

LEGEND:

Construction Area

NOT FOR CONSTRUCTION

RECOMMENDED FOR APPROVAL	DESIGN ENGINEER	5/7/2018	DATE
DESIGNED: DDS	5/7/2018	DRAWN: DDS	5/7/2018
CHECKED: LNB	5/7/2018	CHECKED: LNB	5/7/2018

**INDIANA
DEPARTMENT OF TRANSPORTATION**

**MAINTENANCE OF TRAFFIC
STAGE V OVERVIEW**

SCALE	BRIDGE FILE
1" = 150'	N/A
	DESIGNATION
	1700139
SURVEY BOOK	SHEETS
Electronic	31 of 86
CONTRACT	PROJECT
R-40389	1700139

PROJECT	DESIGNATION
1700139	1702650
CONTRACT	BRIDGE FILE
R-40389	TBD

INDIANA DEPARTMENT OF TRANSPORTATION



STRUCTURE INFORMATION				
STRUCTURE	TYPE	SPAN AND SKEW	OVER	STATION
TBD	Continuous Composite Prestressed Concrete WBT 66x49	2 Spans: 131'-5" & 131'-5" Skew: 0°	Louisville & Indiana Railroad and SR 11	Sta. 33+46.45 Line "M"

KIN PROJECT INFORMATION	
DESIGNATION	PROJECT DESCRIPTION
1700139	SR 46 INTERSECTION IMPROVEMENT AT SR 11

TRAFFIC DATA	SR 46	SR 11
A.A.D.T. (2017)	29,580 V.P.D.	14,470 V.P.D.
A.A.D.T. (2041)	32,550 V.P.D.	15,930 V.P.D.
D.H.V (2041)	3,255 V.P.H.	1,593 V.P.H.
DIRECTIONAL DISTRIBUTION	53 %	58 %
TRUCKS	4 % A.A.D.T. 3 % D.H.V.	4 % A.A.D.T. 3 % D.H.V.

DESIGN DATA	SR 46	SR 11
DESIGN SPEED	30-40 M.P.H.	30-40 M.P.H.
PROJECT DESIGN CRITERIA	4R, NON FREEWAY	4R, NON FREEWAY
FUNCTIONAL CLASSIFICATION	PRINCIPAL ARTERIAL	MINOR ARTERIAL
RURAL/URBAN	URBAN (SUBURBAN)	URBAN (SUBURBAN)
TERRAIN	LEVEL	LEVEL
ACCESS CONTROL	NONE	NONE

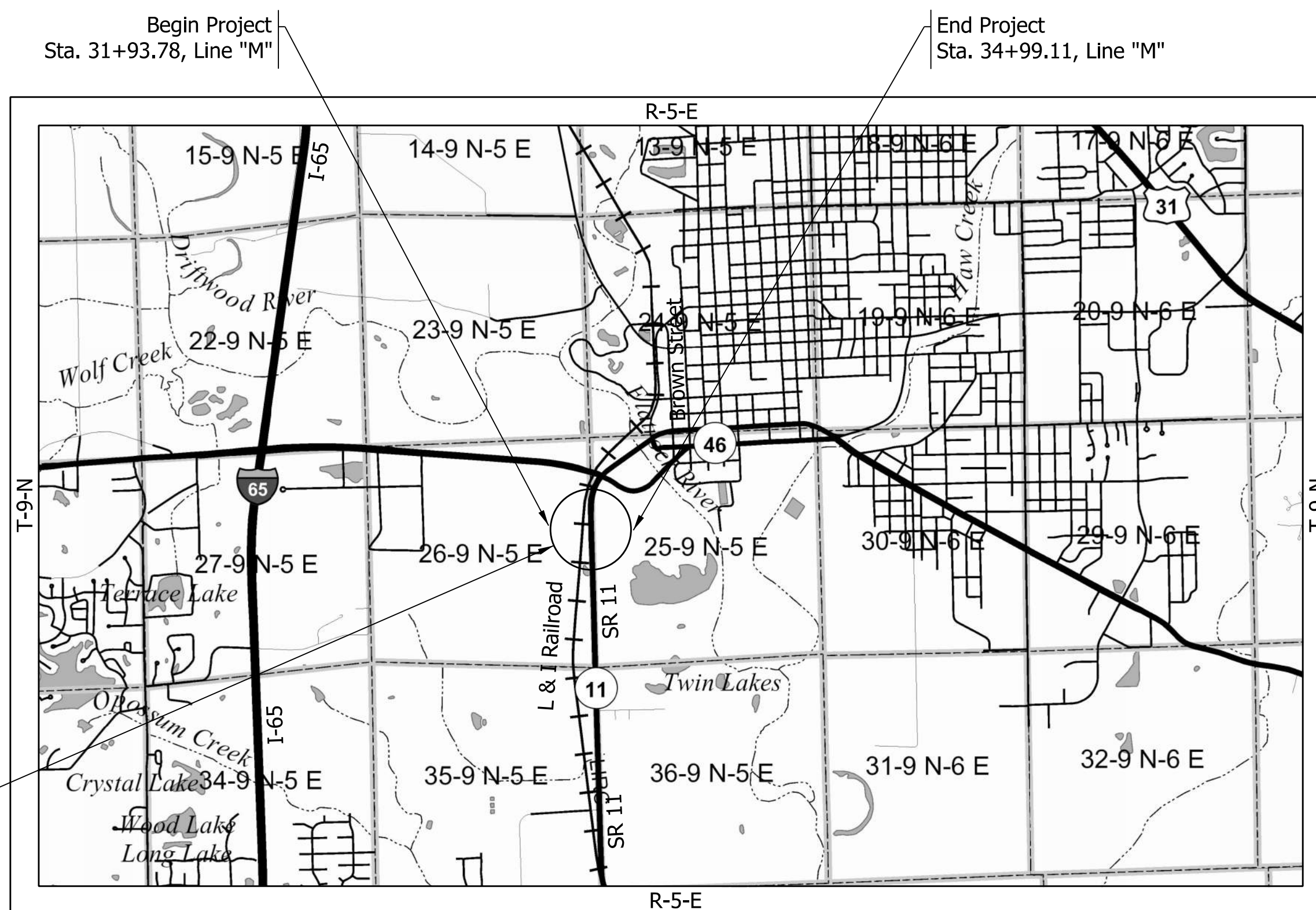
BRIDGE PLANS

FOR SPANS OVER 20 FEET

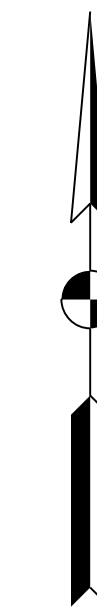
ROUTE: SR 46 AT: RP 90+63

PROJECT NO. 1700139 P.E.
1700139 R/W
1702650 CONST.

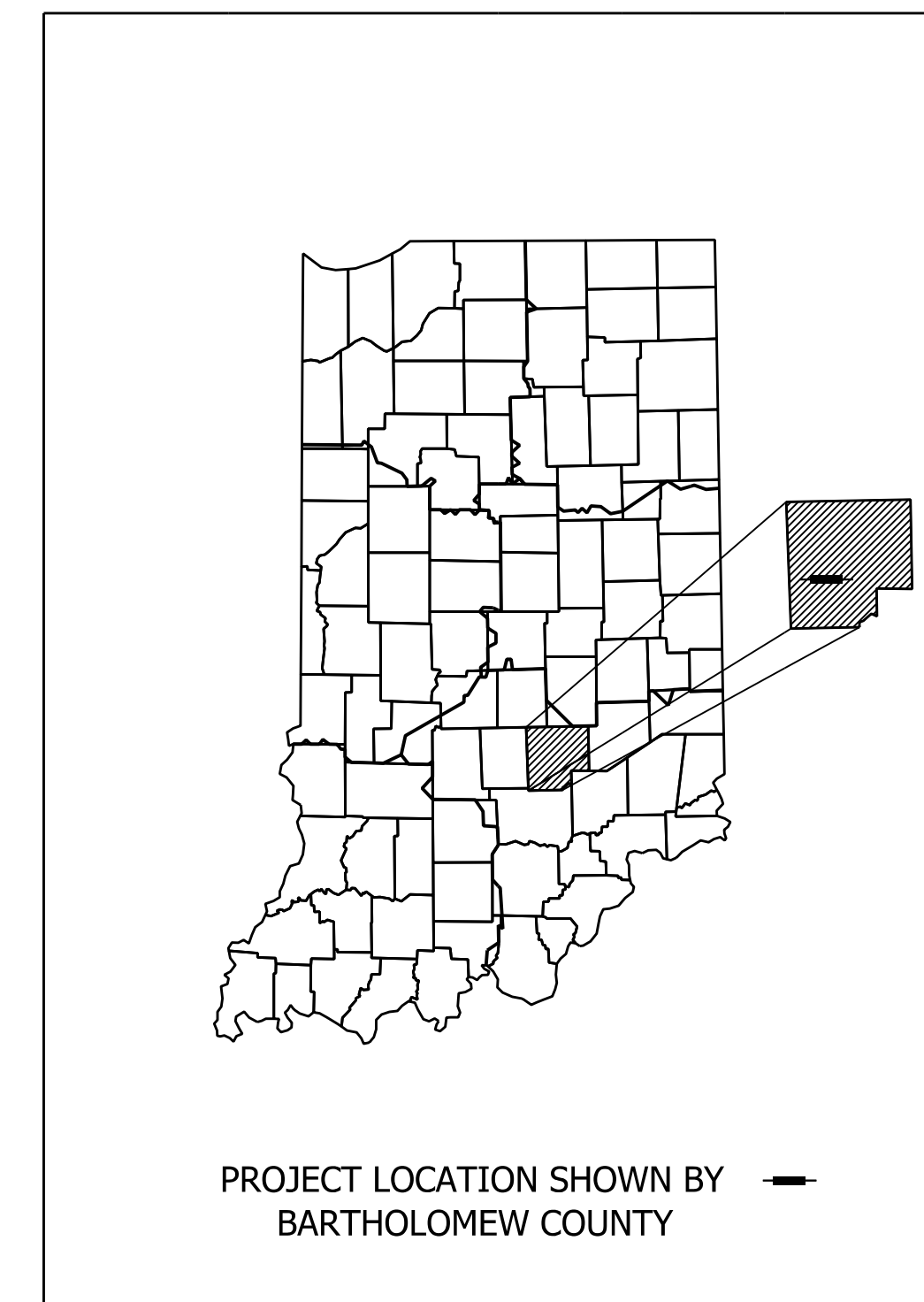
New Bridge Construction Along a New Interchange Carrying SR 46 Over Louisville & Indiana Railroad and SR 11
Located 1.5 Miles East of Interstate 65
in Section 25 & 26, T-9-N, R-5-E, Columbus Township, Bartholomew County, Indiana.



Structure TBD
Structure TBD
Over SR 11 & L&I RR
Sta. 33+46.45, Line "M"



SCALE: 1" = 2500'



PROJECT LOCATION SHOWN BY —

LATITUDE: 39°11'54" LONGITUDE: 85°55'48"

BRIDGE LENGTH:	0.050	MI.
ROADWAY LENGTH:	0.009	MI.
TOTAL LENGTH:	0.059	MI.
MAX. GRADE:	4.0	%

PFC PLANS
May 4, 2018

INDIANA DEPARTMENT OF TRANSPORTATION
STANDARD SPECIFICATIONS DATED 2018
TO BE USED WITH THESE PLANS

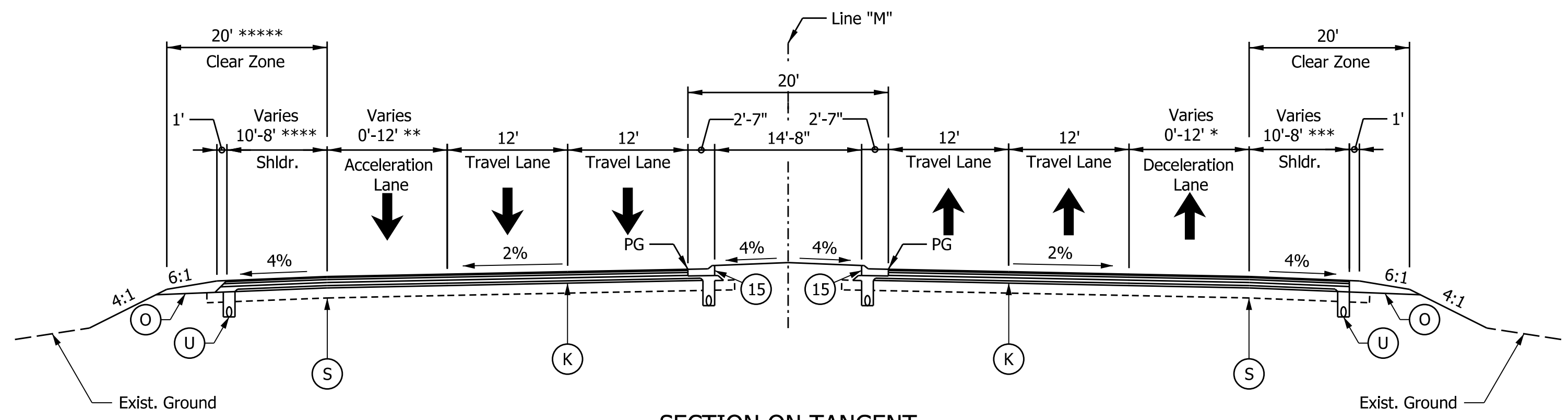
© Copyright CMT, Inc.

Engineers and Consultants
8790 PURDUE ROAD
INDIANAPOLIS, IN 46268-6128
PHONE: (317) 298-4500

NOT FOR CONSTRUCTION

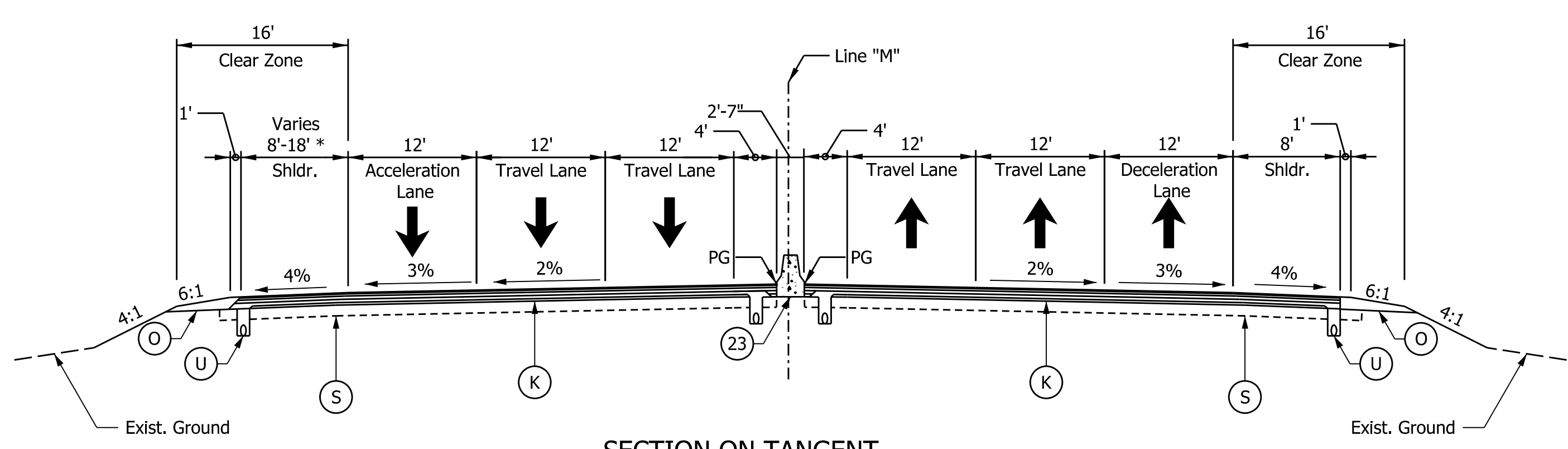
PLANS PREPARED BY:	CRAWFORD, MURPHY & TILLY, INC.	(317) 298-4500 PHONE NUMBER
CERTIFIED BY:		DATE
APPROVED FOR LETTING:	INDIANA DEPARTMENT OF TRANSPORTATION	DATE

BRIDGE FILE	
TBD	
DESIGNATION	
1702650	
SHEETS	
SURVEY BOOK	1 of 14
ELECTRONIC	1 of 14
CONTRACT	PROJECT
R-40389	1700139



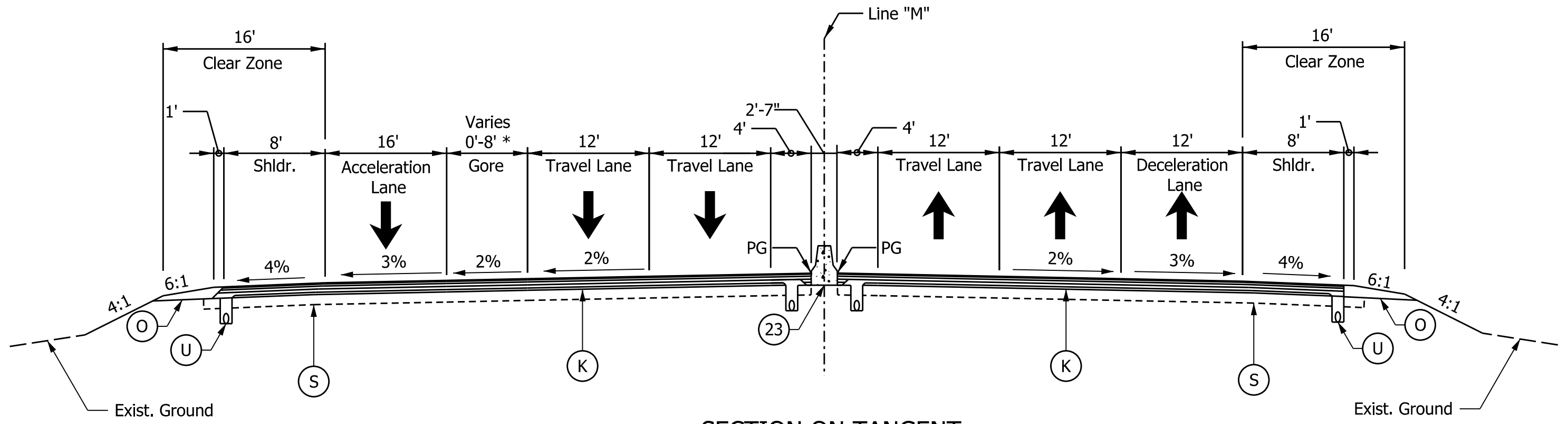
SECTION ON TANGENT

Line "M" Sta. 09+54.00 to 29+27.43
 *Varies Sta. 25+68.53 to 26+60.62
 **Varies Sta. 25+79.27 to 29+11.57
 ***Varies Sta. 25+68.53 to 26+60.62
 ****Varies Sta. 25+79.27 to 29+11.57
 ***** Reduces to 16' starting at Sta. 25+48.71



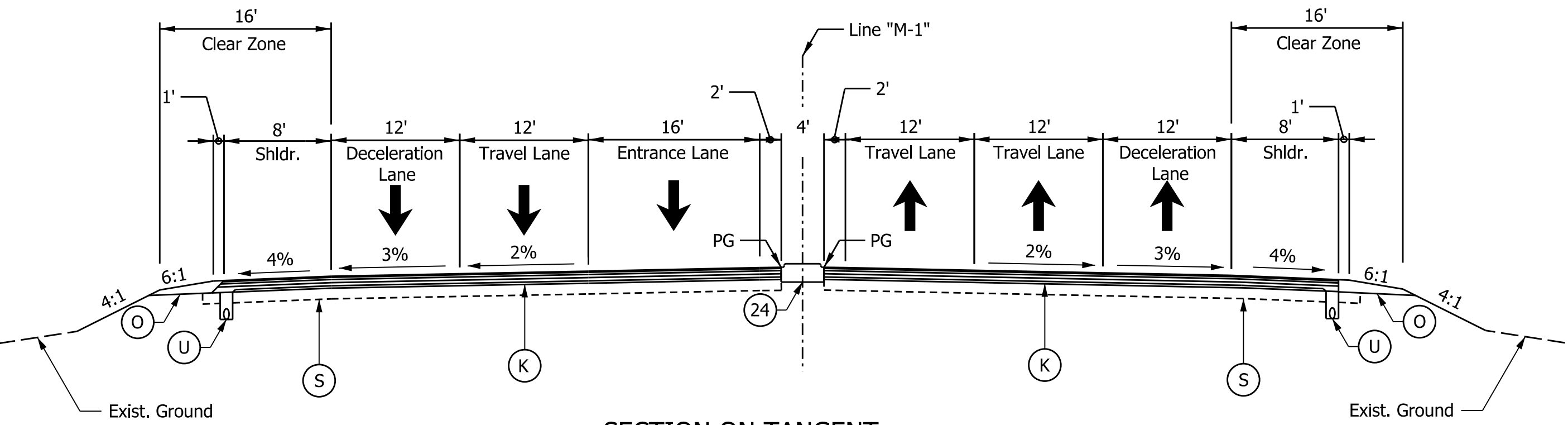
SECTION ON TANGENT

Line "M" Sta. 29+27.43 to 31+93.44
 *Varies Sta. 30+36.11 to 31+93.44



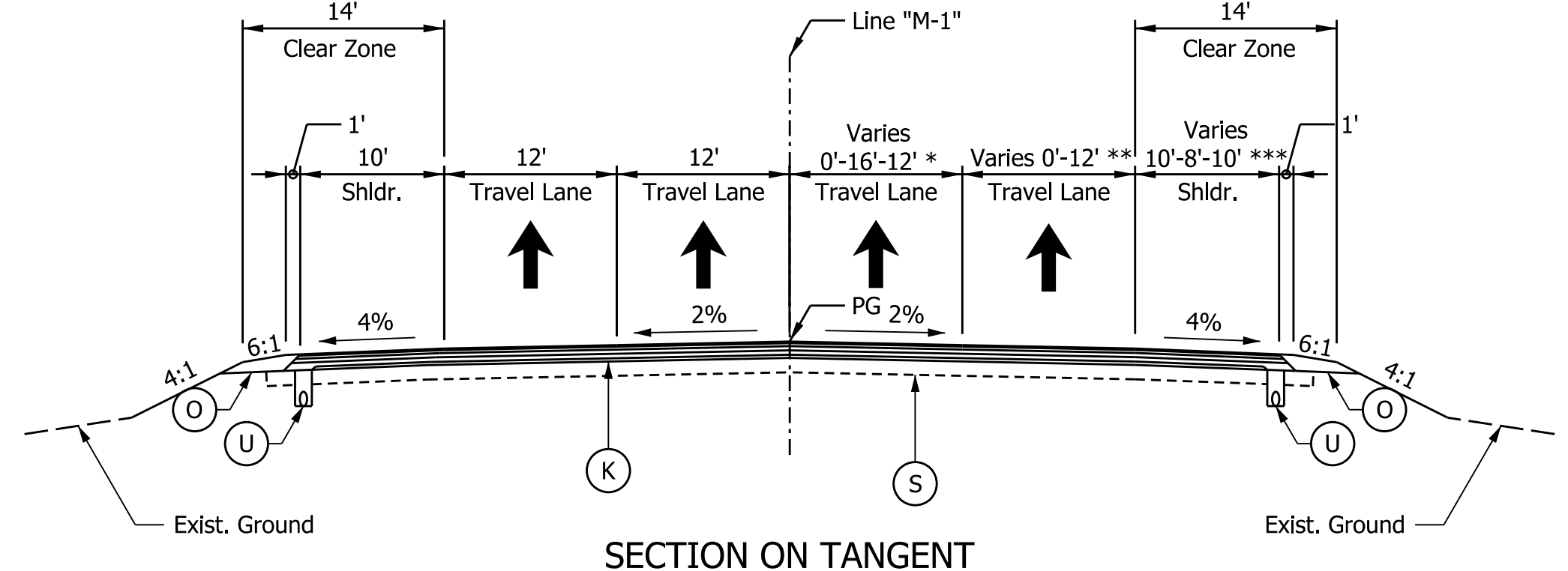
SECTION ON TANGENT

Line "M" Sta. 34+99.72 to 36+33.70
 *Varies Gore to 36+33.7



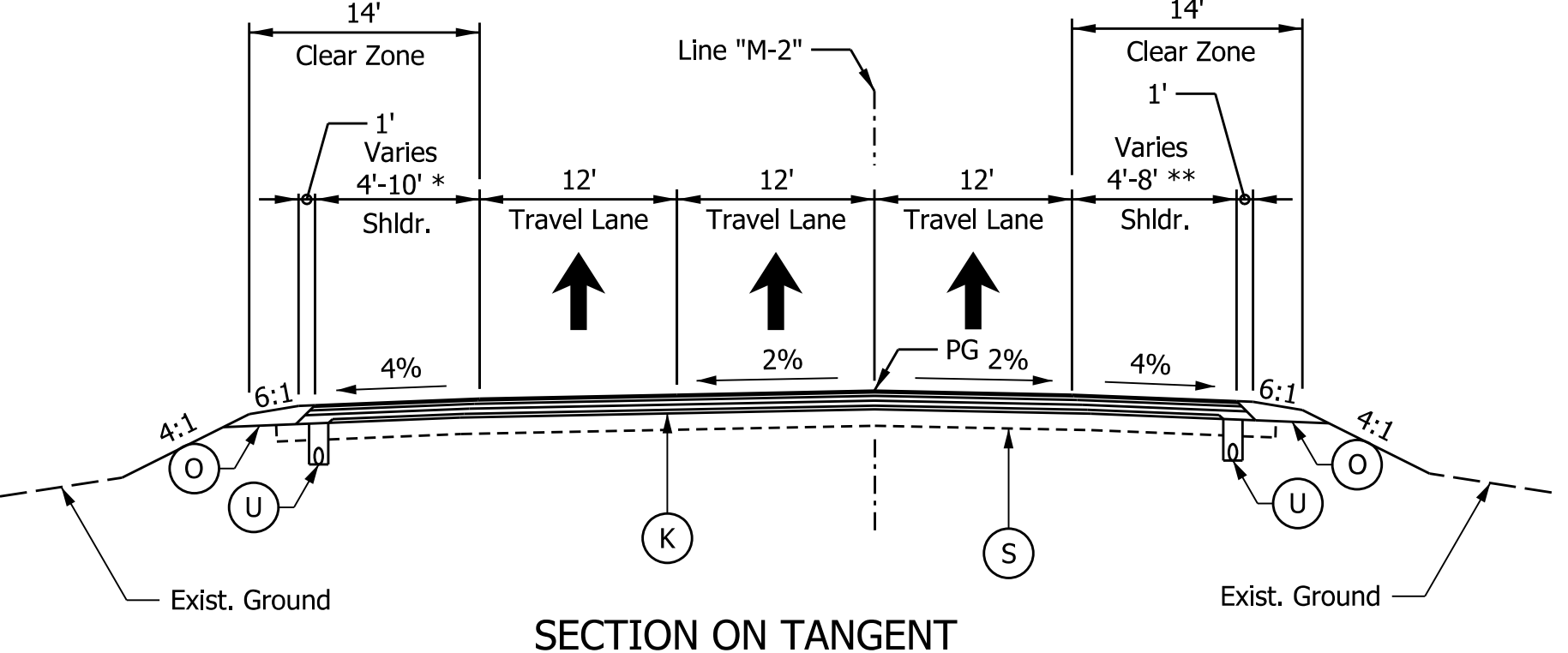
SECTION ON TANGENT

Line "M-1" Sta. 00+00.00 to Gore



SECTION ON TANGENT

Line "M-1" Gore to 14+72.32
 *Varies Sta. Gore to 05+40.26 (0'-16') & Sta. 07+26.61 to 09+26.51 (16'-12')
 **Varies Sta. 13+70.48 to 14+72.32
 ***Varies Sta. Gore to 05+74.10 (10'-8') & Sta. 07+26.61 to 09+26.57 (8'-10')



SECTION ON TANGENT

Line "M-2" Sta. 125+87.76 to Gore
 *Varies Sta. 125+87.76 to 126+47.71
 **Varies 125+87.76 to 126+17.91(4'-8')

NOTE

1. For information only, refer to Roadway Plans Des. No. 1700139 for details.

LEGEND

(K) FULL DEPTH HMA COMPOSED OF:
 165 lb/syd QC/QA - HMA, 3, 64, SURFACE, 9.5mm
 330 lb/syd QC/QA - HMA, 3, 70, INTERMEDIATE, 19.0 mm
 660 lb/syd QC/QA - HMA, 3, 64, BASE, 25.0 mm
 250 lb/syd QC/QA - HMA, 4, 76, INTERMEDIATE OG, 19.0 mm
 330 lb/syd QC/QA - HMA, 3, 64, BASE, 19.0 mm

- (S) SUBGRADE TREATMENT, TYPE IB
- (O) COMPACTED AGGREGATE, NO. 53
- (U) 6-IN. UNDERDRAIN COMPOSED OF PIPE, TYPE 4, CIRCULAR, 6 IN. AGGREGATE FOR UNDERDRAINS GEOTEXTILE FOR UNDERDRAINS
- (13) CURB, CONCRETE
- (15) CURB AND GUTTER, CONCRETE
- (23) MEDIAN, CONCRETE
- (24) CENTER CURB, TYPE B

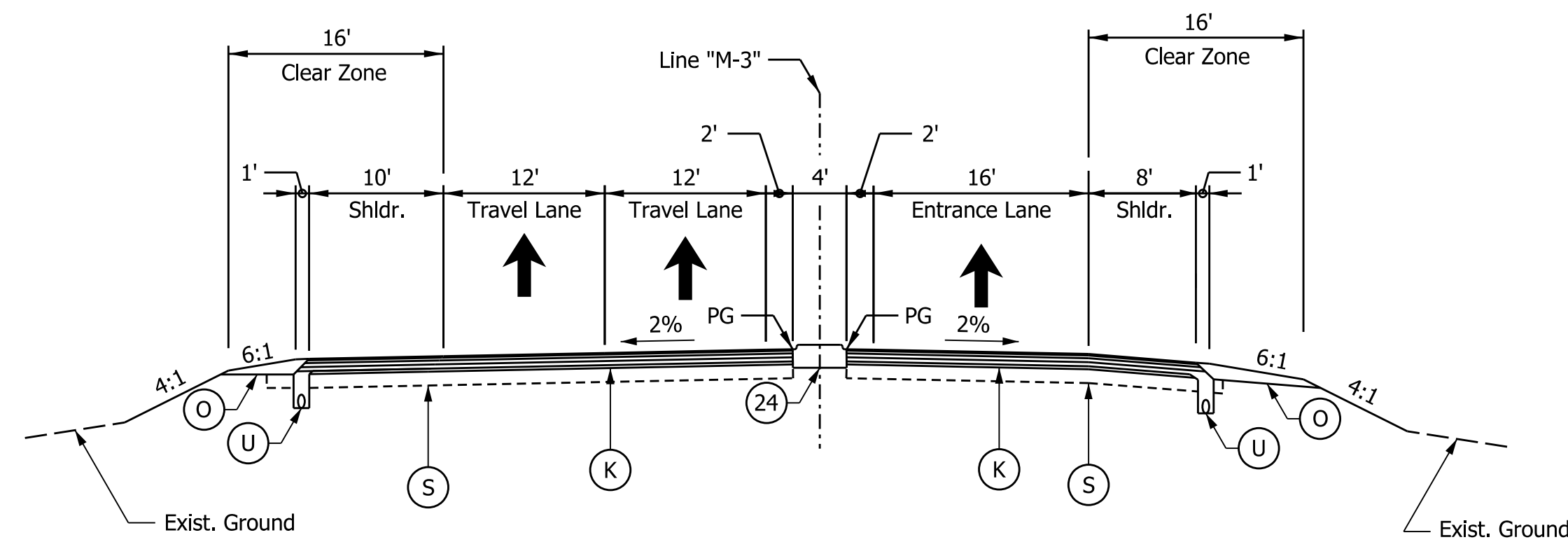
NOT FOR CONSTRUCTION

RECOMMENDED FOR APPROVAL	DESIGN ENGINEER	DATE
DESIGNED: NMG	5/7/2018	DRAWN: DDB
5/7/2018		5/7/2018
CHECKED: LNB	5/7/2018	CHECKED: LNB
		5/7/2018

INDIANA DEPARTMENT OF TRANSPORTATION

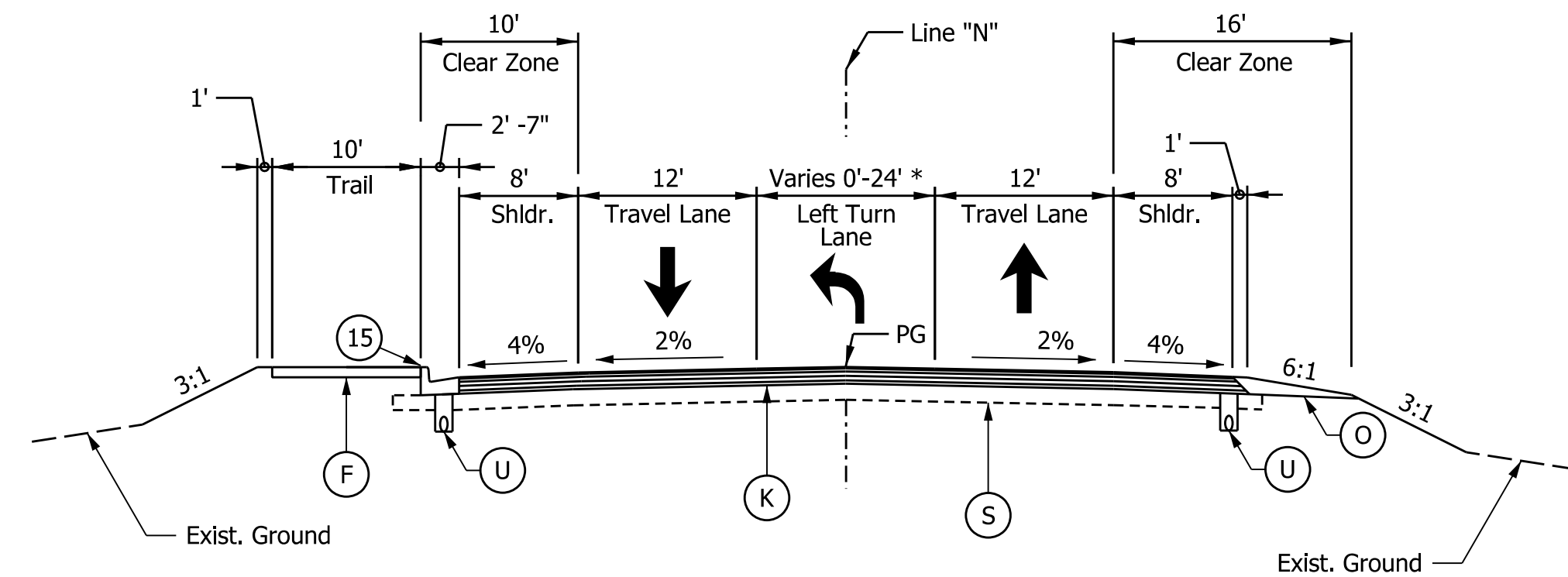
TYPICAL SECTIONS

SCALE	BRIDGE FILE
N.T.S	TBD
	DESIGNATION
	1700139
SURVEY BOOK	SHEETS
ELECTRONIC	3 of 14
CONTRACT	PROJECT
R-40389	1700139



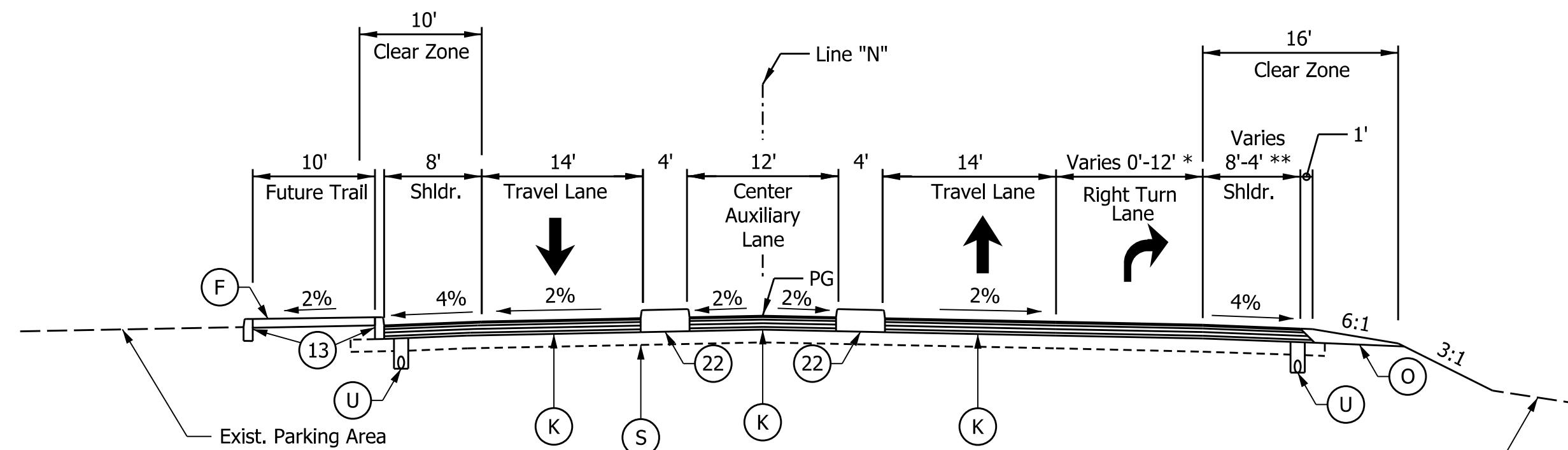
SECTION ON TANGENT

Line "M-3" Sta. 131+00.00 to 138+96.29



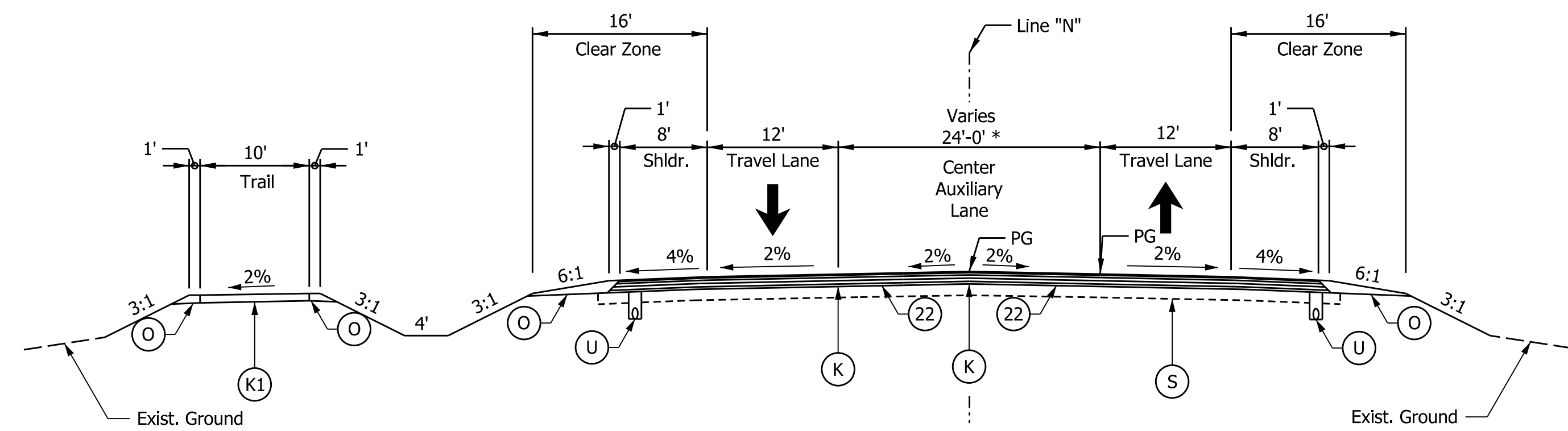
SECTION ON TANGENT

Line "N" Sta. 100+00.00 to 106+10.00
* Varies Sta. 100+50.00 to 101+60.00 (0'-12')



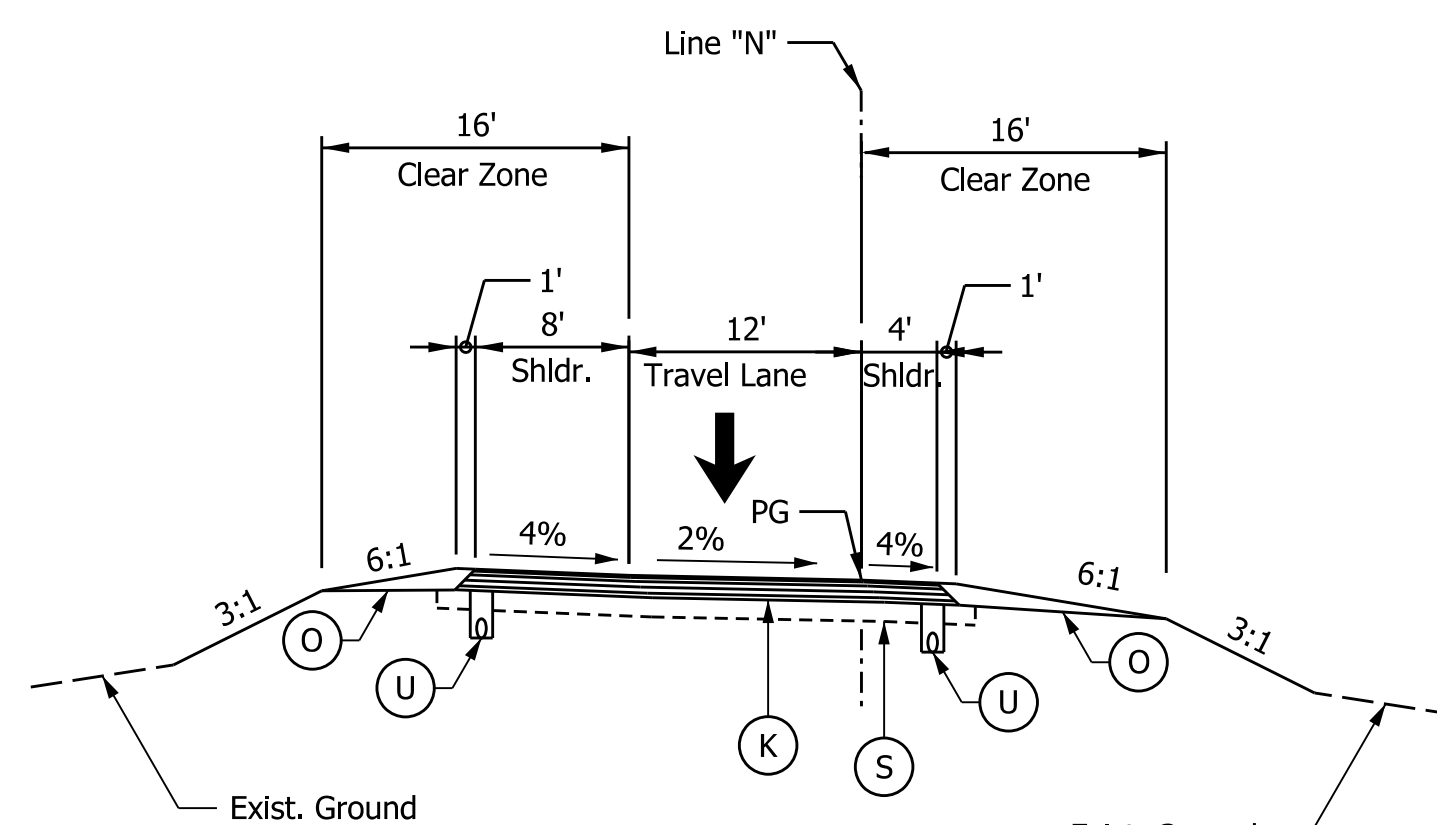
SECTION ON TANGENT

Line "N" Sta. 106+10.00 to 111+73.00
* Varies Sta. 106+10.00 to 107+09.52
** Varies Sta. 106+10.00 to 170+09.52



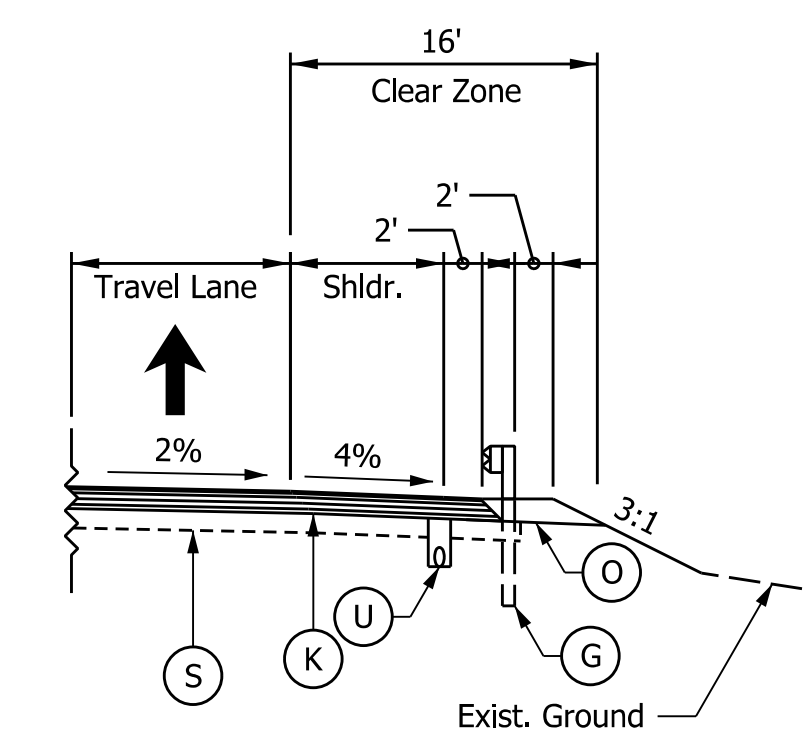
SECTION ON TANGENT

Line "N" Sta. 111+73.00 to Gore
* Varies Sta. 111+73.00 to 113+89.00



SECTION ON TANGENT

Line "N" Gore to 124+52.83



SECTION ON TANGENT

TYPICAL GUARDRAIL SECTION

NOTE

- For information only, refer to Roadway Plans Des. No. 1700139 for details.

LEGEND

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165 lb/syd QC/QA - HMA, 3, 64, SURFACE, 9.5mm
330 lb/syd QC/QA - HMA, 3, 70, INTERMEDIATE, 19.0 mm
660 lb/syd QC/QA - HMA, 3, 64, BASE, 25.0 mm
250 lb/syd QC/QA - HMA, 4, 76, INTERMEDIATE OG, 19.0 mm
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- (13) CURB, CONCRETE
- (15) CURB AND GUTTER, CONCRETE
- (22) CENTER CURB, TYPE C
- (G) GUARDRAIL
- (K1) HMA FOR SIDEWALK COMPOSED OF:
140 lb/syd HMA Surface, Type B
220 lb/syd HMA Intermediate, Type B
- (F) SIDEWALK, CONCRETE

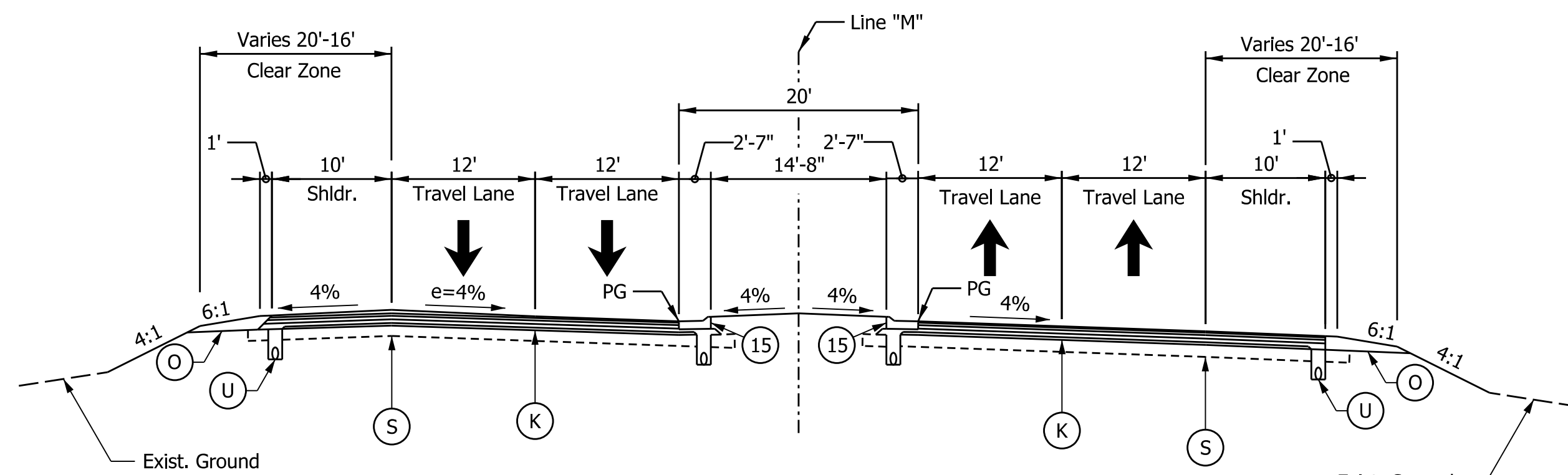
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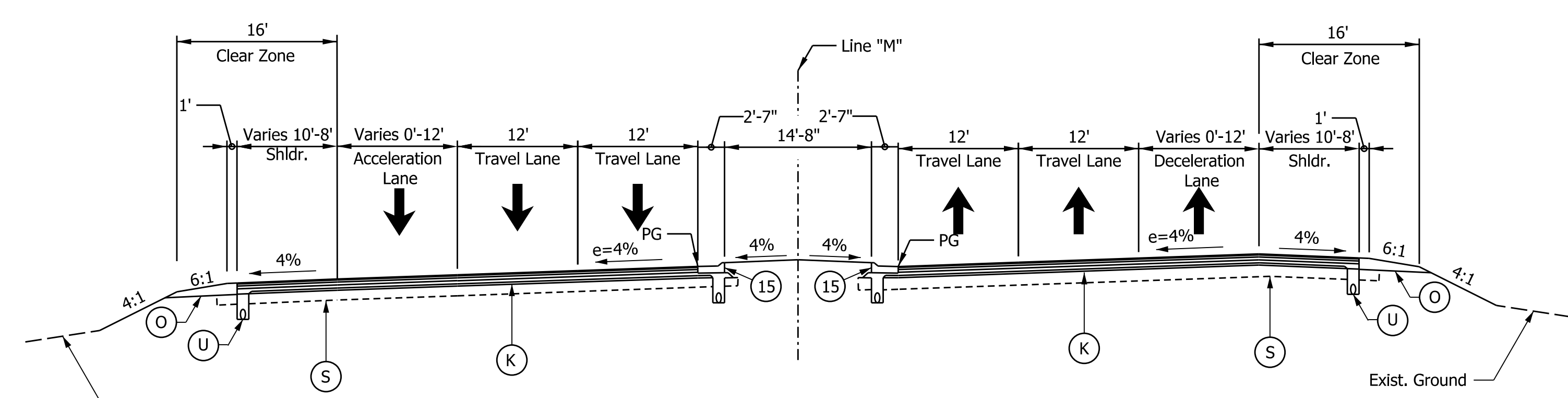
INDIANA DEPARTMENT OF TRANSPORTATION

TYPICAL SECTIONS

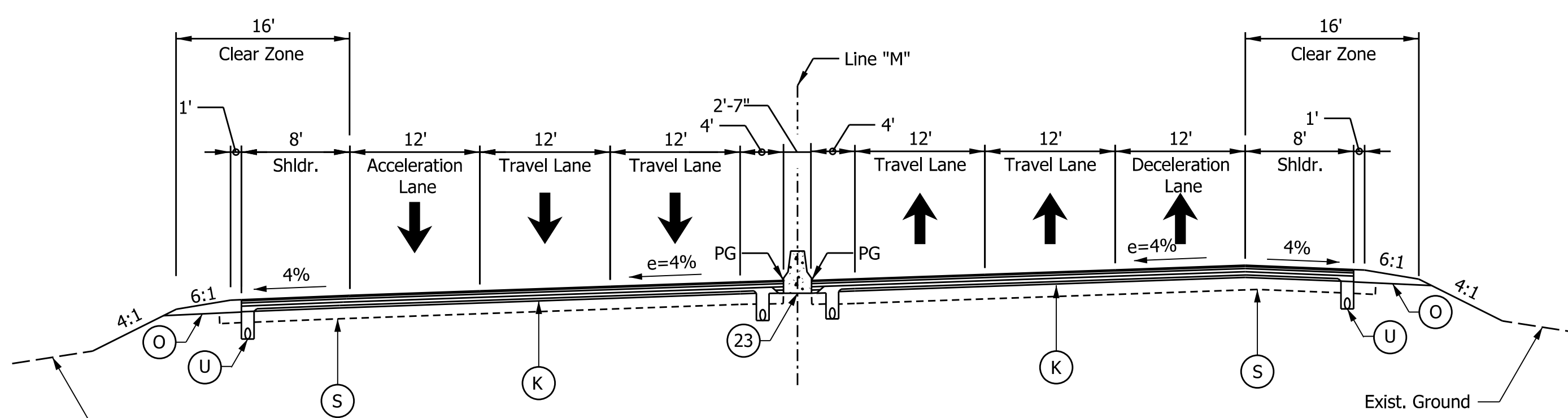
SCALE	BRIDGE FILE
N.T.S.	TBD
	DESIGNATION
	1700139
SURVEY BOOK	SHEETS
ELECTRONIC	4 of 14
CONTRACT	PROJECT
R-40389	1700139



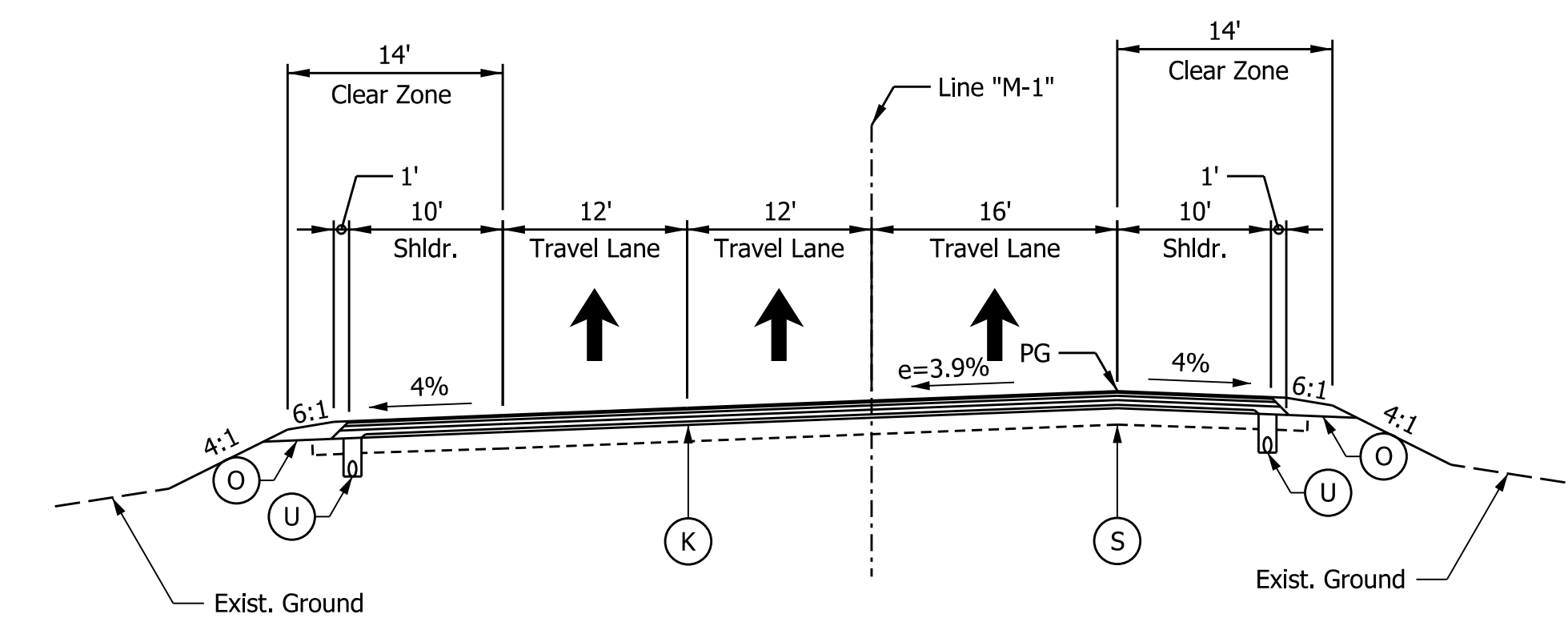
SECTION ON CURVE
Line "M" Sta. 11+55.60 to 19+48.98



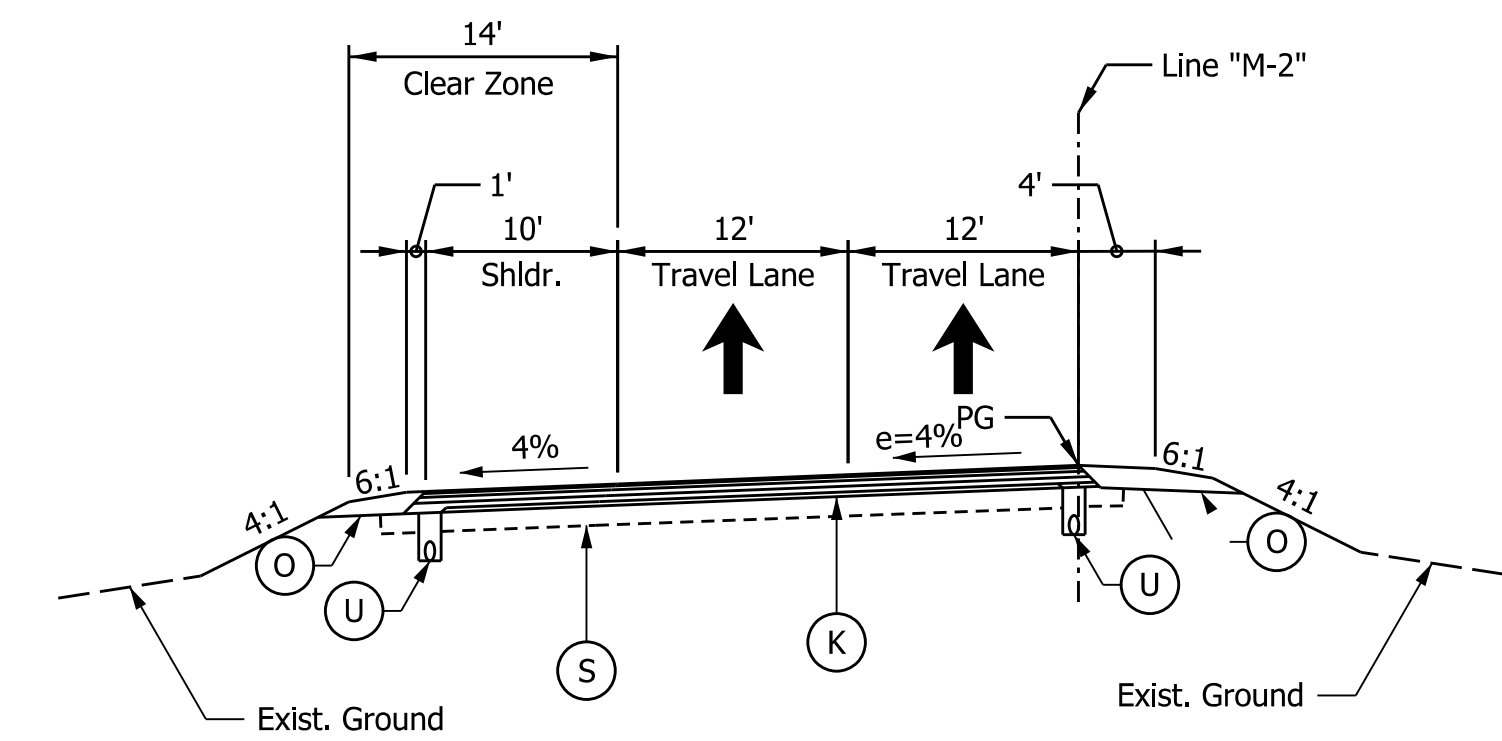
SECTION ON CURVE
Line "M" Sta. 25+74.90 to 29+27.43



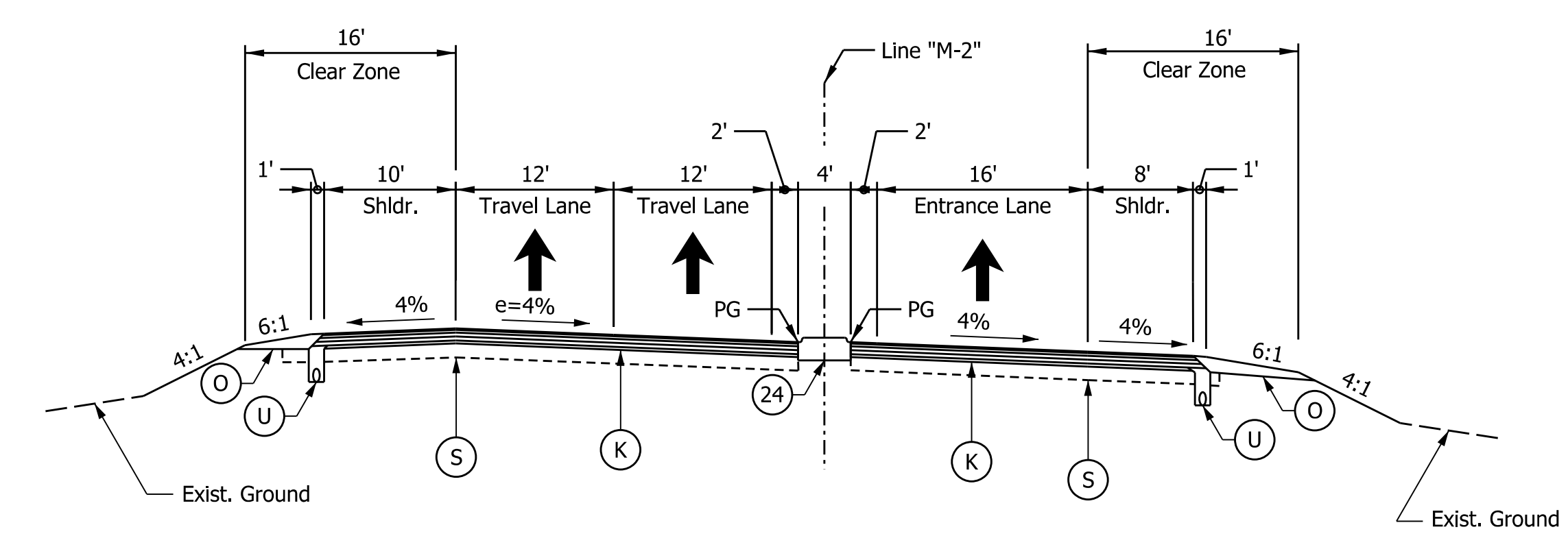
SECTION ON CURVE
Line "M" Sta. 29+27.43 to 30+29.57



SECTION ON CURVE
Line "M-1" Sta. 04+54.35 to 07+26.51



SECTION ON CURVE
Line "M-2" Gore to 131+11.80



SECTION ON CURVE
Line "M-2" Sta. 133+29.08 to 138+86.70

LEGEND

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 165 lb/syd QC/QA - HMA, 3, 64, SURFACE, 9.5mm
 330 lb/syd QC/QA - HMA, 3, 70, INTERMEDIATE, 19.0 mm
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- (24) CENTER CURB, TYPE B

NOT FOR CONSTRUCTION

RECOMMENDED FOR APPROVAL	DESIGN ENGINEER	DATE
DESIGNED: NMG	5/7/2018	DRAWN: DDB
CHECKED: LNB	5/7/2018	CHECKED: LNB

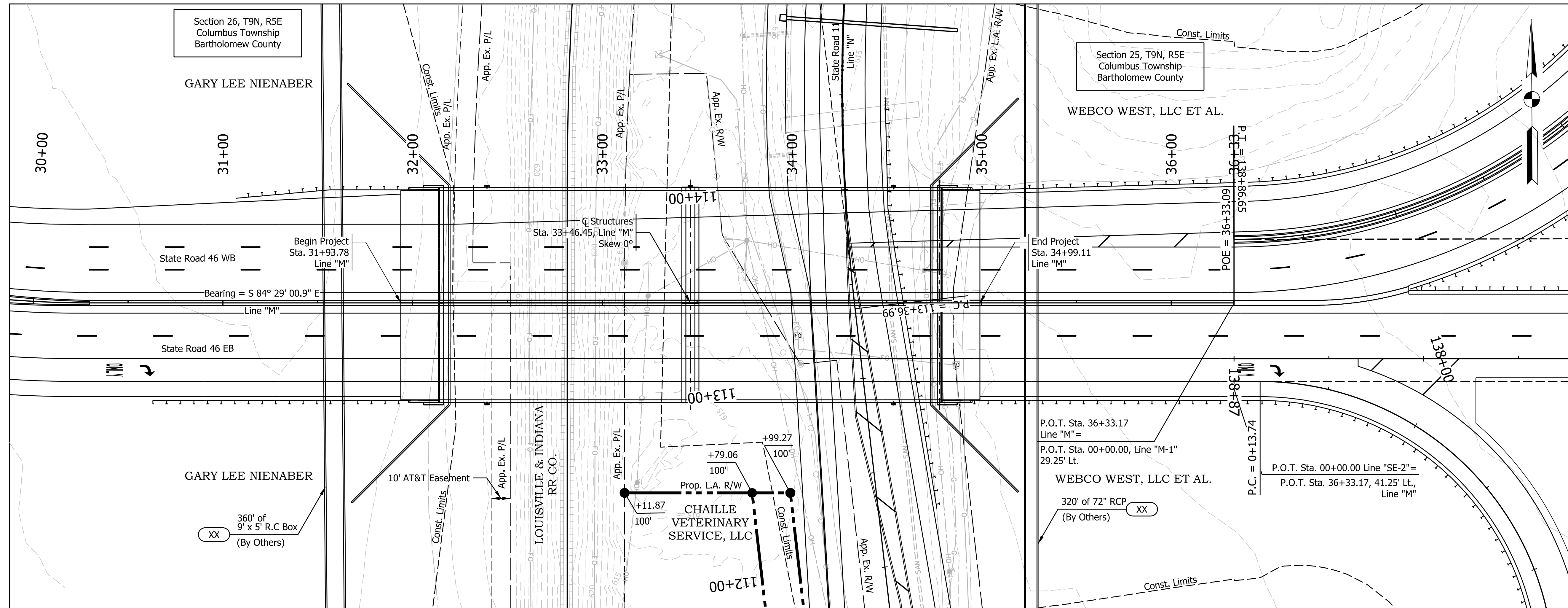
INDIANA DEPARTMENT OF TRANSPORTATION

TYPICAL SECTIONS

SCALE	BRIDGE FILE
N.T.S.	TBD
	DESIGNATION
	1700139
SURVEY BOOK	SHEETS
ELECTRONIC	5 of 14
CONTRACT	PROJECT
R-40389	1700139

NOTE

1. For information only, refer to Roadway Plans Des. No. 1700139 for details.



- Notes:
- All R/W described from Line "M" unless noted otherwise.
 - Station/offset callouts refer to Line "M" unless noted otherwise.
 - Utility information is QL-D unless noted otherwise.

EXISTING STRUCTURE

None

HYDRAULIC DATA

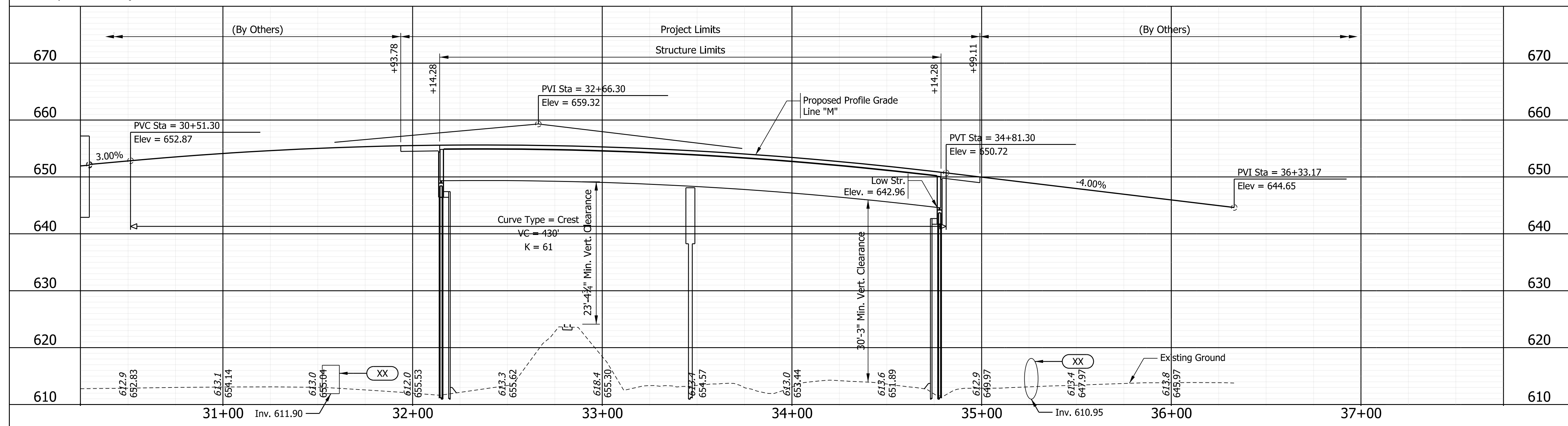
None

HYDRAULIC SCOUR DATA

None

EARTHWORK TABULATION

Common Excavation	XXX.XX	cys
Surplus Foundation Excavation (XX%)	XXX.XX	cys
Dry Excavation	XXX.XX	cys
Unusable Excavation	XXX.XX	cys
Benching (Estimated)	XXX.XX	cys
Borrow	XXX.XX	cys
B Borrow	XXX.XX	cys
Fill +XX%	XXX.XX	cys



CONTINUOUS PRESTRESSED
CONCRETE BULB-TEE BEAM BRIDGES
2 SPAN: 131'-5", 131'-5"; 49'-8" EB
& 57'-10" WB CLEAR ROADWAY; SKEW: 0°
SR 46 OVER SR 11 AND L & I RR
BARTHOLOMEW COUNTY

DATE	REVISION

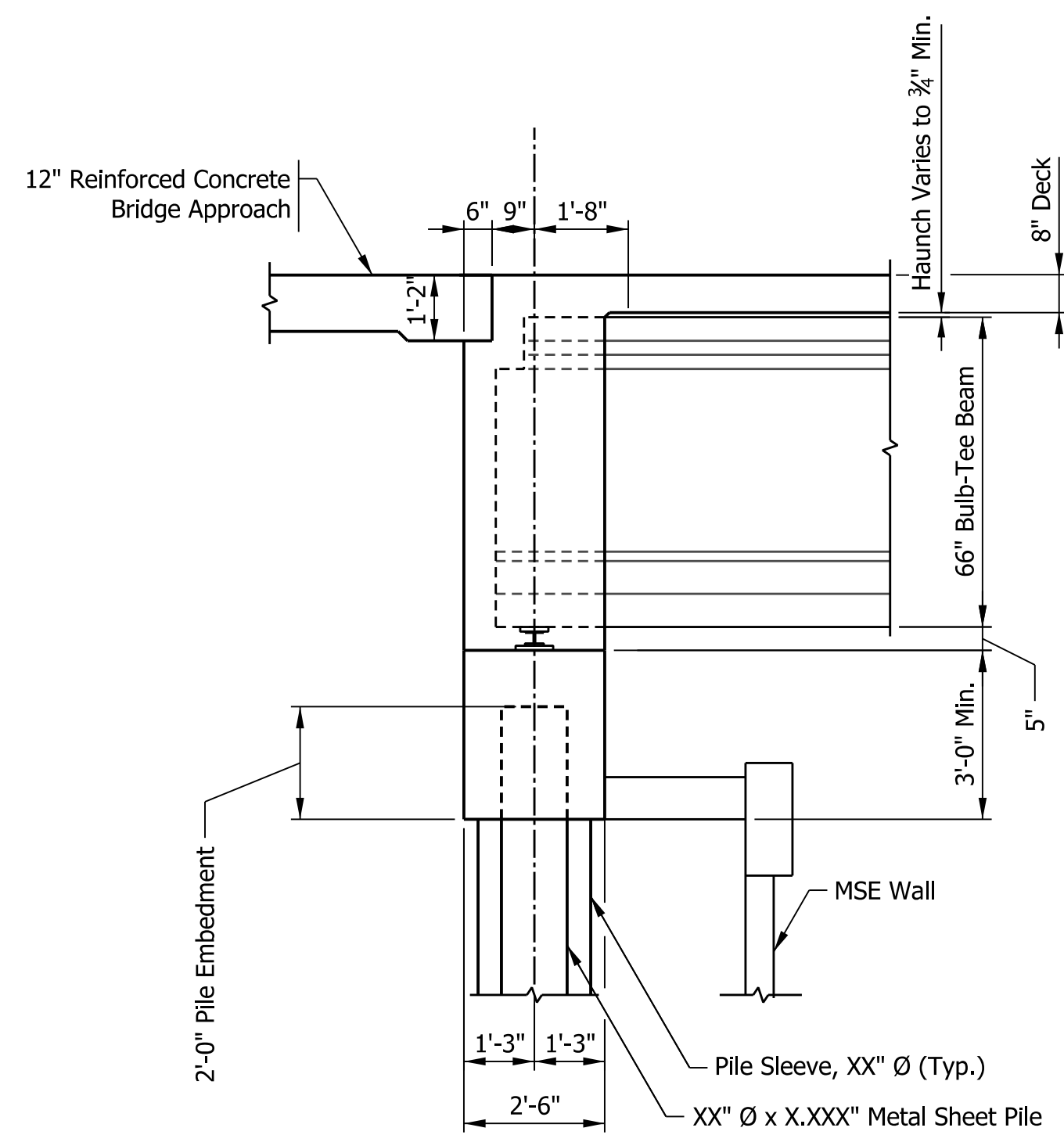
NOT FOR CONSTRUCTION

RECOMMENDED FOR APPROVAL	DESIGN ENGINEER	DATE
DESIGNED: DRT	5/7/2018	DRAWN: DRT
CHECKED: MJL	5/7/2018	CHECKED: MJL

INDIANA
DEPARTMENT OF TRANSPORTATION

LAYOUT

HORIZONTAL SCALE	BRIDGE FILE
1" = 30'	TBD
VERTICAL SCALE	DESIGNATION
1" = 3'	1702650
SURVEY BOOK	SHEETS
ELECTRONIC	9 of 14
CONTRACT	PROJECT
R-40389	1700139



INTEGRAL END BENT SECTION
Scale: 3/8" = 1'-0"

GENERAL NOTES

Reinforcing steel covering shall be 2 1/2" in Top and 1" min. in bottom of floor slab, 3" in footings except bottom steel which shall be 4", and 2" in all other parts, unless noted.

All New Reinforcement Shall be Epoxy Coated, unless noted otherwise

Surface Seal Shall be Applied to the Approach Slabs, All Exposed Surfaces of Concrete Railings and Railing Transitions, Deck Copings, and All Exposed Ends of the Substructure Units.

Contractor to Verify Plan Dimensions versus Field Conditions.

DESIGN DATA

Designed for HL-93 loading, in accordance with AASHTO LRFD Bridge Design Specifications, 8th Edition, 2017.

DEAD LOAD

Actual weight plus 35 lb/ft² for future wearing surface and 15 lb/ft² for permanent metal deck forms.

FLOOR SLAB

Designed with a 7 1/2" structural depth plus 1/2" sacrificial wearing surface.

DESIGN STRESSES

CONCRETE

Class "A" Concrete f_c = 3,500 p.s.i.
Class "B" Concrete f_c = 3,000 p.s.i.
Class "C" Concrete f_c = 4,000 p.s.i.

REINFORCING STEEL

Grade 60 f_y = 60,000 p.s.i.

CONSTRUCTION LOADING

The exterior girder has been checked for strength, deflection, and overturning using the construction loads shown below. Cantilever overhang brackets were assumed for support of the deck overhang past the edge of the exterior girder. The finishing machine was assumed to be supported 6" outside the vertical coping form. The top overhang brackets were assumed to be located 6" past the edge of the vertical coping form. The bottom overhang brackets were assumed to be braced against the intersection of the girder bottom flange and web.

DECK FALSEWORK LOADS

Designed for 15 lb/ft² for permanent metal stay-in-place deck forms, removable deck forms, and 2-ft exterior walkway.

CONSTRUCTION LIVE LOAD

Designed for 20 lb/ft² extending 2-ft past the edge of coping and 75 lb/ft vertical force applied at a distance of 6 in. outside the face of coping over a 30-ft length of the deck centered with the finishing machine.

FINISHING-MACHINE LOAD

4500 lb distributed over 10-ft along the coping.

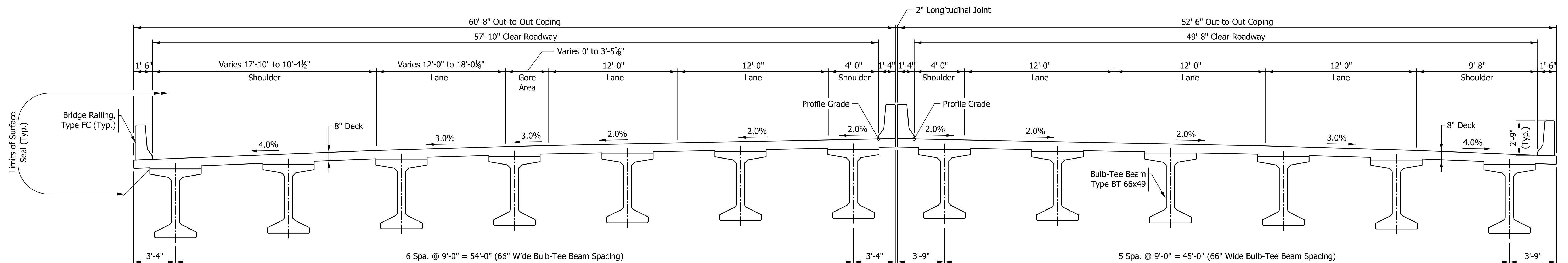
WIND LOAD

Designed for 70 mph horizontal wind loading in accordance with LRFD 3.8.1.

SEISMIC DESIGN DATA

Seismic Performance Zone Zone X
Peak Ground Acceleration X.XXX
Acceleration Coefficient X.XXX
Seismic Soil Profile Type Class X

Note to Reviewer:
Seismic design data will be documented once geotechnical report is completed and provided to CMT.



TYPICAL SECTION
Scale: 1/4" = 1'-0"

NOTE

- For more information refer to Roadway Plans Des. No. 1700139 and Superelevation Sheets 7 & 8 .

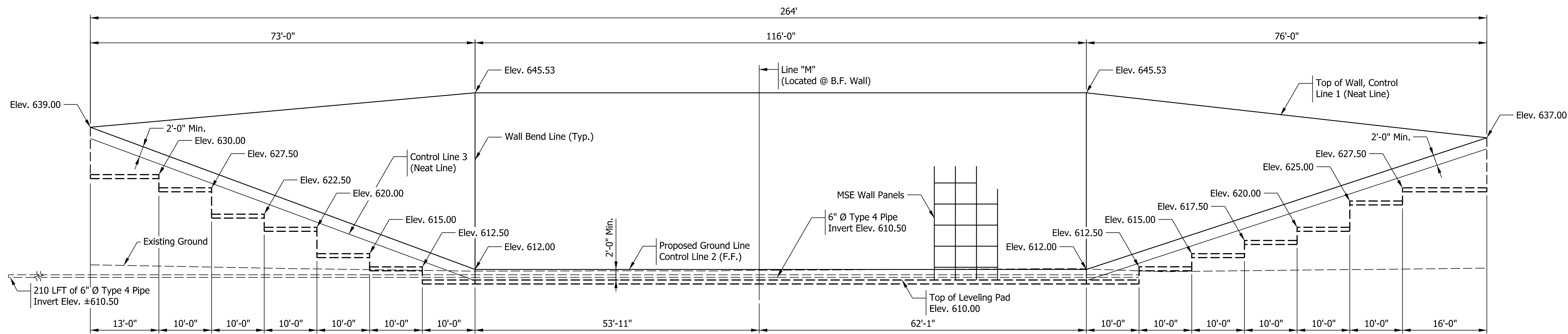
**CONTINUOUS PRESTRESSED
CONCRETE BULB-TEE BEAM BRIDGES
2 SPAN: 131'-5", 131'-5"
49'-8" EB & 57'-10" WB CLEAR ROADWAY; SKEW: 0°
SR 46 OVER SR 11 AND L & I RR
BARTHOLOMEW COUNTY**

DATE	REVISION

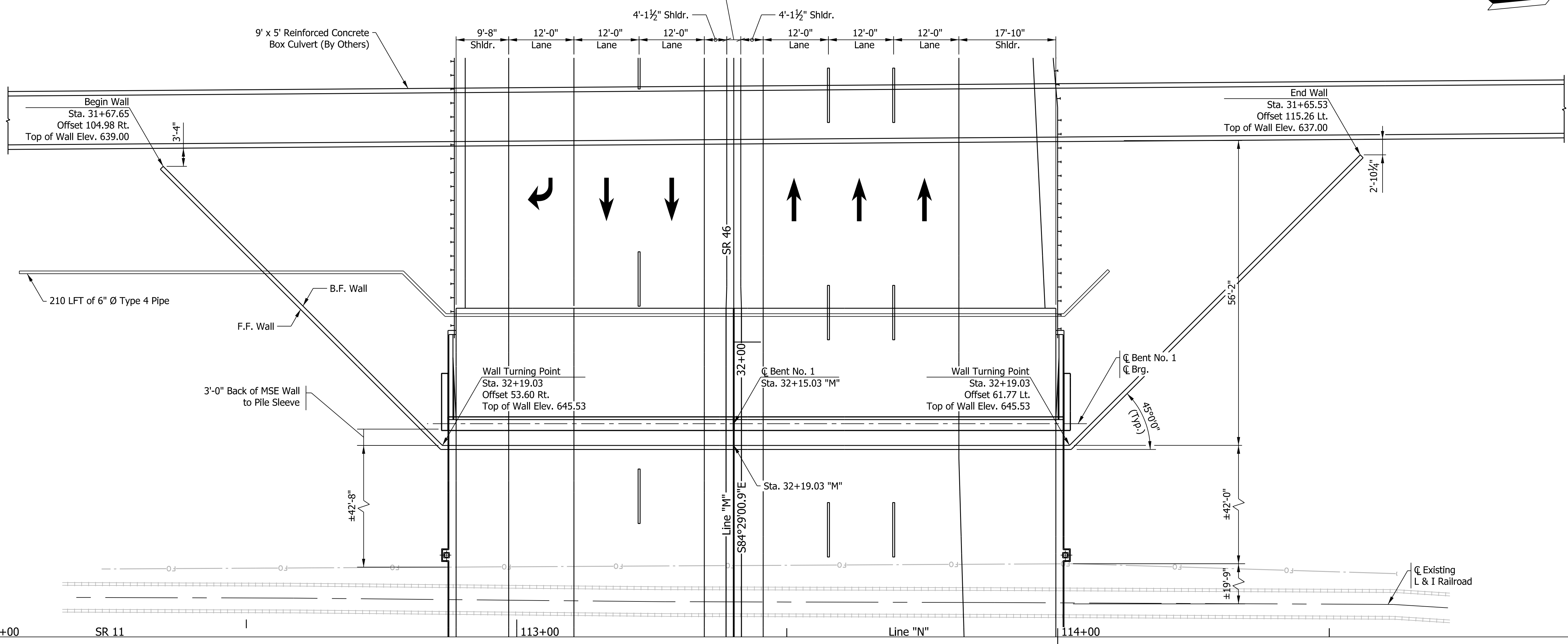
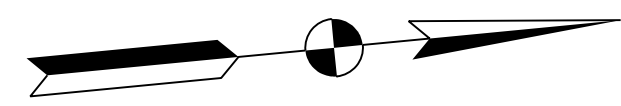
NOT FOR CONSTRUCTION	RECOMMENDED FOR APPROVAL _____	DESIGN ENGINEER _____	DATE _____
	DESIGNED: DRT 5/7/2018	DRAWN: DRT 5/7/2018	
	CHECKED: MJL 5/7/2018	CHECKED: MJL 5/7/2018	

INDIANA DEPARTMENT OF TRANSPORTATION	
GENERAL PLAN	

SCALE AS NOTED	BRIDGE FILE TBD
DESIGNATION 1702650	SHEETS 11 of 14
SURVEY BOOK ELECTRONIC	PROJECT R-40389
CONTRACT R-40389	PROJECT 1700139



ELEVATION
(Looking at Front Face of Wall)
1'-6"



PLAN

NOTE

1. Stationing and offsets are from line "M".

DATE	REVISION

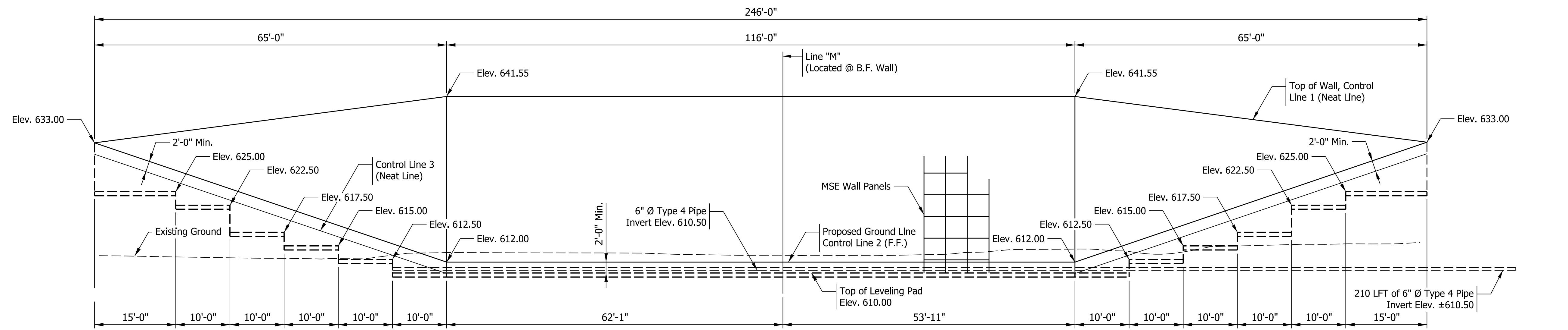
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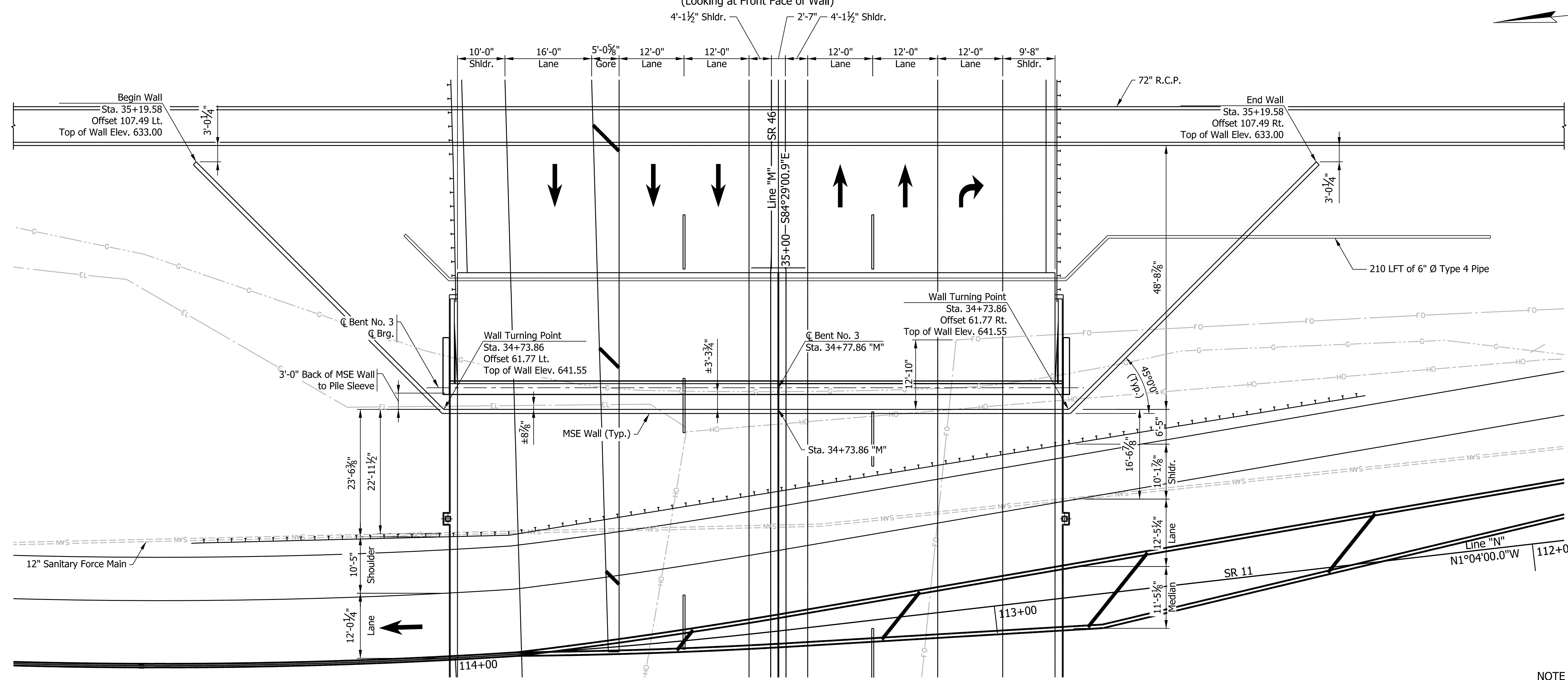
**INDIANA
DEPARTMENT OF TRANSPORTATION**

MSE RETAINING WALL - WEST

SCALE	BRIDGE FILE
3/32" = 1'-0"	TBD
	DESIGNATION
	1702650
SURVEY BOOK	SHEETS
ELECTRONIC	12 of 14
CONTRACT	PROJECT
R-40389	1700139



ELEVATION
(Looking at Front Face of Wall)



PLAN

NOTE

1. Stationing and offsets are from line "M".

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5/7/2018		5/7/2018
CHECKED: MJL	5/7/2018	CHECKED: MJL
		5/7/2018

INDIANA
DEPARTMENT OF TRANSPORTATION

MSE RETAINING WALL - EAST

SCALE	BRIDGE FILE
3/32" = 1'-0"	TBD
	DESIGNATION
	1702650
SURVEY BOOK	SHEETS
ELECTRONIC	13 of 14
CONTRACT	PROJECT
R-40389	1700139



SR 46 Intersection Improvement at SR 11 (Des. No. 1700139) - Columbus, IN

TREE PLANTING EXHIBIT



Appendix C

Early Coordination



Example Early Coordination Letter

- ENGINEERING
- ENVIRONMENTAL
- INSPECTION
- LAND SURVEYING
- LAND ACQUISITION
- PLANNING
- WATER & WASTEWATER
- SINCE 1965

November 30, 2017

Mr. Robin McWilliams
 U.S. Fish and Wildlife Service Bloomington Indiana Field Office
 620 South Walker Street
 Bloomington, Indiana 47403-2121

RE: Early Coordination Letter
 SR 46 Grade Separation over Louisville & Indiana Railroad
 Columbus, Bartholomew County, Indiana
 Des. No.: 1700139

Dear Mr. McWilliams,

The Indiana Department of Transportation (INDOT) and Federal Highway Administration (FHWA) intends to proceed with a grade separation project along SR 46 over the Louisville & Indiana Railroad in Columbus, Bartholomew County, Indiana. This letter is part of the early coordination phase of the environmental review process. We are requesting comments from your area of expertise regarding any possible environmental effects associated with this project. **Please use the above designation number and description in your reply.** We will incorporate your comments into a study of the project's environmental impacts.

This project is located at the intersection of SR 46 and the Louisville & Indiana Railroad in Columbus, Bartholomew County, Indiana. This section of SR 46 is a *Principal Arterial - Other*. The existing SR 46 approach cross section consists of 4, 12 ft. lanes, bordered by 10 ft. outside shoulders and a 16 ft. median. Roadside ditches exist along SR 46 in the vicinity of the intersection. The approximate existing right-of-way is 100 ft. each side of the centerline throughout the project area. The existing SR 11 approach cross section consists of 2, 12 ft. lanes, bordered by 2 ft. outside shoulders without a median. Roadside ditches exist along SR 11 in the vicinity of the intersection. The approximate existing right-of-way is 25 ft. each side of the centerline throughout the project area.

The proposed project will consist of creating a grade separation intended to carry SR 46 over the Louisville & Indiana Railroad. Fill will need to be placed for construction of the embankments to raise the profile grade. The existing intersection of SR 46 and SR 11 will need to be reconfigured to accommodate the proposed grade separation. The project is expected to require the acquisition of approximately 35 acres of new permanent right-of-way. Proposed right-of-way widths along SR 46 would vary from 75 ft. to 100 ft. from the centerline. The project limits would be approximately 3,615 ft. (0.68 mi.) in length from west to east, and approximately 1,350 ft. (0.25 mi.) in length from north to south. The preferred method of traffic maintenance would be through the use of lane restrictions with SR 46 and SR 11 remaining open to traffic during construction.

Land use in the vicinity of the project is primarily agricultural and residential. Members of the project team will perform waters and wetlands determinations and a biological assessment to identify any ecological resources that may be present. This project qualifies for the application of the United States Fish and Wildlife Service (USFWS) Range-Wide Programmatic Informal Consultation for the Indiana Bat and Northern Long-Eared Bat and USFWS Project Information Form will be provided to USFWS for review separately. Likewise, the project team will investigate the areas of additional right-of-way for archaeological and historic resources for compliance with Section 106. The results of these

OFFICERS

- William E. Hall, PE
- Dave Richter, PE, PLS
- Steven W. Jones
- Christopher R. Pope, PE
- B. Keith Bryant, PE
- Michael Rowe, PE

PROFESSIONAL STAFF

- Andrew T. Wolka, PE
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- Michael S. Oliphant, AICP
- E. Rachelle Pemberton, PE
- Timothy J. Coomes, PLS
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- Steven R. Passey, PE
- Brian J. Pierson, PE
- Christopher L. Hammond, PE
- Paul D. Glotzbach, PE
- Brian S. Frederick, PE
- Jay N. Ridens, PE
- Christopher J. Dyer, PE
- Matthew R. Lee, PE
- William R. Curtis, PE
- Jeremy A. Richardson, PE
- Heather E. Kilgour, PE
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- Caleb C. Ross, PE
- Matthew A. Taylor, PE
- Dann C. Barrett, PE
- Scott G. Minnich, PE
- Jim R. Lesh, PE
- Nicholas J. Kocher, PE
- Jennifer L. Hart, PE
- Jeffrey R. Andrews, PE
- Kelton S. Cunningham, PE
- Jonathan M. Korff, PE
- Braun S. Rodgers, PE
- Jordan C. Baker, PE
- Chris J. Andrzejewski, PE
- Greg J. Broz, PE
- John E. Harstad, PE

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investigations will be forwarded to the State Historic Preservation Officer for review and concurrence.

Should we not receive your response **within thirty (30) calendar days** from the date of this letter, it will be assumed that your agency feels that there will be no adverse effects incurred as a result of the proposed project. However, should you find that an extension to the response time is necessary, a reasonable amount of time may be granted upon request. If you have any questions regarding this matter, please feel free to contact Michael S. Oliphant, (317)895-2585 / mikeo@ucindy.com. Thank you in advance for your input.

Sincerely,

UNITED CONSULTING



Michael S. Oliphant, AICP
Environmental Specialist

List of Early Coordination Recipients

Enclosure: Location Maps
 Ground Level Photographs

- c:
- Natural Resources Conservation Service
 - Indiana Department of Environmental Management
 - US Fish and Wildlife Service
 - US Army Corps of Engineers
 - Indiana Department of Natural Resources – Division of Water
 - INDOT Seymour District
 - INDOT Public Involvement
 - INDOT Project Manager, Joe Bell
 - CMT Project Manager, Nick Batta
 - Indiana Geological Survey
 - Federal Highway Administration
 - Mayor, City of Columbus
 - Engineer, City of Columbus
 - Engineer, Bartholomew County
 - Columbus Area Metropolitan Planning Organization (MPO)
 - National Park Service
 - HUD
 - Columbus City Council
 - Columbus Parks and Recreation Department
 - UNITED File: (17-703)

State of Indiana
DEPARTMENT OF NATURAL RESOURCES
Division of Fish and Wildlife
Early Coordination/Environmental Assessment

DNR #: ER-20243

Request Received: November 30, 2017

Requestor: United Consulting
Michael S Oliphant
1625 North Post Road
Indianapolis, IN 46219-1995

Project: SR 46 grade separation over Louisville & Indiana Railroad, about 1.52 miles east of I-65 in Columbus; **Des #1700139**

County/Site info: Bartholomew

The Indiana Department of Natural Resources has reviewed the above referenced project per your request. Our agency offers the following comments for your information and in accordance with the National Environmental Policy Act of 1969.

If our agency has regulatory jurisdiction over the project, the recommendations contained in this letter may become requirements of any permit issued. If we do not have permitting authority, all recommendations are voluntary.

Regulatory Assessment: This proposal may require the formal approval of our agency pursuant to the Flood Control Act (IC 14-28-1) for any proposal to construct, excavate, or fill in or on the floodway of a stream or other flowing waterbody which has a drainage area greater than one square mile.

Natural Heritage Database: The Natural Heritage Program's data have been checked. To date, no plant or animal species listed as state or federally threatened, endangered, or rare have been reported to occur in the project vicinity.

Fish & Wildlife Comments: The extent of the project limits is unclear from the information provided for review. If impacts to the riparian habitat and floodway to the east of the project is likely, then further review may be needed at the project is further developed. Avoid and minimize impacts to fish, wildlife, and botanical resources to the greatest extent possible, and compensate for impacts. The following are preliminary recommendations that address potential impacts identified in the proposed project area:

We recommend a mitigation plan be developed (and submitted with the permit application, if required) for any unavoidable habitat impacts that will occur. The mitigation site should be located as close to the impact site as possible and adjacent to existing forested riparian habitat. The DNR's Floodway Habitat Mitigation guidelines (and plant lists) can be found online at:
<http://www.in.gov/legislative/iac/20140806-IR-312140295NRA.xml.pdf>.

Impacts to non-wetland forest of one (1) acre or more should be mitigated at a minimum 2:1 ratio. If less than one acre of non-wetland forest is removed in a rural setting, replacement should be at a 1:1 ratio based on area. Impacts to non-wetland forest under one (1) acre in an urban setting should be mitigated by planting five trees, at least 2 inches in diameter-at-breast height (dbh), for each tree which is removed that is 10" dbh or greater (5:1 mitigation based on the number of large trees). Impacts to wetland habitat should be mitigated at the appropriate ratio according to the 1991 INDOT/IDNR/USFWS Memorandum of Understanding.

The additional measures listed below should be implemented to avoid, minimize, or compensate for impacts to fish, wildlife, and botanical resources:

1. Revegetate all bare and disturbed areas in the floodway with a mixture of native

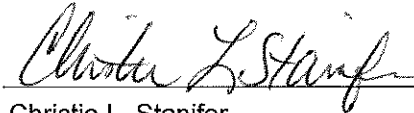
THIS IS NOT A PERMIT

State of Indiana
DEPARTMENT OF NATURAL RESOURCES
Division of Fish and Wildlife
Early Coordination/Environmental Assessment

- grasses, sedges, wildflowers as soon as possible upon completion. Do not use any varieties of Tall Fescue or other non-native plants (e.g. crown-vetch).
2. Minimize and contain within the project limits inchannel disturbance and the clearing of trees and brush.
 3. Do not work in the waterway from April 1 through June 30 without the prior written approval of the Division of Fish and Wildlife.
 4. Do not cut any trees suitable for Indiana bat or Northern Long-eared bat roosting (greater than 3 inches dbh, living or dead, with loose hanging bark, or with cracks, crevices, or cavities) from April 1 through September 30.
 5. Post "Do Not Mow or Spray" signs along the right-of-way.
 6. Appropriately designed measures for controlling erosion and sediment must be implemented to prevent sediment from entering the stream or leaving the construction site; maintain these measures until construction is complete and all disturbed areas are stabilized.
 7. Seed and protect all disturbed slopes that are 3:1 or steeper with heavy-duty biodegradable-fiber or net-free erosion control blankets (follow manufacturer's recommendations for selection and installation); seed and apply mulch on all other disturbed areas.

Contact Staff:

Christie L. Stanifer, Environ. Coordinator, Fish & Wildlife
Our agency appreciates this opportunity to be of service. Please contact the above staff member at (317) 232-4080 if we can be of further assistance.



Date: December 29, 2017

Christie L. Stanifer
Environ. Coordinator
Division of Fish and Wildlife



Indiana Department of Environmental Management

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Eric J. Holcomb
Governor

Bruno Pigott
Commissioner

December 4, 2017

66-33
United Consulting
Attention: Mr. Aaron Toombs
1625 North Post Road
Indianapolis, Indiana 46219-1995

Dear Mr. Aaron Toombs,

RE: Wellhead Protection Area
Proximity Determination
Des No 1700139
SR 46 Grade Separation over
Louisville & Indiana Railroad
Columbus, Bartholomew County,
Indiana

Upon review of the above referenced project site, it has been determined that the proposed project area **is located within** a Wellhead Protection Area. If the contact information is needed for the WHPA, please contact the reference located at the bottom of the letter for the appropriate information. The information is accurate to the best of our knowledge; however, there are in some cases a few factors that could impact the accuracy of this determination. Some Wellhead Protection Area Delineations have not been submitted, and many have not been approved by this office. In these cases we use a 3,000 foot fixed radius buffer to make the proximity determination. To find the status of a Public Water Supply System's (PWSS's) Wellhead Protection Area Delineation please visit our tracking database at <http://www.in.gov/idem/cleanwater/2456.htm> and scroll to the bottom of the page.

Note: the Drinking Water Branch has launched a new self service feature which allows one to determine wellhead proximity without submitting the application form. Use the following instructions:

1. Go to <http://idemmaps.idem.in.gov/whpa2/>
2. Use the search tool located in the upper left hand corner of the application to zoom to your site of interest by way of city, county, or address; or use the mouse to click on the site of interest displayed on the map.
3. Once the site of interest has been located and selected, use the print tool to create a .pdf of a wellhead protection area proximity determination response.

In the future please consider using this self service feature if it suits your needs.

If you have any additional questions please feel free to contact me at the address above or at (317) 233-9158 and aturnbow@idem.in.gov.

Sincerely,

Alisha Turnbow,
Environmental Manager
Ground Water Section
Drinking Water Branch
Office of Water Quality



A State that Works

Early Coordination

Please Reduce, Reuse, Recycle

From: Toombs, Aaron
To: ["kreeves@columbusutilities.org"](mailto:kreeves@columbusutilities.org)
Subject: Wellhead Protection Area
Date: Wednesday, January 3, 2018 9:16:00 AM
Attachments: [EC to IDEM-GWS.PDF](#)

Keith,

Through coordination with the Indiana Department of Environmental Management it has been determined that the **SR 46 Grade Separation project is within a Wellhead Protection Area.**

Our firm is part of a project team retained by the Indiana Department of Transportation to complete the required preliminary engineering activities for this project. A copy of the letter sent to resource agencies containing details of the project has been attached for your reference. Please verify the proposed project is within the Wellhead Protection Area.

In the event that the project is within the Wellhead Protection Area, please provide our office with management measures and requirements discussed in the local wellhead protection program developed for the Community Public Water Supply System. This information will be included in the environmental commitments for this project.

If you have any questions or concerns, or require additional information, please contact me at your earliest convenience.

Sincerely,

Aaron Toombs
Environmental Specialist

United Consulting
1625 North Post Road
Indianapolis, IN 46219-1995
(317) 895-2585



From: [McNulty, Jim](#)
To: [Toombs, Aaron](#)
Cc: [Ed Bergsieker \(ebergsieker@columbusutilities.org\)](mailto:ebergsieker@columbusutilities.org)
Subject: Columbus Utilities Wellhead Protection Plan
Date: Thursday, January 11, 2018 8:20:21 AM
Attachments: [image008.png](#)
[image003.jpg](#)
[image005.jpg](#)

Aaron,

I am responding to your e-mail dated January 3, 2018 to Keith Reeves at Columbus City Utilities as I have been assisting Columbus Utilities with implementation of the wellhead protection program. **The proposed SR 46 Grade Separation project will at least partially inside the Columbus wellhead protection area.** Columbus has well fields on SR 11 south of SR 46 and the boundary for the wellhead protection area extends northward to the intersection of SR 46 and SR 11 where the proposed project is to be constructed. I have included excerpts from the Columbus Wellhead Protection Management Plan that may be applicable to this area. The City does not allow the use of dry wells or infiltration ponds in a wellhead protection area so this may require consideration in design. Changes in traffic patterns that would increase the transportation of hazardous cargo on SR 11 south of SR 46 is also a concern for the well fields located south of Garden City as this increases the risk for the release of hazardous materials near the water supply. Please let Columbus Utilities know if additional information is required.

**EXCERPTS FROM THE CITY OF COLUMBUS' WELLHEAD
PROTECTION MANAGEMENT PROGRAM**

7.2.3 Hazardous Waste Collection Program

The LPT recognizes the need to remove potential sources of pollution in the WHPA by providing opportunities for individuals to dispose of hazardous chemicals in an environmentally safe manner. The LPT will work with the Bartholomew County Solid Waste District to promote the annual hazardous waste collection event during the first year of Phase II implementation and possibly annually thereafter. The Columbus LPT will have flyers and educational items available to the public at these events to promote wellhead protection.

The Utility does not have a budget or staff to actively participate in such events. Materials will be made available at future recycling activities. (Added 7/09)

7.2.4 Transportation Controls

The Utility and the LPT recognize transportation routes as a significant potential contamination source. Fairgrounds wells are especially vulnerable if an incident were to occur on the railroad or on S.R. 11 near the well field. The LPT recommends the following measures be pursued by the City Utility to reduce the threat from transportation sources:

- Educate Columbus, Bartholomew County Commissioners and INDOT officials about sensitive wellhead protection areas where chemical application could be minimized.
- Request that the City investigate restricting the transport of hazardous cargo on 25th Street within the 1 Year TOT of the Lincoln Park Well Field, except for shipments whose destinations are located within the WHPA.
- Request that the City have discussions with INDOT officials about the possibility of diverting hazardous cargo from S.R. 11 within the 1 Year TOT at the Fairgrounds Well Field to Interstate 65.

These items have been partially accomplished through a meeting with a local INDOT representative as well as a meeting with the Bartholomew County Highway Department. Documentation of these meetings are contained in Appendix A. (Added 10/09)

**EXCERPTS FROM THE CITY OF COLUMBUS' WELLHEAD
PROTECTION MANAGEMENT PROGRAM**

7.2.5 Land Use Standards

The LPT recommends that since the safety of the community's water supply depends heavily on types of site use in the area of a well field, and since there is currently no zoning mechanism in place to sufficiently protect public well fields from adverse site development, some level of land use controls should be investigated. The LPT recommends that the Bartholomew County area government and planning consider adopting the following regulatory measures to restrict activities inside the 1 or 5 year TOT of a WHPA and/or the County:

- Formalize a City Policy prohibiting the use of dry wells, infiltration ponds or other infiltration structures as a form of storm water management inside a WHPA.

This task has been accomplished with the City Engineer. Dry wells are not permitted inside a wellhead protection area. (Added 7/09)

- Support the existing ordinance that requires residences or businesses within 200 feet of utility service to hookup to City utilities when existing wells or septic systems fail.

This task continues to be actively supported. (Added 7/09)

8.0 ZONING OVERLAY DISTRICT

The Utility and the LPT evaluated the possibility of restricting site uses through zoning restrictions. Upon adoption of this Plan, the Utility will recommend that no new land use or activity shall be allowed in the Sanitary Setback areas surrounding the supply wells. Only those activities and land uses necessary for the operation and maintenance of a public water system should be allowed in the Sanitary Setback areas.

The LPT recommends that the five-year TOT zone be shown as an overlay to the existing city/county zoning map. The purpose of the overlay district will be to provide individuals and businesses wishing to construct or operate in the Overlay District with information regarding wellhead protection. The Utility will request that any time a building permit is issued inside the WHPA, information brochures are provided to the applicant. The Utility will also seek to formalize the current procedure in which the Utility is notified of proposed land use changes inside the WHPA, and given an opportunity to respond to the proposed land use change.



Jim McNulty

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From: [Oliphant, Mike](#)
To: [Stettler, Devin](#)
Cc: [Toombs, Aaron](#)
Subject: FW: Des 1700139 Early Coordination Letter
Date: Tuesday, December 05, 2017 2:22:36 PM

FYI

Mike O

From: Danny Hollander [mailto:dhollander@bartholomew.in.gov]
Sent: Tuesday, December 05, 2017 2:19 PM
To: Oliphant, Mike <MIKEO@ucindy.com>
Subject: Des 1700139 Early Coordination Letter

The overpass will create no adverse effect to Bartholomew County. Actually if not built, will create an adverse effect, but that is why they are building it.

Danny Hollander P.E.
County Engineer
Bartholomew County Highway
2452 State Street
Columbus IN 47201
PH 812-379-1660
Cell – 812-314-1193
Fax 812-378-9480

From: [Oliphant, Mike](#)
To: [Stettler, Devin](#)
Subject: FW: 1700139 Early Coordination SR 46 intersection at SR 11 Bartholomew Co
Date: Tuesday, December 19, 2017 12:47:30 PM
Attachments: [image002.jpg](#)

FYI

From: Wright, Mary [mailto:MWRIGHT@indot.IN.gov]
Sent: Tuesday, December 19, 2017 12:44 PM
To: Oliphant, Mike <MIKEO@ucindy.com>
Subject: RE: 1700139 Early Coordination SR 46 intersection at SR 11 Bartholomew Co



Early Coordination and Creating a Public Involvement Plan (PIP)

We have received your early coordination notification packet for the above referenced project(s). Our office prefers to be notified at the early coordination stage in order to encourage early and ongoing public involvement aside from the specific legal requirements as outlined in our Public Involvement Manual <http://www.in.gov/indot/2366.htm>. Seeking the public's understanding of transportation improvement projects early in the project development stage can allow the opportunity for the public to express their concerns, comments, and to seek buy-in. Early coordination is the perfect opportunity to examine the proposed project and its impacts to the community along with the many ways and or tools to inform the public of the improvements and seek engagement. A good public involvement plan, or PIP, should consider the type, scope, impacts, and the level of public awareness that should, or could, be implemented. In other words, although there are cases where no public involvement is legally required, sometimes it is simply the right thing to do in order to keep the public informed.

The public involvement office is always available to provide support and resources to bolster any public involvement activities you may wish to implement or discuss. Please feel free to contact our office anytime should you have any questions or concerns. Thank you for notifying our office about your proposed project. We trust you will not only analyze the appropriate public involvement required, but also consider the opportunity to do go above and beyond those requirements in creating a good PIP.

Rickie Clark, Manager
100 North Senate Avenue, Room N642
Indianapolis, IN 46204

Phone: 317-232-6601
Email: rclark@indot.in.gov

Mary Wright, Hearing Examiner
Phone: 317-234-0796
Email: mwright@indot.in.gov



United States Department of the Interior



FISH AND WILDLIFE SERVICE

Indiana Ecological Services Field Office

620 South Walker Street

Bloomington, IN 47403-2121

Phone: (812) 334-4261 Fax: (812) 334-4273

<http://www.fws.gov/midwest/Endangered/section7/s7process/step1.html>

In Reply Refer To:

November 28, 2017

Consultation Code: 03E12000-2017-SLI-1162

Event Code: 03E12000-2018-E-00851

Project Name: Des. No. 1700139, Railroad Overpass and Intersection Improvements

Subject: Updated list of threatened and endangered species that may occur in your proposed project location, and/or may be affected by your proposed project

To Whom It May Concern:

The attached species list identifies any federally threatened, endangered, proposed and candidate species that may occur within the boundary of your proposed project or may be affected by your proposed project. The list also includes designated critical habitat if present within your proposed project area or affected by your project. This list is provided to you as the initial step of the consultation process required under section 7(c) of the Endangered Species Act, also referred to as Section 7 Consultation.

Section 7 of the Endangered Species Act of 1973 requires that actions authorized, funded, or carried out by Federal agencies not jeopardize federally threatened or endangered species or adversely modify designated critical habitat. To fulfill this mandate, Federal agencies (or their designated non-federal representative) must consult with the Service if they determine their project “may affect” listed species or critical habitat.

Under 50 CFR 402.12(e) (the regulations that implement Section 7 of the Endangered Species Act) the accuracy of this species list should be verified after 90 days. This verification can be completed formally or informally. You may verify the list by visiting the ECOS-IPaC website <http://ecos.fws.gov/ipac/> at regular intervals during project planning and implementation and completing the same process you used to receive the attached list. As an alternative, you may contact this Ecological Services Field Office for updates.

Please use the species list provided and visit the U.S. Fish and Wildlife Service's Region 3 Section 7 Technical Assistance website at - <http://www.fws.gov/midwest/endangered/section7/s7process/index.html>. This website contains step-by-step instructions which will help you determine if your project will have an adverse effect on listed species and will help lead you through the Section 7 process.

For all **wind energy projects** and **projects that include installing towers that use guy wires or are over 200 feet in height**, please contact this field office directly for assistance, even if no federally listed plants, animals or critical habitat are present within your proposed project or may be affected by your proposed project.

Although no longer protected under the Endangered Species Act, be aware that bald eagles are protected under the Bald and Golden Eagle Protection Act (16 U.S.C. 668 et seq.) and Migratory Bird Treaty Act (16 U.S.C. 703 et seq), as are golden eagles. Projects affecting these species may require measures to avoid harming eagles or may require a permit. If your project is near an eagle nest or winter roost area, see our Eagle Permits website at <http://www.fws.gov/midwest/midwestbird/EaglePermits/index.html> to help you determine if you can avoid impacting eagles or if a permit may be necessary.

We appreciate your concern for threatened and endangered species. Please include the Consultation Tracking Number in the header of this letter with any request for consultation or correspondence about your project that you submit to our office.

Attachment(s):

- Official Species List

Official Species List

This list is provided pursuant to Section 7 of the Endangered Species Act, and fulfills the requirement for Federal agencies to "request of the Secretary of the Interior information whether any species which is listed or proposed to be listed may be present in the area of a proposed action".

This species list is provided by:

Indiana Ecological Services Field Office

620 South Walker Street

Bloomington, IN 47403-2121

(812) 334-4261

Project Summary

Consultation Code: 03E12000-2017-SLI-1162

Event Code: 03E12000-2018-E-00851

Project Name: Des. No. 1700139, Railroad Overpass and Intersection Improvements

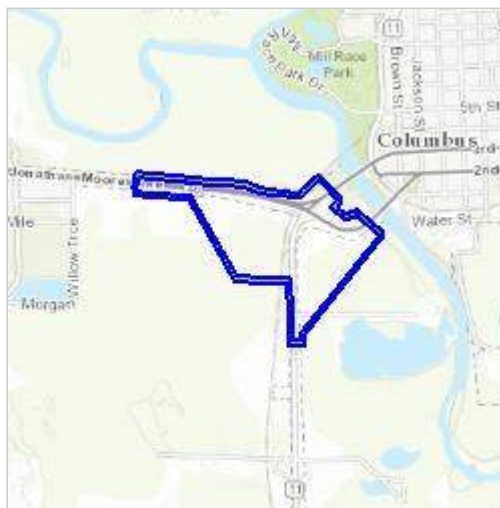
Project Type: TRANSPORTATION

Project Description: The proposed improvements include construction of an overpass at the L&I railroad and improvements to the intersection of SR 46 / SR 11, Columbus, Bartholomew County, Indiana. A total of approximately 2.4 acres of trees are planned to be removed adjacent to and up to 160 feet from the edge of existing roadways and railroad. Tree removal is planned to be conducted from November 1, 2019 through March 1, 2020. Construction activities are planned from spring of 2020 through fall of 2021. Temporary and new permanent lighting is planned during this project.

Project Location:

Approximate location of the project can be viewed in Google Maps:

<https://www.google.com/maps/place/39.19599343532058N85.92619237046472W>



Counties: Bartholomew, IN

Endangered Species Act Species

There is a total of 2 threatened, endangered, or candidate species on this species list. Species on this list should be considered in an effects analysis for your project and could include species that exist in another geographic area. For example, certain fish may appear on the species list because a project could affect downstream species. Note that 1 of these species should be considered only under certain conditions. See the "Critical habitats" section below for those critical habitats that lie wholly or partially within your project area under this office's jurisdiction. Please contact the designated FWS office if you have questions.

Mammals

NAME	STATUS
<p>Indiana Bat <i>Myotis sodalis</i></p> <p>There is final critical habitat for this species. Your location is outside the critical habitat.</p> <p>Species profile: https://ecos.fws.gov/ecp/species/5949</p> <p>Species survey guidelines: https://ecos.fws.gov/ipac/guideline/survey/population/1/office/31440.pdf</p>	<p>Endangered</p>
<p>Northern Long-eared Bat <i>Myotis septentrionalis</i></p> <p>No critical habitat has been designated for this species.</p> <p>This species only needs to be considered under the following conditions:</p> <ul style="list-style-type: none"> ▪ Incidental take of the NLEB is not prohibited here. Federal agencies may consult using the 4(d) rule streamlined process. Transportation projects may consult using the programmatic process. See www.fws.gov/midwest/endangered/mammals/nleb/index.html <p>Species profile: https://ecos.fws.gov/ecp/species/9045</p> <p>Species survey guidelines: https://ecos.fws.gov/ipac/guideline/survey/population/10043/office/31440.pdf</p>	<p>Threatened</p>

Critical habitats

THERE ARE NO CRITICAL HABITATS WITHIN YOUR PROJECT AREA UNDER THIS OFFICE'S JURISDICTION.

FILE COPY



United States Department of the Interior
Fish and Wildlife Service



Indiana Field Office (ES)
620 South Walker Street
Bloomington, IN 47403-2121
Phone: (812) 334-4261 Fax: (812) 334-4273

January 24, 2018

Michelle Allen
Federal Highway Administration
575 N. Pennsylvania St. Room 254
Indianapolis, Indiana 46204

TAILS: 03E12000-2017-SLI-1162

RE: SR 46 Railroad Overpass and Intersection Improvement (DES. 1700139)

Dear Ms. Allen:

The U.S. Fish and Wildlife Service (Service) is responding to your request dated November 28, 2017 to verify that the proposed SR 46 Railroad Overpass and Intersection Improvement Project (the Project) may rely on the December 15, 2016, Programmatic Biological Opinion (BO) for federally funded or approved transportation projects that may affect the federally listed endangered Indiana bat (*Myotis sodalis*) and/or federally listed threatened northern long-eared bat (NLEB) (*Myotis septentrionalis*). We received your request and the associated Project Submittal Form on November 28, 2017. Additional information was finalized on January 18, 2018.

This letter provides the Service's response as to whether the Federal Highway Administration may rely on the BO to comply with Section 7(a)(2) of the Endangered Species Act of 1973 (ESA) (87 Stat. 884, as amended; 16 U.S.C. 1531 *et seq.*) for the Project's effects to the Indiana bat and/or NLEB.

The Federal Highway Administration has determined that the Project is *likely to adversely affect* the Indiana bat and/or the NLEB.

The Service concurs with this determination(s), because some tree clearing will occur between 100-300 feet from the edge of pavement, but not greater than 300 feet. This concurrence concludes your ESA Section 7 responsibilities relative to these species for this Project, subject to the Reinitiation Notice below.

Conclusion

The Service has reviewed the effects of the proposed Project, which includes the Federal Highway Administration's commitment to implement any applicable mitigation measures as indicated on the Project Submittal Form. We confirm that the proposed Project's effects are consistent with those analyzed in the BO. The Service has determined that projects consistent

with the conservation measures and scope of the program analyzed in the BO are not likely to jeopardize the continued existence of the Indiana bat and/or the NLEB. In coordination with your agency and the other sponsoring Federal Transportation Agencies, the Service will reevaluate this conclusion annually in light of any new pertinent information under the adaptive management provisions of the BO.

Incidental Take

Indiana Bat

The Service anticipates that tree removal associated with the proposed Project will cause incidental take of Indiana bats. As described in the Incidental Take Statement (ITS) of the BO, such taking will be difficult to detect. The Service determined that it is appropriate to measure the amount or extent of incidental taking resulting from BO projects using the proposed acreage of tree removal from Indiana bat suitable habitat as a surrogate for the numbers of individuals taken.

The proposed Project will remove 2.4 acres of trees from habitat that is suitable for the Indiana bat. All tree removal will occur in winter and comply with all other conservation measures in the BO. Based on the BO, 2.33 acres of the removal are not anticipated to result in any adverse effects, and 0.07 acres are anticipated to result in adverse effects.

The Federal Highway Administration used the mitigation ratio of 1.75 from Table 3 of the BO to calculate the compensatory mitigation required to offset these adverse impacts for a total of 0.12 acres¹ of trees that are suitable for the Indiana bat.

Using the information provided in Table 2 of Exhibit E in The Conservation Fund's (TCF) In Lieu Fee (ILF) Instrument² and the mitigation identified above, the Federal Highway Administration will contribute \$1300 to TCF to comply with the mitigation requirements of the program of transportation projects reviewed in the BO. These calculations are based on the 2017/2018 Land Use Values in Table 2 of Exhibit E in TCF's ILF Instrument, which are applicable even if the project construction should occur in a different calendar year.

If a conservation bank or ILF option is chosen to compensate for adverse effects on Indiana bats, the purchase of species conservation credits and/or in-lieu fee contributions shall occur prior to construction of a transportation project covered under this programmatic consultation. Exceptions to this program stipulation include emergency projects that do not require a letting prior to construction. In these cases, purchase of credits and/or in-lieu fee contributions shall occur within three months of completion of the project. This timeframe allows for measuring the acres of habitat affected by the emergency project and for financial processing.

The Service will add the acreage of Project-related tree removal to the annual total acreage attributed to the BO as a surrogate measure of Indiana bat incidental take and exempted from the prohibitions of Section 9 of the ESA. Such exemption is effective as long as your agency

1 XX acres * XX ratio

2 https://www.fws.gov/midwest/endangered/section7/fhwa/pdf/ILF_ExhibitsBthruI_INBA.pdf
https://www.fws.gov/midwest/endangered/section7/fhwa/pdf/ILF_ExhibitsBthruI_INBA.pdf

implements the reasonable and prudent measure (RPM) and accompanying terms and conditions of the BO's ITS.

The sole RPM of the BO's ITS requires the Federal Transportation Agencies to ensure that State/Local transportation agencies, who choose to include eligible projects under the programmatic action, incorporate all applicable conservation measures in the project proposals submitted to the Service for ESA section 7 compliance using the BO. The implementing terms and conditions for this RPM require the Federal Transportation Agencies to offer training to appropriate personnel about using the BO, and promptly report sick, injured, or dead bats (regardless of species) or any other federally listed species located in project action areas.

Northern Long-eared Bat

The Service anticipates that tree removal associated with the Project will cause incidental take of NLEBs. However, the Project is consistent with the BO, and such projects will not cause take of NLEB that is prohibited under the ESA section 4(d) rule for this species (50 CFR §17.40(o)). Therefore, the incidental take of NLEBs resulting from the Project does not require exemption from the Service.

Reporting Dead or Injured Bats

The Federal Highway Administration, its State/Local cooperators, and any contractors must take care when handling dead or injured Indiana bats and/or NLEBs, or any other federally listed species that are found at the Project site to preserve biological material in the best possible condition and to protect the handler from exposure to diseases, such as rabies. Project personnel are responsible for ensuring that any evidence about determining the cause of death or injury is not unnecessarily disturbed. Reporting the discovery of dead or injured listed species is required in all cases to enable the Service to determine whether the level of incidental take exempted by this BO is exceeded, and to ensure that the terms and conditions are appropriate and effective. Parties finding a dead, injured, or sick specimen of any endangered or threatened species must promptly notify this Service Office.

Reinitiation Notice

This letter concludes consultation for the Project, which qualifies for inclusion in the BO issued to the Federal Transportation Agencies. To maintain this inclusion, a reinitiation of this Project-level consultation is required where the Federal Highway Administration's discretionary involvement or control over the Project has been retained (or is authorized by law) and if:

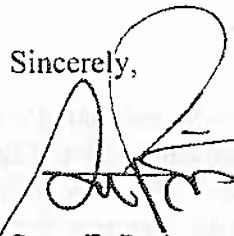
1. the amount or extent of incidental take of Indiana bat is exceeded;
2. new information reveals that the Project may affect listed species or critical habitat in a manner or to an extent not considered in the BO;
3. the Project is subsequently modified in a manner that causes an effect to listed species or designated critical habitat not considered in the BO; or
4. a new species is listed or critical habitat designated that the Project may affect.

Per condition #1 above, the anticipated incidental take is exceeded when:

- the Project removes trees from more than 0.07 acres of habitat suitable for the Indiana bat;

In instances where the amount or extent of incidental take is exceeded, the Federal Highway Administration is required to immediately request a reinitiation of this project-level consultation.

We appreciate your continued efforts to ensure that this Project is fully consistent with all applicable provisions of the BO. If you have any questions regarding our response or if you need additional information, please contact Robin McWilliams Munson at 812-334-4261 or robin_mcwilliams@fws.gov.

Sincerely,

Scott E. Pruitt
Field Supervisor

cc: Laura Hilden, INDOT, Indianapolis, IN

ES: RMunson/812-334-4261

Federal Highway Administration (FHWA), Federal Railroad Administration (FRA), and Federal Transit Administration (FTA)

Range-wide Programmatic Consultation for
Indiana Bat and Northern Long-eared Bat

Project Submittal Form

Updated December 2016

If not using the Assisted Determination Key in the U.S. Fish and Wildlife Service (Service) Information for Planning and Conservation (IPaC) System, transportation agencies must provide this submittal form (or a comparable Service approved form) with provide project-level information for use of the range-wide programmatic consultation covering actions that may affect the Indiana bat and/or northern long-eared bat (NLEB). The completed form should be submitted to the appropriate Service Field Office prior to project commencement. For more information, see the Standard Operating Procedure for Site Specific Project(s) Submission in the User's Guide.

By submitting this form, the transportation agency ensures that the proposed project(s) adhere to the criteria and conditions of the range-wide programmatic consultation, as outlined in the biological assessment (BA) and biological opinion (BO). Upon submittal of this form, the appropriate Service Field Office may review the project-specific information provided and request additional information. For projects that may affect, but are not likely to adversely affect (NLAA) the Indiana bat and/or NLEB, if the applying transportation agency is **not** contacted by the Service with any questions or concerns within 14 calendar days of form submittal, it may proceed under the range-wide programmatic consultation and assume concurrence of the NLAA determination made by the Service in the BO. For projects that may affect, and are likely to adversely affect (LAA) the Indiana bat and/or the NLEB, the appropriate Service Field Office will respond (see recommended response letter template) within 30 calendar days of receiving a complete project-level submission, which includes, but may not be limited to this completed form.

Further instructions on completing the submittal form can be found by hovering your cursor over each text box.

1. Date:

2. Lead agency:

This refers to the Federal governmental lead action agency initiating consultation; select FHWA, FRA or FTA as appropriate.

3. Requesting agency:

This refers to the transportation agency completing the form (it may or may not be the same as the Lead Agency).

Name:

Title:

Phone:

Email:

4. Consultation code¹:

5. Project name(s):

6. Project description:

Please attach additional documentation or explanatory text if necessary

7. Project location (county, state):

If not delineated in IPaC, attach shape files

8. For species **other than Indiana bat and NLEB** (from IPaC official species list):

No effect – project(s) are inside the range, but no suitable habitat (see additional information attached).

May affect – see additional information provided for those species (see attached or forthcoming).

Please confirm and identify how the proposed project(s) adhere to the criteria of the BO by completing the following (see User Guide Section 2.0):

¹ Available through IPaC System Official Species List: <https://ecos.fws.gov/ipac/>

NO EFFECT

9. For Indiana bat/NLEB, if applicable, select your no effect determination:

No effect – project(s) are outside the species' range. *submittal form complete*

No effect – project(s) are inside the species range with no suitable **summer** habitat; project(s) must also be greater than 0.5 miles from any hibernaculum unless meeting exceptions listed below. *submittal form complete*

No effect – project(s) do not involve any construction activities (e.g., bridge/**abandoned structure** assessments, property inspections, planning and technical studies, property sales, property easements, and equipment purchases). *submittal form complete*

No effect – project(s) are completely within existing road/rail surface and do not involve percussive or other activities that increase noise above existing traffic/background levels (e.g., road line painting). *submittal form complete*

No effect - project(s) are outside suitable summer bat habitat and limited to the maintenance of existing facilities (e.g., rest areas, stormwater detention basins) with no new ground disturbance.

No effect – project(s) includes maintenance, alteration, or **removal** of bridge(s)/structure(s) and indicate(s) no signs of bats from results of a bridge/**abandoned** structure assessment. *submittal form complete*
Otherwise, please continue below.

MAY AFFECT, NOT LIKELY TO ADVERSELY EFFECT – W/O AMMS

10. For Indiana bat/NLEB, if applicable, select your may affect, NLAA determination (without implementation of AMMs):

NLAA – project(s) are inside the species range and within suitable bat habitat, but **negative** bat presence/absence (P/A) surveys; must also be greater than 0.5 miles from any hibernaculum. *submittal form complete*

NLAA – project(s) are within 300 feet of the existing road/rail surface and in area that contain suitable habitat (but no documented habitat) that do not involve tree removal, but include percussives or other activities that increase noise above existing traffic/background levels (must also be greater than 0.5 miles of a hibernaculum). *submittal form complete*

NLAA – project(s) are limited to slash pile burning (**must also be greater than 0.5 miles from any hibernaculum**). *submittal form complete*

NLAA – project(s) are limited to wetland or stream protection activities associated

with compensatory wetland mitigation that do not clear suitable habitat (**must also be greater than 0.5 miles from any hibernaculum**). *submittal form complete*

NLAA – project(s) *anywhere*, including within 0.5 mile of hibernacula, with suitable summer bat habitat present that are limited to the maintenance of existing facilities (e.g., rest areas, stormwater detention basins) with no new ground disturbance or tree removal/trimming. *submittal form complete*

Otherwise, please continue below.

MAY EFFECT, NOT LIKELY TO ADVERSELY AFFECT – WITH AMMs

11. For Indiana bat/NLEB, if applicable, document your may affect, NLAA determination by completing the following section (**with implementation of AMMs**; use #13 to document AMMs).

Affected Resource/Habitat Type:

a. Trees

Verify that all tree removal occurs greater than 0.5 mile from any hibernaculum

Verify that the project is within 100 feet of existing road/rail surfaces

Verify that no documented Indiana bat and/or NLEB roosts and/or surrounding summer habitat within 0.25 mile of documented roosts will be impacted

Verify that all tree removal will occur outside the active season (i.e., will occur in winter)²:

Acres of trees proposed for removal:

b. Bridge/Structure Work Projects

Proposed work:

Timing of work:

Evidence of bat activity on/in bridge/structure? Yes: No:

Verify that work will be conducted outside the active season, or if during the active season, verify that no roosting bats will be harmed or disturbed in any way

Verify that work will not alter roosting potential in any way

² Coordinate with the local Service Field Office for appropriate dates

Verify that all applicable lighting minimization measures will be implemented

MAY AFFECT, LIKELY TO ADVERSELY AFFECT

12. For Indiana bat/NLEB, if applicable, document your may affect, LAA determination by completing the following section (use #13 to document AMMs).

Affected Resource/Habitat Type:

a. Trees

Verify that all tree removal occurs greater than 0.5 mile from any hibernaculum

Project Location:

0-100 feet from edge of existing road/rail surface

100-300 feet from edge of existing road/rail surface

Verify that no documented Indiana bat roosts or surrounding summer habitat within 0.25 mile of documented roosts will be impacted between May 1 and July 31

Verify that no documented NLEB roosts or surrounding summer habitat within 150 feet of documented roosts will be impacted between June 1 and July 31

Timing of tree removal:

Acres of trees proposed for removal:

b. Bridge/Structure Work Projects

Proposed work:

Timing of work:

Verify no signs of a colony

ACCEPTED AMMs HAVE BEEN INCLUDED AS FIRM COMMITMENTS WITHIN THIS CE DOCUMENT

Verify that work will not alter roosting potential in any way

13. For Indiana bat/NLEB, **if applicable to the action type**, the following AMMs will be implemented³ unless P/A surveys and/or bridge/**abandoned** structure assessments⁴ **have occurred to** document that the species are not likely to be present:

General AMM 1 (required for all projects):

³ See AMMs Fact Sheet (Appendix C) for more information on AMMs

⁴ Structure assessment for occupied buildings means a cursory inspection for bat use. For abandoned buildings a more thorough evaluation is required (See User Guide Appendix D for bridge/abandoned structure assessment guidance).

- Tree Removal AMM 1
- Tree Removal AMM 2 (required for NLAA)
- Tree Removal AMM 3 (required for all projects)
- Tree Removal AMM 4 (required for NLAA)
- Tree Removal AMM 5 (required for LAA)
- Tree Removal AMM 6 (required for LAA)
- Tree Removal AMM 7 (required for LAA)

- Bridge AMM 1
- Bridge AMM 2 (required for all projects during active season)
- Bridge AMM 3 (required for NLAA during active season)
- Bridge AMM 4 (required for NLAA during active season)
- Bridge AMM 5 (required for all projects)

Structure AMMs are required for all Indiana bat projects, required for NLAA NLEB projects.

- Structure AMM 1
- Structure AMM 2
- Structure AMM 3
- Structure AMM 4

ACCEPTED AMMs HAVE BEEN INCLUDED AS FIRM COMMITMENTS WITHIN THIS CE DOCUMENT

- ~~Lighting~~ AMM 1 (required for all projects during the active season)
- Lighting AMM 2 (required for all projects)

Hibernacula AMM 1 (required for all projects)

14. For Indiana bat, if applicable, compensatory mitigation measures will also be required to offset adverse effects on the species (see Section 2.10 of the BA). Please verify the mechanism in which compensatory mitigation will be implemented and that sufficient information is provided to the Service.

Range-wide In-Lieu Fee Program, The Conservation Fund

State, Regional, Recovery Unit-Specific In-Lieu Fee Program

Name:

Conservation Bank

Name:

Location:

Local Conservation Site(s)

Name:

Location:

Description:

Bridge/Structure Assessment Form

This form will be completed and submitted to the District Environmental Manager by the Contractor prior to conducting any work below the deck surface either from the underside, from activities above that bore down to the underside, or that could impact expansion joints, from deck removal on bridges, or from structure demolish. Each bridge/structure to be worked on must have a current bridge inspection. Any bridge/structure suspected of providing habitat for any species of bat will be removed from work schedules until such time that the DOT has obtained clearance from the US Fish and Wildlife Service, if required. Additional studies may be undertaken by the DOT to determine what species may be utilizing structures prior to allowing any work to proceed.

DOT Project # Des. No. 1700139	Water Body Flatrock River	Date/Time of Inspection 8/23/17
--	-------------------------------------	---

Route:	County:	Federal Structure ID:	Bat Indicators				Notes: (e.g., number & species of bats, if known. Include the results of thermal, emergent, or presence/absence summer survey)
Check all that apply. Presence of one or more indicators is sufficient evidence that bats may be using the structure.			Visual	Sound	Droppings	Staining	
		NBI No.					
SR 46 East	Bartholomew	10335					No presence observed
SR 46 West	Bartholomew	10340					No presence observed

Areas Inspected (Check all that apply)

Bridges		Culverts/Other Structures		Summary Info (circle all that apply)			
All vertical crevices sealed at the top and 0.5-1.25" wide & ≥4" deep	X	Crevices, rough surfaces or imperfections in concrete	X	Human disturbance or traffic under bridge/in culvert or at the structure	High	Low	None

All crevices >12" deep & not sealed	X	Spaces between walls, ceiling joists	X	Possible corridors for netting	None/poor	Marginal	Excellent
All guardrails	X			Evidence of bats using bird nests, if present?	Yes	No	
All expansion joints							
Spaces between concrete end walls and the bridge deck	X						
Vertical surfaces on concrete I-beams							

Assessment Conducted By: Josh Myers Signature(s): Josh Myers

District Environmental Use Only: Date Received by District Environmental Manager: _____

DOT Bat Assessment Form Instructions

1. Assessments must be completed a minimum of 1 year prior to conducting any work below the deck surface on all bridges that meet the physical characteristics described in the Programmatic Consultation, regardless of whether assessments have been conducted in the past. **Due to the transitory nature of bat use, a negative result in one year does not guarantee that bats will not use that structure in subsequent years.**
2. Any bridge/structure suspected of providing habitat for any species of bat will be removed from work schedules until such time that the DOT has obtained clearance from the USFWS, if required. Additional studies may be undertaken by the DOT to determine what species may be utilizing each structure identified as supporting bats prior to allowing any work to proceed.
3. Estimates of numbers of bats observed should be place in the Notes column.
4. Any questions should be directed to the District Environmental Manager.

From: [McWilliams, Robin](#)
To: [Toombs, Aaron](#)
Subject: Re: Early Coordination - (Des. No.: 1700139) SR 46 Grade Separation
Date: Monday, December 4, 2017 1:32:00 PM
Attachments: [image001.jpg](#)

Dear Aaron,

This responds to your recent letter, requesting our comments on the aforementioned project.

These comments have been prepared under the authority of the Fish and Wildlife Coordination Act (16 U.S.C. 661 et. seq.) and are consistent with the intent of the National Environmental Policy Act of 1969, the Endangered Species Act of 1973, and the U. S. Fish and Wildlife Service's Mitigation Policy.

The project is within the range of the Indiana bat (*Myotis sodalis*) and northern long-eared bat (*Myotis septentrionalis*) and should follow the new Indiana bat/northern long-eared bat programmatic consultation process, if applicable (*i.e.* a federal nexus is established). We will review that information once it is received. If it possible, if tree clearing is beyond 100 feet from the edge of pavement, the project may fall under the **formal** side of the rangewide programmatic.

Based on a review of the information you provided, the U.S. Fish and Wildlife Service has no other concerns regarding the project, as currently proposed; however, should new information arise pertaining to project plans or a revised species list be published, it will be necessary for the Federal agency to reinstate consultation. Standard recommendations are provided below.

We appreciate the opportunity to comment at this early stage of project planning. If project plans change such that fish and wildlife habitat may be affected, please re-coordinate with our office as soon as possible. If you have any questions about our recommendations, please call (812) 334-4261.

Sincerely,
Robin

Standard Recommendations:

1. Do not clear trees or understory vegetation outside the construction zone boundaries. (**This restriction is not related to the "tree clearing" restriction for potential Indiana Bat habitat.**)
2. Restrict below low-water work in streams to placement of culverts, piers, pilings and/or footings, shaping of the spill slopes around the bridge abutments, and placement of riprap.

Culverts should span the active stream channel, should be either embedded or a 3-sided or open-arch culvert, and be installed where practicable on an essentially flat slope. When an open-bottomed culvert or arch is used in a stream, which has a good natural bottom substrate, such as gravel, cobbles and boulders, the existing substrate should be left undisturbed beneath the culvert to provide natural habitat for the aquatic community.
3. Restrict channel work and vegetation clearing to the minimum necessary for installation of the stream crossing structure.
4. Minimize the extent of hard armor (riprap) in bank stabilization by using bioengineering techniques whenever possible. If rip rap is utilized for bank stabilization, extend it below low-water elevation to provide aquatic habitat.
5. Implement temporary erosion and sediment control methods within areas of disturbed soil. All disturbed soil areas upon project completion will be vegetated following INDOT's standard specifications.
6. Avoid all work within the inundated part of the stream channel (in perennial streams and larger intermittent streams) during the fish spawning season (April 1 through June 30), except for work within sealed structures such as caissons or cofferdams that were installed prior to the spawning season. No equipment shall be operated below Ordinary High Water Mark during this time unless the machinery is within the caissons or on the cofferdams.

7. Evaluate wildlife crossings under bridge/culverts projects in appropriate situations. Suitable crossings include flat areas below bridge abutments with suitable ground cover, high water shelves in culverts, amphibian tunnels and diversion fencing.

Robin McWilliams Munson

U.S. Fish and Wildlife Service
620 South Walker Street
Bloomington, Indiana 46403
812-334-4261 x. 207 Fax: 812-334-4273

Monday, Tuesday - 7:30a-3:00p
Wednesday, Thursday - telework 8:30a-3:00p

On Thu, Nov 30, 2017 at 5:42 PM, Toombs, Aaron <Aaron.Toombs@ucindy.com> wrote:

Dear Mr. McWilliams,

The attached early coordination letter has been provided for your review.

The above referenced project is located in Columbus, Bartholomew County, Indiana – Section 25, Township 9 North, Range 5 East, Columbus Township. The intersection is located along State Road 46 approximately 1.52 miles east of I-65.

The proposed scope of work includes constructing a grade separation carrying SR 46 over the Louisville and Indiana Railroad. It is anticipated that the existing intersection will need to be reconfigured to accommodate the grade separation.

Location, topographic, and aerial maps as well as ground level photographs can be downloaded from the following link:

<https://ucindy.sharefile.com/d-s8c230fc086148ab9>

Thank you in advance for you attention to this project. If you have any questions or concerns, if you require additional information, please feel free to contact me at your earliest convenience.

Sincerely,

Aaron Toombs

Environmental Specialist

United Consulting

1625 North Post Road

Indianapolis, IN 46219-1995

(317) 895-2585





Indiana Department of Environmental Management

We Protect Hoosiers and Our Environment.

100 North Senate Avenue - Indianapolis, IN 46204

(800) 451-6027 - (317) 232-8603 - www.idem.IN.gov

Indiana Department of Transportation
Greg Prince
185 Agrico Lane
Seymour, IN 47274

United Consulting
Aaron Toombs
8440 Allison Pointe Boulevard
Indianapolis, IN 46250

Date 9/6/18

To Engineers and Consultants Proposing Roadway Construction Projects:

RE: The City of Columbus plans to construct a grade separation structure carrying SR 46 over SR 11 and the Louisville and Indiana Railroad. The intersection is anticipated to be reconfigured to the south in order to accommodate the new structure.

This letter from the Indiana Department of Environmental Management (IDEM) serves as a standardized response to enquiries inviting IDEM comments on roadway construction, reconstruction, or other improvement projects within existing roadway corridors when the proposed scope of the project is beneath the threshold requiring a formal National Environmental Policy Act-mandated Environmental Assessment or Environmental Impact Statement. As the letter attempts to address all roadway-related environmental topics of potential concern, it is possible that not every topic addressed in the letter will be applicable to your particular roadway project.

For additional information on specific roadway-related topics of interest, please visit the appropriate Web pages cited below, many of which provide contact information for persons within the various program areas who can answer questions not fully addressed in this letter. Also please be mindful that some environmental requirements may be subject to change and so each person intending to include a copy of this letter in their project documentation packet is advised to download the most recently revised version of the letter; found at: <http://www.in.gov/idem/5283.htm>.

To ensure that all environmentally-related issues are adequately addressed, IDEM recommends that you read this letter in its entirety, and consider each of the following issues as you move

forward with the planning of your proposed roadway construction, reconstruction, or improvement project:

WATER AND BIOTIC QUALITY

1. Section 404 of the Clean Water Act requires that you obtain a permit from the U.S. Army Corps of Engineers (USACE) before discharging dredged or fill materials into any wetlands or other waters, such as rivers, lakes, streams, and ditches. Other activities regulated include the relocation, channelization, widening, or other such alteration of a stream, and the mechanical clearing (use of heavy construction equipment) of wetlands. Thus, as a project owner or sponsor, it is your responsibility to ensure that no wetlands are disturbed without the proper permit. Although you may initially refer to the U.S. Fish and Wildlife Service National Wetland Inventory maps as a means of identifying potential areas of concern, please be mindful that those maps do not depict jurisdictional wetlands regulated by the USACE or the Department of Environmental Management. A valid jurisdictional wetlands determination can only be made by the USACE, using the 1987 Wetland Delineation Manual.
 - o USACE recommends that you have a consultant check to determine whether your project will abut, or lie within, a wetland area. To view a list of consultants that have requested to be included on a list posted by the USACE on their Web site, see USACE [Permits and Public Notices](http://www.lrl.usace.army.mil/orf/default.asp) (<http://www.lrl.usace.army.mil/orf/default.asp>) and then click on "Information" from the menu on the right-hand side of that page. Their "Consultant List" is the fourth entry down on the "Information" page. Please note that the USACE posts all consultants that request to appear on the list, and that inclusion of any particular consultant on the list does not represent an endorsement of that consultant by the USACE, or by IDEM.
 - o Much of northern Indiana (Newton, Lake, Porter, LaPorte, St. Joseph, Elkhart, LaGrange, Steuben, and Dekalb counties; large portions of Jasper, Starke, Marshall, Noble, Allen, and Adams counties; and lesser portions of Benton, White, Pulaski, Kosciusko, and Wells counties) is served by the USACE District Office in Detroit (313-226-6812). The central and southern portions of the state (large portions of Benton, White, Pulaski, Kosciusko, and Wells counties; smaller portions of Jasper, Starke, Marshall, Noble, Allen, and Adams counties; and all other Indiana counties located in north-central, central, and southern Indiana) are served by the USACE Louisville District Office (502-315-6733).
 - o Additional information on contacting these U.S. Army Corps of Engineers (USACE) District Offices, government agencies with jurisdiction over wetlands, and other water quality issues, can be found at <http://www.in.gov/idem/4396.htm>. IDEM recommends that impacts to wetlands and other water resources be avoided to the fullest extent.
2. In the event a Section 404 wetlands permit is required from the USACE, you also must obtain a Section 401 Water Quality Certification from the IDEM Office of Water Quality Wetlands Program. To learn more about the Wetlands Program, visit: <http://www.in.gov/idem/4384.htm>.

3. If the USACE determines that a wetland or other water body is isolated and not subject to Clean Water Act regulation, it is still regulated by the state of Indiana . A State Isolated Wetland permit from IDEM's Office of Water Quality (OWQ) is required for any activity that results in the discharge of dredged or fill materials into isolated wetlands. To learn more about isolated wetlands, contact the OWQ Wetlands Program at 317-233-8488.
4. If your project will involve over a 0.5 acre of wetland impact, stream relocation, or other large-scale alterations to water bodies such as the creation of a dam or a water diversion, you should seek additional input from the OWQ Wetlands Program staff. Consult the Web at: <http://www.in.gov/idem/4384.htm> for the appropriate staff contact to further discuss your project.
5. Work within the one-hundred year floodway of a given water body is regulated by the Department of Natural Resources, Division of Water. The Division issues permits for activities regulated under the follow statutes:
 - o IC 14-26-2 Lakes Preservation Act 312 IAC 11
 - o IC 14-26-5 Lowering of Ten Acre Lakes Act No related code
 - o IC 14-28-1 Flood Control Act 310 IAC 6-1
 - o IC 14-29-1 Navigable Waterways Act 312 IAC 6
 - o IC 14-29-3 Sand and Gravel Permits Act 312 IAC 6
 - o IC 14-29-4 Construction of Channels Act No related code
 - o For information on these Indiana (statutory) Code and Indiana Administrative Code citations, see the DNR Web site at: <http://www.in.gov/dnr/water/9451.htm> . Contact the DNR Division of Water at 317-232-4160 for further information.
 - o The physical disturbance of the stream and riparian vegetation, especially large trees overhanging any affected water bodies should be limited to only that which is absolutely necessary to complete the project. The shade provided by the large overhanging trees helps maintain proper stream temperatures and dissolved oxygen for aquatic life.
6. For projects involving construction activity (which includes clearing, grading, excavation and other land disturbing activities) that result in the disturbance of one (1), or more, acres of total land area, contact the Office of Water Quality – Watershed Planning Branch (317/233-1864) regarding the need for of a Rule 5 Storm Water Runoff Permit. Visit the following Web page
 - o <http://www.in.gov/idem/4902.htm>
 - o To obtain, and operate under, a Rule 5 permit you will first need to develop a Construction Plan (<http://www.in.gov/idem/4917.htm#constreq>), and as described in 327 IAC 15-5-6.5 (<http://www.in.gov/legislative/iac/T03270/A00150> [PDF], pages 16 through 19). Before you may apply for a Rule 5 Permit, or begin construction, you must submit your Construction Plan to your county Soil and Water Conservation District (SWCD) (<http://www.in.gov/isda/soil/contacts/map.html>).
 - o Upon receipt of the construction plan, personnel of the SWCD or the Indiana Department of Environmental Management will review the plan to determine if it meets the

requirements of 327 IAC 15-5. Plans that are deemed deficient will require re-submittal. If the plan is sufficient you will be notified and instructed to submit the verification to IDEM as part of the Rule 5 Notice of Intent (NOI) submittal. Once construction begins, staff of the SWCD or Indiana Department of Environmental Management will perform inspections of activities at the site for compliance with the regulation.

- Please be mindful that approximately 149 Municipal Separate Storm Sewer System (MS4) areas are now being established by various local governmental entities throughout the state as part of the implementation of Phase II federal storm water requirements. All of these MS4 areas will eventually take responsibility for Construction Plan review, inspection, and enforcement. As these MS4 areas obtain program approval from IDEM, they will be added to a list of MS4 areas posted on the IDEM Website at: <http://www.in.gov/idem/4900.htm>.
 - If your project is located in an IDEM-approved MS4 area, please contact the local MS4 program about meeting their storm water requirements. Once the MS4 approves the plan, the NOI can be submitted to IDEM.
 - Regardless of the size of your project, or which agency you work with to meet storm water requirements, IDEM recommends that appropriate structures and techniques be utilized both during the construction phase, and after completion of the project, to minimize the impacts associated with storm water runoff. The use of appropriate planning and site development and appropriate storm water quality measures are recommended to prevent soil from leaving the construction site during active land disturbance and for post construction water quality concerns. Information and assistance regarding storm water related to construction activities are available from the Soil and Water Conservation District (SWCD) offices in each county or from IDEM.
7. For projects involving impacts to fish and botanical resources, contact the Department of Natural Resources - Division of Fish and Wildlife (317/232-4080) for addition project input.
 8. For projects involving water main construction, water main extensions, and new public water supplies, contact the Office of Water Quality - Drinking Water Branch (317-308-3299) regarding the need for permits.
 9. For projects involving effluent discharges to waters of the State of Indiana , contact the Office of Water Quality - Permits Branch (317-233-0468) regarding the need for a National Pollutant Discharge Elimination System (NPDES) permit.
 10. For projects involving the construction of wastewater facilities and sewer lines, contact the Office of Water Quality - Permits Branch (317-232-8675) regarding the need for permits.

AIR QUALITY

The above-noted project should be designed to minimize any impact on ambient air quality in, or near, the project area. The project must comply with all federal and state air pollution regulations. Consideration should be given to the following:

1. Regarding open burning, and disposing of organic debris generated by land clearing activities; some types of open burning are allowed (<http://www.in.gov/idem/4148.htm>) under specific conditions. You also can seek an open burning variance from IDEM.
 - However, IDEM generally recommends that you take vegetative wastes to a registered yard waste composting facility or that the waste be chipped or shredded with composting on site (you must register with IDEM if more than 2,000 pounds is to be composted; contact 317/232-0066). The finished compost can then be used as a mulch or soil amendment. You also may bury any vegetative wastes (such as leaves, twigs, branches, limbs, tree trunks and stumps) onsite, although burying large quantities of such material can lead to subsidence problems, later on.
 - Reasonable precautions must be taken to minimize fugitive dust emissions from construction and demolition activities. For example, wetting the area with water, constructing wind barriers, or treating dusty areas with chemical stabilizers (such as calcium chloride or several other commercial products). Dirt tracked onto paved roads from unpaved areas should be minimized.
 - Additionally, if construction or demolition is conducted in a wooded area where blackbirds have roosted or abandoned buildings or building sections in which pigeons or bats have roosted for 3-5 years precautionary measures should be taken to avoid an outbreak of histoplasmosis. This disease is caused by the fungus *Histoplasma capsulatum*, which stems from bird or bat droppings that have accumulated in one area for 3-5 years. The spores from this fungus become airborne when the area is disturbed and can cause infections over an entire community downwind of the site. The area should be wetted down prior to cleanup or demolition of the project site. For more detailed information on histoplasmosis prevention and control, please contact the Acute Disease Control Division of the Indiana State Department of Health at (317) 233-7272.
2. The U.S. EPA and the Surgeon General recommend that people not have long-term exposure to radon at levels above 4 pCi/L. (For a county-by-county map of predicted radon levels in Indiana, visit: <http://www.in.gov/idem/4145.htm>.)
 - The U.S. EPA further recommends that all homes (and apartments within three stories of ground level) be tested for radon. If in-home radon levels are determined to be 4 pCi/L, or higher, EPA recommends a follow-up test. If the second test confirms that radon levels are 4 pCi/L, or higher, EPA recommends the installation of radon-reduction measures. (For a list of qualified radon testers and radon mitigation (or reduction) specialists visit: http://www.in.gov/isdh/regsvcs/radhealth/pdfs/radon_testers_mitigators_list.pdf.) It also is recommended that radon reduction measures be built into all new homes, particularly in areas like Indiana that have moderate to high predicted radon levels.

- To learn more about radon, radon risks, and ways to reduce exposure visit: <http://www.in.gov/isdh/regsvcs/radhealth/radon.htm>, <http://www.in.gov/idem/4145.htm>, or <http://www.epa.gov/radon/index.html>.
3. With respect to asbestos removal: all facilities slated for renovation or demolition (except residential buildings that have (4) four or fewer dwelling units and which will not be used for commercial purposes) must be inspected by an Indiana-licensed asbestos inspector prior to the commencement of any renovation or demolition activities. If regulated asbestos-containing material (RACM) that may become airborne is found, any subsequent demolition, renovation, or asbestos removal activities must be performed in accordance with the proper notification and emission control requirements.
 - If no asbestos is found where a renovation activity will occur, or if the renovation involves removal of less than 260 linear feet of RACM off of pipes, less than 160 square feet of RACM off of other facility components, or less than 35 cubic feet of RACM off of all facility components, the owner or operator of the project does not need to notify IDEM before beginning the renovation activity.
 - For questions on asbestos demolition and renovation activities, you can also call IDEM's Lead/Asbestos section at 1-888-574-8150.
 - However, in all cases where a demolition activity will occur (even if no asbestos is found), the owner or operator must still notify IDEM 10 working days prior to the demolition, using the form found at <http://www.in.gov/icpr/webfile/formsdiv/44593.pdf>.
 - Anyone submitting a renovation/demolition notification form will be billed a notification fee based upon the amount of friable asbestos containing material to be removed or demolished. Projects that involve the removal of more than 2,600 linear feet of friable asbestos containing materials on pipes, or 1,600 square feet or 400 cubic feet of friable asbestos containing material on other facility components, will be billed a fee of \$150 per project; projects below these amounts will be billed a fee of \$50 per project. All notification remitters will be billed on a quarterly basis.
 - For more information about IDEM policy regarding asbestos removal and disposal, visit: <http://www.in.gov/idem/4983.htm>.
 4. With respect to lead-based paint removal: IDEM encourages all efforts to minimize human exposure to lead-based paint chips and dust. IDEM is particularly concerned that young children exposed to lead can suffer from learning disabilities. Although lead-based paint abatement efforts are not mandatory, any abatement that is conducted within housing built before January 1, 1978 , or a child-occupied facility is required to comply with all lead-based paint work practice standards, licensing and notification requirements. For more information about lead-based paint removal visit: <http://www.in.gov/isdh/19131.htm>.
 5. Ensure that asphalt paving plants are permitted and operate properly. The use of cutback asphalt, or asphalt emulsion containing more than seven percent (7%) oil distillate, is

prohibited during the months April through October. See 326 IAC 8-5-2 , Asphalt Paving Rule (<http://www.ai.org/legislative/iac/T03260/A00080.PDF>).

6. If your project involves the construction of a new source of air emissions or the modification of an existing source of air emissions or air pollution control equipment, it will need to be reviewed by the IDEM Office of Air Quality (OAQ). A registration or permit may be required under 326 IAC 2 (View at: www.ai.org/legislative/iac/t03260/a00020.pdf.) New sources that use or emit hazardous air pollutants may be subject to Section 112 of the Clean Air Act and corresponding state air regulations governing hazardous air pollutants.
7. For more information on air permits visit: <http://www.in.gov/idem/4223.htm>, or to initiate the IDEM air permitting process, please contact the Office of Air Quality Permit Reviewer of the Day at (317) 233-0178 or OAMPROD atdem.state.in.us.

LAND QUALITY

In order to maintain compliance with all applicable laws regarding contamination and/or proper waste disposal, IDEM recommends that:

1. If the site is found to contain any areas used to dispose of solid or hazardous waste, you need to contact the Office of Land Quality (OLQ) at 317-308-3103.
2. All solid wastes generated by the project, or removed from the project site, need to be taken to a properly permitted solid waste processing or disposal facility. For more information, visit <http://www.in.gov/idem/4998.htm>.
3. If any contaminated soils are discovered during this project, they may be subject to disposal as hazardous waste. Please contact the OLQ at 317-308-3103 to obtain information on proper disposal procedures.
4. If PCBs are found at this site, please contact the Industrial Waste Section of OLQ at 317-308-3103 for information regarding management of any PCB wastes from this site.
5. If there are any asbestos disposal issues related to this site, please contact the Industrial Waste Section of OLQ at 317-308-3103 for information regarding the management of asbestos wastes (Asbestos removal is addressed above, under Air Quality).
6. If the project involves the installation or removal of an underground storage tank, or involves contamination from an underground storage tank, you must contact the IDEM Underground Storage Tank program at 317/308-3039. See: <http://www.in.gov/idem/4999.htm>.

FINAL REMARKS

Should you need to obtain any environmental permits in association with this proposed project, please be mindful that IC 13-15-8 requires that you notify all adjoining property owners and/or

occupants within ten days your submittal of each permit application. However, if you are seeking multiple permits, you can still meet the notification requirement with a single notice if all required permit applications are submitted with the same ten day period.

Should the scope of the proposed project be expanded to the extent that a National Environmental Policy Act Environmental Assessment (EA) or Environmental Impact Statement (EIS) is required, IDEM will actively participate in any early interagency coordination review of the project.

Meanwhile, please note that this letter does not constitute a permit, license, endorsement or any other form of approval on the part of the Indiana Department of Environmental Management regarding any project for which a copy of this letter is used. Also note that it is the responsibility of the project engineer or consultant using this letter to ensure that the most current draft of this document, which is located at <http://www.in.gov/idem/5284.htm>, is used.

Signature(s) of the Applicant

I acknowledge that the following proposed roadway project will be financed in part, or in whole, by public monies.

Project Description

The City of Columbus plans to construct a grade separation structure carrying SR 46 over SR 11 and the Louisville and Indiana Railroad. The intersection is anticipated to be reconfigured to the south in order to accommodate the new structure.

With my signature, I do hereby affirm that I have read the letter from the Indiana Department of Environment that appears directly above. In addition, I understand that in order to complete that project in which I am interested, with a minimum of impact to the environment, I must consider all the issues addressed in the aforementioned letter, and further, that I must obtain any required permits.

Date: 9/11/18


Signature of the INDOT
Project Engineer or Other Responsible Agent



Greg Prince

Date: 09/06/2018

Signature of the
For Hire Consultant



Aaron M. Toombs

Organization and Project Information

Project ID: 17-703
Des. ID: DES. No.: 1700139
Project Title: SR 46 & SR 11 Interchange Improvements
Name of Organization: United Consulting
Requested by: Aaron Toombs

Environmental Assessment Report

1. Geological Hazards:
 - High liquefaction potential
 - Floodway
2. Mineral Resources:
 - Bedrock Resource: Moderate Potential
 - Sand and Gravel Resource: High Potential
3. Active or abandoned mineral resources extraction sites:
 - Petroleum Exploration Wells

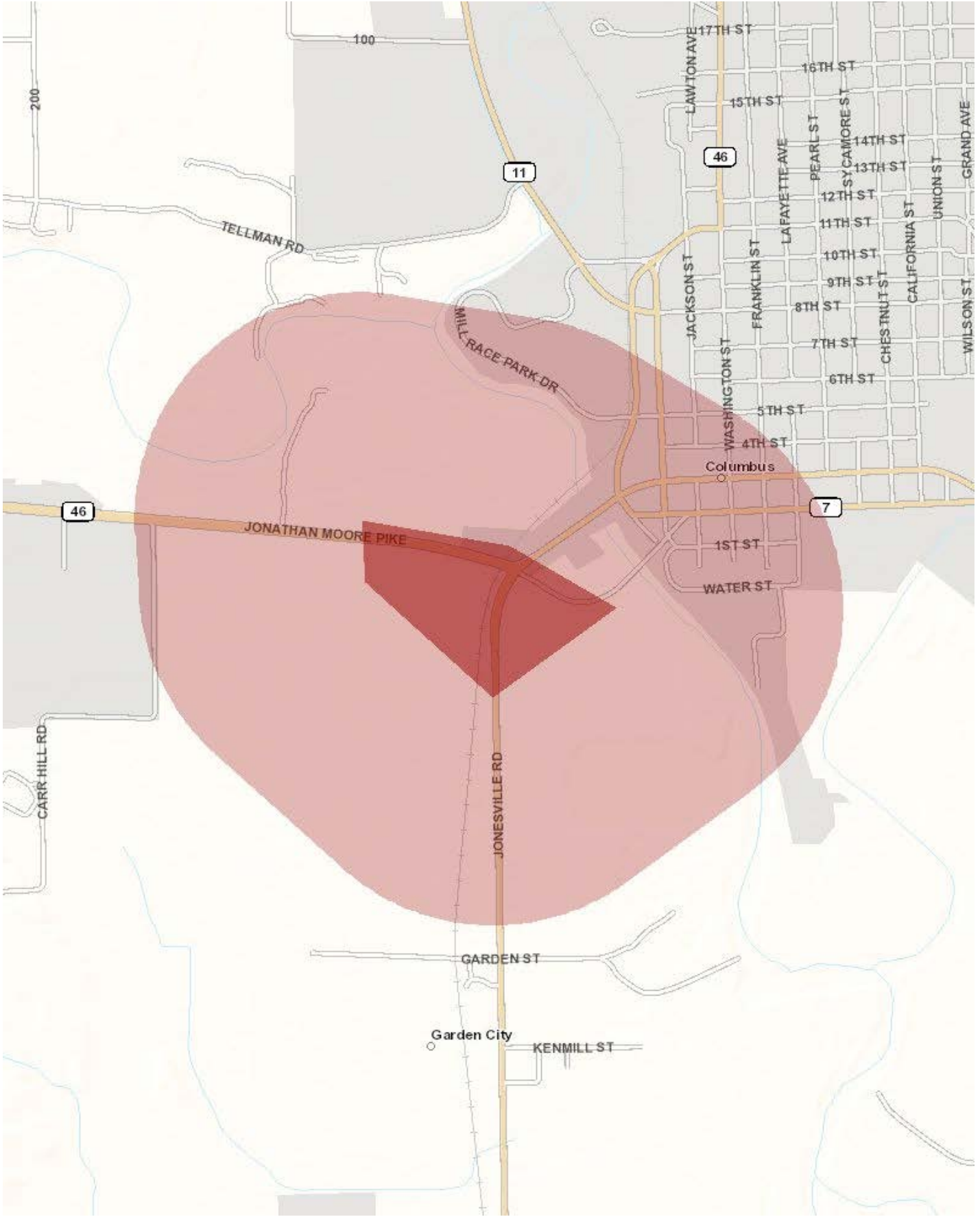
*All map layers from Indiana Map (maps.indiana.edu)

DISCLAIMER:

This document was compiled by Indiana University, Indiana Geological Survey, using data believed to be accurate; however, a degree of error is inherent in all data. This product is distributed "AS-IS" without warranties of any kind, either expressed or implied, including but not limited to warranties of suitability to a particular purpose or use. No attempt has been made in either the design or production of these data and document to define the limits or jurisdiction of any federal, state, or local government. The data used to assemble this document are intended for use only at the published scale of the source data or smaller (see the metadata links below) and are for reference purposes only. They are not to be construed as a legal document or survey instrument. A detailed on-the-ground survey and historical analysis of a single site may differ from these data and this document.

This information was furnished by Indiana Geological Survey
Address: 611 N. Walnut Grove Avenue, Bloomington, IN 47405-2208
Email: IGSEnvir@indiana.edu
Phone: 812 855-7428

Date: September 11, 2018



Metadata:

- https://maps.indiana.edu/metadata/Geology/Petroleum_Wells.html
- https://maps.indiana.edu/metadata/Geology/Seismic_Earthquake_Liquefaction_Potential.html
- https://maps.indiana.edu/metadata/Geology/Industrial_Minerals_Sand_Gravel_Resources.html
- https://maps.indiana.edu/metadata/Hydrology/Floodplains_FIRM.html
- https://maps.indiana.edu/metadata/Geology/Bedrock_Geology.html

September 20, 2018

Michael S. Oliphant
Environmental Specialist
United Consulting
1625 North Post Road
Indianapolis, Indiana 46219

Dear Mr. Oliphant:

The proposed project to perform a grade separation on State Road 46 in Columbus, Bartholomew County, Indiana, (Des No. 1700139) as referred to in your letter received August 16, 2018, will not cause a conversion of prime farmland.

If you need additional information, please contact Rick Neilson at 317-295-5875.

Sincerely,

JERRY RAYNOR

Digitally signed by JERRY
RAYNOR
Date: 2018.09.24 09:28:17 -04'00'

JERRY RAYNOR
State Conservationist

Enclosure

Helping People Help the Land.



USDA is an equal opportunity provider, employer and lender.



MEMORANDUM

TO: Aaron Toombs
FROM: Cory Fischer, Floodplain Manager
DATE: October 31, 2018
RE: DES. No. 1700139- State Road 46 State Road 11 Intersection Improvements

This memorandum is in reference to the State Road 46 State Road 11 Intersection Railroad Overpass Improvements, in the City of Columbus.

With reference to the presence of the floodplain, I have the following comments regarding the information that has been provided.

- a. As shown on Flood Insurance Rate Map (FIRM) 18005C0133E, effective December 9, 2014, (Revised April 17, 2018 LOMR (17-05-4135P)) the project scope is located in Flood Zone AE, which is more commonly called the 100-year floodway fringe, as well as Zone AE Floodway. In the information provided (page 6) the FIRM Date is listed as June 2016, is there a reason the most up to date FIRM panel is not being used? If not please update to reflect the most effective information that was revised in April of 2018.
- b. Zoning Ordinance Section 4.7(l)(1)(g) grants streets, roads, bridges, pedestrian paths, and related infrastructure to be exempt from the development prohibition in the floodway, provided that all necessary IDNR approvals are obtained. The Planning Department will need to review this documentation prior to the commencement of construction activities to ensure compliance with the floodplain regulations.
- c. According to the Flood Insurance Study, revised to reflect LOMR (17-05-4135P), the BFE is approximately 621.1 feet (NAVD88). The City of Columbus has developed a Flood Risk Management Plan to help guide floodplain development in the City Jurisdiction. One goal of the plan is to provide flood free access along critical transportation routes when opportunities arise, Currently SR11 and SR46 both flood periodically throughout the year. This project presents an opportunity to pursue the creation of flood-free routes in this area, have these elevations been discuss and what decisions have been made?

Appendix D

Section 106

**FEDERAL HIGHWAY ADMINISTRATION'S
SECTION 4(F) COMPLIANCE REQUIREMENTS (FOR HISTORIC PROPERTIES) AND
SECTION 106 FINDINGS AND DETERMINATIONS
AREA OF POTENTIAL EFFECTS
ELIGIBILITY DETERMINATIONS
EFFECT FINDING
STATE ROAD 46 GRADE SEPARATION PROJECT
IN THE CITY OF COLUMBUS, BARTHOLOMEW COUNTY, INDIANA
DES NO.: 1700139**

AREA OF POTENTIAL EFFECTS

(Pursuant to 36 CFR § 800.4(a)(1))

The Area of Potential Effects (APE) was drawn as a one-quarter mile buffer and extended approximately 500 feet to the north to account for potential traffic increases along Second Street (eastbound State Road [SR] 46), Third Street (westbound SR 46), and Washington Street. The APE was further expanded to include adjacent properties along SR 11 to Garden Road and along Fifth Street and Lafayette Avenue. The APE for archaeological resources was defined as the project footprint. (See Appendix A: Maps & Plans.)

ELIGIBILITY DETERMINATIONS

(Pursuant to 36 CFR § 800.4(c)(2)). Eleven properties are listed, or eligible for listing, in the National Register of Historic Places (NRHP) within the APE for this undertaking: Columbus Historic District (National Register [NR]-0373); Bartholomew County Courthouse (NR-0131); Haw Creek Leather Company (NR-1404); The Republic (NR-2354/National Historic Landmark [NHL]); Third Street/SR 46 Bridge (Bridge No. 04-03-03782BWBL; NBI No.: 10340); City Power House Building (Indiana Historic Sites and Structures Inventory [IHSSI] No.: 005-130-45059), Pennsylvania Railroad Bridge (IHSSI No.: 005-130-25031), Columbus City Hall (NR-0134), McEwen-Samuels-Marr Home (NR-0135); First Christian Church (NR-1532/NHL); and Columbus Post Office (IHSSI No.: 005-130-45055).

Columbus Historic District – The Columbus Historic District includes the city's historic commercial center in its southwest corner, as well as more than forty square blocks of residences. The district was listed in the NRHP in 1980 with significance in the areas of Commerce and Architecture (Criteria A and C). The period of significance is 1821 to 1942.

Bartholomew County Courthouse – The Bartholomew County Courthouse was designed by architect Isaac Hodgson in the Second Empire style and completed in 1874. It was listed in the NRHP in 1978 with significance in the areas of Politics/Government and Architecture (Criteria A and C) and the period of significance is 1871-1874.

Haw Creek Leather Company – The Haw Creek Leather Company is a two-story, brick industrial building constructed in two sections in 1914 and 1916. The building was listed in the NRHP in 1998 with significance in the areas of Industry and Architecture (Criteria A and C) and the period significance spans from 1914 to 1947.

The Republic – The Republic building was constructed in 1971 and designed by Myron Goldsmith of the Chicago-based architectural firm of Skidmore, Owings, & Merrill. The property was listed in the NRHP and NHL in 2012, with Architecture and Landscape Architecture significance (Criterion C). The period of significance is 1969-1971.

Third Street/SR 46 Bridge – The Third Street/SR 46 Bridge (Bridge No.: 04-03-03782BWBL; NBI No.: 10340) is an eleven-span continuous steel beam stringer bridge constructed in 1949. It was determined eligible for listing in the NRHP as part of the *Indiana Historic Bridge Inventory* under Criterion C for being “built during the initial period of development or application of standards for its type in Indiana.” In addition, “this bridge displays exceptional overall or main span length for its type representing an innovative design and/or construction method.” Its period of significance is 1949.

City Power House Building – The City Power House Building is a Romanesque Revival-style utility building completed in 1903 and located on a steep rise above the East Fork of the White River on the edge of downtown Columbus. The building was designed by architect Harrison Albright. It is eligible for the NRHP under Criterion A for its association with Politics/Government as an example of public works construction in the City of Columbus in the early-twentieth century. The City Power House Building is also eligible under Criterion C for Architecture. The period of significance is 1903 to 1951.

Pennsylvania Railroad Bridge – The Pennsylvania Railroad Bridge is a fifteen-span plate girder bridge constructed circa 1929. The structure carries approximately 860 feet of the former Pennsylvania Railroad Line (today, the Louisville & Indiana Railroad) over the East Fork of the White River. The plate girder structure is eligible for listing in the NRHP under Criterion C for its exceptional overall length and as a good example of a riveted girder bridge. The period of significance is circa 1929, the approximate date of construction.

Columbus City Hall – The Columbus City Hall is a Romanesque civic building constructed in 1895 and designed by architect Charles Sparrell. It was listed in the State Register in 1976 and in the NRHP in 1979 with significance in the areas of Politics/Government and Architecture (Criteria A and C). The period of significance is 1895, the date of construction.

McEwen-Samuels-Marr Home – The McEwen-Samuels-Marr Home is an Italianate residential building constructed in 1864 (back portion) and circa 1875 (front portion). It was listed in the State Register in 1976 and in the NRHP in 1978 with significance in the areas of Commerce and Architecture (Criteria A and C). The period of significance is 1864/1875, the dates of construction.

First Christian Church – The First Christian Church was completed in 1942 by reknown Modern architects Eiel Saareinen and Eero Saareinen. The building was listed in the NHL and in the NRHP under Criterion C with the period of significance being 1942, the beginning of construction.

Columbus Post Office – The Columbus Post Office was dedicated in July 1970 and designed by architect Kevin Roche of Roche Dinkeloo. The structural engineer was Henry A. Pfisterer and the mechanical engineering firm was Cosetini Associates. The Modern, steel frame building encompasses an entire block between Fifth Street, Jackson Street, Fourth Street, and Brown Street. The building is eligible under Criteria A and C for Architecture and as an example of corporate social responsibility (Social History); the period of significance is circa 1970, the date of construction.

In addition, **Site 12B1024** is a previously recorded Late Archaic artifact scatter within the archaeological APE. SHPO stated there is insufficient information to determine the eligibility of Site 12B1024. This cannot be avoided, so it must be subjected to Phase II archaeological investigations to determine eligibility. The investigation of archaeological resources is ongoing and the eligibility of archaeological resources located within the archaeological APE will be determined at a later date.

EFFECT FINDING

Columbus Historic District – No Adverse Effect

Bartholomew County Courthouse – No Adverse Effect

Haw Creek Leather Company – No Adverse Effect

The Republic – No Adverse Effect

Third Street/SR 46 Bridge – No Adverse Effect

City Power House Building – No Adverse Effect

Pennsylvania Railroad Bridge - No Adverse Effect

Columbus City Hall – No Adverse Effect

McEwen-Samuels-Marr Home - No Adverse Effect

First Christian Church - No Adverse Effect

Columbus Post Office - No Adverse Effect

Site 12B1024 – Potential Adverse Effect

Federal Highway Administration (FHWA) has determined a finding of “Adverse Effect” is appropriate for this undertaking due to ongoing archaeological investigations.

FHWA respectfully requests the Indiana State Historic Preservation Office provide written concurrence with the Section 106 determination of Adverse Effect based on the fact that the effect of the undertaking on archaeological resources is not yet known. Eligibility of individual archaeological sites will be addressed at a later date. FHWA intends to address any archaeological work that may need to be completed through stipulations in a Memorandum of Agreement.

SECTION 4(F) COMPLIANCE REQUIREMENTS (for historic properties)

Columbus Historic District - This undertaking will not convert property from the Columbus Historic District, a Section 4(f) historic property, to a transportation use. FHWA has determined the appropriate Section 106 finding is “No Adverse Effect”; therefore, no Section 4(f) evaluation is required for the Columbus Historic District.

Bartholomew County Courthouse – This undertaking will not convert property from the Bartholomew County Courthouse, a Section 4(f) historic property, to a transportation use. FHWA has determined the appropriate Section 106 finding is “No Adverse Effect”; therefore, no Section 4(f) evaluation is required for the Bartholomew County Courthouse.

Haw Creek Leather Company – This undertaking will not convert property from the Haw Creek Leather Company, a Section 4(f) historic property, to a transportation use. FHWA has determined the appropriate Section 106 finding is “No Adverse Effect”; therefore, no Section 4(f) evaluation is required for the Haw Creek Leather Company.

The Republic – This undertaking will not convert property from the Republic, a Section 4(f) historic property, to a transportation use. FHWA has determined the appropriate Section 106 finding is “No Adverse Effect”; therefore, no Section 4(f) evaluation is required for the Republic.

Third Street/SR 46 Bridge – This undertaking will not convert property from the Third Street/SR 46 Bridge, a Section 4(f) historic property, to a transportation use. FHWA has determined the appropriate Section 106 finding is “No Adverse Effect”; therefore, no Section 4(f) evaluation is required for the Third Street/SR 46 Bridge.

City Power House Building – This undertaking will not convert property from the City Power House Building, a Section 4(f) historic property, to a transportation use. FHWA has determined the appropriate Section 106 finding is “No Adverse Effect”; therefore, no Section 4(f) evaluation is required for the City Power House Building.

Pennsylvania Railroad Bridge - This undertaking will not convert property from the Pennsylvania Railroad Bridge, a Section 4(f) historic property, to a transportation use. FHWA has determined the appropriate Section 106 finding is “No Adverse Effect”; therefore, no Section 4(f) evaluation is required for the Pennsylvania Railroad Bridge.

Columbus City Hall - This undertaking will not convert property from the Columbus City Hall, a Section 4(f) historic property, to a transportation use. FHWA has determined the appropriate Section 106 finding is “No Adverse Effect”; therefore, no Section 4(f) evaluation is required for the Columbus City Hall.

McEwen-Samuels-Marr Home - This undertaking will not convert property from the McEwen-Samuels-Marr Home, a Section 4(f) historic property, to a transportation use. FHWA has determined the appropriate Section 106 finding is “No Adverse Effect”; therefore, no Section 4(f) evaluation is required for the McEwen-Samuels-Marr Home.

First Christian Church - This undertaking will not convert property from the First Christian Church, a Section 4(f) historic property, to a transportation use. FHWA has determined the appropriate Section 106 finding is “No Adverse Effect”; therefore, no Section 4(f) evaluation is required for the First Christian Church.

Columbus Post Office - This undertaking will not convert property from the Columbus Post Office, a Section 4(f) historic property, to a transportation use. FHWA has determined the appropriate Section 106 finding is "No Adverse Effect"; therefore, no Section 4(f) evaluation is required for the Columbus Post Office.

FHWA respectfully requests the Indiana State Historic Preservation Officer to provide written concurrence with the Section 106 determination of Adverse Effect based on the fact that the effect of the undertaking on archaeological resources is not yet known. FHWA respectfully request the Indiana State Historic Preservation Office to provide written concurrence that no adverse effect will occur to any aboveground resources. FHWA intends to address any archaeological work that may need to be completed in a Memorandum of Agreement.

Michelle Allen

MS
Mayela Sosa
Division Administrator
FHWA-IN Division

February 12, 2019

Approved Date

**FEDERAL HIGHWAY ADMINISTRATION
DOCUMENTATION OF SECTION 106 FINDING OF
ADVERSE EFFECT
SUBMITTED TO THE STATE HISTORIC PRESERVATION OFFICER
PURSUANT TO 36 CFR 800.6(a)(3)
STATE ROAD 46 GRADE SEPARATION PROJECT
IN THE CITY OF COLUMBUS, BARTHOLOMEW COUNTY, INDIANA
DES NO.: 1700139**

1. DESCRIPTION OF THE UNDERTAKING

The Indiana Department of Transportation (INDOT), with funding from the Federal Highway Administration (FHWA) and funding support from the City of Columbus, proposes to proceed with a grade separation of State Road (SR) 46 at SR 11 over the Louisville & Indiana Railroad in the City of Columbus, Bartholomew County, Indiana.

The purpose of the project is to provide the public a safer intersection crossing. The need for this project results from an anticipated increase in rail traffic from the Louisville & Indiana Railroad. The railroad crossing at SR 46 is anticipated to see an increase of trains from an average of 8 per day to 22 per day. Safety, delays to motorists, and emergency access are all expected to have negative impacts as a result. Therefore, this project will construct a grade separation of SR 46 from the railroad corridor. Due to the proximity of the SR 46/SR 11 intersection, it will need reconfiguration as part of the grade separation. The existing SR 46/SR 11 signalized intersection exhibits its own congestion and high crash rates that will be improved through this project.

This section of SR 46 is classified as a "Principal Arterial - Other." The existing SR 46 approach cross section consists of four, 12-foot lanes, bordered by 10-foot outside shoulders and a 16-foot median. Roadside ditches exist along SR 46 in the vicinity of the intersection. The approximate existing right-of-way is 100 feet on each side of the centerline throughout the project area. The existing SR 11 approach cross section consists of two, 12 foot-wide lanes, bordered by two foot outside shoulders without a median. Roadside ditches exist along SR 11 in the vicinity of the intersection. The approximate existing right-of-way is 25 feet on each side of the centerline throughout the project area.

Under the preferred alternative, the proposed project would involve a grade separation intended to carry SR 46 over the Louisville & Indiana Railroad. The existing intersection of SR 46 and SR 11 will need to be reconfigured to accommodate the proposed grade separation. The structure would be approximately 34 feet from the railroad track to the top of the bridge deck and approximately 45 feet from SR 11 to the top of the bridge deck. Single-arm cobra head street lights would be installed on the bridge deck with height of 25 feet. Elsewhere, the other roadways will have lights installed at the normal 40 feet height (similar to the present street lights). It has not been a goal of this project to construct a "signature" bridge, and so there will not be any architectural enhancements installed to it.

The Area of Potential Effects (APE) is “the geographic area or areas within which an undertaking may directly or indirectly cause alterations in the character or use of historic properties, if any such properties exist” (36 CFR § 800.16[d]). The APE was drawn as a one-quarter mile buffer and extended approximately 500 feet to the north to account for potential traffic increases along Second Street (eastbound SR 46), Third Street (westbound SR 46), and Washington Street. The APE was further expanded to include adjacent properties along SR 11 to Garden Road and along Fifth Street and Lafayette Avenue. SHPO concurred with the APE in a letter dated June 21, 2018. The APE for archaeological resources was defined as the project footprint. (See Appendix A: Maps & Plans and Appendix B: Correspondence.)

2. EFFORTS TO IDENTIFY HISTORIC PROPERTIES

Pursuant to 36 CFR § 800.4(b), Weintraut & Associates, Inc. (W&A) identified and evaluated historic properties. W&A historians reviewed the National Register of Historic Places (NRHP), Indiana Register of Historic Sites and Structures (State Register), the Indiana Historic Sites and Structures Inventory (IHSSI), the State Historical Architectural and Archaeological Research Database (SHAARD), the *Indiana Statewide Historic Bridge Inventory*, and the *Bartholomew County: Interim Report* for previously identified properties. Historians also reviewed prior Section 106 studies completed by W&A in the general area.

An archaeologist for W&A completed an archaeological records check on August 3, 2017, of the project area using SHAARD. The results of the search showed that portions of the project area had been previously surveyed by professional archaeologists and that eight recorded archaeological sites are located within the project area: 12B0918, 12B0919, 12B0920, 12B0921, 12B0936, 12B1022, 12B1023, and 12B1024. Three of these sites, 12B0936, 12B1023, and 12B1024, had been recommended for further investigation. Sites 12B0918, 12B0919, 12B0920, 12B0921 and 12B1022 had been recommended for no further investigation. (See Appendix C: Report Summaries.)

Historians for W&A conducted a field survey of aboveground resources on September 20, 2017. Historians photographed and recorded survey notes for all properties that would be more than fifty years of age within the APE by the time of the project’s letting. Representative views and photographs of individual properties were taken, and historians scrutinized individual properties that possessed historic and/or architectural significance carefully. In addition, they carefully considered collections of buildings and structures to evaluate the architectural and thematic continuity of properties as districts while in the field. (See Appendix D: Photographs.)

The Phase Ia archaeological field reconnaissance of the project area began on October 30, 2017, and was completed on March 19, 2018. During the Phase Ia archaeological field reconnaissance, two of the eight previously recorded sites were relocated and reinvestigated, and sixteen previously undocumented sites were recorded. Additionally, an area of deep alluvial soil was identified. (See Appendix C: Report Summaries.)

W&A completed a Historic Property Report (HPR) in January 2018. Historians surveyed twenty-four resources within the APE. Of those, eight merited a rating of Contributing or higher, per the IHSSI. Four of those eight resources are listed in the NRHP and/or have been designated as a National Historic Landmark (NHL): Columbus Historic District (NR-0373), Bartholomew County Courthouse (NR-0131), Haw Creek Leather Company (NR-1404),

The Republic (NR-2354/NHL). One resource had been previously determined eligible for listing in the NRHP per the *Indiana Historic Bridge Inventory*: Third Street/SR 46 Bridge (Bridge No. 04-03-03782BWBL; NBI No.: 10340). In addition, historians recommended two resources eligible for listing in the NRHP: City Power House Building (IHSSI No.: 005-130-45059) and Pennsylvania Railroad Bridge (IHSSI No.: 005-130-25031). (See Appendix C: Report Summaries.)

On January 26, 2018, W&A sent an email notification of the Early Coordination Letter (ECL, dated January 23, 2018) and the Historic Property Report (HPR; Molloy and Natali, January 2018) (available on the INSCOPE website) and invited the following individuals or organizations to join Section 106 consultation: Bartholomew County History Center, Bartholomew County Historian, Bartholomew County Genealogical Society, Board of Commissioners of Bartholomew County, Columbus Area Metropolitan Planning Organization, Indiana Landmarks (Central Regional Office), Dr. James Cooper, Historic SPANS Task Force, and the National Park Service. INDOT-CRO invited the Delaware Nation of Oklahoma, Eastern Shawnee Tribe of Oklahoma, Miami Tribe of Oklahoma, Peoria Tribe of Indians of Oklahoma, and Pokagon Band of Potawatomi Indians to join consultation in an email sent on the same day. The Indiana State Historic Preservation Officer (SHPO) is a designated consulting party and was sent a paper copy of the HPR and ECL. (See Appendix B: Correspondence and Appendix E: Consulting Parties.)

The National Park Service (NPS) declined the invitation to join consultation in an email dated January 26, 2018. (See Appendix B: Correspondence.)

The Miami Tribe of Oklahoma accepted the invitation to join consultation in an email and letter sent January 31, 2018. The Miami offered “no objection to the project at that time, as we are not currently aware of existing documentation directly linking a specific Miami cultural or historic site to the project site.” (See Appendix B: Correspondence.)

On February 2, 2018, Indiana Landmarks accepted the invitation to join consultation and concurred with the APE and recommendations of the HPR. (See Appendix B: Correspondence.)

The Delaware Nation replied to the ECL via email on February 6, 2018, and stated “[w]ith the information you have submitted we can concur at present with this proposed plan. . .” and requested to be informed of the project progress or any new discoveries. (See Appendix B: Correspondence.)

The SHPO replied to the ECL and HPR on February 23, 2018. SHPO recommended that Landmark Columbus, the mayor of the City of Columbus, the engineer of the City of Columbus, and the Bartholomew County Engineer be invited to join consultation. The SHPO also noted the position of Bartholomew County historian was currently vacant. (See Appendix B: Correspondence.)

In the same letter, SHPO stated it may be appropriate to expand the APE. SHPO also stated that it would be important to determine if the nearby stairs and low-head dam contribute to the City Power House, especially in the event the resource would incur direct effects from the project. For the purposes of this project, SHPO stated

“we think it is sufficient to draw the historic property boundary around only the City Power House building, as it is depicted in the HPR.” SHPO also concurred with the identification of listed NRHP and NHL properties in the report as well as the recommendations of eligibility and ineligibility. (See Appendix B: Correspondence.)

Regarding archaeology, SHPO suggested surveying a larger area than the project location shown, “in order to avoid having to delay the conclusion of the Section 106 process or reopen it after a finding is made.” The SHPO advised of a dump near the project location and noted that “verification of the locations of the dumps might aid the qualified professional archaeologist in determining where a field reconnaissance survey might be necessary.” (See Appendix B: Correspondence.)

In the letter of February 23, 2018, SHPO also requested information about the elevated structure and the interchange. (See Appendix B: Correspondence.)

On February 27, 2018, W&A invited Landmark Columbus, the Mayor of Columbus, City Engineer, Bartholomew County Highway Department, Columbus Area Chamber of Commerce, and Columbus Area Visitors Center to join Section 106 consultation. W&A also invited the director of the Columbus Redevelopment Department to join consultation on March 23, 2018, following a discussion with SHPO at a meeting for an unrelated project. (See Appendix B: Correspondence.)

In consideration of SHPO’s comments, W&A expanded the APE to the south along SR 11 and to the north along Fifth Street and Lafayette Road. W&A conducted an additional site survey on March 8, 2018, and prepared an Additional Information Memorandum—No. 1 in April 2018. Historians identified three resources within the expanded APE listed in the NRHP and/or NHL that are within the boundaries of the Columbus Historic District (NR-0373): Columbus City Hall (NR-0134), McEwen-Samuels-Marr Home (NR-0135), and First Christian Church (NR-1532, NHL). In addition, historians recommended the Columbus Post Office (IHSSI No.: 005-130-45055) as eligible for listing in the NRHP. (See Appendix B: Correspondence.)

INDOT prepared a letter, dated May 3, 2018, responding to comments raised in SHPO’s letter of February 23, 2018. The letter also conveyed the Additional Information Memorandum—No. 1 (Natali, April 2018). W&A notified consulting parties the letter was available for review on INSCOPE on May 21, 2018, and sent a paper copy of the documentation to SHPO on the same day. As noted above, NPS declined to participate in consultation following the distribution of the ECL and HPR; however, due the expansion of the APE and identification of an additional NHL property, W&A also notified NPS of the availability of the letter and Additional Information Memorandum—No. 1. NPS replied on May 22 and stated that no NHL property “in particular is affected” by this project and also expressed confidence that the “IN SHPO and preservationists in Columbus will be proactive [if] there is any concern.” (See Appendix B: Correspondence and Appendix C: Report Summaries.)

Archaeologists for W&A completed a Phase Ia Archaeological Records Check and Field Reconnaissance Report in May 2018 (Goldbach and Arnold, May 2018). Specifically, W&A made the following recommendations: sites 12B0918, 12B0919, 12B0920, and 12B0921 are assumed to be destroyed and are not recommended for further

work; sites 12B0936 and 12B1023 will not be impacted and no further work is required; no further work for site 12B1022; but site 12B1024 must be avoided by project activities or subjected to Phase II testing. All of the newly recorded sites were recommended not eligible for the NRHP or Indiana Register of Historic Sites and Structures (IRHSS) and no further work was recommended. W&A sent a paper copy of the report to SHPO on June 11, 2018. INDOT-CRO notified Tribal consulting parties of the report's availability on that same day. (See Appendix C: Report Summaries and Appendix B: Correspondence.)

In an email and letter dated June 19, 2018, Indiana Landmarks concurred with the eligibility recommendations conveyed in the Additional Information Memorandum—No. 1 (Natali, April 2018). (See Appendix B: Correspondence.)

On June 21, 2018, SHPO responded to the Additional Information Memorandum and INDOT's letter of May 3, 2018. SHPO agreed with the expanded APE and recommendations of eligibility, as discussed in the Additional Information Memorandum. SHPO also stated that since "the City Power House and associated low-head dam are not anticipated to incur any direct impacts from this project, we are satisfied that the . . . [NRHP]. . . eligibility evaluation and historic boundary. . . in the [HPR] . . . are appropriate, for the purposes of this Section 106 review." SHPO also requested information about additional alternatives, when available, and acknowledged receipt of the Phase Ia Archaeology Report. (See Appendix B: Correspondence.)

In a letter dated July 16, 2018, SHPO commented on the Phase Ia Archaeology Report. SHPO concurred that sites 12B0918, 12B0919, 12B0920, 12B0921, and 12B1022 "do not appear eligible"; no further archaeological investigations appear necessary at these locations." Regarding sites 12B0936 and 12B1023, SHPO stated "there is insufficient information...to determine whether they are eligible for inclusion in the NRHP. However, it is our understanding that project-related ground-disturbing activities in the vicinity [of sites 12B0936 and 12B1023] are not proposed for depths greater than 15 inches below ground surface—that is, above the depths at which intact prehistoric deposits were encountered during the original 1993 archaeological investigations." Depths greater than fifteen inches at sites 12B0936 and 12B1023 must be avoided or subjected to further archaeological investigations. (See Appendix B: Correspondence.)

SHPO stated there is insufficient information to determine the eligibility of site 12B1024 and concurred with the recommendation that this site must be avoided or subjected to Phase II archaeological investigations to determine eligibility. SHPO also recommended that portions of site 12B1511 within the project area must either be avoided by project activities or subjected to Phase Ic investigation. SHPO then concurred with the recommendation that sites 12B1512 to 12B1516, 12B1518 to 12B1524, 12B1528, and 12B1529 do not appear to be eligible for inclusion in the NRHP and no further archaeology investigations appear necessary at these locations. SHPO stated there is insufficient information to determine if site 12B1517 is eligible for the NRHP; portions of this site within the project area do not appear to have research value but portions of the site outside the proposed project area must either be avoided by project activities or subjected to additional investigation. (See Appendix B: Correspondence.)

On August 24, 2018, Debra Haza, a local resident, called W&A and requested to be added as a consulting party. (See Appendix B: Correspondence and Appendix E: Consulting Parties.)

On September 26 through 28, 2018, archaeologists conducted a Phase Ic subsurface reconnaissance of the area of alluvial soils identified in the Phase Ia Report (Goldbach, 2018). No cultural features, buried cultural horizons, or significant buried archaeological deposits were encountered during the Phase Ic subsurface reconnaissance. The portion of 12B1511 within the project area does not appear to be eligible for listing in the IRHSS or the NRHP, and no further work is recommended.

Archaeologists for W&A conducted a Phase Ia archeological reconnaissance in an expanded area of the project on October 16, 2018. The reconnaissance located no archaeological resources in the project area; therefore, archaeological clearance was recommended for this expanded area.

The Phase Ic and Addendum Phase Ia archaeological reports are being submitted concurrently with this 800.11 documentation.

No further efforts, including consultation, to identify historic properties took place.

3. DESCRIBE AFFECTED HISTORIC PROPERTIES

Eleven properties are listed, or eligible for listing, in the NRHP within the APE for this undertaking: Columbus Historic District (NR-0373); Bartholomew County Courthouse (NR-0131); Haw Creek Leather Company (NR-1404); The Republic (NR-2354/ NHL); Third Street/SR 46 Bridge (Bridge No. 04-03-03782BWBL; NBI No.: 10340); City Power House Building (IHSSI No.: 005-130-45059), Pennsylvania Railroad Bridge (IHSSI No.: 005-130-25031), Columbus City Hall (NR-0134), McEwen-Samuels-Marr Home (NR-0135); First Christian Church (NR-1532/NHL); Columbus Post Office (IHSSI No.: 005-130-45055).

Columbus Historic District – The Columbus Historic District includes the city's historic commercial center in its southwest corner, as well as more than forty square blocks of residences. The district was listed in the NRHP in 1980 with significance in the areas of Commerce and Architecture (Criteria A and C). The period of significance is 1821 to 1942.

Bartholomew County Courthouse – The Bartholomew County Courthouse was designed by architect Isaac Hodgson in the Second Empire style and completed in 1874. It was listed in the NRHP in 1978 with significance in the areas of Politics/Government and Architecture (Criteria A and C) and the period of significance being from 1871 to 1874.

Haw Creek Leather Company – The Haw Creek Leather Company is a two-story, brick industrial building constructed in two sections in 1914 and 1916. The building was listed in the NRHP in 1998 with significance in the areas of Industry and Architecture (Criteria A and C) and the period significance being from 1914 to 1947.

The Republic – The Republic building was constructed in 1971 and designed by Myron Goldsmith of the Chicago-based architectural firm of Skidmore, Owings, & Merrill. The property was listed in the NRHP and NHL in 2012, with Architecture and Landscape Architecture significance (Criterion C). The period of significance is 1969-1971, the years of construction.

Third Street/SR 46 Bridge – The Third Street/SR 46 Bridge (Bridge No.: 04-03-03782BWBL; NBI No.: 10340) is an eleven-span continuous steel beam stringer bridge constructed in 1949. It was determined eligible for listing in the NRHP as part of the *Indiana Historic Bridge Inventory* under Criterion C for being “built during the initial period of development or application of standards for its type in Indiana.” In addition, “this bridge displays exceptional overall or main span length for its type representing an innovative design and/or construction method.” The period of significance is the year of construction, 1949.

City Power House Building – The City Power House Building is a Romanesque Revival-style utility building completed in 1903 and located on a steep rise above the East Fork of the White River on the edge of downtown Columbus. The building was designed by architect Harrison Albright. It is eligible for the NRHP under Criterion A for its association with Politics/Government as an example of public works construction in the City of Columbus in the early-twentieth century. The City Power House Building is also eligible under Criterion C for Architecture. The period of significance is from 1903 to 1951.

Pennsylvania Railroad Bridge – The Pennsylvania Railroad Bridge is a fifteen-span plate girder bridge constructed circa 1929. The structure carries approximately 860 feet of the former Pennsylvania Railroad Line (today, the Louisville & Indiana Railroad) over the East Fork of the White River. The plate girder structure is eligible for listing in the NRHP under Criterion C for its exceptional overall length and as a good example of a riveted girder bridge. The period of significance is recommended as circa 1929, the approximate date of construction.

Columbus City Hall – The Columbus City Hall is a Romanesque civic building constructed in 1895 and designed by architect Charles Sparrell. It was listed in the State Register in 1976 and in the NRHP in 1979 with significance in the areas of Politics/Government and Architecture (Criteria A and C). The period of significance is 1895, the date of construction.

McEwen-Samuels-Marr Home – The McEwen-Samuels-Marr Home is an Italianate residential building constructed in 1864 (back portion) and circa 1875 (front portion). It was listed in the State Register in 1976 and in the NRHP in 1978 with significance in the areas of Commerce and Architecture (Criteria A and C). The period of significance is 1864/1875, the dates of construction.

First Christian Church – The First Christian Church was completed in 1942 by reknown Modern architect Eliel Saarinen with Eero Saarinen. The building was listed in the NHL and in the NRHP under Criterion C with the period of significance being 1942, the beginning of construction.

Columbus Post Office – The Columbus Post Office was dedicated in July 1970 and designed by architect Kevin Roche of Roche Dinkeloo. The structural engineer was Henry A. Pfisterer and the mechanical engineering firm was Cosetini Associates. The Modern, steel frame building encompasses an entire block between Fifth Street, Jackson Street, Fourth Street, and Brown Street. The building is eligible under Criteria A and C for architecture and as an example of corporate social responsibility; the period of significance is circa 1970, the date of construction.

In addition, **Site 12B1024** is a previously recorded Late Archaic artifact scatter within the archaeological APE. SHPO stated there is insufficient information to determine the eligibility of Site 12B1024. This site cannot be avoided, so it will be subjected to Phase II archaeological investigations to determine eligibility.

4. DESCRIBE THE UNDERTAKING'S EFFECTS ON HISTORIC PROPERTIES

The preferred alternative is a grade separation that will use a bridge to carry SR 46 over the railroad. The structure will be 34 feet from the railroad track to the top of the bridge deck and 45 feet from SR 11 to the top of the bridge deck. Single-arm cobra head street lights will be installed on the deck. To avoid visual intrusion, lights will be twenty-five feet tall, which is the shortest standard height. The City of Columbus wants to perpetuate the current themes of the SR 46 corridor, with native species of trees lining the highway. The new bridge will not have any significant architectural enhancements to it. As a driver approaches downtown Columbus from this overpass, their eye will catch the Stewart Bridge and the County Courthouse. Aboveground historic properties will have a view to the undertaking but none will be adversely affected by the project. No work will occur within the boundaries of historic properties.

5. EXPLAIN APPLICATION OF CRITERIA OF ADVERSE EFFECT -- INCLUDE CONDITIONS OR FUTURE ACTIONS TO AVOID, MINIMIZE OR MITIGATE ADVERSE EFFECTS

36 CFR § 800.5(a)(1) states: "An adverse effect is found when an undertaking may alter, directly or indirectly, any of the characteristics of a historic property that qualify the property for inclusion in the National Register in a manner that would diminish the integrity of the property's location, design, setting, materials, workmanship, feeling, or association. Consideration shall be given to all qualifying characteristics of a historic property, including those that may have been identified subsequent to the original evaluation of the property's eligibility for the National Register. Adverse effects may include reasonably foreseeable effects caused by the undertaking that may occur later in time, be farther removed in distance or be cumulative."

Columbus Historic District – The criteria of adverse effect, as defined and described in 36 CFR 800.5(a)(1) and in 36 CFR 800.5(a)(2)(i) through (v), do not apply to the Columbus Historic District.

Per 36 CFR 800.5(a)(2)(i), the undertaking will not cause "physical destruction of or damage to all or part of the property." Work will occur outside the district boundaries.

Per 36 CFR 800.5(a)(2)(ii), there will be no "restoration, rehabilitation, repair, maintenance, stabilization, hazardous material remediation and provision of handicapped access, that is not consistent with the Secretary's Standards for the Treatment of Historic Properties (36 CFR part 68) and applicable guidelines."

Per 36 CFR 800.5(a)(2)(iii), the property will not be removed from its historic location.

Per 36 CFR 800.5(a)(2)(iv), there will be a change “of the character of the property’s use or of physical features within the property’s setting,” because the district will likely have a view to the grade separated structure. However, this change in setting will not affect the district’s significant historic features.

Per 36 CFR 800.5(a)(2)(v), there will be an “introduction of visual, atmospheric or audible elements” with the introduction of the grade separated structure outside the historic district but this visual change will not “diminish the integrity of the property’s significant historic features.” The wooded area around the river near the grade separation will obstruct views during most times of the year. Lights and transportation facilities may be visible during times of less dense leaf cover, but lights and transportation facilities are already present where work will occur.

Per 36 CFR 800.5(a)(2)(vi), there will be no neglect or deterioration of the property.

Per 36 CFR 800.5(a)(2)(vii), there will be no “transfer, lease, or sale of the property out of Federal ownership or control.”

Bartholomew County Courthouse – The criteria of adverse effect, as defined and described in 36 CFR 800.5(a)(1) and in 36 CFR 800.5(a)(2)(i) through (v), do not apply to the Bartholomew County Courthouse.

Per 36 CFR 800.5(a)(2)(i), the undertaking will not cause “physical destruction of or damage to all or part of the property.” Work will occur outside the historic property boundary.

Per 36 CFR 800.5(a)(2)(ii), there will be no “restoration, rehabilitation, repair, maintenance, stabilization, hazardous material remediation and provision of handicapped access, that is not consistent with the Secretary’s Standards for the Treatment of Historic Properties (36 CFR part 68) and applicable guidelines.”

Per 36 CFR 800.5(a)(2)(iii), the property will not be removed from its historic location.

Per 36 CFR 800.5(a)(2)(iv), there will be a change “of the character of the property’s use or of physical features within the property’s setting,” because the courthouse will likely have a view to the grade separated structure. However, this change in setting will not affect the courthouse’s significant historic features.

Per 36 CFR 800.5(a)(2)(v), there will be an “introduction of visual, atmospheric or audible elements” with the introduction of the grade separated structure outside the historic property boundary but this visual change will not “diminish the integrity of the property’s significant historic features.” The wooded area around the river near the grade separation will obstruct views during most times of the year. Lights and transportation facilities may be

visible during times of less dense leaf cover, but lights and transportation facilities are already present where work will occur.

Per 36 CFR 800.5(a)(2)(vi), there will be no neglect or deterioration of the property.

Per 36 CFR 800.5(a)(2)(vii), there will be no “transfer, lease, or sale of the property out of Federal ownership or control.”

Haw Creek Leather Company – The criteria of adverse effect, as defined and described in 36 CFR 800.5(a)(1) and in 36 CFR 800.5(a)(2)(i) through (v), do not apply to the Haw Creek Leather Company.

Per 36 CFR 800.5(a)(2)(i), the undertaking will not cause “physical destruction of or damage to all or part of the property.” Work will occur outside the historic property boundary.

Per 36 CFR 800.5(a)(2)(ii), there will be no “restoration, rehabilitation, repair, maintenance, stabilization, hazardous material remediation and provision of handicapped access, that is not consistent with the Secretary’s Standards for the Treatment of Historic Properties (36 CFR part 68) and applicable guidelines.”

Per 36 CFR 800.5(a)(2)(iii), the property will not be removed from its historic location.

Per 36 CFR 800.5(a)(2)(iv), there will be a change “of the character of the property’s use or of physical features within the property’s setting,” because the historic property will likely have a view to the grade separated structure. However, this change in setting will not affect the property’s significant historic features.

Per 36 CFR 800.5(a)(2)(v), there will be an “introduction of visual, atmospheric or audible elements” with the introduction of the grade separated structure outside the historic property boundary but this visual change will not “diminish the integrity of the property’s significant historic features.” The wooded area around the river near the grade separation will obstruct views during most times of the year. Lights and transportation facilities may be visible during times of less dense leaf cover, but lights and transportation facilities are already present where work will occur.

Per 36 CFR 800.5(a)(2)(vi), there will be no neglect or deterioration of the property.

Per 36 CFR 800.5(a)(2)(vii), there will be no “transfer, lease, or sale of the property out of Federal ownership or control.”

The Republic – The criteria of adverse effect, as defined and described in 36 CFR 800.5(a)(1) and in 36 CFR 800.5(a)(2)(i) through (v), do not apply to the Republic.

Per 36 CFR 800.5(a)(2)(i), the undertaking will not cause “physical destruction of or damage to all or part of the property.” Work will occur outside the historic property boundary.

Per 36 CFR 800.5(a)(2)(ii), there will be no “restoration, rehabilitation, repair, maintenance, stabilization, hazardous material remediation and provision of handicapped access, that is not consistent with the Secretary’s Standards for the Treatment of Historic Properties (36 CFR part 68) and applicable guidelines.”

Per 36 CFR 800.5(a)(2)(iii), the property will not be removed from its historic location.

Per 36 CFR 800.5(a)(2)(iv), there will be a change “of the character of the property’s use or of physical features within the property’s setting,” because the Republic will likely have a view to the grade separated structure. However, this change in setting will not affect the property’s significant historic features.

Per 36 CFR 800.5(a)(2)(v), there will be an “introduction of visual, atmospheric or audible elements” with the introduction of the grade separated structure outside the historic property boundary but this visual change will not “diminish the integrity of the property’s significant historic features.” The wooded area around the river near the grade separation will obstruct views during most times of the year. Lights and transportation facilities may be visible during times of less dense leaf cover, but lights and transportation facilities are already present where work will occur.

Per 36 CFR 800.5(a)(2)(vi), there will be no neglect or deterioration of the property.

Per 36 CFR 800.5(a)(2)(vii), there will be no “transfer, lease, or sale of the property out of Federal ownership or control.”

Third Street/SR 46 Bridge – The criteria of adverse effect, as defined and described in 36 CFR 800.5(a)(1) and in 36 CFR 800.5(a)(2)(i) through (v), do not apply to the Third Street/SR 46 Bridge.

Per 36 CFR 800.5(a)(2)(i), the undertaking will not cause “physical destruction of or damage to all or part of the property.” Work will terminate south of the bridge.

Per 36 CFR 800.5(a)(2)(ii), there will be no “restoration, rehabilitation, repair, maintenance, stabilization, hazardous material remediation and provision of handicapped access, that is not consistent with the Secretary’s Standards for the Treatment of Historic Properties (36 CFR part 68) and applicable guidelines.”

Per 36 CFR 800.5(a)(2)(iii), the property will not be removed from its historic location.

Per 36 CFR 800.5(a)(2)(iv), there will be a change “of the character of the property’s use or of physical features within the property’s setting,” because the bridge will have a view to the grade separated structure. However, this change in setting will not affect the bridge’s significant historic features.

Per 36 CFR 800.5(a)(2)(v), there will be an “introduction of visual, atmospheric or audible elements” with the introduction of the grade separated structure south of the bridge but this visual change will not “diminish the integrity of the property’s significant historic features.” Specifically, the introduction of the grade separated structure south of the bridge will not affect the ability of this bridge to convey its engineering significance.

Per 36 CFR 800.5(a)(2)(vi), there will be no neglect or deterioration of the property.

Per 36 CFR 800.5(a)(2)(vii), there will be no “transfer, lease, or sale of the property out of Federal ownership or control.”

City Power House Building – The criteria of adverse effect, as defined and described in 36 CFR 800.5(a)(1) and in 36 CFR 800.5(a)(2)(i) through (v), do not apply to the City Power House Building.

Per 36 CFR 800.5(a)(2)(i), the undertaking will not cause “physical destruction of or damage to all or part of the property.” Work will occur outside the historic property boundary.

Per 36 CFR 800.5(a)(2)(ii), there will be no “restoration, rehabilitation, repair, maintenance, stabilization, hazardous material remediation and provision of handicapped access, that is not consistent with the Secretary’s Standards for the Treatment of Historic Properties (36 CFR part 68) and applicable guidelines.”

Per 36 CFR 800.5(a)(2)(iii), the property will not be removed from its historic location.

Per 36 CFR 800.5(a)(2)(iv), there will be a change “of the character of the property’s use or of physical features within the property’s setting,” because the City Power House will have a view to the grade separated structure. However, this change in setting will not affect the property’s significant historic features.

Per 36 CFR 800.5(a)(2)(v), there will be an “introduction of visual, atmospheric or audible elements” with the introduction of the grade separated structure outside the historic property boundary but this visual change will not “diminish the integrity of the property’s significant historic features.” The wooded area around the river, particularly on the south side, will obstruct views during most times of the year. Lights and transportation facilities may be visible across the river during times of less dense leaf cover but lights and transportation facilities are already present where work will occur.

Per 36 CFR 800.5(a)(2)(vi), there will be no neglect or deterioration of the property.

Per 36 CFR 800.5(a)(2)(vii), there will be no “transfer, lease, or sale of the property out of Federal ownership or control.”

Pennsylvania Railroad Bridge – The criteria of adverse effect, as defined and described in 36 CFR 800.5(a)(1) and in 36 CFR 800.5(a)(2)(i) through (v), do not apply to the Pennsylvania Railroad Bridge.

Per 36 CFR 800.5(a)(2)(i), the undertaking will not cause “physical destruction of or damage to all or part of the property.” Work will terminate south of the bridge.

Per 36 CFR 800.5(a)(2)(ii), there will be no “restoration, rehabilitation, repair, maintenance, stabilization, hazardous material remediation and provision of handicapped access, that is not consistent with the Secretary’s Standards for the Treatment of Historic Properties (36 CFR part 68) and applicable guidelines.”

Per 36 CFR 800.5(a)(2)(iii), the bridge will not be removed from its historic location.

Per 36 CFR 800.5(a)(2)(iv), there will be a change “of the character of the property’s use or of physical features within the property’s setting,” because the railroad bridge will have a view to the grade separated structure. However, this change in setting will not affect the property’s significant historic features.

Per 36 CFR 800.5(a)(2)(v), there will be an “introduction of visual, atmospheric or audible elements” with the introduction of the grade separated structure south of the bridge but this visual change will not “diminish the integrity of the property’s significant historic features.” Specifically, the introduction of the grade separated structure south of the bridge will not affect the ability of this bridge to convey its engineering significance.
Per 36 CFR 800.5(a)(2)(vi), there will be no neglect or deterioration of the property.

Per 36 CFR 800.5(a)(2)(vii), there will be no “transfer, lease, or sale of the property out of Federal ownership or control.”

Columbus City Hall – The criteria of adverse effect, as defined and described in 36 CFR 800.5(a)(1) and in 36 CFR 800.5(a)(2)(i) through (v), do not apply to the Columbus City Hall.

Per 36 CFR 800.5(a)(2)(i), the undertaking will not cause “physical destruction of or damage to all or part of the property.”

Per 36 CFR 800.5(a)(2)(ii), there will be no “restoration, rehabilitation, repair, maintenance, stabilization, hazardous material remediation and provision of handicapped access, that is not consistent with the Secretary’s Standards for the Treatment of Historic Properties (36 CFR part 68) and applicable guidelines.”

Per 36 CFR 800.5(a)(2)(iii), the building will not be removed from its historic location.

Per 36 CFR 800.5(a)(2)(iv), there will be a change “of the character of the property’s use or of physical features within the property’s setting,” because the City Hall will have a view to the grade separated structure. However, this change in setting will not affect the property’s significant historic features.

Per 36 CFR 800.5(a)(2)(v), there may be an “introduction of visual, atmospheric or audible elements” with the introduction of the grade separated structure but this visual change will not “diminish the integrity of the property’s significant historic features.” The built environment and wooded areas around the river near the grade separation will obstruct views during most times of the year. Lights and transportation facilities may be visible during times of less dense leaf cover, but lights and transportation facilities are already present where work will occur.

Per 36 CFR 800.5(a)(2)(vi), there will be no neglect or deterioration of the property.

Per 36 CFR 800.5(a)(2)(vii), there will be no “transfer, lease, or sale of the property out of Federal ownership or control.”

McEwen-Samuels-Marr Home - The criteria of adverse effect, as defined and described in 36 CFR 800.5(a)(1) and in 36 CFR 800.5(a)(2)(i) through (v), do not apply to the McEwen-Samuels-Marr Home.

Per 36 CFR 800.5(a)(2)(i), the undertaking will not cause “physical destruction of or damage to all or part of the property.”

Per 36 CFR 800.5(a)(2)(ii), there will be no “restoration, rehabilitation, repair, maintenance, stabilization, hazardous material remediation and provision of handicapped access, that is not consistent with the Secretary’s Standards for the Treatment of Historic Properties (36 CFR part 68) and applicable guidelines.”

Per 36 CFR 800.5(a)(2)(iii), the house will not be removed from its historic location.

Per 36 CFR 800.5(a)(2)(iv), there may be a change “of the character of the property’s use or of physical features within the property’s setting,” because the house will likely have a view to the grade separated structure. However, this change in setting will not affect the property’s significant historic features.

Per 36 CFR 800.5(a)(2)(v), there may be an “introduction of visual, atmospheric or audible elements” with the introduction of the grade separated structure but this visual change will not “diminish the integrity of the property’s significant historic features.” The built environment and wooded areas around the river near the grade separation will obstruct views during most times of the year. Lights and transportation facilities may be visible during times of less dense leaf cover, but lights and transportation facilities are already present where work will occur.

Per 36 CFR 800.5(a)(2)(vi), there will be no neglect or deterioration of the property.

Per 36 CFR 800.5(a)(2)(vii), there will be no “transfer, lease, or sale of the property out of Federal ownership or control.”

First Christian Church - The criteria of adverse effect, as defined and described in 36 CFR 800.5(a)(1) and in 36 CFR 800.5(a)(2)(i) through (v), do not apply to the First Christian Church.

Per 36 CFR 800.5(a)(2)(i), the undertaking will not cause “physical destruction of or damage to all or part of the property.”

Per 36 CFR 800.5(a)(2)(ii), there will be no “restoration, rehabilitation, repair, maintenance, stabilization, hazardous material remediation and provision of handicapped access, that is not consistent with the Secretary’s Standards for the Treatment of Historic Properties (36 CFR part 68) and applicable guidelines.”

Per 36 CFR 800.5(a)(2)(iii), the property will not be removed from its historic location.

Per 36 CFR 800.5(a)(2)(iv), there may be a change “of the character of the property’s use or of physical features within the property’s setting,” because the church may have a view to the grade separated structure. However, this change in setting will not affect the property’s significant historic features.

Per 36 CFR 800.5(a)(2)(v), there may be an “introduction of visual, atmospheric or audible elements” with the introduction of the grade separated structure but this visual change will not “diminish the integrity of the property’s significant historic features.” The built environment and wooded areas around the river near the grade separation will obstruct views during most times of the year. Lights and transportation facilities may be visible during times of less dense leaf cover, but lights and transportation facilities are already present where work will occur.

Per 36 CFR 800.5(a)(2)(vi), there will be no neglect or deterioration of the property.

Per 36 CFR 800.5(a)(2)(vii), there will be no “transfer, lease, or sale of the property out of Federal ownership or control.”

Columbus Post Office - The criteria of adverse effect, as defined and described in 36 CFR 800.5(a)(1) and in 36 CFR 800.5(a)(2)(i) through (v), do not apply to the Columbus Post Office.

Per 36 CFR 800.5(a)(2)(i), the undertaking will not cause “physical destruction of or damage to all or part of the property.”

Per 36 CFR 800.5(a)(2)(ii), there will be no “restoration, rehabilitation, repair, maintenance, stabilization, hazardous material remediation and provision of handicapped access, that is not consistent with the Secretary’s Standards for the Treatment of Historic Properties (36 CFR part 68) and applicable guidelines.”

Per 36 CFR 800.5(a)(2)(iii), the property will not be removed from its historic location.

Per 36 CFR 800.5(a)(2)(iv), there may be a change “of the character of the property’s use or of physical features within the property’s setting,” because the post office will likely have a view to the grade separated structure. However, this change in setting will not affect the property’s significant historic features.

Per 36 CFR 800.5(a)(2)(v), there may be an “introduction of visual, atmospheric or audible elements” with the introduction of the grade separated structure but this visual change will not “diminish the integrity of the property’s significant historic features.” The wooded areas around the river near the grade separation will obstruct views during most times of the year. Lights and transportation facilities may be visible during times of less dense leaf cover, but lights and transportation facilities are already present where work will occur.

Per 36 CFR 800.5(a)(2)(vi), there will be no neglect or deterioration of the property.

Per 36 CFR 800.5(a)(2)(vii), there will be no “transfer, lease, or sale of the property out of Federal ownership or control.”

The eligibility of archaeological site **12B1024** will be addressed at a later date. Standards for the archaeological identification, evaluation, and reporting will be included in a Memorandum of Agreement (MOA). FHWA intends to address the effects of the undertaking on any NRHP-eligible archaeology site through stipulations in a MOA. (See Appendix F: MOA.)

CONDITIONS OR FUTURE ACTIONS TO AVOID, MINIMIZE OR MITIGATE ADVERSE EFFECTS

Throughout this project, engineers sought ways to minimize the effects on historic properties.

At the consulting party held August 27, 2018, CMT discussed the alternatives considered for this project. Project engineers examined a number of alternatives for the grade reconstruction and interchange, including an underpass. The preferred alternative is a grade separation that will use a bridge to carry SR 46 over the railroad that will minimize the visual impacts to the historic properties to the east. The structure will be 34 feet from the railroad track to the top of the bridge deck and 45 feet from SR 11 to the top of the bridge deck. Single-arm cobra head street lights will be installed on the bridge deck. To avoid visual intrusion, lights will be twenty-five feet tall, which is the shortest standard height. The City of Columbus wants to perpetuate the current themes of the SR 46 corridor, with native species of trees lining the highway. The new bridge will not have any significant architectural enhancements to it. As a driver approaches downtown Columbus from this overpass, their eye will catch the Stewart Bridge and the County Courthouse.

A MOA is being submitted concurrently with this 800.11 documentation to address the effects of the undertaking on historic properties. (See Appendix B: Correspondence, Appendix E: Consulting Parties, and Appendix F: MOA.)

6. SUMMARY OF CONSULTING PARTIES AND PUBLIC VIEWS

The National Park Service (NPS) declined the invitation to join consultation in an email dated January 26, 2018. (See Appendix B: Correspondence.)

The Miami Tribe of Oklahoma accepted the invitation to join consultation in an email and letter sent January 31, 2018. The Miami offered no objection to the project at that time, "as we are not currently aware of existing documentation directly linking a specific Miami cultural or historic site to the project site." (See Appendix B: Correspondence.)

Indiana Landmarks accepted the invitation to join consultation on February 2, 2018, and concurred with the APE and recommendations of the HPR. (See Appendix B: Correspondence.)

The Delaware Nation replied to the ECL via email on February 6, 2018, and stated "[w]ith the information you have submitted we can concur at present with this proposed plan. . ." and requested to be informed of the project progress or any new discoveries. (See Appendix B: Correspondence.)

The SHPO replied to the ECL and HPR on February 23, 2018. SHPO recommended that Landmark Columbus, the City of Columbus Mayor, City of Columbus Engineer, and the Bartholomew County Engineer be invited to join consultation. The SHPO also noted the position of Bartholomew County historian was currently vacant. Regarding the APE, SHPO stated it may be appropriate to expand the APE. Specifically, "It seems possible that part of the elevated structure could be visible from the upper stories of a few more buildings within the Columbus Historic District besides the Bartholomew County Courthouse, at least when the leaves are off the trees. There is a fairly dense, wooded area between the current SR 46-SR 11 intersection and the west bank of the East Fork of White River. We are aware that the City of Columbus is considering developing park or trail amenities along both sides of the river, between the westbound SR 46 bridge and the eastbound SR 46 bridge. It is not clear whether either this project or the park or trail project would require the removal of many trees between the intersection and the river, but, if so, then the area from which the elevated structure could be visible might expand." SHPO stated the APE would likely not need to be expanded to the west and south. SHPO stated, "We do not have any specific recommendations for enlarging the APE. We do ask that consideration be given to the factors we have mentioned here. Also, if the anticipated footprint of the project location at some point would be proposed to extend outside the area shown on the map in the HPR, then it would be appropriate to consider expanding the APE." (See Appendix B: Correspondence.)

SHPO also stated that the rail line that parallels Lindsey Street "is actually still used as a spur line by the Louisville & Indiana Railroad to serve industries on the south edge of Columbus." SHPO also stated that it would be important to determine if the nearby stairs and low-head dam contribute to the City Power House, especially in the event the resource would incur direct effects from the project. For the purposes of this project, SHPO stated "we think it is sufficient to draw the historic property boundary around only the City Power House building, as it is depicted in the HPR." SHPO also concurred with the identification of listed NRHP and NHL properties in the report as well as the recommendations of eligibility and ineligibility. Regarding archaeology, SHPO stated "it might be advisable to survey an area somewhat larger than the project location shown, in order to avoid having to delay the conclusion of the Section 106 process or reopen it after a finding is made. We have read that a dump was located near the west bank of the East Fork of White River several decades ago, roughly between the eastbound and

westbound SR 46 bridges. There also may have been a dump decades ago farther south, somewhere in the southeastern part of the APE, to the west of the river and to the south of the west approach to the eastbound SR 46 bridge. Verification of the locations of the dumps might aid the qualified professional archaeologist in determining where a field reconnaissance survey might be necessary." (See Appendix B: Correspondence.)

Finally, SHPO requested that their office and other consulting parties be provided "as part of the assessment of adverse effects step of the review-as much information as is available regarding the footprint, height, and design of the elevated structure and interchange, as well as a qualified professional's assessment of the foreseeable effects on each of the identified historic properties. Also, if alternative project locations or significant variations on the design of the elevated structure and interchange are being considered, information about the design and effects of each would be important to share. Providing these kinds of information and analysis before the finding could reduce the chances of unanticipated delays resulting from questions or concerns that the other consulting parties or our office may express." (See Appendix B: Correspondence.)

On May 22, 2018, NPS replied to additional information (conveyed May 21, 2018) and stated that no NHL property "in particular is affected" by this project and also expressed confidence that that the "IN SHPO and preservationists in Columbus will be proactive [if] there are any concerns." (See Appendix B: Correspondence.)

In an email and letter dated June 19, 2018, Indiana Landmarks concurred with the eligibility recommendations conveyed in the Additional Information Memorandum—No. 1 and letter dated May 3, 2018. (See Appendix B: Correspondence.)

SHPO responded to the Additional Information Memorandum—No. 1 and letter on June 21, 2018. SHPO agreed with the expanded APE and recommendations of eligibility. SHPO also stated that since "the City Power House and associated low-head dam are not anticipated to incur any direct impacts from this project, we are satisfied that the . . . [NRHP]. . . eligibility evaluation and historic boundary. . . in the [HPR] . . . are appropriate, for the purposes of this Section 106 review." SHPO also requested information about additional alternatives, when available, and acknowledged receipt of the Phase Ia archaeology report. (See Appendix B: Correspondence.)

SHPO commented on the Phase Ia Archaeology Report in a letter dated July 16, 2018. SHPO Concurred with the recommendations in the report that sites 12B0918, 12B0919, 12B0920, 12B0921, and 12B1022 "do not appear eligible . . . and that no further archaeological investigations appear necessary at these locations." Regarding sites 12B0936 and 12B1023, SHPO stated "there is insufficient information . . . to determine whether they are eligible for inclusion in the NRHP. However it is our understanding that project-related ground-disturbing activities in the vicinity [of sites 12B0936 and 12B1023] are not proposed for depths greater than 15 inches below ground surface—that is, above the depths at which intact prehistoric deposits were encountered during the original 1993 archaeological investigations." Depths greater than fifteen inches at sites 12B0936 and 12B1023 must be avoided or subjected to further archaeological investigations. (See Appendix B: Correspondence.)

SHPO stated there is insufficient information to determine the eligibility of site 12B1024 and concurred with the recommendation that this site must be avoided or subjected to Phase II archaeological investigations to determine eligibility. SHPO also recommended that portions of site 12B1511 must either be avoided by project activities or subjected to Phase I investigation. SHPO then concurred with the recommendation that sites 12B1512 to 12B1516, 12B1518 to 12B1524, 12B1528, and 12B1529 “do not appear to be eligible for inclusion in the NRHP and no further archaeology investigations appear necessary at these locations.” SHPO stated there is insufficient information to determine if site 12B1517 is eligible for the NRHP and concurred that portions of the site outside the proposed project area must either be avoided by project activities or subjected to additional investigation. (See Appendix B: Correspondence.)

On August 24, 2018, Debra Haza, a local resident, called W&A and requested to be added to the project as a consulting party. (See Appendix B: Correspondence and Appendix E: Consulting Parties.)

At the consulting parties meeting held August 27, 2018, to discuss project effects, the SHPO staff asked if there would be pedestrian access to the bridge. The Columbus People Trail (which runs parallel to SR 46), will remain in place but there will be no access on the bridge. As part of this project, the City of Columbus would like to construct a portion of trail that runs under the bridge on the west side of SR 11. Plans are that this trail would eventually be continued south to connect to Garden City (but that would be completed as a part of different project). (See Appendix E: Consulting Parties.)

SHPO staff also asked if trees would be planted in the area and if they would create a “blind spot” or safety hazard for people using the trail. CMT said the City would like to plant trees, but some areas would need to be avoided due to drainage issues. The plantings would be similar in pattern to what is seen today; plantings would use native species. There would also be a buffer from the trail similar to what is seen today. (See Appendix E: Consulting Parties.)

SHPO staff asked if there were still plans to improve the river near the pump house as part of a park. CMT and City of Columbus representatives confirmed the City would like to develop the area as part of a riverside park. The designers believe this park could be accessed by a drive to the south of the Stewart Bridge but that safe access could not be constructed from the Third Street Bridge. FHWA asked about markings on the People Trail and inquired how pedestrian safety will be maintained at the railroad once the bridge is elevated. City representatives explained that the People Trail will continue to feature safety markings. New asphalt has just been added to the trail and markings will be painted soon. In addition, existing safety gates and signals for trail users maintain safety at the railroad. Those features will remain in place for trail users following the bridge construction. (See Appendix E: Consulting Parties.)

The SHPO staff stated it is believed that the wooded area around the river would obstruct views to the historic resources within the APE. Lights may shine through the woods at night or during times of less dense leaf cover but there are currently lights in the area. The bridges would have a view to the undertaking but are already

transportation features. SHPO staff did not foresee the project having an adverse effect on aboveground historic resources. (See Appendix E: Consulting Parties.)

SHPO responded to the meeting summary in a letter dated September 27, 2018, and stated “[t]he summary captures the essence of the points that . . . my staff recalls were discussed at the meeting. We have no corrections or additions.”

The Phase Ic and Addendum Phase Ia reports are being submitted to Tribes and SHPO concurrently with this 800.11 documentation. No other comments from consulting parties or the public were received.

A public notice of “Historic Properties Affected: Adverse Effect” will be posted in a local newspaper and the public will be afforded thirty (30) days to respond. If appropriate, this document will be revised after the expiration of the public comment period.

APPENDICES

Appendix A: Maps & Plans

Appendix B: Correspondence

Appendix C: Report Summaries

Appendix D: Photographs

Appendix E: Consulting Parties

Appendix F: MOA

Section 106

APPENDIX A. Maps & Plans

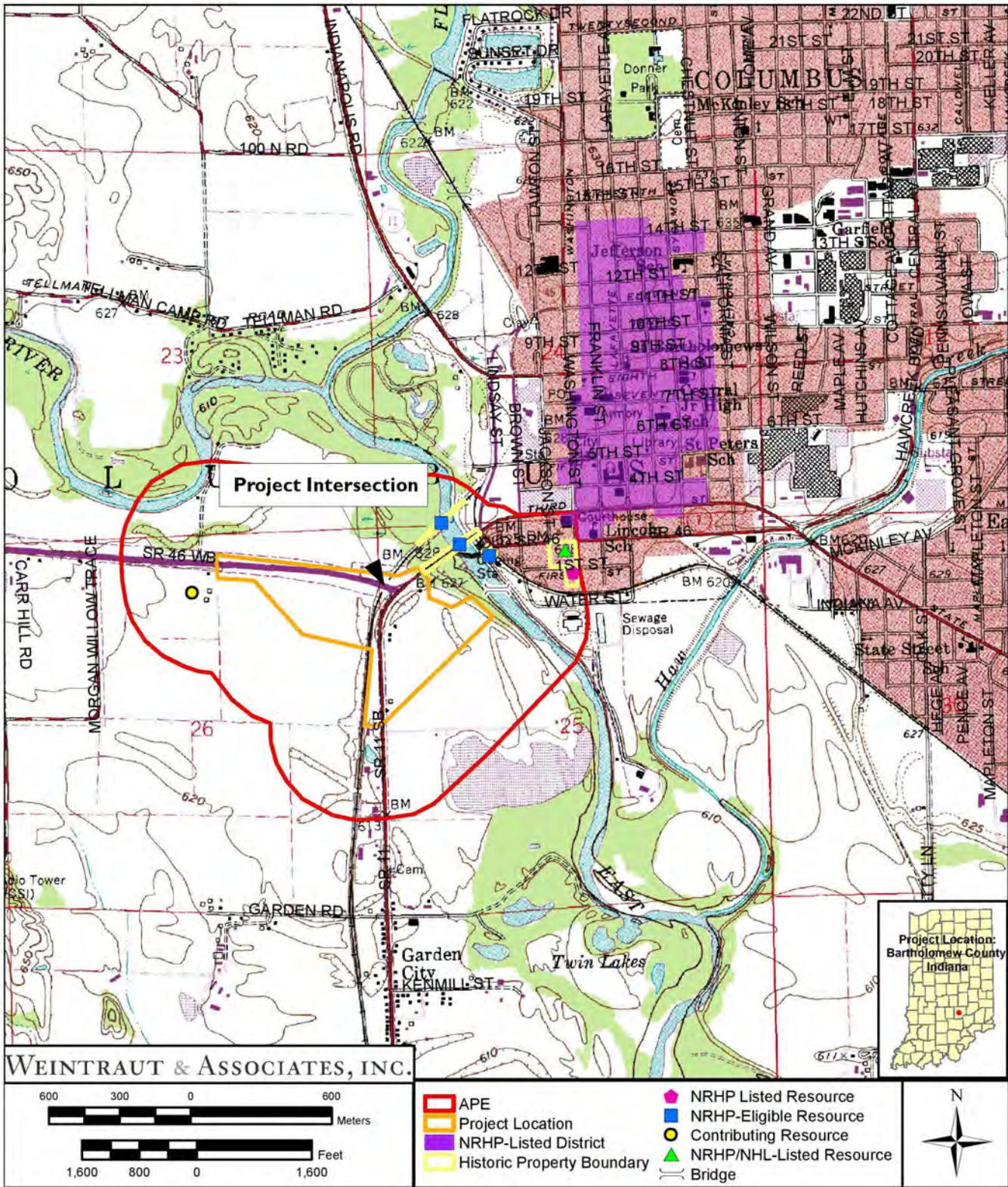


FIGURE I. PROJECT LOCATION, AREA OF POTENTIAL EFFECTS, AND RESOURCES SHOWN ON A PORTION OF THE COLUMBUS, INDIANA, USGS TOPOGRAPHIC QUADRANGLE MAP (1:24,000.)

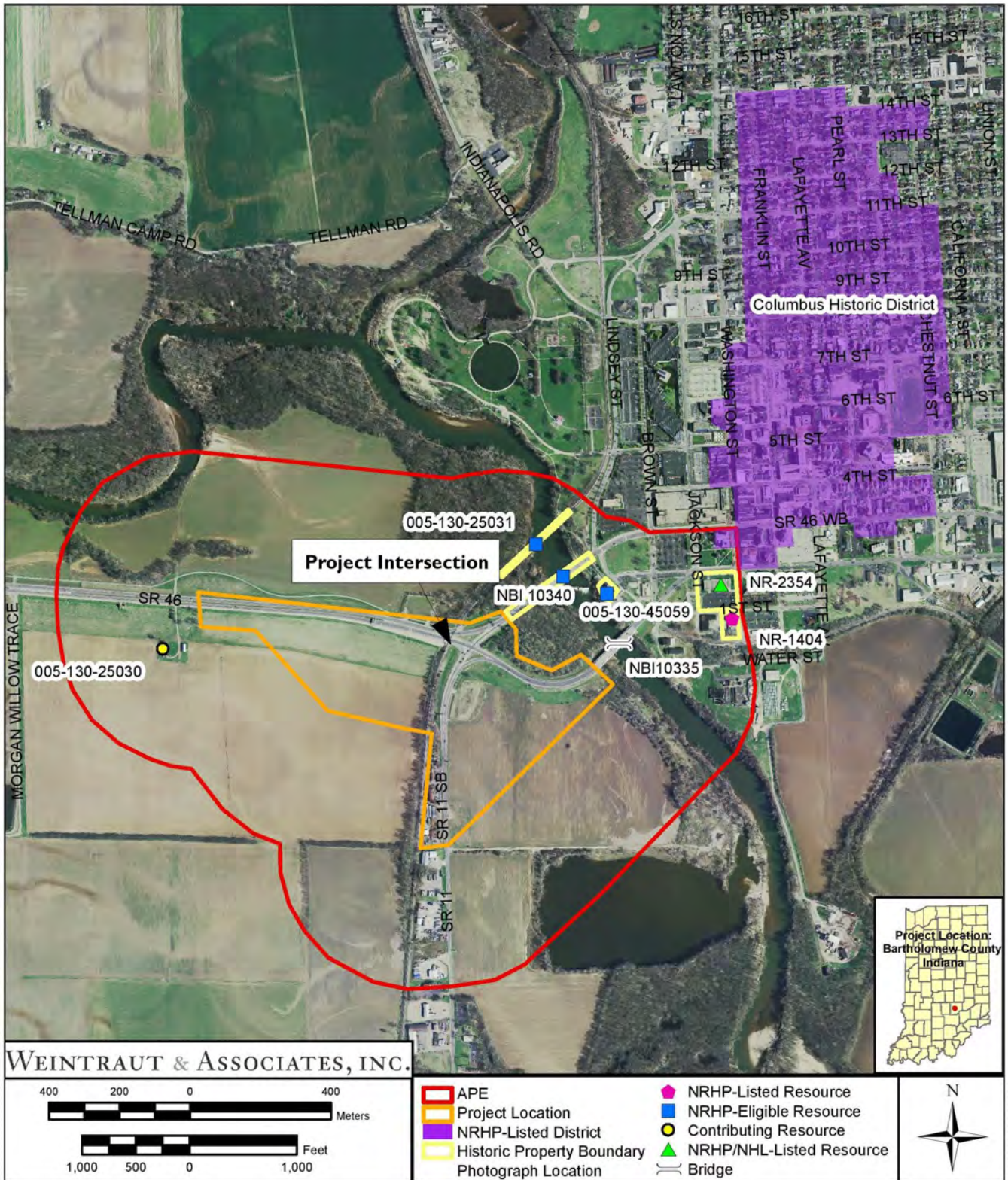


FIGURE 2. PROJECT LOCATION, AREA OF POTENTIAL EFFECTS, AND RESOURCES SHOWN ON AN AERIAL PHOTOGRAPH (2005).

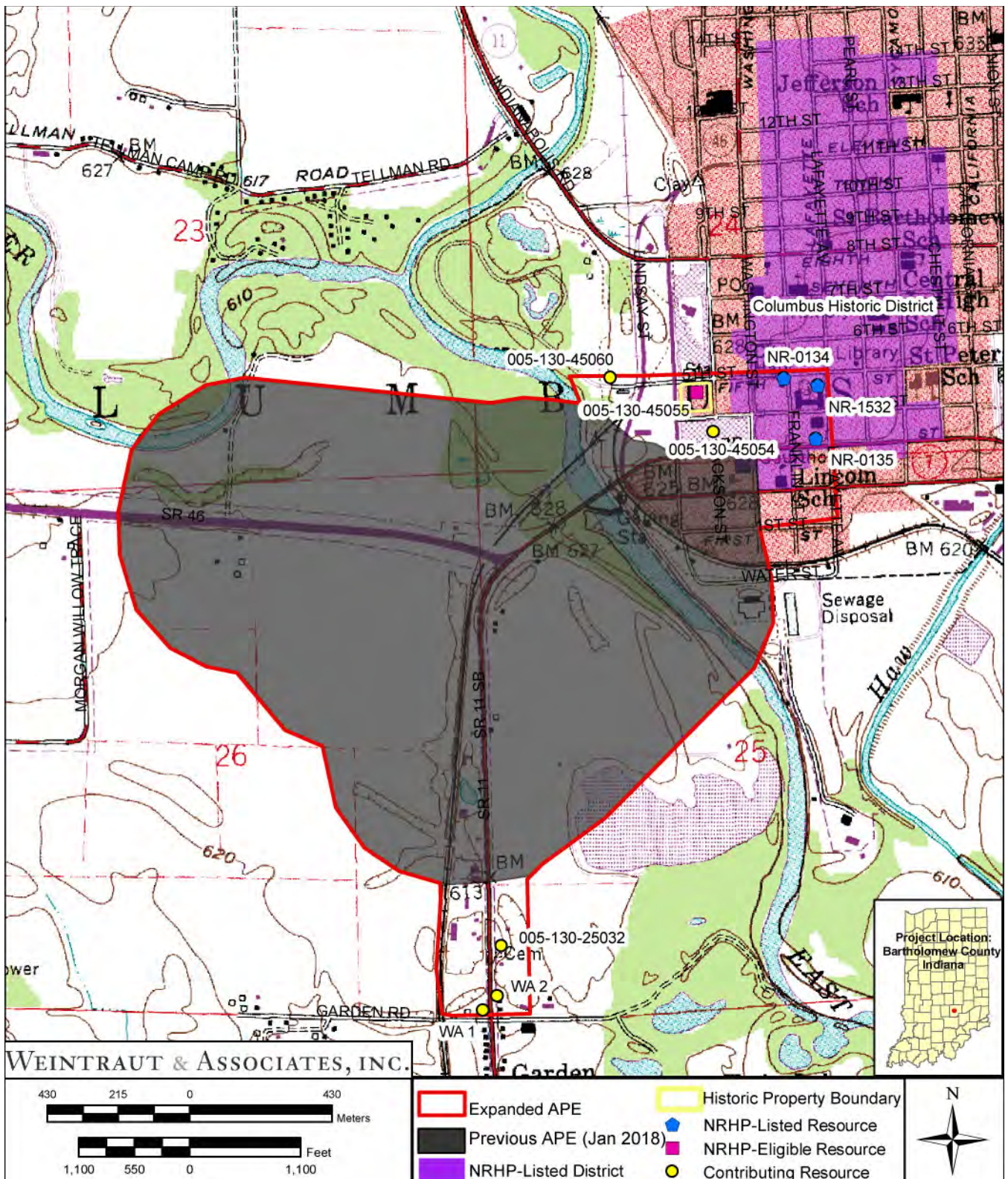


FIGURE I. EXPANDED APE AND RESOURCES SHOWN ON A PORTION OF THE COLUMBUS, INDIANA, USGS TOPOGRAPHIC QUADRANGLE MAP (1:24,000).

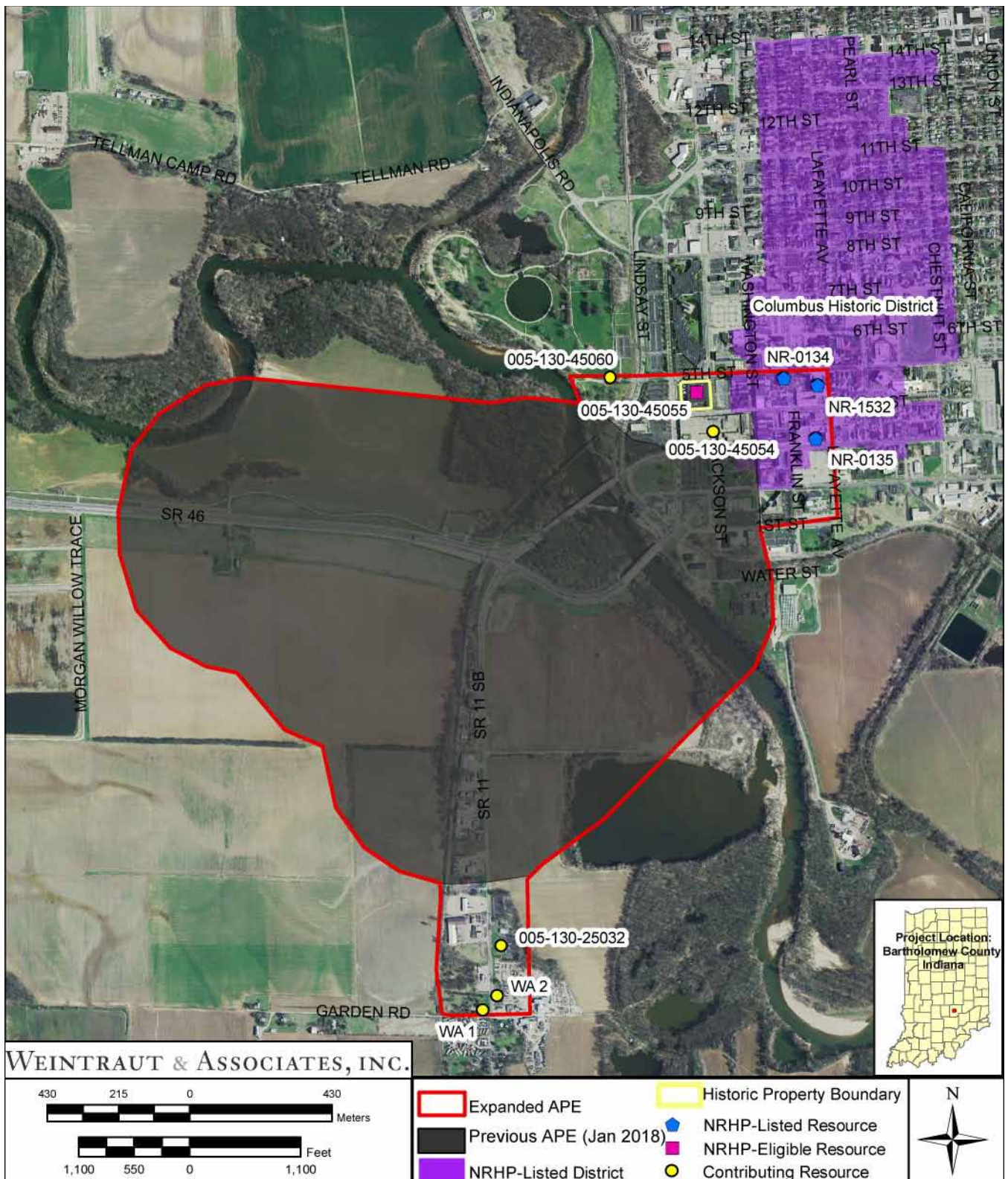
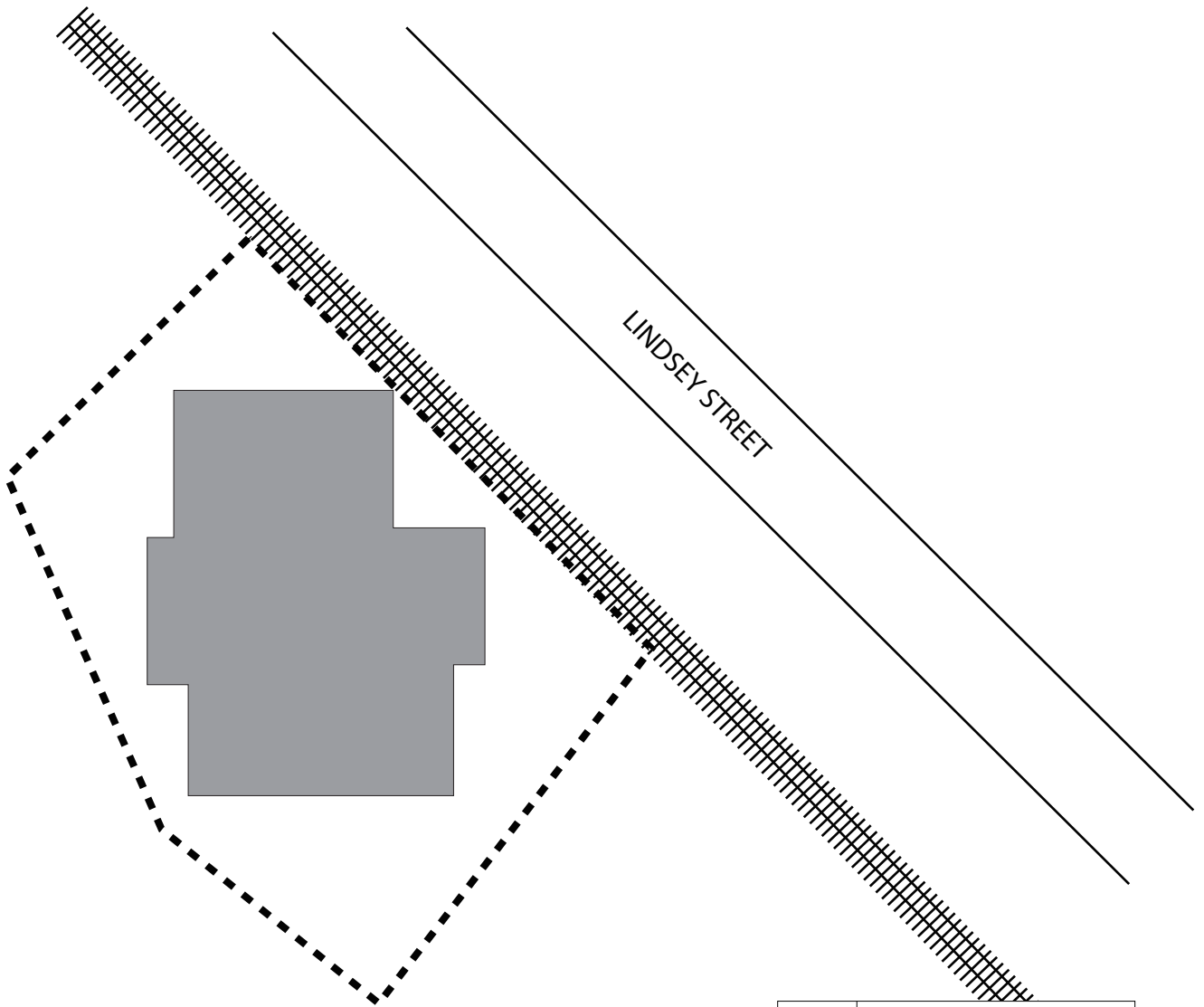






FIGURE 2. EXPANDED APE AND RESOURCES SHOWN ON AN AERIAL PHOTOGRAPH (2005).

CITY POWER HOUSE BUILDING (005-130-45059) 148 LINDSEY STREET

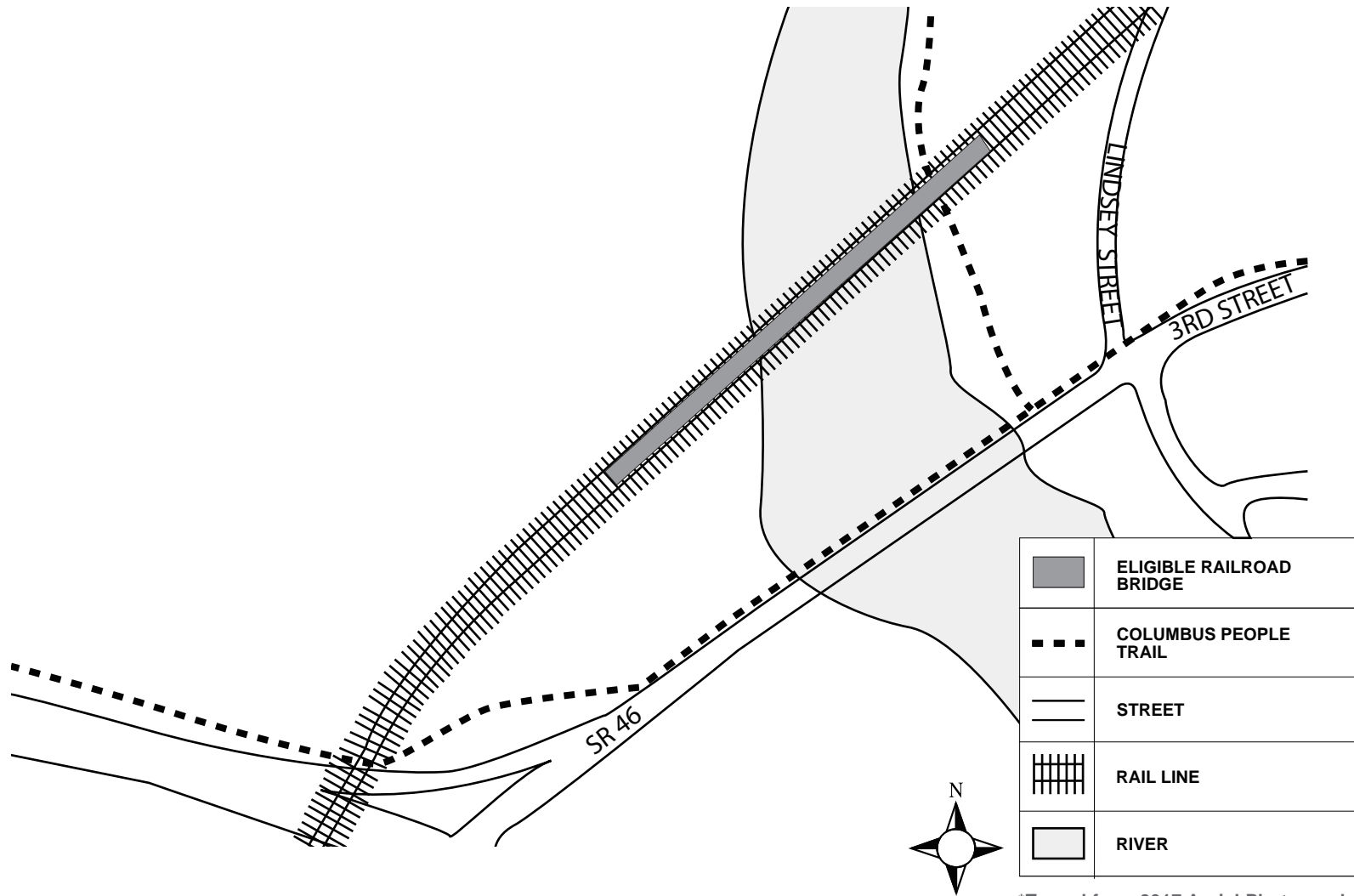


	NRHP ELIGIBLE BUILDING
	RECOMMENDED HISTORIC BOUNDARY
	STREET
	RAIL LINE



*Traced from 2017 Aerial Photograph.

PENNSYLVANIA RAILROAD BRIDGE (005-130-25031) PENNSYLVANIA RAILROAD OVER EAST FORK OF THE WHITE RIVER



*Traced from 2017 Aerial Photograph.

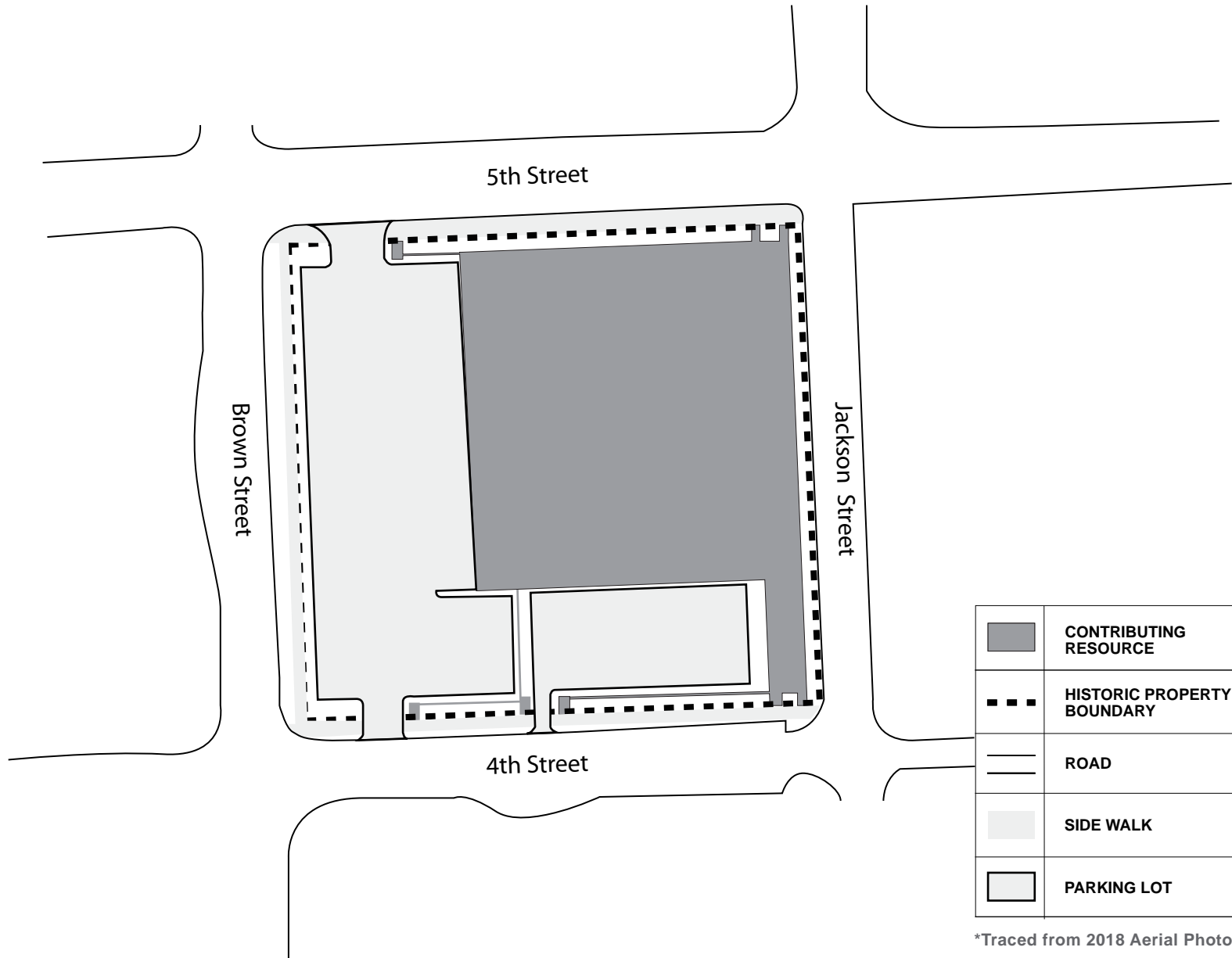
Des. Nos.: 1700139 & 1702650

Section 106

D-32

COLUMBUS POST OFFICE (005-130-45055)

450 JACKSON STREET



*Traced from 2018 Aerial Photograph.

D-33

Des. Nos.: 1700139 & 1702650



Section 106

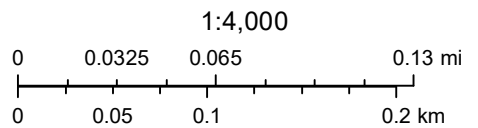
Active & Abandoned Railroad Layer



March 7, 2018

Rail System - Active and Abandoned (INDOT)

-  Abandoned
-  Active



Des. Nos.: 1700139 & 1702650

Section 106

State Road 46 Grade Separation Project
In the City of Columbus, Bartholomew County, Indiana | Des. No.: 1700139
Version: February 5, 2019

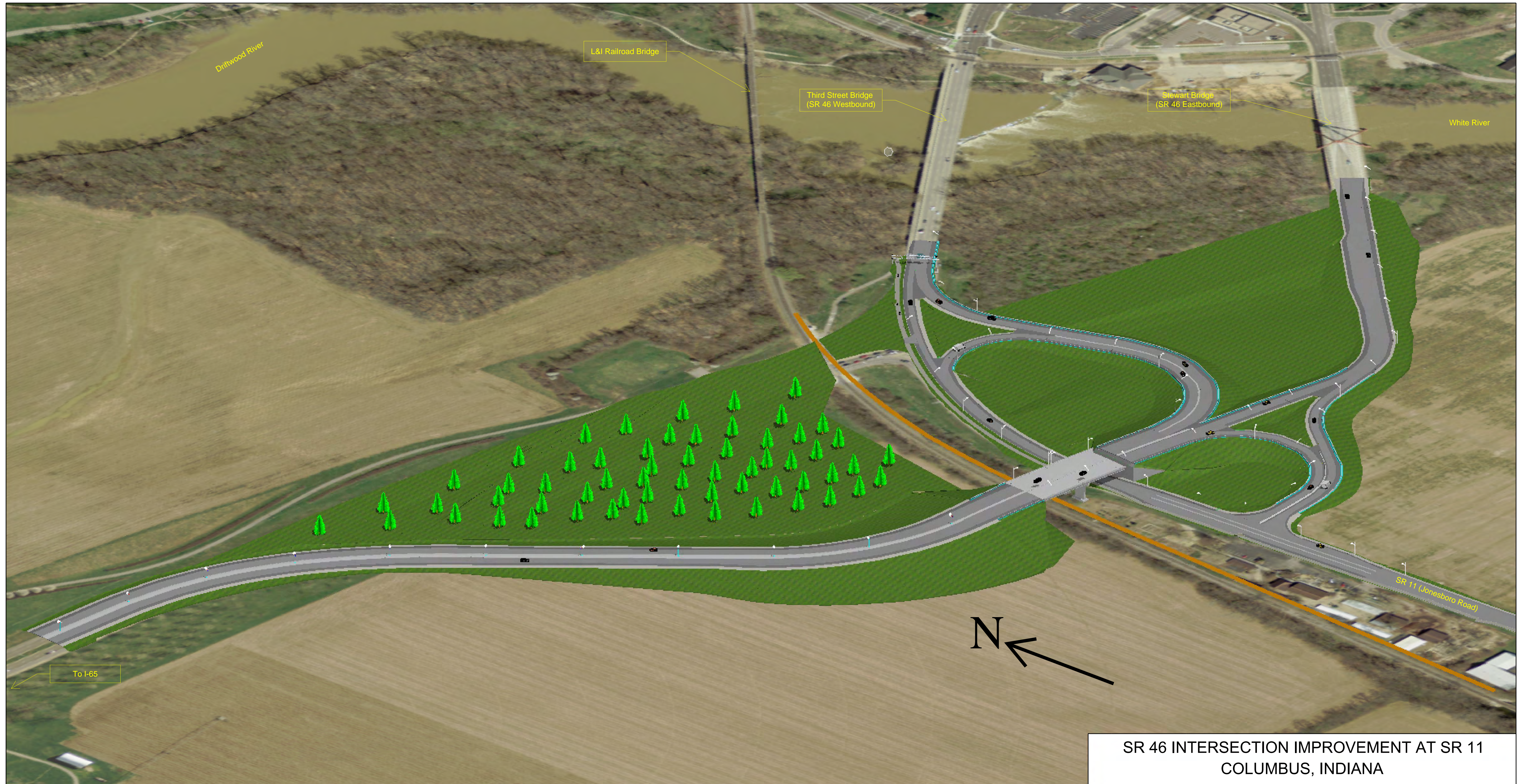
Indiana Department of Transportation (INDOT), U.S. Census Bureau (USCB),
Indiana Geographic Information Council (IGIC), UITS, Indiana Spatial Data
Portal
Indiana Department of Transportation (INDOT), Business Development and
Technology Systems, GIS Mapping

Page 34 of 129

Indiana Map

Tree Removal Map





SR 46 INTERSECTION IMPROVEMENT AT SR 11
COLUMBUS, INDIANA

OVERVIEW

INDOT DES. NO. : 1700139



Section 106

APPENDIX B. Correspondence

January 23, 2018

This letter was sent to the listed parties.

RE: State Road 46 Grade Separation (Des. No.: 1700139)

Dear Consulting Party,

The Indiana Department of Transportation (INDOT), with funding from the Federal Highway Administration (FHWA) and funding support from the City of Columbus and Bartholomew County, proposes to proceed with a grade separation of State Road (SR) 46 (Des. No.: 1700139). Weintraut & Associates, Inc. is under contract with INDOT to advance the environmental documentation for the referenced project.

This letter is part of the early coordination phase of the environmental review process requesting comments associated with this project. We are requesting comments from your area of expertise regarding any possible environmental effects associated with this project. Please use the above DES Number and project description in your reply and your comments will be incorporated into the formal environmental study.

The proposed undertaking is located at the intersection of SR 46 and the Louisville & Indiana Railroad in Bartholomew County, Indiana. It is within Columbus Township, on the Columbus, Indiana USGS Topographic Quadrangle, in portions of Section 25 and 26, in Township 9 North, and Range 5 East. (See Attached Map of Project Area)

Purpose and Need

The purpose of this undertaking is to provide the public a safer intersection crossing. The need for this project results from an anticipated increase in rail traffic from the Louisville & Indiana Railroad. The railroad crossing at SR 46 is anticipated to see an increase of trains from an average of 8 per day to 22 per day. The safety, delays to motorists, and emergency access are all expected to have negative impacts as a result. Therefore, this project will construct a grade separation of SR 46 from the railroad corridor. Due to the proximity of the SR 46/SR 11 intersection, it will need reconfiguration as part of the grade separation. The existing SR 46/SR 11 signalized intersection exhibits its own congestion and high crash rates that will be improved through this project.

Proposed Project

The proposed project will consist of creating a grade separation intended to carry SR 46 over the Louisville & Indiana Railroad. Fill will need to be placed for construction of the embankments to raise the profile grade. The existing intersection of SR 46 and SR 11 will need to be reconfigured to accommodate the proposed grade separation.

Existing Conditions

This section of SR 46 is a Principal Arterial - Other. The existing SR 46 approach cross section consists of four, 12-foot lanes, bordered by 10-foot outside shoulders and a 16-foot median. Roadside ditches exist along SR 46

in the vicinity of the intersection. The approximate existing right-of-way is 100 feet on each side of the centerline throughout the project area. The existing SR 11 approach cross section consists of two, 12 foot- wide lanes, bordered by two foot outside shoulders without a median. Roadside ditches exist along SR 11 in the vicinity of the intersection. The approximate existing right-of-way is 25 feet on each side of the centerline throughout the project area.

Right-of-Way

The project is expected to require the acquisition of approximately 35 acres of new permanent right-of-way. Proposed right-of-way widths along SR 46 would vary from 75 feet to 100 feet from the centerline. The project limits would be approximately 3,615 feet (0.68 mile) in length from west to east, and approximately 1,350 feet (0.25 mile) in length from north to south.

Maintenance of Traffic

The preferred method of traffic maintenance would be through the use of lane restrictions with SR 46 and SR 11 open to traffic during construction.

Section 106

Section 106 of the National Historic Preservation Act requires Federal agencies to take into account the effects of their undertakings on historic and archaeological properties. In accordance with 36 CFR 800.2 (c), you are hereby requested to be a consulting party to participate in the Section 106 process. Entities that have been invited to participate in the Section 106 consultation process for this project are identified in the attached list. Per 36 CFR 800.3(f), we hereby request that the Indiana State Historic Preservation Officer (SHPO) notify this office if the SHPO staff is aware of any other parties that may be entitled to be consulting parties or should be contacted as potential consulting parties for the project.

The Section 106 process involves efforts to identify historic properties potentially affected by the undertaking, assess its effects and seek ways to avoid, minimize or mitigate any adverse effects on historic properties. For more information regarding the protection of historic resources, please see the Advisory Council on Historic Preservation's guide: *Protecting Historic Properties: A Citizen's Guide to Section 106 Review* available online at <http://www.achp.gov/citizenguide.pdf>.

The Area of Potential Effects (APE) is the area in which the proposed project may cause alterations in the character or use of historic resources. A historian who meets the Secretary of the Interior's Professional Qualification Standards identified and evaluated above-ground resources within the APE for potential eligibility for the National Register of Historic Places (NRHP). As a result of the historic property identification and evaluation efforts, historians identified four resources previously listed in the NRHP—the Columbus Historic District (NR-0373), Bartholomew County Courthouse (NR-0131), and Haw Creek Leather Company (NR-1404), and The Republic (NR-2354/NHL). One resource that was previously determined eligible—Third Street/SR 46 Bridge (Bridge No. 04-03-03782BWBL; NBI No.: 10340). Additionally, the City Power House Building (IHSSI No.: 005-130-45059) and the Pennsylvania Railroad Bridge (IHSSI No.: 005-130-25031) are recommended as eligible for listing on the NRHP.

With regard to archaeological resources, in the future, an archaeologist who meets the Secretary of the Interior's Professional Qualification Standards will submit a report identifying archaeological resources in the project area.

The Historic Property Report is available for review in IN SCOPE at <http://erms.indot.in.gov/Section106Documents/>; (the Des No. is the most efficient search term, once in IN SCOPE). You are invited to review these documents and respond with comments on any historic resource

impacts incurred as a result of this project so that an environmental report can be completed. We also welcome your related opinions and other input to be considered in the preparation of the environmental document. If you prefer a hard copy of this material, please respond to this email with your request within seven (7) days.

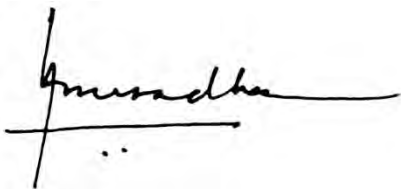
Please review the information and comment within thirty (30) calendar days of receipt. If you indicate that you do not desire to be a consulting party, or if you do not respond, you will not be included on the list of consulting parties for this project. If we do not receive your response in the time allotted, the project will proceed consistent with the proposed design and you will not receive further information about the project unless the design changes.

For questions concerning specific project details, you may contact Linda Weintraut of Weintraut & Associates, Inc. at 317-733-9770 or Linda@weintrautinc.com. All future responses regarding the proposed project should be forwarded to Weintraut & Associates, Inc. at the following address:

Linda Weintraut, Ph.D.
Weintraut & Associates, Inc.
PO Box 5034
Zionsville, Indiana 46077
Linda@weintrautinc.com

Tribal contacts may contact Shaun Miller at smiller@indot.in.gov or 317- 233-6795 or Michelle Allen at FHWA at michelle.allen@dot.gov or 317-226-7344.

Sincerely,



Anuradha V. Kumar, Manager
Cultural Resources Office
Environmental Services

Enclosures:

Map

Distribution List:

Michelle Allen, FHWA
Anuradha Kumar, INDOT
Nick Batta, CMT
Delaware Nation of Oklahoma
Eastern Shawnee Tribe of Oklahoma
Miami Tribe of Oklahoma
Peoria Tribe of Indians of Oklahoma
Pokagon Band of Potawatomi Indians
Bartholomew County History Center
Bartholomew County Historian