



Reevaluation Statement #1

I-69 Section 6

**Additional Roadway Improvements and Minor Right-of-Way
Modifications**

November 8, 2018



I-69 EVANSVILLE TO INDIANAPOLIS TIER 2 STUDIES

Section 6—Reevaluation Statement #1

I-69 SECTION 6 REEVALUATION STATEMENT #1 ADDITIONAL ROADWAY IMPROVEMENTS AND MINOR RIGHT-OF-WAY MODIFICATIONS

I-69

Evansville to Indianapolis, Indiana

Designation Number: 0500430

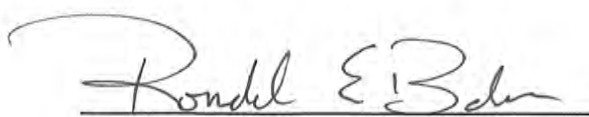
The Tier 2 Final Environmental Impact Statement (FHWA-IN-EIS-18-01-F) and Record of Decision was approved February 18, 2018.

This reevaluation of the Tier 2 Final Environmental Impact Statement (FEIS) was prepared to reflect design changes in Section 6 of the I-69 highway in Morgan, Johnson, and Marion Counties, Indiana. Section 6 will construct a new I-69 interstate facility from the Section 5 terminus south of Indian Creek and the city of Martinsville north to I-465, including improvements to I-465. I-69 Section 6 will be designed in five segments beginning at the southern termini and extending north to I-465.


Reevaluation Statement #1 focuses on Design Contract #1 also referenced as Segment 6.1 from the southern terminus of the project north through Martinsville, a distance of approximately 5.5 miles. Two new local roadways, modifications to proposed interchanges, and maintenance of traffic including the temporary closure of SR 37 are the most substantial changes to the project; however, there are also minor changes to the proposed right-of-way and bridge sizes or types. The revised design for I-69 Section 6 Segment 6.1 also includes additional right-of-way areas to accommodate utility design, structure removal, and roadway improvements. This reevaluation includes design changes to I-69 Section 6 which have occurred since the approval of the FEIS and examines the potential impacts on the natural, human, and cultural environments due to the revised design in Segment 6.1.

The analysis in this reevaluation supports the conclusion that this design change will not have impacts sufficient to require the preparation of a Supplemental Environmental Impact Statement (SEIS) for I-69 Section 6. Therefore, the Section 6 Tier 2 FEIS and ROD remain valid.

Approval


ES Signature

11-9-18
Date


FHWA Signature

November 9, 2018
Date



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CHAPTER 1 – INTRODUCTION

This reevaluation of the Tier 2 Final Environmental Impact Statement (FEIS) was prepared to reflect design changes in Section 6 of the I-69 highway in Morgan, Johnson, and Marion Counties, Indiana. INDOT will construct a new I-69 interstate facility from the Section 5 terminus south of Indian Creek and the city of Martinsville north to I-465, including improvements to I-465. I-69 Section 6 will be designed in five segments beginning at the southern termini and extending north to I-465.

Reevaluation Statement #1 focuses on Design Contract #1, known as Segment 6.1, from the southern terminus of the project north through Martinsville a distance of approximately 5.5 miles. Two new local roadways, modifications to proposed interchanges, and maintenance of traffic including the temporary closure of SR 37 are the most substantial changes to the project; however, there are also minor changes to the proposed right-of-way and bridge sizes or type. The revised design for Segment 6.1 also includes additional right-of-way areas to accommodate utility design, structure removal, and roadway improvements. Proposed local roadway improvements would be required to accommodate traffic diverted during construction and to enhance the local roadway network connectivity both during construction and post construction. This reevaluation includes design changes to I-69 Section 6 which have occurred since the approval of the FEIS and examines the potential impacts on the natural, human, and cultural environments due to of the revised design in Segment 6.1.

The purpose of this reevaluation document is to examine roadway and right-of-way modifications which were made as part of post-National Environmental Policy Act (NEPA) design efforts to improve upon the project design and further minimize the project footprint and resource impacts.

The post-NEPA design efforts increased existing right-of-way by 16.8 acres and decreased new right-of-way by 2.2 acres for a total change in right-of-way of 14.6 acres and reduced overall relocations by one. Key changes in impacts since the I-69 Section 6 FEIS/ROD include:

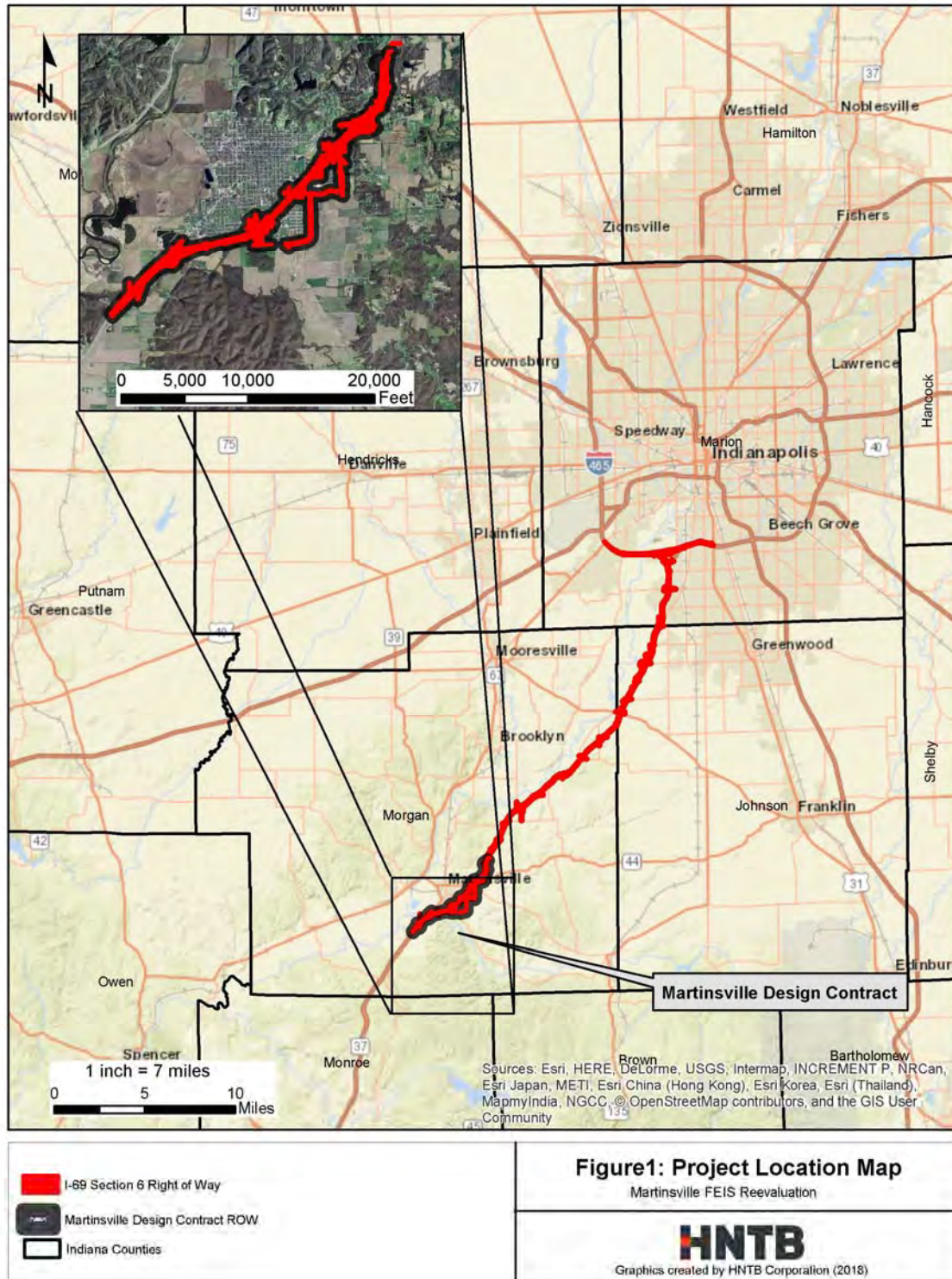
- Total right-of-way decreased by 2.2 acres
- Reduction of six in single-family residential relocations reduced along Ohio Street and Twin Branch Road.
- Addition of three single family residential relocations due to inability to relocate septic tank and field. One of these is located along Cramertown Loop and is a result of the additional roadway improvements included in the reevaluation.
- Addition of one mobile home relocation. Note this addition is not due to a change in the right-of-way, rather an addition of a mobile home within the project right-of-way.
- Confirmation of relocation of Evening Lions Club.
- Wetland and open water impacts increased by 0.346 acres due to the addition of utility right-of-way and Southview Drive.



- Total permanent stream impacts decreased by 358 linear feet due to limiting of stream impacts to the construction limits.
- Floodplain impacts increased by 5.4 acres and floodway impacts decreased by 3.4 acres due to changes along Indian Creek and Sartor Ditch
- Increase in impacts upland forest habitat by 3.1 acres

The analysis in this reevaluation supports the conclusion that this design change will not have impacts sufficient to require the preparation of a Supplemental Environmental Impact Statement (SEIS) or an additional Draft Environmental Impact Statement (DEIS) for I-69 Section 6. Therefore, the I-69 Section 6 Tier 2 FEIS and ROD remain valid.

Figure 1-1: Project Location Map





CHAPTER 2 – PROJECT DESCRIPTION

2.1 *Project Description and Area*

INDOT will construct a new I-69 interstate facility from the Section 5 terminus south of Indian Creek and the city of Martinsville north to I-465, including improvements to I-465 referenced as I-69 Section 6. I-69 Section 6 will be designed in five design segments beginning at the southern termini and extending north to I-465. Each design segment may be broken further into multiple construction contracts.

Reevaluation Statement #1 focuses on Design Contract #1, known as Segment 6.1, from the southern terminus of the project north through Martinsville, a distance of approximately 5.5 miles. The Refined Preferred Alternative (RPA) for I-69 Section 6 Martinsville Subsection will begin approximately 1,500 feet south of Indian Creek just south of Martinsville and continue northward to 300 feet south of Morgan Street. Segment 6.1 will be broken into two construction contracts as described below.

Construction Contract 1 (Contract R-40848) includes local access roads within Martinsville including Grand Valley Boulevard and South Street from South Home Avenue east to Cramertown Loop including a new bridge over I-69, a new roadway called Artesian Avenue from Grand Valley Boulevard south and east to East Mahalasville Road, Cramertown Loop from the intersection with Grand Valley Boulevard north past Crestview Drive, and advanced tree clearing for Construction Contract 2.

Construction Contract 2 (Contract R-33493) includes I-69 mainline roadway, bridges, and culverts from Indian Creek via SR 37 to 1 mile north of SR 44; interchanges at SR 39, Ohio Street, SR 252, and SR 44; local access roadways including Old SR 37, Rogers Road, Commercial Boulevard, Mahalasville Road, Bill's Boulevard, Kristi Road, Southview Drive, Cramertown Loop Road, and Twin Branch Road; and the relocation of Sartor Ditch.

2.2 *Approved Environmental Documentation*

The study of I-69 Evansville to Indianapolis was conducted using a two-tiered EIS process as allowed by NEPA. The Tier 1 EIS for I-69 from Evansville to Indianapolis was completed in 2004. The Federal Highway Administration (FHWA) issued the Tier 1 Record of Decision (ROD) on March 24, 2004, approving Alternative 3C as the selected corridor for I-69 between Evansville and Indianapolis.

The I-69 Evansville to Indianapolis corridor was considered in its entirety for the Tier 1 EIS, and divided into six sections for more detailed Tier 2 EIS and project development. I-69 Section 6 is the northernmost of the six sections and is approximately 26 miles long. The RPA for I-69 Section 6 as approved in the Tier 2 FEIS begins 725 feet south of Indian Creek just south of Martinsville and continues north to I-465 in Morgan, Johnson, and Marion counties. The Tier 2 Final



Environmental Impact Statement (FHWA-IN-EIS-18-01-F) and Record of Decision for I-69 Section 6 was approved February 18, 2018.

2.3 Public Involvement

As part the reevaluation process, a public information meeting was held on September 17, 2018, at the Martinsville High School, 1360 E. Gray Street in Martinsville. Announcements of the meeting were published on the INDOT and I-69 Section 6 list serves via email and text, and a press release was issued. The meeting consisted of an open house followed by a formal presentation. A total of 135 attendees signed in at the meeting.

Design details presented at the public information meeting were also posted with other project documents to the I-69 Section 6 website: <https://www.in.gov/indot/projects/i69/2344.htm>. Comment sheets were available at the meeting and comments were accepted until September 28, 2018 via the project website, mail, or email.

Two comments were received at the meeting. Neither of these comments were related to the changes in the project since the FEIS. These comments include the following.

- Commercial business along SR 37 indicated proposed noise barriers blocking view of property from I-69 would be detrimental to business.
- Construction phasing and maintenance of local traffic patterns is crucial for future segments, especially with maintaining access to properties between Egbert Road and Morgan Street which will be served in the future by the new local service road.

For reference to the meeting information and comments see Appendix G.

In addition to the public information meeting, “kitchen table meetings” or KTMs have been on-going with affected property owners. KTMs are individual meetings between project representatives and property owners to review impacts to each property owner, gather information on each property such as locations of drinking water wells and septic systems, and review the property acquisition process. At this time, KTMs have been held with the majority of affected property owners within Segment 6.1 including those owners affected by the design changes. Where possible, the design has been updated to minimize or avoid impacts on individual properties.

2.4 Description of Project Changes

The two most substantial physical changes to the project since the FEIS/ROD are the addition of two new roadways and modifications to proposed interchanges. In addition, there are a number of minor changes to right-of-way, roadway alignments, and a determination of the maintenance of traffic plan during construction. For reference to the design changes see mapping in Appendix A.



2.4.1 Improvements to Cramertown Loop

Cramertown Loop was not identified as a local roadway improvement in the FEIS/ROD. Cramertown Loop from SR 252 south to Grand Valley Boulevard was identified by the City of Martinsville and Morgan County as a local roadway in need of improvement during coordination completed after the approval of the FEIS/ROD. Improvements were incorporated as part of the proposed project because of the existing conditions, which include inadequate sight distance along Cramertown Loop, poor pavement condition, lack of pedestrian facilities, lack of adequate drainage, and lack of traffic control at the intersection with SR 252. Cramertown Loop is anticipated during the construction of Segment 6.1 and after construction to be utilized by increased vehicular traffic including heavy trucks accessing Grand Valley Center. For reference to the increased traffic volumes see **Section 3.3**.

The Cramertown Loop improvements will include reconstruction of the existing roadway just east of the current roadway and correction of existing vertical geometric deficiencies. This roadway improvement will require approximately 10 acres of additional right-of-way and relocation of one single family home. The single-family home is being acquired due to unavoidable impacts which cannot be mitigated to the existing septic system on the parcel.

2.4.2 Southview Drive

Southview Drive from the Ohio Street interchange south of Burton Lane was not identified as a local roadway improvement in the FEIS/ROD. Southview Drive from Burton Lane south to the SR 39 interchange was identified by local business as a roadway in need of improvement/extension during coordination completed after the approval of the FEIS/ROD. Improvements on Southview Drive were incorporated into the proposed project to provide local roadway connectivity that was lost as a result of the closure of Burton Lane at SR 37.

Southview Drive south of Burton Lane is currently a private roadway south to Centerstone Behavioral Health Clinic. The Southview Drive improvements will reconstruct Southview Drive as a local roadway south of Burton Lane and extend the roadway south of Centerstone Behavioral Health Clinic to the SR 39 interchange. This roadway improvement will require approximately 4 acres of additional right-of-way.

2.4.3 Additional Minor Changes

Additional changes from the FEIS/ROD include minor shifts in the alignments, extension of alignments, or alterations to the interchange type. These include the following.

- Addition of right-of-way along the west side of the proposed I-69 from just south of Indian Creek to SR 39. This right-of-way will be used for multiple utilities. For reference see Appendix A1 – Pages 1 and 2 of 10.



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- The existing Indian Creek Overflow structure will be removed, requiring additional work in the floodway to accommodate all flood flows. The additional work includes removal of a portion of the Old SR 37 roadway embankment, reconstruction of Old SR 37 as a recreational roadway, and the purchase of a flood easement.
 - The existing Indian Creek overflow structure will be removed. This existing structure is a series of four 10.5 foot by 8.8 foot concrete boxes which create a total structure span of 48 feet. This structure will be removed and will not be replaced. The intent of this removal is to reduce overall long term maintenance costs for I-69 Section 6.
 - Old SR 37 is a dead-end roadway within the floodway of Indian Creek that was part of SR 37 prior to construction of the current four-lane roadway. Old SR 37 will be cut off from existing SR 37 as part of the I-69 Project. This roadway provides access to the Morgan County Bridge #224 which carried Old SR 37 over Indian Creek. Old SR 37 will be maintained in the future as a recreational roadway with access to the bridge. The existing roadway was designed to highway standards and the asphalt roadbed rises from the existing grade at approximately a 2 percent slope to the elevation of the Morgan County Bridge #224. As part of the I-69 Section 6 project, the roadway classification will be changed to a recreational road which allows for direct access to a historical site and for steeper roadway gradients. The proposed roadway will be graded at approximately a 5 percent slope and reconstructed as a gravel roadway. Reconstruction of the roadway, changing the roadway gradient, and removal of a portion of the roadway embankment will require approximately 2 acres of additional temporary right-of-way. The lowered roadway will accommodate more floodwater flow through the Indian Creek floodway. For reference see Appendix A1 – Pages 1 and 2 of 10.
 - A flood easement will be acquired downstream of the Indian Creek bridge. For reference see Appendix A1 – Pages 1 and 2 of 10.
- Eliminate the extension of Rogers Road. The removal of this roadway will eliminate the need for approximately 12 acres of local access right-of-way. This local access roadway was eliminated as it was not cost effective to avoid landlocking of a single parcel. For reference see Appendix A1 – Pages 1 and 2 of 10.
- Shift the SR 39 interchange ramps to the south in order to remove the skew from the bridges carrying I-69 mainline over SR 39. No additional right-of-way will be required. For reference see Appendix A1 – Page 2 of 10.
- Change the Ohio Street interchange type from a diamond with roundabout ramp intersections to a traditional diamond interchange. Ohio Street will switch from going over I-69 to under I-69. No additional right-of-way will be required. The change in the Ohio Street interchange results in five fewer residential property acquisitions. For reference see Appendix A1 – Page 4 of 10.
- Relocate Unnamed Tributary (UNT) 1 to Sartor Ditch and relocate Sartor Ditch within and adjacent to the Ohio Street interchange to accommodate roadway widening and to better



accommodate the flow paths of the streams. As a result of the Sartor Ditch relocation, the existing bridge at Southview Drive will be replaced, and a new crossing of Ohio Street over Sartor Ditch will be constructed. The channel relocation will require approximately one acre of additional right-of-way. For reference see Appendix A1 – Pages 4 and 5 of 10.

- Shift the Artesian Avenue alignment slightly to avoid utility impacts. No additional right-of-way will be required; however, the proposed right-of-way lines are shifted slightly. For reference see Appendix A1 – Pages 5 and 6 of 10.
- Replace the existing culvert at South Street over Sartor Ditch with a three-span bridge to help improve hydraulic conditions in the area. A third span has been added to the Grand Valley Boulevard bridge over I-69 to act as an overflow structure to Sartor Ditch. No additional right-of-way is required. For reference see Appendix A1 – Page 5 of 10.
- Convert the intersection of Cramertown Loop and SR 252 to a roundabout. A minor strip of additional right-of-way will be required and is included in the additional right-of-way required for Cramertown Loop. For reference see Appendix A1 – Pages 7 and 8 of 10.
- Convert the SR 252 interchange from a split diamond interchange with traditional ramp intersections to a split diamond interchange with roundabout ramp intersections. No additional right-of-way is required. For reference see Appendix A1 – Page 8 of 10.
- Extend Twin Branch Road south to SR 44 instead of the originally proposed intersection with Old SR 44. Approximately one acre of additional right-of-way will be required. Twin Branch Road north to Cikana Fish Hatchery will be reconstructed as a local roadway. The current roadway is partially a private roadway. Approximately six acres of additional local roadway right-of-way will be required. For reference see Appendix A1 – Pages 9 and 10 of 10.
- Additional right-way on both the east and west side of SR 37 north of SR 44 will be required due to the steepness of the existing slopes in those areas. For reference see Appendix A1 – Pages 9 and 10 of 10.
- Provide a dynamic message sign (DMS) structure and three closed circuit television towers in the Martinsville Section of I-69. The DMS will be located at the southern project limits south of Indian Creek. The towers will be at the each of the three interchanges associated with the project.

In addition to the above aspects of I-69 Section 6 in Martinsville, improvements are anticipated along SR 39 from SR 37 north to the southern bridge approach over the White River and on Morton Avenue, Main Street, Morgan Street, Ohio Street, and South Street. These improvements will facilitate construction of I-69 by allowing these roadways to serve as official detour routes and to accommodate diverted traffic during construction.

As these projects were previously planned and have independent utility, improvements along SR 39, Morton Avenue, Main Street, and Morgan Street will be completed by INDOT and evaluated under a separate environmental document. Improvements include pavement rehabilitation, addition of turn lanes and auxiliary lanes, signal improvements, and storm water improvements.



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The Ohio Street and South Street projects will be completed by the City of Martinsville and will be evaluated under a separate environmental document. These projects will likely include road reconstruction with curb and gutter and sidewalks. For reference see **Figure 2-1**.



Figure 2-1: Local Improvements





CHAPTER 3 – ENVIRONMENTAL CONSEQUENCES

This section summarizes the resource impacts within Segment 6.1 in comparison to the FEIS RPA impacts. As noted previously, INDOT intends to divide I-69 Section 6 into five design contracts (Segments 6.1 through 6.5) each of which may be divided further into multiple construction contracts. The environmental consequences discussed below are limited to those impacts associated with Segment 6.1 including Construction Contracts #1 and #2. For reference see **Table 3-1**.

There are no impacts in the City of Martinsville to private managed lands, core forest, or wellhead protections areas. Impacts to wetlands, floodplains, and streams are anticipated to increase while impacts to floodways and public managed lands are anticipated to decrease. The number of relocations is anticipated to be reduced by one which includes a reduction of residential relocation by five along Ohio Street and one along Twin Branch Road and the addition of three other residential relocations throughout the project.

Table 3-1: Total End-to-End Impacts for the Segment 6.1

Impact Criteria	RPA	Segment 6.1 Reevaluation	Difference
Right of Way (acres)			
Existing Right of Way	235.1	251.9	16.8
New Right of Way	161.6	159.4	-2.2
Total Right of Way	396.7	411.3	14.6
Relocations			
Residential - Single Family Home	55	52	-3
Residential - Duplex Unit	3	3	0
Residential - Mobile Home	2	3	1
Residential - Apartment Unit	1	1	0
Business	24	24	0
Non-Profit	1	2	1
Total Relocations	86	85	-1
Section 4(f)			
Park (acres)	0	0	0
Historic or NRHP Eligible (acres)	0	0	0
Total Wetland (acres)			
Emergent Wetland	0.243	0.195	-0.048
Forested Wetland	0.260	0.284	0.024
Scrub/Shrub Wetland	0.101	0.455	0.354



Impact Criteria	RPA	Segment 6.1 Reevaluation	Difference
Open Water	0.090	0.107	0.017
Total Wetland Impacts	0.695	1.041	0.346
Total Stream (linear feet) ¹			
Ephemeral	9,725	9,653	-72
Intermittent	3,639	3,208	-431
Perennial	2,202	2,347	145
Total Stream Impacts	15,566	15,208	-358
Floodplain (acres) ²	52.3	57.7	5.4
Floodway (acres) ³	46.9	43.5	-3.4
Wellhead Protection Areas (acres)	0	0	0
Agricultural Land (acres)	40.2	35.9	-4.3
Managed Lands (acres)	2.0	1.2	-0.8
Publicly Owned	2.0	1.2	-0.8
Privately Owned	0	0	0
Upland Forest (acres)	32.0	35.1	3.1
Core Forest (acres)	0	0	0

The following sections discuss anticipated changes to the environment and community based on the alterations to the Refined Preferred Alternative approved in the FEIS. If not specifically included in the discussion below, there are not anticipated to be any changes to impacts as disclosed in the FEIS.

3.1 Social

The total number of relocations is anticipated to be reduced by one residential property. Single family residential relocations along Ohio Street were reduced by a total of five due to the change in the interchange and a reduction in the right-of-way footprint. Additionally, one residential relocation along Twin Branch Road was eliminated due to minimization of right-of-way. Three single family residential relocations have been added due to inability to relocate septic tank and/or septic fields on those parcels. Two of these would have been relocations in the FEIS if information with regards to the septic tank location was known at that time. One of these is an additional relocation along Cramertown Loop and is a result of the additional roadway improvements included in the reevaluation. The Evening Lions Club at Cramertown Loop and SR 252 was

¹ Includes only permanent impacts.

² Includes areas within regulated Sartor Ditch floodway which are mapped as floodplain.

³ Does not include regulated floodway of Sartor Ditch which is not mapped as floodway.



included in the FEIS as a potential non-profit relocation and has been confirmed as a relocation. One additional mobile home relocation is also included. This addition is not due to a change in the right-of-way, rather an addition of a mobile home within the project right-of-way.

For reference to the relocations see **Table 3-2** and mapping in **Appendix A**.

Table 3-2: Relocations

Impact Criteria	RPA	Segment 6.1 Reevaluation	Difference
Residential - Single Family Home	55	52	-3
Residential - Duplex Unit	3	3	0
Residential - Mobile Home	2	3	1
Residential - Apartment Unit	1	1	0
Business	24	24	0
Non-Profit	1	2	1
Total Relocations	86	85	-1

All acquisitions and relocations required by this project will be completed in accordance with the Uniform Act and Title VI of the Civil Rights Act. No person displaced by this project will be required to move from a displaced dwelling unless comparable replacement housing is available to that person. INDOT will take required actions to ensure fair and equitable treatment of persons displaced as a result of this project, up to and including providing replacement housing of last resort as defined in 49 CFR §24.404. Relocation resources for this project will be available to relocated residents and business without discrimination. Relocation agents will be actively working with relocates to ascertain the needs and desires of the potentially displaced persons to provide information, answer questions, give help in finding replacement property, and issue last resort housing payments, if needed. Advisory services will be available to farms and businesses, with the aim of minimizing the economic harm of relocations.

If a displaced resident cannot be relocated due to the unavailability of comparable housing, or because comparable housing is not available within the statutory limit of the Uniform Act, housing of last resort will be made available. Last resort housing includes rental assistance, additions to existing replacement dwellings, construction of new dwellings, and dwelling relocation. Replacement dwellings must meet decent, safe, and sanitary standards established by FHWA.

Resources will be available to all relocated residents without regard to race, creed, color, sex, national origin, or economic status, as required by the Uniform Act and Title VI of The Civil Rights Act. Financial assistance will be available to eligible persons displaced by this project. Payments received are not considered as income under the provisions of the Internal Revenue Code of 1954; or for the purposes of determining any person's eligibility, or the extent of eligibility, for assistance under the Social Security Act or any other federal law.



Kitchen table meetings or KTMs have been on-going with affected property owners. KTMs are individual meetings between project representatives and property owners to review impacts to each property owner, gather information on each property such as locations of drinking water wells and septic systems, and review the property acquisition process. During these meetings, details which may affect property acquisition or unique requirements for relocation are also noted. At this time, KTMs have been held with the majority of affected property owners within Segment 6.1 including those owners affected by the design changes. Where possible, the design has been updated to minimize or avoid impacts on individual properties.

Changes in relocations are not anticipated to alter community cohesion, impacts to low income or minority populations, or other community impacts as discussed in the FEIS.

3.2 Farmland

The evaluation of compliance with the FPPA uses the Farmland Conversion Impact Rating for Corridor Type Projects form NRCS-CPA-106, as outlined in 7 CFR § 658.4. For this project, the NRCS-CPA-106 form was prepared during the DEIS preparation and again for the RPA in the FEIS. The assessment criteria were scored according to the NRCS instructions and 7 CFR 658.5. The impact ratings ranged from 118 to 119 in Johnson County, 113 to 119 in Marion County, and 112 to 116 in Morgan County. Since this project received less than 160 points in every county, I-69 Section 6 it will receive no further consideration for farmland protection, and the project is considered to have no significant impact to farmland.

As is required by the Farmland Protection Policy Act, the NRCS has been coordinated with and the Form NRCS-AD-1006/NRCS CPA-106 has been completed as part of this reevaluation. For reference to this correspondence see **Appendix F**. Since this project received a total point value of less than 160 points, this site will receive no further consideration for farmland protection. No other alternatives other than those already discussed in this document will be considered without a reevaluation of the project's potential impacts upon farmland. This project will not have a significant impact to farmland.

3.3 Traffic

The build alternatives evaluated in the FEIS for I-69 Section 6 all assume upgrade of SR 37 to an interstate facility which is consistent with this reevaluation. There is no anticipated change to the mainline traffic as evaluated in the FEIS. However, there are two local roadways which have been added to I-69 Section 6 in Martinsville and are included in this reevaluation. The forecasted traffic volumes for these two roadways are located in **Table 3-3**.

Traffic volumes along Southview Drive and Cramertown Loop are expected to increase by 30 to 60 percent over the existing traffic volumes. Improvements to both the vertical and horizontal alignment for Cramertown Loop are included in the proposed design to safely accommodate the proposed traffic.

**Table 3-3: Local Roadway Traffic Data**

TRAFFIC DATA	Southview Dr. at SR 39	Southview Dr. at Ohio St. / Mahalasville Rd.	Cramertown Loop
A.A.D.T. ⁴ 2016 (counts)	--	3,400	1,600
A.A.D.T. 2019	2,900	3,600	1,800
A.A.D.T. 2039	3,400	5,100	4,300
Increase in Traffic Volume	15 %	30 %	60 %

3.4 Visual Aesthetics

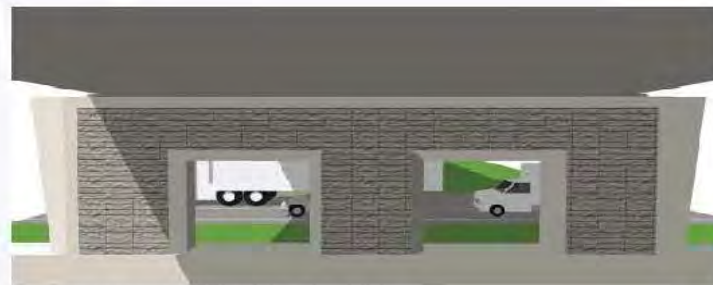
After the FEIS was approved, INDOT and the City of Martinsville formed a Martinsville Aesthetics Task Force comprised of residents of the city of Martinsville to evaluate potential aesthetic elements within the Martinsville segment of I-69 Section 6. The aesthetic elements design concepts include visual representations of an entrance monument, noise and retaining walls, and bridge and overpass elements. Aesthetic elements for the bridges, overpasses, noise walls and retaining walls in the Martinsville segment include a combination of brick and limestone features. See **Figure 3-1**. Design elements will be utilized on the Grand Valley Boulevard, Ohio Street, SR 252, and SR 44 bridges which are included in Segment 6.1 for the Martinsville area. Drawings included in this document are illustrative in nature and final design must be approved in accordance with INDOT Operations Memo 10-06 (Public Art and Landscaping the ROW).

Design elements associated with the Grand Valley bridge include a lighted sign. The intent of the lighted sign is to provide sense of place and gateway for the City of Martinsville in conjunction with the other aesthetic details. For reference see **Figure 3-1** and **Figure 3-2**

Since the publication of the FEIS, several changes have occurred to interchange types and intersections which would visually change both the view from and the view to I-69. The most noteworthy change is the Ohio Street interchange has been updated from Ohio Street over I-69 to I-69 over Ohio Street and the Hospital. This alteration reduced impacts to residential properties along Ohio Street by five. For reference to the new Ohio Street interchange, including the aesthetic elements incorporated into its design, see **Figure 3-3**.

⁴ A.A.D.T = Average Annual Daily Traffic

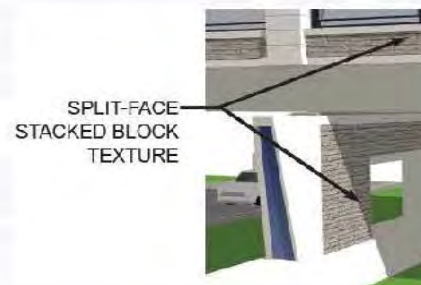
Figure 3-1: Aesthetic Elements for Martinsville



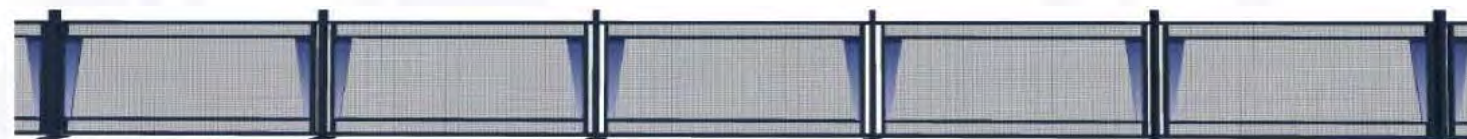
SPLIT-FACE STACKED BLOCK TEXTURE



ORNAMENTAL
PEDESTRIAN LIGHT



SPLIT-FACE
STACKED BLOCK
TEXTURE



DECORATIVE FENCING

Figure 3-2: Aesthetic Treatments for the Grand Valley Boulevard Bridge

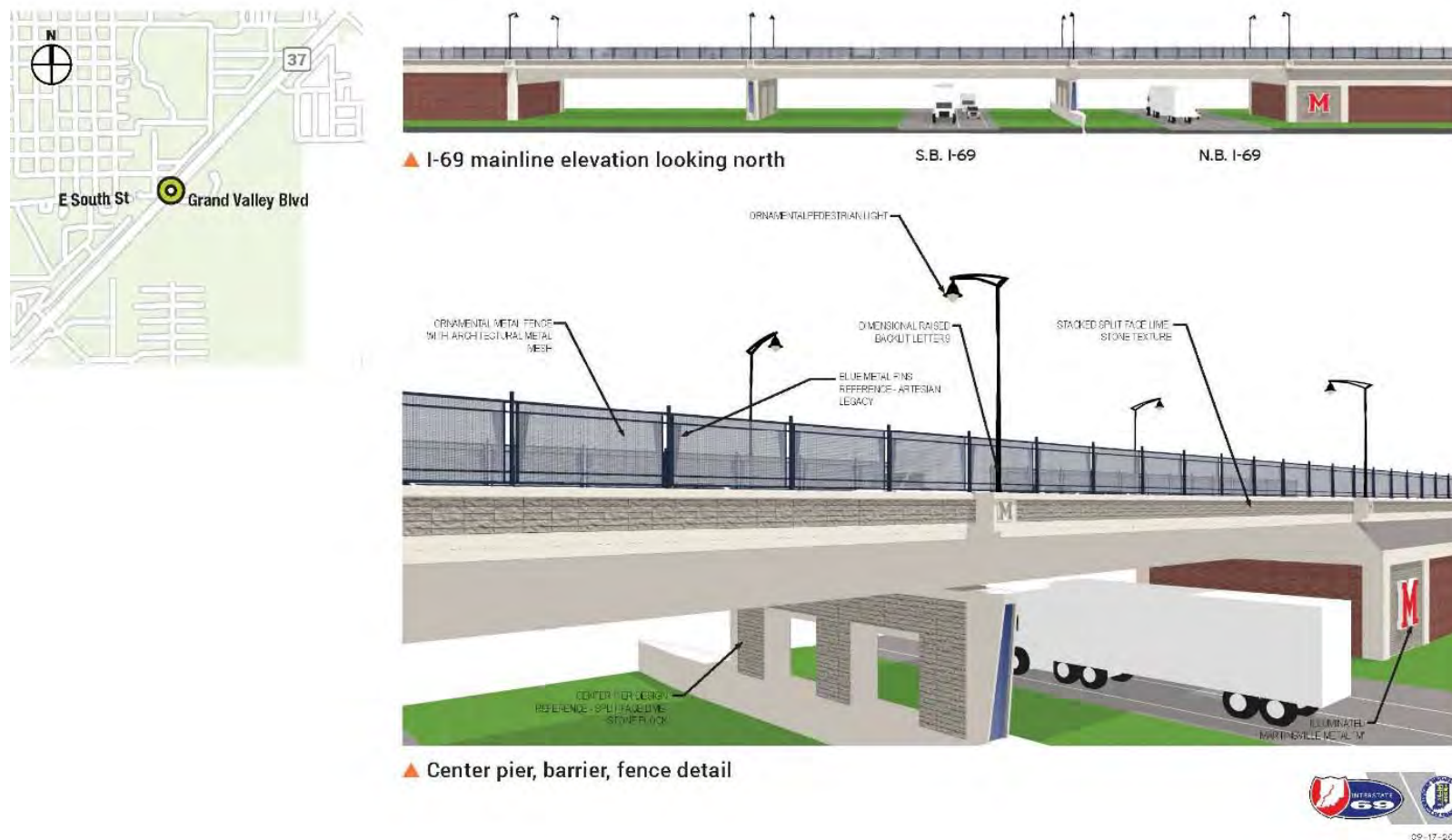




Figure 3-3: Aesthetic Treatments for the Ohio Street Interchange



▲ Aesthetic treatments for roadways under I-69
(birds-eye view to the southeast)



▲ Street view





Design elements were shared with the public via an on-line survey. Residents were encouraged to provide input into the selection of three final design elements: the texture of walls and barriers, the style of ornamental fencing and the type of ornamental lighting fixtures. A total of 2,534 individuals, including 1,497 Morgan County residents, completed the survey. For reference see **Table 3-4**.

Table 3-4: Aesthetics Survey Results

Question	Criteria	Total Responses	Morgan County Responses	Morgan County Distribution Percent
Are you a resident of Morgan County, Indiana?	Yes	1497	1497	100.0 %
	No	417	-	-
	N/A	620	-	-
Which wall and barrier texture option do you prefer?	Horizontal Limestone Texture	856	676	45. %
	Split-face Stacked Block Texture	937	742	50 %
	N/A	741	79	5 %
Which fence option do you prefer?	Wave Fence Option	708	538	36 %
	Artesian Fin Fence Option	1094	887	59 %
	N/A	732	72	5 %
Which lighting option do you prefer?	Gardenia Option	830	634	42 %
	Fullonia Option	939	765	51 %
	N/A	765	98	7 %

The split-face stacked block texture retaining wall and noise barrier were slightly preferred over the horizontal limestone textured walls, the artesian fin fence was preferred over the wave fence option, and the Fullonia lighting option was preferred over the Gardenia option. These options will be included in the I-69 Section 6 design plans for the Martinsville areas.

3.5 Noise Analysis

During the FEIS, noise abatement was analyzed at 25 locations for Alternatives evaluated in the FEIS. Based on those studies RPA would expose 788 receptors to 2045 design year noise levels approaching or exceeding the FHWA noise abatement criteria.

Traffic noise barriers for the RPA have been analyzed at 30 locations with TNM®2.5 after the DEIS was published. INDOT has determined that noise abatement was likely, but not guaranteed, at ten locations, three of which were located within Segment 6.1

A reevaluation of the noise analysis will occur during final design. If during final design it is determined that conditions have changed such that noise abatement is not feasible and reasonable, the abatement measures might not be provided. The final decision on the installation of any



abatement measure(s) will be made upon the completion of the project's final design and the public involvement process.

As part of the public involvement process, the viewpoints of the benefited residents and property owners will be sought and considered in determining the reasonableness of highway traffic noise abatement measures for the proposed I-69 Section 6 highway construction project. The viewpoints will be collected through mailed surveys or public meetings. INDOT will incorporate highway traffic noise consideration in on-going I-69 Section 6 public involvement through the completion of the proposed project.

3.6 Construction Impacts

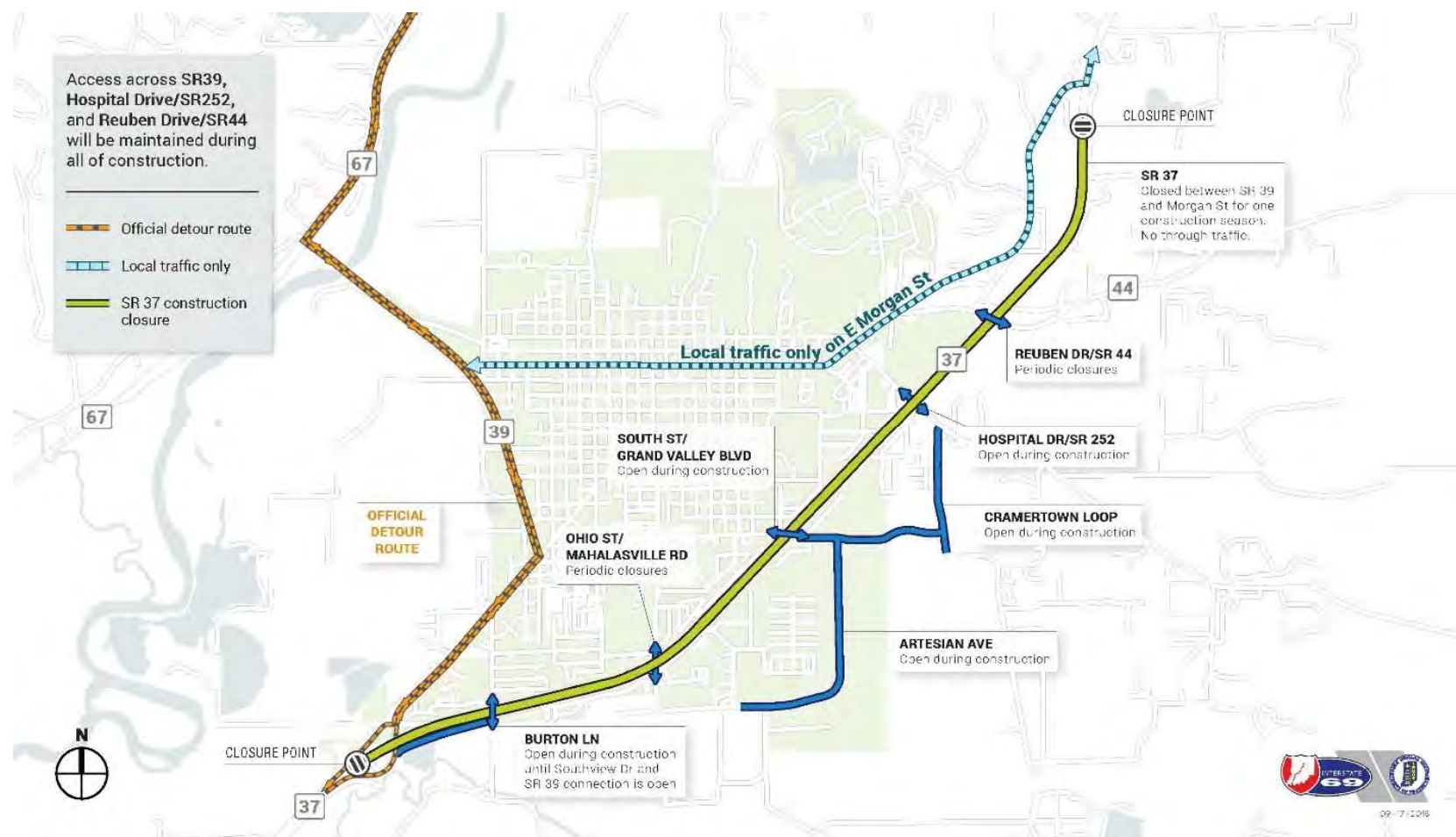
Maintenance of traffic for I-69 Section 6 within the Martinsville area was developed with several considerations including safety, access to business and residential properties during construction, timing and duration of construction, cost, and schedule. Local roadway improvements will be completed during the initial construction phases in order to accommodate local and traffic diversion during later phases of construction including the mainline of I-69. Access across SR 39, Hospital Drive/SR 252 and South Street/Grand Valley Boulevard will be maintained during all phases of construction. SR 37 from SR 39 north to Morgan Street at the northern end of the I-69 Section 6 Martinsville phase will be closed for one construction season in order to facilitate construction.

During the closure of SR 37, the official signed detour route will include SR 39, SR 67, and SR 144. Morgan Street through Martinsville will be signed for local traffic only and truck traffic will also be prohibited. Local service roads to be constructed during the initial construction phases, prior to the SR 37 closure, include the Grand Valley Boulevard bridge, Artesian Avenue, and Cramertown Loop, as well as Southview Drive prior to the closure of SR 387. Cross traffic on Ohio Street, and Reuben Drive/SR 44 will be maintained to the extent possible during construction. Cross traffic on Burton Lane will be maintained until Southview Drive is completed. For reference see **Figure 3-4**.

Construction of I-69 Section 6 through Martinsville is anticipated to take three years. Grand Valley Boulevard, Mahalasville Road, and Artesian Avenue will be constructed during 2019. The completion of these roadway segments will maintain north-south local traffic between Ohio Street and Hospital Drive/SR 252. SR 39 and other local roadway improvements will be completed during 2020 as separate construction projects. These improvements will be completed in advance of the SR 37 road closure to maintain local traffic during the 2021 construction phase when SR 37 will be closed to traffic for one construction season.

The construction of mainline I-69 and interchanges is expected to take two construction seasons, 2020 and 2021. The first season will include construction of offline elements such as ramps. The second season will include the closure of SR 37 to through traffic. Without a construction season of closure, the construction of I-69 mainline and interchanges would take three construction seasons. The closure will shorten the overall construction schedule by one year.

Figure 3-4: Maintenance of Traffic during SR 37 Closure





Existing travel on SR 37 was studied to identify expected diversion routes. The most logical diversion route was identified for each trip by performing select link analysis using the I-69 Section 6 Corridor Model developed in TransCAD for the I-69 Section 6 Environmental Impact Study (EIS) was the primary tool used in this analysis. The traffic operations on SR 39 and Morgan Street were analyzed using Highway Capacity Methodologies in Synchro Software.

It is anticipated that 4,400 trips would divert to I-70/US 41. Regional trips would use the official signed detour through Martinsville. It is anticipated that the detour would increase traffic on SR 39 by 9,200 vehicles per day. Local trips through Martinsville are trips that would have to “backtrack” to use the official signed detour route, so it is anticipated that 3,000 trips per day would divert to Morgan Street through Martinsville. The remaining trips are local trips going to or from Martinsville.

The lane restrictions on each of these SR 37 and local roadways will pose a temporary inconvenience to traveling motorists (including school buses and emergency services); however, no substantial delays are anticipated and all inconveniences will cease upon project completion. Coordination completed to date with the Martinsville School Corporation has indicated that once the Grand Valley Boulevard connection to South Street has been completed, routing of buses and movement between schools will be simplified. Outreach to the public and coordination with the emergency management and local officials will occur during the design process to minimize impacts to the local community. Further outreach will occur during construction to keep the motoring public informed of construction activities, including lane restrictions and closures. This outreach was initiated as part of the public meeting in Martinsville on September 17, 2018, and will continue through construction. It is anticipated that a minimum of one public meeting will occur annually to update the community on the project status and maintenance of traffic plans.

During the initial maintenance of traffic design and discussion, several alternatives were evaluated. These included various combinations of widening of SR 39 to four lanes for all or part of the distance from SR 37 to SR 67 and intersection improvements at SR 39 and Morgan Street, SR 39 and Morton Avenue/Harriett Street, and SR 39 and Rogers Road. Design criteria of no more than 50 percent increase in travel time from SR 37 to SR 67 along SR 39 was utilized to evaluate various maintenance of traffic alternatives. The current travel time is seven minutes and therefore an increase in travel time during construction, specifically during the closure of SR 37, to 10.5 minutes was acceptable. The anticipated travel time with no improvements was 18 minutes or an increase of 160 percent. Three build scenarios as well as the “no improvement” scenario were evaluated, see



Table 3-5.



Table 3-5: Comparison of MOT Options

Criteria	Existing Conditions	Maintenance of Traffic Scenarios			
		No Improvements	Option 1	Option 2a	Option 2b
Travel Time (Minutes)	7	18	11	6	5
Percentage Increase (%)	--	160	60	-10	-30

Option 1 includes widening of SR 39 to four lanes from SR 37 to York Street, to three lanes from York Street to the railroad crossing, maintaining two lanes from the railroad crossing to the existing four lane section near SR 67. Intersection improvements including turn lanes and/or traffic signals would be completed at SR 39 and Morgan Street, SR 39 and Morton Avenue/Harriett Street, and SR 39 and Rogers Road. This option would not change the Indiana Southern Railroad (ISRR) railroad crossing. Anticipated increase in travel time is four minutes making the total travel time 11 minutes or an increase of 60 percent.

Option 2a includes widening of SR 39 to a 4-lane section from SR 37 to existing 4-lane section near SR 67. Intersection improvements including turn lanes and/or traffic signals would be completed at SR 39 and Morgan Street, SR 39 and Morton Avenue/Harriett Street, and SR 39 and Burton Road. SR 37 at the ISRR crossing would be widened to four lanes. This alternative would decrease travel time to six minutes or a 10 percent reduction.

Option 2b includes widening of SR 39 to a 4-lane section from SR 37 to existing 4-lane section near SR 67. Intersection improvements including turn lanes and/or traffic signals would be completed SR 39 and Burton Road and SR 39 and Morgan Street with a roundabout at SR 39 and Morton Avenue/Harriett Street. SR 37 at the ISRR crossing would be widened to four lanes. This alternative would decrease travel time to five minutes or a 30 percent reduction.

Due to various time and costs constraints associated with construction of the ISRR railroad crossing, the crossing of Nutter Ditch, construction within the floodway of the White River, and utility conflicts, Options 2a and 2b were determined to not be feasible. However, Option 1 substantially met the design criteria of an increase in travel times to no more than 10.5 minutes and therefore was determined to operate at acceptable level of delay. Therefore, the maintenance of traffic alternative for the mainline construction of I-69 will use a closure.

3.7 Above ground Historic Resources

On February 14, 2017, FHWA signed a Finding of Effects for Section 6 of the I-69 Evansville to Indianapolis Study: Historic Properties Affected – Adverse Effect. On March 17, 2017, the Finding



of Effects was submitted to the SHPO and all I-69 Section 6 consulting parties. The SHPO concurred with the Adverse Effect finding on April 13, 2017. On September 13, 2017, a draft MOA was sent for review and comment to the Indiana SHPO and all I-69 Section 6 consulting parties. On November 13, 2017, the MOA was signed by all required and invited signatories.

A field survey of the APE and documentary research were conducted as part of the FEIS to collect data needed to develop a historic context and complete the eligibility determinations according to NRHP guidelines. A Historic Property Report (HPR) was prepared in 2008 and updated in 2015 and again in 2016 with an Additional Information (AI) documents. Surveys were completed in accordance with the Secretary of the Interior's Standards and Guidelines for Archaeology and Historic Preservation, the INDOT Cultural Resource Manual, and written guidance provided by the DHPA. Within the Martinsville area, six properties or districts have been identified that are extant and either listed on or eligible for listing on the NRHP. The following is a summary of the reports prepared and sites identified within the Martinsville area. All project components which have been added or altered since the FEIS are included within the original Area of Potential Effect (APE) for the project and no previously unidentified above ground resources have been identified.

The HPR (published in 2008) identified one individual district listed in the NRHP and recommended five properties eligible for listing in the NRHP within the Martinsville area. The East Washington Street Historic District (NR-1313) was listed in the NRHP in 1997. The following properties were recommended eligible for listing in the NRHP:

- Morgan County Bridge No. 224 (NBI No. 55001421; IHSSI No. 109-386-60030);
- Top Notch Farm (IHSSI No. 109-386-60028);
- W.E. Nutter House (IHSSI No. 109-386-64053);
- Grassyfork Fisheries (IHSSI No. 109-386-60012);
- Stockwell Bridge (IHSSI No.: 109-386-60053; NBI No.: 550004) (has since been demolished);

Since the release of the HPR in 2008, the Indiana Historic Bridge Inventory (2009) had identified the following NRHP-eligible bridges with in the Martinsville area:

- Morgan Co. Br. 224 (IHSSI No. 109-386-60030; NBI No.: 5500142) (which was previously identified); and
- Stockwell Bridge/Morgan Co. Br. 56 (IHSSI No. 109-386-60053; NBI No.: 5500049) (now demolished).

Subsequently, in 2012, Grassyfork Fisheries was listed in the NRHP as Grassyfork Fisheries Farm No. 1 (NR-2209).

In 2015, the AI No. 1 Report recognized the above NRHP-listed and NRHP-eligible properties and confirmed the above listed properties with the exception of the Stockwell Bridge, which had



been demolished. In the AI No. 2 Memorandum published in 2016, historians recommended the Percy Farm and Clear Creek Fisheries (IHSSI No. 109-386-60015) eligible for the NRHP.

In accordance with the Documentation of Section 106 Finding of Adverse Effect, Pursuant to 800.6(a)(3) approved by FHWA on February 14, 2018, an overall determination of “Historic Properties Affected: Adverse Effect” has been issued for I-69 Section 6 due to impacts to the setting of the Reuben Aldrich Farm. This resource is not within the Segment 6.1. For reference to the effect determination for each resource within the Martinsville area see **Table 3-6**.

Table 3-6: Above Ground Resources in Martinsville Area

Survey No.	Property Name	Address	Property Type	County	NRHP Status	Effects from FEIS
109-386-60030 (NBI No. 5500142)	Morgan County Bridge No. 224	Old SR 37 over Indian Creek	Warren Pony Truss Bridge	Morgan	NRHP Eligible “Select”	No Adverse Effect
109-386-60028	Top Notch Farm	351 Mahalasville Road	Farm	Morgan	NRHP Eligible	No Adverse Effect
NR-1313	East Washington Street Historic District	East Washington Street	Residential District	Morgan	NRHP Listed	No Effect
109-386-64053	W.E. Nutter House	1089 East Harrison Street	American Foursquare	Morgan	NRHP Eligible	No Effect
109-386-60015	Percy Farm and Clear Creek Fisheries	295 Hess Road	Farm and Fishery	Morgan	NRHP Eligible	No Effect
NR-2209	Grassfork Fisheries Farm No. 1	2902 East Morgan Street	Fishery	Morgan	NRHP Listed	No Adverse Effect

3.7.1 Morgan County Bridge 224

Morgan County Bridge 224 is a three-span Warren pony truss located along old SR 37 and has been determined eligible for the NRHP as a Select Bridge in the Indiana Statewide Historic Bridge Inventory under Criterion C. Morgan County Bridge No. 224 is currently closed to traffic but access to old SR 37 is available off existing SR 37. Project improvements on SR 37 under the FEIS Refined Preferred Alternative are located nearly 600 feet from the location of Bridge No. 224 and will take place along existing SR 37. Under the Refined Preferred Alternative, Old SR 37 will be permanently closed to the new I-69 and the connecting pavement removed within the I-69 right-of-way. The roadway outside of the I-69 right-of-way will remain. During the FEIS, it was



determined the undertaking will have an effect on Morgan County Bridge No. 224, but that effect will not be adverse.

The proposed improvements under the Segment 6.1 include removal of a portion of the roadway embankment, changing the grade of the roadway, and reconstruction of the Old SR 37 road as a recreational roadway. Changing the grade of the roadway and removing portions of the roadway embankment is required to maintain flows through the Indian Creek floodway. Reconstruction of the roadway will extend to the bridge approaches with roadway embankment regrading taking place up to approximately 100 feet north of the bridge. The integrity of bridge will not be adversely impacted as a result of this project. Changing the roadway grade, removing of a portion of the roadway embankment, and reconstructing the roadway with gravel is not anticipated to alter the original Section 106 effect finding. Per stipulation II.C.1.c. of the I-69 Section 6 MOA, INDOT requested confirmation from the SHPO in a letter dated August 15, 2018 if they concur that the No Adverse Effect finding for Morgan County Bridge No. 224 is still valid. In a letter dated September 14, 2018, SHPO indicated “we do not believe that the modifications will adversely affect Morgan County Bridge No. 224”. For reference to this correspondence see **Appendix E**.

3.7.2 Top Notch Farm

Top Notch Farm (IHSSI No. 108-386-60028) is located around the base of Pollard Hill near SR 37 at Mahalasville Road in Martinsville near the Ohio Street interchange. The property includes a simple one- and one-half story, frame farmhouse and several outbuildings relating to dairy farming. Top Notch Farm is eligible for inclusion in the NRHP under Criterion A. The RPA from the FEIS included Ohio Street over I-69 approximately 700 feet from Top Notch Farm and an interchange at this location. At the time, the determination found the effects of the undertaking would not alter the characteristics of the Top Notch Farm that are cause for its eligibility in the NRHP. The property is already in a disturbed setting with modern non-agricultural buildings in proximity. It is the significance of the farm property itself rather than the setting that renders this resource eligible. During the FEIS, it was determined the integrity of the farm will not be adversely impacted as a result of this project.

There are no changes to the local roadway configuration with Segment 6.1; however, there are changes to the interchange type and vertical alignment. Local roadways and existing buildings will remain in place between the Top Notch Farm and the I-69 and Ohio Street interchange. The change of the interchange type and raising of I-69 over Ohio Street is not anticipated to alter the original determination. The property is already in a disturbed setting with modern non-agricultural buildings in proximity and the integrity of the farm will not be adversely impacted as a result of this project. Per stipulation II.C.1.c. of the I-69 Section 6 MOA, INDOT requested confirmation from the SHPO in a letter dated August 15, 2018 if they concur that the No Adverse Effect finding for Top Notch Farm is still valid. In a letter dated September 14, 2018, SHPO indicated “we do not believe that the modifications will adversely affect Top Notch Farm”. For refence to this correspondence see **Appendix E**.

3.7.3 East Washington Street Historic District



The East Washington Street Historic District is a residential extension of a main commercial street in the town of Martinsville. Much of the area was developed between about 1880 and 1930. The most prevalent architectural styles are Queen Anne and Colonial Revival. Also represented are the Second Empire, Craftsman, Free Classic, Bungalow, Italianate, Stick, Shingle, and Prairie styles. Vernacular types include gable-front, gabled-ell, and double-pen houses. Mature shade trees extend on both sides of Washington Street and are important in defining the district's character. Other contributing elements are sandstone curbs, iron fences, and brick and stone retaining walls. The East Washington Street Historic District was listed in the NRHP in 1997 and is significant under Criteria A and C. The period of significance is 1869 to circa 1940. The FEIS Refined Preferred Alternative is located more than 4,000 feet from the boundary of the East Washington Street Historic District. The district is located in a dense, urban area of Martinsville and thus would not have a view to the undertaking. Noise and traffic increases would not occur as a result of the undertaking. During the FEIS, it was determined the undertaking would have no effect on the East Washington Street Historic District.

The proposed improvement under Segment 6.1 is not anticipated to change the view to the undertaking or alter the original determination. Per stipulation II.C.1.c. of the I-69 Section 6 MOA, INDOT requested confirmation from the Indiana SHPO in a letter dated August 15, 2018 if they concur that the No Effect finding for the East Washington Street Historic District is still valid. In a letter dated September 14, 2018, SHPO indicated "we do not believe that the modifications will have an effect on the East Washington Street Historic District". For reference to this correspondence see Appendix E.

3.7.4 W.E. Nutter House

The W. E. Nutter House appears to be unaltered, is in excellent condition, and is distinctive for its degree of architectural detail. The two-story, three-bay house is basically an American Foursquare in massing, with a sun porch extending on the west side of the house and a porte cochere on the east side. There is a small, unattached garage to the rear of the property that matches the style and materials of the house. The W. E. Nutter House retains integrity and is eligible for listing in the NRHP under Criterion C. The period of significance is circa 1915. The FEIS Refined Preferred Alternative is located approximately 3,500 feet from the W.E. Nutter House. The Nutter House is located in a dense, urban area of Martinsville and thus, would not have a view to the undertaking. Noise and traffic increases would not occur as a result of the undertaking under any of the alternatives. During the FEIS, it was determined the undertaking would have no effect on the W.E. Nutter House.

The proposed improvement under Segment 6.1 is not anticipated to change the view to the undertaking or alter the original determination. Per stipulation II.C.1.c. of the I-69 Section 6 MOA, INDOT requested confirmation from the Indiana SHPO in a letter dated August 15, 2018 if they concur that the No Effect finding for W. E. Nutter House is still valid. In a letter dated September 14, 2018, SHPO indicated "we do not believe that the modifications will have an effect on the W.E. Nutter House". For reference to this correspondence see Appendix E.



3.7.5 Pearcy Farm and Clear Creek Fisheries

The Pearcy Farm and Clear Creek Fisheries complex is situated on the east side of Hess Road, approximately 0.33 miles south of SR 44. The property consists of a Central Passage House (circa 1870) and five agricultural buildings dating to the historic period including a smokehouse, tool shed/corn crib, small barn, and two utility sheds (all circa 1920); the large fishery (1934) includes a barn and complex of ponds east of the main outbuildings. Intact transportation networks show the relationship between the house, the small collection of agricultural outbuildings, and the fisheries. The fishery includes eighty-eight actively farmed ponds containing eight varieties of commercial game fish. A modern pole barn southwest of the earlier fishery barn dates to circa 2010. This property is eligible for listing in the NRHP under Criteria A and C (house only) for significance in the areas of Agriculture and Architecture. The period of significance is circa 1870 to 1972. The mainline of the FEIS Refined Preferred Alternative is located over 3,000 feet from the Pearcy Farm and Clear Creek Fisheries. No improvements are planned along Hess Road as part of the construction, although traffic is projected to decrease over the “No Build” alternative as a result of this undertaking. During the FEIS, it was determined the undertaking will not affect the Pearcy Farm and Clear Creek Fisheries.

The proposed improvement under Segment 6.1 is not anticipated to change the view to the undertaking or alter the original determination. Per stipulation II.C.1.c. of the I-69 Section 6 MOA, INDOT requested confirmation from the Indiana SHPO in a letter dated August 15, 2018 if they concur that the No Effect finding for the Pearcy Farm and Clear Creek Fisheries is still valid. In a letter dated September 14, 2018, SHPO indicated “we do not believe that the modifications will have an effect on the Pearcy Farm and Clear Creek Fisheries”. For reference to this correspondence see Appendix E.

3.7.6 Grassyfork Fisheries Farm No. 1

The Grassyfork Fisheries Farm No. 1 consists of a main building, several accessory buildings and structures, and dozens of goldfish breeding and hatching ponds. The Office and Display Room, built in 1936, is located near Old 37 (also known as Morgan Road) within the APE for this project and is a two-story commercial structure with Prairie-style massing and details. The Office and Display Room was constructed along Old SR 37 as a sales and service building. Grassyfork Fisheries Farm No. 1 was listed in the NRHP in 2012. It is significant under Criteria A, B, and C with a period of significance from 1936 to 1960. The FEIS Refined Preferred Alternative will take place nearly 1,300 feet from the boundary of Grassyfork Fisheries Farm No. 1 along SR 37. The I-69 mainline will maintain the general elevation of existing SR 37, which is depressed in the area; SR 37 is not currently visible from the property, and the undertaking would not be elevated as part of the improvements to the mainline.

Morgan Street will be reconstructed to join Old SR 37 north of the Country Club Road and Teeters Road will include an overpass. Traffic will increase in front of Grassyfork Fisheries Farm No. 1. There will be a change in view produced by increasing traffic along Teeters Road. The ambient noise level at Grassyfork Fisheries Farm No. 1 is 48.2 dBA; that level will increase to 55.7 dBA, a change of 7.5 dBA, which is not considered adverse per INDOT’s noise policy. Grassyfork



Fisheries Farm No. 1 is not sensitive to noise and would not be affected by traffic changes that would result from the construction of this undertaking. These changes will not constitute an adverse effect. During the FEIS, it was determined the integrity of the farm will not be adversely impacted as a result of this project.

The proposed improvement under Segment 6.1 is not anticipated to change the view to the undertaking or alter the original determination. Per stipulation II.C.1.c. of the I-69 Section 6 MOA, INDOT requested the opinion of the Indiana SHPO if they concur that the No Adverse Effect finding for the Grassyfork Fisheries Farm No. 1 is still valid. In a letter dated September 14, 2018, SHPO indicated “we do not believe that the modifications will adversely affect Grassyfork Fisheries Farm No. 1”. For reference to this correspondence see Appendix E.

FHWA and INDOT have reviewed potential modifications resulting from the additional right-of-way areas and determined that there is no change to any individual resource findings or the original project finding of “Adverse Effect” issued on April 13, 2017. Therefore, based on this determination, FHWA does not intend to reopen the Section 106 process on the I-69 Section 6 project for the above mentioned areas for the following reasons: the determination that no above ground resources listed in or eligible for the NRHP will have any change to its effect finding due to the additional right-of-way areas and design changes.

3.8 Below ground Historic Resources

Phase Ia archaeological surveys have been completed for the I-69 Section 6 RPA to identify whether National Register of Historic Places (NRHP)-eligible archaeological resources are located within the Area of Potential Effects (APE), and to determine what effect the proposed I-69 undertaking could have on those resources. The APE was investigated through shovel testing, surface collection/survey, and visual inspection. The 2015–2016, 2016–2017, and 2017 Phase Ia archaeological research identified 72 sites within the APE. Fifty-five sites were determined to not be eligible for listing in the NRHP. Five sites were determined potentially eligible for listing in the NRHP. Twelve sites had insufficient data for eligibility determinations outside the I-69 Section 6 APE, and these sites should be clearly marked so they can be avoided by ground disturbing activities. Three alluvial locales (five individual areas) were recommended for Phase Ic archaeological investigations. In addition, site 12Mg525 is located in close proximity to the project and will be clearly marked and avoided. Otherwise, further investigation will be required.

As a result of the design changes included in Segment 6.1, additional right-of-way will be required. An archaeological investigation has been completed within the additional project area outside the archaeological APE for the I-69 Section 6 project. The Phase Ia Archaeological Survey 4 for I-69 Section 6, Morgan, Johnson, and Marion Counties, Indiana Des. No. 0300382 was completed on June 22, 2018 and was prepared by Gray & Pape. This additional survey is the fourth Phase Ia survey undertaken by Gray & Pape, Inc., within the I-69 Section 6 corridor. The survey was conducted on April 16–17, 23–24, and May 21–22, 2018. Shovel testing, surface inspection, and walkover survey methods were used during the investigations. The design changes created additional right-of-way at 79 locations along the I-69 Section 6 corridor including all design contracts. A total of 15.87 hectares (39.23 acres) was covered by the investigation. Five previously



undocumented archaeological sites (12MG588, 12MG589, 12MG590, 12MG591, and 12JO722) were recorded within the survey area. The new sites consist of two prehistoric lithic scatters, one bridge abutment, one historical barn foundation, and one historical farmstead. None of these sites are recommended as eligible for inclusion in the NRHP.

In addition, one previously recorded multicomponent historical and prehistoric site location was revisited (12JO488). This multicomponent historical and prehistoric site was recommended as not eligible for inclusion in the NRHP in an earlier report, and nothing was found during this investigation to alter that conclusion.

The topographic setting and soils encountered in the additional right-of-way were not found to be conducive for the identification of intact buried cultural resources, and no subsurface investigations are recommended. This report was circulated to the SHPO and tribes for review on July 19, 2018. In a letter dated August 20, 2018, SHPO indicated “we concur with the opinion of the archaeologist, as expressed in the Phase Ia archaeological investigations report (Baltz, Trader, and McCord, 07/16/2018), that archaeological sites 12-Mg-0588, 12-Mg-0589, 12-Mg-0590, 12-Mg-0591 (all of which were identified during the archaeological investigations), and 12-Jo-0488 (which was resurveyed during the archaeological investigations) do not appear eligible for inclusion in the National Register of Historic Places ("NRHP"), and that no further investigations appear necessary at these locations”.

FHWA and INDOT have reviewed potential modifications resulting from the additional right-of-way areas and determined that there is no change to any individual resource findings or the original project finding of “Adverse Effect” issued on April 13, 2017. Therefore, based on this determination, FHWA does not intend to reopen the Section 106 process on the I-69 Section 6 project for the above mentioned areas for the following reasons: the determination that no below ground resources listed in or eligible for the NRHP will have any change to its effect finding due to the additional right-of-way areas and the conclusion that the proposed action of adding design right-of-way within Segment 6.1 will have no change to the effect on archaeological resources.

3.9 Threatened and Endangered Species

This study has included an evaluation of potential impacts on federally-listed threatened and endangered species, as well as state-listed species. The evaluation of impacts on federally-listed species has been carried out in consultation with USFWS under Section 7 of the ESA.

As part of Section 7 consultation during the preparation of the Tier 1 EIS for I-69, USFWS initially identified six species in the 26-county study area that required evaluation. All six of those species were evaluated in the Tier 1 DEIS. In comments on the Tier 1 DEIS, USFWS requested that FHWA and INDOT prepare a BA for a single preferred alternative prior to publication of the FEIS. Subsequently, INDOT identified the Alternative 3C as the Tier 1 Preferred Alternative. FHWA and INDOT then proceeded with Section 7 consultation regarding the impacts of Preferred Alternative 3C. Of the six species evaluated in the Tier 1 DEIS, USFWS identified three species that may be present in the action area for Preferred Alternative 3C. Those three species were the



Indiana bat, the bald eagle and the eastern fanshell mussel. The bald eagle is no longer a listed species but remains protected under other laws.

FHWA and INDOT initiated formal consultation with USFWS on the Indiana bat, the bald eagle and the eastern fanshell mussel. FHWA and INDOT prepared a BA for Tier 1 for all three species identified by USFWS and an addendum to the BA for Tier 1 for the Indiana bat. Based on these, USFWS concurred that the project “is not likely to adversely affect” the eastern fanshell mussel. Formal consultation concluded with the issuance of a revised BO for Tier 1 by USFWS on August 24, 2006.

The revised BO for Tier 1 concluded that Preferred Alternative 3C “is not likely to jeopardize the continued existence” of the Indiana bat or the bald eagle nor would it be “likely to destroy or adversely modify [Indiana bat] designated critical habitat” (p. 98). It also noted, “[b]ecause no critical habitat has been designated for the bald eagle, none will be adversely modified by this project” (p. 37). The revised BO for Tier 1 also included an incidental take statement for both species. The BO specifies the procedures to be followed for Section 7 consultation in Tier 2.

The Tier 2 biological surveys conducted in I-69 Section 6 included generalized pedestrian surveys during project field work, mist netting for Indiana bats and northern long-eared bats, surveys for fish, crayfish and unionids (mussels). No federally-listed species of flora or fauna were identified within I-69 Section 6 during the generalized survey.

A total of 10 Indiana bats were captured during the 2004 mist net survey, five of which were fitted with radio-transmitters and tracked after release. Three of these were tracked to a total of four roost trees. One of these roosts is located within close proximity to existing SR 37. Additional mist netting surveys were completed during the summer of 2005 and focused around the location of Indiana bat captures where no primary roost trees were identified in 2004. Seven sites were surveyed for a total of 24 net nights. Three reproductive female Indiana bats were captured as a result of this effort, fitted with radio transmitters, and subsequently tracked to a total of six roost trees, all of which were closely associated with the White River floodplain more than 0.4 mile from existing SR 37.

Mist netting surveys at 19 sites in 2015 yielded a three juvenile Indiana bats each of which was fitted with a radio transmitter. One of these was tracked to two roosts within the White River floodplain, west of the river and over 1.5 miles from existing SR 37. From data obtained through the 2004, 2005 and 2015 surveys, USFWS have designated four Indiana bat maternity colonies, each with a 2.5-mile radius. Two of these are in the southern portion of the I-69 Section 6 project, north of Martinsville, with the remaining two in the northern portion, north of SR 144.

A total of 21 northern long-eared bats were captured in 2004 from 11 survey sites with an additional six captured in 2005 from four sites. Because the northern long-eared bat had not yet been listed as threatened by USFWS, no radio-telemetry efforts to locate roosts were conducted. In 2015, a total of three northern long-eared bats were captured from three separate sites. Two of these were fitted with radio transmitters, but tracking only resulted in the identification of one roost tree in the White River floodplain that yielded low emergence counts. This roost is more than 1.25 miles from existing SR 37.



Based on the results of these surveys no direct or indirect impacts on federal listed endangered or threatened species that would jeopardize the continued existence of such species are anticipated as a result of any of the alternatives in I-69 Section 6.

Due to the availability of habitat or their known presence in the I-69 Section 6 field survey study area, impacts to the following state listed species are possible: evening bat, little brown bat, eastern tri-colored bat, and eastern red bat. Forest and wetland mitigation for I-69 Section 6 is anticipated to benefit both federal and state listed species.

No formal surveys were conducted for the rusty patched bumble bee; only recorded data was used. USFWS has developed “high potential” zones around each current (2007-2016) rusty patched bumble bee record, and have concluded that the bee is only likely to be present within these specific areas. There are three such zones in Indiana. Although not of uniform size, they have discrete boundaries that are being used by USFWS field offices to help action agencies determine when consultation under the ESA section 7(a) (2) may be necessary. One zone is in northern Marion County although it is not near the I-69 project area (<https://ecos.fws.gov/ipac/>). Based on the project location and action area, USFWS has determined that consultation for the rusty patched bumble bee under section 7 (a) (2) for the I-69 Section 6 project is not required.

The Federal Highway Administration (FHWA) and the Indiana Department of Transportation (INDOT) formally consulted on Section 6 of the I-69 highway project in 2017 which resulted in the issuance of a biological opinion dated October 30, 2017. Per the biological opinion, approximately 210 acres of forest impacts (upland and forested wetland) are anticipated for I-69 Section 6. To avoid reinitiation of consultation, impacts may not exceed 10 percent of the anticipated amount of clearing (i.e. 231 acres) and no clearing should occur during the summer maternity season (April 1-September 30). As long as the reinitiation trigger is not met and all of the Terms and Conditions set forth within the biological opinion are implemented, we do not have any additional concerns or comments regarding these recent minor project modifications.

3.10 Water Resources

As part of the development of the RPA as detailed in the FEIS, delineations of all wetland and waterways within the proposed right-of-way were completed. The proposed right-of-way, which includes all design changes identified under Segment 6.1 was further investigated to ensure that all wetlands and waterways were noted and potential impacts quantified.

3.10.1 Wetlands

On-site field reviews were conducted in 2015, 2017, and 2018. During the field reviews, the entire Segment 6.1 area was reviewed to identify possible wetland impacts. Eleven jurisdictional wetland complexes were identified during the field reviews that will be impacted within Segment 6.1. These wetlands and ponds are located in the Upper White 8-digit watersheds.



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Wetland impacts associated with the Segment 6.1 are 0.346 acres greater than the impacts associated with the FEIS. These impacts are a result primarily of the addition of the utility corridor and the addition of Southview Drive from SR 39 to Burton Lane.

A total of 11 jurisdictional wetland complexes will be impacted within Segment 6.1. These 11 wetland complexes consist of three palustrine forested, three palustrine scrub shrub, four palustrine emergent, and one palustrine unconsolidated bottom wetland areas. The total area of wetland impacts associated with Segment 6.1 project will be 1.041 acres. **Table 3-7** identifies the wetland impacts within Segment 6.1.

Table 3-7: Summary of Wetland and Stream Impacts in Segment 6.1 Limits

ID #	Wetlands	Permanent Impact Area	Temporary Impact Area	Jurisdiction	Classification (Cowardin)
S6W001A	Forested	0.034 acre	0.000 acre	Yes	PFO
S6W002A	Forested	0.031 acre	0.047 acre	Yes	PFO
S6W003A	Emergent	0.000 acre	0.009 acre	Yes	PEM
S6W004A	Emergent	0.010 acre	0.056 acre	Yes	PEM
S6W005A	Emergent	0.055 acre	0.035 acre	Yes	PEM
S6W007A	Forested	0.065 acre	0.107 acre	Yes	PFO
S6W008A	Open Water Pond	0.107 acre	0.000 acre	Yes	PUB
S6W009A	Emergent	0.030 acre	0.000 acre	Yes	PEM
S6W021A	Scrub/Shrub	0.042 acre	0.063 acre	Yes	PSS
S6W037A	Scrub/Shrub	0.060 acre	0.000 acre	Yes	PSS
S6W137A	Scrub/Shrub	0.290 acre	0.000 acre	Yes	PSS
	TOTAL IMPACTS	0.724 acre	0.317 acre		

The wetlands being permanently impacted have a total area of 0.617 acre consisting of 0.130 acre of forested wetlands, 0.392 acre of scrub shrub wetlands, 0.095 acre of emergent wetlands, and the open water being permanently impacted has a total area of 0.107 acre. The wetlands being temporarily impacted have a total area of 0.317 acre comprised of 0.154 acre of forested wetlands, 0.063 acre of scrub shrub wetlands, and 0.100 acre of emergent wetlands. There will be no temporary impacts to open water areas. The wetlands and open water are located throughout Segment 6.1. Appendix C contains detailed impact site information on each of the wetland and pond impact areas. InWRAP was performed on all of the wetlands being impacted by the Segment 6.1. For reference to a description of each of the wetland and impact area see Appendix C.



Normal circumstances were considered to exist at the wetland impact sites and no atypical situations or potential problems were identified on-site. Mitigation is provided for permanent fill into wetlands and clearing of forested and scrub shrub wetlands. Mitigation for the permanent impacts to the 0.284 acre of forested will be completed at a 3:1 ratio, mitigation for the 0.455 acre of scrub shrub wetlands and 0.195 acre of emergent wetlands will be completed at a 2:1 mitigation ratio, and mitigation for the 0.107 acre of open water pond will be completed at a 1:1 ratio.

3.10.1.1 Streams

On-site field reviews were conducted in 2015, 2017, and 2018. During the field reviews, the entire Segment 6.1 area was reviewed to identify possible stream impacts. Twenty jurisdictional streams were identified during the field reviews that will be impacted by the Segment 6.1. These streams are located in the Upper White 8-digit watersheds.

A total of 20 jurisdictional streams will be impacted within Segment 6.1. These 20 streams consist of two perennial streams, seven intermittent streams, and 11 ephemeral streams. The total length and area of stream impacts associated with Segment 6.1 will be 14,965 feet and 1.827 acres. **Table 3-8** below identifies the stream impacts within Segment 6.1.

Table 3-8: Summary of Stream Impacts

ID #	Stream Flow Regime	Permanent Impact Length/Area (Feet /acre)	Temporary Impact Length/Area (Feet /acre)	QHEI/HHEI Avg. Score
S6S001	Perennial	0 / 0	166 / 0.19	56.1
S6S003	Ephemeral	788 / 0.09	0 / 0	38.5
S6S004	Ephemeral	1,051 / 0.07	0 / 0	14.5
S6S008	Perennial	2,347 / 0.65	378 / 0.89	37.8
S6S009	Ephemeral	394 / 0.04	0 / 0	21.0
S6S010	Ephemeral	1,524 / 0.11	0 / 0	17.0
S6S011	Intermittent	376 / 0.05	424 / 0.034	50.3
S6S013	Intermittent	298 / 0.07	0 / 0.007	29.8
S6S014	Intermittent	781 / 0.16	0 / 0	69.0
S6S015	Ephemeral	3,843 / 0.36	539 / 0.05	31.8
S6S016	Ephemeral	148 / 0.01	0 / 0	16.0
S6S019	Ephemeral	452 / 0.05	0 / 0	50.0
S6S020	Ephemeral	463 / 0.05	0 / 0	35.0



ID #	Stream Flow Regime	Permanent Impact Length/Area (Feet /acre)	Temporary Impact Length/Area (Feet /acre)	QHEI/HHEI Avg. Score
S6S021	Ephemeral	85 / 0.01	0 / 0	62.0
S6S027	Ephemeral	810 / 0.04	0 / 0	25.7
S6S028	Intermittent	714 / 0.15	49 / 0	33.0
S6S030	Intermittent	392 / 0.02	79 / 0.005	14.5
S6S035	Intermittent	110 / 0.016	10 / 0.004	24.0
S6S114	Intermittent	537 / 0.052	102 / 0.015	31.0
S6S115	Ephemeral	95 / 0.008	59 / 0.005	31.0
Totals		15,208 / 3.80	3,252 / 1.62	

The stream field reviews in 2015, 2017, and 2018 for the proposed I-69 Segment 6.1 project in Morgan County, Indiana resulted in the identification of 20 jurisdictional streams that will be impacted within the Segment 6.1. Approximately 15,208 linear feet (3.80 acres) of streams will be permanently impacted and 3,252 linear feet (1.62 acre) of streams will be temporarily impacted by the construction of Segment 6.1. Normal circumstances were considered to exist at the stream impact sites. Coordination with the USACE and the IDEM on this project is ongoing. Mitigation for the permanent impacts to the streams will be completed by onsite stream restoration or offsite compensatory mitigation at a 1:1 ratio.

3.11 Forest Impacts

Field investigations and review of aerial photography resulted in the identification of five USDA forest classification types in the I-69 Section 6 field survey study area. **Table 3-9** lists the five types and describes the species associated with each type. The total forest area in the Segment 6.1 field survey study area is 33 acres.

Table 3-9: Forest Types and Associated Plant Species in the I-69 Section 6 Corridor

USDA Forest Classifications	Representative Plant Species
Elm-Ash-Cottonwood	Forests in which lowland elm, ash, red maple, silver maple, and cottonwood, singly or in combination, comprise a plurality of the stocking. Species commonly associated with the elm-ash-cottonwood forest type in Indiana include sycamore, yellow-poplar, red oak, and black walnut.



USDA Forest Classifications	Representative Plant Species
Maple-Beech-Birch	Forests in which hard maple, beech, American elm, and red maple, singly or in combination, comprise a plurality of the stocking. Species commonly associated with the maple-beech forest type in Indiana include white oaks, red oaks, hickories, yellow-poplar, and ash.
Oak-Hickory	Forests in which upland oaks and hickories, singly or in combination, comprise a plurality of the stocking. Species commonly associated with the oak-hickory forest type in Indiana include yellow-poplar, ash, black cherry, cottonwood, and black walnut.
White-Red-Jack Pine	Forests in which eastern white pine, red pine, or jack pine, singly or in combination, comprise a plurality of the stocking. This type of forest appears planted in the field survey study area.
Non-Native Dominant Stand	Forests dominated by non-native species including white mulberry and honeysuckle.

Table 3-10 lists the forest types, the acres of each within the field survey study area, the area within the proposed right of way the RPA and the reevaluation alternative, and the degree of impact anticipated (i.e., edge, fragment, or total). All forest areas within the field survey study area are depicted Appendix A2.

As part of the FEIS, a total of 35.1 acres of forested areas were anticipated to be impacted by the RPA. As part of this reevaluation, the total potential impacts to forested wetlands (included in the above totals) would be 0.3 acres for the reevaluation alternative which is not a change from the RPA.

Upland habitat and forested wetlands are included in **Table 3-10**. Impact types are defined as edge, fragment, or total. An "edge" impact type is identified where an alternative would affect one side of the forest, leaving the remaining forest on one side of the right of way. A "fragment" impact type is identified where an alternative would split the forest such that one or more forest areas remain on each side of the right of way. A "total" type impact is identified where the entire forest would be affected or less than 1 acre would remain.

The Revised Programmatic Biological Opinion (BO)⁵ for Tier 1 (see **FEIS Appendix W**) lists thresholds of forest impacts for each I-69 section. If these thresholds are exceeded, Section 7 consultation with the U.S. Fish and Wildlife Service for Tier 1 may need to be reinitiated. For the RPA, the total forest impacts are 160 acres. This is approximately 106 acres less than the 266 acres estimated for I-69 Section 6 in the Revised Programmatic BO for Tier 1. The increase in forested

⁵ The BO for Tier 2 establishes limits on the maximum amount of forest impacts for Tier 2 sections in Tier 1.



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impacts by 3.1 acres for the reevaluation would not exceed the acreage estimated in the I-69 Section 6 Revised BO for Tier 1.

Impacts evaluated in the FEIS did not account for relocation of utilities or billboards, since the specific location of such impacts cannot be identified until project design. Impacts included in this reevaluation account for utilities and billboards to the extent possible. This includes a small strip of utility right-of-way at the southern end of I-69 Section 6 on the west side of the roadway. Additional impact estimates for I-69 Section 6 are included in the Biological Assessment (BA) for the Indiana bat (*Myotis sodalis*) and northern long-eared bat (*Myotis septentrionalis*) for Tier 2 (see **FEIS Appendix GG1**).

Some of the forests affected by I-69 Section 6 alternatives would extend beyond the field survey study area boundary. Forests that extend outside the field survey study area boundary are indicated with an “†” in the “Forest ID” column of **Table 3-10**.

Impacts on multiple locations of a forest result in greater fragmentation of that forest. An example of multiple encroachments on a forest could include the widening of the mainline as well as construction of a new local access road at a different location within the same forest. Of the 21 forests potentially affected by the I-69 Section 6 Martinsville reevaluation, three would have multiple encroachments which is not a change from the RPA. Multiple encroachments result where an alternative impact a forest in more than one location. Forests with multiple encroachments are indicated with an “*” in the “Forest ID” column in **Table 3-10**.

Table 3-10: Direct Forest Impacts

Forest ID	Forest Type	Total Acres of Forest ID in Field Survey Study Area	RPA		Segment 6.1 Reevaluation	
			Acres Impact	Type Impact	Acres Impacts	Change
F001†	Elm-Ash-Cottonwood	1.6	0.7	Edge	0.7	0.0
F002†	Elm-Ash-Cottonwood	1.4	0.8	Edge	0.8	0.0
F003†	Elm-Ash-Cottonwood	1.1	0.5	Edge	0.7	0.2
F004†	Elm-Ash-Cottonwood	1.1	0.6	Edge	0.8	0.2
F005†*	Elm-Ash-Cottonwood	0.9	0.0	Edge	0.2	0.2
F006#	Elm-Ash-Cottonwood	0.2	0.1	Edge	0.1	0.0
F007†*	Elm-Ash-Cottonwood	2.2	1.0	Edge	1.0	0.0
F008#	Elm-Ash-Cottonwood	0.2	0.2	Total	0.2	0.0
F009†	Maple-Beech-Birch	6.6	5.6	Edge	5.5	-0.1



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Forest ID	Forest Type	Total Acres of Forest ID in Field Survey Study Area	RPA		Segment 6.1 Reevaluation	
			Acres Impact	Type Impact	Acres Impacts	Change
F010†	Oak-Hickory	1.6	0.9	Edge	0.9	0.0
F011†	Maple-Beech-Birch	3.3	1.1	Edge	1.1	0.0
F012†	Maple-Beech-Birch	0.2	0.0	Edge	0.0	0.0
F013†*	Maple-Beech-Birch	8.2	3.1	Edge	2.9	-0.2
F014†*	Elm-Ash-Cottonwood	4.3	2.7	Edge	2.3	-0.4
F015†	Maple-Beech-Birch	1.1	0.6	Edge	0.6	0.0
F016†	Maple-Beech-Birch	13.3	7.8	Fragment	8.6	0.8
F020†*	Maple-Beech-Birch	11.6	3.6	Edge	4.0	0.4
F021†	Maple-Beech-Birch	1.4	0.9	Edge	1.1	0.2
F022†	Maple-Beech-Birch	2.6	0.9	Edge	1.8	0.9
F023†*	Maple-Beech-Birch	1.2	0.1	Edge	0.6	0.5
F024†	Maple-Beech-Birch	1.4	0.8	Edge	1.2	0.4
Total			32.0		35.1	3.1
Edge			25.6		24.2	
Fragment			8.6		7.8	

† Indicates forest tract with some portion of the tract located outside the I-69 Section 6 study area boundary.

* Includes multiple encroachments upon forests.

Forested Wetlands

Notes: An "edge" impact means the alternative impacts one side of the forest leaving the remaining forest on one side of the right-of-way. "Fragment" means the alternative splits the forest such that one or more forest areas remain on each side of the right-of-way. "Total" means the entire forest will be impacted by the alternative or less than 1 acre, which is the USDA size criterion for forest, will remain.

There are no core forest impacts associated the reevaluation for I-69 Section 6 in Martinsville.

All I-69 Section 6 alternatives follow the existing SR 37 corridor, which has previously been disturbed by transportation use. The use of an existing transportation facility minimizes the direct impacts and fragmentation to forests when compared to new terrain alternatives. In addition, efforts were made to minimize impacts to forests in the development of interchanges and local service roads. Additional local service roads for this reevaluation are either immediately adjacent



to existing roadways or on existing alignments. Impacts associated with interchanges have been reduced to the extent possible.

Forests are not a regulated resource and do not generally require mitigation. However, mitigation for forests may be required if there is a connection to another regulatory requirement. For example, forested wetlands require mitigation as part of the Clean Water Act. In addition, forest serves as habitat for endangered bat species and impacts to forest act as a surrogate to measure potential impacts to these bats.

In the Tier 1 Record of Decision (ROD), INDOT committed to mitigate upland forest impacts at a 3 to 1 ratio for the I-69 Evansville to Indianapolis project. This commitment considers upland forests as all those not classified as wetlands. INDOT and FHWA offered this level of mitigation as environmental stewardship to assure adequate habitat for the Indiana bat and northern long-eared bat as well as other species. The implementation of this commitment was required under the Terms and Conditions of the I-69 Revised BO for Tier 1 issued by the USFWS under the authority of Section 7 of the Endangered Species Act (ESA).

INDOT and FHWA committed to mitigate impacts to upland forests at a 3 to 1 ratio averaged over the entire length of the I-69 study area, which includes a 1 to 1 ratio of replacement plus a 2 to 1 ratio of forest preservation. Actual ratios within each individual section may vary from the overall average. Areas converted to mitigation land will no longer be available for timbering activities. Therefore, these lands will be taken out of production for forest products.

For purposes of this analysis, reforestation would be at a 1 to 1 ratio, and preservation of existing forest at a 2 to 1 ratio within I-69 Section 6. Reforestation required for the Segment 6.1 would be approximately 35.1 acres. This reforestation would be accomplished by the conversion of agricultural land to forested land. Landlocked and excess land parcels within the Indian Creek floodway at the southern end of I-69 Section 6 have been targeted for this mitigation.



CHAPTER 4 – CONCLUSIONS

The analysis of the impacts from the additional permanent right-of-way areas required by the design changes included in Segment 6.1 supports the conclusion that these modifications will not cause significant environmental impacts that were not evaluated in the I-69 Section 6 FEIS. The proposed right-of-way modifications offer no new information or circumstances relevant to environmental concerns, nor will it result in significant environmental impacts that were not discussed in the I-69 Section 6 FEIS. Additionally, no new environmental commitments were identified as part of the modifications to the design changes included in Segment 6.1. The analysis in this reevaluation supports the conclusion that the design modifications in Segment 6.1 will not have impacts sufficient to require the preparation of a Supplemental Environmental Impact Statement.