

**Indiana Department of Transportation**

County Hamilton Route Greenfield Avenue/Howe Road Des. No. 1401716

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

<b>Road No./County:</b>	Greenfield Avenue and Howe Road/ Hamilton County
<b>Designation Number:</b>	1401716
<b>Project Description/Termini:</b>	New Roundabout Construction / Approximately 415 feet east, 290 feet west, 350 feet north, and 300 feet south of the intersection of Greenfield Avenue and Howe Road

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

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

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

**Approval**

_____	_____	_____	_____
ESM Signature	Date	ES Signature	Date
_____		_____	
FHWA Signature		Date	

**Release for Public Involvement**

_____	_____	<u>REB</u>	<u>1-4-17</u>
ESM Initials	Date	ES Initials	Date

**Certification of Public Involvement** \_\_\_\_\_

Office of Public Involvement      Date

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

INDOT ES/District Env. Reviewer Signature: \_\_\_\_\_ Date: \_\_\_\_\_

Name and Organization of CE/EA Preparer: Britta Anderson and Elizabet Biggio, Butler, Fairman & Seufert, Inc.

**Indiana Department of Transportation**

County Hamilton

Route Greenfield Avenue/Howe Road

Des. No. 1401716

**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:

A Notice of Survey was sent to the owners of adjacent properties on October 1, 2015 (Appendix G, G1). The letters explained to property owners that survey crews would be walking on their land in order to take measurements of features such as buildings, trees, fences, and driveways and obtain ground elevations. No responses to the Notice of Survey were received.

To meet the public involvement requirements of Section 106 of the National Historic Preservation Act (NHPA), the Indiana Department of Transportation's (INDOT) finding of "No Historic Properties Affected," on behalf of the Federal Highway Administration (FHWA), was advertised in *The Times* (serving Noblesville and Hamilton County) on March 7, 2016 (Appendix G, G2-G3). No public comments were received by the established 30-day deadline of April 7, 2016.

The proposed project will meet the minimum requirements described in the current Indiana Department of Transportation (INDOT) Public Involvement Manual 2012 which would require the project sponsor to offer the public an opportunity to submit comment and/or request a public hearing. Therefore, a legal notice will appear in a local publication contingent upon the release of this document for public involvement. This document will be revised after the public involvement requirements are fulfilled.

**Public Controversy on Environmental Grounds**

Will the project involve substantial controversy concerning community and/or natural resource impacts?	Yes <input type="checkbox"/>	No <input checked="" type="checkbox"/>
--	---------------------------------	---

Remarks:

At this time, there is no known public controversy concerning community and natural resource impacts associated with the project.

**Indiana Department of Transportation**

County Hamilton Route Greenfield Avenue/Howe Road Des. No. 1401716

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

Sponsor of the Project: City of Noblesville INDOT District: Greenfield

Local Name of the Facility: Greenfield Avenue and Howe Road

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

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

**PURPOSE AND NEED:**

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

**Purpose**

The purpose of the project is to address the poor level of service (LOS) and limited sight distance at the intersection of Greenfield Avenue and Howe Road (Des. No. 1401716). Additionally, the purpose is to improve the overall travel conditions for the motoring public at the intersection of Greenfield Avenue and Howe Road.

**Need**

The need for the project comes from the high volume of traffic at this intersection and the current intersection configuration. The 2017 average daily traffic (ADT) on Greenfield Avenue is 9,450 vehicles per day (VPD) and the ADT on Howe Road is 1,365 VPD. The future ADT (2037) for Greenfield Avenue is projected to be 10,775 VPD and 1,555 VPD for Howe Road. The 45 degree angle of the intersection impairs visibility for motorists on both Greenfield Avenue and Howe Road. Greenfield Avenue is classified as a Principal Arterial and Howe Road as a Local Street.

A traffic capacity analysis was performed December 15, 2015 by Butler, Fairman and Seufert, Inc. (BF&S) to evaluate the traffic operations at the intersection. The capacity analysis is based on the methodology outlined in the *Highway Capacity Manual* (Transportation Research Board 2010). The standard parameter used to evaluate traffic operating conditions is referred to as the level-of-service (LOS). There are six LOS (A-free flow through F-grid lock) which rank driving conditions from best to worst. The LOS for un-signalized intersections is defined in terms of control delay per vehicle, which is a direct correlation to driver discomfort, frustration, fuel consumption, and lost travel time. The capacity analysis indicated that the Greenfield Avenue/ Howe Road intersection currently (2015) has a LOS of "C" (stable flow). In 2035, the intersection will remain a LOS of "C" if no action is taken. As a result of this intersection's current LOS and reasonably foreseeable future LOS, improvements are needed to enhance traffic flow through this intersection.

**Indiana Department of Transportation**

County Hamilton Route Greenfield Avenue/Howe Road Des. No. 1401716

**PROJECT DESCRIPTION (PREFERRED ALTERNATIVE):**

County: Hamilton Municipality: City of Noblesville

Limits of Proposed Work: Approximately 290 feet west, 415 feet east, 350 feet north, and 300 feet south of the intersection of Greenfield Avenue and Howe Road

Total Work Length: 0.26 Mile(s) Total Work Area: 1.43 Acre(s)

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

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

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

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

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

The project is located within the City of Noblesville, Noblesville Township, Hamilton County, Indiana. The project is located approximately 2.5 miles southeast of downtown Noblesville and approximately 19.9 miles northeast of Indianapolis (Appendix B, B1).

Existing Conditions

The existing roadway configuration of Greenfield Avenue, from the western project terminus (approximately 290 feet west of its intersection with Howe Road) to the eastern project terminus (approximately 415 feet east of its intersection with Howe Road), consists of one 10.5-foot wide asphalt travel lane in each direction bordered by variable 1-2 foot wide shoulders. At the western project terminus, Greenfield Avenue has an 11.5-foot asphalt-paved right turn from westbound Greenfield Avenue to Symphony Boulevard. Greenfield Avenue has one 6-foot wide concrete sidewalk, located on the north side of Greenfield Avenue, which terminates directly north of the existing intersection of Greenfield Avenue and Howe Road. There are no curbs, gutters or median along Greenfield Avenue within the project area. The Wheeler & Wheeler legal drain, a 12-inch reinforced concrete pipe (RCP) runs across Greenfield Avenue approximately 48 feet east of the intersection. The section underneath the roadway is a 20-inch corrugated metal pipe.

Howe Road, from approximately 300 feet south of Greenfield Avenue to the Greenfield Avenue intersection, is paved in asphalt and has one 11-foot travel lane (northbound) and one 9-foot travel lane (southbound). Howe Road intersects Greenfield Avenue at an approximately 45-degree angle to form a T-intersection. There are no shoulders, curbs, gutters, pedestrian paths or center median along Howe Road within the project area. The Wheeler & Wheeler Legal Drain runs approximately parallel to the east side of Howe Road at a distance tapering from approximately 27.5 feet at the intersection. The drain crosses underneath Howe Road approximately 240 feet south of the intersection.

Preferred Alternative

The City of Noblesville proposes to construct a new roundabout at the T-intersection of Greenfield Avenue and Howe Road (Des No. 1401716). The proposed roundabout will be located slightly northeast of the existing intersection in order to minimize impacts to residential properties on the south side of Greenfield Avenue. The total project length will be approximately 0.26 mile. The project will include approach work on

**Indiana Department of Transportation**

County Hamilton Route Greenfield Avenue/Howe Road Des. No. 1401716

each leg of the intersection. Specifically, approximately 290 feet of approach work will occur on Greenfield Avenue west of the intersection, approximately 415 feet of approach work will occur on Greenfield Avenue east of the intersection, approximately 300 feet of approach work will occur on Howe Road south of the intersection, and approximately 350 feet of work will occur north of the existing intersection (Appendix B, B3).

The interior of the roundabout will be approximately 50 feet in diameter. The roundabout will have one approximately 18-foot wide circulatory travel lane. The roundabout will have a 10-foot wide concrete truck apron area on the interior side of the travel lane. The truck apron will be a concrete area with a mountable curb where the back wheels of a longer vehicle (semis, buses, etc.) may cross to navigate the roundabout without impacting any solid barriers. The roundabout will have an approximately 2-foot wide curb and gutter on each side of the travel lane (Appendix B, B12).

The east approach on Greenfield Avenue will taper from the existing lane widths of approximately 11 feet (one lane in each direction) to approximately 14 feet on the approaches. The westbound lane will enter the roundabout at a width of approximately 20 feet and the eastbound lane will exit at a width of approximately 17.75 feet. A raised, concrete center curb, varying in width from 4 feet to 19.8 feet, will separate the travel lanes on the approach to the roundabout (Appendix B, B17).

On the west approach along Greenfield Avenue, the eastbound lane will vary from its existing width of approximately 11 feet to approximately 14 feet on the approach and to approximately 19.9 feet at the entrance to the roundabout. The westbound lane will be approximately 18.6 feet wide exiting the roundabout, taper to 14 feet, and expand to 24 feet to include a right-turn lane at the intersection with Symphony Boulevard. The lane will return to its existing width on the west side of the intersection. A raised concrete center curb, varying in width from approximately 4 feet to 17.5 feet, will separate the lanes leading up to the roundabout. Both approaches along Greenfield Avenue will have 2 foot wide curbs and gutters on the outside of the travel lanes (Appendix B, B12-B13 and B16).

The approach on Howe Road will vary from the existing lane widths of 11 feet (northbound) and 9 feet (southbound) to 14 feet on the approach. The northbound lane will enter the roundabout at a width of approximately 20 feet and the southbound lane will exit at a width of approximately 17.5 feet. A concrete center curb, varying in width from approximately 4 feet to 20 feet, will separate the lanes leading up to the roundabout. Howe Road will have 2 foot wide curb and gutter bordering the outside of the travel lanes (Appendix B, B13 and B18). An 8 foot wide concrete sidewalk will be installed along the east side of Howe Road from the roundabout to a point approximately 300 feet south of the roundabout where it will connect to an existing, asphalt-paved multi-use path (Appendix B, B20-B21).

In order to accommodate storm runoff from the roundabout, project will include the construction of a detention basin on the roundabout's north side. The detention basin will be approximately 160 feet in length and 15 feet wide at the base and with side slopes at a 4:1 ratio (4 feet horizontally for every 1 foot vertically). The maximum depth of the basin will be approximately 8 feet. The construction of the basin will require approximately 2,000 cubic yards (CY) of excavation (Appendix B, B19). Runoff from the intersection will be collected through the gutters and curb drains into 15-21 inch RCPs and carried to the detention basin through a 24-inch RCP. Water detained in the basin will exit via a 15 inch RCP into the Wheeler & Wheeler Legal Drain. The existing 12 inch RCP between the intersection and the drain and the 20-inch corrugated metal pipe under the intersection will be removed.

The existing 6-foot wide concrete sidewalk on the north side of Greenfield Avenue, west of Howe Road, will be extended from its existing terminus on the west side of the intersection to the east side of the roundabout.

**Indiana Department of Transportation**

County Hamilton Route Greenfield Avenue/Howe Road Des. No. 1401716

The sidewalk will cross south over Greenfield Avenue and continue south to connect to the existing asphalt path on the east side of Howe Road as discussed previously in this section. The crossing will include Americans with Disabilities Act (ADA) compliant curb ramps.

Land use around the intersection is residential (lawn), forested, and agricultural. Approximately 1.09 acre of permanent ROW and 0.01 acre of temporary ROW acquisition is anticipated. Permanent ROW acquisition will be needed for the construction of the roundabout, approaches, and detention basin. Temporary ROW will be used for the reconstruction of private drives. No residential relocations are anticipated from this project. Minimal excavation and fill are anticipated for construction of the roundabout, as the vertical elevation of the new intersection will match the current vertical elevation.

This alternative will increase the LOS of the intersection from "C" to "A" and improve sight distance. This alternative meets the purpose and need of this project and, therefore, is the preferred alternative.

**OTHER ALTERNATIVES CONSIDERED:**

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

Do-Nothing Alternative

This alternative proposes no construction take place. There would be no cost and no environmental impacts associated with this alternative; however, residents of Noblesville would not benefit from an improved LOS and sight distance at the intersection of Greenfield Avenue and Howe Road. Therefore, this alternative would not improve the LOS and sight distance, which is the purpose and need of this project, and has been dismissed from further consideration.

Traffic Signal Alternative

This alternative proposes the installation of traffic signals at this intersection. While this alternative would reduce project costs and environmental impacts, it would retain poor sight distance from the 45-degree angle at the intersection. Therefore, this alternative would not address the sight distance, the purpose and need for this project, and has been dismissed from further consideration.

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

It would not correct existing capacity deficiencies;

It would not correct existing safety hazards;

It would not correct the existing roadway geometric deficiencies;

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

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

Other (Describe): It would not address the LOS or the sight distance deficiency

X
X

## Indiana Department of Transportation

County Hamilton Route Greenfield Avenue/Howe Road Des. No. 1401716

### ROADWAY CHARACTER: Greenfield Avenue

Functional Classification: Principal Arterial  
 Current ADT: 9,450 VPD (2015) Design Year ADT: 10,775 VPD (2037)  
 Design Hour Volume (DHV): 1,078 (2037) Truck Percentage (%) 8  
 Designed Speed (mph): 40 Legal Speed (mph): 40

	Existing		Proposed	
Number of Lanes:	2 @ 11 ft.		2 @ 12 ft.	
Type of Lanes:	Through		Through	
Pavement Width:	22	ft.	24	ft.
Shoulder Width:	1-2 (gravel)	ft.	2 (curb & gutter)	ft.
Median Width:	N/A	ft.	N/A	ft.
Sidewalk Width:	1 @ 8 (west of Howe Road)	ft.	1 @ 8	ft.

Setting:  Urban  Suburban  Rural  
 Topography:  Level  Rolling  Hilly

### ROADWAY CHARACTER: Howe Road

Functional Classification: Local Street  
 Current ADT: 1,365 VPD (2015) Design Year ADT: 1,555 VPD (2037)  
 Design Hour Volume (DHV): 156 (2037) Truck Percentage (%) 2  
 Designed Speed (mph): 40 Legal Speed (mph): 40

	Existing		Proposed	
Number of Lanes:	1 @ 9 ft. 1 @ 11 ft.		1 variable @ 9-14 ft. 1 variable 2 11-14 ft.	
Type of Lanes:	Through		Through	
Pavement Width:	18	ft.	24	ft.
Shoulder Width:	N/A	ft.	2 (curb & gutter)	ft.
Median Width:	N/A	ft.	N/A	ft.
Sidewalk Width:	N/A	ft.	1 @ 8	ft.

Setting:  Urban  Suburban  Rural  
 Topography:  Level  Rolling  Hilly

**Indiana Department of Transportation**

County Hamilton Route Greenfield Avenue/Howe Road Des. No. 1401716

**DESIGN CRITERIA FOR BRIDGES: N/A**

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

	Existing		Proposed	
Bridge Type:	N/A		N/A	
Number of Spans:	N/A		N/A	
Weight Restrictions:	N/A	ton	N/A	Ton
Height Restrictions:	N/A	ft.	N/A	ft.
Curb to Curb Width:	N/A	ft.	N/A	ft.
Outside to Outside Width:	N/A	ft.	N/A	ft.
Shoulder Width:	N/A	ft.	N/A	ft.
Length of Channel Work:	N/A		N/A	ft.

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

Remarks:

There are no existing or proposed bridges located within the project limits.

There is a 30-foot long, 12-inch by 12-inch square concrete pipe running under Greenfield Avenue approximately 140 feet east of the intersection. The pipe carries storm water runoff from the south side of Greenfield Avenue to the north side of Greenfield Avenue. There are no indications of an ordinary high water mark (OHWM) or other jurisdictional stream features at either end of the pipe, and this area was dry during a site visit by BF&S on October 13, 2015. This pipe will be removed as part of the project.

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.*



**Indiana Department of Transportation**

County Hamilton Route Greenfield Avenue/Howe Road Des. No. 1401716

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

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

Remarks:

Construction of the roundabout will require temporary closure of the intersection of Greenfield Avenue and Howe Road to through traffic for approximately 45 days. The official detour will utilize Promise Road, East 146th Street, and Cumberland Road (Appendix B, B15). Each of these roads is designated as a primary use roadway in the City of Noblesville Thoroughfare Plan (Appendix I, I3).

Early Coordination was sent to the City of Noblesville on December 3, 2015 (Appendix C, C1-C2). The City of Noblesville did not respond to Early Coordination. Early Coordination was not sent to any businesses.

The detour route was planned to utilize roadways with the ability to hold the volume of traffic that would be diverted by the intersection closure. To this effect, East 146th Street is an east-west Principal Arterial with an ADT of 21,844 VPD (2015), more than twice that of Greenfield Avenue. Promise Road is a north-south Major Collector with an ADT of 5,449 VPD (2015), and Cumberland Road is a north-south Minor Arterial with an ADT of 5,685 VPD (2015). Both ADTs are greater than four times that of Howe Road. East 146th Street is of the same functional class as Greenfield Avenue, and Cumberland Road and Promise Road are both of higher functional classes than Howe Road.

The MOT will be implemented per the Indiana Design Manual guidelines. Access to all adjacent residences, businesses, and facilities will be maintained by the contractor and posted throughout the duration of construction. This closure will be a temporary impact to the motoring public.

School corporations and emergency services will be notified at least two weeks prior to any construction that would block or limit access. Delays would occur during construction but would cease with project completion.

**Indiana Department of Transportation**

County Hamilton Route Greenfield Avenue/Howe Road Des. No. 1401716

**ESTIMATED PROJECT COST AND SCHEDULE:**

Engineering: \$ 170,000 (2015) Right-of-Way: \$ 300,000 (2017) Construction: \$ 1,144,000 (2019)

Anticipated Start Date of Construction: Spring 2019

Date project incorporated into STIP July 1, 2015 (Appendix H, H2)

\*Note: ROW will be purchased with 100% local funds.

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

If yes,  
Name of MPO Indianapolis Metropolitan Planning Organization

Location of Project in TIP FY 2016-2019 Indianapolis Regional Transportation Improvement Program (IRTIP)  
(Appendix H, H1)

Date of incorporation by reference into the STIP July 1, 2015

**RIGHT OF WAY:**

Land Use Impacts	Amount (acres)	
	Permanent	Temporary
Residential	0.38	0.01
Commercial	0.00	0.00
Agricultural	0.40	0.00
Forest	0.31	0.00
Wetlands	0.00	0.00
Other:	0.00	0.00
Other:	0.00	0.00
TOTAL	1.09	0.01

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

Remarks:

The existing ROW width along Greenfield Avenue is approximately 40 feet (20 feet either side of the roadway centerline). The existing ROW along Howe Road is approximately 33 feet (16.5 feet either side of the roadway centerline). The proposed typical and maximum ROW widths along Greenfield Avenue will be approximately 60 feet (30 feet each side of the roadway centerline) and 125 feet. The proposed typical and maximum ROW widths along Howe Road will be approximately 50 feet (25 feet each side of the roadway centerline) and 180 feet.

Approximately 1.09 acre of permanent ROW and 0.01 acre of temporary ROW acquisition is anticipated. Permanent ROW will be acquired from the parcels adjacent to the intersection. Permanent ROW acquisition is anticipated at approximately 0.09 acre of wooded land in the northwest quadrant of the intersection, 0.22 acre of wooded land and 0.40 acre of agricultural land in the northeast quadrant, 0.01 acre of residential land in the southwest quadrant, and 0.37 acre of residential land in the southeast quadrant. Temporary ROW will be used for the reconstruction of private drives in the southwest quadrant of the intersection. No residential relocations are anticipated as a result of this project.

**Indiana Department of Transportation**

County Hamilton Route Greenfield Avenue/Howe Road Des. No. 1401716

ROW acquisition was increased to the amounts detailed above subsequent to the initial early coordination of December 9, 2015. As a result, re-coordination was distributed on September 23, 2016 (Appendix C, C23).

**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>
<b>Streams, Rivers, Watercourses &amp; Jurisdictional Ditches</b>			
Federal Wild and Scenic Rivers			
State Natural, Scenic or Recreational Rivers			
Nationwide Rivers Inventory (NRI) listed			
Outstanding Rivers List for Indiana			
Navigable Waterways			

Remarks:

No jurisdictional streams or watercourses are present within the project area, as determined by a desktop review of the United States Geological Survey (USGS) Riverwood topographical map (Appendix B, B2), a review of the Red Flag Investigation Water Resources aerial (Appendix E, E6) and by a site reconnaissance performed by BF&S on October 13, 2015.

The Wheeler & Wheeler Legal Drain runs through the project area, as identified in a review of the City of Noblesville geographic information system (GIS) map viewer and the Hamilton County Regulated Drain Map (Appendix F, F12-F13). The drain starts as an inlet to an enclosed stormwater system on the west side of Howe Road, approximately 240 feet south of Greenfield Avenue. The enclosed drain crosses to the east under Howe Road, then turns to the north and follows the east side of Howe Road to Greenfield Avenue. The enclosed system continues north under Greenfield Avenue and outlets into the Wheeler & Wheeler Legal Drain approximately 550 feet north of Greenfield Avenue. Since the drain is constructed to collect and convey stormwater from the two parcels south of the intersection and this enclosed drain does not originate from a natural stream system, it does not meet the definition of a “Waters of the U.S.,” which must have an identifiable bed and banks with an ordinary high water mark. This enclosed drain was man-made and is entirely enclosed from its origin to its discharge. Therefore, it does not have the characteristics needed to qualify as a “Waters of the U.S.” As a result, the Wheeler & Wheeler Legal Drain would not likely be considered jurisdictional under the Clean Water Act.

No other potential jurisdictional stream features were noted within or adjacent to the project area based on a review of aerial maps, USGS topographical maps, the Red Flag Investigation Water Resources aerial map (Appendix E, E6), and a site visit performed by an environmental specialist with BF&S on October 13, 2015.

There is a 30-foot long, 12-inch by 12-inch square concrete pipe running under Greenfield Avenue approximately 140 feet east of the intersection. This pipe will be removed as part of the project. The pipe does not connect to any stream, river, watercourse, or jurisdictional ditch features.

**Indiana Department of Transportation**

County Hamilton Route Greenfield Avenue/Howe Road Des. No. 1401716

The U.S. Fish and Wildlife Service (USFWS) responded to Early Coordination on December 9, 2015, stating the project falls within the USFWS programmatic policy for transportation projects and provided a list of standard recommendations (Appendix C, C7-C8). There are no watercourses within the project area, thus, none of the standard recommendations are applicable to this project.

The Indiana Department of Natural Resources (IDNR) responded to Early Coordination on December 30, 2015, indicating formal approval under the regulatory projects administered by the Division of Water was not required for this project (Appendix C, C11-C12).

Re-coordination was distributed to provide information on the detention basin on September 23, 2016 (Appendix C, C23). The USFWS responded on September 26, 2016, and did not provide any comments specific to watercourses (Appendix C, C24). The IDNR responded on October 25, 2016, stating a 15 foot buffer strip around the detention basin should contain a mixture of native plants to help mitigate potential nuisance Canada goose conflicts (Appendix C, C28).

All recommendations pertaining to Streams, Rivers, Watercourses & Jurisdictional Ditches are listed in Section J of this document. Based on the map review, site visit, and agency coordination, no impacts to streams, rivers, watercourses or jurisdictional ditches are anticipated from this project.

**Other Surface Waters**

- Reservoirs
- Lakes
- Farm Ponds
- Detention Basins
- Storm Water Management Facilities
- Other: \_\_\_\_\_

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

Remarks:

The closest surface water features are subdivision detention ponds located approximately 625 feet to the northwest, 1,280 feet to the southeast (southwest quadrant of the Union Chapel Road/Greenfield Road intersection roundabout), 1,570 feet to the south (east of Howe Road) and 1,590 feet to the south (west of Howe Road) of the existing center of the Greenfield Road/Howe Road intersection.

There are no surface waters present within the project area, as determined during a field reconnaissance by BF&S on October 13, 2015, along with a review of existing USGS topographical maps and aerial photography (Appendix B, B2). As a result, there are no anticipated impacts to existing open-water resources as a result of this project.

Construction of a detention basin is proposed as a part of this project. Re-coordination was distributed to provide information on the basin on September 23, 2016 (Appendix C, C23). The IDNR responded on October 25, 2016, stating a 15 foot buffer strip around the detention basin should contain a mixture of native plants to help mitigate potential nuisance Canada goose conflicts (Appendix C, C28). This recommendation is listed in Section J of this document under "For Further Consideration".

**Indiana Department of Transportation**

County Hamilton Route Greenfield Avenue/Howe Road Des. No. 1401716

**Wetlands** Presence Impacts  
Yes No

Total wetland area: 0.0 acre(s) Total wetland area impacted: 0.0 acre(s)

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

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

	<u>Documentation</u>	<u>ES Approval Dates</u>
<b>Wetlands</b> (Mark all that apply)		
Wetland Determination	X	N/A
Wetland Delineation		
USACE Isolated Waters Determination		
Mitigation Plan		

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

- Substantial adverse impacts to adjacent homes, business or other improved properties;
- Substantially increased project costs;
- Unique engineering, traffic, maintenance, or safety problems;
- Substantial adverse social, economic, or environmental impacts, or
- The project not meeting the identified needs.

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

Remarks:

The National Wetland Inventory map for this area does not indicate the presence of any palustrine wetlands along the project area (Appendix F, F4). The closest mapped wetland is approximately 625 feet northwest of the existing intersection and is a detention pond for the adjacent subdivision as recorded in the previous section. However, the project area does contain the mapped hydric soil Brookston silty clay loam (Appendix F, F5-F7). As a result, a Professional Wetland Scientist with BF&S conducted a field reconnaissance and determination of the project area on March 29, 2016. One data point was taken within the construction limits of the proposed project and within the mapped Brookston soil area. This data point was taken in the lowest contour within the study area. The data point did not show the necessary criteria to be considered a wetland point as described in the *1987 Corps of Engineers Wetland Delineation Manual* as currently applied in the *Final Midwest Regional Supplement*. The data point was taken as the lowest contour within a concave area which is potentially conducive topography to trap and retain surface hydrology. The data point did not contain a dominant hydrophytic plant community, nor evidence of prolonged hydrology. In addition, the data point did not contain any field indicators for hydric soils as discussed in the *Field Indicators of Hydric Soils in the United States Manual Volume 7.0*. Therefore, the data point as deemed a non-wetland data point. These findings are consistent with the NWI map which illustrated the data point area as non-wetland (Appendix F, F4). As a result of this investigation, it has been determined no wetlands are present within the study area for the project.

The United States Army Corps of Engineers (USACE), USFWS, and the IDNR were provided Early Coordination information on December 3, 2015. The USACE did not respond to this request.

**Indiana Department of Transportation**

County Hamilton Route Greenfield Avenue/Howe Road Des. No. 1401716

The USFWS responded to Early Coordination on December 9, 2015, stating the project falls within the USFWS programmatic policy for transportation projects and provided a list of standard recommendations (Appendix C, C7-C8).

The IDNR responded to Early Coordination on December 30, 2015, indicating formal approval under the regulatory projects administered by the Division of Water was not required for this project (see Appendix C, C11-C12). The IDNR also recommended coordination with the Indiana Division of Environmental Management (IDEM) 401 program and the USACE 404 program take place due to the presence of potential wetlands.

Re-coordination was distributed to provide information on the detention basin on September 23, 2016 (Appendix C, C23). The USFWS responded on September 26, 2016 and did not provide any comments specific to wetlands (Appendix C, C24). The IDNR responded on October 25, 2016, and repeated its comments from the prior letter. IDNR also acknowledged a wetland determination occurred that determined that no wetlands were present within the project area (Appendix C, C27-C28).

Based on the review of area maps, the field investigation, and the coordination with resource agencies, impacts to wetland are not anticipated from the proposed project.

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

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

Remarks:

The project area was investigated by an environmental scientist with BF&S on October 13, 2015 (Appendix F, F1-F3 for the Ecological Evaluation Form).

Land use within the southwest and southeast quadrants of the intersection consists of mowed grass residential land with scattered trees. Land use northeast of the intersection consists of a combination of mowed grass with scattered trees and open fallow fields. The area directly north of the intersection consists of a combination of open herbaceous areas and wooded areas. Land use northwest of the intersection consists of mowed grass areas and sidewalk areas. The dominate tree species found in the wooded area north of the intersection, and in the scattered tree areas elsewhere along the project, are comprised of American elm (*Ulmus americana*), black walnut (*Juglans nigra*), sycamore (*Platanus occidentalis*), silver maple (*Acer saccharinum*), American beech (*Fagus grandifolia*), and American hornbeam (*Carpinus caroliniana*). Open herbaceous areas within the project area are dominated by Kentucky bluegrass (*Poa pratensis*), Canadian horseweed (*Erigeron canadensis*), goldenrod (*Solidago sp.*), Canada thistle (*Cirsium arvense*), and black raspberry (*Rubus occidentalis*). During the site visit, the only wildlife species observed was a downy woodpecker (*Picoides pubescens*). Approximately 50 trees of various size and species type, and approximately 0.1 acre of open herbaceous land will be directly impacted by construction. Given the proximity of project construction to existing roadway corridors, secondary impacts, such as habitat segmentation, are not anticipated. Some wildlife may be displaced from areas immediately adjacent to the project as a result of construction-related activities.

**Indiana Department of Transportation**

County Hamilton Route Greenfield Avenue/Howe Road Des. No. 1401716

Early coordination was distributed to natural resource agencies on December 3, 2015. The USFWS responded to Early Coordination on December 9, 2015, stating the project falls within the USFWS programmatic policy for transportation projects and providing a list of standard recommendations (Appendix C, C7-C8). The IDNR responded to Early Coordination on December 30, 2015, with a list of standard recommendations for minimization of terrestrial impacts (Appendix C, C11-C12). Examples of the standard terrestrial habitat related recommendations are the avoidance of tree and understory vegetation clearing outside of the construction limits and the use of temporary erosion and sediment control methods.

Re-coordination was distributed to provide information on the detention basin on September 23, 2016 (Appendix C, C23). The USFWS responded on September 26, 2016, stating if tree clearing will extend further than 75 feet from the edge of pavement, seasonal clearing restrictions on trees suitable for Indiana bat or Northern long-eared bat roosting should be implemented (Appendix C, C24). The IDNR responded on October 25, 2016, stating a 15 foot buffer strip around the detention basin should contain a mixture of native plants to help mitigate potential nuisance Canada goose conflicts (Appendix C, C28).

All recommendations are listed in Section J of this document.

*If there are high incidences of animal movements observed in the project area, or if bridges and other areas appear to be the sole corridor for animal movement, consideration of utilizing wildlife crossings should be taken.*

**Karst**

	<b>Yes</b>	<b>No</b>
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:

The 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 the USFWS.

Early coordination was sent to the Indiana Geological Survey (IGS) on December 3, 2015 (Appendix C, C1-C2). The IGS responded to early coordination on March 30, 2016, and did not report any unusual features or potential or former mineral resource sites within the project vicinity (Appendix C, C13). Based on a review of maps, field investigations, and coordination with IGS, no impacts to geologic resources, including karst features, are anticipated as a result of this project.

## Indiana Department of Transportation

County Hamilton Route Greenfield Avenue/Howe Road Des. No. 1401716

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

Remarks:

According to the USFWS Information for Planning and Conservation (IPaC) Trust Report (October 26, 2016), the project is within the known range of the federally endangered Indiana bat (*Myotis sodalis*). In addition, this project is within the range of the threatened Northern long-eared bat (*Myotis septentrionalis*). No critical habitat for either of these species was observed within the project area. The report indicated there is no critical habitat for either species within the project area (Appendix F, F9-F11).

The USFWS responded to Early Coordination on December 9, 2015, stating the project falls within the USFWS programmatic policy for transportation projects and providing a list of standard recommendations (Appendix C, C7-C8). The USFWS also stated no further coordination was required under Section 7 of the Endangered Species Act (as amended). The IDNR responded to Early Coordination on December 30, 2015, and stated that, 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 (Appendix C, C11).

In addition, the IDNR Indiana County Endangered, Threatened and Rare Species List for Hamilton County (Appendix E, E10-E11) was reviewed. The Prairie white-fringed orchid (*Platanthera leucophaea*) is listed as federally threatened. This species occurs in moist to wet tallgrass prairies, sedge meadows, fens or old fields with little or no woody vegetation nearby. There is no such habitat in or near the project area. The list also contains seven species of federally threatened or endangered mussels. There is no aquatic habitat in or near the project area.

Re-coordination was distributed to provide information on the proposed detention basin on September 23, 2016 (Appendix C, C23). The USFWS responded on September 26, 2016, stating that if tree clearing will extend further than 75 feet from the edge of pavement, seasonal clearing restrictions on trees suitable for Indiana bat or Northern long-eared bat roosting should be implemented (Appendix C, C24). Tree clearing further than 75 feet from the edge of pavement is anticipated to facilitate the construction of the detention basin. The IDNR responded on October 25, 2016 and did not provide any new comments specific to endangered species (Appendix C, C27).

As a result of the above coordination and investigation, impacts to threatened or endangered species are not anticipated from this project. All recommendations are listed in Section J of this document.



**Indiana Department of Transportation**

County Hamilton Route Greenfield Avenue/Howe Road Des. No. 1401716

**SECTION B – OTHER RESOURCES**

Drinking Water Resources	Presence	Impacts	
		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:

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

Remarks:

The project is not located within St. Joseph Aquifer System, the only legally designated sole source aquifer in the state of Indiana. Therefore, the FHWA/EPA Sole Source Aquifer Memorandum of Agreement (MOA) is not applicable to this project, and a detailed groundwater assessment is not required.

IDEM's Wellhead Proximity Determinator website (<http://www.in.gov/idem/pages/wellhead/>) was reviewed on October 2, 2015 by an environmental specialist with BF&S. The required project location data was provided and it was determined the project is not located within a Wellhead Protection Area. The Wellhead Proximity Determinator website was consulted again by BF&S on November 2, 2016 to investigate the area for the detention basin. It was confirmed the project is not located within a Wellhead Protection Area.

The project may require the relocation of electric, communication lines and public water supply lines. The City of Noblesville is coordinating with all utilities and no issues with these relocations have been raised. All the utilities will have work plans in place to expedite the relocation of their facilities. No disruption of service to area residences is expected..

The IDNR's Enhanced Water Well Web Viewer website (<http://www.in.gov/dnr/water/6604.htm>) was accessed on February 9, 2016 by BF&S. Three (3) unconsolidated water wells were identified near the project area. The closest unconsolidated well is approximately 310 feet from the project area. The Enhanced Water Well Web Viewer website was consulted a second time by BF&S on November 2, 2016 to examine the area around the detention basin. No additional water wells were identified. Erosion control measures will be incorporated into the project to reduce or eliminate any surface runoff or sedimentation from reaching the well areas. As a result, no direct impacts to water wells are anticipated for this project. If any residential or public wells are encountered, they will be re-drilled as part of the ROW agreement with the property owner. If any identified well needs to be backfilled, it will be performed according to 312 IAC 13-10.

## Indiana Department of Transportation

County Hamilton Route Greenfield Avenue/Howe Road Des. No. 1401716

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

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

Remarks:

This project is located in a suburban environment and will not encroach upon regulatory floodplains as determined from available Federal Emergency Management Agency (FEMA) floodplain maps (Appendix F, F8). Therefore, it does not fall within the guidelines for the implementation of 23 CFR 650, 23 CFR 771, and 44 CFR.

The IDNR responded to Early Coordination on December 30, 2015, indicating formal approval under the regulatory projects administered by the Division of Water is not required for this project (Appendix C, C11-C12).

Re-coordination was distributed to provide information on the detention basin on September 23, 2016 (Appendix C, C23). The IDNR responded on October 25, 2016 and restated formal approval under the regulatory projects administered by the Division of Water is not required for this project (Appendix C, C28). After the above review and agency coordination, impacts to floodplains are not anticipated from this project.

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

Total Points (from Section VII of CPA-106/AD-1006\* 112

*\*If 160 or greater, see CE Manual for guidance.*

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

Remarks:

As is required by the Farmland Protection Policy Act, the Natural Resources Conservation Service (NRCS) has been coordinated with and the Form NRCS-AD-1006 has been completed. The NRCS responded to Early Coordination on December 9, 2015, stating the project would not cause the conversion of prime farmland (Appendix C, C9-C10).

Re-coordination was distributed to provide information on the detention basin on September 23, 2016 (Appendix C, C23). The NCRS responded on September 30, 2016, stating the project would cause a conversion of prime farmland. Form NRCS-AD-1006 was revised in response to the new information (Appendix C, C25-C26). NRCS's threshold score for significant impacts to farmland that result in the consideration of alternatives is 160 points. Coordination with the NRCS resulted in a score of 112 on the NRCS-AD-1006 form. Since this project received a total point value of less than 160 points and is less than the NRCS threshold, this site will receive no further consideration for farmland protection.

No other alternatives other than those already discussed in this document will be considered without a re-evaluation of the project's potential impacts upon farmland. This project will not have a significant impact to farmland.

**Indiana Department of Transportation**

County Hamilton Route Greenfield Avenue/Howe Road Des. No. 1401716

**SECTION C – CULTURAL RESOURCES**

Minor Projects PA Clearance	<input type="text"/>	<input type="text"/>	INDOT Approval Dates	<input type="text"/>	N/A
					<b>X</b>

Eligible and/or Listed Resource Present

**Results of Research**

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

**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	<b>X</b>	November 13, 2015	December 18, 2015
Archaeological Records Check/ Review	<input type="checkbox"/>		
Archaeological Phase Ia Survey Report	<b>X</b>	January 12, 2016 September 14, 2016	February 11, 2016 September 26, 2016
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	<b>X</b>	March 3, 2016	March 31, 2016
800.11 Documentation	<b>X</b>	March 3, 2016	March 31, 2016

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 Area of Potential Effects (APE) includes the existing and proposed ROW, immediately adjacent properties, and those areas where a visual differentiation may occur between an existing structure and the project area. Although most of the area around the intersection is heavily developed and/or covered with mature trees, the APE was extended over open fields on the north side of the intersection in order to account for possible effects to the viewshed (Appendix D, D6).

**Coordination with Consulting Parties:**  
 INDOT, FHWA, and the Indiana State Historic Preservation Officer (SHPO), are considered automatic consulting parties. In addition, the following individuals/organizations were provided a

**Indiana Department of Transportation**

County Hamilton Route Greenfield Avenue/Howe Road Des. No. 1401716

copy of the Historic Property Report (HPR) and invited to be Section 106 consulting parties on November 16, 2015 (Appendix D, D13-D14):

<b>Consulting Party</b>	<b>Response</b>
Indiana Landmarks Central Regional Office	Yes
Hamilton County Historian	No Response
Hamilton County Historical Society/Museum of History	No Response
Hamilton County Genealogy Society	No Response
Indianapolis Metropolitan Planning Organization	No Response
Noblesville Main Street	No Response
Noblesville Preservation Alliance	No Response

Indiana Landmarks replied by email on November 24, 2015, accepting consulting party status (Appendix D, D15). The response from SHPO is described later in this section. No other responses to the November 16, 2015 mailing were received.

**Archaeology:**

A Phase Ia Archaeological Field Reconnaissance was conducted by Accidental Discoveries, LLC on December 17, 2015. In the resulting Archaeological Short Report (ASR; January 11, 2016), the archaeologist reported no archaeological resources were found in the project area and recommended the project be allowed to proceed as planned (Appendix D, D10-D11). The ASR was approved by the Indiana Department of Transportation-Cultural Resources Office (INDOT-CRO) on January 12, 2016, and forwarded to the SHPO on the same day (Appendix D, D18-D19). The SHPO responded in a letter dated February 11, 2016, concurring with the opinion of the archaeologist and stating the project could proceed without additional archaeological assessment (Appendix D, D20-D21).

An additional Phase Ia Archaeological Field Reconnaissance was conducted by Accidental Discoveries, LLC on September 6, 2016 in order to investigate the area around the proposed detention basin. In the resulting ASR (September 12, 2016), the archaeologist reported no archaeological resources were found in the project area and recommended the project be allowed to proceed as planned (Appendix D, D27-D29). The additional ASR was approved by INDOT-CRO on September 14, 2016 (Appendix D, D30). The additional ASR was forwarded to the SHPO on September 20, 2016 with a statement that the original finding of March 3, 2016 remained valid (Appendix D, D31-D32). The SHPO responded in a letter dated September 26, 2016, concurring with the opinion of the archaeologist and stating no further archaeological investigation was necessary (Appendix D, D33-34).

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

**Historic Properties:**

According to the HPR completed by BF&S on November 9, 2015, 10 properties were located within the APE, six of which included structures over 50 years old. No properties were recommended eligible for listing in the National Register of Historic Places (NRHP; Appendix D, D7-D9). INDOT-CRO approved the HPR on November 13, 2015 (Appendix D, D12). The SHPO

**Indiana Department of Transportation**

County Hamilton Route Greenfield Avenue/Howe Road Des. No. 1401716

concurred with the HPR in a letter dated December 18, 2015, stating no NRHP-listed or eligible properties were located within the APE (Appendix D, D16-D17).

The APE was investigated by BF&S to determine the presence of any historic properties and/or structures. Historic properties may include buildings, structures, districts, objects, and/or archaeological resources. The Indiana Register of Historic Sites and Structures (State Register) and the NRHP were reviewed for historic properties in the project vicinity. No properties within the APE were listed in the State Register or the NRHP (Appendix D, D8).

Hamilton County, Indiana was surveyed for the Indiana Historic Sites and Structures Inventory by Historic Landmarks Foundation of Indiana (now Indiana Landmarks) in 1992. The Indiana State Historic Architectural and Archaeological Research Database (SHAARD) was consulted for IHSSI-surveyed properties within the APE. One previously-surveyed property, IHSSI #057-541-30046, a c. 1840 hall-and-parlor house rated “contributing”, was located within the APE (Appendix D, D8).

A Historic Property Report (HPR) was prepared by BF&S on November 9, 2015 after an October 13, 2015 site visit and contextual research by a Division of Historic Preservation and Archaeology-Qualified Professional. According to the HPR, 10 properties were located within the APE, six of which included resources greater than 50 years old. No properties within the APE, including IHSSI #057-541-30046, were found to meet the criteria for NRHP-eligibility (Appendix D, D9). INDOT-CRO approved the HPR on November 13, 2015 (Appendix D, D12). The SHPO concurred with the HPR in a letter dated December 18, 2015, stating no NRHP-listed or eligible properties were located within the APE (Appendix D, D16-D17). Re-coordination was not undertaken because the addition of the detention basin did not affect the APE for above-ground properties.

**Documentation, Findings:**

INDOT approved an 800.11(d) finding of “No Historic Properties Affected,” on March 3, 2016 (Appendix D, D1-D5 and D22). The INDOT-approved finding was forwarded to the SHPO and consulting parties on the same day (Appendix D, D23-D24). The SHPO concurred with the finding in a letter dated March 31, 2016 (Appendix D, D25-D26). No other responses to the March 3, 2016 mailing were received. Additional archaeological fieldwork and coordination conducted in September 2016 did not identify any historic properties and the original APE for above-ground properties was not altered by the addition of the detention basin; therefore, the March 3, 2016 finding remains valid.

**Public Involvement:**

A public notice regarding the “No Historic Properties Affected” finding was published in *The Times* (serving Noblesville and Hamilton County) on March 7, 2016 (Appendix G, G2-G3). No public comments were received by the established 30-day deadline date of April 7, 2016. Therefore, the Section 106 process has been completed and the FHWA’s Section 106 responsibilities have been fulfilled.

## Indiana Department of Transportation

County Hamilton Route Greenfield Avenue/Howe Road Des. No. 1401716

<b>SECTION D – SECTION 4(f) RESOURCES/ SECTION 6(f) RESOURCES</b>
---

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

**Parks & Other Recreational Land**

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

Presence


Use

Yes	No

Evaluations Prepared

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


FHWA Approval date

--

**Wildlife & Waterfowl Refuges**

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

Presence


Use

Yes	No

Evaluations Prepared

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


FHWA Approval date

--

**Historic Properties**

- Sites eligible and/or listed on the NRHP

Presence

--

Use

Yes	No

Evaluations Prepared

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


FHWA Approval date

--

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

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

Remarks:

Section 4(f) of the U.S. Department of Transportation Act of 1966 prohibits the use of certain public and historic lands for federally funded transportation facilities unless there is no feasible or prudent alternative. This law applies to significant publicly owned parks, recreation areas, wildlife/waterfowl refuges, and NRHP-eligible or listed historic properties. These properties are known as Section 4(f) resources.

**Indiana Department of Transportation**

County Hamilton Route Greenfield Avenue/Howe Road Des. No. 1401716

The project area was reviewed using GIS mapping (Appendix E, E1-E4 for Red Flag Investigation report) and the site surveyed by BF&S on October 13, 2015. As a result of these efforts, no recreation areas, wildlife or waterfowl refuges were discovered within the project area.

During the Section 106 process, it was determined through coordination with the INDOT-CRO and the SHPO that no properties (historic buildings, structures, districts, objects, or archaeological resources) along the project corridor were eligible for or listed in the NRHP.

As a result of the review of area maps, the site investigation, and completion of Section 106, no Section 4(f) resources were identified in or near the project area and, therefore, no Section 4(f) resources will be impacted by the project.

<b>Section 6(f) Involvement</b>	<u>Presence</u>	<u>Use</u>	
<b>Section 6(f) Property</b>	<input type="checkbox"/>	Yes <input type="checkbox"/>	No <input type="checkbox"/>

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

Section 6(f) is the provision of the Federal Land and Water Conservation Fund (LWCF) Act of 1965 that protects public recreational properties developed or enhanced using federal funding supplied to states or municipalities under the act by requiring replacement of lands converted to non-recreation use. These lands are known as Section 6(f) resources.

No Section 6(f) resources in or near the project area were identified from the list of LWCF sites in Hamilton County (Appendix I, I1). This list was generated from the National Park Service (NPS) website (<http://www.nps.gov/nrc/programs/lwcf/>). The NPS did not respond to the December 3, 2015 Early Coordination request with any information regarding Section 6(f) resources. Additionally, an email from the IDNR Division of Outdoor Recreation dated November 20, 2015 (Appendix I, I2) stated no LWCF are properties located within the project area. Therefore, no properties acquired with or improved by the LWCF will be impacted by this project.

**Indiana Department of Transportation**

County Hamilton Route Greenfield Avenue/Howe Road Des. No. 1401716

**SECTION E – Air Quality**

**Air Quality**

**Conformity Status of the Project**

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

Level of MSAT Analysis required?

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

Remarks:

This project is located within Hamilton County, which is in attainment for all criteria pollutants. This project is not of regional significance.

This project’s design, concept and scope are accurately reflected in the Indianapolis Metropolitan Planning Organization’s (IMPO) Indianapolis Regional Transportation Improvement Program (IRTIP) (Appendix H, H1). The project was incorporated by reference into the Indiana Statewide Transportation Improvement Plan on July 1, 2015. Since Hamilton County is in attainment, the conformity procedures of 40 CFR Part 93 have been met. A hot spot analysis is not required.

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

**SECTION F - NOISE**

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

	No	Yes/ Date
<b>ES Review of Noise Analysis</b>	X	

Remarks:

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



**Indiana Department of Transportation**

County Hamilton Route Greenfield Avenue/Howe Road Des. No. 1401716

**SECTION G – COMMUNITY IMPACTS**

**Regional, Community & Neighborhood Factors**

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

Yes	No
X	
	X
	X
	X
X	
X	

Remarks:

The project will be constructed in a suburban environment and is being designed to minimize impacts to the surrounding properties. A local events calendar for the City of Noblesville and the City website were reviewed to determine if any local or community events would take place during the construction period. Greenfield Avenue is one of several roads providing direct access to the Klipsch Music Center (KMC). The KMC is located approximately 2.5 miles southeast of the construction site and provides several concerts and other entertainment during the spring, summer and fall months. The closed intersection will temporarily impact access along Greenfield Avenue to the KMC. The proposed detour and other city/county roads may be used to access the KMC during construction of the proposed roundabout. Other community events are not located near the construction area and no other fairs, festivals or community events will be impacted by the construction of the roundabout. No increase in local taxes will occur as a result of this project since all funds will come from the FHWA and established local accounts. The project does not divide a community or destroy any areas where the community hosts events.

Greenfield Avenue has one non-ADA compliant 6 foot wide concrete sidewalk located on the north side of Greenfield Avenue which terminates directly northwest of the intersection of Greenfield Avenue and Howe Road. A 10-foot wide asphalt path exists along the east side of Howe Road, currently beginning at the project's southern terminus and running south and east from that point. Both the sidewalk and path were constructed as part of the construction of the adjacent subdivisions. A 6-foot wide concrete, ADA compliant sidewalk will be constructed as part of this project, and will connect the existing sidewalk and path along the north and southeast edges of the roundabout. By improving this intersection, this project is also enhancing accessibility and furthering the City of Noblesville's ADA Transition Plan (Appendix I, I9-I13). The project will comply with the ADA Transition Plan because it will facilitate enhanced motorist movement through the intersection of Greenfield Avenue and Howe Road and provide a marked pedestrian crosswalk across Greenfield Avenue, which further pedestrian safety.

**Indirect and Cumulative Impacts**

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

Yes	No
	X

Remarks:

Indirect impacts are those impacts that occur at a later time from the proposed action, but are reasonably foreseeable. Cumulative impacts are impacts that result from the incremental impact that the action has when combined with the past, present and reasonably foreseeable future impacts that may occur within the project area.

The project will not change the general land use of the area. The viewshed will change, as a roundabout will replace the T-intersection; however, the improved intersection will allow for

**Indiana Department of Transportation**

County Hamilton Route Greenfield Avenue/Howe Road Des. No. 1401716

efficient traffic movement. As a result, this project is not anticipated to have any negative indirect or cumulative impacts.

**Public Facilities & Services**

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

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

Remarks:

A detour route will be provided during the construction of the project. School corporations and emergency services will be notified at least two weeks prior to any construction that will block or limit access. Delays will occur during construction but will cease with project completion. Access to the adjacent properties will be maintained by the contractor during construction. All other through traffic will use the provided detour.

It is not anticipated this project will cause any permanent impact to community services such as police, fire, emergency services, schools, religious facilities, etc. The project will benefit these facilities by improving the LOS at this intersection.

The INDOT Office of Aviation responded to Early Coordination on December 4, 2015 noting the Noblesville Airport is located 5,600 feet southeast of the project area and indicating the correct form be filed if any permanent structures or equipment penetrate the 100:1 slope from the airport as a result of the project (Appendix C, C6). It is not anticipated any impact to this or any airport approach or departure airspace will occur as a result of this project.

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

During the development of the project were EJ issues identified?

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

Does the project require an EJ analysis?

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

If YES, then:

Are any EJ populations located within the project area?

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

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

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

Remarks:

Title IV of the Civil Rights Act of 1964, the President's Executive Order 12898 on February 11, 1994 and the President's Memorandum of Environmental Justice in Minority Populations and Low Income Populations require Federal agencies to ensure none of their programs discriminate on the basis of race, color, national origin, age, gender, handicap/disability, or religion. The intent is to ensure that the Federal departments and agencies identify and address any disproportionately high and adverse human health or environmental effects resulting from the policies, programs, and activities on minority populations and low-income populations.

INDOT policy requires that an Environmental Justice (EJ) analysis be performed if the project requires two or more relocations or 0.5 acre or more of additional permanent ROW. Since the project will require the acquisition of more than 0.5 acre of new permanent ROW, a comparative analysis was performed utilizing the 2009 – 2013 American Community Survey (ACS) 5-year estimate data for Hamilton County as the Community of Comparison (COC) and Census Tract 1500.6 as the Affected Community (Appendix I, I4-I5).

**Indiana Department of Transportation**

County Hamilton Route Greenfield Avenue/Howe Road Des. No. 1401716

An EJ population of concern exists if the minority or low-income population of the AC is more than 50% of the total population of the COC or if the minority or low-income population of the AC is greater than 125% of the COC.

<b>Minority Population EJ Analysis</b>	<b>COC Hamilton County, Indiana</b>	<b>Census Tract 1500.6, Hamilton County, Indiana</b>
Total population	282,977	9,189
Number Non-white/minority	40,377	1,097
Percent Non-white/Minority	14.3%	11.9%
125 % of COC	17.8%	AC <125% COC
<b>Potential Population of EJ Concern?</b>	-	<b>NO</b>

The minority population of Census Tract 1500.6 was found to be 11.9%. The threshold percentage in the COC is 17.8% (Appendix I, I6). Since the AC does not contain a minority population greater than 50% of the total population or greater than 125% of the COC minority population, it does not contain a minority population of EJ concern.

<b>Low-Income Population EJ Analysis</b>	<b>COC Hamilton County, Indiana</b>	<b>Census Tract 1500.6, Hamilton County, Indiana</b>
Total population	281,143	9,174
Below Poverty Line	14,453	778
Percent Low-income	5.1%	8.5%
125% of COC	6.4%	AC > 125% COC
<b>Potential Population of EJ Concern?</b>	-	<b>YES</b>

The low-income population of Census Tract 1500.6 was found to be 8.5% (Appendix I, I6). The threshold percentage in the COC is 6.4%. Since the AC has a low-income population greater than 125% that of the COC, it constitutes a low-income population of EJ concern.

One classifiable population of EJ concern was identified for this project. The project will require minimal residential ROW, require no relocations, and will not disrupt community cohesion or create a physical barrier. Therefore, there will be no impacts associated with this project that will cause a disproportionately high and adverse effect on minority and/or low income populations in accordance with the provisions of Executive Order 12898 and FHWA Order 6640.23a. No further EJ Analysis is required.

INDOT ES reviewed the EJ Analysis and provided concurrence with the findings on February 19, 2016 (Appendix I, I14).

## Indiana Department of Transportation

County Hamilton Route Greenfield Avenue/Howe Road Des. No. 1401716

**Relocation of People, Businesses or Farms**

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

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

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

*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.

The following utilities have been identified in the vicinity of the project area:

AT&T Distribution – communications  
 Duke Energy – electric  
 Comcast – cable TV  
 Indiana American Water Co. – water main  
 City of Noblesville – storm & sanitary sewers  
 Vectren Energy – gas  
 Zayo Bandwidth – fiber optics  
 Windstream - communications

An Initial Notice of Proposed Improvement was sent to the above entities on October 6, 2015 (Appendix G, G4-G5). Any conflicts with existing utilities will continue to be identified during the design phase. The environmental document would be updated to include any utility conflicts resulting from an increase in project scope or the need for additional permanent or temporary ROW, and utilities will continue to be coordinated with throughout the project.

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

Documentation

**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"/>	

	No	Yes/ Date
<b>ES Review of Investigations</b>	<input checked="" type="checkbox"/>	

*Include a summary of findings for each investigation.*

Remarks:

A red flag investigation was completed on October 26, 2015 by BF&S. No potentially hazardous sites or sites involved with regulated substances were identified in the project vicinity or in the project area (Appendix E, E1-E11). A site inspection by BF&S on October 13, 2015 did not show any evidence of hazardous materials or regulated substances within the permanent or temporary right of way for this project, or immediately adjacent to the project area (Appendix E, E12). Further investigation for hazardous materials or regulated substances is not required at this time.

**Indiana Department of Transportation**

County Hamilton Route Greenfield Avenue/Howe Road Des. No. 1401716

If a spill occurs or contaminated soils or water are encountered during construction, appropriate personal protective equipment (PPE) should be used. Contaminated materials will need to be properly handled by trained personnel and disposed in accordance with current regulations. IDEM should be notified through the spill line at (888) 233-7745 within 24 hours of discovery of contamination. This commitment is listed in Section J of this document under "Firm".

**SECTION I – PERMITS CHECKLIST**

Permits (mark all that apply)	<u>Likely Required</u>
<b>Army Corps of Engineers (404/Section10 Permit)</b>	
Individual Permit (IP)	<input type="checkbox"/>
Nationwide Permit (NWP)	<input type="checkbox"/>
Regional General Permit (RGP)	<input type="checkbox"/>
Pre-Construction Notification (PCN)	<input type="checkbox"/>
Other	<input type="checkbox"/>
Wetland Mitigation required	<input type="checkbox"/>
Stream Mitigation required	<input type="checkbox"/>
<b>IDEM</b>	
Section 401 WQC	<input 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"/>
<b>IDNR</b>	
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"/>
<b>US Coast Guard Section 9 Bridge Permit</b>	<input type="checkbox"/>
<b>Others (Please discuss in the remarks box below)</b>	<input type="checkbox"/>

Remarks: An IDEM Rule 5 permit will be required since more than one acre of land disturbance is going to occur. No other permits are anticipated to be needed. It will be the responsibility of the project sponsor or designer on behalf of the project sponsor to obtain the necessary permits. Requirements under any necessary permits will become firm commitments. The project is in an MS4 area regulated by the City of Noblesville. The City has a Storm Water Runoff Ordinance (No. 24-4-05) applicable to this project. Coordination with the MS4 project manager will take place during design.

**Indiana Department of Transportation**

County Hamilton Route Greenfield Avenue/Howe Road Des. No. 1401716

**SECTION J- ENVIRONMENTAL COMMITMENTS**

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

Remarks:

**Firm:**

1. If permanent and/or temporary rights-of-way are needed beyond what is covered in the environmental document, INDOT-Environmental Services must be contacted immediately. (INDOT ES)
2. School corporations and emergency services will be notified at least two weeks prior to any construction that would block or limit access. Delays would occur during construction but would cease with project completion. (INDOT ES)
3. If any prehistoric or historic archaeological artifacts or human remains are uncovered during construction, demolition, or earthmoving activities, state law (Indiana Code 14-21-1-27 and 29) requires the discovery be reported to the Department of Natural Resources within two (2) business days. (IDNR-SHPO)
4. If any permanent structures or equipment utilized for the project penetrates the 100:1 slope from the airport, then FAA Form 7460 (Notice of Proposed Construction or Alteration) must be filed. (INDOT Office of Aviation)
5. If any residential or public wells are encountered, they will be re-drilled as part of the ROW agreement with the property owner. (INDOT)
6. If any identified well needs to be backfilled, it will be performed according to 312 IAC 13-10. (INDOT)
7. Do not cut any trees suitable for Indiana bat or Northern long-eared bat roosting (greater than 3 inches diameter-at-breast height, living or dead, with loose hanging bark, or with cracks, crevices, or cavities) from April 1 through September 30. (USFWS)
8. If a spill occurs or contaminated soils or water are encountered during construction, appropriate personal protective equipment (PPE) should be used. Contaminated materials will need to be properly handled by trained personnel and disposed in accordance with current regulations. IDEM should be notified through the spill line at (888) 233-7745 within 24 hours of discovery of contamination. (IDEM)

**For Further Consideration:**

9. Do not clear trees or understory vegetation outside the construction zone. (USFWS)
10. Implement temporary erosion and sediment control methods within areas of disturbed soil. All disturbed soil areas upon project completion will be vegetated following INDOT's standard specifications. (USFWS)
11. 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. (IDNR)
12. Minimize and contain within the project limits all tree and brush clearing. (IDNR)
13. Appropriately designed measures for controlling erosion and sediment must be implemented to prevent sediment from entering the stream or leaving the construction site; maintain these measures until construction is complete and all disturbed areas are stabilized. (IDNR)
14. Seed and protect all disturbed stream banks 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)

**Indiana Department of Transportation**

County Hamilton Route Greenfield Avenue/Howe Road Des. No. 1401716

- 15. Plant five trees, at least two inches in diameter-at-breast height, for each tree which is removed that is ten inches or greater in diameter-at-breast height. (IDNR)
- 16. Maintain a minimum 15-foot side buffer strip around the detention basin from the top of the bank landward after construction using a mixture of grasses, sedges, and wildflowers native to central Indiana to help mitigate for potential nuisance Canada goose conflicts. Post "Do Not Mow or Spray" signs along the buffer strip and do not mow, cut, or spray the area. (IDNR)

**SECTION K- EARLY COORDINATION**

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

Remarks:

Early Coordination was sent on December 3, 2015 (see submittal correspondence in Appendix C, C1-C2). A list of the agencies contacted is provided below, along with their response date (if applicable).

<b><i>AGENCY</i></b>	<b><i>RESPONSE DATE</i></b>
U.S. Fish and Wildlife Service	December 9, 2015
Indiana Department of Environmental Management	April 7, 2016
USDA Natural Resources Conservation Service	December 9, 2015
INDOT Office of Aviation	December 4, 2015
Indiana Geological Survey	March 30, 2016
Indianapolis Metropolitan Planning Organization	No Response
U.S. Department of Housing and Urban Development	No Response
Indiana Department of Natural Resources Division of Fish and Wildlife	December 30, 2015
U.S. Army Corps of Engineers	No Response
INDOT Office of Communications	No Response
Indianapolis Metropolitan Planning Organization	No Response
City of Noblesville	No Response

Re-coordination was sent on September 23, 2016 in order to provide information concerning the construction of the detention basin to the appropriate agencies (Appendix C, C23). A list of those contacted is provided below, along with their response date (if applicable).

<b><i>AGENCY</i></b>	<b><i>RESPONSE DATE</i></b>
U.S. Fish and Wildlife Service	September 26, 2016
Indiana Department of Environmental Management	September 29, 2016
USDA Natural Resources Conservation Service	September 30, 2016
Indiana Department of Natural Resources Division of Fish and Wildlife	October 25, 2016
U.S. Army Corps of Engineers	No Response

**APPENDIX TABLE OF CONTENTS**  
**Greenfield Avenue and Howe Road Intersection Improvement**  
**City of Noblesville, Hamilton County, Indiana**  
**Des. No. 1401716**

Appendix A: INDOT Supporting Documentation	
CE Level Thresholds Chart	A1
Appendix B: Graphics	
Indiana State Map	B1
USGS Riverwood Quadrangle Map	B2
Aerial Map	B3
Photo Key Map	B4
Photo Reference Pages	B5-B9
Preliminary Plan Sheets	B10-B26
Appendix C: Early Coordination	
Early Coordination Letter/List of Recipients	C1-C2
Project Description	C3-C5
INDOT Office of Aviation Response	C6
USFWS Response	C7-C8
USDA Natural Resources Conservation Service Response	C9-C10
IDNR, Division of Fish and Wildlife Response	C11-C12
Indiana Geological Society	C13
IDEM Online Letter	C14-C22
Re-Coordination Letter	C23
USFWS Response to Addendum Early Coordination	C24
NRCS Response to Addendum Early Coordination	C25-C26
IDNR Response to Addendum Early Coordination	C27-28
Re-Coordination IDEM Online Letter	C29-C35
Appendix D: Section 106 of the NHPA	
FHWA 800.11(d) Documentation	D1-D5
APE Map	D6
Excerpt from Historic Property Report	D7-D9
Excerpt from Indiana Archaeological Short Report	D10-D11
INDOT Approval of HPR	D12
BFS Submittal of HPR to Consulting Parties	D13-D14
Consulting Party Responses	D15
SHPO Concurrence with HPR Letter	D16-D17
INDOT Approval of ASR Email	D18
BFS Submittal of ASR to SHPO Letter	D19
SHPO Concurrence with ASR Letter	D20-D21
INDOT Approval of 800.11 Document Email	D22
BFS Submittal of 800.11 Document to SHPO Letter	D23
BFS Submittal of 800.11 Document to CPs Letter	D24
SHPO Concurrence with Finding	D25-D26
Excerpt from additional Indiana Archaeological Short Report	D27-D29
INDOT approval of additional archaeology	D30
BFS Submittal of Additional Archaeology to SHPO letter	D31-D32
SHPO Concurrence with Additional Archaeology letter	D33-D34



Appendix E: Red Flag Investigation and Hazardous Materials	
Red Flag Investigation Report	E1-E11
Hazardous Materials Site Visit Form	E12
Appendix F: Ecological and Water Resources	
Ecological Evaluation Form	F1-F3
National Wetland Inventory Map	F4
Soil Map	F5-F7
FEMA Flood Maps	F8
USFWS IPaC Trust Resource Report	F9-F11
Regulated Drain Map for Hamilton County, IN	F12
City of Noblesville GIS: Drainage Structures	F13
Appendix G: Public Involvement	
Notice of Survey Letter	G1
Section 106 Public Notice and Publisher’s Affidavits	G2-G3
Initial Notice of Proposed Improvement	G4-G5
Appendix H: Air Quality	
Excerpt from NIRCC FY 2016 – 2019 TIP	H1
INDOT STIP by Reference Excerpt	H2
Appendix I: Additional Studies	
List of Section 6(f) Properties in Hamilton County	I1
LWCF Coordination with DNR Division of Outdoor Recreation	I2
Excerpt from <i>Noblesville Traffic Impact Study Master Plan</i>	I3
EJ Analysis Community of Comparison Map	I4
EJ Analysis Affected Communities Map	I5
EJ Analysis Calculations	I6
EJ Analysis Data Tables	I7-I8
Excerpt of Noblesville ADA Transition Plan	I9-I13
INDOT approval of Environmental Justice Analysis	I14

## APPENDIX A: INDOT SUPPORTING DOCUMENTATION

---

**Greenfield Avenue and Howe Road Roundabout  
City of Noblesville, Hamilton County, Indiana  
Des. No. 1401716**

**Categorical Exclusion Level Thresholds**

	Level 1	Level 2	Level 3	Level 4
Relocations	None	≤ 2	> 2	> 10
Right-of-Way <sup>1</sup>	< 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 <sup>2</sup>
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 <sup>7</sup>
Noise Analysis Required	No	No	Yes <sup>3</sup>	Yes <sup>3</sup>
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" <sup>4</sup>
Sole Source Aquifer Groundwater Assessment	Detailed Assessment Not Required	Detailed Assessment Not Required	Detailed Assessment Not Required	Detailed Assessment Required
Approval Level	Yes	Yes	Yes	Yes
• ESM <sup>5</sup>			Yes	Yes
• ES <sup>6</sup>			Yes	Yes
• FHWA				Yes

These thresholds have changed from the March 2011 Manual.

<sup>1</sup>Permanent and/or temporary right-of-way.

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

<sup>3</sup>In accordance with INDOT's Noise Policy.

<sup>4</sup>If 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.

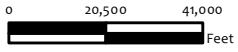
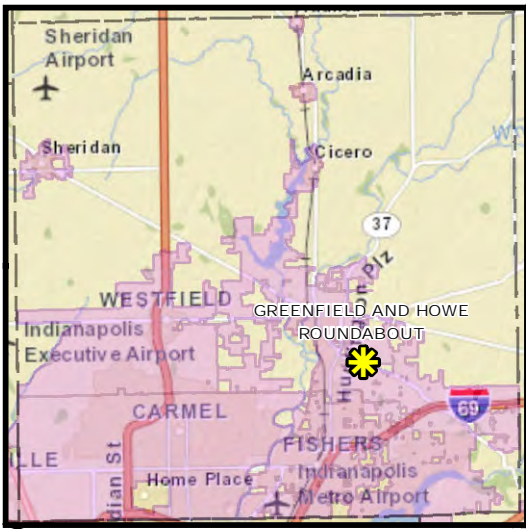
<sup>5</sup>Environmental Scoping Manager

<sup>6</sup>Environmental Services Division

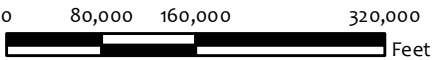
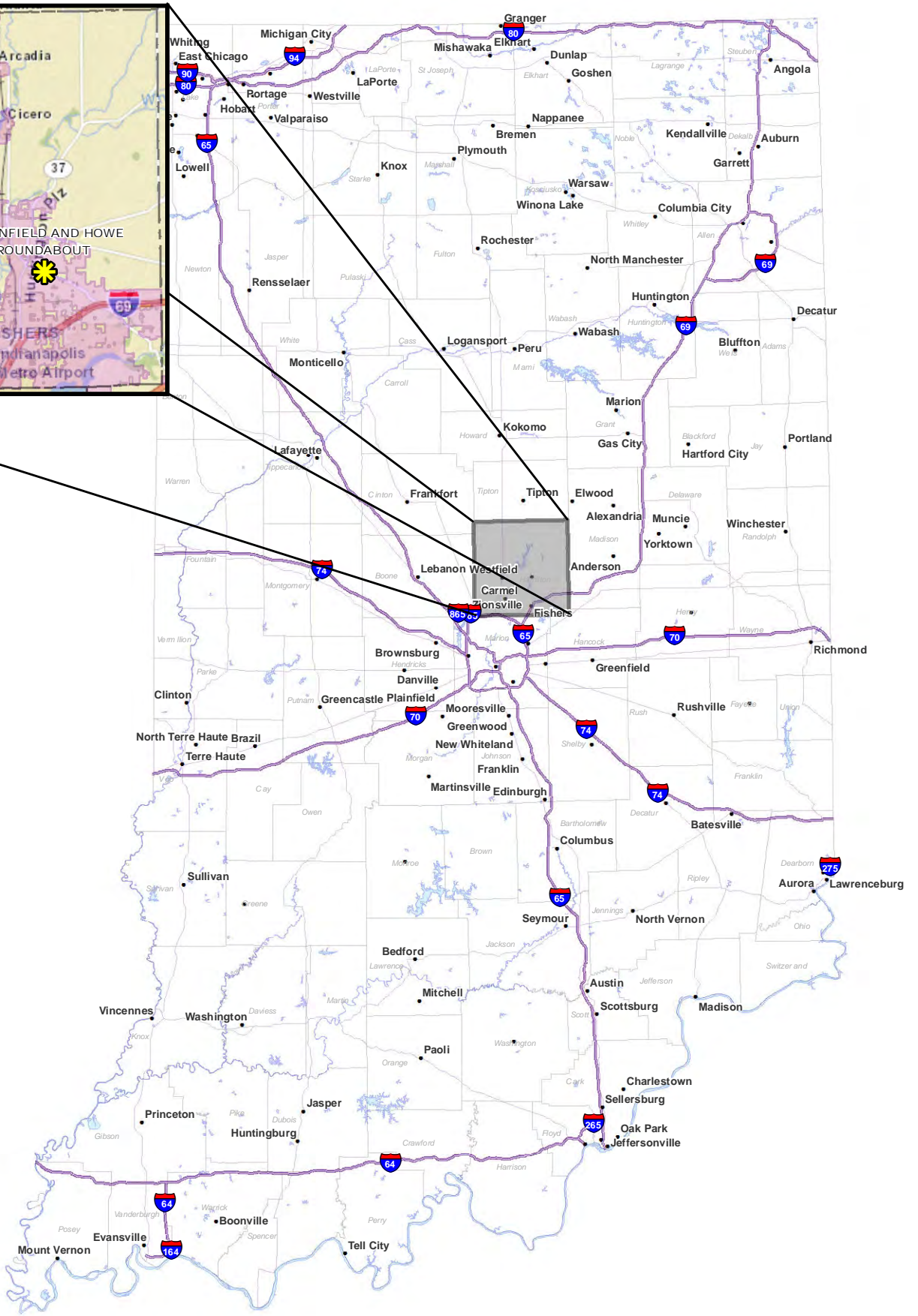
<sup>7</sup>Any involvement with a bridge processed under the Historic Bridge Programmatic Agreement

## APPENDIX B: GRAPHICS

---



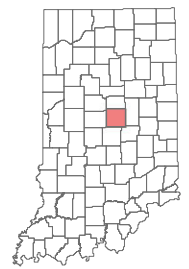
Project Location



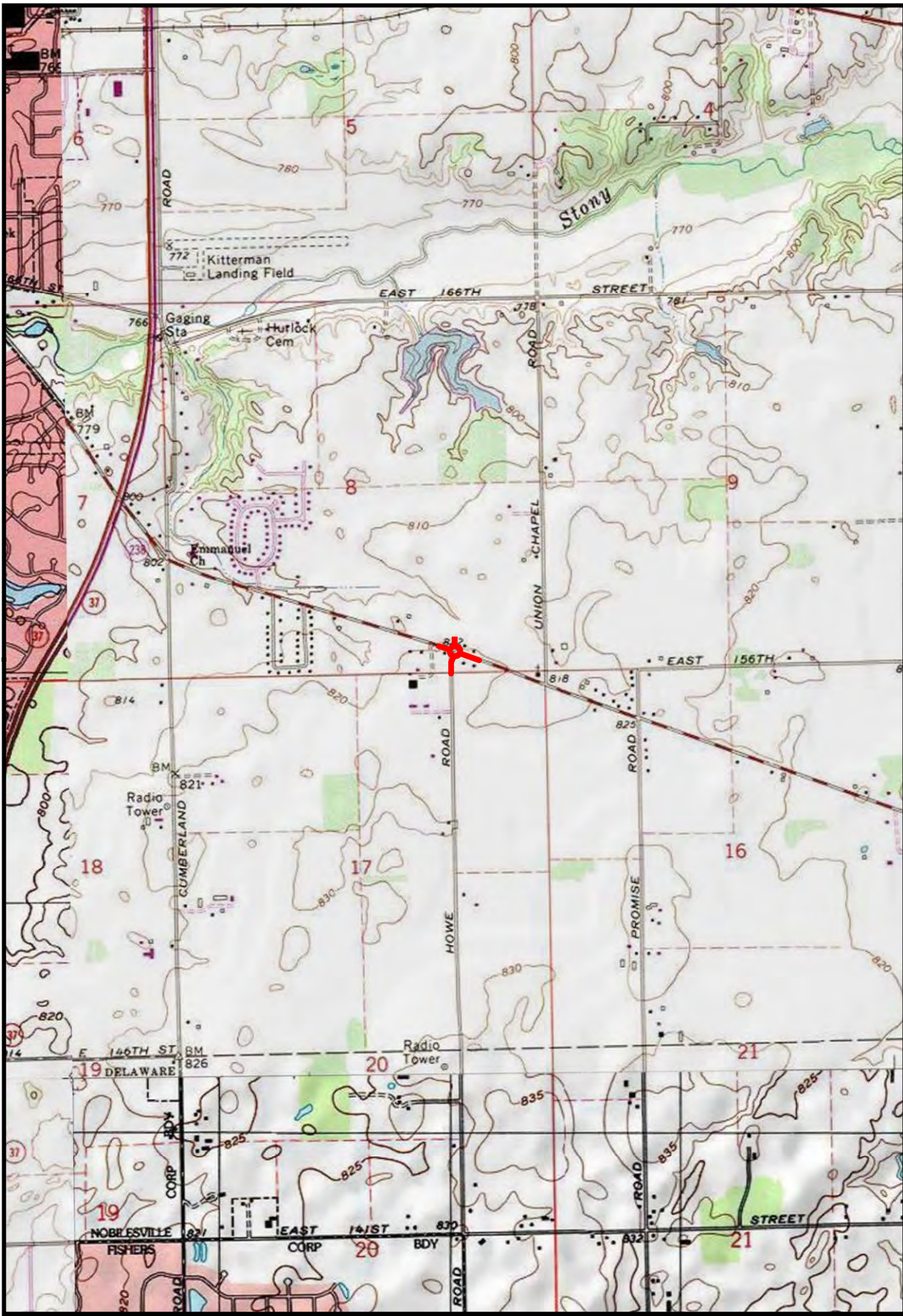
**State Map**  
 Greenfield Avenue and Howe Road Roundabout  
 City of Noblesville, Hamilton County, Indiana  
 Des. No. 1401716



Map Source: Indiana Map



Legend  
Project Area



Map Source: Indiana Geological Survey (IGS), IndianaMap, ArcGIS Online (ESRI) USA Topo Maps



### USGS Riverwood Quadrangle

Greenfield Avenue and Howe Road Roundabout  
City of Noblesville, Hamilton County, Indiana  
Section 8 & 17, Township 18N, Range 5E  
Des. No. 1401716






Conceptual Project Design  
Greenfield Ave. & Howe Rd.  
City of Noblesville, Hamilton County, Indiana  
Des. No. 1401716



**Legend**

Project Area  


Photo Numbers  


Map Source: IndianaMap, ArcGIS Online (ESRI) World Imagery, National Register of Historic Places Database Inventory from National Park Service



**Photo Key**

Greenfield Avenue and Howe Road Roundabout  
 City of Noblesville, Hamilton County, Indiana

Des. No. 1401716





1. Looking south along Howe Road, away from the project area



2. Looking north along Howe Road, towards the intersection with Greenfield Avenue



3. Looking northwest along Greenfield Avenue, away from the project area



4. Looking southeast along Greenfield Avenue, towards the intersection with Howe Road



5. Looking southeast along Greenfield Avenue, away from the project area



6. Looking northwest along Greenfield Avenue, towards the intersection with Howe Road



7. Looking southeast along Greenfield Avenue towards Howe Road



8. Looking south along Greenfield Avenue, towards the intersection of Greenfield Avenue and Howe Road



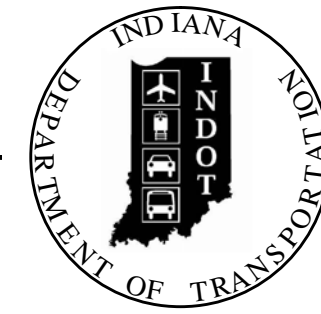
9. Looking east along Greenfield Avenue towards the eastern project terminus



10. Looking northwest along Greenfield Avenue, towards the intersection of Greenfield Avenue and Howe Road

PROJECT	DESIGNATION
1401716	1401716
CONTRACT	
R-38246	

# INDIANA DEPARTMENT OF TRANSPORTATION



## ROAD PLANS GREENFIELD AVE. & HOWE RD. PROJECT NO. 1401716

P.E.  
R/W  
CONST.

TRAFFIC DATA		GREENFIELD AVE.	
A.A.D.T.	(2017)	9,450	V.P.D.
A.A.D.T.	(2037)	10,775	V.P.D.
D.H.V.	(2037)	1,078	V.P.H.
DIRECTIONAL DISTRIBUTION		50	%
TRUCKS		8	% D.H.V.
		8	% A.A.D.T.

DESIGN DATA	
DESIGN SPEED	40 mph
FUNCTIONAL CLASSIFICATION	Principal Arterial
TERRAIN	Level
RURAL/URBAN	Urban (Suburban)
ACCESS CONTROL	None
PROJECT DESIGN CRITERIA	New Constr. 4R (Non-Freeway)

TRAFFIC DATA		HOWE RD.	
A.A.D.T.	(2017)	1,365	V.P.D.
A.A.D.T.	(2037)	1,555	V.P.D.
D.H.V.	(2037)	156	V.P.H.
DIRECTIONAL DISTRIBUTION		50	%
TRUCKS		2	% D.H.V.
		2	% A.A.D.T.

DESIGN DATA	
DESIGN SPEED	40 mph
FUNCTIONAL CLASSIFICATION	Local Street
TERRAIN	Level
RURAL/URBAN	Urban (Suburban)
ACCESS CONTROL	None
PROJECT DESIGN CRITERIA	New Constr. 4R (Non-Freeway)

Intersection And Roadway Improvements At Greenfield Blvd. And Howe Rd., Located Approximately 1 mi. North Of The 146th St. & Howe Rd. Intersection And Approximately 1 mi. East Of The S.R. 27 & Greenfield Ave. Intersection. All Within Sections 8 & 17, Township 18 North, Range 5 East, In Noblesville Township Of Hamilton County, Indiana.

GROSS LENGTH: 0.19 mi.  
NET LENGTH: 0.19 mi.

SCALES:

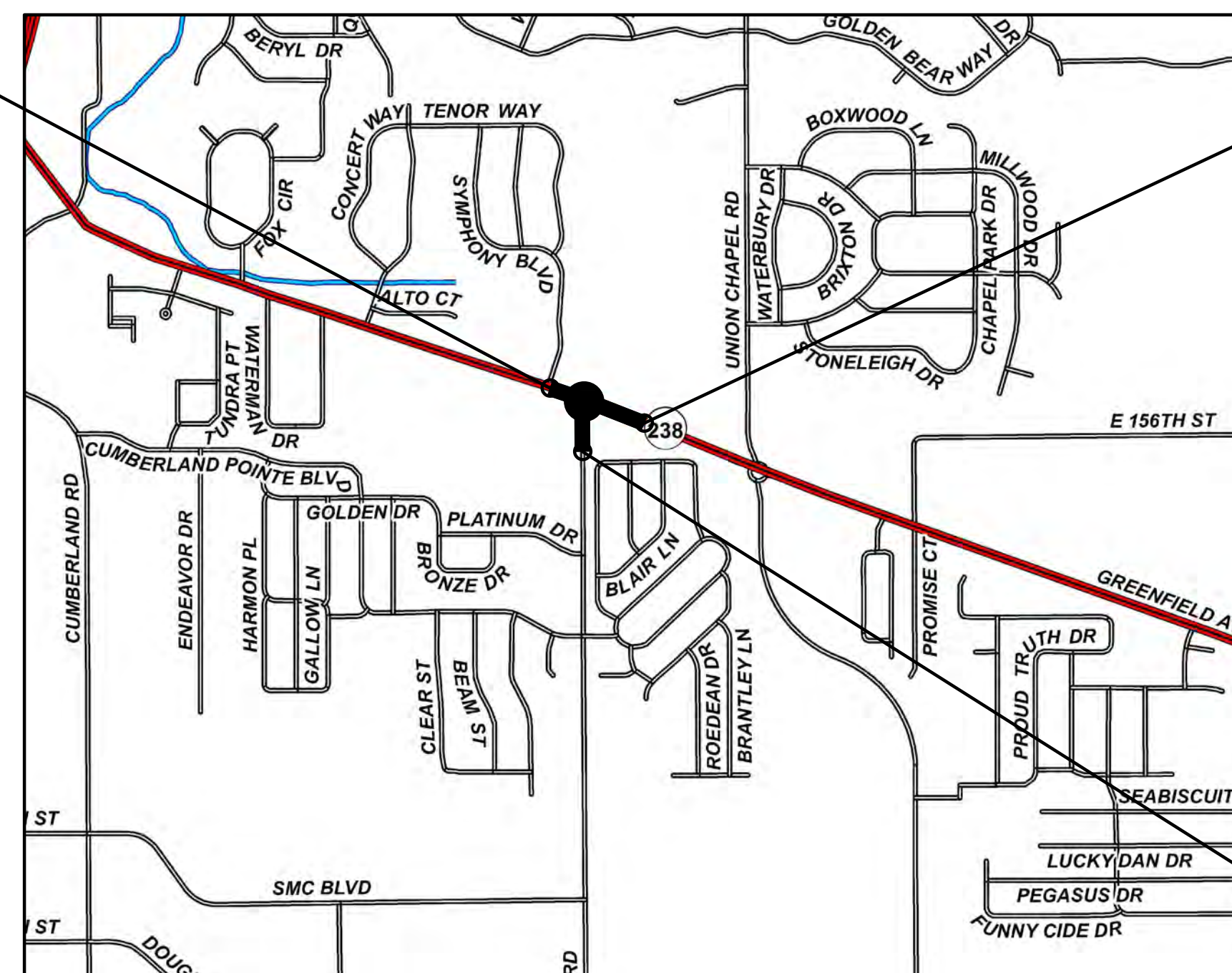
PLAN { LONG: 1" = 20'  
TRANS: 1" = 20'

PROFILE { HORIZ: 1" = 20'  
VERT: 1" = 5'

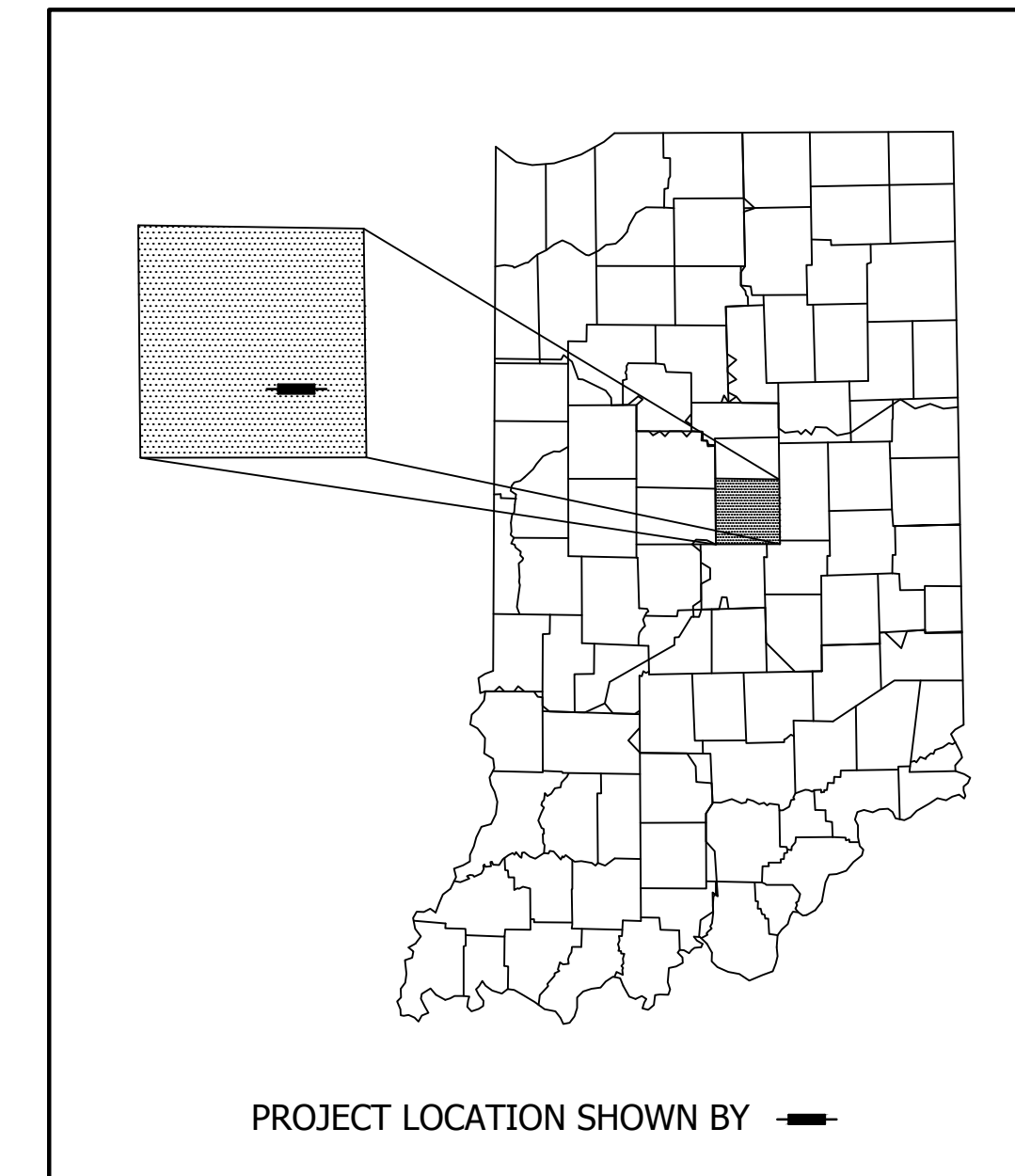
MAX. GRADE: 1.47%

BEGIN PROJECT 1401716  
P.O.T. Sta. 18+00.00 "A"

END PROJECT 1401716  
P.O.T. Sta. 24+51.06 "PR-1" =  
O.P.O.T. Sta. 24+51.06 "A",  
0.47' Rt.



VICINITY MAP  
HAMILTON COUNTY



PROJECT LOCATION SHOWN BY —

Approx. 49°01'00" N. Lat. & 85°58'50" W. Long.

### APPROVED BY

BOARD OF PUBLIC WORKS & SAFETY

HON. JOHN DITSLEAR MAYOR

LAWRENCE J. STORK MEMBER

JACK E. MARTIN MEMBER

### ATTEST

EVELYN L. LEES CLERK

MICHAEL A. HOWARD CITY ATTORNEY

### RECOMMENDED FOR APPROVAL

JOHN BEERY, P.E. CITY ENGINEER

INDIANA DEPARTMENT OF TRANSPORTATION STANDARD SPECIFICATIONS DATED 2016 TO BE USED WITH THESE PLANS.

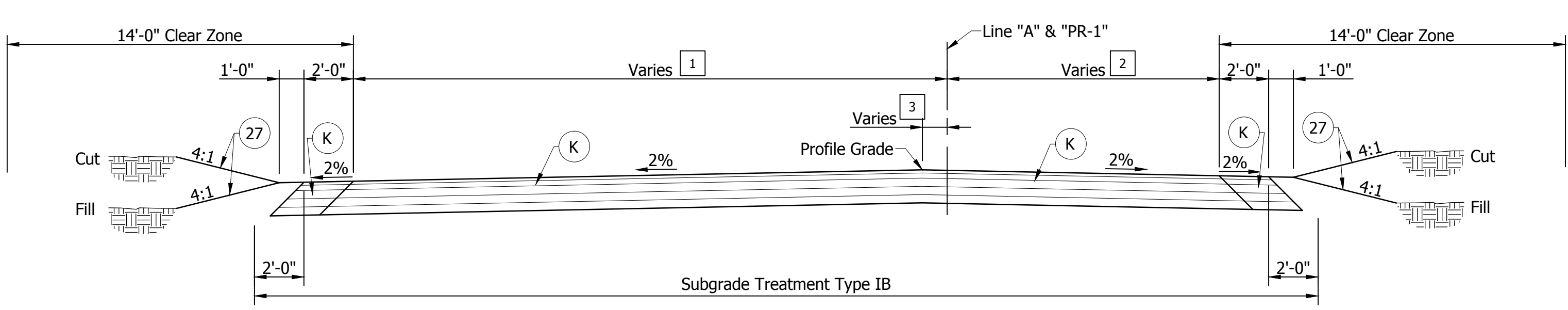
PLANS PREPARED BY: Butler Fairman and Seufert Inc. (317)713-4615  
PHONE  
CERTIFIED BY: \_\_\_\_\_ DATE  
APPROVED FOR LETTING: \_\_\_\_\_ DATE  
INDIANA DEPARTMENT OF TRANSPORTATION

BRIDGE FILE	
DESIGNATION	
1401716	
SURVEY BOOK	SHEET
356	1 OF
CONTRACT	PROJECT
R-38246	1401716

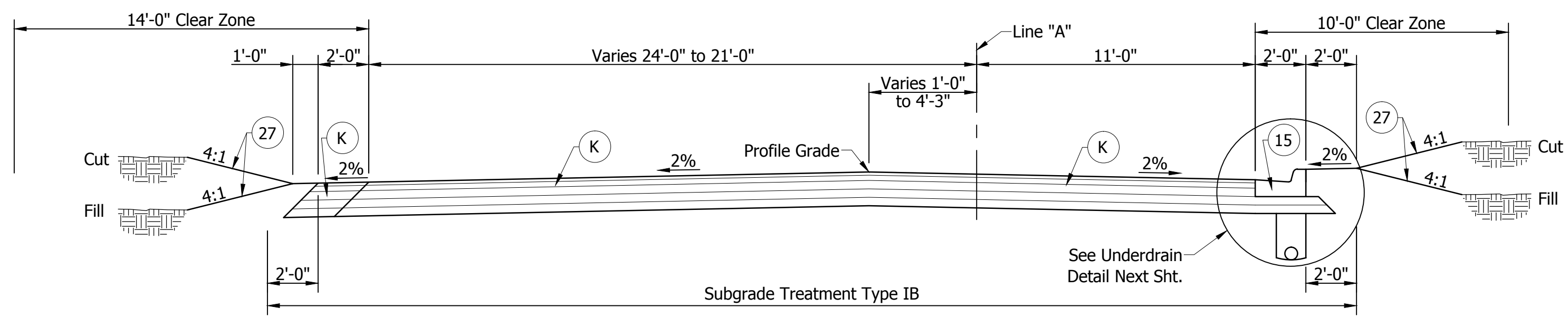
H:\58271\ProjDevelopment\Design Drawings\5827R101.dwg Alexander Rittman Plot:10/11/2016 12:41 PM Save:9/19/2016 2:37 PM



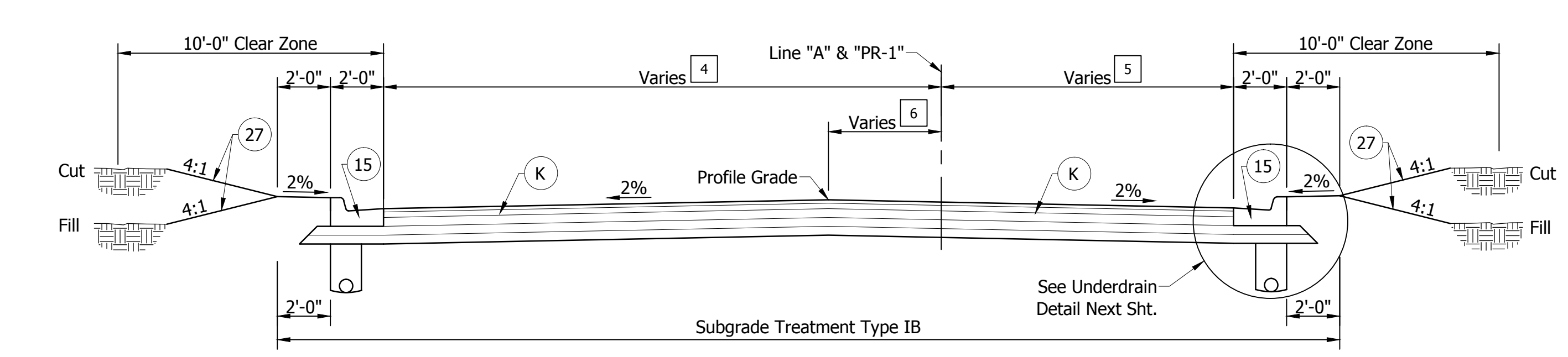
H:\58271\ProDevelopment\Design\Drawings\5827R201.dwg Alexandria Rittman Plot:10/11/2016 12:42 PM Save:9/28/2016 8:02 AM



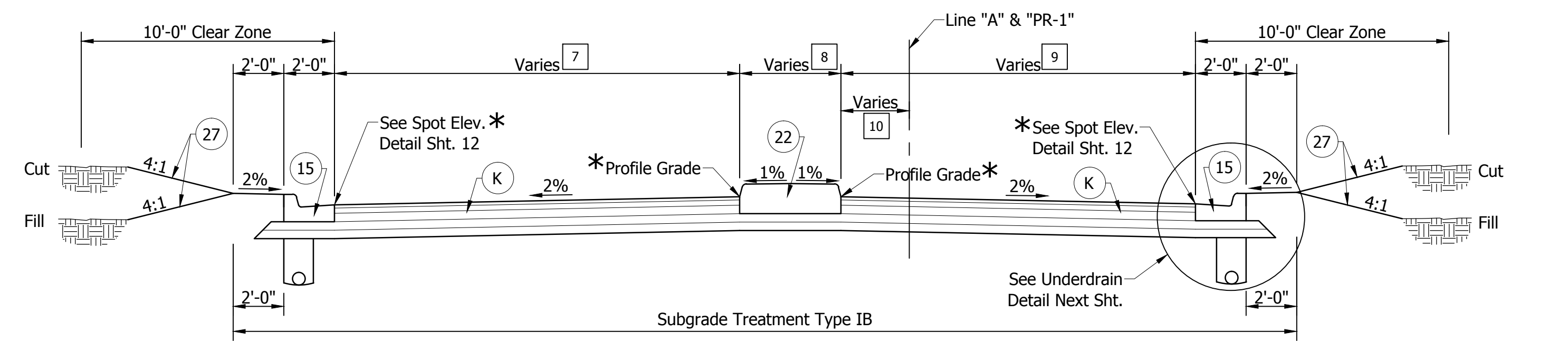
**TYPICAL CROSS SECTION - GREENFIELD AVE.**  
 Scale: 1/4" = 1'-0"  
 Sta. 18+00.00 "A" to Sta. 18+18.00 "A"  
 Sta. 23+43.75 "PR-1" to Sta. 24+51.06 "PR-1"



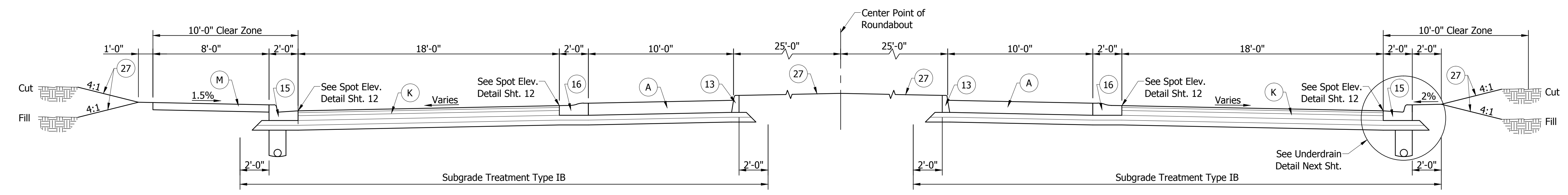
**TYPICAL CROSS SECTION - GREENFIELD AVE.**  
 Scale: 1/4" = 1'-0"  
 Sta. 18+18.00 "A" to Sta. 18+75.00 "A"



**TYPICAL CROSS SECTION - GREENFIELD AVE.**  
 Scale: 1/4" = 1'-0"  
 Sta. 18+75.00 "A" to Sta. 18+88.00 "A"  
 Sta. 22+50.00 "PR-1" to Sta. 23+43.75 "PR-1"



**TYPICAL CROSS SECTION - GREENFIELD AVE. (SPLITTER ISLAND)**  
 Scale: 1/4" = 1'-0"  
 Sta. 18+88.00 "A" to Sta. 19+85.13 "A"  
 Sta. 20+97.47 "PR-1" to Sta. 22+50.00 "PR-1"

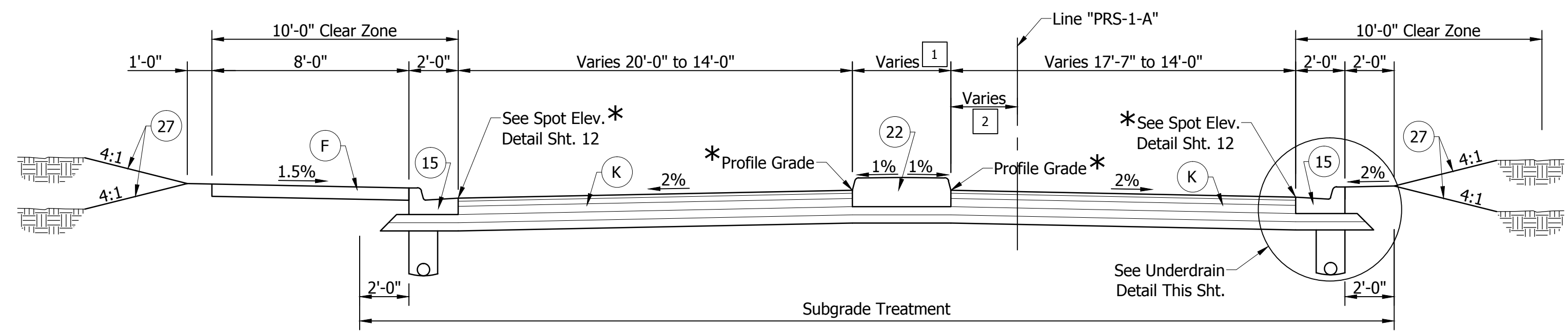


**TYPICAL CROSS SECTION - ROUNDABOUT**  
 Scale: 1/4" = 1'-0"  
 Radial Around Center Point @ 20+40.70 "A", 15.03' Lt.

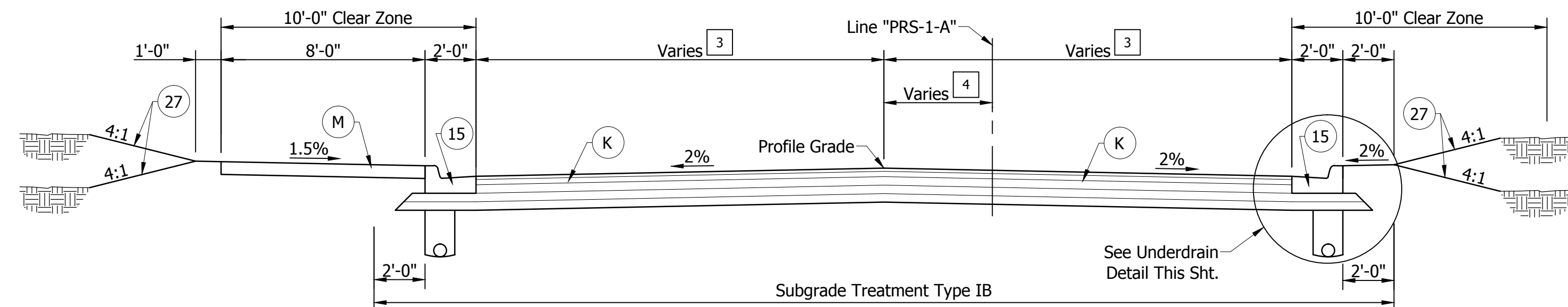
- LEGEND**
- (A) Concrete Median/Truck Apron: 10" PCCP, Decorative on 440#/SYD HMA Base, Type B, 25.0mm on 440#/SYD HMA Base, Type B, 25.0mm
  - (F) Concrete Sidewalk, 6"
  - (K) HMA Pavement: 165#/SYD HMA Surface, Type B, 9.5mm on 275#/SYD HMA Inter., Type B, 19.0mm on 440#/SYD HMA Base, Type B, 25.0mm on 440#/SYD HMA Base, Type B, 25.0mm on 440#/SYD HMA Base, Type B, 25.0mm
  - (M) HMA For Sidewalk: 140#/SYD HMA Surface, Type B, 9.5mm on 220#/SYD HMA Inter., Type B, 19.0mm on 6" of Compacted Aggregate, No. 53, Base on Subgrade Treatment, Type III
  - (13) Concrete Curb
  - (15) 2' Combined Conc. Curb & Gutter, Type II (6")
  - (16) 2' Inverted Conc. Roll Curb & Gutter, Type I
  - (22) Concrete Center Curb, Type 'D'
  - (27) Seed Mixture, Type 'U'

RECOMMENDED FOR APPROVAL: _____ DESIGNED: K LW DRAWN: BEH CHECKED: ACE CHECKED: K LW	INDIANA DEPARTMENT OF TRANSPORTATION  TYPICAL CROSS SECTIONS	HORIZONTAL SCALE	BRIDGE FILE
		AS SHOWN	
		VERTICAL SCALE	DESIGNATION
		AS SHOWN	1401716
		SURVEY BOOK	SHEET
		356	3 OF
		CONTRACT	PROJECT
		R-38246	1401716

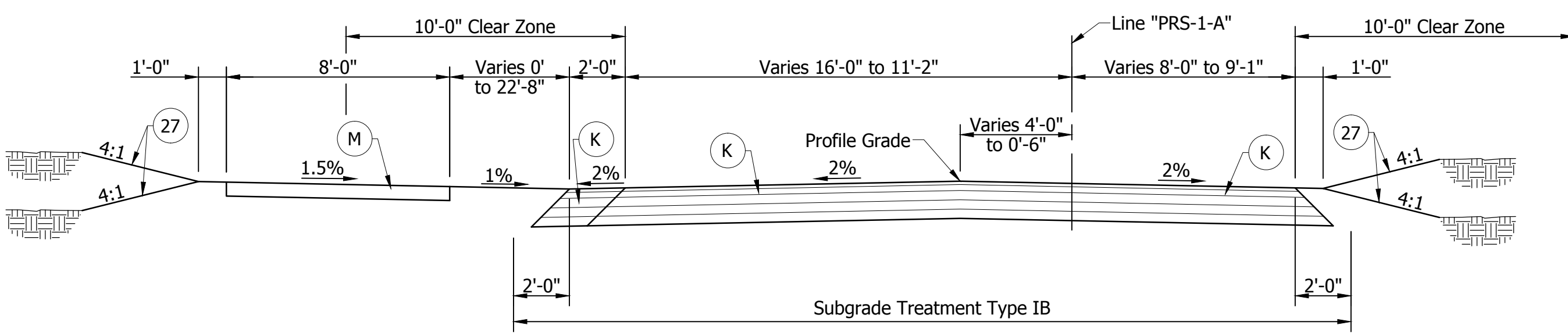




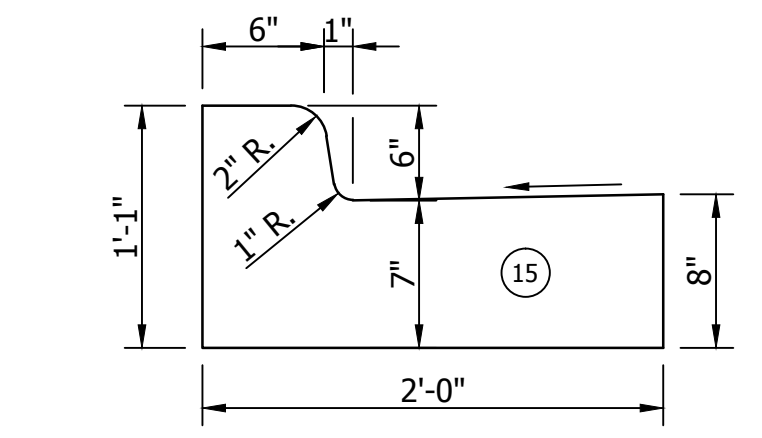
**TYPICAL CROSS SECTION - HOWE RD. (SPLITTER ISLAND)**  
 Scale: 1/4" = 1'-0"  
 Sta. 50+50.14 "PRS-1-A" to Sta. 51+10.00 "PRS-1-A"  
 \* Spot Elevation Details from Sta. 50+50.14 to 51+00.00 "PRS-1-A"



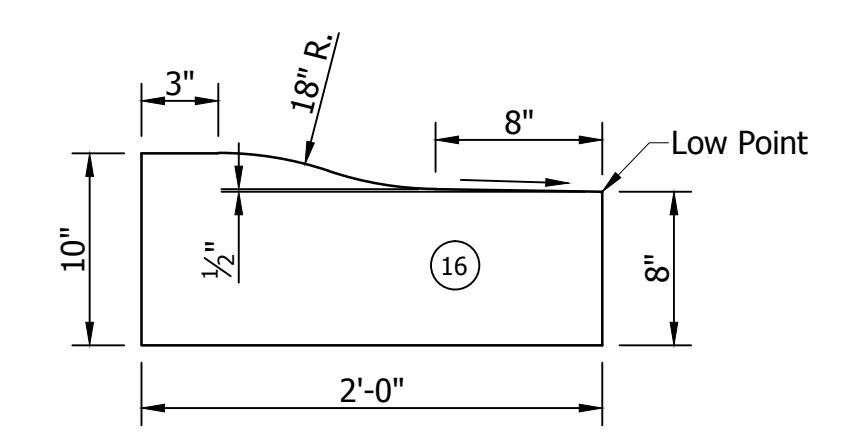
**TYPICAL CROSS SECTION - GREENFIELD AVE.**  
 Scale: 1/4" = 1'-0"  
 Sta. 51+10.00 "PRS-1-A" to Sta. 52+80.00 "PRS-1-A"



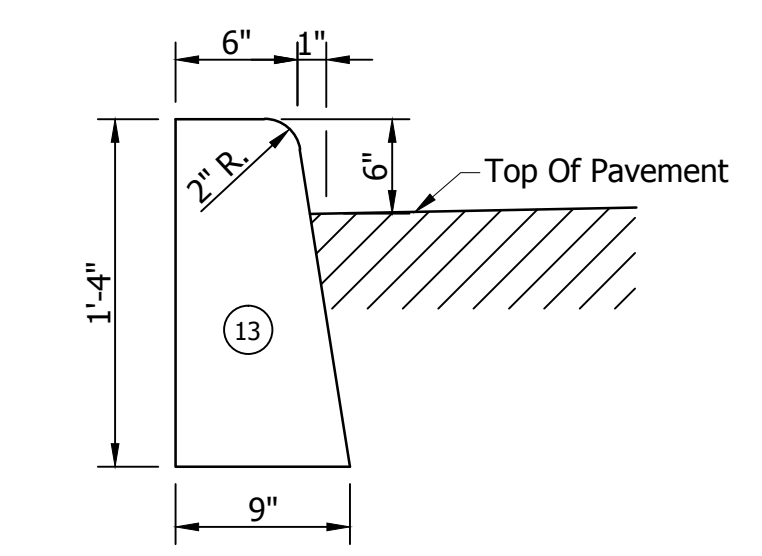
**TYPICAL CROSS SECTION - GREENFIELD AVE.**  
 Scale: 1/4" = 1'-0"  
 Sta. 52+80.00 "PRS-1-A" to Sta. 53+55.00 "PRS-1-A"



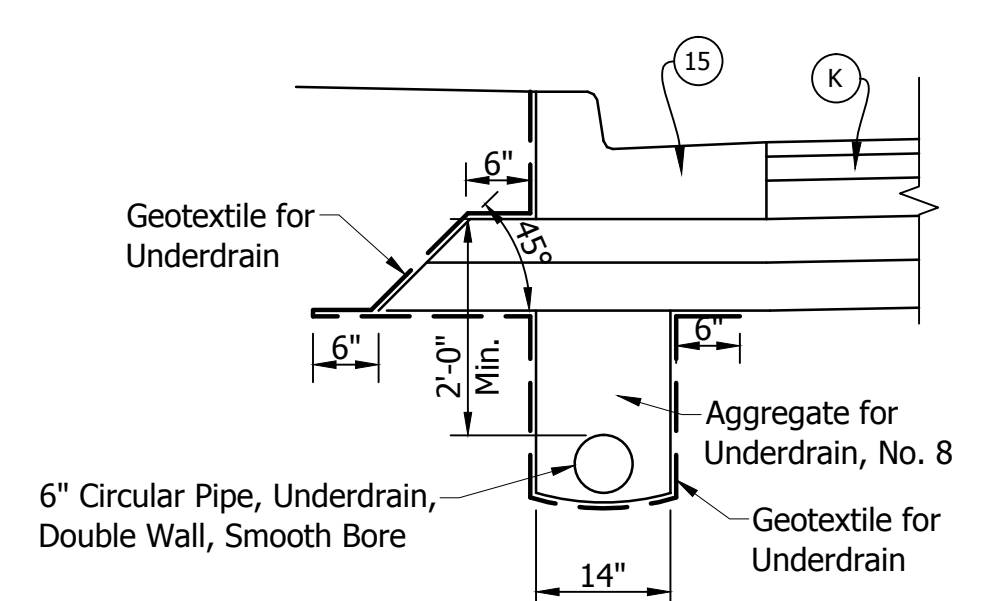
**2'-0" COMBINED CONCRETE CURB & GUTTER, TYPE II DETAIL**  
 Not To Scale



**2'-0" INVERTED CONCRETE ROLL CURB, TYPE I DETAIL**  
 Not To Scale



**CONCRETE CURB DETAIL**  
 Not To Scale

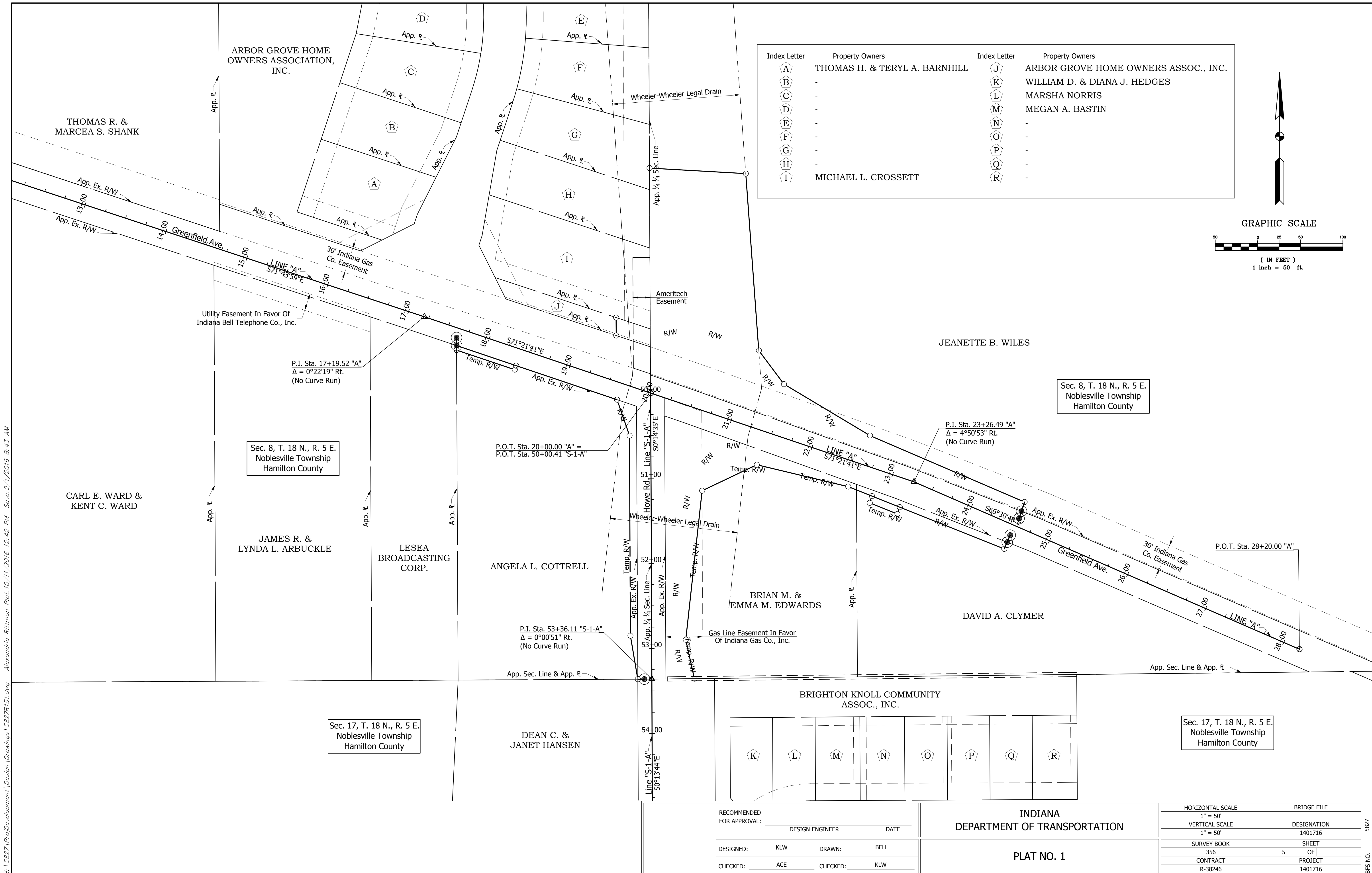


**UNDERDRAIN DETAIL**  
 Not To Scale

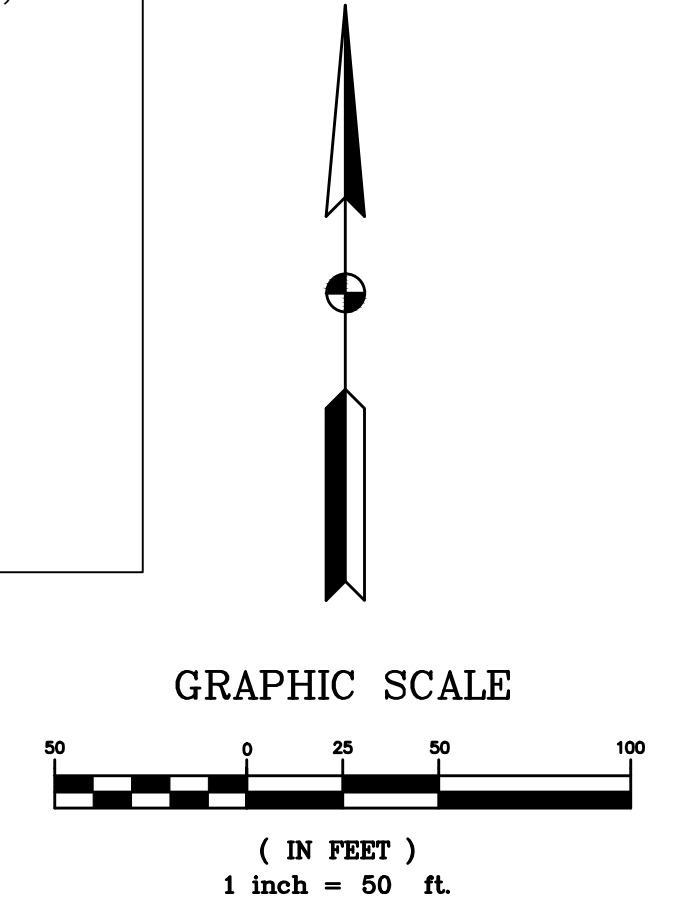
- LEGEND**
- (K) HMA Pavement:  
 165#/SYD HMA Surface, Type B, 9.5mm on  
 275#/SYD HMA Inter., Type B, 19.0mm on  
 440#/SYD HMA Base, Type B, 25.0mm on  
 440#/SYD HMA Base, Type B, 25.0mm on  
 440#/SYD HMA Base, Type B, 25.0mm
  - (M) HMA For Sidewalk:  
 140#/SYD HMA Surface, Type B, 9.5mm on  
 220#/SYD HMA Inter., Type B, 19.0mm on  
 6" of Compacted Aggregate, No. 53, Base on  
 Subgrade Treatment, Type III
  - (13) Concrete Curb
  - (15) 2' Combined Conc. Curb & Gutter, Type II (6")
  - (16) 2' Inverted Conc. Roll Curb & Gutter, Type I
  - (27) Seed Mixture, Type 'U'

RECOMMENDED FOR APPROVAL: _____ DESIGNED: K LW DRAWN: BEH CHECKED: ACE CHECKED: K LW	INDIANA DEPARTMENT OF TRANSPORTATION  TYPICAL CROSS SECTIONS	HORIZONTAL SCALE AS SHOWN	BRIDGE FILE
		VERTICAL SCALE AS SHOWN	DESIGNATION 1401716
		SURVEY BOOK 356	SHEET 4 OF
		CONTRACT R-38246	PROJECT 1401716

H:\58271\ProDevelopment\Drawings\5827R201.dwg Alexandria Rittman Plot:10/11/2016 12:42 PM Save:9/28/2016 8:02 AM



Index Letter	Property Owners	Index Letter	Property Owners
A	THOMAS H. & TERYL A. BARNHILL	J	ARBOR GROVE HOME OWNERS ASSOC., INC.
B	-	K	WILLIAM D. & DIANA J. HEDGES
C	-	L	MARSHA NORRIS
D	-	M	MEGAN A. BASTIN
E	-	N	-
F	-	O	-
G	-	P	-
H	-	Q	-
I	MICHAEL L. CROSSETT	R	-



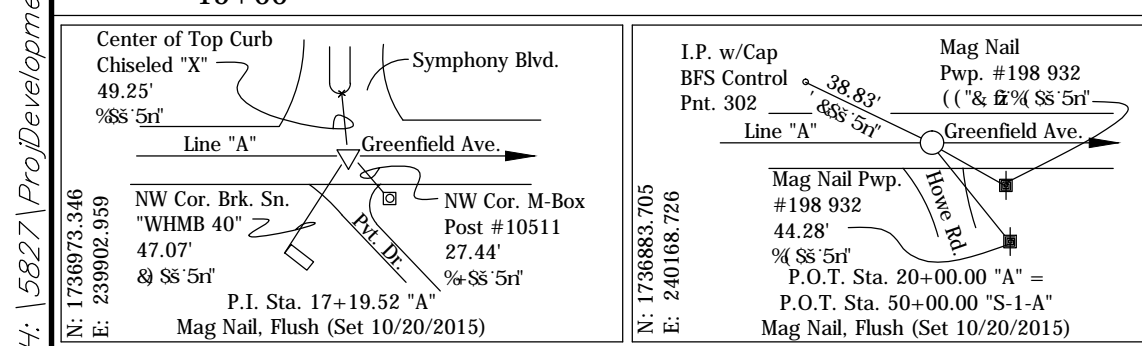
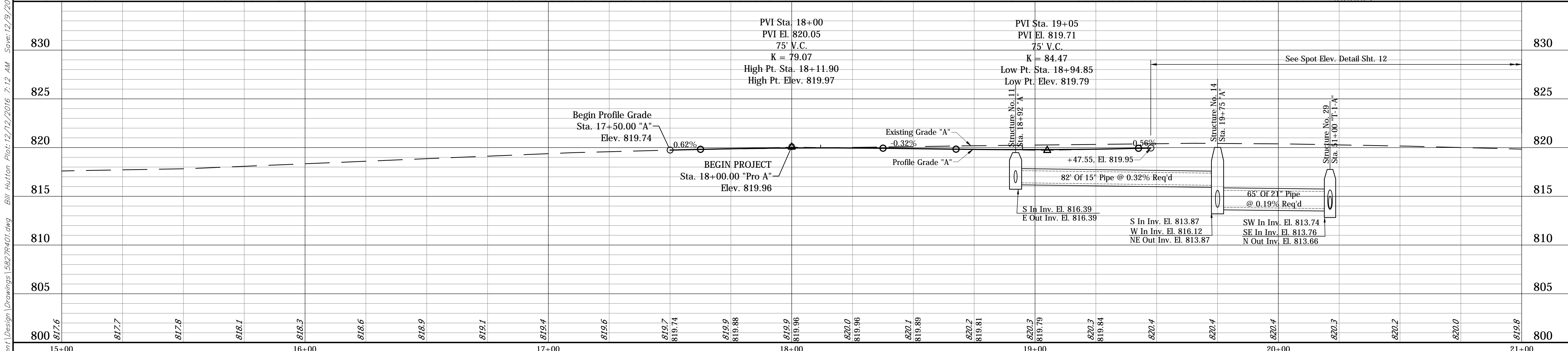
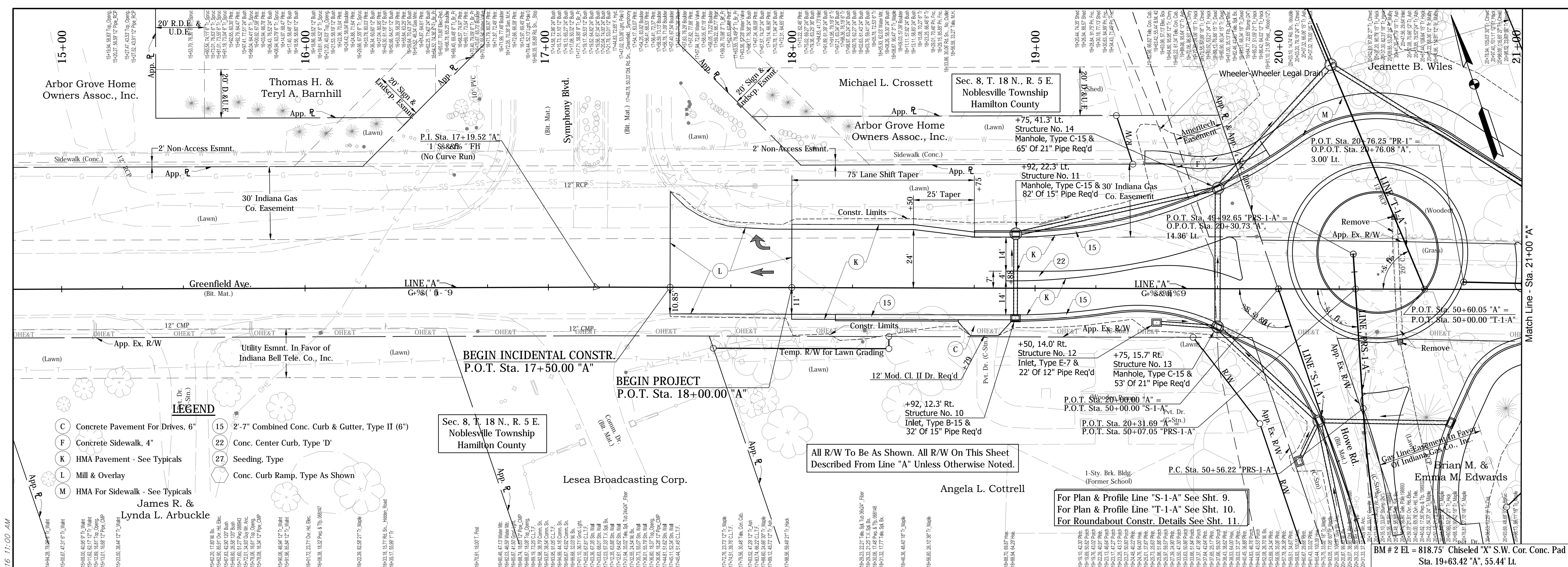
H:\58271\ProDevelopment\Design Drawings\5827R151.dwg Alexander Rittman Plot:10/11/2016 12:42 PM Save:9/1/2016 8:43 AM

RECOMMENDED FOR APPROVAL: DESIGN ENGINEER: _____ DATE: _____ DESIGNED: KLV DRAWN: BEH CHECKED: ACE CHECKED: KLV	<b>INDIANA DEPARTMENT OF TRANSPORTATION</b>  <b>PLAT NO. 1</b>	HORIZONTAL SCALE 1" = 50'	BRIDGE FILE
		VERTICAL SCALE 1" = 50'	DESIGNATION 1401716
		SURVEY BOOK 356	SHEET 5 OF
		CONTRACT R-38246	PROJECT 1401716

5827  
BFS NO.



H:\156271\_Proj\_Development\Design Drawings\56271R401.dwg Bill Hutton Plot:12/12/2016 7:12 AM Sves:12/9/2016 11:00 AM



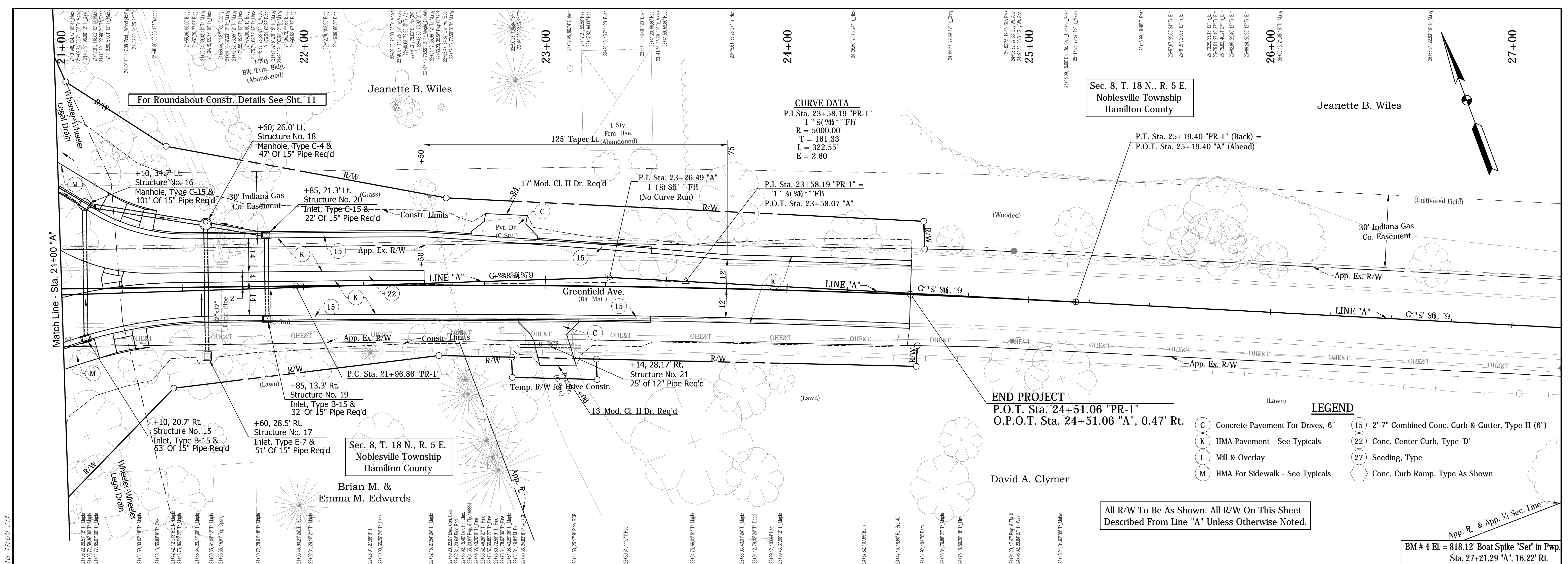
RECOMMENDED FOR APPROVAL:	DESIGN ENGINEER	DATE
DESIGNED:	KLW	DRAWN: BEH
CHECKED:	ACE	CHECKED: KLW

**INDIANA DEPARTMENT OF TRANSPORTATION**

**PLAN & PROFILE LINE "A" GREENFIELD AVENUE**

HORIZONTAL SCALE	BRIDGE FILE
1" = 20'	
VERTICAL SCALE	DESIGNATION
1" = 5'	1401716
SURVEY BOOK	SHEET
356	7 OF
CONTRACT	PROJECT
R-38246	1401716

H:\58271\Pro\Development\Design Drawings\5827R401.dwg Bill Hutton Plot:12/12/2016 7:12 AM, Sves:12/9/2016 11:00 AM



**CURVE DATA**  
 P.I. Sta. 23+58.19 "PR-1"  
 1" s (% $\dot{m}$ ) "FH"  
 R = 5000.00'  
 T = 161.33'  
 L = 322.55'  
 E = 2.60'

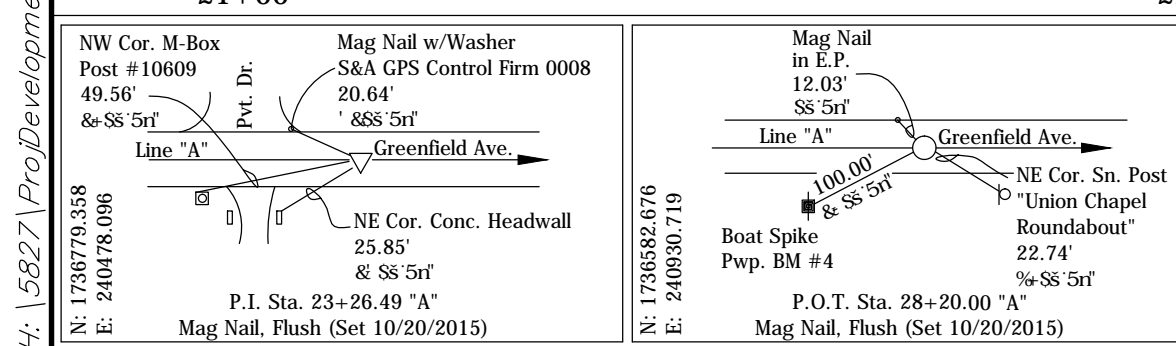
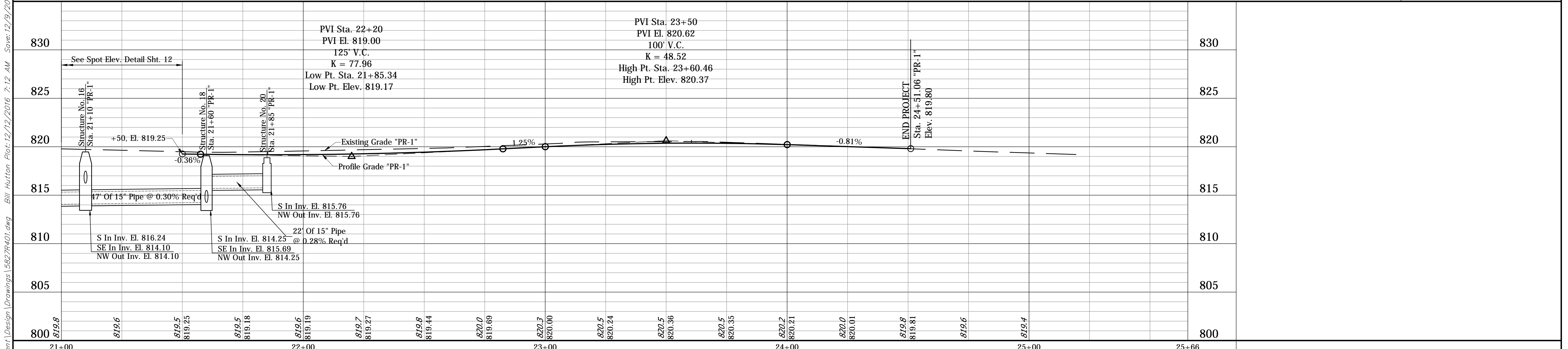
Sec. 8, T. 18 N., R. 5 E.  
 Noblesville Township  
 Hamilton County

**END PROJECT**  
 P.O.T. Sta. 24+51.06 "PR-1"  
 O.P.O.T. Sta. 24+51.06 "A", 0.47' Rt.

- LEGEND**
- (C) Concrete Pavement For Drives, 6"
  - (K) HMA Pavement - See Typical
  - (L) Mill & Overlay
  - (M) HMA For Sidewalk - See Typical
  - (15) 2'-7" Combined Conc. Curb & Gutter, Type II (6")
  - (22) Conc. Center Curb, Type 'D'
  - (27) Seeding, Type
  - (27) Conc. Curb Ramp, Type As Shown

All R/W To Be As Shown. All R/W On This Sheet Described From Line "A" Unless Otherwise Noted.

BM # 4 EL = 818.12' Boat Spike "Set" in Pwp. Sta. 27+21.29 "A", 16.22' Rt.



RECOMMENDED FOR APPROVAL:

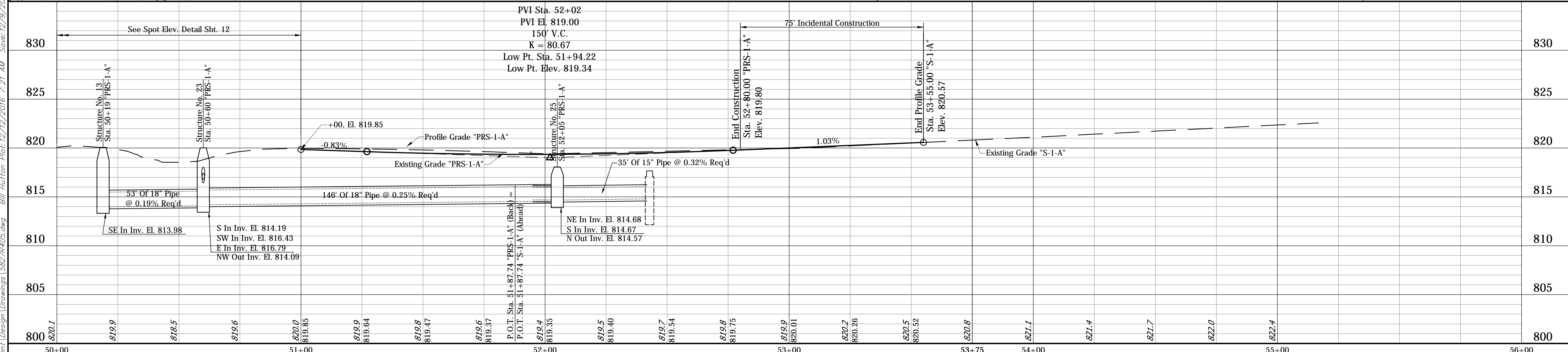
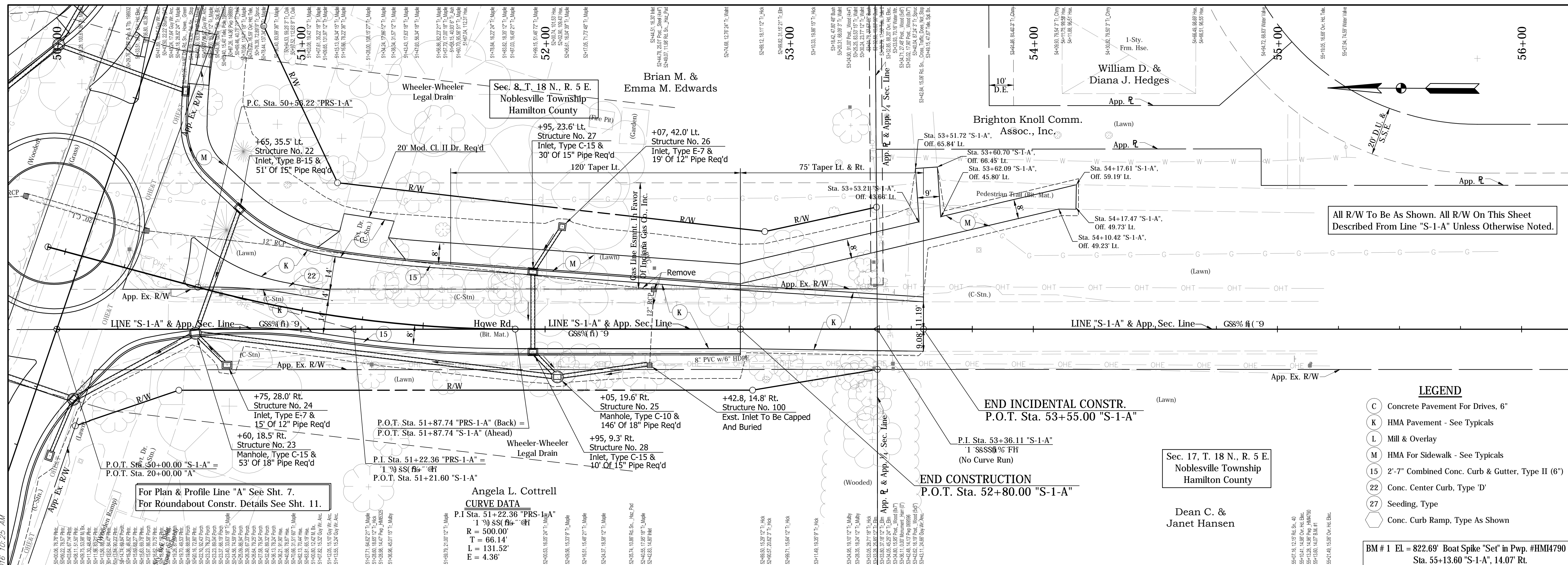
DESIGNED: KLW DRAWN: BEH  
 CHECKED: ACE CHECKED: KLW

INDIANA DEPARTMENT OF TRANSPORTATION

PLAN & PROFILE  
 LINE "A"  
 GREENFIELD AVENUE

HORIZONTAL SCALE 1" = 20'	BRIDGE FILE
VERTICAL SCALE 1" = 5'	DESIGNATION 1401716
SURVEY BOOK 356	SHEET 8 OF
CONTRACT R-38246	PROJECT 1401716

BFS NO. 5827

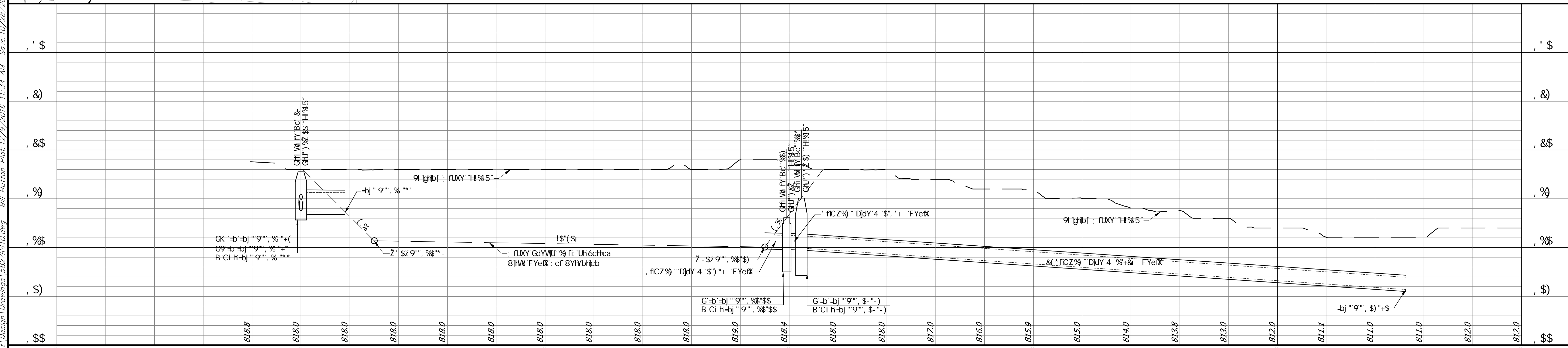
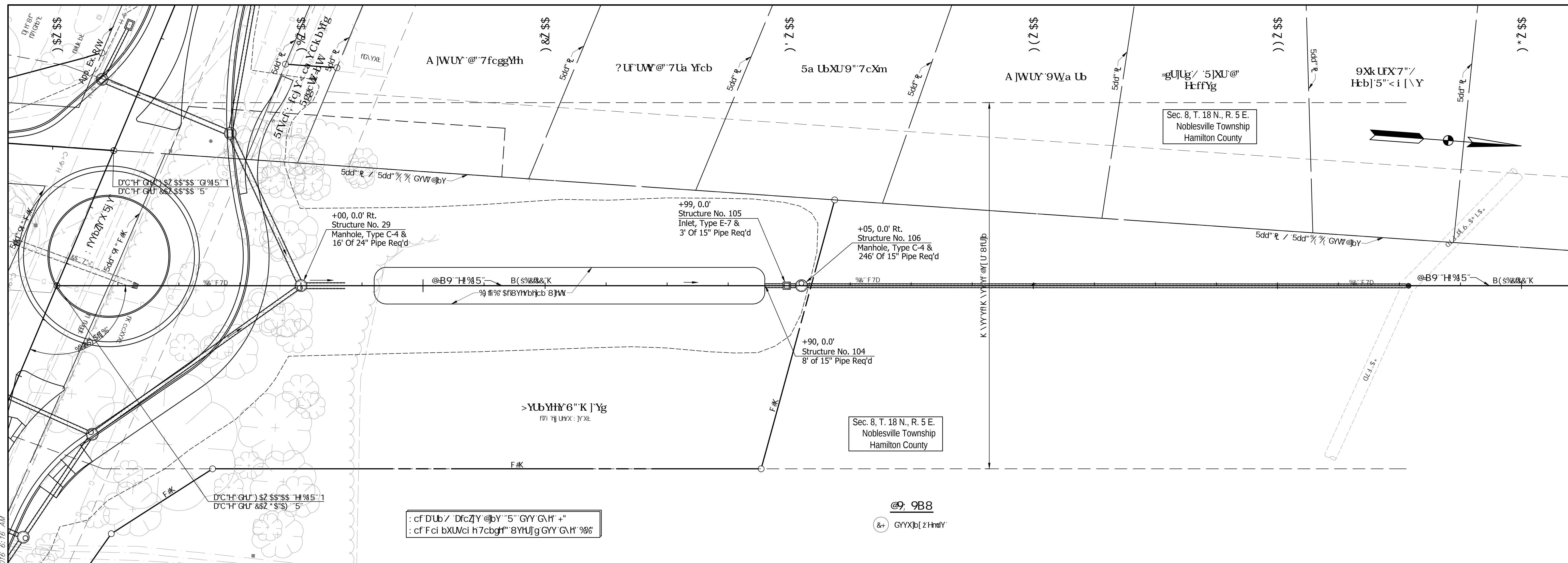


RECOMMENDED FOR APPROVAL:		DESIGN ENGINEER		DATE	
DESIGNED: KLW		DRAWN: BEH			
CHECKED: ACE		CHECKED: KLW			
INDIANA DEPARTMENT OF TRANSPORTATION				BRIDGE FILE	
PLAN & PROFILE LINE "S-1-A" HOWE ROAD				DESIGNATION 1401716	
				SHEET 9 OF 14	
				PROJECT 1401716	

H:\56271\_ProDevelopment\Design Drawings\56271R405.dwg Bill Hutton Plot:12/12/2016 7:21 AM Sves:12/9/2016 10:25 AM  
 H:\56271\_ProDevelopment\Design Drawings\56271R405.dwg

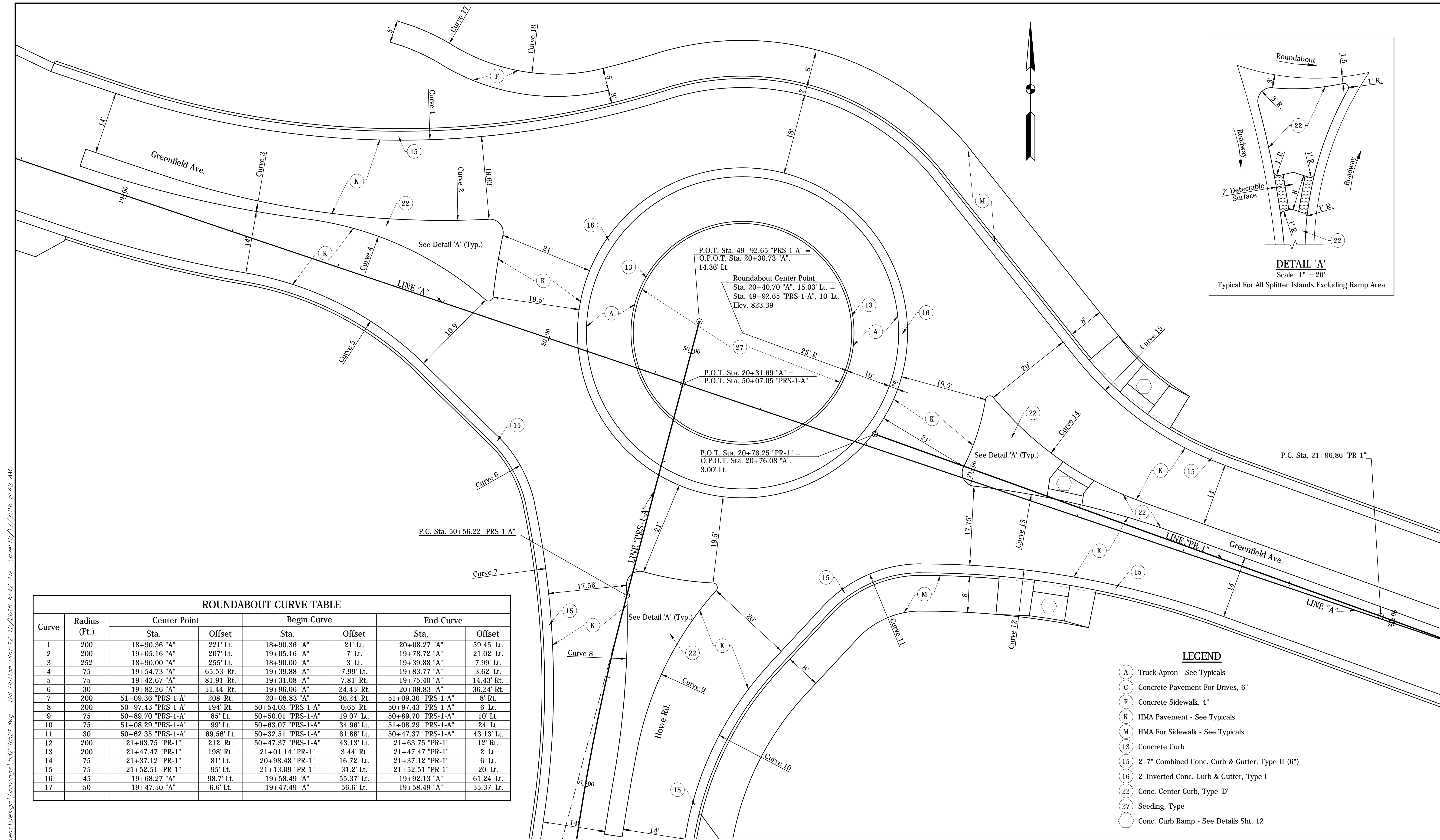
5827  
 BPS NO.

H:\56271\ProDevelopment\Design Drawings\5627R10.dwg Bill Hutton Plot:12/9/2016 11:34 AM Sows:10/28/2016 6:16 AM



F97CA 98898 :CF 50DFCJ5M				89G= B 98: B99F 85H9				-B8-5B5 89D5FHA 9BH'C: HF 5BGDCF H5H-CB				<CF-NCBH5@G75@9 %1 85H J9FH-75@G75@9 %1 )H G FJ9M6CC? ' ) 7CBHF 57H F' )&*				6F-B: 9: @9 89G= B5HCB %1 )H G< 99H % DFC-97H %1 )&*			
89G= B98: ?@K 7<97798: 579				8F5K B: 69< 7<97798: ?@K				D@5B / 'DFC: =@9 @B9 "H' 15" 89H9BH-CB' 5F 95				G< 99H % DFC-97H %1 )&*							

H: 156271 Pro:Development\Design Drawings 156279521.dwg Bill Hutton Plot:12/12/2016 6:42 AM Soves:12/12/2016 6:42 AM



**ROUNDBOUT CURVE TABLE**

Curve	Radius (Ft.)	Center Point		Begin Curve		End Curve	
		Sta.	Offset	Sta.	Offset	Sta.	Offset
1	200	18+90.36 "A"	221' Lt.	18+90.36 "A"	21' Lt.	20+08.27 "A"	59.45' Lt.
2	200	19+05.16 "A"	207' Lt.	19+05.16 "A"	7' Lt.	19+78.72 "A"	21.02' Lt.
3	252	18+90.00 "A"	255' Lt.	18+90.00 "A"	3' Lt.	19+39.88 "A"	7.99' Lt.
4	75	19+54.73 "A"	65.53' Rt.	19+39.88 "A"	7.99' Lt.	19+83.77 "A"	3.62' Lt.
5	75	19+42.67 "A"	81.91' Rt.	19+31.08 "A"	7.81' Rt.	19+75.40 "A"	14.43' Rt.
6	30	19+82.26 "A"	51.44' Rt.	19+96.06 "A"	24.45' Rt.	20+08.83 "A"	36.24' Rt.
7	200	51+09.36 "PRS-1-A"	208' Rt.	20+08.83 "A"	36.24' Rt.	51+09.36 "PRS-1-A"	8' Rt.
8	200	50+97.43 "PRS-1-A"	194' Rt.	50+54.03 "PRS-1-A"	0.65' Rt.	50+97.43 "PRS-1-A"	6' Lt.
9	75	50+89.70 "PRS-1-A"	85' Lt.	50+50.01 "PRS-1-A"	19.07' Lt.	50+89.70 "PRS-1-A"	10' Lt.
10	75	51+08.29 "PRS-1-A"	99' Lt.	50+63.07 "PRS-1-A"	34.96' Lt.	51+08.29 "PRS-1-A"	24' Lt.
11	30	50+62.35 "PRS-1-A"	69.56' Lt.	50+32.51 "PRS-1-A"	61.88' Lt.	50+47.37 "PRS-1-A"	43.13' Lt.
12	200	21+63.75 "PR-1"	212' Rt.	50+47.37 "PRS-1-A"	43.13' Lt.	21+63.75 "PR-1"	12' Rt.
13	200	21+47.47 "PR-1"	198' Rt.	21+01.14 "PR-1"	3.44' Rt.	21+47.47 "PR-1"	2' Lt.
14	75	21+37.12 "PR-1"	81' Lt.	20+98.48 "PR-1"	16.72' Lt.	21+37.12 "PR-1"	6' Lt.
15	75	21+52.51 "PR-1"	95' Lt.	21+13.09 "PR-1"	31.2' Lt.	21+52.51 "PR-1"	20' Lt.
16	45	19+68.27 "A"	98.7' Lt.	19+58.49 "A"	55.37' Lt.	19+92.13 "A"	61.24' Lt.
17	50	19+47.50 "A"	6.6' Lt.	19+47.49 "A"	56.6' Lt.	19+58.49 "A"	55.37' Lt.

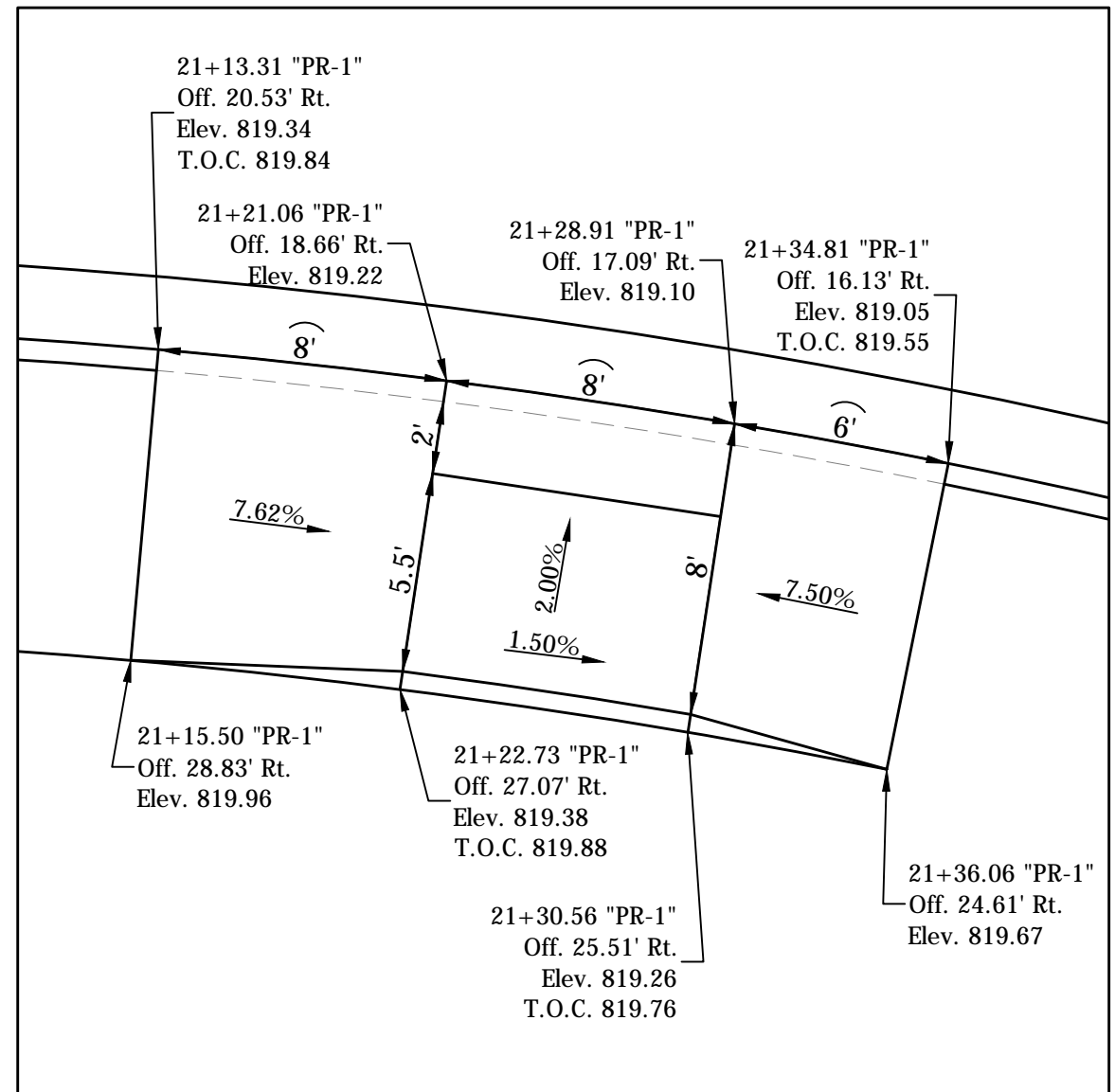
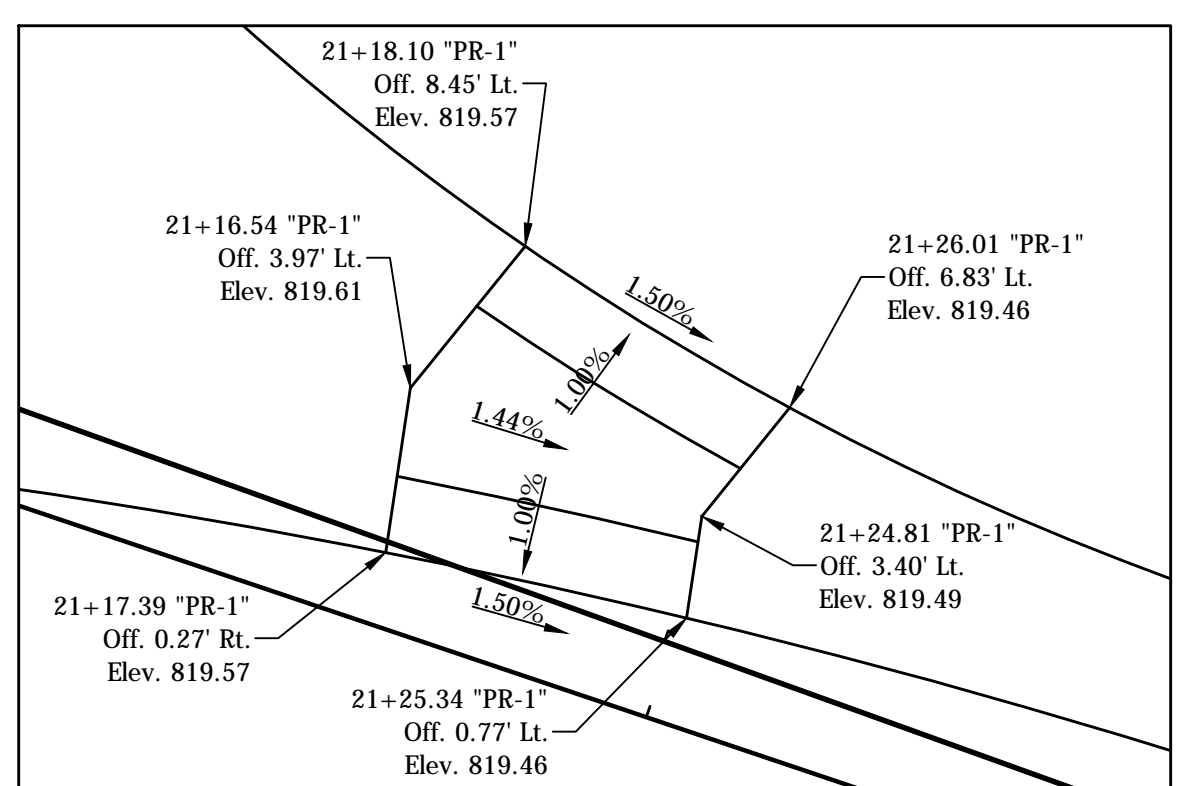
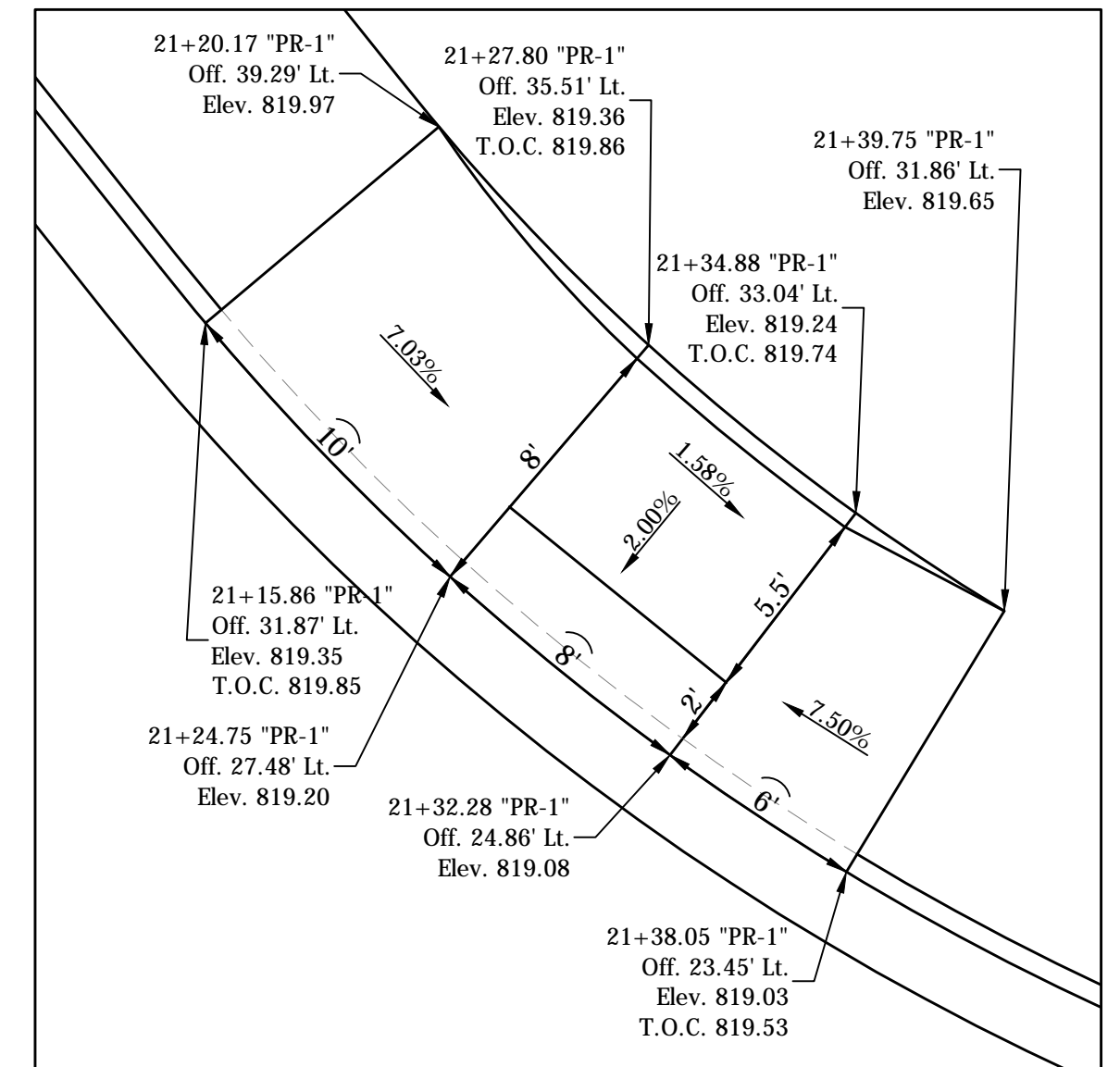
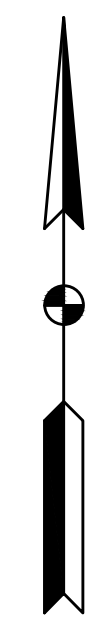
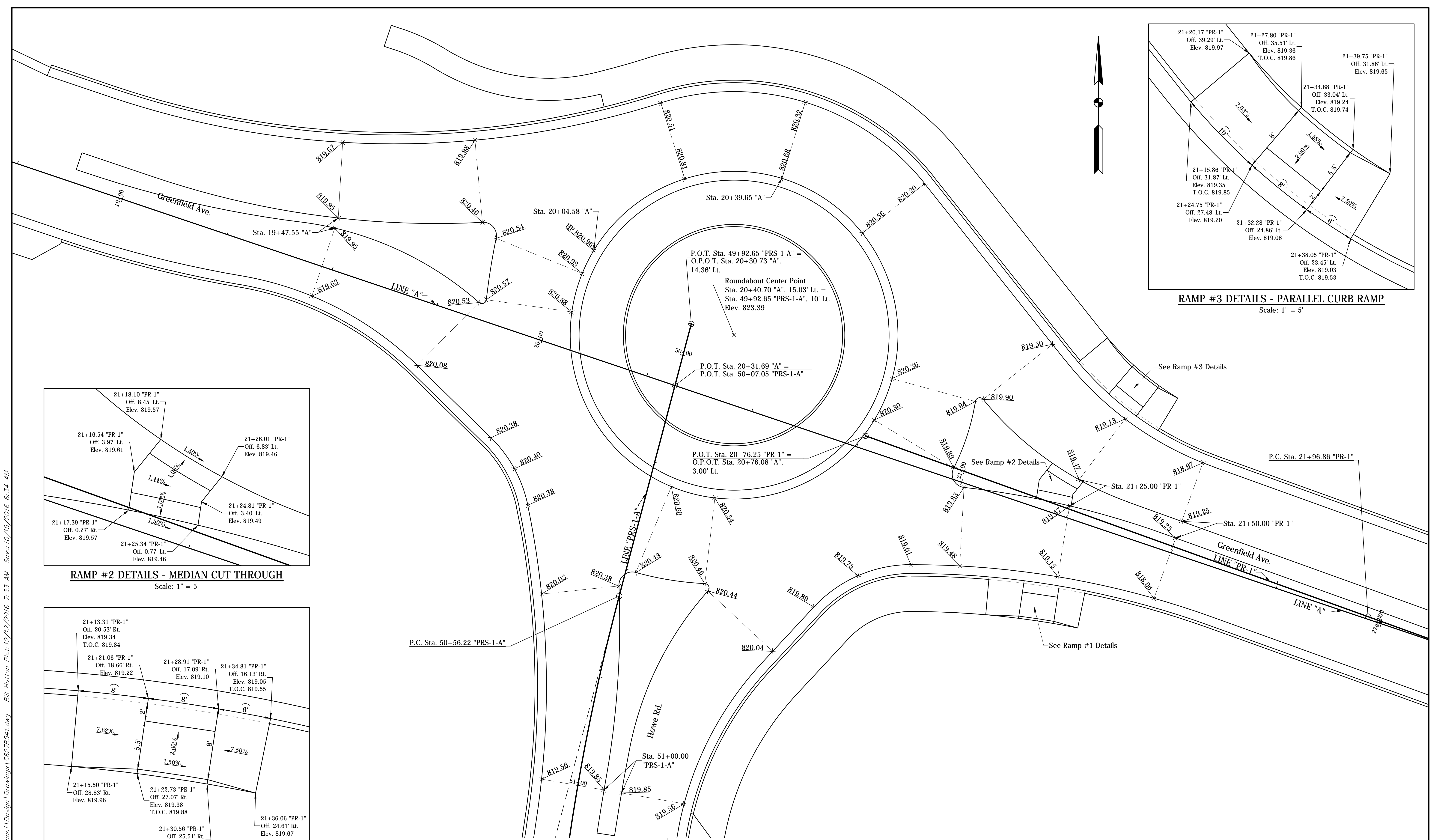
- LEGEND**
- (A) Truck Apron - See Typical
  - (C) Concrete Pavement For Drives, 6"
  - (F) Concrete Sidewalk, 4"
  - (K) HMA Pavement - See Typical
  - (M) HMA For Sidewalk - See Typical
  - (13) Concrete Curb
  - (15) 2'-7" Combined Conc. Curb & Gutter, Type II (6")
  - (16) 2' Inverted Conc. Curb & Gutter, Type I
  - (22) Conc. Center Curb, Type 'D'
  - (27) Seeding, Type
  - (Hexagon) Conc. Curb Ramp - See Details Sht. 12

<p>RECOMMENDED FOR APPROVAL:</p> <p style="text-align: center;">DESIGN ENGINEER _____ DATE _____</p> <p>DESIGNED: KIW DRAWN: BEH</p> <p>CHECKED: ACE CHECKED: KIW</p>	<p><b>INDIANA</b> DEPARTMENT OF TRANSPORTATION</p> <p><b>ROUNDBOUT CONSTRUCTION DETAILS</b> GREENFIELD AVE. @ HOWE RD.</p>	<p>HORIZONTAL SCALE 1" = 10'</p> <p>VERTICAL SCALE 1" = 10'</p> <p>SURVEY BOOK 356</p> <p>CONTRACT R-38246</p>	<p>BRIDGE FILE</p> <p>DESIGNATION 1401716</p> <p>SHEET 11 OF</p> <p>PROJECT 1401716</p>
---	--	--	---

BFS NO. 5827

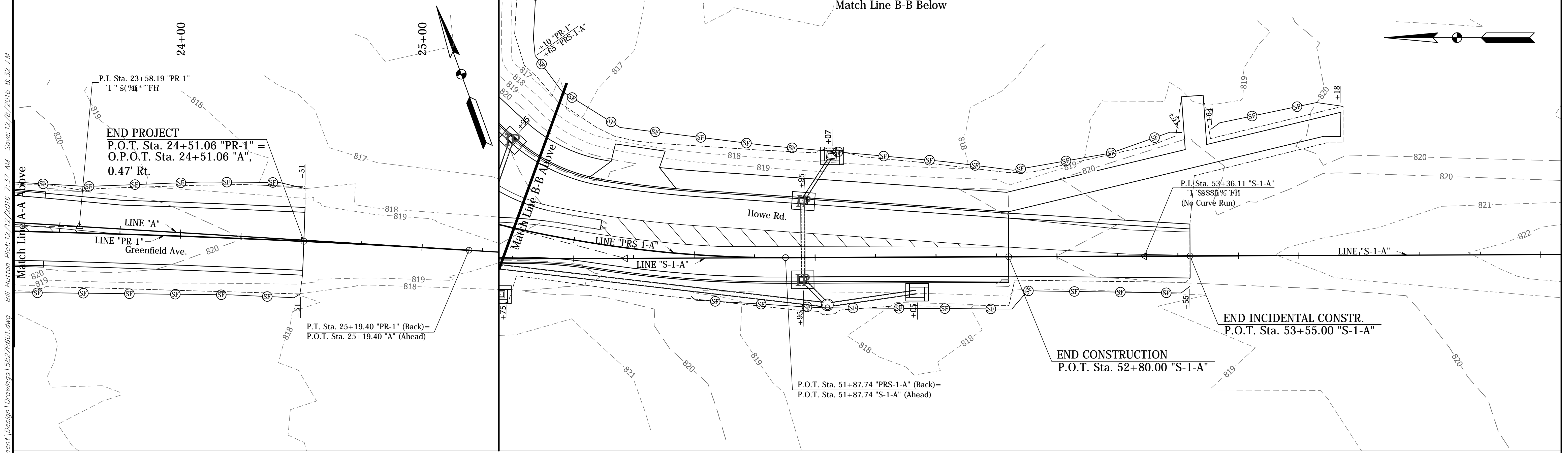
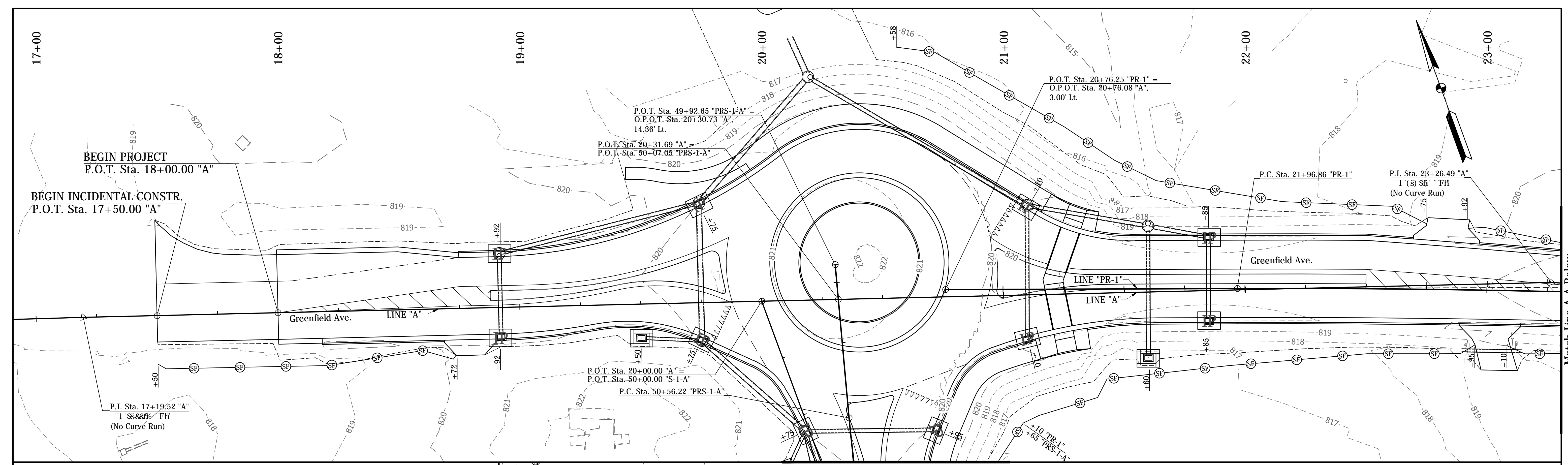


H:\56271\ProDevelopment\Design Drawings\56279541.dwg Bill Hutton Plot:12/12/2016 7:33 AM Soves:10/19/2016 8:34 AM




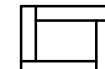
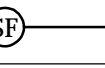
RECOMMENDED FOR APPROVAL: _____		DESIGN ENGINEER _____ DATE _____		INDIANA DEPARTMENT OF TRANSPORTATION		HORIZONTAL SCALE		BRIDGE FILE	
DESIGNED: KIW		DRAWN: BEH				1" = 10'		DESIGNATION	
CHECKED: ACE		CHECKED: KIW		SPOT ELEVATION DETAIL & CURB RAMP DETAILS		1" = 10'		1401716	
						SURVEY BOOK		SHEET	
				356		12 OF			
				CONTRACT		PROJECT			
				R-38246		1401716			

BFS NO. 5827



H:\56271\ProDevelopment\Design Drawings\56276601.dwg Bill Hutton Plot:12/12/2016 7:37 AM, Sves:12/B/2016 8:32 AM

**LEGEND**

	CURB INLET PROTECTION
	DROP INLET PROTECTION
	PERIMETER PROTECTION (SILT FENCE)

RECOMMENDED FOR APPROVAL:	DESIGN ENGINEER	DATE
DESIGNED:	KLW	DRAWN: BEH
CHECKED:	ACE	CHECKED: KLW

**INDIANA  
DEPARTMENT OF TRANSPORTATION**

**EROSION CONTROL PLAN  
GREENFIELD AVE. & HOWE RD.**

HORIZONTAL SCALE 1" = 20'	BRIDGE FILE
VERTICAL SCALE 1" = 20'	DESIGNATION 1401716
SURVEY BOOK 356	SHEET 13 OF
CONTRACT R-38246	PROJECT 1401716

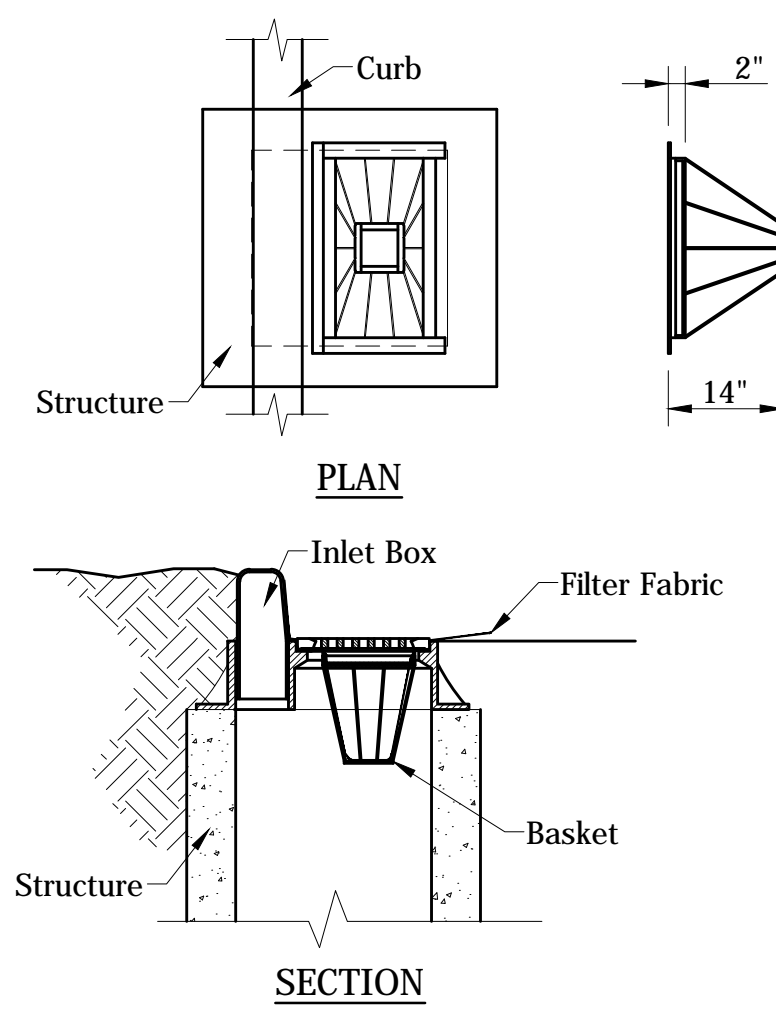
Match Line A-A Below

Match Line B-B Below

Match Line A-A Above

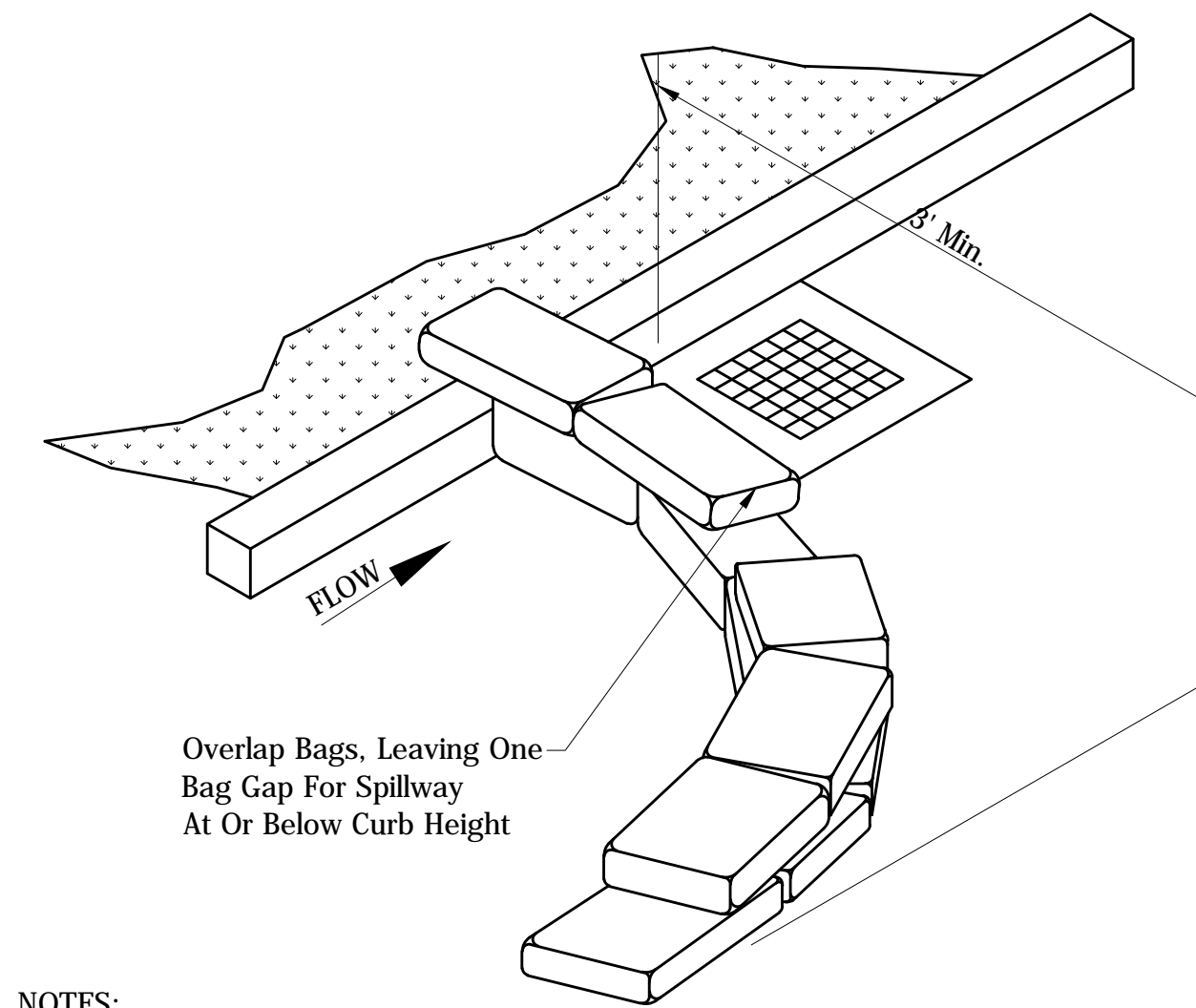
Match Line B-B Above

BFS NO. 5827



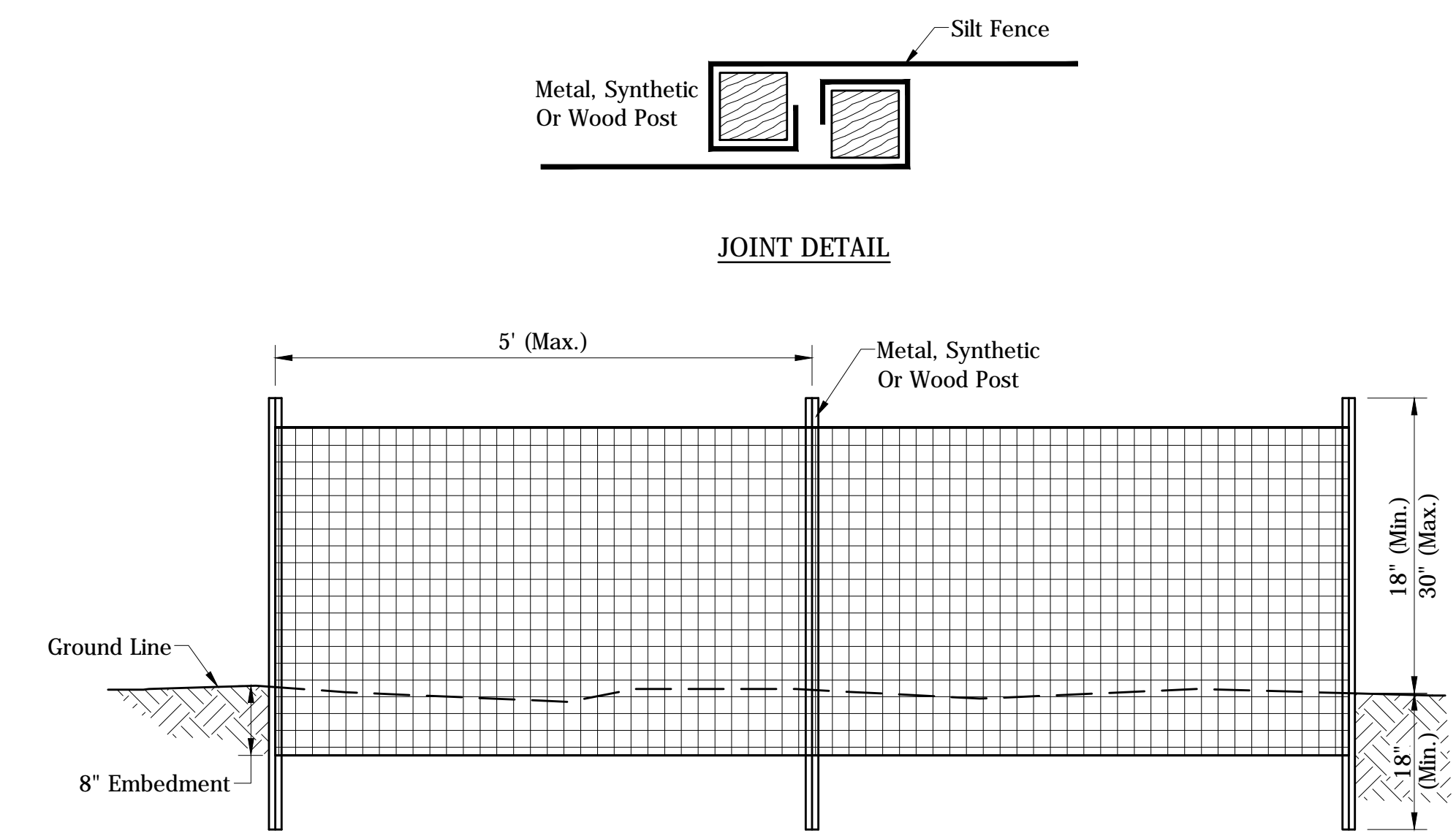
**NOTES:**  
**Installation:**  
 Install Basket Curb Inlet Protection As Soon As Inlet Boxes Are Installed (New Development) Or Prior To Land Disturbing Activities (Existing Development).  
 If Necessary, Adapt Basket Dimensions To Fit Inlet Box Dimensions.  
 Remove The Grate And Install The Frame Into The Grate Opening. Cut And Install Geotextile Fabric According To The Manufacturer's Recommendations. Replace The Grate.  
**Maintenance:**  
 Inspect Daily And After Each Storm And Remove Sediment. Replace Or Clean Geotextile Fabric As Needed. Remove Tracked On Sediment From The Street (But Not By Flushing With Water) To Reduce The Sediment Load On This Curb Inlet Practice.

**BASKET CURB INLET PROTECTION DETAIL**  
 NOT TO SCALE



**NOTES:**  
**Installation:**  
 Fill Bags Approximately Half Full With Washed Aggregate.  
 Place Bags In A Row Curving From The Curb, And Away From The Inlet Up-Slope From The Inlet.  
 Overlap The Barrier Onto The Curb, Extending It A Minimum Of 3 Feet Into The Street.  
**Maintenance:**  
 Inspect Daily And After Each Storm Event For Damage And Make Needed Repairs Immediately.  
 Inspect For Damage By Vehicular Traffic And Repair As Needed.  
 Remove Sediment (But Not By Flushing) When It Reaches Half The Height Of The Barrier.

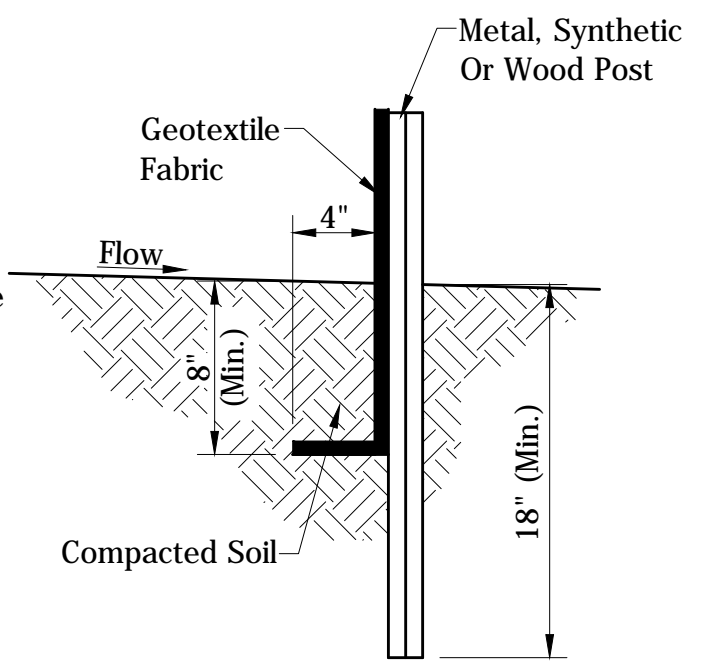
**STONE BAG INLET SEDIMENT DETAIL**  
 NOT TO SCALE



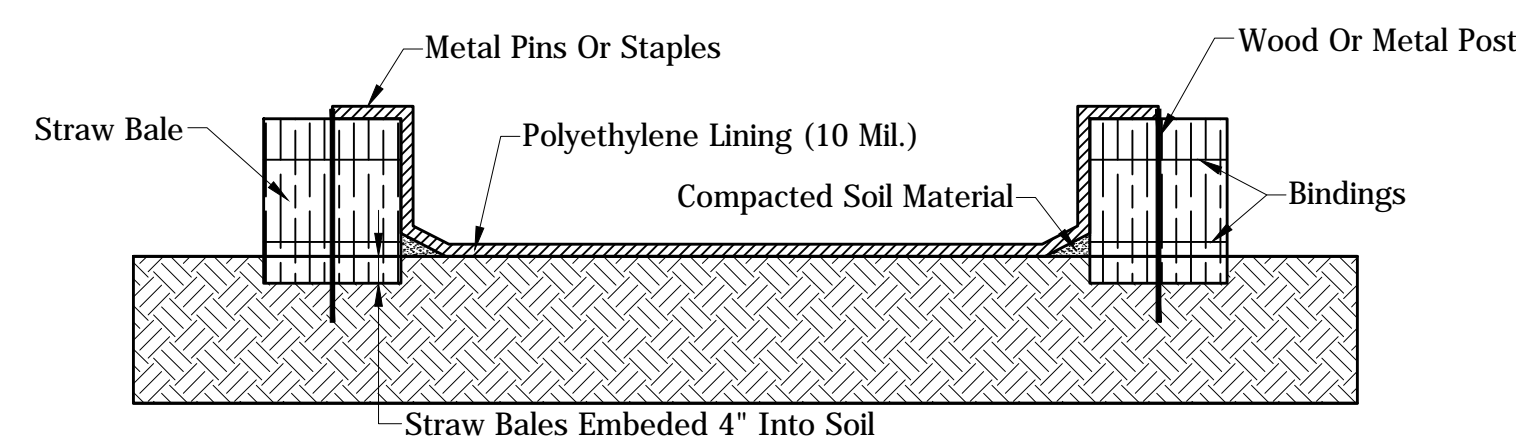
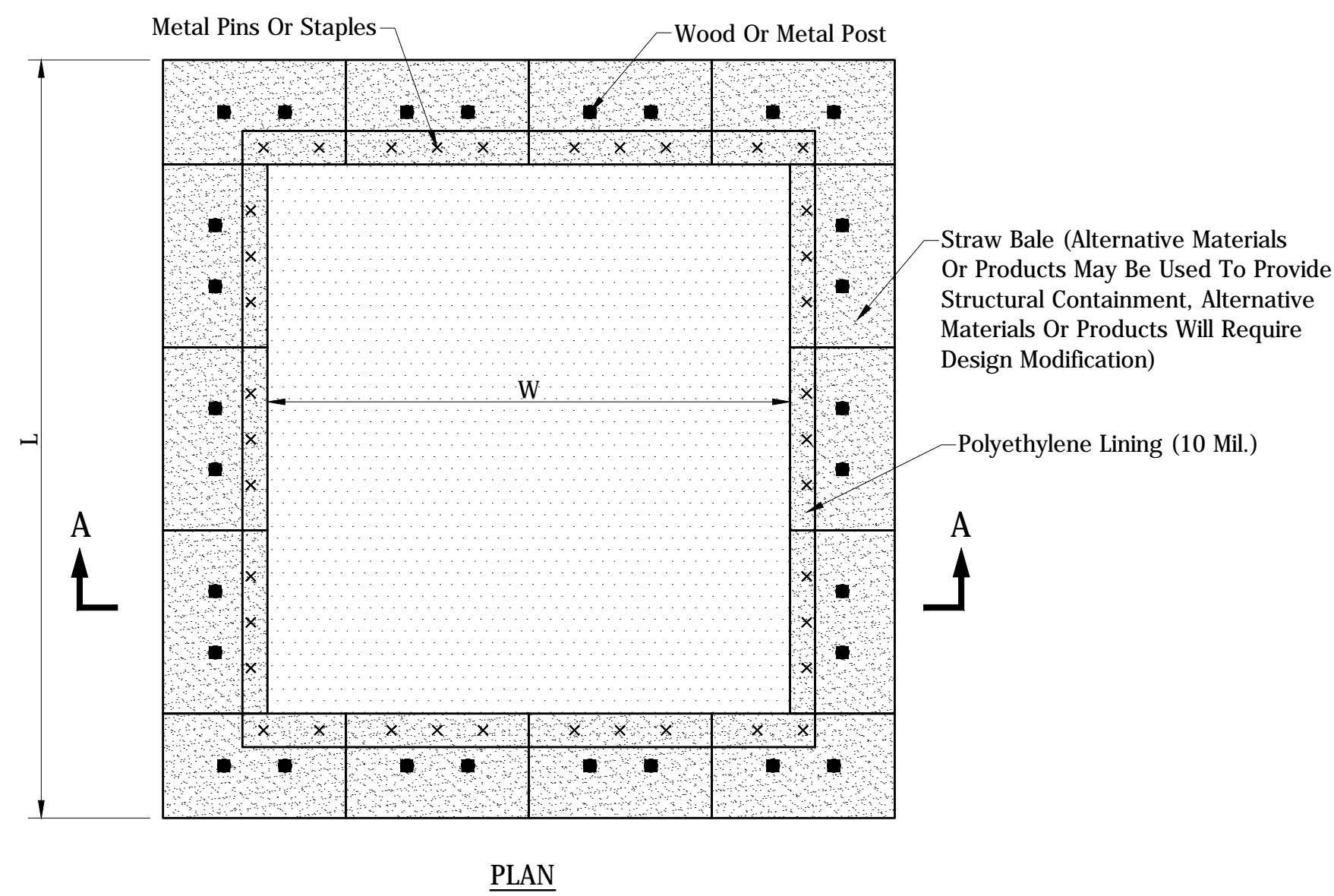
**NOTES:**  
**Installation:**  
 Silt Fence Is Not Recommended For Use As A Diversion And Should Not Be Used Across A Stream, Channel, Ditch, Swale, Or Anywhere That Concentrated Flow Is Anticipated.  
 Lay Out The Location Of The Fence So That It Is Parallel To The Contour Of The Slope And At Least 10 Feet Beyond The Toe Of The Slope To Provide A Sediment Storage Area. Turn The Ends Of The Fence Up Slope Such That The Point Of Contact Between The Ground And The Bottom Of The Fence End Terminates At A Higher Elevation Than The Top Of The Fence At Its Lowest Point

Along The Entire Fence Line, Dig An 8 Inch Deep Flat Bottomed Or V-Shaped Trench. Place Fence According To Manufacturer's Recommendations.  
**Maintenance:**  
 Inspect The Silt Fence Weekly And After Each Storm Event.  
 If Fence Fabric Tears, Starts To Decompose, Or In Any Way Becomes Ineffective, Replace The Affected Portion Immediately.  
 Remove Deposited Sediment When It Reaches Half The Height Of The Fence At Its Lowest Point Or Is Causing The Fabric To Bulge.  
 Take Care To Avoid Undermining The Fence During Clean Out.  
 After The Contributing Drainage Area Has Been Stabilized, Remove The Fence And Sediment Deposits, Bring The Disturbed Area To Grade, And Stabilize.

**SILT FENCE (SEDIMENT FENCE) DETAIL**  
 NOT TO SCALE



**TRENCH DETAIL**



**CONCRETE WASHOUT DETAIL**  
 NOT TO SCALE

RECOMMENDED FOR APPROVAL: _____ DESIGN ENGINEER DATE DESIGNED: K LW DRAWN: BEH CHECKED: ACE CHECKED: K LW	INDIANA DEPARTMENT OF TRANSPORTATION : EROSION CONTROL DETAILS	HORIZONTAL SCALE	BRIDGE FILE
		NONE	DESIGNATION
		VERTICAL SCALE	1401716
		NONE	
		SURVEY BOOK	SHEET
		356	14 OF
		CONTRACT	PROJECT
		R-38246	1401716

H: 156271 Pro-Development\Design Drawings 156276605.dwg Bill Hutten Plot:12/12/2016 7:38 AM Sves:10/19/2016 8:40 AM

BFS NO. 5827

**EROSION CONTROL NOTES**

**GENERAL:**

Take Measures To Control Erosion And Sedimentation To Assure That Sediment Is Not Transported From The Site By Storm Events. Practices Such As Silt Traps Or Filters Shall Be Installed Prior To Land Disturbing Activities. New Drainage Swales Shall Be Seeded And/Or Sodded, Or Other Protective Practices Applied, Immediately Following Construction. All Practices Shall Be Maintained To Remove Sediment From Runoff Leaving The Site As Long As Unstabilized Soil Conditions Exist.

After Land Disturbing Activities Cease And The Soil Is Stabilized, Temporary Erosion Control Measures May Be Eliminated If Their Purpose Has Been Fulfilled. Any Disturbed Soil Resulting From Removal Of Such Practices Shall Be Stabilized By Approved Methods.

Dispose Properly All Waste And Unused Building Materials Including, But Not Limited To, Garbage, Debris, Cleaning Wastes, Water, Toxic Materials, And Hazardous Substances. Do Not Allow Substances To Be Carried By Runoff Into A Receiving Channel Or Storm Sewer System.

Clean Public Or Private Roadways Daily And After Major Storms Using Acceptable Methods To Remove Any Accumulated Sediment. The Developer's Contractors Are Responsible For Supervision Of The Construction Activity Within The Development And Shall Take All Necessary Actions To Remove Sediment From The Streets.

For Construction Sequence, Maintenance, And Other Soil Erosion Requirements, See Specifications For Site Clearing, Slope Protection, Erosion Control, Landscaping, And Seeding.

Erosion And Sediment Control Practices Must Adhere To, Or Exceed Those Shown On The Erosion Control Plan. (And Rule 5 327 IAC 15-5) And Shall Be In Accordance With The Indiana Storm Water Quality Manual, Indiana Department Of Environmental Management.

**SURFACE STABILIZATION:**

Cut Slopes Which Are To Be Topsoiled Should Be Scarified To A Minimum Depth Of 4 Inches Prior To Placement Of Topsoil. Install Erosion Control Blankets On All Slopes Of 3 (Horizontal) To 1 (Vertical).

Stabilize All Disturbed Ground Left Inactive For Fifteen Or More Days By Seeding, Sodding, Mulching, Or By Other Equivalent Erosion Control Practices. See The Landscape Plan For Permanent Ground Cover Requirements Adjacent To The Building And Parking Areas.

**TEMPORARY GRAVEL CONSTRUCTION ENTRANCE/EXIT PAD:**

Construct The Temporary Gravel Drive Using 2-3 Inches INDOT CA No. 53 Washed Stone Over A Stable Foundation, 6 Inches Minimum Thickness. Geotextile Fabric May Be Used Under Wet Conditions Or For Soils Within A High Seasonal Water Table To Provide Greater Bearing Strength. Grade For Positive Drainage.

Inspect The Entrance Pad Area Weekly And After Storm Events Or Heavy Use. Reshape The Pad As Needed For Drainage And Runoff Control. Top Dress Pad With Clean Stone.

**SODDING:**

Do Not Install Sod On Hot, Dry Soil, Frozen Soil, Compacted Clay, Loose Sand Or Gravel, Or Pesticide Treated Soil. Ideal Sodding Time Is May 1-June 1, Or September 1-October 20, Although It Can Be Installed 5g9UFm5gAUFW% z-Z5j UUVY 5bXfBa dYfUH fYg 5fY 5Vcj Y\* 8s: zCf-4 bY%GydhNa VYf%-Z-4f] UHX

Install Sod After Other Erosion Control Practices Have Been Completed. Break Up Compacted Soils Sufficiently To Create A Favorable Rooting Depth Of 6-8 Inches, Using A Chisel Plow, Disk, Harrow, Or Rake.

Apply Topsoil If The Site Is Otherwise Unsuitable For Establishing Vegetation. Shape, Smooth, And Firm The Soil Surface.

Have The Soil In The Sod Bed Tested To Determine Its pH And Nutrient Level. If The pH Is Too Acidic For The Grass Sod To Be Installed, Apply Lime According To Test Results Or At The Rate Recommended By The Sod Supplier.

Fertilize As Recommended By The Soil Test. If Testing Was Not Done, Consider Applying 400-600 Lbs./Acre Of 12-12-12 Analysis Fertilizer, Or Equivalent Fertilizer, As Recommended By The Soil Test. Work The Fertilizer Into The Soil To 2-4 Inches Deep.

**TREE CONSERVATION/PROTECTION:**

Protect Trees From Construction Equipment By Fencing Off An Area Equivalent To The Tree's Crown With Temporary Construction Safety Fence. If A Fence Cannot Be Erected, Cushion The Rooting Area With 6 Inches Of Wood Chips, Or Wood Or Brick Paths.

Create Traffic Patterns Such As To Keep Soil Compaction To A Minimum. Store Supplies And Equipment Away From Protected Tree Areas. Aerate Soil Where Compaction Has Been Excessive.

When Clearing Areas Adjacent To Protected Trees, Use Equipment Such As A Brush Cutter Or Rotary Ax, Or Cut By Hand. Where Root Areas Must Be Graded, Cut Large Roots Instead Of Tearing Them With Equipment.

**EROSION CONTROL NOTES (Con't)**

Minimize Changes In The Drainage Pattern. Avoid Putting Fill Over The Root System.

Prune Low Hanging Limbs That Could Otherwise Be Broken Off By Equipment.

Repair Wounds Simply By Removing Damaged Bark And Wood Tissue (Do Not Use Tree Paint).

**EROSION CONTROL BLANKETS:**

Use Machine Produced Mat Of Straw Fiber Matrix Or Curled Wood Excelsior Of 80 Percent, 6 Inch Or Longer Fiber Length.

Evenly Distribute Fibers Over Entire Area Of Blanket To Provide Consistent Thickness.

Provide Blanket With Top Side Covered With Biodegradable Extruded Plastic Mesh.

Treat Blankets To Impart Smolder Resistance Without Use Of Chemical Additives.

Provide "Curlex Blankets" By American Excelsior Company, Or "S150" By North American Green, Or Accepted Substitute.

**EROSION CONTROL BLANKET STAPLES:**

Use Minimum 0.091 Inch Diameter Steel Wire "U" Shape With Legs 6 Inches In Length With 1 Inch Crown.

**SEEDING:**

The Following Table Is For General Seeding Information Only. Consult The Indiana Storm Water Quality Manual For Recommendations Relating To Steep Banks And Cuts, High Maintenance Areas, And Channels And Areas Of Concentrated Flow.

**SEEDS:**

- 40 Percent Kentucky Bluegrass
- 40 Percent Creeping Red Fescue
- 20 Percent Annual Rye Grass

**FERTILIZER:**

Commercial Fertilizer (12-12-12)

**STRAW:**

Clean And Free Of Weed Seeds

Spread Fertilizer Uniformly Over Finish Graded Surfaces At A Rate Of 20 Pounds Per 1,000 Square Feet. Thoroughly Disk, Harrow, Or Rake Fertilizer Into Soil To Depth Not Less Than 2 Inches.

Distribute Seed Mix Same Day As Fertilizer Is Applied. Spread Evenly At A Rate Of 3 Pounds Per 1,000 Square Feet. Rake Lightly And Compact Areas With 100 Pound Roller.

Cover Areas With Straw Evenly Spread At A Rate Of 2 Tons Per Acre Immediately After Seeding. Water Areas With Fine Spray. Do Not Flood Or Create Washes. Protect Seeded Areas From Erosion.

Continue Watering Of These Areas On A Daily Basis For The Remainder Of The Construction Period.

Hold Sloped Areas Steeper Than 2 (Horizontal) To 1 (Vertical) With Wire Mesh Or Stakes And Wire.

	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC
						Temporary Seeding Dates						
Wheat Or Rye												
Oats												
Annual Rye Grass												
						Permanent Seeding Dates						
Non-Irrigated*												
Irrigated												
Dormant Seeding**												

- ▨ Irrigation Required
- \* Seeding Dates May Be Extended 5 Days If Mulch Applied And Planted Late Summer
- \*\* Increase Seeding Rate By 50%

**NOTES:**

If Construction Activities Take Place During The Months Of November Through February, Use Dormant Seeding Practices In Place Of Temporary And Permanent Seeding Practices.

See Chapter 7 Of The Indiana Storm Water Quality Manual, For Additional Seeding Recommendations.

Potential Storm Water Pollutants Material Handling and Spill Prevention				
Trade Name /Material	Source	Chemical/Physical Description	Storm Water Pollutants	Remedial Action
Fertilizer	Landscaping Activities	Liquid or Solid Grains	Nitrogen, Phosphorus	(1), (2), (3)
Cleaning Solvents	Normal Business Operation	Colorless, Blue Or Yellow-Green Liquid	Perchloroethylene, Methylene Chloride, Trichloroethylene, Petroleum Distillates	Seal Drains & Inlets w/Plastic And Or Tape And Collect Excess, (1), (2), (3), (4)
Asphalt	Site Construction	Black Solid	Oil, Petroleum Distillates	(1), (2) Due To Contamination Of Runoff Before Curing Is Complete
Concrete	Bridge Construction	White Solid	Limestone, Sand	Concrete Washout Areas Shall Be Utilized & Concrete Disposed Of Properly Once Hardened (2).
Paints	Roadway Striping	Various Colored Liquids	Metal Oxides, Stoddard Solvent, Talc, Calcium Carbonate, Arsenic	Care Should Be Taken To Minimize Overspray (1), (2), (3), (4)
Curing Compounds	Site Construction	Creamy White Liquid	Naphtha	(1), (2), (3), (4)
Wastewater From Constr. Equipment Washing	Construction Equipment	Water	Soil, Oil, Grease, Solids	Equipment Washing Shall Be Executed In A Location Which Does Not Cause Wastewater To Drain Directly To Storm Sewers Or Ditches (i.e. Flat Vegetated Area) (2)
Hydraulic Oil/Fluids	Construction Equipment, Cars	Brown Oily Petroleum Hydrocarbon	Mineral Oil	Storm Structures Incorporate A Hooded Outlet Preventing Floatables From Exiting Site, (3), (4)
Gasoline	On Site Storage Tanks, Cars, Construction Equipment, Fueling Operations	Colorless, Pale Brown Or Pink Petroleum Hydrocarbon	Benzene, Ethyl Benzene, Toluene, Xylene, MTBE	Storage Tanks Shall Have Emergency Storage Capacity Below Tank In Case Of Rupture. 3'x3'x6" Spill Pans Shall Be Used During Fueling, (3), (4)
Diesel Fuel	On Site Storage Tanks, Cars, Construction Equipment, Fueling Operations	Clear, Blue-Green To Yellow Liquid	Bpetroleum Distillate, Oil And Grease, Naphthalene, Xylenes	Storage tanks shall have emergency storage capacity below tank in case of rupture. 3'x3'x6" spill pans shall be used during fueling, (3), (4)
Kerosene	Cleaning Operations, Heaters	Pale Yellow Liquid Petroleum Hydrocarbon	Coal Oil, Petroleum Distillates, Arsenic, Copper	3'x3'x6" Spill Pans Shall Be Used During Fueling Operations And Cleaning Of Equip. To Catch Excess, (1), (2), (3), (4)
Antifreeze Coolant	Construction Equipment, Cars	Clear Green/Yellow Liquid	Ethylene Glycol, Propylene Glycol, Heavy Metals (Copper, Lead, Zinc)	(1), (2), (3), (4)
Soil Erosion	Exposed Soil	Solid Particles	Soil Sediment	Erosion Control Measures (This Sht.)
Solid Waste Trash	Normal Business Operation	Trash, Debris, Refuse	Trash, Debris, Refuse	Trash Cans Shall Be Utilized On Site During And After Construction

This Table Was Provided For General Information Only To Supplement Information Used In The Rule 5 Permitting Process. The Contractor Is Responsible For Material Handling And Spill Mitigation Procedures.

**Notes:**

1. All Excess Materials Shall Be Collected And Disposed Of In Accordance With All Federal, State And Local Regulations.
2. Material Shall Not Be Applied Immediately Preceding, During Or Following Rainfall (When Applicable).
3. Spillage Should Be Cleaned Immediately By A Trained Individual And Disposed Of Per Note (2).
4. Store In Sealed Containers Appropriate For Specific Use.

H:\56271\Pro-Development\Design Drawings\56276605.dwg Bill Hutten Plot:12/12/2016 7:38 AM Save:10/19/2016 8:40 AM

RECOMMENDED FOR APPROVAL: _____ DESIGN ENGINEER DATE	INDIANA DEPARTMENT OF TRANSPORTATION		HORIZONTAL SCALE	BRIDGE FILE
			NONE	DESIGNATION
DESIGNED: KIW DRAWN: BEH	EROSION CONTROL NOTES		NONE	1401716
CHECKED: ACE CHECKED: KIW			SURVEY BOOK	SHEET
			356	15 OF
			CONTRACT	PROJECT
			R-38246	1401716

5827  
BFS NO.

**Rule 5 Checklist - Section A:  
Construction Plan Elements**

- Index Showing Locations Of Required Plan Elements  
See The Index Sheet.
- 11x17 Inch Plat With Building, Lots, Boundaries, Road Layout Names  
See Plat No. 1 Sheet.
- Narrative Describing Nature And Purpose Of Project  
The City Of Noblesville Proposes A Project Involving The Construction Of A Roundabout At The Existing T-Intersection Of Greenfield Avenue And Howe Road. The Purpose Of The Project Is To Address The Poor Level Of Service And Sight Distance And Improve The Overall Travel Conditions For The Motoring Public At The Intersection.
- Vicinity Map Showing Project Location  
See Title Sheet.
- Legal Description Of The Project Site  
@UHh XY. ( - sS%\$S BZ@cbl Ji XY. ) s) . fi S'K /H.YDfc^YW-g@WHX5ddfcl la UYn#6A]Y  
North Of The 146th Street And Howe Road Intersection And Approximately 1 Mile East Of The S.R. 27 And Greenfield Avenue Intersection; All Within Sections 8 And 17, Township 18 North, Range 5 East, On The U.S.G.S. Riverwood Quadrangle, In Noblesville Township, Hamilton County, Indiana.
- Location Of All Site Improvements  
Improvements Shall Be Contained Within The Construction Limits, As Shown On The Plan And Profile Sheets.
- Hydrologic Unit Code  
05120201070070
- Note Any State Or Federal Water Quality Permits  
An IDEM Rule 5 Erosion Control Permit Is Required For This Project.
- Specific Points Where Stormwater Discharge Will Leave The Site  
Stormwater Will Leave The Pipe Network At 51+00 Line "T-1-A" And Enter The Extended Dry Detention Basin Before Draining To Wheeler And Wheeler Legal Drain At The Northern Border Of The Project. See The Plan And Profile Sheets.
- Location And Name Of All Wetlands, Lakes And Water Courses On And Adjacent To The Site  
The Wheeler And Wheeler Legal Drain Is Located At The Northern Limits Of This Project. There Are No Known Wetlands Or Lakes Located Within The Project Limits.
- Identification Of All Receiving Waters  
Stormwater Will Discharge From The Proposed Pipe Network To The Dry Detention Basin The Empties To Wheeler And Wheeler Legal Drain.
- Identification Of Potential Discharges To Ground Water (Abandoned Well, Sinkholes, Etc.)  
No Potential Locations For Groundwater Infiltration Are Known To Exist For This Project..
- 100 Year Floodplains, Floodways, And Floodway Fringes  
See The Attached Flood Insurance Rate Map.
- Pre-Construction And Post Construction Estimate Of Peak Discharge (10 Year Storm Event)  

Location	Pre-Construction (10 yr.)	Post-Construction (10 yr.)
51+00 "T-1-A"	6.42 cfs	5.22 cfs
- Adjacent Land Use, Including Upstream Watershed  
The Land Use Within, And Adjacent To, The Project Limits Mostly Consists Of Residential And Agricultural Development.
- Construction Limits  
See The Plan And Profile Sheets For Construction Limits.
- Identification Of Existing Vegetative Cover  
The Project Is Located Mostly On Existing Pavement, Grass, And Woods.
- Soils Map Including Soil Descriptions And Limitations  

Br	Brookston Silty Clay Loam, 0 To 2% Slopes	31.2%
CrA	Crosby Silt Loam, Fine-Loamy Subsoil, 0 To 2% Slopes	68.8%

  
See The Attached Soils Map.
- Locations, Size And Dimensions Of Proposed Stormwater Systems (e.g. Pipes, Swales, And Channels)  
See The Plan And Profile Sheets And The Structure Data Table.
- Plans For Any Off Site Construction Activities Associated With This Project (Sewer/Water Tie-ins)  
There Are No Known Offsite Construction Activities Associated With This Project.
- Locations Of Proposed Soil Stockpiles And/or Borrow Disposal Areas  
The Contractor Shall Determine The Location Of Stockpiles, Borrow, And/Or Disposal Areas Used During Construction. The Determined Locations Shall Be Approved By INDOT. Proposed Borrow Or Disposal Sites Shall Be Identified By The Contractor Before The Material Is Excavated Or Disposed Of Within Or Outside The R/W In Accordance With Sections 203.08, 203.09, And 212. The Contractor Shall Comply With Section 108.04 Of The INDOT Standard Specifications And RSP 108-C-192D Storm Water, Erosion, And Sediment Control Inspection Report.
- Existing Site Topography At An Interval Appropriate To Indicate Drainage Patterns  
See The Plan And Profile Sheets, Erosion Control Sheets, And Cross Section Sheets For Existing Topography.
- Proposed Final Topography At An Interval Appropriate To Indicate Drainage Patterns  
Refer To The Plan And Profile Sheets And Cross Section Sheets For Final Topography.

**Rule 5 Checklist - Section B:  
Stormwater Pollution Prevention Plan-Construction Component**

- Description Of Potential Pollutant Sources Associated With Construction Activities.  
The Following Could Generate Potential Pollutants Associated With Construction Activities:
  - Fueling Of Vehicles
  - Leaking Equipment Or Vehicles
  - Material Storage
  - Site Demolition
  - Excavation Of Materials
  - Exposed Soils
  - Construction Waste And Litter
  - Sanitary Waste
  - Concrete Waste And Washout
  - Tracking Of Soils Offsite
 See The Potential Stormwater Pollutants And Spill Prevention Handling Table Located On The Erosion Control Notes.
- Sequence Describing Stormwater Quality Measure Implementation Relative To Land Disturbing Activities.  
Preconstruction:
  - Notify Project Owner
  - Contact The Indiana Underground Plant Protection Systems, Inc. To Verify The Location Of Any And All Underground Utilities.
  - Install Temporary Construction Entrances At All Access Points.
  - Exhibit Rule 5 Information At The Job Site. Contractor Shall Designate A Person Responsible For On-Site Inspections And For Providing This SWPPP On-Site.
  - Install Silt Fence And Drop Inlet Protection For Existing Inlets.
 Construction:
  - Establish Construction Entrances.
  - Contractor Shall Construct Concrete Washouts. Contractor Shall Coordinate Location Of Concrete Washouts With Owner And Engineer.
  - Install Erosion Control Measures As Each New Item Of The Project Is Installed As Required Which May Include But Is Not Limited To Drop Inlet Protection, Silt Fence, Rock Check Dams, Erosion Control Blankets, and Riprap.
  - Begin Mass Earthwork Operations.
  - Install Temporary Diversion Swales.
  - Install Staging Areas, Material Storage Areas, & Fueling Stations.
  - Temporary Seed Disturbed Areas If To Be Disturbed More Than 7 Days.
  - Begin Trenching For Storm Sewers.
  - Install Ditch Inlet Protection.
  - Riprap Storm Sewer Discharge Location.
  - Complete Subgrade Operations.
  - Install Storm Sewers.
  - Finish Grading.
  - Install Permanent Seeding.
- Stable Construction Entrance Locations And Specifications (At All Points Of Ingress And Egress)  
The Contractor Shall Utilize Existing Streets And Drives As Much As Possible For Construction Ingress And Egress. The Contractor Shall Keep Public Roads And Private Drives Clear And Remove All Dust, Dirt, And Debris As A Result Of Construction Activities. Temporary Construction Entrances Shall Meet The Requirements Of INDOT Standard Drawing E 205-TECP-01.
- Sediment Control Measures For Sheet Flow Areas  
Sediment Control In Areas Of Sheet Flow Shall Be Handled Via Silt Fence And Temporary And Permanent Seeding. See The Plan And Profile Sheets, The Erosion Control Sheets, The Erosion Control Details, The Erosion Control Notes, And INDOT Standard Drawing No. E 205-TECP-02.
- Sediment Control Measures For Concentrated Flow Areas  
Sediment Control In Areas Of Concentrated Flow Shall Be Handled Via Inlet Protections. See The Erosion Control Sheets, The Erosion Control Details, And INDOT Standard Drawing No. E 205-TECI-04.
- Storm Sewer Inlet Protection Measure Locations And Specifications  
Inlets Shall Be Protected From Sediment During Construction Using Temporary Erosion Control Inlet Bag Protection From The INDOT Standard Drawings. See The Erosion Control Sheets And INDOT Standard Drawing No. E 205-TECI-04.
- Runoff Control Measures (e.g. Diversions, Rock Check Dams, Slope Drains, Etc.)  
Runoff Will Be Controlled By Curb And Gutter, Inlets, And Permanent Seeding. The Runoff Will Be Routed Through A Dry Detention Basin Which Will Outlet To Wheeler And Wheeler Legal Drain. See The Plan And Profile Sheets.
- Stormwater Outlet Protection Specifications  
Stormwater Will Discharge To The Extended Dry Detention Basin, Which Was Sized Based On Outlet Rates From The Hamilton County Surveyor's Office And The Noblesville Stormwater Technical Standards Manual And Does Not Require Specific Outlet Protection. See The Plan And Profile Sheets.
- Grade Stabilization Structure Locations And Specifications.  
A Grade Stabilization Will Not Be Required For This Project.
- Location, Dimensions, Specifications, And Construction Details Of Each Stormwater Quality Measure.  
See The Plan And Profile Sheets, Erosion Control Sheets, Erosion Control Details Sheet, Erosion Control Notes Sheet, And The Applicable INDOT Standard Specifications And Drawings.
- Temporary Surface Stabilization Methods Appropriate For Each Season.  
Temporary Seeding Shall Be Implemented For All Disturbed Land Let Inactive For A Period Of 7 Days.
- Permanent Surface Stabilization Specifications.  
Permanent Seeding Shall Be Implemented For All Disturbed Land And Shall Occur Once Final Grading Has Been Completed. See The Plan And Profile Sheets And Erosion Control Details Sheet.

**Rule 5 Checklist - Section B: (Continued)**

- Material Handling And Spill Prevention Plan  
Vehicle And Equipment Maintenance: Onsite Vehicle And Equipment Maintenance Shall Only Be Used Where It Is Impractical To Send Vehicles And Equipment Offsite For Maintenance And Repair. For Onsite Maintenance, Locate Maintenance Area At Least Fifty (50) Feet From Storm Drains, Open Ditches, Or Bodies Of Water. Use Drip Pans And Absorbent Pads During Vehicle And Equipment Maintenance Work That Involves Fluids, Unless The Maintenance Work Is Performed Over An Impermeable Surface In A Designated Maintenance Area. Properly Dispose Of Used Oils, Fluids, Lubricants, And Spill Cleanup Materials. Do Not Place Used Oil In A Dumpster Or Pour Into A Storm Drain Or Watercourse. Inspect Onsite Vehicles And Equipment For Leaks Daily At The Startup, And Repair Immediately.
- Vehicle Fueling: Onsite Vehicle And Equipment Fueling Shall Only Be Used Where It Is Impractical To Send Vehicles And Equipment Offsite For Fueling. For Onsite Fueling, Locate Fueling Area At Least Fifty (50) Feet From Storm Drains, Open Ditches, Or Bodies Of Water. Use Drip Pans And Absorbent Pads During Fueling, Unless The Fueling Is Performed Over An Impermeable Surface In A Designated Fueling Area. Nozzles Used In Vehicle And Equipment Fueling Shall Be Equipped With An Automatic Shutoff To Control Drips. Do Not Place Used Oil In A Dumpster Or Pour Into A Storm Drain Or Watercourse. Fueling Operations Shall Not Be Left Unattended. Observe Federal, State, And Local Requirements For Any Stationary Above Ground Storage Tanks.
- Debris Collection: Litter And Debris Removal From Drainage Grates, Trash, Rocks, And Ditch Lines Shall Be A Priority To Prevent Clogging Of The Storm Drainage System. Remove Construction Debris And Waste From The Site Biweekly Or More Frequently As Needed. Store Construction Material Visible To The Public In An Orderly Manner. Prevent Stormwater From Contacting Solid Waste.
- Concrete Washout: Perform Washout Of Concrete Trucks Offsite Or In Designated Areas Only. For An Onsite Washout, Locate Washout Area At Least Fifty (50) Feet From Storm Drains, Open Ditches, Or Bodies Of Water. Do Not Allow Runoff From This Area By Constructing A Temporary Berm Or Holding Area Large Enough For Liquid And Solid Waste. Wash Out Waste Into The Designated Area Where The Concrete Can Set And Be Broken Up And Then Disposed Of Properly. Do Not Wash Out Concrete Trucks Into Storm Drains, Open Ditches, Streets, Or Streams. Do Not Allow Excess Concrete To Be Dumped Onsite, Except In Designated Areas.
- Alert Procedure For Spills: In The Event Of A Material Spill (Fuel, Oil, Fluids, Lubricants, Etc.), Barricade The Area To Keep Vehicles From Entering Or Leaving The Spill Zone. Notify The Indiana Department Of Environmental Management (IDEM), Office Of Emergency Response, By Calling The Appropriate Phone Number: Office 317-233-7745 Or Toll Free 800-424-88023. Also, The National Response Center Can Be Contacted At 800-424-8802. Provide The Following Information: Time Of Observation Of The Spill, Location Of The Spill, Identify The Material Spills, Probable Time And Source Of The Spill, Weather Conditions, Personnel At The Scene, And Action Initiated By Personnel. Notify The Local Fire Department And Police Department. Coordinate And Monitor Cleanup Until The Situation Has Been Stabilized And The Spill Has Been Eliminated.
- Monitoring And Maintenance Guidelines For Each Proposed Stormwater Quality Measure.  
The Contractor Shall Maintain All Water Quality Measures During Construction To Prevent Any Blockages From Accumulated Sediment. Monitoring Of The Protective Measures Shall Be Done On A Weekly Basis, And Again Within 24 Hours Of Every Half-Inch Rain Event. Maintenance Shall Include A Written Record Of Each Inspection By Filling Out The Storm Water, Erosion, And Sediment Control Inspection Report Included In INDOT RSP 108-C-192D. The Written Record Shall Be Made Available Upon Request.
- Temporary Construction Entrance:
  - Inspect Weekly, Within 24 Hours Of Every Half-Inch Rain Event, And After Heavy Use.
  - Reshape Pad As Needed.
  - Top Dress Pad As Needed.
  - Immediately Remove Any Mud And Sediment Tracked Or Washed Onto The Street Using Brushing Or Sweeping. Flush Area Only If Runoff Will Be Flowing Through A Sediment Trap.
  - Repair Any Damaged Pavement Immediately.
- Silt Fence:
  - Replace If Torn, Starts To Degrade, Or Becomes Ineffective In Any Way.
  - Remove Sediment When It Reaches Half Of The Fence Height, Taking Care Not To Undermine.
  - Remove Trash And Other Debris From Riser, Emergency Spillway, And Pool Area.
  - Clean Or Replace Aggregate Around The Riser If The Sediment Pool Does Not Dewater Within 48 To 72 Hours Following A Stormwater Runoff Event.
- Temporary Inlet Protection:
  - Inspect Daily And Following Each Storm Event.
  - Remove Accumulated Sediment As Needed To Maintain Drainage And To Prevent Large Flows From Displacing Sediment.
  - Add Aggregate As Needed To Maintain Design Height And Cross Section.
- Seeding:
  - Monitor Until It Reaches 70% Coverage.
  - Reseed As Needed.
  - Install Additional Erosion Control To Help Establish Cover.
- Concrete Washout:
  - Inspect Weekly, Within 24 Hours Of Every Half-Inch Rain Event, And After Heavy Use.
  - Repair Or Replace Leaks, Spills, And Tears As Needed.
  - Ensure Each Containment System Maintains Adequate Capacity.
- Check And Maintain Any Additional Erosion Control Measures As Needed.
- Erosion & Sediment Control Specifications For Individual Building Lots.  
N/A.

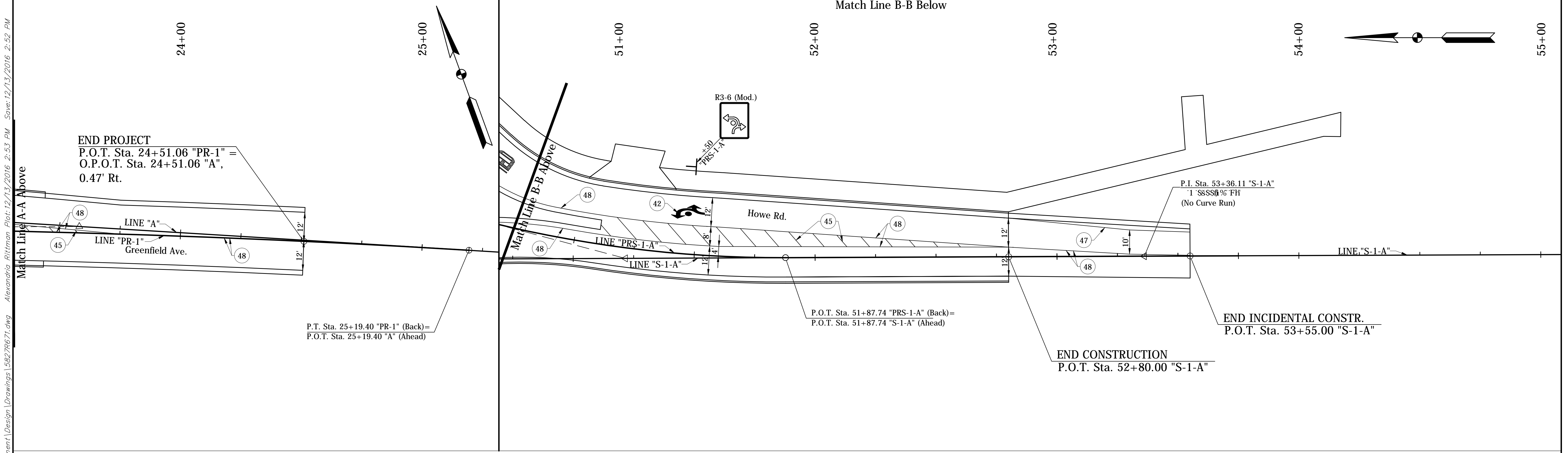
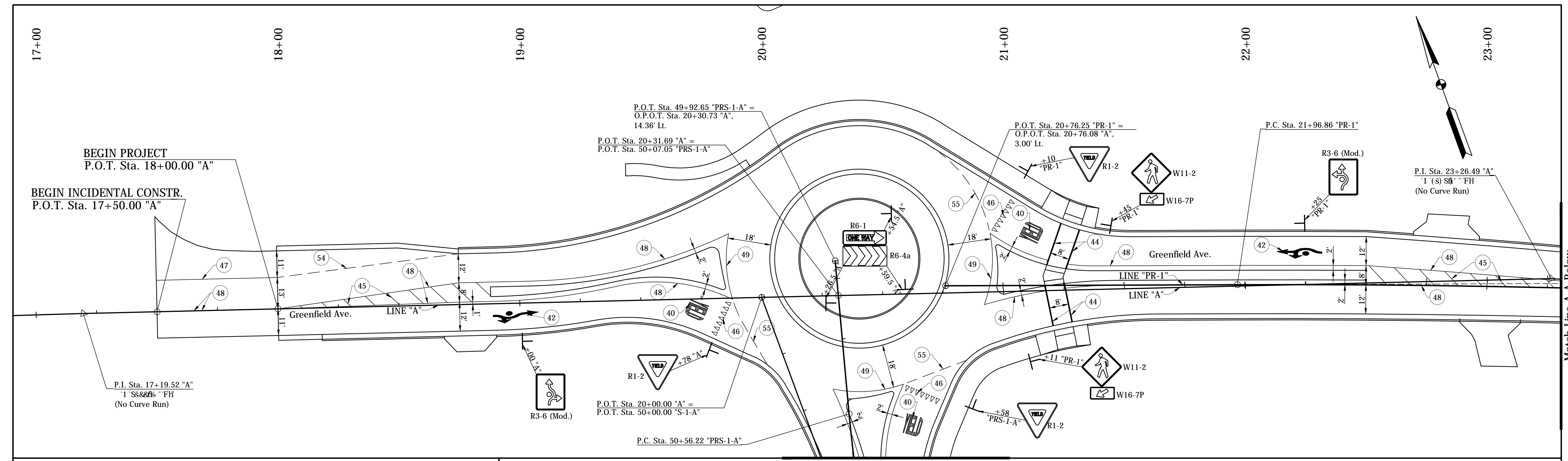
**Rule 5 Checklist - Section C:  
Stormwater Pollution Prevention Plan-Post Construction Component**

- Description Of Pollutants And Their Sources Associated With The Proposed Land Use.  
The Pollutants From The Proposed Land Use Shall Be The Same As The Pollutants From The Existing Land Use; Vehicular Traffic, Litter, And Their Associated Pollutants. See The Potential Storm Water Pollutants And Spill Prevention Handling Table Located On The Erosion Control Notes.
- Sequence Describing Stormwater Quality Measure Implementation.  
Typical Construction Sequence Schedule:
  - Install Water Quality BMPs Before Draining The Proposed Storm Network Into Wheeler And Wheeler Legal Drain.
  - All Disturbed Ground Shall Be Permanently Seeded Immediately After Final Grading Or When The Project Is Substantially Complete.
  - Silt Fence And Inlet Protections Shall Be Removed After Disturbed Soil Areas Have Been Stabilized.
- Description Of Proposed Post Construction Stormwater Quality Measures.  
All Disturbed, Non-Paved Areas Will Be Seeded. All On-Site Runoff Will Be Routed Through The Extended Dry Detention Basin.
- Location, Dimensions, Specifications, And Construction Details Of Each Stormwater Quality Measure.  
See The Erosion Control Sheets, The Erosion Control Details, The Erosion Control Notes, And The Applicable INDOT Standard Specifications And Drawings.
- Description Of Maintenance Guidelines For Post Construction Stormwater Quality Measures.  
The Contractor Shall Ensure That Revegetated Areas Become Fully Established And Shall Water And Reseed As Necessary. The Owner Shall Clean Up Trash And Shall Perform Maintenance On The Storm Sewer System At Regularly Scheduled Intervals. The Extended Dry Detention Basin Shall Be Maintained Per The Specifications In Chapter 7 Of The Noblesville Stormwater Technical Standards Manual.

H:\56271\Pro-Development\Design Drawings\56276605.dwg Bill Hutten Plot:12/12/2016 7:40 AM Save:10/19/2016 8:40 AM

RECOMMENDED FOR APPROVAL:	DESIGN ENGINEER	DATE	INDIANA DEPARTMENT OF TRANSPORTATION		HORIZONTAL SCALE	BRIDGE FILE
					NONE	DESIGNATION
DESIGNED:	KLW	DRAWN:	BEH	EROSION CONTROL, RULE 5 CHECKLIST	NONE	1401716
CHECKED:	ACE	CHECKED:	KLW		SURVEY BOOK	SHEET
					356	16
					CONTRACT	PROJECT
					R-38246	1401716

BIS NO. 5827



LEGEND			
40	Pavement Message Marking, Thermo., Word (Yield)	46	Transverse Markings, Thermo., Yield Triangle, White
42	Pavement Message Marking, Thermo., Fish Hook Arrow	47	Line, Thermo., Solid, White, 4"
44	Transverse Markings, Thermo., Crosswalk, White, 6"	48	Line, Thermo., Solid, Yellow, 4"
45	Line, Thermo., Solid, White, 8"	49	Line, Thermo., Solid, White, 8"
54	Line, Thermo., Skip, White, 4" (5' Line, 3' Gap)		
55	Line, Thermo., Dotted, White, 12" (2' Line, 2' Gap)		
	Ground Mounted, Sheet Sign		

RECOMMENDED FOR APPROVAL:	DESIGN ENGINEER	DATE
DESIGNED:	KLW	DRAWN: BEH
CHECKED:	ACE	CHECKED: KLW

INDIANA  
DEPARTMENT OF TRANSPORTATION

PAVEMENT MARKINGS & SIGNAGE PLAN  
GREENFIELD AVE. @ HOWE RD.

HORIZONTAL SCALE	BRIDGE FILE
1" = 20'	
VERTICAL SCALE	DESIGNATION
1" = 20'	1401716
SURVEY BOOK	SHEET
356	17 OF
CONTRACT	PROJECT
R-38246	1401716

H:\56271\_Proj\_Development\Design Drawings\56276671.dwg Alexander, Rittman, Plot: 12/13/2016 2:53 PM Save: 12/13/2016 2:52 PM

Match Line A-A Below

Match Line B-B Below

17+00

18+00

19+00

20+00

21+00

22+00

23+00

24+00

25+00

51+00

52+00

53+00

54+00

55+00

BFS NO. 5827

## APPENDIX C: EARLY COORDINATION

---

December 3, 2015

Sample Early Coordination Letter

**Headquarters:**

8450 Westfield Blvd., Suite 300  
Indianapolis, IN 46240-5920  
t 317.713.4615  
f 317.713.4616  
e bfs@BFSEngr.com  
[www.BFSEngr.com](http://www.BFSEngr.com)

**Branch Locations:**

Ft. Wayne  
Lafayette  
Louisville  
Merrillville  
Plainfield

**Founded 1961**



**RE:** Federal Designation No. 1401716; Greenfield Avenue and Howe Road Intersection Improvement; City of Noblesville, Hamilton County, Indiana

Dear Mr. Marquis:

On behalf of the City of Noblesville, our firm has been retained to prepare the environmental document for the above referenced project. Prior to the completion of our environmental studies, technical assistance is needed from your agency. Please review the enclosed material and send us any comments or information that you may have.

Please respond within 30 days with any comments so that the project may proceed as scheduled. If we have not received a response within 30 days, we will assume that you have no comments you wish to contribute to the project scope and we will proceed with the environmental analysis. If you have any questions, please contact this office.

Thank you for your consideration of this request.

Sincerely,

BUTLER, FAIRMAN and SEUFERT, INC.

Britta A. Anderson

BA:lm

Enclosures ←

Coordination Enclosures:  
Project Description (Appendix C, C3-C5)  
The following were included with documentation, but to eliminate repetition of documentation are located in different appendix within CE documentation:  
State Map (Appendix B, B1)  
USGS Quad Map (Appendix B, B2)  
Aerial Map (Appendix B, B3)  
Photographs (Appendix B, B5-B9)  
Ecological Evaluation Form (Appendix F, F1-F3)  
NWI Map (Appendix F, F4)  
Soils Map (Appendix F, F5)



*Ms. Robin McWilliams  
Supervisor  
U.S. Fish and Wildlife Service  
Bloomington Field Office  
620 South Walker Street  
Bloomington, IN 47403-2121*

*Ms. Jane Hardisty  
State Conservationist  
Natural Resources Conservation Service  
6013 Lakeside Boulevard  
Indianapolis, IN 46278*

*Manager  
INDOT Office of Aviation  
Room N955, IGC North  
100 North Senate Avenue  
Indianapolis, IN 46204-2891*

*Ms. Nancy Hasenmueller  
Environmental Geology Section  
Indiana Geological Survey  
611 North Walnut Grove  
Bloomington, IN 47405*

*Chief, Environmental Resources  
Department of the Army  
Louisville District, Corps of Engineers  
ATTN: CEPMP-P-E  
P. O. Box 59  
Louisville, KY 40201-0059*

*Mr. Steve Vahl  
Regional Environmental Officer  
Chicago Regional Office  
US Department of Housing and Urban  
Development  
Metcalf Fed. Bldg.  
77 W. Jackson Blvd. Room 2401  
Chicago, IL 60604*

*Ms. Anna Gremling, Executive Director  
Indianapolis Metropolitan Planning  
Organization  
Suite 1922, City County Building  
200 East Washington Street  
Indianapolis, IN 46204-3310*

*John Ditslear, Mayor  
City Hall  
16 S 10<sup>th</sup> Street  
Noblesville, IN 46060*

**PROJECT DESCRIPTION**  
**Greenfield Avenue and Howe Road Intersection Improvement**  
**City of Noblesville, Hamilton County, Indiana**  
**Des. No. 1401716**

The City of Noblesville is planning a project involving the construction of a roundabout at the intersection of Greenfield Avenue and Howe Road. The purpose of the project is to improve the level of service at the intersection. The need comes from the high volume of traffic, 45-degree angle of intersection makes visibility of intersection difficult for motorists on Greenfield Avenue, and insufficient level of service. The current average daily traffic (ADT) on Greenfield Avenue is 9,450 ADT and Howe Road is 1,365 ADT. The 2037 future ADT for Greenfield Avenue is projected to be 10,775; Howe Road is project to be 1,555. In regards to the limited visibility of the intersection a sign along Greenfield Avenue that says “Hidden Road Ahead” when approaching Howe Road along Greenfield Avenue. Level of Service (LOS) refers to the speed, convenience, comfort and security of transportation facilities and services as experienced by users. The intersection of Greenfield Avenue and Howe Road has an existing condition LOS of C. The proposed roundabout would have a LOS of A following its construction.

The proposed solution is the construction of a roundabout, located slightly east and north of the existing intersection in order to minimize impacts to the residential properties in the northwest and southern quadrants. There is an existing enclosed legal drain, Wheeler Drain, which flows north from the intersection. The proposed curb and gutter system will tie into the existing enclosed legal drain.

It is anticipated permanent right-of-way will be acquired from each property adjacent to the intersection. The project is located in Sections 8 and 17, Township 18 North, Range 5 East of the U.S.G.S. Riverwood Quadrangle, all within the City of Noblesville, Noblesville Township, Hamilton County, Indiana. The project is approximately 2.5 miles southeast of downtown Noblesville and approximately 19.9 miles northeast of Indianapolis.

The total project length will be approximately 0.23 mile, including approximately 360 feet of the Howe Road south approach, approximately 350 feet of the Greenfield Avenue west approach, and approximately 550 feet of the Greenfield Avenue east approach. Minimal excavation is anticipated, as the vertical elevation of the new intersection will match the current vertical elevation. No residential relocations are anticipated from this project.

General Existing and Proposed Parameters

	<u>Existing</u>	<u>Proposed</u>
Total Project Length:	-----	0.23 mile
Project Length:	----- -----	900 ft. (Greenfield Ave.) 366 ft. (Howe Rd.)
Right-of-Way:		
Permanent:	N/A	Approximately 0.65 acre is anticipated to be needed for this project in order to facilitate the roundabout
Temporary:	N/A	Approximately 0.01 acre for private drive reconstruction
Vertical Alignment:	Level	Level
Horizontal Alignment		Minor approach curves will be added to each leg of the

Greenfield Avenue	Northwest to Southeast	roundabout so traffic can transition onto and off the roundabout
Howe Road	North to South	

Roundabout will be located slightly north and east of the current intersection

Land Use:	Residential; Partially Forested; Agricultural	Residential
-----------	---	-------------

Channelization, Bank Shaping and In-Stream Work:

Based on a review of available maps, and observations made during the field investigation, there are no apparent jurisdictional streams located within the limits of the proposed project.

Wheeler Legal Drain has been located within the project area through a review of county maps. The drain starts on the west side of Howe Road approximately 250 feet south of Greenfield Avenue, crosses to the east under Howe Road, then turns to the north and follows the east side of Howe Road to Greenfield Avenue. The enclosed system continues north under Greenfield Avenue and eventually outlets into an open ditch approximately 550 feet north of Greenfield Avenue. Since the start of the legal drain is an enclosed system, and that enclosed system continues beyond the project area, the drain is not considered to be a jurisdictional waterway feature within the limits of the project. No other potential jurisdictional stream features were noted within or adjacent to the project area.

Temporary Runaround and Equipment Crossing: None

Design Speed:	40 mph (Greenfield Ave.)	40 mph (Howe Rd.)
Posted Speed:	40 mph (Greenfield Ave.)	40 mph (Howe Rd.)

Existing and Proposed Roadway Design – Greenfield Avenue

	<u>Existing</u>	<u>Proposed</u>
Pavement Width:	~34 ft.	~38 ft.
Number of Lanes:	2 @ 10.5 ft. each	1 @ 18 ft. 8 in. 1 @ 14 ft. 11 in.
Surface:	Asphalt	Asphalt
Shoulders:	1-2 ft. (north side)	none
Curb and gutter:	None	2 feet 7 inches
Sidewalks:	1 @ 6 ft. concrete (north side, west of Howe Road)	1 @ 6 ft. concrete (north side)
Side slopes:	3:1 or flatter	3:1 or flatter
Functional Classification:	Principal Arterial	Primary Arterial

Existing and Proposed Roadway Design – Howe Road

	<u>Existing</u>	<u>Proposed</u>
Pavement Width:	~18 ft.	~20 ft.
Number of Lanes:	2 @ 9 ft.	2 @ 10 ft.
Surface:	Asphalt	Asphalt
Shoulders:	1 @ 10 ft.	None
Curb and gutter:	None	None
Sidewalks:	2 @ 6 ft. Asphalt (east side, near southern project terminus)	2 @ 6 ft. concrete on east side
Side slopes:	3:1 or flatter	3:1 or flatter
Functional Classification:	Local	Primary Arterial

### Existing and Proposed Roadway Design – Roundabout

The roundabout will have total diameter width of approximately 90 feet, and will carry one lane of traffic at any given point. The center area of the roundabout will likely consist of brick pavers. The roundabout will utilize curb and gutter, as well as a concrete truck apron area to separate the travel lanes from the center area. The concrete truck apron is a mountable curb and paved area where the back wheels of a longer vehicle (semis, buses, etc.) may cross to navigate the roundabout without impacting any solid barriers. It is estimated that each travel lane on the roundabout will be a minimum of 14 feet wide, and the concrete truck apron will be a minimum of 10 feet wide.

### Additional Design Parameters Unique to the Project:

Standard INDOT erosion control measures will be used.

A suspected wetland area is located on the north side of the intersection where there is mapped hydric soil in what appears to be a lot spot in the surrounding topography.

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

**Job No.** \_\_\_\_\_ **Des/Bridge No:** 140176 \_\_\_\_\_

***Project Description:***

*Greenfield Ave and Howe Road Inspection Improvement, City  
Of Noblesville, Hamilton County, Indiana*

---

---

***Requested By:***

*BF&S*

---

***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 5,600' Southeast 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:** *December 4, 2015*

## Britta Anderson

---

**From:** McWilliams, Robin <robin\_mcwilliams@fws.gov>  
**Sent:** Wednesday, December 09, 2015 12:43 PM  
**To:** Britta Anderson  
**Subject:** Re: Des. No. 1401716; Greenfield Avenue and Howe Road Intersection Improvement; City of Noblesville, Hamilton County, Indiana

Dear Britta,

We have reviewed the above-mentioned project and believe it falls within our **programmatic** policy for transportation projects. Below is a list of standard recommendations (where applicable) for such projects. Please feel free to call or email if you have any questions or concerns. In the event that project plans change or new information becomes available, please re-coordinate with our office. This precludes the need for further consultation on this project under Section 7 of the Endangered Species Act (as amended).

### Standard Recommendations:

1. Do not clear trees or understory vegetation outside the construction zone boundaries. **(This restriction is not related to the “tree clearing” restriction for potential Indiana Bat habitat.)**
2. Restrict below low-water work in streams to placement of culverts, piers, pilings and/or footings, shaping of the spill slopes around the bridge abutments, and placement of riprap.  
  
Culverts should span the active stream channel, should be either embedded or a 3-sided or open-arch culvert, and be installed where practicable on an essentially flat slope. When an open-bottomed culvert or arch is used in a stream, which has a good natural bottom substrate, such as gravel, cobbles and boulders, the existing substrate should be left undisturbed beneath the culvert to provide natural habitat for the aquatic community.
3. Restrict channel work and vegetation clearing to the minimum necessary for installation of the stream crossing structure.
4. Minimize the extent of hard armor (riprap) in bank stabilization by using bioengineering techniques whenever possible. If rip rap is utilized for bank stabilization, extend it below low-water elevation to provide aquatic habitat.
5. Implement temporary erosion and sediment control methods within areas of disturbed soil. All disturbed soil areas upon project completion will be vegetated following INDOT’s standard specifications.
6. Avoid all work within the inundated part of the stream channel (in perennial streams and larger intermittent streams) during the fish spawning season (April 1 through June 30), except for work within sealed structures such as caissons or cofferdams that were installed prior to the spawning season. No equipment shall be operated below Ordinary High Water Mark during this time unless the machinery is within the caissons or on the cofferdams.

7. Evaluate wildlife crossings under bridge/culverts projects in appropriate situations. Suitable crossings include flat areas below bridge abutments with suitable ground cover, high water shelves in culverts, amphibian tunnels and diversion fencing.

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



United States Department of Agriculture

Natural Resources Conservation Service  
Indiana State Office  
6013 Lakeside Boulevard  
Indianapolis, IN 46278  
317-290-3200

December 9, 2015

Britta A. Anderson  
Butler, Fairman & Seufert  
8450 Westfield Boulevard, Suite 300  
Indianapolis, Indiana 46240

Dear Ms. Anderson:

The proposed project to Improve the Road Intersection at Greenfield Avenue and Howe Road in the City of Noblesville, Hamilton County, Indiana (Des No 1401716), as referred to in your letter received December 7, 2015, will not cause a conversion of prime farmland.

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

Sincerely,

*Roger Kault, Acting for*

JANE E. HARDISTY  
State Conservationist

Helping People Help the Land.



USDA is an equal opportunity provider and employer.



**FARMLAND CONVERSION IMPACT RATING**

<b>PART I</b> (To be completed by Federal Agency)		Date of Land Evaluation Request <b>12-3-15</b>			
Name of Project <b>Greenfield Avenue/Howe Road Intersection Improvement</b>		Federal Agency Involved <b>FHWA</b>			
Proposed Land Use <b>Roundabout</b>		County and State <b>Hamilton County, Indiana</b>			
<b>PART II</b> (To be completed by NRCS)		Date Request Received By NRCS <b>12/07/2015</b>			
Does the site contain prime, unique, statewide or local important farmland? (If no, the FPPA does not apply - do not complete additional parts of this form).		Yes <input type="checkbox"/>	No <input checked="" type="checkbox"/>	Acres Irrigated	Average Farm Size
Major Crop(s)	Farmable Land in Govt. Jurisdiction Acres: %	Amount of Farmland As Defined in FPPA Acres: %			
Name of Land Evaluation System Used	Name of Local Site Assessment System	Date Land Evaluation Returned by NRCS <b>12/09/2015</b>			
<b>PART III</b> (To be completed by Federal Agency)		Alternative Site Rating			
		Site A	Site B	Site C	Site D
A. Total Acres to Be Converted Directly		0.55			
B. Total Acres to Be Converted Indirectly					
C. Total Acres in Site		0.55			
<b>PART IV</b> (To be completed by NRCS) Land Evaluation Information					
A. Total Acres Prime And Unique Farmland					
B. Total Acres Statewide And Local Important Farmland					
C. Percentage of Farmland in County Or Local Govt. Unit to Be Converted					
D. Percentage Of Farmland In Govt. Jurisdiction With Same Or Higher Relative Value					
<b>PART V</b> (To be completed by NRCS) Land Evaluation Criterion Relative Value of Farmland To Be Converted (Scale of 0 to 100 Points)					
<b>PART VI</b> (To be completed by Federal Agency) Site Assessment Criteria (These criteria are explained in 7 CFR 658.5 (b))		Maximum Points			
1. Area In Nonurban Use		15			
2. Perimeter In Nonurban Use		10			
3. Percent Of Site Being Farmed		20			
4. Protection Provided By State And Local Government		20			
5. Distance From Urban Builtup Area		0			
6. Distance To Urban Support Services		0			
7. Size Of Present Farm Unit Compared To Average		10			
8. Creation Of Nonfarmable Farmland		25			
9. Availability Of Farm Support Services		5			
10. On-Farm Investments		20			
11. Effects Of Conversion On Farm Support Services		25			
12. Compatibility With Existing Agricultural Use		10			
TOTAL SITE ASSESSMENT POINTS		160			
<b>PART VII</b> (To be completed by Federal Agency)					
Relative Value of Farmland (From Part V)		100			
Total Site Assessment (From Part VI above or a local site assessment)		160			
TOTAL POINTS (Total of above 2 lines)		260			
Site Selected: <b>A</b>		Date of Selection			Was A Local Site Assessment Used? Yes <input type="checkbox"/> No <input type="checkbox"/>
Reason for Selection:					

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

DNR #: ER-18763

Request Received: December 3, 2015

**Requestor:** Butler, Fairman & Seufert Inc  
Britta A Rees-Anderson  
8450 Westfield Boulevard, Suite 300  
Indianapolis, IN 46240

**Project:** Greenfield Avenue & Howe Road intersection improvement: construction of a roundabout, City of Noblesville; Des #1401716

**County/Site info:** Hamilton

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:** 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 (see <http://www.in.gov/legislative/iac/20120801-IR-312120434NRA.xml.pdf>).

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 all tree and brush clearing.
3. Do not cut any trees suitable for Indiana bat or Northern Long-eared bat roosting (greater than 3 inches dbh, living or dead, with loose hanging bark, or with cracks, crevices, or cavities) from April 1 through September 30.
4. 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.
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.
6. Plant five trees, at least 2 inches in diameter-at-breast height, for each tree which is removed that is ten inches or greater in diameter-at-breast height.

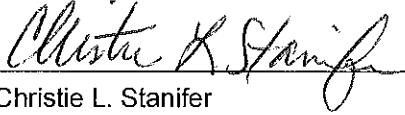
**THIS IS NOT A PERMIT**

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

---

**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:** December 30, 2015

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

Project No. \_\_\_\_\_ Des. No. 1401716

Project Description Greenfield Avenue and Howe Road Intersection Improvement; City of Noblesville, Hamilton County, Indiana

Name of Organization requesting early coordination:

Butler, Fairman & Seufert

**QUESTIONNAIRE FOR THE INDIANA GEOLOGICAL SURVEY**

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

None

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

None

- 3) Are there any active or abandoned mineral resources extraction sites located nearby? Describe: None

This information was furnished by:

Name: Robin Rupp Title: Geologist

Address: 611 North Walnut Grove, Bloomington, IN 47405

Phone: 812-855-7428 Date: March 30, 2016

**Indiana Department of Environmental Management**

**IDEM > Proposed Roadway Letter**



**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](http://www.IN.gov/idem)

City of Noblesville  
John Beery, City Engineer  
16 South 10th Street, Suite 155  
Noblesville , IN 46060

Butler, Fairman & Seufert, Inc.  
Britta Anderson  
8450 Westfield Blvd., Suite 300  
Indianapolis , IN 46240

Date

To Engineers and Consultants Proposing Roadway Construction Projects:

RE: The City of Noblesville is planning a project involving the construction of a roundabout at the intersection of Greenfield Avenue and Howe Road. The purpose of the project is to improve the level of service at the intersection. The need comes from the high volume of traffic, 45-degree angle of intersection makes visibility of intersection difficult for motorists on Greenfield Avenue, and insufficient level of service. The current average daily traffic (ADT) on Greenfield Avenue is 9,450 ADT and Howe Road is 1,365 ADT. The 2037 future ADT for Greenfield Avenue is projected to be 10,775; Howe Road is project to be 1,555. In regards to the limited visibility of the intersection a sign along Greenfield Avenue that says "Hidden Road Ahead" when approaching Howe Road along Greenfield Avenue. Level of Service (LOS) refers to the speed, convenience, comfort and security of transportation facilities and services as experienced by users. The intersection of Greenfield Avenue and Howe Road has an existing condition LOS of C. The proposed roundabout would have a LOS of A following its construction. The proposed solution is the construction of a roundabout, located slightly east and north of the existing intersection in order to minimize impacts to the residential properties in the northwest and southern quadrants. There is an existing enclosed legal drain, Wheeler Drain, which flows north from the intersection. The proposed curb and gutter system will tie into the existing enclosed legal drain. It is anticipated permanent right-of-way will be acquired from each property adjacent to the intersection. The project is located in Sections 8 and 17, Township 18 North, Range 5

East of the U.S.G.S. Riverwood Quadrangle, all within the City of Noblesville, Noblesville Township, Hamilton County, Indiana. The project is approximately 2.5 miles southeast of downtown Noblesville and approximately 19.9 miles northeast of Indianapolis. The total project length will be approximately 0.23 mile, including approximately 360 feet of the Howe Road south approach, approximately 350 feet of the Greenfield Avenue west approach, and approximately 550 feet of the Greenfield Avenue east approach. Minimal excavation is anticipated, as the vertical elevation of the new intersection will match the current vertical elevation. No residential relocations are anticipated from 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.
  - o USACE recommends that you have a consultant check to determine whether your project will abut, or lie within, a wetland area. To view a list of consultants that have requested to be included on a list posted by the USACE on their Web site, see USACE [Permits and Public Notices](http://www.lrl.usace.army.mil/orf/default.asp) (<http://www.lrl.usace.army.mil/orf/default.asp>) and then click on "Information" from the menu on the right-hand side of that page. Their "Consultant List" is the fourth entry down on the "Information" page. Please note that the USACE posts all consultants that request to appear on the list, and that inclusion of any particular consultant on the list does not represent an endorsement of that consultant by the USACE, or by IDEM.

- Much of northern Indiana (Newton, Lake, Porter, LaPorte, St. Joseph, Elkhart, LaGrange, Steuben, and Dekalb counties; large portions of Jasper, Starke, Marshall, Noble, Allen, and Adams counties; and lesser portions of Benton, White, Pulaski, Kosciusko, and Wells counties) is served by the USACE District Office in Detroit (313-226-6812). The central and southern portions of the state (large portions of Benton, White, Pulaski, Kosciusko, and Wells counties; smaller portions of Jasper, Starke, Marshall, Noble, Allen, and Adams counties; and all other Indiana counties located in north-central, central, and southern Indiana ) are served by the USACE Louisville District Office (502-315-6733).
  - Additional information on contacting these U.S. Army Corps of Engineers (USACE) District Offices, government agencies with jurisdiction over wetlands, and other water quality issues, can be found at <http://www.in.gov/idem/4396.htm>. 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](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 off of other facility components, or less than 35 cubic feet of RACM off of all facility components, the owner or operator of the project does not need to notify IDEM before beginning the renovation activity.
  - For questions on asbestos demolition and renovation activities, you can also call IDEM's Lead/Asbestos section at 1-888-574-8150.
  - However, in all cases where a demolition activity will occur (even if no asbestos is found), the owner or operator must still notify IDEM 10 working days prior to the demolition, using the form found at <http://www.in.gov/icpr/webfile/formsdiv/44593.pdf>.
  - 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](http://www.ai.org/legislative/iac/t03260/a00020.pdf).) New sources that use or emit hazardous air pollutants may be subject to Section 112 of the Clean Air Act and corresponding state air regulations governing hazardous air pollutants.

7. For more information on air permits visit: <http://www.in.gov/idem/4223.htm>, 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  
Commissioner

W.

Easterly

### **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 City of Noblesville is planning a project involving the construction of a roundabout at the intersection of Greenfield Avenue and Howe Road. The purpose of the project is to improve the level of service at the intersection. The need comes from the high volume of traffic, 45-degree angle of intersection makes visibility of intersection difficult for motorists on Greenfield Avenue, and insufficient level of service. The current average daily traffic (ADT) on Greenfield Avenue is 9,450 ADT and Howe Road is 1,365 ADT. The 2037 future ADT for Greenfield Avenue is projected to be 10,775; Howe Road is project to be 1,555. In regards to the limited visibility of the intersection a sign along Greenfield Avenue that says "Hidden Road Ahead" when approaching Howe Road along Greenfield Avenue. Level of Service (LOS) refers to the speed, convenience, comfort and security of transportation facilities and services as experienced by users. The intersection of Greenfield Avenue and Howe Road has an existing condition LOS of C. The proposed roundabout would have a LOS of A following its construction. The proposed solution is the construction of a roundabout, located slightly east and north of the existing intersection in order to minimize impacts to the residential properties in the northwest and southern quadrants. There is an existing enclosed legal drain, Wheeler Drain, which flows north from the intersection. The proposed curb and gutter system will tie into the existing enclosed legal drain. It is anticipated permanent right-of-way will be acquired from each property adjacent to the intersection. The project is located in Sections 8 and 17, Township 18 North, Range 5 East of the U.S.G.S. Riverwood Quadrangle, all within the City of Noblesville, Noblesville Township, Hamilton County, Indiana. The project is approximately 2.5 miles southeast of downtown Noblesville and approximately 19.9 miles northeast of Indianapolis. The total project length will be approximately 0.23 mile, including approximately 360 feet of the Howe Road south approach, approximately 350 feet of the Greenfield Avenue west approach, and approximately 550 feet of the Greenfield Avenue east approach. Minimal excavation is anticipated, as the vertical elevation of the new intersection will match the current vertical elevation. No residential relocations are anticipated from 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: 4/7/16

Signature of the INDOT  
Project Engineer or Other Responsible Agent



\_\_\_\_\_

John Beery, City Engineer

Date: 4/7/14

Signature of the  
For Hire Consultant



\_\_\_\_\_

Britta Anderson

September 23, 2016

Sample Re-Coordination Letter

**Headquarters:**  
8450 Westfield Blvd., Suite 300  
Indianapolis, IN 46240-5920  
t 317.713.4615  
f 317.713.4616  
e bfs@BFSEngr.com  
[www.BFSEngr.com](http://www.BFSEngr.com)

**Branch Locations:**  
Ft. Wayne  
Lafayette  
Louisville  
Merrillville  
Plainfield

Founded 1961

**RE:** Designation No. 1401716; Greenfield Avenue and Howe Road Intersection Improvement; City of Noblesville, Hamilton County, Indiana

Dear Ms. Hardisty:

On behalf of the City of Noblesville, our firm has been retained to prepare the environmental document for the above referenced project. Early coordination for this project was previously sent on December 3, 2015. Since that time, construction of a detention basin on the north side of the roundabout, within an existing utility easement, has been added to the project scope. Since the basin will extend the project limits beyond what was previously studied, reassessment of the project area is necessary. Therefore, prior to the completion of our environmental studies, we are requesting further technical assistance from your agency. Please review the enclosed material and send us any comments or information that you may have.

Please respond with any comments within 30 days so the project may proceed as scheduled. If we have not received a response within 30 days, we will assume you have no comments you wish to contribute and proceed with the environmental analysis. If you have any questions, please do not hesitate to contact this office.

Thank you for your consideration of this request.

Sincerely,

BUTLER, FAIRMAN and SEUFERT, INC.



Elizabeth Biggio  
ebiggio@bfsengr.com

Enclosures: Project Description  
State Map  
Quadrangle Map  
Aerial Map  
Detention Basin Aerial  
Ecological Evaluation Form

Photo Key  
Photographs  
NWI Map  
FEMA Floodplain Map  
NRCS Soils Map  
IPAC Trust Recourses Report excerpt  
Hamilton Co. Endangered Species List



## Elizabet Biggio

---

**From:** McWilliams, Robin <robin\_mcwilliams@fws.gov>  
**Sent:** Monday, September 26, 2016 11:12 AM  
**To:** Elizabet Biggio  
**Subject:** Re: Greenfield & Howe-Des1401716-Addendum Early Coordination

OK. Thanks! If tree-clearing for the new drainage basin will extend further than 75 feet from the edge of pavement (criteria for previous programmatic policy), then seasonal tree-clearing restrictions should be implemented. All other standard recommendations would remain the same. Please let me know if you have any other questions.

Sincerely,

Robin

Robin McWilliams Munson

U.S. Fish and Wildlife Service  
620 South Walker Street  
Bloomington, Indiana 46403  
812-334-4261 x. 207 Fax: 812-334-4273

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

September 30, 2016

Elizabeth Biggio  
Butler, Fairman & Seufert  
8450 Westfield Boulevard, Suite 300  
Indianapolis, Indiana 46240

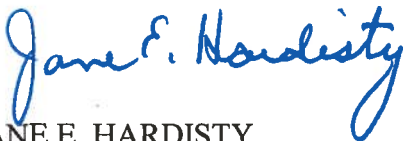
Dear Ms. Biggio:

The proposed project to construct a roundabout at the intersection of Greenfield Avenue and Howe Road in the City of Noblesville, Hamilton County, Indiana (Des No 1401716), as referred to in your letter received September 26, 2016, will cause a conversion of prime farmland.

The attached packet of information is for your use 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

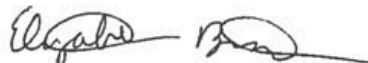




**FARMLAND CONVERSION IMPACT RATING**

<b>PART I</b> (To be completed by Federal Agency)		Date Of Land Evaluation Request <b>9/23/2016</b>			
Name of Project <b>Greenfield and Howe Intersection</b>		Federal Agency Involved <b>FHWA</b>			
Proposed Land Use <b>Roundabout</b>		County and State <b>Hamilton, Indiana</b>			
<b>PART II</b> (To be completed by NRCS)		Date Request Received By NRCS <b>9/26/16</b>		Person Completing Form: <b>CB</b>	
Does the site contain Prime, Unique, Statewide or Local Important Farmland? <i>(If no, the FPPA does not apply - do not complete additional parts of this form)</i>		YES <input checked="" type="checkbox"/> NO <input type="checkbox"/>		Acres Irrigated _____ Average Farm Size <b>194</b>	
Major Crop(s) <b>Corn</b>		Farmable Land In Govt. Jurisdiction Acres: <b>246596</b> % <b>96</b>		Amount of Farmland As Defined in FPPA Acres: <b>236378</b> % <b>92</b>	
Name of Land Evaluation System Used <b>LESA</b>		Name of State or Local Site Assessment System _____		Date Land Evaluation Returned by NRCS <b>9/30/16</b>	
<b>PART III</b> (To be completed by Federal Agency)		Alternative Site Rating			
		Site A	Site B	Site C	Site D
A. Total Acres To Be Converted Directly		<b>0.39</b>			
B. Total Acres To Be Converted Indirectly		<b>0</b>			
C. Total Acres In Site		<b>0.39</b>			
<b>PART IV</b> (To be completed by NRCS) Land Evaluation Information					
A. Total Acres Prime And Unique Farmland		<b>0.39</b>			
B. Total Acres Statewide Important or Local Important Farmland					
C. Percentage Of Farmland in County Or Local Govt. Unit To Be Converted		<b>&lt;0.001</b>			
D. Percentage Of Farmland in Govt. Jurisdiction With Same Or Higher Relative Value		<b>32</b>			
<b>PART V</b> (To be completed by NRCS) Land Evaluation Criterion Relative Value of Farmland To Be Converted (Scale of 0 to 100 Points)		<b>100</b>			
<b>PART VI</b> (To be completed by Federal Agency) Site Assessment Criteria <i>(Criteria are explained in 7 CFR 658.5 b. For Corridor project use form NRCS-CPA-106)</i>		<b>Maximum Points</b>	Site A	Site B	Site C
1. Area In Non-urban Use		(15)	<b>2</b>		
2. Perimeter In Non-urban Use		(10)	<b>4</b>		
3. Percent Of Site Being Farmed		(20)	<b>0</b>		
4. Protection Provided By State and Local Government		(20)	<b>0</b>		
5. Distance From Urban Built-up Area		(15)	<b>0</b>		
6. Distance To Urban Support Services		(15)	<b>0</b>		
7. Size Of Present Farm Unit Compared To Average		(10)	<b>0</b>		
8. Creation Of Non-farmable Farmland		(10)	<b>0</b>		
9. Availability Of Farm Support Services		(5)	<b>5</b>		
10. On-Farm Investments		(20)	<b>0</b>		
11. Effects Of Conversion On Farm Support Services		(10)	<b>0</b>		
12. Compatibility With Existing Agricultural Use		(10)	<b>1</b>		
TOTAL SITE ASSESSMENT POINTS		<b>160</b>	<b>12</b>	<b>0</b>	<b>0</b>
<b>PART VII</b> (To be completed by Federal Agency)					
Relative Value Of Farmland (From Part V)		<b>100</b>	<b>100</b>	<b>0</b>	<b>0</b>
Total Site Assessment (From Part VI above or local site assessment)		<b>160</b>	<b>12</b>	<b>0</b>	<b>0</b>
<b>TOTAL POINTS (Total of above 2 lines)</b>		<b>260</b>	<b>112</b>	<b>0</b>	<b>0</b>
Site Selected: <b>A</b>		Date Of Selection <b>10/5/2016</b>		Was A Local Site Assessment Used? YES <input type="checkbox"/> NO <input type="checkbox"/>	
Reason For Selection:					

Name of Federal agency representative completing this form:



Date: October 5, 2016

(See Instructions on reverse side)

Form AD-1006 (03-02)

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

DNR #: ER-18763-1

Request Received: September 23, 2016

**Requestor:** Butler Fairman and Seufert Inc  
Elizabet Biggio  
8450 Westfield Boulevard, Suite 300  
Indianapolis, IN 46240-8302

**Project:** Greenfield Avenue & Howe Road intersection improvement: construction of a roundabout, City of Noblesville; Des #1401716: addition of a detention basis

**County/Site info:** Hamilton

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 mitigate for unavoidable impacts. The following are recommendations that address potential impacts identified in the proposed project area:

1) Wetland Habitat:

Our previous letter dated December 30, 2015, stated the following:

"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 wetland habitat should be mitigated at the appropriate ratio (see <http://www.in.gov/legislative/iac/20140806-IR-312140295NRA.xml.pdf>)."

According to the submitted Ecological Evaluation Form, a depressional area with saturated soils was encountered during the field investigation on the north side of the intersection. A wetland determination conducted by a Professional Wetland Scientist on March 29, 2016, determined that no wetland was present within the project area.

2) Wooded Habitat:

Impacts to trees and wooded areas near the intersection should be minimal overall, but may still require some level of mitigation or replacement. We recommend a mitigation plan be developed if impacts to trees or wooded areas 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>.

For impacts to trees and wooded habitat outside of riparian areas within the proposed project limits, consider using native trees and shrubs for any proposed on-site revegetation or landscaping. The following is a link to information on landscaping with native plants on the Indiana Native Plant and Wildflower Society (INPAWS) website:

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

<http://www.inpaws.org/landscaping/>.

3) Detention Basin:

Consider maintaining a minimum 15' wide buffer strip around the detention basin from the top of the bank landward after construction using a mixture of grasses, sedges, and wildflowers native to Central Indiana to help mitigate for potential nuisance Canada goose conflicts. Post "Do Not Mow or Spray" signs along the buffer strip, and do not mow, cut, or spray the area.

The Division of Fish and Wildlife has a new urban wildlife program that has potential cost-share and financial reimbursement available for native plantings and other urban habitat projects. Contact Megan Dillon ([mdillon@dnr.in.gov](mailto:mdillon@dnr.in.gov) or 765-320-0517) for information regarding assistance with establishment of pollinator habitat, trees and shrubs, native plugs, wetland habitat, rain gardens, nuisance Canada goose mitigation, and/or educational signage that could enhance the proposed project. An article on the new urban wildlife program and dealing with nuisance Canada goose issues can be found at:

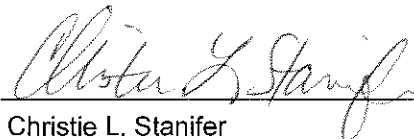
[http://www.suncommercial.com/news/article\\_59bb6642-6bc6-11e6-b9bb-3f041b2c8de7.html](http://www.suncommercial.com/news/article_59bb6642-6bc6-11e6-b9bb-3f041b2c8de7.html).

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 within the project area using a mixture of grasses, sedges, wildflowers, shrubs, and trees native to Central Indiana and specifically for stream bank/floodway stabilization purposes as soon as possible upon completion.
2. Minimize and contain within the project limits all tree and brush clearing.
3. Do not cut any trees suitable for Indiana bat or Northern Long-eared bat roosting (greater than 3 inches dbh, living or dead, with loose hanging bark, or with cracks, crevices, or cavities) from April 1 through September 30.
4. 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.
5. Seed and protect disturbed stream banks and slopes that are 3:1 or steeper with heavy-duty net-free biodegradable erosion control blankets to minimize the entrapment and snaring of small wildlife such as snakes and turtles (follow manufacturer's recommendation for installation); seed and apply mulch on all other disturbed areas.
6. Plant five trees, at least 2 inches in diameter-at-breast height, for each tree which is removed that is ten inches or greater in diameter-at-breast height.

**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.



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

**Date:** October 25, 2016



## 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](http://www.IN.gov/idem)

City of Noblesville  
John Beery, City Engineer  
16 South 10th Street  
Suite 155  
Noblesville, IN 46060

Butler, Fairman, & Seufert  
Elizabeth Biggio, Architectural Historian  
8450 Westfield Boulevard  
Suite 300  
Indianapolis, IN 46240

Date

To Engineers and Consultants Proposing Roadway Construction Projects:

RE: The City of Noblesville is planning construction of a roundabout at the intersection of Greenfield Avenue and Howe Road. A sidewalk connecting existing pedestrian facilities in the northwest and southeast quadrants will be incorporated. The project will include a drainage basin to the north of the intersection, routed to an existing enclosed legal drain, within the existing easement. Permanent right-of-way will be acquired from adjacent properties. The project is in Sections 8 and 17, Township 18 North, Range 5 East of the USGS Riverwood Quadrangle, within Noblesville Township, Hamilton County. The project length will be approximately 0.25 mile.

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 USACE Louisville District Office (502-315-6733).

Additional information on contacting these U.S. Army Corps of Engineers (USACE) District Offices, government agencies with jurisdiction over wetlands, and other water quality issues, can be found at <http://www.in.gov/idem/4396.htm>. 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 following statutes:
  - o IC 14-26-2 Lakes Preservation Act 312 IAC 11
  - o IC 14-26-5 Lowering of Ten Acre Lakes Act No related code

- o IC 14-28-1 Flood Control Act 310 IAC 6-1
- o IC 14-29-1 Navigable Waterways Act 312 IAC 6
- o IC 14-29-3 Sand and Gravel Permits Act 312 IAC 6
- o 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
  - o <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](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 building that have (4) four or fewer dwelling units and which will not be used for commercial purposes) must be inspected by an Indiana-licensed asbestos inspector prior to the commencement of any renovation or demolition activities. If regulated asbestos-containing material (RACM) that may become airborne is found, any subsequent demolition, renovation, or asbestos removal activities must be performed in accordance with the proper notification and emission control requirements.

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

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

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

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](http://www.ai.org/legislative/iac/t03260/a00020.pdf).) New sources that use or emit hazardous air pollutants may be subject to Section 112 of the Clean Air Act and corresponding state air regulations governing hazardous air pollutants.
7. For more information on air permits visit: <http://www.in.gov/idem/4223.htm>, 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 City of Noblesville is planning construction of a roundabout at the intersection of Greenfield Avenue and Howe Road. A sidewalk connecting existing pedestrian facilities in the northwest and southeast quadrants will be incorporated. The project will include a drainage basin to the north of the intersection, routed to an existing enclosed legal drain, within the existing easement. Permanent right-of-way will be acquired from adjacent properties. The project is in Sections 8 and 17, Township 18 North, Range 5 East of the USGS Riverwood Quadrangle, within Noblesville Township, Hamilton County. The project length will be approximately 0.25 mile.

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 issues addressed in the aforementioned letter, and further, that I must obtain any required permits.

Date: 9/29/16

Signature of the INDOT  
Project Engineer or Other Responsible Agent 

John Beery, City Engineer

Date: 23 September 2016

Signature of the  
For Hire Consultant 

Elizabeth Biggio, Architectural Historian

## APPENDIX D: SECTION 106 OF THE NHPA

---

**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  
GREENFIELD AVENUE AND HOWE ROAD INTERSECTION IMPROVEMENT PROJECT  
CITY OF NOBLESVILLE, HAMILTON COUNTY, INDIANA  
DES. NO.: 1401716**

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

The area of potential effects (APE) includes the existing and proposed right-of-way (ROW), immediately adjacent properties, and those areas where a visual differentiation may occur between an existing structure and the project area. Although most of the area around the intersection is heavily developed and mature trees are present, the APE was extended over open fields on the north side of the intersection in order to account for possible effects to the viewshed (see Appendix B, B4). Approximately 0.54 acre of permanent and 0.1 acre of ROW acquisition is anticipated.

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

The Indiana Department of Transportation (INDOT), on behalf of the Federal Highway Administration (FHWA), has determined there are no properties within the APE listed in or eligible for the National Register of Historic Places (NRHP).

**EFFECT FINDING**

INDOT, acting on behalf of FHWA, has determined a "No Historic Properties Affected" finding is appropriate for this undertaking because no properties listed in or eligible for the NRHP are present within the APE.

INDOT respectfully requests the Indiana State Historic Preservation Officer provide written concurrence with the Section 106 determination of "No Historic Properties Effected."

**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 FHWA's behalf, has determined the appropriate Section 106 finding is "No Historic Properties Affected"; therefore no Section 4(f) evaluation is required.

Consulting parties will be provided a copy of the findings and determinations in accordance with INDOT and FHWA's Section 106 procedures. Comments will be accepted for thirty (30) days upon receipt of the findings.

*Shaun Miller*

---

Shaun Miller, for FHWA  
Acting Manager  
INDOT Cultural Resources

3/3/16

---

Approval 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)  
GREENFIELD AVENUE AND HOWE ROAD INTERSECTION IMPROVEMENT PROJECT  
CITY OF NOBLESVILLE, HAMILTON COUNTY, INDIANA  
DES. NO.: 1401716**

**1. DESCRIPTION OF THE UNDERTAKING**

The City of Noblesville is planning a project involving the construction of a roundabout at the intersection of Greenfield Avenue and Howe Road near the City of Noblesville, in Hamilton County, Indiana. The proposed roundabout will be located slightly northeast of the existing T-intersection in order to minimize impacts to residential properties on the south side of Greenfield Avenue. The total project length will be approximately 0.19 mile. The project will include approach work on each side, approximately 300 feet to the west, approximately 425 feet to the east, and approximately 350 feet south of the intersection (see Appendix B, B3). This project will utilize funds from the Federal Highway Administration (FHWA), which makes it an undertaking subject to the Section 106 process.

The interior of the roundabout will be approximately 50 feet in diameter and will likely consist of brick pavers with plantings in the center. The roundabout will have one circulatory travel lane, varying between 14 feet and 19 feet 9 inches. The roundabout will have a 10-foot wide concrete truck apron area separating the travel lanes from the center area. The truck apron is a mountable curb and paved area where the back wheels of a longer vehicle (semis, buses, etc.) may cross to navigate the roundabout without impacting any solid barriers. The roundabout will have a 2-foot inside and outside curbs.

The east approach on Greenfield Avenue will be tapered from its existing lane widths of approximately 11 feet (one in each direction) to approximately 14 feet at the roundabout. A concrete center curb, tapering in width from 2 feet to 19 feet 10 inches, will separate the lanes leading up to the roundabout (see Appendix B, B13). On west approach of Greenfield Avenue, the eastbound lane will be tapered from its existing width of approximately 11 feet to approximately 15 feet at the roundabout. The westbound lane will be approximately 19 feet at the roundabout, expand to 27 feet, and taper back to 24 feet 6 inches at Symphony Boulevard. A concrete center curb, varying in width from 4 feet to 17 feet 5 inches, will separate the lanes leading up to the roundabout (see Appendix B, B14). Both approaches will have 2-foot curb and gutters (see Appendix B, B17-B18).

The approach on Howe Road will be tapered from its existing lane widths of 11 feet (northbound) and 9 feet 1 inch (southbound) to 15 feet at the roundabout. A concrete center curb, varying in width from 4 feet to 17 feet 5 inches, will separate the lanes leading up to the roundabout (see Appendix B, B12). Howe Road will have a 2-foot curb and gutter (see Appendix B, B16).

The project will include tie-ins to the existing enclosed legal drain, Wheeler Drain, which flows north under Greenfield Avenue east of the existing intersection. Wheeler Drain runs north to tie-into another existing underground legal drain. The PVC pipe may be replaced as part of this project. The roundabout gutters will tie-into the existing drain.

The sidewalk on the north side of Greenfield Avenue will be extended at 8 feet wide from its existing terminus west of the intersection to the east side of the roundabout, cross south over Greenfield Avenue, and continue at 6 feet wide south to connect to the existing asphalt path on the east side of Howe Road (see Appendix B, B12). The crossing will include ADA-compliant curb ramps.

The purpose of the project is to improve the level of service at the intersection of Greenfield Avenue and Howe Road. The need comes from the high volume of traffic, limited visibility, and insufficient level of service. Greenfield Avenue is a principal arterial with an average daily traffic (ADT) of 9,450 vehicles per day (VPD) and Howe Road is a local Street with an ADT of 1,354 VPD. In the *City of Noblesville Thoroughfare Plan*, Greenfield Avenue is designated as a primary thoroughfare and Howe Road as a collector (see Appendix B, B7).

The project is located in Sections 8 and 17, Township 18 North, Range 5 East of the U.S.G.S. Riverwood Quadrangle, all within the City of Noblesville, Noblesville Township, Hamilton County, Indiana. The project is approximately 2.5 miles southeast of downtown Noblesville and approximately 19.9 miles northeast of Indianapolis (see Appendix B, B1-B2).

The area of potential effect (APE) is defined as the “geographic area or areas within which an undertaking may directly or indirectly cause alterations in the character or use of historic properties. The area of potential effects is influenced by the scale and nature of an undertaking...” (36 CFR 800.9 a). The APE is an irregular area, including the existing and proposed right-of-way (ROW), immediately adjacent properties, and sightlines where a visual differentiation may occur between an existing structure and the project area. Although most of the area around the intersection is heavily developed and mature trees are present, the APE was extended over open fields on the north side of the intersection in order to account for possible effects to the viewshed (see Appendix B, B4).

Since the establishment of the APE, it has been determined construction of the roundabout will require temporary closure of the intersection of Greenfield Avenue and Howe Road to through traffic for approximately 45 days. The official detour will likely utilize Promise Road, East 146<sup>th</sup> Street, and Cumberland Road (see Appendix B, B15). Each of these roads is designated a primary thoroughfare in the *City of Noblesville Thoroughfare Plan* (see Appendix B, B7).

The detour route was planned to utilize roadways with the ability to hold the volume of traffic that would be diverted by the intersection closure. To this effect, East 146<sup>th</sup> Street is an east-west principal arterial with an ADT of 21,844 VPD, more than twice that of Greenfield Avenue. Promise Road is a north-south major collector with an ADT of 5,449 VPD and Cumberland Road is a north-south minor arterial with an ADT of 5,685 VPD. Both ADTs are greater than four times that of Howe Road. East 146<sup>th</sup> Street is of the same functional class as Greenfield Avenue, and Cumberland Road and Promise Road are both of higher functional classes than Howe Road.

Access to all adjacent residences, businesses, and facilities will be maintained and posted throughout the duration of construction. Through-traffic dependent businesses and any local special events and/or festivals will be provided detour routes to avoid the construction area. The maintenance of traffic detour has the capacity to accommodate the change in traffic pattern caused by the temporary closure of the intersection without altering the project’s potential to affect historic resources, and, therefore, the detour route is not included within the APE. The maintenance of traffic will not affect the project’s potential effect on historic resources.

Land use around the intersection is residential and agricultural. Approximately 0.54 acres of permanent ROW and 0.01 acre of temporary ROW acquisition is expected. The composition of permanent ROW acquisition is anticipated to be approximately 0.09 acre of wooded land in the northwest quadrant of the intersection, 0.07 acre of wooded land in the northeast quadrant, 0.01 acre of residential land in the southwest quadrant, and 0.037 acre of residential land in the southeast quadrant. Temporary ROW will be used for the reconstruction of private drives in the southwest quadrant. No residential relocations are anticipated from this project. Minimal excavation is anticipated, as the vertical elevation of the new intersection will match the current vertical elevation.

## 2. EFFORTS TO IDENTIFY HISTORIC PROPERTIES

The National Register of Historic Places (NRHP) and the Indiana Register of Historic Sites and Structures (State Register) were checked for listing in Hamilton County, Indiana. No NRHP or State Register-listed properties were located near the project area.

Hamilton County was surveyed for the Indiana Inventory of Historic Sites and Structures (IHSSI) by the Historic Landmarks Foundation of Indiana (HLFI) in 1992 for cultural resources in accordance with the National Historic Preservation Act (NHPA). The Indiana State Historic Architectural and Archaeological Research Database (SHAARD) was consulted for IHSSI-surveyed properties within the APE. One previously-surveyed property, IHSSI #057-541-30046, a c. 1840 hall-and-parlor house rated “contributing”, was located within the APE (see Appendix B, B6).

An Indiana Department of Historic Preservation and Archeology (DHPA)-qualified professional visited the site on October 13, 2015. Information from the site visit and research regarding historic resources were compiled into a Historic Property Report (HPR; Biggio, November 9, 2015). The HPR did not recommend any properties within the APE, including IHSSI #057-541-30046, eligible for listing in the NRHP (see Appendix D, D1-D3). The HPR was approved by the Indiana Department of Transportation-Cultural Resource Office (INDOT-CRO) on November 13, 2015.

FHWA, INDOT, and the Indiana State Historic Preservation Officer (SHPO) are considered automatic consulting parties. In addition, the following individuals and organizations were provided a copy of the HPSR and invited to be Section 106 consulting parties on November 16, 2015 (see Appendix F, F1-F2):

Indiana Landmarks Central Regional Office  
Hamilton County Historian  
Hamilton County Historical Society/Museum of History  
Hamilton County Genealogy Society  
Indianapolis Metropolitan Planning Organization  
Noblesville Main Street  
Noblesville Preservation Alliance

Indiana Landmarks responded by email on November 24, 2015, accepting consulting party status and not providing any comments concerning historic properties (see Appendix F, F3). The SHPO responded in a letter dated December 18, 2015, stating, in part, “*none of the properties identified in the HPR is listed in or eligible for inclusion in the National Register of Historic Places*” (see Appendix F, F4-F5). The SHPO also indicated the appropriate consulting parties had been contacted.

No other responses to the November 16, 2015 mailing were received.

With regard to archaeology, a Phase Ia Archaeological Field Reconnaissance was conducted by Accidental Discoveries, LLC on December 17, 2015. In an Indiana Archaeological Short Report (ASR) dated January 11, 2016, the archaeologist reported no archaeological resources were located within the project area and recommended the project be allowed to proceed as planned (see Appendix E, E1-E2). INDOT-CRO approved the ASR on January 12, 2016.

The ASR was referred to the SHPO on January 12, 2016 (see Appendix F, F6). The SHPO responded on February 11, 2016, concurring with the opinion of the archaeologist and stating the project may proceed without additional archaeological assessment (see Appendix F, F7-F8).

## 3. BASIS FOR FINDING

A finding of “No Historic Properties Affected” is appropriate for this project because the APE contains no NRHP-listed or eligible properties.

A public notice regarding the APE and “No Historic Properties Affected” finding will be published in *The Times* (serving Hamilton County). A thirty (30) day comment period will be given. The document will be revised, if necessary, after the public notice to reflect any comments received.

## **APPENDICES**

- Appendix A: Invited Section 106 Consulting Parties
- Appendix B: Graphics
- Appendix C: Photographs
- Appendix D: Excerpt from the Historic Property Report
- Appendix E: Excerpt from the Archaeological Short Report
- Appendix F: Correspondence





**Legend**

Project Area



APE



Map Source: IndianaMap, ArcGIS Online (ESRI) World Imagery, National Register of Historic Places Database Inventory from National Park Service



**APE Map**  
 Greenfield Avenue and Howe Road Roundabout  
 City of Noblesville, Hamilton County, Indiana  
 Des. No. 1401716

# HISTORIC PROPERTY REPORT

for the Greenfield Avenue and Howe Road Intersection  
Improvement Project  
located in the City of Noblesville, Noblesville Township,  
Hamilton County Indiana  
Des. No.: 1401716



Elizabeth Biggio  
Butler, Fairman & Seufert, Inc.  
8450 Westfield Blvd., Suite 300  
Indianapolis, IN 46240  
Phone: (317) 713-4615  
Fax: (317) 713-4616  
ebiggio@bfsengr.com  
November 9 2015

**Abstract**

This Historic Property Report (HPR) documents the identification and evaluation efforts for properties included in the Area of Potential Effects (APE) for a project to improve the intersection of Greenfield Avenue and Howe Road. Above-ground resources were identified and evaluated according to Section 106 of the National Historic Preservation Act (NHPA) of 1966, as amended, 36 CFR Part 800 (revised January 2001), the Final Rule on Revision of Current Regulations, dated December 12, 2000, and incorporating amendments effective August 5, 2004. As a result of the NHPA, as amended, federal agencies are required to take into account the impact of federal undertakings upon historic properties in the area of the undertaking. Historic properties include buildings, structures, sites, objects, and/or districts included in or eligible for inclusion in the National Register of Historic Places (NRHP). The project will utilize funds from the Federal Highway Administration (FHWA), which makes it an undertaking subject to the Section 106 process.

Of the 10 properties within the APE, none are currently listed in the NRHP. One Indiana Historic Site and Structure Inventory (IHSSI)-surveyed property is recorded in the State Historic Archaeological and Architectural Research Database (SHAARD). This property is:

Noblesville Township Site #057-541-30046: House, c. 1840, Hall-and-parlor, SR 238; Exploration/settlement, vernacular/construction, "contributing"

Within the APE, six properties will meet the 50-year age criteria at time of project letting. No properties identified in the APE are recommended eligible for listing in the NRHP.

This property is associated with the growth and development trends of Hamilton County. However, none of the original outbuildings are extant, detracting from the integrity of setting. This property does not demonstrate any additional aspects of mid-nineteenth century farmsteads. Since this property lacks sufficient significance, it is not recommended NRHP-eligible under Criterion A. Research conducted for this document was unable to establish a connection between this property and the lives of historically significant persons. Therefore, the property is not recommended NRHP-eligible under Criterion B. This house is an example of early settlement architecture. However, this house has very poor material integrity and more intact representations of the hall-and-parlor plan exist in Noblesville Township, including the house at 708 S. 9th Street (IHSSI #057-464-36012) and the house at 1168



Photo 12: Looking northeast at the west elevation of IHSSI #057-541-30046

E. Wayne Street (IHSSI #057-464-37025). Therefore, this house does not reach a level of architectural integrity and significance such that it is recommended eligible for listing in the NRHP under Criterion C. This property has not yielded, and is not likely to yield, information important in prehistory or history and is not recommended NRHP-eligible under Criterion D. This property is not recommended eligible for listing in the NRHP.

## Conclusions

The APE encompasses ten properties, six of which will be 50 years of age or older at time of project letting. Of those properties, none are currently listed in the NRHP and no properties are recommended eligible for listing in the NRHP.



# 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: Jeffrey A. Plunkett

Date (month, day, year): January 11, 2016

Project Title: Phase Ia Archaeological Field Reconnaissance: Proposed Roundabout Intersection Improvement at Greenfield Avenue and Howe Road in Noblesville, Hamilton County, Indiana (Des. No. 1401716).

### PROJECT OVERVIEW

Project Description:

The City of Noblesville is planning a project involving the construction of a roundabout at the intersection of Greenfield Avenue and Howe Road. The purpose of the project is to improve the level of service at the intersection. The need comes from the high volume of traffic, the 45-degree angle of intersection which makes visibility of intersection difficult for motorists on Greenfield Avenue, and the insufficient level of service. The proposed solution is the construction of a roundabout, located slightly east and north of the existing intersection in order to minimize impacts to the residential properties in the northwest and southern quadrants. There is an existing enclosed legal drain, Wheeler Drain, which flows north from the intersection. The proposed curb and gutter system will tie into the existing enclosed legal drain.

INDOT Designation Number/ Contract Number: Des. No. 1401716 Project Number: IN15035.01

DHPA Number: Approved DHPA Plan Number:

Prepared For: Butler, Fairman & Seufert, Inc.

Contact Person: Britta A. Rees Anderson

Address: 8450 Westfield Blvd., Suite 300

City: Indianapolis State: IN ZIP Code: 46240-8302

Telephone Number: (317) 713-4615 Email Address: BRees@bfsengr.com

Principal Investigator: Jeffrey A. Plunkett

Signature:

Company/Institution: Accidental Discoveries, LLC

Address: 205 Angela Court

City: Noblesville State: IN ZIP Code: 46062

Comments: The Schoolhouse No. 11 property that is located in the southwest quadrant of the Greenfield Avenue and Howe Road intersection will not be impacted by the project construction.

### 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: 00.5 acres: 01.1

Comments:

### 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 (1:24,000 scale).
- Aerial photograph showing the project area, land use, and survey methods.
- Photographs of the project area.
- Project plans (if available)

Other Attachments: Table 1: Previous Archaeological Investigations within One Mile of the Project.

## Elizabeth Biggio

---

**From:** Kennedy, Mary <MKENNEDY@indot.IN.gov>  
**Sent:** Friday, November 13, 2015 1:17 PM  
**To:** Elizabeth Biggio  
**Cc:** Miller, Shaun (INDOT); Britta Anderson; Beck, Jennifer; jbeery@noblesville.in.us; Dhpacommentsfromcro, Dnr  
**Subject:** RE: Des1401716\_Greenfield&Howe\_HPR

Elizabeth,

Thank you for the revisions. This looks fine to send to consulting parties. Please let us know when it goes out so that we can note it in our files.

Regards,

**Mary E. Kennedy**

*Architectural Historian/History Team Lead*

*Cultural Resources Office*

*Environmental Services*

100 N. Senate Ave., Room N642

Indianapolis, IN 46204

**Office:** (317) 232-5215

**Email:** [mkennedy@indot.in.gov](mailto:mkennedy@indot.in.gov)





November 16, 2015

Mr. Chad Slider  
Assistant Director for Environmental Review  
Division of Historic Preservation and Archaeology  
Indiana Department of Natural Resources  
402 W. Washington St., Room W274  
Indianapolis, IN 46204-2739

**Headquarters:**  
8450 Westfield Blvd., Suite 300  
Indianapolis, IN 46240-5920  
t 317.713.4615  
f 317.713.4616  
e bfs@BFSEngr.com  
www.BFSEngr.com

**Branch Locations:**  
Ft. Wayne  
Lafayette  
Louisville  
Merrillville  
Plainfield

**RE: Greenfield Avenue and Howe Road Intersection Improvement, City of Noblesville, Hamilton County, Indiana (Des. No. 1401716)**

Dear Mr. Slider:

**Founded 1961**

Our firm has been hired by the City of Noblesville to prepare an environmental study for the above-referenced project. Prior to the completion of our studies, technical assistance has been requested from required agencies. INDOT Cultural Resources Office approved the Historic Property Report (HPR) on November 16, 2015, and the following organizations and individuals have been contacted to determine their desire to be considered Section 106 consulting parties for this project:



Indiana Landmarks Central Office  
Hamilton County Historical Society/Museum of History  
Hamilton County Historian  
Indianapolis Metropolitan Planning Organization  
Noblesville Main Street  
Noblesville Preservation Alliance

Please find the HPR enclosed. If you have any questions, please contact this office.

Sincerely,

BUTLER, FAIRMAN & SEUFERT, INC.

Elizabeth Biggio  
[ebiggio@bfsengr.com](mailto:ebiggio@bfsengr.com)

EB:lm

Enclosures

Emc: Shaun Miller, Indiana Department of Transportation  
Mary Kennedy, Indiana Department of Transportation

**\*Note: Hamilton County Genealogy Society was sent a letter inviting them to be a Section 106 consulting party. Hamilton County Genealogy Society's name was left out of the letter SHPO letter in error.**





November 16, 2015

CERTIFIED MAIL

Sample Section 106 Consulting Parties  
Early Coordination Letter

**Headquarters:**  
8450 Westfield Blvd., Suite 300  
Indianapolis, IN 46240-5920  
t 317.713.4615  
f 317.713.4616  
e bfs@BFSEngr.com  
[www.BFSEngr.com](http://www.BFSEngr.com)

**Branch Locations:**  
Ft. Wayne  
Lafayette  
Louisville  
Merrillville  
Plainfield

Founded 1961



**RE:** Greenfield Avenue and Howe Road Intersection Improvement, City of Noblesville, Hamilton County, Indiana (Des. No. 1401716)

Dear Ms. Nevitt:

Section 106 of the National Historic Preservation Act requires federal agencies to take into account the effects of their undertakings on historic properties. In accordance with 36 CFR 800.2(c), you are hereby invited to be a Section 106 consulting party to participate in efforts to identify historic properties potentially affected by the above-referenced undertaking, assess its effects, and seek ways to avoid, minimize or mitigate any adverse effects on historic properties. For more information on Section 106 of the NHPA and the Section 106 review process, we recommend reviewing the Advisory Council on Historic Preservation's publication titled *Protecting Historic Properties: A Citizen's Guide to Section 106 Review*. It can be downloaded at: <http://www.achp.gov/docs/CitizenGuide.pdf>.

The full Historic Property Report for this project may be downloaded for your review by using the following link:

<https://bfsengr.sharefile.com/d-s65d82d3b87b4900a>

If you are unable to download the report, please contact our office as soon as possible and we will provide you with a physical copy.

Please return the enclosed postcard and check if you "do" or "do not" agree to be a consulting party for the above-referenced project. If the postcard is not returned within 30 days indicating your desire to be a consulting party, you will not be included on the list of consulting parties for this project. Please provide our office with any information or comments you may have concerning historic resources along the project. If you have any questions concerning this project, please do not hesitate to contact us. Thank you for your consideration of this request.

Sincerely,

BUTLER, FAIRMAN and SEUFERT, INC.

  
Elizabeth Biggio  
[ebiggio@bfsengr.com](mailto:ebiggio@bfsengr.com)

EB:lm

Enclosures

## Elizabeth Biggio

---

**From:** Raina Regan <rregan@indianalandmarks.org>  
**Sent:** Tuesday, November 24, 2015 3:32 PM  
**To:** Elizabeth Biggio  
**Subject:** Des. No. 1401716 Noblesville

Hello Elizabeth:

I've tried downloading the historic property report for Des. No. 1401716 Greenfield Avenue and How Road Intersection Improvement, but can't seem to get it to load. Thoughts?

Also, I haven't set back the postcard, but Indiana Landmarks would like to be a consulting party.

Thanks,  
Raina

.....  
**Raina Regan**  
Community Preservation Specialist

.....  
**Indiana Landmarks**  
Central Regional Office  
1201 Central Avenue  
Indianapolis, IN 46202  
Ph. 317-639-4534, 800-450-4534  
Fax: 317-639-6734  
[www.indianalandmarks.org](http://www.indianalandmarks.org)

Indiana Landmarks revitalizes communities, reconnects us to our heritage, and saves meaningful places.

[Become a member](#) | [Subscribe to our e-letter](#) | [Find us on Facebook](#)



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 • www.IN.gov/dnr/historic

December 18, 2015

Elizabet Biggio  
Butler, Fairman & Seufert, Inc.  
8450 Westfield Boulevard, Suite 300  
Indianapolis, Indiana 46240-5920

Federal Agency: Indiana Department of Transportation (“INDOT”)  
on behalf of Federal Highway Administration

Re: “Historic Property Report for the Greenfield Avenue and Howe Road Intersection Improvement Project located in the City of Noblesville, Noblesville Township, Hamilton County Indiana” (Biggio, 11/9/2015) (Des. No. 1401716; DHPA No. 18510)

Dear Ms. Biggio:

Pursuant to Section 106 of the National Historic Preservation Act of 1966, as amended (54 U.S.C. § 306108), 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 and 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 reviewed the report submitted with your cover letter dated November 16, 2015, and received on November 19, for the aforementioned project, which includes construction of a roundabout, in Hamilton County.

We are not aware of any parties who should be invited to participate in this Section 106 consultation, beyond those whom you already have invited.

The area of potential effects proposed in the historic property report (“HPR”) appears to be appropriate for this project.

We agree that none of the properties identified in the HPR is listed in or eligible for inclusion in the National Register of Historic Places.

As you know, we will need to review an archaeological report that has been prepared by a qualified profession archaeologist in accordance with the guidance in Part II, Chapter 7, of INDOT’s *Cultural Resources Manual* ([www.in.gov/indot/crm](http://www.in.gov/indot/crm)).

If you have questions about archaeological issues, please contact Mitch Zoll at (317) 232-3492 or [mzoll@dnr.IN.gov](mailto:mzoll@dnr.IN.gov). Questions about buildings or structures should be directed to John Carr at (317) 233-1949 or [jcarr@dnr.IN.gov](mailto:jcarr@dnr.IN.gov).

In all future correspondence regarding the Greenfield Avenue and Howe Road Intersection Improvement Project (Des. No. 1401716) please refer to DHPA No. 18510.

Very truly yours,



Mitchell K. Zoll  
Deputy State Historic Preservation Officer

MKZ:JLC:jlc

emc: Shaun Miller, Indiana Department of Transportation  
Mary Kennedy, Indiana Department of Transportation  
Shirley Clark, Indiana Department of Transportation  
Elizabet Biggio, Butler, Fairman & Seufert, Inc.  
Mitchell Zoll, Department of Natural Resources  
John Carr, Department of Natural Resources

## **Britta Anderson**

---

**From:** Laswell, Jeffrey <JLaswell@indot.IN.gov>  
**Sent:** Monday, January 11, 2016 1:24 PM  
**To:** Jeff Plunkett  
**Cc:** Britta Anderson  
**Subject:** RE: Des. 1401716- Greenfield Avenue and Howe Road/ Hamilton County

Thanks Jeff for the quick turnaround. Yes, I thought it odd as well that the school was not in the Interim Report, but I suppose buildings are missing from time to time.

Looks good- please submit to DHPA at your convenience and let me know when the report is sent out so that I may update our records.

Best,

Jeff Laswell  
Archaeologist  
INDOT Environmental Services  
Cultural Resources Office  
100 N. Senate Ave. IGCN - Room N642  
Indianapolis, Indiana  
46204-2216  
(317) 233-2093

January 12, 2016



Mr. Chad Slider  
Assistant Director for Environmental Review  
Division of Historic Preservation and Archaeology  
Indiana Department of Natural Resources  
402 W. Washington St., Room W274  
Indianapolis, IN 46204-2739

**Headquarters:**

8450 Westfield Blvd., Suite 300  
Indianapolis, IN 46240-5920  
t 317.713.4615  
f 317.713.4616  
e bfs@BFSEngr.com  
[www.BFSEngr.com](http://www.BFSEngr.com)

**Branch Locations:**

Ft. Wayne  
Lafayette  
Louisville  
Merrillville  
Plainfield

**Founded 1961**

*RE: Archaeology Short Report for the Roundabout at Greenfield Avenue and Howe Road Intersection in City of Noblesville, Hamilton County, Indiana (Des. No. 1401716).*

Dear Mr. Slider:

*Please find enclosed the completed DHPA review request submittal form and the above-referenced Indiana Archaeological Short Report (Plunket, January 11, 2016) completed for our company by Accidental Discoveries, LLC. The Phase Ia Archaeological Field Reconnaissance is for the project involving the proposed roundabout at the intersection of Greenfield Avenue and Howe Road.*

*The enclosed Phase Ia was reviewed by INDOT Cultural Resources personnel who meet the Secretary of Interior's Professional Qualification Standards as per 36 CFR Part 61. INDOT agreed with the recommendations made by Accidental Discoveries, LLC, January 12, 2016, and it is INDOT's opinion that the project should be allowed to proceed as planned.*

*Please review the enclosed report and advise INDOT of your recommendations concerning its acceptability. If there are any questions or concerns regarding this project, please contact Mr. Shaun Miller of the INDOT Cultural Resources Office, Environmental Services at (317) 233-6795 or [smiller@indot.in.gov](mailto:smiller@indot.in.gov).*

Sincerely,

BUTLER, FAIRMAN and SEUFERT, INC.

A handwritten signature in cursive script that reads 'Britta A. Anderson'.

Britta A. Anderson  
[banderson@bfsengr.com](mailto:banderson@bfsengr.com)

Enclosures

*Emc: Shaun Miller, INDOT Cultural Resources Office  
Mary Kennedy, INDOT Cultural Resources Office  
Jeff Plunkett, Accidental Discoveries, LLC*

# DNR Indiana Department of Natural Resources

Michael R. Pence, Governor  
Cameron F. Clark, Director



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 • www.IN.gov/dnr/historic

February 11, 2016

Britta A. Anderson  
Butler, Fairman & Seufert, Inc.  
8450 Westfield Boulevard, Suite 300  
Indianapolis, Indiana 46240-5920

Federal Agency: Indiana Department of Transportation (“INDOT”)  
on behalf of Federal Highway Administration

Re: Indiana archaeological short report: “Phase Ia Archaeological Field Reconnaissance: Proposed Roundabout Intersection Improvement at Greenfield Avenue and Howe Road in Noblesville, Hamilton County, Indiana” (Plunkett, 1/11/2016) (Des. No. 1401716; DHPA No. 18510)

Dear Ms. Anderson:

Pursuant to Section 106 of the National Historic Preservation Act of 1966, as amended (54 U.S.C. § 306108), 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 and 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 reviewed the report submitted with your cover letter dated January 12, 2016, and received on January 15, for the aforementioned project, in Hamilton County.

We concur with the archaeology report. The project may proceed without additional archaeological assessment.

However, if any prehistoric or historic archaeological artifacts or human remains are uncovered during construction, demolition, or earthmoving activities, state law (Indiana Code 14-21-1-27 and -29) requires that the discovery be reported to 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, including but not limited to 36 C.F.R. 800.

As we said in our December 18, 2015, letter to Elizabeth Biggio, we agree with the historic property report (“HPR”; Biggio, 11/9/2015) that none of the properties identified in the HPR is listed in or eligible for inclusion in the National Register of Historic Places.

We recommend that you discuss with INDOT’s Cultural Resources Office whether it is time for a finding to be issued.

If you have questions about archaeological issues, please contact Mitch Zoll at (317) 232-3492 or mzoll@dnr.IN.gov. Please direct questions about buildings or structures to John Carr at (317) 233-1949 or jcarr@dnr.IN.gov. In future correspondence about the Greenfield Avenue and Howe Road Intersection (Des. No. 1401716), please refer to DHPA No. 18510.

Very truly yours,

Mitchell K. Zoll  
Deputy State Historic Preservation Officer

MKZ:JLC:jlc

Britta A. Anderson  
February 11, 2016  
Page 2

emc: Shaun Miller, Indiana Department of Transportation  
Mary Kennedy, Indiana Department of Transportation  
Shirley Clark, Indiana Department of Transportation  
Britta Anderson, Butler, Fairman & Seufert, Inc.  
Elizabeth Biggio, Butler, Fairman & Seufert, Inc.  
Jeffrey Plunkett, Accidental Discoveries, LLC  
Mitchell Zoll, Department of Natural Resources  
John Carr, Department of Natural Resources



## Elizabeth Biggio

---

**From:** Kennedy, Mary <MKENNEDY@indot.IN.gov>  
**Sent:** Thursday, March 03, 2016 2:23 PM  
**To:** Elizabeth Biggio  
**Cc:** Miller, Shaun (INDOT); Britta Anderson; jbeery@noblesville.in.us; Beck, Jennifer; Harrington, Susan; Dhpacommentsfromcro, Dnr  
**Subject:** RE: Greenfield&Howe\_Des1401716\_800.11 Finding  
**Attachments:** Pages from Greenfield&Howe\_Des1401716\_800.11FindingDoc\_2016-03-03-signed.pdf

Thanks for the additional text, Elizabeth. It looks good & explains the situation well. Please find the approval form attached. Please copy us when the document is sent out for review (emc).

### **Mary E. Kennedy**

*Architectural Historian/History Team Lead*

*Cultural Resources Office*

*Environmental Services*

100 N. Senate Ave., Room N642

Indianapolis, IN 46204

**Office:** (317) 232-5215

**Email:** [mkennedy@indot.in.gov](mailto:mkennedy@indot.in.gov)



March 3, 2016

Mr. Chad Slider  
Assistant Director for Environmental Review  
Division of Historic Preservation and Archaeology  
Indiana Department of Natural Resources  
402 W. Washington St., Room W274  
Indianapolis, IN 46204-2739

RE: 800.11(d) "No Historic Properties" APE, Eligibility  
Determinations and Effect Finding for the Greenfield Avenue  
and Howe Road Intersection Improvement, City of Noblesville,  
Hamilton County, Indiana (Des. No. 1401716)

Dear Mr. Slider:

Please find enclosed the "No Historic Properties Affected" documentation pursuant to 36 CFR 800.11(d). This documentation includes the identification of the recommended area of potential effect (APE) and the determination of the recommended eligibility of, and effect on, historic properties within the APE. INDOT, on behalf of FHWA, approved the recommended finding on March 3, 2016.

Please review the enclosed material and send us any comments or information that you may have within 30 days. If you do not take exception to the "No Historic Properties Affected" determination within 30 days, please send your concurrence of the finding thus concluding the Section 106 process for this project.

Thank you for your consideration of this request.

Sincerely,

BUTLER, FAIRMAN & SEUFERT, INC.



Elizabeth Biggio  
[ebiggio@bfsenqr.com](mailto:ebiggio@bfsenqr.com)

EB:lm

Enclosures

Emc: Mary Kennedy, INDOT  
Shaun Miller, INDOT  
Raina Regan, Indiana Landmarks

**Headquarters:**  
8450 Westfield Blvd., Suite 300  
Indianapolis, IN 46240-5920  
t 317.713.4615  
f 317.713.4616  
e [bfs@BFSEngr.com](mailto:bfs@BFSEngr.com)  
[www.BFSEngr.com](http://www.BFSEngr.com)

**Branch Locations:**  
Fl. Wayne  
Lafayette  
Louisville  
Merrillville  
Plainfield

**Founded 1961**





March 3, 2016

Raina Regan  
Community Preservation Specialist  
Indiana Landmarks, Central Regional Office  
1201 Central Avenue  
Indianapolis, 46202

**Headquarters:**  
8450 Westfield Blvd, Suite 300  
Indianapolis, IN 46240-5920  
t 317.713.4615  
f 317.713.4616  
e bfs@BFSEngr.com  
www.BFSEngr.com

**Branch Locations:**  
Ft. Wayne  
Lafayette  
Louisville  
Merrillville  
Plainfield

**Founded 1961**



**RE: 800.11(d) "No Historic Properties Affected" APE, Eligibility Determinations and Effect Finding for the Greenfield Avenue and Howe Road Intersection Improvement, City of Noblesville, Hamilton County, Indiana (Des. No. 1401716)**

Dear Ms. Regan:

Please find the link to the "No Historic Properties Affected" finding documentation pursuant to 36 CFR 800.11(d). This documentation includes the identification of the recommended area of potential effect (APE) and the determination of the recommended eligibility of, and effect on, historic properties within the APE. The Federal Highway Administration determined an 800.11(d) finding of "No Historic Properties Affected" was appropriate for this project on March 3, 2016.

The full 800.11(e) finding of "No Adverse Effect" may be downloaded for your review by using the following link:

<https://bfsenqr.sharefile.com/d-sdd32daac0da4af7a>

If you are unable to download the 800.11(d) finding, please contact our office as soon as possible and we will provide you with a physical copy.

Please review the enclosed material and send us any comments or information that you may have within 30 days. If you do not take exception to the "No Historic Properties Affected" determination within 30 days, the Section 106 process for this project will be concluded.

Thank you for your consideration of this request.

Sincerely,

BUTLER, FAIRMAN & SEUFERT, INC.

Elizabeth Biggio  
[EBiggio@bfsenqr.com](mailto:EBiggio@bfsenqr.com)

EB:lm

Enclosures

Emc: Chad Slider, Indiana Division of Historic Preservation & Archaeology  
Mary Kennedy, Indiana Department of Transportation  
Shaun Miller, Indiana Department of Transportation

# DNR Indiana Department of Natural Resources

Michael R. Pence, Governor  
Cameron F. Clark, Director



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

March 31, 2016

Shaun Miller  
Acting Manager, Cultural Resources Office  
Environmental Services  
Indiana Department of Transportation  
100 North Senate Avenue, Room N642  
Indianapolis, Indiana 46204

Federal Agency: Indiana Department of Transportation (“INDOT”)  
on behalf of Federal Highway Administration (“FHWA”)

Re: INDOT’s finding, with supporting documentation, of “No Historic Properties Affected” for the City of Noblesville’s Greenfield Avenue and Howe Road Intersection Improvement Project (Des. No. 1401716; DHPA No. 18510)

Dear Mr. Miller:

Pursuant to Section 106 of the National Historic Preservation Act of 1966, as amended (54 U.S.C. § 306108), 36 C.F.R. Part 800, and the “Programmatic Agreement (PA) Among the Federal Highway Administration, the Indiana Department of Transportation, the Advisory Council on Historic Preservation and 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 reviewed the report submitted with Butler, Fairman & Seufert’s cover letter dated March 3, 2016, and received on March 7, for the aforementioned roundabout construction project in the City of Noblesville, Hamilton County, Indiana.

We concur with INDOT’s finding, on behalf of FHWA, of “No Historic Properties Affected” for the Greenfield Avenue and Howe Road Intersection Improvement Project.

However, if any prehistoric or historic archaeological artifacts or human remains are uncovered during construction, demolition, or earthmoving activities, state law (Indiana Code 14-21-1-27 and -29) requires that the discovery be reported to 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, including but not limited to 36 C.F.R. 800.

If you have questions about archaeological issues, please contact Mitch Zoll at (317) 232-3492 or mzoll@dnr.IN.gov. Please direct questions about buildings or structures to John Carr at (317) 233-1949 or jcarr@dnr.IN.gov.

If there is any future correspondence about the Greenfield Avenue and Howe Road Intersection Improvement Project (Des. No. 1401716), please refer to DHPA No. 18510.

Very truly yours,

Mitchell K. Zoll  
Deputy State Historic Preservation Officer

MKZ:JLC:jlc

Shaun Miller  
March 31, 2016  
Page 2

cc: Elizabet Biggio, Butler, Fairman & Seufert, Inc.

emc: Shaun Miller, Indiana Department of Transportation  
Mary Kennedy, Indiana Department of Transportation  
Shirley Clark, Indiana Department of Transportation  
Britta Anderson, Butler, Fairman & Seufert, Inc.  
Elizabet Biggio, Butler, Fairman & Seufert, Inc.  
Jeffrey Plunkett, Accidental Discoveries, LLC  
Mitchell Zoll, Department of Natural Resources  
John Carr, Department of Natural Resources



# 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](mailto: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: Jeffrey A. Plunkett

Date (month, day, year): September 12, 2016

Project Title: Phase Ia Archaeological Field Reconnaissance: Addendum to the Proposed Roundabout Intersection Improvement at Greenfield Avenue and Howe Road in Noblesville, Hamilton County, Indiana (Des. No. 1401716).

### PROJECT OVERVIEW

Project Description: This investigation was conducted on a proposed detention basin that was added to the original Greenfield and Howe roundabout project (Des. No. 1401716).

INDOT Designation Number/ Contract Number: Des. No. 1401716 Project Number: 16321

DHPA Number: Approved DHPA Plan Number:

Prepared For: Butler, Fairman & Seufert, Inc.

Contact Person: Elizabet Biggio

Address: 8450 Westfield Blvd., Suite 300

City: Indianapolis State: IN ZIP Code: 46240-8302

Telephone Number: (317) 713-4615 Email Address: EBiggio@bfsengr.com

Principal Investigator: Jeffrey A. Plunkett

Signature:

Company/Institution: NS Services, LLC

Address: 4974 South Cobblestone Drive

City: Zionsville State: IN ZIP Code: 46077

Telephone Number: (317) 753-5581 Email Address: [j.plunkett@nsenvservices.com](mailto:j.plunkett@nsenvservices.com)

**FIELD INVESTIGATION:** (check all that apply) Field Investigation Dates: September 6, 2016

Field Supervisor: Jeffrey A. Plunkett

Field Crew: Jeffrey A. Plunkett

Surface Visibility: 40-95%

Factors Affecting Visibility: Mature corn and trees

Visual Walkover  Pedestrian Survey  Shovel Test  Screened  Mesh Size

Interval 5 m  10 m  15 m  Other (describe below)

Number of Shovel Test Units Excavated:

Describe Methods: All of the undisturbed portions of the project area had a surface visibility greater than 30%, therefore, parallel visual pedestrian transects at 10-meter (32.8-foot) intervals were used to survey the area.

Attach photographs documenting disturbances below

Describe Disturbances: The wooded area on the southern end of the project area was wet and poorly drained and disturbed from water runoff and channeling.

Comments:

**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:

**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 (*1:24,000 scale*).
- Aerial photograph showing the project area, land use, and survey methods.
- Photographs of the project area.
- Project plans (*if available*)

Other Attachments:

Adderley, Anthony and Andrew V. Martin  
 2001 Archaeological Records Review and Phase Ia Field Reconnaissance for Noblesville Site, American Tower Site #87775, Hamilton County, Indiana. Sagamore Project Number 01-0739M3. Sagamore Environmental Services, Indianapolis, Indiana. Prepared for American Tower Corporation, Schaumburg, Illinois.

Brammer, Beth N. and Thomas C. Beard  
 1995 Archaeological Field Reconnaissance: Proposed Sight Distance Correction on SR 238 at Promise Road, INDOT Project ST-3229( ), 8572230, Hamilton County, Indiana. Report of Investigations 95IN0007. Landmark Archaeological and Environmental Services, Lebanon, Indiana. Prepared for Indiana Department of Transportation, Indianapolis.

Enterprise Printing and Publishing Company  
 1922 Atlas and Plat Book of Hamilton County, Indiana: Containing Outline Map of the County, Plats of All the Townships with Owner's Names, Indiana State Map, Honor Roll of Hamilton County. Enterprise Printing and Publishing Company, Noblesville, Indiana.



## Elizabeth Biggio

---

**From:** Laswell, Jeffrey <JLaswell@indot.IN.gov>  
**Sent:** Wednesday, September 14, 2016 10:00 AM  
**To:** Elizabeth Biggio  
**Cc:** j.plunkett@nsenvservices.com; Miller, Shaun (INDOT)  
**Subject:** RE: Des1401716 Greenfield&Howe Additional Archaeology  
**Attachments:** Greenfield&Howe-Des1401716-AdditionalASR\_2016-09-12 Comments.pdf

Elizabeth,

Thank you for the submission of the above referenced archaeological report. The report was reviewed by INDOT Cultural Resources personnel who meet the Secretary of the Interior's Professional Qualification Standards as per 36 CFR Part 61. We concur with the evaluations and recommendations made by Accidental Discoveries (Plunkett 9/12/2016) received by our office on September 13, 2016. However, the INDOT, Cultural Resources Office (CRO) respectfully requests that comments included in the enclosed report are addressed prior to forwarding the final report to SHPO. Once these minor revisions have been made, please submit one copy of the archaeology report to SHPO for review and concurrence. In addition, we ask that the revised report and the SHPO submittal letter are sent to INDOT, CRO care Jeff Laswell [jaswell@indot.in.gov](mailto:jaswell@indot.in.gov) during the time of submission. If there are any questions or concerns regarding this project, please contact me at [jaswell@indot.in.gov](mailto:jaswell@indot.in.gov) or (317) 233-2093.

Sincerely,

Jeff Laswell  
Archaeologist  
INDOT Environmental Services  
Cultural Resources Office  
100 N. Senate Ave. IGCN - Room N642  
Indianapolis, Indiana  
46204-2216  
(317) 233-2093



September 20, 2016

Mr. Chad Slider  
Assistant Director for Environmental Review  
Division of Historic Preservation and Archaeology  
Indiana Department of Natural Resources  
402 W. Washington St., Room W274  
Indianapolis, IN 46204-2739

RE: Addendum Archaeology Short Report for the Greenfield Avenue  
and Howe Road Intersection in the City of Noblesville, Hamilton  
County, Indiana (Des. No. 1401716; DHPA No.18510)

Dear Mr. Slider:

Please find enclosed the completed DHPA review request submittal form and the above-referenced Indiana Archaeological Short Report (Plunket, January 11, 2016) completed for our company by Accidental Discoveries, LLC. The Phase Ia Archaeological Field Reconnaissance covers an additional area for the proposed roundabout project at the intersection of Greenfield Avenue and Howe Road in the City of Noblesville.

The original ASR for this project was approved by INDOT on January 12, 2016 and the SHPO concurred with the recommendations on February 11, 2016. Since the completion of the Section 106 process, a detention ditch has been added to the north side of the proposed roundabout, within an easement for the Wheeler-Wheeler legal drain, for the purpose of managing drainage. This area was not studied during the original archaeological investigations. The enclosed rendering and plan sheet show the area where the proposed ditch will be placed. The proposed ditch will be approximately 15 feet by 100 feet and will tie-in to the legal drain through 12-inch pipes. Project drainage was originally planned and documented to tie-in to this existing legal drain.

The enclosed Phase Ia was reviewed by INDOT Cultural Resources personnel who meet the Secretary of Interior's Professional Qualification Standards as per 36 CFR Part 61. INDOT agreed with the recommendations of the archaeologist on DATE, 2016 and it is INDOT's opinion the project should be allowed to proceed as planned.

**Headquarters:**  
8450 Westfield Blvd., Suite 300  
Indianapolis, IN 46240-5920  
t 317.713.4615  
f 317.713.4616  
e bfs@BFSEngr.com  
[www.BFSEngr.com](http://www.BFSEngr.com)

**Branch Locations:**  
Ft. Wayne  
Lafayette  
Louisville  
Merrillville  
Plainfield

**Founded 1961**



Mr. Chad Slider  
Page 2  
September 20, 2016

*In regard to above-ground properties, the area of potential effect included the area around the ditch and the historic property report will not be revised. No historic properties were identified. Therefore, the May 3, 2016 800.11(d) finding of "No Historic Properties Affected" remains valid.*

*Please review the enclosed report and advise INDOT of your recommendations concerning its acceptability. If there are any questions or concerns regarding this project, please contact Mr. Jeff Laswell of the INDOT Cultural Resources Office, Environmental Services at (317) 233-6795 or [jlswell@indot.in.gov](mailto:jlswell@indot.in.gov).*

Sincerely,

BUTLER, FAIRMAN and SEUFERT, INC.



Elizabeth Biggio  
[ebiggio@bfsengr.com](mailto:ebiggio@bfsengr.com)

EBL:lm

Enclosures

Emc: Shaun Miller, INDOT Cultural Resources Office  
Jeff Laswell, INDOT Cultural Resources Office  
Jeff Plunkett, NS Services

# DNR Indiana Department of Natural Resources



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](mailto:dhpa@dnr.IN.gov) • [www.IN.gov/dnr/historic](http://www.IN.gov/dnr/historic)

September 26, 2016

Elizabeth Biggio  
Butler, Fairman & Seufert  
8450 Westfield Boulevard, Suite 300  
Indianapolis, Indiana 46240-5920

Federal Agency: Indiana Department of Transportation ("INDOT")  
on behalf of Federal Highway Administration

Re: Addendum Archaeology Short Report for the Greenfield Avenue and Howe Road Intersection  
in the City of Noblesville, Hamilton County, Indiana; (Des. No. 1401716) (DHPA No.  
18510)

Ms. Biaggio:

Pursuant to Section 106 of the National Historic Preservation Act of 1966, as amended (54 U.S.C. § 306108), 36 C.F.R. Part 800, and the "Programmatic Agreement . . . Regarding the Implementation of the Federal Aid Highway Program In the State of Indiana," the staff of the Indiana State Historic Preservation Officer has reviewed the report submitted with your letter dated September 20, 2016 and received on September 22, 2016 for the aforementioned project in the Hamilton County, Indiana.

In regard to the phase Ia reconnaissance addendum report, based on the submitted information and the documentation available to the staff of the Indiana SHPO, we concur with the recommendation of the archaeologist and agree that no further archaeological investigation is necessary.

The structures report was commented on in our letter of December 18, 2015. The original Phase I archaeology report was commented on in our letter of February 11, 2016.

If you have questions about archaeological issues, please contact Mitch Zoll at (317) 232-3492 or [mzoll@dnr.IN.gov](mailto:mzoll@dnr.IN.gov). If you have questions about buildings or structures, please contact John Carr at (317) 233-1949 or [jcarr@dnr.IN.gov](mailto:jcarr@dnr.IN.gov).

In all future correspondence regarding this project (Des. No. 1401716) please refer to DHPA No. 18510.

Very truly yours,

  
Mitchell K. Zoll  
Deputy State Historic Preservation Officer

MKZ:mkz:

emc: Anu Kumar, INDOT – [akumar@indot.in.gov](mailto:akumar@indot.in.gov)  
Shaun Miller, INDOT - [smiller@indot.IN.gov](mailto:smiller@indot.IN.gov)

Mary Kennedy, INDOT - [mkennedy@indot.in.gov](mailto:mkennedy@indot.in.gov)  
Patrick Carpenter, INDOT - [pacarpenter@indot.IN.gov](mailto:pacarpenter@indot.IN.gov)  
Shirley Clark, INDOT - [SClark@indot.in.gov](mailto:SClark@indot.in.gov)  
Jeff Laswell, INDOT - [jlaswell@indot.in.gov](mailto:jlaswell@indot.in.gov)  
Elizabeth Biggio, BFS - [ebiggio@bfsedr.com](mailto:ebiggio@bfsedr.com)  
Jeff Plunkett, NS Services - [jplunkett@nsenservices.com](mailto:jplunkett@nsenservices.com)

## APPENDIX E: RED FLAG INVESTIGATION AND HAZARDOUS MATERIALS

---

Date: October 26, 2015

Re: RED FLAG INVESTIGATION  
DES # 1401716  
Greenfield Avenue and Howe Road Intersection  
City of Noblesville, Hamilton County, IN

Please note: This report has not been reviewed by the Hazardous Materials Unit as the project does not involve impacts to INDOT right-of-way.

## NARRATIVE

The City of Noblesville is planning a project involving the construction of a roundabout at the intersection of Greenfield Avenue and Howe Road. It is anticipated permanent right-of-way (ROW) will be acquired from each property adjacent to the intersection. The project is located in Sections 8 and 17, Township 18 North, Range 5 East of the USGS Riverwood Quadrangle, all within the City of Noblesville, Noblesville Township, Hamilton County, Indiana. The project is approximately 2.5 miles southeast of downtown Noblesville and approximately 19.9 miles northeast of Indianapolis.

## SUMMARY

<b>Infrastructure</b>			
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	N/A	Recreational Facilities	N/A
Airports	N/A	Pipelines	N/A
Cemeteries	N/A	Railroads	N/A
Hospitals	N/A	Trails	3
Schools	N/A	Managed Lands	N/A

Explanation:

**Trails:** There are a total of three (3) mapped trail segments within 0.5 mile of the project area. The closest mapped trail segment is the SR 238 from Howe Rd. to Marilyn Rd. segment and is mapped adjacent to the project area along Greenfield Avenue. This trail is marked as under development by the Noblesville Parks and Recreation Department. Given the nature of the work proposed, no negative impacts to this or any mapped trails are anticipated from this project.

<b>Water Resources</b>			
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	18
Karst Springs	N/A	IDEM 303d Listed Lakes	N/A
Canal Structures – Historic	N/A	Lakes	2
NWI - Lines	N/A	Floodplain - DFIRM	N/A
IDEM 303d Listed Rivers and Streams (Impaired)	N/A	Cave Entrance Density	N/A
Rivers and Streams	1	Sinkhole Areas	N/A
Canal Routes - Historic	N/A	Sinking-Stream Basins	N/A

Explanation:

**NWI Wetlands:** There are a total of 18 NWI wetlands mapped within 0.5 mile of the project area. The closest wetland is mapped approximately 0.06 mile north of the project area. This wetland is recorded as a freshwater pond of 0.57 acre. Given their distance from the project area and the inclusion of drainage to accommodate expanded pavement areas, no impacts to mapped wetlands are anticipated from this project. However, a waterways and wetlands reconnaissance should be conducted within the project area to verify the presence or absence of any water features.

**Rivers and Streams:** There is a total of one (1) stream segment mapped within 0.5 mile of the project area. This unnamed stream is mapped approximately 0.17 mile northwest of the project area at its closest point. This project would not cross the stream or include any work within the stream. No impacts to this stream are anticipated, however, a waterways and wetlands reconnaissance should be conducted within the project area to verify the presence or absence of any water features.

**Lakes:** There are two (2) lakes mapped within 0.5 mile of the project area. Both lakes are detention pond, located approximately 0.24 mile and 0.28 mile southwest of the project area. No impacts to mapped lakes are anticipated, however, a waterways and wetlands reconnaissance should be conducted within the project area to verify the presence or absence of any water features.

<b>Mining/Mineral Exploration</b>			
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	N/A	Petroleum Fields	1
Mines – Surface	N/A	Mines – Underground	N/A

Explanation:

**Petroleum Fields:** There is a total of one (1) mapped petroleum field within 0.5 mile of the project area. The proposed project is located within the Trenton Oil Field. This oil field is no longer active. Given the depth of these wells when they were active and the nature of the proposed work, no impacts to the project from the Trenton Oil Field are anticipated.

<b>Hazmat Concerns</b>			
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
NPDES Facilities	N/A	Superfund	N/A
NPDES Pipe Locations	N/A	Institutional Control Sites	N/A
Open Dump Sites	N/A		



Explanation:

There are no hazmat sites mapped within 0.5 mile of the project area.

**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. It is recommended Early Coordination with the Indiana Department of Natural Resources and the U.S. Fish and Wildlife Service occur.

**Cultural Resources**

According to the Indiana State Historic Architectural and Archaeological Database (SHAARD) there are three (3) previously-surveyed site mapped within 0.5 mile of the project area. It is recommended the project's Area of Potential Effect (APE) be evaluated by an Indiana Division of Historic Preservation and Archaeology (DHPA)-qualified professional.

**RECOMMENDATIONS**

Include recommendations from each section. If there are no recommendations, please indicate N/A:

INFRASTRUCTURE: It is recommended the maintenance of traffic plan be communicated to local residents prior to the commencement of construction.

WATER RESOURCES: A waterways and wetlands reconnaissance should be conducted within the project area to verify the presence or absence of any water features.

MINING/MINERAL EXPLORATION: N/A

HAZMAT CONCERNS: N/A

ECOLOGICAL INFORMATION: Coordination with the US Fish and Wildlife Service and the Indiana Department of Natural Resources is recommended in order to determine if there is the potential for the project to impact any of the listed species.

CULTURAL RESOURCES: A full Section 106 review by a DHPA Qualified Professional is recommended to determine the presence of any historic properties within the APE, and the effect that the project will have on those properties.

Prepared by:

Elizabet Biggio  
Architectural Historian  
Butler, Fairman, & Seufert, Inc.

**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

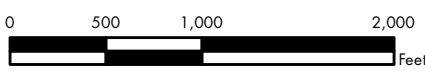
HAZMAT CONCERNS: YES

SHAARD MAP: YES



- Legend**
- Project Area
  - Half Mile Radius
  - Airports
  - Cemeteries
  - Hospitals
    - Church Hospital
    - Hospital District
    - Local Hospital
    - Other Hospital
    - Private Hospital
    - Proprietary Hospital
    - Rural Health Clinic
    - State Hospital
  - Managed Lands IDNR
  - Pipelines
    - Crude Oil
    - Natural Gas
    - Refined Products
  - Railroad 100k
  - Recreational Facilities
  - Religious Centers
  - Schools IDOE
  - Trails - IDNR
    - Open
    - Under Development
    - Planned

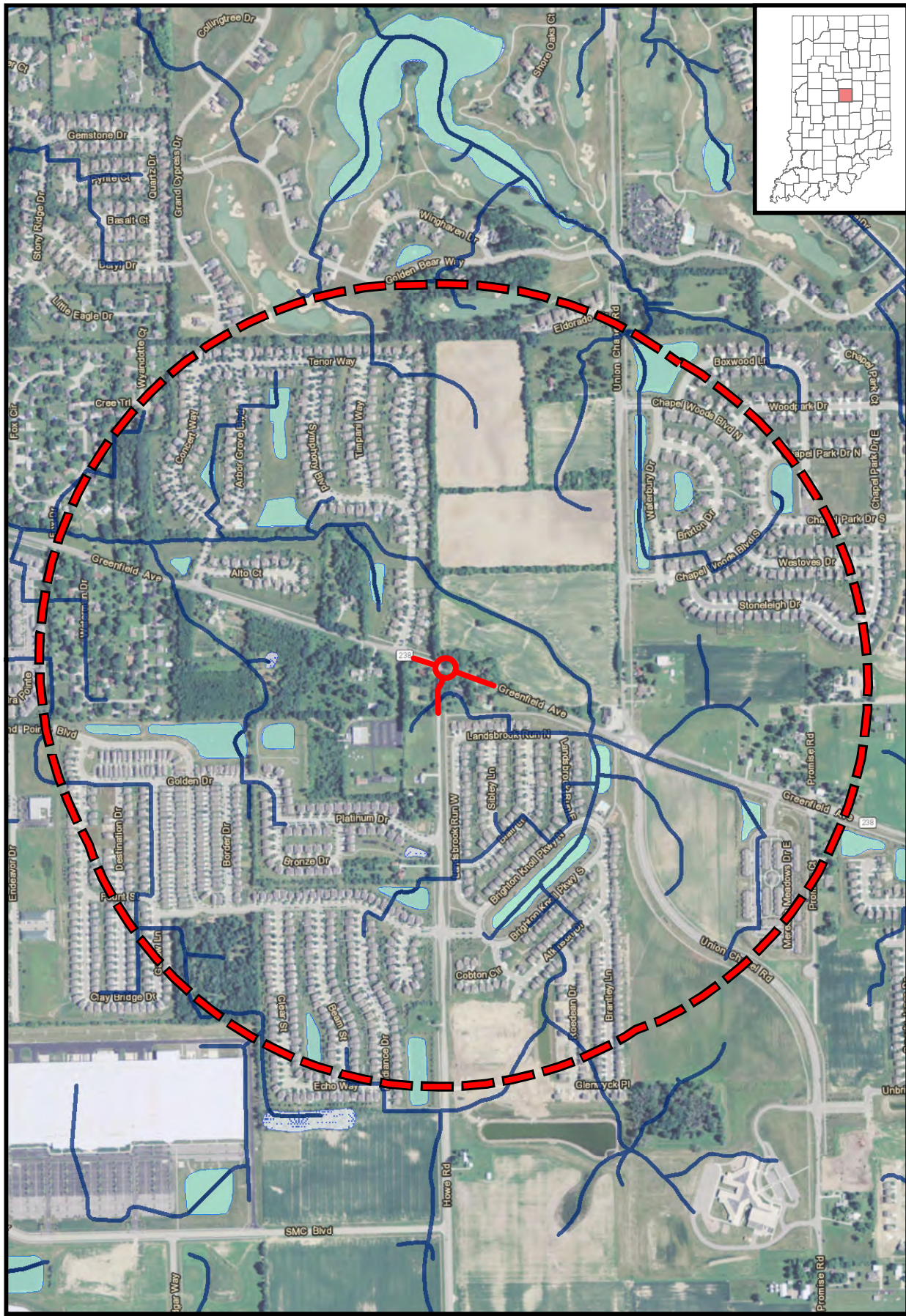
Map Source: Indiana Geological Survey (IGS), IndianaMap, ArcGIS Online (ESRI) World Imagery



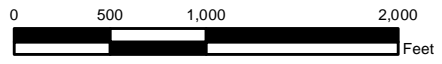
**Red Flag Investigation  
Infrastructure**

Greenfield Avenue and Howe Road Roundabout  
City of Noblesville, Hamilton County, Indiana  
Des. No. 1401716





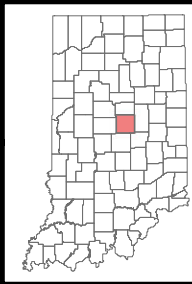
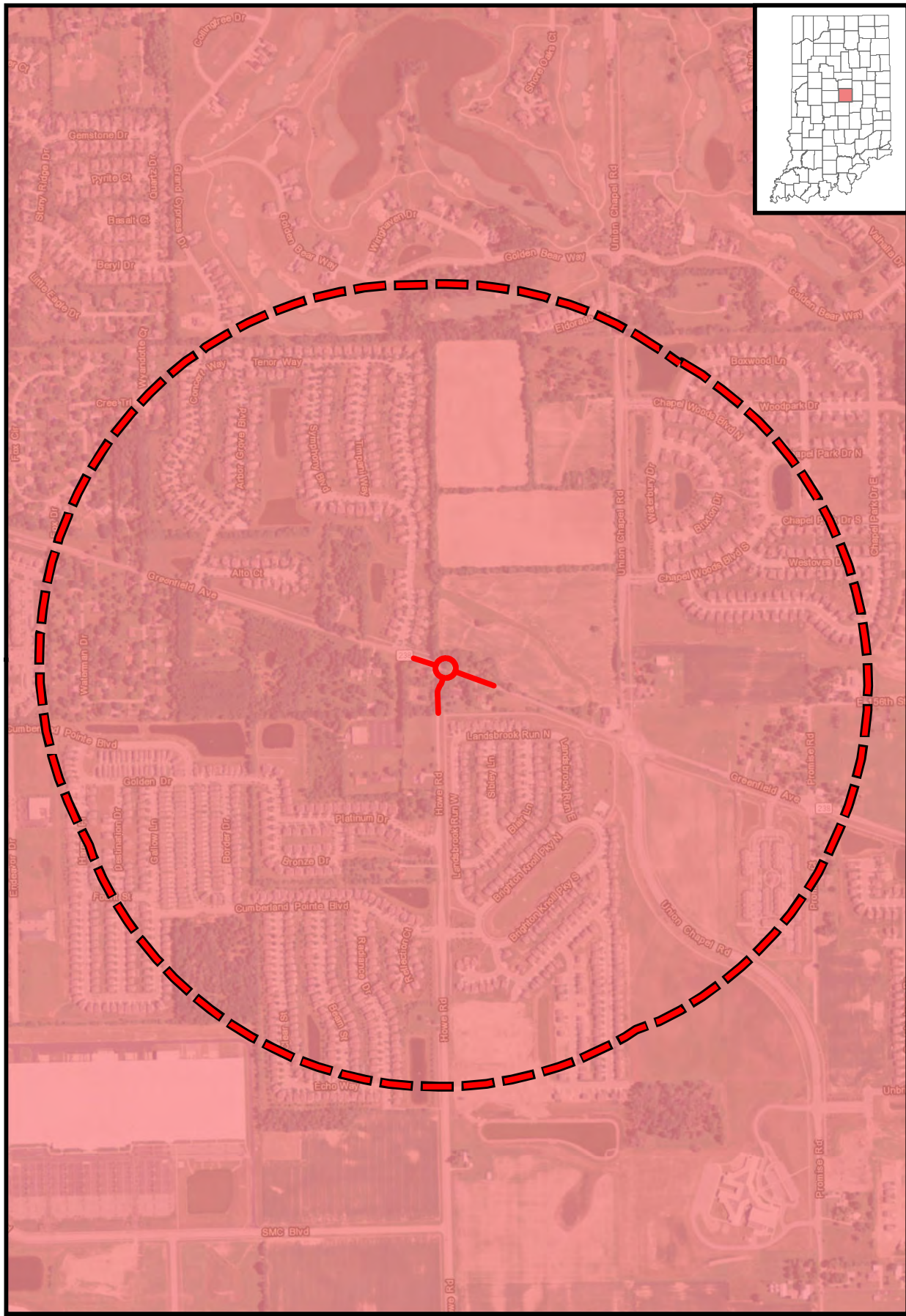
- Legend**
- Project Area
  - Half Mile Radius
  - Karst Springs
  - Canal Structures Historic
  - Wetland Points (NWI)
  - Canal Routes Historic
  - IDEM 303d Listed Rivers and Streams (Impaired)
  - Streams (NHD)
  - Wetland Lines (NWI)
  - Rivers (NHD)
  - Lakes (NHD)
  - Floodplains DFIRM
    - A,
    - AE,
    - AE, FLOODWAY
    - AH,
    - AO,
    - X,
  - IDEM 303d Listed Lakes (Impaired)
  - Sinkhole Areas
    - Sinkhole Area
    - Sinking Stream Basin
  - Wetlands (NWI)
  - Cave Entrance Density
    - Entrances/sqkm
    - 0-1
    - 2-5
    - 6-10
    - 11-15



**Red Flag Investigation  
Water Resources**

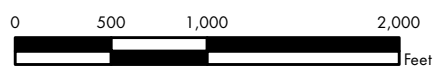
**Greenfield Avenue and Howe Road Roundabout  
City of Noblesville, Hamilton County, Indiana  
Des. No. 1401716**





- Legend**
- Project Area
  - Half Mile Radius
  - Mines Surface
  - Mines Underground
  - Petroleum Fields (2015)
    - Gas
    - Oil
    - Oil/gas
  - Petroleum Wells (IGS, 2015)
    - Gas Wells
    - Gas Storage Wells
    - Oil Wells
    - Service Wells
    - Stratigraphic Test Wells
    - Dry Wells
    - Unknown Wells

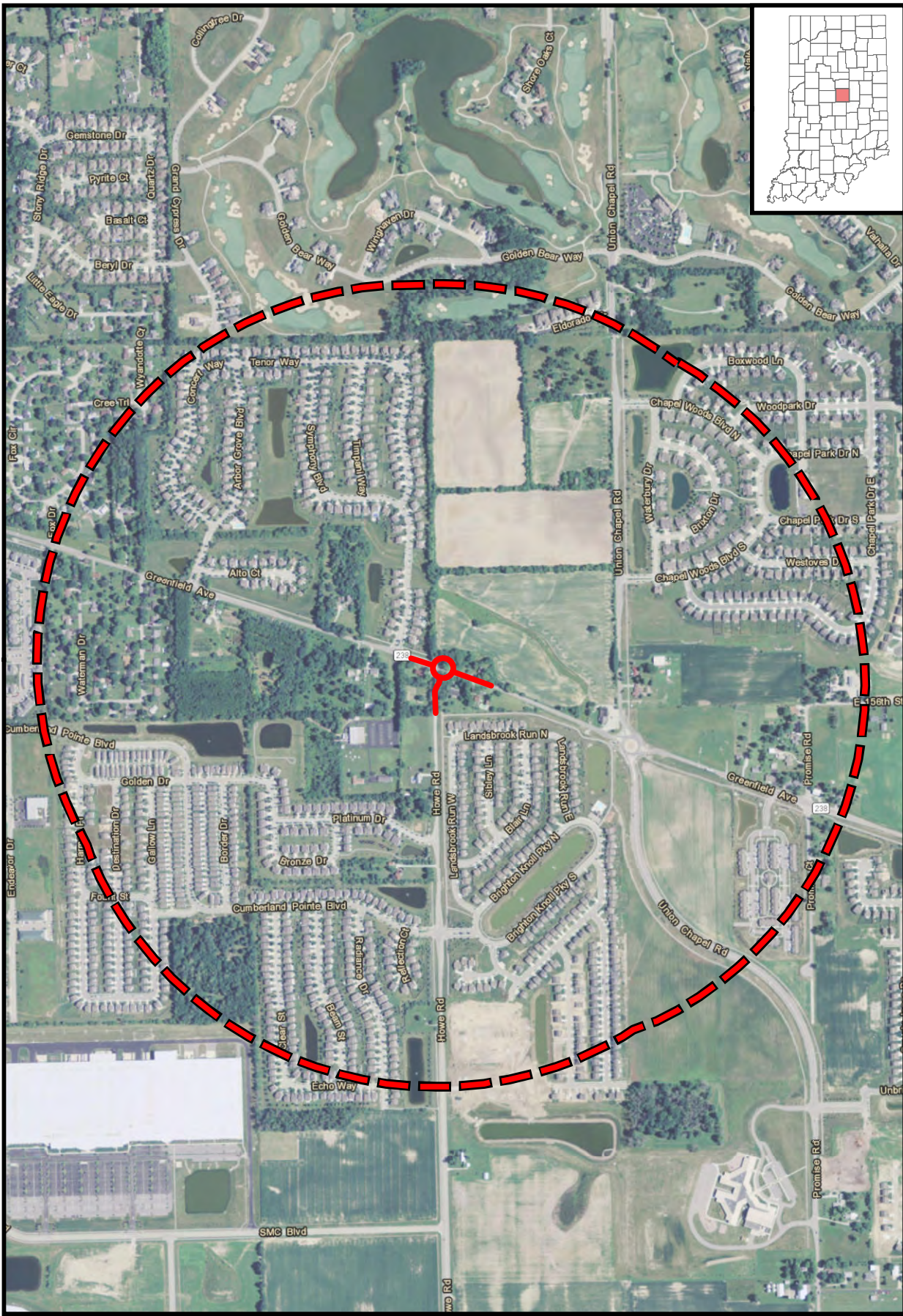
Map Source: Indiana Geological Survey (IGS), IndianaMap, ArcGIS Online (ESRI) World Imagery



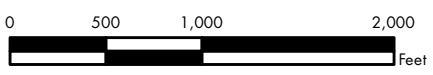
**Red Flag Investigation  
Mining and Mineral Exploration**

Greenfield Avenue and Howe Road Roundabout  
City of Noblesville, Hamilton County, Indiana  
Des. No. 1401716





- Legend**
- Project Area
  - Half Mile Radius
  - Brownfield Sites
  - Confined Feeding Operations
  - Construction Demolition Waste
  - Corrective Action Sites (RCRA)
  - Industrial Waste Sites (RCRA Generators)
  - Institutional Control Sites
  - Manufactured Gas Plant Sites
  - NPDES Facilities
  - NPDES Pipe Locations
  - Open Dump Sites
  - RCRA Waste Treatment, Storage, and Disposal Sites (TSDs)
  - Restricted Waste Sites
  - Septage Waste Sites
  - Solid Waste Landfills
  - State Cleanup Sites
  - Superfund
  - Tire Waste Sites
  - Underground Storage Tanks
    - No Leaking
    - Leaking
  - Voluntary Remediation Program
  - Waste Disposal Storage Handling
    - Infectious Waste
    - Incinerator (<7 tons/day)
    - Medical Waste Processor
    - Surface Impoundment/Lagoon
  - Waste Transfer Stations

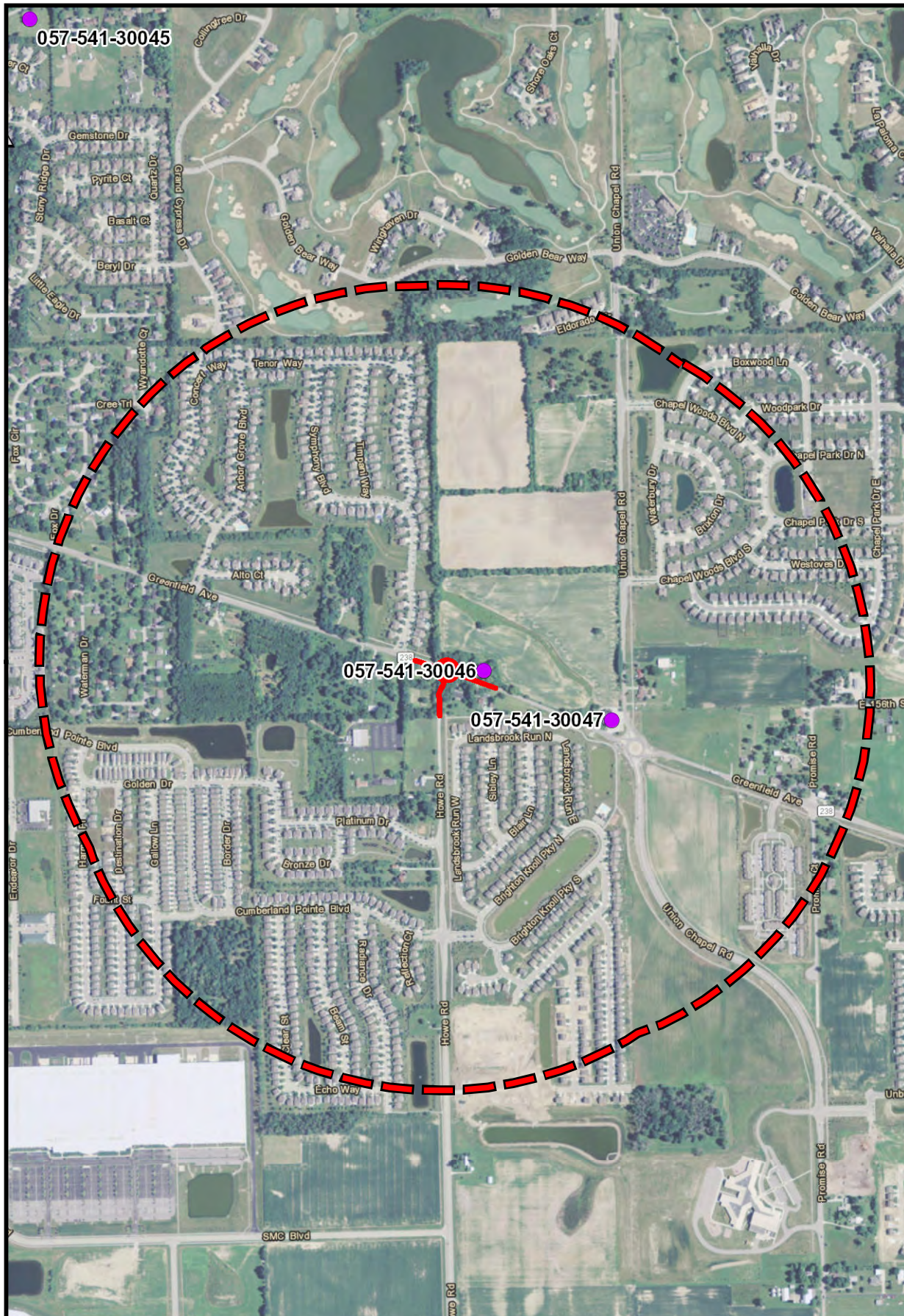


**Red Flag Investigation  
Hazmat Concerns**

Greenfield Avenue and Howe Road Roundabout  
City of Noblesville, Hamilton County, Indiana  
Des. No. 1401716



Map Source: Indiana Geological Survey (IGS), IndianaMap, ArcGIS Online (ESRI) Web Imagery



- Legend**
- Project Area
  - - - Half Mile Radius
  - Cemeteries
- County Survey Sites**
- RATING**
- Outstanding
  - Notable
  - Contributing
  - Non-Contributing
  - Demolished
  - Unknown
- Historic Bridges**
- RATING**
- Outstanding
  - Notable
  - Contributing
  - Non-Contributing
  - Demolished
  - Unknown
  - National Register Sites
  - Historic Districts

Map Source: Indiana Geological Survey (IGS), IndianaMap, ArcGIS Online (ESRI) World Imagery, IDNR -Division of Historic Preservation and Archaeology



**SHAARD Map**  
 Greenfield Avenue and Howe Road Roundabout  
 City of Noblesville, Hamilton County, Indiana  
 Des. No. 1401716

# Indiana County Endangered, Threatened and Rare Species List

## County: Hamilton

Species Name	Common Name	FED	STATE	GRANK	SRANK
<b>Mollusk: Bivalvia (Mussels)</b>					
<i>Epioblasma torulosa rangiana</i>	Northern Riffleshell	LE	SE	G2T2	SX
<i>Epioblasma triquetra</i>	Snuffbox	LE	SE	G3	S1
<i>Lampsilis fasciola</i>	Wavyrayed Lampmussel		SSC	G5	S3
<i>Ligumia recta</i>	Black Sandshell			G4G5	S2
<i>Obovaria subrotunda</i>	Round Hickorynut		SE	G4	S1
<i>Plethobasus cyphus</i>	Sheepnose	LE	SE	G3	S1
<i>Pleurobema clava</i>	Clubshell	LE	SE	G1G2	S1
<i>Ptychobranhus fasciolaris</i>	Kidneyshell		SSC	G4G5	S2
<i>Quadrula cylindrica cylindrica</i>	Rabbitsfoot	LT	SE	G3G4T3	S1
<i>Toxolasma lividus</i>	Purple Lilliput		SSC	G3Q	S2
<i>Venustaconcha ellipsiformis</i>	Ellipse		SSC	G4	S2
<i>Villosa fabalis</i>	Rayed Bean	LE	SE	G2	S1
<i>Villosa lienosa</i>	Little Spectaclecase		SSC	G5	S3
<b>Insect: Odonata (Damselflies)</b>					
<i>Enallagma divagans</i>	Turquoise Bluet		SR	G5	S3
<b>Amphibian</b>					
<i>Acris blanchardi</i>	Northern Cricket Frog		SSC	G5	S4
<i>Lithobates pipiens</i>	Northern Leopard Frog		SSC	G5	S2
<i>Necturus maculosus</i>	Common mudpuppy		SSC	G5	S2
<b>Reptile</b>					
<i>Clemmys guttata</i>	Spotted Turtle		SE	G5	S2
<i>Sistrurus catenatus catenatus</i>	Eastern Massasauga	C	SE	G3G4T3Q	S2
<b>Bird</b>					
<i>Bartramia longicauda</i>	Upland Sandpiper		SE	G5	S3B
<i>Buteo lineatus</i>	Red-shouldered Hawk		SSC	G5	S3
<i>Certhia americana</i>	Brown Creeper			G5	S2B
<i>Dendroica cerulea</i>	Cerulean Warbler		SE	G4	S3B
<i>Haliaeetus leucocephalus</i>	Bald Eagle		SSC	G5	S2
<i>Ixobrychus exilis</i>	Least Bittern		SE	G5	S3B
<i>Lanius ludovicianus</i>	Loggerhead Shrike		SE	G4	S3B
<i>Nycticorax nycticorax</i>	Black-crowned Night-heron		SE	G5	S1B
<i>Thryomanes bewickii</i>	Bewick's Wren			G5	S1B
<b>Mammal</b>					
<i>Taxidea taxus</i>	American Badger		SSC	G5	S2
<b>Vascular Plant</b>					
<i>Armoracia aquatica</i>	Lake Cress		SE	G4?	S1
<i>Chelone obliqua</i> var. <i>speciosa</i>	Rose Turtlehead		WL	G4T3	S3
<i>Drosera intermedia</i>	Spoon-leaved Sundew		SR	G5	S2

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
<b>Platanthera leucophaea</b>	<b>Prairie White-fringed Orchid</b>	<b>LT</b>	<b>SE</b>	<b>G2G3</b>	<b>S1</b>
<b>High Quality Natural Community</b>					
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  
 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

## HAZARDOUS MATERIALS SITE VISIT FORM

Des # 1401716 Project # \_\_\_\_\_  
 Road # Greenfield Ave/Howe Road Type of Road Project- Sidewalk  
 Description of area (either general location or exact location of parcel) Residential area with wooded lot near Noblesville Airport  
 Person completing this Field Check- Britta Anderson

1. **Has a Red Flag Investigation been completed?**  Yes  No

Notes: No hazardous sites are located near the project site.

2. **Right-of-Way Requirements:**

No New ROW  Strip ROW  Minor Take  Whole Parcel Take  Information Not Available

Notes: Anticipated that more

3. **Land Use History and Development:** (Industrial, Light Industry, Commercial, Agricultural, Residential, Other – also, indicate source of data: visual inspection, aerial photos, U.S.G.S. topo maps, etc.)

Setting (rural or urban): Urban (Aerial photos, U.S.G.S. Topo maps)

Current Land Uses: Residential/Wooded Lot (visual inspection)

Previous Land Uses: Farmsteads and residential (historic aerials, Hamilton County Interim Report)

Adjacent Land Uses: Residential (visual inspection)

Describe any structures on the property:

4. <b>Visual Inspection:</b>	Property	Adjoining Property	Property	Adjoining Property
<b>Storage Structures:</b>			<b>Evidence of Contamination:</b>	
Underground Tanks	_____	_____	Junkyard	_____
Surface Tanks	_____	_____	Auto Graveyard	_____
Transformers	_____	_____	Surface Staining	_____
Sumps	_____	_____	Oil Sheen	_____
Ponds/Lagoons	_____	_____	Odors	_____
Drums	_____	_____	Vegetation Damage	_____
Basins	_____	_____	Dumps	_____
Landfills	_____	_____	Fill Dirt Evidence	_____
Other	_____	_____	Vent pipes or fill pipes	_____
			Other	_____

5. **Is a Phase I, Initial Site Assessment required?**  Yes  No

The site visit was on October 13, 2015.

## APPENDIX F: ECOLOGICAL AND WATER RESOURCES

---

**ECOLOGICAL EVALUATION FORM**

Road: Greenfield Avenue and Howe Road Des. No: 1401716 Project No: 1401716 County: Hamilton  
 Project Description: Improvement to the intersection of Greenfield Avenue and Howe Road  
 Project Location: The project is located at the intersection of Greenfield Avenue and Howe Road which is approx. 2.7 miles southeast of downtown of Noblesville, Indiana  
 Natural Region and Section: Section 8, Township 18N, Range 5E  
 8-Digit Watershed: 05120201 USGS Quadrangle: Riverwood Soil Survey Map Sheet: Online

**RIGHT-OF-WAY BY LAND USE TYPE**

Permanent Right-of-way

Land Use Type	R/W (ac)
Commercial	0.0
Industrial	0.0
Residential	0.54
Agricultural	0.0
Wooded	0.11
<b>Total Perm R/W</b>	<b>0.65</b>

Temporary Right-of-way

Land Use Type	R/W (ac)
Commercial	0.0
Industrial	0.0
Residential	0.01
Agricultural	0.0
Wooded	0.0
<b>Total Temp R/W</b>	<b>0.01</b>

Is the project located in an urban or a rural setting? Suburban  
 Is land use in the project changing? (Yes) No If yes, explain: Within the last 10 -15 years the area has transitioned from scattered single family residential and agricultural fields to mainly suburban neighborhoods northwest, southwest, and southeast of the intersection. Additional residential development is anticipated to occur northeast of the intersection where agricultural fields now exist.

**QUADRANT DESCRIPTION**

Northeast Residential, Partially Forested, Agricultural  
 Northwest Residential  
 Southeast Residential  
 Southwest Residential

**STREAM INFORMATION – N/A**

	Width	Depth	Maximum Depth
Bank Full Channel	---	---	---
Ordinary High Water Mark	---	---	---

Substrate Material: (circle one) silt sand gravel loose rock bedrock  
 Flow Velocity: (circle one) stagnant slow moderate swift rapid  
 Does the stream contain riffle/pool complexes? Yes No  
 Does the stream contain meanders within the proposed right-of-way? Yes No  
 Is channel work proposed as part of this project? Yes No If yes, describe: \_\_\_\_\_  
 Is aquatic flora present? Yes No If yes, please list: \_\_\_\_\_  
 Is aquatic fauna present? Yes No If yes, please list: \_\_\_\_\_  
 Comments: \_\_\_\_\_  
 \_\_\_\_\_  
 \_\_\_\_\_

**TERRAIN**

Immediate Area: Depressed (Flat) Gently Rolling Rolling Hilly  
 Extended Area: Depressed (Flat) Gently Rolling Rolling Hilly

**TERRESTRIAL WILDLIFE**

Fauna Observed or Indicated – None observed due to weather conditions

Family <sup>1</sup>	Common Name	Scientific Name	Indication <sup>2</sup>
Bird	Downy Woodpecker	<i>Picoides pubescens</i>	Observed

<sup>1</sup>Mammal, Bird, Reptile, or Amphibian

<sup>2</sup>Observed Animal, Tracks, Scat, Homes, and/or Markings

Dominant Flora Observed

Strata <sup>1</sup>	Common Name	Scientific Name	Wetland Indicator <sup>2</sup>	Location <sup>3</sup>
Overstory	American Elm	<i>Ulmus americana</i>	FACW	Upland
Overstory	Black Walnut	<i>Juglans nigra</i>	FACU	Upland
Overstory	Sycamore	<i>Platanus occidentalis</i>	FACW	Upland
Overstory	Silver Maple	<i>Acer saccharinum</i>	FACW	Upland
Overstory	American Beech	<i>Fagus grandifolia</i>	FACU	Upland
Overstory	American Hornbeam	<i>Carpinus caroliniana</i>	FAC	Upland
Herbaceous	Ornamental vegetation	-----	-----	Upland
Herbaceous	Kentucky bluegrass	<i>Poa pratensis</i>	FAC	Upland
Herbaceous	Canadian horseweed	<i>Erigeron canadensis</i>	FACU	Upland
Herbaceous	goldenrod	<i>Solidago sp.</i>	FACU	Upland
Herbaceous	Canadian thistle	<i>Cirsium arvense</i>	FACU	Upland
Herbaceous	black raspberry	<i>Rubus occidentalis</i>	FACU	Upland

<sup>1</sup>Overstory, Understory, Vine, or Herbaceous

<sup>2</sup>UPL, FACU-, FACU, FACU+, FAC-, FAC, FAC+, FACW-, FACW, FACW+, or OBL

<sup>3</sup>Floodplain, Depression, or Upland

**SOILS INFORMATION**

Abbreviation	Soil Name	Soil Texture	Drainage Class <sup>1</sup>	Hydric Soil Status <sup>2</sup>	Location <sup>3</sup>
CrA	Crosby	Silt loam	SWPD	NH	Upland
Br	Brookston	Silty clay loam	PD	H	Upland

<sup>1</sup>ED-Excessively Drained, WD-Well Drained, MWD-Moderately Well Drained, SWPD-Somewhat Poorly Drained, PD-Poorly Drained, VPD-Very Poorly Drained

<sup>2</sup>H-Hydric Soil, HI-Contains Hydric Inclusions, NH-Non-Hydric

<sup>3</sup>Floodplain, Depression, or Upland

**ENDANGERED AND THREATENED SPECIES**

Is this project located within the range of any Federally Endangered or Threatened Species?  Yes  No

If yes, please list below.

Common Name	Scientific Name	Status	Confirmed Occurrences Nearby?	Suitable Habitat Present
Indiana bat	<i>Myotis sodalis</i>	E	Unknown	Yes <input type="radio"/> No <input checked="" type="radio"/>
Northern Long-Eared Bat	<i>Myotis septentrionalis</i>	PE	Unknown	Yes <input type="radio"/> No <input checked="" type="radio"/>
				Yes <input type="radio"/> No <input type="radio"/>

Will any of the above listed species be impacted by the planned improvements? Yes  No

**NATURAL AREAS**

Are there any natural areas located within 5 miles of the project area? Yes  No

If yes, please list below.

Property Name	Ownership	Proximity to Project

Will any of the above listed properties be impacted by the planned improvements? Yes  No

**WETLAND INFORMATION**

Are wetlands mapped within or adjacent to project limits? Yes  No

If yes, please list below.

Wetland Type	Abbreviation	Location within Project	Confirmed in Field?		
			Yes	No	Undetermined

Were any of the following wetland indicators observed in or adjacent to project limits?

	<u>Yes</u>	<u>No</u>	<u>Location within Project</u>
Standing Water	___	<u>X</u>	_____
Saturated Soil	<u>X</u>	___	<u>Northeast of the intersection</u>
Depressional Areas	<u>X</u>	___	<u>North side of intersection</u>
Water Marks on Trees	___	<u>X</u>	_____
Drift Lines	___	<u>X</u>	_____
Fluted Tree Trunks/Roots	___	<u>X</u>	_____
Sediment Deposits	___	<u>X</u>	_____
Water Stained Leaves	___	<u>X</u>	_____
Other _____	___	<u>X</u>	_____

Is there a potential for impacts to jurisdictional wetlands as a result of the planned improvements?  Yes  No

Comments: A depressional area with saturated soils was encountered during the field investigation on the north side of the intersection. A wetland determination and, if necessary, delineation will be conducted during the growing season.

**GENERAL PROJECT COMMENTS**

The project will cause not cause any major impacts to ecological resources. Waterway permits may be required for this project depending on the results of a wetland determination for the depressional area north of the intersection. This project is located in a section of residential Hamilton County which is comprised of typical residential land uses.

**ATTACHMENTS**

- State/Location Map
- USGS Quad Map
- NWI Map
- Soils Map
- Aerial Photograph
- Project Graphics or Written Description
- Photographs

Performed by: Britta Anderson /BF&S  
Date: October 13, 2015

Intersection Improvement at  
Greenfield Ave. and Howe Rd.



**U.S. Fish and Wildlife Service**  
**National Wetlands Inventory**

Oct 26, 2015



**Wetlands**

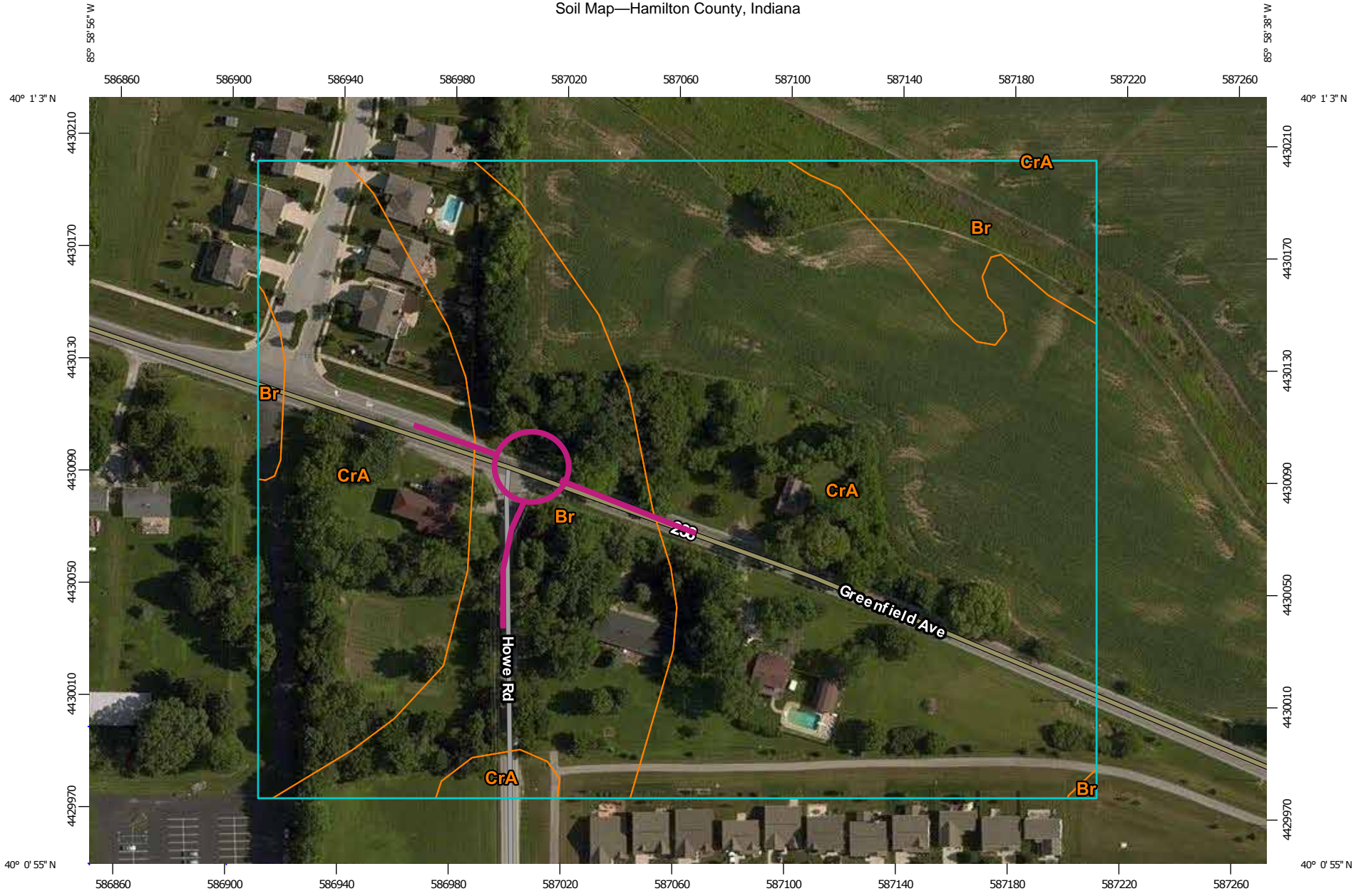
-  Freshwater Emergent
-  Freshwater Forested/Shrub
-  Estuarine and Marine Deepwater
-  Estuarine and Marine
-  Freshwater Pond
-  Lake
-  Riverine
-  Other

 Project Alignment

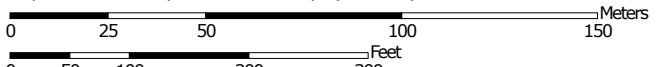
**User Remarks:**

This map is for general reference only. The US Fish and Wildlife Service is not responsible for the accuracy or currentness of the base data shown on this map. All wetlands related data should be used in accordance with the layer metadata found on the Wetlands Mapper web site.

Soil Map—Hamilton County, Indiana



Map Scale: 1:1,930 if printed on A landscape (11" x 8.5") sheet.



Map projection: Web Mercator Corner coordinates: WGS84 Edge tics: UTM Zone 16N WGS84




— Project Location



### MAP LEGEND

**Area of Interest (AOI)**

 Area of Interest (AOI)




















**Soils**







 Soil Map Unit Polygons

 Soil Map Unit Lines


 Soil Map Unit Points

**Special Point Features**






-  Blowout
-  Borrow Pit
-  Clay Spot
-  Closed Depression
-  Gravel Pit
-  Gravelly Spot
-  Landfill
-  Lava Flow
-  Marsh or swamp
-  Mine or Quarry
-  Miscellaneous Water
-  Perennial Water
-  Rock Outcrop
-  Saline Spot
-  Sandy Spot
-  Severely Eroded Spot
-  Sinkhole
-  Slide or Slip
-  Sodic Spot

-  Spoil Area
-  Stony Spot
-  Very Stony Spot
-  Wet Spot
-  Other
-  Special Line Features


**Water Features**

 Streams and Canals

**Transportation**

-  Rails
-  Interstate Highways
-  US Routes
-  Major Roads
-  Local Roads

**Background**

 Aerial Photography

### MAP INFORMATION

The soil surveys that comprise your AOI were mapped at 1:15,800.

Warning: Soil Map may not be valid at this scale.

Enlargement of maps beyond the scale of mapping can cause misunderstanding of the detail of mapping and accuracy of soil line placement. The maps do not show the small areas of contrasting soils that could have been shown at a more detailed scale.

Please rely on the bar scale on each map sheet for map measurements.

Source of Map: Natural Resources Conservation Service  
 Web Soil Survey URL: <http://websoilsurvey.nrcs.usda.gov>  
 Coordinate System: Web Mercator (EPSG:3857)

Maps from the Web Soil Survey are based on the Web Mercator projection, which preserves direction and shape but distorts distance and area. A projection that preserves area, such as the Albers equal-area conic projection, should be used if more accurate calculations of distance or area are required.

This product is generated from the USDA-NRCS certified data as of the version date(s) listed below.

Soil Survey Area: Hamilton County, Indiana  
 Survey Area Data: Version 16, Sep 9, 2015

Soil map units are labeled (as space allows) for map scales 1:50,000 or larger.

Date(s) aerial images were photographed: Jun 27, 2014—Aug 28, 2014

The orthophoto or other base map on which the soil lines were compiled and digitized probably differs from the background imagery displayed on these maps. As a result, some minor shifting of map unit boundaries may be evident.

## Map Unit Legend

Hamilton County, Indiana (IN057)			
Map Unit Symbol	Map Unit Name	Acres in AOI	Percent of AOI
Br	Brookston silty clay loam, 0 to 2 percent slopes	8.5	31.2%
CrA	Crosby silt loam, fine-loamy subsoil, 0 to 2 percent slopes	18.8	68.8%
<b>Totals for Area of Interest</b>		<b>27.3</b>	<b>100.0%</b>

**NOTES TO USERS**

This map is for use in administering the National Flood Insurance Program. It does not necessarily identify all areas subject to flooding, particularly from local drainage sources of small size. The community map repository should be consulted for possible updated or additional flood hazard information.

To obtain more detailed information in areas where **Base Flood Elevations (BFEs)** and/or **floodways** have been determined, users are encouraged to consult the Flood Profiles and Floodway Data and/or Summary of Stillwater Elevations tables contained within the Flood Insurance Study (FIS) Report that accompanies this FIRM. Users should be aware that BFEs shown on the FIRM represent rounded whole-foot elevations. These BFEs are intended for flood insurance rating purposes only and should not be used as the sole source of flood elevation information. Accordingly, flood elevation data presented in the FIS Report should be utilized in conjunction with the FIRM for purposes of construction and/or floodplain management.

**Coastal Base Flood Elevations** shown on this map apply only landward of 0.0' North American Vertical Datum of 1988 (NAVD 88). Users of this FIRM should be aware that coastal flood elevations are also provided in the Summary of Stillwater Elevations table in the Flood Insurance Study Report for this jurisdiction. Elevations shown in the Summary of Stillwater Elevations table should be used for construction and/or floodplain management purposes when they are higher than the elevations shown on this FIRM.

Boundaries of the **floodways** were computed at cross sections and interpolated between cross sections. The floodways were based on hydraulic considerations with regard to requirements of the National Flood Insurance Program. Floodway widths and other pertinent floodway data are provided in the Flood Insurance Study Report for this jurisdiction.

Certain areas not in Special Flood Hazard Areas may be protected by **flood control structures**. Refer to Section 2.4 "Flood Protection Measures" of the Flood Insurance Study Report for information on flood control structures for this jurisdiction.

The **projection** used in the preparation of this map was Indiana State Plane East Zone (FIPS zone 1301). The **horizontal datum** was NAD 83, GRS 1980 spheroid. Differences in datum, spheroid, projection or UTM zones used in the production of FIRMs for adjacent jurisdictions may result in slight positional differences in map features across jurisdiction boundaries. These differences do not affect the accuracy of this FIRM.

Flood elevations on this map are referenced to the North American Vertical Datum of 1988. These flood elevations must be compared to structure and ground elevations referenced to the same vertical datum. For information regarding conversion between the National Geodetic Vertical Datum of 1929 and the North American Vertical Datum of 1988, visit the National Geodetic Survey website at <http://www.ngs.noaa.gov> or contact the National Geodetic Survey at the following address:

NGS Information Services  
NOAA, NNGS12  
National Geodetic Survey  
SSMC-3, #9202  
1315 East-West Highway  
Silver Spring, Maryland 20910-3282  
(301) 713-3242

To obtain current elevation, description, and/or location information for **bench marks** shown on this map, please contact the Information Services Branch of the National Geodetic Survey at (301) 713-3242, or visit its website at <http://www.ngs.noaa.gov>.

**Base map** information shown on this FIRM was derived from the 2011 Indiana Orthophotography (IndianaMap Framework Data [www.indianamap.org](http://www.indianamap.org)). This information was photogrammetrically compiled at a scale of 1:2400 from aerial photography dated spring 2011.

The **profile baselines** depicted on this map represent the hydraulic modeling baselines that match the flood profiles in the FIS report. As a result of improved topographic data, the **profile baseline**, in some cases, may deviate significantly from the channel centerline or appear outside the SFHA.

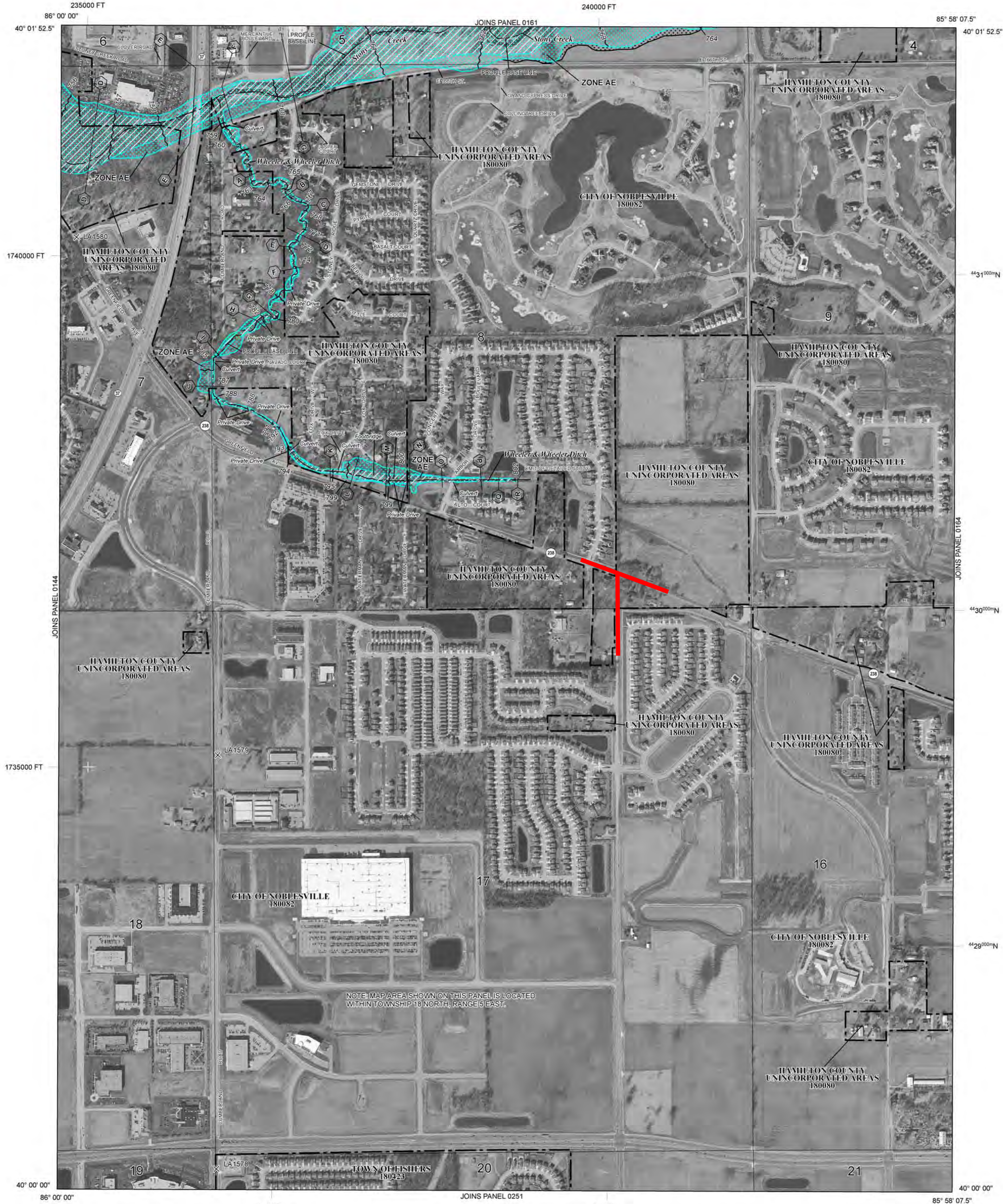
**Corporate limits** shown on this map are based on the best data available at the time of publication. Because changes due to annexations or de-annexations may have occurred after this map was published, map users should contact appropriate community officials to verify current corporate limit locations.

Please refer to the separately printed **Map Index** for an overview map of the county showing the layout of map panels, community map repository addresses; and a Listing of Communities table containing National Flood Insurance Program dates for each community as well as a listing of the panels on which each community is located.

For information on available products associated with this FIRM visit the **Map Service Center (MSC)** website at <http://msc.fema.gov>. Available products may include previously issued Letters of Map Change, a Flood Insurance Study Report, and/or digital versions of this map. Many of these products can be ordered or obtained directly from the MSC website.

If you have **questions about this map**, how to order products, or the National Flood Insurance Program in general, please call the **FEMA Map Information eXchange (FMIX)** at 1-877-FEMA-MAP (1-877-336-2627) or visit the FEMA website at <http://www.fema.gov/business/nfp>.

 Project Area



**LEGEND**

**SPECIAL FLOOD HAZARD AREAS (SFHAs) SUBJECT TO INUNDATION BY THE 1% ANNUAL CHANCE FLOOD**  
The 1% annual chance flood (100-year flood), also known as the base flood, is the flood that has a 1% chance of being equaled or exceeded in any given year. The Special Flood Hazard Area is the area subject to flooding by the 1% annual chance flood. Areas of Special Flood Hazard include Zones A, AE, AH, AO, AR, A99, V, and VE. The Base Flood Elevation is the water-surface elevation of the 1% annual chance flood.

- ZONE AE** No Base Flood Elevations determined.
- ZONE AH** Base Flood Elevations determined.
- ZONE AO** Flood depths of 1 to 3 feet (usually areas of ponding); Base Flood Elevations determined.
- ZONE AR** Flood depths of 1 to 3 feet (usually sheet flow on sloping terrain); average depths determined. For areas of alluvial fan flooding, velocities also determined.
- ZONE A99** Special Flood Hazard Areas formerly protected from the 1% annual chance flood by a flood control system that was subsequently destroyed. Zone AR indicates that the former flood control system is being restored to provide protection from the 1% annual chance or greater flood. Area to be protected from 1% annual chance flood by a Federal flood protection system under construction; no Base Flood Elevations determined.
- ZONE V** Coastal flood zone with velocity hazard (wave action); no Base Flood Elevations determined.
- ZONE VE** Coastal flood zone with velocity hazard (wave action); Base Flood Elevations determined.

**FLOODWAY AREAS IN ZONE AE**  
The floodway is the channel of a stream plus any adjacent floodplain areas that must be kept free of encroachment so that the 1% annual chance flood can be carried without substantial increases in flood heights.

**OTHER FLOOD AREAS**

- ZONE X** Areas of 0.2% annual chance flood; areas of 1% annual chance flood with average depths of less than 1 foot or with drainage areas less than 1 square mile; and areas protected by levees from 1% annual chance flood.
- OTHER AREAS**
- ZONE D** Areas determined to be outside the 0.2% annual chance floodplain.
- ZONE D** Areas in which flood hazards are undetermined, but possible.

**COASTAL BARRIER RESOURCES SYSTEM (CBRS) AREAS**

**OTHERWISE PROTECTED AREAS (OPAs)**  
CBRS areas and OPAs are normally located within or adjacent to Special Flood Hazard Areas.

- 1% Annual Chance Floodplain Boundary
- 0.2% Annual Chance Floodplain Boundary
- Floodway boundary
- Zone D boundary
- CBRS and OPA boundary
- Boundary dividing Special Flood Hazard Area Zones and boundary dividing Special Flood Hazard Areas of different Base Flood Elevations, flood depths, or flood velocities.
- Base Flood Elevation line and value; elevation in feet\*
- Base Flood Elevation value where uniform within zone; elevation in feet\*

\*Referenced to the North American Vertical Datum of 1988

- (A)—(A)— Cross section line
- (23)—(23)— Transect line
- (C)—(C)— Culvert
- (B)—(B)— Bridge

Geographic coordinates referenced to the North American Datum of 1983 (NAD 83) Western Hemisphere

- 3100000 FT 5000-foot ticks: Indiana State Plane East Zone (FIPS Zone 1301), Transverse Mercator projection
- 1000-meter Universal Transverse Mercator grid values, zone 16
- DX5510 X Bench mark (see explanation in Notes to Users section of this FIRM panel)
- M1.5 River Mile

**MAP REPOSITORIES**  
Refer to Map Repositories list on Map Index

**EFFECTIVE DATE OF COUNTYWIDE FLOOD INSURANCE RATE MAP**  
February 19, 2003

**EFFECTIVE DATE(S) OF REVISION(S) TO THIS PANEL**  
November 19, 2014 - to update corporate limits and to change Special Flood Hazard Areas

For community map revision history prior to countywide mapping, refer to the Community Map History table located in the Flood Insurance Study report for this jurisdiction.

To determine if flood insurance is available in this community, contact your insurance agent or call the National Flood Insurance Program at 1-800-638-6620.

**NATIONAL FLOOD INSURANCE PROGRAM**

**PANEL 0163G**

**FIRM**  
**FLOOD INSURANCE RATE MAP**  
**HAMILTON COUNTY,**  
**INDIANA**  
**AND INCORPORATED AREAS**

**PANEL 163 OF 300**  
(SEE MAP INDEX FOR FIRM PANEL LAYOUT)

**CONTAINS:**

COMMUNITY	NUMBER	PANEL	SUFFIX
FISHERS, TOWN OF	180423	0163	G
HAMILTON COUNTY	180060	0163	G
NOBLESVILLE, CITY OF	180082	0163	G

Notice to User: The **Map Number** shown below should be used when placing map orders; the **Community Number** shown above should be used on insurance applications for the subject community.

**MAP NUMBER**  
**18057C0163G**  
**MAP REVISED**  
**NOVEMBER 19, 2014**  
Federal Emergency Management Agency

# Intersection Improvement of Greenfield Avenue and Howe Road

---

## *IPaC Trust Resource Report*

Generated October 26, 2015 10:56 AM MDT

This report is for informational purposes only and should not be used for planning or analyzing project-level impacts. For projects that require FWS review, please return to this project on the IPaC website and request an official species list from the Regulatory Documents page.



US Fish &amp; Wildlife Service

# IPaC Trust Resource Report



## Project Description

### NAME

Intersection Improvement of Greenfield  
Avenue and Howe Road

### PROJECT CODE

J46UF-XLQEB-DDZN3-75THJ-YPR3CQ

### LOCATION

Hamilton County, Indiana

### DESCRIPTION

No description provided



## U.S. Fish & Wildlife Contact Information

Species in this report are managed by:

### **Bloomington Ecological Services Field Office**

620 South Walker Street

Bloomington, IN 47403-2121

(812) 334-4261

## Endangered Species

Proposed, candidate, threatened, and endangered species that are managed by the [Endangered Species Program](#) and should be considered as part of an effect analysis for this project.

This unofficial species list is for informational purposes only and does not fulfill the requirements under [Section 7](#) of the Endangered Species Act, which states that Federal agencies are required to "request of the Secretary of Interior information whether any species which is listed or proposed to be listed may be present in the area of a proposed action." This requirement applies to projects which are conducted, permitted or licensed by any Federal agency.

A letter from the local office and a species list which fulfills this requirement can be obtained by returning to this project on the IPaC website and requesting an official species list on the Regulatory Documents page.

## Mammals

### Indiana Bat *Myotis sodalis*

**Endangered**

CRITICAL HABITAT

**No critical habitat** has been designated for this species.

<https://ecos.fws.gov/speciesProfile/profile/speciesProfile.action?spcode=A000>

### Northern Long-eared Bat *Myotis septentrionalis*

**Threatened**

CRITICAL HABITAT

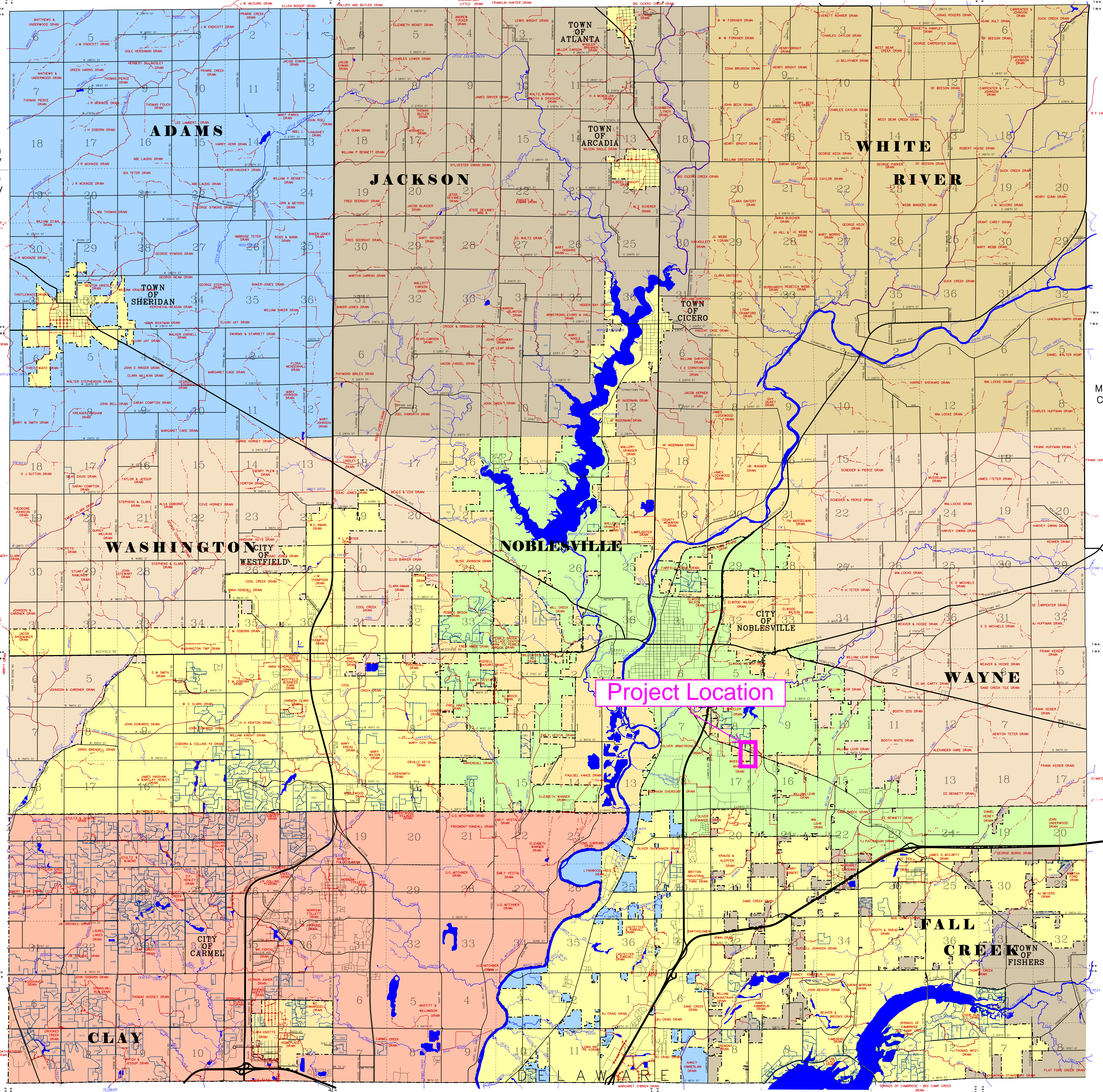
**No critical habitat** has been designated for this species.

<https://ecos.fws.gov/speciesProfile/profile/speciesProfile.action?spcode=A0JE>

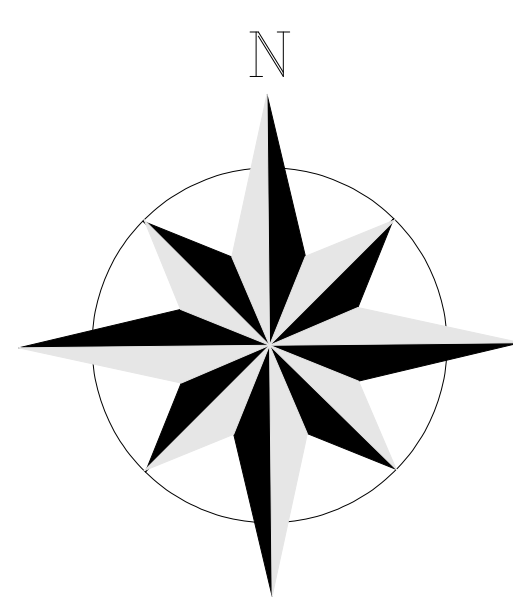
## Critical Habitats

Potential effects to critical habitat(s) within the project area must be analyzed along with the endangered species themselves.

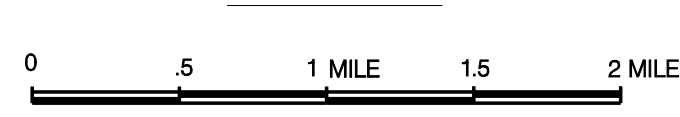
There is no critical habitat within this project area



REGULATED DRAIN MAP  
HAMILTON COUNTY  
INDIANA



SCALE

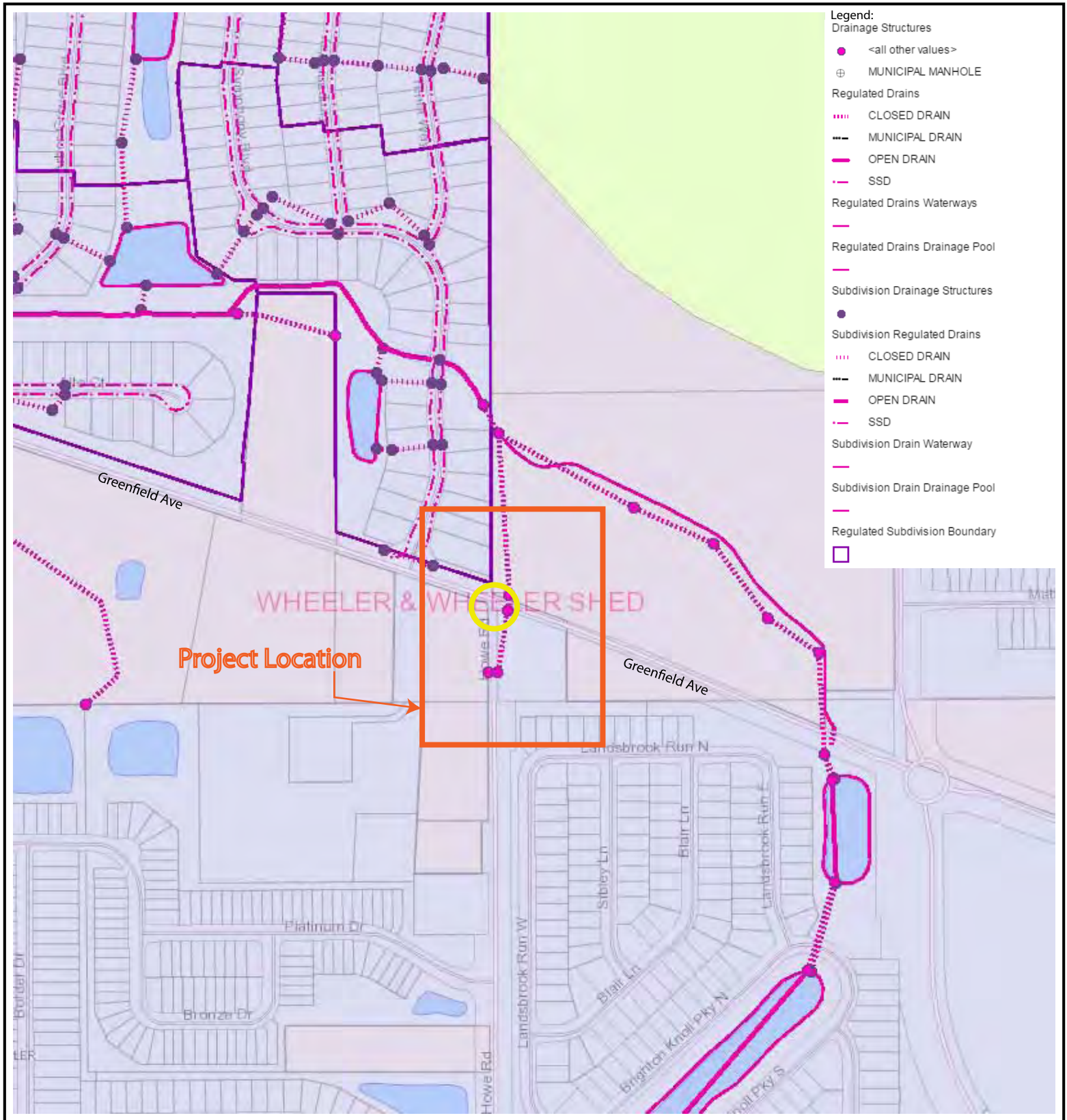


INDEX

- REGULATED TILE
- REGULATED OPEN DITCH
- NATURAL STREAM
- REGULATED SUBDIVISION

NOTE: THIS MAP DOES NOT INCLUDE REGULATED SUBDIVISION DRAINS  
This map was compiled by the Hamilton County Surveyor's Office. Additional copies are available from the Hamilton County Surveyor's Office, Hamilton County Government and Judicial Center, One Hamilton County Square, Suite 188, Noblesville, IN 46060.  
Although strict accuracy standards have been employed in the compilation of this map, Hamilton County does not warrant or guarantee the accuracy of the information contained herein and disclaims any and all liability resulting from any error or omission in this map.

04-APR-2012



# City of Noblesville

## GIS Map of Drainage Structures

Printed: Aug 21, 2016



Proposed Roundabout



The information on this web site is provided and hosted by Hamilton County, Indiana and the City of Noblesville, Indiana. Continued use of this web site is conditional upon your explicit acceptance of the terms and conditions set forth in this disclaimer document. The data provided herein may be inaccurate and/or out of date. Any person or entity who relies on this data for any purpose whatsoever does so solely at their own risk. Neither Hamilton County or City of Noblesville nor its employees or officers warrant the accuracy, reliability, or timeliness of any of the data provided herein. This data is provided "as is" without warranty of any kind. Hamilton County or City of Noblesville may elect to discontinue this service without notice at any point in the future.





**APPENDIX G: PUBLIC INVOLVEMENT**

---

October 1, 2015

NOTICE OF SURVEY

Sample Notice  
of Survey Letter

*RE: Greenfield Avenue and Howe Road Intersection Improvement,  
City of Noblesville, Hamilton County, Indiana*

*Dear Property Owner(s):*

*The City of Noblesville has selected Butler, Fairman and Seufert, Inc., to survey and design the referenced project. Courthouse records show that you are a property owner within the limits of the area where data will be collected for the project survey.*

*Our survey crews will commence the survey in the near future. In the process, they will be walking on your land to take measurements to locate features such as houses, trees, and drives. We appreciate your cooperation in this effort. Unless we are notified to the contrary, we will assume your permission to walk on your property.*

*Please forward this information to any tenants that may be occupying your property.*

*Should you have questions concerning the survey, please contact the undersigned in this office at 800-553-0863.*

*Sincerely,*

*BUTLER, FAIRMAN and SEUFERT, INC.*

*Mark W. Neal, P.S.  
mneal@bfsengr.com*

*MWN:lm*

**Public Notice  
Des. No. 1401716**

The City of Noblesville is planning to undertake an intersection improvement project, funded in part by the Federal Highway Administration. The project will consist of the construction of a roundabout at the intersection of Greenfield Ave. and Howe Rd., slightly northeast of the existing intersection. The project will include approach work on each side, approximately 300 ft. to the west, 425 ft. to the east, and 350 ft. south of the intersection.

The interior of the roundabout will be approximately 50 ft. in diameter. The roundabout will have one circulatory travel lane, varying between 14 ft. and 19 ft. 9 inches with a 10-ft. concrete truck apron. The approaches will be tapered up to the roundabout, with curbs and gutters.

The sidewalk on the north side of Greenfield Ave. will be extended from its existing terminus west of the intersection to the east side of the roundabout, cross south over Greenfield Ave., and continue south to connect to the existing asphalt path on the east side of Howe Rd.. The project will include tie-ins to the existing enclosed legal drain under Greenfield Ave. east of the intersection.

The purpose of the project is to improve the level of service at the intersection of Greenfield Ave. and Howe Rd. Approximately 0.54 acre of permanent and 0.01 acre of temporary right-of-way acquisition is expected.

The proposed action does not impact items listed on or eligible for the National Register of Historic Places. The INDOT, on behalf of the FHWA, has issued a finding of "No Historic Properties Affected" for the project, due to the absence of National Register of Historic Places-listed or eligible properties within the area of potential effect. In accordance with the National Historic Preservation Act, the views of the public are being sought regarding the effect of a proposed project on historic elements per 36 CFR 800.2(d), 800.3(e) and 800.6(a)(4). Pursuant to 36 CFR 800.6(a) (4), the documentation specified in 36 CFR 800.11d is available for inspection in the Indianapolis office of Butler, Fairman and Seufert, Inc.

Please reply with any comments to the contact listed below no later than April 7, 2016.

Elizabet Biggio  
Architectural Historian  
Butler, Fairman & Seufert Inc.  
8450 Westfield Blvd., Suite 300  
Indianapolis, IN 46240  
p.317-713-4615  
ebiggio@bfsengr.com

*TL9629 3/7 1t hspaxlp*

PUBLISHER'S AFFIDAVIT

State of Indiana )  
 ) ss:  
Hamilton County )

Personally appeared before me, a notary public in and for said county and state, the undersigned Tim Timmons who, being duly sworn, says that he is Publisher of The Times newspaper of general circulation printed and published in the English language in the city of Noblesville in state and county afore-said, and that the printed matter attached hereto is a true copy, which was duly published in said paper for 1 time(s), the date(s) of publication being as follows:

3/7/2016

  
\_\_\_\_\_

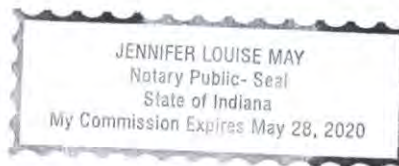
Subscribed and sworn to before me this Monday, March 07, 2016.

  
\_\_\_\_\_

Notary Public

My commission expires: **05/28/2020**  
**Jennifer Louise May**  
**Resident of Marion County**

Publisher's Fee: \$33.13





8450 Westfield Blvd., Suite 300  
Indianapolis, IN 46240-5920  
t 317.713.4615  
f 317.713.4617

[www.BFSEngr.com](http://www.BFSEngr.com)

October 6, 2015

## Sample Initial Notice of Proposed Improvement

Subject: Initial Notice of Proposed Improvement Project Des. No. 1401716

Dear Mr. Spindler;

Our firm has been assigned the task of utility coordination for the project referenced above by the Indiana Department of Transportation and the City of Noblesville. In accordance with 105 IAC 13-3-1(c), this letter serves as your initial notice of the proposed improvement project: Greenfield Avenue and Howe Road Roundabout (Des. No. 1401716) in the City of Noblesville, Hamilton County, Indiana.

In accordance with 105 IAC 13-3-1(c), the following information is provided. The dates listed in items (4) and (5) below are the currently scheduled dates.

- |   |   |
|---|---|
| (1) Name or route number:                     | Greenfield Avenue and Howe Road   |
| (2) Geographical limits:                      | See attached preliminary drawing  |
| (3) General description of work:              | Roundabout Construction at Intersection   |
| (4) Date approved work plan will be needed:   | February 1, 2018  |
| (5) Ready for contracts date:                 | May 12, 2018  |
| (6) Name of designer and contact information: | Kevin Waldroup, P.E. – Project Manager – Butler, Fairman & Seufert, Inc., E: <a href="mailto:KWaldroup@BFSEngr.com">KWaldroup@BFSEngr.com</a> , P: 317-713-4615 |
| (7) Major or minor project:                   | Minor   |

In accordance with 105 IAC 13-3-1(d), within 30 days after receiving the initial notice, the utility shall respond in writing with a:

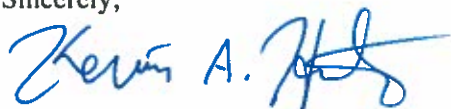
- (1) description of the type and location of its facilities within the geographical limits of the proposed improvement project (facility maps are helpful); or
- (2) statement that the utility has no facilities within the geographical limits of the improvement project.
- (3) documentation of any reimbursable property interest your utility has within the geographical limits of the improvement project

Additionally, please provide us the name, telephone number, postal address and email address of the person selected as your designated contact for this project to expedite future communications. We will contact Indiana 811 and request locates for this project prior to our survey. If you would prefer to provide us location information by some other means please contact this office to discuss.

If at any time throughout the duration of Utility Coordination to the end of Construction on this project your utility modifies, upgrades, relocates, abandons, or installs new or existing facilities please notify the Utility Coordinator at the contact information below.

Please send your response to Kevin A. Hintz, P.E., Butler, Fairman & Seufert, Inc., 8450 Westfield Blvd. Suite 300, Indianapolis, Indiana, 46240, P: (317) 713-4615, F: (317) 713-4616, [KHintz@BFSEngr.com](mailto:KHintz@BFSEngr.com). Thank you for your attention to these matters.

Sincerely;

A handwritten signature in blue ink that reads "Kevin A. Hintz". The signature is stylized with a large, sweeping initial "K" and a long horizontal stroke at the end.

Kevin A. Hintz, P.E.

Utility Coordinator

Enclosure:      Location Map

Cc:                File

**APPENDIX H: AIR QUALITY**

---



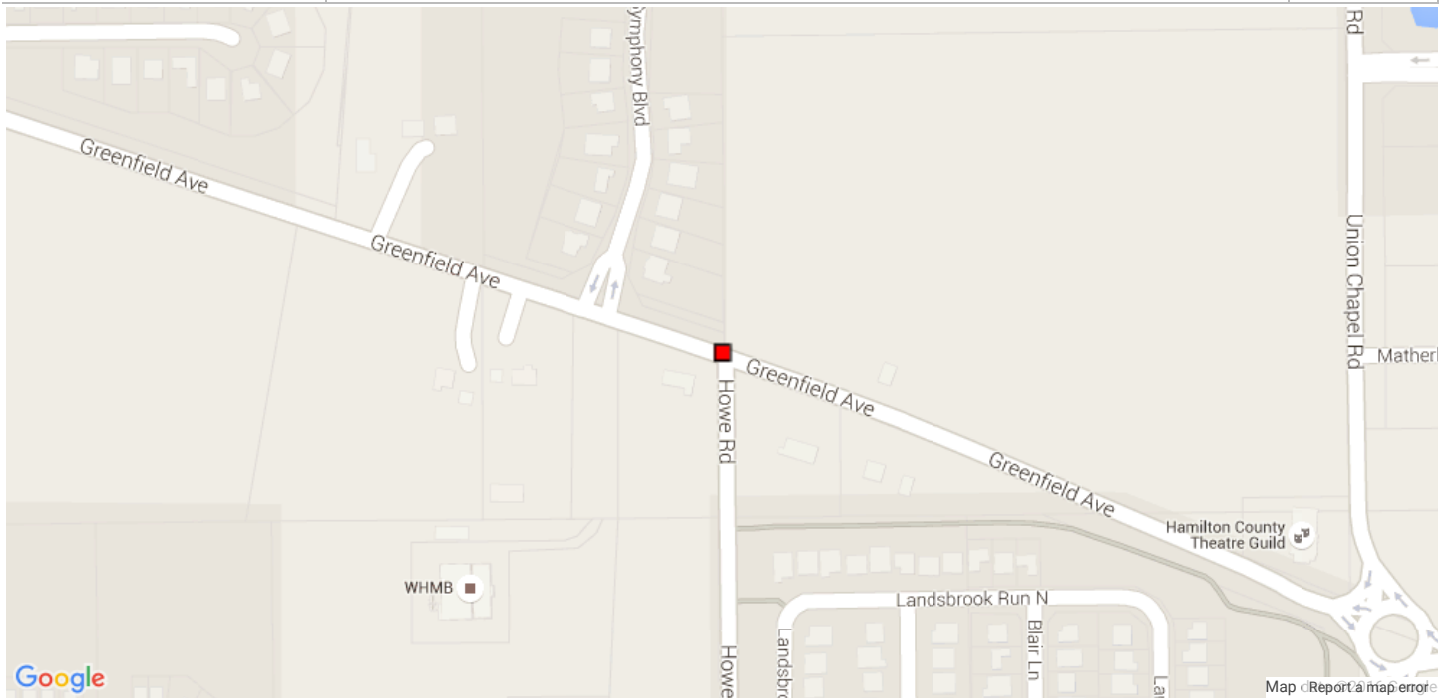
[Project Overview](#) | [Funding History](#) | [Amendment History](#)

<<Go Back

### Greenfield Avenue & Howe Road Roundabout (1401716)

Des Number	1401716	Amendment	16-00 IRTIP	Exempt Category	Exempt	Est Total Project Cost	\$1,614,000
Lead Agency	Noblesville	Contact (ERC)	John Beery 3177766330	INDOT District	Greenfield	County	Hamilton Co.
Project Type	Intersection or Intersection Groups	Functional Classification		Other Principal Arterial		Bike/Ped Component(s)	Yes 10
Title	Greenfield Avenue & Howe Road Roundabout						
Limits	Primary Crossstreet: Greenfield Avenue, Secondary Crossstreet: Howe Road						
Description	This project is currently on the City's Functional Classification Map and include in the City's Traffic Impact Study Master Plan. The present proposal is to convert the existing configuration, in which Howe Road stops for Greenfield Avenue, to a roundabout. The present alignment of the intersection is skewed with limited sight distance. The intersection is also poorly lit and aligned, which lends itself to be convenient for conversion into a roundabout.						

Phase	Fund Source	Prior SFY	SFY2016	SFY2017	SFY2018	SFY2019	SFY2020	Future SFY	Total
PE	LOCAL	\$170,000	-	-	-	-	-	-	\$170,000
	Total Preliminary Engineering	\$170,000	-	-	-	-	-	-	\$170,000
RW	LOCAL	-	-	\$300,000	-	-	-	-	\$300,000
	Total Right of Way	-	-	\$300,000	-	-	-	-	\$300,000
CN	FEDERAL - CMAQ	-	-	-	-	\$800,625	-	-	\$800,625
CN	LOCAL	-	-	-	-	\$200,375	-	-	\$200,375
	Total Construction	-	-	-	-	\$1,001,000	-	-	\$1,001,000
CE	FEDERAL - CMAQ	-	-	-	-	\$114,375	-	-	\$114,375
CE	LOCAL	-	-	-	-	\$28,625	-	-	\$28,625
	Total Construction Engineering	-	-	-	-	\$143,000	-	-	\$143,000
	Total Programmed	\$170,000	-	\$300,000	-	\$1,144,000	-	-	\$1,614,000





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

SPONSOR	DES	STIP NAME	ROUTE	WORK TYPE	LOCATION	DISTRICT	MILES	FEDERAL CATEGORY	Estimated Cost left to Complete Project*	PROGRAM	PHASE	FEDERAL	MATCH	2016	2017	2018	2019
Fishers	1592387	A 08	ST 1092	Bridge Rehabilitation Or Repair	Cumberland Road over Sand Creek; Hamilton County Bridge #162	Greenfield	0	STP	\$1,589,668.00	100% Local Funds	CN	\$0.00	\$260,268.00				\$260,268.00
										100% Local Funds	RW	\$0.00	\$172,500.00		\$172,500.00		
										100% Local Funds	PE	\$0.00	\$115,000.00	\$115,000.00			
										Indianapolis MPO	CN	\$1,041,900.00	\$0.00				\$1,041,900.00
Comments: QUARTER Q4, 2015 ADMINISTRATIVE 16-02.1 - New Project. Split bridge funds from Des. No. 1401704 into separate Des. No 1592387.																	
Noblesville	1401713	M 12	ST 1079	Intersection Improvement, Roundabout	Intersection of 19th Street and Pleasant Street; roundabout	Greenfield	0	STP		100% Local Funds	CN	\$0.00	\$191,000.00				\$191,000.00
										Indianapolis MPO	CN	\$764,000.00	\$0.00				\$764,000.00
										100% Local Funds	RW	\$0.00	\$150,000.00		\$150,000.00		
Comments: IMPO FY 16-19 TIP in cooperated into STIP 2016-2019 by reference July 1, 2015 for phases and year.																	
Noblesville	1401714	M 12	ST 1017	Intersection Improvement, Roundabout	Intersection of 186th Street and Cumberland Rd roundabout	Greenfield	0	STP		100% Local Funds	CN	\$0.00	\$220,000.00				\$220,000.00
										Indianapolis MPO	CN	\$879,000.00	\$0.00				\$879,000.00
										100% Local Funds	RW	\$0.00	\$150,000.00		\$150,000.00		
Comments: IMPO FY 16-19 TIP in cooperated into STIP 2016-2019 by reference July 1, 2015 for phases and year.																	
Noblesville	1401716	M 12	ST 1049	Intersection Improvement, Roundabout	Intersection of Greenfield Avenue and Howe Road	Greenfield	0	STP		100% Local Funds	RW	\$0.00	\$300,000.00		\$300,000.00		
										Indianapolis MPO	CN	\$915,000.00	\$0.00				\$915,000.00
										100% Local Funds	CN	\$0.00	\$229,000.00				\$229,000.00
Comments: IMPO FY 16-19 TIP in cooperated into STIP 2016-2019 by reference July 1, 2015 for phases and year.																	
Fishers	1401705	Init.	ST 1077	Intersect. Improv. W/ Added Turn Lanes	Intersection of 131st Street and Allisonville Road	Greenfield	0	STP		100% Local Funds	RW	\$0.00	\$150,000.00		\$150,000.00		
										100% Local Funds	PE	\$0.00	\$250,000.00	\$250,000.00			
Fishers	1500348	A 04	ST 1080	Road Rehabilitation (3R/4R Standards)	Cyntheanne Rd Corridor Improvements S of 136th St to Southeastern Pkwy	Greenfield	0	STP	\$1,124,874.00	100% Local Funds	CN	\$0.00	\$224,975.00		\$224,975.00		

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

**APPENDIX I: ADDITIONAL STUDIES**

---

**United States Department of the Interior  
National Park Service  
Land & Water Conservation Fund**

**Detailed Listing of Grants Grouped by County**

Today's Date: 10/7/2015

**INDIANA - 18**

Page: 11

Grant ID & Element	Type	Grant Element Title	Grant Sponsor	Amount	Status	Date Approved	Exp. Date	Cong. District
<b>HAMILTON</b>								
17 - XXX	D	FOREST PARK DEVELOPMENT	NOBLESVILLE PARK BOARD	\$8,383.88	C	12/17/1969	12/31/1969	6
58 - XXX	A	FOREST PARK ADDITION	NOBLESVILLE PARK BOARD	\$45,744.50	C	5/8/1969	12/31/1970	6
128 - XXX	C	MORSE PARK	HAMILTON COUNTY PARK BOARD	\$142,332.00	C	12/6/1972	6/30/1975	6
198 - XXX	D	TRI-TOWN COMMUNITY PARK	CICERO PARK BOARD	\$34,242.81	C	5/6/1975	12/31/1977	6
236 - XXX	D	FOREST PARK POOL	HAMILTON COUNTY PARK BOARD	\$125,000.00	C	2/3/1976	6/30/1978	6
493 - XXX	C	FLOWING WELL PARK	CARMEL/CLAY TWP PARK BOARD	\$75,000.00	C	4/23/1993	6/30/1998	6
502 - XXX	D	COOL CREEK PARK NATURE CENTER	HAMILTON COUNTY PARK BOARD	\$75,000.00	C	5/20/1994	6/30/1999	6
519 - XXX	C	KOTEWEI PARK ACQUISITION & DEVELOPMENT	HAMILTON COUNTY PARK BOARD	\$200,000.00	C	9/6/2000	12/31/2005	5
551 - XXX	C	D/MACGREGOR PARK	WASHINGTON TOWNSHIP PARK BOARD	\$200,000.00	C	3/9/2005	12/31/2007	0
<b>Hamilton County Total:</b>				<b>\$905,703.19</b>		<b>County Count:</b>	<b>9</b>	
<b>HANCOCK</b>								
350 - XXX	D	RILEY PARK AND POOL RENOVATION	GREENFIELD PARK BOARD	\$220,000.00	C	1/30/1979	12/31/1983	6
552 - XXX	C	BECKENHOLDT PARK	GREENFIELD PARK BOARD	\$200,000.00	C	4/19/2005	12/31/2009	5
561 - XXX	C	SUGAR CREEK TOWNSHIP PARK	SUGAR CREEK PARK BOARD	\$200,000.00	C	9/7/2006	12/31/2009	5
575 - XXX	D	BECKENHOLDT PARK PHASE II	GREENFIELD PARK & RECREATION BOARD	\$156,466.00	C	4/15/2011	12/31/2015	0
<b>Hancock County Total:</b>				<b>\$776,466.00</b>		<b>County Count:</b>	<b>4</b>	

## Elizabeth Biggio

---

**From:** Herber, Lisa <LHerber1@dnr.IN.gov>  
**Sent:** Friday, November 20, 2015 11:47 AM  
**To:** Elizabeth Biggio  
**Cc:** Bronson, Bob  
**Subject:** FW: LWCF Review Des No. 1401716 Greenfield/Howe  
**Attachments:** Des1400716\_Project Description\_10-29-15.pdf; Des1401716\_Aerial Map for INDR\_2015-11-20.pdf; Hamilton County LWCF Properties.pdf; 5827 Aerial Map.pdf

Thank you Elizabeth—the extra information helped. ☺ After reviewing all the information I do not find that the project impacts any LWCF 6(f)3 boundary encumbered park properties.

*Sincerely,*

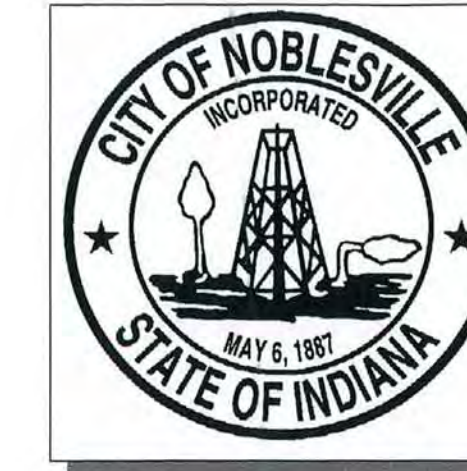
*Lisa Herber*

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

“Be more conscious and intentional with your communication.

Ask others if they understand what you said.

Spend more time in clarifying messages you send – and receive.”



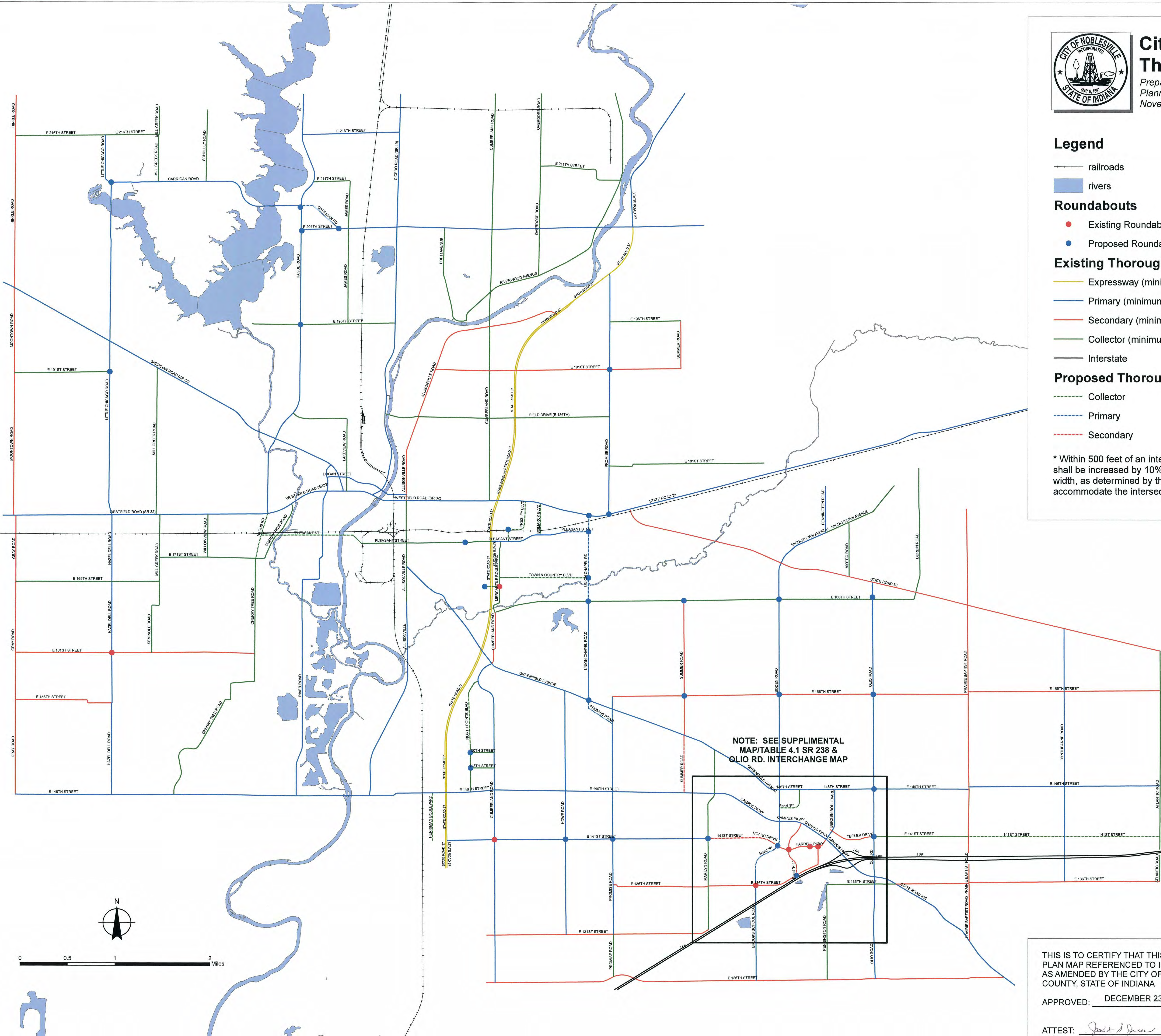
# City of Noblesville Thoroughfare Plan

Prepared by the City of Noblesville  
Planning & Development Department  
November, 25, 2008

## Legend

- railroads
- rivers
- Roundabouts**
  - Existing Roundabout
  - Proposed Roundabout
- Existing Thoroughfares**
  - Expressway (minimum R-O-W: 240 feet\*)
  - Primary (minimum R-O-W: 140 - 200 feet\*)
  - Secondary (minimum R-O-W: 100 feet\*)
  - Collector (minimum R-O-W: 80 feet\*)
  - Interstate
- Proposed Thoroughfares**
  - Collector
  - Primary
  - Secondary

\* Within 500 feet of an intersection, right-of-way width shall be increased by 10% - 40% of total right-of-way width, as determined by the City Engineer, in order to accommodate the intersection.



NOTE: SEE SUPPLEMENTAL  
MAP/TABLE 4.1 SR 238 &  
OLIO RD. INTERCHANGE MAP

THIS IS TO CERTIFY THAT THIS IS THE OFFICIAL THOROUGHFARE  
PLAN MAP REFERENCED TO IN ARTICLE IV OF RESOLUTION # R-11-95  
AS AMENDED BY THE CITY OF NOBLESVILLE, HAMILTON  
COUNTY, STATE OF INDIANA

APPROVED: DECEMBER 23, 2008

ATTEST: CLERK TREASURER



Greenfield Ave. and Howe Rd.

**Legend:**

**Boundaries**

- State
- '10 County
- '10 Census Tract
- '10 Block Group

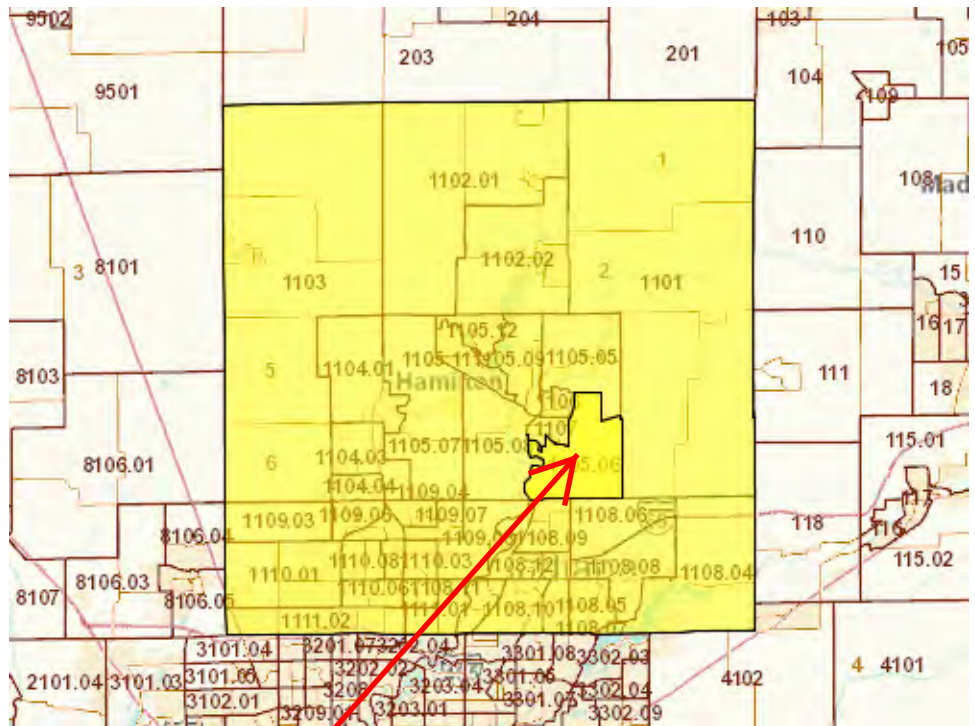
**Features**

- Major Road
- Street
- Stream/Waterbody

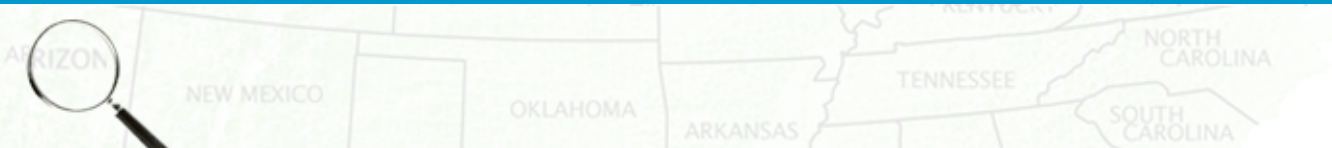
**Your Selections**

- Your Selections

Items in grey text are not visible at this zoom level



Project Location



Greenfield Ave. and Howe Rd.

**Legend:**

**Boundaries**

- State
- '10 County
- '10 Census Tract
- '10 Block Group

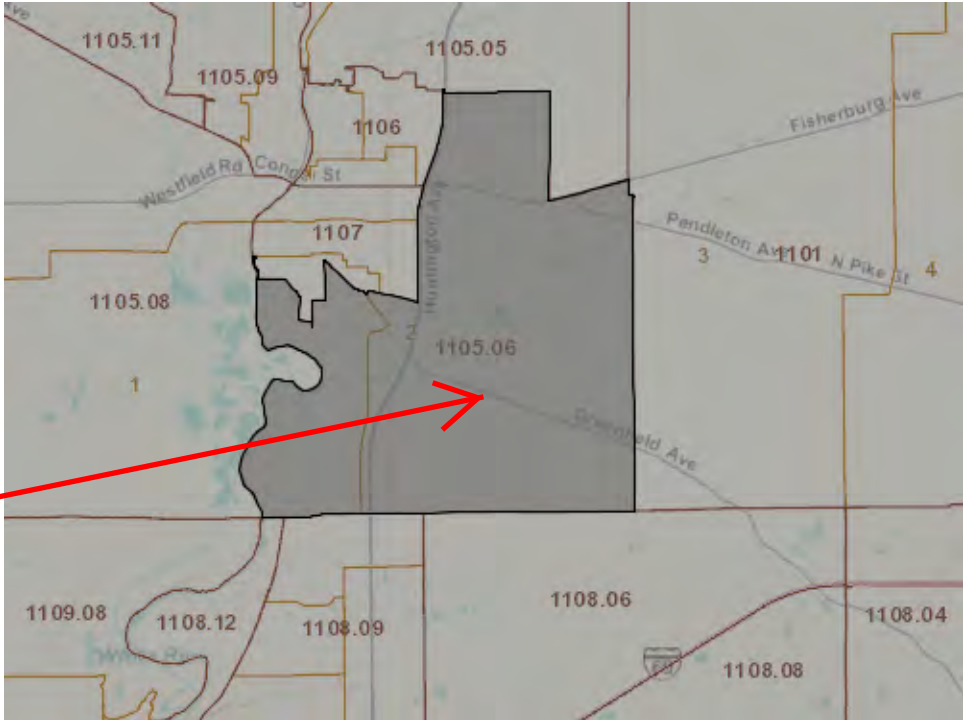
**Features**

- Major Road
- Street
- Stream/Waterbody

Items in grey text are not visible at this zoom level

**Selection Results**

- Selection Results



Project Location

Environmental Justice Data Analysis

Des. No. 1401716: Greenfield Avenue and Howe Road Intersection Improvement

Source: U.S. Census Bureau 2009-2013 ACS 5-year Estimates

		COC	AC
		Hamilton County, Indiana	Census Tract 1500.6, Hamilton County, Indiana
B17001	<b>LOW-INCOME</b>		
	Population for whom poverty status is determined: Total	281,143	9,174
	Population for whom poverty status is determined: Income in 2013 below poverty level	14,453	778
	<b>Percent Low-income</b>	<b>5.1%</b>	<b>8.5%</b>
	<b>125 Percent of COC</b>	<b>6.4%</b>	<b>AC &gt; 125% COC</b>
	<b>Potential Population of EJ Concern?</b>		<b>YES</b>
B03002	<b>MINORITY</b>		
	Total population: Total	282,977	9,189
	Total population: Not Hispanic or Latino	272,960	8,613
	Total population: Not Hispanic or Latino; White alone	242,600	8,092
	Total population: Not Hispanic or Latino; Black or African American alone	9,802	205
	Total population: Not Hispanic or Latino; American Indian and Alaska Native alone	363	0
	Total population: Not Hispanic or Latino; Asian alone	13,937	213
	Total population: Not Hispanic or Latino; Native Hawaiian and Other Pacific Islander alone	26	0
	Total population: Not Hispanic or Latino; Some other race alone	961	49
	Total population: Not Hispanic or Latino; Two or more races	5,271	54
	Total population: Hispanic or Latino	10,017	576
	Total population: Hispanic or Latino; White alone	6,758	464
	Total population: Hispanic or Latino; Black or African American alone	201	0
	Total population: Hispanic or Latino; American Indian and Alaska Native alone	40	0
	Total population: Hispanic or Latino; Asian alone	28	0
	Total population: Hispanic or Latino; Native Hawaiian and Other Pacific Islander alone	0	0
	Total population: Hispanic or Latino; Some other race alone	2,031	112
	Total population: Hispanic or Latino; Two or more races	959	0
	<b>Number Non-white/minority (P007001-P007003)</b>	<b>40,377</b>	<b>1,097</b>
	<b>Percent Non-white/Minority</b>	<b>14.3%</b>	<b>11.9%</b>
	<b>125 Percent of COC</b>	<b>17.8%</b>	<b>AC &lt;125% COC</b>
<b>Potential Population of EJ Concern?</b>		<b>No</b>	





B03002

HISPANIC OR LATINO ORIGIN BY RACE

Universe: Total population

2009-2013 American Community Survey 5-Year Estimates

**Note:** This is a modified view of the original table.

Supporting documentation on code lists, subject definitions, data accuracy, and statistical testing can be found on the American Community Survey website in the Data and Documentation section.

Sample size and data quality measures (including coverage rates, allocation rates, and response rates) can be found on the American Community Survey website in the Methodology section.

Although the American Community Survey (ACS) produces population, demographic and housing unit estimates, it is the Census Bureau's Population Estimates Program that produces and disseminates the official estimates of the population for the nation, states, counties, cities and towns and estimates of housing units for states and counties.

	Hamilton County, Indiana		Census Tract 1105.06, Hamilton County, Indiana	
	Estimate	Margin of Error	Estimate	Margin of Error
Total:	282,977	*****	9,189	+/-400
Not Hispanic or Latino:	272,960	*****	8,613	+/-404
White alone	242,600	+/-604	8,092	+/-408
Black or African American alone	9,802	+/-449	205	+/-113
American Indian and Alaska Native alone	363	+/-146	0	+/-16
Asian alone	13,937	+/-485	213	+/-143
Native Hawaiian and Other Pacific Islander alone	26	+/-31	0	+/-16
Some other race alone	961	+/-609	49	+/-75
Two or more races:	5,271	+/-696	54	+/-54
Hispanic or Latino:	10,017	*****	576	+/-268
White alone	6,758	+/-685	464	+/-251
Black or African American alone	201	+/-201	0	+/-16
American Indian and Alaska Native alone	40	+/-45	0	+/-16
Asian alone	28	+/-34	0	+/-16
Native Hawaiian and Other Pacific Islander alone	0	+/-27	0	+/-16
Some other race alone	2,031	+/-569	112	+/-119
Two or more races:	959	+/-380	0	+/-16

Data are based on a sample and are subject to sampling variability. The degree of uncertainty for an estimate arising from sampling variability is represented through the use of a margin of error. The value shown here is the 90 percent margin of error. The margin of error can be interpreted roughly as providing a 90 percent probability that the interval defined by the estimate minus the margin of error and the estimate plus the margin of error (the lower and upper confidence bounds) contains the true value. In addition to sampling variability, the ACS estimates are subject to nonsampling error (for a discussion of nonsampling variability, see Accuracy of the Data). The effect of nonsampling error is not represented in these tables.

While the 2009-2013 American Community Survey (ACS) data generally reflect the February 2013 Office of Management and Budget (OMB) definitions of metropolitan and micropolitan statistical areas; in certain instances the names, codes, and boundaries of the principal cities shown in ACS tables may differ from the OMB definitions due to differences in the effective dates of the geographic entities.

Estimates of urban and rural population, housing units, and characteristics reflect boundaries of urban areas defined based on Census 2010 data. As a result, data for urban and rural areas from the ACS do not necessarily reflect the results of ongoing urbanization.

Source: U.S. Census Bureau, 2009-2013 5-Year American Community Survey



B17001

POVERTY STATUS IN THE PAST 12 MONTHS BY SEX BY AGE

Universe: Population for whom poverty status is determined  
2009-2013 American Community Survey 5-Year Estimates

**Note:** This is a modified view of the original table.

Supporting documentation on code lists, subject definitions, data accuracy, and statistical testing can be found on the American Community Survey website in the Data and Documentation section.

Sample size and data quality measures (including coverage rates, allocation rates, and response rates) can be found on the American Community Survey website in the Methodology section.

Although the American Community Survey (ACS) produces population, demographic and housing unit estimates, it is the Census Bureau's Population Estimates Program that produces and disseminates the official estimates of the population for the nation, states, counties, cities and towns and estimates of housing units for states and counties.

	Hamilton County, Indiana		Census Tract 1105.06, Hamilton County, Indiana	
	Estimate	Margin of Error	Estimate	Margin of Error
Total:	281,143	+/-318	9,174	+/-401
Income in the past 12 months below poverty level:	14,453	+/-1,330	778	+/-426
Income in the past 12 months at or above poverty level:	266,690	+/-1,411	8,396	+/-592

Data are based on a sample and are subject to sampling variability. The degree of uncertainty for an estimate arising from sampling variability is represented through the use of a margin of error. The value shown here is the 90 percent margin of error. The margin of error can be interpreted roughly as providing a 90 percent probability that the interval defined by the estimate minus the margin of error and the estimate plus the margin of error (the lower and upper confidence bounds) contains the true value. In addition to sampling variability, the ACS estimates are subject to nonsampling error (for a discussion of nonsampling variability, see Accuracy of the Data). The effect of nonsampling error is not represented in these tables.

While the 2009-2013 American Community Survey (ACS) data generally reflect the February 2013 Office of Management and Budget (OMB) definitions of metropolitan and micropolitan statistical areas; in certain instances the names, codes, and boundaries of the principal cities shown in ACS tables may differ from the OMB definitions due to differences in the effective dates of the geographic entities.

Estimates of urban and rural population, housing units, and characteristics reflect boundaries of urban areas defined based on Census 2010 data. As a result, data for urban and rural areas from the ACS do not necessarily reflect the results of ongoing urbanization.

Source: U.S. Census Bureau, 2009-2013 5-Year American Community Survey

Explanation of Symbols:

1. An '\*\*\*' entry in the margin of error column indicates that either no sample observations or too few sample observations were available to compute a standard error and thus the margin of error. A statistical test is not appropriate.
2. An '-' entry in the estimate column indicates that either no sample observations or too few sample observations were available to compute an estimate, or a ratio of medians cannot be calculated because one or both of the median estimates falls in the lowest interval or upper interval of an open-ended distribution.
3. An '-' following a median estimate means the median falls in the lowest interval of an open-ended distribution.
4. An '+' following a median estimate means the median falls in the upper interval of an open-ended distribution.
5. An '\*\*\*\*' entry in the margin of error column indicates that the median falls in the lowest interval or upper interval of an open-ended distribution. A statistical test is not appropriate.
6. An '\*\*\*\*\*' entry in the margin of error column indicates that the estimate is controlled. A statistical test for sampling variability is not appropriate.
7. An 'N' entry in the estimate and margin of error columns indicates that data for this geographic area cannot be displayed because the number of sample cases is too small.
8. An '(X)' means that the estimate is not applicable or not available.

CITY OF NOBLESVILLE  
AMERICANS WITH DISABILITIES ACT  
TRANSITION PLAN  
(JULY 2008 – UPDATED JULY 2009)



In accordance with the Americans with Disabilities Act (ADA), this document shall serve as the City of Noblesville's Transition Plan. Included are results of a self-evaluation that addresses barriers within City programs and facilities. The development of this plan has occurred with the assistance of several individuals and organizations throughout the community. The Director of the Engineering Department for the City of Noblesville ADA Coordinator will coordinate all aspects of ADA compliance. Any comments, additions or suggestions about this plan may be directed to the Coordinator for ADA Access to Public Facilities and Public Right-of-Way and for General Information and Complaints.

This Transition Plan will continuously be updated. A public hearing regarding the contents of the plan will be held on a yearly basis. Notice of the public hearing will be given at least two (2) weeks in advance of the hearing. Any comments, suggestions or additions to the plan may be addressed to the City's ADA Coordinator throughout the year.

General complaints, comments, concerns, and questions may be filed electronically through the City's Web Site at:

[www.cityofnoblesville.org](http://www.cityofnoblesville.org)

Issues regarding public facilities or facilities within the right-of-way can be submitted to:

Mr. John Beery, PE  
ADA Coordinator  
Director of Engineering  
16 South 10<sup>th</sup> Street  
Suite 155  
Noblesville, IN 46060  
317-776-6330  
[jbeery@noblesville.in.us](mailto:jbeery@noblesville.in.us)

Questions Regarding the ADA and Public Communications may be directed to:

Cara Culp  
Public Affairs Manager  
16 South 10<sup>th</sup> Street  
Noblesville, IN 46060  
317-776-6367  
[cculp@noblesville.in.us](mailto:cculp@noblesville.in.us)

Issues regarding public facilities with the City of Noblesville's Parks may be directed to:

Don Seal  
Parks Director  
Forest Park Inn  
701 Cicero Road  
Noblesville, IN 46060-1441  
317-776-6350  
[dseal@noblesville.in.us](mailto:dseal@noblesville.in.us)

CITY OF NOBLESVILLE  
AMERICANS WITH DISABILITIES ACT  
TRANSITION PLAN  
(JULY 2008 – UPDATED JULY 2009)



Issues regarding reasonable accommodation requests for personnel, interview, and job application issues may be directed to:

Holly Ramon  
Human Resources Manager  
16 South 10<sup>th</sup> Street  
Noblesville, IN 46060  
317-776-6360  
[hramon@noblesville.in.us](mailto:hramon@noblesville.in.us)

Issues regarding ADA access to and within private establishments and buildings:

Daniel Sheposh  
Chief Building Inspector  
Noblesville Planning Department  
16 South 10<sup>th</sup> Street  
Noblesville, IN 46060  
317-776-6325  
[dsheposh@noblesville.in.us](mailto:dsheposh@noblesville.in.us)

#### EXHIBITS

- Exhibit A – Statement of ADA Compliance for Newly Designed and Constructed Projects
- Exhibit B – ADA Contact Protocol
- Exhibit C – Obstacle Removal Procedure
- Exhibit D – Reasonable Accommodation Request Procedures
- Exhibit E – Grievance/Complaint Intake Form
- Exhibit F – Transition Plan Physical Improvement Matrix

#### STATEMENT OF POLICY

##### CITY CODE

##### CHAPTER 34, SECTION 34.02

##### Equal Employment Policy

It is the policy of the city to be an equal opportunity employer. No officer or employee of the city shall discriminate against any other officer or employee, or applicant for employment on the basis of sex, race, color, religious belief, national origin, sexual orientation, political affiliation, marital status, age or disability unrelated to the person's ability to perform the duties of a particular job or position, except where a bona fide occupational qualification exists.

#### RULES OF THE NOBLESVILLE HUMAN RELATIONS COMMISSION

##### SECTION 34.32

##### Statement of Equal Employment Opportunity

City of Noblesville's Human Rights commission is committed to a policy of acting affirmatively to attract and utilize the talents of all citizens. No Commission member or agent of the City shall discriminate against any employee or applicant for employment on the basis of sex, race, color, religious belief, national origin, sexual orientation, political affiliation, marital status, age or disability unrelated to a person's ability to perform the duties of a particular job or position, except where a bona fide occupational qualification exists.



City Services, Programs, Activities, and Compliance Actions  
GENERAL NON-DISCRIMINATORY REQUIREMENTS

Designation of ADA Coordinator

- City ADA Coordinator has been designated as the Director of the Department of Engineering.
- The City of Noblesville is an equal opportunity employer and the policies of such are set forth in the Noblesville Code of Ordinances and the Rules of the Noblesville Human Relations Commission.

Review of City Code/Policies

- Noblesville City Code of Ordinances and any other City-issued policies will be reviewed to ensure proper and uniform terms and definitions are used.

EQUALLY EFFECTIVE COMMUNICATION

To provide public notice of ADA Coordinator and communication sources:

- City has published the name, address and phone number of the ADA Coordinator on the Internet, Intranet, and bulletin boards.
- Provide internal notice to City employees about ADA issues and compliance steps
- City has posted the ADA Compliance Notice on bulletin boards at all work sites (Exhibit A).
- City has posted the names of the ADA Contact Protocol on bulletin boards at all work sites (Exhibit B).
- City has prepared and distributed a copy of this document to all Department Heads.
- City has prepared and distributed notice regarding ADA Obstacle Removal Procedure (Exhibit D).

PROGRAM AND INFRASTRUCTURE ACCESSIBILITY

Obstacle Removal

- Front ADA access to the Noblesville Public Safety Building was reconstructed in 2008.
- Noblesville City Hall was constructed with full ADA accommodation in 2007.
- City has completed the identification/mapping of all curb ramps, evaluating adequateness and developing financial needs:
  - City has established priorities based upon need and cost, as well as impact on affected population and in conjunction with its annual resurfacing program.
  - The City has established an annual program budgeted at
  - The City maintains and updates an inventory map on ADA accessible sidewalk ramps.
  - The City of Noblesville revised its construction design standards to include standards requirement for the construction of ADA compliant accessible ramps.
  - The City of Noblesville maintains a strict program for the inspection of construction for ADA ramps for public walkways.
  - The City of Noblesville has incorporated mandatory ADA requirement for sidewalk accessibility for encroachments within public right-of-way with special consideration to the Downtown Central Business District.
  - The City of Noblesville utilizes regular Community Development Block Funding received from the Federal Government to funding ADA and sidewalk accessibility improvements in low to moderate income neighborhoods.

Access to City services and programs

- Noblesville City Hall has Braille markings on elevators and room numbers on public areas.
- All public buildings have ADA accessible restrooms.
- City has provided for integrated wheelchair seating in the City Council Chambers.



- City has provided a mechanism for which individuals using wheelchairs can address the City Council and utilize the microphone system.
- City will ensure new public facilities and remodeling facilities are reviewed for compliance with ADA standards.
- The City's Parks Department has completed an audit and inventory on accessibility in park facilities. The document is on file at the Park's Department office.

#### EMPLOYMENT

Employment and accommodations for potential and existing employees are outlined in the City of Noblesville's Civilian Employee Personnel Policy Handbook on file in the City's Human Resource's Department. For more information, contact the City's Human Resource Manager..

#### Reasonable Accommodation Requests

- City will review all formal and informal requests for reasonable accommodations and may approve such requests unless they have imposed an undue hardship.
- Formal procedures and a request form for employees requesting a reasonable accommodation have been developed. Such procedures will be distributed to employees and department heads. (Exhibit D).

#### OTHER

##### Grievance Procedure

- The City's Code of Ordinances outlines the grievance procedure for City Employees and the public.
- City has established a grievance procedure for the general public relating to disability/access-related complaints (Exhibit E).
- City will ensure all employees are aware of the grievance procedure.
- Cooperation from Organizations/Advocates of Persons with Disabilities
- City utilized public input during the self-evaluation process.

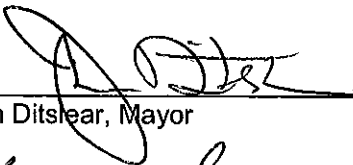
CITY OF NOBLESVILLE  
AMERICANS WITH DISABILITIES ACT  
TRANSITION PLAN  
(JULY 2008 – UPDATED JULY 2009)

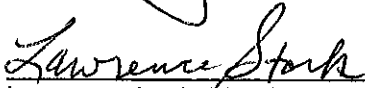


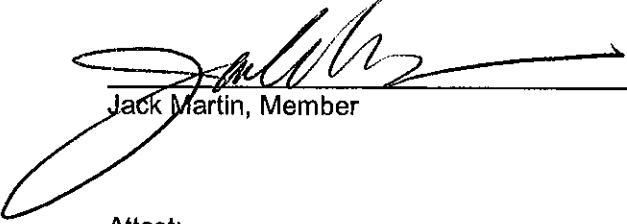
This Transition Plan is hereby approved by the City of Noblesville's Board of Public Works this

28th Day of July, 2009

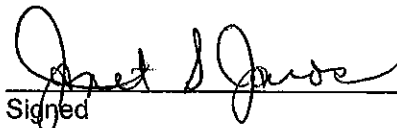
By:

  
\_\_\_\_\_  
John Ditslear, Mayor

  
\_\_\_\_\_  
Lawrence Stork, Member

  
\_\_\_\_\_  
Jack Martin, Member

Attest:

  
\_\_\_\_\_  
Signed

Janet S. Jarvis  
\_\_\_\_\_  
Printed Name

## Elizabeth Biggio

---

**From:** Bales, Ronald <[rbales@indot.IN.gov](mailto:rbales@indot.IN.gov)>  
**Sent:** Friday, February 19, 2016 11:03 AM  
**To:** Elizabeth Biggio  
**Cc:** Ryan Scott; Harrington, Susan; Hall, Erin  
**Subject:** Greenfield & Howe (Des 1401716) Environmental Justice Analysis  
**Attachments:** Greenfield&Howe\_Des1401716\_EJ Analysis\_2016-02-12.pdf

INDOT-Environmental Services Division (ES) has reviewed the project information along with the Environmental Justice (EJ) Analysis for the above referenced project. The project would only require strip right-of-way, require no relocations, and will not disrupt community cohesion or create a physical barrier. The proposed project is anticipated to improve traffic movement and response time for emergency services to this area of Hamilton County. With the information provided, INDOT-ES would not consider the impacts associated with this project as causing a disproportionately high and adverse effect on minority and/or low incomes populations of EJ concern relative to non EJ populations in accordance with the provisions of Executive Order 12898 and FHWA Order 6640.23a. No further EJ Analysis is required.

Should the scope of work change or the amount of right-of-way, INDOT-ES should be contacted immediately to determine if the EJ Analysis would need to be reinitiated.

Please make sure on your demographic map that you delineate your project area in your EJ analysis.

Thank you.

### **Ron Bales**

*Environmental Policy Manager*

100 North Senate Ave., Room 642

Indianapolis, IN 46204

Office: (317) 234-4916

Email: [rbales@indot.in.gov](mailto:rbales@indot.in.gov)

