

Categorical Exclusion Documentation

Curve Correction on Old SR 37 and Profile Correction of North Dunn Street Des. No. 1297060

For: City of Bloomington & Monroe County

By: Eagle Ridge Civil Engineering Services, LLC

List of Contents:

Required Forms:

Attachment 2 - Categorical Exclusion / Environmental Assessment Form

APPENDICES:

Appendix A: INDOT Documentation

A1 - Threshold Chart

Appendix B: Graphics

B1	USGS MAP
B2	Aerial Map
B3	Contour Map
B4	Proposed Alignment Overlaid on Existing
B5-B7	Soils Map
B8-B11	Photographs
B12-B24	Plans

Appendix C: Early Coordination

C1	Sample Early Coordination Letter
C2-C6	Project Description for Early Coordination
C7-C33	Responses to Early Coordination

Appendix D: Section 106

D1-D96	Combined Section 106 Documentation including 800.11(e) and appendices
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Appendix E: Red Flag and Hazardous Materials

E1-E5	Red Flag Maps
E6-E8	Attachment 10 – Hazardous Materials Site Visit Form

Appendix F: Water Resources

F1	National Wetlands Inventory Mapping
F2-F-45	JF New Wetlands Report
F46	FEMA Flood Insurance Rate Map (Firmette)

Appendix G: Public Involvement

G1	Copy of Legal Notice Requesting Comments on Findings
G2	Proof of Publication Affidavit (pending)

Appendix H: STIP / MPO TIP Information

H1	MPO TIP Page
H2-H4	Acceptance of MPO TIP into STIP dated July 11, 2014

Appendix I: 4(f) Resource Information

J1	Sponsor - City 4(f) Letter
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Indiana Department of Transportation

County Monroe

Route Old SR 37 & Dunn Street

Des. No. 1297060

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*? If No, then: Opportunity for a Public Hearing Required? Yes No [] [X] [] [X]

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

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

Remarks:

This project involves both Section 106 and 4(f) resources, with each bearing a requirement for the Public Notice of the proposed findings. For Section 106, the project finding is No Adverse Effect, and for the project's two 4(f) resources, both qualify as de minimis findings. To meet the public involvement requirements for both types of resources, a joint Public Notice was advertised in the Bloomington Herald Times on October 18, 2014. The public comment period closed 30 days later on November 17, 2014 with ___ comments having been received. (TO BE UPDATED FOR FINAL ENV. DOC) The text of the public notices and the affidavits of publication are provided in Appendix G. This project requires approximately 0.35 acre of additional permanent and 0.09 acre of temporary right of way. It does not involve any changes to the roadway function, nor will it have any substantial effect on abutting properties. The project is not expected to have any significant social, economic or environmental effect. Because the project has only a minor and temporary effect, an Opportunity to Request a Public Hearing is not required per the INDOT Public Involvement Manual. This does not preclude the City or County from making the decision to hold a public information meeting or to prepare a news release in the future.

Public Controversy on Environmental Grounds

Will the project involve substantial controversy concerning community and/or natural resource impacts? Yes No [] [X]

Remarks:

The project is not expected to involve significant public controversy for either community or natural resource impacts. The only community impact is the temporary detouring of traffic. While the impacts to the existing trees are not insignificant, the project has been fully coordinated with all local, state and federal agencies and a mitigation plan has been adopted to replant the area. All other areas of natural resource impacts have been reviewed by the jurisdictional agencies and none are deemed significant. This project is not likely to generate public controversy, especially in light of the recognized need to improve safety in this area.

Indiana Department of Transportation

County Monroe Route Old SR 37 & Dunn Street Des. No. 1297060

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

Sponsor of the Project: City of Bloomington and Monroe County (Joint) INDOT District: Seymour
Local Name of the Facility: Old SR 37 and Dunn Street

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

*If other is selected, please indentify 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)

Accidents are occurring with a high frequency in the vicinity of the intersection of Old SR 37 and Dunn Street at the edge of the City of Bloomington. The location is ranked #2 on the City's recent highway safety improvement list and consistently appears in the Bloomington Monroe County Metropolitan Planning Organization's list of top accident locations. This is especially notable when the relatively low traffic volumes are considered.

Upon closer review of accident records, it was found that over 90% of the accidents fall into the categories of "Opposite Direction Sideswipes", "Ran Off Road", and "Head On". These are considered Roadway Departure crashes and indicate problems with the roadways themselves, rather than accidents more typical of an intersection such as Rear-End Crashes or Failure to Yield crashes. The vast majority of accidents are related to vehicles leaving their designated lane of travel. Accident records indicate most of these accidents occur on Old SR 37, east of Dunn Street.

Dunn Street is a virtually straight section of roadway, but offers no shoulders and a steep upgrade as it comes into its approach with Old SR 37. The pavement grade at the approach is at approximately 10% and puts drivers in a low area where sight distance is limited due to the presence of guardrail in the corner. Starting movements from Dunn Street, especially in slippery conditions, can be particularly challenging, and the author of this report eye-witnessed a bicyclist who was unable to come to a safe stop on Dunn Street while waiting for traffic. The steep upgrade caused the bicyclist to be unable to hold his position without rolling backward and taking a tumble. Bicyclists are frequent users of the roadways in this area, especially competitive teams from Indiana University.

The primary purpose of this project is to reduce the frequency and severity of accidents along Old SR 37, and to improve the geometry and conditions of Dunn Street in its approach to Old SR 37.

PROJECT DESCRIPTION (PREFERRED ALTERNATIVE):

County: Monroe Municipality: Partially inside City Limits of Bloomington

Limits of Proposed Work: Old SR 37: From 190' west of Dunn Street to 1,190' east of Dunn Street;
Dunn Street: From Old SR 37 to 480' south of Old SR 37;
Paved Recreational Trail south of Old SR 37 and west of Dunn Street with a total length of 1,900'

Total Work Length: 0.35 mile Roadway 0.40 mile Paved Trail Mile(s) Total Work Area: Acre(s)

This is page 3 of 31 Project name: Old SR 37 and Dunn Street, Bloomington, Monroe County Date: October 15, 2014

Indiana Department of Transportation

County Monroe Route Old SR 37 & Dunn Street Des. No. 1297060

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

Yes ¹	No
Date: N/A	X

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

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

Existing Conditions:

Old SR 37 is a relatively narrow roadway that offers no paved shoulders. The northern (westbound) edge offers no shoulder and in many areas has a drop which is significant enough to make recovery difficult if a vehicle strays off the edge. The eastbound edge does not have a drop, but is unimproved and features a heavily damaged guardrail where almost every section over several hundred feet shows evidence of having been impacted.

Old SR 37 is in a significant vertical grade coming downhill from east to west at an approximate 8% slope. Adding to the challenges, the roadway presents a compound curve with three distinct radii with the sharpest curve in the lower portion of the slope. Drivers frequently exceed the posted speed limit coming downhill. The varying curve radii aggravate the situation by causing drivers to make a more sudden adjustment at the point where they may be traveling the fastest. Old SR 37 is cut into the side of a hill, a common condition in this very hilly terrain, but also limiting sight distance in the westbound direction.

Project Location:

Old SR 37 at Dunn Street marks the northern boundary of the City of Bloomington. Old SR 37 east of this intersection is part of unincorporated Monroe County, while the roadway west is in the City's jurisdiction. North Dunn Street is a City street. Both roads are classified as Local Rural Collectors.

Type of Work:

On Old SR 37, a curve correction is proposed to realign the roadway into a single horizontal curve with appropriate superelevation. The Indiana Design Manual shows strong preference for this solution when dealing with a roadway where complex curvature is contributing to accidents. The existing condition presents a compound curvature at three different radii with the sharpest occurring toward the bottom of the hill.

Because the roadway is cut into a hillside with exposed rock on the inside (uphill) side of the curve, and a steep hillside protected by guardrail on the outside of the curve, the total roadway width must be kept reasonable to keep the improvement affordable and to avoid major environmental and right of way impacts.

It is proposed that the eastbound (outside of the curve) side of the road will include a paved shoulder in front of new guardrail. Shoulder width will need to be kept relatively narrow due to the steep downslope, but a paved shoulder will be a significant improvement over the existing unstable road edge.

On the inside of the curve, due to the high cost of excavating deeper into the rocky hillside, widening is to be limited. The inside of the curve would feature a curb and gutter to address drainage needs, to eliminate the existing edge drop, and to provide a 2' gutter as a recovery space. In addition, the hillside will be cut back enough to provide required sight distance in the westbound direction for a design/posted speed limit of 30 mph that is consistent with this roadway on both ends of this project area.

Indiana Department of Transportation

County Monroe Route Old SR 37 & Dunn Street Des. No. 1297060

These improvements will require the introduction of a storm sewer along the inside of the curve, but this will provide additional benefits near Hillview Drive where the existing drop into the roadside ditch is severe (approaching 3' in depth). Enclosing this section in a storm sewer will remove this hazard.

For North Dunn Street, it is intended to raise the road to meet Old SR 37 at a grade not to exceed 2%, a major improvement from the current condition of nearly 10%. This will improve stopping and starting conditions for traffic coming onto Old SR 37, and will also greatly improve intersection sight distance. Raising the profile of Dunn Street at the intersection will not only address the operational challenge of vehicles and bicyclists starting from a stopped condition on a slope, but also will address the deficient intersection sight distance that exists there. Aside from fixing its profile, only a minimal shoulder is deemed worthy of consideration because traffic counts are very low and Roadway Departure crashes have not historically occurred along Dunn Street.

A part of the project includes a paved sidepath along the south side of Old SR 37, then turning southward along the west side of Dunn Street. This portion of the project is in the City limits and is expected to comply with the City's Complete Streets requirements. Old SR 37 east of the intersection is outside the City limits and the topography does not make widening for bicycle or pedestrian facilities practical due to the expense, environmental impacts, and the project's rural setting. A path connection from the sidepath to Hillview Drive will be included to facilitate connection to the nearest residential area, and to provide a paved connection to the designated bike route that follows Hillview instead of Old SR 37. This proposal was presented for Complete Streets review and has been approved.

The RSA notes that there is a heavier occurrence of accidents in wet conditions and in the fall (presumably when leaves may be on the roadway in this heavily forested area). The City agrees with the potential benefits of occasional street sweeping if leaves are accumulating on the pavement, and this maintenance solution should be implemented in conjunction with other proposals.

An exhibit highlighting the area topography by contours is presented on Appendix Page B-2, and the roadway outline is shown on Appendix Page B-3.
The Preliminary Plans are attached in Appendix Pages B-4 to B-43.

OTHER ALTERNATIVES CONSIDERED:

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

1. Do Nothing:

This area is the site of many accidents and continues to be ranked as one of the City's and MPO's primary accident locations. The "Do Nothing" alternative would not address the overall Purpose and Need of the project which is to reduce the frequency and severity of accidents at this location. Therefore, the Do Nothing alternative was dismissed from further consideration.

2. Intersection Improvement Alternatives:

The intersection of Old SR 37 and Dunn Street was reviewed in detail because the "location" of the problem was generally described as being at this intersection. In the accident records, the intersection was documented as the location because it was the nearest intersection.

A traffic and accident study was conducted to consider possible intersection improvement options including:

- Realigning North Dunn Street to meet Hillview Drive to create a single 4-leg intersection rather than the existing pair of T-intersections.
- Adding a westbound to southbound turn lane or passing blister on Old SR 37 at North Dunn Street

Indiana Department of Transportation

County Monroe Route Old SR 37 & Dunn Street Des. No. 1297060

- Signalizing one or both intersections on Old SR 37.
- Converting the intersections into a roundabout configuration.

Traffic counts and turning movements were taken, but the numbers were found to fall well below the normal levels where an intersection improvement, addition of a turn lane, installation of a signal or construction of a roundabout should be considered. Turning counts are low and are not likely to be creating any significant delay or hazard. Additionally, the review of the accidents revealed only a minimal occurrence of accidents typical for an intersection. During the study period, there were no accidents of the "Left Turn into Mainline" or "Right Angle" crash. There were only two "Rear-End" accidents. These are the types most commonly occurring at a troubled intersection.

These findings led to the understanding that while the intersection is where many of these accidents are identified in the records, the vast majority of accidents are related to vehicles leaving their designated lane of travel ("Opposite Direction Sideswipes", "Ran Off Road", and "Head On" accounting for over 90% of the crashes). These are considered Roadway Departure crashes. These findings were supported by a Roadway Safety Audit that was prepared for this location.

The intersection improvements noted above were dismissed from further consideration because they failed to address the overall Purpose and Need of the project.

3. Horizontal Curvature Correction

The complex curvature of Old SR 37 catches an inattentive driver with the sharpest curve and most limited sight distance condition where they are likely travelling the fastest. Vertically the road is at a fairly consistent grade and no contributing vertical alignment problem was noted. The existing road also appears to have a reasonable superelevation. The horizontal alignment is viewed as the primary problem which requires correction, and thus a horizontal curve correction is deemed to be a fundamental improvement to be made in the project to address the Purpose and Need. This is part of the preferred alternative.

4. Edge Condition Improvement

The unsafe edge drop makes the roadway unforgiving to those who do stray from the edge, making recovery far more difficult. Stabilizing the shoulder, or at least providing a paved recovery space on each side of the road is deemed fundamental to improving the roadway. This is part of the preferred alternative.

5. Roadway Cross Sections

A two-lane roadway with full shoulders, possibly even including wide enough shoulders to satisfy clear zone requirements was considered. Full shoulders would involve tremendously high cost and difficult construction. Tree removal to build the downslope embankment would be extreme. Additionally, these types of treatments could be considered later if a more modest section doesn't produce the expected reduction in accidents. The expense and environmental impact was not deemed necessary to achieve the desired improvements. Providing full shoulders and clear zone on each side is deemed too expensive and environmentally impactful. This alternative was dismissed from further consideration because of these factors.

A more limited edge treatment was considered that provides a stable surface on each side. By providing a curb and gutter condition on the inside of the curve and a reduced shoulder with guardrail on the outside of the curve, it is possible to achieve the goal of a stable edge condition with reduced cost and environmental impacts.

For Old SR 37, the preferred Alternative includes a horizontal curve correction and a stabilized edge condition by providing a curb and gutter on one side and a paved shoulder/guardrail section on the other side.

With regard to North Dunn Street, the deficiencies are very specific to the excessively steep connection where Dunn Street connects to Old SR 37. The roadway needs to be vertically realigned to change this, and no other solution was considered because no other solution was identified that addressed the concern. Bringing Old SR

Indiana Department of Transportation

County Monroe Route Old SR 37 & Dunn Street Des. No. 1297060

37 down doesn't make sense because it would alter the vertical grade of that road where vertical grade is not considered a problem. The preferred alternative is to raise Dunn Street at the intersection, and thus flatten the road profile. The "Do Nothing" alternative was dismissed from further consideration because it fails to meet the project's Purpose and Need.

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

- It would not correct existing capacity deficiencies;
- It would not correct existing safety hazards;
- It would not correct the existing roadway geometric deficiencies;
- It would not correct existing deteriorated conditions and maintenance problems; or
- It would result in serious impacts to the motoring public and general welfare of the economy.
- Other (Describe)

X
X

ROADWAY CHARACTER:

OLD SR 37

Functional Classification: Local Rural Collector
 Current ADT: 4854 VPD (2012) Design Year ADT: 5121 VPD (2034)
 Design Hour Volume (DHV): 360 Truck Percentage (%) 6
 Designed Speed (mph): 30 Legal Speed (mph): 30

	Existing		Proposed
Number of Lanes:	2		2
Type of Lanes:	One each direction		One each direction
Pavement Width:	19-22	ft.	22
Shoulder Width:	N/A	ft.	4
Median Width:	N/A	ft.	N/A
Sidewalk Width:	N/A	ft.	N/A*

Setting: Urban Suburban Rural
 Topography: Level Rolling Hilly

*A separated multi-use paved path is proposed along the south side of Old SR 37 and the west side of Dunn Street. This is in accordance with the City's Greenway Plan. The facility is not located at the road edge and is not a sidewalk.

**Most of the project is within the limits of a curve and is cut into the side of a hill. The inside of the curve is to have a curb and gutter to control stormwater, and the outside of the curve will have a 4' shoulder and a guardrail to protect motorists from the steep hillside.

Indiana Department of Transportation

County Monroe Route Old SR 37 & Dunn Street Des. No. 1297060

DUNN STREET

Functional Classification: Local Rural Collector
 Current ADT: 784 VPD (2012) Design Year ADT: 827 VPD (2034)
 Design Hour Volume (DHV): 58 Truck Percentage (%): 6
 Designed Speed (mph): 30 Legal Speed (mph): 30

	Existing	Proposed
Number of Lanes:	2	2
Type of Lanes:	One each direction	One each direction
Pavement Width:	17-18 ft.	22 ft.
Shoulder Width:	None ft.	2 ft.
Median Width:	N/A ft.	N/A ft.
Sidewalk Width:	N/A ft.	N/A* ft.

Setting: Urban Suburban Rural
 Topography: Level Rolling Hilly

*A separated multi-use paved path is proposed along the south side of Old SR 37 which then turns south along the west side of Dunn Street. This is in accordance with the City's Greenway Plan. The facility is not located at the road edge and is not a sidewalk.

DESIGN CRITERIA FOR BRIDGES:

Structure/NBI Number(s): Pedestrian bridge over Griffy Creek Sufficiency Rating: N/A – not for vehicular traffic
 (Rating, Source of Information)

	Existing	Proposed
Bridge Type:	N/A	Prefabricated truss
Number of Spans:		1
Weight Restrictions:	ton	1 Ton – for multi-use trail
Height Restrictions:	ft.	N/A ft.
Curb to Curb Width:	ft.	10 ft. – inside railings
Outside to Outside Width:	ft.	Approx. 12 ft.
Shoulder Width:	ft.	N/A ft.
Length of Channel Work:		None ft.

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

Remarks:

No bridges are proposed for either Dunn Street or Old SR 37. A multi-use trail bridge is proposed as part of the project. It is part of the federally-funded project and will become a City trail asset. Officially it will not be part of any INDOT or county bridge inventory system.

The proposed structure is a prefabricated weathered steel truss that is compatible with other bridges in the City's trail system inventory. The structure will have a 60' span and will have a traversable width of 10' (handrail to handrail).

Channel impacts are not required because the bridge will sit on footers constructed beyond the top of bank on each side, and the bridge is set as a single unit.

Indiana Department of Transportation

County Monroe Route Old SR 37 & Dunn Street Des. No. 1297060

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

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 checked="" type="checkbox"/>	<input type="checkbox"/>
Provisions will be made for through-traffic dependent businesses.	<input type="checkbox"/>	<input type="checkbox"/> N/A
Provisions will be made to accommodate any local special events or festivals.	<input type="checkbox"/>	<input type="checkbox"/> N/A
Will the proposed MOT substantially change the environmental consequences of the action?	<input type="checkbox"/>	<input checked="" type="checkbox"/>
Is there substantial controversy associated with the proposed method for MOT?	<input type="checkbox"/>	<input checked="" type="checkbox"/>

Remarks:

The narrowness of the existing roadways precludes the consideration of trying to construct the realignment of the roadways under traffic. A Detour will be required.

The selection of a detour for Old SR 37 is complicated by the fact that the other collector and arterial roadways available in this rural area of Monroe County are generally of lower geometric and condition standards than Old SR 37, and most are hilly, sometimes narrow, curved, forested and lack shoulders. Safety concerns exist with all alternative routes that would use the County's network of collectors or arterials.

The available routes also increase travel time and distance by several miles. In contrast, there is an existing residential subdivision just north of the project area that offers an alternative route that is only about 1,000' longer than Old SR 37.

The designer is consulting with the County (a project co-sponsor) to consider the routing of the detour using two streets in the established subdivision. Bill Williams, the Monroe County Highway Engineer, has indicated that he believes this routing is satisfactory. While this roadway is not of the same classification, it is deemed to be the default route that will be selected by most locals regardless of whether it is the posted detour or not. It is relatively direct and is many miles shorter than any alternative. The pavement is arguably in better condition than many of the collectors that might otherwise be used and the geometry of the streets is far superior.

Coordination with the County is underway to discuss the potential for roadway needs along this route, including the potential need to overlay the streets either before or after the project, and in conjunction with localized patching if required. Additional patrolling and speed monitoring by law enforcement will be recommended due to the concerns of placing greater traffic, even temporarily, through a residential area. This is deemed the best available solution for a route that local traffic is already aware of and will be used whether posted or not.

Dunn Street is less of a concern. It must also be detoured, but the traffic counts are much lower and the alternate route for a detour is readily available on streets of the same or higher classification. When Dunn Street is closed, the applicable detour is to follow the SR 46 bypass to North Walnut Street to Old SR 37, for a total distance of about 2 miles.

Indiana Department of Transportation

County Monroe Route Old SR 37 & Dunn Street Des. No. 1297060

ESTIMATED PROJECT COST AND SCHEDULE:

Engineering: \$ 222,970 (2014-2015) Local Only Right-of-Way: \$ 125,000 (2014-2015) (80% Fed) Construction: \$ 1,846,471 (2015) (90% Fed)

Anticipated Start Date of Construction: September 2015

Date project incorporated into STIP March 19, 2012

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

NOTE BY CE PREPARER – The BMCMPPO has informed us that they have a pending amendment to their TIP, and, in turn, the STIP for this project. This amendment is scheduled to be acted upon by the MPO Policy Committee on November 7, 2014 with notification to INDOT to follow. The information below is from the previous version of the TIP information for this project. The project will need to be Administratively Modified in the future but given that the next phase of the project (Right of Way) is recognized in this version of the TIP, the environmental document is anticipated to be eligible to proceed to final review.

If yes,
Name of MPO Bloomington / Monroe County Metropolitan Planning Organization (BMCMPPO)

Location of Project in TIP Page 24 of TIP amended Feb 7, 2014. Appendix Page H-1

Date of incorporation by reference into the STIP July 11, 2014 (current amendment)

RIGHT OF WAY:

Land Use Impacts	Amount (acres)	
	Permanent	Temporary
Residential	0	0
Commercial	0	0
Agricultural	0	0
Forest	0.35	0.09
Wetlands	0	0
Other:	0	0
Other:	0	0
TOTAL	0.35	0.09

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 permanent right of way along Old SR 37 is intended to be the primary roadway section which includes slopes, roadside ditch, curb and gutter, roadway, shoulder and guardrail with its associated graded area. Existing right of way on the south side is virtually unlimited because the City of Bloomington owns these large parcels as part of the Griffy Lake Nature Preserve.

On the north side of the road the existing right of way is approximately 34' north of existing centerline. Proposed right of way extends up to 52' north of centerline to incorporate needed slope

This is page 10 of 31 Project name: Old SR 37 and Dunn Street, Bloomington, Monroe County Date: October 15, 2014

Indiana Department of Transportation

County Monroe Route Old SR 37 & Dunn Street Des. No. 1297060

work. Minimum width of the right of way is the same as the existing 34', but the project is in curves and thus varies throughout within these limits.

Dunn Street does not have a defined right of way because the City owns the land to both sides of the roadway.

Preliminary Plans are attached starting on Appendix page B-12.

Minimal right of way is needed because the City already owns the bordering parcels on both sides of Dunn Street and on the south side of Old SR 37, except at the east end of the project.

Permanent right of way is needed along the north side of Old SR 37 where the roadway horizontal alignment is being shifted northward for the curve correction. (0.17 acre needed)

Permanent right of way is also needed on the north side of Old SR 37 near Hillview Drive where the existing right of way is at the edge of the road and land is needed to install new storm sewers and to eliminate a severe drop at the edge of the road. (0.09 acre needed)

Permanent right of way is needed on the south side of Old SR 37 near the east end of the project where existing right of way is at the edge of the road, and space is needed to install guardrail and a standard end treatment. (0.09 acre needed)

Temporary right of way is needed along Old SR 37 in order to build embankment for the roadway section. These areas can be replanted after the work and can be returned to the owners after this work. (0.09 acre temporary needed)

All of the areas noted for acquisition are from large, forested home site parcels, and are reported here as forest since the house is not located adjacent to the proposed acquisition. Mature woodland with minimal undergrowth is typical for the areas identified as proposed right of way.

Indiana Department of Transportation

County Monroe

Route Old SR 37 & Dunn
Street Street

Des. No. 1297060

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

SECTION A – ECOLOGICAL RESOURCES

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

Remarks:

Per the USGS Mapping, there is only one stream in the project limits (Griffy Creek) and the only work near it is the construction of a new prefabricated truss bridge to span the creek for a trail. No work in the stream channel is required because the bridge can be installed as a single unit, and it will be mounted to footings that are to be placed outside the creek banks.

The project area is served by roadside ditches and one culvert pipe, all of which will be replaced within the project limits as part of the project. These facilities all eventually drain to Griffy Creek, though not within the project limits. Griffy Creek does not qualify in any of the categories listed above.

The preliminary plans were sent to the Army Corps of Engineers for a permit determination, and the Corps responded on August 11, 2014 indicating that the project will not impact the "waters of the United States" and no Department of the Army permit is required. This is Appendix page C-9.

	<u>Presence</u>	<u>Impacts</u>	
		<u>Yes</u>	<u>No</u>
Other Surface Waters			
Reservoirs			
Lakes			
Farm Ponds			
Detention Basins			
Storm Water Management Facilities			
Other: _____			

Remarks:

There are no ponds, basins, lakes or reservoirs in the project area.

Indiana Department of Transportation

County Monroe Route Old SR 37 & Dunn Street Des. No. 1297060

Presence **Impacts**

Yes No

Wetlands

Total wetland area: 0.052 acre(s) Total wetland area impacted: 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
1	Emergent	0.052 acre in area of study. Over 3 acres south-west of project area	None	<p>An emergent wetland was suspected and confirmed to be present in the project vicinity, therefore a determination and delineation were completed to define its boundary next to the project area. This investigation was completed by Cardno JFNew in January 2012.</p> <p>The delineated boundary was flagged and included in the area survey. The proposed design in this area includes only the paved trail, and its routing was selected to avoid the edge of the wetland. No direct impact to the wetland is included in the project.</p>

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

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

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

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

Remarks:

National Wetlands Inventory (NWI) mapping is included in Appendix Page F-1, and does not indicate the presence of a suspected wetland in the area. However, during a site visit on November 1, 2011, by Eagle Ridge Civil Engineering, a potential wetland was observed in the field near the project, so a formal investigation was contracted. The study area included the possible extent of the project. The wetland was confirmed, and was delineated in accordance with Corps of Engineers procedures by Cardno JFNew between December 20, 2011 and January 15, 2012. The boundary was flagged and was included in the project survey. The Preliminary Report prepared by Cardno JFNew is provided starting on Appendix Page F-2.

The proposed design avoids the wetland boundary. No jurisdictional determination was deemed

Indiana Department of Transportation

County Monroe Route Old SR 37 & Dunn Street Des. No. 1297060

necessary because the site is being avoided. The wetland boundary has been included on the Plans with a note indicating it must be avoided.

Appropriate erosion control measures, including a continuous silt fence at the anticipated construction limits will be needed to prevent sediment from leaving the project area. In addition, the terms of the IDNR permit require the erection of a temporary construction fence to prevent accidental contractor intrusion into the wetland area in areas where the work will be near the boundary. This fencing requirement is noted on the plans.

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

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

Remarks:

Land use in the area is undeveloped, mostly forested land. With the exception of one house on a forested lot adjacent to the project, the area is completely undeveloped. No lawn areas fall within the anticipated construction limits. There are no commercial or industrial sites in the project's vicinity.

The project area is characterized by two types of habitat: mature woodland growth with trees and some undergrowth, and grassy meadowland or wetland with limited clumps of tree growth.

The grassy meadow area is located in one area which is south of Old SR 37 and west of Dunn Street. This is within the floodplain of Griffy Creek and is characterized by grassy meadowland with some stands of trees and a delineated wetland to the southwest of the project. A former tree mitigation site exists between the proposed improvements and the wetland in this area also. No impacts to the wetland in this area are anticipated. In this area the proposed work is limited to construction of paved multi-use trail whose route was selected to avoid concentrations of trees and to avoid the delineated wetland boundary.

The total area of disturbance required in this meadow area is about 1.1 acres of City-owned land. The disturbance will be linear in form; an approximately 20-25' wide strip for trail construction. No right of way acquisition is required. This area is within the Griffy Lake Nature Preserve.

The mature woodland area is described as Mesic and Dry-mesic Upland Forest and is deemed to be a High Quality community, as identified by IDNR in its response to Early Coordination received on February 14, 2012. IDNR's response also indicates that the Division of Nature Preserves does not anticipate any significant impacts to any of these as a result of the project.

The project area is partly within the limits of the Griffy Lake Nature Preserve, and the forested areas host a wide variety of flora and fauna that is typical for a mature forest in a mostly rural, hilly part of Monroe County. The City forester identified typical varieties of oaks, maple, elm, hickory, sycamore and other native species.

The total area of disturbance in the forested upland areas will be about 2.15 acres. Of that, about 1.25 acres is within the Griffy Lake Nature Preserve. Nearly all of this area is steeply sloped along the south side of Old SR 37. The City owns most of this property. Permanent right of way needed totals about 0.35 acre and temporary right of way another 0.09 acre. The City Tree commission reviewed the project and has recommended a mitigation rate of 5:1, which is consistent with

Indiana Department of Transportation

County Monroe Route Old SR 37 & Dunn Street Des. No. 1297060

feedback from the other agencies. (Their response letter is Appendix page C-32).

Specific protected species that have been recorded within ½ mile of this project are noted in the appropriate section of this document (Threatened or Endangered Species). The primary concern expressed by US Fish & Wildlife was to limit tree removal to the non-roosting season in order to reduce the likelihood of impacts to two species of bats. With that restriction, the Division of Nature Preserves with the IDNR has stated that they do not anticipate impacts to any species of concern as a result of the project. IDNR comments are included in Appendix pages C-7 thru C-8, and US Fish and Wildlife comments are included on pages C10 to C-15.

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

Karst

Is the proposed project located within or adjacent to the potential Karst Area of Indiana?
 Are karst features located within or adjacent to the footprint of the proposed project?

Yes	No
X	
	X
	N/A

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

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

Remarks:

The project is located within the designated karst area of the state as identified in the October 13, 1993 MOU. The US Fish & Wildlife Service also noted the need to check for karst features in its initial response dated January 30, 2012.

In response, a site reconnaissance was completed on March 16, 2012, and no sinkhole, sinking stream, caves or springs were observed or are known to exist within or adjacent to the proposed project. The project area drains to Griffy Creek outside of the project limits and these features are not present in the drainage ways downstream of the project. The Indiana Geological Survey responded to Early Coordination in a letter dated 2-15-12 (Appendix C-17), that the project should not affect, or be affected by, geology in the area.

Surface drainage is to be by ditches and a storm sewer system within the project area. Drainage of the area will continue to be directed to Griffy Creek via existing ditches and culverts.

Indiana Department of Transportation

County Monroe Route Old SR 37 & Dunn Street Des. No. 1297060

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

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

Remarks:

Coordination with both IDNR and the US Fish & Wildlife Service occurred on January 18, 2012, and the following information was obtained:

According to the US Fish & Wildlife Service responses received on January 30, 2012, and March 12, 2014, the project is within the range of the Federally endangered Indiana bat (*Myotis sodalis*). In addition, the northern long-eared bat (*Myotis septentrionalis*) (NLEB) is currently proposed for listing under the Endangered Species Act (ESA) (87 Stat. 884, as amended; 16 U.S.C. 1531 *et seq.*). The final listing decision for the NLEB is expected in October 2014. At this time, no critical habitat has been proposed for the NLEB. The entire state of Indiana is within the known range of the NLEB.

According to the US Fish & Wildlife Service response received on March 12, 2014: "There is suitable summer habitat for both of these species present throughout the area surrounding the project site, including wooded areas within or near the right-of-way. The project will not eliminate enough habitat to affect these species, but to avoid incidental take from removal of an occupied roost tree we recommend that tree-clearing be avoided during the period **April 1 - September 30**. If this measure is implemented then we concur that the proposed project is not likely to adversely affect the Indiana bat or the northern long-eared bat."

This coordination precludes the need for further consultation on this project as required under Section 7 of the Endangered Species Act of 1973, as amended. However, should new information arise pertaining to project plans or a revised species list be published, it would be necessary for the Federal agency to reinstate consultation.

IDNR has also made it a condition of the Floodway Permit to not cut down trees between April 1 and September 30 to mitigate any concern of impacting the Indiana bat. This commitment has been incorporated into the project.

In their response to Early Coordination received on February 14, 2012, the IDNR indicated that the following plant species or natural communities have been recorded within 1/2 mile of the project area:

- Horned Pondweed (*Zannichellia palustris*) – state rare
- Green Adder's Mouth (*Malaxis unifolia*) – state endangered
- Managed Area: Griffy Woods Nature Preserve
- High Quality communities: Dry-mesic Upland Forest and Mesic Upland Forest

IDNR's response also indicates that the Division of Nature Preserves does not anticipate any significant impacts to any of these as a result of the project.

The letters from these two agencies are provided in Appendices pages C-7 thru C-15.

Indiana Department of Transportation

County Monroe Route Old SR 37 & Dunn Street Des. No. 1297060

SECTION B – OTHER RESOURCES

Drinking Water Resources

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

<u>Presence</u>	<u>Impacts</u>	
	<u>Yes</u>	<u>No</u>
YES	X	

If a SSA is present, answer the following:

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

<u>Yes</u>	<u>No</u>

Remarks:

The project is not located within the St. Joseph Aquifer System, the only legally designated sole-source aquifer in Indiana.

Some relocation of existing watermain is expected, primarily as a result of the need to build up the road on an embankment, resulting in the depths of existing pipes getting too deep for the City Utility to maintain. It is anticipated that they will prefer the mains be relocated. This is to be addressed by the designer in Utility Coordination.

Flood Plains

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

<u>Presence</u>	<u>Impacts</u>	
	<u>Yes</u>	<u>No</u>
Y	X	
Y	X	
Y	X	
Y		X

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

The proposed work in the floodway and floodway fringe of Griffy Creek includes the construction of a multiuse trail and pedestrian bridge and the raising of Dunn Street's profile.

Per the CE Manual, this work falls under Category 5 and demands a hydraulic design study and evaluation of the encroachment impacts. Preliminary design of these improvements was coordinated with IDNR and the hydraulic design was completed and submitted to them for review. The IDNR approved a Construction in a Floodway Permit on December 20, 2013 under Permit Number FW-27273.

There will be no substantial impacts on natural and beneficial floodplain values; there will be no substantial change in flood risks; and there will be no substantial increase in potential for interruption or termination of emergency service or emergency evaluation routes; therefore it has been determined that this encroachment is not substantial. A summary of this study will be included with the Field Check Plans.

Indiana Department of Transportation

County Monroe Route Old SR 37 & Dunn Street Des. No. 1297060

Farmland	Presence	Impacts	
		Yes	No
Agricultural Lands	N		X
Prime Farmland (per NRCS)	N		X

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

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

Remarks:

None of the land within the project limits meets the definition of farmland under the Farmland Protection Policy Act (FPPA). The requirements of the FPPA do not apply to this project.

The NRCS indicated its concurrence in its 2/28/2014 letter that the project will not cause a conversion of Prime Farmland. This response is available in Appendix page C-16.

SECTION C – CULTURAL RESOURCES

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

**Eligible and/or Listed
Resource Present**

Results of Research

Archaeology	0
NRHP Buildings/Site(s)	X
NRHP District(s)	X
NRHP Bridge(s)	0

Project Effect

No Historic Properties Affected No Adverse Effect Adverse Effect

**Documentation
Prepared**

Documentation (mark all that apply)

	ES/FHWA Approval Date(s)	SHPO Approval Date(s)
Historic Properties Short Report		
Historic Property Report	X	4/30/2012
Archaeological Records Check/ Review	X	4/4/2012
Archaeological Phase Ia Survey Report	X	4/4/2012; 5/1/2014
Archaeological Phase Ic Survey Report		
Archaeological Phase II Investigation Report		
Archaeological Phase III Data Recovery		
APE, Eligibility and Effect Determination	X	8/13/2014
800.11 Documentation	X	8/13/2014

MOA Signature Dates (List all signatories)

This is page 18 of 31 Project name: Old SR 37 and Dunn Street, Bloomington, Monroe County Date: October 15, 2014

Indiana Department of Transportation

County Monroe Route Old SR 37 & Dunn Street Des. No. 1297060

Memorandum of Agreement (MOA)

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

Remarks:

Area of Potential Effect (APE):

Pursuant to 36 CFR 800.16(d), the APE was drawn to encompass parcels immediately adjacent to the project location and is shown on Appendix Page D-30. The archaeological APE is the project footprint and is shown on Appendix Page D-33.

Coordination with Consulting Parties:

In a letter dated January 16, 2012, Eagle Ridge Civil Engineering Services, LLC (Eagle Ridge) distributed an early coordination letter (ECL) describing the proposed project and inviting parties to participate in Section 106 consultation. The letter is included on Appendix Pages D-59 and D-60.

The State Historic Preservation Office, FHWA and the INDOT Cultural Resources section are automatically made Consulting parties. The letter to the Indiana Department of Historic Preservation and Archaeology State Historic Preservation Officer (SHPO) also included a list of invited consulting parties. The following entities were invited to join consultation, and their respective responses are noted with each:

Recipient:	Response Received:
IDNR – State Historic Preservation Officer	Letter 2-16-2012
Preservation Development, Inc.	None
Downtown Bloomington Commission	None
Historic Preservation Commission	None
Bloomington Restorations, Inc.	None
Monroe County Historic Preservation	Letter 2-17-2012, Affirmative for Sect. 106
Historic Landmarks Foundation	None
INDOT Cultural Resources	None
Monroe County Historian	None
Housing and Neighborhood Development	Returned Form, Affirmative for Sect. 106, 2-16-2014

After the initial invitation letter, correspondence with consulting Parties was addressed by Weintraut & Associates Historians, Inc. (W&A).

On February 17, 2012, Ms. Cheryl Ann Munson, Chair of the Monroe County Historic Preservation Board of Review, sent a letter to Eagle Ridge after reviewing the Early Coordination package. Ms. Munson included the following comments: 1) "Members of the Board had observed features or ruined structures relating to the historic limestone industry in the western portion of the project area" that would warrant further documentation should they fall within the APE, and 2) a small portion of the western project area, "from the toe slope of the uplands in the center of the project area to the floodplain in the western part of the area, may be sensitive for prehistoric archaeological resources," and should be surveyed for archaeological resources.

Indiana Department of Transportation

County Monroe Route Old SR 37 & Dunn Street Des. No. 1297060

Archaeology:

Archaeologists from W&A conducted a literature review on December 27-28, 2011 and reviewed the Indiana State Historical Architectural and Archaeological Research Database (SHAARD), site maps on file at the Division of Historic Preservation and Archaeology (DHPA), reports, cemetery records, the *Monroe County Interim Report: Indiana Historic Sites and Structures Inventory* (IHSSI), and historic maps in an effort to identify archaeological resources within the APE.

On February 2, 2012, archaeologists for W&A (Principal Investigator and Qualified Professional) completed a Phase Ia archaeological field reconnaissance of the archaeological APE. The field investigation included visual inspection and shovel testing. No sites were located in that reconnaissance and a Short Archaeological Report (ASR) was prepared.

W&A submitted an ASR to the SHPO on March 7, 2012 after review and approval by INDOT-CRO. Since no archaeological sites were located within the project area following the Phase Ia archaeological reconnaissance, it was recommended the project be allowed to proceed as planned.

On April 4, 2012, SHPO sent a letter regarding the ASR that stated: "Based upon the documentation available to the staff of the Indiana SHPO, we have not identified any currently known archaeological resources listed in or eligible for inclusion in the National Register of Historic Places ("NRHP"). Therefore, we concur with the opinion of the archaeologist, as expressed in the Indiana archaeological short report (Alexander, 2/27/12), that no further investigations appear necessary at this proposed project area." The letter also reminded the consultants that "[i]f any archaeological artifacts or human remains are uncovered during construction, demolition, or earthmoving activities, state law (Indiana Code 14-21-1-27 and 29) requires that the discovery be reported to the Department of Natural Resources within two (2) business days."

On April 17, 2013, W&A conducted additional reconnaissance to take into account changes to the project footprint. The project designer had noted the need to extend guardrail replacement to the east of the previously assumed project limits. Shovel probes confirmed soils were disturbed. The report was submitted to SHPO on April 4, 2014 with a recommendation to allow the project to proceed as planned. SHPO concurred with the recommendation of the addendum ASR in a letter dated May 1, 2014.

Historic Properties:

Historians from W&A reviewed the National Register of Historic Places (NRHP), Indiana Register of Historic Sites and Structures, SHAARD, the *Monroe County Interim Report* and IHSSI files, and the *Indiana Historic Bridge Inventory* for previously-identified properties in December 2011. Historic maps and aerial photographic maps were also reviewed.

On January 31 and February 2, 2012, W&A viewed all aboveground properties within the APE, photographed and recorded survey notes about all properties more than fifty years old, and took representative photos of the area. On April 2, 2012, W&A transmitted the HPR to the SHPO and consulting parties. Consulting parties were offered the opportunity to comment. The report identified one property previously recommended eligible for listing in the NRHP: Griffy Lake Historic District. No additional properties were recommended eligible for listing in the NRHP.

On April 30, 2012, SHPO responded to recommendations provided in the HPR in a letter to W&A stating, "...we concur with the consultant's assessment that the Griffy Lake Historic District is eligible for inclusion in the National Register of Historic Place." SHPO then commented on the Milisen House (4180 Old SR 37), a property not surveyed during IHSSI investigations but

Indiana Department of Transportation

County Monroe Route Old SR 37 & Dunn Street Des. No. 1297060

recommended as a contributing resource following the W&A survey. SHPO stated, "...we believe that the structure is eligible for inclusion under Criterion B for its association with Dr. Robert Milisen, a nationally recognized researcher in the field of speech disorders." SHPO requested additional information, including an updated scope of work once the type of intersection treatment, roadway alignment, or improvements to the roadway sections have been determined.

On May 1, 2012, Devin Blakenship responded to the HPR on behalf of the Monroe County Historic Preservation Board of Review: "Your firm's thorough report thoroughly addresses the APE to our satisfaction given that the final design has not been determined." Blankenship added, "It appears that the properties eligible for the National Register are outside of our planning area."

On March 24, 2014, SHPO, INDOT, the county engineer, and project consultants met to discuss historic properties and the design plans. As a result of the discussion at that meeting regarding the historic property boundary for the Milisen House, staff from W&A contacted the heirs of Dr. Robert Milisen on April 14, 2014 and requested further information regarding the estate. The heirs did not respond to the request for additional information. On May 5, 2014, W&A provided additional information to SHPO and consulting parties regarding project plans and historic properties, including a recommended boundary for the Milisen House.

Griffy Lake Historic District. The Griffy Lake Historic District includes the Griffy Lake Water Treatment Plant (1927), Griffy Lake and the dam that forms it, and structures related to the lake, such as retaining walls and spillway. It is eligible under Criterion A in the areas of Community Planning and Development for its association with the development of the City of Bloomington's water system. The period of significance, 1924-1961, begins with construction of the dam that created Griffy Lake and extends through the facility's continued use for its original purpose within the historic period.

Milisen House. The Milisen House (circa 1926) is an American Foursquare house clad in irregularly coursed stone veneer set atop a hill. The property is associated with Dr. Robert Milisen who started Indiana University's Department of Speech and Hearing Sciences and developed its speech and hearing clinic. He was recognized nationally for his research on speech disorders in children and for his clinical and teaching innovations. The property is eligible under Criterion B for its association with Dr. Milisen. The period of significance extends from 1937, when Dr. Milisen moved to the house, until the end of the historic period in 1963.

Documentation, Findings:

On June 23, 2014, the FHWA's Findings and Determinations of No Adverse Effect were sent to INDOT for review and signature. After minor revisions, the finding was signed on by INDOT, on FHWA's behalf, on July 10, 2014.

Milisen House – No Adverse Effect

Per 36 CFR 800.5(a)(2)(iv), there will be some change "of the character of the property's use or of physical features within the property's setting." With the removal of trees on the south side of SR 37, the setting of the house will change but that change does not diminish the property's ability to convey its significance under Criterion B. It is the opinion of the historians that this change in setting does not constitute an adverse effect.

Griffy Lake Historic District – No Adverse Effect

Per 36 CFR 800.5(a)(2)(i), the undertaking will cause some "physical destruction" through the extension of the Cascades Trail into the district; however, the conversion of a small portion of the district into a transportation use is not considered an adverse effect. Per 36 CFR 800.5(a)(2)(iv), there will be some change "of the character of the property's use or of physical features within the

Indiana Department of Transportation

County Monroe Route Old SR 37 & Dunn Street Des. No. 1297060

property's setting" through the extension of the Cascades Trail into the district; however, this change will not adversely affect the characteristics for which the Griffy Lake Historic District is considered eligible for listing in the NRHP.

SHPO Concurrence

On August 13, 2014, SHPO concurred with the Finding of No Adverse Effect.

Public Involvement:

(to be updated)

A public notice of "Historic Properties Affected: No Adverse Effect" was published in the Bloomington *Herald Times* on October 18, 2014. The deadline for comments, as published in the notice was November 17, 2014. Copies of the notice and the publisher's affidavit are included in Appendix G. The 30-day comment period ended with no comments being received. The FHWA's responsibilities under the National Historic Preservation Act of 1966 have been fulfilled.

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

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

Parks & Other Recreational Land

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

Presence

X
X

Use

Yes	No
X	
X	

Evaluations

Prepared

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

X

FHWA

Approval date

--

Wildlife & Waterfowl Refuges

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

Presence

X

Use

Yes	No
X	

Evaluations

Prepared

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

X

FHWA

Approval date

--

Historic Properties

- Sites eligible and/or listed on the NRHP

Presence

X

Use

Yes	No
	X

Evaluations

Prepared

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

X

FHWA

Approval date

--

Indiana Department of Transportation

County	Monroe	Route	Old SR 37 & Dunn Street	Des. No.	1297060
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*FHWA approval of the environmental document also serves as approval of any Section 4f Programmatic and/or De minimis evaluation(s) discussed below.

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

Remarks:

The project area includes a portion of the City of Bloomington's Griffy Lake Nature Preserve. The area is owned by the City and also appears on IDNR's list of state-recognized nature preserves. The property is owned by City of Bloomington and is maintained as a nature preserve, recreational area, and a potential source for potable water (though the retired filtration plant nearby has not been used for many years). With regard to this project, this resource is most easily described as all property which sits on the south side of Old SR 37, both east of west of Dunn Street. This is a 4(f) resource and requires that a determination is made on the project's impact to the resource. The property is assumed to be significant under 4(f) standards and no determination from the City was requested. An aerial map showing the project area is shown on Appendix Page B-2. All areas south of Old SR 37 are within the Griffy Nature Preserve.

Additionally, a privately owned house on a parcel on the north side of Old SR 37 (the Milisen House) has been deemed eligible for the National Register. This 4(f) resource is primarily discussed under Section 106. Impacts to that parcel include the proposed need for 0.17 acre of permanent right of way and about 0.01 acre of temporary right of way to allow for the realignment of the existing curves on Old SR 37 in the project limits.

With regard to the Milisen House, which is deemed eligible for the National Register by the SHPO, a *de minimis* finding is also recommended because the Section 106 process has resulted in a finding of No Adverse Effect. INDOT, acting on behalf of FHWA, determined that a finding of No Adverse Effect is appropriate for the project, and requested the concurrence of SHPO. The undertaking does not convert property from the Milisen House to a transportation use. SHPO concurred with this finding on August 12, 2014.

The primary impact of the project to these resources is one of tree removal, most of which is anticipated to be mitigated by replanting trees in the areas where slopes and embankments are constructed. The City's and IDNR's tree mitigation requirements are to be observed. These requirements are listed in the project commitments, and are consistent with the requirements of the City, IDNR and US F&W shown in Appendix C. The long term impact of the project to either 4(f) resource is deemed to be negligible.

With regard to the Griffy Lake Nature Preserve, this project is deemed to be eligible for a *de minimis* finding because the transportation use, including due consideration of avoidance, minimization and mitigation or enhancement, does not adversely affect the activities, features, and attributes that qualify the resource for protection under 4(f). The City, as Owner of the resource, has concurred with this recommendation in writing and the letter is attached in Appendix J-1. SHPO concurred with this finding on August 13, 2014 with respect to the Griffy Lake Historic District, which is discussed with Section 106.

The SHPO's comments and other documentation related to this finding, as well and the Public Notice requirements are fully described in the Section 106 section of this document.

To meet the public involvement requirements, a Public Notice was advertised in the Bloomington Herald Times on October 18, 2014. The public comment period closed 30 days later on

Indiana Department of Transportation

County Monroe Route Old SR 37 & Dunn Street Des. No. 1297060

_____ with _____ comments having been received. The text of the public notice and the affidavit of publication are provided in Appendix _____.

Section 6(f) Involvement

Presence

Use

Section 6(f) Property

Yes

No

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

Remarks:

IDNR was consulted and they confirmed the presence of a 6(f) resource. The Griffy Lake Nature Preserve is a 6(f) resource, and this project occurs partly within its boundaries. This property is owned by the City of Bloomington and is identified as a managed property by the Indiana DNR. The National Park Service was also consulted, but declined to respond to Early Coordination.

The project was reviewed in detail by IDNR under permit application number FW-27273.

No separate formal letter was obtained from the IDNR's Division of Outdoor Recreation, but IDNR queried the database as part of its permit review process. Christine Stanifer, the environmental coordinator at IDNR was consulted about this review, and she noted that this review was done on October 24, 2013. Ms. Stanifer noted that the permit file shows: "The DNR Indiana Outdoor Recreation Grant Dataset has been searched and a Land & Water Conservation Fund, Recreational Trail Fund, Hometown Indiana, or a Wabash Heritage Corridor Fund Site occurs within the project area." The resource noted in the query is the Griffy Lake Nature Preserve. She also noted that on October 24, 2013, Jay Keith, Outdoor Recreation Planner, DNR, Division of Outdoor Recreation, commented in response to the above query: "This project will not negatively affect the outdoor recreation utility of the nearby grant site. This project will enhance the utility of the nearby grant site."

Based on the above review by IDNR, it is concluded that this project does not constitute a conversion of the 6(f) resource, but is instead viewed by IDNR as an enhancement of it. The project does not take any land from the 6(f) resource. The commitments on this project include those required by IDNR as part of the permit process. IDNR did not identify any requirements specific to the presence of the 6(f) resource, but the commitments apply within the resource area.

SECTION E – Air Quality

Air Quality

Conformity Status of the Project

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

Yes	No
<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"/>
--------------------------	--------------------------

Indiana Department of Transportation

County Monroe Route Old SR 37 & Dunn Street Des. No. 1297060

Level of MSAT Analysis required?

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

Remarks:

The project is in Monroe County. This county is currently in attainment for all criteria pollutants. Therefore, the conformity procedures of 40 CFR Part 93 do not apply. The project will maintain existing transportation facilities and has a neutral effect on air quality.

SECTION F - NOISE

Noise Yes No
 Is a noise analysis required in accordance with FHWA regulations and INDOT's traffic noise policy?

	No	Yes/ Date
ES Review of Noise Analysis	X	

Remarks:

For Old SR 37, this project involves only a modest horizontal realignment based on smoothing its curvature, with the maximum deviation from the existing alignment measuring 30'. For Dunn Street, the street is being raised only. Neither of these constitutes a significant change that would alter its effect on nearby receivers. There is only one house within 500' of these realignments, the Milisen House, and the building is about 400' from the horizontal curve correction of Old SR 37. No lanes are being added to the roadway. These modifications do not rise to the significance level of a Type 1 Project.

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

SECTION G – COMMUNITY IMPACTS

	Yes	No
Will the proposed action comply with the local/regional development patterns for the area?	X	
Will the proposed action result in substantial impacts to community cohesion?		X
Will the proposed action result in substantial impacts to local tax base or property values?		X
Will construction activities impact community events (festivals, fairs, etc.)?		X
Does the community have an approved transition plan?	X	
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)	X	

Indiana Department of Transportation

County Monroe Route Old SR 37 & Dunn Street Des. No. 1297060

Remarks:

The project does not involve any significant change to roadway use. No access will be modified or eliminated by the project. There will be no negative impacts to community cohesion or events aside from the temporary detour that is required for construction.

This project is in a rural area without existing sidewalks. In accordance with the City's Complete Streets Policy, the project was reviewed and granted a waiver from the need to add sidewalks along Old SR 37. However, as a part of the project's intended improvements, it is intended to extend the City's existing Cascade Trail (a separate sidepath) which currently terminates just west of this project and is intended to provide a multi-use path facility along Old SR 37 from the west to Dunn Street, and then along Dunn Street to terminate on the south side of Griffy Creek. This extension is in accordance with the City's Greenways Plan and is incorporated in lieu of sidewalks placed alongside the edge of these roads. Local correspondence relating to the application of Complete Streets policy is attached on Appendix pages C-27 and C-28.

Indirect and Cumulative Impacts Yes No
Will the proposed action result in substantial indirect or cumulative impacts?

Remarks:

This project is not expected to have any significant impact on development patterns in this area, or to result in indirect or cumulative impacts through its implementation.

Public Facilities & Services Yes No
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.*

Remarks:

No negative impacts are noted other than temporary delays and the detouring of traffic during construction. No health or education facilities, emergency service facilities, religious institutions, airports or routes of the City's transit (bus) system occur along these roadways in this area.

A detour of Old SR 37 will be necessary during construction, but the proposed route is only about 1,000' longer than the existing road and will not cause any significant impact to public facilities or services. This detour is shown on the plans and was coordinated with Monroe County.

When Dunn Street must be closed, its detour will follow SR 46, Walnut Street and Old SR 37 west of the project. The total length of this detour is about 2 miles. This detour is shown on the plans and was coordinated with the City of Bloomington.

The private drives inside the project limits will be accessible to local traffic.

Public safety services and the Monroe County Schools will be temporarily impacted by the project and the detours. All entities were contacted during Early Coordination but all declined to respond. The City requires that road closures be coordinated through an early notification process, and all public safety agencies and the schools are a part of that list. The detours identified are the shortest in existence, and minimizing impacts to these operations is a key reason to utilize the nearby

Indiana Department of Transportation

County Monroe Route Old SR 37 & Dunn Street Des. No. 1297060

subdivisions streets for the primary detour.

The extension of the Cascades Trail incorporated into this project will offer a significant benefit to multi-modal use of the area. There are no existing bicycle or pedestrian facilities.

Utilities, both public and private exist within the project area and some relocation is likely to be required. This is to be handled through the Utility Coordination process.

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 type="checkbox"/>	<input checked="" type="checkbox"/>
If YES, then:		
Are any EJ populations located within the project area?	<input type="checkbox"/>	<input type="checkbox"/>
Will the project result in adversely high or disproportionate impacts to EJ populations?	<input type="checkbox"/>	<input type="checkbox"/>

Remarks: The project does not require relocations and involves less than 0.5 acre of additional permanent right of way. Projects that are below these thresholds do not require EJ analysis.

Relocation of People, Businesses or Farms

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

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

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

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

SECTION H – HAZARDOUS MATERIALS & REGULATED SUBSTANCES

Hazardous Materials & Regulated Substances (Mark all that apply)	<u>Documentation</u>
Red Flag Investigation	<input type="checkbox"/>
Phase I Environmental Site Assessment (Phase I ESA)	<input type="checkbox"/>
Phase II Environmental Site Assessment (Phase II ESA)	<input type="checkbox"/>
Design/Specifications for Remediation required?	<input type="checkbox"/>

	No	Yes/ Date
ES Review of Investigations	X	

Include a summary of findings for each investigation.

Indiana Department of Transportation

County Monroe Route Old SR 37 & Dunn Street Des. No. 1297060

Remarks: A site inspection was conducted by Eagle Ridge Civil Engineering on March 16, 2012. This inspection did not show any evidence of hazardous materials within the permanent or temporary right of way for the project.

A Red Flag Investigation was conducted by Eagle Ridge Civil Engineering on February 23, 2014. No potentially hazardous sites were identified in the project vicinity or in the project area. A more detailed summary of each analysis is provided below:

Infrastructure – Very little exists within a ½ mile radius of the proposed work. A natural gas pipeline was indicated which has been located during the survey of the project and should not be impacted. (the location on the IndianaMap site is not accurate). The Griffy Lake Dam was identified but is not to be impacted by the project. All proposed work is below the dam and not near it. A planned trail was identified by IndianaMap that this project intends to build a portion of in conjunction with the roadway improvements. Existing utilities include water, natural gas and aerial/buried electric and telecommunications. These must be addressed by the designer through the Utility Coordination process. No other Infrastructure concerns are indicated within ½ mile of the project.

Hazmat – The site is apparently clean. The Red Flag Investigation indicated no sites of interest within ½ mile. Site investigation showed nothing of concern.

Managed Lands – The Red Flag Investigation indicated much of the project area is IDNR Managed Lands, but this was already known given the area is at the edge of the Griffy Recreational Area. This is addressed in the Environmental Document as a 4(f) resource and through appropriate permitting coordination.

Mining/Minerals - The Red Flag Investigation indicated no sites of interest within ½ mile.

Water Resources – The red flag investigation confirmed the presence of the Griffy Creek floodplain which will require an IDNR Construction in a Floodway permit. The red flag survey did not reveal either a specific wetland area near the project or the presence of a former IDNR tree mitigation site, both of which were identified by the City, by site investigations and confirmed in Early Coordination with IDNR. The presence of a wetland, floodplain/floodway and a former IDNR tree mitigation site in the immediate project area will require coordination through the regulatory agencies and indicate the need for permits with IDNR, ACOE, and IDEM.

Karst features, which are a general concern in the area, are not present in the project limits. Some sinkholes and a karst spring were indicated outside of the project limits, but inside the ½ mile radius. The entire project area drains overland, or through roadside ditches and culverts, to Griffy Creek. There is no apparent involvement with karst geology or hydrology for this project.

No further investigation for hazardous materials is required at this time.

The Hazardous Material Site review form and the Red Flag Investigation maps are shown in Appendix pages E-1 thru E-8.

Indiana Department of Transportation

County Monroe Route Old SR 37 & Dunn Street Des. No. 1297060

SECTION I – PERMITS CHECKLIST

Permits (mark all that apply)	<u>Likely Required</u>
Army Corps of Engineers (404/Section10 Permit)	
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"/>
IDEM	
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"/>
IDNR	
Construction in a Floodway	<input checked="" type="checkbox"/>
Navigable Waterway Permit	<input type="checkbox"/>
Lake Preservation Permit	<input type="checkbox"/>
Other	<input type="checkbox"/>
Mitigation Required	<input type="checkbox"/>
US Coast Guard Section 9 Bridge Permit	<input type="checkbox"/>
Others (Please discuss in the remarks box below)	<input type="checkbox"/>

Remarks:

This project requires an IDNR Construction in a Floodway Permit. Because the project is clearly within the floodway of Griffy Creek and their permit is typically the most time-consuming to obtain, a preliminary design was presented to IDNR in order to obtain their detailed comments to help guide the detailed design process.

IDNR approved the preliminary design with the full Construction in a Floodway permit, which has been received. Their terms and conditions are being used to guide further design and special provision development, and their terms have been posted to the commitments for the project.

A permit application was submitted to IDEM to request a Section 401 Water Quality Certification, but IDEM responded on June 30, 2014 that no WQC is required for the project. This is provided on page C-33.

A permit application was submitted to the Army Corps of Engineers to request a 404 permit, but the Corps responded on August 8, 2014 that no permit was required. This is provided on page C-9.

Completion of a Rule 5 Erosion Control permit is required for the project because it exceeds 1 acre of disturbance. IDEM reviewed the plans and specifications pursuant to this permit and granted Technical approval of these documents on July 7, 2014. The final NOI is to be submitted to IDEM along with the required Notice of intent by the project sponsor or its delegate.

The project sponsor or its delegate will be responsible for obtaining all necessary permits.

Indiana Department of Transportation

County Monroe Route Old SR 37 & Dunn Street Des. No. 1297060

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. Include tree mitigation at a 5:1 ratio of at least 2" caliper for every tree removed over 10" dbh as required by the City of Bloomington in compliance with its Tree Ordinance as administered by the City's Tree Commission, and through its representative, the City's Urban Forester. (City of Bloomington)
2. Do not work in the waterway from April 1 through June 30 without prior written approval of the Division of Fish and Wildlife. (IDNR & US F&W)
3. Do not cut any trees suitable for Indiana bat roosting (greater than 3" dbh, living or dead, with loose hanging bark) from April 1 through September 30. (IDNR & US Fish & Wildlife Service)
4. Do not excavate in the low flow area except for the placement of piers, foundations, and riprap, or removal of the old structure. (IDNR and US F&W)
5. Use minimum average 6" graded riprap stone extended below the normal water level to provide habitat for aquatic organisms in the voids. (IDNR)
6. IDNR permit must be posted and maintained at the site until the project is completed. (IDNR)
7. Plant native hardwood trees along the top of bank and right of way to replace the vegetation destroyed during construction. (IDNR)
8. Within the floodway, plant 5 trees, at least 2" dbh, for each tree which is removed that is ten inches or greater dbh. (IDNR)
9. Anchor the bridge deck to prevent dislodging and/or flotation during high water events. (IDNR)
10. Do not disturb existing stone pedestals that border the existing private drive near the east end of this project. The drive is for the Millsen House. (INDOT-CRS).
11. Erect silt fencing or other temporary construction fencing along the construction limits near the delineated wetland to prevent inadvertent intrusion into the area by the contractor. (IDNR)

For Further Consideration:

12. Minimize the extent to artificial bank stabilization. (US F&W)
13. If the work limits change to intrude upon the delineated wetlands, the project may require a Corps of Engineers 404 permit. (IDEM)
14. If a 404 permit is required, then an IDEM 401 permit is also required. (IDEM)
15. If contaminated soils are encountered during this project, they may be subject to disposal as a Hazardous waste (IDEM).
16. Follow up with the Monroe County Highway Engineer at the completion of Stage 3 Plans to

This is page 30 of 31 Project name: Old SR 37 and Dunn Street, Bloomington, Monroe County Date: October 15, 2014

Indiana Department of Transportation

County Monroe Route Old SR 37 & Dunn Des. No. 1297060
Street

determine if they want the official detour route to be overlaid or otherwise improved before or after the project. (Monroe County)

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:

All of the contacts and agencies listed below were sent early coordination letters on 1/16/2012.

<u>Early Coordination Recipient:</u>	<u>Response Received:</u>
Monroe County Schools	No Response
INDOT Aeronautics Section	No Response
National Park Service	No Response
IDNR – Div. of Fish and Wildlife	Letter 2-14-2012
US Forest Service	No Response
US Fish & Wildlife Service	Initial Letter 1-30-2012 (requested more info) Final Email response 3-12-2014
National Resources Conservation Service	Initial Letter 2-2-2012 (requested more info) Final letter 2-28-2014
Indiana Geological Survey	Questionnaire Returned 2-15-2012
US Dept. Housing and Urban Development	No Response
INDOT Environmental Scoping Manager	No Response
INDOT – District Development Engineer	No Response
IDEM	Electronic Response 1-16-2012 Letter that no WQC Permit is Req'd 6-30-2014
IDEM – Groundwater Section	Letter 2-25-2014
Army Corps of Engineers	Letter that no 404 Permit is Req'd 8-11-2014
Monroe County Highway Dept.	No Response
Bloomington Fire Dept.	No Response
Bloomington Police Dept.	No Response
Bloomington Transit	Email Response 1-20-2012
Bloomington ITS	No Response
Bloomington Planning Dept.	Letter - undated
Bloomington Parks Dept.	Email Response 1-24-2012
Bloomington Urban Forester	No Response
Bloomington Economic Development Dept.	Email Response 2-13-2012
Bloomington Bike/Ped Safety Commission	No Response
Bloomington Communications Director	No Response
All members of City Council	No Response
Bloomington Tree Commission	Letter 6-17-2014

All response letters and emails are presented in Appendix pages C-7 thru C-33.

APPENDICES

Appendix A: INDOT Documentation

A1 - Threshold Chart

Appendix B: Graphics

B1	USGS MAP
B2	Aerial Map
B3	Contour Map
B4	Proposed Alignment Overlaid on Existing
B5-B7	Soils Map
B8-B11	Photographs
B12-B24	Plans

Appendix C: Early Coordination

C1	Sample Early Coordination Letter
C2-C6	Project Description for Early Coordination
C7-C33	Responses to Early Coordination

Appendix D: Section 106

D1-D96	Combined Section 106 Documentation including 800.11(e) and appendices
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Appendix E: Red Flag and Hazardous Materials

E1-E5	Red Flag Maps
E6-E8	Attachment 10 – Hazardous Materials Site Visit Form

Appendix F: Water Resources

F1	National Wetlands Inventory Mapping
F2-F-45	JF New Wetlands Report
F46	FEMA Flood Insurance Rate Map (Firmette)

Appendix G: Public Involvement

G1	Copy of Legal Notice Requesting Comments on Findings
G2	Proof of Publication Affidavit

Appendix H: STIP / MPO TIP Information

H1	MPO TIP Page
H2-H4	Acceptance of MPO TIP into STIP dated July 11, 2014

Appendix I: 4(f) Resource Information

J1	Sponsor - City 4(f) Letter
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Appendix A: INDOT Documentation

Categorical Exclusion Level Thresholds

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

*These thresholds have changed from the March 2011 Manual.

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

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

³In accordance with INDOT’s Noise Policy.

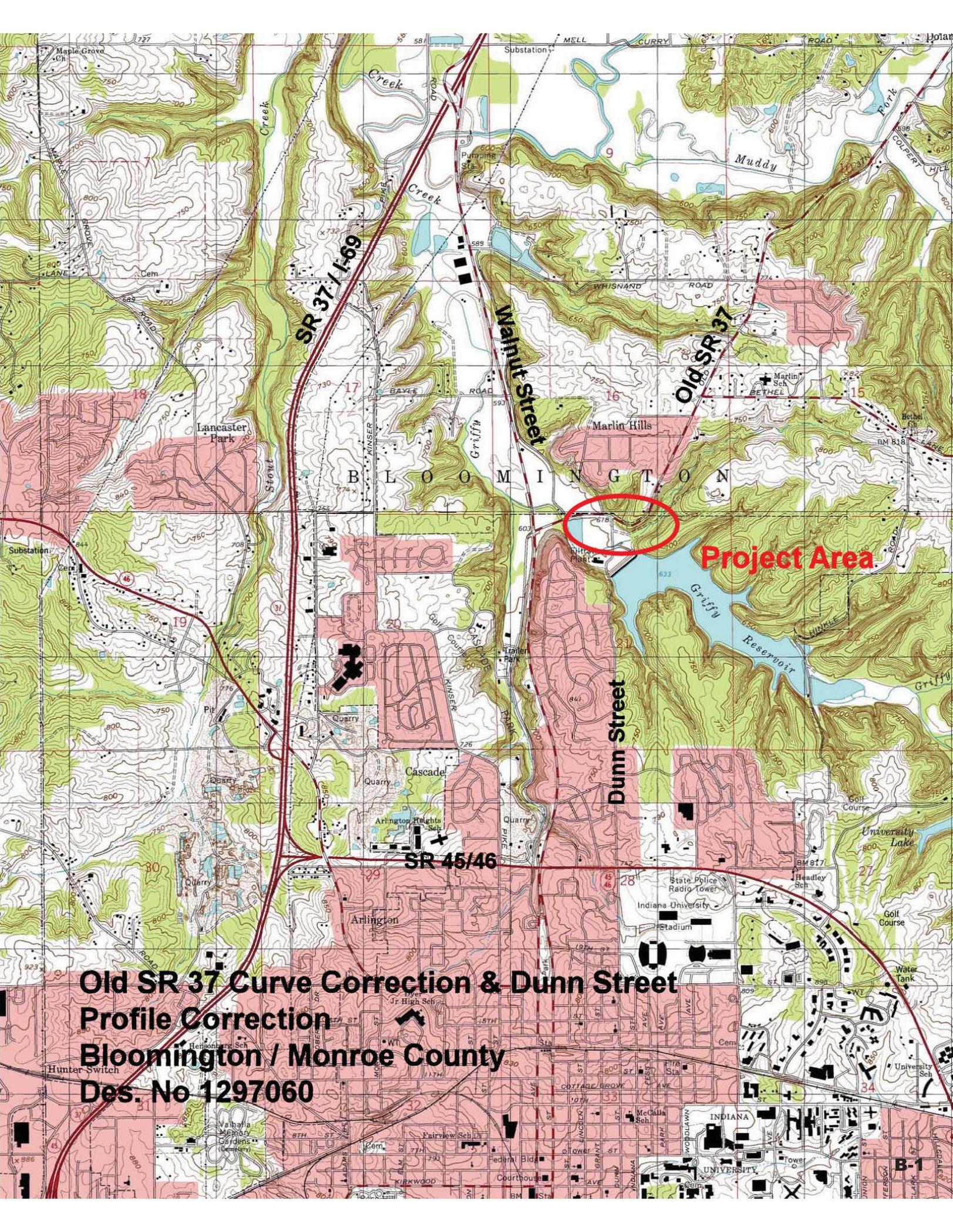
⁴ If the project is considered Likely to Adversely Affect Threatened and/or Endangered Species, INDOT and the FHWA should be consulted to determine whether a higher class of document is warranted.

⁵Environmental Scoping Manager

⁶Environmental Services Division

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

Appendix B: Graphics



SR 37/I-69

Walnut Street

Old SR 37

B L O O M I N G T O N

Project Area

Dunn Street

SR 45/46

**Old SR 37 Curve Correction & Dunn Street
Profile Correction
Bloomington / Monroe County
Des. No 1297060**

B-1



APPROX PROJECT AREA DENOTED
AS YELLOW DASHED LINE

OLD SR 37 & NORTH DUNN STREET
BLOOMINGTON & MONROE COUNTY
DES. NO 1297060

B-2

GRIFFY LAKE

OLD SR 37

HILLVIEW DRIVE

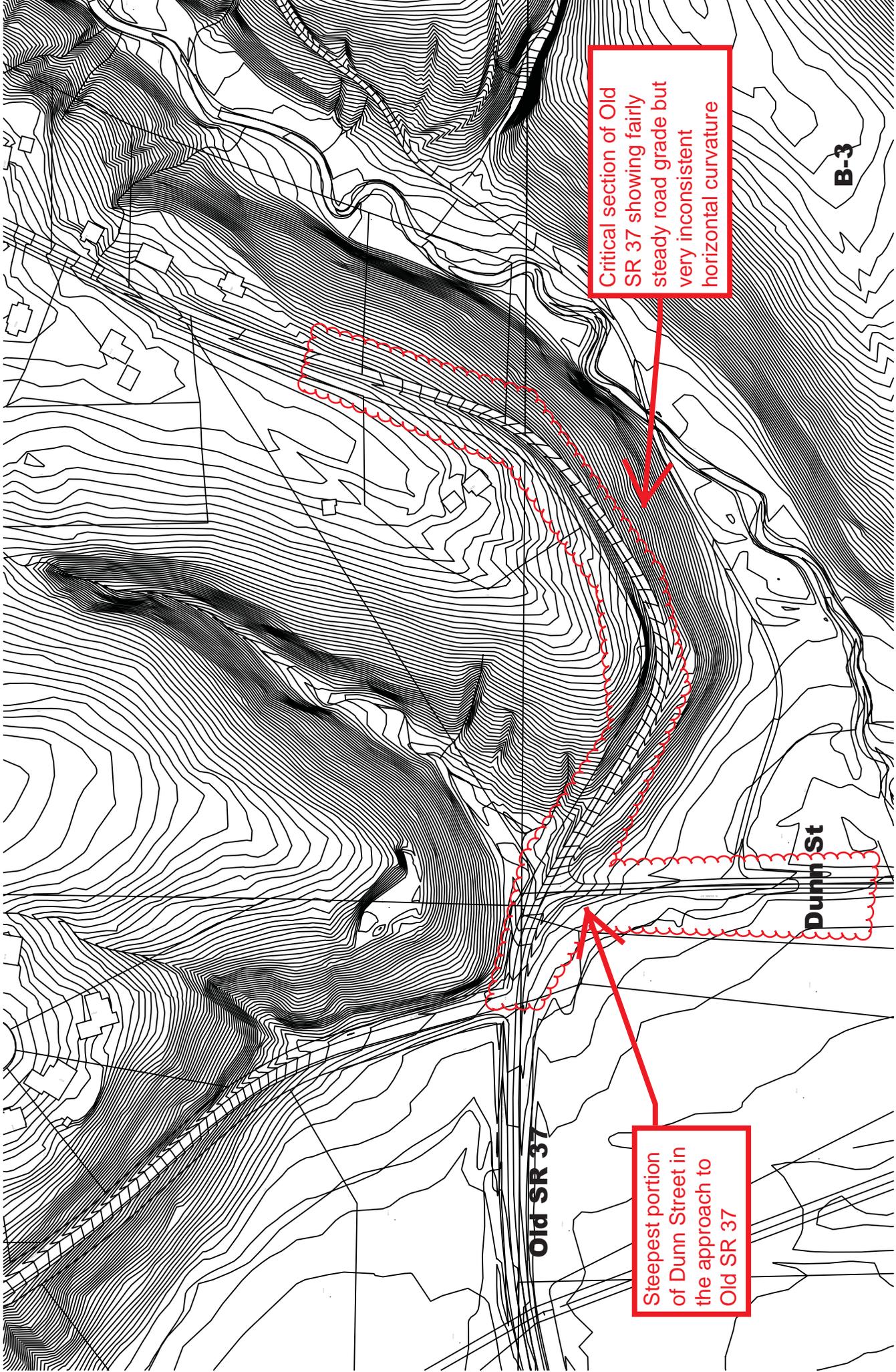
OLD SR 37

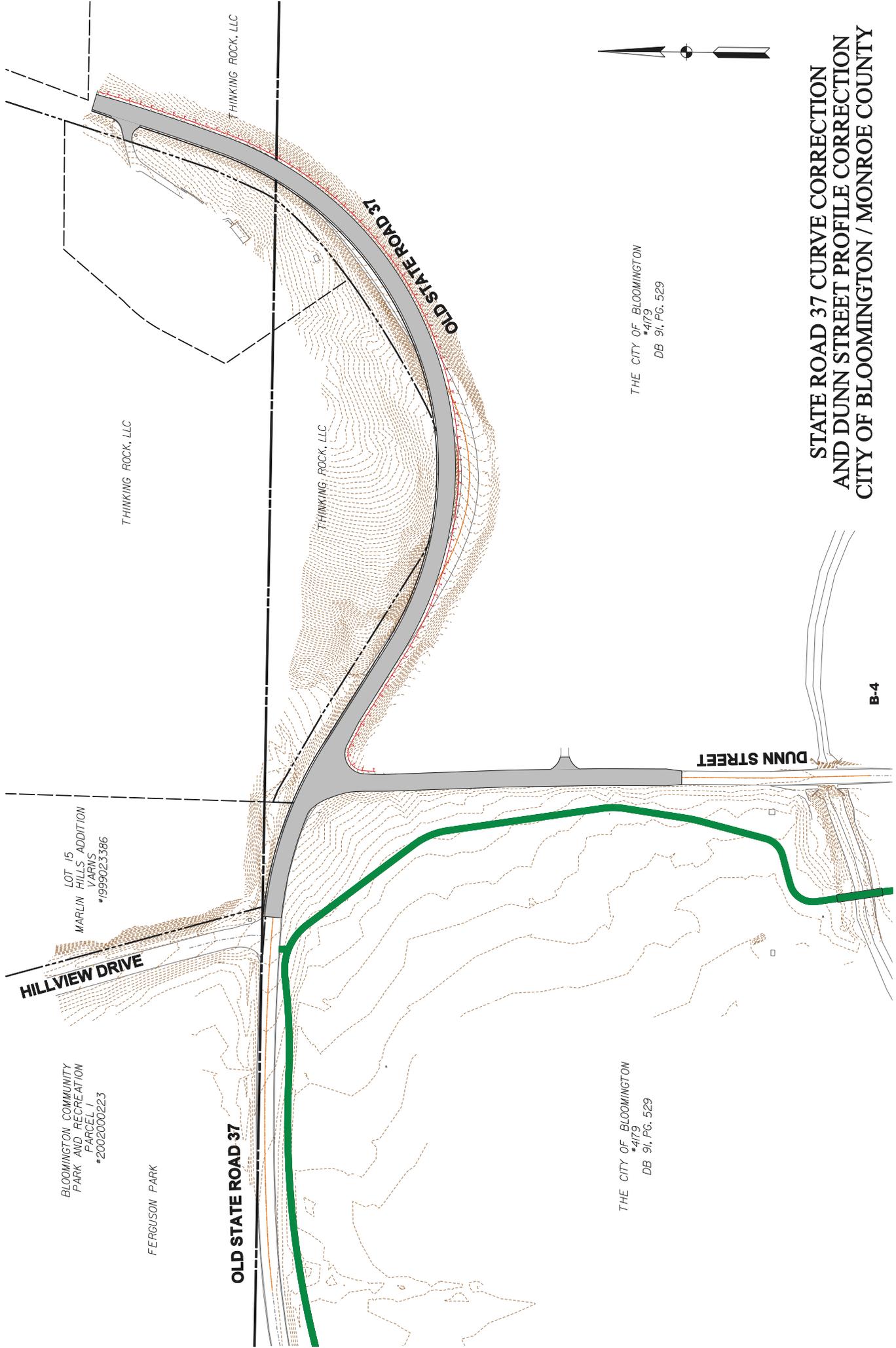
STONE MILL RD

DUNN STREET

Exported map from County GIS showing topography of the area for general information

2' Contours





BLOOMINGTON COMMUNITY
PARK AND RECREATION
PARCEL 1
*2002000223

FERGUSON PARK

HILLVIEW DRIVE

LOT 15
MARLIN HILLS ADDITION
VARNIS
*1999023386

THINKING ROCK, LLC

THINKING ROCK, LLC

OLD STATE ROAD 37

OLD STATE ROAD 37

THINKING ROCK, LLC

THE CITY OF BLOOMINGTON
*4179
DB 91, PG. 529

THE CITY OF BLOOMINGTON
*4179
DB 91, PG. 529

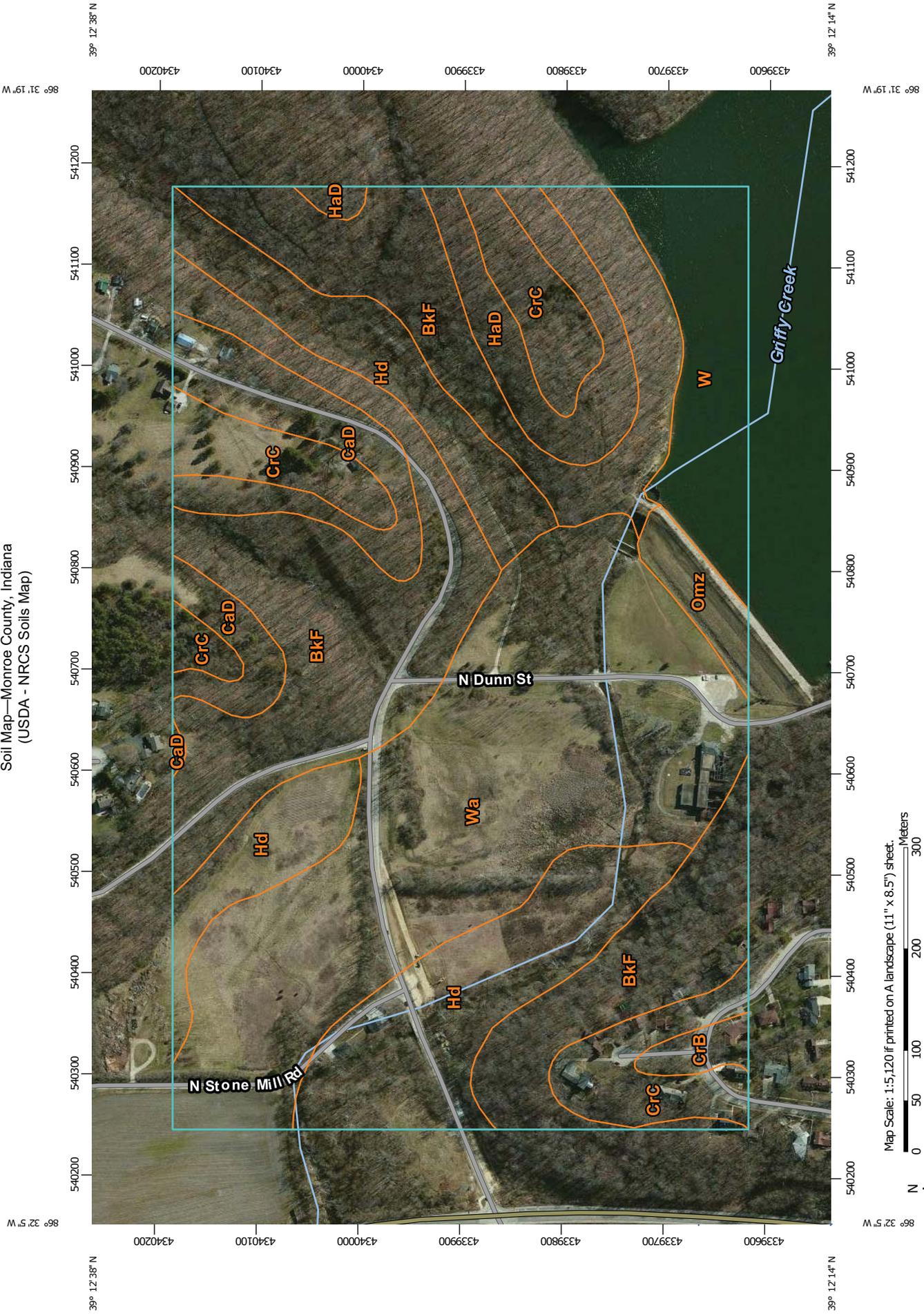


DUNN STREET

B-4

STATE ROAD 37 CURVE CORRECTION
AND DUNN STREET PROFILE CORRECTION
CITY OF BLOOMINGTON / MONROE COUNTY

Soil Map—Monroe County, Indiana
(USDA - NRCS Soils Map)



Map Scale: 1:5,120 if printed on A landscape (11" x 8.5") sheet.

Map projection: Web Mercator Corner coordinates: WGS84 Edge tics: UTM Zone 16N WGS84

MAP LEGEND

 Area of Interest (AOI)	 Spoil Area
 Soils	 Stony Spot
 Soil Map Unit Polygons	 Very Stony Spot
 Soil Map Unit Lines	 Wet Spot
 Soil Map Unit Points	 Other
 Special Point Features	 Special Line Features
 Blowout	 Water Features
 Borrow Pit	 Streams and Canals
 Clay Spot	 Transportation
 Closed Depression	 Rails
 Gravel Pit	 Interstate Highways
 Gravelly Spot	 US Routes
 Landfill	 Major Roads
 Lava Flow	 Local Roads
 Marsh or swamp	 Background
 Mine or Quarry	 Aerial Photography
 Miscellaneous Water	
 Perennial Water	
 Rock Outcrop	
 Saline Spot	
 Sandy Spot	
 Severely Eroded Spot	
 Sinkhole	
 Slide or Slip	
 Sodic Spot	

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: Monroe County, Indiana
Survey Area Data: Version 20, Dec 17, 2013

Soil map units are labeled (as space allows) for map scales 1:50,000 or larger.

Date(s) aerial images were photographed: Oct 4, 2011—Mar 28, 2012

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

Monroe County, Indiana (IN105)			
Map Unit Symbol	Map Unit Name	Acres in AOI	Percent of AOI
BkF	Berks-Weikert complex, 25 to 75 percent slopes	38.3	29.3%
CaD	Caneyville silt loam, 12 to 18 percent slopes	8.2	6.2%
CrB	Crider silt loam, 2 to 6 percent slopes	1.1	0.8%
CrC	Crider silt loam, 6 to 12 percent slopes	11.3	8.6%
HaD	Hagerstown silt loam, 12 to 18 percent slopes	6.0	4.6%
Hd	Haymond silt loam, frequently flooded	21.7	16.6%
Omz	Orthents, earthen dam	2.0	1.5%
W	Water	7.9	6.0%
Wa	Wakeland silt loam, frequently flooded	34.6	26.4%
Totals for Area of Interest		130.9	100.0%



Looking north along existing Dunn St from private drive toward Old SR 37.



Looking north along existing Dunn St. along the hill up to the intersection with Old SR 37.



Looking south along Dunn Street from Old SR 37.



Looking east along Old SR 37 toward the intersection with Dunn Street entering from the right.

Old SR 37 & N. Dunn Street -
Bloomington/Monroe County



Looking west along Old SR 37 toward the intersection with Hillview Drive entering from the right.



Looking east along Old SR 37 from the intersection of Dunn Street. Into the first curve on Old SR 37.



Looking south in the southwest quadrant toward an existing tree mitigation site. Possible realignment would be in the foreground and angling left to avoid most of this area.



Looking northwest from Dunn Street along the possible realignment route of Dunn Street. Hillview Drive is visible in the background,

Old SR 37 & N. Dunn Street -
Bloomington/Monroe County



Looking east along Old SR 37 from Hillview Drive. Dunn Street intersection is visible.



Looking west along Old SR 37 across the intersection with Hillview Drive entering from the right.



Looking north along Hillview Drive from the south side of Old SR 37.



Looking southeast from the edge of Old SR 37 along the possible realignment route of Dunn Street.

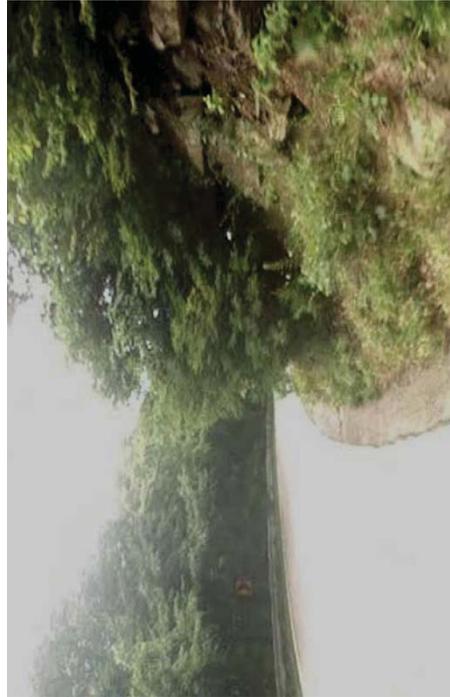
Old SR 37 & N. Dunn Street -
Bloomington/Monroe County



Looking east along Old SR 37 from Dunn Street intersection into first curve on Old SR 37.



On Old SR 37 looking east. This is the curve farthest east in the study area.



Looking west along Old SR 37 in the curve nearest to, but east of Dunn Street. The sharpest curve in the study area.



Looking east along Old SR 37 in the curve east of Dunn Street.

Old SR 37 & N. Dunn Street -
Bloomington/Monroe County

PROJECT	DESIGNATION
1297060	1297060
STATUS	
PENDING	

INDIANA DEPARTMENT OF TRANSPORTATION



ROAD PLANS

CURVE CORRECTION ON OLD SR 37 AND PROFILE CORRECTION OF NORTH DUNN STREET IN SECTION 21, T-9-N, R-1-W, IN BLOOMINGTON, INDIANA, MONROE COUNTY, BLOOMINGTON TOWNSHIP

LATITUDE: BEGIN 39°12'28" N; MIDDLE 39°12'29" N; END 39°12'31" N
 LONGITUDE: BEGIN 86°31'56" W; MIDDLE 86°31'43" W; END 86°31'32" W
PROJECT NO. 1297060 CN



CITY OF BLOOMINGTON

HON. MARK KRUZAN,
MAYOR

BOARD OF PUBLIC WORKS

CHARLOTTE ZIETLOW,
PRESIDENT

JAMES McNAMARA,
VICE PRESIDENT

DR. FRANK HRISOMALOS,
SECRETARY

SUSIE JOHNSON,
DIRECTOR OF PUBLIC WORKS

ADRIAN REID, P.E.,
CITY ENGINEER

MONROE COUNTY

X
X

X
X

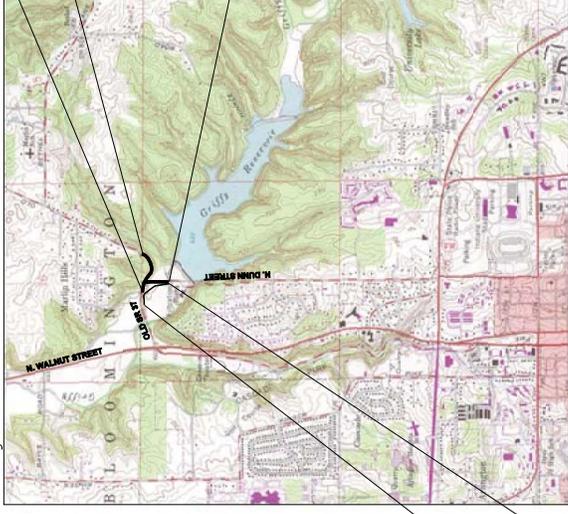
X
X

X
X

COUNTY LOGO
NEEDED

SIGNATURE
NEEDED

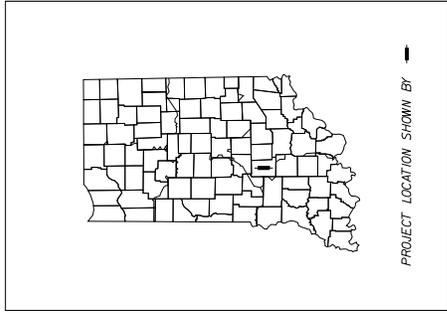
Gross Length: 0.353 Mile
 Net Length: 0.353 Mile
 Maximum Grade: 7.90%



BEGIN PROJECT STA. 14+90.00 "A"
 END PROJECT STA. 28+71.65 "A"
 END CONSTRUCTION STA. 14+80.00 "D"

BEGIN TRAIL CONSTRUCTION STA. 346+65.00 "C"

END TRAIL CONSTRUCTION STA. 365+56.00 "C"



PROJECT LOCATION SHOWN BY



PROJECT LOCATION MAP
 CITY OF BLOOMINGTON, MONROE COUNTY

INDIANA DEPARTMENT OF TRANSPORTATION
 STANDARD SPECIFICATIONS DATED 2012
 TO BE USED WITH THESE PLANS

PREPARED BY:



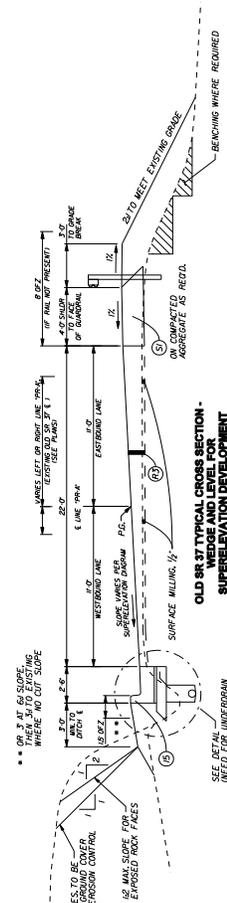
1321 Laurel Oak Drive
 Avon, Indiana 46123
 (317)370-9672

FOR REVIEW ONLY

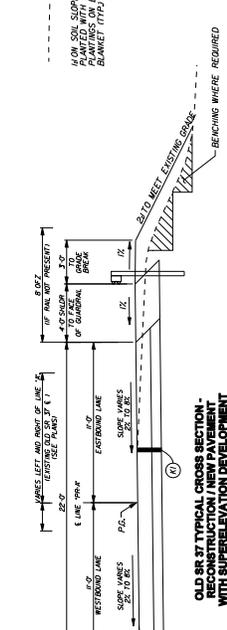
PLANS PREPARED BY: EAGLE RIDGE CIVIL ENGINEERING & SURVEYING, P.A.
 CHECKED BY:
 APPROVED FOR SETTING:

PROJECT NUMBER	DATE
1297060	
PROJECT	DATE
PENDING	

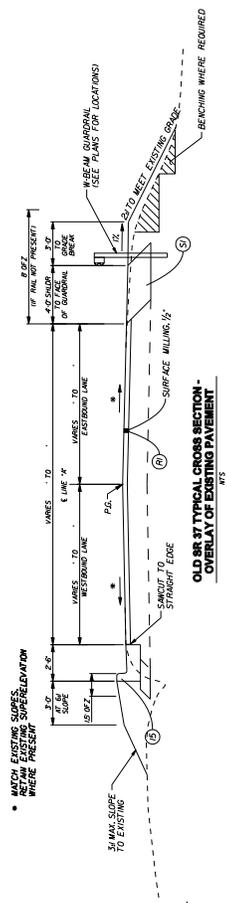
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1297060	1297060
PROJECT	PROJECT
PENDING	PENDING



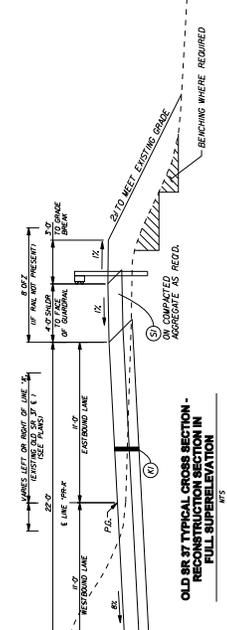
OLD SR 37 TYPICAL CROSS SECTION - WEDGE AND LEVEL FOR SUPERELEVATION DEVELOPMENT
 STA. 0+9840 'X' TO STA. 0+9840 'X'
 STA. 0+9842 'X' TO STA. 28+9262 'X'



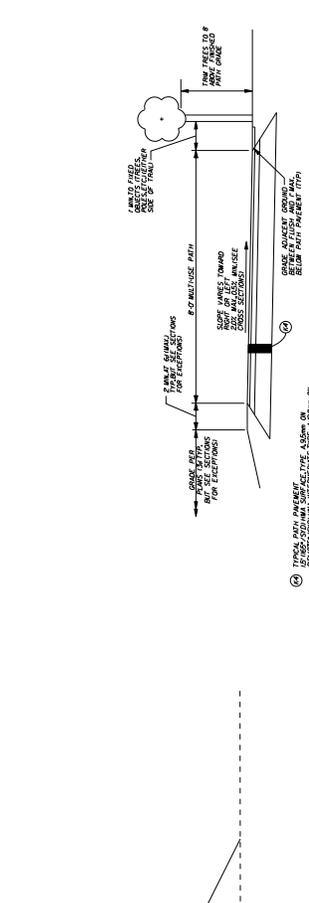
OLD SR 37 TYPICAL CROSS SECTION - RECONSTRUCTION / NEW PAVEMENT WITH SUPERELEVATION DEVELOPMENT
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 STA. 28+4679 'X' TO STA. 28+9262 'X'



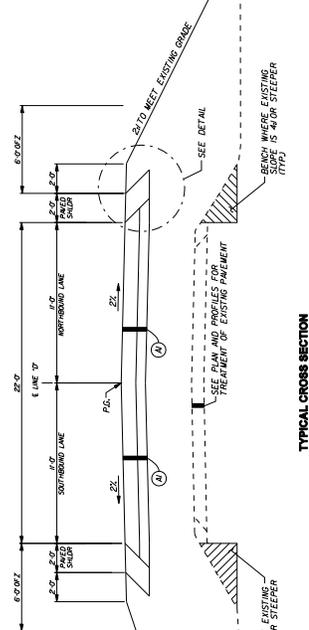
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 STA. 28+9262 'X' TO STA. 28+9262 'X'



OLD SR 37 TYPICAL CROSS SECTION - RECONSTRUCTION / NEW PAVEMENT IN FULL SUPERELEVATION
 STA. 0+9840 'X' TO STA. 28+4679 'X'



(M) TYPICAL PATH PAVEMENT
 STA. 0+9840 'X' TO STA. 0+9840 'X'
 STA. 28+4679 'X' TO STA. 28+9262 'X'



TYPICAL CROSS SECTION (DUNN STREET)

* EXISTING SLOPE TO BE MATCHED IN THIS AREA, INCLUDING AREAS WHERE ADVERSE CHAINY IS REMOVED

LEGEND

- (1) HILL SLOPE: HILL PRESENT TO BE DESIGNED
- (2) HILL AND OVERLAY: HILL PRESENT
- (3) HILL AND OVERLAY: HILL PRESENT
- (4) HILL AND OVERLAY: HILL PRESENT

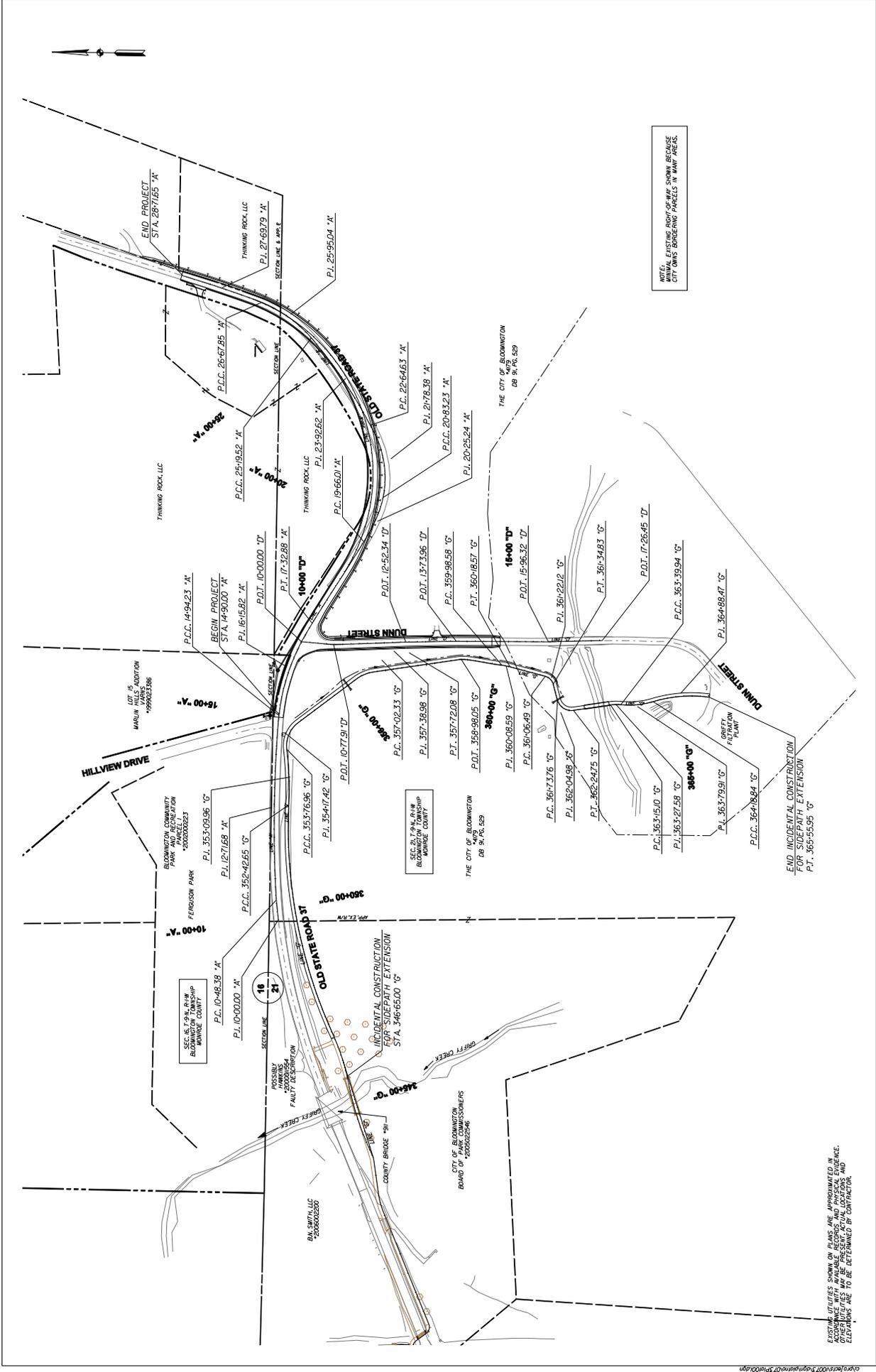
(M) TYPICAL PATH PAVEMENT: HILL PRESENT IN THIS AREA, INCLUDING AREAS WHERE ADVERSE CHAINY IS REMOVED. SEE PLAN AND PROFILES FOR TREATMENT OF EXISTING PAVEMENT.

FOR REVIEW ONLY

RECOMMENDED FOR APPROVAL	DESIGN ENGINEER	DATE
DESIGNED	DR	SSS
CHECKED	MT	BR

**CITY OF BLOOMINGTON
 OLD S.R. 37/DUNN STREET
 TYPICAL CROSS SECTIONS
 AND DETAILS**

HORIZONTAL SCALE	N/A	BROUSE FILE	N/A
VERTICAL SCALE	N/A	DESIGNATION	DESIGN
SHEET BOX	N/A	SHEETS	40
CONTRACT	PELVING	PROJECT	1297000



EXISTING UTILITIES SHOWN BY PINK ARE UNCHANGED IN ACCORDANCE WITH AVAILABLE RECORDS AND PHYSICAL EVIDENCE. ALL UTILITIES NOT SHOWN BY PINK ARE TO BE DETERMINED BY CONTRACTOR.

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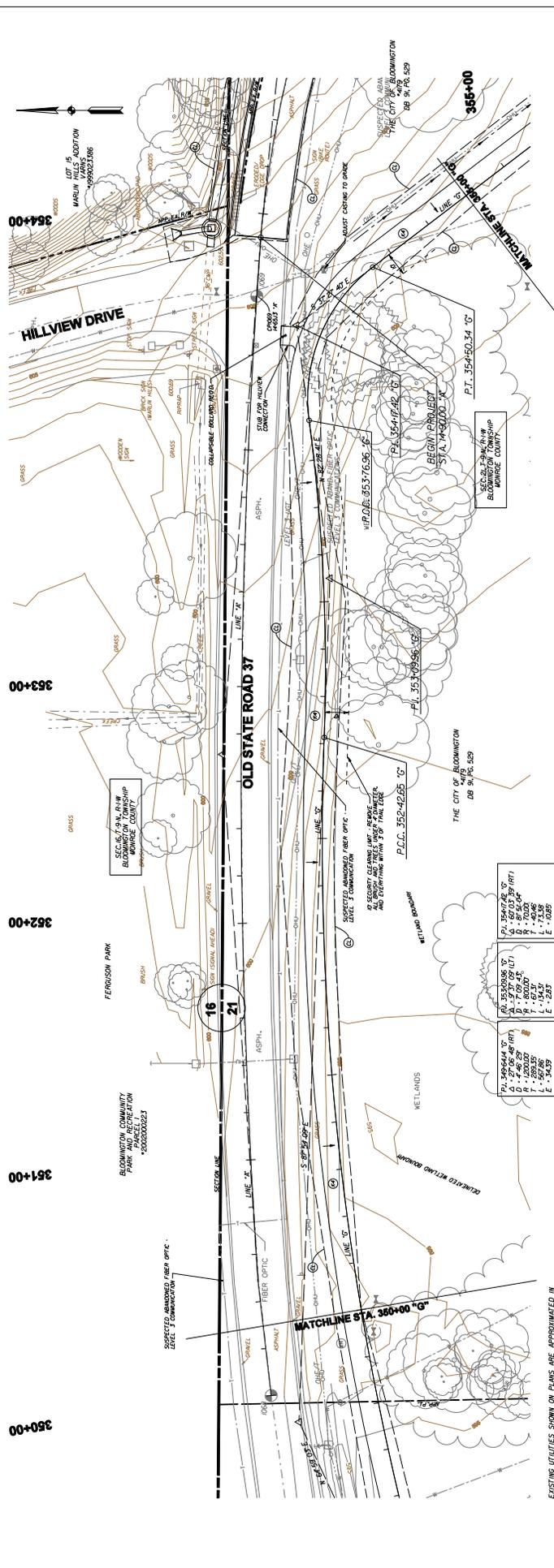
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VERTICAL SCALE	1" = 10'-0"
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SHEETS	40
CONTRACT	PENDING
PROJECT	1297060

CITY OF BLOOMINGTON
OLD S.R. 37 / DUNN STREET

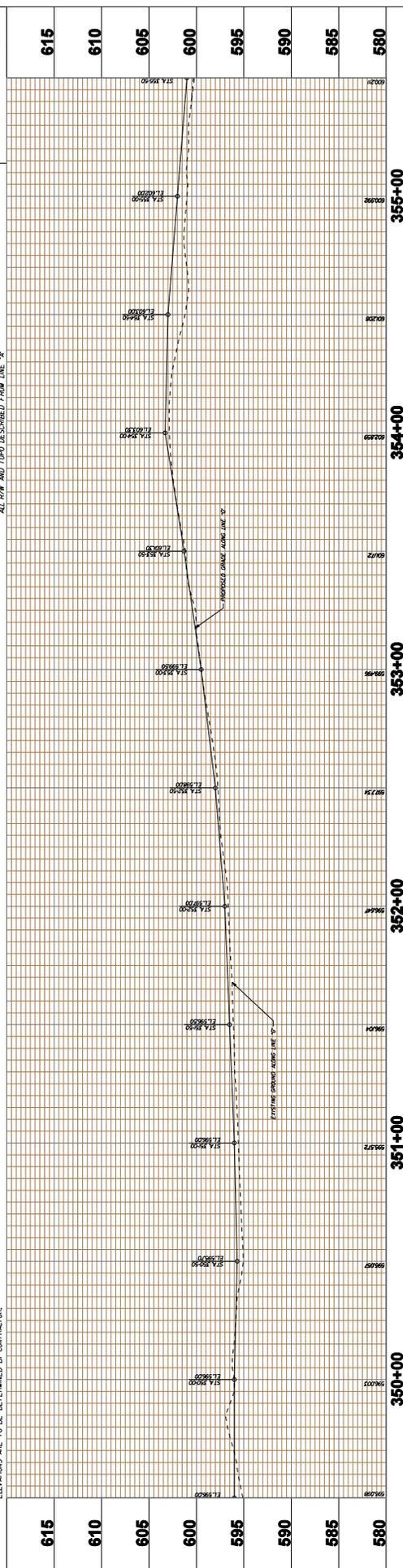
DESIGN ENGINEER	DATE
DRAWN	SSS
CHECKED	BR
MT	BR

FOR REVIEW ONLY

PLAT NO. 1



ALL R/W AND TOPO DESCRIBED FROM LINE 'X'



STATION	PROPOSED GRADE	EXISTING GROUND
350+00	585.00	585.00
350+10	585.00	585.00
350+20	585.00	585.00
350+30	585.00	585.00
350+40	585.00	585.00
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354+60	585.00	585.00
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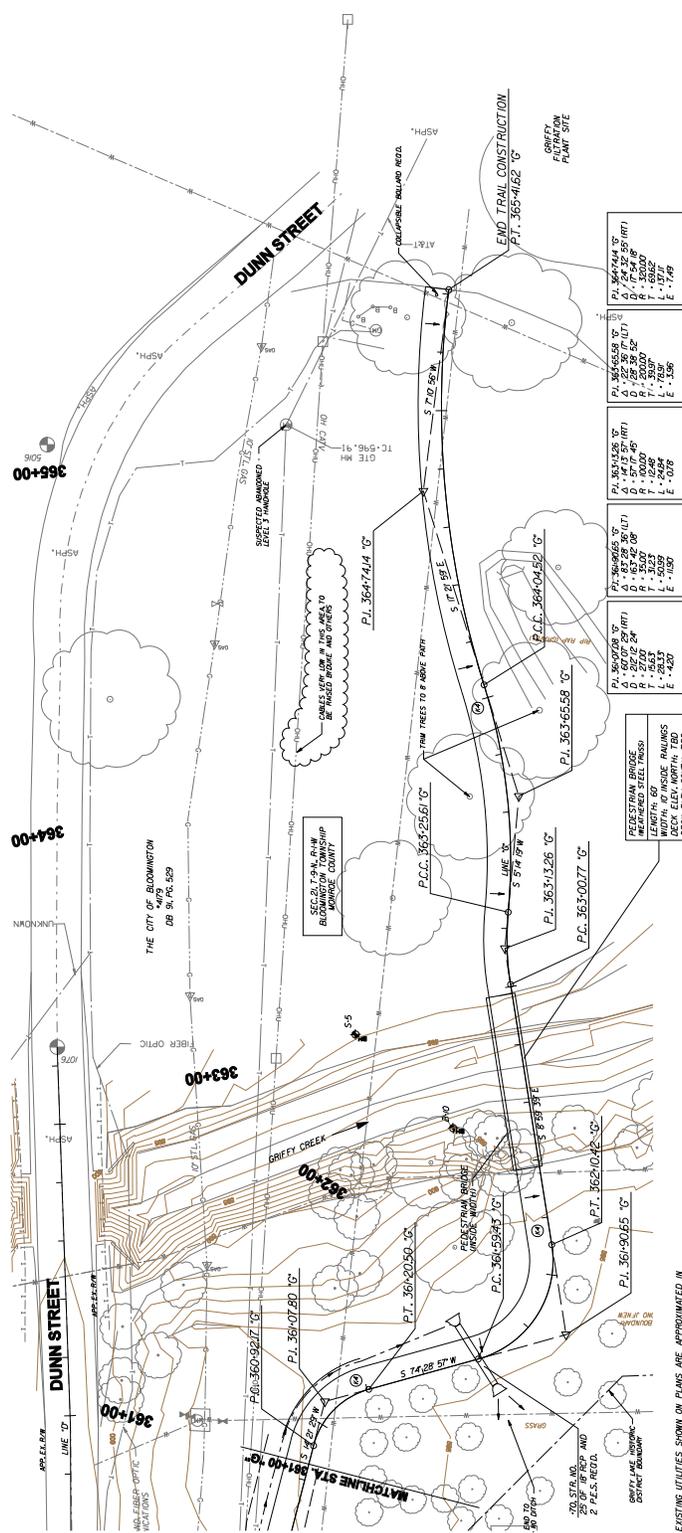
FOR REVIEW ONLY

CITY OF BLOOMINGTON
OLD S.R. 37/DUNN STREET
PLAN AND PROFILE
TRAIL - LINE "C"

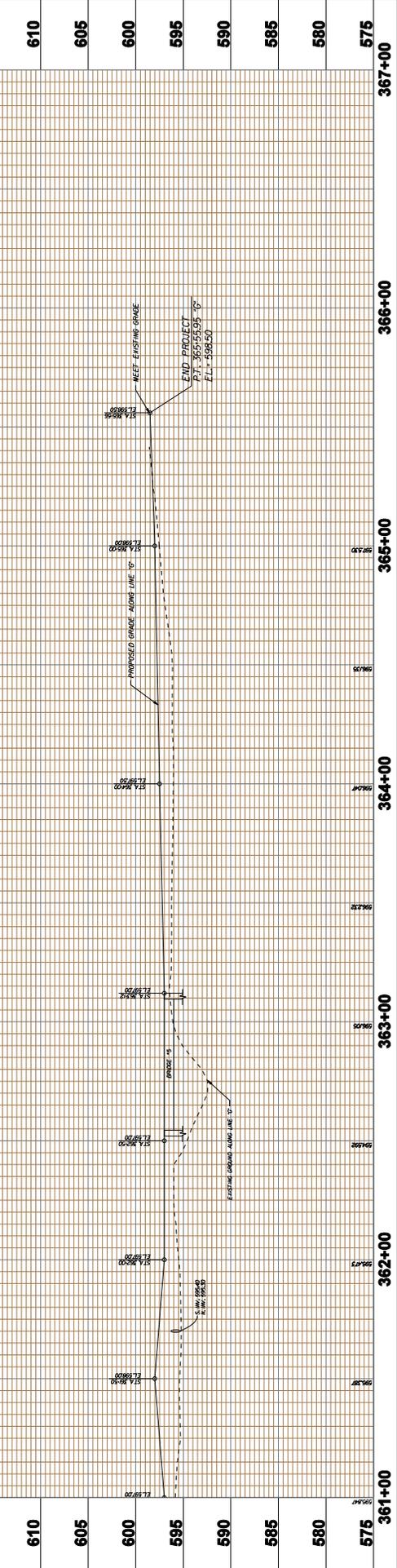
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DATE: []
DRAWN: []
CHECKED: []
PROJECT NO: []
SHEET NO: []

BRIDGE FILE: []
HORIZONTAL SCALE: []
VERTICAL SCALE: []
SHEET BOX: []
CONTRACT: []
PROJECT: []
FEEDING: []

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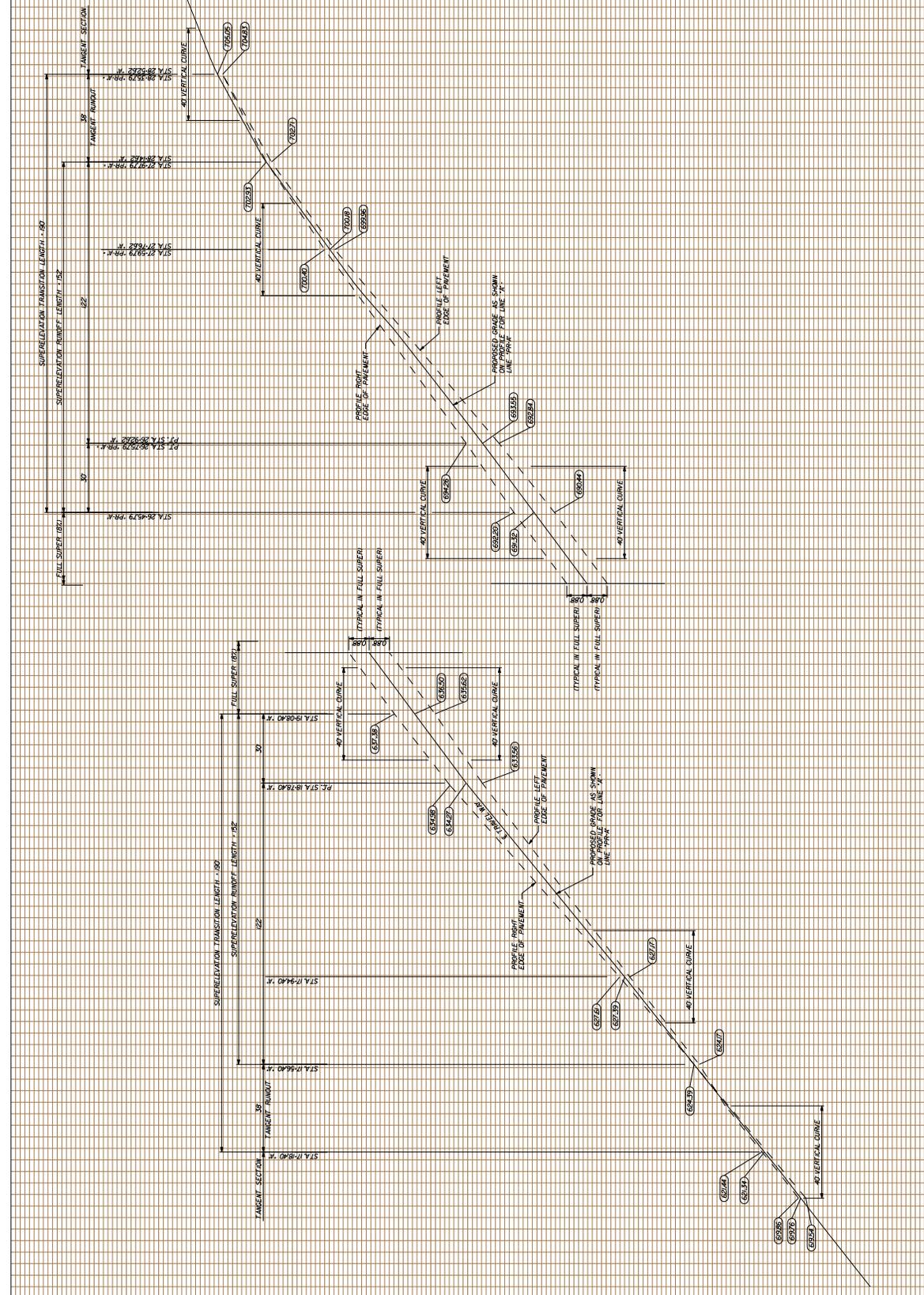


SEE SHEET 2 FOR LEGEND



BRIDGE FILE: N/A
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 VERTICAL SCALE: 1" = 5'-0"
 SHEETS: 12
 PROJECT: 1297050
 CONTRACT: PENDING

8-23



660
645
640
635
630
625
620
615

17+00 18+00 19+00 26+00 27+00 28+00

RECOMMENDED FOR APPROVAL	DESIGN ENGINEER	DATE
	DESIGNED BY	DATE
CHECKED	BY	DATE
	BY	DATE

FOR REVIEW ONLY

CITY OF BLOOMINGTON
OLD S.R. 37/DUNN STREET
SUPERELEVATION -
TRANSITION DIAGRAM

705	700	695	690	685	680
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BROUSE FILE	N/A
HORIZONTAL SCALE	1" = 20'-0"
VERTICAL SCALE	1" = 5'-0"
SHEET BOX	13
SHEETS	40
CONTRACT	1297050
PROJECT	
FEEDING	

Appendix C: Early Coordination

January 16, 2012

Ernest Quintana
Regional Dir., Natl Park Service
Midwest Regional Office
601 Riverfront Drive
Omaha, NE 68102

Sample Early
Coordination
Letter



Re: **Request for Early Coordination and Comments**
Safety Improvements at Old SR 37 and North Dunn Street (Des. No. Pending)
Bloomington, Monroe County, Indiana

Dear Mr. Quintana:

The Bloomington Department of Public Works and Monroe County are initiating the assessment and then design of improvements in the vicinity of Old SR 37 and Dunn Street. **The proposed improvements may include some roadway realignment, relocation or modification of the intersection, the addition of shoulders and other possible changes including the addition of bicycle/pedestrian amenities.**

The effort is to include a detailed assessment phase before the scope of design work is fully defined to determine the improvements which are needed to best reduce accidents in this area. This Early Coordination is part of that assessment in order to solicit comments from many stakeholders.

A **project area map, a preliminary description** and other data are attached to assist you in understanding the proposed work. We stress that the design has not yet been started, and the information presented is simply the best information we have available. Eagle Ridge Civil Engineering has been retained to prepare this design which will be coordinated through the City, County and INDOT. It is intended to eventually seek Highway Safety Improvement Program Funding for part of this project's cost.

The project effort will include detailed coordination with local officials, environmental and historical agencies/groups in order to appropriately involve and address various concerns. They are also receiving coordination letters.

- Please provide any concerns or comments you have about the project area that should be considered during the design of this project.

If you do wish to comment at this stage, please respond to this letter by Friday, February 17, 2012.

We are also available to meet, if preferred. This is the very beginning of the assessment phase, and there will be other opportunities to provide comments, including one or more public meetings that have not yet been scheduled. Construction is anticipated no sooner than 2014.

If you have any questions, you may contact me at the number or email below. I look forward to working with you to make this a better project. Thank you very much for your assistance.

Sincerely Yours,

A handwritten signature in black ink, appearing to read "Bridgway".

Brock Ridgway, P.E.
Project Manager

C-1



PROJECT DESCRIPTION

Existing Conditions:

Roadway Deficiencies

The intersection of Old SR 37 and North Dunn Street, and especially the section of Old SR 37 just east of this intersection, is one of the highest accident areas in Bloomington and Monroe County. Multiple fatalities have occurred over the last several years. Dunn Street meets Old SR 37 at a T-intersection. Approximately 200' to the west of Dunn Street, Hillview Drive connects to Old SR 37 from the north at a second T-intersection. Both Dunn Street and Old SR 37 are two-lane roads without shoulders. Old 37 offers a free movement. Dunn Street and Hillview Drive have stop signs.

On Old 37, the roadway is in a series of curves near the intersection. Sight distance is limited along Old SR 37 due to the small radii of the existing curves, and the steep hillside that was originally excavated to build Old SR 37. The hill on the inside of the curve limits sight distance along Old SR 37 but also to the intersection with Dunn Street. The roadway was not built to modern standards and lacks shoulders. The lack of shoulders greatly increases the risk for those who do stray off the edge of the road, making recovery more difficult.

Dunn Street meets Old SR 37 on the side of the hill, and is on a significant upgrade just prior to the intersection. Intersection sight distance for those stopped at Dunn Street is limited, especially to the east because Old SR 37 curves.

The two intersections do not offer any turn lanes, requiring traffic wishing to turn left off of Old SR 37 to sometimes wait with traffic coming behind them. This is more problematic at Dunn Street where traffic is coming out of the curves to the east.

Roadway deficiencies are believed to be focused road geometry, the lack of left turn lanes, and limited sight distance. There is no perceived need to increase the number of thru lanes or add capacity to the roadways.

Alignment

Dunn Street is relatively straight, but on a significant up-grade near the intersection with Old SR 37. Old SR 37 is in curves throughout the project area. Hillview Drive is straight in the project limits. The roadway is on a significant downslope coming from the east. Old SR 37 is in a hill through the area, sloping from east to west. Dunn Street is relatively flat except near Old Sr 37 where it comes uphill to meet Old SR 37. Hillview Drive is relatively flat near Old SR 37.

Right of Way

This area is at the City limits, and was formerly part of unincorporated Monroe County. Parcels are delineated as metes and bounds parcels, described to the center of the existing roads. Based on available GIS mapping, the City of Bloomington is the primary property owner.

Northwest of Old SR 37 and Hillview Drive, the City owns this property which is expected to be the site of the City's new Dog Park. To the southwest, the City owns this property which is almost entirely in the floodplain of Griffy Creek. It is undeveloped and primarily dedicated to wetland and tree mitigation uses. To the southeast of Old 37 and Dunn Street, the property is

part of the Griffy Recreational Area, which is also owned by the City. There is one private drive that crosses this property which may be permitted under an easement.

The hillside on the north side of Old SR 37 (east of Hillview) is privately owned and is broken into as many as four parcels and appears to be owned by two different property owners.

Because this is not a platted area, existing right of way is limited to the existing roadway through proscriptive easement rights. The roadways do not have an established right of way width.

Current Land Use / Natural Environment:

Land on the north side of Old SR 37 and east of Hillview Drive is a forested hillside. Farther east, there is single family home though the setting continues to be primarily forested. The hillside nearest the road has some exposed rock. This is not unusual for roads in the Bloomington area especially in this steeper topography.

Land on the north side of Old SR 37 and west of Hillview Drive is an open field/meadow area owned by the City of Bloomington. This is the location of a planned City Dog Park, though construction has not yet begun.

Land south of Old SR 37 and east of Dunn Street is wooded though it does contain a long private drive from Dunn Street to beyond the eastern project limits. Old SR 37 was built into a hillside and thus the area nearest the road is a steep, wooded slope.

Land south of Old SR 37 and west of Dunn Street is characterized by some smaller wooded areas and open meadow areas. It is dominated by a known wetland area that is not near the roadway, but occupies a large portion of the southwest quadrant. Farther west and outside of the project area is a meadow that has been designated as a tree mitigation area. It is currently being started with plantings as part of the City's Cascades Trail project, but is quite large and is also viewed as the most likely location for any tree mitigation resulting from this project.

To summarize, the area is largely undeveloped. Any widening of the roadway footprint or realignment of the roads will likely impact wooded areas, but wetland impacts are unlikely.

Proposed Project:

Purpose and Need:

The City wishes to resolve the long-term safety problems at this location through the permanent reduction in both the number and severity of accidents in this area.

It is not yet clear what type of intersection treatment, what roadway alignment, or improvements to roadway sections will offer the best benefits. Because of this, the project is starting with a major assessment activity. Included in this work will be the following:

- Traffic assessment based on 2012 data,
- Environmental assessment and preparation of an environmental document,
- Detailed early coordination/stakeholder involvement effort, and
- Engineering assessment of roadway geometry to determine how curvature and sight distance may be contributing to the area's safety problems.

- Determination of the optimal roadway section including lane widths, shoulder widths, and potential bicycle/pedestrian amenities if needed.

Coordination with other Projects:

The City plans to extend the Cascades Trail along Old SR 37 to the vicinity of Dunn Street and then to route it to the south along Dunn Street to the vicinity of the former filtration plant. It is unclear whether this work will be formally adopted into this project, though it is acknowledged that this work must be considered and that roadway and other impacts will be evaluated with this related improvement in mind. By engineering scope, a future permit with IDNR for construction in the Griffy Creek Floodway will include modeling and coordination for the Cascades Trail extension

The Cascades Trail is currently under construction and includes a new bridge over Griffy Creek parallel to Old SR 37, to the west of this project. This work is expected in early 2012. That work ends the trail on the south side of Old SR 37, opposite Stone Mill Road.

The City has a planned Dog Park west of this area off of Stone Mill Road. It is not expected to connect directly to Old SR 37.

No other roadway improvements are planned in this area.

Project Length:

Project area is approximately 1600 feet along Old SR 37 (1,200' east of Dunn to 400' west of Dun), and approximately 600' along Dunn Street.

Vertical and Horizontal Alignment

Because of the topography, any major change to the profile of Old SR 37 is not feasible. Dunn Street can be significantly flattened it is realigned to meet Old 37 to the west of the existing. This would also increase the sight distant into the hill on Old SR 37. This improvement could occur in conjunction with realigning Dunn Street to meet Hillview Drive.

Dunn Street may be realigned to meet Hillview Drive, which would introduce some new curvature. Old Sr 37 is curved throughout the project and this geometry is to be reviewed in detail. It is likely that some djustment to the roadways footprint would be made in order to reduce the complexity and inconstancy of the existing compound and broken back curvature that currently exists.

Hillview Drive is relatively flat and straight and no significant adjustment is proposed.

Lanes and Paved Width

Since lane widths and the lack of recoverable space is deemed to be a significant factor in contributing to accidents, the lane widths and configuration will be reviewed for opportunities to improve safety. Some adjustment of the travel lanes is possible, and the addition of paved shoulders is likely. Depending on feedback from the City and its Bike/Ped Commission, the roadways may include provisions for bicycle facilities, either bike lanes, wider travel lanes, or a paved shoulder to serve as a bicycle area.

Proposed Right of Way /Acreage Needed/Justification:

Because the City owns the property in 3 of 4 quadrants, the need for property will be limited to the north side of Old SR 37 and east of Hillview Drive.

The Assessment activities will determine what adjustments to the roadway alignment will be most beneficial. It appears likely that there will be some impact, although with an existing home near the eastern limit of the study area, it will be important to minimize the impact in that area.

In terms of a rough approximation, it would appear that the right of way impact could be between 0.5 and 1 acre of permanent right of way, with a similar amount for temporary right of way for slope stabilization, grading and replanting work.

It is currently estimated that the project could impact as many as 4 parcels. Which are owned by a total of two different property owners.

Proposed Instream/Channel Work:

There are no streams in the anticipated project limits.

Access Control:

The City controls the addition of driveway cuts on its local streets. There are also no areas of parking along either road. No additional drives are anticipated.

Environmental Considerations:

Full coordination with agencies is being initiated in accordance with the INDOT Procedures for Environmental Studies. Normal permitting requirements will be observed.

There is a known and delineated wetland southwest of Old SR 37 and Dunn Street. No impact is deemed likely, but the wetland boundary will be mapped and potential realignments of Dunn Street will consider this feature.

There is a former tree mitigation site for the City in the southwest quadrant, which is nearer to Dunn Street than the wetland. It is not known at this time if the area would be impacted. The areas and the trees are being surveyed so that the location is known.

Roadway work is likely to result in impacts to trees. The City observes a 2:1 replacement policy on tree removals, and the IDNR generally mandates 5:1 replacement for trees in a floodway. Griffy Creek's floodway does cross Dunn Street in the project limits and abuts Old SR 37 near the project. A full count of trees will be required, and tree replacement is an expected requirement.

Preliminary Potential for Historic Resource Impacts:

The project will require both Archaeological review and Historical Coordination under Section 106. Reports for both Historic Properties and Archaeology will be prepared for the project. Normal Section 106 Coordination is being initiated, starting with an invitation to consulting parties.

It is a goal of the project to develop it in a manner that has No Historic Properties Affected or No Adverse Effect. Section 106 Coordination will be documented in accordance with accepted procedures and will be a fundamental part of the Environmental Document for the project.

Maintenance of Traffic during Construction:

The optimal Maintenance of Traffic strategy will require consultation with the City, County and emergency services. Like most projects in Bloomington, there is a strong advantage to performing the work in the summer months when the City’s population drops. Local coordination will be initiated to identify concerns related to emergency response. At this time, it appears likely that some full closure with detour will be needed.

Permits:

Permit applications will be filed at the appropriate time. At this time, the following permits have been identified as being required for this project:

- IDEM Rule 5 Erosion Control Permit
- IDNR Construction in a Floodway
- If wetland impacts are involved, the IDEM 401 Water Quality Certification and ACOE 404 (likely Regional General Permits allowed)
- If the work involves any watermain or sanitary sewer work, then an appropriate IDEM permit may be required. (this only applicable if City Utilities requests some work in conjunction with roadway work.)

Mitigation Needed:

Tree mitigation would seem very likely at this stage, but wetland mitigation may be avoidable if the wetland itself is not impacted by more than 0.1 acre.

Approximate Project Schedule:

Begin Planning / Assessment Phase	January 2012
Complete Initial Assessment Activities	March 2012
Project Scope Approval	May 2012
Preliminary Design Complete	August 2012
Conduct Field Check	September 2012
Submit Draft Environmental Study	October 2012
Complete Public Involvement	December 2012
Environmental Study Approval	February 2013
Begin Right of Way Acquisition	March 2013
Complete Construction Plans	December 2013
Bid Letting	Spring 2014
Construction	2014

Contact Information:

Owner/LPA: City of Bloomington	Consultant: Eagle Ridge Civil Engineering Services, LLC
Attn.: Adrian Reid, P.E. , City Engineer reida@bloomington.in.gov (812) 349-3410	Attn.: Brock Ridgway, P.E. bridgway@eagleridgecivil.com (317) 370-9672

**State of Indiana
DEPARTMENT OF NATURAL RESOURCES
Division of Fish and Wildlife**

Early Coordination/Environmental Assessment

DNR #: ER-16117 **Request Received:** January 18, 2012

Requestor: Eagle Ridge Civil Engineering Services LLC
Brock Ridgway, PE
1321 Laurel Oak Drive
Avon, IN 46123-9483

Project: Old SR 37 and North Dunn Street safety improvements, Bloomington

County/Site info: Monroe

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.

Regulatory Assessment: This proposal may require the formal approval of our agency pursuant to the Flood Control Act (IC 14-28-1) for any proposal to construct, excavate, or fill in or on the floodway of a stream or other flowing waterbody which has a drainage area greater than one square mile.

Natural Heritage Database: The Natural Heritage Program's data have been checked. The following plants, managed area, and significant natural communities have been recorded within ½ mile south of the project area. Division of Nature Preserves does not anticipate any impacts to any of these as a result of this project.

1) PLANTS:

- a. Horned Pondweed (*Zannichellia palustris*) - state rare
- b. Green Adder's-mouth (*Malaxis unifolia*) - state endangered

2) MANAGED AREA: Griffy Woods Nature Preserve

3) HIGH QUALITY COMMUNITIES: Dry-mesic Upland Forest and Mesic Upland Forest

Fish & Wildlife Comments: Avoid and minimize impacts to trees to the greatest extent possible. Especially be sure to avoid impacting the forested habitat mitigation area just south of the proposed realignment area. The City of Bloomington was issued a permit (B-13058) in 1993 that required mitigation, which was located on the west side of Dunn Street on both sides of Griffy Creek. Unavoidable impacts to individual trees within this mitigation site should be mitigated at a 2:1 ratio. The "conceptual route of realigned Dunn Street" submitted does not appear to impact this area.

Impacts to non-wetland forested floodway habitat under one (1) acre within the incorporated city limits should be mitigated by planting 5 trees 1" to 2" in diameter-at-breast height (dbh) for each tree which is removed that is 10" dbh or greater.

Impacts to non-wetland forested floodway habitat over one (1) acre should be mitigated at a minimum 2:1 ratio. Impacts to wetlands should be mitigated at the appropriate ratio as well. See the state wetlands and habitat mitigation guidelines at <http://www.in.gov/legislative/register/20061213-IR-312060562NRA.xml.pdf>.

Additional measures that should be implemented to avoid, minimize, or compensate for impacts to fish, wildlife, and botanical resources, include the following:

1. Revegetate all bare and disturbed areas in the floodway with a mixture of native grasses, sedges, wildflowers, and also native hardwood trees and shrubs as soon as possible upon completion. Do not use any varieties of Tall Fescue or other non-native plants (e.g. crown-vetch).
2. Minimize and contain within the project limits inchannel disturbance and the clearing of trees and brush.

State of Indiana
DEPARTMENT OF NATURAL RESOURCES
Division of Fish and Wildlife

Early Coordination/Environmental Assessment

3. Do not work in the waterway from April 1 through June 30 without the prior written approval of the Division of Fish and Wildlife.
4. Do not cut any trees suitable for Indiana bat roosting (greater than 3 inches dbh, living or dead, with loose hanging bark) from April 1 through September 30.
5. Do not excavate in the low flow area except for the placement of piers, foundations, and riprap, or removal of the old structure.
6. Do not construct any temporary runarounds or causeways.
7. Plant native hardwood trees along the top of the bank and right-of-way to replace the vegetation destroyed during construction.
8. Post "Do Not Mow or Spray" signs along the right-of-way.
9. 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.
10. Seed and protect all disturbed slopes that are 3:1 or steeper with bio- or photo-degradable erosion control blankets (follow manufacturer's recommendations for selection and installation; seed and apply mulch on all other disturbed areas.
11. Use minimum average 6 inch graded riprap stone extended below the normal water level to provide habitat for aquatic organisms in the voids.

Contact Staff:

Christie L. Stanifer, Environ. Coordinator, Fish & Wildlife
Our agency appreciates this opportunity to be of service. Please do not hesitate to contact the above staff member at (317) 232-4160 or 1-877-928-3755 (toll free) if we can be of further assistance.



Date: February 14, 2012

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



DEPARTMENT OF THE ARMY

U.S. ARMY CORPS OF ENGINEERS
INDIANAPOLIS REGULATORY OFFICE
8902 OTIS AVENUE, SUITE S106B
INDIANAPOLIS, INDIANA 46216-1055
<http://www.lrl.usace.army.mil/>

August 11, 2014

Operations Division
Regulatory Branch (North)
ID No. LRL-2014-528-sam

Mr. Rick Alexander
City of Bloomington,
Department of Public Works
401 North Morton Street, Suite 130
Bloomington, IN 47402

Dear Mr. Alexander:

This is in regard to your letter June 18, 2014, concerning your proposal to construct a paved trail and road safety measures along Old State Road 37 across Griffy Creek and its adjacent wetlands. The proposed project is located in Section 21, Township 9 North, Range 1 West, Monroe County, Indiana. We have reviewed the submitted data relative to Section 404 of the Clean Water Act.

The provided information indicates that a placement of dredged or fill material will not be required, permanently or temporarily, into any "waters of the United States". Therefore, a Department of the Army (DA) permit is not required.

If you have any questions concerning this matter, please contact Scott Matthews by writing to the above address or by calling 317-543-9424. Any correspondence should reference our assigned Identification Number LRL-2014-528-sam.

Sincerely,

A handwritten signature in black ink that reads "Laban C. Lindley".

Laban C. Lindley
Team Leader
Indianapolis Regulatory Office

Copy Furnished: IDEM (Randolph)
Eagle Ridge Civil Engineering Service, LLC



United States Department of the Interior Fish and Wildlife Service



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

January 30, 2012

Mr. Brock Ridgway
Eagle Ridge Civil Engineering Services
1321 Laurel Oak Drive
Avon, Indiana 46123

Des No.: Pending
Road(s): Old SR 37 and North Dunn Street
Waterway(s): none
Work Type: Design and Safety Improvements
County(ies): Monroe

Dear Mr. Ridgway:

This responds to your letter dated January 16, 2012 requesting U.S. Fish and Wildlife Service (FWS) comments on the aforementioned project.

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

According to information you provided our office, the Bloomington Department of Public Works and Monroe County are developing a project for safety and design improvement along Old SR 37 in the vicinity of the North Dunn Street intersection. The information indicates that no particular designs have been developed, but possible considerations include vertical and horizontal alignment changes for North Dunn Street and possibly lane width, shoulder width and lane configuration upgrades for Old SR 37 to improve safety in area. Some new right-of-way is anticipated, although the exact amount is not known at this time. Rough estimates suggest 0.5 to 1 acre of permanent right-of-way and a similar amount for temporary right-of-way. No stream work is proposed in the project area. A former tree mitigation site is within the project area; however, it is unclear if any impacts to the mitigation site are likely.

The existing land use is forested and open field with a few nearby residential buildings. One wetland has been delineated just southwest of the project area. No wetland impacts are anticipated at this time.

Based on a review of the plans you provided, we recommend the following mitigation measures be included in the final project plans to minimize adverse impacts on fish and wildlife resources:

1. Restrict tree and vegetation clearing to the minimum necessary for construction of the roadway improvements.
2. Implement temporary erosion and siltation control devices such as placement of riprap check dams in drainage ways and ditches, installation of silt fences, covering exposed areas with erosion control materials, and grading slopes to retain runoff in basins.
3. Revegetate all disturbed soil areas immediately upon project completion, using native plant species in areas that are currently dominated by natural vegetation.
4. Post DO NOT DISTURB signs at the construction zone boundaries and do not clear trees or understory vegetation outside the boundaries.

KARST

The project is in the identified karst area of Indiana. A karst survey should be conducted, with mitigation measures as necessary, in accordance with our 1993 Memorandum of Understanding.

4(f)

The project area includes a portion of the City of Bloomington's Griffy Lake Nature Preserve. Section 4(f) of the Transportation Act of 1966 requires that land from a publicly owned park, recreation area or wildlife or waterfowl refuge or any significant public or private historical site shall not be used by the Federal Highway Administration for highway right-of-way unless a determination is made that there is no feasible and prudent alternative to the use of land from such property. Further, the proposed action must include all possible planning to minimize harm to the property which results from such use. A Section 4(f) determination concerning project impacts may be necessary as part of the environmental review process if federal funds are utilized.

ENDANGERED SPECIES

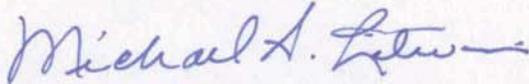
The proposed project is within the range of the federally endangered Indiana bat (*Myotis sodalis*). Indiana bats hibernate in caves and then disperse during spring and summer to reproduce and forage in relatively undisturbed forested areas associated with water resources. Recent research has shown that they will inhabit fragmented landscapes with adequate forest for roosting and foraging. Young are raised in nursery colony roosts in trees, typically near drainageways in undeveloped areas. Like all other bat species in Indiana, the Indiana bat diet consists exclusively of insects.

There is suitable summer habitat for this species present throughout the area surrounding the project site. There are numerous records of the Indiana bat in Monroe County, including many winter hibernacula just west of Bloomington. It is unclear at this point the amount and location

of potential tree clearing activities. We request that once project design details are available that you re-coordinate with our office to determine if seasonal tree-clearing restrictions are necessary.

We appreciate the opportunity to comment at this early stage of project planning. If you have any questions about our recommendations, please call Robin McWilliams Munson at (812) 334-4261 (Ext. 1207).

Sincerely yours,



Scott E. Pruitt
Field Supervisor

cc: Federal Highway Administration, Indianapolis, IN
Christie Stanifer, Indiana Division of Fish and Wildlife, Indianapolis, IN

Brock Ridgway

From: McWilliams, Robin <robin_mcwilliams@fws.gov>
Sent: Wednesday, March 12, 2014 3:07 PM
To: Brock Ridgway
Subject: Re: Follow up on Early Coordination - Old Sr 37 and N. Dunn Street - Des. No 1297060

Dear Brock,

After looking over the information you sent, I believe, in addition to our original recommendations, that seasonal tree-clearing restrictions should be implemented for this project. As previously mentioned, there are numerous records of the Indiana bat in Monroe County.

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

Species proposed for listing are not afforded protection under the ESA; however as soon as a listing becomes effective, the prohibition against jeopardizing its continued existence and “take” applies **regardless of an action’s stage of completion**. If the agency retains any discretionary involvement or control over on-the-ground actions that may affect the species after listing, section 7 applies. Additional information regarding NLEB and conference procedures can be found at (<http://www.fws.gov/midwest/endangered/mammals/nlba/index.html>).

There is suitable summer habitat for both of these species present throughout the area surrounding the project site, including wooded areas within or near the right-of-way. The project will not eliminate enough habitat to affect these species, but to avoid incidental take from removal of an occupied roost tree we recommend that tree-clearing be avoided during the period **April 1 - September 30**. If this measure is implemented we concur that the proposed project is not likely to adversely affect the Indiana bat or the northern long-eared bat.

Prior to the initiation of any construction activities on bridges (if applicable), including the removal of any bridge structures, we recommend the underside of each bridge be carefully examined for the presence of bats, especially between April 1 and September 30. If any bats are found roosting on the underside of the bridge, we request that you immediately contact our office at (812)334-4261.

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

We appreciate the opportunity to review and re-coordinate on this project. Please let me know if you have any questions about our recommendations or previous comments.

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

Schedule

Monday, Tuesday - 7:30a-3:00p

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

On Tue, Mar 11, 2014 at 12:07 PM, Brock Ridgway <bridgway@eagleridgecivil.com> wrote:

It will be more than ½ acre, approximately 1 acre. We show the footprint and construction limits on the plans, and have put an X on every tree that is to be removed that is over 6" diameter.

We have received the Construction in a Floodway permit which requires a 5:1 mitigation of anything 10" or larger (in the floodway).

C-14

I walked the site with the City's urban forester to take inventory of those in the City limits....that review goes through their tree commission, but I anticipate a similar mitigation requirement. That's in progress.

Some of the project (north side of Old SR 37 and east end of project) are in the County, not City....so, those areas fall under whatever requirements come from the Woody Revegetation review process or the overall review of our environmental document with INDOT's Environmental Services (the County is also a project sponsor).

So I guess what I am looking for is your review and response. We expect to have to mitigate/revegetate with tree plantings on this project...just looking for a coherent way to address the needs of all the various stakeholders.

We can mitigate tree planting along the south side of Old SR 37, then can look for other areas in the construction limits....if we can't accommodate in that space, the City has a designated tree replanting site near Griffy Creek east of this project that we can add more trees to.

We appreciate your help.

Brock

Brock Ridgway, P.E.

Eagle Ridge Civil Engineering Services, LLC

(317) 370-9672

Find us at www.eagleridgecivil.com

From: McWilliams, Robin [mailto:robin_mcwilliams@fws.gov]

Sent: Tuesday, March 11, 2014 11:41 AM

To: bridgway@eagleridgecivil.com

Subject: Fwd: Follow up on Early Coordination - Old Sr 37 and N. Dunn Street - Des. No 1297060



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

February 28, 2014

Brock Ridgway, P.E.
Project Manager
Eagle Ridge Civil Engineering Services, LLC
1321 Laurel Oak Drive
Avon, IN 46123

Dear Mr. Ridgway:

The proposed project to make safety improvements at Old SR 37 and North Dunn Street, in the City of Bloomington, Monroe County, Indiana, as referred to in your letter received February 24, 2014, will not cause a conversion of prime farmland.

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

Sincerely,

A handwritten signature in blue ink that reads "Jane E. Hardisty".

JANE E. HARDISTY
State Conservationist

Project No. _____ DES No. _____

Project Description Intersection Safety Improvements at Old SR 37 & N Dunn St

Monroe County

Name of Organization requesting early coordination:

Eagle Ridge Civil Engineering Services

QUESTIONNAIRE FOR THE INDIANA GEOLOGICAL SURVEY

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

NO

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

NO

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

Describe: NO

This information was furnished by:

Marni Karaffa

Name: Marni D. Karaffa Title: Geologist
Address: 611 N Walnut Grove, Bloomington, IN 47405
Phone/Fax: (812) 855-7428 / (812) 855-2862
Email: karaffam@indiana.edu

Date: February 15, 2012





INDIANA DEPARTMENT OF ENVIRONMENTAL MANAGEMENT

We Protect Hoosiers and Our Environment.

100 N. Senate Avenue • Indianapolis, IN 46204
(800) 451-6027 • (317) 232-8603 • www.idem.IN.gov

Michael R. Pence
Governor

Thomas W. Easterly
Commissioner

February 25, 2014

66-33
Mr. Brock Ridgeway
Eagle Ridge Engineering
1321 Laurel Oak Drive
Avon, Indiana 46123

Dear Mr. Ridgeway:

RE: Wellhead Protection Area Proximity
Determination
Intersection Of Old State Road 37 And
North Dunn Street, Bloomington, Indiana,
Monroe County

Upon review of the above referenced site, it has been determined that the site **is not located** within a Wellhead Protection Area. This information is accurate to the best of our knowledge. However, there are in some cases, a few factors that could impact the accuracy of this determination. For example, some Wellhead Protection Area Delineations have not been submitted or many have not been approved by this office. In these cases, we use a 3,000 foot fixed radius buffer to make the proximity determination. To find the status of a Public Water Supply System's Wellhead Protection Area Delineation, please visit our tracking database at <http://www.in.gov/idem/4289.htm>.

Note, the Drinking Water Branch has launched a new self service feature which allows one to determine a wellhead proximity without submitting the application form. Use the following instructions: 1) Go to <http://idemmaps.idem.in.gov/apps/whpa/>; 2) Using the icon/tools in the upper right hand corner of the application, zoom to your site location or address; and 3) Once you have located your site of interest click on the "I" icon, and then using your mouse click on your location. The site wellhead protection area proximity determination will be displayed below the icon tools in the upper right hand corner of tool. In the future, please consider using this self service feature if it is suitable for your needs.

If you have any additional questions, please feel free to contact me at the address above or at (317) 234-7476.

Sincerely,

A handwritten signature in black ink, appearing to read "James Sullivan", with a long horizontal flourish extending to the right.

James Sullivan, Chief
Ground Water Section
Drinking Water Branch
Office of Water Quality

JS:gml



Indiana Department of Environmental Management

We make Indiana a cleaner, healthier place to live.

Mitchell E. Daniels, Jr.
Governor

100 North Senate Avenue
Indianapolis, Indiana 46206

Thomas W. Easterly
Commissioner

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

City of Bloomington
Adrian Reid, City Engineer
401 N. Morton Street, Suite 130
Bloomington, IN 47404

Eagle Ridge Civil Engineering Services
Brock Ridgway
1321 Laurel Oak Drive
Avon, IN 46123

Monday, January 16, 2012

To Engineers and Consultants Proposing Roadway Construction Projects:

RE: Roadway improvements to Old SR 37 and North Dunn Street, including possible realignment of the roads, intersection relocation or modifications, roadway section changes including the addition of shoulders and a possible bicycle lane or sidepath/sidewalk facility.

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

C-20

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 follow statutes:
 - ☐ IC 14-26-2 Lakes Preservation Act 312 IAC 11
 - ☐ IC 14-26-5 Lowering of Ten Acre Lakes Act No related code
 - ☐ IC 14-28-1 Flood Control Act 310 IAC 6-1
 - ☐ IC 14-29-1 Navigable Waterways Act 312 IAC 6
 - ☐ IC 14-29-3 Sand and Gravel Permits Act 312 IAC 6
 - ☐ IC 14-29-4 Construction of Channels Act No related code

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

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

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

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

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

Please be mindful that approximately 149 Municipal Separate Storm Sewer System (MS4) areas are now being established by

various local governmental entities throughout the state as part of the implementation of Phase II federal storm water requirements. All of these MS4 areas will eventually take responsibility for Construction Plan review, inspection, and enforcement. As these MS4 areas obtain program approval from IDEM, they will be added to a list of MS4 areas posted on the IDEM Website at: <http://www.in.gov/idem/4900.htm>.

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

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

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

AIR QUALITY

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

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

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

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

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

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

The U.S. EPA further recommends that all homes (and apartments within three stories of ground level) be tested for radon. If in-home radon levels are determined to be 4 pCi/L, or higher, EPA recommends a follow-up test. If the second test confirms that radon levels are 4 pCi/L, or higher, EPA recommends the installation of radon-reduction measures. (For a list of qualified radon testers and radon mitigation (or reduction) specialists visit:

http://www.in.gov/isdh/regsvcs/radhealth/pdfs/radon_testers_mitigators_list.pdf.) It also is recommended that radon reduction measures be built into all new homes, particularly in areas like Indiana that have moderate to high predicted radon levels.

To learn more about radon, radon risks, and ways to reduce exposure visit: <http://www.in.gov/isdh/regsvcs/radhealth/radon.htm>, <http://www.in.gov/idem/4145.htm>, or <http://www.epa.gov/radon/index.html>.

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

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

If no asbestos is found where a renovation activity will occur, or if the renovation involves removal of less than 260 linear feet of RACM off of pipes, less than 160 square feet of RACM 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.) 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

C-23

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 is it 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.

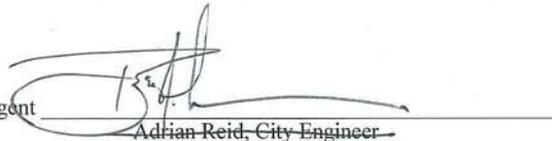
Project Description

Roadway improvements to Old SR 37 and North Dunn Street, including possible realignment of the roads, intersection relocation or modifications, roadway section changes including the addition of shoulders and a possible bicycle lane or sidepath/sidewalk facility.

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: _____

Signature of the INDOT
Project Engineer or Other Responsible Agent



~~Adrian Reid, City Engineer~~

Roy Aten, SENIOR PROJECT MANAGER

Date: 10/9/14

Signature of the
For Hire Consultant _____

Brock Ridgway

Representing the Company: Eagle Ridge Civil Engineering Services

C-24



**City of Bloomington
Planning Department**

Brock Ridgeway, P. E.
Eagle Ridge Civil Engineering
1321 Laurel Oak Drive
Avon, IN 46123

Re: Early coordination comments for Old SR 37 and North Dunn Street safety improvements

Dear Brock:

The project description for the Intersection Safety Improvements at Old SR 37 and N. Dunn St. contains useful information for early project coordination purposes. After review of this information, please consider the following Planning Department and Bloomington/Monroe County Metropolitan Planning Organization (BMCMPPO) comments outlined below, per your letter dated January 16, 2012, as the response to your early coordination request:

Complete Streets Policy – this project, per the BMCMPPO FY 2010-2013 and 2012-2015 Transportation Improvement Programs (TIP) is listed as “compliant” with this policy. Furthermore, this compliance was based upon the Call for Projects - Project Submittal Form dated 5/13/2009. The project description is consistent with the TIPs and Project Submittal Form, however changes to the Project Submittal Form have been made in order to achieve improved consistency with the Complete Streets Policy/process. Changes include robust additional information requirements for the scope of work, performance standards, measurable outcomes, project timeline, key milestones, project costs, public participation process, and stakeholder list.

Now that the project is in the early coordination and data collection process, staff supports reporting on progress made and further elaboration on these additional information requirements as this project continues to move forward. Reporting of this nature would further help all interested parties understand the decision making and project development process. At the completion of the Complete Initial Assessment Activities scheduled for March of 2012, please provide a written report to all stakeholders that summarize the information collected, progress made, updates to the additional information, and details on the key anticipated next steps of the process. Similar reporting at future milestones is also recommended.

Finally, consider including the following groups not listed on the Call for Projects – Project Submittal Form as stakeholders: the Monroe County Alternative Transportation Technical Advisory Board; the Bloomington Bicycle Club; and the residents of Blue Ridge and Marlin Hills Neighborhoods.

2008 Bloomington Bicycle and Pedestrian Transportation and Greenways System Plan (BPTGSP) – identifies a sidepath/trail system within the proposed project area (Dunn Street and Cascades Trail). The project area also contains signed bike routes and popular Bloomington Bicycle Club routes. Accommodations for existing and future non-motorized transportation users must be implemented to the greatest extent possible.

C-25



**City of Bloomington
Planning Department**

Highway Safety Improvement Program (HSIP) – the BMCMPPO has clear guidelines governing projects that seek to utilize HSIP funds. While the purpose and need of this project is to “resolve long-term safety problems” the intent is to utilize HSIP program. Consideration of the six general provisions must be thoroughly vetted early in the process. The BMCMPPO has limited funding through the HSIP program and the scope and anticipated costs for intersection realignment may require numerous years of the annual allotment of HSIP funds (approximately \$176,000 annually). Furthermore, per these guidelines, High-Cost Site-Specific Projects must be identified as one of the top 50 crash locations in the Annual Crash Report. Since 2003 this intersection has intermittent levels of crashes with frequencies much lower than other locations (e.g. not always in the top 50), unfortunately there also have been a few crashes resulting in incapacitating injuries. Further investigations into the cause of the more severe crashes would be beneficial in developing mitigation strategies. Staff has provided detailed crash data (2008-2010) to Adrian Reid, the City Engineer, for consideration.

Because of the limited availability of HSIP fund, the fluctuation in total annual crashes, and the primary cause of the more severe crashes at this location, staff recommends the Policy Committee provide guidance on possible HSIP funding very early in the development process of this project. The Project Scope Approval is scheduled for May of 2012 and subsequently is an ideal time to seek guidance from the Policy Committee on HSIP and/or other BMCMPPO funding before moving forward with preliminary designs. Development of several alternatives, including low cost strategies, may provide several viable options to consider.

If you have any questions don't hesitate to contact me.

Scott Robinson, AICP

A handwritten signature in black ink, appearing to read "Scott Robinson".

Long Range/Transportation Manager

cc- Adrian Reid, P. E., City Engineer

Josh Desmond, AICP, Assistant Planning Director/BMCMPO Director

Raymond Hess, AICP, Senior Transportation Planner

C-26

Brock Ridgway

From: Danise Alano-Martin <alanod@bloomington.in.gov>
Sent: Monday, February 13, 2012 2:02 PM
To: bridgway@eagleridgecivil.com; mtanis@eagleridgecivil.com
Cc: Adrian Reid; Jacqueline Bauer
Subject: Old SR 37 and N Dunn Street - feedback

Greetings!

I am writing in response to your request for comments on the "Safety Improvements at Old SR 37 and North Dunn Street" project, dated January 16, 2012. We greatly appreciate the invitation for the Department of Economic & Sustainable Development to provide feedback at this early stage of assessment and defining potential improvements.

Our department would typically relate our response toward commercial, business and economic development impacts as well as sustainability and sustainable development concerns. As the study area does not have commercial properties or commercially zoned properties, we will focus on two areas of concern with regard to sustainability: environmental impacts on the east edge of the project (along the curve on Old 37), and accommodations for modes of active transportation including bicycles.

Because of the steep, heavily forested slopes along Old 37 east of Dunn Street, widening this road may be expected to have significant impacts on this area, including an increase in the potential for erosion. To the extent possible, we encourage you to minimize the width of the road and associated impacts, allowing enough space to mitigate safety concerns but otherwise keeping the footprint of the project as small as possible.

In addition, our department feels it is extremely important to ensure that our infrastructure be designed to accommodate all forms of transportation, including pedestrians and bicycles, and are fully supportive of the MPO's Complete Streets Policy. The proposed project traverses a narrow, steep section of road that at present is not used heavily by bicycles, many of whom opt for the safer designated bike route that runs through the Marlin Hills neighborhood (along Hillview and Audobon).

Because of the potential environmental impacts of a large-scale road-widening, and because of the well-used existing alternative bicycle route, we feel it would be appropriate to waive Complete Streets requirements if doing so will help minimize the project's environmental impacts. Instead, we advocate for improved signage, pavement markings, and other installations along the Marlin Hills route to make clear to cyclists that they are encouraged to use this route as an alternative. We recommend waiving the Complete Streets requirement only on the section of curve east of Dunn Street.

We are happy to clarify these comments or provide additional information if that would be helpful as you continue with project design. Please feel free to contact Sustainability Coordinator Jacqui Bauer (bauerj@bloomington.in.gov, 812.349.3837) or me at any time.

Thanks, again,



--

Danise Alano-Martin
Economic & Sustainable Development Director

C-27

City of Bloomington
401 N. Morton St., Suite 130
PO Box 100
Bloomington, Indiana 47402
V: [812.349.3477](tel:812.349.3477)
F: [812.349.3520](tel:812.349.3520)
E: alanod@bloomington.in.gov
W: <http://bloomington.in.gov/economicvitality>

Brock Ridgway

From: Dave Williams <williamd@bloomington.in.gov>
Sent: Tuesday, January 24, 2012 11:03 AM
To: Brock Ridgway
Subject: Early Coordination - Old SR 36 and Dunn

Brock,
Some FYI's and comments re: this project:

- 1) Parks (Parks Foundation) owns the 16 acre parcel north of Old SR 37 and west of Hillview Dr. Future plans call for construction of a Dog Park with access via Stone Mill Rd. County has approved our plans; construction timetable is very uncertain.
- 2) It would be nice to see an extension of the Cascades Ph. 1 Trail to Dunn St as part of this project.
- 3) The Approximate Study Area boundary includes the CBU tree mitigation area. Work in this area for a conceptual Dunn St. realignment should consider transplanting many of these trees.
- 4) If the intersection improvements create additional grounds keeping, landscaping or tree maintenance responsibilities for Parks, DPW, or CBU, those discussions need to occur early in the design.

Thanks, Dave

Brock Ridgway

From: Lew May <mayl@bloomingtontransit.com>
Sent: Friday, January 20, 2012 8:12 AM
To: bridgway@eagleridgecivil.com
Subject: Safety Improvements at Old SR 37 and N. Dunn Street

Brock

I received your letter from January 16, 2012 seeking comments on proposed safety improvements at Old SR 37 and N.Dunn Street.

From a transit perspective, we currently don't operate fixed route transit service at the location and don't anticipate operating at that location in the foreseeable future given the low density nature of the surrounding area. As such, we have no transit-related comments on the proposed project.

Let me know if I can be of further assistance.

Lew May
General Manager

Bloomington Public Transportation Corporation
130 W. Grimes Lane
Bloomington, IN 47403
812.961.0522 direct office line

**MONROE COUNTY HISTORIC PRESERVATION
BOARD OF REVIEW**

501 N. Morton Street, Suite 224, Bloomington, IN 47404

Telephone: (812)-349-2560 / Fax: (812)-349-2967

www.co.monroe.in.us/tsd/Government/Infrastructure/PlanningDepartment/HistoricPreservation.aspx

February 17, 2012

Mr. Brock Ridgway
Eagle Ridge Consulting
1321 Laurel Oak Drive
Avon, IN 46213

Re: Safety Improvements at Old SR 37 and North Dunn Street, Monroe County, IN

Dear Mr. Ridgway:

Thank you for the opportunity to review this project.

The Monroe County Historic Preservation Board is familiar with the project setting, but we note that the County has planning jurisdiction only on the North side of the intersection. Our concerns are limited.

Members of our Board report observing in years past features or ruined structures relating to the historic limestone industry in the western portion of the project area. These warrant further observation and documentation if they are in the area of project effect. In addition, the landscape in the western portion of the project area, from the toe slope of the uplands in the center of the project area to the floodplain in the western part of the area, may be sensitive for prehistoric archaeological resources. The slopes above the toe are not sensitive because they do not contain rockshelters or other suitable areas for Native American campsites. Therefore, a small portion of the project area should be surveyed to identify archaeological resources. We have no comments regarding the eastern portion of the project area.

Please feel free to contact us if you have any questions.

Yours truly,



Cheryl Ann Munson,
Chairwoman

June 17th, 2014

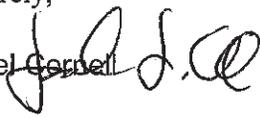
Mr. Brock Ridgeway,

The Bloomington Tree Commission has reviewed the site plan on North Dunn Street and Old HWY 37 road improvements, and recommends a 5:1 ratio for tree replacement.

We look forward to working with you on the tree replacement plan and improving Bloomington's urban forest.

Sincerely,

Laurel Cornell

A handwritten signature in black ink, appearing to read "Laurel Cornell", written over the printed name.

Laurel Cornell
Chair, Bloomington Tree Commission



INDIANA DEPARTMENT OF ENVIRONMENTAL MANAGEMENT

We Protect Hoosiers and Our Environment.

100 N. Senate Avenue • Indianapolis, IN 46204

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

Michael R. Pence
Governor

Thomas W. Easterly
Commissioner

June 30, 2014

Mr. Rick Alexander
City of Bloomington- Dept. of Public Works
401 North Morton Street, Ste 130
Bloomington, IN 47402

Dear Mr. Alexander:

Re: No 401 Water Quality Certification Needed
Project: Dunn and Old 37 Pedestrian Trail
IDEM No.: 2014-292-53-AMM-X
County: Monroe

The Office of Water Quality has reviewed your application dated June 18, 2014 and received June 26, 2014. According to the application, you propose to create a section of pedestrian trail near the intersection of Dunn Street and Old 37 which will include a span crossing of Griffey Creek. Additionally you propose to avoid all wetlands located on the site during construction of the trail segment and the span crossing. The site is located near the intersection of Dunn Street and Old 37 [Section 21, Township 9N, Range 1W, Bloomington USGS Quad], near Bloomington, Monroe County. Because the proposed activity does not involve a discharge of fill material to or work below the Ordinary High Water Mark of waters of the State of Indiana, it does not require a Section 401 Water Quality Certification.

This correspondence does not relieve you of the responsibility of obtaining any other permits or authorizations that may be required for this project or related activities from IDEM or any other agency or person. You may wish to contact the Indiana Department of Natural Resources at 317-232-4160 (toll free at 877-928-3755) concerning the possible requirement of natural freshwater lake or floodway permits. In addition, you may wish to contact IDEM's Storm Water Permits Section at 317-233-1864 concerning the possible need for a 327 IAC 15-5 (Rule 5) permit if you plan to disturb greater than one (1) acre of soil during construction.

If you have any questions about this letter, please contact Mr. Aaron McMahan, Project Manager, of my staff at 317-234-6351, or you may contact the Office of Water Quality through the IDEM Environmental Helpline (1-800-451-6027).

Sincerely,

Mary E. Hollingsworth, Branch Chief
Surface Water, Operations, & Enforcement Branch
Office of Water Quality

cc: Michael Tanis, Eagle Ridge Civil Engineering Services, LLC



Appendix D: Section 106

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



August 13, 2014

Patrick A. Carpenter
Manager, Cultural Resources Office
Environmental Services Division
Indiana Department of Transportation
100 North Senate Avenue, Room N642
Indianapolis, Indiana 46204

Federal Agency: Federal Highway Administration ("FHWA")

Re: Indiana Department of Transportation's finding of "no adverse effect" on behalf of the Federal Highway Administration regarding safety improvements at Old SR 37 and North Dunn Street (Designation No. 1297060; DHPA No. 12921)

Dear Mr. Carpenter:

Pursuant to Section 106 of the National Historic Preservation Act (16 U.S.C. § 470f), 36 C.F.R. Part 800, and the "Programmatic Agreement among the Federal Highway Administration, the Indiana Department of Transportation, the Advisory Council on Historic Preservation, the Indiana State Historic Preservation Officer regarding the implementation of the Federal Aid Highway Program in the State of Indiana," the staff of the Indiana State Historic Preservation Officer ("Indiana SHPO") has conducted an analysis of the materials dated July 15, 2014, and received on July 16, 2014, for the above indicated project in the City of Bloomington, Monroe County, Indiana.

As previously indicated, based upon the documentation available to the staff of the Indiana SHPO, we have not identified any currently known archaeological resources listed in or eligible for inclusion in the National Register of Historic Places ("NRHP") within the proposed project area. Therefore, we concur with the opinion of the archaeologist, as expressed in the Indiana archaeological short report (Alexander, 02/27/2012) and in the Phase Ia archaeological investigation addendum report (Alexander, 06/14/2014), that no further investigations appear necessary at this proposed project area.

If any archaeological artifacts or human remains are uncovered during construction, demolition, or earthmoving activities, state law (Indiana Code 14-21-1-27 and 29) requires that the discovery must be reported to the Department of Natural Resources within two (2) business days. In that event, please call (317) 232-1646. Be advised that adherence to Indiana Code 14-21-1-27 and 29 does not obviate the need to adhere to applicable federal statutes and regulations.

Additionally, in regard to buildings and structures, we previously agreed that the Milisen House at 4180 Old SR 37 and the Griffy Lake Historic District appear to be eligible for inclusion in the National Register of Historic Places. Furthermore, it is our understanding that the Milisen House stone gateposts, a contributing feature of the property, will be avoided and protected during construction as a project commitment.

Based on the project information provided to our office during the March 24, 2014 meeting, and contained in this submittal, we agree with the consultant's assessment that this undertaking does not appear to diminish the characteristics that qualify the Milisen House or the Griffy Lake Historic District for inclusion in the National Register of Historic Places. We concur with INDOT's individual effect findings of No Adverse Effect for the Milisen House and the Griffy Lake Historic District.

Therefore, we concur with INDOT's July 10, 2014 overall finding, on behalf of the FHWA, of No Adverse Effect for the safety improvements at Old SR 37 and North Dunn Street undertaking.

A copy of the revised 36 C.F.R. Part 800 that went into effect on August 5, 2004, may be found on the Internet at www.achp.gov for your reference. If you have questions about archaeological issues please contact Wade T. Tharp at (317) 232-1650 or wtharp1@dnr.IN.gov. If you have questions about buildings or structures please contact Chad W. Slider at (317) 234-5366 or cslider@dnr.IN.gov. Additionally, in all future correspondence regarding the above indicated project, please refer to DHPA No. 12921.

Very truly yours,



Mitchell K. Zoll
Deputy State Historic Preservation Officer

MKZ:WTT:CWS:cws

emc: Patrick A. Carpenter, Indiana Department of Transportation
Mary Kennedy, Indiana Department of Transportation
Shaun Miller, Indiana Department of Transportation
Shirley Clark, Indiana Department of Transportation
Linda Weintraut, Ph.D., Weintraut & Associates, Inc.
Dawn A. J. Alexander, Weintraut & Associates, Inc.

WEINTRAUT & ASSOCIATES, INC.

July 15, 2014

Dear Consulting Party:

Re: Safety Improvements at Old SR 37 & North Dunn Street, Bloomington Township, Monroe County, Indiana (Des. No. 1297060/ DHPA No. 12921)

Pursuant to Section 106 of the National Historic Preservation Act (1966) and 36 CFR Part 800 (Revised January 2001 and incorporating amendments effective August 5, 2004), federal agencies are required to take into account the effects of their undertakings on historic and archaeological properties. The Federal Highway Administration (FHWA), in cooperation with the Indiana Department of Transportation (INDOT), is conducting Section 106 Consultation as part of the above referenced project.

Pursuant to 36 CFR 800.4(d)(1), FHWA, in consultation with the Indiana State Historic Preservation Officer (SHPO), has determined that there are two aboveground historic properties within the Area of Potential Effects for this project: Griffy Lake Historic District and the Milisen House.

Enclosed is a copy of the 800.11(e) documentation, which describes the undertaking, describes the efforts taken to identify historic properties, describes the historic properties, describes the effects of the undertaking on historic properties, explains the application of the criteria of adverse effect, and summarizes consulting party and public views.

Please review this copy of the 800.11(e) documentation and note that the FHWA has signed a Finding of No Adverse Effect for this project.

Please direct any comments to Linda Weintraut at PO Box 5034, Zionsville, Indiana 46077 or you may email her at linda@weintrautinc.com. Please provide any comments by August 18, 2014.

Sincerely,



Linda Weintraut, Ph.D.

Enclosures

cc: Patrick Carpenter, INDOT
Mitchell Zoll, SHPO
Brock Ridgway, Eagle Ridge Civil Engineering Services, LLC

**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
SAFETY IMPROVEMENTS AT OLD SR 37 AND NORTH DUNN STREET
BLOOMINGTON TOWNSHIP, MONROE COUNTY, INDIANA
DES. NO.: 1297060**

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

The Area of Potential Effects (APE) for aboveground resources has been drawn to encompass parcels immediately adjacent to the project location. The APE for archaeological resources is the project footprint. (See Appendix A: Plans and Appendix B: Maps.)

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

No resources within the APE are listed in the National Register of Historic Places (NRHP). One district was previously determined eligible for inclusion in the NRHP: the Griffy Lake Historic District. One individual property has been determined eligible for inclusion in the NRHP: the Milisen House.

Griffy Lake Historic District. The Griffy Lake Historic District includes the Griffy Lake Water Treatment Plant (1927), Griffy Lake and the dam that forms it, and structures related to the lake, such as retaining walls and spillway. It is eligible under Criterion A in the areas of Community Planning and Development for its association with the development of the City of Bloomington's water system. The period of significance, 1924-1961, begins with construction of the dam that created Griffy Lake and extends through the facility's continued use for its original purpose within the historic period.

Milisen House. The Milisen House (circa 1926) is an American Foursquare house clad in irregularly coursed stone veneer set atop a hill. The property is associated with Dr. Robert Milisen who started Indiana University's Department of Speech and Hearing Sciences and developed its speech and hearing clinic. He was recognized nationally for his research on speech disorders in children and for his clinical and teaching innovations. The property is eligible under Criterion B for its association with Dr. Milisen. The period of significance extends from 1937, when Dr. Milisen moved to the house, until the end of the historic period in 1963.

EFFECT FINDING

**Griffy Lake Historic District—No Adverse Effect
Milisen House—No Adverse Effect**

The Indiana Department of Transportation (INDOT), acting on behalf of the Federal Highway Administration (FHWA), has determined a finding of No Adverse Effect is appropriate for this undertaking. INDOT respectfully requests the Indiana State Historic Preservation Officer provide written concurrence with the Section 106 determination of effect.

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

Griffy Lake Historic District. This undertaking will convert property from the Griffy Lake Historic District, a Section 4(f) historic property, to a transportation use. INDOT, acting on FHWA's behalf, has determined the appropriate Section 106 finding is "No Adverse Effect"; therefore, FHWA

hereby intends to issue a "de minimis" finding for the Griffy Lake Historic District, pursuant to SAFETEA-LU, thereby satisfying FHWA's responsibilities under Section 4(f) for this historic property.

Milisen House. This undertaking will not convert property from the Milisen House, a Section 4(f) historic property, to a transportation use. INDOT, acting on FHWA's behalf, has determined the appropriate Section 106 finding is "No Adverse Effect"; therefore, no Section 4(f) evaluation is required for the Milisen House.



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

7-10-2014

Approved Date

**FEDERAL HIGHWAY ADMINISTRATION
DOCUMENTATION OF SECTION 106 FINDING OF
NO ADVERSE EFFECT
SUBMITTED TO THE STATE HISTORIC PRESERVATION OFFICER
PURSUANT TO 36 CFR SECTION 800.5(c)
SAFETY IMPROVEMENTS AT OLD SR 37 AND NORTH DUNN STREET
BLOOMINGTON TOWNSHIP, MONROE COUNTY, INDIANA
DES. NO.: 1297060**

**1. DESCRIPTION OF THE UNDERTAKING
(Pursuant to 36 CFR § 800.4(a)(1))**

The City of Bloomington with funding from the Federal Highway Administration (FHWA), wishes to resolve the long-term safety issues at Dunn Street and Old State Road (Old SR) 37. The City wishes to permanently reduce both the number and severity of accidents in the area of the intersection of Dunn Street and Old SR 37. The project area is located approximately 1,600 feet along Old SR 37 (from 1,200 feet east of Dunn Street to 400 feet west of Dunn Street) and approximately 600 feet along Dunn Street in the City of Bloomington, Bloomington Township, Monroe County, Indiana.

On Old SR 37, a curve correction is proposed to realign the roadway into a single, simple horizontal curve with appropriate superelevation. The Indiana Design Manual shows strong preference for this solution when dealing with a roadway where complex curvature is contributing to the problems. This will address the existing condition, which presents a compound curvature at three different radii with the sharpest occurring toward the bottom of the hill. Because the roadway is cut into a hillside with exposed rock on the inside (uphill) of the curve, and a steep hillside protected by guardrail on the outside of the curve, the total roadway width must be kept reasonable to keep the improvement affordable and to avoid major environmental and right of way impacts.

It is proposed that the eastbound (outside of the curve) side of the road would include a paved shoulder in front of new guardrail installed at the appropriate height. Shoulder width will need to be kept relatively narrow due to the steep downslope, but a paved shoulder will be a significant improvement over the existing unstable road edge. On the inside of the curve, due to the high cost of excavating deeper into the rocky hillside, widening is to be limited. The inside of the curve would feature a curb and gutter to address drainage needs, to eliminate the existing edge drop, and to provide a 2-foot gutter as a recovery space. In addition, the hillside will be cut back enough to provide required sight distance in the westbound direction for a design/posted speed limit of 30 mph that is consistent with this roadway on both ends of this project area.

These improvements will require the introduction of a storm sewer along the inside of the curve, but this will provide additional benefits near Hillside Drive where the existing drop into the roadside ditch is severe (approaching 3 feet in depth). Enclosing this section in a storm sewer will remove this hazard.

For North Dunn Street, it is intended to raise the road to meet Old SR 37 at a grade not to exceed 2 percent, a major improvement from the current condition of nearly 10 percent. This will improve stopping and starting conditions for traffic coming onto Old SR 37 and will also greatly improve intersection sight distance. (See Appendix A: Plans.)

As related work, though not directly related to reducing traffic accidents, a paved sidepath is to be built along the south side of Old SR 37, then turning southward along the west side of Dunn Street. The sidepath will also include a pedestrian bridge which will cross Griffy Creek. This portion of the project is in the city limits and is expected to comply with the City's Complete Streets requirements. Old SR 37 east of the intersection is outside the city limits and the

topography does not make widening for bicycle or pedestrian facilities practical due to the expense, environmental impacts, and the project's rural setting. A path connection from the sidepath to Hillside Drive will be included to facilitate connection to the nearest residential area, and to provide a paved connection to the designated bike route that follows Hillside instead of Old SR 37.

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

Pursuant to 36 CFR 800.16(d), the APE for aboveground resources has been drawn to encompass parcels immediately adjacent to the project location. The archaeological APE is the project footprint. (See Appendix B: Maps.)

2. EFFORTS TO IDENTIFY HISTORIC PROPERTIES

Pursuant to 36 CFR Section 800.4(b), efforts to identify historic properties (both archaeological and aboveground) included research, site investigation, and consultation with individuals and parties knowledgeable about the resources in the area and within the APE. Efforts to identify historic properties are described in chronological order below.

Archaeologists from Weintraut & Associates, Inc. (W&A) conducted a literature review on December 27 and 28, 2011, and reviewed the Indiana State Historical Architectural and Archaeological Research Database (SHAARD), site maps on file at the Division of Historic Preservation and Archaeology (DHPA), reports, cemetery records, the *Monroe County Interim Report: Indiana Historic Sites and Structures Inventory* (IHSSI), and historic maps in an effort to identify historic resources within the APE.

Also beginning in December 2011, historians from W&A reviewed the National Register of Historic Places (NRHP), Indiana Register of Historic Sites and Structures, SHAARD, the *Monroe County Interim Report*, IHSSI files, and the *Indiana Historic Bridge Inventory* for previously-identified properties. Additionally, historic maps and aerial photographic maps were examined.

In a letter dated January 16, 2012, Eagle Ridge Civil Engineering Services, LLC (Eagle Ridge) distributed an early coordination letter (ECL) describing the proposed project and inviting parties to participate in Section 106 consultation. The letter dated January 16, 2012, to the Indiana Department of Historic Preservation and Archaeology State Historic Preservation Officer (SHPO) also included a list of invited consulting parties. The following entities were invited to join consultation: Historic Landmarks Foundation (now Indiana Landmarks) - Western Regional Office, Monroe County Historian, Monroe County Historic Preservation Board of Review, Historic Preservation Commission, Downtown Bloomington Commission, Preservation Development, Inc., and Bloomington Restorations, Inc. The Indiana Department of Transportation (INDOT)—Cultural Resources Office (CRO) and FHWA were included on project correspondence as participating agencies. The Historic Preservation Commission and Monroe County Historic Preservation Board of Review replied affirmatively to the invitation to join consultation. SHPO is an agency that participates in consultation. No other responses to the invitation to join consultation were received. (See Appendix C: Consulting Parties and Appendix F: Correspondence.)

On January 31 and February 2, 2012, Qualified Professional historians from W&A conducted a site survey of all aboveground properties within the APE. The historians photographed and recorded survey notes about all properties more than fifty years old within the APE and took representative photos of the project area. (See Appendix C: Photographs.)

On February 2, 2012, archaeologists for W&A performed a Phase Ia archaeological field reconnaissance of the project area (archaeological APE). The field investigation included visual inspection and shovel testing. No sites were located in that reconnaissance and an Archaeology Short Report was prepared. Since no archaeological sites were located within the project area following the Phase Ia archaeological reconnaissance, it was recommended the project be allowed to proceed as planned at that time. (See Appendix E: Report Summaries.)

On February 17, 2012, Ms. Cheryl Ann Munson, Chair of the Monroe County Historic Preservation Board of Review, sent a letter to Eagle Ridge after reviewing the Early Coordination package. Ms. Munson included the following comments: 1) "Members of the Board had observed features or ruined structures relating to the historic limestone industry in the western portion of the project area" that would warrant further documentation should they fall within the APE, and 2) a small portion of the western project area, "from the toe slope of the uplands in the center of the project area to the floodplain in the western part of the area, may be sensitive for prehistoric archaeological resources," and should be surveyed for archaeological resources. (See Appendix F: Correspondence.)

W&A transmitted an Archaeology Short Report (ASR) to the SHPO on March 7, 2012 after review and approval by INDOT-CRO. (See Appendix F: Correspondence.)

On April 2, 2012, W&A transmitted the HPR to the SHPO and consulting parties. The report identified one property previously recommended eligible for listing in the NRHP: Griffy Lake Historic District. No additional properties were recommended eligible for listing in the NRHP. (See Appendix E: Report Summaries and Appendix F: Correspondence.)

On April 4, 2012, SHPO sent a letter regarding the archaeology report that stated: "Based upon the documentation available to the staff of the Indiana SHPO, we have not identified any currently known archaeological resources listed in or eligible for inclusion in the National Register of Historic Places ("NRHP"). Therefore, we concur with the opinion of the archaeologist, as expressed in the Indiana archaeological short report (Alexander, 2/27/12), that no further investigations appear necessary at this proposed project area." The letter also reminded the consultants that "[i]f any archaeological artifacts or human remains are uncovered during construction, demolition, or earthmoving activities, state law ... requires that the discovery be reported to the Department of Natural Resources within two (2) business days." (See Appendix F: Correspondence.)

On April 30, 2012, SHPO responded to recommendations provided in the HPR, stating "...we concur with the consultant's assessment that the Griffy Lake Historic District is eligible for inclusion in the National Register of Historic Place." SHPO then commented on the Milisen House (4180 Old SR 37), a property not surveyed during IHSSI investigations but recommended as a contributing resource following the W&A survey. SHPO stated, "...we believe that the structure is eligible for inclusion under Criterion B for its association with Dr. Robert Milisen, a nationally recognized researcher in the field of speech disorders." SHPO requested additional information, including an updated scope of work once the type of intersection treatment, roadway alignment, or improvements to the roadway sections have been determined. (See Appendix F: Correspondence.)

On May 1, 2012, Devin Blakenship responded to the HPR on behalf of the Monroe County Historic Preservation Board of Review: "Your firm's thorough report thoroughly addresses the APE to our satisfaction given that the final design has not been determined." Blankenship added, "It appears that the properties eligible for the National Register are outside of our planning area." (See Appendix F: Correspondence.)

On April 17, 2013, after engineers extended the northern terminus of the project 41 meters (135 feet), W&A conducted additional Phase Ia archaeological field survey. Shovel probes confirmed

soils that were moderately disturbed. On June 14, 2013, W&A prepared an addendum ASR documenting that work and recommending project clearance.

On March 24, 2014, SHPO, INDOT, the county engineer, and project consultants met to discuss historic properties and the design plans. As a result of that meeting, W&A transmitted a map showing the limits of a previous investigation for the Cascades Trail project and an addendum ASR to SHPO on April 4, 2014. As a result of the discussion at that meeting regarding the historic property boundary for the Milisen House, staff from W&A contacted the heirs of Dr. Robert Milisen on April 14, 2014 and requested further information regarding the estate. The heirs did not respond to the request for additional information. (See Appendix E: Report Summaries and Appendix F: Correspondence, for meeting summary and email correspondence.)

In a letter dated May 1, 2014, SHPO concurred with the recommendation of the addendum ASR. (See Appendix E: Report Summaries and Appendix F: Correspondence.)

On May 5, 2014, W&A provided additional information to SHPO and consulting parties, including a recommended property boundary for the Milisen House. In a letter dated June 2, 2014, SHPO stated that the boundary for the Milisen House “appears to be appropriate.” (See Appendix B: Maps and Appendix F: Correspondence.)

No further efforts, including consultation, to identify historic archaeological and aboveground resources took place.

3. DESCRIBE AFFECTED HISTORIC PROPERTIES

One NRHP-eligible historic district will be affected by the undertaking: the Griffy Lake Historic District. One NRHP-eligible historic resource will be affected by the undertaking: the Milisen House.

The **Griffy Lake Historic District** consists of the Griffy Lake Water Treatment Plant (1927), Griffy Lake and the dam that forms it, and structures related to the lake, such as retaining walls and a spillway. The district is eligible under Criterion A in the areas of Community Planning and Development for its association with the development of the City of Bloomington’s water system. The period of significance, 1924 to 1961, begins with construction of the dam that created Griffy Lake and extends through the facility’s continued use for its original purpose within the historic period.

The **Milisen House** (circa 1926) is an American Foursquare house clad in irregularly coursed stone veneer. The hilltop house site is impressive; the entrance to the driveway is flanked by square brick posts faced in stone and topped with vertical stone pieces. The driveway approaches the house from the east and extends into a circle. This circular portion encloses mature trees and plantings on the east side of the house. A low stone wall separates the drive from the hillside yard to the southeast. A stone picnic table, similar to those found in Cascades Park, sits nearby. Robert and Ellie Milisen came to Bloomington in 1937 when Robert was hired to start Indiana University’s Department of Speech and Hearing Sciences and to develop a speech and hearing clinic. (The clinic is now named for him.) He was nationally recognized for his research on speech disorders in children and was known for his clinical and teaching innovations. Many of his students have become leaders in the profession. The property is eligible under Criterion B for its association with Dr. Milisen. The period of significance extends from 1937, until the end of the historic period in 1963.

4. DESCRIBE THE UNDERTAKING’S EFFECTS ON HISTORIC PROPERTIES

Griffy Lake Historic District. The new roadway and intersection will be constructed in proximity to the district. As part of this undertaking, Cascades Trail will be extended into the district and a new trail bridge constructed. (See Appendix A: Plans, for the plans and images of a similar type

of bridge.) Land within the district will be converted to a transportation use but this will not affect the district adversely. Any effect will be visual.

Milisen House. A new roadway and intersection will be constructed in proximity to the Milisen House but the project has been designed to avoid acquisition of property from the parcel on which the Milisen House is located. Trees will be removed from the surrounding parcels but not from that parcel. The project engineer has avoided the gate posts. Drainage improvements will occur at road's edge, but the shoulder will be located to the south of the existing roadway where trees will be removed. (See Appendix A: Plans.)

5. EXPLAIN APPLICATION OF CRITERIA OF ADVERSE EFFECT -- INCLUDE CONDITIONS OR FUTURE ACTIONS TO AVOID, MINIMIZE, OR MITIGATE ADVERSE EFFECTS

The criteria of adverse effect, as defined and described in 36 CFR 800.5(a)(1) and in 36 CFR 800.5(a)(2)(i) through (v), do not apply to the **Griffy Lake Historic District** or to the **Milisen House**.

According to 36 CFR 800.5(a)(1) "An adverse effect is found when an undertaking may alter, directly or indirectly, any of the characteristics of a historic property that qualify the property for inclusion in the National Register in a manner that would diminish the integrity of the property's location, design, setting, materials, workmanship, feeling or association."

Griffy Lake Historic District

Per 36 CFR 800.5(a)(2)(i), the undertaking will cause some "physical destruction" through the extension of the Cascades Trail into the district; however, the conversion of a small portion of the district into a transportation use is not considered an adverse effect.

Per 36 CFR 800.5(a)(2)(ii), there will be no "restoration, rehabilitation, repair, maintenance, stabilization, hazardous material remediation and provision of handicapped access, that is not consistent with the Secretary's Standards for the Treatment of Historic Properties (36 CFR part 68) and applicable guidelines."

Per 36 CFR 800.5(a)(2)(iii), the property will not be removed from its historic location.

Per 36 CFR 800.5(a)(2)(iv), there will be some change "of the character of the property's use or of physical features within the property's setting" through the extension of the Cascades Trail into the district; however, this change will not adversely affect the characteristics for which the Griffy Lake Historic District is considered eligible for listing in the NRHP.

Per 36 CFR 800.5(a)(2)(v), there will not be an "introduction of visual, atmospheric or audible elements that diminish the integrity of the property's significant historic features." Visually there will be a slight change to the context of the property but this change of roadway and intersection will not diminish those characteristics which qualify the property for listing in the NRHP.

Per 36 CFR 800.5(a)(2)(vi), there will be no neglect or deterioration of the property.

Per 36 CFR 800.5(a)(2)(vii), there will be no "transfer, lease, or sale of the property out of Federal ownership or control."

Milisen House.

Per 36 CFR 800.5(a)(2)(i), the undertaking will not cause "physical destruction of or damage to all or part of the property."

Per 36 CFR 800.5(a)(2)(ii), there will be no "restoration, rehabilitation, repair, maintenance, stabilization, hazardous material remediation and provision of handicapped access, that is not

consistent with the Secretary's Standards for the Treatment of Historic Properties (36 CFR part 68) and applicable guidelines."

Per 36 CFR 800.5(a)(2)(iii), the property will not be removed from its historic location.

Per 36 CFR 800.5(a)(2)(iv), there will be some change "of the character of the property's use or of physical features within the property's setting." With the removal of trees on the south side of SR 37, the setting of the house will change but that change does not diminish the property's ability to convey its significance under Criterion B. It is the opinion of the historians that this change in setting does not constitute an adverse effect.

Per 36 CFR 800.5(a)(2)(v), there will not be an "introduction of visual, atmospheric or audible elements that diminish the integrity of the property's significant historic features." A new section of roadway will be introduced but it will not diminish the historic association with Dr. Milisen for which the property is recommended eligible.

Per 36 CFR 800.5(a)(2)(vi), there will be no neglect or deterioration of the property.

Per 36 CFR 800.5(a)(2)(vii), there will be no "transfer, lease, or sale of the property out of Federal ownership or control."

Efforts to Avoid, Minimize and Mitigate

Larger-scale changes to the area were originally considered and included the realignment of North Dunn Street to meet Hillview Drive. This option, along with the possibility of adding a signal, a roundabout, or turn lanes on Old SR 37 were found to be unwarranted and unnecessarily expensive in light of simpler, available solutions. The intersection was initially believed to be the focal point of the problems, especially fatalities, in this area. Detailed analysis of the problems, however, revealed that the intersection itself is less of a problem than are the deficiencies in the roadways near the intersection.

At an agency meeting on March 24, 2014, Eagle Ridge presented a design plans that limit project impacts. The project has been designed to avoid acquisition of property from the parcel on which the Milisen House is located. Trees will be removed from the surrounding parcels but not from that parcel. The project engineer has included "do not disturb" labeling on project plans in order that damage to the gate posts is avoided. Drainage improvements will occur at road's edge, but the shoulder will be located to the south of the existing roadway where trees will be removed. (See Appendix A: Plans and for a meeting summary, see Appendix F: Correspondence.)

6. SUMMARY OF CONSULTING PARTIES AND PUBLIC VIEWS

On January 16, 2012, Eagle Ridge sent a letter describing the proposed project and an invitation to join in consultation to the following: Historic Landmarks Foundation (now, Indiana Landmarks)—Western Regional Office, Monroe County Historian, Monroe County Historic Preservation Board of Review, Historic Preservation Commission, Downtown Bloomington Commission, Preservation Development, Inc., and Bloomington Restorations, Inc. INDOT Cultural Resources Section was copied on the letter. The Historic Preservation Commission and Monroe County Historic Preservation Board of Review replied to the invitation to join consultation affirmatively. SHPO is an agency that participates in consultation. No other responses to the invitation to join consultation were received. (See Appendix C: Consulting Parties and Appendix F: Correspondence.)

On February 17, 2012, Ms. Cheryl Ann Munson, Chair of the Monroe County Historic Preservation Board of Review, sent a letter to Eagle Ridge Engineering after reviewing the Early Coordination package. Ms. Munson's comments included 1) "Members of the Board had observed features or ruined structures relating to the historic limestone industry in the western portion of the project area" that would warrant further documentation should they fall within the

APE, and 2) a small portion of the western project area, “from the toe slope of the uplands in the center of the project area to the floodplain in the western part of the area, may be sensitive for prehistoric archaeological resources,” and should be surveyed for archaeological resources. (See Appendix F: Correspondence.)

On April 4, 2012, SHPO sent a letter regarding the archaeology report that stated: “Based upon the documentation available to the staff of the Indiana SHPO, we have not identified any currently known archaeological resources listed in or eligible for inclusion in the National Register of Historic Places (“NRHP”). Therefore, we concur with the opinion of the archaeologist, as expressed in the Indiana archaeological short report (Alexander, 2/27/12), that no further investigations appear necessary at this proposed project area.” The letter also reminded the consultants that “[i]f any archaeological artifacts or human remains are uncovered during construction, demolition, or earthmoving activities, state law ... requires that the discovery be reported to the Department of Natural Resources within two (2) business days.” (See Appendix F: Correspondence.)

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On May 1, 2012, Devin Blakenship responded to the HPR on behalf of the Monroe County Historic Preservation Board of Review: “Your firm’s thorough report thoroughly addresses the APE to our satisfaction given that the final design has not been determined.” Blankenship added, “It appears that the properties eligible for the National Register are outside of our planning area.” (See Appendix F: Correspondence.)

On March 24, 2014, INDOT, SHPO, the Monroe County engineer, and the project consultants met to discuss the historic properties and the potential impacts to them. SHPO requested that the following items be sent to that office: an addendum ASR, Cascades Trail mapping, information regarding the original parcel of the Milisen House, justification for the property boundary for the Milisen House, and photographs of similar prefabricated metal truss bridges. (See Appendix F: Correspondence for meeting summary.)

In a letter dated May 1, 2014, SHPO concurred with the recommendation of the addendum ASR (Alexander, 6/14/2013) that had been transmitted on April 4, 2014. The letter also reminded the consultants that “[i]f any archaeological artifacts or human remains are uncovered during construction, demolition, or earthmoving activities, state law ... requires that the discovery be reported to the Department of Natural Resources within two (2) business days.” (See Appendix E: Report Summaries and Appendix F: Correspondence.)

In a letter dated June 2, 2014, SHPO responded to the additional project information W&A had provided in a letter sent to SHPO and consulting parties on May 1, 2014. SHPO reiterated previous statements that no archaeological resources listed in, or eligible for listing in, the NRHP are present within the APE. Regarding structures, SHPO reaffirmed that the Milisen House and Griffy Lake Historic District are considered NRHP-eligible and that “the recommended historic property boundary for the Milisen House appears to be appropriate.” SHPO added that “it is our understanding that the Milisen House stone gateposts, a contributing feature of the property, will be avoided and protected during construction as a project commitment.” Further, the letter stated

“we agree with the consultant’s assessment that this undertaking does not appear to diminish the characteristics that qualify the Milisen House or the Griffy Lake Historic District for inclusion in the [NRHP].”

Finally, SHPO indicated that it would be appropriate for INDOT on behalf of FHWA, “to analyze the information that has been gathered from the Indiana SHPO, the general public, and any other consulting parties to make the necessary determinations and findings.” (See Appendix F: Correspondence.)

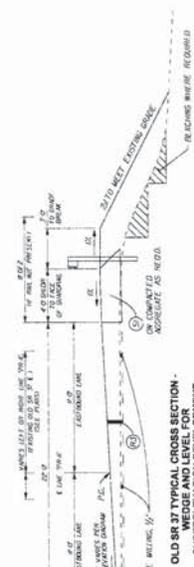
No other comments were received.

A public notice of No Adverse Effect will be posted in the *Bloomington Herald-Times* and the public will be afforded thirty (30) days to respond. If appropriate, this document will be revised after the expiration of the public comment period.

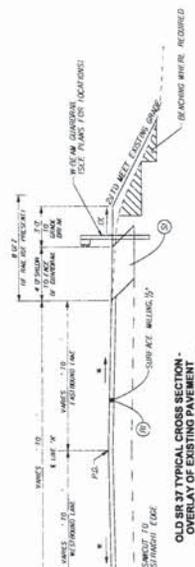
Appendices

- Appendix A: Plans**
- Appendix B: Maps**
- Appendix C: Consulting Parties**
- Appendix D: Photographs**
- Appendix E: Report Summaries**
- Appendix F: Correspondence**

Section 106
APPENDIX A. Plans



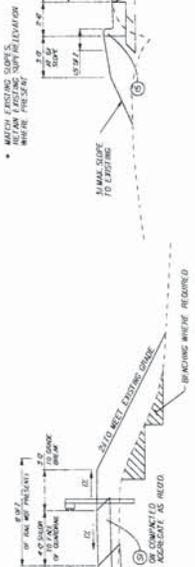
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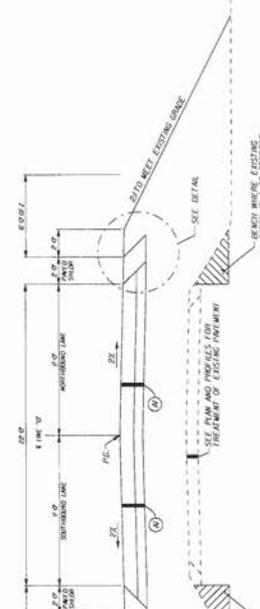
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OLD SR 37 TYPICAL CROSS SECTION - RECONSTRUCTION / NEW PAVEMENT WITH SUPERELEVATION DEVELOPMENT
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 STA 28+76.65 TO STA 29+53.62 'N'



OLD SR 37 TYPICAL CROSS SECTION - RECONSTRUCTION / NEW PAVEMENT FULL SUPERELEVATION
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 STA 28+76.65 TO STA 29+53.62 'N'



TYPICAL CROSS SECTION (DUNN STREET)



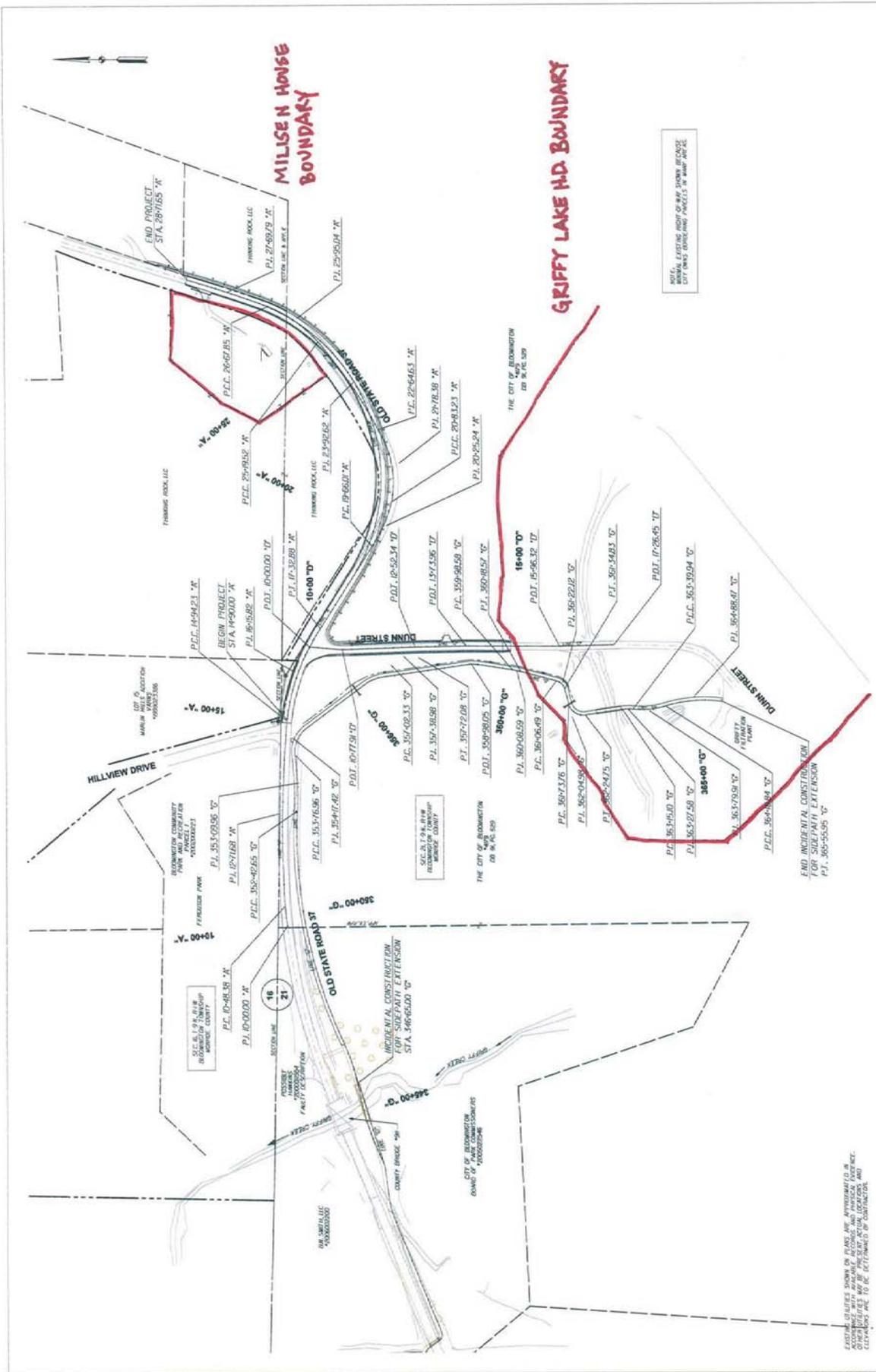
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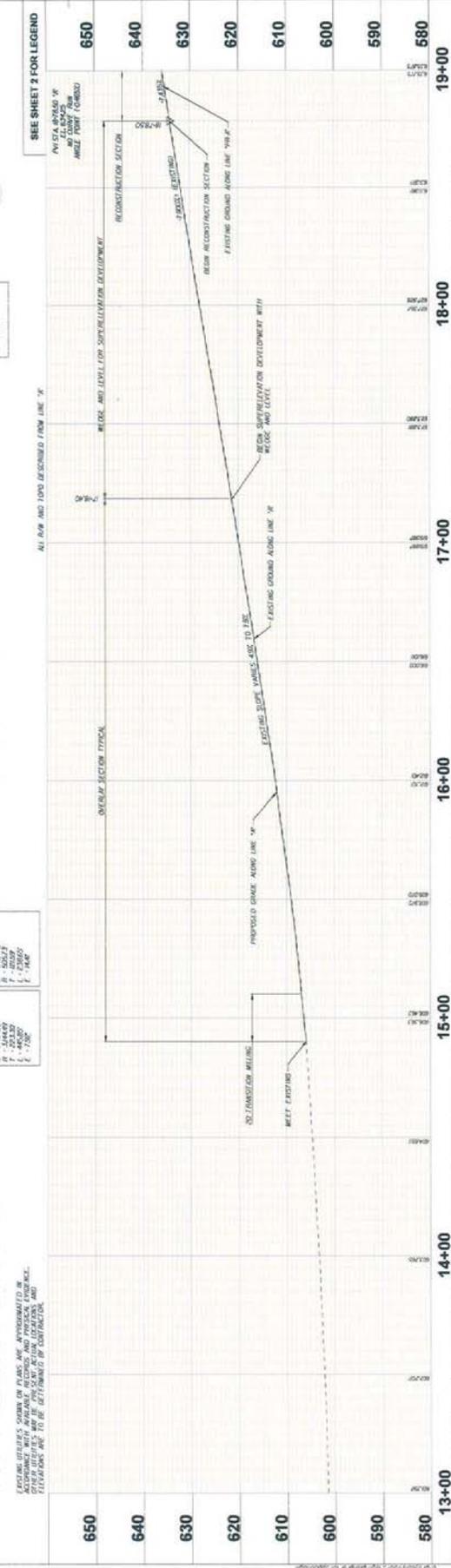
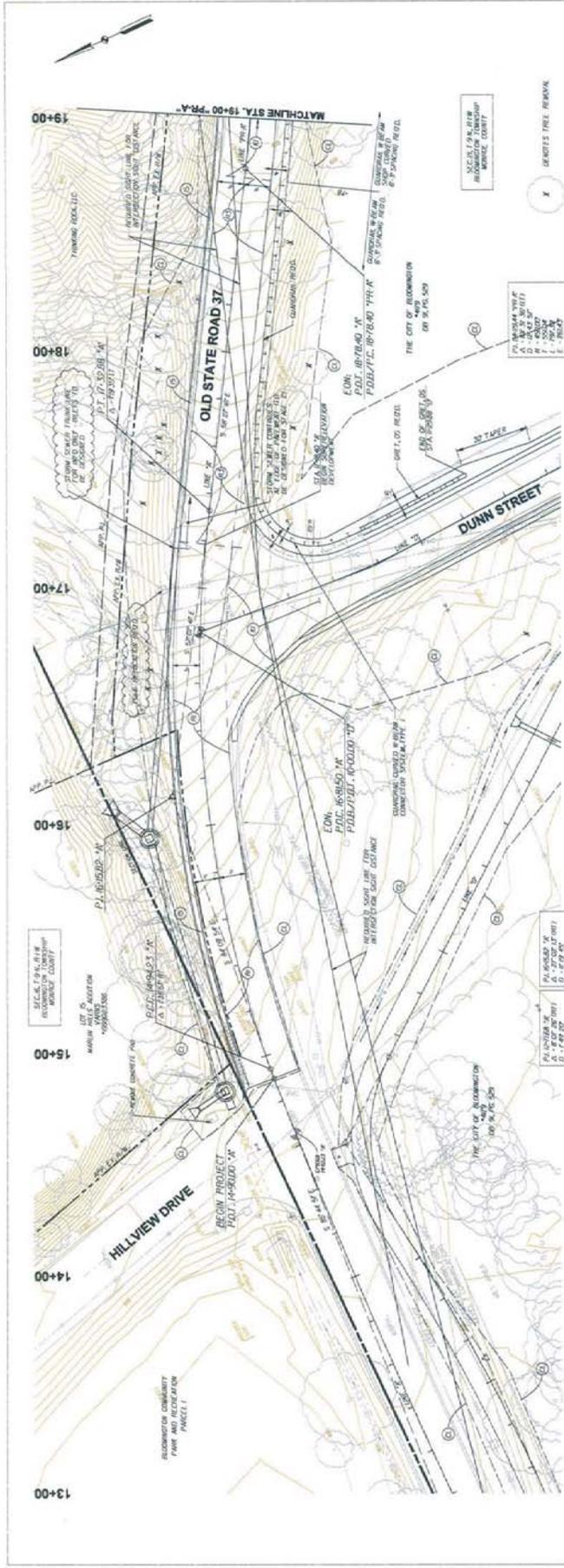
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TOTAL SHEETS	40
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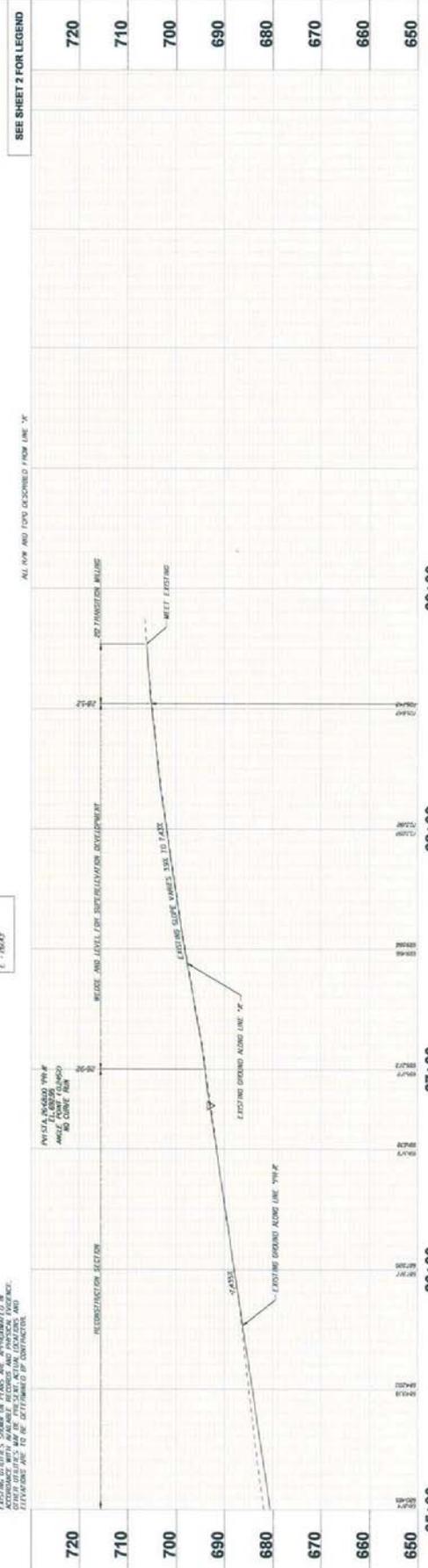
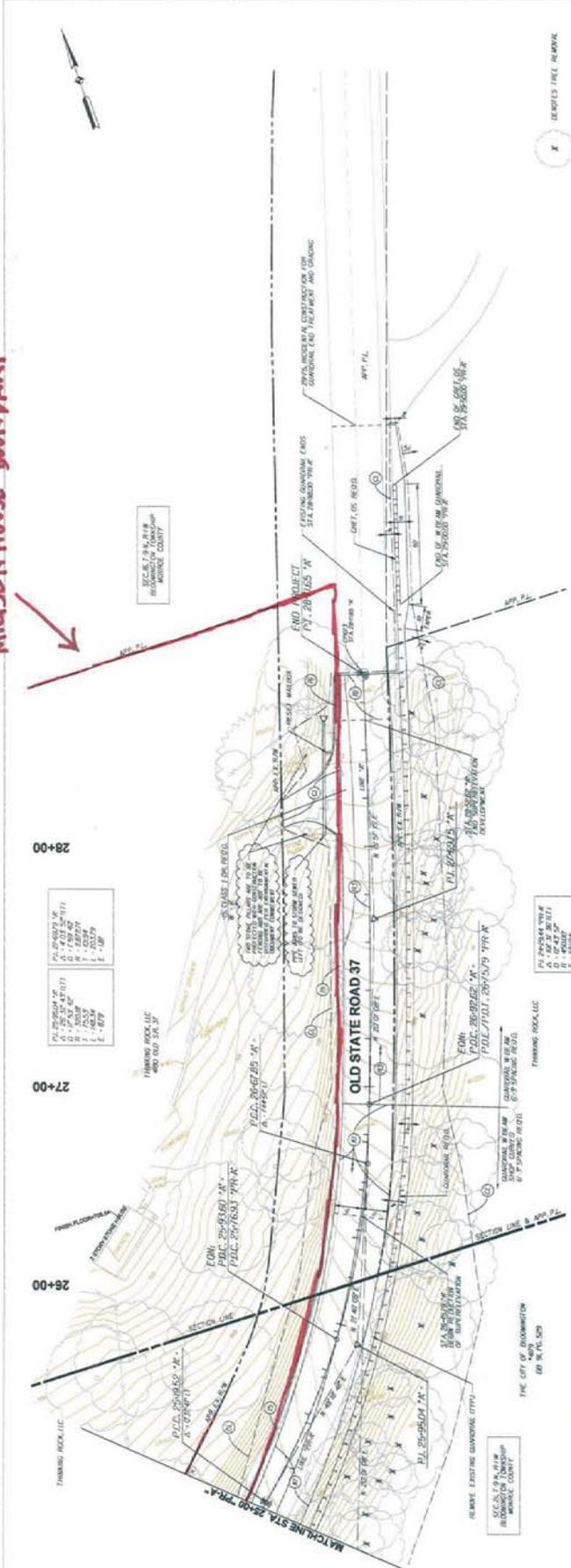


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END INCIDENTAL CONSTRUCTION FOR SIDEWALK EXTENSION P.I. 365-5535 'D'					



FOR REVIEW ONLY		CITY OF BLOOMINGTON OLD S.R. 37 / DUNN STREET		PLAN AND PROFILE TRAIL - LINE 'A' AND 'PR-A'	
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MILSEN HOUSE BOUNDARY



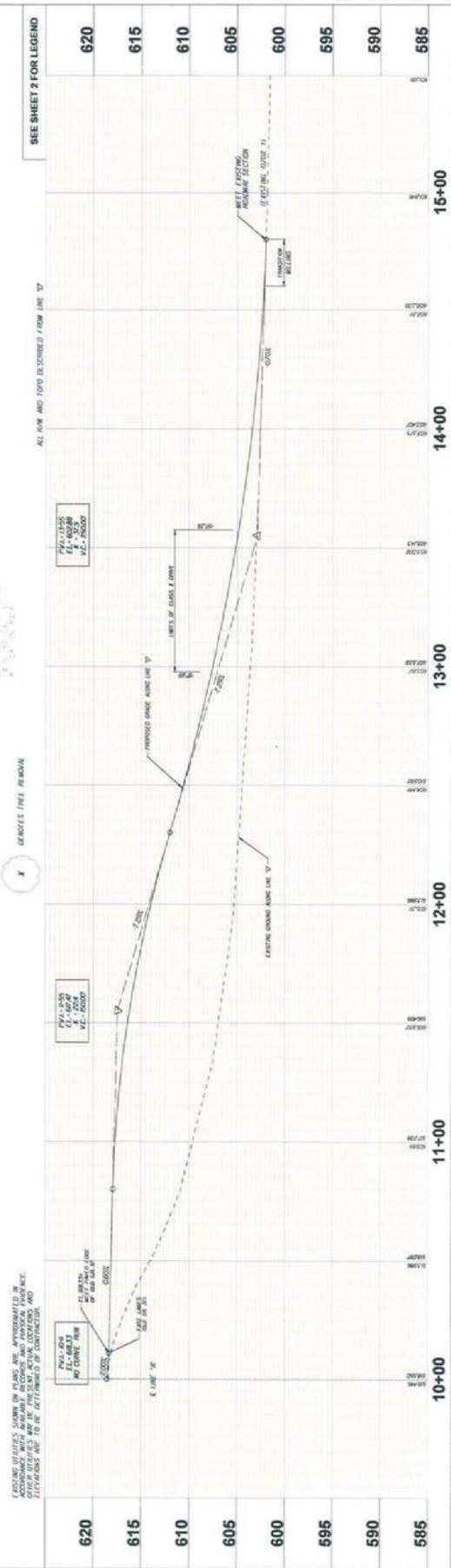
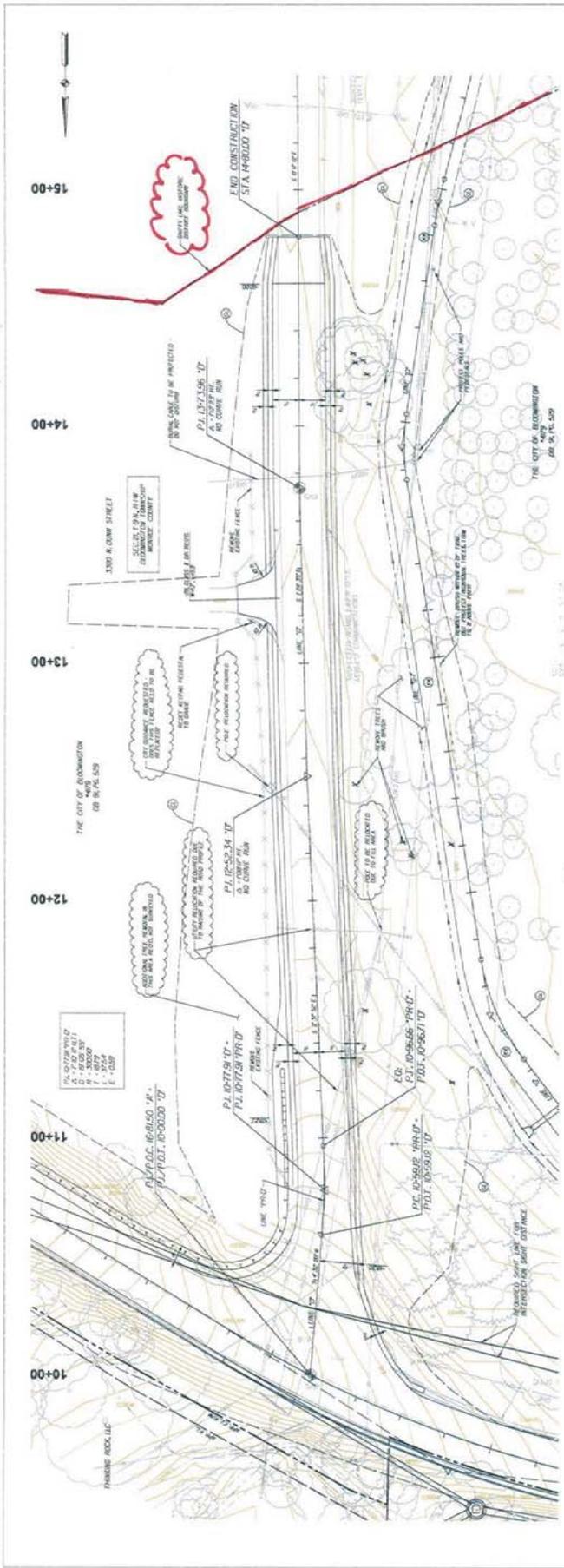
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 PROJECT: [Project Name]

FOR REVIEW ONLY

CITY OF BLOOMINGTON
 OLD S.R. 37 / DUNN STREET
 PLAN AND PROFILE
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ISSUED FOR: [Name]
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 CONTRACT: [Contract Number]
 SHEETS: 7
 PROJECT: [Project Name]



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FOR REVIEW ONLY

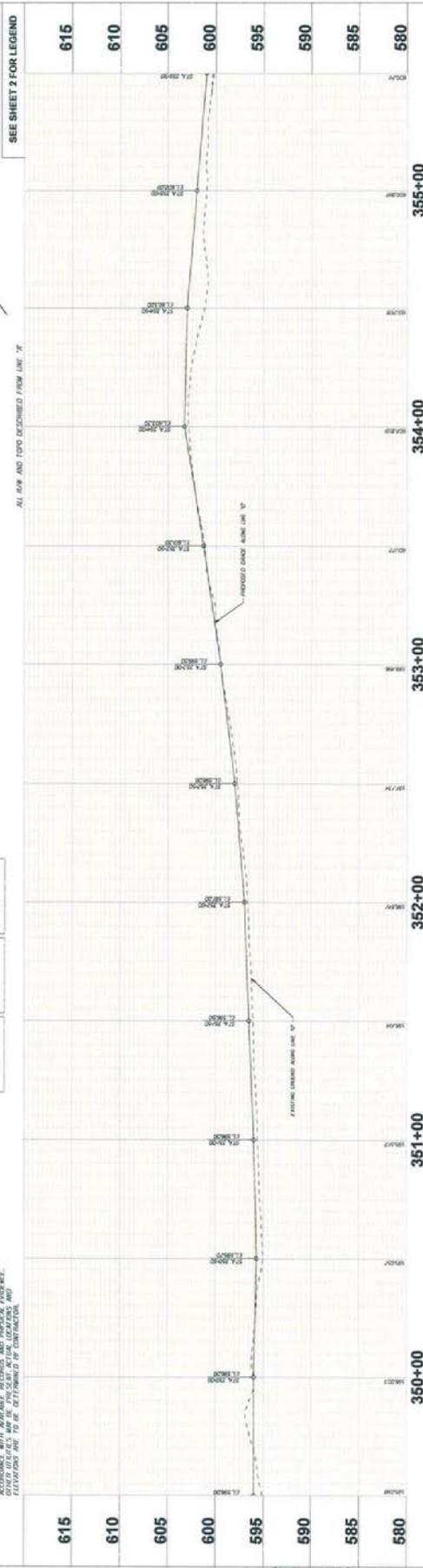
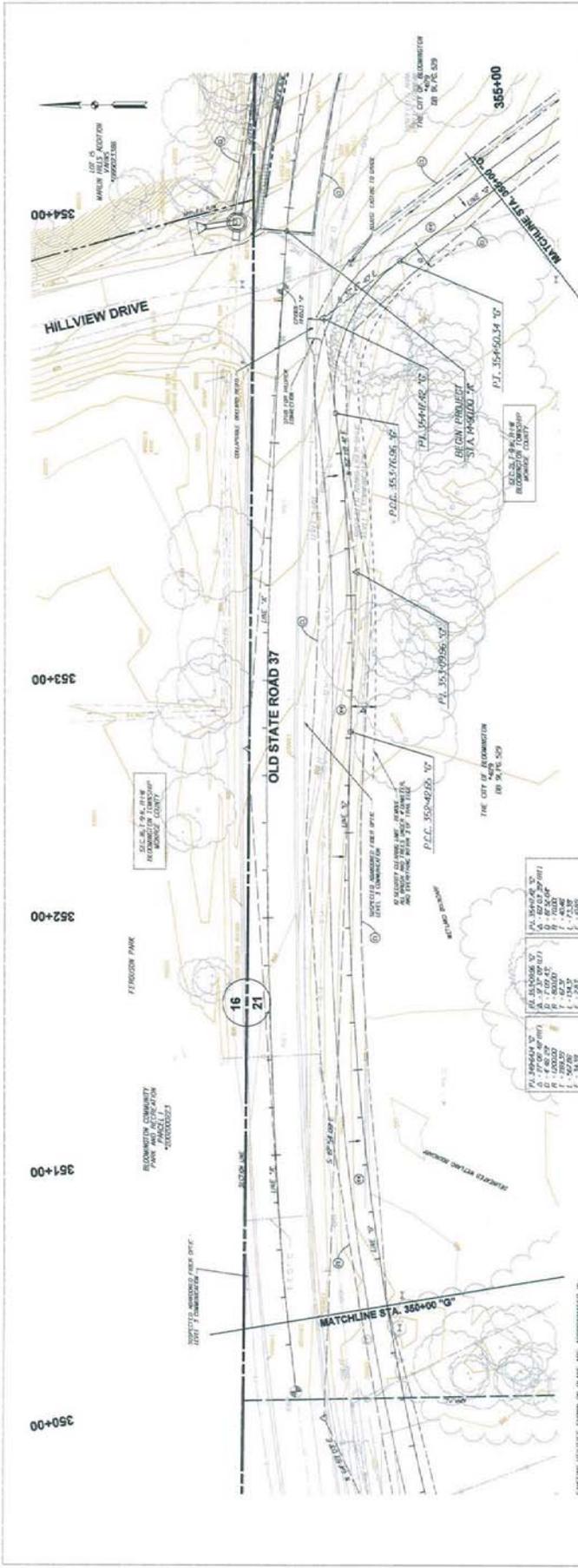
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DUNN STREET - LINE "D"

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PLANNING DEPARTMENT
CITY OF BLOOMINGTON



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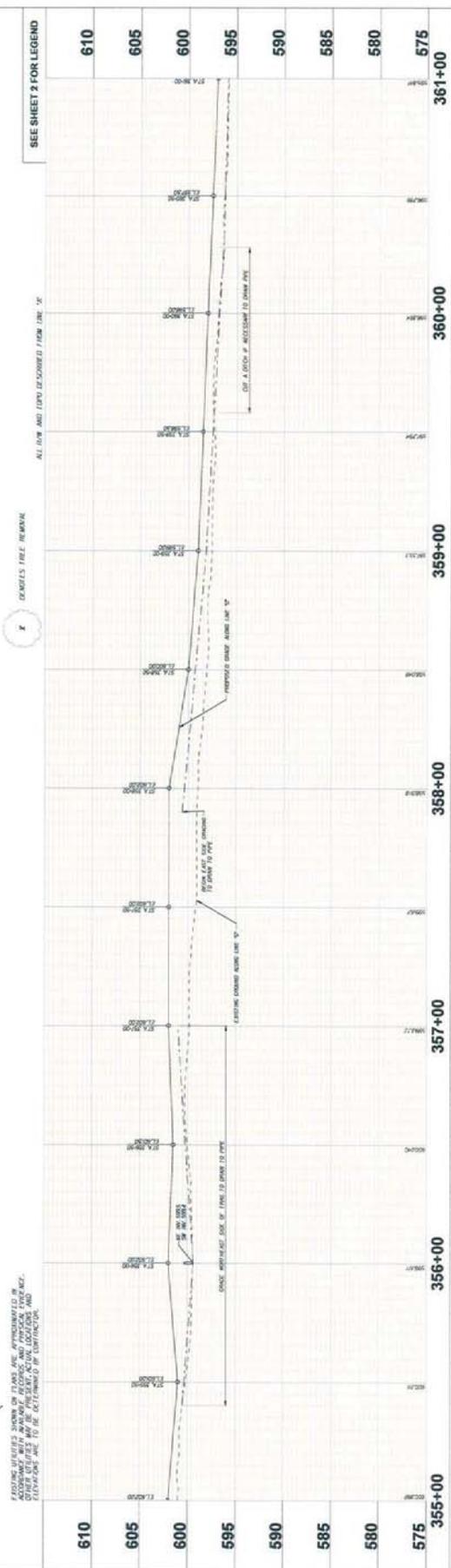
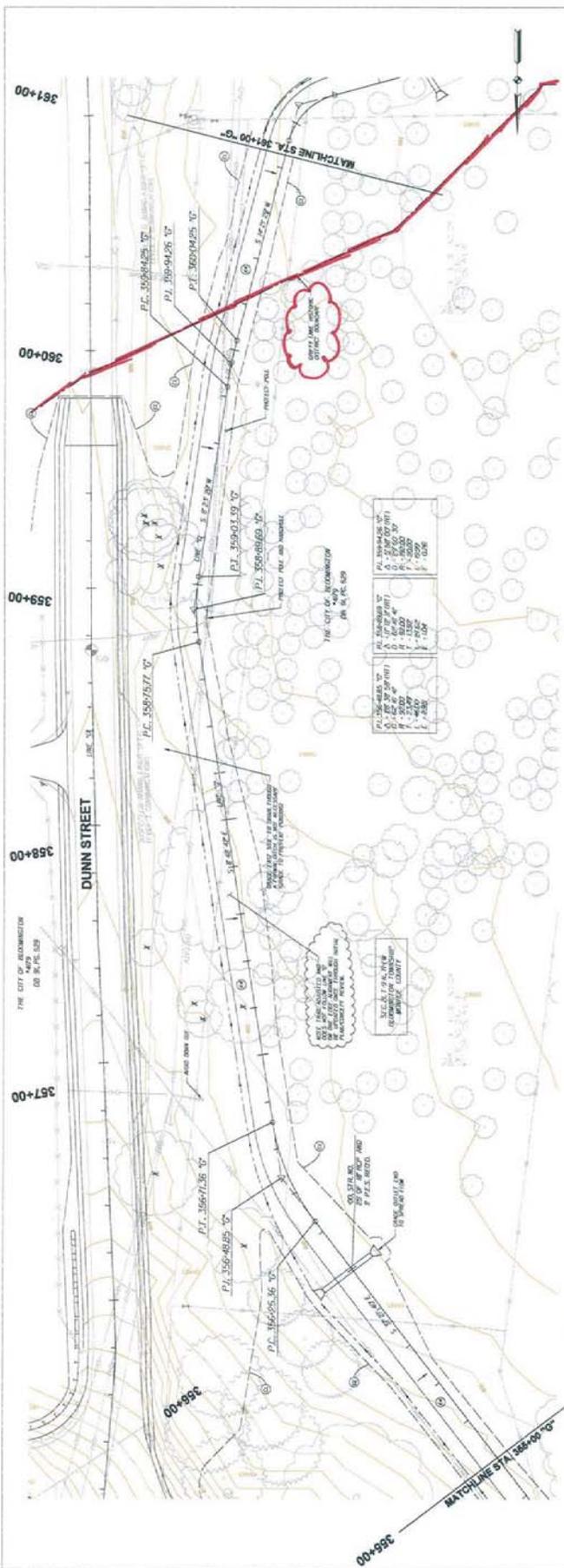
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OLD S.R. 37 / DUNN STREET

PLAN AND PROFILE

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HORIZONTAL SCALE VERTICAL SCALE DESIGNER SHEETS CONTRACT PLOT NO.		CITY OF BLOOMINGTON OLD S.R. 37 / DUNN STREET PLAN AND PROFILE TRAIL-LINE 'G'		DESIGNER CHECKED DATE SCALE SHEET NO.										
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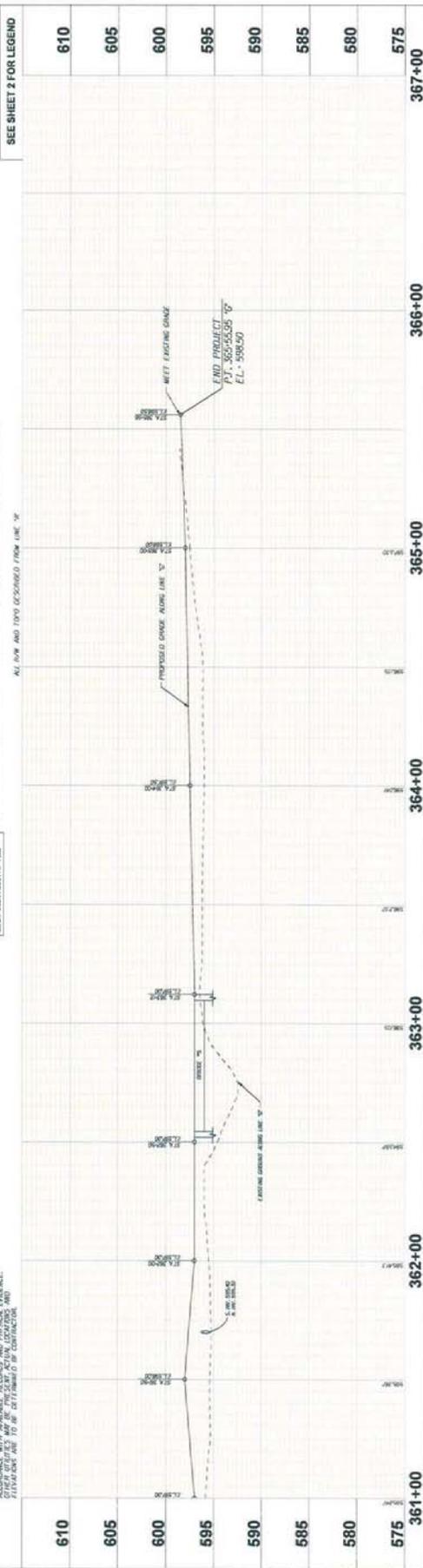
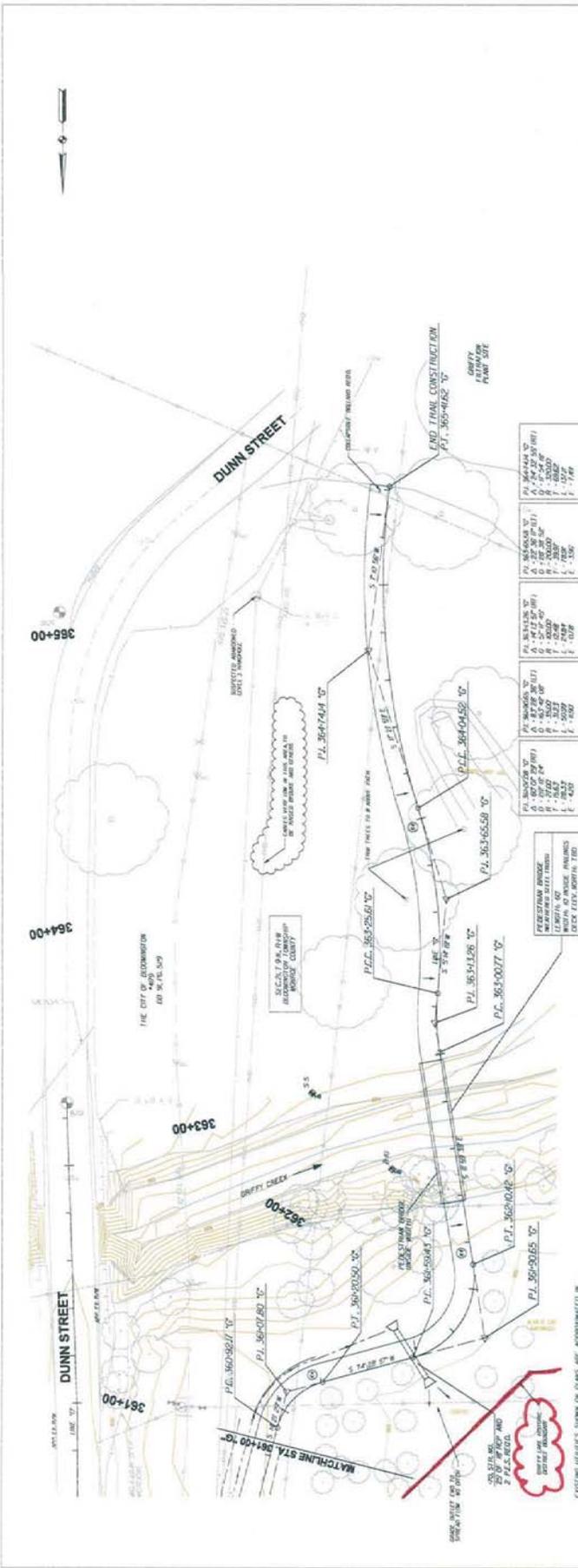
FOR REVIEW ONLY

SEE SHEET G FOR LEGEND

ALL DIM. AND DIM. DESCRIBED FROM LINE 'G'

EXISTING TREE REMAINS

EXISTING UTILITY SHOWN ON PLANS ARE APPROXIMATE TO ACCORDANCE WITH AVAILABLE RECORDS AND APPLICABLE CODES. CLARIFICATIONS ARE TO BE DETERMINED BY CONTRACTOR.



STATION	ELEVATION	DESCRIPTION
361+00	575	MANHOLE
362+00	580	MANHOLE
363+00	585	MANHOLE
364+00	590	MANHOLE
365+00	595	MANHOLE
366+00	600	MANHOLE
367+00	610	MANHOLE

FOR REVIEW ONLY

APPROVED FOR APPROVAL

DESIGNER: [Name]

CHECKED: [Name]

DRAWN: [Name]

DATE: [Date]

PROJECT: [Project Name]

SCALE: [Scale]

VERTICAL SCALE: [Scale]

HORIZONTAL SCALE: [Scale]

PROJECT: [Project Name]

DATE: [Date]

PROJECT: [Project Name]

DATE: [Date]

PROJECT: [Project Name]

DATE: [Date]

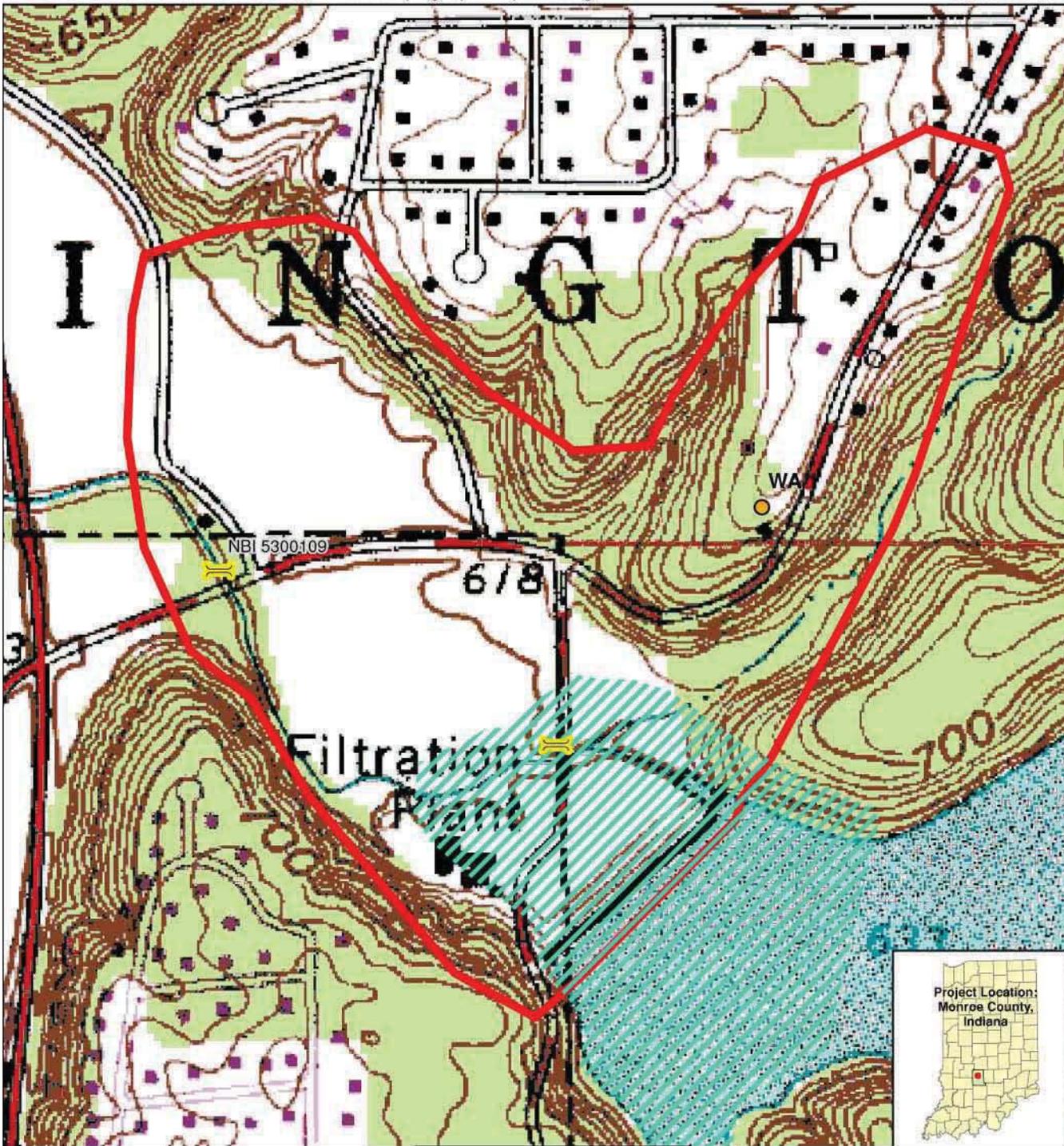




Section 106
APPENDIX B. Maps



March 29, 2012



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

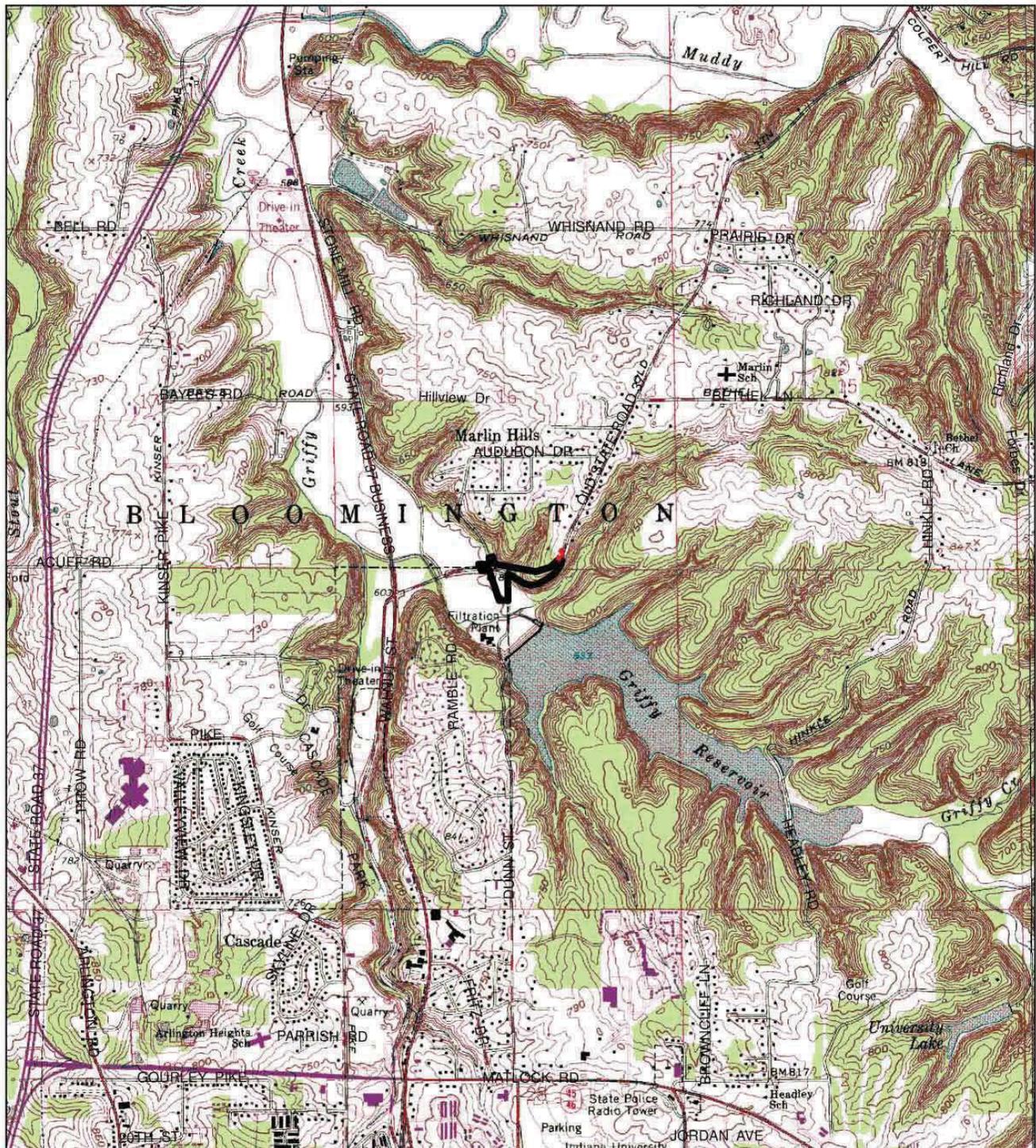


Figure I. Additional project area as shown on a portion of USGS 7.5' series, Bloomington, Indiana topographic quadrangle.

WEINTRAUT & ASSOCIATES, INC.

Phase Ia Archaeological Investigation Addendum Report // Des. No.: 1297060 | June 14, 2013

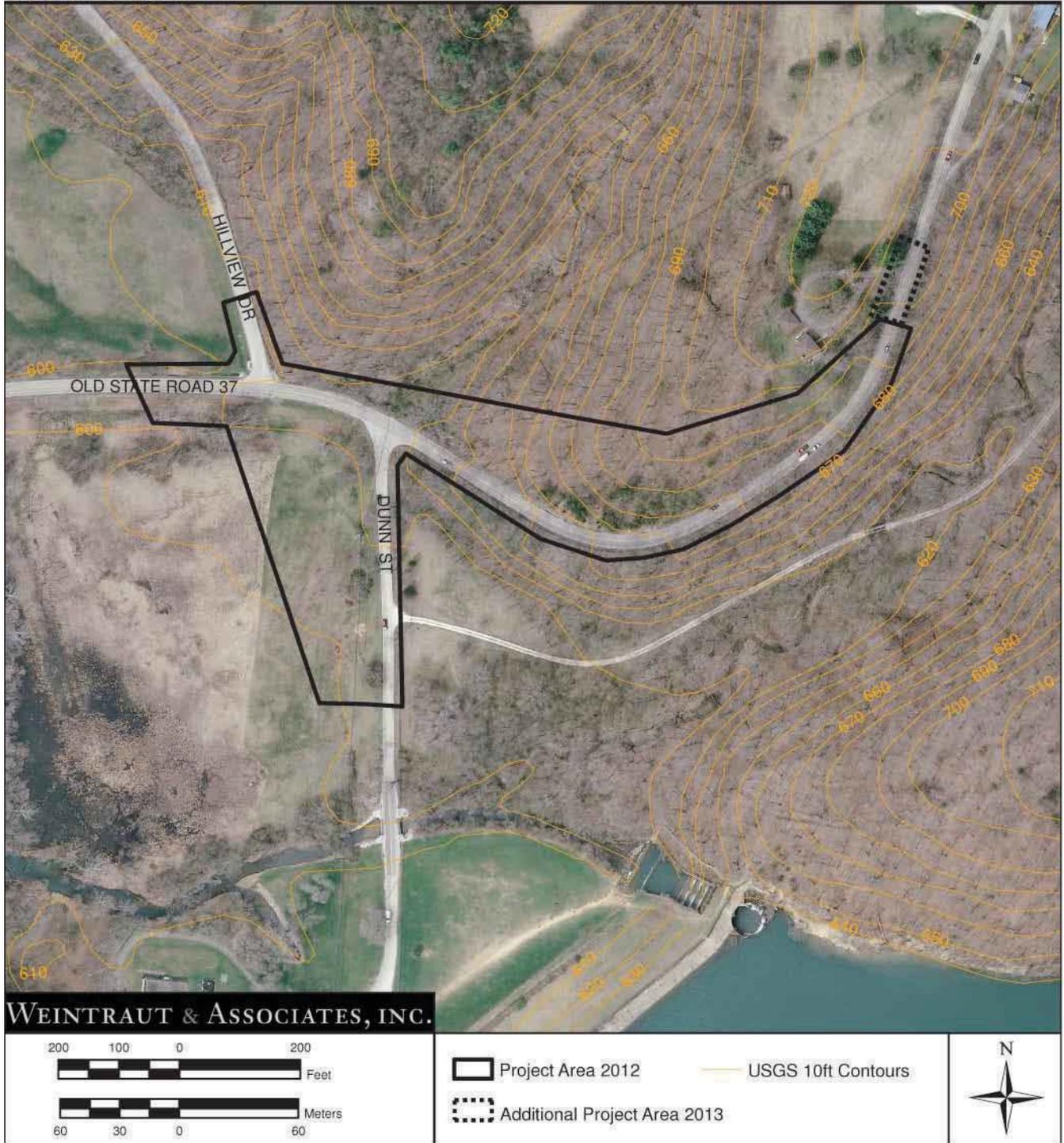
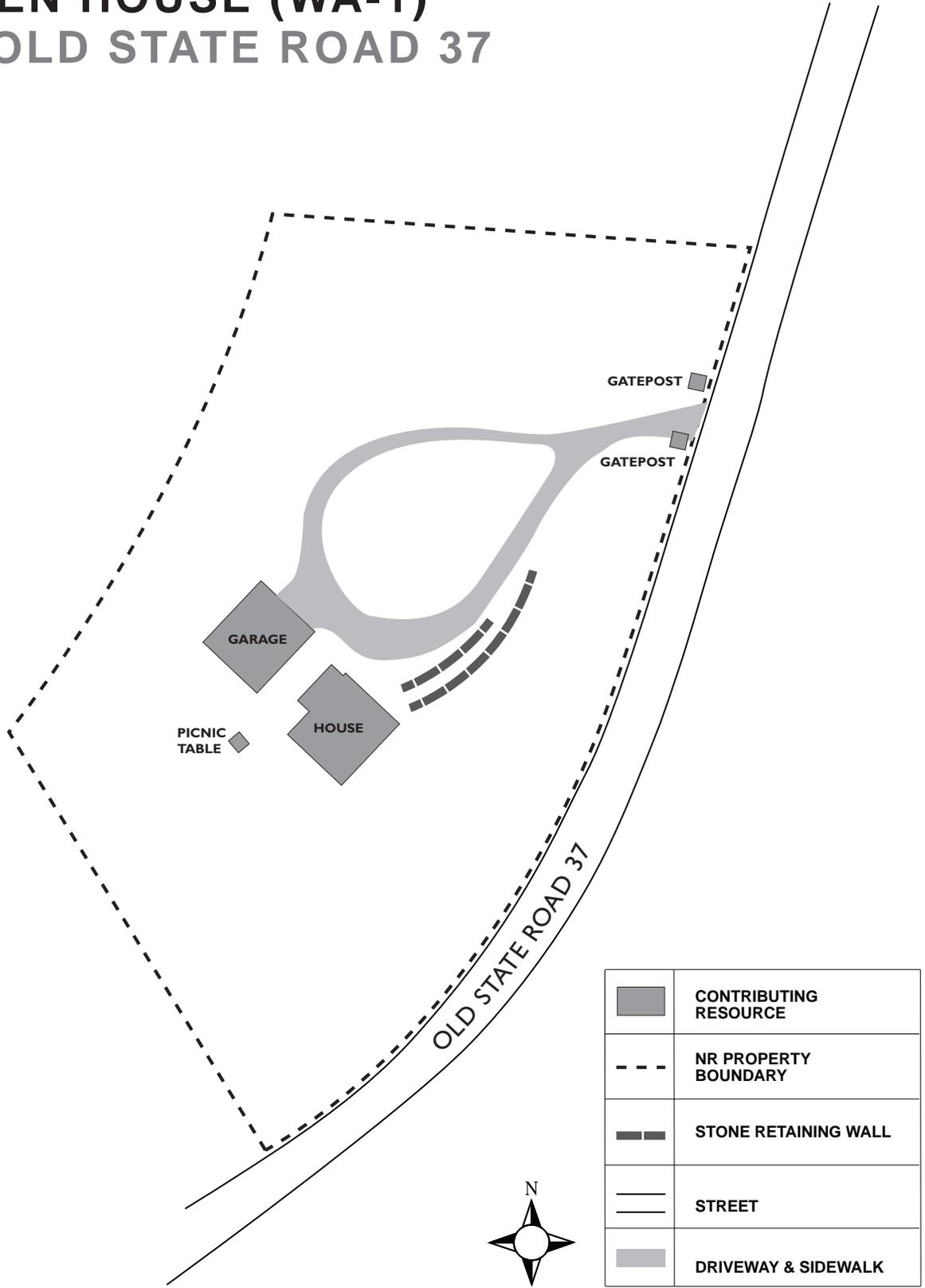


Figure 2. Additional project area as shown on a 2010 aerial photograph

MILISEN HOUSE (WA-1)

4180 OLD STATE ROAD 37



Section 106
APPENDIX C. Consulting Parties

**Old SR 37 and North Dunn Street
Bloomington Township, Monroe County, Indiana
Des. No.: 1297060 // DHPA No.: 12921**

**Individuals, Agencies, and Organizations
Invited to join Consultation**

(Yellow highlighting indicates acceptance of invitation to join consultation)

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

Preservation Development, Inc.
Attn. Duncan Campbell
218 N. Rogers Street
Bloomington, IN 47404

Downtown Bloomington Comm.
Attn. Talisha Coppock
302 S. College Avenue
Bloomington, IN 47403

Nancy Hiestand, Program Manager
Historic Preservation Commission
City Hall at Showers, Suite 130
PO Box 100
Bloomington, IN 47402

Bloomington Restorations, Inc.
Attn. Steve Wyatt
2920 E. 10th Street
Bloomington, IN 47408

Monroe County Historic Preservation
Board of Review
Planning Dept., County Courthouse
Bloomington, IN 47404

Historic Landmarks Foundation
Western Regional Office
643 Wabash Avenue
Terre Haute, IN 47807

Mary Kennedy
INDOT CRS
IGCN, Room N642
100 N. Senate Avenue
Indianapolis, IN 46204

Ron Baldwin
Monroe County Historian
4792 Conti Street
Bloomington, IN 47404

Section 106 Consulting Party Response Sheet

Consulting Party Contact Information:

Contact Name & Address: NANCY HIESTAND
HOUSING + NEIGHBORHOOD DEV.
P.O. BOX 100
BLOOMINGTON, IN 47402

Daytime Phone: 812.349.3507

We DO agree to be a Consulting Party for this project.
(Do/Do Not)

Project Comments / Concerns (Optional):

Signature: _____

Section 106 Consulting Party Response Sheet

Consulting Party Contact Information:

Contact Name & Address: Monroe County Historic Preservation
Board of Review
501 N. Market St, Suite 224
Bloomington, IN 47404

Daytime Phone: 812-349-2560

We agree to be a Consulting Party for this project.
(Do/Do Not)

Project Comments / Concerns (Optional):

Section 106
APPENDIX D. Photographs



Modern bridge over Griffy Creek_NBI 5300109_View to W



Millisen House, 4180 N Old SR 37_Concrete cistern covers in yard_W of ...



Milisen House, 4180 N Old SR 37_Detail of doorway hood_SE elevation



Milisen House, 4180 N Old SR 37_Detail of doorway_SE elevation



Milisen House, 4180 N Old SR 37_Detail of windows_SE elevation



Milisen House, 4180 N Old SR 37_Garage_NE elevation



Milisen House, 4180 N Old SR 37_Garage_SE and SW elevations



Milisen House, 4180 N Old SR 37_NE and NW elevations



Milisen House, 4180 N Old SR 37_E Stone pillar



Milisen House, 4180 N Old SR 37_Stone table_W of house



Milisen House, 4180 N Old SR 37_View NW from road



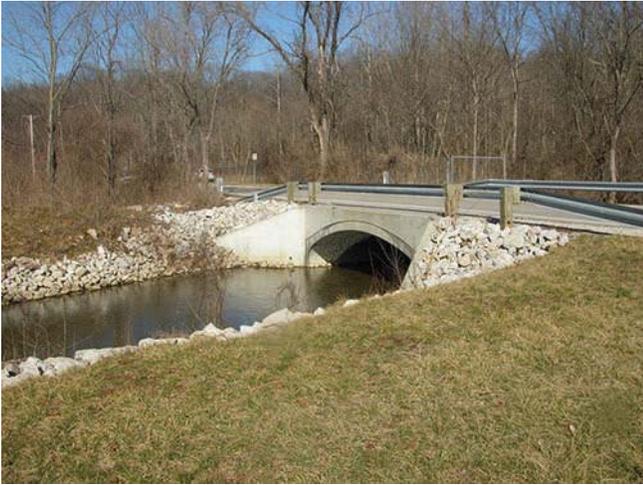
Milisen House, 4180 N Old SR 37_SW and NW elevations



Milisen House, 4180 N Old SR 37_NW elevation



House, 4190 N Old SR 37_View to SW



Modern bridge on N Dunn St_S of Old SR 37_View to NE



Griffy Lake Flood Plain (Dog Park)_View to E



House, Old Stone Mill Drive



Garage, Old Stone Mill Drive



Griffy Lake Dam_View to NE



Griffy Lake Dam_View to SE



Griffy Lake Dam_View to SW



Griffy Lake Spillway_View to SE



N Dunn St_View S from bridge



View E on Old SR 37 from N Hillview Dr



View NE on Old SR 37 from 4180 N Old SR 37



View NE on Old SR 37 from 4215 N Old SR 37



View from N Hillview Dr S toward Old SR 37



View SE from Old Stone Mill Rd and Old SR 37



View SW from Dog Park near Griffy Lake Dam



View to NW from Old SR 37 and N Dunn St 2



View W from N Hillview Dr and Old SR 37



Water Treatment Plant_View to SW



Houses, 4200 Block Old SR 37, S side



House, 4210 Old SR 37



House, 4215 Old SR 37



Houses, 4235 and 4275 Old SR 37



View NE on Old SR 37 from near 4180 OSR37



View NE from Dog Park toward Millisen house location



View SW toward project area on Old SR 37 from near 4235 OSR 37



Milisen House, dining room corner cabinet



Milisen House, upstairs window



Milisen House, upstairs doors



Milisen House, upstairs bath



Milisen House, door to sleeping porch



Milisen House, view of living room from stair



Milisen House, staircase



Milisen House, dining room

Section 106
APPENDIX E. Report Summaries



Archaeological Short Report
Phase Ia Archaeological Records Check and Field Reconnaissance: Safety
Improvements at Old SR 37 and North Dunn Street, Monroe County, Indiana
INDOT Des. No.: 1297060

Prepared for
**The City of Bloomington/
Federal Highway Administration**

Prepared by
WEINTRAUT & ASSOCIATES, INC.
Principal Investigator: Dawn A. J. Alexander, M.A.
P.O. Box 5034
Zionsville, Indiana
(317) 733-9770

February 28, 2012



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: Dawn A. J. Alexander

Date (month, day, year): February 27, 2012

Project Title: Phase Ia Archaeological Records Check and Field Reconnaissance: Safety Improvements at Old SR 37 and North Dunn Street, Monroe County, Indiana

PROJECT OVERVIEW

Project Description:

[Adapted from Eagle Ridge Civil Engineering Services, LLC]. The City of Bloomington with funding from the Federal Highway Administration proposes to resolve long-term safety problems at the intersection of Old SR 37 and North Dunn Street and along the section of SR 37 just east of this intersection. This location is one of the highest accident areas in Bloomington and Monroe County. Multiple fatalities have occurred over the last several years. On Old SR 37, the roadway is in a series of curves near the intersection. Sight distance is limited along Old SR 37 due to the small radii of the existing curves, and the steep hillside that was originally excavated to build Old SR 37. The hill on the inside of the curve limits sight distance along Old SR 37 but also to the intersection with Dunn Street. The roadway was not built to modern standards and lacks shoulders. The lack of shoulders greatly increases the risk for those who stray off the edge of the road, making recovery more difficult.

Dunn Street meets Old SR 37 at a T-intersection. Approximately 200 ft to the west of Dunn Street, Hillview Drive connects to Old SR 37 from the north at a second T-intersection. Both Dunn Street and Old SR 37 are two-lane roads without shoulders. Old SR 37 offers a free movement. Dunn Street and Hillview Drive have stop signs. Intersection sight distance for those stopped at Dunn Street is limited, especially to the east because Old SR 37 curves. The two intersections do not offer any turn lanes, requiring traffic wishing to turn left off of Old SR 37 to sometimes wait with traffic coming behind them. This is more problematic at Dunn Street where west-bound traffic is coming out of the curves.

It is not yet clear what type of intersection treatment, roadway alignment, or improvements to roadway sections will offer the best benefits. This archaeological investigation is being conducted as one of several components of a Major Assessment Activity that will guide project design. Lane widths and configuration will be reviewed for opportunities to improve safety. Some adjustment of the travel lanes is possible and the addition of paved shoulders is likely. Dunn Street may be realigned to meet Hillview Drive, which would introduce some new curvature. Old SR 37 is curved throughout the project and this geometry is to be reviewed in detail. It is likely that some adjustment to the roadways footprint would be made in order to reduce the complexity and inconsistency of the existing compound and broken back curvature that currently exists. Hillview Drive is relatively flat and straight and no significant adjustment is proposed. Depending on feedback from the City of Bloomington and its Bike/Ped Commission, the roadways may include provisions for bicycle facilities (bike lanes, wider travel lanes, or a paved shoulder to serve as a bicycle area).

The project area is located at the city limits and was formerly part of unincorporated Monroe County. It measures approximately 1600 ft along Old SR 37 (1,200 ft east of North Dunn Street to 400 ft west of North Dunn Street) and approximately 600 ft along North Dunn Street.

INDOT Designation Number/ Contract Number: 1297060 Project Number:

DHPA Number: Approved DHPA Plan Number:

RECOMMENDATION

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

Cemetery Name:

Other Recommendations/Commitments:

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

Attachments

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



Historic Property Report
Intersection Safety Improvements at Old SR 37 and North Dunn Street
Des. No.: 1297060
In the City of Bloomington, Monroe County, Indiana

Prepared for
City of Bloomington/Federal Highway Administration

Prepared by
WEINTRAUT & ASSOCIATES, INC.

Principal Investigator: Dr. Linda Weintraut

Author: Kelly Lally Molloy

P.O. Box 5034

Zionsville, Indiana

(317) 733-9770

(Linda@weintrautinc.com)

March 2012

Executive Summary

The City of Bloomington intends to improve the intersection of Old SR 37 and North Dunn Street in the township of Bloomington in Monroe County, Indiana. The City wishes to resolve the long-term safety problems at this location through the permanent reduction in both the number and severity of accidents in this area. It is not yet clear what type of intersection treatment, what roadway alignment, or improvements to roadway sections will offer the best benefits. Because of this, the project is starting with a major assessment activity. The project area for this project is approximately 1,600 feet along Old SR 37 (1,200 feet east of Dunn to 400 feet west of Dunn), and approximately 600 feet along Dunn Street.

The intersection of Old SR 37 and North Dunn Street lies on the north side of Bloomington, north of Griffy Lake. The APE was initially drawn a quarter-mile distance from the project ends and then narrowed based on the view to the improvements. Due to the compact nature of the project, the APE generally includes those parcels immediately adjacent to the roadway. (See map of APE in Appendix 2.)

Project historians who meet the Secretary of the Interior's Professional Standards identified and evaluated historic properties within the APE for this project in accordance with Section

106 of the National Historic Preservation Act (1966), as amended, and 36 C.F.R. Part 800 (Revised January 2012).

Within the APE for this project, there were no properties listed in the National Register of Historic Places (NR). There is one district recommended eligible for the NR: the Griffy Lake Historic District. There are no other historic properties recommended eligible for the NR.

On April 30, 2012, Dr. James Glass, the state's Deputy Historic Preservation Officer, recommended that the Milisen House at 4180 Old SR 37 be considered "eligible for inclusion under Criterion B for its association with Dr. Robert Milisen, a nationally recognized researcher in the field of speech disorders."



Phase Ia Archaeological Investigation Addendum Report

For Safety Improvements at Old SR 37 and North Dunn Street

Monroe County, Indiana

Des. Nos.: 1297060

Prepared for
Eagle Ridge Civil Engineering Services, LLC

Prepared by
WEINTRAUT & ASSOCIATES, INC.

Principal Investigator: Dawn Alexander, M.A.

P.O. Box 5034

Zionsville, Indiana

(317) 733-9770

(Linda@weintrautinc.com)

June 14, 2013



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: Dawn A. J. Alexander

Date (month, day, year): June 14, 2013

Project Title: Phase Ia Archaeological Investigation Addendum Report for Safety Improvements at Old SR 37 and North Dunn Street, Monroe County, Indiana

PROJECT OVERVIEW

Project Description:

[Adapted from Eagle Ridge Civil Engineering Services, LLC]. The City of Bloomington with funding from the Federal Highway Administration proposes to resolve long-term safety problems at the intersection of Old SR 37 and North Dunn Street and along the section of SR 37 just east of this intersection. This location is one of the highest accident areas in Bloomington and Monroe County. Multiple fatalities have occurred over the last several years. On Old SR 37, the roadway is in a series of curves near the intersection. Sight distance is limited along Old SR 37 due to the small radii of the existing curves, and the steep hillside that was originally excavated to build Old SR 37. The hill on the inside of the curve limits sight distance along Old SR 37 but also to the intersection with Dunn Street. The roadway was not built to modern standards and lacks shoulders. The lack of shoulders greatly increases the risk for those who stray off the edge of the road, making recovery more difficult.

In March 2013, Eagle Ridge Civil Engineering Services requested Weintraut & Associates (W&A) to review an additional work space, extending from the 2012 project area footprint, at the north/east terminus of the proposed project area.

INDOT Designation Number/ Contract Number: 1297060 Project Number:

DHPA Number: 12921 Approved DHPA Plan Number:

Prepared For: Eagle Ridge Civil Engineering Services, LLC

Contact Person: Brock Ridgway, P.E.

Address: 1321 Laurel Oak Drive

City: Avon State: IN ZIP Code: 46123

Telephone Number: (317) 370-9672 E-mail Address: bridgway@eagleridgecivil.com

Principal Investigator: Dawn Alexander, M.A.

Signature:

Company/Institution: Weintraut & Associates, Inc.

Address: P. O. Box 5034

WEINTRAUT & ASSOCIATES, INC.

Phase Ia Archaeological Investigation Addendum Report // Des. No.: 1297060 | June 14, 2013

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

.....
WEINTRAUT & ASSOCIATES, INC.

recommended that the project be allowed to proceed as planned.

- The Phase Ia archaeological reconnaissance has determined that the project area includes landforms which have the potential to contain buried archaeological deposits. It is recommended that Phase Ic archaeological subsurface reconnaissance be conducted before the project is allowed to proceed.
- The Phase Ia archaeological reconnaissance has determined that the project area is within 100 feet of a cemetery and a Cemetery Development Plan is required per IC-14-21-1-26.5.

Cemetery Name:

Other Recommendations/Commitments:

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

Attachments

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

Other Attachments:

References Cited:

Alexander, Dawn A. J.
2012 Phase Ia Archaeological Records Check and Field Reconnaissance: Safety Improvements at Old SR 37 and North Dunn Street, Monroe County, Indiana (Des. No.: 1297060). Weintraut & Associates, Zionsville, Indiana. Report on file at the Indiana Division of Historic Preservation and Archaeology, Indianapolis.

Alexander, Dawn A. J. and Jeffrey A. Plunkett
2011 An Archaeological Field Reconnaissance for the Proposed Cascades Park Trail Improvement in Bloomington Township, Monroe County, Indiana (Des. No.: Pending). Weintraut & Associates, Zionsville, Indiana. Report on file at the Indiana Division of Historic Preservation and Archaeology, Indianapolis.

French, Shawn C. and Christopher S. Peebles
1990 An Archaeological Reconnaissance of the Proposed Location for the Construction of a New Handicapped Parking Area and Associated Drive and a Handicapped Accessible Trail and Fishing Area West of Hinkle Road, Griffy Woods Nature Preserve, North of Bloomington, Monroe County, Indiana. Reports of Investigation 90-25. Glenn A. Black Laboratory of Archaeology, Indiana University, Bloomington. Report on file at the Indiana Division of Historic Preservation and Archaeology, Indianapolis.

Historic Landmarks Foundation of Indiana (HLFI)
1989 Indiana Historic Sites and Structures Inventory: Monroe County Interim Report. Bloomington Restorations, Indiana.

2004 Indiana Historic Sites and Structures Inventory: City of Bloomington Interim Report. City of Bloomington, Indiana.

Indiana Historical Society
1968 Illustrated Historical Atlas of the State of Indiana. Reprinted. Indiana Historical Society, Indianapolis. Originally published 1876, Baskin, Forster & Company, Chicago.

Section 106
APPENDIX F. Correspondence

January 16, 2012

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



Re: **Request for Section 106 Consultation**
Safety Improvements at Old SR 37 and North Dunn Street (Des. No. Pending)
Bloomington, Monroe County, Indiana

The Bloomington Department of Public Works and Monroe County are initiating the assessment and then design of improvements in the vicinity of Old SR 37 and Dunn Street. **The proposed improvements may include some roadway realignment, relocation or modification of the intersection, the addition of shoulders and other possible changes including the addition of bicycle/pedestrian amenities.**

The effort is to include a detailed assessment phase before the scope of design work is fully defined to determine the improvements which are needed to best reduce accidents in this area. This Early Coordination is part of that assessment in order to solicit comments from many stakeholders.

A **project area map, a preliminary description** and other data are attached to assist you in understanding the proposed work. We stress that the design has not yet been started, and the information presented is simply the best information we have available. Eagle Ridge Civil Engineering has been retained to prepare this design which will be coordinated through the City, County and INDOT. It is intended to eventually seek Highway Safety Improvement Program Funding for part of this project's cost.

Section 106 Coordination is being initiated which will be conducted primarily by Weintraut & Associates Historians. This letter is only intended to identify Consulting Parties for the project. A Historic Properties Report and an Archaeological Report will be forthcoming in the future.

*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 requested to be a consulting party to participate in the Section 106 process. This process involves efforts to identify historic properties potentially affected by the undertaking, assess its effects, and seek ways to avoid, minimize or mitigate any adverse effects on historic properties.***

The following agencies have been invited to be consulting parties:

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

Preservation Development, Inc.
Attn. Duncan Campbell
218 N. Rogers Street
Bloomington, IN 47404

Downtown Bloomington Comm.
Attn. Talisha Coppock
302 S. College Avenue
Bloomington, IN 47403

Nancy Hiestand, Program Manager
Historic Preservation Commission
City Hall at Showers, Suite 130
PO Box 100
Bloomington, IN 47402

Bloomington Restorations, Inc.
Attn. Steve Wyatt
2920 E. 10th Street
Bloomington, IN 47408

Monroe County Historic Preservation
Review Board
Planning Dept., County Courthouse
Bloomington, IN 47404



Historic Landmarks Foundation
Western Regional Office
643 Wabash Avenue
Terre Haute, IN 47807

Mary Kennedy
INDOT CRS
IGCN, Room N642
100 N. Senate Avenue
Indianapolis, IN 46204

Ron Baldwin
Monroe County Historian
4792 Conti Street
Bloomington, IN 47404

Per 36 CFR § 800.3(f), we hereby request that the SHPO notify this office if the SHPO is aware of any other parties that may be entitled to be consulting parties or should be contacted as potential consulting parties for the subject project.

Please provide any concerns or comments you have about the project area that should be considered during the design of this project.

If you do wish to comment at this stage, please respond to this letter by Friday, February 17, 2012.

If you have any questions, you may contact me at the number or email below. I look forward to working with you to make this a better project. Thank you very much for your assistance.

Sincerely Yours,



Brock Ridgway, P.E.



PROJECT DESCRIPTION

Existing Conditions:

Roadway Deficiencies

The intersection of Old SR 37 and North Dunn Street, and especially the section of Old SR 37 just east of this intersection, is one of the highest accident areas in Bloomington and Monroe County. Multiple fatalities have occurred over the last several years. Dunn Street meets Old SR 37 at a T-intersection. Approximately 200' to the west of Dunn Street, Hillview Drive connects to Old SR 37 from the north at a second T-intersection. Both Dunn Street and Old SR 37 are two-lane roads without shoulders. Old 37 offers a free movement. Dunn Street and Hillview Drive have stop signs.

On Old 37, the roadway is in a series of curves near the intersection. Sight distance is limited along Old SR 37 due to the small radii of the existing curves, and the steep hillside that was originally excavated to build Old SR 37. The hill on the inside of the curve limits sight distance along Old SR 37 but also to the intersection with Dunn Street. The roadway was not built to modern standards and lacks shoulders. The lack of shoulders greatly increases the risk for those who do stray off the edge of the road, making recovery more difficult.

Dunn Street meets Old SR 37 on the side of the hill, and is on a significant upgrade just prior to the intersection. Intersection sight distance for those stopped at Dunn Street is limited, especially to the east because Old SR 37 curves.

The two intersections do not offer any turn lanes, requiring traffic wishing to turn left off of Old SR 37 to sometimes wait with traffic coming behind them. This is more problematic at Dunn Street where traffic is coming out of the curves to the east.

Roadway deficiencies are believed to be focused road geometry, the lack of left turn lanes, and limited sight distance. There is no perceived need to increase the number of thru lanes or add capacity to the roadways.

Alignment

Dunn Street is relatively straight, but on a significant up-grade near the intersection with Old SR 37. Old SR 37 is in curves throughout the project area. Hillview Drive is straight in the project limits. The roadway is on a significant downslope coming from the east. Old SR 37 is in a hill through the area, sloping from east to west. Dunn Street is relatively flat except near Old Sr 37 where it comes uphill to meet Old SR 37. Hillview Drive is relatively flat near Old SR 37.

Right of Way

This area is at the City limits, and was formerly part of unincorporated Monroe County. Parcels are delineated as metes and bounds parcels, described to the center of the existing roads. Based on available GIS mapping, the City of Bloomington is the primary property owner.

Northwest of Old SR 37 and Hillview Drive, the City owns this property which is expected to be the site of the City's new Dog Park. To the southwest, the City owns this property which is almost entirely in the floodplain of Griffy Creek. It is undeveloped and primarily dedicated to wetland and tree mitigation uses. To the southeast of Old 37 and Dunn Street, the property is

part of the Griffy Recreational Area, which is also owned by the City. There is one private drive that crosses this property which may be permitted under an easement.

The hillside on the north side of Old SR 37 (east of Hillview) is privately owned and is broken into as many as four parcels and appears to be owned by two different property owners.

Because this is not a platted area, existing right of way is limited to the existing roadway through proscriptive easement rights. The roadways do not have an established right of way width.

Current Land Use / Natural Environment:

Land on the north side of Old SR 37 and east of Hillview Drive is a forested hillside. Farther east, there is single family home though the setting continues to be primarily forested. The hillside nearest the road has some exposed rock. This is not unusual for roads in the Bloomington area especially in this steeper topography.

Land on the north side of Old SR 37 and west of Hillview Drive is an open field/meadow area owned by the City of Bloomington. This is the location of a planned City Dog Park, though construction has not yet begun.

Land south of Old SR 37 and east of Dunn Street is wooded though it does contain a long private drive from Dunn Street to beyond the eastern project limits. Old SR 37 was built into a hillside and thus the area nearest the road is a steep, wooded slope.

Land south of Old SR 37 and west of Dunn Street is characterized by some smaller wooded areas and open meadow areas. It is dominated by a known wetland area that is not near the roadway, but occupies a large portion of the southwest quadrant. Farther west and outside of the project area is a meadow that has been designated as a tree mitigation area. It is currently being started with plantings as part of the City's Cascades Trail project, but is quite large and is also viewed as the most likely location for any tree mitigation resulting from this project.

To summarize, the area is largely undeveloped. Any widening of the roadway footprint or realignment of the roads will likely impact wooded areas, but wetland impacts are unlikely.

Proposed Project:

Purpose and Need:

The City wishes to resolve the long-term safety problems at this location through the permanent reduction in both the number and severity of accidents in this area.

It is not yet clear what type of intersection treatment, what roadway alignment, or improvements to roadway sections will offer the best benefits. Because of this, the project is starting with a major assessment activity. Included in this work will be the following:

- Traffic assessment based on 2012 data,
- Environmental assessment and preparation of an environmental document,
- Detailed early coordination/stakeholder involvement effort, and
- Engineering assessment of roadway geometry to determine how curvature and sight distance may be contributing to the area's safety problems.

- Determination of the optimal roadway section including lane widths, shoulder widths, and potential bicycle/pedestrian amenities if needed.

Coordination with other Projects:

The City plans to extend the Cascades Trail along Old SR 37 to the vicinity of Dunn Street and then to route it to the south along Dunn Street to the vicinity of the former filtration plant. It is unclear whether this work will be formally adopted into this project, though it is acknowledged that this work must be considered and that roadway and other impacts will be evaluated with this related improvement in mind. By engineering scope, a future permit with IDNR for construction in the Griffy Creek Floodway will include modeling and coordination for the Cascades Trail extension

The Cascades Trail is currently under construction and includes a new bridge over Griffy Creek parallel to Old SR 37, to the west of this project. This work is expected in early 2012. That work ends the trail on the south side of Old SR 37, opposite Stone Mill Road.

The City has a planned Dog Park west of this area off of Stone Mill Road. It is not expected to connect directly to Old SR 37.

No other roadway improvements are planned in this area.

Project Length:

Project area is approximately 1600 feet along Old SR 37 (1,200' east of Dunn to 400' west of Dun), and approximately 600' along Dunn Street.

Vertical and Horizontal Alignment

Because of the topography, any major change to the profile of Old SR 37 is not feasible. Dunn Street can be significantly flattened it is realigned to meet Old 37 to the west of the existing. This would also increase the sight distant into the hill on Old SR 37. This improvement could occur in conjunction with realigning Dunn Street to meet Hillview Drive.

Dunn Street may be realigned to meet Hillview Drive, which would introduce some new curvature. Old Sr 37 is curved throughout the project and this geometry is to be reviewed in detail. It is likely that some djustment to the roadways footprint would be made in order to reduce the complexity and inconstancy of the existing compound and broken back curvature that currently exists.

Hillview Drive is relatively flat and straight and no significant adjustment is proposed.

Lanes and Paved Width

Since lane widths and the lack of recoverable space is deemed to be a significant factor in contributing to accidents, the lane widths and configuration will be reviewed for opportunities to improve safety. Some adjustment of the travel lanes is possible, and the addition of paved shoulders is likely. Depending on feedback from the City and its Bike/Ped Commission, the roadways may include provisions for bicycle facilities, either bike lanes, wider travel lanes, or a paved shoulder to serve as a bicycle area.

Proposed Right of Way /Acreage Needed/Justification:

Because the City owns the property in 3 of 4 quadrants, the need for property will be limited to the north side of Old SR 37 and east of Hillview Drive.

The Assessment activities will determine what adjustments to the roadway alignment will be most beneficial. It appears likely that there will be some impact, although with an existing home near the eastern limit of the study area, it will be important to minimize the impact in that area.

In terms of a rough approximation, it would appear that the right of way impact could be between 0.5 and 1 acre of permanent right of way, with a similar amount for temporary right of way for slope stabilization, grading and replanting work.

It is currently estimated that the project could impact as many as 4 parcels. Which are owned by a total of two different property owners.

Proposed Instream/Channel Work:

There are no streams in the anticipated project limits.

Access Control:

The City controls the addition of driveway cuts on its local streets. There are also no areas of parking along either road. No additional drives are anticipated.

Environmental Considerations:

Full coordination with agencies is being initiated in accordance with the INDOT Procedures for Environmental Studies. Normal permitting requirements will be observed.

There is a known and delineated wetland southwest of Old SR 37 and Dunn Street. No impact is deemed likely, but the wetland boundary will be mapped and potential realignments of Dunn Street will consider this feature.

There is a former tree mitigation site for the City in the southwest quadrant, which is nearer to Dunn Street than the wetland. It is not known at this time if the area would be impacted. The areas and the trees are being surveyed so that the location is known.

Roadway work is likely to result in impacts to trees. The City observes a 2:1 replacement policy on tree removals, and the IDNR generally mandates 5:1 replacement for trees in a floodway. Griffy Creek's floodway does cross Dunn Street in the project limits and abuts Old SR 37 near the project. A full count of trees will be required, and tree replacement is an expected requirement.

Preliminary Potential for Historic Resource Impacts:

The project will require both Archaeological review and Historical Coordination under Section 106. Reports for both Historic Properties and Archaeology will be prepared for the project. Normal Section 106 Coordination is being initiated, starting with an invitation to consulting parties.

It is a goal of the project to develop it in a manner that has No Historic Properties Affected or No Adverse Effect. Section 106 Coordination will be documented in accordance with accepted procedures and will be a fundamental part of the Environmental Document for the project.

Maintenance of Traffic during Construction:

The optimal Maintenance of Traffic strategy will require consultation with the City, County and emergency services. Like most projects in Bloomington, there is a strong advantage to performing the work in the summer months when the City's population drops. Local coordination will be initiated to identify concerns related to emergency response. At this time, it appears likely that some full closure with detour will be needed.

Permits:

Permit applications will be filed at the appropriate time. At this time, the following permits have been identified as being required for this project:

- IDEM Rule 5 Erosion Control Permit
- IDNR Construction in a Floodway
- If wetland impacts are involved, the IDEM 401 Water Quality Certification and ACOE 404 (likely Regional General Permits allowed)
- If the work involves any watermain or sanitary sewer work, then an appropriate IDEM permit may be required. (this only applicable if City Utilities requests some work in conjunction with roadway work.)

Mitigation Needed:

Tree mitigation would seem very likely at this stage, but wetland mitigation may be avoidable if the wetland itself is not impacted by more than 0.1 acre.

Approximate Project Schedule:

Begin Planning / Assessment Phase	January 2012
Complete Initial Assessment Activities	March 2012
Project Scope Approval	May 2012
Preliminary Design Complete	August 2012
Conduct Field Check	September 2012
Submit Draft Environmental Study	October 2012
Complete Public Involvement	December 2012
Environmental Study Approval	February 2013
Begin Right of Way Acquisition	March 2013
Complete Construction Plans	December 2013
Bid Letting	Spring 2014
Construction	2014

Contact Information:

Owner/LPA: City of Bloomington	Consultant: Eagle Ridge Civil Engineering Services, LLC
Attn.: Adrian Reid, P.E. , City Engineer reida@bloomington.in.gov (812) 349-3410	Attn.: Brock Ridgway, P.E. bridgway@eagleridgecivil.com (317) 370-9672



Looking north along existing Dunn St from private drive toward Old SR 37.



Looking north along existing Dunn St. along the hill up to the intersection with Old SR 37.



Looking south along Dunn Street from Old SR 37.



Looking east along Old SR 37 toward the intersection with Dunn Street entering from the right.

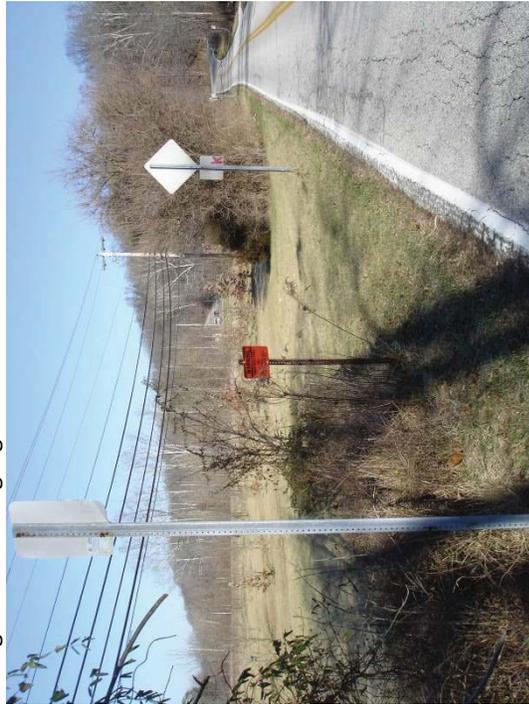
Old SR 37 & N. Dunn Street -
Bloomington/Monroe County



Looking south in the southwest quadrant toward an existing tree mitigation site. Possible realignment would be in the foreground and angling left to avoid most of this area.



Looking west along Old SR 37 toward the intersection with Hillview Drive entering from the right.



Looking northwest from Dunn Street along the possible realignment route of Dunn Street. Hillview Drive is visible in the background,



Looking east along Old SR 37 from the intersection of Dunn Street. Into the first curve on Old SR 37.

Old SR 37 & N. Dunn Street -
Bloomington/Monroe County



Looking east along Old SR 37 from Hillview Drive. Dunn Street intersection is visible.



Looking west along Old SR 37 across the intersection with Hillview Drive entering from the right.



Looking north along Hillview Drive from the south side of Old SR 37.



Looking southeast from the edge of Old SR 37 along the possible realignment route of Dunn Street.

Old SR 37 & N. Dunn Street -
Bloomington/Monroe County



Looking east along Old SR 37 from Dunn Street intersection into first curve on Old SR 37.



On Old SR 37 looking east. This is the curve farthest east in the study area.

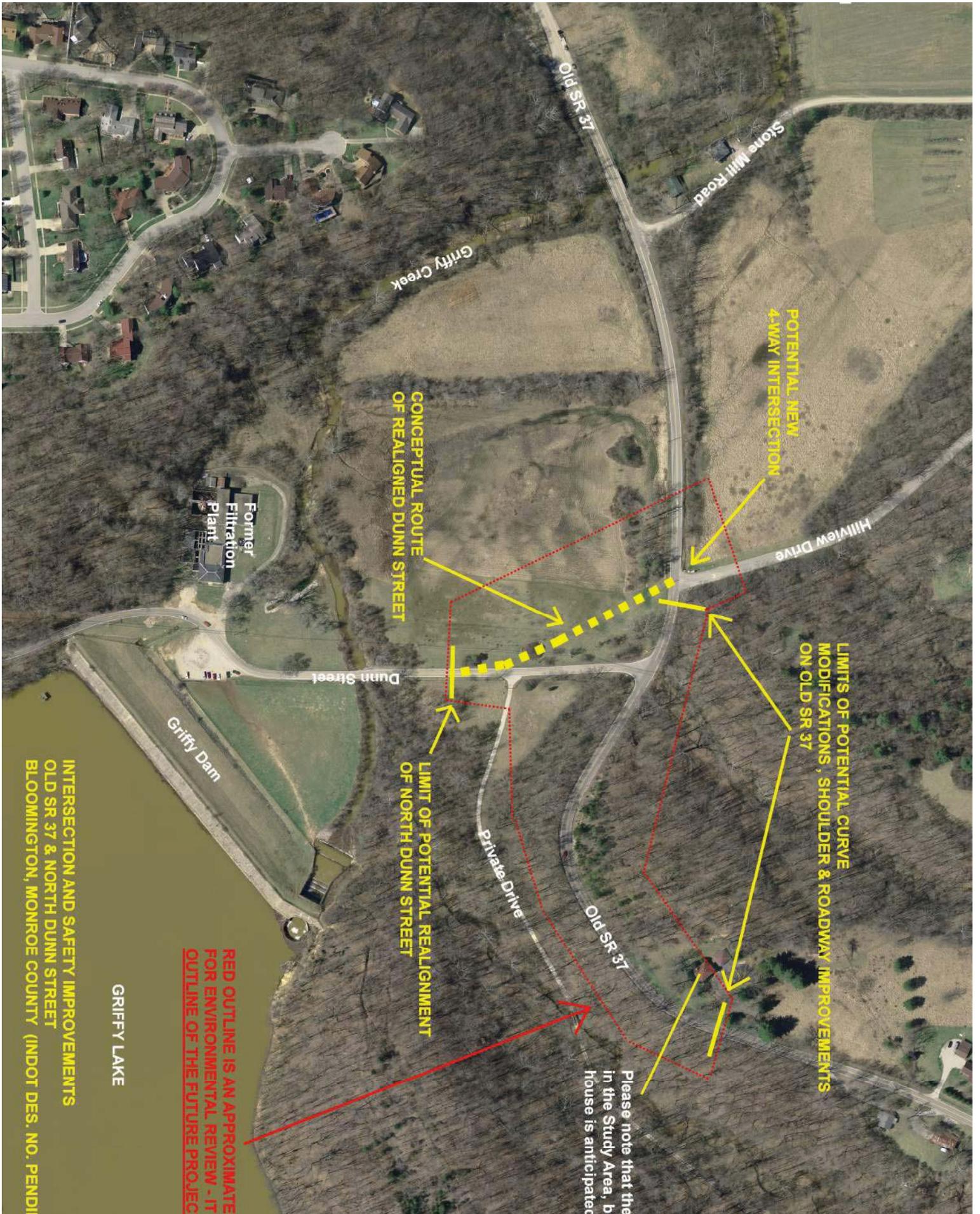


Looking west along Old SR 37 in the curve nearest to, but east of Dunn Street. The sharpest curve in the study area.



Looking east along Old SR 37 in the curve east of Dunn Street.

Old SR 37 & N. Dunn Street -
Bloomington/Monroe County



POTENTIAL NEW 4-WAY INTERSECTION

CONCEPTUAL ROUTE OF REALIGNED DUNN STREET

LIMITS OF POTENTIAL CURVE MODIFICATIONS, SHOULDER & ROADWAY IMPROVEMENTS ON OLD SR 37

LIMIT OF POTENTIAL REALIGNMENT OF NORTH DUNN STREET

Please note that the in the Study Area, but house is anticipated

RED OUTLINE IS AN APPROXIMATE FOR ENVIRONMENTAL REVIEW - IT OUTLINE OF THE FUTURE PROJECT

GRIFFY LAKE

INTERSECTION AND SAFETY IMPROVEMENTS OLD SR 37 & NORTH DUNN STREET BLOOMINGTON, MONROE COUNTY (INDOT DES. NO. PENDI

January 16, 2012

Bloomington Restorations, Inc.
Attn. Steve Wyatt
2920 E. 10th Street
Bloomington, IN 47408



Re: **Request for Section 106 Consultation**
Safety Improvements at Old SR 37 and North Dunn Street (Des. No. Pending)
Bloomington, Monroe County, Indiana

Dear Steve:

The Bloomington Department of Public Works and Monroe County are initiating the assessment and then design of improvements in the vicinity of Old SR 37 and Dunn Street. **The proposed improvements may include some roadway realignment, relocation or modification of the intersection, the addition of shoulders and other possible changes including the addition of bicycle/pedestrian amenities.**

The effort is to include a detailed assessment phase before the scope of design work is fully defined to determine the improvements which are needed to best reduce accidents in this area. This Early Coordination is part of that assessment in order to solicit comments from many stakeholders.

A **project area map, a preliminary description** and other data are attached to assist you in understanding the proposed work. We stress that the design has not yet been started, and the information presented is simply the best information we have available. Eagle Ridge Civil Engineering has been retained to prepare this design which will be coordinated through the City, County and INDOT. It is intended to eventually seek Highway Safety Improvement Program Funding for part of this project's cost.

Section 106 Coordination is being initiated which will be conducted primarily by Weintraut & Associates Historians. This letter is only intended to identify Consulting Parties for the project. A Historic Properties Report and an Archaeological Report will be forthcoming in the future.

*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 requested to be a consulting party to participate in the Section 106 process. This process involves efforts to identify historic properties potentially affected by the undertaking, assess its effects, and seek ways to avoid, minimize or mitigate any adverse effects on historic properties.***

Please return the enclosed response sheet and note if you “do” or “do not” agree to be a consulting party. If you indicate on the response sheet that you do not desire to be a consulting party, or if you do not return the response sheet at all, you will not be included on the list of consulting parties for this project. You will not receive further information about the project unless the scope changes.

In addition to the response sheet, please provide any concerns or comments you have about the project area that should be considered during the design of this project.

If you do wish to comment at this stage, please respond to this letter by Friday, February 17, 2012.



We are also available to meet, if preferred. This is the very beginning of the assessment phase, and there will be other opportunities to provide comments, including one or more public meetings that have not yet been scheduled. Construction is anticipated no sooner than 2014.

If you have any questions, you may contact me at the number or email below. I look forward to working with you to make this a better project. Thank you very much for your assistance.

Sincerely Yours,



Brock Ridgway, P.E.
Project Manager



Section 106 Consulting Party Response Sheet

Consulting Party Contact Information:

Contact Name & Address: _____

Daytime Phone: _____

We _____ agree to be a Consulting Party for this project.
(Do/Do Not)

Project Comments / Concerns (Optional):

**MONROE COUNTY HISTORIC PRESERVATION
BOARD OF REVIEW**

501 N. Morton Street, Suite 224, Bloomington, IN 47404

Telephone: (812)-349-2560 / Fax: (812)-349-2967

www.co.monroe.in.us/tsd/Government/Infrastructure/PlanningDepartment/HistoricPreservation.aspx

February 17, 2012

Mr. Brock Ridgway
Eagle Ridge Consulting
1321 Laurel Oak Drive
Avon, IN 46213

Re: Safety Improvements at Old SR 37 and North Dunn Street, Monroe County, IN

Dear Mr. Ridgway:

Thank you for the opportunity to review this project.

The Monroe County Historic Preservation Board is familiar with the project setting, but we note that the County has planning jurisdiction only on the North side of the intersection. Our concerns are limited.

Members of our Board report observing in years past features or ruined structures relating to the historic limestone industry in the western portion of the project area. These warrant further observation and documentation if they are in the area of project effect. In addition, the landscape in the western portion of the project area, from the toe slope of the uplands in the center of the project area to the floodplain in the western part of the area, may be sensitive for prehistoric archaeological resources. The slopes above the toe are not sensitive because they do not contain rockshelters or other suitable areas for Native American campsites. Therefore, a small portion of the project area should be surveyed to identify archaeological resources. We have no comments regarding the eastern portion of the project area.

Please feel free to contact us if you have any questions.

Yours truly,



Cheryl Ann Munson,
Chairwoman

WEINTRAUT & ASSOCIATES, INC.

Transmittal Letter

DATE: March 7, 2012

TO: Dr. James Glass

FROM: Dr. Linda Weintraut

PROJECT: Safety Improvements at Old SR 37 and N. Dunn St., Monroe Co., Indiana (Des. No.: 1297060)

# OF COPIES	TITLE	COMMENTS
1	Phase Ia Archaeological Records Check and Field Reconnaissance: Safety Improvements at Old SR 37 and North Dunn Street, Monroe County, Indiana (INDOT Des. No.: 1297060)	Archaeological Short Report

ADDITIONAL NOTES:

Please see the enclosed report for review.

Electronic copy:

S. Miller / INDOT, CRO

B. Ridgway / Eagle Ridge Civil Engineering Services, LLC

DA

WEINTRAUT & ASSOCIATES, INC.

April 2, 2012

Dr. James Glass
Deputy State Historic Preservation Officer
Department of Historic Preservation and Archaeology
402 West Washington Street, Room W274
Indianapolis, IN 46204

Re: **Historic Property Report: Intersection Safety Improvements at Old SR 37
and North Dunn Street, Bloomington, Monroe County, Indiana
(Des. No.: 1297060)**

Dear Dr. Glass,

The Bloomington Department of Public Works and Monroe County with funding from the Federal Highway Administration are initiating the assessment and then design of improvements in the vicinity of Old SR 37 and Dunn Street. The proposed improvements may include some roadway realignment, relocation or modification of the intersection, the addition of shoulders and other possible changes including the addition of bicycle/pedestrian amenities. Section 106 of the National Historic Preservation Act (1966) requires Federal agencies to take into account the effects of their undertakings on historic properties.

Weintraut & Associates, Inc. has prepared a Historic Property Report that identifies and evaluates these historic properties within the defined Area of Potential Effects for this undertaking. The Indiana Department of Transportation (INDOT) has reviewed this report. We invite you to review and comment on the enclosed report.

Please direct correspondence to Dr. Linda Weintraut, PO Box 5034, Zionsville, Indiana 46077 within thirty (30) days of receipt of this report.

Best regards,

Linda Weintraut, Ph.D.

Cc; Brock Ridgway, Eagle Ridge Civil Engineering, LLC
Dr. Staffan Peterson, INDOT



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

April 4, 2012

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

Federal Agency: Federal Highway Administration ("FHWA")

Re: Indiana archaeological short report (Alexander, 2/27/12) regarding safety improvements at Old SR 37 and North
Dunn Street (Des. No. 1297060; DHPA No. 12921)

Dear Dr. Weintraut:

Pursuant to Section 106 of the National Historic Preservation Act (16 U.S.C. § 470f), 36 C.F.R. Part 800, and the "Programmatic Agreement among the Federal Highway Administration, the Indiana Department of Transportation, the Advisory Council on Historic Preservation, the Indiana State Historic Preservation Officer regarding the implementation of the Federal Aid Highway Program in the State of Indiana," the staff of the Indiana State Historic Preservation Officer has conducted an analysis of the materials dated March 7, 2012, and received on March 8, 2012, for the above indicated project in the City of Bloomington, Monroe County, Indiana.

In regard to archaeological resources, based upon the documentation available to the staff of the Indiana SHPO, we have not identified any currently known archaeological resources listed in or eligible for inclusion in the National Register of Historic Places ("NRHP") within the proposed project area. Therefore, we concur with the opinion of the archaeologist, as expressed in the Indiana archaeological short report (Alexander, 2/27/12), that no further investigations appear necessary at this proposed project area.

If any archaeological artifacts or human remains are uncovered during construction, demolition, or earthmoving activities, state law (Indiana Code I4-21-1-27 and 29) requires that the discovery must be reported to the Department of Natural Resources within two (2) business days. In that event, please call (317) 232-1646. Be advised that adherence to Indiana Code I4-21-1-27 and 29 does not obviate the need to adhere to applicable federal statutes and regulations.

Please note that we have received a historic property report for this project, and will provide our comments on that document under separate cover.

A copy of the revised 36 C.F.R. Part 800 that went into effect on August 5, 2004 may be found on the Internet at www.achp.gov for your reference. If you have questions about archaeological issues please contact Wade T. Tharp at (317) 232-1650 or wtharp1@dnr.IN.gov. If you have questions about buildings or structures please contact Chad W. Slider at (317) 234-5366 or cslider@dnr.IN.gov. Additionally, in all future correspondence regarding the above indicated project, please refer to DHPA No. 12921.

Very truly yours,


James A. Glass, Ph.D.
Deputy State Historic Preservation Officer

JAG:WTT:wt

emc: Staffan D. Peterson, Ph.D., Indiana Department of Transportation
Mary Kennedy, Indiana Department of Transportation
Shaun Miller, Indiana Department of Transportation
Melany Prather, Indiana Department of Transportation
Linda Weintraut, Ph.D., Weintraut & Associates, Inc.
Dawn A. J. Alexander, Weintraut & Associates, Inc.

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



April 30, 2012

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

Federal Agency: Federal Highway Administration ("FHWA")

Re: Historic property report (Molloy, 3/2012) regarding safety improvements at Old SR 37 and North Dunn Street (Designation No. 1297060; DHPA No. 12921)

Dear Dr. Weintraut:

Pursuant to Section 106 of the National Historic Preservation Act (16 U.S.C. § 470f), 36 C.F.R. Part 800, and the "Programmatic Agreement among the Federal Highway Administration, the Indiana Department of Transportation, the Advisory Council on Historic Preservation, the Indiana State Historic Preservation Officer regarding the implementation of the Federal Aid Highway Program in the State of Indiana," the staff of the Indiana State Historic Preservation Officer has conducted an analysis of the materials dated April 2, 2012, and received on April 4, 2012, for the above indicated project in the City of Bloomington, Monroe County, Indiana.

In regard to archaeological resources, as previously indicated, based upon the documentation available to the staff of the Indiana SHPO, we have not identified any currently known archaeological resources listed in or eligible for inclusion in the National Register of Historic Places ("NRHP") within the proposed project area. Therefore, we concur with the opinion of the archaeologist, as expressed in the Indiana archaeological short report (Alexander, 2/27/12), that no further investigations appear necessary at this proposed project area.

If any archaeological artifacts or human remains are uncovered during construction, demolition, or earthmoving activities, state law (Indiana Code 14-21-1-27 and 29) requires that the discovery must be reported to the Department of Natural Resources within two (2) business days. In that event, please call (317) 232-1646. Be advised that adherence to Indiana Code 14-21-1-27 and 29 does not obviate the need to adhere to applicable federal statutes and regulations.

In regard to buildings and structures, we concur with the consultant's assessment that the Griffy Lake Historic District is eligible for inclusion in the National Register of Historic Places.

However, we do not concur with the consultant's assessment that the Milisen House at 4180 Old SR 37 is not eligible for inclusion in the National Register of Historic Places; we believe that the structure is eligible for inclusion under Criterion B for its association with Dr. Robert Milisen, a nationally recognized researcher in the field of speech disorders.

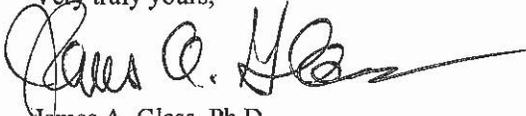
Based on the information provided to our office, we believe that there may be effects on the characteristics of the above identified historic properties that qualify them for inclusion in or eligibility for the National Register (*see* 36 C.F.R., § 800.16[i]). To enable us to provide views on the effects 36 C.F.R. § 800.4(d)(2) for your agency, please provide the following information:

- 1) We have noted from the report that it is not yet clear what type of intersection treatment, roadway alignment, or improvements to the roadway sections will be completed. Please provide an updated scope of work when the assessment has been completed and specific details of the project have been determined.

Once the indicated information is received, the Indiana SHPO will resume identification and evaluation procedures for this project. Please keep in mind that additional information may be requested in the future.

A copy of the revised 36 C.F.R. Part 800 that went into effect on August 5, 2004, may be found on the Internet at www.achp.gov for your reference. If you have questions about archaeological issues please contact Wade T. Tharp at (317) 232-1650 or wtharp1@dnr.IN.gov. If you have questions about buildings or structures please contact Whitney Airgood-Obrycki at (317) 233-9636 or wairgoodobrycki@dnr.IN.gov. Additionally, in all future correspondence regarding the above indicated project, please refer to DHPA No. 12921.

Very truly yours,

A handwritten signature in black ink, appearing to read "James A. Glass", with a long horizontal flourish extending to the right.

James A. Glass, Ph.D.
Deputy State Historic Preservation Officer

JAG:WAO:WTT:wt

emc: Staffan D. Peterson, Ph.D., Indiana Department of Transportation
Mary Kennedy, Indiana Department of Transportation
Shaun Miller, Indiana Department of Transportation
Melany Prather, Indiana Department of Transportation

**MONROE COUNTY HISTORIC PRESERVATION
BOARD OF REVIEW**

501 N. Morton Street, Suite 224, Bloomington, IN 47404

Telephone: (812)-349-2560 / Fax: (812)-349-2967

www.co.monroe.in.us/tsd/Government/Infrastructure/PlanningDepartment/HistoricPreservation.aspx

May 1, 2012

Dr. Linda Weintraut
Weintraut & Associates, Inc.
4649 Northwestern Drive
Zionsville, IN 46077

Dear Dr. Weintraut,

I am writing on behalf of the Monroe County Historic Preservation Board regarding the Historic Property Report: Intersection Safety Improvements at Old SR 37 and North Dunn Street (Des. No.: 1297060). We appreciate the opportunity to comment on this project.

Your firm's thorough report thoroughly addresses the APE to our satisfaction given that the final design has not been determined. It appears that the properties eligible for the National Register are outside of our planning area.

Thank you,



Devin Blankenship
Monroe County Historic Preservation Board

MEETING SUMMARY

Old SR 37 & Dunn, Intersection Improvements

Des. No.: 1297060

March 24, 2014; 1:30 pm

Indiana Government Center North 642

Meeting attendees: Mary Kennedy, Indiana Department of Transportation/Cultural Resources Office (INDOT/CRO); Chad Slider; Indiana Department of Natural Resources/Indiana Division of Historic Preservation and Archaeology (IDNR/DHPA) and staff of State Historic Preservation Officer (SHPO); Wade Tharp (IDNR/DHPA & SHPO); Brock Ridgway, Eagle Ridge Civil Engineering Services, LLC; Bill Williams, Monroe County Public Works Director (via phone); and Linda Weintraut, Weintraut & Associates, Inc. (W&A)

Mary Kennedy asked everyone to introduce themselves.

Linda Weintraut gave a brief update of where we are in the process. SHPO approved the Archaeology Phase Ia Short Report on April 4, 2012. SHPO responded to the Historic Property Report on April 30, 2012; the staff had agreed with the eligibility of the Griffy Lake Historic District (previously determined eligible in the Cascades project) but disagreed with recommendation on Milisen House. The staff believed the Milisen House eligible for listing in the National Register of Historic Places (NRHP) under Criterion B. Weintraut said that she was surprised by this response since typically SHPO has a high bar for Criterion B properties.

Weintraut passed around the historic property boundary that W&A recommended for the Milisen House, which was the parcel on which the house was located in 2012. She noted that the property owner has indicated his intention to seek NRHP status for this property. Brock Ridgway said that Thinking Rock LLC owns both the Milisen House and other surrounding parcels. Slider asked if these parcels comprise the 18 acres associated with Dr. Milisen. Weintraut said that W&A would investigate. SHPO is also interested in a justification for the historic property boundary.

Ridgway then presented plans and stated that the roadway is designed to avoid acquisition of property from the Milisen House. Trees will be removed from the surrounding parcels but not that parcel and he has avoided the gate posts. Drainage improvements will occur at road's edge, but the shoulder will be located to the south of the existing roadway where trees will be removed. Kennedy observed that this will be less of a rural setting and more of an urban setting Ridgway noted that an exception had been obtained from the City so that there are no sidewalks in that area. And there is a trail for walking located nearby that passes through the historic property boundary for the Griffy Lake Historic District.

Wade Tharp stated that the new plans show a larger area than was surveyed in 2011. Weintraut said that he was correct. Archaeologists had sunk a few new Shovel Probes to account for the added area but found disturbance. Tharp requested a Short Archaeology Report documenting this.

Kennedy inquired about the trail through Griffy Lake Historic District. She wondered what type of structure would be crossing the creek. Ridgway said that it would be a prefabricated metal truss footbridge. W&A will submit a photographic example with the next documentation. Tharp asked about archaeology work in this area. Weintraut said that W&A had conducted a Phase Ia in this area in conjunction with the Cascades project. She offered to provide a map with the showing the survey for both projects.

Tharp asked if Old SR 37 will be closed during construction. Ridgway indicated that it would be closed and traffic rerouted through Marlin Hills.

Slider asked if blasting will occur. Ridgway stated that it was not likely since rock can generally be pulled from the hillside.

Next Steps:

1. Archaeology
 - a. Short Report will be submitted to SHPO.
 - b. Map showing survey for the Cascades project will be submitted.
2. Regarding Structures the following will be provided to SHPO and consulting parties:
 - a. Justification for property boundary for Milisen House
 - b. Plans from Eagle Ridge
 - c. Information regarding the original parcel for the Milisen House
 - d. Photographs of similar prefabricated metal truss bridges.

The meeting was adjourned at approximately 2:30 pm.

Note: Details discussed in this meeting are subject to change, but are a reflection of how things stood at the close of the meeting. This meeting summary documents ongoing, internal agency deliberations. Accordingly, the information contained in this summary is considered to be pre-decisional and deliberative.



REVIEW REQUEST SUBMITTAL

State Form 55031 (7-12)

Indiana Department of Natural Resources

Division of Historic Preservation and Archaeology, Indiana State Historic Preservation Office (SHPO)



Please complete this form and attach it to front of all submittals, along with any reports or supplemental materials you are providing to the Indiana DHPA for review.

Date: April 4, 2014

Is this a new submission? Yes No

Reference for previous submittals: DHPA # 12921 Des. No. 1297060

THIS REVIEW REQUEST SUBMITTED BY:

Name: Linda Weintraut

Company/Organization: Weintraut & Associates

Address: PO Box 5034, Zionsville, Indiana

Telephone number: 317.733.9770 Email address: linda@weintrautinc.com

PROJECT NAME & LOCATION *[Please attach a map with location(s) marked]*

Project Name/Reference: Old SR 37 & Dunn Project/ Des # 1297060

Project Address/Location: Old SR 37 & Dunn

City: Bloomington Township(s): Bloomington

County/Counties: Bloomington

STATE OR FEDERAL AGENCY INVOLVEMENT

Agency: FHWA/INDOT Program: _____

Type of funds, license, or permit to be obtained (if applicable): _____

Name(s) of Agency Contact: Patrick A. Carpenter

Address: IGCN 642, Indianapolis, Indiana

Telephone number: 317.233.2063 Email address: pacarpenter@indot.in.gov

APPLICANT (if different than Federal Agency) *If available, please attach copy of authorization letter from federal agency*

Applicant: _____

Name of Contact: _____

Address: _____

Telephone number: _____ Email address: _____

CONSULTANT FOR THE APPLICANT OR AGENCY (IF APPLICABLE)

Consultant: Eagle Ridge Civil Engineering

Name of Contact: Brock Ridgway

Address: 1321 Laurel Oak , Avon, Indiana

Telephone number: 317.370.9672 Email address: bridgway@eagleridgecivil.com

Contact for DHPA questions regarding this review request: Linda Weintraut

Comments:
Provided per meeting request of March 24, 2014.

Please note that incomplete submissions may result in delays. To ensure an expeditious review, please be sure that the following has been provided:

- Full contact information for person/entity submitting form, including phone number and email *(if available)*
- Map of project location with project area(s) clearly marked *(provided in current or previous submission)*
- Clear photographs of project area and surroundings
- Project description
- Description of any proposed ground disturbance
- Name of Federal agency/agencies and program providing funds, license, or permit
- Letter of authorization from Federal agency/agencies *(if applicable)*

Return this Form and Attachments to:

**Indiana Department of Natural Resources
Division of Historic Preservation and Archaeology
402 W. Washington Street, Room W274
Indianapolis, Indiana 46204**

<http://www.in.gov/dnr/historic>



Bethany Natali <bethany@weintrautinc.com>

Fwd: Milisen Estate

1 message

Linda Weintraut <linda@weintrautinc.com>
To: Bethany Natali <bethany@weintrautinc.com>

Mon, Jun 9, 2014 at 11:01 AM

----- Forwarded message -----

From: **Linda Weintraut** <linda@weintrautinc.com>
Date: Mon, Apr 14, 2014 at 12:33 PM
Subject: Milisen Estate
To: chuck@coloradocpa.com
Cc: Kelly Molloy <kelly@weintrautinc.com>

Mr. Milisen,

Thank you so much for returning my call last week. I believe that you spoke with Kelly Molloy, who has conducted much of the research for this project.

To give you some background: as you probably are aware, the City of Bloomington is planning to improve the intersection of North Dunn Street and Old SR 37. Because there will be federal funding involved, historic properties must be identified and evaluated as part of the environmental study. We prepared draft historic property report a few years ago. (The project is ongoing, so we are not able to release the report yet. Engineers are working on the design, but to my knowledge, no official designs have been released.)

I can tell you that the Milisen House was recommended as eligible for listing in the National Register of Historic Places as part of this study. When that happens, we are required to define a "historic property boundary." We had initially recommended the current parcel (the land that Dr. Devereux purchased that included the house and property immediately around it) as the historic property boundary.

In a recent meeting, one agency requested additional information about the acreage that went with the Milisen estate. We have been told that the estate included eighteen acres at one time; however, we cannot with any certainty define the acreage that was part of that eighteen acres. While this is just a query from an agency, we would like to be able to provide an answer to that question.

The boundary ultimately approved for the purposes of this study should not impose restrictions on the land that Thinking Rock LLC owns and it should not affect the boundary that Dr. Devereux will provide if he decides to pursue an official nomination to the National Register of Historic Places. Property owners (in this case the trust) must agree to listing in the National Register so it should not encumber the parcels owned by Thinking Rock, LLC.

We appreciate any help that you can provide in this matter. I know this is a busy time.

D-86

Regards,

Linda

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Linda Weintraut, Ph.D.
Weintraut & Associates, Inc.
PO Box 5034
4649 Northwestern Drive
Zionsville, Indiana 46077
[317.733.9770 ext. 310](tel:317.733.9770)

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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



May 1, 2014

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

Federal Agency: Federal Highway Administration ("FHWA")

Re: Phase Ia archaeological investigation addendum report (Alexander, 06/14/2013) regarding safety improvements at Old SR 37 and North Dunn Street (Designation No. 1297060; DHPA No. 12921)

Dear Dr. Weintraut:

Pursuant to Section 106 of the National Historic Preservation Act (16 U.S.C. § 470f), 36 C.F.R. Part 800, and the "Programmatic Agreement among the Federal Highway Administration, the Indiana Department of Transportation, the Advisory Council on Historic Preservation, the Indiana State Historic Preservation Officer regarding the implementation of the Federal Aid Highway Program in the State of Indiana," the staff of the Indiana State Historic Preservation Officer has conducted an analysis of the materials dated and received on April 4, 2014, for the above indicated project in the City of Bloomington, Monroe County, Indiana.

In regard to archaeological resources, based upon the documentation available to the staff of the Indiana SHPO, we have not identified any currently known archaeological resources listed in or eligible for inclusion in the National Register of Historic Places ("NRHP") within the additional portions of the proposed project area, as indicated in *Figure 2* of the Phase Ia archaeological investigation addendum report (Alexander, 06/14/2013). Therefore, we concur with the opinion of the archaeologist, as expressed in that report, that no further investigations appear necessary at the additional portions of the proposed project area.

If any archaeological artifacts or human remains are uncovered during construction, demolition, or earthmoving activities, state law (Indiana Code 14-21-1-27 and 29) requires that the discovery must be reported to the Department of Natural Resources within two (2) business days. In that event, please call (317) 232-1646. Be advised that adherence to Indiana Code 14-21-1-27 and 29 does not obviate the need to adhere to applicable federal statutes and regulations.

A copy of the revised 36 C.F.R. Part 800 that went into effect on August 5, 2004, may be found on the Internet at www.achp.gov for your reference. If you have questions about archaeological issues please contact Wade T. Tbarp at (317) 232-1650 or wharp1@dnr.IN.gov. If you have questions about buildings or structures please contact Chad W. Slider at (317) 234-5366 or cslider@dnr.IN.gov. Additionally, in all future correspondence regarding the above indicated project, please refer to DHPA No. 12921.

Very truly yours,

A handwritten signature in cursive script that reads "Chad W. Slider".

Mitchell K. Zoll
Deputy State Historic Preservation Officer

MKZ:WTT:wt

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



REVIEW REQUEST SUBMITTAL

State Form 55031 (7-12)

Indiana Department of Natural Resources

Division of Historic Preservation and Archaeology, Indiana State Historic Preservation Office (SHPO)



Please complete this form and attach it to front of all submittals, along with any reports or supplemental materials you are providing to the Indiana DHPA for review.

Date: May 5, 2014

Is this a new submission? Yes No

Reference for previous submittals: DHPA # 12921 Des. No. 1297060

THIS REVIEW REQUEST SUBMITTED BY:

Name: Linda Weintraut

Company/Organization: Weintraut & Associates, Inc.

Address: PO Box 5034, Zionsville, Indiana

Telephone number: 317-733-9770 Email address: Linda@weintrautinc.com

PROJECT NAME & LOCATION *[Please attach a map with location(s) marked]*

Project Name/Reference: Old SR 37 & Dunn Project/ Des # 1297060

Project Address/Location: Old SR 37 & Dunn

City: Bloomington Township(s): Bloomington

County/Countries: Monroe County

STATE OR FEDERAL AGENCY INVOLVEMENT

Agency: FWHA/INDOT Program: _____

Type of funds, license, or permit to be obtained (if applicable): _____

Name(s) of Agency Contact: Patrick A. Carpenter

Address: IGCN 642, Indianapolis, Indiana

Telephone number: 317-233-2063 Email address: pacarpenter@indot.in.gov

APPLICANT (if different than Federal Agency) *If available, please attach copy of authorization letter from federal agency*

Applicant: _____

Name of Contact: _____

Address: _____

Telephone number: _____ Email address: _____

CONSULTANT FOR THE APPLICANT OR AGENCY (IF APPLICABLE)

Consultant: Eagle Ridge Civil Engineering

Name of Contact: Brock Ridgway

Address: 1321 Laurel Oak, Avon, Indiana

Telephone number: 317-370-9672 Email address: bridgway@eagleridgecivil.com

Contact for DHPA questions regarding this review request: Linda Weintraut

Comments:
Letter provides additional information requested at an agency meeting held March 24, 2014, and responds to a letter dated April 30, 2012 from the staff of the SHPO.

Please note that incomplete submissions may result in delays. To ensure an expeditious review, please be sure that the following has been provided:

- Full contact information for person/entity submitting form, including phone number and email *(if available)*
- Map of project location with project area(s) clearly marked *(provided in current or previous submission)*
- Clear photographs of project area and surroundings
- Project description
- Description of any proposed ground disturbance
- Name of Federal agency/agencies and program providing funds, license, or permit
- Letter of authorization from Federal agency/agencies *(if applicable)*

Return this Form and Attachments to:

**Indiana Department of Natural Resources
Division of Historic Preservation and Archaeology
402 W. Washington Street, Room W274
Indianapolis, Indiana 46204**

<http://www.in.gov/dnr/historic>

WEINTRAUT & ASSOCIATES, INC.

May 5, 2014

Chad Slider
Assistant Director, Environmental Review
Division of Historic Preservation & Archaeology
402 West Washington Street, Room W274
Indianapolis, IN 46204

**Re: Old SR 37 and North Dunn Street
Bloomington Township, Monroe County, Indiana
Des. No.: 1297060
DHPA No.: 12921**

Dear Mr. Slider:

This letter provides additional information requested in an agency meeting held March 24, 2014, (summary attached) and responds to a letter dated April 30, 2012, from the staff of the State Historic Preservation Officer (SHPO) regarding the above-referenced project.

Milisen House

In a letter dated April 30, 2012, the staff of the SHPO expressed the opinion that the Milisen House, located at 4180 Old SR 37, is eligible for the National Register of Historic Places (NRHP) “under Criterion B for its association with Dr. Robert Milisen, a nationally recognized researcher in the field of speech disorders.” In response to this comment, the Milisen House is considered eligible for listing in the NRHP as part of Section 106 studies for this project.

Historians are recommending a historic property boundary for this resource that includes the house and contributing elements to the site. It was noted at the meeting held on March 24, 2014, the original estate totaled eighteen acres but that the estate is currently divided between two owners. The majority of the estate is still owned by the Milisen family trust, “Thinking Rock, LLC.” The family has sold the parcel that includes the approximately two acres around the house. Historians have contacted a family member of Dr. Milisen to ascertain the historic boundaries of the estate but as yet, no answer has been received regarding this request for information. However, since most of the surrounding land is presently wooded and without contributing resources therein, the historians believe that it is reasonable to include only the parcel with contributing resources. A site plan for the Milisen House is enclosed with this letter.

Project Plans

In the letter dated April 30, 2012, SHPO staff stated “we believe that there may be effects on the characteristics of the above identified historic properties that qualify them for

Old SR 37 and North Dunn Street
In the City of Bloomington, Monroe County, Indiana
Des. No.: 1297060 // DHPA No.: 12921

inclusion in or eligibility for the National Register . . .” and requested “an updated scope of work when the assessment has been completed and specific details for the project have been determined.”

The *Project Description* provided by Eagle Ridge Civil Engineering states:

On Old SR 37, a curve correction is proposed to realign the roadway into a single, simple horizontal curve with appropriate superelevation. The Indiana Design Manual shows strong preference for this solution when dealing with a roadway where complex curvature is contributing to the problems. This will address the existing condition, which presents a compound curvature at three different radii with the sharpest occurring toward the bottom of the hill.

Because the roadway is cut into a hillside with exposed rock on the inside (uphill) side of the curve, and a steep hillside protected by guardrail on the outside of the curve, the total roadway width must be kept reasonable to keep the improvement affordable and to avoid major environmental and right of way impacts.

It is proposed that the eastbound (outside of the curve) side of the road would include a paved shoulder in front of new guardrail installed at the appropriate height. Shoulder width will need to be kept relatively narrow due to the steep downslope, but a paved shoulder will be a significant improvement over the existing unstable road edge.

On the inside of the curve, due to the high cost of excavating deeper into the rocky hillside, widening is to be limited. The inside of the curve would feature a curb and gutter to address drainage needs, to eliminate the existing edge drop, and to provide a 2' gutter as a recovery space. In addition, the hillside will be cut back enough to provide required sight distance in the westbound direction for a design/posted speed limit of 30 mph that is consistent with this roadway on both ends of this project area.

These improvements will require the introduction of a storm sewer along the inside of the curve, but this will provide additional benefits near Hillside Drive where the existing drop into the roadside ditch is severe (approaching 3' in depth). Enclosing this section in a storm sewer will remove this hazard.

For North Dunn Street, it is intended to raise the road to meet Old SR 37 at a grade not to exceed 2 percent, a major improvement from the current condition of nearly 10 percent. This will improve stopping and starting conditions for traffic coming onto Old SR 37, and will also greatly improve intersection sight distance.

As related work, though not directly related to reducing traffic accidents, a paved sidepath is to be built along the south side of Old SR 37, then turning southward along the west side of Dunn Street. This portion of the project is in the City limits and is expected to comply with the City's Complete Streets requirements. Old SR

37 east of the intersection is outside the City limits and the topography does not make widening for bicycle or pedestrian facilities practical due to the expense, environmental impacts, and the project's rural setting. A path connection from the sidepath to Hillside Drive will be included to facilitate connection to the nearest residential area, and to provide a paved connection to the designated bike route that follows Hillside instead of Old SR 37.

As discussed at a meeting held on March 24, 2014, the project has been designed to avoid acquisition of property from the parcel on which the Milisen House is located. Trees will be removed from the surrounding parcels but not from that parcel. The project engineer has avoided the gate posts. Drainage improvements will occur at road's edge, but the shoulder will be located to the south of the existing roadway where trees will be removed. A copy of draft project plans presented at that meeting is attached.

Effects of the Undertaking on the Milisen House

With the removal of trees on the south side of SR 37, the setting of the house will be changed but that change does not diminish the property's ability to convey its significance under Criterion B. It is the opinion of the historians that this change in setting does not constitute an adverse effect.

Effects of the Undertaking on the Griffy Lake Historic District

During the agency meeting held on March 24, 2014, the SHPO inquired about the effects of the undertaking on the Griffy Lake Historic District. The district includes the Griffy Lake Water Treatment Plant (1927), as well as Griffy Lake and the dam that forms it, along with structures related to the lake, such as retaining walls and a spillway, that are eligible under Criterion A in the areas of Community Planning and Development for its association with the development of the City of Bloomington's water system.

As part of this undertaking, Cascades Trail will be extended into the district as part of this project and a new trail bridge will be constructed. Photographs of a similar bridge are attached. Land within the park will be converted to a trail (transportation use).

The setting within the District will be changed but that change does not diminish the property's ability to convey its significance under Criterion B. It is the opinion of the historians that this change in setting does not constitute an adverse effect.

Archaeology

Per SHPO's request at the agency meeting on March 24, 2014, an addendum Archaeology Short Report (Weintraut & Associates, 2013) for Old SR 37 and North Dunn Street project was hand-delivered to your office on April 4, 2014. [The Archaeology Short Report (Weintraut & Associates 2013) shows the limits of previous archaeological studies, especially those conducted for the Cascades Trail Project (DHPA No. 10167) in 2011; please refer to Figure 2.]

Recommended Finding

Historians are recommending a finding of “No Adverse Effect” for the Old SR 37 and North Dunn Street project.

You are respectfully requested to review this letter and enclosed documentation and provide concurrence or comments within thirty days of receipt of this letter. Consulting parties are being provided this documentation, excluding information about archaeology, and are being invited to provide comment within thirty days of receipt of this letter.

Please direct any comments to: Linda Weintraut, Weintraut & Associates, Inc., P.O. Box 5034, Zionsville, Indiana 46077 or Linda@weintrautinc.com.

Best regards,

Linda Weintraut, Ph.D.

Enclosures

Cc: Nancy Heistand, Housing and Neighborhood Development
Nancy Hiller, Monroe County Historic Preservation Board of Review
Patrick Carpenter, Indiana Department of Transportation—Cultural Resources Section
Michelle Allen, Federal Highway Administration
Brock Ridgway, Eagle Ridge Civil Engineering Services, LLC

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



June 2, 2014

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

Federal Agency: Federal Highway Administration ("FHWA")

Re: Response to request for additional project information regarding safety improvements at Old SR 37 and North Dunn Street (Designation No. 1297060; DHPA No. 12921)

Dear Dr. Weintraut:

Pursuant to Section 106 of the National Historic Preservation Act (16 U.S.C. § 470f), 36 C.F.R. Part 800, and the "Programmatic Agreement among the Federal Highway Administration, the Indiana Department of Transportation, the Advisory Council on Historic Preservation, the Indiana State Historic Preservation Officer regarding the implementation of the Federal Aid Highway Program in the State of Indiana," the staff of the Indiana State Historic Preservation Officer ("Indiana SHPO") has conducted an analysis of the materials dated May 5, 2014, and received on May 7, 2014, for the above indicated project in the City of Bloomington, Monroe County, Indiana.

As previously indicated, based upon the documentation available to the staff of the Indiana SHPO, we have not identified any currently known archaeological resources listed in or eligible for inclusion in the National Register of Historic Places ("NRHP") within the proposed project area. Therefore, we concur with the opinion of the archaeologist, as expressed in the Indiana archaeological short report (Alexander, 02/27/2012) and in the Phase Ia archaeological investigation addendum report (Alexander, 06/14/2014), that no further investigations appear necessary at this proposed project area.

If any archaeological artifacts or human remains are uncovered during construction, demolition, or earthmoving activities, state law (Indiana Code 14-21-1-27 and 29) requires that the discovery must be reported to the Department of Natural Resources within two (2) business days. In that event, please call (317) 232-1646. Be advised that adherence to Indiana Code 14-21-1-27 and 29 does not obviate the need to adhere to applicable federal statutes and regulations.

In regard to buildings and structures, we previously noted the Milisen House at 4180 Old SR 37 and the Griffy Lake Historic District, which are considered eligible for inclusion in the National Register of Historic Places. For purposes of this Section 106 review, the recommended historic property boundary for the Milisen House appears to be appropriate. Furthermore, it is our understanding that the Milisen House stone gateposts, a contributing feature of the property, will be avoided and protected during construction as a project commitment.

Based on the project information provided to our office during the March 24, 2014 meeting, and contained in this submittal, we agree with the consultant's assessment that this undertaking does not appear to diminish the characteristics that qualify the Milisen House or the Griffy Lake Historic District for inclusion in the National Register of Historic Places.

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

- 1) If the INDOT believes that a finding of "no adverse effect" accurately reflects its assessment, then it shall provide documentation of its finding as set forth in 36 C.F.R. § 800.11(e) to the Indiana SHPO, notify all consulting parties, and make the documentation available for public inspection (36 C.F.R. §§ 800.5[b-c] and 800.2[d][2]).
- 2) If, on the other hand, the INDOT believes that a finding of "adverse effect" accurately reflects its assessment, then it shall forward the information to the 36 C.F.R. § 800.11(e) documentation to the FHWA. The FHWA shall provide notification to the Advisory Council on Historic Preservation by providing the documentation in 36 C.F.R. § 800.11(e) as stated in 36 C.F.R. § 800.6(a)(1). Additionally, the FHWA may proceed to provide documentation of its finding as set forth in 36 C.F.R. § 800.11(e) to the Indiana SHPO, all consulting parties, and make the documentation available for public inspection and proceed to seek ways to avoid, reduce and mitigate effects as stated in 36 C.F.R. § 800.6 (a)(2-5).

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

A copy of the revised 36 C.F.R. Part 800 that went into effect on August 5, 2004, may be found on the Internet at www.achp.gov for your reference. If you have questions about archaeological issues please contact Wade T. Tharp at (317) 232-1650 or wtharp1@dnr.IN.gov. If you have questions about buildings or structures please contact Chad W. Slider at (317) 234-5366 or cslider@dnr.IN.gov. Additionally, in all future correspondence regarding the above indicated project, please refer to DHPA No. 12921.

Very truly yours,



Mitchell K. Zoll
Deputy State Historic Preservation Officer

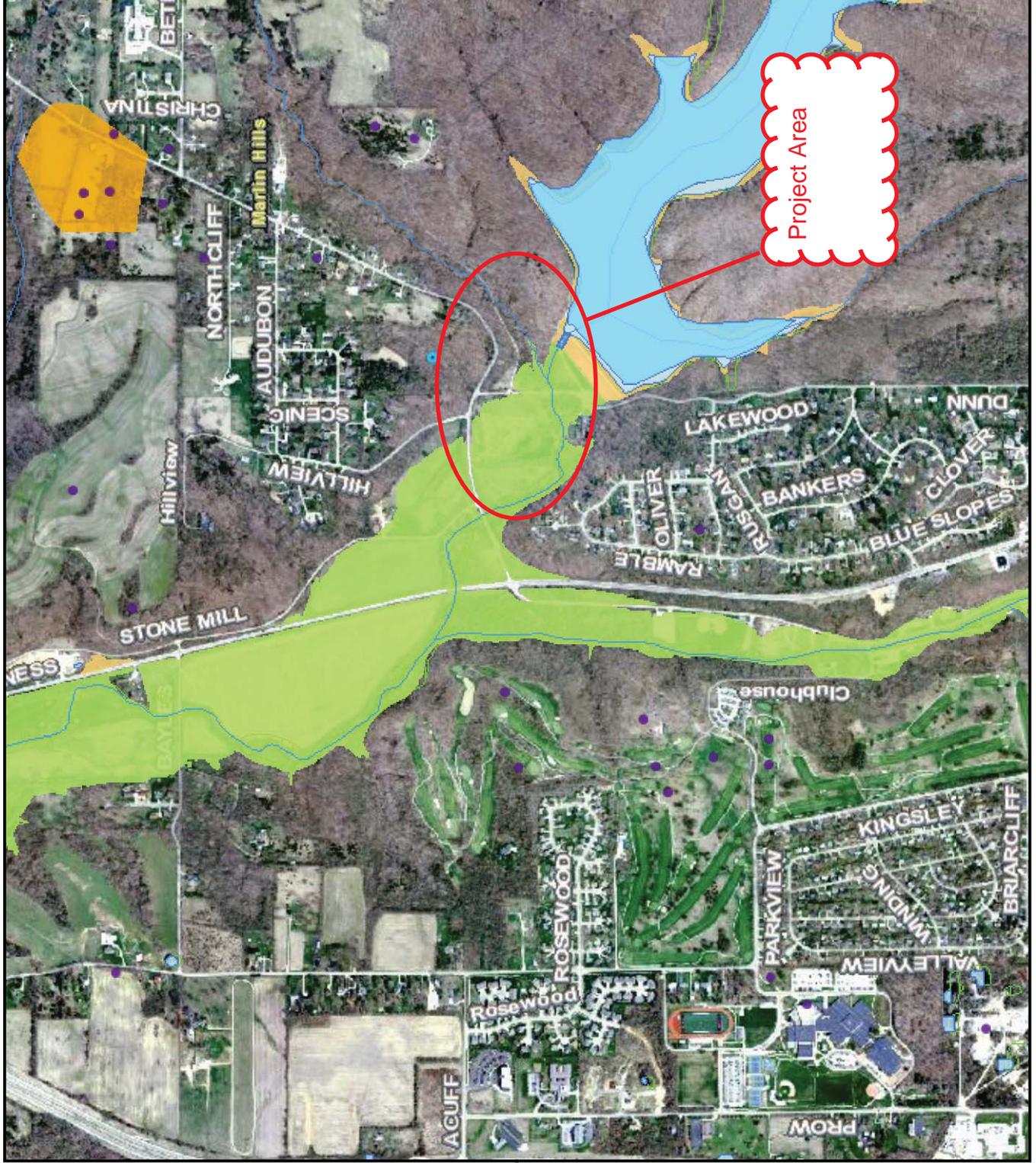
MKZ:WTT:CWS:cws

cmc: Patrick A. Carpenter, Indiana Department of Transportation
Mary Kennedy, Indiana Department of Transportation
Shaun Miller, Indiana Department of Transportation
Melany Prather, Indiana Department of Transportation
Linda Weintraut, Ph.D., Weintraut & Associates, Inc.

Appendix E: Red Flag and Hazardous Materials

Water Resources - Red Flag

Date: 2/23/2014



0.5 mi

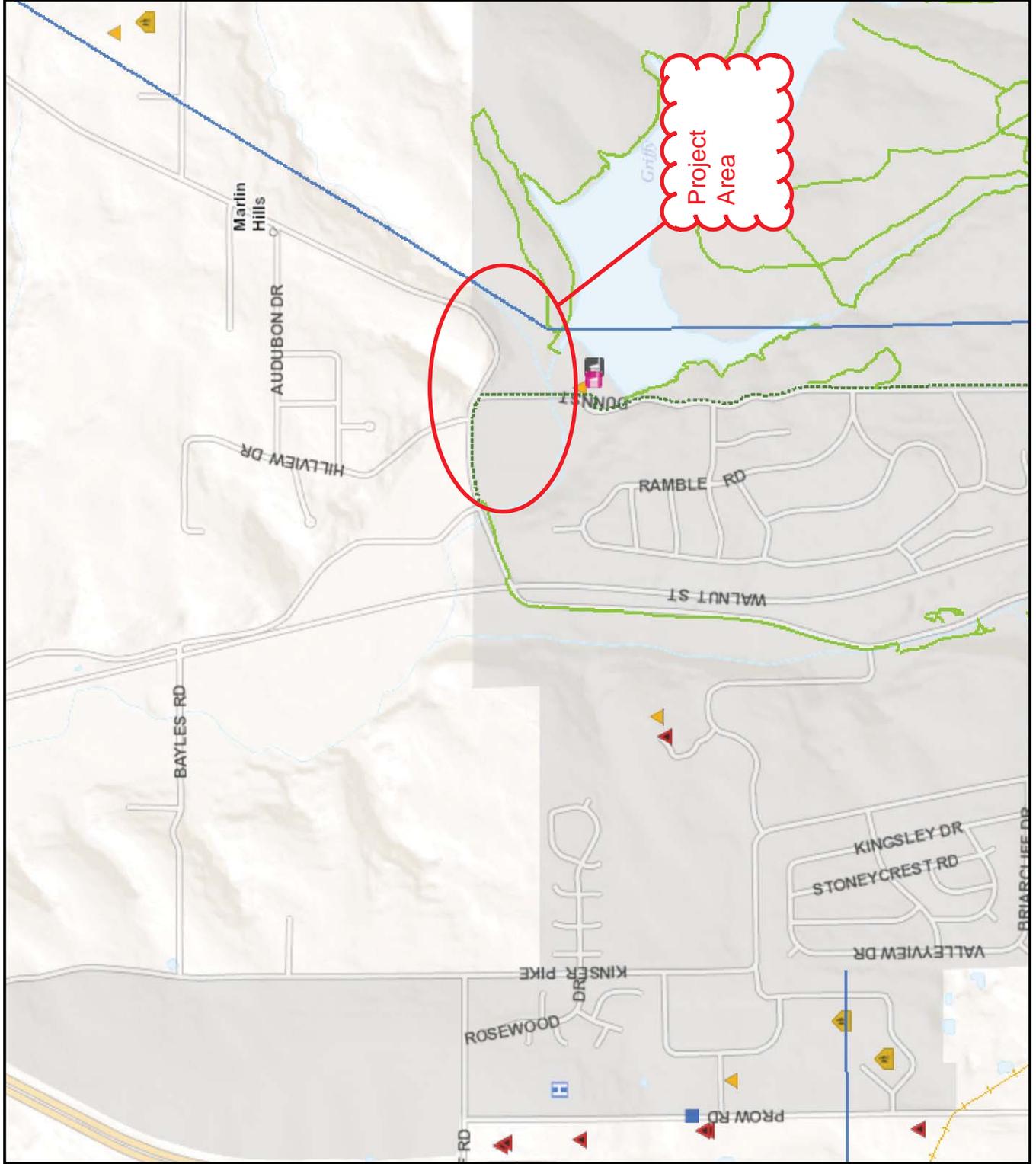
Author:

Legend

- Streams - Impaired (IDEM)
- Lakes - Impaired (IDEM)
- Sinkhole Inventory (2011)
- 0 - 1
- 2 - 5
- 6 - 10
- 11 - 15
- Sinkhole Area
- Sinking Stream Basin
- Streams (Local-Resolution NHD 20
- Stream Features
- Rivers - Outstanding (NRC)
- Streams (NHD)
- Rivers (NHD)
- Lakes (NHD)
- 0.2% Risk (aka 500-year Flood Zone)
- 1% Risk (aka 100-yr Flood Zone)
- Floodway
- Wetland Points
- Wetlands
- Wetland Lines
- Canal Structures - Historic
- Canal Routes - Historic

Infrastructure - Red Flag

Date: 2/23/2014



Legend

- Dams (IDNR)
- Dams 1996 (EPA)
- Crude Oil
- Natural Gas
- Refined Products
- Fire Stations (MHMP)
- Church Hospital
- Hospital District
- Local Hospital
- Other Hospital
- Private Hospital
- Proprietary Hospital
- Rural Health Clinic
- State Hospital
- Railroads - 1:100,000 (NTAD)
- Open
- Planned
- Under Development
- Recreational Facilities
- Religious Facilities
- Cemeteries
- Schools (MHMP)
- Fire Stations (IDHS)
- Hospitals (IDHS)
- Emergency Med. Services (IDHS)

0.5 mi

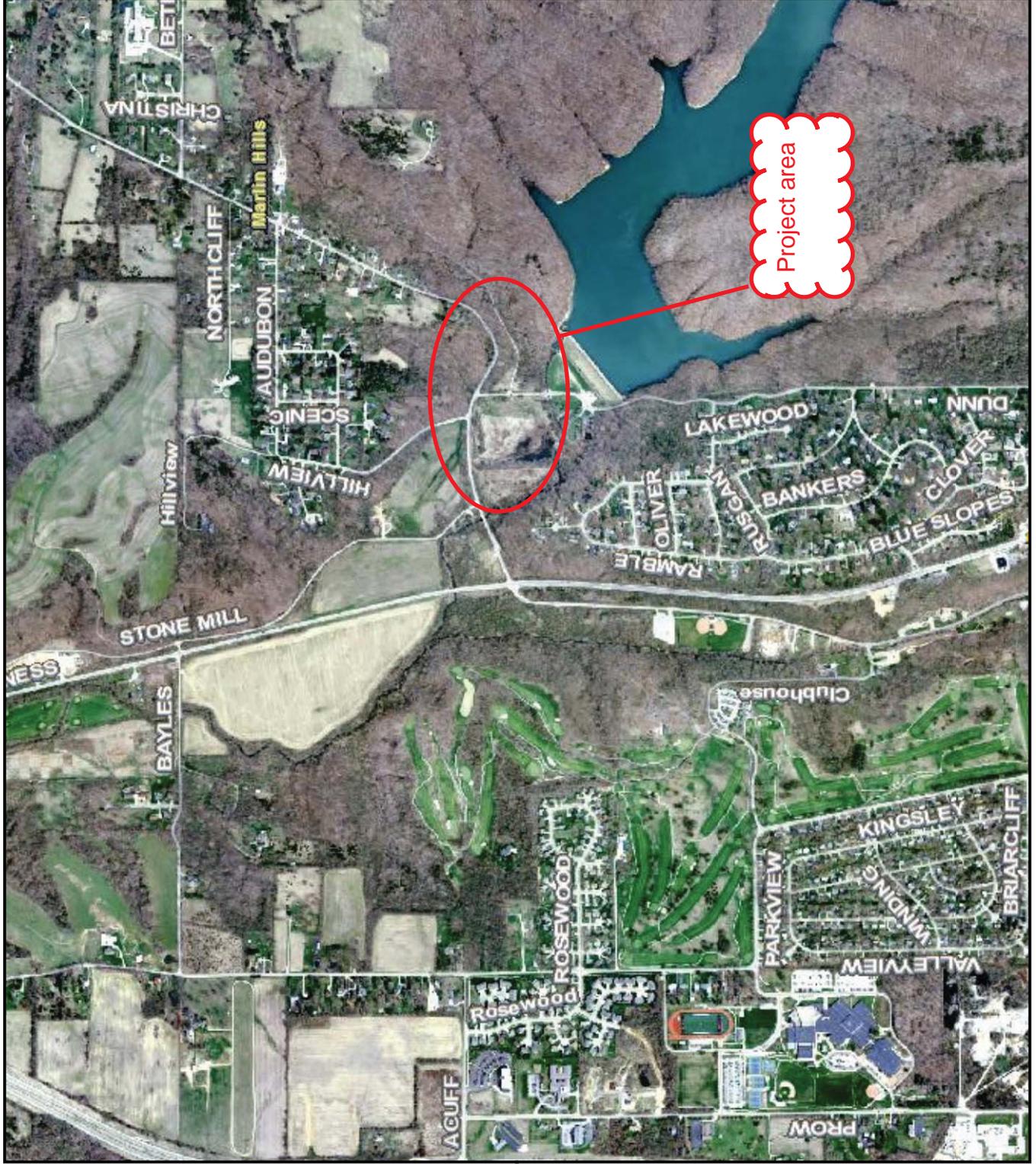
E-2

IndianaMAP

Author:

Hazmat Concerns - Red Flag

Date: 2/23/2014



Legend

- Confined Feeding Operations
- Composting - Confined Feeding Op
- SW Disposal - Construction/Demoli
- SW Disposal - Clean Fill
- SW Disposal - Closed
- SW Disposal - Municipal
- SW Disposal - Non-Municipal
- SW Disposal - Open Dump
- SW Disposal - Restricted (Type I)
- SW Disposal - Restricted (Type II)
- SW Disposal - Restricted (Type III)
- SW Disposal - Restricted (Type IV)
- SW Disposal - Restricted (Type V)
- SW Disposal - Restricted (TBD)
- SW Disposal - Sanitary
- SW Disposal - Surface Impoundme
- SW Processing - Alternate Fuel
- SW Processing - Confined Feeding
- SW Processing - SW Incinerator (>
- SW Processing - Infectious Waste I
- SW Processing - Material Recovery
- SW Processing - Medical Waste
- SW Processing - Other
- SW Processing - Recycling
- SW Processing - Transfer Station

Author:

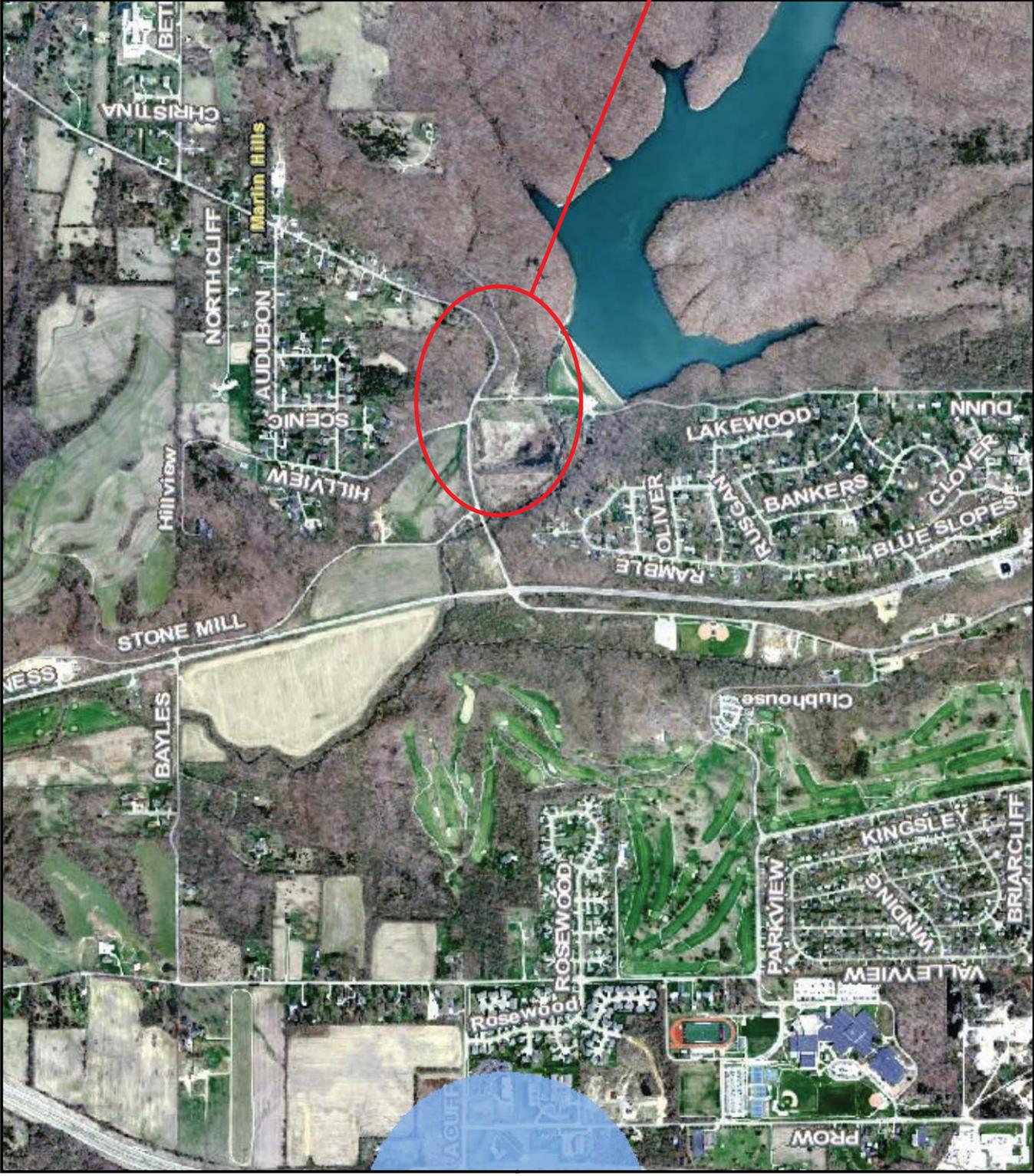
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E-3

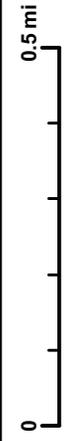
IndianaMAP

Mining/Minerals - Red Flag

Date: 2/23/2014

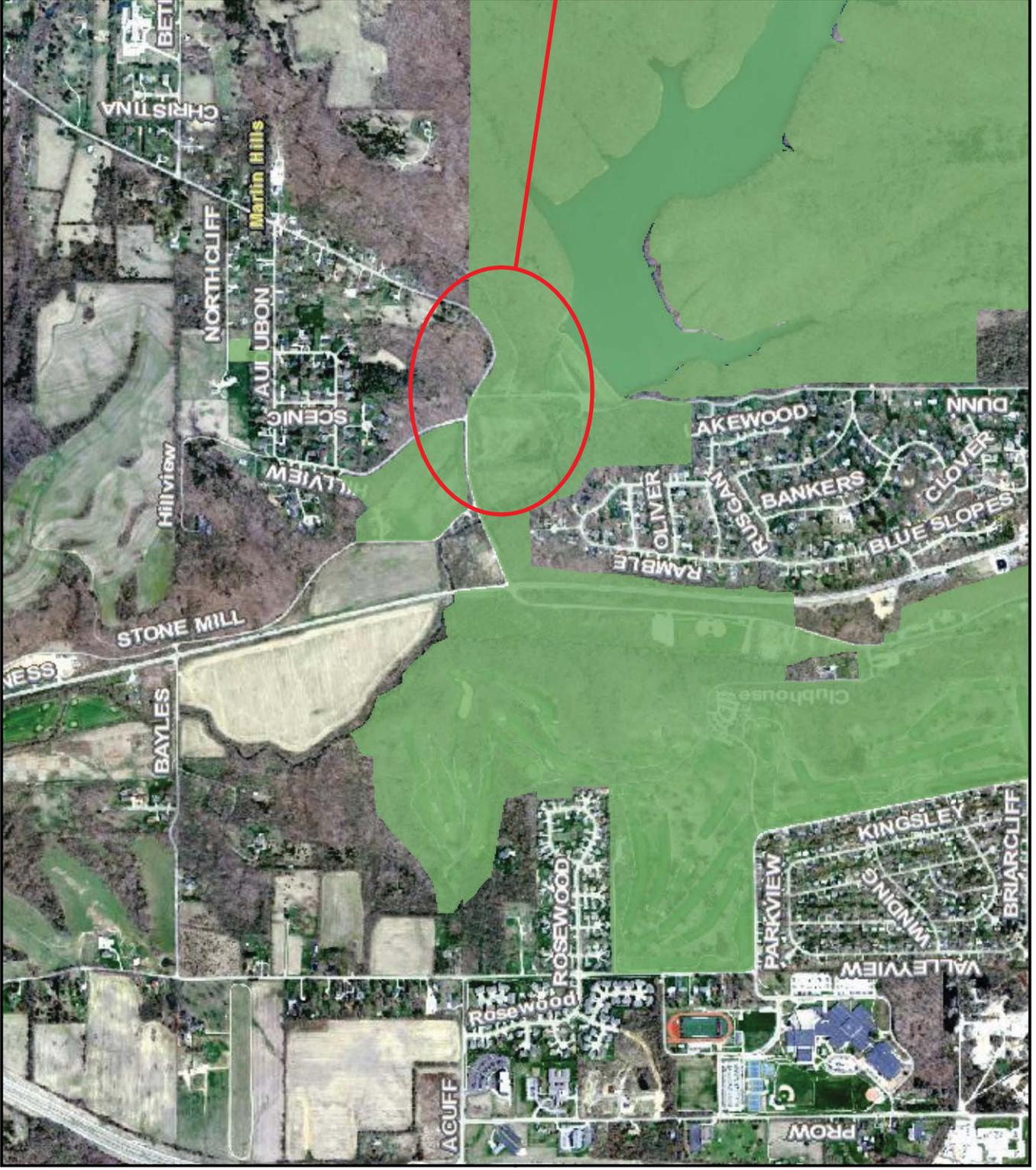


- Legend**
- Mines - Underground
 - Mines - Surface
 - Gas
 - Oil
 - Oil/gas
 - + Gas Wells
 - + Gas Storage Wells
 - + Oil Wells
 - + Service Wells
 - + Stratigraphic Test Wells
 - + Dry Wells
 - + Unknown Wells



Managed Lands- IDNR - Red Flag

Date: 2/23/2014



Legend

- Open (per regulations)
- Restricted

Author:

0.5 mi

IndianaMAP

E-5

HAZARDOUS MATERIALS SITE VISIT FORM

Des #: 1297060 Project #: 1297060
Road #: Old SR 37 and Dunn Streets
Type of Road Project: Curve Correction and Profile Correction

Description of area: In the general vicinity of the intersection of Old SR 37 and Dunn Streets in Bloomington and Monroe County, ranging along Old SR 37 from 1,000' west to 1,100' east of Dunn Street, and along Dunn Street from Old SR 37 to about 1,000' south of Old SR 37.

Person completing this Field Check: Brock Ridgway, P.E., on 3/16/2012

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

Notes:

Infrastructure – Very little exists within a ½ mile radius of the proposed work. A natural gas pipeline was indicated which has been located during the survey of the project and should not be impacted. (the location on the IndianaMap site is not accurate). The Griffy Lake Dam was identified but is not to be impacted by the project. All proposed work is below the dam and not near it. A planned trail was identified by IndianaMap that this project intends to build a portion of in conjunction with the roadway improvements.

Hazmat – The site is apparently clean. The Red Flag survey indicated no sites of interest within ½ mile.

Managed Lands – The Red Flag survey indicated much of the project area is IDNR Managed Lands, but this was already known given the area is at the edge of the Griffy Recreational Area. This must be addressed in the Environmental Document as a 4(f) resource and through appropriate permitting coordination.

Mining/Minerals - The Red Flag survey indicated no sites of interest within ½ mile.

Water Resources – The red flag survey confirmed the presence of the Griffy Creek floodplain which will demand an IDNR Construction in a Floodway permit. The red flag survey did not reveal either a specific wetland area near the project or the presence of a former IDNR tree mitigation site, both of which were identified by the City and by site investigations. These must be considered, avoided if possible, and properly permitting as necessary as the project develops further. Karst features, which are a general concern in the area, are not present in the project area. Some sinkholes and a karst spring were indicated outside of the project limits, but inside the ½ mile radius. The entire project area drains overland, or through roadside ditches and culverts, to Griffy Creek. There is no apparent involvement with karst geology or hydrology for this project.

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

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

Notes:

The curve correction on Old SR 37 will require about 0.25 acre of permanent right of way from private properties. Most of the project area, including both sides of Dunn Street and the south side of Old SR 37 (except a small amount at the east end) are currently publicly owned land held by the City of Bloomington.

3. **Land Use History and Development:** (Industrial, Light Industry, Commercial, Agricultural, Residential,

Setting (rural or urban):

While this project straddles the incorporated boundary of the City of Bloomington, the setting is very much rural, and hilly; typical for rural two-lane roadways in southern Indiana. Old SR 37 was originally cut into the side of a relatively steep hillside and drops off sharply on the roadway's south side. North of Old SR 37 the hillside continues up and is also relatively steep. The land is generally not appropriate for development.

The portions of Old SR 37 and Dunn Street which are in the Griffy Creek floodplain are relatively flat and appear to have been originally built on embankments to reduce their likelihood of being flooded. The presence of the floodway/floodplain no doubt explains the lack of development in this area.

The author is not aware of when the Griffy Creek Dam was constructed, but it appears likely that this was the only major construction to have occurred in this area in recent decades. The proposed work does not include the dam area in any way other than to partially intrude upon the floodplain below the dam.

It is mostly undeveloped land and is still forested, especially north of Old SR 37 and east of Dunn Street. Maps indicated that this area has been unchanged in decades.

Current Land Uses:

These two roadways serve as local rural collectors through this relatively undeveloped area.

Previous Land Uses:

This area has not changed in recent decades.

Adjacent Land Uses:

Forested and undeveloped.

Describe any structures on the property:

There are no structures in the existing or proposed right of way.

There is a single house on the north side of Old SR 37 near the eastern project limits. Its access drive is in the project and will require consideration. The house itself sits about 80' off the existing roadway and on a hill above the roadway. It is not to be impacted per se, though initial investigations reveal it may have historic significance, and this work is being coordinated in the Section 106 work for the project.

There is also a small house east of Dunn Street that sits approximately 1,000' east of Dunn. It is well outside of the project though its access drive will require reconstruction at Dunn Street due to the proposed grade change.

4. Visual Inspection:	Property	Adjoining Property		Property	Adjoining Property
Storage Structures:			Evidence of Contamination:		
Underground Tanks	NO	NO	Junkyard	NO	NO
Surface Tanks	NO	NO	Auto Graveyard	NO	NO
Transformers	NO	NO	Surface Staining	NO	NO
Sumps	NO	NO	Oil Sheen	NO	NO
Ponds/Lagoons	NO	NO	Odors	NO	NO
Drums	NO	NO	Vegetation Damage	NO	NO
Basins	NO	NO	Dumps	NO	NO
Landfills	NO	NO	Fill Dirt Evidence	NO	NO
Other	NO	NO	Vent pipes or fill pipes	NO	NO
			Other	NO	NO

The site includes buried water, natural gas and aerial and buried telecommunications utilities. These each must be handled through the Utility coordination process.

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

The site investigation performed on 3/16/2012 revealed nothing suspicious in the project area. It is mostly undeveloped, forested, hill country along Old SR 37 east of Dunn Street.

The portion of Old SR 37 west of Dunn, and Dunn Street, are clearly in the Griffy Creek floodplain and are reviewed in depth as appropriate for those concerns.

The southwest quadrant of Old SR 37 and Dunn Street contains a wet meadow area that appears to be, and was later confirmed to be, a wetland through a formal determination. That issue is considered in depth in that section of the Environmental document. This quadrant also contains a planted area that the City noted is a former IDNR tree mitigation site. This issue is to be addressed through the permitting process with IDNR.

The red flag survey performed on IndianaMap on 2/23/2014 by Brock Ridgway, P.E. is included in this report. It revealed no additional concerns aside from those discussed herein.

Appendix F: Water Resources



Designer's Note -
 This mapping for Wetlands is what is present on the NWI website - it shows no wetland in the project area, but site investigation revealed a strong suspicion of wetlands near the project that was later confirmed in the investigation and delineation by Cardno JFNew

Approximate area of suspected wetland, which was later mapped and surveyed to determine true boundaries (on plans)

Approximated project area in white

F-1

REGULATED WATERS DELINEATION REPORT

OLD SR 37 AND DUNN INTERSECTION REALIGNMENT
MONROE COUNTY, INDIANA

JANUARY 13, 2012

Prepared for:



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This report was not advanced to final form because the wetland identified was readily avoidable. Additionally, no formal jurisdictional determination was needed because the wetland is being avoided. It is provided for information only to document the effort taken to identify wetlands resources in the project area.

REGULATED WATERS DELINEATION REPORT

TABLE OF CONTENTS

1.0	<u>INTRODUCTION</u>	1
2.0	<u>REGULATORY DEFINITIONS</u>	2
3.0	<u>BACKGROUND INFORMATION</u>	6
4.0	<u>SITE INVESTIGATION AND DESCRIPTION</u>	7
5.0	<u>JURISDICTIONAL ANALYSIS</u>	11
6.0	<u>SUMMARY AND CONCLUSION</u>	12
7.0	<u>REFERENCES</u>	12

FIGURES

APPENDIX A – SITE PHOTOGRAPHS

APPENDIX B – WETLAND DETERMINATION DATA SHEETS – EASTERN MOUNTAINS AND PIEDMONT REGION

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REGULATED WATERS DELINEATION REPORT OLD SR 37 AND DUNN INTERSECTION REALIGNMENT MONROE COUNTY, INDIANA

1.0 INTRODUCTION

1.1 As part of the NEPA process for a road improvement project, Cardno JFNew was contracted to perform a boundary delineation and assessment of regulated waters, including wetlands and streams, which occur at a site located in Section 21, Range 1 West, Township 9 North, in Monroe County, Indiana (Figure 1). The project site encompasses approximately 7.5 acres of land located northwest of Griffy reservoir. Griffy Creek flows from the dam overflow and through the project site. A second outflow from the dam also flows through the site via a buried pipe and then joins Griffy Creek in the project site.

Approximately 0.052 acre of jurisdictional wetland and 300 linear feet (LF) of perennial stream were identified within the study area.

1.2 This report identifies the jurisdictional status of the project area based on Cardno JFNew's best professional understanding and interpretation of the *Corps of Engineers' Wetland Delineation Manual* (Environmental Laboratory, 1987) and U.S. Army Corps of Engineers' (USACE) guidance documents and regulations. Jurisdictional determinations for other "waters of the U.S." were made based on definitions and guidance found in 33 CFR 328.3, USACE Regulatory Guidance Letters, and the wetland delineation manual. The USACE administers Section 404 of the Clean Water Act (CWA), which regulates the discharge of fill or dredged material into all "waters of the U.S.," and is the regulatory authority that must make the final determination as to the jurisdictional status of the project area.

This report was not advanced to final form because the wetland identified was readily avoidable. Additionally, no formal jurisdictional determination was needed because the wetland is being avoided. It is provided for information only to document the effort taken to identify wetlands resources in the project area.

2.0 REGULATORY DEFINITIONS

2.1 Waters of the United States

“Waters of the U.S.” are within the jurisdiction of the USACE under the CWA. “Waters of the U.S.” is a broad term, which includes waters that are used or could be used for interstate commerce. This includes wetlands, ponds, lakes, territorial seas, rivers, tributary streams including any definable intermittent waterways, and some ditches below the ordinary high water mark (OHWM). Also included are manmade water bodies such as quarries and ponds, which are no longer actively being mined or constructed and are connected to other “waters”. Wetlands, mudflats, vegetated shallows, riffle and pool complexes, coral reefs, sanctuaries, and refuges are all considered special aquatic sites which involve more rigorous regulatory permitting requirements. A specific, detailed definition of “waters of the U.S.” can be found in the Federal Register (33 CFR 328.3).

On January 9, 2001, the U.S. Supreme Court issued a decision, Solid Waste Agency of Northern Cook County (SWANCC) v. U.S. Army Corps of Engineers (No. 99-1178). The decision reduces the regulation of isolated wetlands under Section 404 of the CWA, which assigns the USACE authority to issue permits for the discharge of dredge or fill material into “waters of the U.S.”. Prior to the SWANCC decision, the USACE had adopted a regulatory definition of “waters of the U.S.” that afforded federal protection for almost all of the nation’s wetlands. The Supreme Court decision interpreted that the USACE’s jurisdiction is restricted to navigable waters, their tributaries, and wetlands that are adjacent to these navigable waterways and tributaries. The decision leaves the majority of “isolated” wetlands unregulated by the CWA. Therefore, most wetlands that are not adjacent to, or contiguous with, any other “waters of the U.S.” via a surface drain such as a swale, ditch, or stream are considered isolated and thus no longer jurisdictional by the USACE.

On June 19, 2006, the U.S. Supreme Court issued decisions in regards to John A. Rapanos v. United States (No. 04-1034) and June Carabell v. United States (04-1384), et al. The plurality decision created two ‘tests’ for determining CWA jurisdiction: the permanent flow of water test (set out by Justice Scalia) and the “significant nexus” test (set out by Justice Kennedy). On June 5, 2007 the USACE and EPA issued joint guidance on how to interpret and apply the Court’s ruling. According to this guidance, the USACE will assert jurisdiction over traditionally navigable waters, adjacent wetlands, and non-navigable tributaries of traditionally navigable waters that have “relatively permanent” flow, and wetlands that border these waters, regardless of whether or not they are separated by roads, berms, and similar barriers. In addition, the USACE will use a case-by-case “significant nexus” analysis to determine whether waters and their adjacent wetlands are jurisdictional. A “significant nexus” can be found where waters, including adjacent wetlands, alter the physical, biological, or chemical integrity of the traditionally navigable water based on consideration of several factors.

2.2 Waters of the State

“Waters of the state” are within the jurisdiction of the Indiana Department of Environmental Management (IDEM). They are generally defined as surface and underground water bodies, which extend through or exist wholly in the State, which includes, but is not limited to, streams and both isolated and non-isolated wetlands. Private ponds, or any pond, reservoir, or facility

built for reduction of pollutants prior to discharge are not included in this definition. In addition to “waters of the U.S.,” the IDEM also regulates and issues permits for isolated wetland impacts.

The State relies on the USACE decision regarding wetland determinations and delineations including whether or not a wetland is isolated or non-isolated.

2.3 Wetlands

Wetlands are a category of “waters of the U.S.” for which a specific identification methodology has been developed. As described in detail in the *Corps of Engineers Wetland Delineation Manual* (Environmental Laboratory, 1987), wetland boundaries are delineated using three criteria: hydrophytic vegetation, hydric soils, and wetland hydrology. In addition to the criteria defined in the 1987 Manual, the procedures described in the *Interim Regional Supplement to the Corps of Engineers Wetland Delineation Manual: Eastern Mountains and Piedmont Region* (Environmental Laboratory, 2010) was used to evaluate the project area for the presence of wetlands.

2.3.1 Hydrophytic Vegetation. In the course of developing the wetland determination methodology the USACE, in cooperation with the U.S. Fish and Wildlife Service (USFWS), Environmental Protection Agency (EPA), and the Soil Conservation Service (SCS), compiled a comprehensive list of wetland vegetation. The indicator status of plant species is expressed in terms of the estimated probability of that species occurring in wetland conditions within a given region. The indicator categories as defined by the USACE are:

Obligate Wetland (OBL): Occurs almost always (estimated probability >99 percent) under natural conditions in wetlands.

Facultative Wetland (FACW): Usually occurs in wetlands (estimated probability 67 to 99 percent), but occasionally found in non-wetlands.

Facultative (FAC): Equally likely to occur in wetlands or non-wetlands (estimated probability 34 to 66 percent).

Facultative Upland (FACU): Usually occurs in non-wetlands, but occasionally found in wetlands (estimated probability 1 to 33 percent).

Obligate Upland (UPL): Occurs almost always (estimated probability >99 percent) in uplands.

Plants that are OBL, FACW, and FAC are considered wetland species. The percentage of the dominant wetland species in each of the vegetation strata in the sample area determines the hydrophytic or wetland status of the plant community. Soil type and hydroperiod are two factors important in controlling species composition.

In order for an area to be considered a wetland, it must display a dominance of hydrophytic vegetation, which is determined using the 50/20 rule. The methodology for the 50/20 rule is as follows:

1. For each stratum (tree, sapling, shrub, woody vine, herb):
 - a. Estimate percent areal cover (alternatively, use basal area or stem density) for each species.
 - b. Calculate the relative percent areal cover by dividing each species percent cover into the total percent cover for all species and multiplying by 100.
 - c. In descending order of relative percent cover, select species that when cumulatively totaled immediately exceed 50% of total relative cover. Species of equal cover value that would contribute to meeting this requirement must all be selected. These are considered dominants.
 - d. Identify any other species that by themselves account for 20% or more of the relative percent cover. These are also considered dominant species.
2. Look up wetland indicator status of all dominant species in all strata.
3. Determination of prevalence:
 - a. If more than 50% of the dominant species are FAC or wetter, then hydrophytic vegetation is prevalent.
 - b. If the number of dominant species FAC or wetter is equal to the number of dominant species FACU or drier or all dominant species are FAC:
 - i. Use the FAC-neutral test to determine prevalence (see below).
 - ii. If the FAC-neutral test results in a tie, base the determination on soils and hydrology indicators.

2.3.2 Hydric Soils. Hydric soils are defined as soils that are saturated, flooded, or ponded long enough during the growing season to develop anaerobic conditions in the upper part. In general, hydric soils are flooded, ponded, or saturated for a week or more during the growing season when soil temperatures are above 32 degrees Fahrenheit. The anaerobic conditions created by repeated or prolonged saturation or flooding result in permanent changes in soil color and chemistry, which are used to differentiate hydric from non-hydric soils.

In this report, soil colors are described using the Munsell notation system. This method of describing soil color consists of separate notations for hue, value, and chroma that are combined in that order to form the color designation. The hue notation of a color indicates its relation to red, yellow, green, blue, and purple; the value notation indicates its lightness, and the chroma notation indicates its strength or departure from a neutral of the same lightness.

The symbol for hue consists of a number from 1 to 10, followed by the letter abbreviation of the color. Within each letter range, the hue becomes more yellow and less red as the numbers increase. The notation for value consists of numbers from 0 for absolute black, to 10 for absolute white. The notation for chroma consists of numbers beginning with /0 for neutral grays and increasing at equal intervals. A soil described as 10YR 3/1 soil is more gray than a soil designated 10YR 3/6.

2.3.3 Wetland Hydrology. Wetland hydrology is defined as the presence of water for a significant period of time at or near the surface (within the root zone) during the growing season. Wetland hydrology is present only seasonally in many cases, and is often inferred by indirect evidence. Hydrology is controlled by such factors as seasonal and long-term rainfall patterns, local geology and topography, soil type, local water table conditions, and drainage. Primary indicators of hydrology are inundation, soil saturation in the upper 12 inches of the soil, watermarks, sediment deposits, and drainage patterns. Secondary indicators such as oxidized root channels in the upper 12 inches of the soil, water-stained leaves, local soil survey data, and the FAC-neutral vegetation test are sometimes used to identify hydrology. A primary indicator or two or more secondary indicators are required to establish a positive indication of hydrology.

2.3.4 Wetland Definition Summary. In general, an area must meet all three criteria to be classified as a wetland. In certain problem areas such as seasonal wetlands, which are not wet at all times, or in recently disturbed (atypical) situations, areas may be considered a wetland if only two criteria are met. In special situations, an area that meets the wetland definition may not be within the USACE's jurisdiction due to a specific regulatory exemption.

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3.0 **BACKGROUND INFORMATION**

3.1 **Existing Maps**

Several sources of information were consulted to identify potential wetlands and wetland soil units on the site. These include the USFWS's *National Wetland Inventory* (NWI) and the Natural Resources Conservation Service's (NRCS) *Soil Survey* for this county. These maps identify potential wetlands and wetland soil units on the site. The NWI maps were prepared from high altitude photography and in most cases were not field checked. Because of this, wetlands are sometimes erroneously identified, missed, or misidentified. Additionally, the criteria used in identifying these wetlands were different from those currently used by the USACE. The county soil maps, on the other hand, were developed from actual field investigations. However, they address only one of the three required wetland criteria and may reflect historical conditions rather than current site conditions. The resolution of the soil maps limits their accuracy as well. The mapping units are often generalized based on topography and many mapping units contain inclusions of other soil types for up to 15 percent of the area of the unit. The USACE does not accept the use of either of these maps to make wetland determinations.

3.2 **National Wetland Inventory**

The NWI map of the area (Figures 1 and 2) does not identify any NWI wetland complexes within the proposed site boundaries. Digital NWI maps retain the accuracy and currentness of their source materials and their accuracy for use in digital mapping is limited. Original NWI maps for Monroe County were created at a scale of 1:24,000. The NWIs shown on Figure 2 are shown at a scale of 1:2000, creating a significant offset in the locations of the NWI polygons represented on this map. There are no NWI polygons within the project site boundaries.

3.3 **Soil Survey**

The NRCS *Soil Survey of Monroe County* identified four soil series on the site (Figure 3). The following table identifies the soil unit symbol, soil unit name, and whether or not the soil type contains components that meet the hydric soil criteria.

Table 1: Soil Types within the Project Site

Symbol	Description	Hydric
BkF	Berks-Weikert complex, 25 to 75 percent slopes	No
Hd	Haymond silt loam, frequently flooded	No
Wa	Wakeland silt loam, frequently flooded	No

4.0 SITE INVESTIGATION AND DESCRIPTION

4.1 Investigation Methodology

The delineation of wetlands and other “waters of the U.S.” on the site were based on the methodology described in the *Corps of Engineers Wetland Delineation Manual* (Environmental Laboratory, 1987) and the *Interim Regional Supplement to the Corps of Engineers Wetland Delineation Manual: Eastern Mountain and Piedmont Region* (Environmental Laboratory, 2010) as required by current USACE policy.

Prior to the field work, the background information was reviewed to establish the probability and approximate location of wetlands on the site. Next a general reconnaissance of the project area was conducted to determine site conditions. The site was then walked with the specific intent of determining wetland boundaries. Data stations were established at locations within and near the wetland areas to document soil characteristics, evidence of hydrology and dominant vegetation. Note that no attempt was made to examine a full soil profile to confirm any soil series designations. However, soils were examined to a depth of at least 16 inches to assess soil characteristics and site hydrology. Complete descriptions of typical soil series can be found in the soil survey for this county.

4.1.1 Site Photographs. Photographs of the site are located in Appendix A. These photographs are the visual documentation of site conditions at the time of inspection. The photographs are intended to provide representative visual samples of any wetlands or other special features found on the site.

4.1.2 Delineation Data Sheets. Where stations represent a wetland boundary point they are presented as paired data points, one each documenting the wetland and upland sides of the wetland boundary. The distance the specific upland or wetland stations are from the boundary point is noted on the data sheet. The routine wetland delineation data sheets used in the jurisdictional delineation process are located in Appendix B. These forms are the written documentation of how representative sample stations meet or do not meet each of the wetland criteria. The nomenclature for the vegetation portion of the delineation data sheets can be found in *Manual of Vascular Plants of Northeastern United States and Adjacent Canada* (1991).

4.3 Technical Descriptions

Complete data sheets for all of the data points are located in Appendix B. The site is located in the floodplain of Griffy Creek, just northwest of Griffy Reservoir in the town of Bloomington, Indiana. Approximately 0.052 acre of emergent wetland is located within the project boundaries. The wetland extends beyond the project boundary for an undetermined distance and abuts Griffy Creek. This connection to a regulated perennial stream indicated that the wetland located on-site should be considered a jurisdictional “water of the U.S.”

Wetland A (0.052 Acre On-site)

Wetland Data Point

Data Point 1 (DP1)

Data Point 1 is located outside of the project boundary, in the southeast portion of Wetland A. Indicators of hydrology include a high water table, saturated soil, crayfish burrows, microtopographic relief, and the FAC-neutral test.

Dominant vegetation in the vicinity of A1 includes Shallow Sedge (*Carex lurida*, OBL), Common Boneset (*Eupatorium perfoliatum*, FACW), Green Bulrush (*Scirpus atrovirens*, OBL), and Common Rush (*Juncus effuses*, OBL), which meets the hydrophytic (wetland) vegetation criterion. Non-dominant vegetation includes Mistflower (*Conoclinium coelistinum*, FAC), Pennsylvania Smartweed (*Polygonum pensylvanicum*, FACW), and Field Mint (*Mentha arvensis*, FACW).

The soil at DP1 is mapped as Wakeland silt loam, frequently flooded (Wa) - a non-hydric soil unit, and and meets hydric soil field criterion F3 – Depleted Matrix.

Upland Data Point

Data Point 2 (DP2)

Data Point 2 is located immediately northeast of DP1. No indicators of hydrology were observed in the vicinity of DP2.

Dominant vegetation in the vicinity of DP2 includes Autumn Olive (*Elaeagnus umbellatus*, UPL) and Multiflora Rose (*Rosa multiflora*, FACU) in the shrub layer, and Tall Fescue (*Festuca arundinacea*, FACU) in the herbaceous layer, which does not meet the hydrophytic vegetation criterion. Non-dominant vegetation includes Mistflower (FAC), Queen Anne's Lace (*Daucus carota*, UPL), Mexican Muhly Grass (*Muhlenbergia Mexicana*, FACW), Little Bluestem (*Schizachyrium scoparium*, FACU), Creeping Jenny (*Lysimachia nummularia*, OBL), Canada Goldenrod (FACU), Alsike Clover (*Trifolium hybridum*, FAC), and Allegheny Blackberry (*Rubus allegheniensis*, FACU).

The soil at DP2 is mapped as Wakeland silt loam, frequently flooded (Wa) - a non-hydric soil unit, and and meets hydric soil field criterion F3 – Depleted Matrix. Due to a lack of hydrology and hydrophytic vegetation, the area in the vicinity of DP2 was classified as non-wetland.

Wetland Data Point

Data Point 3 (DP3)

Data Point 3 is located outside of the project boundary, in the southeast portion of Wetland A. Indicators of hydrology include a high water table, saturated soil, crayfish burrows, microtopographic relief, and the FAC-neutral test.

Dominant vegetation in the vicinity of DP3 includes Creeping Jenny (OBL), Cattail (*Typha* sp., OBL), and Field Mint (FACW), which meets the hydrophytic vegetation criterion. Non-dominant vegetation includes Tall Fescue (FACU) and Swamp Milkweed (*Asclepias incarnate*, OBL).

The soil at DP3 is mapped as Wakeland silt loam, frequently flooded (Wa) - a non-hydric soil unit, and and meets hydric soil field criterion F3 – Depleted Matrix.

Upland Data Point

Data Point 4 (DP4)

Data Point 2 is located immediately southeast of DP3. Microtopographic relief, a secondary indicator of hydrology, is the only indicator of hydrology observed in the vicinity of DP4.

Dominant vegetation in the vicinity of DP4 includes Tall Fescue (FACU), which does not meet the hydrophytic vegetation criterion. Non-dominant vegetation includes Poverty Rush (*Juncus tenuis*, FAC) and Field Mint (FACW).

The soil at DP4 is mapped as Wakeland silt loam, frequently flooded (Wa) - a non-hydric soil unit, and and meets hydric soil field criterion F3 – Depleted Matrix. Due to a lack of hydrology and hydrophytic vegetation, the area in the vicinity of DP2 was classified as non-wetland.

Additional Upland Data Points

Upland Data Point

Data Point 5 (DP5)

Data Point 5 is located in the east-central portion of the project site, east of Wetland A. No indicators of hydrology were observed in the vicinity of DP5.

Dominant vegetation in the vicinity of DP5 includes White Oak (*Quercus alba*, FACU) and Green Ash (*Fraxinus pennsylvanica*, FACW) in the tree stratum, Amur Honeysuckle (*Lonicera maackii*, UPL) in the shrub stratum, and Kentucky Bluegrass (*Poa pratensis*, FAC) in the herbaceous stratum, which did not meet the hydrophytic vegetation criterion.

The soil at DP5 is mapped as Wakeland silt loam, frequently flooded (Wa) - a non-hydric soil unit, and did not meet any field indicators of hydric soil. Due to a lack of hydrology, hydrophytic vegetation, and hydric soils, the area in the vicinity of DP5 was classified as non-wetland.

Upland Data Point

Data Point 6 (DP6)

Data Point 6 is located in the northwest portion of the project site, north of Wetland A. No indicators of hydrology were observed in the vicinity of DP6.

Dominant vegetation in the vicinity of DP6 includes Eastern Red Cedar (*Juniperus virginianus*, FACU) and Multiflora Rose (FACU) in the shrub stratum, and Kentucky Bluegrass (FAC) and Canada Goldenrod (FACU) in the herbaceous stratum, which did not meet the hydrophytic vegetation criterion.

The soil at DP6 is mapped as Wakeland silt loam, frequently flooded (Wa) - a non-hydric soil unit, and did not meet any field indicators of hydric soil. Due to a lack of hydrology, hydrophytic vegetation, and hydric soils, the area in the vicinity of DP6 was classified as non-wetland.

Streams

Griffy Creek (200 LF On-site)

Griffy Creek emerges from the north end of the Griffy Reservoir dam and flows to the west through the project site. The ordinary high water mark (OHWM) width of the channel through the project site averages approximately 18 LF. The substrate of the creek is 30% gravel, 30% sand, 25% cobble, and 15% concrete slab where it runs through the project site. The water level was above base flow on the date of the site visit and the maximum depth of the stream appeared to be approximately 2.5 feet. The stream was at or above bankfull capacity on the date of the site visit.

Outfall Tributary (100 LF On-site)

A small tributary has formed from a second dam outfall that emerges from a pipe coming from the southern end of the dam. The pipe runs below ground and daylights within the project boundaries. The OHWM width of the tributary through the project area averages approximately 15 LF. The substrate of the creek is dominated by rip-rap. Aquatic vegetation growing in the channel made identifying the substrate of the channel beyond the extents of the rip-rap difficult, but it appeared to be dominantly silt. The water appeared to be approximately two feet deep.

Vegetation growing along the banks of both channels included Tall Fescue (FACU), Allegheny Blackberry (FACU), Ground Ivy (*Glechoma hederacea*, FACU), Coral Berry (*Symphiocarpus orbiculatus*, UPL), Amur Honeysuckle (UPL), Sycamore (*Platanus occidentalis*, FACW), Japanese Honeysuckle (*Lonicera japonica*, FACU), and Canada Goldenrod (FACU).

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5.0 JURISDICTIONAL ANALYSIS

5.1 Corps of Engineers and the Indiana Department of Environmental Management

The USACE has authority over the discharge of fill or dredged material into “waters of the U.S.”. This includes authority over any filling, mechanical land clearing, or construction activities that occur within the boundaries of any “waters of the U.S.”. A permit must be obtained from the USACE before any of these activities occur. Permits can be divided into three general categories: Individual Permits, Nationwide Permits, and the Regional General Permits for Indiana.

Individual Permits are required for projects that do not fall into one of the specific Nationwide Permits (NWP) or the Regional General Permit (RGP) or are deemed to have significant environmental impacts. These permits are much more difficult to obtain and receive a much higher level of regulatory agency and public scrutiny and may require several months to more than a year for processing.

Nationwide Permits have been developed for projects which meet specific criteria and are deemed to have minimal impact on the aquatic environment. In Indiana, however, most NWP's have been rescinded and replaced by the Regional General Permit.

The Regional General Permits (RGP) for Indiana authorizes activities associated with the construction or installation of new facilities or structures as well as for agriculture or mining. Proposed wetland impacts must be less than 1 acre and meet specific criteria in order to qualify for these permits. Section 401 Water Quality Certification (WQC) must be obtained from the IDEM before the USACE will perform their permit review.

The IDEM is responsible for issuing Clean Water Act (CWA) Section 401 permits known as Water Quality Certification (WQC) in conjunction with the USACE Section 404 permits. The IDEM requires notification for all non-isolated wetland impacts less than 0.10 acre, which entails a brief notification form that must be signed by the applicant. However, for non-isolated wetland impacts greater than 0.10 acre, an application for WQC must be submitted concurrently with a wetland mitigation plan. The IDEM will not initiate their review process until both the application and wetland mitigation plan have been submitted.

Applicants proposing an impact to an “isolated wetland,” which is a wetland that the USACE has determined to be a non-federally jurisdictional wetland, are required to apply for and obtain Isolated Wetland Permits from IDEM. Isolated wetland permits are required under Indiana's State Isolated Wetland Law (Indiana Code 13-18-22 and 327 Indiana Administrative Code 17).

5.2 Other Agencies

The Indiana Department of Natural Resources (Indiana DNR) has jurisdiction over the floodway of ditches and streams with a watershed greater than one (1) square mile. If impacts are proposed to jurisdictional floodways, a Construction-In-A-Floodway Permit may be required from the Indiana DNR.

6.0 SUMMARY AND CONCLUSION

Cardno JFNew inspected the Old SR 37 and Dunn Intersection Realignment Project Site on December 22, 2011. Approximately 0.052 acre of wetland and 300 LF of stream were identified in the study area. All of the wetlands identified are located in the 100-year floodplain or the floodway of Griffy Creek and should be classified as “waters of the U.S.”, under the jurisdiction of the USACE.

A permit must be obtained from the USACE and the IDEM prior to any filling, dredging, or mechanical land clearing that occurs within the boundaries of any “waters of the U.S.” or “waters of the State”.

While this report represents our best professional judgment based on our knowledge and experience, it is important to note that the Louisville District of the U.S. Army Corps of Engineers has final discretionary authority over all jurisdictional determinations of “waters of the U.S.” including wetlands under Section 404 of the CWA in this region. It is therefore, recommended that a copy of this report be furnished to the Louisville District of the U.S. Army Corps of Engineers to confirm the results of our findings.

7.0 REFERENCES

Environmental Laboratory. 1987. *U.S. Army Corps of Engineers' Wetland Delineation Manual*, Technical Report Y-87-1, U.S. Waterways Experiment Station, Vicksburg, MS.

Environmental Laboratory. 2008. *Interim Regional Supplement to the Corps of Engineers Wetland Delineation Manual: Midwest Region*, ERDC/EL TR-08-27, U.S. Army Engineer Research and Development Center, Vicksburg, MS.

Gleason, H.A. and A. Cronquist. 1991. *Manual of Vascular Plants of Northeastern United States and Adjacent Canada*. 2nd Edition. The New York Botanical Garden. Bronx, NY.

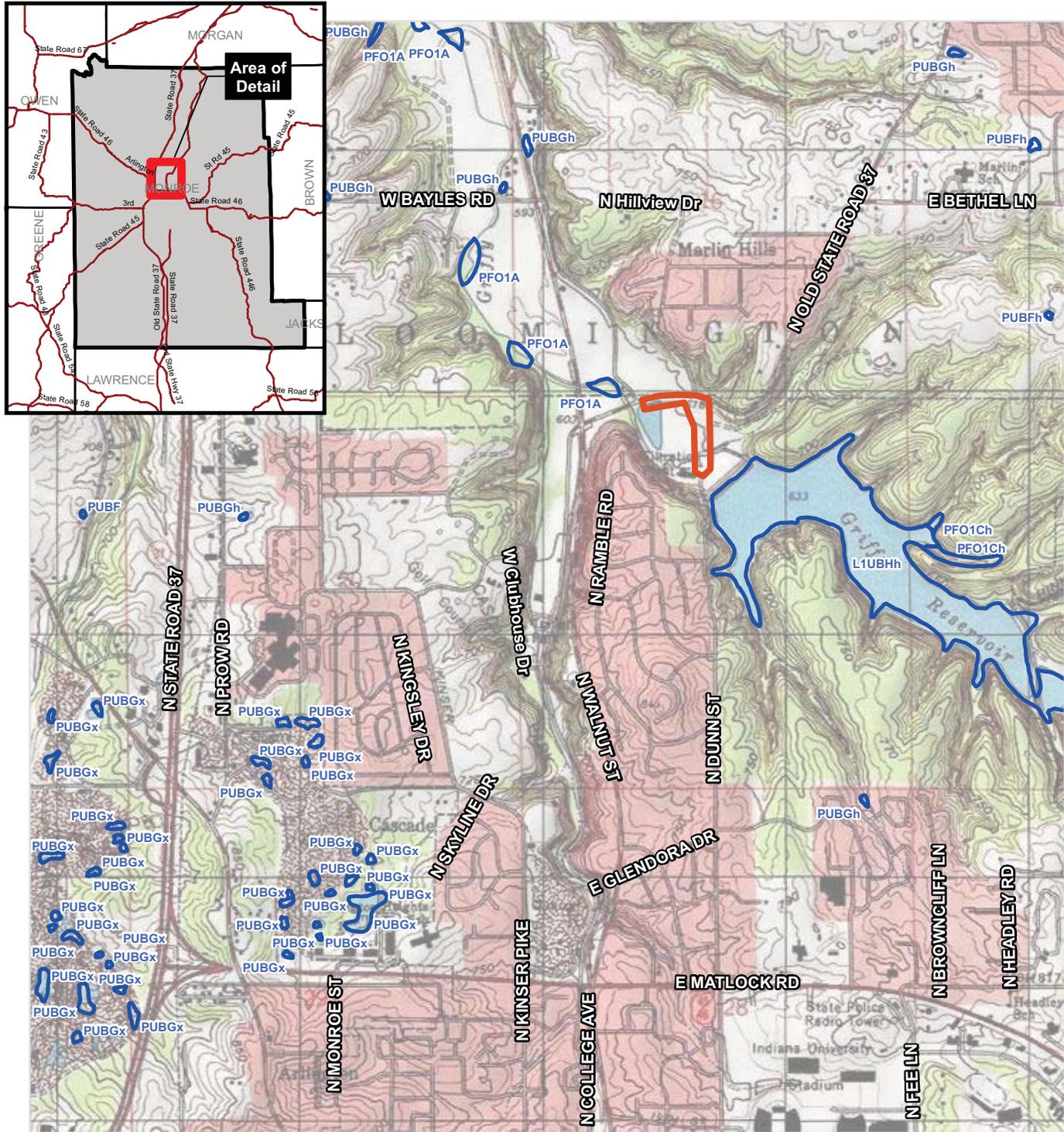
United States Department of Agriculture, Natural Resource Conservation Service (NRCS). Web Soil Survey. *Soil Survey of Monroe County, IN*.

This report was not advanced to final form because the wetland identified was readily avoidable. Additionally, no formal jurisdictional determination was needed because the wetland is being avoided. It is provided for information only to document the effort taken to identify wetlands resources in the project area.

FIGURES

REGULATED WATERS DELINEATION REPORT
SR 48 STREAM MITIGATION (DES. 0710010)
DEARBORN COUNTY, INDIANA





The information presented in this map document is advisory and intended for reference purposes only.

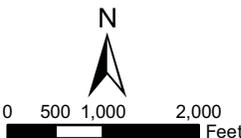
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 False Northing: 0.0000
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 Latitude Of Origin: 0.0000
 Units: Meter

Source: USDA-NRCS-NCGC Digital Raster Graphic MrSID Mosaic
 URL: <http://data.gateway.nrcs.usda.gov/>
 NWI - GIS Data Depot
 (<http://data.geocomm.com/>)

DRAFT

-  Site Boundary
-  National Wetland Inventory (NWI) Polygons

Figure 1: Site Location and NWI Polygon Map
Old SR37 and Dunn Intersection Realignment
Regulated Waters Delineation
Eagle Ridge Civil Engineering Services, LLC
Monroe County, Indiana
 (Bloomington Quadrangle; T9N, R1W, Sec21)

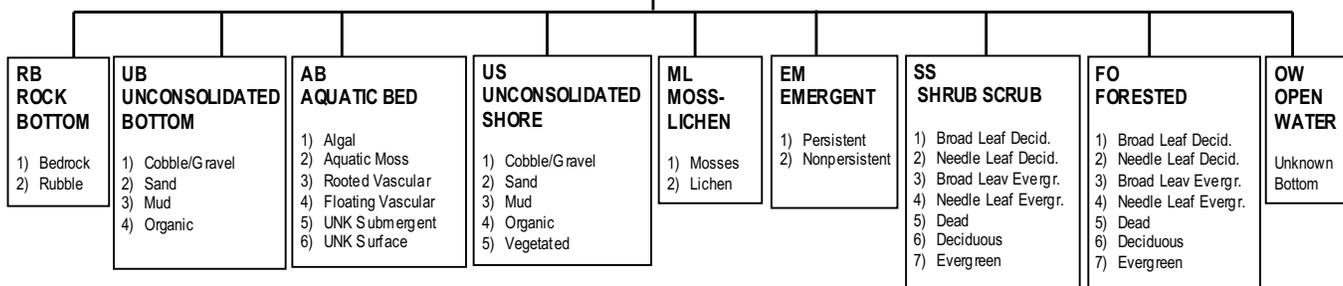



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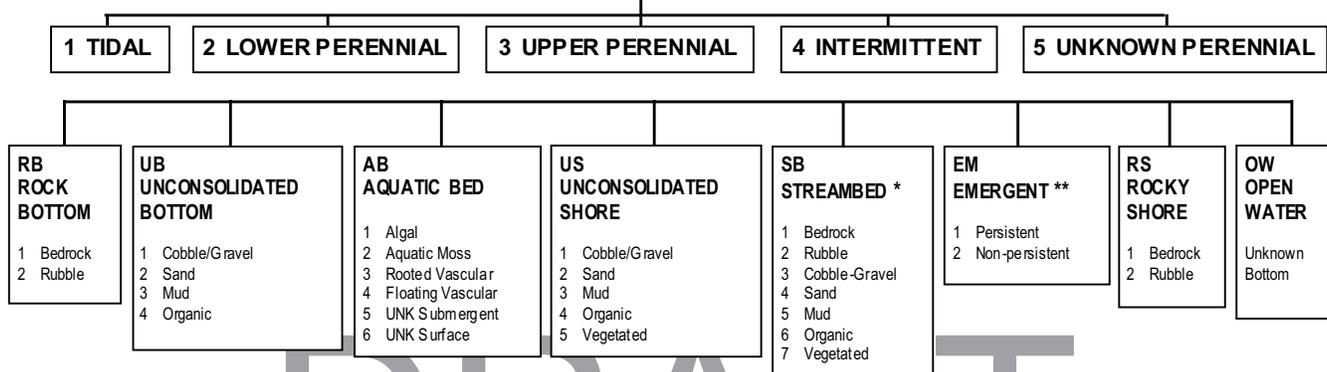
January 2011
 Job No. 1112055

FRESHWATER WETLAND CLASSIFICATION

P—PALUSTRINE



R—RIVERINE



MODIFYING TERMS

In order to more adequately describe wetland and aquatic habitats water regime, water chemistry, soil of special modifiers may be applied.

WATER REGIME		WATER CHEMISTRY		SOIL	SPECIAL MODIFIERS
NON-TIDAL		INLAND SALINITY		pH MODIFIERS FOR FRESHWATER	
A Temporarily Flooded	J Intermittently Flooded	7 Hypersaline	a Acid		g Organic
B Saturated	K Artificially Flooded	8 Eusaline	t Circumneutral	n Mineral	d Partially Drained/Ditched
C Seasonally Flooded	W Intermittently Flooded/ Temporary	9 Mixosaline	i Alkaline		f Farmed
D Seasonally Flooded/ Well-Drained	Y Saturated/Semipermanent/ Seasonal	0 Fresh			h Diked/Impounded
E Seasonally Flooded/Saturated	Z Intermittently Exposed/ Permanent				r Artificial Substrate
F Semipermanently Flooded	U Unknown				s Spoil
G Intermittently Exposed					x Excavated
H Permanently Flooded					

Dominance types must be added by users.

Classification of wetland and deepwater habitats of the U.S. Cowardin et. al. 1979 as modified for national wetland inventory mapping conventions.

Figure 2: NWI Key
Old SR37 and Dunn Intersection Realignment
Regulated Waters Delineation
Eagle Ridge Civil Engineering Services, LLC
Monroe County, Indiana



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Symbol	Description	Hydric
BkF	Berks-Weikert complex, 25 to 75 percent slopes	No
Hd	Haymond silt loam, frequently flooded	No
Wa	Wakeland silt loam, frequently flooded	No

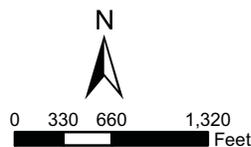
The information presented in this map document is advisory and intended for reference purposes only.

Coordinate System: NAD 1983 UTM Zone 16N
 Projection: Transverse Mercator
 Datum: North American 1983
 false easting: 500,000.0000
 false northing: 0.0000
 central meridian: -87.0000
 scale factor: 0.9996
 latitude of origin: 0.0000
 Units: Meter

Source:
 2010 Monroe County Aerial - USDA/NRCS Geospatial Data Gateway
 (<http://datagateway.nrcs.usda.gov/>)
 Soil Survey Geographic (SSURGO) database for Monroe County, Indiana
 URL: <http://SoilDataMart.nrcs.usda.gov/>

 Soil Unit
 Site Boundary

**Figure 3: Monroe County Soil Survey
 Old SR37 and Dunn Intersection Realignment
 Regulated Waters Delineation
 Eagle Ridge Civil Engineering Services, LLC
 Monroe County, Indiana**




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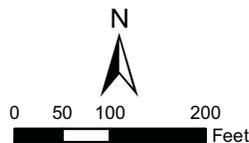
The information presented in this map document is advisory and intended for reference purposes only.

Coordinate System: NAD 1983 UTM Zone 16N
 Projection: Transverse Mercator
 Datum: North American 1983
 false easting: 500,000.0000
 false northing: 0.0000
 central meridian: -87.0000
 scale factor: 0.9996
 latitude of origin: 0.0000
 Units: Meter

Source:
 2010 Monroe County Aerial - USDA/NRCS Geospatial Data Gateway
 (<http://datagateway.nrcs.usda.gov/>)
 Soil Survey Geographic (SSURGO) database for Monroe County, Indiana
 URL: <http://SoilDataMart.nrcs.usda.gov/>

- Data Point
- P Photo Point
- ~ Stream
- ~ Stream (+/- 300 LF)
- ◆◆◆ Buried Outlet Pipe
- + Wetland (0.052 Acre)
- ~ Wetland extends beyond boundary
- + Site Boundary

Figure 4: Delineation
Old SR37 and Dunn Intersection Realignment
Regulated Waters Delineation
Eagle Ridge Civil Engineering Services, LLC
Monroe County, Indiana



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January 2011
 Job No. 1112055

APPENDIX A

SITE PHOTOGRAPHS

**REGULATED WATERS DELINEATION REPORT
STREAM MITIGATION (DES. 0710010)
DEARBORN COUNTY, INDIANA**

URATI



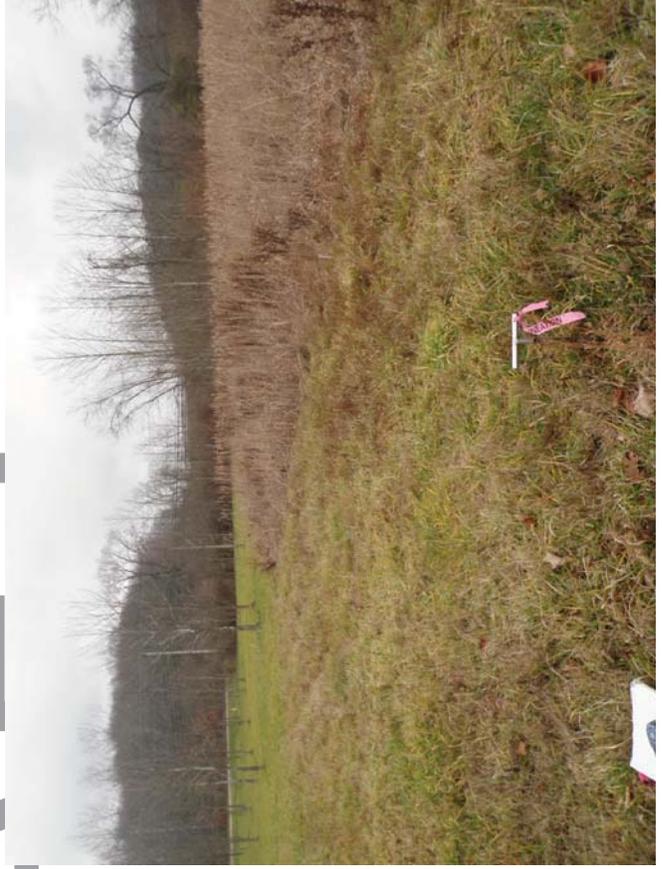
DP1, View Looking North



DP1, View Looking South



DP2, View Looking North



DP2, View Looking South



DP3, View Looking North



DP3, View Looking South



DP4, View Looking North



DP4, View Looking South



DP5, View Looking North



DP5, View Looking South



DP6, View Looking East



DP6, View Looking West



Dam Inflow Looking North



Dam Outflow Looking North



Griffy Creek Looking East Upstream



Griffy Creek Looking West Downstream



PP1 Site Looking South Toward Dam

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APPENDIX B

**WETLAND DETERMINATION DATA SHEETS
MIDWEST REGION**

**REGULATED WATERS DELINEATION REPORT
STREAM MITIGATION (DES. 0710010)
DEARBORN COUNTY, INDIANA**

VEGETATION - Use scientific names of plants.

Sampling Point: 1

	Absolute % Cover	Dominant Species?	Indicator Status	
Tree Stratum (Plot size: <u>30</u>)				
1.				
2.				
3.				
4.				
5.				
6.				
7.				
		= Total Cover		
Sapling/Shrub Stratum (Plot size: <u>15</u>)				
1.				
2.				
3.				
4.				
5.				
6.				
7.				
		= Total Cover		
Herb Stratum (Plot size: <u>5</u>)				
1. <i>Carex lurida</i>	30	Yes	OBL	
2. <i>Eupatorium perfoliatum</i>	20	Yes	FACW	
3. <i>Scirpus atrovirens</i>	20	Yes	OBL	
4. <i>Juncus effusus</i>	20	Yes	OBL	
5. <i>Conoclinium coelstinum</i>	15	No	FAC	
6. <i>Polygonum pensylvanicum</i>	10	No	FACW	
7. <i>Mentha arvensis</i>	5	No	FACW	
8.				
9.				
10.				
11.				
12.				
	120	= Total Cover		
Woody Vine Stratum (Plot size: <u>30</u>)				
1.				
2.				
3.				
4.				
		= Total Cover		
Remarks: (Include photo numbers here or on a separate sheet.)				

Dominance Test Worksheet:

Number of Dominant Species That Are OBL, FACW, or FAC: 4 (A)

Total Number of Dominant Species Across All Strata: 4 (B)

Percent of Dominant Species That Are OBL, FACW, or FAC: 100% (A/B)

Prevalence Index worksheet:

Total % Cover of:	Multiply by:
OBL species <u>70</u>	x 1 = <u>70</u>
FACW species <u>35</u>	x 2 = <u>70</u>
FAC species <u>15</u>	x 3 = <u>45</u>
FACU species <u>0</u>	x 4 = <u>0</u>
UPL species <u>0</u>	x 5 = <u>0</u>
Column Totals: <u>120</u> (A)	<u>185</u> (B)
Prevalence Index = B/A = <u>1.54</u>	

Hydrophytic Vegetation Indicators:

Rapid Test for Hydrophytic Vegetation

Dominance Test is >50%

Prevalence Index is ≤ 3.0¹

Morphological Adaptations¹ (Provide supporting data in Remarks or on a separate sheet)

Problematic Hydrophytic Vegetation¹ (Explain)

¹Indicators of hydric soil and wetland hydrology must be present, unless disturbed or problematic.

Definitions of Vegetation Strata:

Tree - Woody plants, excluding woody vines, approximately 20 ft (6m) or more in height and 3 in. (7.6 cm) or larger in diameter at breast height (DBH)

Sapling - Woody plants, excluding woody vines, approximately 20 ft (6m) or more in height and less than 3 in. (7.6 cm) DBH

Shrub - Woody plants, excluding woody vines, approximately 3 to 20 ft (1 to 6m) or more in height

Herb - All herbaceous (non-woody) plants, including herbaceous vines, regardless of size. Includes woody plants, except woody vines, less than approximately 3 ft (1 m) in height

Woody vine - All woody vines, regardless of size

Hydrophytic Vegetation Present ? Yes x No

VEGETATION - Use scientific names of plants.

Sampling Point: 2

	Absolute % Cover	Dominant Species?	Indicator Status	
Tree Stratum (Plot size: <u>30</u>)				
1. _____	_____	_____	_____	
2. _____	_____	_____	_____	
3. _____	_____	_____	_____	
4. _____	_____	_____	_____	
5. _____	_____	_____	_____	
6. _____	_____	_____	_____	
7. _____	_____	_____	_____	
	_____	= Total Cover		
Sapling/Shrub Stratum (Plot size: <u>15</u>)				
1. <u>Elaeagnus umbellatus</u>	<u>5</u>	<u>Yes</u>	<u>UPL</u>	
2. <u>Rosa multiflora</u>	<u>5</u>	<u>Yes</u>	<u>FACU</u>	
3. <u>Quercus bicolor</u>	<u>2</u>	<u>No</u>	<u>FACW</u>	
4. _____	_____	_____	_____	
5. _____	_____	_____	_____	
6. _____	_____	_____	_____	
7. _____	_____	_____	_____	
	<u>12</u>	= Total Cover		
Herb Stratum (Plot size: <u>5</u>)				
1. <u>Festuca arundinacea</u>	<u>80</u>	<u>Yes</u>	<u>FACU</u>	
2. <u>Conoclinium coelstinum</u>	<u>20</u>	<u>No</u>	<u>FAC</u>	
3. <u>Daucus carota</u>	<u>15</u>	<u>No</u>	<u>UPL</u>	
4. <u>Muhlenbergia mexicana</u>	<u>10</u>	<u>No</u>	<u>FACW</u>	
5. <u>Schizachyrium scoparium</u>	<u>10</u>	<u>No</u>	<u>FACU</u>	
6. <u>Lysimachia nummularia</u>	<u>5</u>	<u>No</u>	<u>OBL</u>	
7. <u>Solidago canadensis</u>	<u>5</u>	<u>No</u>	<u>FACU</u>	
8. <u>Trifolium hybridum</u>	<u>5</u>	<u>No</u>	<u>FAC</u>	
9. <u>Rubus allegheniensis</u>	<u>1</u>	<u>No</u>	<u>FACU</u>	
10. _____	_____	_____	_____	
11. _____	_____	_____	_____	
12. _____	_____	_____	_____	
	<u>151</u>	= Total Cover		
Woody Vine Stratum (Plot size: <u>30</u>)				
1. _____	_____	_____	_____	
2. _____	_____	_____	_____	
3. _____	_____	_____	_____	
4. _____	_____	_____	_____	
	_____	= Total Cover		

Dominance Test Worksheet:

Number of Dominant Species That Are OBL, FACW, or FAC: 0 (A)

Total Number of Dominant Species Across All Strata: 3 (B)

Percent of Dominant Species That Are OBL, FACW, or FAC: 0% (A/B)

Prevalence Index worksheet:

Total % Cover of:	Multiply by:
OBL species <u>5</u>	x 1 = <u>5</u>
FACW species <u>12</u>	x 2 = <u>24</u>
FAC species <u>25</u>	x 3 = <u>75</u>
FACU species <u>101</u>	x 4 = <u>404</u>
UPL species <u>20</u>	x 5 = <u>100</u>
Column Totals: <u>163</u> (A)	<u>608</u> (B)
Prevalence Index = B/A = <u>3.73</u>	

Hydrophytic Vegetation Indicators:

Rapid Test for Hydrophytic Vegetation

Dominance Test is >50%

Prevalence Index is ≤ 3.0¹

Morphological Adaptations¹ (Provide supporting data in Remarks or on a separate sheet)

Problematic Hydrophytic Vegetation¹ (Explain)

¹Indicators of hydric soil and wetland hydrology must be present, unless disturbed or problematic.

Definitions of Vegetation Strata:

Tree - Woody plants, excluding woody vines, approximately 20 ft (6m) or more in height and 3 in. (7.6 cm) or larger in diameter at breast height (DBH)

Sapling - Woody plants, excluding woody vines, approximately 20 ft (6m) or more in height and less than 3 in. (7.6 cm) DBH

Shrub - Woody plants, excluding woody vines, approximately 3 to 20 ft (1 to 6m) or more in height

Herb - All herbaceous (non-woody) plants, including herbaceous vines, regardless of size. Includes woody plants, except woody vines, less than approximately 3 ft (1 m) in height

Woody vine - All woody vines, regardless of size

Hydrophytic Vegetation Present ? Yes No x

Remarks: (Include photo numbers here or on a separate sheet.)

WETLAND DETERMINATION DATA FORM -- Eastern Mountains and Piedmont DRAFT

Project/Site: Dunn and Old SR37 City/County: Monroe County Sampling Date: 12/22/11
 Applicant/Owner: Eagle Ridge Engineering Services, LLC State: IN Sampling Point: 3
 Investigator(s): Heather Bobich and Bruce Behan Section, Township, Range: 21, 9N, 1W
 Landform (hillslope, terrace, etc.): Floodplain of Griffy Creek Local relief (concave, convex, none): shallowly concave
 Slope (%): flat Lat: 39.2072140566948 N Long: 86.5289696111035 W Datum: UTM 16 N NAD 83
 Soil Map Unit Name: Wakeland silt loam, frequently flooded (Wa) - a non-hydric soil unit NWI classification: None
 Are climatic / hydrologic conditions on the site typical for this time of year? Yes x No (If no, explain in Remarks.)
 Are Vegetation , Soil , or Hydrology significantly disturbed? Are "Normal Circumstances" present? Yes x No
 Are Vegetation , Soil , or Hydrology naturally problematic? (If needed, explain any answers in Remarks.)

SUMMARY OF FINDINGS -- Attach site map showing sampling point locations, transects, important features, etc.

Hydrophytic Vegetation Present? Yes <u>x</u> No <u> </u> Hydric Soil Present? Yes <u>x</u> No <u> </u> Wetland Hydrology Present? Yes <u>x</u> No <u> </u>	Is the Sampled Area within a Wetland? Yes <u>x</u> No <u> </u> If yes, optional Wetland Site ID: <u> </u>
Remarks: (Explain alternative procedures here or in a separate report.)	

HYDROLOGY

Wetland Hydrology Indicators: Primary Indicators (minimum of one is required; check all that apply) <ul style="list-style-type: none"> <u> </u> Surface Water (A1) <u>x</u> High Water Table (A2) <u>x</u> Saturation (A3) <u> </u> Water Marks (B1) <u> </u> Sediment Deposits (B2) <u> </u> Drift Deposits (B3) <u> </u> Algal Mat or Crust (B4) <u> </u> Iron Deposits (B5) <u> </u> Inundation Visible on Aerial Imagery (B7) <u> </u> Water-Stained Leaves (B9) <u> </u> Aquatic Fauna (B13) <u> </u> True Aquatic Plants (B14) <u> </u> Hydrogen Sulfide Odor (C1) <u> </u> Oxidized Rhizospheres on Living Roots (C3) <u> </u> Presence of Reduced Iron (C4) <u> </u> Recent Iron Reduction in Tilled Soils (C6) <u> </u> Thin Muck Surface (C7) <u> </u> Other (Explain in Remarks) 	Secondary Indicators (minimum of two required) <ul style="list-style-type: none"> <u> </u> Surface Soil Cracks (B6) <u> </u> Sparsely Vegetation Concave Surface (B8) <u> </u> Drainage Patterns (B10) <u> </u> Moss Trim Lines (B16) <u> </u> Dry-Season Water Table (C2) <u> </u> Crayfish Burrows (C8) <u> </u> Saturation Visible on Aerial Imagery (C9) <u> </u> Stunted or Stressed Plants (D1) <u> </u> Geomorphic Position (D2) <u> </u> Shallow Aquitard (D3) <u>x</u> Microtopographic Relief (D4) <u>x</u> FAC-Neutral Test (D5)
---	---

Field Observations: Surface Water Present? Yes <u> </u> No <u> </u> Depth (inches): <u> </u> Water Table Present? Yes <u>x</u> No <u> </u> Depth (inches): <u>surface</u> Saturation Present? Yes <u>x</u> No <u> </u> Depth (inches): <u>surface</u> (includes capillary fringe)	Wetland Hydrology Present? Yes <u>x</u> No <u> </u>
---	--

Describe Recorded Data (stream gauge, monitoring well, aerial photos, previous inspections), if available:

Remarks:

VEGETATION - Use scientific names of plants.

Sampling Point: 3

	Absolute % Cover	Dominant Species?	Indicator Status		
Tree Stratum (Plot size: <u>30</u>)				Dominance Test Worksheet: Number of Dominant Species That Are OBL, FACW, or FAC: <u>3</u> (A) Total Number of Dominant Species Across All Strata <u>3</u> (B) Percent of Dominant Species That Are OBL, FACW, or FAC: <u>100%</u> (A/B)	
1.					
2.					
3.					
4.					
5.					
6.					
7.					
= Total Cover				Prevalence Index worksheet: Total % Cover of: Multiply by: OBL species <u>75</u> x 1 = <u>75</u> FACW species <u>30</u> x 2 = <u>60</u> FAC species <u>0</u> x 3 = <u>0</u> FACU species <u>15</u> x 4 = <u>60</u> UPL species <u>0</u> x 5 = <u>0</u> Column Totals: <u>120</u> (A) <u>195</u> (B) Prevalence Index = B/A = <u>1.63</u>	
Sapling/Shrub Stratum (Plot size: <u>15</u>)					
1.					
2.					
3.					
4.					
5.					
6.					
7.					
= Total Cover					
Herb Stratum (Plot size: <u>5</u>)				Hydrophytic Vegetation Indicators: <input checked="" type="checkbox"/> Rapid Test for Hydrophytic Vegetation <input checked="" type="checkbox"/> Dominance Test is >50% <input checked="" type="checkbox"/> Prevalence Index is ≤ 3.0 ¹ _____ Morphological Adaptations ¹ (Provide supporting data in Remarks or on a separate sheet) _____ Problematic Hydrophytic Vegetation ¹ (Explain) ¹ Indicators of hydric soil and wetland hydrology must be present, unless disturbed or problematic.	
1.	<u>Lysimachia nummularia</u>	<u>40</u>	<u>Yes</u>		<u>OBL</u>
2.	<u>Typha sp.</u>	<u>30</u>	<u>Yes</u>		<u>OBL</u>
3.	<u>Mentha arvensis</u>	<u>30</u>	<u>Yes</u>		<u>FACW</u>
4.	<u>Festuca arundinacea</u>	<u>15</u>	<u>No</u>		<u>FACU</u>
5.	<u>Asclepias incarnata</u>	<u>5</u>	<u>No</u>		<u>OBL</u>
6.					
7.					
8.					
9.					
10.					
11.					
12.					
= Total Cover					
Woody Vine Stratum (Plot size: <u>30</u>)				Definitions of Vegetation Strata: Tree - Woody plants, excluding woody vines, approximately 20 ft (6m) or more in height and 3 in. (7.6 cm) or larger in diameter at breast height (DBH) Sapling - Woody plants, excluding woody vines, approximately 20 ft (6m) or more in height and less than 3 in. (7.6 cm) DBH Shrub - Woody plants, excluding woody vines, approximately 3 to 20 ft (1 to 6m) or more in height Herb - All herbaceous (non-woody) plants, including herbaceous vines, regardless of size. Includes woody plants, except woody vines, less than approximately 3 ft (1 m) in height Woody vine - All woody vines, regardless of size	
1.					
2.					
3.					
4.					
= Total Cover					
Remarks: (Include photo numbers here or on a separate sheet.)				Hydrophytic Vegetation Present ? Yes <u> x </u> No <u> </u>	

WETLAND DETERMINATION DATA FORM -- Eastern Mountains and Piedmont DRAFT

Project/Site: Dunn and Old SR37 City/County: Monroe County Sampling Date: 12/22/11
 Applicant/Owner: Eagle Ridge Engineering Services, LLC State: IN Sampling Point: 4
 Investigator(s): Heather Bobich and Bruce Behan Section, Township, Range: 21, 9N, 1W
 Landform (hillslope, terrace, etc.): Floodplain of Griffy Creek Local relief (concave, convex, none): none
 Slope (%): flat Lat: 39.2073779011393 N Long: 86.529775455548 W Datum: UTM 16 N NAD 83
 Soil Map Unit Name: Wakeland silt loam, frequently flooded (Wa) - a non-hydric soil unit NWI classification: None
 Are climatic / hydrologic conditions on the site typical for this time of year? Yes x No (If no, explain in Remarks.)
 Are Vegetation , Soil , or Hydrology significantly disturbed? Are "Normal Circumstances" present? Yes x No
 Are Vegetation , Soil , or Hydrology naturally problematic? (If needed, explain any answers in Remarks.)

SUMMARY OF FINDINGS -- Attach site map showing sampling point locations, transects, important features, etc.

Hydrophytic Vegetation Present?	Yes <u> </u>	No <u>x</u>	Is the Sampled Area within a Wetland? Yes <u> </u> No <u>x</u> If yes, optional Wetland Site ID: <u> </u>
Hydric Soil Present?	Yes <u>x</u>	No <u> </u>	
Wetland Hydrology Present?	Yes <u> </u>	No <u>x</u>	
Remarks: (Explain alternative procedures here or in a separate report.)			

HYDROLOGY

Wetland Hydrology Indicators: Primary Indicators (minimum of one is required; check all that apply) <input type="checkbox"/> Surface Water (A1) <input type="checkbox"/> Water-Stained Leaves (B9) <input type="checkbox"/> High Water Table (A2) <input type="checkbox"/> Aquatic Fauna (B13) <input type="checkbox"/> Saturation (A3) <input type="checkbox"/> True Aquatic Plants (B14) <input type="checkbox"/> Water Marks (B1) <input type="checkbox"/> Hydrogen Sulfide Odor (C1) <input type="checkbox"/> Sediment Deposits (B2) <input type="checkbox"/> Oxidized Rhizospheres on Living Roots (C3) <input type="checkbox"/> Drift Deposits (B3) <input type="checkbox"/> Presence of Reduced Iron (C4) <input type="checkbox"/> Algal Mat or Crust (B4) <input type="checkbox"/> Recent Iron Reduction in Tilled Soils (C6) <input type="checkbox"/> Iron Deposits (B5) <input type="checkbox"/> Thin Muck Surface (C7) <input type="checkbox"/> Inundation Visible on Aerial Imagery (B7) <input type="checkbox"/> Other (Explain in Remarks)	Secondary Indicators (minimum of two required) <input type="checkbox"/> Surface Soil Cracks (B6) <input type="checkbox"/> Sparsely Vegetation Concave Surface (B8) <input type="checkbox"/> Drainage Patterns (B10) <input type="checkbox"/> Moss Trim Lines (B16) <input type="checkbox"/> Dry-Season Water Table (C2) <input type="checkbox"/> Crayfish Burrows (C8) <input type="checkbox"/> Saturation Visible on Aerial Imagery (C9) <input type="checkbox"/> Stunted or Stressed Plants (D1) <input type="checkbox"/> Geomorphic Position (D2) <input type="checkbox"/> Shallow Aquitard (D3) <input checked="" type="checkbox"/> Microtopographic Relief (D4) <input type="checkbox"/> FAC-Neutral Test (D5)
---	---

Field Observations: Surface Water Present? Yes <u> </u> No <u>x</u> Depth (inches): <u> </u> Water Table Present? Yes <u> </u> No <u>x</u> Depth (inches): <u> </u> Saturation Present? Yes <u> </u> No <u>x</u> Depth (inches): <u> </u> (includes capillary fringe)	Wetland Hydrology Present? Yes <u> </u> No <u>x</u>
--	---

Describe Recorded Data (stream gauge, monitoring well, aerial photos, previous inspections), if available:

Remarks:

VEGETATION - Use scientific names of plants.

Sampling Point: 4

	Absolute % Cover	Dominant Species?	Indicator Status																	
Tree Stratum (Plot size: <u>30</u>)																				
1.																				
2.																				
3.																				
4.																				
5.																				
6.																				
7.																				
		= Total Cover																		
Sapling/Shrub Stratum (Plot size: <u>15</u>)																				
1.																				
2.																				
3.																				
4.																				
5.																				
6.																				
7.																				
		= Total Cover																		
Herb Stratum (Plot size: <u>5</u>)																				
1. <i>Festuca arundinacea</i>	90	Yes	FACU																	
2. <i>Junus tenuis</i>	2	No	FAC																	
3. <i>Mentha arvensis</i>	1	No	FACW																	
4.																				
5.																				
6.																				
7.																				
8.																				
9.																				
10.																				
11.																				
12.																				
	93	= Total Cover																		
Woody Vine Stratum (Plot size: <u>30</u>)																				
1.																				
2.																				
3.																				
4.																				
		= Total Cover																		
<p>Dominance Test Worksheet:</p> <p>Number of Dominant Species That Are OBL, FACW, or FAC: <u>0</u> (A)</p> <p>Total Number of Dominant Species Across All Strata: <u>1</u> (B)</p> <p>Percent of Dominant Species That Are OBL, FACW, or FAC: <u>0%</u> (A/B)</p> <hr/> <p>Prevalence Index worksheet:</p> <table style="width:100%; border-collapse: collapse;"> <tr> <td style="width:50%;">Total % Cover of:</td> <td style="width:50%;">Multiply by:</td> </tr> <tr> <td>OBL species <u>0</u></td> <td>x 1 = <u>0</u></td> </tr> <tr> <td>FACW species <u>1</u></td> <td>x 2 = <u>2</u></td> </tr> <tr> <td>FAC species <u>0</u></td> <td>x 3 = <u>0</u></td> </tr> <tr> <td>FACU species <u>90</u></td> <td>x 4 = <u>360</u></td> </tr> <tr> <td>UPL species <u>0</u></td> <td>x 5 = <u>0</u></td> </tr> <tr> <td>Column Totals: <u>91</u> (A)</td> <td><u>362</u> (B)</td> </tr> <tr> <td colspan="2" style="text-align: center;">Prevalence Index = B/A = <u>3.98</u></td> </tr> </table> <hr/> <p>Hydrophytic Vegetation Indicators:</p> <p><input type="checkbox"/> Rapid Test for Hydrophytic Vegetation</p> <p><input type="checkbox"/> Dominance Test is >50%</p> <p><input type="checkbox"/> Prevalence Index is ≤ 3.0¹</p> <p><input type="checkbox"/> Morphological Adaptations¹ (Provide supporting data in Remarks or on a separate sheet)</p> <p><input type="checkbox"/> Problematic Hydrophytic Vegetation¹ (Explain)</p> <p>¹Indicators of hydric soil and wetland hydrology must be present, unless disturbed or problematic.</p> <hr/> <p>Definitions of Vegetation Strata:</p> <p>Tree - Woody plants, excluding woody vines, approximately 20 ft (6m) or more in height and 3 in. (7.6 cm) or larger in diameter at breast height (DBH)</p> <p>Sapling - Woody plants, excluding woody vines, approximately 20 ft (6m) or more in height and less than 3 in. (7.6 cm) DBH</p> <p>Shrub - Woody plants, excluding woody vines, approximately 3 to 20 ft (1 to 6m) or more in height</p> <p>Herb - All herbaceous (non-woody) plants, including herbaceous vines, regardless of size. Includes woody plants, except woody vines, less than approximately 3 ft (1 m) in height</p> <p>Woody vine - All woody vines, regardless of size</p> <hr/> <p>Hydrophytic Vegetation Present ? Yes <u> </u> No <u> x </u></p>					Total % Cover of:	Multiply by:	OBL species <u>0</u>	x 1 = <u>0</u>	FACW species <u>1</u>	x 2 = <u>2</u>	FAC species <u>0</u>	x 3 = <u>0</u>	FACU species <u>90</u>	x 4 = <u>360</u>	UPL species <u>0</u>	x 5 = <u>0</u>	Column Totals: <u>91</u> (A)	<u>362</u> (B)	Prevalence Index = B/A = <u>3.98</u>	
Total % Cover of:	Multiply by:																			
OBL species <u>0</u>	x 1 = <u>0</u>																			
FACW species <u>1</u>	x 2 = <u>2</u>																			
FAC species <u>0</u>	x 3 = <u>0</u>																			
FACU species <u>90</u>	x 4 = <u>360</u>																			
UPL species <u>0</u>	x 5 = <u>0</u>																			
Column Totals: <u>91</u> (A)	<u>362</u> (B)																			
Prevalence Index = B/A = <u>3.98</u>																				
<p>Remarks: (Include photo numbers here or on a separate sheet.)</p>																				

WETLAND DETERMINATION DATA FORM -- Eastern Mountains and Piedmont DRAFT

Project/Site: Dunn and Old SR37 City/County: Monroe County Sampling Date: 12/22/11
 Applicant/Owner: Eagle Ridge Engineering Services, LLC State: IN Sampling Point: 6
 Investigator(s): Heather Bobich and Bruce Behan Section, Township, Range: 21, 9N, 1W
 Landform (hillslope, terrace, etc.): Floodplain of Griffy Creek Local relief (concave, convex, none): none
 Slope (%): flat Lat: 39.2079048978817 N Long: 86.5313087478378 W Datum: UTM 16 N NAD 83
 Soil Map Unit Name: Wakeland silt loam, frequently flooded (Wa) - a non-hydric soil unit NWI classification: None
 Are climatic / hydrologic conditions on the site typical for this time of year? Yes x No (If no, explain in Remarks.)
 Are Vegetation , Soil , or Hydrology significantly disturbed? Are "Normal Circumstances" present? Yes x No
 Are Vegetation , Soil , or Hydrology naturally problematic? (If needed, explain any answers in Remarks.)

SUMMARY OF FINDINGS -- Attach site map showing sampling point locations, transects, important features, etc.

Hydrophytic Vegetation Present?	Yes <u> </u>	No <u>x</u>	Is the Sampled Area within a Wetland? Yes <u> </u> No <u>x</u> If yes, optional Wetland Site ID: <u> </u>
Hydric Soil Present?	Yes <u> </u>	No <u>x</u>	
Wetland Hydrology Present?	Yes <u> </u>	No <u>x</u>	
Remarks: (Explain alternative procedures here or in a separate report.)			

HYDROLOGY

Wetland Hydrology Indicators:		Secondary Indicators (minimum of two required)	
Primary Indicators (minimum of one is required; check all that apply)			
<input type="checkbox"/> Surface Water (A1)	<input type="checkbox"/> Water-Stained Leaves (B9)	<input type="checkbox"/> Surface Soil Cracks (B6)	
<input type="checkbox"/> High Water Table (A2)	<input type="checkbox"/> Aquatic Fauna (B13)	<input type="checkbox"/> Sparsely Vegetation Concave Surface (B8)	
<input type="checkbox"/> Saturation (A3)	<input type="checkbox"/> True Aquatic Plants (B14)	<input type="checkbox"/> Drainage Patterns (B10)	
<input type="checkbox"/> Water Marks (B1)	<input type="checkbox"/> Hydrogen Sulfide Odor (C1)	<input type="checkbox"/> Moss Trim Lines (B16)	
<input type="checkbox"/> Sediment Deposits (B2)	<input type="checkbox"/> Oxidized Rhizospheres on Living Roots (C3)	<input type="checkbox"/> Dry-Season Water Table (C2)	
<input type="checkbox"/> Drift Deposits (B3)	<input type="checkbox"/> Presence of Reduced Iron (C4)	<input type="checkbox"/> Crayfish Burrows (C8)	
<input type="checkbox"/> Algal Mat or Crust (B4)	<input type="checkbox"/> Recent Iron Reduction in Tilled Soils (C6)	<input type="checkbox"/> Saturation Visible on Aerial Imagery (C9)	
<input type="checkbox"/> Iron Deposits (B5)	<input type="checkbox"/> Thin Muck Surface (C7)	<input type="checkbox"/> Stunted or Stressed Plants (D1)	
<input type="checkbox"/> Inundation Visible on Aerial Imagery (B7)	<input type="checkbox"/> Other (Explain in Remarks)	<input type="checkbox"/> Geomorphic Position (D2)	
		<input type="checkbox"/> Shallow Aquitard (D3)	
		<input type="checkbox"/> Microtopographic Relief (D4)	
		<input type="checkbox"/> FAC-Neutral Test (D5)	
Field Observations:		Wetland Hydrology Present? Yes <u> </u> No <u>x</u>	
Surface Water Present?	Yes <u> </u> No <u>x</u> Depth (inches): <u> </u>		
Water Table Present?	Yes <u> </u> No <u>x</u> Depth (inches): <u> </u>		
Saturation Present?	Yes <u> </u> No <u>x</u> Depth (inches): <u> </u>		
<small>(includes capillary fringe)</small>			
Describe Recorded Data (stream gauge, monitoring well, aerial photos, previous inspections), if available:			
Remarks:			

VEGETATION - Use scientific names of plants.

Sampling Point: 6

	Absolute % Cover	Dominant Species?	Indicator Status	
Tree Stratum (Plot size: <u>30</u>)				
1.				
2.				
3.				
4.				
5.				
6.				
7.				
		= Total Cover		
Sapling/Shrub Stratum (Plot size: <u>15</u>)				
1.	<u>5</u>	<u>Yes</u>	<u>FACU</u>	
2.	<u>5</u>	<u>Yes</u>	<u>FACU</u>	
3.				
4.				
5.				
6.				
7.				
	<u>10</u>	= Total Cover		
Herb Stratum (Plot size: <u>5</u>)				
1.	<u>80</u>	<u>Yes</u>	<u>FAC</u>	
2.	<u>60</u>	<u>Yes</u>	<u>FACU</u>	
3.	<u>10</u>	<u>No</u>	<u>FACU</u>	
4.	<u>10</u>	<u>No</u>	<u>FAC</u>	
5.				
6.				
7.				
8.				
9.				
10.				
11.				
12.				
	<u>160</u>	= Total Cover		
Woody Vine Stratum (Plot size: <u>30</u>)				
1.				
2.				
3.				
4.				
		= Total Cover		
Remarks: (Include photo numbers here or on a separate sheet.)				

Dominance Test Worksheet:

Number of Dominant Species That Are OBL, FACW, or FAC: 0 (A)

Total Number of Dominant Species Across All Strata: 4 (B)

Percent of Dominant Species That Are OBL, FACW, or FAC: 25% (A/B)

Prevalence Index worksheet:

Total % Cover of:	Multiply by:
OBL species <u>0</u>	x 1 = <u>0</u>
FACW species <u>0</u>	x 2 = <u>0</u>
FAC species <u>10</u>	x 3 = <u>30</u>
FACU species <u>80</u>	x 4 = <u>320</u>
UPL species <u>0</u>	x 5 = <u>0</u>
Column Totals: <u>90</u> (A)	<u>350</u> (B)
Prevalence Index = B/A = <u>3.89</u>	

Hydrophytic Vegetation Indicators:

Rapid Test for Hydrophytic Vegetation

Dominance Test is >50%

Prevalence Index is ≤ 3.0¹

Morphological Adaptations¹ (Provide supporting data in Remarks or on a separate sheet)

Problematic Hydrophytic Vegetation¹ (Explain)

¹Indicators of hydric soil and wetland hydrology must be present, unless disturbed or problematic.

Definitions of Vegetation Strata:

Tree - Woody plants, excluding woody vines, approximately 20 ft (6m) or more in height and 3 in. (7.6 cm) or larger in diameter at breast height (DBH)

Sapling - Woody plants, excluding woody vines, approximately 20 ft (6m) or more in height and less than 3 in. (7.6 cm) DBH

Shrub - Woody plants, excluding woody vines, approximately 3 to 20 ft (1 to 6m) or more in height

Herb - All herbaceous (non-woody) plants, including herbaceous vines, regardless of size. Includes woody plants, except woody vines, less than approximately 3 ft (1 m) in height

Woody vine - All woody vines, regardless of size

Hydrophytic Vegetation Present ? Yes No x

WETLAND DETERMINATION DATA FORM -- Eastern Mountains and Piedmont DRAFT

Project/Site: Dunn and Old SR37 City/County: Monroe County Sampling Date: 12/22/11
 Applicant/Owner: Eagle Ridge Engineering Services, LLC State: IN Sampling Point: 5
 Investigator(s): Heather Bobich and Bruce Behan Section, Township, Range: 21, 9N, 1W
 Landform (hillslope, terrace, etc.): Floodplain of Griffy Creek Local relief (concave, convex, none): none
 Slope (%): flat Lat: 39.2074280645756 N Long: 86.5298652733033 W Datum: UTM 16 N NAD 83
 Soil Map Unit Name: Wakeland silt loam, frequently flooded (Wa) - a non-hydric soil unit NWI classification: None
 Are climatic / hydrologic conditions on the site typical for this time of year? Yes x No (If no, explain in Remarks.)
 Are Vegetation , Soil , or Hydrology significantly disturbed? Are "Normal Circumstances" present? Yes x No
 Are Vegetation , Soil , or Hydrology naturally problematic? (If needed, explain any answers in Remarks.)

SUMMARY OF FINDINGS -- Attach site map showing sampling point locations, transects, important features, etc.

Hydrophytic Vegetation Present?	Yes <u> </u>	No <u>x</u>	Is the Sampled Area within a Wetland? Yes <u> </u> No <u>x</u> If yes, optional Wetland Site ID: <u> </u>
Hydric Soil Present?	Yes <u> </u>	No <u>x</u>	
Wetland Hydrology Present?	Yes <u> </u>	No <u>x</u>	
Remarks: (Explain alternative procedures here or in a separate report.)			

HYDROLOGY

Wetland Hydrology Indicators:		Secondary Indicators (minimum of two required)	
Primary Indicators (minimum of one is required; check all that apply)			
<input type="checkbox"/> Surface Water (A1)	<input type="checkbox"/> Water-Stained Leaves (B9)	<input type="checkbox"/> Surface Soil Cracks (B6)	
<input type="checkbox"/> High Water Table (A2)	<input type="checkbox"/> Aquatic Fauna (B13)	<input type="checkbox"/> Sparsely Vegetation Concave Surface (B8)	
<input type="checkbox"/> Saturation (A3)	<input type="checkbox"/> True Aquatic Plants (B14)	<input type="checkbox"/> Drainage Patterns (B10)	
<input type="checkbox"/> Water Marks (B1)	<input type="checkbox"/> Hydrogen Sulfide Odor (C1)	<input type="checkbox"/> Moss Trim Lines (B16)	
<input type="checkbox"/> Sediment Deposits (B2)	<input type="checkbox"/> Oxidized Rhizospheres on Living Roots (C3)	<input type="checkbox"/> Dry-Season Water Table (C2)	
<input type="checkbox"/> Drift Deposits (B3)	<input type="checkbox"/> Presence of Reduced Iron (C4)	<input type="checkbox"/> Crayfish Burrows (C8)	
<input type="checkbox"/> Algal Mat or Crust (B4)	<input type="checkbox"/> Recent Iron Reduction in Tilled Soils (C6)	<input type="checkbox"/> Saturation Visible on Aerial Imagery (C9)	
<input type="checkbox"/> Iron Deposits (B5)	<input type="checkbox"/> Thin Muck Surface (C7)	<input type="checkbox"/> Stunted or Stressed Plants (D1)	
<input type="checkbox"/> Inundation Visible on Aerial Imagery (B7)	<input type="checkbox"/> Other (Explain in Remarks)	<input type="checkbox"/> Geomorphic Position (D2)	
		<input type="checkbox"/> Shallow Aquitard (D3)	
		<input type="checkbox"/> Microtopographic Relief (D4)	
		<input type="checkbox"/> FAC-Neutral Test (D5)	
Field Observations:		Wetland Hydrology Present? Yes <u> </u> No <u>x</u>	
Surface Water Present? Yes <u> </u> No <u>x</u>	Depth (inches): <u> </u>		
Water Table Present? Yes <u> </u> No <u>x</u>	Depth (inches): <u> </u>		
Saturation Present? Yes <u> </u> No <u>x</u>	Depth (inches): <u> </u>		
<small>(includes capillary fringe)</small>			
Describe Recorded Data (stream gauge, monitoring well, aerial photos, previous inspections), if available:			
Remarks:			

VEGETATION - Use scientific names of plants.

Sampling Point: 5

	Absolute % Cover	Dominant Species?	Indicator Status		
Tree Stratum (Plot size: <u>30</u>)					
1. <u>Quercus alba</u>	<u>30</u>	<u>Yes</u>	<u>FACU</u>	Dominance Test Worksheet: Number of Dominant Species That Are OBL, FACW, or FAC: <u>2</u> (A) Total Number of Dominant Species Across All Strata: <u>4</u> (B) Percent of Dominant Species That Are OBL, FACW, or FAC: <u>50%</u> (A/B)	
2. <u>Fraxinus pennsylvanica</u>	<u>30</u>	<u>Yes</u>	<u>FACW</u>		
3. _____					
4. _____					
5. _____					
6. _____					
7. _____					
<u>60</u> = Total Cover				Prevalence Index worksheet: Total % Cover of: Multiply by: OBL species <u>0</u> x 1 = <u>0</u> FACW species <u>30</u> x 2 = <u>60</u> FAC species <u>20</u> x 3 = <u>60</u> FACU species <u>30</u> x 4 = <u>120</u> UPL species <u>50</u> x 5 = <u>250</u> Column Totals: <u>130</u> (A) <u>490</u> (B) Prevalence Index = B/A = <u>3.77</u>	
Sapling/Shrub Stratum (Plot size: <u>15</u>)					
1. <u>Lonicera maackii</u>	<u>50</u>	<u>Yes</u>	<u>UPL</u>		
2. _____					
3. _____					
4. _____					
5. _____					
6. _____					
7. _____					
<u>50</u> = Total Cover				Hydrophytic Vegetation Indicators: <input type="checkbox"/> Rapid Test for Hydrophytic Vegetation <input type="checkbox"/> Dominance Test is >50% <input type="checkbox"/> Prevalence Index is ≤ 3.0 ¹ <input type="checkbox"/> Morphological Adaptations ¹ (Provide supporting data in Remarks or on a separate sheet) <input type="checkbox"/> Problematic Hydrophytic Vegetation ¹ (Explain)	
Herb Stratum (Plot size: <u>5</u>)					
1. <u>Poa pratensis</u>	<u>20</u>	<u>Yes</u>	<u>FAC</u>		
2. _____					
3. _____					
4. _____					
5. _____					
6. _____					
7. _____					
8. _____					
9. _____					
10. _____					
11. _____					
12. _____					
<u>20</u> = Total Cover				Definitions of Vegetation Strata: Tree - Woody plants, excluding woody vines, approximately 20 ft (6m) or more in height and 3 in. (7.6 cm) or larger in diameter at breast height (DBH) Sapling - Woody plants, excluding woody vines, approximately 20 ft (6m) or more in height and less than 3 in. (7.6 cm) DBH Shrub - Woody plants, excluding woody vines, approximately 3 to 20 ft (1 to 6m) or more in height Herb - All herbaceous (non-woody) plants, including herbaceous vines, regardless of size. Includes woody plants, except woody vines, less than approximately 3 ft (1 m) in height Woody vine - All woody vines, regardless of size	
Woody Vine Stratum (Plot size: <u>30</u>)					
1. _____					
2. _____					
3. _____					
4. _____					
<u> </u> = Total Cover					Hydrophytic Vegetation Present ? Yes <u> </u> No <u> </u> x
Remarks: (Include photo numbers here or on a separate sheet.)					



MAP SCALE 1" = 500'

250 0 500 1000

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 equalled 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 A**
No Base Flood Elevations determined.
- ZONE AE**
Base Flood Elevations determined.
- ZONE AH**
Flood depths of 1 to 3 feet (usually areas of ponding); Base Flood Elevations determined.
- ZONE AO**
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 AR**
Special Flood Hazard Areas formerly protected from the 1% annual chance flood by a flood control system that was subsequently decertified. Zone AR indicates that the former flood control system is being restored to provide protection from the 1% annual chance or greater flood.
- ZONE A99**
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 X
Areas determined to be outside the 0.2% annual chance floodplain.

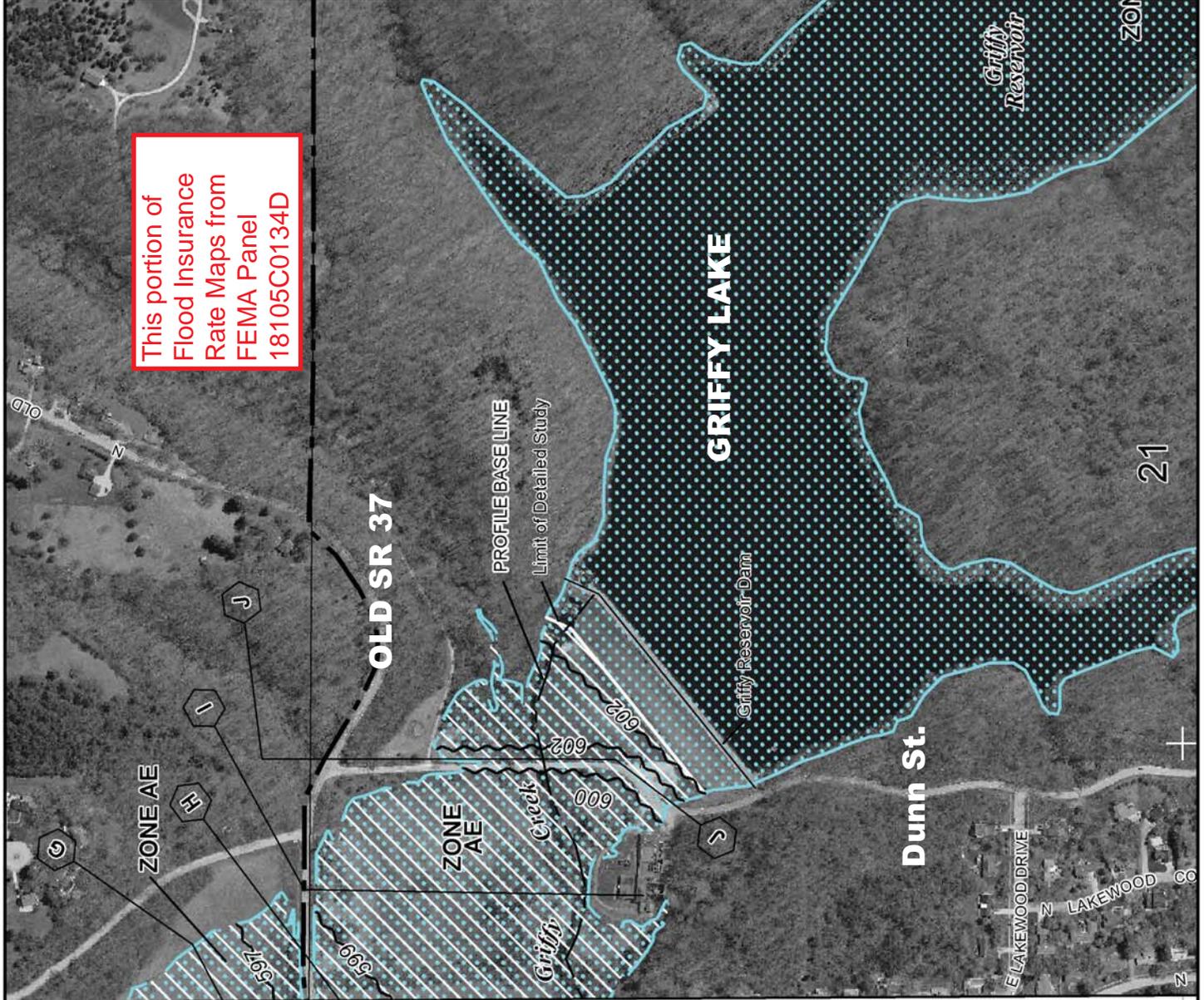
ZONE D
Areas in which flood hazards are undetermined, but possible.

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

This is an official copy of a portion of the above referenced flood map. It was extracted using F-MIT On-Line. This map does not reflect changes or amendments which may have been made subsequent to the date on the title block. For the latest product information about National Flood Insurance Program flood maps, check the FEMA Flood Map Store at www.msc.fema.gov



Appendix G: Public Involvement

Public Notice (Des. No. 1297060)

The City of Bloomington and Monroe County are planning to undertake a roadway improvement project, funded in part by the Federal Highway Administration (FHWA). The project will improve safety on Old SR 37 east of Dunn Street and at the intersection of Old SR 37 with Dunn Street. The project is located partially within the City of Bloomington and partially within unincorporated Monroe County, Indiana.

The project (Des. No. 1297060) is approximately 1,400 feet in length along Old SR 37 and approximately 500 feet in length along Dunn Street. Additionally, the project will include an extension of the Cascades Trail from the vicinity of Old SR 37 at Stone Mill Road to the Griffy Lake Nature Preserve parking area near the former Water Filtration Plant.

This purpose of the project is to improve the roadway curvature along Old SR 37 and to improve the roadway profile of Dunn Street as it approaches Old SR 37. In addition to the improved roadway alignments, the project will provide stabilized edges with a curb and gutter and storm sewer on the north edge of Old SR 37 and a paved shoulder with guardrail on the south side of Old SR 37. Dunn Street, in addition to being raised to meet Old SR 37, will received paved shoulders to each side.

The proposed action impacts items eligible for, the National Register of Historic Places (NR). INDOT, on behalf of the FHWA, has issued a "No Adverse Effect" finding for the project with regard to the NR eligible Milisen House. INDOT, on behalf of the FHWA, has issued a finding of "No Adverse Effect" with regard to the NR eligible Griffy Lake Historic District.

In accordance with the National Historic Preservation Act, the views of the public are being sought regarding the effect of the proposed project on the historic elements as 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 800.11(e) is available for inspection at the Department of Planning and Transportation, 401 N. Morton Ave., Suite 130, Bloomington, Indiana.

This documentation serves as the basis for the FHWA's No Adverse Effect findings. The views of the public on this finding are being sought. Please reply to the contact listed below.

The project will require the temporary use of approximately 2.50 acres of property belonging to the City of Bloomington and managed by the City of Bloomington Parks and Recreation Department. The Griffy Lake Nature Preserve and the Griffy Lake Historic District reside on this property and included with this property are recreational facilities that are open to the public. The designed action will not adversely impact the activities, features, and attributes that qualify the property for protection under Section 4(f) of the Department of Transportation Act of 1966 and in accordance with SAFETEA-LU Section 6009 (a). As such, it is the intent of INDOT, along with the Federal Highway Administration to issue a finding of *de minimis*.

In accordance with SAFETEA-LU Section 6009 (a), the views of the public are being sought regarding the effect of the proposed project on the public recreational area.

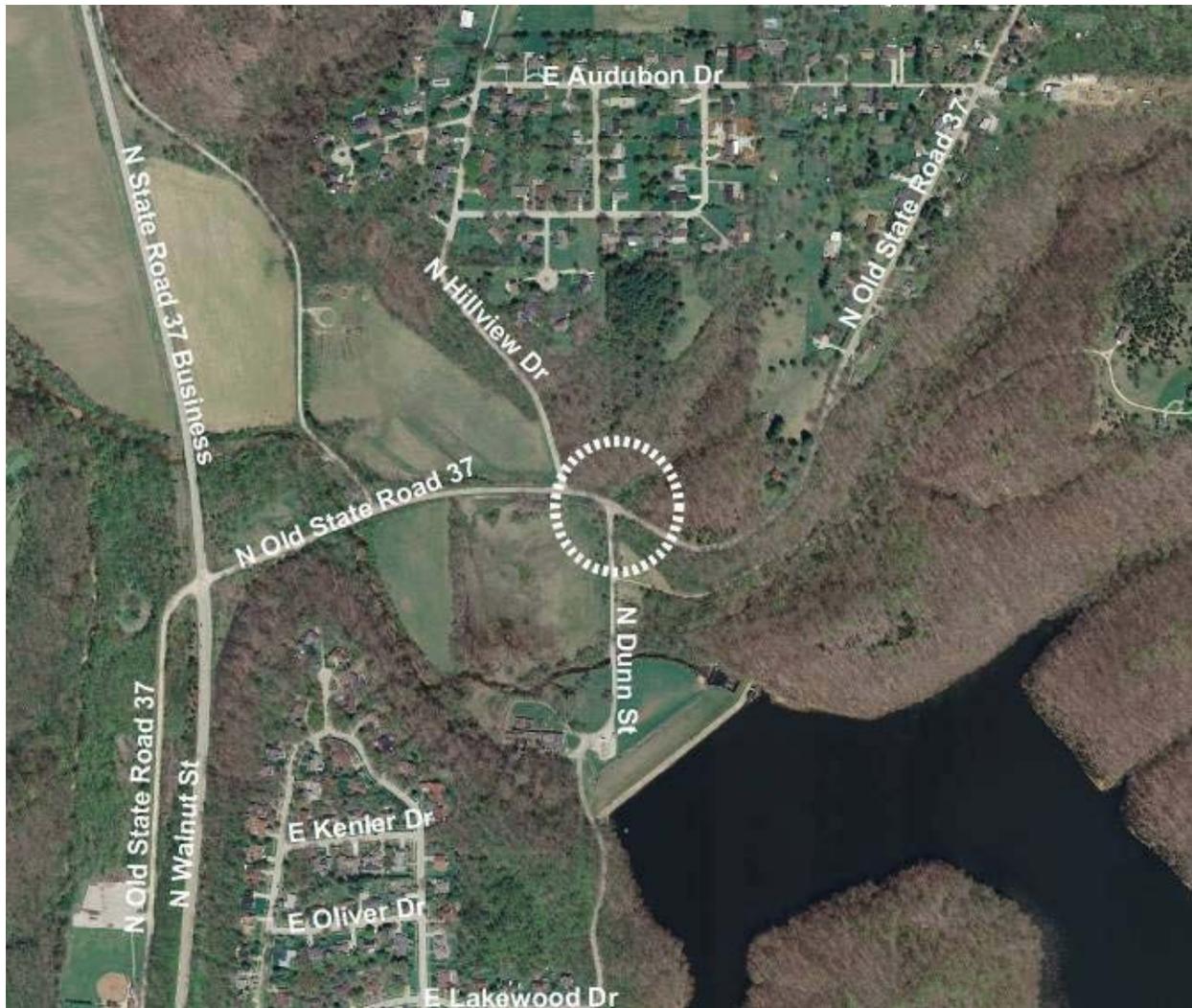
Please reply no later than November 17, 2014, to:

Brock Ridgway
Eagle Ridge Civil Engineering Services
1321 Laurel Oak Drive
Avon, IN 46123
bridgway@eagleridgecivil.com
317-370-9672

Appendix H: STIP / MPO TIP Information

Programmed Projects: City of Bloomington

City of Bloomington Projects		Funding Source	Fiscal Year			
			2014	2015	2016	2017
Project:	Old SR 37 & Dunn St. Intersection Improvements					
Location:	At the intersection of Old SR 37 & Dunn St.					
Description:	Improve horizontal and vertical geometry and sight distance at the intersection and on approaches	STP Local		\$ 100,000 \$ 25,000		
DES#:	1297060	HSIP		\$ 1,616,471		
Support:	L RTP	STP Local		\$ 40,000 \$ 190,000		
Allied Projects:	Proposed development on Old SR 37	TOTAL	\$ -	\$ 1,971,471	\$ -	\$ -





U.S. Department
of Transportation

Federal Transit Administration Federal Highway Administration
Region V Indiana Division
200 West Adams St., Suite 320 575 N. Pennsylvania St., Rm 254
Chicago, IL 60606-6253 Indianapolis, IN 46204-1576

July 11, 2013

In Reply Refer To:
HDA-IN

Ms. Brandye Hendrickson
Interim Commissioner
Indiana Department of Transportation
100 North Senate Avenue
Indianapolis, Indiana 46204

Dear Interim Commissioner Hendrickson:

The Federal Highway Administration (FHWA) and Federal Transit Administration (FTA) have received and reviewed the Indiana Department of Transportation's (INDOT) FY 2014-2017 Statewide Transportation Improvement (STIP) Program document for the State of Indiana, and hereby give our conditional approval.

It is recognized that INDOT's first two Public Private Partnership (P3) projects, the Louisville-Southern Indiana Ohio River Bridges Project (LSIORB) and the I-69 Section 5 Project, are included in this STIP. The STIP is consistent with the most recent project finance plans. As the finance plan documents are updated in the coming months, INDOT has committed to updating the STIP to be consistent with the updated finance plans.

FHWA and FTA also note this new STIP includes an Americans with Disabilities Act (ADA) summary. We appreciate INDOT's efforts to develop projects that improve access to public services for everyone.

INDOT has improved the development and quality of the STIP this year. These improvements are discussed in an enclosure to this letter. However, FHWA and FTA are only able to grant conditional approval for the FY 2014-2017 STIP because several elements of the Statewide Planning Process still need improvement. These elements are also identified in the enclosure.

With the recent passage of the *Moving Ahead for Progress in the 21st Century* (MAP-21) Act, FHWA and FTA would like to take this opportunity to ask that INDOT and the Indiana Metropolitan Planning Organizations (MPOs) be aware of new requirements for performance-based plans and programs, as well as the more formal use of performance measures. FHWA and FTA would like to collaborate with INDOT and the MPOs in the coming months to begin this transition. FHWA would also specifically like to engage with INDOT on new ways of advancing safety improvements/programs and improving the obligation rates of Highway Safety Improvement Program (HSIP) funding.

H-2

Please contact Joyce Newland, our Planning Program Manager, at (317) 226-5353 or Joyce.Newland@dot.gov to schedule a follow-up meeting within 30 days, to coordinate how these items can best be addressed.

Sincerely



Richard J. Marquis
Division Administrator

Enclosure: FHWA & FTA's Analysis of Indiana's 2014-2017 STIP

cc: (w/enclosure): Marisol Simón, FTA Region 5
Troy Woodruff, INDOT
Dan Brassard, INDOT
Kathy Eaton-McKalip, INDOT
Jim Stark, INDOT
Jay Wasson, INDOT
Matt Voors, INDOT
Dan Avery, Northeastern Indiana Regional Coordinating Council
Jerold Bridges, Madison County Council of Governments
Laurence Brown, Columbus Area Metropolitan Planning Organization
Larry Chaney, Kentuckiana Regional Planning and Development Agency
Sallie Dell Fahey, Area Plan Commission of Tippecanoe County
Josh Desmond, Bloomington/Monroe County Metropolitan Planning Organization
Ron Hisenkamp, West Central Indiana Economic Development District
Larry Ives, Kokomo and Howard County Coordinating Council
Marta Moody, Delaware-Muncie Metropolitan Plan Commission
Mark Policinski, Ohio-Kentucky-Indiana Regional Council of Governments
Sandra Seanor, Michiana Area Council of Governments
Seyed Shokouhzadeh, Evansville Metropolitan Planning Organization
Anna Tyszkiewicz, Indianapolis Metropolitan Planning Organization
Ty Warner, Northwestern Indiana Regional Planning Commission

FHWA & FTA's ANALYSIS OF INDIANA's 2014-2017 STIP

INCORPORATION OF TRANSPORTATION IMPROVEMENT PROGRAMS:

At the request of the Indiana Department of Transportation (INDOT), the following Metropolitan Planning Organization's (MPO's) Transportation Improvement Programs (TIPs) are accepted for incorporation into the 2014-2017 Statewide Transportation Improvement Program (STIP):

<u>Metropolitan Planning Organization</u>	<u>TIP Coverage</u>
Madison County Council of Government, covering the Anderson urbanized area	2012-2015
Bloomington/Monroe County Metropolitan Planning Organization, covering the Bloomington urbanized area	2014-2017
Columbus Area Metropolitan Planning Commission, covering the Columbus urbanized area	2012-2016
Evansville Metropolitan Planning Organization, covering the Evansville urbanized area	2013-2016
Northeastern Indiana Regional Coordinating Council, covering the Fort Wayne urbanized area	2014-2017
Indianapolis Metropolitan Planning Organization, covering the Indianapolis urbanized area	2012-2015
Kokomo-Howard County Governmental Coordinating Council, covering the Kokomo urbanized area	2011-2014
Area Plan Commission for Tippecanoe County, covering the Lafayette and West Lafayette urbanized areas	2014-2017
Kentuckiana Regional Planning and Development Agency, covering the Louisville-Southern Indiana urbanized area	2011-2015
Delaware-Muncie Metropolitan Plan Commission, covering the Muncie urbanized area	2012-2015
Northwestern Indiana Regional Planning Commission, covering the Northwestern Indiana urbanized area	2012-2015
Michiana Area Council of Governments, covering the South Bend, Mishawaka, Elkhart and Goshen urbanized areas	2014-2017
West Central Indiana Economic Development District, covering the Terre Haute and Brazil urbanized area	2012-2015
Ohio-Kentucky-Indiana Regional Council of Governments, covering the Cincinnati urbanized area	2012-2015

Appendix I: 4(f) Resource Sponsor Letter



CITY OF BLOOMINGTON
parks and recreation

Mailing Address

Administrative Offices
401 N. Morton Street Suite 250
PO Box 848
Bloomington, IN 47402
Phone: (812) 349-3700
Fax: (812) 349-3705
parks@bloomington.in.gov
www.bloomington.in.gov/parks

Allison-Jukebox

Community Center
351 South Washington Street
Bloomington, IN 47401
(812) 349-3731

Banneker Community Center

930 West 7th Street
Bloomington, IN 47402
(812) 349-3735

Cascades Golf Course

3550 North Kinser Pike
Bloomington, IN 47402
(812) 349-3764

Frank Southern Ice Arena

1965 South Henderson Street
Bloomington, IN 47401
(812) 349-3740

Twin Lakes Recreation Center

1700 West Bloomfield Road
Bloomington, IN 47403
(812) 349-3720

Inclusive Recreation

(812) 349-3747

**Maintenance, Landscaping
& Cemetery Operations**

(812) 349-3498

Urban Forestry

(812) 349-3716

April 2, 2014

Mr. David Dye
Environmental Scoping Manager
Seymour District, INDOT
185 Agrico Lane
Seymour, IN 47274

Project: Safety Improvements to Old SR 37 & Dunn Street in Bloomington and
Monroe County
Des No: 1297060
4(f) Resource: Griffy Lake Nature Preserve

Re: **Recommendation for Finding of *De Minimus* Impact to 4(f) Resource**

Dear Mr. Dye:

The Griffy Lake Nature Preserve is an area owned by the City of Bloomington through its Utility Department. The area was once, and is protected in the event it may once again need to be, a potential water source for the City. The Parks Department is the City's managing authority for the property and its current uses as a public park, recreation area and nature preserve.

We have reviewed the proposed plans, and the uses that are proposed by this project do not adversely affect the activities, features and attributes that qualify this area as a 4(f) resource. Instead, the project area is on the edge of the nature preserve in areas that are not otherwise used for recreational purposes.

The proposed improvements are expected to result in a significant safety benefits to the bordering roadways from which the visitors to the nature preserve will share the benefits. The proposed extension of the Cascades Trail that is included in this project will complete a long-planned portion of the City's multi-use trail system, and provide paved, non-motorized trail access to the nature preserve. The project should enhance the access to, and use of, the nature preserve area and result in an overall increase of its value as a 4(f) resource.

The City is working with the project designer to establish tree mitigation requirements for area inside the City limits, which includes any areas inside the nature preserve.

As Director for the City of Bloomington Parks Department, and on behalf of the City of Bloomington, I wish to offer the recommendation that the Federal Highway Administration reach a finding of *De Minimus* impacts in accordance with its procedures for reviewing potential uses of 4(f) resources.

Sincerely,



Mick Renneisen
Director
City of Bloomington
Parks & Recreation Department

cc: Adrian Reid, City Engineer
Brock Ridgway, Eagle Ridge Civil Engineering Service, LLC
Dave Williams, Operations Director