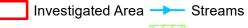


Figure 7 Water Resources Map SR 14, Pavement and Culvert Work Pulaski and Fulton County, IN Des. 1800182



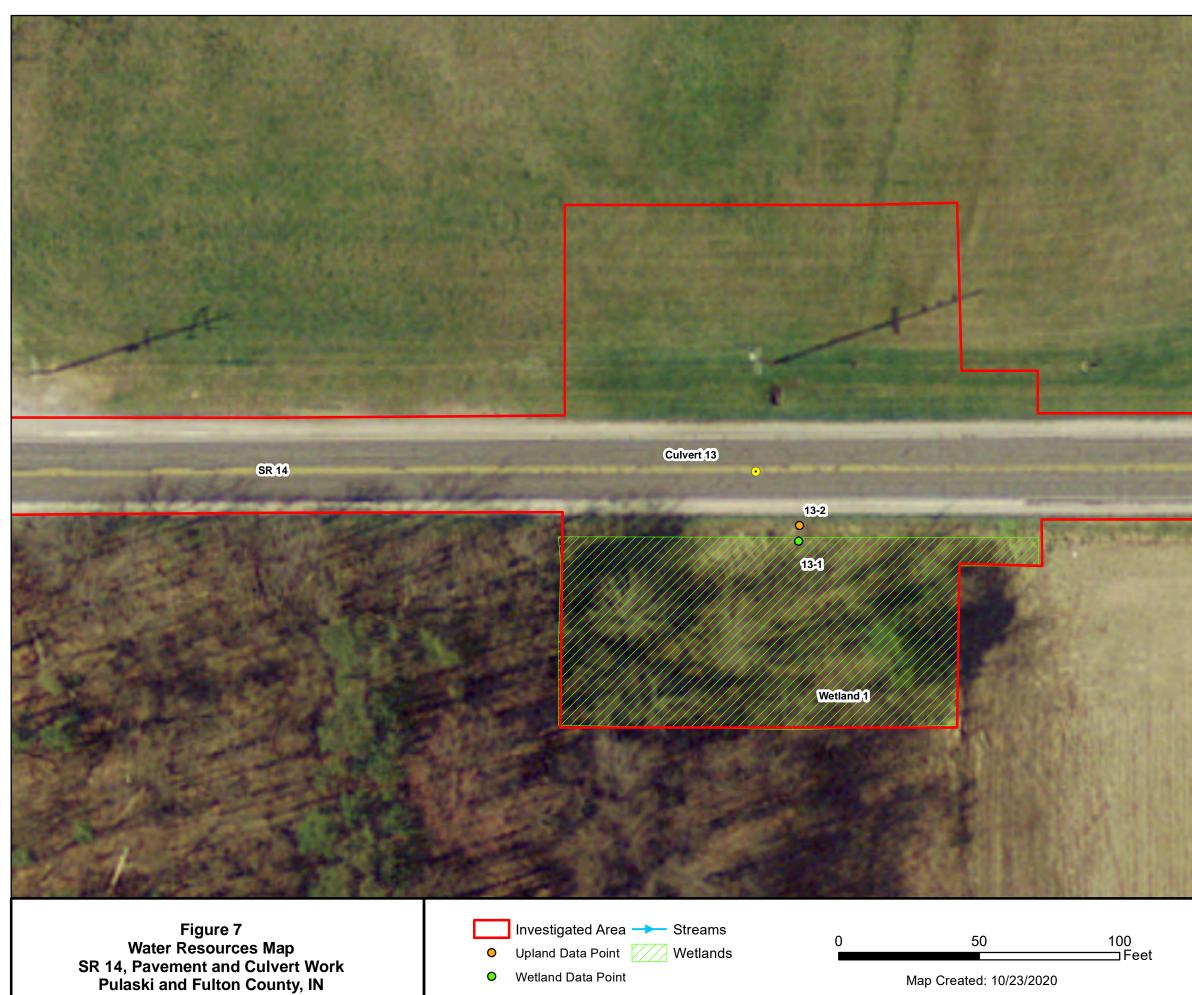
- Upland Data Point Wetlands
- Wetland Data Point
- Culverts

State of India Kaskaskia Engineering Group, LLC ſŊ

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Map Created: 10/23/2020

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• Culverts

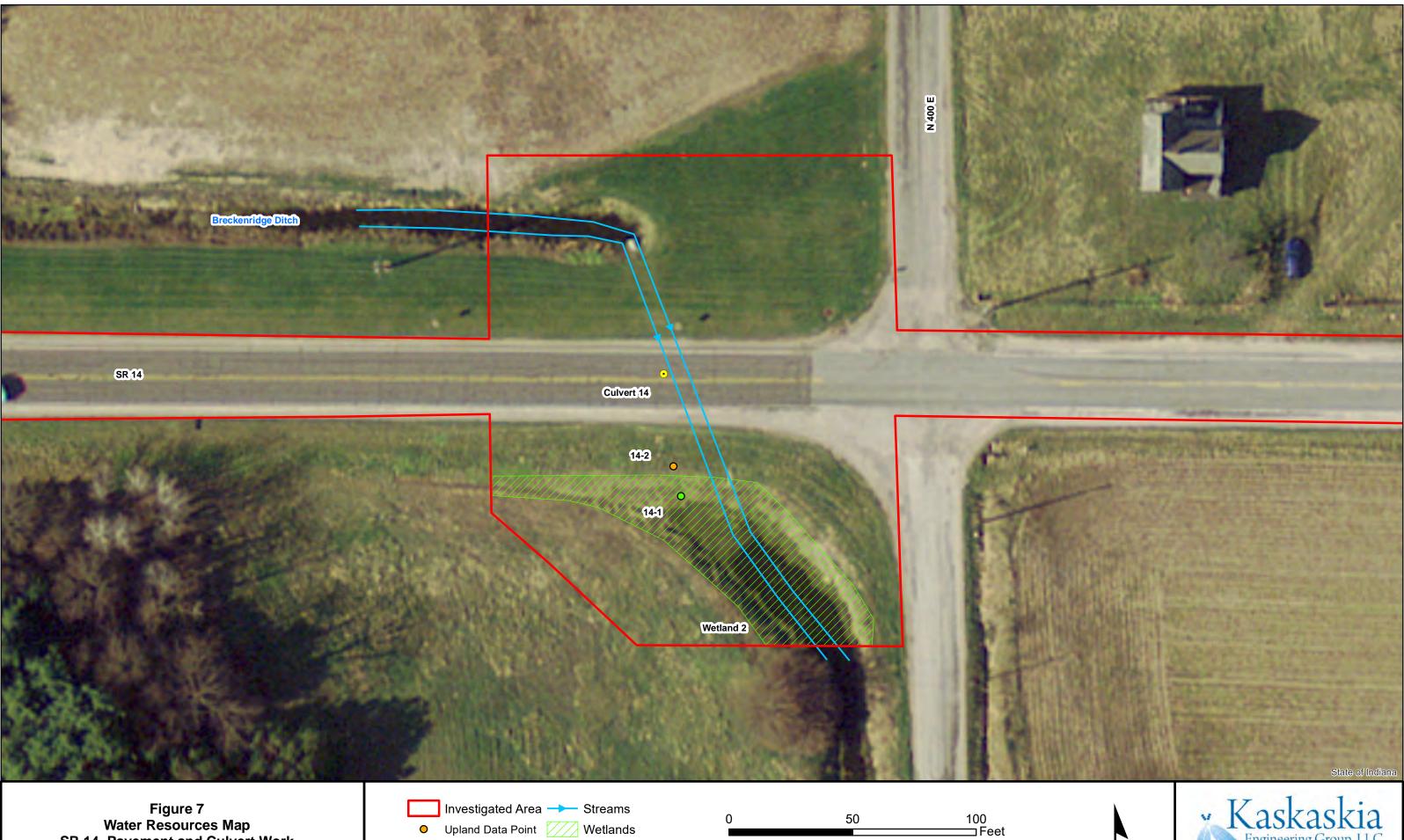
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Des. 1800182

State of Indiana



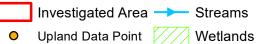
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Map Created: 10/23/2020

Figure 7 Water Resources Map SR 14, Pavement and Culvert Work Pulaski and Fulton County, IN Des. 1800182

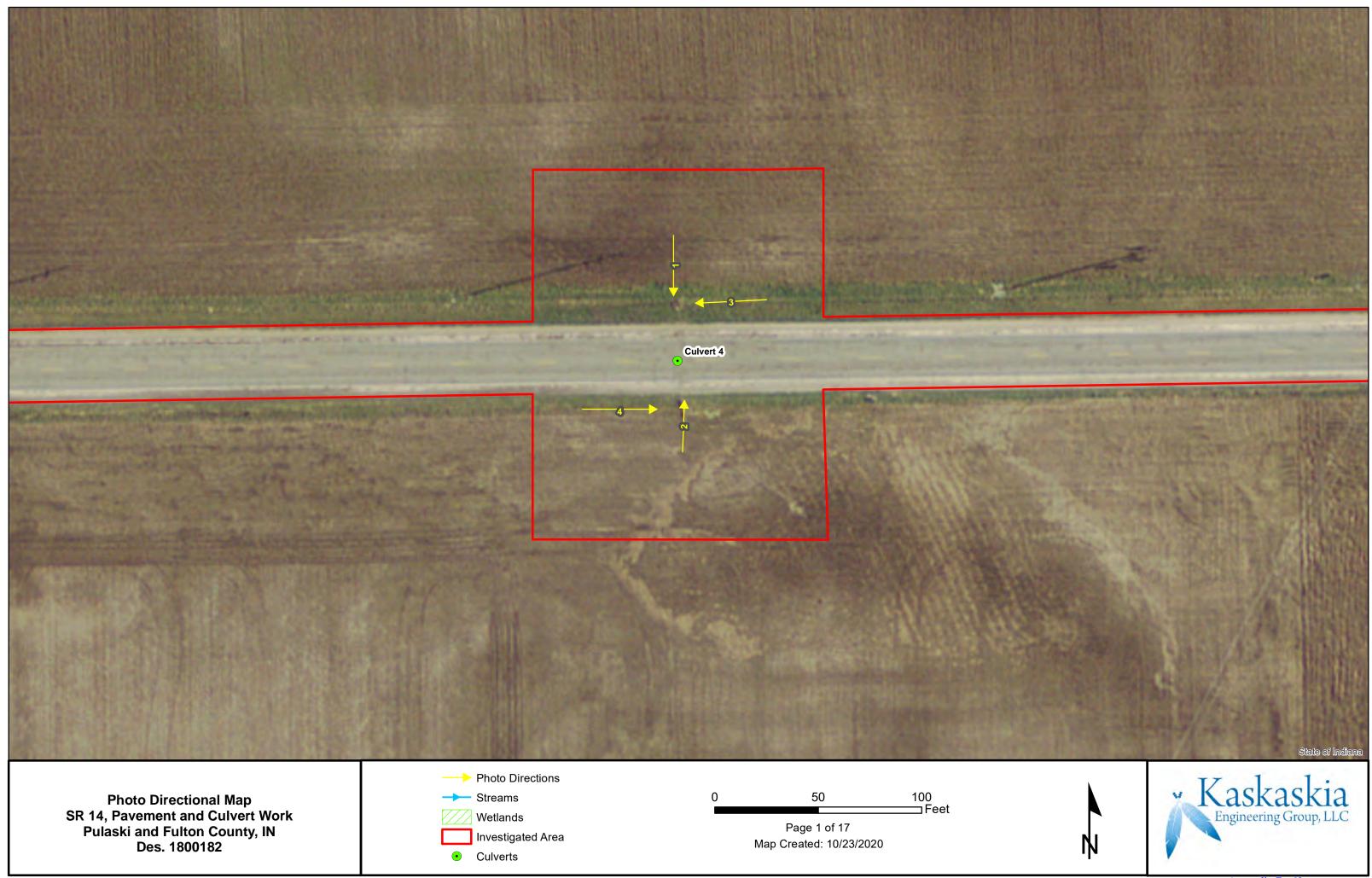


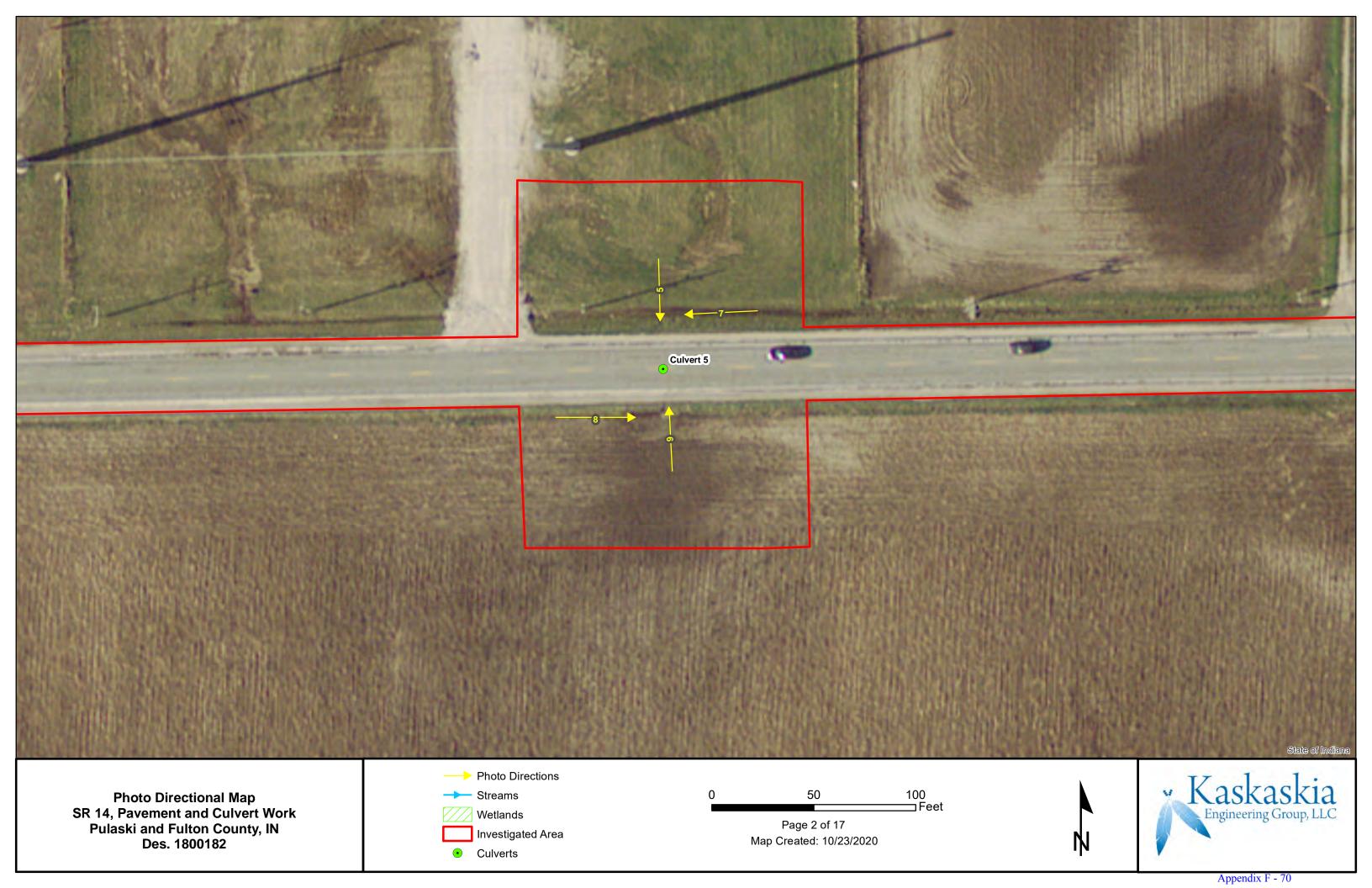
- \circ Wetland Data Point
- Culverts

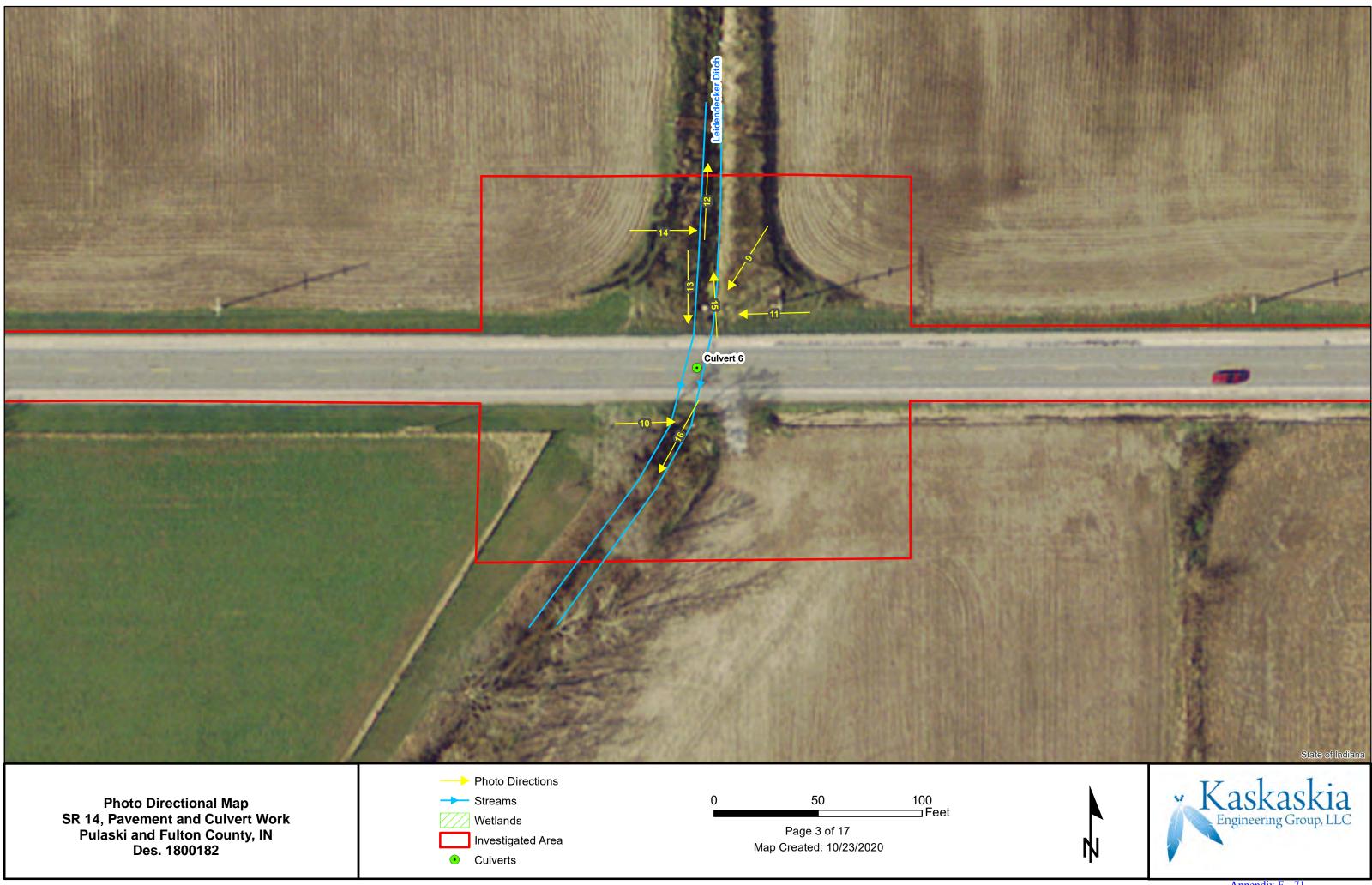


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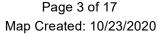




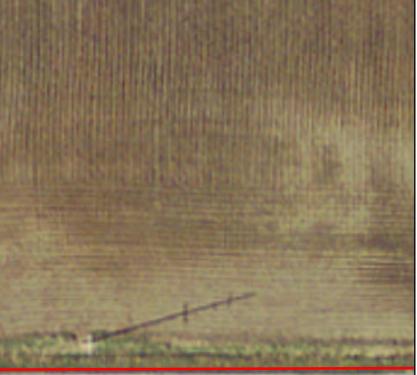


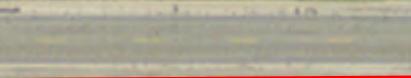






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Photo Directional Map SR 14, Pavement and Culvert Work Pulaski and Fulton County, IN Des. 1800182	 Photo Directions Streams Wetlands Investigated Area Culverts 	0 50 100 Feet Page 4 of 17 Map Created: 10/23/2020	

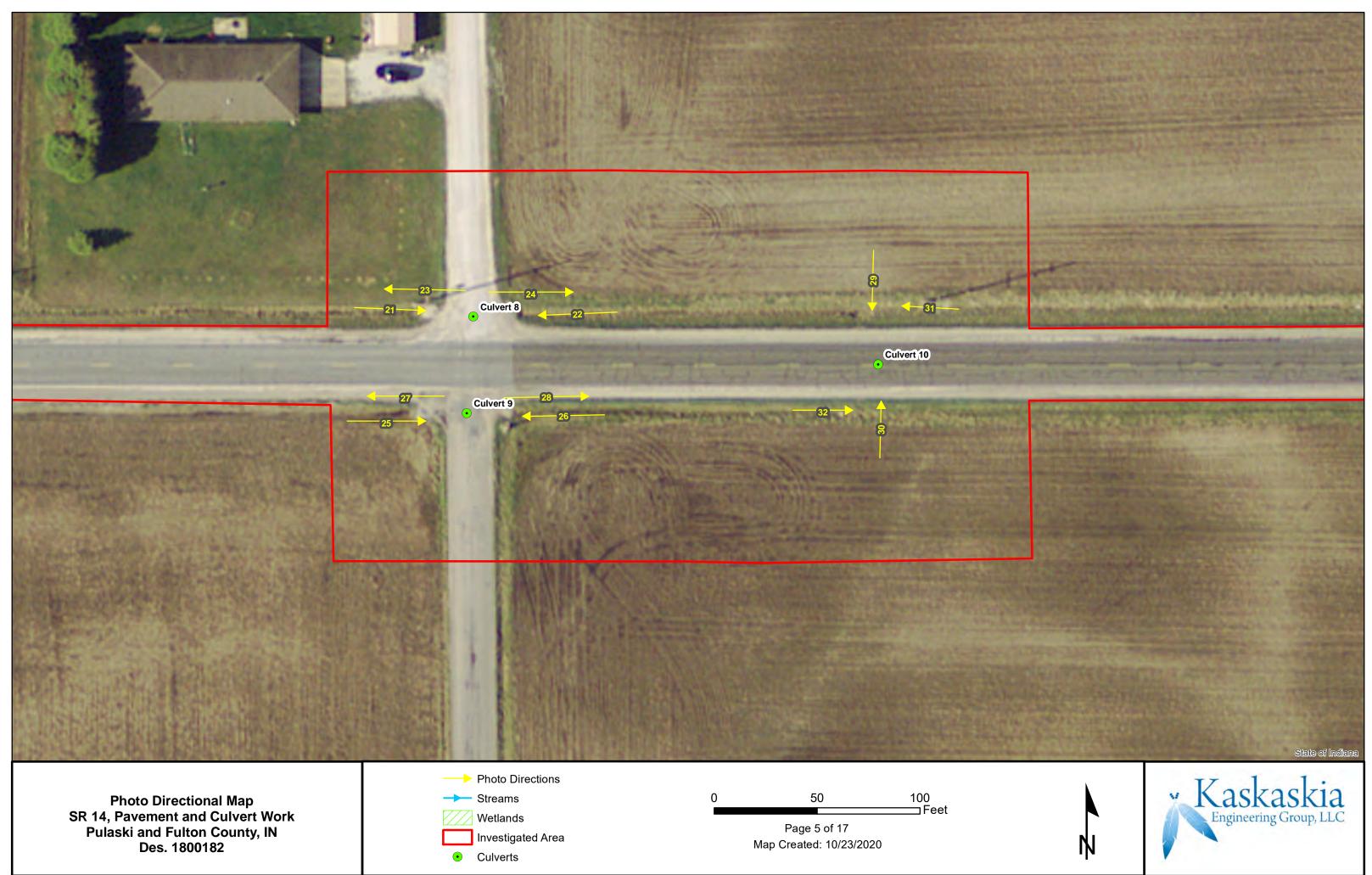


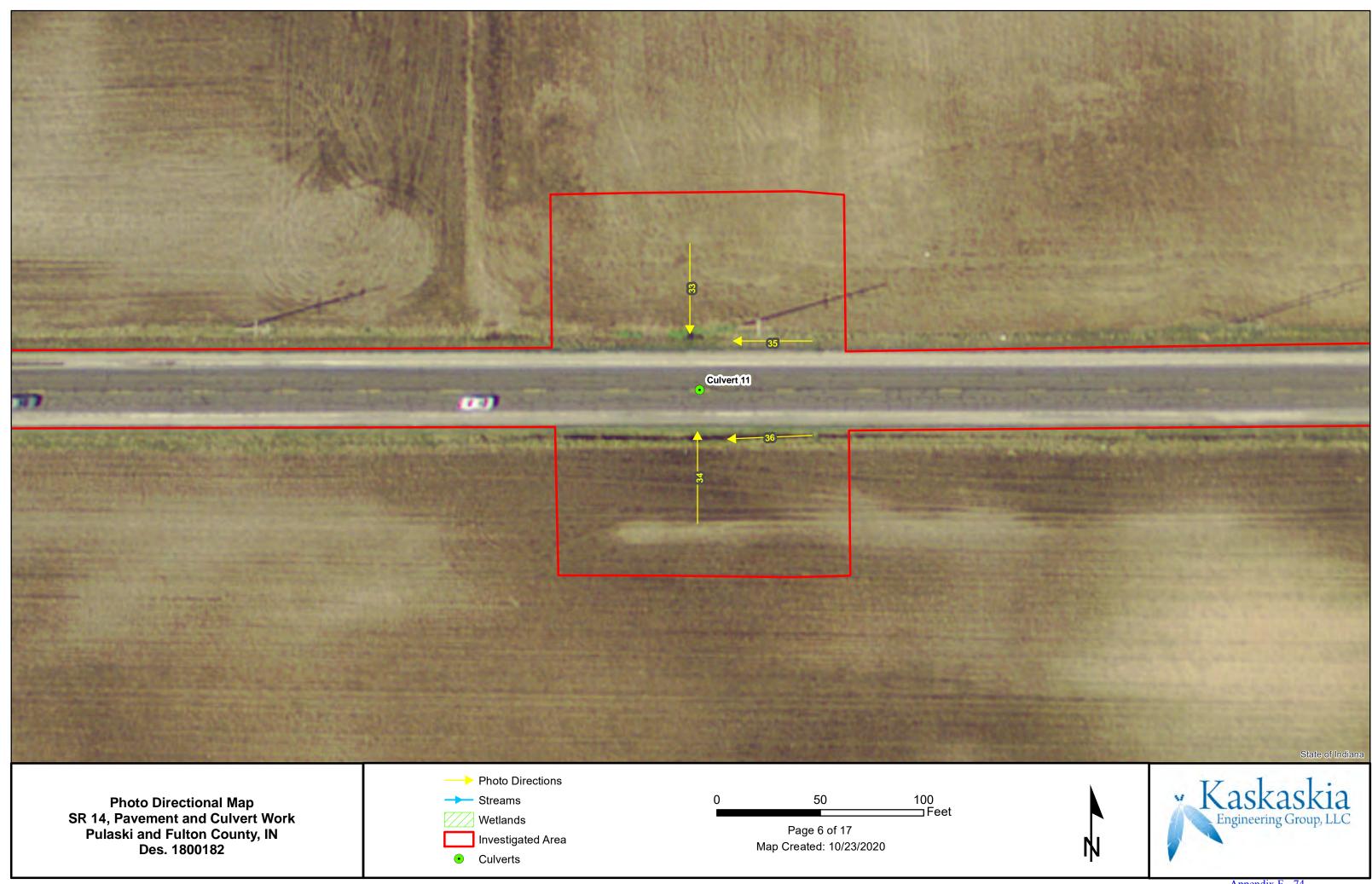


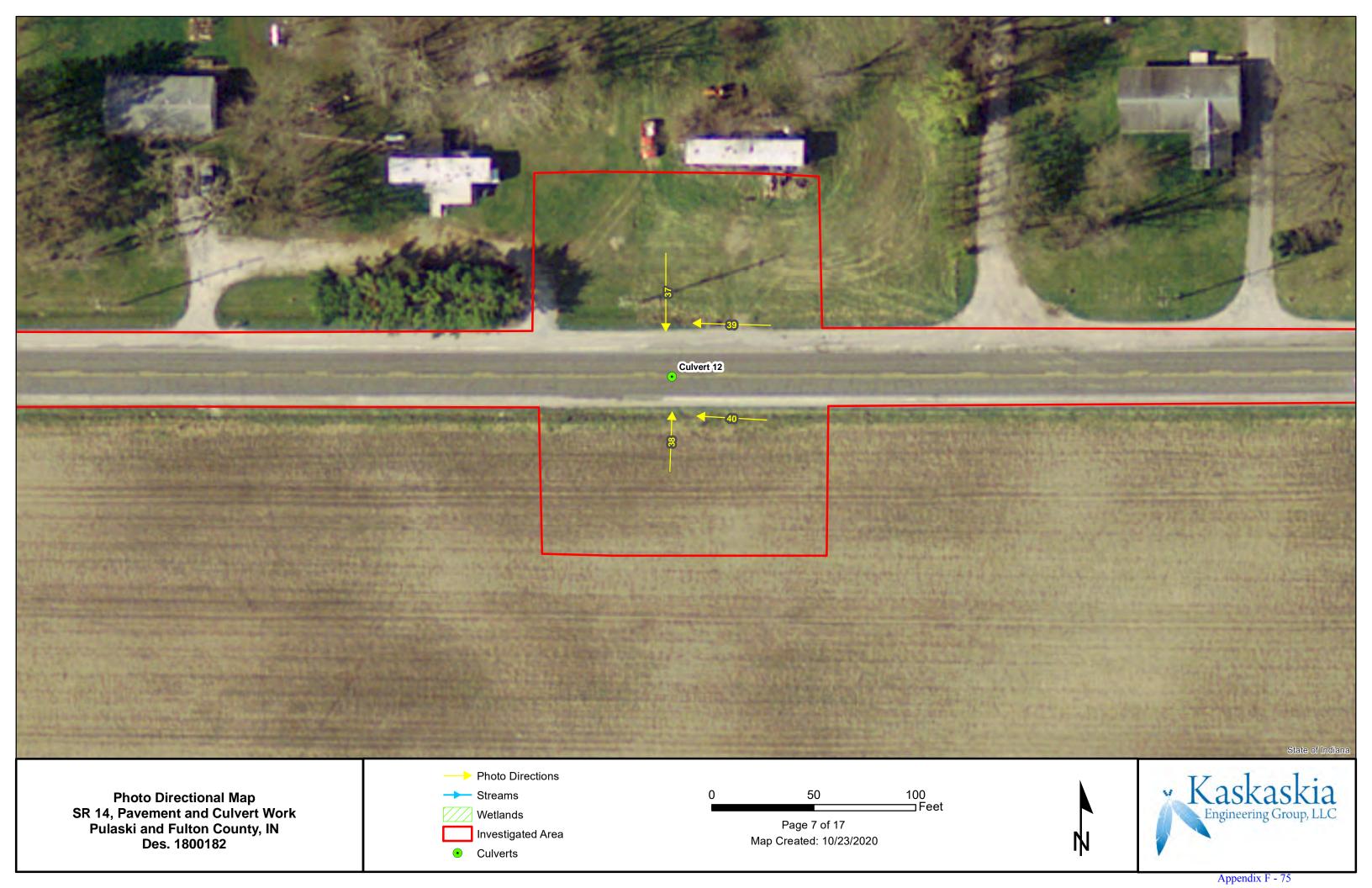
State of Indiana

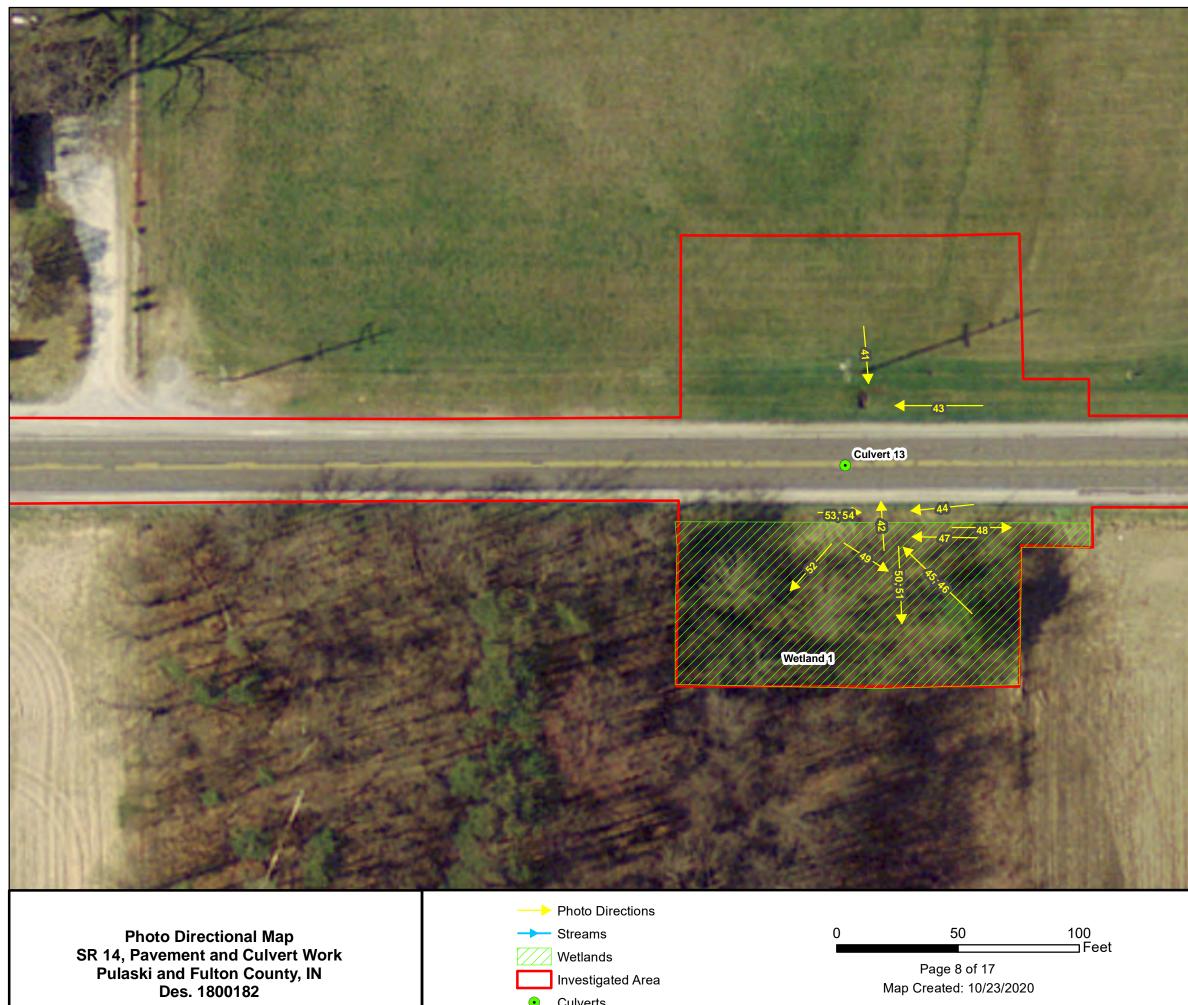


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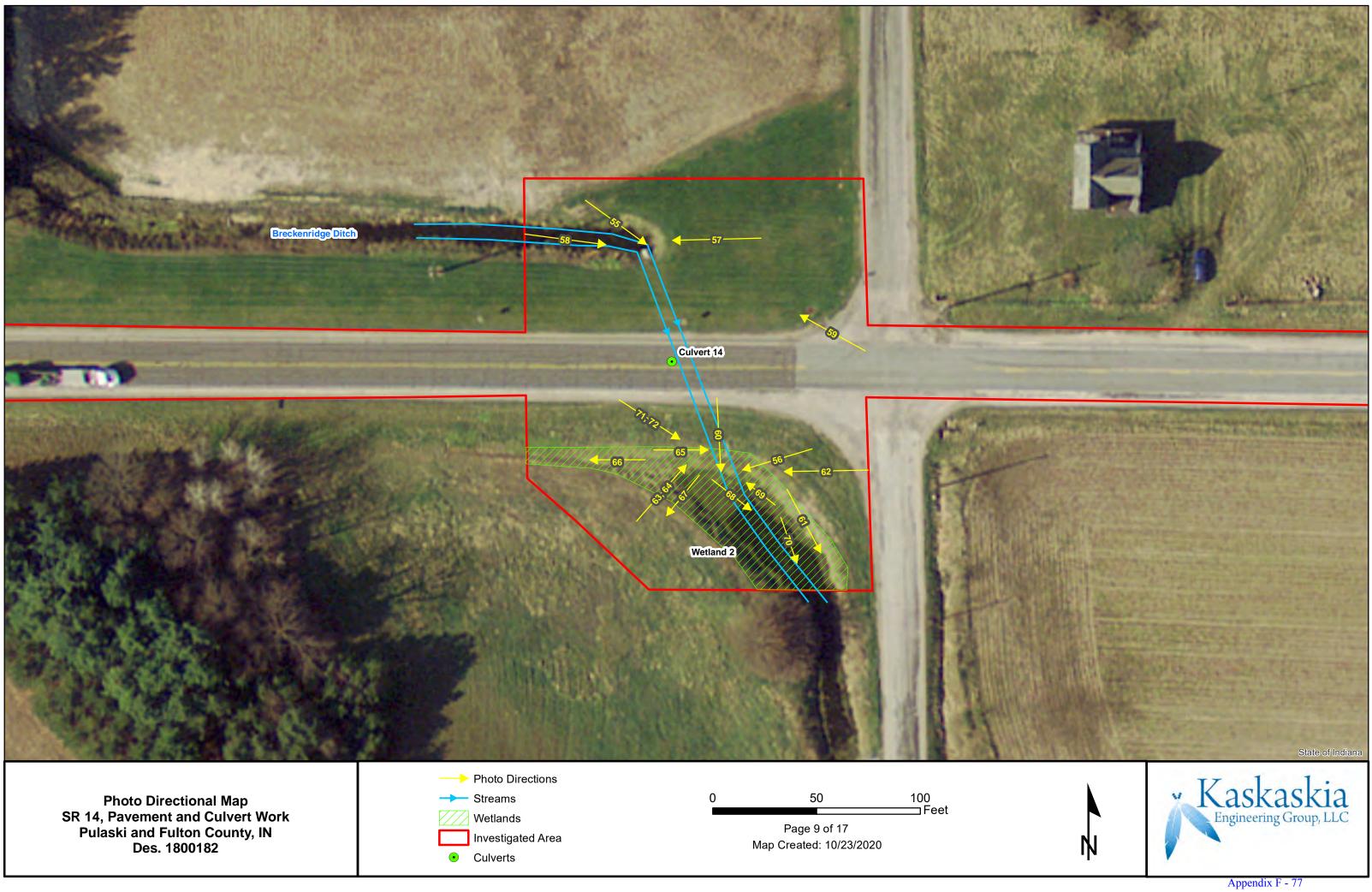


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•	Culverts

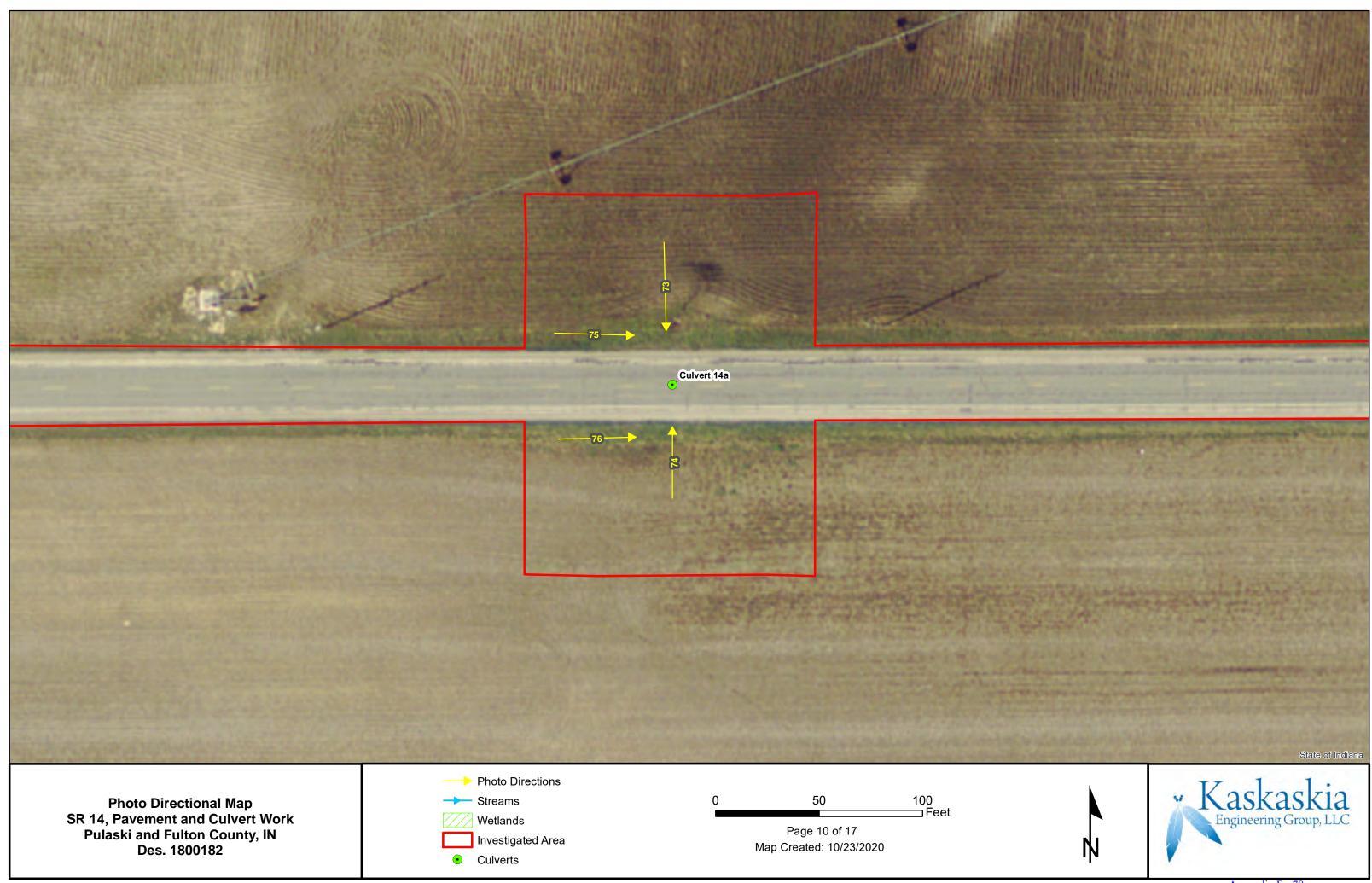
State of Indiana

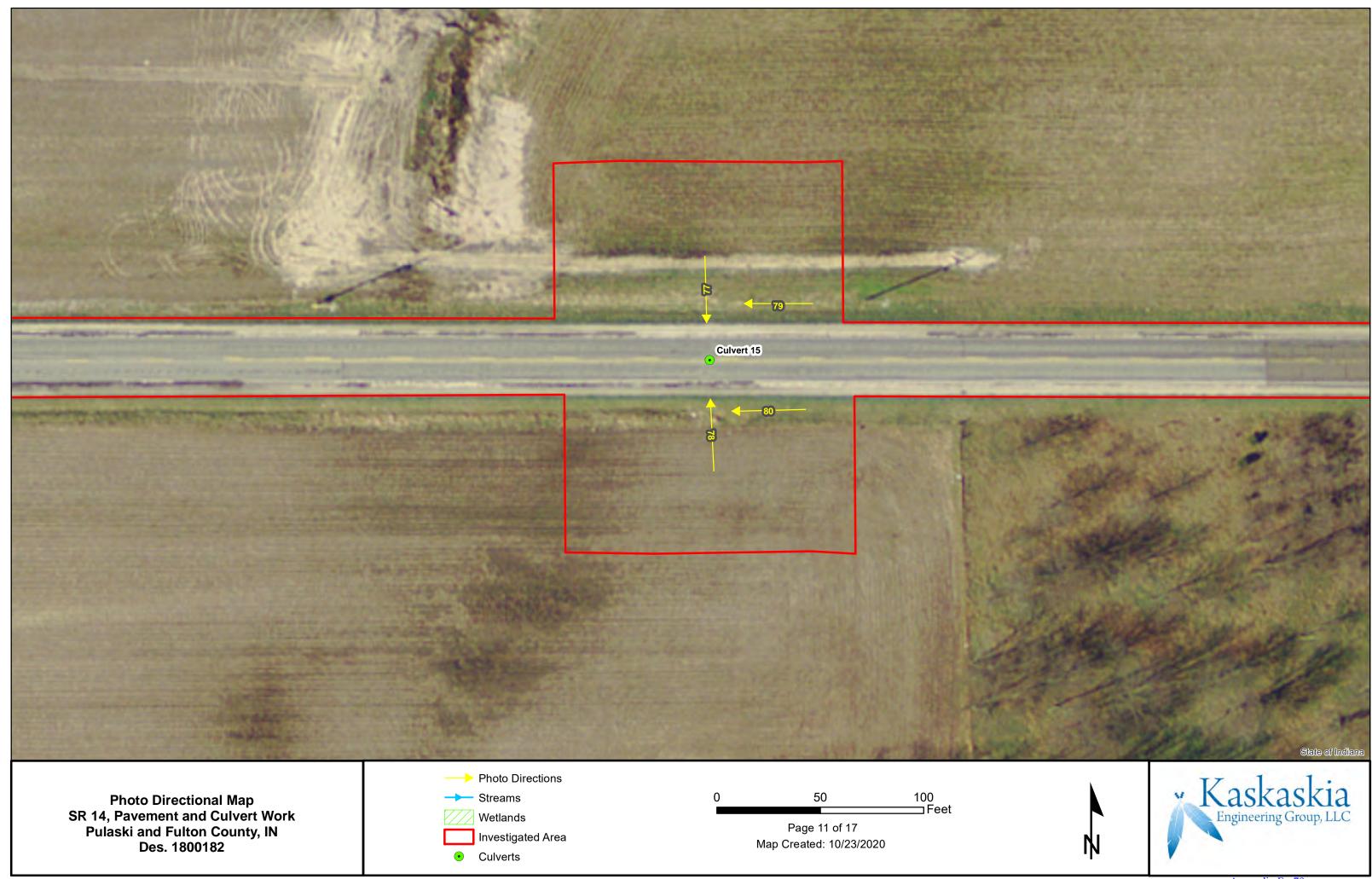


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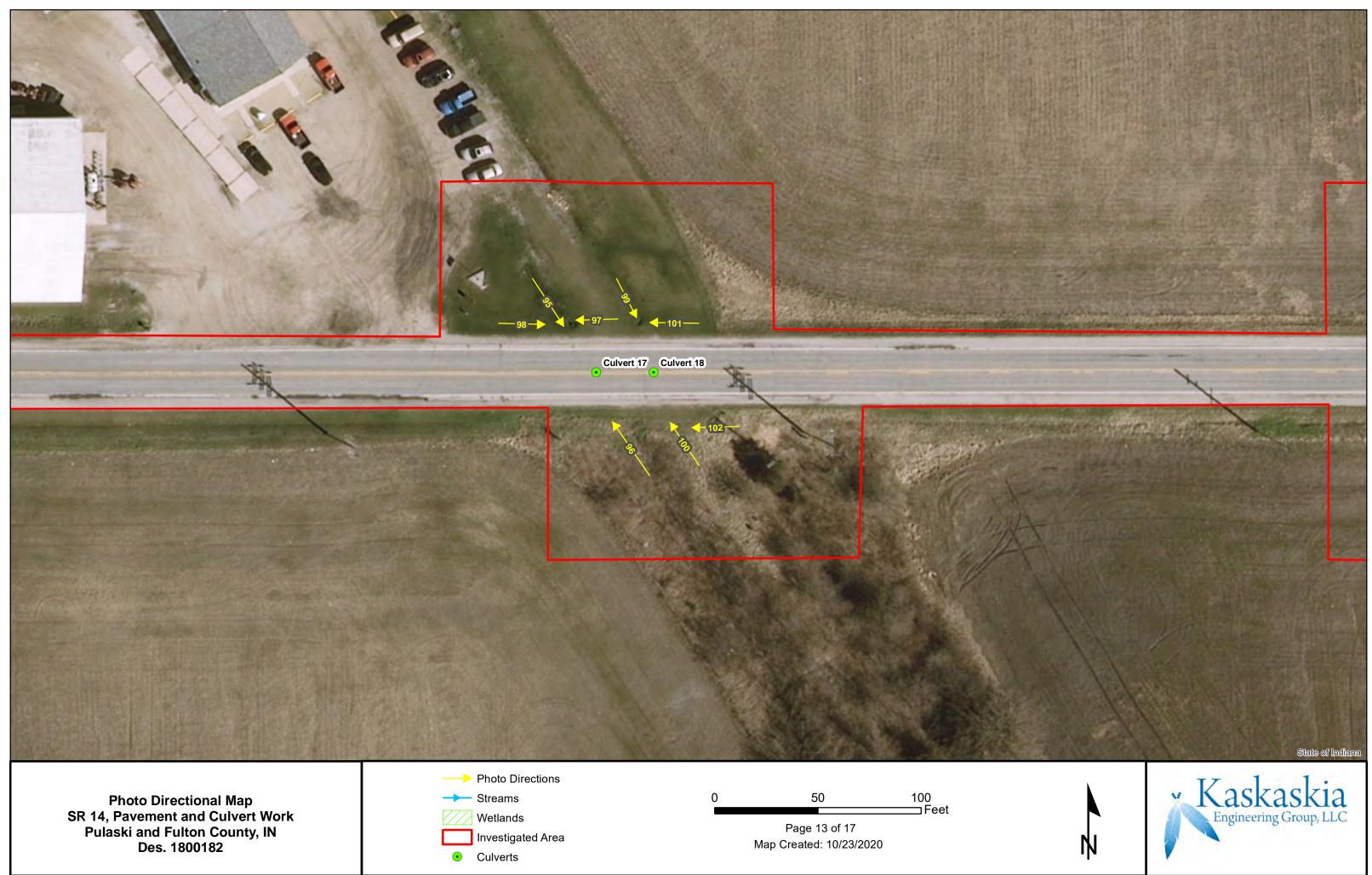


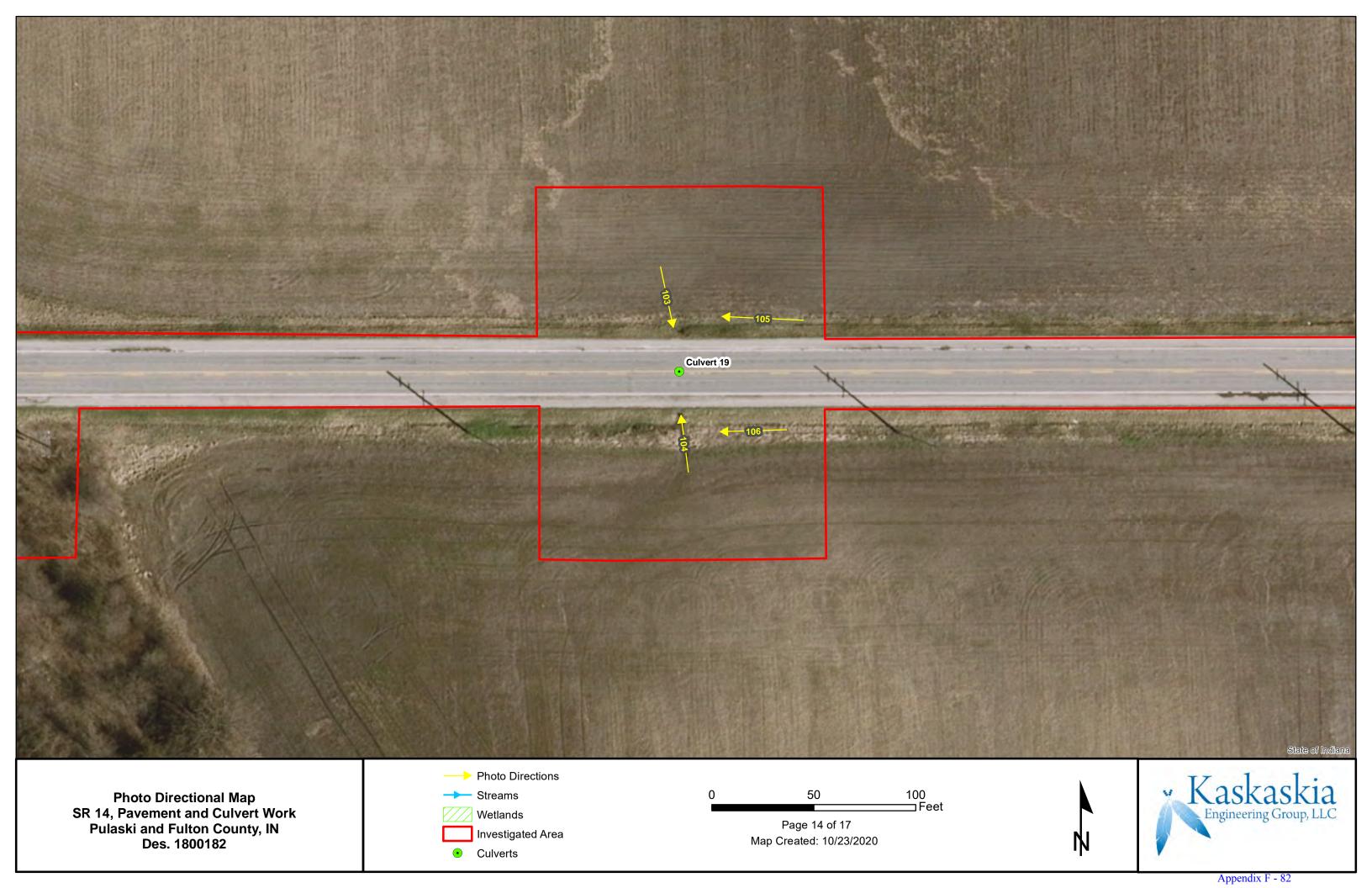


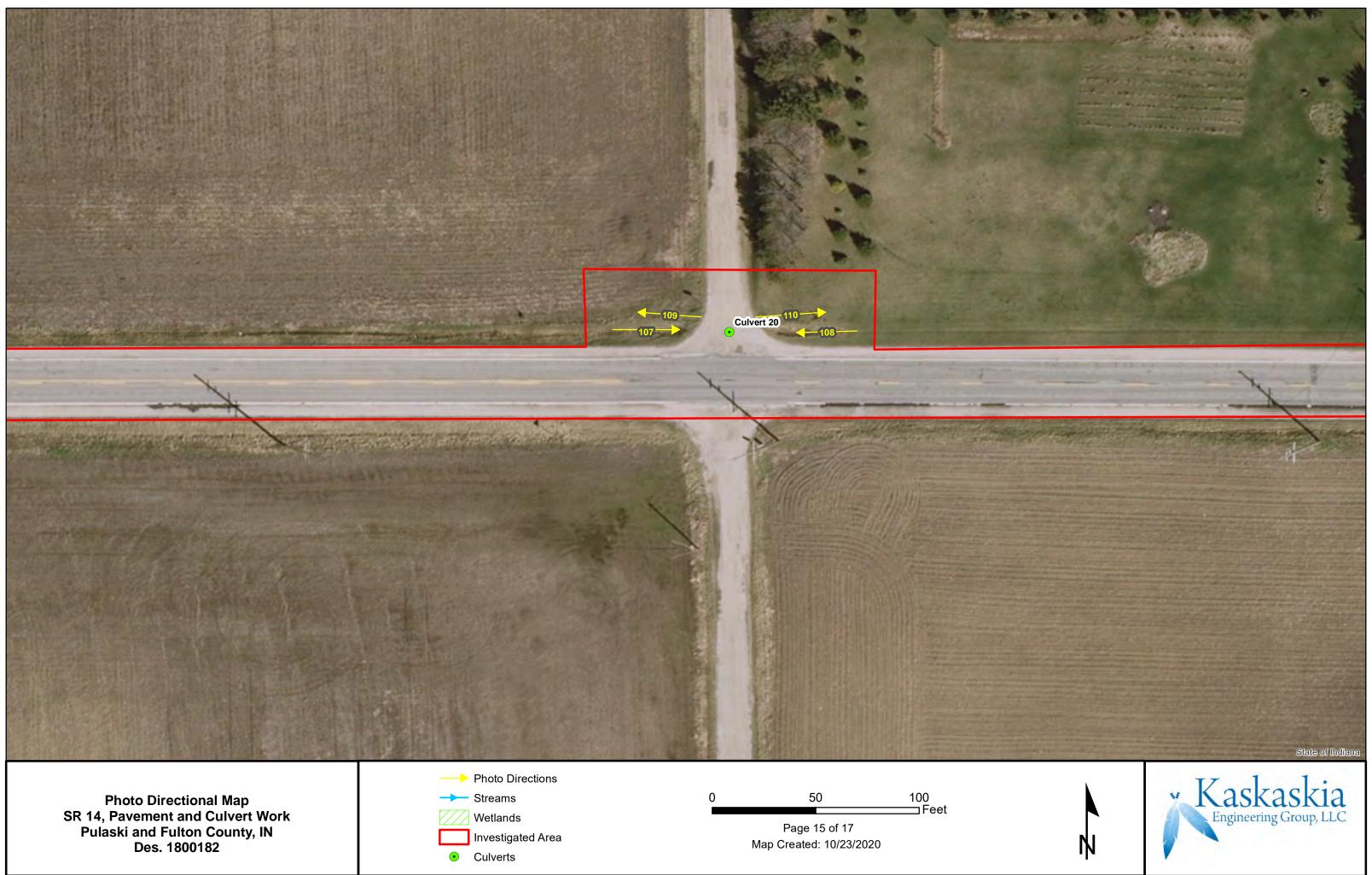




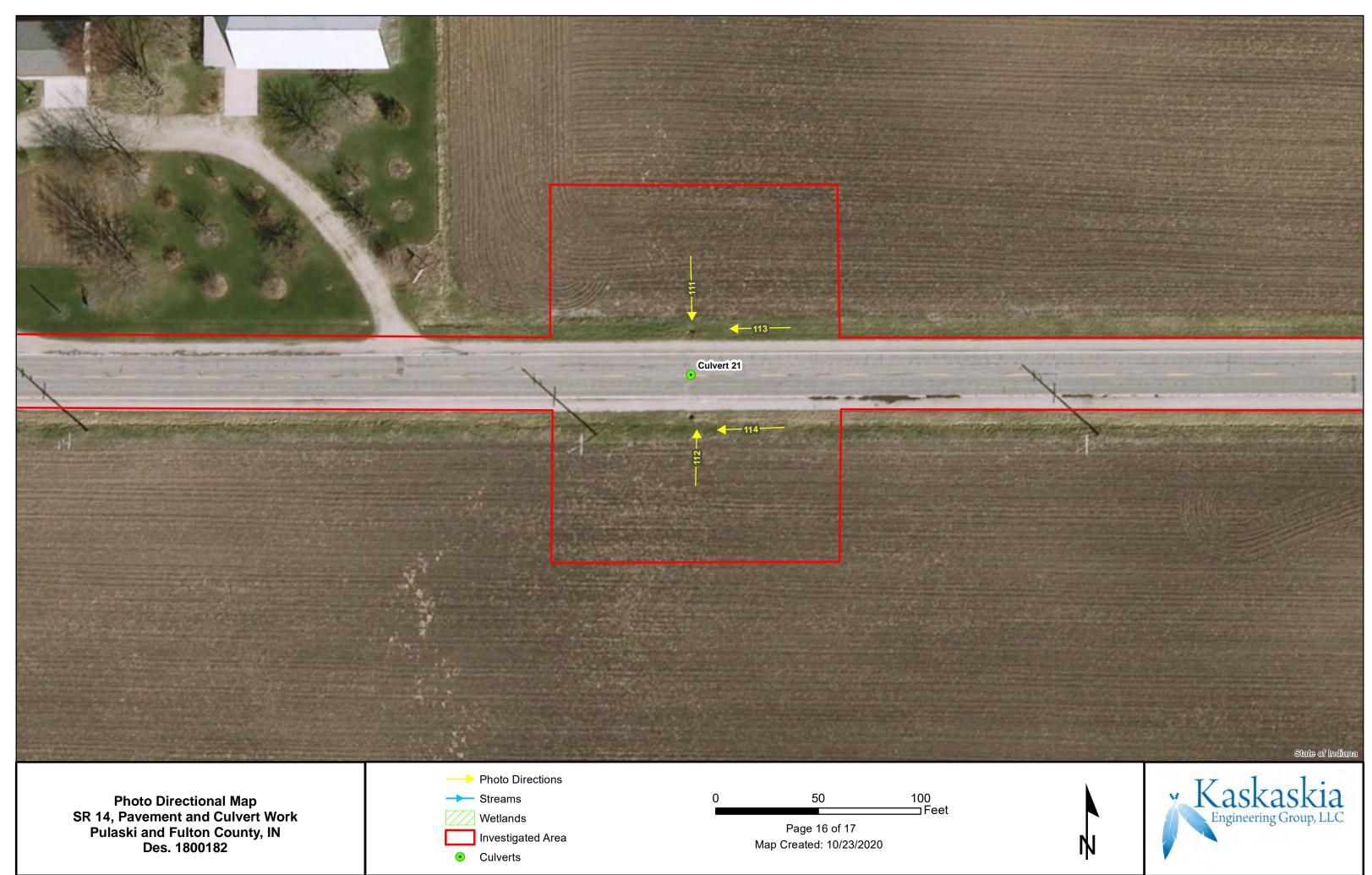


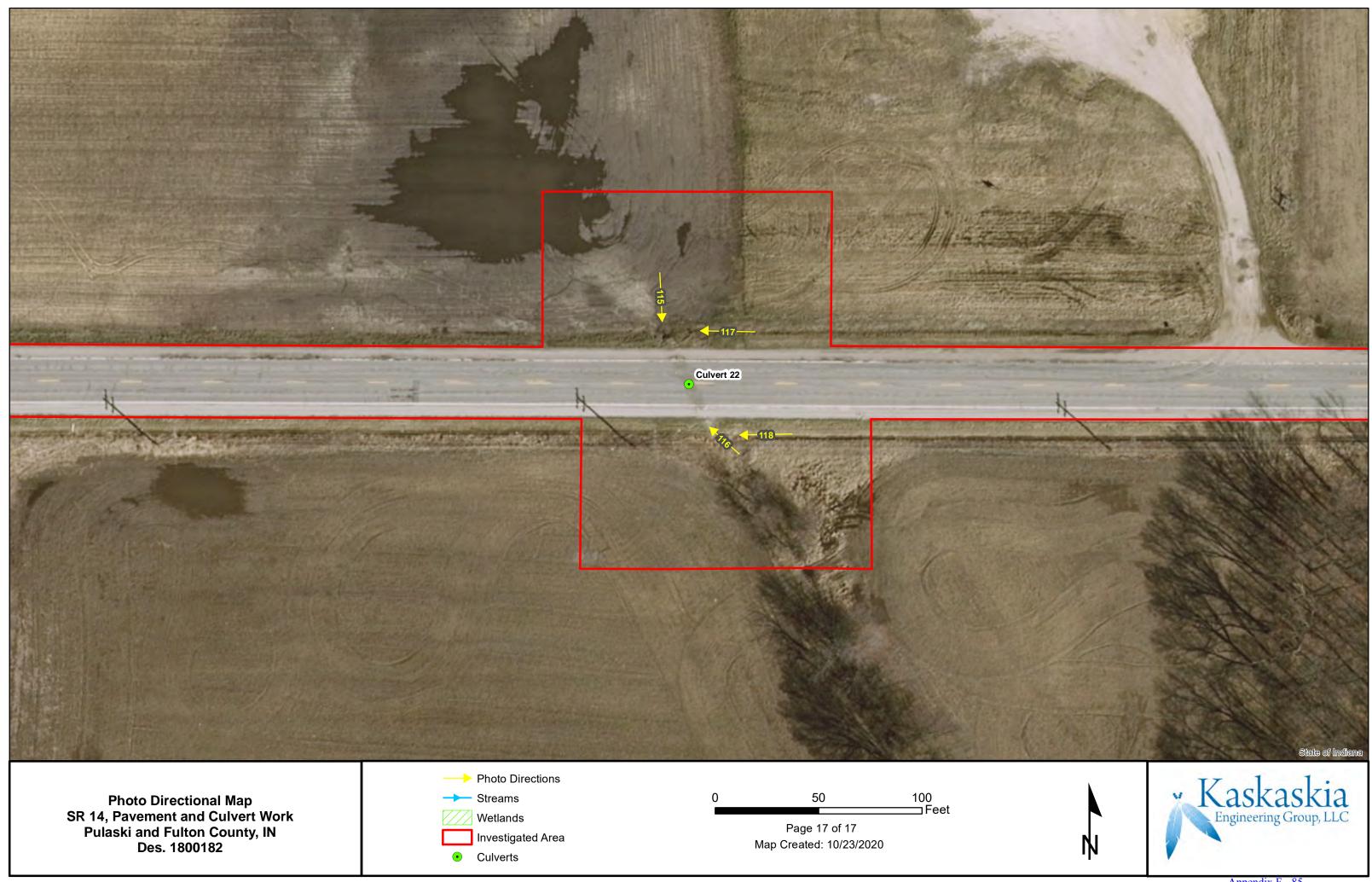






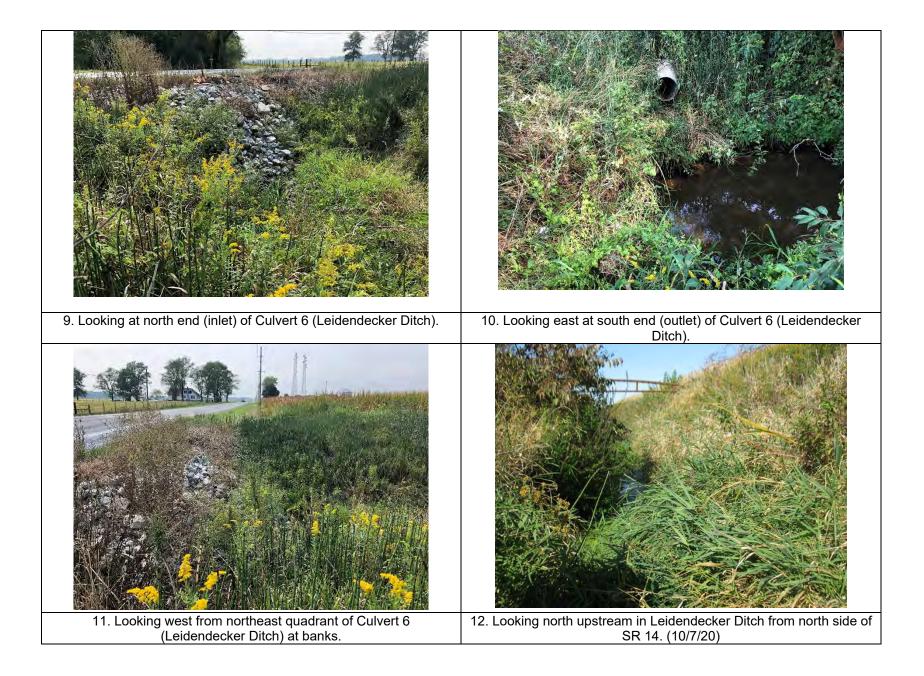


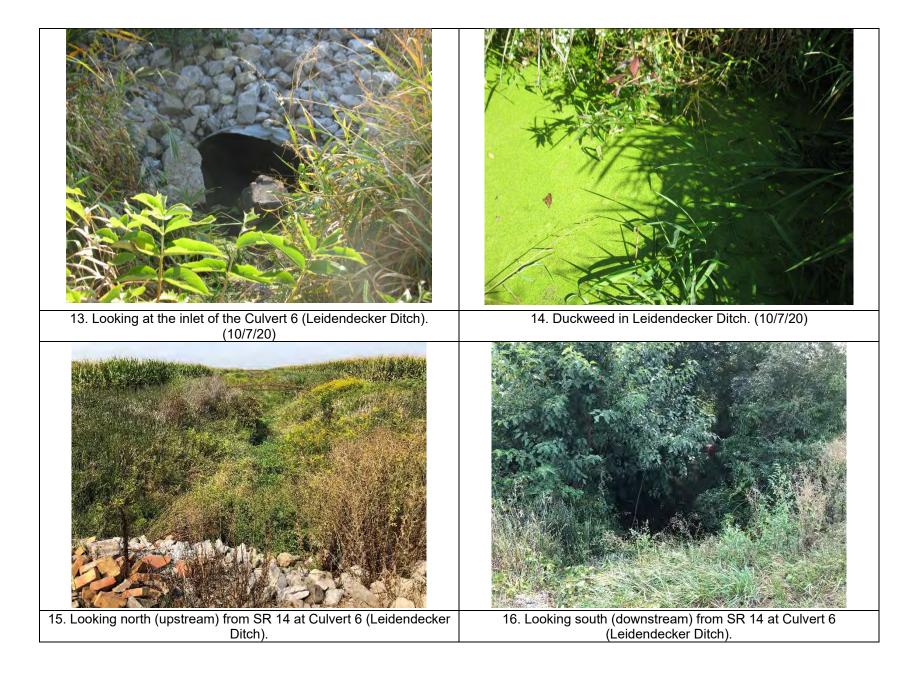


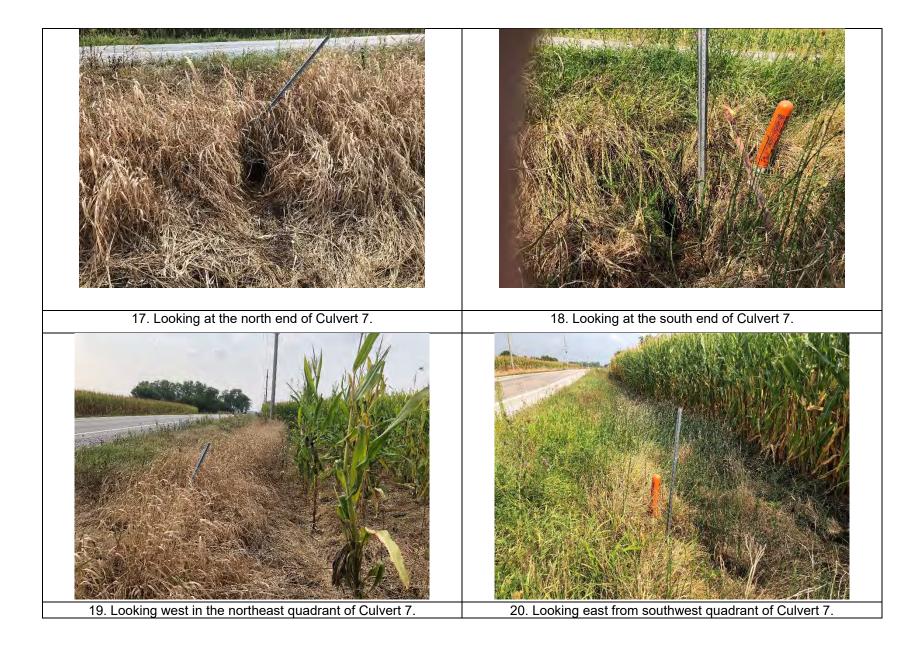




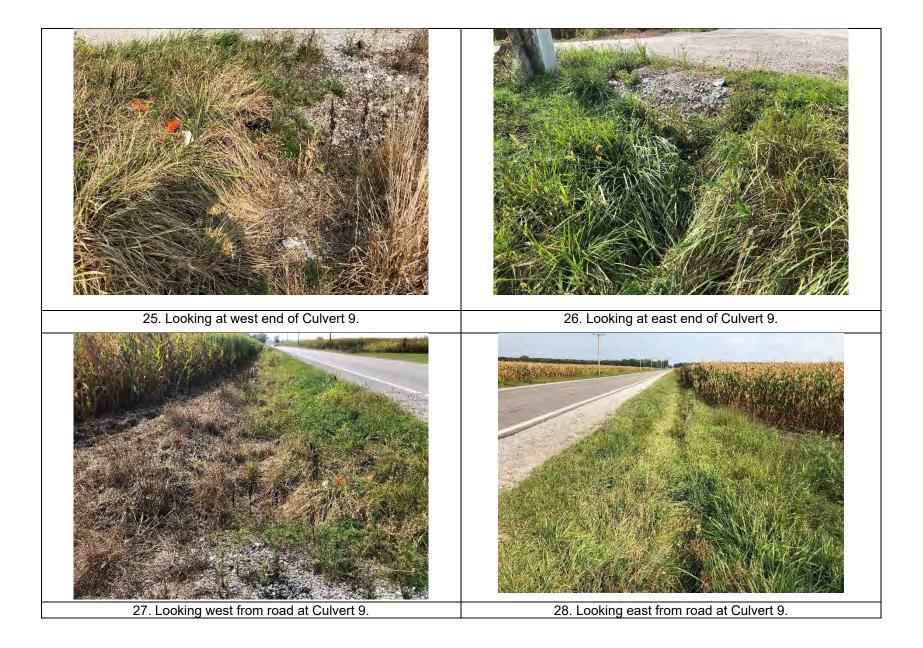




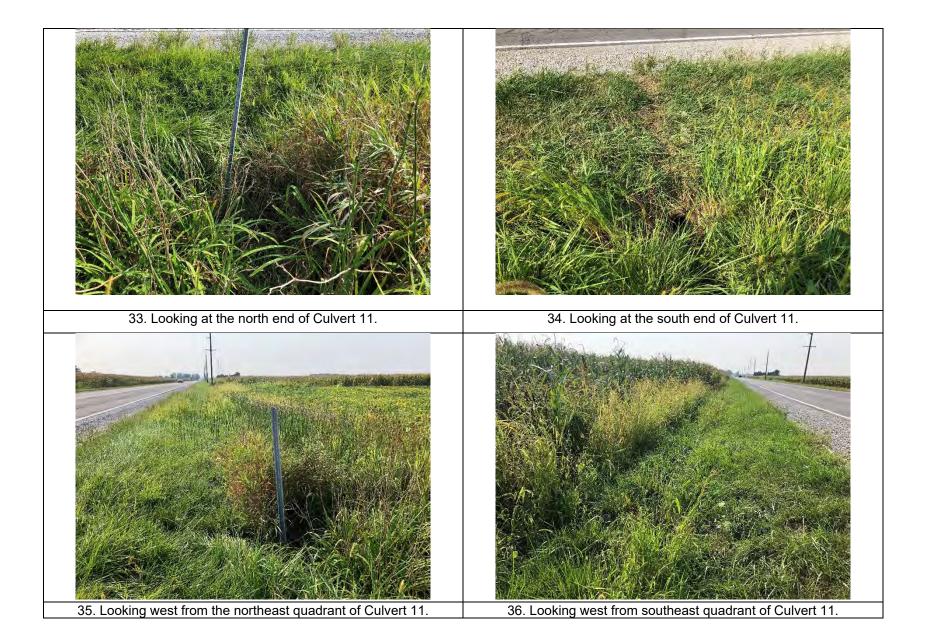






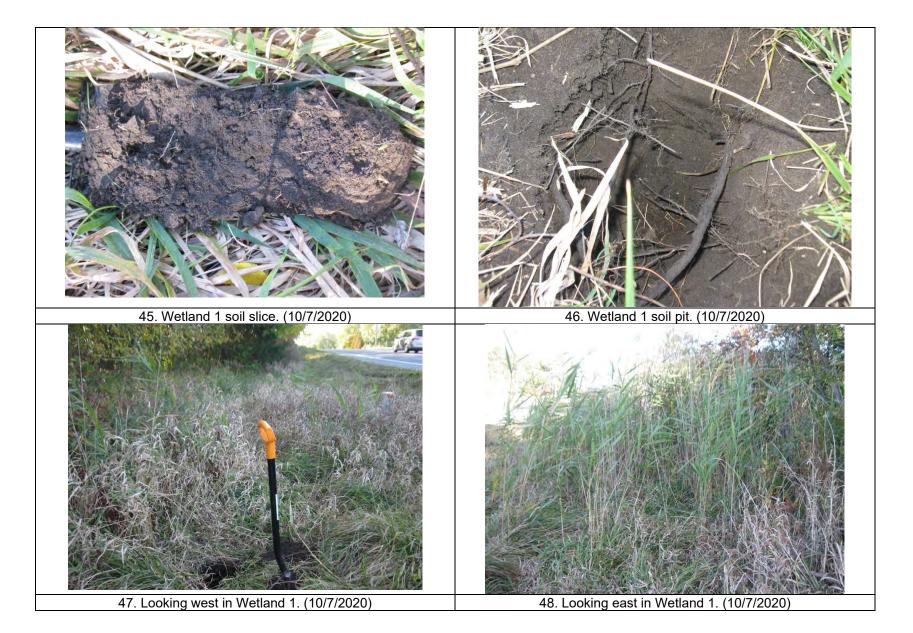




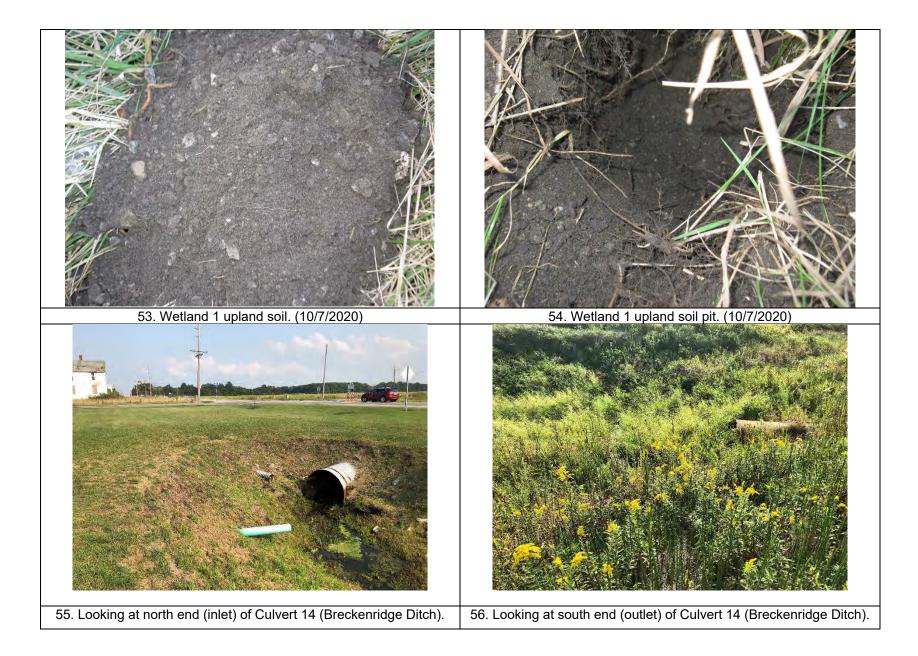




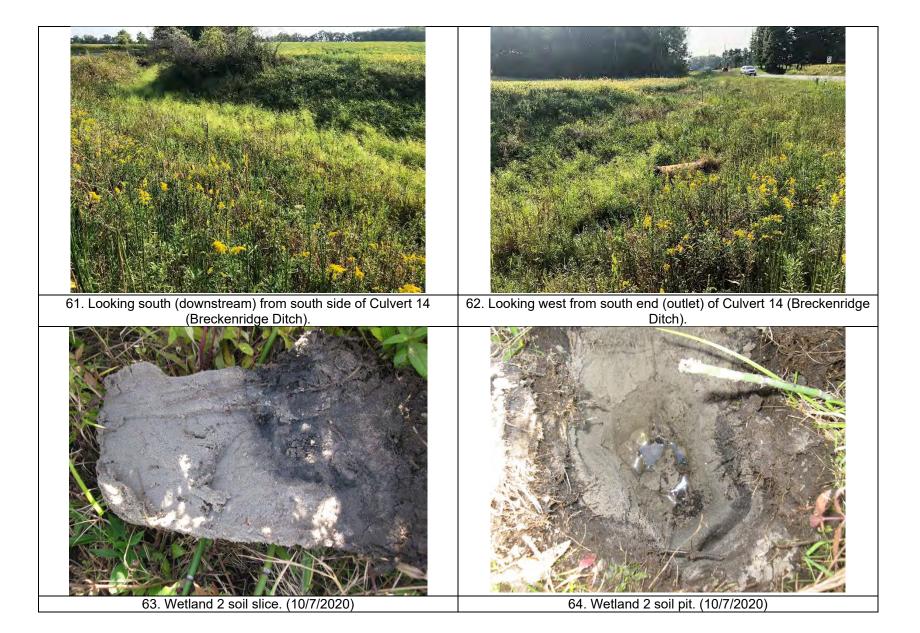


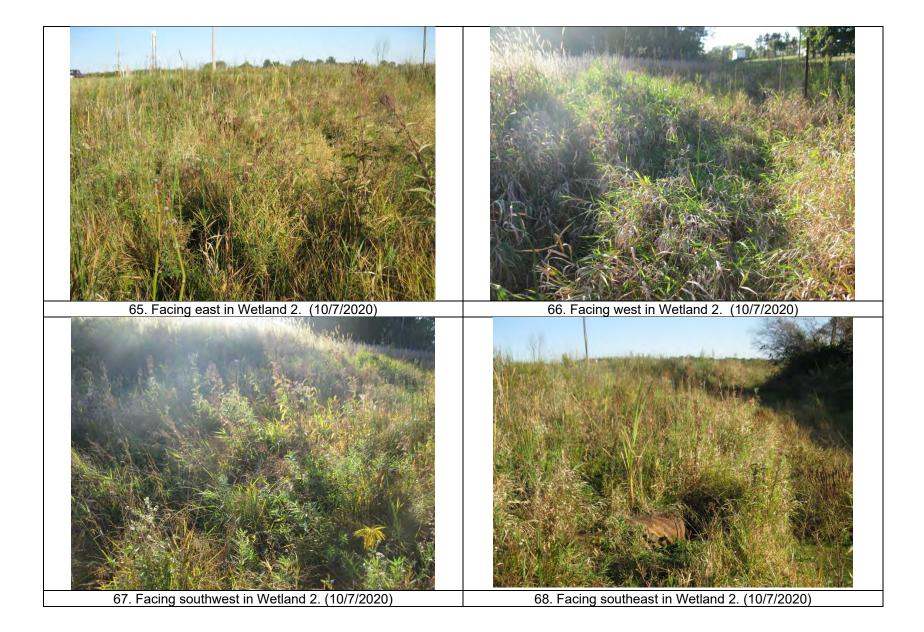


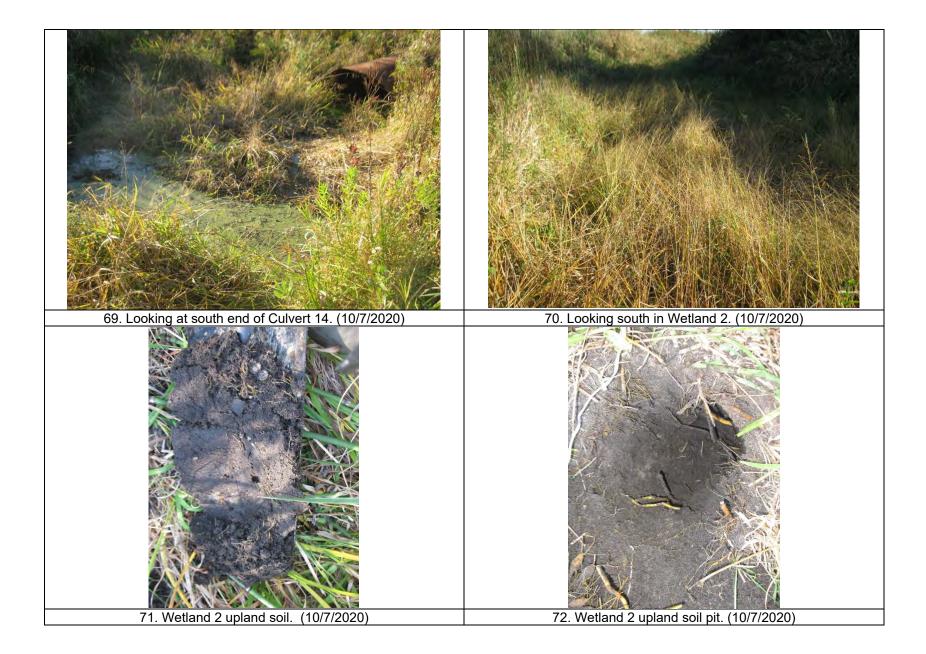


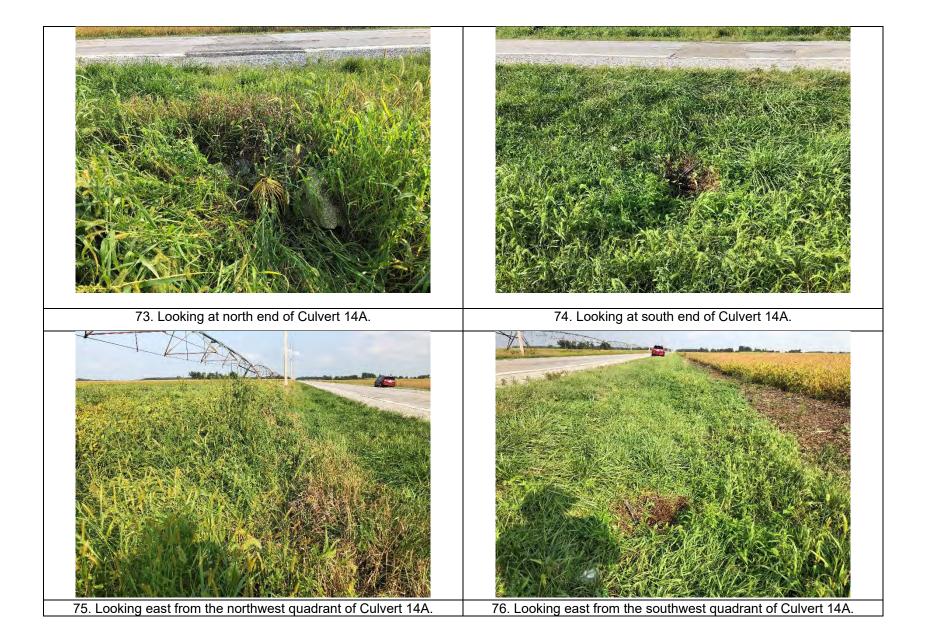






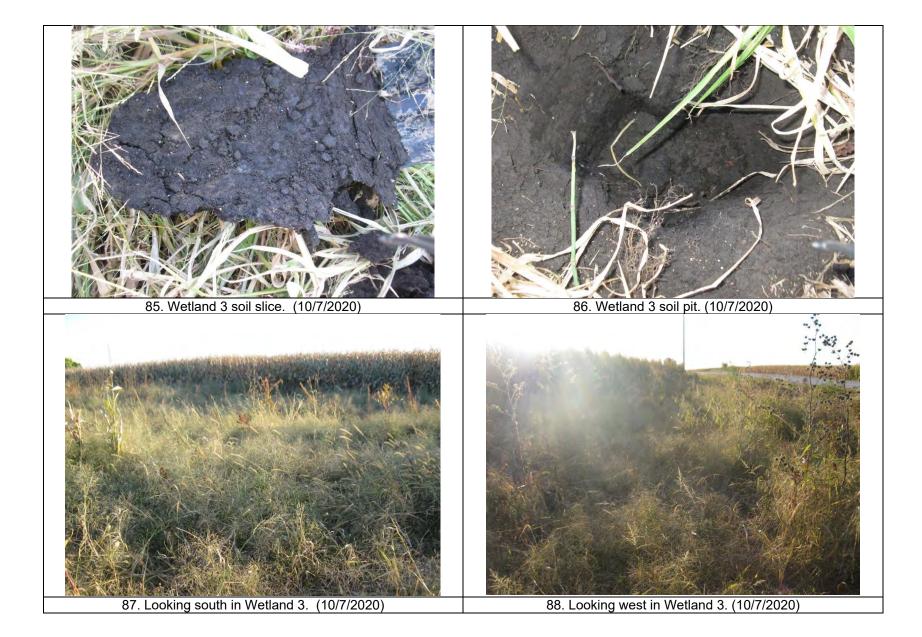












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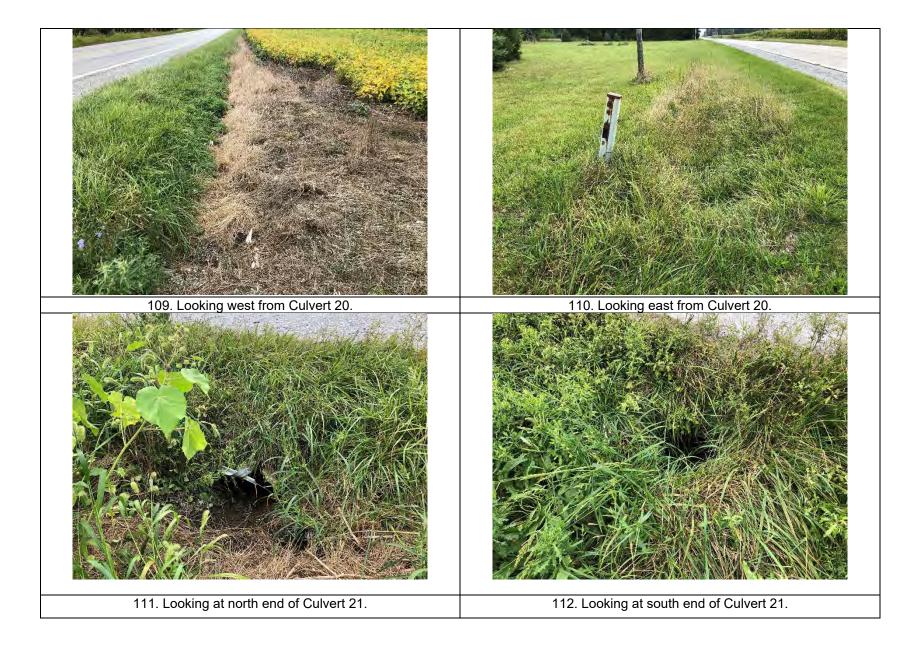


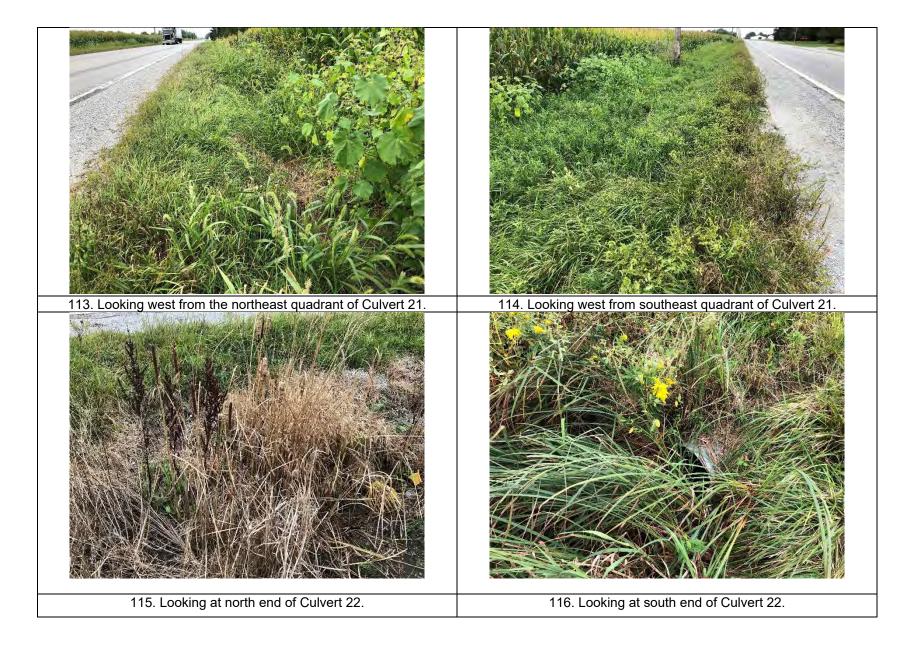


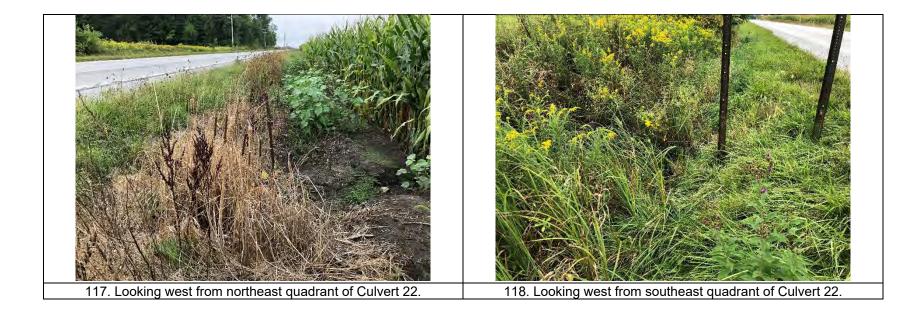












Project/Site: SR 14 - Culvert 13	City/County: Pulaski Cour	nty	Sampling Date: 10/7/2020
Applicant/Owner: INDOT		State: IN	Sampling Point: 13-1
Investigator(s): V. Flynn/K. Bollmann	Section, Township, Range:	Section 16, T30N	, R1W
Landform (hillslope, terrace, etc.): terrace	Local relief (cond	ave, convex, none):	none
Slope (%): 0 Lat: 41.055608	Long: -86.529618		Datum: NAD 83
Soil Map Unit Name: Goodell-Gilford fine sandy loams, 0 to 1 p	percent slopes (GmnA)	NWI classific	ation: <u>N</u> /A
Are climatic / hydrologic conditions on the site typical for this time of ye	ear? Yes No _X	_ (If no, explain in R	emarks.)
Are Vegetation, Soil, or Hydrology significantly		nal Circumstances" p	resent? Yes X No
Are Vegetation, Soil, or Hydrology naturally pro	oblematic? (If needed	l, explain any answei	rs in Remarks.)

SUMMARY OF FINDINGS – Attach site map showing sampling point locations, transects, important features, etc.

Hydrophytic Vegetation Present?	Yes No			
Hydric Soil Present?	Yes X No	Is the Sampled Area		
Wetland Hydrology Present?	Yes X No	within a Wetland?	Yes X	No

Remarks:

Previous 3 month period was drier than average based on rainfall data near Winamac 2SSE weather station from 1971-2020 (AgACIS, 2020)

VEGETATION – Use scientific names of plants.

	Absolute	Dominant	Indicator	Dominance Test worksheet:
Tree Stratum (Plot size: <u>30 ft. diam.</u>)	% Cover	Species?	Status	Number of Dominant Species
1				That Are OBL, FACW, or FAC: 2 (A)
2				
				Total Number of Dominant Species Across All Strata: 3 (B)
3				Species Across All Strata: <u>3</u> (B)
4	·			Percent of Dominant Species
5				That Are OBL, FACW, or FAC: 67 (A/B)
		= Total Cov	/er	
Sapling/Shrub Stratum (Plot size: 15 ft. diam)				Prevalence Index worksheet:
1				Total % Cover of:Multiply by:
2				OBL species x 1 =
3.				FACW species x 2 =
				FAC species x 3 =
4				FACU species x 4 =
5				
Herb Stratum (Plot size: 5 ft. diam.)		= Total Cov	/er	UPL species x 5 =
1. Phalaris arundinacea	60	Y	FACW	Column Totals: (A) (B)
	· <u> </u>			
2. Schedonorus arundinaceus	20	<u>Y</u>	FACU	Prevalence Index = B/A =
3. Phragmites australis		Y	FACW	Hydrophytic Vegetation Indicators:
4				1 - Rapid Test for Hydrophytic Vegetation
5				\overline{X} 2 - Dominance Test is >50%
6				3 - Prevalence Index is ≤3.0 ¹
				4 - Morphological Adaptations ¹ (Provide supporting
7				data in Remarks or on a separate sheet)
8				Problematic Hydrophytic Vegetation ¹ (Explain)
9	·			
10				¹ Indicators of hydric soil and wetland hydrology must
15 ft diam	100	= Total Cov	/er	be present, unless disturbed or problematic.
Woody Vine Stratum (Plot size: 15 ft. diam.)				
1				Hydrophytic
2				Vegetation
		= Total Cov	/er	Present? Yes X No
Remarks: (Include photo numbers here or on a separate s				1
	,			

Midwest Region - Version 2.0

Depth	Matrix		Red	ox Featur	es			
(inches)	Color (moist)	%	Color (moist)	%		Loc ²	Texture	Remarks
0-10 1	0 YR 2/2	100					SL	
10-20 1	0 YR 2/1	95 1	0 YR 4/6	5	С	PL	SL	
Type: C=Conc Hydric Soil Ind	entration, D=Deple	etion, RM=R	educed Matrix, N	/IS=Maske	d Sand Gr	ains.		n: PL=Pore Lining, M=Matrix. s for Problematic Hydric Soils ³ :
Thick Dark Sandy Muc	edon (A2) c (A3) Sulfide (A4) ayers (A5)		Sandy Strippo Loamy Loamy Deplet Redox Deplet	Gleyed M ed Matrix Dark Sur	5) S6) ineral (F1) latrix (F2) (F3) face (F6) urface (F7)	I	Coast Dark 3 Iron-W Very 5 Other ³ Indicator: wetlan	Prairie Redox (A16) Surface (S7) Manganese Masses (F12) Shallow Dark Surface (TF12) (Explain in Remarks) s of hydrophytic vegetation and hydrology must be present, s disturbed or problematic.
	ver (if observed):	/						
Type:	es):		_				Hydric Soi	I Present? Yes XNo
Remarks:								
	(
YDROLOGY	f logy Indicators:							
YDROLOG) Vetland Hydro		ne is required	: check all that a	apply)			Second	ary Indicators (minimum of two require
YDROLOG) Vetland Hydro	logy Indicators: ors (minimum of or	ne is required		apply)	ves (B9)			ary Indicators (minimum of two require
YDROLOGY Vetland Hydro	logy Indicators: ors (minimum of or ater (A1)	ne is required		ained Lea	, ,		Sur	
YDROLOG Vetland Hydro Primary Indicato Surface Wa High Water	logy Indicators: ors (minimum of or ater (A1) Table (A2)	ne is required	Water-St Aquatic F	ained Lea Fauna (B1	3)		Sur Dra	face Soil Cracks (B6) inage Patterns (B10)
YDROLOG Vetland Hydro Primary Indicato Surface Wa High Water Saturation (logy Indicators: ors (minimum of or ater (A1) Table (A2) (A3)	ne is required	Water-St Aquatic F True Aqu	ained Lea Fauna (B1 atic Plants	3) s (B14)		Sur Dra Dry	face Soil Cracks (B6) ainage Patterns (B10) ⁄-Season Water Table (C2)
YDROLOG Vetland Hydro Primary Indicato Surface Wa High Water Saturation (Water Mark	logy Indicators: ors (minimum of or ater (A1) Table (A2) (A3) (s (B1)	ne is required	Water-St Aquatic F True Aqu Hydroge	ained Lea Fauna (B1 natic Plants n Sulfide C	3) s (B14) Odor (C1)	ing Roots (Sur Dra Dry Cra	face Soil Cracks (B6) ainage Patterns (B10) a-Season Water Table (C2) ayfish Burrows (C8)
YDROLOGY Vetland Hydro Primary Indicato Surface Wa High Water Saturation (Water Mark Sediment D	logy Indicators: ors (minimum of or ater (A1) Table (A2) (A3) (A3) (s (B1) Deposits (B2)	ne is required	Water-St Aquatic F True Aqu Hydroger Oxidized	ained Lea Fauna (B1 natic Plants n Sulfide C Rhizosph	3) s (B14) Odor (C1) eres on Liv	ing Roots (Sur Dra Dry Cra C3) Sat	face Soil Cracks (B6) ainage Patterns (B10) r-Season Water Table (C2) ayfish Burrows (C8) turation Visible on Aerial Imagery (C9)
YDROLOG Vetland Hydro Primary Indicato Surface Wa High Water Saturation (Water Mark Sediment D Drift Depos	logy Indicators: ors (minimum of or ater (A1) Table (A2) (A3) (A3) (A3) (A3) (A2) (A2) (A2) (A2) (A2) (A2) (A2) (A2	ne is required	Uter-St Aquatic F True Aqu Hydroged Oxidized	ained Lea Fauna (B1 Iatic Plants n Sulfide C Rhizosph e of Reduc	3) s (B14) Odor (C1) eres on Liv red Iron (C4	4)	Sur Dra Dry Cra C3) Sat Stu	face Soil Cracks (B6) ainage Patterns (B10) v-Season Water Table (C2) ayfish Burrows (C8) auration Visible on Aerial Imagery (C9) inted or Stressed Plants (D1)
YDROLOG Netland Hydro Primary Indicato Surface Wa High Water Saturation (Water Mark Sediment D Drift Deposi Algal Mat o	logy Indicators: ors (minimum of or ater (A1) Table (A2) (A3) (A3) (s (B1) Deposits (B2) its (B3) r Crust (B4)	ne is required	Water-St Aquatic F True Aqu Hydroged Oxidized Presence Recent In	ained Lea Fauna (B1 natic Plants n Sulfide C Rhizosph of Reduc ron Reduc	3) s (B14) Odor (C1) eres on Liv eed Iron (C4 tion in Tille		C3) <u>X</u> Geo	face Soil Cracks (B6) ainage Patterns (B10) r-Season Water Table (C2) ayfish Burrows (C8) turation Visible on Aerial Imagery (C9) inted or Stressed Plants (D1) omorphic Position (D2)
YDROLOG Netland Hydro Primary Indicato Surface Wa High Water Saturation (Water Mark Sediment D Drift Depos Algal Mat o Iron Deposi	logy Indicators: ors (minimum of or ater (A1) Table (A2) (A3) (A3) (s (B1) Deposits (B2) its (B3) r Crust (B4) its (B5)		Water-St Aquatic F True Aqu Hydrogen Oxidized Presence Recent In Thin Muc	ained Lea Fauna (B1 atic Plants n Sulfide C Rhizosph e of Reduc ron Reduc ck Surface	3) s (B14) Odor (C1) eres on Liv eed Iron (C4 tion in Tille (C7)	4)	C3) <u>X</u> Geo	face Soil Cracks (B6) ainage Patterns (B10) v-Season Water Table (C2) ayfish Burrows (C8) auration Visible on Aerial Imagery (C9) inted or Stressed Plants (D1)
YDROLOG Vetland Hydro Primary Indicato Surface Wa High Water Saturation (Water Mark Sediment D Drift Deposi Algal Mat o Iron Deposi Inundation	logy Indicators: ors (minimum of or ater (A1) Table (A2) (A3) (A3) (s (B1) Deposits (B2) its (B3) r Crust (B4)	nagery (B7)	Water-St Aquatic F Aquatic F Hydrogen Oxidized Presence Recent In Gauge o	ained Lea Fauna (B1 natic Plants n Sulfide C Rhizosph of Reduc ron Reduc	3) s (B14) Odor (C1) eres on Liv red Iron (C4 tion in Tille (C7) a (D9)	4)	C3) <u>X</u> Geo	face Soil Cracks (B6) ainage Patterns (B10) r-Season Water Table (C2) ayfish Burrows (C8) turation Visible on Aerial Imagery (C9) inted or Stressed Plants (D1) omorphic Position (D2)

, , ,	· · · · —	(]		
Field Observations:				
Surface Water Present?		Depth (inches):		
Water Table Present?	Yes No _X	Depth (inches):		
Saturation Present? (includes capillary fringe)	Yes No _X	Depth (inches):	Wetland Hydrology Present?	Yes X No
Describe Recorded Data (st	ream gauge, monitoring w	vell, aerial photos, previous inspec	tions), if available:	
Remarks:				

Project/Site: SR 14 - Culvert 13	City/County: Pulaski Cour	nty	Sampling Date: 10/7/2020
Applicant/Owner: INDOT			Sampling Point: 13-2
Investigator(s): V. Flynn/K. Bollmann	Section, Township, Range:	S16, T30N, R1W	
Landform (hillslope, terrace, etc.): hillslope		ave, convex, none):	
Slope (%): <u>30</u> Lat: <u>41.055624</u>	Long: -86.529616		Datum: NAD 87
Soil Map Unit Name: Goodell-Gilford fine sandy loams, 0 to 1 p	percent slopes (GmnA)	NWI classific	ation: N/A
Are climatic / hydrologic conditions on the site typical for this time of ye	ear? Yes No _X	_ (If no, explain in R	emarks.)
Are Vegetation, Soil, or Hydrology significantly		nal Circumstances" p	resent? Yes X No
Are Vegetation, Soil, or Hydrology naturally pro-	oblematic? (If needed	, explain any answe	rs in Remarks.)

SUMMARY OF FINDINGS – Attach site map showing sampling point locations, transects, important features, etc.

Hydrophytic Vegetation Present? Yes X No Hydric Soil Present? Yes No X Wetland Hydrology Present? Yes No X	Is the Sampled Area within a Wetland? Yes No
--	---

Remarks:

Previous 3 month period was drier than average based on rainfall data near Winamac 2SSE weather station from 1971-2020 (AgACIS, 2020)

VEGETATION – Use scientific names of plants.

30 ft diam	Absolute		Indicator	Dominance Test worksheet:
Tree Stratum (Plot size: <u>30 ft. diam.</u>)	% Cover	Species?	Status	Number of Dominant Species
1				That Are OBL, FACW, or FAC: _1 (A)
2				Total Number of Dominant
3				Species Across All Strata: 2 (B)
4.				
				Percent of Dominant Species
5				That Are OBL, FACW, or FAC: 50 (A/B)
Sapling/Shrub Stratum (Plot size: 15 ft. diam.)		= Total Co	ver	Prevalence Index worksheet:
				Total % Cover of: Multiply by:
1				$\begin{array}{c} \hline \hline \\ \hline \\ \hline \\ \hline \\ \hline \\ \hline \\ \\ \\ \hline \\ \\ \\ \hline \\ \\ \\ \\ \hline \\ \\ \\ \\ \\ \hline \\ \\ \\ \\ \\ \hline \\$
2				
3				FACW species 50 $x = 100$
4				FAC species 0 $x 3 = 0$
5				FACU species _50 x 4 = _200
Eft diam		= Total Co	ver	UPL species x 5 =
Herb Stratum (Plot size: 5 ft, diam.)				Column Totals: <u>100</u> (A) <u>300</u> (B)
1. Phalaris arundinacea	50	Y	FACW	
2. Schedonorus arundinaceus	50	Υ	FACU	Prevalence Index = B/A = _3
3				Hydrophytic Vegetation Indicators:
4				1 - Rapid Test for Hydrophytic Vegetation
5				2 - Dominance Test is >50%
6				X 3 - Prevalence Index is ≤3.0 ¹
				4 - Morphological Adaptations ¹ (Provide supporting
7				data in Remarks or on a separate sheet)
8				Problematic Hydrophytic Vegetation ¹ (Explain)
9	·			
10				¹ Indicators of hydric soil and wetland hydrology must
15 ft, diam	100	= Total Co	ver	be present, unless disturbed or problematic.
<u>Woody Vine Stratum</u> (Plot size: <u>15 ft. diam.</u>)				
1	·			Hydrophytic
2	·			Vegetation Present? Yes No
		= Total Co	ver	
Remarks: (Include photo numbers here or on a separate s	sheet.)			

Midwest Region - Version 2.0

Depth <u>N</u> (inches) Color (m	<u>/atrix</u> oist)%	<u></u>	Texture	Remarks
0-8 10 YR 4/2			SL	Gravelly, fill
ype: C=Concentration,	D=Depletion, RM=R	educed Matrix, MS=Masked Sand Grains.		PL=Pore Lining, M=Matrix.
lydric Soil Indicators:			Indicators	for Problematic Hydric Soils ³ :
Histosol (A1)		Sandy Gleyed Matrix (S4)		Prairie Redox (A16)
Histic Epipedon (A2)		Sandy Redox (S5)		urface (S7)
Black Histic (A3)		Stripped Matrix (S6)		anganese Masses (F12)
_ Hydrogen Sulfide (A4		Loamy Mucky Mineral (F1)		hallow Dark Surface (TF12)
_ Stratified Layers (A5)		Loamy Gleyed Matrix (F2)	Other (Explain in Remarks)
2 cm Muck (A10) Depleted Below Dark	Surface (A11)	Depleted Matrix (F3) Redox Dark Surface (F6)		
Thick Dark Surface (/	. ,	Depleted Dark Surface (F7)	³ Indicators	of hydrophytic vegetation and
Sandy Mucky Minera	,	Redox Depressions (F8)		d hydrology must be present,
5 cm Mucky Peat or I	()	<u> </u>		disturbed or problematic.
estrictive Layer (if obs	. ,			
contouve Layer (II Obs				
				Present? Yes No
Type: Depth (inches):			Hydric Soil	
Type: Depth (inches):		_	Hydric Soil	
Туре:	iches	_	Hydric Soil	
Type: Depth (inches): Remarks:	iches		Hydric Soil	
Type: Depth (inches): Remarks:	iches		Hydric Soil	
Type: Depth (inches): emarks:	iches		Hydric Soil	
Type: Depth (inches): emarks: ravel and rock at 8 in			Hydric Soil	
Type: Depth (inches): emarks: ravel and rock at 8 in	cators:	d; check all that apply)		
Type: Depth (inches): emarks: ravel and rock at 8 in /DROLOGY	cators:	d; check all that apply)	<u>Seconda</u>	rry Indicators (minimum of two require ace Soil Cracks (B6)
Type: Depth (inches): emarks: ravel and rock at 8 in /DROLOGY /etland Hydrology Indi- rimary Indicators (minim	cators: um of one is require		<u>Seconda</u>	ry Indicators (minimum of two require
Type: Depth (inches): emarks: ravel and rock at 8 in /DROLOGY /etland Hydrology Indii rimary Indicators (minim Surface Water (A1)	cators: um of one is require	Water-Stained Leaves (B9)	<u>Seconda</u> Surf Drai	iry Indicators (minimum of two require ace Soil Cracks (B6) nage Patterns (B10)
Type: Depth (inches): emarks: ravel and rock at 8 in /DROLOGY /etland Hydrology Indi- rimary Indicators (minim Surface Water (A1) High Water Table (A2	cators: um of one is require	 Water-Stained Leaves (B9) Aquatic Fauna (B13) 	<u>Seconda</u> Surf Drai Dry-	ary Indicators (minimum of two require ace Soil Cracks (B6) nage Patterns (B10) Season Water Table (C2)
Type: Depth (inches): emarks: ravel and rock at 8 in //DROLOGY //etland Hydrology India rimary Indicators (minim Surface Water (A1) High Water Table (A2 Saturation (A3)	cators: um of one is require 2)	 Water-Stained Leaves (B9) Aquatic Fauna (B13) True Aquatic Plants (B14) 	<u>Seconda</u> Surf Drai Dry- Cray	iry Indicators (minimum of two require ace Soil Cracks (B6) nage Patterns (B10)
Type: Depth (inches): emarks: ravel and rock at 8 in //DROLOGY /etland Hydrology India rimary Indicators (minim Surface Water (A1) High Water Table (A2 Saturation (A3) Water Marks (B1)	cators: um of one is require 2)	 Water-Stained Leaves (B9) Aquatic Fauna (B13) True Aquatic Plants (B14) Hydrogen Sulfide Odor (C1) 	<u>Seconda</u> <u>Suff</u> <u>Drai</u> <u>Dry-</u> <u>Cray</u> C3) <u>Satu</u>	ary Indicators (minimum of two require ace Soil Cracks (B6) nage Patterns (B10) Season Water Table (C2) /fish Burrows (C8)
Type: Depth (inches): emarks: ravel and rock at 8 in //DROLOGY //etland Hydrology Indi- rimary Indicators (minim Surface Water (A1) High Water Table (A2 Saturation (A3) Water Marks (B1) Sediment Deposits (B	cators: um of one is require 2) 32)	 Water-Stained Leaves (B9) Aquatic Fauna (B13) True Aquatic Plants (B14) Hydrogen Sulfide Odor (C1) Oxidized Rhizospheres on Living Roots (C 	<u>Seconda</u> Surf Drai Dry- Cray C3)Satu Stur	rry Indicators (minimum of two require ace Soil Cracks (B6) nage Patterns (B10) Season Water Table (C2) rfish Burrows (C8) iration Visible on Aerial Imagery (C9)
Type: Depth (inches): emarks: ravel and rock at 8 in //DROLOGY //etland Hydrology Indii rimary Indicators (minim Surface Water (A1) High Water Table (A2 Saturation (A3) Water Marks (B1) Sediment Deposits (B3)	cators: um of one is require 2) 32)	 Water-Stained Leaves (B9) Aquatic Fauna (B13) True Aquatic Plants (B14) Hydrogen Sulfide Odor (C1) Oxidized Rhizospheres on Living Roots (C Presence of Reduced Iron (C4) 	<u>Seconda</u> Surf Drai Dry- Cray C3)Satu Stur Geo	rry Indicators (minimum of two require ace Soil Cracks (B6) nage Patterns (B10) Season Water Table (C2) /fish Burrows (C8) uration Visible on Aerial Imagery (C9) ited or Stressed Plants (D1)

—				
Sparsely Vegetated Cor	ncave Surface (B8)	Other (Explain in Remarks)		
Field Observations:				
Surface Water Present?		Depth (inches):		
Water Table Present?	Yes No _X_	Depth (inches):		
Saturation Present? (includes capillary fringe)	Yes No _X	Depth (inches):	Wetland Hydrology Present?	Yes No
Describe Recorded Data (str	ream gauge, monitoring w	vell, aerial photos, previous inspec	tions), if available:	
Remarks:				

Project/Site: SR 14 - Culvert 14	City/County: Pulaski Cour	nty	Sampling Date: 10/7/2020
Applicant/Owner: INDOT		State: IN	Sampling Point: 14-1
Investigator(s): V. Flynn/K. Bollmann	Section, Township, Range:	S16, T30N, R1W	
Landform (hillslope, terrace, etc.): terrace		ave, convex, none):	
Slope (%): 2 Lat: 41.055532	Long: -86.526351		Datum: NAD 87
Soil Map Unit Name: Brookston loam, 0 to 1 percent slopes (B	uuA)	NWI classific	ation: N/A
Are climatic / hydrologic conditions on the site typical for this time of ye	ear? Yes No X	(If no, explain in R	emarks.)
Are Vegetation, Soil, or Hydrology significantly	disturbed? Are "Norm	al Circumstances" p	resent? Yes 🔀 No
Are Vegetation, Soil, or Hydrology naturally pr	oblematic? (If needed	, explain any answei	s in Remarks.)

SUMMARY OF FINDINGS – Attach site map showing sampling point locations, transects, important features, etc.

Hydrophytic Vegetation Present? Yes				
Hydric Soil Present? Yes X	No	Is the Sampled Area		
Wetland Hydrology Present? Yes X	No	within a Wetland?	Yes X	No

Remarks:

Previous 3 month period was drier than average based on rainfall data near Winamac 2SSE weather station from 1971-2020 (AgACIS, 2020)

VEGETATION - Use scientific names of plants.

20 ft diam	Absolute	Dominant		Dominance Test worksheet:
Tree Stratum (Plot size: <u>30 ft. diam.</u>)	% Cover	Species?	Status	Number of Dominant Species
1				That Are OBL, FACW, or FAC: (A)
2				TANK A CONTRACTOR
3				Total Number of Dominant Species Across All Strata: (B)
4				Percent of Dominant Species
5				That Are OBL, FACW, or FAC: (A/B)
Sapling/Shrub Stratum (Plot size: 15 ft. diam.)		= Total Co	ver	Prevalence Index worksheet:
1				Total % Cover of: Multiply by:
2				OBL species x 1 =
3				FACW species x 2 =
4				FAC species x 3 =
5				FACU species x 4 =
		= Total Co		UPL species x 5 =
Herb Stratum (Plot size: 5 ft. diam.)		- 10tai 00	461	
1. Juncus effusus	30	Y	OBL	Column Totals: (A) (B)
2 Equisetum hymenale	10	N	FACW	Prevalence Index = B/A =
3. Verbena hastata	10	N	FACW	Hydrophytic Vegetation Indicators:
4. Lythrum salicaria	5	N	OBL	X 1 - Rapid Test for Hydrophytic Vegetation
5. Eupatorium perfoliatum	5	N	OBL	2 - Dominance Test is >50%
	2	 N	OBL	
6. Typha latifolia				
7				4 - Morphological Adaptations ¹ (Provide supporting data in Remarks or on a separate sheet)
8				
9				Problematic Hydrophytic Vegetation ¹ (Explain)
10				
	62	= Total Cov	/er	¹ Indicators of hydric soil and wetland hydrology must
Woody Vine Stratum (Plot size: 15 ft. diam.)		10101-00		be present, unless disturbed or problematic.
1				Hydrophytic
2.				Vegetation
a -		= Total Co		Present? Yes X No
Remarks: (Include photo numbers here or on a separate		- 10(a) 00		
Nomarka. (molude prioto numbera nere or off a separate a	neer.)			

Profile Desci	ription: (Describe	to the dep	pth needed to docu	ment the	indicator	or confirn	n the absence	e of indicators.)
Depth	Matrix			x Feature		1 2	Tation	Deventer
(inches)	Color (moist)	%	Color (moist)	%	_Type ¹	Loc ²		
0-6	10 YR 2/2	100			·		SL	High organics
6-20	Gley1 6/10Y	99	10 YR 4/6				<u>S</u>	
					·			
					·			
					·			
		oletion, RM	I=Reduced Matrix, M	S=Maske	d Sand Gra	ains.	² Location	n: PL=Pore Lining, M=Matrix.
Hydric Soil I			×					for Problematic Hydric Soils ³ :
Histosol (. ,		X Sandy	-				Prairie Redox (A16)
Black His	ipedon (A2) tic (A3)			Redox (St d Matrix (\$				Surface (S7) Ianganese Masses (F12)
	n Sulfide (A4)				neral (F1)			Shallow Dark Surface (TF12)
	Layers (A5)			Gleyed M				(Explain in Remarks)
2 cm Mu	ck (A10)		Deplete	ed Matrix (F3)			
	Below Dark Surfac	ce (A11)		Dark Surfa	• •			
	rk Surface (A12)				urface (F7)			s of hydrophytic vegetation and
	ucky Mineral (S1) cky Peat or Peat (S	2)	Redox	Depressio	ns (F8)			nd hydrology must be present, s disturbed or problematic.
	ayer (if observed)	,						s disturbed of problematic.
Type:		•						
	hes):						Hydric Soi	I Present? Yes <u> </u>
Remarks:								
Remarks.								
HYDROLOG	GY							
Wetland Hyd	rology Indicators:	:						
Primary Indic	ators (minimum of o	one is requ	ired; check all that a	oply)			Second	ary Indicators (minimum of two required)
Surface \	Nater (A1)		Water-Sta	ined Leav	es (B9)		Sur	face Soil Cracks (B6)
High Wat	er Table (A2)		Aquatic F	auna (B13)		Dra	inage Patterns (B10)
🔀 Saturatio	n (A3)		True Aqua	atic Plants	(B14)		$\underline{\times}$ Dry	r-Season Water Table (C2)
Water Ma	arks (B1)		\underline{X} Hydrogen	Sulfide O	dor (C1)		Cra	yfish Burrows (C8)
Sedimen	t Deposits (B2)		Oxidized	Rhizosphe	eres on Liv	ing Roots	(C3) Sat	uration Visible on Aerial Imagery (C9)
Drift Dep	osits (B3)				ed Iron (C4	,		nted or Stressed Plants (D1)
Algal Mat	t or Crust (B4)		Recent Ire	on Reduct	ion in Tille	d Soils (Ce	6) <u>X</u> Ge	omorphic Position (D2)
Iron Dep	osits (B5)		Thin Mucl		, ,		FA0	C-Neutral Test (D5)
	n Visible on Aerial		, <u> </u>		` '			
	Vegetated Concav	e Surface	(B8) Other (Ex	plain in Re	emarks)			
Field Observ			\sim					
Surface Wate			No X Depth (in			-		
Water Table I			No Depth (in)	_		
Saturation Pro		/es_X_	No Depth (in	ches): <u>0</u>		_ Wetl	and Hydrolog	y Present? Yes X No
(includes cap								
Describe Rec	orded Data (stream	n gaude, m	ionitoring well, aerial	photos, pi	evious ins	pections)	if available:	
Describe Rec	orded Data (stream	n gauge, m	onitoring well, aerial	photos, pi	evious ins	pections),	if available:	

Project/Site: SR 14 - Culvert 14	City/County: Pulaski Coun	ity	Sampling Date: 10/7/2020
Applicant/Owner: INDOT			Sampling Point: 14-2
Investigator(s): V. Flynn/K. Bollmann	Section, Township, Range:	S16, T30N, R1W	
Landform (hillslope, terrace, etc.): hillslope		ave, convex, none):	
Slope (%): 15 Lat: 41.055565	Long: -86.526362		Datum: NAD 87
Soil Map Unit Name: Brookston loam, 0 to 1 percent slopes (Br	uuA)	NWI classific	ation:
Are climatic / hydrologic conditions on the site typical for this time of ye	ear? Yes No X	(If no, explain in Re	emarks.)
Are Vegetation, Soil, or Hydrology significantly	disturbed? Are "Norm	al Circumstances" p	resent? Yes X No
Are Vegetation, Soil, or Hydrology naturally pro	oblematic? (If needed,	, explain any answer	rs in Remarks.)

SUMMARY OF FINDINGS – Attach site map showing sampling point locations, transects, important features, etc.

Hydrophytic Vegetation Present? Hydric Soil Present?	Yes No Yes No	Is the Sampled Area	v		
Wetland Hydrology Present?	Yes No	within a Wetland?	Yes	_ No <u>X</u>	

Remarks:

Previous 3 month period was drier than average based on rainfall data near Winamac 2SSE weather station from 1971-2020 (AgACIS, 2020)

VEGETATION – Use scientific names of plants.

20 ft diam	Absolute	Dominant		Dominance Test worksheet:
Tree Stratum (Plot size: <u>30 ft. diam.</u>)	% Cover	Species?	Status	Number of Dominant Species
1				That Are OBL, FACW, or FAC: 0 (A)
2				Total Number of Deminent
3				Total Number of Dominant Species Across All Strata: (B)
4				
				Percent of Dominant Species
5				That Are OBL, FACW, or FAC: (A/B)
Sapling/Shrub Stratum (Plot size: 15 ft. diam.)		= Total Cov	/er	Prevalence Index worksheet:
1				Total % Cover of: Multiply by:
2				
3				FACW species 25 x 2 = 50
4				FAC species 0 x 3 = 0
5				FACU species x 4 =64
		= Total Cov	/er	UPL species _55 x 5 = _275
Herb Stratum (Plot size: 5 ft. diam.)				Column Totals: <u>121</u> (A) <u>489</u> (B)
_{1.} Hemerocallis fulva	50	Y	UPL	
2. Solidago canadensis	40	Υ	FACU	Prevalence Index = B/A =
3. Euthamia graminifolia	20	N	FACW	Hydrophytic Vegetation Indicators:
4. Equisetum hymenale	5	N	FACW	1 - Rapid Test for Hydrophytic Vegetation
5. Daucus carota	5	N	UPL	2 - Dominance Test is >50%
6. Oenothera biennis	1	N	FACU	3 - Prevalence Index is ≤3.0 ¹
7				4 - Morphological Adaptations ¹ (Provide supporting
				data in Remarks or on a separate sheet)
8				Problematic Hydrophytic Vegetation ¹ (Explain)
9				
10				¹ Indicators of hydric soil and wetland hydrology must
Woody Vine Stratum (Plot size: 15 ft. diam.)	121	= Total Cov	/er	be present, unless disturbed or problematic.
1				Hydrophytic
2				Vegetation Present? Yes No _X
		= Total Cov	/er	
Remarks: (Include photo numbers here or on a separate s	sheet.)			

(inches)	Matrix		Redox Features	_
	Color (moist)		<u>Color (moist)</u> <u>%</u> <u>Type¹</u> Loc ²	
)-20	10 YR 2/1			_ <u>SL</u>
 Гуре: С=Сс	oncentration, D=Dep	letion, RM=R	Reduced Matrix, MS=Masked Sand Grains.	² Location: PL=Pore Lining, M=Matrix.
ydric Soil I				Indicators for Problematic Hydric Soils ³ :
Histosol	(A1)		Sandy Gleyed Matrix (S4)	Coast Prairie Redox (A16)
Histic Ep	ipedon (A2)		Sandy Redox (S5)	Dark Surface (S7)
Black His	stic (A3)		Stripped Matrix (S6)	Iron-Manganese Masses (F12)
_ Hydroger	n Sulfide (A4)		Loamy Mucky Mineral (F1)	Very Shallow Dark Surface (TF12)
_	Layers (A5)		Loamy Gleyed Matrix (F2)	Other (Explain in Remarks)
2 cm Mu	· ,		Depleted Matrix (F3)	
	Below Dark Surfac	æ (A11)	Redox Dark Surface (F6)	2
-	rk Surface (A12)		Depleted Dark Surface (F7)	³ Indicators of hydrophytic vegetation and
_ ,	ucky Mineral (S1)	•	Redox Depressions (F8)	wetland hydrology must be present,
	cky Peat or Peat (S			unless disturbed or problematic.
a a fini a filiva I	.ayer (if observed):			
	,			
Туре:				Hydric Soil Present? Yes No X
				Hydric Soil Present? Yes No
Type: Depth (inc			_	Hydric Soil Present? Yes No
Type: Depth (inc				Hydric Soil Present? Yes No
Type: Depth (inc				Hydric Soil Present? Yes No
Type: Depth (inc				Hydric Soil Present? Yes No
Type: Depth (inc				Hydric Soil Present? Yes No
Type: Depth (inc emarks:	:hes):			Hydric Soil Present? Yes NoX
Type: Depth (inc emarks:	:hes):			Hydric Soil Present? Yes NoX
Type: Depth (inc emarks: DROLOG etland Hyd	GY Irology Indicators:		d: check all that apply)	Hydric Soil Present? Yes NoX
Type: Depth (inc emarks: DROLO(etland Hyd imary Indic	GY Irology Indicators:		d: check all that apply) Water-Stained Leaves (B9)	
Type: Depth (inc emarks: DROLO(etland Hyd imary Indic Surface N	GY Irology Indicators: ators (minimum of c			Secondary Indicators (minimum of two requir
Type: Depth (inc marks: DROLO(etland Hyd imary Indic Surface V	GY Irology Indicators: ators (minimum of o Water (A1) ter Table (A2)		Water-Stained Leaves (B9)	Secondary Indicators (minimum of two requir Surface Soil Cracks (B6)
Type: Depth (inc emarks: DROLO(etland Hyd imary Indic Surface V High Wat	GY frology Indicators: ators (minimum of c Water (A1) ter Table (A2) on (A3)		Water-Stained Leaves (B9) Aquatic Fauna (B13)	Secondary Indicators (minimum of two requir Surface Soil Cracks (B6) Drainage Patterns (B10)
Type: Depth (inc emarks: DROLOO etland Hyd imary Indic Surface N High Wat Saturatio Water Ma	GY frology Indicators: ators (minimum of c Water (A1) ter Table (A2) on (A3)		 Water-Stained Leaves (B9) Aquatic Fauna (B13) True Aquatic Plants (B14) 	Secondary Indicators (minimum of two requir Surface Soil Cracks (B6) Drainage Patterns (B10) Dry-Season Water Table (C2) Crayfish Burrows (C8)
Type: Depth (inc emarks: DROLOO etland Hyd imary Indic Surface Ma Saturatio Saturatio Water Ma Sedimen	GY Irology Indicators: ators (minimum of o Water (A1) ter Table (A2) on (A3) arks (B1) t Deposits (B2)		 Water-Stained Leaves (B9) Aquatic Fauna (B13) True Aquatic Plants (B14) Hydrogen Sulfide Odor (C1) 	Secondary Indicators (minimum of two requir Surface Soil Cracks (B6) Drainage Patterns (B10) Dry-Season Water Table (C2) Crayfish Burrows (C8) ts (C3) Saturation Visible on Aerial Imagery (C9
Type: Depth (inc emarks: DROLOO etland Hyd imary Indic Surface M Saturatio Saturatio Water Ma Sedimen Drift Dep	GY Irology Indicators: ators (minimum of c Water (A1) ter Table (A2) on (A3) arks (B1) t Deposits (B2) osits (B3)		 Water-Stained Leaves (B9) Aquatic Fauna (B13) True Aquatic Plants (B14) Hydrogen Sulfide Odor (C1) Oxidized Rhizospheres on Living Root Presence of Reduced Iron (C4) 	 <u>Secondary Indicators (minimum of two requin</u> Surface Soil Cracks (B6) Drainage Patterns (B10) Dry-Season Water Table (C2) Crayfish Burrows (C8) ts (C3) Saturation Visible on Aerial Imagery (C9 Stunted or Stressed Plants (D1)
Depth (inc emarks: (DROLOO /etland Hyd rimary Indic Surface N High Wat Saturatio Saturatio Water Ma Sedimen Drift Dep Algal Ma	GY Irology Indicators: ators (minimum of o Water (A1) ter Table (A2) on (A3) arks (B1) t Deposits (B2)		 Water-Stained Leaves (B9) Aquatic Fauna (B13) True Aquatic Plants (B14) Hydrogen Sulfide Odor (C1) Oxidized Rhizospheres on Living Root 	 <u>Secondary Indicators (minimum of two requin</u> Surface Soil Cracks (B6) Drainage Patterns (B10) Dry-Season Water Table (C2) Crayfish Burrows (C8) ts (C3) Saturation Visible on Aerial Imagery (C9 Stunted or Stressed Plants (D1)

Sparsely Vegetated Con	cave Surface ((B8)	Other (Explain in Remarks)				
Field Observations:							
Surface Water Present?	Yes	No	Depth (inches):				
Water Table Present?	Yes	No	Depth (inches):				
Saturation Present? (includes capillary fringe)	Yes	No	Depth (inches):	Wetland Hydrology Present?	Yes	No _	<u>×</u>
Describe Recorded Data (str	eam gauge, m	onitoring w	vell, aerial photos, previous inspe	ections), if available:			
Remarks:							

Project/Site: SR 14 - Culvert 16	City/County: Fulton County	/	Sampling Date: 10/7/2020
Applicant/Owner: INDOT			Sampling Point: 16-1
Investigator(s): _V. Flynn/K. Bollmann	Section, Township, Range:	518, T30N, R1E	
Landform (hillslope, terrace, etc.): terrace		ive, convex, none):	none
Slope (%): 0 Lat: 41.055106	Long: -86.455852		Datum: NAD 87
Soil Map Unit Name: Arian muck, drained, 0 to 1 percent slope	s (Ad)	NWI classifica	
Are climatic / hydrologic conditions on the site typical for this time of ye		(If no, explain in Re	emarks.)
Are Vegetation, Soil, or Hydrology significantly	disturbed? Are "Norma	al Circumstances" p	resent? Yes No X
Are Vegetation, Soil, or Hydrology naturally pr	oblematic? (If needed,	explain any answer	s in Remarks.)

SUMMARY OF FINDINGS – Attach site map showing sampling point locations, transects, important features, etc.

Hydrophytic Vegetation Present? Hydric Soil Present? Wetland Hydrology Present?	Yes X No Yes X No Yes X No	ls the Sampled Area within a Wetland?	Yes X	No
Demention				

Remarks:

Agricultural Field-No Row crops planted in this area. Previous 3 month period was drier than average based on rainfall data near Winamac 2SSE weather station from 1971-2020 (AgACIS, 2020)

VEGETATION - Use scientific names of plants.

20 ft diam	Absolute	Dominant	Indicator	Dominance Test worksheet:
Tree Stratum (Plot size: <u>30 ft. diam.</u>)	% Cover	Species?	Status	Number of Dominant Species
1				That Are OBL, FACW, or FAC: 2 (A)
2				
				Total Number of Dominant
3				Species Across All Strata: _2 (B)
4				Percent of Dominant Species
5				That Are OBL, FACW, or FAC: 100 (A/B)
		= Total Cov	/er	
Sapling/Shrub Stratum (Plot size: 15 ft. diam.)				Prevalence Index worksheet:
1. Cornus racemosa	10	Υ	FAC	Total % Cover of: Multiply by:
2				OBL species x 1 =
3				FACW species x 2 =
4				FAC species x 3 =
5				FACU species x 4 =
	10	= Total Cov	/er	UPL species x 5 =
Herb Stratum (Plot size: <u>5 ft. diam.</u>)				Column Totals: (A) (B)
1. Panicum rigidulum	90	Y	FACW	
2. Echnochloa crus galli	20	N	FACW	Prevalence Index = B/A =
3. Persicaria lapathafolium	10	Ν	FACW	Hydrophytic Vegetation Indicators:
4. Abutilon theophrasti	10	N	FACU	1 - Rapid Test for Hydrophytic Vegetation
5. Xanthium strumarium	10	N	FAC	2 - Dominance Test is >50%
6.				3 - Prevalence Index is ≤3.0 ¹
7				4 - Morphological Adaptations ¹ (Provide supporting
				data in Remarks or on a separate sheet)
8				Problematic Hydrophytic Vegetation ¹ (Explain)
9				
10				¹ Indicators of hydric soil and wetland hydrology must
15 ft_diam	140	= Total Cov	/er	be present, unless disturbed or problematic.
Woody Vine Stratum (Plot size: 15 ft. diam.)				
1				Hydrophytic
2				Vegetation
		= Total Cov		Present? Yes X No
Remarks: (Include photo numbers here or on a separate s	heet.)			1
	-			

US Army Corps of Engineers

	Matrix			dox Featur				
(inches)	Color (moist)	%	Color (moist)	%_	Type ¹	Loc ²		Remarks
0-12	10 YR 2/2	100					SiCL	
12-20	10 YR 2/2	97 5	YR 3/3	3	<u>C</u>	PL	SiCL	
Type: C=Cc	ncentration, D=Deple	tion, RM=R	educed Matrix,	MS=Maske	d Sand Gr	ains.	² Locatio	on: PL=Pore Lining, M=Matrix.
Hydric Soil I	ndicators:						Indicator	rs for Problematic Hydric Soils ³ :
Black His Hydroger Stratified 2 cm Mu	ipedon (A2) stic (A3) n Sulfide (A4) Layers (A5) ck (A10) Below Dark Surface	(A11)	Sand Stripp Loam Loam Deple Redo	y Gleyed N y Redox (S oed Matrix (ny Mucky M ny Gleyed N eted Matrix x Dark Sur	5) S6) ineral (F1) latrix (F2) (F3) face (F6)		Dark Iron-I Very Othe	st Prairie Redox (A16) Surface (S7) Manganese Masses (F12) Shallow Dark Surface (TF12) er (Explain in Remarks)
	rk Surface (A12)			eted Dark S)		ors of hydrophytic vegetation and
_ ,	ucky Mineral (S1)		Redo	x Depressi	ons (F8)			ind hydrology must be present,
	cky Peat or Peat (S3) ayer (if observed):						unies	ss disturbed or problematic.
Type:	ayer (ii observed).		_				Hudria Sa	oil Present? Yes <u>×</u> No
. , , , , , , , , , , , , , , , , , , ,							Hyunc 30	
Depth (inc	hes):							
	hes):						1	
Depth (inc Remarks:							1	
Depth (inc Remarks: YDROLOG								
Depth (inc Remarks: YDROLO(Vetland Hyd	GY	e is required	I; check all that	apply)			<u>Second</u>	dary Indicators (minimum of two required
Depth (inc Remarks: YDROLOG Vetland Hyd Primary Indic	GY Irology Indicators:	e is required		apply) Stained Lea	ves (B9)			dary Indicators (minimum of two required
Depth (inc Remarks: YDROLOO Vetland Hyd Primary Indic Surface N	GY Irology Indicators: ators (minimum of one	e is required		Stained Lea	· /		Su	
Depth (inc Remarks: YDROLOO Vetland Hyd 'rimary Indic Surface N	GY Irology Indicators: ators (minimum of one Water (A1) ter Table (A2)	e is required	Water-S Aquatic	Stained Lea	3)		Su Dr	urface Soil Cracks (B6)
Depth (inc Remarks: YDROLOO Vetland Hyc Primary Indic Surface V High Wat	GY Irology Indicators: ators (minimum of one Water (A1) ter Table (A2) m (A3)	e is required	Water-S Aquatic True Aq	Stained Lea Fauna (B1	3) s (B14)		Su Dr Dr Cr	urface Soil Cracks (B6) rainage Patterns (B10) γ-Season Water Table (C2) rayfish Burrows (C8)
Depth (inc Remarks: YDROLOO Vetland Hyd Primary Indic Surface V High Wa Saturatio Saturatio Water Ma	GY Irology Indicators: ators (minimum of one Water (A1) ter Table (A2) m (A3)	e is required	Water-S Aquatic True Aq Hydroge	Stained Lea Fauna (B1 juatic Plant	3) s (B14) Odor (C1)	ing Roots (Su Dr Dr Cr C3) Sa	urface Soil Cracks (B6) rainage Patterns (B10) ry-Season Water Table (C2) rayfish Burrows (C8) aturation Visible on Aerial Imagery (C9)
Depth (inc Remarks: YDROLOO Vetland Hyc Primary Indic Surface V High Wa Saturatic Saturatic Water Ma Sedimen	GY Irology Indicators: ators (minimum of one Water (A1) ter Table (A2) in (A3) arks (B1)	e is required	Water-S Aquatic True Aq Hydroge Oxidized	Stained Lea Fauna (B1 Juatic Plant en Sulfide C	3) s (B14) Odor (C1) eres on Liv		Su Dr Dr Cr C3) Sa	urface Soil Cracks (B6) rainage Patterns (B10) γ-Season Water Table (C2) rayfish Burrows (C8)
Depth (inc Remarks: YDROLOO Vetland Hyd Primary Indic Surface V High Wa Saturatio Water Ma Sedimen Drift Dep	GY Irology Indicators: ators (minimum of one Water (A1) ter Table (A2) in (A3) arks (B1) t Deposits (B2)	e is required	Water-S Aquatic True Aq Hydroge Oxidized Presence	Stained Lea Fauna (B1 Juatic Plant en Sulfide (d Rhizosph	3) s (B14) Odor (C1) eres on Liv red Iron (C4	4)	C3) Su Dr Cr C3 Sa X Stu Ge	urface Soil Cracks (B6) rainage Patterns (B10) ry-Season Water Table (C2) rayfish Burrows (C8) aturation Visible on Aerial Imagery (C9) unted or Stressed Plants (D1) eomorphic Position (D2)
Depth (inc Remarks: YDROLOO Vetland Hyd Primary Indic Surface V High Wat Saturatio Water Ma Saturatio Drift Dep Algal Ma	GY Irology Indicators: ators (minimum of one Water (A1) ter Table (A2) on (A3) arks (B1) t Deposits (B2) osits (B3)	e is required	Water-S Aquatic True Aq Hydroge Oxidizer Presenc Recent	Stained Lea Fauna (B1 Juatic Plant en Sulfide C d Rhizosph ce of Reduc	3) s (B14) Odor (C1) eres on Liv ed Iron (C4 tion in Tille	4)	C3) Su Dr Cr C3 Sa X Stu Ge	urface Soil Cracks (B6) rainage Patterns (B10) ry-Season Water Table (C2) rayfish Burrows (C8) aturation Visible on Aerial Imagery (C9) unted or Stressed Plants (D1)
Depth (inc Remarks: YDROLOO Primary Indic Primary Indic Surface V High Wat Saturatio Water Ma Sedimen Drift Dep Algal Ma Iron Dep Inundatio	GY Irology Indicators: ators (minimum of one Water (A1) ter Table (A2) on (A3) arks (B1) t Deposits (B2) osits (B3) t or Crust (B4)	agery (B7)	Water-S Aquatic True Aq Hydroge Oxidized Presenc Recent Thin Mu Gauge o	Stained Lea Fauna (B1 Juatic Plant en Sulfide C d Rhizosph ce of Reduc Iron Reduc	3) s (B14) Odor (C1) eres on Liv eed Iron (C4 tion in Tille (C7) a (D9)	4)	C3) Su Dr Cr C3 Sa X Stu Ge	urface Soil Cracks (B6) rainage Patterns (B10) ry-Season Water Table (C2) rayfish Burrows (C8) aturation Visible on Aerial Imagery (C9) unted or Stressed Plants (D1) eomorphic Position (D2)

Field Observations:				
Surface Water Present?	Yes No	Depth (inches):		
Water Table Present?	Yes No _X			
Saturation Present? (includes capillary fringe)	Yes X No	Depth (inches): 20	Wetland Hydrology Present?	Yes X No
Describe Recorded Data (strea	am gauge, monitoring w	ell, aerial photos, previous inspec	tions), if available:	
Remarks:				

Project/Site: SR 14 - Culvert 16	City/County: Fulton Count	ty	Sampling Date: 10/7/2020
Applicant/Owner: INDOT			Sampling Point: 16-2
Investigator(s): V. Flynn/K. Bollmann	Section, Township, Range:	S18, T30N, R1E	
Landform (hillslope, terrace, etc.): hillslope		cave, convex, none):	none
Slope (%): 10 Lat: 41.055156	Long: -86.455833		Datum: NAD 87
Soil Map Unit Name: Arian muck, drained, 0 to 1 percent slope	s (Ad)	NWI classific	ation: N/A
Are climatic / hydrologic conditions on the site typical for this time of ye	ear? Yes No X	_ (If no, explain in R	emarks.)
Are Vegetation, Soil, or Hydrology significantly	disturbed? Are "Norm	nal Circumstances" p	resent? Yes X No
Are Vegetation, Soil, or Hydrology naturally pro	oblematic? (If needed	l, explain any answei	rs in Remarks.)

SUMMARY OF FINDINGS – Attach site map showing sampling point locations, transects, important features, etc.

Hydrophytic Vegetation Present? Yes No X Hydric Soil Present? Yes No X Wetland Hydrology Present? Yes No X	Is the Sampled Area within a Wetland? Yes No
--	---

Remarks:

Previous 3 month period was drier than average based on rainfall data near Winamac 2SSE weather station from 1971-2020 (AgACIS, 2020)

VEGETATION – Use scientific names of plants.

20 ft diam	Absolute	Dominant		Dominance Test worksheet:
Tree Stratum (Plot size: <u>30 ft. diam.</u>)	% Cover	Species?	Status	Number of Dominant Species
1				That Are OBL, FACW, or FAC: _0 (A)
2				
				Total Number of Dominant Species Across All Strata: 1 (B)
3				Species Across All Strata: [] (B)
4				Percent of Dominant Species
5				That Are OBL, FACW, or FAC: 0 (A/B)
15 ft diam		= Total Cov	/er	
Sapling/Shrub Stratum (Plot size: 15 ft. diam.)				Prevalence Index worksheet:
1				Total % Cover of: Multiply by:
2				OBL species x 1 = _0
3				FACW species $0 x 2 = 0$
4				400 400
5				
5 ft diam		= Total Cov	/er	UPL species $0 \times 5 = 0$
Herb Stratum (Plot size: 5 ft. diam.)	100			Column Totals: <u>100</u> (A) <u>400</u> (B)
1. Schedonorus arundinaceus	100	<u>Y</u>	FACU	4
2				Prevalence Index = B/A =
3				Hydrophytic Vegetation Indicators:
4				1 - Rapid Test for Hydrophytic Vegetation
				2 - Dominance Test is >50%
5				3 - Prevalence Index is $\leq 3.0^1$
6				
7				 4 - Morphological Adaptations¹ (Provide supporting data in Remarks or on a separate sheet)
8				Problematic Hydrophytic Vegetation ¹ (Explain)
9				
10				
		= Total Cov	/er	¹ Indicators of hydric soil and wetland hydrology must
Woody Vine Stratum (Plot size: 15 ft. diam.)		rotar oor		be present, unless disturbed or problematic.
1				Under a la stile
				Hydrophytic Vegetation
2				Present? Yes No X
		= Total Cov	/er	
Remarks: (Include photo numbers here or on a separate sheet.)				

Profile Des Depth	cription: (Describe Matrix	to the dep	th needed to document the indicator or confirm Redox Features	m the absence	e of indicators.)		
(inches)	Color (moist)	%	<u>Color (moist)</u> % Type ¹ Loc ²	Texture	Remarks		
0-8	10 YR 3/2	100		SiL			
8-12	10 YR 5/4	100		SiCL	(fill)		
					·		
¹ Type: C=C	Concentration, D=Dep	pletion, RM=	Reduced Matrix, MS=Masked Sand Grains.		n: PL=Pore Lining, M=Matrix.		
Hydric Soil	Indicators:			Indicators	s for Problematic Hydric Soils ³ :		
Histoso	ol (A1)		Sandy Gleyed Matrix (S4)	Coast	t Prairie Redox (A16)		
Histic E	pipedon (A2)		Sandy Redox (S5)	Dark	Surface (S7)		
Black H	listic (A3)		Stripped Matrix (S6)		Manganese Masses (F12)		
Hydrogen Sulfide (A4)			Loamy Mucky Mineral (F1)		y Shallow Dark Surface (TF12)		
	ed Layers (A5)		Loamy Gleyed Matrix (F2)	Other	Other (Explain in Remarks)		
	luck (A10)	(***	Depleted Matrix (F3)				
Depleted Below Dark Surface (A11)			Redox Dark Surface (F6)	³ Indicators of hydrophytic vegetation and			
Thick Dark Surface (A12) Sandy Mucky Mineral (S1)			Depleted Dark Surface (F7)		etland hydrology must be present,		
_ /	lucky Peat or Peat (S1)	3)	Redox Depressions (F8)		s disturbed or problematic.		
	Layer (if observed)			unies	s disturbed of problematic.		
Type:		-			×		
	nches):			Hydric Soi	il Present? Yes No		
Remarks:							
HYDROLO	DGY						
Wetland Hy	drology Indicators	:					
Primary Ind	icators (minimum of	one is requir	ed; check all that apply)	Second	lary Indicators (minimum of two required)		
Surface	e Water (A1)		Water-Stained Leaves (B9)	Su	rface Soil Cracks (B6)		
High W	ater Table (A2)		Aquatic Fauna (B13)	Dra	ainage Patterns (B10)		
Saturat	tion (A3)		True Aquatic Plants (B14)	Dry	y-Season Water Table (C2)		
Water M	Marks (B1)		Hydrogen Sulfide Odor (C1)	Cra	ayfish Burrows (C8)		
Sedime	ent Deposits (B2)		Oxidized Rhizospheres on Living Roots	s (C3) Sat	turation Visible on Aerial Imagery (C9)		
Drift De	eposits (B3)		Presence of Reduced Iron (C4)	Stu	unted or Stressed Plants (D1)		
Algal M	lat or Crust (B4)		Recent Iron Reduction in Tilled Soils (C	(6) Ge	omorphic Position (D2)		

_ FAC-Neutral Test (D5)

___ Iron Deposits (B5) ____ Thin Muck Surface (C7) ___ Inundation Visible on Aerial Imagery (B7) ___ Gauge or Well Data (D9) ____ Sparsely Vegetated Concave Surface (B8) ____ Other (Explain in Remarks) Field Observations: Yes _____ No X Depth (inches): _ Surface Water Present? Yes _____ No X Depth (inches): _____ Water Table Present? Yes _____ No X Depth (inches): _ Wetland Hydrology Present? Yes ____ No ____ Saturation Present? (includes capillary fringe) Describe Recorded Data (stream gauge, monitoring well, aerial photos, previous inspections), if available: Remarks:

Appendix 2 - PRELIMINARY JURISDICTIONAL DETERMINATION (PJD) FORM

BACKGROUND INFORMATION

- A. REPORT COMPLETION DATE FOR PJD:
- B. NAME AND ADDRESS OF PERSON REQUESTING PJD:
- C. DISTRICT OFFICE, FILE NAME, AND NUMBER:

D. PROJECT LOCATION(S) AND BACKGROUND INFORMATION:

(USE THE TABLE BELOW TO DOCUMENT MULTIPLE AQUATIC RESOURCES AND/OR AQUATIC RESOURCES AT DIFFERENT SITES)

State: County/parish/borough:

City:

Center coordinates of site (lat/long in degree decimal format):

Lat.: Long.:

Universal Transverse Mercator:

Name of nearest waterbody:

E. REVIEW PERFORMED FOR SITE EVALUATION (CHECK ALL THAT APPLY):

Office (Desk) Determination. Date:

Field Determination. Date(s):

TABLE OF AQUATIC RESOURCES IN REVIEW AREA WHICH "MAY BE" SUBJECT TO REGULATORY JURISDICTION.

Site number	Latitude (decimal degrees)	Longitude (decimal degrees)	Estimated amount of aquatic resource in review area (acreage and linear feet, if applicable)	Type of aquatic resource (i.e., wetland vs. non-wetland waters)	Geographic authority to which the aquatic resource "may be" subject (i.e., Section 404 or Section 10/404)

- The Corps of Engineers believes that there may be jurisdictional aquatic resources in the review area, and the requestor of this PJD is hereby advised of his or her option to request and obtain an approved JD (AJD) for that review area based on an informed decision after having discussed the various types of JDs and their characteristics and circumstances when they may be appropriate.
- 2) In any circumstance where a permit applicant obtains an individual permit, or a Nationwide General Permit (NWP) or other general permit verification requiring "preconstruction notification" (PCN), or requests verification for a non-reporting NWP or other general permit, and the permit applicant has not requested an AJD for the activity, the permit applicant is hereby made aware that: (1) the permit applicant has elected to seek a permit authorization based on a PJD, which does not make an official determination of jurisdictional aquatic resources; (2) the applicant has the option to request an AJD before accepting the terms and conditions of the permit authorization, and that basing a permit authorization on an AJD could possibly result in less compensatory mitigation being required or different special conditions; (3) the applicant has the right to request an individual permit rather than accepting the terms and conditions of the NWP or other general permit authorization; (4) the applicant can accept a permit authorization and thereby agree to comply with all the terms and conditions of that permit, including whatever mitigation requirements the Corps has determined to be necessary; (5) undertaking any activity in reliance upon the subject permit authorization without requesting an AJD constitutes the applicant's acceptance of the use of the PJD; (6) accepting a permit authorization (e.g., signing a proffered individual permit) or undertaking any activity in reliance on any form of Corps permit authorization based on a PJD constitutes agreement that all aquatic resources in the review area affected in any way by that activity will be treated as jurisdictional, and waives any challenge to such jurisdiction in any administrative or judicial compliance or enforcement action, or in any administrative appeal or in any Federal court; and (7) whether the applicant elects to use either an AJD or a PJD, the JD will be processed as soon as practicable. Further, an AJD, a proffered individual permit (and all terms and conditions contained therein), or individual permit denial can be administratively appealed pursuant to 33 C.F.R. Part 331. If, during an administrative appeal, it becomes appropriate to make an official determination whether geographic jurisdiction exists over aquatic resources in the review area, or to provide an official delineation of jurisdictional aquatic resources in the review area, the Corps will provide an AJD to accomplish that result, as soon as is practicable. This PJD finds that there "may be" waters of the U.S. and/or that there "may be" navigable waters of the U.S. on the subject review area, and identifies all aquatic features in the review area that could be affected by the proposed activity, based on the following information:

SUPPORTING DATA. Data reviewed for PJD (check all that apply)

Checked items should be included in subject file.	Appropriately reference sources
below where indicated for all checked items:	-

Maps	s, plans, plots	or plat submitted by or on behalf of the PJD requestor:
Мар):	
C	office concurs	ared/submitted by or on behalf of the PJD requestor. with data sheets/delineation report. t concur with data sheets/delineation report. Rationale:
🗌 Data	sheets prep	ared by the Corps:
Corp	s navigable v	vaters' study:
U.S.	Geological S	Survey Hydrologic Atlas:
-	SGS NHD da SGS 8 and 1	ata. 2 digit HUC maps.
U.S.	Geological S	urvey map(s). Cite scale & quad name:
🗌 Natu	ral Resource	s Conservation Service Soil Survey. Citation:
Natio	nal wetlands	inventory map(s). Cite name:
State	local wetlan	d inventory map(s):
FEM	A/FIRM map	s:
<u> </u>	year Floodpla	in Elevation is:(National Geodetic Vertical Datum of 1929)
Phot	ographs:	Aerial (Name & Date):
	or	Other (Name & Date):
🗌 Previ	ous determir	nation(s). File no. and date of response letter:
Othe	r information	(please specify):

IMPORTANT NOTE: The information recorded on this form has not necessarily been verified by the Corps and should not be relied upon for later jurisdictional determinations.

Signature and date of Regulatory staff member completing PJD

Krista Bollmann

Signature and date of 10/27/2020 person requesting PJD (REQUIRED, unless obtaining the signature is impracticable)¹

¹ Districts may establish timeframes for requestor to return signed PJD forms. If the requestor does not respond within the established time frame, the district may presume concurrence and no additional follow up is necessary prior to finalizing an action.