

# **Technical Memorandum**

## **Comparison of the 2003 FEIS Selected Alternative**

### **To The 2010 Selected Alternative**

#### **Executive Summary**

The 2003 FEIS established an approach for the project design. The footprint established for right-of-way by the 2003 FEIS Selected Alternative was retained as the basis for the project design for the 2010 Selected Alternative with exception of changes to the East End Interchange at US 62 and Port Road in Clark County, IN. In addition, there was a right-of-way reduction at the Waterfront Park in Louisville. Both of these are described in more detail in this document.

With exception of the areas discussed above, there are no additional revisions in the area of right-of-way takings throughout this project. Therefore, all environmental effects remain identical in the remaining areas of the project in comparing these two alternatives.

#### **2003 FEIS Selected Alternative**

The publication of the FEIS in 2003 established a Preferred Alternative that would be utilized for the project design. The features of the Preferred Alternative include the following:

- The Kennedy Interchange (I-64, I-71, and I-65) would be reconstructed south of its existing location, including leaving the existing Third Street Ramp exit from I-64 in place (Attachment A).

A new partial interchange is proposed at I-71 to and from Frankfort Avenue (Attachment A). Frankfort Avenue would be raised to be above the 10-year flood elevation

- Connections would be provided between Melwood and Story Avenue on the southeast connection of I-64 to provide a split-diamond interchange ( Attachment A).
- Witherspoon is reconstructed to run parallel to the new Kennedy Interchange along its southern border and makes a connection to Frankfort Avenue across from the new I-71 ramp termini on Frankfort Avenue. (Attachment A)
- A new bridge would be constructed adjacent to the existing I-65 Kennedy Bridge on the east side (Attachment A) The new bridge would provide for six lanes northbound and would include a 17' bicycle and pedestrian facility located on the East side of the bridge.

- The existing Kennedy Bridge's deck would be reconstructed to include removal of the existing barrier wall, provide a thin overlay, and re-stripe the roadway to allow six lanes of traffic southbound with adequate shoulders to provide safety.
- I-65 in Indiana would be reconstructed to the north approximately one mile to accommodate the additional lanes provided from the Downtown Ohio River Bridges . The reconstruction of the interchanges provides for many fly over type ramps. (Attachment B).
- On the East End, a new 6-lane bridge with full width shoulders over the Ohio River is proposed. (Attachment C).
- A new 6-lane highway extension of the Gene Snyder Freeway (KY 841) in the vicinity of I-71 to the new East End Ohio River Bridge is provided, which includes a tunnel under the historic Drumanard Estate (Attachment C).
- The 6-lane extension continues to the west from the new East End Ohio River Bridge to connect to the Lee Hamilton Highway (S.R. 265) near its connection with SR 62, which includes a large free-flow interchange for S.R. 62 and the Port Road (Attachment D).

### **2010 Selected Alternative**

The 2003 FEIS Selected Alternative was utilized as the basis of the project design as consultant teams were selected in 2004. As more detailed design work became available, it became evident that certain revisions could improve the proposed designs without causing any change in the right-of-way footprint that was established in the EIS. The one exception to that statement is that some additional right-of-way was proposed on the Indiana East End at the S.R. 62 interchange. This will be discussed further in this section.

Elements of the 2010 Selected Alternative design include:

- The Kennedy Interchange design continues to be based on the alignment shifted to the south of the existing interchange. The interchange is somewhat reconfigured to reduce the stack height of the interchange at its I-65, I-64, I-71 connection. The Third Street ramp is eliminated and replaced with a new ramp exiting to River Road. River Road is reconstructed between that ramp termini and the intersection of River Road and Witherspoon. (See Attachment E). All revisions occur within the original R/W footprint established in the EIS. Frankfort Avenue and Melwood-Story remain the same as in the 2003 EIS. With the removal of the Third Street ramp and a grade alignment between the multiple ramps that cross the area known as the Great Lawn within the Louisville Waterfront Park, the width of right-of-way required across the Great Lawn is reduced by

93', resulting in a reduction of 1.23 acres being acquired from the park.. At the request of Butchertown, access points were provided through the Kennedy Interchange between Witherspoon and River Road in three locations.

- The new bridge adjacent to the Kennedy and the re-deck of the Kennedy Bridge remain exactly as proposed with the 2003 EIS. The bike/pedway is still proposed as part of the new bridge construction.
- The Indiana approaches along I-65, including all ramps, remain the same as shown in the 2003 EIS.
- The East End alignment remains as a 6-lane facility. All basic design concepts remain the same for all of the East End with exception of the proposed interchange at S.R. 62.
- As design progressed, it became apparent that the S.R. 62 – Port Road Interchange proposed in the 2003 FEIS Selected Alternative would be very expensive to build. The design team started investigation of alternative designs to reduce the costs, while maintaining the established right-of-way footprint. Potential alternative designs were initially restricted by the Swartz Farm, a historic property located on the eastern end of the interchange. The Swartz Farm was identified as a 4-f resource in the 2003 EIS. While a taking was proposed from the Swartz Farm in the 2003 FEIS, we limited any potential reconfiguration of the interchange to the footprint that was established with the 2003 FEIS Selected Alternative so that no additional property would be acquired. In October 2007, the owners of the property demolished the buildings on the property. Subsequent reviews of the property led the Indiana Department of Transportation, working in conjunction the Indiana State Historic Preservation Office, to determine that as a result of the demolition the property had lost the elements that provided its historic eligibility and therefore is no longer eligible for listing in the National Register. As the Swartz Farm was no longer considered eligible, additional interchange alternatives were investigated that considered potential use of the farm area. Ultimately, a diverging diamond design was recommended for the location. (Figure F). The diverging diamond takes an additional approximately 11 acres from the Swartz Farm, but also lessens right of way in the northwest and northeast quadrants by 20.36 acres and 7.49 acres respectively. (See Figure G). In addition, a water tower and a water supply system located in the northwest quadrant will no longer have to be relocated. Since the development of the 2003 FEIS, a trucking company located within proximity of the original interchange, which would likely have required relocation. The Diverging Diamond will also not require the acquisition of that building. In the northeast quadrant, the relocation of five residences

and a church will also no longer be acquired. The diverging diamond further saves an approximate \$50 M in construction costs.

### Summary

The 2003 FEIS Selected Alternative and the 2010 Selected Alternative are identical in design except with the Kennedy Interchange in the Louisville Downtown and at the SR 62 Interchange with SR 265 in the Indiana East End.

Attachments A & E show the difference in configuration of the two interchange designs for the Kennedy Interchange. The 2010 Selected Alternative reduces the acquisition from the Waterfront Park by 1.23 acres.

Attachments D & F show the difference in configuration of the two interchange designs for the SR 62 – Port Road Interchange at SR 265. Attachment G focuses in on the difference in the area of taking between the 2003 FEIS Selected Alternative and the 2010 Selected Alternative. As noted there is a net reduction of taking of approximately 17 acres of property, which includes one business, a water tower and a water supply system, a church, and five residences. The one area of additional taking is from the Swartz Farm, which is no longer considered eligible for the Historic Register. The 10.89 acres of taking from this property, which is presently zoned as light industrial, is still considered agricultural until such time that development occurs. There are no wetlands, additional stream impacts or other environmental effects identified in the areas of differential between the two interchange designs,

Table 1 provides a summary of the differences of environmental effects between the 2003 FEIS Selected Alternative and the 2010 Selected Alternative.

Table 1 2003 FEIS Selected Alternative & 2010 Selected Alternative  
Environmental Effects Comparison

| Resource        | Resource Size (Acres) | 2003 FEIS Usage (Acres) | 2010 Selected Usage (acres) | Net Addition or Reduction (acres) | Net Effect             |
|-----------------|-----------------------|-------------------------|-----------------------------|-----------------------------------|------------------------|
| Waterfront Park | 85                    | 8.13                    | 6.86                        | -1.27                             | Reduction in 4-f usage |
| Swartz farm     | 155                   | 46                      | 57                          | 11                                | Additional agriculture |

### **List of Attachments**

**A – 2003 EIS Preferred – Kennedy Interchange and New Ohio River Bridge**

**B – 2003 EIS Preferred – Indiana Downtown Approaches**

**C – 2003 EIS Preferred – Kentucky East End and New Ohio River Bridge**

**D – 2003 EIS Preferred – Indiana East End**

**E – 2010 Selected Alternative – Kennedy Interchange**

**F – 2010 Selected Alternative – Indiana East End Diverging Diamond**

**G – 2010 Selected Alternative – Right-of-Way variation for Diverging Diamond**