



Indiana Department of Transportation

County Orange

Route New Airport Road / County Road 300 S

Des. No. 1702378

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 No
If No, then: Opportunity for a Public Hearing Required? X

\*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
Notice of entry letters were mailed to potentially affected property owners near the project area on October 5, 2017 notifying them about the project and that individuals responsible for land surveying and field activities may be seen in the area. A sample copy of the Notice of entry letter is included in Appendix G, page 1.
Section 106
To meet the public involvement requirements of Section 106, a legal notice of FHWA's finding of "No Adverse Effect" was published in the Herald Times and Herald Times Online on September 5, 2019 and September 18, 2019 offering the public an opportunity to submit comment pursuant to 36 CFR 800.2(d), 800.3(e), and 800.6(a)(4). The public comment period will close 30 days later on October 5, 2019. The text of the public notice and the affidavit of publication appear in Appendix G, pages 5-7. This document will be revised after the 30-day comment period and if any comments are received, they will be included with any responses in this document.
The project will meet the minimum requirements described in the current Indiana Department of Transportation (INDOT) Public Involvement Manual which requires the project sponsor to offer the public an opportunity to submit comment and/or request a public hearing. Therefore, a legal notice will appear in a local publication contingent upon the release of this document for public involvement. This document will be revised after the public involvement requirements are fulfilled.

Public Controversy on Environmental Grounds

Will the project involve substantial controversy concerning community and/or natural resource impacts?

Yes No
X

Remarks:

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

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

Sponsor of the Project: Indiana Department of Transportation INDOT District: Vincennes
Local Name of the Facility: French Lick Airport & CR 300S

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

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

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### 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)

#### Purpose

The purpose of the project is to provide a safe roadway that meets current roadway design standards for travelers to reach attraction areas in Orange County from the French Lick Municipal Airport; attraction areas such as the French Lick Resort and Casino, Big Splash Water Park and the Valley Links, Pete Dye, and Donald Ross golf courses.

This project is to complete the original September 4, 2012 approved INDOT Project Des. No. 0901872 construction of roadway designated as CR 300 S/New Airport Road (as referenced as New Airport Road throughout). Following embankment slide and roadway failures during Des. No. 0901872 construction in 2014 and 2015, New Airport Road never fully opened for public use; the original Des. No. 0901872 purpose (*in italics*) remains valid for this project:

*The purpose of the project is to provide a safe roadway that meets current roadway design standards for air travelers to reach area attractions in Orange County from the Orange County (French Lick Municipal) Airport;*

#### Need

The need for this project Des. No. 1702378 is recognized by the deficient roadway and underlying unstable embankment material left incomplete for public use of the original June 12, 2012 approved INDOT Project Des. No. 0901872 construction of New Airport Road following embankment slide and roadway failures during construction in 2014 and 2015; the need for the original Des. No. 0901872 safety, airport operations, and economic development considerations (*in italics*) remain valid for this project:

#### Safety Considerations

*The current access road to the French Lick Municipal Airport, CR 350 S and CR 375 S, both known locally as West Airport Road, are deficient in roadway geometrics. The lane widths and cross slope are inadequate. The vertical alignment does not meet the required Level 1 design criteria for stopping sight distance or maximum grade. The road has a section where the grade is greater than 16%. The horizontal alignment does not meet the required Level 1 design criteria for horizontal curvature, superelevation, and stopping sight distance. There has been a slope failure along the edge of the road where there is a 50-60 foot drop to a creek. The guardrail at this location is no longer anchored to the ground. The latest available data has six accidents from 2004-2007 (INDOT District supplied crash data). Passenger vans and small buses are frequently used to transport groups of people to and from the airport to area attractions. CR 350 S and CR 375 S are difficult to traverse by large passenger buses due to steep 16% grades.*

#### Airport Operations

*The French Lick Municipal Airport has experienced a significant increase in aircraft landings and takeoffs with the 2006 opening of the French Lick Resort and Casino and other attractions, increasing vehicular traffic traveling to and from the airport. The airport recently constructed a new terminal and a new taxiway to accommodate the increased number of air travelers. These improvements are complete, and no additional improvements are currently planned. The airport had approximately 10,000 takeoffs and landings in 2010 with some aircraft carrying up to 30 passengers. It is anticipated that the flights will increase with the airport expansion requiring additional vehicle trips between the area attractions and airport. Airport flights in 2010 increased by 30% from 2009. There are no future plans to expand the airport operations (runway, taxiway, or terminal). Any future commercial development that supports the airport, such as freight warehouses, will be within the non-forested areas on level ground adjacent to the main airport drive and would not extend into existing forested areas. Information provided by the French Lick Airport Manager.*

#### Economic Development

*The French Lick area has seen significant economic development with the opening of the French Lick Resort and Casino. The Pete Dye Golf Course and Big Splash Water Park are attractions that have opened recently. The area has become a tourist destination with PGA & LPGA Golf Tournaments being scheduled at the area golf*

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*courses. Safer access to the French Lick area from the French Lick Municipal Airport will enhance the attractiveness of the area to those that decide where such tournaments are held. As a tourist destination, the economic viability of the area relies on a safe infrastructure to provide access for visitors. A portion of the increase in air traffic can somewhat be attributed to the lack of a nearby Interstate. Last year, the airport flights connected to 44 different states. With the airport expansion completed, improving the access will increase the capacity of this conduit between French Lick destination area attractions and the French Lick Airport. The County Road from the airport to SR 145 is the "gateway" to the French Lick Resort and other attractions in the area.*

**Summary**

Although the majority of construction has occurred as part of the previous project, a section of roadway and underlying embankment material remains unsafe due to roadway slide failures, therefore, the purpose and need for this project Des. No. 1702378 is unchanged despite the delayed completion and public use of the original September 4, 2012 approved INDOT Project Des. No. 0901872 construction of New Airport Road (in italics):

*The existing airport roads CR 350 S and CR 375 S do not provide adequate safety for drivers or passengers traveling to and from the airport along the only direct roadway network between the airport and SR 145.*

**PROJECT DESCRIPTION (PREFERRED ALTERNATIVE):**

County: Orange Municipality: N/A

Limits of Proposed Work: New Airport Road is located 500' north of where old SR 145 intersects with SR 145. The new road will then proceed in a southwesterly direction to intersect with CR 375S/Airport Road, east of the airport entrance.

Total Work Length: 1.96 Mile(s) Total Work Area: 22.21 Acre(s)

Is an Interchange Modification Study / Interchange Justification Study (IMS/IJS) required? 

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

  
 If yes, when did the FHWA grant a conditional approval for this project?

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

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

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The project is located on New Airport Road, also known locally as County Road 300 S, 2.95 miles South of SR 56 on SR 145 in French Lick Township, Orange County, Indiana. The project's location is within the Hillam and French Lick Quadrangles in Sections 21 and 22, Township 1N, Range 2W. See Appendix B for project location maps and photos. In addition, the New Airport Road is identified north of W CR 375 S, approximately 825 feet (ft) east of the French Lick Municipal Airport entrance drive and extends to SR 145. New Airport Road was originally constructed in 2014 as a new alignment under a contract originated by Orange County (contract R34735) to provide access from the Airport to SR 145. During the construction in September 2014, an embankment slide failure occurred approximately 2,200 feet from W CR 375 S, at roadway location that runs parallel to the airport taxiway. In February 2015, a construction change was issued to address the embankment failure and was later constructed. In July 2015, a second roadway slide failure occurred approximately 450 feet west of the initial slide. Due to these roadway failures, New Airport Road has not been fully completed and therefore is not currently open for public use. New Airport Road is a two-lane roadway that is approximately 1.96 miles long and defined as a Rural Major Collector. The French Lick Municipal Airport is located north of the roadway and residential and forested areas are located to the south.

The Indiana Department of Transportation (INDOT) and Federal Highway Administration (FHWA) intends to proceed with a realignment project completing the existing roadway identified as New Airport Road. Approximately 0.84 miles of New Airport Road will be realigned, while the remaining 0.98 miles of roadway is to be completed per plans of the original project. Work that is to be completed under the original contract No. R34735, Des. No. 0901872, will consist of pavement resurfacing, signing, pavement markings, and guardrail installation. This work is to be completed from the start of the new alignment, approximately 825 ft east of the French Lick Municipal Airport entrance drive to the approach of Bridge Structure, Orange 55, station 121 + 80, and is to continue after the bridge structure for an additional approximate 119 ft, connecting to SR 145. Structure, Orange 55 is excluded from this project. The realigned roadway will be designed to meet 4R design criteria and will avoid the slide area. The new alignment portion of the roadway will match the existing roadway with two 11-ft wide lanes. The realigned section of the roadway will be constructed with a 2-ft wide curb offset and a six-inch-high barrier curb. The addition of the curb and gutter section is needed to collect all water from the roadway into an enclosed storm system to minimize erosion on the sideslopes. Additional project drainage will be managed through in-stream detention. In the resurface section of the roadway, the 24-ft wide pavement section is to include two 11-ft wide travel lanes and 1-ft wide shoulders. The total usable shoulder is 4-ft wide with the remaining 3-ft unpaved width consisting of aggregate. The proposed realignment will provide a structurally sufficient road, updated to current safety standards to provide safe passage to and from the French Lick Municipal Airport effectively satisfying the purpose and need for the original June 12, 2012 approved INDOT Project Des. No. 0901872 and this project Des. No. 1702378. No detour of traffic will be required since the road is not currently open to traffic.

### OTHER ALTERNATIVES CONSIDERED:

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

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The majority of the original 1.96-mile New Airport Road elements were completed when construction was suspended in July 2015 following the second slide failure. In addition to the No-Build Alternative, eight Build Alternatives were developed to complete the 2015 suspended construction and correct the slide failure portion of New Airport Road (Appendix B, page 3). Alternatives 1 to 6 included realignment to the south to avoid the 2014/2015 slide failures while Alternative 7 retained the original alignment:

### Realignment Alternatives

- Alternative 1 – Diverges from the existing road pavement starting at Station 57+98 for 0.79 mile until returning at Sta. 64+00. Anticipated impacts for the realignment portion included 6.57 acres of core forest, 0.08 acres of delineated wetlands, 0.30-mile of delineated streams, no acres of the Hoosier National Forest, and a preliminary cost estimate of \$2.18 million (M). Alternative 1, realignment will provide a structurally sufficient road, updated to current safety standards to provide safe passage to and from the French Lick Municipal Airport effectively satisfying the purpose and need.
- Alternative 2 – Diverges from the existing road pavement starting at Station 57+98 for 0.71 mile until returning at Station 68+20. Anticipated impacts for the realignment portion included 11.20 acres of core forest, no acres of delineated wetlands, 0.14-mile of delineated streams, no acres of the Hoosier National Forest, and a preliminary cost estimate of \$3.24 M. Alternative 2, realignment will provide a structurally sufficient road, updated to current safety standards to provide safe passage to and from the French Lick Municipal Airport effectively satisfying the purpose and need.
- Alternative 3 – Diverges from the existing road pavement starting at Station 32+68.74 for 0.75 mile until returning at Station 68+20. Anticipated impacts for the realignment portion included 11.71 acres of core forest, 0.03 acres of delineated wetlands, 0.17 mile of delineated streams, 0.46 acres of the Hoosier National Forest, and a preliminary cost estimate of \$3.24 M. Alternative 3, realignment will provide a structurally sufficient road, updated to current safety standards to provide safe passage to and from the French Lick Municipal Airport effectively satisfying the purpose and need.
- Alternative 4 – Diverges from the existing road pavement starting at Station 28+84.72 for 0.70 mile until returning at Station 68+20. Anticipated impacts for the realignment portion included 13.68 acres of core forest, 0.01 acres of delineated wetlands, 0.20 mile of delineated streams, 0.47 acres of the Hoosier National Forest, and a preliminary cost estimate of \$3.57 M. Alternative 4, realignment will provide a structurally sufficient road, updated to current safety standards to provide safe passage to and from the French Lick Municipal Airport effectively satisfying the purpose and need.
- Alternative 5 – Diverges from the existing road pavement starting at Station 26+75.76 for 0.67 mile until returning at Station 64+00. Anticipated impacts for the realignment portion included 13.83 acres of core forest, no acres of delineated wetlands, 0.16 mile of delineated streams, 0.47 acres of the Hoosier National Forest, and a preliminary cost estimate of \$3.05 M. Alternative 5, realignment will provide a structurally sufficient road, updated to current safety standards to provide safe passage to and from the French Lick Municipal Airport effectively satisfying the purpose and need.
- Alternative 6 – Diverges from the existing road pavement starting at Station 28+15.89 for 1.15 mile until returning at Station 88+95.21. Anticipated impacts for the realignment portion included 13.40 acres of core forest, no acres of delineated wetlands, 0.29 mile of delineated

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streams, 8.78 acres of the Hoosier National Forest, and a preliminary cost estimate of \$3.68 M. Alternative 6, realignment will provide a structurally sufficient road, updated to current safety standards to provide safe passage to and from the French Lick Municipal Airport effectively satisfying the purpose and need.

The six Realignment Alternatives were reviewed as part of an Agency Coordination Meeting held December 12, 2017, with representatives from United States Army Corps of Engineers (USACE), United States Fish and Wildlife Service (USFWS), Federal Aviation Administration (FAA), Federal Highway Administration (FHWA), Indiana Department of Natural Resources (IDNR), Indiana Department of Environmental Management (IDEM), Indiana Department of Transportation (INDOT), and Orange County Commissioners Office. The participating agencies preferred minimizing impacts. Alternative 1 was chosen at this time due to cost and anticipated impacts. It was agreed that Alternatives 2, 3, 4, 5, and 6 were removed from consideration due to impacts and cost, along with a second agreement that unless some unforeseen issue with the chosen alternative becomes apparent, a discarded alternative or a modification to the preferred may have to be carried forward. After topographical survey and preliminary geotechnical analysis were obtained, it was determined that alternative 1, the chosen alternative would need a slight shift in alignment; this alignment became the based for the preferred alternative.

**Post – Agency Meeting Alternatives**

**Original Alignment** – Alternative 7 - Remains on the original road alignment and includes new construction of a retaining wall, anchors, drainage, and erosion control elements to shore up the existing road bed adjacent to the French Lick Airport taxiway. This alternative will provide a structurally sufficient road, updated to current safety standards to provide safe passage to and from the French Lick Municipal Airport effectively satisfying the purpose and need. While there were no anticipated impacts, this Alternative was dismissed based upon previous slide failures and a disproportionate preliminary cost of \$9.95 M.

**No-Build Alternative** - This alternative would not involve any improvements to the existing roadway New Airport Road, which is currently not open for public use because of slide failures. The No-Build would keep New Airport Road closed indefinitely. The current access road to the French Lick Municipal Airport, CR 350 S and CR 375 S would not meet current roadway geometrics and safety standards due to continued pavement failure and underlying unstable embankment material. While there are no anticipated impacts or immediate costs, the No-Build Alternative did not meet the purpose and need of the project and was dismissed.

**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
x

**ROADWAY CHARACTER:**

**New Airport Road**  
 Functional Classification: Rural Major Collector  
 Current ADT: 300 VPD (2018) 446 Design Year ADT: 446 VPD (2038)  
 Design Hour Volume (DHV): 45 Truck Percentage (%) 2% AADT  
 Designed Speed (mph): 40 Legal Speed (mph): 40

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**Existing** **Proposed**

Number of Lanes:	2	2	
Type of Lanes:	Through	Through	
Pavement Width:	22	22	ft.
Shoulder Width:	4 -1' paved, 3' aggregate	4 -1' paved, 3' aggregate	ft.
Median Width:	N/A	N/A	ft.
Sidewalk Width:	N/A	N/A	ft.

Setting:  Urban  Suburban  Rural  
 Topography:  Level  Rolling  Hilly

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

**DESIGN CRITERIA FOR BRIDGES:**

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

**Existing** **Proposed**

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

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

Remarks: There is one structure located in the project area. The structure is Orange County Bridge. This bridge structure is identified as Orange 55, and is at station 121+80, over French Lick Creek. It is a continuous composite prestressed concrete Hybrid bulb-T beam bridge. This bridge was completed under contract R-34735, Des.No.0902252 of the original New Airport Road project. This project excludes the bridge as parts of the original project are to be completed up to the bridge approaches. Guardrail and pavement resurfacing are to take place up to the existing bridge approaches. No impacts or structure work is to be completed.

Will the structure be rehabilitated or replaced as part of the project?  Yes  No  N/A  
*If the proposed action has multiple bridges or small structures, this section should be filled out for each structure.*

**MAINTENANCE OF TRAFFIC (MOT) DURING CONSTRUCTION:**

Is a temporary bridge proposed?	Yes	No
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 type="checkbox"/>	<input checked="" type="checkbox"/>
Provisions will be made for through-traffic dependent businesses.	<input type="checkbox"/>	<input checked="" 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"/>

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Remarks: No detour for the maintenance of traffic during construction is required for this project as the road is currently not open to the public. All through-traffic is continued to be maintained by the existing surrounding roadways of Old SR 145, SR 145, CR 350 S, and CR 375 S. There will be no temporary inconvenience to traveling motorists. No significant delays are anticipated as a result of this project taking place.

**ESTIMATED PROJECT COST AND SCHEDULE:**

Engineering: \$ 1.5 M (2019) Right-of-Way: \$ 0.0 (2020) Construction: \$ 11.2 M (2020)

Anticipated Start Date of Construction: February of 2020 (tree-clearing)  
November of 2021

Date project incorporated into STIP July 2, 2019

Is the project in an MPO Area?  Yes  No  
If yes,

Name of MPO N/A

Location of Project in TIP N/A

Date of incorporation by reference into the STIP N/A

**RIGHT OF WAY:**

Land Use Impacts	Amount (acres)	
	Permanent	Temporary
Residential	0.00	0.00
Commercial	0.00	0.00
Agricultural	0.00	0.00
Forest	21.74	0.00
Wetlands	0.00	0.00
Other: Commercial/ Municipal Airport	0.42	0.00
Other:	0.00	0.00
<b>TOTAL</b>	<b>22.16</b>	<b>0.00</b>

*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: There is currently 43.2 acres of existing right-of-way that was formerly obtained by the previous project. This right-of-way included 31.2 acres of forest, 4.9 acres of agriculture, 0.3 acres of residential and 6.8 acres of wetlands.

The project requires approximately 22.16 acres of permanent right-of-way. A total of 0.42 acres of the French Lick Municipal Airport will be donated to the project. This land is located on the southeast end of the French Lick Municipal Airport along the original New Airport Road alignment. A total of 21.74 is wooded forest that will be privately donated for the project. No temporary right-of- way is anticipated. All 22.16 acres of right-of-way is to be donated to Orange County, who is to be the project owner upon completion.

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

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

**SECTION A – ECOLOGICAL RESOURCES**

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

Remarks: Based on a desktop review, a site visit conducted on August, 29, 2018 by Kaskaskia Engineering Group (KEG) and August 12, 2019 by Michael Baker International (Michael Baker), the aerial map of the project area (Appendix F, page 30), and the water resources map in the Red Flag Investigation (RFI) report (Appendix E, page 9), there are 6 streams, rivers watercourses, jurisdictional ditches located within the 0.5 mile search radius. There is a stream present within or adjacent to the project area. No Federal, Wild, and Scenic Rivers; State Natural, Scenic, and Recreational Rivers; Outstanding Rivers for Indiana; navigable waterways or National Rivers Inventory waterways are present in the project area.

*A Waters of the U.S. Determination / Wetland Delineation Report* was approved by INDOT Ecology and Waterway Permitting Office on December 10, 2018 and a *Waters of the U.S. Determination / Wetland Delineation Report Addendum* was approved on August 30, 2019. Please refer to Appendix F, page 2 for the *Waters of the U.S. Determination / Wetland Delineation Report* and Addendum. It was determined that the field observations revealed the presence of 30 waterways with a defined Ordinary High Watermark (OHWM) within the investigated area, totaling 14,895 linear feet within the study area. The study area was larger than the preferred alternative project limits which identified nine of the 30 waterways (with a defined OHWM) that total approximately 6,701 linear feet: Unnamed Tributary (UNT) to French Lick Creek (FLC), UNT 1, UNT 2, UNT-3, UNT-4, UNT-9, UNT-10, UNT-11, and UNT-12. A regulatory agency field visit occurred on August 12, 2019, with the USACE Louisville District, Indiana Department of Environmental Management (IDEM), and INDOT. The USACE makes all final determinations regarding jurisdiction.

UNT to FLC: UNT to FLC flows through the investigated area from the northwest to the southeast. It is approximately 3,656 linear feet in length. It is channelized and contains riprap to the northwest of the existing Airport Road. It flows through a culvert under Airport Road and through a channelized riprap channel before flowing into the forested portion of the investigated area, where it exhibits a natural channel. UNT to FLC flows into French Lick Creek and exhibited an OHWM and a defined bed and bank. Its primary source of hydrology appears to be drainage from the French Lick Municipal Airport, other tributaries, and forested upland areas. UNT to French Lick Creek is likely a jurisdictional Waters of the U.S. The preferred alternative is anticipated to have approximately 924 linear feet of impact to UNT to FLC.

UNT 1: UNT 1 flowed northeast from near the north side of existing Airport Road and had a natural channel. The channel had a wide riparian corridor with 80 percent cover from trees. There was no water within the stream and the substrate was predominantly silt and boulders. UNT 1 exhibited an OHWM and defined bed

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and bank. Its primary source of hydrology appears to be runoff due to topography. UNT 1 is approximately 430 linear feet and is likely a jurisdictional Waters of the U.S. The preferred alternative is within 200 feet of UNT 1, however, no impact is anticipated.

UNT 2: UNT 2 flowed north from the north side of the existing Airport Road and had a natural channel. The channel had a wide riparian corridor with 80 percent cover from trees. There was no water within the stream and the substrate was predominantly silt and cobbles. It exhibited an OHWM and a defined bed and bank. Its primary source of hydrology appears to be runoff due to topography. UNT 2 is approximately 255 linear feet and is likely a jurisdictional Waters of the U.S. The preferred alternative is within 200 feet of UNT 2, however, no impact is anticipated.

UNT 3: The upper portion of UNT 3 drains through a channelized riprap drainage feature from a culvert under Airport Road into the woods, where it exhibits a natural stream channel. The portion of the channel within the woods had overhanging vegetation including 90 percent cover from trees. UNT 3 had a wide riparian corridor. The preferred alternative is adjacent to UNT 3. UNT 3 exhibited an OHWM and a defined bed and bank. Its primary source of hydrology appears to be drainage from the roadway. UNT 3 is approximately 117 linear feet and is likely a jurisdictional Waters of the U.S. No impacts are anticipated to UNT 3.

UNT 4: UNT 4 exhibits a steep gradient through the forest, just south of existing Airport Road. It has a natural stream channel. The stream had 70 percent cover from trees. UNT 4 has a wide riparian corridor. The substrate was predominantly boulders and bedrock. Based on these observations, UNT 4 exhibited a defined bed and bank and OHWM. Its primary source of hydrology appears to be drainage from upland forested areas and Airport Road. UNT 4 is approximately 470 linear feet and is likely a jurisdictional Waters of the U.S. No impacts are anticipated to UNT 4.

UNT 9: UNT 9 drains through a culvert under Airport Road, through a riprap drainage channel and into the forest portion of the survey area, where the stream exhibits a more natural stream bed. The channel had overhanging vegetation including 80 percent cover from trees within the forested portion. UNT 9 has a varying wide to narrow riparian corridor. A pool depth of six inches was noted in the stream. The substrate was predominantly cobbles and boulders. Based on these observations, UNT 9 exhibited an OHWM and a defined bed and bank. Its primary source of hydrology appears to be drainage from the existing Airport Road and the French Lick Municipal airport. UNT 9 is approximately 124 linear feet and is likely a jurisdictional Waters of the U.S. The preferred alternative is anticipated to have approximately 124 linear feet of impact to UNT 9.

UNT 10: UNT 10 begins near the southwest side of Airport Road at the top of a forested slope just east of Wetland 1. It flows through a natural channel, flows along a logging road, and then returns to a natural stream channel within the forested area. An OHWM, characterized by sediment sorting, was observed at approximately 6 feet wide and 9 inches deep. UNT 10 has a wide riparian corridor. There was no visible water or pools within the stream. The substrate was predominantly cobbles and boulders. UNT 10 is approximately 622 linear feet and is likely a jurisdictional Waters of the U.S. The preferred alternative is anticipated to have approximately 622 linear feet of impact to UNT 10.

UNT 11: UNT 11 flows through a channelized riprap channel running adjacent to Airport Road, and then flows down a hillside into the forested area. Once it enters the forest, it becomes a natural drainage channel. UNT 11 has a wide to moderate riparian corridor. A pool depth of less than 2 inches was noted in the stream. The substrate was predominately cobbles and gravel. UNT 11 flows into French Lick Creek and exhibited an OHWM and a defined bed and bank. Its primary source of hydrology appears to be drainage from Airport Road. UNT 11 is approximately 136 linear feet and is likely a jurisdictional Waters of the U.S. The preferred alternative is anticipated to have approximately 136 linear feet of impact to UNT 11.

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UNT 12: UNT 12 flows south from existing Airport Road through the forest and exhibited a natural channel. UNT 12 has a wide riparian corridor. There were no visible water or pools within the stream and the substrate was predominantly cobbles and gravel. UNT 12 flows into UNT to French Lick Creek and exhibited an OHWM and a defined bed and bank. Its primary source of hydrology appears to be drainage from Airport Road and upland forested areas. UNT 12 is approximately 891 linear feet and is likely a jurisdictional Waters of the U.S. Preferred alternative is anticipated to have approximately 228 linear feet of impact to UNT 12.

The project is anticipated to have approximately 2,034 linear feet of total permanent impact to jurisdictional streams. No temporary impacts are anticipated. Avoidance was not practicable in order for the project to meet the purpose and need, in addition, rebuilding New Airport Road in the area of previous embankment failures would present additional geological and mechanical stability challenges due to the height of the embankment fill. Minimization measures were considered during design and impacts have been minimized where possible. A USACE 404 and IDEM 401 Individual Permit is anticipated for the preferred alternative. Unavoidable impacts will be mitigated for with the purchase of credits through the IDNR In-Lieu Fee Program.

Early coordination letters were sent on March 1, 2018, USACE did not respond to the letter. IDEM responded on March 27, 2018, with comments and the standard automated response (Appendix C, page 4). IDEM advises to avoid using structures that will require the stream to be manipulated and all stream relocations should follow natural stream channel design protocol. United States Fish and Wildlife Service (USFWS) responded on April 5, 2018, (Appendix C, page 16), with a recommendation to restrict below low-water work in streams to placement of culverts, piers, pilings and/or footings, shaping of the spill slops around the bridge abutments and placement of riprap (Appendix C, page 16). All applicable IDEM and USFWS recommendations are included in the Environmental Commitments section of this CE document.

**Other Surface Waters**

Reservoirs

Lakes

Farm Ponds

Detention Basins

Storm Water Management Facilities

Other: \_\_\_\_\_

Presence

Impacts

Yes

No

X


X

Remarks:

Based on a desktop review, a site visit on August 29, 2018 by KEG and on August 12, 2019 by Michael Baker, the aerial map of the project area (Appendix F, page 30), and the water resources map in the Red Flag Investigation (RFI) report (Appendix E, page 9), there are 7 lakes within the 0.5 mile search radius. No lakes or other surface waters located within or adjacent to the project area.

A *Waters of the U.S. Determination / Wetland Delineation Report* was approved by INDOT Ecology and Waterway Permitting Office on December 10, 2018 and a *Waters of the U.S. Determination/Wetland Delineation Report Addendum* was approved on August 30, 2019. Please refer to Appendix F, page 2 for the *Waters of the U.S. Determination / Wetland Delineation Report* and Addendum. It was determined that no other surface waters are located within or adjacent to the project area.

Early coordination letters were sent on March 1, 2018, USACE did not respond to the letter. IDEM responded on March 27, 2018, (Appendix C, page 16), with comments and the standard automated response (Appendix C, page 4). USFWS responded on April 5, 2018, with a recommendation. USFWS and IDEM did not have any specific recommendations related to other surface waters. All applicable IDEM and USFWS recommendations are included in the Environmental Commitments section of this CE document.

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**Presence**                      **Impacts**

Yes                      Yes                      No

                                          

**Wetlands**

Total wetland area: 0.13 acre(s)                      Total wetland area impacted: 0.039 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
1	Palustrine Emergent	0.09	0.035	0.035 acres of Wetland No. 1 is anticipated to be impacted by the realignment of the roadway
2	Palustrine Forested	0.02	0.004	0.004 acres of Wetland No. 2 is anticipated to be impacted by Multi stage weir structure that is to contribute to the proposed detention basin that will be created just north of Wetland No. 2
3	Palustrine Emergent	0.02	0.00	N/A

**Documentation**

**ES Approval Dates**

**Wetlands (Mark all that apply)**

Wetland Determination                     

Wetland Delineation                     

USACE Isolated Waters Determination                     

Mitigation Plan                     

December 10, 2018, August 30, 2019
December 10, 2018, August 30, 2019

**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: Based on a review of the National Wetlands Inventory (NWI) online mapper (<https://www.fws.gov/wetlands/data/Mapper.html>) (Appendix F, page 45), a site visit on August, 29, 2018 by KEG and Michael Baker, the USGS topographic map (Appendix B page 2), and the RFI report (Appendix E page 9) there are 10 wetlands located within the 0.5 mile search radius. There are 2 wetlands present within or adjacent to the project area.

A *Waters of the U.S. Determination / Wetland Delineation Report* was approved by INDOT Ecology and Waterway Permitting Office on December 10, 2018 and a *Waters of the U.S. Determination / Wetland*

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*Delineation Report Addendum* was approved on August 30, 2019. Please refer to Appendix F, page 2 for the *Waters of the U.S. Determination / Wetland Delineation Report* and Addendum. It was determined that 3 wetlands are located within or adjacent to the project area. The USACE makes all final determinations regarding jurisdiction.

Wetland 1: Wetland 1 is a palustrine emergent wetland associated with UNT 10. Its primary source of hydrology appears to be lack of drainage after rainfall events and overflow from UNT 10. Since it has a connection to a likely Waters of the U.S. this feature is likely a jurisdictional wetland. The preferred alternative will permanently impact approximately 0.035 acres.

Wetland 2: Wetland 2 is a palustrine forested wetland connected to UNT to French Lick Creek. Its primary source of hydrology appears to be lack of drainage after rainfall events and overflow from UNT to French Lick Creek. Due to its connection to a likely Waters of the U.S. this feature is likely a jurisdictional wetland. The preferred alternative will permanently impact approximately 0.004 acres.

Wetland 3: Wetland 3 is a palustrine emergent wetland that occurs within a roadside ditch and then drains into UNT 8. The dominant vegetation consisted of *Typha latifolia* (cattail) (OBL). A majority of the ditch was lined with riprap, and therefore soils were not investigated. The primary source of hydrology appears to be lack of drainage after rainfall events. Due to a connection to a likely Waters of the U.S. (UNT 8) this feature is likely a jurisdictional wetland. No impacts to Wetland 3 are anticipated.

The project will permanently impact a total of 0.039 acres of wetland. Avoidance is limited due to connecting with existing Airport Road and meet the purpose and need; impacts have been minimized where possible. A USACE 404 and IDEM 401 Individual Permit is anticipated for the preferred alternative. Unavoidable impacts will be mitigated for with the purchase of credits through the IDNR In-Lieu Fee Program.

Early coordination letters were sent on March 1, 2018, USACE did not respond to the letter. IDEM responded on March 27, 2018, with comments and the standard automated response (Appendix C, page 4). USFWS and IDEM did not have any specific recommendations related to wetlands. All applicable IDEM and USFWS recommendations are included in the Environmental Commitments section of this CE document.

	Presence	Impacts	
		Yes	No
Terrestrial Habitat	X	X	
Unique or High Quality Habitat	X	X	

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

Remarks:

Based on desktop review, a site visit on August 29, 2018, by KEG and Michael Baker, the aerial map of the project area (Appendix B, page 5), there is one main type of terrestrial habitat, a forested area with a dense canopy. The area surrounding the original project was also dense forest. The dominant forest canopy is known to have the Tulip tree (*Liriodendron tulipifera*), and the Northern Red oak (*Quercus Rubra*), The subdominant canopy is known to be Sassafras (*Sassafras albidum*). The habitat type is specifically identified as Mature Upland Forest with Dense Herbaceous Cover.

The preferred alternative will impact approximately 9.56 acres of forested area with tree clearing for the new roadway alignment. The preferred alternative is still the most viable option and has the second lowest amount of forest impact amongst the alternatives. Avoidance was not practicable in order for the project to meet the purpose and need, in addition, rebuilding New Airport Rd in the area of previous embankment failures would present additional geological and mechanical stability challenges due to the height of the embankment fill.

Tree mitigation is not anticipated as the project does not fall within a floodplain, nor was critical habitat identified for any threatened, rare or endangered species (reference appendix). Tree clearing will be conducted in February 2020. Disturbed

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areas outside of the roadway will be reseeded. Replanting opportunities are limited due to airport operation requirements.

Early coordination letters were sent on March 1, 2018, USACE did not respond to the letter. IDEM responded on March 27, 2018, with comments and the standard automated response (Appendix C, page 4). IDEM had no specific recommendations related to terrestrial habitats. USFWS responded on April 5, 2018, with a recommendation: due to the large amount of cumulative forest impacts that have occurred in the vicinity of the French Lick Municipal Airport, USFWS recommends reforestation elsewhere on the French Lick Municipal airport or public property to compensate for lost habitat. USFWS also recommends not to clear or understory vegetation outside of the construction zone boundaries. Indiana Department of Natural Resources (IDNR) responded to the early coordination letter on March 27, 2018. IDNR recommends a mitigation plan be developed for any unavoidable habitat impacts that will occur. All planting plans, mitigation plans, and/or woody vegetation plans should be developed based upon IDNR's Floodway Habitat Mitigation Guidelines. All applicable IDEM, USFWS and IDNR recommendations are included in the Environmental Commitments section of this CE 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 checked="" type="checkbox"/>	<input type="checkbox"/>
<input checked="" type="checkbox"/>	<input type="checkbox"/>

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

<input checked="" type="checkbox"/>	<input type="checkbox"/>
-------------------------------------	--------------------------

*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:

Based on a desktop review, the project is located inside the designated karst region of Indiana as outlined in the October 13, 1993 Memorandum of Understanding (MOU). According to the topo map of the project area (Appendix B, page 2), the RFI report (Appendix E, page 9), and karst related documents provided by INDOT and the French Lick Municipal airport (Appendix J, Page 28), there are karst features identified within or adjacent to the project area.

In the early coordination response, the Indiana Geological Survey (IGS) did not indicate that karst features may exist in the project area (Appendix C, page 27), IGS indicated the project area has potential for high liquefaction, a high potential for bedrock resources and low potential for sand/gravel resources. Response from IGS has been communicated with the designer on March 9, 2018. The location of the project has 1% annual chance of flood hazard.

Local karst prone bedrock and features are present in the higher elevations within and adjacent to the project area. Karst bedrock and features in northwest project area were covered with fill material and regraded for drainage as part of the north adjoining French Lick Municipal Airport development and expansion. This included increased impermeable surfaces, alteration of drainage patterns to/from karst features (such as 2 or possibly 3 caves), and creation of a large embankment of fill material on which the northwest portion of New Airport Road was located. Documentation of reported karst feature mitigation measures were not available as of the completion of this CE form.

A karst study was required after consultation with INDOT-ESD; the *Karst Study* was completed for the embankment failure and realignment portion of the project area on January 14, 2019 (Appendix J, Page 1); karst conditions and recommendations for consideration as part of project design and implementation are summarized below:

Completion and use of the structurally sound portions of the New Airport Road roadway would generally decrease impacts to karst features. However, due to the nature of the karst prone bedrock within the project area, the elevation of mapped karst features was an important consideration during roadway design with the most critical elevations between 700 to 730 ft New Airport Rd runs parallel to this 700 to 730 ft elevation range in the areas of embankment failures where three (buried) caves were identified. Rebuilding New Airport Rd in the area of previous embankment failures would likely result in similar challenges regarding karst geology, such as erosion and migration of soil and other materials into karst voids in the underlying limestone bedrock as well as karst related redirection of both surface water and groundwater flow.

Avoidance is not viable since the New Airport Road and potential embankment failure avoidance alternatives would

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cross the karst prone bedrock 700 to 730 feet elevation range (and likely presence of other unknown karst features). The potential embankment failure avoidance alternatives minimize impacts by crossing the karst prone bedrock close to a right angle to 1) reduce the cross-sectional area and potential to encounter unknown karst features, 2) more closely align with drainage, and 3) decrease recharge area impacts by returning to New Airport Road at a narrow "finger" of karst prone bedrock to the east. A potential karst feature (FLA-01) within the proposed project construction limits is a small seep spring located at the toe of the slope and under embankment material at about 650 ft elevation (at least 80-ft lower than the mapped karst features). FLA-01 was included since under current conditions, field observations and dye traces were not able to determine the exact nature of the flow; it is possible that this seep spring is not karstic in nature, but rather flow through the extensive (and unstable) embankment fill material. This potential karst feature is located within a ditch that extends from under existing fill material; proposed existing water feature trench drain treatments (6-inch perforated pipe, geotextile material and aggregate) will convey the existing embankment drainage underneath the project area and down gradient receiving streams.

In addition to the October 13, 1993 Karst MOU, agency commitments, and INDOT's Standard Specifications to reduce the impacts to karst, it is recommended that excavation to expose the underlying bedrock and evaluate for the presence of karst features be conducted where the proposed project construction areas cross the critical elevations between 700 to 730 ft and that a karst professional be involved throughout the design and construction phases.

**Threatened or Endangered Species**

- Within the known range of any federal species
- Any critical habitat identified within project area
- Federal species found in project area (based upon informal consultation)
- State species found in project area (based upon consultation with IDNR)

	Presence	Impacts	
		Yes	No
Within the known range of any federal species	X		X
Any critical habitat identified within project area	X		X
Federal species found in project area (based upon informal consultation)			
State species found in project area (based upon consultation with IDNR)			

Is Section 7 formal consultation required for this action?                       Yes                       No

**Remarks:**

Based on a desktop review and the RFI report (Appendix E, page 1), completed by Michael Baker on July 31 2018, the IDNR Orange County Endangered, Threatened and Rare (ETR) Species List has been checked and is included in (Appendix E, page 12). The highlighted species on the list reflect the federal and state identified ETR species located within the county. According to the IDNR-DFW early coordination response letter dated March 1, 2018, (Appendix C, page 14), the Natural Heritage Program's Database has been checked. "To date, no plant or animal species listed as state or federally threatened, endangered or rare have been reported to occur in the project vicinity."

The proposed project is within the range of the federally endangered Indiana bat (*Myotis sodalists*) and the federally threatened northern long-eared bat (*Myotis septentrionalis*). USFWS responded to the early coordination letter on April 5, 2018, stating, "Although there are no known hibernacula in Orange County, there are hibernacula in surrounding counties including Martin, Lawrence, Crawford, and Washington. In addition, in August of 2007, a bat survey was conducted at the French Lick Municipal Airport, prior to a new taxiway being constructed. Nine northern long-eared bats, including four females, were captured at one site over two nights. Based on the information we have reviewed, there is suitable summer habitat for both of these species present throughout the area surrounding the project site, including wooded areas within the potential project boundary. To avoid incidental take from removal of an occupied roost tree we recommend that tree-clearing be avoided during the period of April 1 – September 30."

Based on the April 5, 2018 response letter from USFWS and the project requiring tree clearing, a Mist-Net Survey was conducted by Environmental Solutions and Innovations, Inc (ESI) from July 19 to 23, 2018 and resulted in the capture of two big brown bats. No federally listed bats were captured during the survey. The Mist-Net Survey Report dated October 17, 2018, concluded the results of the mist net survey did not provide evidence that the Indiana or northern long-eared bats are present within the project area and tree removal activities associated with the project area are highly unlikely to result in the take of listed bats (Appendix I, page 19). This survey was provided to the USFWS for review. USFWS responded on October 25, 2018 (Appendix I, page 1) stating, "based on the 2018 survey results and habitat assessment, the Service concurs that the Project is not likely to affect the Indiana bat or the northern long-eared bat." USFWS also stated, "we are not including seasonal tree-clearing restrictions as part of our concurrence, we do recommend that tree clearing be avoided, if possible, during May, June, and July and that the alternative with the least impacts to forest and other natural resources be selected."

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Tree clearing will be conducted in February 2020 to avoid any clearing during the months of May, June, and July that were identified by USFWS. All USFWS recommendations are included in the Environmental Commitments section of this document.

In addition to the coordination with USFWS, an automatically generated species list was generated using the Information for Planning and Consultation (IPaC) to identify if any critical habitat was located within the project area. No critical habitats were listed (Appendix C, page 21).

This precludes the need for further consultation on this project as required under Section 7 of the Endangered Species Act, as amended. If new information on endangered species at the site becomes available, or if project plans are changed, USFWS will be contacted for consultation.

### SECTION B – OTHER RESOURCES

	<u>Presence</u>	<u>Impacts</u>	
		Yes	No
<b>Drinking Water Resources</b>			
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 type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Source Water Protection Area(s)	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Sole Source Aquifer (SSA)	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

If a SSA is present, answer the following:

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

**Wellhead Protection Area and Source Water**  
 An early coordination letter was sent to IDEM on March 1, 2018 (Appendix C, Page 5). There are no Wellhead Protection areas and Source Waters located within the project area, verified through desktop review of the IDEM Wellhead Proximity Determinator website (<https://www.in.gov/idem/cleanwater/pages/wellhead/>) accessed on July 31, 2019 by Michael Baker.

**Water Wells** The Indiana Department of Natural Resources Water Well Record Database website (<https://www.in.gov/dnr/water/3595.htm>) was accessed on July 31, 2019 by Michael Baker. No wells are located near this project. Therefore, no impacts are expected.

**Urban Area Boundary**  
 Based on a desktop review of the INDOT MS4 website (<https://entapps.indot.in.gov/MS4/>) by Michael Baker on July 31, 2018 and the RFI report; this project is not located in an Urban Area Boundary location. No impacts are expected.

**Public Water System** Based on a desktop review, a site visit on July 31, 2019, by Michael Baker the aerial map of the project area (Appendix B, page 3), this project is not located where there will be public water system impacts. Therefore, no impacts are expected.

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Flood Plains	Presence	Impacts	
		Yes	No
Longitudinal Encroachment	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Transverse Encroachment	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Project located within a regulated floodplain	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Homes located in floodplain within 1000' up/downstream from project	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

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

Remarks: The Indiana Department of Natural Resources Indiana Floodway Information Portal website (<http://dnrmaps.dnr.in.gov/appsphp/fdms/>) was accessed on April 6, 2019 by Michael Baker. This project is not located in a regulatory floodplain as determined from approved IDNR floodplain maps (Appendix A, page 205). Therefore, it does not fall within the guidelines for the implementation of 23 CFR 650, 23 CFR 771, and 44 CFR. No impacts are expected.

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

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

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

Remarks: Based on a desktop review, a site visit on August 29, 2018 by Michael Baker, the aerial map of the project area (Appendix B, page 3), there is no land that meets the definition of farmland under the Farmland Protection Policy Act (FPPA) within or adjacent to the project area. The requirements of the FPPA do not apply to this project; therefore, no impacts are expected. An early coordination letter was sent on March 1, 2018, to Natural Resources Conservation Services (NRCS) responded on March 15, 2018 with a finding of the project will not cause a conversion of prime farmland.

### SECTION C – CULTURAL RESOURCES

Category	Type	INDOT Approval Dates	N/A
Minor Projects PA Clearance	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>

Eligible and/or Listed  
Resource Present

**Results of Research**

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

**Project Effect**

No Historic Properties Affected  No Adverse Effect  Adverse Effect

Documentation  
Prepared

Documentation (mark all that apply)

		ES/FHWA Approval Date(s)	SHPO Approval Date(s)
Historic Properties Short Report	<input checked="" type="checkbox"/>	May 2, 2019	May 30, 2019
Historic Property Report	<input checked="" type="checkbox"/>	May 2, 2019	May 30, 2019
Archaeological Records Check/ Review	<input checked="" type="checkbox"/>	May 2, 2019	May 30, 2019

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Archaeological Phase Ia Survey Report	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Archaeological Phase Ic Survey Report	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Archaeological Phase II Investigation Report	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Archaeological Phase III Data Recovery	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
APE, Eligibility and Effect Determination	X	May 2, 2019	May 30, 2019
800.11 Documentation	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

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

Memorandum of Agreement (MOA)

*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:**

**Area of Potential Effect (APE):**  
 The project's above-ground area of potential effects (APE) for the identification of above-ground resources is a 2,000-ft buffer around the project centerline (1,000 ft to each side of the centerline). The APE includes a portion of the French Lick Municipal Airport (to the north of the project area), a portion of a previously surveyed farmstead (to the southwest of the project area), and portions of forested parcels of land (to the south and east of the project area). In total, the above-ground APE encompasses 276 acres. The project's archaeological APE is restricted to areas of direct impact that were not previously surveyed under Des. No. 0901872. In total, the archaeological APE encompasses 8.9 acres.

**Coordination with Consulting Parties:**  
 During an inter-agency meeting held on March 11, 2019, the IN SHPO stated that in consideration of the accelerated project schedule and the high priority nature of the project, it would be acceptable for INDOT CRO to combine the Historic Property Survey Report (HPSR), Archaeological Survey Report (ASR) and the supporting 800.11 for this project. Please see the list of consulting parties in Appendix E. As specified in 36 CFR 800.5(c), consulting parties have 30 days from receipt of this documentation to view and comment on the finding.  
 On May 2, 2019, Michael Baker sent an email to potential consulting parties introducing the project and directing them to IN SCOPE, INDOT's Section 106 electronic coordination website, where they could find a copy of the Early Coordination Letter (ECL) and HPSR. Hard copies of the ECL (dated May 2, 2019) were also mailed to potential consulting parties on May 2, 2019. On May 2, 2019, INDOT sent Tribal Representatives an email as part of the early-coordination phase of the process, asking recipients to review the ECL; invited organizations and entities are as follows: The Indiana State Historic Preservation Office (IN SHPO); Indiana Landmarks – Southern Regional Office; West Baden Historical Society, Inc, Orange County Historian; West Baden Springs Historic Preservation Commission; French Lick West Baden Museum; French Lick West Baden Chamber of Commerce, Orange County Historical Society; Saving Historic Orange County; Eastern Shawnee Tribe of Oklahoma; Miami Tribe of Oklahoma; Peoria Tribe of Indians of Oklahoma; Pokagon Band of Potawatomi Indians; Delaware Nation of Oklahoma; and the Delaware Tribe of Indians of Oklahoma.

**Archaeology:**  
 An ASR was completed for the project (Seymour 2019). The report detailed archaeological resource identification efforts and recommendations. As noted in the report, the Phase I archaeological field survey located no archaeological resources in the project APE. The report concluded that the project be allowed to proceed as planned. This report was forwarded to the IN SHPO for review and comment along with the 800.11 documentation.

**Historic Properties:**  
 Historic properties report, conclusion.  
 In 2018, project historians used historic maps to determine the historic development of the project area/APE. In this way, above-ground resources were identified that had not been previously surveyed. Aside from the previously surveyed farmstead, project historians identified one additional above-ground resource within the project APE, the French Lick Municipal Airport, which was initially constructed c.-1964. Cartographic resources used for this purpose include USGS topographic quadrangles and historic aerial photographs.

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After project historians identified the above-ground resources, they conducted historical research to determine whether any previously recorded or newly identified above-ground resources might merit a "Notable" or higher rating in the IHSSI. Historians compiled a short context in which to frame the development of the French Lick Municipal Airport; to this end, county, regional, and community histories were consulted along with various county records, newspaper articles, and other sources.

**Documentation, Findings:**

INDOT, on behalf of FHWA, determined on May 2, 2019, the appropriate finding for this undertaking is "No Historic Properties Affected." This finding is reasonable because there are no above-ground resources or archaeological resources eligible or listed in the NRHP located within the architectural or archaeological APEs.

May 30, 2019, IN SHPO concurred with INDOT May 2, 2019, section 106 finding, on behalf of FHWA, of No Historic Properties Affected for all the alternatives for this federal undertaking.

**Public Involvement:**

To meet the public involvement requirements of Section 106, a legal notice of FHWA's finding of "No Adverse Effect" was published in the *Herald Times* and *Herald Times Online* on September 5, 2019 and September 18, 2019 offering the public an opportunity to submit comment pursuant to 36 CFR 800.2(d), 800.3(e), and 800.6(a)(4). The public comment period will close 30 days later on October 5, 2019. The text of the public notice and the affidavit of publication appear in Appendix G, page 5 – page 7. This document will be revised after the 30-day comment period and if any comments are received, they will be included with any responses in this document.

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

### 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

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Evaluations  
Prepared

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


FHWA  
Approval date

Presence

**Historic Properties**  
Sites eligible and/or listed on the NRHP

Use

<u>Yes</u>	<u>No</u>
<div style="border: 1px solid black; width: 40px; height: 20px;"></div>	<div style="border: 1px solid black; width: 40px; height: 20px;"></div>

Evaluations  
Prepared

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


FHWA  
Approval date

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

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

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

Based on a desktop review, a site visit on August 29, 2018 by KEG and Michael Baker, the aerial map of the project area (Appendix B, page 5), and the RFI report (Appendix E, page 8) there is no 4(f) resources located within the 0.5 mile search radius. There are no Section 4(f) resources within or adjacent to the project area. The Hoosier National Forest is located within the project study limits and approximately 478 ft east of the project area and does not fall within the construction limits; therefore, no impact is to occur.

**Section 6(f) Involvement**

Presence

**Section 6(f) Property**

Use

<u>Yes</u>	<u>No</u>
<div style="border: 1px solid black; width: 40px; height: 20px;"></div>	<div style="border: 1px solid black; width: 40px; height: 20px;"></div>

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

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

A review of 6(f) properties on the Land and Water Conservation Fund (LWCF) website at <https://www.lwcfcoalition.com/tools> revealed a total of zero properties in Orange County, there will be no impacts to 6(f) resources as a result of this project.

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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: This project is included in the Fiscal Year (FY) 2020-2024, Orange County and INDOT Statewide Transportation Improvement Program (STIP) (Appendix H, page 1).

This project is located in Orange County, which is currently an attainment area with criteria pollutants according to [https://www.in.gov/idem/airquality/files/nonattainment\\_areas\\_map.pdf](https://www.in.gov/idem/airquality/files/nonattainment_areas_map.pdf). Therefore, the conformity procedures of 40 CFR Part 93 do not apply. This project has been identified as being exempt from air quality analysis in accordance with 40 CFR Part 93.126 and this project is not a project of air quality concern (40 CFR Part 93.123); therefore, the project will have no significant impact on air quality.

The purpose of this project is to realign the roadway by constructing the alignment to match the existing roadway. This project has been determined to generate minimal air quality impacts for Clean Air Act criteria pollutants and has not been linked with any special mobile source air toxic (MSAT) concerns. As such, this project will not result in changes in traffic volumes, vehicle mix, basic project location, or any other factor that would cause a meaningful increase in MSAT impacts of the project from that of the no-build alternative.

Moreover, Environmental Protection Agency (EPA) regulations for vehicle engines and fuels will cause overall MSAT emissions to decline significantly over the next several decades. Based on regulations now in effect, an analysis of national trends with EPA's MOVES2014 model forecasts a combined reduction of over 90 percent in the total annual emissions rate for the priority MSAT from 2010 to 2050 while vehicle-miles of travel are projected to increase by over 45 percent. This will both reduce the background level of MSAT as well as the possibility of even minor MSAT emissions from this project.

**SECTION F - 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	X	

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



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acre of additional permanent right-of-way. The project will have fewer than two relocations (none), but more than 0.5 acres (22.16 acres) of additional permanent right-of-way. However, all 22.16 acres of additional right-of-way for the project are either undeveloped (forested) or unused portions of the French Lick Municipal Airport facility, from willing property owners. There are no recognized EJ concerns within or adjacent to the project as identified from the original Des. No. 0901872, EJ analysis for the area was completed using data from the 2000, U.S. Bureau of Censes, concluded *in italics*.

*The minority and low-income percentages of the AC, (affected community), are below 50 percent and below the 125 percent of the COC, (community of comparison of Orange County), (low income 4.5 %, minority 15.6%), therefore elevated EJ populations are not located in the project area. As a result, the project will not have a disproportionately high adverse environmental or health impacts to low-income populations or minority populations.*

The EJ analysis completed under the original Des. No. 0901872, identified a study area larger than the current proposed project area; which no longer contains residential properties, therefore, no impact will result from this project.

**Relocation of People, Businesses or Farms**

Will the proposed action result in the relocation of people, businesses or farms?  
 Is a Business Information Survey (BIS) required?  
 Is a Conceptual Stage Relocation Study (CSRS) required?  
 Has utility relocation coordination been initiated for this project?

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

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 as a result of this project.

**SECTION H – HAZARDOUS MATERIALS & REGULATED SUBSTANCES**

Documentation

Hazardous Materials & Regulated Substances (Mark all that apply)

Red Flag Investigation **X**  
 Phase I Environmental Site Assessment (Phase I ESA)    
 Phase II Environmental Site Assessment (Phase II ESA)    
 Design/Specifications for Remediation required?  

	No	Yes/ Date
ES Review of Investigations		

*Include a summary of findings for each investigation.*

Remarks: Based on a review of GIS and available public records, a Red Flag Investigation (RFI) was approved on July 31, 2018 by INDOT Environmental Services (Appendix E, page 1-11). GIS layers were reviewed once more on July 31, 2019 and no sites were identified. No sites with hazardous material concerns (hazmat sites) or sites involved with regulated substances were identified in or within 0.5 mile of the project area. Further investigation for hazardous material concerns or regulated substances is not required at this time.

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<b>SECTION I – PERMITS CHECKLIST</b>
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Permits (mark all that apply)

Likely Required

**Army Corps of Engineers (404/Section10 Permit)**

Individual Permit (IP)	<input checked="" type="checkbox"/>
Nationwide Permit (NWP)	<input type="checkbox"/>
Regional General Permit (RGP)	<input type="checkbox"/>
Pre-Construction Notification (PCN)	<input type="checkbox"/>
Other	<input type="checkbox"/>
Wetland Mitigation required	<input checked="" type="checkbox"/>
Stream Mitigation required	<input checked="" type="checkbox"/>

**IDEM**

Section 401 WQC	<input type="checkbox"/>
Isolated Wetlands determination	<input type="checkbox"/>
Rule 5	<input checked="" type="checkbox"/>
Other	<input checked="" type="checkbox"/>
Wetland Mitigation required	<input checked="" 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**

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

Remarks:

The project requires a USACE 404 Individual Permit, an IDEM 401 Individual Permit, and an IDEM Rule 5 Permit. Unavoidable impacts to streams and wetlands will be mitigated with the purchase of credits through the IDNR In-Lieu Fee Program. If a karst feature is determined to receive runoff, the project may require a Class V injection well permit from IDEM.

Applicable recommendations provided by IDEM and USACE are included in the Environmental Commitments section of this document. The conditions of the permits will be requirements of the project and will supersede these recommendations.

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

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### SECTION J- ENVIRONMENTAL COMMITMENTS

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

Remarks:

**Firm:**

1. If the scope of work or permanent or temporary right-of-way amounts change, the INDOT Environmental Services Division (ESD) and the INDOT District Environmental Section will be contacted immediately. (INDOT ESD and INDOT District)
2. It is the responsibility of the project sponsor to notify school corporations and emergency services at least two weeks prior to any construction that would block or limit access. (INDOT ESD)
3. If a spill occurs or contaminated soils or ground water are encountered during construction, appropriate personal protective equipment (PPE) will be utilized. Contaminated materials will need to be properly handled and disposed of in accordance with current regulations. IDEM should be notified through the spill line at (888) 233-7745 within 24 hours of discovery of contamination from an Underground Storage Tank system and within 2 hours of discovery of a spill. (INDOT Site Assessment & Management)
4. If any prehistoric or historic 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 be reported to IDNR-DHPA within two (2) business days. In that event, please call (317) 232-1646. Be advised that adherence to Indiana Code 14-21-1-27 and Indiana Code 14-21-1-29 does not obviate the need to adhere to applicable federal statutes and regulations, including but not limited to 36 C.F.R. 800. (IDNR-DHPA)
5. Design and construction will adhere to the karst MOU (dated October 13, 1993) and INDOT's Standard Specifications to reduce the impacts to karst such as:

MOU #10 Prior to acceptance of the final design plans an agreement will be developed which will set out the appropriate and practicable measures to offset unavoidable impacts to karst features. This agreement will be signed by the Department Director of IDNR, the Commissioner of the IDEM, the Commissioner of INDOT and the Supervisor of the USFWS Bloomington, Indiana Field Office. The agreement will become a part of the contract documents for the project, will be discussed at the pre-construction conference and will be on file at the office of the project administrator.

MOU #11. INDOT will assure that the terms of the agreement will be completed with all safeguards given to the karst area. Special provisions, which are binding provisions that are a part of the contract will be included outlining the precautions to be taken. Construction and design strategies for handling karst features will be discussed with the contractor(s) and project administrator during the pre-construction conference. Project administrator shall ensure that the contractor is following the new erosion control standards that meet Rule 5 of 327 IAC 13 and any special precautions outlined in the design plans that the sinkhole treatment is being handled correctly. The erosion control plan must be available at the project administrator's office. An emergency response plan will be made a part of the contract documents. In addition, the contract documents will contain a strategy for signing to alert the public to the fact that all types of spills are potentially hazardous to the karst environment. For INDOT, this plan would be procedure 20 of the Field Operations Manual dated 6/24/1992. [Currently in the Construction Activities Environmental Manual].

MOU #12. The location and nature of the sinkholes and drainage schematic will be provided to the IDEM. They will provide the information to the appropriate local authorities and the Hazmat teams. An emergency response plan will be followed. This constitutes procedure 20. Included in this information is an understanding that all types of spills are potentially hazardous to karst regions.

MOU #13. IDNR, IDEM and USFWS personnel will monitor construction and maintenance to the agreed upon terms, as deemed necessary.

MOU #14. If during construction it is found that the mitigation agreement must be altered, all of the agencies will be contacted, and agreement reached prior to work continuing in that specific area of the project. In order to not unduly delay projects, a two working days response time is needed from the resource agencies.



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- riparian zone wherever feasible. (USFWS)
16. Restrict below low-water work in streams to placement of culverts, piers, pilings and/or footings, shaping of the spill slopes around the bridge abutments, and placement of riprap. Culverts should span the active stream channel, should either be embedded or a 3-sided or open-arch culvert, and be installed where practicable on an essentially flat slope. When an open-bottomed culvert or arch is used in a stream, which has a good natural bottom substrate, such as gravel, cobbles and boulders, the existing substrate should be left undisturbed beneath the culvert to provide natural habitat for the aquatic community. (USFWS)

