

## Decatur Direct Alignment Study

Extension of Ameriplex Parkway from Kentucky (SR 67) Avenue to White River

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## PREPARED FOR

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Appendix A: Marion County Thoroughfare Plan Map



## 1. Report Purpose

The purpose of this report is to identify a preferred alignment and conceptual design for the extension of Ameriplex Parkway from its current terminus at Kentucky Avenue (SR 67) to the intersection of Southport Road at Mann Road, with improvements continuing along Southport Road to the White River. The report documents the method and results of a study conducted by the Indianapolis Department of Public Works (DPW) and Indianapolis Department of Metropolitan Development (DMD) to develop and evaluate alternatives for this proposed road project. The development and evaluation process considered the costs, operational and engineering considerations, and environmental impacts of three alignment alternatives.

The City of Indianapolis plans to fund the project through a combination of Tax Increment Finance (TIF) and other local sources. Since Federal funding would not be used, the National Environmental Policy Act (NEPA) does not apply. This report summarizes expected environmental impacts to support environmental review and permitting applications.

## 2. Project Purpose and Need

The primary purpose of the proposed Ameriplex Parkway extension from Kentucky Avenue to Mann Road is to improve east-west connectivity across the southern part of Marion County and to support future economic development within the southwest portion of Marion County. There is a lack of continuous east-west thoroughfares in the southern part of Marion County, especially providing connection across the White River. Construction of the Ameriplex Parkway extension would connect it to Southport Road and provide a continuous east-west primary arterial across the south side of Marion County, extending from I-70 on the west to Acton Road on the east. This would include connections between the Indianapolis International Airport, I-70, planned I-69, and I-65. A connection of Camby Road to Southport Road and to Ameriplex Parkway has been envisioned for many years and has been identified in multiple versions of the Marion County Thoroughfare Plan.

The portion of Decatur Township surrounding the proposed Ameriplex Parkway extension is experiencing land development pressure, particularly due to its proximity to the Indianapolis International Airport and the AmeriPlex industrial park. Land use planning recently completed by the City of Indianapolis Department of Metropolitan Development will help to assure that this development occurs in a manner desired by the local community. Construction of the Ameriplex Parkway extension would provide appropriate access to this new land development without overloading the existing road infrastructure, which has inadequate capacity and connectivity.



## 3. Study Area

## 3.1 Road Network

**Figure 1** shows the study area for the Ameriplex Parkway extension, which is located in Decatur Township of Marion County, Indiana. The study area is composed of three distinct sections. The western section is bounded by Kentucky Avenue (SR 67), Milhouse Road, High School Road/Mooresville Road and Camby Road. This area would allow several alternative road alignments. East of Mooresville Road, it is assumed that the Ameriplex Parkway extension would connect to Southport Road at Mann Road primarily using City of Indianapolis right of way already reserved for the extension of Southport Road. This right of way is located between the Crossfield residential neighborhood to the south and the Pheasant Run residential neighborhood to the north. Only minor alignment differences were considered between Mooresville Road and Mann Road. The third section, east of Mann Road to the White River, would follow the existing Southport Road alignment, but may shift from its existing centerline to reduce impacts or cost.

## 3.2 Land Use

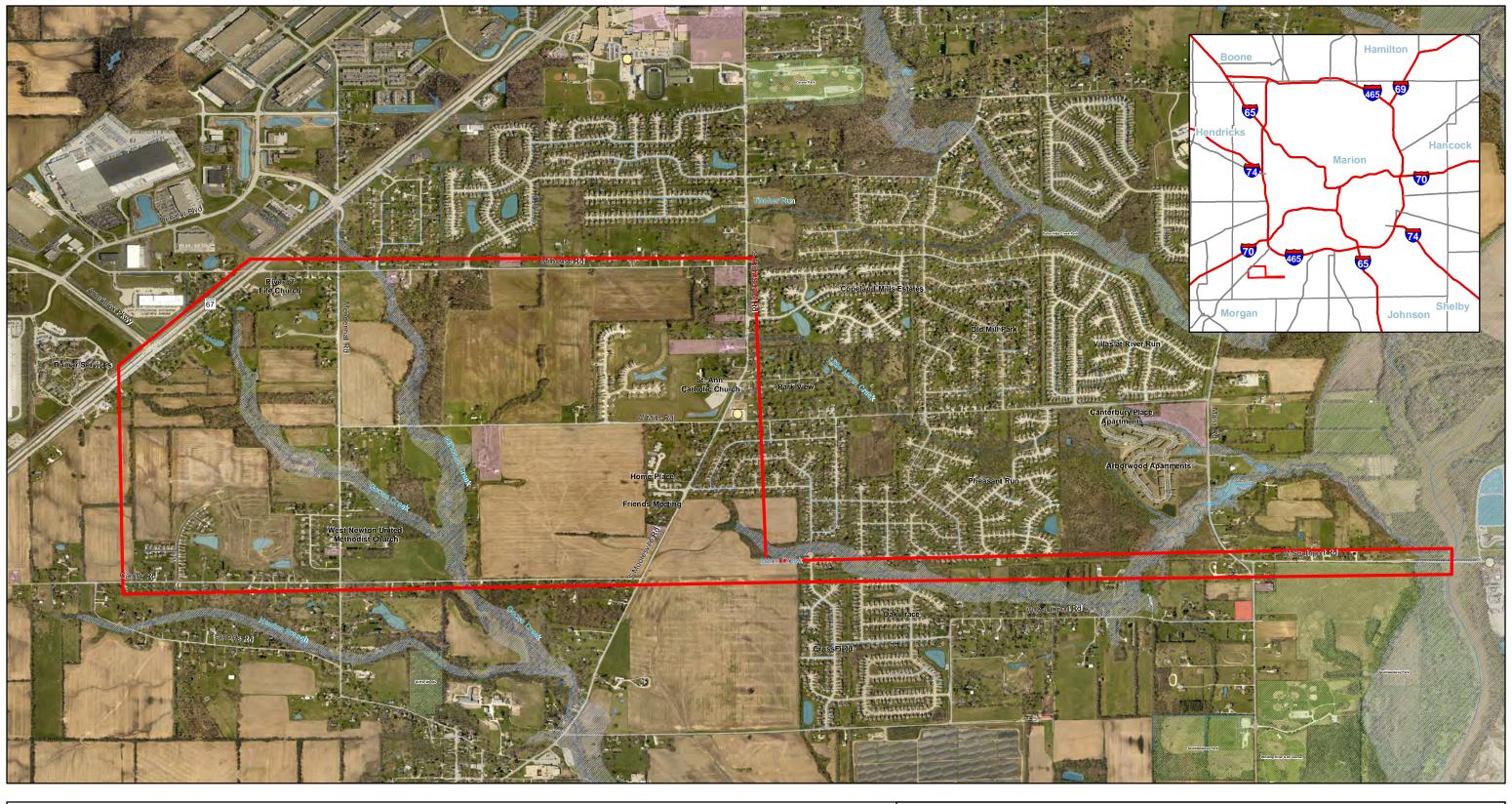
Land use within the study area is generally a mix of agricultural and residential. Older residential homes are located with driveways on the major roads in the area: Camby Road, Mann Road, Mendenhall Road, Mills Road, Milhouse Road, Mooresville Road, and Southport Road. Newer residential neighborhoods with internal local streets have been constructed having their primary entrances from these thoroughfares. Land use within the study area adjacent to Kentucky Avenue is a mixture of agricultural, residential, and small commercial. Land use west of the study area, on the west side of Kentucky Avenue, is dominated by the AmeriPlex industrial park.

Four churches are located within the study area: River of Life Church at 6001 Kentucky Avenue, West Newton United Methodist Church at 6843 Mendenhall Road, West Newton Friends Church at 6800 Mooresville Road, and Saint Ann's Catholic Church at 6350 Mooresville Road

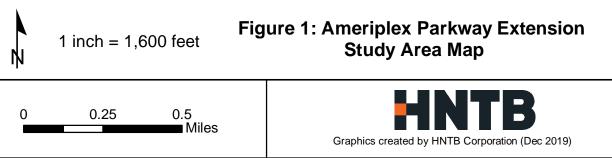
Southwestway Park, a public park owned by the City of Indianapolis, is located east of Mann Road and South of Southport Road. The segment of the project that follows existing Southport Road, east of Mann Road, forms the north border of Southwestway Park.

### 3.3 Environmental Features and Constraints

A draft environmental red flag investigation was developed in accordance with the Indiana Department of Transportation's published standard procedures to document environmental features and constraints in the study area. Natural and manmade features in the project study area were identified using geographic Information systems (GIS) data obtained from the IndianaMap website (<a href="www.indianamap.org">www.indianamap.org</a>) and from the City of Indianapolis Department of Public Works. Some of the structures and key environmental features identified in the GIS data were field verified by cursory field observations.









A query of the Indiana Department of Environmental Management (IDEM) Wellhead Proximity Determinator website (<a href="http://www.in.gov/idem/pages/">http://www.in.gov/idem/pages/</a> wellhead/) conducted by qualified staff, indicated that portions of the project area lie within a Wellhead Protection Area. During final design and construction, appropriate sediment and erosion control and spill protection measures should be implemented to ensure appropriate protection of the wellhead protection areas.

Three creeks cross the study area as they flow toward the White River. Goose Creek and Millhouse Creek cross the study area west of Mooresville Road and Mann Creek crosses the study area east of Mooresville Road.

Wetland areas exist at various locations along Goose Creek and Mann Creek, as identified in US Fish and Wildlife Service National Wetlands Inventory data. Additional areas that may be considered wetlands were noted within unfinished portions of the Camby Woods subdivision and may also exist elsewhere in the study area. Wetland delineation should be completed for the area impacted by the preferred alternative during the project development process, as required for permitting.

Indiana Department of Natural Resources GIS data was reviewed for the presence of historic properties within and adjacent to the study area. One property located on Mann Road, just south of Southport Road, is listed on the National Register of Historic Places. It is not expected to be impacted by this project. Some properties were identified in the GIS data as potentially eligible historic properties. Other properties were identified during field review as potentially eligible based on their apparent age.

A potentially eligible historic bridge is identified in GIS on Mills Road at Milhouse Creek, but it is identified as "demolished." Field observation from street level did not indicate that the current bridge is historic, and it was not considered to be historic.

Forested areas exist within the study area and would be impacted by any of the project alternatives. Forested areas within Marion County are potential summer habitat for the federally endangered Indiana bat and the federally threatened northern long-eared bat.

The U.S. Land and Water Conservation Fund Act of 1965 established the Land and Water Conservation Fund (LWCF), which was created to preserve, develop, and assure accessibility to outdoor recreation resources. Section 6(f) of this Act prohibits conversion of lands purchased with LWCF monies to a non-recreation use without appropriate replacement.

A review of 6(f) properties on the Land and Water Conservation Fund (LWCF) list of funded projects revealed two occurrences within Southwestway Park. The first is funding of \$176,151.12 in 1972 for Southwestway Park, and the second is funding of \$200,000 in 2003 for Southwestway Park Phase II. Coordination with the Indianapolis Park Board indicated that funding was used for property acquisition, and therefore the prohibition of conversion of lands purchased with LWCF monies extends to the entire park. Southwestway Park is located on the south side of Southport Road, between Mann Road and the White River. Widening of Southport Road would result in the acquisition of both park land and residential properties. During preliminary and final design, further alterative refinement and coordination with the National Park Service and Indianapolis Parks Board would occur, and determination of appropriate



replacement property would be negotiated. Prior to completion of the project, any property acquired from Southwestway Park would be replaced with property of reasonably equivalent usefulness and value.

## 3.4 Utilities

Significant underground utilities owned by Citizens Energy Group (CEG) exist within the study area. A gas transmission line and water line are located parallel to Camby Road and extend through the city-owned right of way to Southport Road. Along Southport Road, CEG gas transmission and water lines extend to White River. A CEG sanitary line also exists near Mann Creek. These facilities are generally located within easements. Other utilities, including Indianapolis Power and Light, Comcast, AT&T, also have facilities within the study area. AT&T has easement along Camby Road west of Mooresville Intersection. The City of Indianapolis also has facilities in the study area.

The Indianapolis Airport Authority maintains property easements through the study area that provide a 400-foot wide corridor for the future potential rerouting of electrical transmission lines that would conflict with airport expansion. This corridor crosses Kentucky Avenue in an east-west orientation south of Mills Road, turns and runs parallel to Kentucky Avenue within ½ mile of the southeast side of the road, then turns again and crosses Kentucky Avenue in a north-south orientation immediately east of Mendenhall Road.

## 3.5 Indiana Southern Railroad

The Indiana Southern Railroad Company (ISRR) maintains an active single-track freight line that runs parallel to Kentucky Avenue through the study area. The track is located on the northwest side of Kentucky Avenue, with a track center generally 30 to 50 feet away from the edge of the Kentucky Avenue travel lanes. The railroad crosses Ameriplex Parkway within the signalized intersection of Ameriplex Parkway and Kentucky Avenue. Active gates and overhead flashers are located at this crossing. The August 2019 US Department of Transportation crossing inventory form for this crossing estimates that this crossing is used by one train per day with a typical speed not exceeding 10 mph<sup>1</sup>.

This project is not anticipated to directly impact the railroad but is included in the study area due to its proximity. The Indiana Department of Transportation has a project under development to improve the intersection and RR crossing

## 4. Previous Planning and Related Projects

## 4.1 Thoroughfare plan and alignment studies

The official Thoroughfare Plan for Indianapolis and Marion County<sup>2</sup> proposes two projects that together would provide a connection from Ameriplex Parkway at Kentucky Avenue to Southport Road at Mann Road. The first is a new terrain roadway segment that would extend Ameriplex Parkway south from its current terminus at Kentucky Avenue to intersect with Camby Road and then extend to its intersection

<sup>&</sup>lt;sup>1</sup> https://safetydata.fra.dot.gov/. DOT crossing inventory number 539296U

<sup>&</sup>lt;sup>2</sup> Thoroughfare Plan, Indianapolis + Marion County, October 16, 2019. Adopted by the Metropolitan Development Commission on October 16, 2019.



with Mann Road. The second is the widening of Southport Road from Mann Road to SR 37 (planned I-69). The Thoroughfare Plan proposes that these roads be constructed as 4-lane primary arterials with right of way width of 119 feet. A map from the Thoroughfare Plan that shows these, and other nearby proposed projects is provided in **Appendix A**.

Previous versions of the official Thoroughfare Plan have also designated these projects and have provided additional details on their alignment, design and impacts. Information supporting the 2012 Thoroughfare Plan update includes a detailed description of the proposed Ameriplex Parkway extension segment from Kentucky Avenue to Camby Road.<sup>3</sup> This information is based primarily on a 2011 study conducted by Parsons Brinckerhoff for the City of Indianapolis Department of Public Works.<sup>4</sup> This study developed updated traffic forecasts for the proposed extension from Kentucky Avenue to Camby Road, developed a preferred alignment and preliminary layout drawings, and determined that an at-grade intersection would be sufficient where Ameriplex Parkway would cross Kentucky Avenue and the Indiana Southern Railroad.

Supporting information for an earlier version of the official Thoroughfare Plan was developed in 1997 and provides additional detail for the proposed new segment of Camby Road between Mooresville Rd and Mann Road.<sup>5</sup> Plans developed with this information identify a proposed right of way width of up to 140 feet. Potential stream relocations are identified where the alignment would cross Mann Creek in two separate locations.

## 4.2 Related Projects

## 4.2.1 Ameriplex Parkway and SR 67 (Kentucky Avenue) Intersection

The Indiana Department of Transportation has a project programmed (Des Number 1800072) to construct improvements to the intersection of Ameriplex Parkway and Kentucky Avenue, including additional turn lanes. The total anticipated construction cost is approximately \$4.0 Million. The project is currently on hold while INDOT reviews the construction schedule and coordinates with Indianapolis DPW on its plans for the extension of Ameriplex Parkway.

### 4.2.2 I-465 at SR 67 (Kentucky Avenue) Ramp Terminal Intersections

The Indiana Department of Transportation has a project programmed (Des Number 1800315) to construct improvements to the ramp terminal intersections at the I-465/SR 67 interchange. Construction is anticipated to cost approximately \$7.4 million and occur in 2020.

## 4.2.3 Southport Road and Mann Road Intersection

The City of Indianapolis has received federal Highway Safety Improvement Program funding to reconstruct the intersection of Southport Road and Mann Road (Des Number 1700905). This intersection has a high crash history due to its unusual intersection geometry. The project will realign Southport Road to intersect

<sup>&</sup>lt;sup>3</sup> "Segment No. 20 – Ameriplex Parkway from SR 67 to Camby Road." *Indianapolis Thoroughfare Plan Supplement – Missing Roadway Segment – Sketch Plans.* No Date.

<sup>&</sup>lt;sup>4</sup> Traffic Analysis for SR 67 and Ameriplex Parkway, Indianapolis, Indiana. Parsons Brinckerhoff. June 30, 2011.

<sup>&</sup>lt;sup>5</sup> "Segment No. 18 – Camby Road from Mooresville Road to Mann Road." *Indianapolis Thoroughfare Plan Supplement – Missing Roadway Segment – Sketch Plans*. No Date.



Mann Road at a right angle and will install a traffic signal. This project is expected to be constructed in 2022.

#### 4.2.4 I-69 Section 6

The I-69 Evansville to Indianapolis freeway project is currently being designed and constructed in sections by the Indiana Department of Transportation (INDOT). I-69 Section 6 will begin in Martinsville and end with a new interchange at I-465 near Harding Street. This new freeway facility will be located on the existing alignment of SR 37, and is proposed to have local access interchanges at County Line Road, Southport Road, and Epler Avenue within Marion County. Construction of I-69 within Marion County is anticipated to begin in 2021 and continue through 2024.

## 4.2.5 Other proposed thoroughfare improvements

Several capacity improvement projects are identified in the Indianapolis and Marion County Thoroughfare Plan in the immediate vicinity of the proposed Ameriplex Parkway extension. <sup>6</sup> These include the following:

- Mann Road, Kentucky Avenue to Southport Road widen to 4-lane primary arterial
- Southport Road, Mann Road to SR 37 widen to 4-lane primary arterial
- Mendenhall Road/Paddock Road, Kentucky Avenue to County Line Road build/widen to 4-lane collector

Of the above projects, the Mann Road and Southport Road projects are identified as "illustrative" in the MPO 2045 Long Range Transportation Plan, meaning that they have not been identified for funding through the MPO.<sup>7</sup> The Mendenhall/Paddock project is not contained in the 2045 transportation plan.

## 4.3 Land Use Plan

The Land Use Plan is an element of the official Comprehensive Plan for the City of Indianapolis and Marion County. The existing Land Use Plan for the portion of Decatur Township that includes the Ameriplex Extension study area was updated in 2018.<sup>8</sup> The Land Use Plan identifies proposed future land use throughout the township, identifies environmental constraints to land development, and provides development recommendations within areas defined by the plan as "Critical Areas". Proposed land use within the study area is primarily residential. **Figure 2** shows the Land Use Plan for Decatur Township, as documented in this plan.

Higher density residential, along with commercial and office uses, are proposed along Kentucky Avenue between Ameriplex Parkway and Camby Road. This area is identified as Critical Area 004 (*CA 004*) in the 2018 Land Use Plan. The Plan calls for this area to be master-planned, walkable and with a high degree of

<sup>&</sup>lt;sup>6</sup> Indy Moves, Final Plan 2018. Adopted by the Metropolitan Development Commission on November 7, 2018

<sup>&</sup>lt;sup>7</sup> Indianapolis Metropolitan Planning Area Long Range Transportation Plan: 2017 June Amendment. Indianapolis Metropolitan Planning Organization. June 14, 2017.

<sup>&</sup>lt;sup>8</sup> The Marion County Land Use Plan, A Component of the Comprehensive Plan for Indianapolis and Marion County. Decatur Township area City of Indianapolis, Department of Metropolitan Development, Division of Planning. Adopted December 5, 2018.



connectivity. Large scale retail and office are permitted in this area, as are hotel/motel/hostels or light industrial uses.

A second critical area (*CA 006*) is identified east of the Southport Road/Mann Road intersection. Similar to CA 004, this area is intended to develop in a way that is walkable and connected, with a mix of neighborhood-serving commercial and retail uses. This area is not intended to contain a single housing type or land use.

A detailed plan for development of the Kentucky Avenue corridor was developed in 2010.<sup>9</sup> This plan includes recommendations to guide future development within the corridor, including:

- Pedestrian and bicycle facilities
- Additional transit infrastructure and service
- Signage, lighting, landscaping and other corridor design elements
- Site development standards
- Development and redevelopment recommendations for specific areas and sites, including conceptual site plans

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<sup>&</sup>lt;sup>9</sup> Kentucky Avenue Corridor Plan. City of Indianapolis, Department of Metropolitan Development, Division of Planning. Adopted February 17, 2010.



Figure 2. Decatur Township Land Use Plan





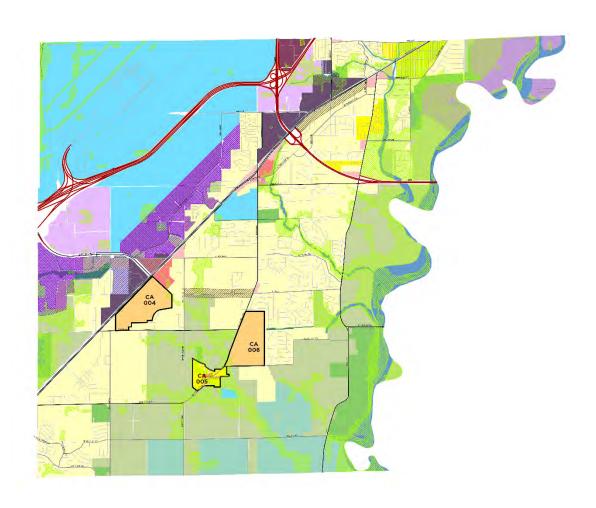


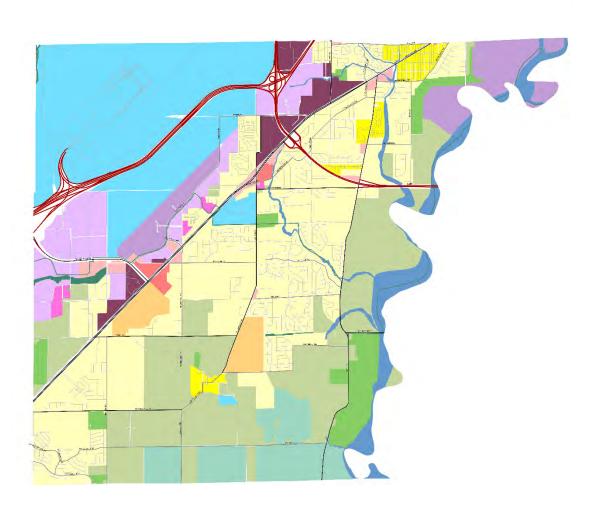


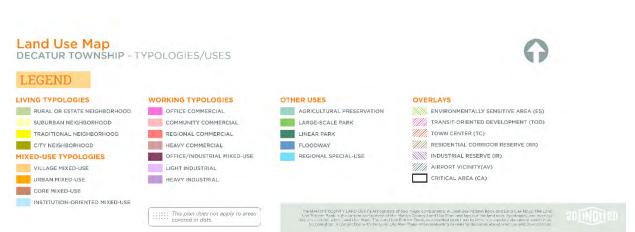


Figure 3. Decatur Township Land Use Map - Typologies/Uses











## 5. Traffic Demand

In December 2019, the Indianapolis Metropolitan Planning Organization (MPO) used their regional travel demand model to develop an updated forecast of traffic that would use a direct roadway connection between Ameriplex Parkway at Kentucky Avenue and I-69 at Southport Road. The year 2045 forecast generated with the travel demand model predicts that 21,000 to 27,000 vehicles per day would use the segment of Ameriplex Parkway between Kentucky Avenue and Mann Road. Traffic volumes of 38,000 to 40,000 vehicles per day would be expected on Southport Road east of Mann Road. Traffic projections indicate that trucks would comprise approximately 12% of the daily traffic volumes in the year 2045.

The MPO traffic forecast is sufficient to confirm the basic design configuration and footprint of the proposed facility. However, more detailed design hour traffic forecasts would be necessary as the project proceeds to confirm intersection lane configurations and traffic control.

## 6. Roadway Design

Recommended design criteria for the Ameriplex Parkway extension are derived from the Marion County Thoroughfare Plan and adjusted based on discussions with DPW and DMD staff. Recommended design criteria are provided in **Table 1**, and typical sections are shown in **Figure 4**. It is recommended that the road be constructed as a 4-lane divided arterial with curb and gutter, raised center median, and separated pedestrian and bicycle facilities within a 130-foot wide right of way. The forecast traffic demand is within the range that can be accommodated by a 4-lane divided arterial, which is the facility type designated in the existing Thoroughfare Plan.

Table 1. Recommended Design Standards for Ameriplex Parkway Extension

Feature	Recommendation
Functional Classification	Primary Arterial
Proposed Lanes	4 lanes @11-feet wide
Right of Way Width	130 feet
Design Speed	45 mph
Posted Speed	40 mph
Median	15-foot median
Drainage	Curb and gutter with enclosed drainage
Pedestrian Accommodation	6-foot sidewalk on one side and 10-foot multi-use path on opposite side.
Bicycle Accommodation	10-foot multi-use path.
Utility accommodation	Can be accommodated at back of right of way.

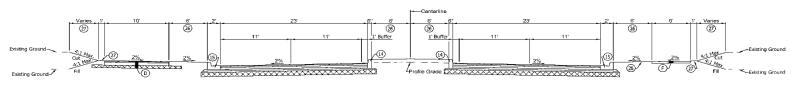


This study made assumptions about intersection traffic control based on the preliminary daily traffic forecasts. Stop control is assumed on lower volume streets that intersect Ameriplex Parkway. Traffic signals or roundabouts are assumed at higher volume intersections. Detailed traffic forecasts and analysis would be necessary during project design to select the best intersection control and lane configurations. A two-lane roundabout should be able to accommodate intersections that have total daily entering volumes of up to 30,000 and possibly more, depending on conditions.<sup>10</sup>

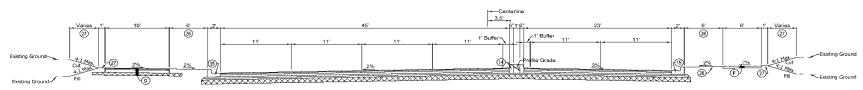
<sup>&</sup>lt;sup>10</sup> Roundabouts: An Informational Guide, Second Edition. National Cooperative Highway Research Program Report 672. Transportation Research Board. 2010. Exhibit 3-12.



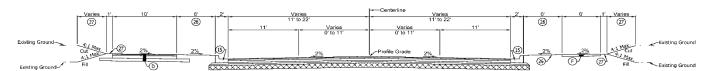
Figure 4. Typical Sections



## TYPICAL SECTION - AMERIPLEX PARKWAY KENTUCKY AVENUE TO MANN ROAD



#### TYPICAL SECTION - AT INTERSECTIONS



## TYPICAL SECTION - SOUTHPORT ROAD MANN ROAD TO WHITE RIVER BRIDGE

- LEGEND

- Curb and Gutter, Roll Curb
   Curb, Concrete, Modified
   Integral Concrete Curb
   Combined Concrete Curb
   Combined Concrete Curb And Gutter
   \*\*PCCP, Colored and Jointed, on
   10\*\*Compacted Aggregate, No. 53, on
   Subgrade Treatment, Type IIA

- Subgrade Treatment, Type IIA

  Sodding

  Mulched Seeding, U

  1558/270 HMA Surface, 9.5 mm, on
  2758/S70 HMA Determediate, 19.0 mm, on
  4408/S70 HMA Determediate, 19.0 mm, on
  3706/S70 HMA Base, 25.0 mm, on
  3706/S70 HMA Intermediate, 0G, 19.0 mm, on
  37 Compacted Aggregate No. 53, on

  D 1558/S70 HMA Surface, Type A, 9.55 mm, on
  Subgrade Treatment, Type III

  D 1558/S70 HMA Surface, Type A, 9.55 mm, on
  Subgrade Treatment, Type III

  Concrete Sidewalk, 47
- F Concrete Sidewalk, 4"



## 7. Alignment alternatives

## 7.1 Conceptual Alternatives Screening

Four conceptual alignment alternatives for the Ameriplex Parkway extension were originally developed, as shown in **Figure 5**. A 130-foot typical right of way width was assumed for all alternatives. Auto-CAD software was used to lay out the right of way envelope for each conceptual alignment alternative on digital aerial photography. Additional right of way acquisition was assumed along crossing streets where new intersection turning lanes may be necessary, although no detailed analysis of intersection requirements was conducted. While the alignments differ west of Mooresville Road, they all follow the same alignment from Mooresville Road to the east project terminus at the White River.

Conceptual alignment alternatives were reviewed by the project team using a qualitative comparison of advantages and disadvantages. A brief description of each conceptual alternative is provided.

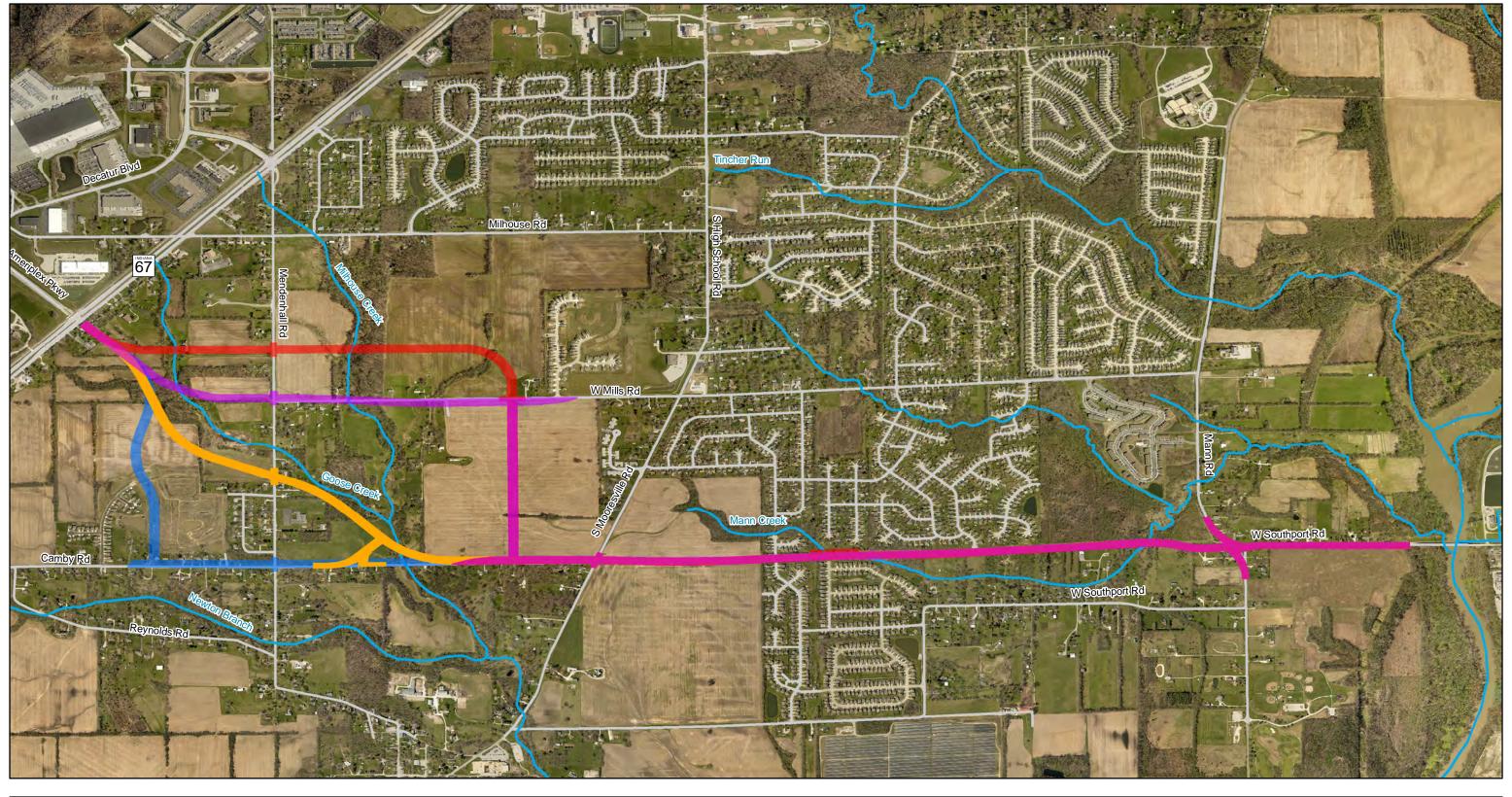
<u>Conceptual Alternative 1</u>. This alternative would follow the alignment identified in the previous version of the Marion County Thoroughfare Plan. The road would extend Ameriplex Parkway along new terrain south from Kentucky Avenue to a T-intersection with Camby Road. It would use right of way reserved through the Camby Woods residential development. The road would then turn east, following Camby Road and extend Camby Road to intersect with Mann Road at its existing intersection with Southport Road. From there it would continue along the existing Southport Road alignment to the White River. The following advantages and disadvantages were identified for this conceptual alternative:

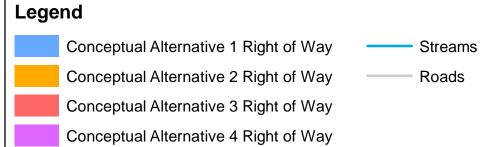
#### Advantages

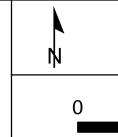
- Partial right of way already reserved through the Camby Woods residential development
- o Alignment could somewhat discourage use as a through traffic connection
- Avoids most environmentally sensitive areas along Goose Creek and Milhouse Creek
- o Re-uses one mile of existing Camby Road right of way
- Least new terrain construction of any alternative

#### Disadvantages

- Most relocations and driveway impacts of any alternative due to alignment along Camby
   Road
- Right of way within unfinished areas of the Camby Woods subdivision has developed wetland characteristics and may be regulated wetland
- Highest utility impacts, with significant utility relocations required along Camby Road
- Alignment could somewhat discourage use as a through traffic connection

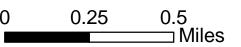






1 inch = 1,500 feet

Figure 5: Ameriplex Parkway Extension Conceptual Alternatives



Graphics created by HNTB Corporation (Dec 2019)



<u>Conceptual Alternative 2</u>. This alternative would follow a new terrain alignment along the south side of Goose Creek and would cross Milhouse Creek using a new bridge constructed just north of Camby Road. The road would intersect Camby Road just east of Goose Creek. It would then turn east, following Camby Road and extending Camby Road to intersect with Mann Road at its existing intersection with Southport Road, then continue along existing Southport Road alignment to the White River. The existing Camby Road crossing over Goose Creek would be eliminated, and a new T-intersection would be constructed to connect the segment of Camby Road west of Goose Creek to the Ameriplex Parkway extension. The following advantages and disadvantages were identified for this conceptual alternative:

## Advantages

- Most direct through route between Kentucky Avenue and Southport Road
- Lowest impacts to developable property of any alternative

#### Disadvantages

- Highest potential floodplain and waterway impacts due to route adjacent to Goose
- o Relatively high impacts to forested areas and possible summer bat habitat
- Alignment of the road adjacent to Goose Creek minimizes its exposure to developable land
- A direct through traffic route may be undesirable to some
- o Creates a new skewed intersection within close proximity of Camby Road

<u>Conceptual Alternative 3</u>. This alternative would extend Ameriplex Parkway from Kentucky Avenue east for approximately one mile on new terrain parallel to and approximately 800 feet north of Mills Road. The road would then turn south, still following a new terrain alignment, to cross Mills Road and intersect with Camby Road. The road would then turn east again, following Camby Road and extending Camby Road to intersect with Mann Road at its existing intersection with Southport Road and continuing along existing Southport Road alignment to the White River. The following advantages and disadvantages were identified for this conceptual alternative:

## Advantages

- o Lowest utility impacts due to new terrain alignment
- o More access to developable land than any other alternative

## Disadvantages

- Longest new terrain alignment
- o Requires separate crossings of Goose Creek and Milhouse Creek and tributaries
- o May impact forested wetlands associated with Milhouse Creek
- Alignment parallel to Mills Road and approximately 800 feet away limits land development options between Mills Road and Ameriplex Parkway
- Creates a new intersection 800 feet from the existing Mendenhall Road/Mills Road intersection
- Some impacts to forested areas and possible summer bat habitat



Conceptual Alternative 4. This alternative would extend Ameriplex Parkway southeast on new terrain from Kentucky Avenue to the intersection of Mendenhall Road and Mills Road. The road would then follow the alignment of Mills Road east for approximately 3,000 feet before turning south at a new intersection and extending across new terrain to a new T-intersection with Camby Road. The road would then turn east again, following Camby Road to intersect with Mann Road at its existing intersection with Southport Road. From there it would continue along existing Southport Road alignment to the White River. The following advantages and disadvantages were identified for this conceptual alternative:

### Advantages

- o Re-uses ¾ mile of existing right of way along Mills Road and Camby Road
- Alignment would support better access to existing and new development along Mills
   Road
- Alignment could somewhat discourage use as a through traffic connection, which may appeal to stakeholders
- Less relocations and residential impacts

#### Disadvantages

- o Requires right of way acquisition from a potential historic property along Mills Road
- o Relatively high impacts to forested areas and possible summer bat habitat
- Requires a crossing of Goose Creek and a crossing of a tributary of Milhouse Creek
- Alignment could draw more traffic to residential areas along Mills Road east of Mooresville Road
- Creates a new intersection 1,000 feet from the existing Camby Road/Mooresville Road intersection

## 7.2 Final Alternatives

Based on evaluation of the four conceptual alignment alternatives, the alternatives were refined and consolidated into three final alternatives for more detailed quantitative evaluation. The refinements are described below. The refined alternatives are shown in **Figure 6**.

Alternative 1. This alternative was retained from Conceptual Alternative 1 with minimal refinement.

<u>Alternative 2</u>. This alternative was retained from Conceptual Alternative 2. The alignment was refined to reduce impacts on Goose Creek and improve the alignment at its connection with existing Camby Road.

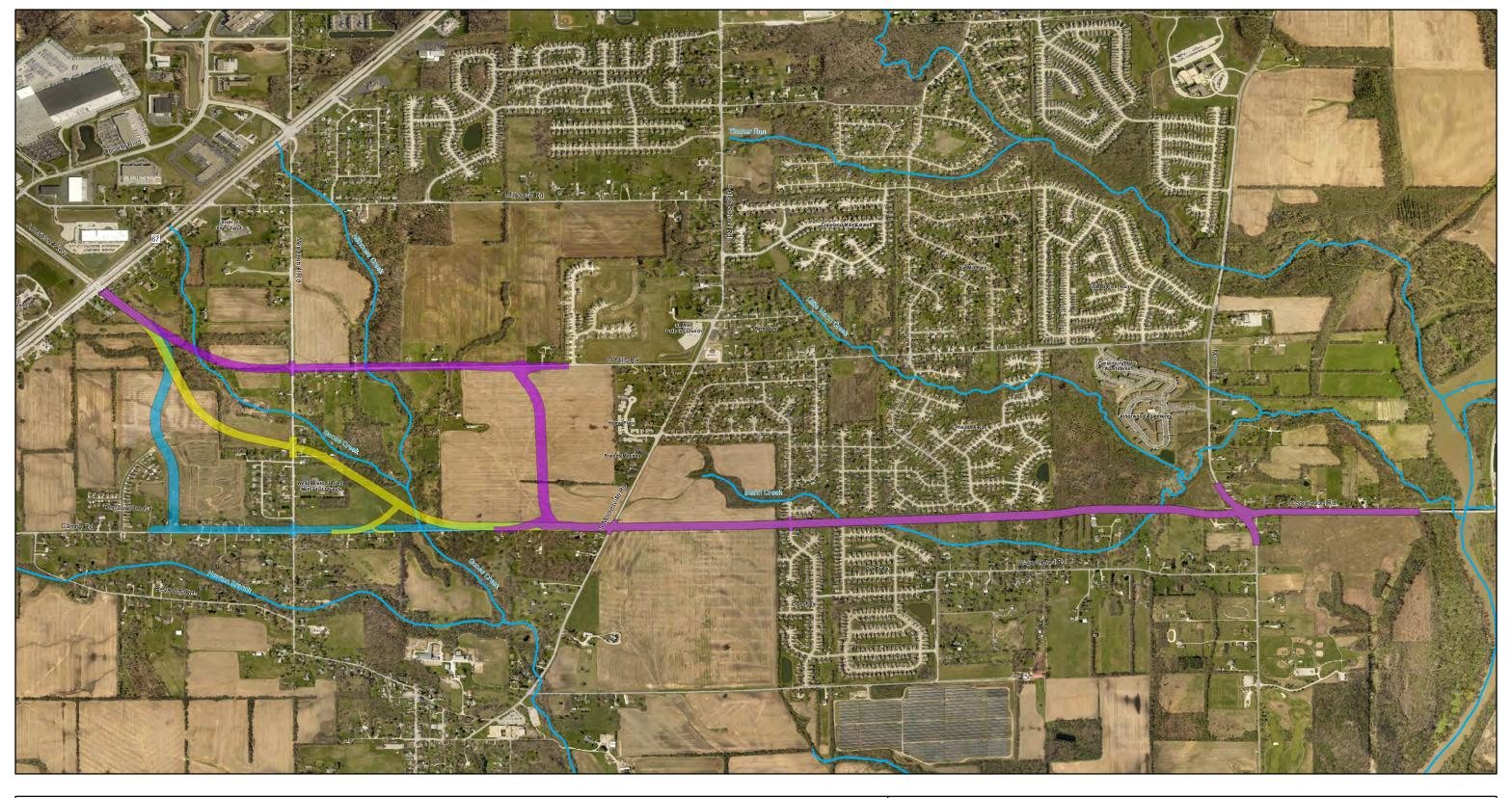
Alternative 3. This alternative is a refinement of Conceptual Alternative 4. This included reconfiguring the proposed new intersections at Mills Road and Camby Road to provide better through connectivity along the Ameriplex Parkway extension. The road would curve through these intersections to allow drivers to remain on the Ameriplex Parkway without making a right or left turn. This would also be expected to reduce traffic volumes on Mills Road east of Ameriplex Parkway and on Camby Road west of Ameriplex Parkway because these would be less direct movements. The proposed alignment of Ameriplex Parkway was also shifted north where it follows Mills Road, and would hold the existing right of way line on the south side of Mills Road. This would reduce property impacts and eliminate the direct impact to the potentially historic Mills Farm property.

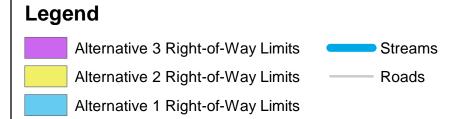


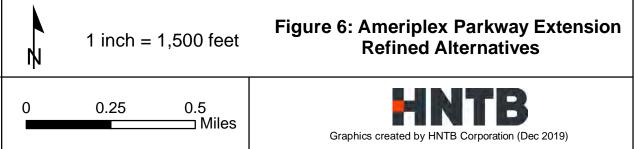
During refinement of Conceptual Alternative 3, multiple alignment options were considered for trade-offs among anticipated property impacts, traffic operation and construction cost. The options that were considered are shown in **Figure 7.** 

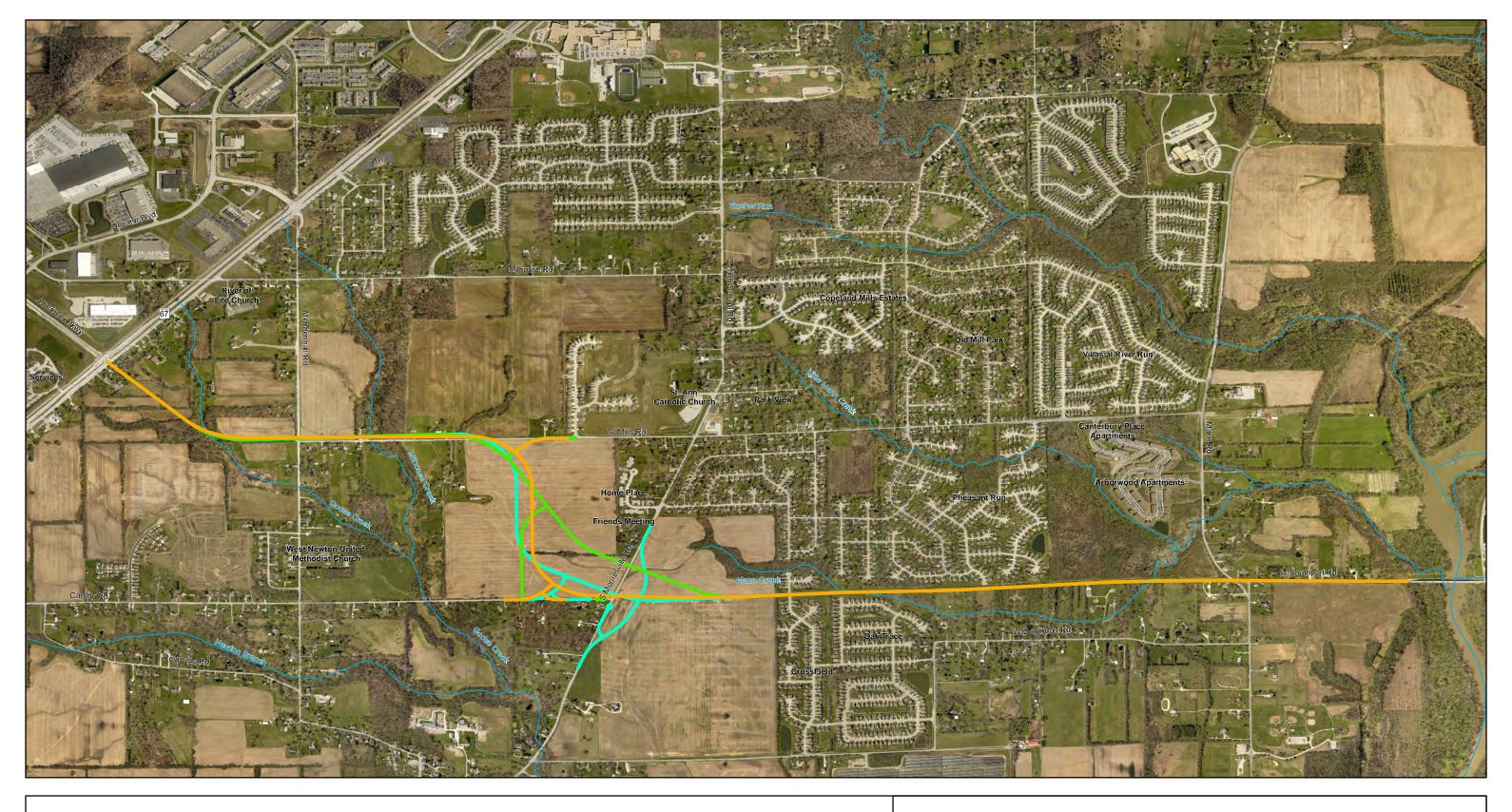
Conceptual Alternative 3 was eliminated from consideration primarily because its alignment 800 feet north of Mills Road would limit development opportunities on the north side of Mills Road and could create traffic congestion along Mendenhall Road due to the proximity of the two intersecting roads. This alignment did not appear to have advantages compared to that used by Conceptual Alternative 3.

During alternative refinement, two options were considered for the alignment of the Ameriplex Parkway extension where it connects to Southport Road at Mann Road. Either of these options could be used with any of the three alignment alternatives. One option would provide a straight east-west alignment of Ameriplex Parkway near Mann Road that would match the existing alignment of Southport Road. The other option would construct a curve along the Ameriplex Parkway alignment so that it intersects Mann Road closer to a right angle. This option was selected because it would provide safer traffic operation at the intersection and would better align with the proposed realignment of Southport Road at Mann Road that is described in **Section 4.2.3**.











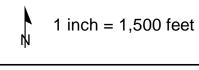


Figure 7: Ameriplex Parkway Extension Alternative 3 Options Considered







## 8. Comparison of Alternatives

The three final Ameriplex Parkway extension alternatives were compared based on their transportation functionality, impacts to the natural and manmade environment, cost and constructability, and their community support. Comparison methods and results are described in the following subsections.

## 8.1 Transportation Functionality

A review of transportation functionality was conducted to consider the ability of each alternative to serve anticipated travel demand safely and efficiently. Each alternative would provide a four-lane primary arterial with a raised center median through the project limits, which is expected to have sufficient capacity for forecasted vehicle demand. Each alternative would also provide a continuous sidewalk and a multi-use path to serve non-motorized travel.

#### Connectivity

Alternative 2 would provide the most direct alignment through the study area, which could encourage its use as a through traffic route between the Indianapolis International Airport vicinity and Southport Road to the east. Alternatives 1 and 3 would provide somewhat less direct connectivity to Southport Road, which could limit the use of the Ameriplex Parkway extension for regional trips. More specifically, the alignment of Alternative 3 along Mills Road might encourage more traffic to continue east along Mills Road through existing residential areas east of Mooresville Road instead of using the Ameriplex Parkway extension.

### **Traffic Operations and Safety**

Each of the alternatives would reuse a segment of existing Camby Road or Mills Road. This could reduce the cost and environmental impacts of new road construction but is also expected to affect the design and operation of the Ameriplex Parkway extension by preserving direct access to existing private driveways along these roads. It is desirable to minimize direct private drive access to an arterial road due to the potential impacts on traffic safety and operation. Alternative 1 would maintain direct access to approximately 25 existing residential driveways along the alignment of Camby Road. Alternatives 2 and 3 would maintain access to approximately 8 to 10 driveways along Mills and/or Camby Road It is recommended that driveway access be restricted to right turns in and out, with no median breaks.

The proposed alignment of Alternative 3 creates challenges that would need to be addressed during design. This alternative would require intersections to be located on curves where the Ameriplex Parkway extension connects to Mills Road and Camby Road. Large curves or reduced speed limits could be necessary to provide appropriate driver sight distance for safe operation at these intersections, which could increase construction, operation and maintenance costs. In addition, the intersection of Ameriplex Parkway with Camby Road would also be less than 1,000 feet from its intersection with Mooresville Road in Alternative 3. The impacts of this proximity on traffic operation at these intersections would need to be considered during design. Roundabouts would be considered as a way to address some of these concerns.



With Alternative 2, Ameriplex Parkway would intersect Mendenhall Road approximately 200 feet north of Eddie Lane. While Eddie Lane is currently a low volume residential street, it is possible that it could be extended west to serve additional development. The configuration of this access would need to be considered in more detail if this alternative is selected for further study.

## 8.2 Impacts

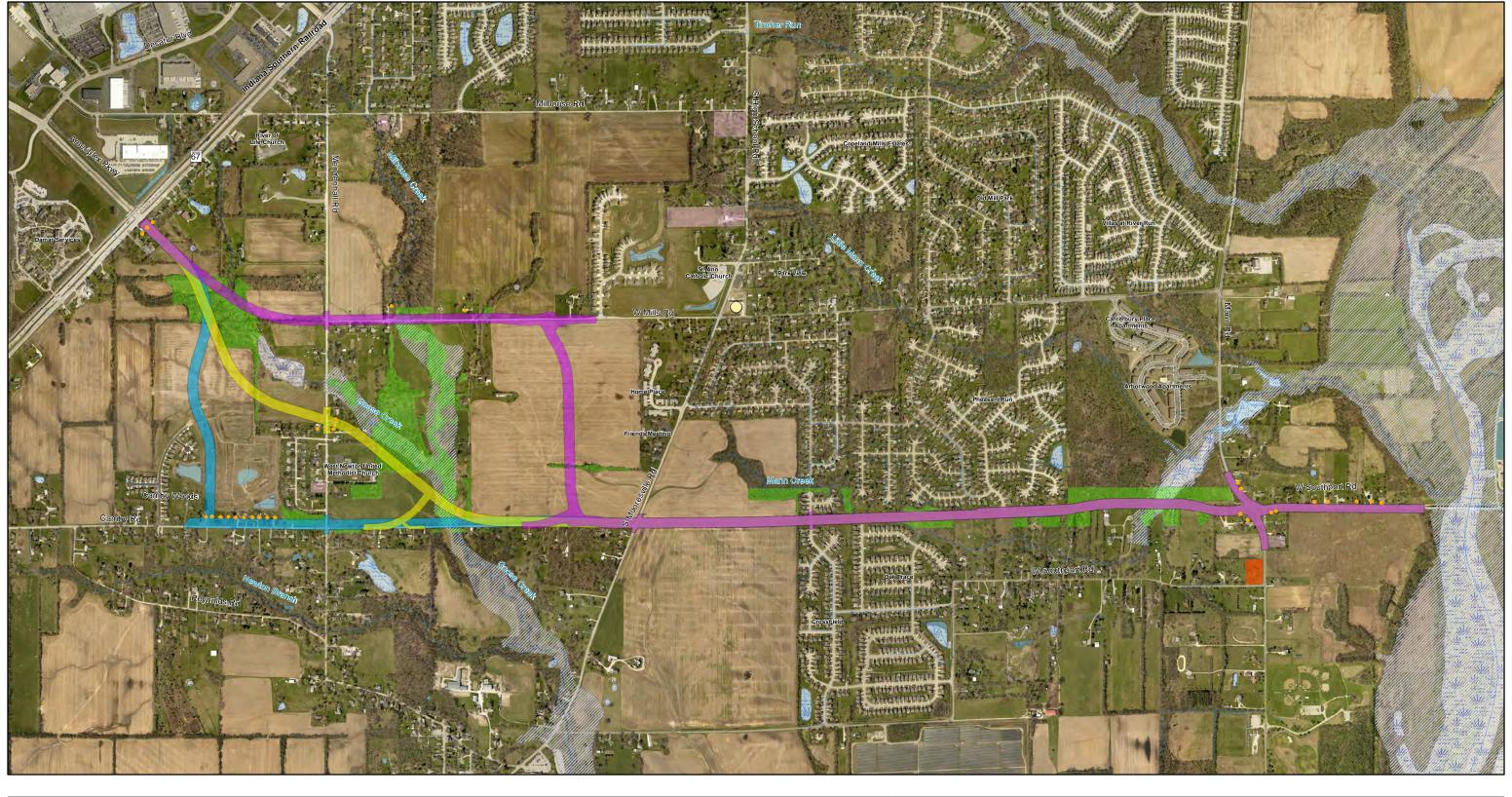
The potential impacts of each alternative to the natural and manmade environment in the project study area were assessed using analysis of geographic Information systems (GIS) data obtained from the IndianaMap website (<a href="www.indianamap.org">www.indianamap.org</a>) and from the Department of Public Works. Some of the structures and key environmental features identified in the GIS data were field verified by windshield survey. **Table 2** provides a summary comparison of the impacts for each alternative. **Figure 8** shows the locations of potentially impacted resources and properties.

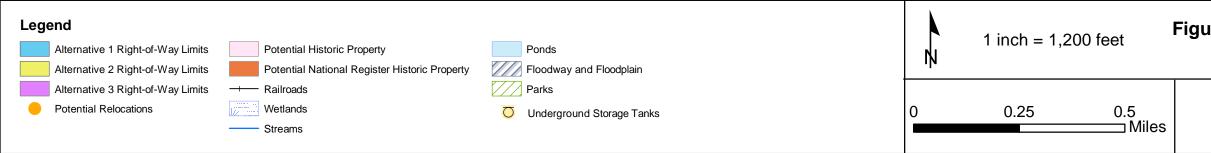
Table 2. Comparison of Alternatives

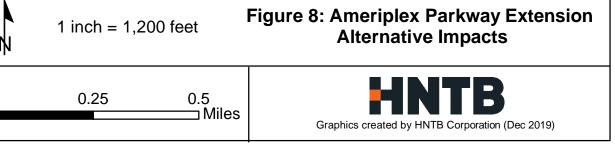
Imno	o <del>t</del>	Alternative 1	Alternative 2	Alternative 3
Impact				
Alternative Length		3.76 miles	3.44 miles	3.62 miles
	Stream Crossings	4	4	5
	Stream Impacts	972 feet	1,035 feet	1,183 feet
Streams & Wetlands	Floodplain Impacts	1.8 acres	2.2 acres	2.4 acres
	Wetland Impacts	0.5 acres	0.5 acres	0.5 acres
Historic Properties	Potential Historic Properties Impacted	-	-	-
Right-of-Way	New Right of Way	103.0 acres	102.3acres	102.9 acres
	Residential	16 homes*	20 homes	6 homes
Potential Relocations	Commercial	-	-	-
	Industrial	-	-	-
	Forest Impacts	10.7 acres	12.4 acres	11.0 acres
Land Use	Residential Impacts	24.4 acres	20.5 acres	18.4 acres
	Commercial Impacts	<0.1 acres	1.1 acres**	<0.1 acres
	Industrial Impacts	-	-	-
	Agricultural Impacts	76.4 acres	78.4 acres	82.3 acres
	Exempt / Park Impacts	2.2 acres	2.2 acres	2.2 acres

<sup>\*</sup> May not include all recent construction in Camby Woods subdivision

<sup>\*\*</sup> Includes land at West Newton United Methodist Church









The GIS analysis was used to estimate potential impacts of each alternative alignment on natural areas that included streams, wetlands, floodplain, and forests. Alternatives were developed to avoid or minimize impacts to wetlands and streams to the extent practical, but some impacts would be unavoidable. Impacts to natural areas were calculated based on the proposed right of way for each alternative. As the project proceeds through development, the preferred alternative will be refined to further reduce impacts or provide mitigation measures where required.

Potential impacts of the project alternatives to wetlands were identified and calculated based on US Fish and Wildlife Service National Wetlands Inventory (NWI) data. These data are useful as a planning tool but are not necessarily up to date and have not been field verified with a wetlands delineation study. For example, field review identified conditions within the unfinished areas of the Camby Woods residential neighborhood on the north side of Camby Road that could be considered wetlands. However, these are not identified on NWI mapping.

The GIS analysis was also used to determine the total new right of way required for each alternative, along with anticipated impacts to residential, business, and agricultural properties, and to properties that are potentially eligible for the National Historic Register. Residential properties were identified as potentially requiring relocation by a project alternative if the main dwelling was inside the proposed right of way or would not be accessible once the project was constructed. No business relocations were identified for any alternative. It is anticipated that 1.5 acres of new right of way would be acquired from the Southwestway Park. As this is a Section 6(f) resource, this acquisition would have to be offset with an acquisition of replacement property of equal or greater value and usefulness.

The potential realignment of Mann Creek where it crosses the proposed Ameriplex Parkway alignment east of Mooresville Road is reflected in the right of way acquisition and stream impacts identified for all three of the alternatives. The realignment would make the creek parallel to the road and create a shorter, single crossing. It could be determined during project design that a different creek alignment would be more advantageous than what is currently assumed.

## 8.3 Cost and Constructability

A summary of costs for each alternative is provided in **Table 3**. Planning level cost estimates were developed for implementation of each of the Ameriplex Parkway extension alternatives. Construction costs were developed based on typical Indiana Department of Transportation (INDOT) construction methods and unit construction costs. Quantities for roadway items associated with each alternative were estimated using the CAD alignments and assumed typical roadway sections. The quantities of other items, such as drainage structures and traffic signals were estimated by identifying their potential locations and sizes from the alignment and aerial photography. The construction cost was quantified using INDOT pay items, and the unit cost for each pay item was determined by INDOT's "2019 English Unit Price Summaries" spreadsheet on INDOT's website. Due to the very preliminary status of project planning, a 25% contingency was applied to project costs.



Utility relocation costs were estimated using utility plans received from the respective utility companies and unit costs identified in coordination with the utilities. The major relocation costs included a 30" water line and a 20" transmission gas line running parallel to Camby Road and extending to Mann Road. The right of way acquisition costs for parcels impacted by each alternative were estimated based on the footprint of each alternative and by applying assessed property value information and typical land acquisition and relocation costs.

### **Utility relocation**

The potential for significant utility conflicts was reviewed for each of the alternatives based on GIS data and evidence of utilities noted during field reviews. Citizens Energy Group has a significant utility corridor along Camby Road and through the city-owned right of way where all three alternatives would be located between Mooresville Road and Mann Road. Utilities located within this corridor include a gas transmission line, a water main, and a sanitary sewer interceptor. These facilities are generally located within easements, and most would be relocated within the right of way for the Ameriplex Parkway extension. CEG has indicated they do not prefer the gas transmission line to remain in place beneath segments of the new roadway. The costs of their relocation have been included in the project cost estimates developed for this study. The impacts of the three alternatives on these utilities are directly related to the length of their alignment along Camby Road, so Alternative 1 has the most impact and Alternative 3 the least.

Cost Element	Alternative 1	Alternative 2	Alternative 3
Construction	\$ 48,616,000	\$ 45,350,400	\$ 51,187,800
Preliminary Engineering	\$ 3,890,000	\$ 3,629,000	\$ 4,096,000
Right of Way	\$ 10,903,600	\$ 12,509,800	\$ 6,713,800
Utilities	\$ 14,560,000	\$ 11,440,000	\$ 10,400,000
Wetland Mitigation	\$ 170,000	\$ 170,000	\$ 170,000
Stream Mitigation	\$ 438,000	\$ 466,000	\$ 533,000
TOTAL	\$ 78,577,600	\$ 73,565,200	\$ 73,100,600

Table 3. Estimated Project Cost by Alternative

## 9. Public and Stakeholder Input

An initial public meeting was held at the Decatur branch of the Indianapolis Public Library on May 11, 2017. The purpose of the meeting was to describe the Ameriplex Parkway extension study and the three alternatives, as well as obtain input that would help to develop the project. The meeting sign-in sheet was signed by 108 participants. Information presented at the meeting is also posted on the Department of Public Works website.<sup>11</sup>

<sup>&</sup>lt;sup>11</sup> http://www.indy.gov/eGov/City/DPW/RebuildIndy/Projects/Pages/MajorProjectFactSheetsandLinks.aspx



Participants in the May 11, 2017 public meeting were invited to provide written comments regarding the project, including feedback on the three alternative alignments for the Ameriplex Parkway extension. A summary of common topics among the written comment forms is provided in **Table 4**. Of those who expressed an opinion for or against specific alternatives, the preference was generally for either Alternative 2 or Alternative 3. This information is shown in **Table 5**. Based on conversations at the public meeting, some were aware of the proposed project and the designation of the Alternative 1 alignment in the Marion County Thoroughfare Plan, but some were not.

Table 4. Public Meeting Comment Topics

Number of Statements	Торіс
10	Requested project information
9	Prefer or oppose specific alternative
5	opposed to project
4	Traffic concerns
2	Opposed to warehousing in the area
2	Noise concerns
2	Need to improve Southport Road
1	In favor of project
1	Request additional meetings
1	Farmland preservation concern
1	Emergency access concern
1	property value concern
1	Neighborhood impacts concern

Table 5. Stated Alternative Preferences from 2017 Public Meeting

Alternative	Number who Prefer	Number who Oppose
Alternative 1	0	2
Alternative 2	2	0
Alternative 3	3	1

Since the May 2017 public meeting, Decatur Township representatives continued conversations about the proposed roadway and future land use in the area, independent of this study process. The City of Indianapolis was invited to attend some of these meetings as an observer.



A second public meeting was held on February 18, 2020 at Decatur Central High School. The purpose of the meeting was to describe recent updates made to the alignment study and the three alternatives, as well as obtain input that would help to progress the project into preliminary design. Approximately 125 people attended the meeting, which included a formal presentation and open-house format conversations between project team members and the public. Public comments were accepted at the open house via comment cards or in for 30 days following the open house by email.

In all, 74 people submitted comments via either on-site comment cards or the Decatur Direct website (www.decaturdirect.com). Most correspondence from the public was in the form of questions about impacts to specific properties or neighborhoods. Only twelve people responded to a specific alignment. **Table 6** summarizes these responses.

Alternative	Number who Prefer	Number who Oppose
Alternative 1	0	1
Alternative 2	1	0
Alternative 3	6	4

Table 6. Stated Alternative Preferences from 2020 Public Meeting

## 10. Conclusions and Recommendations

Based on factors including impacts, costs, and public input, it is recommended that Alternative 3 be advanced as the preferred alternative. Additional engineering will be conducted in the next phase of work to refine Alternative 3. Modifications may be made to reduce or mitigate impacts, improve safety or connectivity, react to new information, or otherwise respond to stakeholder comments.

In accordance with this recommendation, a detailed cost estimate was created for Alternative 3 to assist in advancing it into preliminary design. The estimate encompassed major roadway, hydraulic, and structural (bridge) items. Construction costs were developed based on typical Indiana Department of Transportation construction methods and unit construction costs. Quantities for roadway items were estimated using the CAD alignment and assumed typical roadway sections. The major categories of roadway items include asphalt pavement, subgrade treatment, curbs, sidewalks, earthwork, and pipes and drainage structures for the storm sewers.

Preliminary engineering review has indicated the need for four bridges and one box-culvert. Bridge crossings would be located at Goose Creek, Milhouse Creek, and Mann Creek. Mann Creek will require two crossings, one east of Cordova Drive and one west of Mann Road. The box-culvert would be utilized at an unnamed tributary to Milhouse Creek located to the east of the Milhouse Creek bridge.

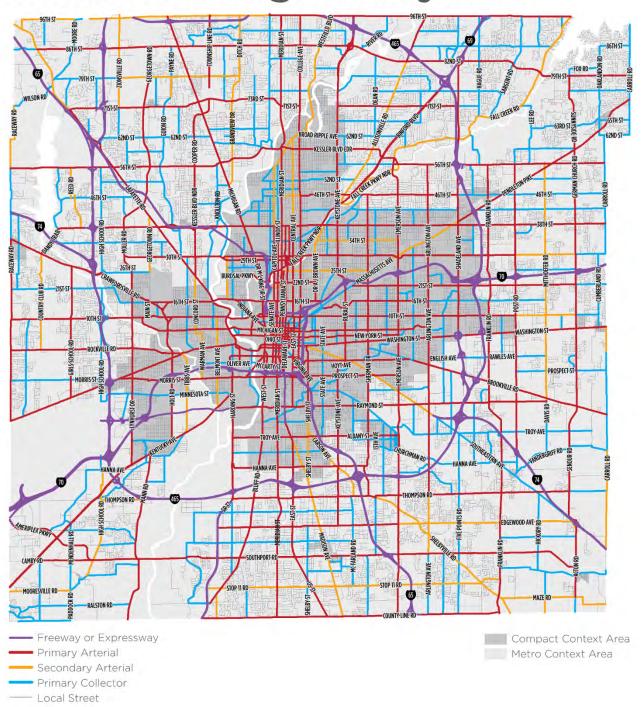
Given the information available at this level of study, the probable overall cost for Alternative 3 is estimated at \$73.1 Million.



# Appendix A Marion County Thoroughfare Plan Maps

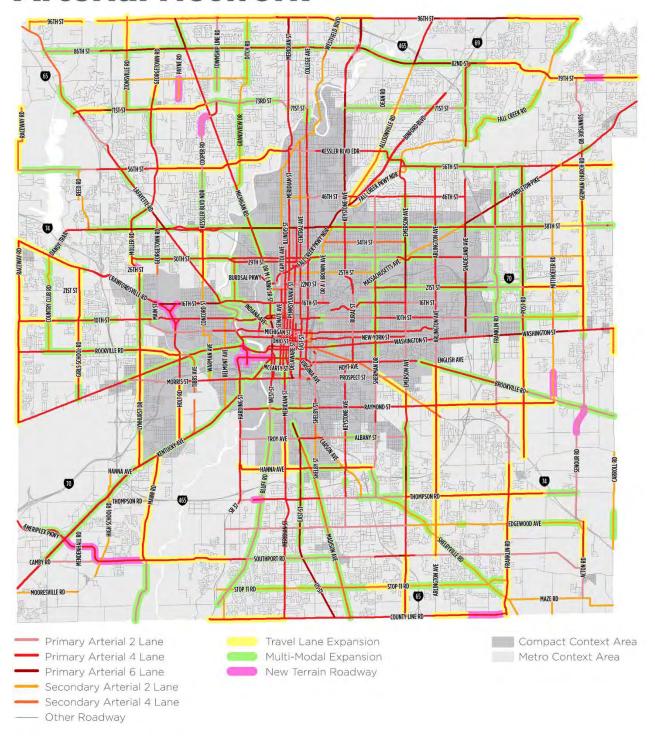


# **Overall Thoroughfare System**





# **Arterial Network**





# **Major New/Expanded Roadways**

