

Categorical Exclusion: Level 4

I-69 Interstate Expansion

Project 2: Interchange Modification at Exit 210 (Campus Parkway/Southeastern Parkway)
Hamilton County

Designation Numbers: 1383489 and 1383490



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I-69 Interstate Expansion

Project 2: Interchange Modification at Exit 210 (Campus Parkway/Southeastern Parkway)
Hamilton County

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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 (NOE) letters were mailed out to potentially affected property owners on March 14, 2014 (see Appendix K, pages 1-3).

The Indiana Department of Transportation (INDOT) has determined, due to the scope of this project, that it is in the public's interest to hold a public hearing. Therefore, in accordance with INDOT's Federal Highway Administration (FHWA)-approved public involvement guidelines, a public hearing will be held to offer the public an opportunity to comment on this environmental document, the Section 106 documentation (see Appendix D), the Section 4(f) *de minimis* (see Appendix E), and the preliminary design plans. The availability of the CE document and the hearing will be advertised in the local media. Any comments received both during the public hearing and after, within the advertised 30 day comment period, will be summarized and included in this Categorical Exclusion (CE). Subsequent to the certification of the public involvement requirements, this CE document will be revised appropriately and re-submitted for INDOT and FHWA approval.

Public Controversy on Environmental Grounds Yes No

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

Remarks: The proposed project will address traffic congestion issues that currently exist at this interchange. Environmental impacts have been minimized and addressed through coordination with the U.S. Fish and Wildlife Service (USFWS), the Indiana Department of Natural Resources (IDNR), the U.S. Army Corps of Engineers (USACE), and other resource agencies (see Appendix C). The preferred alternative will stay within existing right-of-way and require no relocations. To date, this project has not generated substantial public controversy concerning community or natural resource impacts.

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

Sponsor of the Project: Indiana Department of Transportation INDOT District: Greenfield
Local Name of the Facilities: I-69 and Campus Parkway/Southeastern Parkway

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

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

PURPOSE AND NEED:

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

The need for this project stems from traffic congestion issues that currently exist at this interchange. The interchange is experiencing an insufficient Level of Service (LOS) during peak traffic hours. LOS is a rating for traffic congestion, with LOS A indicating little to no delay and LOS F indicating serious congestion and delay. An INDOT study conducted in the fall of 2012 noted, "Southbound [SB] I-69 experiences congestion and reduction of travel speed during the AM peak hours, especially as traffic approaches Exit 205. Northbound [NB] I-69 also experiences congestion and long queues at Exit 210's NB exit during the PM peak hours, especially during events at the Klipsch Music Center (though traffic data collected does not take into account such events)."

Traffic Data was recently analyzed for this interchange using Highway Capacity Manual methodology in Highway Capacity Software (HCS). The NB ramp is currently operating at an LOS D, while the SB ramp is operating at an LOS C. Both ramp termini are predicted to operate at an LOS F in the design year, 2035. The results show unacceptable LOS for both existing and future traffic for the interchange.

The purpose of this project is to improve overall traffic operation by reducing congestion at this interchange.

PROJECT DESCRIPTION (PREFERRED ALTERNATIVE):

County: Hamilton Municipality: City of Fishers and the City of Noblesville

Limits of Proposed Work: From 1,500 feet northwest of the centerline of the Campus Parkway/Southeastern Parkway bridge to 1,100 feet southeast of the centerline

Total Work Length: 0.49 Mile(s) Total Work Area: 5.84 Acre(s)

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

Yes ¹	No
<input checked="" type="checkbox"/>	<input type="checkbox"/>
Date: <u>November 17, 2014</u>	

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

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.

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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.

INDOT is planning an I-69 Interstate Expansion from 106th Street in Fishers to Exit 226 (State Roads (SR) 9 and 109 in Anderson), in Hamilton and Madison Counties. This expansion has been broken into multiple projects with independent utility and logical termini. This document has been prepared for Project 2 (Des. Nos. 1383489 and 1383490), an interchange modification project at Exit 210 (Campus Parkway/Southeastern Parkway). See Project Location Maps in Appendix B, pages 1-2.

Existing Conditions: Improvements have recently been completed on Campus Parkway/Southeastern Parkway on both sides of the interchange. Prior to that work, the cross road was a simple, rural 2-lane road and was referred to as SR 238 (Greenfield Avenue locally) where it connected Noblesville and Fortville. SR 238 has since been relinquished. The City of Noblesville refers to the road as Campus Parkway while the City of Fishers refers to it as Southeastern Parkway.

Campus Parkway (northwest of I-69) has one 11-foot through-lane and one 11-foot left-turn lane going eastbound (EB), two 11-foot through-lanes and one 11-foot left-turn lane going westbound (WB), and two-foot shoulders. A 10-foot-8-inch multiuse path (the 146th Street from Pointe Boulevard to I-69 Trail) exists on the northeast (WB) side. No sidewalk currently exists on the northwest side directly north of the interchange (the Cumberland Road to Hamilton Towne Center Trail terminates approximately 210 feet south of the Hamilton Town Center).

The current interchange type is a diamond interchange with signalized ramp terminals. The bridge has one 11-foot through-lane going EB, two 11-foot through-lanes going WB, and one 11-foot left-turn lane that services both directions (it reverses itself on either side of the bridge). A 10-foot-8-inch multiuse path exists on the northeast (WB) side, which carries the 146th Street from Pointe Boulevard to I-69 Trail across the interchange.

Southeastern Parkway (southeast of I-69) has two 11-foot through-lanes going EB, two 11-foot through-lanes going WB, and two-foot shoulders. The 10-foot-8-inch multiuse path, discussed above, continues on the southeast (WB) side. A portion of an 8-foot planned future trail was recently built on the southwest side (south of the interchange) when East 136th Street was reconstructed. However, this is not currently part of the parks and recreation departments' "active" trail systems.

Proposed Project: The proposed project would modify the existing interchange into a double-crossover diamond (DCD) interchange. A DCD interchange, also referred to as a diverging diamond (DDI) interchange, "twists" or shifts crossroad traffic in the core of the interchange so that the left-turn and through movements will be relocated to the opposite side of the road. The interchange will require two traffic signals, but this shift eliminates the left turning signal phase at the intersections.

At the interchange, the preferred alternative will provide two variable (11 to 15-foot) EB through-lanes, two variable (11 to 15-foot) WB through-lanes, an 11-foot WB left-turn lane, and 16-foot on and off-ramps. An additional 11-foot through-lane going EB will be added to Campus Parkway. Therefore, it will have two 11-foot through-lanes and one 11-foot left-turn lane going EB, two 11-foot through-lanes and one 11-foot left-turn lane going WB, and two-foot shoulders. Southeastern Parkway's current lane configuration will be maintained. A 10-foot-8-inch multiuse path will be maintained on the northeast side of the bridge (which will be temporarily removed to carry EB traffic on the bridge after the traffic shift). The path will narrow to 10 feet beyond the bridge. A 6-foot sidewalk (5-foot on the bridge) will be added to the southwest side (which will carry WB traffic on the bridge after the traffic shift) and connected to the Cumberland Road to Hamilton Towne Center Trail and the existing portion of the planned future trail southwest of the interchange.

For safety reasons, three of the four locations where I-69 off-ramps merge onto Campus Parkway/Southeastern Parkway will be under signalized control to gain entry. At two of the locations (the I-69 SB off-ramp right-turn and the I-69 NB off-ramp left-turn), high traffic volumes necessitate providing dual turn lanes. At the I-69 NB off-ramp right-turn location, dual right-turn lanes (and signalized control) are provided in the interest of safe pedestrian crossing provisions. Only the I-69 SB off-ramp left-turn onto Campus Parkway/Southeastern Parkway will be under yield control. The three

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“signalized entries” will be coordinated with the signals at the crossovers, such that the turn movement occurs simultaneously with the opposing through movement. Within each ramp junction, there is no left turn signal, thereby decreasing the delay through the intersection. The Campus Parkway/Southeastern Parkway through movement is subject to a single traffic signal.

Right-of-Way (ROW): No new permanent or temporary ROW will be required for either project.

Maintenance of Traffic (MOT): For MOT, the project has been broken into 4 phases. Traffic will be maintained at all times on Campus Parkway/Southeastern Parkway and the I-69 Ramps during construction. This is a firm commitment. For a full description of the MOT, see pages 10-11.

Estimated Cost:

Construction:	\$ 8,260,000
Right-of-way:	\$ 0
Engineering:	\$ 1,263,660
<u>Total:</u>	<u>\$ 9,523,660</u>

Environmental Concerns:

The preferred alternative will impact one wetland (approximately 0.055 acre total). Although Project 1 (Added travel lanes, from 106th St to 0.5 mile North of Southeastern Parkway/Campus Parkway) and Project 3 (Added travel lanes from 0.5 mile North of Southeastern Parkway/Campus Parkway to 0.5 mile East of SR 13) have been submitted under a separate environmental document, IDEM and USACE consider these projects as “single & complete” when evaluating impacts to jurisdiction Waters of the US and Waters of the State. Therefore, all three projects will be permitted together for the required Section 404 and Section 401 permits. Permits must be received and the impacts mitigated either concurrently with or before construction of this project.

This project is a Type I project. Based on the studies thus far accomplished, the State of Indiana has not identified any locations where noise abatement is likely. The final decision on the installation of any abatement measure will be made upon the completion of the project’s final design and the public involvement processes. The noise analysis is described in detail below (see page 23).

This project will impact two trails (the 146th Street from Pointe Boulevard to I-69 Trail and the Cumberland Road to Hamilton Towne Center Trail), which meet the requirements to be considered Section 4(f) resources. After assessing the impacts the project would have on the trails, it has been determined that the proposed project would not adversely affect the activities, features, or attributes that make the trails eligible for Section 4(f) protection. Therefore, INDOT and FHWA made a determination of *de minimis* impact, which has been agreed upon by the officials with jurisdiction (the City of Fishers and the City of Noblesville Parks and Recreation Departments). Section 4(f) is described in detail below (see pages 19-21).

All other environmental impacts are minimal and have been addressed through coordination with USFWS, IDNR, and other resource agencies (see Appendix C). Environmental impacts are described in detail below in Part III of this document.

The preferred alternative will meet the Purpose and Need of the project by modifying the interchange into a DCD interchange to address the capacity issues within the project area. The preferred alternative will provide acceptable LOS in the design year and offer some reserve capacity. It is a relatively low cost alternative due to the fact that it only requires the bridge to be widened instead of replaced, and does not require any ROW acquisition.

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OTHER ALTERNATIVES CONSIDERED:

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

ALTERNATIVE A: DO NOTHING (NO BUILD)

The “Do Nothing” alternative would have no project cost and no environmental impacts. However, this alternative would not address the congestion issues at this interchange, which have an unacceptable LOS for both existing and future traffic. Thus, the “Do Nothing” alternative was rejected because it does not meet the Purpose and Need of the project.

ALTERNATIVE B: TRANSPORTATION SYSTEM MANAGEMENT (TSM)

The TSM alternative represents the best that can be done to mitigate the deficiencies short of a major investment. These types of improvements are typically short-term and low-cost in comparison to the preferred alternative. The TSM alternative is defined in accordance with forecast traffic operational concerns and other factors. It is comprised of improved signal timing and coordination, in concert with minor geometric modifications at the key ramp terminal intersections. This alternative would have no wetland impacts. However, this alternative fails to provide acceptable intersection LOS at the SB ramps, resulting in over-capacity movements and unacceptable queues. Thus, the TSM alternative was rejected because it does not meet the Purpose and Need of the project.

ALTERNATIVE C: MODIFIED TIGHT DIAMOND WITH SIX-LANE BRIDGE

This alternative would address the operational performance at the SB ramp terminal where the TSM Alternative could not. Specifically, it would provide two EB through lanes on Campus Parkway/Southeastern Parkway through the interchange and dual left-turn lanes from Campus Parkway/Southeastern Parkway to each of the I-69 on-ramps. Though relatively low in construction cost (\$5,400,000), it still suffers operationally in two respects: (1) both left-turn movements from Campus Parkway/Southeastern Parkway present queues that overflow the storage bay and thus spillover into the adjacent through lanes across the bridge, and (2) the design does not provide much reserve capacity to accommodate fluctuations in traffic volumes and/or general under-forecasting of the volumes. Therefore, this alternative was discarded because it does not meet the Purpose and Need of the project.

ALTERNATIVE D: PARTIAL CLOVERLEAF (PARCLO)

This alternative (technically a “Parclo A – 4 Quadrants”) includes loops that eliminate the left-turns from Campus Parkway/Southeastern Parkway onto the interstate. Left-turns from the I-69 exit ramps onto Campus Parkway/Southeastern Parkway would remain, however, as would the traffic signals at each ramp terminal. While this alternative would provide acceptable traffic operations, it would also require the most ROW acquisition and increased impacts to wetlands. It also has the second highest estimated construction cost (\$10,000,000) among the build alternatives, in part due to the need to widen the existing bridge over I-69 and provide additional pavement for the loop ramps and collector/distributor road. Therefore, this alternative was discarded due to ROW acquisition and increased impacts to wetlands.

ALTERNATIVE E: SINGLE-POINT URBAN INTERCHANGE (SPUI)

An SPUI is a variant of the compressed diamond interchange, in which all turning movements from the major road ramps and all movements from the minor road are executed in a central location, in this case above the interstate. The design improves traffic capacity and operations through consolidation of the two traffic signals (at the ramp terminals) to a single signal, and thereby simplifying coordination on Campus Parkway/Southeastern Parkway. This alternative provides acceptable traffic operations in the design year and it does not require any right-of-way acquisition or wetland disturbance. However, it is the highest cost alternative (\$17,400,000) due in part to replacement of the bridge. Therefore, this alternative was discarded because of the higher increase in cost.

ALTERNATIVE F: TIGHT DIAMOND WITH ROUNDABOUTS

This alternative maintains the existing diamond configuration but replaces the ramp termini with roundabouts. Acceptable traffic operations are provided in 2035, but this alternative has the lowest reserve capacity. This means it is more susceptible to poor LOS should the volumes deviate from their forecast levels. It is, however, among the lowest in construction costs (\$4,700,000) and does not have any right-of-way acquisition requirements. Wetland impacts may also occur as part of this alternative. This alternative was discarded due to the low reserve capacity.

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Setting: Urban Suburban Rural
 Topography: Level Rolling Hilly

I-69 NB Off-Ramp

Functional Classification: Principal Arterial
 Current ADT: 8,790 VPD (2015) Design Year ADT: 11,450 VPD (2035)
 Design Hour Volume (DHV): 1,650 Truck Percentage (%): 2.3
 Designed Speed (mph): 25 Legal Speed (mph): 25

Existing Proposed

Number of Lanes:	1 initially. Becomes 3 near intersection (2 LT, 1 RT)	1 initially. Becomes 4 near intersection (2 LT, 2 RT)
Type of Lanes:	Ramp	Ramp
Pavement Width:	50-ft	78-ft
Shoulder Width:	Left	4-ft
	Right	10-ft
Median Width:	N/A	N/A
Sidewalk Width:	N/A	N/A

Setting: Urban Suburban Rural
 Topography: Level Rolling Hilly

DESIGN CRITERIA FOR BRIDGES:

Structure/NBI Number(s): (169)238-29-05317C (NBI# 029910) Sufficiency Rating: 72.4 , per 2013 Bridge Report
 (Rating, Source of Information)

Existing Proposed

Bridge Type:	Continuous Composite Steel Beam Bridge	Continuous Composite Steel Beam Bridge
Number of Spans:	4 spans (46-ft, 79-ft-6-in, 79-ft-6-in, and 46-ft)	4 spans (46-ft, 79-ft-6-in, 79-ft-6-in, and 46-ft)
Weight Restrictions:	N/A	N/A
Height Restrictions:	NB	16ft-11-in
	SB	16ft-10½-in
Curb to Curb Width:	51-ft-8-in	61-ft
Outside to Outside Width:	64-ft-4-in	82-ft-8-in
Shoulder Width:	Inside	N/A
	Outside	2-ft (EB) 5-ft-8-in (WB)
Length of Channel Work:		N/A

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

Remarks: Bridge No. I69-238-29-05317C (NBI No. 029910) is located within the I-69/ Campus Parkway/Southeastern Parkway Interchange, in Hamilton County. The bridge is a 251-foot long, four-span, continuous composite steel beam bridge, which was constructed in 1966. It accommodates four 11-foot lanes, a 5-foot-8-inch outside shoulder on the WB side, and a 2-foot shoulder on the EB side.

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There is a 10-foot-8-inch multi-use path on the WB side. The existing approaches consist of four 11-foot lanes with 5-foot-8-inch outside shoulders and 2-foot inside shoulders.

As previously discussed, the preferred alternative would modify the existing interchange into a DCD interchange. Therefore the crossroad traffic in the core of the interchange will be shifted so that the left-turn and through movements will be relocated to the opposite side of the road. The preferred alternative would widen the existing bridge deck. The proposed structure would accommodate five 11-foot lanes (2 EB through lanes, 2 WB through lanes, and 1 WB left-turn lane) divided by a 4-foot median, with 1-foot inside shoulders and 2-foot outside shoulders. Approaches would be widened to match the widened structure. No channel work or tree clearing is anticipated.

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

MAINTENANCE OF TRAFFIC (MOT) DURING CONSTRUCTION:

	Yes	No
Is a temporary bridge proposed?	<input type="checkbox"/>	<input checked="" type="checkbox"/>
Is a temporary roadway proposed?	<input checked="" type="checkbox"/>	<input 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 checked="" type="checkbox"/>	<input type="checkbox"/>
Will the proposed MOT substantially change the environmental consequences of the action?	<input type="checkbox"/>	<input checked="" type="checkbox"/>
Is there substantial controversy associated with the proposed method for MOT?	<input type="checkbox"/>	<input checked="" type="checkbox"/>

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Remarks: Traffic will be maintained at all times on Campus Parkway/Southeastern Parkway and the I-69 Ramps during construction. It is anticipated that the interchange will be built in four phases, with phases II and III having concrete median barrier to protect the construction zones. The typical sections on Campus Parkway/Southeastern Parkway will be 11-foot lanes in each direction with 1-foot shoulder offsets. There will be a turn lane in between the two lanes so that traffic can queue and enter the entrance ramps without blocking the through lanes. The ramps will have a 14-foot lane with 1-foot shoulder offsets on either side.

In Phase I, the traffic will be shifted to the south side of the road, with the current lane configuration. Then the multi-use path on the north side of the bridge will be removed and paved so that it can become a driving lane in the next phase.

In Phase II, the traffic will be shifted to the north side of the bridge, and the south side of the bridge will be under construction. The lane configuration will have one lane in each direction with a turn lane in between for each of the entrance ramps. In the WB direction, cars will be driving where the existing multi-use path was removed in Phase I. Each of the ramps will be reduced to one lane, except the southwest ramp, which will be two lanes. Temporary pavement will need to be constructed in some areas to help with the intersections. The existing signals will remain in use and may be modified to accommodate the varying lane configuration.

In Phase III, traffic will be shifted to the south side of the bridge where Phase II construction already occurred. All ramps will be single lane, including the southwestern ramp. Construction will occur on the north side of the bridge, including adding back the multi-use path.

In Phase IV, traffic will be moved into the correct locations of the new interchange. However, there will be one lane in each direction, except on the bridge, where there will be four lanes. The construction zones will be separated by drums from traffic. Temporary pavement will be removed and the median islands and sidewalk on the south side will be constructed and connected to the existing trails.

The Klipsch Music Center has been coordinated with to help mitigate for impacts caused from the MOT and must be coordinated with prior to each phase of construction. This is a firm commitment.

ESTIMATED PROJECT COST AND SCHEDULE:

Engineering: \$ 1,263,660 (2015) Right-of-Way: \$ 0 (2015) Construction: \$ 8,260,000 (2015)

Anticipated Start Date of Construction: Fall 2015

Date project incorporated into STIP October 2, 2014 (see Appendix I, pages 1-2)

Is the project in an MPO Area? **Yes** **No**

If yes,

Name of MPO Indianapolis Metropolitan Planning Organization (IMPO)

Location of Project in TIP 2014 First Quarter Amendments (see Appendix I, pages 3-5)

Date of incorporation by reference into the STIP May 28, 2014

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RIGHT OF WAY:

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

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

Remarks: No new permanent or temporary right-of-way (ROW) will be required for this project.

Apparent existing ROW varies throughout the project area, with a maximum ROW of approximately 1,500 feet.

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			
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"/>

Remarks: Field investigations were conducted in May through August 2014 by Parsons to determine the presence of jurisdictional streams, wetlands, and ponds within the project areas for this project (Project 2) and the first two added travel lanes projects (Projects 1 and 3) of the proposed I-69 Interstate Expansion. A Waters of the US Determination Report was completed on October 16, 2014 by Parsons (see Appendix G), and was approved by INDOT Environmental Services on October 20, 2014 (see Appendix G, pages 96-98). No streams, rivers, watercourses, or jurisdictional ditches were identified within the projects limits of this project.

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Other Surface Waters

Reservoirs
Lakes
Farm Ponds
Detention Basins
Storm Water Management Facilities
Other: _____

	<u>Presence</u>	<u>Impacts</u>	
		Yes	No
Reservoirs	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Lakes	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
Farm Ponds	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Detention Basins	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input checked="" 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: Three lakes/detention basins lie within or adjacent to the projects limits (see Water Resources Map, Appendix H, page 10). Field investigations conducted in May through August 2014 confirmed the location of these features. None of these lakes/detention basins will be impacted by the proposed project. No other surface waters are located in or near the project area.

Wetlands

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

Total wetland area: 1.5465 acre(s) Total wetland area impacted: 0.055 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
27	Palustrine Emergent	0.0592	N/A	This wetland will not be impacted by the project.
28	Palustrine Forested and Palustrine Emergent	0.8000	0.055	Approximately 0.055 acre of the emergent portion of this wetland will be impacted.
29	Palustrine Emergent	0.6763	N/A	This wetland will not be impacted by the project.
30	Palustrine Emergent	0.0110	N/A	This wetland will not be impacted by the project.

Documentation

ES Approval Dates

Wetlands (Mark all that apply)

Wetland Determination
Wetland Delineation
USACE Isolated Waters Determination
Mitigation Plan

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

October 20, 2014
October 20, 2014

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.

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

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

Remarks:

The National Wetlands Inventory (NWI) map identifies ten NWI-wetland polygons within a half-mile radius of the project area (see Water Resources Map, Appendix H, page 10). According to the Soil Survey Geographic (SSURGO) Database for Hamilton County, Indiana, majority of the project area lies within nationally listed hydric soils (see NRCS Soils Map, Appendix B, page 5).

As previously discussed, a formal delineation and waters determination was conducted in May through August 2014 by Parsons to determine the presence of jurisdictional streams and wetlands within the project areas for Projects 1, 2, and 3 of the I-69 Interstate Expansion. Four wetlands totaling 1.5465 acres were identified within or adjacent to the projects limits of this project. Descriptions of these wetlands can be found in the above table. For more details, see the Waters of the US Report in Appendix G.

On August 13, 2014, a meeting was held between USACE, IDEM, INDOT, and Parsons to discuss what was identified, some problematic areas, recent changes in guidance from the USACE on features that lie completely within roadside ditches, expected impacts, and other issues relating to the projects. A follow-up field review with these agencies was held on August 18, 2014. Combined minutes from these two meetings are provided in Appendix G. On September 17, 2014, an additional conference call between Parsons and USACE provided further guidance (see Appendix G).

As a result of this coordination, multiple features delineated by Parsons will **not** be considered jurisdictional Waters of the US, despite meeting all three wetland criteria. Based on agency coordination, features were considered non-jurisdictional if they were entirely contained within roadside drainage. If the feature extended beyond the existing ditch-line, the feature was considered a wetland. The mapped soil unit did not factor into this determination.

Based on regulatory agency feedback, eleven likely non-jurisdictional features that met the three wetland criteria, but fall under the USACE roadside ditch guidance, were delineated within or adjacent to the project area for this project. Table 5 in the Waters of the US Report (Appendix G, page 42) summarizes all of the likely non-jurisdictional features. Their boundaries are included on the resource maps, and each is documented in the report with a single photograph. IDEM is currently reviewing USACE's roadside ditch guidance, and some of the features USACE has determined to be non-jurisdictional may still qualify as Waters of the State. All Waters of the State will be identified, permitted, and mitigated for, if necessary, before the project is allowed to go to construction.

One wetland (Wetland 28; approximately 0.055 acre total) will be impacted by the proposed project. All work for this project will occur within existing ROW. Shoulders and sideslopes have been reduced, where appropriate, throughout the project. Only the low quality, palustrine emergent portion of Wetland 28 will be impacted by this project.

As stated above in the Other Alternatives Considered section of this document, three alternatives (Alternatives A, B, and E) that were analyzed would eliminate impacts to wetlands. Alternatives A & B would not address the congestion issues and were rejected because they do not meet the Purpose and Need of the projects. Alternative E it is the highest cost alternative due in part to replacement of the bridge. Therefore, Alternative E was eliminated due to the increased cost and the fact that the preferred alternative will only impact a small portion of a low quality, palustrine emergent wetland.

USFWS and IDNR were coordinated with on September 9, 2014 (see Appendix C, pages 1-5). On September 16, 2014, USFWS responded stating, "Wetland and stream impacts may require permits from the US Army Corps of Engineers, the Indiana Department of Environmental Management's Water Quality Certification program and the Indiana Department of Natural Resources. Wetland impacts should be avoided, and any unavoidable impacts should be compensated for in accordance with the Corps of Engineers

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mitigation guidelines” (see Appendix C, pages 11-12). On October 28, 2014, IDNR responded with comments to help reduce potential wetland impacts in the project areas (see Appendix C, pages 8-10).

Project commitments are located below in “Section J: Environmental Commitments”. This project will be permitted together with Project 1 and Project 3 of the I-69 Interstate Expansion. Due to the impacts expected, a USACE 404 permit and an IDEM 401 WQC permit will be required for these projects. Mitigation may be required. USACE and IDEM have agreed that credits from the Central Indiana Mitigation Bank could be acquired for mitigation if the projects require mitigation.

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

Remarks: Field checks were conducted in May through August 2014 by Parsons to determine the land use within and adjacent to the project area. This project is located at the edge of an urbanized area, with land use north, south, and west of the project consisting primarily of residential and commercial properties, and areas east of the project area consisting primarily of farmland.

This project would impact approximately 3.4 acres of grassy, maintained median, shoulders and ditch-lines, and approximately 0.055 acre of wetlands. No tree clearing is expected. All impacts will occur within existing ROW within the interstate median and ditch-lines, which provide poor habitat for native species. Therefore, impacts to terrestrial habitat will be minimal.

As previously stated, USFWS and IDNR were coordinated with on September 9, 2014 (see Appendix C, pages 1-5). On September 16, 2014, USFWS responded that they “have no objections to the project as currently proposed” (see Appendix C, pages 11-12). On October 28, 2014, IDNR responded with comments to help reduce potential impacts in the project areas (see Appendix C, pages 8-10). Commitments from these agencies are located in “Section J: Environmental Commitments”.

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.

	Yes	No
Is the proposed project located within or adjacent to the potential Karst Area of Indiana?	<input type="checkbox"/>	<input checked="" type="checkbox"/>
Are karst features located within or adjacent to the footprint of the proposed project?	<input type="checkbox"/>	<input checked="" type="checkbox"/>
If yes, will the project impact any of these karst features?	<input 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: This project is located outside of the designated karst area of the state as identified in the October 13, 1993 Memorandum of Understanding (MOU) between INDOT, IDNR, IDEM, and USFWS. No karst features are mapped within the project limits (see Appendix H, page 10). Therefore, this project is not anticipated to impact any karst features.

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	Presence	Impacts	
Threatened or Endangered Species		Yes	No
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 type="checkbox"/>	<input checked="" type="checkbox"/>

Remarks: This project is within the range of the northern long-eared bat (*Myotis septentrionalis*), which is currently proposed for listing under the Endangered Species Act (ESA) (87 Stat. 884, as amended; 16 U.S.C. 1531 *et seq.*). USFWS and IDNR were coordinated with on September 9, 2014 (see Appendix C, pages 1-5). On October 28, 2014, IDNR responded “The Natural Heritage Program’s data have 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” (see Appendix C, pages 8-10). On September 16, 2014, USFWS responded, “Based on the project description and information, we do not anticipate any adverse impacts to the northern long-eared bat. This precludes the need for further consultation on this species for this project under Section 7 of the Endangered Species Act (as amended)” (see Appendix C, pages 11-12). Therefore, impacts to endangered, threatened, or rare species are not likely to occur.

SECTION B – OTHER RESOURCES

	Presence	Impacts	
Drinking Water Resources		Yes	No
Wellhead Protection Area	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Public Water System(s)	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
Residential Well(s)	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input checked="" 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:			
Is the Project in the St. Joseph Aquifer System?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Is the FHWA/EPA SSA MOU Applicable?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Initial Groundwater Assessment Required?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Detailed Groundwater Assessment Required?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

Remarks: This project is not located within the St. Joseph Aquifer System, the only legally designated Sole Source Aquifer in Indiana.

The Indiana Department of Environmental Management’s Wellhead Proximity Determinator website (<http://idemmaps.idem.in.gov/whpa/>) was reviewed by Parsons on September 5, 2014. Per the website, the project is “not in a Wellhead Protection Area.”

IDNR’s Waterwells Layer (Geographic Information System (GIS)) was reviewed. Several water wells were identified adjacent to the project areas. Field investigations conducted in May through August 2014 by Parsons did not identify any residential wells in the project areas.

The City of Fishers is supplied by two public water systems (Citizen’s Energy Group and The American

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Water Company). As previously stated, all work will occur within existing ROW. Temporary erosion and sediment control methods will be implemented within areas of disturbed soil, and all disturbed soil areas will be vegetated following INDOT's standard specifications upon completion of the projects. Utility coordination is ongoing. Currently, no impacts are expected to occur to either public water system. Any impacts to utilities must be appropriately mitigated.

No other drinking water resources are known to occur within the project area.

	<u>Presence</u>	<u>Impacts</u>	
		Yes	No
Flood Plains			
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: This project does not encroach upon a regulatory floodplain as determined from available FEMA flood plain maps (see Appendix H, page 10). Therefore, it does not fall within the guidelines for the implementation of 23 CFR 650, 23 CFR 771, and 44 CFR.

	<u>Presence</u>	<u>Impacts</u>	
		Yes	No
Farmland			
Agricultural Lands	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
Prime Farmland (per NRCS)	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
Total Points (from Section VII of CPA-106/AD-1006* <u>105</u>)			
<i>*If 160 or greater, see CE Manual for guidance.</i>			

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

Remarks: The Natural Resources Conservation Service (NRCS) was coordinated with for this project on September 9, 2014 (see Appendix C, pages 1-5). This coordination with NRCS resulted in a score of 105 on the NRCS CPA-106 form (see Appendix C, pages 13-14). NRCS's threshold score for significant impacts to farmland that result in the consideration of alternatives is 160. Because this project's score is less than the threshold, no significant loss of farmland will result from this project. Furthermore, design has progressed after coordination was sent to NRCS, and currently, no farmland will be impacted by the proposed project. No alternatives other than those previously discussed in this document will be investigated without reevaluating impacts to prime farmland. This project will not have a significant impact to farmland.

SECTION C – CULTURAL RESOURCES

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

**Eligible and/or Listed
Resource Present**

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

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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 type="checkbox"/>		
Historic Property Report	<input checked="" type="checkbox"/>	May 19, 2014	July 11, 2014
Archaeological Records Check/ Review	<input checked="" type="checkbox"/>	September 18, 2014	October 24, 2014
Archaeological Phase Ia Survey Report	<input checked="" type="checkbox"/>	September 18, 2014	October 24, 2014
Archaeological Phase Ic Survey Report	<input type="checkbox"/>		
Archaeological Phase II Investigation Report	<input type="checkbox"/>		
Archaeological Phase III Data Recovery	<input type="checkbox"/>		
APE, Eligibility and Effect Determination	<input checked="" type="checkbox"/>	November 25, 2014	Pending
800.11 Documentation	<input checked="" type="checkbox"/>	November 25, 2014	Pending

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:

Area of Potential Effect (APE): The APE for this project incorporates the project location and includes properties that may be impacted by project activities, an area approximately one-fourth mile from the interchange along Campus Parkway/Southeastern Parkway that was widened or narrowed where appropriate based on topography and obscured views. The APE for archaeology is defined as the project footprint (see Appendix D, pages 42-46).

Coordination with Consulting Parties: Early Coordination was initiated on June 18, 2014 with a letter inviting organizations and individuals to become consulting parties (see Appendix D, pages 66-69). The Indiana State Historic Preservation Officer (SHPO), FHWA, and INDOT Cultural Resources Office (CRO) are automatically consulting parties. The following is a list of the organizations and individuals formally invited to become a consulting party (those who indicated they wished to be consulting parties are in bold) :

- **Indiana Landmarks—Central Regional Office**
- Hamilton County Historian
- Hamilton County Historical Society
- Hamilton County Genealogy Society
- Carmel-Clay Historical Society
- Fishers Historic Preservation Committee
- Noblesville Preservation Alliance
- City of Noblesville
- Hamilton County Commissioners
- Noblesville Chamber of Commerce
- Indianapolis Metropolitan Planning Organization

The Hamilton County Historical Society and Carmel-Clay Historical Society declined the invitation to participate, while Indiana Landmarks Central Office accepted the invitation to participate (see Appendix D,

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pages 47-51). SHPO responded multiple times, as described below. No other responses were received.

Archaeology: An Indiana Archaeological Short Report was prepared for this project on September 23, 2014 (see Appendix D, pages 62-64). No archaeological sites were found within the project areas, and the report recommended that the project be allowed to proceed as planned. The report was approved by INDOT CRO on September 18, 2014 and then forwarded to SHPO for concurrence.

On October 24, 2014, SHPO responded to the ASR, agreeing that “[b]ased upon the documentation available ... we have not identified any currently known archaeological resources listed in or eligible for inclusion” in the NRHP. The staff further stated that “[i]f 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” (see Appendix D, page 71). This is a firm commitment.

Historic Properties: A Historic Properties Report was completed for this project on April 28, 2014 (see Appendix D, pages 60-61). No properties were recommended eligible for listing in the NHRP. The report was approved by INDOT CRO on May 19, 2014. The HPR and early coordination letters were forwarded to SHPO and the other consulting parties for review on June 18, 2014.

On July 11, 2014, SHPO responded to the early coordination letter and the HPR stating, “[b]ased upon the documentation available to the staff of the Indiana SHPO, we have not identified any” resources eligible for listing or listed in the NRHP (see Appendix D, page 70).

Documentation, Findings: An 800.11(d) document was completed on November 25, 2014 with INDOT, on behalf of FHWA, issuing a “No Historic Properties Affected” finding (see Appendix D, page 1). SHPO’s concurrence is pending, and concurrence must be received before approval of this environmental document.

Public Involvement: As previously stated, a public hearing will be held to offer the public an opportunity to comment on this environmental document, the Section 106 documentation, the Section 4(f) *de minimis*, and the preliminary design plans. The availability of the CE document and the hearing will be advertised in the local media. Any comments received both during the public hearing and after, within the advertised 30 day comment period, will be summarized and included in this CE. Subsequent to the certification of the public involvement requirements and the successful completion of the Section 106 process, this CE document will be revised appropriately and submitted for approval.

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

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	<u>Presence</u>	<u>Use</u>	
		Yes	No
Wildlife & Waterfowl Refuges			
National Wildlife Refuge	<input type="text"/>	<input type="text"/>	<input type="text"/>
National Natural Landmark	<input type="text"/>	<input type="text"/>	<input type="text"/>
State Wildlife Area	<input type="text"/>	<input type="text"/>	<input type="text"/>
State Nature Preserve	<input type="text"/>	<input type="text"/>	<input type="text"/>

	<u>Evaluations Prepared</u>	<u>FHWA Approval date</u>
Programmatic Section 4(f)*	<input type="text"/>	<input type="text"/>
“De minimis” Impact*	<input type="text"/>	
Individual Section 4(f)	<input type="text"/>	

	<u>Presence</u>	<u>Use</u>	
		Yes	No
Historic Properties			
Sites eligible and/or listed on the NRHP	<input type="text"/>	<input type="text"/>	<input type="text"/>

	<u>Evaluations Prepared</u>	<u>FHWA Approval date</u>
Programmatic Section 4(f)*	<input type="text"/>	<input type="text"/>
“De minimis” Impact*	<input type="text"/>	
Individual Section 4(f)	<input type="text"/>	

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

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

Remarks: Section 4(f) of the US Department of Transportation Act of 1966 (49 USC 303) requires Departments of Transportation to avoid impacts to Section 4(f) properties unless there are no feasible and prudent alternatives for avoiding the use of the property. Properties that may be protected under Section 4(f) include, but are not limited to parks, recreation areas, wildlife and waterfowl refuges, and historic sites. Two public trails within the project limits (the 146th Street from Pointe Boulevard to I-69 Trail and the Cumberland Road to Hamilton Towne Center Trail) meet the requirements to be considered Section 4(f) resources. The 146th Street from Pointe Boulevard to I-69 Trail is managed by the Noblesville Parks and Recreation Department, while the Cumberland Road to Hamilton Towne Center Trail is managed by the City of Fishers.

As previously stated, a 10-foot-8-inch multiuse path exists on the northeast (WB) side, which carries the 146th Street from Pointe Boulevard to I-69 Trail across the interchange. The Cumberland Road to Hamilton Towne Center Trail currently terminates approximately 210 feet south of the Hamilton Towne Center, northwest of the interchange. A portion of an 8-foot planned future trail was recently built on the southwest side (south of the interchange) when East 136th Street was reconstructed. However, this is not currently part of the parks and recreation departments’ “active” trail systems. The proposed project will modify the existing interchange into a double-crossover diamond (DCD) interchange. A 10-foot-8-inch multiuse path (146th Street from Pointe Boulevard to I-69 Trail) will be maintained on the northeast side of the bridge (which will be adjacent to EB traffic on the bridge after the traffic shift). The path narrows to 10 feet beyond the bridge. A 6-foot sidewalk (5-foot on the bridge) will be added to the southwest side (which will be adjacent to WB traffic on the bridge after the traffic shift) and connected to the Cumberland Road to Hamilton Towne Center Trail and the existing portion of the planned future trail southwest of the interchange.

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Due to the safety hazards associated with construction, the portion of the 146th Street from Pointe Boulevard to I-69 Trail within the project limits (approximately 0.54 mile at the end of the 7.5 mile long trail) will be closed during construction (1 construction season). A small portion of the Cumberland Road to Hamilton Towne Center Trail (approximately 210 feet of the 1.25 mile long trail) may also need to temporarily be closed during construction for safety purposes. There would be no permanent impacts to either of the trails.

The construction limits have been reduced to the greatest extent possible to minimize harm to these resources. The 146th Street from Pointe Boulevard to I-69 Trail will only be closed east of Bergen Boulevard and the easternmost entrance to the Town Center to allow the remaining trail (approximately 7 miles) to be utilized during construction. As previously discussed, a 6-foot sidewalk will be added to the EB side and connected to the Cumberland Road to Hamilton Towne Center Trail and the existing portion of the planned future trail southwest of the interchange as a mitigation measure.

After assessing the impacts the Project would have on the 146th Street from Pointe Boulevard to I-69 Trail and the Cumberland Road to Hamilton Towne Center Trail, INDOT believes that the proposed project, including the minimization and mitigation measures described above, would not adversely affect the activities, features, or attributes that make the trails eligible for Section 4(f) protection. The City of Fishers Parks and Recreation Department and the City of Noblesville Parks and Recreation Department were identified as the Officials with Jurisdiction (OWJs) over these resources. In a letter included in Appendix E (pages 9-11), representatives from both organizations concurred with a *de minimis* finding.

As previously stated, a public hearing will be held to offer the public an opportunity to comment on this environmental document, the Section 106 documentation, the Section 4(f) *de minimis*, and the preliminary design plans. The availability of the CE document and the hearing will be advertised in the local media. Any comments received both during the public hearing and after, within the advertised 30 day comment period, will be summarized and included in this CE. By signing this document, FHWA will be making the determination that a *de minimis* impact is appropriate for this project.

Section 6(f) Involvement

Presence

Use

Yes

No

Section 6(f) Property

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

Remarks:

Section 6(f) resources are lands that were purchased with or improved using funds from the Land and Water Conservation Fund. The fund was created through the Land and Water Conservation Fund Act of 1965 to preserve, develop, and assure accessibility to outdoor recreation resources, and to strengthen the health and vitality of the public.

No Section 6(f) resources were identified during a check of the National Park Service's Land and Water Conservation Fund website (<http://www.nps.gov/ncrc/programs/lwcf/history.html>, see Appendix F). As previously stated, all work will occur within existing INDOT ROW. Therefore, the project will not involve any properties acquired by or improved with the Land and Water Conservation Fund.

Indiana Department of Transportation

County Hamilton Route I-69 @ Campus Pkwy/Southeastern Pkwy Des. Nos. 1383489 & 1383490

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 checked="" type="checkbox"/>	<input type="checkbox"/>
If YES, then:		
Is the project in the most current MPO TIP?	<input checked="" type="checkbox"/>	<input type="checkbox"/>
Is the project exempt from conformity?	<input type="checkbox"/>	<input checked="" type="checkbox"/>
If the project is NOT exempt from conformity, then:		
Is the project in the Transportation Plan (TP)?	<input checked="" type="checkbox"/>	<input type="checkbox"/>
Is a hot spot analysis required (CO/PM)?	<input type="checkbox"/>	<input checked="" type="checkbox"/>

Level of MSAT Analysis required?

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

Remarks:

This project is located in Hamilton County. Hamilton County was previously a maintenance area for Ozone. The 1997 Ozone standard has since been revoked, and a maintenance plan is no longer required. Hamilton County is currently a maintenance area for PM_{2.5}. The projects' design concept and scope are accurately reflected in the Indianapolis Metropolitan Planning Organization's (IMPO's) Transportation Plan (TP) and Transportation Improvement Program (TIP) (see Appendix I, pages 3-5). Both conform to the State Implementation Plan (SIP). Therefore, the conformity requirements of 40 CFR 93 have been met.

Michael Baker International, LLC conducted air quality analyses for all of the INDOT 20/20 projects, including the I-69 projects, to determine if a PM_{2.5} hot spot analysis was required (see Appendix I, pages 11-23). On September 18, 2014, INDOT and FHWA hosted an Interagency Consultation Group Meeting to discuss whether any of the projects would qualify as "projects of air quality concern" for PM_{2.5} pollutants (see Appendix I, pages 24-25). It was determined that "**none** of the listed projects were to be considered with that distinction" and that "quantitative analyses were not required for each of the projects". Therefore, a hotspot analysis for PM_{2.5} is not required.

The purpose of this project is to improve overall traffic operation by reducing congestion at this interchange by modifying the interchange into a DCD interchange to address the capacity issues within the project area. This project has been determined to generate minimal air quality impacts for CAAA criteria pollutants and has not been linked with any special MSAT concerns. As such, this project will not result in changes in traffic volumes, vehicle mix, basic project locations, or any other factor that would cause an increase in MSAT impacts of the project from that of the no-build alternative.

Moreover, 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 MOVES model forecasts a combined reduction of over 80 percent in the total annual emission rate for the priority MSAT from 2010 to 2050 while vehicle-miles of travel are projected to increase by over 100 percent. This will both reduce the background level of MSAT as well as the possibility of even minor MSAT emissions from this project.

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SECTION F – NOISE

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

	No	Yes/ Date
ES Review of Noise Analysis	<input type="checkbox"/>	<input checked="" type="checkbox"/> /January 15, 2015

Remarks: This project is a Type I project. Therefore, Noise Analyses has been conducted, per INDOT's Traffic Noise Analysis Procedure (2011), and the feasibility and cost effectiveness of noise barriers (NB) were evaluated at all locations in the project area where noise impacts were identified under the future build alternative. Because design year noise levels have been predicted to approach or exceed the FHWA Noise Abatement Criteria (NAC) for Category C (hospital) and Category E (commercial) land uses, the project has been found to have traffic noise impacts at three receptor locations.

Based on the studies thus far accomplished, the State of Indiana has not identified any locations where noise abatement is likely. Noise abatement at these locations is based upon preliminary design costs and design criteria. Noise abatement has not been found to be reasonable based on the cost-effectiveness criteria. A reevaluation of the noise analysis will occur during final design. If during final design it is determined that conditions have changed such that noise abatement is feasible and reasonable, the abatement measures might be provided. The final decision on the installation of any abatement measure will be made upon the completion of the project's final design and the public involvement processes. A copy of the Noise Impact Analysis is included in Appendix J.

SECTION G – COMMUNITY IMPACTS

	Yes	No
Regional, Community & Neighborhood Factors		
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 checked="" type="checkbox"/>	<input 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 checked="" type="checkbox"/>	<input type="checkbox"/>

Remarks: No significant economic or community impacts are expected to develop as a result of this project. This project is necessary to address the capacity issues at the interchange. Therefore, this project will positively impact motorists using this facility. The project should have minimal impacts to community cohesion, the local tax base, or property values. As previously stated, traffic will be maintained at all times on Campus Parkway/Southeastern Parkway and the I-69 ramps during construction. Therefore, impacts from the MOT should not significantly affect community events, though minor travel delays are to be expected. The Klipsch Music Center has been coordinated with to help mitigate for impacts caused from the MOT. The Center must be coordinated with prior to each phase of construction.

Hamilton County and the City of Fishers have approved ADA transition plans. The multi-use trail and sidewalk associated with the 146th Street from Pointe Boulevard to I-69 Trail and the Cumberland Road to Hamilton Towne Center Trail will be ADA compliant.

Indiana Department of Transportation

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Indirect and Cumulative Impacts

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

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

Remarks:

There will be no substantial indirect or cumulative impacts as a result of this project. Although this project will add capacity to the interchange, the project occurs in a rapidly expanding area that has new commercial and residential developments underway and several future developments planned, regardless of this project. Therefore, this project will not substantially increase impacts to land use or development patterns in the area.

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

Remarks:

Traffic will be maintained at all times on Campus Parkway/Southeastern Parkway and the I-69 Ramps during construction. Therefore, impacts from the MOT should not significantly affect public facilities and services. The preferred alternative will have positive impacts on public services by addressing the congestion issues at this interchange. IU Health Saxony Hospital is located off of the southwest quadrant of the Campus Parkway/Southeastern Parkway exit, and St. Vincent Health is located off of the southeast quadrant. All schools and local emergency facilities, such as the police and fire departments, will be coordinated with prior to each phase of construction.

Environmental Justice (EJ) (Presidential EO 12898)

During the development of the project were EJ issues identified?

Yes <input type="checkbox"/>	No <input checked="" type="checkbox"/>
Does the project require an EJ analysis? <input type="checkbox"/>	No <input checked="" type="checkbox"/>

Does the project require an EJ analysis?

If YES, then:

Are any EJ populations located within the project area?

<input type="checkbox"/>	<input type="checkbox"/>
Will the project result in adversely high or disproportionate impacts to EJ populations? <input type="checkbox"/>	<input type="checkbox"/>

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

Remarks:

This project will not relocate residences or businesses, will not require additional permanent right-of-way, and will not change access to properties or access within the community. The project will therefore not have a significant negative impact on low-income populations or minority populations that are of concern for environmental justice consideration.

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

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

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

Remarks:

No relocations of people, businesses, or farms will take place as a result of this project.

Utility coordination has been initiated by Parsons and is ongoing. No underground utilities will be impacted by this project.

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County Hamilton Route I-69 @ Campus Pkwy/Southeastern Pkwy Des. Nos. 1383489 & 1383490

SECTION H – HAZARDOUS MATERIALS & REGULATED SUBSTANCES

Hazardous Materials & Regulated Substances (Mark all that apply)

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"/>

Documentation

	No	Yes/ Date
ES Review of Investigations		✓/August 18, 2014

Include a summary of findings for each investigation.

Remarks: A Red Flag Investigation (RFI) was completed on August 14, 2014 by Parsons (see Appendix H). One National Pollutant Discharge Elimination System (NPDES) Pipe Location (IH Sewer Corporation) is located within the project limits. Coordination with INDOT Utilities will occur to determine where exactly the pipe is located, and that it will not be disturbed by the proposed project. Site investigations from May through August, 2014 did not identify any items of concern within the projects limits. INDOT Environmental Services approved the RFI on August 18, 2014. Further investigation for hazardous materials is not required at this time.

SECTION I – PERMITS CHECKLIST

Permits (mark all that apply)

Likely Required

Army Corps of Engineers (404/Section10 Permit)

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

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Remarks: Permits will be required for this project (Project 2). A USACE Regional General Permit (RGP) and an IDEM Section 401 WQC will be required due to impacts to likely jurisdictional Waters of the US. As previously discussed, although Project 1 and Project 3 have been submitted under a separate environmental document, IDEM and USACE consider these projects as “single & complete” when evaluating impacts to jurisdiction Waters of the US and Waters of the State. Therefore, all three projects will be permitted together for the required Section 404 and Section 401 permits. Mitigation may be required for the cumulative impacts of all three projects. USACE and IDEM have agreed that credits from the Central Indiana Mitigation Bank could be acquired for mitigation if the projects require mitigation.

An IDEM Rule 5 permit will be required as more than one acre of land will be disturbed.

This project falls within the drainage sheds of the Exit Ten, T.J. Patterson and E.E. Bennett Regulated Drains in Hamilton County. Coordination is ongoing with the Hamilton County drainage board. Detention has been added within the project limits to mitigate for impacts caused by the project. A Hamilton County regulated drain permit will be required.

It will be the responsibility of the designer to obtain the USACE Section 404 permit and the IDEM Section 401 permit. It will be the responsibility of the design-build contractor to obtain the Rule 5 permit and any modifications required for the Section 404 and Section 401 permits. The design-build contractor must submit their design and obtain a Hamilton County regulated drain permit, using the Hamilton County Surveyor’s Office as a contact.

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.	1.	If permanent and/or temporary right-of-way increases beyond what is covered in this environmental document, INDOT Environmental Services must be contacted immediately. (INDOT)
2.	2.	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. (SHPO)
3.	3.	If any potential hazardous materials are discovered during construction, the IDEM Spill Line should be notified with details of the discovery within 24 hours. IDEM Spill Line: 1-888-233-7745. (INDOT)
4.	4.	Any work in a wetland area within INDOT’s right-of-way or borrow/waste areas is prohibited unless specifically allowed in the USACE or IDEM permit. (INDOT)
5.	5.	A USACE RGP and an IDEM Section 401 WQC will be required for this project (Project 2) due to impacts to likely jurisdictional Waters of the US. Although Project 1 and Project 3 have been submitted under a separate environmental document, IDEM and USACE consider these projects as “single & complete” when evaluating impacts to jurisdiction Waters of the US and Waters of the State. Therefore, all three projects will be permitted together for the required Section 404 and Section 401 permits. Mitigation may be required for the cumulative impacts of all three projects. USACE and IDEM have agreed that credits from the Central Indiana Mitigation Bank could be acquired for mitigation if the projects require mitigation. Mitigation must take place concurrently with or before construction begins. (INDOT)
6.	6.	It will be the responsibility of the designer to obtain the USACE Section 404 permit and the IDEM Section 401 permit. (INDOT)

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7.	It will be the responsibility of the design-build contractor to obtain the Rule 5 permit and any modifications required for the Section 404 and Section 401 permits. The design-build contractor must submit their design and obtain a Hamilton County regulated drain permit, using the Hamilton County Surveyor's Office as a contact. (INDOT)
8.	Implement temporary erosion and sediment control methods within areas of disturbed soil. All disturbed soil areas upon project completion must be vegetated following INDOT's standard specifications. (USFWS & IDNR)
9.	The Noblesville Airport is located 8,000 feet northwest of the project. If any permanent structures or equipment utilized for the project penetrates the 100:1 slope from the airport, FAA Form 7460 (Notice of Proposed construction or alteration) must be filed. For assistance contact Marcus Dial, INDOT Office of Aviation, 317-232-1494. (INDOT Aviation)
10.	Appropriate structures and techniques must be utilized both during the construction phase, and after completion of the projects, to minimize the impacts associated with storm water runoff. (IDEM)
11.	Reasonable precautions must be taken to minimize fugitive dust emissions from construction and demolition activities. For example, wetting the area with water, constructing wind barriers, or treating dusty areas with chemical stabilizers (such as calcium chloride or several other commercial products). Dirt tracked onto paved roads from unpaved areas must be minimized. (IDEM)
12.	The use of cutback asphalt, or asphalt emulsion containing more than seven percent (7%) oil distillate, is prohibited during the months April through October. See 326 IAC 8-5-2 , Asphalt Paving Rule (http://www.ai.org/legislative/iac/T03260/A00080.PDF). (IDEM)
13.	Traffic must be maintained at all times on Campus Parkway/Southeastern Parkway and the I-69 Ramps during construction. (INDOT)
14.	Coordination must occur with the school corporation, emergency services and the Klipsch Music Center prior to the implementation of each phase of the MOT. (INDOT)
For Further Consideration:	
1.	Do not clear trees or understory vegetation outside the construction zone boundaries. (USFWS)
2.	IDNR recommends a mitigation plan be developed if habitat impacts will occur. IDNR's Floodway Habitat Mitigation guidelines (and plant lists) can be found on line at: http://www.in.gov/legislative/iac/20140806-IR-312140295NRA.xml.pdf . Impacts to non-wetland forest <i>over</i> one (1) acre should be mitigated at a minimum 2:1 ratio. If less than one acre of non-wetland forest is <i>removed</i> in a rural setting, replacement should be at a 1: 1 ratio based on area. Impacts to non-wetland forest under one (1) acre in an urban setting should be mitigated by planting <i>five</i> trees, at least 2 inches in diameter-at-breast height (dbh), for each tree which is <i>removed</i> that is 10 inches dbh or greater (5:1 mitigation based on the number of large trees). (IDNR)
3.	Do not cut any trees suitable for Indiana bat roosting (greater than 3 inches dbh, living or dead, with loose hanging bark) from April 1 through September 30. (IDNR)
4.	Minimize and contain within the projects limits inchannel disturbance and the clearing of trees and brush. (IDNR)
5.	Seed and protect all disturbed streambanks and slopes that are 3:1 or steeper with erosion control blankets (follow manufacturer's recommendations for selection and installation); seed and apply mulch on all other disturbed areas. (IDNR)

This is page 27 of 28 Project name: I-69 Interstate Expansion; Project 2: Interchange Modification at Exit 210 Date: January 28, 2015

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County Hamilton Route I-69 @ Campus Pkwy/Southeastern Pkwy Des. Nos. 1383489 & 1383490

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 was initiated on September 9, 2014 with applicable federal, state, and local agencies (see Appendix C, pages 1-5). Review comments from those agencies that returned a reply have been incorporated into this study, as appropriate. The resource agencies and dates of their responses are listed below.

Agency	Response	Appendix C Page #s
Indiana Department of Natural Resources; Division of Fish and Wildlife	September 10, 2014 (E-mail) October 1, 2014 (Response Letter) October 28, 2014 (Response Letter)	6 7 8-10
U.S. Fish and Wildlife Service	September 16, 2014 (Response Letter)	11-12
Natural Resources Conservation Service	September 24, 2014 (Response Letter) NRCS-CPA-106 Form	13 14
Indiana Geological Survey	October 20, 2014 (Questionnaire)	15
Indiana Department of Environmental Management Roadway Construction Letter	September 9, 2014 (Automated)	16-25
Indiana Department of Transportation Office of Aviation	September 10, 2014	26
Office of Public Involvement	September 11, 2014	27
Hamilton County Surveyor	November 18, 2014	28
City of Fishers Parks and Recreation	Responses Included in Appendix E: Section 4(f)	
City of Noblesville Parks and Recreation	Responses Included in Appendix E: Section 4(f)	
U.S. Dept. of Housing and Urban Development	No Response	
U.S. Army Corps of Engineers	No Response	
National Park Service	No Response	
Hamilton County Commissioners	No Response	
Hamilton County Council Members	No Response	
Hamilton County Drainage Board	No Response	
Hamilton County Engineer	No Response	
Indianapolis MPO	No Response	
Fishers Town Council	No Response	

Appendix A: Categorical Exclusion Level Thresholds

Categorical Exclusion Level Thresholds

	Level 1	Level 2	Level 3	Level 4
Relocations	None	≤ 2	> 2	> 10
Right-of-Way¹	< 0.5 acre	< 10 acres	≥ 10 acres	≥ 10 acres
Length of Added Through Lane	None	None	Any	Any
Permanent Traffic Pattern Alteration	None	None	Yes	Yes
New Alignment	None	None	< 1 mile	≥ 1 mile ²
Wetlands	< 0.1 acre	< 1 acre	< 1 acre	≥ 1 acre
Stream Impacts*	≤ 300 linear feet of stream impacts, no work beyond 75 feet from pavement	> 300 linear feet impacts, or work beyond 75 feet from pavement	N/A	N/A
Section 4(f)	None	None	None	Any impacts
Section 6(f)	None	None	Any impacts	Any impacts
Section 106*	"No Historic Properties Affected" or falls within guidelines of Minor Projects PA	"No Adverse Effect" or "Adverse Effect"	N/A	If ACHP involved Or Historic Bridge Involvement ⁷
Noise Analysis Required	No	No	Yes ³	Yes ³
Threatened/Endangered Species	"Not likely to Adversely Affect", or Falls within Guidelines of USFWS 9/8/93 Programmatic Response	N/A	N/A	"Likely to Adversely Affect" ⁴
Sole Source Aquifer Groundwater Assessment	Detailed Assessment Not Required	Detailed Assessment Not Required	Detailed Assessment Not Required	Detailed Assessment Required
Approval Level • ESM ⁵ • ES ⁶ • FHWA	Yes	Yes	Yes Yes	Yes Yes Yes

*These thresholds have changed from the March 2011 Manual.

¹Permanent and/or temporary right-of-way.

²If the length of the new alignment is equal to or greater than one mile, contact the FHWA's Air Quality/Environmental Specialist.

³In accordance with INDOT's Noise Policy.

⁴If the project is considered Likely to Adversely Affect Threatened and/or Endangered Species, INDOT and the FHWA should be consulted to determine whether a higher class of document is warranted.

⁵Environmental Scoping Manager

⁶Environmental Services Division

⁷Any involvement with a bridge processed under the Historic Bridge Programmatic Agreement

Appendix B: Graphics

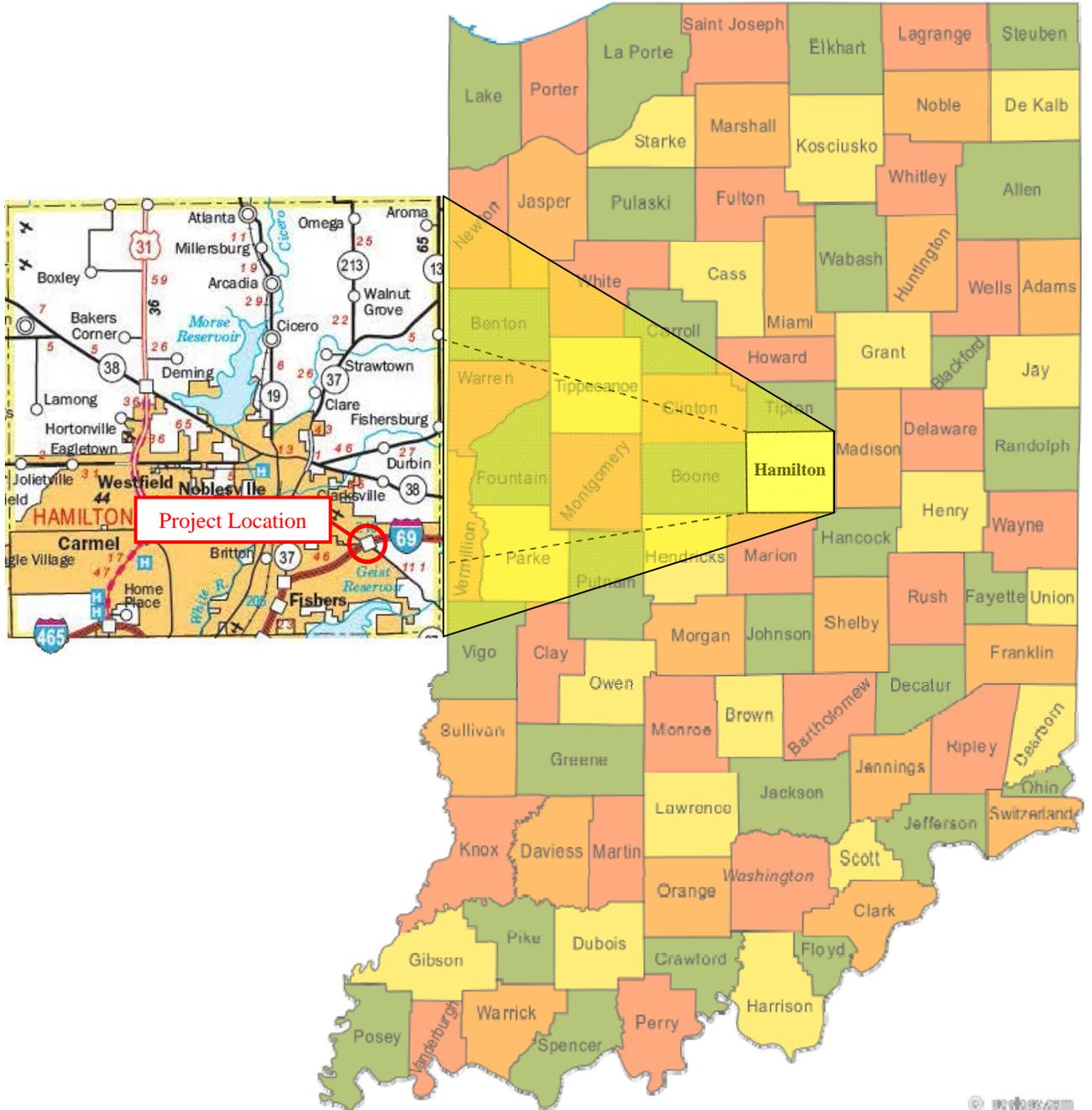
	<u>Page(s)</u>
Project Location.....	1-2
Aerial Maps.....	3
Topography.....	4
Soils.....	5
Photograph Location Map.....	6
Project Area Photographs.....	7-16

Des. No. 1383489

I-69 Interstate Expansion

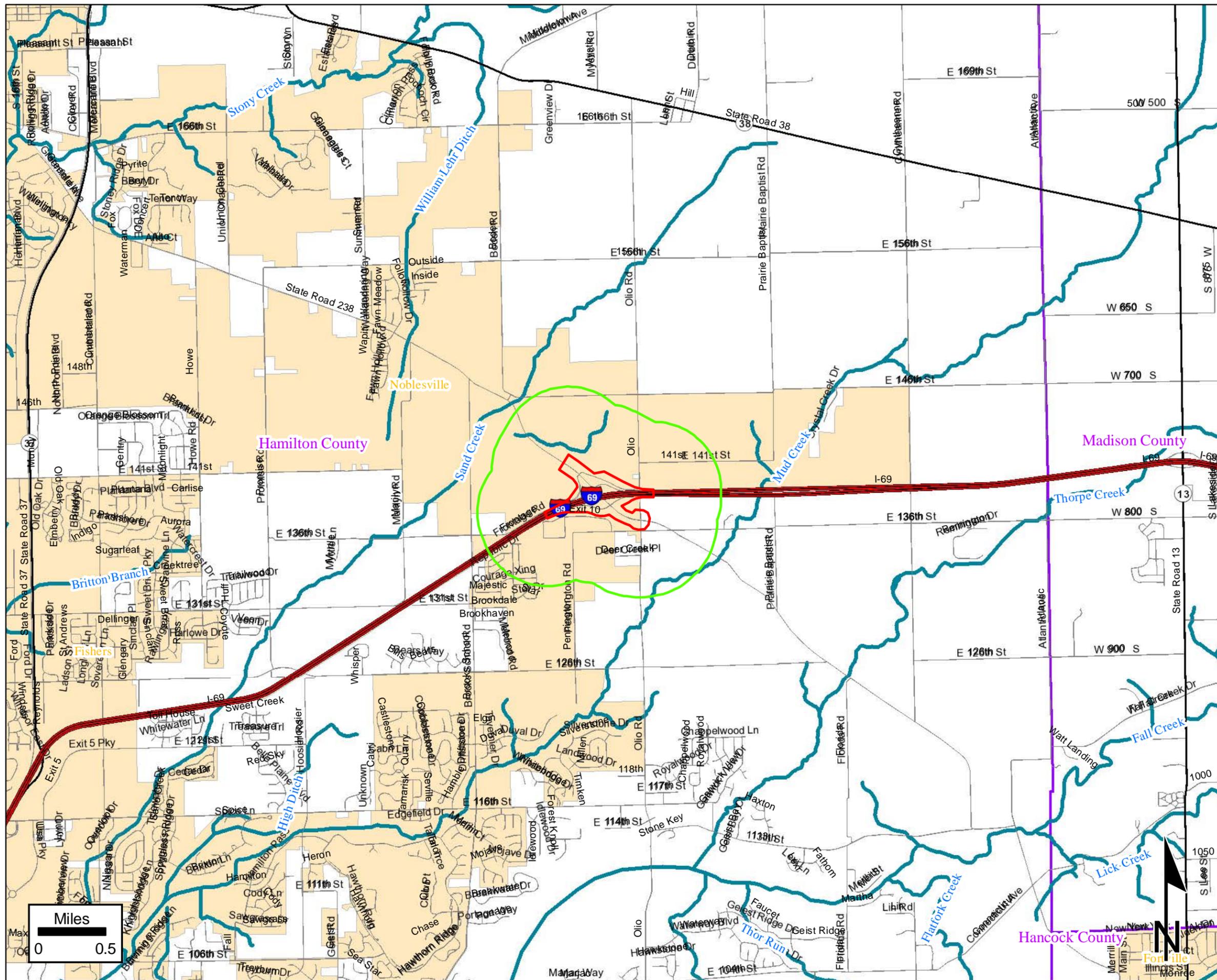
Project 2: Interchange Modification at Exit 210 (Campus Parkway)

Hamilton County; Project Location Map #1



Des. No. 1383489

I-69 Interstate Expansion
 Project 2: Interchange Modification at Exit 210
 (Campus Parkway); Hamilton County



Project Location Map #2

- Project Area
- Half Mile Radius
- Streams (IDNR*)
- Incorporated Areas
- County Boundary
- Interstate
- State
- US
- Local

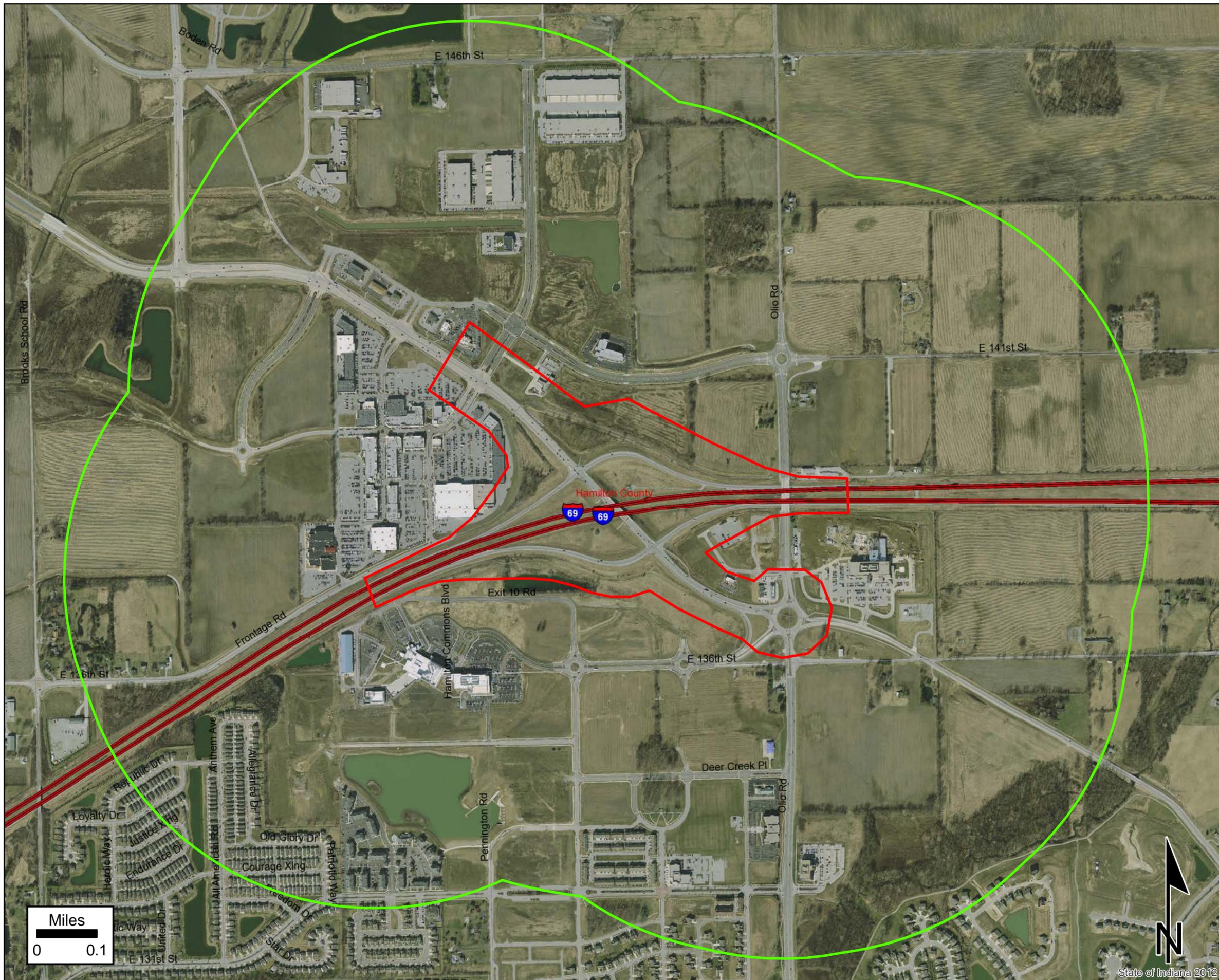
PARSONS

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

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

Des. No. 1383489

I-69 Interstate Expansion
Project 2: Interchange Modification at Exit 210
(Campus Parkway); Hamilton County



2012 Orthos Aerial Photography

-  Project Area
-  Half Mile Radius
-  Interstate
-  State
-  US
-  Local

Orthos - 1 meter - 2012

-  Red: Band_1
-  Green: Band_2
-  Blue: Band_3

PARSONS

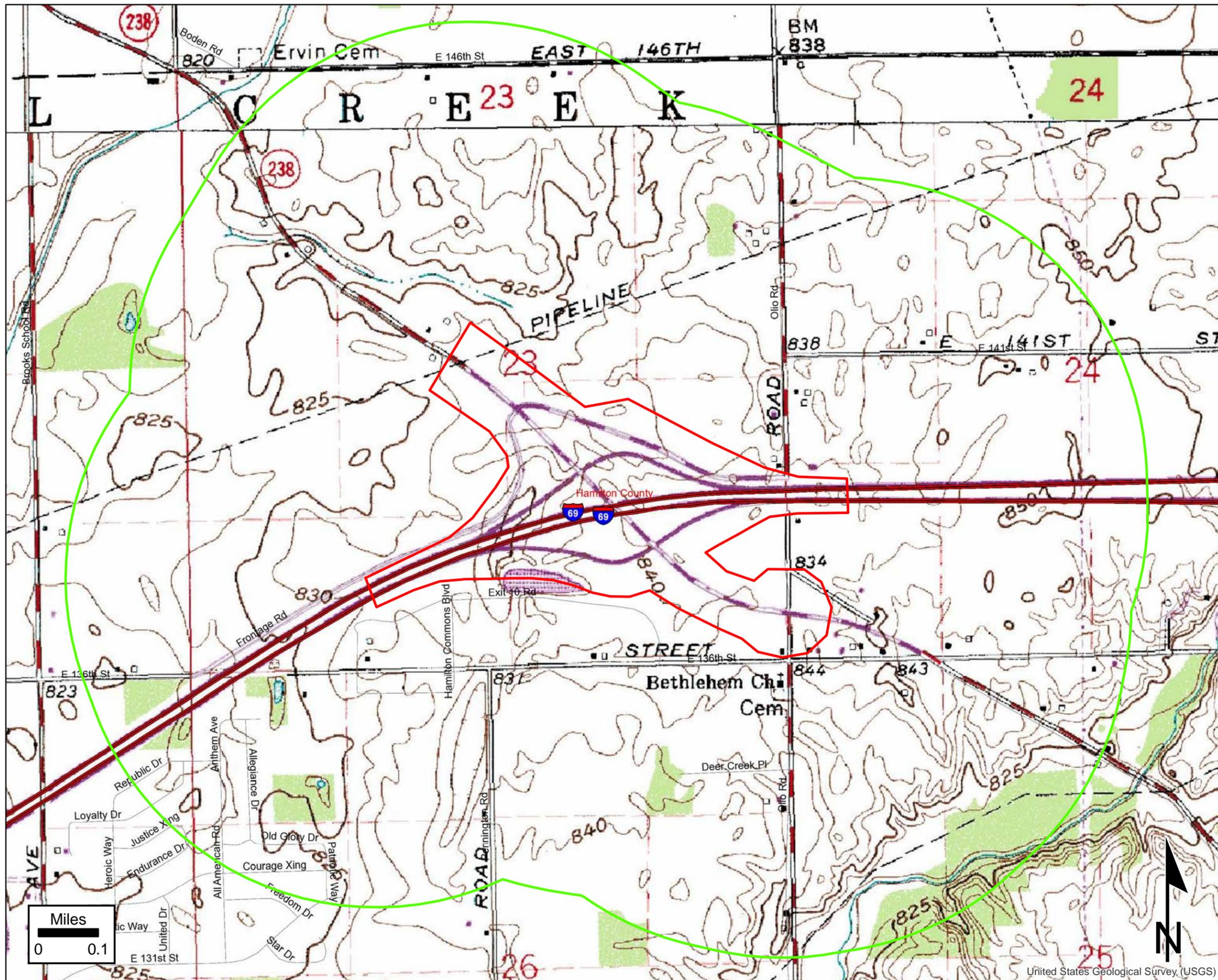
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Orthophotography - Obtained from Indiana Map Framework Data (www.indianamap.org)

Map Projection: UTM Zone 16 N
Map Datum: NAD83



Des. No. 1383489

I-69 Interstate Expansion
 Project 2: Interchange Modification at Exit 210
 (Campus Parkway); Hamilton County

USGS 7.5" Topographic Map

- Project Area
- Half Mile Radius

USGS Topography Map

- Red: Band_1
- Green: Band_2
- Blue: Band_3

PARSONS

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

Sources:

Non Orthophotography

Data - Obtained from the State of Indiana Geographical Information Office Library

Orthophotography - Obtained from Indiana Map Framework Data

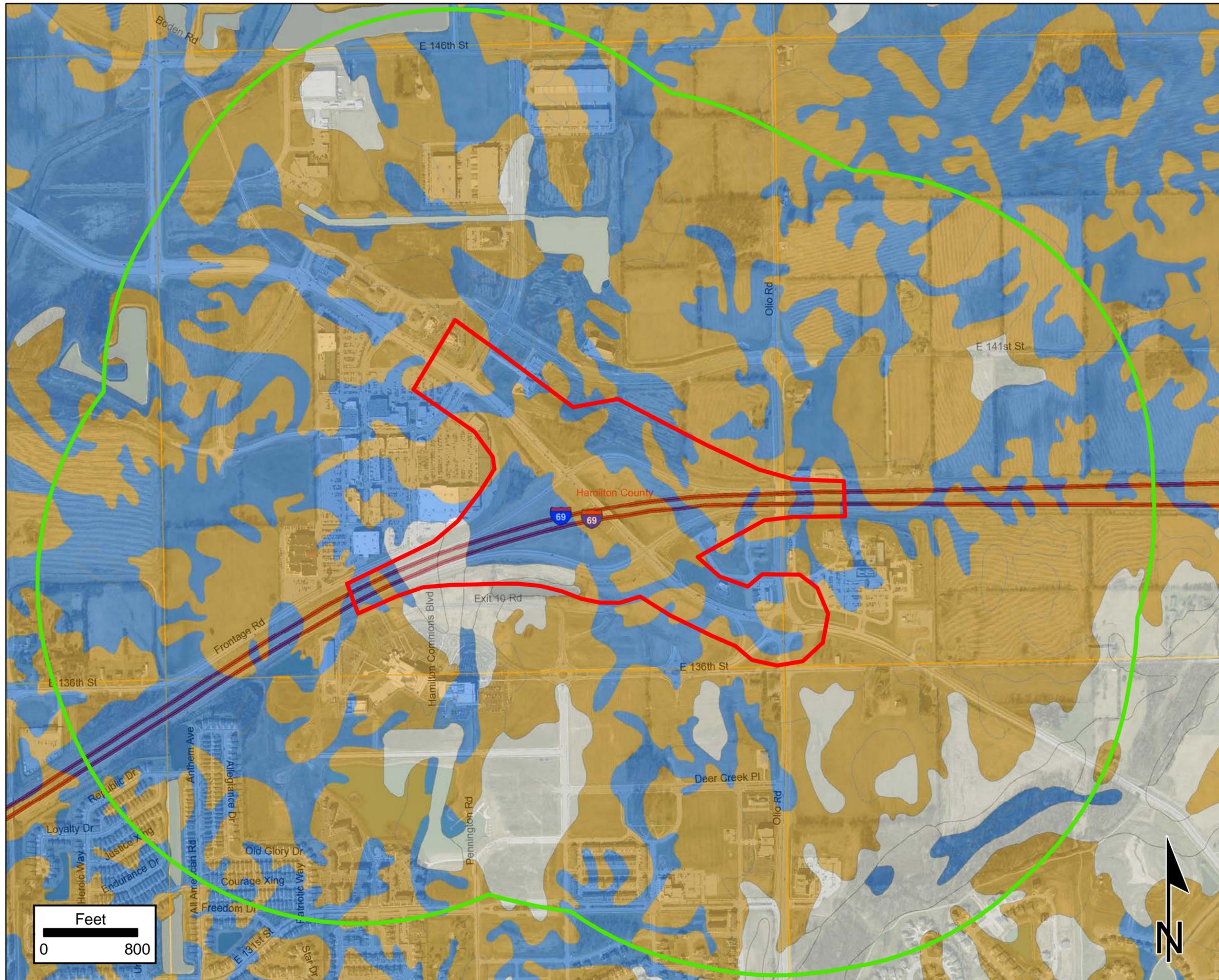
(www.indianamap.org)

Map Projection: UTM Zone 16 N

Map Datum: NAD83

Des. No. 1383489

I-69 Interstate Expansion
Project 2: Interchange Modification at Exit 210
(Campus Parkway); Hamilton County



NRCS Soils

- Project Area
- Half Mile Radius

SSURGO Soil Units

Hydric Classifications

- Hydric (100%)
- Predominantly Hydric (66-99%)
- Partially Hydric (33-65%)
- Predominantly Non-hydric (1-32%)
- Not Hydric (0%)

Interstate

State Route

US Route

Local Road

PARSONS

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

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



Des. No. 1383489
I-69 Interchange Modification at Exit 210 (Campus Parkway); Hamilton County
Photograph Location Map



Photo 1: View of I-69 and its median near the project terminus (facing southwest; July 10, 2014).



Photo 2: View of the roadside drainage along I-69 (facing northeast; June 18, 2014). Note the wetland entirely contained within the roadside drainage at this location.



Photo 3: View of I-69 and its median near the project terminus (facing northeast; July 10, 2014).



Photo 4: View of roadside drainage along I-69 (facing northeast; June 17, 2014).

Des. No. 1383489

I-69 Interchange Modification at Exit 210 (Campus Parkway); Hamilton County Photograph Location Map



Photo 5: View of the roadside drainage along I-69 (facing southwest; June 18, 2014). Note the wetland entirely contained within the roadside drainage at this location.



Photo 6: View of an emergent wetland adjacent to the I-69 eastbound off-ramp to Campus Parkway (facing south; June 17, 2014).



Photo 7: View of INDOT right-of-way between a forested wetland and Hamilton Town Center (facing southwest; June 18, 2014).



Photo 8: View inside of the forested wetland near the Campus Parkway Interchange (facing south; June 18, 2014).

Des. No. 1383489

I-69 Interchange Modification at Exit 210 (Campus Parkway); Hamilton County Photograph Location Map



Photo 9: View of the northwest quadrant of the Campus Parkway Interchange (facing northeast; June 19, 2014). Note the wetland entirely contained within roadside drainage at this location.



Photo 10: View of I-69 and its median near the Campus Parkway Interchange (facing northeast; July 10, 2014).

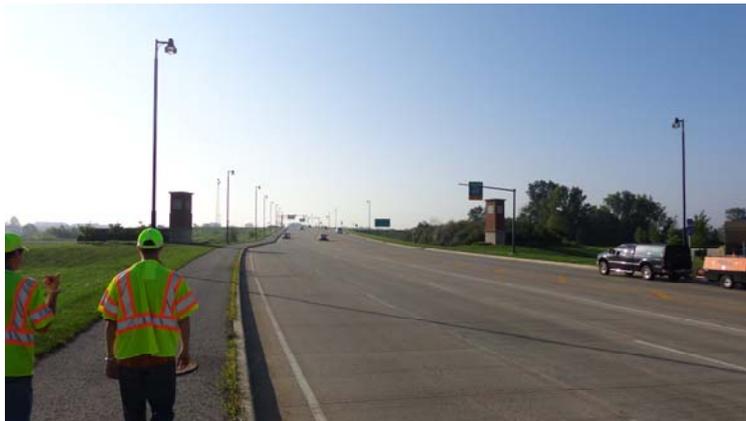


Photo 11: View of Campus Parkway (facing southeast; September 4, 2014).



Photo 12: View of roadside drainage along Campus Parkway (facing northwest; June 18, 2014).

Des. No. 1383489

I-69 Interchange Modification at Exit 210 (Campus Parkway); Hamilton County
Photograph Location Map



Photo 13: View of a forested wetland near the Campus Parkway Interchange (facing west; June 18, 2014).



Photo 14: View of the Campus Parkway Interchange (facing northeast; July 10, 2014).



Photo 15: View of the southwest quadrant of the Campus Parkway Interchange (facing northeast; June 19, 2014).



Photo 16: View of the southwest quadrant of the Campus Parkway Interchange (facing northwest; June 19, 2014).

Des. No. 1383489

I-69 Interchange Modification at Exit 210 (Campus Parkway); Hamilton County Photograph Location Map



Photo 17: View of roadside drainage along the I-69 northbound off-ramp to Campus Parkway (facing northeast; June 17, 2014). Note the wetland entirely contained within the roadside drainage.



Photo 19: View of Campus Parkway Bridge over I-69 (facing northwest; September 4, 2014).

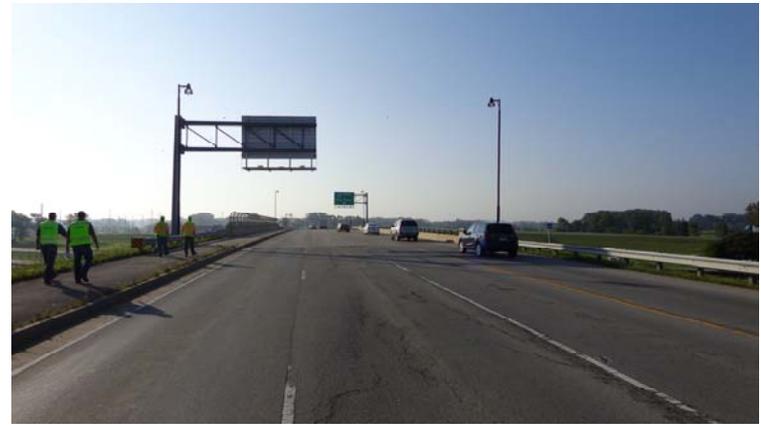


Photo 18: View of the Campus Parkway Bridge over I-69 (facing southeast; September 4, 2014)



Photo 20: View of Campus Parkway (facing southeast; September 4, 2014).

I-69 Interchange Modification at Exit 210 (Campus Parkway); Hamilton County
Photograph Location Map



Photo 21: View along INDOT right-of-way between the emergent wetland and Famous Dave's (facing northwest; June 23, 2014).



Photo 22: View of an emergent wetland located near the Campus Parkway Interchange (facing southwest; June 23, 2014).



Photo 23: View of the northeast quadrant of the Campus Parkway Interchange (facing south; June 23, 2014). Note the wetland entirely contained within the roadside drainage at this location.



Photo 24: View of Campus Parkway (facing southwest; June 19, 2014).

Des. No. 1383489

I-69 Interchange Modification at Exit 210 (Campus Parkway); Hamilton County Photograph Location Map



Photo 25: View of an emergent wetland located near the Campus Parkway Interchange (facing northwest; June 23, 2014).



Photo 26: View of the northeast quadrant of the Campus Parkway Interchange (facing southeast; June 23, 2014). Note the wetland located on the hill slope at this location.



Photo 27: View of I-69 and its median near the Campus Parkway Interchange (facing southwest; July 10, 2014).



Photo 28: View of I-69 and its median (facing east; July 10, 2014). Note the Olio Road Overpass in the background.

Des. No. 1383489

I-69 Interchange Modification at Exit 210 (Campus Parkway); Hamilton County Photograph Location Map



Photo 29: View of the southeast quadrant of the Campus Parkway Interchange (facing west; June 19, 2014).



Photo 30: View of the roadside drainage along the I-69 eastbound on-ramp (facing southwest; June 19, 2014). Note the wetland entirely contained within roadside drainage at this location.



Photo 31: View along the I-69 westbound off-ramp onto Campus Parkway (facing northwest; June 23, 2014). Note the wetland entirely contained within roadside drainage at this location.



Photo 32: View along the I-69 westbound off-ramp onto Campus Parkway (facing southeast; June 23, 2014). Note the Olio Road Overpass in the background.



Photo 33: View of roadside drainage along the I-69 eastbound on-ramp (facing east; June 19, 2014). Note the wetland entirely contained within roadside drainage at this location.



Photo 34: View of the Olio Road Overpass (facing east; July 10, 2014).



Photo 35: View of I-69 and its median (facing east; July 10, 2014).



Photo 36: View of the roadside drainage along I-69 near the project terminus (facing west; June 23, 2014). Note the Olio Road Overpass in the background.

Des. No. 1383489

I-69 Interchange Modification at Exit 210 (Campus Parkway); Hamilton County Photograph Location Map



Photo 37: View of roadside drainage along I-69 near the project terminus (facing west; June 19, 2014). Note the Olio Road Overpass in the background.



Photo 38: View of I-69 and its median near the project terminus (facing west; July 10, 2014). Note the Olio Road Overpass in the background.

Appendix C: Early Coordination

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September 9, 2014

Rick Marquis
Federal Highway Administration
Federal Office Building, Rm 254
575 North Pennsylvania Street
Indianapolis, IN 46204

Re: Des. Nos.: 1383489
Description: I-69 Interstate Expansion
Project 2: Interchange Modification at Exit 210 (Campus Parkway)
Hamilton County, Indiana

Dear Mr. Marquis,

The Indiana Department of Transportation (INDOT) is planning an I-69 Interstate Expansion from 106th Street in Fishers to Exit 226 (SR 9 & 109 in Anderson), in Hamilton and Madison Counties. This expansion has been broken into multiple projects with independent utility and logical termini. Environmental analysis is being conducted for Project 2 (Des. No. 1383489), an interchange modification project at Exit 210 (Campus Parkway). This letter is part of the early coordination phase of the environmental review process. We are requesting comments from your area of expertise regarding any possible environmental effects associated with this project. Please use the above designation number and description in your reply. We will incorporate your comments into a study of the project's environmental impacts.

Purpose and Need: The need for this project stems from traffic congestion issues that currently exist at this interchange. The interchange is experiencing an insufficient Level of Service (LOS) during peak traffic hours. LOS is a rating for traffic congestion, with LOS A indicating little to no delay and LOS F indicating serious congestion and delay. An INDOT study conducted in the fall of 2012 noted, "Southbound [SB] I-69 experiences congestion and reduction of travel speed during the AM peak hours, especially as traffic approaches Exit 205. Northbound [NB] I-69 also experiences congestion and long queues at Exit 210's NB exit during the PM peak hours, especially during events at the Klipsch Music Center (though traffic data collected does not take into account such events)."

Traffic Data was recently analyzed using Highway Capacity Manual methodology in Highway Capacity Software (HCS). The northbound ramp is currently operating at an LOS D, while the southbound ramp is operating at an LOS C. Both ramp termini and are predicted to operate at an LOS F in the design year, 2035. The results show unacceptable LOS for both existing and future traffic for the interchange.

The purpose of this project is to improve overall traffic operation by reducing congestion at this interchange.

Existing Conditions: Improvements have recently been completed on Campus Parkway/Southeastern Parkway on both sides of the interchange. Prior to that work, the cross road was a simple, rural 2-lane road and was referred to as SR 238 (Greenfield Ave locally) where it connected Noblesville and Fortville. Now the SR 238 designation has been relinquished. The City of Noblesville refers to the road as Campus Parkway while the Town of Fishers refers to it as Southeastern Parkway.

The current interchange type is a diamond interchange with signalized ramp terminals. The bridge has one through-lane and one left-turn lane going eastbound, and two through-lanes and one left-turn lane going westbound.

Proposed Project: An interchange modification project is proposed for the interchange to improve the LOS. Improvements to the existing interchange, such as added auxiliary lanes, will be considered. Transportation System Management (TSM) improvements, such as ramp metering and signal coordination, will also be considered. In addition, modification to the interchange type will be considered. While all interchange types will be considered as possible improvements, the limited right-of-way in the vicinity of the interchange will make the following interchange types most likely to be selected: partial-cloverleaf interchange, tight diamond with roundabouts at the ramp termini, single point urban interchange, and double-crossover diamond interchange. The primary factors in determining the modifications selected will be construction costs, LOS rating, traffic safety, land acquisition costs, environmental impacts and cultural resources impacts.

Right-of-Way (ROW): New permanent and/or temporary ROW may be required for this project depending upon the type of improvements selected for this undertaking.

Environmental Concerns: One U.S. Geological Survey (USGS) blue-lined stream (an unnamed tributary to Sand Creek) lies approximately 0.06 mile north of the project area, and will not be impacted by the proposed project. Information from the National Wetland Inventory (NWI) map shows ten NWI-wetland polygons within a half-mile radius of the project area, with two occurring within the project area. Three lakes lie within to the project limits. However, no lakes are expected to be impacted by the proposed project. Two floodplains lie within a half-mile radius of the project area, but well outside of the project limits. Therefore, they will not be impacted by the proposed project. See the attached Water Resources Map, Attachment A-5, for the NWI and FEMA layers. According to the Soil Survey Geographic (SSURGO) Database for Hamilton County, Indiana, majority of the project area lies within nationally listed hydric soils (see NRCS Soils Map, Attachment A-8).

The proposed project is located along an urbanized section of I-69, with land use within vicinity of the project consisting primarily of commercial properties. One religious facility and two hospitals lie within a half-mile radius of the projects, but outside of the projects limits. Two open trail segments (146th St from Pointe Blvd to I-69 and Cumberland Rd to Hamilton Towne Center) and two planned segments (I-69 South to Mud Creek and a segment of Olio Road - SR 238 south to Bee Camp Creek) lie within the project area and may be impacted by the proposed project.

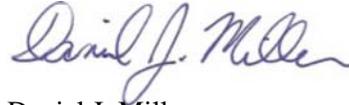
Waters investigations, including wetland delineations, were conducted from May through July, 2014 by Parsons environmental staff to evaluate possible environmental impacts within the project area. Coordination is ongoing with the U.S. Army Corps of Engineers and the Indiana Department of Environmental Management (IDEM). A waters report will be completed, and all applicable permits will be applied for and acquired before construction can begin. See Attachment B for Project Area Photographs.

This project is a Type I project, and therefore Noise Analysis is currently being conducted to determine traffic noise levels, potential noise impacts, and the feasibility of traffic noise mitigation. If any facilities are determined to have traffic noise impacts, noise abatement measures will be considered and appropriate measures constructed to mitigate for these impacts. An Air Quality Analysis is currently being conducted as well. The results of this analysis will be included in the environmental document prepared for this project.

Parsons will continue to work in coordination with the INDOT Ecology and Waterway Permitting Office to determine the presence and impacts to ecological resources. The project is currently being investigated for archaeological and historic resources for compliance with Section 106 regulations. The results of these investigations will be forwarded to the State Historic Preservation Officer for review and concurrence.

Please respond with your comments on any environmental impacts associated with this project. **Should we not receive your response within thirty (30) calendar days from the date of this letter, it will be assumed that your agency feels that there will be no adverse effects incurred as a result of the proposed project.** However, should you find that an extension to the response time is necessary, a reasonable amount may be granted upon request. If you have any questions regarding this matter, please contact me at (317) 616-4663 or via e-mail at Daniel.J.Miller@Parsons.com. Thank you in advance for your input.

Sincerely,



Daniel J. Miller
Senior Environmental Planner

Attachments: Attachment A: Graphics
Attachment B: Project Area Photographs

See Appendix B for the Graphics and
Project Area Photographs

The following agencies received Early Coordination Letters:

Indiana Department of Transportation
Office of Aviation
Room N955, IGC North
100 North Senate Avenue
Indianapolis, IN 46204

Field Supervisor
U.S. Fish & Wildlife Service
Bloomington Field Office
620 South Walker St.
Bloomington, IN 47403

Indiana Department of Transportation
Manager, Public Involvement
Room N642, IGC North
100 North Senate Avenue
Indianapolis, IN 46204

Federal Highway Administration
Room 254, Federal Office Building
575 North Pennsylvania Street
Indianapolis, IN 46204

U.S. Army Corps of Engineers
Indianapolis Regulatory Office
8902 Otis Avenue, Suite S106B
Indianapolis, IN 46216

Indiana Department of Environmental Management
100 N. Senate Avenue
Indianapolis, IN 46204
(Electronic Coordination)

Field Environmental Officer
Chicago Regional Office
US Department of Housing and Urban Development
Metcalf Federal Building
77 West Jackson Boulevard, Room 2401
Chicago, IL 60604

Hamilton County Commissioners
1 Hamilton County Sq.
Suite 157
Noblesville, IN 46060

Regional Environmental Coordinator
Midwest Regional Office
National Park Service
601 Riverfront Drive
Omaha, NE 68102

Hamilton County Council Members
1 Hamilton County Sq.
Suite 157
Noblesville, IN 46060

State Conservationist
Natural Resources Conservation Service
6013 Lakeside Blvd.
Indianapolis, IN 46278

Hamilton County Drainage Board
1 Hamilton County Sq.
Suite 188
Noblesville, IN 46060

Environmental Coordinator
Indiana Department of Natural Resources
Division of Fish and Wildlife
Room W264, IGC South
402 West Washington Street
Indianapolis, IN 46204-2641

Hamilton County Engineer
1700 S 10th St
Noblesville, IN 46060

Indiana Geological Survey
611 North Walnut Grove
Bloomington, IN 47405
(Electronic Coordination)

Hamilton County Surveyor
1 Hamilton County Sq.
Suite 188
Noblesville, IN 46060

Fishers Town Council
1 Municipal Drive
Fishers, IN 46038

Indianapolis MPO
200 East Washington Street
Suite 1922
Indianapolis, IN 46204

Town of Noblesville
Parks and Recreation
701 Cicero Road
Noblesville, IN 46060

Town of Fishers
Parks and Recreation
11565 Brooks School Road
Fishers, IN 46037

Miller, Daniel J

From: Hippensteel, Beth [BHhippensteel@dnr.IN.gov]
Sent: Wednesday, September 10, 2014 8:23 AM
To: Miller, Daniel J
Subject: ER-17827, Hamilton and Madison Counties

Follow Up Flag: Follow up
Flag Status: Flagged

Dear Mr. Miller:

This is a standard informational email in response to your request for an Environmental Review, which was received on September 9, 2014 for the following project:

I-69 Interstate Expansion: Project 2 - Interchange Modification at Exit 210 (Campus Parkway); Des. #1383489

We would like you to know that the review is in process and a formal response will be forthcoming. Please refer to the ER number in the subject line on all future correspondence regarding this project.

Please note that you can submit future requests electronically to the following email address:

environmentalreview@dnr.in.gov.

If you have any questions or comments, please contact Christie Stanifer, Environmental Coordinator, at 317-232-8163 or cstanifer@dnr.in.gov, or to check on the status of a review, please contact Beth Hippensteel at: bhippensteel@dnr.in.gov, or at 317-234-1092.

Christie Stanifer
Environmental Coordinator
Indiana Department of Natural Resources
Division of Fish and Wildlife
402 West Washington St, Room W273
Indianapolis, IN 46204-2781
(317) 232-8163
Fax: (317) 232-8150

THIS IS NOT A PERMIT

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

DNR #: ER-17827

Request Received: September 9, 2014

Requestor: Parsons
Daniel J Miller
101 West Ohio Street, Suite 2121
Indianapolis, IN 46204

Project: I-69 Interstate Expansion: Project 2 - Interchange Modification at Exit 210 (Campus Parkway); Des. #1383489

County/Site info: Hamilton - Madison

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

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

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

Natural Heritage Database: The Natural Heritage Program's data have been checked. 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.

Fish & Wildlife Comments: We were not able to adequately assess impacts to fish, wildlife, and botanical resources resulting from the project with the information provided. It appears that the majority of impacts will occur in existing median areas and at existing bridge and crossing structures. No site specific impacts were detailed in the information submitted for review. Impacts of concern to the Division of Fish and Wildlife include impacts to forested areas, wetlands, streams, and rivers. The information provided indicated that these resources were still being assessed. As project plans develop, we recommend submitting more information for further review.

Contact Staff: Christie L. Stanifer, Environ. Coordinator, Fish & Wildlife
Our agency appreciates this opportunity to be of service. Please contact the above staff member at (317) 232-4080 if we can be of further assistance.



Date: October 1, 2014

Christie L. Stanifer
Environ. Coordinator
Division of Fish and Wildlife

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

DNR #: ER-17827-1

Request Received: October 24, 2014

Requestor: Parsons
Daniel J Miller
101 West Ohio Street, Suite 2121
Indianapolis, IN 46204

Project: I-69 Interstate Expansion: Project 2 - Interchange Modification at Exit 210 (Campus Parkway); Des. #1383489; additional and revised project plans

County/Site info: Hamilton - Madison

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

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

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

Natural Heritage Database: The Natural Heritage Program's data have been checked. 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.

Fish & Wildlife Comments: Avoid and minimize impacts to fish, wildlife, and botanical resources to the greatest extent possible, and compensate for impacts. The following are recommendations that address potential impacts identified in the proposed project area:

1) Pipe lining:

Lining the existing pipes should result in fewer impacts compared to a complete replacement. However, upon completion of the project, the liner could produce more negative in-stream impacts compared to culvert replacement. Installing a culvert liner generally reduces the size of the culvert, which can increase flow velocity, thereby causing negative impacts on fish and wildlife passage, as well as increased turbidity and potential scour in the surrounding area. Liners can also create a perched culvert in which the inlet or outlet are placed above the streambed elevation, causing a barrier to fish and wildlife species using the culvert. Installing a liner is a practical option when there is very little habitat surrounding the culvert and use by fish and wildlife is expected to be minimal.

Installing a new culvert (preferably 3-sided) can provide better passage for fish and wildlife even though initial impacts to the stream bed, banks, and riparian habitat could occur. These disturbances are expected to be temporary. The culvert alternative will likely help reduce debris blockage, provide better fish and wildlife passage, maintain stream substrate continuity, and reduce or maintain flow velocities.

The culvert, either with a liner or a replacement, should be allowed to accumulate some amount of natural bed substrate in order to maintain or improve the biological integrity of the stream.

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

2) Bank Stabilization and Wildlife Passage:

The new, replacement, or rehabbed structure, and any bank stabilization under the structure, should not create conditions that are less favorable for wildlife passage under the structure compared to current conditions. A level area of natural ground under the structure is ideal for wildlife passage. If channel clearing will result in a flat bench area above the normal water level under the structure, this area should allow wildlife passage and should remain free of riprap and other similar materials that can impair wildlife passage. If hard armoring is needed, wildlife passage can be facilitated by using a smooth-surfaced armoring material instead of riprap, such as articulated concrete block mats, fabric-formed concrete mats, or other similar smooth-surfaced material.

Minimize the use of riprap and use alternative erosion protection materials whenever possible. Where riprap must be used, we recommend placing only enough riprap to provide stream bank toe protection, such as from the toe of the bank up to the ordinary high water mark (ohwm). From the ohwm to the top of the bank, we recommend using bioengineered bank stabilization methods instead of riprap. This can provide equal or better erosion control protection than riprap. This will allow a natural, vegetated stream bank to develop and will allow wildlife passage along the creek's banks and riparian corridor. Information about bioengineering techniques can be found at <http://www.in.gov/legislative/iac/20120404-IR-312120154NRA.xml.pdf>. Also, the following is a USDA/NRCS document that outlines many different bioengineering techniques for streambank stabilization: <http://directives.sc.egov.usda.gov/17553.wba>.

3) Riparian Habitat:

We recommend a mitigation plan be developed if habitat impacts will occur. The DNR's Floodway Habitat Mitigation guidelines (and plant lists) can be found online at: <http://www.in.gov/legislative/iac/20140806-IR-312140295NRA.xml.pdf>.

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

4) Wetland Habitat:

Due to the presence or potential presence of wetlands on site, we recommend contacting and coordinating with the Indiana Department of Environmental Management (IDEM) 401 program and also the US Army Corps of Engineers (USACE) 404 program. Impacts to wetlands should be mitigated at the appropriate ratio according to the 1991 INDOT/IDNR/USFWS Memorandum of Understanding.

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

1. Revegetate all bare and disturbed areas with a mixture of grasses (excluding all varieties of tall fescue), legumes, and native shrub and hardwood tree species as soon as possible upon completion.
2. Minimize and contain within the project limits inchannel disturbance and the clearing of trees and brush.
3. Do not work in the waterway from April 1 through June 30 without the prior written approval of the Division of Fish and Wildlife.
4. Do not cut any trees suitable for Indiana bat roosting (greater than 3 inches dbh, living or dead, with loose hanging bark) from April 1 through September 30.
5. Do not excavate in the low flow area except for the placement of piers, foundations, and riprap, or removal of the old structure.

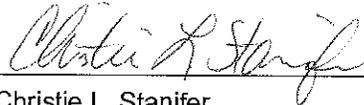
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State of Indiana
DEPARTMENT OF NATURAL RESOURCES
Division of Fish and Wildlife
Early Coordination/Environmental Assessment

6. Do not construct any temporary runarounds or causeways.
7. Operate equipment from the existing roadway or from the top of the bank to the greatest extent possible.
8. Use minimum average 6 inch graded riprap stone extended below the normal water level to provide habitat for aquatic organisms in the voids.
9. Do not use broken concrete as riprap.
10. Underlay the riprap with a bedding layer of well graded aggregate or a geotextile to prevent piping of soil underneath the riprap.
11. Minimize the movement of resuspended bottom sediment from the immediate project area.
12. Do not deposit or allow demolition materials or debris to fall or otherwise enter the waterway.
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.
14. Seed and protect all disturbed streambanks and slopes that are 3:1 or steeper with erosion control blankets (follow manufacturer's recommendations for selection and installation); seed and apply mulch on all other disturbed areas.

Contact Staff:

Christie L. Stanifer, Environ. Coordinator, Fish & Wildlife
Our agency appreciates this opportunity to be of service. Please contact the above staff member at (317) 232-4080 if we can be of further assistance.



Date: October 28, 2014

Christie L. Stanifer
Environ. Coordinator
Division of Fish and Wildlife

Miller, Daniel J

From: McWilliams, Robin [robin_mcwilliams@fws.gov]
Sent: Tuesday, September 16, 2014 12:02 PM
To: Miller, Daniel J
Subject: Re: INDOT Des. No. 1383489; I-69 Interstate Expansion; Project 2: Interchange Modification at Exit 210 (Campus Parkway); Hamilton County; Early Coordination

Follow Up Flag: Follow up
Flag Status: Flagged

Dear Dan,

This responds to your recent letter, requesting our comments on the aforementioned project.

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

Based on a review of the information you provided, the U.S. Fish and Wildlife Service has no objections to the project as currently proposed. This precludes the need for further consultation on this project as required under Section 7 of the Endangered Species Act of 1973, as amended. However, should new information arise pertaining to project plans or a revised species list be published, it will be necessary for the Federal agency to reinitiate consultation.

Proposed Species

The northern long-eared bat (*Myotis septentrionalis*) (NLEB) is currently proposed for listing under the Endangered Species Act (ESA) (87 Stat. 884, as amended; 16 U.S.C. 1531 et seq.). The final listing decision for the NLEB is expected in October 2014. At this time, no critical habitat has been proposed for the NLEB. The state of Indiana is within the known range of the NLEB. During the summer, NLEBs typically roost singly or in colonies in cavities, underneath bark, crevices, or hollows of both live and dead trees and/or snags (typically ≥ 3 inches dbh). Males and non-reproductive females may also roost in cooler places, like caves and mines. This bat seems opportunistic in selecting roosts, using tree species based on presence of cavities or crevices or presence of peeling bark. It has also been occasionally found roosting in structures like barns and sheds (particularly when suitable tree roosts are unavailable). They forage for insects in upland and lowland woodlots and tree lined corridors. During the winter, NLEBs predominately hibernate in caves and abandoned mine portals. Additional habitat types may be identified as new information is obtained.

Pursuant to Section 7(a)(4) of the ESA, federal action agencies are required to confer with the Service if their proposed action is likely to **jeopardize** the continued existence of the NLEB (50 CFR 402.10(a)). Action agencies may also voluntarily confer with the Service if the proposed action may affect a proposed species. Species proposed for listing are not afforded protection under the ESA; however as soon as a listing becomes effective, the prohibition against jeopardizing its continued existence and "take" applies **regardless of an action's stage of completion**. If the agency retains any discretionary involvement or control over on-the-ground actions that may affect the species after listing, section 7 applies.

Based on the project description and information, we do not anticipate any adverse impacts to the northern long-eared bat. This precludes the need for further consultation on this species for this project under Section 7 of the Endangered Species Act (as amended).

Wetland and stream impacts may require permits from the US Army Corps of Engineers, the Indiana Department of Environmental Management's Water Quality Certification program and the Indiana Department of Natural Resources. Wetland impacts should be avoided, and any unavoidable impacts should be compensated for in accordance with the Corps of Engineers mitigation guidelines.

We appreciate the opportunity to comment at this early stage of project planning. If project plans change such that fish and wildlife habitat may be affected, please re-coordinate with our office as soon as possible. If you have any questions about our recommendations, please call (812)334-4261.

Sincerely,

Robin

Robin McWilliams Munson

U.S. Fish and Wildlife Service
620 South Walker Street
Bloomington, Indiana 46403
812-334-4261 Fax: 812-334-4273

Monday, Tuesday - 7:30a-3:00p
Wednesday, Thursday - telework 8:30a-3:00p

On Tue, Sep 9, 2014 at 10:30 AM, Miller, Daniel J <Daniel.J.Miller@parsons.com> wrote:

Good morning Robin,

Attached are the Early Coordination Letter and attachments for INDOT Des. No. 1383489; I-69 Interstate Expansion; Project 2: Interchange Modification at Exit 210 (Campus Parkway); Hamilton County. Please note that this coordination is separate from the coordination letter and attachments I sent last week (for projects 1 & 3).

I have reduced the file sizes on all of the attachments to assist those with limited storage space. This has reduced some of the photo clarity. If you would like a copy of the original file, please let me know and I will mail one out. Please let me know if you have any questions or need anything else.

September 24, 2014

Daniel J. Miller
Sr. Environmental Planner
Parsons
101 W. Ohio St.
Suite 2121
Indianapolis, Indiana 46204

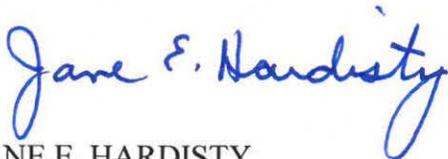
Dear Mr. Miller:

The proposed project to modify the interchange at Exit 210 on I-69 in Hamilton County, Indiana, as referred to in your letter received September 9, 2014, will cause a conversion of prime farmland.

The attached packet of information is for your use in completing Parts VI and VII of the AD-1006. After completion, the federal funding agency needs to forward one copy to NRCS for our records.

If you need additional information, please contact Rick Neilson at 317-295-5875.

Sincerely,



JANE E. HARDISTY
State Conservationist

Enclosures

Helping People Help the Land.



USDA is an equal opportunity provider and employer.

FARMLAND CONVERSION IMPACT RATING FOR CORRIDOR TYPE PROJECTS

PART I (To be completed by Federal Agency) 3. Date Of Land Evaluation Request: **09/09/2014** 4. Sheet 1 of _____

1. Name of Project: **INDOT Des No. 1383489** 5. Federal Agency Involved: **INDOT for FHWA**

2. Proposed Land Use: **I-69 Interstate Expansion; Project 2** 6. County and State: **Hamilton County, IN**

PART II (To be completed by NRCS) 1. Date Request Received By NRCS: **9/9/14** 2. Person Completing Form: **DP**

3. Does the corridor contain prime, unique, statewide or local important farmland? (If no, the FPPA does not apply - do not complete additional parts of this form) YES NO 4. Acres Irrigated _____ Average Farm Size **AC**

5. Major Crop(s): **Corn** 6. Farmable Land In Government Jurisdiction Acres: **247,370 % 96** 7. Amount of Farmland As Defined in FPPA Acres: **236,378 % 92**

8. Name of Land Evaluation System Used: **LESA** 9. Name of State or Local Site Assessment System _____ 10. Date Land Evaluation Returned by NRCS: **9-23-14**

PART III (To be completed by Federal Agency) Alternative Corridor For Segment:

	Corridor A	Corridor B	Corridor C	Corridor d
A. Total Acres To Be Converted Directly	7.20			
B. Total Acres To Be Converted Indirectly				
C. Total Acres In Site	7.20	0.00		

PART IV (To be completed by NRCS) Land Evaluation Information

A. Total Acres Prime And Unique Farmland	7.20			
B. Total Acres Statewide Important or Local Important Farmland	0			
C. Percentage Of Farmland in County Or Local Govt. Unit To Be Converted	0.003			
D. Percentage Of Farmland in Govt. Jurisdiction With Same Or Higher Relative Value	31			

PART V (To be completed by NRCS) Land Evaluation Criterion Relative Value of Farmland To Be Converted (Scale of 0 to 100 Points) **95**

PART VI (To be completed by Federal Agency) Corridor Assessment Criteria (Criteria are explained in 7 CFR 658.5 b & c. For Non-Corridor project use form AD-1006)

	Maximum Points	Corridor A	Corridor B	Corridor C	Corridor D
1. Area In Non-urban Use	(15)	0			
2. Perimeter In Non-urban Use	(10)	0			
3. Percent Of Corridor Being Farmed	(20)	2			
4. Protection Provided By State and Local Government	(20)	0			
5. Size Of Present Farm Unit Compared To Average	(10)	5			
6. Creation Of Non-farmable Farmland	(25)	0			
7. Availability Of Farm Support Services	(5)	3			
8. On-Farm Investments	(20)	0			
9. Effects Of Conversion On Farm Support Services	(25)	0			
10. Compatibility With Existing Agricultural Use	(10)	0			
TOTAL CORRIDOR ASSESSMENT POINTS	160	10	0		

PART VII (To be completed by Federal Agency)

Relative Value Of Farmland (From Part V)	100	95	0		
Total Corridor Assessment (From Part VI above or local site assessment)	160	10	0		
TOTAL POINTS (Total of above 2 lines)	260	105	0		

1. Corridor Selected: **A** 2. Total Acres of Farmlands to be Converted by Project: **0** 3. Date Of Selection: **10/20/14** 4. Was A Local Site Assessment Used? YES NO

5. Reason For Selection:
Alternative chosen that will not impact farmland.

Name of Federal agency representative completing this form: **Daniel J. Miller, Parsons** Date: **10/20/14**

NOTE: Complete one form for each segment with more than one Alternate Corridor

Project No. _____ DES No. **1383489**

Project Description I-69 Expansion: Project 2 interchange modification at exit 210 (Campus Pkwy)
Hamilton County

Name of Organization requesting early coordination:

Parsons

QUESTIONNAIRE FOR THE INDIANA GEOLOGICAL SURVEY

1) Do unusual and/or problem () geographic, () geological, () geophysical, or () topographic features exist within the project limits? Describe:

NO

2) Have existing or potential mineral resources been identified in this area? Describe:

NO

3) Are there any active or abandoned mineral resources extraction sites located nearby?

Describe: NO

This information was furnished by:

Marni D. Karaffa

Marni D. Karaffa , Research Geologist
611 N Walnut Grove, Bloomington, IN 47405
(812) 855-7428 / (812) 855-2862
karaffam@indiana.edu

Monday, October 20, 2014



Indiana Department of Environmental Management

We make Indiana a cleaner, healthier place to live.

Mike Pence
Governor

100 North Senate Avenue
Indianapolis , Indiana 46206

Thomas W. Easterly
Commissioner

(317) 232-8603
800) 451-6027
www.IN.gov/idem

INDOT
Tony Jones
100 North Senate Ave, Rm 601
Indianapolis , IN 46204

Parsons
Daniel J. Miller
101 West Ohio Street, Suite 2121
Indianapolis , IN 46204

Date

To Engineers and Consultants Proposing Roadway Construction Projects:

RE: The Indiana Department of Transportation (INDOT) is planning an I-69 Interstate Expansion from 106th Street in Fishers to Exit 226 (SR 9 & 109 in Anderson), in Hamilton and Madison Counties. This expansion has been broken into multiple projects with independent utility and logical termini. Environmental analysis is being conducted for Project 2 (Des. No. 1383489), an interchange modification project at Exit 210 (Campus Parkway). This letter is part of the early coordination phase of the environmental review process. We are requesting comments from your area of expertise regarding any possible environmental effects associated with this project. Please use the above designation number and description in your reply. We will incorporate your comments into a study of the project's environmental impacts. Purpose and Need: The need for this project stems from traffic congestion issues that currently exist at this interchange. The interchange is experiencing an insufficient Level of Service (LOS) during peak traffic hours. LOS is a rating for traffic congestion, with LOS A indicating little to no delay and LOS F indicating serious congestion and delay. An INDOT study conducted in the fall of 2012 noted, "Southbound [SB] I-69 experiences congestion and reduction of travel speed during the AM peak hours, especially as traffic approaches Exit 205. Northbound [NB] I-69 also experiences congestion and long queues at Exit 210's NB exit during the PM peak hours, especially during events at the Klipsch Music Center (though traffic data collected does not take into account such events)." Traffic Data was recently analyzed using Highway Capacity Manual methodology in Highway Capacity Software (HCS). The northbound ramp is currently operating at an LOS D, while the southbound ramp is operating at an LOS C. Both ramp termini and are predicted to operate at an LOS F in the design year, 2035. The

results show unacceptable LOS for both existing and future traffic for the interchange. The purpose of this project is to improve overall traffic operation by reducing congestion at this interchange.

Existing Conditions: Improvements have recently been completed on Campus Parkway/Southeastern Parkway on both sides of the interchange. Prior to that work, the cross road was a simple, rural 2-lane road and was referred to as SR 238 (Greenfield Ave locally) where it connected Noblesville and Fortville. Now the SR 238 designation has been relinquished. The City of Noblesville refers to the road as Campus Parkway while the Town of Fishers refers to it as Southeastern Parkway. The current interchange type is a diamond interchange with signalized ramp terminals. The bridge has one through-lane and one left-turn lane going eastbound, and two through-lanes and one left-turn lane going westbound.

Proposed Project: An interchange modification project is proposed for the interchange to improve the LOS. Improvements to the existing interchange, such as added auxiliary lanes, will be considered. Transportation System Management (TSM) improvements, such as ramp metering and signal coordination, will also be considered. In addition, modification to the interchange type will be considered. While all interchange types will be considered as possible improvements, the limited right-of-way in the vicinity of the interchange will make the following interchange types most likely to be selected: partial-cloverleaf interchange, tight diamond with roundabouts at the ramp termini, single point urban interchange, and double-crossover diamond interchange. The primary factors in determining the modifications selected will be construction costs, LOS rating, traffic safety, land acquisition costs, environmental impacts and cultural resources impacts.

Right-of-Way (ROW): New permanent and/or temporary ROW may be required for this project depending upon the type of improvements selected for this undertaking.

Environmental Concerns: One U.S. Geological Survey (USGS) blue-lined stream (an unnamed tributary to Sand Creek) lies approximately 0.06 mile north of the project area, and will not be impacted by the proposed project. Information from the National Wetland Inventory (NWI) map shows ten NWI-wetland polygons within a half-mile radius of the project area, with two occurring within the project area. Three lakes lie within to the project limits. However, no lakes are expected to be impacted by the proposed project. Two floodplains lie within a half-mile radius of the project area, but well outside of the project limits. Therefore, they will not be impacted by the proposed project. See the attached Water Resources Map, Attachment A-5, for the NWI and FEMA layers. According to the Soil Survey Geographic (SSURGO) Database for Hamilton County, Indiana, majority of the project area lies within nationally listed hydric soils (see NRCS Soils Map, Attachment A-8). The proposed project is located along an urbanized section of I-69, with land use within vicinity of the project consisting primarily of commercial properties. One religious facility and two hospitals lie within a half-mile radius of the projects, but outside of the projects limits. Two open trail segments (146th St from Pointe Blvd to I-69 and Cumberland Rd to Hamilton Towne Center) and two planned segments (I-69 South to Mud Creek and a segment of Olio Road - SR 238 south to Bee Camp Creek) lie within the project area and may be impacted by the proposed project. Waters investigations, including wetland delineations, were conducted from May through July, 2014 by Parsons environmental staff to evaluate possible environmental impacts within the project area. Coordination is ongoing with the U.S. Army Corps of Engineers and the Indiana Department of Environmental Management (IDEM). A waters report will be completed, and all applicable permits will be applied for and acquired before construction can begin. See Attachment B for Project Area Photographs. This project is a Type I project, and therefore Noise Analysis is currently being conducted to determine traffic noise levels, potential noise impacts, and the feasibility of traffic noise mitigation. If any facilities are determined to have traffic noise impacts, noise abatement measures will be considered and appropriate measures constructed to mitigate for these impacts. An Air Quality Analysis is currently being conducted as well. The results of this analysis will be included in the environmental document prepared for this project.

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

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

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

WATER AND BIOTIC QUALITY

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

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

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

Indiana counties located in north-central, central, and southern Indiana) are served by the USACI Louisville District Office (502-315-6733).

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

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

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

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

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

To obtain, and operate under, a Rule 5 permit you will first need to develop a Construction Plan (<http://www.in.gov/idem/4917.htm#constreq>), and as described in 327 IAC 15-5-6.5

(<http://www.in.gov/legislative/iac/T03270/A00150> [PDF], pages 16 through 19). Before you may apply for a Rule 5 Permit, or begin construction, you must submit your Construction Plan to your county Soil and Water Conservation District (SWCD) (<http://www.in.gov/isda/soil/contacts/map.html>).

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

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

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

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

7. For projects involving impacts to fish and botanical resources, contact the Department of Natural Resources - Division of Fish and Wildlife (317/232-4080) for addition project input.
8. For projects involving water main construction, water main extensions, and new public water supplies, contact the Office of Water Quality - Drinking Water Branch (317-308-3299) regarding the need for permits.
9. For projects involving effluent discharges to waters of the State of Indiana , contact the Office of Water Quality - Permits Branch (317-233-0468) regarding the need for a National Pollutant Discharge Elimination System (NPDES) permit.
10. For projects involving the construction of wastewater facilities and sewer lines, contact the Office of Water Quality - Permits Branch (317-232-8675) regarding the need for permits.

AIR QUALITY

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

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

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

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

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

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

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

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

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

3. With respect to asbestos removal: all facilities slated for renovation or demolition (except residential buildings that have (4) four or fewer dwelling units and which will not be used for commercial purposes) must be inspected by an Indiana-licensed asbestos inspector prior to the

commencement of any renovation or demolition activities. If regulated asbestos-containing material (RACM) that may become airborne is found, any subsequent demolition, renovation, or asbestos removal activities must be performed in accordance with the proper notification and emission control requirements.

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

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

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

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

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

4. With respect to lead-based paint removal: IDEM encourages all efforts to minimize human exposure to lead-based paint chips and dust. IDEM is particularly concerned that young children exposed to lead can suffer from learning disabilities. Although lead-based paint abatement efforts are not mandatory, any abatement that is conducted within housing built before January 1, 1978, or a child-occupied facility is required to comply with all lead-based paint work practice standards, licensing and notification requirements. For more information about lead-based paint removal visit: <http://www.in.gov/isdh/19131.htm>.
5. Ensure that asphalt paving plants are permitted and operate properly. The use of cutback asphalt, or asphalt emulsion containing more than seven percent (7%) oil distillate, is prohibited during the months April through October. See 326 IAC 8-5-2, Asphalt Paving Rule (<http://www.ai.org/legislative/iac/T03260/A00080.PDF>).
6. If your project involves the construction of a new source of air emissions or the modification of an existing source of air emissions or air pollution control equipment, it will need to be reviewed by the IDEM Office of Air Quality (OAQ). A registration or permit may be required under 326 IAC 2 (View at: www.ai.org/legislative/iac/t03260/a00020.pdf.) New sources that use or emit hazardous air pollutants may be subject to Section 112 of the Clean Air Act and corresponding state air regulations governing hazardous air pollutants.

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

LAND QUALITY

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

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

FINAL REMARKS

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

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

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

Sincerely,



Thomas W. Easterly
Commissioner

Signature(s) of the Applicant

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

Project Description

The Indiana Department of Transportation (INDOT) is planning an I-69 Interstate Expansion from 106th Street in Fishers to Exit 226 (SR 9 & 109 in Anderson), in Hamilton and Madison Counties. This expansion has been broken into multiple projects with independent utility and logical termini. Environmental analysis is being conducted for Project 2 (Des. No. 1383489), an interchange modification project at Exit 210 (Campus Parkway). This letter is part of the early coordination phase of the environmental review process. We are requesting comments from your area of expertise regarding any possible environmental effects associated with this project. Please use the above designation number and description in your reply. We will incorporate your comments into a study of the project's environmental impacts. Purpose and Need: The need for this project stems from traffic congestion issue that currently exist at this interchange. The interchange is experiencing an insufficient Level of Service (LOS) during peak traffic hours. LOS is a rating for traffic congestion, with LOS A indicating little to no delay and LOS F indicating serious congestion and delay. An INDOT study conducted in the fall of 2012 noted, "Southbound [SB] I-69 experiences congestion and reduction of travel speed during the AM peak hours, especially as traffic approaches Exit 205. Northbound [NB] I-69 also experiences congestion and long queues at Exit 210's NB exit during the PM peak hours, especially during events at the Klipsch Music Center (though traffic data collected does not take into account such events)." Traffic Data was recently analyzed using Highway Capacity Manual methodology in Highway Capacity Software (HCS). The northbound ramp is currently operating at an LOS D, while the southbound ramp is operating at an LOS C. Both ramp termini are predicted to operate at an LOS F in the design year 2035. The results show unacceptable LOS for both existing and future traffic for the interchange. The purpose of this project is to improve overall traffic operation by reducing congestion at this interchange. Existing Conditions: Improvements have recently been completed on Campus Parkway/Southeastern Parkway on both sides of the interchange. Prior to that work, the cross road was a simple, rural 2-lane road and was referred to as SR 238 (Greenfield Ave locally) where it connected Noblesville and Fortville. Now the SR 238 designation has been relinquished. The City of Noblesville refers to the road as Campus Parkway while the Town of Fishers refers to it as Southeastern Parkway. The current interchange type is a diamond interchange with signalized ramp terminals. The bridge has one through-lane and one left-turn lane going eastbound, and two through-lanes and one left-turn lane going westbound. Proposed Project: An interchange modification project is proposed for the interchange to improve the LOS. Improvements to the existing interchange, such as added auxiliary lanes, will be considered. Transportation System Management (TSM) improvements, such as ramp metering and signal coordination, will also be considered. In addition, modification to the interchange type will be considered. While all interchange types will be considered as possible improvements, the limited right-of-way in the vicinity of the interchange will make the following interchange types most likely to be

selected: partial-cloverleaf interchange, tight diamond with roundabouts at the ramp termini, single point urban interchange, and double-crossover diamond interchange. The primary factors in determining the modifications selected will be construction costs, LOS rating, traffic safety, land acquisition costs, environmental impacts and cultural resources impacts. Right-of-Way (ROW): New permanent and/or temporary ROW may be required for this project depending upon the type of improvements selected for this undertaking. Environmental Concerns: One U.S. Geological Survey (USGS) blue-lined stream (an unnamed tributary to Sand Creek) lies approximately 0.06 mile north of the project area, and will not be impacted by the proposed project. Information from the National Wetland Inventory (NWI) map shows ten NWI-wetland polygons within a half-mile radius of the project area, with two occurring within the project area. Three lakes lie within to the project limits. However, no lakes are expected to be impacted by the proposed project. Two floodplains lie within a half-mile radius of the project area, but well outside of the project limits. Therefore, they will not be impacted by the proposed project. See the attached Water Resources Map, Attachment A-5, for the NWI and FEMA layers. According to the Soil Survey Geographic (SSURGO) Database for Hamilton County, Indiana, majority of the project area lies within nationally listed hydric soils (see NRCS Soils Map, Attachment A-8). The proposed project is located along an urbanized section of I-69, with land use within vicinity of the project consisting primarily of commercial properties. One religious facility and two hospitals lie within a half-mile radius of the projects, but outside of the projects limits. Two open trail segments (146th St from Pointe Blvd to I-69 and Cumberland Rd to Hamilton Towne Center) and two planned segments (I-69 South to Mud Creek and a segment of Olio Road - SR 238 south to Bee Camp Creek) lie within the project area and may be impacted by the proposed project. Waters investigations, including wetland delineations, were conducted from May through July, 2014 by Parsons environmental staff to evaluate possible environmental impacts within the project area. Coordination is ongoing with the U.S. Army Corps of Engineers and the Indiana Department of Environmental Management (IDEM). A waters report will be completed, and all applicable permits will be applied for and acquired before construction can begin. See Attachment B for Project Area Photographs. This project is a Type I project, and therefore Noise Analysis is currently being conducted to determine traffic noise levels, potential noise impacts, and the feasibility of traffic noise mitigation. If any facilities are determined to have traffic noise impacts, noise abatement measures will be considered and appropriate measures constructed to mitigate for these impacts. An Air Quality Analysis is currently being conducted as well. The results of this analysis will be included in the environmental document prepared for this project.

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

Date: Sept. 9, 2014

Signature of the INDOT
Project Engineer or Other Responsible Agent _____


Tony Jones

Date: September 9, 2014

Signature of the
For Hire Consultant _____



Daniel J. Miller

**Questionnaire for the Indiana Department of Transportation,
Office of Aviation**

Des/Bridge No: 1383489

Project Description:

I69 Interstate Expansion project 2 Exit 210
In Hamilton County, Indiana

Requested By:

PARSONS

Are there any existing or proposed airports within or near the project limits? YES

If yes, describe any potential conflicts with air traffic during or after the construction of the project.

The Noblesville Airport is located 8,000' Northwest of the
project. If any permanent structures or equipment utilized
for
the project penetrates the 100:1 slope from the airport FAA
Form 7460 (Notice of Proposed construction or alteration) must
be filed. For assistance contact Marcus Dial, INDOT Office of
Aviation, 317-232-1494.

This information was furnished by:

Name: James W. Kinder
Title: Chief Airport Inspector – INDOT Office of Aviation
Date: September 10, 2014

Miller, Daniel J

From: Clark, Rickie [RCLARK@indot.IN.gov]
Sent: Thursday, September 11, 2014 4:09 PM
To: Miller, Daniel J
Subject: Early Coordination - DES# 1383489 I-69 Interstate Expansion; Interchange modification at Exit 210 (Campus Parkway); DES# 1383332 & 1383336
Attachments: Best Practices in Public Involvement Final.pdf
Follow Up Flag: Follow up
Flag Status: Flagged



INDIANA DEPARTMENT OF TRANSPORTATION

Good Afternoon,

I received an early coordination notification packet for the project listed above. The reason we're requesting to be notified at the early coordination stage is to try to develop public involvement plans and raise public awareness of transportation improvement projects earlier in the project development phase when it makes sense to engage the public/stakeholders. For larger projects (EIS, EA) INDOT/LPA's do a great job engaging the public. For smaller jobs (CE) there may be other opportunities to engage the public prior to the hearings phase **(if your project meets the minimum INDOT public involvement criteria), or opportunities that are simply good business in terms of engaging project stakeholders**, so I wanted to provide templates (via our web page) for consideration as this project develops and to also let you know that my office is available to help with any public outreach efforts you may wish to use as this project develops.

The Community Context Audit is an important tool in project development and should be used when developing a public involvement plan. In addition, completion of the Community Context Audit better equips the project sponsor in developing a project that best meets the needs of the community. A public involvement plan is an important element in the project development process.

Visit <http://www.in.gov/indot/2366.htm> to view the Community Context Audit and Public Involvement Plan template. Also, attached to this e-mail is document title "Best Practices in Public Involvement" which highlights some activities INDOT has found to be effective in our public involvement efforts. This document may be of interest to you as you think about how best to engage project stakeholders.

The templates available via INDOT's Office of Public Involvement (OPI) may be helpful in documenting any public involvement activities implemented during project development or perhaps encourage discussion in identifying any public involvement needs for the project. The public involvement plan could be as simple as using a more detailed Notice of Survey with additional contact info, and the normal Public Hearings phase.....or a detailed Notice of Survey, a media release/advisory, the Public Hearings phase, in addition to Sec. 106 and other activities.

My office is available to provide support and/or resources to bolster any public involvement activities you may wish to implement or just discuss. I appreciate the time and opportunity to comment. Feel free to contact myself or Mary Wright, Public Hearings Examiner (317-234-0796) should you have questions or concerns.

Rickie Clark, Indiana Department of Transportation
Office of Public Involvement / Central Office Communications Division
100 North Senate Avenue, Room N642
Indianapolis, Indiana 46204
Phone: (317) 232-6601
Email: rclark@indot.in.gov



Kenton C. Ward, CFM
Surveyor of Hamilton County
Phone (317) 776-8495
Fax (317) 776-9628

Suite 188
One Hamilton County Square
Noblesville, Indiana 46060-2230

November 18, 2014

Daniel J. Miller
Parsons
101 W. Ohio Street, Suite 2121
Indianapolis, IN 46204

RE: Des. Nos. : 1383489
Description: I-69 Interstate Expansion
Project 2: Interchange Modification at Exit 210 (Campus Parkway)
Hamilton County, Indiana

I received your letter dated September 9, 2014 regarding the above referenced project. Below are my comments.

1. The project falls within the drainage sheds of the Exit Ten, T.J. Patterson and E.E. Bennett Regulated Drains.
2. Additional hard surface will require detention per the Hamilton County Stormwater Management Technical Standards Manual.
3. Please go to the Hamilton County website for information on locations of drains and Hamilton County requirements as to drainage.

Mr. Steve Cash of my office will be the plan reviewer for this project. Steve may be reached at 317-776-8495 or steve.cash@hamiltoncounty.in.gov.

Sincerely,

Kenton C. Ward, CFM
Hamilton County Surveyor

KCW/pll

Appendix D: Section 106

	<u>Page(s)</u>
FHWA Approved 800.11(d) Document	
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**FEDERAL HIGHWAY ADMINISTRATION'S
SECTION 4(F) COMPLIANCE REQUIREMENTS (FOR HISTORIC PROPERTIES) AND
SECTION 106 FINDINGS AND DETERMINATIONS
AREA OF POTENTIAL EFFECTS
ELIGIBILITY DETERMINATIONS
EFFECT FINDING
I-69 INTERCHANGE AT CAMPUS PARKWAY, EXIT 210
FALL CREEK AND WAYNE TOWNSHIPS, HAMILTON COUNTY, INDIANA
DES. NO.: 1383489**

**AREA OF POTENTIAL EFFECTS
(Pursuant to 36 CFR § 800.4(a)(1))**

The APE for this undertaking incorporates the project location and includes properties that may be impacted by project activities, an area approximately one-fourth mile from the interchange along Campus Parkway that was widened or narrowed where appropriate based on topography and obscured views. The APE for archaeology is defined as the project footprint. (See Appendix A: Plans and Appendix B: Maps.)

**ELIGIBILITY DETERMINATIONS
(Pursuant to 36 CFR § 800.4(c)(2))**

No properties are listed in, or eligible for listing in, the National Register of Historic Places (NRHP) within the APE.

EFFECT FINDING

The Indiana Department of Transportation (INDOT), acting on behalf of the Federal Highway Administration (FHWA), has determined a finding of "No Historic Properties Affected" is appropriate for this undertaking.

INDOT respectfully requests the Indiana State Historic Preservation Officer provide written concurrence with the Section 106 determination of "No Historic Properties Affected" for the I-69 Interchange at Campus Parkway, Exit 210.

SECTION 4(F) COMPLIANCE REQUIREMENTS (for historic properties)

This undertaking will not convert property from any Section 4(f) historic property to a transportation use. INDOT, acting on behalf of FHWA, has determined the appropriate Section 106 finding is "No Historic Properties Affected"; therefore no Section 4(f) evaluation is required.



Patrick A. Carpenter for FHWA
Manager, Cultural Resources Office
Environmental Services
Indiana Department of Transportation

11-25-2014

Approved Date

**FEDERAL HIGHWAY ADMINISTRATION
DOCUMENTATION OF SECTION 106 FINDING OF
NO HISTORIC PROPERTIES AFFECTED
SUBMITTED TO THE STATE HISTORIC PRESERVATION OFFICER
PURSUANT TO 36 CFR Section 800.4(d)(1)
I-69 INTERCHANGE AT CAMPUS PARKWAY, EXIT 210
FALL CREEK AND WAYNE TOWNSHIPS, HAMILTON COUNTY, INDIANA
DES. NO.: 1383489**

1. DESCRIPTION OF THE UNDERTAKING

Proposed Project 2: I-69 Interchange Modification at Campus Parkway, Exit 210

The Federal Highway Administration (FHWA) and the Indiana Department of Transportation (INDOT) are planning an I-69 Interstate Expansion from 106th Street in Fishers to Exit 226 (State Roads [SR] 9 & 109 in Anderson), in Hamilton and Madison Counties. This expansion has been broken into multiple projects with independent utility and logical termini. This Section 106 investigation was conducted for Project 2 (Des. No.: 1383489), an interchange modification at Campus Parkway, Exit 210.

Existing Conditions: Improvements have recently been completed on Campus Parkway/Southeastern Parkway on both sides of the interchange. Prior to that work, the cross road was a simple, rural two-lane road and was referred to as SR 238 (Greenfield Ave locally), where it connected Noblesville and Fortville. Now the SR 238 designation has been relinquished. The City of Noblesville refers to the road as Campus Parkway, while the Town of Fishers refers to it as Southeastern Parkway.

The current interchange type is a diamond interchange with signalized ramp terminals. The bridge has one through-lane and one left-turn lane going eastbound, and two through-lanes and one left-turn lane going westbound.

Improvements to the existing interchange such as added auxiliary lanes will be considered. Transportation System Management (TSM) improvements such as ramp metering and signal coordination will also be considered. In addition, modification to the interchange type will be considered. While all interchange types will be considered as possible improvements, the limited right-of-way in the vicinity of the interchange will make the following interchange types most likely to be selected: partial-cloverleaf interchange, tight diamond with roundabouts at the ramp termini, single point urban interchange, and double-crossover diamond interchange. The primary factors in determining the modifications selected will be construction costs, Level of Service (LOS) rating, traffic safety, land acquisition costs, environmental impacts and cultural resources impacts.

Right of Way (ROW): No new permanent and/or temporary ROW will be required for this project.

36 CFR § 800.16(d) defines the Area of Potential Effects (APE) as the “geographic area or areas within which an undertaking may directly or indirectly cause alterations in the character or use of historic properties, if any such properties exist. The area of potential effects is influenced by the scale and nature of an undertaking and may be different for different kinds of effects caused by the undertaking.”

The APE for this undertaking incorporates the project location and includes properties that may be impacted by project activities, such as noise and visual intrusions. (See Appendix B: Maps.) Weintraut & Associates (W&A) initially drew an APE approximately one-fourth mile from the interchange along Campus Parkway and then widened or narrowed the APE where appropriate based on topography and obscured views. The APE for archaeology is defined as the project footprint. (Note that at the time of the

archaeological reconnaissance, the extent of ground disturbing activity was not yet known so a larger area was the subject of a reconnaissance survey). (See Appendix B: Maps.) The State Historic Preservation Officer (SHPO) did not disagree with the APE.

2. EFFORTS TO IDENTIFY HISTORIC PROPERTIES

Pursuant to 36 CFR § 800.4(b), historians for W&A conducted a review of the National Register of Historic Places (NRHP), National Historic Landmarks (NHL) Program, Indiana Register of Historic Sites and Structures (State Register), the State Historical Architectural and Archaeological Research Database (SHAARD), the Indiana Historic Sites and Structures Inventory (IHSSI) survey cards at the Indiana Department of Natural Resources (IDNR), Division of Historic Preservation and Archaeology (DHPA), the *Hamilton County Interim Report*, and the *Indiana Bridge Inventory* for previously identified properties. In addition, W&A reviewed 1950s and 1960s topographic quadrangle maps for McCordsville and Riverwood; aerial photographs of the APE from 1962; and plat maps from the late nineteenth and early twentieth centuries in order to establish baseline construction dates for resources. Historians examined other primary and secondary resources. Documentary research for the project included county histories and online resources. Finally, historians consulted previous investigations conducted by W&A for information relating to the history of the area and its properties.

Also pursuant to 36 CFR § 800.4(b), an archaeologist for W&A conducted a records check of the archaeological APE and its one mile buffer on March 6, 2014, and reviewed SHAARD, Cultural Resource Management and other reports, cemetery records, and historic maps for previously identified resources.

Historians for W&A conducted field surveys on March 10, 2014, March 18, 2014, and April 1, 2014. Historians photographed and recorded survey notes for all properties more than fifty years of age within the APE. Representative views and photographs of individual properties were taken, and historians scrutinized individual properties that possessed historic and/or architectural significance carefully. In addition, they carefully considered architectural and thematic continuity of properties while in the field. (See Appendix D: Photographs.)

Historians wrote a historic context, which provided the background by which to evaluate resources within the APE for listing in the NRHP. Historians considered properties using the NRHP evaluation criteria and criteria considerations. The historians evaluated the APE for the presence of a historic district but found none present. Seven properties in the APE were identified as Contributing to the historic fabric of the area. No properties were recommended eligible for listing in the NRHP. W&A prepared a Historic Properties Report in April 2014 that was reviewed and approved by INDOT on May 19, 2014. (See Appendix E: Report Summaries.)

On June 18, 2014, W&A sent an early coordination letter, the HPR, and an invitation to join in consultation to the following: Indiana State Historic Preservation Officer (SHPO), Indiana Landmarks – Central Regional Office, Hamilton County Historian, Hamilton County Historical Society, Hamilton County Genealogy Society, Carmel-Clay Historical Society, Fishers Historic Preservation Committee, Noblesville Preservation Alliance, City of Noblesville, Hamilton County Commissioners, Noblesville Chamber of Commerce, and the Indianapolis Metropolitan Planning Organization (IMPO). INDOT and FHWA were copied on the correspondence. (See Appendix C: Consulting Parties and Appendix F: Correspondence.) The Hamilton County Historical Society and Carmel-Clay Historical Society declined the invitation to participate; Indiana Landmarks Central Office accepted the invitation to participate. (See Appendix C: Consulting Parties.)

On July 2, 3, and 7, 2014, W&A Principal Investigator, Jason Goldbach M.A. and two crew members, Bethany Hughes and Katherine Seikel, conducted a field reconnaissance on 48.12 acres (19.47 hectares). The archaeologists found the project area to be heavily disturbed and unlikely to contain any

I-69 Interchange at Campus Parkway, Exit 210
Fall Creek and Wayne Townships, Hamilton County, Indiana
Des. No.: 1383489 // DHPA No.: 16356
November 17, 2014

archaeological deposits in their original context. (Note that later the project footprint was reduced such that all ground disturbing activities will occur within INDOT ROW).

On July 11, 2014, the SHPO responded to the HPR; the letter stated that “[b]ased upon the documentation available to the staff of the Indiana SHPO, we have not identified any” resources eligible for listing or listed in the NRHP. (See Appendix F: Correspondence.)

In September 2014, W&A prepared an Archaeology Short Report (ASR) that was sent to INDOT. INDOT approved the report on September 18, 2014, pending the incorporation of edits requested by the agency. On September 25, 2014, W&A sent the ASR to the Indiana SHPO. The report recommended that “the project be allowed to proceed as planned.” (See Appendix E: Report Summaries.)

On October 24, 2014, SHPO responded to the ASR, agreeing that “[b]ased upon the documentation available ... we have not identified any currently known archaeological resources listed in or eligible for inclusion” in the NRHP. The staff further stated that “[i]f 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.” (See Appendix F: Correspondence.)

No consulting party, other than SHPO, commented on the reports. No other efforts to identify historic properties took place as a result of this project.

A public notice of the finding of “No Historic Properties Affected” will be published in a local newspaper and the public will be afforded thirty (30) days to comment. If appropriate, this document will be revised to reflect public comment.

3. BASIS FOR FINDING

No historic properties are present within the APE for the undertaking. Therefore, a finding of “No Historic Properties Affected” is appropriate.

Appendices

Appendix A: Plans

Appendix B: Maps

Appendix C: Consulting Parties

Appendix D: Photographs

Appendix E: Report Summaries

Appendix F: Correspondence

Section 106

APPENDIX A. Plans

PROJECT	DESIGNATION
1383489	1383489
CONTRACT	BRIDGE DESIGNATION
R-37053	138490

INTERCHANGE - STAGE 1
SUBMISSION
NOT FOR CONSTRUCTION

INDIANA DEPARTMENT OF TRANSPORTATION



ROAD PLANS

INTERCHANGE MODIFICATION AT I-69 & CAMPUS PARKWAY/
SOUTHEASTERN PARKWAY
FROM: RP 210+00 TO: RP 210+20
PROJECT NO. 1383489

P.E.
R/W
CONST.

The project begins approximately 0.20 miles north of Interstate 69 and ends approximately 0.20 miles south of Interstate 69 along Campus Parkway and Southeastern Parkway. The project is in Section 23 in T-18-N, R-5-E, in Fall Creek Township in Hamilton County, Indiana.

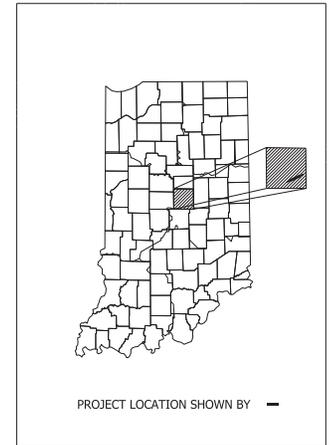
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Net Length: .37 miles
Maximum Grade: 3.84 %



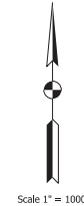
LOCATION MAP
HAMILTON COUNTY

TRAFFIC DATA		CAMPUS PARKWAY/ SOUTHEASTERN PARKWAY
A.A.D.T.	2015	24,730 V.P.D.
A.A.D.T.	2035	30,980 V.P.D.
D.H.V.	2035	3,060 V.P.H.
DIRECTIONAL DISTRIBUTION		(SWB/NEB) 46%/54%
TRUCKS		2.7% A.A.D.T. 1.5% D.H.V.

DESIGN DATA	
DESIGN SPEED	45 MPH
PROJECT DESIGN CRITERIA	RECONSTRUCTION, (NOV-FREEWAY)
FUNCTIONAL CLASSIFICATION	PRINCIPAL ARTERIAL
RURAL/URBAN	URBAN (INTERMEDIATE)
TERRAIN	LEVEL
ACCESS CONTROL	PARTIAL



LATITUDE: 39°59'27" LONGITUDE: 85°55'27"



INDIANA DEPARTMENT OF TRANSPORTATION
STANDARD SPECIFICATIONS DATED 2014
TO BE USED WITH THESE PLANS

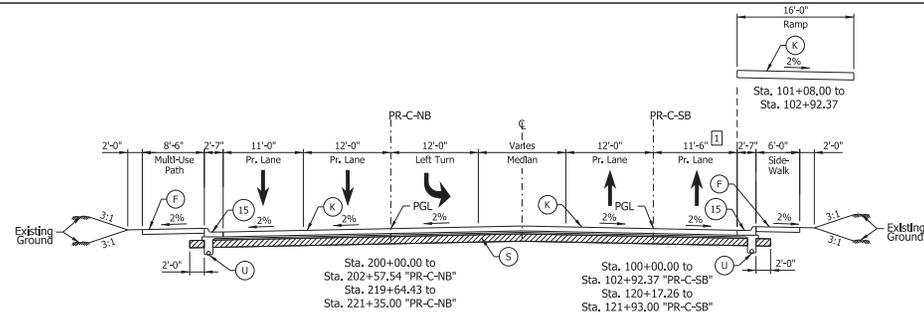
PARSONS

101 W. Ohio St., Suite 2121
Indianapolis, IN 46204
Bus (317) 616-1000
Fax (317) 616-1033

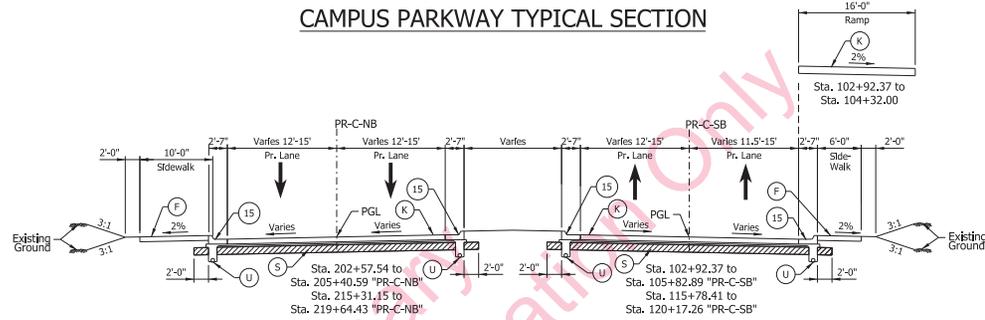
P:\PWP\310694547\SH1\T18.dgn
07-NOV-2014

PLANS
PREPARED BY: _____ PHONE NUMBER _____
CERTIFIED BY: _____ DATE _____
APPROVED FOR LETTING: _____ DATE _____
INDIANA DEPARTMENT OF TRANSPORTATION

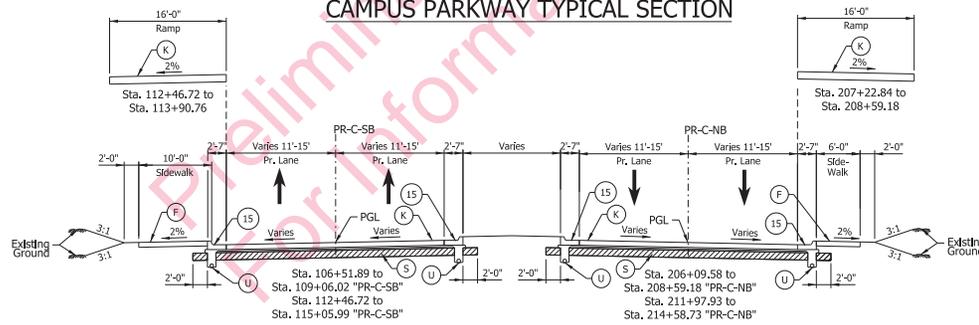
DESIGNATION	1383489
SURVEY BOOK	SHEETS
ELECTRONIC	1 of 1
CONTRACT	PROJECT
R-37053	1383489



CAMPUS PARKWAY TYPICAL SECTION



CAMPUS PARKWAY TYPICAL SECTION



CAMPUS PARKWAY TYPICAL SECTION

BRIDGE PAVING EXCEPTION

Sta. 208+59.18 to Sta. 211+97.93 "PR-C-NB"
 Sta. 109+06.02 to Sta. 112+46.72 "PR-C-SB"

Note:
 See Sheets xx-xx for Lane Widths
 and Sheets xx-xx for Cross Slope Details

LEGEND

- (F) Concrete Sidewalk
- (K) Full Depth, HMA Pavement
- (S) Subgrade Treatment
- (U) 6" Underdrain
- (15) Concrete Curb and Gutter
- (26) Sodding

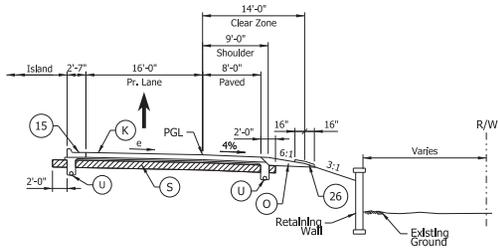
RECOMMENDED FOR APPROVAL	DESIGN ENGINEER	DATE
DESIGNED: CAC	DRAWN: DH	
CHECKED: KCD	CHECKED: KCD	

INDIANA
 DEPARTMENT OF TRANSPORTATION

TYPICAL SECTIONS

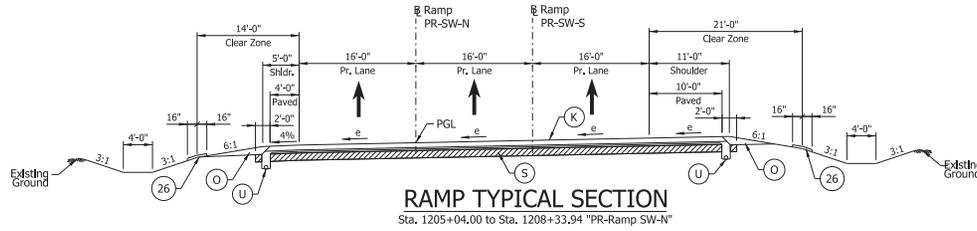
HORIZONTAL SCALE	BRIDGE FILE
1" = 8'	
VERTICAL SCALE	DESIGNATION
	1383489
SURVEY BOOK	SHEETS
ELECTRONIC	3 of 1
CONTRACT	PROJECT
R-37053	1383489

P:\PWP\pms\94547\SHL_Type_01.dgn
 07-NOV-2014



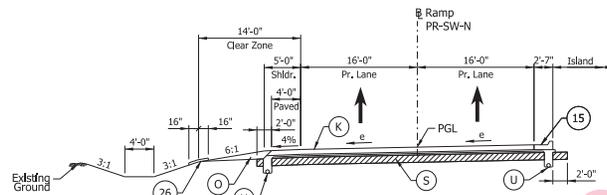
RAMP TYPICAL SECTION

Sta. 1104+47.11 to Sta. 1104+91.72 "PR-Ramp NW-S"
Sta. 2219+21.73 to Sta. 2219+47.09 "PR-Ramp SE-N"



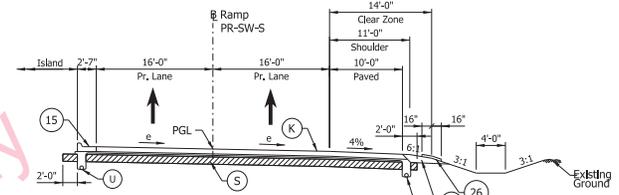
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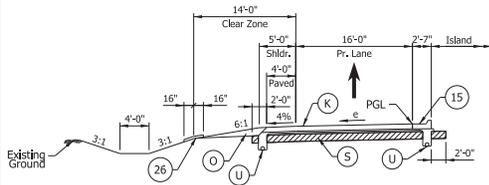
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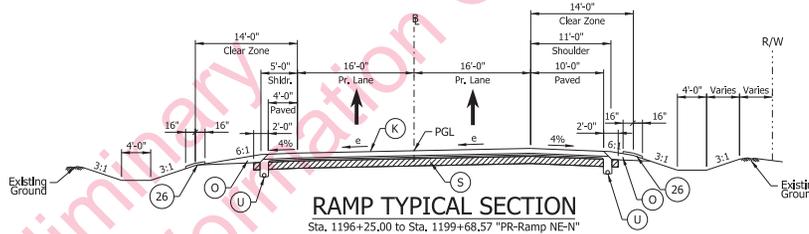
RAMP TYPICAL SECTION

Sta. 2210+69.77 to Sta. 2210+95.28 "PR-Ramp SW-S"



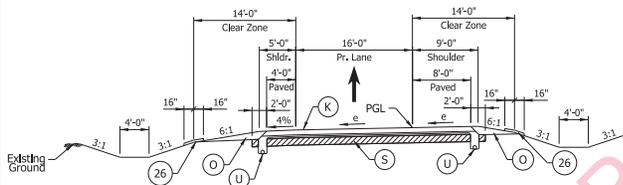
RAMP TYPICAL SECTION

Sta. 2208+61.74 to Sta. 2209+30.00 "PR-Ramp NW-N"
Sta. 1113+94.09 to Sta. 1114+70.00 "PR-Ramp SE-S"
Sta. 2202+55.00 to Sta. 2202+81.32 "PR-Ramp NE-S"



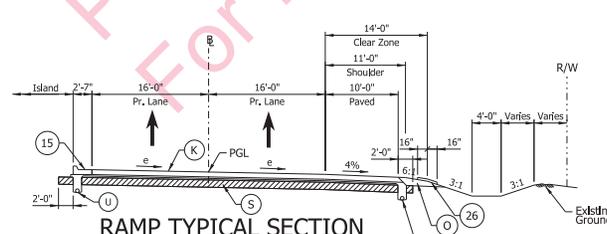
RAMP TYPICAL SECTION

Sta. 1196+25.00 to Sta. 1199+68.57 "PR-Ramp NE-N"



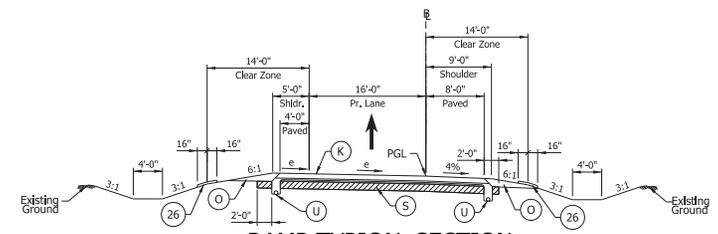
RAMP TYPICAL SECTION

Sta. 2211+01.60 to Sta. 2213+14.12 "PR-Ramp NW-N"
Sta. 1116+10.81 to Sta. 1117+84.00 "PR-Ramp SE-S"



RAMP TYPICAL SECTION

Sta. 1202+95.00 to Sta. 1203+20.20 "PR-Ramp NE-N"



RAMP TYPICAL SECTION

Sta. 1196+25.00 to Sta. 1196+97.28 "PR-Ramp NE-N"

Note:
See Sheets xx-xx for Lane Widths
and Sheets xx-xx for Cross Slope Details

- LEGEND**
- (F) Concrete Sidewalk
 - (K) Full Depth, HMA Pavement
 - (O) Compacted Aggregate, No. 53
 - (S) Subgrade Treatment
 - (U) 6" Underdrain
 - (15) Concrete Curb and Gutter
 - (26) Sodding

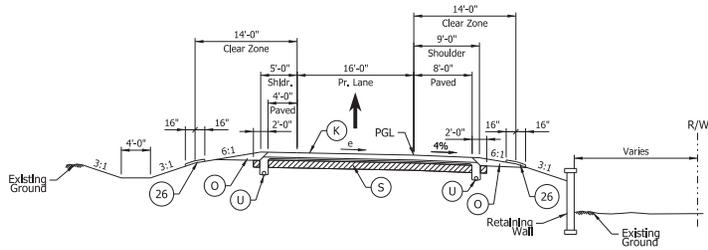
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DESIGNED: CAC	DRAWING: DH	
CHECKED: KCD	CHECKED: KCD	

INDIANA
DEPARTMENT OF TRANSPORTATION

TYPICAL SECTIONS

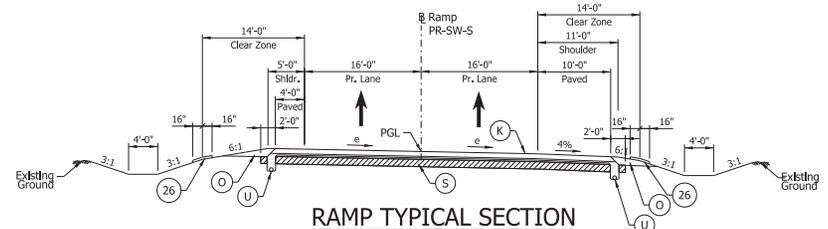
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1" = 8'	DESIGNATION
VERTICAL SCALE	1383489
SURVEY BOOK	SHEETS
ELECTRONIC	4 of 1
CONTRACT	PROJECT
R-37053	1383489

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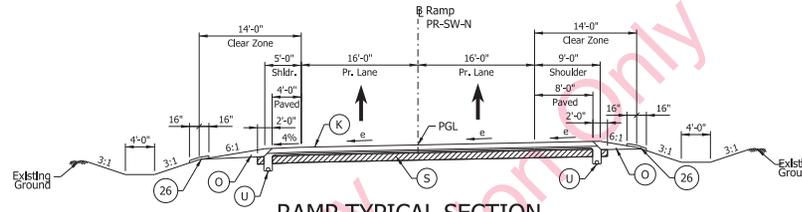
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Sta. 1104+91.72 to Sta. 1105+94.75 "PR-Ramp NW-S"
Sta. 2219+47.09 to Sta. 2220+51.21 "PR-Ramp SE-N"



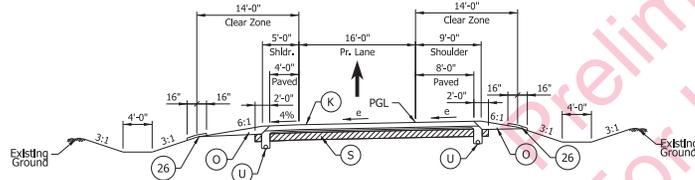
RAMP TYPICAL SECTION

Sta. 2208+42.33 to Sta. 2210+69.77 "PR-Ramp SW-S"



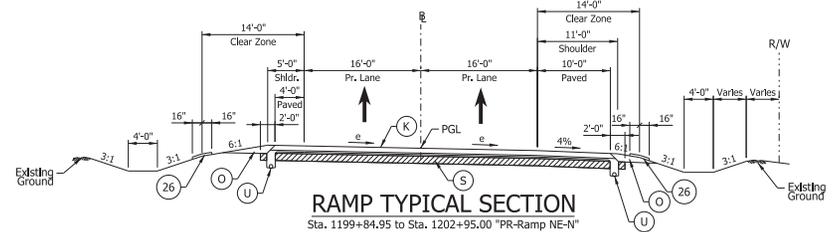
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RAMP TYPICAL SECTION

Sta. 2209+30.00 to Sta. 2210+84.38 "PR-Ramp NW-N"
Sta. 1114+70.00 to Sta. 1116+10.29 "PR-Ramp SE-S"
Sta. 2199+84.95 to Sta. 2202+55.00 "PR-Ramp NE-S"



RAMP TYPICAL SECTION

Sta. 1199+84.95 to Sta. 1202+95.00 "PR-Ramp NE-N"

Note:
See Sheets xx-xx for Lane Widths
and Sheets xx-xx for Cross Slope Details

LEGEND	
(F) Concrete Sidewalk	(S) Subgrade Treatment
(K) Full Depth, HMA Pavement	(U) 6" Underdrain
(O) Compacted Aggregate, No. 53	(15) Concrete Curb and Gutter
	(26) Sodding

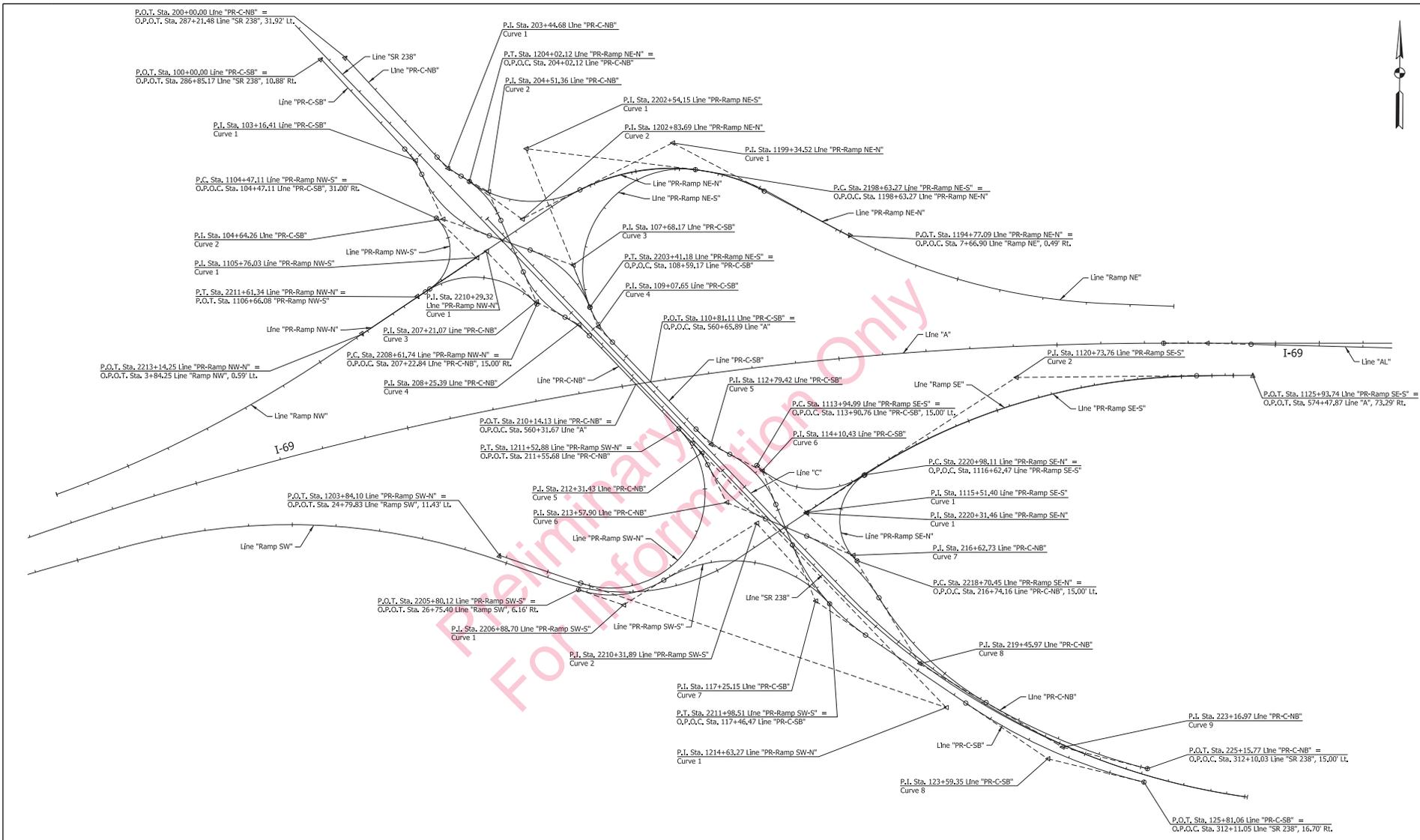
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DESIGNED: CAC	DRAWING: DH	
CHECKED: KCD	CHECKED: KCD	

INDIANA
DEPARTMENT OF TRANSPORTATION

TYPICAL SECTIONS

HORIZONTAL SCALE	BRIDGE FILE
1" = 8'	
VERTICAL SCALE	DESIGNATION
	1383489
SURVEY BOOK	SHEETS
ELECTRONIC	5 of 1
CONTRACT	PROJECT
R-37053	1383489

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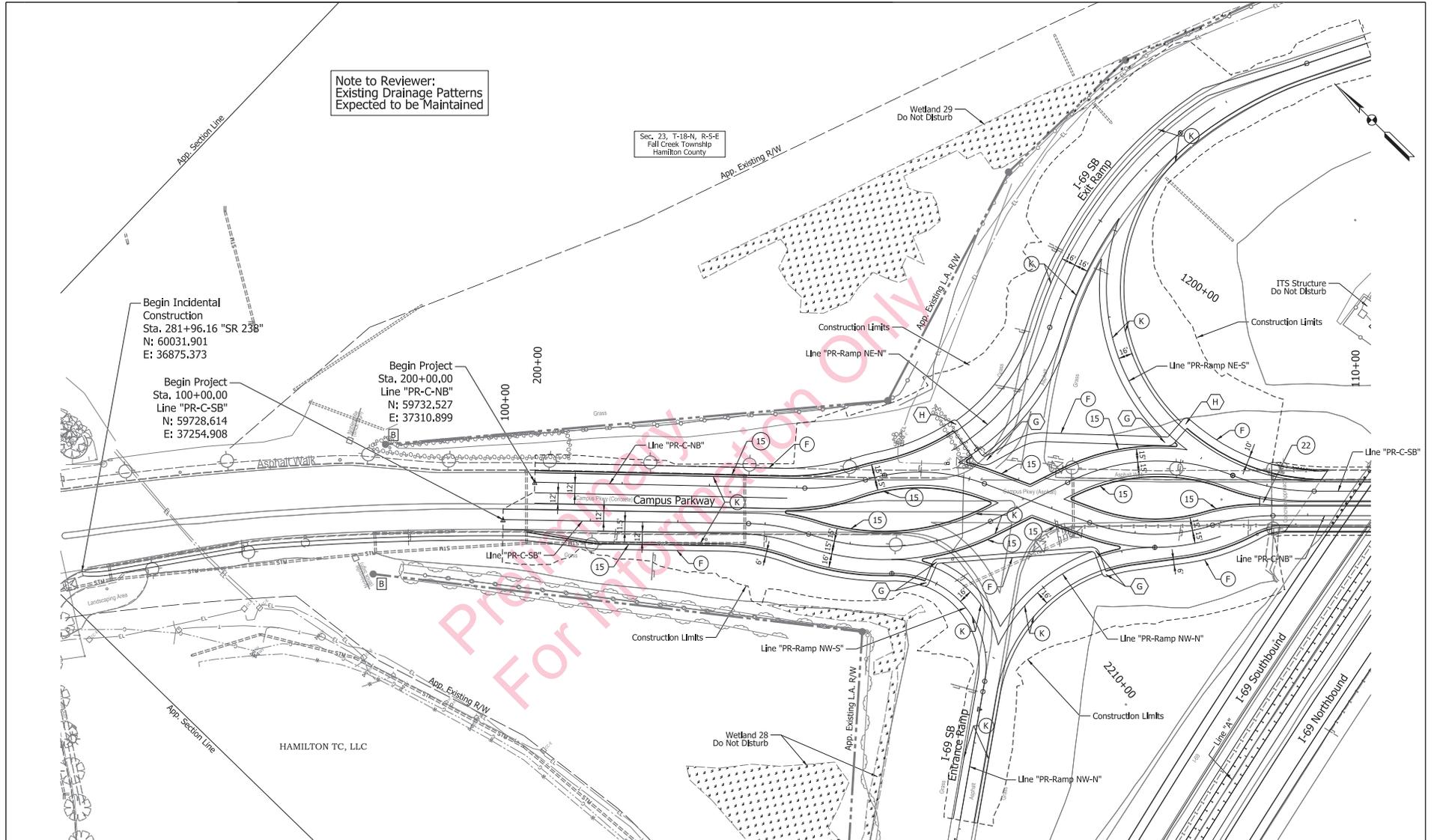
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CHECKED:	KCD	CHECKED:	KCD				
						SURVEY BOOK	SHEETS
					ELECTRONIC	6	of 1
					CONTRACT		PROJECT
					R-37053		1383489

CURVE NUMBER	DEGREE	RADIUS	SIMPLE CURVE DELTA	CURVE LENGTH	TANGENT	EXTERNAL	CURVE DATA TABLE (BASELINE)						D.S. (M+H)	e	BEGIN BEARING	END BEARING			
							PC, PRC OR PCC			PI (OF TANGENTS)							PT, PRC OR PCC		
							STATION	NORTHING	EASTING	NORTHING	EASTING	STATION					NORTHING	EASTING	
PR-C-NB-1	25° 27' 53"	225.00	17° 54' 02" (LT)	70.30	35.44	2.77	203+09.24	59506.590	37522.050	59480.700	37546.246	203+79.54	59463.500	37572.228	25	NC	S43° 03' 45"E	S60° 57' 48"E	
PR-C-NB-2	26° 38' 57"	215.00	36° 56' 35" (RT)	130.63	71.82	11.68	203+79.54	59463.500	37572.228	59428.641	37640.021	205+18.17	59363.041	37669.255	25	NC	S60° 57' 48"E	S24° 01' 13"E	
PR-C-NB-3	26° 38' 57"	215.00	38° 11' 29" (LT)	143.31	74.43	12.52	206+46.64	59245.694	37271.551	59172.707	37751.850	207+89.95	59143.006	37817.698	25	NC	S24° 01' 13"E	S62° 12' 41"E	
PR-C-NB-4	25° 27' 53"	225.00	17° 54' 04" (RT)	70.30	35.44	2.77	207+89.95	59143.006	37817.698	59126.485	37849.049	208+60.25	59101.127	37873.803	25	NC	S62° 12' 41"E	S44° 18' 37"E	
PR-C-NB-5	28° 38' 52"	200.00	17° 16' 50" (RT)	60.32	30.39	2.30	212+01.04	58857.269	38111.860	58835.522	38133.089	212+61.36	58808.451	38146.901	25	NC	S44° 18' 37"E	S67° 46' 07"E	
PR-C-NB-6	22° 02' 13"	260.00	40° 44' 20" (LT)	184.87	96.54	17.34	212+61.36	58808.451	38146.901	58722.460	38190.771	214+46.23	58685.936	38280.131	25	NC	S22° 01' 47"E	S67° 46' 07"E	
PR-C-NB-7	16° 08' 23"	355.00	35° 37' 48" (RT)	220.76	114.08	17.88	215+48.65	58647.183	38374.943	58604.021	38480.543	217+69.41	58507.422	38541.230	25	NC	S67° 46' 07"E	S32° 08' 20"E	
PR-C-NB-8	8° 04' 52"	709.00	27° 58' 00" (LT)	346.07	176.55	21.65	217+69.41	58507.422	38541.230	58357.923	38635.152	221+15.48	58269.928	38786.214	35	5.4%	S32° 08' 20"E	S60° 06' 19"E	
PR-C-NB-9	4° 02' 36"	1418.00	16° 10' 27" (LT)	400.29	201.49	16.24	221+15.48	58269.928	38788.214	58169.506	38962.890	225+15.77	58121.716	39156.627	45	6.0%	S60° 06' 19"E	S76° 16' 46"E	
PR-C-SB-1	25° 27' 53"	225.00	17° 49' 58" (RT)	70.03	35.30	2.75	102+81.11	59524.323	37448.002	59498.669	37472.250	103+51.13	59466.822	37487.477	25	NC	S43° 23' 11"E	S25° 33' 11"E	
PR-C-SB-2	21° 13' 14"	270.00	45° 28' 01" (LT)	214.26	113.13	22.74	103+51.13	59466.822	37487.477	59364.758	37536.275	105+65.39	59327.965	37643.253	25	NC	S25° 33' 11"E	S71° 01' 13"E	
PR-C-SB-3	24° 54' 40"	230.00	48° 34' 19" (RT)	194.98	103.78	22.33	106+64.39	59295.768	37736.866	59262.015	37835.005	108+59.37	59166.098	37874.634	25	NC	S71° 01' 13"E	S22° 26' 53"E	
PR-C-SB-4	22° 55' 06"	250.00	21° 51' 44" (LT)	95.39	48.28	4.62	108+59.37	59166.098	37874.634	59121.473	37893.071	109+54.76	59086.924	37926.798	25	NC	S22° 26' 53"E	S44° 18' 37"E	
PR-C-SB-5	19° 45' 26"	290.00	19° 03' 35" (LT)	96.47	48.68	4.06	112+30.73	58889.447	38119.577	58854.610	38153.585	113+27.20	58832.788	38197.105	25	NC	S44° 18' 37"E	S63° 22' 12"E	
PR-C-SB-6	25° 27' 53"	225.00	40° 36' 05" (RT)	159.44	83.23	14.90	113+27.20	58832.788	38197.105	58795.481	38271.509	114+86.64	58718.734	38303.721	25	NC	S63° 22' 12"E	S22° 46' 07"E	
PR-C-SB-7	12° 27' 20"	460.00	33° 32' 24" (LT)	269.28	136.62	20.43	115+86.53	58626.631	38342.378	58498.813	38396.026	118+55.81	58421.918	38511.263	25	2.0%	S22° 46' 07"E	S56° 18' 32"E	
PR-C-SB-8	4° 34' 35"	1252.00	20° 30' 51" (LT)	448.26	226.56	20.33	121+32.79	58268.269	38741.827	58142.594	38930.331	125+81.06	58090.947	39150.923	45	6.0%	S56° 18' 32"E	S76° 49' 22"E	
PR-RAMP NE-N-1	12° 27' 20"	460.00	54° 33' 47" (LT)	438.06	237.24	57.57	1196+97.28	59434.825	38271.269	59543.372	38060.322	1201+35.34	59434.825	37849.575	35	4.0%	N62° 46' 16"W	S62° 39' 57"W	
PR-RAMP NE-N-2	23° 23' 10"	245.00	62° 23' 18" (RT)	266.78	148.34	41.41	1201+35.34	59434.825	37849.575	59366.323	37717.795	1204+02.12	59451.524	37966.360	25	3.8%	S62° 39' 57"W	N54° 56' 44"W	
PR-RAMP NE-S-1	24° 54' 40"	230.00	119° 03' 11" (LT)	477.91	390.88	223.53	2198+63.27	59482.793	38113.305	59527.412	37724.983	2203+41.18	59166.285	37874.634	25	3.8%	N83° 26' 44"W	S22° 26' 53"E	
PR-RAMP NW-N-1	28° 38' 52"	200.00	79° 54' 59" (LT)	278.96	167.57	60.92	2208+61.74	59172.499	37753.398	59292.374	37636.308	2211+40.70	59198.081	37497.784	25	4.0%	N44° 19' 36"W	S55° 45' 25"W	
PR-RAMP NW-S-1	54° 34' 03"	105.00	101° 40' 33" (RT)	186.33	128.92	61.27	1104+47.11	59367.061	37521.668	59277.377	37614.276	1106+33.44	59304.835	37507.706	25	NC	S45° 55' 08"E	S55° 45' 25"W	
PR-RAMP SE-N-1	45° 50' 12"	125.00	104° 21' 08" (RT)	237.66	161.01	70.84	2218+70.45	58591.422	38490.536	58700.172	38374.001	2220+98.11	58788.245	38506.590	25	4.0%	N80° 37' 47"W	N56° 50' 21"E	
PR-RAMP SE-S-1	28° 38' 52"	200.00	76° 03' 17" (LT)	265.48	156.41	53.90	1113+94.99	58807.712	38259.365	58701.412	38374.100	1116+60.47	58787.150	38504.919	25	4.0%	S47° 11' 10"E	N56° 45' 33"E	
PR-RAMP SE-S-2	4° 00' 24"	1430.00	32° 14' 22" (RT)	804.64	413.28	58.52	1116+60.47	58787.150	38504.919	59013.694	38850.578	1124+65.11	59020.915	39263.799	45	5.7%	N56° 45' 33"E	N88° 59' 56"E	
PR-RAMP SW-S-1	26° 38' 57"	215.00	152° 38' 07" (LT)	572.76	883.14	693.94	1205+80.12	58535.444	37858.729	58257.778	38697.088	1211+52.88	58889.728	38080.173	25	3.8%	S71° 40' 30"E	N44° 18' 37"W	
PR-RAMP SW-S-1	24° 48' 12"	231.00	50° 21' 00" (LT)	203.00	108.58	24.24	2205+80.12	58520.255	37853.698	58486.118	37956.769	2207+83.12	58543.695	38048.823	25	3.8%	S71° 40' 30"E	N57° 58' 30"W	
PR-RAMP SW-S-2	19° 05' 55"	300.00	79° 20' 05" (RT)	415.40	248.78	89.73	2207+83.12	58543.695	38048.823	58675.619	38259.740	2211+98.51	58492.760	38428.419	25	2.0%	N57° 58' 30"E	S42° 41' 25"E	



RECOMMENDED FOR APPROVAL	DESIGN ENGINEER	DATE	INDIANA DEPARTMENT OF TRANSPORTATION	HORIZONTAL SCALE	BRIDGE FILE
DESIGNED: CAC	DRAWING: DH			VERTICAL SCALE	DESIGNATION
CHECKED: KCD	CHECKED: KCD			SURVEY BOOK	SHEETS
				ELECTRONIC	7 of 1
			GEOMETRIC SHEET	CONTRACT	PROJECT
				R-37053	1383489

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07-NOV-2014



Note to Reviewer:
Existing Drainage Patterns
Expected to be Maintained

Sec. 23, T-18-N, R-9-E
Fall Creek Township
Hamilton County

Begin Incidental
Construction
Sta. 281+96.16 "SR 238"
N: 60031.901
E: 36875.373

Begin Project
Sta. 100+00.00
Line "PR-C-SB"
N: 59728.614
E: 37254.908

Begin Project
Sta. 200+00.00
Line "PR-C-NB"
N: 59732.527
E: 37310.899

- (F) - Concrete Sidewalk
- (K) - Full Depth HMA Pavement
- (M) - MSE Retaining Wall
- (15) - Concrete Curb and Gutter
- (22) - Concrete Center Curb
- (Hexagon) - Concrete Curb Ramp
- (Dotted Area) - Wetlands

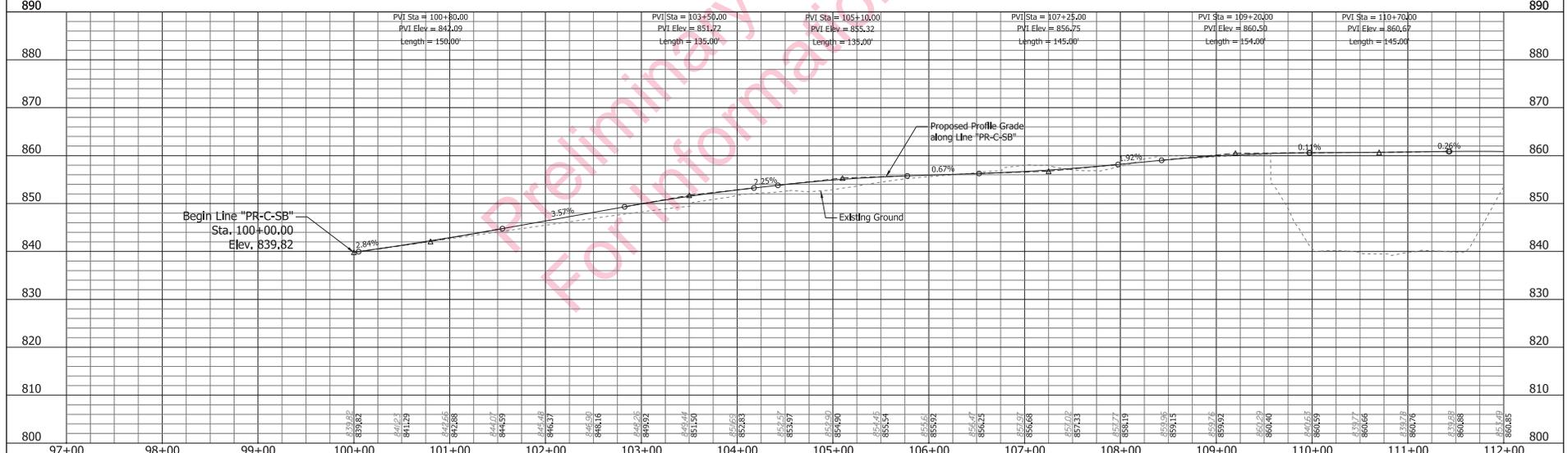
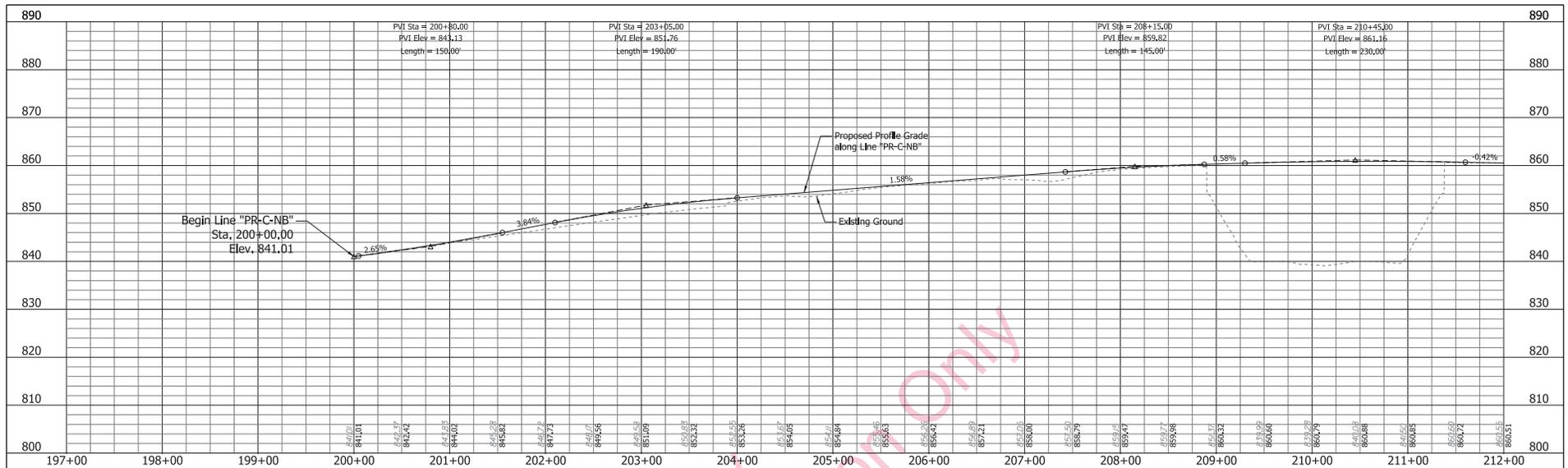
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DESIGNED: CAC	DRAWING: DH	
CHECKED: KCD	CHECKED: KCD	

INDIANA
DEPARTMENT OF TRANSPORTATION

PLAN SHEET
LINE "PR-C-NB" AND "PR-C-SB"

HORIZONTAL SCALE	BRIDGE FILE
1"=50'	
VERTICAL SCALE	DESIGNATION
	1383489
SURVEY BOOK	SHEETS
ELECTRONIC	19 of 1
CONTRACT	PROJECT
R-37053	1383489

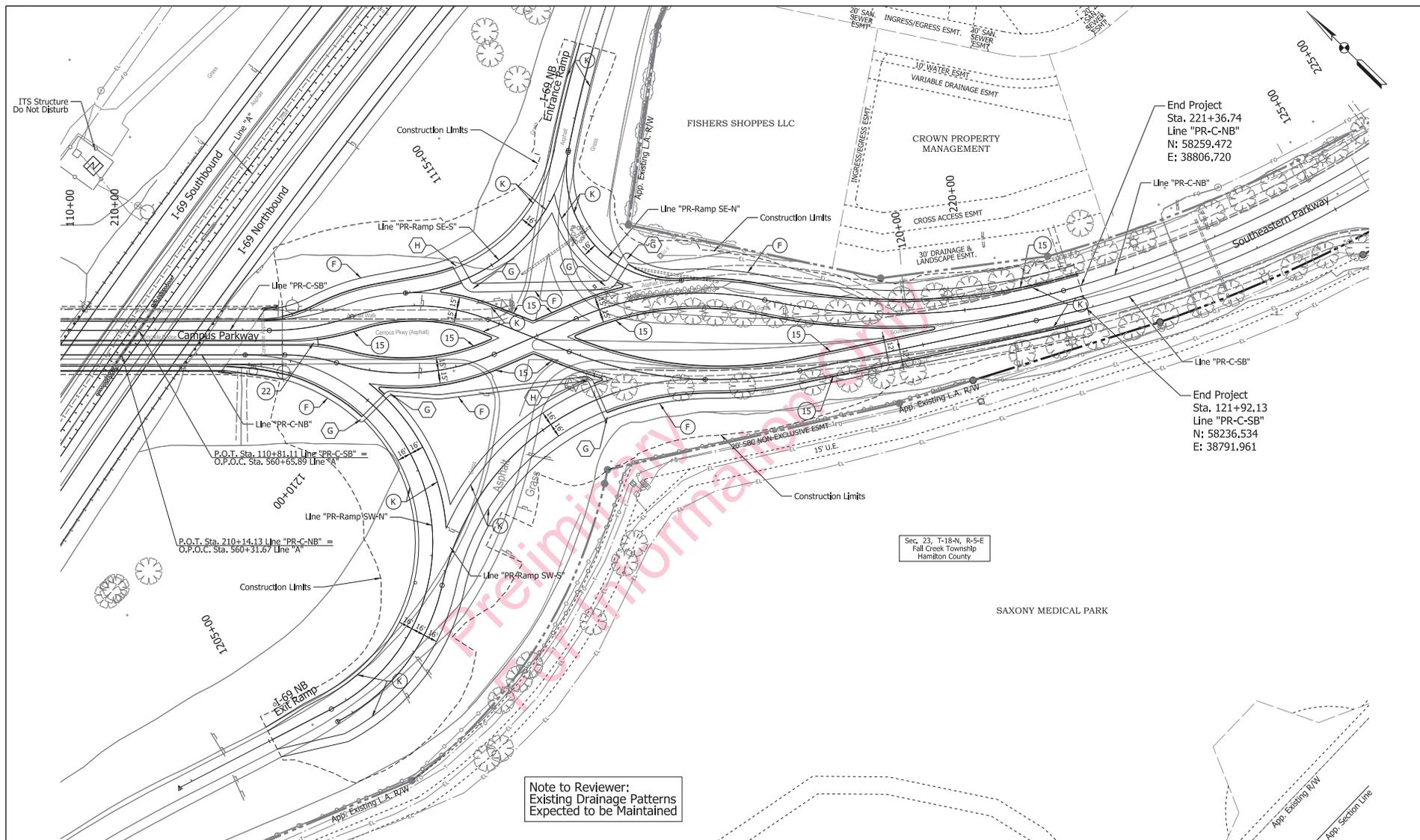
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07-NOV-2014



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For Information Only

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CHECKED: KCD	CHECKED: KCD											
HORIZONTAL SCALE 1"=50'	BRIDGE FILE											
VERTICAL SCALE	DESIGNATION 1383489											
SURVEY BOOK ELECTRONIC R-37053	SHEETS 20 of 1 PROJECT 1383489											

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07-NOV-2014



Note to Reviewer:
Existing Drainage Patterns
Expected to be Maintained

- (F) - Concrete Sidewalk
- (K) - Full Depth HMA Pavement
- (M) - MSE Retaining Wall
- (15) - Concrete Curb and Gutter
- (22) - Concrete Center Curb
- (C) - Concrete Curb Ramp
- (W) - Wetlands

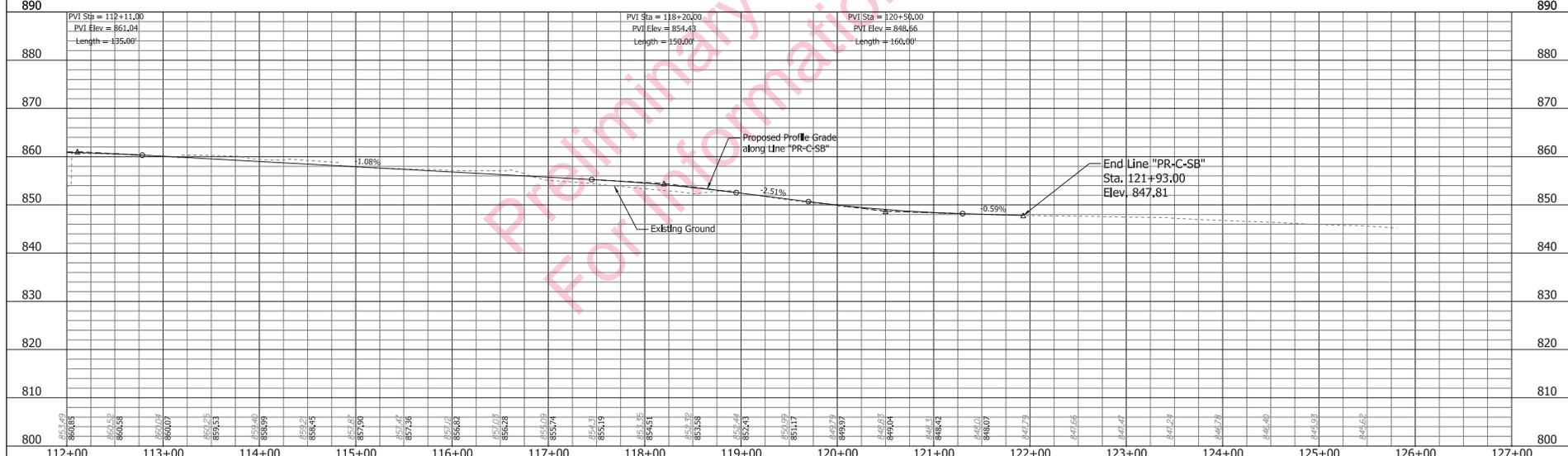
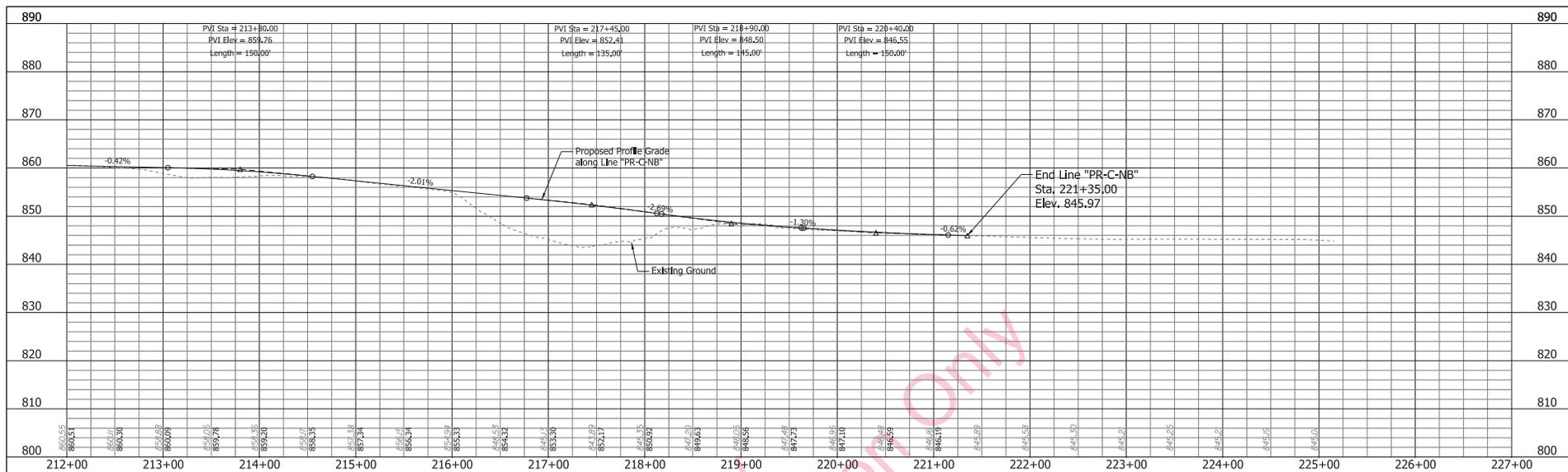
RECOMMENDED FOR APPROVAL	DESIGN ENGINEER	DATE
DESIGNED: CAC	DRAWING: DH	
CHECKED: KCD	CHECKED: KCD	

INDIANA
DEPARTMENT OF TRANSPORTATION

PLAN SHEET
LINE "PR-C-NB" AND "PR-C-SB"

HORIZONTAL SCALE	BRIDGE FILE
1"=50'	
VERTICAL SCALE	DESIGNATION
	1383489
SURVEY BOOK	SHEETS
ELECTRONIC	21 of 1
CONTRACT	PROJECT
R-37053	1383489

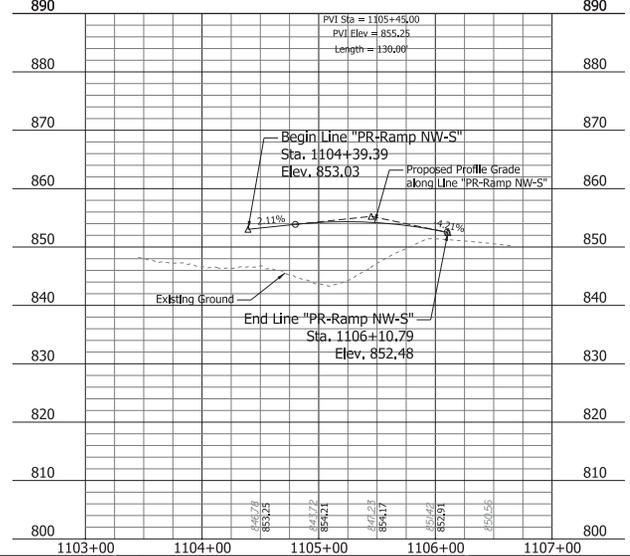
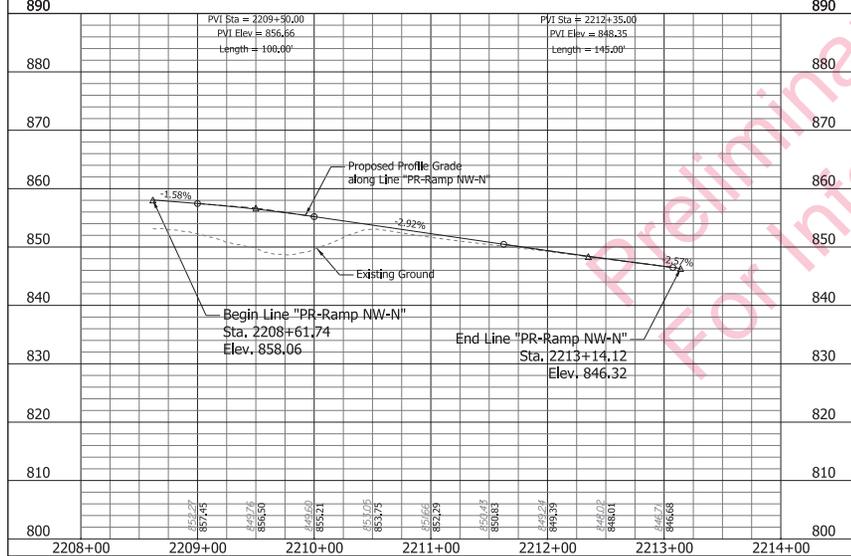
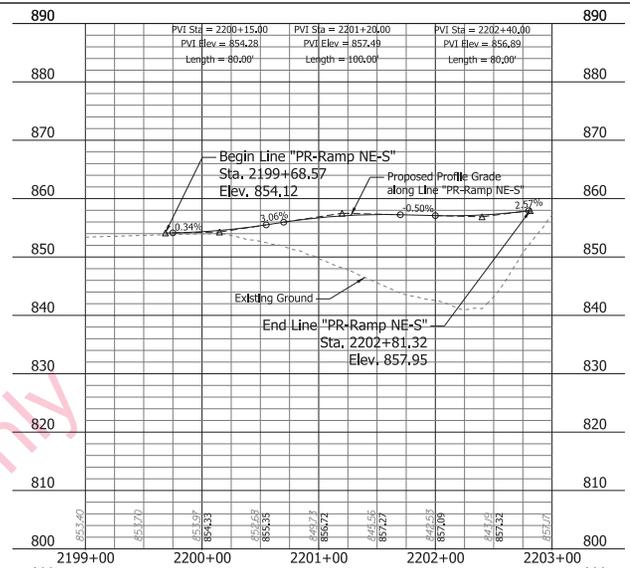
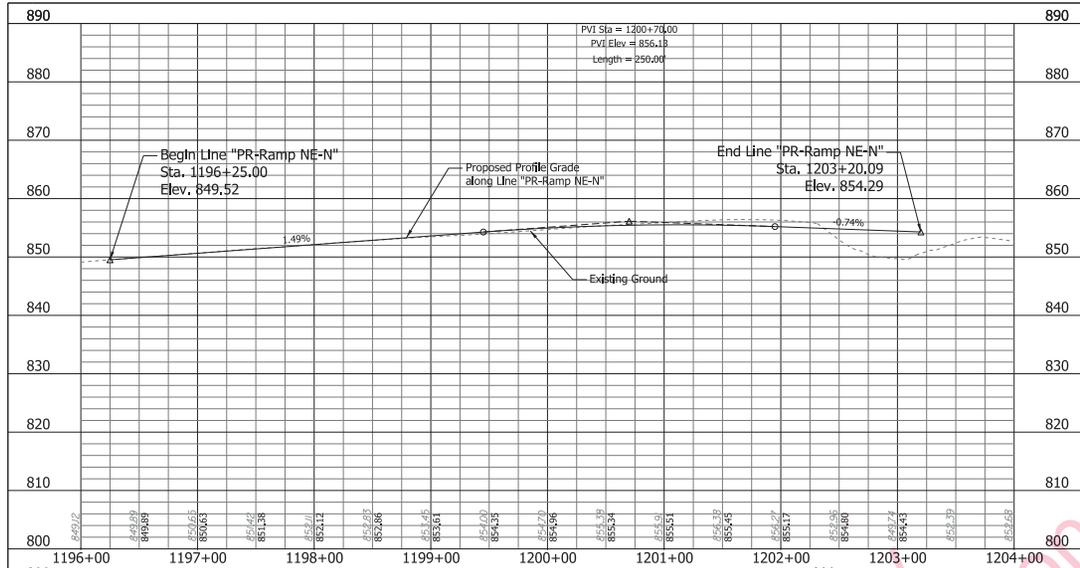
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	INDIANA DEPARTMENT OF TRANSPORTATION	HORIZONTAL SCALE 1"=50' VERTICAL SCALE 1/8"=1'
		BRIDGE FILE DESIGNATION 1383489
	PROFILE SHEET STA. 212+00 TO STA. 227+00 "PR-C-NB" STA. 112+00 TO STA. 127+00 "PR-C-SB"	SURVEY BOOK ELECTRONIC CONTRACT R-37053
		SHEETS 22 of 1 PROJECT 1383489

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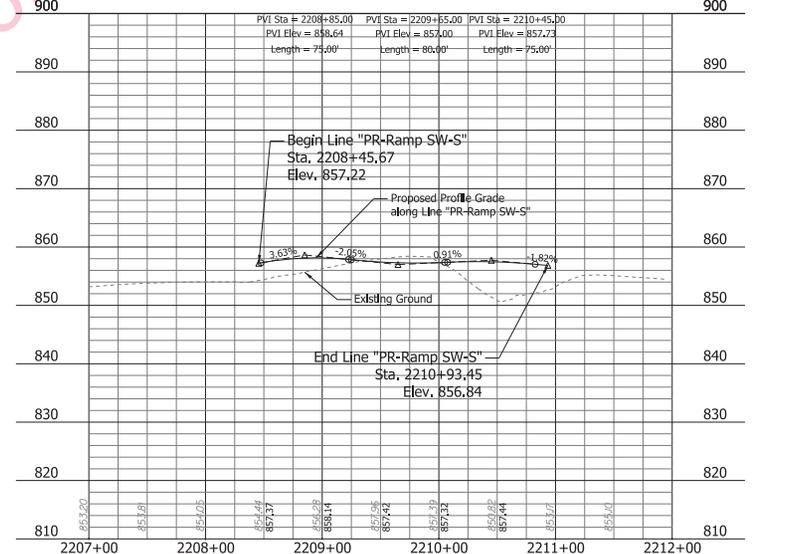
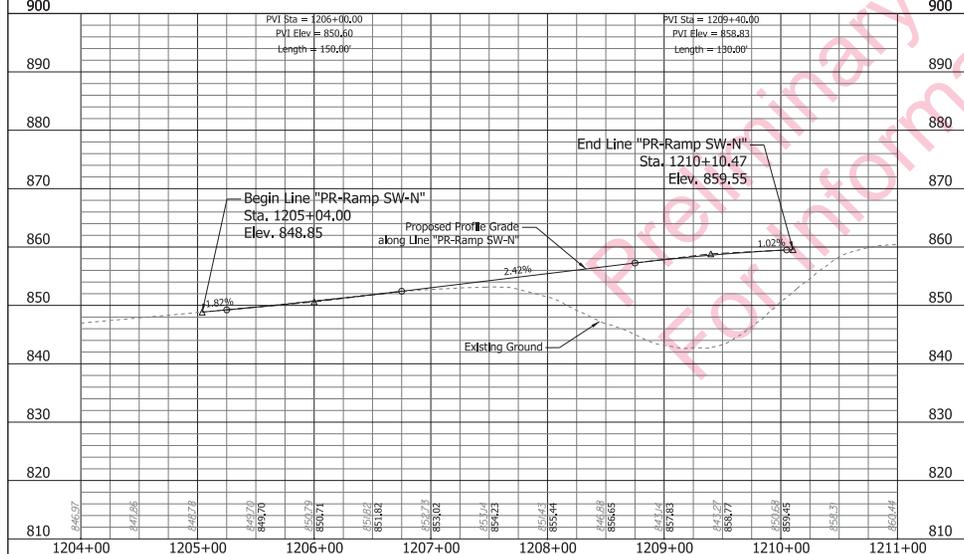
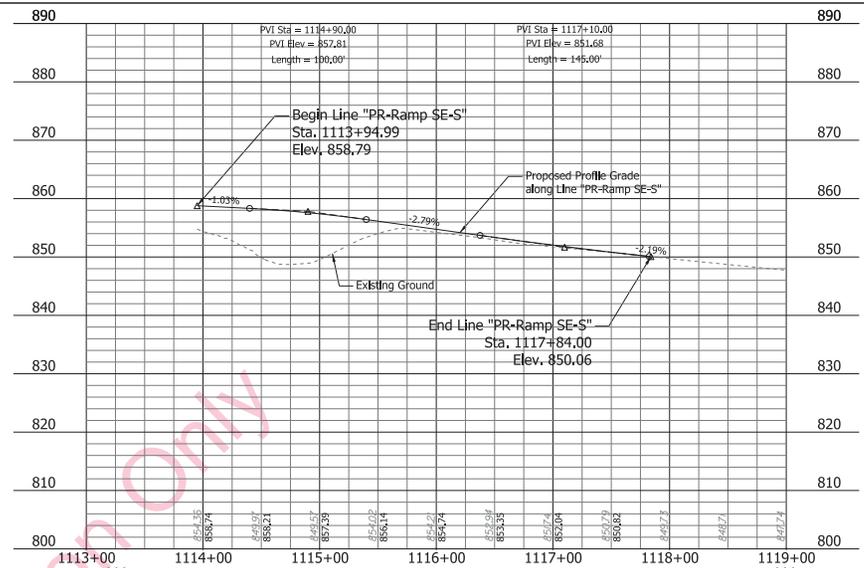
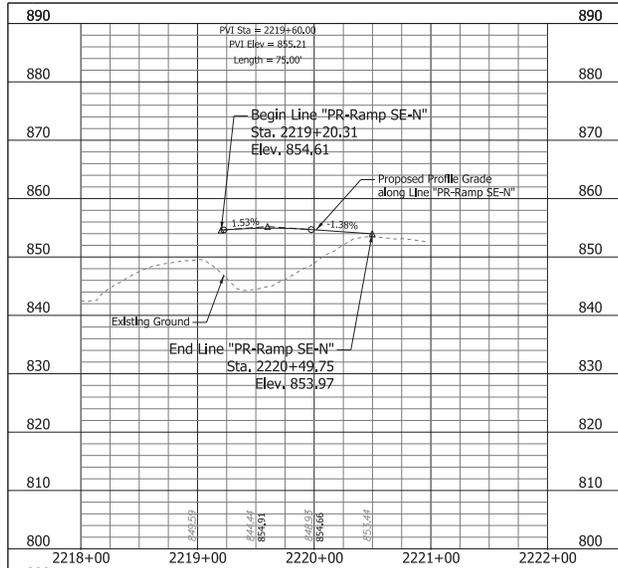
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CHECKED: KCD	CHECKED: KCD

RECOMMENDED FOR APPROVAL	DESIGN ENGINEER	DATE
INDIANA DEPARTMENT OF TRANSPORTATION		
PROFILE SHEET		
LINE "PR-RAMP NE-N", LINE "PR-RAMP NE-S"		
LINE "PR-RAMP NW-N", LINE "PR-RAMP NW-S"		

HORIZONTAL SCALE	BRIDGE FILE
1"=50'	
VERTICAL SCALE	DESIGNATION
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SURVEY BOOK	SHEETS
ELECTRONIC	23 of 1
CONTRACT	PROJECT
R-37053	1383489

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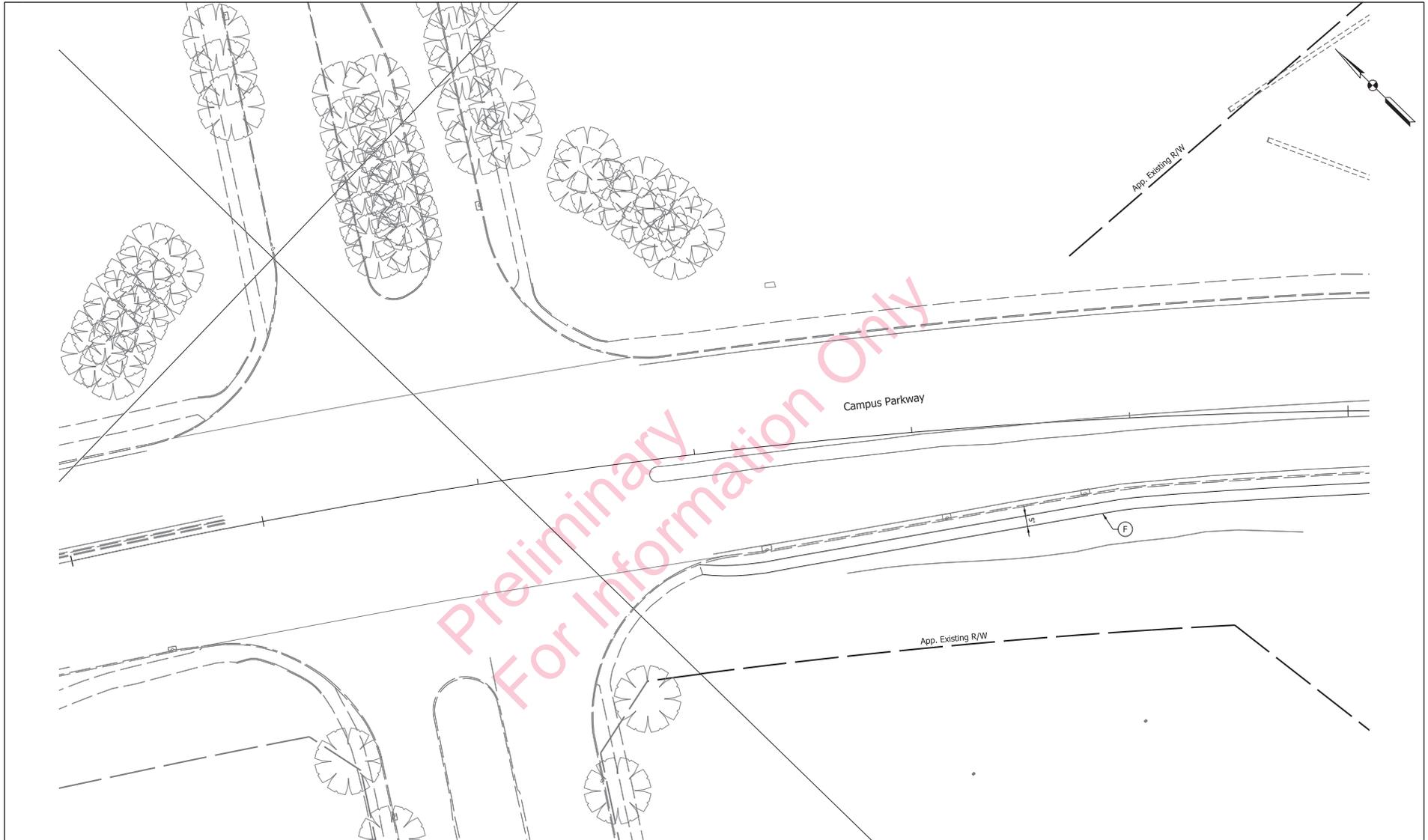


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DESIGNED: CAC	DRAWN: DH
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INDIANA DEPARTMENT OF TRANSPORTATION		HORIZONTAL SCALE 1"=50' VERTICAL SCALE 1"=5'	BRIDGE FILE DESIGNATION 1383489
PROFILE SHEET LINE "PR-RAMP SE-N", LINE "PR-RAMP SE-S" LINE "PR-RAMP SW-N", LINE "PR-RAMP SW-S"		SURVEY BOOK ELECTRONIC CONTRACT R-37053	SHEETS 24 of PROJECT 1383489

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07-NOV-2014



F Concrete Skidewalk

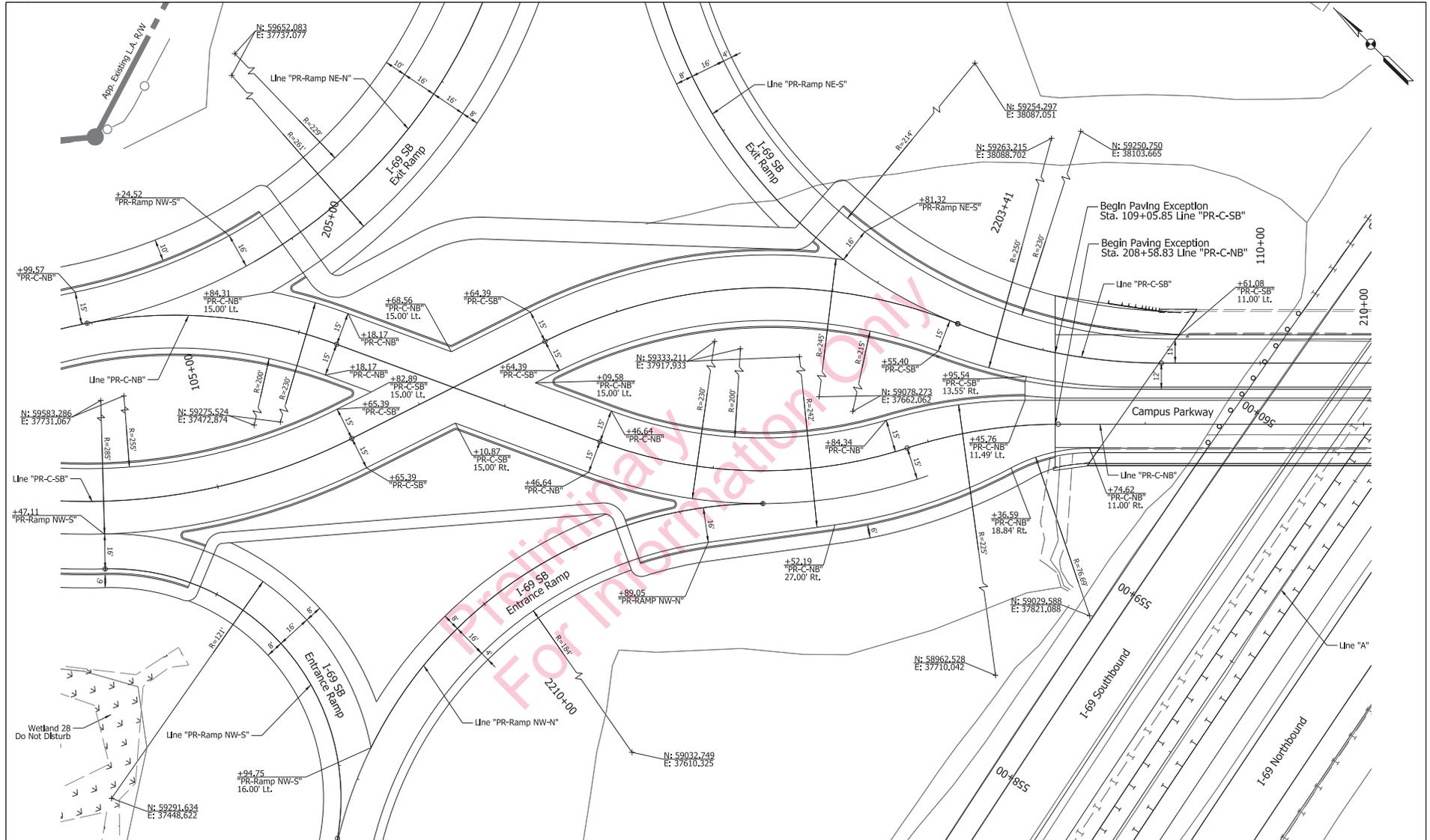
RECOMMENDED FOR APPROVAL	DESIGN ENGINEER	DATE
DESIGNED: CAC	DRAWN: DH	
CHECKED: KCD	CHECKED: KCD	

INDIANA
DEPARTMENT OF TRANSPORTATION

CONSTRUCTION DETAIL

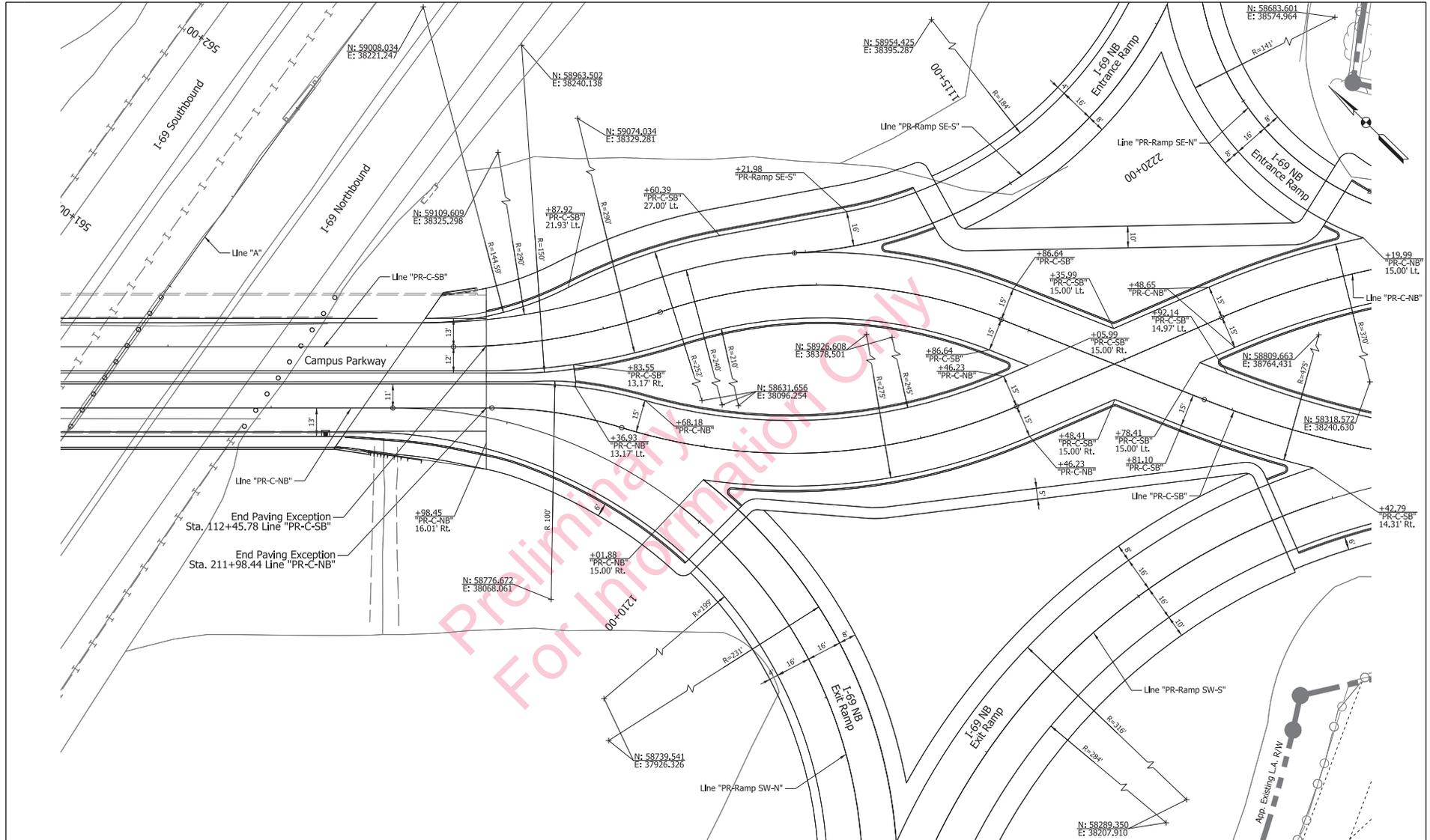
HORIZONTAL SCALE	BRIDGE FILE
1"=20'	DESIGNATION
VERTICAL SCALE	1383489
SURVEY BOOK	SHEETS
ELECTRONIC	25 of 1
CONTRACT	PROJECT
R-37053	1383489

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07-NOV-2014



RECOMMENDED FOR APPROVAL _____ DESIGN ENGINEER DATE		INDIANA DEPARTMENT OF TRANSPORTATION CONSTRUCTION DETAIL LINE "PR-C-NB", "PR-C-SB", "PR-RAMP NW-S", "PR-RAMP NW-N", "PR-RAMP NE-N" & "PR-RAMP NE-S"	HORIZONTAL SCALE	BRIDGE FILE
DESIGNED: CAC DRAWING: DH CHECKED: KCD CHECKED: KCD			1"=20' VERTICAL SCALE	DESIGNATION 1383489
			SURVEY BOOK	SHEETS
			ELECTRONIC	27 of 1
			CONTRACT	PROJECT
			R-37053	1383489

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07-NOV-2014



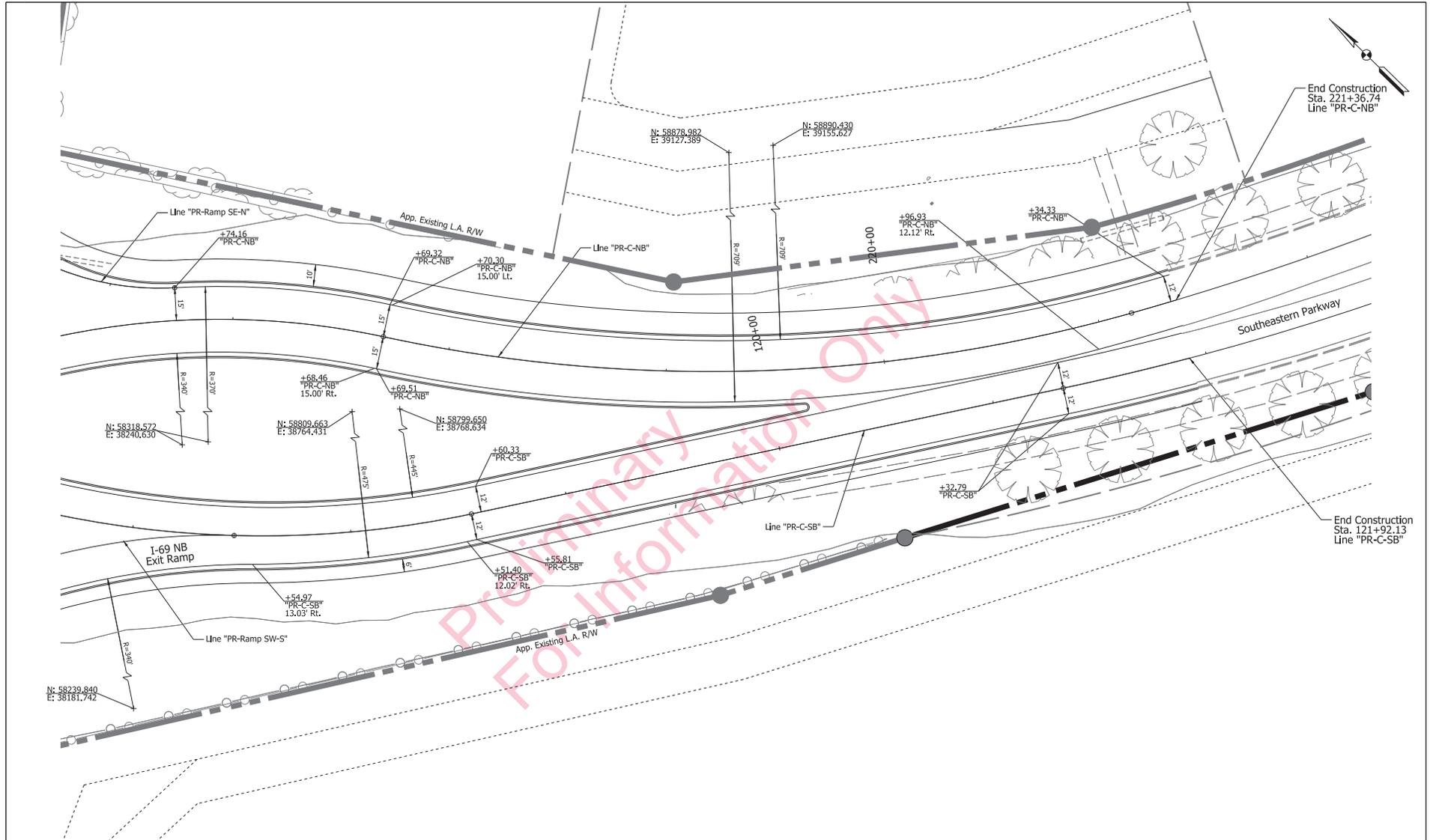
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RECOMMENDED FOR APPROVAL	DESIGN ENGINEER	DATE
DESIGNED: CAC	DRAWING: DH	
CHECKED: KCD	CHECKED: KCD	

INDIANA
DEPARTMENT OF TRANSPORTATION

CONSTRUCTION DETAIL
LINE "PR-C-NB", "PR-C-SB", "PR-RAMP SW-S",
"PR-RAMP SW-N", "PR-RAMP SE-N" & "PR-RAMP SE-S"

HORIZONTAL SCALE	BRIDGE FILE
1"=20'	
VERTICAL SCALE	DESIGNATION
	1383489
SURVEY BOOK	SHEETS
ELECTRONIC	28 of 1
CONTRACT	PROJECT
R-37053	1383489



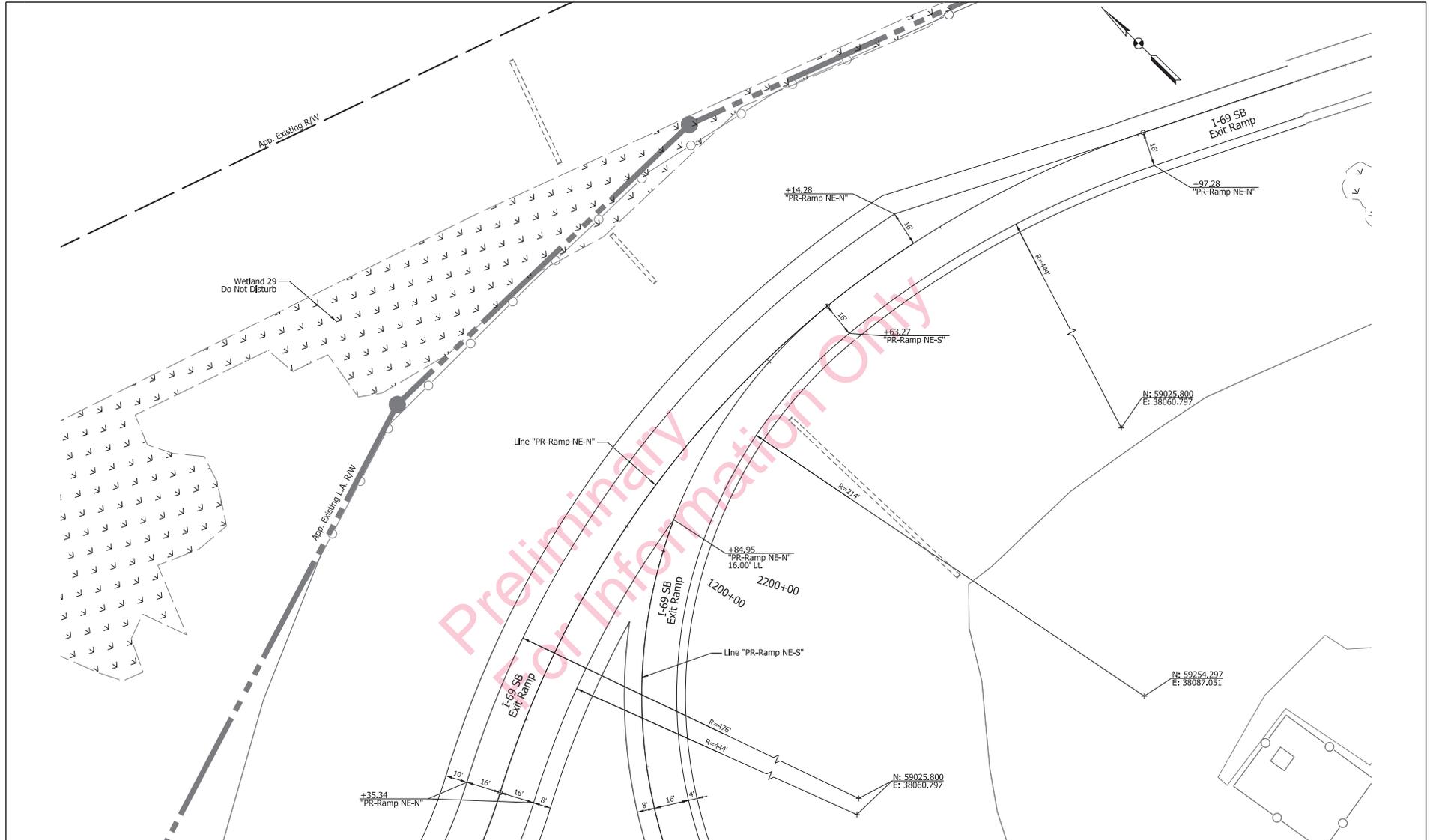
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RECOMMENDED FOR APPROVAL	DESIGN ENGINEER	DATE
DESIGNED: CAC	DRAWN: DH	
CHECKED: KCD	CHECKED: KCD	

INDIANA
DEPARTMENT OF TRANSPORTATION

CONSTRUCTION DETAIL
LINE "PR-C-NB", "PR-C-SB",
"PR-RAMP SW-S, & "PR-RAMP SE-N"

HORIZONTAL SCALE	BRIDGE FILE
1"=20'	
VERTICAL SCALE	DESIGNATION
	1383489
SURVEY BOOK	SHEETS
ELECTRONIC	29 of 1
CONTRACT	PROJECT
R-37053	1383489



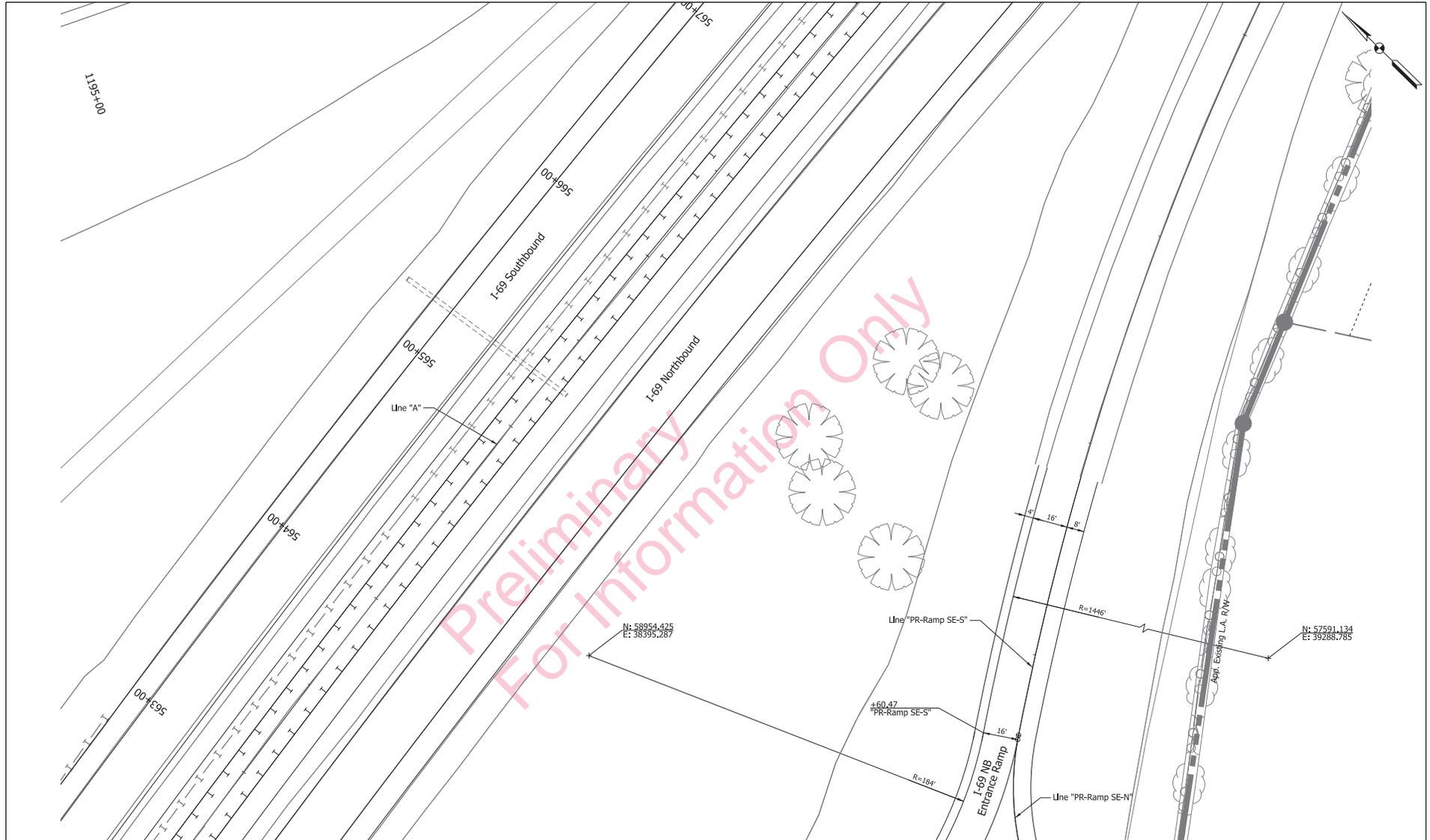
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RECOMMENDED FOR APPROVAL	DESIGN ENGINEER	DATE
DESIGNED: CAC	DRAWN: DH	
CHECKED: KCD	CHECKED: KCD	

INDIANA
DEPARTMENT OF TRANSPORTATION

CONSTRUCTION DETAIL
"PR-RAMP NE-N" & "PR-RAMP NE-S"

HORIZONTAL SCALE	BRIDGE FILE
1"=20'	
VERTICAL SCALE	DESIGNATION
	1383489
SURVEY BOOK	SHEETS
ELECTRONIC	30 of 1
CONTRACT	PROJECT
R-37053	1383489



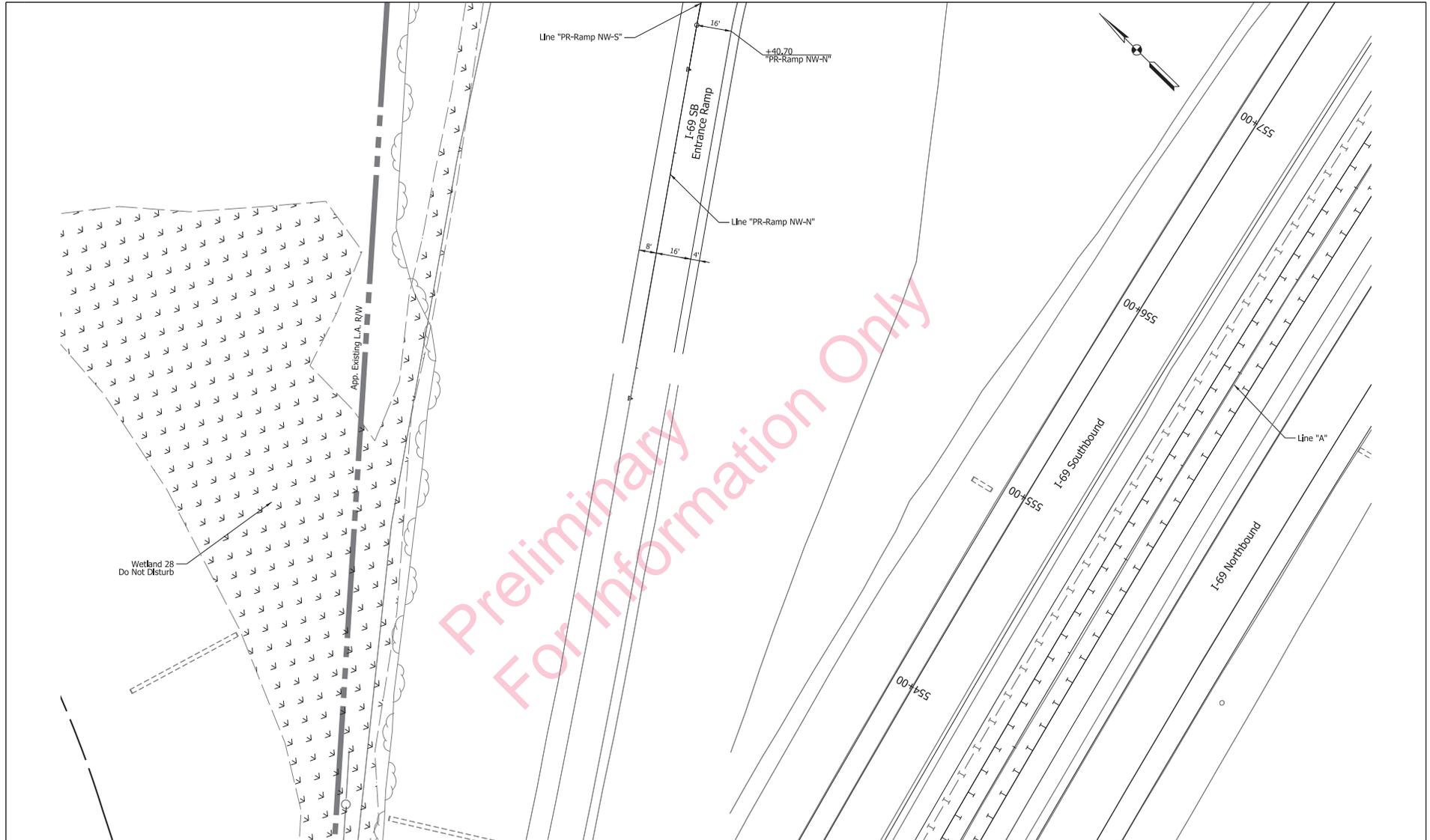
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RECOMMENDED FOR APPROVAL	DESIGN ENGINEER	DATE
DESIGNED: CAC	DRAWN: DH	
CHECKED: KCD	CHECKED: KCD	

INDIANA
DEPARTMENT OF TRANSPORTATION

CONSTRUCTION DETAIL
"PR-RAMP SE-N" & "PR-RAMP SE-S"

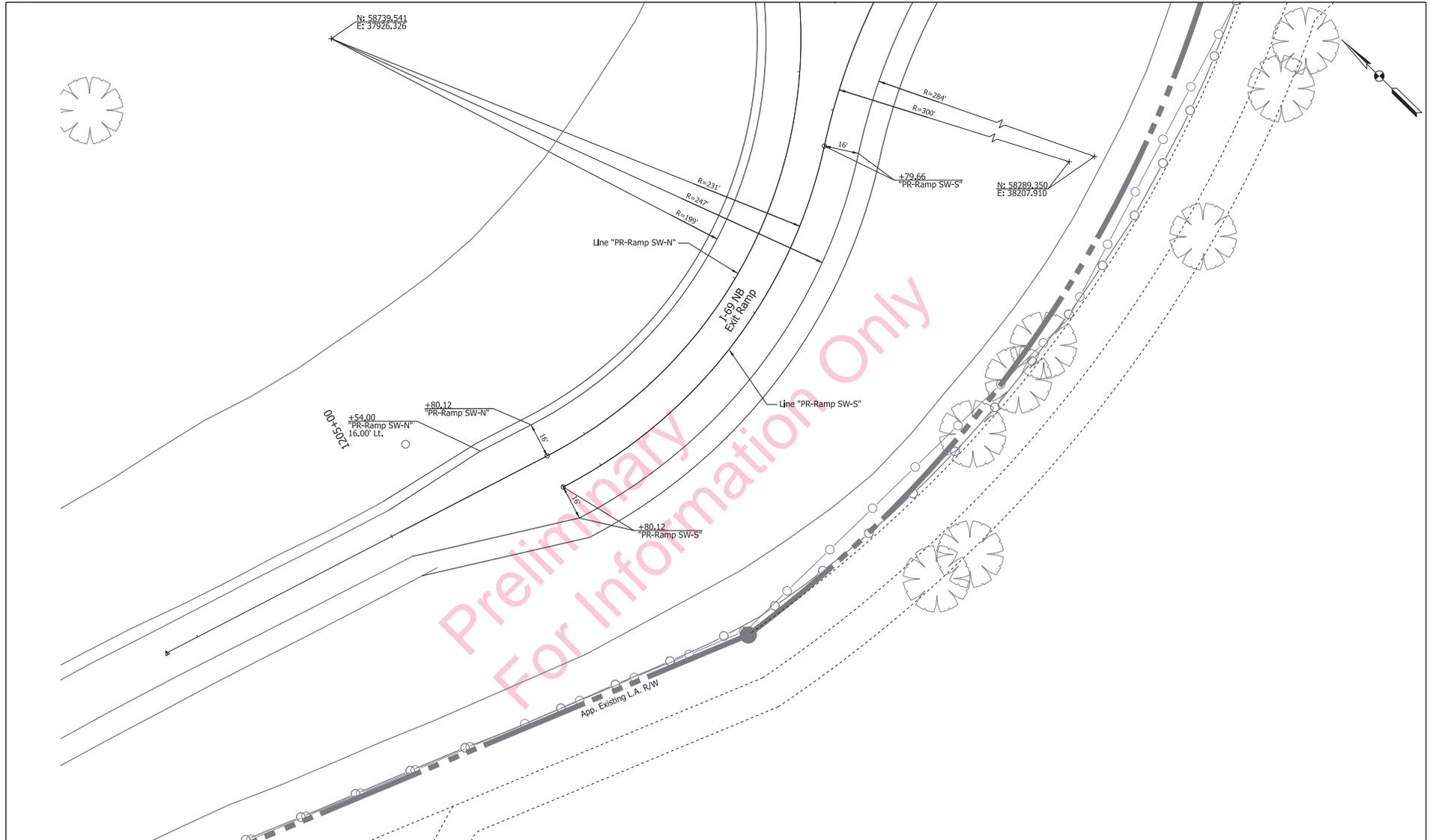
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1"=20'	
VERTICAL SCALE	DESIGNATION
	1383489
SURVEY BOOK	SHEETS
ELECTRONIC	31 of 1
CONTRACT	PROJECT
R-37053	1383489



Preliminary
For Information Only

RECOMMENDED FOR APPROVAL _____ DESIGN ENGINEER _____ DATE _____		INDIANA DEPARTMENT OF TRANSPORTATION CONSTRUCTION DETAIL "PR-RAMP NW-N" & "PR-RAMP NW-S"		HORIZONTAL SCALE 1"=20' VERTICAL SCALE 1/8"=1'-0"		BRIDGE FILE DESIGNATION 1383489	
DESIGNED: CAC	DRAWN: DH			SURVEY BOOK		SHEETS	
CHECKED: KCD	CHECKED: KCD			ELECTRONIC		32 of 1	
				CONTRACT		PROJECT	
				R-37053		1383489	

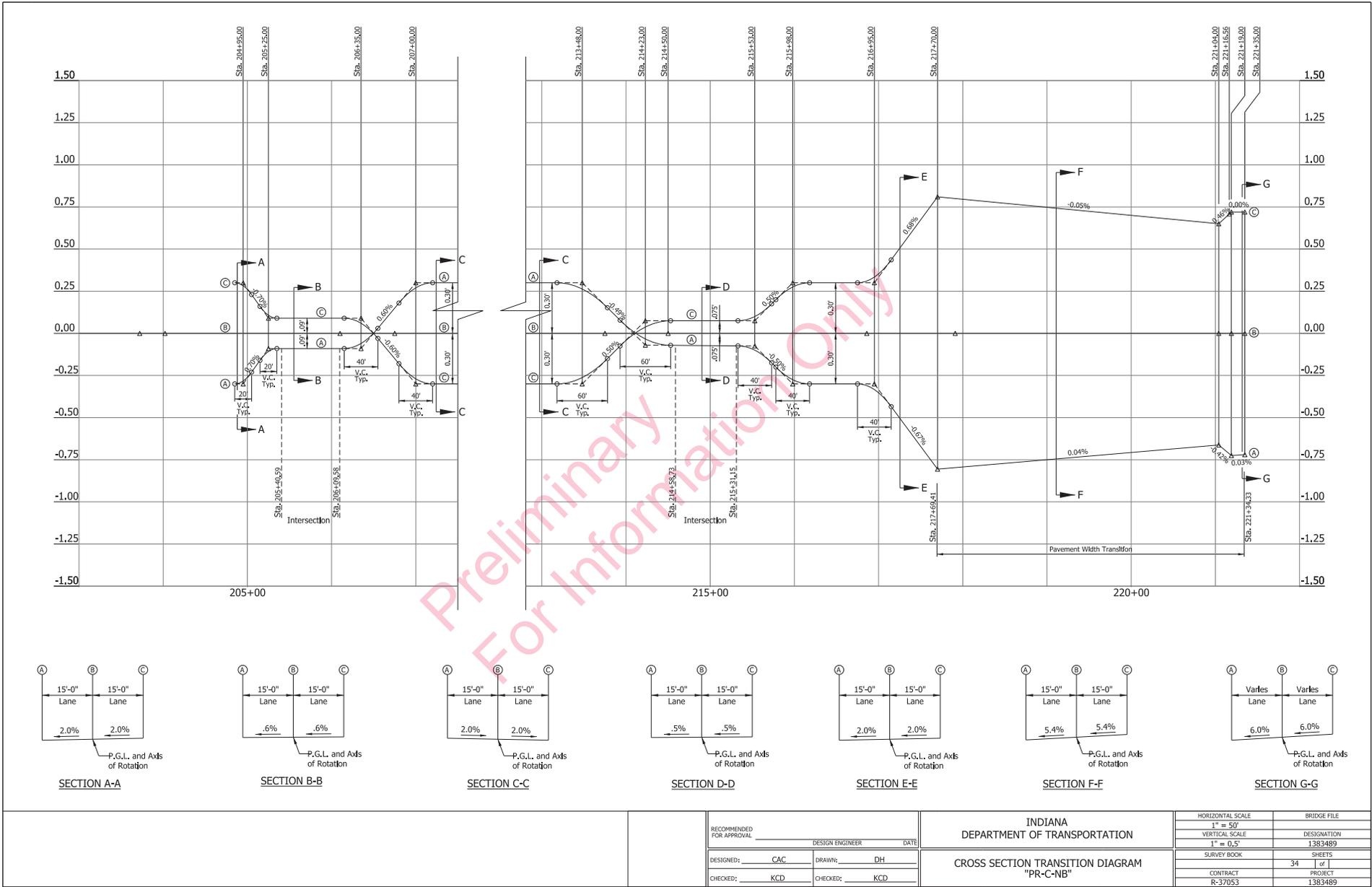
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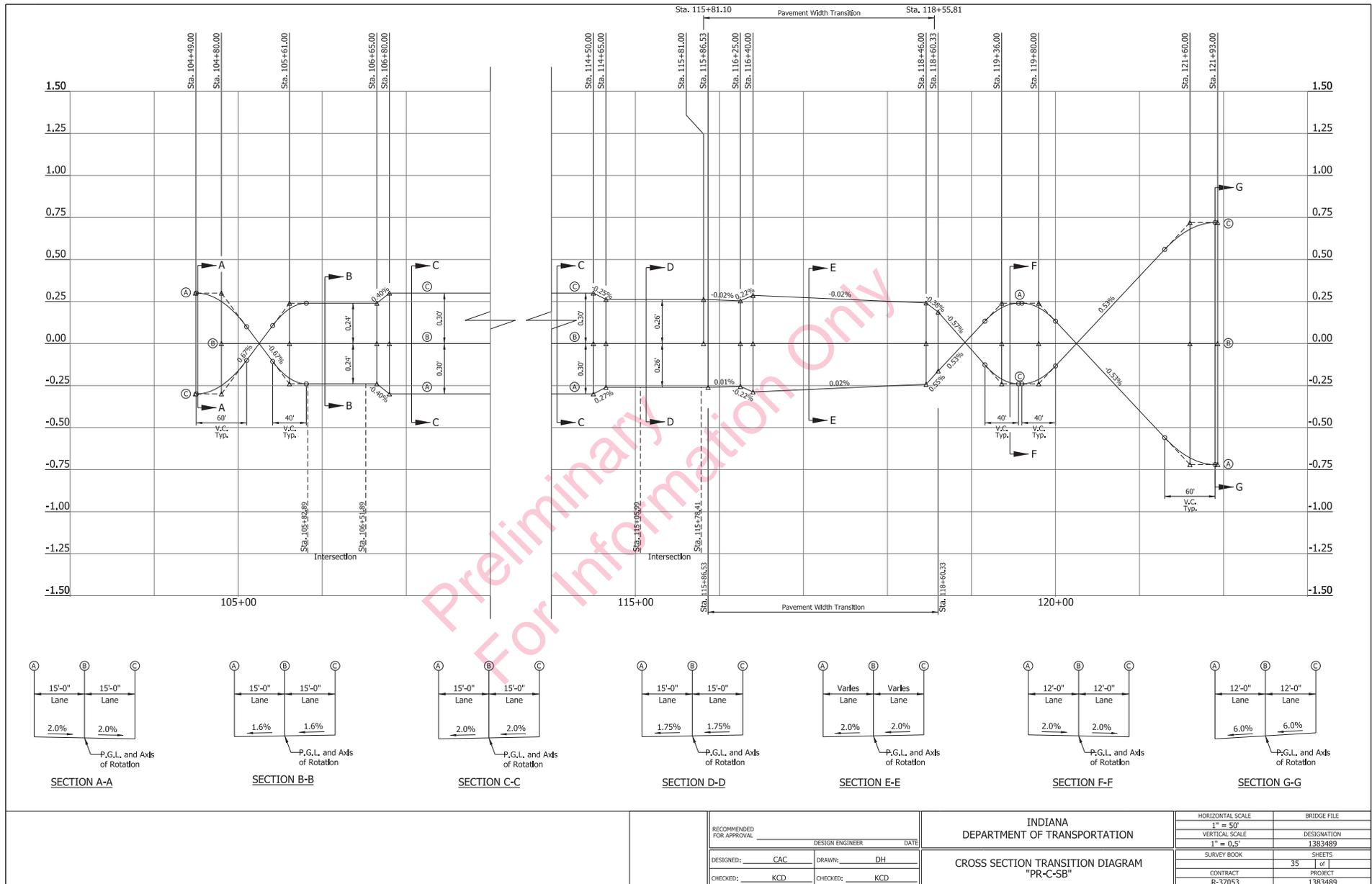
Preliminary
For Information Only

	INDIANA DEPARTMENT OF TRANSPORTATION	HORIZONTAL SCALE 1"=20' VERTICAL SCALE 1/8"=1'									
	CONSTRUCTION DETAIL "PR-RAMP SW-N" & "PR-RAMP SW-S"	BRIDGE FILE DESIGNATION 1383489 SHEETS 33 of 1 PROJECT 1383489									
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RECOMMENDED FOR APPROVAL	DESIGN ENGINEER	DATE									
DESIGNED: CAC	DRAWN: DH										
CHECKED: KCD	CHECKED: KCD										

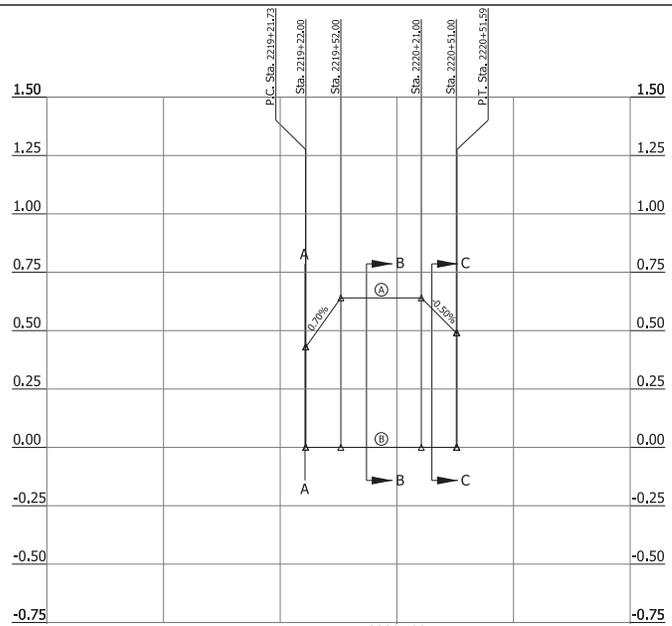
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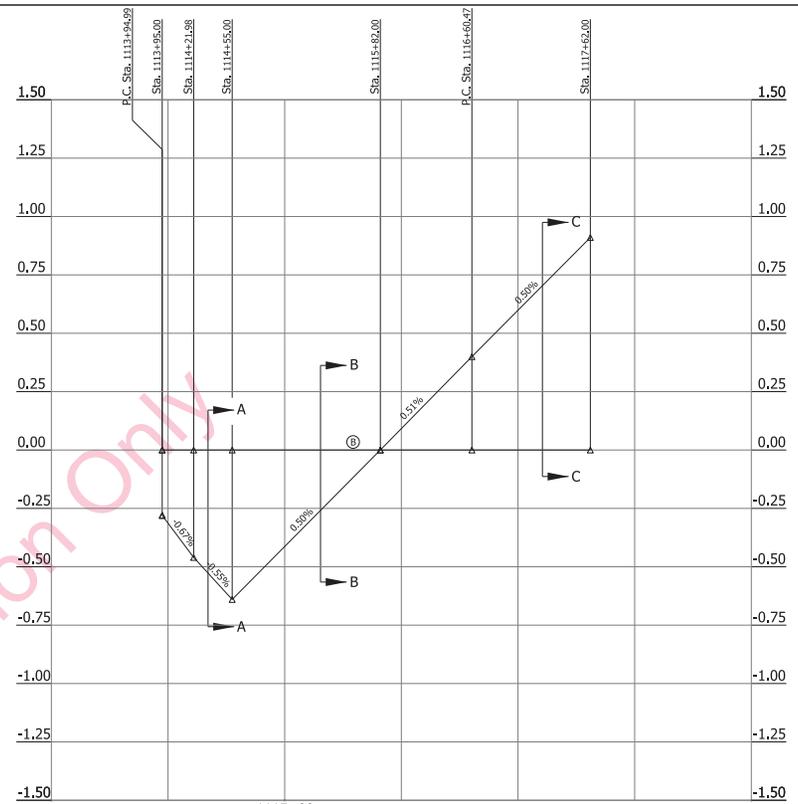
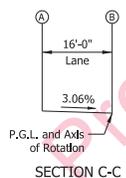
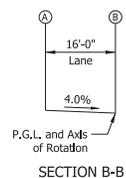
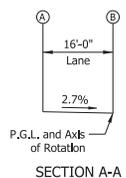
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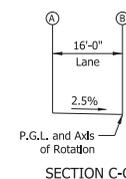
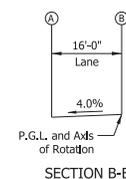
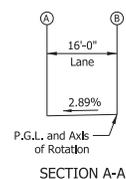
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07-NOV-2014



"PR-RAMP SE-N"



"PR-RAMP SE-S"



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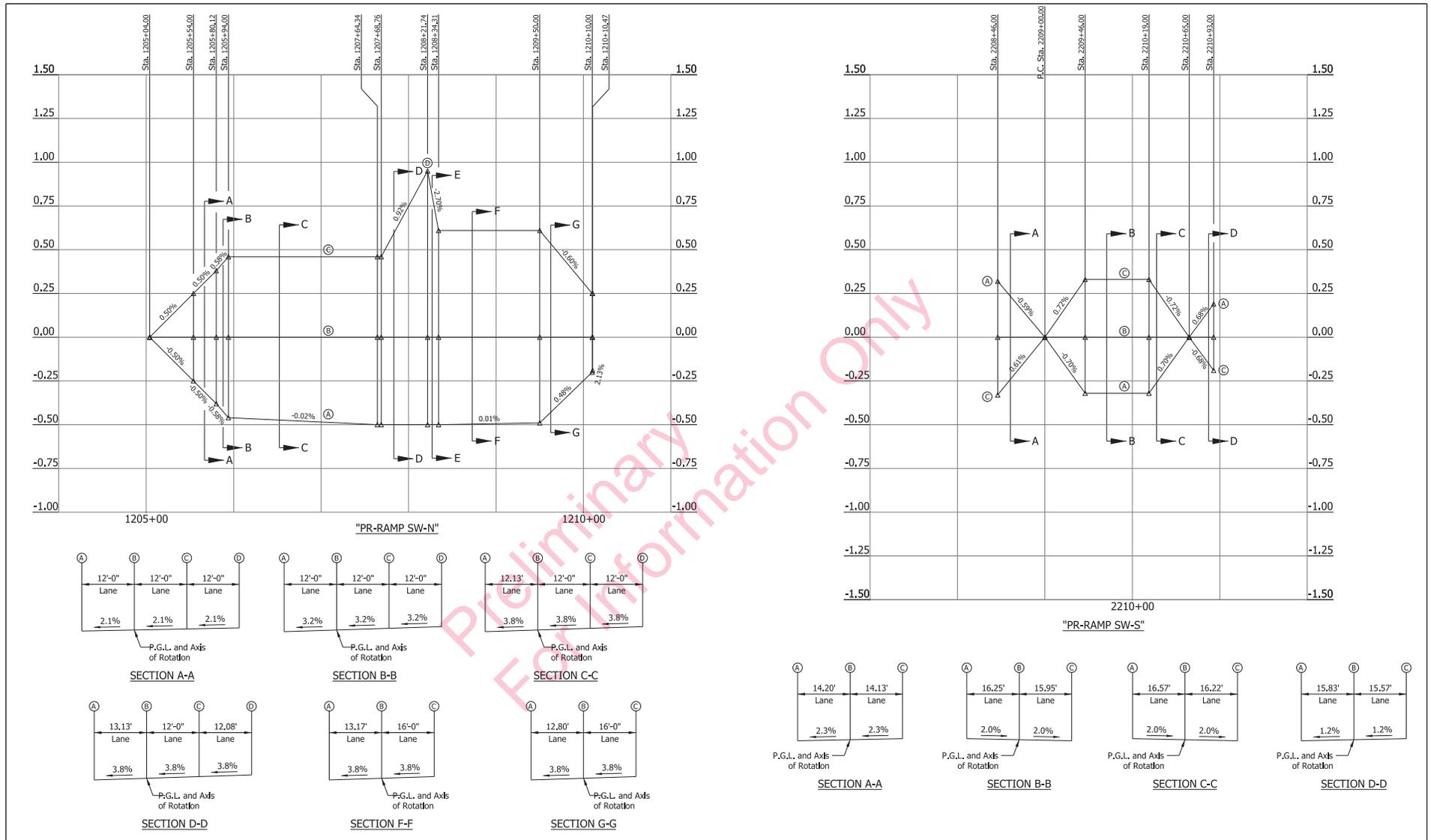
RECOMMENDED FOR APPROVAL	DESIGN ENGINEER	DATE
DESIGNED: CAC	DRAWN: DH	
CHECKED: KCD	CHECKED: KCD	

INDIANA
DEPARTMENT OF TRANSPORTATION

CROSS SECTION TRANSITION DIAGRAM
"PR-RAMP SE-N" & "PR-RAMP SE-S"

HORIZONTAL SCALE	BRIDGE FILE
1" = 50'	
VERTICAL SCALE	DESIGNATION
1" = 0.5'	1383489
SURVEY BOOK	SHEETS
	36 of 1
CONTRACT	PROJECT
R-37053	1383489

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07-NOV-2014



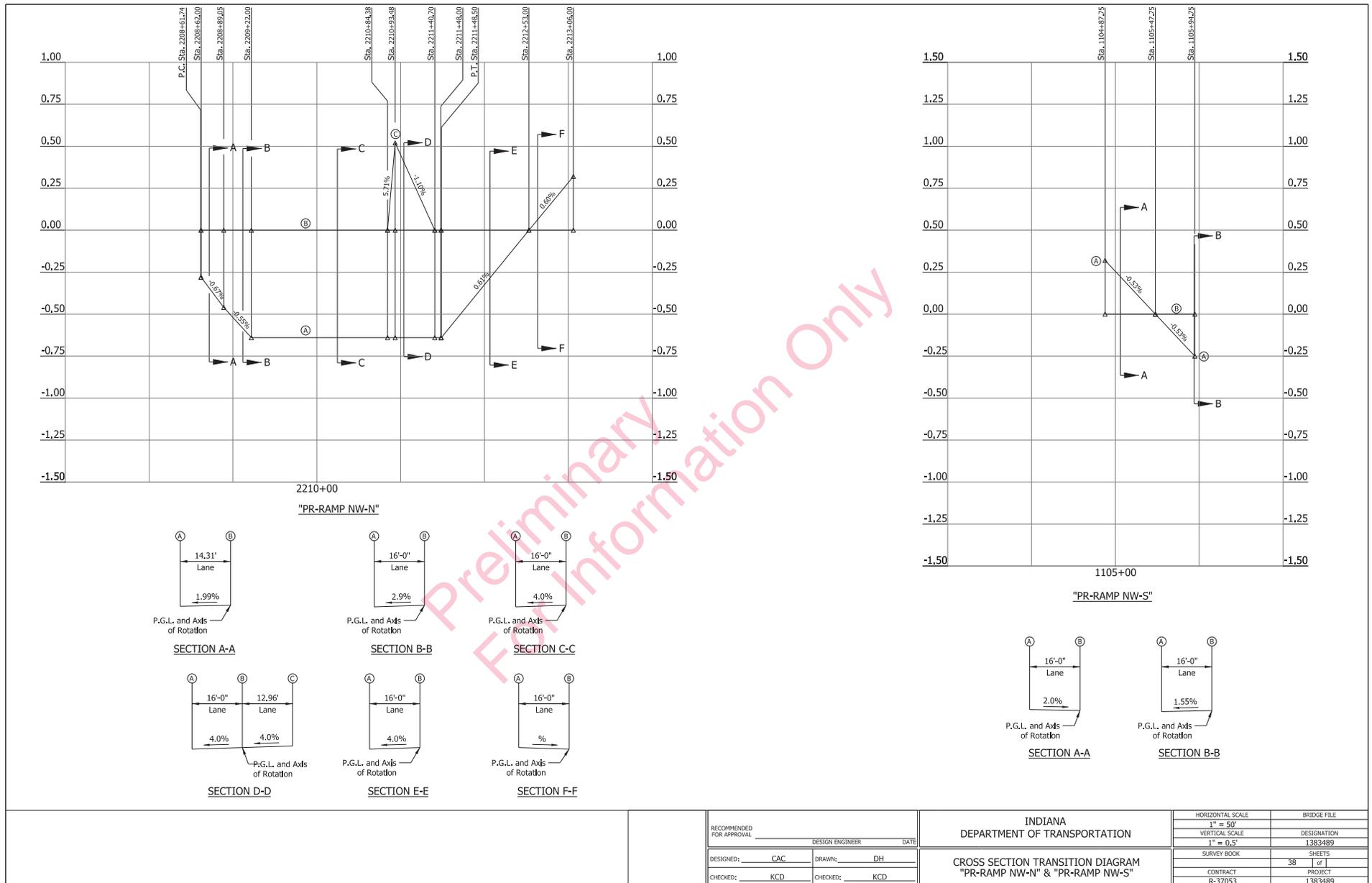
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07-NOV-2014

RECOMMENDED FOR APPROVAL	DESIGN ENGINEER	DATE
DESIGNED: CAC	DRAWN: DH	
CHECKED: KCD	CHECKED: KCD	

INDIANA
DEPARTMENT OF TRANSPORTATION

CROSS SECTION TRANSITION DIAGRAM
"PR-RAMP SW-N" & "PR-RAMP SW-S"

HORIZONTAL SCALE	BRIDGE FILE
1" = 50'	
VERTICAL SCALE	DESIGNATION
1" = 0.5'	1383489
SURVEY BOOK	SHEETS
	37 of 1
CONTRACT	PROJECT
R-37053	1383489



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07-NOV-2014

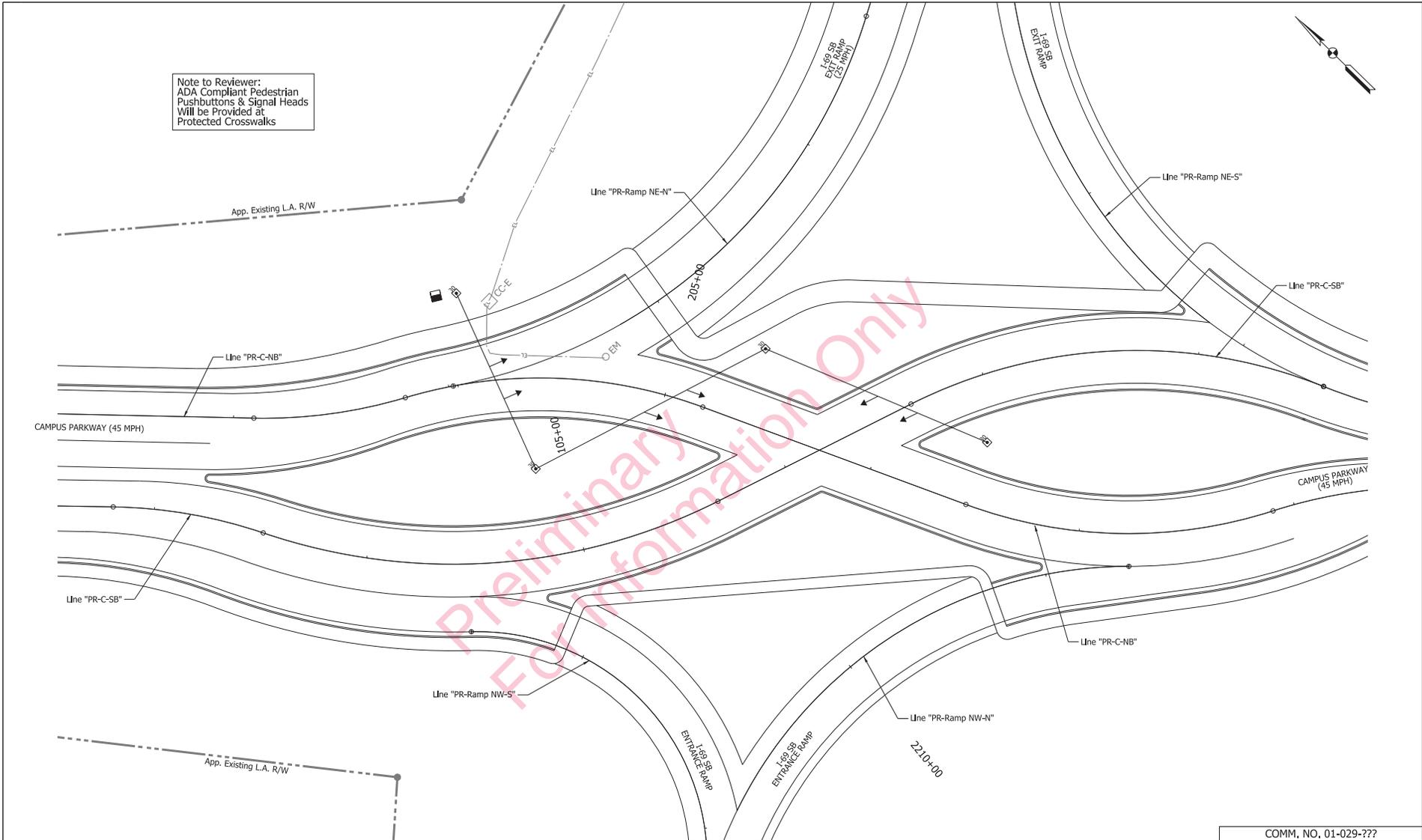
RECOMMENDED FOR APPROVAL	DESIGN ENGINEER	DATE
DESIGNED: CAC	DRAWN: DH	
CHECKED: KCD	CHECKED: KCD	

INDIANA
DEPARTMENT OF TRANSPORTATION

CROSS SECTION TRANSITION DIAGRAM
"PR-RAMP NW-N" & "PR-RAMP NW-S"

HORIZONTAL SCALE	BRIDGE FILE
1" = 50'	
VERTICAL SCALE	DESIGNATION
1" = 0.5'	1383489
SURVEY BOOK	SHEETS
	38 of 1
CONTRACT	PROJECT
R-37053	1383489

Note to Reviewer:
 ADA Compliant Pedestrian
 Pushbuttons & Signal Heads
 Will be Provided at
 Protected Crosswalks



	Traffic Signal Head, 3 Faces, 12" Red, Amber, Green		Orthogonal Loop, 4 Turn Series		2" Galvanized Steel Conduit
	30" Steel Strain Pole & Foundation		Signal Handhole		Pedestrian Signal Head, International Symbols, 18"
	TS2 Controller and P-21 Cabinet, 110" x 48" x 24" Foundation		Signal Detector		P Pedestrian Push Button & Sign
	Disconnect Hanger		Signal Pedestal on "A" Foundation		

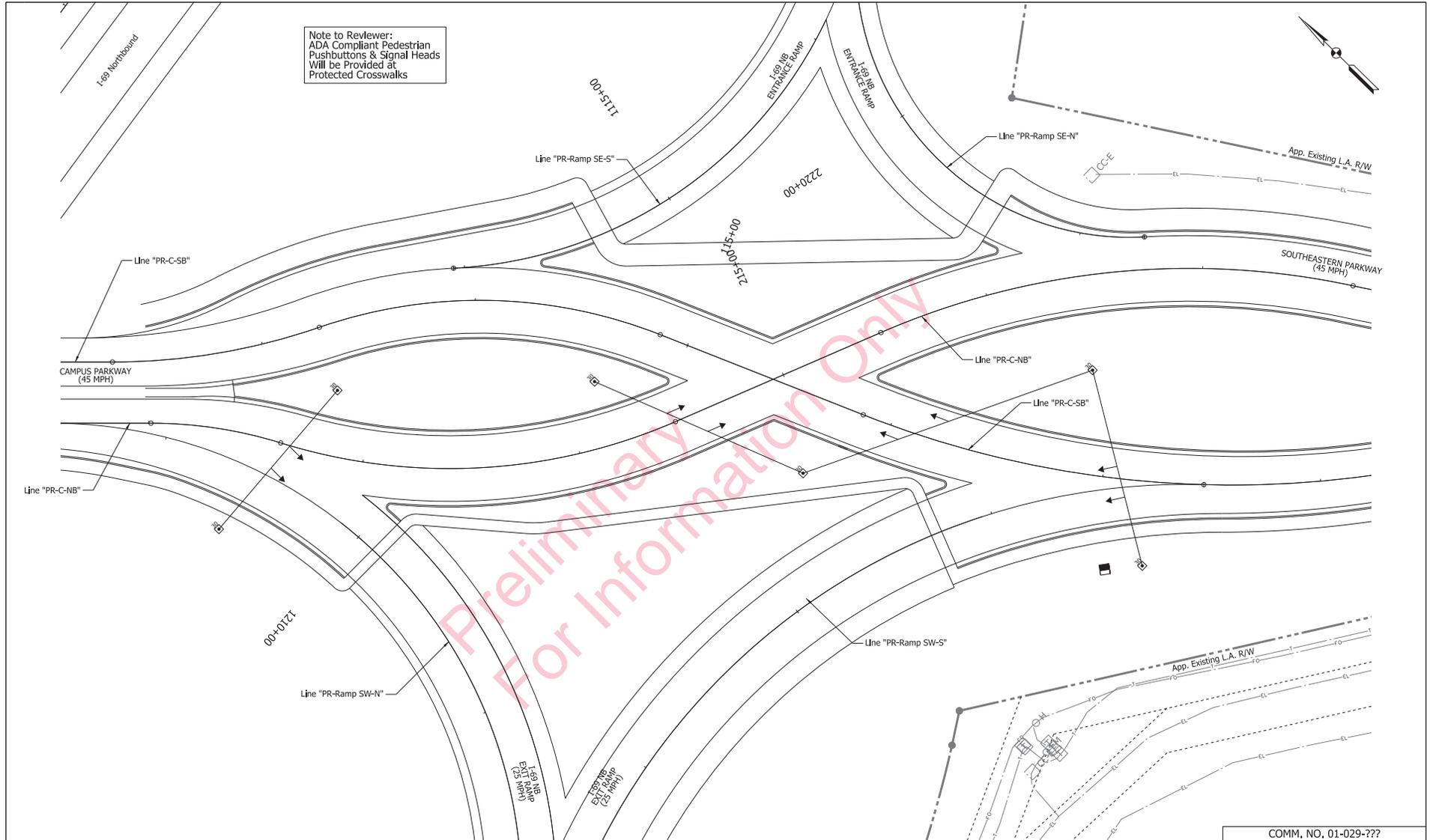
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RECOMMENDED FOR APPROVAL	DESIGN ENGINEER	DATE
DESIGNED: REH	DRAWN: DH	
CHECKED: CAC	CHECKED: REH	

INDIANA
 DEPARTMENT OF TRANSPORTATION

TRAFFIC SIGNAL PLAN
 I-69 SB & CAMPUS PARKWAY
 HAMILTON COUNTY, GREENFIELD DISTRICT

COMM. NO. 01-029-???	
HORIZONTAL SCALE	BRIDGE FILE
1"=20'	
VERTICAL SCALE	DESIGNATION
	1383489
SURVEY BOOK	SHEETS
ELECTRONIC	39 of 1
CONTRACT	PROJECT
R-37053	1383489



Note to Reviewer:
 ADA Compliant Pedestrian
 Pushbuttons & Signal Heads
 Will be Provided at
 Protected Crosswalks



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- ← Traffic Signal Head, 3 Face, 12" x 12" Rod, Amber, Green
- Octagonal Loop, 4 Turn Series
- Signal Handhole
- 2" Galvanized Steel Conduit
- Pedestrian Signal Head, International Symbols, 18"
- Pedestrian Push Button & Sign
- Signal Detector Housing
- Pedestrian Pedestal on "A" Foundation
- ⌘ Disconnect Hanger

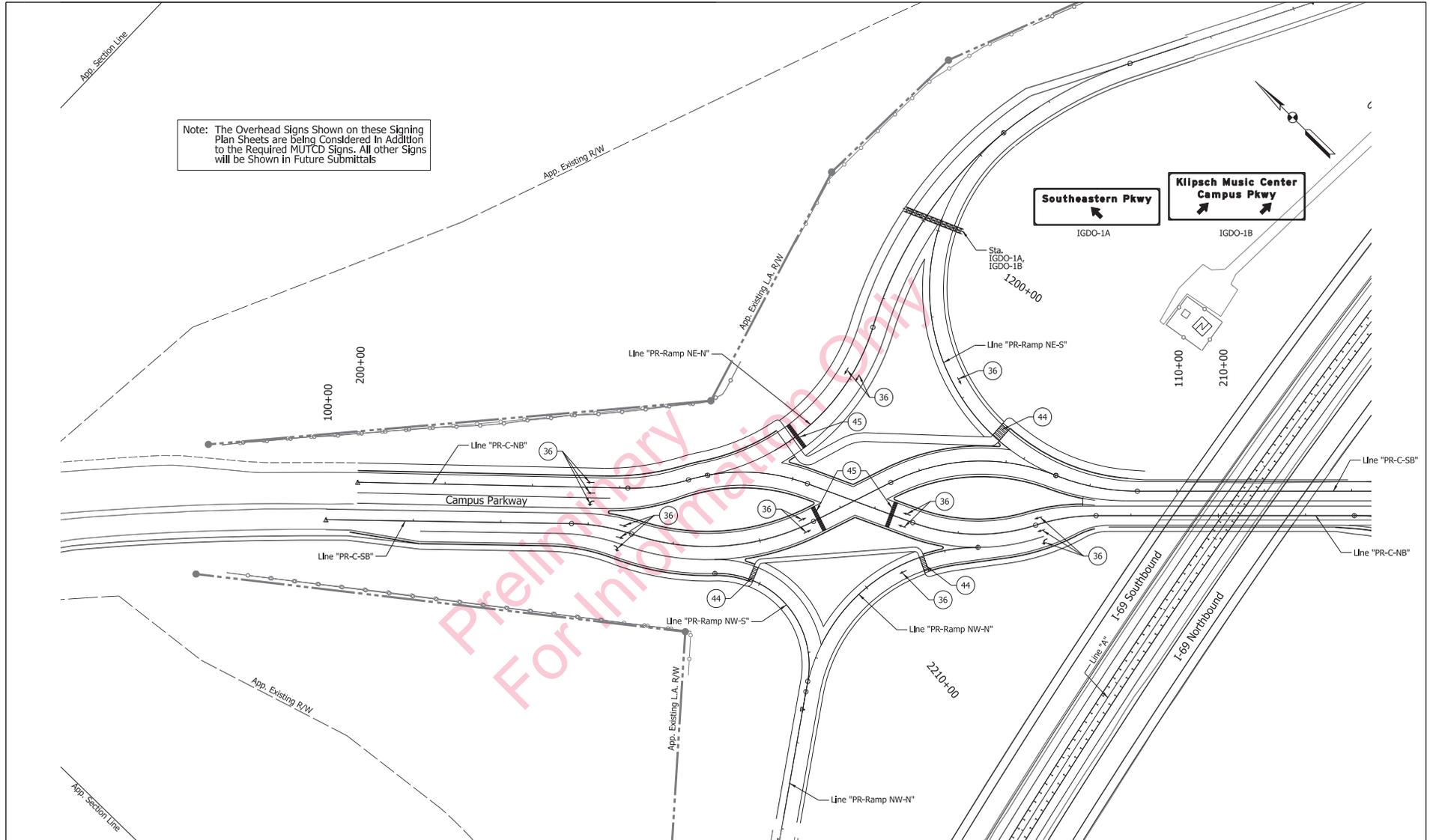
RECOMMENDED FOR APPROVAL		DESIGN ENGINEER	DATE
DESIGNED: REH	DRAWN: DH		
CHECKED: CAC	CHECKED: REH		

INDIANA
 DEPARTMENT OF TRANSPORTATION

 TRAFFIC SIGNAL PLAN
 I-69 NB & CAMPUS PARKWAY
 HAMILTON COUNTY, GREENFIELD DISTRICT

COMM. NO. 01-029-???	
HORIZONTAL SCALE	BRIDGE FILE
1"=20'	
VERTICAL SCALE	DESIGNATION
	1383489
SURVEY BOOK	SHEETS
ELECTRONIC	40 of 1
CONTRACT	PROJECT
R-37053	1383489

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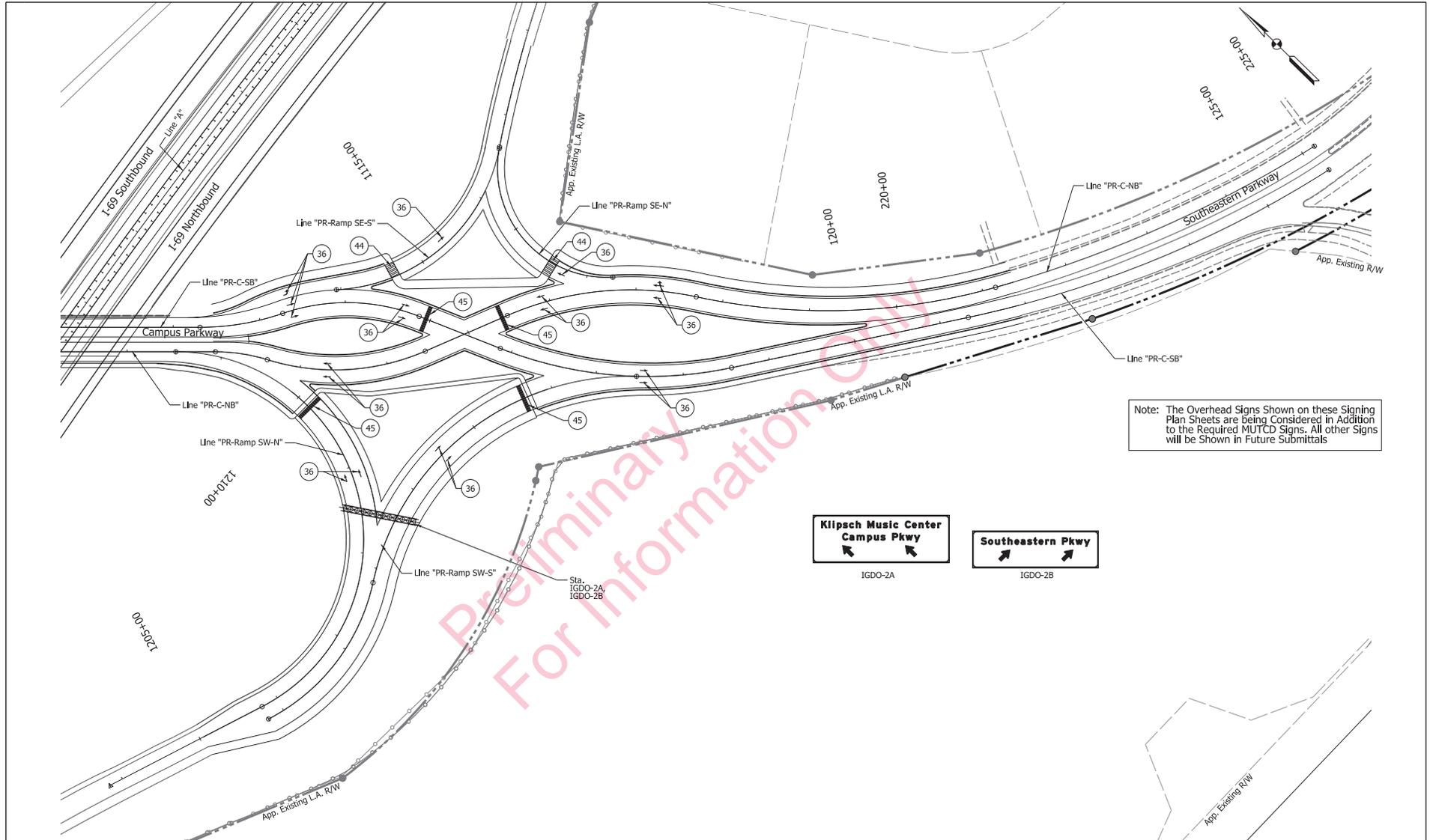


Note: The Overhead Signs Shown on these Signing Plan Sheets are being Considered in Addition to the Required MUTCD Signs. All other Signs will be Shown in Future Submittals



Overhead Truss Lane Indication Arrow Preformed Plastic Pavement Message Marking 6 in. Crosswalk White Preformed Plastic Transverse Marking	4 In. Solid White Preformed Plastic Line 4 In. Solid Yellow Preformed Plastic Line 4 In. Broken White Preformed Plastic Line 24 in. Crosswalk Solid White Preformed Plastic Lines	24 In. White Stop Line, Preformed Plastic 4 In. Dotted White Preformed Plastic Line	RECOMMENDED FOR APPROVAL _____ DESIGN ENGINEER _____ DATE _____ DESIGNED: SNM DRAWING: DH CHECKED: CAC CHECKED: CAC	INDIANA DEPARTMENT OF TRANSPORTATION SIGNING PLAN	HORIZONTAL SCALE 1"=50' VERTICAL SCALE _____ SURVEY BOOK ELECTRONIC 41 of 1 CONTRACT R-37053	BRIDGE FILE DESIGNATION 1383489 SHEETS PROJECT 1383489
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07-NOV-2014



Note: The Overhead Signs Shown on these Signing Plan Sheets are being Considered in Addition to the Required MUTCD Signs. All other Signs will be Shown in Future Submittals

**Klipsch Music Center
Campus Pkwy**

IGDO-2A

Southeastern Pkwy

IGDO-2B

Sta.
IGDO-2A
IGDO-2B

	Overhead Truss		4 In. Solid White Preformed Plastic Line		24 In. White Stop Line, Preformed Plastic
	Lane Indication Arrow Preformed Plastic Pavement Message Marking		4 In. Solid Yellow Preformed Plastic Line		4 in. Dotted White Preformed Plastic Line
	6 In. Crosswalk White Preformed Plastic Transverse Marking		4 In. Broken White Preformed Plastic Line		
			24 In. Crosswalk Solid White Preformed Plastic Lines		

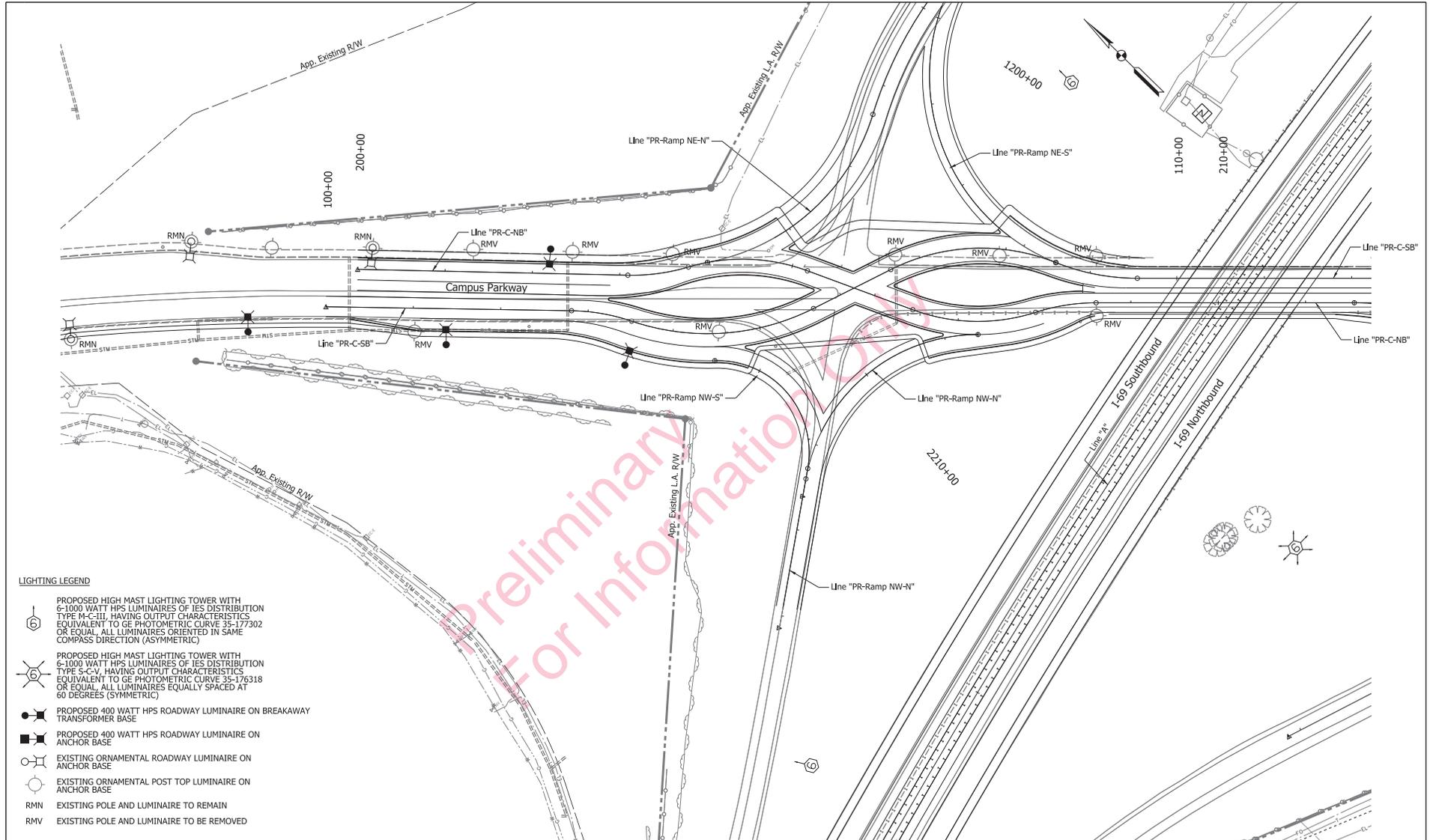
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DESIGNED: SNM	DRAWN: DH	
CHECKED: CAC	CHECKED: CAC	

INDIANA
DEPARTMENT OF TRANSPORTATION

SIGNING PLAN

HORIZONTAL SCALE	BRIDGE FILE
1"=50'	
VERTICAL SCALE	DESIGNATION
	1383489
SURVEY BOOK	SHEETS
ELECTRONIC	42 of 1
CONTRACT	PROJECT
R-37053	1383489

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07-NOV-2014



LIGHTING LEGEND

-  PROPOSED HIGH MAST LIGHTING TOWER WITH 6-1000 WATT HPS LUMINAIRES OF IES DISTRIBUTION TYPE M-C-III, HAVING OUTPUT CHARACTERISTICS EQUIVALENT TO GE PHOTOMETRIC CURVE 35-177302 OR EQUAL. ALL LUMINAIRES ORIENTED IN SAME COMPASS DIRECTION (ASYMMETRIC)
-  PROPOSED HIGH MAST LIGHTING TOWER WITH 6-1000 WATT HPS LUMINAIRES OF IES DISTRIBUTION TYPE S-C-V, HAVING OUTPUT CHARACTERISTICS EQUIVALENT TO GE PHOTOMETRIC CURVE 35-176318 OR EQUAL. ALL LUMINAIRES EQUALLY SPACED AT 60 DEGREES (SYMMETRIC)
-  PROPOSED 400 WATT HPS ROADWAY LUMINAIRE ON BREAKAWAY TRANSFORMER BASE
-  PROPOSED 400 WATT HPS ROADWAY LUMINAIRE ON ANCHOR BASE
-  EXISTING ORNAMENTAL ROADWAY LUMINAIRE ON ANCHOR BASE
-  EXISTING ORNAMENTAL POST TOP LUMINAIRE ON ANCHOR BASE
-  RMN EXISTING POLE AND LUMINAIRE TO REMAIN
-  RMV EXISTING POLE AND LUMINAIRE TO BE REMOVED

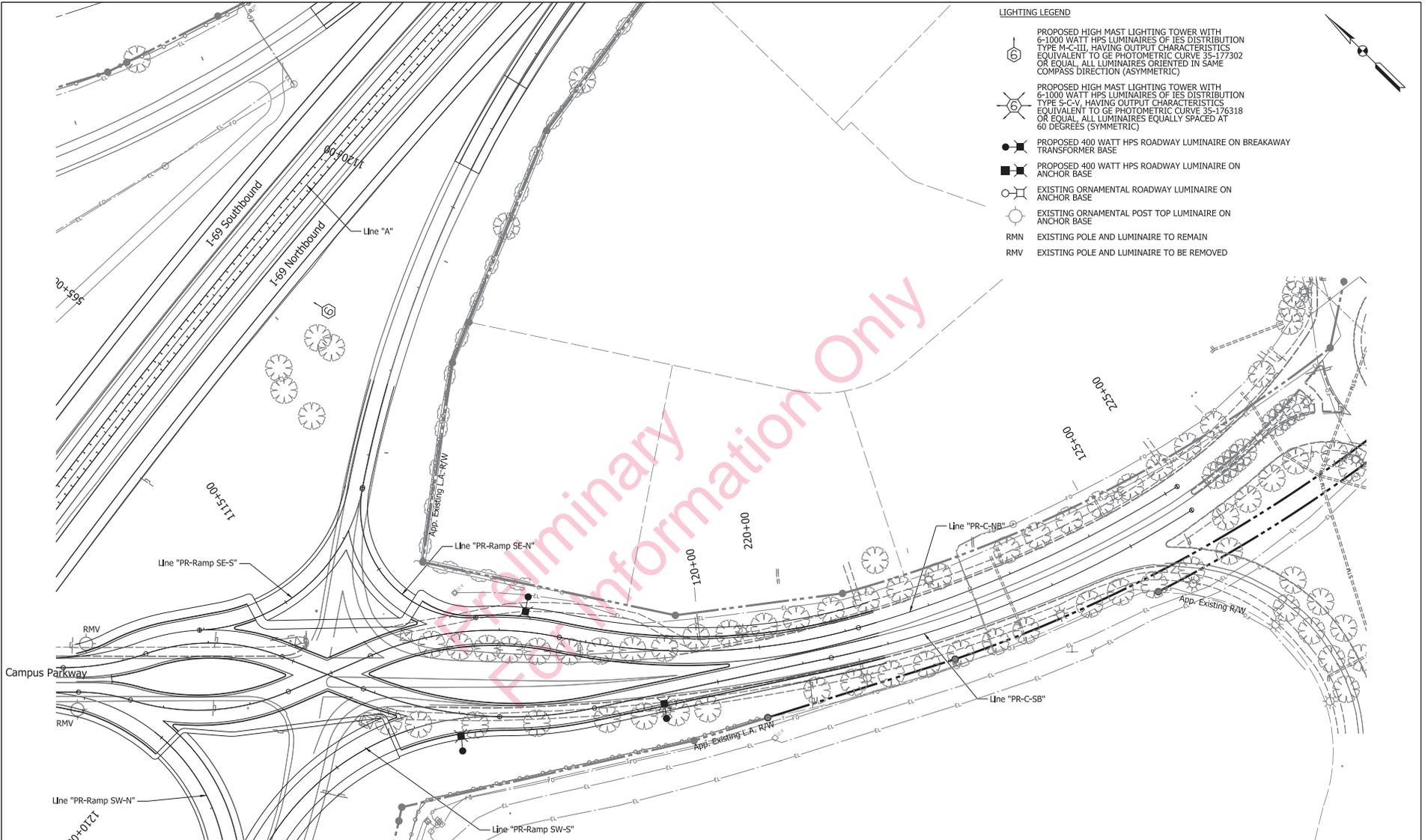
RECOMMENDED FOR APPROVAL	DESIGN ENGINEER	DATE
DESIGNED: REH	DRAWN: DH	
CHECKED: CAC	CHECKED: CAC	

INDIANA
DEPARTMENT OF TRANSPORTATION

LIGHTING PLAN
I-69 AND CAMPUS PARKWAY
HAMILTON COUNTY, GREENFIELD DISTRICT

HORIZONTAL SCALE	BRIDGE FILE
1"=50'	DESIGNATION
VERTICAL SCALE	1383489
SURVEY BOOK	SHEETS
ELECTRONIC	43 of 1
CONTRACT	PROJECT
R-37053	1383489

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07-NOV-2014



LIGHTING LEGEND

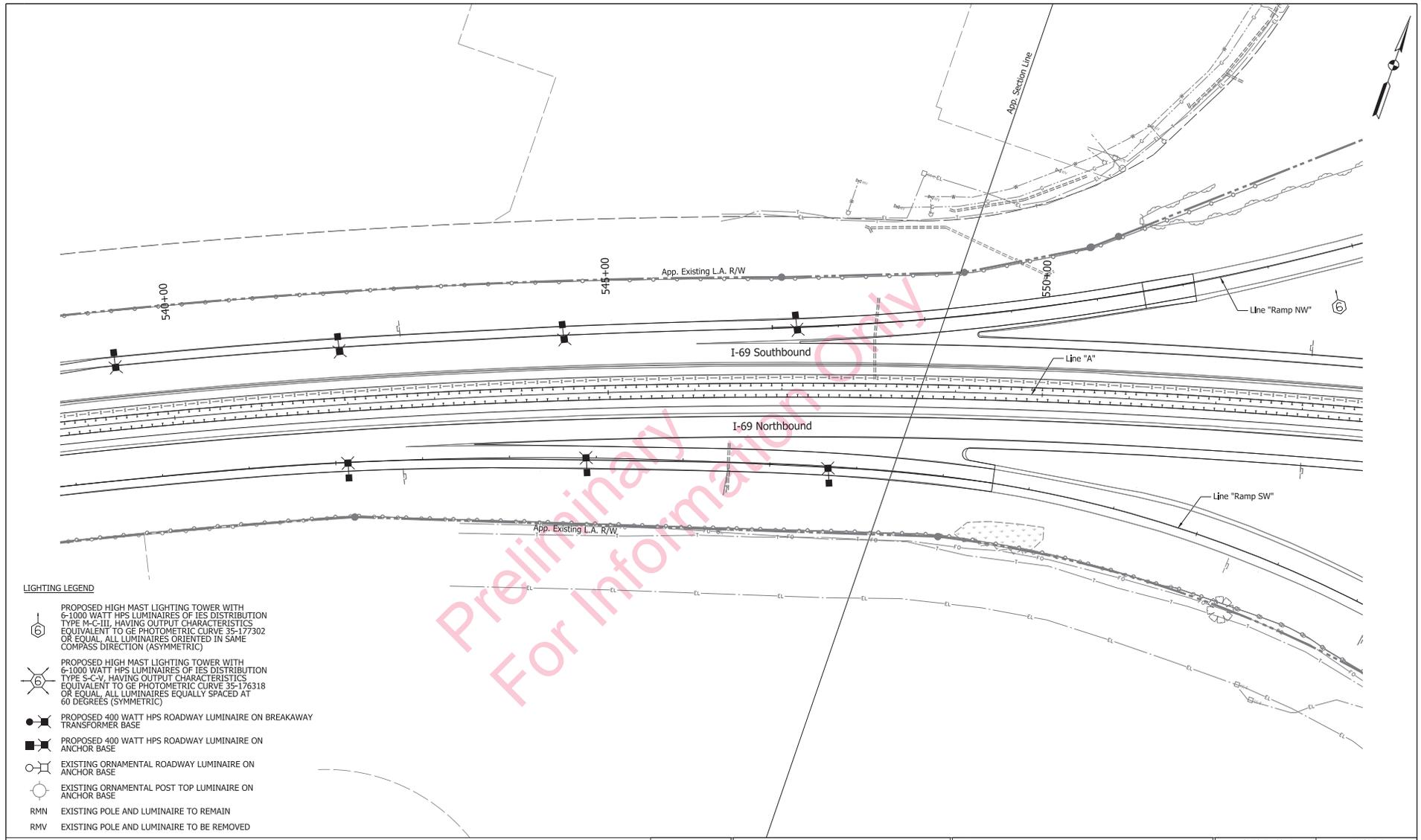
- PROPOSED HIGH MAST LIGHTING TOWER WITH 6-1000 WATT HPS LUMINAIRES OF IES DISTRIBUTION TYPE M-C-III, HAVING OUTPUT CHARACTERISTICS EQUIVALENT TO GE PHOTOMETRIC CURVE 35-177302 OR EQUAL, ALL LUMINAIRES ORIENTED IN SAME COMPASS DIRECTION (ASYMMETRIC)
- PROPOSED HIGH MAST LIGHTING TOWER WITH 6-1000 WATT HPS LUMINAIRES OF IES DISTRIBUTION TYPE S-C-V, HAVING OUTPUT CHARACTERISTICS EQUIVALENT TO GE PHOTOMETRIC CURVE 35-176318 OR EQUAL, ALL LUMINAIRES EQUALLY SPACED AT 60 DEGREES (SYMMETRIC)
- PROPOSED 400 WATT HPS ROADWAY LUMINAIRE ON TRANSFORMER BASE
- PROPOSED 400 WATT HPS ROADWAY LUMINAIRE ON ANCHOR BASE
- EXISTING ORNAMENTAL ROADWAY LUMINAIRE ON ANCHOR BASE
- EXISTING ORNAMENTAL POST TOP LUMINAIRE ON ANCHOR BASE
- RMN EXISTING POLE AND LUMINAIRE TO REMAIN
- RMV EXISTING POLE AND LUMINAIRE TO BE REMOVED



Preliminary For Information Only

	INDIANA DEPARTMENT OF TRANSPORTATION	HORIZONTAL SCALE 1"=50'	BRIDGE FILE
RECOMMENDED FOR APPROVAL _____	DESIGN ENGINEER _____ DATE _____	VERTICAL SCALE	DESIGNATION 1383489
DESIGNED: REH	DRAWING: DH	SURVEY BOOK	SHEETS
CHECKED: CAC	CHECKED: CAC	ELECTRONIC	44 of 1
LIGHTING PLAN I-69 AND CAMPUS PARKWAY HAMILTON COUNTY, GREENFIELD DISTRICT		CONTRACT R-37053	PROJECT 1383489

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07-NOV-2014



LIGHTING LEGEND

- 
 PROPOSED HIGH MAST LIGHTING TOWER WITH 6-1000 WATT HPS LUMINAIRES OF IES DISTRIBUTION TYPE M-C-III, HAVING OUTPUT CHARACTERISTICS EQUIVALENT TO GE PHOTOMETRIC CURVE 35-177302 OR EQUAL. ALL LUMINAIRES ORIENTED IN SAME COMPASS DIRECTION (ASYMMETRIC)
- 
 PROPOSED HIGH MAST LIGHTING TOWER WITH 6-1000 WATT HPS LUMINAIRES OF IES DISTRIBUTION TYPE S-C-V, HAVING OUTPUT CHARACTERISTICS EQUIVALENT TO GE PHOTOMETRIC CURVE 35-176318 OR EQUAL. ALL LUMINAIRES EQUALLY SPACED AT 60 DEGREES (SYMMETRIC)
- 
 PROPOSED 400 WATT HPS ROADWAY LUMINAIRE ON BREAKAWAY TRANSFORMER BASE
- 
 PROPOSED 400 WATT HPS ROADWAY LUMINAIRE ON ANCHOR BASE
- 
 EXISTING ORNAMENTAL ROADWAY LUMINAIRE ON ANCHOR BASE
- 
 EXISTING ORNAMENTAL POST TOP LUMINAIRE ON ANCHOR BASE
- 
 RMN EXISTING POLE AND LUMINAIRE TO REMAIN
- 
 RMV EXISTING POLE AND LUMINAIRE TO BE REMOVED

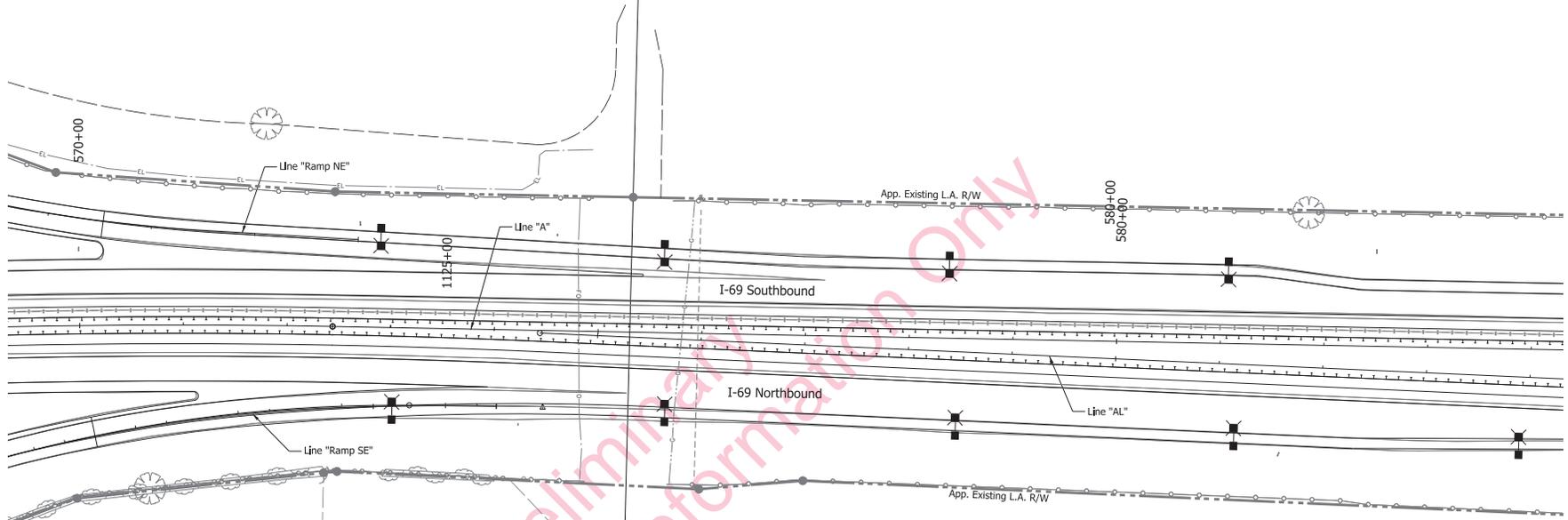
RECOMMENDED FOR APPROVAL	DESIGN ENGINEER	DATE
DESIGNED: REH	DRAWN: DH	
CHECKED: CAC	CHECKED: CAC	

INDIANA
DEPARTMENT OF TRANSPORTATION

LIGHTING PLAN
I-69 AND CAMPUS PARKWAY
HAMILTON COUNTY, GREENFIELD DISTRICT

HORIZONTAL SCALE	BRIDGE FILE
1"=50'	
VERTICAL SCALE	DESIGNATION
	1383489
SURVEY BOOK	SHEETS
ELECTRONIC	45 of 1
CONTRACT	PROJECT
R-37053	1383489

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07-NOV-2014



Preliminary For Information Only

- LIGHTING LEGEND**
- PROPOSED HIGH MAST LIGHTING TOWER WITH 6-1000 WATT HPS LUMINAIRES OF IES DISTRIBUTION TYPE M-C-III, HAVING OUTPUT CHARACTERISTICS EQUIVALENT TO GE PHOTOMETRIC CURVE 35-177302 OR EQUAL, ALL LUMINAIRES ORIENTED IN SAME COMPASS DIRECTION (ASYMMETRIC)
 - PROPOSED HIGH MAST LIGHTING TOWER WITH 6-1000 WATT HPS LUMINAIRES OF IES DISTRIBUTION TYPE S-C-V, HAVING OUTPUT CHARACTERISTICS EQUIVALENT TO GE PHOTOMETRIC CURVE 35-175318 OR EQUAL, ALL LUMINAIRES EQUALLY SPACED AT 60 DEGREES (SYMMETRIC)
 - PROPOSED 400 WATT HPS ROADWAY LUMINAIRE ON TRANSFORMER BASE
 - PROPOSED 400 WATT HPS ROADWAY LUMINAIRE ON ANCHOR BASE
 - EXISTING ORNAMENTAL ROADWAY LUMINAIRE ON ANCHOR BASE
 - EXISTING ORNAMENTAL POST TOP LUMINAIRE ON ANCHOR BASE
 - RMN** EXISTING POLE AND LUMINAIRE TO REMAIN
 - RMV** EXISTING POLE AND LUMINAIRE TO BE REMOVED

P:\PWP\dm\94547\Lighting_Plan_94.dgn
07-NOV-2014

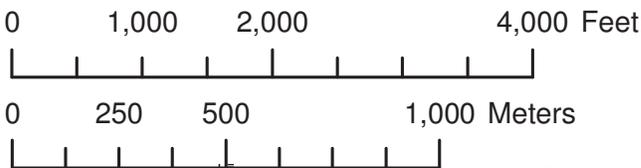
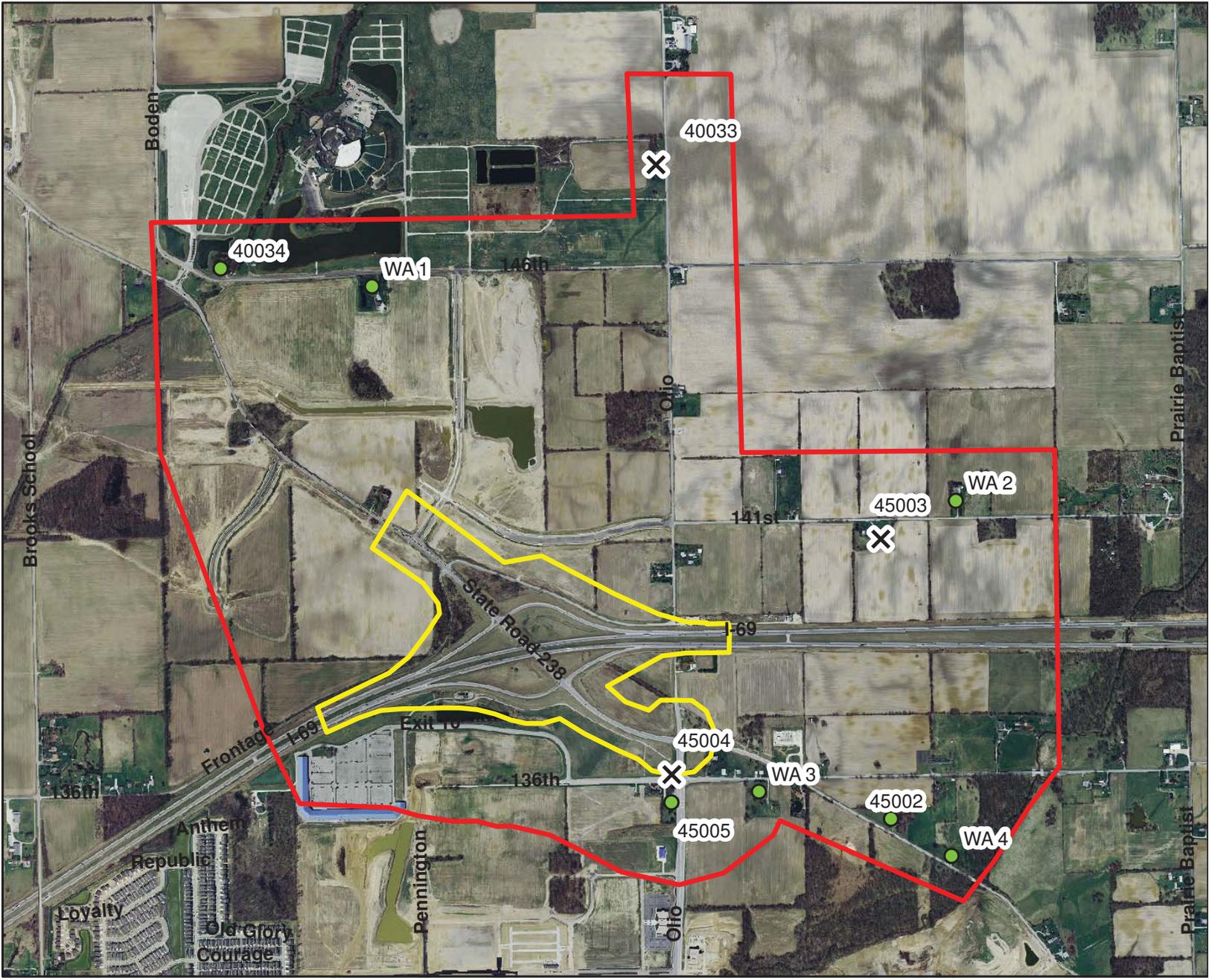
RECOMMENDED FOR APPROVAL _____ DESIGN ENGINEER DATE _____	INDIANA DEPARTMENT OF TRANSPORTATION LIGHTING PLAN I-69 AND CAMPUS PARKWAY HAMILTON COUNTY, GREENFIELD DISTRICT	HORIZONTAL SCALE 1"=50' VERTICAL SCALE 1/8"=1'-0"	BRIDGE FILE DESIGNATION 1383489 SHEETS ELECTRONIC 46 of 1 PROJECT 1383489
DESIGNED: REH DRAWING: DH CHECKED: CAC CHECKED: CAC			

Section 106

APPENDIX B. Maps



April 8, 2014



●	Contributing Property
✕	No Longer Extant
	APE
	Project Location



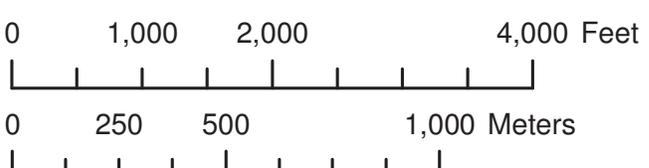
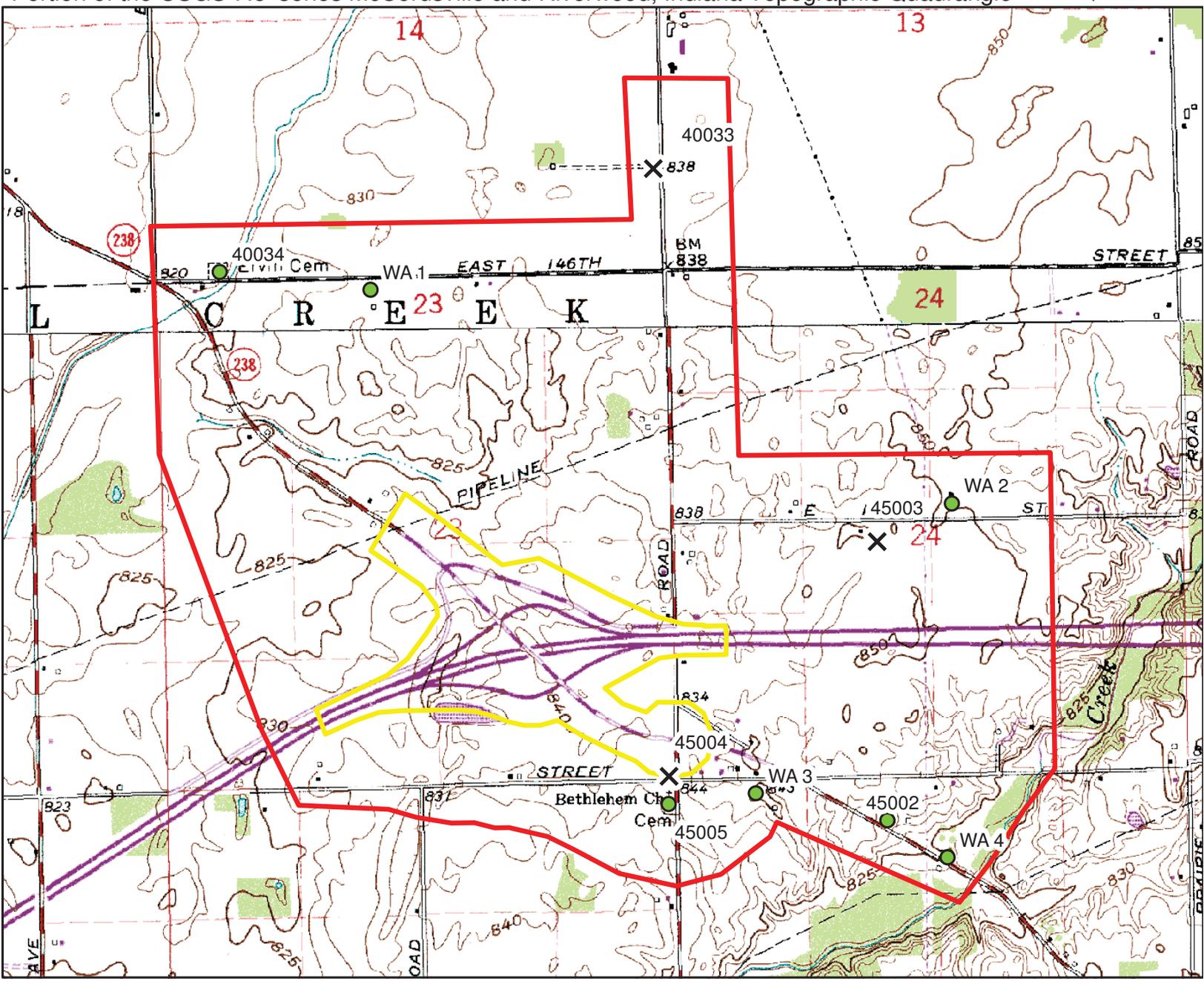
WEINTRAUT & ASSOCIATES, INC.

Note: Information shown on this map is not warranted for accuracy or merchantability. GIS data used to create this map are from the best known sources existing at this time. However, experience shows that many national datasets are not all inclusive. Use of this map should be limited to planning, and should not replace field review or background checks with other sources. It is intended to serve as an aid in graphic representation only. This map does not represent a legal document.

I-69 Interchange at Campus Parkway, Exit 210
 Fall Creek and Wayne Townships, Hamilton County, Indiana
 Des. No.: 1383489



Portion of the USGS 7.5' series McCordsville and Riverwood, Indiana Topographic Quadrangle April 8, 2014



- Contributing Property
- ✕ No Longer Extant
- APE
- Project Location

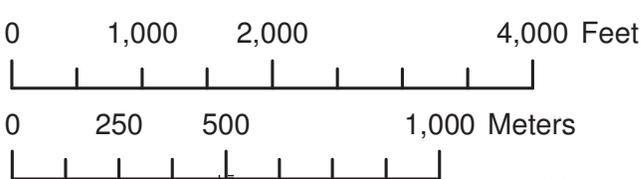
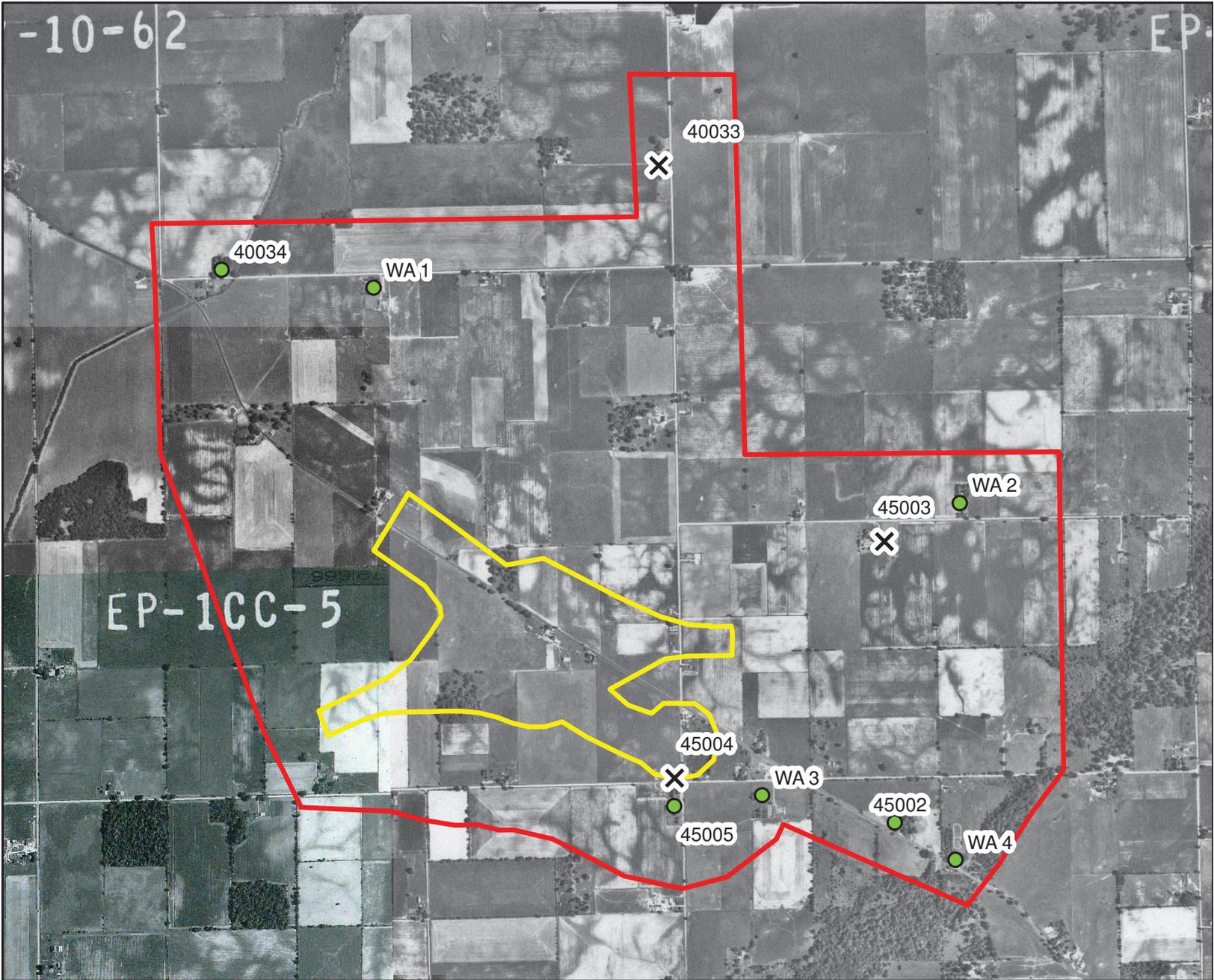


WEINTRAUT & ASSOCIATES, INC.

Note: Information shown on this map is not warranted for accuracy or merchantability. GIS data used to create this map are from the best known sources existing at this time. However, experience shows that many national datasets are not all inclusive. Use of this map should be limited to planning, and should not replace field review or background checks with other sources. It is intended to serve as an aid in graphic representation only. This map does not represent a legal document.



April 8, 2014

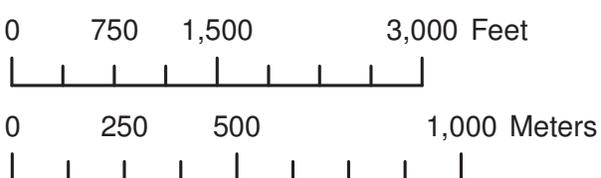
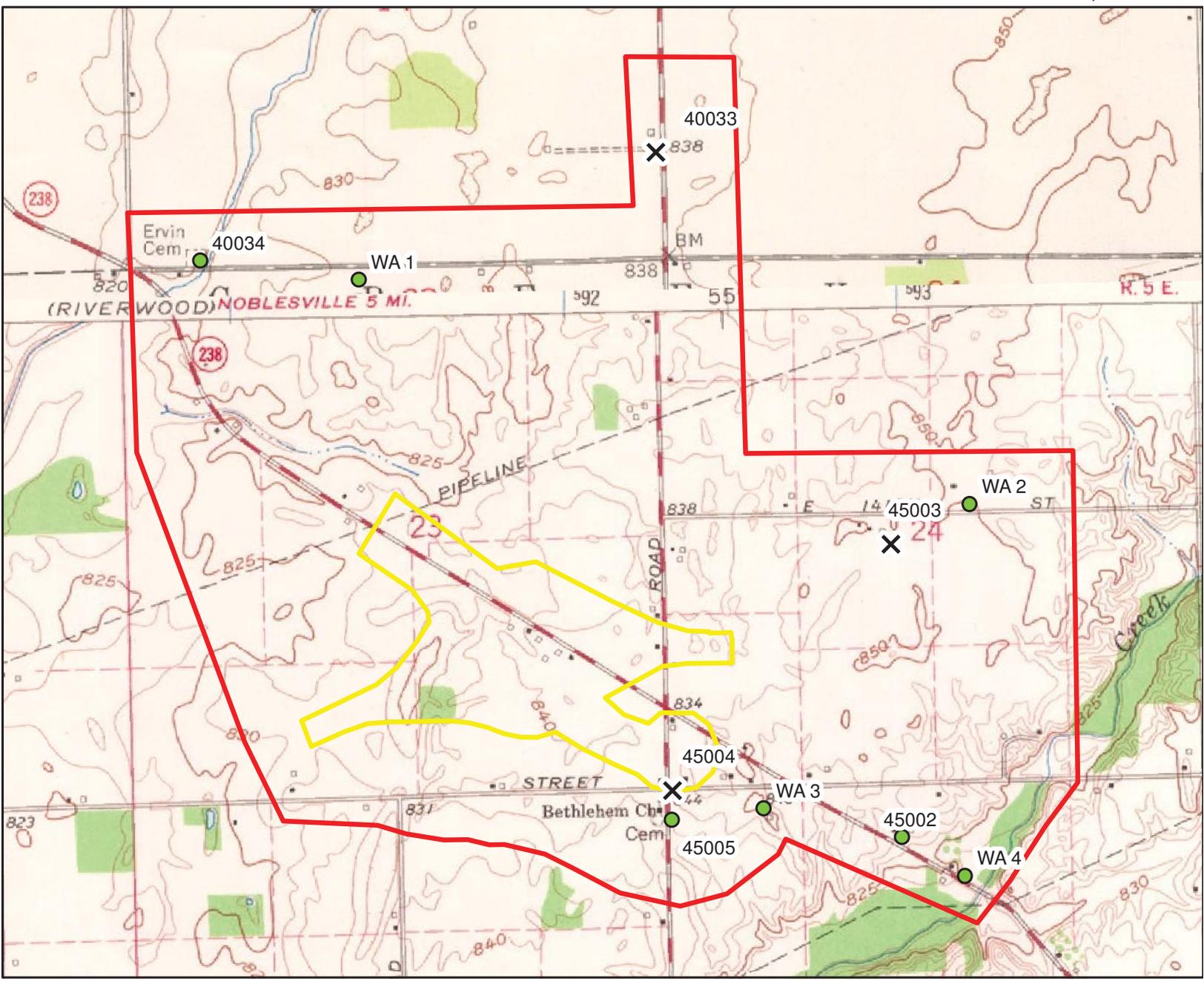


- Contributing Property
- X No Longer Extant
- APE
- Project Location



WEINTRAUT & ASSOCIATES, INC.

Note: Information shown on this map is not warranted for accuracy or merchantability. GIS data used to create this map are from the best known sources existing at this time. However, experience shows that many national datasets are not all inclusive. Use of this map should be limited to planning, and should not replace field review or background checks with other sources. It is intended to serve as an aid in graphic representation only. This map does not represent a legal document.



- Contributing Property
- ✕ No Longer Extant
- APE
- Project Location



WEINTRAUT & ASSOCIATES, INC.

Note: Information shown on this map is not warranted for accuracy or merchantability. GIS data used to create this map are from the best known sources existing at this time. However, experience shows that many national datasets are not all inclusive. Use of this map should be limited to planning, and should not replace field review or background checks with other sources. It is intended to serve as an aid in graphic representation only. This map does not represent a legal document.

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APPENDIX C. Consulting Party List

**I-69 Interchange Hamilton County
Invited Consulting Parties
Highlighting Indicates Acceptance of Consulting Party Invitation**

Agencies copied on documents:

Mary Kennedy, Senior Environmental Manager

Indiana Department of Transportation,
Office of Environmental Services
100 N. Senate Avenue
IGCN, Room 642
Indianapolis, IN 46204
(317) 232-5215
mkennedy@indot.in.gov

Richard J. Marquis, Division Administrator

Indiana Division, Federal Highway Administration
575 N. Pennsylvania Street, Room 254
Indianapolis, IN 46204

SHPO

State Historic Preservation Officer

Indiana Department of Natural Resources
Division of Historic Preservation and Archaeology
402 W. Washington Street, W274
Indianapolis, IN 46204-2739

Invited Consulting Parties

Indiana Landmarks – Central Regional Office

1201 Central Avenue
Indianapolis, IN 46202
(317) 639-4534
info@indianalandmarks.org
central@indianalandmarks.org

David Heighway, Hamilton County Historian

140 N. 15th Street
Noblesville, IN 46060
Home Phone: (317) 773-2142
Work Phone: (317) 770-3222
heighwayd@earthlink.net

Hamilton County Historical Society

Diane Nevitt, Director
P.O. Box 397
Noblesville, IN 46061-0397
(317) 770-0775
hamiltoncomuseum@att.net

Hamilton County Genealogy Society

Kathy A. Venable, President
111 Beechmont Drive.
Carmel, IN 46032
(317) 846-5714
Kathyvena@att.net

Carmel-Clay Historical Society

Katherine Dill, Director
211 1st Street SW
Carmel, IN 46032-2003
(317) 846-7117
carmelclayhistory@yahoo.com

Fishers Historic Preservation Committee

Michael Quinn, Chairperson
1 Municipal Drive
Fishers, IN 46038
Phone: 317-595-3120
mike.quinn@cliftonpa.com

Noblesville Preservation Alliance

Charlie Hyde, President
P. O. Box 632
Noblesville, IN 46060
Phone: 317-773-4549
info@noblesvillepreservation.com
Affiliate member of Indiana Landmarks

City of Noblesville

John Ditslear, Mayor
16 S 10th Street
Noblesville, IN 46060
jditslear@noblesville.in.us
Phone: 317-776-6324

Hamilton County Commissioners

1 Hamilton County Square
Suite 157
Noblesville, IN 46060

Noblesville Chamber of Commerce

Bob DuBois, President
601 E. Conner Street
Noblesville, IN 46060
(317) 773-0086

Indianapolis Metropolitan Planning Organization (MPO)

200 East Washington Street, Suite 1922
Indianapolis, IN 46204
(317) 327-5950

**Consulting Party Response: I-69 Interchange Modification at Campus
Parkway, Exit 210**

You are hereby invited to be a consulting party. As a consulting party you will participate in consultation to identify and evaluate historic properties, assess effects, and resolve any adverse effects. Please complete and return this postcard. Check if you "do" or "do not" wish to be a consulting party for the following project. Thank you.

We "do" wish to be a consulting party for:

I-69 Interchange Modification at Campus Parkway, Exit 210

We "do not" wish to be a consulting party

Name Mark Dollace
Organization Indiana Landmarks
Address 1201 Central Ave
Indianapolis, IN 46202
Telephone Number 317 639 4534 Fax _____
E-mail Address mdollace@indianalandmarks.org

Consulting Party Response: I-69 Interchange Modification at Campus Parkway, Exit 210

You are hereby invited to be a consulting party. As a consulting party you will participate in consultation to identify and evaluate historic properties, assess effects, and resolve any adverse effects. Please complete and return this postcard. Check if you "do" or "do not" wish to be a consulting party for the following project. Thank you.

We "**do**" wish to be a consulting party for:

- I-69 Interchange Modification at Campus Parkway, Exit 210
- We "**do not**" wish to be a consulting party

Name Diane Nevitt
Organization HAMILTON COUNTY HISTORICAL SOCIETY
Address PO BOX 397
NOBLESVILLE IN 46061
Telephone Number 317-770-0775 Fax SAME
E-mail Address HAMILTON CO MUSEUM @ ATT.NET

Consulting Party Response: I-69 Interchange Modification at Campus Parkway, Exit 210

You are hereby invited to be a consulting party. As a consulting party you will participate in consultation to identify and evaluate historic properties, assess effects, and resolve any adverse effects. Please complete and return this postcard. Check if you "do" or "do not" wish to be a consulting party for the following project. Thank you.

We "**do**" wish to be a consulting party for:

- I-69 Interchange Modification at Campus Parkway, Exit 210
- We "**do not**" wish to be a consulting party

Name Katherine Dill
Organization Carmel Clay Historical Society
Address 211 J Street SW
Carmel IN 46032
Telephone Number 317-846-2117 Fax _____
E-mail Address Carmelclayhistory@yahoo.com

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APPENDIX D. Photographs



I34th Street and Olio Road looking N into APE



I34th Street and Olio Road looking NE into APE



I34th Street and Olio Road looking NW into APE



I36th Street and Minden Street_Looking N1



I36th Street and Minden Street_Looking N2

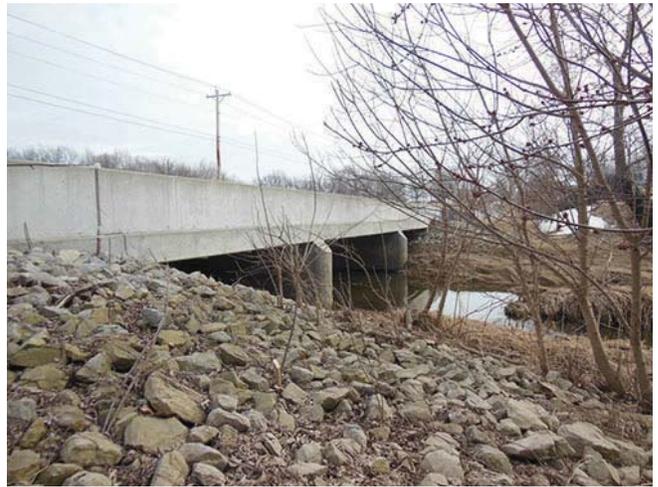


I36th Street and Minden Street_Looking W

WEINTRAUT & ASSOCIATES, INC.



136th Street_13914 Southeastern Parkway looking N



136th Street_Bridge crossing Mud Creek looking NE to substructure



146th Street and Bergen Boulevard looking S



40033_Olio Road looking W



40034_146th Street_Ervin Cemetery looking NW



40034_146th Street_Ervin Cemetery looking NW 2

WEINTRAUT & ASSOCIATES, INC.



40034_I46th Street_Ervin Cemetery looking NW to fence posts



45002_Southeastern Parkway_Barn NW of I4362 Southeastern Parkway looking N



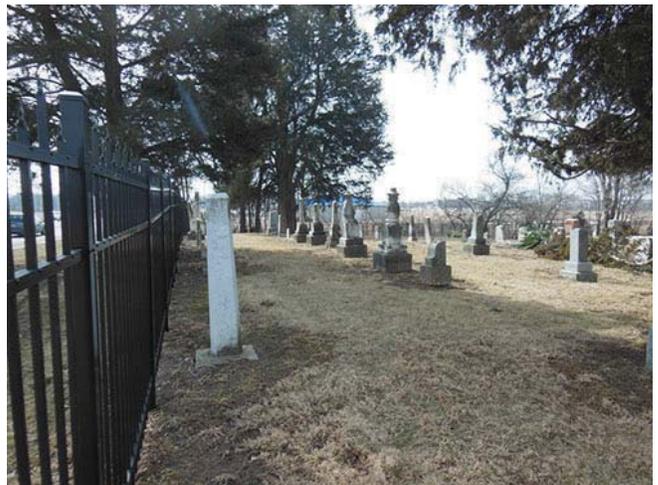
45002_Southeastern Parkway_Barn NW of I4362 Southeastern Parkway looking NW



45002_Southeastern Parkway_Barn NW of I4362 Southeastern Parkway looking SE



45005_Olio Road_Bethlehem Brethren Church and Cemetery looking NE



45005_Olio Road_Bethlehem Brethren Church and Cemetery looking S

WEINTRAUT & ASSOCIATES, INC.



45005_Olio Road_Bethlehem Brethren Church and Cemetery looking SE



45005_Olio Road_Bethlehem Brethren Church and Cemetery looking SW



45005_Olio Road_Bethlehem Brethren Church and Cemetery looking W



Campus Parkway and Bergen Boulevard looking ESE



Campus Parkway and Bergen Boulevard looking NNE



Campus Parkway and Bergen Boulevard looking NNW

WEINTRAUT & ASSOCIATES, INC.



Campus Parkway and Bergen Boulevard looking NW



Campus Parkway and Bergen Boulevard looking SE



Campus Parkway and Bergen Boulevard looking WNW



Campus Parkway and Corporate Parkway looking ESE



Campus Parkway and Corporate Parkway looking N



Campus Parkway and Corporate Parkway looking NE

WEINTRAUT & ASSOCIATES, INC.



Campus Parkway and Corporate Parkway looking SE



Campus Parkway and Corporate Parkway looking SW

WEINTRAUT & ASSOCIATES, INC.

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APPENDIX E. Report Summaries



Historic Property Report
I-69 Interchange Modification at Campus Parkway, Exit 210
Fall Creek and Wayne Townships, Hamilton County, Indiana
Des. No.: 1383489

Prepared for
**Indiana Department of Transportation/
Federal Highway Administration**

Prepared by
WEINTRAUT & ASSOCIATES, INC.
Principal Investigator: Dr. Linda Weintraut
Authors: Bethany Natali, M.A. and Kelly Lally Molloy, M.A.
P.O. Box 5034
Zionsville, Indiana 46077
317.733.9770
Linda@weintrautinc.com

April 2014

I-69 Interchange Modification at Campus Parkway, Exit 210 Fall Creek and Wayne Townships, Hamilton County, Indiana Des. No.: 1383489 | Executive Summary:

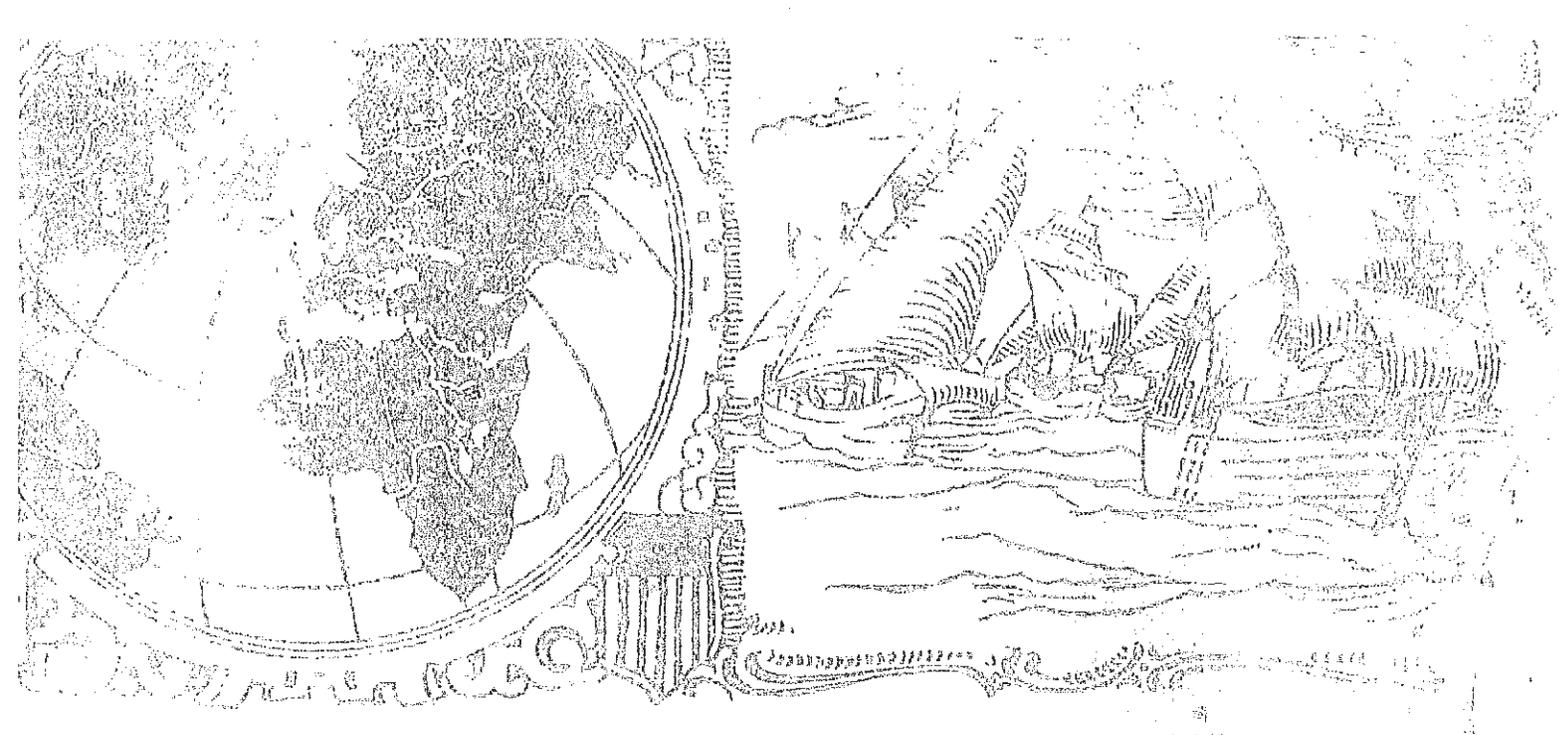
The Federal Highway Administration (FHWA) and the Indiana Department of Transportation (INDOT) are planning an I-69 Interstate Expansion from 106th St in Fishers to Exit 226 (SR 9 & 109 in Anderson), in Hamilton and Madison Counties. This expansion has been broken into multiple projects with independent utility and logical termini. This report is being conducted for Project 2 (Des. No. 1383489), an interchange modification project at Exit 210 (Campus Parkway) to improve the interchange of I-69 at Campus Parkway, which is experiencing an insufficient Level of Service (LOS) during peak traffic hours. While the LOS of the current interchange has not yet been modeled, observations have noted the poor LOS at the interchange. The current interchange type is a diamond interchange with signalized ramp terminals. An interchange modification project is proposed for the interchange to improve the LOS. While all interchange types will be considered as possible improvements, the limited right-of-way in the vicinity of the interchange will make the following interchange types most likely to be selected: partial-cloverleaf interchange, tight diamond interchange with roundabouts at the ramp termini, single point urban interchange, and double-crossover diamond interchange. The primary factors in determining the modifications selected will be construction

costs, LOS rating, traffic safety, land acquisition costs, environmental impacts and cultural resources impacts.

The Area of Potential Effects (APE) is “the geographic area or areas within which an undertaking may directly or indirectly cause alterations in the character or use of historic properties, if any such properties exist” [36 CFR § 800.16(d)]. The APE was drawn to include properties that may be impacted by project activities.

Project personnel for Weintraut & Associates, Inc. (W&A), who meet the Secretary of the Interior’s Professional Standards and who are historians listed as Qualified Professionals by the Indiana Department of Natural Resources (IDNR), Indiana Division of Historic Preservation & Archaeology (DHPA), identified and evaluated resources for this project.

Historians for W&A recommend no properties eligible for inclusion in the National Register of Historic Places.



Indiana Archaeological Short Report
I-69 Interchange Modification at Campus Parkway, Exit 210,
in Hamilton County, Indiana
Des. No.: 1383489

Prepared for
Indiana Department of Transportation /
Federal Highway Administration

Prepared by
WEINTRAUT & ASSOCIATES, INC.

Principal Investigator: Jason Goldbach, M.A., R.P.A.

With contributions from: Bethany Hughes

P.O. Box 5034

Zionsville, Indiana

(317) 733-9770

(Jason@weintrautinc.com)

September 23, 2014



INDIANA ARCHAEOLOGICAL SHORT REPORT

State Form 54566 (1-11)

INDIANA DEPARTMENT OF NATURAL RESOURCES
DIVISION OF HISTORIC PRESERVATION
AND ARCHAEOLOGY

402 West Washington Street, Room W274
Indianapolis, Indiana 46204-2739
Telephone Number: (317) 232-1646
Fax Number: (317) 232-0693
E-mail: dhpa@dnr.IN.gov

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

Author: Jason Goldbach and Bethany Hughes

Date (month, day, year): September 23, 2014

Project Title: Interstate 69 Interchange Modification at Campus Parkway, Exit 210, in Hamilton County, Indiana

PROJECT OVERVIEW

Project Description:

The Federal Highway Administration (FHWA) and the Indiana Department of Transportation (INDOT) are planning an I-69 Interstate Expansion from 106th Street in Fishers to Exit 226 (State Roads [SR] 9 & 109 in Anderson), in Hamilton and Madison Counties. This expansion has been broken into multiple projects with independent utility and logical termini. This report is being conducted for Project 2 (Des. No.: 1383489), an interchange modification at Campus Parkway, Exit 210.

Existing Conditions: Improvements have recently been completed on Campus Parkway/Southeastern Parkway on both sides of the interchange. Prior to that work, the cross road was a simple, rural 2-lane road and was referred to as SR 238 (Greenfield Ave locally) where it connected Noblesville and Fortville. Now the SR 238 designation has been relinquished. The City of Noblesville refers to the road as Campus Parkway while the Town of Fishers refers to it as Southeastern Parkway.

The current interchange type is a diamond interchange with signalized ramp terminals. The bridge has one through-lane and one left-turn lane going eastbound, and two through-lanes and one left-turn lane going westbound.

Improvements to the existing interchange such as added auxiliary lanes will be considered. Transportation System Management (TSM) improvements such as ramp metering and signal coordination will also be considered. In addition, modification to the interchange type will be considered. While all interchange types will be considered as possible improvements, the limited right-of-way in the vicinity of the interchange will make the following interchange types most likely to be selected: partial-cloverleaf interchange, tight diamond with roundabouts at the ramp termini, single point urban interchange, and double-crossover diamond interchange. The primary factors in determining the modifications selected will be construction costs, Level of Service (LOS) rating, traffic safety, land acquisition costs, environmental impacts and cultural resources impacts.

Right-of-Way: No new permanent and/or temporary ROW will be required for this project depending upon the type of improvements selected for this undertaking. This survey includes areas outside of existing ROW which were subsequently excluded from the preferred alternative.

INDOT Designation Number/ Contract Number: 1383489 Project Number:

DHPA Number: Approved DHPA Plan Number:

Prepared For: Parsons

Contact Person: Daniel J. Miller

Comments:

The preferred alternative is entirely within the existing ROW of the I-69 and Campus Parkway (Old SR 238) interchange. This area is heavily disturbed and is unlikely to have any archaeological deposits in their original context.

RESULTS

- Archaeological records check has determined that the project area does not have the potential to contain archaeological resources.
- Archaeological records check has determined that the project area has the potential to contain archaeological resources.
- Phase Ia reconnaissance has located no archaeological resources in the project area.
- Phase Ia reconnaissance has identified landforms conducive to buried archaeological deposits.

Actual Area Surveyed hectares: acres:

Comments:

Within the vicinity of site 12H0661, the area was shovel tested at a 15-m interval. No archaeological materials were recovered from these tests.

RECOMMENDATION

- The archaeological records check has determined that the project area has the potential to contain archaeological resources and a Phase Ia archaeological reconnaissance is recommended.
- The archaeological records check has determined that the project area does not have the potential to contain archaeological resources and no further work is recommended before the project is allowed to proceed.
- The Phase Ia archaeological reconnaissance has located no archaeological sites within the project area and it is recommended that the project be allowed to proceed as planned.
- The Phase Ia archaeological reconnaissance has determined that the project area includes landforms which have the potential to contain buried archaeological deposits. It is recommended that Phase Ic archaeological subsurface reconnaissance be conducted before the project is allowed to proceed.
- The Phase Ia archaeological reconnaissance has determined that the project area is within 100 feet of a cemetery and a Cemetery Development Plan is required per IC-14-21-1-26.5.

Cemetery Name:

Other Recommendations/Commitments:

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

Attachments

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

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APPENDIX F. Correspondence

WEINTRAUT & ASSOCIATES, INC.

June 18, 2014

State Historic Preservation Officer
Indiana Department of Natural Resources
Division of Historic Preservation and Archaeology
402 W. Washington Street, W274
Indianapolis, IN 46204-2739

Re: INDOT Designation No: 1383489

Location: Fall Creek and Wayne Townships, Hamilton County, Indiana

Description: I-69 Interchange Modification at Campus Parkway, Exit 210

Dear Mitch Zoll,

The Federal Highway Administration (FHWA) and the Indiana Department of Transportation (INDOT) are planning an I-69 Interstate Expansion from 106th Street in Fishers to Exit 226 (SR 9 & 109 in Anderson), in Hamilton and Madison Counties. This expansion has been broken into multiple projects with independent utility and logical termini. This study is being conducted for Project 2 (Des. No. 1383489), an interchange modification project at Exit 210 (Campus Parkway). We are requesting comments from your area of expertise regarding any possible environmental effects associated with this project. **Please use the above designation number and description in your reply.** We will incorporate your comments into a study of the projects' environmental impacts.

Purpose and Need: The need for this project stems from traffic congestion issues that currently exist at this interchange. The interchange is experiencing an insufficient Level of Service (LOS) during peak traffic hours. LOS is a rating for traffic congestion, with LOS A indicating little to no delay and LOS F indicating serious congestion and delay. An INDOT study conducted in the fall of 2012 noted, "Southbound [SB] I-69 experiences congestion and reduction of travel speed during the AM peak hours, especially as traffic approaches Exit 205. Northbound [NB] I-69 also experiences congestion and long queues at Exit 210's NB exit during the PM peak hours, especially during events at the Klipsch Music Center (though traffic data collected does not take into account such events)."

Traffic Data was recently analyzed using Highway Capacity Manual methodology in Highway Capacity Software (HCS). The northbound ramp is currently operating at an LOS D, while the southbound ramp is operating at an LOS C. Both ramp termini are predicted to operate at an LOS F in the design year, 2035. The results show unacceptable LOS for both existing and future traffic for the interchange.

The purpose of this project is to improve overall traffic operation by reducing congestion at this interchange.

Existing Conditions: Improvements have recently been completed on Campus Parkway/Southeastern Parkway on both sides of the interchange. Prior to that work, the cross road was a simple, rural 2-lane road and was referred to as SR 238 (Greenfield Ave. locally) where it connected Noblesville and Fortville. Now the SR 238 designation has been relinquished. The City of Noblesville refers to the road as Campus Parkway while the Town of Fishers refers to it as Southeastern Parkway.

The current interchange type is a diamond interchange with signalized ramp terminals. The bridge has one through-lane and one left-turn lane going eastbound, and two through-lanes and one left-turn lane going westbound.

Proposed Project 2: I-69 Interchange Modification at Campus Parkway, Exit 210

An interchange modification project is proposed for the interchange to improve the LOS. Improvements to the existing interchange such as added auxiliary lanes will be considered. Transportation System Management (TSM) improvements such as ramp metering and signal coordination will also be considered. In addition, modification to the interchange type will be considered. While all interchange types will be considered as possible improvements, the limited right-of-way in the vicinity of the interchange will make the following interchange types most likely to be selected: partial-cloverleaf interchange, tight diamond with roundabouts at the ramp termini, single point urban interchange, and double-crossover diamond interchange. The primary factors in determining the modifications selected will be construction costs, LOS rating, traffic safety, land acquisition costs, environmental impacts and cultural resources impacts.

Right-of-Way (ROW): New permanent and/or temporary ROW may be required for this project depending upon the type of improvements selected for this undertaking. This survey has utilized extents that take into account the maximum amount of ROW that may be required.

Section 106 of the National Historic Preservation Act: Section 106 requires federal agencies to take into account the effects of their undertaking on historic properties (both archaeological and structures). Pursuant to 36 CFR 800.2(c), you are hereby invited to be a consulting party to participate in efforts to identify historic properties that may be affected by the undertaking, assess the effects of the undertaking on historic properties, and seek ways to avoid, minimize, or mitigate adverse effects on historic properties. Historic Properties are properties that are listed or eligible for listing in the NRHP. The intent of this letter is to provide you an opportunity to become a consulting party by responding to the invitation via the enclosed post card.

The following individuals, agencies and organizations have been invited to be consulting parties:

- Indiana State Historic Preservation Officer
- Indiana Landmarks – Central Regional Office
- Hamilton County Historian
- Hamilton County Historical Society

- Hamilton County Genealogy Society
- Carmel-Clay Historical Society
- Fishers Historic Preservation Committee
- Noblesville Preservation Alliance
- City of Noblesville
- Hamilton County Commissioners
- Noblesville Chamber of Commerce
- Indianapolis MPO

Per 36 CFR 800.3(f), the State Historic Preservation Officer (SHPO) is requested to notify this office if the SHPO is aware of any other individuals, agencies, or organizations which may be "entitled to become consulting parties."

Enclosed with this letter is one electronic copy of the Historic Property Report (HPR) prepared by Weintraut & Associates, Inc. for your review, should you chose to participate in consultation on this project. The report was reviewed and approved by the INDOT-Cultural Resources Office (CRO) on May 19, 2014. Weintraut & Associates is not recommending any properties eligible for listing in the NRHP. The results of the archaeological investigation will be forwarded to the SHPO for review and comment when it is completed.

To facilitate the development of this project, please respond with your comments on the HPR **within thirty (30) days** from the date of receipt of this letter. Should you find that an extension to the response time is necessary, a reasonable amount may be granted upon request. Please direct comments to Linda Weintraut at the address below or via email at Linda@weintrautinc.com.

Sincerely,



Linda Weintraut, Ph.D.
 Weintraut & Associates, Inc.
 PO Box 5034
 Zionsville, Indiana 46077
 Phone: 317-733-9770

Enclosures

Cc: Indiana State Historic Preservation Officer
 Indiana Landmarks – Central Regional Office
 Hamilton County Historian
 Hamilton County Historical Society
 Hamilton County Genealogy Society
 Carmel-Clay Historical Society
 Fishers Historic Preservation Committee

Noblesville Preservation Alliance
City of Noblesville
Hamilton County Commissioners
Noblesville Chamber of Commerce
Indianapolis MPO
Emc: Richard J. Marquis, FHWA
Mary E. Kennedy, INDOT-CRO
Daniel J. Miller, Parsons

Division of Historic Preservation & Archaeology • 402 W. Washington Street, W274 • Indianapolis, IN 46204-2739
Phone 317-232-1646 • Fax 317-232-0693 • dhpa@dnr.IN.gov



July 11, 2014

Linda Weintraut, Ph.D.
Weintraut & Associates, Inc.
PO Box 5034
Zionsville, IN 46077

Federal Agency: Federal Highway Administration

Re: Historic property report (Weintraut, 4/2014) for the I-69 interchange modification at Campus Parkway, Exit 210 (Designation #1383489; DHPA #16356)

Dear Dr. Weintraut:

Pursuant to Section 106 of the National Historic Preservation Act (16 U.S.C. § 470f), 36 C.F.R. Part 800, and the "Programmatic Agreement among the Federal Highway Administration, the Indiana Department of Transportation, the Advisory Council on Historic Preservation, the Indiana State Historic Preservation Officer regarding the implementation of the Federal Aid Highway Program in the State of Indiana," the staff of the Indiana State Historic Preservation Officer has conducted an analysis of the materials dated June 18, 2014 and received on June 19, 2014, for the above indicated project in Fall Creek and Wayne Townships, Hamilton County, Indiana.

Based upon the documentation available to the staff of the Indiana SHPO, we have not identified any historic buildings, structures, or districts listed in or eligible for inclusion in the National Register of Historic Places within the probable area of potential effects.

The above comments are strictly in regards to historic structures, since no information has been provided thus far regarding archaeology.

A copy of the revised 36 C.F.R. Part 800 that went into effect on August 5, 2004 may be found on the Internet at www.achp.gov for your reference. If you have questions about archaeological issues please contact Wade T. Tharp at (317) 232-1650 or wtharp1@dnr.IN.gov. If you have questions about buildings or structures please contact Ashley Thomas at (317) 234-7034 or asthomas@dnr.IN.gov. Additionally, in all future correspondence regarding the above indicated project, please refer to DHPA #16356.

Very truly yours,

Mitchell K. Zoll
Deputy State Historic Preservation Officer

MKZ:ADT:adt

emc: Patrick Carpenter, Indiana Department of Transportation
Mary Kennedy, Indiana Department of Transportation
Shaun Miller, Indiana Department of Transportation
Melany Prather, Indiana Department of Transportation

Division of Historic Preservation & Archaeology 402 W. Washington Street, W274 Indianapolis, IN 46204-2739
Phone 317-232-1646 Fax 317-232-0693 dhpa@dnr.IN.gov



October 24, 2014

Linda Weintraut, Ph.D.
Weintraut & Associates, Inc.
P. O. Box 5034
Zionsville, Indiana 46077

Federal Agency: Federal Highway Administration ("FHWA")

Re: Indiana archaeological short report (Goldbach, 09/23/2014) for the I-69 interchange modification at Campus Parkway, Exit 210 (Designation No. 1383489; DHPA No. 16356)

Dear Dr. Weintraut:

Pursuant to Section 106 of the National Historic Preservation Act (16 U.S.C. § 470f), 36 C.F.R. Part 800, and the "Programmatic Agreement among the Federal Highway Administration, the Indiana Department of Transportation, the Advisory Council on Historic Preservation, the Indiana State Historic Preservation Officer regarding the implementation of the Federal Aid Highway Program in the State of Indiana," the staff of the Indiana State Historic Preservation Officer ("Indiana SHPO") has conducted an analysis of the materials dated September 25, 2014, and received on September 26, 2014, for the above indicated project in Fall Creek Township and Wayne Township, Hamilton County, Indiana.

Based upon the documentation available to the staff of the Indiana SHPO, we have not identified any currently known archaeological resources listed in or eligible for inclusion in the National Register of Historic Places ("NRHP") within the proposed project area.

We note that that, per the submitted report, when disturbed profiles repeatedly were encountered, the shovel testing interval was increased to 30 meters, rather than kept to 15 meter intervals, as indicated in the *Revised Policy for Shovel Test Probes in Indiana* (Glass, 03/10/2009). Additionally, we note that a known archaeological site—12-H-0661—was within the surveyed area, and that this site was resurveyed at 15 meter intervals, rather than at 5 meter intervals, as indicated for known sites in the *Revised Policy*. Please be advised that, per the current *Draft Guidebook for Indiana Historic Sites and Structures Inventory—Archaeological Sites*, the DHPA must be consulted with prior to implementation of changes in field methodology or survey techniques. Additionally, a site resurvey form for 12-H-0661 should be uploaded to the DHPA SHAARD database.

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

As previously indicated, based upon the documentation available to the staff of the Indiana SHPO, we have not identified any historic buildings, structures, or districts listed in or eligible for inclusion in the NRHP within the probable area of potential effects.

At this time, it would be appropriate for the Indiana Department of Transportation ("INDOT"), on behalf of the FHWA, to analyze the information that has been gathered from the Indiana SHPO, the general public, and any other consulting parties and make the necessary determinations and findings. Please refer to the following comments for guidance:

- 1) If the INDOT believes that a determination of "no historic properties affected" accurately reflects its assessment, then it shall provide documentation of its finding as set forth in 36 C.F.R. § 800.11 to the Indiana SHPO, notify all consulting parties, and make the documentation available for public

inspection (36 C.F.R. §§ 800.4[d][1] and 800.2[d][2]).

- 2) If, on the other hand, the INDOT finds that an historic property may be affected, then it shall notify the Indiana SHPO, the public and all consulting parties of its finding and seek views on effects in accordance with 36 C.F.R. §§ 800.4(d)(2) and 800.2(d)(2). Thereafter, the INDOT may proceed to apply the criteria of adverse effect and determine whether the project will result in a "no adverse effect" or an "adverse effect" in accordance with 36 C.F.R. § 800.5.

Please be advised that prior to INDOT approving and issuing a finding, the 36 C.F.R. § 800.11 documentation must be submitted to INDOT for review and comment.

A copy of the revised 36 C.F.R. Part 800 that went into effect on August 5, 2004 may be found on the Internet at www.achp.gov for your reference. If you have questions about archaeological issues please contact Wade T. Tharp at (317) 232-1650 or wtharp1@dnr.IN.gov. If you have questions about buildings or structures please contact Ashley Thomas at (317) 234-7034 or asthomas@dnr.IN.gov. Additionally, in all future correspondence regarding the above indicated project, please refer to DHPA No. 16356.

Very truly yours,



Sar

Mitchell K. Zoll
Deputy State Historic Preservation Officer

MKZ:WTT:wtt

emc: Patrick Carpenter, Indiana Department of Transportation
Mary Kennedy, Indiana Department of Transportation
Shaun Miller, Indiana Department of Transportation
Melany Prather, Indiana Department of Transportation
Jason Goldbach, Weintraut & Associates, Inc.

Appendix E: Section 4(f)

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Miller, Daniel J

From: Miller, Daniel J
Sent: Wednesday, September 17, 2014 3:14 PM
To: 'parks@fishers.in.us'; 'bbennett@noblesville.in.us'
Subject: INDOT Des. No. 1383489; I-69 Interstate Expansion; Project 2: Interchange Modification at Exit 210 (Campus Parkway); Hamilton County; Section 4(f)
Attachments: Trails within the project limits.pdf
Follow Up Flag: Follow up
Flag Status: Flagged

Mr. Elliot and Mr. Bennett,

The Indiana Department of Transportation (INDOT) is planning an I-69 Interstate Expansion from 106th Street in Fishers to Exit 226 (SR 9 & 109 in Anderson), in Hamilton and Madison Counties. This expansion has been broken into multiple projects with independent utility and logical termini. Environmental analysis is currently being conducted for Project 2 (Des. No. 1383489), an interchange modification project at Exit 210 (Campus Parkway).

I mailed out early coordination letters and attachments last week (September 9, 2014) for this project. Would you please confirm whether or not you received these?

Per GIS review, there are two open trail segments (146th St from Pointe Blvd to I-69 and Cumberland Rd to Hamilton Towne Center) and two planned segments (I-69 South to Mud Creek and a segment of Olio Road - SR 238 south to Bee Camp Creek) that partially lie within the project area (please see the attached map). According to GIS, the 146th St from Pointe Blvd to I-69 trail is managed by the Noblesville Parks and Recreation Department, while the Cumberland Rd to Hamilton Towne Center trail and both planned segments are managed by the Town of Fishers. Would you please confirm whether or not this is correct?

Due to the safety hazards associated with construction, it is preferred to close the portion of the 146th St from Pointe Blvd to I-69 trail within the project limits (approximately 0.54 mile at the end of the 7.5 mile long trail) during construction (1 construction season). A very small portion of the Cumberland Rd to Hamilton Towne Center trail (approximately 210 feet of the 1.25 mile long trail) may also need to temporarily be closed during construction for safety purposes. It is assumed that both of the proposed trails would not be impacted by the proposed project (unless they are planned to open before construction begins?). There would be no permanent impacts to any of the trails.

The open segments of trails would likely be considered Section 4(f) Resources per the US Department of Transportation Act of 1966. If the trails are temporarily closed for one construction season (or part of one construction season), this would likely be considered “[interference with the protected activities, features, or attributes of the property, on either a temporary or permanent basis](#)”, and, therefore, likely be considered a “use”. Due to the minor impacts associated with temporarily closing portions of these trails for safety related purposes, it is believed that a determination of a *de minimis* impact is appropriate. Per FHWA’s Section 4(f) tutorial (http://www.environment.fhwa.dot.gov/section4f/use_deminimis.aspx):

A determination of *de minimis* impact on parks, recreation areas, and wildlife and waterfowl refuges, may be made when all three of the following criteria are satisfied:

1. The transportation use of the Section 4(f) resource, together with any impact avoidance, minimization, and mitigation or enhancement measures incorporated into the project, does not adversely affect the activities, features, and attributes that qualify the resource for protection under Section 4(f);
2. The public has been afforded an opportunity to review and comment on the effects of the project on the protected activities, features, and attributes of the Section 4(f) resource; and
3. The official(s) with jurisdiction over the property are informed of U.S. DOT's intent to make the *de minimis* impact determination based on their written concurrence that the project will not adversely affect the activities, features, and attributes that qualify the property for protection under Section 4(f).

Do you concur that the project will not adversely affect the activities, features, and attributes that qualify the trails under your jurisdiction for protection under Section 4(f)?

If so, I will write up an official concurrence letter for all parties to sign. INDOT will then hold a hearing to allow the public an opportunity to review and comment on the effects of the project.

Please let me know if you have any questions or comments, or if you find it prudent to hold a meeting to discuss the project. Please feel free to contact me by e-mail or at the number below.

Thank you,

Daniel J. Miller

Senior Environmental Planner

PARSONS

101 West Ohio Street, Suite 2121

Indianapolis, IN 46204

Phone: (317)616-4663

E-mail: Daniel.J.Miller@Parsons.com

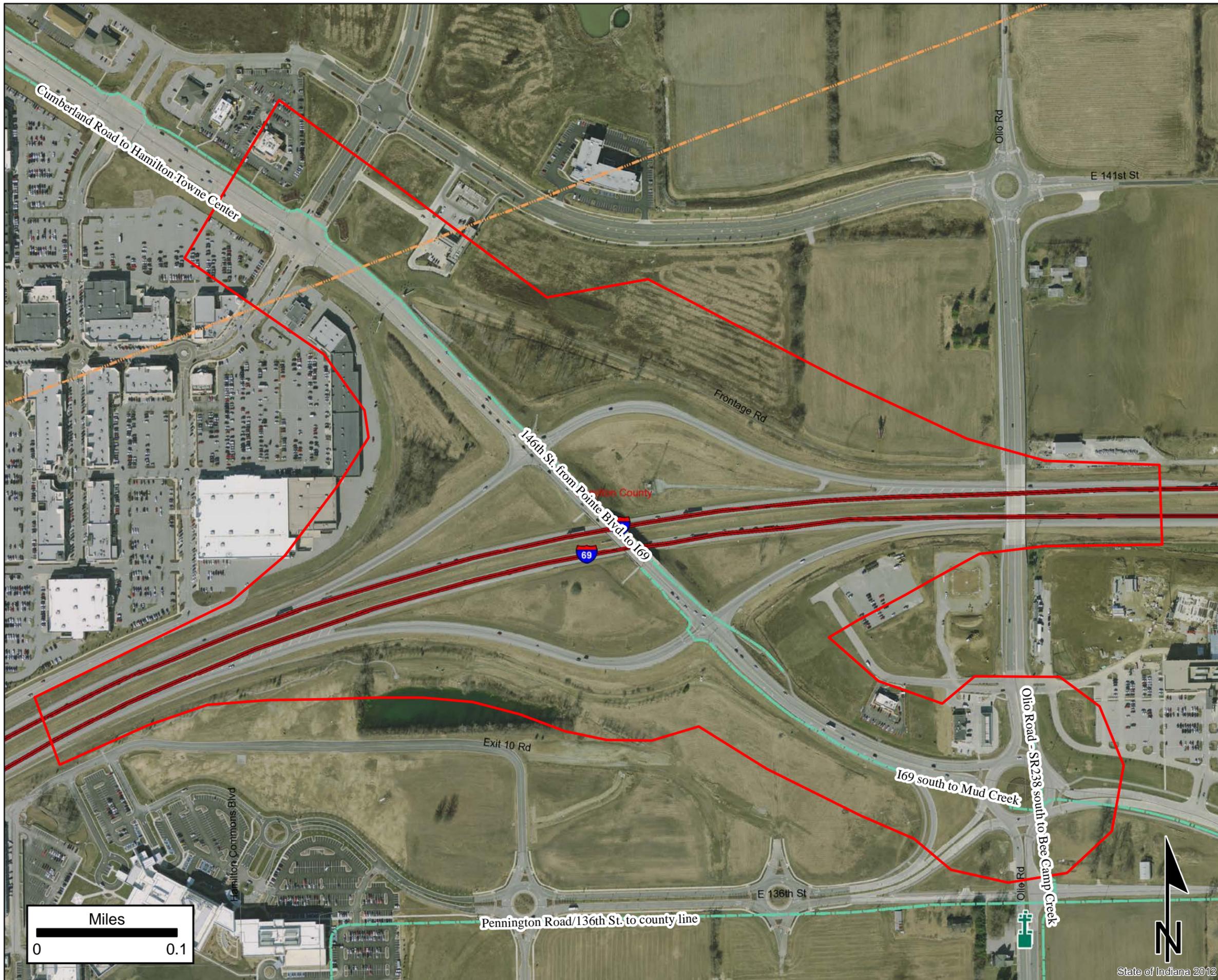
Web: www.parsons.com



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Des. No. 1383489

I-69 Interstate Expansion
 Project 2: Interchange Modification at Exit 210
 (Campus Parkway); Hamilton County



Infrastructure

- Project Area
- Half Mile Radius
- ✈ Airport
- + Cemeteries
- H Hospital
- Railroad
- 🚶 Recreation Facility
- ✚ Religious Facility
- ▲ Religious Facility Indiana Map
- 🚩 School
- · — · — · — Trails
- · — · — · — Pipeline
- Managed Lands
- County Boundary
- Interstate
- State
- US
- Local

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

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

Miller, Daniel J

From: John Beery [JBeery@noblesville.in.us]
Sent: Wednesday, September 17, 2014 4:14 PM
To: Miller, Daniel J
Cc: Brandon Bennett
Subject: RE: INDOT Des. No. 1383489; I-69 Interstate Expansion; Project 2: Interchange Modification at Exit 210 (Campus Parkway); Hamilton County; Section 4(f)

Follow Up Flag: Follow up
Flag Status: Flagged

Mr. Miller,

Please just forward us the pages of the MOT that show the closure. You can copy me directly via email. I suggest only the portion east of Bergan Blvd and the easternmost entrance to the Town Center be closed.

Regards,

John Beery, PE, PTOE
City Engineer
City of Noblesville
Phone: (317) 776-6330

From: Brandon Bennett
Sent: Wednesday, September 17, 2014 3:27 PM
To: John Beery
Subject: FW: INDOT Des. No. 1383489; I-69 Interstate Expansion; Project 2: Interchange Modification at Exit 210 (Campus Parkway); Hamilton County; Section 4(f)

Can you decipher this for me please? Your input is requested. Thanks!

Brandon Bennett, CPRP | Director | Parks & Recreation Department

City of Noblesville

701 Cicero Road

P: 317-776-6350

Noblesville, IN 46060

C: 317-716-2586

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www.noblesvilleparks.org



From: Miller, Daniel J [<mailto:Daniel.J.Miller@parsons.com>]
Sent: Wednesday, September 17, 2014 3:14 PM
To: parks@fishers.in.us; Brandon Bennett
Subject: INDOT Des. No. 1383489; I-69 Interstate Expansion; Project 2: Interchange Modification at Exit 210 (Campus Parkway); Hamilton County; Section 4(f)

Mr. Elliot and Mr. Bennett,

The Indiana Department of Transportation (INDOT) is planning an I-69 Interstate Expansion from 106th Street in Fishers to Exit 226 (SR 9 & 109 in Anderson), in Hamilton and Madison Counties. This expansion has been broken into multiple

Miller, Daniel J

From: Elliot, Tony [elliota@fishers.in.us]
Sent: Friday, October 17, 2014 8:59 AM
To: Miller, Daniel J
Subject: RE: Fishers Parks - I69 Expansion

Follow Up Flag: Follow up
Flag Status: Flagged

Mr. Miller,

I concur with the de minimis determination based on review of the project and discussions with Fishers Engineering Department. Please let me know if you need additional information from us.

Thank you,

Tony Elliot

Director, Parks & Recreation, Parks Department

P/F 317.595.3214 C 317.260.7112



www.fishers.in.us



From: Miller, Daniel J [mailto:Daniel.J.Miller@parsons.com]
Sent: Monday, October 13, 2014 10:01 AM
To: Elliot, Tony
Subject: RE: Fishers Parks - I69 Expansion

Mr. Elliot,

Attached is the first set of plans for the project. This project is design build. We are working on getting the MOT together, and I will forward that as soon as it is completed.

Would you please let me know if you concur that a determination of *de minimis* is appropriate for the temporary closure of the trail? If so, I will prepare the official concurrence letter for all parties to sign.

Please let me know if you need any additional information. FYI, NEPA is on an expedited schedule for this project. If you would like to discuss anything in detail, I am available by phone (below) or can meet you at your office to discuss.

Thanks,

Daniel J. Miller

Principal Environmental Planner

PARSONS

101 West Ohio Street, Suite 2121

Indianapolis, IN 46204

Phone: (317)616-4663

E-mail: Daniel.J.Miller@Parsons.com

Web: www.parsons.com



Please consider the environment before printing this email

From: Elliot, Tony [<mailto:elliota@fishers.in.us>]

Sent: Thursday, September 18, 2014 7:54 AM

To: Miller, Daniel J

Subject: Fishers Parks - I69 Expansion

Mr. Miller,

This email is to confirm receipt of the letter sent on September 9, 2014 regarding the Interstate 69 Expansion in Fishers, Hamilton County.

I will aim to have responses to you by end of week.

Thank you,

Tony Elliot

Director, Parks & Recreation, Parks Department

P/F[317.595.3214](tel:317.595.3214) C [317.260.7112](tel:317.260.7112)



www.fishers.in.us



Miller, Daniel J

From: John Beery [JBeery@noblesville.in.us]
Sent: Monday, October 20, 2014 9:38 AM
To: Miller, Daniel J
Cc: Brandon Bennett
Subject: RE: INDOT Des. No. 1383489; I-69 Interstate Expansion; Project 2: Interchange Modification at Exit 210 (Campus Parkway); Hamilton County; Section 4(f)

Follow Up Flag: Follow up
Flag Status: Flagged

We were unable to get any attachments and did not receive any information.

I believe that the closure of trails is of no consequence.

Please use Drop Box for further submittals. I also believe that I state in past correspondence that you need only send MOT plans for the specific area, which should reduce the size of the file that you need to transmit.

Regards,

John Beery, PE, PTOE
City Engineer
City of Noblesville
Phone: (317) 776-6330

From: Miller, Daniel J [mailto:Daniel.J.Miller@parsons.com]
Sent: Monday, October 20, 2014 9:21 AM
To: John Beery
Cc: Brandon Bennett
Subject: RE: INDOT Des. No. 1383489; I-69 Interstate Expansion; Project 2: Interchange Modification at Exit 210 (Campus Parkway); Hamilton County; Section 4(f)

Mr. Berry & Mr. Bennett,
Would either of you have time this week to discuss the *de minimis* determination?

Thanks,
Daniel J. Miller
Principal Environmental Planner
PARSONS
101 West Ohio Street, Suite 2121
Indianapolis, IN 46204
Phone: (317)616-4663
E-mail: Daniel.J.Miller@Parsons.com
Web: www.parsons.com



Please consider the environment before printing this email

From: Miller, Daniel J
Sent: Monday, October 13, 2014 10:11 AM
To: 'John Beery'

Cc: 'Brandon Bennett'

Subject: RE: INDOT Des. No. 1383489; I-69 Interstate Expansion; Project 2: Interchange Modification at Exit 210 (Campus Parkway); Hamilton County; Section 4(f)

Mr. Berry & Mr. Bennett,

I tried to send you some plans (7MB), but got a response back that both of your mailboxes are full. I've dropped the attachment. Would you please contact me and let me know if you were able to receive this?

Daniel J. Miller

Principal Environmental Planner

PARSONS

101 West Ohio Street, Suite 2121

Indianapolis, IN 46204

Phone: (317)616-4663

E-mail: Daniel.J.Miller@Parsons.com

Web: www.parsons.com



Please consider the environment before printing this email

From: Miller, Daniel J

Sent: Monday, October 13, 2014 9:59 AM

To: 'John Beery'

Cc: Brandon Bennett

Subject: RE: INDOT Des. No. 1383489; I-69 Interstate Expansion; Project 2: Interchange Modification at Exit 210 (Campus Parkway); Hamilton County; Section 4(f)

Mr. Beery,

Attached is the first set of plans for the project. The trail will only be closed east of Bergan Blvd and the easternmost entrance to the Town Center. This project is design build. We are working on getting the MOT together, and I will forward that as soon as it is completed.

Would you please let me know if you concur that a determination of *de minimis* is appropriate for the temporary closure of the trail? If so, I will prepare the official concurrence letter for all parties to sign.

Please let me know if you need any additional information. FYI, NEPA is on an expedited schedule for this project. If you would like to discuss anything in detail, I am available by phone (below) or can meet you at your office to discuss.

Thanks,

Daniel J. Miller

Principal Environmental Planner

PARSONS

101 West Ohio Street, Suite 2121

Indianapolis, IN 46204

Phone: (317)616-4663

E-mail: Daniel.J.Miller@Parsons.com

Web: www.parsons.com



Please consider the environment before printing this email

From: John Beery [<mailto:JBeery@noblesville.in.us>]

Sent: Wednesday, September 17, 2014 4:14 PM

To: Miller, Daniel J

Cc: Brandon Bennett



INDIANA DEPARTMENT OF TRANSPORTATION

100 North Senate Avenue
Room N642
Indianapolis, Indiana 46204

Michael R. Pence, Governor
Karl B. Browning, Commissioner

December 5, 2014

Mr. Tony Elliot
Director of Parks and Recreation
Town of Fishers
Parks and Recreation
Fishers, IN 46037

Brandon Bennett
Director of Parks and Recreation
City of Noblesville
701 Cicero Road
Noblesville, IN 46060

John Beery, PE, PTOE
City Engineer
City of Noblesville
Noblesville, IN 46060

Re: Des. Nos.: 1383489
Description: I-69 Interstate Expansion
Project 2: Interchange Modification at Exit 210 (Campus Parkway)
Hamilton County, Indiana

Dear Mr. Elliot, Mr. Bennett, and Mr. Beery,

The purpose of this letter is to document the current understanding between the Indiana Department of Transportation (INDOT), the Federal Highway Administration (FHWA), the Town of Fishers' Department of Parks and Recreation, and the City of Noblesville's Department of Parks and Recreation regarding the impacts of the above-referenced project on the 146th Street from Pointe Boulevard to I-69 Trail and the Cumberland Road to Hamilton Towne Center Trail.

Use of federal funds, administered by FHWA, subjects the proposed undertaking to the requirements of Section 4(f) of the Department of Transportation (DOT) Act of 1966. This federal law protects publicly owned parks, recreation areas, wildlife and waterfowl refuges, and public or privately-owned historic sites from conversion to a transportation use. The 146th Street from Pointe Boulevard to I-69 Trail and the Cumberland Road to Hamilton Towne Center Trail meet the requirements to be considered Section 4(f) resources. The 146th Street from Pointe Boulevard to I-69 Trail is managed by the Noblesville Parks and Recreation Department, while the Cumberland Road to Hamilton Towne Center Trail is managed by the Town of Fishers.

As discussed in the early coordination letters (ECL) sent out September 9, 2014 and the September 17, 2014 follow-up e-mails, INDOT is planning an I-69 Interstate Expansion from 106th Street in Fishers to Exit 226 (SR 9 & 109 in Anderson), in Hamilton and Madison Counties. This expansion has been broken into multiple projects with independent utility and logical termini. Project 2 is an interchange modification project at Exit 210 (Southeastern Parkway/Campus Parkway).

The current interchange type is a diamond interchange with signalized ramp terminals. The bridge has one 11-foot through-lane and one 11-foot left-turn lane going eastbound, and two 11-foot through-lanes and one 11-foot left-turn lane going westbound. A 10-foot-8-inch multiuse path exists on the westbound side, which carries the 146th Street from Pointe

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Boulevard to I-69 trail across the interchange. The Cumberland Road to Hamilton Towne Center Trail currently terminates approximately 210 feet south of the Hamilton Towne Center, northwest of the interchange.

The proposed project will modify the existing interchange into a double-crossover diamond (DCD) interchange. A DCD interchange, also referred to as a diverging diamond (DDI) interchange, “twists” or shifts crossroad traffic in the core of the interchange so as to eliminate turning movements at the signalized intersections. Therefore, left-turn and through movements will be relocated to the opposite side of the road on the bridge structure. The interchange will require two traffic signals, but they control opposing through movements only and are therefore two-phase signals (since no left-turn phases are needed).

The preferred alternative will provide two variable (12 to 15-foot) eastbound through-lanes, two variable (12 to 15-foot) westbound through-lanes, and 16-foot on and off-ramps. A 10-foot multiuse path will be maintained on the westbound side for the 146th Street from Pointe Boulevard to I-69 trail, and a 6-foot sidewalk will be added to the eastbound side and connected to the Cumberland Road to Hamilton Towne Center trail.

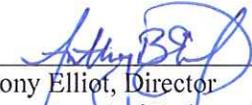
Due to the safety hazards associated with construction, the portion of the 146th Street from Pointe Boulevard to I-69 trail within the project limits (approximately 0.54 mile at the end of the 7.5 mile long trail) will be closed during construction (1 construction season). A small portion of the Cumberland Road to Hamilton Towne Center Trail (approximately 210 feet of the 1.25 mile long trail) may also need to temporarily be closed during construction for safety purposes. There would be no permanent impacts to either of the trails. The construction limits have been reduced to the greatest extent possible to minimize harm to these resources. The 146th Street from Pointe Boulevard to I-69 trail will only be closed east of Bergen Boulevard and the easternmost entrance to the Town Center to allow the remaining trail (approximately 7 miles) to be utilized during construction. As previously discussed, a 6-foot sidewalk will be added to the eastbound side and connected to the Cumberland Road to Hamilton Towne Center Trail as a mitigation measure.

After assessing the impacts the Project would have on the 146th Street from Pointe Boulevard to I-69 Trail and the Cumberland Road to Hamilton Towne Center Trail, it has been determined that the proposed Project, including the minimization and mitigation measures described above, would not adversely affect the activities, features, or attributes that make the trails eligible for Section 4(f) protection.

A determination of *de minimis* impact to Section 4(f) resources requires the concurrence of the officials with jurisdiction (OWJ) for the resource. As such, INDOT respectfully requests your concurrence with its *de minimis* finding by signing the appropriate line below and returning it to my attention. If you have any questions regarding the Project, the potential impacts on the 146th Street from Pointe Boulevard to I-69 Trail and the Cumberland Road to Hamilton Towne Center Trail, or the Section 4(f) process, please contact me at daniel.j.miller@parsons.com or at (317) 616-4663.

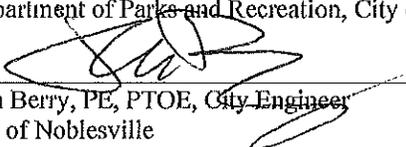
Sincerely,

Daniel J. Miller
Principal Environmental Planner
Parsons, on behalf of INDOT

Concurrence:  Date: 12/5/2014
Tony Elliot, Director
Department of Parks and Recreation, Town of Fishers

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Concurrence:  Date: 12/9/14
Brandon Bennett, CPRP, Director
Department of Parks and Recreation, City of Noblesville

Concurrence:  Date: 1/13/15
John Berry, PE, PTOE, City Engineer
City of Noblesville

cc: Tony Jones, INDOT
Larry Heil, FHWA
Ken McMullen, INDOT Environmental Services

Appendix F: Section 6(f)

Listing from the National Park Service's Land and Water Conservation Fund Website.....	<u>Page(s)</u> 1
--	---------------------

Land and Water Conservation Fund Grants: Indiana

The Park Service is finding out about more closures and conversions of federally protected parks than ever before. But no one knows just how many, so InvestigateWest compiled this database, which lists every LWCF grant between 1965 and 2011, as a starting point. Click a column header to re-sort the table. Click-shift to add a secondary sort.

RETURN TO THE PROJECT PAGE

Grant ID & Element	Grant Name	Sponsor	County	State	Grant Amount	Year Approved	Year Completed	Type
17 - XXX	FOREST PARK DEVELOPMENT	NOBLESVILLE PARK BOARD	HAMILTON	IN	\$8,383.88	1969	1969	Development
58 - XXX	FOREST PARK ADDITION	NOBLESVILLE PARK BOARD	HAMILTON	IN	\$45,744.50	1969	1970	Acquisition
128 - XXX	MORSE PARK	HAMILTON COUNTY PARK BOARD	HAMILTON	IN	\$142,332.00	1972	1975	Combination
198 - XXX	TRI-TOWN COMMUNITY PARK	CICERO PARK BOARD	HAMILTON	IN	\$34,242.81	1975	1977	Development
236 - XXX	FOREST PARK POOL	HAMILTON COUNTY PARK BOARD	HAMILTON	IN	\$125,000.00	1976	1978	Development
493 - XXX	FLOWING WELL PARK	CARMEL/CLAY TWP PARK BOARD	HAMILTON	IN	\$75,000.00	1993	1998	Combination
502 - XXX	COOL CREEK PARK NATURE CENTER	HAMILTON COUNTY PARK BOARD	HAMILTON	IN	\$75,000.00	1994	1999	Development
519 - XXX	KOTEEMI PARK ACQUISITION & DEVELOPMENT	HAMILTON COUNTY PARK BOARD	HAMILTON	IN	\$200,000.00	2000	2005	Combination
551 - XXX	D/MACGREGOR PARK	WASHINGTON TOWNSHIP PARK BOARD	HAMILTON	IN	\$200,000.00	2005	2007	Combination

AN INVESTIGATEWEST DATA PROJECT

Appendix G: Waters of the US Determination Report

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Waters of the U.S. Report

**I-69 Interstate Expansion; Projects 1, 2, and 3
Hamilton and Madison Counties, Indiana
INDOT Designation Numbers 1383332, 1383336, and 1383489**



October 16, 2014

Prepared by:

PARSONS
101 West Ohio Street, Suite 2121
Indianapolis, Indiana 46204

Prepared for:

Indiana Department of Transportation
Environmental Services Division
100 North Senate Avenue, Room N642
Indianapolis, Indiana 46204

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WATERS OF THE U.S. REPORT
I-69 Interstate Expansion; Projects 1, 2, and 3
Hamilton and Madison Counties, Indiana
INDOT Designation Numbers 1383332, 1383336, and 1383489
Prepared By: Thomas J. Warrner, Environmental Planner
October 16, 2014

I: Project Information

Fieldwork Dates:

Fieldwork was conducted on the following dates in 2014: May 7, May 8, May 12, June 16, June 17, June 18, June 19, June 23, June 25, June 27, July 3, July 9, July 10, and August 14.

Contributors:

Daniel J. Miller, Senior Environmental Planner
Alan Ball, Senior Environmental Planner
Thomas J. Warrner, Environmental Planner
Stephany Stamatis, Associate Environmental Planner
Wade Kimmon, GIS Specialist

Project Location:

Fishers Quadrangle:

Sections 1 and 12 of Township 17N, Range 4E
Section 6 of Township 17N, Range 5E
Section 31 of Township 18N, Range 5E

McCordsville Quadrangle:

Sections 19, 23, 24, 26, 27, 28, 31, 32, and 33 of Township 18N, Range 5E
Section 20 of Township 18N, Range 6E

Ingalls Quadrangle:

Sections 20, 21, and 22 of Township 18N, Range 6E

Hamilton and Madison Counties, Indiana

Project Description:

The Indiana Department of Transportation (INDOT) is planning an I-69 Interstate Expansion Project from 106th Street in Fishers to Exit 226 (S.R. 9 and S.R. 109 in Anderson) in Hamilton and Madison Counties. This expansion has been broken into multiple projects with independent utility and logical termini. This report pertains to Projects 1, 2, and 3.

Project 1

Project 1 (Des. 1383332) extends on I-69 from 106th Street to 0.5 mile north of the Campus Parkway in Hamilton County. This project would construct additional lanes from Exit 205 (116th Street and S.R. 37 in Fishers) to Exit 210 (Campus Parkway) in the form of median travel lanes. An outside auxiliary lane would be added on southbound I-69 from 106th Street to 116th Street. Existing pavement would be resurfaced. The cross section would have a 10-foot paved inside shoulder and a 10-foot paved outside shoulder. Double-sided guardrail would be installed. All mainline bridges would be widened in the median. There would be work on the overhead structure at Cumberland Road. The structure at Brooks School Road over I-69 would have the bridge deck replaced. The overhead structure at 126th Street would require no additional work. The interchange at Exit 210 would be modified as part of a separate project (Project 2). All small structures would be evaluated to determine if rehabilitation or replacement is necessary. Detention would likely be required at all legal drains. All detention basins would be constructed within existing right-of-way. No new right-of-way would be required for this project.

Project 2

Project 2 (Des. 1383489) is a proposed interchange modification at Exit 210 (Campus Parkway) to improve the level of service (LOS). Improvements to the existing interchange, such as added auxiliary lanes, will be considered. Transportation System Management (TSM) improvements, such as ramp metering and signal coordination, will also be considered. In addition, modification to the interchange type will be considered. While all interchange types will be considered as possible improvements, the limited right-of-way in the vicinity of the interchange will make the following interchange types most likely to be selected: partial-cloverleaf interchange, tight diamond with roundabouts at the ramp termini, single point urban interchange, and double-crossover diamond interchange. The primary factors in determining the modifications selected will be construction costs, LOS rating, traffic safety, land acquisition costs, environmental impacts, and cultural resources impacts. New permanent and/or temporary right-of-way may be required for this project depending upon the type of improvements selected for this undertaking.

Project 3

Project 3 (Des. 1383336) extends on I-69 from 0.5 mile north of Campus Parkway to 0.5 mile east of S.R. 13 in Hamilton and Madison Counties. The project would construct additional lanes from Exit 210 (Campus Parkway) to S.R. 13 in the form of median travel lanes. Existing pavement would be resurfaced. The cross section would have a 10-foot paved inside shoulder and a 10-foot paved outside shoulder. Double-sided guardrail would be installed in most areas, though not in wide median areas. All mainline bridges would be widened in the median. The overhead structures at Olio Road and Cyntheanne Road would require no additional work. The pavement on S.R. 13 under I-69 would be lowered to provide adequate bridge clearance. All small structures will be evaluated to determine if rehabilitation or replacement is necessary. Detention would likely be required at all legal drains within Hamilton County. Detention is not expected to be required in Madison County. All detention basins would be constructed within existing right-of-way. No new right-of-way would be required for this project.

A project location map is provided in Exhibit 1 (page 45) for reference.

II: Office Evaluation

Methodology

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

NWI Mapping:

During NWI review, two potential wetlands were identified within the project limits. Both of these were located near the Campus Parkway Interchange, with one being an open water area (based on review of aerial photography). Ten (10) NWI polygons were noted adjacent to the project limits. Eight (8) of these, however, appeared to be associated with open water areas (based on review of aerial photography). NWI maps are provided for reference in Exhibit 2 (pages 47 to 53).

USGS Mapping:

After review of USGS 7.5 minutes series topographic maps, three solid blue-line streams were identified within the project limits (Sand Creek, Mud Creek, and Thorpe Creek). One dashed blue-line stream is immediately adjacent to the project limits (Cheeney Creek). USGS maps are provided for reference in Exhibit 2 (pages 47 to 53).

Mapped Soil Units:

According to the Soil Survey Geographic (SSURGO) Database for Hamilton and Madison Counties, Indiana, the project area does contain nationally listed hydric soils. In addition, several of the non-hydric soils that are prevalent within the project limits contain hydric inclusions. The Natural Resources Conservation Service (NRCS) classifies soil types as follows: hydric (100%), predominantly hydric (66-99%), partially

hydric (33-65%), predominantly non-hydric (1-32%), and non-hydric (0%). The Soil Summary Table (Table 1, page 36) details all soil units noted within the project limits. Maps showing the location of soil types are provided in Exhibit 3 (pages 55 to 61).

Historic Drainage:

Soil surveys for both Hamilton and Madison Counties were reviewed to identify areas with historic drainage. Twenty-four (24) historic drainage features were identified within or near the project limits (Exhibit 4, pages 63 to 68). Each of these areas was flagged for field review.

III: Field Reconnaissance

Methodology

Parsons conducted fieldwork in May, June, July, and August of 2014 to determine the presence of streams, wetlands, and other water resources within the project limits. While specific areas identified via desktop review were targeted for review, the entire project was surveyed for resources. When observed, features located adjacent to, but outside of the project limits were also noted. Resource maps showing all identified features are attached for reference (Exhibit 5, pages 70 to 118).

Photographs were taken throughout the right-of-way, and specifically for each feature identified. Selected photographs are included within this report for reference (Exhibit 6, pages 120 to 218).

Each stream's ordinary high water mark (OHWM) was obtained using a measuring tape. Both a qualitative assessment of stream quality and quantitative assessment of stream quality were conducted. Qualitative assessments were only done within the project limits, while quantitative assessments often extended outside of INDOT right-of-way. Quantitative assessments were conducted based on each stream's drainage area using the guidelines for either the headwater habitat evaluation index (HHEI) (Ohio EPA, 2012) or qualitative habitat evaluation index (QHEI) (Ohio EPA, 2006). The results of these evaluations are provided in Exhibit 7 (pages 220 to 258). A hand-held GPS unit (Geoexplorer 6000 Series) was used to collect the location of each identified stream.

Vegetation, soil, and hydrology data were collected using the methods described in the *Regional Supplement to the Corps of Engineers Wetland Delineation Manual: Midwest Region (Version 2.0)* (USACE 2010). Wetland indicator statuses for plants were obtained from the 2014 National Wetland Plant List. Wetland data forms are provided in Exhibit 8 (pages 259 to 434) for reference. A qualitative assessment of each wetland's quality and function was conducted. A hand-held GPS unit (Geoexplorer 6000 Series) was used to collect the boundary of each identified wetland, as well as its data points.

Streams

Field investigations resulted in the identification of nineteen (19) likely jurisdictional streams totaling 17,605 linear feet within the project area. These features are summarized in the Stream Summary Table (Table 2, page 37). All roadside drainage features within the project limits were evaluated for the presence or absence of an OHWM. Due to the large number of these features, only those that exhibited an OHWM are discussed in this report. ***All other roadside drainages lacked OHWMs and are therefore not likely to be considered to be waters of the U.S.***

Cheeny Creek (R.J. Craig Drain)

Cheeny Creek (page 72) crosses under I-69 approximately 1.35 miles north of the 106th Street Overpass. Historic drainage was noted for this area during the desktop evaluation (Exhibit 4, page 63). At the May 8, 2014 field check, Cheeny Creek exhibited a 10-foot wide by 22-inch deep OHWM within the project area. Approximately 400 linear feet of Cheeny Creek lies within the project limits.

Within the project limits, this stream is predominantly encapsulated under I-69. The remaining segments within the project limits lack riffles/pools as well as a wooded riparian corridor. Upstream of the project limits, the creek is encapsulated underground after a distance of less than 50 feet. Cheeny Creek is also a Hamilton County regulated drain (R.J. Craig Drain). Because of these factors, qualitatively the aquatic and

terrestrial habitat quality for this stream within the project limits was considered to be poor. An HHEI evaluation was done downstream of the project limits for Cheeney Creek since sufficient room (200 meters) was not available within INDOT right-of-way. This index scored 75 (Exhibit 7, pages 220 to 221), indicating a higher quality than the qualitative evaluation. However, based on level of encapsulation and lack of riffles/pools, the actual stream quality within the project limits is likely a combination of both (average). The primary function of this stream is conveyance of storm water with some habitat value. Cheeney Creek is not listed as a *Federal Wild and Scenic River*, a *State Natural, Scenic and Recreational River*, or on the Indiana Register's listing of *Outstanding Rivers and Streams*.

Cheeney Creek is noted as a dashed blue line stream on USGS 7.5 series topographic maps immediately downstream of the project limits (Exhibit 2, page 47). However, flowing water was observed during all field checks, including on August 14, 2014. Therefore, Cheeney Creek would likely be classified as a perennial stream. This creek is a direct tributary to the West Fork of the White River, which is a direct tributary to the Wabash River, which outlets into the Ohio River (a traditionally navigable waterway). Due to the presence of an OHWM and this connectivity, Cheeney Creek would likely be considered a water of the U.S.

Unnamed Tributary 1 to Cheeney Creek

Unnamed Tributary 1 (UNT1) to Cheeney Creek (pages 72 to 76) is located along the west side of I-69, from the S.R. 37 Interchange to Cheeney Creek. No historic drainage was noted for this area during desktop evaluation (Exhibit 4, pages 63 to 64). However, at the May 7, 2014 field check, an OHWM was observed. South of the 116th Street Interchange the OHWM was 11-feet in width by 6-inches in depth. North of the 116th Street Interchange, the OHWM was 6-feet in width by 12-inches in depth. Approximately 5,865 linear feet of UNT1 lies within the project limits. Of this length, 1,600 linear feet is lined with concrete with an additional 530 linear feet lined with riprap. The concrete lined section at the confluence with Cheeney Creek is broken, allowing the stream to flow under this lining for approximately 50 linear feet. In addition, approximately 350' of this stream contains *Typha spp.* (cattails, OBL) below the OHWM.

This stream is channelized and receives direct pollutant inputs due to its location within the roadside drainage of I-69. Significant portions of this stream are lined with concrete or riprap. It also lacks a wooded riparian corridor along both banks. Because of these factors, qualitatively the aquatic and terrestrial habitat quality for this stream was considered to be poor. UNT1 to Cheeney Creek received an HHEI score of 30 (Exhibit 7, pages 222 to 223), indicating low habitat quality and supporting the qualitative determination. The primary function of this stream is conveyance of storm water. UNT1 to Cheeney Creek is not listed as a *Federal Wild and Scenic River*, a *State Natural, Scenic and Recreational River*, or on the Indiana Register's listing of *Outstanding Rivers and Streams*.

UNT1 to Cheeney Creek is not noted as a stream on USGS 7.5 series topographic maps (Exhibit 2, page 47). UNT1, however, would likely be classified as an intermittent stream. Water was flowing during the May 7, 2014 field check, but was nearly dry during the August 14, 2014 field check. This feature discharges into Cheeney Creek, which a direct tributary to the West Fork of the White River, which is a direct tributary to the Wabash River, which outlets into the Ohio River (a traditionally navigable waterway). Due to the presence of an OHWM and this connectivity, UNT1 to Cheeney Creek would likely be considered a water of the U.S.

Unnamed Tributary 2 to Cheeney Creek

Unnamed Tributary 2 (UNT2) to Cheeney Creek is located along the east side of I-69 within the roadside drainage (page 72). This stream discharges at the southeast quadrant of the Cheeney Creek crossing under I-69. Historic drainage was noted for this area during the desktop evaluation, indicating that a stream may have been captured during I-69's construction (Exhibit 4, page 63). At the May 8, 2014 field check, UNT2 exhibited a 1-foot wide and 4-inch deep OHWM within the project area. Approximately 960 linear feet of UNT2 lies within the project limits.

This stream is channelized and receives direct pollutant inputs due to its location within the roadside drainage of I-69. Approximately 100 linear feet of the stream has been lined with concrete. It lacks a wooded riparian corridor along both banks. Because of these factors, qualitatively the aquatic and terrestrial

habitat quality for this stream was considered to be poor. UNT2 to Cheeney Creek had an HHEI score of 35 (Exhibit 7, pages 224 to 225), indicating low habitat quality and supporting the qualitative determination. The primary function of this stream is conveyance of storm water. UNT2 to Cheeney Creek is not listed as a *Federal Wild and Scenic River*, a *State Natural, Scenic and Recreational River*, or on the Indiana Register's listing of *Outstanding Rivers and Streams*.

UNT2 to Cheeney Creek is not noted as a stream on USGS 7.5 series topographic maps (Exhibit 2, page 47). UNT2, however, would likely be classified as an ephemeral stream. An OHWM was observed, but no flowing water was observed during any of the field checks. This feature discharges into Cheeney Creek, which is a direct tributary to the West Fork of the White River, which is a direct tributary to the Wabash River, which outlets into the Ohio River (a traditionally navigable waterway). Due to the presence of an OHWM and this connectivity, UNT2 to Cheeney Creek would be likely considered a water of the U.S.

Unnamed Tributary 3 to Cheeney Creek

Unnamed Tributary 3 (UNT3) to Cheeney Creek is located along the east side of I-69 within the roadside drainage (pages 72 to 73). This stream discharges at the northeast quadrant of the Cheeney Creek crossing under I-69. No historic drainage was noted for this area during desktop evaluation (Exhibit 4, page 63). At the August 14, 2014 field check, UNT3 exhibited a 1-foot wide by 4-inch deep OHWM within the project area. Approximately 1,000 linear feet of UNT3 lies within the project limits.

This stream is channelized and receives direct pollutant inputs due to its location within the roadside drainage of I-69. Approximately 120 linear feet of the stream has been lined with concrete. It also lacks a wooded riparian corridor along both banks. Because of these factors, qualitatively the aquatic and terrestrial habitat quality for this stream was considered to be poor. UNT3 to Cheeney Creek had an HHEI score of 28 (Exhibit 7, pages 226 to 227), indicating low habitat quality and supporting the qualitative determination. The primary function of this stream is conveyance of storm water. UNT3 to Cheeney Creek is not listed as a *Federal Wild and Scenic River*, a *State Natural, Scenic and Recreational River*, or on the Indiana Register's listing of *Outstanding Rivers and Streams*.

UNT3 to Cheeney Creek is not noted as a stream on USGS 7.5 series topographic maps (Exhibit 2, page 47). UNT3, however, would likely be classified as an ephemeral stream. An OHWM was observed, but no flowing water was observed after the May 8, 2014 field check. This feature discharges into Cheeney Creek, which is a direct tributary to the West Fork of the White River, which is a direct tributary to the Wabash River, which outlets into the Ohio River (a traditionally navigable waterway). Due to the presence of an OHWM and this connectivity, UNT3 to Cheeney Creek would likely be considered a water of the U.S.

Unnamed Tributary 4 to Cheeney Creek

Unnamed Tributary 4 (UNT4) to Cheeney Creek (pages 72 to 73) is located along the east side of I-69 in the roadside drainage between UNT3 to Cheeney Creek and USA Parkway. This stream discharges at the northeast quadrant of the Cheeney Creek crossing under I-69. No historic drainage was noted for this area during desktop evaluation (Exhibit 4, page 63). At the August 14, 2014 field check, UNT4 exhibited a 3-foot wide by 6-inch deep OHWM within the project area. Approximately 425 linear feet of UNT3 lies within the project limits.

This stream is channelized and lined with concrete. Despite having a narrow wooded riparian corridor (shrubs) along both banks, qualitatively the aquatic and terrestrial habitat quality for this stream was considered to be poor. UNT4 to Cheeney Creek had an HHEI score of 49 (Exhibit 7, pages 228 to 229), suggesting average aquatic habitat quality. Despite scoring high in both the bankfull width and pool depth metrics, the paved nature of the channel bottom is likely a limiting factor for aquatic habitat. Therefore, the overall quality of this stream is likely a combination of both (below average). The primary function of this stream is likely conveyance of storm water with limited habitat value. UNT4 to Cheeney Creek is not listed as a *Federal Wild and Scenic River*, a *State Natural, Scenic and Recreational River*, or on the Indiana Register's listing of *Outstanding Rivers and Streams*.

UNT4 to Cheeney Creek is not noted as a stream on USGS 7.5 series topographic maps (Exhibit 2, page 47). UNT4, however, would likely be classified as a perennial stream. Water was flowing during all field checks, including the August 14, 2014 field check. This feature discharges into Cheeney Creek, which is a direct tributary to the West Fork of the White River, which is a direct tributary to the Wabash River, which outlets to the Ohio River (a traditionally navigable waterway). Due to the presence of an OHWM and this connectivity, UNT4 to Cheeney Creek would likely be considered a water of the U.S.

Unnamed Tributary 5 to Cheeney Creek

Unnamed Tributary 5 (UNT5) to Cheeney Creek (page 71) is located in the southwest quadrant of the 106th Street Overpass over I-69. No historic drainage was noted for this area during desktop evaluation (Exhibit 4, page 63). At the August 14, 2014 field check, UNT5 exhibited a 4-foot wide by 3-inch deep OHWM within the project area. Approximately 55 linear feet of UNT5 lies within the project limits.

This stream is channelized and receives direct pollutant inputs due to its location within the roadside drainage along the 106th Street overpass. It lacks a wooded riparian corridor along both banks and is impounded immediately downstream in a commercial property's retention pond. Because of these factors, qualitatively the aquatic and terrestrial habitat quality for this stream was considered to be poor. UNT5 to Cheeney Creek had an HHEI score of 52 (Exhibit 7, pages 230 to 231), suggesting average aquatic habitat quality. Because several components of the qualitative assessment are not included in HHEI scoring, the overall quality of this stream is likely a combination of both (below average). The primary function of this stream is conveyance of storm water with limited habitat value. UNT5 to Cheeney Creek is not listed as a *Federal Wild and Scenic River*, a *State Natural, Scenic and Recreational River*, or on the Indiana Register's listing of *Outstanding Rivers and Streams*.

UNT5 to Cheeney Creek is not noted as a stream on USGS 7.5 series topographic maps (Exhibit 2, page 47). UNT5, however, would likely be classified as an ephemeral stream. Water was flowing at the May 8, 2014 field check, but not at the August 14, 2014 field check. This feature discharges into Cheeney Creek, which is a direct tributary to the West Fork of the White River, which is a direct tributary to the Wabash River, which outlets into the Ohio River (a traditionally navigable waterway). Due to the presence of an OHWM and this connectivity, UNT5 to Cheeney Creek would likely be considered a water of the U.S.

Sand Creek

Sand Creek (page 83) crosses under I-69 approximately 0.5 mile south of the 126th Street Overpass. Historic drainage was noted in this area during desktop review (Exhibit 4, page 65). At the June 16, 2014 field check, Sand Creek exhibited a 21-foot wide by 28-inch deep OHWM within the project area. Approximately 340 linear feet of Sand Creek lies within the project limits.

Immediately adjacent to the project limits, Sand Creek has a wooded riparian along each bank as well as riffles and pools. It is a Hamilton County regulated drain (Sand Creek Drain), however. Based on these qualitative observations, Sand Creek provides average aquatic and terrestrial wildlife habitat. Sand Creek had a QHEI score of 41.5 (Exhibit 7, pages 232 to 233), which supports the determination of average quality. Sand Creek is not listed as a *Federal Wild and Scenic River*, a *State Natural, Scenic and Recreational River*, or on the Indiana Register's listing of *Outstanding Rivers and Streams*.

Sand Creek is noted as a solid blue line stream on USGS 7.5 series topographic maps (Exhibit 2, page 49). Field observations in June and August confirmed the perennial flow of this stream. Sand Creek is a direct tributary to Mud Creek, which is a direct tributary to Fall Creek, which is a direct tributary to the West Fork White River, which is a direct tributary to the Wabash River, which outlets into the Ohio River (a traditionally navigable waterway). Due to the presence of an OHWM and this connectivity, Sand Creek would likely be considered a water of the U.S.

Unnamed Tributary 1 to Sand Creek

Unnamed Tributary 1 (UNT1) to Sand Creek (pages 82 to 83) is located on the south side of I-69 near the I-69 Northbound Bridge over Sand Creek. UNT1 discharges into Sand Creek approximately 430 linear feet west of this bridge. Historic drainage was noted in this area during desktop review, indicating that a stream

may have been captured in I-69's roadside drainage (Exhibit 4, pages 64 to 65). At the August 14, 2014 field check, UNT1 exhibited a 1.5-foot wide by 8-inch deep OHWM within the project area. Approximately 1,930 linear feet of UNT1 lies within the project limits. Of this, approximately 270 linear feet of the stream channel is concrete lined and 160 linear feet is riprap lined. The concrete lined portion consists of broken pavement, allowing the stream to flow underneath the lining for a distance of about 75 linear feet.

This stream is channelized and receives direct pollutant inputs due to its location within the roadside drainage of I-69. Portions of this stream are lined with concrete or riprap. UNT1 lacks a wooded riparian corridor along both banks. Because of these factors, qualitatively the aquatic and terrestrial habitat quality for this stream was considered to be poor. UNT1 to Sand Creek had an HHEI score of 20 (Exhibit 7, pages 234 to 235), supporting the qualitative assessment of quality. The primary function of this stream is conveyance of storm water. UNT1 to Sand Creek is not listed as a *Federal Wild and Scenic River*, a *State Natural, Scenic and Recreational River*, or on the Indiana Register's listing of *Outstanding Rivers and Streams*.

UNT1 to Sand Creek is not noted as a stream on USGS 7.5 series topographic maps (Exhibit 2, pages 48 to 49). This stream, however, would likely be classified as an ephemeral stream. Water was flowing during the May 12, 2014 field check, but not at the August 14, 2014 field check. This feature discharges into Sand Creek, which is a direct tributary to Mud Creek, which is a direct tributary to Fall Creek, which is a direct tributary to the West Fork White River, which is a direct tributary to the Wabash River, which outlets into the Ohio River (a traditionally navigable waterway). Due to the presence of an OHWM and this connectivity, UNT1 to Sand Creek would likely be considered a water of the U.S.

Unnamed Tributary 2 to Sand Creek

Unnamed Tributary 2 (UNT2) to Sand Creek (page 83) is located in the northwest quadrant of the I-69 Southbound Bridge over Sand Creek. Historic drainage was noted in this area during the desktop review (Exhibit 4, page 65). At the June 16, 2014 field check, UNT2 exhibited a 3-foot wide by 8-inch deep OHWM within the project area. UNT2 originates in an adjacent pasture, and approximately 135 linear feet lies within the project limits. Of this, approximately 75 linear feet of the stream channel is lined with concrete.

This stream is channelized and receives direct pollutant inputs due to its location within the roadside drainage of I-69. It also receives pollutants from the adjacent pasture in which animals have unrestricted access. Portions of this stream are lined with concrete. UNT2 does have a wooded riparian along both banks, but this does not extend beyond INDOT right-of-way. Because of these factors, qualitatively the aquatic and terrestrial habitat quality for this stream was considered to be poor. UNT2 to Sand Creek had an HHEI score of 20 (Exhibit 7, pages 236 to 237), which supports this qualitative determination. The primary function of this stream is conveyance of storm water. UNT2 to Sand Creek is not listed as a *Federal Wild and Scenic River*, a *State Natural, Scenic and Recreational River*, or on the Indiana Register's listing of *Outstanding Rivers and Streams*.

UNT2 to Sand Creek is not noted as a stream on USGS 7.5 series topographic maps (Exhibit 2, page 49). This stream, however, would likely be classified as an ephemeral stream. Water was flowing during the May 12, 2014 field check, but not at the August 14, 2014 field check. This feature discharges into Sand Creek, which is a direct tributary to Mud Creek, which is a direct tributary to Fall Creek, which is a direct tributary to the West Fork White River, which is a direct tributary to the Wabash River, which outlets into the Ohio River (a traditionally navigable waterway). Due to the presence of an OHWM and this connectivity, UNT2 to Sand Creek would likely be considered a water of the U.S.

Unnamed Tributary 3 to Sand Creek

Unnamed Tributary 3 (UNT3) to Sand Creek (page 83) is located in the southeast quadrant of the I-69 Northbound Bridge over Sand Creek. No historic drainage was noted in this area during the desktop review (Exhibit 4, page 65). At the June 16, 2014 field check, UNT3 exhibited a 1.3-foot wide by 7-inch deep OHWM within the project area. UNT3 originates from a small pipe located on the I-69 roadside slope, and approximately 100 linear feet lies within the project limits. Of this length, 90 linear feet is lined with riprap.

UNT3 is channelized within the roadside drainage along I-69. The majority of the stream has been lined with riprap. It lacks a wooded riparian corridor along both banks for the majority of its length. Because of these factors, qualitatively the aquatic and terrestrial habitat quality for this stream was considered to be poor. UNT3 to Sand Creek had an HHEI score of 10 (Exhibit 7, pages 238 to 239), supporting the qualitative determination. The primary function of this stream is conveyance of storm water. UNT3 to Sand Creek is not listed as a *Federal Wild and Scenic River*, a *State Natural, Scenic and Recreational River*, or on the Indiana Register's listing of *Outstanding Rivers and Streams*.

UNT3 to Sand Creek is not noted as a stream on USGS 7.5 series topographic maps (Exhibit 2, page 49). This stream, however, would likely be classified as an ephemeral stream. An OHWM was observed at the June 16, 2014 field check, but without flowing water. This feature discharges into Sand Creek, which is a direct tributary to Mud Creek, which is a direct tributary to Fall Creek, which is a direct tributary to the West Fork White River, which is a direct tributary to the Wabash River, which outlets into the Ohio River (a traditionally navigable waterway). Due to the presence of an OHWM and this connectivity, UNT3 to Sand Creek would likely be considered a water of the U.S.

Unnamed Tributary 4 to Sand Creek

Unnamed Tributary 4 (UNT4) to Sand Creek (page 84) is located approximately 1,000 feet north of the I-69 Bridges over Sand Creek. UNT4 discharges into Sand Creek approximately 1,700 linear feet upstream (north) of the I-69 crossing. Historic drainage was noted in this area during the desktop review (Exhibit 4, page 65). At the June 16, 2014 field check, UNT4 exhibited a 17-foot wide by 4-inch deep OHWM within the project area. Approximately 325 linear feet of UNT4 lies within the project limits. Of this, approximately 185 linear feet is encapsulated under I-69 and 30 linear feet is lined with riprap. Immediately upstream from the project limits, this stream is impounded in a residential retention pond.

This stream is largely encapsulated within INDOT right-of-way. Upstream of the project limits, the stream is impounded within a residential retention pond, and downstream the stream is channelized with a non-wooded riparian corridor. Because of these factors, qualitatively the aquatic and terrestrial habitat quality for this stream was considered to be poor. UNT4 to Sand Creek had an HHEI score of 44 (Exhibit 7, pages 240 to 241), suggesting average aquatic habitat value. Because several components of the qualitative assessment are not scored in the HHEI, the actual quality of this stream is likely a combination of both (below average). The primary function of this stream is conveyance of storm water with limited habitat value. UNT4 to Sand Creek is not listed as a *Federal Wild and Scenic River*, a *State Natural, Scenic and Recreational River*, or on the Indiana Register's listing of *Outstanding Rivers and Streams*.

UNT4 to Sand Creek is not noted as a stream on USGS 7.5 series topographic maps (Exhibit 2, page 49). This stream, however, would likely be classified as a perennial stream. Water was flowing during both the June 16, 2014 and August 14, 2014 field checks. This feature discharges into Sand Creek, which is a direct tributary to Mud Creek, which is a direct tributary to Fall Creek, which is a direct tributary to the West Fork White River, which is a direct tributary to the Wabash River, which outlets into the Ohio River (a traditionally navigable waterway). Due to the presence of an OHWM and this connectivity, UNT4 to Sand Creek would likely be considered a water of the U.S.

Unnamed Tributary 5 to Sand Creek

Unnamed Tributary 5 (UNT5) to Sand Creek (page 94) is located approximately 0.75 mile west of the Campus Parkway Interchange. UNT5 discharges to Sand Creek approximately 2 miles upstream (north) of the I-69 Bridges over Sand Creek. No historic drainage was noted for this area during desktop evaluation (Exhibit 4, page 66). At the June 17, 2014 field check, however, UNT5 exhibited a 10-foot wide by 5-inch deep OHWM within the project area. Approximately 260 linear feet of UNT5 lies within the project limits. Of this, 220 linear feet is encapsulated under I-69, and 15 linear feet is lined with riprap.

This stream is primarily encapsulated within INDOT right-of-way. Upstream of the project limits, the stream is impounded within a retention pond, and downstream the stream is channelized and has a non-wooded riparian corridor. Because of these factors, qualitatively the aquatic and terrestrial habitat quality for

this stream was considered to be poor. An HHEI evaluation was done downstream of the project limits since sufficient room (200 meters) was not available within INDOT right-of-way. UNT5 scored 50 on this index (Exhibit 7, pages 242 to 243), suggesting average aquatic habitat value. Because several components of the qualitative assessment are not scored in the HHEI, the actual quality of this stream is likely a combination of both assessments (below average). The primary function of this stream is conveyance of storm water with limited habitat value. UNT5 to Sand Creek is not listed as a *Federal Wild and Scenic River*, a *State Natural, Scenic and Recreational River*, or on the Indiana Register's listing of *Outstanding Rivers and Streams*.

UNT5 to Sand Creek is not noted as a stream on USGS 7.5 series topographic maps (Exhibit 2, page 50). UNT5, however, would likely be classified as an intermittent stream. Water was flowing during the June 17, 2014 field check, but the channel was nearly dry at the August 14, 2014 field check. This feature discharges into Sand Creek, which is a direct tributary to Mud Creek, which is a direct tributary to Fall Creek, which is a direct tributary to the West Fork White River, which is a direct tributary to the Wabash River, which outlets into the Ohio River (a traditionally navigable waterway). Due to the presence of an OHWM and this connectivity, UNT5 to Sand Creek would likely be considered a water of the U.S.

Mud Creek

Mud Creek (page 103) crosses under I-69 approximately 1.16 miles east of the Campus Parkway Interchange. Historic drainage was noted in this area during the desktop review (Exhibit 4, page 67). At the August 14, 2014 field check, Mud Creek exhibited a 27-foot wide by 54-inch deep OHWM within the project area. Approximately 430 linear feet of Mud Creek lies within the project limits.

Immediately adjacent to the project limits, Mud Creek has a wooded riparian. This stream also has riffles and pools. It is a Hamilton County regulated drain (Daniel Heiney Drain), however. Based on these observations, qualitatively the aquatic and terrestrial wildlife habitat of this stream was considered to be average. Mud Creek had a QHEI score of 47 (Exhibit 7, pages 244 to 245), supporting this assessment. Mud Creek is not listed as a *Federal Wild and Scenic River*, a *State Natural, Scenic and Recreational River*, or on the Indiana Register's listing of *Outstanding Rivers and Streams*.

Mud Creek is noted as a solid blue line stream on USGS 7.5 series topographic maps (Exhibit 2, page 51). Field observations in June and August confirmed the perennial flow of this stream. This stream is a direct tributary to Fall Creek, which is a direct tributary to the West Fork White River, which is a direct tributary to the Wabash River, which outlets into the Ohio River (a traditionally navigable waterway). Due to the presence of an OHWM and this connectivity, Mud Creek would likely be considered a water of the U.S.

Unnamed Tributary 1 to Mud Creek

Unnamed Tributary 1 (UNT1) to Mud Creek (pages 101 to 103) is located on the south side of I-69 and discharges into Mud Creek at the southwest bridge quadrant of the northbound bridge. Historic drainage was noted in this area during the desktop review indicating that a stream may have been captured during I-69's construction (Exhibit 4, page 67). At the August 14, 2014 field check, UNT1 exhibited a 0.5-foot wide by 3-inch deep OHWM within the project area. Approximately 2,920 linear feet of UNT1 lies within the project limits. Of this, approximately 2,030 linear feet of the stream channel is lined with riprap.

This stream is channelized and receives direct pollutant inputs due to its location within the roadside drainage of I-69. The majority of this tributary is riprap lined. UNT1 lacks a wooded riparian corridor along both banks for the vast majority of its length. Because of these factors, qualitatively the aquatic and terrestrial habitat quality for this stream was considered to be poor. UNT1 to Mud Creek had an HHEI score of 9 (Exhibit 7, pages 246 to 247), supporting this assessment. The primary function of this stream is conveyance of storm water. UNT1 to Mud Creek is not listed as a *Federal Wild and Scenic River*, a *State Natural, Scenic and Recreational River*, or on the Indiana Register's listing of *Outstanding Rivers and Streams*.

UNT1 to Mud Creek is not noted as a stream on USGS 7.5 series topographic maps (Exhibit 2, page 51). This stream, however, would likely be classified as an ephemeral stream. Water was flowing during the June 19, 2014 field check, but not flowing during the August 14, 2014 field check. This feature discharges into

Mud Creek, which is a direct tributary to Fall Creek, which is a direct tributary to the West Fork White River, which is a direct tributary to the Wabash River, which outlets into the Ohio River (a traditionally navigable waterway). Due to the presence of an OHWM and this connectivity, UNT1 to Mud Creek would likely be considered a water of the U.S.

Unnamed Tributary 2 to Mud Creek

Unnamed Tributary 2 (UNT2) to Mud Creek (page 103) is located on the south side of I-69 and discharges into Mud Creek at the southeast bridge quadrant of the northbound bridge. Historic drainage was noted in this area during the desktop review indicating that a stream may have been captured during I-69's construction (Exhibit 4, page 67). At the June 25, 2014 field check, UNT2 exhibited a 3-foot wide by 10-inch deep OHWM within the project area. Approximately 200 linear feet of UNT2 lies within the project limits.

This stream receives direct pollutant inputs due to its location within the roadside drainage of I-69. UNT2 does have a mature wooded riparian corridor along both banks. Because of these factors, qualitatively the aquatic and terrestrial habitat quality for this stream was considered to be average. UNT2 to Mud Creek had an HHEI score of 32 (Exhibit 7, pages 248 to 249), suggesting below average quality. Based on the riparian quality, which is not scored in the HHEI, the overall stream quality is likely average. The primary function of UNT2 is storm water conveyance with some habitat value. UNT2 to Mud Creek is not listed as a *Federal Wild and Scenic River*, a *State Natural, Scenic and Recreational River*, or on the Indiana Register's listing of *Outstanding Rivers and Streams*.

UNT2 to Mud Creek is not noted as a stream on USGS 7.5 series topographic maps (Exhibit 2, page 51). This stream, however, would likely be classified as ephemeral. Water was barely flowing during the June 25, 2014 field check, but not flowing at all during the August 14, 2014 field check. This feature discharges into Mud Creek, which is a direct tributary to Fall Creek, which is a direct tributary to the West Fork White River, which is a direct tributary to the Wabash River, which outlets into the Ohio River (a traditionally navigable waterway). Due to the presence of an OHWM and this connectivity, UNT2 to Mud Creek would likely be considered a water of the U.S.

Unnamed Tributary 3 to Mud Creek

Unnamed Tributary 3 (UNT3) to Mud Creek (page 103) is located on the north side of I-69 and discharges into Mud Creek at the northeast bridge quadrant of the I-69 Southbound Bridge. Historic drainage was noted in this area during the desktop review indicating that a stream may have been captured in I-69's roadside drainage (Exhibit 4, page 67). At the June 25, 2014 field check, UNT3 exhibited a 4-foot wide by 6-inch deep OHWM within the project area. Approximately 185 linear feet of UNT2 lies within the project limits.

This stream receives direct pollutant inputs due to its location within the roadside drainage of I-69. UNT3 only has a wooded riparian along its north bank. Because of these factors, qualitatively the aquatic and terrestrial habitat quality for this stream was considered to be poor. UNT3 to Mud Creek had an HHEI score of 26 (Exhibit 7, pages 250 to 251), supporting the qualitative determination. The primary function of UNT3 is conveyance of storm water. UNT3 to Mud Creek is not listed as a *Federal Wild and Scenic River*, a *State Natural, Scenic and Recreational River*, or on the Indiana Register's listing of *Outstanding Rivers and Streams*.

UNT3 to Mud Creek is not noted as a stream on USGS 7.5 series topographic maps (Exhibit 2, page 51). This stream, however, would likely be classified as ephemeral. Water was barely flowing during the June 25, 2014 field check, but not flowing at all during the August 14, 2014 field check. This feature discharges into Mud Creek, which is a direct tributary to Fall Creek, which is a direct tributary to the West Fork White River, which is a direct tributary to the Wabash River, which outlets into the Ohio River (a traditionally navigable waterway). Due to the presence of an OHWM and this connectivity, UNT3 to Mud Creek would likely be considered a water of the U.S.

Thorpe Creek

Thorpe Creek (page 115) crosses under I-69 approximately 0.28 mile west of the S.R. 13 Interchange. Historic drainage was noted in this area during the desktop review (Exhibit 4, page 53). At the July 9, 2014 field check, Thorpe Creek exhibited a 8.5-foot wide by 6-inch deep OHWM within the project area. Approximately 370 linear feet of Thorpe Creek lies within the project limits.

Thorpe Creek has a narrow wooded riparian both upstream and downstream of the project limits. The stream is impounded directly upstream of the project limits. It is a Madison County regulated drain (Martha A. Ford Drain), as well. Based on these qualitative observations, the aquatic and terrestrial wildlife habitat quality was considered poor. Thorpe Creek had a QHEI score of 35 (Exhibit 7, pages 252 to 253) supporting this assessment. Thorpe Creek is not listed as a *Federal Wild and Scenic River*, a *State Natural, Scenic and Recreational River*, or on the Indiana Register's listing of *Outstanding Rivers and Streams*.

Thorpe Creek is noted as a solid blue line stream on USGS 7.5 series topographic maps (Exhibit 2, page 68). Field observations in June, July, and August confirmed the perennial flow of this stream. This stream flows into Geist Reservoir, which drains into Fall Creek, which is a direct tributary to the West Fork White River, which is a direct tributary to the Wabash River, which outlets into the Ohio River (a traditionally navigable waterway). Due to the presence of an OHWM and this connectivity, Thorpe Creek would likely be considered a water of the U.S.

Unnamed Tributary 1 to Thorpe Creek (John Underwood Drain)

Unnamed Tributary 1 (UNT1) to Thorpe Creek (page 110) crosses under I-69 approximately 0.5 mile east of the Cyntheanne Road Overpass. Historic drainage was noted in this area during the desktop evaluation (Exhibit 4, page 67). At the August 14, 2014 field check, UNT1 exhibited a 2.5-foot wide by 12-inch deep OHWM within the project area. Approximately 275 linear feet of UNT1 lies within the project limits.

UNT1 is channelized. Downstream of the project limits it has a wooded riparian, but this is largely absent north of the project limits. This stream is also a Hamilton County regulated drain (John Underwood Drain). Because of these factors, qualitatively this aquatic and terrestrial wildlife habitat quality for this stream was considered poor. UNT1 to Thorpe Creek had an HHEI score of 48 (Exhibit 7, pages 254 to 255) suggesting average quality. Since there are components of the qualitative assessment not scored in the HHEI, the actual quality of this stream is likely a combination of both assessments (below average). The primary function of UNT1 is conveyance of storm water with limited habitat value. UNT1 is not listed as a *Federal Wild and Scenic River*, a *State Natural, Scenic and Recreational River*, or on the Indiana Register's listing of *Outstanding Rivers and Streams*.

UNT1 is not noted as a blue line stream on USGS 7.5 series topographic maps (Exhibit 2, page 52). This stream, however, would likely be classified as perennial. Flowing water was observed during multiple field checks, including at the August 14, 2014 field check. This stream is a direct tributary to Thorpe Creek, which flows into Geist Reservoir, which drains into Fall Creek, which is a direct tributary to the West Fork White River, which is a direct tributary to the Wabash River, which outlets into the Ohio River (a traditionally navigable waterway). Due to the presence of an OHWM and this connectivity, UNT1 to Thorpe Creek would likely be considered a water of the U.S.

Unnamed Tributary 2 to Thorpe Creek

Unnamed Tributary 2 (UNT2) to Thorpe Creek is located along the south side of I-69 (pages 110 to 111). UNT2 discharges into UNT1 to Thorpe Creek (John Underwood Drain) at the southeast quadrant of this crossing. No historic drainage was noted for this area during desktop evaluation (Exhibit 4, page 67). During the August 14, 2014 field check, however, UNT2 exhibited a 1-foot wide by 4-inch deep OHWM within the project area. Approximately 1,430 linear feet of UNT2 lies within the project limits. Of this, approximately 160 linear feet is riprap lined.

This stream is channelized and receives direct pollutant inputs due to its location within the roadside drainage of I-69. A portion of this stream is riprap lined. UNT2 lacks a wooded riparian corridor along both banks. Because of these factors, qualitatively the aquatic and terrestrial habitat quality for this stream was

considered poor. UNT2 to Thorpe Creek had an HHEI score of 16 (Exhibit 7, pages 256 to 257) supporting this assessment. The primary function of this stream is conveyance of storm water. UNT2 to Thorpe Creek is not listed as a *Federal Wild and Scenic River*, a *State Natural, Scenic and Recreational River*, or on the Indiana Register's listing of *Outstanding Rivers and Streams*.

UNT2 to Thorpe Creek is not noted as a stream on USGS 7.5 series topographic maps (Exhibit 2, page 52). This stream, however, would likely be classified as ephemeral. Water was barely flowing during the June 26, 2014 field check, but not flowing at all during the August 14, 2014 field check. This feature discharges into UNT1 to Thorpe Creek (John Underwood Drain), which is a direct tributary to Thorpe Creek, which flows into Geist Reservoir, which drains into Fall Creek, which is a direct tributary to the West Fork White River, which is a direct tributary to the Wabash River, which outlets to the Ohio River (a traditionally navigable waterway). Due to the presence of an OHWM and this connectivity, UNT2 to Thorpe Creek would likely be considered a water of the U.S.

Wetlands

A total of forty-two (42) wetlands totaling 5.62 acres were identified within the project limits. Of these, the vast majority were emergent wetlands, with four (4) forested wetland and one (1) shrub-scrub wetland observed. Twenty-two (22) wetlands are likely jurisdictional because of their connection to a likely water of the U.S. The remaining twenty (20) wetlands are likely isolated due to the absence of a detectable connection to a water of the U.S. A minimum of two data points (one within and one outside) were obtained for each wetland (Exhibit 8, pages 259 to 434). The Wetland Summary Table (Table 3, page 38) and Wetland Data Point Summary Table (Table 4, pages 39 to 40) summarize the data collected.

Wetland 01

Data Point 1 (Exhibit 8, pages 259 to 260) was dominated by *Phalaris arundinacea* (reed canary grass, FACW) and *Typha spp.* (cattail, OBL). This point passed the rapid, dominance, and prevalence tests, and therefore met the hydrophytic vegetation criterion. The soil profile met the hydric soil criterion as it exhibited a Redox Dark Surface (F6). One primary indicator (oxidized rhizospheres on living roots) and two secondary indicators (geomorphic position and FAC-neutral test) of hydrology were observed. Therefore, all three wetland criteria were met at Data Point 1. Although not classified as a potential wetland on the NWI Map (Exhibit 2, page 47), this area would likely be considered a temporarily flooded, palustrine, emergent wetland according to the Cowardin et. al. (1979) classification scheme. The quality of the wetland was considered poor due to the low species diversity, the dominance of both *Phalaris* and *Typha*, the high prevalence of bare soil (65%), and its location within maintained INDOT right-of-way. The wetland does extend beyond the boundary of the roadside drainage at this location.

Data Point 2 (Exhibit 8, pages 261 to 262) was dominated by an unidentified grass. Identification was not possible due to recent mowing. Without an indicator for this species, the presence of a hydrophytic vegetation indicator could not be ruled out. The remaining three species that were identified at this location were all FACU, suggesting that this data point would not meet this criterion. The soil profile met the hydric soil criterion as it exhibited a Depleted Matrix (F3) and Redox Dark Surface (F6). No primary indicators and no secondary indicators for hydrology were observed. Since one of the three wetland criteria was not met, this point was considered to be upland. Data Point 2 helped establish the wetland/upland boundary for Wetland 01. There was a distinct change in plant communities, along with a very minor topographic change, that was used in establishing this boundary.

Wetland 01 is adjacent to UNT5 to Cheeny Creek near the 106th Street Overpass (Exhibit 5, page 71). UNT5 discharges to Cheeny Creek, which is a direct tributary to the West Fork of the White River, which is a direct tributary to the Wabash River, which outlets to the Ohio River (a traditionally navigable waterway). Therefore, this feature is likely a water of the U.S.

Wetland 02

Data Point 1 (Exhibit 8, pages 263 to 264) was dominated by *Phragmites australis* (common reed, FACW). This point passed the rapid, dominance, and prevalence tests, and therefore met the hydrophytic vegetation criterion. The soil profile met the hydric soil criterion as it exhibited a Depleted Matrix (F3). One primary

indicator (oxidized rhizospheres on living roots) and two secondary indicators (geomorphic position and FAC-neutral test) of hydrology were observed. Therefore, all three wetland criteria were met at Data Point 1. Although not classified as a potential wetland on the NWI Map (Exhibit 2, page 47), this area would likely be considered a temporarily flooded, palustrine, emergent wetland according to the Cowardin et. al. (1979) classification scheme. The quality of the wetland was considered poor due to the low species diversity, the dominance of *Phragmites*, the high prevalence of bare soil (58%), and its location within maintained INDOT right-of-way. The wetland does extend beyond the boundary of the roadside drainage at this location.

Data Point 2 (Exhibit 8, pages 265 to 266) was dominated by *Trifolium spp.* (clover, FACU) and *Festuca arundinacea* (Kentucky fescue, FACU). This point failed to pass any indicator for the hydrophytic vegetation criterion. The soil profile did not meet any indicators under the hydric soil criterion. No primary indicators and no secondary indicators for hydrology were observed. Since none of the three wetland criteria were met, this data point was determined to be upland. Data Point 2 was used to establish the wetland/upland boundary for Wetland 02. There was a distinct change in plant communities, along with a very minor topographic change, that was used in establishing this boundary.

Wetland 02 is located near the 106th Street Overpass (Exhibit 5, page 71). It drains via roadside drainage into Cheeney Creek. Cheeney Creek is a direct tributary to the West Fork of the White River, which is a direct tributary to the Wabash River, which outlets to the Ohio River (a traditional navigable waterway). Therefore, this feature is likely a water of the U.S.

Wetland 03

Data Point 1 (Exhibit 8, pages 267 to 268) was dominated by *Typha spp.* (cattail, OBL). This point passed the rapid, dominance, and prevalence tests, and therefore met the hydrophytic vegetation criterion. The soil profile met the hydric soil criterion as it exhibited a Redox Dark Surface (F6). Two primary indicators (surface water and oxidized rhizospheres on living roots) and two secondary indicators (geomorphic position and FAC-neutral test) of hydrology were observed. Therefore, all three wetland criteria were met at Data Point 1. Although not classified as a potential wetland on the NWI Map (Exhibit 2, page 47), this area would likely be considered a temporarily flooded, palustrine, emergent wetland according to the Cowardin et. al. (1979) classification scheme. The quality of the wetland was considered poor due to the low species diversity, the dominance of *Typha*, the high prevalence of bare soil (60%), and its location within maintained INDOT right-of-way. The wetland does extend beyond the boundary of the roadside drainage at this location.

Data Point 2 (Exhibit 8, pages 269 to 270) was dominated by *Festuca arundinacea* (Kentucky fescue, FACU). This point failed to pass indicators for the hydrophytic vegetation criterion. The soil profile met the hydric soil criterion as it exhibited a Depleted Matrix (F3) and Redox Dark Surface (F6). One primary indicator (oxidized rhizospheres on living roots) of hydrology was observed. Since one of the three wetland criteria was not met at this point, this area was determined to be upland. Data Point 2 helped establish the wetland/upland boundary for Wetland 03. There was a distinct change in plant communities, along with a very minor topographic change, that was used in establishing the wetland/upland boundary.

Wetland 03 is located near the 106th Street Overpass (Exhibit 5, page 71) and is connected via roadside drainage to UNT2 to Cheeney Creek. UNT2 discharges to Cheeney Creek, which is a direct tributary to the West Fork of the White River, which is a direct tributary to the Wabash River, which outlets to the Ohio River (a traditionally navigable waterway). Therefore, this feature is likely a water of the U.S.

Wetland 04

Data Point 1 (Exhibit 8, pages 271 to 272) was dominated by *Typha spp.* (cattail, OBL). This point passed the rapid, dominance, and prevalence tests, and therefore met the hydrophytic vegetation criterion. The soil profile met the hydric soil criterion as it exhibited a Depleted Matrix (F3). Two primary indicators (high water table and saturation) and three secondary indicators (crayfish burrows, geomorphic position, and FAC-neutral test) of hydrology were observed. Therefore, all three wetland criteria were met at Data Point 1. Although not classified as a potential wetland on the NWI Map (Exhibit 2, page 47), this area would likely

be considered a temporarily flooded, palustrine, emergent wetland according to the Cowardin et. al. (1979) classification scheme. The quality of the wetland was considered poor due to the low species diversity, the dominance of *Typha*, the prevalence of bare soil (35%), and its location within maintained INDOT right-of-way. The wetland does extend beyond the boundary of the roadside drainage at this location.

Data Point 2 (Exhibit 8, pages 273 to 274) was dominated by *Festuca arundinacea* (Kentucky fescue, FACU). This point failed to pass indicators for the hydrophytic vegetation criterion. The soil profile did not meet any hydric soil indicators. No primary indicators and no secondary indicators of hydrology were observed. Since none of the three wetland criteria were met at this point, this area was determined to be upland. Data Point 2 helped establish the wetland/upland boundary for Wetland 04. There was a distinct change in plant communities, along with a very minor topographic change, that was used in establishing the boundary.

Wetland 04 is located near the 106th Street Overpass (Exhibit 5, page 71). It is connected via roadside drainage to Cheeney Creek. Cheeney Creek is a direct tributary to the West Fork of the White River, which is a direct tributary to the Wabash River, which outlets to the Ohio River (a traditional navigable waterway). Therefore, this feature is likely a water of the U.S.

Wetland 05

Data Point 1 (Exhibit 8, pages 275 to 276) was dominated by *Typha spp.* (cattail, OBL). This point passed the rapid, dominance, and prevalence tests, and therefore met the hydrophytic vegetation criterion. The soil profile met the hydric soil criterion as it exhibited a Depleted Matrix (F3). Two secondary indicators of hydrology were observed (geomorphic position and FAC-neutral test). Therefore, all three wetland criteria were met at Data Point 1. Although not classified as a potential wetland on the NWI Map (Exhibit 2, page 48), this area would likely be considered a temporarily flooded, palustrine, emergent wetland according to the Cowardin et. al. (1979) classification scheme. The quality of the wetland was considered poor due to the low species diversity, the dominance of *Typha*, the prevalence of bare soil (40%), and its location within maintained INDOT right-of-way. The wetland does extend beyond the boundary of the roadside drainage at this location.

Data Point 2 (Exhibit 8, pages 277 to 278) was dominated by *Solidago altissima* (tall goldenrod, FACU) and *Festuca arundinacea* (Kentucky fescue, FACU). This point failed to pass any indicators for the hydrophytic vegetation criterion. The soil profile met the hydric soil criterion as it exhibited a Depleted Matrix (F3). No primary indicators and no secondary indicators of hydrology were observed. Since two of the three wetland criteria were not met, Data Point 2 was determined to be upland. This point helped establish the wetland/upland boundary for Wetland 05. There was a distinct change in plant communities, along with a very minor topographic change, that was used in establishing this boundary.

Wetland 05 is located near the S.R. 37 Interchange (Exhibit 5, page 77). It is connected via roadside drainage to UNT1 to Cheeney Creek. UNT1 discharges to Cheeney Creek, which is a direct tributary to the West Fork of the White River, which is a direct tributary to the Wabash River, which outlets into the Ohio River (a traditionally navigable waterway). Therefore, this feature is likely a water of the U.S.

Wetland 06

Data Point 1 (Exhibit 8, pages 279 to 280) was dominated by *Juncus effusus* (common rush, OBL). This point passed the rapid, dominance, and prevalence tests, and therefore met the hydrophytic vegetation criterion. The soil profile met the hydric soil criterion as it exhibited a Depleted Matrix (F3). One primary indicator (surface water) and two secondary indicators (geomorphic position and FAC-neutral test) of hydrology were observed. Therefore, all three wetland criteria were met at Data Point 1. Although not classified as a potential wetland on the NWI Map (Exhibit 2, page 48), this area would likely be considered a temporarily flooded, palustrine, emergent wetland according to the Cowardin et. al. (1979) classification scheme. The quality of the wetland was considered poor due to the low species diversity and its location within maintained INDOT right-of-way. The wetland does extend beyond the boundary of the roadside drainage at this location.

Data Point 2 (Exhibit 8, pages 281 to 282) was dominated by *Festuca arundinacea* (Kentucky fescue, FACU). This point failed to pass any indicators for the hydrophytic vegetation criterion. The soil profile met the hydric soil criterion as it exhibited a Depleted Matrix (F3) and Loamy Gleyed Matrix (F2). No primary indicators and no secondary indicators of hydrology were observed. Since two of the three wetland criteria were not met at this location, this area was determined to be upland. Data Point 2 helped establish the wetland/upland boundary for Wetland 06. There was a distinct change in plant communities, along with a very minor topographic change, that was used in establishing this boundary.

Wetland 06 is located near the S.R. 37 Interchange adjacent to a large open water feature just outside of INDOT right-of-way (Exhibit 5, pages 77 and 79). No connection between this open water feature and a water of the U.S. was detected. Therefore, this wetland is likely isolated.

Wetland 07

Data Point 1 (Exhibit 8, pages 283 to 284) was dominated by *Typha spp.* (cattail, OBL). This point passed the rapid, dominance, and prevalence tests, and therefore met the hydrophytic vegetation criterion. The soil profile met the hydric soil criterion as it exhibited a Depleted Matrix (F3). One primary indicator (hydrogen sulfide odor) and two secondary indicators (geomorphic position and FAC-neutral test) of hydrology were observed. Therefore, all three wetland criteria were met at Data Point 1. Although not classified as a potential wetland on the NWI Map (Exhibit 2, page 48), this area would likely be considered a temporarily flooded, palustrine, emergent wetland according to the Cowardin et. al. (1979) classification scheme. The quality of the wetland was considered poor due to the low species diversity, the dominance of *Typha*, and its location within maintained INDOT right-of-way. The wetland does extend beyond the boundary of the roadside drainage at this location.

Data Point 2 (Exhibit 8, pages 285 to 286) was dominated by *Festuca arundinacea* (Kentucky fescue, FACU). This point failed to pass any indicators for the hydrophytic vegetation criterion. The soil profile met the hydric soil criterion as it exhibited a Depleted Matrix (F3). No primary indicators and no secondary indicators of hydrology were observed. Since two of the three wetland indicators were not observed, this point was determined to be upland. Data Point 2 helped establish the wetland/upland boundary for Wetland 07. There was a distinct change in plant communities, along with a very minor topographic change, that was used in establishing the wetland/upland boundary.

Wetland 07 is located near the S.R. 37 Interchange (Exhibit 5, pages 77 and 79). No connection to a water of the U.S. was detected for Wetland 07. Water appears to pond in this area without any observed outlet. Therefore, this feature is likely isolated.

Wetland 08

Data Point 1 (Exhibit 8, pages 287 to 288) was dominated by *Typha spp.* (cattail, OBL). This point passed the rapid, dominance, and prevalence tests, and therefore met the hydrophytic vegetation criterion. The soil profile met the hydric soil criterion as it exhibited a Depleted Matrix (F3). One primary indicator (oxidized rhizospheres on living roots) and two secondary indicators (geomorphic position and FAC-neutral test) of hydrology were observed. Therefore, all three wetland criteria were met at Data Point 1. Although not classified as a potential wetland on the NWI Map (Exhibit 2, page 48), this area would likely be considered a temporarily flooded, palustrine, emergent wetland according to the Cowardin et. al. (1979) classification scheme. The quality of the wetland was considered poor due to the low species diversity, the dominance of *Typha*, and its location within maintained INDOT right-of-way. The wetland does extend beyond the boundary of the roadside drainage at this location.

Data Point 2 (Exhibit 8, pages 289 to 290) was dominated by *Festuca arundinacea* (Kentucky fescue, FACU). This point failed to pass any indicators for the hydrophytic vegetation criterion. The soil profile met the hydric soil criterion as it exhibited a Depleted Matrix (F3). No primary indicators and no secondary indicators of hydrology were observed. Since two of the three wetland criteria were not met, this point was determined to be upland. Data Point 2 helped establish the wetland/upland boundary for Wetland 08. There was a distinct change in plant communities, along with a very minor topographic change, that was used in establishing this boundary.

Wetland 08 is located near the Cumberland Road Overpass (Exhibit 5, pages 79 and 80). No connection to a water of the U.S. was detected for Wetland 08. This wetland is connected via roadside drainage to Wetland 07, but no connection for this feature was observed. Therefore, this feature is likely isolated.

Wetland 09

Data Point 1 (Exhibit 8, pages 291 to 292) was dominated by *Populus deltoides* (eastern cottonwood, FAC) and *Eleocharis palustris* (common spike-rush, OBL). This point passed the dominance and prevalence tests, and therefore met the hydrophytic vegetation criterion. The soil profile met the hydric soil criterion as it exhibited a Depleted Matrix (F3). Two secondary indicators (geomorphic position and FAC-neutral test) of hydrology were observed. Therefore, all three wetland criteria were met at Data Point 1. Although not classified as a potential wetland on the NWI Map (Exhibit 2, page 48), this area would likely be considered a temporarily flooded, palustrine, forested wetland according to the Cowardin et. al. (1979) classification scheme. The quality of the wetland was considered average due to its increased species diversity (including tree and shrub stratum), the presence of *Typha*, and its location within maintained INDOT right-of-way. The wetland does not extend beyond the boundary of the roadside drainage at this location.

Data Point 2 (Exhibit 8, pages 293 to 294) was dominated by *Festuca arundinacea* (Kentucky fescue, FACU). This point failed to pass any indicators for the hydrophytic vegetation criterion. The soil profile met the hydric soil criterion as it exhibited a Depleted Matrix (F3). No primary indicators and no secondary indicators of hydrology were observed. Since two of the three wetland indicators were not observed, this point was determined to be upland. Data Point 2 helped establish the wetland/upland boundary for Wetland 09. There was a distinct change in plant communities, along with a very minor topographic change, that was used in establishing this boundary.

Wetland 09 is located near the Cumberland Road Overpass (Exhibit 5, page 80). It is connected via an equalizer pipe under I-69 to Wetland 10. Wetland 10 is connected to a water of the U.S. (see below). Therefore, this feature is likely a water of the U.S.

Wetland 10

Data Point 1 (Exhibit 8, pages 295 to 296) was dominated by *Festuca arundinacea* (Kentucky fescue, FACU) and *Typha spp.* (cattail, OBL). This point passed the prevalence test, and therefore met the hydrophytic vegetation criterion. The soil profile met the hydric soil criterion as it exhibited a Depleted Matrix (F3) and Redox Dark Surface (F6). Two secondary indicators (surface soil cracks and geomorphic position) of hydrology were observed. Therefore, all three wetland criteria were met at Data Point 1. Although not classified as a potential wetland on the NWI Map (Exhibit 2, page 48), this area would likely be considered a temporarily flooded, palustrine, emergent wetland according to the Cowardin et. al. (1979) classification scheme. The quality of the wetland was considered poor due to its low species diversity, the dominance of *Festuca* and *Typha*, and its location within maintained INDOT right-of-way. The wetland does not extend beyond the boundary of the roadside drainage at this location.

Data Point 2 (Exhibit 8, pages 297 to 298) was dominated by *Festuca arundinacea* (Kentucky fescue, FACU). This point failed to pass any indicators for the hydrophytic vegetation criterion. The soil profile did not meet any indicators under the hydric soil criterion. No primary indicators and no secondary indicators of hydrology were observed. Since none of the three wetland criteria were met, this point was determined to be upland. Data Point 2 helped establish the wetland/upland boundary for Wetland 10. There was a distinct change in plant communities, along with a very minor topographic change, that was used in establishing this boundary.

Wetland 10 is located near the Cumberland Road Overpass (Exhibit 5, page 80). It is connected via roadside drainage to UNT1 to Sand Creek. UNT1 discharges to Sand Creek, which is a direct tributary to Mud Creek, which is a direct tributary to Fall Creek, which is a direct tributary to the West Fork White River, which is a direct tributary to the Wabash River, which outlets to the Ohio River (a traditionally navigable waterway). Therefore, this feature is likely a water of the U.S.

Wetland 11

Data Point 1 (Exhibit 8, pages 299 to 300) was dominated by *Typha spp.* (cattail, OBL). This point passed the rapid, dominance, and prevalence tests, and therefore met the hydrophytic vegetation criterion. The soil profile met the hydric soil criterion as it exhibited a Depleted Matrix (F3). One primary indicator (saturation) and two secondary indicators (geomorphic position and FAC-neutral test) were observed. Therefore, all three wetland criteria were met at Data Point 1. Although not classified as a potential wetland on the NWI Map (Exhibit 2, page 48), this area would likely be considered a temporarily flooded, palustrine, emergent wetland according to the Cowardin et. al. (1979) classification scheme. The quality of the wetland was considered poor due to the low species diversity, the dominance of *Typha*, the prevalence of bare soil (35%), and its location within maintained INDOT right-of-way. The wetland does extend beyond the boundary of the roadside drainage at this location.

Data Point 2 (Exhibit 8, pages 301 to 302) was dominated by *Festuca arundinacea* (Kentucky fescue, FACU). This point failed to pass any indicators for the hydrophytic vegetation criterion. The soil profile met the hydric soil criterion as it exhibited a Depleted Matrix (F3). No primary and no secondary indicators of hydrology were observed. Since two of the three wetland criteria were not met, this point was determined to be upland. Data Point 2 helped establish the wetland/upland boundary for Wetland 11. There was a distinct change in plant communities, along with a very minor topographic change, that was used in establishing this boundary.

Wetland 11 is located near the Cumberland Road Overpass (Exhibit 5, page 80). It is connected via roadside drainage to UNT1 to Sand Creek. UNT1 discharges to Sand Creek, which is a direct tributary to Mud Creek, which is a direct tributary to Fall Creek, which is a direct tributary to the West Fork White River, which is a direct tributary to the Wabash River, which outlets to the Ohio River (a traditionally navigable waterway). Therefore, this feature is likely a water of the U.S.

Wetland 12

Data Point 1 (Exhibit 8, pages 303 to 304) was dominated by *Hordeum jubatum* (fox-tail barley, FAC) and *Carex stipata* (stalk-grain sedge, OBL). This point passed the dominance and prevalence tests, and therefore met the hydrophytic vegetation criterion. The soil profile met the hydric soil criterion as it exhibited a Depleted Matrix (F3). Two secondary indicators (geomorphic position and FAC-neutral test) of hydrology were observed. Therefore, all three wetland criteria were met at Data Point 1. Although not classified as a potential wetland on the NWI Map (Exhibit 2, page 49), this area would likely be considered a temporarily flooded, palustrine, emergent wetland according to the Cowardin et. al. (1979) classification scheme. The quality of the wetland was considered poor based on its low species diversity and its location within maintained INDOT right-of-way. The wetland does extend beyond the boundary of the roadside drainage at this location.

Data Point 2 (Exhibit 8, pages 305 to 306) was dominated by *Hordeum jubatum* (fox-tail barley, FAC). This point passed the dominance and prevalence test, and therefore met the hydrophytic vegetation criterion. The soil profile did not meet any hydric soil indicators. No primary indicators and no secondary indicators of hydrology were observed. Since two of the three wetland indicators were not met, this point was determined to be upland. Data Point 2 helped establish the wetland/upland boundary for Wetland 12. There was a distinct change in the soil profile associated with a minor topographic change that was used in establishing the wetland/upland boundary.

Wetland 12 is located between Sand Creek and the 126th Street Overpass (Exhibit 5, page 84). No connection to a water of the U.S. was detected for Wetland 12. Roadside drainage at this location has no outlet, and water appears to pond in this area. Therefore, this feature is likely isolated.

Wetland 13

Data Point 1 (Exhibit 8, pages 307 to 308) was dominated by *Hordeum jubatum* (fox-tail barley, FAC). This point passed the dominance and prevalence tests, and therefore met the hydrophytic vegetation criterion. The soil profile met the hydric soil criterion as it exhibited a Depleted Matrix (F3). One primary indicator (oxidized rhizospheres on living roots) and one secondary indicator (geomorphic position) of hydrology were

observed. Therefore, all three wetland criteria were met at Data Point 1. Although not classified as a potential wetland on the NWI Map (Exhibit 2, page 49), this area would likely be considered a temporarily flooded, palustrine, emergent wetland according to the Cowardin et. al. (1979) classification scheme. The quality of the wetland was considered poor due to low species diversity and its location within maintained INDOT right-of-way. The wetland does extend beyond the boundary of the roadside drainage at this location.

Data Point 2 (Exhibit 8, pages 309 to 310) was dominated by *Festuca arundinacea* (Kentucky fescue, FACU). This point failed to pass indicators for the hydrophytic vegetation criterion. The soil profile did not meet any of the hydric soil indicators. No primary indicators and no secondary indicators of hydrology were observed. Since none of the three wetland indicators were met, this point was determined to be upland. Data Point 2 helped establish the wetland/upland boundary for Wetland 13. There was a distinct change in plant communities, as well as a minor topographic change, that was used in establishing the wetland/upland boundary.

Wetland 13 is located near the 126th Street Overpass (Exhibit 5, page 85). No connection to a water of the U.S. was detected for Wetland 13. No outlet for the roadside drainage at this location was observed, and water appears to pond in this area. Therefore, this feature is likely isolated.

Wetland 14

Data Point 1 (Exhibit 8, pages 311 to 312) was dominated by *Typha spp.* (cattail, OBL). This point passed the rapid, dominance, and prevalence tests, and therefore met the hydrophytic vegetation criterion. The soil profile met the hydric soil criterion as it exhibited a Depleted Matrix (F3). Two secondary indicators (geomorphic position and FAC-neutral test) of hydrology were observed. Therefore, all three wetland criteria were met at Data Point 1. Although not classified as a potential wetland on the NWI Map (Exhibit 2, page 49), this area would likely be considered a temporarily flooded, palustrine, emergent wetland according to the Cowardin et. al. (1979) classification scheme. The quality of the wetland was considered poor due to low species diversity, high prevalence of bare soil (70%), and its location within maintained INDOT right-of-way. The wetland does extend beyond the boundary of the roadside drainage at this location.

Data Point 2 (Exhibit 8, pages 313 to 314) was dominated by *Festuca arundinacea* (Kentucky fescue, FACU). This point failed to pass any indicators for the hydrophytic vegetation criterion. The soil profile did not meet any of the hydric soil indicators. No primary indicators and no secondary indicators of hydrology were observed. Since none of the three wetland indicators were met, this point was determined to be upland. Data Point 2 helped establish the wetland/upland boundary for Wetland 14. There was a distinct change in plant communities, as well as a minor topographic change, that was used in establishing the wetland/upland boundary.

Wetland 14 is located near the 126th Street Overpass (Exhibit 5, page 85). No connection to a water of the U.S. was detected for Wetland 14. No outlet for the roadside drainage at this location was observed, and water appears to pond in this area. Therefore, this feature is likely isolated.

Wetland 15

Data Point 1 (Exhibit 8, pages 315 to 316) was dominated by *Carex stipata* (stalk-grain sedge, OBL). This point passed the rapid, dominance, and prevalence tests, and therefore met the hydrophytic vegetation criterion. The soil profile met the hydric soil criterion as it exhibited a Depleted Matrix (F3). Two secondary indicators (geomorphic position and FAC-neutral test) of hydrology were observed. Therefore, all three wetland criteria were met at Data Point 1. Although not classified as a potential wetland on the NWI Map (Exhibit 2, page 49), this area would likely be considered a temporarily flooded, palustrine, emergent wetland according to the Cowardin et. al. (1979) classification scheme. The quality of the wetland was considered poor due to low species diversity and its location within maintained INDOT right-of-way.

Data Point 2 (Exhibit 8, pages 317 to 318) was dominated by *Festuca arundinacea* (Kentucky fescue, FACU). This point failed to pass any indicators for the hydrophytic vegetation criterion. The soil profile met the hydric soil criterion as it exhibited a Depleted Matrix (F3) and Redox Dark Surface (F6). No

primary indicators and no secondary indicators of hydrology were observed. Since two of the three wetland indicators were not met, this point was determined to be upland. Data Point 2 helped establish the wetland/upland boundary for Wetland 15. There was a distinct change in plant communities, as well as a minor topographic change, that was used in establishing the wetland/upland boundary.

Wetland 15 is located approximately 0.4 mile northeast of the 126th Street Overpass (Exhibit 5, page 87). No connection to a water of the U.S. was detected for Wetland 15. No outlet for the roadside drainage at this location was observed, and water appears to pond in this area. Therefore, this feature is likely isolated.

Wetland 16

Data Point 1 (Exhibit 8, pages 319 to 320) was dominated by *Typha spp.* (cattail, OBL) and *Apocynum cannabinum* (Indian-hemp, FAC). This point passed the dominance and prevalence tests, and therefore met the hydrophytic vegetation criterion. The soil profile met the hydric soil criterion as it exhibited a Depleted Matrix (F3) and Redox Dark Surface (F6). Two primary indicators (high water table and saturation) and two secondary indicators (geomorphic position and FAC-neutral test) of hydrology were observed. Therefore, all three wetland criteria were met at Data Point 1. Although not classified as a potential wetland on the NWI Map (Exhibit 2, page 49), this area would likely be considered a temporarily flooded, palustrine, emergent wetland according to the Cowardin et. al. (1979) classification scheme. The quality of the wetland was considered poor due to low species diversity, the presence of *Typha* as a dominant species, and its location within maintained INDOT right-of-way.

Data Point 2 (Exhibit 8, pages 321 to 322) was dominated by *Festuca arundinacea* (Kentucky fescue, FACU). This point failed to pass any indicators of the hydrophytic vegetation criterion. The soil profile met the hydric soil criterion as it displayed Depleted Below Dark Surface (A11). Two primary indicators (high water table and saturation) of hydrology were observed. Since one of the three wetland indicators was not met, this point was determined to be upland. Data Point 2 helped establish the wetland/upland boundary for Wetland 16. There was a distinct change in plant communities, as well as a minor topographic change, that was used in establishing the wetland/upland boundary.

Wetland 16 is located approximately 0.5 mile northeast of the 126th Street Overpass and extends outside of INDOT right-of-way (Exhibit 5, page 87). No connection to a water of the U.S. was detected for Wetland 16. No outlet for the roadside drainage at this location was observed, and water appears to pond in this area. Therefore, this feature is likely isolated.

Wetland 17

Wetland 17 consisted of inundated, sparsely vegetated areas with drainage patterns that fed into a forested wetland outside of INDOT right-of-way. Data Point 1 (Exhibit 8, pages 323 to 324) was collected above an unvegetated, inundated area. The soil profile met the hydric soil criterion as it displayed a Depleted Matrix (F3) and Redox Dark Surface (F6). One primary indicator (saturation) and one secondary indicator (geomorphic position) of hydrology were observed. As previously stated, surface water was noted adjacent to this point. Data Point 1 contained only *Festuca arundinacea* (Kentucky fescue, FACU), with approximately 40% of the area being unvegetated. Although no hydrophytic vegetation was present, problematic hydrophytic vegetation was marked as an indicator because of the adjacent areas with sparse vegetation, standing water, and drainage patterns, and the fact that it was hydrologically connected to the forested wetland located outside of INDOT right-of-way. Therefore, this area was determined to be a wetland. Although not classified as a potential wetland on the NWI Map (Exhibit 2, page 49), this area would likely be considered a temporarily flooded, palustrine, emergent wetland according to the Cowardin et. al. (1979) classification scheme. The quality of the wetland was considered poor due to the low species diversity and its location within maintained INDOT right-of-way.

Data Point 2 (Exhibit 8, pages 325 to 326) was dominated by *Festuca arundinacea* (Kentucky fescue, FACU). This point failed to pass any indicators of the hydrophytic vegetation criterion. The soil profile met the hydric soil criterion as it displayed a Depleted Matrix (F3). One secondary indicator (geomorphic position) of hydrology was observed. Since two of the three wetland indicators were not met, this point was

determined to be upland. Data Point 2 helped establish the wetland/upland boundary for Wetland 17. There was a minor topographic and hydrology change that was used in establishing the wetland/upland boundary.

Wetland 17 is located approximately 0.6 mile northeast of the 126th Street Overpass (Exhibit 5, page 87). No connection to a water of the U.S. was detected for Wetland 17. No outlet for the roadside drainage at this location was observed, and water appears to pond in this area. Therefore, this feature is likely isolated.

Wetland 18

Data Point 1 (Exhibit 8, pages 327 to 328) was dominated by *Quercus palustris* (pin oak, FACW), *Cornus drummondii* (rough-leaf dogwood, FAC), and *Carex grayi* (gray's sedge, FACW). This point passed the dominance and prevalence tests, and therefore met the hydrophytic vegetation criterion. The soil profile met the hydric soil criterion as it exhibited a Depleted Matrix (F3). One primary indicator (water-stained leaves) and two secondary indicators (geomorphic position and FAC-neutral test) of hydrology were observed. Therefore, all three wetland criteria were met at Data Point 1. Although not classified as a potential wetland on the NWI Map (Exhibit 2, page 49), this area would likely be considered a temporarily flooded, palustrine, forested wetland according to the Cowardin et. al. (1979) classification scheme. The quality of the wetland was classified average based on its species diversity, which included components in the tree stratum.

Data Point 2 (Exhibit 8, pages 329 to 330) was dominated by *Festuca arundinacea* (Kentucky fescue, FACU). This point failed to pass any indicators for the hydrophytic vegetation criterion. The soil profile met the hydric soil criterion as it exhibited a Depleted Matrix (F3). No primary indicators and no secondary indicators of hydrology were observed. Since two of the three wetland indicators were not met, this point was determined to be upland. Data Point 2 helped establish the wetland/upland boundary for Wetland 18. There was a distinct change in plant communities that was used in establishing the wetland/upland boundary.

Wetland 18 is located approximately 0.7 mile northeast of the 126th Street Overpass (Exhibit 5, page 87) and extends outside of INDOT right-of-way. No connection to a water of the U.S. was detected for Wetland 18. No outlet for the roadside drainage at this location was observed, and water appears to pond in this area. Therefore, this feature is likely isolated.

Wetland 19

Data Point 1 (Exhibit 8, pages 331 to 332) was dominated by *Persicaria maculosa* (spotted ladythumb, FACW). This point passed the rapid, dominance, and prevalence tests, and therefore met the hydrophytic vegetation criterion. The soil profile met the hydric soil criterion as it displayed Depleted Below Dark Surface (A11). Three secondary indicators (surface soil cracks, geomorphic position, and FAC-neutral test) of hydrology were observed. Therefore, all three wetland criteria were met at Data Point 1. Although not classified as a potential wetland on the NWI Map (Exhibit 2, page 49), this area would likely be considered a temporarily flooded, palustrine, emergent wetland according to the Cowardin et. al. (1979) classification scheme. The quality of the wetland was considered poor due to low species diversity and its location within maintained INDOT right-of-way. The wetland does extend beyond the boundary of the roadside drainage at this location.

Data Point 2 (Exhibit 8, pages 333 to 334) was dominated by *Festuca arundinacea* (Kentucky fescue, FACU). This point failed to pass any indicators for the hydrophytic vegetation criterion. The soil profile met the hydric soil criterion as it exhibited a Depleted Matrix (F3). No primary indicators and no secondary indicators of hydrology were observed. Since two of the three wetland indicators were not met, this point was determined to be upland. Data Point 2 helped establish the wetland/upland boundary for Wetland 19. There was a distinct change in plant communities, as well as a minor topographic change, that was used in establishing the wetland/upland boundary.

Wetland 19 is located approximately 0.6 mile southwest of the Brooks School Road Overpass (Exhibit 5, page 88). No connection to a water of the U.S. was detected for Wetland 19. No outlet for the roadside drainage at this location was observed, and water appears to pond in this area. Therefore, this feature is likely isolated.

Wetland 20

Data Point 1 (Exhibit 8, pages 335 to 336) was dominated by *Persicaria maculosa* (spotted ladythumb, FACW) and *Carex stipata* (stalk-grain sedge, OBL). This point passed the rapid, dominance, and prevalence tests, and therefore met the hydrophytic vegetation criterion. The soil profile met the hydric soil criterion as it exhibited a Depleted Matrix (F3). Three secondary indicators (surface soil cracks, geomorphic position, and FAC-neutral test) of hydrology were observed. Therefore, all three wetland criteria were met at Data Point 1. Although not classified as a potential wetland on the NWI Map (Exhibit 2, page 50), this area would likely be considered a temporarily flooded, palustrine, emergent wetland according to the Cowardin et. al. (1979) classification scheme. The quality of the wetland was considered poor due to low species diversity and its location within maintained INDOT right-of-way. The wetland does extend beyond the boundary of the roadside drainage at this location.

Data Point 2 (Exhibit 8, pages 337 to 338) was dominated by *Festuca arundinacea* (Kentucky fescue, FACU). This point failed to pass any indicators for the hydrophytic vegetation criterion. The soil profile met the hydric soil criterion as it exhibited a Depleted Matrix (F3). No primary indicators and no secondary indicators of hydrology were observed. Since two of the three wetland indicators were not met, this point was determined to be upland. Data Point 2 helped establish the wetland/upland boundary for Wetland 20. There was a distinct change in plant communities, as well as a minor topographic change, that was used in establishing the wetland/upland boundary.

Wetland 20 is located approximately 0.5 mile southwest of the Brooks School Road Overpass (Exhibit 5, page 89). No connection to a water of the U.S. was detected for Wetland 20. No outlet for the roadside drainage at this location was observed, and water appears to pond in this area. Therefore, this feature is likely isolated.

Wetland 21

Data Point 1 (Exhibit 8, pages 339 to 340) was dominated by *Typha spp.* (cattail, OBL). This point passed the rapid, dominance, and prevalence tests, and therefore met the hydrophytic vegetation criterion. The soil profile met the hydric soil criterion as it exhibited a Depleted Matrix (F3). Three primary indicators (surface water, high water table, and saturation) and three secondary indicators (surface soil cracks, geomorphic position, and FAC-neutral test) of hydrology were observed. Therefore, all three wetland criteria were met at Data Point 1. Although not classified as a potential wetland on the NWI Map (Exhibit 2, page 50), this area would likely be considered a temporarily flooded, palustrine, emergent wetland according to the Cowardin et. al. (1979) classification scheme. The quality of the wetland was considered poor due to low species diversity, the dominance of *Typha*, the high prevalence of bare soil (60%), and its location within maintained INDOT right-of-way. The wetland does extend beyond the boundary of the roadside drainage at this location.

Data Point 2 (Exhibit 8, pages 341 to 342) was dominated by *Festuca arundinacea* (Kentucky fescue, FACU). This point failed to pass any indicators for the hydrophytic vegetation criterion. The soil profile met the hydric soil criterion as it exhibited a Depleted Matrix (F3). No primary indicators and no secondary indicators of hydrology were observed. Since two of the three wetland indicators were not met, this point was determined to be upland. Data Point 2 helped establish the wetland/upland boundary for Wetland 21. There was a distinct change in plant communities, as well as a minor topographic change, that was used in establishing the wetland/upland boundary.

Wetland 21 is located near the Brooks School Road Overpass (Exhibit 5, page 90). No connection to a water of the U.S. was detected for Wetland 21. No outlet for the roadside drainage at this location was observed, and water appears to pond in this area. Therefore, this feature is likely isolated.

Wetland 22

Data Point 1 (Exhibit 8, pages 343 to 344) was dominated by *Carex stipata* (stalk-grain sedge, OBL). This point passed the rapid, dominance, and prevalence tests, and therefore met the hydrophytic vegetation criterion. The soil profile met the hydric soil criterion as it exhibited a Depleted Matrix (F3). Three secondary indicators (surface soil cracks, geomorphic position, and FAC-neutral test) of hydrology were

observed. Therefore, all three wetland criteria were met at Data Point 1. Although not classified as a potential wetland on the NWI Map (Exhibit 2, page 50), this area would likely be considered a temporarily flooded, palustrine, emergent wetland according to the Cowardin et. al. (1979) classification scheme. The quality of the wetland was considered poor due to low species diversity and its location within maintained INDOT right-of-way. The wetland does extend beyond the boundary of the roadside drainage at this location.

Data Point 2 (Exhibit 8, pages 345 to 346) was dominated by *Festuca arundinacea* (Kentucky fescue, FACU). This point failed to pass any indicators for hydrophytic vegetation criterion. The soil profile met the hydric soil criterion as it exhibited a Depleted Matrix (F3). No primary indicators and no secondary indicators of hydrology were observed. Since two of the three wetland indicators were not met, this point was determined to be upland. Data Point 2 helped establish the wetland/upland boundary for Wetland 22. There was a distinct change in plant communities, as well as a minor topographic change, that was used in establishing the wetland/upland boundary.

Wetland 22 is located near the Brooks School Road Overpass (Exhibit 5, page 91). No connection to a water of the U.S. was detected for Wetland 22. No outlet for the roadside drainage at this location was observed, and water appears to pond in this area. Therefore, this feature is likely isolated.

Wetland 23

Data Point 1 (Exhibit 8, pages 347 to 348) was dominated by *Carex stipata* (stalk-grain sedge, OBL) and *Typha spp.* (cattail, OBL). This point passed the rapid, dominance, and prevalence tests, and therefore met the hydrophytic vegetation criterion. The soil profile met the hydric soil criterion as it exhibited a Depleted Matrix (F3). Three secondary indicators (surface soil cracks, geomorphic position, and FAC-neutral test) of hydrology were observed. Therefore, all three wetland criteria were met at Data Point 1. Although not classified as a potential wetland on the NWI Map (Exhibit 2, page 50) this area would likely be considered a temporarily flooded, palustrine, emergent wetland according to the Cowardin et. al. (1979) classification scheme. The quality of the wetland was considered poor due to low species diversity, dominance of *Typha*, high prevalence of bare soil (70%), and its location within maintained INDOT right-of-way. The wetland does extend beyond the boundary of the roadside drainage at this location.

Data Point 2 (Exhibit 8, pages 349 to 350) was dominated by *Festuca arundinacea* (Kentucky fescue, FACU). This point failed to pass any indicators for the hydrophytic vegetation criterion. The soil profile met the hydric soil criterion as it exhibited a Depleted Matrix (F3). No primary indicators and no secondary indicators of hydrology were observed. Since two of the three wetland indicators were not met, this point was determined to be upland. Data Point 2 helped establish the wetland/upland boundary for Wetland 23. There was a distinct change in plant communities, as well as a minor topographic change, that was used in establishing the wetland/upland boundary.

Wetland 23 is located near the Brooks School Road Overpass (Exhibit 5, page 91). No connection to a water of the U.S. was detected for Wetland 23. No outlet for the roadside drainage at this location was observed, and water appears to pond in this area. Therefore, this feature is likely isolated.

Wetland 24

Data Point 1 (Exhibit 8, pages 351 to 352) was dominated by *Salix interior* (sandbar willow, FACW), *Typha spp.* (cattail, OBL), and *Carex vulpinoidea* (common fox sedge, FACW). This point passed the rapid, dominance, and prevalence tests, and therefore met the hydrophytic vegetation criterion. The soil profile met the hydric soil criterion as it exhibited a Depleted Matrix (F3). Two secondary indicators (geomorphic position and FAC-neutral test) of hydrology were observed. Therefore, all three wetland criteria were met at Data Point 1. Although not classified as a potential wetland on the NWI Map (Exhibit 2, page 50), this feature would likely be considered a palustrine shrub-scrub wetland (with a palustrine emergent component) according to the Cowardin et. al. (1979) classification scheme. The quality of the wetland was classified as average due to its species diversity, which included a shrub-scrub component. However, it is located within maintained INDOT right-of-way. The wetland does extend beyond the boundary of the roadside drainage at this location.

Data Point 2 (Exhibit 8, pages 353 to 354) was dominated by *Festuca arundinacea* (Kentucky fescue, FACU). This point failed to pass any indicators for the hydrophytic vegetation criterion. The soil profile failed to meet any indicators for hydric soil. No primary indicators and no secondary indicators of hydrology were observed. Since none of the three wetland indicators were met, this point was determined to be upland. Data Point 2 helped establish the wetland/upland boundary for Wetland 24. There was a distinct change in plant communities, as well as a minor topographic change, that was used in establishing the wetland/upland boundary.

Wetland 24 is located approximately 0.25 mile northeast of the Brooks School Road Overpass and borders UNT5 to Sand Creek (Exhibit 5, page 94). This wetland extends off INDOT right-of-way. UNT5 discharges into Sand Creek, which is a direct tributary to Mud Creek, which is a direct tributary to Fall Creek, which is a direct tributary to the West Fork White River, which is a direct tributary to the Wabash River, which outlets to the Ohio River (a traditionally navigable waterway). Therefore, this feature is likely a water of the U.S.

Wetland 25

Data Point 1 (Exhibit 8, pages 355 to 356) was dominated by *Leersia oryzoides* (rice cut grass, OBL). This point passed the rapid, dominance, and prevalence tests, and therefore met the hydrophytic vegetation criterion. The soil profile could not be evaluated since the roadside drainage had been riprap lined. The soil in the adjacent Data Point 2 met the hydric soil criterion, and the point met both the vegetation and hydrology criteria. Because of this, it was assumed that the soil criterion would be met for Data Point 1. One primary indicator (surface water) and two secondary indicators (geomorphic position and FAC-neutral test) of hydrology were observed. Therefore, all three wetland criteria were met at Data Point 1. Although not classified as a potential wetland on the NWI Map (Exhibit 2, page 50), this area would likely be considered a temporarily flooded, palustrine, emergent wetland according to the Cowardin et. al. (1979) classification scheme. The quality of the wetland was considered poor because it was lined with riprap and is located within maintained INDOT right-of-way. The wetland does extend beyond the boundary of the roadside drainage at this location.

Data Point 2 (Exhibit 8, pages 357 to 358) was dominated by *Festuca arundinacea* (Kentucky fescue, FACU). This point failed to pass any indicators for the hydrophytic vegetation criterion. The soil profile met the hydric soil criterion as it exhibited a Depleted Matrix (F3). No primary indicators and no secondary indicators of hydrology were observed. Since two of the three wetland indicators were not met, this point was determined to be upland. Data Point 2 helped establish the wetland/upland boundary for Wetland 25. There was a distinct change in plant communities, along with a topographic change, that was used in establishing the wetland/upland boundary.

Wetland 25 is located approximately 0.25 mile northeast of the Brooks School Road Overpass and borders UNT5 to Sand Creek (Exhibit 5, page 94). UNT5 discharges into Sand Creek, which is a direct tributary to Mud Creek, which is a direct tributary to Fall Creek, which is a direct tributary to the West Fork White River, which is a direct tributary to the Wabash River, which outlets into the Ohio River (a traditionally navigable waterway). Therefore, this feature is likely a water of the U.S.

Wetland 26

Data Point 1 (Exhibit 8, pages 359 to 360) was dominated by *Carex lacustris* (lakebank sedge, OBL) and *Carex vulpinoidea* (common fox sedge, OBL). This point passed the rapid, dominance, and prevalence tests, and therefore met the hydrophytic vegetation criterion. The soil profile met the hydric soil criterion as it exhibited a Depleted Matrix (F3). One primary indicator (algal mat or crust) and two secondary indicators (crayfish burrows and FAC-neutral test) for hydrology were observed. Therefore, all three wetland criteria were met at Data Point 1. Although not classified as a potential wetland on the NWI Map (Exhibit 2, page 50), this area would likely be considered a temporarily flooded, palustrine, emergent wetland according to the Cowardin et. al. (1979) classification scheme. The quality of the wetland was considered poor due to its low species diversity, prevalence of bare soil (30%), and the fact that it is located within frequently maintained INDOT right-of-way.

Data Point 2 (Exhibit 8, pages 361 to 362) was dominated by *Festuca arundinacea* (Kentucky fescue, FACU). This point failed to pass any indicators for the hydrophytic vegetation criterion. The soil profile met the hydric soil criterion as it exhibited a Depleted Matrix (F3). No primary indicators and no secondary indicators of hydrology were observed. Since two of the three wetland indicators were not met, this point was determined to be upland. Data Point 2 helped establish the wetland/upland boundary for Wetland 26. There was a distinct change in plant communities that was used in establishing the wetland/upland boundary.

Wetland 26 is located approximately 0.4 mile northeast of the Brooks School Road Overpass (Exhibit 5, page 94). It drains via riprap lined roadside drainage to UNT5 to Sand Creek. UNT5 discharges into Sand Creek, which is a direct tributary to Mud Creek, which is a direct tributary to Fall Creek, which is a direct tributary to the West Fork White River, which is a direct tributary to the Wabash River, which outlets into the Ohio River (a traditionally navigable waterway). Therefore, this feature is likely a water of the U.S.

Wetland 27

Data Point 1 (Exhibit 8, pages 363 to 364) was dominated by *Salix interior* (sandbar willow, FACW) and *Typha spp.* (cattail, OBL). This point passed the rapid, dominance, and prevalence tests, and therefore met the hydrophytic vegetation criterion. The soil profile met the hydric soil criterion as it exhibited a Depleted Matrix (F3). Three primary indicators (surface water, high water table, and saturation) and one secondary indicator (FAC-neutral test) of hydrology were observed. Therefore, all three wetland criteria were met at Data Point 1. Although not classified as a potential wetland on the NWI Map (Exhibit 2, page 50), this area would likely be considered a temporarily flooded, palustrine, emergent wetland according to the Cowardin et. al. (1979) classification scheme. This would likely not be considered a shrub-scrub wetland due to the low coverage of *Salix interior* (5%) and the fact that this entire area has been mowed as recently as September 2013 (as noted during desktop review using online resources). The quality of the wetland was classified poor due to low species diversity, the presence of *Typha*, and the fact that it is located within frequently maintained INDOT right-of-way.

Data Point 2 (Exhibit 8, pages 365 to 366) was dominated by *Festuca arundinacea* (Kentucky fescue, FACU). This point failed to pass any indicators for the hydrophytic vegetation criterion. The soil profile did not meet any of the hydric soil indicators. No primary indicators and no secondary indicators of hydrology were observed. Since none of the three wetland indicators were met, this point was determined to be upland. Data Point 2 helped establish the wetland/upland boundary for Wetland 27. There was a distinct change in plant communities that was used in establishing the wetland/upland boundary.

Wetland 27 is located near the Campus Parkway Interchange (Exhibit 5, page 96). It drains under I-69 via a slip-lined pipe into Wetland 28. No connection to a water of the U.S. was detected for Wetland 28. Therefore, this feature is likely isolated.

Wetland 28

Data Point 1 (Exhibit 8, pages 367 to 368) was dominated by *Fraxinus pennsylvanica* (green ash, FACW), *Celtis occidentalis* (common hackberry, FAC), *Populus deltoides* (eastern cottonwood, FAC), *Acer negundo* (ash-leaf maple, FAC), *Morus rubra* (red mulberry, FACU), *Carex stipata* (stalk-grain sedge, OBL), and *Toxicodendron radicans* (eastern poison-ivy, FAC). This point passed the dominance and prevalence tests, and therefore met the hydrophytic vegetation criterion. The soil profile met the hydric soil criterion as it exhibited a Depleted Matrix (F3). Two secondary indicators (geomorphic position and FAC-neutral test) of hydrology were observed. Therefore, all three wetland criteria were met at Data Point 1.

Data Point 2 (Exhibit 8, pages 369 to 370) was dominated by *Fraxinus pennsylvanica* (green ash, FACW), *Acer negundo* (ash-leaf maple, FAC), and *Cephalanthus occidentalis* (common buttonbush, OBL). This point passed the dominance and prevalence tests, and therefore met the hydrophytic vegetation criterion. The soil profile met the hydric soil criterion as it exhibited a Depleted Matrix (F3). Four primary indicators (sediment deposits, drift deposits, sparsely vegetated concave surface, and water-stained leaves) and two secondary indicators (geomorphic position and FAC-neutral test) for hydrology were observed. Therefore, all three wetland criteria were met at Data Point 2.

Data Point 3 (Exhibit 8, pages 371 to 372) was dominated by *Morus rubra* (red mulberry, FACU) and *Festuca arundinacea* (Kentucky fescue, FACU). This point failed to pass any indicators for the hydrophytic vegetation criterion. The soil profile did not meet any of the hydric soil indicators. No primary indicators and no secondary indicators of hydrology were observed. Since none of the three wetland indicators were met, this point was determined to be upland. Data Point 3 helped establish the wetland/upland boundary for Wetland 28. There was a distinct change in plant communities that was used in establishing the wetland/upland boundary.

Data Point 4 (Exhibit 8, pages 373 to 374) was dominated by *Carex stipata* (stalk-grain sedge, OBL) and an unidentified grass. This point passed the prevalence test, and therefore met the hydrophytic vegetation criterion. The soil profile met the hydric soil criterion as it exhibited a Depleted Matrix (F3). One primary indicator (surface water) and one secondary indicator (geomorphic position) of hydrology were observed. Therefore, all three wetland criteria were met at Data Point 4. This plot represented the small emergent community draining into the forested wetland portion of Wetland 28.

Wetland 28 was noted as a palustrine shrub-scrub wetland on the NWI Map (Exhibit 2, page 50). Based on field observations, this feature would be considered a palustrine forested wetland (with a small palustrine emergent wetland component) according to the Cowardin et. al. (1979) classification scheme. The quality of the wetland was classified average due to its species diversity. It is negatively impacted by roadside drainage along I-69 and Campus Parkway, receiving storm water pollutants and a large amount of litter/trash.

Wetland 28 is located near the Campus Parkway Interchange (Exhibit 5, page 96). No connection to a water of the U.S. was detected for Wetland 28. No outlet for the roadside drainage at this location was observed, and water appears to pond in this area. Therefore, this feature is likely isolated.

Wetland 29

Data Point 1 (Exhibit 8, pages 375 to 376) was dominated by *Ambrosia trifida* (great ragweed, FAC), *Carex gracillima* (graceful sedge, FACU), and *Carex stipata* (stalk-grain sedge, OBL). This point passed the dominance and prevalence tests, and therefore met the hydrophytic vegetation criterion. The soil profile met the hydric soil criterion as it was Depleted Below Dark Surface (A11). One primary indicator (saturation) was observed. Therefore, all three wetland criteria were met at Data Point 1. Although not classified as a potential wetland on the NWI Map (Exhibit 2, page 50), this area would likely be considered a temporarily flooded, palustrine, emergent wetland according to the Cowardin et. al. (1979) classification scheme. The quality of the wetland was considered average due to species diversity and low prevalence of invasive species. However, this wetland still receives direct runoff from I-69 and its associated pollutants.

Data Point 2 (Exhibit 8, pages 377 to 378) was dominated by *Euthamia graminifolia* (flat-top goldentop, FACW) and *Ambrosia trifida* (great ragweed, FAC). This point passed the dominance and prevalence tests, and therefore met the hydrophytic vegetation criterion. The soil profile did not meet any of the hydric soil indicators. No primary and no secondary indicators of hydrology were observed. Since two of the three wetland indicators were not met, this point was determined to be upland. Data Point 2 helped establish the wetland/upland boundary for Wetland 29. There was a minor change topography that was used in establishing the wetland/upland boundary.

Wetland 29 is located near the Campus Parkway Interchange (Exhibit 5, page 96). It is bordered to the north by an old roadbed (and its associated slope). No connection to a water of the U.S. was detected for Wetland 29. No outlet for the roadside drainage was observed at this location, and water appears to pond in this area. Therefore, this feature is likely isolated.

Wetland 30

Data Point 1 (Exhibit 8, pages 379 to 380) was dominated by *Typha spp.* (cattail, OBL). This point passed the rapid, dominance, and prevalence tests, and therefore met the hydrophytic vegetation criterion. The soil profile met the hydric soil criterion as it exhibited a Depleted Matrix (F3). One primary indicator (surface water) and one secondary indicator (FAC-neutral test) for hydrology were observed. Therefore, all three wetland criteria were met at Data Point 1. Although not classified as a potential wetland on the NWI Map

(Exhibit 2, page 50), this area would likely be considered a temporarily flooded, palustrine, emergent wetland according to the Cowardin et. al. (1979) classification scheme. The quality of the wetland was considered poor due to low species diversity, the dominance of *Typha*, and the high prevalence of bare soil (40%).

Data Point 2 (Exhibit 8, pages 381 to 382) was dominated by *Festuca arundinacea* (Kentucky fescue, FACU). This point failed to pass any indicators for the hydrophytic vegetation criterion. The soil profile met the hydric soil criterion as it exhibited a Depleted Matrix (F3). No primary indicators and no secondary indicators of hydrology were observed. Since two of the three wetland indicators were not met, this point was determined to be upland. Data Point 2 helped establish the wetland/upland boundary for Wetland 30. There was a distinct change in plant communities that was used in establishing the wetland/upland boundary.

Wetland 30 is located within the Campus Parkway Interchange (Exhibit 5, page 96). It has formed on the hillslope for the I-69 southbound off-ramp. Its primary source of hydrology appears to be an underdrain. No connection to a water of the U.S. was detected for Wetland 30. The roadside drainage at the toe of this slope is not connected to a water of the U.S. Therefore, this feature is likely isolated.

Wetland 31

Data Point 1 (Exhibit 8, pages 383 to 384) was dominated by an unidentified *Carex*. The other three species could be identified, two of which were FACW and one OBL. Although the dominant species could not be confirmed, the point still passed the prevalence test. The soil profile met the hydric soil criterion as it exhibited a Depleted Matrix (F3). Three secondary indicators (surface soil cracks, crayfish burrows, and geomorphic position) of hydrology were observed. Therefore, all three wetland criteria were met at Data Point 1. Although not classified as a potential wetland on the NWI Map (Exhibit 2, page 51), this area would likely be considered a temporarily flooded, palustrine, emergent wetland according to the Cowardin et. al. (1979) classification scheme. The quality of the wetland was considered average due to its species diversity. However, it is located within maintained INDOT right-of-way. The wetland does extend beyond the boundary of the roadside drainage at this location.

Data Point 2 (Exhibit 8, pages 385 to 386) was dominated by *Festuca arundinacea* (Kentucky fescue, FACU) and *Cirsium arvense* (Canadian thistle, FACU). This point failed to pass any indicators for the hydrophytic vegetation criterion. The soil profile met the hydric soil criterion as it exhibited a Depleted Matrix (F3). No primary indicators and no secondary indicators of hydrology were observed. Since two of the three wetland indicators were not met, this point was determined to be upland. Data Point 2 helped establish the wetland/upland boundary for Wetland 31. There was a distinct change in plant communities, as well as a minor topographic change, that was used in establishing the wetland/upland boundary.

Wetland 31 is located near the Olio Road Overpass (Exhibit 5, page 100). No connection to a water of the U.S. was detected for this wetland. Water outlets from this feature via a pipe to the adjacent farm field. However, this drainage feature appears to be actively farmed and is completely consumed within the adjacent field with no connection to a water of the U.S. Therefore, this feature is likely isolated.

Wetland 32

Data Point 1 (Exhibit 8, pages 387 to 388) was dominated by *Juglans nigra* (black walnut, FACU), *Acer negundo* (ash-leaf maple, FAC), *Impatiens capensis* (spotted touch-me-not, FACW), and *Elymus virginicus* (Virginia wild rye, FACW). This point passed the dominance and prevalence tests, and therefore met the hydrophytic vegetation criterion. The soil profile met the hydric soil criterion as it exhibited a Depleted Matrix (F3). Two secondary indicators (geomorphic position and FAC-neutral test) of hydrology were observed. Therefore, all three wetland criteria were met at Data Point 1. Although not classified as a potential wetland on the NWI Map (Exhibit 2, page 51) this area would likely be considered a temporarily flooded, palustrine, forested wetland according to the Cowardin et. al. (1979) classification scheme. The quality of the wetland was considered average due species diversity, which included species in both the tree and shrub stratum. However, this wetland is located its location within INDOT right-of-way. The wetland does extend beyond the boundary of the roadside drainage at this location.

Data Point 2 (Exhibit 8, pages 389 to 390) was dominated by *Festuca arundinacea* (Kentucky fescue, FACU). This point failed to pass any indicators for the hydrophytic vegetation criterion. The soil profile did not meet any hydric soil indicators. No primary indicators and no secondary indicators of hydrology were observed. Since none of the three wetland indicators were observed, this point was determined to be upland. Data Point 2 helped establish the wetland/upland boundary for Wetland 32. There was a distinct change in plant communities, as well as a topographic change, that was used in establishing the wetland/upland boundary.

Wetland 32 borders UNT2 to Mud Creek near the I-69 Bridges over Mud Creek (Exhibit 5, page 103). UNT2 drains into Mud Creek, which is a direct tributary to Fall Creek, which is a direct tributary to the West Fork White River, which is a direct tributary to the Wabash River, which outlets into the Ohio River (a traditionally navigable waterway). Because of this connection, this feature is likely a water of the U.S.

Wetland 33

Data Point 1 (Exhibit 8, pages 391 to 392) was dominated by *Phalaris arundinacea* (reed canary grass, FACW). This point passed the rapid, dominance, and prevalence tests, and therefore met the hydrophytic vegetation criterion. The soil profile met the hydric soil criterion as it exhibited a Depleted Matrix (F3). Two secondary indicators (geomorphic position and FAC-neutral test) of hydrology were observed. Therefore, all three wetland criteria were met at Data Point 1. Although not classified as a potential wetland on the NWI Map (Exhibit 2, page 53), this area would likely be considered a temporarily flooded, palustrine, emergent wetland according to the Cowardin et. al. (1979) classification scheme. The quality of the wetland was considered poor due to low species diversity, the dominance of *Phalaris*, and its location within maintained INDOT right-of-way. The wetland does extend beyond the boundary of the roadside drainage at this location.

Data Point 2 (Exhibit 8, pages 393 to 394) was dominated by *Festuca arundinacea* (Kentucky fescue, FACU). This point failed to pass any indicators for the hydrophytic vegetation criterion. The soil profile did not meet any hydric soil indicators. No primary indicators and no secondary indicators of hydrology were observed. Since none of the wetland indicators were observed, this point was determined to be upland. Data Point 2 helped establish the wetland/upland boundary for Wetland 33. There was a distinct change in plant communities, and a minor topographic change, that was used in establishing the wetland/upland boundary.

Wetland 33 is located approximately 0.7 mile west of the I-69 Bridges over Thorpe Creek (Exhibit 5, page 112). It drains via roadside drainage to UNT1 to Thorpe Creek (John Underwood Drain). UNT1 flows into Thorpe Creek, which drains into Geist Reservoir, which drains into Fall Creek, which is a direct tributary to the West Fork White River, which is a direct tributary to the Wabash River, which outlets into the Ohio River (a traditionally navigable waterway). Therefore, this feature is likely a water of the U.S.

Wetland 34

Data Point 1 (Exhibit 8, pages 395 to 396) was dominated by *Phalaris arundinacea* (reed canary grass, FACW). This point passed the rapid, dominance, and prevalence tests, and therefore met the hydrophytic vegetation criterion. The soil profile met the hydric soil criterion as it exhibited a Depleted Matrix (F3). Two primary indicators (high water table and saturation) and two secondary indicators (geomorphic position and FAC-neutral test) of hydrology were observed. Therefore, all three wetland criteria were met at Data Point 1. Although not classified as a potential wetland on the NWI Map (Exhibit 2, page 53), this area would likely be considered a temporarily flooded, palustrine, emergent wetland according to the Cowardin et. al. (1979) classification scheme. The quality of the wetland was considered poor due to low species diversity and the dominance of *Phalaris*.

The surface of Data Point 2 (Exhibit 8, pages 397 to 398) was lined with riprap. This stone is associated with the Thorpe Creek bridge cone, which runs from the top of slope to the toe of slope. No vegetation was growing on top of this riprap, and surrounding vegetation at the top of slope was *Festuca arundinacea* (Kentucky fescue, FACU). This location, therefore, would likely not meet the hydrophytic vegetation criterion. Riprap at this location was greater than 12 inches in depth, preventing the collection of a soil sample. This also prohibited the investigation for subsurface hydrology indicators. No surface indicators of

hydrology were observed, and subsurface indicators would not be anticipated based on the topography (hillslope) of this area. Therefore, this point would likely be considered upland. Data Point 2 helped establish the wetland/upland boundary for Wetland 34. The distinct change in topography and lack of a plant community was used in establishing the wetland/upland boundary.

Wetland 34 is adjacent to Thorpe Creek (Exhibit 5, page 115). Thorpe Creek flows into Geist Reservoir, which drains into Fall Creek, which is a direct tributary to the West Fork White River, which is a direct tributary to the Wabash River, which outlets into the Ohio River (a traditionally navigable waterway). Therefore, this feature is likely a water of the U.S.

Wetland 35

Data Point 1 (Exhibit 8, pages 399 to 400) was dominated by *Phalaris arundinacea* (reed canary grass, FACW). This point passed the rapid, dominance, and prevalence tests, and therefore met the hydrophytic vegetation criterion. The soil profile met the hydric soil criterion as it exhibited a Depleted Matrix (F3). Two secondary indicators (geomorphic position and FAC-neutral test) of hydrology were observed. Therefore, all three wetland criteria were met at Data Point 1. Although not classified as a potential wetland on the NWI Map (Exhibit 2, page 53), this area would likely be considered a temporarily flooded, palustrine, emergent wetland according to the Cowardin et. al. (1979) classification scheme. The quality of the wetland was considered poor due to low species diversity and the dominance of *Phalaris*.

The surface of Data Point 2 (Exhibit 8, pages 401 to 402) was lined with riprap. This stone is associated with the Thorpe Creek bridge cone, which runs from the top of slope to the toe of slope. No vegetation was growing on top of this riprap, and surrounding vegetation at the top of slope was *Festuca arundinacea* (Kentucky fescue, FACU). This location, therefore, would likely not meet the hydrophytic vegetation criterion. Riprap at this location was greater than 12 inches in depth, preventing the collection of a soil sample. This also prohibited the investigation for subsurface hydrology indicators. No surface indicators of hydrology were observed, and subsurface indicators would not be anticipated based on the topography (hillslope) of this area. Therefore, this point would likely be considered upland. Data Point 2 helped establish the wetland/upland boundary for Wetland 34. The distinct change in topography and lack of a plant community was used in establishing the wetland/upland boundary.

Wetland 35 is adjacent to Thorpe Creek (Exhibit 5, page 115). Thorpe Creek flows into Geist Reservoir, which drains into Fall Creek, which is a direct tributary to the West Fork White River, which is a direct tributary to the Wabash River, which outlets into the Ohio River (a traditionally navigable waterway). Therefore, this feature is likely a water of the U.S.

Wetland 36

Data Point 1 (Exhibit 8, pages 403 to 404) was dominated by *Eleocharis palustris* (common spike-rush, OBL) and *Typha spp.* (cattail, OBL). This point passed the rapid, dominance, and prevalence tests, and therefore met the hydrophytic vegetation criterion. The soil profile met the hydric soil criterion as it exhibited a Loamy Gleyed Matrix (F2). Two primary indicators (high water table and saturation) and one secondary indicator (FAC-neutral test) of hydrology were observed. Therefore, all three wetland criteria were met at Data Point 1. Although not classified as a potential wetland on the NWI Map (Exhibit 2, page 53), this area would likely be considered a temporarily flooded, palustrine, emergent wetland according to the Cowardin et. al. (1979) classification scheme. The quality of the wetland was considered poor due to low species diversity, the high prevalence of bare soil (45%), and the dominance of *Typha*.

Data Point 2 (Exhibit 8, pages 405 to 406) was dominated by *Festuca arundinacea* (Kentucky fescue, FACU) and *Trifolium pratense* (red clover, FACU). This point failed to pass any indicators for the hydrophytic vegetation criterion. The soil profile did not meet any hydric soil indicators. No primary indicators and no secondary indicators of hydrology were observed. Since none of the three wetland indicators were met, this point was determined to be upland. Data Point 2 helped establish the wetland/upland boundary for Wetland 36. There was a distinct change in plant communities that was used in establishing the wetland/upland boundary.

Wetland 36 is located near the I-69 Northbound Bridge over Thorpe Creek (Exhibit 5, page 115). It is located on the I-69 northbound roadside slope and its primary source of hydrology is an underdrain. It is connected via a riprap lined ditch into Thorpe Creek. Thorpe Creek drains into Geist Reservoir, which drains into Fall Creek, which is a direct tributary to the West Fork White River, which is a direct tributary to the Wabash River, which outlets into the Ohio River (a traditionally navigable waterway). Therefore, this feature is likely a water of the U.S.

Wetland 37

Data Point 1 (Exhibit 8, pages 407 to 408) was dominated by *Typha spp.* (cattail, OBL) and *Hordeum jubatum* (fox-tail barley, FAC). This point passed the dominance and prevalence tests, and therefore met the hydrophytic vegetation criterion. The soil profile met the hydric soil criterion as it exhibited a Depleted Matrix (F3). One primary indicator (surface water) and one secondary indicator (FAC-neutral test) of hydrology were observed. Therefore, all three wetland criteria were met at Data Point 1. Although not classified as a potential wetland on the NWI Map (Exhibit 2, page 53), this area would likely be considered a temporarily flooded, palustrine, emergent wetland according to the Cowardin et. al. (1979) classification scheme. The quality of the wetland was considered poor due to low species diversity and the dominance of *Typha*.

Data Point 2 (Exhibit 8, pages 409 to 410) was dominated by *Festuca arundinacea* (Kentucky fescue, FACU). This point failed to pass any indicators for the hydrophytic vegetation criterion. The soil profile met the hydric soil criterion as it exhibited a Depleted Matrix (F3). No primary indicators and no secondary indicators of hydrology were observed. Since two of the three wetland indicators were not met, this point was determined to be upland. Data Point 2 helped establish the wetland/upland boundary for Wetland 37. There was a distinct change in plant communities that was used in establishing the wetland/upland boundary.

Wetland 37 is located near the I-69 Southbound Bridge over Thorpe Creek (Exhibit 5, page 115). It is located on the I-69 southbound roadside slope and its primary source of hydrology is an underdrain. It is connected via a riprap lined conveyance into Thorpe Creek. Thorpe Creek flows into Geist Reservoir, which drains into Fall Creek, which is a direct tributary to the West Fork White River, which is a direct tributary to the Wabash River, which outlets into the Ohio River (a traditionally navigable waterway). Therefore, this feature is likely a water of the U.S.

Wetland 38

Data Point 1 (Exhibit 8, pages 411 to 412) was dominated by *Typha spp.* (cattail, OBL) and *Eleocharis palustris* (common spike-rush, OBL). This point passed the rapid, dominance, and prevalence tests, and therefore met the hydrophytic vegetation criterion. The soil profile met the hydric soil criterion as it exhibited a Depleted Matrix (F3). One primary indicator (surface water) and one secondary indicator (FAC-neutral test) of hydrology were observed. Therefore, all three wetland criteria were met at Data Point 1. Although not classified as a potential wetland on the NWI Map (Exhibit 2, page 53), this area would likely be considered a temporarily flooded, palustrine, emergent wetland according to the Cowardin et. al. (1979) classification scheme. The quality of the wetland was considered poor due to low species diversity and the dominance of *Typha*.

Data Point 2 (Exhibit 8, pages 413 to 414) was dominated by *Festuca arundinacea* (Kentucky fescue, FACU). This point failed to pass any indicators for the hydrophytic vegetation criterion. The soil profile met the hydric soil criterion as it exhibited a Depleted Matrix (F3). No primary indicators and no secondary indicators of hydrology were observed. Since two of the three wetland indicators were not met, this point was determined to be upland. Data Point 2 helped establish the wetland/upland boundary for Wetland 38. There was a distinct change in plant communities that was used in establishing the wetland/upland boundary.

Wetland 38 is located within the S.R. 13 Interchange (Exhibit 5, page 116). It is located on the I-69 southbound roadside slope and its primary source of hydrology is an underdrain. It is connected, via several roadside drainages along the I-69 southbound on ramp, to Thorpe Creek. Thorpe Creek flows into Geist Reservoir, which drains into Fall Creek, which is a direct tributary to the West Fork White River, which is a

direct tributary to the Wabash River, which outlets into the Ohio River (a traditionally navigable waterway). Therefore, this feature is likely a water of the U.S.

Wetland 39

Data Point 1 (Exhibit 8, pages 415 to 416) was dominated by *Typha spp.* (cattail, OBL). This point passed the rapid, dominance, and prevalence tests, and therefore met the hydrophytic vegetation criterion. The soil profile met the hydric soil criterion as it exhibited a Depleted Matrix (F3). One primary indicator (saturation) and one secondary indicator (FAC-neutral test) for hydrology were observed. Therefore, all three wetland criteria were met at Data Point 1. Although not classified as a potential wetland on the NWI Map (Exhibit 2, page 53), this area would likely be considered a temporarily flooded, palustrine, emergent wetland according to the Cowardin et. al. (1979) classification scheme. The quality of the wetland was classified poor due to low species diversity and the dominance of *Typha*.

Data Point 2 (Exhibit 8, pages 417 to 418) was dominated by *Festuca arundinacea* (Kentucky fescue, FACU). This point failed to pass any indicators for the hydrophytic vegetation criterion. The soil profile met the hydric soil criterion as it exhibited a Depleted Matrix (F3). No primary indicators and no secondary indicators of hydrology were observed. Since two of the three wetland indicators were not met, this point was determined to be upland. Data Point 2 helped establish the wetland/upland boundary for Wetland 39. There was a distinct change in plant communities that was used in establishing the wetland/upland boundary.

Wetland 39 is located within the S.R. 13 Interchange (Exhibit 5, page 116). It is located on the I-69 northbound roadside slope and its primary source of hydrology is an underdrain. It is connected to a roadside conveyance that flows under the I-69 northbound off-ramp into another roadside conveyance connected Thorpe Creek. Thorpe Creek drains into Geist Reservoir, which drains into Fall Creek, which is a direct tributary to the West Fork White River, which is a direct tributary to the Wabash River, which outlets into the Ohio River (a traditionally navigable waterway). Therefore, this feature is likely a water of the U.S.

Wetland 40

Data Point 1 (Exhibit 8, pages 419 to 420) was dominated by *Typha spp.* (cattail, OBL) and *Hordeum jubatum* (fox-tail barley, FAC). This point passed the dominance and prevalence tests, and therefore met the hydrophytic vegetation criterion. The soil profile met the hydric soil criterion as it exhibited a Depleted Matrix (F3). One primary indicator (surface water) and one secondary indicator (FAC-neutral test) of hydrology were observed. Therefore, all three wetland criteria were met at Data Point 1. Although not classified as a potential wetland on the NWI Map (Exhibit 2, page 53), this area would likely be considered a temporarily flooded, palustrine, emergent wetland according to the Cowardin et. al. (1979) classification scheme. The quality of the wetland was considered poor due to low species diversity, the dominance of *Typha*, and the high prevalence of bare soil (40%).

Data Point 2 (Exhibit 8, pages 421 to 422) was dominated by *Festuca arundinacea* (Kentucky fescue, FACU). This point failed to pass any indicators for the hydrophytic vegetation criterion. The soil profile met the hydric soil criterion as it exhibited a Depleted Matrix (F3). No primary indicators and no secondary indicators of hydrology were observed. Since two of the three wetland indicators were not met, this point was determined to be upland. Data Point 2 helped establish the wetland/upland boundary for Wetland 40. There was a distinct change in plant communities that was used in establishing the wetland/upland boundary.

Wetland 40 is located within the S.R. 13 Interchange (Exhibit 5, page 116). It is located on the I-69 northbound roadside slope and its primary source of hydrology is an underdrain. It is connected via several roadside drainages into Thorpe Creek. Thorpe Creek flows into Geist Reservoir, which drains into Fall Creek, which is a direct tributary to the West Fork White River, which is a direct tributary to the Wabash River, which outlets to the Ohio River (a traditionally navigable waterway). Therefore, this feature is likely a water of the U.S.

Wetland 41

Data Point 1 (Exhibit 8, pages 423 to 424) was dominated by *Typha spp.* (cattail, OBL). This point passed the rapid, dominance, and prevalence tests, and therefore met the hydrophytic vegetation criterion. The soil

profile met the hydric soil criterion as it exhibited a Loamy Gleyed Matrix (F2). Two primary indicators (surface water and algal mat or crust) and one secondary indicator (FAC-neutral test) of hydrology were observed. Therefore, all three wetland criteria were met at Data Point 1. Although not classified as a potential wetland on the NWI Map (Exhibit 2, page 53), this area would likely be considered a temporarily flooded, palustrine, emergent wetland according to the Cowardin et. al. (1979) classification scheme. The quality of the wetland was considered poor due to low species diversity and the dominance of *Typha*.

Data Point 2 (Exhibit 8, pages 425 to 426) was dominated by *Festuca arundinacea* (Kentucky fescue, FACU). This point failed to pass any indicators for the hydrophytic vegetation criterion. The soil profile met the hydric soil criterion as it exhibited a Depleted Matrix (F3). No primary indicators and no secondary indicators of hydrology were observed. Since two of the three wetland indicators were not met, this point was determined to be upland. Data Point 2 helped establish the wetland/upland boundary for Wetland 41. There was a distinct change in plant communities that was used in establishing the wetland/upland boundary.

Wetland 41 is located within the S.R. 13 Interchange (Exhibit 5, page 116). It is located on the I-69 southbound roadside slope and its primary source of hydrology is an underdrain. It is connected via several vegetated roadside drainages Thorpe Creek. Thorpe Creek flows into Geist Reservoir, which drains into Fall Creek, which is a direct tributary to the West Fork White River, which is a direct tributary to the Wabash River, which outlets into the Ohio River (a traditionally navigable waterway). Therefore, this feature is likely a water of the U.S.

Wetland 42

Data Point 1 (Exhibit 8, pages 427 to 428) was dominated by *Lythrum salicaria* (purple loosestrife, OBL) and *Carex cristatella* (crested sedge, FACW). This point passed the rapid, dominance, and prevalence tests, and therefore met the hydrophytic vegetation criterion. The soil profile met the hydric soil criterion as it exhibited a Depleted Matrix (F3). Two secondary indicators (geomorphic position and FAC-neutral test) of hydrology were observed. Therefore, all three wetland criteria were met at Data Point 1. Although not classified as a potential wetland on the NWI Map (Exhibit 2, page 53), this area would likely be considered a temporarily flooded, palustrine, emergent wetland according to the Cowardin et. al. (1979) classification scheme. The quality of the wetland was considered poor due to low species diversity, the dominance of *Lythrum*, and its location within maintained INDOT right-of-way. The wetland does extend beyond the boundary of the roadside drainage at this location.

Data Point 2 (Exhibit 8, pages 429 to 430) was dominated by *Festuca arundinacea* (Kentucky fescue, FACU). This point failed to pass any indicators for hydrophytic vegetation criterion. The soil profile met the hydric soil criterion as it exhibited at Loamy Gleyed Matrix (F2). No primary indicators and no secondary indicators of hydrology were observed. Since two of the three wetland indicators were met, this point was determined to be upland. Data Point 2 helped establish the wetland/upland boundary for Wetland 42. There was a distinct change in plant communities, and a minor topographic change, that was used in establishing the wetland/upland boundary.

Wetland 42 is located approximately 0.25 mile east of the S.R. 13 Interchange (Exhibit 5, page 117). It drains under I-69 into a roadside conveyance that eventually discharges into Thorpe Creek. Thorpe Creek flows into Geist Reservoir, which drains into Fall Creek, which is a direct tributary to the West Fork White River, which is a direct tributary to the Wabash River, which outlets into the Ohio River (a traditionally navigable waterway). Therefore, this feature is likely a water of the U.S.

Miscellaneous Features

Non-Jurisdictional Features

Parsons met with representatives from INDOT, the Indiana Department of Environmental Management (IDEM), and the United States Army Corps of Engineers (USACE) on August 13, 2014 to discuss features identified during fieldwork. A follow-up field review with these agencies was held on August 18, 2014. Combined minutes from these two meetings are provided in Exhibit 9 (pages 436 to 441). An additional conference call between Parsons and the USACE on September 17, 2014 provided further guidance, and is summarized in Exhibit 9 (pages 442 to 444), as well.

As a result of this coordination, multiple features delineated by Parsons would not be considered jurisdictional, despite meeting all three wetland criteria. Based on agency coordination, features were considered non-jurisdictional if they were entirely contained within roadside drainage. If the feature extended beyond the existing ditchline, the feature was considered a wetland. The mapped soil unit did not factor into this determination.

Based on regulatory agency feedback, ninety (90) likely non-jurisdictional features that met the three wetland criteria, but fall under the USACE roadside ditch guidance, were delineated in the field. Table 5 (pages 40 to 43) summarizes these features. Their boundaries are included on the resource maps (Exhibit 5, pages 70 to 118), and each is documented in this report with a single photograph (Exhibit 6, pages 120 to 218).

Sand Creek Point 1

A data point (Exhibit 8, pages 431 to 432) was taken on a floodplain shelf at Sand Creek due to the presence of hydrophytic vegetation. The point was dominated by *Phalaris arundinacea* (reed canary grass, FACW) and *Equisetum arvense* (field horsetail, FAC) and therefore met the dominance and prevalence test for hydrophytic vegetation. The soil profile failed to meet any hydric soil indicators. Two secondary indicators (geomorphic position and FAC-neutral test) were observed. Since one of the three wetland indicators was not met, this area is likely upland.

Mud Creek Point 1

A data point (Exhibit 8, pages 433 to 434) was taken on a floodplain shelf at Mud Creek due to the presence of hydrophytic vegetation. The point was dominated by *Phalaris arundinacea* (reed canary grass, FACW) and *Ambrosia trifida* (great ragweed, FAC) and therefore met the dominance and prevalence test for hydrophytic vegetation. The soil profile failed to meet any hydric soil indicators. Two secondary indicators (geomorphic position and FAC-neutral test) were observed. Since one of the three wetland indicators was not met, this area is likely upland.

IV: Conclusions

Based on the field review, this project has features that are likely waters of the U.S. within the project limits.

A total of nineteen (19) streams totaling 17,605 linear feet were identified within the project limits. All roadside drainage features within the project limits were evaluated for an OHWM. Due to the large number of these features, only those that exhibited an OHWM are specifically detailed in this report. ***All roadside drainages not detailed in this report lacked OHWMs and are therefore not likely waters of the U.S.***

A total of forty-two (42) wetlands totaling 5.62 acres were identified within the project limits. Of these, the vast majority were emergent wetlands with the exception of four forested wetlands and one shrub-scrub wetland. Twenty-two (22) of these are likely jurisdictional, while the remaining twenty (20) are likely isolated.

Every effort should be taken to avoid impacts to the resources outlined in this report. If impacts will occur, waterway permits will be required and mitigation may be required. Impacts must be minimized before mitigation can be considered. INDOT's Ecology and Waterway Permitting Office (EWPO) staff should be contacted immediately if impacts will occur.

The conclusions in this report are the best judgment of Parsons and based on the guidelines set forth by the USACE. ***The final determination of jurisdictional waters, however, is ultimately made by the USACE.***

A preliminary jurisdictional determination (pre-JD) form is provided in Exhibit 10 (pages 446 to 452).

V. References

Cowardin, L.M, V. Carter, F.C. Golet, and E.T. LaRoe. 1979. *Classification of Wetlands and Deepwater Habitats of the United States*. U.S. Department of the Interior, Fish and Wildlife Service, Washington D.C.

Ohio EPA. 2012. Field Evaluation Manual for Ohio's Primary Headwater Habitat Streams. State of Ohio Environmental Protection Agency, Division of Surface Water.

Ohio EPA. 2006. Methods for Assessing Habitat in Flowing Waters: Using the Qualitative Habitat Evaluation Index (QHEI). State of Ohio Environmental Protection Agency, Division of Surface Water.

United States Army Corps of Engineers. 2014. Midwest 2014 Regional Plant List. Cold Regions Research and Engineering Laboratory.

United States Army Corps of Engineers. 2010. *Regional Supplement to the Corps of Engineers Wetland Delineation Manual: Midwest Region (Version 2.0)*. U.S. Army Engineer Research and Development Center, Washington D.C.

TABLES

TABLE 1: SOIL SUMMARY TABLE

TABLE 2: STREAM SUMMARY TABLE

TABLE 3: WETLAND SUMMARY TABLE

TABLE 4: WETLAND DATA POINT SUMMARY TABLE

TABLE 5: NON-JURISDICTIONAL FEATURES SUMMARY TABLE

**Table 1: Soil Summary Table
I-69 Interstate Expansion Projects 1, 2, and 3
Hamilton and Madison Counties, Indiana
Designation Numbers 1383332, 1383336, 1383489**

Abbreviation	Soil Name	Nationally Listed Hydric Soil (Y/N)	Hydric Component (%)
Br	Brookston silt loam	Yes	100
Bs	Brookston silty clay loam	Yes	100
CnB2	Celina silt loam	No	0
CrA	Crosby silt loam	No	1-32
MmA	Miami silt loam	No	0
MmB2	Miami silt loam	No	1-32
MmC2	Miami silt loam	Yes	1-32
MmD2	Miami silt loam	No	0
MoC3	Miami clay loam	No	0
MoD3	Miami clay loam	No	0
Or	Orthents	No	0
Pn	Patton silty clay loam	Yes	100
Sh	Shoals silt loam	No	0
St	Sleeth loam	No	0
W	Water	No	0

**Table 2: Stream Summary Table
I-69 Interstate Expansion Projects 1, 2, and 3
Hamilton and Madison Counties, Indiana
Designation Numbers 1383332, 1383336, and 1383489**

Stream Name	Photograph # (Exhibit 6)	Latitude/Longitude	Section, Township, Range	OHWL Width (ft)	OHWL Depth (in)	USGS Blue-line (Y/N)	Riffles/ Pools (Y/N)	Habitat Quality* (Qualitative)	HHEI/QHEI Score* *	Likely Waters of U.S. (Y/N)	Length in Project Limits (ft)	Stream Type
Cheeneey Creek	16,17,18	39.947832 N -86.014879 W	Sec 1 T17N R4E	10	22	Yes	Yes	Average	75	Yes	400	Perennial
UNT1 to Cheeneey Creek	22-27	39.953972 N -86.010587 W	Sec 1 T17N R4E	11	6	No	No	Poor	30	Yes	5,865	Intermittent
UNT2 to Cheeneey Creek	14,15	39.946620 N -86.014934 W	Sec1 T17N R4E	1	4	No	No	Poor	35	Yes	960	Ephemeral
UNT3 to Cheeneey Creek	18,19	39.949073 N -86.013086 W	Sec 1 T17N R4E	1	4	No	No	Poor	28	Yes	1,000	Ephemeral
UNT4 to Cheeneey Creek	20,21	39.948231 N -86.013557 W	Sec 1 T17N R4E	3	6	No	No	Poor	49	Yes	425	Perennial
UNT5 to Cheeneey Creek	3,4	39.941494 N -86.019577 W	Sec 12 T17N R4E	4	3	No	No	Poor	52	Yes	55	Ephemeral
Sand Creek	55-57	39.969304 N -85.975870 W	Sec 32 T18N R5E	21	28	Yes	Yes	Average	41.5	Yes	340	Perennial
UNT1 to Sand Creek	49-52	39.968671 N -85.979058 W	Sec 32 T18N R5E	1.5	8	No	No	Poor	20	Yes	1,930	Ephemeral
UNT2 to Sand Creek	53,54	39.969631 N -85.976066 W	Sec 32 T18N R5E	3	8	No	No	Poor	20	Yes	135	Ephemeral
UNT3 to Sand Creek	58,59	39.969063 N -85.975866 W	Sec 32 T18N R5E	1.3	7	No	No	Poor	10	Yes	100	Ephemeral
UNT4 to Sand Creek	60,61	39.970221 N -85.972345 W	Sec 33 T18N R5E	17	4	No	No	Poor	44	Yes	325	Perennial
UNT5 to Sand Creek	113,117	39.986532 N -85.937797 W	Sec 27 T18N R5E	10	5	No	Yes	Poor	50	Yes	260	Intermittent
Mud Creek	150-152	39.991031 N -85.902347 W	Sec 18 T18N R5E	27	54	Yes	Yes	Average	47	Yes	430	Perennial
UNT1 to Mud Creek	148,149	39.990680 N -85.903144 W	Sec 24 T18N R5E	0.5	3	No	No	Poor	9	Yes	2,920	Ephemeral
UNT2 to Mud Creek	153,154	39.990579 N -85.902138 W	Sec 24 T18N R5E	3	10	No	Yes	Average	32	Yes	200	Ephemeral
UNT3 to Mud Creek	158,159	39.990580 N -85.902244 W	Sec 24 T18N R5E	4	6	No	Yes	Poor	26	Yes	185	Ephemeral
Thorpe Creek	194-197	39.993419 N -85.848462 W	Sec 21 T18N R6E	8.5	6	Yes	Yes	Poor	35	Yes	370	Perennial
UNT1 to Thorpe Creek (John Underwood Drain)	171,172	39.991478 N -85.871661 W	Sec 20 T18N R6E	2.5	12	No	Yes	Poor	48	Yes	275	Perennial
UNT2 to Thorpe Creek	174,175	39.991175 N -85.871161 W	Sec 20 T18N R6E	1	4	No	No	Poor	16	Yes	1,430	Ephemeral
TOTAL											17605	

* Aquatic and terrestrial habitat quality within the project limits only
** Sample reach in some cases extended outside of the project limits

Table 3: Wetland Summary Table
I-69 Interstate Expansion Projects 1, 2, and 3
Hamilton and Madison Counties, Indiana
Designation Numbers 1383332, 1383336, and 1383489

Wetland Name	Photograph # (Exhibit 6)	Latitude/Longitude	Wetland Type	Area (Acres)	Quality	Likely Jurisdictional/Isolated
Wetland 01	1,2	39.941511 N -86.019662 W	Palustrine Emergent	0.0438	Poor	Jurisdictional
Wetland 02	5,6	39.942207 N -86.019095 W	Palustrine Emergent	0.0495	Poor	Jurisdictional
Wetland 03	9,10	39.942749 N -86.017783 W	Palustrine Emergent	0.1479	Poor	Jurisdictional
Wetland 04	7,8	39.942755 N -86.018625 W	Palustrine Emergent	0.0344	Poor	Jurisdictional
Wetland 05	28,29	39.963123 N -86.004264 W	Palustrine Emergent	0.0290	Poor	Jurisdictional
Wetland 06	31,32	39.965024 N -86.001207 W	Palustrine Emergent	0.4532	Poor	Isolated
Wetland 07	33,34	39.965956 N -86.000959 W	Palustrine Emergent	0.2222	Poor	Isolated
Wetland 08	37,38,39	39.967467 N -85.994772 W	Palustrine Emergent	0.7879	Poor	Isolated
Wetland 09	40,41	39.967663 N -85.993443 W	Palustrine Forested	0.0845	Average	Jurisdictional
Wetland 10	43,44	39.967081 N -85.993381 W	Palustrine Emergent	0.1198	Poor	Jurisdictional
Wetland 11	46,47	39.967321 N -85.990890 W	Palustrine Emergent	0.0556	Poor	Jurisdictional
Wetland 12	62,63	39.970826 N -85.970673 W	Palustrine Emergent	0.0216	Poor	Isolated
Wetland 13	66,67	39.972154 N -85.967835 W	Palustrine Emergent	0.1800	Poor	Isolated
Wetland 14	71	39.972774 N -85.966487 W	Palustrine Emergent	0.0084	Poor	Isolated
Wetland 15	75	39.975844 N -85.960098 W	Palustrine Emergent	0.0037	Poor	Isolated
Wetland 16	76, 77	39.976626 N -85.958684 W	Palustrine Emergent	0.1970	Poor	Isolated
Wetland 17	80,81	39.977147 N -85.957434 W	Palustrine Emergent	0.0350	Poor	Isolated
Wetland 18	82, 83	39.977592 N -85.956632 W	Palustrine Forested	0.0549	Average	Isolated
Wetland 19	89,90	39.979228 N -85.953082 W	Palustrine Emergent	0.2472	Poor	Isolated
Wetland 20	91,92	39.980530 N -85.950366 W	Palustrine Emergent	0.1946	Poor	Isolated
Wetland 21	100,101	39.983607 N -85.943890 W	Palustrine Emergent	0.0090	Poor	Isolated
Wetland 22	102,103	39.984029 N -85.943140 W	Palustrine Emergent	0.0659	Poor	Isolated
Wetland 23	105,106	39.984469 N -85.942132 W	Palustrine Emergent	0.0225	Poor	Isolated
Wetland 24	111-113	39.986690 N -85.937636 W	Palustrine Shrub-Scrub (0.1137 acre) and Palustrine Emergent (0.1583 acre)	0.2720	Average	Jurisdictional
Wetland 25	116,117	39.986188 N -85.937119 W	Palustrine Emergent	0.0072	Poor	Jurisdictional
Wetland 26	118,119	39.987122 N -85.935137 W	Palustrine Emergent	0.1881	Poor	Jurisdictional
Wetland 27	125,126	39.989670 N -85.927868 W	Palustrine Emergent	0.0592	Poor	Isolated
Wetland 28	127-130	39.991350 N -85.927043 W	Palustrine Forested (0.6932 acre) and Palustrine Emergent (0.1068 acre)	0.8000	Average	Isolated
Wetland 29	133-135	39.992603 N -85.924896 W	Palustrine Emergent	0.6763	Average	Isolated
Wetland 30	138,139	39.991734 N -85.923098 W	Palustrine Emergent	0.0110	Poor	Isolated
Wetland 31	145,146	39.991403 N -85.916568 W	Palustrine Emergent	0.0709	Average	Isolated
Wetland 32	155,156	39.990578 N -85.901911 W	Palustrine Forested	0.0947	Average	Jurisdictional
Wetland 33	180,181	39.991914 N -85.861960 W	Palustrine Emergent	0.0490	Poor	Jurisdictional
Wetland 34	192-194	39.993123 N -85.848439 W	Palustrine Emergent	0.0708	Poor	Jurisdictional
Wetland 35	194,198,199	39.993134 N -85.848327 W	Palustrine Emergent	0.0434	Poor	Jurisdictional
Wetland 36	200,201	39.993155 N -85.848169 W	Palustrine Emergent	0.0061	Poor	Jurisdictional
Wetland 37	202	39.993760 N -85.848281 W	Palustrine Emergent	0.0046	Poor	Jurisdictional
Wetland 38	205,206	39.994123 N -85.844783 W	Palustrine Emergent	0.0214	Poor	Jurisdictional
Wetland 39	207,208	39.993470 N -85.844670 W	Palustrine Emergent	0.0232	Poor	Jurisdictional
Wetland 40	216,217	39.993376 N -85.841504 W	Palustrine Emergent	0.0321	Poor	Jurisdictional
Wetland 41	214,215	39.994010 N -85.841344 W	Palustrine Emergent	0.0385	Poor	Jurisdictional
Wetland 42	218,219	39.992773 N -85.837616 W	Palustrine Emergent	0.0843	Poor	Jurisdictional
TOTAL				5.6205		

**Table 4: Wetland Data Point Summary Table
I-69 Interstate Expansion Projects 1, 2, and 3
Hamilton and Madison Counties Indiana
Designation Numbers 1383332, 1383336, and 1383489**

Wetland ID	Latitude/Longitude	Soil Unit	NWI (Y/N)	Quadrangle	Section Township Range	Wetland (Y/N)
Wetland 01 Point 1	39.941511 N -86.019662 W	Brookston silt loam	No	Fishers	Section 12 T17N R4E	Yes
Wetland 01 Point 2	39.941471 N -86.019665 W	Brookston silt loam	No	Fishers	Section 12 T17N R4E	No
Wetland 02 Point 1	39.942207 N -86.019095 W	Crosby silt loam	No	Fishers	Section 1 T17N R4E	Yes
Wetland 02 Point 2	39.942266 N -86.019062 W	Crosby silt loam	No	Fishers	Section 1 T17N R4E	No
Wetland 03 Point 1	39.942749 N -86.017783 W	Brookston silt loam	No	Fishers	Section 1 T17N R4E	Yes
Wetland 03 Point 2	39.942718 N -86.017780 W	Brookston silt loam	No	Fishers	Section 1 T17N R4E	No
Wetland 04 Point 1	39.942755 N -86.018625 W	Crosby silt loam	No	Fishers	Section 1 T17N R4E	Yes
Wetland 04 Point 2	39.942745 N -86.018655 W	Crosby silt loam	No	Fishers	Section 1 T17N R4E	No
Wetland 05 Point 1	39.963232 N -86.004232 W	Crosby silt loam	No	Fishers	Section 31 T18N R5E	Yes
Wetland 05 Point 2	39.963240 N -86.004221 W	Crosby silt loam	No	Fishers	Section 31 T18N R5E	No
Wetland 06 Point 1	39.965024 N -86.001207 W	Brookston silt loam	No	Fishers	Section 31 T18N R5E	Yes
Wetland 06 Point 2	39.964980 N -86.001174 W	Brookston silt loam	No	Fishers	Section 31 T18N R5E	No
Wetland 07 Point 1	39.966391 N -86.000065 W	Brookston silt loam	No	Fishers	Section 31 T18N R5E	Yes
Wetland 07 Point 2	39.966374 N -86.000048 W	Brookston silt loam	No	Fishers	Section 31 T18N R5E	No
Wetland 08 Point 1	39.967467 N -85.994772 W	Brookston silt loam	No	McCordsville	Section 31 T18N R5E	Yes
Wetland 08 Point 2	39.967442 N -85.994754 W	Brookston silt loam	No	McCordsville	Section 31 T18N R5E	No
Wetland 09 Point 1	39.967668 N -85.993323 W	Crosby silt loam	No	McCordsville	Section 32 T18N R5E	Yes
Wetland 09 Point 2	39.967664 N -85.993294 W	Crosby silt loam	No	McCordsville	Section 32 T18N R5E	No
Wetland 10 Point 1	39.967081 N -85.993381 W	Crosby silt loam	No	McCordsville	Section 32 T18N R5E	Yes
Wetland 10 Point 2	39.967071 N -85.993455 W	Crosby silt loam	No	McCordsville	Section 32 T18N R5E	No
Wetland 11 Point 1	39.967321 N -85.990890 W	Crosby silt loam	No	McCordsville	Section 32 T18N R5E	Yes
Wetland 11 Point 2	39.967362 N -85.990869 W	Crosby silt loam	No	McCordsville	Section 32 T18N R5E	No
Wetland 12 Point 1	39.970825 N -85.970641 W	Crosby silt loam	No	McCordsville	Section 33 T18N R5E	Yes
Wetland 12 Point 2	39.970822 N -85.970611 W	Crosby silt loam	No	McCordsville	Section 33 T18N R5E	No
Wetland 13 Point 1	39.971546 N -85.969042 W	Brookston silt loam	No	McCordsville	Section 33 T18N R5E	Yes
Wetland 13 Point 2	39.971568 N -85.969061 W	Brookston silt loam	No	McCordsville	Section 33 T18N R5E	No
Wetland 14 Point 1	39.972754 N -85.966506 W	Crosby silt loam	No	McCordsville	Section 28 T18N R5E	Yes
Wetland 14 Point 2	39.972752 N -85.966528 W	Crosby silt loam	No	McCordsville	Section 28 T18N R5E	No
Wetland 15 Point 1	39.975828 N -85.960097 W	Brookston silt loam	No	McCordsville	Section 28 T18N R5E	Yes
Wetland 15 Point 2	39.975819 N -85.960093 W	Brookston silt loam	No	McCordsville	Section 28 T18N R5E	No
Wetland 16 Point 1	39.976389 N -85.958963 W	Brookston silt loam	No	McCordsville	Section 28 T18N R5E	Yes
Wetland 16 Point 2	39.976389 N -85.958944 W	Brookston silt loam	No	McCordsville	Section 28 T18N R5E	No
Wetland 17 Point 1	39.977130 N -85.957401 W	Brookston silt loam	No	McCordsville	Section 28 T18N R5E	Yes
Wetland 17 Point 2	39.977118 N -85.957386 W	Brookston silt loam	No	McCordsville	Section 28 T18N R5E	No
Wetland 18 Point 1	39.977620 N -85.956577 W	Crosby silt loam	No	McCordsville	Section 28 T18N R5E	Yes
Wetland 18 Point 2	39.977555 N -85.956590 W	Crosby silt loam	No	McCordsville	Section 28 T18N R5E	No
Wetland 19 Point 1	39.979623 N -85.952279 W	Brookston silt loam	No	McCordsville	Section 27 T18N R5E	Yes
Wetland 19 Point 2	39.979574 N -85.952250 W	Brookston silt loam	No	McCordsville	Section 27 T18N R5E	No
Wetland 20 Point 1	39.980628 N -85.950198 W	Brookston silt loam	No	McCordsville	Section 27 T18N R5E	Yes
Wetland 20 Point 2	39.980571 N -85.950147 W	Brookston silt loam	No	McCordsville	Section 27 T18N R5E	No
Wetland 21 Point 1	39.983605 N -85.943915 W	Brookston silt loam	No	McCordsville	Section 27 T18N R5E	Yes
Wetland 21 Point 2	39.983602 N -85.943926 W	Brookston silt loam	No	McCordsville	Section 27 T18N R5E	No
Wetland 22 Point 1	39.984160 N -85.942821 W	Brookston silt loam	No	McCordsville	Section 27 T18N R5E	Yes
Wetland 22 Point 2	39.984150 N -85.942804 W	Brookston silt loam	No	McCordsville	Section 27 T18N R5E	No
Wetland 23 Point 1	39.984541 N -85.941900 W	Brookston silt loam	No	McCordsville	Section 27 T18N R5E	Yes
Wetland 23 Point 2	39.984547 N -85.941908 W	Brookston silt loam	No	McCordsville	Section 27 T18N R5E	No
Wetland 24 Point 1	39.986738 N -85.937508 W	Brookston silt loam	No	McCordsville	Section 26 T18N R5E	Yes
Wetland 24 Point 2	39.986697 N -85.937473 W	Brookston silt loam	No	McCordsville	Section 26 T18N R5E	No
Wetland 25 Point 1	39.986181 N -85.937131 W	Brookston silt loam	No	McCordsville	Section 26 T18N R5E	Yes
Wetland 25 Point 2	39.986190 N -85.937143 W	Brookston silt loam	No	McCordsville	Section 26 T18N R5E	No
Wetland 26 Point 1	39.987002 N -85.935515 W	Brookston silt loam	No	McCordsville	Section 26 T18N R5E	Yes
Wetland 26 Point 2	39.987002 N -85.935526 W	Brookston silt loam	No	McCordsville	Section 26 T18N R5E	No
Wetland 27 Point 1	39.989690 N -85.927774 W	Brookston silt loam	No	McCordsville	Section 23 T18N R5E	Yes
Wetland 27 Point 2	39.989714 N -85.927693 W	Brookston silt loam	No	McCordsville	Section 23 T18N R5E	No
Wetland 28 Point 1	39.991665 N -85.927061 W	Brookston silt loam	Yes	McCordsville	Section 23 T18N R5E	Yes
Wetland 28 Point 2	39.991262 N -85.927111 W	Brookston silt loam	Yes	McCordsville	Section 23 T18N R5E	Yes
Wetland 28 Point 3	39.991753 N -85.927156 W	Brookston silt loam	No	McCordsville	Section 23 T18N R5E	No
Wetland 28 Point 4	39.991379 N -85.926600 W	Brookston silt loam	No	McCordsville	Section 23 T18N R5E	Yes

**Table 4: Wetland Data Point Summary Table (cont.)
I-69 Interstate Expansion Projects 1, 2, and 3
Hamilton and Madison Counties Indiana
Designation Numbers 1383332, 1383336, and 1383489**

Wetland 29 Point 1	39.992423 N -85.925063 W	Crosby silt loam	No	McCordsville	Section 23 T18N R5E	Yes
Wetland 29 Point 2	39.992410 N -85.925076 W	Crosby silt loam	No	McCordsville	Section 23 T18N R5E	No
Wetland 30 Point 1	39.991767 N -85.923094 W	Brookston silt loam	No	McCordsville	Section 23 T18N R5E	Yes
Wetland 30 Point 2	39.991771 N -85.923110 W	Brookston silt loam	No	McCordsville	Section 23 T18N R5E	No
Wetland 31 Point 1	39.991404 N -85.916771 W	Brookston silt loam	No	McCordsville	Section 24 T18N R5E	Yes
Wetland 31 Point 2	39.991395 N -85.916780 W	Brookston silt loam	No	McCordsville	Section 24 T18N R5E	No
Wetland 32 Point 1	39.990576 N -85.901688 W	Shoals silt loam	No	McCordsville	Section 24 T18N R5E	Yes
Wetland 32 Point 2	39.990612 N -85.901690 W	Shoals silt loam	No	McCordsville	Section 24 T18N R5E	No
Wetland 33 Point 1	39.991924 N -85.862008 W	Brookston silty clay loam	No	Ingalls	Section 21 T18N R6E	Yes
Wetland 33 Point 2	39.991935 N -85.862007 W	Brookston silty clay loam	No	Ingalls	Section 21 T18N R6E	No
Wetland 34 Point 1	39.993176 N -85.848432 W	Brookston silty clay loam	No	Ingalls	Section 21 T18N R6E	Yes
Wetland 34 Point 2	39.993187 N -85.848471 W	Brookston silty clay loam	No	Ingalls	Section 21 T18N R6E	No
Wetland 35 Point 1	39.993196 N -85.848376 W	Brookston silty clay loam	No	Ingalls	Section 21 T18N R6E	Yes
Wetland 35 Point 2	39.993199 N -85.848348 W	Brookston silty clay loam	No	Ingalls	Section 21 T18N R6E	No
Wetland 36 Point 1	39.993153 N -85.848156 W	Brookston silty clay loam	No	Ingalls	Section 21 T18N R6E	Yes
Wetland 36 Point 2	39.993154 N -85.848139 W	Brookston silty clay loam	No	Ingalls	Section 21 T18N R6E	No
Wetland 37 Point 1	39.993757 N -85.848283 W	Crosby silt loam	No	Ingalls	Section 21 T18N R6E	Yes
Wetland 37 Point 2	39.993761 N -85.848250 W	Crosby silt loam	No	Ingalls	Section 21 T18N R6E	No
Wetland 38 Point 1	39.994088 N -85.844792 W	Brookston silty clay loam	No	Ingalls	Section 21 T18N R6E	Yes
Wetland 38 Point 2	39.994086 N -85.844804 W	Brookston silty clay loam	No	Ingalls	Section 21 T18N R6E	No
Wetland 39 Point 1	39.993483 N -85.844652 W	Brookston silty clay loam	No	Ingalls	Section 21 T18N R6E	Yes
Wetland 39 Point 2	39.993483 N -85.844617 W	Brookston silty clay loam	No	Ingalls	Section 21 T18N R6E	No
Wetland 40 Point 1	39.993404 N -85.841538 W	Crosby silt loam	No	Ingalls	Section 22 T18N R6E	Yes
Wetland 40 Point 2	39.993402 N -85.841563 W	Crosby silt loam	No	Ingalls	Section 22 T18N R6E	No
Wetland 41 Point 1	39.994038 N -85.841364 W	Brookston silty clay loam	No	Ingalls	Section 22 T18N R6E	Yes
Wetland 41 Point 2	39.994041 N -85.841385 W	Brookston silty clay loam	No	Ingalls	Section 22 T18N R6E	No
Wetland 42 Point 1	39.992809 N -85.837827 W	Brookston silty clay loam	No	Ingalls	Section 22 T18N R6E	Yes
Wetland 42 Point 2	39.992838 N -85.837821 W	Brookston silty clay loam	No	Ingalls	Section 22 T18N R6E	No
Sand Creek Point 1	39.969305 N -85.975931 W	Shoals silt loam	No	McCordsville	Sec 32 T18N R5E	No
Mud Creek Point 1	39.991440 N -85.902151 W	Shoals silt loam	No	McCordsville	Section 18 T18N R5E	No

**Table 5: Non-Jurisdictional Features Summary Table
I-69 Interstate Expansion Projects 1, 2, and 3
Hamilton and Madison Counties, Indiana
Designation Numbers 1383332, 1383336, and 1383489**

Feature Name	Photograph # (Exhibit 6)	Latitude/Longitude	Area (Acre)
A	11	39.943429 N -86.018083 W	0.0257
B	12	39.946415 N -86.015915 W	0.0045
C	13	39.946832 N -86.015598 W	0.0104
D	224	39.957473 N -86.006833 W	0.1922
E	30	39.963327 N -86.003191 W	0.0081
F	35	39.966185 N -85.999889 W	0.0171
G	36	39.967141 N -85.995718 W	0.0916
H	42	39.967368 N -85.993444 W	0.0054
I	45	39.967750 N -85.990081 W	0.0472
J	48	39.968009 N -85.985358 W	0.0700
K	50	39.968336 N -85.982437 W	0.0126
L	64	39.970665 N -85.970207 W	0.0080
M	65	39.970565 N -85.969881 W	0.0151
N	68	39.971418 N -85.968645 W	0.0194
O	69	39.971982 N -85.967499 W	0.0060
P	70	39.972087 N -85.966657 W	0.0132
Q	72	39.973476 N -85.964357 W	0.0053
R	73	39.973777 N -85.963769 W	0.0031
S	74	39.975041 N -85.960519 W	0.0327
T	225	39.975380 N -85.960424 W	0.0065
U	78	39.976718 N -85.957084 W	0.1190
V	79	39.976748 N -85.957563 W	0.0220
W	84	39.977259 N -85.956503 W	0.0082
X	85	39.977649 N -85.955675 W	0.0085
Y	86	39.978181 N -85.954027 W	0.0048
Z	87	39.978725 N -85.952867 W	0.0090
AA	88	39.978829 N -85.952634 W	0.0256
AB	93	39.980112 N -85.949956 W	0.0012
AC	94	39.981142 N -85.947795 W	0.0246
AD	95	39.981748 N -85.947139 W	0.0067
AE	96	39.982712 N -85.944539 W	0.0014
AF	97	39.983070 N -85.944367 W	0.0031
AG	98	39.982961 N -85.943996 W	0.0122
AH	99	39.983140 N -85.943533 W	0.0041
AI	104	39.984137 N -85.942167 W	0.0055
AJ	107	39.984811 N -85.940755 W	0.0947
AK	108	39.984830 N -85.941316 W	0.0212
AL	109	39.984508 N -85.940786 W	0.0145
AM	110	39.985246 N -85.939235 W	0.0038

**Table 5: Non-Jurisdictional Features Summary Table (cont.)
I-69 Interstate Expansion Projects 1, 2, and 3
Hamilton and Madison Counties, Indiana
Designation Numbers 1383332, 1383336, and 1383489**

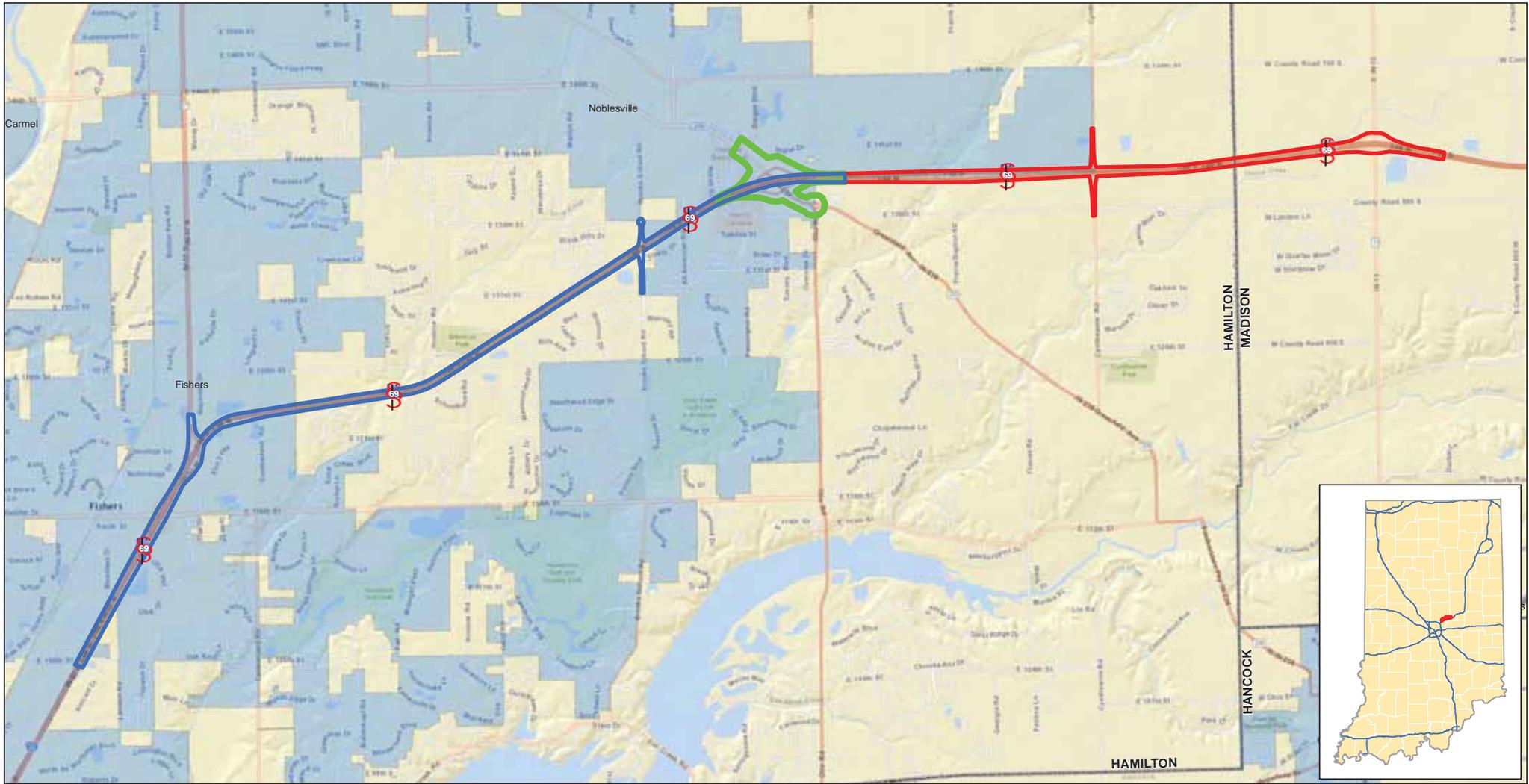
AN	114	39.986203 N -85.937833 W	0.0030
AO	115	39.986021 N -85.937639 W	0.0056
AP	120	39.988201 N -85.934236 W	0.0026
AQ	121	39.989106 N -85.932128 W	0.0107
AR	122	39.989480 N -85.931133 W	0.0077
AS	123	39.990264 N -85.928681 W	0.0092
AT	124	39.990155 N -85.927764 W	0.0168
AU	131	39.990703 N -85.926369 W	0.0188
AV	132	39.989597 N -85.925835 W	0.0023
AW	136	39.991630 N -85.924286 W	0.0409
AX	137	39.989392 N -85.923499 W	0.0226
AY	140	39.990333 N -85.921838 W	0.0718
AZ	141	39.991495 N -85.921342 W	0.0300
BA	142	39.990736 N -85.917909 W	0.2475
BB	143	39.991066 N -85.919746 W	0.0055
BC	144	39.991382 N -85.918095 W	0.0247
BD	147	39.991074 N -85.913806 W	0.0105
BE	157	39.991044 N -85.901869 W	0.0681
BF	163	39.990761 N -85.892170 W	0.0182
BG	164	39.991006 N -85.881459 W	0.0173
BH	165	39.991034 N -85.880925 W	0.0032
BI	166	39.991354 N -85.879614 W	0.0707
BJ	167	39.991695 N -85.879358 W	0.2621
BK	226	39.991045 N -85.879365 W	0.0092
BL	168	39.991380 N -85.878149 W	0.0556
BM	169	39.991165 N -85.872749 W	0.1869
BN	170	39.991450 N -85.873191 W	0.0141
BO	173	39.991248 N -85.870089 W	0.0765
BP	176	39.991538 N -85.869711 W	0.0207
BQ	177	39.99215 N -85.864781 W	0.0957
BR	178	39.991623 N -85.865375 W	0.0109
BS	179	39.992115 N -85.862689 W	0.0089
BT	182	39.992082 N -85.860385 W	0.0263
BU	183	39.992575 N -85.860353 W	0.0229
BV	184	39.992439 N -85.859250 W	0.0064
BW	185	39.992518 N -85.858365 W	0.0068
BX	186	39.992841 N -85.854888 W	0.0591
BY	187	39.993221 N -85.853846 W	0.0290
BZ	188	39.992921 N -85.853992 W	0.0087
CA	189	39.993722 N -85.849099 W	0.4078
CB	190	39.993055 N -85.848864 W	0.2949

**Table 5: Non-Jurisdictional Features Summary Table (cont.)
I-69 Interstate Expansion Projects 1, 2, and 3
Hamilton and Madison Counties, Indiana
Designation Numbers 1383332, 1383336, and 1383489**

CC	191	39.993086 N -85.852262 W	0.0136
CD	203	39.994470 N -85.845244 W	0.3243
CE	204	39.993063 N -85.844616 W	0.3269
CF	209	39.993249 N -85.843627 W	0.0365
CG	210	39.993037 N -85.842048 W	0.2222
CH	213	39.993301 N 85.836903 W	0.9588
CI	212	39.99458 N -85.842686 W	0.0164
CJ	211	39.993232 N -85.842364 W	0.0129
CK	220	39.993088 N -85.837616 W	0.0020
CL	221	39.993013 N -85.837095 W	0.0087
CM	222	39.992602 N -85.836130 W	0.2437
CN	223	39.992545 N -85.834041 W	0.0036
TOTAL			5.4640

EXHIBIT 1

PROJECT LOCATION MAP



ESRI Map Projection: Indiana State Plane East Datum: NAD 1983

Legend

- Project Area 1
- Project Area 3
- Project Area 2
- Indiana County Lines
- Incorporated Areas

0 0.5 1 2 Miles

1 inch = 3,500 feet

9

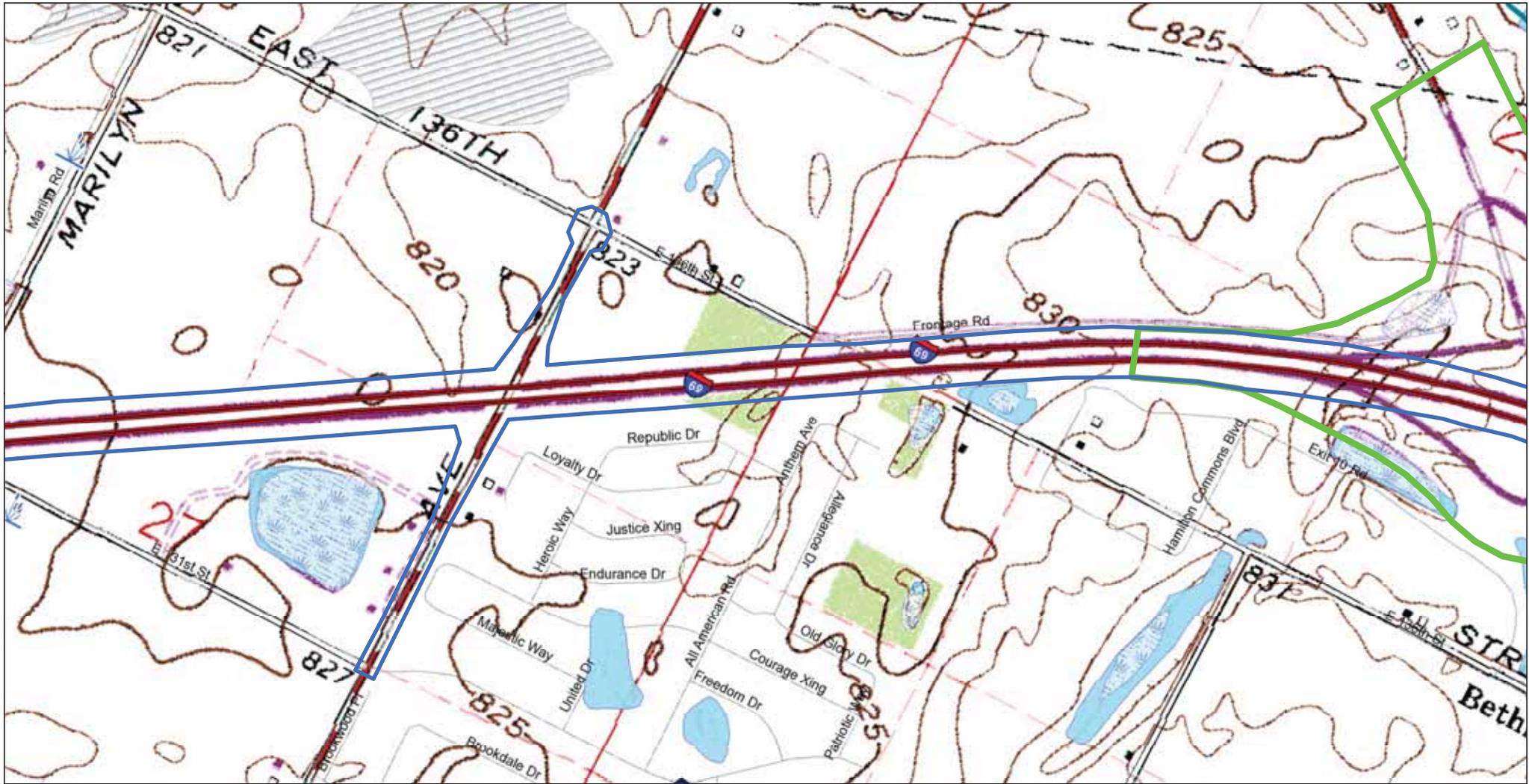
Service Layer Credits: Sources: Esri, HERE, DeLorme, USGS, Intermap, increment P Corp., NRCAN, Esri Japan, METI, Esri China (Hong Kong), Esri (Thailand), TomTom, MapmyIndia, © OpenStreetMap contributors, and the GIS

Exhibit 1: Project Location Map	
Des. 1383332, 1383336, 1383489 Date: 10/6/2014 Created By: WCK	<h1 style="margin: 0;">PARSONS</h1>

EXHIBIT 2

NATIONAL WETLANDS INVENTORY (NWI) OVERVIEW

Pages applicable to Project 2. All other pages have been deleted.



ESRI Map Projection: Indiana State Plane East Datum: NAD 1983

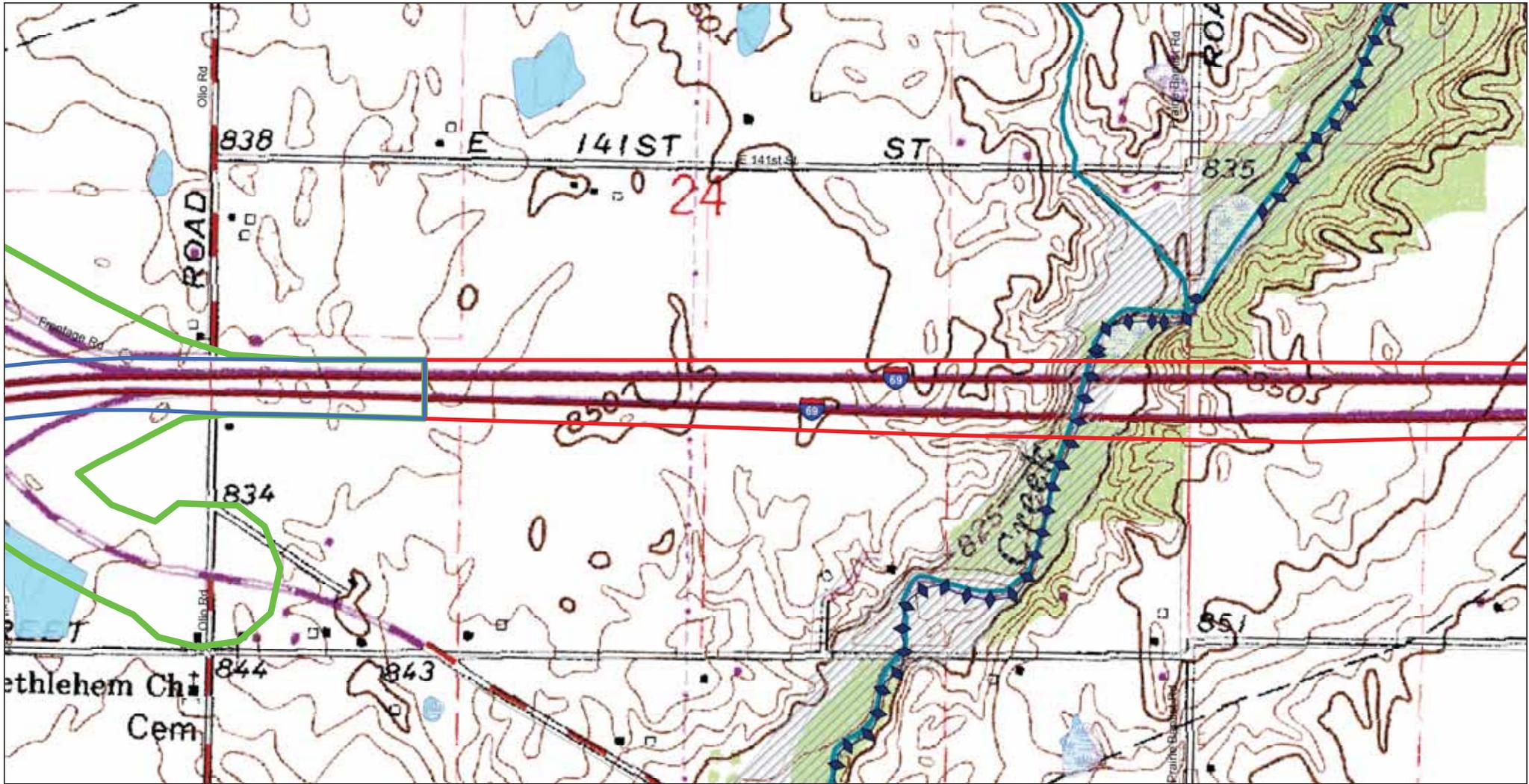


Sources:
 Non Orthophotography Data -
 Obtained from the State
 of Indiana Geographical
 Information Office Library
 Orthophotography -
 Obtained from Indiana
 Map Framework Data
 (www.indianamap.org)

Exhibit 2: National Wetlands Inventory (NWI) Overview
 Sheet 4 of 7

Des. 1383332,
 1383336, 1383489
 Date: 10/2/2014
 Created By: WCK





ESRI Map Projection: Indiana State Plane East Datum: NAD 1983

Legend			

Sources:
 Non Orthophotography Data -
 Obtained from the State
 of Indiana Geographical
 Information Office Library
 Orthophotography -
 Obtained from Indiana
 Map Framework Data
 (www.indianamap.org)

Exhibit 2: National Wetlands Inventory (NWI) Overview
 Sheet 5 of 7

Des. 1383332,
 1383336, 1383489
 Date: 10/2/2014
 Created By: WCK

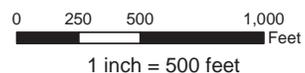
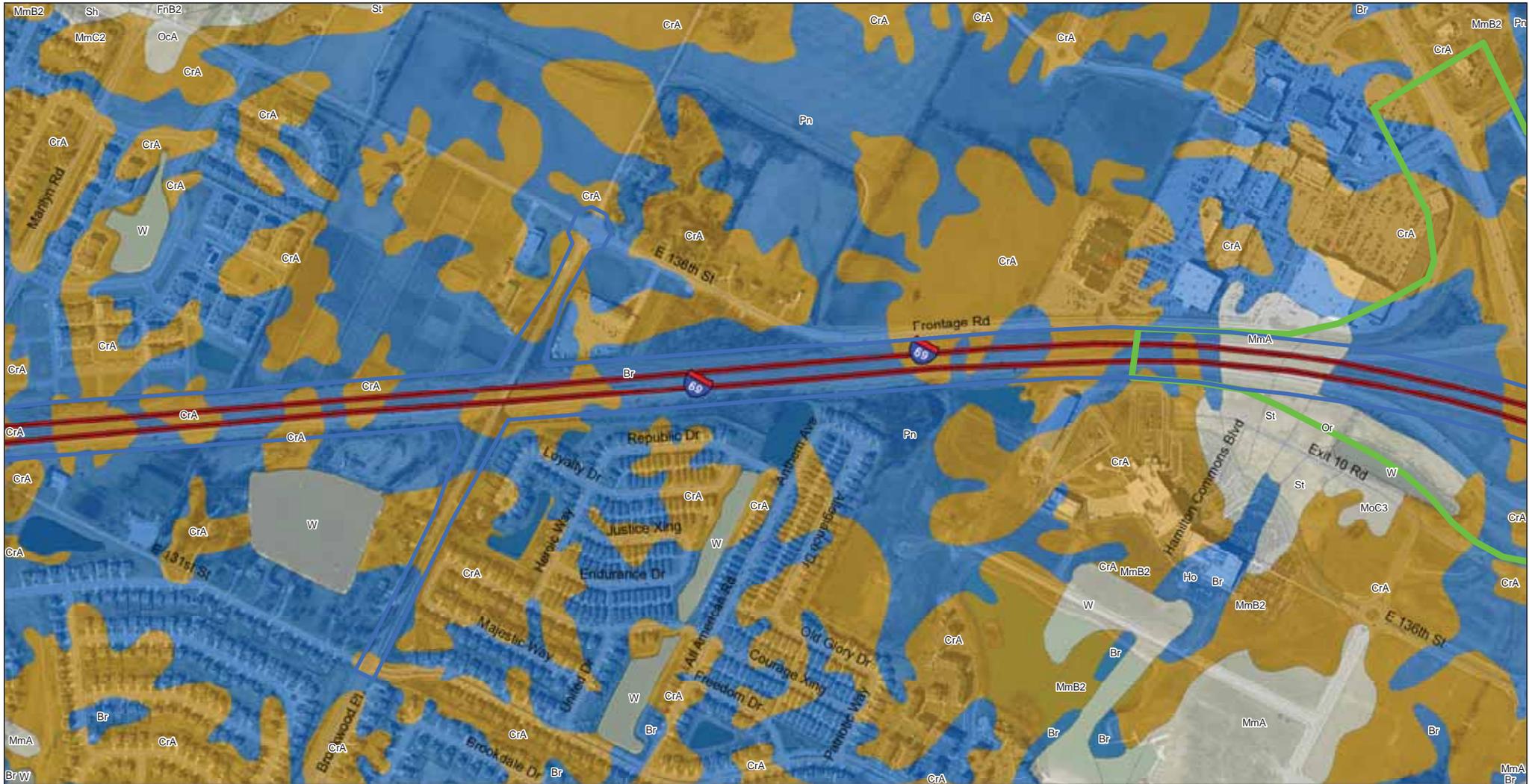


EXHIBIT 3

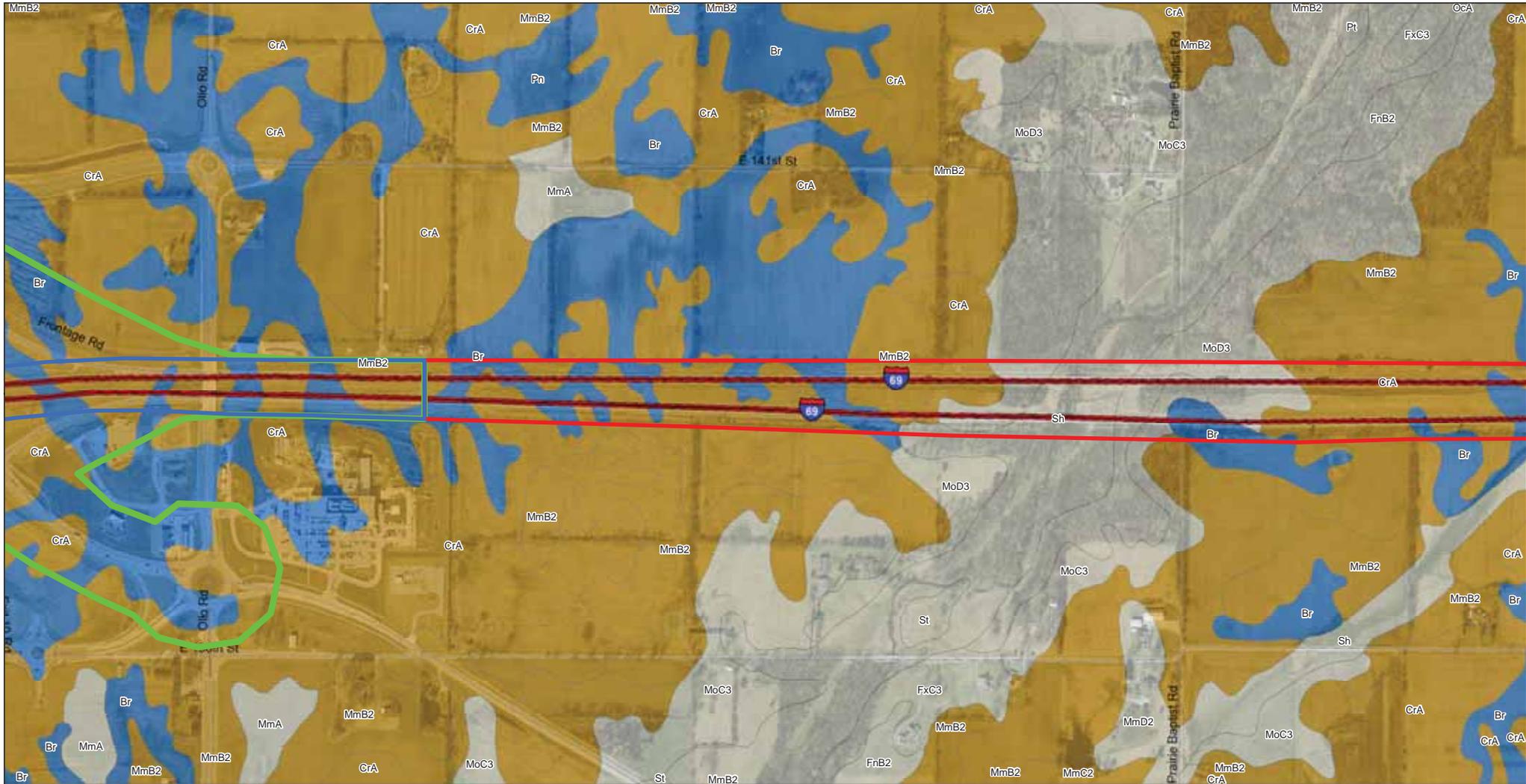
MAPPED SOIL UNITS

Pages applicable to Project 2. All other pages have been deleted.



Base Map: Indiana Spatial Data Portal, UITS, ESRI Map Projection: Indiana State Plane East Datum: NAD 1983

Legend Project Area 1 (Blue outline) Project Area 2 (Green outline) Project Area 3 (Red outline)		Hydric Classification-Presence Hydric (100%) (Blue) Predominantly Hydric (66-99%) (Light Blue) Partially Hydric (33-65%) (Yellow) Predominantly Non-hydric (1-32%) (Tan) Not Hydric (0%) (White)		State Routes Interstates (Red line) State Routes (Black line) US Routes (Orange line) Local Road (Grey line)		 1 inch = 500 feet		Soil Survey Staff, Natural Resources Conservation Service, United States Department of Agriculture. Soil Survey Geographic (SSURGO) Database for Hamilton and Madison County, Indiana. Available online at http://www.arcgis.com/apps/OnePanel/basicviewer/index.html?appid=a23eb436f6ec4ad6982000dbaddea5ea . Accessed [8/2014].		Exhibit 3: Mapped Soil Units Sheet 4 of 7			
										Des. 1383332, 1383336, 1383489 Date: 9/30/2014 Created By: WCK			



Base Map: Indiana Spatial Data Portal, UITS, ESRI Map Projection: Indiana State Plane East Datum: NAD 1983

Legend Project Area 1 (Blue outline) Project Area 2 (Green outline) Project Area 3 (Red outline)		Hydric Classification-Presence Hydric (100%) Predominantly Hydric (66-99%) Partially Hydric (33-65%) Predominantly Non-hydric (1-32%) Not Hydric (0%)	State Routes Interstates (Red line) State Routes (Black line) US Routes (Orange line) Local Road (Grey line)
--	--	---	---

1 inch = 500 feet

Soil Survey Staff, Natural Resources Conservation Service, United States Department of Agriculture. Soil Survey Geographic (SSURGO) Database for Hamilton and Madison County, Indiana. Available online at <http://www.arcgis.com/apps/OnePane/basicviewer/index.html?appid=a23eb436f6ec4ad6982000dbaddea5ea>. Accessed [8/2014].

Exhibit 3: Mapped Soil Units Sheet 5 of 7	
Des. 1383332, 1383336, 1383489	
Date: 9/30/2014	
Created By: WCK	

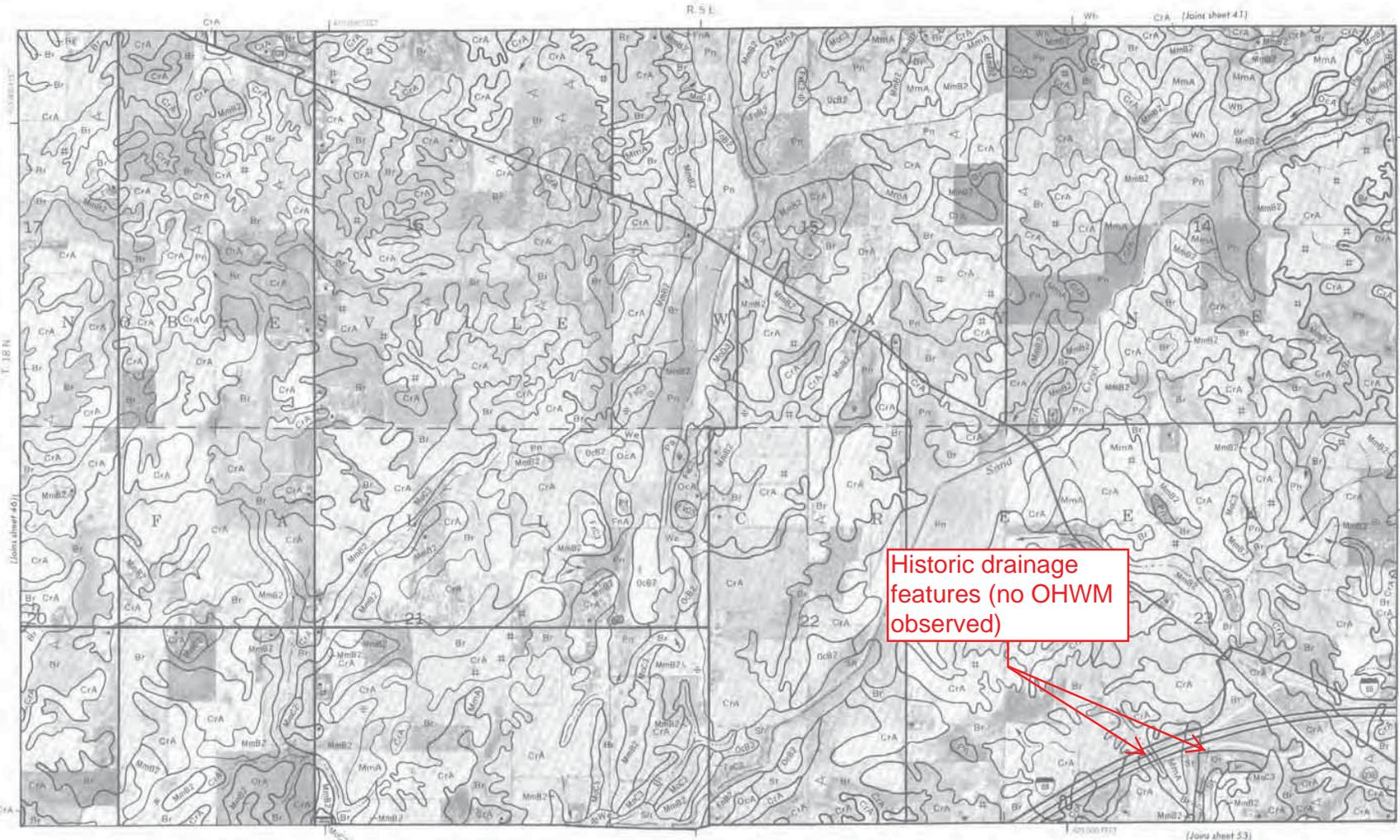
EXHIBIT 4

HISTORIC DRAINAGE

Pages applicable to Project 2. All other pages have been deleted.

Figure 4: Historic Drainage
Sheet 4 of 6

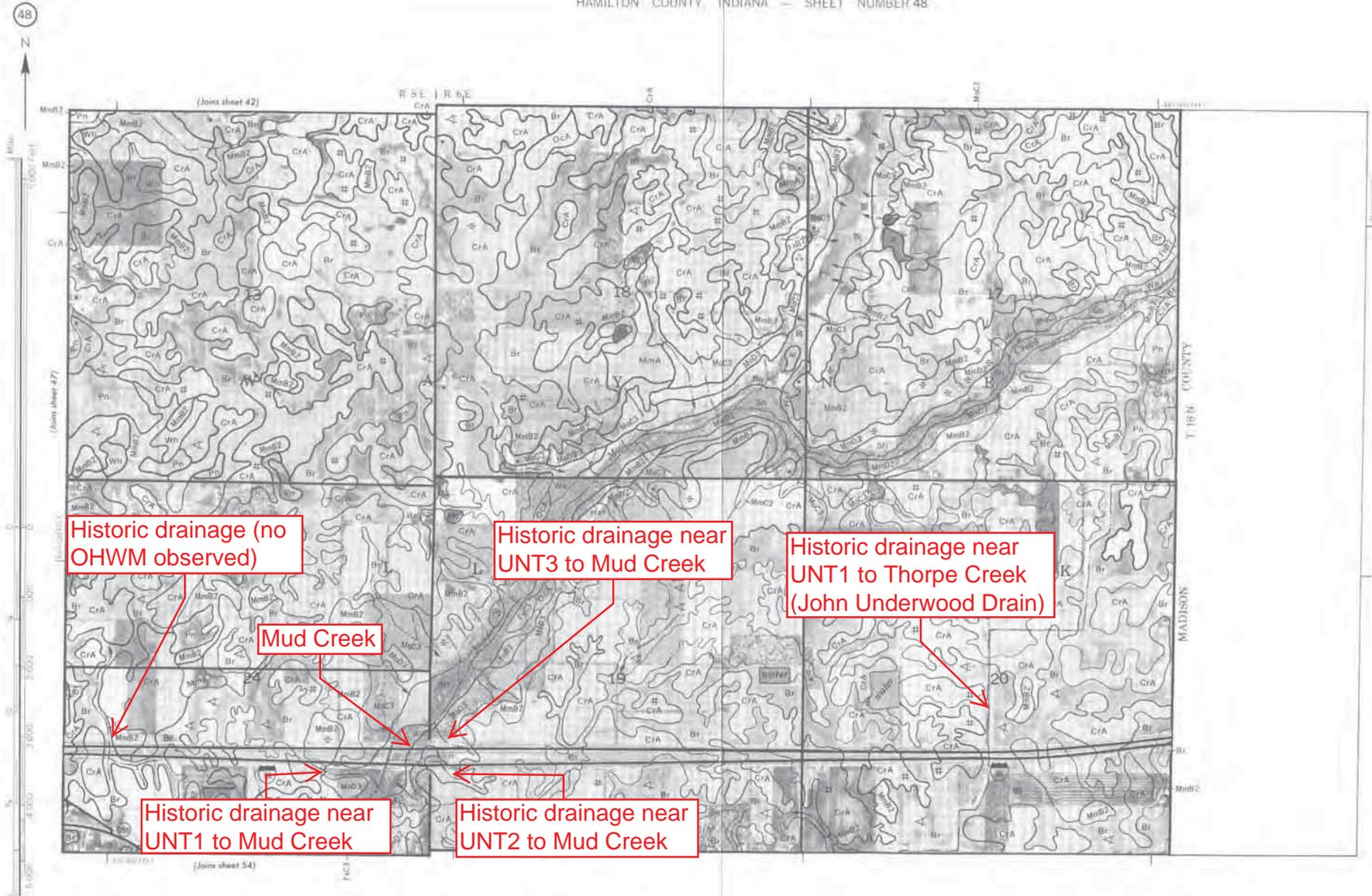
HAMILTON COUNTY, INDIANA - SHEET NUMBER 47



Source:
Soil Survey of Hamilton County, Indiana. United States
Department of Agriculture. 1978.

Figure 4: Historic Drainage
Sheet 5 of 6

HAMILTON COUNTY, INDIANA — SHEET NUMBER 48



Source:
Soil Survey of Hamilton County, Indiana. United States
Department of Agriculture. 1978.

EXHIBIT 5

RESOURCE MAPS

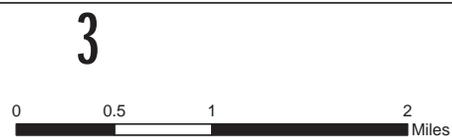
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ESRI Map Projection: NAD 1983 StatePlane Indiana East FIPS 1301 Feet Datum: NAD 1983

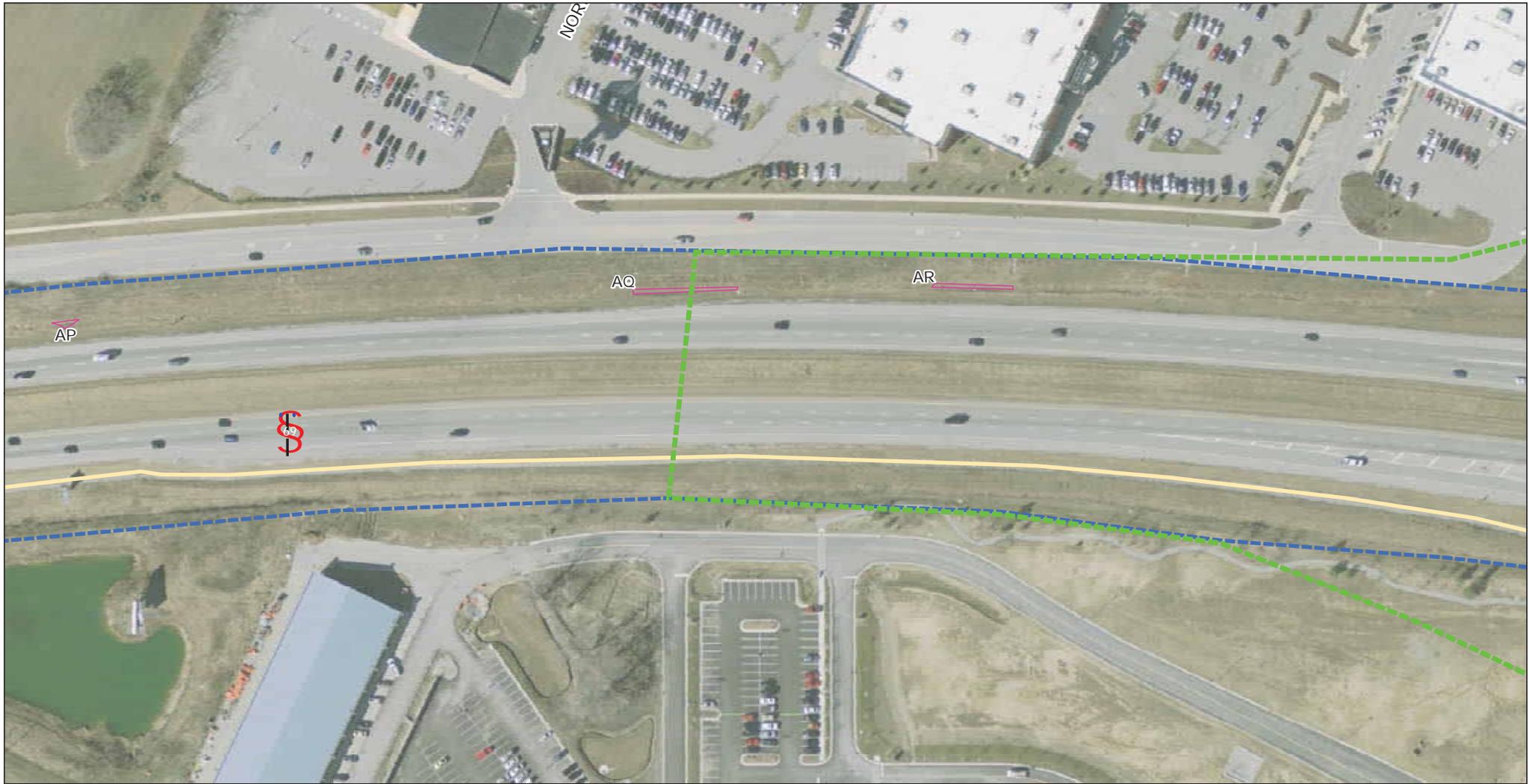
Legend

	Project Area 1
	Project Area 2
	Project Area 3
	I69ResourceMapStripMap



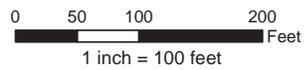
Sources:
 Non Orthophotography Data -
 Obtained from the State of
 Indiana Geographical
 Information Office Library
 Orthophotography -
 Obtained from Indiana
 Map Framework Data
 (www.indianamap.org)

Exhibit 5: Resource Map	
Des. 1383332, 1383336, 1383489	
Date: 10/2/2014	
Created By: WCK	



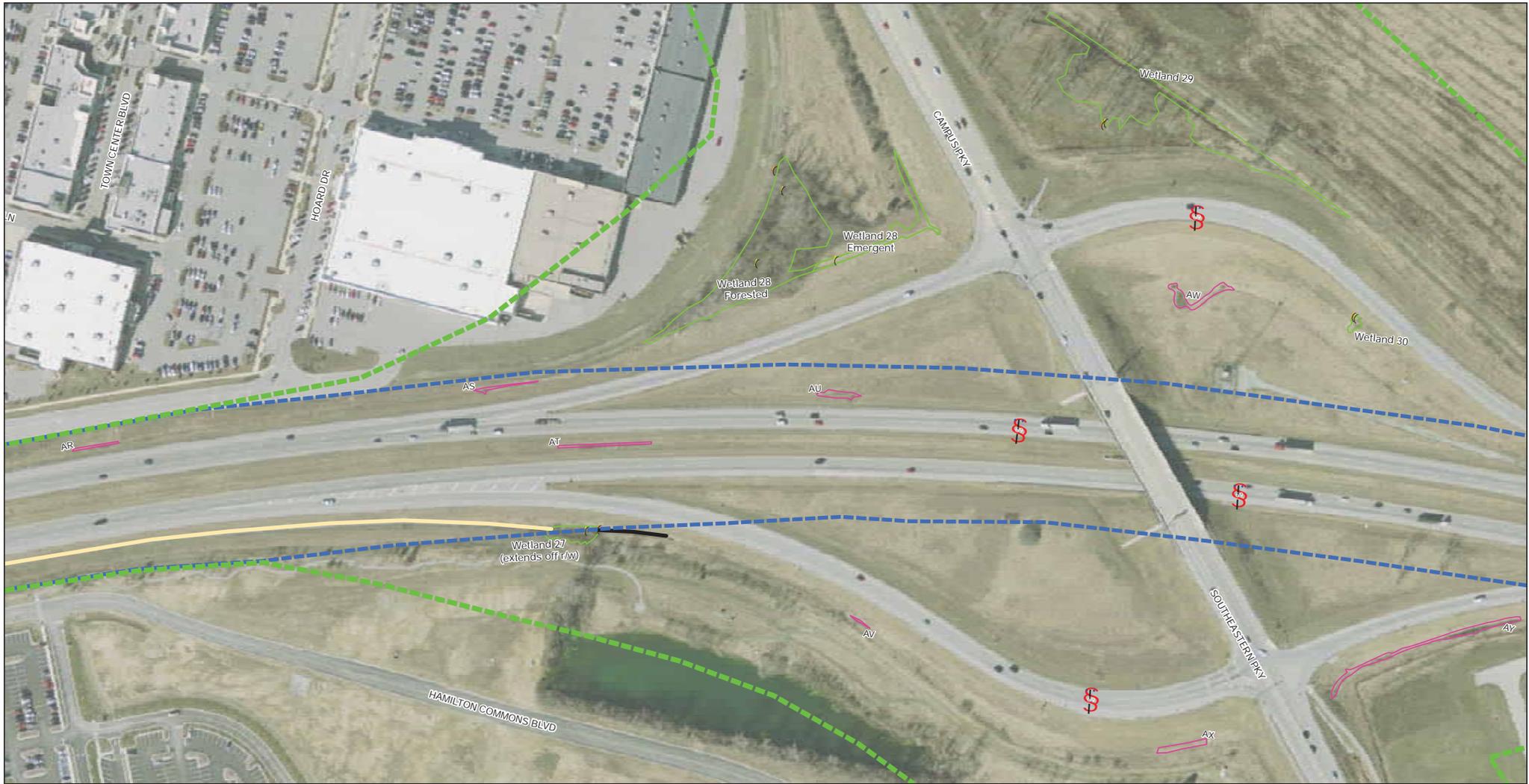
ESRI Map Projection: NAD 1983 StatePlane Indiana East FIPS 1301 Feet Datum: NAD 1983

Legend		
	Project Area 1	
	Project Area 2	
	Project Area 3	
	Concrete Lined Ditch	
	Riprap Lined Ditch	
	Wetland Data Point (In)	
	Wetland Data Point (out)	



Sources:
 Non Orthophotography Data -
 Obtained from the State of
 Indiana Geographical
 Information Office Library
 Orthophotography -
 Obtained from Indiana
 Map Framework Data
 (www.indianamap.org)

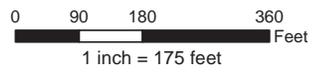
Exhibit 5: Resource Map Sheet 25 of 48	
Des. 1383332, 1383336, 1383489	
Date: 10/16/2014	
Created By: WCK	



ESRI Map Projection: NAD 1983 StatePlane Indiana East FIPS 1301 Feet Datum: NAD 1983

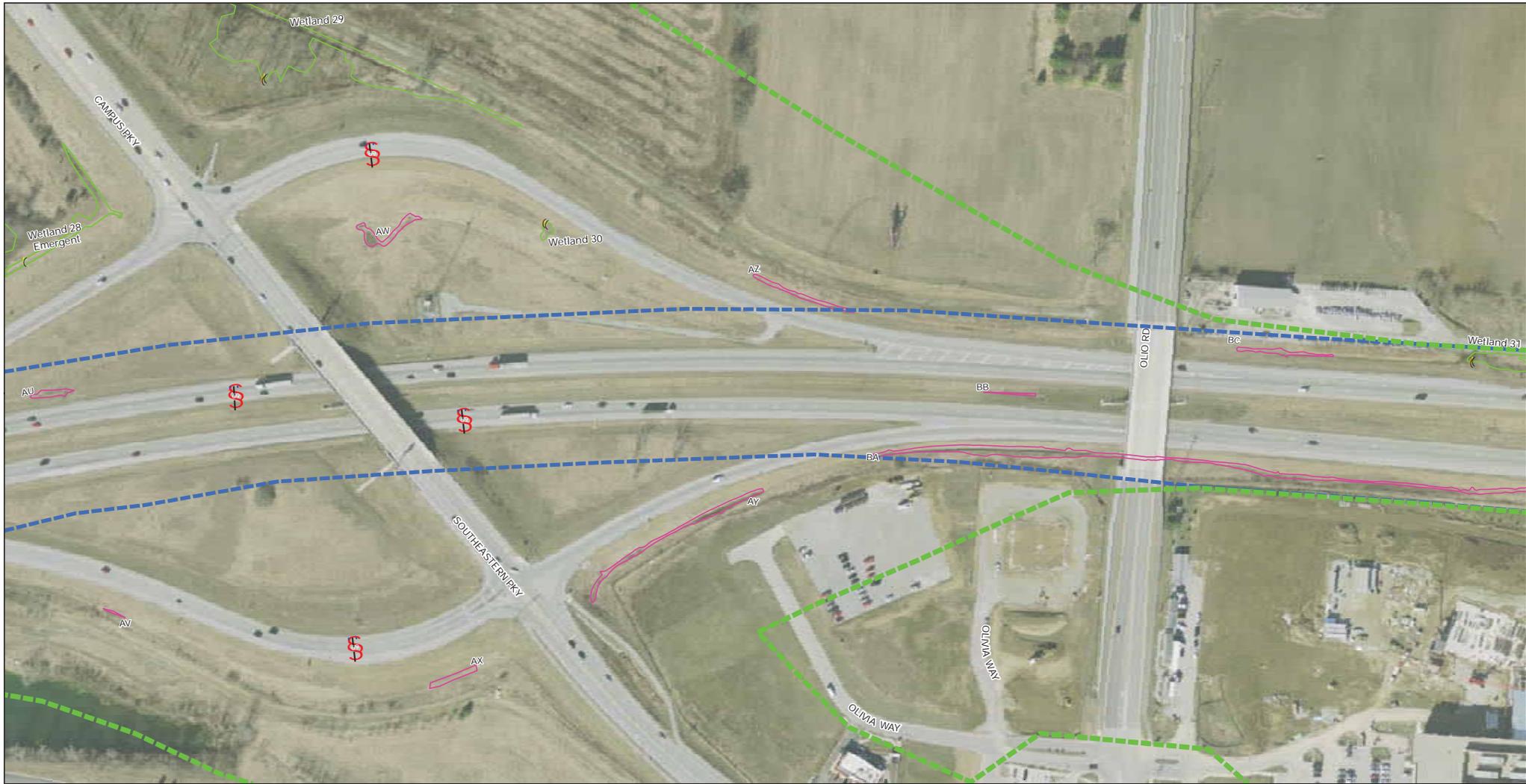
Legend	
	Project Area 1
	Project Area 2
	Project Area 3
	Wetland Data Point (In)
	Wetland Data Point (out)
	Concrete Lined Ditch
	Riprap Lined Ditch
	Streams
	Wetlands
	Non-Jurisdictional Features

3



Sources:
 Non Orthophotography Data -
 Obtained from the State of
 Indiana Geographical
 Information Office Library
 Orthophotography -
 Obtained from Indiana
 Map Framework Data
 (www.indianamap.org)

Exhibit 5: Resource Map Sheet 26 of 48	
Des. 1383332, 1383336, 1383489	
Date: 10/16/2014	
Created By: WCK	

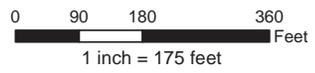


ESRI Map Projection: NAD 1983 StatePlane Indiana East FIPS 1301 Feet Datum: NAD 1983

Legend

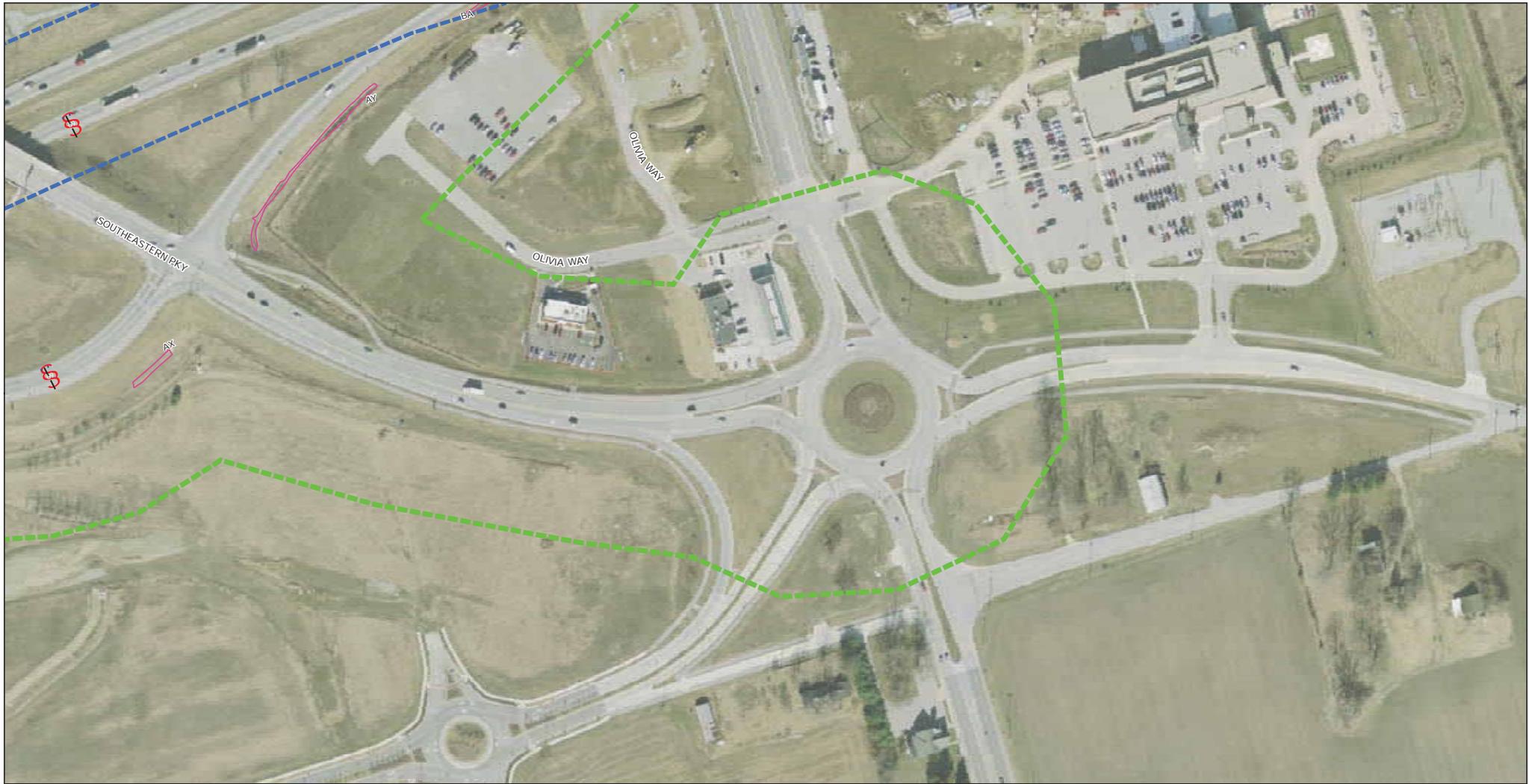
	Project Area 1		Wetland Data Point (In)		Streams
	Project Area 2		Wetland Data Point (out)		Wetlands
	Project Area 3		Concrete Lined Ditch		Non-Jurisdictional Features
			Riprap Lined Ditch		

3



Sources:
 Non Orthophotography Data -
 Obtained from the State of
 Indiana Geographical
 Information Office Library
 Orthophotography -
 Obtained from Indiana
 Map Framework Data
 (www.indianamap.org)

Exhibit 5: Resource Map Sheet 27 of 48	
Des. 1383332, 1383336, 1383489	
Date: 10/16/2014	
Created By: WCK	



ESRI Map Projection: NAD 1983 StatePlane Indiana East FIPS 1301 Feet Datum: NAD 1983

Legend			
	Project Area 1		Streams
	Project Area 2		Wetlands
	Project Area 3		Concrete Lined Ditch
			Riprap Lined Ditch
	Wetland Data Point (In)		Non-Jurisdictional Features
	Wetland Data Point (out)		

3

Sources:
 Non Orthophotography Data -
 Obtained from the State of
 Indiana Geographical
 Information Office Library
 Orthophotography -
 Obtained from Indiana
 Map Framework Data
 (www.indianamap.org)

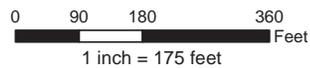
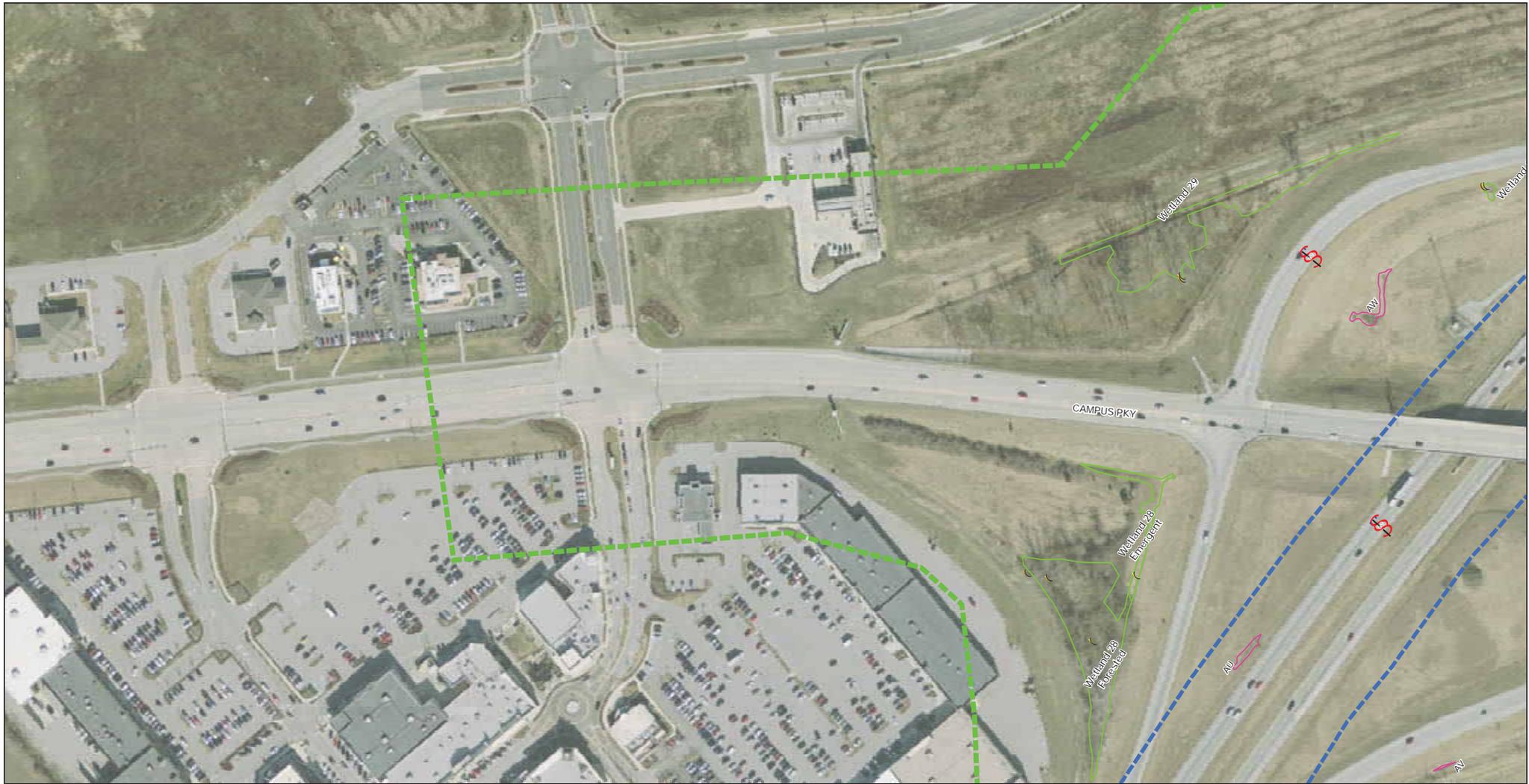


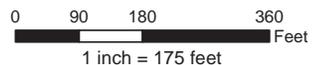
Exhibit 5: Resource Map Sheet 28 of 48	
Des. 1383332, 1383336, 1383489	
Date: 10/16/2014	
Created By: WCK	



ESRI Map Projection: NAD 1983 StatePlane Indiana East FIPS 1301 Feet Datum: NAD 1983

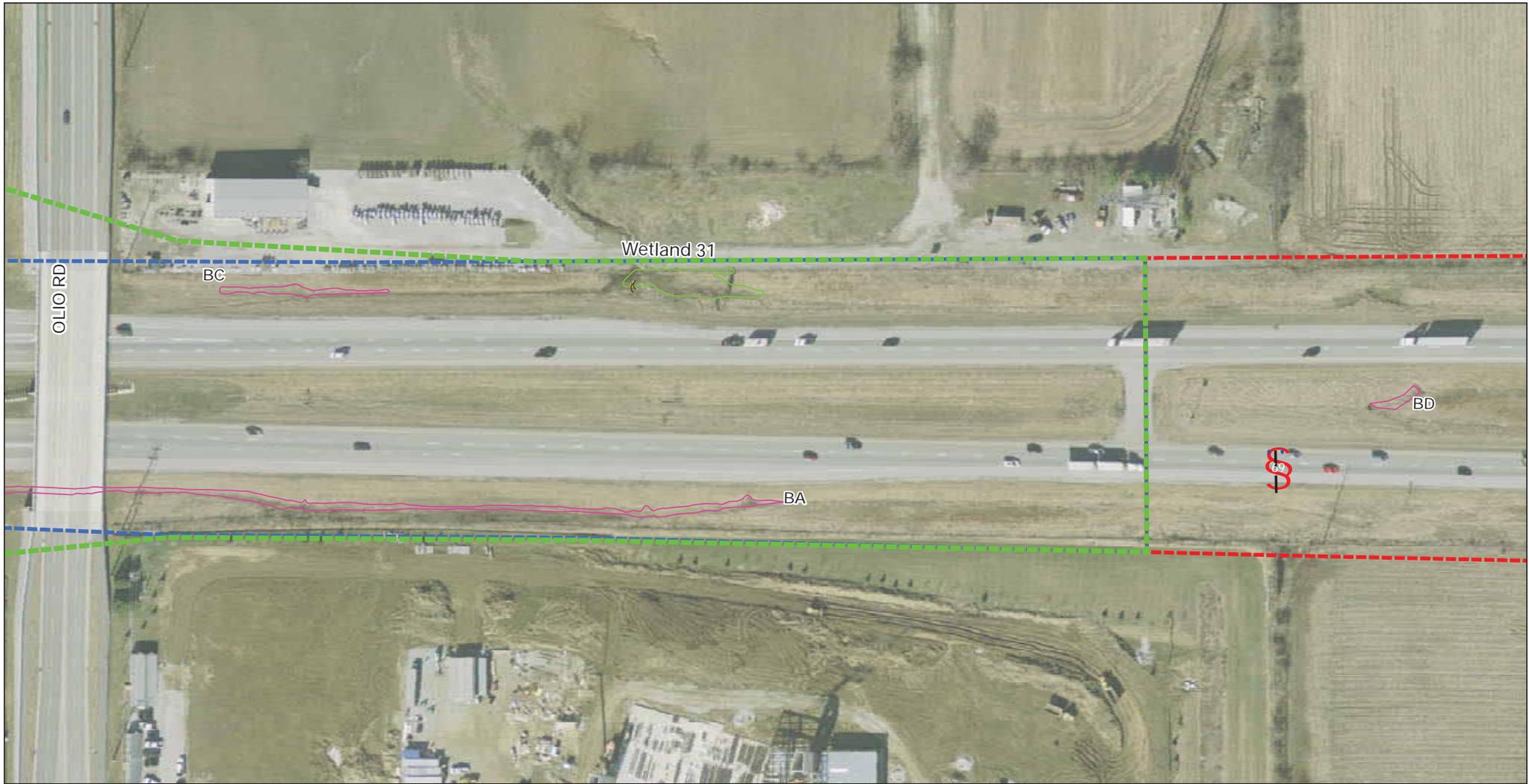
Legend	
	Project Area 1
	Project Area 2
	Project Area 3
	Wetland Data Point (In)
	Wetland Data Point (out)
	Concrete Lined Ditch
	Riprap Lined Ditch
	Streams
	Wetlands
	Non-Jurisdictional Features

3



Sources:
 Non Orthophotography Data -
 Obtained from the State of
 Indiana Geographical
 Information Office Library
 Orthophotography -
 Obtained from Indiana
 Map Framework Data
 (www.indianamap.org)

Exhibit 5: Resource Map Sheet 29 of 48	
Des. 1383332, 1383336, 1383489	
Date: 10/16/2014	
Created By: WCK	

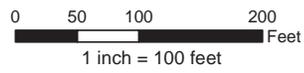


ESRI Map Projection: NAD 1983 StatePlane Indiana East FIPS 1301 Feet Datum: NAD 1983

Legend

	Project Area 1		Wetland Data Point (In)		Streams
	Project Area 2		Wetland Data Point (out)		Wetlands
	Project Area 3		Concrete Lined Ditch		Non-Jurisdictional Features
			Riprap Lined Ditch		

3



Sources:
 Non Orthophotography Data -
 Obtained from the State of
 Indiana Geographical
 Information Office Library
 Orthophotography -
 Obtained from Indiana
 Map Framework Data
 (www.indianamap.org)

Des. 1383332, 1383336, 1383489
Date: 10/16/2014
Created By: WCK

Exhibit 5: Resource Map
 Sheet 30 of 48

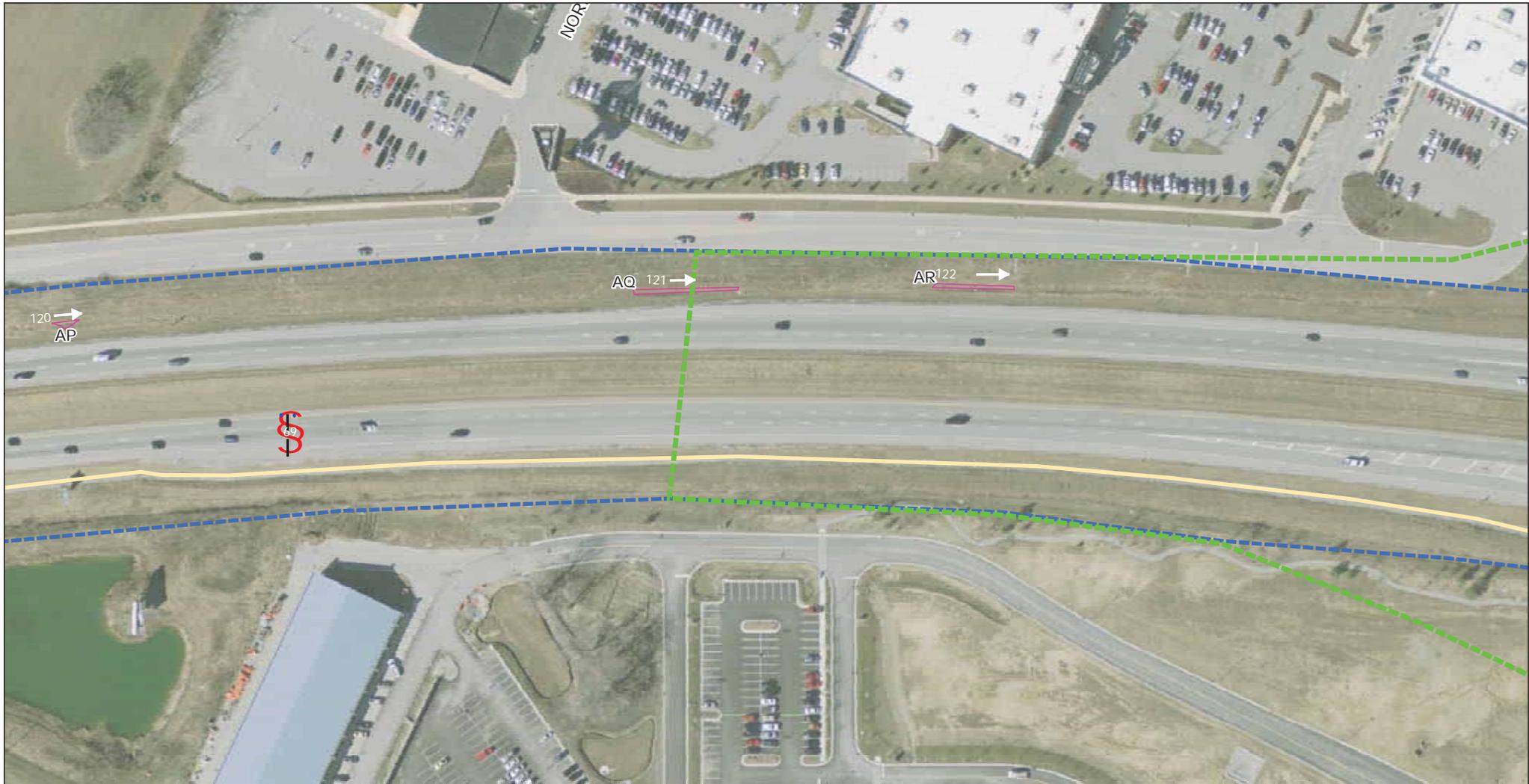
EXHIBIT 6

PHOTO-ORIENTATION MAPS

AND

PHOTOGRAPHS

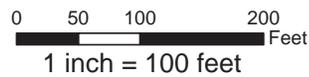
Pages applicable to Project 2. All other pages have been deleted.



ESRI Map Projection: NAD 1983 StatePlane Indiana East FIPS 1301 Feet Datum: NAD 1983

- Legend**
- Project Area 1
 - Project Area 2
 - Project Area 3
 - Wetlands
 - Non- Jurisdictional Features
 - Concrete Lined Ditch
 - Riprap Lined Ditch
 - Streams
 - Photograph Location
 - Direction Taken

9

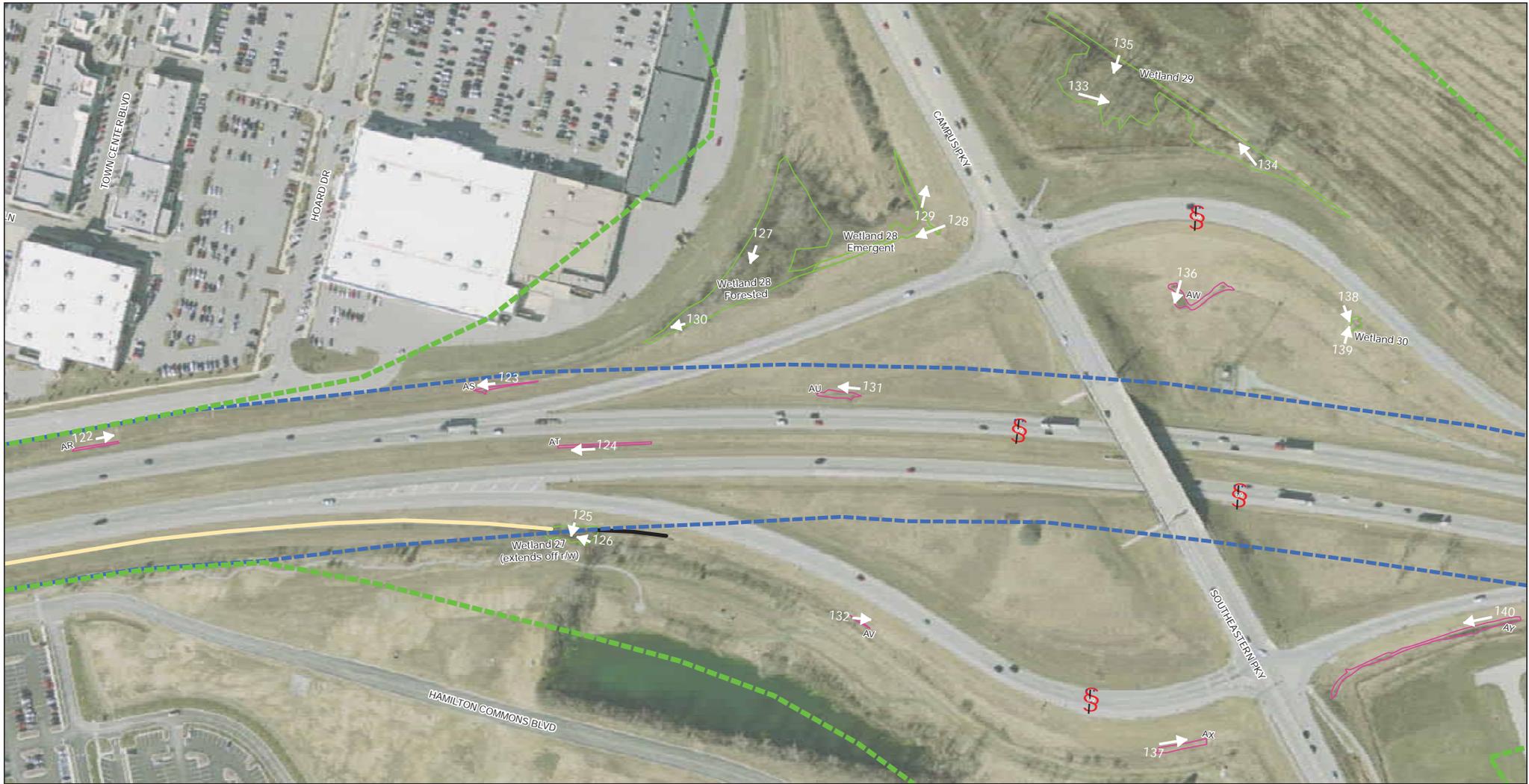


Sources:
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 Obtained from the
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Des. 1383332, 1383336, 1383489
Date: 10/16/2014
Created By: WCK

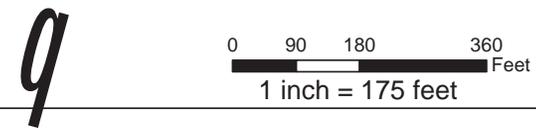
Exhibit 6: Photo Orientation
 Sheet 22 of 41

PARSONS



ESRI Map Projection: NAD 1983 StatePlane Indiana East FIPS 1301 Feet Datum: NAD 1983

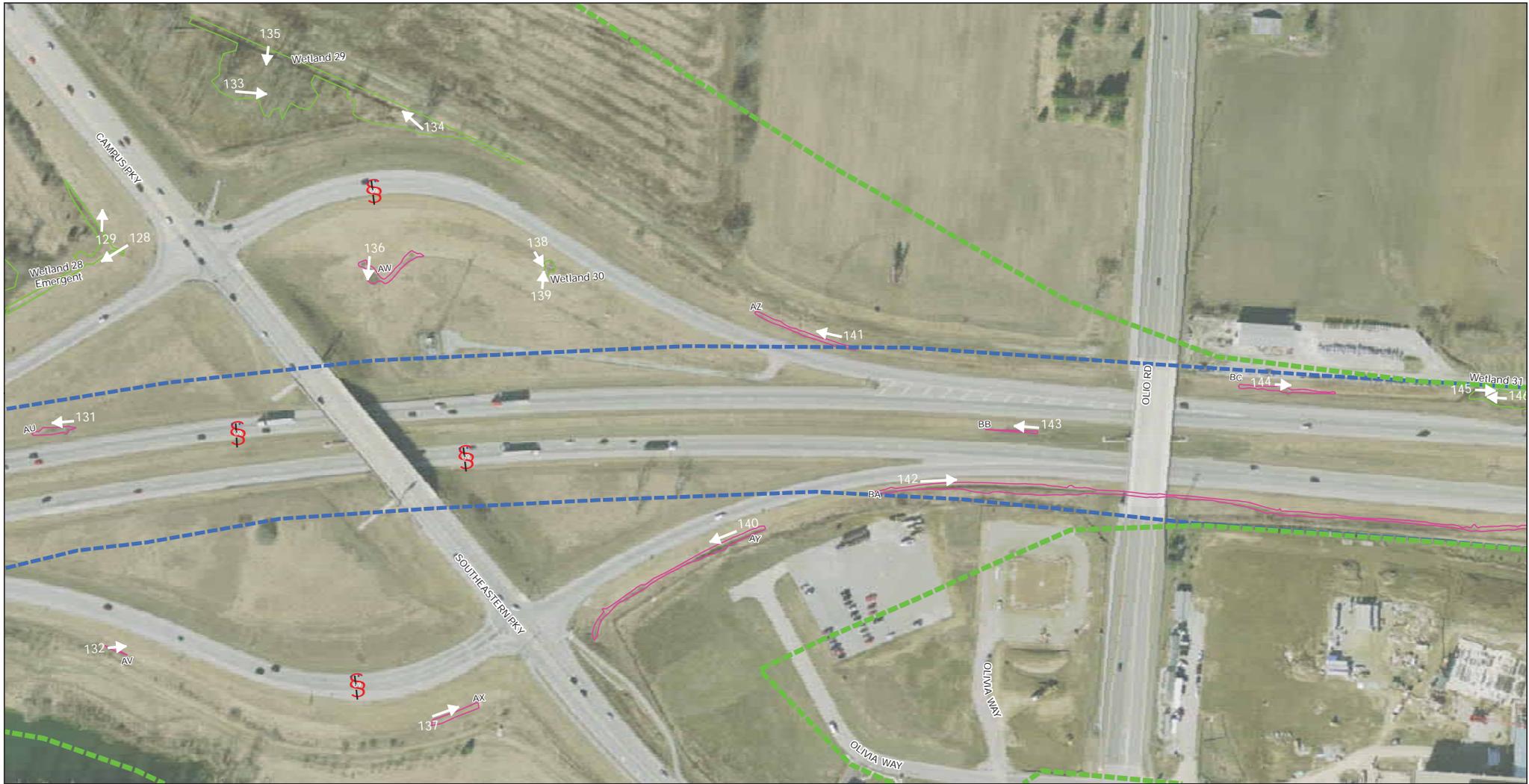
Legend		
	Project Area 1	
	Project Area 2	
	Project Area 3	
	Wetlands	
	Non- Jurisdictional Features	
	Concrete Lined Ditch	
	Riprap Lined Ditch	
	Streams	



Sources:
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 Obtained from the
 State of Indiana Geographical
 Information Office Library
 Orthophotography -
 Obtained from Indiana
 Map Framework Data
 (www.indianamap.org)

Des. 1383332, 1383336, 1383489
Date: 10/16/2014
Created By: WCK

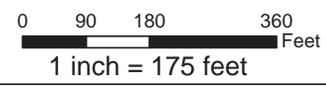
Exhibit 6: Photo Orientation
Sheet 23 of 41



ESRI Map Projection: NAD 1983 StatePlane Indiana East FIPS 1301 Feet Datum: NAD 1983

Legend					
	Project Area 1		Non- Jurisdictional Features		Photograph Location
	Project Area 2		Concrete Lined Ditch		Direction Taken
	Project Area 3		Riprap Lined Ditch		
	Wetlands		Streams		

9

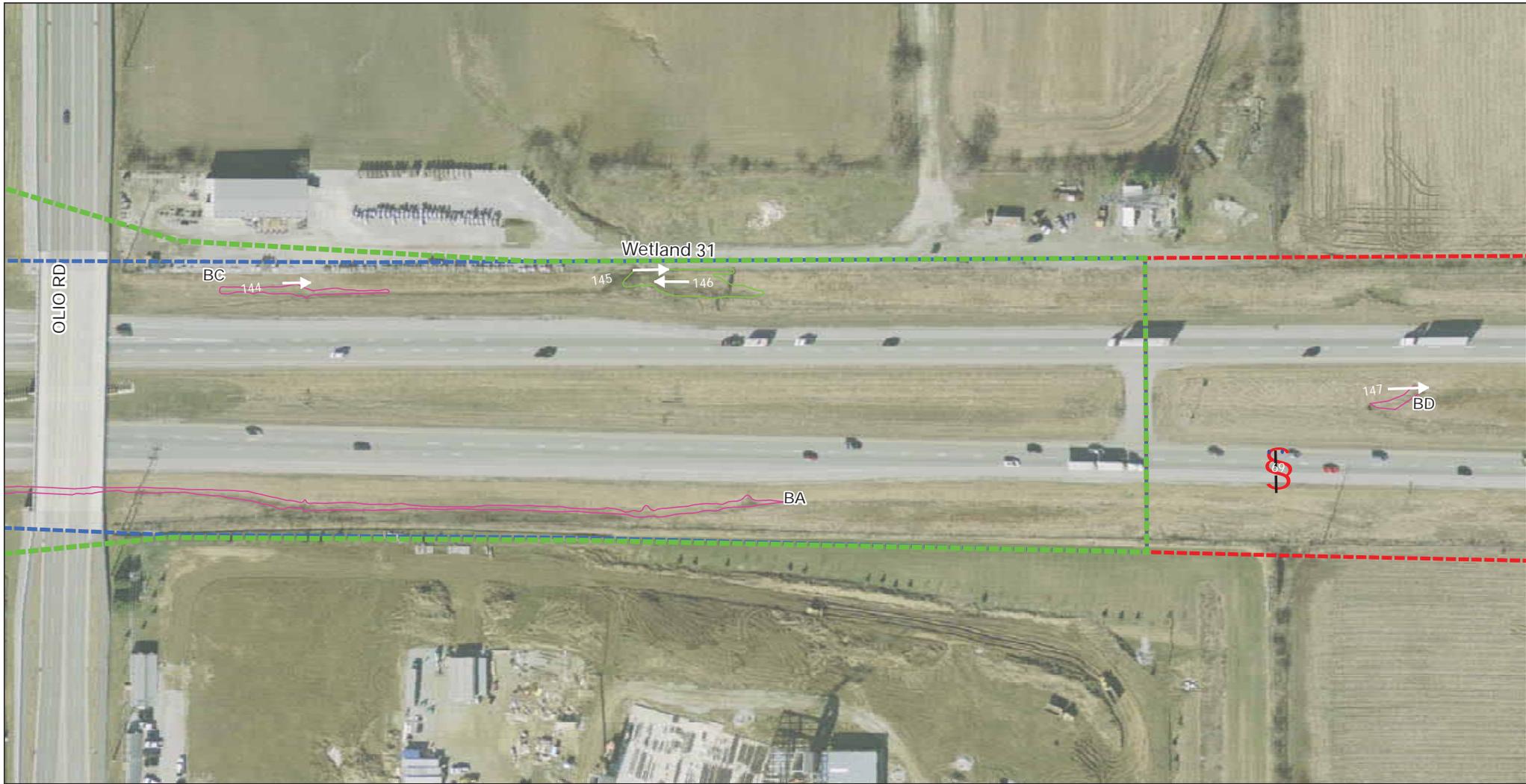


Sources:
 Non Orthophotography Data -
 Obtained from the
 State of Indiana Geographical
 Information Office Library
 Orthophotography -
 Obtained from Indiana
 Map Framework Data
 (www.indianamap.org)

Des. 1383332, 1383336, 1383489
Date: 10/16/2014
Created By: WCK

Exhibit 6: Photo Orientation
 Sheet 24 of 41

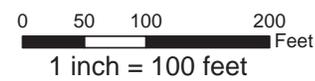
PARSONS



ESRI Map Projection: NAD 1983 StatePlane Indiana East FIPS 1301 Feet Datum: NAD 1983

Legend		
	Project Area 1	
	Project Area 2	
	Project Area 3	
	Wetlands	
	Non- Jurisdictional Features	
	Concrete Lined Ditch	
	Riprap Lined Ditch	
	Streams	

q



Sources:
 Non Orthophotography Data -
 Obtained from the
 State of Indiana Geographical
 Information Office Library
 Orthophotography -
 Obtained from Indiana
 Map Framework Data
 (www.indianamap.org)

Des. 1383332, 1383336, 1383489
Date: 10/16/2014
Created By: WCK

Exhibit 6: Photo Orientation
 Sheet 25 of 41

PARSONS

Des. Numbers 1383332, 1383336, and 1383489
I-69 Interstate Expansion, Projects 1, 2, and 3, Hamilton and Madison Counties
Project Area Photographs



Photo 121: View of non-jurisdictional feature AQ facing northeast (June 18, 2014). This feature is located entirely within the roadside drainage along I-69.



Photo 122: View of non-jurisdictional feature AR facing northeast (June 18, 2014). This feature is located entirely within the roadside drainage along I-69.



Photo 123: View of non-jurisdictional feature AS facing southwest (June 18, 2014). This feature is located entirely within the roadside drainage along I-69.



Photo 124: View of non-jurisdictional feature AT facing southwest (July 10, 2014). This feature is located entirely within the median roadside drainage along I-69.

Des. Numbers 1383332, 1383336, and 1383489
I-69 Interstate Expansion, Projects 1, 2, and 3, Hamilton and Madison Counties
Project Area Photographs



Photo 125: View of Wetland 27 facing south (June 17, 2014). This feature extends beyond the roadside drainage along I-69.



Photo 126: View of Wetland 27 facing west (June 17, 2014).



Photo 127: View of Wetland 28 facing south (June 18, 2014). This photograph was taken within the forested portion of this wetland.



Photo 128: View of Wetland 28 from the Campus Parkway Interchange facing west (June 18, 2014). The roadside drainage along this slope contained the emergent portion of this wetland.

Des. Numbers 1383332, 1383336, and 1383489
I-69 Interstate Expansion, Projects 1, 2, and 3, Hamilton and Madison Counties
Project Area Photographs



Photo 129: View of the emergent portion of Wetland 28 facing northwest along Campus Parkway (June 18, 2014).



Photo 130: View of the pipe draining into the forested portion of Wetland 28 facing southwest (June 18, 2014). No OHWM was observed within (or leaving) this wetland.



Photo 131: View of non-jurisdictional feature AU facing west (June 19, 2014). This feature is located entirely within the roadside drainage along I-69.



Photo 132: View of non-jurisdictional feature AV facing east (June 17, 2014). This feature was not vegetated, and is located entirely within the roadside drainage along I-69.



Photo 133: View of Wetland 29 facing east (June 23, 2013). This feature is located between the off-ramp slope and the old roadbed slope to the east.



Photo 134: View of Wetland 29 facing northwest (June 23, 2014).



Photo 135: View of Wetland 29 from the old roadbed slope, facing southwest towards the Campus Parkway Interchange (June 23, 2014).



Photo 136: View of non-jurisdictional feature AW facing south (June 23, 2014). This feature is located entirely within the roadside drainage along I-69.

Des. Numbers 1383332, 1383336, and 1383489
I-69 Interstate Expansion, Projects 1, 2, and 3, Hamilton and Madison Counties
Project Area Photographs



Photo 137: View of non-jurisdictional feature AX facing east (June 17, 2014). This feature is located entirely within the roadside drainage along I-69.



Photo 138: View of Wetland 30 facing southeast (June 23, 2014). The primary source of hydrology for this wetland is an underdrain along the I-69 southbound off-ramp.



Photo 139: View of Wetland 30 facing north (June 23, 2014).



Photo 140: View of non-jurisdictional feature AY facing southwest (June 19, 2014). This feature is located entirely within the roadside drainage along I-69. The Campus Parkway Interchange is in the background.

Des. Numbers 1383332, 1383336, and 1383489
I-69 Interstate Expansion, Projects 1, 2, and 3, Hamilton and Madison Counties
Project Area Photographs



Photo 141: View of non-jurisdictional feature AZ facing northwest (June 23, 2014). This feature is located entirely within the roadside drainage along I-69.



Photo 142: View of non-jurisdictional feature BA facing east (June 19, 2014). This feature is located entirely within the roadside drainage along I-69. The Olio Road Overpass is in the background.



Photo 143: View of non-jurisdictional feature BB facing west (July 10, 2014). This feature is located entirely within the median roadside drainage along I-69.



Photo 144: View of non-jurisdictional feature BC facing east (June 23, 2014). This feature is located entirely within the roadside drainage along I-69.

Des. Numbers 1383332, 1383336, and 1383489
I-69 Interstate Expansion, Projects 1, 2, and 3, Hamilton and Madison Counties
Project Area Photographs



Photo 145: View of Wetland 31 facing east (June 23, 2014). This feature extends beyond the roadside drainage along I-69.



Photo 146: View of Wetland 31 facing west (June 23, 2014).



Photo 147: View of non-jurisdictional feature BD facing east (July 10, 2014). This feature is located entirely within the median roadside drainage along I-69.



Photo 148: View of UNT1 to Mud Creek facing east (June 19, 2014). The OHWM is 6 inches wide and 3 inches in depth.

EXHIBIT 7

QHEI/HHEI ASSESSMENTS

*The QHEI/HHEI assessments have been omitted as they are summarized in Table 2 of the report.

EXHIBIT 8

WETLAND DATA FORMS

*The Wetland Data Forms have been omitted as the results are summarized throughout the report.

EXHIBIT 9

MEETING MINUTES



MEETING MINUTES

DATE:	<i>Office:</i> August 13, 2014 9:00 am – 12:00 pm	<i>Field:</i> August 18, 2014 12:30 pm – 3:30 pm
PROJECT:	I-69 Interstate Expansion Madison/Hamilton Counties INDOT Des. Nos. 1383332/1383336/1383489	
LOCATION:	<i>Office:</i> Parsons 101 West Ohio Street, Suite 2121 Indianapolis, Indiana 46204	<i>Field:</i> Various locations throughout corridor
ATTENDEES:	Deb Snyder, USACE Jay Turner, IDEM Tony Jones, INDOT Lisa Herber, INDOT Ben Carnahan, Parsons (<i>office only</i>) Dan Miller, Parsons T.J. Warrner, Parsons Wade Kimmon, Parsons (<i>office only</i>)	

TOPICS:

Introductions were made. All of the meeting participants (above) were in attendance. *Note that these meeting minutes were organized using the agenda and do not necessarily reflect the order items were discussed during the meetings. Discussion items from the field meeting are included as updates to the office meeting minutes to provide all related discussion within the same document.*

Dan provided a summary of the proposed projects and their locations. Project 1 (Des. 1383332) will construct added travel lanes in the median from 106th St to 0.5 mi N of Campus Parkway. An auxiliary lane will be added on southbound I-69 between 106th Street and 116th Street. Project 2 (Des. 1383489) is an Interchange Modification at Exit 210 (Campus Parkway). Currently 4 interchange types are being considered, with 2 being focused on for the possible preferred alternative. Project 3 (Des. 1383336) will construct added travel lanes in the median from 0.5 mi N of Campus Parkway to 0.5 mi East of SR 13. Design is in early stages, as these are “design-build” projects. Deb asked if the interchange project was related to the traffic anticipated for the Cabelas store. Ben indicated that, while traffic models had been adjusted to reflect the additional traffic from Cabelas, this was part of INDOT’s 2020 funded projects.

Dan detailed Parsons’ waters of the U.S. survey efforts to date, which included a walking survey of the entire I-69 project corridor, including median. He also discussed the field data that was collected.

- I. Results of May-July Fieldwork
 - A. Wetlands
 - 36 median wetlands totaling 0.75 acre (35 isolated)
 - 96 roadside wetlands totaling 9.84 acres (41 isolated)

- 129 located in *mapped* hydric soils; 3 located in mapped non-hydric soils
- Types: 127 emergent, 1 shrub-scrub, 4 forested (all current impacts are emergent)

Dan gave an overview of the wetlands delineated in the field (both in the median and outside ditches), discussed their low quality, and noted 35 of the 36 median wetland and nearly half of the roadside ditch wetlands were isolated.

Deb noted that there have been recent meetings with INDOT regarding roadside ditch (RSD) guidance and associated wetlands (discussed in detail below). She agreed that most of these wetlands were RSDs, had low functional value, and noted that the proposed road design would potentially recreate these features within the new roadside drainage. She noted that the goal of the 404 program is to replace wetland function, and with this potential replacement function would not be lost.

Dan discussed the high prevalence of mapped nationally listed hydric soils within the project area, and noted that only 3 identified wetlands were located in mapped non-hydric soils.

Deb asked about the five non-emergent wetlands and their jurisdiction. TJ indicated that one was isolated while the rest were likely jurisdictional due to their connection to waters of the U.S. Dan noted that no forested or shrub-scrub wetlands would be impacted based on the current design.

Jay noted that Jason Randolph from IDEM had mentioned at least one higher quality wetland of concern was located along the project. Dan noted that these wetlands will not be impacted by the project.

B. Streams

- 5 streams crossed (all have historic drainage)
- 16 streams identified within I-69 roadside drainage (8 have historic drainage)

Deb asked about the age of I-69 in relation to historic drainage features. TJ indicated that the soil surveys from 1967 showed “proposed I-69”, likely indicating that this stretch of interstate was constructed in the late 1960s or early 1970s. Ben confirmed that this is correct.

II. Problematic Features

A. Updated USACE guidance on roadside ditch wetlands

- Details on new guidance
- General discussion on impact to field results

Deb referred to a recent meeting with INDOT regarding updated roadside ditch guidance. She stated that if the roadside ditch develops all three wetland indicators and does not extend outside of the RSD it is not jurisdictional. Additionally, the RSD must not have any historic drainage or be dug out of pre-existing wetlands. These features would not be considered wetland since “normal conditions” are not present (their “normal condition” is acting as a roadside ditch). Deb noted that the non-jurisdictional features should not be included in the pre-JD form that is included in the waters report. Dan indicated that three quarters, or more, of the wetlands were located within roadside ditches.

Lisa asked about the gray area regarding the definition of upland soils/excavated in uplands. Deb stated that the areas along the I-69 corridor have been heavily impacted by urbanization, further complicating the discussion.



Jay stated that Deb's feedback is in agreement with a recent IDEM meeting with the USACE on this topic.

UPDATE: Field Meeting: Several wetlands contained entirely within roadside drainage were reviewed in the field. These included multiple drainage features that eventually drain into Thorpe Creek at the S.R. 13 Interchange. Each of these exhibit all three wetland characteristics and are contained entirely within the roadside drainage. None of these features have historic drainage. Deb indicated that all met the updated USACE roadside ditch guidance. Because the median wetlands are all contained within roadside drainage, Deb indicated that this same guidance would apply and she did not need to specifically review these in the field.

B. Stream versus wetland conveyances (7)

- Field observations/photographs
- Historic drainage absent
- Resource agency feedback

Deb indicated that the examples provided in the presentation would likely be considered roadside ditches and therefore not jurisdictional.

Tony asked if it was important to identify features that are located within right-of-way but are unlikely to be impacted by proposed construction. Ben discussed how this is a design-build project, making it important that all resources are clearly identified on the plans, should the contractor make changes once the contract is awarded. It would then be on the contractor to modify the permits and mitigate for any additional impacts.

C. Non-vegetated wetlands (6)

- Field observations/photographs
- No vegetation data
- Resource agency feedback

Dan discussed how some of these features had ruts, with the top of the rut containing non-hydrophytic vegetation (K-31, thistle, etc.). Bare soil was located in the bottom of these ruts, likely where the water collected. Dan noted that these features would likely fall out based on earlier meeting discussion on roadside ditches.

D. Riprap lined wetlands

- Field observations/photographs
- 10 failed to meet soils indicator but had adjacent hydric soils for out point
- Several additional met indicator despite presence of riprap close to surface
- Resource agency feedback

Deb agreed that the out points located adjacent to these features could be used as a surrogate for the wetland soils data. Dan, however, noted that most if not all of these features will likely be removed based on earlier meeting discussion on roadside ditches. Deb noted that the function of these features will likely be replaced by the nature of the project.

E. Hillslope wetlands (6)

- Field observations/photographs
- Artificial hydrology



- USACE previous guidance (I-70) for similar features
- Resource agency feedback

Dan discussed previous USACE feedback on these types of features not being jurisdictional. Deb indicated that she, however, would likely take these features since they exhibit all three characteristics under “normal conditions.” She will confirm with her section chief.

The jurisdictional status of these features was discussed. Even though their connections to Thorpe Creek (via roadside ditches) are not considered resources, these features exist outside of the RSDs and would still be considered jurisdictional by connection via the RSDs.

Ben indicated that the under drains feeding these wetland features could be left in place by design. Deb and Jay stated that if these areas are impacted, the only way they could be used as “restoration” would be to monitor these areas (against success criteria) for several years.

UPDATE: Fieldwork Meeting: Several of these were visited within or near the S.R. 13 Interchange and the office meeting determination was confirmed.

F. Data collection in median wetlands with safety concerns (2)

- Field observations/photographs
- No soil data collected (met hydrology and vegetation criteria)
- Located in mapped hydric soils
- Resource agency feedback

Deb agreed that soil data collection was not required for these two wetlands. Dan noted that these features will likely be removed due to earlier discussion of roadside ditches.

G. Potential jurisdictional ditches

- Field observation/photographs
- Concrete lined ditch draining into Cheeney Creek
- Misc. interchange and roadside drainages without connection to waters of the US (15)

After reviewing the example roadside drainages with OHWMs but undetermined connection, Deb indicated that she would likely not take these since historic drainage was not present.

Lisa asked about making a call on features that lacked historical drainage, such as the long stream relocation area. Deb indicated that this feature would be taken due to its relatively permanent flow. A follow-up field visit was proposed to specifically evaluate several ditches.

UPDATE: Field Meeting: The concrete lined ditch draining to Cheeney Creek was visited. Its poor quality was confirmed by both IDEM and the USACE. Active construction (noise wall) was observed near the 116th Street Interchange within this UNT (non-paved portion). Both Lisa and Deb indicated they would check to see if this was previously permitted. Deb indicated she would evaluate how far upstream of Cheeney Creek she would take jurisdiction on this UNT. Both agencies indicated that their office stance on mitigation remained unchanged for this feature (see Section III Part A).



III. 404/401 Permits

A. Stream relocation

- Concrete lined ditch draining to Cheeney Creek
- Approximately 1,200' impact (most recent estimate)
- Resource agency mitigation requirements

Deb asked if an approved JD was going to be used. TJ indicated that the project schedule likely dictated the use of the preliminary JD.

Dan asked if there would be a deed restriction if the concrete lined ditch was relocated and INDOT pursued on-site mitigation. Deb and Jay both indicated this would not be required. Deb and Jay stated that this would be considered "self mitigating" and no success criteria would be tied to this relocation.

Deb indicated that she would not want to see an increase in the length of concrete-lined ditches. She also stated that if the impact threshold exceeds 1,500' a 404 Individual Permit would be required. This can take 12 months, or longer, to obtain.

Dan indicated that some of the concrete lined ditch may not be necessary following relocation, and could be constructed as a vegetated ditch instead. Per discussions with design, a small section of the concrete would have to remain due to scour. Ben stated that riprap may be a viable alternative. Deb noted that riprap or vegetation would be seen as an improvement in resource quality over concrete. Dan asked about leaving the 400' of concrete ditch (north of the relocation) in place vs. clearing this area and making it a vegetated ditch. Deb and Jay confirmed that removing this portion of the ditch and making it vegetated would be ideal. Deb stated she would look into the upcoming RGP to see if this could be allowed without pushing the project into a 404 Individual Permit.

Jay noted that a key point of this discussion was there is little need to monitor the relocated roadside channel. The post-construction condition of the roadside stream is an important part of the 401 (and 404). The 401 certification might simply refer to the mitigation plan for the design of UNT1 Cheeney Creek, or it might list success criteria. Either way, this roadside channel will not be viewed as a traditional mitigation project requiring monitoring. If success criteria are listed in the 401 certification, they would be used to describe what is to be built and planted to ensure the result is a more natural channel rather than a concrete lined channel. Example success criteria are as follows:

- "Ensure the relocated stream consists of a minimum of xxx linear feet of open channel flowing over native substrate."
- "Construct xxxx linear feet of UNT Cheeney Creek as described in the mitigation plan."
- "Plant an herbaceous wetland seed mix in and along the UNT for xxxx linear feet of the relocated channel."

B. USACE cumulative determination on impacts

- Unnamed tributaries (UNTs) draining to major creeks
- Wetlands in close proximity to each other

Deb indicated that the examples shown in the presentation would likely be considered cumulative. Dan noted that several of the wetlands in these examples would be ruled out based on earlier meeting guidance on roadside ditches.



Jay indicated that impacts along the entire corridor would be considered cumulatively per IDEM requirements.

C. Wetland impacts

- Mitigation
- Central Indiana Mitigation Bank
- Resource agency update on credit status

Dan stated that approximately 0.75 acre of median wetland identified in the field would have been impacted by current design. Ben discussed that some of this was related to lowering the median near SR 13, while in other locations this was due to lane widening into the median. Dan stated that, based on earlier meeting feedback on roadside ditches, it appears that virtually all of these wetlands will be classified as non-jurisdictional.

Deb asked if any forested wetlands would be impacted. Dan indicated that none of these are impacted based on current design.

Dan thought the total wetland impacts for the corridor could potentially be less than 0.1 acre based on resource agency feedback.

Deb noted that the current RGP program expires on 12/15/2014. This could affect the 404 (and 401) application submittal which is anticipated in January.

Dan asked Deb and Jay if they would approve wetland credits from the Central Indiana Mitigation Bank, if/when made available, if the project ended up requiring mitigation. Both indicated that this would be a preferred source for credits. Jay indicated that the typical IDEM ratios would apply. Jay and Deb confirmed that credits are currently not available, but the bank is working to get these released shortly.

D. Hamilton County regulated drain permit requirements

- Required detention
- Figures
- Potential conflicts with 401 permitting

Dan discussed that detention would include water storage for 24 to 48 hours and that berms would be used in some locations to help achieve detention. This could potentially inundate some waters. Jay indicated he would want to see more specifics.

Participants agreed that a field check would be useful to finalize thoughts on several identified waters in the project corridor and questions regarding relatively permanent flow for ditch to Thorpe Creek. Dan indicated he would be scheduling this as soon as possible to accommodate the project schedule.

Tony reiterated that this project is on an aggressive schedule to use the allotted 2020 project funding. He asked all involved to process documents and requests with urgency to help keep this project on schedule.

Warrner, Thomas

From: Warrner, Thomas
Sent: Wednesday, September 17, 2014 11:03 AM
To: 'Snyder, Deborah D LRL'
Cc: Miller, Daniel J; Herber, Lisa
Subject: RE: I-69 Hamilton/Madison Counties Conference Call Minutes (UNCLASSIFIED)

Thanks Deb. Dan and I were in the process of generating a response to confirm that very same thing.

T. J.

-----Original Message-----

From: Snyder, Deborah D LRL [<mailto:Deborah.D.Snyder@usace.army.mil>]
Sent: Wednesday, September 17, 2014 10:39 AM
To: Warrner, Thomas
Cc: Miller, Daniel J; Herber, Lisa
Subject: RE: I-69 Hamilton/Madison Counties Conference Call Minutes (UNCLASSIFIED)

Classification: UNCLASSIFIED
Caveats: NONE

T. J. and Dan,

I talked to Lisa about this e-mail, and there is one more clarification:

Any roadside ditch that has perennial or relatively permanent flow is considered jurisdictional, no matter what mapped soil type the ditch was cut into.

I think that our discussion assumed this without anybody stating it, but I thought I would reiterate this point.

Thanks,
Deb
317-517-2659

-----Original Message-----

From: Warrner, Thomas [<mailto:Thomas.Warrner@parsons.com>]
Sent: Wednesday, September 17, 2014 9:55 AM
To: Snyder, Deborah D LRL
Cc: Miller, Daniel J
Subject: [EXTERNAL] I-69 Hamilton/Madison Counties Conference Call Minutes
Importance: High

Hi Deb,

Thank-you for the time this morning to discuss various features that Parsons has field delineated throughout the I-69 Interstate Expansion Corridor.

Since our earlier office meeting and field review, there have been a few changes to the guidance you provided on USACE jurisdiction over potential waters of the U.S. During the phone call you clarified the following:

* Roadside ditches with an OHWM:

o If mapped entirely in hydric (100%) and/or predominantly hydric (66-99%), consider these features jurisdictional.

o If mapped entirely in not hydric (0%), predominantly non-hydric (1-32%), and/or partially hydric (33-65%) consider these features non-jurisdictional. This would be considered cut in upland.

o If the feature is split between the first and second bullet point, only consider those portions that lie within the first bullet point jurisdictional.

Note: Soil classifications are based on revised NRCS hydric classifications that are available for both Hamilton and Madison Counties. These may not be available for all counties in Indiana.

The drainage features that drain into Thorpe Creek were specifically discussed in regards to this revised guidance. These features were evaluated during the field review meeting, and you confirmed over the call that these features lacked an OHWM. Because of this, these will remain non-jurisdictional. This contrasts to Cheeny Creek's tributaries which were also discussed. These have distinct OHWMs and will remain jurisdictional.

* Roadside ditches with wetlands but no OHWM:

o If located entirely within the existing ditchline, the feature will not be considered a wetland. The mapped soil unit does not affect jurisdiction.

o If the feature extends beyond the existing ditchline, the feature will be considered jurisdictional. The mapped soil unit does not affect jurisdiction.

Take care,

T. J.

Thomas J. Warrner

Environmental Planner
Parsons_Blue_300ppi 2
101 West Ohio Street, Suite 2121

Indianapolis, Indiana 46204

Phone: (317) 616-4671

E-mail: thomas.warrner@parsons.com

Web: www.parsons.com <<http://www.parsons.com/>>

Classification: UNCLASSIFIED

Caveats: NONE

EXHIBIT 10

PRELIMINARY JD FORM

ATTACHMENT

PRELIMINARY JURISDICTIONAL DETERMINATION FORM

BACKGROUND INFORMATION

A. REPORT COMPLETION DATE FOR PRELIMINARY JURISDICTIONAL DETERMINATION (JD): September 30, 2014

B. NAME AND ADDRESS OF PERSON REQUESTING PRELIMINARY JD:
Parsons; 101 West Ohio Street Suite 2121; Indianapolis, Indiana 46204; Thomas J. Warrner; (317) 616-4671; thomas.warrner@parsons.com

C. DISTRICT OFFICE, FILE NAME, AND NUMBER:

D. PROJECT LOCATION(S) AND BACKGROUND INFORMATION: Project 1
The Indiana Department of Transportation (INDOT) is planning an I-69 Interstate Expansion from 106th Street in Fishers to Exit 226 (S.R. 9 and S.R. 109 in Anderson) in Hamilton and Madison Counties. This expansion has been broken into multiple projects with independent utility and logical termini. This report pertains to Projects 1, 2, and 3.

Project 1 (Des. 1383332) extends on I-69 from 106th Street to 0.5 mile north of the Campus Parkway in Hamilton County. This project would construct additional lanes from Exit 205 (116th Street and S.R. 37 in Fishers) to Exit 210 (Campus Parkway) in the form of median travel lanes. An outside auxiliary lane would be added on southbound I-69 from 106th Street to 116th Street. Existing pavement would be resurfaced. The cross section would have a 10-foot paved inside shoulder and a 10-foot paved outside shoulder. Double-sided guardrail would be installed. All mainline bridges would be widened in the median. There would be work on the overhead structure at Cumberland Road. The structure at Brooks School Road over I-69 would have the bridge deck replaced. The overhead structure at 126th Street would require no additional work. The interchange at Exit 210 would be modified as part of a separate project (Project 2). All small structures would be evaluated to determine if rehabilitation or replacement is necessary. Detention would likely be required at all legal drains. All detention basins would be constructed within existing right-of-way. No new right-of-way would be required for this project.

Project 3 (Des. 1383336) extends on I-69 from 0.5 mile north of Campus Parkway to 0.5 mile east of S.R. 13 in Hamilton and Madison Counties. The project would construct additional lanes from Exit 210 (Campus Parkway) to S.R. 13 in the form of median travel lanes. Existing pavement would be resurfaced. The cross section would have a 10-foot paved inside shoulder and a 10-foot paved outside shoulder. Double-sided guardrail would be installed in most areas, though not in wide median areas. All mainline bridges would be widened in the median. The overhead structures at Olio Road and Cyntheanne Road would require no additional work. The pavement on S.R. 13 under I-69 would be lowered to provide adequate bridge clearance. All small structures will be evaluated to determine if rehabilitation or replacement is necessary. Detention would likely be required at all legal drains within Hamilton County. Detention is not expected to be required in Madison County. All detention basins would be constructed within existing right-of-way. No new right-of-way would be required for this project.

Project 2 (Des. 1383489) is a proposed interchange modification at Exit 210 (Campus Parkway) to improve the level of service (LOS). Improvements to the existing interchange, such as added auxiliary lanes, will be considered. Transportation System Management (TSM) improvements, such as ramp metering and signal coordination, will also be considered. In addition, modification to the interchange type will be considered. While all interchange types will be considered as possible improvements, the limited right-of-way in the vicinity of the interchange will make the following interchange types most likely to be selected: partial-cloverleaf interchange, tight diamond with roundabouts at the ramp termini, single point urban interchange,

and double-crossover diamond interchange. The primary factors in determining the modifications selected will be construction costs, LOS rating, traffic safety, land acquisition costs, environmental impacts, and cultural resources impacts. New permanent and/or temporary right-of-way may be required for this project depending upon the type of improvements selected for this undertaking.

(USE THE ATTACHED TABLE TO DOCUMENT MULTIPLE WATERBODIES AT DIFFERENT SITES)

State: Indiana County/parish/borough: Hamilton/Madison City: Fishers
Center coordinates of site (lat/long in degree decimal format): Lat. 39.582807° N, Long. -85.574496° W.

Universal Transverse Mercator: Northing: 496104.1087982189 Easting: 505020.7991331144 Zone: 37
Name of nearest waterbody: various (see attached) that all drain to the West Fork White River

Identify (estimate) amount of waters in the review area:

Non-wetland waters: 17,605 linear feet: various width (ft) and/or 2.6 acres.
Cowardin Class: various (see attached table)
Stream Flow: various (see attached table)
Wetlands: 5.6 acres
Cowardin Class: various (see attached table)

Name of any water bodies on the site that have been identified as Section 10 waters:

Tidal: NA
Non-Tidal: NA

E. REVIEW PERFORMED FOR SITE EVALUATION (CHECK ALL THAT APPLY):

Office (Desk) Determination. Date:

Field Determination. Date(s):

1. The Corps of Engineers believes that there may be jurisdictional waters of the United States on the subject site, and the permit applicant or other affected party who requested this preliminary JD is hereby advised of his or her option to request and obtain an approved jurisdictional determination (JD) for that site. Nevertheless, the permit applicant or other person who requested this preliminary JD has declined to exercise the option to obtain an approved JD in this instance and at this time.

2. In any circumstance where a permit applicant obtains an individual permit, or a Nationwide General Permit (NWP) or other general permit verification requiring "pre-construction notification" (PCN), or requests verification for a non-reporting NWP or other general permit, and the permit applicant has not requested an approved JD for the activity, the permit applicant is hereby made aware of the following: (1) the permit applicant has elected to seek a permit authorization based on a preliminary JD, which does not make an official determination of

jurisdictional waters; (2) that the applicant has the option to request an approved JD before accepting the terms and conditions of the permit authorization, and that basing a permit authorization on an approved JD could possibly result in less compensatory mitigation being required or different special conditions; (3) that the applicant has the right to request an individual permit rather than accepting the terms and conditions of the NWP or other general permit authorization; (4) that the applicant can accept a permit authorization and thereby agree to comply with all the terms and conditions of that permit, including whatever mitigation requirements the Corps has determined to be necessary; (5) that undertaking any activity in reliance upon the subject permit authorization without requesting an approved JD constitutes the applicant's acceptance of the use of the preliminary JD, but that either form of JD will be processed as soon as is practicable; (6) accepting a permit authorization (e.g., signing a proffered individual permit) or undertaking any activity in reliance on any form of Corps permit authorization based on a preliminary JD constitutes agreement that all wetlands and other water bodies on the site affected in any way by that activity are jurisdictional waters of the United States, and precludes any challenge to such jurisdiction in any administrative or judicial compliance or enforcement action, or in any administrative appeal or in any Federal court; and (7) whether the applicant elects to use either an approved JD or a preliminary JD, that JD will be processed as soon as is practicable. Further, an approved JD, a proffered individual permit (and all terms and conditions contained therein), or individual permit denial can be administratively appealed pursuant to 33 C.F.R. Part 331, and that in any administrative appeal, jurisdictional issues can be raised (see 33 C.F.R. 331.5(a)(2)). If, during that administrative appeal, it becomes necessary to make an official determination whether CWA jurisdiction exists over a site, or to provide an official delineation of jurisdictional waters on the site, the Corps will provide an approved JD to accomplish that result, as soon as is practicable. This preliminary JD finds that there "may be" waters of the United States on the subject project site, and identifies all aquatic features on the site that could be affected by the proposed activity, based on the following information:

SUPPORTING DATA. Data reviewed for preliminary JD (check all that apply)

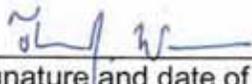
- checked items should be included in case file and, where checked and requested, appropriately reference sources below):

- Maps, plans, plots or plat submitted by or on behalf of the applicant/consultant:Parsons.
- Data sheets prepared/submitted by or on behalf of the applicant/consultant.
 - Office concurs with data sheets/delineation report.
 - Office does not concur with data sheets/delineation report.
- Data sheets prepared by the Corps: .
- Corps navigable waters' study: .
- U.S. Geological Survey Hydrologic Atlas: .
 - USGS NHD data.
 - USGS 8 and 12 digit HUC maps.

- U.S. Geological Survey map(s). Cite scale & quad name:USGS 7.5 Minute Topographic Map; Fishers, McCordsville, and Ingalls Quadrangles.
- USDA Natural Resources Conservation Service Soil Survey. Citation:Soil Survey Geographic (SSURGO) Hamilton and Madison Counties.
- National wetlands inventory map(s). Cite name:USFWS GIS database (see NWI Map).
- State/Local wetland inventory map(s): .
- FEMA/FIRM maps:as noted on the NWI Map.
- 100-year Floodplain Elevation is: (National Geodectic Vertical Datum of 1929)
- Photographs: Aerial (Name & Date):Orthos 2012, Orthos 2008, Othos 2005.
- or Other (Name & Date):May-July Fieldwork (see report for specific dates).
- Previous determination(s). File no. and date of response letter: .
- Other information (please specify): .

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

 Signature and date of
 Regulatory Project Manager
 (REQUIRED)

 10/2/2014
 Signature and date of
 person requesting preliminary JD
 (REQUIRED, unless obtaining
 the signature is impracticable)

Site number	Latitude	Longitude	Cowardin Class	Estimated amount of aquatic resource in review area	Class of aquatic resource
Cheaney Creek	39.947832 N	-86.014879 W	Riverine-Perennial	400 linear feet	non-section 10 – non-wetland
UNT1 to Cheaney Creek	39.953972 N	-86.010587 W	Riverine-Intermittent	5,865 linear feet	non-section 10 – non-wetland
UNT2 to Cheaney Creek	39.946620 N	-86.014934 W	Riverine-Ephemeral	960 linear feet	non-section 10 – non-wetland
UNT3 to Cheaney Creek	39.949073 N	-86.013086 W	Riverine-Ephemeral	1,000 linear feet	non-section 10 – non-wetland
UNT4 to Cheaney Creek	39.948231 N	-86.013557 W	Riverine-Perennial	425 linear feet	non-section 10 – non-wetland
UNT5 to Cheaney Creek	39.941494 N	-86.019577 W	Riverine-Ephemeral	55 linear feet	non-section 10 – non-wetland
Sand Creek	39.969304 N	-85.975870 W	Riverine-Perennial	340 linear feet	non-section 10 – non-wetland
UNT1 to Sand Creek	39.968671 N	-85.979058 W	Riverine-Ephemeral	1,930 linear feet	non-section 10 – non-wetland
UNT2 to Sand Creek	39.969631 N	-85.976066 W	Riverine-Ephemeral	135 linear feet	non-section 10 – non-wetland
UNT3 to Sand Creek	39.969063 N	-85.975866 W	Riverine-Ephemeral	100 linear feet	non-section 10 – non-wetland
UNT4 to Sand Creek	39.970221 N	-85.972345 W	Riverine-Perennial	325 linear feet	non-section 10 – non-wetland
UNT5 to Sand Creek	39.986532 N	-85.937797 W	Riverine-Intermittent	260 linear feet	non-section 10 – non-wetland
Mud Creek	39.991031 N	-85.902347 W	Riverine-Perennial	430 linear feet	non-section 10 – non-wetland
UNT1 to Mud Creek	39.990680 N	-85.903144 W	Riverine-Ephemeral	2,920 linear feet	non-section 10 – non-wetland
UNT2 to Mud Creek	39.990579 N	-85.902138 W	Riverine-Ephemeral	200 linear feet	non-section 10 – non-wetland
UNT3 to Mud Creek	39.990580 N	-85.902244 W	Riverine-Ephemeral	185 linear feet	non-section 10 – non-wetland
Thorpe Creek	39.993419 N	-85.848462 W	Riverine-Perennial	370 linear feet	non-section 10 – non-wetland
UNT1 to Thorpe Creek	39.991478 N	-85.871661 W	Riverine-Perennial	275 linear feet	non-section 10 – non-wetland
UNT2 to Thorpe Creek	39.991175 N	-85.871161 W	Riverine-Ephemeral	1,430 linear feet	non-section 10 – non-wetland
Wetland 01	39.941511 N	-86.019662 W	Palustrine Emergent	0.0438 acre	non-section 10 – wetland
Wetland 02	39.942207 N	-86.019095 W	Palustrine Emergent	0.0495 acre	non-section 10 – wetland
Wetland 03	39.942749 N	-86.017783 W	Palustrine Emergent	0.1479 acre	non-section 10 – wetland
Wetland 04	39.942755 N	-86.018625 W	Palustrine Emergent	0.0344 acre	non-section 10 – wetland
Wetland 05	39.963123 N	-86.004264 W	Palustrine Emergent	0.0290 acre	non-section 10 – wetland
Wetland 06	39.965024 N	-86.001207 W	Palustrine Emergent	0.4531 acre	non-section 10 – wetland
Wetland 07	39.965956 N	-86.000959 W	Palustrine Emergent	0.2222 acre	non-section 10 – wetland
Wetland 08	39.967467 N	-85.994772 W	Palustrine Emergent	0.7879 acre	non-section 10 – wetland

Wetland 09	39.967663 N	-85.993443 W	Palustrine Forested	0.0845 acre	non-section 10 – wetland
Wetland 10	39.967081 N	-85.993381 W	Palustrine Emergent	0.1198 acre	non-section 10 – wetland
Wetland 11	39.967321 N	-85.990890 W	Palustrine Emergent	0.0556 acre	non-section 10 – wetland
Wetland 12	39.970826 N	-85.970673 W	Palustrine Emergent	0.0216 acre	non-section 10 – wetland
Wetland 13	39.972154 N	-85.967835 W	Palustrine Emergent	0.1800 acre	non-section 10 – wetland
Wetland 14	39.972774 N	-85.966487 W	Palustrine Emergent	0.0084 acre	non-section 10 – wetland
Wetland 15	39.975844 N	-85.960098 W	Palustrine Emergent	0.0037 acre	non-section 10 – wetland
Wetland 16	39.976626 N	-85.958684 W	Palustrine Emergent	0.1970 acre	non-section 10 – wetland
Wetland 17	39.977147 N	-85.957434 W	Palustrine Emergent	0.0350 acre	non-section 10 – wetland
Wetland 18	39.977592 N	-85.956632 W	Palustrine Forested	0.0549 acre	non-section 10 – wetland
Wetland 19	39.979228 N	-85.953082 W	Palustrine Emergent	0.2472 acre	non-section 10 – wetland
Wetland 20	39.980530 N	-85.950366 W	Palustrine Emergent	0.01946 acre	non-section 10 – wetland
Wetland 21	39.983607 N	-85.943890 W	Palustrine Emergent	0.0090 acre	non-section 10 – wetland
Wetland 22	39.984029 N	-85.943140 W	Palustrine Emergent	0.0659 acre	non-section 10 – wetland
Wetland 23	39.984469 N	-85.942132 W	Palustrine Emergent	0.0225 acre	non-section 10 – wetland
Wetland 24	39.986690 N	-85.937636 W	Palustrine Shrub-Scrub and Palustrine Emergent	0.2720 acre	non-section 10 – wetland
Wetland 25	39.986188 N	-85.937119 W	Palustrine Emergent	0.0072 acre	non-section 10 – wetland
Wetland 26	39.987122 N	-85.935137 W	Palustrine Emergent	0.1881 acre	non-section 10 – wetland
Wetland 27	39.989670 N	-85.927868 W	Palustrine Emergent	0.0592 acre	non-section 10 – wetland
Wetland 28	39.991350 N	-85.927043 W	Palustrine Forested and Palustrine Emergent	0.8000 acre	non-section 10 – wetland
Wetland 29	39.992603 N	-85.924896 W	Palustrine Emergent	0.6763 acre	non-section 10 – wetland
Wetland 30	39.991734 N	-85.923098 W	Palustrine Emergent	0.0110 acre	non-section 10 – wetland
Wetland 31	39.991403 N	-85.916568 W	Palustrine Emergent	0.0709 acre	non-section 10 – wetland
Wetland 32	39.990578 N	-85.901911 W	Palustrine Forested	0.0947 acre	non-section 10 – wetland
Wetland 33	39.991914 N	-85.861960 W	Palustrine Emergent	0.0490 acre	non-section 10 – wetland
Wetland 34	39.993123 N	-85.848439 W	Palustrine Emergent	0.0708 acre	non-section 10 – wetland
Wetland 35	39.993134 N	-85.848327 W	Palustrine Emergent	0.0434 acre	non-section 10 – wetland
Wetland 36	39.993155 N	-85.848169 W	Palustrine Emergent	0.0061 acre	non-section 10 – wetland
Wetland 37	39.993760 N	-85.848281 W	Palustrine Emergent	0.0046 acre	non-section 10 – wetland
Wetland 38	39.994123 N	-85.844783 W	Palustrine Emergent	0.0214 acre	non-section 10 – wetland
Wetland 39	39.993470 N	-85.844670 W	Palustrine Emergent	0.0232 acre	non-section 10 – wetland

Wetland 40	39.993376 N	-85.841504 W	Palustrine Emergent	0.0321 acre	non-section 10 – wetland
Wetland 41	39.994010 N	-85.841344 W	Palustrine Emergent	0.0385 acre	non-section 10 – wetland
Wetland 42	39.992773 N	-85.837616 W	Palustrine Emergent	0.0843 acre	non-section 10 – wetland

Miller, Daniel J

From: Herber, Lisa [LHerber@indot.IN.gov]
Sent: Monday, October 20, 2014 10:21 AM
To: Warrner, Thomas; Jones, Tony W; Allen, Kathleen
Cc: Miller, Daniel J; Carnahan, Ben
Subject: RE: I-69 Des 1383332/138336/1383489 Marion and Hamilton Counties, Waters of the U.S. Report Revisions

Follow Up Flag: Follow up
Flag Status: Flagged

TJ,

I have reviewed the waters revisions and everything looks great! The information in this report should be used by the project designer to determine if waters of the U.S. will be impacted by the project. Avoidance and minimization of impacts must occur *before* mitigation will be considered. If mitigation is required, the project manager or project designer must coordinate with the EWPO to discuss how adequate compensatory mitigation will be provided.

The project manager should notify the EWPO if there is any change to the project footprint presented in this report. Such changes may require additional fieldwork and submittal of an updated waters report covering areas not previously investigated. *This report is only valid for a period of five years from the date of fieldwork.* If the report expires prior to waterway permit application submittal, additional fieldwork and a revised waters report will be required. The waters report will not be sent to the United States Army Corps of Engineers (USACE) or the Indiana Department of Environmental Management (IDEM) until the waterways permit applications are submitted to these agencies.

A couple of things: submittal of the waters report ahead of permits to the USACE for their approval may be preferable if there are concerns with mitigation needs for some of these features. I also saw the status report for milestones/completion dates for the project and did not see a Rule 5 listed as a milestone. Please verify.

Lisa Herber

Ecology & Waterway Permits Team Lead

100 North Senate Avenue, Rm N642

Indianapolis, Indiana 46204

Office: (317) 232-5135

Email: Lherber@indot.in.gov



From: Warrner, Thomas [mailto:Thomas.Warrner@parsons.com]
Sent: Thursday, October 16, 2014 1:41 PM
To: Herber, Lisa
Cc: Miller, Daniel J; Carnahan, Ben; Jones, Tony W
Subject: RE: I-69 Des 1383332/138336/1383489 Marion and Hamilton Counties, Waters of the U.S. Report Revisions

Hi Lisa,

Thank-you for your quick review and comments. The revised waters report I dropped off this afternoon incorporates each comment (below) per our morning phone conversation. Please let me know if you have any additional questions or comments on this report.

Take care,

T.J.
317-616-1033

From: Herber, Lisa [<mailto:LHerber@indot.IN.gov>]
Sent: Wednesday, October 15, 2014 2:57 PM
To: Warrner, Thomas
Cc: Jones, Tony W; Carnahan, Ben; Miller, Daniel J
Subject: RE: I-69 Des 1383332/1383336/1383489 Marion and Hamilton Counties, Waters of the U.S. Report

TJ, I have reviewed the waters report and have a few comments:

1. Table 2, Stream Summary: Habitat Quality for Cheeney Creek is listed as Poor but the report states Average. [Table 2 has been revised as requested.](#)
2. Maps: Waterways are not labeled on Exhibits 2 & 3. Wetland type is not consistently named on the maps. [We discussed over the phone on 10/16/14 that waterways would typically be included on the NWI and soils mapping. However, to keep the report length down \(this revision would add approximately 100 pages\), we will leave these two exhibits as originally submitted. These layers can be readily combined should the USACE or IDEM request this during their review. Also, as discussed, wetland labels for emergent wetlands will be left as is. An additional label has been added for the three forested wetlands \(Wetland 09, Wetland 18, and Wetland 32\). The only shrub scrub wetland was labeled previously since it was split between emergent and shrub-scrub wetland types.](#)
3. QHEI & HHEI: Check substrate scores for QHEIs; HHEIs do not have the % substrate filled in on all. Area drawing for both forms should have north arrow and the stream named/labeled. [QHEI substrate scores for Sand Creek and Mud Creek were calculated correctly. The error on the Thorpe Creek QHEI score has been corrected, and all references to this score have been updated in the report. HHEI forms where % substrate was missing have also been updated. A north arrow and stream label has been added to all drawings on both the QHEI and HHEI forms.](#)
4. Pre-JD: Uncheck Box E; typically for USACE use. [This has been revised as requested.](#)

Everything else looks great! Let me know if you have any questions.

Lisa Herber

Ecology & Waterway Permits Team Lead

100 North Senate Avenue, Rm N642

Indianapolis, Indiana 46204

Office: (317) 232-5135

Email: Lherber@indot.in.gov



From: Warrner, Thomas [<mailto:Thomas.Warrner@parsons.com>]
Sent: Monday, October 06, 2014 3:07 PM
To: Herber, Lisa
Cc: Jones, Tony W; Carnahan, Ben; Miller, Daniel J
Subject: I-69 Des 1383332/1383336/1383489 Marion and Hamilton Counties, Waters of the U.S. Report

Hi Lisa,

Thank-you for meeting with me this afternoon so I could deliver the I-69 Interstate Expansion Waters of the U.S. Report for your review. As discussed, we incorporated the feedback from three early coordination meetings with INDOT, IDEM, and the USACE into the document. Attached is a copy of the cover letter that accompanied our submittal.

Please let me know if you have any questions or comments on the report.

Take care,

T.J.

Thomas J. Warrner

Environmental Planner

PARSONS

101 West Ohio Street, Suite 2121

Indianapolis, Indiana 46204

Phone: (317) 616-4671

E-mail: thomas.warrner@parsons.com

Web: www.parsons.com

Appendix H: Red Flag Investigation

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INDIANA DEPARTMENT OF TRANSPORTATION

Driving Indiana's Economic Growth

100 North Senate Avenue
Room N642
Indianapolis, Indiana 46204-2216 (317) 232-5348 FAX: (317) 233-4929

Michael R. Pence, Governor
Karl B. Browning, Commissioner

Date: August 14, 2014

To: Hazardous Materials Unit
Environmental Services
Indiana Department of Transportation
100 N Senate Avenue, Room N642
Indianapolis, IN 46204

From: Daniel J Miller
Senior Environmental Planner
Parsons
101 W. Ohio St., Suite 2121
Indianapolis, IN 46204
Daniel.J.Miller@parsons.com

Re: RED FLAG INVESTIGATION
Des. No. 1383489
I-69 Interstate Expansion
Project 2: Interchange Modification at Exit 210 (Campus Parkway)
Hamilton County, Indiana

NARRATIVE

The Indiana Department of Transportation is planning an I-69 Interstate Expansion from 106th Street in Fishers to Exit 226 (State Routes (SRs) 9 & 109 in Anderson), in Hamilton and Madison Counties. This expansion has been broken into multiple projects with independent utility and logical termini. This report is being conducted for Project 2 (Des. No. 1383489), an interchange modification project at Exit 210 (Campus Parkway).

Purpose and Need: The need for this project stems from traffic congestion issues that currently exist at this interchange. The interchange is experiencing an insufficient Level of Service (LOS) during peak traffic hours. LOS is a rating for traffic congestion, with LOS A indicating little to no delay and LOS F indicating serious congestion and delay. An INDOT study conducted in the fall of 2012 noted, "Southbound [SB] I-69 experiences congestion and reduction of travel speed during the AM peak hours, especially as traffic approaches Exit 205. Northbound [NB] I-69 also experiences congestion and long queues at Exit 210's NB exit during the PM peak hours, especially during events at the Klipsch Music Center (though traffic data collected does not take into account such events)."

Traffic Data was recently analyzed using Highway Capacity Manual methodology in Highway Capacity Software (HCS). The northbound ramp is currently operating at an LOS D, while the southbound ramp is operating at an LOS C. Both ramp termini and are predicted to operate at an LOS F in the design year, 2035. The results show unacceptable LOS for both existing and future traffic for the interchange.

The purpose of this project is to improve overall traffic operation by reducing congestion at this interchange.

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Existing Conditions: Improvements have recently been completed on Campus Parkway/Southeastern Parkway on both sides of the interchange. Prior to that work, the cross road was a simple, rural 2-lane road and was referred to as SR 238 (Greenfield Ave locally) where it connected Noblesville and Fortville. Now the SR 238 designation has been relinquished. The City of Noblesville refers to the road as Campus Parkway while the Town of Fishers refers to it as Southeastern Parkway.

The current interchange type is a diamond interchange with signalized ramp terminals. The bridge has one through-lane and one left-turn lane going eastbound, and two through-lanes and one left-turn lane going westbound.

Proposed Project: An interchange modification project is proposed for the interchange to improve the LOS. Improvements to the existing interchange such as added auxiliary lanes will be considered. Transportation System Management (TSM) improvements such as ramp metering and signal coordination will also be considered. In addition, modification to the interchange type will be considered. While all interchange types will be considered as possible improvements, the limited right-of-way in the vicinity of the interchange will make the following interchange types most likely to be selected: partial-cloverleaf interchange, tight diamond with roundabouts at the ramp termini, single point urban interchange, and double-crossover diamond interchange. The primary factors in determining the modifications selected will be construction costs, LOS rating, traffic safety, land acquisition costs, environmental impacts and cultural resources impacts.

Right-of-Way (ROW): New permanent and/or temporary ROW may be required for this project depending upon the type of improvements selected for this undertaking. This survey has utilized extents that take into account the maximum amount of ROW that may be required.

SUMMARY

Infrastructure			
Indicate the number of items of concern found within ½ mile, including an explanation why each item within the ½ mile radius will/will not impact the project. If there are no items, please indicate N/A:			
Religious Facilities	1	Recreational Facilities	N/A
Airports	N/A	Pipelines	2
Cemeteries	N/A	Railroads	N/A
Hospitals	2*	Trails	8 (segments)
Schools	N/A	Managed Lands	N/A

Explanation: (Please provide a separate paragraph for each item.)

- *Religious Facilities:* One religious facility (Bethlehem Church) lies within a half-mile radius of the project area, approximately 0.03 mile south of the southern edge of the project area. Therefore, it will not be altered by construction activities. Minor inconveniences may occur from the maintenance of traffic (MOT). Local roads would offer a very minimal detour around the project area. Coordination with the religious facility will take place for proper MOT throughout construction. This project is a Type I project, and therefore Noise Analysis will be conducted to determine traffic noise levels, potential noise impacts, and the feasibility of traffic noise mitigation. If this facility is determined to have traffic noise impacts, noise abatement measures will be considered and appropriate measures constructed to mitigate for these impacts.
- *Pipelines:* Two pipelines (Vectren Energy and Marathon Pipeline Company (shown on GIS as Indiana Gas Co. and Buckeye Pipeline Company)) lie within a half mile radius of the project area. The Marathon Pipeline Company pipeline lies outside of the project area and will not be impacted by the proposed project. The Vectren Energy pipeline is approximately 0.03 mile east of the intersection of Campus Pkwy and Harrell Pkwy. Coordination will occur with INDOT Utilities during project development and any impacts will be appropriately mitigated for.

- Hospitals:** *The GIS review did not locate any hospitals within a half-mile radius of the project area. However, IU Health Saxony Hospital is now located off of the southwest quadrant of the Campus Parkway exit, and St. Vincent Health is now located off of the southeast quadrant of the Campus Parkway exit (the locations of the hospitals have been noted on the attached maps). The hospitals lie outside of the project limits. Therefore, they will not be altered by construction activities. Minor inconveniences may occur from the MOT. Local roads should offer a very minimal detour around the project area. Coordination with the hospitals will take place for proper MOT throughout construction. As previously stated, this project is a Type I project, and therefore Noise Analysis will be conducted to determine traffic noise levels, potential noise impacts, and the feasibility of traffic noise mitigation. If the hospitals are determined to have traffic noise impacts, noise abatement measures will be considered and appropriate measures constructed to mitigate for these impacts.
- Trails:** Eight segments of trail (5 open and 3 planned) lie within a half-mile radius of the project area. Three open trails (Various Fisher Subdivisions, Mud Creek trail existing, a segment of Olio Road - SR 238 south to Bee Camp Creek) and one planned trail (Pennington Road/136th Street to County Line) lie outside of the project limits and would not be impacted by the proposed project. Two open segments (146th St from Pointe Blvd to I-69 and Cumberland Rd to Hamilton Towne Center) and two planned segments (I-69 South to Mud Creek and a segment of Olio Road - SR 238 south to Bee Camp Creek) lie within the project area and may be impacted by the proposed project. As these trails are likely to be considered Section 4(f) resources, if impacts to the resources occur, the project will be evaluated to determine the appropriate level of involvement and documentation that must occur. The officials with jurisdiction will be coordinated with throughout the project development.

Water Resources			
Indicate the number of items of concern found within ½ mile, including an explanation why each item within the ½ mile radius will/will not impact the project. If there are no items, please indicate N/A:			
NWI - Points	N/A	NWI - Wetlands	10
Karst Springs	N/A	IDEM 303d Listed Lakes	N/A
Canal Structures – Historic	N/A	Lakes	14
NWI - Lines	1	Floodplain - DFIRM	2 (8 segments)
IDEM 303d Listed Rivers and Streams (Impaired)	N/A	Cave Entrance Density	N/A
Rivers and Streams	2 (5 segments)	Sinkhole Areas	N/A
Canal Routes - Historic	N/A	Sinking-Stream Basins	N/A

Explanation: (Please provide a separate paragraph for each item.)

- NWI Wetlands:** Ten NWI-wetlands lie within a half-mile radius of the project area. Two lie within the project area, and eight lie outside of the project limits. Due to the scope of this project, a waters/wetland determination will be performed and any possible wetlands delineated. A Waters Report will then be written to summarize the findings and coordination with INDOT Ecology and Permits will occur. All applicable permits will be applied for and acquired before construction can begin. Applicable agencies will be coordinated with, and any comments received will be incorporated into the environmental document.
- Lakes:** Fourteen lakes lie within a half-mile radius of the project limits. Three lakes lie within the project area, and the remaining eleven lie outside of the project limits. Currently, no lakes are expected to be impacted by the proposed project. As previously stated, a waters determination will be performed to verify jurisdictional waters within and/or adjacent to the project area and coordination with INDOT Ecology and Permits will occur.

- *NWI Lines*: One NWI line lies within a half-mile radius of the project area, but outside of the project limits. It is approximately 0.49 mile southeast of the project area. Therefore, it will not be impacted by the proposed project.
- *Floodplain – DFIRM*: Two floodplains (8 segments) lie within a half-mile radius of the project area, the nearest being approximately 0.40 mile southeast of the project area. Therefore, they will not be impacted by the proposed project.
- *Rivers and Streams*: Two Streams (UNT to Sand Creek (4 segments) and Mud Creek (1 segment)) lie within a half-mile radius of the project area. The nearest segment is approximately 0.06 mile north of the project area. These streams will not be impacted by the proposed project.

Mining/Mineral Exploration			
Indicate the number of items of concern found within ½ mile, including an explanation why each item within the ½ mile radius will/will not impact the project. If there are no items, please indicate N/A:			
Petroleum Wells	21	Petroleum Fields	1
Mines – Surface	N/A	Mines – Underground	N/A

Explanation: (Please provide a separate paragraph for each item.)

- *Petroleum Wells*: Twenty-one petroleum wells lie within a half-mile radius of the project area. Two inactive wells are noted within the project area. No wells were identified within or adjacent to the project area at a field check on December 4, 2013. Therefore, no petroleum wells will be impacted by the proposed project.
- *Petroleum Fields*: The project area lies entirely within the Trenton Petroleum Field, which is no longer active. When this field was active, the defunct wells were often abandoned in place and those that were plugged were usually done so using ineffective methods. Oil and brine from these wells and from the field occasionally migrates and surfaces. It is possible for contaminants from the oil field to pollute streams and rivers; however, the average depth of the oil field is 900 feet below surface and this project is unlikely to impact the oil field. Again, no petroleum wells were identified within or adjacent to the project area at a field check on December 4, 2013. The proposed project is not expected to impact this petroleum field.

Hazmat Concerns			
Indicate the number of items of concern found within ½ mile, including an explanation why each item within the ½ mile radius will/will not impact the project. If there are no items, please indicate N/A:			
Brownfield Sites	N/A	Restricted Waste Sites	N/A
Corrective Action Sites (RCRA)	N/A	Septage Waste Sites	N/A
Confined Feeding Operations	N/A	Solid Waste Landfills	N/A
Construction Demolition Waste	N/A	State Cleanup Sites	N/A
Industrial Waste Sites (RCRA Generators)	N/A	Tire Waste Sites	N/A
Infectious/Medical Waste Sites	N/A	Waste Transfer Stations	N/A
Lagoon/Surface Impoundments	N/A	RCRA Waste Treatment, Storage, and Disposal Sites (TSDs)	N/A
Leaking Underground Storage Tanks (LUSTs)	N/A	Underground Storage Tanks	N/A
Manufactured Gas Plant Sites	N/A	Voluntary Remediation Program	N/A

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NPDES Facilities	N/A	Superfund	N/A
NPDES Pipe Locations	1	Institutional Control Sites	N/A
Open Dump Sites	N/A		

Explanation: (Please provide a separate paragraph for each item.)

- *NPDES Pipe Location:* One NPDES Pipe Location (IH Sewer Corporation) is located within a half-mile radius of the project area. The pipe is located within the project limits. Coordination with INDOT Utilities will occur to determine where exactly the pipe is located, and that it will not be disturbed by the proposed project.

Ecological Information

The Hamilton County listing of the Indiana Natural Heritage Data Center information on endangered, threatened, or rare (ETR) species and high quality natural communities is attached with ETR species highlighted.

Early coordination will be initiated with applicable resource agencies and any comments received will be incorporated into the environmental document.

Cultural Resources

The Section 106 process has been initiated by Weintraut & Associates, Inc. All commitments received from the Section 106 process will be incorporated in the final environmental document for this project.

RECOMMENDATIONS

INFRASTRUCTURE: Religious Facility: Noise Analysis will be conducted to determine traffic noise levels, potential noise impacts, and the feasibility of traffic noise mitigation. If the identified religious facility is determined to have traffic noise impacts, noise abatement measures will be considered and appropriate measures constructed to mitigate for these impacts. Due to the local roads offering a very minimal detour around the project area, coordination with the religious facility will take place for proper MOT throughout construction.

Pipelines: One Indiana Gas Co. pipeline crosses the project area approximately 0.03 mile east of the intersection of Campus Pkwy and Harrell Pkwy. Coordination will occur with INDOT Utilities during project development and any impacts will be appropriately mitigated for.

Trails: Two open trail segments (146th St from Pointe Blvd to I-69 and Cumberland Rd to Hamilton Towne Center) and two planned segments (I-69 South to Mud Creek described as planned and Olivo Road - SR 238 south to Bee Camp Creek) lie within the project area and may be impacted by the proposed project. As these trails are likely to be considered Section 4(f) resources, if impacts to the resources occur, the project will be evaluated to determine the appropriate level of involvement and documentation that must occur. The officials with jurisdiction will be coordinated with throughout the project development.

Hospitals: Noise Analysis will be conducted to determine traffic noise levels, potential noise impacts, and the feasibility of traffic noise mitigation. If the identified hospitals are determined to have traffic noise impacts, noise abatement measures will be considered and appropriate measures constructed to mitigate for these impacts. Minor inconveniences may occur from the MOT. Due to the local roads offering a very minimal detour around the project area, coordination with the hospitals will take place for proper MOT throughout construction.

WATER RESOURCES: NWI – Wetlands: Due to the scope of this project, a waters/wetland determination will be performed and any possible wetlands delineated. A Waters Report will then be written to summarize the findings and coordination with INDOT Ecology and Permits will occur. All applicable permits will be applied for and acquired before construction can begin. Applicable agencies will be coordinated with, and any comments received will be incorporated into the environmental document. It is expected that a Section 401/404 permit will be required. If mitigation is required for this project, construction will take place concurrently with or before the construction of this project.

Lakes: A waters determination will be performed and coordination with INDOT Ecology and Permits will occur to verify jurisdictional waters within and/or adjacent to the project area. All applicable permits will be applied for and acquired before construction can begin. Applicable agencies will be coordinated with, and any comments received will be incorporated into the environmental document.

MINING/MINERAL EXPLORATION: N/A. No impacts to mining/mineral exploration resources are expected to occur from the proposed project.

HAZMAT CONCERNS: One NPDES Pipe Location (IH Sewer Corporation) is located within a half-mile radius of the project area. The pipe is located within the project limits. Coordination with INDOT Utilities will occur to determine where exactly the pipe is located, and that it will not be disturbed by the proposed project.

ECOLOGICAL INFORMATION: Early coordination will be initiated with applicable resource agencies and any comments received will be incorporated into the environmental document. Impacts to endangered species are not expected to occur from the proposed project.

CULTURAL RESOURCES: The Section 106 process has been initiated by Weintraut & Associates, Inc. All commitments received from the Section 106 process will be incorporated in the final environmental document for this project.

**Anthony
Johnson**
Digitally signed by Anthony
Johnson
DN: cn=Anthony Johnson,
o=Hazardous Materials,
ou=Environmental Services,
email=awjohnson@indot.in.gov,
c=US
Date: 2014.08.18 14:41:28 -04'00' (Signature)

INDOT Environmental Services concurrence:

Prepared by:



Daniel J. Miller
Senior Environmental Planner
Parsons

Graphics:

A map for each report section with a ½ mile radius buffer around all project area(s) showing all items identified as possible items of concern is attached. If there is not a section map included, please change the YES to N/A:

GENERAL SITE MAP SHOWING PROJECT AREA: YES

INFRASTRUCTURE: YES

WATER RESOURCES: YES

MINING/MINERAL EXPLORATION: YES

HAZMAT CONCERNS: YES

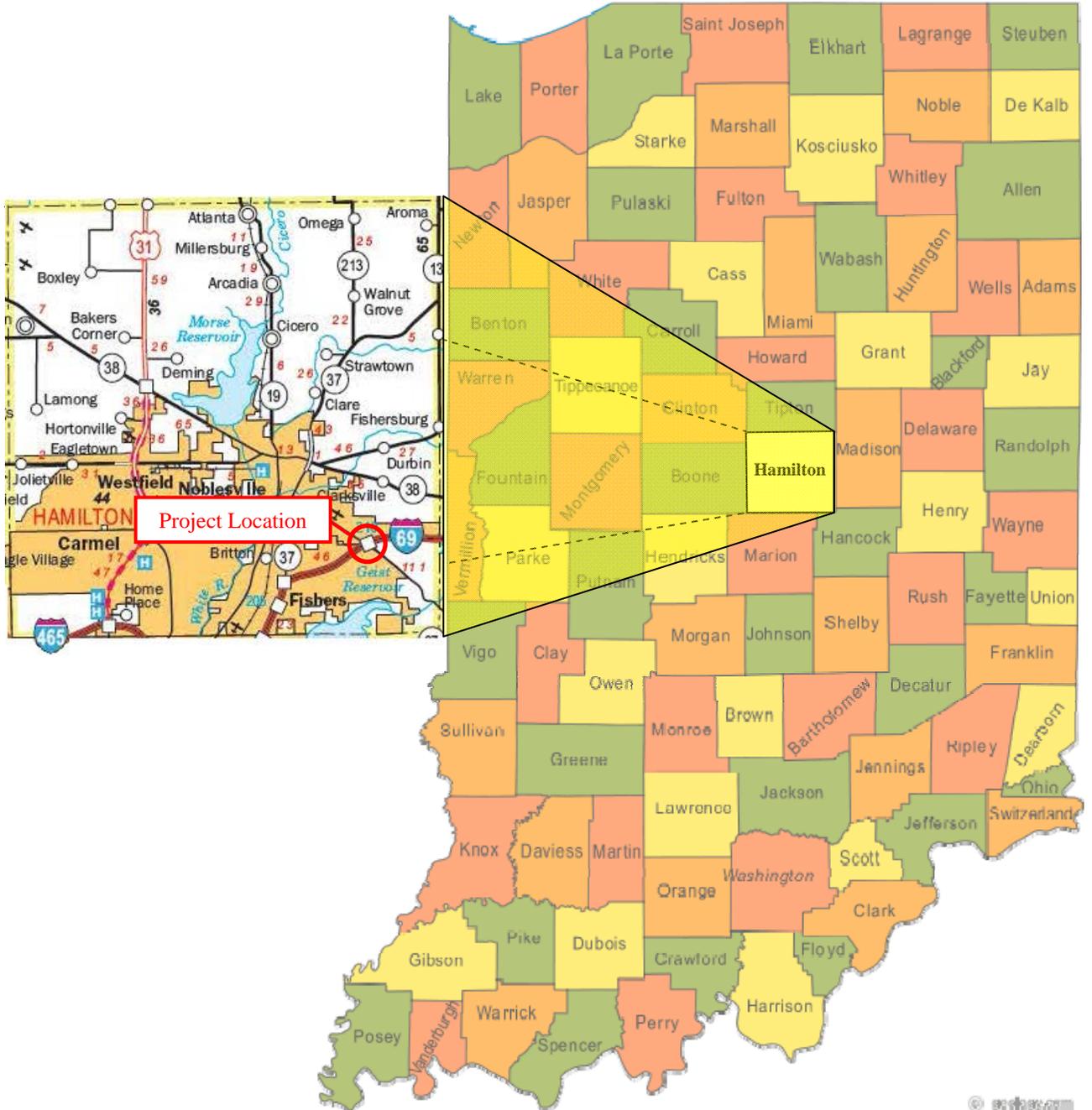
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Des. No. 1383489

I-69 Interstate Expansion

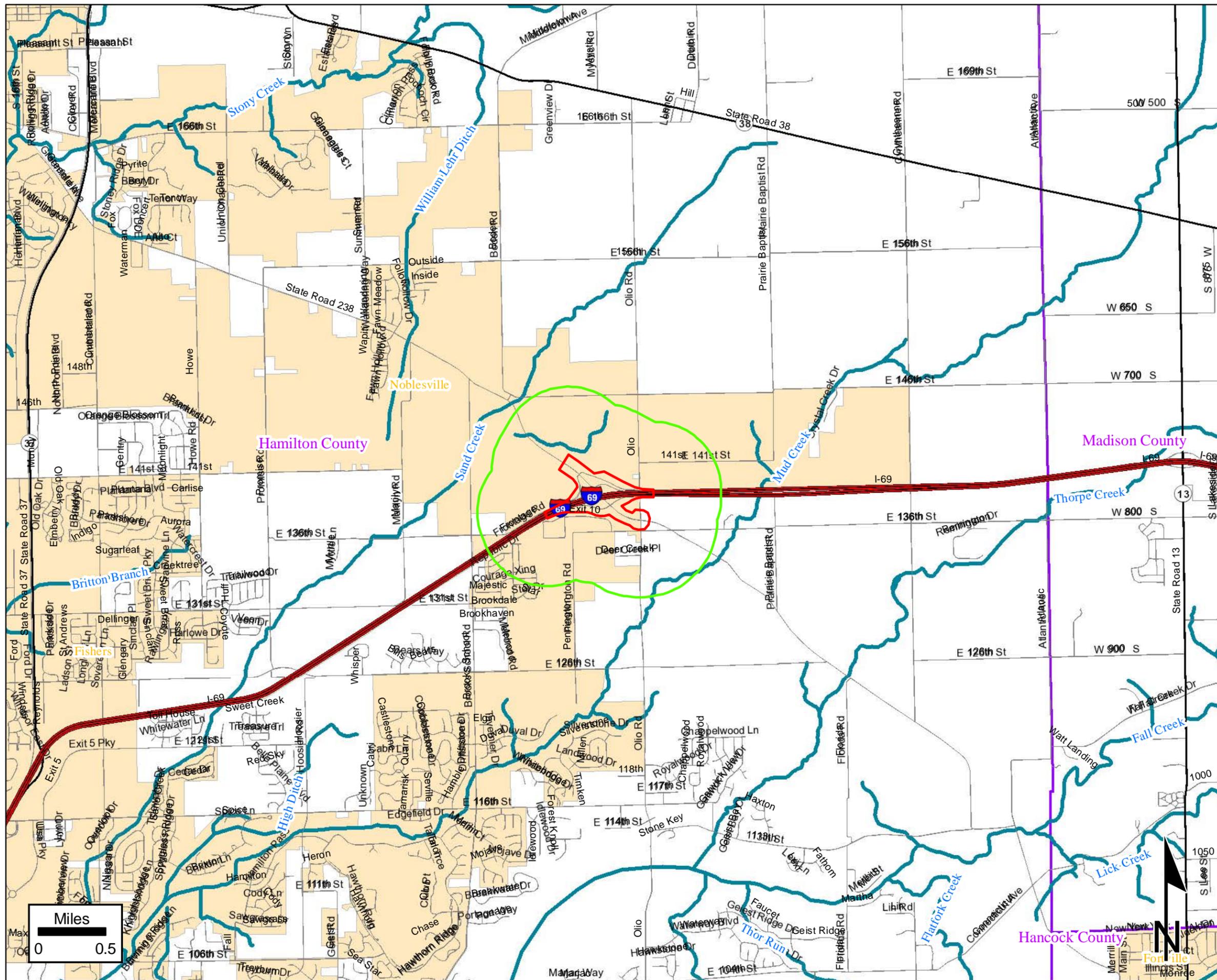
Project 2: Interchange Modification at Exit 210 (Campus Parkway)

Hamilton County; Project Location Map #1



Des. No. 1383489

I-69 Interstate Expansion
Project 2: Interchange Modification at Exit 210
(Campus Parkway); Hamilton County

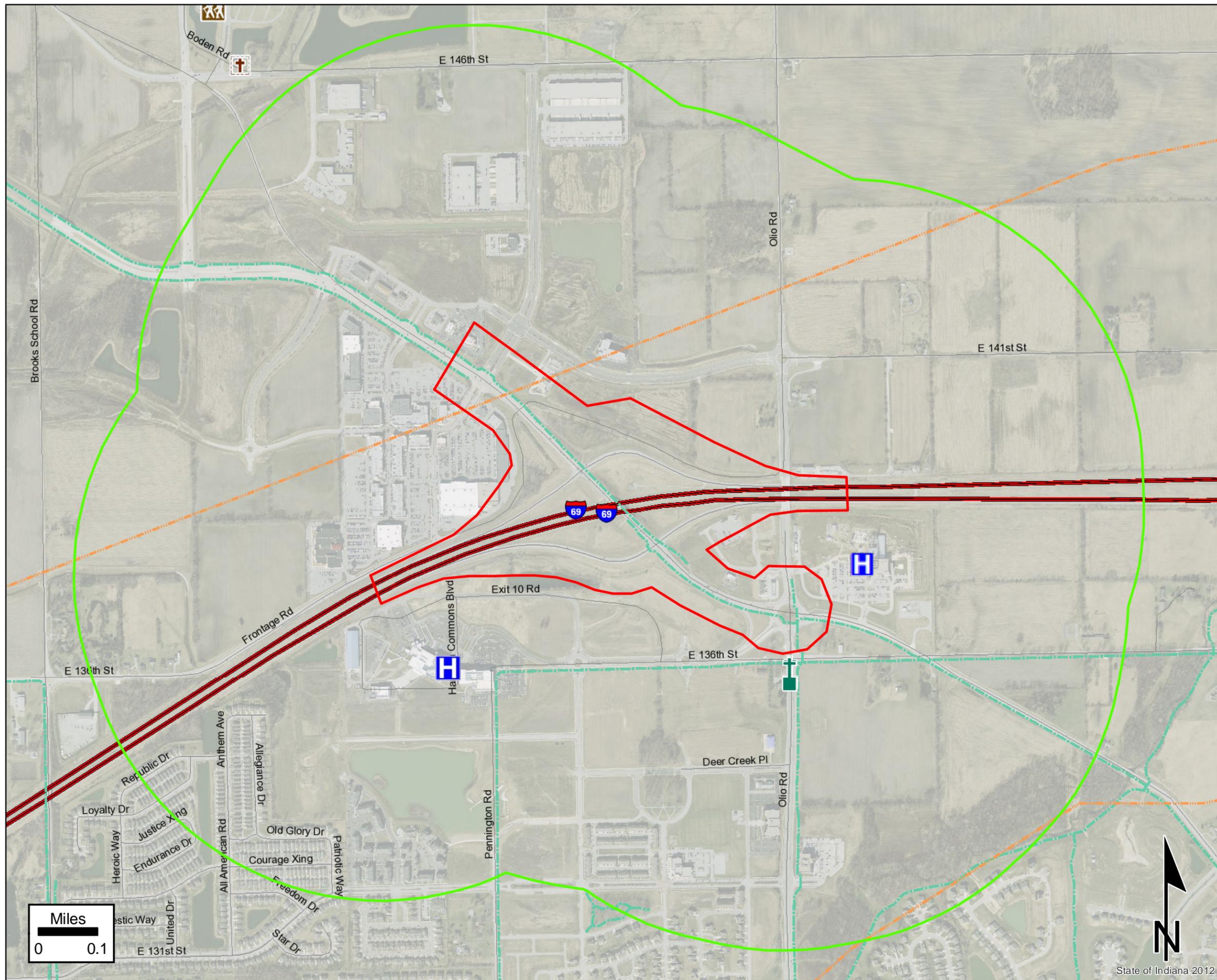


Project Location Map #2

- Project Area
- Half Mile Radius
- Streams (IDNR*)
- Incorporated Areas
- County Boundary
- Interstate
- State
- US
- Local

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

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



Des. No. 1383489

I-69 Interstate Expansion
 Project 2: Interchange Modification at Exit 210
 (Campus Parkway); Hamilton County

Infrastructure

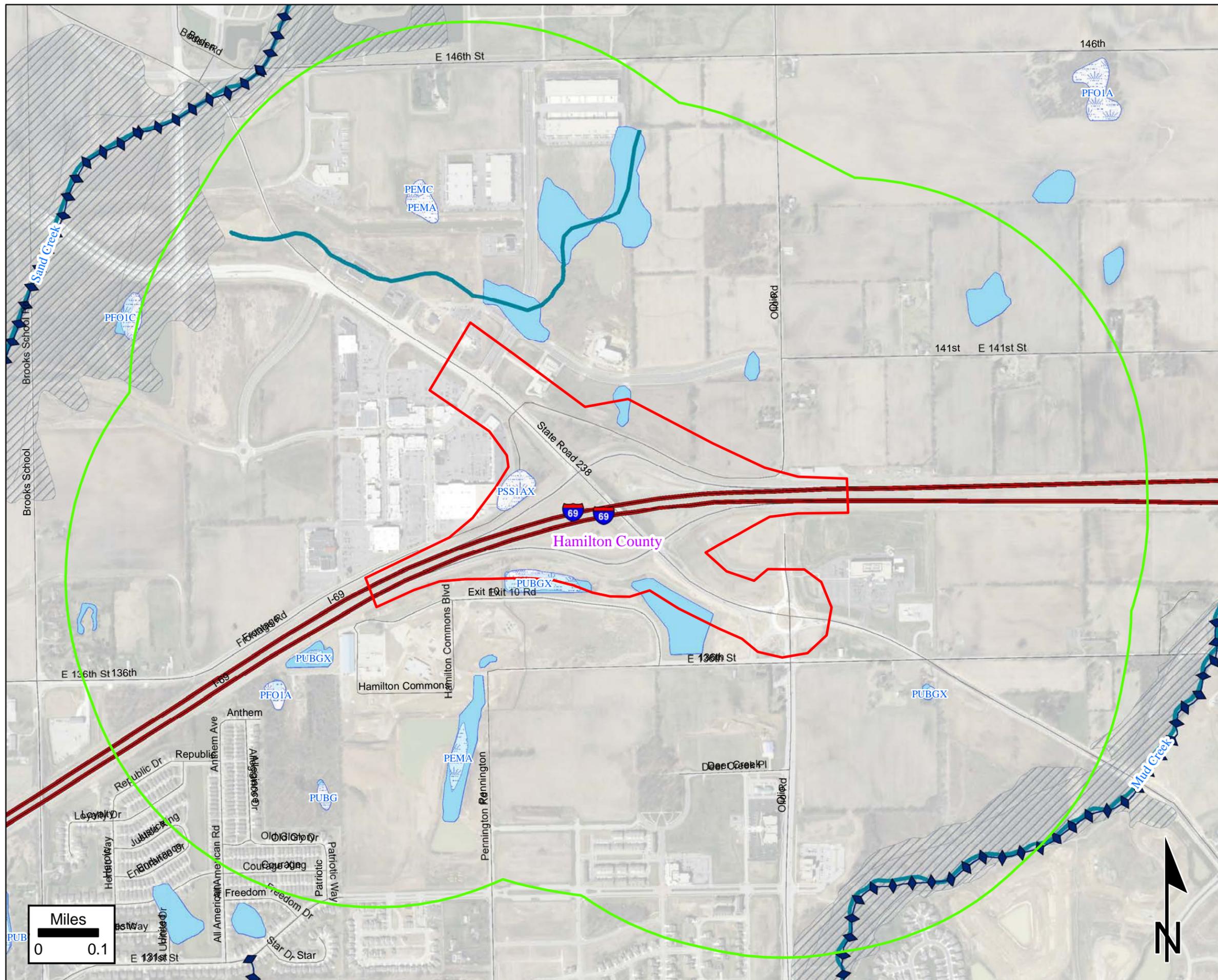
- Project Area
- Half Mile Radius
- ✈ Airport
- Cemeteries
- Hospital
- +— Railroad
- +— Recreation Facility
- +— Religious Facility
- ▲— Religious Facility Indiana Map
- School
- - - Trails
- - - Pipeline
- Managed Lands
- County Boundary
- Interstate
- State
- US
- Local

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

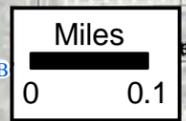
Des. No. 1383489

I-69 Interstate Expansion
 Project 2: Interchange Modification at Exit 210
 (Campus Parkway); Hamilton County



Water Resources

- Project Area
- Half Mile Radius
- Canal Route - Historic
- Canal Structure - Historic
- NWI Wetland Lines
- NWI Wetland Point
- NWI Wetland Polygons
- Floodplain - DFIRM
- IDEM 303d Listed Rivers and Streams
- Rivers and Streams
- NPS NRI listed
- IDEM 303d Listed Lakes
- Lake
- Cave Entrance Density
- Sinkhole Area
- Sinking-Stream Basin
- Karst Spring
- County Boundary
- Interstate
- State
- US
- Local

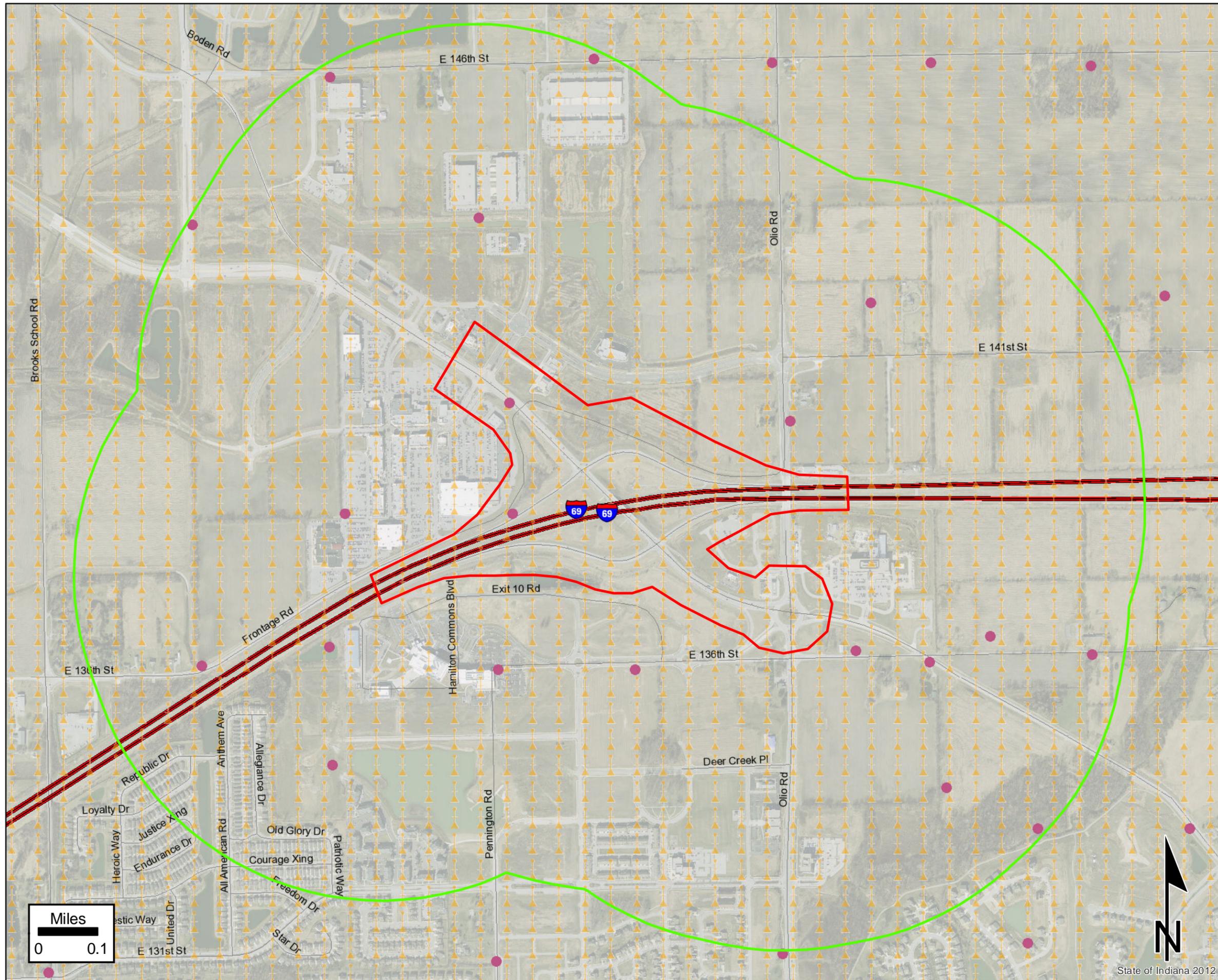


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Des. No. 1383489

I-69 Interstate Expansion
 Project 2: Interchange Modification at Exit 210
 (Campus Parkway); Hamilton County



Mining/Mineral Exploration

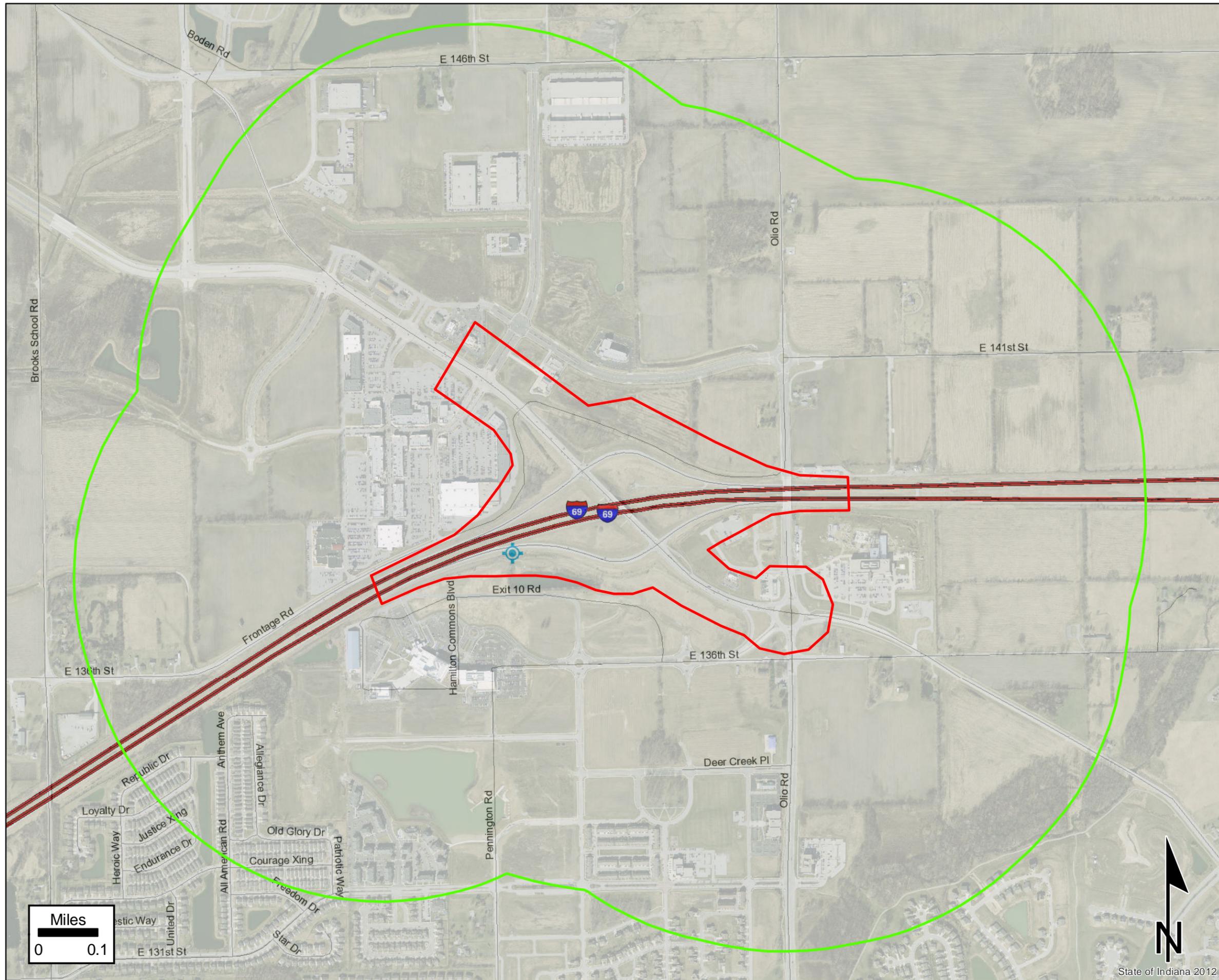
- Project Area
- Half Mile Radius
- Petroleum Wells
- Petroleum Field
- Mine - Surface
- Mine - Underground
- County Boundary
- Interstate
- State
- US
- Local

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Data - Obtained from the State of Indiana Geographical Information Office Library
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Des. No. 1383489

I-69 Interstate Expansion
 Project 2: Interchange Modification at Exit 210
 (Campus Parkway); Hamilton County



Hazardous Materials

- Project Area
- Half Mile Radius
- Institutional Controls
- ☢ Industrial Waste Site
- ✱ Brownfield
- Corrective Action Site (RCRA)
- ▲ State Cleanup Site
- ★ Superfund Site
- ⬠ Voluntary Remediation Program
- ⊗ Manufactured Gas Plant Site
- Underground Storage Tank
- Leaking Underground Storage Tank
- 🐷 Confined Feeding Operation
- Septage Waste Site
- ◆ Construction/Demolition Waste
- ⊕ Infectious/Medical Waste Sites
- ⬠ Lagoon/Surface Impoundment
- Open Dump Site
- S Restricted Waste Site
- Solid Waste Landfill
- ⊗ Tire Waste Site
- ⊕ Waste Transfer Station
- ★ Waste Treatment, Storage, and Disposal
- 🏭 NPDES Facilities
- ⊕ NPDES Pipe Locations
- County Boundary
- Interstate
- State
- US
- Local

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

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

Indiana County Endangered, Threatened and Rare Species List

County: Hamilton

Species Name	Common Name	FED	STATE	GRANK	SRANK
Mollusk: Bivalvia (Mussels)					
Epioblasma torulosa rangiana	Northern Riffleshell	LE	SE	G2T2	SX
Epioblasma triquetra	Snuffbox	LE	SE	G3	S1
Lampsilis fasciola	Wavyrayed Lampmussel		SSC	G5	S3
Ligumia recta	Black Sandshell			G5	S2
Obovaria subrotunda	Round Hickorynut		SSC	G4	S1
Plethobasus cyphus	Sheepnose	LE	SE	G3	S1
Pleurobema clava	Clubshell	LE	SE	G2	S1
Ptychobranhus fasciolaris	Kidneyshell		SSC	G4G5	S2
Quadrula cylindrica cylindrica	Rabbitsfoot	C	SE	G3G4T3	S1
Toxolasma lividus	Purple Lilliput		SSC	G3	S2
Villosa fabalis	Rayed Bean	LE	SSC	G2	S1
Villosa lienosa	Little Spectaclecase		SSC	G5	S3
Insect: Odonata (Dragonflies & Damselflies)					
Enallagma divagans	Turquoise Bluet		SR	G5	S3
Amphibian					
Acris crepitans blanchardi	Northern Cricket Frog		SSC	G5	S4
Necturus maculosus	Common mudpuppy		SSC	G5	S2
Rana pipiens	Northern Leopard Frog		SSC	G5	S2
Reptile					
Clemmys guttata	Spotted Turtle		SE	G5	S2
Sistrurus catenatus catenatus	Eastern Massasauga	C	SE	G3G4T3T4Q	S2
Bird					
Bartramia longicauda	Upland Sandpiper		SE	G5	S3B
Buteo lineatus	Red-shouldered Hawk		SSC	G5	S3
Certhia americana	Brown Creeper			G5	S2B
Dendroica cerulea	Cerulean Warbler		SE	G4	S3B
Haliaeetus leucocephalus	Bald Eagle	LT,PDL	SSC	G5	S2
Ixobrychus exilis	Least Bittern		SE	G5	S3B
Lanius ludovicianus	Loggerhead Shrike	No Status	SE	G4	S3B
Nycticorax nycticorax	Black-crowned Night-heron		SE	G5	S1B
Thryomanes bewickii	Bewick's Wren			G5	S1B
Mammal					
Taxidea taxus	American Badger		SSC	G5	S2
Vascular Plant					
Armoracia aquatica	Lake Cress		SE	G4?	S1
Chelone obliqua var. speciosa	Rose Turtlehead		WL	G4T3	S3
Drosera intermedia	Spoon-leaved Sundew		SR	G5	S2
Platanthera leucophaea	Prairie White-fringed Orchid	LT	SE	G2G3	S1

Indiana Natural Heritage Data Center
Division of Nature Preserves
Indiana Department of Natural Resources
This data is not the result of comprehensive county surveys.

Fed: LE = Endangered; LT = Threatened; C = candidate; PDL = proposed for delisting
State: SE = state endangered; ST = state threatened; SR = state rare; SSC = state species of special concern; SX = state extirpated; SG = state significant; WL = watch list
GRANK: Global Heritage Rank: G1 = critically imperiled globally; G2 = imperiled globally; G3 = rare or uncommon globally; G4 = widespread and abundant globally but with long term concerns; G5 = widespread and abundant globally; G? = unranked; GX = extinct; Q = uncertain rank; T = taxonomic subunit rank
SRANK: State Heritage Rank: S1 = critically imperiled in state; S2 = imperiled in state; S3 = rare or uncommon in state; G4 = widespread and abundant in state but with long term concern; SG = state significant; SH = historical in state; SX = state extirpated; B = breeding status; S? = unranked; SNR = unranked; SNA = nonbreeding status unranked

Indiana County Endangered, Threatened and Rare Species List

County: Hamilton

Species Name	Common Name	FED	STATE	GRANK	SRANK
High Quality Natural Community					
Forest - floodplain wet-mesic	Wet-mesic Floodplain Forest		SG	G3?	S3
Forest - upland mesic	Mesic Upland Forest		SG	G3?	S3

Indiana Natural Heritage Data Center
Division of Nature Preserves
Indiana Department of Natural Resources
This data is not the result of comprehensive county surveys.

Fed: LE = Endangered; LT = Threatened; C = candidate; PDL = proposed for delisting
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 SRANK: State Heritage Rank: S1 = critically imperiled in state; S2 = imperiled in state; S3 = rare or uncommon in state; G4 = widespread and abundant in state but with long term concern; SG = state significant; SH = historical in state; SX = state extirpated; B = breeding status; S? = unranked; SNR = unranked; SNA = nonbreeding status unranked

Appendix I: Air Quality

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Statewide Transportation Improvement Program

FY2014-2017



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Indiana Department of Transportation (INDOT)
 State Preservation and Local Initiated Projects FY 2014 - 2017

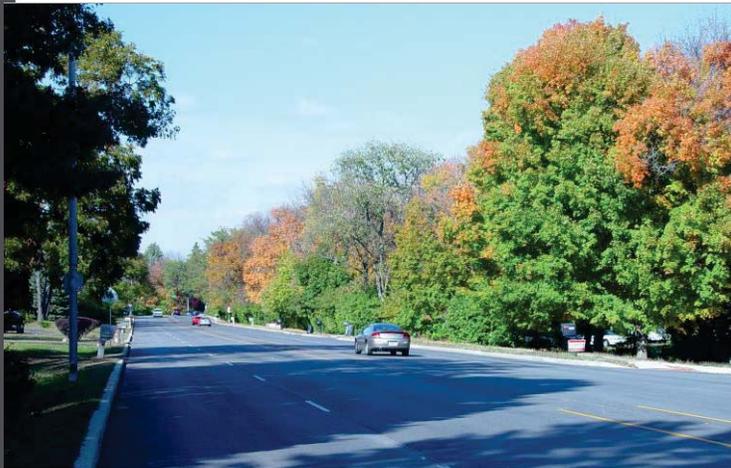
SPONSOR	DES	STIP NAME	ROUTE	WORK TYPE	LOCATION	DISTRICT	MILES	FEDERAL CATEGORY	Estimated Cost left to Complete Project*	PROGRAM	PHASE	FEDERAL	MATCH	2014	2015	2016	2017
Indiana Department of Transportation	1383332	A 19	I 69	Added Travel Lanes	At SR 37 (N jct.) to 5.24 miles N of SR 37 (N jct.) (0.50 mile N of old SR 238)	Greenfield	5.242	Interstate		2020 Trust Fund Program - Construction	CN	\$0.00	\$41,500,000.00		\$41,500,000.00		
Comments: PE in FY 14 and CN in FY 15 amended into 14-17 IRTIP via Reso 14-IMPO-002 on 3.5.14. This is a 2020 project																	
Indiana Department of Transportation	1383485	A 24	I 69	Repair Or Replace Joints	I69 at Cumberland Rd	Greenfield	0	Interstate		Major New - Construction	CN	\$18,000.00	\$2,000.00		\$20,000.00		
Comments: Project added for CN in FY 2015 of the FY 2014-2017 Indianapolis Regional TIP with the second quarter CY 2014 amendments via Resolution # 14-IMPO-005 approved on May 28, 2014. FHWA issued a conformity letter on June 2, 2014 for USDOT.																	
Indiana Department of Transportation	1383486	A 24	I 69	Bridge Widening	I69 NB at Sand Creek	Greenfield	0	Interstate		Major New - Construction	CN	\$1,350,000.00	\$150,000.00		\$1,500,000.00		
Comments: Project added for FY 2015 CN to the FY 2014-2017 Indianapolis Regional TIP with the second quarter CY 2014 amendments via Resolution # 14-IMPO-005 approved on May 28, 2014. FHWA issued a conformity letter on June 2, 2014 for USDOT.																	
Indiana Department of Transportation	1383487	A 24	I 69	Bridge Widening	I69 SB at Sand Creek	Greenfield	0	Interstate		Major New - Construction	CN	\$1,350,000.00	\$150,000.00		\$1,500,000.00		
Comments: Project added for CN in FY 2015 to the FY 2014-2017 Indianapolis Regional TIP with the second quarter CY 2014 amendments via Resolution # 14-IMPO-005 approved on May 28, 2014. FHWA issued a conformity letter on June 2, 2014 for USDOT.																	
Indiana Department of Transportation	1383488	A 24	I 69	Bridge Deck Replacement	Brook School Rd over I69	Greenfield	0	Interstate		Major New - Construction	CN	\$2,025,000.00	\$225,000.00		\$2,250,000.00		
Comments: Project added for CN in FY 2015 to the FY 2014-2017 Indianapolis Regional TIP with the second quarter CY 2014 amendments via Resolution # 14-IMPO-005 approved on May 28, 2014. FHWA issued a conformity letter on June 2, 2014 for USDOT.																	
Indiana Department of Transportation	1383489	A 24	I 69	Interchange Modification	I69 at Old SR238 (Exit 210)	Greenfield	0	Interstate		Major New - Construction	CN	\$11,700,000.00	\$1,300,000.00		\$13,000,000.00		
Road Consulting PE \$1,137,294.00 \$126,366.00 \$1,163,770.00 \$99,890.00																	
Comments: Project added for PE in FY 2015 and CN in FY 2015 to the FY 2014-2017 Indianapolis Regional TIP with second quarter CY 2014 amendments via Resolution # 14-IMPO-005 approved on May 28, 2014. FHWA issued a conformity letter on June 2, 2014 for USDOT.																	
Indiana Department of Transportation	1383490	A 24	I 69	Bridge Widening	Old SR238 over I69	Greenfield	0	Interstate		Major New - Construction	CN	\$1,800,000.00	\$200,000.00		\$2,000,000.00		
Comments: Project added for CN in FY 2015 to the FY 2014-2017 Indianapolis Regional TIP with the second quarter CY 2014 amendments via Resolution # 14-IMPO-005 approved on May 28, 2014. FHWA issued a conformity letter on June 2, 2014 for USDOT.																	
Indiana Department of Transportation	1383509	A 24	I 69	Bridge Widening	I69 NB at Mud Creek	Greenfield	0	Interstate		Major New - Construction	CN	\$1,350,000.00	\$150,000.00		\$1,500,000.00		
Comments: Project added for CN in FY 2015 to the FY 2014-2017 Indianapolis Regional TIP with the second quarter CY 2014 amendments via Resolution # 14-IMPO-005 approved on May 28, 2014. FHWA issued a conformity letter on June 2, 2014 for USDOT.																	
Indiana Department of Transportation	1383510	A 24	I 69	Bridge Widening	I69 SB at Mud Creek	Greenfield	0	Interstate		Major New - Construction	CN	\$1,350,000.00	\$150,000.00		\$1,500,000.00		
Comments: Project added for CN in FY 2015 to the FY 2014-2017 Indianapolis Regional TIP with the second quarter CY 2014 amendments via Resolution # 14-IMPO-005 approved on May 28, 2014. FHWA issued a conformity letter on June 2, 2014 for USDOT.																	
Indiana Department of Transportation	1383511	A 24	I 69	Bridge Replacement, Concrete	Cyntheanne Rd over I69	Greenfield	0	Interstate		Major New - Construction	CN	\$2,259,000.00	\$251,000.00		\$2,510,000.00		
Comments: Project added for CN in FY 2015 to the FY 2014-2017 Indianapolis Regional TIP with the second quarter CY 2014 amendments via Resolution # 14-IMPO-005 approved on May 28, 2014. FHWA issued a conformity letter on June 2, 2014 for USDOT.																	

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

2014-2017 INDIANAPOLIS REGIONAL TRANSPORTATION IMPROVEMENT PROGRAM

Prepared by the Indianapolis Metropolitan Planning Organization

www.indympo.org



INDIANAPOLIS METROPOLITAN PLANNING ORGANIZATION
INDIANAPOLIS REGIONAL TRANSPORTATION COUNCIL
POLICY COMMITTEE

Resolution Number 14-IMPO-005

A RESOLUTION amending the 2014-2017 Indianapolis Regional Transportation Improvement Program.

WHEREAS, the 2014-2017 Indianapolis Regional Transportation Improvement Program (IRTIP) incorporates projects proposed by local governments and agencies within the Indianapolis Metropolitan Planning Area; and

WHEREAS, the projects contained in the proposed IRTIP amendment have been reviewed as to their immediate impact and importance to the continued improvement of the transportation system operating within the area; and

WHEREAS, changing conditions necessitate periodic amendments to the IRTIP; and

WHEREAS, section 176(c) of the Clean Air Act, amended in 1990, required that the Transportation Conformity Rule establish criteria and procedures by which the Federal Highway Administration (FHWA), the Federal Transit Administration (FTA), and metropolitan planning organizations (MPOs) determine the conformity of federally funded or approved highway and transit plans, programs, and projects to state implementation plans (SIPs) prepared for criteria pollutants; and

WHEREAS, the MPO consulted with the Interagency Consultation Group and the agencies did not take exception to the MPO finding that (1) each project in the TIP as amended is consistent with the design concept and scope of the project that was modeled in the most recent conformity demonstration, (2) the open-to-traffic date of each project in the TIP as amended is consistent with the open-to-traffic dates in the most recent conformity demonstration, (3) that the previous emissions analysis meets the requirements of 40 CFR 93.118 and demonstrate conformity of the TIP as amended; and

WHEREAS, the proposed IRTIP amendments were made available for public comment and comments received were provided to the Indianapolis Regional Transportation Council Policy Committee (IRTC); and

WHEREAS, the IRTC Policy Committee is the approval body for all transportation-related activities of the Metropolitan Planning Organization for the Indianapolis Urbanized Area under applicable U.S. Department of Transportation regulations;

NOW, THEREFORE, BE IT RESOLVED, that the IRTC hereby approves the amendment to the 2014-2017 Indianapolis Regional Transportation Improvement Program as shown on the attached Exhibit A.

The above and foregoing resolution was adopted this 28 day of May 2014 by the IRTC Policy Committee.

DATE: 5/28/14



Anna M. Gremling, Executive Director
Indianapolis MPO
For the IRTC Policy Committee Chair

LEAD AGENCY	DES NUM	ROAD/TRAIL	PROJECT TITLE	TYPE	EXEMPT?	TOTAL	TOTAL DIFF	PHASE	SFY	FED FUNDS	LINE TOTAL	FED TOTAL	FED %	STATE TOTAL	STATE %	JUSTIFICATION	ACTION PROPOSED
NEW	INDOT	1400014	I- 65	Bridge subproject on CR 500 N (Whiteland Road) over I-65 within the limits of added travel lanes (DES # 1383341) from 0.85 mile S of SR 44 to 0.50 mile N of Whiteland Road	Bridge Deck Overlay	Exempt	\$905,000	\$905,000	CN	SFY 2015	\$905,000	\$-	0%	\$905,000	100%	NEW PROJECT	Add CN to SFY 2015
NEW	INDOT	1383485	I- 69	Bridge subproject (Cumberland Road) to I-69 Added Travel Lanes from SR 37 to 0.50 mile N of Old SR 238 (DES # 1383332) that was amended to the LRP and TIP in first quarter CY 2014	Repair Or Replace Joints	Exempt	\$20,000	\$20,000	CN	SFY 2015	\$20,000	\$-	0%	\$20,000	100%	NEW PROJECT	Add CN to SFY 2015
NEW	INDOT	1383486	I- 69	Bridge subproject (over Sand Creek - NB lanes) on I-69 added travel lanes project (DES # 1383332) that was amended to the long range plan and TIP in the first quarter of CY 2014	Bridge Widening	Exempt	\$1,500,000	\$1,500,000	CN	SFY 2015	\$1,500,000	\$-	0%	\$1,500,000	100%	NEW PROJECT	Add CN to SFY 2015
NEW	INDOT	1383487	I- 69	Bridge subproject over Sand Creek SB lanes on I69 included in added travel lanes project (DES # 1383332) that was amended to the long range plan and TIP in the first quarter of CY 2014	Bridge Widening	Exempt	\$1,500,000	\$1,500,000	CN	SFY 2015	\$1,500,000	\$-	0%	\$1,500,000	100%	NEW PROJECT	Add CN to SFY 2015
NEW	INDOT	1383488	I- 69	Bridge subproject on Brooks School Road over I-69 within the limits of added travel lanes project (DES # 1383332) that was amended to the long range plan and TIP in the first quarter of CY 2014	Bridge Replacement, Concrete	Exempt	\$2,250,000	\$2,250,000	CN	SFY 2015	\$2,250,000	\$-	0%	\$2,250,000	100%	NEW PROJECT	Add CN to SFY 2015
NEW	INDOT	1383489	I- 69	Interchange subproject at I-69 and Old SR 238 within the limits of project DES # 1383332 for added lanes from SR 37 to 0.50 mile N of Old SR 238 added to the LRP and TIP in first quarter CY 2014	Interchange Modification	Exempt	\$14,263,660	\$14,263,660	PE/PL	SFY 2015	\$1,263,660	\$-	0%	\$1,263,660	100%	NEW PROJECT	Add CN to SFY 2015
NEW								CN	SFY 2015	\$13,000,000	\$-	0%	\$13,000,000	100%			
NEW	INDOT	1383490	I- 69	Bridge subproject Old SR 238 at I-69 as part of added travel lanes project (DES # 1383332) from SR 37 to 0.50 mile N of Old SR 238 that was amended to the LRP and TIP in the first quarter of CY 2014	Bridge Widening	Exempt	\$2,000,000	\$2,000,000	CN	SFY 2015	\$2,000,000	\$-	0%	\$2,000,000	100%	NEW PROJECT	Add CN to SFY 2015

Indianapolis Metropolitan Planning Area

Air Quality Conformity Determination Report

2035 Long-Range Transportation Plan:

2014 Update

&

2014-2017 Indianapolis Regional

Transportation Improvement Program

March 5, 2014

**Indianapolis Metropolitan Planning Organization
Indiana Department of Transportation**



Prepared by:

Indianapolis Metropolitan Planning Organization

200 East Washington Street, Suite 1922

Indianapolis, Indiana 46204

317-327-7599

Stephanie.belch@indy.gov

Introduction

The Indianapolis Metropolitan Planning Organization is updating its 2035 Long Range Transportation Plan (LRTP) to amend several INDOT interstate widening projects being funded through the 2020 Trust Fund as approved by the Indiana General Assembly in 2013. Many of these interstate widening projects are not new to the LRTP as they have been in both the MPO’s and INDOT’s long range plan in the recent past.

Another action being taken with this update is the reaffirmation of the goals and objectives as developed and approved in the 2010/2011 LRTP Major Update. Those goals and objectives are shown in the table below:

<i>Goals and Objectives of the 2035 Long Range Transportation Plan</i>	
<p>Goal 1:</p> <p>Preserve, make safe, and improve utilization of the existing transportation system.</p>	<p>Objective 1: Maintain the existing network in a state-of-good repair.</p> <p>Objective 2: Use cost-effective transportation system management, transportation demand management, intelligent transportation system, and operational improvements and techniques to increase the efficiency and safety of the existing transportation system.</p>
<p>Goal 2:</p> <p>Enhance regional transportation mobility and accessibility.</p>	<p>Objective 1: Provide cost-effective transportation improvements to address identified mobility problems and reduce the growth in traffic congestion.</p> <p>Objective 2: Provide appropriate travel options and choice for all users, including auto, transit, paratransit, bicycle, and pedestrian.</p> <p>Objective 3: Improve accessibility to regional employment and activity centers.</p> <p>Objective 4: Enhance connections between modes.</p> <p>Objective 5: Support commercial goods movement within and through the region.</p>
<p>Goal 3:</p> <p>Coordinate transportation system improvements to be consistent with regional values.</p>	<p>Objective 1: Partner with state and local jurisdictions to ensure transportation and land use are complementary.</p> <p>Objective 2: Enhance transportation system sustainability and minimize impacts of the transportation system to the built and natural environment.</p> <p>Objective 3: Support regional economic development.</p> <p>Objective 4: Support transportation security.</p>

Current Air Quality Status

Under the standards set forth in the Clean Air Act Amendments in 1990, the 9-county region of Hancock, Hamilton, Hendricks, Johnson, Morgan, Madison, Marion, Boone, and Shelby Counties is currently in

attainment of the annual National Ambient Air Quality Standard (NAAQS) for the current eight-hour ozone standard.

The counties of Hamilton, Hendricks, Johnson, Marion, and Morgan counties are currently a Maintenance area for Particulate Matter of 2.5 microns or less in size (PM2.5).

Planning Assumptions

The only change in the planning assumptions for the 2035 Long Range Transportation Plan is the type of travel demand model (TDM) being used by the Indianapolis MPO. The MPO has moved from a gravity travel demand model to a destination-choice model in order to better reflect transit ridership. Successful checks to the new TDM have been made throughout the transition to make sure air quality conformity is maintained.

Interagency Consultation Group (ICG) Process

As prescribed in the Interagency Consultation Group, Conformity Consultation Guidance document, this consultation process is intended to guide Metropolitan Planning Organizations (MPOs) and other interagency consultation group parties through the Transportation Conformity Process. On January 17, 2014, the MPO held the conference call with members of the ICG and discussed the projects proposed for change in the LRTP, and the travel demand modeling and air quality modeling process to represent those changes. The meeting summary can be found in Appendix A.

Public Involvement Process

The 2014 LRTP Update was offered for public review beginning February 14 through February 28, 2014.

LRTP Project List Changes

See complete table in Appendix B.

INDOT 2020 Trust Fund Projects (added travel lanes to be constructed by 2020):

- ≠ I-65 from 0.7 m S of SR 44 to 0.5 m N of Whiteland Rd. in Johnson County
- ≠ I-65 from 0.5 m N of Whiteland Rd. to 0.5 N of Main St. (Greenwood) in Johnson County
- ≠ I-65 from 0.5 m N of Main St. (Greenwood) to 0.5 m N of County Line Rd. in Johnson County
- ≠ I-65 from 0.5 m N of County Line Rd. to Southport Road in Marion County
- ≠ I-70 from 0.7 m W of SR 39 to 0.5 m E of SR 267 in Hendricks County
- ≠ I-69 from SR 37 (N jct.) to 0.5 miles N of old SR 238 in Hamilton County
- ≠ I-69 from Exit 210 (SR 238) in Hamilton County to SR 13 in Madison County
- ≠ I-69 from SR 13 to SR 38 in Madison County

IndyGo New Service (locally funded in 2013)

- ≠ New Crosstown fixed-route: 86th St. between Traders Point and Community Hospital North

Appendix B: Table of 2014 Project Changes

L RTP #	Roadway/ Route	Project Limits	Project Type	L RTP Period	Sponsor	Funding Source	Comments
5005	I-65	0.7 m S of SR 44 to 0.5 m N of Whiteland Rd.	Added Travel Lanes	2016-2025	INDOT	INDOT 2020 Trust Fund	Requires State legislative approval.
5006	I-65	0.5 m N of Whiteland Rd. to 0.5 N of Main St. (Grnwd)	Added Travel Lanes	2016-2025	INDOT	INDOT 2020 Trust Fund	Requires State legislative approval.
5007	I-65	0.5 m N of Main St. (Grnwd) to 0.5 m N of County Line Rd.	Added Travel Lanes	2016-2025	INDOT	INDOT 2020 Trust Fund	Requires State legislative approval.
6035	I-65	0.5 m N of County Line Rd. to Southport Road	Added Travel Lanes	2016-2025	INDOT	INDOT 2020 Trust Fund	Requires State legislative approval.
4001	I-70	0.7 m W of SR 39 to 0.5 m E of SR 267	Added Travel Lanes	2016-2025	INDOT	INDOT 2020 Trust Fund	Requires State legislative approval.
2014	I-69	SR 37 (N jct.) to 0.5 miles N of old SR 238	Added Travel Lanes	2016-2025	INDOT	INDOT 2020 Trust Fund	Requires State legislative approval.
2015	I-69	from Exit 210 (SR 238) to SR 13 in Madison Co.	Added Travel Lanes	2016-2025	INDOT	2020 Trust Fund	Requires State legislative approval.
2016	I-69	from SR 13 to SR 38 in Madison Co.	Added Travel Lanes	2016-2025	INDOT	2020 Trust Fund	Requires State legislative approval.
9001	86th St.	between Trader's Point (northwest side) and Community Hospital North (northeast side)	New fixed-route service (crosstown)	2011-2015	IndyGo	Local	implemented in 2013 with local money.
9002	Various	extending routes to serve more destinations, improving connections and frequency, offering more direct service	Service Improvements	2011-2015	IndyGo	Local	implemented in 2013 with local money.
1204	Bennett Parkway	from 106th Street to 0.5 miles south (new alignment)	new roadway	2011-2015	Zionsville	Local	Project #1204 being split in two projects. The northern half moves to 1st L RTP Period (2011-2015); the southern half is #1208, and remains in 2nd Period (2016-2025).
1208	Bennett Parkway	from 0.5 miles south of 106th Street to 96th Street	new roadway	2016-2025	Zionsville	Local	Project #1204 being split in two projects. The northern half moves to 1st L RTP Period; the southern half is #1208, and remains in 2nd Period.
2104	96th St.	from just east of Lantern Road to just west of Cumberland Road	Added Travel Lanes (2 to 4)	2026-2035	Fishers	STP (illustrative in '18)	This project is programmed in the TIP as illustrative in 2018 (STP); should be moved to 2nd Period (2016-2025)
5108	CRs 700N and 750N	from CR 325 E to CR 400E in Clark Township	new roadway	2011-2015	Johnson County	STP Group IV	This project is programmed in the TIP, CN in 2015; should be moved to 2nd Period (2016-2025)
6002	I-465	at SR 37 (Indianapolis' south side)	Interchange Modification	2011-2015	INDOT	INDOT	This project has been completed; was included in the L RTP but not considered regionally significant during previous consultation. Remove from the Plan (model changes already made)
2002	SR 32	from SR 37 to E Junction w/ SR 38	Widen 2 to 5 lanes	2011-2015	INDOT	INDOT	This project is not moving forward and should be moved to illustrative list.
6004	I-465	from 0.5 W of Allisonville to Fall Creek	Added Travel Lanes (Widen from 6 to 10 lanes)	2016-2025	INDOT	INDOT	This project is not moving forward and should be moved to illustrative list.
6005	I-69	I-465 to 96th Street interchange + 2 interchanges at I-465 and 82nd Street	Added Travel Lanes (Widen to 8 lanes divided with 6 collector/distributor lanes - up to 14 lanes total)	2016-2025	INDOT	INDOT	This project is not moving forward and should be moved to illustrative list.
5003	SR 135 (Meridian St.)	CR 500 N (Whiteland Rd.) to CR 700 N (Stones Crossing Rd.)	Widen 2 to 5 lanes	2016-2025	INDOT	INDOT	This project is not moving forward and should be moved to illustrative list.
7001	SR 39	SR 37 to SR 67	New Alignment; remains 2 lanes	2016-2025	INDOT	INDOT	This project is not moving forward and should be moved to illustrative list.

Miller, Daniel J

From: Jones, Tony W [TWJones@indot.IN.gov]
Sent: Tuesday, September 23, 2014 5:15 PM
To: Miller, Daniel J
Cc: Carnahan, Ben
Subject: Hot Spot Analysis
Attachments: INDOT PM25 Project-Level Consultation Handouts 9-18-14.pdf; Project Level ICG_20140918_FINAL Meeting Minutes.pdf

Follow Up Flag: Follow up
Flag Status: Flagged

Dan,
I received email below from Mary Jo Hammons. Our I-69 project is in the list, so FYI.

All,

*INDOT & FHWA hosted an Interagency Consultation Group Meeting to discuss whether any of the projects listed below would qualify as "projects of air quality concern" for PM2.5 pollutants on Thursday, Sept. 18, 2014. It was determined that **none** of the listed projects were to be considered with that distinction. As such, no hotspot analysis is required for PM2.5 pollutants for any of the projects listed below. As noted in the INDOT CE Manual, the preparer of each environmental document should summarize the findings, including coordination with other agencies in the CE.*

*I've attached the Final Meeting Minutes and the Handouts used at the meeting to this email. **Please route these to your respective consultants for use as an appendix to their environmental documents.***

Either Ron Bales or I are available if there are any questions.

Kind Regards, Mary Jo

*Tony Jones, PE
INDOT, Project Manager
100 North Senate Ave, Rm 601
Indianapolis, IN 46204*

twjones@indot.in.gov
317-233-5282 Office
317-503-5026 Cell

INDOT PM_{2.5} Project Level Interagency Consultation

Conference Call Handouts
September 18, 2014

Goals and Methods for Evaluation

Goal:

- Identify INDOT projects “of air quality concern” (if any) that will require a PM_{2.5} quantitative hot-spot analysis
- Include consultation decisions in NEPA documents to indicate projects are not of air quality concern

Evaluation Methods:

- Compare current and forecast traffic volumes from the Indiana Statewide Travel Demand Model (ISTDM) vs. project examples identified in the current guidance
- Determine if ISTDM project Build vs. No-Build volume changes are “significant”
- Assess nearby monitor readings
- Compare project to other projects found to be of air quality concern

EPA Guidance (Appendix B) Examples

Some examples of projects of local air quality concern that would be covered by 40 CFR 93.123(b)(1)(i) and (ii) are:

- A project on a new highway or expressway that serves a significant volume of diesel truck traffic, such as facilities with greater than 125,000 annual average daily traffic (AADT) and 8% or more of such AADT is diesel truck traffic;
- New exit ramps and other highway facility improvements to connect a highway or expressway to a major freight, bus, or intermodal terminal;
- Expansion of an existing highway or other facility that affects a congested intersection (operated at Level-of-Service D, E, or F) that has a significant increase in the number of diesel trucks; and,
- Similar highway projects that involve a significant increase in the number of diesel transit busses and/or diesel trucks.

Reference Link:

<http://www.epa.gov/oms/stateresources/transconf/policy/420b13053-appx.pdf>

Previous INDOT Project-Level Analyses (Indianapolis)

Item	I-69 Section 5 (Bloomington to Martinsville) DES# 0300381	I-65 (SR44 to Southport Road) DES# 1383343/1383354/1383342/1383341
Highest AADT	2035 Build AADT = 61,588	2035 Build AADT = 125,695
Highest Truck Volume	2035 Build Trucks = 12,785	2035 Build Trucks = 22,442
Build vs. No-Build %	2035 AADT = + 38% 2035 Trucks = + 16%	2035 Trucks = < 10%
Background Concentration	10.43 µg/m ³	11.27 µg/m ³
Estimated Analysis Year Design Values	2018 = 11.4 µg/m ³ 2035 = 11.1 µg/m ³	2017 = 12.0 µg/m ³

Compared against 15 µg/m³ Annual NAAQS

* Designations under 12 µg/m³ NAAQS expected in December 2014

INDOT Initial Project Screening

➤ Evaluated INDOT project lists to identify projects that clearly do not require a quantitative hot-spot analysis

- Not in a nonattainment/maintenance area
- Intersection projects
- Low traffic volumes (< 75,000 forecast AADT and 10,000 Trucks)
- No significant capacity increase resulting from project

➤ Identify projects for further review

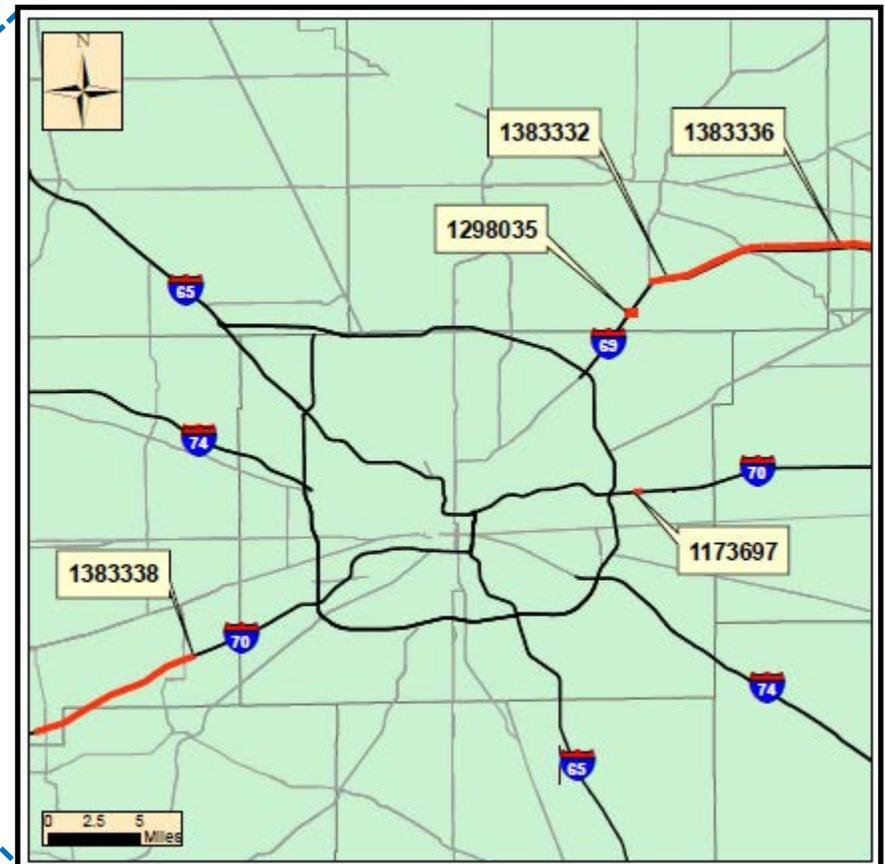
4	Corr#	LRP#	Old LRP	KIN#	LD	DES	Contract Prefix	Contract Number	Contract#	District	CO#	County	Route	Location	Work Category Name	Section	Notes	ELIMINATE DUE	
5	002			4454	Y	0400283	IR	30153	IR-30153	Greenfield	49	Marion	I465	From 0.5 mile W of I-69 interchange to 75th street	Added Travel Lanes Project	I-69 to 75th St		Active	
6	016				N	1172943	IR	33066	IR-33066	Greenfield	49	Marion	I65	Ramp (I-465 to I-65 SB) over I-65 and I-465	Interchange Modification Project			Active	
7	022				Y	1006581	IR	34001	IR-34001	Greenfield	29	Hamilton	I69	I-69 improvements from I-465 to 116th and SR 37 Interchan	Added Travel Lanes Project		SR-37 interchange	Under Construction	
8	022				Y	1173161	IR	34166	IR-34166	Greenfield	49	Marion	I69	I-69 improvements from I-465 to 116th and SR 37 Interchan	Added Travel Lanes Project		116th St interchange	Under Construction	
9																		Under Construction	
10																		Under Construction	
11	266			5592	Y	1005696	IR	33274	IR-33274	Greenfield	49	Marion	US52	German Church Road	Intersection Improvement Project		German Church Rd intersection	Project Type	
12	266				N	1005697	IR	33305	IR-33305	Greenfield	49	Marion	US52	Bade Davis	Intersection Improvement Pr	No data for Bade	Bade Rd intersection	Project Type	
13																		Project Type	
14	266		2645			9700320	PLC	37344	PLC-37344	Greenfield	49	Marion	US52	Marion/Hancock County Line to CR 500W (PE & RW Trackin	Added Travel Lanes Project	C/L to CR500W	Mt. Comfort Rd intersection	Project Type	
15	402				Y	1297199	IR	35187	IR-35187	Seymour	41	Johnson	I65	@ Worthsville Road, 7.7 miles North of SR 44	New Interchange Project			PM2.5 Review COMPLETED as	
16	405				Y	1383332	R	37053	R-37053	Greenfield	29	Hamilton	I69	At SR 37 (N jct.) to 5.24 miles N of SR 37 (N jct.) (0.50 mile N	Added Travel Lanes Project	SR-37 to SR-238		Active	
17	405				N	1383489	R	37053	R-37053	Greenfield	29	Hamilton	I69	I69 at Old SR238 (Exit 210)	Added Travel Lanes Project		SR-238 interchange	Active	
18	405				Y	1383336	R	37055	R-37055	Greenfield	29	Hamilton	I69	5.24 mi N of SR 37 (N jct.) (0.50 mi N of old SR 238) to 0.85 n	Added Travel Lanes Project	SR-238 to SR-13	SR-13 interchange	Hold - reassessment of MM20	
19	406				Y	1383338	R	37133	R-37133	Crawfordsville	32	Hendricks	I70	0.85 mile W of SR 39 to 0.50 mile E of SR 267	Added Travel Lanes Project	SR-39 to SR-267		Hold - reassessment of MM20	
20	406				N	1400176	R	37133	R-37133	Crawfordsville	32	Hendricks	I70	SR39 at I70, 2.39 mi N of SR42	Added Travel Lanes Project		SR-39 interchange	Hold - reassessment of MM20	
21	407				Y	1383343	R	37075	R-37075	Greenfield	41	Johnson	I65	4.72 miles S of I-465 South Leg to 2.88 miles S of I-465 South	Added Travel Lanes Project	County Line Rd to Southport Rd	Southport Rd Interchange	PM2.5 Study COMPLETED as I	
22	407				Y	1383354	R	37094	R-37094	Seymour	41	Johnson	I65	6.18 miles S of I-465 South Leg (0.50 mile N of Main St Greer	Added Travel Lanes Project	Main St to County Line Rd	County Line Rd interchange	PM2.5 Study COMPLETED as I	
23	407				Y	1383342	R	37095	R-37095	Seymour	41	Johnson	I65	5.41 miles N of SR 44 to 6.18 miles S of I-465 South Leg (Just	Added Travel Lanes Project	Whiteland Rd to Main St	Main St-Greenwood Interchange	PM2.5 Study COMPLETED as I	
24	407				Y	1383341	R	37096	R-37096	Seymour	41	Johnson	I65	0.85 mile S of SR 44 to 5.41 miles N of SR 44 (0.50 mile N of	Added Travel Lanes Project	SR-44 to Whiteland Rd	Whiteland Rd Interchange	PM2.5 Study COMPLETED as I	
25																		SR-44 Interchange	PM2.5 Study COMPLETED as I
26						0400962	R	30395	R-30395	Greenfield	49	Marion	SR135	1.52 miles S of US 31 (Edgewood Avenue)	Intersection Improvement Project		Edgewood Ave intersection	Project Type	
27						1006121	R	34861	R-34861	Greenfield	29	Hamilton	SR38	At 226th Street/6 Points Road	District Intersection Improvement Project		226th St intersection	Project Type	
28					Y	1173698	R	35048	R-35048	Greenfield	49	Marion	I465	exit ramp from EB I-465 to US 421(Michigan Road)	Interchange Modification	Interchange Modification	1465 at US-421/Michigan Rd interchange	Active	
29						1173700	R	35048	R-35048	Greenfield	49	Marion	I465	Entrance ramp from US 421 (Michigan Road) to EB I-465	Added Travel Lanes Project			Active	
30						1173701	R	35048	R-35048	Greenfield	49	Marion	I465	Entrance Ramp from US 421 (Michigan Road) to WB I-465	Added Travel Lanes Project			Active	
31					N	1173704	R	35048	R-35048	Greenfield	49	Marion	I465	Exit ramp from WB I-465 to US 421 (Michigan Road)	Added Travel Lanes Project			Active	
32						1173697	R	35459	R-35459	Greenfield	49	Marion	I70	Exit ramp from EB I-70 to Post Road RP 90+71	Interchange Modification		Post Rd interchange	Active	
33						1298035	IR	35629	IR-35629	Greenfield	29	Hamilton	I69	I-69 at 106 Street	Intersection Improvement Project		106th St interchange	Active	
34						1296847	R	35680	R-35680	Greenfield	29	Hamilton	SR37	SR 37, at Strawtown Ave (6.34 mile north SR 32 / SR 38 Conn	District Intersection Improvement Project		Strawtown Ave intersection	Project Type	

Projects Identified for Consultation Review (List)

Project DES # *	Route	Project Type	Length (mi)	County / Nonattainment Area
1383332 1383489	I-69	Added Travel Lanes	5.17	Hamilton Indianapolis
1383336		Added Travel Lanes	4.64	
1298035		New Interchange	0.47	
1383338 1400176	I-70	Added Travel Lanes	7.99	Hendricks Indianapolis
1173697		Interchange Modification	0.20	Marion Indianapolis
1400597	I-65	Added Travel Lanes	8.11	Clark Louisville KY-IN
0500194 1005804 (bridge)	SR 61	New Road (Minor Arterial) Construction	4.17	Warrick Evansville
1297017	Chicago Street Corridor	Added Travel Lanes	-----	Lake Chicago-Gary-Lake Cty

* Project DES numbers in bold are shown on MAP (next page)

Projects Identified for Consultation Review (Map)



I-69 Projects

- DES # 1383332
- DES # 1383489
- DES # 1383336
- DES # 1298035

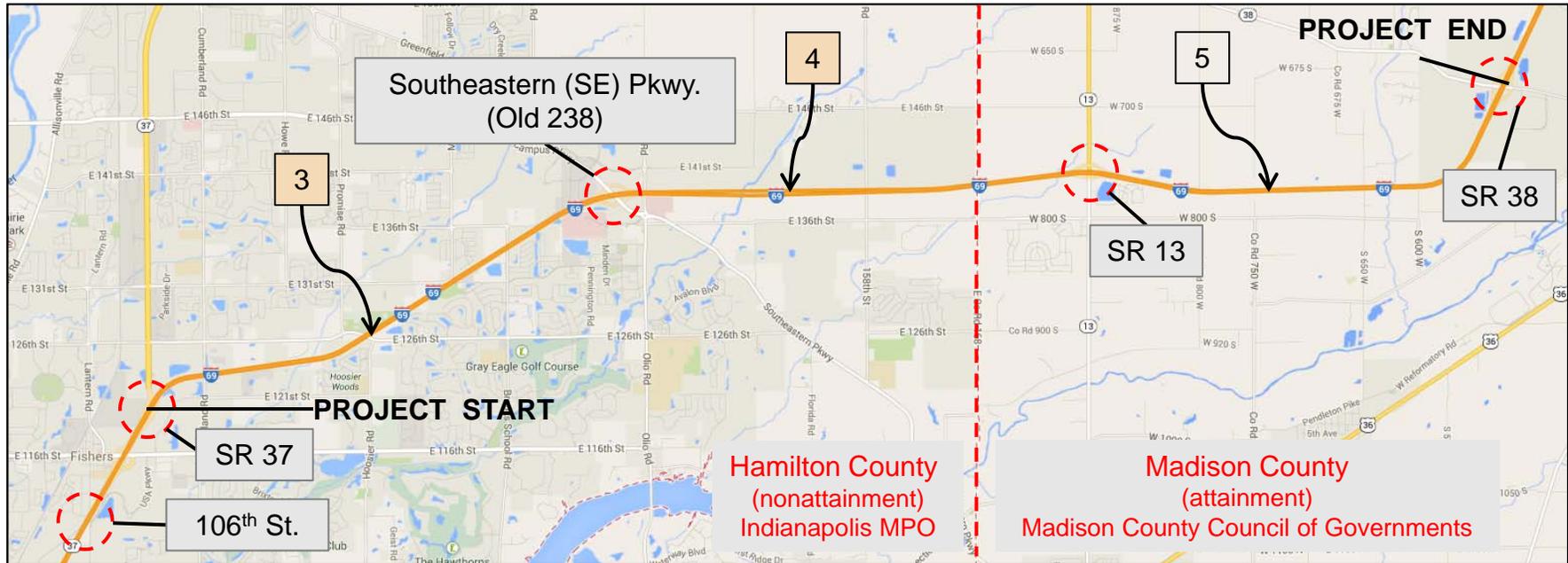
- **Add a third travel lane in each direction on I-69 from SR 37 to SR 38**
- **Interchange modification at Exit 210**
- **New interchange @ 106th Street**

- **Completion Year of 2016**

- **Eastern portion of project located in the Indianapolis PM2.5 nonattainment area**

Project Location & Traffic Volumes

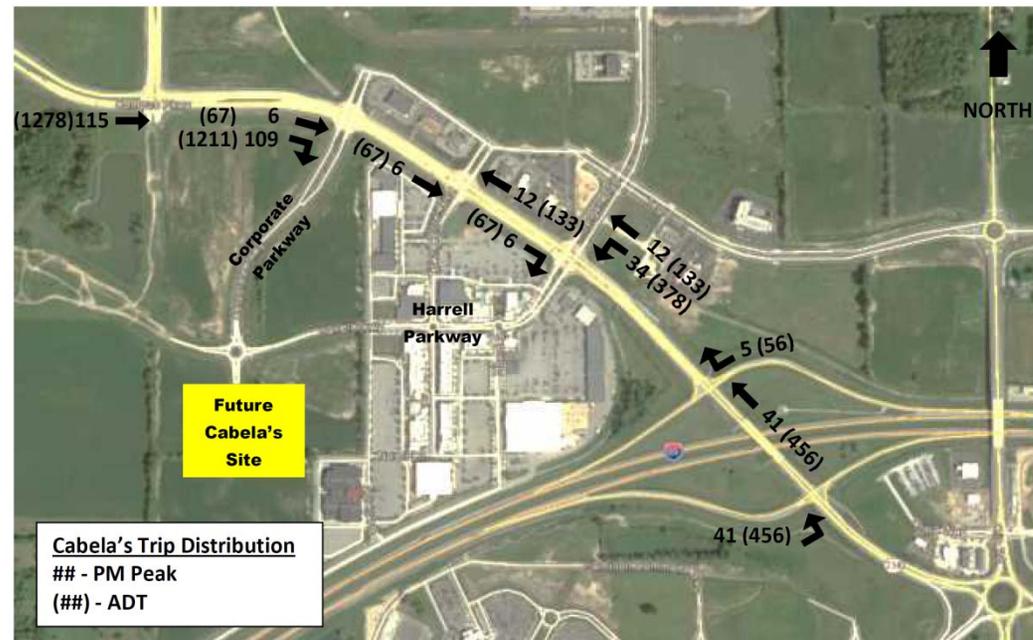
I-69 PROJECTS



ID	I-69 Section	2010		2020 (closest to completion year)				2035			
		AADT	Truck	AADT	AADT Build vs NoBuild	Truck	Truck Build vs NoBuild	AADT	AADT Build vs NoBuild	Truck	Truck Build vs NoBuild
3	SR 37 to SE Pkwy	62,161	10,485	72,403	+ 4%	12,131	+ 1%	91,016	+ 11%	15,097	+ 11%
4	SE Pkwy to SR 13	57,734	11,749	64,784	+ 4%	13,090	+ 1%	77,006	+ 3%	15,394	+ 3%

August 21, 2014 INDOT Summary of ISTDM Base and Forecast Volumes including Build vs. No-Build

- April 2014 AECOM “Traffic Volume Forecast” for I-69 at Campus Parkway (Exit 210) and SR 13 (Exit 214)
- Exit 210 (Campus Parkway) interchange in nonattainment area
- Average traffic growth rates determined from the Indianapolis MPO model
- Impact of new Cabela’s added to forecasts

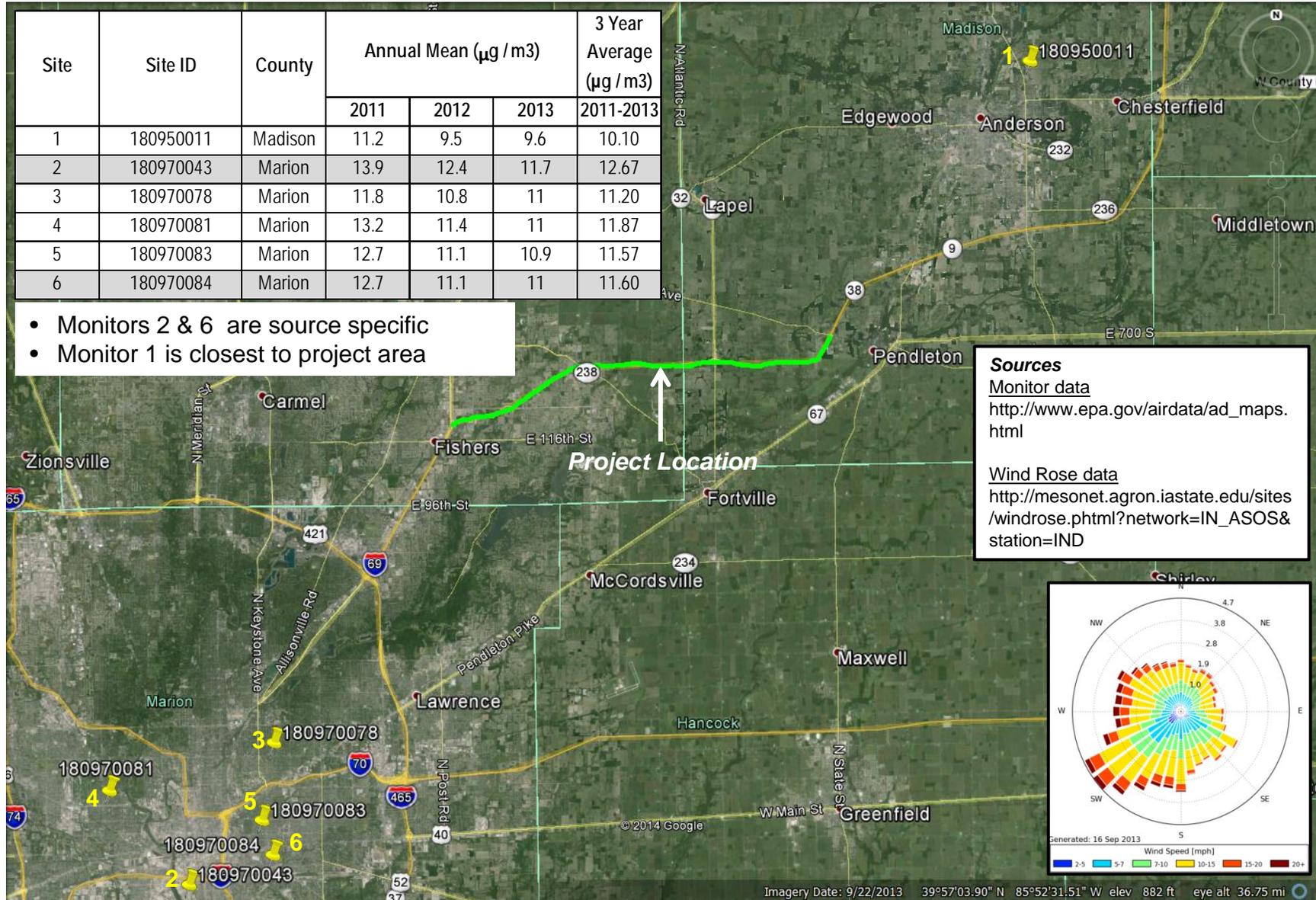


Background Concentration Monitor Locations and Readings

I-69 PROJECTS

Site	Site ID	County	Annual Mean ($\mu\text{g} / \text{m}^3$)			3 Year Average ($\mu\text{g} / \text{m}^3$)
			2011	2012	2013	
1	180950011	Madison	11.2	9.5	9.6	10.10
2	180970043	Marion	13.9	12.4	11.7	12.67
3	180970078	Marion	11.8	10.8	11	11.20
4	180970081	Marion	13.2	11.4	11	11.87
5	180970083	Marion	12.7	11.1	10.9	11.57
6	180970084	Marion	12.7	11.1	11	11.60

- Monitors 2 & 6 are source specific
- Monitor 1 is closest to project area



Evaluating Need for Hot-spot Analysis

Highest Section: SR 37 to SE Pkwy

I-69 PROJECTS

Item	Comparison to EPA Guidance Examples	Comparison To Previous I-69 Hot-Spot Analyses	Comparison To Previous I-65 Hot-Spot Analyses
Highest AADT	< 125,000 AADT	Higher	Lower (38% less AADT in 2035)
Highest Truck Volume	>10,000 Trucks	Higher	Lower (32% less Trucks in 2035)
Build vs. No-Build %	Only 1% Change in 2020 Diesel Traffic	Lower	Lower
Background Concentration	-----	Higher	Similar

INDOT PM2.5 Project-Level Consultation
Interagency Consultation Group
Conference Call

Thursday, September 18, 2014, 10:00 am

1. Meeting Attendees

Name	Organization	Email	Phone
Larry Heil	FHWA – Indiana Division	LHEIL@dot.gov	317-226-748
Michelle Allen	FHWA – Indiana Division	Michelle.Allen@dot.gov	317-226-7344
Tony Maietta	US EPA – Region 5	maietta.anthony@epa.gov	312-353-8777
Laura Hilden	INDOT – Environmental Services	lhilden@indot.in.gov	317-233-5018
Ken McMullen	INDOT – Environmental Policy Manager	KMCMULLEN@indot.IN.gov	317-233-1164
Ron Bales	INDOT – NEPA Specialist	rbales@indot.IN.gov	317-234-4916
Frank Baukert	INDOT – Long Range Planning	FBAUKERT@indot.IN.gov	317-232-1486
Shawn Seals	IDEM – Office of Air Quality	SSEALS@idem.IN.gov	317-233-0425
Dan Szekeres	Michael Baker Jr., Inc. (Baker)	dszekeres@mbakerintl.com	717-221-2019
Rob Dabadie	Baker	RDabadie@mbakerintl.com	410-689-3452
Mary Jo Hamman	Baker	mhamman@mbakerintl.com	317-663-8190
Dean Munn	Corradino Group	dmunn@corradino.com	317-488-2363

Materials: Attached Handouts (INDOT PM25 Project-Level Consultation Handouts 9-18-14.pdf)

2. Overview

- Larry Heil (FHWA) provided background on the purpose of the conference call.
- In Indiana, project-level air quality analyses have been completed for three projects (I-69, I-65, Iliana). For each analysis, the project portion of the total concentration was about 1 µg/m³ and forecasted peak year concentrations were below the current 15 µg/m³ annual PM2.5 National Ambient Air Quality Standard (NAAQS).
- All projects except for Chicago St and the 106th St. interchange are being advanced as Categorical Exclusions. These other projects are expected to be Environmental Assessments.

3. Project Review

- Dan Szekeres (Baker) led discussions through each of the handout pages including an overview of the key data and resources to assist the consultation group in determining whether projects are of “air quality concern” requiring a quantitative analysis.
- The evaluation methods included an assessment of existing and forecast traffic volumes, the impact of the project on volume (build vs. no-build), nearby monitor readings, and comparisons of volumes to EPA guidance examples. All forecasted traffic volumes were developed from the Indiana Statewide

- Travel Demand Model (ISTDM) and produced by INDOT.
- Handout page 4 provides roadway traffic and monitor data for the completed quantitative hotspot analyses for I-69 (Section 5) and I-65 (SR 44 to Southport Road) under the current NAAQS. Both IDEM and EPA noted that they do not expect the Indianapolis area to be nonattainment under the upcoming 2012 PM_{2.5} NAAQS designations.
 - IDEM commented that there may be other factors and considerations when evaluating projects for quantitative analysis beyond the current numbers provided in the handouts. However, no specific concerns or issues were identified for the projects under consideration at this time.
 - For the I-65 project in Clark County, IDEM noted that this area is the most sensitive PM area in the state. However, it was agreed that the project impact on diesel traffic for this project is expected to be minimal.
 - All participants on the consultation call agreed that quantitative analyses were not required for each of the projects.
 - Minor enhancements to the handout materials will be provided including:
 - Remove the reference to "15 µg/m³" in the footnote on Slide 4
 - Modify the graphic on Slide 10 to show the 106th St. Interchange
 - Remove decision references for each grouping of projects on Slides 13, 18, 23, 28, 33
 - Include traffic count information for SR 61 on Slide 26

4. Conclusions

- The interagency consultation group concurred that each of the projects provided in the handouts (see handout page 6) is not a project of air quality concern and does not require a quantitative hotspot analysis. This includes the following project DES #s:
 - DES # 1383332
 - DES # 1383489
 - DES # 1383336
 - DES # 1298035
 - DES # 1383338
 - DES # 1400176
 - DES # 1173697
 - DES #1400597
 - DES # 0500194
 - DES # 1005804
 - DES # 1297017
- Each of the environmental documents should contain the conference call meeting minutes and the associated handouts. The conformity determination will include references to indicate that the associated projects were determined not to be of air quality concern.
- INDOT and FHWA will continue to track other new major transportation investment projects to determine future consultation.

Meeting concluded at 10:55 am ET.

Miller, Daniel J

From: Bales, Ronald [rbales@indot.IN.gov]
Sent: Thursday, November 06, 2014 2:35 PM
To: Miller, Daniel J
Subject: RE: INDOT Des #s 1383332 & 1383336; I-69 Interstate Expansion Projects 1 & 3; Hamilton & Madison Counties; MSAT Analysis

Follow Up Flag: Follow up
Flag Status: Flagged

Dan,

Please use the following language.

The purpose of this project is to (insert major deficiency that the project is meant to address) by constructing (insert major elements of the project). This project has been determined to generate minimal air quality impacts for CAAA criteria pollutants and has not been linked with any special 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 an increase in MSAT impacts of the project from that of the no-build alternative.

Moreover, 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 MOVES model forecasts a combined reduction of over 80 percent in the total annual emission rate for the priority MSAT from 2010 to 2050 while vehicle-miles of travel are projected to increase by over 100 percent. This will both reduce the background level of MSAT as well as the possibility of even minor MSAT emissions from this project.

As far as selecting the MSAT Level Analysis Check box, please check Level 1b analysis.

Ron

From: Miller, Daniel J [mailto:Daniel.J.Miller@parsons.com]
Sent: Thursday, November 06, 2014 11:47 AM
To: Bales, Ronald
Subject: RE: INDOT Des #s 1383332 & 1383336; I-69 Interstate Expansion Projects 1 & 3; Hamilton & Madison Counties; MSAT Analysis

Outstanding! Thanks for your help!

Daniel J. Miller
Principal Environmental Planner
PARSONS
101 West Ohio Street, Suite 2121
Indianapolis, IN 46204
Phone: (317)616-4663
E-mail: Daniel.J.Miller@Parsons.com
Web: www.parsons.com



Please consider the environment before printing this email

From: Bales, Ronald [<mailto:rbales@indot.IN.gov>]

Sent: Thursday, November 06, 2014 11:39 AM

To: Miller, Daniel J

Subject: RE: INDOT Des #s 1383332 & 1383336; I-69 Interstate Expansion Projects 1 & 3; Hamilton & Madison Counties; MSAT Analysis

An emission analysis will not be needed. I will get back with you later today. Should be able to provide the standard language in the CE Manual for projects with no meaningful impact. I still need to confer with FHWA. Thank you.

Ron

From: Miller, Daniel J [<mailto:Daniel.J.Miller@parsons.com>]

Sent: Wednesday, November 05, 2014 3:30 PM

To: Bales, Ronald

Subject: FW: INDOT Des #s 1383332 & 1383336; I-69 Interstate Expansion Projects 1 & 3; Hamilton & Madison Counties; MSAT Analysis

Importance: High

Ron,
I just got a message delivery error for your e-mail saying that the message could not be delivered. Please let me know if you receive this.

Thanks,

Daniel J. Miller

Principal Environmental Planner

PARSONS

101 West Ohio Street, Suite 2121

Indianapolis, IN 46204

Phone: (317)616-4663

E-mail: Daniel.J.Miller@Parsons.com

Web: www.parsons.com



Please consider the environment before printing this email

From: Miller, Daniel J

Sent: Wednesday, November 05, 2014 3:27 PM

To: Bales, Ronald (rbales@indot.IN.gov)

Cc: Carnahan, Ben; 'Jones, Tony W'

Subject: INDOT Des #s 1383332 & 1383336; I-69 Interstate Expansion Projects 1 & 3; Hamilton & Madison Counties; MSAT Analysis

Importance: High

Ron,
As we discussed, in finishing up the CE write-up for the I-69 Added Travel Lanes projects, I noticed that the AADTs provided only covered the sections where the added travel lanes will be included (from Exit 205 (116th Street and SR 37 in Fishers) to Exit 210 (Campus Parkway) and from Exit 210 to SR 13). I discussed this with our designer, and asked him to provide the AADT & other required information for the 106th St to 116th ST section, where an auxiliary lane will be added from 106th St to 116th St. The design year AADT for this section is 163,300.

Previously, we were told that a quantitative analysis would not be required for the ATL projects because the design year AADT would be below 140,000. This is true for the remaining sections of the ATL projects (see below).

ROADWAY CHARACTER:

Section 1: I-69 from 106th Street to 116th Street

Functional Classification:	Principal Arterial			
Current ADT:	118,560	VPD (2015)	Design Year ADT:	163,300
Design Hour Volume (DHV):	13,064	Truck Percentage (%)	8	VPD (2035)
Designed Speed (mph):	70	Legal Speed (mph):	65	

Existing

Proposed

Number of Lanes:	5 SB *	6 SB*
Type of Lanes:	Through	Through
Pavement Width:	60ft	72ft
Shoulder Width: Inside	4ft 10ft	4ft 10ft
Shoulder Width: Outside		
Median Width:	12ft	12ft
Sidewalk Width:	N/A	N/A

Setting: Urban Suburban Rural
 Topography: Level Rolling Hilly

Work will occur on the NB lanes in this section. Therefore, the information only includes the SB lanes.

Section 1: 116th Street Southbound Ramp

Functional Classification:	Principal Arterial			
Current ADT:	12,350	VPD (2015)	Design Year ADT:	15,670
Design Hour Volume (DHV):	1,411	Truck Percentage (%)	5	VPD (2035)
Designed Speed (mph):	35/60	Legal Speed (mph):	45	

Existing

Proposed

Number of Lanes:	1	1
Type of Lanes:	Ramp	Ramp
Pavement Width:	16ft	16ft
Shoulder Width: Inside	4ft 6ft	4ft 8ft

Outside			
Median Width:	N/A		N/A
Sidewalk Width:	N/A		N/A

Setting: Urban Suburban Rural
 Topography: Level Rolling Hilly

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

Segment 1: I-69 from SR 37 to Campus Parkway

Functional Classification:	Principal Arterial			
Current ADT:	63,440	VPD (2015)	Design Year ADT:	83,850 (2035)
Design Hour Volume (DHV):	5,870	Truck Percentage (%)	20	
Designed Speed (mph):	70	Legal Speed (mph):	70	

Existing **Proposed**

Number of Lanes:	4 (2 NB, 2 SB)	6 (3 NB, 3 SB)
Type of Lanes:	Through	Through
Pavement Width:	48ft	72ft
Shoulder Width:	4ft	10ft
	10ft	10ft
Outside		
Median Width:	60ft	36ft
Sidewalk Width:	N/A	N/A

Setting: Urban Suburban Rural
 Topography: Level Rolling Hilly

Segment 3: I-69 from Campus Parkway to SR 13

Functional Classification:	Principal Arterial			
Current ADT:	56,140	VPD (2015)	Design Year ADT:	66,190 (2035)
Design Hour Volume (DHV):	5,296	Truck Percentage (%)	10	
Designed Speed (mph):	70	Legal Speed (mph):	70	

Existing **Proposed**

Number of Lanes:	4 (2 NB, 2 SB)	6 (3 NB, 3 SB)
------------------	----------------	----------------

Type of Lanes:	Through	Through
Pavement Width:	46ft	72ft
Shoulder Width: Inside	4ft	10ft
	10ft	10ft
Outside		
Median Width:	60ft	36ft
Sidewalk Width:	N/A	N/A

Setting: Urban Suburban Rural
Topography: Level Rolling Hilly

Project 3: SR 13

Functional Classification:	State Collector			
Current ADT:	12,472	VPD (2015)	Design Year ADT:	18,213
Design Hour Volume (DHV):	1,989	Truck Percentage (%)	12	
Designed Speed (mph):	55	Legal Speed (mph):	55	

Existing

Proposed

Number of Lanes:	2	2
Type of Lanes:	Through	Through
Pavement Width:	24ft	24ft
Shoulder Width: Inside	6ft	6ft
	10ft	10ft
Outside		
Median Width:	N/A	N/A
Sidewalk Width:	N/A	N/A

Setting: Urban Suburban Rural
Topography: Level Rolling Hilly

As you can see, the portions of the projects where added travel lanes will be added have design year ADTs of 83,850 (Project 1: I-69 from SR 37 to Campus Parkway) and 66,190 (Project 3: I-69 from Campus Parkway to SR 13), and the 116th St SB ramp & SR 13 are well below the 40,000 limit.

I called Mary Jo Hamman from Baker to ask her if she had performed a quantitative analysis for this section of I-69. She stated that Baker was only contracted to do the PM2.5 analysis for the I-69 projects. In reviewing their handout that was provided, they did not consider this section of I-69 in their analysis (see attached, pg 10).

Currently we have included the qualitative analysis, but have not conducted the quantitative emission analysis. Again, the section with the high AADT (163,300) is where an auxiliary lane is being built between 106th St. and

116th St. The remaining sections, where the added travel lanes are being built, have design year AADTs below 140,000. Do we need to conduct a quantitative emission analysis for this section? Please advise.

Please let me know if you need any additional information.

Thanks,

Daniel J. Miller

Principal Environmental Planner

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101 West Ohio Street, Suite 2121

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Phone: (317)616-4663

E-mail: Daniel.J.Miller@Parsons.com

Web: www.parsons.com



Please consider the environment before printing this email

From: Jones, Tony W [<mailto:TWJones@indot.IN.gov>]

Sent: Tuesday, September 23, 2014 5:15 PM

To: Miller, Daniel J

Cc: Carnahan, Ben

Subject: Hot Spot Analysis

Dan,

I received email below from Mary Jo Hammons. Our I-69 project is in the list, so FYI.

All,

*INDOT & FHWA hosted an Interagency Consultation Group Meeting to discuss whether any of the projects listed below would qualify as "projects of air quality concern" for PM2.5 pollutants on Thursday, Sept. 18, 2014. It was determined that **none** of the listed projects were to be considered with that distinction. As such, no hotspot analysis is required for PM2.5 pollutants for any of the projects listed below. As noted in the INDOT CE Manual, the preparer of each environmental document should summarize the findings, including coordination with other agencies in the CE.*

*I've attached the Final Meeting Minutes and the Handouts used at the meeting to this email. **Please route these to your respective consultants for use as an appendix to their environmental documents.***

Either Ron Bales or I are available if there are any questions.

Kind Regards, Mary Jo

Tony Jones, PE

INDOT, Project Manager

100 North Senate Ave, Rm 601

Indianapolis, IN 46204

twjones@indot.in.gov

317-233-5282 Office

317-503-5026 Cell

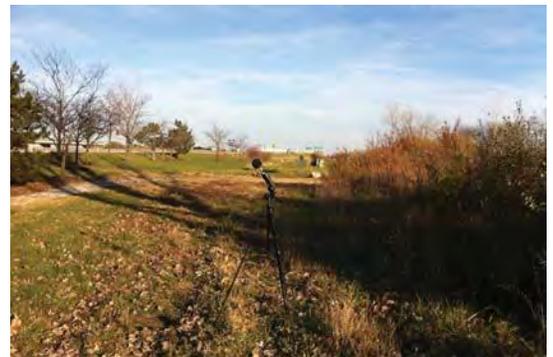
Appendix J: Noise

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Hamilton County, Indiana – Des. No. 1383489

INTERCHANGE MODIFICATION AT EXIT 210 (CAMPUS PARKWAY) DRAFT TRAFFIC NOISE IMPACT ANALYSIS

January 2015



PREPARED BY

PARSONS

101 W. Ohio Street, Suite 2121
Indianapolis, IN 46204

PREPARED FOR



INDIANA DEPARTMENT
OF TRANSPORTATION

100 N. Senate Avenue, Room N642
Indianapolis, IN 46204

Executive Summary

This Draft Traffic Noise Impact Analysis was conducted for the Exit 210 (Campus Parkway) Interchange Modification (Des. 1383489). The Exit 210 Interchange Modification is one of three projects being constructed as part of the overall I-69 Expansion Design Build Projects in Hamilton and Madison Counties, Indiana, which would all be let under a single construction contract. The remaining two projects are the I-69 Added Travel Lanes from 106th Street to 0.5 mile north of Campus Parkway (Des. 1383332) and the I-69 Added Travel Lanes in the median from 0.5 mile north of Campus Parkway to 0.5 mile east of SR 13 (Des. 1383336). A separate Traffic Noise Impact Analysis was conducted that includes those two projects in one study. All three are design-build projects that would be let under a single construction contract.

The Federal Highway Administration (FHWA) Traffic Noise Model (TNM) Version 2.5 was used to model existing and proposed noise levels. Because design year noise levels have been predicted to approach or exceed the FHWA Noise Abatement Criteria (NAC) for Category C (hospital) and Category E (commercial) land uses, the project has been found to have traffic noise impacts at three receptor locations. Based on the Indiana Department of Transportation (INDOT) *Traffic Noise Analysis Procedure*, 2011, a barrier would not be feasible for two of the impacted receptors, as it would not meet INDOT's engineering requirement that a barrier must have long, uninterrupted segments without access points or driveways. The barrier evaluated for the third impacted receptor was feasible but not reasonable, as it did not meet INDOT's cost-effectiveness criterion.

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APPENDIX A	Noise Measurement and Model Location Figures
APPENDIX B	Identification of Receptors Table B - Identification of Receptors
APPENDIX C	Predicted Noise Levels Table C - Predicted Noise Levels - NSA 10
APPENDIX D	Noise Barrier Reasonableness Analysis Worksheet Table D - Noise Barrier Reasonableness Analysis Worksheet
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APPENDIX G	Sound Level Meter Calibration Records
APPENDIX H	Field Survey Forms and Photo Log

1.0 PROJECT HISTORY AND BACKGROUND INFORMATION

1.1 Purpose of the Traffic Noise Impact Analysis

The purpose of this Draft Traffic Noise Impact Analysis is to evaluate noise impacts and abatement under the requirements of Title 23, Part 772 of the Code of Federal Regulations (23 CFR 772) “Procedures for Abatement of Highway Traffic Noise” for the Exit 210 Interchange Modification, as one of the three projects included under the I-69 Expansion Design Build Projects. 23 CFR 772 provides procedures for preparing operational and construction noise studies and evaluating noise abatement considered for federal and federal-aid highway projects. According to 23 CFR 772.3, all highway projects that are developed in conformance with this regulation are deemed to be in conformance with FHWA noise standards.

The INDOT *Traffic Noise Analysis Procedure* establishes INDOT policy for implementing 23 CFR 772 in Indiana. The INDOT *Traffic Noise Analysis Procedure* outlines the requirements for analyzing highway traffic noise. Noise impacts associated with this project will be included in the project’s Categorical Exclusion Level 4 (CE-4), in compliance with the National Environmental Policy Act (NEPA).

1.2 Project Purpose and Need

The purpose of the I-69 Expansion Design Build Projects is to improve overall traffic operation by reducing congestion on the segment of I-69 from 106th Street to 0.5 mile north of SR 13. The need for the I-69 Expansion Design Build Projects stems from traffic congestion issues that currently exist on this segment of I-69. Traffic data for the I-69 Expansion Design Build Projects was analyzed using Highway Capacity Manual methodology in Highway Capacity Software (HCS). The data was collected by INDOT in 2011, and a 1.5% per year growth rate was applied to forecast the traffic for 2015 (“current year”) and 2035 (“design year”). The adjusted and balanced data was then used to calculate results in Level of Service (LOS). LOS is a rating for traffic congestion, with LOS A indicating little to no delay and LOS F indicating serious congestion and delay. I-69 between Exit 205 and SR 38 is currently operating at LOS E, which is characterized as “unstable flow.” In 2035, I-69 from Exit 205 to SR 13 is predicted to experience “forced flow” (LOS F).

The purpose of Exit 210 Interchange Modification included in this Draft Traffic Noise Impact Analysis is to improve overall traffic operation by reducing congestion at this interchange. The need for this project stems from traffic congestion issues that currently exist during peak traffic hours. An INDOT study conducted in the fall of 2012 noted, “Southbound [SB] I-69 experiences congestion and reduction of travel speed during the AM peak hours, especially as traffic approaches Exit 205. Northbound [NB] I-69 also experiences congestion and long queues at Exit 210’s NB exit during the PM peak hours, especially during events at the Klipsch Music Center (though traffic data collected does not take into account such events).”

The northbound ramp is currently operating at an LOS D, while the southbound ramp is operating at an LOS C. Both ramps are predicted to operate at an LOS F in the design year, 2035. The results show unacceptable LOS for both existing and future traffic for the interchange.

1.3 Project Description

Project 1 (Des. 1383332) would construct added travel lanes in the median from 106th Street to 0.5 mile north of Campus Parkway. An auxiliary lane would be added on southbound I-69 between 106th Street and 116th Street. Project 2 (Des. 1383489) is an interchange modification at Exit 210. Project 3 (Des. 1383336) would construct added travel lanes in the median from 0.5 mile north of Campus Parkway to 0.5 mile east of S.R. 13. All three are design-build projects that would be let under a single construction contract. A project location map is provided in Appendix A for reference.

The proposed Exit 210 Interchange Modification would modify the existing interchange into a double-crossover diamond (DCD) interchange. A DCD interchange, also referred to as a diverging diamond interchange (DDI), “twists” or shifts crossroad traffic in the core of the interchange to eliminate conflicts with traffic approaching from the opposite direction at the signalized intersections. Therefore, left-turn and through movements would be relocated to the opposite side of the road on the bridge structure. The interchange would require two traffic signals, but they only control opposing through movements and are therefore two-phase signals (since no left-turn phases are needed).

2.0 EXISTING NOISE ENVIRONMENT

2.1 Existing Land Uses

Field investigations were conducted on November 10, 2014 to identify land uses that could be subject to traffic and construction noise impacts from the proposed project. Shopping centers (Activity Category E), hospitals (Activity Category C), and recreational trails (Activity Category C) were identified.

Although all developed land uses are evaluated in this analysis, noise abatement is only considered for areas of frequent human use that would benefit from a lowered noise level. Accordingly, this impact analysis focuses on locations with defined outdoor activity areas, such as residential backyards and common use areas at other facilities.

2.2 Noise Study Area (NSA) Descriptions

Noise Study Areas (NSAs) were identified for the entire I-69 Expansion Design Build Project corridor. Land uses in the project area were grouped into a series of numbered NSAs for the I-69 Added Travel Lanes Project. One NSA, NSA 10, encompasses the area surrounding Exit 210.

- Land uses in NSA 10 include Indiana University Saxony Hospital, Hamilton Town Center Shopping complex, fast food restaurants with outdoor seating, and recreational trails. Within Hamilton Town Center, several areas of frequent human use have been identified. These areas include outdoor seating areas associated with restaurants and benches (Activity Category E). Areas of frequent human use on the hospital grounds include a wellness path and seating area (Activity Category C). There is also a Starbucks and a Dairy Queen on Olivia Way, each with outdoor seating (Activity Category E), as well as two paved trails east and west of Southeastern Parkway (Activity Category C).

2.3 Noise-Sensitive Receptors and Existing Noise Conditions

Noise-sensitive receptors are those locations where activities that could be affected by increased traffic noise levels occur (e.g., residences, motels, churches, schools, parks and libraries). Existing noise levels are determined for the most commonly used outdoor living areas at sensitive receptors. For residences, this is typically the backyard or front porch, and for commercial areas it could be a picnic table or bench. Noise-sensitive receptors are located within the project area (see Appendix A). A total of 11 sensitive receptors representing 11 equivalent dwelling units or areas of frequent outdoor use were identified in the project area for analysis as part of the noise study. These receptors include all Category C and E land uses located within approximately 500 feet of the alignment.

2.4 Measurement Procedures, Equipment, and Results

Measurement locations were selected to represent major developed areas within the project area.

Short term measurements were conducted using a Larson-Davis Model LXT-1 sound level. Measurements were taken at two locations, each for a 20-minute period. Calibration of the meter was checked before and after field work using a Larson-Davis Model Cal 200 calibrator. Noise meter calibration data is included in Appendix G.

When the measurements were taken on November 10, 2014, the temperature averaged around 60 degrees Fahrenheit. Winds were moderate, between 9 – 10 mph, but had little effect on sound propagation over moderate distances. Temperature, humidity, and wind speeds were within the manufacturer's recommended guidelines for operation of the sound level meter. Site conditions for each measurement are included on the field survey forms in Appendix H.

Table 1 summarizes the results of the existing noise measurements taken.

Table 1
Summary of Short-Term Measurements

Position	Address	Land Use	Start Time	Duration (minutes)	Measured Leq(h)
ST01	13157 Norell Lane	Commercial	2:54 p.m.	20	73.6
ST02	13000 E 136 th Street (IU Saxony)	Hospital	3:47 p.m.	20	66.1

Traffic-generated $L_{eq}(h)$ noise levels were predicted for the design year (2035) using FHWA TNM 2.5, a computer simulation model. The model takes into account anticipated traffic volumes, vehicle types, vehicle speeds, roadway geometry, and sensitive receptor locations to calculate future traffic-generated noise levels. As shown in Table 2, comparing the modeled and measured noise levels using observed traffic counts confirms the applicability of the model to the study area. Predicted traffic noise levels using the traffic counts observed during the measurements are within +/- 3 dBA of the measured levels, indicating reasonable correlation. Therefore, this model is validated per 23 CFR 722.11 (d)(2), and no modifications to the model were needed.

Table 2
Comparison of Measured to Predicted Sound Levels in the TNM Model

Measurement Position	Measured Sound Level (dBA)	Predicted Sound Level (dBA)	Measured minus Predicted (dBA)
ST01	73.6	71.3	2.3
ST02	66.1	68.6	-2.5

3.0 METHODOLOGY

3.1 Fundamentals of Traffic Noise

The human ear perceives noise as a form of vibration that causes pressure variations. The ear is sensitive to this variation and perceives it as sound. The intensity of these pressure variations causes the ear to discern different levels of loudness. These pressure differences are commonly measured in decibels (dB). The decibel scale that is audible to the human ear spans about 140 decibels. A dB level of zero is barely audible to the human ear while 140 dB is an unrecognizable sound which is painful to the listener. The decibel scale is a logarithmic representation of the actual sound pressure variation. This means that a 26 percent change in energy level only changes the sound level 1 dB. It would be possible for the human ear to detect this difference only in a laboratory. Increasing the energy level 100 percent would result in a 3 dB increase, which would be barely perceptible outdoors. A tripling in sound energy level would result in a clearly noticeable change of 5 dB in the sound level. An increase of ten times the energy level would result in a 10 dB increase in the sound level, which would be perceived as a doubling of the sound level.

The human ear has a non-linear sensitivity to noise. To account for this in noise measurement, electronic weighting scales are used to define the relative loudness of different frequencies. The “A” weighting scale, expressed as dBA, is widely used in environmental work because it most nearly matches the non-linear nature of human hearing.

The measurement that is most commonly used to express dBA levels for traffic noise is the Hourly Equivalent Sound Level [$L_{eq}(h)$]. The $L_{eq}(h)$ describes a noise-sensitive receptor’s cumulative exposure from all noise-producing events over a 1-hour period.

Traffic noise studies for road projects in Indiana are performed in accordance with 23 CFR 772 and INDOT’s *Traffic Noise Analysis Procedure*. There are five main steps comprising traffic noise studies:

1. Identify noise sensitive receptors,
2. Determine existing ambient peak noise levels,
3. Predict future peak noise levels,
4. Identify traffic noise impacts, and
5. Evaluate mitigation measures for sensitive receptors where traffic noise impacts occur.

Noise levels were predicted for the outdoor living areas at each sensitive receptor using the worst traffic conditions likely to occur on a regular basis during the design year. Future noise levels predicted for the project area are included on Table C in Appendix C.

According to the INDOT *Traffic Noise Analysis Procedure*, a traffic noise impact occurs when either of the following conditions results at a sensitive receptor:

- The future predicted $L_{eq}(h)$ noise level either approaches (is within 1 dBA) or exceeds the Noise Abatement Criteria (NAC) shown in Table 3.
- The future predicted $L_{eq}(h)$ noise level substantially exceeds (by 15 or more dBA) the existing $L_{eq}(h)$ noise level. Traffic-generated noise level increases of 15 dBA or more are typically associated with roadway improvements on a new alignment.

3.2 Methods for Identifying Land Uses and Selecting Noise Measurement and Modeling Locations

A field investigation was conducted to identify land uses that could be subject to traffic and construction noise impacts from the proposed project. Land uses in the project area were categorized by land use type, Activity Category as defined in Table 3, and the extent of frequent human use. Although all developed land uses are evaluated in this analysis, the focus is on locations of frequent human use that would benefit

from a lowered noise level. Accordingly, this impact analysis focuses on locations with defined outdoor activity areas, such as residential backyards and common use areas at recreational facilities.

Table 3
Noise Abatement Criteria in 23 CFR 772

Activity Category	L_{Aeq}(h)	Evaluation Location	Activity Description
A	57	Exterior	Lands on which serenity and quiet are of extraordinary significance and serve an important public need and where the preservation of those qualities is essential if the area is to continue to serve its intended purpose.
B	67	Exterior	Residential.
C	67	Exterior	Active sport areas, amphitheaters, auditoriums, campgrounds, cemeteries, day care centers, hospitals, libraries, medical facilities, parks, picnic areas, places of worship, playgrounds, public meeting rooms, public or nonprofit institutional structure, radio stations, recording studios, recreation areas, Section 4(f) sites, schools, television studios, trails, and trail crossings.
D	52	Interior	Auditoriums, day care centers, hospitals, libraries, medical facilities, places of worship, public meeting rooms, public or nonprofit institutional structure, radio studios, recording studios, schools, and television studios.
E	72	Exterior	Hotels, motels, offices, restaurants/bars, and other developed lands, properties or activities not included in A-D, or F.
F	---	---	Agriculture, airports, bus yards, emergency services, industrial, logging, maintenance facilities, manufacturing, mining, rail yards, retail facilities, shipyards, utilities (water resources, water treatment, electrical), and warehousing.
G	---	---	Undeveloped lands that are not permitted.

Source: 23 CFR 772

3.3 Traffic Noise Level Prediction Methods

Traffic noise levels were predicted using FHWA TNM 2.5. Traffic noise was evaluated under design year conditions for both the Build and No-Build alternatives. The loudest hour traffic volumes, vehicle classification percentages, and traffic speeds under design-year (2035) conditions were developed for input into the traffic noise model. The loudest hour is generally characterized by free-flowing traffic at the highway design speed (i.e., Level of Service [LOS] C or better). Peak traffic volumes for the new roadway alternatives are not predicted to exceed LOS C, therefore design hour traffic volumes were used in this analysis. Hourly traffic volumes used in this study were taken from the *Traffic Volume Forecast for Interstate 69 at Campus Parkway (Exit210) and State Route 13 (Exit 214)* prepared by AECOM (April 2014).

3.4 Methods for Identifying Traffic Noise Impacts and Consideration of Abatement

Traffic noise impacts are considered to occur at receptor locations where predicted design-year noise levels are at least 15 dBA greater than existing noise levels, or where predicted design year noise levels approach or exceed the NAC for the applicable activity category. Where traffic noise impacts are identified, noise abatement must be considered for reasonableness and feasibility as required by 23 CFR 772 and the INDOT *Traffic Noise Analysis Procedure*.

According to the INDOT *Traffic Noise Analysis Procedure*, abatement measures are considered acoustically feasible if a minimum noise reduction of 5 dBA at a majority of impacted receptors is predicted with implementation of the abatement measures. Other factors that affect feasibility include topography, access requirements for driveways and ramps, presence of local cross streets, utility conflicts, other noise sources in the area, and safety considerations. The overall reasonableness of noise abatement is determined by considering factors such as:

- cost;
- absolute predicted noise levels;
- predicted future increase in noise levels;
- expected noise abatement benefits;
- achieve a 7dBA reduction for benefited first row receptors in the design year;
- build date of surrounding residential development along the highway;
- environmental impacts of abatement construction;
- opinions of affected residents;
- input from the public and local agencies; and
- social, legal, and technological factors.

Details of this evaluation are provided in Section 4.2.

4.0 FUTURE NOISE ENVIRONMENT, IMPACTS AND ABATEMENT

4.1 Future Noise Environment and Impacts

Table C in Appendix C summarizes the traffic noise modeling results for existing, No-Build and design-year conditions with and without noise barriers. As described in Section 3.3, these predictions utilize forecasted design hour traffic conditions to ensure a conservative estimate of noise levels for the loudest noise hour. The comparison to existing conditions is included in the analysis to identify traffic noise impacts under 23 CFR 772.

The results shown in Appendix C indicate that predicted traffic noise levels for the design-year conditions approach or exceed the NAC of 67 dBA $L_{eq}(h)$ for Category C land uses at three receptor locations. Therefore, traffic noise impacts are predicted to occur at activity Category C land uses within the project area. Abatement considered in this report includes a barrier evaluated where there is an impact for receptor at the wellness path and seating area near IU Saxony Hospital.

There are two additional receptors with noise impacts, which are paved trails along each side of Southeastern Parkway. However, these trails currently have a very narrow planted area (approximately 3 feet wide with a slight downslope) between them and the existing roadway, as well as access points for road crossing at the intersections. The scope of work for the project includes realigning these trails directly to the curb face of the proposed roadway with access points at the intersections. INDOT's *Traffic Noise Analysis Procedure* states that INDOT requires noise abatement measures to be based on sound engineering practices and standards and requires that any measures be evaluated at the optimum location. Noise barriers also require long, uninterrupted segments of barrier to be feasible. If there are existing access points and/or driveways, it is not feasible to construct effective noise barriers for the roadway. Since these locations do not meet INDOT's requirements for engineering feasibility, no barriers were evaluated for the two trail receptors along Southeastern Parkway.

As shown in Appendix A, undeveloped areas adjacent to the corridor are predicted to approach or exceed the NAC for potential future Activity Category B land uses based on the 66 dBA contour line.

4.2 Noise Abatement Analysis

In accordance with 23 CFR 772, noise abatement is considered where noise impacts are predicted in areas of frequent human use that would benefit from a lowered noise level. Potential noise abatement measures include the following:

- avoiding the impact by using design alternatives, such as altering the horizontal and vertical alignment of the project;
- construction of noise barriers;
- acquiring property to serve as a buffer zone;
- using traffic management measures to regulate types of vehicles and speeds; and
- acoustically insulating public-use or nonprofit institutional structures.

Alteration of the roadway geometry would not be feasible. The preferred alternative has been developed to best meet the transportation need of the corridor while minimizing impacts to the immediate area and meeting the purpose of the project. Horizontal geometry changes significant enough to effect noise levels at receiver locations would require numerous relocations and is not a practical alternative. Thus any changes to these alignments would be limited, and have only minimal effects on sound levels.

Noise barriers placed along roadways on state-owned right-of way can effectively shield locations from traffic-related noise. A barrier's feasibility is based on its acoustic effectiveness, which depends on the area's geometry, the barrier's configuration, and the effects of other (unblocked) noise sources. Noise barriers were evaluated, and the results are described below.

Vacant or undeveloped property may be acquired to provide a buffer zone from noise generating facilities. However, there is no vacant land in the study area that, if acquired, would provide effective abatement as a buffer zone.

Traffic management measures would not be effective for this project. Traffic management measures that could reduce sound levels include “traffic calming” actions, such as reducing volumes, especially truck volumes, or travel speeds. Such measures are not consistent with the transportation needs in the area or purpose of the project.

Insulation of public structures and nonprofit institutions is not relevant, since there are no public-use or nonprofit institutional structures impacted by the project. Interior noise levels at public-use or nonprofit institutional structures are not anticipated to be above interior NAC levels.

All of these abatement options have been considered. However, because of the configuration and location of the project, noise barriers are the only abatement suited for this project.

Feasibility of Abatement

Feasibility analysis deals with engineering considerations to determine if a particular form of abatement can actually have an effect on the traffic noise levels at a receiver. It also takes into account such considerations as topography, drainage, safety, and access/maintenance needs (which may include right-of-way considerations). To be feasible, an abatement measure must meet or exceed a 5 dBA reduction at a majority (greater than 50%) of the impacted receptors. If a barrier cannot achieve this acoustic goal, abatement is considered to not be acoustically feasible.

Reasonableness of Abatement

Reasonable means that INDOT believes abatement of traffic noise impacts is prudent based on consideration of the following factors:

1. Consideration and Obtaining Views of Residents and Property Owners

Consideration of noise barriers can cause conflicts in mixed-use developments, as barriers to protect residences may block line of sight to adjacent businesses. If a barrier is proposed directly adjacent to the property line of a business, the business will be solicited for input to determine whether they have any concerns about line of sight. If a mutually satisfactory compromise cannot be reached between business(es) and residences, barriers may be terminated at the property line dividing the two areas. These conflicts can be minimized by noise-compatible planning.

2. Cost-effectiveness

To determine cost-effectiveness, the estimated cost of constructing a noise barrier (including installation and additional necessary construction such as foundations or guardrail) will be divided among the number of benefited receptors (those who would receive a reduction of at least 5 dBA). A cost of \$25,000 or less per benefited receptor is considered to be “cost-effective”. Development in which a majority (more than 50%) of the receptors was in place prior to initial construction of the roadway in its current state (functional classification) will receive additional consideration for noise abatement. The cost-effectiveness criteria to be used for these cases will be 20% greater (currently \$30,000 per benefited receptor). INDOT is currently evaluating other methods of addressing complaints about traffic noise beyond traditional noise barriers. If this study identifies viable alternatives to barriers, the policy will be amended to provide additional flexibility accordingly.

Placing noise barriers on structures creates additional challenges, since reinforcement of the structure may be necessary to support the increased load. In these situations, other options should be assessed to determine whether cost-effective abatement can be provided without requiring complicated and expensive structural modifications. These could include lighter-weight barriers,

shorter barriers, or other considerations. Any variations will be worked out in coordination between the FHWA division office and INDOT's Offices of Structural Services, Environmental Services and Construction Management.

3. INDOT Design Goal For Noise Abatement

INDOT's goal for substantial noise reduction is to provide at least a 7 dBA reduction for benefited first row receptors in the design year. However, conflicts with adjacent lands may make it impossible to achieve substantial noise reduction at all impacted first row receptors. Therefore, the noise reduction design goal for INDOT is 7 dBA for a majority (greater than 50%) of the impacted first row receptors.

One noise barrier was analyzed for feasibility based on achievable noise reduction and engineering considerations. The noise barrier was found to be acoustically feasible, since the impacted receptor received a 5 dBA noise reduction. It also met the INDOT design goal of a 7 dBA reduction. However, the cost of the barrier for one benefited receptor exceeds the cost-effectiveness criterion of \$25,000. Table 4 summarizes the barrier analyzed.

Table 4
Analyzed Noise Barrier

Barrier ID	Min. Height (ft)	Max Height (ft)	Total Length (ft)	Estimated Total Cost	Benefited Receptors	Estimated Cost per Benefited Receptor	Cost-Effectiveness Criterion per Benefited Receptor
1	14	20	800	\$413,896	1	\$413,896	\$25,000

5.0 CONSTRUCTION NOISE

During construction of the project, noise from construction activities may intermittently dominate the noise environment in the immediate area of construction.

Table 5 summarizes noise levels produced by construction equipment that is commonly used on roadway construction projects. Construction equipment is expected to generate noise levels ranging from 70 to 90 dBA at a distance of 50 feet, and noise produced by construction equipment would be reduced over distance at a rate of approximately 6 dBA per doubling of distance.

Table 5
Construction Equipment Noise

Equipment	Maximum Noise Level (dBA at 50 feet)
Scrapers	89
Bulldozers	85
Heavy Trucks	88
Backhoe	80
Pneumatic Tools	85
Concrete Pump	82

Source: U.S. Environmental Protection Agency 1971.

No adverse noise impacts from construction are anticipated because construction noise would be short-term and intermittent. Measures to minimize the temporary impacts will include requiring equipment to have sound-control devices that are no less effective than those provided on the original equipment and requiring all equipment to be muffled.

6.0 PUBLIC INVOLVEMENT

Since the barrier evaluated for this study is not cost-effective, no benefited properties will be sought and no further public involvement regarding noise impacts will be required for this project.

7.0 STATEMENT OF LIKELIHOOD

Based on the studies thus far accomplished, the State of Indiana has not identified any locations where noise abatement is likely. Noise abatement at these locations is based upon preliminary design costs and design criteria. Noise abatement has not been found to be reasonable based on the cost-effectiveness criteria. A reevaluation of the noise analysis will occur during final design. If during final design it is determined that conditions have changed such that noise abatement is feasible and reasonable, the abatement measures might be provided. The final decision on the installation of any abatement measure will be made upon the completion of the project's final design.

8.0 CONCLUSIONS AND RECOMMENDATIONS

Based on this evaluation, no barriers were identified for this project that were reasonable based upon the cost-effectiveness criterion.

9.0 REFERENCES

23 CFR 772 (2011). "Procedures for Abatement of Highway Traffic Noise and Construction Noise." Accessed August 4, 2014.

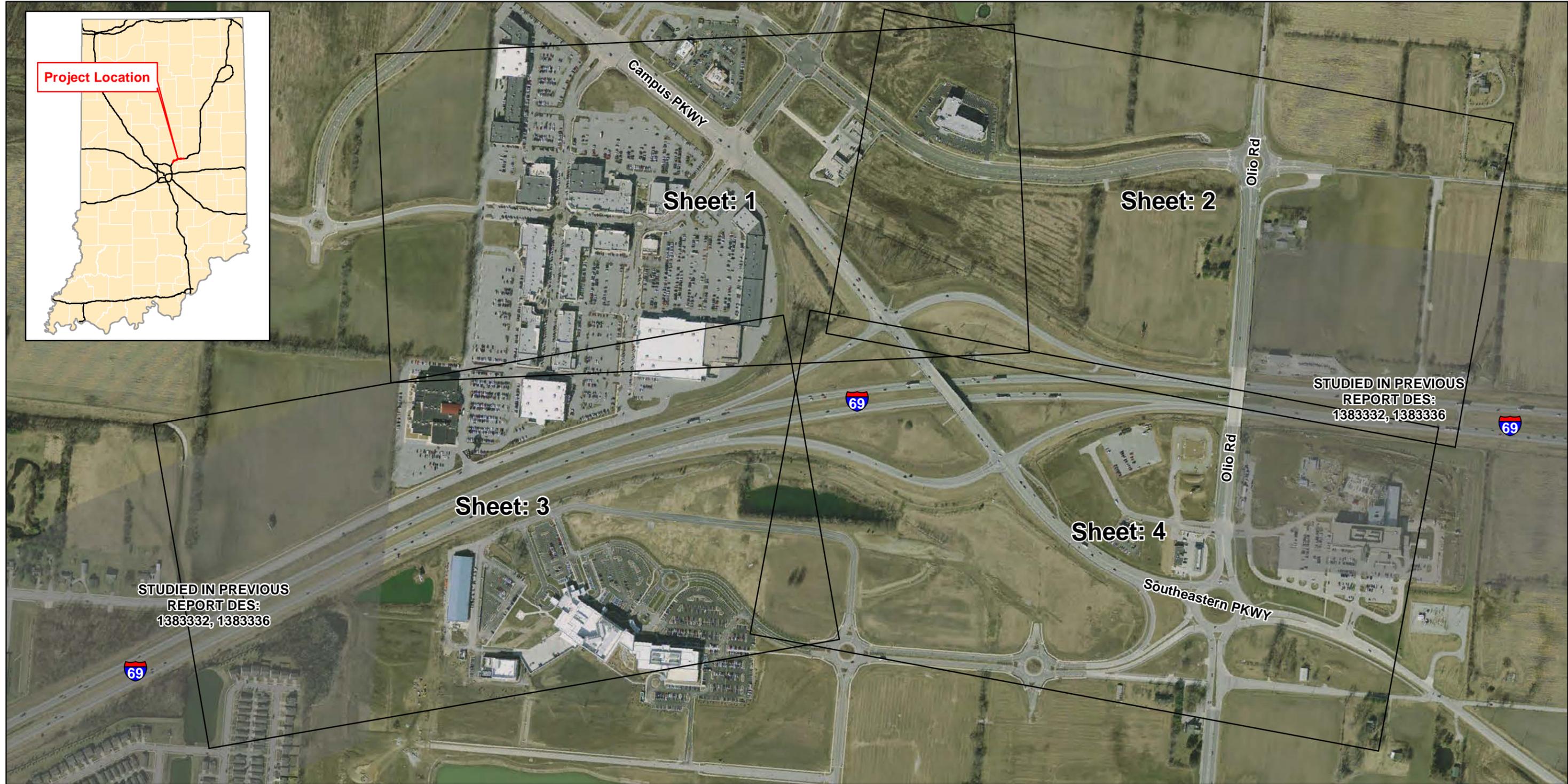
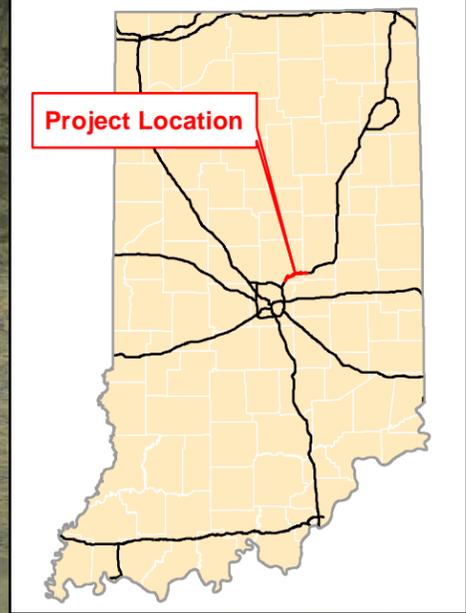
INDOT 2011. "*Indiana Department of Transportation Traffic Noise Analysis Procedure*" Office of Environmental Services.

AECOM April 2014. "*Traffic Volume Forecast: Interstate 69 at Campus Parkway (Exit 210) and State Route 13 (Exit 214)*"

U.S. Environmental Protection Agency, "Noise from Construction Equipment and Operations, Building Equipment and Home Appliances," NTID300.1, December 31, 1971.

Appendix A

Noise Measurement and Model Location Figures



ESRI Map Projection: NAD 1983 StatePlane Indiana East FIPS 1301 Feet Datum: NAD 1983



1 inch = 500 feet

Sources:
Non Orthophotography Data -
 Obtained from the State of Indiana Geographical Information Office Library
Orthophotography -
 Obtained from Indiana Map Framework Data (www.indianamap.org)

Appendix A: Index Measurement and Modeling Locations

Des. 1383489
 Date: 12/18/2014
 Created By: WCK





ESRI Map Projection: NAD 1983 StatePlane Indiana East FIPS 1301 Feet Datum: NAD 1983

- Legend**
- Noise Measurement Locations
 - Receptors
 - Proposed Trail
 - 66 dBA Contour
 - 500' Study Corridor



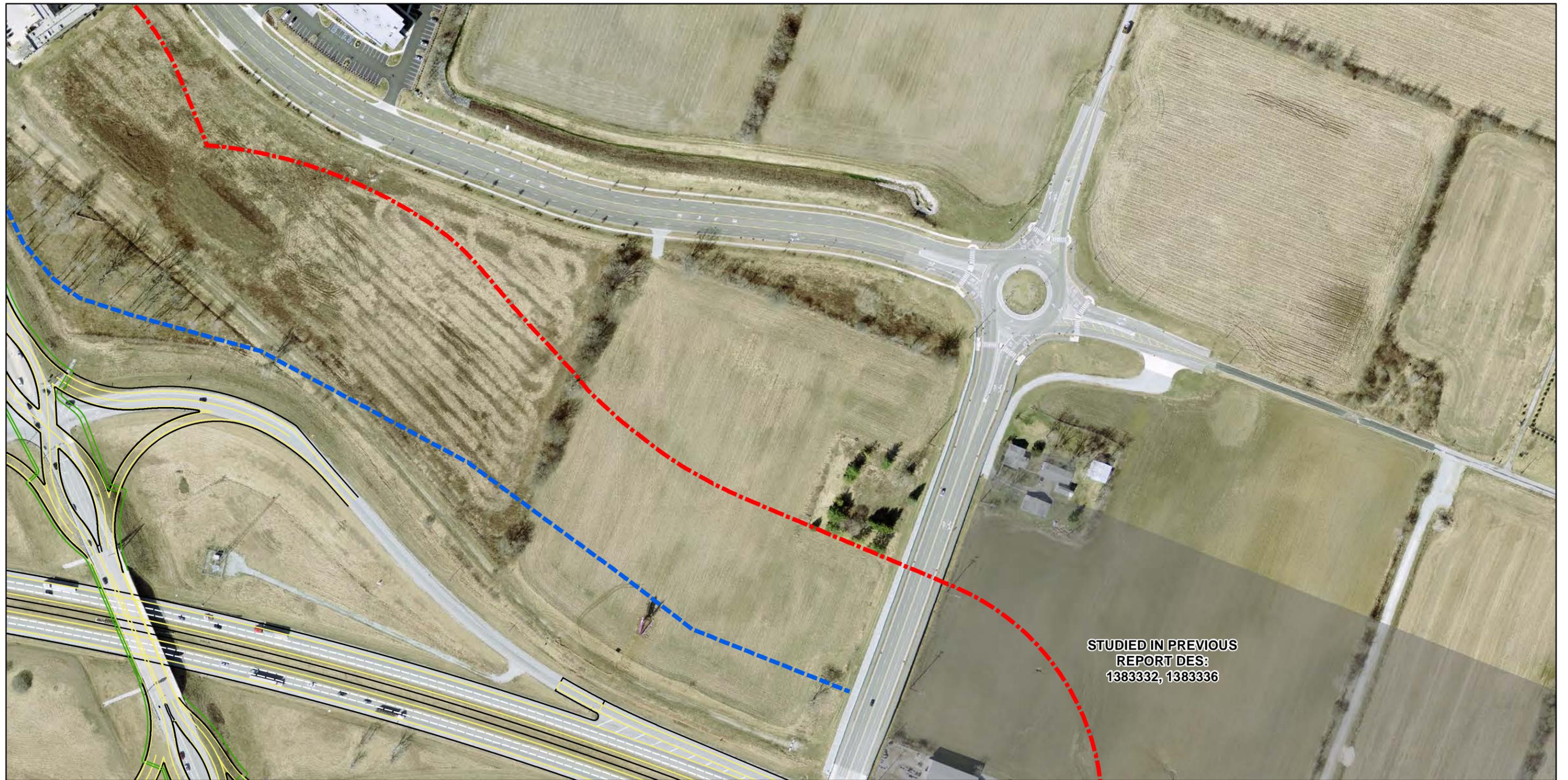
1 inch = 200 feet

Sources:
Non Orthophotography Data -
 Obtained from the State of Indiana Geographical Information Office Library
Orthophotography -
 Obtained from Indiana Map Framework Data (www.indianamap.org)

Des. 1383489
Date: 1/7/2015
Created By: WCK

Appendix A
 Measurement and Modeling Locations
 Page 1 of 4



ESRI Map Projection: NAD 1983 StatePlane Indiana East FIPS 1301 Feet Datum: NAD 1983

- Legend**
-  Noise Measurement Locations
 -  Receptors
 -  Proposed Trail
 -  66 dBA Contour
 -  500' Study Corridor



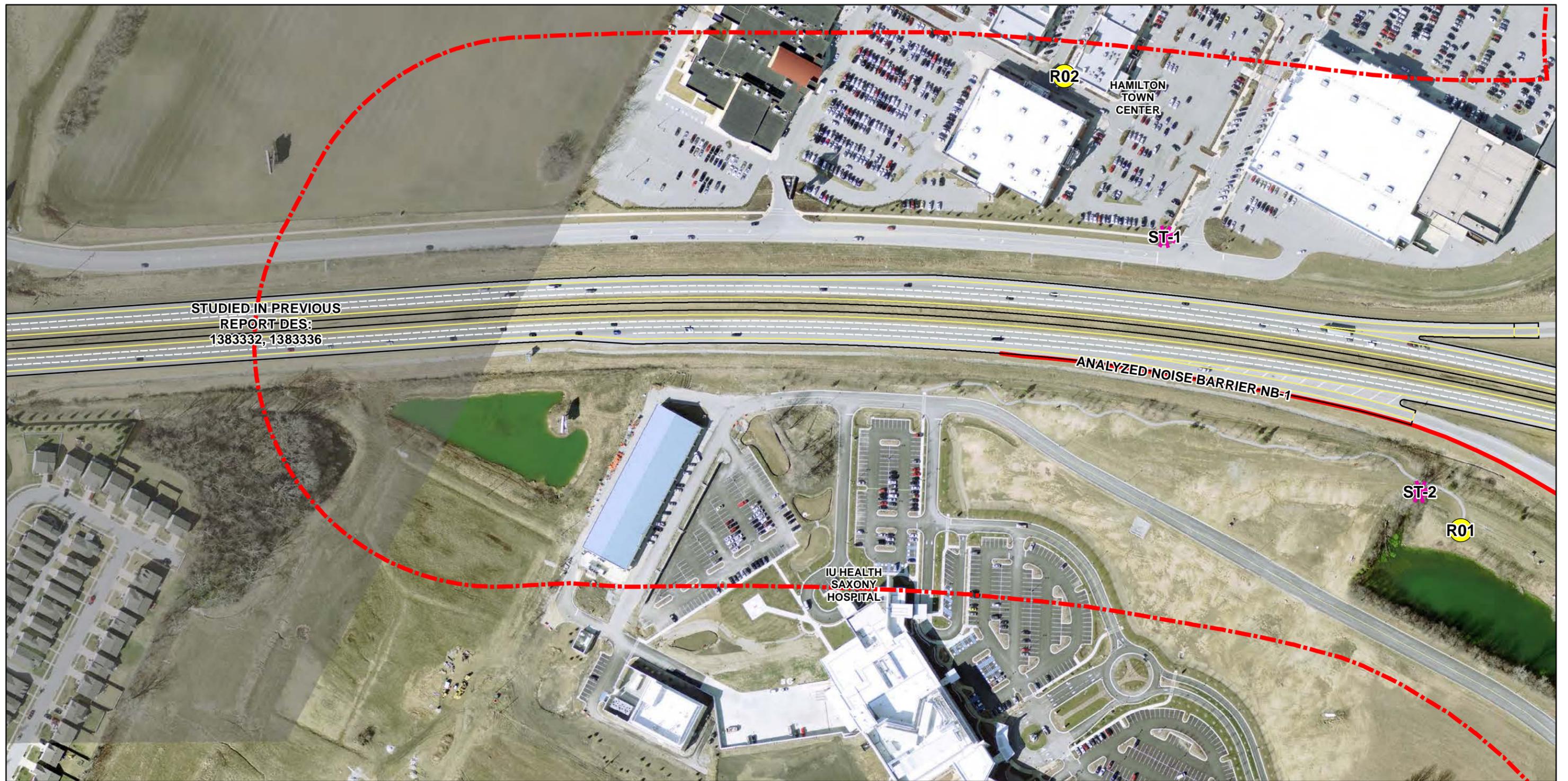
1 inch = 200 feet

Sources:
Non Orthophotography Data -
 Obtained from the State of Indiana Geographical Information Office Library
Orthophotography -
 Obtained from Indiana Map Framework Data (www.indianamap.org)

Des. 1383489
Date: 1/7/2015
Created By: WCK

Appendix A
 Measurement and Modeling Locations
 Page 2 of 4



ESRI Map Projection: NAD 1983 StatePlane Indiana East FIPS 1301 Feet Datum: NAD 1983

Legend

-  Noise Measurement Locations
-  Receptors
-  Proposed Trail
-  66 dBA Contour
-  500' Study Corridor



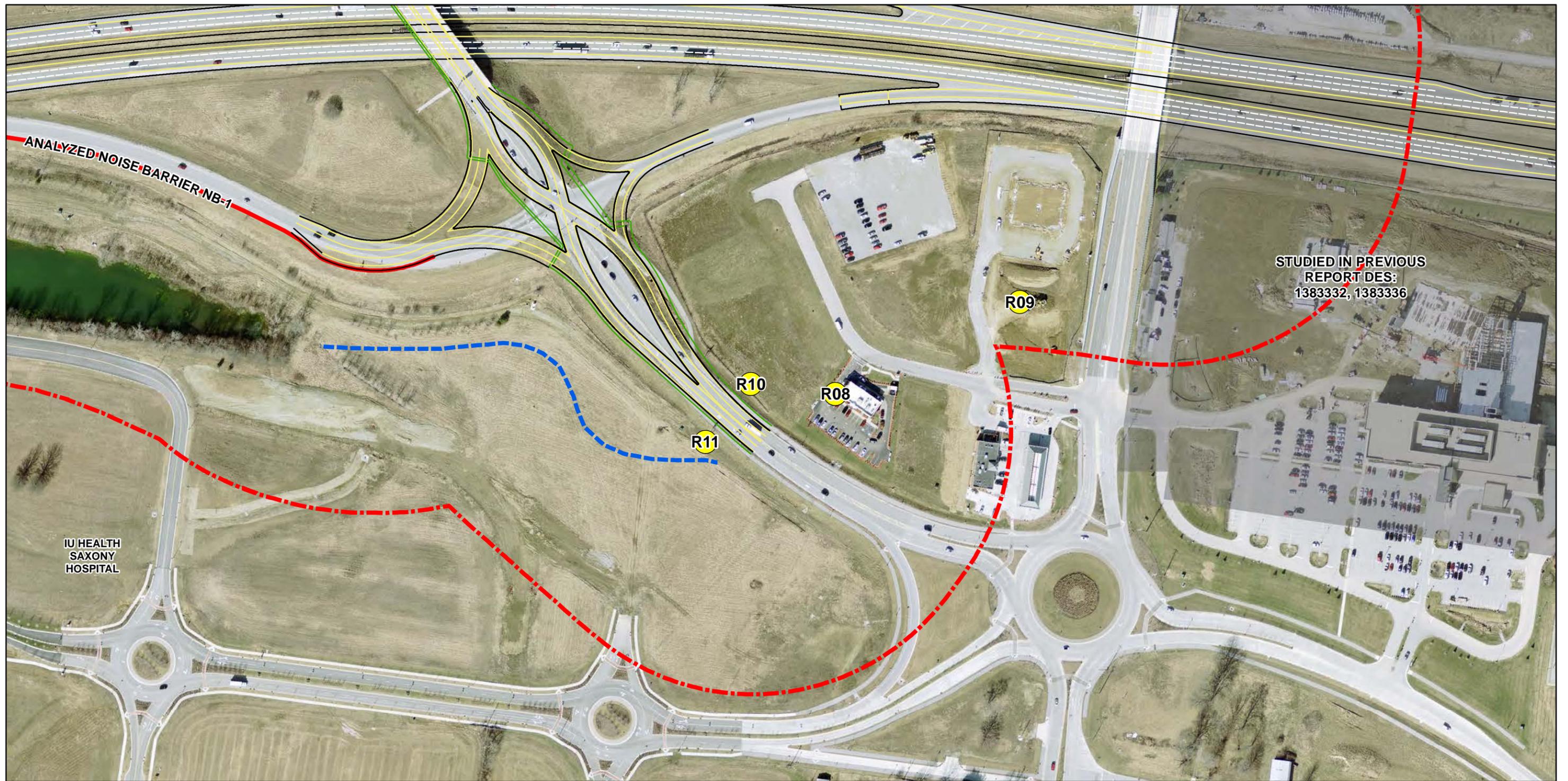
1 inch = 200 feet

Sources:
Non Orthophotography Data -
 Obtained from the State
 of Indiana Geographical
 Information Office Library
Orthophotography -
 Obtained from Indiana
 Map Framework Data
www.indianamap.org

Des. 1383489
Date: 1/7/2015
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Appendix A
Measurement and Modeling Locations
 Page 3 of 4





ESRI Map Projection: NAD 1983 StatePlane Indiana East FIPS 1301 Feet Datum: NAD 1983

Legend

-  Noise Measurement Locations
-  Receptors
-  Proposed Trail
-  66 dBA Contour
-  500' Study Corridor



1 inch = 200 feet

Sources:
Non Orthophotography Data -
 Obtained from the State of Indiana Geographical Information Office Library
Orthophotography -
 Obtained from Indiana Map Framework Data (www.indianamap.org)

Des. 1383489
Date: 1/7/2015
Created By: WCK

Appendix A
Measurement and Modeling Locations
 Page 4 of 4



Appendix B

Identification of Receptors

Table B - Identification of Receptors

Receptor ID	Address	City	Zip Code	Land Use	Activity Category	NAC level	Number of Dwelling Units
R01	13000 East 136th Street	Fishers	46037	Hospital	C	67	1
R02	13904 Town Center Blvd	Noblesville	46060	Commercial	E	72	1
R03	13901 Town Center Boulevard	Noblesville	46060	Commercial	E	72	1
R04	13971 Town Center Boulevard	Noblesville	46060	Commercial	E	72	1
R05	13170 Harrell Parkway	Noblesville	46060	Commercial	E	72	1
R06	13230 Harrell Parkway	Noblesville	46060	Commercial	E	72	1
R07	13193 Levinson Lane	Noblesville	46060	Commercial	E	72	1
R08	13844 Olivia Way	Fishers	46037	Commercial	E	72	1
R09	13647 Olivia Way	Fishers	46037	Commercial	E	72	1
R10	Trail along eastbound Southeastern Parkway	Fishers	46037	Recreational	C	67	1
R11	Trail along westbound Southeastern Parkway	Fishers	46037	Recreational	C	67	1

Appendix C

Predicted Noise Levels

Table C - Predicted Noise Levels - NSA 10

Receptor ID	Noise Abatement Criteria	Representative Dwelling Units	Existing Noise Level	No-Build Noise Level	Build Alternative Level w/o Barrier	Barrier ID	Build Alternative Level with Barrier	Noise Barrier Reduction	First Row Receptor (Y/N)	Benefited Receptor (Y/N)	Impact Type A/E=Approaching or Exceeding
R01	67	1	67	68	68	NB 1	61	7	Y	Y	A/E
R02	72	1	62	64	64	N/A	-	-	N	N	None
R03	72	1	59	60	61	N/A	-	-	N	N	None
R04	72	1	57	58	59	N/A	-	-	N	N	None
R05	72	1	55	56	56	N/A	-	-	N	N	None
R06	72	1	54	55	55	N/A	-	-	N	N	None
R07	72	1	55	56	57	N/A	-	-	N	N	None
R08	72	1	64	64	62	N/A	-	-	N	N	None
R09	72	1	65	65	65	N/A	-	-	N	N	None
R10	67	1	74	74	70	N/A	-	-	N	N	A/E
R11	67	1	77	77	75	N/A	-	-	N	N	A/E

Appendix D

Noise Barrier Reasonableness Analysis Worksheet

Table D - Noise Barrier Reasonableness Analysis Worksheet

Barrier #	Percentage of First Row Receptors which Receive 7dBA or Greater Noise Reduction (%)	Percentage of Impacted Receptors which Receive 5dBA or Greater Noise Reduction (%)	Existing Noise Levels Leq(H) dBA	Range of Future Noise Levels		Barrier Characteristics						# of D/Us Attenuated (Min 5dBA)	Cost/Unit	Noise Barrier Effectiveness			Feasible and Reasonable
				W/O Barriers Leq(dBA)	Barrier Leq(dBA)	Noise Reduction (dBA)	Length (ft)	Height (range)	Height (ft Average)	Total Barrier Area(sw ft)	Cost ⁽¹⁾			Design Goal Achieved ⁽²⁾	Acoustic Feasibility Achieved ⁽³⁾	Cost -Effectiveness Criterion Achieved ⁽⁴⁾	
1	100	100	67.0	67.9	60.9	7.0	800	14-20	17.25	13,797	\$413,896	1	\$413,896	Y	Y	N	N

Notes:

- ⁽¹⁾ Estimated cost of the barriers is based on the surface area cost of \$30 per square foot of barrier wall.
- ⁽²⁾ The INDOT design goal is a 7 dBA noise reduction for a majority (greater than 50%) of benefitted first row receptors.
- ⁽³⁾ Acoustic effectiveness of a barrier was judged by providing a noise reduction of 5 dBA or greater at 50 percent or more of the impacted receptors.
- ⁽⁴⁾ Cost-effectiveness criterion was based on INDOT unit cost of \$25,000 per benefiting receptor.

Appendix E

Traffic Data

Table E - Traffic Data for Existing, No-Build, and Build Conditions

Segment	Number of Lanes	Loudest Hour Volume (DHV)	Auto (per lane)		Heavy Trucks (per lane)		Speed* (AT/HT)
			%	Volume	%	Volume	
Existing							
I-69, South of SR 238/Campus Parkway	4	4,369	86	939	14	153	68/59
I-69, North of SR 238/Campus Parkway	4	4,451	95	1,057	5	56	73/60
I-69 Northbound to Campus Parkway	1	1,167	98	1,039	2	32	55/50
I-69 Southbound to Campus Parkway	1	601	98	589	2	12	55/50
Campus Parkway to I-69 Northbound	1	589	98	524	2	16	55/50
Campus Parkway to I-69 Southbound	1	1,071	98	1,050	2	21	55/50
No-Build							
I-69, South of SR 238/Campus Parkway	4	5,870	86	1,262	14	205	68/59
I-69, North of SR 238/Campus Parkway	4	5,295	95	1,258	5	66	73/60
I-69 Northbound to Campus Parkway	1	1,650	98	1,634	2	17	55/50
I-69 Southbound to Campus Parkway	1	800	98	784	2	16	55/50
Campus Parkway to I-69 Northbound	1	800	98	784	2	16	55/50
Campus Parkway to I-69 Southbound	1	1,430	98	1,401	2	29	55/50
Build							
I-69, South of SR 238/Campus Parkway	6	5,870	86	841	14	137	68/59
I-69, North of SR 238/Campus Parkway	6	5,295	95	838	5	44	73/60
I-69 Northbound to Campus Parkway	1	1,650	98	1,634	2	17	55/50
I-69 Southbound to Campus Parkway	1	800	98	784	2	16	55/50
Campus Parkway to I-69 Northbound	1	800	98	784	2	16	55/50
Campus Parkway to I-69 Southbound	1	1,430	98	1,401	2	29	55/50

*Speeds used were observed based on an average of three drive through of the corridor while maintaining the average speed of the flow of traffic.

Appendix F1

Existing TNM Data Tables

Appendix F2

No-Build TNM Data Tables

Appendix F3

Proposed TNM Data Tables

Appendix F4

TNM Barrier Descriptions

RESULTS: BARRIER DESCRIPTIONS

I69_Hamilton_County

PTG				7 January 2015						
RJC				TNM 2.5						

RESULTS: BARRIER DESCRIPTIONS

PROJECT/CONTRACT:	I69_Hamilton_County									
RUN:	Proposed NSA_10_with barrier									
BARRIER DESIGN:	NB_01_rev									

Barriers										
Name	Type	Heights along Barrier			Length	If Wall Area	If Berm Volume	Top Width	Run:Rise	Cost
		Min	Avg	Max						
		ft	ft	ft	ft	sq ft	cu yd	ft	ft:ft	\$
Barrier1	W	14.00	17.25	20.00	800	13797				413896
									Total Cost:	413896

Appendix G

Sound Level Meter Calibration Records

Certificate of Calibration and Conformance

This document certifies that the instrument referenced below meets published specifications per Procedure PRD-P263; ANSI S1.4-1983 (R 2006) Type 1; S1.4A-1985; S1.43-1997 Type 1; S1.11-2004 Octave Band Class 0; S1.25-1991; IEC 61672-2002 Class 1; 60651-2001 Type 1; 60804-2000 Type 1; 61260-2001 Class 0; 61252-2002.

Manufacturer:	Larson Davis	Temperature:	70.7	°F
Model Number:	LxT1		21.5	°C
Serial Number:	3277	Rel. Humidity:	31	%
Customer:	TMS Rental	Pressure:	999	mbars
Description:	Sound Level Meter		999	hPa

Note: As Found / As Left: In Tolerance

Upon receipt for testing, this instrument was found to be:

Within the Stated tolerance of the manufacturer's specification

Calibration Date: 4-Feb-14

Calibration Due:

Calibration Standards Used:

Manufacturer	Model	Serial Number	Cal Due	Traceability No.
Larson Davis	LDSigGen/2239	0760/0109	4/12/2014	2013-172614

This Certificate attests that this instrument has been calibrated under the stated conditions with Measurement and Test Equipment (M&TE) Standards traceable to the National Institute of Standards and Technology (NIST). All of the Measurement Standards have been calibrated to their manufacturers' specified accuracy / uncertainty. Evidence of traceability and accuracy is on file at The Modal Shop and/or Larson Davis Corporate Headquarters. An acceptable accuracy ratio between the Standard(s) and the item calibrated has been maintained. This instrument meets or exceeds the manufacturer's published specification unless noted.

This calibration complies with ISO 17025 and ANSI Z540. The collective uncertainty of the Measurement Standard used does not exceed 25% of the applicable tolerance for each characteristic calibrated unless otherwise noted.

The results documented in this certificate relate only to the item(s) calibrated or tested. Calibration interval assignment and adjustment are the responsibility of the end user. This certificate may not be reproduced, except in full, without the written approval of The Modal Shop.

Technician: Wayne Underwood

Signature:




The Modal Shop, Inc.
 3149 East Kemper Road
 Cincinnati, OH 45241
 Phone: (513) 351-9919
 (800) 860-4867
www.modalshop.com

~ Calibration Report ~

Microphone Model: 377B02

Serial Number: 142333

Description: 1/2" Free-Field Microphone

Calibration Data

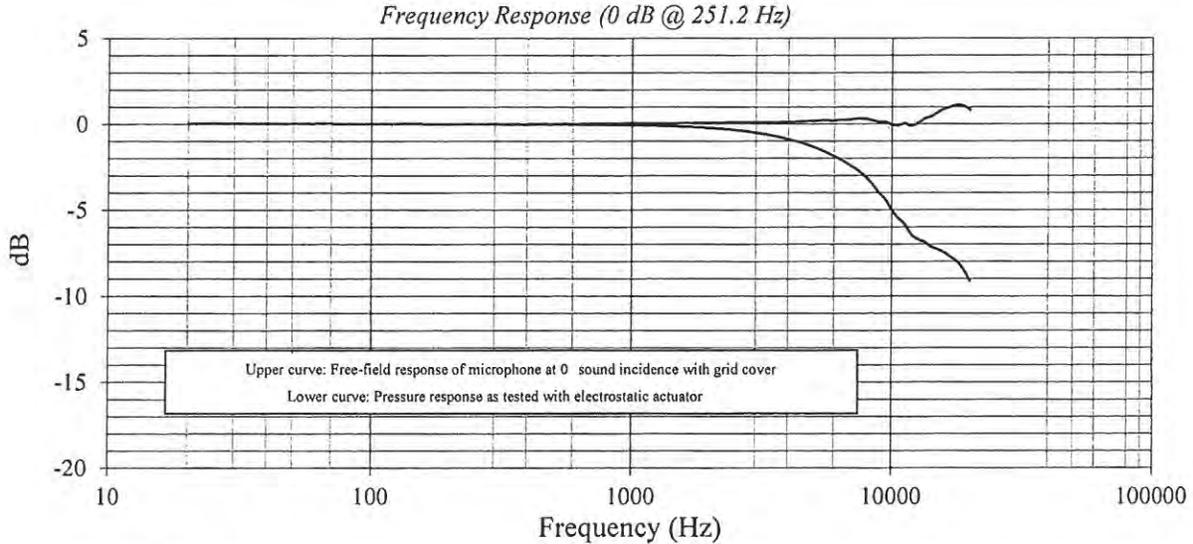
Open Circuit Sensitivity @ 251.2 Hz: 47.15 mV/Pa
-26.53 dB re 1V/Pa

Polarization Voltage, External: 0 V
Capacitance: 11.5 pF

Temperature: 69 °F (21°C)

Ambient Pressure: 983 mbar

Relative Humidity: 26 %



Freq (Hz)	Lower (dB)	Upper (dB)	Freq (Hz)	Lower (dB)	Upper (dB)	Freq (Hz)	Lower (dB)	Upper (dB)	Freq (Hz)	Lower (dB)	Upper (dB)
20.0	0.04	0.04	1584.9	-0.16	0.05	6683.4	-2.27	0.25	-	-	-
25.1	0.03	0.03	1678.8	-0.17	0.06	7079.5	-2.50	0.28	-	-	-
31.6	0.03	0.03	1778.3	-0.18	0.07	7498.9	-2.75	0.32	-	-	-
39.8	0.03	0.03	1883.7	-0.21	0.07	7943.3	-3.09	0.30	-	-	-
50.1	0.03	0.03	1995.3	-0.23	0.08	8414.0	-3.51	0.22	-	-	-
63.1	0.03	0.03	2113.5	-0.26	0.08	8912.5	-3.99	0.12	-	-	-
79.4	0.02	0.02	2238.7	-0.29	0.08	9440.6	-4.39	0.13	-	-	-
100.0	0.02	0.02	2371.4	-0.32	0.09	10000.0	-5.00	-0.05	-	-	-
125.9	0.02	0.02	2511.9	-0.36	0.10	10592.5	-5.47	-0.07	-	-	-
158.5	0.01	0.01	2660.7	-0.40	0.11	11220.2	-5.82	0.04	-	-	-
199.5	0.01	0.01	2818.4	-0.44	0.12	11885.0	-6.42	-0.10	-	-	-
251.2	-0.00	0.00	2985.4	-0.50	0.12	12589.3	-6.70	0.07	-	-	-
316.2	-0.01	0.00	3162.3	-0.56	0.12	13335.2	-6.86	0.33	-	-	-
398.1	-0.01	-0.01	3349.7	-0.63	0.11	14125.4	-7.14	0.45	-	-	-
501.2	-0.02	0.02	3548.1	-0.70	0.12	14962.4	-7.28	0.69	-	-	-
631.0	-0.03	0.01	3758.4	-0.78	0.12	15848.9	-7.46	0.89	-	-	-
794.3	-0.05	0.04	3981.1	-0.87	0.13	16788.0	-7.71	1.01	-	-	-
1000.0	-0.07	0.05	4217.0	-0.97	0.14	17782.8	-7.99	1.12	-	-	-
1059.3	-0.08	0.05	4466.8	-1.08	0.15	18836.5	-8.44	1.07	-	-	-
1122.0	-0.09	0.05	4731.5	-1.20	0.17	19952.6	-9.10	0.83	-	-	-
1188.5	-0.09	0.06	5011.9	-1.34	0.19	-	-	-	-	-	-
1258.9	-0.10	0.06	5308.8	-1.49	0.21	-	-	-	-	-	-
1333.5	-0.12	0.06	5623.4	-1.66	0.22	-	-	-	-	-	-
1412.5	-0.13	0.06	5956.6	-1.86	0.21	-	-	-	-	-	-
1496.2	-0.14	0.06	6309.6	-2.05	0.24	-	-	-	-	-	-

Technician: Milton Munger

MM
3646

Date: January 20, 2014



3425 Walden Avenue, Depew, New York, 14043

TEL: 888-684-0013 FAX: 716-685-3886 www.pcb.com

ID: CAL60-3473102382.233

~ Certificate of Calibration and Compliance ~

Microphone Model: 377B02

Serial Number: 142333

Manufacturer: PCB

Calibration Environmental Conditions

Environmental test conditions as printed on microphone calibration chart.

Reference Equipment

Manufacturer	Model #	Serial #	PCB Control #	Cal Date	Due Date
Hewlett Packard	34401A	MY41045214	LD-001	3/6/13	3/6/14
Bruel & Kjaer	4192	2657834	CA1270	11/26/13	11/26/14
Newport	BTH-W/N	8410668	CA1187	not required	not required
Larson Davis	PRM915	122	CA-865	9/17/13	9/17/14
Larson Davis	PRM902	4701	CA1450	10/21/13	10/21/14
Larson Davis	2559LF	3216	CA-883	not required	not required
Larson Davis	ADP005	1	LD-017	not required	not required
Larson Davis	PRM916	127	CA924	4/15/13	4/15/14
Larson Davis	CAL250	5025	CA1277	7/25/13	7/25/14
Larson Davis	2201	140	CA-1409	3/22/13	3/21/14
Larson Davis	2900	1079	CA-521A	6/4/13	6/4/14
Larson Davis	PRA951-4	234	CA1154	9/17/13	9/17/14
0	0	0	0	not required	not required
0	0	0	0	not required	not required

Frequency sweep performed with B&K UA0033 electrostatic actuator.

Condition of Unit

As Found: N/A

As Left: New unit in tolerance

Notes

1. Calibration of reference microphone is traceable through PTB.
2. This certificate shall not be reproduced, except in full, without written approval from PCB Piezotronics, Inc.
3. Calibration is performed in compliance with ISO 9001, ISO 10012-1, ANSI/NCSL Z540.3 and ISO 17025.
4. See Manufacturer's Specification Sheet for a detailed listing of performance specifications.
5. Open circuit sensitivity is measured using the insertion voltage method following procedure AT603-5.
6. Measurement uncertainty (95% confidence level with coverage factor of 2) for sensitivity is +/-0.20 dB.
7. Unit calibrated per ACS-20.

Technician: Milton Munger



Date: January 20, 2014



3425 Walden Avenue, Depew, New York, 14043

TEL: 888-684-0013 FAX: 716-685-3886 www.pcb.com

ID: CAL60-3473102062.233



~Calibration Certificate~

3149 East Kemper Rd.
Cincinnati, OH 45241
Ph : 513-351-9919
Fax: 513-458-2172
www.modalshop.com

Manufacturer:	Larson Davis	Asset ID:	39309
Model:	CAL200	Calibration Date:	Sep 10, 2014 14:55:59
Serial Number:	6792	Due Date:	
Description:	Acoustic Calibrator	Technician:	Wayne Underwood
Customer:	TMS Rental	Approval:	

Calibration Results:

Temperature:	22 °C (72 °F)
Measured SPL : 93.82 dB re. 20µPa	Humidity: 52.40%
Measured Frequency : 1,000.00 Hz	Pressure: 990.6 mbar

Upon receipt for calibration, the instrument was found to be:
WITHIN the stated tolerance of the manufacturer's specification.

Note: **As Found/As Left In Tolerance**

Measurement uncertainty at 95% confidence level: 0.3 dB

The subject instrument was calibrated to the indicated specification using standards stated below or to accepted values of natural physical constants. This document certifies that the instrument met the following specification upon its return to the customer.

This calibration is traceable through : 683/281794-12

Notes:

The calibration was performed under operating procedures intended to implement the requirements of ISO 9001, ISO 17025 and ANSI Z540. Unless otherwise noted, the reported value is both "as found" and "as left" data. Calibration results relate only to the items calibrated. This certificate may not be reproduced, except in full, without written permission.

Reference Equipment Used:

Manuf.	Model	Serial	Cal. Date	Due Date
GRAS	40AG	77606	9/16/2013	9/16/2014



~Calibration Certificate~

3149 East Kemper Rd.
Cincinnati, OH 45241
Ph : 513-351-9919
Fax: 513-458-2172
www.modalshop.com

Manufacturer:	Larson Davis	Asset ID:	39309
Model:	CAL200	Calibration Date:	Sep 10, 2014 14:58:40
Serial Number:	6792	Due Date:	
Description:	Acoustic Calibrator	Technician:	Wayne Underwood
Customer:	TMS Rental	Approval:	

Calibration Results:

Measured SPL : 113.85 dB re. 20 μ Pa	Temperature:	22 °C (72 °F)
Measured Frequency : 1,000.00 Hz	Humidity:	52.40%
	Pressure:	990.6 mbar

Upon receipt for calibration, the instrument was found to be:
WITHIN the stated tolerance of the manufacturer's specification.

Note: **As Found/As Left In Tolerance**

Measurement uncertainty at 95% confidence level: 0.3 dB

The subject instrument was calibrated to the indicated specification using standards stated below or to accepted values of natural physical constants. This document certifies that the instrument met the following specification upon its return to the customer.

This calibration is traceable through : 683/281794-12

Notes:

The calibration was performed under operating procedures intended to implement the requirements of ISO 9001, ISO 17025 and ANSI Z540. Unless otherwise noted, the reported value is both "as found" and "as left" data. Calibration results relate only to the items calibrated. This certificate may not be reproduced, except in full, without written permission.

Reference Equipment Used:

Manuf.	Model	Serial	Cal. Date	Due Date
GRAS	40AG	77606	9/16/2013	9/16/2014

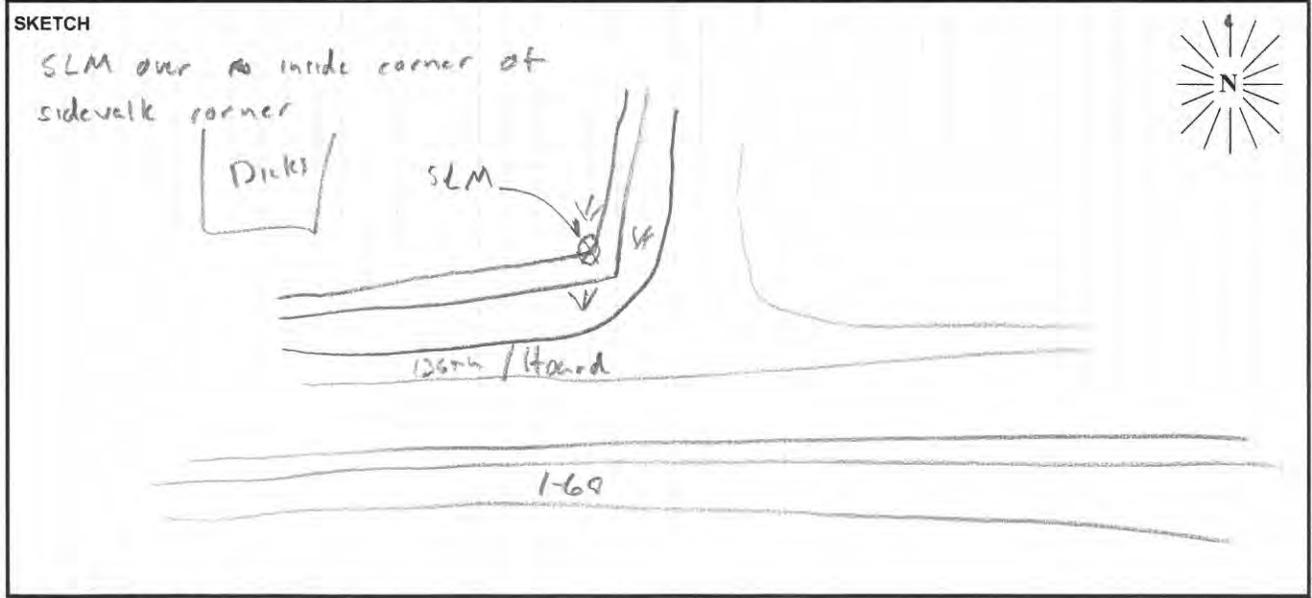
Appendix H

Field Survey Forms and Photo Log

FIELD SURVEY FORM

PROJECT: <u>Exit 210 Interchange Mod</u>		ENGINEER: <u>R. Connolly W. Kimmen</u>	DATE: <u>11/10/14</u>
MEASUREMENT ADDRESS: <u>Dicks 13157 Norrell Ln</u>		CITY: <u>Noblesville IN</u>	SITE NO.: <u>ST-01</u>
SOUND LEVEL METER: <input type="checkbox"/> LD-870 <input type="checkbox"/> LD-820 <input type="checkbox"/> LD-824 <input type="checkbox"/> LD-812 <input type="checkbox"/> B&K-2250 <input checked="" type="checkbox"/> <u>LxT1</u>		MICROPHONE: <input type="checkbox"/> WIND SCREEN <input type="checkbox"/> NON-POLAR <input type="checkbox"/> POLARIZED <input checked="" type="checkbox"/> 1/2-INCH <input checked="" type="checkbox"/> FREEFIELD <input type="checkbox"/> 1-INCH <input type="checkbox"/> RANDOM	PRE AMP: <input type="checkbox"/> LD-900 <input type="checkbox"/> LD-828 <input checked="" type="checkbox"/> <u>PRMLET1</u>
SERIAL #: <u>3277</u>	SERIAL #: <u>142333</u>	SERIAL #: <u>25010</u>	NOTES: SYSTEM PWR: <input type="checkbox"/> BAT <input type="checkbox"/> AC (observations at start of measurement) TEMP: <u>60.5</u> °F R.H.: <u>42</u> %
CALIBRATOR: <input type="checkbox"/> LD CA250 Freq. Hz. <input type="checkbox"/> B&K 4231 <input type="checkbox"/> 250 S/N <u>6792</u> <input type="checkbox"/> 1000 <input checked="" type="checkbox"/> <u>CA2200</u>		CALIBRATION RECORD: Input, dB / Reading, dB / Offset, dB / Time Before <u>94.0 / 94.0 / / /</u> After <u>94.0 / 93.9 / / /</u>	
METER SETTINGS: <input type="checkbox"/> A-WTD <input type="checkbox"/> LINEAR <input type="checkbox"/> SLOW <input type="checkbox"/> 1/1 OCT <input type="checkbox"/> INTERVALS _____ - MINUTE <input type="checkbox"/> C-WTD <input type="checkbox"/> IMPULSE <input type="checkbox"/> FAST <input type="checkbox"/> 1/3 OCT <input type="checkbox"/> L _N PERCENTILE VALUES		WIND SPEED: <u>8.9</u> MPH TOWARD (DIR): <u>N</u> SKIES: <u>Clear</u> CAMERA _____ PHOTO NOS. _____	

NOTES: <u>43 AT on Howard drive</u>										Dist. to Center of Nearest Lane _____			<input type="checkbox"/> Video <input type="checkbox"/> Radar			Counts AT MT HT <u>NR-479 6 147</u> <u>SR-603 13 93</u>			MEAS. TYPE: <input type="checkbox"/> Long Term <input checked="" type="checkbox"/> Short Term	
DATE	START TIME	STOP TIME	L _{MIN}	L ₉₉	L ₉₀	L ₅₀	L ₂₅	L ₁₀	L ₀₁	L _{MAX}	L _{EQ}	NOTES:								
11/10/14	14:54	15:14									77.6									



PARSONS

Des. No. 1383489
I69 Noise Measurement Locations



Photo 1: Dicks Sporting Goods, 13157 Norell Ln, Site No. ST-01, Facing North



Photo 2: Dicks Sporting Goods, 13157 Norell Ln, Site No. ST-01, Facing East



Photo 3: Dicks Sporting Goods, 13157 Norell Ln, Site No. ST-01, Facing West

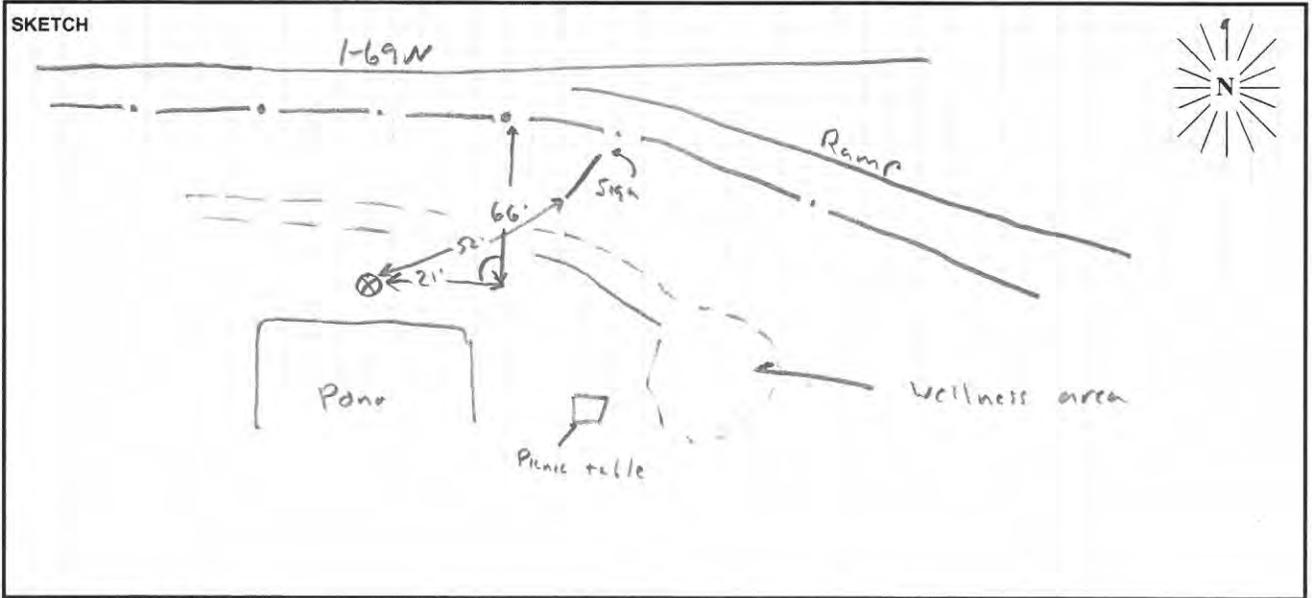


Photo 4: Dicks Sporting Goods, 13157 Norell Ln, Site No. ST-01, Facing South

FIELD SURVEY FORM

PROJECT: <u>Exit 210 Interchange Mod</u>		ENGINEER: <u>R. Connolly, V. Kimman</u>	DATE: <u>11/10/14</u>
MEASUREMENT ADDRESS: <u>Wellness Park</u> <u>13000 E 136th Street (10 Saxony)</u>		CITY: <u>Fishers</u>	SITE NO.: <u>ST-02</u>
SOUND LEVEL METER: <input type="checkbox"/> LD-870 <input type="checkbox"/> LD-820 <input type="checkbox"/> LD-824 <input type="checkbox"/> LD-812 <input type="checkbox"/> B&K-2250 <input checked="" type="checkbox"/> <u>Let 1</u>		MICROPHONE: <input type="checkbox"/> WIND SCREEN <input type="checkbox"/> NON-POLAR <input type="checkbox"/> POLARIZED <input checked="" type="checkbox"/> 1/2-INCH <input checked="" type="checkbox"/> FREEFIELD <input type="checkbox"/> 1-INCH <input type="checkbox"/> RANDOM	PRE AMP: <input type="checkbox"/> LD-900 <input type="checkbox"/> LD-828 <input checked="" type="checkbox"/> <u>PRM Let 1</u>
SERIAL #: <u>3277</u>	SERIAL #: <u>142333</u>	SERIAL #: <u>25010</u>	NOTES: SYSTEM PWR: <input checked="" type="checkbox"/> BAT <input type="checkbox"/> AC (observations at start of measurement) TEMP: <u>61.0</u> °F R.H.: <u>43</u> % WIND SPEED: <u>9.7</u> MPH TOWARD (DIR): <u>N</u> SKIES: <u>Clear</u> CAMERA _____ PHOTO NOs. _____
CALIBRATOR: <input type="checkbox"/> LD CA250 <input type="checkbox"/> B&K 4231 S/N <u>6792</u>		CALIBRATION RECORD: Freq, Hz. <input type="checkbox"/> 250 <input type="checkbox"/> 1000 Input, dB / Reading, dB / Offset, dB / Time Before <u>94.0 / 94.0 / / 15:45</u> After <u>94.0 / 93.8 / / 16:09</u>	
METER SETTINGS: <input type="checkbox"/> A-WTD <input type="checkbox"/> LINEAR <input checked="" type="checkbox"/> SLOW <input type="checkbox"/> 1/1 OCT <input type="checkbox"/> INTERVALS _____ - MINUTE <input type="checkbox"/> C-WTD <input type="checkbox"/> IMPULSE <input type="checkbox"/> FAST <input type="checkbox"/> 1/3 OCT <input type="checkbox"/> L _N PERCENTILE VALUES			

NOTES: <u>Measurement taken near Wellness path</u>		Dist. to Center of Nearest Lane _____	<input type="checkbox"/> Video <input type="checkbox"/> Radar	Counts AT MT HT <u>NB 448 2 102</u> <u>SB 808 13 99</u>	MEAS. TYPE: <input type="checkbox"/> Long Term <input checked="" type="checkbox"/> Short Term <u>20 min</u>							
DATE	START TIME	STOP TIME	L _{MIN}	L ₉₉	L ₉₀	L ₅₀	L ₂₅	L ₁₀	L ₀₁	L _{MAX}	L _{EQ}	NOTES:
11/10/14	15:47	16:07									66.1	



PARSONS

Des. No. 1383489
I69 Noise Measurement Locations



Photo 5: Wellness Path IU Saxony Hospital, 13000 E 136th St, Site No. ST-02, Facing North



Photo 6: Wellness Path IU Saxony Hospital, 13000 E 136th St, Site No. ST-02, Facing East

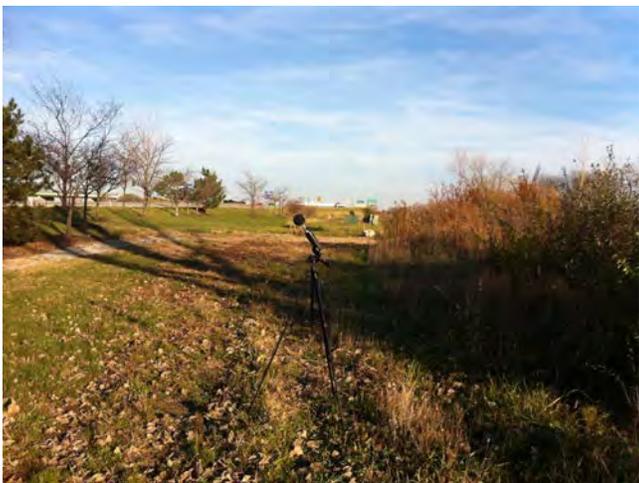


Photo 7: Wellness Path IU Saxony Hospital, 13000 E 136th St, Site No. ST-02, Facing West



Photo 8: Wellness Path IU Saxony Hospital, 13000 E 136th St, Site No. ST-02, Facing South

Miller, Daniel J

From: Bales, Ronald [rbales@indot.IN.gov]
Sent: Thursday, January 15, 2015 9:18 AM
To: Jones, Tony W
Cc: Giffin, Toni; Carnahan, Ben; Miller, Daniel J; Stamatis, Stephany
Subject: Des. No. 1383489, Exit 210 (Campus Parkway) Interchange Modification Project in Hamilton County (Traffic Noise Impact Analysis)

A Traffic Noise Analysis report was completed by Parsons on January 14, 2015 for the Exit 210 (Campus Parkway) Interchange Modification Project (Des. 1383489) in Hamilton County. The traffic noise analysis evaluated noise impacts and potential mitigation measures for this project.

The traffic noise analysis identified three impacted receptors in the design year (2035). A barrier would not be feasible for two of the impacted receptors, as it would not meet INDOT's engineering requirement that a barrier must have long, uninterrupted segments without access points or driveways. The barrier evaluated for the third impacted receptor was feasible but not reasonable, as it did not meet INDOT's cost-effectiveness criterion.

Therefore we are not recommending noise barriers be included in this project. A reevaluation of the noise analysis will occur during final design. If during final it has been determined that conditions have changed such that noise abatement is feasible and reasonable, the abatement measures might be provided. The final decision on the installation of any abatement measures will be made upon the completion of the project's final design and the public involvement processes.

This e-mail serves as approval of the traffic noise analysis report.

Please let us know if you would like to view the full report or discuss further. Thank you.

Ron Bales

Senior Environmental Manager

100 North Senate Ave., Room 642

Indianapolis, IN 46204

Office: (317) 234-4916

Email: rbales@indot.in.gov



Appendix K: Public Involvement

Sample Notice of Entry Letter.....	<u>Page(s)</u> 1-3
------------------------------------	-----------------------

«Owner_name»
«Address»
«City», «State» «Zip»

RE: Des. Nos. 1383332, 1383336, & 1383489
I-69 Interstate Expansion
Added Travel Lanes from 106th St to 0.5 mi East of SR 13, and Interchange Modification at Exit 210
(Campus Parkway); Hamilton & Madison Counties, Indiana

Notice of Entry for Survey or Investigations

March 14, 2014

Dear Property Owner,

Our information indicates that you own property near the above proposed transportation project. Representatives of the Indiana Department of Transportation will be conducting engineering and/or environmental surveys of the project area in the near future. It may be necessary for the INDOT Representatives to enter onto your property to complete this work. This is permitted by Indiana Code § 8-23-7-26. Anyone performing this type of work has been instructed to identify him or herself to you, if you are available, before they enter your property. If you no longer own this property or it is currently occupied by someone else (i.e. rental, sharecrop), please let us know the name of the new owner or occupant so that we can contact them about the survey.

Please read the attached notice to inform you of what the “Notice of Entry for Survey or Investigation” means. The design and environmental surveys are needed for the proper planning and design of this highway project. Engineering survey work would include mapping the location of features such as trees, buildings, fences, drives, ground elevations, etc. Environmental survey work may include the identification and mapping of wetlands, architectural surveys, archaeological investigations (which may involve the survey, testing, or excavation of identified archaeological sites), and various other environmental studies. It is our sincere desire to cause you as little inconvenience as possible during this survey.

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

If any problems occur, please contact the field crew or one of the following:

Ben Carnahan, PE
Project Manager (Parsons)
101 West Ohio Street, Suite 2121
Indianapolis, IN 46204
(317) 616-1016
ben.carnahan@parsons.com

Daniel J. Miller
Sr. Environmental Planner (Parsons)
101 West Ohio Street, Suite 2121
Indianapolis, IN 46204
(317) 616-4663
daniel.j.miller@parsons.com

Linda Weintraut, Ph.D.
Weintraut & Associates, Inc.
P.O. Box 5034
Zionsville, IN 46077
(317) 733-9770
linda@weintrautinc.com

Please be aware that IC 8-23-7-27 and 28 provides that you may seek compensation from INDOT for damages occurring to your property (land or water) that result from INDOT’s entry for the purposes mentioned above in IC 8-23-7-26. In this case, a basic procedure that may be followed is for you and/or an INDOT employee or representative to present an account of the damages to one of the above named INDOT staff. They will check



the information and forward it to the appropriate person at INDOT who will contact you to discuss the situation and compensation.

In the event that property damage occurs as a result of work performed during survey, the Greenfield District Real Estate Manager can provide you with a form to request compensation for damages. You may contact:

Ronald Raney
Greenfield District Real Estate Manager
32 South Broadway
Greenfield, IN 46160
(317) 467-3499
rraney@indot.in.gov

After filling out the form, you can return it to the District Real Estate Manager for consideration. Please contact the District Real Estate Manager if you have questions regarding the matter, rights, and procedures.

If you are not satisfied with the compensation that INDOT determines is owed to you, Indiana Code 8-23-7-8 provides the following:

The amount of damages shall be assessed by the county agricultural extension educator of the county in which the land or water is located and two (2) disinterested residents of the county, one (1) appointed by the aggrieved party and one (1) appointed by the department. A written report of the assessment of damages shall be mailed to the aggrieved party and the department by first class United States mail. If either the department or the aggrieved party is not satisfied with the assessment of damages, either or both may file a petition, not later than fifteen (15) days after receiving the report, in the circuit or superior court of the county in which the land or water is located.

Thank you in advance for your cooperation in this matter.

Sincerely,



Daniel J. Miller
Parsons, Senior Environmental Planner
101 W. Ohio St., Suite 2121
Indianapolis, IN 46204
daniel.j.miller@parsons.com

Attachment





INDIANA DEPARTMENT OF TRANSPORTATION

Driving Indiana's Economic Growth

100 North Senate Avenue
Room N642
Indianapolis, IN 46204

Michael R. Pence, Governor
Karl B. Browning, Commissioner

Indiana Department of Transportation Notice of Entry for Survey or Investigation Indiana Department of Transportation

If you have received a “Notice of Entry for Survey or Investigation” from INDOT or an INDOT representative, you may be wondering what it means. In the early stages of a project’s development, INDOT must collect as much information as possible to ensure that sound decisions are made in designing the proposed project. Before entering onto private property to collect that data, INDOT is required to notify landowners that personnel will be in the area and may need to enter onto their property. Indiana Code, Title 8, Article 23, Chapter 7, Section 26 deals with the department’s authority to enter onto any property within Indiana.

Receipt of a Notice of Entry for Survey or Investigation does not necessarily mean that INDOT will be buying property from you. It doesn’t even necessarily mean that the project will involve your property at all. Since the Notice of Entry for Survey or Investigation is sent out in the very early stages and since we want to collect data within AND surrounding the project’s limits more landowners are contacted than will actually fall within the eventual project limits. It may also be that your property falls within the project limits but we will not need to purchase property from you to make improvements to the roadway. Another thing to keep in mind is that when you receive a Notice of Entry for Survey or Investigation, very few specifics have been worked out and actual construction of the project may be several years in the future.

Before INDOT begins a project that requires them to purchase property from landowners, they must first offer the opportunity for a public hearing. If you were on the list of people who received a Notice of Entry for Survey or Investigation, you should also receive a notice informing you of your opportunity to request a public hearing. These notices will also be published in your local newspaper so interested individuals who are not adjacent to the project will also have the opportunity to request a public hearing. If a public hearing is to be held, INDOT will publicize the date, location, and time. INDOT will present detailed project information at the public hearing, comments will be taken from the public in spoken and written form, and question and answer sessions will be offered. Based on the feedback INDOT receives from the public, a project can be modified and improved to better serve the public.

So, if you have received a “Notice of Entry for Survey or Investigation”, remember:

1. You do not need to take any action at this time. It is merely letting you know that people in orange/lime vests are going to be in your neighborhood.
2. The project is still in its very early planning stages.
3. You will be notified of your opportunity to comment on the project at a later date.

www.in.gov/dot/
An Equal Opportunity Employer