

*ARDOT Job 101140*  
*POCAHONTAS BYPASS*

Environmental  
Assessment



May 2024

# Pocahontas Bypass

F.A.P. Number STPSC-9350(7)

## Environmental Assessment

*Submitted pursuant to:*

The National Environmental Policy Act (NEPA)

42 U.S.C. §4322(2)(c) and 23 C.F.R. §771

*Submitted by:*

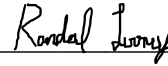
**FEDERAL HIGHWAY ADMINISTRATION**

*and*

**ARKANSAS DEPARTMENT OF TRANSPORTATION**

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June 6, 2024

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In compliance with the National Environmental Policy Act, this Environmental Assessment describes the No Action Alternative and two build alternatives to provide a new connection between Highway 90 and Highway 67 north of the Central Business District in the City of Pocahontas. No significant adverse environmental effects were identified with any of the alternatives.

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# ***TABLE OF CONTENTS***

## ***CHAPTERS***

### **Chapter 1: Purpose and Need**

- 1.1 What is the Highway 90 to Highway 67 connection project? ..... 1
- 1.2 What are the current conditions in the project area? ..... 1
- 1.3 Why is a new connection between Highway 90 and Highway 67 needed? ..... 5
- 1.4 What is the purpose of this project? ..... 6
- 1.5 What is the purpose of this Environmental Assessment? ..... 6
- 1.6 Who is leading this project? ..... 6

### **Chapter 2: Alternative Development**

- 2.1 What are the project limits and how were they chosen? ..... 7
- 2.2 What alternatives were initially considered?..... 7
- 2.3 What alternatives were further developed and evaluated?..... 7
- 2.4 How has the public been involved in the development of these alternatives? .... 10
- 2.5 How have tribal governments been involved?..... 10
- 2.6 How have other governmental agencies been involved?..... 10
- 2.7 Which of these alternatives will be considered? ..... 11

### **Chapter 3: Project Impacts and Mitigation**

- 3.1 How were potential impacts evaluated?..... 12
- 3.2 How would the project affect properties and land use? ..... 12
- 3.3 How would the project affect the community? ..... 13
- 3.4 What is Environmental Justice and how is it addressed?..... 14
- 3.5 Would traffic noise levels change? ..... 14
- 3.6 Would the project impact Important Farmland? ..... 15
- 3.7 How would the project affect cultural resources? ..... 15
- 3.8 How would visual quality be affected? ..... 17
- 3.9 How would water resources, wetlands, and streams be affected? ..... 18
- 3.10 Would the project cause flooding in surrounding areas?..... 20
- 3.11 Would any protected species and their habitats be affected by the project? ..... 21

3.12 Does the project have any climate change impacts?..... 23

3.13 Does the project have any indirect impacts?..... 25

3.14 Does the project have any cumulative impacts? ..... 26

3.15 What other resource areas were examined but not impacted? ..... 27

**Chapter 4: Results and Commitments**

4.1 What are the results of this EA?..... 30

4.2 What commitments have been made? ..... 30

4.3 Is the NEPA process finished?..... 32

***REFERENCE PAGE***

Acronyms ..... 33

***APPENDICES***

- Appendix A: Traffic Study
- Appendix B: Minute Order 2018-090
- Appendix C: Public Involvement Synopsis Report
- Appendix D: Agency and Tribal Coordination
- Appendix E: Community Impacts and Environmental Justice Evaluation
- Appendix F: Noise
- Appendix G: Farmlands
- Appendix H: Cultural Resources
- Appendix I: Visual Impacts
- Appendix J: Wetland and Stream Assessment
- Appendix K: Species Information

**FIGURES**

Figure 1: Project Location and Extent of Study Area ..... 2

Figure 2: Damage from Roadway Deficiencies ..... 3

Figure 3: Location of 90-Degree Turns ..... 4

Figure 4: Full and Partial Bypass Alternatives Eliminated from Consideration..... 8

Figure 5: Build Alternatives, Alternatives A and B..... 9

Figure 6: Aquatic Features in Study Area..... 19

**TABLES**

Table 1: Right of Way, Relocations, and Property Impacts ..... 13

Table 2: Floodplains..... 20

Table 3: Possible Threatened and Endangered Species in the Study Area ..... 22

Table 4: GHG Emission Equivalent and Equivalent Emission Sources ..... 24

Table 5: Alternative Impact Comparison ..... 30

# Chapter 1: Purpose and Need

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*This chapter explains the proposed project's purpose, why improvements are needed, and the project's lead agency roles.*

## **1.1 What is the Highway 90 to Highway 67 connection project?**

The Arkansas Department of Transportation (ARDOT) is proposing to reduce heavy truck traffic and improve mobility in and near the City of Pocahontas' Central Business District (CBD). The proposed project would involve providing a two-lane roadway on new location (**Figure 1**).

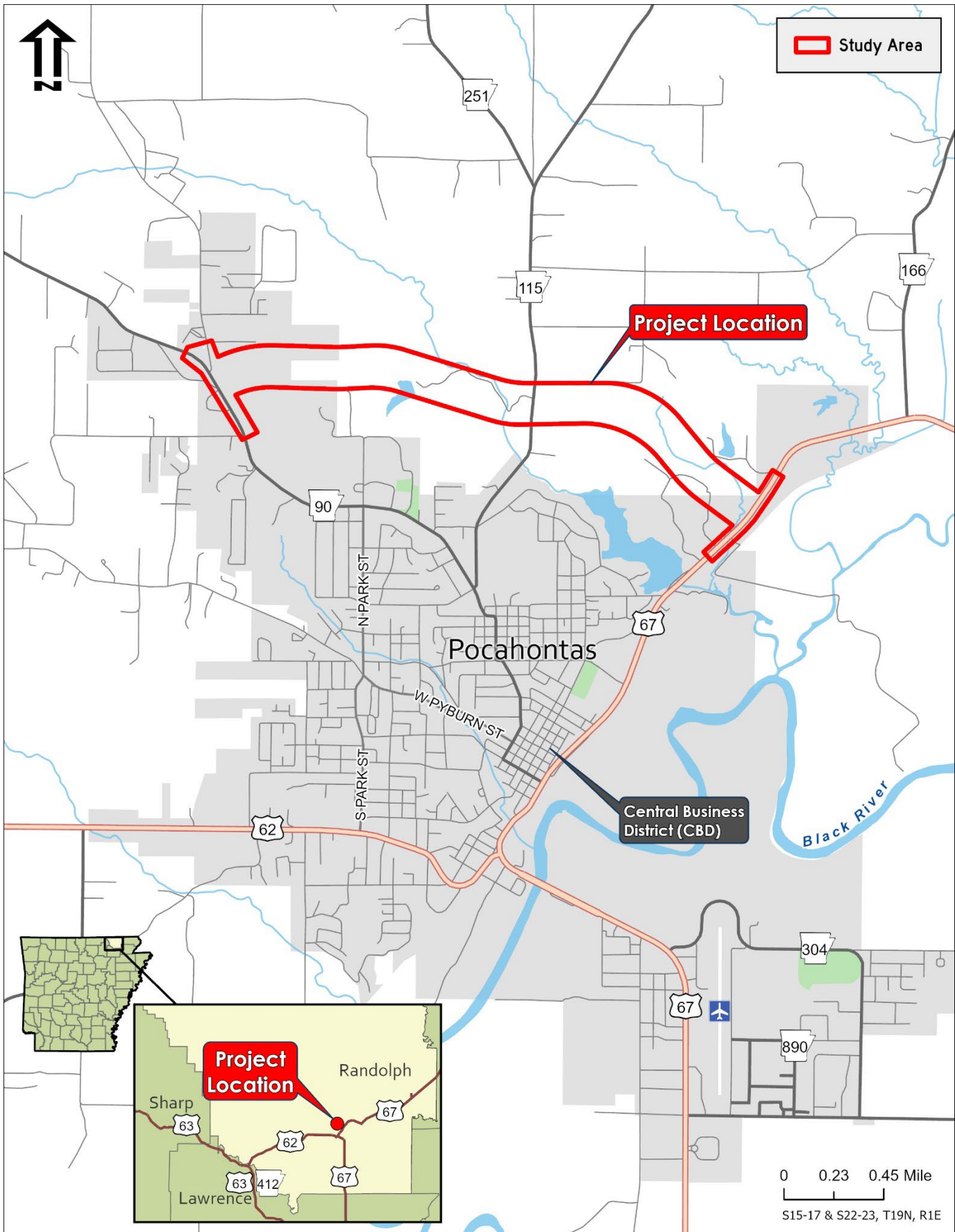
## **1.2 What are the current conditions in the project area?**

Situated along the Black River, Pocahontas is the population, business, and transportation center of Randolph County in Northeast Arkansas. Residential development is concentrated northwest of the river, while many businesses and a large industrial park are located southeast of the river. Highway 67, a principal arterial running southwest-northeast through Pocahontas, provides the only bridge crossing of the Black River in Randolph County. Highway 67 connects central and northeastern Arkansas to eastern Missouri and points beyond. Highway 67 also serves local traffic through Pocahontas, connecting residential areas to the north with employment centers to the south.

Several other highways intersect Highway 67 in and around the Pocahontas CBD. Highway 62 is a minor arterial route that connects Pocahontas to Highway 63/412, and much of north-central Arkansas. Highways 90, 115, and 251 are collector routes that connect much of rural Randolph County to Pocahontas and points beyond. These three routes converge in central Pocahontas, traversing several 90-degree turns before reaching Highway 67.

Structural impacts resulting from trucks attempting to navigate through these 90-degree turns were observed at these locations, as shown in **Figure 2**. Trucks have difficulty navigating these turns. **Figure 3** shows the location of the 90-degree turns along Highway 90 within the CBD.

Figure 1: Project Location and Extent of Study Area

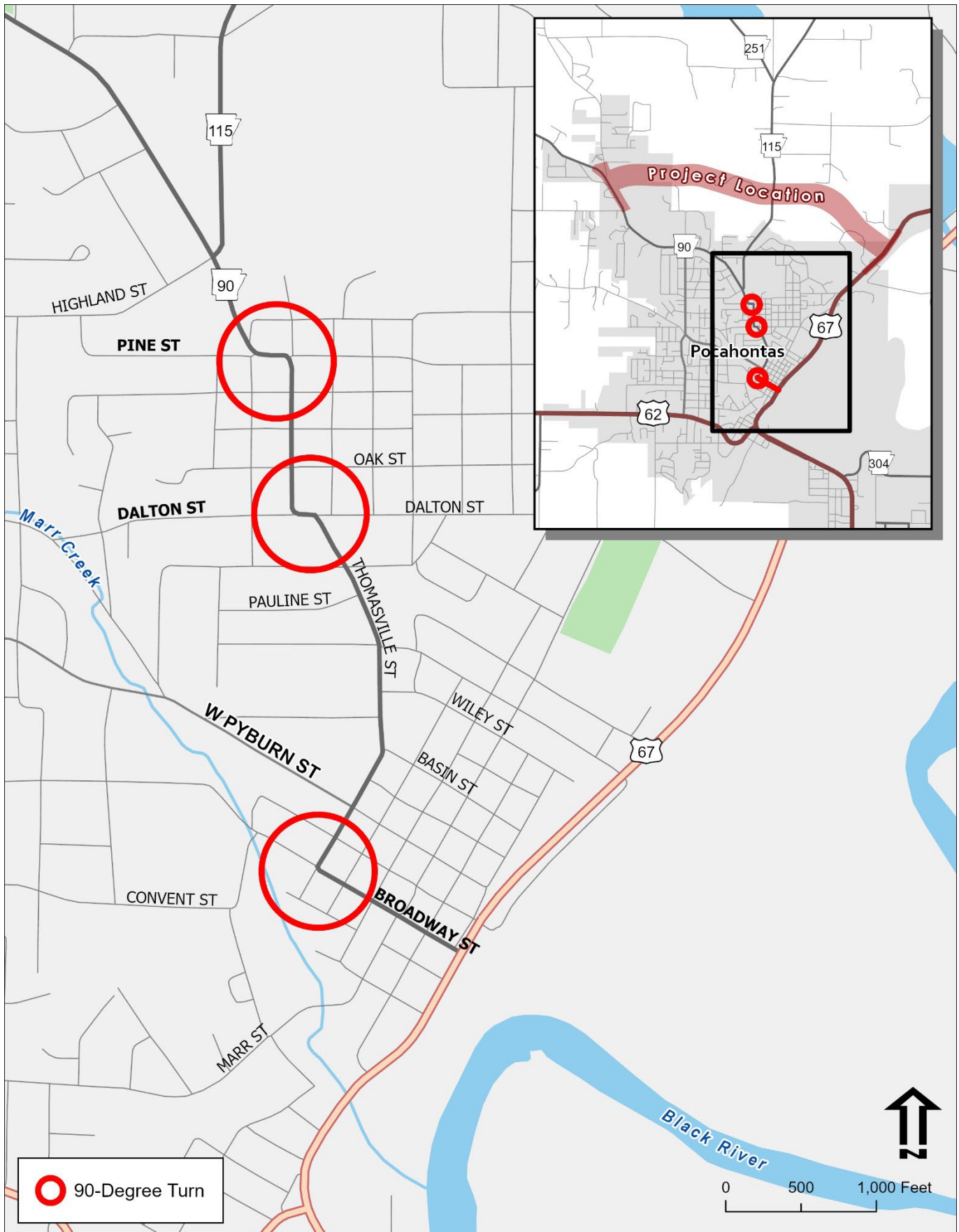




**Figure 2: Damage from Roadway Deficiencies**



Figure 3: Location of 90-Degree Turns



### 1.3 Why is a new connection between Highway 90 and Highway 67 needed?

This section references the existing conditions described in Section 1.2 and summarizes the Pocahontas Bypass Feasibility Study Update.

#### Truck Traffic

Like much of Arkansas, agriculture is a major driver of Randolph County's economy. Numerous chicken farms exist in northwestern Randolph County, and these farms use Highway 90 through Pocahontas to reach markets. One frequent destination is the PECO (food processing) facility in southern Pocahontas. This plant generates over 65,000 truck trips annually, of which 14,000 use the Highway 90 corridor. A quarry north of Pocahontas also uses Highway 90 through the CBD to reach markets. Overall, about 800 trucks travel daily on Highway 90 through Pocahontas, representing about 9% of all traffic. Details on traffic conditions can be found in **Appendix A**.

Local officials have expressed concerns about increased truck traffic. The truck traffic is due to industrial and agricultural expansions in the area. As a result, the Arkansas State Highway Commission approved Minute Order 2018-090 (**Appendix B**) authorizing additional studies of alternative truck route options through Pocahontas.

#### CBD Mobility

As previously discussed, Highway 90 through central Pocahontas is an important route connecting farms and a quarry in northwestern Randolph County to other industries. This route includes three 90-degree turns and several other less tight turns. Trucks are able to navigate these turns but must substantially reduce their speed. The presence of these trucks causes frustration and travel time delays to other road users as turning trucks often have to wait for approaching vehicles to make their turns so that the necessary room is available for them to move through the intersection. Leading vehicles waiting in travel lanes for gaps in oncoming traffic result in delays for following vehicles. In addition, the high number of driveways in the project area contributes to turn complications. The frequent travel delays caused by these conditions reduce mobility in the area. As shown in Figure 3, trucks must negotiate up to three difficult turns as they pass through the CBD.

**Mobility** is the easy movement of people and goods through an area. Mobility improvements reduce congestion and increase roadway capacity.

#### 1.4 What is the purpose of this project?

The purpose of this project is to reduce heavy truck traffic and improve mobility in the Pocahontas CBD.

#### 1.5 What is the purpose of this Environmental Assessment?

This Environmental Assessment (EA) is being prepared under the National Environmental Policy Act (NEPA) to:

- Evaluate the environmental effects of the project alternatives.
- Inform and receive feedback from the public and decision makers about the environmental effects of the project alternatives.
- Determine whether effects are significant and require an Environmental Impact Statement, or if the project effects can be sufficiently documented through an EA and Finding of No Significant Impacts (FONSI).

The **National Environmental Policy Act** requires federal agencies to consider the potential environmental consequences of their actions, document the analysis, and provide a public involvement process prior to project implementation.

#### 1.6 Who is leading this project?

This project is led by a partnership between the Federal Highway Administration (FHWA) and ARDOT. FHWA is involved because it would fund a portion of the project and has the primary responsibility for the content and accuracy of this NEPA document.

The project is also being funded through state funds allocated to ARDOT. ARDOT is responsible for administering and maintaining the state highway system, which includes Highways 90 and 67.

In addition, the City of Pocahontas has partnered with ARDOT and will contribute funds to construct the bypass. After the project is complete, the city would assume responsibility for portions of Highway 90 and Highway 115.

## Chapter 2: Alternative Development

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*This chapter identifies the project limits, explains how project alternatives were developed, and describes the alternatives evaluated in this EA.*

### 2.1 What are the project limits and how were they chosen?

The project limits include the area required to construct a new two-lane roadway, including construction and access. The total project length is approximately 2.6 miles. The project limits were determined as Highway 67 and Highway 90 because these facilities are major traffic generators. The western limit is a major traffic origin point, and the eastern limit provides a direct connection to Highway 67. Highway 67 and Highway 90 are the logical termini based on the purpose and need of the project to reduce heavy truck traffic and improve mobility through the Pocahontas CBD.

### 2.2 What alternatives were initially considered?

Several alternatives were developed to address the Pocahontas travel challenges. A full bypass alternative was considered along with partial bypass alternatives, as shown in **Figure 4**.

Partial bypass alternatives were also initially proposed with all but one alignment eliminated from consideration based on criteria of potential impacts on resources, cost estimates, construction feasibility, and local travel patterns. Partial bypass Alternative 1B, shown in Figure 4, was retained and further developed.

### 2.3 What alternatives were further developed and evaluated?

Partial bypass Alternative 1B (Figure 4), was retained and further developed along with a second build alternative aligned slightly farther south. Thus, three alternatives are being considered for this project: the No Action Alternative and two build alternatives, Alternative A and Alternative B. The two build alternatives are shown in **Figure 5**.

#### No Action Alternative

The No Action Alternative would be limited to routine maintenance operations. Truck traffic through the Pocahontas CBD and mobility concerns would not be addressed. This alternative is used for comparison purposes in this document.

Figure 4: Full and Partial Bypass Alternatives Eliminated from Consideration

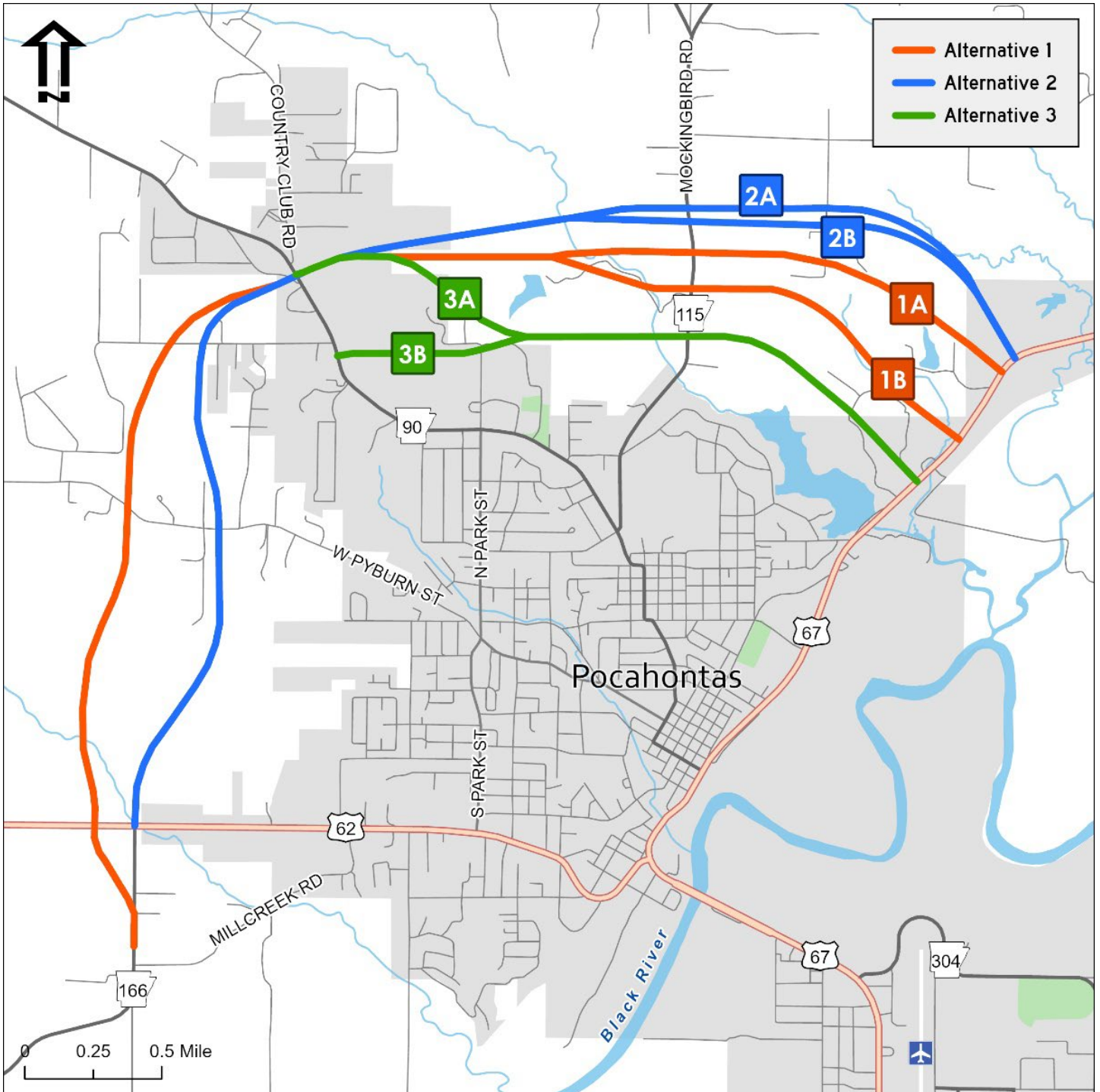
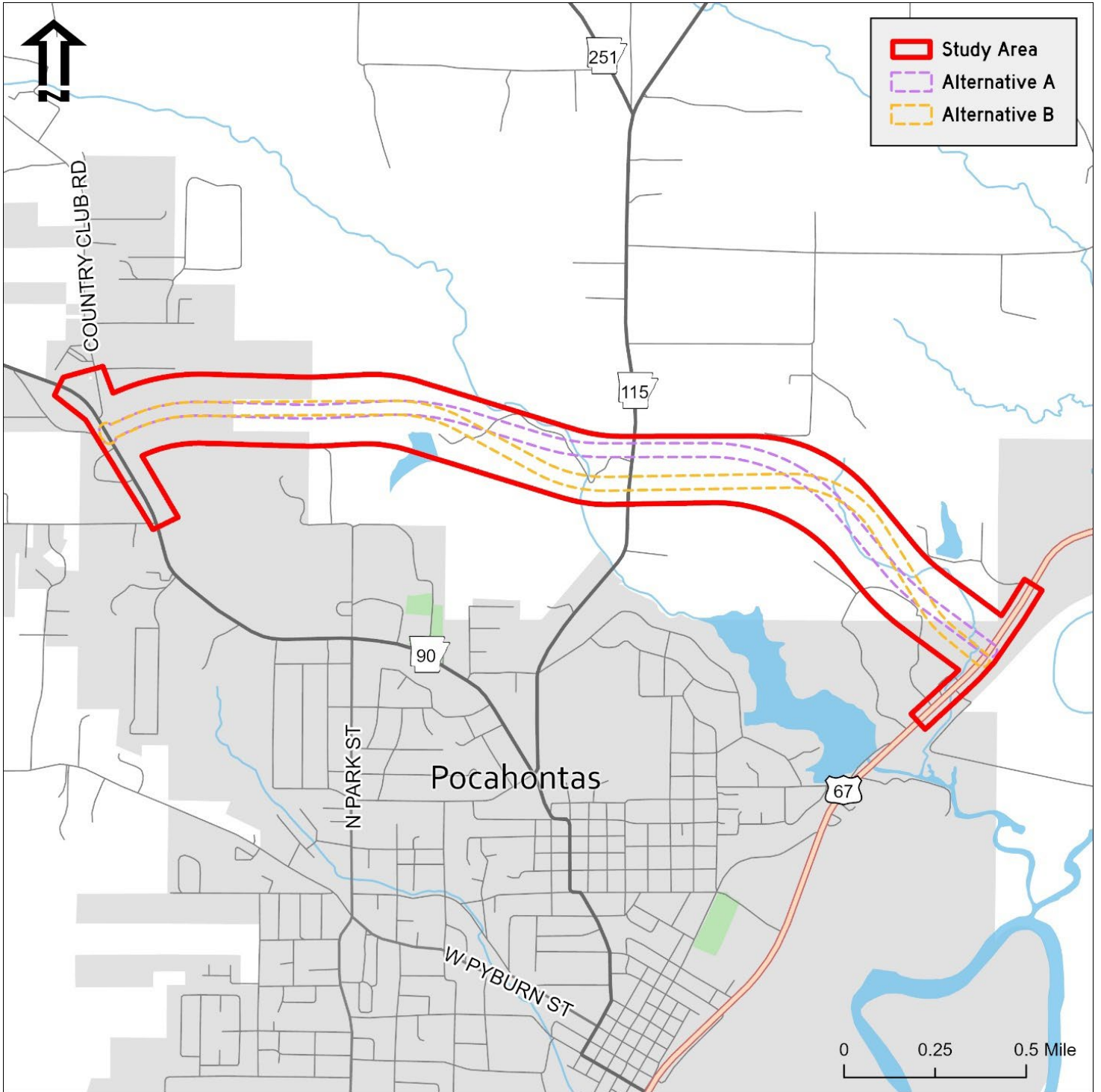


Figure 5: Build Alternatives, Alternatives A and B



## Build Alternatives

Both Alternatives A and B are proposed as a new rural arterial roadway and would consist of two 12-foot travel lanes, one lane in each direction with 8-foot shoulders, a 30-foot clear zone, and a design speed of 55 miles per hour. Alternative A and Alternative B, which are shown in Figure 5, share a similar alignment through much of the study area.

Proposed improvements for both Alternatives A and B include intersection improvements at Highway 90 and Highway 67, an at-grade intersection at Highway 115.

Construction costs are estimated to be \$19.5 million for Alternative A or Alternative B.

### **2.4 How has the public been involved in the development of these alternatives?**

A public meeting was held at the Pocahontas Community Center on October 24, 2023. ARDOT and the project team staff were in attendance to provide information and answer questions. Comments were accepted by mail, email, and online during the public comment period of October 18 through November 8, 2023. Input received from the public meeting is considered as part of the evaluation of the alternatives being considered for the proposed project. A summary of the public involvement meeting can be found in **Appendix C**.

### **2.5 How have tribal governments been involved?**

Section 106 of the National Historic Preservation Act requires federal agencies to consult with tribes where projects could affect tribal areas with historical or cultural significance. The FHWA initiated tribal government coordination with tribal governments having an active cultural interest in the area.

The Tribal Historic Preservation Officers were given the opportunity to comment on the proposed project. Copies of the tribal correspondence are located in **Appendix D**.

### **2.6 How have other governmental agencies been involved?**

The review and environmental analysis included agency coordination for data collection and concurrence of findings. Coordination letters and/or project information were submitted to the following agencies: the Arkansas Department of Energy and Environment, Division of Environmental Quality, Arkansas Department of Health (ADH),

The following **tribal governments** were contacted:

- Osage Nation
- Quapaw Nation
- Shawnee Tribe
- Tunica-Biloxi Tribe of Louisiana, Inc
- United Keetowah Band of Cherokee Indians in Oklahoma



Arkansas Department of Parks, Heritage and Tourism, Arkansas Game and Fish Commission, Arkansas Geological Survey, Arkansas Natural Heritage Commission (ANHC), Natural Resource Conservation Service (NRCS), State Historic Preservation Officer (SHPO), U.S. Army Corps of Engineers (USACE), U.S. Fish and Wildlife Service (USFWS), and U.S. Geological Survey. No response was received from the Arkansas Game and Fish Commission, Arkansas Geological Survey, or U.S. Geological Survey. Other than SHPO, none of the agencies expressed concern regarding potential project impacts. SHPO requested a cultural resources survey and an architectural resources survey be conducted (see Section 3.10 for details). Letters and documented correspondence are included in Appendix D.

## **2.7 Which of these alternatives will be considered?**

All three alternatives identified in Section 2.3 are appropriate courses of action under the NEPA regulations. The No Action Alternative does not meet the project's purpose and need but will be considered in the remainder of the EA as a baseline for comparison of project impacts. The two build alternatives meet the project's purpose and need, and their impacts are assessed in the remainder of this EA.

## Chapter 3: Project Impacts and Mitigation

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*This chapter summarizes potential project impacts on people and the environment.*

### 3.1 How were potential impacts evaluated?

Potential impacts based on the improvements proposed by each build alternative were studied using the latest available applicable data. Analyses were based on a study area delineated from a 1,000-foot-wide buffer centered on the proposed build alternatives. Evaluations of impacts are in accordance with NEPA and applicable federal, state, and local guidelines.

The No Action Alternative is used as a baseline for comparison purposes.

### 3.2 How would the project affect properties and land use?

#### No Action Alternative

The No Action Alternative does not involve any construction through the study area; therefore, no relocations, land use changes, acquisitions, or property impacts would result, and this alternative would not encourage any additional development in or around the project area.

#### Build Alternatives

Alternatives A and B would result in similar quantities of right of way acquisition to construct the new location roadway. Both build alternatives would impact 13 residential or commercial properties and are anticipated to require two business relocations. All land acquisitions and relocations would be conducted in accordance with the Uniform Relocation Assistance and Real Property Acquisition Act. Estimated property impacts and proposed right of way based on preliminary design can be found in **Table 1**. Any temporary construction easements would be determined during final design after the Preferred Alternative is approved.

Land use changes for both build alternatives would be limited to the conversion of undeveloped areas to roadway and maintained right of way. The proposed right of way is 200' in width.

Both build alternatives cross power line easements at three locations. No impacts to these lines are anticipated. Any utility infrastructure impacted by the project would be relocated prior to construction. Utility customers should not be impacted by the proposed project.

**Table 1: Right of Way, Relocations, and Property Impacts**

Alternative	Number of Landowners Impacted	Number of Parcels Impacted	Proposed Right of Way Required (Acres)	Number of Business Relocations Required
No Action	None	None	None	None
A	13	19	65.5	2
B	13	19	66.2	2

**3.3 How would the project affect the community?**

Randolph County and the City of Pocahontas have estimated populations of 18,619 and 7,384 persons, respectively (U.S. Census Bureau, 2022 American Community Survey). The project study area primarily passes through undeveloped areas but also occurs adjacent to business and residential properties. Community facilities and emergency services within the study area include three hospital/medical service facilities, three senior living and rehabilitation centers, and an elementary school. One cemetery is located immediately north of the study area and one is located immediately south of the study area. **Appendix E** contains detailed socio-economic information for Pocahontas and its vicinity. Potential effects are summarized below.

No Action Alternative

The No Action Alternative does not involve construction of a new roadway; therefore, impacts to community facilities and community cohesion are not anticipated from this alternative.

Build Alternatives

The build alternatives would not result in a displacement of any of the community facilities listed above and would not adversely affect services provided by these or nearby facilities. The build alternatives are anticipated to benefit the community by allowing truck traffic to be routed away from the CBD, thereby improving mobility in the area. The build alternatives would not separate or further divide any existing communities or neighborhoods.

Project design would minimize the need for right of way acquisition to the extent possible. ARDOT would continue to be responsive to the concerns of residents and business owners regarding driveway configurations and other specific property concerns.

### 3.4 What is Environmental Justice and how is it addressed?

Environmental Justice refers to social equity in bearing the burden of adverse environmental impacts. In the past, minorities and low-income populations have experienced disproportionate impacts caused by transportation projects. Executive Order 12898, *Federal Actions to Address Environmental Justice in Minority Populations and Low-Income Populations*, was issued as a response to these concerns.

An Environmental Justice analysis (see Appendix E) was performed for the proposed project in accordance with Executive Order 12898. The Environmental Justice analysis was intended to determine if low-income or minority populations would suffer disproportionately high and adverse effects of the proposed project. The evaluation determined that despite resulting in some property impacts, the proposed project would not sever any subdivisions or neighborhoods or disrupt community services. No disproportionately high and adverse effects on any minority or low-income populations or Title VI violations would occur as a result of either of the build alternatives.

The No Action Alternative would not have any Environmental Justice impacts.

### 3.5 Would traffic noise levels change?

The proposed project meets FHWA noise regulation criteria for projects requiring a noise study. A screening level noise analysis was therefore completed using FHWA’s Traffic Noise Model 2.5. As part of the screening level noise analysis, noise sensitive receptors are identified for the potential to experience traffic noise impacts. The screening level noise analysis determines changes in noise levels and possible noise impacts to these identified noise sensitive receptors in the study area. **Appendix F** provides more detailed information on the screening level noise analysis.

#### No Action Alternative

The No Action Alternative is considered to be on the existing route through Pocahontas, from Highway 67 to Highway 90 and is in close proximity to 187 sensitive noise receptors. Four of these receptors are located adjacent to Highway 67 in downtown Pocahontas and are impacted by existing conditions. Noise level increases between 2025 and 2045 due to increased traffic volumes under the No Action Alternative are categorized as minor at less than 1 (dBA). Under future conditions

**Environmental Justice** at the FHWA includes addressing potentially adverse effects to achieve an equitable distribution of benefits and burdens.

Title VI of the Civil Rights Act of 1964 prohibits discrimination based on race, color, sex, national origin, religion, or disability under any program or activity receiving federal financial assistance.

**Traffic noise** is measured in decibels (dB). The amplification or attenuation of different sound frequencies to correspond to the way the human ear hears these frequencies is referred to as “A-weighting.” The A-weighted sound level in decibels is expressed as **dBA**.

**Noise sensitive receptors** include residences and public places that have a special sensitivity to noise, such as schools, churches, and parks.

with higher forecasted traffic, six receptors would be impacted by traffic noise.

### Build Alternatives

Because both alternatives are on new alignment, they were modeled under the same traffic conditions, typical sections, and speeds and the results were identical. A total of 16 sensitive noise receptors were identified in the project area. The noise level increases under the build alternatives were predicted to range from less than 1 dBA up to 7 dBA, which is categorized as minor to moderate increases. Although noise levels would increase in some areas, no receptors would be impacted by noise levels of 66 dBA or above. A detailed noise analysis is therefore not required for this project. Project construction operations typically increase noise levels. These increases would be temporary, limited duration, and have minor adverse effects on land uses and activities in the project area.

### **3.6 Would the project impact Important Farmland?**

Important Farmland, specifically Prime Farmland and Farmland of Statewide Importance, is present in the study area. Based on coordination with the U.S. Department of Agriculture Natural Resources Conservation Service (NRCS), approximately 83 acres of Farmland of Statewide Importance and one acre of Prime Farmland was identified in the study area. NRCS coordination is provided in **Appendix G**.

### No Action Alternative

The No Action Alternative would have no impact on Important Farmland.

### Build Alternatives

A Farmland Conversion Rating Form was completed and submitted to NRCS, identifying Alternative B as the Preferred Alternative. Alternative A would convert 11 acres of Farmland of Statewide Importance and scored 103 total points on the impact rating form. Alternative B would convert 8 acres of Farmland of Statewide Importance and scored 102 total points on the impact rating form.

### **3.7 How would the project affect cultural resources?**

Section 106 of the National Historic Preservation Act requires agencies to consider the effects of federal actions on cultural resources. In

**Important Farmland** is land suited to food, feed, forage, fiber, and oilseed crops. **Prime Farmland** is a subset of Important Farmland with the best combination of characteristics for crop production. **Farmland of Statewide Importance** is a subset of Important Farmland that does not meet the criteria for Prime or Unique Farmland yet produces high yields of crops when appropriately treated and managed.

compliance with Section 106 requirements, ARDOT cultural resource specialists consult with the SHPO and Native American tribes.

An Architectural Resources Survey prepared for this project determined there are no properties/standing structures listed or considered eligible for listing in the NRHP within, or immediately adjacent to, the study area; SHPO concurred with this determination in August 2023 (**Appendix H**).

Preliminary records reviews with the Arkansas Archeological Survey and Arkansas Historic Preservation Program, as well as early maps of the study area, were checked for indications of known archeological sites or historic structures. This preliminary archeological assessment indicates a total of four sites of interest are in the study area: a grave site (3RA602) and three sites (3RA0348, 3RA601, and 3RA0603) with undetermined eligibility for the NRHP. Investigation of 3RA602 with ground penetrating radar was conducted with graves found in a very concentrated area. A Phase I cultural resources survey that includes shovel tests is in progress for the Preferred Alternative (Alternative B). The survey report documenting the results of the survey, quantifying impacts to historic properties, and stating recommendations will be submitted to the SHPO for review. If no historic properties are identified, a recommendation of no further work will be submitted to the SHPO. Should any of the properties be found eligible or potentially eligible for nomination to the NRHP and avoidance is not possible, site-specific data recovery plans would be prepared and data recovery would be carried out at the earliest practicable time.

#### No Action Alternative

The No Action Alternative would have no impact on cultural resources.

#### Build Alternatives

##### *Alternative A*

The grave site (3RA602) is located immediately adjacent to the outer edge of Alternative A's right of way footprint and therefore has much higher potential for discovery of additional unknown graves and cultural resources. One site with undetermined NRHP eligibility (3RA601) also occurs within the proposed right of way of Alternative A.

**Cultural Resources** include elements of the built environment (buildings, structures, or objects) or evidence of past human activity (archeological sites). Those that are eligible for inclusion in the National Register of Historic Places are defined as **historic properties**.

*Alternative B*

Three sites with undetermined NRHP eligibility (3RA0348, 3RA601 and 3RA0603) occur within the proposed right of way of Alternative B.

**3.8 How would visual quality be affected?**

The abbreviated visual impact assessment provided in **Appendix I** is summarized below.

The visual character of the study area is primarily rural, consisting of undeveloped fields, woodlands, some large parcel residential properties, and commercial developments concentrated on either end of the project limits. Construction on new location would introduce a new road to a previously undeveloped area dominated by trees and vegetation. The removal of several acres of trees and other vegetation would alter visual resources along the project corridor.

Project visual resources would not detract from the area’s overall existing visual character. Local planning and development guidelines would be taken into consideration to ensure compatibility. For these reasons, overall visual quality impacts are likely to be largely neutral, or beneficial in some cases.

No Action Alternative

The No Action Alternative would not alter views in the study area.

Build Alternatives

The addition of a roadway would introduce new infrastructure to nearby residential neighbors and would create new views for potential travelers. Within the corridor, undeveloped and unobstructed natural views would be disturbed by the construction of the new roadway and clearing required for the new alignment. Although roadway pavement would be added to views along the proposed corridor, grade separations are not anticipated that would create obstructed views across the corridor. Permanent adverse impacts are anticipated for the two residential neighbors for whom exposure would be substantially increased and neutral for remaining neighbors. Visual quality impacts are anticipated to be beneficial for most travelers.

Temporary impacts would include the presence of heavy equipment, materials, and construction vehicles during construction, temporarily altering the area’s visual character. Impacts would be more obvious for the few adjacent properties, where views of the roadway may become

**Visual quality** impacts are determined by predicting viewer responses to changes in the project area’s visual resources.

**Visual resources** include vegetation, existing structures, and roadway features such as cross sections and construction materials.

more prominent, but revegetation would likely provide an additional visual buffer. Overall, visual impacts would be similar among the two build alternatives.

### 3.9 How would water resources, wetlands, and streams be affected?

#### Water Resources

A review of the ADH public water supply database identified surface water intakes, wellheads, or associated assessment areas in the study area. According to ADH, the project would cross the surface assessment area for Pocahontas’s intake on the Black River. The water system should be notified before commencement of construction activities. As Pocahontas’s drinking water is surface water sourced, the primary pollutant of concern would be turbidity. Due to the implementation of stormwater best management practices during construction, adverse impacts to this water resource are not anticipated.

**Assessment areas** are areas associated with surface water intakes or wellheads that ADH defines or delineates. The associated water source could be impacted if these areas were to become contaminated.

#### Wetlands and Streams

A review of wetlands and streams within the study area revealed the presence of two named streams (Mansker Creek and Hamil Creek) with associated tributaries, one lake (Bates Lake), several farm ponds, and herbaceous and forested wetlands. **Figure 6** shows the preliminarily identified wetlands and streams located in the study area. A full wetland delineation for the areas impacted by the Preferred Alternative (Alternative B) is in progress. Additional information on the preliminary wetland and stream assessment is provided in **Appendix J**.

**Wetlands** are areas that can support vegetation adapted for life in wet soil conditions. Wetlands are protected under the Clean Water Act because they provide flood control, aid in water quality, and provide wildlife habitat.

#### No Action Alternative

The No Action Alternative would not affect any wetlands or streams.

#### Build Alternatives

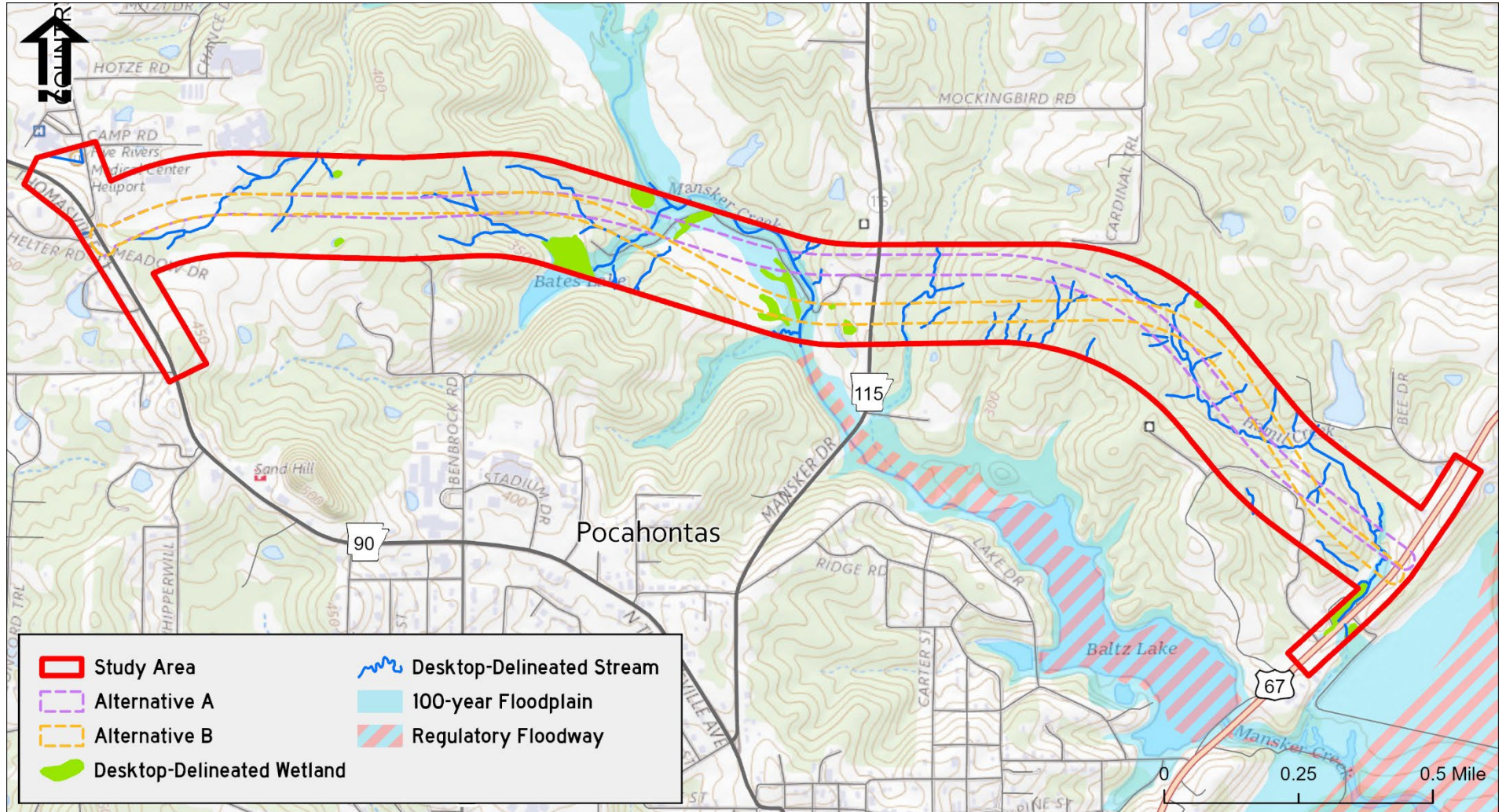
Alternative A would impact an estimated 0.4 acre of wetlands and 5,234 linear feet (LF) of streams. Alternative B would impact an estimated 0.8 acre of wetlands and 5,567 LF of streams.

The build alternatives would require a USACE Section 404 Permit. The permit type and stream and/or wetland mitigation, if required, would be determined when a Preferred Alternative is identified. ARDOT will obtain all required waterway and stormwater permits before construction begins.

**Mitigation** measures are used to offset unavoidable impacts to natural resources such as streams and wetlands. Restoring, establishing, enhancing, or preserving streams and wetlands may be legally required under the Clean Water Act, depending on the severity of the impacts.



Figure 6: Aquatic Features in Study Area



For either build alternative, temporary impacts to water quality have the potential to occur during the construction phase of the project due to increased soil disturbance and associated runoff. Upon project completion and vegetation regrowth, water quality should return to pre-construction levels. Short term Activity Authorization for in stream work, Section 401 Water Quality Certification, and National Pollutant Discharge Elimination System permit and associated Stormwater Pollution Prevention Plan for soil disturbance would all be required from the Arkansas Division of Environmental Quality. Sediment and erosion control best practices would be used to prevent erosion and prevent sediment from leaving the construction site and entering streams.

**3.10 Would the project cause flooding in surrounding areas?**

The project was reviewed to identify any encroachments into special flood hazard areas, also known as the 100-year floodplain, as shown on the Flood Insurance Rate Maps issued by the Federal Emergency Management Agency. Portions of both build alternatives are located within Zone A and Zone AE floodplains. The study area does not contain a floodway. Figure 6 shows the locations of floodplains in the study area. See **Table 2** for the total acreages of floodplain within each alternative.

No Action Alternative

The No Action Alternative would not impact any floodplains.

Build Alternatives

Both build alternatives would require constructing a new roadway and associated bridge structures within portions of the floodplain. The roadway and bridges would be designed to not increase the flood risk to adjacent properties. All proposed roadway approaches and structures would comply with current standards and would be designed to remain open during a 50-year flood event, at a minimum, which is the current standard for highway design. For either build alternative, associated floodplain impacts would result in a no net rise of the floodplain elevation.

**Floodplains are** areas that become flooded by water in a flood event. Special flood hazard areas, also known as 100-year floodplains, are areas that would be covered by a 100-year flood event. This is the floodplain commonly used for insurance and regulatory purposes.

**Table 2: Floodplains**

Alternative	Area Within Right of Way (Acres)
No Action	None
A	5.4
B	3.7

### 3.11 Would any protected species and their habitats be affected by the project?

The study area is primarily forested, with the exception of low-density development surrounding Highways 90 and 115. The northern half of Bates Lake as well as Mansker and Hamil Creeks are present within the study area and would provide aquatic habitat and water resources to wildlife. No caves are known to occur in the study area, though it is situated within a karst region. Additional information on protected species and their habitats is provided in **Appendix K**.

The USFWS lists 12 threatened or endangered species, two proposed threatened/endangered species, and one candidate species as having the potential to occur in the study area (Appendix K). These species, along with their status and distance to the nearest known occurrence, are listed in **Table 3**.

Based on the habitat observed in the study area, suitable foraging habitat is available for all four listed bat species and suitable roosting habitat is available for the Indiana, Northern Long-eared, and Tricolored Bats.

Open wetland habitat is available in the study area for the Eastern Black Rail, though the species, a migrant in the state, is not known to occur in or near the study area.

The nearest record of the Alligator Snapping Turtle is over 5 miles away, and this species typically uses watercourses much larger than the creeks within the study area. Suitable habitat may be available in the study area within Bates Lake.

The ANHC did not have records for the Monarch Butterfly within the study area; however, it is reasonable to assume seasonal presence of the species in habitats with native wildflowers.

No suitable habitat was observed in the study area for the Piping Plover, Rufa Red Knot, Pink Mucket, Rabbitsfoot, Curtis Pearlymussel, Scaleshell Mussel, Missouri Bladderpod, or Pondberry. Therefore, no impacts to these species are anticipated.

Bald Eagles (*Haliaeetus leucocephalus*) are protected under the Migratory Bird Treaty Act and the Bald and Golden Eagle Protection Act. No suitable nesting habitat was observed within the study area for the Bald Eagle. Other migratory bird species, such as the Eastern Phoebe (*Sayornis phoebe*), Cliff Swallow (*Petrochelidon pyrrhonota*), and

**Karst** is a type of landscape where the dissolving of bedrock has created sinkholes, caves, losing streams, and springs.

**Endangered species** are in danger of extinction throughout all or a significant portion of their ranges. **Threatened species** are likely to become endangered in the near future. Both threatened and endangered species receive federal protection under the Endangered Species Act.

Barn Swallow (*Hirundo rustica*), build nests underneath bridges and culverts. As the project would occur on new alignment, no existing bridges and culverts would be impacted. Therefore, no impacts to these species are anticipated.

**Table 3: Possible Threatened and Endangered Species in the Study Area**

Scientific Name	Common Name	Federal Status	Nearest Known Occurrence*
<i>Myotis grisescens</i>	Gray Bat	Endangered	> 5 miles
<i>Myotis sodalis</i>	Indiana Bat	Endangered	> 5 miles
<i>Myotis septentrionalis</i>	Northern Long-eared Bat	Endangered	> 5 miles
<i>Perimyotis subflavus</i>	Tricolored Bat	Proposed Endangered	> 5 miles
<i>Laterallus jamaicensis ssp. jamaicensis</i>	Eastern Black Rail	Threatened	> 5 miles
<i>Charadrius melodus</i>	Piping Plover	Threatened	> 5 miles
<i>Calidris canutus rufa</i>	Rufa Red Knot	Threatened	> 5 miles
<i>Macrochelys temminckii</i>	Alligator Snapping Turtle	Proposed Threatened	> 5 miles
<i>Epioblasma florentina curtisii</i>	Curtis Pearlymussel	Endangered	> 5 miles
<i>Lampsilis abrupta</i>	Pink Mucket	Endangered	1-5 miles
<i>Quadrula cylindrica cylindrica</i>	Rabbitsfoot	Threatened	1-5 miles
<i>Leptodea leptodon</i>	Scaleshell Mussel	Endangered	> 5 miles
<i>Danaus plexippus</i>	Monarch Butterfly	Candidate	> 5 miles**
<i>Physaria filiformis</i>	Missouri bladderpod	Threatened	> 5 miles
<i>Lindera melissifolia</i>	Pondberry	Endangered	> 5 miles

\*Based on ANHC Natural Diversity Database records (2023). Occurrence was listed as beyond 5 miles for species not listed by ANHC.

\*\*ANHC did not have records for the Monarch within the study area, but it is reasonable to assume seasonal presence of the species.

**No Action Alternative**

The No Action Alternative would not impact any threatened or endangered species.

**Build Alternatives**

Tree clearing would remove potential foraging habitat for all bat species and remove potential roosting habitat for Indiana, Northern Long-eared, and Tricolored Bats. Alternative A would remove approximately 41.8 acres of trees and Alternative B would remove approximately 41.2 acres. Presence/absence surveys for the listed bat species would be conducted prior to seeking concurrence from the USFWS. The construction contract for either build alternative would include a provision specifying that tree clearing activities must occur outside the

Indiana Bat summer active period from March 15 to November 15. Soil disturbance would increase sedimentation and turbidity in Mansker and Hamil Creeks, which could affect bat foraging opportunities. These effects would be minimized with appropriate best management practices. For a more detailed analysis of water quality impacts, see Section 3.9.

Grading and road construction activities would fill in emergent wetlands, removing potential habitat for the Eastern Black Rail. As habitat impacts are anticipated to be minor (less than 1 acre) and habitat is unlikely to be utilized by the species, neither build alternative is anticipated to adversely affect the Eastern Black Rail.

As neither build alternative would impact Bates Lake, habitat for the Alligator Snapping Turtle would not be impacted.

The Monarch Butterfly is a candidate species, and as such, is not federally protected under the Endangered Species Act. The USFWS recommends agencies implement conservation measures for candidate species in action areas, as these are species that may warrant future protection under the Act. ARDOT would plant native wildflowers on all disturbed areas following construction.

A Biological Assessment of the impacts on federal threatened and endangered species will be completed and Section 7 consultation with the USFWS will be initiated prior to the issuance of a FONSI. For all federally-listed species, USFWS concurrence/clearance would be obtained for the Preferred Alternative prior to construction.

### 3.12 Does the project have any climate change impacts?

Climate change refers to long-term shifts in temperatures and weather patterns. Human activities have been the main driver of climate change, primarily due to the burning of fossil fuels like coal, oil and gas for energy and transportation (<https://www.epa.gov/climatechange-science/basics-climate-change>), and these activities emit greenhouse gases (GHGs). In 2022, carbon dioxide (CO<sub>2</sub>) accounted for 80% of all U.S. manmade GHG emissions (<https://www.epa.gov/ghgemissions/overview-greenhouse-gases>).

Carbon dioxide equivalent (CO<sub>2</sub>E) is a unit of measure used to compare emissions of various GHGs. To provide a project level comparison, estimated vehicle per day (vpd) data was used to determine CO<sub>2</sub>E. Because metric tons of CO<sub>2</sub>E is considered by most to be an abstract

**Greenhouse gases (GHGs)** trap heat in the atmosphere like a greenhouse and include carbon dioxide (CO<sub>2</sub>), methane (CH<sub>4</sub>), nitrous oxide (N<sub>2</sub>O), and fluorinated gases, such as hydrofluorocarbons.

**CO<sub>2</sub>E** is the number of metric tons of CO<sub>2</sub> emissions with the same global warming potential as one metric ton of another GHG.

measurement, project alternatives are also compared using “equivalencies” to make the emissions data more tangible (see **Table 4**). These equivalencies were determined using the EPA equivalencies calculator (<https://www.epa.gov/energy/greenhouse-gas-equivalencies-calculator>).

**Table 4: GHG Emission Equivalent and Equivalent Emission Sources**

Alternative	2045 vpd	Metric Tons CO2E	CO <sub>2</sub> Emissions Equivalence
No Action Alternative (Existing Route on Hwys 90 and 67)	9,250	14,185,816	32.8 million barrels of oil consumed
Build Alternative (Existing Route on Hwys 90 and 67 plus Proposed Pocahontas Bypass)	9,850	15,105,977	35.0 million barrels of oil consumed

**No Action Alternative**

Traffic volumes would increase under the No Action Alternative, as population increases, resulting in increased air emissions. As shown in Table 4, the GHG emission for the No Action Alternative along the existing route is estimated to be approximately 14,185,816 metric tons CO<sub>2</sub>E per year. To put this in perspective, this would be equivalent to CO<sub>2</sub> emissions from consuming 32.8 million barrels of oil.

**Build Alternatives**

Traffic volumes would increase under either build alternative, as population increases, resulting in increased air emissions. There would be no discernable difference in GHG emissions between Alternatives A and B because traffic volume estimates, therefore estimated emissions, are the same for both. As shown in Table 4, the GHG emission for the build alternatives along the proposed bypass plus the existing route is estimated to be approximately 15,105,977 metric tons CO<sub>2</sub>E per year. This would be equivalent to CO<sub>2</sub> emissions from consuming 35.0 million barrels of oil.

If the build alternative is constructed, future traffic would be distributed between the new location roadway and segments of the existing facilities (Highways 90 and 67). Overall, the GHG emissions resulting from the construction of either build alternative would be greater than the No Action Alternative because of the increased capacity and attracting traffic from other roadways resulting in greater total traffic in the area.

Construction and subsequent maintenance of the project would generate

additional GHG emissions. Typically, construction emissions associated with a new roadway account for a relatively minor amount of the total 20-year lifetime emissions from the roadway, although this can vary widely with the extent of construction activity and the number of vehicles that use the roadway.

According to the National Oceanic and Atmospheric Administration's 2022 Arkansas State Climate Summary (<https://statesummaries.ncics.org/chapter/ar/>), climate change impacts within Arkansas include:

- historically unprecedented warming is projected during this century and naturally occurring droughts are projected to be more intense.
- frequency and intensity of extreme heat and extreme precipitation events are projected to increase, while the intensity of extreme cold events is projected to decrease.

Drought, extreme temperature, and flooding are all environmental conditions that could affect the pavement of both the existing and proposed roadway. However, climate change is not anticipated to substantially impact any of the alternatives and there would be no discernable differences between Alternatives A and B.

### **3.13 Does the project have any indirect impacts?**

Indirect effects are reasonably foreseeable effects that may be caused by the project but would occur in the future or outside of the study area.

#### **Encroachment-Alteration Effects**

Encroachment-alteration effects are physical, chemical, or biological changes in the environment that occur as a result of the project but are removed in time or distance from the direct effects. Impacts to wildlife species from habitat fragmentation that would occur as a result of the project construction are the primary encroachment-alteration effect for this project. These impacts are discussed in Section 3.11.

#### **Induced-Growth Effects**

Changes in the pattern of land use, growth patterns, population density, or growth rate due to the construction of a highway project also may occur, and the resulting induced development can impact sensitive

resources. This is another type of indirect effect that is categorized as induced-growth effects.

#### No Action Alternative

The No Action Alternative involves no work other than regular maintenance and would not result in any encroachment-alteration or induced-growth effects.

#### Build Alternatives

Both alternatives would remove similar types and amounts of natural wildlife habitat. Because most terrestrial species would have some difficulty crossing the bypass, habitat fragmentation would occur for both build alternatives.

The build alternatives have equal potential to induce additional development as there is available land adjacent to and within the study area. The proposed project would not increase capacities of the existing roadways; however, the scope of the project is to build a new roadway bypass and would divert some traffic to the new connection. The population trend for Pocahontas shows growth based on past census data. According to the 2020 and 2010 Census, Pocahontas experienced an 11% population growth. This percent growth is greater than both Randolph County and the state of Arkansas, both at 3% population growth from 2010 to 2020.

Potential induced growth areas within the study area would likely occur near Highways 90, 115, and 67 as access would be limited to other areas along the proposed roadway. Overall, any induced growth would not result in substantial impacts to resources. The resources potentially impacted by any future development would be wetlands, streams, and wildlife habitat. Any habitat and aquatic features impacts would be required to be coordinated between developers and state and local agencies.

### **3.14 Does the project have any cumulative impacts?**

Cumulative impacts result from the total effects of a proposed project when added to other past, present, and reasonably foreseeable future projects or actions. Cumulative impacts include the direct and indirect impacts of a project together with the reasonably foreseeable future actions of others: e.g., other federal, state, and local governments, non-governmental organizations, and private entities. The direct impacts that result from an action may be undetectable, but when added to other



disturbances, can eventually lead to a measurable environmental change. Cumulative effects are studied so that the public, decision makers, and project proponents take the time to consider the “big picture” effects a project could have on the community and environment. For any given resource, a cumulative impact would only potentially exist if the resource were also directly or indirectly impacted by the proposed project.

#### No Action Alternative

The No Action Alternative would not involve any construction and would not result in any cumulative effects.

#### Build Alternatives

For the build alternatives, cumulative impacts to aquatic features (wetlands and streams) and wildlife habitat are evaluated. Direct impacts to other resources were not considered substantial enough to warrant a cumulative impacts analysis. For example, although floodplains are identified to have direct impacts, the effects are not considered significant since the project would ensure no net rise in the floodplain would occur. Additionally, although indirect and direct land use changes from the proposed right of way are anticipated, undeveloped areas represent a large portion of the study area, land resources are not considered a declining resource, and the proposed project is not incompatible with state transportation plans.

No reasonably foreseeable actions were identified in the study area to affect possible water resources. Any direct and indirect effects to aquatic features would be coordinated for the proposed project with the USACE. Information on cumulative impacts to wildlife habitat associated with threatened and endangered species would be evaluated in the Biological Assessment to be prepared with the USFWS before final environmental clearance is obtained.

### **3.15 What other resource areas were examined but not impacted?**

#### **Air Quality**

The purpose of this project is to reduce heavy truck traffic and improve mobility in and near the City of Pocahontas’ CBD by constructing a new connection between Highways 90 and 67. This project has been determined to generate minimal air quality impacts for Clean Air Act criteria pollutants and has not been linked with any special mobile

source air toxics (MSAT) concerns. As such, this project would not result in changes in traffic volumes, vehicle mix, basic project location, or any other factor that would cause a meaningful increase in MSAT impacts of the project from that of the No Action Alternative.

Moreover, U.S. Environmental Protection Agency (EPA) regulations for vehicle engines and fuels will cause overall MSAT emissions to decline significantly over the next several decades. Based on regulations now in effect, an analysis of national trends with EPA's MOVES3 model forecasts a combined reduction of over 76% in the total annual emissions rate for the priority MSAT from 2020 to 2060 while vehicle-miles of travel are projected to increase by 31% (Updated Interim Guidance on Mobile Source Air Toxic Analysis in NEPA Documents, Federal Highway Administration, January 18, 2023). This will both reduce the background level of MSAT as well as the possibility of even minor MSAT emissions from this project.

### **Landforms and Geology**

The project is located near the east edge of the Central Plateau of the Ozark Highlands ecoregion. This undulating to hilly portion of the Salem Plateau is underlain chiefly by dolomite and limestone, resulting in karst features. The ecoregion is dominated by agriculture (pastureland and hayland) and housing, though remnant forests and savannas occur in steeper areas. Other primary land uses include livestock (cattle and hogs) and poultry farming, logging, and recreation. The landforms and geological resources of the study area would not be impacted by the proposed project.

### **Hazardous Waste**

A desktop assessment and database search were conducted to determine if any hazardous materials were located in the study area. One Resource Conservation and Recovery Act site, United Parcel Service, is located at the east end of the study area on the east side of Highway 67. However, none of the alternatives would impact the United Parcel Service facility. Any impacts to hazardous materials discovered during construction would be the responsibility of ARDOT and remediated in accordance with the governing regulations of the Arkansas Division of Environmental Quality, the EPA, and the Occupational Safety and Health Administration.

**Hazardous material/waste** discoveries may adversely impact the timely completion of a project. Potential areas of contamination are therefore assessed during the early stages of project development.

**Section 4(f)/Section 6(f) Sites**

No publicly owned resources or public land sites were identified within the study area that would be eligible for Section 4(f) or 6(f) protections. However, there are previously recorded cultural resources sites within the study area that have not yet been evaluated. Impacts to any newly recorded archeological sites would be determined upon completion of an archeological survey. Any site identified as eligible for listing in the NRHP would qualify as a Section 4(f) property. If avoidance of a Section 4(f) property is not possible, the appropriate Section 4(f) evaluation would be conducted prior to issuance of the FONSI. See Section 3.7 for additional information on cultural resources.

**Wild and Scenic Rivers**

No Wild and Scenic Rivers or other federal or state regulated waterbodies would be impacted by the proposed project.

# Chapter 4: Results and Commitments

*This chapter summarizes environmental analysis results and commitments.*

## 4.1 What are the results of this EA?

The environmental analysis of the proposed project did not identify any significant impacts to the natural, cultural, or social environment as a result of any of the project alternatives. A summary of the impacts associated with each alternative can be found in **Table 5**.

The majority of impacts for each build alternative are similar; however, Alternative A has a high potential to impact recently discovered unmarked graves. Additionally, a preference for Alternative B was communicated by the public at the public involvement meeting held in October 2023. Due to these reasons, Alternative B has been identified as the Preferred Alternative.

**Table 5: Alternative Impact Comparison**

	No Action	Alternative A	Alternative B
<b>Total Construction Cost in Millions</b>	None	\$19.5	\$19.5
<b>Right of Way Acquisition</b>	None	65.5 acres	66.2 acres
<b>Business Relocations Required</b>	None	2	2
<b>Farmland Impact Rating Score</b>	0	103	102
<b>Undetermined Cultural Resource Sites Present</b>	None	1 site	3 sites
<b>Risk to Adjacent Grave Site</b>	None	High	Low
<b>Visual Impacts</b>	None	Minor	Minor
<b>Wetland Impacts</b>	None	0.4 acre	0.8 acre
<b>Stream Impacts</b>	None	5,234 LF	5,567 LF
<b>Floodplain Present</b>	None	5.4 acres	3.7 acres
<b>Tree Clearing</b>	None	41.8 acres	41.2 acres
<b>Noise Receptor Impacts (Existing and Future)</b>	4 and 6	None	None
<b>GHG Emissions in Metric Tons of CO2E</b>	14,185,816	15,105,977	15,105,977

## 4.2 What commitments have been made?

The following commitments have been made for this project.

- All land acquisitions and relocation assistance will comply with the Uniform Relocation Assistance and Real Property Acquisition Policies Act of 1970.

- If hazardous materials, unknown illegal dumps, or underground storage tanks are identified or accidentally uncovered by ARDOT personnel or its contractors, the type and extent of the contamination will be determined according to the ARDOT's response protocol. In cooperation with the Arkansas Division of Environmental Quality, appropriate remediation and disposal methods will be determined.
- A Phase I cultural resources survey that includes shovel tests will be conducted for the Preferred Alternative. A report documenting the survey results and recommendations will be prepared and submitted for SHPO review. Should any of the sites be determined as eligible or potentially eligible for nomination to the NRHP and avoidance is not possible, site specific data recovery plans would be prepared, and data recovery would be carried out at the earliest practicable time. All borrow pits, waste areas, and work roads will be surveyed for historic properties when locations become available.
- ARDOT will implement stormwater best management practices during construction activities to minimize impacts to the surface assessment area for Pocahontas's intake on the Black River. Appropriate coordination with the Pocahontas water system will occur before commencement of construction activities.
- A formal wetland delineation will be conducted for the areas impacted by the Preferred Alternative upon approval. The wetland delineation report will be submitted to the USACE, and the appropriate Section 404 permit will be determined at that time.
- Project construction will comply with all applicable Clean Water Act, as amended, requirements. This includes obtaining Section 401 Water Quality Certification; Section 402 National Pollutant Discharge Elimination Permit; and Section 404 Permit for Dredged or Fill Material.
- Floodplain impacts will result in a no net rise of the floodplain elevation.
- The construction contract for the Selected Alternative would include a provision specifying that tree clearing activities must

occur outside the Indiana Bat summer active period from March 15 to November 15.

- Presence/absence surveys for the listed bat species will be conducted prior to seeking concurrence from the USFWS.
- ARDOT will include the Water Pollution Control Special Provision in the construction contract.
- ARDOT will plant native wildflowers on all disturbed areas following construction.
- For all federally-listed species, USFWS concurrence/clearance will be obtained for the Selected Alternative prior to construction.

### **4.3 Is the NEPA process finished?**

After this EA is signed by the FHWA and approved for public dissemination, a public hearing and 30-day comment period will be offered. Detailed design and additional environmental studies such as resource surveys and analyses will be completed, if required. After a review of comments received from citizens, public officials, and public agencies on the Preferred Alternative, a FONSI document would be prepared and submitted to the FHWA or the project would be recommended for an Environmental Impact Statement study if significant, unmitigable impacts are identified. If the FHWA issues a FONSI, it would identify the Selected Alternative and conclude the NEPA process.

## Reference Page: Acronyms

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ADA	Americans with Disabilities Act
ADH	Arkansas Department of Health
ANHC	Arkansas Natural Heritage Commission
ARDOT	Arkansas Department of Transportation
CBD	Central Business District
CO2E	Carbon Dioxide Equivalent
DHHS	Department of Health and Human Services
EA	Environmental Assessment
EPA	Environmental Protection Agency
FHWA	Federal Highway Administration
FONSI	Finding of No Significant Impacts
GHG	Greenhouse Gas
LEP	Limited English Proficiency
LF	Linear Feet
MSAT	Mobile Source Air Toxics
NEPA	National Environmental Policy Act
NRCS	Natural Resource Conservation Service
NRHP	National Register of Historic Places
SHPO	State Historic Preservation Officer
VPD	Vehicles per Day
USACE	U.S. Army Corps of Engineers
USFWS	U.S. Fish and Wildlife Service

## **Appendix A: Traffic Study**

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# TABLE OF CONTENTS

<b>Chapter</b>	<b>Page</b>
<b>Introduction.....</b>	<b>1</b>
<b>Needs Identified.....</b>	<b>2</b>
Transportation Demand.....	2
Roadway Network.....	5
Site Visit.....	6
Safety and Security.....	11
Mobility and System Reliability.....	13
Economic Competitiveness .....	17
Other LRITP Goals .....	17
<b>Alternatives Analysis .....</b>	<b>18</b>
No-Action Alternative .....	18
Action Alternative .....	18

## INTRODUCTION

Located in northeast Arkansas, the City of Pocahontas is a major business and population hub for Randolph County. This generates transportation demand in the region, and traffic is served by several highways that traverse through downtown Pocahontas. The highway routes through the Central Business District (CBD) of Pocahontas contain tight 90-degree curves that can be difficult for regional truck traffic to navigate. Trucks traveling through the CBD have become a concern for the city, as most trucks do not have destinations within the CBD.

To address this concern, the idea of a northern bypass of Pocahontas was first considered in 1977 with the study *The Planning Document, Comprehensive Development Plan-1995*. More recently, the 2001 *Pocahontas Bypass Feasibility Study* also considered such a bypass. Neither study determined a bypass to be feasible. In 2017, the Arkansas Department of Transportation (ARDOT) again considered regional transportation improvements. The *Highway 90 Improvement Study* focused on existing Highway 90 northwest of downtown Pocahontas. The 2017 study recommended improvements to Highway 90 from Park Street to Country Club Road.

Even with Highway 90 improvements, local officials have expressed concerns about increased truck traffic. The truck traffic is due to industrial and agricultural expansions in the area. As a result, the Arkansas State Highway Commission approved Minute Order 2018-090, authorizing an updated bypass study of Pocahontas. The resulting *Pocahontas Bypass Feasibility Study Update Executive Summary* dated October 2020 was provided to Garver by ARDOT. This current report serves to update the data and findings of the 2020 study.

## NEEDS IDENTIFIED

Based on primary purposes and goals of this study and information gathered from the 2020 Study, the needs identified for the *Traffic and Safety Study* were examined using the most recent crash data and updated volumes, and general observations on the existing corridor including its geometry and connectivity. The findings are presented below.

### TRANSPORTATION DEMAND

The volume and classification count data collected annually by ARDOT was used to develop the design hourly volumes used in the operational analysis of the corridors. **Table 1** shows the historical data at key locations on highways within the study area. These Average Daily Traffic (ADT) volumes are available on the ARDOT website. Several stations had intermittent time frames of missing data. In instances where one year or more years of data was missing, the average of the most recent year before and the next available year after was used to fill in the missing data point. Filled in data points are shown in red.

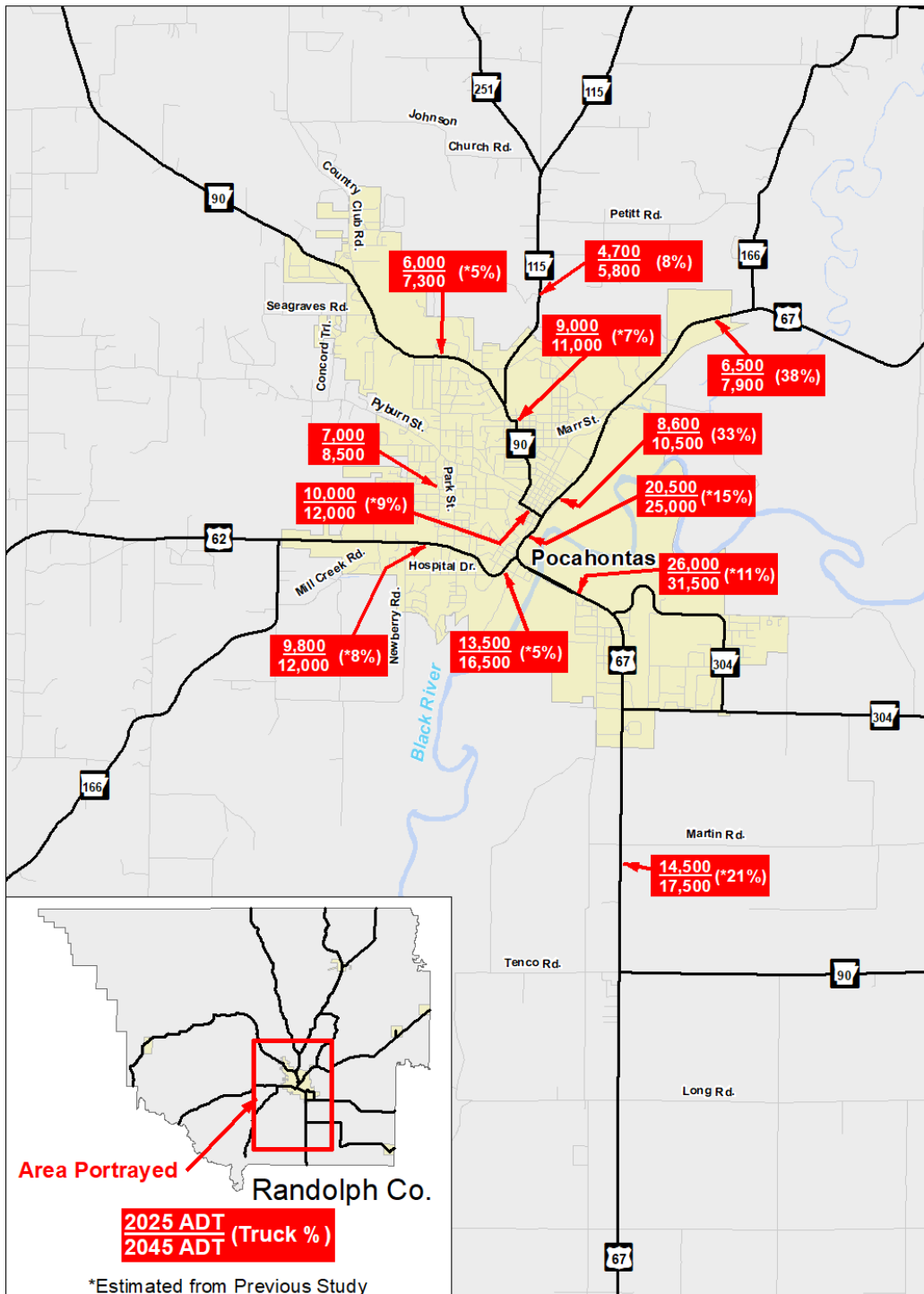
ARDOT Job 101140: Pocahontas Bypass (S) EA

**Table 1: Historical ADT on Highways within the Study Area**

Location	Hwy 67					Hwy 90			Hwy 62			Hwy 115	
	Hwy 67 b/t Hwy 304 and Hwy 90	Hwy 67 E of Black River Bridge	Hwy 67 b/t Hwy 62 and Hwy 90	Hwy 67 N of Hwy 90	Hwy 67 W of Hwy 166	Hwy 90 W of Hwy 67	Hwy 90 S of Maple St	Hwy 90 E of Park St	Hwy 62 W Hospital Drive	Hwy 62 W of Hwy 67	Hwy 62 W of Park St	Hwy 115 N of Hwy 90	Park St
	610009	610205	610207	610208	610210	610211	610212	610213	610201	610202	610200	610215	61S081
2002	8,100	19,000	15,000	5,300	4,800	7,100	6,900	4,400	11,000	12,000	7,900	5,400	7,700
2003	9,000	20,000	11,000	5,700	4,600	7,000	7,100	4,900	10,000	12,000	7,600	4,000	7,800
2004	8,700	20,600	15,200	5,900	4,700	7,200	7,100	4,900	10,500	12,100	7,800	4,800	7,000
2005	7,900	19,400	14,900	4,800	4,800	7,500	7,000	4,900	10,700	12,500	7,900	4,500	7,000
2006	7,800	23,500	16,100	5,400	3,900	7,800	7,500	5,100	11,200	13,200	8,000	4,800	7,200
2007	7,800	23,800	15,700	6,200	4,200	7,600	7,400	5,300	10,900	13,300	8,000	4,600	7,400
2008	7,700	23,000	15,000	5,800	3,700	7,000	7,000	4,900	10,000	12,000	7,800	4,600	6,700
2009	8,300	24,000	15,500	6,100	4,200	8,100	8,200	6,100	10,000	12,000	8,400	4,700	7,300
2010	8,400	21,000	16,000	6,300	4,200	8,200	7,700	5,700	10,000	12,000	8,000	4,300	7,300
2011	9,300	21,000	17,000	6,100	3,900	7,800	7,700	5,600	11,000	13,000	8,200	4,600	7,200
2012	9,400	22,000	16,000	6,100	3,800	8,000	8,200	6,100	11,000	13,000	8,500	4,600	7,600
2013	9,000	21,000	16,000	6,100	4,000	7,700	7,200	5,700	11,000	13,000	8,400	4,500	6,700
2014	10,000	22,000	18,000	5,400	4,000	9,700	8,500	6,000	12,000	13,000	9,700	4,700	6,300
2015	10,000	21,000	16,000	6,200	4,500	8,200	7,700	5,000	11,000	13,000	8,400	4,300	7,000
2016	11,000	23,000	18,000	6,900	4,900	8,600	8,000	5,300	11,000	12,000	8,800	4,900	7,100
2017	12,000	23,000	18,000	7,200	5,600	8,600	8,100	5,300	12,000	13,000	9,600	4,700	7,600
2018	13,000	23,000	18,000	7,400	5,800	6,800	6,700	4,900	12,000	14,000	9,200	5,200	8,000
2019	13,000	25,000	19,000	7,600	6,100	9,000	8,600	5,600	12,000	13,000	9,300	5,200	7,000
2020	12,000	24,000	19,000	8,050	6,500	9,000	8,400	5,300	12,000	13,000	9,600	4,800	7,000
2021	16,000	26,000	21,000	8,500	6,900	8,800	7,800	5,300	12,000	13,000	9,600	5,600	6,900
2022	14,000	25,000	20,000	8,300	6,300	9,700	8,700	5,800	11,000	13,000	9,500	4,600	6,800

While the 2020 Study used an annual growth rate of 0.5 percent, the most recent data indicates a growth rate of one percent is more appropriate. Therefore, one percent is the growth rate used for calculating future volumes for this study. This was determined by looking at the trend function and linear growth calculated from the historic data within the study area. Linear growth was applied to project from 2022 existing volumes to get 2025 and 2045 No-Action traffic volumes. The study area with existing and future traffic on the highways within it is shown in **Figure 1** on the following page.

Figure 1: Study Area with Existing and Future Traffic



**Study Area and Existing & Projected Traffic Vicinity of Pocahontas Randolph County**

ARDOT  
 ARIZONA'S DEPARTMENT OF TRANSPORTATION

## ROADWAY NETWORK

The study area covers the entirety of Pocahontas city limits and parts of Randolph County, including Highways 62, 67, 90, 115, and 251. Pocahontas is situated mostly to the west of the Black River. Highway 67 provides the only bridge over the Black River in Randolph County. This bridge connects the mostly residential development to the northwest with the many businesses and a large industrial park that exists southeast of the river crossing.

Highway 67 is a principal arterial route that was recently designated as Future Interstate 57 (I-57) for a majority of the corridor from North Little Rock to Walnut Ridge. From Walnut Ridge to the Missouri State Line, future I-57 will be on new alignment. The impact of I-57 on the traffic volumes along the existing Highway 67 is expected to be minimal. Volumes are expected to reduce somewhat, but not significantly, as drivers between Walnut Ridge and Pocahontas will remain on Highway 67. The future I-57 route does not provide improved connection from the south side of Pocahontas to the northwest and is therefore not expected to significantly impact volumes on other highways in the study area or the proposed bypass.

Highway 62 is a minor arterial route that connects Pocahontas to much of north-central Arkansas via Highway 63/412 to the west. To the east, Highway 62 runs concurrent with Highway 67 towards Corning after the two routes meet on the south side of Pocahontas.

Highways 90 and 115 are also minor arterials, while highway 251 is a major collector route. All three highways connect rural Randolph County to Pocahontas and points beyond. These three routes converge in central Pocahontas. Highway 90 through Pocahontas includes three 90-degree turns and several other curves. Trucks serving the nearby quarry and other industries have difficulty navigating the tight turns on the route, as noted by damaged infrastructure observed during the site visit. Trucks must substantially reduce their speed, use caution, and require that other drivers are aware of their surroundings to maintain space for the wide turns trucks require.

## SITE VISIT

A site visit was conducted on Wednesday, July 19, 2023, from 3:30 - 5:30 PM. All the highway routes within the study area were traversed to observe traffic flow and navigability, particularly for large trucks. Several large trucks were observed traveling from Highway 67 to Highway 90, through Pocahontas CBD, and continuing north along Highway 90 or Highway 115. Problem areas were noted in specific locations along this path and are described below.

The intersection of Highway 67 at Broadway Street/Highway 90 is a key intersection within the study area which showed operational and safety concerns for truck traffic. The Broadway Street/Highway 90 leg of this intersection has a steep incline with retaining walls on either side of the narrow roadway. While the turn radii at this intersection are wide to accommodate the turns, large trucks coming from the south along Highway 67 and turning onto Highway 90 must make the turn very slowly to avoid hitting the retaining wall in the northwest quadrant of the intersection. **Figure 2** shows a truck making this turn. The traffic exiting this intersection along Highway 90 tends to back up and clear slowly due to an all-way stop just 250 feet to the west and uphill of this intersection. **Figure 3** shows the steep incline for Highway 90 exiting the Highway 67 intersection.

**Figure 2: Truck turning- Hwy 67 & 90**



**Figure 3: Steep incline on Hwy 90**



As mentioned previously, an all-way stop is located along Highway 90 at S Bettis Street just 250 feet to the west and uphill of the Highway 67 intersection. This tends to create congestion and

ARDOT Job 101140: Pocahontas Bypass (S) EA

slow travel speeds for westbound traffic at this location, particularly for large trucks. Furthermore, the lanes are not wide enough to comfortably accommodate the truck traffic. As shown in **Figure 4**, the stop sign facing westbound traffic shows evidence of being scraped or sideswiped. Eastbound through trucks were observed to encroach into the eastbound left turn lane as seen in **Figure 5**.

**Figure 4: Damaged Stop Sign on Hwy 90**



**Figure 5: Narrow Lanes on Hwy 90**



The most notable problem area for truck traffic is located at the 90-degree curve along Highway 90 where N Thomasville Street and W Broadway Street intersect to form an unconventional intersection. N Thomasville Street (south approach) and W Broadway Street (west approach) are stop controlled. The east approach of Highway 90 is yield-controlled, and the north approach of Highway 90 is free. The roads are narrow with tight turn radii. A retaining wall in the northeast quadrant of the intersection limits visibility and shows evidence of being struck by vehicles traveling along Highway 90 westbound/northbound as shown in **Figure 6**.



**Figure 6: Damaged retaining wall in 90-degree bend intersection of Hwy 90**

Trucks proceeding through this 90-degree bend in Highway 90 caused backups in traffic for both directions of travel. When a truck would come southbound/eastbound through this bend, vehicles in the opposing direction would have to stop about 100 feet back to give the truck space to swing wide around the curve. Similarly, a truck driving westbound/northbound through the bend would stop for a gap in southbound traffic causing queues of approximately six vehicles to form behind the truck. This would create a bit of a platooning effect behind trucks, particularly for northbound traffic along Highway 90. Pictures of the stopped traffic at this curve are shown in **Figures 7 and 8**.

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**Figure 7: SB truck at curve on Hwy 90**



**Figure 8: NB truck at curve on Hwy 90**



While not as disruptive as the 90-degree curve along Highway 90 at W Broadway Street/N Thomasville Street, Highway 90 contains several other sharp curves including another 90-degree bend at W Pine Street/ N Thomasville Street/Hayes Street. Highway 90 is free flowing through this intersection, but trucks must stop or nearly stop to navigate this sharp curve. **Figure 9** shows a truck navigating this curve at less than five mph.

**Figure 9: NB truck on Hwy 90 at W Pine Street/N Thomasville Street/Hayes Street**



Through town, the speed limit is 30 mph with some 15 mph advisory speeds through curves. In addition to sharp curves, narrow lanes, and lack of shoulders along Highway 90 through

ARDOT Job 101140: Pocahontas Bypass (S) EA

Pocahontas, this route also has two school zones, a fire station, and several residential driveways along it. **Figure 10** shows a school zone located within a curve.

**Figure 10: School Zone within Curve along Hwy 90**



On Highway 67 outside of Pocahontas, the speed limit is 55 mph with rumble strips on reasonably wide shoulders. The speed limit drops to 45 mph and the rumble strips discontinue close to Broadway Street/downtown Pocahontas. Highway 115 and Highway 90 have speed limits of 55 mph to the north of Pocahontas. Site visit observations confirmed that navigability of Highway 90 through Pocahontas is slow and difficult with many sharp curves, narrow lanes, little to no shoulder, and several driveways and conflict points. While the speed limits are reduced along Highway 90 through Pocahontas, trucks are not able to drive as fast as the posted speed due to the unfavorable geometry. Cars often platoon behind a truck because the truck must stop and/or proceed slowly through this route.

AR DOT Job 101140: Pocahontas Bypass (S) EA

## SAFETY AND SECURITY

### SAFETY

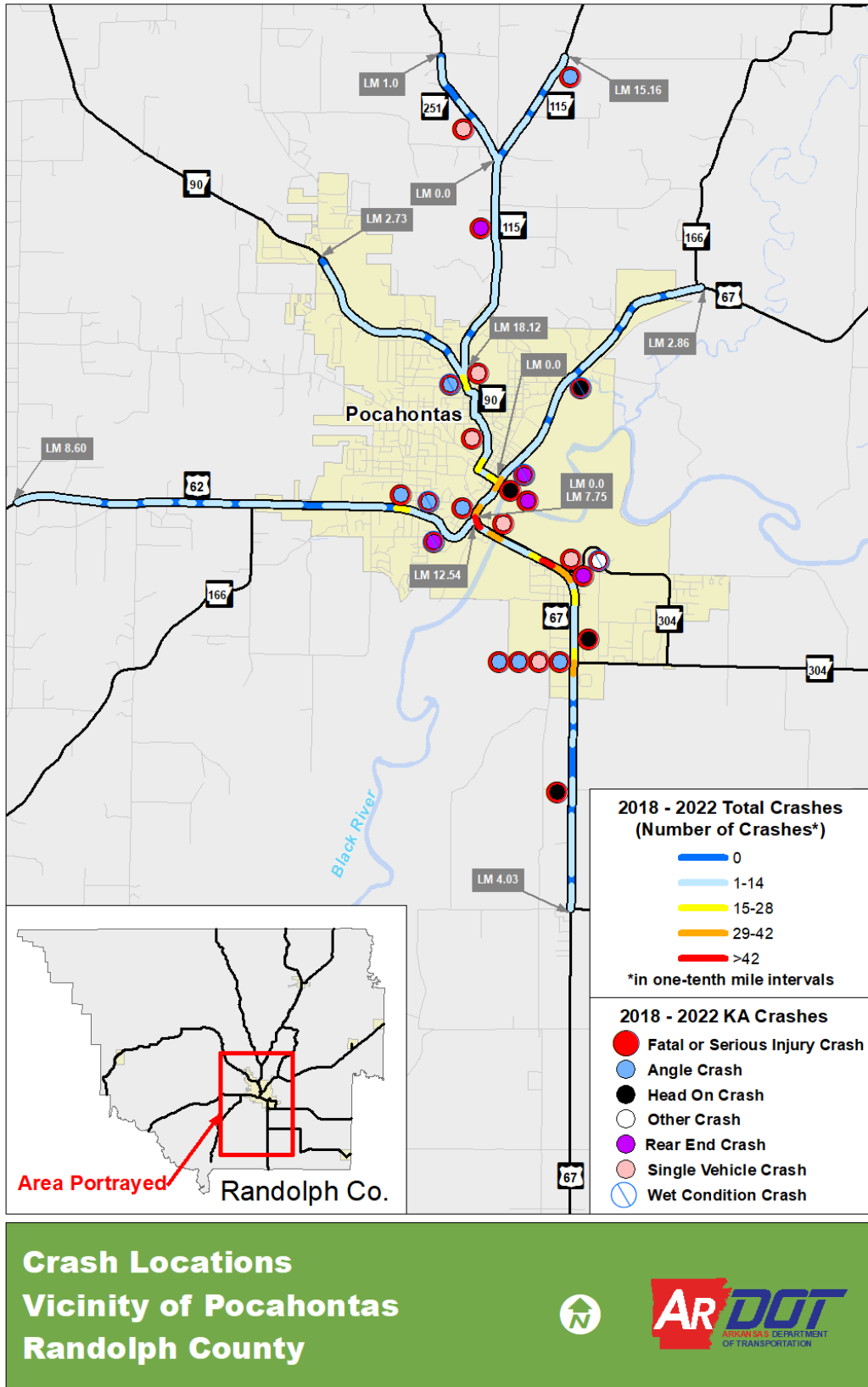
Crash data from 2018 to 2022 was reviewed on study area highways. Total crashes, as well as fatal and suspected serious injury (KA) crashes, are shown in **Figure 11** on the following page. Rates for total and KA crashes were compared to the statewide average for similar facilities and are shown in **Table 2**.

**Table 2: Crash Rates – Total and KA Crash Rates (2018-2022)**

Log Miles*	Average Weighted ADT	Total Crashes				KA Crashes			
		Number of Crashes	Crash Rate <sup>1</sup>	Statewide Average Rate <sup>1</sup>	Crash Ratio	Number of Crashes	Crash Rate <sup>2</sup>	Statewide Average Rate <sup>2</sup>	KA Crash Ratio
<b>Highway 62</b>									
8.60 to 10.57	4,900	35	1.99	1.02	1.95	0	0.00	8.89	0.00
10.57 to 11.74	9,500	51	2.51	2.83	0.89	0	0.00	9.76	0.00
11.74 to 12.54	11,300	69	4.18	4.63	0.90	3	18.18	9.95	1.83
<b>Highway 67</b>									
4.03 to 5.78	14,000	27	0.60	0.88	0.69	1	2.24	6.81	0.33
5.78 to 6.85	18,200	132	3.71	4.63	0.80	7	19.70	9.95	1.98
6.85 to 7.75	25,200	206	4.98	4.63	1.07	2	4.83	9.95	0.49
0.00 to 0.39	20,000	109	7.66	4.63	1.65	3	21.07	9.95	2.12
0.39 to 2.86	7,400	77	2.31	2.83	0.82	2	6.00	9.76	0.61
<b>Highway 90</b>									
0.00 to 1.05	8,700	89	5.34	2.83	1.89	1	6.00	9.76	0.61
1.05 to 1.74	5,800	17	2.33	2.83	0.82	1	13.69	9.76	1.40
1.74 to 2.73	5,800	39	3.72	2.83	1.32	0	0.00	9.76	0.00
<b>Highway 115</b>									
15.16 to 18.12	4,600	52	2.09	1.02	2.05	3	12.07	8.89	1.36
<b>Highway 251</b>									
0.00 to 1.00	900	11	6.70	1.02	6.57	1	60.88	8.89	6.85

\*Log Miles for the safety analysis were selected based on homogenous segments.  
<sup>1</sup> - Crash rates reported in crashes per million vehicle miles (MVM).

**Figure 11: Total and KA Crashes (2018-2022)**



ARDOT Job 101140: Pocahontas Bypass (S) EA

The data shows that crashes are generally trending up as compared to the previous study, with total crashes increasing from 794 to 914 and KA crashes increasing from 14 to 24. Every highway has at least one segment with an overall crash rate that exceeds the statewide average. More noteworthy, the KA crash rate increased on over half of the segments and exceeds the statewide average on at least one segment of each highway. When mapped, the trend of KA crashes being clustered on Highway 67 south of the Black River as described in the previous study is no longer as apparent. KA crashes are more widely spread across the study area. While approximately 72 percent of the crashes in the study area involved only property damage, the increasing overall trend of crashes indicates safety may be justification for reducing the volume of traffic through the CBD by constructing the northern bypass. The damage caused by trucks to infrastructure near the CBD may not always go reported but was evident during the site visit.

## **SECURITY**

*Enhancing resiliency* is the study goal related to ensuring security of the transportation system. Resilience is the ability of the transportation system to recover and regain functionality after a major disruption or disaster. Resiliency can be evaluated by considering the impacts to the transportation system resulting from disruptions to normal traffic flow. A traffic incident, flooding, or infrastructure failure on most of the state highways in the study area would result in moderate inconveniences for travelers in the region, with detours adding a few miles or minutes to their trip. This is especially true for Highway 90 through the center of Pocahontas, which can only be bypassed using local city streets.

## **MOBILITY AND SYSTEM RELIABILITY**

As stated by the previous study, mobility on highways through Pocahontas was considered in terms of capacity, as well as their suitability for carrying truck traffic. Special attention was given to Highway 90 because it is the key route through the CBD, connecting northwestern Randolph County to Highway 67 and points beyond.

ARDOT Job 101140: Pocahontas Bypass (S) EA

### **PEAK CONGESTION LEVELS**

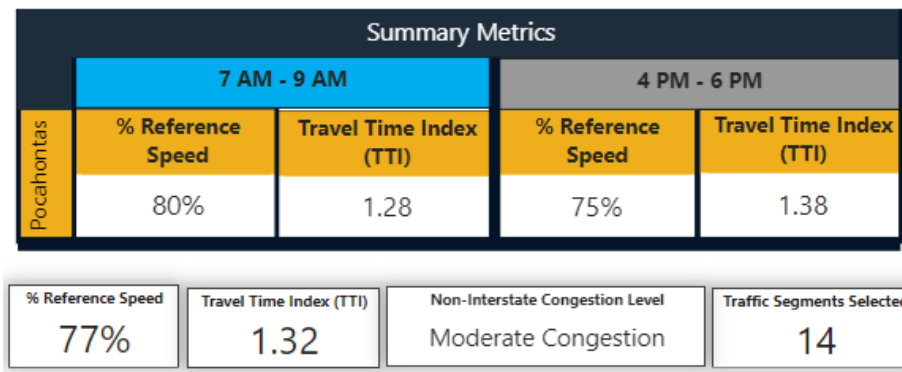
Volumes within the study area are below the available capacity, resulting in minimal delay due to congestion. Most of the delay currently comes from time spent following slower moving vehicles.

### **SYSTEM RELIABILITY**

Reliability data was provided by ARDOT from the National Performance Management Research Data Set (NPMRDS) covering January 3, 2023, to June 18, 2023. The data includes 24/7 hourly information on average speed and travel time that can be used to determine how often vehicles are traveling below the reference speed. The reference speed approximates free-flow speed for the segment.

Data was only available on Highway 67 and was analyzed to calculate the Travel Time Index (TTI) for the AM and PM timeframes. The TTI is the reference speed divided by the observed average speed, with values greater than 1 indicating less reliable travel times. Only Tuesday-Thursday data was used for the analysis to capture typical weekday traffic conditions. The results of the reliability analysis are provided in **Figure 12**.

**Figure 12: Reliability Analysis and Travel Time Index**



ARDOT Job 101140: Pocahontas Bypass (S) EA

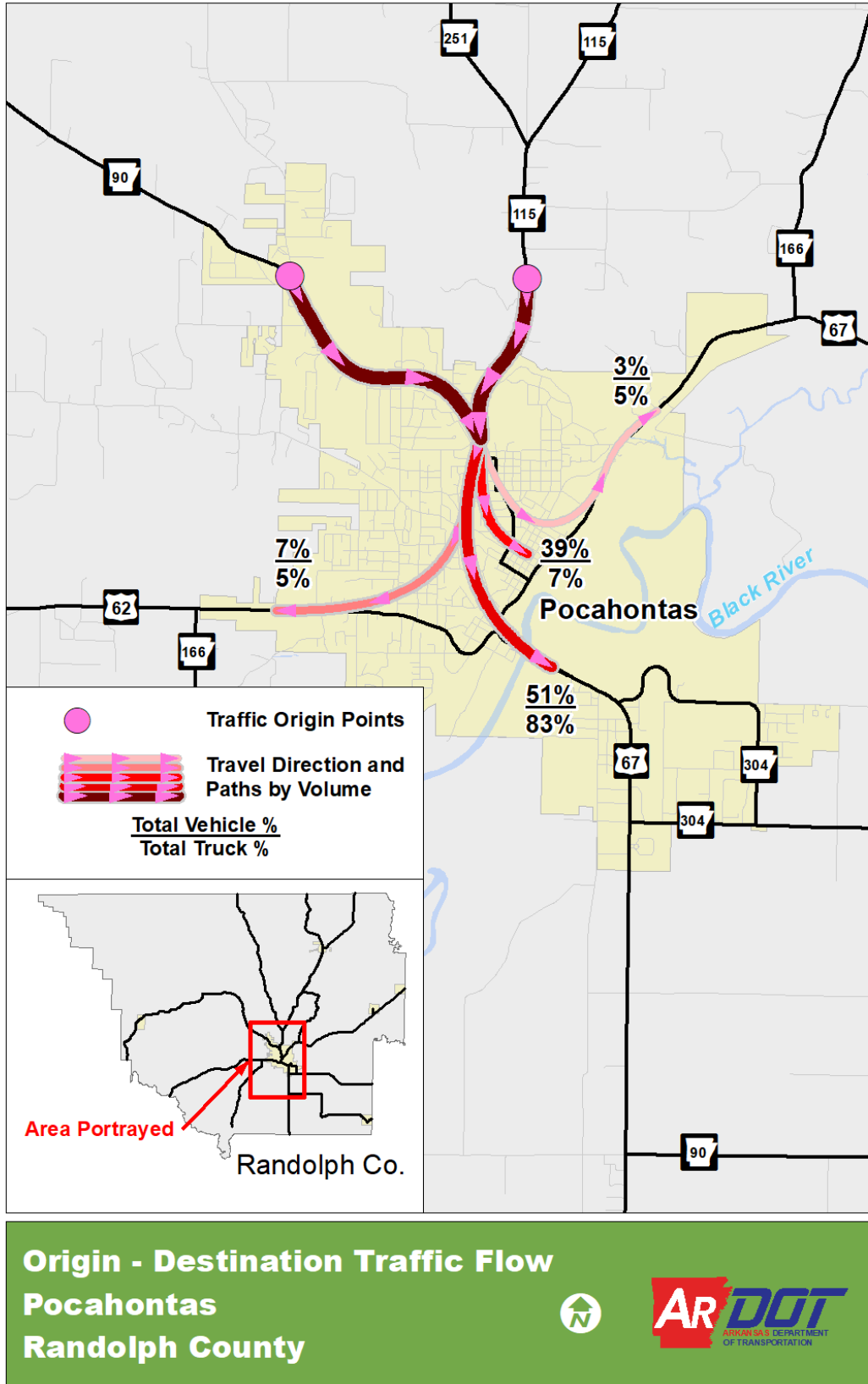
The results of the reliability analysis show that travel time is not always consistent, with average speeds reaching 80 percent of the reference speed in the AM, and 75 percent of the reference speed in the PM.

### **SYSTEM CONNECTIVITY**

Pocahontas area origin and destination trips were reviewed from 2022 Streetlight data provided by ARDOT. Vehicles and trucks enter Pocahontas from northwestern Randolph County on Highways 90, 115, and 251. From these origins, 51 percent of all traffic and 83 percent of trucks seek to cross the Highway 67 Black River Bridge and proceed towards destinations southward. While 39 percent of all traffic is traveling toward the CBD and would not use any alternate route, only seven percent of trucks have the CBD as their destination. This highlights the fact that most truck traffic is using Highway 90 as a through route, and a bypass that is easier to navigate could be more attractive for these trucks. Only five percent of trucks are traveling to Highway 67 north (toward Corning), and only five percent of trucks are traveling to Highway 62 west (toward Imboden). A graphic of the origin and destination information is provided in **Figure 13** on the following page.



**Figure 13: Highway 90 and Highway 115 Origin and Destination Analysis**



## ECONOMIC COMPETITIVENESS

As noted in the site visit, numerous trucks traversing routes through Pocahontas are an indicator of the agricultural activity in the region. A quarry that lies north of Pocahontas is one generator of truck traffic on Highway 90 through the CBD. Many chicken farms exist northwest of Pocahontas, and their trucks use Highway 90 to reach markets. A specific destination for many agricultural trucks is the PECO food processing facility in southeast Pocahontas. This plant opened in 2016 and generates over 65,000 truck trips annually. Of those trips, 14,000 use the Highway 90 corridor.

## OTHER LRITP GOALS

The three remaining LRITP goals were addressed in the previous study and are repeated below:

- **Infrastructure Condition** – All pavements and bridges in the study area are in good or fair condition.
- **Multimodal Transportation Systems** – Sidewalks exist on several major routes in central Pocahontas, including Highway 90 between the CBD and the public schools. Pedestrians are required to cross Highway 90 several times to use the sidewalks, which is not optimal.
- **Environmental Sustainability** – Several environmental constraints exist in and around central Pocahontas. These are included in the NEPA documentation.

## ALTERNATIVES ANALYSIS

The previous study identified two alternatives, a full bypass, and a partial bypass. The full bypass has since been eliminated, and the partial bypass is currently the preferred action alternative.

### NO-ACTION ALTERNATIVE

In the No-Action Alternative, no modifications would be made to the existing roadway network. This alternative has no cost other than routine maintenance of existing facilities.

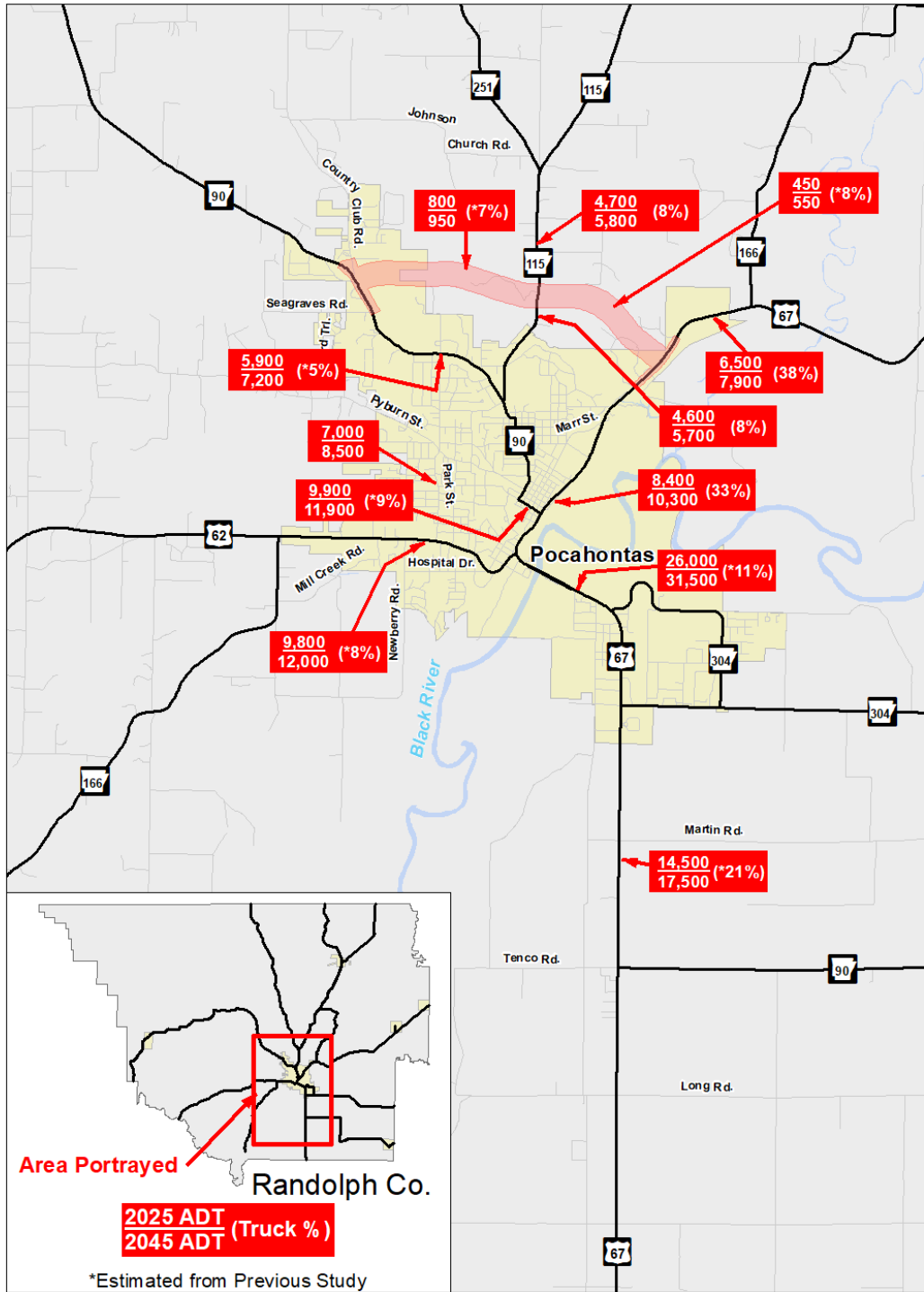
### ACTION ALTERNATIVE

Under the current Action Alternative, only the 2.6-mile portion of the bypass between Highway 90 and Highway 67 north would be constructed. The Action Alternative would directly connect Highways 90 and 115 to Highway 67 north, providing an efficient route to points north and east.

### VOLUME DEVELOPMENT

To determine traffic volumes for the build scenario, the 2020 Study was referenced. Linear growth from the 2020 Study volumes to 2022 ARDOT ADT values was calculated at count stations near the bypass route. This growth rate represents the actual rate that volumes have grown since the previous study and was used to grow bypass volumes to 2025. Existing volumes were grown using one percent annual growth to get 2045 volumes. The resulting volumes for the build scenario are provided in **Figure 14**.

Figure 14: Study Area with Action Alternative



**Study Area and Existing & Projected Traffic with Partial Bypass Vicinity of Pocahontas Randolph County**

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 ARIZONA'S DEPARTMENT OF TRANSPORTATION

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### **SAFETY**

The proposed Action Alternative is on a new alignment and will be built to current design standards which would be safer than the existing routes which have numerous functionally deficient horizontal curves and steep vertical grades. A reduction in the number of crashes on existing routes would be expected to coincide with the reduction in volume along those routes.

### **SECURITY**

To improve security a bypass would need to improve the resiliency of the transportation system in the study area, making it less likely to be impacted by disruptions to normal traffic flow. The proposed bypass route will provide a new connection between highways 90, 115, and 67 on the north side of Pocahontas. This new link provides an alternate route between these highways without having to navigate the CBD of Pocahontas or any local city streets. Such a connection enhances the resiliency of the network, especially due to disruptions on Highway 90 through the center of Pocahontas.

### **MOBILITY AND SYSTEM RELIABILITY**

#### **PEAK CONGESTION LEVELS**

The recurring delay of each corridor segment or intersection in the Action Alternative was quantified in the same manner as for the previous study, based on capacity and suitability for truck traffic. The updated traffic volumes show that none of the highways in the study area should exceed capacity during the study horizon. Increased volumes will result in increased delay as compared to today, but these increases are expected to be minimal.

#### **SYSTEM RELIABILITY**

While not by a significant margin, the bypass is expected to reduce volumes on Highway 67 north of Highway 90, in particular the truck volumes. Any reduction in volumes on Highway 67 would be expected to improve travel time reliability along the route.

**CONNECTIVITY**

From a connectivity standpoint, the Action Alternative does not improve travel time or distance between northwestern Randolph County and Highway 67 to the south including the Pocahontas Industrial Park, though it could provide a safer and more reliable route for trucks. For this study, distance and travel time information were limited to information from NPMRDS and the 2020 Study.

Based on the updated origin-destination information, a successful bypass route would still need to make travel to Highway 67 south, and to the Pocahontas Industrial Park, more efficient. **Table 2** shows the change in travel time and distance for the bypass route build scenario from the 2020 Study.

**Table 3: Travel Time**

	No-Action Alternative		Action Alternative	
	Length (mi)	Travel Time	Length (mi)	Travel Time
Hwy 90 to Hwy 67	2.7	5:37	4.2	6:48
Hwy 115 to Hwy 67	2.1	4:06	2.7	4:52

While the bypass does not provide a shorter route, it would provide a safer and more navigable route for truck traffic. For large trucks that have difficulty navigating the CBD, the improved route may be worth the extra time and distance.

## **Appendix B: Minute Order 2018-090**

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ARKANSAS STATE HIGHWAY COMMISSION

MINUTE ORDER

District: Ten  
County: Randolph  
Category: Miscellaneous



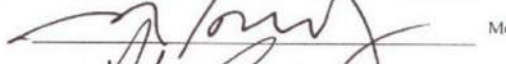
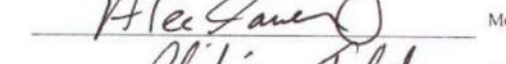

Page 1 of 1 Page

WHEREAS, IN RANDOLPH COUNTY, IN THE CITY OF POCAHONTAS local officials have expressed concern about traffic flow within the City; and

WHEREAS, Minute Order 2001-127 adopted the Pocahontas Bypass Feasibility Study as a planning guide to schedule improvements as funding became available; and

WHEREAS, an update to this study is necessary due to changes in traffic patterns as a result of recent developments in the area.

NOW THEREFORE, the Director is authorized to conduct an updated study to determine the need for and feasibility of a bypass around Pocahontas.

Approved:  Chairman  
 Vice-Chairman  
 Member  
 Member  
 Member

Submitted By:  Assistant Chief Engineer - Planning

Approved:  Director

Minute Order No. **2018 090** *mes phit*

Date Passed **AUG 29 2018**



# **Appendix C: Public Involvement Synopsis Report**

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## PUBLIC INVOLVEMENT SYNOPSIS

### ARDOT JOB 101140

Pocahontas Bypass  
Randolph County

### PUBLIC COMMENT PERIOD

October 19, 2023 - November 8, 2023

### PUBLIC MEETING

October 24, 2023  
Pocahontas Community Center  
300 Geneva Dr.  
Pocahontas, Arkansas

### PUBLIC MEETING WEBSITE

PocahontasBypass.TransportationPlanroom.com

## PUBLIC INVOLVEMENT SNAPSHOT



1 PUBLIC MEETING



950 WEBSITE VISITORS



141 IN-PERSON ATTENDEES



64 COMMENTS RECEIVED

## PUBLIC MEETING AND COMMENT PERIOD

Garver, in coordination with the Arkansas Department of Transportation (ARDOT) and Federal Highway Administration (FHWA), conducted a Public Involvement Meeting to discuss the proposed new road connecting Highway 90 and Highway 67 north of Pocahontas in Randolph County. Two project websites (in English and Spanish) were published: PocahontasBypass.TransportationPlanroom.com; PocahontasBypass.es.TransportationPlanroom.com.

- **A public meeting was held Tuesday, October 24, from 4:00 – 7:00 p.m. at the Pocahontas Community Center, 300 Geneva Dr., in Pocahontas.**

This was an open house meeting with no formal presentation. The meeting consisted of members of the public visiting the different exhibits and stations and talking with project team members. **A public officials meeting was also held the same day prior to the meeting.** Attendees were invited to view the exhibits and materials and talk directly with project team members.

The comment period was available from Thursday, October 19, 2023, through Wednesday, November 8, 2023.

### QUICK LINKS

[Outreach](#)

[Meeting Material](#)

[Public Meeting and Project Website](#)

[Comment Summary](#)

[Need for the Project](#)

[Impacts](#)

[Community](#)

[Historical Sites, Cemeteries, Archaeological Sites](#)

[Environmental Constraints](#)

[Additional Comments](#)

## ////// METHODS OF OUTREACH ////

Special efforts to involve the public in the meeting included the following:

- **Postcards mailed** to 2,499 property owners (2-mile radius around study area) and stakeholders (October 4, 2023)
- **Initial phone calls** to local and surrounding public officials (October 6, 2023)
- **Letters with project map and notice flier mailed and emailed** to public officials (October 9-10, 2023)
- **Letters with notice flier mailed and emailed** to local churches (October 9-10, 2023)
- **Notice flier emailed** to individuals interested in the project (October 10, 2023)
- **Marshallese notice fliers** handed out at the Pacific Islander Day event in Pocahontas (October 14, 2023)
- **Display ads** placed in four newspapers
  - Arkansas Democrat Gazette (October 15 and October 22, 2023)
  - Pocahontas Star Herald (October 18, 2023)
  - Clay County Courier (October 11 and October 18, 2023)
  - Times Dispatch (October 11 and October 18, 2023)
- **News release** published (October 16, 2023)
- **Fliers hand-delivered** to properties within and adjacent to study area and public locations (gas stations, library, grocery stores, etc.) along Highway 90 (October 18, 2023)
- **Public Service Announcements (PSA)** ran on La Jefa 99.3 FM (October 21-24, 2023)
- Multiple rounds of outreach through **various websites and social media platforms** including Marshallese translations

## /// MATERIALS AND RESOURCES ///

The following materials were available for review and comment at the public meeting. All materials were also available on the project websites. Copies of the handouts, exhibits, and video slides are attached.

- **Two identical roll plot maps** on aerial photography showing the proposed alternatives in the study area at a scale of 1-inch equals 225 feet. Included on the map was a typical section
- **Why Are We Having This Meeting? Exhibit Board** explaining the purpose of the meeting and methods for public comment
- **Purpose and Need Exhibit Board** showing the purpose and need statement and proposed alternatives
- **Constraints Map Exhibit Board** showing the study corridor and any identified constraints within or near the study area
- **What's Next? Exhibit Board** explaining the process after the public meeting
- **A four-minute repeating video with voiceover** that provided a project overview (introductory presentation video)
- **Interactive Project Maps with the ability to comment** available on two laptops/large computer screens
- **ARDOT Right-of-Way Procedures for Acquisition Report**
- **Exhibit boards** with QR codes to view electronic versions of the sign-in sheet, project overview video, interactive map, project website, and comment form
- **Handouts** for the public included a summary sheet, a comment form, and a small-scale map showing the location of the study area and the two proposed alternatives

## //////////////////// PUBLIC MEETING AND PROJECT WEBSITE //////////////////////

**Table 1 describes the participation data** gathered from the in-person public meeting and the project website.

<b>Table 1 - Results of Participation</b>	
<b>Public Participation</b>	<b>Totals</b>
Public Officials Meeting Attendees (non-staff)	3
In-Person Public Meeting Attendees (non-staff)	141
Staff Present at Meeting	18
Attendees who Signed Website Register (English/Spanish)	17/0
Unique Visitors to the Website (English/Spanish)	950/30
Comment forms received (English/Spanish)	43/0
Phone Calls/Letters/Emails received - no comment form (English/Spanish)	4/0
Interactive Map comments/Roll Plot Post-It notes received - no comment form (English/Spanish)	17/0
<b>Project Website, English (October 6 - November 8, 2023)</b>	<b>Totals</b>
Visits to the Website (Sessions)	1,372
Number of Website Pages Viewed (Pageviews)	2,957
Percent of Total Users Interacting with Mobile Devices/Tablets	58.5%
Clicked Hyperlinks on Website	701
<b>Project Website, Spanish (October 6 - November 8, 2023)</b>	<b>Totals</b>
Visits to the Website (Sessions)	74
Number of Website Pages Viewed (Pageviews)	156
Percent of Total Users Interacting with Mobile Devices/Tablets	6.7%

### PARTICIPATION AT A GLANCE

141

Public Meeting  
Attendees

17

Online Registrations

64

Comments  
Received

950

Unique Visitors to the  
Website

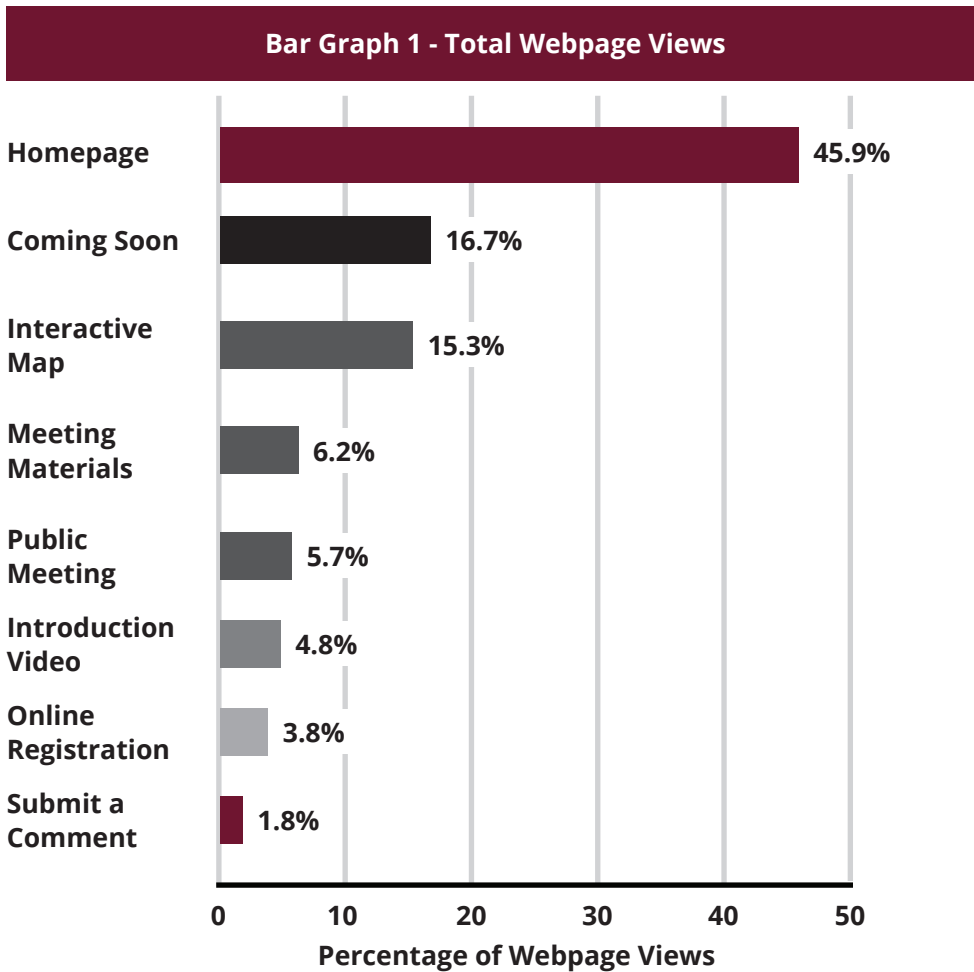
701

Clicked Links  
(English Website)

\*If comments were submitted in multiple forms (letter, phone, email, etc.), and were identical in nature, they were only counted once.

# PUBLIC MEETING & PROJECT WEBSITE

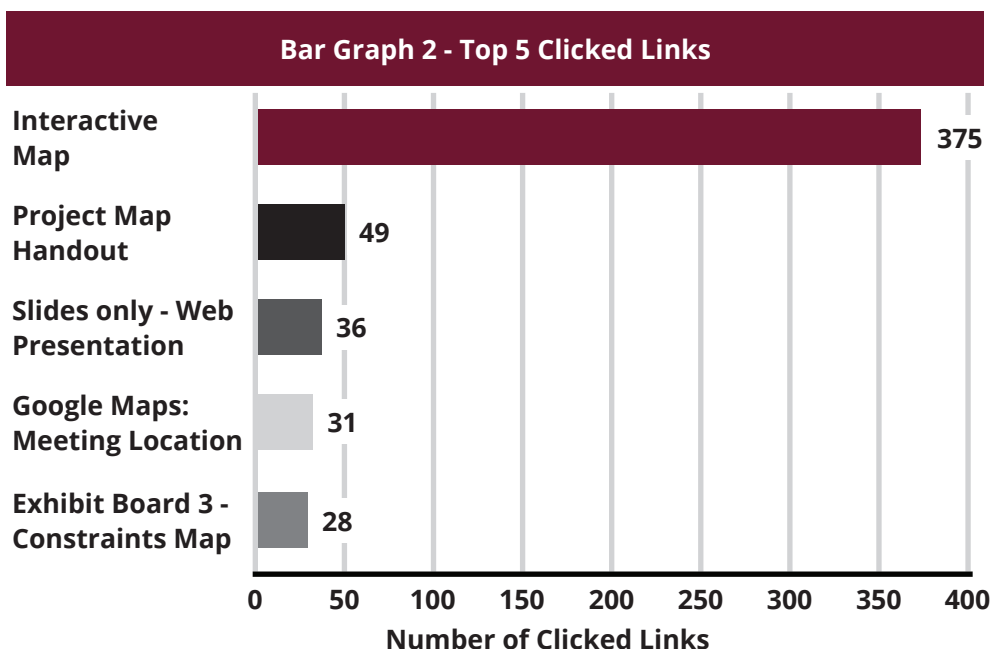
Bar Graph 1 describes the total page views and corresponding percentage based on each individual website page on the English Website.



### WEBSITE AT A GLANCE

- 2,957** Pageviews
- 16+** Hours Visitors Engaged with the Site
- 950** Unique Visitors
- 1,372** Sessions
- 166** Peak Site Traffic in One Day (10/18/2023)
- 22** Comments Submitted Online

Bar Graph 2 describes the top five clicked links on the English website.



## PUBLIC COMMENTS

Garver staff reviewed all comments received and evaluated their contents. The summary of comments listed below reflects the personal perception or opinion of the person or organization making the statement. The sequencing of the comments is random and is not intended to reflect importance or numerical values. Some of the comments were combined and/or paraphrased to simplify the synopsis process.

### COMMENT SUMMARY

- 33 indicated a need for the project; 11 indicated no need for the project
- Nineteen comments mentioned alleviating traffic on Highway 90.
- Nine comments mentioned cemeteries (Friendship, Martin, unnamed) within the project study area.
- Nine comments suggested an alternative Highway 90 connection (away from the school, hospital, nursing homes, etc.).
- Eight comments stated the bypass would increase local traffic safety.
- Eight comments mentioned personal property impacts.
- Eight comments mentioned school traffic concerns.
- Six comments stated historical and/or archaeological sites on the current proposed routes (Camp Shaver, soldier graves, Indian arrowheads, etc.).
- Five comments stated there is no need for the bypass.
- Five comments suggested using an alternative location for the bypass (Blacks Ferry Road/Hoelscher Lane/Highway 62 or Pettit Road, etc.).
- Four comments suggested an alternative Highway 67 connection.
- Four comments mentioned access to the hospital and/or EMS.
- Three comments mentioned maintenance and repairs.
- Three comments stated cost savings or positive economic impact.
- Three comment stated approval for Alternative B.
- Three comments stated concern for trucks traveling Highway 67 due to the grade.
- Three comments stated concern regarding the cost of the project.
- Two comments stated an increase in noise from the bypass.
- Two comments stated better access to the west.
- Two comments mentioned new development or city growth.
- Two comments suggested straightening out the 90 degree curves on Highway 90.
- Two comments stated concern regarding the loss of forested areas.
- Two comments stated the bypass should have limited access points by using frontage roads to help keep traffic moving.

### COMMENTS AT A GLANCE

64

Comments received during the public comment period, which ran from October 19, 2023 through November 8, 2023

22

Online Comment Forms

21

Paper Comment Forms

4

Letters/Emails/Phone Calls

12

Interactive Map Comments

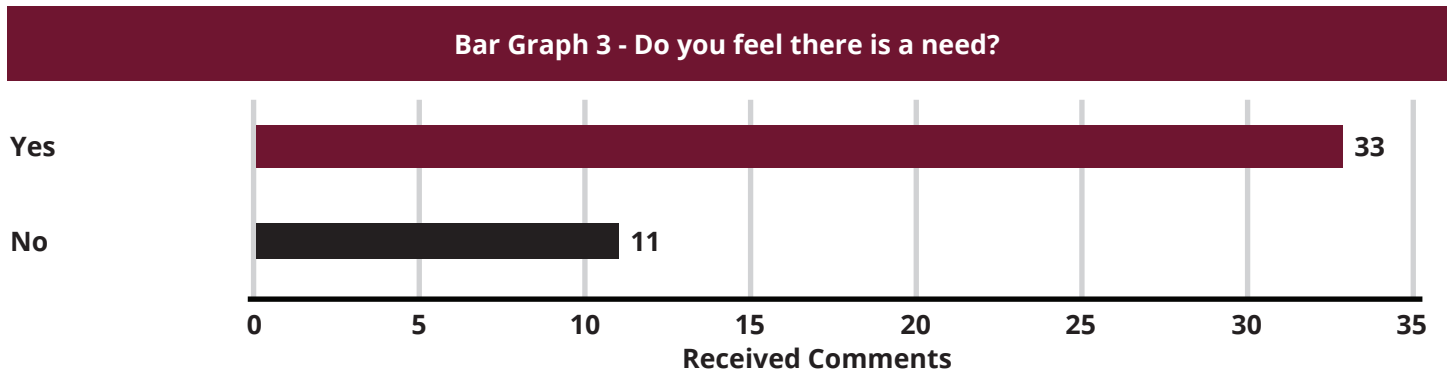
5

Roll Plot Comments

## /////// PUBLIC COMMENTS //////////////

### NEED FOR THE PROJECT

**Bar Graph 3 shows the responses** to the comment form question, “Do you feel there is a need for the proposed new road connecting Hwy. 90 and Hwy. 67 north of Pocahontas?”



The following is a list of comments regarding the question, “Do you feel there is a need for the proposed new road connecting Hwy. 90 and Hwy. 67 north of Pocahontas?”

#### Yes

- Seven comments mentioned safety improvements.
- Six comments stated alleviating traffic through downtown, Thomasville, and/or Park Street.
- Three comments mentioned increased traffic efficiency (two specific to school traffic).
- Two comments mentioned better routing for ambulance services and/or hospital access.
- Two comments mentioned better access to West Pocahontas.
- One comment stated the need to reroute heavy traffic to sustain roads.
- One comment stated the need to decrease the interstate traffic.
- One comment requested that a traffic light or four-way stop at the intersection of Thomasville and Broadway be considered.
- One comment stated the nursing homes and new school will be affected and it could be a potential safety issue.
- One comment stated the city will also be able to control the main road and downtown area for festivals and events.
- One comment stated it will help the city grow in the future.
- One commented stated thanks for partnering on this important project.
- One commented stated approval and support of ARDOT’s Pocahontas Bypass Project and specifically Alternative B because it will avoid impacts to the Martin Cemetery.
- One comment suggested that the bypass should go from Blacks Ferry Road to Hoelscher Lane to Highway 62 to Highway 67 or on Pettit Road.
- One comment stated uncertainty on how many trucks and truck traffic will be involved.

**PUBLIC COMMENTS****No**

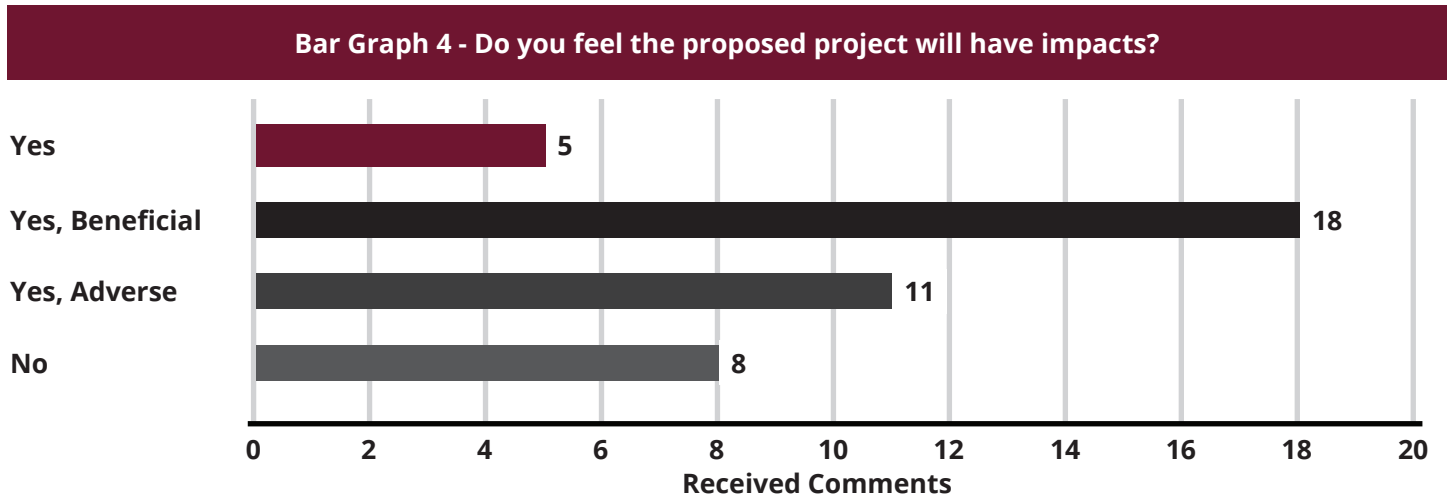
- One comment stated there is not enough traffic flow to warrant the 10-15 million taxpayer dollars.
- One comment stated there is no need to destroy and re-purpose one of the last forested areas in Pocahontas.
- One comment suggested the bypass connect Highway 67, south of Pocahontas, to Highway 90 from Hoelscher Lane to keep traffic away from town and to use the already existing roads (increasing safety).
- One comment stated the bypass connection should be along Pettit Road.
- One comment stated the proposal was rejected in two previous feasibility studies by ARDOT due to low traffic.
- One comment stated there is not a need for another road to connect Highway 90 and Highway 67.
- One comment stated truck traffic in the downtown area is a sign of a healthy local economy and it is not economically feasible to build a bypass around all busy small towns.
- One comment stated uncertainty on how many trucks and truck traffic will be involved.



## /////// PUBLIC COMMENTS /////

### IMPACTS TO PROPERTY OR COMMUNITY

**Bar Graph 4 shows the responses** to the comment form question, “Do you feel that the proposed project will have any impacts (Beneficial or Adverse) on your property and or community (economic, environmental, social, etc)?”



The following is a list of comments regarding the question, “Do you feel that the proposed project will have any impacts (Beneficial or Adverse) on your property and or community (economic, environmental, social, etc)?”

#### Yes

- One comment stated that the traffic is loud enough by their property and believes it will get worse if the bypass is constructed as Jake Brake Laws are not currently enforced.

#### Yes, Beneficial

- Seven comments stated reduced large and heavy vehicle traffic and traffic in general through center of town/ Pocahontas/CBD.
- Four comments mentioned alleviating congestion due to school traffic.
- Two comments stated improved traffic flow through town.
- One comment stated the bypass will preserve the life of Thomasville.
- One comment stated it will help create a new area for development (gas stations, strip malls, apartments, etc.).
- One comment stated it would bring relief to Thomasville residences.
- One comment stated it will save travel time.
- One comment stated that the pros far outweigh the cons: efficiency, safety, economic impact.
- One comment stated it will be safer.
- One comment stated it will create savings in maintenance and repairs of roads downtown.

## PUBLIC COMMENTS

### Yes, Adverse

- Two comments mentioned the close proximity to an elementary school, nursing home, and/or a hospital.
- Two comments mentioned issues with school traffic at the west end connection with Highway 90 (and potential danger).
- One comment stated it may end up hindering emergency services.
- One comment stated Alternative A had more impacts to property owners than Alternative B as it is through undeveloped woods. The right-of-way required must be limited to the minimum required to keep property owners from losing generational lands.
- One comment stated it would be a tremendous loss for this community and the local environment to destroy the last forested areas around Pocahontas.
- One comment stated that the proposed bypass should not be built by Baltz Lake.
- One comment suggested the bypass connect Highway 67, south of Pocahontas, to Highway 90 from Hoelscher Lane to keep traffic away from town and uses the already existing roads (increasing safety).
- One comment stated this will destroy the woodland tree farm, limit income, damage habitat, impact streams and ponds on the property, and contribute to disease and illness as well as climate warming.
- One comment stated a possible traffic problem when loaded trucks try to travel uphill north and south on Highway 67.
- One comment stated it unjustly takes land from their family. They requested to see a report from Arkansas Game and Fish and anything from the Forestry Department on the impact on the forest and the wildlife.
- One comment stated the entire bypass area is made up of generational Ozark foothill farms and the anticipated traffic volume for the present or foreseeable future on Highways 90, 115, and business 67 don't justify construction of a highway through the proposed area.

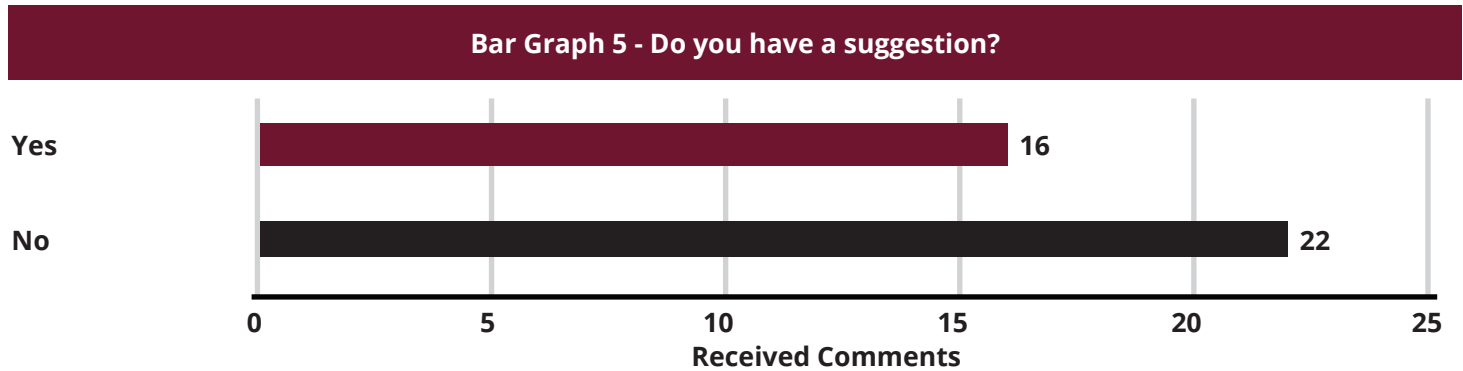
### No

- One comment stated that the property owner lives far enough north the only impact would be slightly more traffic noise.

## /////// PUBLIC COMMENTS //////////////

### COMMUNITY SUGGESTIONS

**Bar Graph 5 shows the responses** to the comment form question, “Do you have a suggestion that would make this proposed project better serve the needs of the community?”



The following is a list of comments regarding the question, “Do you have a suggestion that would make this proposed project better serve the needs of the community?”

#### Yes

- Two comments mentioned looking for an alternative route (one mentioned the other side of the country club) where land has less public buildings (nursing homes, schools, and hospitals).
- Two comments mentioned using Alternate Route B (one specifically mentioned impacting families less than Alternate Route A).
- One comment asked if the bypass could directly connect to the school for easy on-off access for school traffic.
- One comment stated that the connection to Highway 90 should go north of the hospital and nursing homes to lessen negative impacts.
- One comment stated that a traffic light at the entrance to the bypass may be needed.
- One comment suggested buying the houses within range of the proposal.
- One comment suggested putting it a little farther from the elementary school for safety and noise levels.
- One comment suggested remodeling the existing Pettit Road or selecting a route more to the north than its current east connection to Highway 67.
- One comment suggested that US 67 and Geneva Drive need a turn lane or turned into a 4-lane for safety as there is a history of accidents in this area.
- One comment suggested a traffic light or a four-way stop at the intersection of Broadway and Thomasville for increased safety.
- One comment stated that existing routes for Highway 90 and 115 can be improved by widening the four 90 degree turns by a few feet.

## PUBLIC COMMENTS

- One comment stated this proposed bypass should not be built by Baltz Lake, but instead connect Highway 67, south of Pocahontas, to Highway 90 by using the Hoelscher Lane route to keep traffic out of town, use already existing roads, improve safety, and preserves the last forested area of Pocahontas.
- One comment stated there is no need and to leave it alone.
- One comment stated that this proposal violates three Federal Executive orders and suggested obeying the law, not doing a quid pro quo with “interested parties,” and to do what the executive orders require by protecting farms and woodland property.

### No

- One comment suggested starting the project quickly for the benefit and access for the new Highway 57.
- One comment suggested having the bypass start north of the hospital so the school will be less impacted.
- One comment suggested that Peco move as they were the only one benefiting from the bypass.

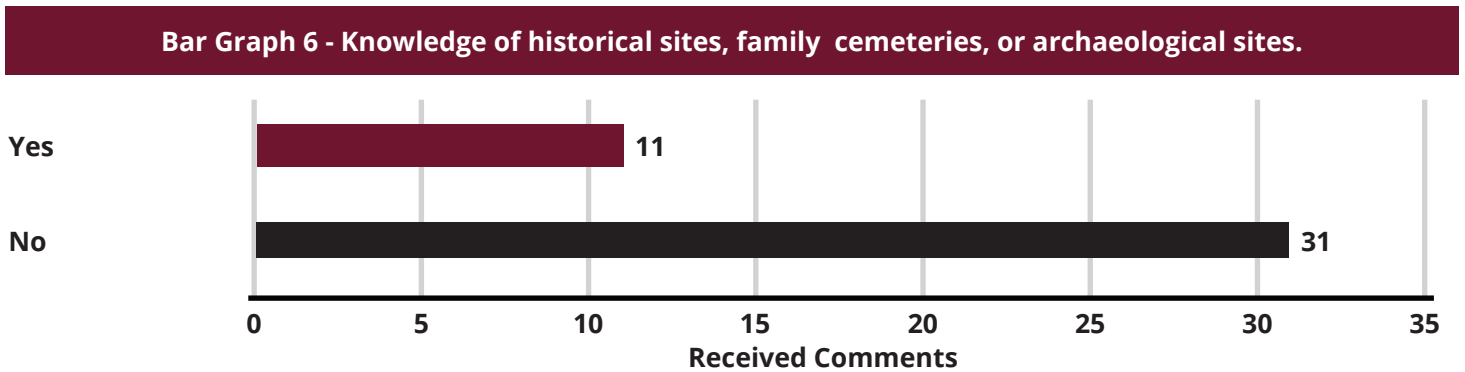
### Other (did not select yes or no on this question, but did leave a comment)

- One comment stated that the bypass looks like it will have minimal impact on homes and families.
- One comment suggested the bypass take Blacks Ferry Road, Hoelscher Lane, and Highway 62 to Highway 67 or use Pettit Road.
- One comment stated school traffic.
- One comment asked what happens when Highway 67 bypasses Pocahontas all together and the population declines?

## /////// PUBLIC COMMENTS //////////////

### HISTORICAL SITES, CEMETERIES, ARCHAEOLOGICAL SITES

**Bar Graph 6 shows the responses** to the comment form question, “Do you know of any historical sites, family cemeteries, or archaeological sites in the project area?”



The following is a list of comments regarding the question, “Do you know of any historical sites, family cemeteries, or archaeological sites in the project area?”

#### Yes

- Four comments mentioned the Martin Cemetery (two specifically mentioned unmarked graves on either side of the cemetery).
- Two comments mentioned a possible cemetery.
- One comment stated that Indian arrowheads can be found in the bottoms.
- One comment stated that the training area of Civil War era Camp Shaver is located in the area behind radio station KPOC. Relics have been found and soldier graves are possibly located there.
- One comment stated that there are homes, old homestead sites, burial spots, cemeteries, and archaeological sites all in the area. This area is some of the last woodland in the area and there are animal homes, food sources, water sources, and trees which provide their habitat that should be protected.
- One comment stated that the known sites were identified in the Public Presentation.
- One comment stated that the Friendship Cemetery is still an active cemetery and is in the study area. It is located south and west of Alternative A and Alternative B.

#### No

- One comment stated build it.

#### Other (did not select yes or no on this question, but did leave a comment)

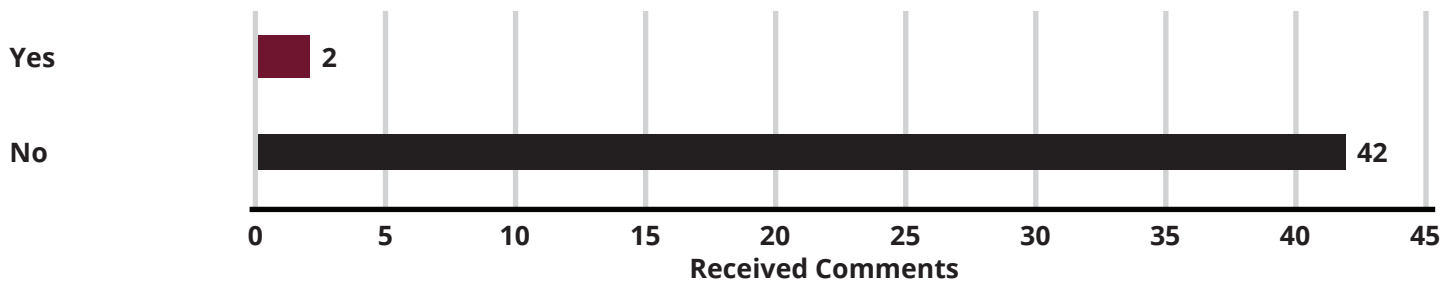
- One comment stated that there are a lot of historical and archaeological sites along the current route.

## /////// PUBLIC COMMENTS //////////////

### ENVIRONMENTAL CONSTRAINTS

**Bar Graph 7 shows the responses** to the comment form question, “Do you know of any environmental constraints, such as endangered species, hazardous waste sites, or existing or former landfills, in the vicinity of the project?”

**Bar Graph 7 - Do you know of any environmental constraints?**



The following is a list of comments regarding the question, “Do you know of any environmental constraints, such as endangered species, hazardous waste sites, or existing or former landfills, in the vicinity of the project?”

#### Yes

- One comment stated families, wildlife, and ponds, etc. will be negatively impacted by vehicle produced waste.
- One comment stated concern for the already restricted deer population, additional negative impacts from the already existing Clay County Station and Future I-57 corridor, and damage to farmland, cattle, and the farms on the west side of Highway 67. The comment concluded with a statement that this project should not be done.

## PUBLIC COMMENTS

### ADDITIONAL COMMENTS

The following is a list of additional comments at the bottom of the comment form.

- Three comments mentioned concern over the proximity to the school (two specifically mentioned school traffic) and seeing if the bypass could be moved farther away. One also mentioned the proximity to the hospital and traffic concerns.
- One comment stated liking the idea of the bypass as it would get truck traffic out of downtown.
- One comment stated that the road is much needed.
- One comment stated that the bypass would greatly reduce the traffic concerns on Thomasville and provide better travel options going through and around Pocahontas.
- One comment stated being glad that the state is moving forward with this project as it will greatly reduce the burden of the heavy truck traffic through Pocahontas which has increased the past several years.
- One comment stated that the property owner at 3054 Highway 90 is interested in how this project will affect the property's driveway.
- One comment requested to see more plans as there is concern of traffic backing up at the school.
- One comment suggested that the Highway 90 connection should be located along the north side of the hospital and nursing homes. Also, due to flooding it would be beneficial if the US 67 connection was moved a little farther north uphill.
- One comment stated support for the idea of the bypass but does not want to live next to a fully functioning bypass with more traffic and noise. This property owner supports the bypass if their whole property is purchased for the project. If only part of their property will be purchased, they do not want the bypass.
- One comment suggested better public meeting publicizing in the future and to make sure that EMS can get through the traffic for any emergencies.
- One comment stated that the bypass will affect very important businesses and concern for the impacted nursing homes and daycares.
- One comment suggested reviewing the possibility of widening Highway 67 between Baltz Lake and Outlook Park. As increased traffic on Highway 67 (from Highway 90) could make turning into the Community and Aquatic Centers more dangerous.
- One comment suggested considering the intersection at Thomasville and Broadway.
- One comment stated that there is more than 50 trucks per day that go through town with the 90 degree curves.
- One comment stated understanding the City's desire to stop 18 wheelers from traveling though Pocahontas but that it has been this way since the 1970's and forcing families to lose their homes and property without a better justification is wrong. It was suggested that the six homes and old Ford garage on Thomasville be bought and the turns straightened.
- One comment requested to be contacted by phone.
- One comment stated opposition to using the proposed routes and that it would be better left alone or using a different location.
- One comment stated that there are countless other state highway and bridge projects that better deserve this funding and to spend the tax dollars wisely.

## PUBLIC COMMENTS

- One comment requested to see the impact report, to know who this bypass will benefit, to know why there is a need for the bypass, to know why the current path for big trucks is not feasible, and to know why ARDOT changed their minds on the feasibility of constructing the bypass. The comment also asked if the Federal Government viewed this bypass as a mismanaged use of federal money, how can the City take privately owned land in the county without the owner's permission, and does the city get to vote on this? The comment closed by stating that it is taking lots of tax money to upkeep the road.
- One comment stated opposition to the process and procedure and that not having an open forum for discussion is just another way of controlling the interactions between the community, ARDOT, and the people responsible for this illegal proposal. This property owner's family has had their property for over 150 years and intend to fight every step of the way and encourage other impacted landowners to join the fight. The property owner believes this is the first step in the seizure of the property for the benefit of special interests and believes that there has already been discussion of moving East Pocahontas businesses in flood areas to the study area rather than enacting the Corp of Engineers.

### Letter/Email/Phone Call Comments

The following is a list of comments submitted in ways other than a comment form.

- Two comments were in support of the bypass from a trucker's perspective. It was also stated to not have driveways along the bypass, but to rather have frontage roads with connections at Highways 90, 115, and 67. If there are a lot of driveways along the bypass, it will defeat the purpose of the bypass.
- One comment suggested moving the Highway 90 connection north of it's current location to near the abandoned Superior Trucking building as this would simplify the connection by placing a simple 4-way stop on Country Club Road and possibly eliminating the need for a signal.
- One comment stated that the property at 2696 Highway 115, Pocahontas, Arkansas is in the direct path of the current proposed study area for the Pocahontas Bypass. Surveys and Ground Penetrating Radar show that the property contains significant archaeological sites, is eligible as a historic site, and that there are other feasible and prudent alternative routes that avoid the historic areas on the property. The owner strongly opposes any route that will disturb those sites as they are preserving as much of the historical area without disruption to the land as possible [surveys were included with the comment].

### Roll Plot and Interactive Map Comments

The following is a list of comments submitted on maps.

- Two comments mentioned moving the east end connection to Highway 67 to a more level area south of the radio station.
- Two comments mentioned the curve/hill along Highway 67 north of the bypass. Specifically traffic needing speed to get up it. There is also a blind spot due to the trees (one specifically mentioned several semi truck incidences in the last five years).
- One comment suggested moving the Highway 90 connection further north to 5th Mile Springs possibly.
- One comment stated that the area around the radio station is a flood zone.
- One comment noted that a cemetery is along Alternative A west of Martin Cemetery.



**PUBLIC COMMENTS**

- One comment asked if the bypass could use the already cleared area under the Overhead Utilities between Highway 90 and Highway 115? They stated that Seagraves Road already does this and it would minimize the impacts to the fields and trees.
- One comment stated that their home is over 50 years old and was constructed by a family member. The current owner is a Vietnam Veteran and wonders why this route was chosen considering there is a hospital and elementary school in the immediate vicinity.
- One comment suggested using a roundabout at the Highway 90 connection.
- One comment suggested moving the Highway 90 connection away from the school and nursing home possibly up toward the trucking company on Esna Dr.
- One comment stated that this is a great plan.
- One comment stated concern regarding the access to Camp Road and school traffic.
- One comment suggested checking into Civil War Training Area (Camp Shaver) between Friendship Cemetery and the radio station.
- One comment stated they would prefer not to have a left turn lane along Highway 67 north of the bypass connection with Highway 67.
- One comment suggested considering putting the Highway 67 connection north of Bee Road.
- One comment suggested locating the Highway 67 connection at Engelberg and using Pettit Road.

## ////// **SUMMARY OF ATTACHMENTS** ////

Attachments\* (four separate PDF documents contain the following):

### **PocahontasBypass\_PM\_SynopsisAttachments\_Outreach**

- Public Meeting Outreach
- Outreach Materials
- Screenshots of Public Meeting Website
- Website Analytics Report

### **PocahontasBypass\_PM\_SynopsisAttachments\_MeetingMaterials**

- Public Meeting Materials
- Copies of Meeting Sign-In Sheets
- Small-Scale Copies of Meeting Materials
- Meeting Pictures

### **PocahontasBypass\_PM\_SynopsisAttachments\_Translations**

- Outreach Materials (Marshallese)
- Outreach Materials (Spanish)
- Screenshots of Public Meeting Website (Spanish)
- Website Analytics Report (Spanish)
- Small-Scale Copies of Meeting Materials (Spanish)

### **PocahontasBypass\_PM\_SynopsisAttachments\_Comments**

- Copies of Comments Forms

\*Attachments are available by request.

## **Appendix D: Agency and Tribal Coordination**

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**Arkansas Department of Energy and Environment,  
Division of Environmental Quality**



## DIVISION OF ENVIRONMENTAL QUALITY

Sarah Huckabee Sanders  
GOVERNOR

Shane E. Khoury  
SECRETARY

8/23/2023

Cassie Schmidt  
Environmental Scientist  
Garver, LLC  
4300 South J.B. Hunt Drive, Suite 240  
Rogers, AR 72758  
Via email: [CPSchmidt@GarverUSA.com](mailto:CPSchmidt@GarverUSA.com)

RE: National Environmental Policy Act (NEPA) Comments Requested Regarding the Arkansas Department of Transportation – Pocahontas New Bypass Connection Project – Randolph County, Arkansas

The Arkansas Department of Energy and Environment, Division of Environmental Quality (DEQ), is pleased to comment on the proposed location connection that will connect Highway 90 northwest of Pocahontas, Arkansas to Highway 67 northeast of Pocahontas. Construction would include an approximately 2.6-mile long two-lane bypass that would also connect with Highway 115 to better facilitate traffic. The project's construction will begin on Highway 90 near Country Club Road and will extend eastward to Highway 67 north of Baltz Lake.

From an environmental compliance standpoint, based on the information provided, there are areas of concern. A Construction Stormwater General Permit ARR150000 is required if the project disturbs one (1) acre or more of land. The Construction Stormwater General Permit is required prior to the start of construction. Information on the permit and its requirements can be found on DEQ's website, <https://www.adeq.state.ar.us/water/permits/npdes/stormwater/>, or by contacting DEQ's Office of Water Quality (OWQ), Construction Stormwater Section, at 501.682.0929.

The Construction Stormwater General permit does not authorize any activity to be conducted in Waters of the State or Waters of the United States. Work in Waters of the State requires a short-term activity authorization (STAA) from DEQ prior to working in the wetted area of a stream or water body and may require a U.S. Corps of Engineers permit. A STAA is necessary for any in-stream activity that could cause an exceedance of applicable water quality standards, including, but not limited to, gravel removal, bridge or crossing repair/maintenance, bank stabilization, debris removal, culvert replacement, flood control projects, and stream relocation. Appropriate Best Management Practices should be used during construction to ensure the protection of the water quality and prevent future impacts or impairment of the receiving waters. For more information and forms, see DEQ's website, <https://www.adeq.state.ar.us/water/planning/instream/>, or call 501.682.0047.

**ARKANSAS DEPARTMENT OF ENERGY AND ENVIRONMENT**

ee.arkansas.gov | 5301 Northshore Drive, North Little Rock, AR 72118 | 501.682.0744

Additionally, if the project causes water utilities to be relocated, the project will require coverage under the Non-Stormwater Hydrostatic Testing General Permit ARG670000. All applicable State and Federal laws must be met before, during, and after the completion of the project. Any discharge of wastewater — whether domestic, industrial, process water, or such related activities — must be authorized by obtaining the appropriate permits prior to the activities taking place.

All facilities, as defined by the Asbestos National Emission Standards for Hazardous Air Pollutants, scheduled for demolition or renovation must be inspected for asbestos before beginning the project. Depending on the work to be conducted, Notices of Intent (NOI) for demolition/renovation must be submitted with applicable fees. If asbestos is found, dependent on the type and its condition, it may have to be removed. Information on the Arkansas Pollution Control and Ecology Commission Asbestos Abatement Rule No. 21 can be found on the DEQ website, <https://www.adeg.state.ar.us/air/asbestos>. You may also contact the DEQ's Office of Air Quality (OAQ), Asbestos Program, at 501.682.0718 for more information or assistance.

All waste resulting from the proposed project should be properly disposed of, or if the material removed meets the definition of beneficial fill, the material is used as beneficial fill. All waste resulting from the proposed project should be properly classified as hazardous waste or non-hazardous waste. Any hazardous waste resulting from this project must be sent to a permitted hazardous waste treatment, storage, or disposal facility. For additional information, please contact DEQ's Office of Land Resources (OLR) Compliance Section, at 501.682.0582.

This letter is issued in reliance upon the statements and representations made in the submittal. DEQ has no responsibility for the adequacy or proper functioning of the proposed project. Please contact the respective Offices with any questions.

Sincerely,

A handwritten signature in black ink that reads "Lucy Cross". The signature is written in a cursive style with a large, looped "L" and "C".

Lucy Cross  
Director of Enterprise Services, Division of Environmental Quality  
5301 Northshore Drive, North Little Rock, AR 72118

LC: tdb

## **Arkansas Department of Health (ADH)**



# Arkansas Department of Health

4815 West Markham Street • Little Rock, Arkansas 72205-3867 • Telephone (501) 661-2000

**Governor Sarah Huckabee Sanders**

**Renee Mallory, RN, BSN, Interim Secretary of Health**

**Jennifer Dillaha, MD, Director**

*via email*

July 31, 2023

ARDOT Department of Transportation  
Environmental Division  
John Fleming – Division Head  
PO Box 2261  
Little Rock, AR 72203-2261

RE: ARDOT Job 101140 – Pocahontas Bypass (S); F.A.P. STPSC-9350(7)  
Highway 90 to Highway 67  
Pocahontas, Randolph County, Arkansas

Dear Mr. Fleming,

A staff review has been made of the information received on the referenced project. The Engineering Section has no comments on the submittal beyond noting the work will cross the surface assessment area for Pocahontas's intake on the Black River. Please notify the water system before commencement of construction activities. The geodatabases for the assessment and wellhead protection areas are attached in zip format as requested.

If you have any questions or comments, please coordinate them through Darcia Routh at (501) 661-2856.

Sincerely,

A handwritten signature in cursive script that reads 'Teresa Lee'.

Teresa Lee, P.E.  
Chief, Technical Support  
Engineering Section

TL:DR:sb

CC: Cassie Schmidt, ARDOT  
Esmerelda Marquez, ARDOT  
POCAHONTAS WATERWORKS, BRUCE BRODELL, 207 HIGHWAY 67, POCAHONTAS AR 72455



## **Arkansas Department of Parks, Heritage and Tourism**

**Schmidt, Cassie P.**

---

**From:** Randy Roberson <randy.roberson@arkansas.gov>  
**Sent:** Monday, August 7, 2023 11:38 AM  
**To:** Schmidt, Cassie P.  
**Subject:** RE: ARDOT Job 101140, Pocahontas Bypass (S) - Agency Coordination Letter  
**Attachments:** (20230807) ARDOT Job 101140 Pocahontas Bypass.pdf

Cassie,

Thanks for the opportunity to review information regarding the above referenced project. As the Environmental Review Coordinator for the Outdoor Recreation Grants Program of the Department of Parks, Heritage and Tourism, the focus of my review is on a project's potential to affect public outdoor recreation sites in the state with emphasis on those sites that have potential to affect sites that have utilized grant funds administered by our program.

Based on review of the information provided, it appears the proposed bypass of Pocahontas, AR from Highway 67 to Highway 90 will not affect any public outdoor recreation sites monitored by our program. Please see the attached copy of your correspondence, which has been marked to indicate this finding.

Sincerely,

**RANDY ROBERSON,**  
 Project Officer – Environmental Review Coordinator  
 Outdoor Recreation Grants Program - Office of Outdoor Recreation

Arkansas Department of Parks, Heritage and Tourism  
 One Capitol Mall, Suite 4B.215  
 Little Rock, AR 72201  
[randy.roberson@arkansas.gov](mailto:randy.roberson@arkansas.gov)  
 p: 501.682.6946 | c: 501-297-1787

[OutdoorGrants.com](https://adpht.arkansas.gov/office-of-outdoor-recreation)

<https://adpht.arkansas.gov/office-of-outdoor-recreation>



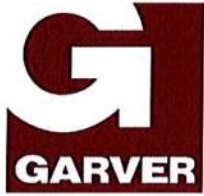

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**From:** Schmidt, Cassie P. <CPSchmidt@GarverUSA.com>  
**Sent:** Thursday, July 27, 2023 8:30 AM  
**To:** Randy Roberson <randy.roberson@arkansas.gov>  
**Subject:** ARDOT Job 101140, Pocahontas Bypass (S) - Agency Coordination Letter

Dear Mr. Roberson,

On behalf of the Arkansas Department of Transportation, please find the attached agency coordination letter for a proposed roadway project in Pocahontas, AR.

Sincerely,



4300 South J.B. Hunt Drive  
Suite 240  
Rogers, AR 72758  
TEL 479.257.9188

[www.GarverUSA.com](http://www.GarverUSA.com)

July 27, 2023

Randy Roberson  
Project Officer / Environmental Review Coordinator  
Division of Arkansas State Parks  
One Capitol Mall  
Little Rock, AR 72201  
#501-682-6946; [randy.roberson@arkansas.gov](mailto:randy.roberson@arkansas.gov)

Re: ARDOT Job 101140 – Pocahontas Bypass (S); F.A.P. STPSC-9350(7)  
Highway 90 to Highway 67  
Pocahontas, Randolph County, Arkansas  
**Initial Agency Coordination Letter**

Dear Mr. Roberson:

The Arkansas Department of Transportation (Department) is proposing a new location connection between Highway 90 northwest of Pocahontas to Highway 67 northeast of Pocahontas. Improvements would include an approximately 2.6-mile two-lane bypass on new location that would also connect with Highway 115 to help remove truck movements through Pocahontas. The project begins on Highway 90 near Country Club Road and extends east to Highway 67 north of Baltz Lake. The project is approximately 2.6 miles in length.

We are in the process of assessing environmental impacts for analysis in the NEPA document (an Environmental Assessment). We are requesting that you review the proposed study area (see enclosed exhibit) and provide your written response to this letter describing any concerns related to the proposed action's potential effects. A shapefile or KMZ of the study area can be provided upon request. We are seeking comments regarding resources such as unique environmental features or environmentally sensitive areas, properties receiving Land and Water Conservation Funds (LWCF), and permits or approvals that should be obtained prior to construction of the project. Formal, written replies should be emailed to [CPSchmidt@GarverUSA.com](mailto:CPSchmidt@GarverUSA.com) or mailed to the address provided in the letterhead.

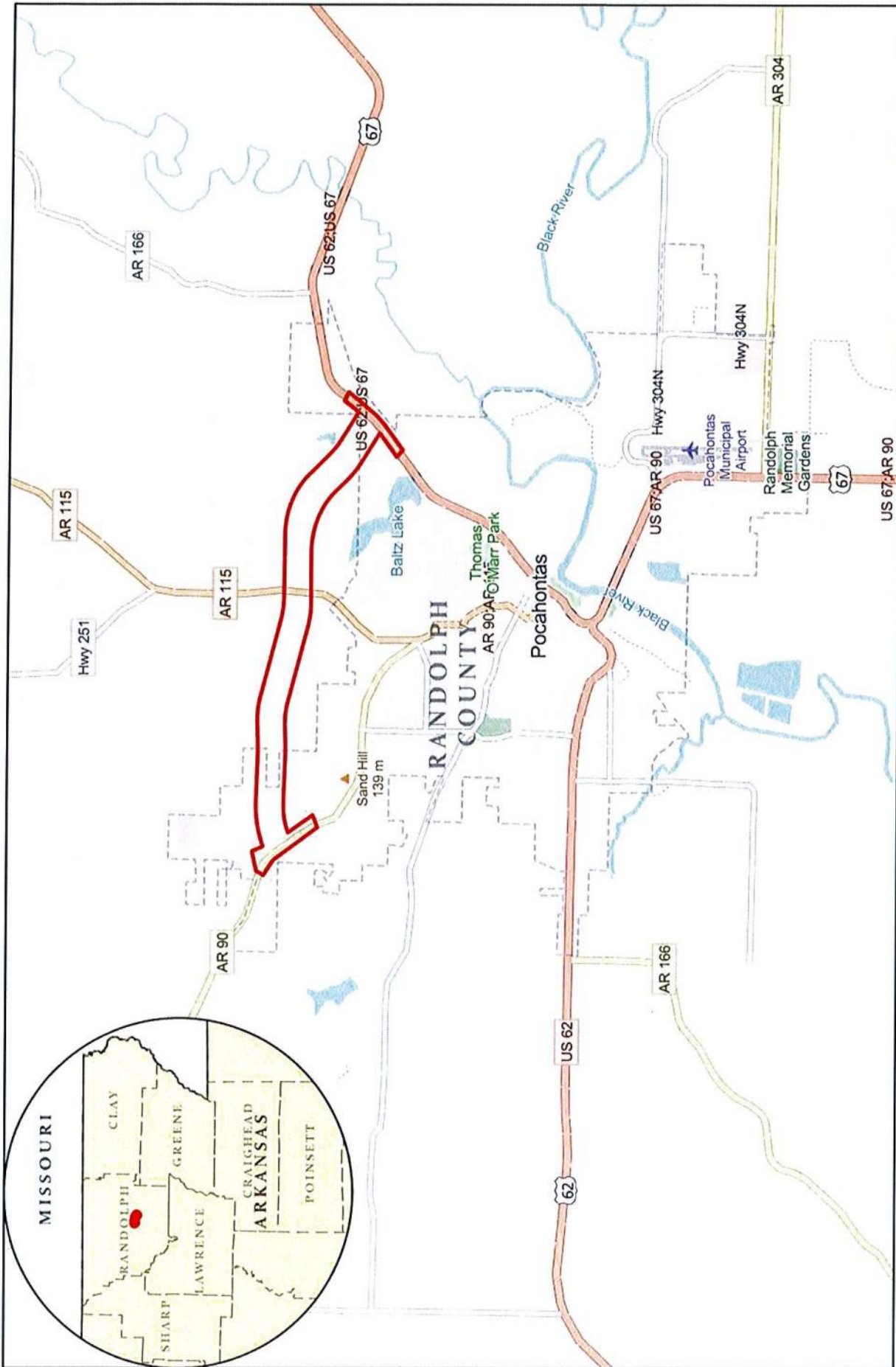
We would appreciate your response within 30 days to help us maintain the schedule. If you have any questions regarding this request, please contact me at #479-287-4673 or [CPSchmidt@GarverUSA.com](mailto:CPSchmidt@GarverUSA.com).

Sincerely,

  
Cassie Schmidt  
Environmental Scientist

Enclosure

<p style="text-align: center;"><b>ADPHT-ORGP</b></p> <p style="text-align: center;">No apparent or immediate conflict with public outdoor recreation at this time.</p> <p>Date: <u>7 August 2023</u></p> <p>Signature: <u>Randy Roberson</u></p> <p style="text-align: center;"><b>Randy Roberson</b> ADPHT-ORGP Project Officer One Capitol Mall, Suite 4B.215 Little Rock, AR 72201 501-682-6946 <a href="mailto:randy.roberson@arkansas.gov">randy.roberson@arkansas.gov</a></p>
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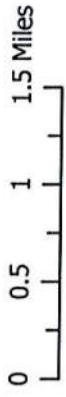
**PROJECT LOCATION MAP**  
 ARDOT Job 101140, Pocahontas Bypass (S)  
 Pocahontas, Randolph County, Arkansas



 Study Area



S15-17 & S22-23, T19N, R1E



Esri Open Street Basemap



**Cassie Schmidt**

Environmental Scientist/Environmental Specialist

*Transportation Team*

📞 479-287-4673

📠 918-440-2886

**Arkansas Natural Heritage Commission (ANHC)**

See Appendix K

## **Natural Resources Conservation Service (NRCS)**

**From:** [Schmidt, Cassie P.](#)  
**To:** ["Grishanova, Greta - FPAC-NRCS, AR"](#)  
**Subject:** RE: [External Email]ARDOT Job 101140, Pocahontas Bypass (S) - Agency Coordination Letter  
**Date:** Monday, February 12, 2024 2:14:00 PM  
**Attachments:** [Pocahontas Bypass CPA-106 for Alt A and B Final PRINT.pdf](#)  
[image001.png](#)

---

Thank you Greta! Please find the attached finalized CPA-106 form for this project.

Sincerely,

**Cassie Schmidt**

Garver  
479-287-4673

---

**From:** Grishanova, Greta - FPAC-NRCS, AR <Greta.Grishanova@usda.gov>  
**Sent:** Friday, February 9, 2024 11:58 AM  
**To:** Schmidt, Cassie P. <CPSchmidt@GarverUSA.com>  
**Subject:** RE: [External Email]ARDOT Job 101140, Pocahontas Bypass (S) - Agency Coordination Letter

Hi Cassie -

I've completed the review for the Pocahontas Bypass Project (Alternatives A and B) located in Randolph County, Arkansas. For Alternative A, there are 11 acres of farmland of statewide importance. For Alternative B, there are 8 acres of farmland of statewide importance.

Attached, please find completed form CPA-106 (included an editable version in case additional sections will be filled out) as well as a corresponding map and letter.

If you have any questions or need additional information, please let me know!

Thanks,

**Greta Grishanova**

*Soil Scientist*



Natural Resources Conservation Service  
U.S. DEPARTMENT OF AGRICULTURE

700 West Capitol Avenue, Suite 5317, Little Rock, AR, 72201

p: (501) 301-3140

e: [greta.grishanova@usda.gov](mailto:greta.grishanova@usda.gov) w: [www.nrcs.usda.gov/Arkansas](http://www.nrcs.usda.gov/Arkansas)

**Helping People Help the Land**

*USDA is an equal opportunity provider, employer, and lender.*

---

**From:** Schmidt, Cassie P. <[CPSchmidt@GarverUSA.com](mailto:CPSchmidt@GarverUSA.com)>  
**Sent:** Thursday, February 1, 2024 11:37 AM  
**To:** Grishanova, Greta - FPAC-NRCS, AR <[Greta.Grishanova@usda.gov](mailto:Greta.Grishanova@usda.gov)>



**Subject:** RE: [External Email]ARDOT Job 101140, Pocahontas Bypass (S) - Agency Coordination Letter

Hi Greta,

Last summer you provided us with farmland information for a 1000-foot-wide corridor we were assessing for a proposed bypass in Pocahontas, Arkansas (ARDOT Job 101140). We now have footprints for the two alternatives being analyzed for the project. I have attached shapefiles of each alternative along with a partially completed CPA-106 form. Could you please complete and return the form at your earliest convenience?

Thank you for your time!

Sincerely,

**Cassie Schmidt**

Garver

479-287-4673

---

**From:** Grishanova, Greta - FPAC-NRCS, AR <[Greta.Grishanova@usda.gov](mailto:Greta.Grishanova@usda.gov)>

**Sent:** Tuesday, August 8, 2023 8:29 AM

**To:** Schmidt, Cassie P. <[CPSchmidt@GarverUSA.com](mailto:CPSchmidt@GarverUSA.com)>

**Subject:** RE: [External Email]ARDOT Job 101140, Pocahontas Bypass (S) - Agency Coordination Letter

Hi Cassie,

Thanks for the shapefile. I have finished the review and determined that in this project area, there is one acre of prime and unique farmland, and there are 83 acres of farmland of statewide importance. There are no Wetland Reserve Easements (WRE) within the proposed project area.

Attached, please find completed form CPA-106 as well as a corresponding map and letter.

Should you have any questions or need additional information, please let me know!

**Greta Grishanova**

Soil Scientist

USDA - Natural Resources Conservation Service

700 West Capitol Avenue, Suite 5317

Little Rock, Arkansas 72201

Office: 501.301.3140



Helping People Help the Land

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**From:** Schmidt, Cassie P. <[CPSchmidt@GarverUSA.com](mailto:CPSchmidt@GarverUSA.com)>

**Sent:** Monday, August 7, 2023 10:50 AM

U.S. DEPARTMENT OF AGRICULTURE  
Natural Resources Conservation Service

NRCS-CPA-106  
(Rev. 1-91)

**FARMLAND CONVERSION IMPACT RATING  
FOR CORRIDOR TYPE PROJECTS**

<b>PART I (To be completed by Federal Agency)</b>		3. Date of Land Evaluation Request <b>2/1/24</b>	4. Sheet 1 of <b>1</b>
1. Name of Project <b>ARDOT Job 101140 - Pocahontas Bypass (S)</b>		5. Federal Agency Involved <b>Federal Highway Administration</b>	
2. Type of Project <b>Roadway</b>		6. County and State <b>Randolph County, Arkansas</b>	
<b>PART II (To be completed by NRCS)</b>		1. Date Request Received by NRCS <b>2/1/24</b>	2. Person Completing Form <b>Greta Grishanova</b>
3. Does the corridor contain prime, unique statewide or local important farmland? (If no, the FPPA does not apply - Do not complete additional parts of this form). YES <input checked="" type="checkbox"/> NO <input type="checkbox"/>		4. Acres Irrigated <b>59,478</b>	Average Farm Size <b>339</b>
5. Major Crop(s) <b>Soybeans</b>	6. Farmable Land in Government Jurisdiction Acres: <b>222,789</b> % <b>53</b>	7. Amount of Farmland As Defined in FPPA Acres: <b>209,002</b> % <b>50</b>	
8. Name Of Land Evaluation System Used <b>NCCPI</b>	9. Name of Local Site Assessment System <b>NONE</b>	10. Date Land Evaluation Returned by NRCS <b>2/9/24</b>	

	Alternative Corridor For Segment			
	Corridor A	Corridor B	Corridor C	Corridor D
<b>PART III (To be completed by Federal Agency)</b>				
A. Total Acres To Be Converted Directly	<b>65.5</b>	<b>66.2</b>		
B. Total Acres To Be Converted Indirectly, Or To Receive Services	<b>0</b>	<b>0</b>		
C. Total Acres In Corridor	<b>65.5</b>	<b>66.2</b>		
<b>PART IV (To be completed by NRCS) Land Evaluation Information</b>				
A. Total Acres Prime And Unique Farmland	<b>0</b>	<b>0</b>		
B. Total Acres Statewide And Local Important Farmland	<b>11</b>	<b>8</b>		
C. Percentage Of Farmland in County Or Local Govt. Unit To Be Converted	<b>0.03</b>	<b>0</b>		
D. Percentage Of Farmland in Govt. Jurisdiction With Same Or Higher Relative Value	<b>54</b>	<b>55</b>		
<b>PART V (To be completed by NRCS) Land Evaluation Information Criterion Relative value of Farmland to Be Serviced or Converted (Scale of 0 - 100 Points)</b>	<b>66</b>	<b>65</b>		
<b>PART VI (To be completed by Federal Agency) Corridor Assessment Criteria (These criteria are explained in 7 CFR 658.5(c))</b>	Maximum Points			
1. Area in Nonurban Use	15	<b>15</b>	<b>15</b>	
2. Perimeter in Nonurban Use	10	<b>10</b>	<b>10</b>	
3. Percent Of Corridor Being Farmed	20	<b>3</b>	<b>3</b>	
4. Protection Provided By State And Local Government	20	<b>0</b>	<b>0</b>	
5. Size of Present Farm Unit Compared To Average	10	<b>0</b>	<b>0</b>	
6. Creation Of Nonfarmable Farmland	25	<b>0</b>	<b>0</b>	
7. Availability Of Farm Support Services	5	<b>4</b>	<b>4</b>	
8. On-Farm Investments	20	<b>5</b>	<b>5</b>	
9. Effects Of Conversion On Farm Support Services	25	<b>0</b>	<b>0</b>	
10. Compatibility With Existing Agricultural Use	10	<b>0</b>	<b>0</b>	
<b>TOTAL CORRIDOR ASSESSMENT POINTS</b>	<b>160</b>	<b>37</b>	<b>37</b>	<b>0</b> <b>0</b>
<b>PART VII (To be completed by Federal Agency)</b>				
Relative Value Of Farmland (From Part V)	100	<b>66</b>	<b>65</b>	<b>0</b> <b>0</b>
Total Corridor Assessment (From Part VI above or a local site assessment)	160	<b>37</b>	<b>37</b>	<b>0</b> <b>0</b>
<b>TOTAL POINTS (Total of above 2 lines)</b>	<b>260</b>	<b>103</b>	<b>102</b>	<b>0</b> <b>0</b>
1. Corridor Selected: <b>Corridor B</b>	2. Total Acres of Farmlands to be Converted by Project: <b>8</b>	3. Date Of Selection: <b>2/12/24</b>	4. Was A Local Site Assessment Used? YES <input type="checkbox"/> NO <input type="checkbox"/>	

5. Reason For Selection:

**Alternative B (i.e., Corridor B) best minimizes impacts to cultural and natural resources.**

Signature of Person Completing this Part:

*Cassie Schmidt*

DATE

**2/12/24**

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



United States Department of Agriculture

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**VIA EMAIL**

February 9, 2024

Cassie Schmidt  
Environmental Scientist  
Garver  
4300 South J.B. Hunt Dr., Ste. 240  
Rogers, AR 72758

Dear Ms. Schmidt,

This letter is in response to your request for information related to Prime Farmland and Farmland of Statewide Importance for the Pocahontas Bypass Project (Alternatives A and B) located in Randolph County, Arkansas. For Alternative A, there are 11 acres of farmland of statewide importance. For Alternative B, there are 8 acres of farmland of statewide importance. Please find enclosed completed form CPA-106 as well as a corresponding map.

Should you have any questions or need additional information, please call me at (501) 301-3140 or email at [greta.grishanova@usda.gov](mailto:greta.grishanova@usda.gov).

Sincerely,

Greta Grishanova  
Soil Scientist

Enclosure



**Natural Resources Conservation Service**

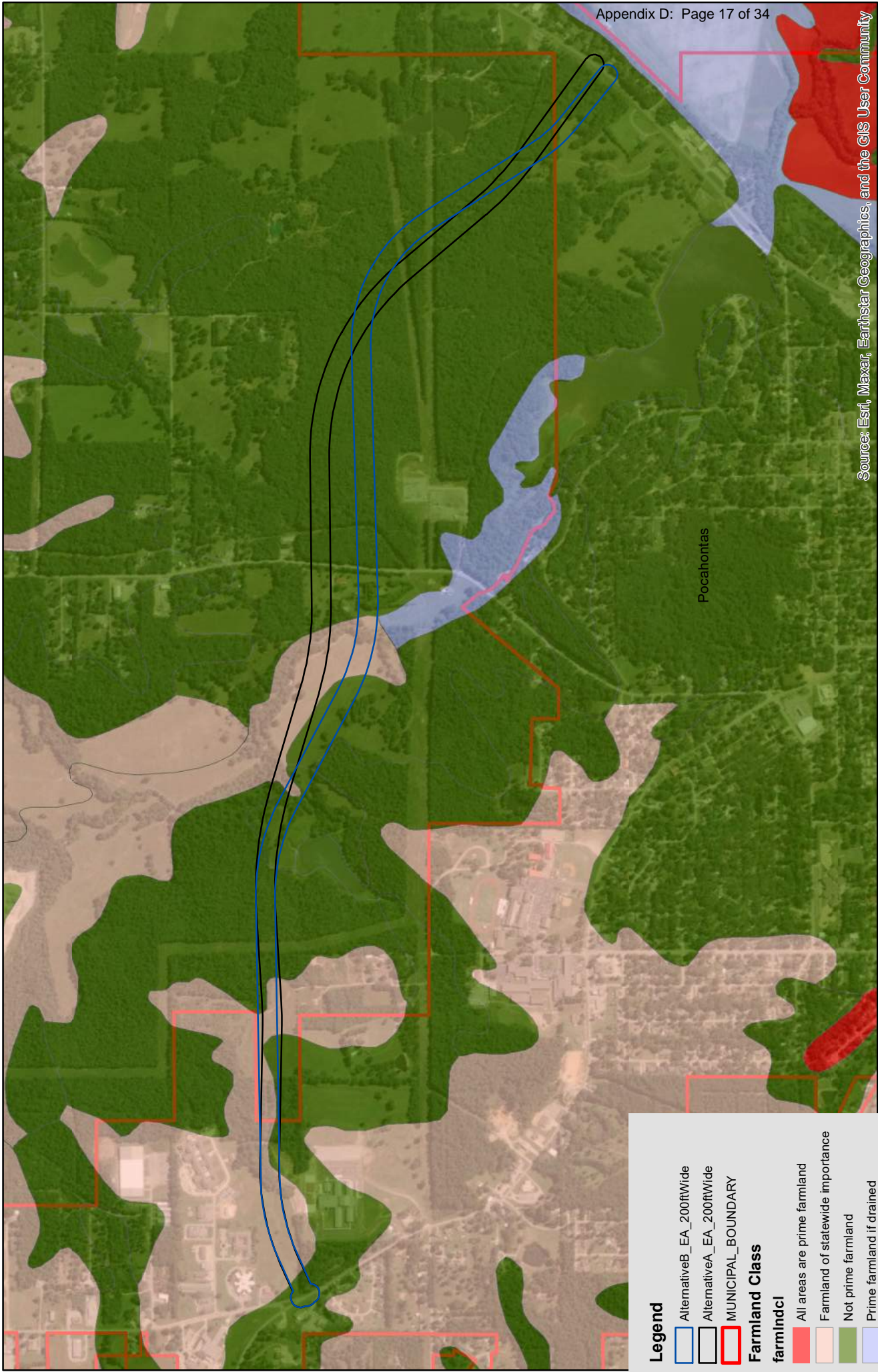
Room 3416, Federal Building  
700 West Capitol Avenue  
Little Rock, Arkansas 72201-3215

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# Farmland Classification of Soils ARDOT Job 101140 - Pocahontas Bypass (S) Randolph County, Arkansas



## Legend

- AlternativeB\_EA\_200ftWide
- AlternativeA\_EA\_200ftWide
- MUNICIPAL\_BOUNDARY

## Farmland Class

farmlandci

- All areas are prime farmland
- Farmland of statewide importance
- Not prime farmland
- Prime farmland if drained

## **State Historic Preservation Officer (SHPO)**



Sarah Huckabee Sanders  
Governor  
Shea Lewis  
Interim Secretary

August 24, 2023

Ms. Cassie Schmidt  
Environmental Scientist  
Garver  
4300 South J.B. Hunt Drive  
Suite 240  
Rogers, AR 72758

RE: Randolph County: Pocahontas  
Section 106 Review: FHWA  
Proposed Undertaking: Pocahontas Bypass (S)  
Highway 90 to Highway 67  
ArDOT Job Number: 101140  
AHPP Tracking Number: 111379

Dear Mr. Fleming:

The staff of the Arkansas Historic Preservation Program (AHPP) has reviewed the Project Identification Form (PIF) for the above-referenced undertaking in Sections 15, 16, 17, 22, and 23 Township 19 North, Range 1 East in Randolph County. The project proposes to construct an approximately 2.6-mile two-lane bypass at a new location that will connect to Highway 115 in order to remove truck traffic through Pocahontas. There are numerous archeological sites recorded in the proposed project area and one AHPP property (RA0176).

Based on the provided information, the AHPP requests that a cultural resources survey and an architectural resources survey be conducted of the APE. We request the survey conform to the *Arkansas State Plan, Appendix B: Guidelines for Archeological Fieldwork and Report Writing in Arkansas* (revised 2010). Personnel supervising the investigation should meet the Secretary of the Interior's Professional Qualifications Standards found in 36 CFR Part 61.

Thank you for the opportunity to review this submission. Please refer to the AHPP Tracking Number listed above in all correspondence. If you have any questions, please call Jessica Cogburn of my staff at 501-324-9357 or email [jessica.cogburn@arkansas.gov](mailto:jessica.cogburn@arkansas.gov).

Sincerely,  
Jessica H.  
Cogburn  
for

Digitally signed by Jessica  
H. Cogburn  
Date: 2023.08.24  
14:59:21 -05'00'

Scott Kaufman  
State Historic Preservation Officer and Director, AHPP

cc: Randal Looney, Federal Highway Administration  
Dr. Melissa Zabecki, Arkansas Archeological Survey



**Sarah Huckabee Sanders**  
Governor  
**Shea Lewis**  
Interim Secretary

August 30, 2023

Mr. John Fleming  
Division Head  
Environmental Division  
Arkansas Department of Transportation  
P.O. Box 2261  
Little Rock, AR 72203-2261

Re: Randolph County – General  
Architectural Resources Survey – FHWA  
Pocahontas Bypass (S)  
ARDOT Job Number 101140  
AHPP Tracking Number 111434

Dear Mr. Fleming:

The staff of the Arkansas Historic Preservation Program (AHPP) reviewed the Architectural Resources Survey received August 14, 2023 for the above-referenced job.

Name/Bridge Number	ARDOT/FHWA NRHP Determination	AHPP Concurrence
Structure 1	Not Eligible	Yes
Structure 2	Not Eligible	Yes
Structure 3	Not Eligible	Yes
Structure 4	Not Eligible	Yes
Structure 5	Not Eligible	Yes
Structure 5a	Not Eligible	Yes
Structure 5b	Not Eligible	Yes
Structure 5c	Not Eligible	Yes
Structure 5d	Not Eligible	Yes
Structure 5e	Not Eligible	Yes
Structure 5f	Not Eligible	Yes
Structure 5g	Not Eligible	Yes
Structure 5h	Not Eligible	Yes
Structure 6 (RA0176)	Not Eligible	Yes
Structure 6a	Not Eligible	Yes
Structure 7	Not Eligible	Yes
Structure 7a	Not Eligible	Yes
Structure 8	Not Eligible	Yes
Structure 9	Not Eligible	Yes
Structure 10	Not Eligible	Yes
Structure 11	Not Eligible	Yes
Structure 12	Not Eligible	Yes
Structure 13	Not Eligible	Yes

Name/Bridge Number	ARDOT/FHWA NRHP Determination	AHPP Concurrence
Structure 14	Not Eligible	Yes
Structure 15	Not Eligible	Yes
Structure 16	Not Eligible	Yes
Structure 17	Not Eligible	Yes
Structure 18	Not Eligible	Yes


We appreciate the opportunity to review this undertaking. If you have any questions, please contact George Burson at (501) 324-9270 or at [George.Burson@arkansas.gov](mailto:George.Burson@arkansas.gov). Please refer to the AHPP Tracking Number above in any correspondence.

Sincerely,

George

Burson

*for*

 Digitally signed by George Burson  
Date: 2023.08.30  
11:12:16 -05'00'

Scott Kaufman

AHPP Director and State Historic Preservation Officer

cc: Mr. Randal Looney, Federal Highway Administration



## **U.S. Army Corps of Engineers (USACE)**

**Schmidt, Cassie P.**

---

**From:** CESWL-Regulatory <PR-R.CESWL-PR-R@usace.army.mil>  
**Sent:** Tuesday, August 1, 2023 2:29 PM  
**To:** Schmidt, Cassie P.; Mclean, Johnny L CIV USARMY CESWL (USA)  
**Subject:** RE: ARDOT Job 101140, Pocahontas Bypass (S) - Agency Coordination Letter

Ms. Cassie,

This is official notification that we have received your agency coordination letter and are now assigning it to our Regulatory Project Manager, Mr. Johnny McLean. You can contact him either through email at [johnny.l.mclean@usace.army.mil](mailto:johnny.l.mclean@usace.army.mil) or on the phone at 501-340-1382.

The Administrative Record Number assigned to this project is: SWL-2023-00211. Please use this number when communicating with us about your project.

For more information on the Regulatory Program, visit our website at:  
<http://www.swl.usace.army.mil/Missions/Regulatory.aspx>

Please let us know how we are doing by submitting your comments or suggestions on our Customer Service Survey: <https://regulatory.ops.usace.army.mil/customer-service-survey/>

Will Bullard

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**From:** Schmidt, Cassie P. <CPSchmidt@GarverUSA.com>  
**Sent:** Thursday, July 27, 2023 8:30 AM  
**To:** CESWL-Regulatory <PR-R.CESWL-PR-R@usace.army.mil>  
**Subject:** [URL Verdict: Neutral][Non-DoD Source] ARDOT Job 101140, Pocahontas Bypass (S) - Agency Coordination Letter

Dear Ms. Chitwood,

On behalf of the Arkansas Department of Transportation, please find the attached agency coordination letter for a proposed roadway project in Pocahontas, AR.

Sincerely,



**Cassie Schmidt**  
 Environmental Scientist/Environmental Specialist  
*Transportation Team*  
 📞 479-287-4673  
 📠 918-440-2886

**U.S. Fish and Wildlife Service (USFWS)**

See Appendix K

## **Tribal Coordination**

# QUAPAW NATION



P.O. Box 765  
Quapaw, OK 74363-0765

August 2, 2023

(918) 542-1853  
FAX (918) 542-4694

Randal Looney  
ARDOT  
700 West Capitol Ave Suite 3130  
Little Rock AR 72201

Re: ARDOT Job 101140 Pocahontas Bypass (S) in Randolph County AR

Dear Mr. Looney,

The Quapaw Nation Historic Preservation Program (QNHPP) has received notification of the proposed ARDOT Job 101140 Pocahontas Bypass (S) in Randolph County AR.

In accordance with the National Historic Preservation Act, (NHPA)[U.S.C. 470 §§ 470-470w-6] 1966, undertakings subject to the review process are referred to in S101 (d)(6)(A), which clarifies that historic properties may have religious and cultural significance to Indian tribes. Additionally, Section 106 of NHPA requires Federal agencies to consider the effects of their actions on historic properties (36 CFR Part 800) as does the National Environmental Policy Act (43 U.S.C. 4321 and 4331-35 and 40 CFR 1501.7(a) of 1969).

The Quapaw Nation has a vital interest in protecting its historic and ancestral cultural resources. The Quapaw Nation concurs with the Arkansas Department of Transportation recommendations that a cultural resources survey should be conducted. The Quapaw Nation looks forward to receiving the cultural resources survey report for the proposed project.

Should you have any questions or need any additional information, please feel free to contact Billie Burtrum at [bburtrum@quapawnation.com](mailto:bburtrum@quapawnation.com), please copy [section106@quapawnation.com](mailto:section106@quapawnation.com) to ensure additional information requests are reviewed in a timely manner. Thank you for consulting with the Quapaw Nation on this matter.

Sincerely,

**Billie Burtrum**

On behalf of  
-Everett Bandy  
Preservation Officer/ QNHPP Director  
Quapaw Nation  
P.O. Box 765  
Quapaw, OK 74363  
(w) 918-238-3100  
(f) 918-674-2456



## Osage Nation Historic Preservation Office

HAZAZA BOSN BANPOLA

**Date:** November 14, 2023

**File:** 2324-3690AR-11

**RE:** FHWA, Pocahontas Bypass (s), ARDOT 101140, Randolph County, Arkansas

Federal Highway Administration  
Arkansas Division, FHWA  
Randal Looney  
700 West Capitol Ave., Suite 3130  
Little Rock, AR 72201

*Sent via email*

Dear Mr. Looney,

The Osage Nation has received notification and accompanying information for the proposed project listed as FHWA, Pocahontas Bypass (s), ARDOT 101140, Randolph County, Arkansas. **The Osage Nation has great concerns for this project.**

Of utmost concern is the proposed project's impact to previously identified archaeological sites: 3RA421, 3RA524, 3RA549, 3RA550, 3RA551, 3RA601, and 3RA602.

Site 3RA551 has a spring associated with it making site 3RA551 a Sacred Site and as such the Osage Nation request a minimum 100 meter avoidance buffer around Site 3RA551 and the associated spring.

Sites 3RA421 (Martin Cemetery), 3RA524, and 3RA602 are all associated with historic cemeteries and should be avoided by the proposed project. Site 3RA602 should be subjected to ground penetrating radar to locate associated unmarked graves so that they will not be impacted by the proposed project.

Sites 3RA549, 3RA550, and 3RA601 are all undetermined in their eligibility for the National Register of Historic Places and should be subjected to further archaeological testing to include systematic shovel testing to determine their eligibility.

The Osage Nation requests monitoring by a representative of the Osage Nation of the proposed cultural resource survey and the subsequent construction of the proposed project.

In accordance with the National Historic Preservation Act, (NHPA) [16 U.S.C. 470 §§ 470-470w-6] 1966, undertakings subject to the review process are referred in S101 (d)(6)(A), which clarifies that historic properties may have religious and cultural significance to Indian tribes. Additionally, Section 106 of NHPA requires Federal agencies to consider the effects of their actions on historic properties (36 CFR Part 800) as does the National Environmental Policy Act (43 U.S.C. 4321 and 4331-35 and 40 CFR 1501.7(a) of 1969).

The Osage Nation has a vital interest in protecting its historic and ancestral cultural resources. **The Osage Nation anticipates a formal response to the Osage Nation request for a minimum 100 meter avoidance buffer around Site 3RA551 and the associated spring, avoidance of sites 3RA421 (Martin Cemetery), 3RA524, and 3RA602 with ground penetrating radar conducted at 3RA602 to locate associated unmarked graves, and additional testing of sites 3RA549, 3RA550, and 3RA601 to determine their eligibility for the National Register of Historic Places in regards to the proposed FHWA, Pocahontas Bypass (s), ARDOT 101140, Randolph County, Arkansas.**

OSAGE NATION HISTORIC PRESERVATION OFFICE

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Should you have any questions or need any additional information, please feel free to contact me at the number listed below. Thank you for consulting with the Osage Nation on this matter.

Andrea C. Hunter

Dr. Andrea A. Hunter  
Director, THPO

Deseray Wynn

Deseray Wynn  
Archaeologist

cc: Kristina Boykin, Section Head - Cultural Resources, Arkansas Department of Transportation



U.S. Department  
of Transportation  
**Federal Highway  
Administration**

**Arkansas Division**

July 27, 2023

700 West Capitol Ave  
Suite 3130  
Little Rock AR 72201  
(501) 324-6430

In Reply Refer To:  
ARDOT Job 101140  
Pocahontas Bypass (S)  
Randolph County, Arkansas  
HDA-AR

Mr. Joey Barbry, Jr.  
Tribal Historic Preservation Officer  
Tunica-Biloxi Tribe of Louisiana, Inc.  
P. O. Box 1589  
Marksville, LA 71351

Dear Mr. Barbry, Jr.:

This letter is written to initiate consultation between the Federal Highway Administration, Arkansas Division Office and the Tunica-Biloxi Tribe of Louisiana, Inc. regarding a federal-aid highway project that may potentially affect ancestral lands or properties that may be of religious or cultural significance to your Tribe.

The Arkansas Department of Transportation (ARDOT) is proposing a new location connection between Highway 90 to Highway 67, in Pocahontas, Arkansas (see enclosed map). Improvements would include an approximately 2.6-mile two-lane bypass on new location that would also connect with Highway 115 to help remove truck movement through Pocahontas. To date, a survey of existing records regarding previously recorded archeological sites has been conducted in the proposed study area, and six archeological sites (3RA0348, 3RA0421, 3RA0524, 3RA0549, 3RA0550, and 3RA0551) are listed in the records within or near the proposed project. In an effort to determine the existence of unknown archeological sites within the proposed project area, ARDOT is planning to conduct a cultural resources survey.

Please review this information and notify us of any constraints or concerns that you may have regarding this undertaking. We would greatly appreciate your input regarding not only this project but also sites or properties in the immediate area that might be of cultural or religious significance to your Tribe. If you have any questions or need additional information, please contact me at (501) 324-6430.

Sincerely,

A handwritten signature in black ink that reads "Randal Looney".

Randal Looney  
Environmental Coordinator

Enclosures





U.S. Department  
of Transportation  
**Federal Highway  
Administration**

**Arkansas Division**

July 27, 2023

700 West Capitol Ave  
Suite 3130  
Little Rock AR 72201  
(501) 324-6430

In Reply Refer To:  
ARDOT Job 101140  
Pocahontas Bypass (S)  
Randolph County, Arkansas  
HDA-AR

Mr. Everett Bandy  
Tribal Historic Preservation Officer  
Quapaw Nation  
P.O. Box 765  
Quapaw, OK 74363-0765

Dear Mr. Bandy:

This letter is written to initiate consultation between the Federal Highway Administration, Arkansas Division Office and Quapaw Nation regarding a federal-aid highway project that may potentially affect ancestral lands or properties that may be of religious or cultural significance to your Nation.

The Arkansas Department of Transportation (ARDOT) is proposing a new location connection between Highway 90 to Highway 67, in Pocahontas, Arkansas (see enclosed map). Improvements would include an approximately 2.6-mile two-lane bypass on new location that would also connect with Highway 115 to help remove truck movement through Pocahontas. To date, a survey of existing records regarding previously recorded archeological sites has been conducted in the proposed study area, and six archeological sites (3RA0348, 3RA0421, 3RA0524, 3RA0549, 3RA0550, and 3RA0551) are listed in the records within or near the proposed project. In an effort to determine the existence of unknown archeological sites within the proposed project area, ARDOT is planning to conduct a cultural resources survey.

Please review this information and notify us of any constraints or concerns that you may have regarding this undertaking. We would greatly appreciate your input regarding not only this project but also sites or properties in the immediate area that might be of cultural or religious significance to your Nation. If you have any questions or need additional information, please contact me at (501) 324-6430.

Sincerely,

A handwritten signature in black ink that reads "Randal Looney".

Randal Looney  
Environmental Coordinator

Enclosure



U.S. Department  
of Transportation  
**Federal Highway  
Administration**

**Arkansas Division**

July 27, 2023

700 West Capitol Ave  
Suite 3130  
Little Rock AR 72201  
(501) 324-6430

In Reply Refer To:  
ARDOT Job 101140  
Pocahontas Bypass (S)  
Randolph County, Arkansas  
HDA-AR

Dr. Andrea A. Hunter  
Tribal Historic Preservation Officer  
The Osage Nation  
627 Grandview Avenue  
Pawhuska, OK 74056

Dear Dr. Hunter:

This letter is written to initiate consultation between the Federal Highway Administration, Arkansas Division Office and the Osage Nation regarding a federal-aid highway project that may potentially affect ancestral lands or properties that may be of religious or cultural significance to your Nation.

The Arkansas Department of Transportation (ARDOT) is proposing a new location connection between Highway 90 to Highway 67, in Pocahontas, Arkansas (see enclosed map). Improvements would include an approximately 2.6-mile two-lane bypass on new location that would also connect with Highway 115 to help remove truck movement through Pocahontas. To date, a survey of existing records regarding previously recorded archeological sites has been conducted in the proposed study area, and six archeological sites (3RA0348, 3RA0421, 3RA0524, 3RA0549, 3RA0550, and 3RA0551) are listed in the records within or near the proposed project. In an effort to determine the existence of unknown archeological sites within the proposed project area, ARDOT is planning to conduct a cultural resources survey.

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Sincerely,

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Randal Looney  
Environmental Coordinator

Enclosure



U.S. Department  
of Transportation  
**Federal Highway  
Administration**

**Arkansas Division**

July 27, 2023

700 West Capitol Ave  
Suite 3130  
Little Rock AR 72201  
(501) 324-6430

In Reply Refer To:  
ARDOT Job 101140  
Pocahontas Bypass (S)  
Randolph County, Arkansas  
HDA-AR

Ms. Tonya Tipton  
Tribal Historic Preservation Officer  
Shawnee Tribe  
P.O. Box 189  
Miami, OK 74355

Dear Ms. Tipton:

This letter is written to initiate consultation between the Federal Highway Administration, Arkansas Division Office and Shawnee Tribe regarding a federal-aid highway project that may potentially affect ancestral lands or properties that may be of religious or cultural significance to your Tribe.

The Arkansas Department of Transportation (ARDOT) is proposing a new location connection between Highway 90 to Highway 67, in Pocahontas, Arkansas (see enclosed map). Improvements would include an approximately 2.6-mile two-lane bypass on new location that would also connect with Highway 115 to help remove truck movement through Pocahontas. To date, a survey of existing records regarding previously recorded archeological sites has been conducted in the proposed study area, and six archeological sites (3RA0348, 3RA0421, 3RA0524, 3RA0549, 3RA0550, and 3RA0551) are listed in the records within or near the proposed project. In an effort to determine the existence of unknown archeological sites within the proposed project area, ARDOT is planning to conduct a cultural resources survey.

Please review this information and notify us of any constraints or concerns that you may have regarding this undertaking. We would greatly appreciate your input regarding not only this project but also sites or properties in the immediate area that might be of cultural or religious significance to your Tribe. If you have any questions or need additional information, please contact me at (501) 324-6430.

Sincerely,

A handwritten signature in black ink that reads "Randal Looney".

Randal Looney  
Environmental Coordinator

Enclosure



U.S. Department  
of Transportation  
**Federal Highway  
Administration**

**Arkansas Division**

July 27, 2023

700 West Capitol Ave  
Suite 3130  
Little Rock AR 72201  
(501) 324-6430

In Reply Refer To:  
ARDOT Job 101140  
Pocahontas Bypass (S)  
Randolph County, Arkansas  
HDA-AR

Mr. Acee Watt  
Tribal Historic Preservation Officer  
United Keetoowah Band of  
Cherokee Indians in Oklahoma  
P.O. Box 746  
Tahlequah, OK 74465

Dear Mr. Watt:

This letter is written to initiate consultation between the Federal Highway Administration (FHWA), Arkansas Division Office and the United Keetoowah Band of Cherokee Indians in Oklahoma regarding a federal-aid highway project that may potentially affect ancestral lands or properties that may be of religious or cultural significance to your Band.

The Arkansas Department of Transportation (ARDOT) is proposing a new location connection between Highway 90 to Highway 67, in Pocahontas, Arkansas (see enclosed map). Improvements would include an approximately 2.6-mile two-lane bypass on new location that would also connect with Highway 115 to help remove truck movement through Pocahontas. To date, a survey of existing records regarding previously recorded archeological sites has been conducted in the proposed study area, and six archeological sites (3RA0348, 3RA0421, 3RA0524, 3RA0549, 3RA0550, and 3RA0551) are listed in the records within or near the proposed project. In an effort to determine the existence of unknown archeological sites within the proposed project area, ARDOT is planning to conduct a cultural resources survey.

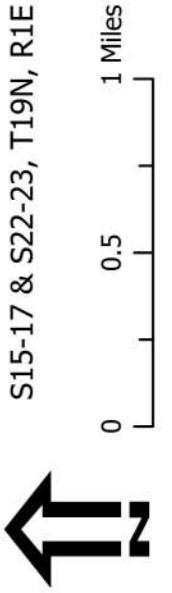
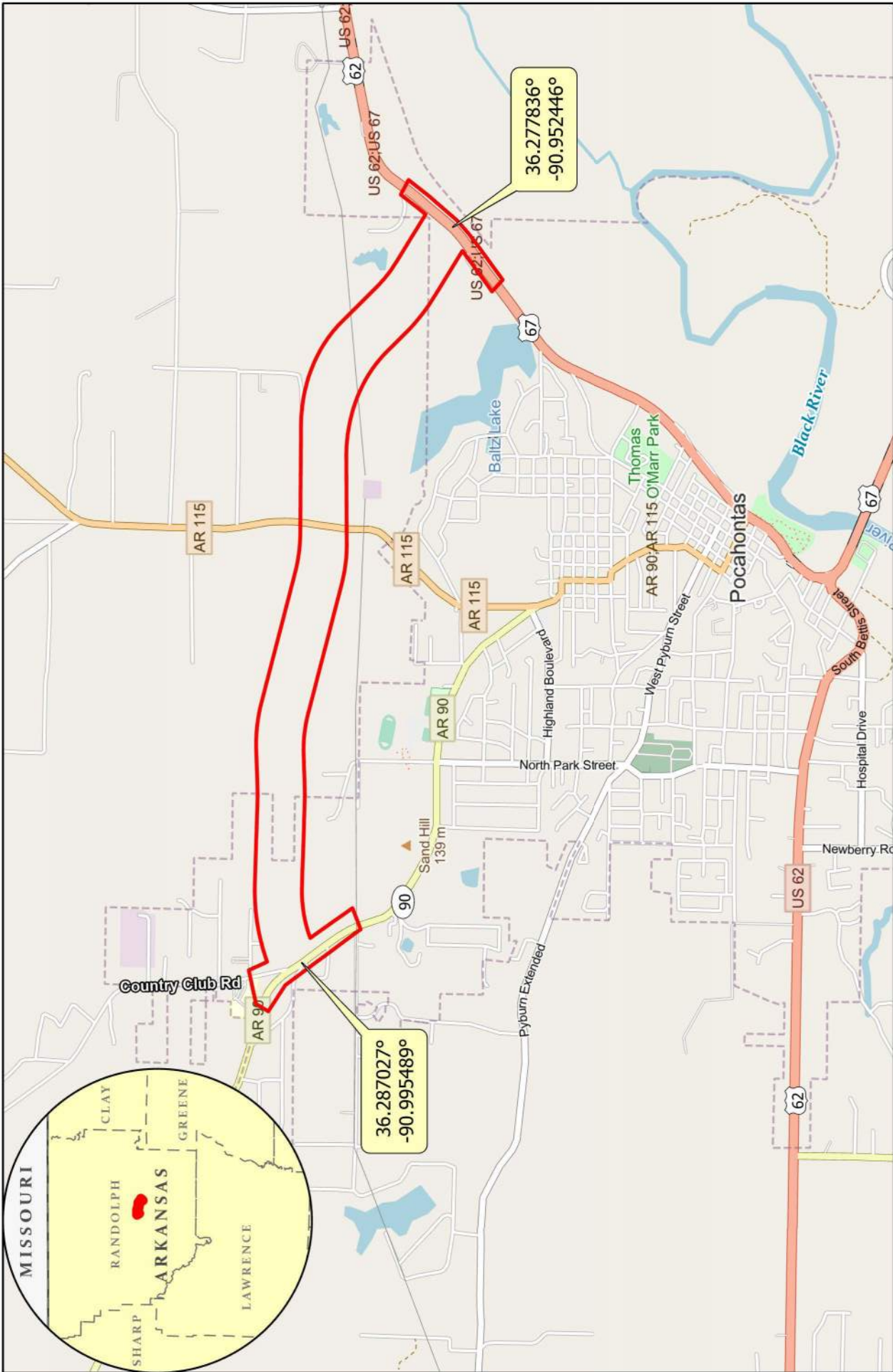
Please review this information and notify us of any constraints or concerns that you may have regarding this undertaking. We would greatly appreciate your input regarding not only this project but also sites or properties in the immediate area that might be of cultural or religious significance to your Band. If you have any questions or need additional information, please contact me at (501) 324-6430.

Sincerely,

A handwritten signature in black ink that reads "Randal Looney". The signature is written in a cursive style.

Randal Looney  
Environmental Coordinator

Enclosure



 Study Area

**PROJECT LOCATION MAP**  
 ARDOT Job 101140, Pocahontas Bypass (S)  
 Pocahontas, Randolph County, Arkansas



Esri Open Street Basemap

## **Appendix E: Community Impacts and Environmental Justice Evaluation**

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## **Social, Environmental Justice, Community Impacts and Economics Technical Memorandum**

This socioeconomic, environmental justice, and community impacts assessment describes the existing conditions in the project study area and evaluates potential impacts with or without the proposed project.

The geographic area considered for analysis of existing social conditions and impacts consists of the 13 census blocks and the four census block groups in which the project study area is located. A map of the census blocks and census block groups is provided at the end of this document. Reference geographies include the City of Pocahontas and Randolph County. Pocahontas is a city located in northeastern Arkansas and near the center of Randolph County. The purpose of this project is to reduce heavy truck traffic and improve mobility in and near the City of Pocahontas' Central Business District (CBD). The proposed project would involve providing a two-lane roadway on new location north of the CBD that connects Highway 67 and Highway 90.

### **What is Environmental Justice and how do we deal with it?**

Environmental Justice refers to social equity in bearing the burden of adverse environmental impacts. In the past, minorities and low-income populations have experienced disproportionate impacts caused by construction of transportation projects. In response to this concern, an Executive Order (EO) was issued by President Bill Clinton in 1994. Among other things, it directed that:

“Each Federal agency shall make achieving environmental justice part of its mission by identifying and addressing, as appropriate, disproportionately high and adverse human health or environmental effects of its programs, policies, and activities on minority populations and low-income populations.”

-Executive Order 12898, *Federal Actions to Address Environmental Justice in Minority Populations and Low-Income Populations*, 1994.

Projects involving a federal action (funding, permit, or land) must comply with EO 12898, *Federal Actions to Address Environmental Justice in Minority Populations and Low-Income Populations*. The environmental justice evaluation determines whether low-income or minority populations would suffer disproportionately high and adverse effects of an action. Low-income is defined based on the Department of Health and Human Services (DHHS) 2022 poverty guidelines, which is \$27,750 for a family of four (4).

The Federal Highway Administration defines Minority as a person who is:

- Black (having origins in any of the black racial groups of Africa);
- Hispanic (of Mexican, Puerto Rican, Cuban, Central or South American or other Spanish culture or origin, regardless of race);

- Asian American (having origins in any of the original peoples of the Far East, Southeast Asia, the Indian subcontinent, or the Pacific Islands); or
- American Indian and Alaskan Native (having origins in any of the original people of North America and who maintains cultural identification through tribal affiliation or community recognition);
- Native Hawaiian and Other Pacific Islander (having origins in any of the original peoples of Hawaii, Guam, Samoa or Pacific Islands).

## **What is the community composition and are there Environmental Justice/Title VI populations present?**

Title VI of the Civil Rights Act of 1964 prohibits discrimination based on race, color, sex, national origin, religion, or disability under any program or activity receiving federal financial assistance.

Data gathered from the U.S. Census Bureau 2022 American Community Survey 5-year Estimates found that all census block groups report median household incomes above the 2022 DHHS poverty guideline. The median household income within the study area ranges from \$32,383 to \$60,650; however, the percentage of households below the poverty level ranges from 13-36%. For the study area, the overall median household income is \$47,185 and approximately 21% of the 2,094 households are below the poverty level, which is comparable to the city (20%) and county (19%) percentages.

Approximately 7% of the total population identify as minority for the study area, which is lower than the city (18%) and county (11%) percentages. Out of the 13 census blocks in the study area, one census block is considered a high minority census area (Census Tract 9603.01, Block Group 1, Block 1009) and has a minority population (Native Hawaiian and Other Pacific Islander) consisting of 50% of the total population. Other census blocks have minority populations ranging from 2% to 50%. In addition, Marshallese populations were also identified within the City of Pocahontas.

The LEP population within the study area is approximately 2% of the total population five years and older, which is comparable with the city (3%) and county (2%) percentages. One of the four census block groups in the study area (Census Tract 9603.02, Block Group 4) has the highest percentage of LEP individuals (speaking Asian or Pacific Island languages), with approximately 10% of the population five years and older having limited English proficiency.

Disadvantaged populations include individuals over 65 years of age and persons with a disability, which are reported at approximately 21% of the total population and 30% of the population 18 years and older.



## **How would community service facilities and people be affected during construction?**

The project study area primarily passes through undeveloped areas but also occurs adjacent to business and residential properties. The build alternatives would not separate or further divide any existing communities or neighborhoods. Both Alternatives A and B traverse undeveloped properties and would not isolate any existing distinct developments, residential or commercial; therefore, no impacts to community cohesion are anticipated by either build alternative.

Community facilities and emergency services within the study area include three hospital/medical service facilities, three senior living and rehabilitation centers, and an elementary school. One cemetery is located immediately north of the study area and one is located immediately south of the study area. The build alternatives would not result in a displacement of any of these community facilities and would not adversely affect services provided by these or nearby facilities.

The build alternatives are anticipated to allow truck traffic to be routed away from the CBD, thereby cutting down congestion, reducing travel times for emergency services, and improving access for commercial, residential, and community facilities in the area.

Constructions delays, dust, noise, and exhaust fumes from equipment would temporarily affect residences and businesses along the project corridor. Access to homes and businesses would be maintained during construction.

The project would pose some property impacts. Both build alternatives would impact 13 residential or commercial property owners. At this time, both Alternatives A and B are anticipated to require two business relocations:

- TLC Health Care at 103 Country Club Road
- Health-Way Medical Supply / Rotech Healthcare at 3054 Highway 90 W

Both businesses sell home medical equipment and supplies and are located near the intersection of Highway 90 and Country Club Road.

## **What measures are proposed to minimize or avoid effects to social and economic resources?**

The right of way acquisition necessary for the proposed project would be minimized as much as possible. The opportunity for businesses to relocate within the vicinity of the project area may be an option. The Department's design engineers would work closely with residents and business owners regarding driveway configurations and other specific property concerns. Property acquisition would be completed in accordance with the federal Uniform Relocation and Real Property Acquisition Policies Act of 1970.

## **Would the project have unavoidable adverse effects on Environmental Justice/Title VI populations that could not be mitigated?**

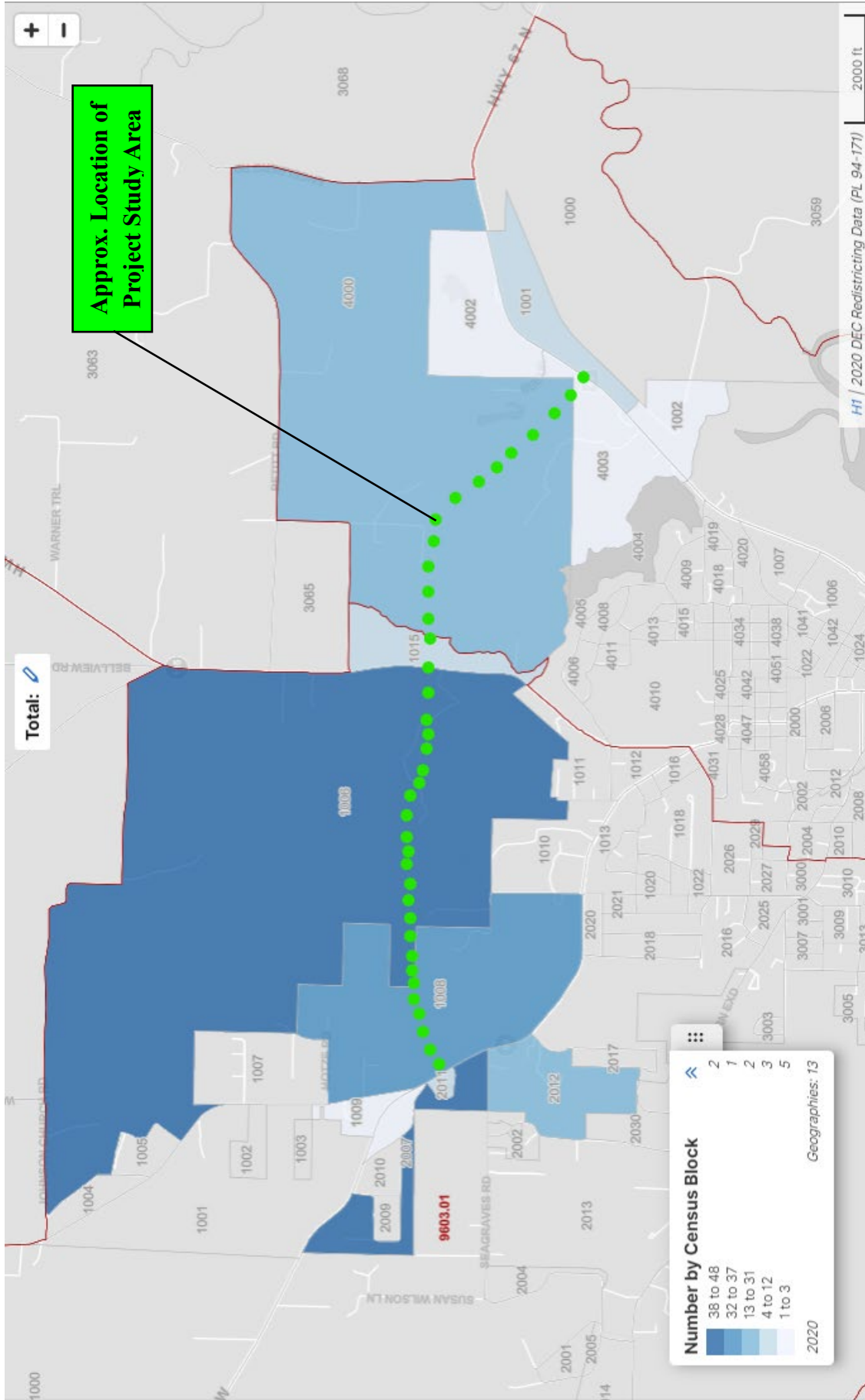
U.S. Census Bureau Data indicate a low presence of low-income, minority, and limited English proficiency (LEP) populations within the study area as a whole. However, small clusters of these Environmental Justice/Title VI populations appear to be present. While some impacts would be borne by those populations, the proposed project would not cause disproportionately high and adverse effects on any minority or low-income populations in accordance with the provisions of EO 12898 and FHWA Order 6640.23. Further steps to minimize the impacts would be considered during the final design phase. No further EJ analysis is required.

## **How has the public been involved?**

Public interaction is essential to involve all populations in the study area to assist in making transportation decisions. Allowing the public early and on-going interaction allows them the opportunity to be a part of the transportation decision-making process.

An in-person public involvement meeting was conducted on October 24, 2023 and was well attended. There were 141 in-person attendees and 950 visitors to the project website. The proposed project has generated a wide range comments and suggestions. The majority of the comments received indicated a need to construct a new roadway connecting Highway 67 and Highway 90.

**Census Tracts (CT), Block Groups (BG), and Census Blocks within the Project Study Area:**



## Race and Ethnicity Population Data

Geographic Area Name	Total Population	White alone	Hispanic or Latino	Black or African American	American Indian and Alaska Native	Asian	Native Hawaiian and Other Pacific Islander	Some Other Race	Two or more races	Percent Minority
Randolph County, Arkansas	18,571	89.1%	2.1%	0.8%	0.5%	0.4%	3.2%	0.1%	3.9%	10.9%
Pocahontas city, Arkansas	7,371	81.8%	3.4%	1.4%	0.5%	0.7%	7.7%	0.2%	4.2%	18.2%
CT 9603.01	4,320	84.4%	2.9%	1.1%	0.5%	0.5%	6.7%	0.3%	3.6%	15.6%
BG 1; CT 9603.01	1,080	94.1%	1.6%	0.6%	0.3%	0.4%	0.9%	0.6%	1.5%	5.9%
Block 1006	103	98.1%	0.0%	0.0%	1.0%	0.0%	0.0%	0.0%	1.0%	1.9%
Block 1008	294	96.9%	0.0%	1.7%	0.0%	0.3%	0.0%	0.7%	0.3%	3.1%
Block 1009	8	50.0%	0.0%	0.0%	0.0%	0.0%	25.0%	0.0%	25.0%	50.0%
Block 1015	7	71.4%	14.3%	0.0%	0.0%	0.0%	0.0%	0.0%	14.3%	28.6%
BG 2; CT 9603.01	1,312	88.9%	2.0%	0.6%	0.2%	0.7%	2.9%	0.0%	4.8%	11.1%
Block 2007	100	98.0%	1.0%	0.0%	0.0%	0.0%	1.0%	0.0%	0.0%	2.0%
Block 2008	7	85.7%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	14.3%	14.3%
Block 2011	20	70.0%	5.0%	0.0%	0.0%	0.0%	0.0%	0.0%	25.0%	30.0%
Block 2012	48	93.8%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	6.3%	6.3%
CT 9603.02	3,979	81.9%	3.6%	1.6%	0.5%	0.7%	7.0%	0.1%	4.6%	18.1%
BG 1; CT 9603.02	1,124	78.7%	3.6%	1.5%	0.7%	1.2%	9.0%	0.3%	5.1%	21.3%
Block 1001	26	84.6%	0.0%	0.0%	0.0%	3.8%	3.8%	0.0%	7.7%	15.4%
Block 1002	5	60.0%	0.0%	0.0%	20.0%	0.0%	20.0%	0.0%	0.0%	40.0%
BG 4; CT 9603.02	1,367	82.5%	3.4%	0.7%	0.5%	0.5%	7.8%	0.1%	4.5%	17.5%
Block 4000	64	98.4%	0.0%	1.6%	0.0%	0.0%	0.0%	0.0%	0.0%	1.6%
Block 4002	11	72.7%	18.2%	0.0%	0.0%	0.0%	9.1%	0.0%	0.0%	27.3%
Block 4003	19	52.6%	15.8%	0.0%	0.0%	0.0%	0.0%	0.0%	31.6%	47.4%
Study Area Total (census block data)	712	93.3%	1.1%	0.8%	0.3%	0.3%	0.8%	0.3%	3.1%	6.7%

Source: US Census Bureau, 2020 Census, Table P2.

**Income and LEP Data**

Geographic Area Name	Total Number of Households	Percent Households Below Poverty Level	Median household income	Total Population 5 Years and Older	Speak Spanish	Speak other Indo-European languages	Speak Asian and Pacific Island languages	Total Percent LEP
Randolph County	7,190	19%	\$45,993	17,481	0.5%	0.1%	0.9%	1.5%
Pocahontas city	2,981	20%	\$38,912	6,824	0.7%	0.2%	2.3%	3.2%
CT 9603.01	1,715	18%	\$38,513	4,268	0.0%	0.3%	0.0%	0.4%
BG 1; CT 9603.01	311	<b>27%</b>	\$60,650	916	0.0%	0.0%	0.0%	0.0%
BG 2; CT 9603.01	705	13%	\$32,383	1,668	0.0%	0.0%	0.1%	0.1%
CT 9603.02	1,550	24%	\$38,021	3,252	1.5%	0.0%	4.7%	6.2%
BG 1; CT 9603.02	352	<b>36%</b>	\$48,929	1,064	0.0%	0.0%	4.7%	<b>4.7%</b>
BG 4; CT 9603.02	726	20%	\$45,441	1,470	3.4%	0.0%	6.9%	<b>10.3%</b>
Study Area Total (block group data)	2,094	21%	\$47,185	5,118	1.0%	0.0%	3.0%	2.4%

Source: US Census Bureau, 2022 American Community Survey 5-year Estimates.

**Age, Gender, and Disability Demographics**

Geographic Area Name	Total Population	Percent Male	Percent Female	Percent 65 Years and Older	Total Population 18 Years and Older:	Percent Population with a Disability
Randolph County	18,619	50.4%	49.6%	20%	13,924	27%
Pocahontas city	7,384	48.4%	51.6%	20%	5,301	31%
CT 9603.01	4,643	48.4%	51.6%	23%	3,165	36%
BG 1; CT 9603.01	969	54.8%	45.2%	45%	547	39%
BG 2; CT 9603.01	1,770	40.3%	59.7%	24%	1,299	36%
CT 9603.02	3,506	50.0%	50.0%	16%	2,661	26%
BG 1; CT 9603.02	1,166	58.3%	41.7%	9%	880	24%
BG 4; CT 9603.02	1,583	45.7%	54.3%	13%	1,145	23%
Study Area Total (block group data)	5,488	48.3%	51.7%	21%	3,871	30%

Source: US Census Bureau, 2022 American Community Survey 5-year Estimates.

## Appendix F: Noise

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## SCREENING LEVEL NOISE ANALYSIS REPORT

ARDOT JOB NUMBER 101140

POCAHONTAS BYPASS (S) EA

### Introduction

The Arkansas Department of Transportation (ARDOT) proposes to construct a new two-lane roadway between Highway 90 and Highway 67 north of the Central Business District (CBD) in the City of Pocahontas, Randolph County, Arkansas. The project length is approximately 2.6 miles. The purpose of the project is to reduce heavy truck traffic and improve mobility in the Pocahontas CBD.

The purpose of this report is to evaluate possible noise impacts from the proposed project in accordance with the Federal Highway Administration (FHWA) Guidelines for Traffic Noise Analysis of Highway Projects. A screening level noise analysis was conducted according to the ARDOT 2018 Noise Policy (noise policy), and the results are discussed in this report.

### Fundamentals of Sound and Noise

Noise is defined as unwanted or excessive sound. The three basic parameters of how noise affects people are summarized below.

*Intensity* is determined by the level of sound expressed in units of decibels (dB). A 3 dB change in sound level is barely perceptible to most people in typical outdoor settings. However, a 5 dB increase presents a noticeable change, and a 9-10 dB increase in sound level is typically judged to be twice as loud as the original sound, while a 9-10 dB reduction is half as loud. Outdoor conversation at normal levels at a distance of 3 feet becomes difficult when the sound level exceeds the mid-60 dBA range.

*Frequency* is related to the tone or pitch of the sound. The amplification or attenuation of different frequencies of sound to correspond to the way the human ear hears these frequencies is referred to as "A-weighting." The A-weighted sound level in decibels is expressed as dBA.

*Variation* with time occurs because most noise fluctuates from moment to moment. A single level called the equivalent sound level (Leq) is used to compensate for this fluctuation. The Leq is a steady sound level containing the same amount of sound energy as the actual time-varying sound evaluated over the same time period. The Leq averages the louder and quieter moments but gives more weight to the louder moments.

For highway noise assessment purposes, Leq is typically evaluated over the worst 1-hour period. The Leq commonly describes sound levels at locations of outdoor human use and activity and reflects the conditions that will typically produce the worst traffic

noise (e.g., the highest traffic volumes traveling at the highest possible speeds). Doubling the number of sources (i.e., vehicles) increases the hourly equivalent sound level (Leq) by approximately 3 dB, which is usually the smallest change that people can detect without specifically listening for the change.

Many factors affect traffic noise levels, including distance, topography, land cover, buildings, traffic volumes and speeds, and vehicle type. For example, the Leq would generally decrease by 4.5 dBA for doubling of distances when the ground cover is grass, pasture, or other sound absorbing cover. When hard ground cover such as gravel, paved surfaces, and water is encountered, noise levels can be expected to decrease typically by 3 dBA for doubling of distances.

Vehicles classified by FHWA as medium and heavy trucks generate greater sound levels. Higher truck volumes combined with higher highway speeds will produce greater potential for noise impacts. In general, speed increases from 30 to 45 mph will increase sound by 5 to 6 dBA and by another 3 dBA with speed increases to 55 mph. Quiet daytime noise levels in rural areas with no significant noise sources might be in the 30 to 40 dBA range, while quiet daytime noise levels in suburban areas might be in the 40 to 50 dBA range.

### Noise Impact and Abatement Criteria

Traffic noise impacts are determined by comparing design year worst noise hour Leq(h) values to: (1) a set of NAC defined by the FHWA for different land use categories; and (2) existing Leq(h) values. Table 1 shows the land uses classified as Activity Categories A through G and their corresponding Noise Abatement Criteria (NAC).

**Table 1 – Noise Abatement Criteria (NAC)**

Activity Category	Leq(h) dBA	Evaluation Location	Activity Description
A	57	Exterior	Lands on which serenity and quiet are of extraordinary significance and serve an important public need and where the preservation of those qualities is essential if the area is to continue to serve its intended purpose.
B*	67	Exterior	Residential properties.
C*	67	Exterior	Active sport areas, amphitheaters, auditoriums, campgrounds, cemeteries, day care centers, hospitals, libraries, medical facilities, parks, picnic areas, places of worship, playgrounds, public meeting rooms, public or nonprofit institutional structure, radio stations, recording studios, recreation areas, Section 4(f) sites, schools, television studios, trails, and trail crossings.
D	52	Interior	Auditoriums, day care centers, hospitals, libraries, medical facilities, places of worship, public meeting rooms, public or nonprofit institutional structure, radio studios, recording studios, schools, and television studios.
E*	72	Exterior	Hotels, motels, offices, restaurants/bars, and other developed lands, properties or activities not included in A-D, or F.



Activity Category	Leq(h) dBA	Evaluation Location	Activity Description
F	---	---	Agriculture, airports, bus yards, emergency services, industrial, logging, maintenance facilities, manufacturing, mining, rail yards, retail facilities, shipyards, utilities (water resources, water treatment, electrical), and warehousing.
G	---	---	Undeveloped lands that are not permitted.

\*Includes undeveloped lands permitted for this activity category.

A noise impact occurs when at a given receptor future noise levels approach by 1 dB, meet, or exceed the FHWA NAC for its activity category for the design year. A substantial increase occurs when the future noise levels exceed existing noise levels by 10 dBA at a given receptor. Consideration of noise abatement measures is required when the NAC value is approached or exceeded, or when a substantial increase is predicted. Aside from alignment shifts and overall receptor avoidance, noise barriers (walls or berms) are the most common noise abatement measure.

A noise sensitive receptor (receptor) is defined as a representative location of a noise sensitive area for various land uses. Most receptors associated with highway traffic noise analysis are categorized as Noise Abatement Criteria (NAC) Activity Category B (residential) and C (campgrounds, parks, places of worship). A receptor can represent a noise-sensitive area, such as the backyard of a single family, restaurant seating area or a park bench. A receptor can also represent the location of a group of receptors with similar land uses.

### Screening Level Noise Analysis

A screening analysis may be performed for projects that are unlikely to cause noise impacts and/or where noise abatement measures are likely to be unfeasible for engineering reasons. Factors common to these types of projects include low traffic volumes, slower speeds, the presence of few or no receptors, and the need for roadway access points (driveways, roadway intersections, etc.). For screening analysis purposes, the ARDOT noise policy requires determining noise levels within 4 dBA of the NAC value. The screening analysis threshold would therefore be 63 dBA for Activity Categories B and C.

Screening analysis results represent a worst-case scenario with higher sound levels than would be expected in detailed modeling and may be used to determine the need for detailed analysis if noise impacts are likely and the placement of noise barriers are feasible. It may also be used for projects that lack receptors in order to assess impacts on undeveloped or developing land.

### Project Evaluation and Screening Analysis Results

Based on a traffic study conducted for the proposed project, Highways 90, 115, and 67 have low existing and future traffic volumes (less than 10,000 average daily traffic), a factor associated with low noise levels. Additionally, noise barriers would not be feasible due to both topography and established land uses requiring access points to the proposed roadway. Therefore, a screening analysis was determined appropriate for this project based on the low traffic volumes and roadway access requirements.

NAC B and C receptors were identified in the study area (up to 400 feet from the proposed alternatives). Table 2 shows the identified noise sensitive receptors for each alternative and type of facilities associated within each category. Both alternatives share the same receptors with the exception of Alternative A, which is also in the vicinity of a cemetery.

**Table 2 – Identified Noise Sensitive Receptors**

Alternative	Activity Category	Leq(h) dBA	Facilities
A	B*	67	14 Residential
	C*	67	1 school, 1 senior living facility, 1 historic cemetery
B	B*	67	14 Residential
	C*	67	1 school, 1 senior living facility

\*Includes undeveloped lands permitted for this activity category.

The FHWA Traffic Noise Model Version 2.5 (TNM) software program is used to predict existing and future Leq(h) traffic noise levels. The TNM straight line model used in the screening level analysis uses the existing year and design year traffic and roadway information. This modeling allows for reasonable estimates of traffic noise using varying offset distances from the highway. Receivers (discrete points modeled in the TNM program to represent a noise sensitive receptor) are incrementally placed away from the roadway centerline to determine the distances to which noise impacts and noise levels within 4 dBA of the NAC extend. The model assumes that the roadway and receivers were located at the same elevation with no intervening barriers such as topography or dense vegetation.

Alternatives A and B follow the same proposed alignment for approximately 0.85 mile before splitting for the remaining 1.8 miles, which are also on new alignment for both alternatives. Ambient noise measurements were taken (shown in Exhibit A and listed in Table 3) and compared to the TNM predicted noise levels of the new location roadway alternatives.

**Table 3 – Identified Ambient Noise Measurements and Location**

Site #	General Location	Recorded dB	Segment*	Latitude	Longitude
POC A-1	StoneBridge Senior Living Facility –Camp Rd	47.9	1	36.288517°	-90.994162°
POC A-2	Randolph Co Nursing Home – Camp Rd	42.3	1	36.289294°	-90.990333°
POC A-3	Benbrock Rd	40.2	1	36.285768°	-90.984535°
POC A-4	Private Drive north of Radio Dr	44.7	2	36.279867°	-90.956109°
POC A-5	Bee Dr	47.8	2	36.281378°	-90.952613°
POC A-6	Cardinal Trl	38.8	2	36.286713°	-90.960940°

\* Segment 1 = AR 90 to AR 115; Segment 2 = AR 115 to US 67

The TNM modeling was completed using the existing year 2025 and design year 2045 (future build) traffic and roadway information. The purpose of the modeling was to determine the distances correlating to the 66 dBA noise impact level for Activity Category B and C receptors under existing, future build, and future no-build conditions. Receivers were incrementally extended from the centerline of the proposed build alternatives to compare modeled data to ambient measurement readings. Table 4 shows the results for roadway sections within the study area. The calculation and input data (see Noise Data Worksheets) and figures (see Exhibit B and C) showing the predicted noise impact contours and receptors are attached.

### **Build Alternatives**

As indicated in Table 4, a substantial increase in noise level is not predicted ( $\geq 10$  dBA); however, minor to moderate increases could occur (increases in noise levels up to 7 dBA) according to ambient measurements. Because both alternatives were modeled under the same traffic conditions, typical sections, and speeds, TNM results for NBZ distances were identical. The proposed width of the roadway encompasses the future build 66 dBA for both segments. Additionally, no existing residences fall within the 63 dBA screening analysis threshold at a distance of 25 feet from the proposed roadway centerline, or approximately 5 feet from the proposed edge-of-pavement, under the future build conditions. Noise impacts are not anticipated under either Build Alternative.

### **No-Build Alternative**

The No-Build condition is considered to be on the existing route through Pocahontas, from US 67 to AR 90 and is in close proximity to 187 receptors as shown in Exhibit C. Four of these receptors are impacted under existing conditions; all of these receptors are located adjacent to US 67 in downtown Pocahontas. Under future conditions (higher forecasted traffic), six receptors would be impacted as they approach or exceed the NAC of 66 dBA for the future No-Build. No substantial increases ( $\geq 10$  dBA) are predicted.

### **Conclusion**

The noise level increases under the Build Alternatives are predicted to range from less than 1 dBA up to 7 dBA, which is categorized as minor to moderate, and would not constitute as a noise impact. Predicted noise levels along the Build Alternatives neither approach nor exceed the NAC levels for Category B and C receptors as defined in Table 1. Therefore, no traffic noise impacts are anticipated as a result of either future Build Alternative. Increases in noise levels may occur during the construction phase of the project. These increases would be temporary, of limited duration, and have minor adverse effects on land use and activities in the project area. Under future conditions, the No-Build Alternative would result in a noise impact to six receptors with predicted noise levels at or above 66 dBA. No substantial increases in noise levels were predicted to occur under the future No-Build Alternative with minor noise level increases at less than 1 dBA. Based on these results, a detailed noise analysis is not required for the project.

**Table 4 – Noise Level Results for Compatibility Planning – Build Alternatives**

Location	2025		2045		Ambient Measurements (dBA)	NAC Receptors Existing 66dB NBZ	NAC Impacted Receptors Proposed 66dB NBZ	NAC Receptors Within Future 63dB NBZ	Impacted Receptors by Substantial Increase
	Distance (feet)*	Leq(h), dBA**	Distance (feet)*	Leq(h), dBA**					
AR 90	36	66	42	66	-	0	0	0	0
	50	64	50	65					
	68	63	80	63					
	100	61	100	62					
	150	57	150	57					
	200	54	200	54					
AR 115	33	66	40	66	-	0	0	0	0
	50	64	50	65					
	62	63	75	63					
	100	61	100	61					
	150	56	150	57					
	200	53	200	54					
US 67	50	70	50	71	-	0	0	6	0
	100	67	100	68					
	112	66	135	66					
	150	65	150	65					
	180	63	200	63					
	200	62	250	61					
<b>No-Build</b>									
US 90 West of AR 115	35	66	45	66	-	0	0	2	0
	50	65	50	65					
	70	63	80	63					
	100	61	100	62					
	150	59	150	60					
	200	55	200	56					
US 90 from AR 115 to US 67	30	66	38	66	-	0	0	3	0
	50	64	50	65					
	60	63	70	63					
	100	60	100	61					
	150	56	150	57					
	200	54	200	55					
US 67 East of US 90	50	71	50	72	-	4	2	6	0
	100	67	100	68					
	130	66	150	66					

ARDOT Job 101140: Pocahontas Bypass (S) EA

Location	2025		2045		Ambient Measurements (dBA)	NAC Receptors Existing 66dB NBZ	NAC Impacted Receptors Proposed 66dB NBZ	NAC Receptors Within Future 63dB NBZ	Impacted Receptors by Substantial Increase						
	Distance (feet)*	Leq(h), dBA**	Distance (feet)*	Leq(h), dBA**											
Segment 1	150	65	200	64	-	0	0	0	0						
	195	63	210	63											
	250	61	250	61											
	25	63													
	50	59													
	100	56													
	150	54													
	200	51													
	250	48													
	300	46													
	350	44 (50)†													
	400	43													
	485	41 (45)†													
	500	41													
	550	39													
600	39														
650	38														
700	37														
		755	36 (42)†	47.9 (POC A-1)											
Segment 2	25	61			-	0	0	0	0						
	50	58													
	100	54													
	155	52													
	200	49													
	250	46													
	300	44													
	350	43													
	400	41													
	450	40													
	500	39													
	550	38													
										42.3 (POC A-2)					
										40.2 (POC A-3)					
										44.7 (POC A-4)					

Location	2025		2045		Ambient Measurements (dBA)	NAC Receptors Existing 66dB NBZ	NAC Impacted Receptors Proposed 66dB NBZ	NAC Receptors Within Future 63dB NBZ	Impacted Receptors by Substantial Increase
	Distance (feet)*	Leq(h), dBA**	Distance (feet)*	Leq(h), dBA**					
			590	37 (41)†	38.8 (POC A-6)				
			650	36	-				
			900	32 (48)†	47.8 (POC A-5)				
<b>Alternative B</b>									
<b>Segment 1</b>			25	63					
			50	60					
			100	56					
			150	54	-				
			200	51					
			250	48					
			300	46					
			350	44 (50)†	47.9 (POC A-1)				
		-	N/A	400	43	-	0	0	0
				485	41 (45)†	42.3 (POC A-2)			
				500	41				
				550	40				
				600	39	-			
			650	38					
			700	37					
			800	35 (41)†	40.2 (POC A-3)				
<b>Segment 2</b>			25	61					
			50	58					
			100	54	-				
			150	52					
		-	N/A	190	50	44.7 (POC A-4)	N/A	0	0
				250	46				
				300	44				
				350	43				
				400	41				
				450	40				

ARDOT Job 101140: Pocahontas Bypass (S) EA

Location	2025		2045		Ambient Measurements (dBA)	NAC Receptors Existing 66dB NBZ	NAC Impacted Receptors Proposed 66dB NBZ	NAC Receptors Within Future 63dB NBZ	Impacted Receptors by Substantial Increase
	Distance (feet)*	Leq(h), dBA**	Distance (feet)*	Leq(h), dBA**					
			500	39					
			550	38					
			600	37					
			650	36					
			700	35 (40)†	38.8 (POC A-6)				
			995	31 (48)†	47.8 (POC A-5)				

\* Perpendicular to centerline of Alternative

\*\* Rounded to tenth value

† The logarithmic function of decibel addition was used during impact analysis to incorporate non-modeled noise sources when the predicted future noise levels were lower or the same as the existing condition ambient measurements. The results of decibel addition are shown in parenthesis.

**Planning Information for Local Officials**

The ARDOT encourages local communities and developers to practice noise compatibility planning. As presented in Table 4, noise level predictions for future build conditions were made at incremental distances. These predictions do not represent noise levels at every location at a particular distance back from the roadway. Noise levels will vary with changes in terrain and other site conditions.

Land uses classified as Activity Categories A through G and their corresponding NACs are listed in Table 1. This information, along with Table 4 data, are provided to inform and assist local officials and planners of anticipated noise levels so that future development will be compatible. In compliance with federal guidelines, a copy of this screening analysis will be transmitted to the City of Pocahontas and regional planning commission for land use planning purposes.

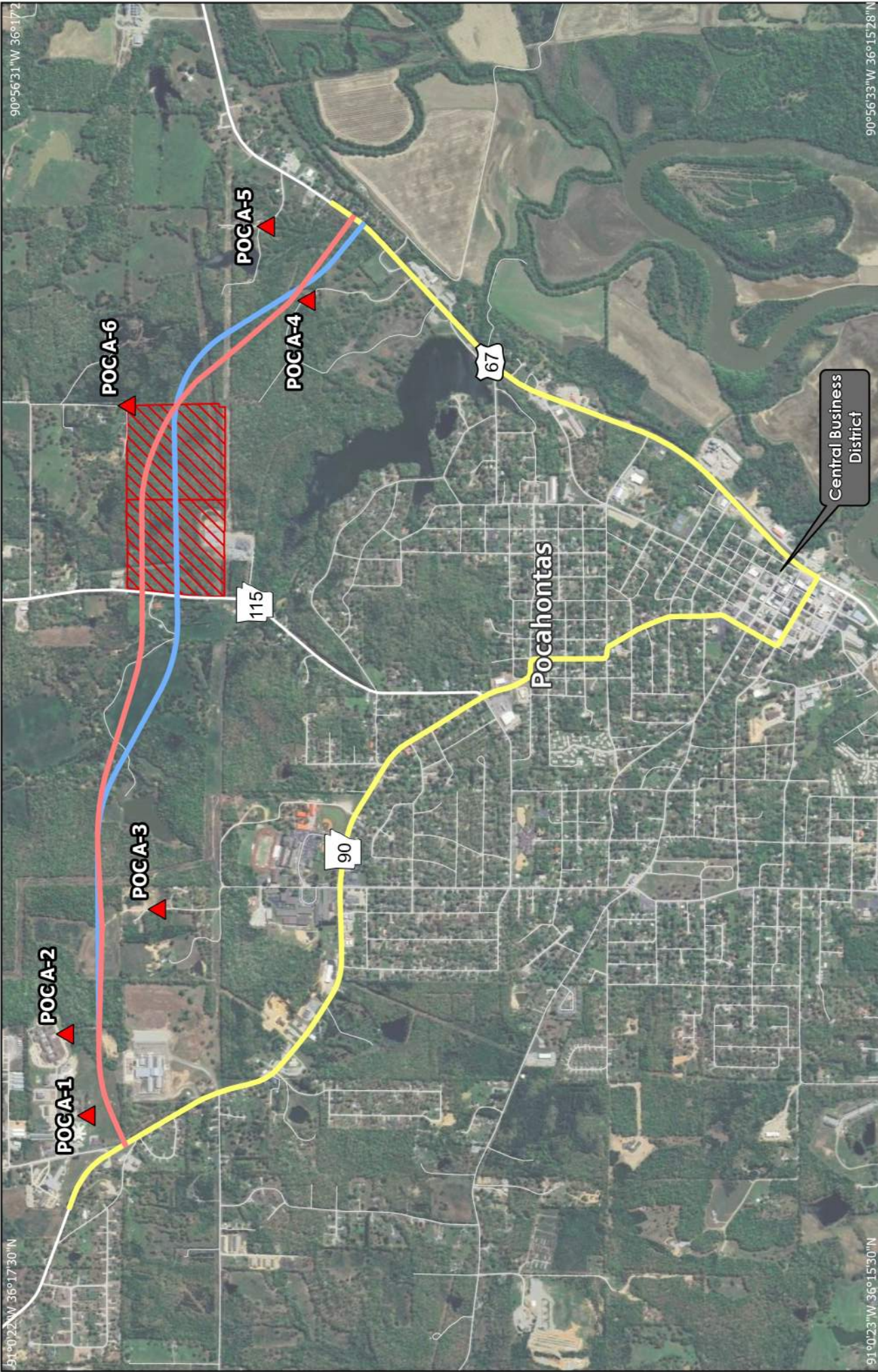
**Attachments**

Exhibit A: Overview Noise Screening  
Exhibit B: Detailed View Build Alternatives  
Exhibit C: Detailed View No-Build Alternative  
Noise Data Worksheets and TNM Results



ARDOT Job 101140: Pocahontas Bypass (S) EA

## **ATTACHMENTS**



**EXHIBIT A - OVERVIEW  
NOISE SCREENING**

ARDOT Job No. 101140  
Hwy. 90 to Hwy. 67 (Pocahontas Bypass)  
Pocahontas, Randolph County, Arkansas



- Alternative A
- Alternative B
- No-Build Alternative
- ▲ Ambient Location
- No-Access Area

91°0'22"W 36°17'30"N

90°56'31"W 36°17'2

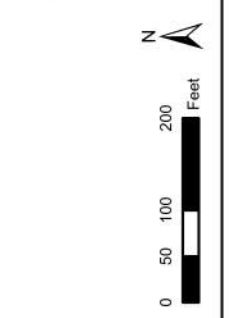
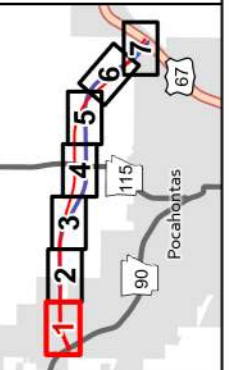
91°0'23"W 36°15'30"N

90°56'33"W 36°15'28"N



**EXHIBIT B - DETAILED VIEW  
BUILD ALTERNATIVES**

Page 1 of 7  
 ARDOT Job No. 101140  
 Hwy. 90 to Hwy. 67 (Pocahontas Bypass)  
 Pocahontas, Randolph County, Arkansas



- Alternative A
- Alternative B
- Ambient Location
- Receptor
- Approx. Proposed Roadway Width
- Existing 66 dBA Contour
- Proposed 66 dBA Contour
- Proposed 63 dBA Contour

90°58'53"W 36°17'21"N

90°59'20"W 36°17'22"N

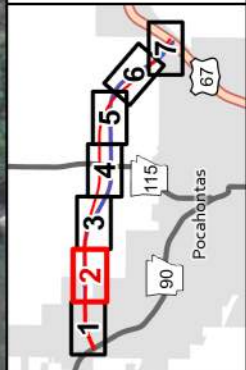
90°58'54"W 36°17'17"N







90°59'20"W 36°17'8"N



**EXHIBIT B - DETAILED VIEW  
BUILD ALTERNATIVES**

Page 2 of 7  
 ARDOT Job No. 101140  
 Hwy. 90 to Hwy. 67 (Pocahontas Bypass)  
 Pocahontas, Randolph County, Arkansas

-  Alternative A
-  Alternative B
-  Ambient Location
-  Receptor
-  Approx. Proposed Roadway Width
-  Proposed 63 dBA Contour



90°58'27"W 36°17'20"N

90°58'27"W 36°17'6"N

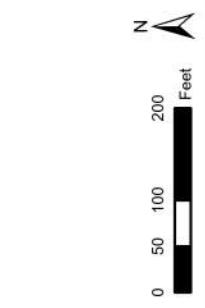
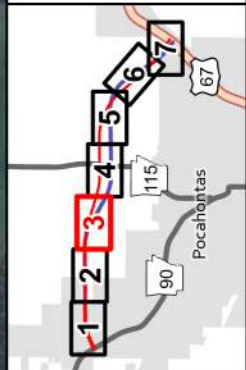
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90°58'54"W 36°17'6"N



**EXHIBIT B - DETAILED VIEW  
BUILD ALTERNATIVES**

Page 3 of 7  
 ARDOT Job No. 101140  
 Hwy. 90 to Hwy. 67 (Pocahontas Bypass)  
 Pocahontas, Randolph County, Arkansas



- Alternative A
- Alternative B
- Approx. Proposed Roadway Width
- Proposed 63 dBA Contour

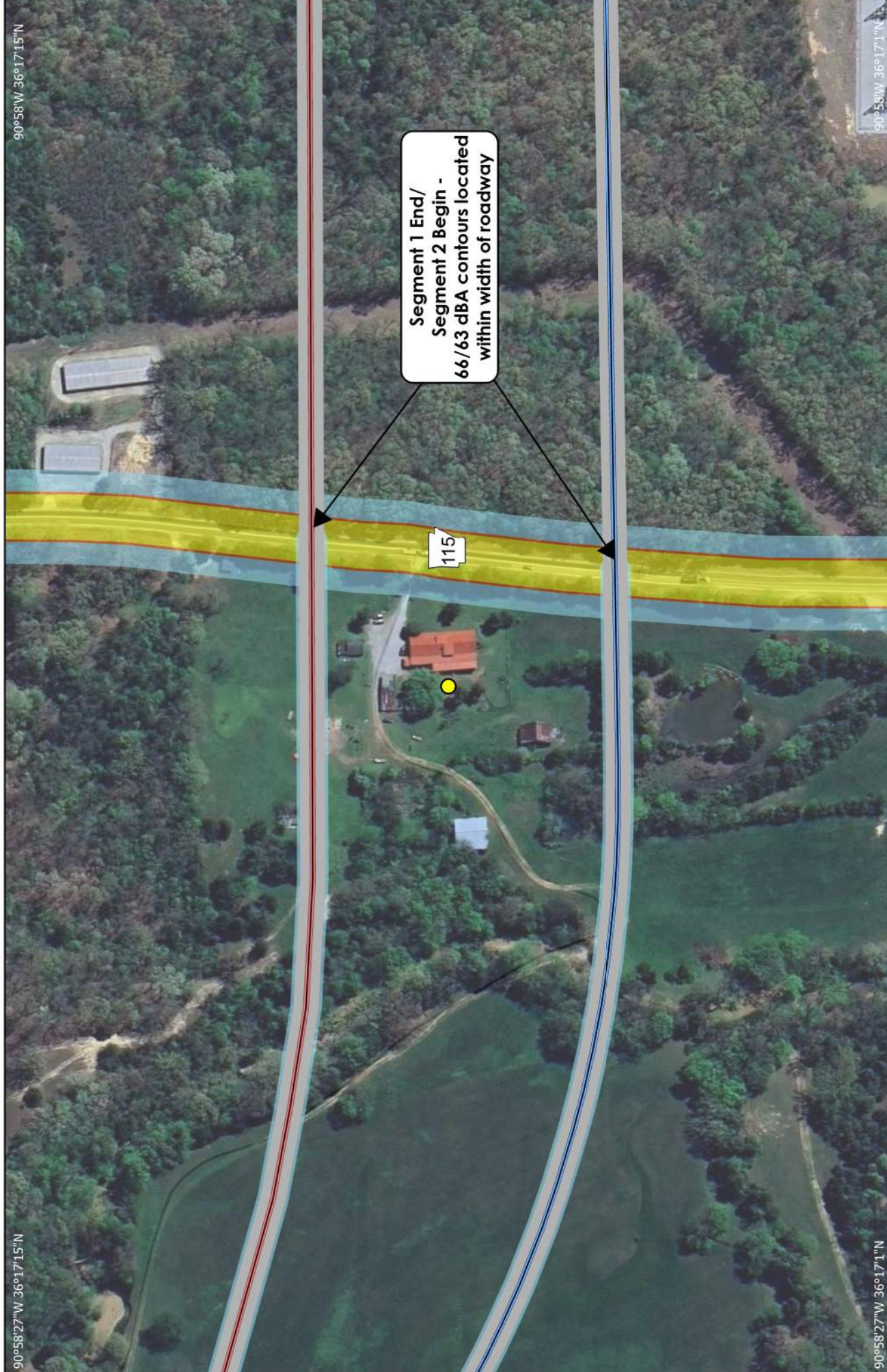
90°58'W 36°17'15"N

90°58'27"W 36°17'15"N

90°58'W 36°17'15"N

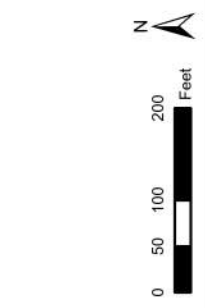
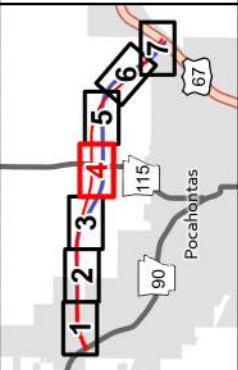
90°58'27"W 36°17'15"N

Segment 1 End/  
Segment 2 Begin -  
66/63 dBA contours located  
within width of roadway



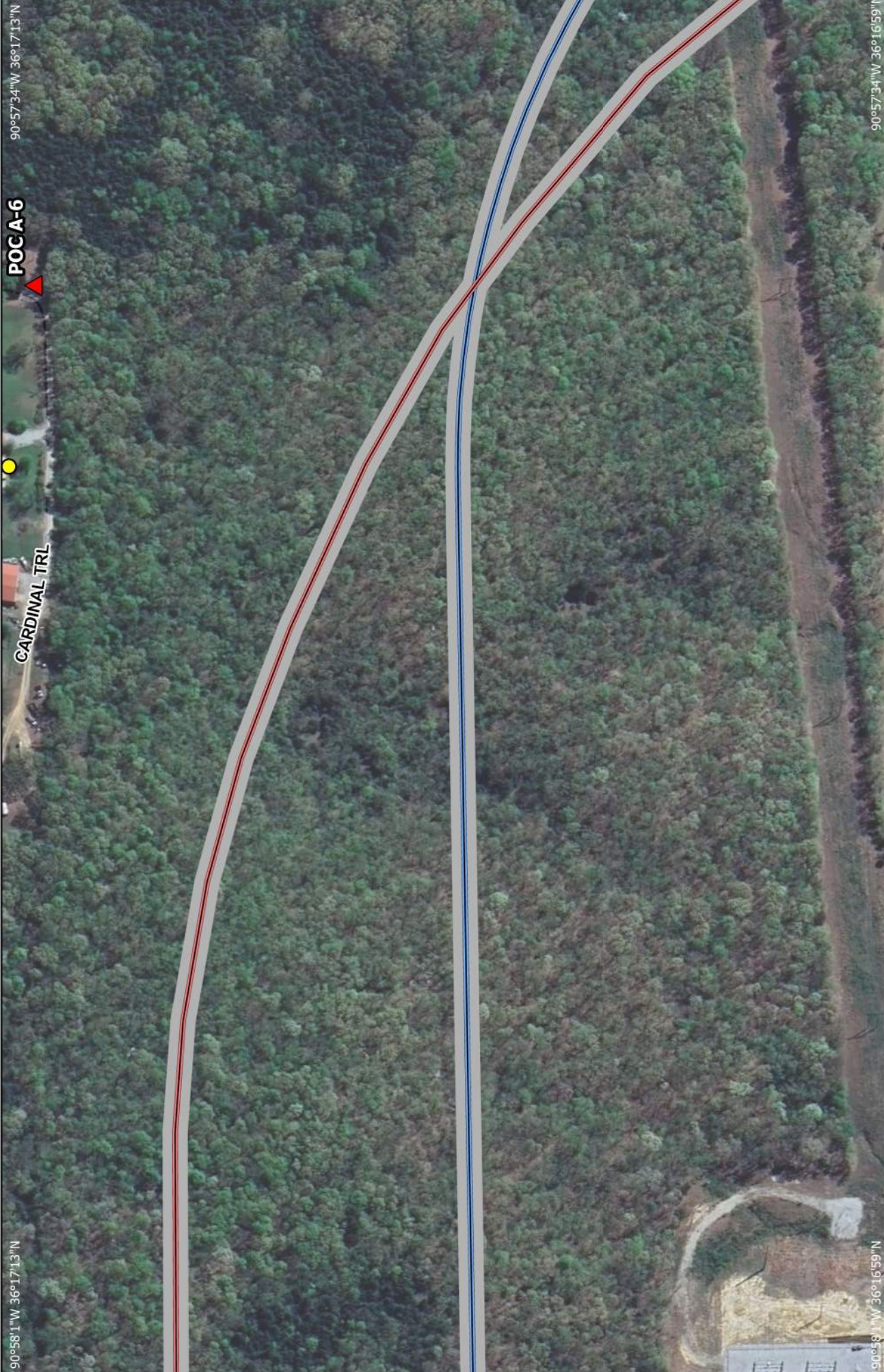
**EXHIBIT B - DETAILED VIEW  
BUILD ALTERNATIVES**

Page 4 of 7  
ARDOT Job No. 101140  
Hwy. 90 to Hwy. 67 (Pocahontas Bypass)  
Pocahontas, Randolph County, Arkansas

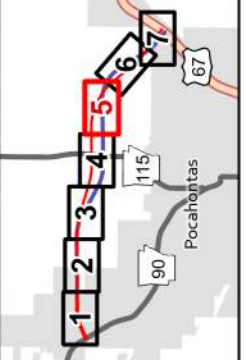
- Existing 66 dBA Contour
- Proposed 66 dBA Contour
- Proposed 63 dBA Contour






- Alternative A
- Alternative B
- Receptor
- Approx. Proposed Roadway Width



**EXHIBIT B - DETAILED VIEW  
BUILD ALTERNATIVES**

Page 5 of 7  
 ARDOT Job No. 101140  
 Hwy. 90 to Hwy. 67 (Pocahontas Bypass)  
 Pocahontas, Randolph County, Arkansas

-  Alternative A
-  Alternative B
-  Receptor
-  Approx. Proposed Roadway Width
-  Ambient Location



90°57'34\"/>

90°58'1\"/>



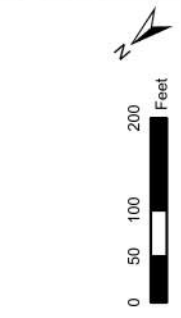
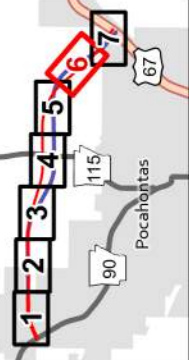
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90°57'10\"W 36°16'43\"N

90°57'41\"W 36°16'43\"N

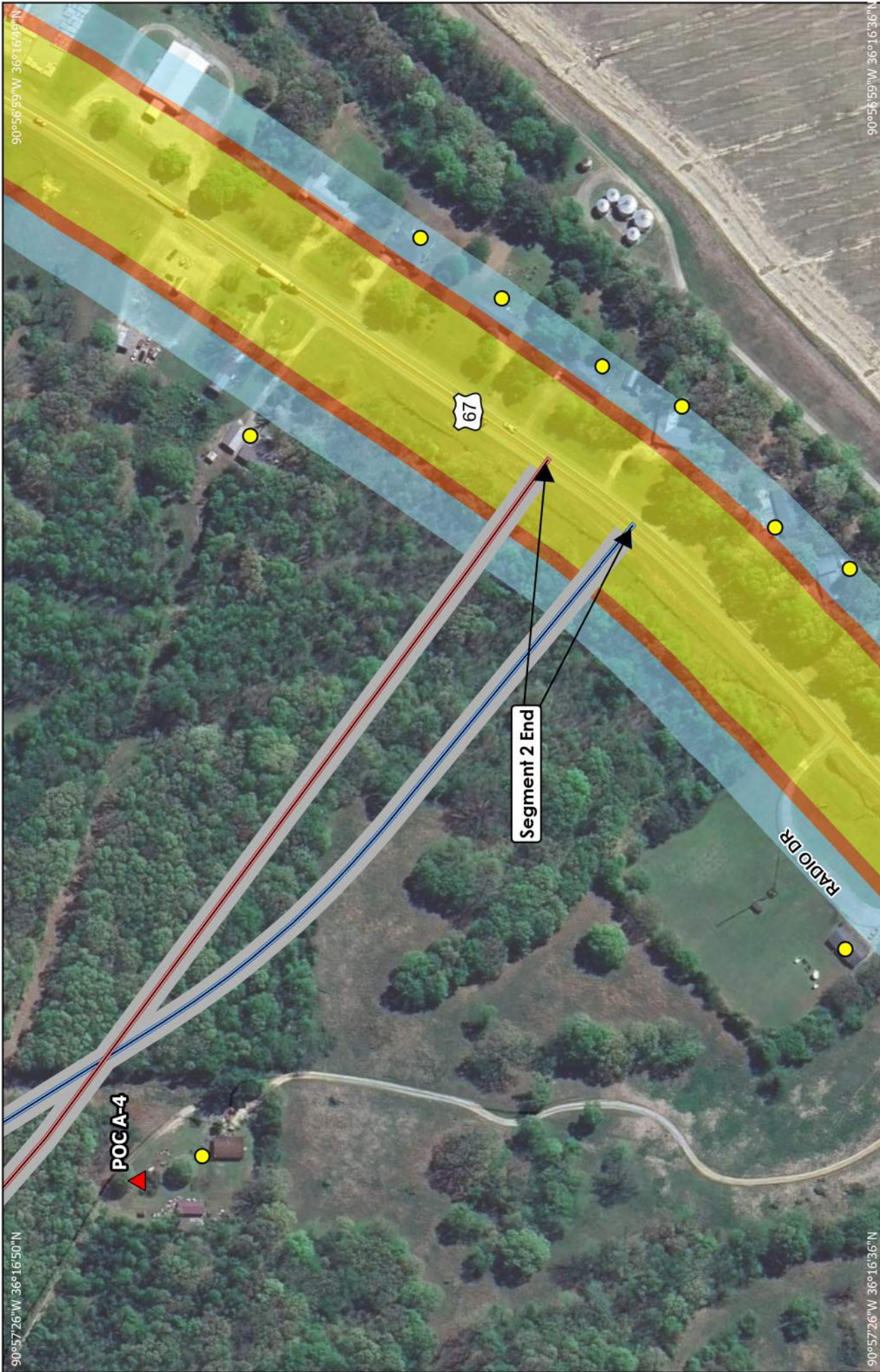
**EXHIBIT B - DETAILED VIEW  
BUILD ALTERNATIVES**

Page 6 of 7  
 ARDOT Job No. 101140  
 Hwy. 90 to Hwy. 67 (Pocahontas Bypass)  
 Pocahontas, Randolph County, Arkansas



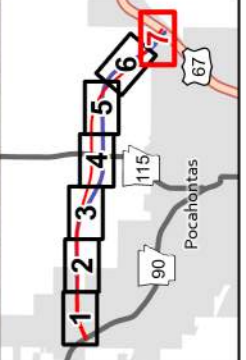
- Alternative A
- Alternative B
- Approx. Proposed Roadway Width
- ▲ Ambient Location
- Receptor





**EXHIBIT B - DETAILED VIEW  
BUILD ALTERNATIVES**

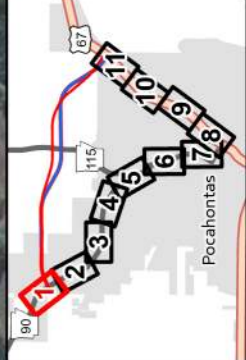
Page 7 of 7  
 ARDOT Job No. 101140  
 Hwy. 90 to Hwy. 67 (Pocahontas Bypass)  
 Pocahontas, Randolph County, Arkansas



- Alternative A
- Alternative B
- Ambient Location
- Receptor
- Approx. Proposed Roadway Width
- Existing 66 dBA Contour
- Proposed 66 dBA Contour
- Proposed 63 dBA Contour



**EXHIBIT C - DETAILED VIEW  
NO-BUILD ALTERNATIVE**  
Page 1 of 11  
ARDOT Job No. 101140  
Hwy. 90 to Hwy. 67 (Pocahontas Bypass)  
Pocahontas, Randolph County, Arkansas



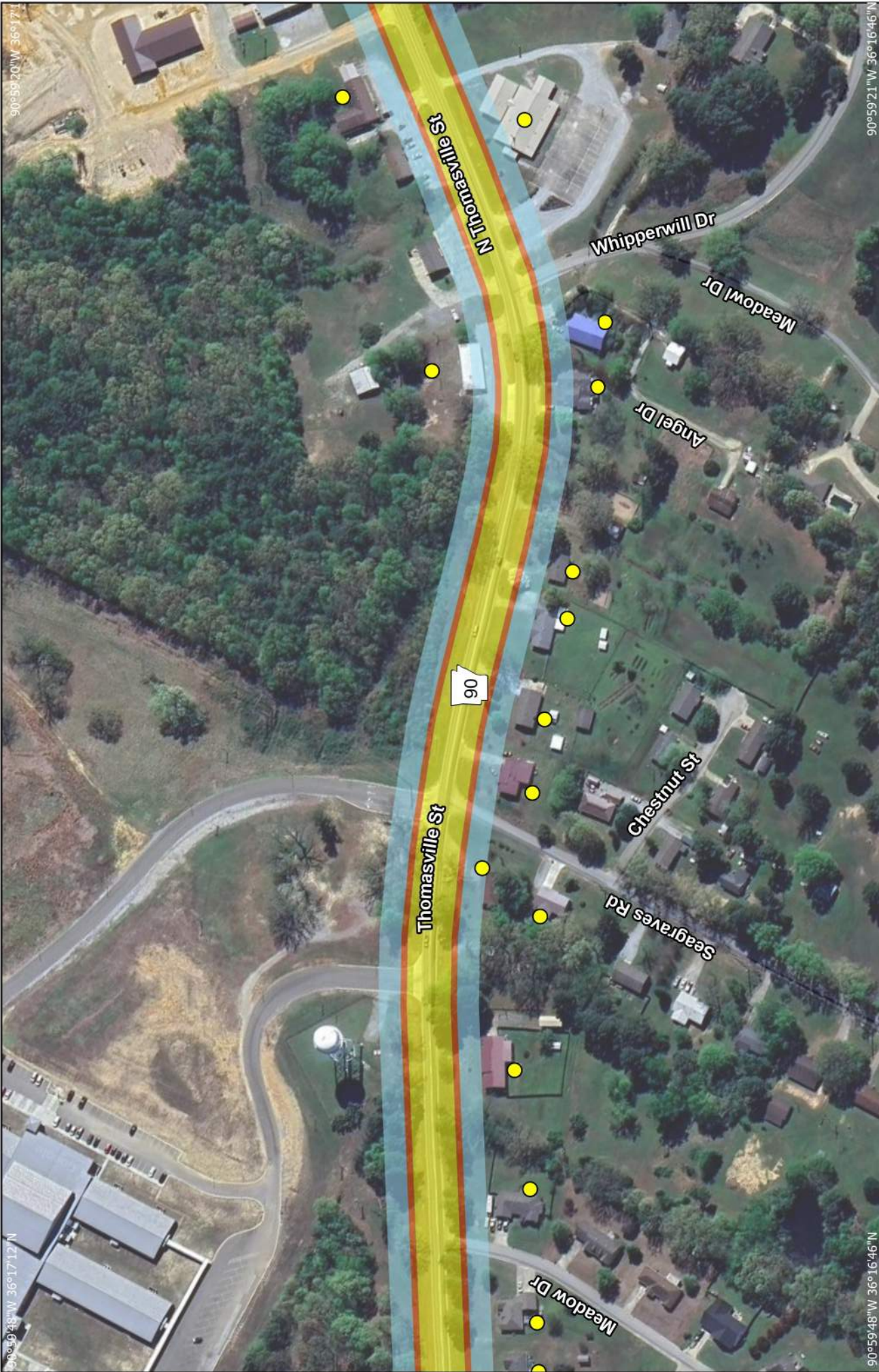
- Receptor
- Existing 66 dBA Contour
- Future 66 dBA Contour
- Future 63 dBA Contour
- Proposed Alternative A
- Proposed Alternative B

91°03'W 36°17'28\"

90°59'33\"

91°03'W 36°17'3\"

90°59'33\"



90°59'20"W 36°17'12"N

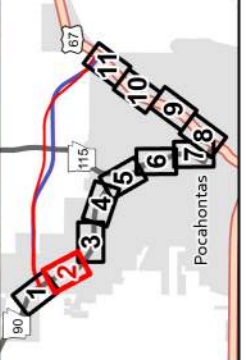
90°59'21"W 36°16'46"N

90°59'48"W 36°17'12"N

90°59'48"W 36°16'46"N

**EXHIBIT C - DETAILED VIEW  
NO-BUILD ALTERNATIVE**

Page 2 of 11  
 ARDOT Job No. 101140  
 Hwy. 90 to Hwy. 67 (Pocahontas Bypass)  
 Pocahontas, Randolph County, Arkansas



- Receptor
- Existing 66 dBA Contour
- Future 66 dBA Contour
- Future 63 dBA Contour



90°59'11"W 36°16'52"N

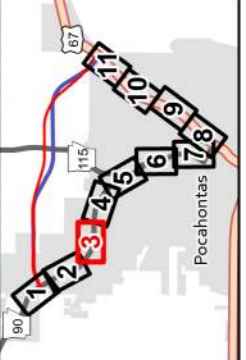
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90°59'11"W 36°16'38"N

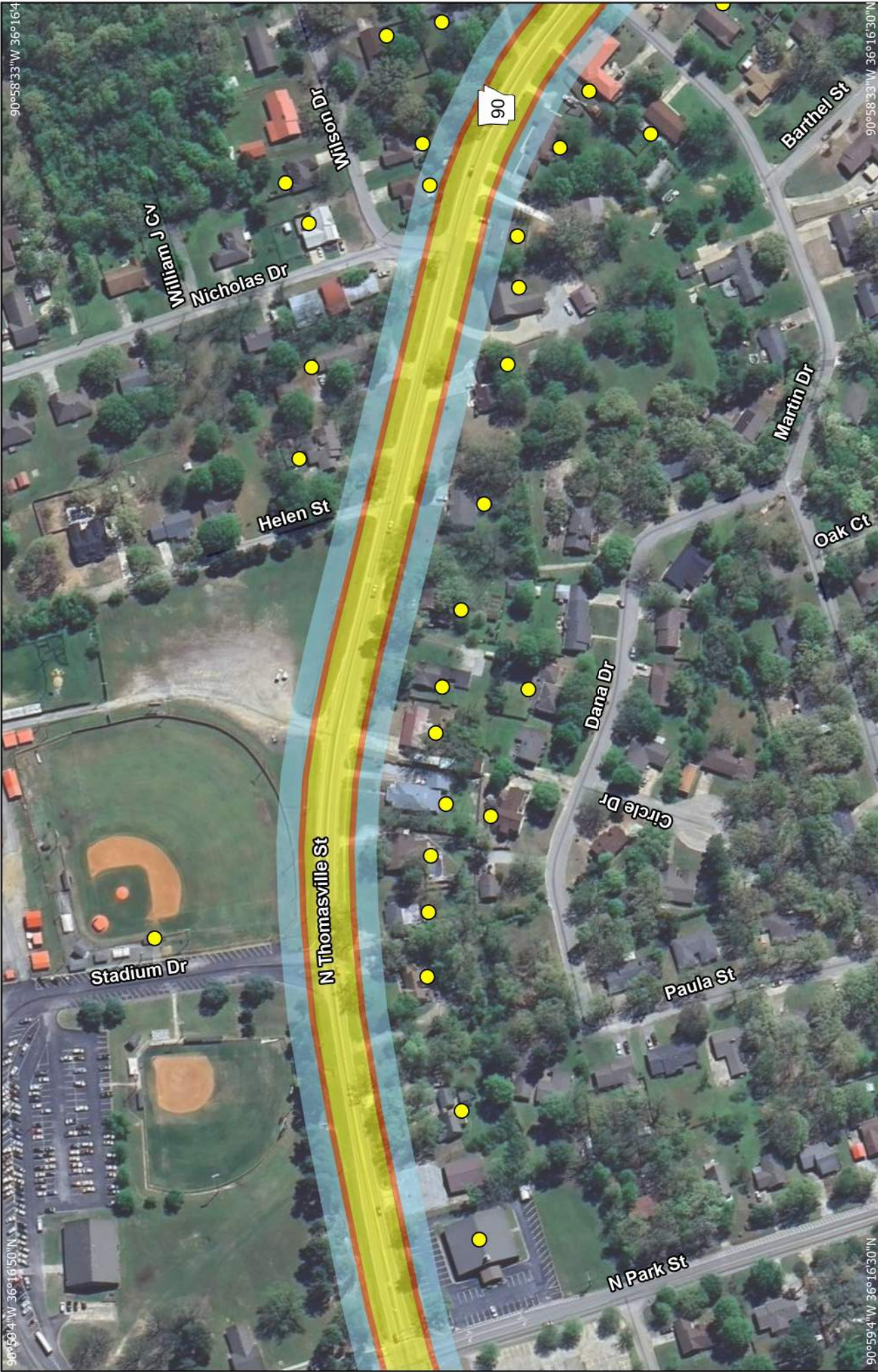
90°59'28"W 36°16'39"N

**EXHIBIT C - DETAILED VIEW  
NO-BUILD ALTERNATIVE**

Page 3 of 11  
 ARDOT Job No. 101140  
 Hwy. 90 to Hwy. 67 (Pocahontas Bypass)  
 Pocahontas, Randolph County, Arkansas

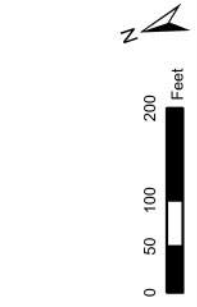


- Receptor
- Existing 66 dBA Contour
- Future 66 dBA Contour
- Future 63 dBA Contour

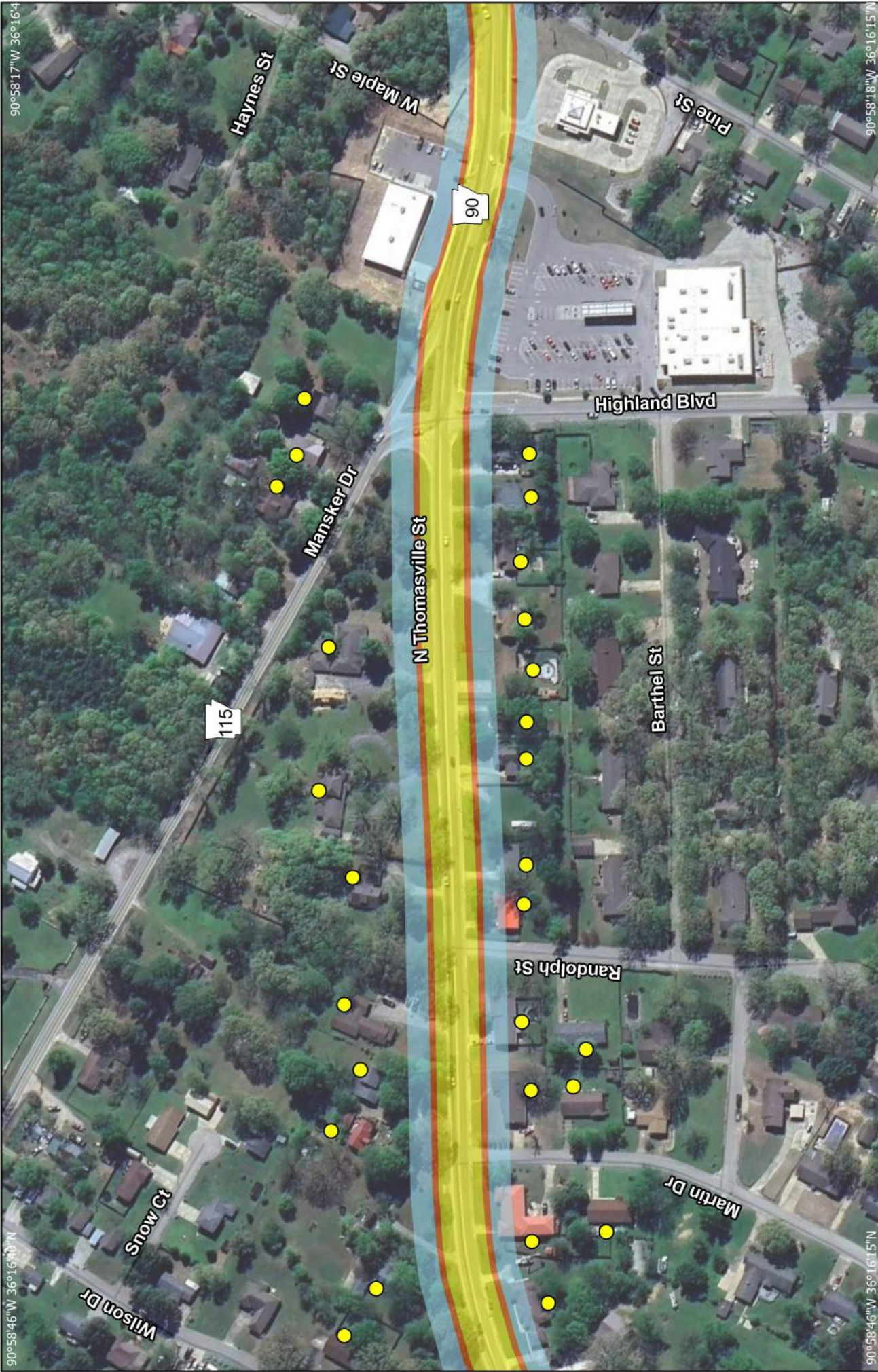


**EXHIBIT C - DETAILED VIEW  
NO-BUILD ALTERNATIVE**

Page 4 of 11  
 ARDOT Job No. 101140  
 Hwy. 90 to Hwy. 67 (Pocahontas Bypass)  
 Pocahontas, Randolph County, Arkansas

- Receptor
- Existing 66 dBA Contour
- Future 66 dBA Contour
- Future 63 dBA Contour



90°58'17"W 36°16'4

90°58'18"W 36°16'15"N





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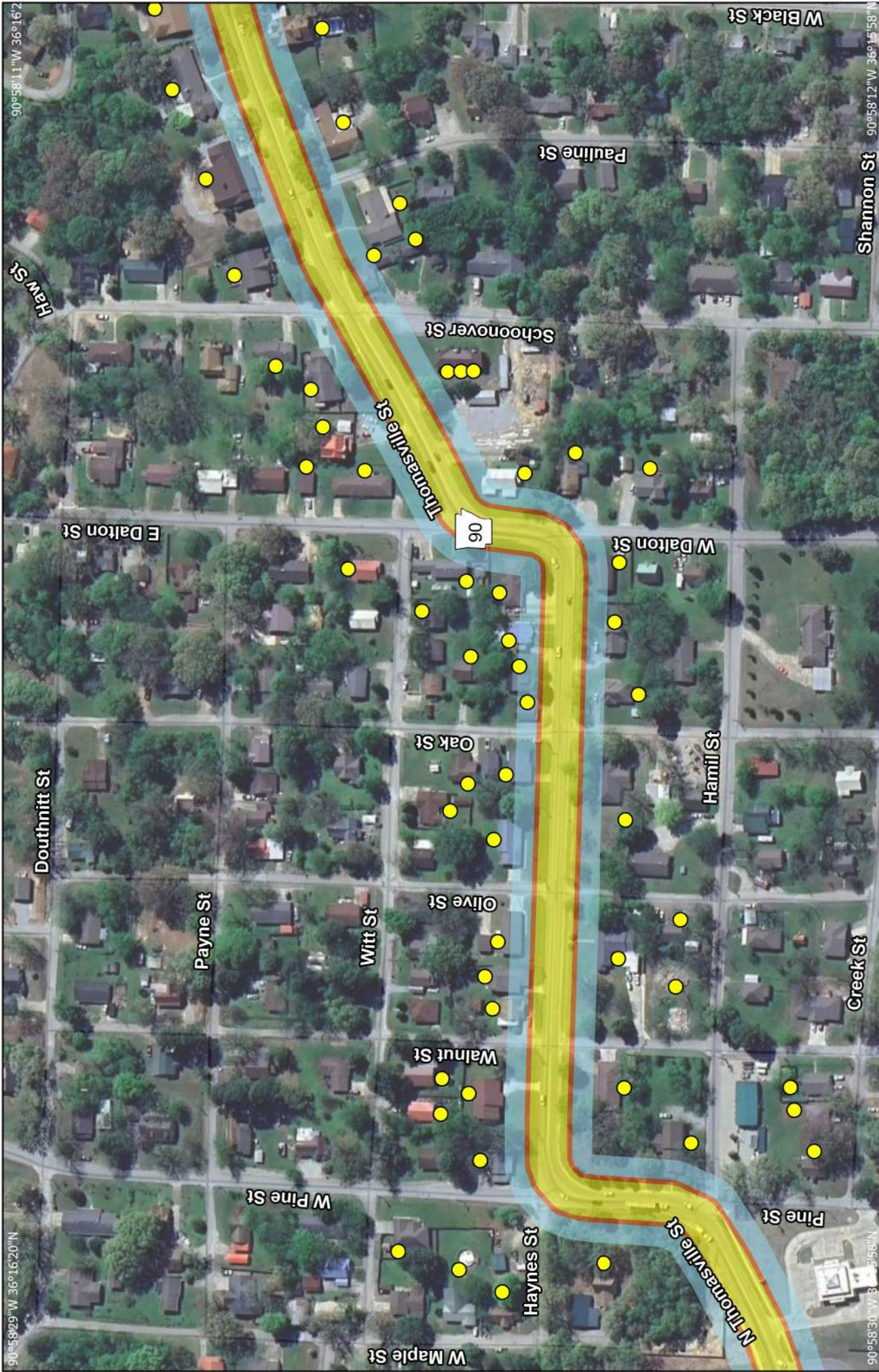
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**EXHIBIT C - DETAILED VIEW  
NO-BUILD ALTERNATIVE**

Page 5 of 11  
ARDOT Job No. 101140  
Hwy. 90 to Hwy. 67 (Pocahontas Bypass)  
Pocahontas, Randolph County, Arkansas

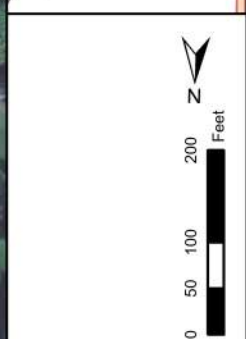



-  Receptor
-  Existing 66 dBA Contour
-  Future 66 dBA Contour
-  Future 63 dBA Contour



**EXHIBIT C - DETAILED VIEW  
NO-BUILD ALTERNATIVE**

Page 6 of 11  
 ARDOT Job No. 101140  
 Hwy. 90 to Hwy. 67 (Pocahontas Bypass)  
 Pocahontas, Randolph County, Arkansas

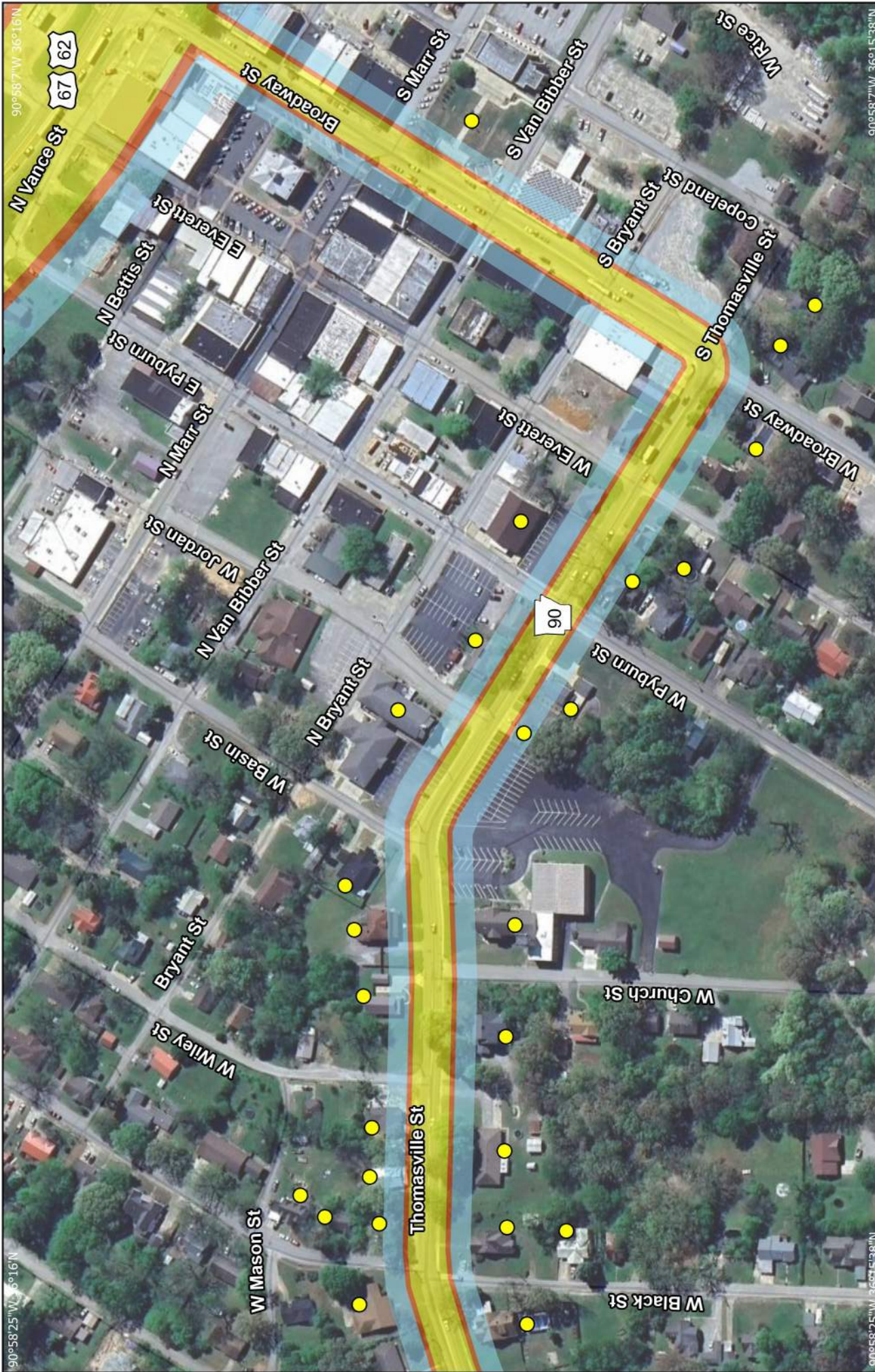


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90°58'11"W 36°16'22"N

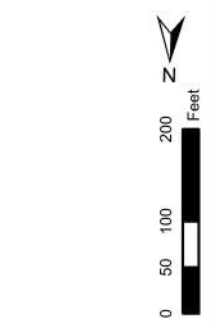
90°58'30"W 36°15'58"N

90°58'12"W 36°15'58"N



**EXHIBIT C - DETAILED VIEW  
NO-BUILD ALTERNATIVE**

Page 7 of 11  
 ARDOT Job No. 101140  
 Hwy. 90 to Hwy. 67 (Pocahontas Bypass)  
 Pocahontas, Randolph County, Arkansas

-  Receptor
-  Existing 66 dBA Contour
-  Future 66 dBA Contour
-  Future 63 dBA Contour

90°58'25"W, 36°15'16"N

90°58'25"W, 36°15'38"N

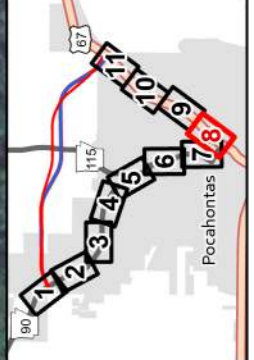
90°58'7"W, 36°15'16"N

90°58'7"W, 36°15'38"N





**EXHIBIT C - DETAILED VIEW  
NO-BUILD ALTERNATIVE**  
Page 8 of 11  
ARDOT Job No. 101140  
Hwy. 90 to Hwy. 67 (Pocahontas Bypass)  
Pocahontas, Randolph County, Arkansas



- Receptor
- Impacted Receptor
- Existing 66 dBA Contour
- Future 66 dBA Contour
- Future 63 dBA Contour

90°57'48"W 36°15'5"

90°57'49"W 36°15'51"N

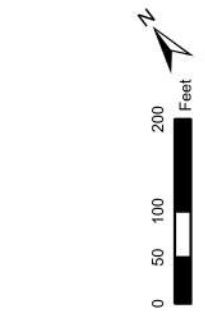
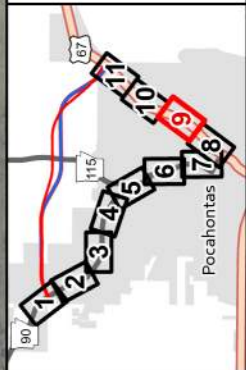
90°58'18"W 36°15'57"N

90°58'18"W 36°15'31"N



**EXHIBIT C - DETAILED VIEW  
NO-BUILD ALTERNATIVE**

Page 9 of 11  
 ARDOT Job No. 101140  
 Hwy. 90 to Hwy. 67 (Pocahontas Bypass)  
 Pocahontas, Randolph County, Arkansas

- Receptor
- Existing 66 dBA Contour
- Future 66 dBA Contour
- Future 63 dBA Contour

90°58'W 36°16'13\"/>

90°58'W 36°15'47\"/>

90°57'18"W 36°16'3"

90°57'18"W 36°16'6"

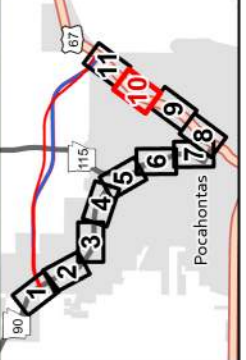
90°57'48"W 36°16'32"N

90°57'48"W 36°16'7"N



**EXHIBIT C - DETAILED VIEW  
NO-BUILD ALTERNATIVE**

Page 10 of 11  
 ARDOT Job No. 101140  
 Hwy. 90 to Hwy. 67 (Pocahontas Bypass)  
 Pocahontas, Randolph County, Arkansas



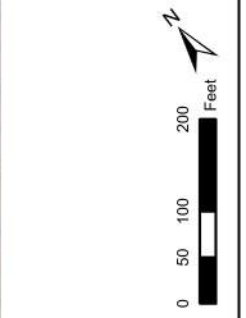
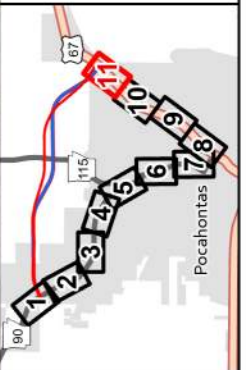
- Receptor
- Impacted Receptor
- Existing 66 dBA Contour
- Future 66 dBA Contour
- Future 63 dBA Contour












**EXHIBIT C - DETAILED VIEW  
NO-BUILD ALTERNATIVE**

Page 11 of 11  
 ARDOT Job No. 101140  
 Hwy. 90 to Hwy. 67 (Pocahontas Bypass)  
 Pocahontas, Randolph County, Arkansas

-  Receptor
-  Impacted Receptor
-  Proposed Alternative A
-  Proposed Alternative B
-  Existing 66 dBA Contour
-  Future 66 dBA Contour
-  Future 63 dBA Contour

**NOISE DATA WORKSHEET**

Job No:   
 Job Name:   
 Roadway Reference:   
 County:   
 Design Year:   
 Year(s) To Be Modeled:

Roadway Cross-Sections:  Note: DHV = (ADT)(K)  
 DDHV = (ADT)(K)(D)  
 K - Percent of ADT occurring in design hour  
 D - Directional Distribution

Operating Speed:

Traffic Data:

YEAR	ADT	%TRUCK	DHV	CARS	MT	HT
					46.1%	53.9%
2025	-	-	-	-	-	-
2045	950	7%	71	66	2	3

Garver  
 Leigh Mercer  
 20-Mar-24  
 TNM 2.5  
 Calculated with TNM 2.5

RESULTS: SOUND LEVELS  
 PROJECT/CONTRACT: Pocahontas Bypass ARDOT No. 101140  
 RUN: Proposed Build Alt A Seg 1  
 BARRIER DESIGN: INPUT HEIGHTS

Average pavement type shall be used unless a State highway agency substantiates the use of a different type with approval of FHWA.

ATMOSPHERICS: 68 deg F, 50% RH

Receiver Name	No.	#DUs	Existing LAeq1h	No Barrier LAeq1h	Noise Reduction	Increase over existing	Type	With Barrier	Calculated Noise Reduction	Calculated Goal	Calculated minus Goal
			dB	dB	dB	dB	Impact	LAeq1h	dB	dB	dB
	50	1	0.0	59.4	66	59.4	10	59.4	0	8	-8
	100	2	0.0	56.1	66	56.1	10	56.1	0	8	-8
	150	3	0.0	53.9	66	53.9	10	53.9	0	8	-8
	200	4	0.0	51	66	51	10	51	0	8	-8
	250	5	0.0	48.3	66	48.3	10	48.3	0	8	-8
	300	6	0.0	46.2	66	46.2	10	46.2	0	8	-8
350 - POC A-1	7	1	47.9	44.4	66	49.5	10	44.4	0	8	-8
400	8	1	0.0	42.9	66	42.9	10	42.9	0	8	-8
485 - POC A-2	11	1	42.3	40.8	66	44.6	10	40.8	0	8	-8
500	12	1	0.0	40.5	66	40.5	10	40.5	0	8	-8
550	31	1	0.0	39.4	66	39.4	10	39.4	0	8	-8
600	33	1	0.0	38.5	66.0	38.5	10	38.5	0	8	-8
650	34	1	0.0	37.6	66	37.6	10	37.6	0	8	-8
700	36	1	0.0	36.7	66	36.7	10	36.7	0	8	-8
755 - POC A-3	38	1	40.2	35.9	66	41.6	10	35.9	0	8	-8
25	42	1	0	62.9	66	62.9	10	62.9	0	8	-8

Dwelling Units

# DUs	Min	Avg	Max
	dB	dB	dB
All Selected	16	0	0
All Impacted	0	0	0
All that meet NR Goal	0	0	0

**NOISE DATA WORKSHEET**

Job No:

Job Name:

Roadway Reference:

County:

Design Year:

Year(s) To Be Modeled:

Roadway Cross-Sections:  Note: DHV = (ADT)(K)  
 DDHV = (ADT)(K)(D)  
 K - Percent of ADT occurring in design hour  
 D - Directional Distribution

Operating Speed:

Traffic Data:

YEAR	ADT	%TRUCK	DHV	CARS	MT	HT
2025	-	-	-	-	46.1%	53.9%
2045	550	8%	41	38	2	2

Garver  
 Leigh Mercer  
 20-Mar-24  
 TNM 2.5  
 Calculated with TNM 2.5

RESULTS: SOUND LEVELS  
 PROJECT/CONTRACT: Pocahontas Bypass ARDOT No. 101140  
 RUN: Proposed Build Alt A Seg 2  
 BARRIER DESIGN: INPUT HEIGHTS  
 ATMOSPHERICS: 68 deg F, 50% RH

Average pavement type shall be used unless a State highway agency substantiates the use of a different type with approval of FHWA.

Receiver Name	No.	#DUs	Existing		No Barrier		Increase over existing		Type Impact	With Barrier			Calculated minus Goal dB
			LAeq1h	LAeq1h	LAeq1h	Calculated Crit'n	Calculated Crit'n	Sub'l Inc		Calculated Noise Reduction LAeq1h	Calculated Goal	Calculated Goal	
			dBA	dBA	dBA	dB	dB		dBA	dB	dB		
50	1	1	0	57.5	66	57.5	10	----	57.5	0	8	-8	
100	2	1	0	54.1	66	54.1	10	----	54.1	0	8	-8	
155 - POC A-4	3	1	44.7	51.8	66	7.1	10	----	51.8	0	8	-8	
200	4	1	0	49.0	66	49	10	----	49	0	8	-8	
250	5	1	0	46.4	66	46.4	10	----	46.4	0	8	-8	
300	6	1	0	44.3	66	44.3	10	----	44.3	0	8	-8	
350	7	1	0	42.5	66	42.5	10	----	42.5	0	8	-8	
400	8	1	0	41.0	66	41	10	----	41	0	8	-8	
450	11	1	0	39.7	66	39.7	10	----	39.7	0	8	-8	
500	12	1	0	38.6	66	38.6	10	----	38.6	0	8	-8	
550	31	1	0	37.5	66	37.5	10	----	37.5	0	8	-8	
590 - POC A-6	33	1	38.8	36.8	66	40.9	10	----	36.8	0	8	-8	
650	34	1	0	35.7	66	35.7	10	----	35.7	0	8	-8	
900 - POC A-5	36	1	47.8	32.1	66	47.9	10	----	32.1	0	8	-8	
25	42	1	0	61	66	61	10	----	61	0	8	-8	

Dwelling Units

	# DUs	Noise Reduction		
		Min dB	Avg dB	Max dB
All Selected	15	0	0	0
All Impacted	0	0	0	0
All that meet NR Goal	0	0	0	0

**NOISE DATA WORKSHEET**

Job No:   
 Job Name:   
 Roadway Reference:   
 County:   
 Design Year:   
 Year(s) To Be Modeled:

Roadway Cross-Sections:  Note: DHV = (ADT)(K)  
 DDHV = (ADT)(K)(D)  
 K - Percent of ADT occurring in design hour  
 D - Directional Distribution

Operating Speed:

Traffic Data:

YEAR	ADT	%TRUCK	DHV	CARS	MT	HT
					46.1%	53.9%
2025	-	-	-	-	-	-
2045	950	7%	71	66	2	3

Garver  
 Leigh Mercer  
 27-Mar-24  
 TNM 2.5  
 Calculated with TNM 2.5

RESULTS: SOUND LEVELS  
 PROJECT/CONTRACT: Pocahontas Bypass ARDOT No. 101140  
 RUN: Proposed Build Alt B Seg 1  
 BARRIER DESIGN: INPUT HEIGHTS  
 ATMOSPHERICS: 68 deg F, 50% RH

Average pavement type shall be used unless a State highway agency substantiates the use of a different type with approval of FHWA.

Receiver Name	No.	#DUs	Existing LAeq1h	No Barrier LAeq1h	Noise Reduction	Increase over existing	Type	With Barrier	Calculated Noise Reduction	Calculated Goal	Calculated minus Goal
			dB	dB	dB	dB	Impact	LAeq1h	dB	dB	dB
50	1	1	0.0	59.4	66	59.4	10	59.4	0	8	-8
100	2	1	0.0	56.1	66	56.1	10	56.1	0	8	-8
150	3	1	0.0	53.9	66	53.9	10	53.9	0	8	-8
200	4	1	0.0	51	66	51	10	51	0	8	-8
250	5	1	0.0	48.3	66	48.3	10	48.3	0	8	-8
300	6	1	0.0	46.2	66	46.2	10	46.2	0	8	-8
350 - POC A-1	7	1	47.9	44.4	66	49.5	10	44.4	0	8	-8
400	8	1	0.0	42.9	66	42.9	10	42.9	0	8	-8
485 - POC A-2	11	1	42.3	40.8	66	44.6	10	40.8	0	8	-8
500	12	1	0.0	40.5	66	40.5	10	40.5	0	8	-8
550	31	1	0.0	39.4	66	39.4	10	39.4	0	8	-8
600	33	1	0.0	38.5	66.0	38.5	10	38.5	0	8	-8
650	34	1	0.0	37.6	66	37.6	10	37.6	0	8	-8
700	36	1	0.0	36.7	66	36.7	10	36.7	0	8	-8
800 - POC A-3	38	1	40.2	35.2	66	41.4	10	35.2	0	8	-8
25	42	1	0	62.9	66	62.9	10	62.9	0	8	-8

Dwelling Units

# DUs	Min	Avg	Max
	dB	dB	dB
All Selected	16	0	0
All Impacted	0	0	0
All that meet NR Goal	0	0	0

### NOISE DATA WORKSHEET

Job No:

Job Name:

Roadway Reference:

County:

Design Year:

Year(s) To Be Modeled:

Roadway Cross-Sections:  Note: DHV = (ADT)(K)  
 DDHV = (ADT)(K)(D)  
 K - Percent of ADT occurring in design hour  
 D - Directional Distribution

Operating Speed:

Traffic Data:

YEAR	ADT	%TRUCK	DHV	CARS	MT	HT
2025	-	-	-	-	46.1%	53.9%
2045	550	8%	41	38	2	2

Garver  
 Leigh Mercer  
 27-Mar-24  
 TNM 2.5  
 Calculated with TNM 2.5

RESULTS: SOUND LEVELS  
 PROJECT/CONTRACT: Pocahontas Bypass ARDOT No. 101140  
 RUN: Proposed Build Alt B Seg 2  
 BARRIER DESIGN: INPUT HEIGHTS  
 ATMOSPHERICS: 68 deg F, 50% RH

Average pavement type shall be used unless a State highway agency substantiates the use of a different type with approval of FHWA.

Receiver Name	No.	#DUs	Existing		No Barrier		Increase over existing		Type Impact	With Barrier			Calculated minus Goal dB
			L <sub>Aeq1h</sub>	LA <sub>eq1h</sub>	LA <sub>eq1h</sub>	Calculated Crit'n	Calculated Crit'n	Sub'l Inc		Calculated Noise Reduction L <sub>Aeq1h</sub>	Calculated Goal	Calculated Goal	
			dBA	dBA	dBA	dB	dB		dBA	dB	dB		
50	1	1	0	57.5	66	57.5	10	----	57.5	0	8	-8	
100	2	1	0	54.1	66	54.1	10	----	54.1	0	8	-8	
150	3	1	0	51.9	66	51.9	10	----	51.9	0	8	-8	
190 - POC A-4	4	1	44.7	49.6	66	4.9	10	----	49.6	0	8	-8	
250	5	1	0	46.4	66	46.4	10	----	46.4	0	8	-8	
300	6	1	0	44.3	66	44.3	10	----	44.3	0	8	-8	
350	7	1	0	42.5	66	42.5	10	----	42.5	0	8	-8	
400	8	1	0	41.0	66	41	10	----	41	0	8	-8	
450	11	1	0	39.7	66	39.7	10	----	39.7	0	8	-8	
500	12	1	0	38.6	66	38.6	10	----	38.6	0	8	-8	
550	31	1	0	37.5	66	37.5	10	----	37.5	0	8	-8	
600	33	1	0	36.6	66	36.6	10	----	36.6	0	8	-8	
650	34	1	0	35.7	66	35.7	10	----	35.7	0	8	-8	
700 - POC A-6	36	1	38.8	34.8	66	40.3	10	----	34.8	0	8	-8	
25	42	1	0	61	66	61	10	----	61	0	8	-8	
995 - POC A-5	44	1	47.8	31.1	66	47.9	10	----	31.1	0	8	-8	

Dwelling Units

# DUs	Noise Reduction		
	Min dB	Avg dB	Max dB
All Selected	16	0	0
All Impacted	0	0	0
All that meet NR Goal	0	0	0



**NOISE DATA WORKSHEET**

Job No:

Job Name:

Roadway Reference:

County:

Design Year:

Year(s) To Be Modeled:

Roadway Cross-Sections:  Note: DHV = (ADT)(K)  
 DDHV = (ADT)(K)(D)  
 K - Percent of ADT occurring in design hour  
 D - Directional Distribution

Operating Speed:

Traffic Data:

YEAR	ADT	%TRUCK	DHV	CARS	MT	HT
2025	5,900	5%	443	420	10	12
2045						

Garver  
 Leigh Mercer  
 20-Mar-24  
 TNM 2.5  
 Calculated with TNM 2.5

RESULTS: SOUND LEVELS  
 PROJECT/CONTRACT: Pocahontas Bypass ARDOT No. 101140  
 RUN: AR 90 Existing Conditions  
 BARRIER DESIGN: INPUT HEIGHTS  
 ATMOSPHERICS: 68 deg F, 50% RH

Average pavement type shall be used unless a State highway agency substantiates the use of a different type with approval of FHWA.

Receiver Name	No.	#DUs	Existing LAeq1h	No Barrier LAeq1h	Increase over existing	Type	With Barrier	Calculated Noise Reduction	Calculated Goal	Calculated minus Goal		
			dBA	Calculated Crit'n	Calculated Crit'n	Impact	LAeq1h	Calculated Goal		dB		
			dBA	dBA	dBA	dB	dB	dB		dB		
	50	1	1	0	64.4	66	64.4	10 ----	64.4	0	8	-8
	100	2	1	0	60.9	66	60.9	10 ----	60.9	0	8	-8
	150	3	1	0	56.5	66	56.5	10 ----	56.5	0	8	-8
	200	4	1	0	53.5	66	53.5	10 ----	53.5	0	8	-8
	36	39	1	0	66	66	66	10 Snd Lvl	66	0	8	-8
	68	40	1	0	62.9	66	62.9	10 ----	62.9	0	8	-8

Dwelling Units

# DUs	Min dB	Avg dB	Max dB
All Selected	6	0	0
All Impacted	1	0	0
All that meet NR Goal	0	0	0

**NOISE DATA WORKSHEET**

Job No: 101140  
 Job Name: Pocahontas Bypass (s)  
 Roadway Reference: AR 90 Future Conditions  
 County: Randolph  
 Design Year: 2045  
 Year(s) To Be Modeled: 2025 2045

Roadway Cross-Sections: Undivided 2-lane - 12' two-way lanes Note: DHV = (ADT)(K)  
 2045 PROPOSED DDHV = (ADT)(K)(D)  
 K - Percent of ADT occurring in design hour  
 D - Directional Distribution  
 Operating Speed: 45 Kfactor 8% D 50%

YEAR	ADT	%TRUCK	DHV	CARS	MT	HT
					46.1%	53.9%
2025						
2045	7,200	5%	540	513	12	15

Garver 20-Mar-24  
 Leigh Mercer TNM 2.5  
 Calculated with TNM 2.5

RESULTS: SOUND LEVELS  
 PROJECT/CONTRACT: Pocahontas Bypass ARDOT No. 101140  
 RUN: AR 90 Future Conditions  
 BARRIER DESIGN: INPUT HEIGHTS Average pavement type shall be used unless a State highway agency substantiates the use of a different type with approval of FHWA.  
 ATMOSPHERICS: 68 deg F, 50% RH

Receiver Name	No.	#DUs	Existing LAeq1h	No Barrier LAeq1h	Noise Reduction Calculated Crit'n	Increase over existing Calculated Crit'n	Type Impact	With Barrier Calculated LAeq1h	Noise Reduction Calculated Goal	Calculated minus Goal		
			dB	dB	dB	dB		dB	dB	dB		
50	1	1	0	65.3	66	65.3	10	----	65.3	0	8	-8
100	2	1	0	61.7	66	61.7	10	----	61.7	0	8	-8
150	3	1	0	57.4	66	57.4	10	----	57.4	0	8	-8
200	4	1	0	54.4	66	54.4	10	----	54.4	0	8	-8
80	39	1	0	63.0	66	63	10	----	63	0	8	-8
42	40	1	0	66.1	66	66.1	10	Snd Lvl	66.1	0	8	-8

Dwelling Units	# DUs	Min	Avg	Max
		dB	dB	dB
All Selected	6	0	0.0	0
All Impacted	1	0	0.0	0
All that meet NR Goal	0	0	0.0	0

**NOISE DATA WORKSHEET**

Job No:   
 Job Name:   
 Roadway Reference:   
 County:   
 Design Year:   
 Year(s) To Be Modeled:

Roadway Cross-Sections:  Note: DHV = (ADT)(K)  
 DDHV = (ADT)(K)(D)  
 K - Percent of ADT occurring in design hour  
 D - Directional Distribution  
   
 Operating Speed:

Traffic Data:

YEAR	ADT	%TRUCK	DHV	CARS	MT	HT
					46.1%	53.9%
2025	4,700	8%	353	324	13	15
2045						

Garver  
 Leigh Mercer  
 20-Mar-24  
 TNM 2.5  
 Calculated with TNM 2.5

RESULTS: SOUND LEVELS  
 PROJECT/CONTRACT: Pocahontas Bypass ARDOT No. 101140  
 RUN: AR 115 Existing Conditions  
 BARRIER DESIGN: INPUT HEIGHTS  
 ATMOSPHERICS: 68 deg F, 50% RH  
 Average pavement type shall be used unless a State highway agency substantiates the use of a different type with approval of FHWA.

Receiver Name	No.	#DUs	Existing LAeq1h	No Barrier LAeq1h	Noise Reduction Calculated Crit'n	Increase over existing Calculated Crit'n	Type Impact	With Barrier Calculated LAeq1h	Noise Reduction Calculated Goal	Calculated minus Goal
			dBA	dBA	dBA	dB		dBA	dB	dB
50	1	1	0	64.0	66	64	10	64	0	8
100	2	1	0	60.5	66	60.5	10	60.5	0	8
150	3	1	0	56.2	66	56.2	10	56.2	0	8
200	4	1	0	53.3	66	53.3	10	53.3	0	8
62	39	1	0	63.0	66	63	10	63	0	8
33	40	1	0	66.0	66	66	10	Snd Lvl 66	0	8

Dwelling Units

	# DUs	Min	Avg	Max
		dB	dB	dB
All Selected	6	0	0.0	0
All Impacted	1	0	0.0	0
All that meet NR Goal	0	0	0.0	0

**NOISE DATA WORKSHEET**

Job No:   
 Job Name:   
 Roadway Reference:   
 County:   
 Design Year:   
 Year(s) To Be Modeled:

Roadway Cross-Sections:  Note: DHV = (ADT)(K)  
 DDHV = (ADT)(K)(D)  
 K - Percent of ADT occurring in design hour  
 D - Directional Distribution  
   
 Operating Speed:  Kfactor

Traffic Data:

YEAR	ADT	%TRUCK	DHV	CARS	MT	HT
					46.1%	53.9%
2025						
2045	5,800	8%	435	400	16	19

Garver  
 Leigh Mercer  
 20-Mar-24  
 TNM 2.5  
 Calculated with TNM 2.5

RESULTS: SOUND LEVELS  
 PROJECT/CONTRACT: Pocahontas Bypass ARDOT No. 101140  
 RUN: AR 115 Future Conditions  
 BARRIER DESIGN: INPUT HEIGHTS  
 ATMOSPHERICS: 68 deg F, 50% RH  
 Average pavement type shall be used unless a State highway agency substantiates the use of a different type with approval of FHWA.

Receiver Name	No.	#DUs	Existing LAeq1h	No Barrier LAeq1h	Noise Reduction Calculated Crit'n	Increase over existing Calculated Crit'n	Type Impact	With Barrier Calculated LAeq1h	Noise Reduction Calculated Goal	Calculated minus Goal		
			dB	dB	dB	dB		dB	dB	dB		
50	1	1	0	65.0	66	65	10	----	65	0	8	-8
100	2	1	0	61.4	66	61.4	10	----	61.4	0	8	-8
150	3	1	0	57.2	66	57.2	10	----	57.2	0	8	-8
200	4	1	0	54.3	66	54.3	10	----	54.3	0	8	-8
75	39	1	0	63.0	66	63	10	----	63	0	8	-8
40	40	1	0	66.1	66	66.1	10	Snd Lvl	66.1	0	8	-8

Dwelling Units

	# DUs	Min	Avg	Max
		dB	dB	dB
All Selected	6	0	0.0	0
All Impacted	1	0	0.0	0
All that meet NR Goal	0	0	0.0	0

**NOISE DATA WORKSHEET**

Job No:   
 Job Name:   
 Roadway Reference:   
 County:   
 Design Year:   
 Year(s) To Be Modeled:

Roadway Cross-Sections:  Note: DHV = (ADT)(K)  
 DDHV = (ADT)(K)(D)  
 K - Percent of ADT occurring in design hour  
 D - Directional Distribution  
   
 Operating Speed:

Traffic Data:

YEAR	ADT	%TRUCK	DHV	CARS	MT	HT
					9.7%	90.3%
2025	6,500	38%	488	302	18	167
2045						

Garver  
 Leigh Mercer  
 20-Mar-24  
 TNM 2.5  
 Calculated with TNM 2.5

RESULTS: SOUND LEVELS  
 PROJECT/CONTRACT: Pocahontas Bypass ARDOT No. 101140  
 RUN: US 67 Existing Conditions  
 BARRIER DESIGN: INPUT HEIGHTS  
 ATMOSPHERICS: 68 deg F, 50% RH

Average pavement type shall be used unless a State highway agency substantiates the use of a different type with approval of FHWA.

Receiver Name	No.	#DUs	Existing LAeq1h	No Barrier LAeq1h	Noise Reduction Calculated Crit'n	Increase over existing Calculated Crit'n	Type Impact	With Barrier Calculated LAeq1h	Noise Reduction Calculated Goal	Calculated minus Goal		
			dBA	dBA	dBA	dB		dBA	dB	dB		
50	1	1	0	70.0	66	70	10	Snd Lvl	70	0	8	-8
100	2	1	0	66.6	66	66.6	10	Snd Lvl	66.6	0	8	-8
112	3	1	0	66.1	66	66.1	10	Snd Lvl	66.1	0	8	-8
150	4	1	0	64.6	66	64.6	10	----	64.6	0	8	-8
180	39	1	0	63.1	66	63.1	10	----	63.1	0	8	-8
200	40	1	0	62.1	66	62.1	10	----	62.1	0	8	-8

Dwelling Units

	# DUs	Min	Avg	Max
		dB	dB	dB
All Selected	6	0	0.0	0
All Impacted	3	0	0.0	0
All that meet NR Goal	0	0	0.0	0

**NOISE DATA WORKSHEET**

Job No:   
 Job Name:   
 Roadway Reference:   
 County:   
 Design Year:   
 Year(s) To Be Modeled:

Roadway Cross-Sections:  Note: DHV = (ADT)(K)  
 DDHV = (ADT)(K)(D)  
 K - Percent of ADT occurring in design hour  
 D - Directional Distribution  
   
 Operating Speed:  Kfactor

Traffic Data:

YEAR	ADT	%TRUCK	DHV	CARS	MT	HT
					9.7%	90.3%
2025						
2045	7,900	38%	593	367	22	203

Garver  
 Leigh Mercer  
 20-Mar-24  
 TNM 2.5  
 Calculated with TNM 2.5

RESULTS: SOUND LEVELS  
 PROJECT/CONTRACT: Pocahontas Bypass ARDOT No. 101140  
 RUN: US 67 Future Conditions  
 BARRIER DESIGN: INPUT HEIGHTS  
 ATMOSPHERICS: 68 deg F, 50% RH

Average pavement type shall be used unless a State highway agency substantiates the use of a different type with approval of FHWA.

Receiver Name	No.	#DUs	Existing LAeq1h	No Barrier LAeq1h	Noise Reduction Calculated Crit'n	Increase over existing Calculated Crit'n	Type Impact	With Barrier Calculated LAeq1h	Noise Reduction Calculated Goal	Calculated minus Goal		
			dBA	dBA	dBA	dB		dBA	dB	dB		
50	1	1	0	70.8	66	70.8	10	Snd Lvl	70.8	0	8	-8
100	2	1	0	67.5	66	67.5	10	Snd Lvl	67.5	0	8	-8
135	3	1	0	66.0	66	66	10	Snd Lvl	66	0	8	-8
150	4	1	0	65.4	66	65.4	10	----	65.4	0	8	-8
200	40	1	0	62.9	66	62.9	10	----	62.9	0	8	-8
250	41	1	0	60.7	66	60.7	10	----	60.7	0	8	-8

Dwelling Units

	# DUs	Min	Avg	Max
		dB	dB	dB
All Selected	6	0	0.0	0
All Impacted	3	0	0.0	0
All that meet NR Goal	0	0	0.0	0

**NOISE DATA WORKSHEET**

Job No:   
 Job Name:   
 Roadway Reference:   
 County:   
 Design Year:   
 Year(s) To Be Modeled:

Roadway Cross-Sections:  Note: DHV = (ADT)(K)  
 DDHV = (ADT)(K)(D)  
 K - Percent of ADT occurring in design hour  
 D - Directional Distribution

Operating Speed:  Kfactor

Traffic Data:

YEAR	ADT	%TRUCK	DHV	CARS	MT	HT
					46.1%	53.9%
2025	6,000	5%	450	428	10	12
2045						

Garver  
 Leigh Mercer  
 20-Mar-24  
 TNM 2.5  
 Calculated with TNM 2.5

RESULTS: SOUND LEVELS  
 PROJECT/CONTRACT: Pocahontas Bypass ARDOT No. 101140  
 RUN: NoBuild AR 90\_EX - W of AR 115  
 BARRIER DESIGN: INPUT HEIGHTS  
 ATMOSPHERICS: 68 deg F, 50% RH  
 Average pavement type shall be used unless a State highway agency substantiates the use of a different type with approval of FHWA.

Receiver Name	No.	#DUs	Existing LAeq1h	No Barrier LAeq1h	Calculated Crit'n	Increase over existing Calculated Crit'n	Type Impact	With Barrier Calculated LAeq1h	Noise Reduction Calculated Goal	Calculated minus Goal		
			dB	dB	dB	dB		dB	dB	dB		
50	1	1	0	64.5	66	64.5	10	----	64.5	0	8	-8
100	2	1	0	61.1	66	61.1	10	----	61.1	0	8	-8
150	3	1	0	58.8	66	58.8	10	----	58.8	0	8	-8
200	4	1	0	55.4	66	55.4	10	----	55.4	0	8	-8
35	39	1	0	66.2	66	66.2	10	Snd Lvl	66.2	0	8	-8
70	41	1	0	62.9	66	62.9	10	----	62.9	0	8	-8

Dwelling Units

	# DUs	Noise Reduction		
		Min	Avg	Max
		dB	dB	dB
All Selected	6	0	0.0	0
All Impacted	1	0	0.0	0
All that meet NR Goal	0	0	0.0	0

**NOISE DATA WORKSHEET**

Job No:   
 Job Name:   
 Roadway Reference:   
 County:   
 Design Year:   
 Year(s) To Be Modeled:

Roadway Cross-Sections:  Note: DHV = (ADT)(K)  
 DDHV = (ADT)(K)(D)  
 K - Percent of ADT occurring in design hour  
 D - Directional Distribution

Operating Speed:  Kfactor

Traffic Data:

YEAR	ADT	%TRUCK	DHV	CARS	MT	HT
					46.1%	53.9%
2025						
2045	7,300	5%	548	520	13	15

Garver  
 Leigh Mercer  
 20-Mar-24  
 TNM 2.5  
 Calculated with TNM 2.5

RESULTS: SOUND LEVELS  
 PROJECT/CONTRACT: Pocahontas Bypass ARDOT No. 101140  
 RUN: NoBuild AR 90\_PROP - W of AR 115  
 BARRIER DESIGN: INPUT HEIGHTS  
 ATMOSPHERICS: 68 deg F, 50% RH

Average pavement type shall be used unless a State highway agency substantiates the use of a different type with approval of FHWA.

Receiver Name	No.	#DUs	Existing LAeq1h	No Barrier LAeq1h	Noise Reduction Calculated Crit'n	Increase over existing Calculated Crit'n	Type Impact	With Barrier Calculated LAeq1h	Noise Reduction Calculated Goal	Calculated minus Goal
			dBA	dBA	dBA	dB		dBA	dB	dB
	50	1	0	65.4	66	65.4	10	65.4	0	8
	100	2	0	62.0	66	62	10	62	0	8
	150	3	0	59.7	66	59.7	10	59.7	0	8
	200	4	0	56.3	66	56.3	10	56.3	0	8
	45	39	0	65.9	66	65.9	10	65.9	0	8
	80	41	0	63.1	66	63.1	10	63.1	0	8

Dwelling Units

	# DUs	Min	Avg	Max
		dB	dB	dB
All Selected	6	0	0.0	0
All Impacted	0	0	0.0	0
All that meet NR Goal	0	0	0.0	0



**NOISE DATA WORKSHEET**

Job No:   
 Job Name:   
 Roadway Reference:   
 County:   
 Design Year:   
 Year(s) To Be Modeled:

Roadway Cross-Sections:  Note: DHV = (ADT)(K)  
 DDHV = (ADT)(K)(D)  
 K - Percent of ADT occurring in design hour  
 D - Directional Distribution

Operating Speed:

Traffic Data:

YEAR	ADT	%TRUCK	DHV	CARS	MT	HT
					46.1%	53.9%
2025	10,000	9%	750	683	31	36
2045						

Garver  
 Leigh Mercer  
 20-Mar-24  
 TNM 2.5  
 Calculated with TNM 2.5

RESULTS: SOUND LEVELS  
 PROJECT/CONTRACT: Pocahontas Bypass ARDOT No. 101140  
 RUN: NoBuild AR 90\_EX - AR 115 to US 67  
 BARRIER DESIGN: INPUT HEIGHTS  
 ATMOSPHERICS: 68 deg F, 50% RH

Average pavement type shall be used unless a State highway agency substantiates the use of a different type with approval of FHWA.

Receiver Name	No.	#DUs	Existing LAeq1h	No Barrier LAeq1h	Noise Reduction Calculated Crit'n	Increase over existing Calculated Crit'n	Type Impact	With Barrier Calculated LAeq1h	Noise Reduction Calculated Goal	Calculated minus Goal		
			dB	dB	dB	dB		dB	dB	dB		
50	1	1	0	63.7	66	63.7	10	----	63.7	0	8	-8
100	2	1	0	60.2	66	60.2	10	----	60.2	0	8	-8
150	3	1	0	56.4	66	56.4	10	----	56.4	0	8	-8
200	4	1	0	53.8	66	53.8	10	----	53.8	0	8	-8
30	39	1	0	66.2	66	66.2	10	Snd Lvl	66.2	0	8	-8
60	41	1	0	62.9	66	62.9	10	----	62.9	0	8	-8

Dwelling Units

	# DUs	Min	Avg	Max
		dB	dB	dB
All Selected	6	0	0.0	0
All Impacted	1	0	0.0	0
All that meet NR Goal	0	0	0.0	0

**NOISE DATA WORKSHEET**

Job No:   
 Job Name:   
 Roadway Reference:   
 County:   
 Design Year:   
 Year(s) To Be Modeled:

Roadway Cross-Sections:  Note: DHV = (ADT)(K)  
 DDHV = (ADT)(K)(D)  
 K - Percent of ADT occurring in design hour  
 D - Directional Distribution

Operating Speed:

Traffic Data:

YEAR	ADT	%TRUCK	DHV	CARS	MT	HT
					46.1%	53.9%
2025						
2045	12,000	9%	900	819	37	44

Garver  
 Leigh Mercer  
 20-Mar-24  
 TNM 2.5  
 Calculated with TNM 2.5

RESULTS: SOUND LEVELS  
 PROJECT/CONTRACT: Pocahontas Bypass ARDOT No. 101140  
 RUN: NoBuild AR 90\_PROP - AR 115 to US 67  
 BARRIER DESIGN: INPUT HEIGHTS  
 ATMOSPHERICS: 68 deg F, 50% RH

Average pavement type shall be used unless a State highway agency substantiates the use of a different type with approval of FHWA.

Receiver Name	No.	#DUs	Existing LAeq1h	No Barrier LAeq1h	Noise Reduction Calculated Crit'n	Increase over existing Calculated Crit'n	Type Impact	With Barrier Calculated LAeq1h	Noise Reduction Calculated Goal	Calculated minus Goal
			dBA	dBA	dBA	dB		dBA	dB	dB
50	1	1	0	64.5	66	64.5	10	64.5	0	8
100	2	1	0	61.0	66	61	10	61	0	8
150	3	1	0	57.2	66	57.2	10	57.2	0	8
200	4	1	0	54.6	66	54.6	10	54.6	0	8
38	39	1	0	65.9	66	65.9	10	65.9	0	8
70	41	1	0	62.9	66	62.9	10	62.9	0	8

Dwelling Units

	# DUs	Min	Avg	Max
		dB	dB	dB
All Selected	6	0	0.0	0
All Impacted	0	0	0.0	0
All that meet NR Goal	0	0	0.0	0

**NOISE DATA WORKSHEET**

Job No:

Job Name:

Roadway Reference:

County:

Design Year:

Year(s) To Be Modeled:

Roadway Cross-Sections:  Note: DHV = (ADT)(K)  
 DDHV = (ADT)(K)(D)  
 K - Percent of ADT occurring in design hour  
 D - Directional Distribution

Operating Speed:

Traffic Data:

YEAR	ADT	%TRUCK	DHV	CARS	MT	HT
					9.7%	90.3%
2025	8,600	33%	645	432	21	192
2045						

Garver  
 Leigh Mercer

20-Mar-24  
 TNM 2.5  
 Calculated with TNM 2.5

RESULTS: SOUND LEVELS  
 PROJECT/CONTRACT: Pocahontas Bypass ARDOT No. 101140  
 RUN: NoBuild US 67\_EX - E of AR 90  
 BARRIER DESIGN: INPUT HEIGHTS

ATMOSPHERICS: 68 deg F, 50% RH

Average pavement type shall be used unless a State highway agency substantiates the use of a different type with approval of FHWA.

Receiver Name	No.	#DUs	Existing LAeq1h	No Barrier LAeq1h	Noise Reduction Calculated Crit'n	Increase over existing Calculated Crit'n	Type Impact	With Barrier Calculated LAeq1h	Noise Reduction Calculated Goal	Calculated minus Goal		
			dBA	dBA	dBA	dB		dBA	dB	dB		
50	1	1	0	70.7	66	70.7	10	Snd Lvl	70.7	0	8	-8
100	2	1	0	67.4	66	67.4	10	Snd Lvl	67.4	0	8	-8
150	3	1	0	65.3	66	65.3	10	----	65.3	0	8	-8
195	4	1	0	63.0	66	63	10	----	63	0	8	-8
130	39	1	0	66.1	66	66.1	10	Snd Lvl	66.1	0	8	-8
250	40	1	0	60.6	66	60.6	10	----	60.6	0	8	-8

Dwelling Units

	# DUs	Min	Avg	Max
		dB	dB	dB
All Selected	6	0	0.0	0
All Impacted	3	0	0.0	0
All that meet NR Goal	0	0	0.0	0

**NOISE DATA WORKSHEET**

Job No:   
 Job Name:   
 Roadway Reference:   
 County:   
 Design Year:   
 Year(s) To Be Modeled:

Roadway Cross-Sections:  Note: DHV = (ADT)(K)  
 DDHV = (ADT)(K)(D)  
 K - Percent of ADT occurring in design hour  
 D - Directional Distribution  
   
 Operating Speed:

Traffic Data:

YEAR	ADT	%TRUCK	DHV	CARS	MT	HT
					9.7%	90.3%
2025						
2045	10,500	33%	788	528	25	235

Garver  
 Leigh Mercer  
 20-Mar-24  
 TNM 2.5  
 Calculated with TNM 2.5

RESULTS: SOUND LEVELS  
 PROJECT/CONTRACT: Pocahontas Bypass ARDOT No. 101140  
 RUN: NoBuild US 67\_PROP - E of AR 90  
 BARRIER DESIGN: INPUT HEIGHTS  
 ATMOSPHERICS: 68 deg F, 50% RH  
 Average pavement type shall be used unless a State highway agency substantiates the use of a different type with approval of FHWA.

Receiver Name	No.	#DUs	Existing LAeq1h	No Barrier LAeq1h	Noise Reduction Calculated Crit'n	Increase over existing Calculated Crit'n	Type Impact	With Barrier Calculated LAeq1h	Noise Reduction Calculated Goal	Calculated minus Goal		
			dBA	dBA	dBA	dB		dBA	dB	dB		
50	1	1	0	71.6	66	71.6	10	Snd Lvl	71.6	0	8	-8
100	2	1	0	68.3	66	68.3	10	Snd Lvl	68.3	0	8	-8
150	3	1	0	66.2	66	66.2	10	Snd Lvl	66.2	0	8	-8
200	4	1	0	63.7	66	63.7	10	----	63.7	0	8	-8
210	39	1	0	63.2	66	63.2	10	----	63.2	0	8	-8
250	40	1	0	61.4	66	61.4	10	----	61.4	0	8	-8

Dwelling Units

	# DUs	Min	Avg	Max
		dB	dB	dB
All Selected	6	0	0.0	0
All Impacted	3	0	0.0	0
All that meet NR Goal	0	0	0.0	0

## **Appendix G: Farmlands**

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**From:** [Schmidt, Cassie P.](#)  
**To:** ["Grishanova, Greta - FPAC-NRCS, AR"](#)  
**Subject:** RE: [External Email]ARDOT Job 101140, Pocahontas Bypass (S) - Agency Coordination Letter  
**Date:** Monday, February 12, 2024 2:14:00 PM  
**Attachments:** [Pocahontas Bypass CPA-106 for Alt A and B Final PRINT.pdf](#)  
[image001.png](#)

---

Thank you Greta! Please find the attached finalized CPA-106 form for this project.

Sincerely,

**Cassie Schmidt**

Garver  
479-287-4673

---

**From:** Grishanova, Greta - FPAC-NRCS, AR <Greta.Grishanova@usda.gov>  
**Sent:** Friday, February 9, 2024 11:58 AM  
**To:** Schmidt, Cassie P. <CPSchmidt@GarverUSA.com>  
**Subject:** RE: [External Email]ARDOT Job 101140, Pocahontas Bypass (S) - Agency Coordination Letter

Hi Cassie -

I've completed the review for the Pocahontas Bypass Project (Alternatives A and B) located in Randolph County, Arkansas. For Alternative A, there are 11 acres of farmland of statewide importance. For Alternative B, there are 8 acres of farmland of statewide importance.

Attached, please find completed form CPA-106 (included an editable version in case additional sections will be filled out) as well as a corresponding map and letter.

If you have any questions or need additional information, please let me know!

Thanks,

**Greta Grishanova**

*Soil Scientist*



Natural Resources Conservation Service  
U.S. DEPARTMENT OF AGRICULTURE

700 West Capitol Avenue, Suite 5317, Little Rock, AR, 72201

p: (501) 301-3140

e: [greta.grishanova@usda.gov](mailto:greta.grishanova@usda.gov) w: [www.nrcs.usda.gov/Arkansas](http://www.nrcs.usda.gov/Arkansas)

**Helping People Help the Land**

*USDA is an equal opportunity provider, employer, and lender.*

---

**From:** Schmidt, Cassie P. <[CPSchmidt@GarverUSA.com](mailto:CPSchmidt@GarverUSA.com)>  
**Sent:** Thursday, February 1, 2024 11:37 AM  
**To:** Grishanova, Greta - FPAC-NRCS, AR <[Greta.Grishanova@usda.gov](mailto:Greta.Grishanova@usda.gov)>

**Subject:** RE: [External Email]ARDOT Job 101140, Pocahontas Bypass (S) - Agency Coordination Letter

Hi Greta,

Last summer you provided us with farmland information for a 1000-foot-wide corridor we were assessing for a proposed bypass in Pocahontas, Arkansas (ARDOT Job 101140). We now have footprints for the two alternatives being analyzed for the project. I have attached shapefiles of each alternative along with a partially completed CPA-106 form. Could you please complete and return the form at your earliest convenience?

Thank you for your time!

Sincerely,

**Cassie Schmidt**

Garver

479-287-4673

---

**From:** Grishanova, Greta - FPAC-NRCS, AR <[Greta.Grishanova@usda.gov](mailto:Greta.Grishanova@usda.gov)>

**Sent:** Tuesday, August 8, 2023 8:29 AM

**To:** Schmidt, Cassie P. <[CPSchmidt@GarverUSA.com](mailto:CPSchmidt@GarverUSA.com)>

**Subject:** RE: [External Email]ARDOT Job 101140, Pocahontas Bypass (S) - Agency Coordination Letter

Hi Cassie,

Thanks for the shapefile. I have finished the review and determined that in this project area, there is one acre of prime and unique farmland, and there are 83 acres of farmland of statewide importance. There are no Wetland Reserve Easements (WRE) within the proposed project area.

Attached, please find completed form CPA-106 as well as a corresponding map and letter.

Should you have any questions or need additional information, please let me know!

**Greta Grishanova**

Soil Scientist

USDA - Natural Resources Conservation Service

700 West Capitol Avenue, Suite 5317

Little Rock, Arkansas 72201

Office: 501.301.3140



Helping People Help the Land

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**From:** Schmidt, Cassie P. <[CPSchmidt@GarverUSA.com](mailto:CPSchmidt@GarverUSA.com)>

**Sent:** Monday, August 7, 2023 10:50 AM

U.S. DEPARTMENT OF AGRICULTURE  
Natural Resources Conservation Service

NRCS-CPA-106  
(Rev. 1-91)

**FARMLAND CONVERSION IMPACT RATING  
FOR CORRIDOR TYPE PROJECTS**

<b>PART I (To be completed by Federal Agency)</b>		3. Date of Land Evaluation Request <b>2/1/24</b>	4. Sheet 1 of <b>1</b>
1. Name of Project <b>ARDOT Job 101140 - Pocahontas Bypass (S)</b>		5. Federal Agency Involved <b>Federal Highway Administration</b>	
2. Type of Project <b>Roadway</b>		6. County and State <b>Randolph County, Arkansas</b>	
<b>PART II (To be completed by NRCS)</b>		1. Date Request Received by NRCS <b>2/1/24</b>	2. Person Completing Form <b>Greta Grishanova</b>
3. Does the corridor contain prime, unique statewide or local important farmland? (If no, the FPPA does not apply - Do not complete additional parts of this form). YES <input checked="" type="checkbox"/> NO <input type="checkbox"/>		4. Acres Irrigated <b>59,478</b>	Average Farm Size <b>339</b>
5. Major Crop(s) <b>Soybeans</b>	6. Farmable Land in Government Jurisdiction Acres: <b>222,789</b> % <b>53</b>	7. Amount of Farmland As Defined in FPPA Acres: <b>209,002</b> % <b>50</b>	
8. Name Of Land Evaluation System Used <b>NCCPI</b>	9. Name of Local Site Assessment System <b>NONE</b>	10. Date Land Evaluation Returned by NRCS <b>2/9/24</b>	

	Alternative Corridor For Segment			
	Corridor A	Corridor B	Corridor C	Corridor D
<b>PART III (To be completed by Federal Agency)</b>				
A. Total Acres To Be Converted Directly	<b>65.5</b>	<b>66.2</b>		
B. Total Acres To Be Converted Indirectly, Or To Receive Services	<b>0</b>	<b>0</b>		
C. Total Acres In Corridor	<b>65.5</b>	<b>66.2</b>		
<b>PART IV (To be completed by NRCS) Land Evaluation Information</b>				
A. Total Acres Prime And Unique Farmland	<b>0</b>	<b>0</b>		
B. Total Acres Statewide And Local Important Farmland	<b>11</b>	<b>8</b>		
C. Percentage Of Farmland in County Or Local Govt. Unit To Be Converted	<b>0.03</b>	<b>0</b>		
D. Percentage Of Farmland in Govt. Jurisdiction With Same Or Higher Relative Value	<b>54</b>	<b>55</b>		
<b>PART V (To be completed by NRCS) Land Evaluation Information Criterion Relative value of Farmland to Be Serviced or Converted (Scale of 0 - 100 Points)</b>	<b>66</b>	<b>65</b>		
<b>PART VI (To be completed by Federal Agency) Corridor Assessment Criteria (These criteria are explained in 7 CFR 658.5(c))</b>	Maximum Points			
1. Area in Nonurban Use	15	<b>15</b>	<b>15</b>	
2. Perimeter in Nonurban Use	10	<b>10</b>	<b>10</b>	
3. Percent Of Corridor Being Farmed	20	<b>3</b>	<b>3</b>	
4. Protection Provided By State And Local Government	20	<b>0</b>	<b>0</b>	
5. Size of Present Farm Unit Compared To Average	10	<b>0</b>	<b>0</b>	
6. Creation Of Nonfarmable Farmland	25	<b>0</b>	<b>0</b>	
7. Availability Of Farm Support Services	5	<b>4</b>	<b>4</b>	
8. On-Farm Investments	20	<b>5</b>	<b>5</b>	
9. Effects Of Conversion On Farm Support Services	25	<b>0</b>	<b>0</b>	
10. Compatibility With Existing Agricultural Use	10	<b>0</b>	<b>0</b>	
<b>TOTAL CORRIDOR ASSESSMENT POINTS</b>	<b>160</b>	<b>37</b>	<b>37</b>	<b>0</b> <b>0</b>
<b>PART VII (To be completed by Federal Agency)</b>				
Relative Value Of Farmland (From Part V)	100	<b>66</b>	<b>65</b>	<b>0</b> <b>0</b>
Total Corridor Assessment (From Part VI above or a local site assessment)	160	<b>37</b>	<b>37</b>	<b>0</b> <b>0</b>
<b>TOTAL POINTS (Total of above 2 lines)</b>	<b>260</b>	<b>103</b>	<b>102</b>	<b>0</b> <b>0</b>
1. Corridor Selected: <b>Corridor B</b>	2. Total Acres of Farmlands to be Converted by Project: <b>8</b>	3. Date Of Selection: <b>2/12/24</b>	4. Was A Local Site Assessment Used? YES <input type="checkbox"/> NO <input type="checkbox"/>	

5. Reason For Selection:

**Alternative B (i.e., Corridor B) best minimizes impacts to cultural and natural resources.**

Signature of Person Completing this Part:

*Cassie Schmidt*

DATE

**2/12/24**

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





United States Department of Agriculture

---

**VIA EMAIL**

August 8, 2023

Cassie Schmidt  
Environmental Scientist  
Garver  
4300 South J.B. Hunt Dr., Ste. 240  
Rogers, AR 72758

Dear Ms. Schmidt

This letter is in response to your request for information related to Prime Farmland and Farmland of Statewide Importance for the Pocahontas Bypass Project located in Randolph County, Arkansas. In this project area, there is one acre of prime and unique farmland, and there are 83 acres of farmland of statewide importance. There are no Wetland Reserve Easements (WRE) within the proposed project area. Please find enclosed form CPA-106 as well as a corresponding map.

Should you have any questions or need additional information, please call me at (501) 301-3140 or email at [greta.grishanova@usda.gov](mailto:greta.grishanova@usda.gov).

Sincerely,

Greta Grishanova  
Soil Scientist

Enclosure



**Natural Resources Conservation Service**

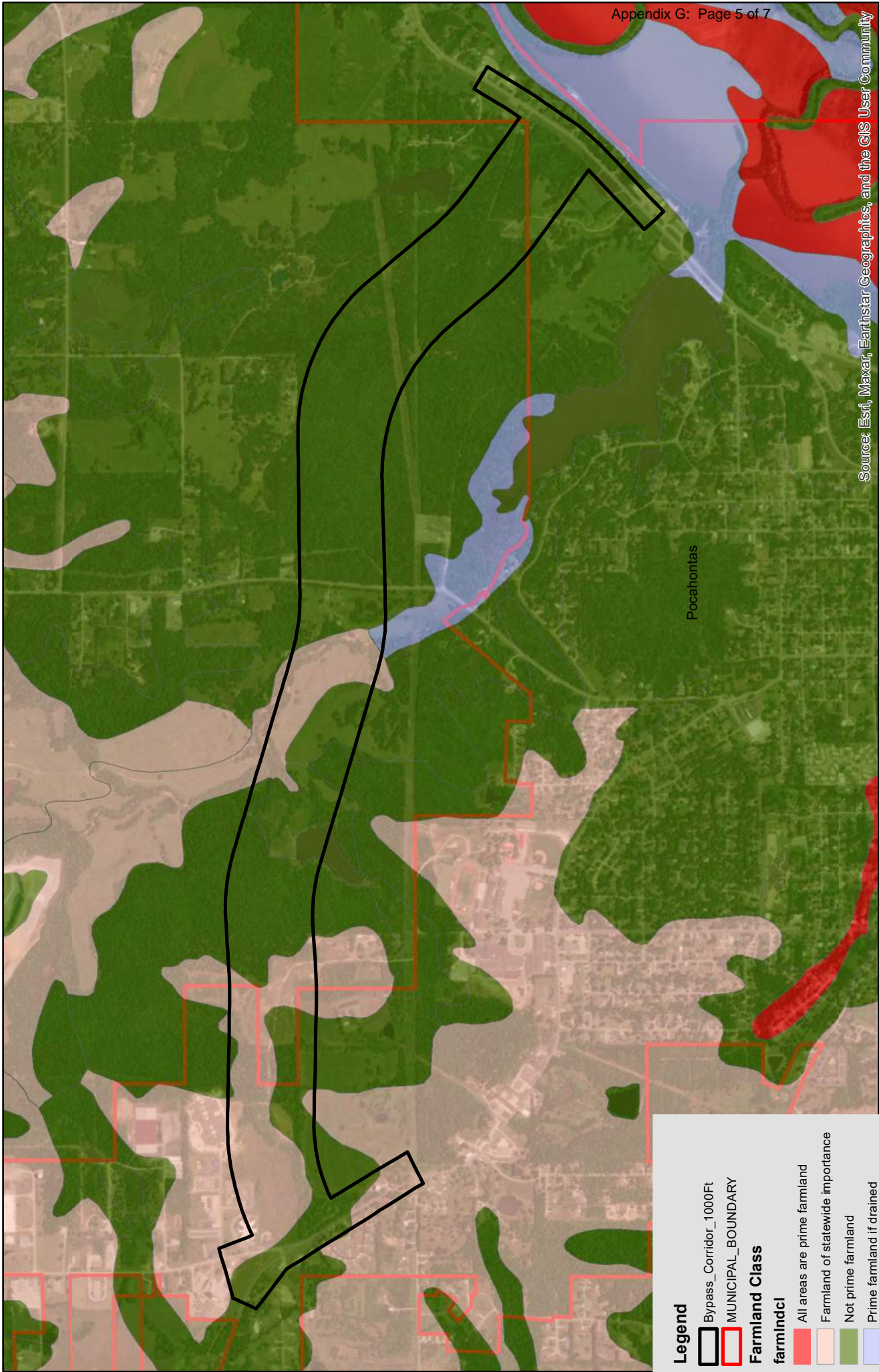
Room 3416, Federal Building  
700 West Capitol Avenue  
Little Rock, Arkansas 72201-3215

An Equal Opportunity Provider and Employer

*Helping People Help the Land*



Farmland Classification of Soils  
Pocahontas Bypass (ARDOT Job 101140)  
Randolph County, Arkansas



**Legend**

- Bypass\_Corridor\_1000Ft
- MUNICIPAL\_BOUNDARY
- Farmland Class**  
**farmlandci**
- All areas are prime farmland
- Farmland of statewide importance
- Not prime farmland
- Prime farmland if drained

U.S. DEPARTMENT OF AGRICULTURE  
Natural Resources Conservation Service

NRCS-CPA-106  
(Rev. 1-91)

**FARMLAND CONVERSION IMPACT RATING  
FOR CORRIDOR TYPE PROJECTS**

<b>PART I (To be completed by Federal Agency)</b>		3. Date of Land Evaluation Request <b>7/27/23</b>	4. Sheet <b>1</b> of <b>1</b>
1. Name of Project <b>ARDOT Job 101140 - Pocahontas Bypass</b>		5. Federal Agency Involved <b>USDOT</b>	
2. Type of Project <b>Roadway</b>		6. County and State <b>Randolph County, Arkansas</b>	
<b>PART II (To be completed by NRCS)</b>		1. Date Request Received by NRCS <b>7/27/23</b>	2. Person Completing Form <b>Greta Grishanova</b>
3. Does the corridor contain prime, unique statewide or local important farmland? (If no, the FPPA does not apply - Do not complete additional parts of this form). YES <input checked="" type="checkbox"/> NO <input type="checkbox"/>		4. Acres Irrigated <b>56,920</b>	Average Farm Size <b>316</b>
5. Major Crop(s) <b>Soybeans</b>	6. Farmable Land in Government Jurisdiction Acres: <b>210,550</b> % <b>50</b>	7. Amount of Farmland As Defined in FPPA Acres <b>209,002</b> % <b>50</b>	
8. Name Of Land Evaluation System Used <b>NCCPI</b>	9. Name of Local Site Assessment System <b>NONE</b>	10. Date Land Evaluation Returned by NRCS <b>8/8/23</b>	

<b>PART III (To be completed by Federal Agency)</b>	<b>Alternative Corridor For Segment</b>			
	<b>Corridor A</b>	<b>Corridor B</b>	<b>Corridor C</b>	<b>Corridor D</b>
A. Total Acres To Be Converted Directly	<b>357</b>			
B. Total Acres To Be Converted Indirectly, Or To Receive Services	<b>0</b>			
C. Total Acres In Corridor	<b>357</b>			
<b>PART IV (To be completed by NRCS) Land Evaluation Information</b>				
A. Total Acres Prime And Unique Farmland	<b>1</b>			
B. Total Acres Statewide And Local Important Farmland	<b>83</b>			
C. Percentage Of Farmland in County Or Local Govt. Unit To Be Converted	<b>0.17</b>			
D. Percentage Of Farmland in Govt. Jurisdiction With Same Or Higher Relative Value	<b>57</b>			
<b>PART V (To be completed by NRCS) Land Evaluation Information Criterion Relative value of Farmland to Be Serviced or Converted (Scale of 0 - 100 Points)</b>	<b>64</b>			
<b>PART VI (To be completed by Federal Agency) Corridor Assessment Criteria (These criteria are explained in 7 CFR 658.5(c))</b>	<b>Maximum Points</b>			
1. Area in Nonurban Use	<b>15</b>			
2. Perimeter in Nonurban Use	<b>10</b>			
3. Percent Of Corridor Being Farmed	<b>20</b>			
4. Protection Provided By State And Local Government	<b>20</b>			
5. Size of Present Farm Unit Compared To Average	<b>10</b>			
6. Creation Of Nonfarmable Farmland	<b>25</b>			
7. Availability Of Farm Support Services	<b>5</b>			
8. On-Farm Investments	<b>20</b>			
9. Effects Of Conversion On Farm Support Services	<b>25</b>			
10. Compatibility With Existing Agricultural Use	<b>10</b>			
<b>TOTAL CORRIDOR ASSESSMENT POINTS</b>	<b>160</b>	<b>0</b>	<b>0</b>	<b>0</b>
<b>PART VII (To be completed by Federal Agency)</b>				
Relative Value Of Farmland (From Part V)	<b>100</b>	<b>64</b>	<b>0</b>	<b>0</b>
Total Corridor Assessment (From Part VI above or a local site assessment)	<b>160</b>	<b>0</b>	<b>0</b>	<b>0</b>
<b>TOTAL POINTS (Total of above 2 lines)</b>	<b>260</b>	<b>64</b>	<b>0</b>	<b>0</b>
1. Corridor Selected:	2. Total Acres of Farmlands to be Converted by Project:	3. Date Of Selection:	4. Was A Local Site Assessment Used? YES <input type="checkbox"/> NO <input type="checkbox"/>	

5. Reason For Selection:

Signature of Person Completing this Part:

DATE

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

## CORRIDOR - TYPE SITE ASSESSMENT CRITERIA

The following criteria are to be used for projects that have a linear or corridor - type site configuration connecting two distant points, and crossing several different tracts of land. These include utility lines, highways, railroads, stream improvements, and flood control systems. Federal agencies are to assess the suitability of each corridor - type site or design alternative for protection as farmland along with the land evaluation information.

(1) How much land is in nonurban use within a radius of 1.0 mile from where the project is intended?

More than 90 percent - 15 points  
 90 to 20 percent - 14 to 1 point(s)  
 Less than 20 percent - 0 points

(2) How much of the perimeter of the site borders on land in nonurban use?

More than 90 percent - 10 points  
 90 to 20 percent - 9 to 1 point(s)  
 Less than 20 percent - 0 points

(3) How much of the site has been farmed (managed for a scheduled harvest or timber activity) more than five of the last 10 years?

More than 90 percent - 20 points  
 90 to 20 percent - 19 to 1 point(s)  
 Less than 20 percent - 0 points

(4) Is the site subject to state or unit of local government policies or programs to protect farmland or covered by private programs to protect farmland?

Site is protected - 20 points  
 Site is not protected - 0 points

(5) Is the farm unit(s) containing the site (before the project) as large as the average - size farming unit in the County ?

(Average farm sizes in each county are available from the NRCS field offices in each state. Data are from the latest available Census of Agriculture, Acreage or Farm Units in Operation with \$1,000 or more in sales.)

As large or larger - 10 points  
 Below average - deduct 1 point for each 5 percent below the average, down to 0 points if 50 percent or more below average - 9 to 0 points

(6) If the site is chosen for the project, how much of the remaining land on the farm will become non-farmable because of interference with land patterns?

Acreage equal to more than 25 percent of acres directly converted by the project - 25 points  
 Acreage equal to between 25 and 5 percent of the acres directly converted by the project - 1 to 24 point(s)  
 Acreage equal to less than 5 percent of the acres directly converted by the project - 0 points

(7) Does the site have available adequate supply of farm support services and markets, i.e., farm suppliers, equipment dealers, processing and storage facilities and farmer's markets?

All required services are available - 5 points  
 Some required services are available - 4 to 1 point(s)  
 No required services are available - 0 points

(8) Does the site have substantial and well-maintained on-farm investments such as barns, other storage building, fruit trees and vines, field terraces, drainage, irrigation, waterways, or other soil and water conservation measures?

High amount of on-farm investment - 20 points  
 Moderate amount of on-farm investment - 19 to 1 point(s)  
 No on-farm investment - 0 points

(9) Would the project at this site, by converting farmland to nonagricultural use, reduce the demand for farm support services so as to jeopardize the continued existence of these support services and thus, the viability of the farms remaining in the area?

Substantial reduction in demand for support services if the site is converted - 25 points  
 Some reduction in demand for support services if the site is converted - 1 to 24 point(s)  
 No significant reduction in demand for support services if the site is converted - 0 points

(10) Is the kind and intensity of the proposed use of the site sufficiently incompatible with agriculture that it is likely to contribute to the eventual conversion of surrounding farmland to nonagricultural use?

Proposed project is incompatible to existing agricultural use of surrounding farmland - 10 points  
 Proposed project is tolerable to existing agricultural use of surrounding farmland - 9 to 1 point(s)  
 Proposed project is fully compatible with existing agricultural use of surrounding farmland - 0 points

## **Appendix H: Cultural Resources**

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**Sarah Huckabee Sanders**  
Governor  
**Shea Lewis**  
Interim Secretary

August 30, 2023

Mr. John Fleming  
Division Head  
Environmental Division  
Arkansas Department of Transportation  
P.O. Box 2261  
Little Rock, AR 72203-2261

Re: Randolph County – General  
Architectural Resources Survey – FHWA  
Pocahontas Bypass (S)  
ARDOT Job Number 101140  
AHPP Tracking Number 111434

Dear Mr. Fleming:

The staff of the Arkansas Historic Preservation Program (AHPP) reviewed the Architectural Resources Survey received August 14, 2023 for the above-referenced job.

Name/Bridge Number	ARDOT/FHWA NRHP Determination	AHPP Concurrence
Structure 1	Not Eligible	Yes
Structure 2	Not Eligible	Yes
Structure 3	Not Eligible	Yes
Structure 4	Not Eligible	Yes
Structure 5	Not Eligible	Yes
Structure 5a	Not Eligible	Yes
Structure 5b	Not Eligible	Yes
Structure 5c	Not Eligible	Yes
Structure 5d	Not Eligible	Yes
Structure 5e	Not Eligible	Yes
Structure 5f	Not Eligible	Yes
Structure 5g	Not Eligible	Yes
Structure 5h	Not Eligible	Yes
Structure 6 (RA0176)	Not Eligible	Yes
Structure 6a	Not Eligible	Yes
Structure 7	Not Eligible	Yes
Structure 7a	Not Eligible	Yes
Structure 8	Not Eligible	Yes
Structure 9	Not Eligible	Yes
Structure 10	Not Eligible	Yes
Structure 11	Not Eligible	Yes
Structure 12	Not Eligible	Yes
Structure 13	Not Eligible	Yes

Name/Bridge Number	ARDOT/FHWA NRHP Determination	AHPP Concurrence
Structure 14	Not Eligible	Yes
Structure 15	Not Eligible	Yes
Structure 16	Not Eligible	Yes
Structure 17	Not Eligible	Yes
Structure 18	Not Eligible	Yes


We appreciate the opportunity to review this undertaking. If you have any questions, please contact George Burson at (501) 324-9270 or at [George.Burson@arkansas.gov](mailto:George.Burson@arkansas.gov). Please refer to the AHPP Tracking Number above in any correspondence.

Sincerely,

George

Burson

*for*

 Digitally signed by George Burson  
Date: 2023.08.30 11:12:16 -05'00'

Scott Kaufman

AHPP Director and State Historic Preservation Officer

cc: Mr. Randal Looney, Federal Highway Administration

# Appendix I: Visual Impacts

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# VISUAL IMPACT ASSESSMENT

Arkansas Department of Transportation

**ARDOT Job No. 101140  
POCAHONTAS BYPASS EA**

Randolph County, Arkansas



March 2024

ARDOT Job 101140: Pocahontas Bypass (S)  
Abbreviated VIA

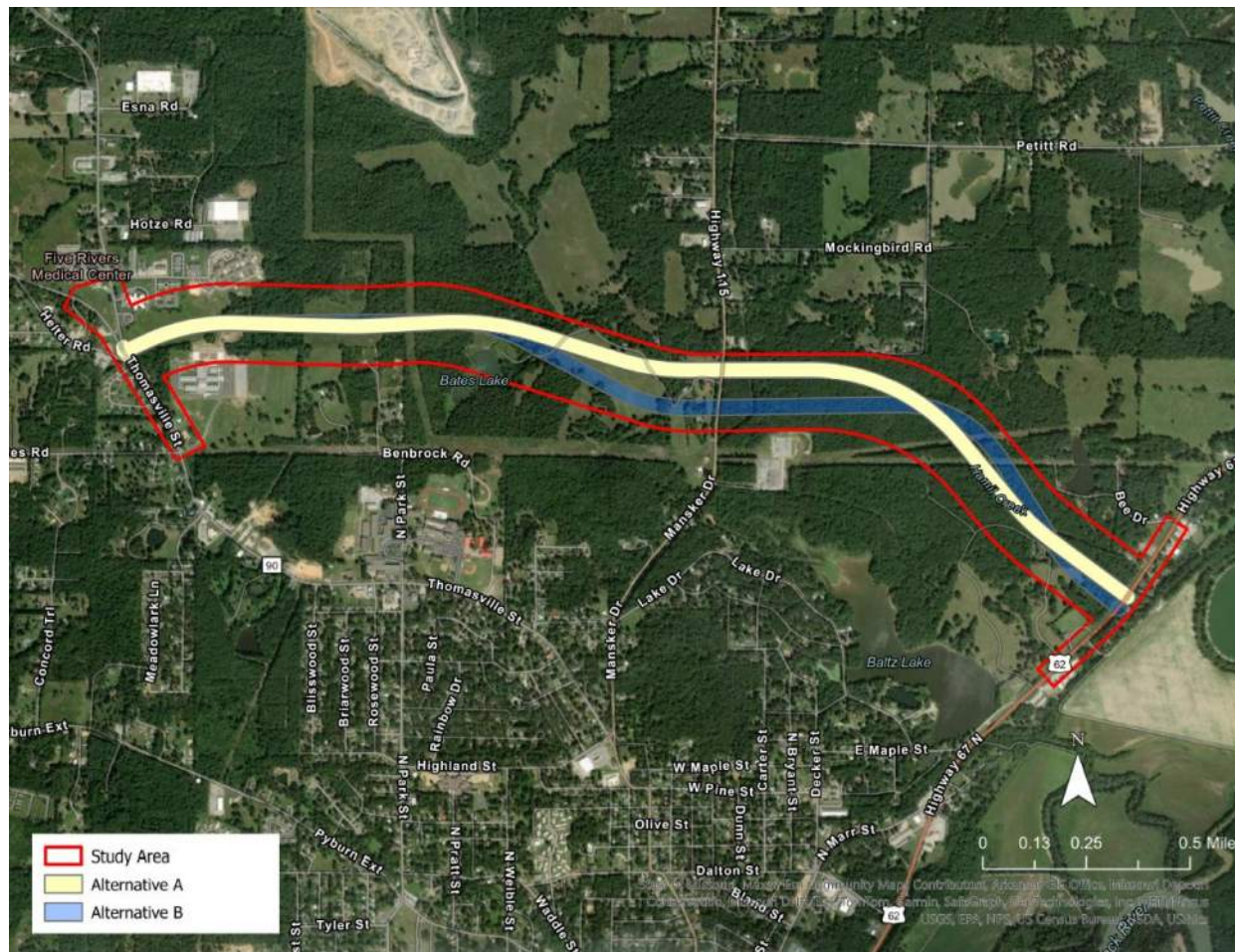
### Introduction

The Arkansas Department of Transportation (ARDOT) proposes to construct a new two-lane roadway between Highway 90 and Highway 67 north of the Central Business District (CBD) in the City of Pocahontas, located in Randolph County, Arkansas. The purpose of this report is to evaluate possible visual impacts from the proposed project in accordance with the Federal Highway Administration (FHWA) *Guidelines for the Visual Impact Assessment of Highway Projects* (January 2015). A visual assessment questionnaire was prepared and determined this abbreviated VIA would be prepared for the proposed project. See Attachment A for the completed questionnaire.

### Project Description

The proposed project would provide a new connection from Highway 90 to Highway 67. The project length is approximately 2.6 miles. The purpose of the project is to reduce heavy truck traffic, improve mobility and safety in the Pocahontas CBD, and to provide an alternative route for truck traffic to Highway 67. As shown in Figure 1, there are two build alternatives under consideration for the proposed project. The study area, also known as the area of visual effect (AVE), is shown in Figure 1. The AVE considers the landform and land cover conditions identified using aerial imagery.

Figure 1: Build Alternatives, Alternatives A and B



ARDOT Job 101140: Pocahontas Bypass (S)  
Abbreviated VIA

### **Affected Environment**

The visual character of the study area is primarily rural. The current environment of the study area (AVE) includes undeveloped fields, woodlands, some residential large parcel residential properties, and commercial developments primarily located on either end of the project limits. The study area is predominantly undeveloped; therefore, a natural environment of vegetation dominates the visual character of the area. Most of the study area consists of open grass fields and woodland/forested areas. Both static and dynamic views from existing roads in the study area, such as Highway 115, consist of trees and natural landscapes. As shown in Attachment B, existing tree lines limit views beyond the foreground and inhibit views to the middle and background environments. There are limited structures and buildings that can be observed in the study area. The existing developments are primarily located on either end of the proposed limits and have varied styles and features.

### **Existing Visual Character**

The current route followed by truck and passenger vehicles is the existing Highway 90 through the Pocahontas CBD. The route through the CBD provides the travelers' view to be limited to buildings in the foreground and middle ground. The right of way is narrow and does not provide a large expansive view also from the neighbors' perspective. In addition, the increased truck traffic is not appealing for the neighbors' views toward the existing facility. Views for travelers along other portions of the current route intermix between expansive views of open land and natural views of tree lines adjacent to the roadway. The views for the neighbors are not hindered by the two-lane roadway that is at grade and does not block views across the road to the other side. For various views depicted along the existing route, see Attachment B: Views at Existing Locations.

The existing roadway does not provide a hindrance to views across the facility and would not block a more expansive view in certain portions of the roadway when the natural terrain does not pose as an obstruction. The current experience by neighbors would not be considered negative, however, would be slightly less than neutral due to the increased traffic, as their views would be of truck traffic albeit temporary. For travelers, their current experience along the existing route is better than neutral consisting of cultural environment of buildings and a natural environment of undeveloped, vegetated fore and middle ground views.

### **Visual Quality Impacts from the Build Alternatives**

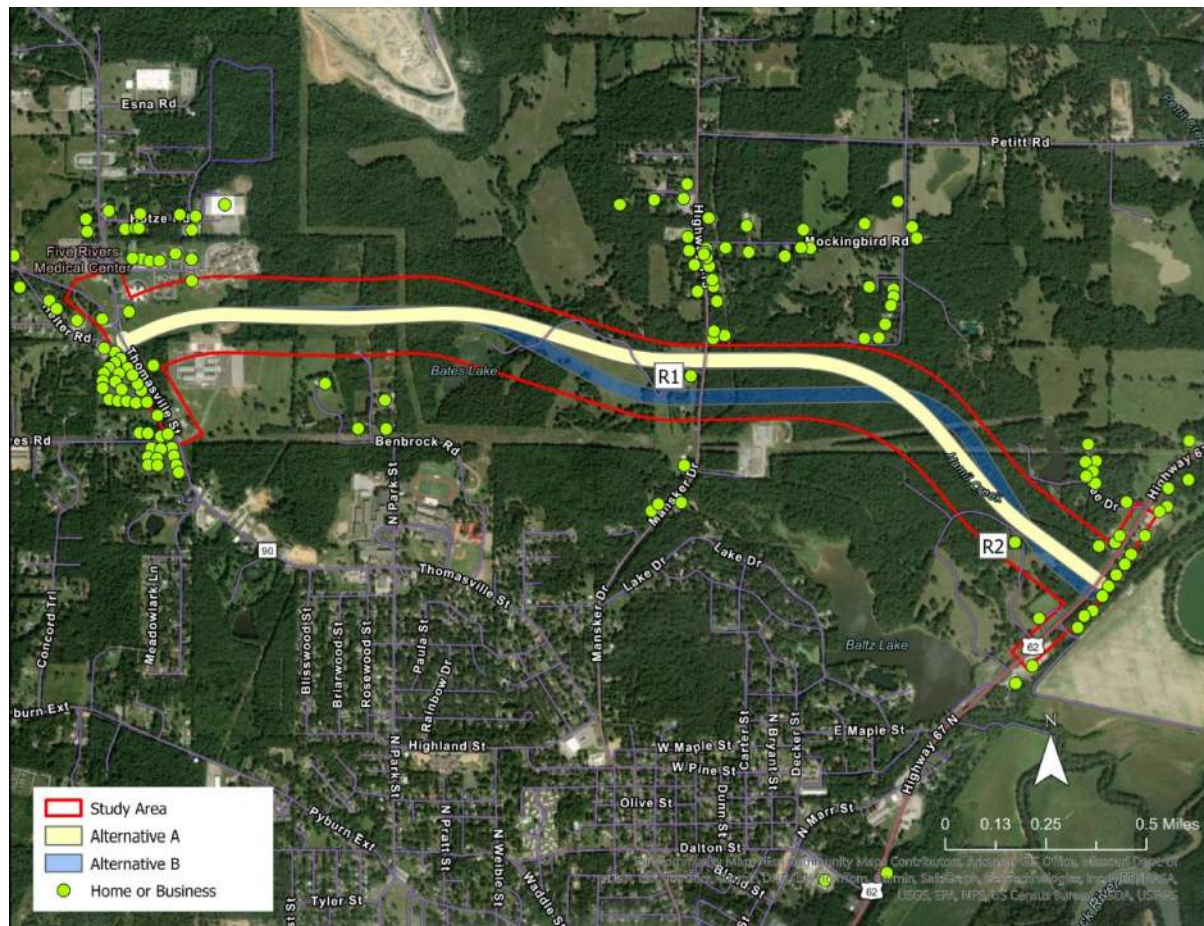
The proposed roadway is anticipated to consist of a similar roadway type, aesthetic look, configuration, and roadway features as the existing roadways in the study area such as Highways 90, 115 and 67. Roadway features would be newly constructed; therefore, the features would be more aesthetically pleasing for both neighbors and travelers.

The degree of visual impact for the proposed project would generally be neutral for both travelers and neighbors. Neighbors are not anticipated to experience substantial adverse effects to their views based on human sight limitations and the distances of adjacent housing from the proposed roadway alternatives. Several residential properties are located on either end of the project limits and their views would not be substantially altered because these residents have existing views of roadways such as Highway 90 and Highway 67. On the other hand, there are two residences, identified as R1 and R2 shown in Figure 2, where views are potentially affected by the build alternatives. These two residences would have views altered from the existing natural environment to the project environment. Some vegetation, trees, and forested

ARDOT Job 101140: Pocahontas Bypass (S)  
Abbreviated VIA

areas may remain to balance views of the new roadway; however, design refinement would determine exact pavement locations in relation to the residential properties for specific view changes. Possible set back from the proposed alternatives would also impact overall views from these neighbors. Although a 200-foot-wide right of way is being evaluated, the roadway pavement would not span the entire footprint. The neighbors' view would not be substantially adverse because the new roadway is proposed to be an at-grade grade facility, which would not block views across the facility. An approximate 40-foot pavement width is proposed with 30 feet clearing on each side. Trees would be removed and eliminate sight limitations towards the roadway, but vegetation and possible landscaping aesthetics along the proposed roadway may be installed to reduce middle to background views over time from the neighbors' perspective. Vehicles and trucks that travel on the road would be temporary and not a static view for neighbors to experience. For travelers, view impacts are estimated to be beneficial or neutral compared to the existing route condition. Travelers would see more natural views along the new build alternatives and less development for the near future. The views would be similar to portions of the current route and eliminate the structures and buildings seen through the CBD. The route would result in a more pleasant drive for truck travelers because it would eliminate the congestion, and adverse experience from efforts to maneuver through tight turns and narrow shoulders they currently experience. Passenger vehicle travelers would also benefit from less vehicle traffic, specifically truck traffic, along the proposed roadway, resulting in a more pleasant driving experience.

Figure 2: Build Alternatives, Homes and Businesses



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Abbreviated VIA

**Mitigation**

Any potential beneficial aesthetic features to be incorporated into the proposed project will be coordinated with the city. Potential visual impacts would be reduced over time through revegetation practices and maintenance of the roadway. Avoidance and minimization of adverse impacts to the two residences may be provided through landscaping treatments and other aesthetic measures to minimize project environment features. The proposed project may also include mitigation measures such as site grading to mimic natural terrain, landscaping to lessen visual impacts, or create berms to shield the adjacent property from the roadway.

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Abbreviated VIA

## Attachment A: Questionnaire

Federal Highway Administration

# Visual Impact Assessment Scoping Questionnaire

Project Name: Pocahontas Bypass EA	Site Visit Date: 01/09/2024
Location: Pocahontas, Arkansas	Time: 0:00 a.m. / p.m.
Special Conditions/Notes:	Conducted By: Michele Lopez

## Environmental Compatibility

1. *Will the project result in a noticeable change in the physical characteristics of the existing environment? (Consider all project components and construction impacts - both permanent and temporary, including landform changes, structures, noise barriers, vegetation removal, railing, signage, and contractor activities.)*

- High level of permanent change (3)
  Moderate level of permanent change (2)
  Low level of permanent or temporary change (1)
  No Noticeable Change (0)

2. *Will the project complement or contrast with the visual character desired by the community? (Evaluate the scale and extent of the project features compared to the surrounding scale of the community. Is the project likely to give an urban appearance to an existing rural or suburban community? Do you anticipate that the change will be viewed by the public as positive or negative? Research planning documents, or talk with local planners and community representatives to understand the type of visual environment local residents envision for their community.)*

- Low Compatibility (3)
  Moderate Compatibility (2)
  High compatibility (1)

3. *What level of local concern is there for the types of project features (e.g., bridge structures, large excavations, sound barriers, or median planting removal) and construction impacts that are proposed? (Certain project improvements can be of special interest to local citizens, causing a heightened level of public concern, and requiring a more focused visual analysis.)*

- High concern (3)
  Moderate concern (2)
  Low concern (1)
  Negligible Project Features (0)

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Abbreviated VIA

Federal Highway Administration

4. *Is it anticipated that to mitigate visual impacts, it may be necessary to develop extensive or novel mitigation strategies to avoid, minimize, or compensate for adverse impacts or will using conventional mitigation strategies, such as landscape or architectural treatment adequately mitigate adverse visual impacts?*

- Extensive Non-Conventional Mitigation Likely (3)       Some non-conventional Mitigation Likely (2)
- Only Conventional Mitigation Likely (1)       No Mitigation Likely (0)

5. *Will this project, when seen collectively with other projects, result in an aggregate adverse change (cumulative impacts) in overall visual quality or character? (Identify any projects [both state and local] in the area that have been constructed in recent years and those currently planned for future construction. The window of time and the extent of area applicable to possible cumulative impacts should be based on a reasonable anticipation of the viewing public's perception.)*

- Cumulative Impacts likely: 0-5 years (3)       Cumulative Impacts likely: 6-10 years (2)
- Cumulative Impacts unlikely (1)

## Viewer Sensitivity

1. *What is the potential that the project proposal may be controversial within the community, or opposed by any organized group? (This can be researched initially by talking with the state DOT and local agency management and staff familiar with the affected community's sentiments as evidenced by past projects and/or current information.)*

- High Potential (3)       Moderate Potential (2)
- Low Potential (1)       No Potential (0)

2. *How sensitive are potential viewer-groups likely to be regarding visible changes proposed by the project? (Consider among other factors the number of viewers within the group, probable viewer expectations, activities, viewing duration, and orientation. The expected viewer sensitivity level may be scoped by applying professional judgment, and by soliciting information from other DOT staff, local agencies and community representatives familiar with the affected community's sentiments and demonstrated concerns.)*

- High Sensitivity (3)       Moderate Sensitivity (2)
- Low Sensitivity (1)

ARDOT Job 101140: Pocahontas Bypass (S)  
Abbreviated VIA

Federal Highway Administration

3. *To what degree does the project's aesthetic approach appear to be consistent with applicable laws, ordinances, regulations, policies or standards?*

- Low Compatibility (3)                       Moderate Compatibility (2)  
 High compatibility (1)

4. *Are permits going to be required by outside regulatory agencies (i.e., Federal, State, or local)?*  
 (Permit requirements can have an unintended consequence on the visual environment. Anticipated permits, as well as specific permit requirements - which are defined by the permitter, may be determined by talking with the project environmental planner and project engineer. Note: coordinate with the state DOT representative responsible for obtaining the permit prior to communicating directly with any permitting agency. Permits that may benefit from additional analysis include permits that may result in visible built features, such as infiltration basins or devices under a storm water permit or a retaining wall for wetland avoidance or permits for work in sensitive areas such as coastal development permits or on Federal lands, such as impacts to Wild and Scenic Rivers.)

- Yes (3)     Maybe (2)  
 No (1)

5. *Will the project sponsor or public benefit from a more detailed visual analysis in order to help reach consensus on a course of action to address potential visual impacts? (Consider the proposed project features, possible visual impacts, and probable mitigation recommendations.)*

- Yes (3)     Maybe (2)  
 No (1)



ARDOT Job 101140: Pocahontas Bypass (S)  
Abbreviated VIA

**Attachment B: Views at Existing Locations**



Photo 1: View facing north toward tie in on the western project limit. (Photo taken on March 4, 2024.)



Photo 2: View facing northeast toward location where the proposed alignments would tie into Highway 90. (Photo taken on March 4, 2024.)

ARDOT Job 101140: Pocahontas Bypass (S)  
Abbreviated VIA



Photo 3: View facing south from location, where the project alignments would tie into Highway 90. (Photo taken on March 4, 2024.)



Photo 4: View facing southeast at Helter Road, just south of location where the western project roadway would tie into Highway 90. (Photo taken on March 4, 2024.)

ARDOT Job 101140: Pocahontas Bypass (S)  
Abbreviated VIA



Photo 5: View facing north toward where the project corridor would be in the distance, approximately 240 feet from the photo location, behind the Pocahontas Elementary School property. (Photo taken on March 4, 2024.)



Photo 6: View facing northwest toward where the project corridor would be in the distance, approximately 400 feet north from the photo location on 2528 Benbrock Road. (Photo taken on March 5, 2024.)

ARDOT Job 101140: Pocahontas Bypass (S)  
Abbreviated VIA



Photo 7: View facing north from where Alternative B would be located on the west side of Highway 115. (Photo taken on March 4, 2024.)



Photo 8: View facing south toward location where Alternative B would be located and intersect with Highway 115 (shown in the left side of photo behind line of trees) (Photo taken on March 4, 2024.)

ARDOT Job 101140: Pocahontas Bypass (S)  
Abbreviated VIA



Photo 9: View facing northeast toward area where project corridor for both Alternatives A and B would be located, west of Highway 115. (Photo taken on March 5, 2024.)



Photo 10: View facing north at open field area, toward area where project corridor for both Alternatives A and B would be located, west of Highway 115. (Photo taken on March 5, 2024.)

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Abbreviated VIA



Photo 11: View facing east toward location where the project corridor would be located from a residential property. (Photo taken on March 4, 2024.)



Photo 12: View facing west toward utility easement area and possible Alternative B corridor, west of Highway 115 within the Alternative A corridor. (Photo taken on March 4, 2024.)

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Abbreviated VIA



Photo 13: View facing southeast along Alternative A corridor, west of Highway 67, near the eastern project limit. (Photo taken on March 5, 2024.)



Photo 14: View facing northeast along Highway 67 at proposed location where proposed alignment locations would tie in for the eastern project limit. (Photo taken on March 5, 2024.)

ARDOT Job 101140: Pocahontas Bypass (S)  
Abbreviated VIA



Photo 15: View facing northeast toward residences along the east side of Highway 67 at the eastern project limit. (Photo taken on March 4, 2024.)



Photo 16: View facing south toward location where the eastern project roadways would tie into Highway 67. (Photo taken on March 4, 2024.)



## **Appendix J: Wetland and Stream Assessment**

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## **Wetland and Stream Assessment**

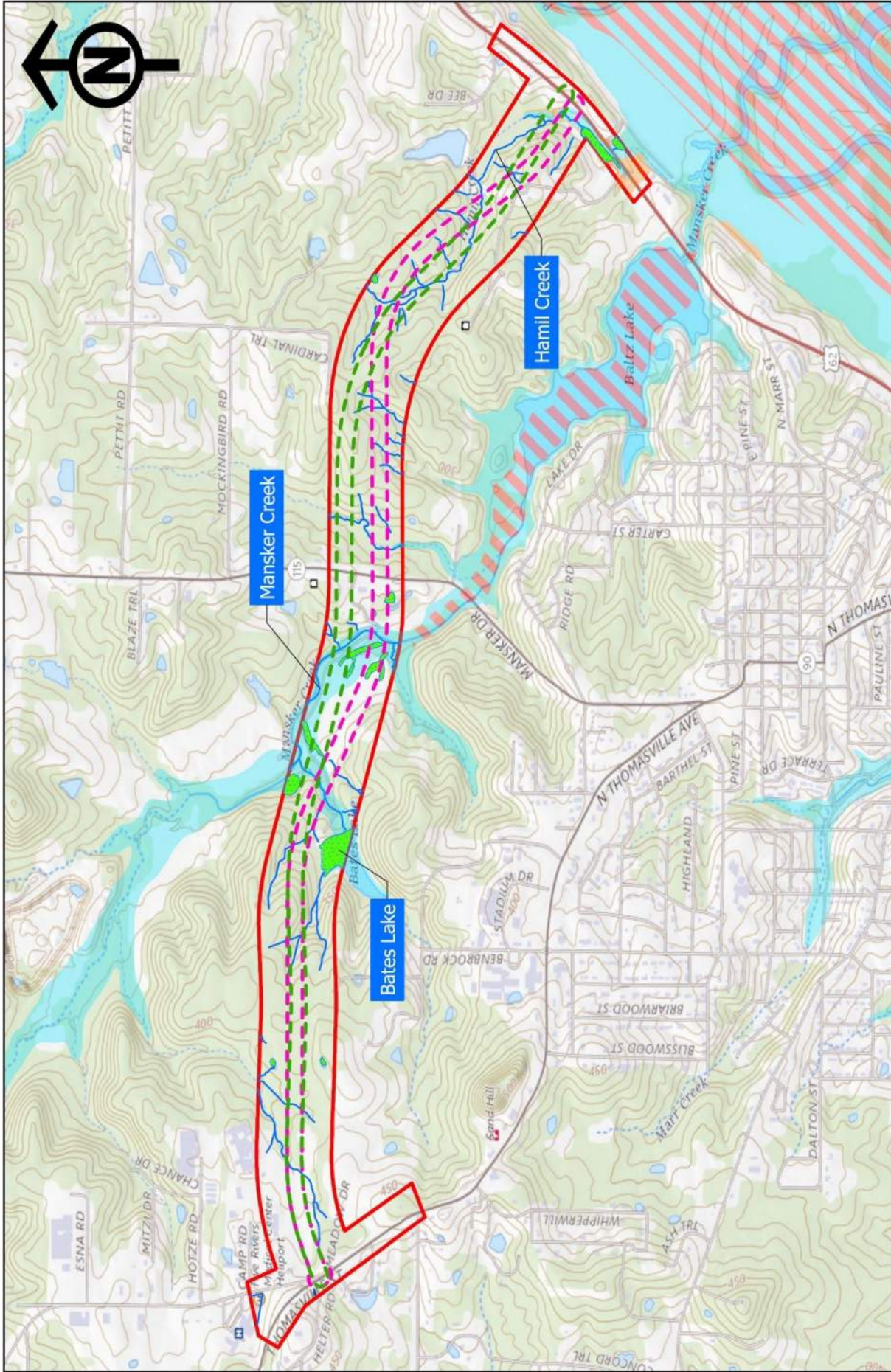
This assessment serves to provide information on the occurrence of potentially jurisdictional waters (e.g., streams and wetlands) for the proposed Pocahontas Bypass (S) EA project located in Pocahontas, Randolph County, Arkansas. The purpose of this project is to reduce heavy truck traffic and improve mobility and safety in the Pocahontas Central Business District (CBD) and to provide truck traffic with an alternate route to Highway 67. A primary concern is the heavy truck traffic that must negotiate several difficult turns and pass through the CBD.

The project includes evaluating two alternative alignments in an Environmental Assessment (EA) as part of complying with the National Environmental Policy Act (NEPA). Refer to the EA document for detailed information on the alignment of each alternative. The project is receiving federal funding and federal permits, and the Federal Highway Administration (FHWA) is acting as the lead Federal agency.

In accordance with Executive Order 11990, which requires that impacts to wetlands be considered in federal undertakings, impacts to potentially jurisdictional waters and wetlands were evaluated. A desktop review of waters and wetlands within the entire project area was conducted and results are presented below. Once the Preferred Alternative is selected, a formal wetland delineation on the Preferred Alternative will be conducted and submitted to the United States Army Corps of Engineers (USACE) as part of the Section 404 permitting process and the appropriate Section 404 permit will be determined at that time. Unavoidable impacts would be mitigated, if required, for the areas impacted by the Selected Alternative.

This desktop delineation utilized current and historical aerial photography, topographic quadrangles, hydric soils data from Natural Resources Conservation Service, LIDAR (Light Detection and Ranging) modeling, the US Geological Survey (USGS) National Hydrological Database, Federal Emergency Management Agency floodplain maps, and the US Fish and Wildlife Service National Wetland Inventory. The assessment revealed that the project study corridor contains two named streams (Mansker Creek and Hamil Creek) with associated tributaries, one lake (Bates Lake), and several unnamed farm ponds and herbaceous wetlands.

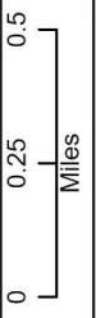
ARDOT Job 101140



**AQUATIC RESOURCES IN STUDY CORRIDOR**  
 Pocahontas Bypass  
 Pocahontas, Randolph County, Arkansas  
 USGS Topographic Map

- Study Corridor
- Alternative A
- Alternative B
- Desktop Identified Wetland
- Desktop Identified Stream
- 1% Annual Chance Flood
- 1% Annual Chance Flood Hazard
- 0.2% Annual Chance Flood Hazard

**Figure 1**



Job Number 101140

Wetlands within the right-of-way footprint of both build alternatives would be permanently cleared/filled in order to construct the proposed roadways and/or interchanges. Streams likely would be impacted by the placement of culverts in order to convey stream flow below the proposed roadway. **Table 1** summarizes the estimated total acreage of impacted wetlands and estimated total linear feet of impacted streams for the two build alternative evaluated in the EA. Alternative A would require fewer wetland and fewer stream impacts than Alternative B.

**Table 1: Estimated Wetland and Stream Impacts**

<b>Build Alternative</b>	<b>Wetland Impacts</b>	<b>Stream Impacts</b>
<b>Alternative A</b>	0.37 Acres	5,234 Linear Feet
<b>Alternative B</b>	0.80 Acres	5,567 Linear Feet

For either of the build alternatives, most stream impacts should be minor; however, for an alternative located parallel to a stream, construction may result in the realignment of the stream. Secondary and cumulative impacts should be similar between the two build alternatives. Temporary impacts to water quality have the potential occur during the construction phase of the project due to increased soil disturbance and associated runoff resulting from land clearing, culvert construction, and construction equipment. Upon project completion and vegetation regrowth, water quality should return to pre-construction levels.

In addition to a Section 404 permit, the Selected Alternative (once identified) will obtain coverage under the National Pollutant Discharge Elimination System general permit for Construction Activities (as required by Section 402 of the Clean Water Act). The provisions of this permit include preparation of a Stormwater Pollution Prevention Plan, which contains a selection of Best Management Practices to be implemented to effectively reduce or prevent the discharge of pollutants into receiving waters during and after construction activities. Therefore, stormwater runoff will be controlled and monitored according to applicable federal regulations. Additionally, water quality regulations required by the Arkansas Division of Environmental Quality state Water Quality Certification (Section 401 of the Clean Water Act) will be implemented.

## **Appendix K: Species Information**

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## Protected Species Technical Memorandum

This Protected Species Technical Memorandum describes how protected species and their habitats would be affected by the project.

### Natural Environment

The project is located near the east edge of the Central Plateau of the Ozark Highlands ecoregion. This undulating to hilly portion of the Salem Plateau is underlain chiefly by dolomite and limestone, resulting in karst features. The ecoregion is dominated by agriculture (pastureland and hayland) and housing, though remnant forests and savannas occur in steeper areas. Other primary land uses include livestock (cattle and hogs) and poultry farming, logging, and recreation.

The study area is primarily forested, with the exception of low-density development surrounding Highways 90 and 115. Additionally, portions of the study area between Highways 90 and 115 have been cleared for hayfields and/or livestock grazing, providing some edge habitats and variation for wildlife foraging. The northern half of Bates Lake as well as Mansker and Hamil Creeks are present within the study area and would provide aquatic habitat and water resources to wildlife. No caves are known to occur in the study area, though it is situated within a karst region. Karst is a type of landscape where the dissolving of bedrock has created sinkholes, caves, losing streams, and springs.

Common game mammals in the region include White-tailed Deer (*Odocoileus virginianus*), Black Bears (*Ursus americanus*), Gray Squirrels (*Sciurus carolinensis*), Cottontail Rabbits (*Sylvilagus floridanus*), Raccoons (*Procyon lotor*), and Opossums (*Didelphis virginiana*). Waterfowl (ducks and geese) are the most abundant game birds, and the region contains some of the state's premier duck hunting destinations. Game fish include catfish (*Ictalurus* and *Pylodictis* species), crappie (*Pomoxis species*), and Largemouth Bass (*Micropterus salmoides*).

### Federally-protected Species

The official species list obtained through the U.S. Fish and Wildlife Service's (USFWS) Information for Planning and Consultation website identifies 12 threatened or endangered species, two proposed threatened/endangered species, and one candidate species as having the potential to occur in the study area. See the USFWS Species List. Endangered species are in danger of extinction throughout all or a significant portion of their ranges. Threatened species are likely to become endangered in the near future. Both threatened and endangered species receive federal protection under the Endangered Species Act (ESA). Proposed species for listing under the ESA are those candidate species that were found to warrant listing as either threatened or endangered, after completion of a status review and consideration of other protective conservation measures. Candidate species are those for which the USFWS has sufficient information on their biological status and threats to propose them as endangered or threatened under the ESA, but development of a proposed listing regulation is precluded by other higher priority listing activities. These 15 species, along with their status and distance to the nearest known occurrence, are listed in **Table 1**.

**Table 1: Possible Threatened and Endangered Species in the Study Area**

<b>Common Name (Scientific Name)</b>	<b>Federal Status</b>	<b>Nearest Known Occurrence*</b>
Gray Bat ( <i>Myotis grisescens</i> )	Endangered	> 5 miles
Indiana Bat ( <i>Myotis sodalis</i> )	Endangered	> 5 miles
Northern Long-eared Bat ( <i>Myotis septentrionalis</i> )	Endangered	> 5 miles
Tricolored Bat ( <i>Perimyotis subflavus</i> )	Proposed Endangered	> 5 miles
Eastern Black Rail ( <i>Laterallus jamaicensis ssp. jamaicensis</i> )	Threatened	> 5 miles
Piping Plover ( <i>Charadrius melodus</i> )	Threatened	> 5 miles
Rufa Red Knot ( <i>Calidris canutus rufa</i> )	Threatened	> 5 miles
Alligator Snapping Turtle ( <i>Macrochelys temminckii</i> )	Proposed Threatened	> 5 miles
Curtis Pearlymussel ( <i>Epioblasma florentina curtisii</i> )	Endangered	> 5 miles
Pink Mucket ( <i>Lampsilis abrupta</i> )	Endangered	1-5 miles
Rabbitsfoot ( <i>Quadrula cylindrica cylindrica</i> )	Threatened	1-5 miles
Scaleshell Mussel ( <i>Leptodea leptodon</i> )	Endangered	> 5 miles
Monarch Butterfly ( <i>Danaus plexippus</i> )	Candidate	> 5 miles**
Missouri bladderpod ( <i>Physaria filiformis</i> )	Threatened	> 5 miles
Pondberry ( <i>Lindera melissifolia</i> )	Endangered	> 5 miles

\*Based on Arkansas Natural Heritage Commission (ANHC) Natural Diversity Database records (2023). Occurrence was listed as beyond 5 miles for species not listed by ANHC.

\*\*ANHC did not have records for the Monarch within the study area, but it is reasonable to assume seasonal presence of the species.

### **Species with Habitat Present in Study Area**

Indiana and Northern Long-eared Bats use open forests, riparian corridors and forest edge habitat for foraging. Both species use trees with flaky or sloughing bark for summer roosting habitat. Gray Bats occupy caves or cave-like structures year-round. While Gray Bats prefer caves, summer

colonies have been documented using dams, mines, quarries, concrete box culverts and the undersides of bridges. Gray Bats forage in woodlands surrounding caves and wooded riparian corridors along streams near caves. Tricolored Bats primarily roost among live and dead leaf clusters of live or recently dead deciduous hardwood trees during the non-hibernating seasons. In addition, Tricolored Bats have been observed roosting during summer among pine needles, eastern red cedar (*Juniperus virginiana*), within artificial roosts like barns, beneath porch roofs, bridges, concrete bunkers, and rarely within caves. Tricolored Bats hibernate during the winter in caves and mines; although, in the southern U.S., where caves are sparse, Tricolored Bats often hibernate in road-associated culverts, as well as sometimes in tree cavities and abandoned water wells.

Based on the habitat observed in the study area, suitable foraging habitat is available for all four listed bat species and suitable roosting habitat is available for the Indiana, Northern Long-eared, and Tricolored Bats.

The Eastern Black Rail is a small secretive species of wading bird that inhabits marshes and other herbaceous wetlands, with a scattered distribution across North America. It spends winters along the Atlantic Coast, the Gulf of Mexico and the Caribbean. The nearest breeding population to Arkansas occurs in alkali wetlands in south-central Kansas and northern Oklahoma. Open wetland habitat is available in the study area that could serve as migration habitat for the Eastern Black Rail, though the species, a migrant in the state, is not known to occur in or near the study area.

The nearest record of the Alligator Snapping Turtle is over 5 miles away, and this species typically uses watercourses much larger than the creeks within the study area. Suitable habitat may be available in the study area within Bates Lake.

The Arkansas Natural Heritage Commission (ANHC) did not have records for the Monarch Butterfly within the study area; however, it is reasonable to assume seasonal presence of the species in habitats with native wildflowers.

### **Species with No Habitat in Study Area**

No suitable habitat was observed in the study area for the Piping Plover, Rufa Red Knot, Pink Mucket, Rabbitsfoot, Curtis Pearlymussel, Scaleshell Mussel, Missouri bladderpod, or pondberry.

The Piping Plover is a small shorebird that breeds along the prairie pothole region, the Great Lakes and the North Atlantic Coast of North America. The Piping Plover nests and forages on gravel shorelines of rivers, though typically along watercourses much larger than the creeks within the study area. Red Knot is a shorebird species with a cosmopolitan distribution. In the Western Hemisphere, it breeds in the high Arctic of Alaska, Canada and Greenland, and spends winters along the coasts of North, Central and South America. The Red Knot has one of the longest migrations of all bird species. The Rufa Red Knot may use inland freshwater areas (wetlands, riverine sandbars or manmade impoundments like reservoirs) as stopover habitat during migration. Both Piping Plover and Red Knot appear in Arkansas occasionally during migration, along the shorelines of reservoirs and banks of large rivers. Neither the Piping Plover nor the Rufa Red Knot are known to occur in or near the study area. While some emergent wetlands are present in the study area, they are small, relatively isolated, and lack sufficiently open exposed areas for foraging. Bates Lake also lacks mudflats sufficient to provide suitable foraging habitat



for the Rufa Red Knot. Suitable habitat for these two shorebird species is absent from the project area, thus no impacts to these species are anticipated.

While the Pink Mucket and Rabbitsfoot mussels are known to occur within 1-5 miles of the study area, these two species as well as the Curtis Pearlymussel and Scaleshell Mussel typically use watercourses much larger than the creeks within the study area.

No glades or forested wetland depressions occur in the study area as potential habitat for the Missouri Bladderpod and Pondberry, respectively.

### **No Action Alternative**

The No Action Alternative would not impact any threatened or endangered species.

### **Build Alternative**

Tree clearing would remove potential foraging habitat for all bat species and remove potential roosting habitat for Indiana, Northern Long-eared, and Tricolored Bats. The construction contract for either build alternative would include a provision specifying that tree clearing activities must occur outside the Indiana Bat summer active period from March 15 to November 15. The amount of tree clearing associated with each alternative can be found in **Table 2**.

**Table 2: Potential Tree Clearing Area**

<b>Alternative</b>	<b>Proposed Right of Way Cleared</b>
No Action	None
A	41.8 acres
B	41.2 acres

Soil disturbance during the construction phase of the project would increase sedimentation and turbidity in Mansker and Hamil Creeks. Sedimentation entering streams during construction could reduce the foraging potential for the listed bat species, which feed on emerging aquatic insects in addition to terrestrial insects. However, these indirect effects would be minimized by the implementation of best management practices in sediment and erosion control during construction, and the inclusion of the ARDOT Water Pollution Control Special Provision. Upon project completion and vegetation regrowth, water quality should return to pre-construction levels. ARDOT will obtain all required waterway and stormwater permits before construction begins.

Presence/absence surveys for the listed bat species will be conducted prior to seeking concurrence from the USFWS.

Grading and road construction activities would fill in emergent wetlands, removing potential habitat for the Eastern Black Rail. As habitat impacts are anticipated to be minor (less than 1 acre) and habitat is unlikely to be utilized by the species, neither build alternative is anticipated to adversely affect the Eastern Black Rail.

As neither build alternative would impact Bates Lake, habitat for the Alligator Snapping Turtle would not be impacted by the project.

The Monarch Butterfly is a candidate species, and as such, is not federally protected under the ESA. The USFWS recommends agencies implement conservation measures for candidate species in action areas, as these are species that may warrant future protection under the Act. ARDOT will plant native wildflowers on all disturbed areas following construction as a conservation measure.

No habitats for the Piping Plover, Rufa Red Knot, Pink Mucket, Rabbitsfoot, Curtis Pearlymussel, Scaleshell Mussel, Missouri bladderpod, or pondberry were identified in the study area. There are no anticipated impacts to these species associated with either of the build alternatives.

A Biological Assessment of the impacts on federal threatened and endangered species will be completed and Section 7 consultation with the USFWS will be initiated prior to the issuance of a FONSI. For all federally-listed species, USFWS concurrence/clearance would be obtained for the Preferred Alternative prior to construction.

## Migratory Birds

Several migratory bird species, such as the Eastern Phoebe (*Sayornis phoebe*), Cliff Swallow (*Petrochelidon pyrrhonota*), and Barn Swallow (*Hirundo rustica*), build nests underneath bridges and culverts. Other migratory birds can also nest on transportation structures. As the project would occur on new alignment, no existing bridges and culverts would be impacted.

Bald Eagles (*Haliaeetus leucocephalus*) are protected under the Migratory Bird Treaty Act and the Bald and Golden Eagle Protection Act. No suitable nesting habitat was observed within the proposed project area for Bald Eagles

Thus, significant impacts to migratory birds are not anticipated with any of the alternatives.

## ANHC Tracked Species

The ANHC tracks the location and status of rare species of animals and plants as well as natural communities in Arkansas. Their database maintains information on almost 900 rare species of animals and plants, some of which are listed as threatened or endangered by the USFWS, while others are simply considered rare in the state.

A total of 19 rare plant and animal tracked species are known to occur within five miles of the study area, based on data provided by ANHC. See attached ANHC species list. These species are listed in **Table 3**. None of the species' records occurred within the study area.

The Swamp Dwarf Crayfish (*Cambarellus puer*) will burrow during dry periods and is found commonly in sluggish streams, sloughs, and roadside ditches, habitats which are found in the study area.

No suitable habitat for any of the four mussel species was identified in the study area, as these species typically use watercourses much larger than the creeks and streams present.

Of the 12 fish species, suitable habitat within Mansker Creek, Hamil Creek, and/or Bates Lake may be present in the study area for the Highfin Carpsucker (*Carpionodes velifer*), Current Darter (*Etheostoma uniporum*), Blackspot Shiner (*Notropis atrocaudalis*), Sabine Shiner (*Notropis*

*sabinae*), and Saddleback Darter (*Percina vigil*). The remaining fish species require watercourses larger than those found in the study area.

Little Brown Bats (*Myotis lucifugus*) use a wide range of habitats and often use human-made structures for resting and maternity sites; they also use caves and hollow trees. Foraging habitat requirements are generalized and winter hibernation sites include caves, tunnels, abandoned mines, and similar sites. Foraging and summer roosting habitat is present in the study area.

Corkwood (*Leitneria pilosa ssp. ozarkana*) occurs in swampy woodlands and prairies, prairie pond shores, and wet depressions in man-made habitats. Suitable habitat for Corkwood may be present in the study area.

**Table 3: ANHC Rare Species Within Five Miles of the Study Area**

Group	Scientific Name	Common Name
Crustaceans	<i>Cambarellus puer</i>	Swamp Dwarf Crayfish
Mussels	<i>Cyrogenia aberti</i>	Ozark Fanshell
Mussels	<i>Lampsilis abrupta</i>	Pink Mucket
Mussels	<i>Theliderma cylindrica</i>	Rabbitsfoot
Mussels	<i>Villosa lienosa</i>	Little Spectaclecase
Fishes	<i>Ammocrypta clara</i>	Western Sand Darter
Fishes	<i>Carpionodes velifer</i>	Highfin Carpsucker
Fishes	<i>Cycleptus elongatus</i>	Blue Sucker
Fishes	<i>Etheostoma uniporum</i>	Current Darter
Fishes	<i>Hiodon alosoides</i>	Goldeye
Fishes	<i>Macrhybopsis hyostoma</i>	Shoal Chub
Fishes	<i>Moxostoma pisolabrum</i>	Pealip Redhorse
Fishes	<i>Notropis atrocaudalis</i>	Blackspot Shiner
Fishes	<i>Notropis sabinae</i>	Sabine Shiner
Fishes	<i>Percina evides</i>	Gilt Darter
Fishes	<i>Percina uranidea</i>	Stargazing Darter
Fishes	<i>Percina vigil</i>	Saddleback Darter
Mammals	<i>Myotis lucifugus</i>	Little Brown Bat
Plants	<i>Leitneria pilosa ssp. ozarkana</i>	Corkwood

### **No Action Alternative**

The No Action Alternative would not impact any rare species.

### **Build Alternatives**

Both alternatives would remove similar types and amounts of natural wildlife habitat. Because most terrestrial species would have some difficulty crossing the bypass, habitat fragmentation would occur for both build alternatives.

The construction of new bridges over Mansker and Hamil Creeks associated with both build alternatives could result in temporary increases in sedimentation, affecting the rare species that are aquatic themselves or rely on aquatic species as a food source. The installation and removal of a work road associated with either build alternative could impact fish and crayfish species by temporarily decreasing foraging opportunities, impeding movement, or crushing individuals with cobble or heavy equipment. Temporary increases in sedimentation and turbidity downstream could also decrease foraging opportunities and impede movement for these aquatic species. The best practices for sediment and erosion control previously described in the Federally-protected Species section would help minimize the impacts to these species.

Tree clearing would remove potential habitat for Little Brown Bats. The amount of tree clearing associated with each alternative can be found in Table 2. The construction contract for either build alternative would include a provision specifying that tree clearing activities must occur outside the Indiana Bat summer active period from March 15 to November 15.

Grading and road construction activities would fill in some wet depressions, removing suitable habitat for the Corkwood plant. As there are no occurrence records within the study area and habitat impacts are anticipated to be minor (less than 1 acre), neither build alternative is anticipated to adversely affect the species.

Significant impacts to rare/tracked species are not anticipated with either build alternative.



## United States Department of the Interior



FISH AND WILDLIFE SERVICE  
 Arkansas Ecological Services Field Office  
 110 South Amity Suite 300  
 Conway, AR 72032-8975  
 Phone: (501) 513-4470 Fax: (501) 513-4480

In Reply Refer To:

January 04, 2024

Project Code: 2023-0115641

Project Name: ARDOT Job 101140 – Pocahontas Bypass (S)

Subject: List of threatened and endangered species that may occur in your proposed project location or may be affected by your proposed project

To Whom It May Concern:

The enclosed species list identifies threatened, endangered, proposed and candidate species, as well as proposed and final designated critical habitat, that may occur within the boundary of your proposed project and/or may be affected by your proposed project. The species list fulfills the requirements of the U.S. Fish and Wildlife Service (Service) under section 7(c) of the Endangered Species Act (Act) of 1973, as amended (16 U.S.C. 1531 *et seq.*).

New information based on updated surveys, changes in the abundance and distribution of species, changed habitat conditions, or other factors could change this list. Please feel free to contact us if you need more current information or assistance regarding the potential impacts to federally proposed, listed, and candidate species and federally designated and proposed critical habitat. Please note that under 50 CFR 402.12(e) of the regulations implementing section 7 of the Act, the accuracy of this species list should be verified after 90 days. This verification can be completed formally or informally as desired. The Service recommends that verification be completed by visiting the IPaC website at regular intervals during project planning and implementation for updates to species lists and information. An updated list may be requested through the IPaC system by completing the same process used to receive the enclosed list.

The purpose of the Act is to provide a means whereby threatened and endangered species and the ecosystems upon which they depend may be conserved. Under sections 7(a)(1) and 7(a)(2) of the Act and its implementing regulations (50 CFR 402 *et seq.*), Federal agencies are required to utilize their authorities to carry out programs for the conservation of threatened and endangered species and to determine whether projects may affect threatened and endangered species and/or designated critical habitat.

A Biological Assessment is required for construction projects (or other undertakings having similar physical impacts) that are major Federal actions significantly affecting the quality of the human environment as defined in the National Environmental Policy Act (42 U.S.C. 4332(2) (c)). For projects other than major construction activities, the Service suggests that a biological

evaluation similar to a Biological Assessment be prepared to determine whether the project may affect listed or proposed species and/or designated or proposed critical habitat. Recommended contents of a Biological Assessment are described at 50 CFR 402.12.

If a Federal agency determines, based on the Biological Assessment or biological evaluation, that listed species and/or designated critical habitat may be affected by the proposed project, the agency is required to consult with the Service pursuant to 50 CFR 402. In addition, the Service recommends that candidate species, proposed species and proposed critical habitat be addressed within the consultation. More information on the regulations and procedures for section 7 consultation, including the role of permit or license applicants, can be found in the "Endangered Species Consultation Handbook" at:

<https://www.fws.gov/sites/default/files/documents/endangered-species-consultation-handbook.pdf>

**Migratory Birds:** In addition to responsibilities to protect threatened and endangered species under the Endangered Species Act (ESA), there are additional responsibilities under the Migratory Bird Treaty Act (MBTA) and the Bald and Golden Eagle Protection Act (BGEPA) to protect native birds from project-related impacts. Any activity, intentional or unintentional, resulting in take of migratory birds, including eagles, is prohibited unless otherwise permitted by the U.S. Fish and Wildlife Service (50 C.F.R. Sec. 10.12 and 16 U.S.C. Sec. 668(a)). For more information regarding these Acts see <https://www.fws.gov/program/migratory-bird-permit/what-we-do>.

The MBTA has no provision for allowing take of migratory birds that may be unintentionally killed or injured by otherwise lawful activities. It is the responsibility of the project proponent to comply with these Acts by identifying potential impacts to migratory birds and eagles within applicable NEPA documents (when there is a federal nexus) or a Bird/Eagle Conservation Plan (when there is no federal nexus). Proponents should implement conservation measures to avoid or minimize the production of project-related stressors or minimize the exposure of birds and their resources to the project-related stressors. For more information on avian stressors and recommended conservation measures see <https://www.fws.gov/library/collections/threats-birds>.

In addition to MBTA and BGEPA, Executive Order 13186: *Responsibilities of Federal Agencies to Protect Migratory Birds*, obligates all Federal agencies that engage in or authorize activities that might affect migratory birds, to minimize those effects and encourage conservation measures that will improve bird populations. Executive Order 13186 provides for the protection of both migratory birds and migratory bird habitat. For information regarding the implementation of Executive Order 13186, please visit <https://www.fws.gov/partner/council-conservation-migratory-birds>.

We appreciate your concern for threatened and endangered species. The Service encourages Federal agencies to include conservation of threatened and endangered species into their project planning to further the purposes of the Act. Please include the Consultation Code in the header of this letter with any request for consultation or correspondence about your project that you submit to our office.

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Attachment(s):

- Official Species List

## **OFFICIAL SPECIES LIST**

This list is provided pursuant to Section 7 of the Endangered Species Act, and fulfills the requirement for Federal agencies to "request of the Secretary of the Interior information whether any species which is listed or proposed to be listed may be present in the area of a proposed action".

This species list is provided by:

**Arkansas Ecological Services Field Office**

110 South Amity Suite 300

Conway, AR 72032-8975

(501) 513-4470

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## PROJECT SUMMARY

Project Code: 2023-0115641

Project Name: ARDOT Job 101140 – Pocahontas Bypass (S)

Project Type: Road/Hwy - New Construction

Project Description: The Arkansas Department of Transportation (Department) is proposing a new location connection between Highway 90 northwest of Pocahontas to Highway 67 northeast of Pocahontas. Improvements would include an approximately 2.6-mile two-lane bypass on new location that would also connect with Highway 115 to help remove truck movements through Pocahontas. The project begins on Highway 90 near Country Club Road and extends east to Highway 67 north of Baltz Lake. The project is approximately 2.6 miles in length.

Project Location:

The approximate location of the project can be viewed in Google Maps: <https://www.google.com/maps/@36.28228845,-90.95812935946199,14z>



Counties: Randolph County, Arkansas

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## ENDANGERED SPECIES ACT SPECIES

There is a total of 15 threatened, endangered, or candidate species on this species list.

Species on this list should be considered in an effects analysis for your project and could include species that exist in another geographic area. For example, certain fish may appear on the species list because a project could affect downstream species.

IPaC does not display listed species or critical habitats under the sole jurisdiction of NOAA Fisheries<sup>1</sup>, as USFWS does not have the authority to speak on behalf of NOAA and the Department of Commerce.

See the "Critical habitats" section below for those critical habitats that lie wholly or partially within your project area under this office's jurisdiction. Please contact the designated FWS office if you have questions.

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1. [NOAA Fisheries](#), also known as the National Marine Fisheries Service (NMFS), is an office of the National Oceanic and Atmospheric Administration within the Department of Commerce.

## MAMMALS

NAME	STATUS
Gray Bat <i>Myotis grisescens</i> No critical habitat has been designated for this species. Species profile: <a href="https://ecos.fws.gov/ecp/species/6329">https://ecos.fws.gov/ecp/species/6329</a>	Endangered
Indiana Bat <i>Myotis sodalis</i> There is <b>final</b> critical habitat for this species. Your location does not overlap the critical habitat. Species profile: <a href="https://ecos.fws.gov/ecp/species/5949">https://ecos.fws.gov/ecp/species/5949</a>	Endangered
Northern Long-eared Bat <i>Myotis septentrionalis</i> No critical habitat has been designated for this species. Species profile: <a href="https://ecos.fws.gov/ecp/species/9045">https://ecos.fws.gov/ecp/species/9045</a>	Endangered
Tricolored Bat <i>Perimyotis subflavus</i> No critical habitat has been designated for this species. Species profile: <a href="https://ecos.fws.gov/ecp/species/10515">https://ecos.fws.gov/ecp/species/10515</a>	Proposed Endangered

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**BIRDS**

NAME	STATUS
Eastern Black Rail <i>Laterallus jamaicensis ssp. jamaicensis</i> No critical habitat has been designated for this species. Species profile: <a href="https://ecos.fws.gov/ecp/species/10477">https://ecos.fws.gov/ecp/species/10477</a>	Threatened
Piping Plover <i>Charadrius melodus</i> Population: [Atlantic Coast and Northern Great Plains populations] - Wherever found, except those areas where listed as endangered. There is <b>final</b> critical habitat for this species. Your location does not overlap the critical habitat. Species profile: <a href="https://ecos.fws.gov/ecp/species/6039">https://ecos.fws.gov/ecp/species/6039</a>	Threatened
Rufa Red Knot <i>Calidris canutus rufa</i> There is <b>proposed</b> critical habitat for this species. Species profile: <a href="https://ecos.fws.gov/ecp/species/1864">https://ecos.fws.gov/ecp/species/1864</a>	Threatened

**REPTILES**

NAME	STATUS
Alligator Snapping Turtle <i>Macrochelys temminckii</i> No critical habitat has been designated for this species. Species profile: <a href="https://ecos.fws.gov/ecp/species/4658">https://ecos.fws.gov/ecp/species/4658</a>	Proposed Threatened

**CLAMS**

NAME	STATUS
Curtis Pearlymussel <i>Epioblasma florentina curtisii</i> No critical habitat has been designated for this species. Species profile: <a href="https://ecos.fws.gov/ecp/species/5628">https://ecos.fws.gov/ecp/species/5628</a>	Endangered
Pink Mucket (pearlymussel) <i>Lampsilis abrupta</i> No critical habitat has been designated for this species. Species profile: <a href="https://ecos.fws.gov/ecp/species/7829">https://ecos.fws.gov/ecp/species/7829</a>	Endangered
Rabbitsfoot <i>Quadrula cylindrica cylindrica</i> There is <b>final</b> critical habitat for this species. Your location does not overlap the critical habitat. Species profile: <a href="https://ecos.fws.gov/ecp/species/5165">https://ecos.fws.gov/ecp/species/5165</a>	Threatened
Scaleshell Mussel <i>Leptodea leptodon</i> No critical habitat has been designated for this species. Species profile: <a href="https://ecos.fws.gov/ecp/species/5881">https://ecos.fws.gov/ecp/species/5881</a>	Endangered

**INSECTS**

NAME	STATUS
Monarch Butterfly <i>Danaus plexippus</i> No critical habitat has been designated for this species. Species profile: <a href="https://ecos.fws.gov/ecp/species/9743">https://ecos.fws.gov/ecp/species/9743</a>	Candidate

01/04/2024

7

## FLOWERING PLANTS

NAME	STATUS
Missouri Bladderpod <i>Physaria filiformis</i> No critical habitat has been designated for this species. Species profile: <a href="https://ecos.fws.gov/ecp/species/5361">https://ecos.fws.gov/ecp/species/5361</a>	Threatened
Pondberry <i>Lindera melissifolia</i> No critical habitat has been designated for this species. Species profile: <a href="https://ecos.fws.gov/ecp/species/1279">https://ecos.fws.gov/ecp/species/1279</a>	Endangered

## CRITICAL HABITATS

THERE ARE NO CRITICAL HABITATS WITHIN YOUR PROJECT AREA UNDER THIS OFFICE'S JURISDICTION.

YOU ARE STILL REQUIRED TO DETERMINE IF YOUR PROJECT(S) MAY HAVE EFFECTS ON ALL ABOVE LISTED SPECIES.

**IPAC USER CONTACT INFORMATION**

Agency: Arkansas Department of Transportation  
Name: Garver LLC  
Address: 4300 South J.B Hunt Drive, Suite 240  
Address Line 2: Suite 240  
City: Rogers  
State: AR  
Zip: 72758  
Email: arbiologist@garverusa.com  
Phone: 4792874628

**LEAD AGENCY CONTACT INFORMATION**

Lead Agency: Federal Highway Administration

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**Sarah Huckabee Sanders**  
Governor  
**Shea Lewis**  
Secretary

Date: August 18, 2023  
Subject: Elements of Special Concern  
Pocahontas Bypass  
ARDOT Job No. 101140  
Randolph County, Arkansas  
ANHC No.: P-CF..-23-089

Ms. Cassie Schmidt  
Garver  
4300 South J.B. Hunt Dr., Ste. 240  
Rogers, AR

Dear Ms. Schmidt:

Staff members of the Arkansas Natural Heritage Commission have reviewed our files for records indicating the occurrence of rare plants and animals, outstanding natural communities, natural or scenic rivers, or other elements of special concern within or near the following site:

<u>Project Name</u>	<u>County</u>	<u>Quad. Name</u>	<u>Location</u>
Pocahontas Bypass	Randolph	Pocahontas 7.5'	T19N/R1E/S15-17,22

We find no records at present time.

A Randolph County Element List is enclosed. Represented on this list are elements for which we have records in our database. The list has been annotated to indicate those elements known to occur within a one and a five mile radius of the project site. A legend is enclosed to help you interpret the codes used on this list.

Please keep in mind that the project area may contain important natural features of which we are unaware. Staff members of the Arkansas Natural Heritage Commission have not conducted a field survey of the study site. Our review is based on data available to the program at the time of the request. It should not be regarded as a final statement on the elements or areas under consideration. Because our files are updated constantly, you may want to check with us again at a later time.

Thank you for consulting us. It has been a pleasure to work with you on this study.

Sincerely,

Cindy Osborne  
Data Manager/Environmental Review Coordinator

Enclosures: Legend  
Randolph County Element List (annotated)  
Invoice

8/18/2023

**Arkansas Natural Heritage Commission**  
**Division of Arkansas Heritage**  
**Department of Parks, Heritage and Tourism**  
**Randolph County**

Scientific Name	Common Name	Federal Status	State Status	Global Rank	State Rank
<b>Animals-Invertebrates</b>					
<i>Alasmidonta marginata</i>	Elktoe	-	INV	G4	S3
<i>Bactrurus pseudomucronatus</i>	false sword-tailed cave amphipod	-	INV	G2G3	S1?
<i>Caecidotea brevicauda</i>	an isopod	-	INV	GNR	S1
✓ <i>Cambarellus puer</i>	Swamp Dwarf Crayfish	-	INV	G5	S3S4
<i>Cambarunio hesperus</i>	Western Rainbow	-	INV	GNR	S3
<i>Cambarus hubbsi</i>	Hubbs' Crayfish	-	INV	G3G4	S3
✓ <i>Cyprogenia aberti</i>	Ozark Fanshell	LT	INV	G1G2	S3
<i>Epioblasma curtisii</i>	Curtis Pearlymussel	LE	SE	G1	SH
<i>Epioblasma triquetra</i>	Snuffbox	LE	SE	G3	S1
<i>Faxonius eupunctus</i>	Coldwater Crayfish	-	INV	G1	S1
<i>Faxonius marchandi</i>	Mammoth Spring Crayfish	-	INV	G2G3	S2S3
<i>Faxonius roberti</i>	Spring River Crayfish	-	INV	G1	S1
<i>Faxonius wagneri</i>	Eleven Point River Crayfish	-	INV	G1	S1
<i>Fusconaia ozarkensis</i>	Ozark Pigtoe	-	INV	G3G4	S3
<i>Hesperoernes occidentalis</i>	a pseudoscorpion	-	INV	G5	S1
<i>Heterosternuta ouachita</i>	Ouachita diving beetle	-	INV	GNR	S2
✓ <i>Lampsilis abrupta</i>	Pink Mucket	LE	SE	G1G2	S2
<i>Marstonia ozarkensis</i>	Ozark Pyrg	-	INV	G1	S1?
<i>Obovaria olivaria</i>	Hickorynut	-	INV	G4	S3
<i>Obovaria sp. cf arkansasensis</i>	Ozark Hickorynut	-	INV	GNR	S2
<i>Ophiogomphus westfalli</i>	Westfall's snaketail	-	INV	G3	S1S2
<i>Pleurobema cordatum</i>	Ohio pigtoe	-	INV	G4	S3
<i>Pleurobema rubrum</i>	Pyramid Pigtoe	PT	INV	G2G3	S2
<i>Pleurobema sintoxia</i>	Round Pigtoe	-	INV	G4G5	S3
<i>Poanes viator</i>	Broad-winged Skipper	-	INV	G5	S3
<i>Ptychobranchus occidentalis</i>	Ouachita Kidneyshell	-	INV	G3G4	S3
<i>Simpsonia ambigua</i>	Salamander Mussel	Review	INV	G3	S1
✓ <i>Theliderma cylindrica</i>	Rabbitsfoot	LT	SE	G3G4	S3
<i>Toxolasma lividum</i>	Purple Lilliput	-	INV	G3	S3
<i>Toxolasma parvum</i>	Lilliput	-	INV	G5	S3
<i>Truncilla donaciformis</i>	Fawnsfoot	-	INV	G5	S3
<i>Venustaconcha pleasii</i>	Bleedingtooth Mussel	-	INV	G3G4	S3
✓ <i>Villosa sp. cf lienosa</i>	little spectaclecase	-	INV	G5	S2S3
<b>Animals-Vertebrates</b>					
<i>Ambystoma tigrinum</i>	Eastern Tiger Salamander	-	INV	G5	S3
✓★ <i>Ammocrypta clara</i>	western sand darter	-	INV	G3	S3
<i>Carphophis amoenus</i>	Common Wormsnake	-	INV	G5	S2
✓★ <i>Carpiodes velifer</i>	highfin carpsucker	-	INV	G4G5	S3
<i>Cistothorus stellaris</i>	Sedge Wren	-	INV	G5	S1S2B,S4N

Scientific Name	Common Name	Federal Status	State Status	Global Rank	State Rank
<i>Cryptobranchus alleganiensis bishopi</i>	Ozark Hellbender	LE	SE	G3T1	S1
★ <i>Cycleptus elongatus</i>	blue sucker	-	INV	G3G4	S3
<i>Cyprinella spiloptera</i>	spotfin shiner	-	INV	G5	S1?
✓★ <i>Etheostoma uniporum</i>	current darter	-	INV	G4	S3
<i>Eurycea nerea</i>	Northern Grotto Salamander	-	INV	G4TNR	S2
✓ <i>Hiodon alosoides</i>	goldeye	-	INV	G5	S2
<i>Hiodon tergisus</i>	mooneye	-	INV	G5	S2
<i>Lampetra aepyptera</i>	least brook lamprey	-	INV	G5	S3
<i>Lethenteron appendix</i>	American brook lamprey	-	INV	G4	S3
<i>Liodytes rigida</i>	Glossy Swampsnake	-	INV	G5	S3
✓ <i>Macrhybopsis hyostoma</i>	shoal chub	-	INV	G5	S3
<i>Moxostoma anisurum</i>	silver redhorse	-	INV	G5	S1
✓★ <i>Moxostoma pisolabrum</i>	pealip redhorse	-	INV	G5	S2
<i>Myotis austroriparius</i>	southeastern bat	-	INV	G4	S3
<i>Myotis grisescens</i>	gray bat	LE	SE	G3G4	S2S3
✓ <i>Myotis lucifugus</i>	little brown bat	Review	SE	G3G4	S1
✓ <i>Notropis atrocaudalis</i>	blackspot shiner	-	INV	G4	S3
<i>Notropis ozarcanus</i>	Ozark shiner	Review	INV	G3	S3
✓★ <i>Notropis sabiniae</i>	sabine shiner	-	INV	G4	S2
<i>Notropis wickliffi</i>	channel shiner	-	INV	G5	S2
<i>Ophisaurus attenuatus</i>	Slender Glass Lizard	-	INV	G5	S3
✓ <i>Percina evides</i>	gilt darter	-	INV	G4	S3
✓★ <i>Percina uranidea</i>	stargazing darter	-	INV	G3	S2
✓★ <i>Percina vigil</i>	saddleback darter	-	INV	G5	S3
<i>Perimyotis subflavus</i>	tricolored bat	PE	INV	G3G4	S1
<i>Typhlichthys eigenmanni</i>	Salem Plateau Cavefish	-	INV	GNR	S1

### Plants-Vascular

<i>Asclepias incarnata ssp. incarnata</i>	swamp milkweed	-	INV	G5T5	S2
<i>Asplenium ruta-muraria</i>	wall-rue	-	INV	G5	S1
<i>Carex conjuncta</i>	soft fox sedge	-	INV	G4G5	S1
<i>Carex normalis</i>	spreading oval sedge	-	INV	G5	S1
<i>Carex suberecta</i>	prairie straw sedge	-	INV	G4	S2
<i>Elymus riparius</i>	river-bank wild rye	-	INV	G5	S1S2
<i>Gentiana alba</i>	pale gentian	-	INV	G4	S1
<i>Gentiana puberulenta</i>	downy gentian	-	INV	G4G5	S2
✓★ <i>Leitneria pilosa ssp. ozarkana</i>	corkwood	-	INV	G2G3T2T3	S2S3
<i>Orbexilum onobrychis</i>	french-grass	-	INV	G5	S1
<i>Perideridia americana</i>	eastern yampah	-	INV	G4	S2
<i>Phacelia gilioides</i>	Brand's scorpion-weed	-	INV	G5	S2S3
<i>Plantago cordata</i>	heart-leaf plantain	-	ST	G4	S2
<i>Pycnanthemum virginianum</i>	Virginia mountain-mint	-	INV	G5	S1S2
<i>Sium suave</i>	water-parsnip	-	INV	G5	S1S3
<i>Thalictrum dioicum</i>	early meadow-rue	-	INV	G5	S1
<i>Tradescantia subaspera</i>	zigzag spiderwort	-	INV	G5	S1S3

<b>Scientific Name</b>	<b>Common Name</b>	<b>Federal Status</b>	<b>State Status</b>	<b>Global Rank</b>	<b>State Rank</b>
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★ - These elements of special concern have been recorded within a 1-mile radius of the study area.

√ - These elements of special concern have been recorded within a 5-mile radius of the study area



## LEGEND

### STATUS CODES

#### FEDERAL STATUS CODES

C	=	Candidate species. The U.S. Fish and Wildlife Service has enough scientific information to warrant proposing this species for listing as endangered or threatened under the Endangered Species Act.
LE	=	Listed Endangered; the U.S. Fish and Wildlife Service has listed this species as endangered under the Endangered Species Act.
LT	=	Listed Threatened; the U.S. Fish and Wildlife Service has listed this species as threatened under the Endangered Species Act.
-PD	=	Proposed for Delisting; the U.S. Fish and Wildlife Service has proposed that this species be removed from the list of Endangered or Threatened Species.
PE	=	Proposed Endangered; the U.S. Fish and Wildlife Service has proposed this species for listing as endangered.
PT	=	Proposed Threatened; the U.S. Fish and Wildlife Service has proposed this species for listing as threatened.
T/SA E/SA	=	Threatened (or Endangered) because of similarity of appearance.

#### STATE STATUS CODES

INV	=	Inventory Element; The Arkansas Natural Heritage Commission is currently conducting active inventory work on these elements. Available data suggests these elements are of conservation concern. These elements may include outstanding examples of Natural Communities, colonial bird nesting sites, outstanding scenic and geologic features as well as plants and animals, which, according to current information, may be rare, peripheral, or of an undetermined status in the state. The ANHC is gathering detailed location information on these elements.
WAT	=	Watch List Species; The Arkansas Natural Heritage Commission is not conducting active inventory work on these species, however, available information suggests they may be of conservation concern. The ANHC is gathering general information on status and trends of these elements. An “*” indicates the status of the species will be changed to “INV” if the species is verified as occurring in the state (this typically means the agency has received a verified breeding record for the species).
MON	=	Monitored Species; The Arkansas Natural Heritage Commission is currently monitoring information on these species. These species do not have conservation concerns at present. They may be new species to the state, or species on which additional information is needed. The ANHC is gathering detailed location information on these elements
SE	=	State Endangered; this term is applied differently for plants and animals.  Animals – These species are afforded protection under Arkansas Game and Fish Commission (AGFC) Regulation. The AGFC states that it is unlawful to import, transport, sell, purchase, hunt, harass or possess any threatened or endangered species of wildlife or parts. The AGFC lists as endangered any wildlife species or subspecies endangered or threatened with extinction, listed or proposed as a candidate for listing by the U.S. Fish and Wildlife Service or any native species or subspecies listed as endangered by the Commission.  Plants – These species have been recognized by the Arkansas Natural Heritage Commission as being in danger of being extirpated from the state. This is an administrative designation with no regulatory authority.
ST	=	State Threatened; These species have been recognized by the Arkansas Natural Heritage Commission as being likely to become endangered in Arkansas in the foreseeable future, based on current inventory information. This is an administrative designation with no regulatory authority.

### DEFINITION OF RANKS

#### Global Ranks

G1	=	Critically imperiled globally. At a very high risk of extinction due to extreme rarity (often 5 or fewer populations), very steep declines, or other factors.
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<b>G2</b>	=	<b>Imperiled globally. At high risk of extinction due to very restricted range, very few populations (often 20 or fewer), steep declines, or other factors.</b>
<b>G3</b>	=	<b>Vulnerable globally. At moderate risk of extinction due to a restricted range, relatively few populations (often 80 or fewer), recent and widespread declines, or other factors.</b>
<b>G4</b>	=	<b>Apparently secure globally. Uncommon but not rare; some cause for long-term concern due to declines or other factors.</b>
<b>G5</b>	=	<b>Secure globally. Common, widespread and abundant.</b>
<b>GH</b>	=	<b>Of historical occurrence, possibly extinct globally. Missing; known from only historical occurrences, but still some hope of rediscovery.</b>
<b>GU</b>	=	<b>Unrankable. Currently unrankable due to lack of information or due to substantially conflicting information about status or trends.</b>
<b>GX</b>	=	<b>Presumed extinct globally. Not located despite intensive searches and virtually no likelihood of rediscovery.</b>
<b>GNR</b>	=	<b>Unranked. The global rank not yet assessed.</b>
<b>GNA</b>	=	<b>Not Applicable. A conservation status rank is not applicable.</b>
<b>T-RANKS=</b>		<b>T subranks are given to global ranks when a subspecies, variety, or race is considered at the state level. The subrank is made up of a "T" plus a number or letter (1, 2, 3, 4, 5, H, U, X) with the same ranking rules as a full species.</b>

#### State Ranks

<b>S1</b>	=	<b>Critically imperiled in the state due to extreme rarity (often 5 or fewer populations), very steep declines, or other factors making it vulnerable to extirpation.</b>
<b>S2</b>	=	<b>Imperiled in the state due to very restricted range, very few populations (often 20 or fewer), steep declines, or other factors making it vulnerable to extirpation.</b>
<b>S3</b>	=	<b>Vulnerable in the state due to a restricted range, relatively few populations (often 80 or fewer), recent and widespread declines, or other factors making it vulnerable to extirpation.</b>
<b>S4</b>	=	<b>Apparently secure in the state. Uncommon but not rare; some cause for long-term concern due to declines or other factors.</b>
<b>S5</b>	=	<b>Secure in the state. Common, widespread and abundant.</b>
<b>SH</b>	=	<b>Of historical occurrence, with some possibility of rediscovery. Its presence may not have been verified in the past 20-40 years. A species may be assigned this rank without the 20-40 year delay if the only known occurrences were destroyed or if it had been extensively and unsuccessfully sought.</b>
<b>SU</b>	=	<b>Unrankable. Currently unrankable due to lack of information or due to substantially conflicting information about status or trends.</b>
<b>SX</b>	=	<b>Presumed extirpated from the state. Not located despite intensive searches and virtually no likelihood of rediscovery.</b>
<b>SNR</b>	=	<b>Unranked. The state rank not yet assessed.</b>
<b>SNA</b>	=	<b>Not Applicable. A conservation status rank is not applicable.</b>

#### General Ranking Notes

<b>Q</b>	=	<b>A "Q" in the global rank indicates the element's taxonomic classification as a species is a matter of conjecture among scientists.</b>
<b>RANGES=</b>		<b>Ranges are used to indicate a range of uncertainty about the status of the element.</b>
<b>?</b>	=	<b>A question mark is used to denote an inexact numeric rank.</b>
<b>B</b>	=	<b>Refers to the breeding population of a species in the state.</b>
<b>N</b>	=	<b>Refers to the non-breeding population of a species in the state.</b>