES/FHWA Approval Date(s)	SHPO Approval Date(s)
Historic Properties Short Report		
Historic Property Report	October 5, 2016	November 28, 2016
Archaeological Records Check/ Review	October 14, 2016	November 28, 2016
Archaeological Phase Ia Survey Report	October 14, 2016	November 28, 2016
Archaeological Phase Ic Survey Report		
Archaeological Phase II Investigation Report		
Archaeological Phase III Data Recovery		
APE, Eligibility and Effect Determination	February 16, 2017	March 21, 2017
800.11 Documentation	February 16, 2017	March 21, 2017

Memorandum of Agreement (MOA) **MOA Signature Dates** (List all signatories)

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: As a result of Section 106, National Historic Preservation Act (NHPA) of 1966, as amended, and CFR Part 800 (Revised January 2001), federal agencies are required to take into account the impact of federal undertakings upon historic properties in the area of the undertaking. Historic properties include buildings, structures, sites, objects and or districts. This project is receiving funds from the FHWA which is designated the lead Federal agency in this Section 106 undertaking.

Area of Potential Effect (APE): The APE is the area that includes all above-ground historic properties that could be affected, either directly or indirectly, by the project. The APE for this project is an elongated polygon that generally encompasses those areas directly adjacent to the proposed work where ground-disturbing activity may occur, within a viewshed of the proposed work. The APE is generally 1,000 feet from 236th Street and contracts down to where the screening vegetation, topography, and structures limit views, particularly at the east end of the project. The APE is at least 625 feet from the project area and expands to beyond 1,250 feet at

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cross streets where intersection approach work may occur. See the APE maps in Appendix D, pages D-17 through D-19.

Coordination with Consulting Parties: Early coordination was initiated with potential consulting parties on October 24, 2016 with a letter inviting organizations and individuals to be consulting parties. A copy of the Historic Property Report (HPR) was also provided. The following is a list of organizations and individuals that were sent letters. Indiana Landmarks was the only organization who wished to be a consulting party. [Note: INDOT, FHWA and Indiana State Historic Preservation Officer (SHPO) are automatic consulting parties.] The Pastor of Bakers corner Wesleyan Church was subsequently invited on December 20, 2016 and wished to be a consulting party. See the list of consulting parties in Appendix D, page D-75 and the early coordination e-mail in Appendix D, pages D-80 and D-81.

Section 106 Consulting Parties	Date of Response
1. Indiana Landmarks (Central Regional Office)	October 27, 2016 and January 18, 2017
2. Indianapolis Metropolitan Planning Organization	No response
3. Hamilton County Historical Society/Hamilton County Museum of History	No response
4. Northern Hamilton County Chamber of Commerce	No response
5. Sheridan Historical Society	No response
6. Hamilton County Historian	No response
7. Pastor of Bakers Corner Wesleyan Church	December 22, 2016

Archaeology: A *Phase Ia Archaeological Reconnaissance Survey* was completed by a qualified professional from Cultural Resource Analysis (CRA) on September 30, 2016. The survey identified seven sites within the survey area. The sites likely extend beyond the survey area and their NRHP eligibility could not be fully assessed. However, the portions of those sites within the survey area demonstrated poor integrity and no further work was recommended for the portions of these sites within the survey area. The report describing these findings was sent to the INDOT Cultural Resources Office (CRO) on September 30, 2016 and was approved by INDOT CRO on October 14, 2016. The report was sent to the Indiana SHPO on October 24, 2016 and the Indiana SHPO concurred with the findings of the report on November 28, 2016. Per this letter, the Indiana SHPO stipulated that portions of sites 12-H-1788 through 12-H-1794 that lie outside the project area must be either be avoided or subjected to further archaeological investigations. The SHPO also requested those areas be clearly marked in the field so they are avoided by all ground-disturbing project activities. If avoidance is not feasible, then a plan for subsurface archaeological investigations must be submitted to the SHPO for review and comment. This is included as firm (required) in the *Environmental Commitments* at the end of this document. The final design plans will also note, "SENSITIVE AREA—DO NOT DISTURB" at these locations. See Appendix D, page D-79 for the CRO concurrence e-mail, Appendix D, pages D-86 and D-87 for the Indiana SHPO concurrence letter and Appendix D, pages D-113 and D-114 for the archaeological summary.

The Spicewood Cemetery is approximately 800 feet north of the 236th Street/Springmill Road Intersection and the Bakers Corner Cemetery is approximately 370 feet north of the 236th Street/Dunbar Road Intersection. Both cemeteries are greater than 100 feet from any proposed ground disturbing project activities; therefore, a cemetery development plan(s) will not be needed. Per the Indiana SHPO, if the project area is altered to include any portions within 100 feet of a cemetery, a cemetery development plan may be necessary. Following the public hearing, both cemeteries are still at least 100 feet from any proposed ground disturbing activity.

Historic Properties: The APE was investigated for the existence of any historic properties and/or structures by a qualified professional from RQAW on March 11, 2016 and August 26, 2016. There are no properties listed in the NRHP within the APE of this project. The Bakers Corner Wesleyan Church (IHSSI # 057-587-19005) is recommended eligible for listing in the NHRP. The church is recommended eligible under Criterion

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A because of its association with religion and rural community life in Bakers Corner and northern Hamilton County during the first half of the twentieth century and under Criterion C because the church is an excellent example of a Romanesque Revival style rural church in Hamilton County. The HPR describing these findings was sent to INDOT CRO on September 23, 2016 and was approved by INDOT CRO on October 5, 2016. The report was sent to consulting parties, including the Indiana SHPO, on October 24, 2016. The Indiana SHPO concurred on November 28, 2016, that the Bakers Corner Wesleyan Church is eligible for listing in the NRHP. See Appendix D, page D-77 for the CRO concurrence e-mail, Appendix D, pages D-86 and D-87 for the Indiana SHPO concurrence letter and Appendix D, page D-111 and D-112 for the HPR summary.

After the dissemination of the HPR and after further research and coordination with consulting parties, INDOT and the Indiana SHPO, it was recommended that the Charles B. Jones House (IHSSI Number 057-587-19006) be considered eligible for inclusion in the NRHP under criterion C as an outstanding example of a Craftsman Airplane Bungalow. An additional information letter describing this finding was sent to INDOT CRO on December 7, 2016 and was approved by INDOT CRO on December 19, 2016. The letter was sent to consulting parties, including the Indiana SHPO, on December 20, 2016. In a letter dated January 18, 2017, Indiana Landmarks concurred with the recommendation. The Indiana SHPO concurred with the recommendation in the additional information letter on January 25, 2017. See Appendix D, pages D-108 and 109 for the Indiana SHPO concurrence letter and Appendix D, pages D-90 through D-103 for the additional information letter.

Documentation, Findings: The 800.11(e) document was sent to INDOT CRO on January 31, 2017 and was signed by INDOT, on behalf of FHWA, on February 16, 2017. See the signed 800.11(d) document in Appendix D, pages D-2 to D-4. The 800.11(e) document was sent to consulting parties, including the Indiana SHPO, on February 17, 2017. In a letter dated March 15, 2017, Indiana Landmarks concurred with the *No Adverse Effect* Section 106 finding. The Indiana SHPO concurred with the *No Adverse Effect* Section 106 finding on March 21, 2017. See the Indiana SHPO concurrence letter in Appendix D, pages D-119 and D-120 and the Indiana Landmarks response letter in Appendix D, page D-118.

Following the public hearing, temporary right-of-way limits were revised at the Bakers Corner Wesleyan Church and Charles B. Jones House. For the Bakers Corner Church, temporary right-of-way will now be needed within the southwest area of the historic property boundary. The temporary right-of-way will be needed for an area so construction workers and their equipment can perform the work. Approximately 0.003 acre of temporary right-of-way will be needed from within the historic boundary and construction limits will remain entirely outside the historic boundary. In a letter dated March 6, 2018, the Indiana SHPO stated the impacts to the Bakers Corner Church will constitute a temporary occupancy. See the Indiana SHPO letter in Appendix D, pages D-125 and D-126.

For the Charles B. Jones House, additional temporary right-of-way will be needed within the northeast area of the historic property boundary. The temporary right-of-way will be needed for an area so construction workers and their equipment can perform the work. An additional approximately 0.0007 acre of temporary right-of-way will be needed from the northeast historic boundary while no construction limits will enter the historic boundary at this location. Lastly, the construction limits were revised for the driveway reconstruction within the previously documented temporary right-of-way. In a letter dated March 6, 2018, the Indiana SHPO stated the impacts to the Charles B. Jones House will constitute a temporary occupancy. See the Indiana SHPO letter in Appendix D, pages D-125 and D-126.

Since right-of-way limits were revised within the historic property boundaries after the 800.11(e) documentation was approved, coordination was conducted with the INDOT CRO. In January 2018, INDOT CRO responded that re-coordination with the Indiana SHPO will be necessary. A letter was sent to the Indiana SHPO and consulting parties on January 31, 2018. Consulting parties were notified for transparency purposes and comments were not requested. The letter described changes to the temporary right-of-way limits for the Bakers Corner Wesleyan Church and Charles B. Jones House. The letter stated the *No Adverse Effect* finding

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is still applicable because the minimal changes within the historic resource boundaries do not rise to the level of *Adverse Effect* (no additional construction limits for ground disturbing activities are within either historic resource boundary). Therefore, per 36 CFR 800.5(a)(1), the finding of *No Adverse Effect* does not change. See the letter sent to consulting parties and the Indiana SHPO concurrence letter in Appendix D, pages D-121 through D-126.

Public Involvement: A legal notice was published in the Indianapolis Star on February 20, 2017. The notice offered the public an opportunity to comment on the *No Adverse Effect* Section 106 finding. The public had a 30-day comment period to respond to the notice. The comment period expired on March 22, 2017 and no public comments were received. See the affidavit and legal notice in Appendix D, pages D-116 and D-117. The Section 106 process has been completed and the FHWA responsibilities for 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

X

Use

Yes	No
	X

Evaluations Prepared

- Programmatic Section 4(f)*
- “De minimis” Impact*
- Individual Section 4(f)

FHWA Approval date

--

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*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 Department of Transportation Act of 1966, 49 USC 303(c) was established to protect publicly owned parks, recreational areas, wildlife and waterfowl refuges, or public and private historical sites listed in, or eligible for, the NRHP against direct or constructive use impacts from transportation projects. Per review of infrastructure shapefiles from IndianaMap, USGS topographic map and site visits conducted on March 11, 2016 and August 26, 2016 by RQAW, three Section 4(f) resources are identified as located within the project limits. One potential trail is mapped along the entire project area, one church (The Bakers Corner Wesleyan Church) and one house (Charles B. Jones House) are recommended eligible for the NRHP. See the Infrastructure map in the *Red Flag Investigation* in Appendix E, page E-6 and the APE map showing the location of the church and house in Appendix D, page D-19.

Proposed Trail Along 236th Street: Per the FHWA Section 4(f) Policy Paper (July 20, 2012), "the key is whether the planned facility is presently publicly owned, presently formally-designated for Section 4(f) purposes and presently significant. When this is the case, Section 4(f) would apply." The land that will be required for the project is currently privately owned. The proposed trail is documented in Hamilton County's 2007 Thoroughfare Plan (<http://www.hamiltoncounty.in.gov/DocumentCenter/View/4667>) (maps A-9 and A-10). To determine "significance," coordination was conducted with the Official with Jurisdiction (OWJ) over trails within Hamilton County. The OWJ is the official(s) of an agency or agencies that owns and/or administers the property in question and who are empowered to represent the agency on matters related to the property. For this project, the OWJ is Hamilton County. In a letter dated November 1, 2016, the OWJ stated there is currently no plans or funding for this planned trail. Because this trail does not have significance (i.e. it is not currently planned or funded for development), Section 4(f) would not apply for this project. See the OWJ concurrence letter in Appendix I, page I-9.

The Charles B. Jones House: The house was rated "Contributing" in the *Hamilton County Interim Report* (1992). The Craftsman Airplane Bungalow was constructed in circa 1920 and located is at 1083 East 236th Street in the Bakers Corner village.

The road widening work occurs along the north boundary and adjacent to the Charles B. Jones House. The proposed work in this location will include widening the pavement by one foot, installing a curb and gutter, installing a sewer trunk line, and driveway reconstruction. Although permanent work is adjacent to the Charles B. Jones house historic boundary and approximately 10 feet of the driveway will be reconstructed, it is anticipated that there will be no adverse effect on the house. See the design plan sheet in Appendix D, page D-101 for the work to be done on the Charles B. Jones House. No contributing features such as vegetation will be removed and the concrete walkway will not be impacted. Therefore, the minor alterations as part of this project will occur where they will not have a significant negative impact on the Charles B. Jones House overall ability to convey historic significance; thus, the impacts do not rise to the level of being an adverse effect. INDOT has determined the appropriate Section 106 finding is *No Adverse Effect*. See Appendix D, page D-3 for Section 106 effect finding for historic properties. The Indiana SHPO concurred with the *No Adverse Effect* Section 106 finding in a letter dated March 21, 2017. The SHPO letter also stated the impacts to the Charles B. Jones House constitute a temporary occupancy. See Appendix D, pages D-119 and D-120 for the SHPO concurrence letter.

Temporary Occupancy:

Per the FHWA's Section 4(f) Policy Paper (dated July 20, 2012), Section 23 CFR 774.13(d) provides the condition under which "temporary occupancies of land . . . are so minimal as to not constitute a use within the

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meaning of Section 4(f).” If all of the conditions in Section 774.13(d) are met, the temporary occupancy does not constitute a use of the Section 4(f) resource. In general, the temporary occupancy of the land is so minimal that it is exempted from being defined as a use for protection under Section 4(f). A temporary occupancy will not constitute a Section 4(f) use when all of the conditions listed in 23 CFR 774.13(d) are satisfied:

1. Duration must be temporary, i.e., less than the time needed for construction of the project, and there should be no change in ownership of the land;
2. Scope of the work must be minor, i.e., both the nature and the magnitude of the changes to the Section 4(f) property are minimal;
3. There are no anticipated permanent adverse physical impacts, nor will there be interference with the protected activities, features, or attributes of the property, on either a temporary or permanent basis;
4. The land being used must be fully restored, i.e., the property must be returned to a condition which is at least as good as that which existed prior to the project; and
5. There must be documented agreement of the official(s) with jurisdiction over the Section 4(f) resource regarding the above conditions.

Because the project will require temporary occupancy from the Charles B. Jones House, a Section 4(f) resource, agreement with the OWJ is required. For this Section 4(f) resource, the OWJ is the Indiana SHPO. In order to meet the temporary occupancy exemption, written agreement by the OWJ is necessary. As mentioned above, the Indiana SHPO stated the impacts to the Charles B. Jones House constitute a temporary occupancy in a letter dated March 21, 2017.

As previously described, project limits were modified following the public hearing. This modification resulted in approximately 0.0007 acre of additional temporary right-of-way being needed from within the northeast area of the historic boundary. No construction limits will enter the historic boundary at this location. The construction limits were also revised for driveway reconstruction within the previously documented temporary right-of-way limits. In a letter dated March 6, 2018, the Indiana SHPO stated the impacts to the Charles B. Jones House still constitute a temporary occupancy. This project meets all the conditions listed in Section 774.13(d), thus, the temporary occupancy of the Charles B. Jones House does not constitute a Section 4(f) use. See the Indiana SHPO concurrence letter in Appendix D, pages D-125 and D-126.

The Bakers Corner Wesleyan Church: The church was rated “Notable” in the *Hamilton County Interim Report* (1992). The Romanesque Revival style church was constructed in 1916 and is located at 1080 East 236th Street in the Bakers Corner village.

The proposed project will require approximately 0.02 acre of permanent right-of-way from the legal property boundary of Bakers Corner Wesleyan Church. The proposed undertaking will encroach upon approximately 0.003 acre of the NRHP (historic) boundary of the church, which qualifies as a Section 4(f) resource. Although the project is within proximity to the Bakers Corner Wesleyan Church (approximately 26 feet between the building and existing north edge of 236th Street), there will be no adverse effect on the church. The historic boundary extends south to the front edge of the sidewalk, south of the church. It does not include the handicapped parallel parking spaces between the sidewalk and 236th Street. The existing 236th Street westbound lane is approximately 12 feet wide and is the extent of the existing right-of-way. The north edge of 236th Street pavement is adjacent to the handicapped parallel parking. The westbound lane will be milled and resurfaced to create a continuous depth and an even 12-foot wide lane in front of the Bakers Corner Wesleyan Church. A smooth transition will be recreated between the handicapped parallel parking and the 236th Street roadway. Right-of-way will be extended from the existing 12 feet to 15 feet north of the centerline, in front of the Bakers Corner Wesleyan Church. See the design plan sheet in Appendix D, page D-101 for the work to be done near the Bakers Corner Wesleyan Church. This undertaking will temporarily occupy land from the Bakers Corner Wesleyan Church, a Section 4(f) historic property. INDOT has determined the appropriate Section 106 finding is *No Adverse Effect*. See Appendix D, page D-3 for Section 106 effect finding for historic properties. The

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Indiana SHPO concurred with the *No Adverse Effect* Section 106 finding in a letter dated March 21, 2017. See Appendix D, pages D-119 and D-120 for the SHPO concurrence letter.

Temporary Occupancy:
 Per the FHWA’s Section 4(f) Policy Paper (dated July 20, 2012), Section 23 CFR 774.13(d) provides the condition under which “temporary occupancies of land . . . are so minimal as to not constitute a use within the meaning of Section 4(f).” If all of the conditions in Section 774.13(d) are met, the temporary occupancy does not constitute a use of the Section 4(f) resource. In general, the temporary occupancy of the land is so minimal that it is exempted from being defined as a use for protection under Section 4(f). A temporary occupancy will not constitute a Section 4(f) use when all of the conditions listed in 23 CFR 774.13(d) are satisfied:

1. Duration must be temporary, i.e., less than the time needed for construction of the project, and there should be no change in ownership of the land;
2. Scope of the work must be minor, i.e., both the nature and the magnitude of the changes to the Section 4(f) property are minimal;
3. There are no anticipated permanent adverse physical impacts, nor will there be interference with the protected activities, features, or attributes of the property, on either a temporary or permanent basis;
4. The land being used must be fully restored, i.e., the property must be returned to a condition which is at least as good as that which existed prior to the project; and
5. There must be documented agreement of the official(s) with jurisdiction over the Section 4(f) resource regarding the above conditions.

Because the project will require temporary occupancy from the Bakers Corner Wesleyan Church, a Section 4(f) resource, agreement with the OWJ is required. For this Section 4(f) resource, the OWJ is the Indiana SHPO. In order to meet the temporary occupancy exemption, written agreement by the OWJ is necessary. In a letter dated March 6, 2018, the Indiana SHPO stated the impacts to the Bakers Corner Wesleyan Church constitute a temporary occupancy. This project meets all the conditions listed in Section 774.13(d), thus the temporary occupancy of the Bakers Corner Wesleyan Church does not constitute a Section 4(f) use. See the Indiana SHPO concurrence letter in Appendix D, pages D-125 and D-126.

No additional 4(f) resources are located within the project area, thus no further 4(f) evaluation is necessary.

Section 6(f) Involvement

<u>Presence</u>	<u>Use</u>	
<input type="checkbox"/>	Yes <input type="checkbox"/>	No <input type="checkbox"/>

Section 6(f) Property

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

Remarks: Section 6(f) properties include lands that were purchased with or improved using funds from the Land and Water Conservation Fund (LWCF). The National Park Service (NPS) LWCF website (<http://www.nps.gov/nrcr/programs/lwcf/>) was consulted on August 22, 2016 by RQAW. Because no lands purchased with funds from the LWCF are mapped within or near the project area, early coordination was not conducted with the IDNR Division of Outdoor Recreation. Per site visits conducted on March 11, 2016 and August 26, 2016 by RQAW, no readily apparent Section 6(f) resources were observed. The project will not involve any properties acquired with or improved by the LWCF. See the LWCF electronic printout in Appendix I, page I-12 and Infrastructure map in the *Red Flag Investigation* in Appendix E, page E-6.

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SECTION E – Air Quality

Air Quality

Conformity Status of the Project

	Yes	No
Is the project in an air quality non-attainment or maintenance area?	<input type="checkbox"/>	<input checked="" type="checkbox"/>
If YES, then:		
Is the project in the most current MPO TIP?	<input type="checkbox"/>	<input type="checkbox"/>
Is the project exempt from conformity?	<input type="checkbox"/>	<input type="checkbox"/>
If the project is NOT exempt from conformity, then:		
Is the project in the Transportation Plan (TP)?	<input type="checkbox"/>	<input type="checkbox"/>
Is a hot spot analysis required (CO/PM)?	<input type="checkbox"/>	<input type="checkbox"/>

Level of MSAT Analysis required?

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

Remarks:

Hamilton County is currently in attainment for all criteria pollutants. Because the project is in attainment for CO, a CO hot spot analysis is not required.

The project is of a type qualifying as a categorical exclusion (Group 1) under 23 CFR 771.117(d), 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.

The project is listed in INDOT's *Statewide Transportation Improvement Program (STIP)* for fiscal years 2016-2019. The project is listed in the TIP for fiscal years 2016-2019. See relevant pages from the STIP and TIP in Appendix H, pages H-1 to H-3.

SECTION F - NOISE

Noise

	Yes	No
Is a noise analysis required in accordance with FHWA regulations and INDOT's traffic noise policy?	<input type="checkbox"/>	<input checked="" type="checkbox"/>

No Yes/ Date

ES Review of Noise Analysis		

Remarks:

The project is a Type III project. In accordance with 23 CFR 772 and INDOT's *Traffic Noise Policy*, this action does not require a formal noise analysis.

SECTION G – COMMUNITY IMPACTS

Regional, Community & Neighborhood Factors

	Yes	No
Will the proposed action comply with the local/regional development patterns for the area?	<input checked="" type="checkbox"/>	<input type="checkbox"/>
Will the proposed action result in substantial impacts to community cohesion?	<input type="checkbox"/>	<input checked="" type="checkbox"/>
Will the proposed action result in substantial impacts to local tax base or property values?	<input type="checkbox"/>	<input checked="" type="checkbox"/>
Will construction activities impact community events (festivals, fairs, etc.)?	<input type="checkbox"/>	<input checked="" type="checkbox"/>
Does the community have an approved transition plan?	<input checked="" type="checkbox"/>	<input type="checkbox"/>
If No, are steps being made to advance the community's transition plan?	<input type="checkbox"/>	<input type="checkbox"/>
Does the project comply with the transition plan? (explain in the remarks box)	<input type="checkbox"/>	<input checked="" type="checkbox"/>

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Remarks:

The proposed project will comply with the local/regional development patterns for the area. The project is not anticipated to result in substantial impacts to community cohesion, because it would not change access to properties within the area or divide existing communities. The proposed project is not expected to impact the surrounding community or cause economic impacts to the surrounding area. Therefore, the project will have minimal or no negative impacts to the community or local economy.

There are five businesses within the project area: a gasoline station and fast food restaurant west of the 236th Street/US 31 Intersection, a long-haul truck carrier company east of the 236th Street/Dunbar Road Intersection, a paint store east of the 236th Street/Dunbar Road Intersection and an unknown commercial property in the southeast quadrant of the 236th Street/Dunbar Road Intersection. There is also a tree nursery and home gardening business located approximately 3,800 feet west of the project. The MOT will close 236th Street to through traffic and will utilize an official detour; however, access to these businesses will be maintained during construction. The project will be constructed in three segments to reduce impacts to property owners within the project area. Please refer to the *Maintenance of Traffic (MOT) During Construction* section of this document for further details on the proposed MOT. A public hearing will be held prior to the approval of this document which will provide nearby businesses and property owners an opportunity to provide comments on the project.

Per the Fairs and Festivals website (www.fairsandfestivals.net) (accessed on September 20, 2016 by RQAW), five fairs/festivals were noted within 10 miles for zip code 46069 and nine fairs/festivals were noted within 10 miles for zip code 46030. The MOT for the project is not anticipated to impact access to these events. The majority of these are events are at least seven miles away and there are several adjacent roads next to the project area that fair or festival goers can utilize.

Per coordination with the Hamilton County Americans with Disabilities Act (ADA) Coordinator, Hamilton County has an approved ADA Transition Plan. The plan was approved on February 22, 2013 and can be viewed here: <http://www.hamiltoncounty.in.gov/DocumentCenter/Home/View/4183>. Per coordination with the project designer, there are no ADA facilities included within the existing or proposed right of way.

During the public hearing, several concerns/questions were raised by the public. These generally related to how water will drain post construction, what will be done about potential damage to personal property during construction, damage to personal property post construction due to being closer to the road, how to access mailboxes safely post construction, requesting data that supports the purpose and need, what the real estate process will involve, project schedule and maintenance of traffic logistics. See all public comments/questions and responses to public comments/questions in Appendix G, pages G-36 through G-50.

Following the public hearing, project designers and Hamilton County met to address concerns raised by the public. As a result, the project design was changed within some portions of the project area. Examples include: (1) constructing a U-shaped drive for one property owner, (2) installing mailboxes that can be accessed from both sides, (3) installing additional safety signs within and adjacent to Bakers Corner indicating *Do Not Pass* or *Reduced Speed Ahead*, (4) relocating a mailbox for one property owner, (5) constructing a drain inlet in the front yard for one property owner, (6) constructing an enclosed drainage pipe with a small swale for one property owner, and (7) constructing agricultural field entrances for multiple property owners. These changes will help address concerns raised by the public.

Indirect and Cumulative Impacts

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

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

Remarks:

Indirect effects are effects that are caused by an action that are reasonably foreseeable to occur at a later time. Cumulative impacts result from the action when added to the past, present and reasonably foreseeable actions. Due to the scope of the project and limited impacts, it is not expected to result in any substantial indirect effects

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or cumulative impacts. These roadway improvements will add capacity to the existing roadway network. However, the improved traffic flow and safety is not expected to increase development in the area beyond what is already planned.

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: There are no health and educational facilities, airports, public transportation, pedestrian and bicycle facilities present within the project area. Overhead power lines and communication utility lines are present within the project area and will need to be relocated. A subsurface gas line is also present and may need to be relocated to complete the project. Any interruption in service would be temporary. One religious institution, Bakers Corner Wesleyan Church, is present within the project area. Construction is estimated to begin in March 2019 and end in October 2019. The MOT will close the roadway to through traffic and have an official detour; however, access to businesses and the Bakers Corner Wesleyan Church will be maintained during construction. This will likely be an inconvenience to traveling motorists, but it will not be a significant, long term disruption to them or school bus routes and/or emergency response providers. The project is anticipated to create only minor delays for emergency responders or school bus routes. Two weeks prior to construction, Hamilton County will coordinate with school corporations and emergency units. Access to all properties will be maintained throughout construction. Following construction, the project will provide safer conditions and improved traffic flow.

Environmental Justice (EJ) (Presidential EO 12898)

During the development of the project were EJ issues identified? Yes No
 Does the project require an EJ analysis? Yes No
 If YES, then:
 Are any EJ populations located within the project area? Yes No
 Will the project result in adversely high or disproportionate impacts to EJ populations? Yes No

Remarks: Per INDOT's 2013 CE Manual, an Environmental Justice (EJ) analysis is needed for any project requiring two or more relocations or more than 0.5 acre of permanent right-of-way. Because the project will require more than 0.5 acre of right-of-way, an EJ analysis was conducted. Potential EJ impacts are detected by locating minority populations and low-income populations in and near the project area, calculating their percentage in the area relative to a reference population to determine if, in fact, populations of EJ concern do exist and determining whether there will be disproportionately high and adverse impacts to them. The reference population may be a county, city, or town and is called the community of comparison (COC). In this project, the COC is Hamilton County. The community that overlaps the project limits is called the affected community (AC). In this project, the AC is Census Tract 1103.

An AC has a population of concern for EJ if the population is equal to or greater than 50% low-income or minority or if the low-income population or minority population is equal to or greater than 25% higher than the population in the COC. A review of American Community Survey (ACS) 5-year estimates data (2010-2014) was completed. The data was obtained from the U.S. Census Bureau's American Fact Finder webpage (<http://factfinder.census.gov/faces/nav/jsf/pages/index.xhtml>) on August 10, 2016 by RQAW.

COC: Hamilton County		
	Low Income	Minority
COC %	4.8%	14.5%
125% of COC	6.0%	18.2%
AC: Census Tract 1103	8.6%	10.0%

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Population of EJ Concern	Yes	No
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The low-income percentage for the AC (8.6%) is greater than 125% of the reference community (6.0%). The minority percentage for the AC (10.0%) is not greater than 125% of the reference community (18.2%). Neither the low-income nor minority populations were 50% of the AC. Because there is an elevated low-income population within the project area, coordination with INDOT Environmental Services was conducted on August 10, 2016. In an e-mail dated December 15, 2016, INDOT Environmental Services stated that, "With the information provided, INDOT-ES would not consider the impacts associated with this project as causing a disproportionately high and adverse effect on minority and/or low incomes populations of EJ concern relative to non EJ populations in accordance with the provisions of Executive Order 12898 and FHWA Order 6640.23a. No further EJ Analysis is required. Should the scope of work change or the amount of right-of-way, INDOT-ES should be contacted immediately to determine if the EJ Analysis would need to be reinitiated." See the EJ analysis and INDOT e-mail in Appendix I, pages I-1 through I-8.

Relocation of People, Businesses or Farms

Will the proposed action result in the relocation of people, businesses or farms?	Yes	No
Is a Business Information Survey (BIS) required?	<input type="checkbox"/>	<input checked="" type="checkbox"/>
Is a Conceptual Stage Relocation Study (CSRS) required?	<input type="checkbox"/>	<input checked="" type="checkbox"/>
Has utility relocation coordination been initiated for this project?	<input checked="" type="checkbox"/>	<input type="checkbox"/>

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

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. Utility coordination has been initiated for the project. Utilities have attended meetings held on October 12, 2016, October 27, 2016 and February 9, 2017. Additional meetings will be held as needed throughout the plan development process.

SECTION H – HAZARDOUS MATERIALS & REGULATED SUBSTANCES

Hazardous Materials & Regulated Substances (Mark all that apply)

Documentation

Red Flag Investigation	<input checked="" type="checkbox"/>	
Phase I Environmental Site Assessment (Phase I ESA)	<input type="checkbox"/>	
Phase II Environmental Site Assessment (Phase II ESA)	<input type="checkbox"/>	
Design/Specifications for Remediation required?	<input type="checkbox"/>	

	No	Yes/ Date
ES Review of Investigations	<input type="checkbox"/>	December 15, 2016

Include a summary of findings for each investigation.

Remarks: A Red Flag Investigation was completed for a 0.5-mile buffer by RQAW Corporation on December 15, 2016; this was done to identify any potential environmental concerns located within the project vicinity. One underground storage tank (UST), one National Pollutant Discharge Elimination System (NPDES) facility and one NPDES pipe are mapped within the eastern project limits. They are associated with Speedway #8028 located in the northwest quadrant of the 236th Street/US 31 Intersection. The March 24, 2015, IDEM inspection indicated the UST facility was in compliance with equipment, operating and maintenance requirements set forth in Indiana's UST Rule 329 IAC 9. No impact to the UST is expected. Coordination will occur with Speedway to ensure the NPDES facility and pipe will not be impacted by the project. This is listed as a firm commitment. The *Red Flag Investigation* was approved by INDOT on December 15, 2016. See the *Red Flag Investigation* in Appendix E, pages E-1 through E-12.

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Field visits were conducted on March 11, 2016 and August 26, 2016 by RQAW and no readily apparent hazmat concerns were observed. See the *Hazardous Materials Site Visit Form* in Appendix E, page E-13.

Per early coordination with IDNR Division of Oil and Gas, the IDNR noted two potential buried gas wells near the project area. Both gas wells appear to be near the 236th Street/Six Points Road Intersection which is west of the project area. However, because exact locations are not known, the IDNR recommended contractors be observant for metal pipes standing on end. If metal pipes are observed, the IDNR Division of Oil and Gas will be notified; this is listed as a firm commitment in *Environmental Commitments* at the end of this document. See the IDNR response e-mail in Appendix C, pages C-19 and C-20.

SECTION I – PERMITS CHECKLIST

Permits (mark all that apply) Likely Required

Army Corps of Engineers (404/Section10 Permit)	
Individual Permit (IP)	<input type="checkbox"/>
Nationwide Permit (NWP)	<input type="checkbox"/>
Regional General Permit (RGP)	<input checked="" type="checkbox"/>
Pre-Construction Notification (PCN)	<input type="checkbox"/>
Other	<input type="checkbox"/>
Wetland Mitigation required	<input type="checkbox"/>
Stream Mitigation required	<input type="checkbox"/>
IDEM	
Section 401 WQC	<input checked="" type="checkbox"/>
Isolated Wetlands determination	<input type="checkbox"/>
Rule 5	<input checked="" type="checkbox"/>
Other	<input type="checkbox"/>
Wetland Mitigation required	<input type="checkbox"/>
Stream Mitigation required	<input checked="" type="checkbox"/>
IDNR	
Construction in a Floodway	<input type="checkbox"/>
Navigable Waterway Permit	<input type="checkbox"/>
Lake Preservation Permit	<input type="checkbox"/>
Other	<input type="checkbox"/>
Mitigation Required	<input type="checkbox"/>
US Coast Guard Section 9 Bridge Permit	<input type="checkbox"/>
Others (Please discuss in the remarks box below)	<input checked="" type="checkbox"/>

Remarks: Five permits will be needed. An USACE Regional General Section 404 Permit and IDEM Section 401 Water Quality Certification Permit will be needed for impacts to four streams and one wetland. The total area of stream impacts within the permanent right-of-way limits did not change after project limits were modified following the public hearing. The project will still impact approximately 2,740 linear feet of streams. The total area of wetland impacts within the permanent right-of-way limits did not change following the public hearing. The project will still impact approximately 0.003 acre of wetlands. Because stream impacts will exceed the 300 linear feet threshold, stream mitigation will likely be required. However, this mitigation will be in-kind, which includes replacement of existing function. Close coordination with the designer to avoid/minimize impacts to streams and wetlands has been on-going throughout the design process. If the project scope changes, INDOT Environmental Services will be contacted immediately.

Two county regulated drain permits will be required since the project will involve two legal drains (William Baker Drain and CB Jones Arm of William Baker Drain). Because William Baker Drain and CB Jones Arm of

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William Baker Drain are legal drains, the project sponsor is responsible for obtaining a construction within a legal drain permit from Hamilton County and for following all permit requirements and conditions.

The only structures within the mapped floodway are associated with Teter Branch Legal Drain and UNT 3. The structures associated with Teter Branch Legal Drain and UNT 3 will not be modified per this project. Their upstream drainage areas are 3.4 square miles and 0.01 square mile, respectively. Both are below the 50 square miles threshold; therefore, the project is exempt from floodplain regulations and will not require a Construction in a Floodway Permit.

An IDEM Rule 5 Permit will also be needed because at least one acre of land will be disturbed. It is the responsibility of the project sponsor to obtain and comply with the conditions of any necessary 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 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 the event, please call (317) 232-1646. Be advised that adherence to Indiana Code 14-21-1-27 and 29 does not obviate the need to adhere to applicable federal statutes and regulations. (INDOT Cultural Resources Office)
2. If the scope of work or permanent or temporary right-of-way amounts change, the INDOT Environmental Services will be contacted immediately. (INDOT Environmental Services)
3. If a spill occurs or contaminated soils or water are encountered during construction, appropriate personal protective equipment (PPE) should be used. Contaminated materials will need to be properly handled by trained personnel and disposed in accordance with current regulations. IDEM should be notified through the spill line at (888) 233-7745 within 24 hours of discovery of a release from a UST system and within two hours (2) of discovery of a spill. (IDEM)
4. If residential wells are encountered, they will be re-drilled as part of the right-of-way agreement with the property owner. If any identified well needs to be backfilled, it will be performed according to 312 IAC 13-10. (INDOT Environmental Services)
5. Wetland boundaries will be identified as "WETAND—Do Not Disturb outside construction limits" on the final design plans. Wetland boundaries will be identified in the field prior to construction to avoid indirect impacts. INDOT Environmental Services recommends orange fencing and signs to separate construction activities from Wetland A. (INDOT Environmental Services)
6. Portions of sites 12-H-1788 through 12-H-1794 that lie outside the project area must be either be avoided or subjected to further archaeological investigations. These areas must be clearly marked in the field so they are avoided by all ground-disturbing project activities. If avoidance is not feasible, then a plan for subsurface archaeological investigations must be submitted to the SHPO for review and comment. Sites will also be marked as "Sensitive Area - Do Not Disturb" on the final design plans. (INDOT Cultural Resources Office)
7. If the project area is altered to include any portions within 100 feet of a cemetery, a cemetery development plan will be necessary. (INDOT Cultural Resources Office)
8. Hamilton County is responsible for coordinating with school corporations and emergency services two weeks prior to construction. (Hamilton County)
9. 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. (IDEM)
10. Reasonable precautions will be taken to minimize fugitive dust emissions from construction and demolition activities. Dirt tracked out from unpaved areas should be minimized. (IDEM)

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11. The use of cutback asphalt, or asphalt emulsion containing more than 7% oil distillate, will be prohibited during the months of April through October. (IDEM)
12. Install silt fence or other erosion control measures around the perimeter of any wetlands and/or other waterbodies to remain undisturbed at the project site. (IDEM)
13. Stabilize all disturbed areas upon completion of land disturbing activities. (IDEM)
14. Sediment-laden water which otherwise would flow from the project site shall be treated by erosion and sediment control measures appropriate to minimize sedimentation. (IDEM)
15. A stable construction site access shall be provided at all points of construction traffic ingress and egress to the project site. (IDEM)
16. Public or private roadways shall be kept cleared of accumulated sediment that is a result of run-off or tracking. (IDEM)
17. Use best management practices to minimize and contain any leaks or spills to prevent any potential impacts. (Citizens Energy Group)
18. While excavating, be observant for an unnaturally round hole or metal casing, or see fluids (oil, saltwater) or gas in the hole. Call the IDNR Division of Oil and Gas if you suspect you have encountered a well. People to contact if needed: Mary Estrada, Orphan/Abandoned Wells (317) 233-0933, John White, Area Inspector (765) 618-0766, Bryan Royer, Field Specialist (317) 417-6556. (IDNR Division of Oil and Gas)
19. Because the project area may contain gas wells in the western project area, the IDNR Division of Oil and Gas will be contacted prior to construction in that specific area. Please contact Mary Estrada, IDNR Division of Oil and Gas, (317) 233-0933 (INDOT Environmental Services)
20. Coordination will occur with Speedway to ensure the NPDES facility and pipe will not be impacted by the project. (INDOT Hazardous Materials)
21. Because William Baker Drain and CB Jones Arm of William Baker Drain are legal drains, the project sponsor is responsible for obtaining a construction within legal drain permits from Hamilton County and for following all permit requirements and conditions. (Hamilton County)
22. An enclosed drainage pipe with a small swale will be added and deep ditch eliminated at the Kirschner Property. (Hamilton County)
23. The mailbox will be relocated next to the driveway due to the proximity of the intersection taper to the existing mailbox location at the Kirschner Property. (Hamilton County)
24. A representative will come to the Kirschner Property to determine the exact location of the septic system. If the septic system is within the right-of-way limits, it will be relocated to an appropriate spot on the property at the expense of the County. Additional steps will be taken if relocating the septic system is not possible. (Hamilton County)
25. Within Bakers Corner, there will be "reduced speed ahead" signs included in the plans. (Hamilton County)
26. Mailboxes with access from both ends will be included in the project. (Hamilton County)
27. Access will be maintained to all properties during the road closure. (Hamilton County)
28. The contractor will coordinate any drive closures and timing of those with the property owner prior to construction. (Hamilton County)
29. A U-shaped drive will be added to the plans for the Waggoner Property. (Hamilton County)
30. All traffic will be detoured on county maintained roads. (Hamilton County)

For Further Consideration:

1. Revegetate all bare and disturbed areas within the project area using a mixture of grasses, sedges, wildflowers, shrubs and trees native to central Indiana as soon as possible upon completion. (IDNR Division of Fish and Wildlife)
2. Minimize and contain within the project limits in-channel disturbance and the clearing of tree and brush. (IDNR Division of Fish and Wildlife)
3. Do not work in the waterway from April 1 through June 30 without the prior written approval of the

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- IDNR Division of Fish & Wildlife. (IDNR Division of Fish and Wildlife)
4. Do not cut any trees suitable for Indiana bat or Northern long-eared bat roosting (greater than three inches diameter-at-breast-height [DBH], living or dead, with loose hanging bark, or with cracks, crevices, or cavities) from April 1 through September 30. (IDNR Division of Fish and Wildlife)
 5. Do not excavate in the low flow area except for the placement of piers, foundations, and riprap, or removal of the old structure. (IDNR Division of Fish and Wildlife)
 6. Do not construct any temporary runarounds, access bridges, causeways, cofferdams, diversions, or pumparounds, if possible. (IDNR Division of Fish and Wildlife)
 7. Operate equipment used to replace/rehabilitate/modify stream crossings from the existing roadway whenever possible. (IDNR Division of Fish and Wildlife)
 8. Do not use broken concrete as riprap. (IDNR Division of Fish and Wildlife)
 9. Underlay the riprap with a bedding layer of well graded aggregate or a geotextile to prevent piping of soil underneath the riprap. (IDNR Division of Fish and Wildlife)
 10. The sideslopes of the outlet section must be 2:1 or flatter. (IDNR Division of Fish and Wildlife)
 11. Minimize the movement of resuspended bottom sediment from the immediate project area. (IDNR Division of Fish and Wildlife)
 12. Do not deposit or allow demolition/construction materials or debris to fall or otherwise enter the waterway. (IDNR Division of Fish and Wildlife)
 13. 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. (IDNR Division of Fish and Wildlife)
 14. Seed and protect disturbed stream banks that are 3:1 or steeper with heavy-duty net-free biodegradable erosion control blankets to minimize the entrapment and snaring of small wildlife such as snakes and turtles (follow manufacturer's recommendations for selection and installation); seed and apply mulch on all other disturbed areas. (IDNR Division of Fish and Wildlife)
 15. Seed and protect areas where runoff is conveyed through a channel/swale with erosion control blankets (follow manufacturer's recommendations for selection and installation) or use an appropriate structural armament; seed and apply mulch on all other disturbed areas. (IDNR Division of Fish and Wildlife)
 16. Protect the area around and below any concentrated discharge points, down to the waterway's normal flow level, with an appropriate structural armament such as riprap. (IDNR Division of Fish and Wildlife)
 17. Install appropriate armament below pipe outfalls. (IDNR Division of Fish and Wildlife)
 18. It is recommended to use bridges rather than culverts and bottomless culverts rather than box or pipe culverts. Wide culverts are better than narrow culverts, and culverts with shorter through lengths are better than culverts with longer through lengths. (IDNR Division of Fish and Wildlife)
 19. If box or pipe culverts are used, the bottoms should be buried a minimum of six inches (or 20% of the culvert height/pipe diameter, whichever is greater up to a maximum of two feet) below the stream bed elevation to allow a natural streambed to form within or under the crossing structure. (IDNR Division of Fish and Wildlife)
 20. Crossings should span the entire channel width (a minimum of 1.2 times the bankful width), maintain the natural stream substrate within the structure, have a minimum openness ratio (height x width/length) of 0.25, and have stream depths and water velocities during low-flow conditions that are approximate to those in the natural stream channel. (IDNR Division of Fish and Wildlife)
 21. The new/replacement/rehabilitated crossing structure, and any bank stabilization under or around the structure, must not create conditions that are less favorable for wildlife passage when compared to current conditions. (IDNR Division of Fish and Wildlife)
 22. Regrading to a stable slope (2:1 or shallower) and establishing native vegetation along the banks are the most effective techniques for streambank stabilization and erosion control. Methods include planting plugs, whips, container stock, seeding, and live stakes. (IDNR Division of Fish and Wildlife)

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23. Bioengineered bank stabilization may be needed in certain circumstances (inability to regrade to a stable slope, flow velocities that exceed the limits of vegetation alone). Methods include geotextiles, erosion control blankets (heavy-duty net free biodegradable preferred to minimize entrapment and snaring of small wildlife species such as snakes and turtles) and/or turf reinforcement mats, vegetated geogrids or soil lifts, fiber rolls, glacial stone, or riprap. (IDNR Division of Fish and Wildlife)
24. Riprap or other hard bank stabilization materials may be used only at the toe of the side slopes up to the Ordinary High Water Mark (OHWM). The banks above the OHWM should be restored, stabilized, and revegetated using geotextiles and a mixture of grasses, sedges, wildflowers, shrubs and trees native to central Indiana and specifically for stream bank/floodway stabilization purposes as soon as possible upon completion. (IDNR Division of Fish and Wildlife)
25. For streambed stabilization or scour protection, riprap or other stabilization materials should not be placed in the active stream channel above the existing streambed elevation. This is to prevent obstructions to the movement of aquatic organisms upstream and downstream. (IDNR Division of Fish and Wildlife)
26. 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. (IDNR Division of Fish and Wildlife)
27. Consider using native trees and shrubs for any proposed on-site revegetation or landscaping for impacts to trees and wooded habitat outside riparian areas. (IDNR Division of Fish and Wildlife)
28. Per stormwater management, it is recommended to use storage techniques (retention basins, constructed wetlands, rain gardens), recharging groundwater using infiltration techniques (infiltration basins or trenches, pervious pavement), and reusing runoff for irrigation elsewhere in the basin. (IDNR Division of Fish and Wildlife)
29. Impacts to wetland habitat should be mitigated at the appropriate ratio according to the 1991 INDOT/IDNR/USFWS Memorandum of Understanding. (IDNR Division of Fish and Wildlife)
30. Post DO NOT DISTURB signs at the construction zone boundaries and do not clear trees or understory vegetation outside the boundaries. (USFWS)
31. Restrict below low-water work to placement of piers, pilings, and/or footings, shaping of the spill slopes around the bridge abutments, and placement of riprap. (USFWS)
32. Restrict channel work and vegetation clearing to within the width of the normal approach road right-of-way. (USFWS)
33. Minimize the extent of artificial bank stabilization. (USFWS)
34. If riprap is utilized for bank stabilization, extend it below low-water elevation to provide aquatic habitat. (USFWS)
35. Implement temporary erosion and siltation control devices such as placement of straw bales in drainage ways and ditches, covering exposed areas with burlap, jute matting or straw, and grading slopes to retain runoff in basins. (USFWS)
36. Revegetate all disturbed soil areas immediately upon project completion. (USFWS)
37. Avoid all work within the inundated part of the stream channel during the fish spawning season (April 1 through June 30) except for work within sealed structures such as caissons or cofferdams that were installed prior to the spawning season. (USFWS)

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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: Early coordination letters were sent to agencies on August 23, 2016. If no response was received, it was assumed the agency did not feel the project would result in substantial impacts. See an example of the early coordination letter and agencies' responses in Appendix C, pages C-1 through C-29. The following agencies/individuals were contacted during early coordination:

Agency	Date of Response(s)
1. INDOT Department of Aviation (electronic submission)	September 2, 2016
2. US Department of Housing and Urban Development (electronic submission)	No response received
3. IDNR, Division of Fish and Wildlife (electronic submission)	September 22, 2016
4. Indiana Geological Survey (electronic submission)	September 5, 2016
5. INDOT Office of Communication (electronic submission)	No response received
6. National Park Service, Land and Water Conservation Fund website (electronic query)	N/A
7. IDEM (electronic submission)	August 23, 2016
8. US Army Corps of Engineers, Louisville District	No response received
9. National Park Service, Midwest Regional Office	No response received
10. Natural Resources Conservation Service	September 13, 2016
11. IDNR Division of Oil and Gas	August 31, 2016
12. IDEM Groundwater Section	August 26, 2016
13. Indianapolis Metropolitan Planning Organization	No response received
14. Hamilton County Commissioners	August 28, 2016
15. Hamilton County Highway Project Manager	No response received
16. Hamilton County Surveyor	August 26, 2016
17. Hamilton County Planning Commission	September 16, 2016
18. Town of Sheridan Street Superintendent	No response received
19. Town of Cicero Street Superintendent	No response received