U.S. Department of Transportation
Federal Highway Administration

Federal Highway Administration
Kentucky Division
330 West Broadway
Frankfort KY, 40601
502-223-6720

Federal Highway Administration
Ohio Division
200 North High Street, Room 328
Columbus, OH, 43215
614-280-6896

August 13, 2025

In Reply Refer To:
HDA-OH

ELECTRONIC CORRESPONDENCE ONLY
Pamela Boratyn, Director
Ohio Department of Transportation
1980 West Broad Street
Columbus, OH 43223

Subject: Brent Spence Bridge Corridor Project Re-evaluation #1 [KYTC Project Item No. 6-17; ODOT PID 89068]

Dear Director Boratyn:

The Federal Highway Administration (FHWA) has received your August 13, 2025 transmittal with the documentation titled "Brent Spence Bridge Corridor Project, Re-evaluation 1," dated August 13, 2025, and including supporting documents in appendices.

In accordance with FHWA 23 CFR 771.129, this document was prepared by the Ohio Department of Transportation (ODOT) and Kentucky Transportation Cabinet (KYTC) to evaluate proposed changes to the approved action and associated impacts by addressing all current environmental requirements. The purpose of this re-evaluation is to document the consultation with FHWA to establish whether the approved environmental document, including the revised Supplemental Environmental Assessment (SEA) and the Finding of No Significant Impact (FONSI), executed May 8, 2024 [2024 SEA/FONSI], and associated documentation remain valid.

Proposed changes include the incorporation of Build Innovations as part of the Phase III Progressive Design Build procurement process, as well as principal project design modifications resulting from progression of detailed design. It also documents the required Section 4(f) approval in accordance with 23 CFR 774.7. Further, as part of this review, FHWA understands that environmental commitments included in the existing approved environmental documentation will apply to these activities and that additional commitments have been identified based on the project changes presented in this re-evaluation.

After review of the documentation, we concur with the KYTC and ODOT's conclusion that the approved environmental documentation, the 2024 SEA/FONSI, is still valid for the Brent Spence Bridge Corridor Project and no significant impacts exist to warrant preparation of a supplemental environmental document or additional documentation outside of this re-evaluation.

Sincerely,

Shundreka R. Givan

Shundreka Givan
Division Administrator
Federal Highway Administration
Kentucky Division

David L. Snyder
Division Administrator
Federal Highway Administration
Ohio Division

BRENT SPENCE BRIDGE CORRIDOR PROJECT

RE-EVALUATION 1

KYTC PROJECT ITEM NO. 6-17 | ODOT PID 89068

AUGUST 13, 2025

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1. INTRODUCTION

On May 8, 2024, the Federal Highway Administration (FHWA) signed a Revised Supplemental Environmental Assessment (SEA) and issued a Finding of No Significant Impact (FONSI) (hereinafter referred to as the 2024 SEA/FONSI) for the Brent Spence Bridge (BSB) Corridor Project. The SEA assessed updated regulatory requirements, changed site conditions, incorporated design refinements to the previously selected alternative, updated impacts due to changes (mostly reductions), further developed environmental commitments (enhancements and mitigation), and included additional National Environmental Policy Act (NEPA) re-evaluation and coordination efforts that had occurred since the original 2012 FONSI was issued.

Kentucky Transportation Cabinet (KYTC) and Ohio Department of Transportation (ODOT) have since identified and evaluated additional measures to further improve the design and constructability of the project while reducing the costs and environmental impacts where practicable. These efforts resulted in refinements to the project's design (see **Section 4.1**). In accordance with 23 Code of Federal Regulations (CFR) 771.129, this re-evaluation has been prepared to disclose and assess these design refinements and modifications since issuance of the 2024 SEA/FONSI and to confirm the validity of the 2024 NEPA decision or whether a supplemental NEPA document or additional analysis is warranted. This re-evaluation assesses updated regulatory requirements, changed site conditions, design refinements and modifications, and impact changes since the 2024 SEA/FONSI.

2. PROJECT DESCRIPTION

The primary project elements, overarching project phasing, purpose and need, logical termini, and independent utility remain unchanged since issuance of the 2024 SEA/FONSI. The project will widen 7.8 miles of I-71/I-75 from south of Dixie Highway in Kentucky to the Western Hills Viaduct in Ohio and rebuild all bridges and interchanges. A collector-distributor (C-D) system will be added between 12th Street in Kentucky and Ezzard Charles Drive in Ohio. A C-D system is a network of roads alongside a highway that "collects" traffic exiting from a highway and "distributes" it to local roadways. It also "collects" traffic from local roadways and "distributes" it onto the highway. The primary features of the project include:

- Reconstructing I-71/I-75 and adding one lane in each direction;
- Rebuilding the overpass bridges and interchanges in the corridor and adding a new exit at Ezzard Charles Drive in Ohio;
- Constructing a C-D roadway system between West 12th Street/Martin Luther King (MLK) Jr. Boulevard in Kentucky and Ezzard Charles Drive in Ohio;
- Extending frontage roads connecting Pike Street to West 4th Street and West 5th;
- Adding C-D lanes between Dixie Highway (US-25) and Kyles Lane (KY-1072) in Kentucky;
- Rehabilitating and reconfiguring the existing double-decker BSB to carry three lanes of local traffic on each deck as part of the C-D roadway system; and

- Building a new double-decker companion bridge west of the existing BSB to carry five lanes of through (interstate) traffic on each deck.

As described in the SEA, the project will be delivered in three, nonsequential construction phases (Phases I–III) (**Figure 1**). The scope, procurement methods, and primary components for each phase remain unchanged since issuance of the FONSI, except for Phase II. Following coordination under 2024 SEA/FONSI Commitment 35, ODOT will use design-build procurement to construct the Metropolitan Sewer District of Greater Cincinnati trunk line as part of Phase II.

3. PURPOSE AND NEED

The purpose and need for the BSB Corridor Project is unchanged from what was presented in the approved 2024 SEA/FONSI. The 2024 SEA/FONSI describes the project purpose and need as to:

- Improve traffic flow and level of service (LOS);
- Improve safety;
- Correct geometric deficiencies; and
- Maintain connections to key regional and national transportation corridors.

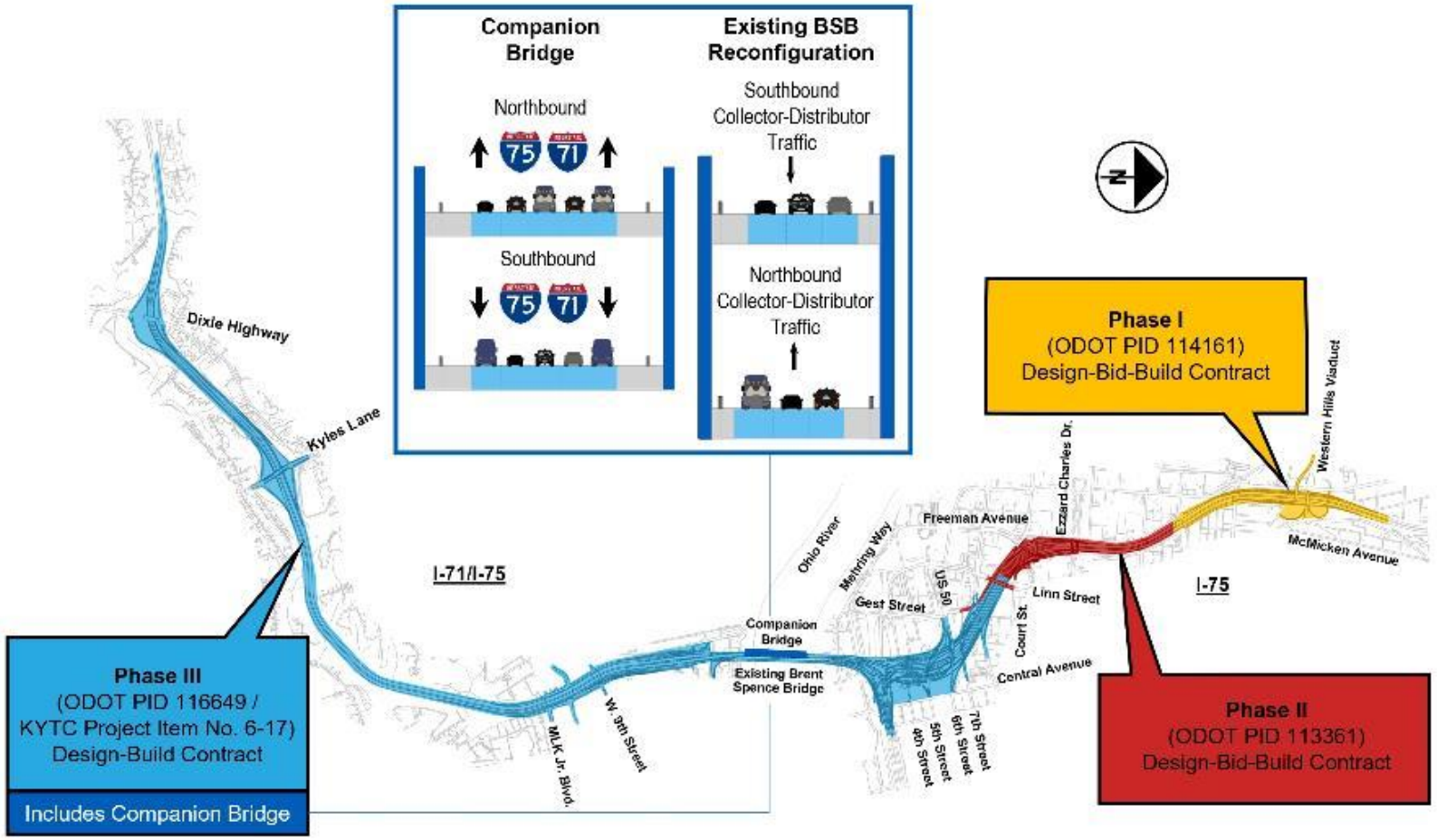
Additional details about the project's purpose and need are provided in the *Purpose and Need Statement (May 2006)* and the 2012 Environmental Assessment (EA) and FONSI[1].

3.1 Logical Termini and Independent Utility

The project's logical termini and the independent utility are unchanged for this reevaluation. The project's logical termini and independent utility were established in the *Purpose and Need Statement (May 2006)*. See the 2024 SEA/FONSI for further information.

[1] The purpose and need statement in the 2024 SEA/FONSI was unchanged from what was presented and approved in the 2012 EA/FONSI.

Figure 1: BSB Corridor Project Phases



4. PROJECT DESIGN MODIFICATIONS AND REFINEMENTS

Following the 2024 SEA/FONSI, which identified Refined Alternative I (Concept I-W) as the selected alternative, the project team has worked collaboratively to evaluate additional opportunities to optimize the Concept I-W, including concepts that improve geometrics, enhance project quality, reduce costs, shorten schedule, support project goals, and encourage local support for refinements. Many of the project changes are driven by the innovations process undertaken through the Phase III progressive design-build (PDB) contract, while others are driven by standard detailed design progression including implementation of commitments[1] from the 2024 SEA/FONSI. These two primary drivers—Build Innovations and advancement of detailed design—and the changes that may warrant re-evaluation under NEPA and that resulted from these efforts are described in **Section 4.1** and **Section 4.2** below.

For purposes of this re-evaluation and the analysis provided herein, the following terms and methods are used to analyze and disclose changes since the 2024 SEA/FONSI:

- The Concept I-W design analyzed in the 2024 SEA/FONSI is referred to as "Concept I-W Base Design" as it serves as the baseline for comparison since the 2024 NEPA decision.
- The term "Re-eval 1 Design" is used to encompass the collective changes resulting from the Phase III PDB Build Innovations and advancement of detailed design that are analyzed in this re-evaluation. However, the Build Innovation number is noted where changes or impacts are directly attributed to an innovation. If a change or impact is attributed to standard design progression, it is noted as driven by detailed design progression. Otherwise, impacts are generally discussed as Re-eval 1 Design.

4.1 Build Innovations

The concept and reference to "innovations" was introduced in the 2024 SEA/FONSI as part of the Phase III PDB procurement process. The 2024 SEA/FONSI stated that, "Innovations that improve project quality, reduce costs, shorten schedule, support the project goals and objectives, and have support at the local level may be incorporated into the project." Public engagement during the 2024 SEA development was intended and used to inform future design refinements as part of the innovations process. During public review of the 2024 SEA, comments were received that guided the project team in the innovations process, including to reconnect communities and improve public safety. This resulted in the commitment[2] for KYTC and ODOT to evaluate the following refinements during the innovations process for the Phase III PDB contract:

1. Elimination of the 3rd Street ramp to the northbound C-D system in Cincinnati and redirect traffic to the proposed connection at the end of the Clay Wade Bailey Bridge;
2. Reconfiguration of the lanes on the Clay Wade Bailey Bridge to add bicycle lanes;

[1] Where 2024 SEA/FONSI commitments are referenced, but not explicitly described in the text, the referenced commitment(s) are specified via footnote.
[2] 2024 SEA/FONSI Commitment 51.

3. Reconfiguration of 6th Street in Cincinnati to accommodate two-way traffic; and
4. Design concepts submitted by the Bridge Forward Coalition.

To continue stakeholder and public collaboration throughout the PDB innovations process, the 2024 SEA/FONSI reflected KYTC's and ODOT's commitment[1] to informing and coordinating with stakeholders and the public on innovations development and decisions. See **Section 6: Public Involvement and Agency Coordination**, for more information on these outreach efforts.

To date, the BSB Corridor Project Design-Build Team has identified and explored a total of 117 potential innovations for Phase III during the innovations process. As a result of these efforts, 26 of the 117 identified innovations have been recommended for incorporation into the project at this time. The formal innovation phase was concluded, but additional innovations and design progression may be developed and incorporated as the phases and final plans progress to implementation and construction.

In addition, the refinements noted in this section above were evaluated; however, refinements 1, 3, and 4 were not recommended based on unacceptable traffic operations and constructability issues. However, as described in **Section 4.1.2**, elements of refinement 4, such as two-way traffic on West 5th Street, are not precluded from future implementation. Bicycle lanes on the Clay Wade Bailey Bridge (refinement 2) are still under review, and a separate re-evaluation will be prepared for those changes, as needed.

The 26 recommended innovations, which are evaluated in this re-evaluation, can be grouped into three major innovations in Kentucky and four major innovations in Ohio, which are described in **Section 4.1.1** and **Section 4.1.2** below. FHWA concurred with advancing the development of these major innovations as part of the Phase III PDB contract on May 28, 2024, and again on May 15, 2025. The future development of other Build Innovations will be submitted for acceptance to FHWA as required.

4.1.1 Kentucky Innovations

Kentucky Innovation 1 (KY 1): Vertical Profile Optimization

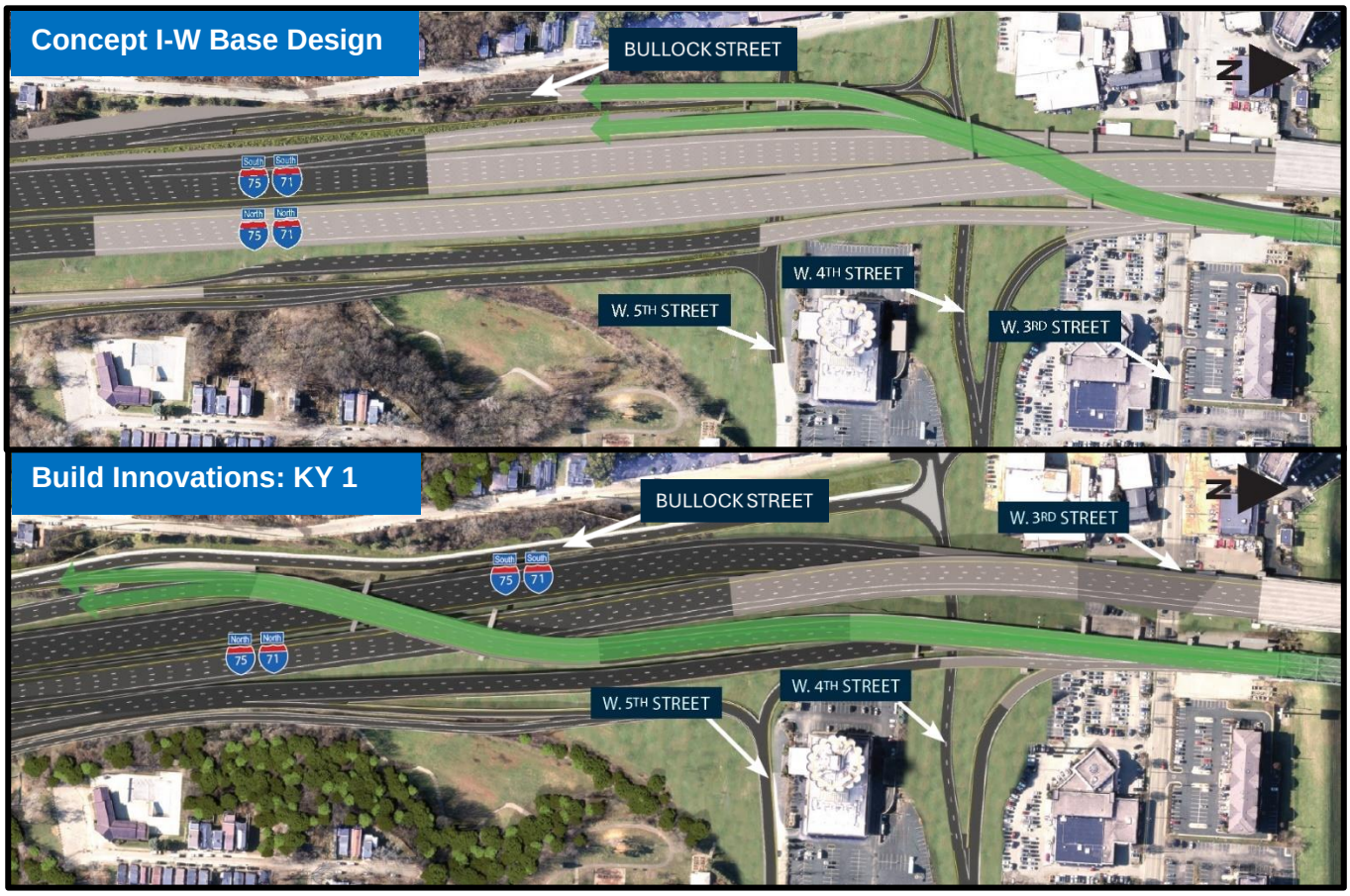
KY 1 optimizes the vertical profile of I-71/I-75. To do this, the southbound (SB) C-D road from the Concept I-W Base Design is reconfigured to move the existing BSB C-D exit further south and braid the C-D road over the mainline lanes. The SB local movement on the C-D road will remain on the east side of northbound (NB) I-75 until south of 5th Street, where it then crosses I-75 to diverge to the SB frontage road and to SB I-75. This movement is shown in **Figure 2**. By shifting where the SB C-D road crosses I-75, the NB I-75 vertical profile is lowered by approximately 20 feet and an interchange level between 4th and 5th streets is eliminated. KY 1 also adjusts West 5th Street to better integrate traffic into Covington by closing West 5th Street between Crescent Avenue and Simon Kenton Way and redistributing traffic to West 3rd Street. Refer to **Appendix A: Exhibit 1** and **Exhibit 2,** for more detailed figures of the Concept I-W Base Design and KY 1 between West Pike Street and West 3rd Street. The closure of the West 5th Street underpass also:

[1] 2024 SEA/FONSI Commitment 1.

- Eliminates a bridge over existing grade separated Bullock Street underpass;
- Improves the grade to an at-grade frontage road and reduces retaining walls on Bullock Street;
- Shortens the mainline overpass structures; and
- Allows for more substantive improvements at the Crescent Avenue and West 3rd Street intersection to accomplish the City of Covington's desire to establish a "gateway" entrance into the riverfront area at Crescent Avenue/West 3rd Street.

To accomplish the desired gateway entrance, the Crescent Avenue/West 3rd Street intersection will be converted to a two-lane, three-legged roundabout (refer to **Appendix A: Exhibit 3** and **Exhibit 4**) rather than the signalized intersection previously proposed.

Figure 2: Concept I-W Base Design and KY 1 – Vertical Profile Optimization

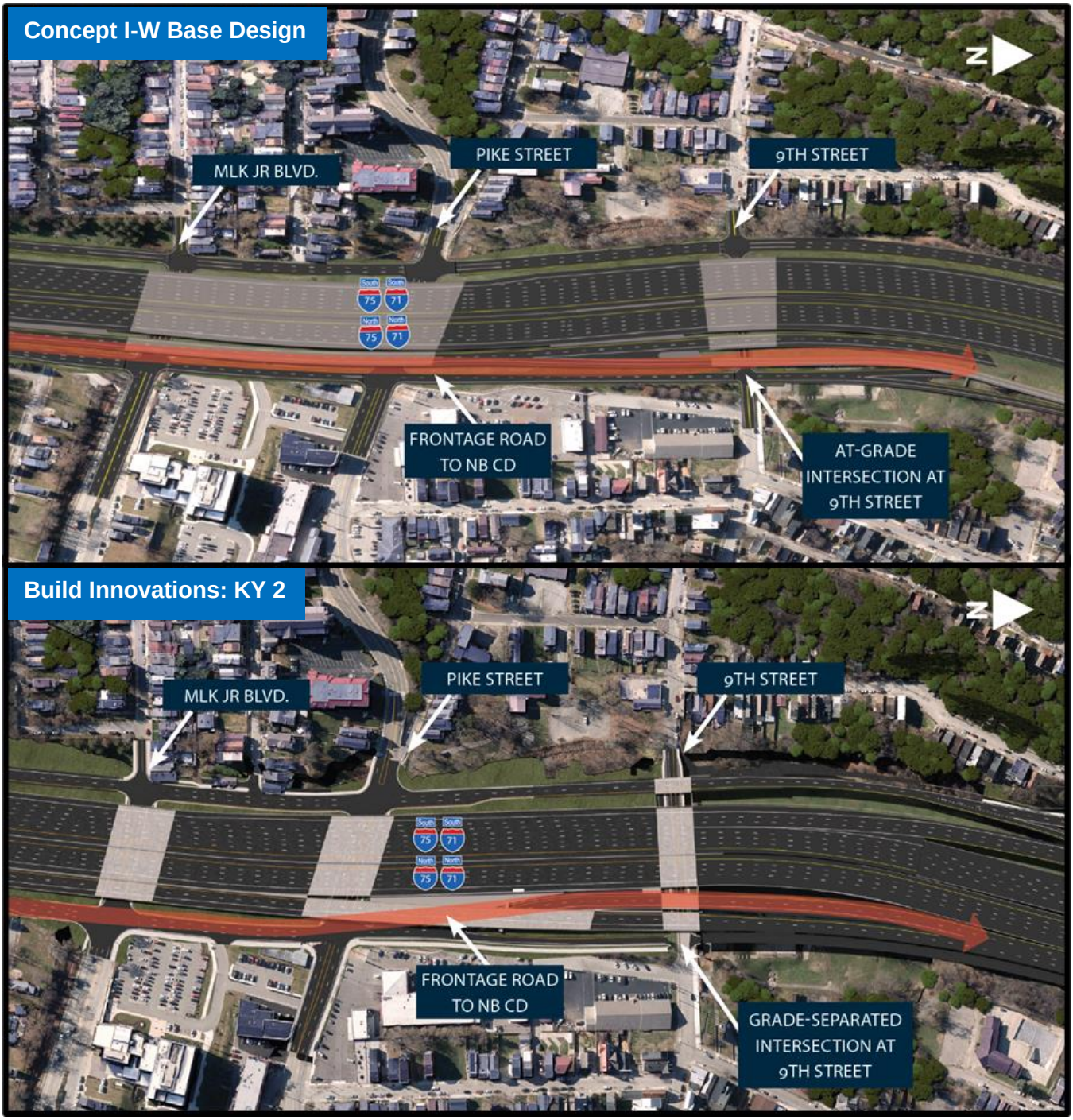


Kentucky Innovation 2 (KY 2): Pike Street Access Optimization

The Concept I-W Base Design includes revising the current access in Covington to provide a new frontage road system, both NB and SB, connecting Martin Luther King (MLK) Jr. Boulevard, Pike Street, 9th Street, 4th Street, and 5th Street (**Figure 3**). With the Concept I-W Base Design, the primary access to and from the interstate was relocated from Pike Street to 9th Street (see more detail in **Appendix A: Exhibit 5**). Based on certified traffic projections, the relocation of interstate access from Pike Street to 9th Street redistributes traffic in Covington and adds a substantial amount of traffic to 9th Street, effectively making it a primary cut-through for traffic entering and existing the freeway.

KY 2 maintains the frontage road concept between MLK Jr. Boulevard and West 4th and 5th streets proposed in the Concept I-W Base Design, but eliminates direct interstate access at West 9th Street (**Figure 3**; for more detail see **Appendix A: Exhibit 6**). Interstate access will occur at Pike Street, where it exists today.

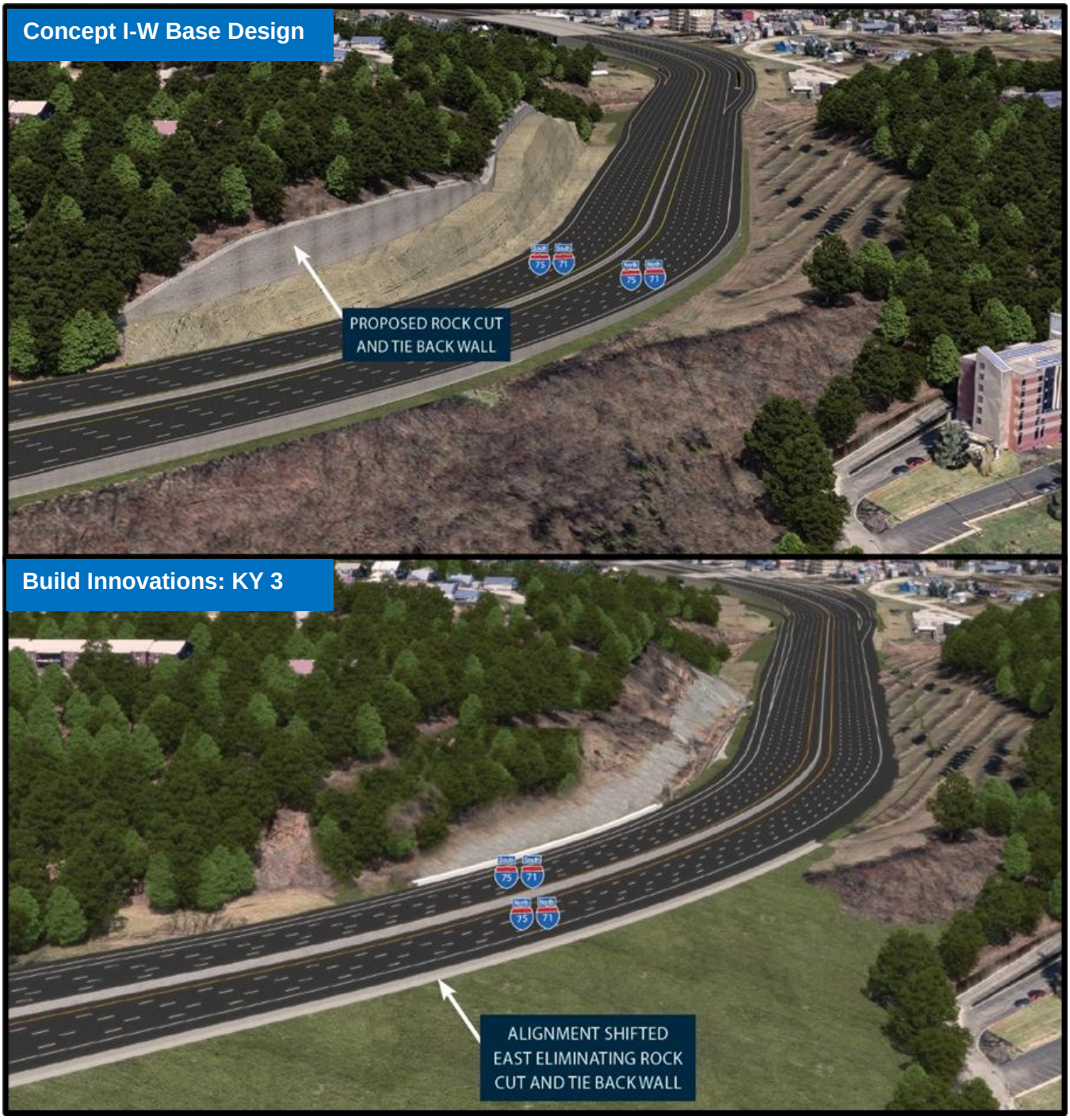
Figure 3: Concept I-W Base Design and KY 2 Comparison – Pike Street Access Optimization



Kentucky Innovation 3 (KY 3): Hillside Cut Alignment Shift

KY 3 shifts the I-71/I-75 centerline east between Kyles Lane and the MLK Jr. Boulevard exit (**Figure 4**). To shift the road east, six mechanically stabilized earth walls (three cut walls on the west; two fill walls and one cut wall on the east) totalling approximately 9,000 square feet will be required, as will 23,000 cubic yards of additional fill on the east side of the highway. However, this innovation eliminates approximately 96,000 cubic yards of rock cut and approximately 62,000 square feet of up to 35-foot-tall tie-back wall required under Concept I-W Base Design. This innovation improves upon the Concept I-W Base Design and meets the primary goals of the project by reducing long term maintenance of the tie-back wall. For a detailed plan view and cross section comparison between the Concept I-W Base Design and KY 3, refer to **Appendix A: Exhibit 7**.

Figure 4: Concept I-W Base Design and KY 3 Comparison – Hillside Cut Alignment Shift



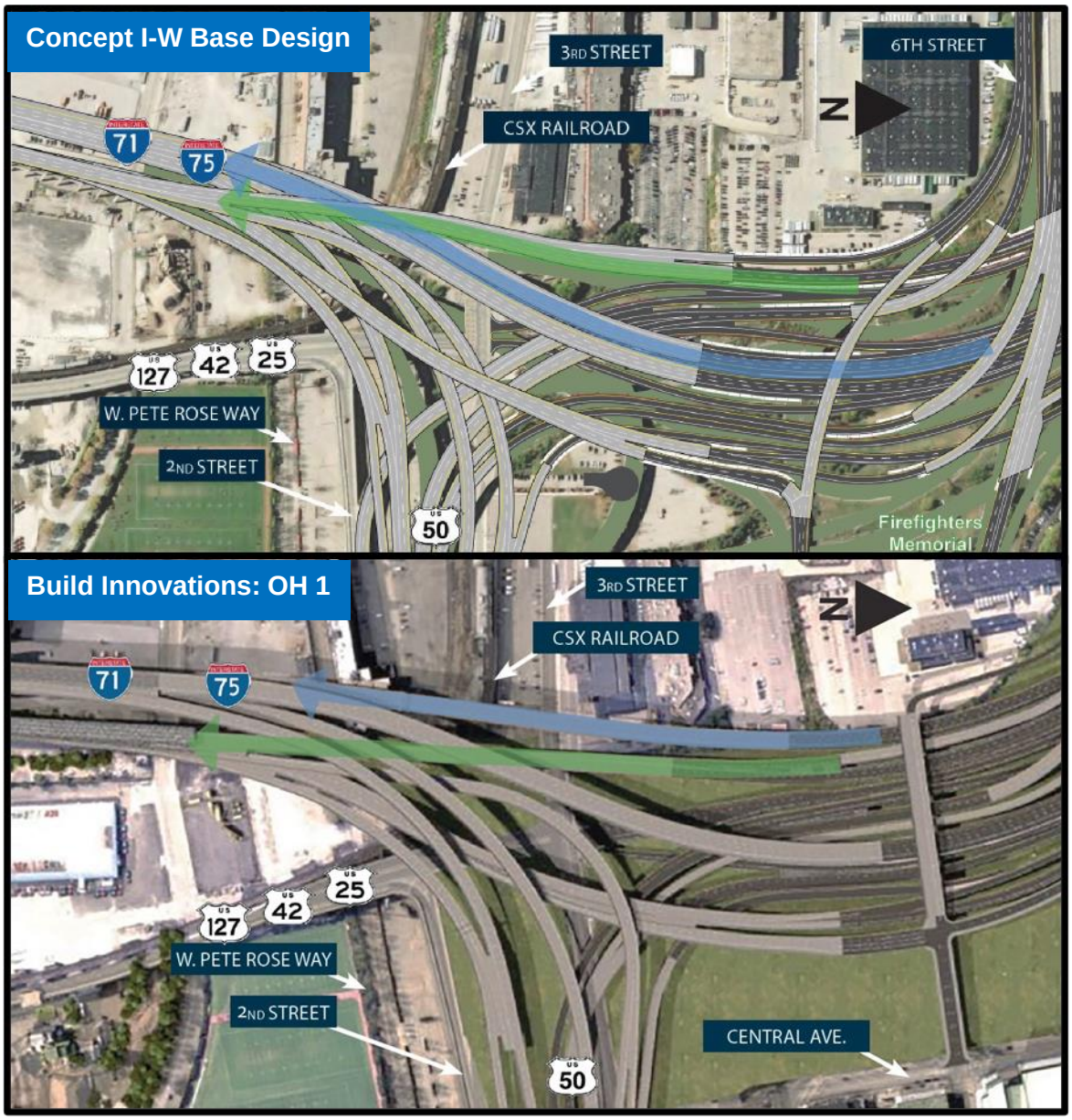
4.1.2 Ohio Innovations

The Ohio innovations work in collaboration to improve constructability and reduce the project footprint. For figures that provide a comprehensive overview of the Concept I-W Base Design and all the Ohio Build Innovations, see **Appendix A: Exhibit 8** and **Exhibit 9**.

Ohio Innovation 1 (OH 1): Southbound Roadway Reconfiguration

OH 1 relocates SB I-71/I-75 to the outside lane (blue lane on **Figure 5**), and the SB C-D system is placed to the inside (green lane on **Figure 5**). This allows for safer construction of the project by constructing SB I-75 offline, simplifies complicated bridge designs, and simplifies maintenance of traffic resulting in overall improved constructability and safety. The SB roadway reconfiguration will eliminate the SB I-75 entrance ramp from Western Avenue. This movement will be rerouted about 0.6 miles to the proposed 9th Street entrance or 1.25 miles to the existing Freeman Avenue interchange.

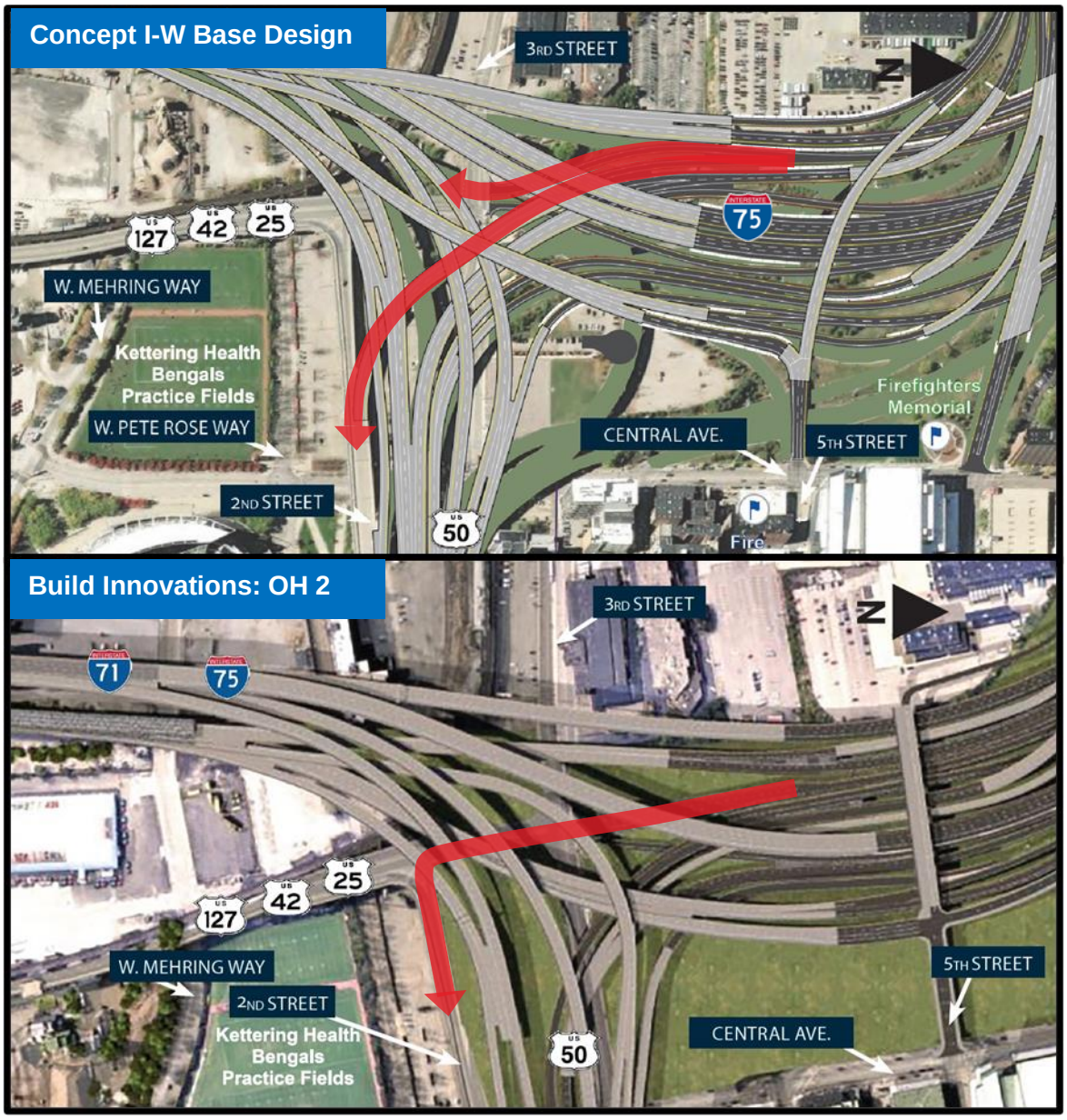
Figure 5: Concept I-W Base Design and OH 1 Comparison – SB Roadway Reconfiguration



Ohio Innovation 2 (OH 2): Combination of 2nd and 3rd Street Connections

OH 2 combines the SB I-75 ramps to 2nd and 3rd streets to reduce vertical design challenges in the interchange, enhances the grid street system, improves safety at the 2nd Street and Elm Street intersection, and reduces impacts to the City of Cincinnati parking lots. Traffic is rerouted through upgraded at-grade intersections at 2nd and 3rd streets, which reduces costs by reducing bridge deck area and improves constructability (**Figure 6**).

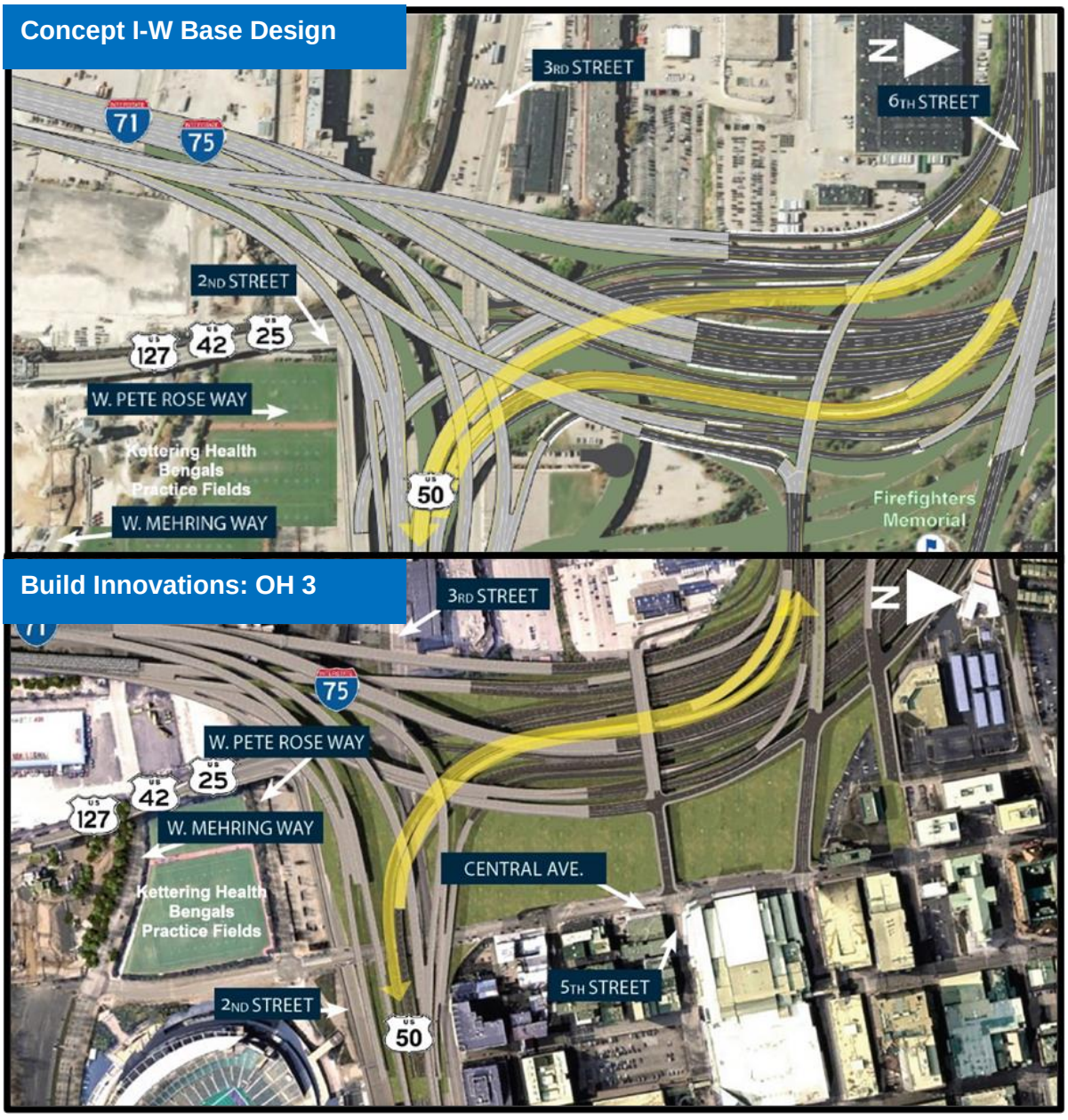
Figure 6: Concept I-W Base Design and OH 2 Comparison – 2nd and 3rd Street Connections



Ohio Innovation 3 (OH 3): US Highway 50 Roadway Consolidation

OH 3 reconfigures the eastbound (EB) and westbound (WB) US-50 movements so that they follow a single alignment (**Figure 7**). The ramp from WB US-50 to Gest Street is removed and traffic is rerouted to the existing Linn Street exit, and the ramp from EB US-50 to 2nd Street is also removed and traffic is rerouted to either the existing Freeman Avenue or 5th Street exits.

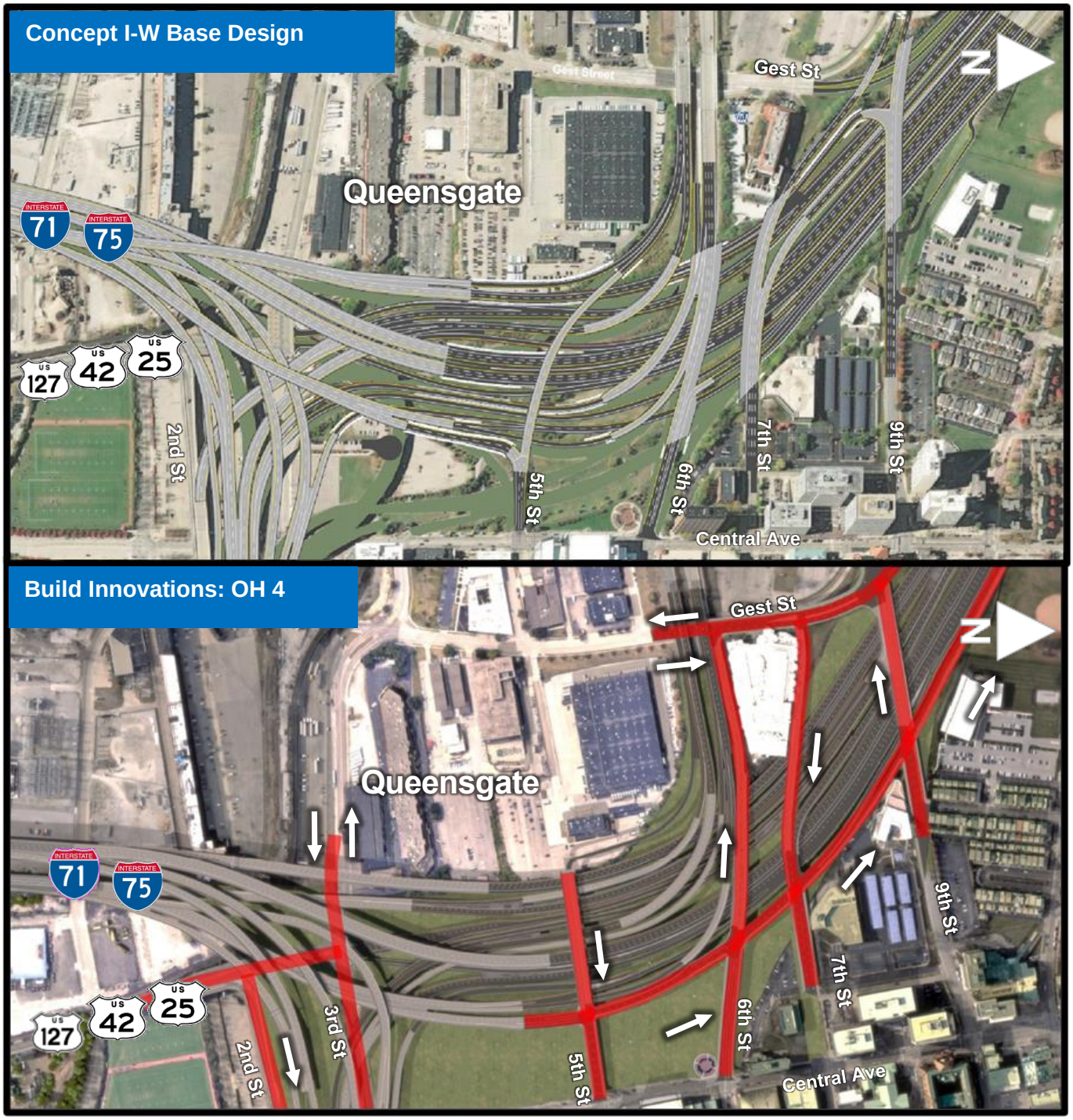
Figure 7: Concept I-W Base Design and OH 3 Comparison – US-50 Roadway Consolidation



Ohio Innovation 4 (OH 4): Realization of Street Grid Concept

In the Concept I-W Base Design, a connection across the interstate to downtown Cincinnati was not included at 5th street, and the connections proposed at 5th, 6th, 7th, and 9th streets did not provide connection to or potential for future connection to Gest Street. OH 4 enhances connectivity for all modes of travel through reconnecting the street grid across 5th, 6th, 7th, and 9th streets, with a connection provided to Gest Street from West 7th and West 9th streets (**Figure 8**). This configuration, combined with OH 3, also allows for a future extension of 5th Street to Gest Street and does not preclude the West 5th Street bridge from accommodating two-way traffic if it functions with future development and is consistent with City of Cincinnati plans. The corridor-wide exhibit in **Appendix A: Exhibit 13** also reflects the improved sidewalk and shared-use path that could be constructed if the West 5th Street to Gest Street connection is realized.

Figure 8: Concept I-W Base Design and OH 4 Comparison –Street Grid Concept



4.2 Detailed Design Progression

This section describes the principal project design modifications resulting from progression of detailed design.

4.2.1 Kyles Lane and Dixie Highway Interchanges

Under the Concept I-W Base Design, the existing Kyles Lane overpass on I-75 was to be reconstructed in a widened configuration to accommodate turn lanes and pedestrian/bicycle facilities with new ramps constructed to tie into the existing alignment for vehicular access on and off the interstate's C-D system. At the Dixie Highway interchange, the Concept I-W Base Design placed the entrance to the NB C-D road south of the interchange, creating a single exit location for traffic heading to both Dixie Highway and Kyles Lane, as well as onto the C-D road. This placed the C-D system under the overpass and adjacent to the main I-75 lanes, which required lengthening the overpass.

Based on detailed design progression, including coordination with the City of Fort Mitchell and the City of Fort Wright, the project will construct sequential roundabouts at either end of the overpass structure at the Kyles Lane and Dixie Highway interchanges (**Figure 9** and **Figure 10**). This improves constructability and maintenance of traffic during construction, while also reducing pedestrian and vehicle conflict points and allowing for further aesthetic enhancements. At the Dixie Highway interchange, the NB entrance to the C-D road is shifted just north of the Dixie Highway overpass, which creates successive exit ramps for Dixie Highway and Kyles Lane. The overpass NB bridge span is reduced by approximately 30 feet, which amounts to a reduction of approximately 2,850 square feet of bridge. Additionally, the design reduces an estimated 37,500 square feet of pavement area.

Appendix A: Exhibits 10 and **11** illustrate Concept I-W Base Design, comparing it to the detailed design progression at the Kyles Lane and Dixie Highway interchanges.

Figure 9: Kyles Lane Interchange (Fort Wright)

Figure 10: Dixie Highway Interchange (Fort Mitchell)

4.2.2 Bridge Construction and Access

Since the development of the Concept I-W Base Design, advancement of detailed design revealed that building the companion bridge exclusively with barges is impractical due to the vertical clearance limitations of the Ohio River and the fluctuating river levels. Since the companion bridge will be constructed independent of the approach structures on both the Ohio and Kentucky sides of the Ohio River, separate construction access routes are also required to work within the constraints of the Covington Levee System, including its pump

station, the existing BSB, and the Riverfront Commons Trail. See **Appendix A: Exhibit 12,** for the temporary works plan.

The temporary works required to construct the new companion bridge include the following:

- Falsework to temporarily support the companion bridge structure will be constructed on the Ohio and Kentucky sides of the river. The falsework will consist of 12 60-inch diameter steel pipe columns supported by 15-foot by 15-foot concrete foundations on four 70-foot 36-inch diameter driven steel pipe columns;
- To provide access over the levee during construction, a temporary trestle will be constructed on top of the temporary falsework. The trestle will be located between the companion bridge and the existing BSB. The trestle will be built on 30 48-inch diameter steel pipe piles;
- Equipment, material, and labor will access the trestle via a ramp constructed at a 10:1 slope installed from the east side of Pier 1 to the south end of the trestle. The trestle ramp will be built on eight 48-inch steel pipe piles;
- A cofferdam will be constructed to support construction of the Pier 2 foundation in Kentucky and a temporary bulkhead will be constructed to access the work area from land. The bulkhead will consist of steel sheet pilings driven into the ground and backfilled with aggregate material. This is needed because the water depth at Pier 2 is not adequate to allow barge-mounted equipment access;
- A temporary bulkhead will be constructed in the Ohio River at Pete Rose Pier Drive immediately upstream of the Clay Wade Bailey Bridge. The bulkhead will consist of a temporary three-sided sheet pile wall system filled with aggregate and an aggregate ramp used for loading and unloading equipment and material to and from barges. The bulkhead will be 100 feet wide and will extend into the Ohio River approximately 120 feet from the ordinary high-water mark (OHWM) of the Kentucky riverbank; and
- To access the construction site, a section of the Riverfront Commons Trail will be temporarily used as a construction access road. Fill material will be used to widen the area at the toe of the Covington Levee System for vehicle and equipment construction access and to facilitate materials storage and staging in designated areas.

4.2.3 Kentucky Drainage and Flood Storage

As part of detailed design progression, KYTC advanced design solutions to comply with 2024 SEA/FONSI Commitment 34. This commitment required separating the interstate runoff from the project corridor and the existing combined sewer system, which would help address existing flooding issues. The commitment also required addressing surcharging in the Peaselburg Neighborhood based on local design criteria for a 25-year storm. The Concept I-W Base Design proposed mitigating the potential loss of flood storage volume in the Goebel Park Complex, which is part of a U.S. Army Corps of Engineers (USACE) Public Works Project for flood protection within the City of Covington (commonly referred to as the Willow Run Flood Protection System). This proposed mitigation would be facilitated by upgrading the Willow Run flood pump station. In

addition, flooding in Peaselburg would have been addressed by increasing the size of the Willow Run trunkline from MLK Jr. Boulevard to 9th Street in the Concept I-W Base Design.

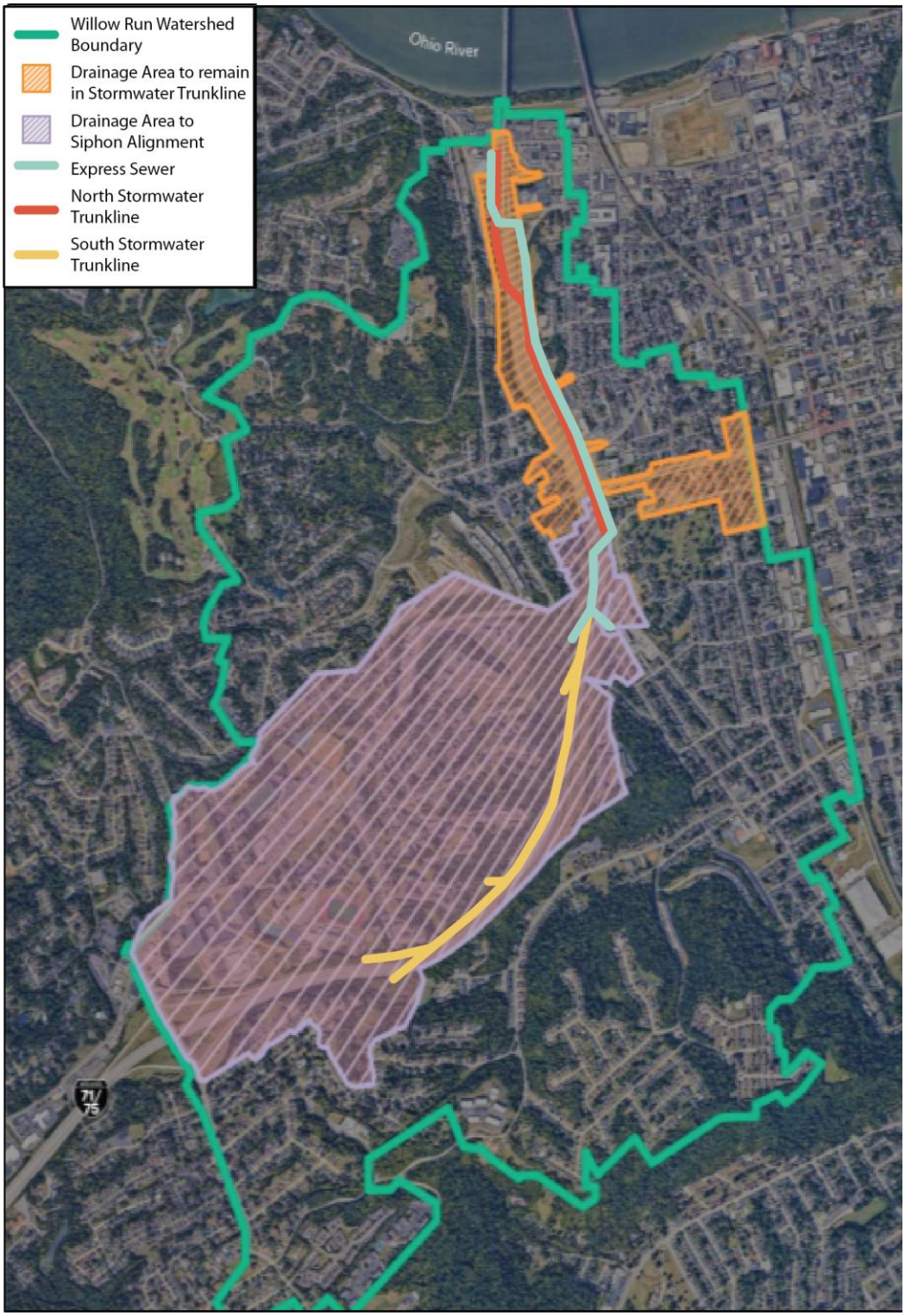
Based on detailed design progression, the project will now rehabilitate the existing Willow Run diversion sewer and trunkline and will separate a portion of the drainage area and construct a new Express Sewer. The sewer will bypass the existing pump station and drain stormwater directly to the Ohio River. The express storm sewer system consists of an Express Sewer/Siphon, two stormwater trunklines (North and South), a junction chamber, and a siphon outlet chamber. This approach also eliminates the need to enlarge the storm sewer trunkline from MLK Jr. Boulevard to 9th Street. **Figure 11** provides an overview of the system and **Appendix L** includes the preliminary plans of the Express Sewer.

The proposed Express Sewer will capture the area labeled as “Drainage Area to Siphon Alignment” in **Figure 11** by the purple hatch pattern, and includes the existing KYTC 1, 2 and 3 basins, the St. Elizabeth Basin and the KYTC Retrofit Basin. KYTC 1, 2, and 3 basins will also be modified to maximize storage volume. These basins will maintain their existing bottom elevations, but the side slopes of each basin will be modified to have 3:1 slopes. The basins will receive new outlet structures that maximize storage and meet the required discharge flow rates. The Express Sewer conveys the stormwater to a junction chamber located just north of West 3rd Street. During normal operations, the Express Sewer will convey all flow by gravity to the existing 144-inch-diameter Willow Run outfall sewer through the junction chamber. During flood pumping operations, a gate will close in the junction chamber to direct the flow from the Express Sewer to the siphon that will convey the flow over the levee to relieve the Willow Run flood pump station. The separated drainage areas and overview of the piping are also shown in **Figure 11.**

In addition, as a result of detailed design progression, drainage improvements south of I-75 and west of Emery Drive in Covington will be required to separate the stormwater from the sanitary sewer and to address flooding in Peaselburg. This includes retrofitting an existing outlet structure and connecting it into a separate drainage system and constructing a new retention pond. The new stormwater detention pond will be just south of Ivy Knoll Senior Living Facility along Highland Avenue and will connect to the combined sewer system. For preliminary plans of this new basin, refer to **Appendix L**.

The proposed Express Sewer system is designed to convey a 10-year, 24-hour design storm through the express siphon during flood pumping operations and convey a 100-year storm to the Ohio River during normal operations. As a result, compared to the Willow Run flood pump station, the Express Sewer provides an equivalent level of service under gravity flow when the Ohio River is at 468 feet, with the maximum water level in the Goebel Park Complex remaining below 480 feet. During flood event pumping operations, when the express siphon is in operation, the elevation in the Goebel Park Complex for the 10-year 24-hour design storm will reach 483.24 feet versus the existing conditions design storm elevation of 482.69 feet. Existing surface flooding starts to occur at elevation 482.66 feet and flooding of properties will occur at elevation 484.00 feet.

Figure 11: Kentucky Stormwater System Overview



4.3 Traffic

In September 2024, the project team developed design-level certified traffic projections for Re-eval 1 Design[1], covering the years 2029 and 2049. These projections reflect the anticipated opening day and design year (opening day plus 20 years) for the entire BSB Corridor Project (**Appendix B**). The 2029 and 2049[2] certified traffic projections were used to conduct a safety evaluation and operational analysis. The findings were used to vet and confirm the operations of the Build Innovations. An *Interchange Modification Study (IMS) Addendum* for the project will be completed and approved before physical construction begins.

Table 1, **Table 2**, and **Table 3** provide an operational comparison between the Concept I-W Base Design and the Re-eval 1 Design. Consistent with the Concept I-W Base Design, the Re-eval 1 Design removes the existing BSB capacity constraint, which leads to free-flow traffic conditions on the freeway mainline throughout the project area, a substantial operational improvement compared to the No-Build scenario. Additionally, the Re-eval 1 Design results in acceptable traffic operations for the C-D roadway, ramp terminal intersections, and adjacent arterial streets. Overall, the Re-eval 1 Design maintains acceptable operations for the peak hours.

Table 1: Freeway Segments by Level of Service (LOS) Grade

Peak Period	LOS	2049 Concept I-W Base Design	2049 Re-eval 1 Design
AM	C or better	62	50
	D	27	31
	E[1]	1	6
	F[2]	1	0
PM	C or better	57	50
	D	25	24
	E	6	11
	F	3	2

[1] In Table 2, LOS E is highlighted with an orange fill.
[2] In Table 2, LOS F is highlighted with a red fill.

[1] Building upon the approved IMS with the preferred Refined Alternative I (Concept I-W Base Design), the BSB Corridor Project design-build team has recommended design innovations. These enhancements to the approved IMS design are referred to as Build Innovations in the 2024 certified traffic report (**Appendix B**) and as Re-eval 1 Design in this document.
[2] The 2049 certified traffic projections were informed by the Ohio-Kentucky-Indiana travel demand model.

Table 2: Intersection LOS – Kentucky

Intersection	Concept I-W Base Design	Re-eval 1 Design	Concept I-W Base Design	Re-eval 1 Design
	AM Period		PM Period	
NB I-71/I-75 & Dixie Hwy.	C	A	A	A
NB I-71/I-75 & Kyles Lane	C	A	B	A
SB I-71/I-75 & Dixie Hwy.	C	D	C	A
SB I-71/I-75 & Kyles Lane	B	B	C	B
Dixie Hwy & Kyles Lane	C	B	C	B
Main St. & Pike St.	C	C	B	B
5th St. & Main St.	C	C	B	C
4th St. & Main St.	B	B	B	B
Simon Kenton & 12th St.	C	B	C	C
Philadelphia St. & 9th St.	F	A	A	A
Simon Kenton Way & Pike St.	D	B	C	D
Simon Kenton Way & 9th St.	D	C	B	C
Philadelphia St. & 5th St.	D	C	C	C
Philadelphia St. & 4th St.	C	D	C	C
Bullock St. & 12th St.	D	C	E	C
Bullock St. & Pike St.	E	C	B	D
Bullock St. & 9th St.	A	N/A	A	N/A
Crescent Ave. & 5th St.	A	N/A	A	N/A
Crescent Ave. & 4th St.	A	A	A	A
Johnson St. & 5th St.[1]	-	C	-	B
Johnson St. & 4th St.[1]	-	B	-	B
Johnson St. & 3rd St.[1]	-	B	-	C
Philadelphia St. & 3rd St.[1]	-	C	-	C
Crescent Ave. & 3rd St.[1]	-	B	-	A

[1] Intersection analyzed only for Re-eval 1 Design.

Table 3: Intersection LOS - Ohio

Intersection	Concept I-W Base Design	Re-eval 1 Design	Concept I-W Base Design	Re-eval 1 Design
	AM Period		PM Period	
Central Ave. & 3rd St.	D	D	D	D
Central Ave. & 4th St.	B	A	B	B
Central Ave. & 5th St.	C	C	B	C
Central Ave. & 6th St.	A	B	C	D
Central Ave. & 7th St.	B	B	B	B
Central Ave. & 9th St.	B	B	C	B
Mound St. & 9th St.	A	A	A	A
US-42 & 3rd St.	C	D	C	D
Gest St. & 6th St.	A	C	A	A
NB I-75 & 5th St.	B	C	B	B
NB Arterial & 6th St.	N/A	A	N/A	B
NB Arterial & 7th St.	N/A	D	N/A	A
NB Arterial & 9th St.	N/A	A	N/A	A
Gest St. & 8th St.	N/A	C	N/A	C
Elm St. & 2nd St.	B	B	B	C
Race St. & 3rd St.	B	B	C	C
Elm St. & 3rd St.	B	B	B	B
Elm St. & 4th St.	B	B	B	B
Plum St. & 3rd St.	A	A	B	A
Plum St. & 4th St.	A	B	A	B
Linn St. & 6th St.	B	B	B	B
Linn St. & 8th St.	B	C	B	C
Linn St. & Court St.	A	A	A	C
Linn St. & Ezzard Charles Dr.	C	C	C	C
Winchell Ave. & Ezzard Charles Dr.	B	B	B	B
Freeman Ave. & Gest St.	C	B	B	B
Western Ave. & Gest St.	A	B	A	B
Western Ave. & Ezzard Charles Dr.	A	A	A	A

Intersection	Concept I-W Base Design	Re-eval 1 Design	Concept I-W Base Design	Re-eval 1 Design
	AM Period		PM Period	
Winchell Ave. & Liberty St.	A	A	B	A
Winchell Ave. & Findlay St.	B	C	B	C
Western Ave. & Liberty St.	B	B	B	B
Western Ave. & Findlay St.	B	B	B	B
Dalton Ave. & Findlay St.	B	B	C	C
Linn St. & Bank St.	A	A	A	A
Linn St. & Central Pkwy.	C	B	C	B
Brighton Pl. & Central Ave.	A	A	A	A
Brighton Pl. & Central Pkwy.	D	C	C	C
McMillian Ave. & Central Pkwy.	D	C	C	C
Colerain Ave. & Harrison St.	A	A	A	A
Patterson St. & Harrison St.	A	A	A	A
Winchell Ave. & Bank St.	C	C	C	D
Winchell Ave. & Harrison St.	A	A	A	A
NB I-75 & Western Hills Viaduct (WHV)	B	B	B	B
Spring Grove Ave. & Bank St.	A	A	A	B
Spring Grove Ave. & Harrison St.	B	B	B	B
SB I-75 & WHV	B	A	B	B
WHV Ramp & Harrison St.	A	A	A	A

5. ENVIRONMENTAL RESOURCES, IMPACTS, AND MITIGATION AND ENHANCEMENT MEASURES

Section 5 assesses changes to the affected environment, impacts, and mitigation and enhancement measures since the 2024 SEA/FONSI. **Appendix A: Exhibit 13** includes a detailed map depicting environmental resources and impacts anticipated with the Re-eval 1 Design for the topics described throughout this section.

Based on the evaluation of the Re-eval 1 Design, there are no changes to the impacts, analyses, findings, or coordination disclosed in the 2024 SEA/FONSI for the following environmental resource topics. Therefore, the 2024 SEA/FONSI remains valid, and it is not necessary to prepare any additional analysis with respect to these environmental resource areas. As such, these topics are not discussed further in this document:

- State listed species;
- Drinking water;
- Farmland;
- Geological;
- Carbon monoxide;
- Ozone;
- Particulate matter; and
- Air quality during construction.

On January 20, 2025, President Trump signed Executive Order (E.O.) 14148 --Initial Rescissions of Harmful Executive Orders and Actions and E.O. 14154 – Unleashing American Energy. The E.O.s revoked E.O. 14096 – Revitalizing Our Nation's Commitment to Environmental Justice for All (April 21, 2023). Subsequently on January 21, 2025, President Trump signed E.O. 14173 – Ending Illegal Discrimination and Restoring Merit-Based Opportunity. This E.O. revoked E.O. 12898 – Federal Actions to Address Environmental Justice in Minority Populations and Low-Income Populations (February 11, 1994). On February 25, 2025, the Council on Environmental Quality (CEQ) published an Interim Final Rule removing the CEQ's National Environmental Policy Act (NEPA) implementing regulations, effective April 11, 2025 (90 Fed. Reg. 10610). As a result of these actions, all federal environmental justice requirements are revoked and no longer apply to the federal environmental review process. FHWA, Federal Transit Administration (FTA), and Federal Rail Administration's (FRA) Joint NEPA regulations (23 CFR 771) and the agencies Interim Final Guidance on "Section 139 Environmental Review Process: Efficient Environmental Reviews for Project Decisionmaking and One Federal Decision" (12/17/2024) do not require an environmental justice analysis. Accordingly, no analysis of environmental justice is included in this re-evaluation. Any purported environmental justice impacts were not considered in the re-evaluation. Further, this re-evaluation does not consider public comments regarding environmental justice. Social, economic, and community impacts will continue to be disclosed where applicable in accordance with 23 CFR 771.

In addition, the E.O.s revoked E.O. 13990 – Protecting Public Health and the Environment and Restoring Science to Tackle the Climate Crisis (January 20, 2021) and E.O. 14008 – Tackling the Climate Crisis at Home and Abroad (January 27, 2021). Subsequently on January 29, 2025, Secretary Duffy signed a Memorandum for Secretarial Offices and Heads of Operating Administrations – Implementation of Executive Orders Addressing Energy, Climate Change, Diversity, and Gender. On February 25, 2025, the Council on Environmental Quality (CEQ) published an Interim Final Rule removing the CEQ's National Environmental Policy Act (NEPA) implementing regulations, effective April 11, 2025 (90 Fed. Reg. 10610). Moreover, on May 28, 2025, CEQ withdrew its "Interim Guidance" titled "National Environmental Policy Act Guidance on Consideration of Greenhouse Gas Emissions and Climate Change." As a result of these actions, FHWA will not include greenhouse gas emissions and climate change analyses in the federal environmental review process. Any purported greenhouse gas emissions and climate change impacts were not considered in this re-evaluation. Accordingly, no greenhouse gas emissions or climate change analyses are included in this re-evaluation. Further, this re-evaluation does not consider public comments regarding greenhouse gas emissions or climate change. Air quality impacts will continue to be disclosed where applicable in accordance with 23 CFR 771.

5.1 Social and Economic Resources

This section addresses changes related to the social and economic environment since the 2024 SEA/FONSI. Based on the analyses provided in the following sections, the 2024 SEA/FONSI remains valid and no further analysis with respect to social and economic resources is required.

5.1.1 Land Use

Land use in the project area has not changed since the 2024 SEA/FONSI and remains a mixture of urban and suburban. The primary uses are commercial, industrial, residential, institutional, and existing roadway rights of way (ROW). As summarized in **Table 4**, the Concept I-W Base Design would have converted 51.33 acres of land to transportation ROW while the Re-eval 1 Design converts 53.45 acres—an increase of 2.12 acres. These changes are described by state in the following sections. Acquisition of property for ROW will continue to be in accordance with the Uniform Relocation Assistance and Real Property Acquisition Policies Act of 1970 (Uniform Act).

Kentucky

While land use has not changed in Kentucky, minor modifications to the existing ROW boundaries have occurred since the 2024 SEA/FONSI and are reflected on **Appendix A: Exhibit 13.** These changes are the result of more detailed title research, which has improved understanding of existing ROW, and Re-eval 1 Design, which expanded the construction limits and increased the use of previously acquired ROW, particularly in areas such as stormwater basins. In Kentucky, while new permanent ROW acquisition is required in select locations, the total permanent ROW acquisition for the Kentucky portion of the project is reduced by 0.55 acres compared to Concept I-W Base Design (**Table 4**).

The new permanent ROW acquisition primarily consists of commercial properties at the West 3rd Street and Crescent Avenue intersection. The land will be converted to transportation ROW to accommodate a new roundabout that will provide a gateway entrance to the riverfront (KY 1; **Appendix A: Exhibit 4**). In addition, the Re-eval 1 Design includes a reduction of 0.59 acres of permanent easement and an increase of 28.40 acres[1] of temporary easement in Kentucky compared to the Concept I-W Base Design, of which 22.88 acres is located along and within the Ohio River. The increase in temporary easements is primarily attributed to construction staging needs identified during detailed design for bridge construction.

Ohio

In Ohio, based on detailed design progression, additional permanent ROW acquisition is required to support the bridge footings for the new companion bridge and a high mast tower. However, the Build Innovations in Ohio, particularly OH 4, consolidate EB and WB US-50, which minimizes the footprint of the interstate system by approximately 1.3 acres compared to the Concept I-W Base Design. This increases the total developable land from approximately 10 acres to 11 acres between West 4th Street and West 6th Street in Cincinnati. The future land use of this developable land will be determined by the City of Cincinnati.

An additional 0.37 acres of permanent easement is also required compared to the Concept I-W Base Design. This increase is for a subterranean easement required underneath the WXIX TV parking lot for retaining wall tie-backs identified as part of detailed design.

Table 4: Land Use Impacts Comparison

State	Concept I-W Base Design			Re-eval 1 Design		
	Permanent Right-of-way	Permanent Easement	Temporary Easement	Permanent Right-of-way	Permanent Easement	Temporary Easement
Kentucky	13.62 acres[1, 2]	1.33 acres	2.65 acres	13.07 acres[2]	0.74 acres	31.05 acres[3]
Ohio	37.71 acres[4]	0.32 acres	28.17 acres[5]	40.38 acres[6]	0.69 acres	28.17 acres[5]
Total	**51.33 acres**	**1.65 acres**	**30.82 acres**	**53.45 acres**	**1.43 acres**	**59.22 acres**

[1] This total includes 0.15 acres of permanent ROW required for Concept I-W Base Design that was not accounted for in the 13.47 acres disclosed in the 2024 SEA/FONSI.
[2] Total accounts for the transfer of replacement land for the Goebel Park Complex as detailed in Section 5.11.2 and Section 5.12.4.
[3] This total includes areas beneath the Ohio River, Clay Wade Bailey Bridge, and the ABM Parking Waterfront Lot.
[4] Total does not reflect the approximately 10 acres of land to be returned to the City of Cincinnati for potential redevelopment and/or public use under Concept I-W Base Design.
[5] 13.17 acres of aerial rights only.
[6] Total does not reflect the approximately 11 acres of land to be returned to the City of Cincinnati for potential redevelopment and/or public use under Re-eval 1 Design.

[1] This total includes areas beneath the Ohio River, Clay Wade Bailey Bridge, and the ABM Parking Waterfront Lot.

5.1.2 Neighborhood and Community Cohesion

As discussed in the 2024 SEA/FONSI, community cohesion was improved by aesthetic enhancements, multimodal facilities, noise reduction measures, and drainage improvements. This finding remains unchanged. The Re-eval 1 Design provides the following Build Innovations and detailed design refinements that will also enhance neighborhood and community cohesion:

- **Kentucky**
    - KY 1: Lowering the interstate vertical profile adjacent to the Goebel Park Complex and adjustments to West 5th Street create an enhanced gateway opportunity to the Covington riverfront and better multi-modal integration into Covington and proposed downtown developments, which may improve neighborhood and community cohesion. The re-route affects travel between the Mainstrasse and Botany Hills neighborhoods. The highway underpass on West 5th Street is the sole connection between the two neighborhoods. The re-route requires vehicular modes of travel to use the 0.5-mile re-route through the Central Business District. This change also eliminates the previously proposed shared-use path underneath the West 5th Street overpass. However, pedestrian and bicycle access will still be accommodated by constructing a shared-use path beneath the West 4th Street overpass. This results in a minor re-route of approximately 0.1 miles through the Central Business District but will improve multi-modal connectivity for both bicyclists and pedestrians. Overall, based on the improved traffic facilities for all modes of travel and the negligible additional distance introduced by the re-routes for mode types, the impact on neighborhood cohesion is expected to be minor;
    - KY 2: Eliminating direct interstate access on West 9th Street proposed with Concept I-W Base Design preserves the residential character of that roadway, which is currently a two-lane residential street with parking, and better maintains neighborhood cohesion; and
    - Detailed design progression: Improving neighborhood connectivity across the interstate at the Kyles Lane and Dixie Highway interchanges by incorporating successive roundabouts reduces conflict points between pedestrians and vehicles, shortens pedestrian crossing distances, and provides additional aesthetic enhancements.
- **Ohio**
    - OH 4: Reconnecting the street grid across 5th, 6th, 7th, and 9th streets will enhance connections between Queensgate and the Central Business District for all modes of travel—supporting improved community cohesion through restoration of multimodal east-west connectivity.

5.1.3 Community Facilities

The community facilities identified within the project area in the 2024 SEA/FONSI remain unchanged.

Table 5 presents a comparison of impacts to community facilities. When compared to the Concept I-W Base Design, the Re-eval 1 Design impacts generally remain the same with a few exceptions. The Re-eval 1 Design reduces impacts to the Notre Dame Academy and the Goebel Park Complex by a total of approximately 0.76

acres of permanent ROW, 0.6 acres of permanent easements, and 0.03 acres of temporary easements. However, temporary easements are increased at the Riverfront Commons Trail by approximately 0.8 acres to accommodate construction of the new bridge. Proposed ROW and easements acquired from community facilities for the Re-eval 1 Design are shown in **Appendix A: Exhibit 13**.

Table 5: Community Facilities Impact Comparison

Impacted Facility (State)	Concept I-W Base Design Impacts	Re-eval 1 Design Impacts
Notre Dame Academy (KY) – 44.6 acres	• 0.30-acre permanent (strip) ROW from an undeveloped portion of the property adjacent to southbound I-71/I-75 • 0.60-acre permanent easement from undeveloped portions of the property. The easement crosses an existing parking lot, but the lot will not be disturbed. • No impacts to school facilities or operations	• 0.20-acre permanent (strip) ROW from an undeveloped portion of the property adjacent to southbound I-71/I-75 • No permanent easement • No impacts to school facilities or operations
Beechwood Elementary and High School (KY) – 15.1 acres	• 0.07-acre permanent (strip) ROW from an undeveloped portion of the property adjacent to the northbound Dixie Highway exit ramp • No impacts to school facilities or operations	• No changes from Concept I-W Base Design
Central Church of the Nazarene (KY) – 3.9 acres	• 0.28-acre permanent (strip) ROW along curb line of parking lot • 0.10-acre temporary easement for the removal of a church sign • No impacts to church function or operation	• No changes from Concept I-W Base Design
St. Elizabeth Covington Hospital (KY) – 11.8 acres	• No ROW • 2.1 acres temporary easement for restoration of existing stormwater retention basin • No impacts to hospital operations	• No changes from Concept I-W Base Design

Impacted Facility (State)	Concept I-W Base Design Impacts	Re-eval 1 Design Impacts
Goebel Park Complex (including Goebel Park, Kenney Shields Park, and SFC Jason Bishop Memorial Dog Park) (KY) – 14.67 acres	• 2.84 acres permanent ROW; 0.07-acre temporary easement; loss of 360 feet of walking trail, two basketball courts and associated resources, and proximity impacts to outdoor pool • Impacts mitigated through replacement land; reconstruction of the walking trail within the complex; and funding for a new Goebel Park Complex Master Plan, replacement and enhancement of the basketball courts or other outdoor recreation facilities within the park, and relocated outdoor pool and associated facilities or other comparable aquatic facility serving the same purpose within the park	• 2.18 acres permanent ROW; 0.04-acre temporary easement; loss of 360 feet of walking trail, two basketball courts and associated resources, and proximity impacts to outdoor pool • Mitigation commitments[1] remain the same as the Concept I-W Base Design
Riverfront Commons Trail (KY) – 1.25 miles	• 1.3 acres permanent ROW to construct the new companion bridge over the Trail • Easement granted to City of Covington for continued Trail operation and maintenance • Trail operations maintained and protective measures installed to provide safe passage for Trail users during construction	• 1.6-acre permanent ROW granting of easement for continued Trail operation and maintenance • 0.8-acre temporary easement[2] • Trail operations will still be maintained, but a temporary closure and detour will be required during construction to ensure safe passage for Trail users
Firefighters Memorial (OH) – approximately 0.9 acre	• Temporary closure of adjacent sidewalk and plaza areas along 6th St. during construction with measures to minimize harm during construction activities[3] • No permanent restriction of access or incorporation of land	• No changes from Concept I-W Base Design

[1] 2024 SEA/FONSI Commitment 36.
[2] This total only includes the portion of the temporary easement on the City of Covington property that contains the Trail. The total excludes areas beneath the Clay Wade Bailey Bridge and the ABM Parking Waterfront Lot, where the Trail falls within a transportation ROW or existing transportation use.
[3] See Section 5.12 for additional details about impacts, mitigation measures, and measures to minimize harm for public recreational properties.

Impacted Facility (State)	Concept I-W Base Design Impacts	Re-eval 1 Design Impacts
Queensgate Playground and Ball Field (OH) – 5.29 acres	• 0.72-acre permanent ROW and easement across existing (2012) outfield area • Impacts to outfield area mitigated in 2014 by reconfiguring two existing ball fields into one all-star ball field and building a new playground and picnic area • Trees and shrubs removed along the park's southern edge due to highway, retaining wall, and noise barrier construction	• No changes from Concept I-W Base Design
Ezzard Charles Park (OH) – approximately 6.5 acres	• Reconstruction/relocation of existing sidewalk. Temporary sidewalk closures during construction with measures to minimize harm during construction activities • No permanent restriction of access or incorporation of land	• No changes from Concept I-W Base Design

5.1.4 Travel Patterns and Access

This section discusses changes related to vehicular, pedestrian and bicycle, and transit travel patterns and access since the 2024 SEA/FONSI.

Vehicular

A *Certified Traffic Report (September 2024)* was completed for the Re-eval 1 Design (**Appendix B**). Based on this analysis, the following changes to vehicular access and travel patterns result from the Build Innovations:

- **Kentucky**
    - KY 1: The vertical profile optimization results in closure of West 5th Street between Crescent Avenue and Philadelphia Street. The closure redistributes vehicular traffic to West 3rd Street and Crescent Avenue. Although the traffic pattern to Crescent Avenue is altered, access will remain available. As described in **Section 5.1.2**, the re-route to Crescent Avenue is minor, adding 0.5 miles from the existing West 5th Street underpass; and
    - KY 2: The I-71/I-75 SB access to 9th Street at Bullock Street intersection is removed. The NB frontage road to NB C-D road access is also moved south from 9th Street to Pike Street. Traffic access from the interstate will be distributed to Pike Street, where access currently exists.

- **Ohio**
    - OH 1: I-71 SB is reconfigured and the Western Avenue ramp is removed to SB I-75. Alternative routes to this ramp include a new 9th Street entrance ramp as well as the existing Freeman Avenue interchange. This is a low-volume movement, resulting in a minor traffic redistribution;
    - OH 2: The SB I-75 2nd Street ramp is removed, and traffic is rerouted through upgraded at-grade 2nd and 3rd Street intersections. The additional delay at these intersections is anticipated to reroute some traffic to the upstream exit ramp at 7th Street;
    - OH 3: The ramp from WB US-50 to Gest Street is removed. This primarily reroutes traffic through the existing Linn Street exit ramp. The ramp from eastbound US-50 to 2nd Street is removed. The alternate EB routes are the Freeman Avenue exit (1 mile from the ramp removal) and 5th Street exit (0.5 miles from the ramp removal). The traffic volumes at the WB and EB exits are low volume, resulting in a minor traffic redistribution. OH 3 also improves roadway geometry for the tie-in movements of the C-D roads and local streets, improving connectivity across the interstate, and allows for the future expansion of 5th Street west to Gest Street, which was requested by the City of Cincinnati; and
    - OH 4: With the re-establishment of the street grid, new intersections are constructed along Gest Street and a new NB road is constructed between 5th Street and 9th Street. The new connections result in several local routing changes that impact traffic demand on roads between 5th Street and 9th Street. The connections provide more choices for vehicles to travel between 5th Street and 9th Street with the introduction of the new arterial road. The additional access allows for a balancing of traffic demand between the new NB arterial and Central Avenue. These changes can be seen in the new intersections at 6th, 7th, and 9th streets with LOS ranging from A to E in the AM peak and A to C in the PM (**Table 3** in **Section 4.3**). Specific differences in turn movements volumes are documented in the traffic forecast plates located in **Appendix B**.

Impacts to vehicular travel patterns and access resulting from the Re-eval 1 Design are anticipated to be minor and provide an improvement over the Concept I-W Base Design based on improved connectivity.

Pedestrian and Bicycle

The Re-eval 1 Design does not introduce major changes to pedestrian and bicycle travel patterns and access. The changes are summarized as follows and are shown in **Appendix A**: **Exhibit 13**.

- **Kentucky**
    - KY 1: As described in **Section 5.1.2**, the West 5th Street underpass is eliminated in Covington; therefore, a shared-use path at West 5th Street[1] cannot be constructed. Instead, a new shared-use path will be constructed under I-71 at West 4th Street, retaining similar access and connectivity as proposed under Concept I-W Base Design. In addition, the proposed shared-use

[1] Related to the 2024 SEA/FONSI Commitment 2. See Section 7 for further details.

path under I-71 at West 4th Street will connect to a network of extensive, new or widened sidewalks along West 4th Street, as well as a new shared-use path along West 3rd Street, extending to Johnson Street and the Clay Wade Bailey Bridge. These enhancements are designed to improve multimodal connectivity, facilitate safer and more efficient pedestrian and bicycle travel, while minimizing impact to existing travel patterns. The improvements are expected to contribute positively to community accessibility and mobility while minimizing adverse impacts to existing transportation infrastructure and surrounding resource areas; and

  - Detailed design progression: An approximately 0.8-mile section of the Riverfront Commons Trail will be temporarily closed during construction and an approximately 1.1-mile detour will be provided. For more information, see **Section 5.11.3**.

- **Ohio**
  - OH 4: The street grid is reconnected across 5th, 6th, 7th, and 9th streets, which will enhance connections for pedestrians and bicyclists to and from the Queensgate Neighborhood. The innovation shortens the pedestrian crossing from downtown Cincinnati to Queensgate by at least 1,100 feet compared to the Concept I-W Base Design. New or widened sidewalks will be provided west of Central Avenue between 5th and 9th streets, and improved sidewalk and shared-use path could be provided across the interstate along 5th Street if the 5th Street to Gest Street connection is realized.

While the changes will result in minor changes to access and travel patterns as compared to the Concept I-W Base Design, the new and improved pedestrian and bicycle infrastructure incorporated into the project is anticipated to benefit pedestrian and bicycle access and mobility. The Re-eval 1 Design will increase the options available to pedestrians and bicyclists, which will enhance community connectivity along and across the I-71/I-75 corridor and may improve access to transit, employment, healthcare, cultural, recreational, and commercial destinations for communities east and west of I-71/I-75. While temporary access restrictions to a portion of the Riverfront Commons Trail will occur during construction, a detour will be provided to maintain access for pedestrians and bicycles and the Trail will be fully restored to a condition that is at least equivalent to existing conditions. Refer to **Section 5.11.3** for further details.

Transit

The analysis and conclusions presented in the 2024 SEA/FONSI remain unchanged.

5.1.5 Relocations

Table 6 summarizes relocations between the Concept I-W Base Design and the Re-eval 1 Design. As shown, an additional two full commercial acquisitions are required in Kentucky. This change is driven by the improvements at West 3rd Street and Crescent Avenue as part of KY 1, which requires additional ROW to construct a roundabout. The commercial businesses include two liquor stores. In addition to the relocations, refinement of noise barrier locations during detailed design progression will require a new full acquisition of a vacant parcel zoned residential in Kentucky to construct a noise barrier.

There are no changes to relocations proposed in Ohio. Since issuance of the 2024 SEA/FONSI, ODOT has completed acquisition of Longworth Hall and fulfillment of commitments[1] related to Longworth Hall detailed in the FONSI are underway.

The acquisition of property for ROW (including residential and commercial relocations) has been, and will continue to be, in accordance with the Uniform Act. As disclosed in the 2024 SEA/FONSI, ongoing acquisition activities in Kentucky and Ohio have indicated that affected businesses will be able to relocate within the same geographic area if so desired, either in existing structures or new construction. The two additional commercial relocations in Kentucky are not expected to result in substantial job loss or economic impact, nor are they known to be substantial employers or serve unique needs within the surrounding communities.

Table 6: Relocations Comparison

State	Concept I-W Base Design	Re-eval 1 Design
Kentucky		
Residential	4 units	No change from Concept I-W Base Design
Commercial	5 full, 0 partial	7 full, 0 partial
Ohio		
Residential	0 units	No change from Concept I-W Base Design
Commercial	19 full, 1 partial	No change from Concept I-W Base Design
Total		
Residential	4 units	No change from Concept I-W Base Design
Commercial	24 full, 1 partial	26 full, 1 partial

5.1.6 Economy and Employment

The analysis and conclusions related to impacts to property revenues, property values, workforce development, and regional and national economy remain unchanged from the 2024 SEA/FONSI.

5.1.7 Local Communities

The population characteristics identified in the 2024 SEA/FONSI remain unchanged. Re-eval 1 Design does not introduce design refinements that affect the workforce development or the temporary construction impacts on local communities analyzed in the 2024 SEA/FONSI; however, changes affecting local communities are discussed below in further detail for each topic. The environmental commitments in the 2024 SEA/FONSI

[1] 2024 SEA/FONSI Commitments 4 and 13.

remain part of the project[1]. As described in this re-evaluation and summarized in the following sections, the project, including the design refinements presented herein, will improve community cohesion, improve traffic flow and safety for all modes of travel, improve air quality, abate noise, reduce flooding and storm sewer overflows, improve aesthetics, and provide additional economic opportunities, which will help to offset reasonably foreseeable unavoidable effects.

Relocations

KY 1 results in two additional commercial relocations (both liquor stores) just north of West 3rd Street. The acquisition of property for ROW has been, and will continue to be, in accordance with the Uniform Act. These additional relocations are expected to result in minimal impacts on local communities. See **Section 5.1.5** for additional detail.

Community Resources

Information about ROW impacts to community facilities is provided in **Section 5.1.3**. Overall, the Re-eval 1 Design reduces these impacts to community resources:

- KY 1 and KY 2 reduce permanent ROW impacts to the Goebel Park Complex by 0.66 acres (KY 1 and KY 2), which reduces total park land area lost from 2.84 to 2.18 acres, representing an approximate decreased impact of 23.2 percent; and
- Further detailed design reduced permanent ROW impacts to Notre Dame Academy by 0.07 acres and eliminated the need for a permanent easement.

However, based on advancement of detailed design, temporary easements are increased at the Riverfront Commons Trail and a temporary detour and closure is required to accommodate construction of the new bridge (see **Section 5.11.3**).

The Re-eval 1 Design results in no other changes to community resources when compared to the Concept I-W Base Design.

Access, Mobility, and Safety

The access, mobility, and safety improvements for local communities remains largely unchanged from the 2024 SEA/FONSI. However, the Build Innovations and detailed design progression will introduce these improvements that further enhance access to, from, and within local communities:

- **Kentucky**
    - KY 1: Lowering the interstate vertical profile adjacent to the Goebel Park Complex and adjustments to West 5th Street removes the West 5th Street underpass, which redistributes traffic to West 3rd Street but creates an enhanced gateway opportunity to the Covington riverfront and

[1] 2024 SEA/FONSI Commitments 2, 4-6, 11-13, and 22-35.

enhances safety and mobility for all modes of travel. See **Section 5.1.2** and **Section 5.1.4** for further details;

- KY 2: Eliminating direct interstate access on West 9th Street originally proposed with the Concept I-W Base Design, which preserves the residential character of that roadway in the Mainstrasse Neighborhood and reduces cut-through traffic that would have resulted from access changes, thereby improving safety; and
- Detailed design progression: Improving neighborhood connectivity across the interstate at the Dixie Highway interchange by incorporating successive roundabouts, thereby reducing conflict points between pedestrians and vehicles, shortening pedestrian crossing distances, and providing additional aesthetic enhancements.

- **Ohio**
  - OH 4: Reconnecting the street grid across 5th, 6th, 7th, and 9th streets will enhance connections to and from the Queensgate Neighborhood for all modes of travel.

Air Quality, Noise, and Stormwater

As described in **Section 5.5**, Air Quality, the Re-eval 1 Design is consistent with the findings for air quality presented in the 2024 SEA/FONSI. Similar to the Concept I-W Base Design, while traffic patterns may change primarily in response to the Build Innovations, the innovations will generally improve traffic flow and reduce traffic congestion and vehicle idling in the project area transportation network. These improvements are expected to reduce vehicle emissions and improve local air quality for communities. For further details on how the Re-eval 1 Design affects air quality, refer to **Section 5.5**.

The noise barriers/barrier systems and noise/visual screening from the 2024 SEA/FONSI[1] remain largely unchanged. Barriers/barrier system locations were optimized as part of detailed design progression. See Section 5.6 for further details. Noise barriers/barrier systems and noise/visual screening will mitigate noise impacts and provide enhanced sound reduction for local communities.

Similar to the Concept I-W Base Design, the stormwater management measures incorporated into the project as part of the Re-eval 1 Design will promote infrastructure resilience, and local communities will share in the benefits of reduced flooding and a more reliable transportation system. For more information on stormwater management, refer to **Section 4.2.3** and **Section 5.10.1**.

The project is not anticipated to result in adverse effects on air quality, noise, or stormwater in local communities.

[1] 2024 SEA/FONSI Commitments 23 and 25.

Visual

Compared to the Concept I-W Base Design, the Re-eval 1 Design further reduces visual impacts by improving the visual character of the project corridor and helping to foster vibrant neighborhood spaces. These benefits are driven primarily by the Build Innovations; specifically, the vertical profile optimization (KY 1) and hillside cut alignment shift in Kentucky (KY 3), and the freeway configuration in Ohio (OH 1–OH 4). Additionally, the implementation of roundabouts at the I-71/I-75 and Kyles Lane and Dixie Highway interchanges developed through detailed design also provides further visual enhancements. Therefore, the Re-eval 1 Design is expected to result in a net visual benefit for local communities. For more details, refer to **Section 5.7**, Visual Resources.

Reasonably Foreseeable Effects

Consistent with the findings of the 2024 SEA/FONSI, the project will have no reasonably foreseeable adverse effects on identified local communities and may be considered beneficial by further reducing impacts.

5.1.8 Children

Consistent with the Concept I-W Base Design, the Re-eval 1 Design is not expected to result in permanent impacts on children. As detailed in **Section 5.1.3**, the Re-eval 1 Design results in a reduction in permanent impacts to the Notre Dame Academy and Goebel Park Complex. The 2024 SEA/FONSI commitments[1] related to minimizing impacts to children remain unchanged; therefore, temporary impacts that may be experienced by children during construction will be minimized to the greatest extent practicable.

5.2 Regulated Materials

This section addresses changes related to regulated materials studies since the 2024 SEA/FONSI. Based on the analyses provided in the following sections, the 2024 SEA/FONSI remains valid and no further analysis with respect to regulated materials is required.

5.2.1 Kentucky

As a result of the KY 1, KYTC prepared a *Phase I Environmental Site Assessment Report (December 2024)* (**Appendix C**) for two new properties to be acquired at West 3rd Street and Crescent Avenue:

- Commercial property at 670 West 3rd Street, Covington, currently occupied by Liquor Barn Express; and
- Commercial property at 220 Crescent Avenue, Covington, currently occupied by Liquor City.

Based on the *Phase I Environmental Site Assessment,* both properties were previously used as gas stations and field observations at 220 Crescent Avenue identified four vent pipes and evidence of the former pump

[1] 2024 SEA/FONSI Commitments 23, 25, 26, and 32.

island. Therefore, these properties have evidence of recognized environmental conditions. As such, KYTC has identified one new commitment:

- Limited Phase II Environmental Site Assessments of soil/groundwater in the area of the former tank pits will be conducted at 670 West 3rd Street and 220 Crescent Avenue in Covington, Kentucky, to determine if any historical releases have occurred which may have impacted the sites' subsurface. If the limited Phase II Environmental Site Assessments identifies issues, the appropriate plan notes will be added to the contract document.

5.2.2 Ohio

Based on detailed design progression, the project will require a new permanent easement on a portion of the WXIX TV station property (see **Section 5.1.1**). ODOT conducted an Ohio Regulatory Property Search in July 2024 and did not identify any regulated material concerns. No further regulated materials research or environmental site assessments are required (**Appendix C**).

5.3 Ecological Resources

This section discusses changes to the affected environment and impacts related to wetlands, streams and rivers; terrestrial habitat; threatened or endangered species; and floodplains.

Based on detailed design progression, three locations extended the study area beyond previous surveys for wetlands, streams and rivers, terrestrial habitat, and threatened or endangered species. These areas were primarily along the Ohio River where changes in construction methods warranted expansion of the study area and survey findings are described in the following sections. Based on the analysis provided in the following sections, the 2024 SEA/FONSI remains valid and no further analysis with respect to ecological resources is required.

5.3.1 Wetlands

A wetland delineation was completed in July 2024 for the expanded study area locations (**Appendix D**). The survey identified one palustrine forested wetland (Wetland E) and one palustrine emergent wetland (Wetland F). The Re-eval 1 Design results in an increase of approximately 2.04 acres of permanent wetland impacts (**Table 7**). The increase in impacts is primarily the result of KYTC implementing the 2024 SEA/FONSI commitment to separate the highway drainage from the combined sewer system (Commitment 34). Five wetlands (Wetland A, C, D, 6, and 8) are stormwater basins that will need to be graded to return them to their original planned capacity and maximize their storage volume (see **Section 4.2.3** for further details). Additionally, the detailed design progression results in an impact to the entirety of the 0.05-acre Wetland F.

Table 7: Wetland Impact Summary

Wetland ID	Total Size (acres)	Cowardin Class	Concept I-W Base Design Impacted Area (acres)	Re-eval 1 Design Impacted Area (acres)
A	1.90	Emergent	0.00	1.90
C	0.03	Emergent	0.00	0.03
D	0.06	Emergent	0.00	0.06
E[1]	< 0.01	Forested	Not Applicable[1]	0.00
F[1]	0.05	Emergent	Not Applicable[1]	0.05
6	0.81	Emergent	0.81	No change from Concept I-W Base Design
8	1.57	Emergent	1.57	No change from Concept I-W Base Design
Total	**4.43**	**--**	**2.38**	**4.42**

[1] Outside of 2024 SEA/FONSI study area. Newly delineated in July 2024.

All permanent wetland impacts are in Kentucky. Consistent with the 2024 SEA/FONSI, mitigation for unavoidable permanent wetland impacts will be completed through purchasing credits at the Bath County/Ova Arnett In-Lieu Fee Mitigation Bank. Using a mitigation ratio of 2:1 and the adjusted mitigation unit (AMU) method, sufficient credits (8.8 AMU) have been reserved for KYTC by the bank sponsor, USACE, to provide compensatory mitigation for project impacts.

5.3.2 Streams and Rivers

Streams and rivers were delineated in July 2024 and February 2025 within the expanded study area locations and documented in the *Addendum #2 to Stream and Wetland Summary* and *Addendum #3 to Stream and Wetland Summary* (**Appendix D**). Seven additional streams were identified during the field reconnaissance; of which one is perennial, three are ephemeral, two are intermittent, and one is intermittent/ephemeral[1]. Based on the Kentucky Division of Water's *Methods for Assessing Biological Integrity of Surface Waters in Kentucky,* all streams were poor quality.

As detailed in **Table 8**, and further summarized in **Table 9**, detailed design progression reduced permanent impacts to streams and rivers by approximately 1.3 acres. Most of this reduction is to the Ohio River. Temporary impacts will increase by approximately 1.6 acres. Impacts to jurisdictional ditches are unchanged from the 2024 SEA/FONSI. The changes in impacts are due to detailed design progression, which altered the construction methodology for constructing the companion bridge and rehabilitating the existing BSB, as well as delineating additional streams previously unaccounted for in the 2024 SEA/FONSI.

[1] Of the identified streams, Stream 2 includes Stream 2a, which was delineated as a separate feature in July 2024, but was included as part of Stream 2 in the individual 404 permit and 401 water quality certification applications submitted in 2025.

Specifically, the change in stream and river impacts is driven by separating highway drainage from the combined sewer system in Kentucky[1], the temporary construction access required for the new companion bridge and rehabilitation of the existing BSB, and delineation of five additional streams in the expanded study area. Five streams (Stream 2, INT 6, and INT 17-19) are within detention basin footprints needed to accomplish the separation of the highway drainage from the combined sewer system in Kentucky (see Section 4.2.3 for further details).

Based on detailed design progression, the new companion bridge will be constructed with two possible methods for temporary construction access. The first is the use of temporary stone causeways as construction platforms built from both the north and south banks of the Ohio River. The second is the use of elevated temporary trestles built on pilings that will also require the construction of temporary in-water coffer dams to construct the bridge pylons. Both methods have the same permanent impacts. However, the temporary stone causeways result in more temporary impacts (approximately 2.7 acres) than the temporary trestles and coffer dams. With either method, the temporary impact areas will be restored to pre-construction conditions following construction, including the restoration of a natural river bed to this section of the Ohio River.

Both construction methods were accounted for in the Section 404 permit, Section 401 water quality certification, and Section 408 permission for the project to allow for flexibility of the temporary access fill design, encourage a cost effective approach, and ensure constructability. A decision on the method for temporary construction access will be determined as further design details become available, including obtaining the Section 404 permit and Section 408 permission (see **Section 5.13** for further details). The decision will take into account cost, schedule, and constructability. The impacts in **Table 8** and **Table 9** reflect conservative estimates included in the permit applications. Additional temporary access will be provided at the Pete Rose bulkhead, located immediately upstream of the Clay Wade Bailey Bridge. The bulkhead will consist of a temporary three-sided, tied-back sheet pile wall system filled with aggregate and accompanying aggregate ramp used for loading equipment onto and off of barges. Temporary access fills, one from the south bank of the Ohio River and one from the north, will also be required for construction of the two permanent bridge pylons of the companion bridge.

The permanent waterway impacts, located wholly within Kentucky, are anticipated to be minor, especially when coupled with mitigation efforts by KYTC. Consistent with the 2024 SEA/FONSI, mitigation measures for unavoidable stream impacts will involve purchasing adjusted mitigation unit (AMU) credits from the approved USACE mitigation bank in the watershed, the Licking River Mitigation Bank operated by Ecosystem Investment Partners. KYTC has reserved adequate AMU credits (up to 5,056 AMU) from the bank to compensate at a 1:1 ratio for impacts to poor quality intermittent streams, a 1:1 ratio for poor quality ephemeral streams, a 1.5:1 ratio for poor quality perennial streams, and a 2.25:1 ratio for fair/average quality perennial streams. All AMU credits purchased from the Licking River Mitigation Bank represent restored ecological functions to streams in the appropriate mitigation service area of the stream and river impacts (lower Licking River watershed/Northern Kentucky mitigation service area).

[1] Separation of highway drainage from the combined sewer system in Kentucky was advanced in detailed design progression to meet 2024 SEA/FONSI Commitment 34.

Based on coordination with the Ohio Environmental Protection Agency (OEPA), ODOT will mitigate impacts related to the proposed temporary access fill in the Ohio River at a ratio of 1.1:1. No stream bank credits are available in the Lower Great Miami Watershed, so in-lieu fee credits from The Nature Conservancy are proposed to compensate for the temporary Ohio River impacts. Consistent with ODOT, KYTC also proposes compensatory mitigation for temporary impacts within the Ohio River. In Kentucky, these temporary impacts will be mitigated at a 1:1 ratio.

Table 8: Streams, Rivers, and Jurisdictional Ditches Impacts[1]

Stream ID (State)	Description	Total Length / Area	Concept I-W Base Design Total Impact	Re-eval 1 Design Total Impact
PER 1 (KY)	Poor-quality perennial stream that flows under I-71/I-75 and into Pleasant Run Creek	307 linear feet / 0.070 acre	134 linear feet / 0.031 acre (permanent)	No impact
INT 14 (KY)	Poor-quality intermittent stream that flows into stream PER 1	696 linear feet / 0.080 acre	355 linear feet / 0.040 acre (permanent)	441 linear feet / 0.050 acre (permanent) 30 linear feet / 0.002 acre (temporary)
PER 2 (KY)	Poor-quality perennial stream that flows into Banklick Creek	675 linear feet / 0.124 acre	64 linear feet / 0.012 (permanent)	48 linear feet / 0.010 acre (permanent) 20 linear feet / 0.001 acre (temporary)
Stream 2 (KY)[1,2]	Poor-quality intermittent stream that flows into Stream 2a, which is a poor-quality ephemeral that flows into Wetland E	925 linear feet / 0.094 acre	No impact	698 linear feet / 0.080 acre (permanent) 30 linear feet / 0.002 acre (temporary)
JD 15 (KY)	Poor-quality jurisdictional ditch that flows into stream PER 2	167 linear feet / 0.020[3] acre	167 linear feet / 0.020[3] acre (permanent)	No change to permanent impacts from Concept I-W Base Design
INT 17 (KY)	Poor-quality intermittent stream that flows into Wetland 6	125 linear feet / 0.020 acre	125 linear feet / 0.020 acre (permanent)	No change to permanent impacts from Concept I-W 10 linear feet / 0.001 acre (temporary)

[1] Table 8 reflects conservative estimates, which is the maximum amount included in the Section 404 permit, Section 401 water quality certification, and the Section 408 permission. The temporary impacts in this table reflect one construction method (stone causeway), which is more impactful and encompasses the impacts of the trestle method.

Stream ID (State)	Description	Total Length / Area	Concept I-W Base Design Total Impact	Re-eval 1 Design Total Impact
INT 18 (KY)	Poor-quality intermittent stream that flows into stream INT 17	43 linear feet / 0.006 acre	43 linear feet / 0.006 acre (permanent)	43 linear feet / 0.010 acre (permanent) 10 linear feet / 0.001 acre (temporary)
INT 6 (KY)	Poor-quality intermittent stream that flows into stream INT 17	163 linear feet / 0.022 acre	163 linear feet / 0.022 acre (permanent)	163 linear feet / 0.020 acre (permanent) 10 linear feet / 0.001 acre (temporary)
INT 19 (KY)	Poor-quality intermittent stream that flows into Wetland 8	134 linear feet / 0.018 acre	134 linear feet / 0.018 acre (permanent)	125 linear feet / 0.020 acre (permanent) 10 linear feet / 0.001 acre (temporary)
Ohio River (KY/OH) (PER 3)	General high-quality perennial stream, warm water habitat aquatic life use designation, traditionally navigable waterway	Not determined	350 linear feet / 1.940 acres (permanent) 283 linear feet / 1.854 acres (temporary)	154 linear feet / 0.400 acre (permanent) 727 linear feet / 3.470 acre (temporary)
Stream 4 (KY)[2]	Poor-quality ephemeral stream that flows into Willow Run (sanitary sewer)	92 linear feet / 0.005 acre	No impact	92 linear feet / 0.010 acre (permanent) 10 linear feet / 0.001 acre (temporary)
Stream 5 (KY)[2]	Poor-quality ephemeral stream that flows into Willow Run (sanitary sewer)	107 linear feet / 0.006 acre	No impact	107 linear feet / 0.010 acre (permanent) 10 linear feet / 0.001 acre (temporary)
Stream 6 (KY)[2]	Poor-quality ephemeral stream that flows into Stream 5	85 linear feet / 0.004 acre	No impact	85 linear feet / 0.01 acre (permanent) 10 linear feet / 0.001 acre (temporary)

Stream ID (State)	Description	Total Length / Area	Concept I-W Base Design Total Impact	Re-eval 1 Design Total Impact
Stream 1 (KY)	Poor-quality perennial stream	155 linear feet	No impact	155 linear feet / 0.02 acre (permanent) 10 linear feet / 0.001 acre (temporary)
Stream 1A (KY)[4]	Poor-quality perennial stream	1,040 linear feet	No impact	1,040 linear feet / 0.130 acre (permanent) 10 linear feet / 0.001 acre (temporary)
Stream 7 (KY)[4]	Poor-quality intermittent stream	12 linear feet	No impact	12 linear feet / 0.001 acre (permanent) 10 linear feet / 0.001 acre (temporary)
Stream 8 (KY)[4]	Poor-quality intermittent stream	22 linear feet	No impact	22 linear feet / 0.002 acre (permanent) 10 linear feet / 0.001 acre (temporary)
Total			**1,535 linear feet / 2.107 acre (permanent)** **283 linear feet / 1.854 acre (temporary)**	**3,477 linear feet / 0.813 acre (permanent)** **917 linear feet / 3.486 acre (temporary)**

[1] The totals for Stream 2 include Stream 2a, which was delineated as a separate feature in July 2024, but was included as part of Stream 2 in the individual Section 404 permit and Section 401 water quality certification applications submitted in 2025.
[2] Outside of 2024 SEA/FONSI study area. Newly delineated in July 2024.
[3] To remain consistent with the individual 404 permit and 401 water quality certification applications submitted in 2025, the total acres and impacts of Concept I-W Base Design have been rounded to the nearest hundredth from 0.015 acres. However, there is no change in impacts to this feature between the Re-eval 1 Design and Concept I-W Base Design.
[4] Outside of 2024 SEA/FONSI study area. Newly delineated in February 2025.

Table 9: Streams, Rivers, and Jurisdictional Ditches Impacts Summary

Resource	Concept I-W Base Design Impacts	Re-eval 1 Design Impacts
Jurisdictional Ditch	167 linear feet / 0.020[1] acres (permanent)	No changes to permanent impacts from Concept I-W Base Design[1] 20 linear feet / < 0.001 acre (temporary)
Intermittent Stream	820 linear feet / 0.107 acre (permanent)	1,629 linear feet / 0.203-acre (permanent)[2] 120 linear feet / 0.011-acre (temporary)[2]
Ephemeral Stream	0 linear feet / 0.000 acre	284 linear feet / 0.030 acre (permanent) 30 linear feet / 0.003 acre (temporary)
Perennial Stream	548 linear feet / 1.983 acres (permanent) 283 linear feet / 1.854 acres (temporary)	1,397 linear feet / 0.56 acre (permanent) 767 linear feet / 3.473 acre (temporary)

[1] To remain consistent with the individual 404 permit and 401 water quality certification applications submitted in 2025, the total acres and impacts of the Concept I-W Base Design has been rounded to the nearest hundredth from 0.015 acres. There is no change in impacts to this feature between the Re-eval 1 Design and Concept I-W Base Design.
[2] Includes impacts to ephemeral Stream 2a.

Ohio River Navigation

The Concept I-W Base Design identified that navigation along the Ohio River would be maintained during construction. Based on design refinements in the Re-eval 1 Design, the navigation channel of the Ohio River will still be maintained but temporary restrictions may be required to construct the temporary access fills and erect portions of the new companion bridge. Temporary restrictions will continue to be coordinated with the U.S. Coast Guard. As previously committed in the 2024 SEA/FONSI[1], KYTC and ODOT will notify the National Park Service (NPS) of any access restrictions affecting the Lewis and Clark National Historic Trail prior to any project-related activities affecting the Ohio River. KYTC and ODOT will also install appropriate signage to alert users of the Lewis and Clark National Historic Trail of project-related activities or access restrictions in the Ohio River. In addition, on June 9, 2025, the Ohio River was designated a National Water Trail. No new commitments are required.

5.3.3 Terrestrial Habitat

Since the 2024 SEA/FONSI, three additional disturbance areas were identified that extend beyond areas previously surveyed for suitable habitat for species of concern. These areas are required to facilitate construction of the companion bridge and rehabilitation of the existing BSB, as well as improvements at the Goebel Park Complex and stormwater improvements along I-71/I-75, which are all driven by detailed design progression. These additional terrestrial habitat impacts include a temporary bulkhead (Pete Rose bulkhead)

[1] 2024 SEA/FONSI Commitment 40.

upstream of the Clay Wade Bailey Bridge for bridge construction and two areas that include the forested slope of I-71/I-75 near Highland Avenue and portions of the Goebel Park Complex.

As summarized in **Table 10** and documented in the *Addendum of the Biological Assessment (August 2024)* and *Addendum of the Biological Assessment to include Longsolid Mussel (May 2025)* (**Appendix E**), the project will impact an additional 8.7 acres of forested habitat in Kentucky, of which 0.3 acres are upland and 8.4 acres are riparian habitat. As such, the project will impact a total of approximately 98.7 acres of forested habitat, as opposed to the 90.0 acres disclosed in the 2024 SEA/FONSI. This includes 82.9 acres in Kentucky (74.5 acres of upland and 8.4 acres of riparian) and 15.8 acres in Ohio (upland). The removal of up to 98.7 acres of forested habitat will result in the loss of potential foraging or maternity areas for the Indiana bat (*Myotis sodalist)*, the northern long-eared bat (*Myotis septentrionalis)*, and the tricolored bat (*Perimyotis subflavus*). The removal of approximately 8.4 acres of additional riparian habitat will result in the loss of potential foraging areas for the gray bat (*Myotis grisescens)*.

Consistent with the 2024 SEA/FONSI Commitment 8, tree removal will be restricted to certain dates, and habitat loss in Kentucky will be mitigated through a contribution to the Imperiled Bat Conservation Fund. However, Commitment 8 has been revised to reflect that tree removal in Kentucky is now restricted to between May 15 and July 31, as opposed to June 1 and July 31, per consultation with USFWS (see Section 7).

Table 10: Forested Habitat Impact Summary

Resource	Concept I-W Base Design Impacts	Re-eval 1 Design Impacts
Upland Habitat	90.0 acres (KY: 74.2 acres) (OH: 15.8 acres)	90.3 acres (KY: 74.5 acres[1]) (OH: No change from Concept I-W Base Design)
Riparian Habitat	0.0 acres	8.4 acres (KY: 8.4 acres)
Total Impact	90.0 acres	98.7 acres

[1] This total includes approximately 3.8 acres in Goebel Park Complex consistent with the August 2024 Section 7 consultation package (Appendix E). However, impacts will be no more than 1.1 acres of forested habitat in the Goebel Park Complex consistent with the 2024 SEA/FONSI and the updated Section 6(f) coordination concluded in 2025 (Appendix N).

5.3.4 Threatened or Endangered Species

The *Addendum of the Biological Assessment (August 2024)* and *Addendum of the Biological Assessment to include Longsolid Mussel (May 2025)* (**Appendix E**) were prepared to determine changes in effects to threatened and endangered species. Detailed design progression results in impacts to three additional areas outside of the previously proposed disturbance limits (detailed in **Section 5.3.3**): the Pete Rose bulkhead, I-71/I-75 slope, and Goebel Park Complex areas. On May 2, 2025, an updated official species list was obtained from the U.S. Fish and Wildlife Service (USFWS) Information for Planning and Consultation (IPaC) for the revised study area. Since the 2024 SEA/FONSI, the IPaC list identified one new threatened species, the

longsolid mussel (*fusconaia subrotunda*), and three new proposed endangered species: salamander mussel (*Simpsonaias ambigua*), eastern hellbender (*Cryptobranchus alleganiensis alleganiensis*), and the monarch butterfly (*Danaus plexippus)*. FHWA determined that the project may affect but is not likely to jeopardize the continued existence of the salamander mussel, eastern hellbender, and monarch butterfly and would not result in the destruction or adverse modification of critical habitat proposed to be designated for the eastern hellbender and monarch butterfly. See **Appendix E** for further details.

The three areas, which comprise the expanded study area, contain potential habitat for Indiana and gray bats. Suitable foraging habitat for all federally listed bat species was identified within forest edges along the Ohio River. No caves or cave-like features suitable for listed bat species were identified in the additional impact areas. Two culverts, located under a paved walking path with outlets to a sanitary sewer, were inspected and no evidence of bat usage was observed. For federally listed bat species, a total of 8.7 acres of additional forested habitat suitable for summer roosting, foraging, and commuting habitat will be impacted by the project changes. These impacts are limited to tree removal, which consists of 4.0 acres at the bulkhead, 0.9 acres at the forested slope along I-71/I-75, and 3.8 acres[1] at Goebel Park. Consistent with the 2024 SEA/FONSI Commitment 8, tree removal will be restricted to certain dates, and habitat loss in Kentucky will be mitigated through a contribution to the Imperiled Bat Conservation Fund. However, Commitment 8 has been revised to reflect that tree removal in Kentucky is now restricted to between May 15 and July 31, as opposed to June 1 and July 31, per consultation with USFWS (see **Section 7**). With the incorporation of minimization and mitigation measures detailed in the 2024 SEA/FONSI, the effects of the project on federally listed bat species remain unchanged (**Table 11**).

In 2022, USFWS-approved mussel surveys were conducted on the Ohio and Kentucky sides of the Ohio River. The proposed Pete Rose bulkhead is in the same general location on the Kentucky side of the Ohio River where surveys were previously conducted. Based on the results of the 2022 mussel survey, and the trend of relatively homogenous substrates (sand-cobble and sand-boulder) from downstream to upstream, the river conditions and mussel compositions at the location of the temporary bulkhead are likely similar to those observed downstream. During the 2022 survey, 20 mussel species were identified; none were federally listed, which suggests probable absence of federally listed mussels.

While the substrate and flow regime of the Ohio River provide suitable habitat for the federally listed mussel species, none were found during the mussel survey, which suggests probable absence from the area of direct impact and subsequent buffer areas. With the KYTC's commitment to relocate all mussels (Commitment 8), regardless of listing status, and proper measures in place during construction, suitable habitat will likely continue to support mussel species in the future. For this reason, the additional impacts at the Pete Rose bulkhead will not alter the previous finding of effect for the project to federally listed mussel species, which was "may affect, not likely to adversely affect" (**Table 11**). This effect determination also applies to the newly identified longsolid mussel.

[1] This acreage was a conservative estimate used in the August 2024 Section 7 consultation package (Appendix E). However, impacts will be no more than 1.1 acres of forested habitat in the Goebel Park Complex consistent with the 2024 SEA/FONSI and the updated Section 6(f) coordination concluded in 2025 (Appendix N).

In addition to the determination for the longsolid mussel, the changes resulting from detailed design progression introduce one change to the findings of effect from the 2024 SEA/FONSI as shown in **Table 11**. The rayed bean (*Villosa fabalis)* is not believed to occur within the specified reach of the Ohio River for the project, nor within the broader area assessed during the re-evaluation. For this reason, a determination of "no effect" was made for the species.

FHWA requested review and concurrence from USFWS on August 19, 2024, for the following federally listed species: gray bat, northern long-eared bat, Indiana bat, clubshell (*Pleurobema clava)*, fanshell (*Cyprogenia stegaria)*, northern riffleshell (*Epioblasma torulosa rangiana)*, pink mucket (*Lampsilis abrupta)*, sheepnose mussel (*Plethobasus cyphyus)*, and snuffbox mussel (*Epioblasma triquetra)*. In the August 19 letter, FHWA also notified USFWS of its determinations for the salamander mussel and the tricolored bat. USFWS concurred with effect determinations for these species for the Re-eval 1 Design on September 19, 2024. FHWA requested review and concurrence from USFWS on May 7, 2025, again, based on the new effect determination for the longsolid mussel. USFWS provided concurrence for the new effect determination on June 13, 2025. On May 20, 2025, FHWA also notified USFWS of their determinations for the eastern hellbender and monarch butterfly. See **Appendix E** for the Section 7 consultation.

Table 11: Federally Listed Species Impacts

Common Name	Scientific Name	Concept I-W Base Design Effect Determination[1]	Re-eval 1 Design Effect Determination[1]
Species of Special Concern			
Bald eagle[2]	*Haliaeetus leucocephalus*	No effect	No changes from Concept I-W Base Design
Threatened			
Rabbitsfoot[3]	*Quadrula cylindrica*	NLTAA	No changes from Concept I-W Base Design
Longsolid mussel	*Fusconaia subrotunda*	Not applicable	NLTAA
Endangered[4]			
Gray bat	*Myotis grisescens*	KY – NLTAA	No changes from Concept I-W Base Design
Indiana bat	*Myotis sodalis*	KY – LTAA OH – NLTAA	No changes from Concept I-W Base Design
Clubshell	*Pleurobema clava*	NLTAA	No changes from Concept I-W Base Design
Fanshell	*Cyprogenia stegaria*	NLTAA	No changes from Concept I-W Base Design
Northern Long-Eared Bat	*Myotis septentrionalis*	NLTAA	No changes from Concept I-W Base Design
Northern riffleshell	*Epioblasma torulosa rangiana*	NLTAA	No changes from Concept I-W Base Design
Orangefoot pimpleback[3]	*Plethobasus cooperianus*	NLTAA	No changes from Concept I-W Base Design
Pink mucket	*Lampsilis abrupta*	NLTAA	No changes from Concept I-W Base Design

Common Name	Scientific Name	Concept I-W Base Design Effect Determination[1]	Re-eval 1 Design Effect Determination[1]
Ring pink	*Obovaria retusa*	NLTAA	No changes from Concept I-W Base Design
Rough Pigtoe[3]	*Epioblasma obliquata*	NLTAA	No changes from Concept I-W Base Design
Sheepnose mussel	*Plethobasus cyphyus*	NLTAA	No changes from Concept I-W Base Design
Snuffbox	*Epioblasma triquetra*	NLTAA	No changes from Concept I-W Base Design
Spectaclecase[3]	*Cumberlandia monodonta*	NLTAA	No changes from Concept I-W Base Design
Rayed bean	*Villosa fabalis*	NLTAA	No effect

[1] LTAA – May affect, likely to adversely affect; NLTAA, May affect, not likely to adversely affect.
[2] This species was previously addressed in the *Ohio Level 1 Ecological Survey Report*. The current design results in no change in habitat impacts within Ohio; therefore, the finding of effect remains the same.
[3] Per the 2025 IPaC list, these species were not identified as having a potential to occur within the expanded study area. Therefore, the findings of effect are unchanged from the 2024 SEA/FONSI and further consultation with USFWS was not conducted for these species.
[4] This does not include species proposed for listing.

5.3.5 Migratory Birds

As previously described, the expanded study area for ecological resources identified 8.7 acres of additional forested habitat. Trees within the 8.7-acre area will be removed (for a project total of 98.7 acres of tree removal), which will result in additional loss of suitable habitat for migratory birds, as well as temporary disturbance during construction as birds may avoid the expanded construction area due to visual and noise intrusion. The minimization and mitigation measures detailed in the 2024 SEA/FONSI[1] remain unchanged, and measures such as preconstruction surveys and construction timing restrictions will reduce impacts to migratory birds.

The following new commitment has been identified to minimize impacts to migratory birds:

- KYTC will coordinate with USFWS on means and methods for deterring bird strikes that may occur in relation to transparent noise barriers and noise/visual screening barriers.

5.3.6 Floodplains

In Covington, the levee, floodwall, pump station, and flood storage at the Goebel Park Complex, which comprise components of the Covington Levee System, were constructed as part of a USACE Civil Works project. The Concept I-W Base Design avoided physical impacts to the levee, proposing the use of barges in the construction of the new companion bridge. Further evaluation as part of detailed design identified that it is impractical to construct the companion bridge solely using barges because of the vertical clearance restrictions for the Ohio River and the volatility of the river elevations. As such, the project will use temporary works that

[1] 2024 SEA/FONSI Commitments 7 and 8.

will temporarily impact the levee. Based on the hydraulic analysis using Federal Emergency Management Agency's (FEMA) standard 1D step-backwater model, Re-eval 1 Design's construction and use of temporary works will not increase the base flood elevation or alter the existing floodplain within the Ohio River floodplain or floodway (**Appendix F**). Therefore, a Certified Letter of Map Revision (CLOMR) or Letter of Map Revision (LOMR) is not required. Refer to **Section 5.13** for information on permit requirements for work within the Ohio River floodplain or floodway.

Temporary Impacts to Covington Levee

As detailed in **Section 4.2.2**, falsework to temporarily support the companion bridge structure is required on the Ohio and Kentucky sides of the Ohio River. The concrete foundations and steel piling to support the falsework will be driven through the levee or within 50 feet of the toe of the levee. Eight of the 12 foundations will require excavation into the levee, which will be approximately 15 feet by 15 feet and range in depth from 2 feet to 5 feet. Additionally, the temporary trestle, located between the companion bridge and the existing BSB, will be built on 30 steel pipe piles. Eighteen piles will be driven into the levee, six will be driven within 50 feet of the levee toe, and the remaining six will be beyond 50 feet of the levee toe. Three of the pipe piles will have a beam connecting them that will intersect the top of the levee, which will require lowering the levee to accommodate them. In addition, fill material will be placed over the Riverfront Commons Trail to temporary use it as an access road; however, the fill material will be located at the toe of the levee.

The falsework, bulkhead, trestle, ramp, and construction access will temporarily impact the levee. However, consistent with the Concept I-W Base Design, the Re-eval 1 Design will not permanently impact the levee operations.

The following new commitment has been identified to ensure impacts to the Covington Levee System are minimized:

- Once the companion bridge is constructed, the temporary works structures (falsework towers, temporary trestle, and bulkhead with work surface) will be demolished to 3 feet below the pre-existing levee grade and the levee will be restored. This involves the cutting off of steel piling to the appropriate elevation below grade, filling holes with flowable fill, and replacing topsoil to the original grades of the levee as determined by pre-construction as-built elevations taken prior to the start of construction. All aggregate fill temporary works will be removed, and the area appropriately restored. Any restored areas that previously had vegetation will be reseeded with a mix meeting the requirements of KYTC Standard Specification Section 827.

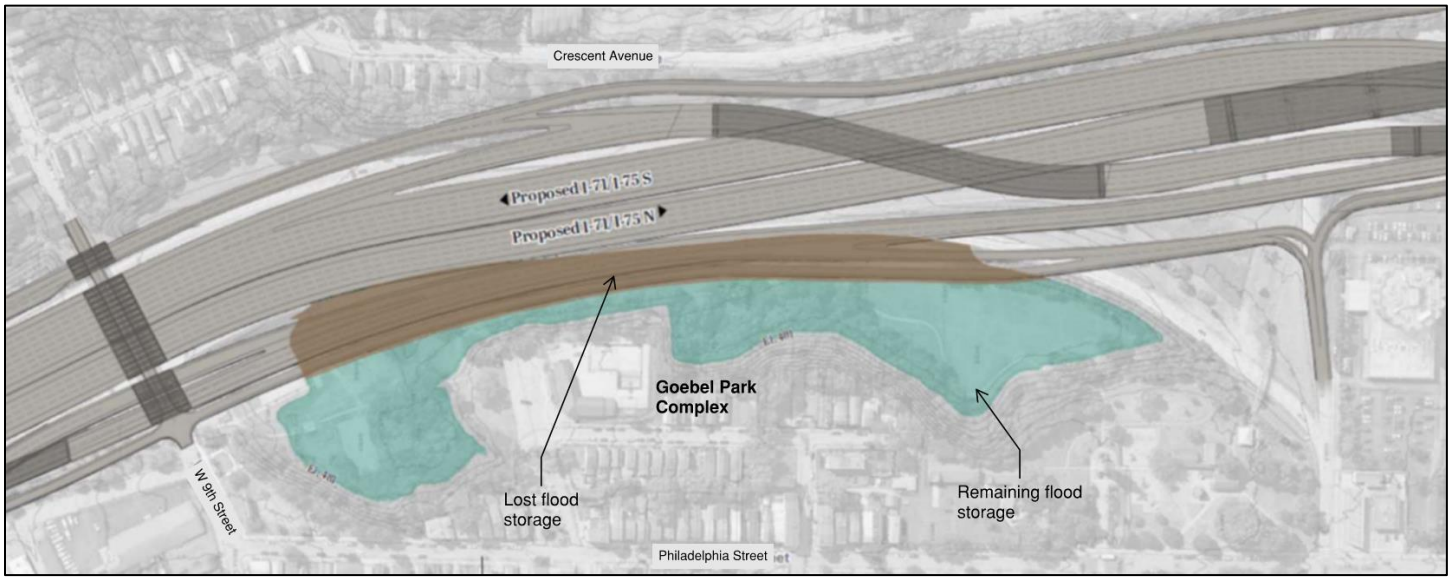
Flood Storage Capacity

At the time of the 2024 SEA/FONSI, it was recognized that road improvements along I-71/I-75 would result in the loss of flood storage volume in the Goebel Park Complex. Through Build Innovations, KY 1 and KY 2 minimized the encroachment onto the Goebel Park Complex, which reduced the loss of flood storage volume. **Figure 12** illustrates the flood storage lost (approximately 5 million gallons) from the Re-eval 1 Design. Based on detailed design progression, the project will construct an express storm sewer system to mitigate for flood

storage loss. This system will maintain a similar level of service within the flood protection system. Consistent with the Concept I-W Base Design, the existing Willow Run pump station will remain in service, but the new system will bypass the station and no upgrades to the station will be required.

Refer to **Section 4.2.3** for further details of the proposed Express Sewer. For the full evaluation of the system, refer to *Willow Run Flood Protection System Hydrological and Hydraulic Analysis for the Brent Spence Bridge Corridor Project (October 2024)* in **Appendix F**. Additional details about permitting for impacts to floodplains and the Section 408 permission process are provided in **Section 5.13**, Permits.

Figure 12: Flood Storage Impacts – Goebel Park Complex



5.4 Cultural Resources

KYTC and ODOT evaluated cultural resources in accordance with Section 106 of the National Historic Preservation Act of 1966 (Section 106) and 36 CFR part 800. This section discusses changed conditions and effects as a result of the Re-eval 1 Design. Based on the analyses provided in the following sections, the 2024 SEA/FONSI remains valid and no further analysis with respect to cultural resources is required.

5.4.1 Area of Potential Effects

KYTC identified areas in Kentucky where the disturbance limits of the project extend beyond the area of potential effects (APE) evaluated for the 2024 SEA/FONSI. No changes to the APE in Ohio were required.

In Kentucky, the APE was expanded to encompass these design and construction method refinements resulting from detailed design progression:

- Staging and construction activities along the Ohio River, including the Pete Rose bulkhead construction and work area and access along the Ohio River east of Clay Wade Bailey Bridge (see **Section 4.2.2**);
- Detailed design refinements at the intersection of West 4th Street and Main Street at the Clay Wade Bailey Bridge that improved the intersection geometry;
- Drainage basins and associated infrastructure that support separating the interstate runoff from the existing combined sewer system (see **Section 4.2.3**); and
- A proposed noise barrier located east of I-75 near Edgecliff Road and continuing north along the existing ROW boundary, terminating just south of the intersection of James Simpson Jr. Way and West 14th Street in Covington, Kentucky.

The Kentucky State Historic Preservation Office (SHPO) concurred with the expanded APE on October 3, 2024, and again on December 10, 2024. Refer to **Appendix G** for a map of the expanded APE and SHPO correspondence.

5.4.2 History/Architecture Resources

This section summarizes the eligibility recommendations and effects on historic/architectural resources for the Re-eval 1 Design as compared to the Concept I-W Base Design.

Kentucky

To evaluate historic resources in the Kentucky portions of the expanded APE, KYTC prepared a *Cultural Historic Survey Report Addendum II (March 2025)* and detailed its assessment of eligibility and effects in a consultation letter dated April 10, 2025 (**Appendix G**). A total of 42 additional historic-age resources were examined within the expanded APE. Only one of these resources, the Garden of Hope (KE-1372, located at 699 Edgecliff Rd), was recommended as eligible for listing on the National Register of Historic Places (NRHP) under Criterion Consideration A and Criterion A for its association with the theme of tourism and recreation in the automobile age. The resource is a one-acre parcel that is a religious-themed garden site intended for meditation and prayer, based on Christian themes. Additionally, based on detailed design progression, which includes optimization to noise barriers and modifications in bridge construction methods, effects to 23[1] previously documented historic properties were also evaluated (**Table 12**).

No Effect Determinations

Detailed design progression, which refined noise barriers and modified bridge construction methods, still does not permanently or temporarily impact the following six historic properties within the expanded APE and, therefore, the project has no effect to these historic properties: Highland Cemetery Historic District, residence at 1000 Emery Drive, Futuro House (224 Wright Street), commercial building at 402 Bakewell Street, and Sisters of Notre Dame Convent and Cemetery.

[1] Kentucky SHPO consultation included in Appendix G references a total of 24 previously documented historic properties evaluated; however, that total includes the newly documented Garden of Hope (KE-1372).

No Adverse Effect Determinations

In accordance with 36 CFR part 800, the project will have no adverse effect to the 12 historic properties detailed below. The Kentucky SHPO concurred with this finding on April 10, 2025. Refer to **Appendix G** for Kentucky SHPO correspondence. The properties and effects resulting from the Re-eval 1 Design are:

- Garden of Hope: Based on detailed design progression, a noise barrier was proposed within approximately 42 feet of the Garden of Hope. Although installing a noise barrier would be partially visible due to tree removal, visual impacts from the barrier would be minimal because of its placement within the interstate ROW downslope from the property. The proposed barrier did not physically encroach upon the Garden of Hope boundary. While this barrier was included in Section 106 consultation, further noise analysis determined that the proposed barrier near the Garden of Hope will not be advanced for construction due to constructability issues and not meeting reasonableness criteria per KYTC *Noise and Abatement Policy (August 2022)*. See **Section 5.6.1** and **Appendix I** for further details;
- Covington Levee System: Based on detailed design, falsework to temporarily support the companion bridge structure is required, which will impact the levee system as described in **Section 5.3.6**. The falsework, bulkhead, trestle, ramp, and construction access will temporarily impact the levee. However, consistent with the Concept I-W Base Design, the Re-eval 1 Design will not permanently impact the levee operations. All of the temporary works will be removed and the levee will be restored to pre-construction conditions, as described in **Section 5.3.6**. The only remaining elements will be portions of the support beams, which will be cut below the surface of the levee. As a result, these alterations will not compromise the character-defining features that contribute to the significance and integrity of the Covington Levee System;
- Elberta Apartments; West Side/Main Strasse; Old Fort Mitchell; Beechwood; Hillsdale Subdivision; and Highland Cemetery historic districts: Based on detailed design progression, noise barriers will be constructed in proximity to these six historic districts, and one proposed noise barrier encroaches on the southern corner of the Elberta Apartments Historic District. While there will be minor visual impacts, including tree removal in some instances, the overall integrity and significance of the historic districts will remain intact. Based on noise public outreach described in **Section 5.6.1**, benefited receptors were in favor of constructing the noise barriers near or within these historic districts. Per KYTC's *Noise Analysis and Abatement Policy (August 2022)*, these results will be used to inform the construction of the proposed barriers; and
- C&O Railroad Bridge, 829-831 Highway Avenue, Brent Spence Bridge, Clay Wade Bailey Bridge: While there will be temporary works within proximity to these historic properties to construct the new companion bridge and rehabilitate the existing BSB, these project elements are temporary in nature and will be removed once construction of the companion bridge and BSB rehabilitation are complete. These temporary works will not compromise the character-defining features of these properties and, therefore, the integrity and significance of these historic properties will remain intact.

Adverse Effect Determination

Detailed design progression optimized noise barriers in proximity to and within the Lewisburg Historic District, including minor encroachment on the southeast and northeast corners of the district (**Appendix A: Exhibit 13)**. The barriers will be adjacent to the parcel boundaries of residences along Hermes Avenue and Hinde Street and in proximity to the eastern end of West Watkins Street. Based on detailed design progression, these barriers have been optimized to reduce both their length and height. Noise-related public outreach identified that benefited receptors are in favor of constructing the barriers and applying a transparent aesthetic treatment. Both the optimization of the noise barriers and the aesthetic treatment reduce impacts to the historic district. See **Section 5.6.1** for further details. As previously documented in the 2024 SEA/FONSI, the project will have an adverse effect to the Lewisburg Historic District. However, previous construction of the I-75 corridor altered the setting and, while trees will be removed to facilitate noise barrier construction, the trees date to the mid-1990s and are not contributing elements of the historic district. Therefore, the construction of noise barriers will not result in additional adverse effects and will not compromise the significance and integrity of the historic district.

Table 12: Kentucky History/Architecture Summary

Site No.	Site Name Address	NRHP Status	Concept I-W Base Design Effects	Re-eval 1 Design Effects
KE-1372	Garden of Hope	Eligible	Not applicable; outside of previous APE	No Adverse Effect
KECL-107	C&O Railroad Bridge Ohio River East of BSB	Eligible	No Adverse Effect	No change from Concept I-W Base Design
KE-09	West Side/Main Strasse Historic District	Listed	No Adverse Effect	No change from Concept I-W Base Design
KE-010	Lewisburg Historic District	Listed	Adverse Effect	No change from Concept I-W Base Design
KECL-815	Bavarian Brewing Company/ Kenton Co Government Center 1840 Simon Kenton Way (522 West 12th Street)	Listed	No Adverse Effect	No change from Concept I-W Base Design
KE-011	Old Fort Mitchell Historic District	Listed	No Effect	No Adverse Effect
KECL-1018	Residence 521 Western Avenue	Eligible	No Effect	No change from Concept I-W Base Design
KEC-462	Bavarian Brewery Bottling Works/Glier's Goetta 533 Goetta Place	Eligible	No Adverse Effect	No change from Concept I-W Base Design
KEC-460	Residence 829-831 Highway Avenue	Eligible	No Effect	No Adverse Effect

Site No.	Site Name Address	NRHP Status	Concept I-W Base Design Effects	Re-eval 1 Design Effects
KEFM-150	Highland Cemetery Historic District	Listed	No Effect	No change from Concept I-W Base Design
KEC-456	Residence 1000 Emery Drive	Eligible	No Effect	No change from Concept I-W Base Design
KEC-458	Residence 45 Rivard Drive	Eligible	No Adverse Effect	No change from Concept I-W Base Design
KEC-1048	Futuro House 224 Wright Street	Eligible	No Effect	No change from Concept I-W Base Design
KEC-1064	Commercial Building 402 Bakewell Street	Eligible	No Effect	No change from Concept I-W Base Design
KEC-1038	Quality Inn/Radisson Hotel 626 West 5th Street	Eligible	No Adverse Effect	No change from Concept I-W Base Design
KEC-820	Brent Spence Bridge	Eligible	No Adverse Effect	No change from Concept I-W Base Design
KEC-1068	Covington Levee System	Eligible	No Adverse Effect	No change from Concept I-W Base Design
KECL-692	Residence 536 West 13th Street	Eligible	No Adverse Effect	No change from Concept I-W Base Design
KEC-1011	Residence 534 West 13th Street	Eligible	No Adverse Effect	No change from Concept I-W Base Design
KE-012	Beechwood Historic District	Listed	No Adverse Effect	No change from Concept I-W Base Design
KE-952	Sisters of Notre Dame Convent and Cemetery 1601 Dixie Highway	Eligible	No Effect	No change from Concept I-W Base Design
KE-07 KE-08	Elberta Apartments Historic District	Eligible	No Adverse Effect	No change from Concept I-W Base Design
KE-013	Hillsdale Subdivision Historic District	Eligible	No Adverse Effect	No change from Concept I-W Base Design
KEC-1075	Clay Wade Bailey Bridge	Eligible	No Adverse Effect	No change from Concept I-W Base Design

Ohio

Harriet Beecher Stowe Elementary School (HAM-1342-43) was previously determined eligible for the NRHP, and the Concept I-W Base Design was determined to have no effect on this property. The resource is currently owned by and houses the WXIX TV station. Based on detailed design progression, a permanent subterranean easement is required to install anchors for a retaining wall at the east end of the parcel. A system of anchors

will be installed beneath a section of the paved parking lot, which is adjacent to the building and partially covered by carports, but the anchors will not be installed under the historic building. All work will be located within the parking area. No changes to the property boundary and no surface landform or contributing feature of the historic building will be affected. One additional commitment has been identified to ensure protection of the property:

- The contractor will monitor the WXIX TV Station building, which is housed in the historic Harriet Beecher Stowe Elementary School, during installation of shoring, anchors, and drilled shaft permanent retaining wall.[1]

The project will have no adverse effect to the Harriet Beecher Stowe Elementary School. The Ohio SHPO concurred with this finding on August 13, 2024. Refer to **Appendix G** for Ohio SHPO correspondence.

5.4.3 Archaeological Resources

There are no changes to archaeological resources in Ohio. Following detailed design progression, 13 areas totaling approximately 2.4 acres were identified in Kentucky that fall outside areas previously surveyed for archaeological resources. These areas are located throughout the project corridor in Kentucky and are primarily related to drainage improvements needed to separate stormwater from the sanitary sewer. Based on KYTC's review, none of these areas have previously recorded sites within or immediately adjacent to the project footprint. In a letter dated April 4, 2025, KYTC requested concurrence from the Kentucky SHPO that these additional areas do not retain integrity and do not warrant a Phase I archaeological survey. The Kentucky SHPO concurred on April 10, 2025. Based on additional data collection and review, KYTC determined that two areas of deferred archaeology in the Kenton County Government Offices parking lot are unlikely to retain integrity and do not warrant a Phase I archaeological survey. KYTC documented these findings in a letter to the Kentucky SHPO on May 2, 2025, and requested concurrence on these findings. The Kentucky SHPO concurred on May 6, 2025. Therefore, stipulation III.B.2.a of the project Section 106 Programmatic Agreement executed on October 20, 2023, has been fulfilled, and 2024 SEA/FONSI Commitment 16 and Commitment 17 are considered complete. See **Appendix G** for the Section 106 consultation.

5.5 Air Quality

Since the 2024 SEA/FONSI, there are no changes to the findings or further analysis warranted for carbon monoxide, ozone, PM2.5, or emissions burdens. As such, this section only addresses Mobile Source Air Toxics (MSAT).

To determine the adequate level of analysis for the MSAT analysis for the current project design, KYTC and ODOT compared the traffic volumes in the 2023 *Air Quality Technical Report: Quantitative MSAT Analysis Report* to year 2049 certified traffic projections for the Re-eval 1 Design. Note that the 2049 traffic forecasts were derived from the Ohio-Kentucky-Indiana Regional Council of Governments (OKI) 2050 travel demand

[1] Commitment 65 (new commitment) in Table 17.

model. The following discussion summarizes the findings detailed in the *Air Quality Technical Memorandum: Mobile Source Air Toxics (December 2024)* (**Appendix H**). Based on this analysis, the 2024 SEA/FONSI remains valid and no further analysis with respect to air quality is required.

Total vehicle miles traveled (VMT) in an affected transportation network is the primary driver of the MSAT analysis in the U.S. Environmental Protection Agency's (USEPA) Motor Vehicle Emission Simulator (MOVES) model, which was used to quantify estimated MSAT emissions in the 2023 report. For this reason, a comparison of total VMT between the Concept I-W Base Design and the Re-eval 1 Design was conducted to determine the level of analysis required to support this re-evaluation. **Table 13** reflects the VMT for the 2050 No-Build Scenario and Concept I-W Base Design. As concluded in the 2024 SEA/FONSI, the project will increase VMT over the No-Build scenario by 1.7 percent. Similarly, the Re-eval 1 Design will also result in a 1.7 percent increase in VMT over the No-Build scenario (**Table 14**). The comparison does reflect minor differences in VMT between the No-Build scenario in the Concept I-W Base Design and Re-eval 1 Design. However, these differences are attributed to the change in affected network and refinements in the travel demand model. This includes accounting for independent projects in the No-Build network, such as the closure of Elm Street. These differences are within an acceptable range of deviation.

Table 13: Concept I-W Base Design Affected Network[1]

Vehicle Miles of Travel (VMT)	2050 No-Build Scenario	2050 Build Scenario	Difference
Daily (million miles)	2.16	2.20	1.7%
Annual (million miles)	723.12	735.41	1.7%

[1] VMT values are based on 2049 traffic projections derived from OKI's 2050 travel demand model

Table 14: Re-eval 1 Design Affected Network[1]

Vehicle Miles of Travel (VMT)	2050 No-Build Scenario	2050 Build Scenario	Difference
Daily (million miles)	2.14	2.17	1.7%
Annual (million miles)	713.50	725.66	1.7%

[1] VMT values are based on 2049 traffic projections derived from OKI's 2050 travel demand model

Because the VMT increases from the No-Build to the Build scenario are consistent between the Concept I-W Base Design and the Re-eval 1 Design, it was concluded that the assessment of MSAT pollutant impacts remains consistent with the findings of the 2023 quantitative assessment, which concluded that the project is not anticipated to have an appreciable impact on MSAT emissions. Therefore, it was determined that a new quantitative MSAT emissions analysis was not warranted.

The 2023 report concluded that emissions of all MSAT pollutants are projected to be substantially lower for the 2050 No-Build and Build scenarios as compared to the 2020 Existing scenario. When compared to the 2050 No-Build scenario, emissions of all MSAT pollutants were projected to decrease across the affected network for the 2050 Build scenario except for a minimal 0.5 percent increase in polycyclic organic matter (POM). However, POM showed a significant reduction of over 80 percent in the 2050 No-Build and Build scenarios when compared to the 2020 Existing scenario. Therefore, the minimal increase (0.5 percent) in POM for the

2050 Build scenario is not considered to be significant. USEPA's vehicle and fuel regulations are expected to result in substantially lower MSAT levels in the future than exist currently due to cleaner engine standards coupled with fleet turnover. The magnitude of the USEPA-projected reductions is so great (even after accounting for VMT growth) that MSAT emissions in the BSB Corridor Project area will be substantially lower in the future than they are today. The decrease in emissions in the 2050 Build scenario as compared to the 2050 No-Build scenario is likely a result of the improved traffic flow and higher average speeds with the project in the Build scenario.

Similarly, because the projected changes in VMT from the Re-eval 1 Design are consistent with the Concept I-W Base Design, the Re-eval 1 Design is anticipated to result in similar air emissions to Concept I-W Base Design. This will be slightly greater (0.7 percent) when the 2050 Build scenario is compared to the 2050 No-Build scenario. The 0.7 percent difference in air emissions is less than the associated 1.7 percent increase in VMT. Therefore, consistent with the 2024 SEA/FONSI, the Re-eval 1 Design is expected to have minimal effects on global environmental changes.

5.5.1 Community Impacts

While the findings and conclusions of the 2023 MSAT analysis remain valid, changes in access that alter traffic patterns and volume distribution may affect communities differently compared to the original evaluation. Changes in traffic patterns and access are explained in greater detail in **Section 5.1.4**. These changes are most noticeable in Cincinnati, where the Build Innovations, particularly OH 2 and OH 4, modify connections and redistribute traffic. The resulting changes in traffic patterns and volume primarily occur within the Central Business District-Riverfront and Queensgate neighborhoods in areas with no sensitive land areas, and the West End and Over-the-Rhine neighborhoods, which have residences, parks, and other sensitive land uses. It is reasonable to conclude that, when compared to the Concept I-W Base Design, the Re-eval 1 Design may alter exposure to MSAT emissions in sensitive land areas, both resulting in localized increases and decreases. However, like the Concept I-W Base Design, the Re-eval 1 Design will generally improve traffic flow and reduce traffic congestion and vehicle idling in the area transportation network, which is expected to overall reduce vehicle emissions and improve local air quality for local communities.

5.5.2 Scope of MSAT Analysis and Consideration of Human Health Effects

As noted in the 2023 *Quantitative MSAT Analysis Report*, this analysis represents the expected MSAT emissions for the entire corridor and does not represent emissions for any one point along the corridor. While MSAT emissions for the 2050 Build scenario are expected to decrease when compared to the 2020 Existing and 2050 No-Build scenarios, it is possible that some localized areas may experience an increase in emissions and ambient levels of these pollutants due to locally increased traffic levels associated with the project. In FHWA's view, information is incomplete or unavailable to credibly predict the project-specific health impacts due to changes in MSAT emissions associated with a proposed highway project. The outcome of such an assessment, adverse or not, would be influenced more by the uncertainty introduced into the process through assumption and speculation rather than any genuine insight into the actual health impacts directly attributable to MSAT exposure associated with a proposed action. Additional information on the consideration of human

health effects in air quality analyses is discussed in the *Air Quality Technical Memorandum: Mobile Source Air Toxics* (*December 2024*) (**Appendix H**).

5.6 Noise

As part of the re-evaluation process, KYTC and ODOT assessed resource-specific changes based on the Build Innovations and detailed design progression since issuance of the 2024 SEA/FONSI. Based on the analysis provided in the following sections, the 2024 SEA/FONSI remains valid and no further analysis with respect to noise is required.

5.6.1 Kentucky

Due to substantial changes in the horizontal and vertical alignments proposed as part of KY 1, KY 2, and KY 3 as compared to the Concept I-W Base Design, a re-evaluation of noise impacts was conducted for the Kentucky portion of the project corridor. Certified traffic for the project was updated September 19, 2024, after the issuance of the 2024 SEA/FONSI. The 2024 Certified Traffic Report predicts an increase in traffic for the 2049 design year ranging from 2 percent to 3 percent along the Kentucky portion of the project corridor.

KYTC evaluated noise for the Re-eval 1 Design and documented the results in *Re-evaluation of Traffic Noise Impacts Brent Spence Bridge Corridor Project Kentucky – Northern Section (June 2025)* (**Appendix I**) and *Re-evaluation of Traffic Noise Impacts Brent Spence Bridge Corridor Project Kentucky Southern Section (May 2025)* (**Appendix J**). Overall, the noise analyses concluded that the Build Innovations will result in noise impacts for 1,246 receptors spread across 11 noise sensitive areas (NSAs) and activity categories in Kentucky, which reduces noise impacts to 242 receptors or approximately 16 percent of noise receptors when compared to the Concept I-W Base Design. While noise impacts have changed with the Re-eval 1 Design, noise impacts have been reduced and remain insignificant.

Table 15 summarizes the results of the noise barrier/barrier systems and noise/visual screening analyzed, and **Appendix A: Exhibit 13** displays their locations. As further described in the technical reports, an exact comparison of previously proposed barriers/barrier systems and the currently proposed barriers/barrier systems is complicated due to a change in reporting approach[1] and the incorporation of updates to the certified traffic and modeling associated with the analyses. The innovation changes also substantially changed the noise environment, which in turn affected the number and degree to which receptors were impacted. Therefore, based on these changes informing the updated analysis, the design of the following barriers, barrier systems and arrays have been revised as follows:

- Northern Section NSA B: Concept I-W Base Design barrier system consisted of seven barrier segments. Re-eval 1 Design replaced this with a three-barrier system;

[1] The Re-evaluation of Traffic Noise Impacts for the Kentucky Northern Section uses NSAs (NSA A, NSA B, NSA C, NSA E, and NSA F) to disseminate noise analysis values and noise barrier effects throughout the Kentucky Northern Section study area. The Re-evaluation of Traffic Noise Impacts for the Kentucky Southern Section utilizes the same methodology as the Kentucky Northern Section study. However, the terminology used for the areas of study in the southern section are described based on analyzed barrier locations and barrier designations.

- Northern Section NSA C, Area C1: Re-eval 1 Design modified the design to include a two-barrier system rather than three-barrier system;
- Northern Section NSA E: Re-eval 1 Design includes one barrier when completed, compared to six barrier segments with Concept I-W Base Design. Since the 2024 SEA/FONSI, KYTC completed an independent pilot project that constructed a transparent noise barrier along 1,000 feet of Crescent Avenue in the Lewisburg area, west of the interstate. While not directly part of the BSB Corridor project, the pilot project corresponded to a portion of Barrier System E/F proposed in the 2024 SEA/FONSI. As such, the Crescent Avenue Wall has been accounted for as an existing condition in the noise analysis for this re-evaluation and the Re-eval 1 Design of the NSA E barrier consists of a 400-foot-long extension of the existing Crescent Avenue Wall;
- Northern Section NSA F: Consistent with the 2024 SEA/FONSI, a total of three standalone barriers are recommended for NSA F. Based on changes from KY 2, barrier lengths were shortened and minor adjustments to barrier heights and locations were made; and
- Southern Section B20/NSA D and B23: Barriers that were previously proposed in this area of the project (B20/NSA D and B23) have been re-evaluated to consider whether changes in location or geometry of the barriers are appropriate as a result of the Re-eval 1 Design, resulting in minor modifications to locations and adjustments to barrier heights. As for the other areas of the project in the Kentucky Southern Section, no other adjustment in barrier location, length, or height has been recommended.

For these reasons, **Table 15** largely reflects only the results of the barriers/barrier systems evaluated as part of Re-eval 1 Design. Where equivalent comparisons can be made, and the results vary between Re-eval 1 Design and Concept I-W Base Design, the Concept I-W Base Design results are included in parentheses. Where proposed barriers and corresponding evaluation results remain unchanged from the 2024 SEA/FONSI, the text in **Table 15** is italicized. Based on the results of the evaluation, KYTC is proposing eight noise barriers/barrier systems, compared to seven in the 2024 SEA/FONSI, that are feasible and reasonable in accordance with KYTC's *Noise Analysis and Abatement Policy (August 2022)* and are considered likely for advancement. Barriers proposed are shaded in **Table 15.** Notable changes to KYTC's barrier recommendations from the 2024 SEA/FONSI include:

- Northbound I-71/I-75 from Pike Street to West 5th Street (NSA B)[1]: As documented in the 2024 SEA/FONSI, this barrier system did not satisfy feasibility and reasonableness criteria but was proposed for noise/visual screening.[2] However, based on modifications to the project design (KY 1 and KY 2) and optimization of the barriers, the NSA B barriers now meet feasibility and reasonableness criteria and are recommended for noise abatement;
- Northbound I-71/I-75 from St. Elizabeth Covington Hospital to Linden Avenue (Barrier System NSA C1/C2): A barrier system was previously proposed within these limits. However, this has been modified

[1] The 2024 SEA/FONSI identified this as a noise/visual screening barrier along Northbound I-71/I-75 from Pike Street to West 4th Street.

[2] The Mainstrasse Neighborhood and the Goebel Park Complex are located in NSA B. Based on the Build Innovations (KY 1 and KY 2), and the degree of change recommended for the barriers in NSA B, the barrier designations were changed from the SEA/FONSI. These three barriers are designated as Wall A/B, Wall B2 and Wall B5.

to propose a barrier system comprised of NSA B and NSA C1 along NB I-71/I-75 from Pike Street to West 5th Street. NSA C2 barrier is no longer recommended in this barrier system because it does not meet reasonableness criteria and has substantial constructability issues; and

- Southbound I-71/I-75 from West 3rd Street to south of Hermes Avenue (Barrier System E/F): As documented in the 2024 SEA/FONSI, this proposed barrier system included NSA E and NSA F barriers that together satisfied feasibility and reasonableness criteria; however, as an individual barrier, the NSA E barrier did not satisfy the criteria while NSA F did. While the barrier system is no longer proposed, three standalone barriers are recommended in NSA F that meet KYTC feasibility and reasonableness criteria. These barriers are referred to as Southbound I-71/I-75 from South of West 5th Street to Pike Street (NSA F) in **Table 15.** One of these barriers, Wall F2, connects to the southern terminus of the existing Crescent Avenue Wall.[1] Additionally, a noise/visual screening barrier is recommended in NSA E. In **Table 15** the noise/visual screening barrier is referred to as Southbound I-71/I-75 from the existing BSB to south of West 5th Street (NSA E).

Consistent with the 2024 SEA/FONSI Commitment 23, KYTC advanced the following noise/visual screening barriers for public outreach that do not meet all of KYTC's *Noise Analysis and Abatement Policy (August 2022)* criteria:

- Southbound I-71/I-75 from the existing BSB to south of West 5th Street (NSA E)[2]; and
- Southbound I-71/I-75 from Dixie Highway to south of West Maple Avenue (B17A/B17B).

In accordance with the KYTC *Noise Analysis and Abatement Policy (August 2022)* and 2024 SEA/FONSI Commitment 23, noise abatement public meetings and surveys were conducted with benefited receptors at each location where noise and noise/visual screening barriers are proposed in Kentucky. Based on completion of this outreach, as well as detailed design progression that evaluated barriers and barrier spacing in the vicinity of Hermes Avenue, Watkins Street, and Hinde Street, Commitment 23 is considered complete. It should be noted that the 2024 pilot project that constructed the Crescent Avenue Wall was intended to help KYTC evaluate the effectiveness of transparent barriers to abate noise and the feasibility of maintenance, as well as provide the public an opportunity to see an example of a transparent noise barrier. As a result, for the BSB Corridor project, transparent barriers were included as an aesthetic option in benefited receptor surveys in the Lewisburg area, Mainstrasse Neighborhood, and the Goebel Park Complex.

On April 4, 2025, and April 9, 2025, KYTC sent a total of 788 letters to all owners and residents of properties that are considered benefited (>5 dB reduction) by the noise barriers proposed as part of Re-eval 1 Design in the Kentucky portion of the project. The letter explained that their opinions were being sought regarding whether they were in favor of the barriers being constructed and, if constructed, their preference for aesthetic finish (smooth or ashlar cut stone, or transparent within the adjacent Lewisburg Historic District) of the finished product. An on-line meeting was held with interested owners and residents on April 14, 2025, (KY Southern Section) and April 24, 2025, (KY Northern Section) and an in-person Open House was held on April 29, 2025,

[1] Although Wall 2 connects to an existing barrier, it was designed as a standalone wall.
[2] This barrier was previously proposed as part of Barrier System E/F. Based on Build Innovations (KY 1 and KY 2), design of this barrier has been modified.

at the KYTC District 6 Office in Covington, Kentucky. Voting was conducted for a period of 30 days resulting in 72 votes being cast. The letters sent to owners/residents also gave interested parties the option to request a paper ballot to cast their vote. Voting was also made available during the open house. Votes cast were weighted in accordance with KYTC's *Noise Analysis and Abatement Policy (August 2022)*, with greater weight being given to front-row receptors.

Table 15: Kentucky Noise Barrier and Visual Screening Barrier Summary[1]

Barrier Location	Length (feet)	Height (feet)	Estimated Cost	Number of Benefited Receptors	Estimated Cost per Benefited Receptor	Acoustic Feasibility Achieved (Yes/No)	Design Goal Achieved (Yes/No)	Cost Effective Achieved (Yes/No)	Feasible and Reasonable (Yes/No)
Northbound I-71/I-75 from Beechwood Road to Dixie Highway (B18)	*4,487*	*16-24*	*$2,791,144*	*213*	*$13,104*	*Yes*	*Yes*	*Yes*	*Yes*
Northbound I-71/I-75 from Dixie Highway to Kyles Lane (B19)	*2,617*	*20*	*$1,670,599*	*59*	*$28,315*	*Yes*	*Yes*	*Yes*	*Yes*
Northbound I-71/I-75 from Kyles Lane to the Ivy Knoll Senior Living Community (B20/NSA D)	4,712 (5,255)	6-24 (19.6 average)	$3,179,296 ($3,149,584)	168 (132)	$18,924 ($23,860)	Yes	Yes	Yes	Yes
Northbound I-71/I-75 from Pike Street to West 5th Street (NSA B)[2]	5,201 (12,750)	15 (18.6 average)	$2,495,744 ($7,459,536)	108 (170)	$23,109 ($43,880)	Yes	Yes (No)	Yes (No)	Yes (No)
Northbound I-71/I-75 from West 5th Street to the existing BSB (NSA A)	3,258 (6,402)	12-15 (15.2 average)	$1,550,464 ($2,904,401)	80 (0)	$19,381 (N/A)	Yes (No)	No	Yes (No)	No
Northbound I-71/I-75 from St. Elizabeth Covington Hospital to West 5th Street (Barrier System NSA B and NSA C, Area C1)	7,935	16	$4,032,256	118	$34,172	Yes	Yes	Yes	Yes
Northbound I-71/I-75 from St. Elizabeth Covington Hospital to Pike Street (NSA C, Area C1)	2,734 (2,486)	19 (19.8 average)	$1,536,512 ($1,433,760)	10 (24)	$74,803 ($59,740)	Yes	No (Yes)	No	No
Northbound I-71/I-75 from Edgecliff Road to Linden Avenue (NSA C, Area C2)	1,531	24	$1,175,808	4	$293,952	Yes	No	No	No
Southbound I-71/I-75 from 12th Street to Kyles Lane (B23)[3]	1,972 (2,350)	18-22	$1,176,822 ($1,464,284)	83 (81)	$14,178 ($18,078)	Yes	Yes	Yes	Yes
Southbound I-71/I-75 north of Dixie Highway (B16B)	*1,308*	*12-22*	*$723,746*	*19*	*$38,091*	*Yes*	*Yes*	*Yes*	*Yes*
Southbound I-71/I-75 from south of West 5th Street to Pike Street (NSA F)[4]	4,559 (6,698)	16 (19.3 average)	$2,326,016 ($3,773,346)	73 (116)	$31,863 ($32,529)	Yes	Yes	Yes	Yes
Southbound I-71/I-75 from the existing BSB to south of West 5th Street (NSA E)[4]	1,400[5]	13	$596,496	0	N/A	No	No	No	No
Southbound I-71/I-75 from Dixie Highway to south of West Maple Avenue (B17A/B17B)	*1,153*	*18-24*	*$759,435*	*16*	*$47,465*	*Yes*	*Yes*	*No*	*No*
	1,153	*16-20*	*$647,286*	*13*	*$49,791*	*Yes*	*No*	*No*	*No*

[1] Shaded rows indicate the barriers/barrier systems are proposed. Italicized rows indicate that the barriers/barrier systems have not changed since the 2024 SEA/FONSI. Concept I-W Base Design evaluation results are also included in parentheses where barrier/barrier system comparisons can be made and results differ between Concept I-W Base Design and Re-eval 1 Design.
[2] Referred to as Northbound I-71/I-75 from Pike Street to West 4th Street in the 2024 SEA/FONSI.
[3] Referred to as Southbound I-71/I-75 from north of St. Joseph Lane to Kyles Lane in the 2024 SEA/FONSI.
[4] Previously part of a barrier system referred to as Southbound I-71/I-75 from West 3rd Street to south of Hermes Avenue (Barrier System E/F) in the 2024 SEA/FONSI.
[5] This length includes 1,000 feet of existing wall along Crescent Avenue. The BSB Corridor Project will construct a 400-foot-long extension to the existing wall.

The majority of ballots received were in favor of constructing noise barriers and noise/visual screening barriers (**Table 16**). The barriers recommended for NSA F intersect or are adjacent to the Lewisburg Historic District, as is the noise/visual screening barrier recommended for NSA E. Given the proximity to the Main Strasse Historic District and the Goebel Park Complex, transparent barriers were also considered for NSA B. The benefited receptors for these barriers were in favor of transparent barriers. For the remaining barriers where ballots were received, a stone finish was the preference. Per KYTC's *Noise Analysis and Abatement Policy (August 2022)*, these results will be used to inform the construction of the proposed noise barriers/barrier systems and noise/visual screening barriers.

Table 16: Summary of Ballot Results

Barrier	Votes Cast to Construct		Weighted Votes to Construct		Finish Preference		
	Yes	No	Yes	No	Smooth	Stone	Transparent
NSA B[1]	5	0	18	0	0	2	3
NSA C[1]	0	0	0	0	0	0	0
NSA E[2]	1	0	2	0	0	0	1
NSA F	6	0	19	0	1	1	4
B16B	3	1	8	0	0	4	N/A
B17A and B17B[2]	11	0	38	0	2	9	N/A
B18	12	0	36	0	0	12	N/A
B19	16	2	40	23	1	17	N/A
B20/NSA D	14	1	48	4	0	15	N/A
B23	0	0	0	0	0	0	N/A

[1] Proposed as part of Barrier System NSA B and NSA C, Area C1.
[2] Proposed as noise/visual screening per 2024 SEA/FONSI Commitment 23.

Noise barriers/barrier systems and noise/visual screening barriers in Kentucky being proposed have also been considered during the evaluation of potential impacts on historic properties (**Section 5.4**), visual resources (**Section 5.7.1**), Section 4(f) properties (**Section 5.11**), and Section 6(f) properties (**Section 5.12**) and the technical reports referenced within those sections.

5.6.2 Ohio

The Re-eval 1 Design did not introduce substantial changes to the vertical or horizontal profile when compared to the Concept I-W Base Design in Ohio. Therefore, the findings detailed in the 2024 SEA/FONSI for Ohio are still valid and no further analysis is required. However, upon detailed design progression, the noise barrier at noise sensitive area (NSA) 5, located on the east side of I-75 south of Ezzard Charles Drive and comprised of multi-family residential dwelling units and outdoor locations, conflicts with a drilled pier retaining wall near the pedestrian bridge over Winchell Avenue and an interstate ramp. To resolve this issue, the noise barrier at NSA

5 will be shortened by 70 feet to end the barrier before it intersects the pedestrian bridge. This alteration does not affect the feasibility or reasonableness of the barrier for these reasons:

- The benefitted receivers at the NSA 5 barrier are located several hundred feet north of the pedestrian bridge; and
- When the noise model was conducted, apartments proposed in the vicinity of the project were included in the noise model and determined to not benefit from the barrier, receiving only a 3-decibel reduction. Based on actual construction of the apartments, there are no exterior human uses on the freeway side, such as balconies or patios. Under the ODOT *Analysis and Abatement of Highway Traffic Noise Policy Statement (October 2023)*, the new apartments are not considered sensitive receivers.

In accordance with the ODOT *Analysis and Abatement of Highway Traffic Noise Policy Statement (October 2023)* and 2024 SEA/FONSI Commitment 25, ODOT completed noise abatement public involvement with benefited receptors where noise abatement was determined feasible and reasonable. **Appendix K** provides a summary of the public involvement efforts. On March 11, 2024, a stakeholder survey vote regarding the construction of noise barrier walls was conducted. Individual stakeholder feedback was accepted through April 10, 2024. The survey was distributed to six stakeholder organizations, which were encouraged to share it with their networks in the West End Neighborhood and community. The survey included both the noise barrier survey and a location map for NSAs, with five areas considered. Out of the possible 310 resident votes and 335 owner votes, 30 residents and 4 property owners responded. Additionally, based on the low response rates and further coordination with FHWA, ODOT completed additional noise outreach for the West End Neighborhood. As part of this outreach, an ODOT representative hosted “office hours” at the West End Recreation Center from 3 to 6 PM on October 23, 2024, and at Longworth Hall from 12 to 3 PM on October 24, 2024, to answer questions regarding noise impacts and noise abatement. This outreach was coordinated with the West End Community Council and the public was notified of the opportunity via the project’s social media accounts. No benefited receptors attended either outreach event. As a result of public involvement with benefited receptors, the barriers identified in the 2024 SEA/FONSI remain unaffected, and all barriers will be constructed as proposed.

Based on completion of this outreach, 2024 SEA/FONSI Commitment 25 is considered complete. In accordance with 2024 SEA/FONSI Commitment 38.c, a noise barrier will be constructed along the Queensgate Playground and Ball Field and the highway boundary, which negates the need for a limited-access right-of-way fence.

5.6.3 Construction Noise

Noise associated with Re-eval 1 Design construction activities is not expected to be substantially different than the impacts described in the 2024 SEA/FONSI for the Concept I-W Base Design. Construction activities will remain consistent with those outlined in the 2024 SEA/FONSI. However, modifications in construction staging and access, driven by detailed design progression, will alter the location of temporary construction noise and the exposure of nearby noise sensitive receptors. As detailed in **Section 4.2.2**, these changes will primarily affect areas along the riverfront in Covington, Kentucky, in connection with the construction of the new

companion bridge and rehabilitation of the existing BSB. No residences are located in this area and the Riverfront Commons Trail will be detoured during construction of the new companion bridge, which will limit noise exposure to Trail users. Therefore, changes in construction noise impacts are expected to be minimal.

The construction noise commitment[1] detailed in the 2024 SEA/FONSI remains unchanged.

5.7 Visual Resources

The key visual characteristics of the project remain unchanged since the 2024 SEA/FONSI. In addition to adhering to the *Brent Spence Bridge Project Aesthetic Committee Charter* and the Aesthetic Design Checklist (Ohio), three key objectives related to visual resources were identified for the Build Innovations process:

- Build the project with a context sensitive design that fits within the community;
- Provide strong aesthetic value along the project corridor; and
- Improve the local road aesthetics when crossing the interstate.

On June 18, 2025, ODOT and KYTC unveiled the selected design for the new companion bridge, a cable-stayed structure with an independent deck. This design was chosen following a comprehensive evaluation of multiple concepts against key visual and aesthetic criteria. As part of the coordination process, the design team worked closely with stakeholders to assess each concept's contextual fit, its visual relationship to the existing BSB, and its potential to serve as a recognizable regional landmark. This collaborative effort ensured that the selected design aligns with both community values and broader regional planning goals.

Consistent with 2024 SEA/FONSI conclusions, the Re-eval 1 Design incorporates aesthetic enhancements that are anticipated to offset minor visual impacts and improve the overall visual character of the corridor. These aesthetic enhancements and minimization efforts are described in **Sections 5.7.1** and **5.7.2**. Therefore, as described in the following sections, the 2024 SEA/FONSI remains valid and no further analysis with respect to visual resources is required.

5.7.1 Kentucky

As a result of the Re-eval 1 Design, the changes to project design primarily impact visual resources within the Kentucky portion of the corridor. The location of these changes run from south to north along the project corridor in Kentucky.

Through detailed design progression and coordination with the City of Fort Wright and the City of Fort Mitchell, interchange enhancements were identified at Kyles Lane and the Dixie Highway interchanges as detailed in **Section 4.2.1**. At both locations, the Re-eval 1 Design implements sequential roundabouts on either side of the interstate. With the roundabouts, the aesthetic treatments are expanded by implementing landscape elements into the center islands of the roundabouts, illustrated in **Section 4.2.1** (**Figure 9** and **Figure 10**). At both

[1] 2024 SEA/FONSI Commitment 32.

locations, this will improve the local road aesthetics over the interstate. Placemaking signs for each city will also be incorporated on the bridge structures over the interstate, consistent with the Concept I-W Base Design.

Figure 4 depicts the design modification between the Concept I-W Base Design and the Build Innovations within Park Hills, Kentucky. The Build Innovations (KY 3) shift the interstate to the east, which avoids a substantial rock cut and tie-back wall originally proposed with Concept I-W Base Design. While cut walls are still required on each side of the interstate, the three cut walls on the east and one cut wall on the west side of the interstate are shorter, intermittent walls that reduce the visual intrusion. Overall, this design change greatly reduces visual impacts in the area—allowing travelers along the interstate an unencumbered view of the expansive tree line buffer in Park Hills.

One of the major public concerns in Kentucky was the proposed height increases from the existing interstate profile with the Concept I-W Base Design, particularly near the Goebel Park Complex in Covington. With KY 1, the vertical profile of the interstate is lowered by approximately 20 feet compared to the Concept I-W Base Design. As shown in **Figure 13**, this decreases the visual intrusion to users within the Goebel Park Complex, as well as residences on the west side of the interstate in this location. KY 2 also reduces the encroachment onto Goebel Park by reconfiguring the NB frontage road. These two design modifications greatly improve the viewshed from the Goebel Park Complex, allowing the interstate profile to be less visually imposing to park users and blend more easily with the treed surroundings.

In addition, visual impacts from noise barriers in the Lewisburg area and Mainstrasse Neighborhood had been identified as a public concern during outreach for the 2024 SEA/FONSI. Based on the noise and noise/visual screening barriers described in **Section 5.6.1**, transparent barriers were provided as an aesthetic treatment option during noise public outreach. As detailed further in **Section 5.6.1**, where transparent barriers were an option, benefited receptors favored that application. The use of the transparent barriers will further minimize visual intrusion and will help preserve views of the Goebel Park Complex from the highway and preserve views of the skyline and across I-71/I-75 from surrounding neighborhoods, including Lewisburg and Mainstrasse.

Figure 13: Goebel Park Complex Viewshed Comparison

Moving north on the corridor, the City of Covington expressed a desire for a gateway entrance to the riverfront area at the West 3rd Street and Crescent Avenue intersection. With the design changes described above, further enhancements at West 3rd Street/Crescent Avenue became feasible. KY 1 reconfigures this intersection to a roundabout, rather than a signalized intersection, and incorporates further landscaped features into the center island and wayfinding signage that will have beneficial visual impacts. For a design rendering of these improvements, see **Appendix A: Exhibit 4**.

5.7.2 Ohio

As shown in **Appendix A: Exhibit 13**, and visualized in **Figure 14**, the Build Innovations (OH 1–OH 4) in Cincinnati reduce pavement between West 3rd Street and West 6th Street, which may open more than 11 acres of developable land for the City of Cincinnati (shown as open space east of the NB lanes, **Figure 14**). While it has not been determined how this land may be utilized in the future, the Build Innovations provide a slight reduction of the interstate footprint adjacent to the West Fourth Street Historic District and Firefighters Memorial, and this change is anticipated to be a visual enhancement for users of the area.

Figure 14: Ohio Build Innovations Visualization

5.8 Reasonably Foreseeable Effects

The past, present, and reasonably foreseeable future actions described in the 2024 SEA/FONSI remain unchanged. As detailed throughout **Section 5: Environmental Resources, Impacts, and Mitigation and Enhancement Measures**, the reasonably foreseeable adverse effects remain largely unchanged from those presented in the 2024 SEA/FONSI. While there are some increases in wetland impacts, permanent ROW acquisition, relocations, and habitat impacts, any adverse effects of the changes as compared to the impacts disclosed in the 2024 SEA/FONSI are minor. There are numerous beneficial impacts that result from the Re-eval 1 Design as compared to the Concept I-W Base Design presented in the 2024 SEA/FONSI, such as additional improved connectivity and aesthetics. Overall, the impacts presented in this re-evaluation do not substantially differ from those of the 2024 SEA/FONSI; therefore, when considered with other past, present,

and reasonably foreseeable projects, the Re-eval 1 Design is expected to result in a minor contribution to reasonably foreseeable effects. Therefore, the 2024 SEA/FONSI remains valid and no further analysis with respect to reasonably foreseeable effects is required.

5.9 Construction Impacts

The construction impacts described in the 2024 SEA/FONSI remain applicable to the Re-eval 1 Design. However, since the 2024 SEA/FONSI, detailed design progression has identified changes to construction staging and access as detailed in **Section 4.2.2**. These changes occur along the riverfront in Covington and will temporarily affect the Ohio River and associated habitat, Covington Levee System, and Riverfront Commons Trail. The temporary construction impacts, and measures to minimize impacts, to the river and associated habitat, levee, and Trail are described in **Section 5.3**, **Section 5.3.6**, **Section 5.11.3**, respectively. In addition, the modification and expansion of construction staging and access along the riverfront, which includes the Riverfront Commons Trail, will change exposure of users of the area to construction noise (**Section 5.6.3**) and construction emissions (**Section 5.5**); however, these impacts will be temporary. Measures[1] to minimize and mitigate temporary construction impacts remain unchanged from the 2024 SEA/FONSI.

Overall, the changes in construction impacts associated with Re-eval 1 Design do not differ substantially from those of the 2024 SEA/FONSI. Therefore, the 2024 SEA/FONSI remains valid and no further analysis with respect to construction impacts is required.

5.10 Utilities and Railroads

There have been minor changes to railroad impacts since the 2024 SEA/FONSI, which encompass additional required aerial easements to set beams over the CSX railway tracks. A *Railroad Coordination and Management Plan* was prepared and accepted on May 28, 2024. Coordination with CSX and the Central Railroad of Indiana is ongoing, with design submissions to these entities in August 2024 and receipt of review comments in September and October 2024.

The utilities identified in the 2024 SEA/FONSI also remain the same. Coordination with 19 utilities has occurred and will continue through the design and construction phases to minimize project-related impacts to their infrastructure. Since the 2024 SEA/FONSI, at least 35 utility meetings have been held and individual utility impacts will continue to be refined and required relocations will be confirmed as each project phase progresses through detailed design[2].

Based on the minor changes to railroad impacts, and the utility impacts described in **Section 5.10.1**, the 2024 SEA/FONSI remains valid and no further analysis respect to utilities and railroads is required.

[1] 2024 SEA/FONSI Commitment 32.
[2] Utility coordination is ongoing in compliance with 2024 SEA/FONSI Commitment 33.

5.10.1 Stormwater

Since the 2024 SEA/FONSI, KYTC and ODOT advanced stakeholder coordination and design related to the 2024 SEA/FONSI Commitments 34 and 35 that resulted in changes to stormwater facilities in Kentucky and Ohio, respectively.

Kentucky

As described in Section 4.2.3, detailed design progression identified a solution to separate the storm sewer system from the sanitary sewer system within the BSB corridor that will maintain the existing level of service of the flood protection system and accommodate the additional impervious surface from the BSB Corridor Project. The proposed solution will also address surcharging in the Peaselburg Neighborhood based on the local design criteria for a 25-year storm. For additional information, **Appendix L** includes the preliminary plans of the Express Sewer. Consistent with the 2024 SEA/FONSI Commitment 34, KYTC intends to execute a Memorandum of Understanding (MOU) between KYTC, the City of Covington, and sewer district (SD) 1 for the funding, construction, and long-term operation and maintenance of the Willow Creek stormwater facilities described in Section 4.2.3.

Ohio

In accordance with the 2024 SEA/FONSI Commitment 35, ODOT continues to coordinate with the Metropolitan Sewer District (MSD) of Greater Cincinnati to build storm sewers that will separate I-75 runoff from combined sewer overflows into Mill Creek. Based on this coordination, ODOT will support construction of a new large diameter storm sewer trunkline between Gest Street and the Western Hills Viaduct on the west side of I-75. This will be located within the disturbance limits of the BSB Corridor Project. Consistent with the 2024 SEA/FONSI Commitment 35, ODOT, the City of Cincinnati, and the MSD intend to execute a MOU for the design, construction, funding, and operation and maintenance of the facility. No other changes from the analysis presented in the 2024 SEA/FONSI have occurred. As ODOT committed, technical review of offsite mitigation for stormwater BMP treatments will be completed during detailed design for each project phase in Ohio.

5.11 Section 4(f) Properties

Since the 2024 SEA/FONSI, only one new Section 4(f) property has been identified in the expanded project study area. As detailed in **Section 5.4.2**, the Garden of Hope has been identified as eligible for the NRHP, which qualifies it for protection under Section 4(f). In addition to the Garden of Hope, the changes to project design resulting from both the Build Innovations and detailed design progression result in new impacts or changes in impacts to six Section 4(f) properties: the Goebel Park Complex; Riverfront Commons Trail; Covington Levee System; the Hillsdale Subdivision, Elberta Apartments, and Lewisburg historic districts.

As noted in the 2024 SEA/FONSI and *Final Individual Section 4(f) Evaluation (April 2024)*, KYTC and ODOT evaluated noise abatement measures and proposed noise barriers in the vicinity of the Hillsdale Subdivision,

Elberta Apartments, and Lewisburg historic districts; Queensgate Playground and Ball Field; and Ezzard Charles Park. Detailed design progression optimized the noise barriers in proximity to the three historic districts as described in **Section 5.4.2**, **Section 5.6.1**, and shown on **Appendix A: Exhibit 13**. These noise barriers do not change the determinations of effect under Section 106 and do not result in a change in the Section 4(f) use of these historic districts. As such, impacts to the historic districts are not discussed further in this section. As described in **Section 5.6**, KYTC and ODOT completed noise-related public outreach for the noise barriers in proximity to or within the Hillsdale Subdivision, Elberta Apartments, and Lewisburg historic districts; Queensgate Playground and Ball Field; and Ezzard Charles Park. Per KYTC's *Noise Analysis and Abatement Policy (August 2022)*, the results of the noise-related public outreach in Kentucky will be used to inform the construction of the proposed barriers in proximity to and within the historic districts. The noise barriers proposed adjacent to the Queensgate Playground and Ball Field and Ezzard Charles Park remain unchanged from the *Final Individual Section 4(f) Evaluation (April 2024)* and ODOT will construct the barriers as proposed.

As previously determined, the Lewis and Clark National Historic Trail meets the Section 4(f) exception criteria set forth in 23 CFR 774.13. Therefore, the Lewis and Clark National Historic Trail is not discussed further. Based on the analyses provided in the following sections, the 2024 SEA/FONSI remains valid and no further analysis with respect to Section 4(f) properties is required. For more information on Section 4(f) properties and the impacts, refer to the *Updated Section 4(f) Evaluation* (**Appendix M**).

5.11.1 Garden of Hope (KE-1372)

As discussed in **Section 5.4.2**, the Re-eval 1 Design will have no physical encroachment on the Garden of Hope and would only have minimal visual impacts, resulting in a finding of no adverse effect under Section 106.[1] The minor visual effects that will occur to this site do not constitute a constructive use, and, therefore, the BSB Corridor Project will have no Section 4(f) use of the Garden of Hope.

5.11.2 Goebel Park Complex

The project will acquire approximately 2.18 acres of permanent ROW and 0.04 acre of temporary easement from the Goebel Park Complex, a decrease of 0.66 acres and 0.03 acres since the 2024 SEA/FONSI. **Figure 15** highlights the impacts on the Goebel Park Complex and replacement land for the Concept I-W Base Design. **Figure 16** reflects the impacts, including temporary easement, and mitigation with the Re-eval 1 Design. Specifically, KY 1 optimizes the vertical profile of the interstate adjacent to the property, reducing visual impacts and allowing for further reconfiguration of the interstate adjacent to the complex. From there, KY 2 reduces encroachment onto the Goebel Park Complex by:

- Eliminating the braided ramp configuration for traffic entering the freeway from Covington and NB traffic on the C-D system heading to 5th Street, which required a tall wall with a wide footprint that introduced impacts to the Goebel Park Complex; and

[1] Further noise analysis determined that the proposed barrier near the Garden of Hope will not be advanced for construction due to constructability issues and not meeting reasonableness criteria per KYTC *Noise and Abatement Policy (August 2022).*

- Reconfiguring the NB frontage road adjacent to the property, moving it between 9th Street and Pike Street.

The remaining impacts still occur from the extension of Simon Kenton Way and the construction of new stormwater facilities, as described in the 2024 SEA/FONSI.

To mitigate impacts to the Goebel Park Complex, KYTC is returning 2.11 acres of land that is currently occupied by the West 5th Street ramp to the park. The replacement land remains in the same location proposed in the 2024 SEA/FONSI and *Final Individual Section 4(f) Evaluation (April 2024)* and will still be at a higher elevation than the impacted area, which will reduce flooding in the park. The replacement acreage is 0.12 acres smaller than proposed in the 2024 SEA/FONSI. However, the Re-eval 1 Design results in a 0.66-acre reduction in impacts to the complex and reduces the total park land area lost by 0.5 percent, compared to the 4.2 percent lost under Concept I-W Base Design. All other mitigation measures for the Goebel Park Complex detailed in the 2024 SEA/FONSI remain unchanged (Commitment 36.a and 36.c-f), and Commitment 36.b has been revised to reflect the Re-eval 1 Design acreages, as shown in Section 7. For these reasons, the *de minimis* impact determination documented in the *Final Individual Section 4(f) Evaluation (April 2024)* remains valid.

Figure 15: Concept I-W Base Design Goebel Park Complex Conversion and Replacement Land

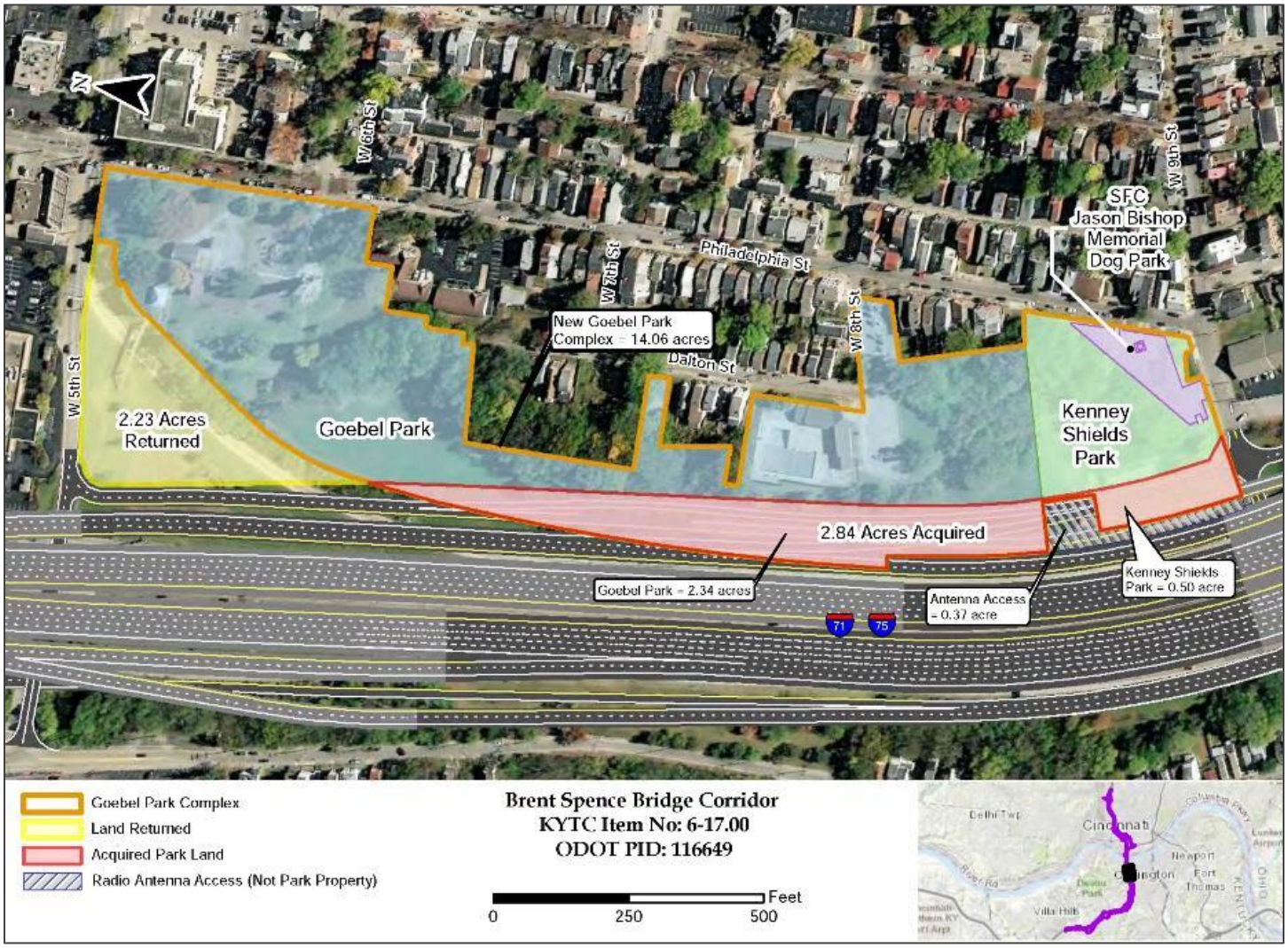
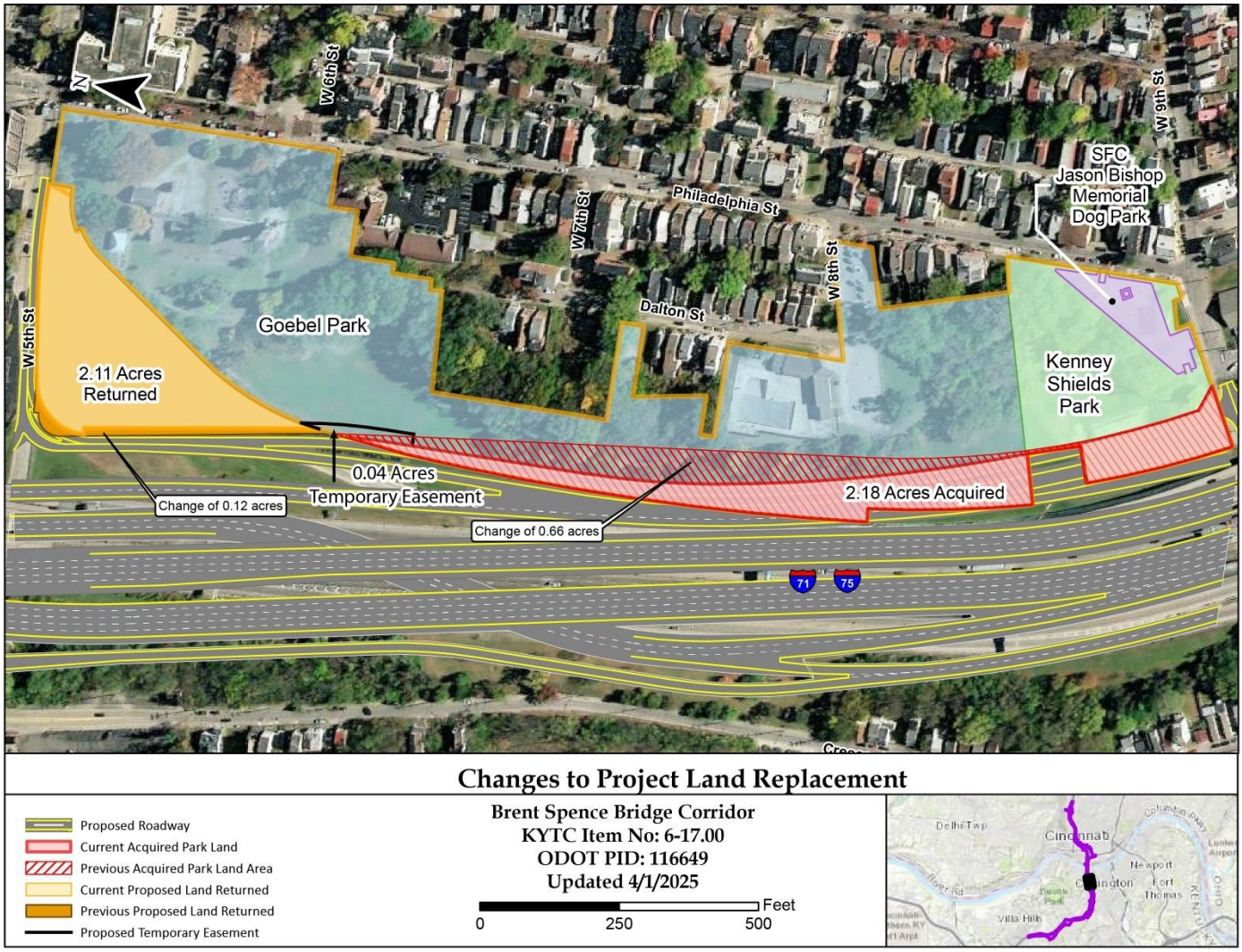


Figure 16: Re-eval 1 Design Goebel Park Complex Impacts and Replacement Land



5.11.3 Riverfront Commons Trail

The Riverfront Commons Trail was identified in the 2024 SEA/FONSI as a Section 4(f) property within the project area; however, it was concluded that the Concept I-W Base Design would not result in the use of the Trail. Additional detailed design after the *Final Individual Section 4(f) Evaluation (April 2024)* demonstrated that construction of temporary works described in **Section 4.2.2** are prudent to safely construct the new double-decker companion bridge and rehabilitate the existing BSB. KYTC assessed the modifications to construction access and bridge construction and rehabilitation methodology and determined that these changes result in a Section 4(f) use of the Riverfront Commons Trail. In accordance with the 2024 SEA/FONSI Commitment 57, KYTC initiated coordination with the City of Covington once it was determined that temporary closures,

occupancy, or detours of the Riverfront Commons Trail may be required. The findings of KYTC's assessment and results of coordination with the City of Covington and public input are summarized in this section. Refer to *Updated Section 4(f) Evaluation* (**Appendix M**) for further details.

The temporary work bridge will be built adjacent to and over the top of the Riverfront Commons Trail. In addition, temporary falsework that will support the new bridge structure during construction, and temporary vehicular access to haul, store, and move construction materials will also encroach on the Trail during construction of the project. To construct a temporary access road, the portion of the Riverfront Commons Trail between the Clay Wade Bailey Bridge and the Ohio River levee gate at Highway/Crescent Avenue will be temporarily covered with aggregate fill to provide an adequate width for equipment movement and prevent the access road from periodic flooding from the Ohio River. Based on these activities, which present overhead hazards and an area of active large equipment movement, it was determined that temporary closure of a portion of the Trail will best promote worker and public safety. The Trail will be closed beginning at the Ohio River levee gate, located approximately 800 feet northwest of the Highway/Crescent Avenue and West 3rd Street intersection, and end approximately 150 feet west of the Covington Plaza at Madison Avenue. Based on safety concerns from the City of Covington, the temporary Trail closure includes closing access to the area east of the Clay Wade Bailey Bridge, starting east of the ABM Parking Waterfront Lot until approximately 150 feet west of the Covington Plaza. To facilitate this work, a temporary easement will be obtained along the riverfront owned by the City of Covington, which includes approximately 0.8 acres of the Riverfront Commons Trail[1].

The 0.8-mile[2] section of the Riverfront Commons Trail will be closed for approximately 60 months beginning in the summer of 2025. Continuity for Trail users will be maintained during this time. An approximately 1.1-mile-long detour will be provided primarily along Rivercenter Boulevard, West 3rd Street, and Highway/Crescent Avenue to maintain continuity. After 60 months, when the companion bridge is substantially complete, the Riverfront Commons Trail will be restored in its current alignment and re-opened to the public. However, intermittent Trail closures within the same 0.8-mile section will be required until the project is complete. These closures will vary between one day to three weeks. Shorter durations will be required for access underneath the BSB, while longer closures will be required for overhead activities, such as deck placement, where Trail user and worker safety are a concern.

Detailed design progression also determined that the new companion bridge will require 1.6 acres of permanent ROW over the Trail as compared to 1.3 acres with Concept I-W Base Design—an increase of 0.3 acres. Consistent with 2024 SEA/FONSI Commitment 59, KYTC will grant a permanent easement to the City of Covington for continued Trail operation and maintenance.

KYTC consulted with the City of Covington, as owner and operator of the Trail, regarding project impacts to ensure the project will not adversely affect the recreational activities, features, or attributes that qualify the Trail

[1] This total does not include areas beneath the Clay Wade Bailey Bridge or in the ABM Parking Waterfront lot where the Trail is within either a transportation ROW or existing transportation use. The ABM Parking Waterfront Lot is not part of the Riverfront Commons Trail, and the use of the lot and an adjacent pier is subject to a separate mutual agreement between KYTC and City of Covington. It will be closed during the same durations as the Trail.

[2] This includes where the Trail intersects the ABM Parking Waterfront Lot and is located within an existing transportation use.

for protection. For maps depicting the closures and temporary detour components and phasing, refer to *Updated Section 4(f) Evaluation* (**Appendix M**).

In addition to fulfilling the 2024 SEA/FONSI Commitments 57–59, KYTC will implement these new commitments to minimize harm to the Trail as part of the project:

- A temporary Trail detour will be provided during periods of full Trail closure, anticipated to last approximately 60 months, to ensure continuity of the Trail. The majority of the detour will be along Rivercenter Boulevard, West 3rd Street, and Highway/Crescent Avenue.
- The Trail detour will accommodate both pedestrians and bicyclists. The detour will widen the sidewalk to accommodate an 8-foot-wide shared-use path or utilize the existing 4-foot-wide sidewalk and restripe the roadway to accommodate a 10-foot-wide two-way bicycle lane.
- Between Highway/Crescent Avenue and the existing BSB, the Trail detour will be completed in two phases. Phase 1 will restripe existing parking lots between West 3rd Street and the Holiday Inn to provide an 8-foot-wide shared-use path. Following completion of West 3rd Street reconstruction, the detour will be shifted back to West 3rd Street (Phase 2).
- The temporary Trail detour will meet design standards, including for safety and operations, outlined in *KYTC's Complete Streets, Roads, and Highway Manual* (2022). Where warranted per design standards, a 2-foot-wide striped buffer will be incorporated to separate bicycles from traffic. The use of flexible bollards for visible delineation will also be evaluated for use. In other locations, a physical buffer will be incorporated using fencing, concrete barriers, water wall barriers or other methods as appropriate and mutually agreed upon by the KYTC and the City of Covington.
- During construction, the appropriate method of traffic control device will be used in select locations of mixed traffic to manage ingress and egress access for construction vehicles and detoured Trail users to ensure safety for pedestrians, bicyclists, and motorists. These traffic control devices will be located at the Ohio River levee gate, located at the western terminus of the Trail detour, and at Highway/Crescent Avenue at the entrance to the Phase 1 detour.
- The Riverfront Commons Trail will be fully restored to a condition that is at least equivalent to existing conditions. This includes removing all temporary aggregate fill, repaving the Trail, reinstalling Trail lighting, and replanting disturbed areas with species approved by the City of Covington. The contractor will remove all existing Trail signage, benches, and trash receptacles within the temporary closure limits, store them during the temporary closure, and will reinstall these amenities as part of the Trail restoration.
- The Trail will be improved where appropriate and mutually agreed upon by the KYTC and the City of Covington to ensure facilities comply with standards of safety and accessibility, including proper lighting conditions and updates to protection from overhead railroad bridge hazards. Certain areas of the Trail will be widened and strengthened to sufficiently accommodate maintenance vehicles that periodically need to use the paved Trail to access utility facilities and the underside of bridges.

- A landscaping plan, mutually agreed upon by the KYTC and the City of Covington, will be implemented as part of the Trail restoration.
- The City of Covington, as owner with jurisdiction, and Southbank Partners, as developer of the Trail, will be notified at least 60 days prior to the initial closure of the Trail.
- The temporary Trail detour will be adequately marked and signed. KYTC will coordinate with the City of Covington and Southbank Partners to incorporate appropriate wayfinding signage along the temporary Trail detour that is consistent with the Riverfront Commons Trail branding.
- The public will be notified at least 30 days prior to full Trail closure and 30 days prior to re-opening of the Trail in its current alignment. Notices will be placed on the project website (www.brentspencebridgecorridor.com), the project's social media platforms, the City of Covington's website, and through the project e-mail list. The public can sign up for the project e-mail list through the project website.
- During intermittent Trail closures required for rehabilitation of the existing BSB, the public will be notified at least 48 hours prior to closure.
- Throughout the project, KYTC will update the City of Covington and Southbank Partners on the projected timeline for project-related impacts to the Trail, including projected periods of intermittent closures.

FHWA notified the public of their intent to make a determination of *de minimis* impacts for the proposed temporary use of a section of the Riverfront Commons Trail. The notice was issued on January 24, 2025, and the 30-day public comment period closed on February 23, 2025. The public notice, along with detailed mapping, was posted to the project website. Notifications to the public of the opportunity to comment were completed through installing temporary signage along the Trail, notifications through the project's social media accounts, and an alert in the January e-newsletter. During the comment period, 77 individuals or groups provided comments related to the Riverfront Commons Trail or project impacts in general. Trail-related comments expressed concerns about the safety of the temporary Trail detour, as well as the duration of the temporary closure and detour; made specific requests for temporary wayfinding signage, for advanced notice of closures, for permanent or improved shared-use path amenities, and for commitments to restoring the existing Trail or requests to enhance the existing Trail; and provided additional access considerations.

After the conclusion of the public comment period, KYTC forwarded the public comments related to the Riverfront Commons Trail to the City of Covington for their consideration. In a letter dated April 15, 2025, FHWA stated its intent to determine that the BSB Corridor Project, including the KYTC committed measures to minimize harm, will have a *de minimis* impact on the Riverfront Commons Trail, as defined by 23 CFR § 774.17. FHWA requested written concurrence that the project will not adversely affect the activities, features, or attributes that make the Riverfront Commons Trail eligible for Section 4(f) protection. KYTC concurred with these findings on April 15, 2025, and the City of Covington concurred on May 12, 2025. Copies of the coordination documents for the Riverfront Commons Trail, including public comments and responses, are provided in *Updated Section 4(f) Evaluation* (**Appendix M**).

5.11.4 Covington Levee System (KEC-1068)

As noted in **Section 5.4.2**, the Covington Levee System had been identified in the 2024 SEA/FONSI as an NRHP-eligible property. The *Final Individual Section 4(f) Evaluation (April 2024)* identified minor visual effects only and, as described in **Section 5.3.6**, physical impacts to the levee system were previously avoided. However, detailed design progression revealed that it is impractical to construct the companion bridge solely using barges because of the vertical clearance restrictions for the Ohio River and the volatility of the river elevations. As such, temporary works are required that will temporarily impact the levee system. **Section 5.3.6** describes the physical impacts to the levee system.

The falsework, bulkhead, trestle, ramp, and construction access will temporarily impact the levee. However, consistent with the Concept I-W Base Design, the Re-eval 1 Design will not permanently impact the levee operations. As detailed in **Section 5.3.6**, the project will incorporate a new commitment to remove all temporary works and restore the levee to pre-construction conditions. The only remaining elements will be portions of the support beams, which will be cut below the surface of the levee. As a result, these alterations will not compromise the character-defining features that contribute to the significance and integrity of the Covington Levee System. The Kentucky SHPO determined that the project will have no adverse effect on the Covington Levee System in accordance with 36 CFR part 800, and FHWA determined it will result in a *de minimis* Section 4(f) use in accordance with 23 CFR §§ 774.3 and 774.17. Refer to *Updated Section 4(f) Evaluation* (**Appendix M**) for further details.

5.12 Section 6(f) Properties

Since the 2024 SEA/FONSI, no new Section 6(f) properties have been identified. However, the Re-eval 1 Design results in changes to the impacts to the Goebel Park Complex, a Section 6(f) property, included in the 2024 SEA/FONSI. Based on the analysis provided in the following sections, the 2024 SEA/FONSI remains valid and no further analysis with respect to Section 6(f) properties is required. For a full description of the Goebel Park Complex and Land and Water Conservation Fund allocations associated with the complex, refer to the 2024 SEA/FONSI.

5.12.1 Impacts to the Goebel Park Complex and to Resources Within the Area

The following sections describe how the Re-eval 1 Design will impact the Goebel Park Complex by describing the physical alterations, including replacement land to be converted for park/recreational use, and how each resource area within and adjacent to the Goebel Park Complex will be impacted. Since the 2024 SEA/FONSI, there have been no changes to land use plans or policies, ecological resources, air quality, or construction impacts with respect to the Goebel Park Complex; therefore, these resource areas are not discussed further.

Physical Alterations and Replacement Land

The project will acquire approximately 2.18 acres of permanent ROW and 0.04 acre of temporary easement from the Goebel Park Complex, a decrease of 0.66 acres and 0.03 acres respectively since the 2024

SEA/FONSI. See **Figure 15** and **Figure 16** for comparisons between the Concept I-W Base Design and Re-eval 1 Design impacts. As described in **Section 5.11.2**, the reduction in impacts results from KY 1 and KY 2. These innovations also reduce the proximity of the nearest travel lane to the outdoor swimming pool by approximately 40 feet, resulting in the nearest travel lane being approximately 100 feet from the pool as opposed to 60 feet from the pool with Concept I-W Base Design. The remaining impacts, including to walking trails and basketball courts, still occur from the extension of Simon Kenton Way and the construction of new stormwater facilities, as described in the 2024 SEA/FONSI.

Local Communities

As detailed in **Section 5.11.2**, KY 1 and KY 2 result in changes to permanent ROW and temporary easement acquisition to the Goebel Park Complex, resulting in a reduction of total park land for local communities. However, as compared to Concept I-W Base Design, the Re-eval 1 Design reduces overall park land lost.

Noise

While the Re-eval 1 Design does reduce physical encroachment on the Goebel Park Complex, thereby reducing proximity of noise generating sources (travel lanes) to sensitive receivers, it still results in noise impacts to the entire complex similar to the Concept I-W Base Design. However, as detailed in **Section 5.6.1**, the NSA B noise barrier located adjacent to the Goebel Park Complex will be incorporated into the project to mitigate noise impacts.

Visual Resources

As described in **Section 5.7.1**, KY 1 reduces the vertical profile adjacent to the Goebel Park Complex and KY 2 reduces encroachment on the complex. Noise barriers proposed adjacent to the Goebel Park Complex are also proposed as transparent barriers, which will help preserve views from the Goebel Park Complex. Accordingly, the project is anticipated to enhance the overall visual character of the corridor, delivering net visual benefits to the Goebel Park Complex. These outcomes align with the visual resource findings detailed in the 2024 SEA/FONSI.

Water Quality and Quantity

As detailed in **Section 5.3.6**, temporary construction elements, including falsework, trestles, and access ramps, will impact the levee system on both sides of the Ohio River. Additionally, to offset flood storage loss in the Goebel Park Complex, an express storm sewer system will be installed, maintaining flood protection without requiring upgrades to the existing Willow Run pump station. As part of detailed design progression, KYTC has advanced the commitment to separate interstate runoff from the combined sewer system, originally outlined in the 2024 SEA/FONSI, with additional details provided in **Section 4.2.3** and **Appendix F**.

5.12.2 Alternatives to Conversion

There remains no prudent alternative that avoids the use of the Goebel Park Complex, and the Re-eval 1 Design includes all possible planning to minimize harm to the property. The resulting impacts, with the identified mitigation measures, will not adversely affect the activities, features, and attributes of the Goebel Park Complex, and may instead enhance the experience in comparison to the Concept I-W Base Design.

5.12.3 Mitigation Measures

To mitigate impacts to the Goebel Park Complex, KYTC is returning 2.11 acres of land that is currently occupied by the West 5th Street ramp to the park. The replacement land remains in the same location and will still be at a higher elevation than the impacted area, which will reduce flooding in the park. The replacement acreage is 0.12 acres smaller than proposed in the 2024 SEA/FONSI. However, KY 1 and KY 2 result in a 0.66-acre reduction in impacts to the complex. All other mitigation measures for Section 6(f) properties detailed in the 2024 SEA/FONSI remain unchanged.

5.12.4 Replacement Property

To address Section 6(f) requirements, KYTC will acquire 2.18 acres of flood-prone park property and replace it with an estimated 2.11 acres of adjacent state-owned property that is at a higher elevation than the 2.18 acres being converted (**Figure 16** in **Section 5.11.2**). For further details on the replacement land characteristics, refer to the 2024 SEA/FONSI.

Based on appraisals in December 2024, the land to be acquired has an appraised value of $610,000 while the replacement property has an appraised value of $1.38 million. Therefore, the market value of the replacement property is $770,000 higher than the land to be acquired. The proposed replacement property is 0.07 acres smaller than the land to be acquired. When the conversion is complete, the total park land area will be reduced from 14.67 acres to approximately 14.60 acres, which represents a 0.5 percent reduction in total acreage of the Goebel Park Complex. As discussed in **Section 5.11.2**, the Concept I-W Base Design would have reduced the total park land area by 0.61 acres, from 14.67 to 14.06 acres, which represented a 4.2 percent reduction in the total acreage of the complex.

KYTC and the Kentucky Department of Local Government (DLG) submitted an updated conversion package to the NPS on March 4, 2025. On March 31, 2025, NPS provided a signed amendment to the project agreement (NPS Project No. 21 00541.1) approving the conversion. NPS coordination documents are included in **Appendix N**.

5.12.5 Summary

Due to the unsubstantial nature of impacts from the Re-eval 1 Design, the summary findings of the Section 6(f) conversion have not altered since the 2024 SEA/FONSI determination. To support this re-evaluation, on April 30, 2025, NPS provided a signed determination that the Section 6(f) conversion is categorically excluded from further NEPA analysis based on the evaluation of the environmental impacts and is fully described in the

documentation provided within the 2012 EA and 2024 SEA/FONSI. NPS environmentally certified the LWCF conversion as a categorical exclusion under item C.2. “Land exchanges which will not lead to significant changes in the use of the land” of the Department of the Interior (DOI) Departmental Manual, Series 31, part 516, Chapter 12. The NPS’s determination (**Appendix N**) concluded that there will be minimal loss of recreation at the remaining Goebel Park Complex as a result of the conversion from outdoor recreation use.

5.13 Permits

Since the 2024 SEA/FONSI, no new permits have been identified as required for the project. The following major permitting submittals and approvals have occurred since the 2024 SEA/FONSI. The permit packages incorporated all project changes from the Build Innovations and detailed design progression.

- The Section 408 permission has been submitted as two separate application packages: one for geotechnical borings to support design and another for construction of the project (referred to as the project-wide Section 408 permission). The Section 408 permission request for geotechnical borings was submitted on August 5, 2025. The project-wide Section 408 permission request was submitted to the USACE most recently on July 18, 2025. Both 408 permission application packages are under review by the USACE;
- The Section 404/10 permit application was originally submitted to the USACE on April 29, 2024. However, due to changes in impacts, the permit application was revised and re-submitted to the USACE on April 8, 2025, and the most recent public comment period ended on June 2, 2025. The permit is currently under review by the USACE;
- The Kentucky Division of Water issued the Section 401 Water Quality Certification for the Kentucky portion of the project on June 3, 2025;
- The Ohio EPA issued the Section 401 Water Quality Certification for the Ohio portion of the project on May 9, 2025; and
- Coordination with the City of Cincinnati for the Flood Hazard Area Development Permit is ongoing. Receipt of the permit is anticipated in 2025.

As disclosed in **Section 5.3.6**, the no-rise condition has been satisfied and, as a result, a CLOMR or LOMR is not required. In Kentucky, coordination with the Kentucky Division of Water and the City of Covington’s local floodplain administrator confirmed that a local floodplain permit is also not necessary because impacts to floodplains are accommodated in the Section 408 permission.

All appropriate permit conditions will be included in the project’s construction documents, and all permit conditions will be followed during construction.

6. PUBLIC INVOLVEMENT AND AGENCY COORDINATION

Since the issuance of the 2024 SEA/FONSI, local, state and federal agency coordination has been ongoing in accordance with the 2024 SEA/FONSI commitments[1] and to obtain necessary permits and approvals to initiate project construction, as described in **Section 5.13**. Additionally, consistent with the 2024 SEA/FONSI commitments, ODOT and KYTC continue to share project information with the public and stakeholders through:

- Project website updates;
- Social media, including Facebook, Instagram, YouTube, and X;
- Monthly e-newsletters; and
- Periodic news releases to provide updates and announce key project milestones.

Between May 2024 and December 2024, the project team held 19 meetings with public stakeholder groups, including the Project Advisory Committee, to present the Build Innovations and the detailed design progression, in accordance with the 2024 SEA/FONSI Commitment 1.a and 1.b. A summary of the Project Advisory Committee meeting is located on the project website and a summary of the remaining 18 meetings, as well as the presentations given as applicable, is included in **Appendix O**.

The key Build Innovations were announced to the public on May 31, 2024. Feedback from the public outreach presenting the Build Innovations and detailed design progression included themes such as inquiries about noise barrier placement and maintenance, questions regarding the reconnection of the street grid and redevelopment opportunities, interest in the proposed alignment and its associated impacts, and concerns about traffic safety. During the innovations process, ODOT and KYTC engaged the Bridge Forward Coalition, along with the City of Cincinnati and Hamilton County, as part of the evaluation of the Bridge Forward Coalition design concepts in accordance with 2024 SEA/FONSI Commitment 51. The results of the evaluation are reflected in the aforementioned Project Advisory Committee meeting summary. KYTC conducted outreach to neighborhood associations as part of the engagement process; however, the Lewisburg and Botany Hills neighborhoods currently do not have active associations. Despite this, KYTC has continued discussions with residents in these areas to gather feedback and address questions. Information on project innovations was shared during the noise meetings as detailed in **Section 5.6**.

Additionally, since the 2024 SEA/FONSI, the project team has continued to track and respond to public comments received via the project website and through the e-newsletter. Between May 2024 and June 2025, the project team has received, tracked, and responded to more than 180 public comments via the project website. KYTC and ODOT respond to public comments received through the website typically on a weekly basis, and a General Public Comment and Response Summary is posted to the project website on a monthly basis. Public outreach has also occurred in accordance with the 2024 SEA/FONSI Commitments 23 and 25 related to noise abatement. Refer to **Section 5.6** for further details.

[1] 2024 SEA/FONSI Commitments 54, 55, and 61.

7. ENVIRONMENTAL COMMITMENTS

As set forth in the 2024 SEA/FONSI, the BSB Corridor Project Sponsors, ODOT and KYTC, are responsible for implementing a total of 62 commitments. The progress and status of the 2024 SEA/FONSI commitments are being tracked separately in the BSB Corridor Project Environmental Commitment Tracking spreadsheet and are reported to FHWA at agreed-upon intervals. Updates on commitments will also be provided to the public in accordance with 2024 SEA/FONSI Commitment 61. Therefore, the status of the 2024 SEA/FONSI commitments are not detailed in this re-evaluation unless they result in a change in impacts from what was disclosed in the 2024 SEA/FONSI.

Table 17 includes the additional commitments that have been identified based on the project changes presented in this re-evaluation. The 2024 SEA/FONSI commitments 2, 8, 34, 35, 36, and 46 have also been revised. Changes since the 2024 SEA/FONSI are reflected as ~~strikethrough~~ for removed text and <u>underline</u> for added text, as well as the reasoning for the changes described in blue text below the commitment.

2. In Support of the Kentucky Transportation Cabinet (KYTC) *Complete Streets, Roads, and Highways Policy,* the Ohio Department of Transportation (ODOT) *Multimodal Design Guide*, and the Ohio-Kentucky-Indiana Regional Council of Governments (OKI) *Regional Complete Streets Policy*, the project will implement:

    c. Rebuilt sidewalks will be constructed along Pike Street west of I-71/I-75. ~~A switchback accessible ramp will be constructed to replace steep stairs between Pike Street and Lewis Street~~. New rebuilt sidewalks will be constructed under the West 12th Street/MLK Jr. Boulevard, Pike Street, West 9th Street, <u>West 4th Street,</u> ~~West 5th Street,~~ and West 3rd Street bridges.

    d. A new shared-use path, which will tie into the shared-use paths in the Goebel Park Complex, will be built under the West <u>4th</u> ~~5th~~ Street bridge. The shared-use path will be extended along Crescent Avenue to connect to an existing shared-use path along the Ohio River.

<u>Re-evaluation revisions</u>: Based on the vertical profile and Pike Street access optimization with KY 1 and KY 2, respectively, there is no longer a bridge over West 5th Street. Therefore, a new sidewalk cannot be constructed under the West 5th Street bridge. Additionally, the switchback ramp is not feasible due to constructability issues; however, the intent of the commitment to provide ADA-compliant facilities in the area will be obtained. The commitment has been modified per coordination with the City of Covington. Commitments 2.a-b and 2.e-i remain unchanged.

8. Measures will be implemented to minimize and mitigate effects to mussels, the federally listed Indiana gray bat, and northern long-eared bat and Ohio state listed little brown bat and tricolored bat as outlined in the project's *Biological Assessment* (October 2022) and *Addendum of the Biological Assessment* (August 2024):

    c. No tree removal will occur in Kentucky from May 15 ~~June 1~~ through July 31 in Kentucky.

Re-evaluation revisions: This revision is consistent with the Addendum of the Biological Assessment *(August 2024). Commitments 8.a-b and 8.d-p remain unchanged.*

34. KYTC, the City of Covington, and Kentucky Sanitation District 1 (SD) intend to ~~will~~ execute a Memorandum of Understanding (MOU) to act cooperatively on water quality issues within the Ohio River and willow Run watersheds. KTYC will participate with City and SD1 efforts to bring applicable agencies together to discuss, investigate, and evaluate mutually beneficial arrangements. KYTC will separate all interstate runoff from the Brent Spence Bridge corridor from the existing combined sewer system. In addition, KYTC will work with the City of Covington and SD1 to address surcharging in the Peaselburg Neighborhood based on the local design criteria for a 25-year storm.

Re-evaluation revisions: This commitment was revised to reflect the intention of KYTC to execute a Memorandum of Understanding (MOU) between KYTC, the City of Covington, and sewer district (SD) 1 for the funding, construction, and long-term operation and maintenance of the Willow Creek stormwater facilities.

35. The project will separate highway drainage from the existing combined sewer system in Ohio, and ODOT intends to ~~will partner~~ execute a Memorandum of Understanding (MOU) with the Metropolitan Sewer District of Greater Cincinnati to build infrastructure to drain directly to Mill Creek and/or the Ohio River. Vegetated options for stormwater best management practices (BMPs) will be utilized to the maximum extent practicable. Given the dense urban land use in the project area, the majority of the stormwater BMP treatment requirements will be addressed via off-site mitigation. ODOT will continue to coordinate off-site mitigation measures with the Ohio Environmental Protection Agency (OEPA) as each project phase progresses through detailed design.

Re-evaluation revisions: This commitment was revised to reflect the intention of ODOT, the City of Cincinnati, and the MSD to execute a Memorandum of Understanding (MOU) for the design, construction, funding, and operation and maintenance of the facility.

36. The following mitigation measures for the Section 4(f) use of the Goebel Park Complex will be implemented:

    b. The use of an estimated ~~2.84~~ 2.18 acres of flood-prone park property from the southwest corner of the Goebel Park Complex (~~2.34~~ 1.58 acres in Goebel Park and ~~0.50~~ 0.6 acre in Kenney Shields Park) will be mitigated and replaced with an estimated ~~2.23~~ 2.11 acres of currently state-owned property that is at a higher elevation, not prone to flooding, and adjacent to the northwest corner of the Goebel Park Complex.

e. Building of a new outdoor pool and associated facilities within the Goebel Park Complex. ~~This~~ Proximity impacts to the existing outdoor pool will be mitigated by funding approximately $1,337,400 of project funds for the construction of a new outdoor pool and associated facilities or other comparable aquatic facility serving the same recreational purpose within the Goebel Park Complex ~~to be~~, as established during the new master planning process facilitated by the City of Covington.

Re-evaluation revisions: Commitment 36.b was revised to reflect the reduction in permanent ROW acquisition with the Build Innovations and the change in total replacement property. Commitment 36 e. was revised to provide clarification relating to the purpose of the commitment. Commitments 36.a,36.c–d, and 36.f remain unchanged.

46. A Flood Hazard Area Development Permit ~~Floodplain/floodway permits~~ will be obtained from the City of Cincinnati before construction activities impacting floodplains/floodways occur in Ohio. ~~– floodplain permits from the City of Cincinnati and the City of Covington and a Conditional Letter of Map Revision (CLOMR)/Letter of Map Revision (LOMR from the Federal Emergency Management Agency (FEMA) for regulated floodways.~~

Re-evaluation revisions: The commitment was revised to reflect that, as noted in Section 5.13, a CLOMR/LOMR is not required and per coordination with the City of Covington and the Kentucky Division of Water, no floodplain permits from local entities in Kentucky are required.

Table 17: Additional Environmental Commitments Resulting from Re-eval 1 Design

No.	Resource Area	Commitment	Responsibility	Timing of Implementation	Project Phase(s)	Section/ Figure Reference
63	Regulated Materials	Limited Phase II Environmental Site Assessments of soil/groundwater in the area of the former tank pits will be conducted at 670 West 3rd Street and 220 Crescent Avenue in Covington, Kentucky, to determine if any historical releases have occurred which may have impacted the sites' subsurface. If the Phase II Environmental Site Assessments identifies issues, the appropriate plan notes will be added to the contract document.	KYTC	Design	Phase III	5.2.1
64	Floodplains	Once the companion bridge is constructed, the temporary works structures (falsework towers, temporary trestle, and bulkhead with work surface) will be demolished to 3 feet below the pre-existing levee grade and the levee will be restored. This involves the cutting-off of steel piling to the appropriate elevation below grade, filling holes with flowable fill, and replacing topsoil to the original grades of the levee as determined by pre-construction as-built elevations taken prior to start of construction. All aggregate fill temporary works will be removed, and the area appropriately restored. Any restored areas that previously had vegetation will be reseeded with a mix meeting the requirements of KYTC Standard Specification Section 827.	KYTC	Design, Post-construction	Phase III	5.3.6

No.	Resource Area	Commitment	Responsibility	Timing of Implementation	Project Phase(s)	Section/ Figure Reference
65	History/ Architecture Resources	The contractor will monitor the WXIX TV Station building, which is housed in the historic Harriet Beecher Stowe Elementary School, during installation of shoring, anchors, and drilled shaft permanent retaining wall.	ODOT	Construction	Phase III	5.4.2
66	Section 4(f) Properties	KYTC has committed to implementing the following measures to minimize harm to the Riverfront Commons Trail: a. A temporary Trail detour will be provided during periods of full Trail closure, anticipated to last approximately 60 months, to ensure continuity of the Trail. The majority of the detour will be along Rivercenter Boulevard, West 3rd Street, and Highway/Crescent Avenue. b. The Trail detour will accommodate both pedestrians and bicyclists. The detour will widen the sidewalk to accommodate an 8-foot-wide shared-use path or utilize the existing 4-foot-wide sidewalk and restripe the roadway to accommodate a 10-foot-wide two-way bicycle lane. c. Between Highway/Crescent Avenue and the existing BSB, the Trail detour will be completed in two phases. Phase 1 will restripe existing parking lots between West 3rd Street and the Holiday Inn to provide an 8-foot-wide shared-use path. Following completion of West 3rd Street reconstruction, the detour will be shifted back to West 3rd Street (Phase 2).	KYTC	Design, Construction, Post-construction	Phase III	5.11.3

No.	Resource Area	Commitment	Responsibility	Timing of Implementation	Project Phase(s)	Section/ Figure Reference
		d. The temporary Trail detour will meet design standards, including for safety and operations, outlined in *KYTC's Complete Streets, Roads, and Highway Manual* (2022). Where warranted per design standards, a 2-foot-wide striped buffer will be incorporated to separate bicycles from traffic. The use of flexible bollards for visible delineation will also be evaluated for use. In other locations, a physical buffer will be incorporated using fencing, concrete barriers, water wall barriers or other methods as appropriate and mutually agreed upon by the KYTC and the City of Covington. e. During construction, the appropriate method of traffic control device will be used in select locations of mixed traffic to manage ingress and egress access for construction vehicles and detoured Trail users to ensure safety for pedestrians, bicyclists, and motorists. These traffic control devices will be located at the Ohio River levee gate, located at the western terminus of the Trail detour, and at Highway/Crescent Avenue at the entrance to the Phase 1 detour. f. The Riverfront Commons Trail will be fully restored to a condition that is at least equivalent to existing conditions. This includes removing all temporary aggregate fill, repaving the Trail, reinstalling Trail lighting, and replanting disturbed areas				

No.	Resource Area	Commitment	Responsibility	Timing of Implementation	Project Phase(s)	Section/ Figure Reference
		with species approved by the City of Covington. The contractor will remove all existing Trail signage, benches, and trash receptacles within the temporary closure limits, store them during the temporary closure, and will reinstall these amenities as part of the Trail restoration. g. The Trail will be improved where appropriate and mutually agreed upon by the KYTC and the City of Covington to ensure facilities comply with standards of safety and accessibility, including proper lighting conditions and updates to protection from overhead railroad bridge hazards. Certain areas of the Trail will be widened and strengthened to sufficiently accommodate maintenance vehicles that periodically need to use the paved Trail to access utility facilities and the underside of bridges. h. A landscaping plan, mutually agreed upon by the KTYC and the City of Covington, will be implemented as part of the Trail restoration. i. The City of Covington, as owner with jurisdiction, and Southbank Partners, as developer of the Trail, will be notified at least 60 days prior to the initial closure of the Trail. j. The temporary Trail detour will be adequately marked and signed. KYTC will coordinate with the City of Covington and Southbank Partners to incorporate appropriate wayfinding signage along the				

No.	Resource Area	Commitment	Responsibility	Timing of Implementation	Project Phase(s)	Section/ Figure Reference
		temporary Trail detour that is consistent with the Riverfront Commons Trail branding. k. The public will be notified at least 30 days prior to full Trail closure and 30 days prior to re-opening of the Trail in its current alignment. Notices will be placed on the project website (www.brentspencebridgecorridor.com), the project's social media platforms, the City of Covington's website, and through the project email list. The public can sign up for the project email list through the project website. l. During intermittent Trail closures required for rehabilitation of the existing BSB, the public will be notified at least 48 hours prior to closure. m. Throughout the project, KYTC will update the City of Covington and Southbank Partners on the projected timeline for project-related impacts to the Trail, including projected periods of intermittent closures.				
67	Migratory Birds	KYTC will coordinate with USFWS on means and methods for deterring bird strikes that may occur in relation to transparent noise barriers and noise/visual screening barriers.	KYTC	Design	Phase III	5.3.5

8. CONCLUSION

KYTC and ODOT have concluded that the May 8, 2024, FONSI is still valid for the BSB Corridor Project and no significant impacts exist to warrant preparation of a supplemental NEPA document or additional NEPA documentation outside of this re-evaluation.