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SECTION 2

Alternatives Including the Proposed Action

This section describes the range of alternatives developed to address the purpose and need factors identified in Section 1. It presents the initial broad range of alternatives considered, the screening process for reducing that range of alternatives, the alternative retained for detailed study, and the reasons other alternatives were eliminated from further consideration. The discussion consists of five major parts. The first part summarizes the reasonable alternatives selected for detailed evaluation. The second describes the alternatives development and screening decisions made during the alignment studies from 2003 to 2007. The third part contains a detailed description of the Build Alternative, and the fourth describes other alternatives considered. The Build Alternative has been identified as the Preferred Alternative. The fifth part describes the Build Alternative's operationally independent phases of work.

2.1 Alternatives Selected for Detailed Study

2.1.1 No-Build Alternative

The No-Build Alternative consists of doing nothing; that is, not constructing the IL 336 project. The No-Build Alternative incorporates all existing and planned roadway improvements in west-central Illinois (Exhibit 1-5), including the Macomb Bypass. Generally, the No-Build Alternative would not require new right-of-way (ROW) and would avoid impacts to the natural environment and to agricultural, residential, and commercial properties. The No-Build Alternative would not meet the proposed action's purpose and need as identified in Section 1. Although the No-Build Alternative does not address the purpose and need, it is retained for detailed evaluation as a basis of comparison to the Build Alternative.

2.1.2 Build Alternative

One alternative, referred to as "Build Alternative," remains under consideration. The Build Alternative, which has been identified as the Preferred Alternative, is shown in Exhibit 2-1. It is shown in detail in Aerial Exhibit Sheets 1 through 37 located at the end of this document. The Build Alternative begins at the west end of the corridor at the proposed Macomb Bypass. From the bypass, it heads almost due east for about 7.5 miles, following mostly along 1400th Road to minimize farm severances. Just before the McDonough/Fulton County line, it heads to the northeast and then follows a divide between two wooded drainages, passing just south of Marietta. East of Marietta it follows the existing IL 95 alignment across the Spoon River, and continue east on the IL 95 alignment for about another four miles east of the Spoon River. It then heads to the northeast away from the IL 95 alignment, and bypasses Cuba just to the north. East of Cuba, it follows the County Highway 5 (CH 5) alignment for several miles, to just southwest of Canton. The route passes to the west of Canton, along the edges of strip-mined areas, just west of the Illinois River Correctional Center and the Canton Airport, with an interchange at IL 9. It continues north, passing just east of the Illinois Department of Natural Resources Double T Conservation Area, then head toward the northeast to join the IL 78 alignment in the vicinity of Norris. It passes southeast of Farmington, continuing east and

generally paralleling IL 116, about a mile to the south of IL 116, until near the east end of the project where it moves north and connects with the Bellevue Stub, which provides a connection to I-474 just west of Peoria. The Build Alternative will be constructed as an expressway except for an approximately six-mile section at the east end, where the traffic volume is expected to be greater.

By providing a four-lane divided highway between US 67 at Macomb (the Macomb Bypass) and I-474, the Build Alternative will meet the proposed action's purpose and need. The Build Alternative will complete the system linkage/route continuity of IL 336 from Quincy to Peoria and will provide more reliable transportation service across the project area. As a four-lane divided facility, the Build Alternative will be more efficient than the existing routes between Macomb and Peoria. It will provide greater options for the project area's industrial employers, agricultural industries, and their suppliers. The Build Alternative will provide improved access from the Peoria Airport, which IDOT considers a primary airport in Illinois (IDOT 2007) to destinations in the project area such as the national meeting and conference facilities at Western Illinois University. Increasing travel efficiency and reliability in the project corridor will reduce transportation costs for commuter, commercial, and other trips through the study area. The potential reductions in transportation costs and the increased efficiency may help prevent further economic decline in the study area.

The basic features of the Build Alternative are discussed below. A detailed description of the Build Alternative is included in Section 2.3.

2.1.3 Basic Features of the Build Alternative

Freeway vs. Expressway

The roadway types considered included a full access-controlled freeway and a four-lane partial access-controlled expressway (Exhibit 2-2).

A freeway has uninterrupted traffic flow, with no traffic signals or stop signs. It is accessible only at interchanges. Frontage roads are used to provide access for other locations. To achieve uninterrupted traffic flow, all intersections with other roads and railroads are grade-separated, which means that either the intersecting road bridges over the freeway, or the freeway bridges over the intersecting road. The Interstate Highway System is the most common example of this type of highway.

Expressways generally do not have signalized intersections. Signalized intersections on expressways typically are used only in urban and suburban areas where an existing highway is upgraded to an expressway design or where an existing expressway is proposed for reconstruction. Otherwise, grade-separated interchanges are provided where traffic signals are

required.⁵ According to the Illinois Department of Transportation (IDOT) policy, if traffic signals are warranted within nine years of construction, an interchange should be initially constructed.⁶ Otherwise, an at-grade intersection would be constructed, with stop control on the side streets that have access to the expressway. Direct access is permitted along an expressway for residences and farms but not for commercial uses.

According to IDOT policy, highways are established as freeways if they are part of the Interstate Highway System, or “where there is a need for control over the entire or a portion of the highway.”⁷ An example of a need for full access control would be where a rural expressway enters an urban area.

The highest existing and projected future traffic volumes occur at the east end of the study area, between Farmington and Peoria, with the volumes increasing from west to east. Since the area from Hanna City to the east is fairly built-up and is expected to continue to develop, it was decided that the benefit of full controlled access in this area justified extending the freeway portion of IL 336 to Hanna City, a distance of approximately six miles. To determine whether or not the freeway section should extend farther west, intersections west of Hanna City to IL 78 were evaluated to determine if, by IDOT policy, interchanges were warranted by the year of construction.⁸ The traffic volume analyses at these intersections indicated that interchanges were not warranted by the year of construction. Based on projected traffic, interchanges are not warranted at any intersections in the project corridor west of Hanna City. In accordance with IDOT policy, interchanges were limited to the freeway section and higher-traffic designated state routes crossing the Build Alternative. Since there are only a few of these higher-traffic state routes in the remainder of the Build Alternative, it was determined that full access control was not necessary and the majority of the Build Alternative will be designed to expressway standards.

⁵ 2002. Illinois Department of Transportation *Bureau of Design and Environment Manual*, Chapter 45, Section 2.05(5).

⁶ 2002. Illinois Department of Transportation *Bureau of Design and Environment Manual*, Chapter 37, Section 1.02(1)(b).

⁷ 2002. Illinois Department of Transportation *Bureau of Design and Environment Manual*, Chapter 44, Section 1.01.

⁸ Year of construction has not been determined. The earliest feasible year of construction was judged to be 2015, and this was used in the analyses.

Interchange Types

Partial cloverleafs (also called parclos) and conventional diamonds are the most common types of interchanges, with the conventional diamond being the simplest and most common. Diamonds include one-way diagonal ramps in each quadrant and two intersections at the crossroad. Partial cloverleaf interchanges are those with loops in one, two, or three quadrants. Partial cloverleafs provide access where one or more quadrants present adverse right-of-way and/or topographic problems which preclude a typical diamond interchange. The parclo Type C has two loops, both on one side of the intersecting roadway.

A fully directional interchange is designed for high speeds and does not use loops or signals. It is used primarily for freeway-to-freeway or freeway-to-major arterial intersections. Fully directional interchanges are costlier than diamonds or parclos because, to avoid loops and signals, more grade-separated structures are required. The detailed description of the Build Alternative (Section 2.3) includes descriptions of each proposed interchange.

Expressway Median Crossover Spacing

Median crossover spacing follows IDOT's policy as summarized below.⁹ In addition to median crossovers at most township roads, county highways, and State highways, crossovers may be provided:

- to permit full access to and from frontage roads and public service drives;
- to minimize the adverse travel from agricultural or residential entrances; and
- where property, held under one ownership, is severed by an expressway. This type of median crossover is allowed for farm use only.

IDOT policy on spacing median crossovers indicates that for new rural alignments, crossovers at existing roadways should generally be spaced about a mile apart. However, closer spacing may be provided in some cases.

Frontage roads may be provided in areas with commercial entrances or several closely spaced private entrances. The frontage road provides a safer single point of access for that type of situation. In areas where there are only a few private entrances, residential or farm, access is generally provided by right-turn only entrances. That is, the private driveway leads to the expressway, where the only allowed turn is to the right (avoiding crossing the median). Return access to the private driveway is right-turn only off the expressway. If safe, adequate spacing that follows policy is available then crossover access may be allowed in some instances.

⁹ 2002. Illinois Department of Transportation *Bureau of Design and Environment Manual*, Chapter 45, Section 2.06(b).

2.2 Build Alternative Screening

The sole remaining Build Alternative described in this chapter evolved from studies conducted between 2003 and 2008. The studies evaluated a wide range of alternatives to address the transportation needs described in Section 1. The first step in the screening process was the identification of a corridor within which alignment alternatives would then be evaluated. The corridor evaluation process is summarized in this section and described in detail in a separate study (IDOT 2004), referred to in this draft EIS as the Corridor Study. The Corridor Study is available for viewing or downloading at IDOT's website.¹⁰

The screening process described below involved input from the proposed action's Advisory Council (discussed in Section 4.3.1), government agencies, and the public. A wide range of environmental and socioeconomic resources and engineering issues was considered during the screening process. The goal of the screening process was to develop cost-effective alternatives that minimize impacts while addressing the transportation needs identified in Section 1. Design criteria for expressways, including a 70 mph design speed, were used in developing alternatives for all mainline sections of the roadway.¹¹ The process used to arrive at the Build Alternative is described below, chronologically and by section.

2.2.1 February 2003 to August 2003

The screening process began with a re-evaluation of the corridors identified in the EIS begun in the 1970s (discussed in Section 1.3). The 1970s corridors, slightly adjusted primarily to include a logical terminus at Macomb, are shown in Exhibit 1-3. Since these corridors were identified in an earlier study for a transportation facility from Macomb to Peoria and were judged to encompass sufficient options to provide a reasonable range of alternatives, they became the starting point for the current evaluation.

1970s Corridors

The 1970s corridors followed existing routes as practicable for the four-lane route that was evaluated. All corridors terminated on US 67 at the west end and I-474 on the east end. Eastern termini were the following interchanges on I-474: Corridor A, Interchange 3 (Exit No. 3); Corridor B, Interchange 5 (Exit No. 5); and Corridor C, Interchange 6 (Exit No. 6). The 1970s Corridors A and B both passed through the City of Canton, and Corridor C provided a connector to Canton. Corridor A followed parts of IL 136 and IL 95 on the west end, then followed the route of IL 78 between Canton and Farmington, and IL 116 between Farmington and I-474. Corridor B followed part of IL 9 on the west. Between Canton and I-474, Corridor B took the

¹⁰ <http://www.dot.state.il.us/desenv/il336corridor/hp.html>.

¹¹ 2002. Illinois Department of Transportation *Bureau of Design and Environment Manual*, Chapter 45, Table 45-4A.

most direct route, not following any existing highway. Corridor C heads directly east from US 67 south of Macomb, connecting with US 24 at Lewisville and then follows US 24 to I-474.

Modification of 1970s Corridors

During the early evaluation process the corridors were modified from the 1970s corridors, then presented in a public meeting in August 2003 (Exhibit 2-3). The three corridors presented in the August 2003 public meeting and the rationale for the modifications to the 1970s corridors, are summarized below.

Corridor A. The modified Corridor A is the northernmost corridor in Exhibit 2-3, and consists of the western part of the 1970s Corridor B combined with the eastern part of the 1970s Corridor A.

The western end of the corridor was widened on both the north and south from the 1970s corridor to include the IL 9 intersection with US 67 at the north and the Macomb Bypass at the south. The modified Corridor A includes the IL 9 alignment from the western end to Canton, while the 1970s corridor did not include the IL alignment on the west end. Both 1970s Corridors A and B included the city of Canton. Because of the impacts that would have resulted from a major transportation project going through the city, the corridors were modified to bypass Canton on the north and south. As a result, the eastern end of the 1970s Corridor B was combined with the western end of Corridor A to form the new northern Corridor A. Near Canton, Corridor A was shifted to the northwest and widened to avoid direct impacts to the following: the city of Canton, Lakeland and Big Creek Parks (just northwest of the city), and Canton airport and the Illinois River Correctional Center west of the city. Because of the presence of the Double T State Fish and Wildlife Area, and the potential for impacts to a state endangered species, the upland sandpiper, the corridor was also widened to the northwest near Canton. Where Corridor A moves from the IL 78 alignment to the IL 116 alignment, the corridor was adjusted to smooth out the sharp northward turn, and to avoid the town of Farmington and a new school that was under construction just southeast of Farmington. The eastern end of Corridor A is essentially the same as the corresponding 1970s corridor, following IL 116 for approximately 15 miles then terminating at I-474.

The eastern terminus at I-474 is at Interchange 3, the "Bellevue Stub," a 4-lane roadway section that extends about a mile to the west of I-474 and ends at the north-south Maxwell Road. The Bellevue Stub extends only to the west, and there is no direct access to or from the east at Interchange 3. Farmington Road (to the north) and IL 116 (to the south) both parallel the Bellevue Stub, and both cross I-474, with no interchange. Traffic entering or leaving Interchange 3 can access either Farmington Road or IL 116 from Maxwell Road, via the Bellevue Stub.

Corridor B. The adjusted Corridor B consists of the eastern part of the 1970s Corridor B, combined with the western part of the 1970s Corridor A.

The western part of the 1970s Corridor A (part of the modified Corridor B) was apparently conceived as the most direct route from Macomb to Canton, slightly adjusted to come close to

Cuba and to accommodate the traffic between Cuba and Canton. From the Macomb area, this section incorporated the east-west section of US 136 that lies to the east of Macomb and then headed almost due east to Cuba. The modified Corridor B between Macomb and Canton incorporates the 1970s corridor and was widened to include the entire IL 95 alignment between Macomb and Cuba, and to form a potential connection to the modified Corridor A on the west side of Canton.

As with Corridor A, adjustments were made to avoid direct impacts to Canton and surrounding developments. The corridor was moved to the south to avoid both the City of Canton and Canton Lake, which is the water supply reservoir for the City of Canton and also includes public recreation land.

Of the three corridors considered, the modified Corridor B represents the most direct route from Peoria to Canton, cutting cross-country over many small drainages and relatively rugged terrain. It generally does not follow existing roadway alignments.

The eastern terminus of the 1970s Corridor B lines up with the current I-474 Interchange 5, but a connection at that interchange is not feasible because the Peoria airport is in the way. In order to connect to I-474 at Interchange 5 and miss the airport, an alignment would have to go south of the airport and then back north along Airport Road to Interchange 5. This is not feasible because that area is built up. The other option is to follow Smithfield Road down over the bluff to US 24 and Interchange 6. This option was considered infeasible because of parks located near the alignment (Lauterbach and Alpha) and the relatively dense built-up area around Interchange 6. Because there were no other feasible options available, Corridor B was adjusted to terminate at Interchange 3, the same as Corridor A. The eastern part of Corridor B was then adjusted northward to avoid the airport, resulting in Corridors A and B being coincident for the first few miles on the eastern end.

Corridor C. Only very minor modifications were made to the 1970s Corridor C. The section in south of the IL 9/US 24 intersection was widened slightly to fully include the existing US 24 alignment. The section that connects the corridor to Canton was adjusted to the north to include the existing IL 9 alignment.

US 24, which Corridor C follows from Lewiston to Peoria, follows the Illinois River for most of the section within the corridor, hugging the western bluff. US 24 is currently built to 4 lanes from Peoria to Kingston Mines and is approved for 4 lanes to Banner. The western part of this 4-lane section is built to expressway standards, but the eastern 10 miles is a congested urban arterial with numerous traffic signals and no access restrictions.

Comparison of Modified Corridors

The corridors were evaluated and compared qualitatively in terms of how well they met the project purpose and need, cost, and potential environmental impacts.

Purpose and Need. The criteria are as follows:

- Enhanced economic stability in the study area;
- Improved regional transportation continuity and improved linkage of west-central Illinois to major economic markets; and
- Travel efficiency.

The greatest benefits to enhanced economic stability would result from a highway that provides the best access to existing populations and markets in the study area and the best access from the study area to outside markets. Overall, in terms of enhancing economic stability, all three corridors appear to be similar, with Corridors A and B being preferred somewhat over Corridor C because of the greater proximity to Canton and better access to Macomb.

Regarding system linkage, from a regional perspective, the most desirable link is the one that is shortest and that connects at a location where it has the quickest access to the other parts of the system. With respect to the connecting locations, all corridors appear to be about equal on the east side, because they all connect into the four-lane system at I-474, which allows access to Peoria, I-74, and I-155. IL 336 from Macomb to Peoria is the final link in the system of 4-lane highway improvements in west-central Illinois (Exhibit 1-5). Since the Macomb Bypass connects the other components of the system (IL 336 west of Macomb and US 67 both north and south), the bypass is the most favorable western terminus for system linkage. Because they both provide for a terminus at the Macomb Bypass and are approximately the same length, Corridors A and B are essentially the same in terms of system linkage, and either is preferred over Corridor C. Corridor C is about 4 or 5 miles longer than A or B. Because it does not have the option of connecting with the Macomb Bypass, this corridor is effectively 9 to 13 miles longer than Corridors A or B for trips on IL 336 between the west side of Macomb and Peoria.

Travel efficiency comparisons were based on how well each corridor would serve the existing and projected future traffic (IDOT 2004). Corridor A would be most effective in serving projected traffic between Canton and Peoria (which has the higher traffic volumes compared with the western part of the study area), and Corridor C would be least effective. Traffic projections show that if IL 336 is constructed in Corridor C, capacity improvements will still be needed on IL 116 between Peoria and Farmington. If IL 336 is constructed in Corridor B, capacity improvements will also be needed on IL 116, between Hanna City and Farmington. Thus, Corridor A would be more effective in serving the higher traffic volumes at the east side of the study area.

Cost. Preliminary costs were developed by first breaking up each corridor into lengths to which a given typical section would apply, then estimating unit quantities for each section for items associated with roadway construction and with the construction of structures. Roadway unit quantities included such items as earth/rock removal, earthwork, base courses and pavement; and standard associated details such as fencing, underdrainage, signage, etc. Quantities were also developed for items such as wetland creation, erosion control, urban drainages, interchanges, side road improvements, frontage roads, and strip mine embankments and drainage. The

structure types used in estimating were the Spoon River Bridge, interchange bridges, and structure crossings. Structure crossings include bridges and culverts. Culverts include box culverts and pipe culverts. Unit demolition costs were also included. The cost of Corridor C is substantially higher than either of the other two routes primarily due to the high cost of upgrading the eastern urban arterial part of it to expressway or freeway standards.

Potential Environmental Impacts. A generalized comparison of potential environmental impacts was done, considering land cover types, stream crossings, parks and other public areas, potential for impacts to threatened and endangered species, and potential relocations (Table 2-1). Not shown in Table 2-1 are potential floodplain impacts. Because of its proximity to the Illinois River, Corridor C has the greatest potential for floodplain impacts. Corridor C also has the greatest potential for impacts on parks and other public lands. The likely route for a highway through the eastern part of Corridor C is US 24, which hugs the bluff at the edge of the Illinois River floodplain. The floodplain along this stretch of US 24 is essentially a string of refuges and conservation areas. Corridor B has the least potential for impacts, with only two small park areas within the corridor. Corridor A, with the large Double T Conservation Area, has more potential for impacts than Corridor B, but considerably less than Corridor C. Also not included in Table 2-1 is potential for impact to archaeological resources. Most of the archaeological sites in the study area are located along the Illinois and Spoon Rivers and their tributaries. While all corridors cross the Spoon River, about half of Corridor C follows the Illinois River. Because of this, Corridor C would have the highest potential for impacts to archaeological resources.

Table 2-1 summarizes the three corridors, as presented at the August 2003 public meetings.

Table 2-1
August 2003 Corridor Comparison

	Corridor A	Corridor B	Corridor C
Corridor Length (Miles)	57	56	61
Rating on How Well the Corridor Serves the Communities and Traffic Patterns (1-10, 10 Best)	8	6	4
Construction Cost \$ Million	410 to 770	530 to 760	800 to 1,000
Percent of Corridor Agricultural	87	67	62
Percent of Corridor Wooded	8	23	20
Percent of Corridor Wetlands	2	5	8
Stream/River Crossings	26	23	34
Railroad Crossings	3	4	4
Potential Threatened/Endangered Species Habitat in Corridor	6	7	9
Public Parks, Recreation Areas, or Wildlife Refuges in Corridor	3	3	4
Potential Residential/Business Locations	80	90	120

Source: IDOT 2004

2.2.2 August 2003 to February 2004

Following the August 2003 public meetings, the corridors were further assessed to identify the most suitable corridor for evaluation of alternative alignments.

Comparative Analysis of Corridors A, B, and C

In a comparative analysis of Corridors A, B, and C, Corridor C was first eliminated, for the reasons discussed below.

- Corridor C would be substantially higher in cost than either Corridor A or B.
- It ranks lowest for system linkage and travel efficiency.
- It would not serve either Canton or Macomb well.
- If Corridor C was selected, improvements will still be needed on IL 116 between Peoria and Farmington.
- As summarized in Section 2.2.1, Corridor C has the highest potential for impacts to parks and other public lands, archaeological resources, wetlands, floodplains, streams, and threatened and endangered species.
- Corridor C would require an estimated 30 percent more relocations than either of the other two corridors.
- Based on comments from the August 2003 public meeting and other public comments, Corridor C had very little public support. (See Section 4 for a discussion of public meetings and comments.)
- It offers no substantive advantages over Corridors A and B in other areas.

Comparative Analysis of Corridors A and B by Section

After Corridor C was eliminated, Corridors A and B were evaluated in more detail. In addition to Corridors A and B, a combination of the two was considered: the eastern part of Corridor A combined with the western part of Corridor B (Corridor AB). For this analysis, Corridor A was redesignated as AA, and Corridor B as BB. Selected bands and associated impacts in each of these corridors were analyzed. The results are summarized in Table 2-2, which was presented at the February 2004 public meeting.

Table 2-2
February 2004 Corridor Comparison

	Corridor AA	Corridor AB	Corridor BB
Wetlands, acres (from National Wetland Inventory Maps)	35	40	60
Stream Crossing, each	28	26	29
Farmland, acres (IDNR Land Cover)	2,300	2,400	2,200
Wooded Land, acres (IDNR Land Cover)	210	190	370
Farmland severances, miles (scaled from aerial photos)	19	16	11
Farmland severances, each (scaled from aerial photos)	53	42	33

Population within 2 miles	41,600	40,000	37,100
Population within 5 miles	43,100	43,100	39,400
Total Estimated Construction Costs, \$ millions	\$410 to \$770	\$470 to \$870	\$530 to \$760

Source: IDOT 2004

As shown in the table, impacts and benefits overall are fairly similar for the three corridors.

Corridor AB was identified for analysis of alternative alignments for the following reasons:

- As discussed in Section 4, it has the greatest public support.
- It's preferable from a traffic standpoint in both the eastern and western parts of the study area. In the east, if Corridor BB was selected, IL 116 west of Hanna City will require capacity improvements. If Corridor AA or AB was selected, other capacity improvements in the study area will not be needed. In the west, there is more traffic in the south and central part of the study area than in the north, and either Corridor BB or AB would better accommodate it, particularly the Cuba-to-Canton traffic.
- It provides access to Farmington.
- It can use about 6 miles of existing railroad right-of-way. Corridor BB is almost all new right-of-way.

As shown in Exhibit 1-4, some further adjustments were made. The western part of the corridor was widened to the north to allow consideration of alignments closer to Bushnell. Where the A and B sections were joined near Canton, a now superfluous area northwest of Canton was eliminated, and the corridor was widened to the east to provide for alignments east of the airport. A small addition was made on the east end of the corridor to accommodate potential future expansion at the Peoria Airport.

2.2.3 February 2004 to December 2004

Alternative alignments within Corridor AB (referred to hereafter as the project corridor) were developed and presented at public meetings in December 2004. These are shown in Exhibits 2-4 through 2-7 and discussed below.¹² To facilitate the development and comparison of alignments in the project corridor, the project was divided into sections.

These alternatives represent the range of reasonable alternatives for a four-lane highway from Macomb to Peoria. In addition to addressing the proposed action's purpose and need, criteria for identifying alignment locations included cost, efficiency, engineering design requirements, and avoidance of environmental impacts.

¹² The project corridor was presented in three sections at the December 2004 public meetings, then later was divided into five sections for evaluation. For ease of comparison, all discussions use the five sections.

Section 1—Macomb Bypass to 1.5 Miles East of Marietta

Section 1 begins in the watershed of the La Moine River, crosses the divide between the La Moine and the Spoon River, and ends in the Spoon River watershed (Exhibit 2-4). Except for the larger drainages near the rivers, which are generally wooded and more rugged, this part of the project corridor is mostly fairly level cropland. Minimization of impacts when crossing agricultural land, especially cropland, includes avoiding severances of farms, in particular diagonal severances.

This part of the project corridor is wide, and alternative alignments were selected to include the north, the middle, and the southern part of the corridor. The only towns in Section 1 are Bardolph and Marietta and the unincorporated village of New Philadelphia. Bushnell is located just north of the area shown in Exhibit 2-4, on IL 41.

The North alignment follows the north side of the drainage of the East Fork of the La Moine River for about five miles, and then head due east for about four miles. As shown in Exhibit 2-4, the first part of the route has several stream crossings and traverses some wooded terrain along the streams. As a result of the wooded terrain and stream crossings, the cropland in this area is already irregularly shaped and broken up. The part of the alignment that goes due east across high quality farmland follows section lines to minimize severances. When the alignment reaches the more rugged drainages of the Spoon River, it drops back toward the south, then after crossing two wooded drainages, follows a less wooded drainage divide toward the Spoon River on the north side of Marietta.

The Middle North alignment is similar to North except at the west end. It begins further south on the Macomb Bypass and follows along the south side of the drainage of the East Fork of the La Moine River.

In Section 1, the Middle alignment is the most direct east-west route among the alignments. It leaves the Macomb Bypass just south of the Middle North interchange and heads almost due east for about 7.5 miles, following mostly along section lines to minimize severances. It is located primarily in cropland with minimal wooded areas and few stream crossings. For much of this part of the alignment it follows existing 1400th Road. The right-of-way of this local road is incorporated into the new IL 336 right-of-way. Just before the McDonough/Fulton County line the Middle alignment heads northeast on a divide between two wooded drainages, then passes just south of Marietta. East of Marietta it follows the existing IL 95 alignment.

The South Middle and South alignments begin at the same location on the proposed Macomb Bypass, almost two miles south of the Middle alignment, with a coincident alignment for about 2.5 miles on the west end, which generally follows US 136. After about 2.5 miles the South Middle alignment heads north, leaving the US 136 alignment, to follow the IL 95 alignment east of IL 41, following section lines as practicable to minimize farm severances. The South Middle

alignment is primarily in cropland. East of IL 41 the South Middle alignment follows IL 95 to a point west of Marietta, where it joins with the Middle alignment.

The South alignment follows the US 136 alignment for about five miles through an area primarily of cropland, to just east of the point where US 136 turns to the south. The South alignment then heads north, still following section lines as much as possible, and joins with the Middle alignment about 0.9 mile west of the McDonough/Fulton County line.

Section 2—1.5 Miles East of Marietta to 1.5 Miles East of Smithfield

Section 2 includes the Spoon River crossing and the adjacent wooded and rugged drainages (Exhibit 2-5). Through most of this section the North and Middle alignments from Section 1 merge and follow the existing IL 95 alignment (shown as blue in Sections 1 and 2 in Exhibit 2-5).

Several alternatives to using the existing IL 95 alignment and Spoon River crossing were evaluated. These alternatives are shown in Exhibit 2-5 and are labeled North, Near South, and South. The alternatives were developed because of the potential for establishment of a nature preserve along both sides of IL 95 east of the Spoon River crossing and in the general vicinity of the existing Harper Rector Woods Nature Preserve and Kedzior Woodlands Land and Water Reserve (Exhibit 2-5). All of these alignments are longer than the Middle alignment. The North alignment passes to the north of Harper Rector Woods and Kedzior Woodlands, and would require a new Spoon River crossing about a mile north of the existing IL 95 bridge (Exhibit 2-5). The Near South and South alignments are coincident on their west ends, with a Spoon River crossing just south of the existing IL 95 bridge. They cross a wooded area adjacent to and east of the Spoon River, then east of that point the Near South alignment passes north of Smithfield and the South alignment passes south of Smithfield (Exhibit 2-5). The alignments that were evaluated to avoid the proposed nature preserve all have more impacts than the Middle alignment (considering all impacts on farm land and wooded land, plus the impacts of a river crossing at a new location) and all were more expensive than the Middle alignment.

The Middle alignment follows IL 95 throughout Section 2. At a point about 2.5 miles east of the Spoon River, a South (green) alignment splits off from the Middle, and moves away from IL 95 to bypass Cuba on the south.

Section 3—1.5 Miles East of Smithfield to 2.0 Miles South of Canton

Just east of the Spoon River drainages and west of Cuba, the major landscape features become the lakes and grassland of the former strip mines that extend from west of Cuba, all along the part of the project corridor that passes west of Canton, to Norris (Exhibits 2-5 and 2-6). Because of the greater construction expense and the potential groundwater and surface water impacts associated with crossing the strip-mined areas, they were avoided as much as practicable when developing alignments in this area.

As noted above, near the east end of Section 2 the South alignment moves away from IL 95 to bypass Cuba on the South. The North alignment (formerly Middle) follows IL 95 for about another mile, then moves away from IL 95 to bypass Cuba on the north. While IL 95 continues to a point just south of Cuba, having an alignment on IL 95 near Cuba was not considered feasible because of the school, parks, and other development on the south side of Cuba in the vicinity of IL 95 (Exhibit 2-5).

East of Cuba the North alignment follows the alignment of County Highway (CH) 5, commonly referred to as the Cuba to Canton blacktop. CH 5 crosses a several-mile-wide strip-mined area on a narrow linear remnant of unmined ground that it shares with a railroad. The South alignment skirts to the south of the strip-mined areas, crossing several wooded drainages of Slug Creek and Big Creek (Exhibits 2-4 and 2-5).

Section 4—2.0 Miles South of Canton to 2.5 Miles South of Farmington

Former strip-mined lands are still a major feature in Section 4, but cropland is also prevalent in the western part of the project corridor near Canton. Just beyond Norris the corridor leaves the strip-mined lands and is in cropland, with some wooded drainages of the Copperas Creek on the east (Exhibit 2-6).

Near the west end of Section 4 the alignments begin to head north to bypass Canton on the west (Exhibit 2-6). Just south and west of Canton the two alignments (designated North and South in Section 3) branch off into several options. The East alignment (Exhibit 2-6) passes as close as practical to Canton, without impacting schools, cemeteries, and the denser development near the city, and while minimizing crossings of strip-mined land. The North alignment from Section 3, labeled as West South in Section 4, is at the west side of the project corridor and generally follows the edge between farm land and strip-mined land (to minimize farm operation impacts). It also passes just to the west of the Illinois River Correctional Center and the Canton Airport and just to the east of Double T State Fish and Wildlife Area. A short section southwest of Canton, shown in red in Exhibit 2-6, provides a connection between the West South and East alignments, allowing use of the West South to the west, combined with the East to the east. North of IL 9, another sub-alignment (Middle) to the East alignment was evaluated. This Middle alignment is closer to Canton than the West South. This requires that it cross strip-mined lands; however, it follows, as much as possible, an old mining haul road, and thus avoids some of the lake crossings. The West South alignment has options at the north besides the continuation of the West South, which skirts the edges of the strip mines: a connection (purple in Exhibit 2-6) that allows switching over to the East, and the West North alignment in farm land to the north. All alignments join to the northeast of Norris, on the existing alignment of IL 78.

Section 5—2.5 Miles South of Farmington to I-474 at Peoria

Section 5, the narrowest part of the project corridor, is located primarily in fairly level farm land, with some wooded drainages on the north side (Exhibit 2-7). The corridor bypasses Farmington to the southeast then heads east along the divide between the Kickapoo Creek watershed to the north and Copperas and Lamarsh Creek watersheds to the south. IL 116 follows this same drainage divide between Farmington and Peoria.

At the west end of Section 5, where all alignments are on IL 78, the North splits off IL 78 first, heading east for about two miles then north for about two miles, crossing IL 116 and then heading east again, paralleling IL 116 about a half mile to the north (Exhibits 2-6 and 2-7). This alignment crosses farm land and some wooded drainages of the Kickapoo Creek watershed. The South and Middle alignments both cut diagonally to the northeast from IL 78, along the southeast side of Farmington, resulting in shorter routes but more diagonal farm severances. The Middle alignment follows IL 116, except in areas of denser development near Trivoli, Hanna City and near the east end of the project corridor, where it moves off the IL 116 alignment to minimize relocations. The South alignment follows a railroad corridor that has not been recently used, moving off this alignment in places to minimize relocations. Near the eastern end, all alignments

move north of IL 116 to connect with a four-lane stub at Bellevue that connects to I-474. Alignments south of IL 116 would constrain future expansion of the Peoria International Airport.

2.2.4 December 2004 to March 2006

A second public meeting was held in March 2006 to present alignments under consideration. During the time between the December 2004 meeting and the March 2006 meeting, alignments were refined, more detailed impacts were assessed, costs were refined, the number of alignments under consideration was reduced, and decisions were made about the freeway vs. expressway option.

Table 2-3 summarizes impacts for the December 2004 alignments. The table shows updated impacts from 2005 as more information was gathered for each alignment. In the table, the highest impacts for each category are highlighted in yellow. These impacts are discussed below by section. The alignments as presented at the March 2006 public meetings are shown in Exhibits 2-8 through 2-11.

As the project developed, the tabulated impacts for a given alignment varied. There are several reasons for this:

- As alignments were refined, more precise ROW requirements were defined, and the ROW estimates generally decreased from the earlier, more conservative estimates.
- Alignments were continually refined to reduce impacts.
- As field data were developed, more refined estimates were made. For example, early tabulations relied on conservative estimates of wetland areas based on National Wetland Inventory (NWI) maps, while later tabulations were based on field-delineated wetlands.

During 2005, the project team also determined which parts of the project will be freeway and which will be expressway. The results of that analysis are discussed in Section 2.1.3.

Section 1—Proposed Macomb Bypass to 1.5 Miles East of Marietta

As shown in Table 2-3, the Middle alignment (Exhibit 2-4) did not have the highest impacts in any category, and it was lowest in cost. The South and South Middle alignments were both more expensive, had more agricultural impacts, more relocations, and were less efficient than the Middle alignment. Since IL 336 comes from west of Macomb and bypasses the city on the north, having a southern interchange with the Proposed Macomb Bypass increases the overall route length. The South and South Middle alignments also had little public support. They were therefore eliminated.

Table 2-3
Comparison of December 2004 Alignments

ALIGNMENT ALTERNATIVES DECEMBER 2004 ALIGNMENTS		Section 1					Section 2				Section 3		Section 4				Section 5			Entire Project Totals	
		Proposed Macomb Bypass to 1.5 Mi. East of Marietta					1.5 Mi. East of Marietta to 1.5 Mi. East of Smithfield				1.5 Mi. East of Smithfield to 2.0 Mi. South of Canton		2.0 Mi. South of Canton to 2.5 Mi. South of Farmington				2.5 Mi. South of Farmington to I-474 at Peoria			Macomb to Peoria	
		North	Middle North	Middle	South Middle	South	North	Middle	Near South	Far South	North	South	West North	West South	Middle	East	North	Middle	South	MIN	MAX
Land Required (acres)	Existing Road ROW used	45	45	45	125	105	60	105	55	65	95	25	65	65	70	90	60	150	60	250	565
	New ROW Required	785	805	970	1,030	1,080	320	240	310	355	390	485	640	615	745	570	1,010	890	980	2,875	3,675
	Total ROW Required	830	850	1,015	1,155	1,185	380	345	365	420	485	510	705	680	815	660	1,070	1,040	1,040	3,360	4,000
(each)	Severances (parallel & diagonal)	26	28	11	14	10	11	0	8	9	15	5	18	18	11	5	58	27	24	44	130
(acres)	Land-locked Parcels	21	0	0	6	6	0	0	0	0	0	0	0	3	5	2	0	0	0	0	26
(number)	Wetlands	22	7	2	6	3	5	3	6	3	13	19	9	17	22	29	6	1	1	28	82
(acres)	Wetlands	19.6	7.7	0.1	1.5	0.1	2.7	1.6	2.3	1.6	4.2	10.0	4.9	8.6	13.6	17.3	4.9	0.0	0.1	10.7	54
(acres)	Cropland	615	665	835	865	925	265	155	205	280	250	230	460	445	345	245	870	790	900	2,035	2,815
(acres)	Wooded Land	110	90	80	80	70	35	65	85	55	25	125	100	85	185	80	90	30	30	240	595
(acres)	Grassland	0	0	0	0	0	10	10	10	10	85	100	30	20	95	125	0	0	0	115	235
(acres)	Other ¹	60	50	55	85	85	10	10	10	10	30	30	50	65	120	120	50	70	50	190	315
(each)	Residential Relocations	5	9	11	18	12	6	15	6	5	13	2	18	16	34	18	35	60	43	63	140
(each)	Commercial Relocations	2	3	3	6	7	0	4	2	0	1	0	1	1	16	16	0	0	7	3	35
(each)	Stream Crossings	23	16	12	13	11	5	4	8	4	0	3	2	2	5	5	2	1	1	18	41
(acres)	Floodplain Encroachment	60	18	0	2	0	26	8	15	15	2	0	0	0	0	0	12	3	0	8	99
(each)	Potential Threatened & Endangered	0	1	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1
(each)	Historic Properties	0	0	0	1	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1
(miles)	Length	15.3	15.3	14.4	15.8	15.7	5.7	5.1	5.6	6.1	9.8	9.9	12.7	12.5	13.8	11.9	19.2	18.7	18.2	59	65
2004 \$	Construction Cost (Expressway)	\$165M	\$155M	\$128M	\$148M	\$143M	\$57M	\$51M	\$71M	\$81M	\$128M	\$219M	\$192M	\$229M	\$302M	\$218M	\$155M	\$155M	\$145M	\$644M	\$922M
2004 \$	Construction Cost (Freeway)	\$179M	\$169M	\$142M	\$162M	\$157M	\$62M	\$56M	\$77M	\$88M	\$135M	\$229M	\$203M	\$240M	\$317M	\$230M	\$170M	\$170M	\$155M	\$691M	\$983M

No alignments impact high quality upland forest or prairies, Section 4(f) sites (including archaeological or cultural resources), or designated lands (including IDNR property).

Note: Highest impacts in each category highlighted in yellow. Data in this table are from September 2005. Further revisions were made in December 2005, based on additional studies.

¹*Other: most of the acreage in this category was later assigned to a specific land cover type. Here, this category includes right-of-way for local roads, residential land, commercial land, open water and some grassland.*

The only difference in the December 2004 alignments on the north side of Section 1 was at the west end, where the Middle North alignment offered an alternative with substantially less wetland and floodplain impact than the North alignment (Table 2-3). However, the route efficiency of the Middle North alignment is low when IL 336 (which includes the Proposed Macomb Bypass) is viewed overall: this alignment drops south then goes back north over a relatively short distance. The Middle North alignment was therefore eliminated from further consideration.

The North and Middle alignments were retained for further evaluation.

In response to concerns from resource agencies about the wetland and floodplain impacts of the North alignment, an additional alternative, the North North alignment, was developed. The North North alignment has less than a tenth of the wetland impacts (in area) of the North alignment and fewer floodplain impacts; but it has more diagonal severances and more cropland impacts. Alignments presented at the March 2006 public meetings are shown in Exhibit 2-8 and impacts are summarized in Table 2-4. Note that the impacts for the North and the Middle alignments are all less than shown in Table 2-3, except for wetlands for the Middle alignment, and grassland for both. A major factor in the reduction of impacts was a refinement of the ROW required. Also, more accurate wetland information was obtained and minor adjustments were made to the alignments to avoid impacts.

Table 2-4
March 2006 Alignment Comparison, Section 1

Impact Description	Section 1: Proposed Macomb Bypass to 1.5 Miles East of Marietta		
	North	North/North	Middle
Existing Road ROW Used	72	70	127
New ROW Required (acres)	604	631	498
Total ROW	676	701	625
Severances (Parallel & Diagonal) (each)	22	26	9
Land Locked Parcels (acres)	37	15	0
Wetlands (number)	10	2	3
Wetlands (acres)	13.5	1.2	0.3
Cropland (acres)	488	540	422
Wooded Land (acres)	57	50	39
Grass Land (acres)	52	34	29
Other Land (acres)	7	8	8
Residential Relocations (each)	1	1	6
Commercial Relocations (each)	0	1	0
Stream Crossings (each)	18	18	6
Floodplain Encroachment (acres)	47	25	0
Length (miles)	15.0	15.0	14.4
Construction Cost \$ Million (2005 \$)	\$208	\$205	\$168

Note: Data in this table are from March 2006. Further revisions were made later in 2006, based on additional studies.

Section 2—1.5 Miles East of Marietta to 1.5 Miles East of Smithfield

In Section 2 several alternatives were under consideration in December 2004 in the event that a proposed nature preserve was established along IL 95 east of the Spoon River, as discussed in Section 2.2.3 (Exhibit 2-5). This proposed Kedzior Woods Addition to Harper-Rector Woods Nature Preserve (Kedzior Woods Addition) consisted of three separate tracts, two on the north and one on the south side of IL 95. In August 2004, the Illinois Nature Preserve Commission (INPC) granted preliminary approval for dedication of the Kedzior Woods Addition (INPC 2004b). In October 2005, INPC, based on the recommendation of the INPC staff following an assessment of the proposed tracts, did not grant final approval for the dedication of the Kedzior Woods Addition (INPC 2005). Part of one of the tracts, located south of existing IL 95, was found to be eligible for the Illinois Natural Area Inventory with continued management, but the tract adjacent to IL 95 on the north was found to be completely dominated by non-native vegetation (Feist and Trester 2005). The INPC's decision eliminated the need to consider alignments other than the Middle alignment, which follows IL 95. The alignment was adjusted to avoid impacting the higher quality tract on the south side of IL 95. A portion of the southern tract has since been listed in the Natural Areas Inventory as the Seville Savanna (Aerial Exhibit Sheet 11). It will be more than 250 feet from edge of ROW for the Middle alignment.

The impacts of all the December 2004 alignments in Section 2 are summarized in Table 2-3. As shown in the table, the Middle alignment (along IL 95) is lowest in cost and had the highest impacts only in the relocation category. Most of these relocations were avoided through later refinements in the alignment: by the March 2006 public meetings, the Middle alignment in Section 2 had one residential relocation and three commercial relocations. The Middle alignment is the only one that does not require a new river crossing location for the Spoon River.

Only the Middle alignment in Section 2 was retained for further study and was presented at the March 2006 public meetings (Exhibit 2-9).

Section 3—1.5 Miles East of Smithfield to 2.0 Miles South of Canton

As shown in Table 2-3, the South alignment is substantially more expensive than the North alignment, and impacts more wetland and grassland and much more wooded land. It also doesn't serve the traffic between Cuba and Canton as well as the North alignment does (Exhibits 2-5 and 2-6). For these reasons the South alignment was eliminated.

The North alignment was retained for further study and presented at the March 2006 public meetings. In addition a new sub-alternative was developed and presented at the meetings.

The new sub-alternative in the vicinity of Cuba was designated North A (Exhibit 2-9). North A is a little shorter than North, comes a little closer to Cuba, and has less wetland and cropland impacts and fewer diagonal severances. However, it has more than twice the relocations of the North alignment. Table 2-5 summarizes the impacts as presented at the March 2006 public

meetings. Note that the impacts for the North alignment were all less than shown in Table 2-3, except for wetlands. A major factor in the reduction of impacts was a refinement of the ROW required. Also, minor adjustments were made to the alignments to avoid impacts.

Table 2-5
March 2006 Alignment Comparison, Section 3

Impact Description	Section 3: 1.5 Miles East of Smithfield to 2.0 Miles South of Canton	
	North	North(A)
Existing Road ROW Used	113	110
New ROW Required (acres)	267	231
Total ROW	380	341
Severances (Parallel & Diagonal) (each)	9	6
Land Locked Parcels (acres)	0	0
Wetlands (number)	17	10
Wetlands (acres)	5.6	1.4
Cropland (acres)	167	131
Wooded Land (acres)	6	6
Grass Land (acres)	73	79
Other Land (acres)	21	15
Residential Relocations (each)	4	10
Commercial Relocations (each)	0	1
Stream Crossings (each)	0	0
Floodplain Encroachment (acres)	0	0
Length (miles)	9.8	9.2
Construction Cost \$ Million (2005 \$)	\$109	\$100

Note: Data in this table are from March 2006. Further revisions were made later in 2006, based on additional studies.

Section 4—2.0 Miles South of Canton to 2.5 Miles South of Farmington

As shown in Table 2-3, among the December 2004 Section 4 alignments, the Middle is highest in cost and the West North is lowest in cost. In evaluating the alignments from east to west, wetland and grassland impacts decrease and cropland impacts increase. Impacts on wooded lands and both residential and commercial relocations are highest for the Middle alignment.

Through this section public support was generally divided between those who preferred an alignment closer to Canton (Middle or East) and those who preferred an alignment that fit between the farm land and the strip-mined land (West South or West North).

The Middle and East alignments were compared. The Middle alignment is farther from Canton and substantially more expensive than the East alignment, has more than twice the impacts on wooded land, more relocations, more severances, and more land locked parcels. It does have fewer wetland and grassland impacts. However, based on its overall higher impacts, greater distance from Canton, and higher cost compared to the East alignment, it was eliminated and the East alignment was retained.

In a comparison between the West South and the West North, the West North has more impacts on cropland, wooded land and grass land, more relocations and was farther from Canton. However, it was less expensive and had fewer wetland impacts. Largely because of the greater distance from Canton and the higher cropland impacts of the West North alignment, it was eliminated and the West South was retained.

Because the double designation was no longer needed, the West South alignment name was simplified to “West” and it along with the East alignment were retained for further evaluation. The alignments as presented in the March 2006 public meetings are shown in Exhibit 2-10. Minor adjustments were made in the alignments presented at the March 2006 public meetings for this section, at various locations, primarily to reduce impacts such as severances and relocations.

Section 5—2.5 Miles South of Farmington to I-474 at Peoria

As shown in Table 2-3, the south alternative was least expensive but had the highest cropland impact. The Middle alignment had the most relocations. The North alignment had the most impacts on wetlands, wooded land, and floodplains. In this section, the North and South were retained primarily because of public support and the lower number of relocations compared with the Middle alignment, and the Middle alignment was eliminated.

Several changes were made in Section 5 between the December 2004 and the March 2006 public meetings. First, it was found that the unused rail line that the South alignment would have followed is not available. Because of that, the South alignment was shifted to the south about a half-mile, to place it on a section line to reduce severances (Exhibit 2-11).

Some alignment changes were made in the South alignment near the east end of the project to avoid conflict with a potential expansion of the Peoria Airport, located just south of the eastern end of Section 5 (Exhibits 2-7 and 2-11). The airport authority has proposed long-range master plans that include extending a runway, and constructing an additional runway northeast of and parallel to the extended runway (Hanson 1999). Just under half the length of the proposed additional runway extends northwest into the project area toward the intersection of CH 24 and IL 116, and would require the closure and relocation of a portion of IL 116. This expansion would eliminate all but the northern alignment on the east end of Section 5 (Exhibit 2-11).

At the west end of the section southeast of Farmington, some substantial changes were made that reduced impacts and cost (Exhibit 2-10). The December 2004 alignments all included intersections with IL 78, south of Farmington, at the point where IL 336 diverges easterly from IL 78. In addition, all the December 2004 alignments also included diamond interchanges with IL 116, east of Farmington, either on the existing IL 116 or near it. Currently, IL 78 and IL 116 intersect in Farmington at two locations: one on the west side of town and one on the east side of town. From the western intersection, IL 78 jogs to the east where it shares a common alignment with IL 116 through Farmington. IL 78 then turns north at the Fulton/Peoria County line and IL 116 continues to the east towards Peoria. The alignment changes in this area begin with a proposed redesignation of IL 78. The part of existing IL 78 that passes through Farmington,

from its intersection with proposed IL 336 south of Farmington to the point where it turns north at the eastern edge of Farmington, will no longer be a state route. (However, access to Farmington from the south will remain open.) Instead, IL 78 will be relocated to Lightfoot Road, which is aligned with the part of IL 78 that runs north out of Farmington along the Fulton/Peoria County line. The IL 78 interchange will be placed on the relocated IL 78, which also accesses the new Farmington public school. This new section of IL 78 will be upgraded. Refer to Aerial Exhibit Sheets 27 and 28.

Table 2-6 compares the alignments in Section 5 that were retained for further study and presented at the March 2006 public meetings (Exhibits 2-10 and 2-11). Compared to the North alignment, the revised South alignment is less costly and has fewer relocations, floodplain impacts, wetland impacts and severances. It has no stream crossings or wooded land impacts. It has higher cropland impacts. Note that the impacts for the North alignment shown in Table 2-6 are all less than shown in Table 2-3, except for stream crossings and grassland. A major factor in the reduction of impacts was a refinement of the ROW required. Alignment adjustments, especially those at the west end of Section 5, also resulted in reduced impacts.

Table 2-6
March 2006 Alignment Comparison, Section 5

Impact Description	Section 5: 2.5 Miles South of Farmington to I-474 at Peoria	
	North	South
Existing Road ROW Used	58	65
New ROW Required (acres)	904	920
Total ROW	962	985
Severances (Parallel & Diagonal) (each)	51	32
Land Locked Parcels (acres)	0	0
Wetlands (number)	4	2
Wetlands (acres)	2.8	0.4
Cropland (acres)	754	878
Wooded Land (acres)	71	0
Grass Land (acres)	48	28
Other Land (acres)	31	14
Residential Relocations (each)	24	11
Commercial Relocations (each)	0	0
Stream Crossings (each)	2	0
Floodplain Encroachment (acres)	19	5
Length (miles)	19.0	18.8
Construction Cost \$ Million (2005 \$)	\$178	\$168

Note: Data in this table are from March 2006. Further revisions were made later in 2006, based on additional studies.

2.2.5 March 2006 to January 2007

After the March 2006 public meetings, further analyses were done to refine the alignments and to identify a single proposed alignment for detailed evaluation. The identification of the proposed alignment is discussed below, by section.

Section 1—Proposed Macomb Bypass to 1.5 Miles East of Marietta

Up through the March 2006 public meetings, a group of stakeholders from the Bushnell area strongly supported alignments as close as possible to Bushnell. For example, of the 93 comments IDOT received following the December 2004 public meetings, 58 supported a north alignment, with the remaining 35 were split between the Middle alignment and a southern alignment that was still under consideration. (Most of those 35 supported the Middle alignment.)

Following the March 2006 public meetings, support for the north alignments began to change. Immediately following the meetings, IDOT received about 25 comments in support of the north alignments. But soon after that, an organized effort against the north alignments developed, led by affected farmers who believed that the impacts to their properties and their farm operations far outweighed the benefits of having the alignment slightly closer to Bushnell. Based on public input to IDOT, by mid-2006 there appeared to be little or no support for the north alignments. IDOT received 48 comments either supporting the Middle alignment or opposing the north alignments, as well as a petition with 159 signatures that opposed the north alignments. By mid-2006, the Bushnell city council and Bushnell Economic Development Corp, both of whom previously supported a north alignment, supported the Middle alignment.

The following summarizes the rationale for retaining or eliminating alignments in Section 1.

The North North alignment was eliminated for the following reasons:

- As noted above, there no longer appeared to be public support for a north alignment.
- It had the most farm severances (26) of any of the Section 1 alignments.
- It had the second highest acreage of land-locked parcels (15 acres).
- It impacted the most cropland (540 acres).
- It had the highest new ROW requirement (631 acres).
- It was more disruptive to the existing road network than the other two alignments.
- It had a high number of stream crossings (18) and substantial floodplain encroachment (25 acres).

- It was tied for highest cost with the North alignment.

The North alignment was eliminated for the following reasons:

- There no longer appeared to be public support for a north alignment.
- It had a large number of farm severances (22).
- It had the highest amount of land-locked parcels (37 acres).
- It had the highest impact to wetlands (13.5 acres).
- It had the second highest cropland impacts (488 acres).
- It had the highest impact to wooded land (57 acres).
- It had a high number of stream crossings (18) and the largest area of floodplain encroachment (47 acres).
- It was tied for highest cost with the North North alignment.

The Middle Alignment was retained for the following reasons:

- As noted above, the Middle alignment now had the most public support.
- It required the least amount of new ROW (100 acres less than the others).
- It resulted in the fewest farm severances (9).
- It had the least impact to cropland (66 acres less than the others).
- It had the fewest stream crossings. In addition the streams in this area were much smaller than those near the La Moine River that were crossed by the north alignments.
- It had essentially no wetland or floodplain impacts.
- It was the least costly of the three alignments by \$40M. The lower cost results primarily from having an at-grade intersection at IL 41 rather than the interchange included in the other two alternatives (Exhibit 2-8).

In summary, when compared with the Middle alignment, the north alignments were costlier, had less public support, and higher impacts to farmland, wetlands, floodplains, wooded land, and streams. The only real benefit of the north alignments is that neither had residential relocations.

The Middle alignment required 6 residential relocations. The Middle alignment was retained for detailed evaluation.

Section 2—1.5 Miles East of Marietta to 1.5 Miles East of Smithfield

This short section includes the Spoon River crossing and the wooded ravines in the vicinity of the Spoon River. By the March 2006 public meetings, only one alignment was under consideration: the Middle alignment that follows existing IL 95 throughout this section. This alignment was retained for detailed evaluation.

Section 3—1.5 Miles East of Smithfield to 2.0 Miles South of Canton

Development of both alignments under consideration continued after the March 2006 public meetings. Based on some public comments, the North A alignment was adjusted to be more like the North alignment where it separates from IL 95 at the west end of this section. Further details were developed regarding existing road impacts and the need for frontage roads for both alignments.

Based on comments from Cuba officials, the 7th Street/10th Street connections to IL 336 east of IL 97 were reversed for both alignments. As presented at the public meetings, for both alignments, 7th Street connected to IL 336 and 10th Street was closed. Following the March 2006 public meetings, access was modified to keep 10th Street open and to close 7th Street. As part of that change, access to the northwest quadrant of Cuba was analyzed in more detail, and street connectors were added to route around the closures. The North A alignment goes through more of the north part of Cuba and causes both 3rd Street and 7th Street to be closed. The North alignment is north of the end of 3rd Street, so only 7th Street is closed. Even at 7th Street, fewer people are affected by the North alignment because it is north of the city. Public comments were essentially split, with six people favoring North and 8 favoring North A. A result of these modifications is that both alignments were improved, but their relative impacts changed after the March 2006 public meetings, as shown in Table 2-7.

Table 2-7
Updated Impact Table—Section 3

Impact	North	North(A)	Note
Severances	9	6	Same as public meeting
Residential relocations	4	9	Reduced from 10 to 9 on North A
Commercial relocations	0	1	Same as public meeting
Row cropland (acres)	165	151	Cropland broken out by row crop and hay; not distinguished at public meetings
Hay cropland (acres)	20	4	

Note: these were the impact changes as of October 2006.

In the impact table presented at the public meetings, “cropland” was a single category. To better discriminate true impacts, the table above breaks cropland into two categories: row cropland and hay cropland. While the North alignment had more impact on cropland overall, much of the impact was on low-quality formerly strip-mined land used for hay. This land is usually poorly drained and hilly. Some of it is used for pasture or hay because it does not economically support row crops. The North A alignment splits 5 large, rectangular parcels into pieces. It is apparent from the aerial photographs that this land has never been strip-mined and is flat. Some of the oral input received in the public meetings supports the conclusion that the North alignment has fewer agricultural impact than the North A alignment.

The North alignment had the following advantages over North A:

- The North alignment had fewer relocations.
- The North alignment was less disruptive to the Cuba street system in the northeast quadrant of the city.
- It had less overall impact on agriculture.

The North alignment was retained for detailed evaluation, and the North A alignment was eliminated.

Section 4—2.0 Miles South of Canton to 2.5 Miles South of Farmington

In Section 4, two alignments, West and East, were presented at the March 2006 public meetings.

The West alignment had the following advantages over the East alignment:

- It had about one-third the wetland impacts of the east alignment.
- It had one-fourth the relocations of the East alignment due to avoiding an industrial park.
- As a planning issue, the West alignment does not separate Canton from its airport and the East does. It also is less restrictive for development than the East alignment because it is further from the more developed part of the city.
- It minimized construction through lakes and strip-mined land. Construction in strip-mined land is a concern because it:
 - Is difficult and expensive due to problems with the uncompacted mine spoil.
 - Could have unintended consequences relating to the water table. Many of the lake surfaces are at different elevations and are connected through the ground water system. Consolidating embankments could disrupt the existing systems in unpredictable ways.

- Could create water quality problems. When disturbed these soils can produce acid runoff and impact streams, lakes and water quality.
- It cost \$36 million less mostly due to less difficult construction requirements (the extra cost of the East alignment was due primarily to construction in previously stripped mined areas, including uncompacted fill and lakes).

In conclusion, for Section 4, the West alignment was retained because it had less wetland impacts, fewer relocations, was better for long range planning, and was less costly. The East alignment was eliminated from further consideration.

Section 5—2.5 Miles South of Farmington to I-474 at Peoria

In Section 5, two alignments, North and South, were presented at the March 2006 public meetings.

The North Alignment was eliminated for the following reasons:

- The North alignment had twice as many residential relocations as the South.
- The North alignment had almost four times as much floodplain encroachment as the South.
- The North alignment took more wooded land than the South.
- The North alignment took more grassland than the South.
- There were more farmland severances on the North alignment.
- Although there was less cropland used by the North alignment, the South alignment seemed to be better for the agricultural community when both severances and cropland take were considered. Part of the difference in cropland between the two alignments resulted from the South alignment having one more interchange than the North.
- The North alignment did not support the transportation needs in the more heavily traveled east side of the section as well as the South, particularly around Hanna City.

In summary, for Section 5, the South alignment was retained because it has less impacts and better served the transportation needs of the area.

2.2.6 Alternative Carried Forward

Section 2.2.5 describes the process whereby, from March 2006 to January 2007, a single alignment from each section was identified for detailed study. This overall alignment was

identified as the preliminary proposed alignment that was presented at public meetings in February 2007 (Exhibit 2-1). It consisted of the following:

- Section 1: Middle alignment (green on Exhibit 2-8)
- Section 2: IL 95 alignment (blue on Exhibit 2-9)
- Section 3: North alignment (green near the west end, Exhibit 2-9; remainder blue, Exhibits 2-9 and 2-10)
- Section 4: West alignment (blue on Exhibit 2-10)
- Section 5: South alignment (green on Exhibits 2-10 and 2-11)

This preliminary proposed alignment is the Build Alternative shown in Exhibit 2-1, described in detail in Section 2.3 and evaluated in detail in Section 3. Note that minor design changes were made throughout the project, primarily to reduce impacts and costs and to meet local needs.

2.3 Detailed Description of the Build Alternative

The Build Alternative is shown in detail in the Aerial Exhibits located before the appendices. A few small changes were made to the Build Alternative following the public hearing. On the Aerial Exhibits, the final Build Alternative is shown in yellow. At locations where the final Build Alternative is different from the Build Alternative shown at the public hearings, the alignment shown at the public hearing is shown in green. These changes are discussed in the following detailed description.

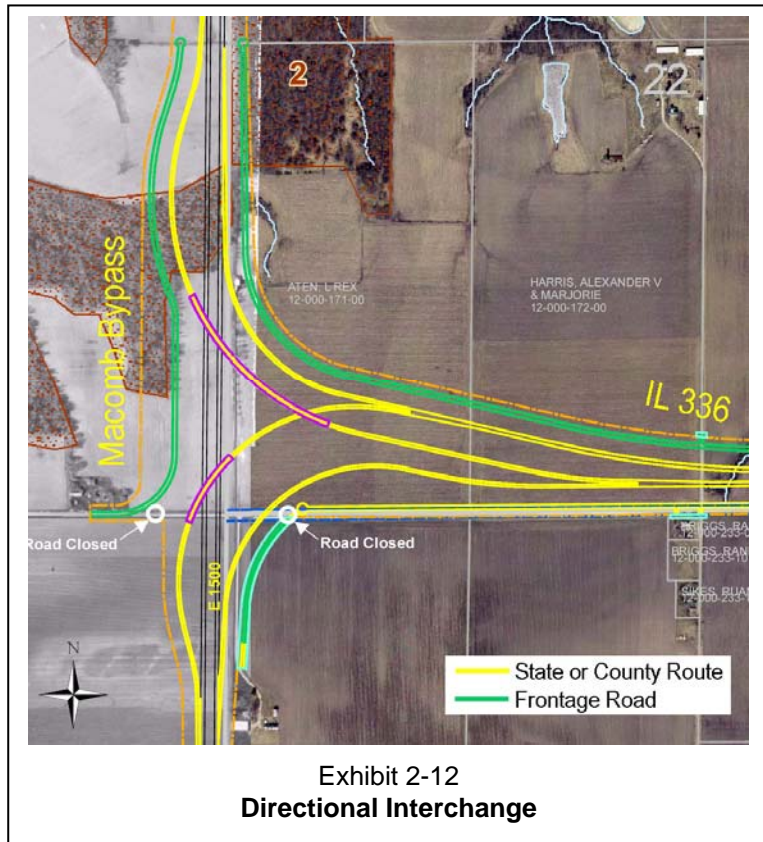
2.3.1 Section 1—Proposed Macomb Bypass to 1.5 Miles East of Marietta

The project begins with a directional interchange at the proposed Macomb Bypass. It includes two flyover ramps: one from IL 336 westbound to the proposed Macomb Bypass southbound, and the other from Proposed Macomb Bypass southbound to IL 336 eastbound (Exhibit 2-12 and Aerial Exhibit Sheet 1).

For approximately the first mile of IL 336, between the proposed Macomb Bypass and East 1600 Street, both north and south frontage roads will be provided. The north frontage road will be new construction. North 1400 Road will remain in place as the south frontage road, and will be closed at the west end of the project, at the proposed Macomb Bypass/IL 336 interchange. Access to the property at the southeast corner of the proposed Macomb Bypass/IL 336 interchange will be provided by a new roadway section extending south from the closed end of North 1400 Road. The part of North 1400 Road that lies west of the proposed Macomb Bypass will also be closed at the proposed Macomb Bypass/IL 336 interchange. A frontage road will extend north along the interchange from the closed point to provide access to provide access to

properties west of the interchange. There will be an at-grade intersection at East 1600 Street, which will remain in its current location. (Aerial Exhibit Sheet 1.)

East 1700 Street will pass beneath IL 336, with no direct access. A property on the south side of IL 336 west of East 1700 Street will have right-turn-only access to IL 336. IL 336 will cross over the BNSF railroad on a bridge, just east of the East 1700 Street overpass. Between the BNSF bridge and East 1800 Street, IL 336 will cross Kepple Creek. IL 336 will have an at-grade intersection with East 1800 Street (North Hanna Road), about a half-mile south of the village of Bardolph. A residence at the southeast corner of East 1800 Street and North 1400 Road will be relocated (Aerial Exhibit Sheet 2).



Between East 1800 Street and East 2000 Street, IL 336 will cross an intermittent tributary of Kepple Creek. There will be a residential relocation on the south side of North 1400 Road, between East 1800 Street and the crossing of the Kepple Creek tributary. Several properties between East 1800 Street and East 2000 Street will have right-turn-only access to IL 336. One farm operation, located approximately halfway between East 1800 Street and East 2000 Street, will have access from both sides, with a median crossing. East 2000 Street will remain in its current location and will have an at-grade intersection with IL 336 (Aerial Exhibit Sheet 3).

IL 41 (East 2100 Street) will remain in its current location and will have an at-grade intersection with IL 336. At IL 41, ROW will be acquired for a potential future Parclo Type C interchange, with the ramps on the west side of IL 41. The north-south BNSF Railroad alignment located east of IL 41 will remain in its current location and will pass under IL 336. There will be a residential relocation on the south side of North 1400 Road between the BNSF crossing and East 2250 Street. Several properties in the vicinity of IL 41 will have right-turn-only access to IL 336. One farm operation, located east of IL 41, will have access from both sides, with a median crossing. (Aerial Exhibit Sheet 4.)

IL 336 will follow generally the same route as North 1400 Road from East 1800 Street to a point just west of East 2400 Street, where IL 336 turns to the northeast. North 1400 Street will be

closed along most of this section, being essentially replaced by IL 336. Access for properties that previously accessed North 1400 Road will be provided by right-turn-only-entrances onto IL 336. East of East 2250 Street, the north-south Mohawk Road (County Road 2270) will be closed at its current intersection with North 1400 Road. East 2350 Street, which currently extends north, but not south, of North 1400 Road will be closed at its current intersection with North 1400 Road. An at-grade intersection with IL 336 will be provided at East 2400 Street (McDonough County Line Road). (Aerial Exhibit Sheet 5.)

Approximately three-quarters of a mile east of the East 2400 Street intersection, IL 336 will bridge over the former TP&W Railroad (now Pioneer Railcorp) and over North Point Pleasant Road (Aerial Exhibit Sheets 6 and 7). There will be no access to IL 336 at the North Point Pleasant Road crossing. The IL 336 bridge at North Point Pleasant Road will have extra length to accommodate cattle passes on the east and west sides of North Point Pleasant Road. Approximately three-quarters of a mile east of the North Point Pleasant Road crossing, where IL 336 will come within about 700 feet of IL 95, it begins to head toward the east again, toward the Village of Marietta (Aerial Exhibit Sheet 7).

Two at-grade intersections will provide access to the Village of Marietta: one at County Highway 34 (CH 34), near the southwest corner of Marietta, and the other at East Coal Cut Road at the southeast corner of Marietta. A small section of East Coal Cut Road will be relocated to provide a perpendicular intersection with IL 336. East of Shaw Creek Road, which lies just east of Marietta, IL 336 will follow the IL 95 alignment, and will replace the current IL 95. Existing IL 95 will be closed just east of Shaw Creek Road. Since IL 336 will be a limited access roadway and IL 95 had unlimited access, right-turn-only access will be provided to property owners along this section. An at-grade intersection with IL 336 will be provided at North Pheasant Lane, which currently extends only to the north of IL 95. A short access road on the south side of IL 336 opposite North Pheasant Road will intersect IL 336 at the same location as North Pheasant Lane. (Aerial Exhibit Sheet 8.)

From Macomb to CH 34, IL 336 will be traversing generally flat cropland. East of CH 34, it begins to enter the more rugged and wooded terrain in the vicinity of the Spoon River. Between CH 34 and Shaw Creek Road, IL 336 will bridge over two intermittent tributaries of Barker Creek, which flows into the Spoon River southeast of Marietta.

East of North Pheasant Lane, Woody Road crosses existing IL 95 at an acute angle. A short section of Woody Road that lies north of IL 95 will be moved just to the west, to provide a right-angle intersection with IL 336. (Aerial Exhibit Sheet 9.)

2.3.2 Section 2—1.5 Miles East of Marietta to 1.5 Miles East of Smithfield

Through this entire section, IL 336 will use the existing IL 95 alignment.

The part of Woody Road that lies south of IL 95 will be closed at IL 336 (Aerial Exhibit Sheet 9). Access to IL 336 for Woody Road will be provided through Seville Road (CH 38), which will have an at-grade intersection with IL 336 just west of the Spoon River, at the location of its existing intersection with IL 95 (Aerial Exhibit Sheet 10). The Spoon River crossing of IL 336 will be a dual bridge structure. The south structure (downstream) will be constructed first, then the existing IL 95 bridge will be removed and replaced with the north IL 336 structure. Right-turn-only access will be provided to several properties in the vicinity of the Spoon River Bridge. (Aerial Exhibit Sheet 10.)

East of the Spoon River, the first public roadways along IL 95 are almost two miles from the river: Smysor Road and Fickle Road, which are currently about a quarter-mile apart along IL 95, and both of which extend only to the south of existing IL 95. While neither of the roads will have direct access to IL 336, access for them will be provided by use of a section of existing IL 95 that will intersect with IL 336 about a half-mile west of Smysor Road (Aerial Exhibit Sheet 11). From this new intersection east to Fickle Road, IL 336 will be shifted north enough to allow the use of existing IL 95 as a frontage road. This section of IL 95 will be closed just east of Fickle Road, and on the west end will be extended with a curve to the new intersection. A property access directly across from this new intersection will allow for a median crossing at this intersection. Several properties will have right-turn-only access through this section of the IL 336 route. A farmstead along the north side of IL 95 just east of Smysor Road will be relocated. There will be a commercial displacement on the north side of IL 95 about a quarter mile east of Fickle Road. (Aerial Exhibit Sheet 11.)

The first intersection east of the Spoon River will be at CH 2, just north of Smithfield. Beginning with CH 2, four at-grade intersections at half-mile intervals will be provided, as follows: CH 2, Brock Chapel Road, Old Miller Lane (Grinders Road), and Howerter Lane (which enters on the north only). There will be two commercial relocations just east of CH 2, and two residential relocations east of Howerter Lane. (Aerial Exhibit Sheet 12.)

East of Smithfield IL 336 leaves the more rugged and wooded topography of the Spoon River valley and is back on more level ground with cropland predominating.

2.3.3 Section 3—1.5 Miles East of Smithfield to 2.0 Miles South of Canton

Just under a mile east of the Howerter Road intersection, IL 336 leaves the IL 95 alignment and turns toward the northeast. An at-grade intersection with the unaffected part of existing IL 95 to the east will be provided just northeast of the point where the IL 336 alignment leaves the IL 95 alignment. This will require about 1,700 feet of new connecting roadway between existing IL 95 to the east and its intersection with IL 336. The location where IL 336 leaves the existing IL 95 alignment also marks the east end of the existing IL 95 closure. About a half-mile north of the proposed intersection with existing IL 95, IL 336 will cross East 11000 Street (Grant Keime Road), which will be closed at IL 336 on both the north and south. (Aerial Exhibit Sheet 13.)

The next intersection along IL 336 after IL 95 will be an at-grade intersection at Lasswell Road, just over a mile east (and north) of the IL 95 intersection. Traffic that previously used the section of East 11000 Street that will be closed will use the parallel section of IL 336 and will have access to it by either the IL 336/IL 95 intersection (to the south) or the Lasswell Road/IL 336 intersection (to the north). Through this section the topography is more varied, with cropland still predominant, but with some rugged wooded land to the west and some previously strip-mined land with lakes mostly to the east. At Lasswell Road, IL 336 starts to turn toward the east, and by the Cameron Road at-grade intersection, about 4,000 feet to the northeast, IL 336 heads almost due east. Cameron Road will be re-aligned in the vicinity of its intersection with IL 336. Several properties between the two intersections will be provided with right-turn only access. Just east of Cameron Road IL 336 will cross the edge of a former strip-mine lake. The portion of the lake being crossed will be filled. A small cabin on the lake will be displaced. (Aerial Exhibit Sheet 14.)

IL 336 will cross the edge of another strip-mine lake west of IL 97, which is the next intersection. The IL 97 intersection is just northwest of Cuba and about 1.2 miles east of the Cameron Road intersection. Several properties will have right-turn-only access through this section of IL 336. There will be a residential relocation at the IL 97/IL 336 intersection. A half-mile east of the IL 97 intersection, IL 336 crosses 7th Street, which will not have access. A quarter-mile east of 7th Street there will be an at-grade intersection at a northward extension of 10th Street. The existing 7th Street will be closed just north and south of IL 336. On the north side of IL 336, a frontage road will be constructed to reroute 7th Street traffic to the 10th Street intersection. A curve was removed from this frontage road after the public hearing, to reduce farmland impacts (Aerial Exhibit Sheet 15). On the south side of IL 336, 7th Street will be closed at the Pioneer Railcorp Railroad in Cuba, and a new, approximately 1,400-foot long, east-west roadway will be constructed to reroute 7th Street traffic to 10th Street. (Aerial Exhibit Sheet 15.)

Currently the only direct route from Cuba to Canton, the next town to the east, is CH 5, commonly referred to as the Cuba to Canton Blacktop. This route follows a narrow strip of unmined land between two large areas of former strip mines. A linear strip mine lake parallels CH 5 on the north. The Pioneer Railcorp railroad also follows this narrow strip of unmined ground, running along the north side of CH 5. IL 336 will follow this CH 5 alignment for a distance of about 4.5 miles. Traffic that previously used CH 5 will use IL 336, accessing it at Cuba at 10th Street, the same street that currently provides access to CH 5. A half-mile-long south frontage road will be built, extending from 10th Street east to Winship Road, to provide access to properties on the south side of IL 336. Based on input from the public hearing, it was determined that a proposed access road on the north side of IL 336, opposite Winship Road, was not needed; it has been removed (Aerial Exhibit Sheet 16). Along the CH 5 alignment portion of IL 336, the Pioneer Railcorp Railroad will be relocated to the south side of IL 336, to avoid multiple grade-separated crossings of IL 336 (Aerial Exhibit Sheets 15 and 16).

Because of the strip mining, there is less development in this area and fewer roads. At-grade intersections will be provided at Gale Road (on the south) and at Hyatt Cemetery Road (on the north). The only road closures along this CH 5 section will be CH 5 itself, and an unnamed road

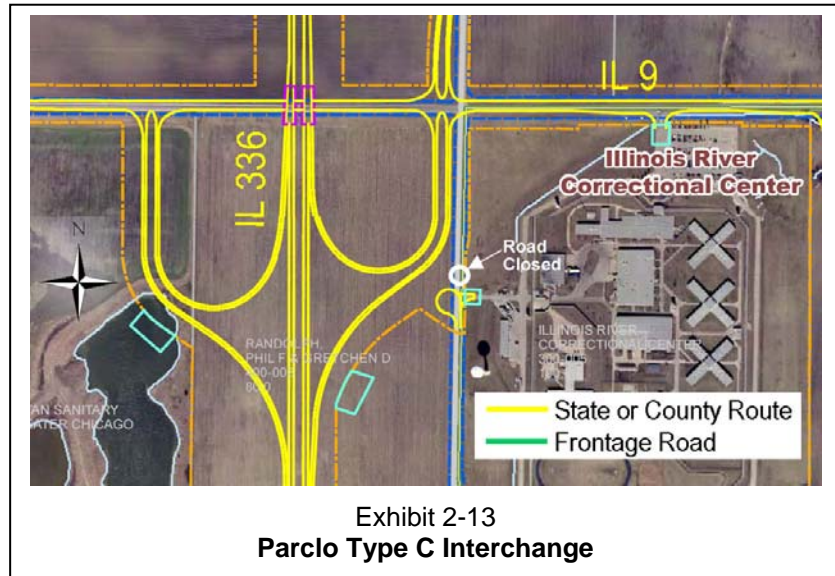
within the large Chicago Sanitary District property to the south of CH 5, which can be accessed from Gale Road. Several properties on the south side of IL 336 through this section will have right-turn-only access to IL 336. (Aerial Exhibit Sheets 16 and 17.)

2.3.4 Section 4—2.0 Miles South of Canton to 2.5 Miles South of Farmington

Just west of Lone Barn Road, the IL 336 alignment leaves the CH 5 alignment and heads north, following the Lone Barn Road alignment for about 1.4 miles. IL 336 will replace Lone Barn Road from just north of CH 5 to a point southwest of the Illinois River Correctional Center (Aerial Exhibit Sheet 18).

Along this section Lone Barn Road intersects Ripper Road (to the west only). The Ripper Road/IL 336 intersection will be located slightly south of the current Ripper Road/Lone Barn Road intersection. A new 3,300-foot long section of connecting roadway will be constructed from the Ripper Road intersection to an intersection with CH 5 at Shields Chapel Road (Aerial Exhibit Sheets 18 and 19).

This connecting roadway will provide access between CH 5 and IL 336, as well as access for the existing local roadway network (CH 5, Lone Barn Road, and Ripper Road). Just south of the Illinois River Corrections Center (Prison), IL 336 crosses Truax Road, which will be closed on both sides of IL 336. This section of IL 336 will traverse strip-mined lands and some cropland. (Aerial Exhibit Sheet 19.)



The next intersection on IL 336 going east (north) will be at IL 9, about a mile and a half north of Ripper Road. This will be a Parclo Type C interchange, the first interchange since the Macomb end of the project. This interchange type was chosen to minimize impacts to the cropland on the north side of IL 9. The partial cloverleaf will be located on the south side of IL 9, just west of the Illinois River Correctional Center. IL 9 will bridge over IL 336. (Exhibit 2-13 and Aerial Exhibit Sheets 19 and 20.)

The main (north) Prison entrance, off IL 9 will not be affected. The Prison has a smaller west entrance off Lone Barn Road (CH 22), which will be affected by the IL 9/IL 336 interchange. CH 22 will be closed from just north of the Prison's west entrance to IL 9, a distance of about 900 feet, to provide required access control for the interchange. This will eliminate access to the west Prison entrance from the north. On the north side of IL 9, the IL 9/CH 22 intersection will

Access will be provided to properties south of IL 336 that are located within the access control limits of the interchange. Just north of the interchange, Old Route 78 will be closed at its current junction with IL 78, to provide adequate access control for the interchange area. A new entrance will be provided for the Pschirrer Asphalt Company plant. (Aerial Exhibit Sheet 23).

East of the IL 78 interchange, IL 336 moves away from the strip-mined land, traverses farm land with some wooded ravines, and begins curving to the north, with a crossing of the West Branch of Copperas Creek. Following the public hearing, this curve was adjusted to reduce wetland impacts (Aerial Exhibit Sheets 24 and 25).

IL 336 will have an at-grade intersection at Owens Road, east of Norris. About a half-mile north of Owens Road it will have an at-grade intersection with relocated Blue Spruce Lane, with IL 336 trending due north. Just before the Blue Spruce intersection, IL 336 crosses an intermittent tributary to the Middle Branch of Copperas Creek, then the Middle Branch of Copperas Creek itself. Blue Spruce Lane currently runs east-west on the east side of IL 78, but just before its intersection with IL 78 it heads to the north, avoiding some rugged terrain. This IL 78/Blue Spruce intersection will be closed, as will existing IL 78 and Blue Spruce Lane in the vicinity of the intersection. A new section of roadway will connect IL 78 to the south with Blue Spruce Lane to the east, and will have an intersection with IL 336 about 1,100 feet south of the existing intersection. (Aerial Exhibit Sheet 25). Traffic that currently uses the portions of IL 78 and Blue Spruce Lane that will be closed will use IL 336 instead, accessing it at the IL 78/Blue Spruce intersection. The Build Alternative includes a bike path along the west side of IL 336, with its southern terminus at the point where existing IL 78 will be closed at IL 336 (Aerial Exhibit Sheet 25). IL 336 trends due north from the IL 78/Blue Spruce intersection, with the next intersection about a half-mile north at Barnabee Road. This intersection will provide access to the part of existing IL 78 that lies north of Barnabee Road. A short section of existing IL 78 will be relocated in the vicinity of the intersection, to provide sufficient room for the intersection. There will be a residential relocation about 2,300 feet north of Barnabee Road. Existing IL 78 will become an east frontage road from Blue Spruce Lane through the remainder of Section 4 (Aerial Exhibit Sheet 25).

From the Barnabee Road intersection, IL 336 continues due north across farm land for a mile to the next intersection at Cottonwood Road, paralleling existing IL 78, which lies immediately to the east, and which will serve as a frontage road to Cottonwood Road. There will be a residential relocation about 600 feet south of Cottonwood Road. North of Cottonwood Road, existing IL 78 will no longer serve as a frontage road, and existing IL 78 will intersection Cottonwood Road only on the south. The existing IL 78/Cottonwood Road intersection will be moved about 200 feet to the east, to allow adequate spacing from the IL 336/Cottonwood Road intersection. (Aerial Exhibit Sheet 26.)

2.3.5 Section 5—2.5 Miles South of Farmington to I-474 at Peoria

One half-mile north of Cottonwood Road, IL 336 will intersection Autumn Road, which enters only on the east. From Cottonwood Road north for about a mile, existing IL 78 will be replaced

by IL 336. Right-turn-only access will be provided to farms and residences. IL 336 traverses cropland through this area (Aerial Exhibit Sheet 26).

About 3,000 feet north of Autumn Road IL will be an intersection with IL 78. At this point, IL 336 moves off the existing IL 78 alignment and begin to curve to the east. The proposed bike path will continue north toward Farmington, on the west side of existing IL 78, which becomes Main Street just south of Farmington (Aerial Exhibit Sheet 27.). At the Fulton/Peoria County line, IL 336 heads due east, and will have a diamond interchange with Lightfoot Road, east of Farmington.

The existing IL 78 passes through Farmington and trends north-south on the south side of Farmington and east-west on the east side of Farmington, to its intersection with IL 116 and Lightfoot Road. At IL 116/Lightfoot Road, existing IL 78 continues north again (Aerial Exhibit Sheet 28). With the construction of IL 336, IL 78 and IL 336 will be on the same marked route

(IL 78/336) from the IL 78/IL 336 interchange south of Norris to the IL 78/IL 336 interchange southeast of Farmington. The section of existing IL 78 that extends south of Farmington then goes north through Farmington and then east to IL 116/Lightfoot Road, will become a local road. (Aerial Exhibit Sheets 27 and 28).

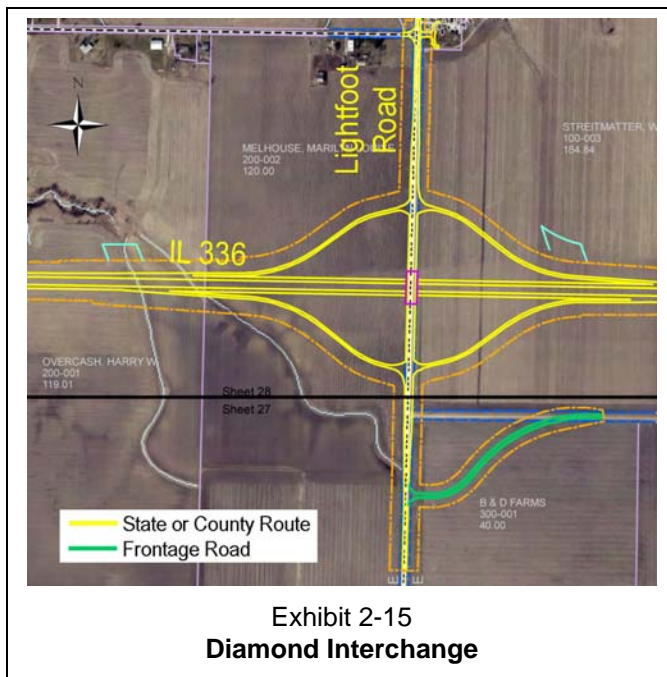


Exhibit 2-15
Diamond Interchange

Lightfoot Road will be upgraded to state highway standards from the IL 78 (Lightfoot Rd)/IL 336 interchange north to the point where Lightfoot Road joins existing IL 78, and will be designated as IL 78 over that distance. The upgrading will provide improved access to the new Farmington schools, located on the east side of existing Lightfoot Road, about a

mile north of the proposed IL 336. Because of the projected traffic volumes for Lightfoot Road/IL 78, a diamond interchange will be constructed at its intersection with IL 336 (Exhibit 2-15 and Aerial Exhibit Sheet, 28).

To provide adequate access control distance from the interchange, the existing Lightfoot Road/Moul Road intersection will be moved about 900 feet south of its current location. This will require relocation of about 1,000 feet of Moul Road, from Lightfoot Road to the east. (Aerial Exhibit Sheets 27 and 29.)

Beyond the Lightfoot Road/IL 78 interchange, IL 336 will continue due east for a mile, to an at-grade intersection with Downs School Road. Between Downs School Road and Cramer Road, another mile to the east, IL 336 jogs to the north, resuming its due east direction at an at-grade

intersection at Cramer Road, and continuing due east for four miles, to Texas Road, with at-grade intersections at one-mile intervals, at Cramer Road, Stone School Road, Gronewalt Road, Trivoli Road (CH 25), and Texas Road. Between Cramer Road and Gronewalt Road the IL 336 alignment will use the existing Nelson Road, which will therefore cause Nelson Road to be closed between Cramer Road and Gronewalt Road. Properties that formerly used Nelson Road will have right-turn-only access to IL 336. There will be a residential relocation about 0.5 mile east of Cramer Road. (Aerial Exhibit Sheets 29, 30 and 31.)

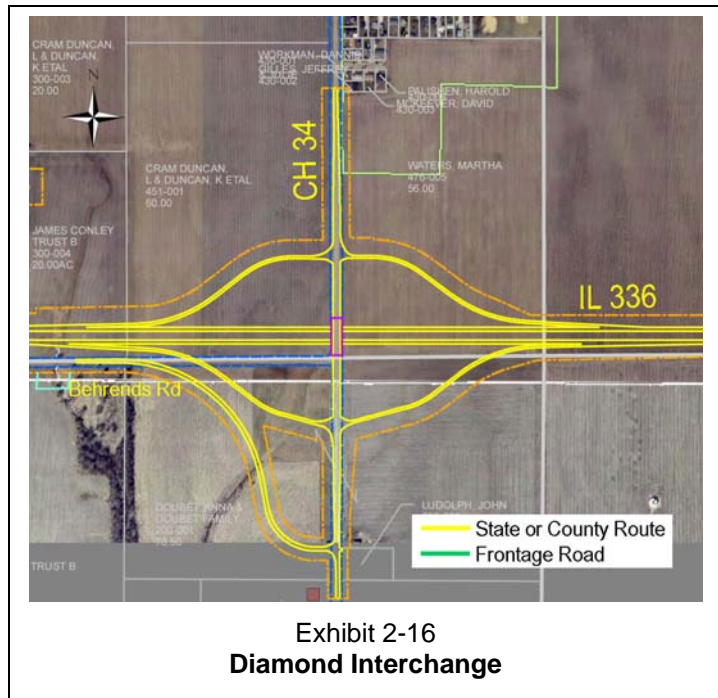


Exhibit 2-16
Diamond Interchange

A little over a mile east of Texas Road IL 336 will have an at-grade intersection with Logan (Fisher) Road, then another at-grade intersection with Eden Road a little less than a mile east of Logan. From a point about a half-mile east of Texas Road to a point about a half-mile east of Eden Road, the IL 336 alignment will be shifted about 700 feet north to avoid two farmsteads. Just east of Eden Road, IL 336 will cross the East Branch of Copperas Creek. About 0.7 mile east of Eden Road IL 336 will transition from expressway to freeway. From this point east, the only access to IL 336 will be at interchanges. (Aerial Exhibit Sheets 32 and 33.) In this area, revisions were made following the public hearing to reduce farmland severances (Aerial Exhibit Sheets 32 and 33). Refer to the discussion in Section 4.3.4.4 for details.

A mile east of this transition IL 336 will have a diamond interchange with Hanna City Glasford Road (CH 34), with Hanna City Glasford Road bridging over IL 336. The interchange construction will require relocating Behrends Road to the south the vicinity of the interchange. (Exhibit 2-16 and Aerial Exhibit Sheet 33.)

Three quarters of a mile east of the Hanna City Glasford interchange, Murphy Road will be reconstructed to bridge over IL 336. There will be no access to IL 336 at Murphy Road. A half-mile long roadway will be constructed for property access between Murphy and Pinkerton Roads, south of IL 336. There will be a residential relocation on the east side of Murphy Road. Pinkerton Road will be closed on both the north and south sides of IL 336. An approximately 2,000-foot long north frontage road will be provided from Pinkerton Road to the east. (Aerial Exhibit Sheet 34.)

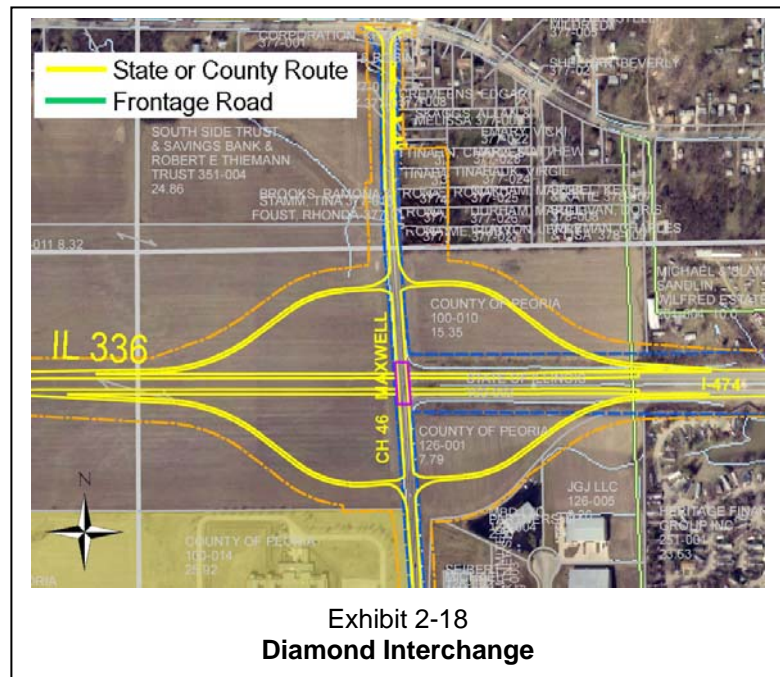


Exhibit 2-18
Diamond Interchange

Between Murphy Road and Taylor Road IL 336 makes a long S-curve to the north. Along this S-curve IL 336 will bridge over the UP Railroad and IL 116.

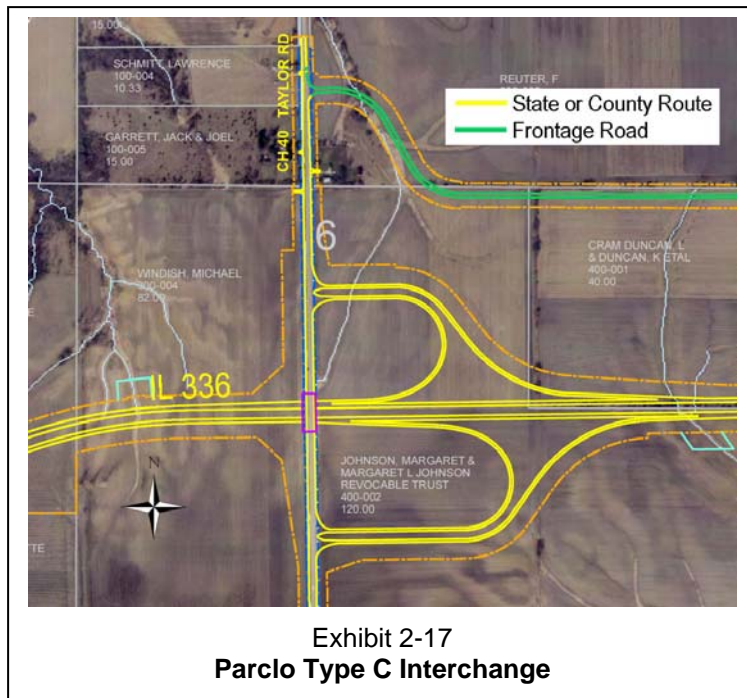


Exhibit 2-17
Parclo Type C Interchange

The next interchange on IL 336 will be a Parclo Type C at Taylor Road, about 2.5 miles east of Murphy Road, with the partial cloverleaf on the east side of the interchange. (Exhibit 2-17 and Aerial Exhibit Sheets 35 and 36.) This interchange type was chosen to avoid three sets of major power transmission lines west of Taylor Road that would have required relocation if an interchange with ramps was located on the west. It also avoided placing ramps on the horizontal curve west of the interchange (Exhibit 2-17 and Aerial Exhibit Sheet 36).

A new road to provide property access will be constructed between Taylor Road and Christ Church

Road, parallel to and about 1,000 feet north of IL 336. IL 336 will pass under Christ Church Road, then jog south to tie into the Bellevue Stub, with a diamond interchange at Maxwell Road. The Bellevue Stub provides access to I-474. Between Christ Church Road and Maxwell Road IL 336 will also bridge over Farmington Road. There will be seven residential relocations on the northeast side of the Maxwell Road interchange. (Exhibit 2-18 and Aerial Exhibit Sheet 37.)

2.4 Other Alternatives Considered

2.4.1 Transportation Control Measures

Transportation control measures (TCMs) are strategies to reduce transportation-related emissions by reducing vehicle use or improving traffic flow. Examples of TCMs are improved public transit, high-occupancy vehicle lanes, shared-ride services and flexible work schedules. TCMs would not meet the project purpose and need of system linkage and facility continuity (Section 1). Transportation control measures also do not address the need for improved efficiency for farm vehicles and trucks (Section 1.4.3).

Transit service is unavailable in the project area, and there are no known plans to begin such service.

2.4.2 Transportation System Management

Transportation system management employs measures to maximize the efficiency and use of existing highways to help alleviate or postpone the need to increase capacity. Such measures include engineering design features to improve traffic flow and safety, such as intersection capacity improvements, adding traffic signals, eliminating or consolidating driveways, adding passing lanes at critical locations, widening shoulders, and flattening slopes, among others. Although the transportation system management alternative might partially address some transportation deficiencies in the project area, it would not address the basic purpose and need of the project (Section 1). Specifically, it would not address the need for system linkage and facility continuity (Section 1.4.1). It would also not address the travel efficiency concerns regarding use of farm equipment on the roadways, and reduced speed limits through towns and villages on the existing routes (Section 1.4.3). It is not a feasible solution for improving transportation continuity across the entire project area, or improving travel efficiency between the proposed Macomb Bypass and I-474.

2.5 Operationally Independent Phase of Work

Section 1904 of the Safe, Accountable, Flexible, Efficient Transportation Equity Act: A Legacy for Users (SAFETEA-LU) amended 23 U.S.C. 106 and made several substantial changes to the requirements for major projects. Major projects have a total estimated cost of \$500 million or more and receive financial assistance from the federal government. In compliance with the major project requirements, FHWA has identified operationally independent phases of work for the IL-

336 study that could be built and function as feasible transportation facilities, even if the rest of the work described in the Final EIS is never built. The sections are described in detail in the Operational Independence Justification Report accepted by FHWA.

FHWA identified 3 (three) operationally independent project phases for the IL-336 study:

- PHASE 1 would construct the 3.7 mile segment from I-474 at Bellevue to Taylor Road.
- PHASE 2 would construct the 3.5 mile segment from Taylor Road to Hanna City Road.
- PHASE 3 would construct the 52.5 mile segment from Hanna City Road to the US 67 Bypass east of Macomb.

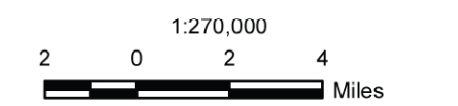
Environmental commitments described in this Final EIS will be implemented as part of each operationally independent phase of work that is built. The three operationally independent project phases were identified to address future needs identified in the Purpose and Need statement for the study. Each operationally independent project phase will provide travel related benefits. Those benefits will compound as additional operationally independent project phases are completed. There are no additional environmental impacts associated with the implementation and construction of the project in the suggested operationally independent phases of work.



Legend

- Preferred Alignment
- Interstate
- U.S. Highway or State Highway
- - - Macomb Bypass
- - - County Boundary
- Municipality

Source(s): Illinois Natural History Survey (Illinois Department of Natural Resources), Illinois Department of Transportation (IDOT), and URS Corporation



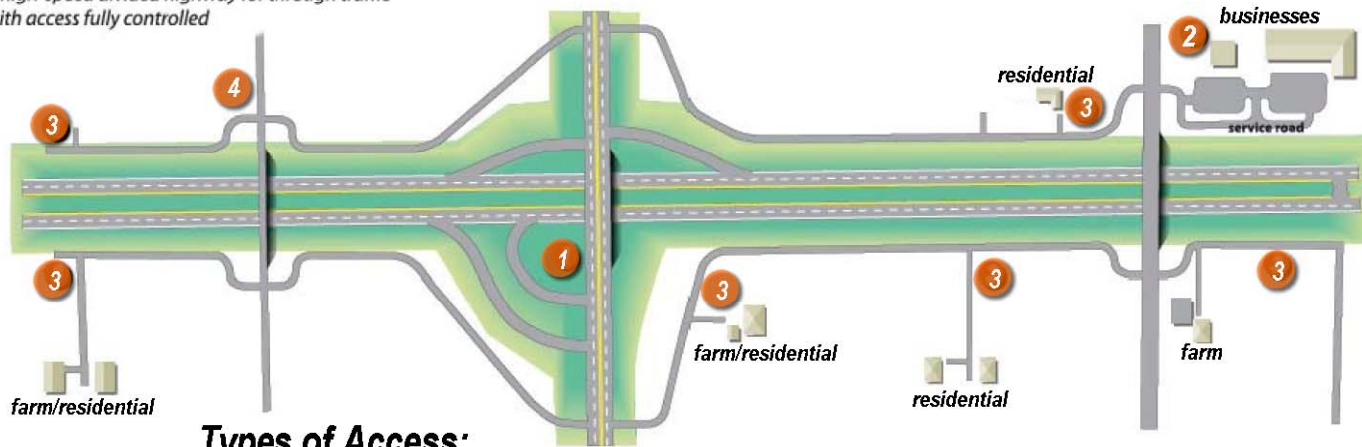
**Peoria to Macomb EIS
 FAP 315 (IL 336)**

Section: Various
 Peoria, Fulton, McDonough Counties
 Job No. P94-025-00
 Catalog No. 032258-00P
 Contact: Mike McLuckie

**Exhibit 2-1
 Build Alternative**

Rural Freeway

A high-speed divided highway for through traffic with access fully controlled

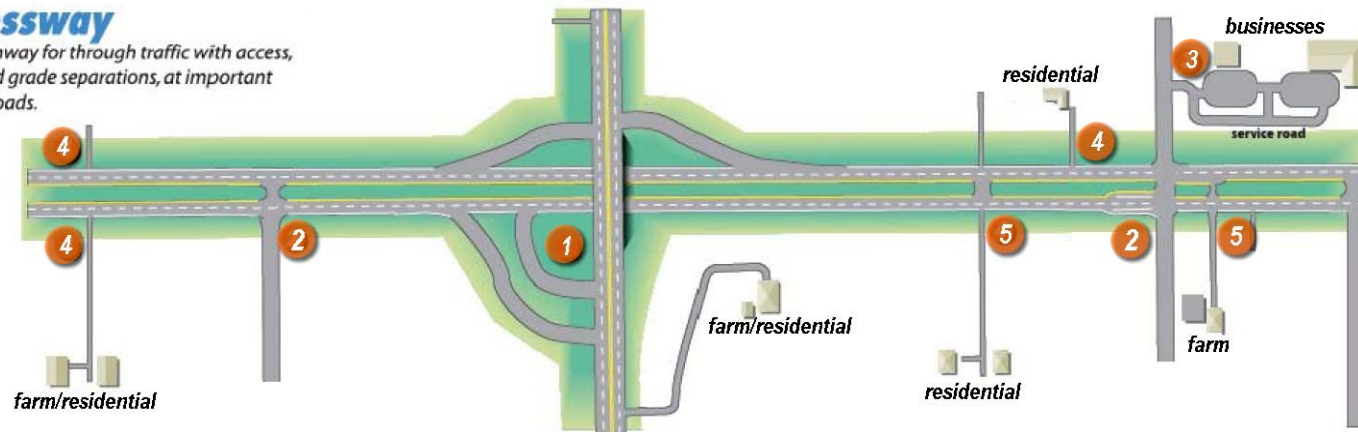


Types of Access:

- 1 Interchanges**
- 2 Businesses or Commercial Entrances**
access only from service drives or frontage roads
- 3 Farm or Residential Entrances**
access only from service drives or frontage roads
- 4 Grade-Separated Crossroads**
Road is carried, via bridge over the freeway.
Direct access to the freeway is prohibited.

Rural Expressway

A high-speed divided highway for through traffic with access, partially or controlled and grade separations, at important intersections with other roads.



Types of Access:

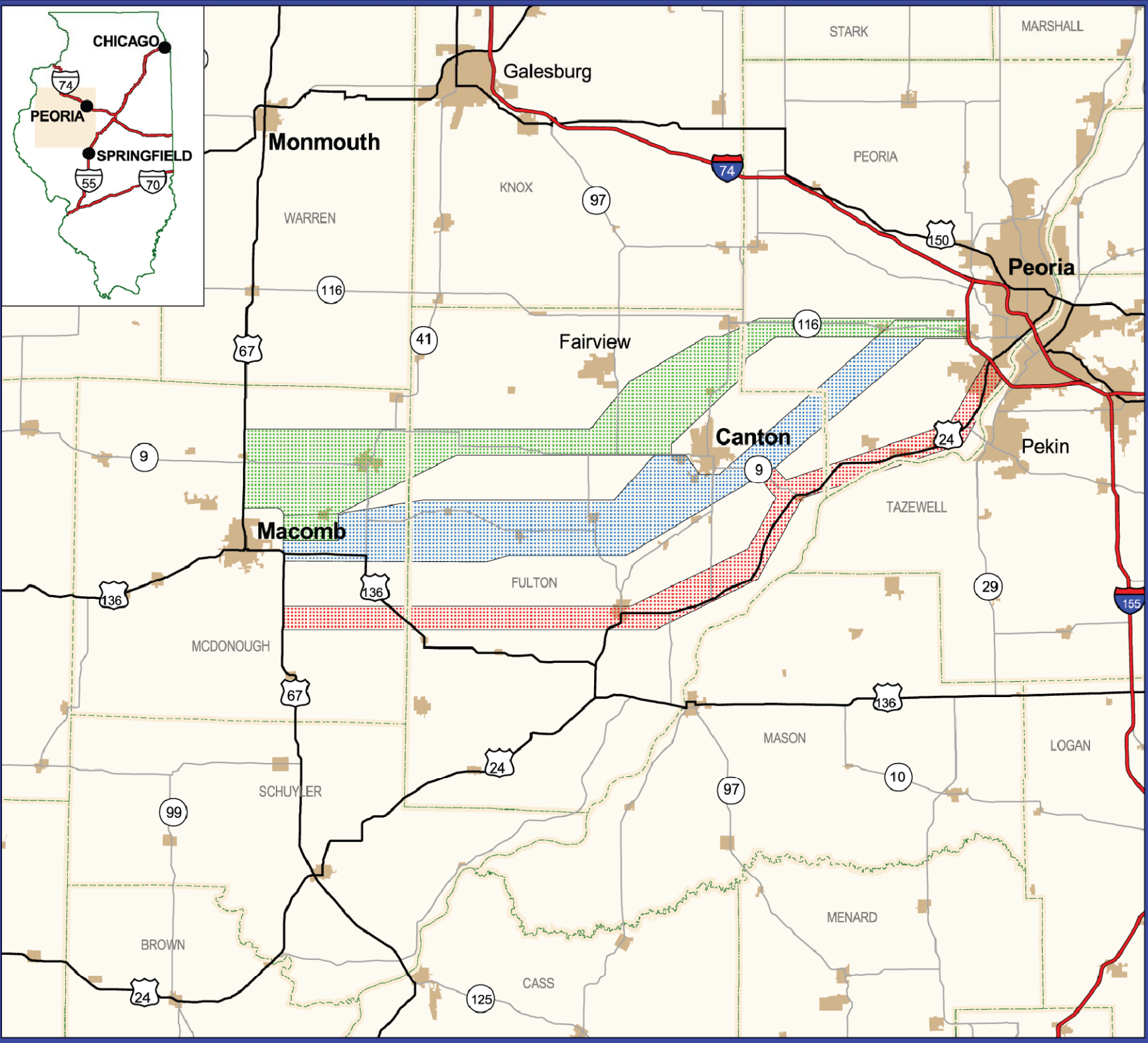
- 1 Interchanges**
at higher traffic volume roads where traffic conditions warrant
- 2 At-Grade Intersections**
allow direct access onto the expressway
- 3 Businesses or Commercial Entrances**
access only from service drives or side streets
- 4 Farm or Residential Entrances**
access directly onto the expressway but capable only of right in right out movements
- 5 Farm or Residential Entrances**
direct access to expressway with median opening that allows for all movements

Source(s): URS Corporation








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**Exhibit 2-2
Freeway and Expressway**

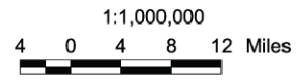


Legend

-  Alternate Route A
-  Alternate Route B
-  Alternate Route C
-  Municipality
-  Interstate
-  U.S. Highway
-  State Highway



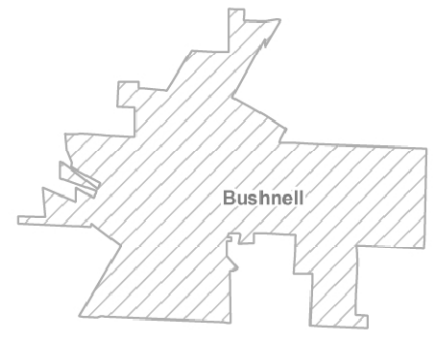
Source(s): Illinois Department of Natural Resources and URS Corporation



**Peoria to Macomb EIS
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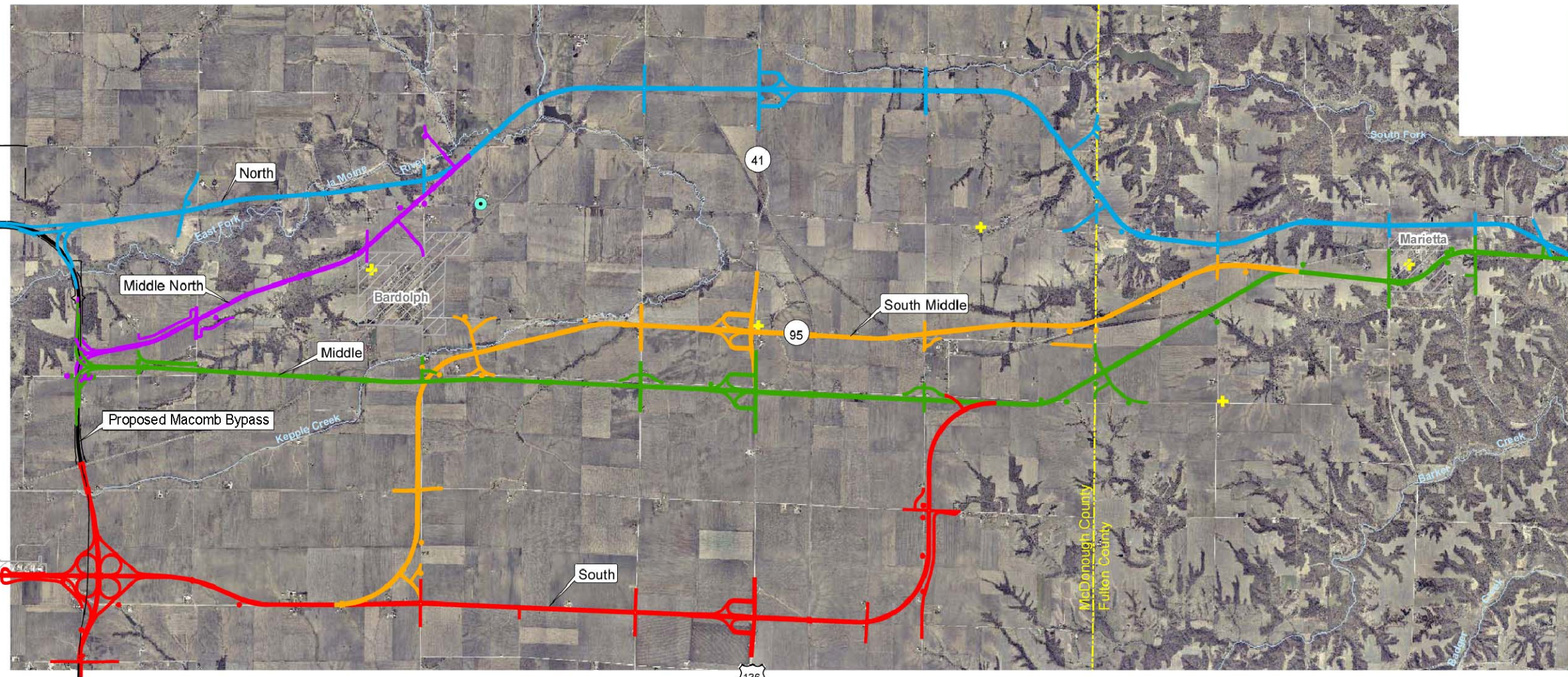
Section: Various
Peoria, Fulton, and
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**Exhibit 2-3
Adjusted Corridors**

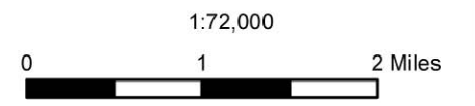


Legend

- County Boundary
- Water
- Potential Historic Property (IDOT)
- Historic Property (IHPA)
- School
- Cemetery
- Municipality



Source(s): Illinois Department of Natural Resources, Illinois Department of Transportation, Illinois Historic Preservation Agency, National Center for Education Statistics, National Wetlands Inventory and URS Corporation



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**Exhibit 2-4
 December 2004 Alignments,
 Section 1**

Legend

- County Boundary
- Water
- Potential Historic Property (IDOT)
- Historic Property (IHPA)
- School
- Cemetery
- Municipality
- Park, Preserve, Reserve, State or Federally Owned Land



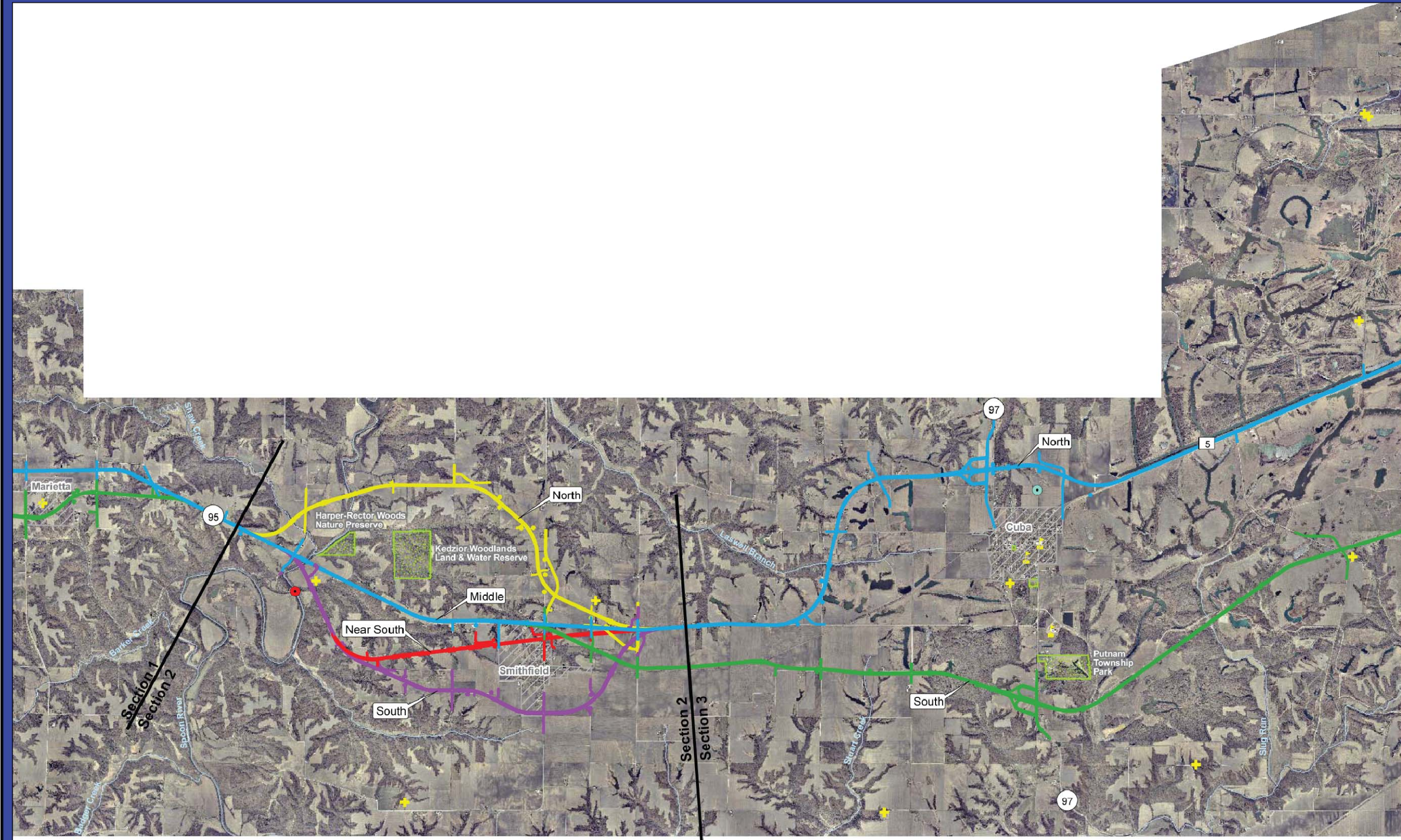
Source(s): Illinois Department of Natural Resources, Illinois Department of Transportation, Illinois Historic Preservation Agency, National Center for Education Statistics, National Wetlands Inventory and URS Corporation













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Exhibit 2-5
December 2004 Alignments,
Sections 1, 2, and 3



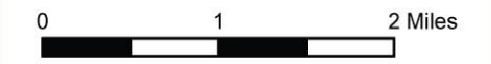
Legend

-  County Boundary
-  Water
-  Potential Historic Property (IDOT)
-  Historic Property (IHPA)
-  School
-  Cemetery
-  Municipality
-  Park, Preserve, Reserve, State or Federally Owned Land
-  Airport
-  Prison



Source(s): Illinois Department of Natural Resources, Illinois Department of Transportation, Illinois Historic Preservation Agency, National Center for Education Statistics, National Wetlands Inventory and URS Corporation

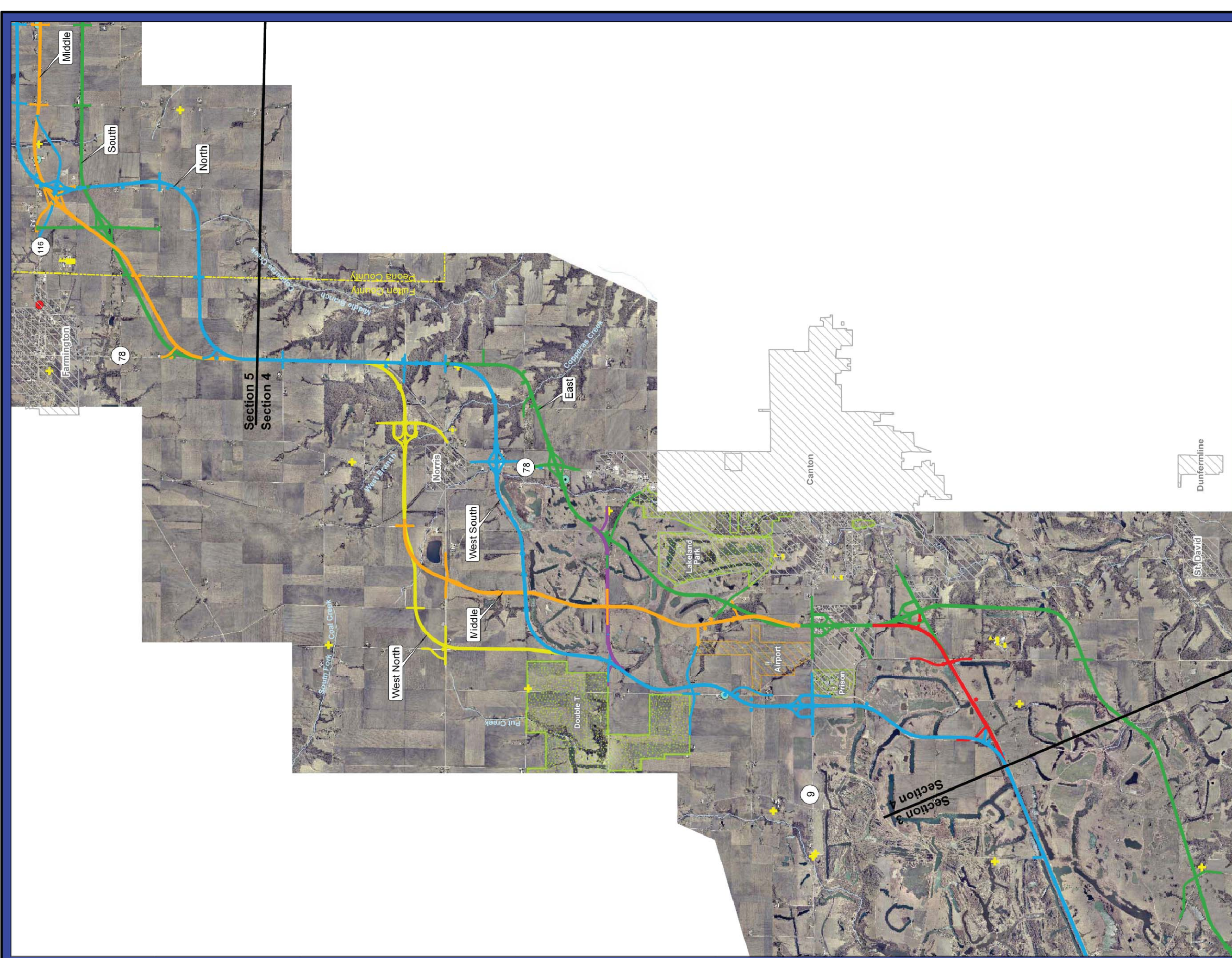
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**Exhibit 2-6
December 2004 Alignments,
Sections 3, 4, and 5**



Legend

- County Boundary
- Water
- Potential Historic Property (IDOT)
- Historic Property (IHPA)
- School
- Cemetery
- Municipality



Source(s): Illinois Department of Natural Resources, Illinois Department of Transportation, Illinois Historic Preservation Agency, National Center for Education Statistics, National Wetlands Inventory and URS Corporation

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Peoria to Macomb EIS FAP 315 (IL 336)

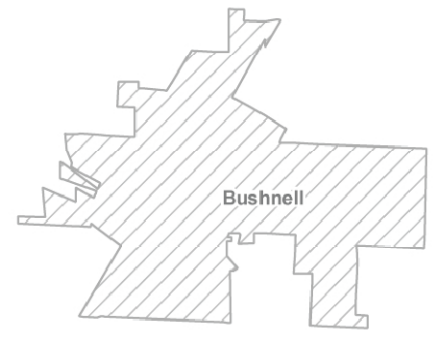
Section: Various
Peoria, Fulton, McDonough Counties
Job No. P94-025-00
Catalog No. 032258-00P
Contact: Mike McLuckie

Exhibit 2-7
December 2004 Alignments,
Section 5



Section 5
Section 4



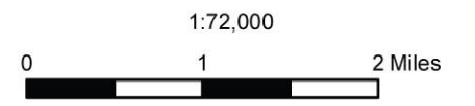


Legend

- County Boundary
- Water
- Potential Historic Property (IDOT)
- Historic Property (IHPA)
- School
- Cemetery
- Municipality



Source(s): Illinois Department of Natural Resources, Illinois Department of Transportation, Illinois Historic Preservation Agency, National Center for Education Statistics, National Wetlands Inventory and URS Corporation











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**Exhibit 2-8
 March 2006 Alignments,
 Section 1**

Legend

-  County Boundary
-  Water
-  Potential Historic Property (IDOT)
-  Historic Property (IHPA)
-  School
-  Cemetery
-  Municipality
-  Park, Preserve, Reserve, State or Federally Owned Land



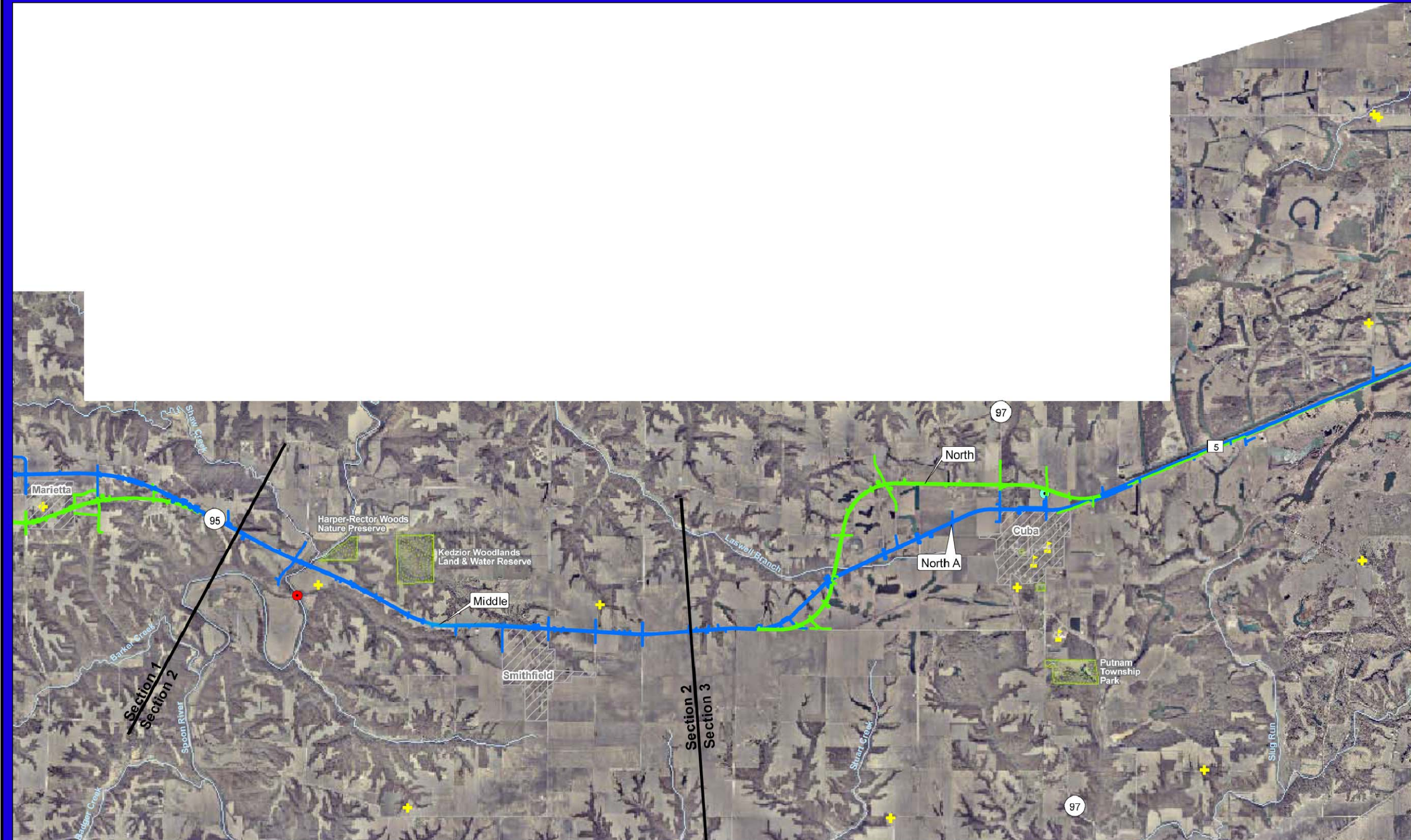
Source(s): Illinois Department of Natural Resources, Illinois Department of Transportation, Illinois Historic Preservation Agency, National Center for Education Statistics, National Wetlands Inventory and URS Corporation













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Exhibit 2-9 March 2006 Alignments, Sections 1, 2, and 3

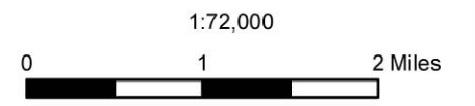


Legend

-  County Boundary
-  Water
-  Potential Historic Property (IDOT)
-  Historic Property (IHPA)
-  School
-  Cemetery
-  Municipality
-  Park, Preserve, Reserve, State or Federally Owned Land
-  Airport
-  Prison



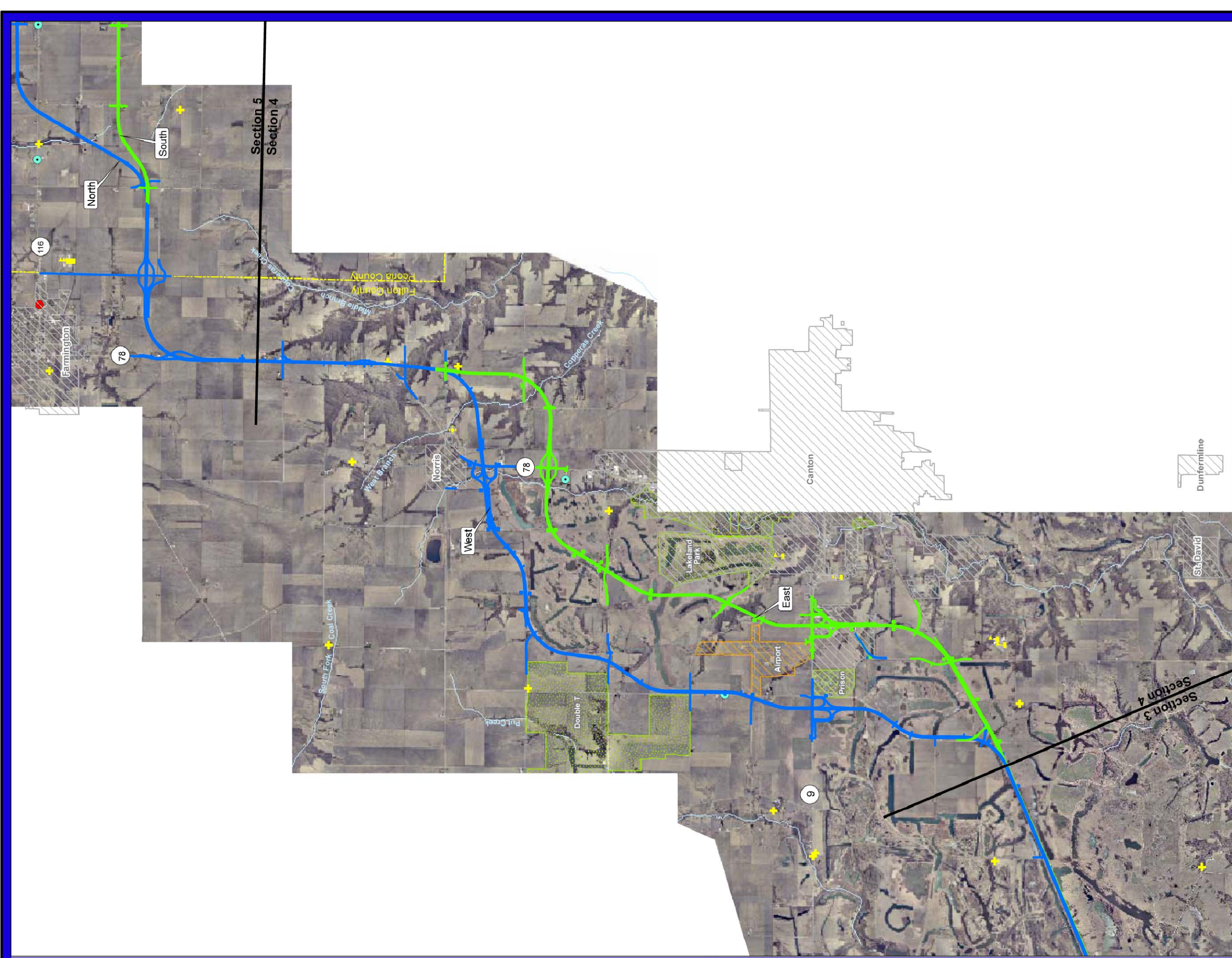
Source(s): Illinois Department of Natural Resources, Illinois Department of Transportation, Illinois Historic Preservation Agency, National Center for Education Statistics, National Wetlands Inventory and URS Corporation



Peoria to Macomb EIS FAP 315 (IL 336)

Section: Various
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Exhibit 2-10
March 2006 Alignments,
Sections 3, 4, and 5



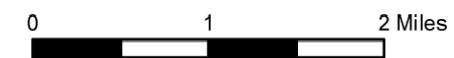
Legend

- County Boundary
- Water
- Potential Historic Property (IDOT)
- Historic Property (IHPA)
- School
- Cemetery
- Municipality



Source(s): Illinois Department of Natural Resources, Illinois Department of Transportation, Illinois Historic Preservation Agency, National Center for Education Statistics, National Wetlands Inventory and URS Corporation

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Peoria to Macomb EIS FAP 315 (IL 336)

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Exhibit 2-11
March 2006 Alignments,
Section 5

