33. Wetland data point A1 soil profile and close-up of hydric features. 9/28/2021

34. Upland data point A2 soil profile. No indicators of hydric soils were present. 9/28/2021

35. View of upland area near upland data point A2, looking west. 9/28/2021

36. View of RSD5 between Wetland A and inlet of Culvert 2 under SR 258, looking east. 9/28/2021

37. View of RSD1 located along the east side of N CR 100 E, looking north. RSD1 ultimately drains into UNT 1 to White Lick Creek. 9/28/2021

39. View of RSD2 and outlet of Culvert 1 under a driveway, located east of N CR 100 E, looking north. RSD2 ultimately drains into UNT 1 to White Lick Creek 9/28/2021

38. View of RSD1 and inlet of Culvert 1 under a driveway, located east of N CR 100 E, looking south. 9/28/2021

40. View of RSD2 and inlet of Culvert 2 under SR 258, looking southeast. 9/28/2021

41. View of UNT 1 to White Creek, looking southeast (downstream). The OHWM in this area measured 3.6 feet wide and 3 inches deep. Blue arrow signifies flow direction. 9/28/2021

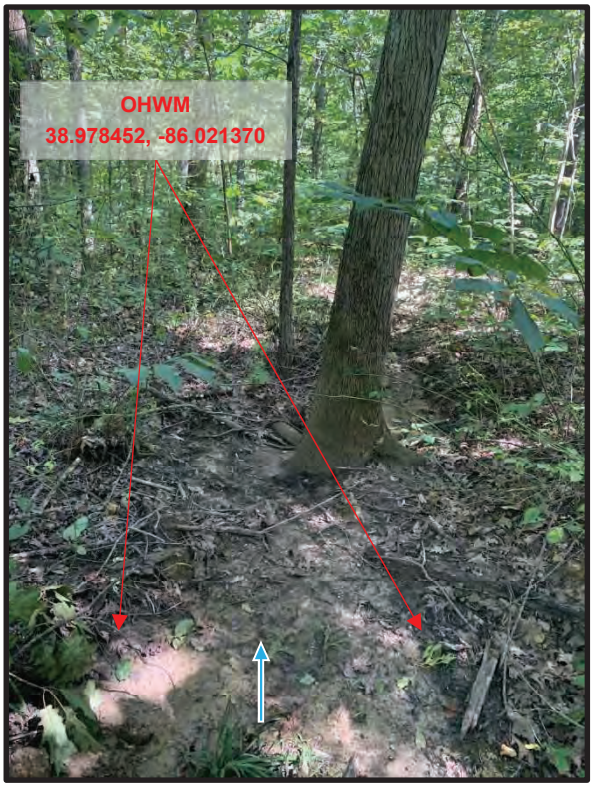
42. View of UNT 1 to White Creek and outlet of Culvert 2 under SR 258, looking northwest (upstream). 9/28/2021

43. View of UNT 1 to White Creek and outlet of Culvert 3 under N CR 100 E, looking west (upstream). 9/28/2021

44. View of UNT 1 to White Creek and inlet of Culvert 3 under N CR 100 E, looking east (downstream). 9/28/2021

45. View of UNT 1 to White Creek along SR 258, looking west (upstream). 9/28/2021

46. View of UNT 1 to White Creek at confluence with RSD8, looking northeast (downstream). 9/28/2021



47. View of UNT 2 to White Creek, looking east (downstream). The OHWM in this area measured 3.5 feet wide and 2 inches deep. 9/28/2021

48. View of UNT 2 to White Creek, looking northwest (upstream). 9/28/2021

49. View of UNT 2 to White Creek and inlet of Culvert 4 under N CR 100 E, looking east (downstream). 9/28/2021

51. View of RSD6 to UNT 2 to White Creek located along the west side of N CR 100 E, looking south. 9/28/2021

50. View of UNT 2 to White Creek, looking southwest (upstream). 9/28/2021

52. View of RSD6 located west of N CR 100 E, looking north. 9/28/2021

53. View of RSD6 located west of N CR 100 E, looking north towards UNT 2 to White Creek. 9/28/2021

54. View of RSD7 to UNT 1 to White Creek, located south of SR 258, looking southwest from SR 258. 9/28/2021

55. View of RSD7, located south of SR 258, looking northeast. 9/28/2021

56. View of RSD8 to UNT 1 to White Creek located along the south side of SR 258, looking west. 9/28/2021

57. View of RSD8 to UNT 1 to White Creek located along the south side of SR 258, looking east. 9/28/2021

58. View of RSD9 located along the south side of SR 258, looking west. RSD9 ultimately drains into UNT 3 to White Creek. 9/28/2021

59. View of RSD9 and inlet of Culvert 6 under a driveway, located south of SR 258, looking west. 9/28/2021

60. View of RSD10 to UNT 3 to White Creek and outlet of Culvert 6 under a driveway, located south of SR 258, looking east. 9/28/2021

61. View of RSD10 located south of SR 258, looking west towards UNT 3 to White Creek. 9/28/2021

62. View of UNT 3 to White Creek and new box culvert (CV 258-036-4.73) under SR 258, looking north (upstream). 9/28/2021

63. View of UNT 3 to White Creek, looking south (downstream). The OHWM in this area measured 6 feet wide and 2 inches deep. 9/28/2021

64. View of dredged section of UNT 3 to White Creek and new box culvert (CV 258-036-4.73) under SR 258, looking south (downstream). 9/28/2021

65. View of dredged section of UNT 3 to White Creek and vegetation removal along banks, looking north (upstream). 9/28/2021

66. View of RSD11 located along the north side of SR 258, looking west. RSD11 drains into Wetland B. 9/28/2021

67. View of RSD11 into Wetland B located along the north side of SR 258, looking east. 9/28/2021

68. View of Wetland B, located within a roadside ditch along the north side of SR 258 and west of N CR 100 E, looking east. 9/28/2021

69. View of Wetland B and surrounding terrain, looking east. 9/28/2021

70. View of Wetland B, looking south. 9/28/2021

71. View from within Wetland B looking out towards surrounding terrain, looking west. 9/28/2021

72. View of Wetland B, with shovel located at wetland data point B1, looking west. B1 passed the dominance for hydrophytic vegetation. 9/28/2021

73. Wetland data point B1 soil profile and close-up of hydric features. 9/28/2021

74. Upland data point B2 soil profile. No indicators of hydric soils were present. 9/28/2021

75. View of upland area near upland data point B2, looking north. 9/28/2021

76. View of RSD12 between Wetland B and UNT 3 to White Creek, located along the north side of SR 258, looking east. 9/28/2021

77. View of RSD12 between Wetland B and UNT 3 to White Creek, located along the north side of SR 258, looking west. 9/28/2021

78. View of RSD12 transitioning to riprap-lined, between Wetland B and UNT 3 to White Creek, located north of SR 258, looking east. 9/28/2021

79. Upland data point C2 soil profile. No indicators of hydric soils were present. 9/28/2021

80. View of upland area near upland data point C2, looking north. 9/28/2021

81. View of RSD13 to UNT 4 to White Creek located along the north side of SR 258, looking east. 9/28/2021

82. View of RSD13 to UNT 4 to White Creek located along the north side of SR 258, looking west. 9/28/2021

83. View of riprap-lined RSD13 to UNT 4 to White Creek located north of SR 258, looking southeast. 9/28/2021

84. View of sediment-filled, riprap-lined RSD13 to UNT 4 to White Creek, located north of SR 258, looking northwest. 9/28/2021

85. View of beginning of UNT 4 to White Creek, looking southeast (upstream). 9/28/2021

87. View of Pond 1 located west of N CR 100 E, looking northwest. 9/28/2021

86. View of UNT 4 to White Creek, looking north (downstream). The OHWM in this area measured 1.6 feet wide and 0.5 inches deep. 9/28/2021

88. View of Pond 1 and drain inlet, looking southwest. 9/28/2021

89. View of Wetland D, located within a depression west of N CR 100 E and north of SR 258, looking southeast. 9/28/2021

90. View of Wetland D and surrounding terrain, looking east. 9/28/2021

91. View of Wetland D, looking northwest. 9/28/2021

92. View of Wetland D, looking south. 9/28/2021

93. View from within Wetland D, looking out towards surrounding terrain, looking north. 9/28/2021

94. Wetland data point D1 soil profile and close-up of hydric features. 9/28/2021

95. Upland data point D2 soil profile. No indicators of hydric soils were present. 9/28/2021

96. View of upland area near upland data point D2, looking east. 9/28/2021

97. View of RSD14 between Wetland D and inlet of Culvert 5 under N CR 100 E, looking north. 9/28/2021

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WETLAND DETERMINATION DATA FORM – Midwest Region

Project/Site: SR 258 Sight Distance Improvement (Des No. 1295633) City/County: Jackson County Sampling Date: 9/28/21

Applicant/Owner: INDOT State: IN Sampling Point: A1

Investigator(s): Marion Wells & Claudia McAllister-Peterson, CMT Section, Township, Range: S6 T6N R5E

Landform (hillslope, terrace, etc.): Roadside ditch Local relief (concave, convex, none): Concave

Slope (%): 5 Lat: 38.979345 Long: -86.020861 Datum: NAD 83

Soil Map Unit Name: CkkC2 - Cincinnati silt loam, 6 to 12 percent slopes, eroded NWI or WWI classification: N/A

Are climatic / hydrologic conditions on the site typical for this time of year? Yes X No _____ (If no, explain in Remarks.)

Are Vegetation _____, Soil _____, or Hydrology _____ significantly disturbed? Are "Normal Circumstances" present? Yes X No _____

Are Vegetation _____, Soil _____, or Hydrology _____ naturally problematic? (If needed, explain any answers in Remarks.)

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

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

Remarks:

VEGETATION – Use scientific names of plants.

Tree Stratum (Plot size: _____)	Absolute % Cover	Dominant Species?	Indicator Status
1.			
2.			
3.			
4.			
5.			
	_____ = Total Cover		
Sapling/Shrub Stratum (Plot size: _____)			
1.			
2.			
3.			
4.			
5.			
	_____ = Total Cover		
Herb Stratum (Plot size: _____)			
1. *Eleocharis obtusa*	90	Y	OBL
2. *Echinochloa muricata*	10	N	OBL
3.			
4.			
5.			
6.			
7.			
8.			
9.			
10.			
	100 = Total Cover		
Woody Vine Stratum (Plot size: _____)			
1.			
2.			
	_____ = Total Cover		

Dominance Test worksheet:

Number of Dominant Species That Are OBL, FACW, or FAC: 1 (A)

Total Number of Dominant Species Across All Strata: 1 (B)

Percent of Dominant Species That Are OBL, FACW, or FAC: 100.00 (A/B)

Prevalence Index worksheet:

Total % Cover of:		Multiply by:	
OBL species	100	x 1 =	100
FACW species	0	x 2 =	0
FAC species	0	x 3 =	0
FACU species	0	x 4 =	0
UPL species	0	x 5 =	0
Column Totals:	100 (A)		100 (B)

Prevalence Index = B/A = 1.00

Hydrophytic Vegetation Indicators:

X Dominance Test is >50%

X Prevalence Index is ≤3.0[1]

___ Morphological Adaptations[1] (Provide supporting data in Remarks or on a separate sheet)

___ Problematic Hydrophytic Vegetation[1] (Explain)

[1]Indicators of hydric soil and wetland hydrology must be present, unless disturbed or problematic.

Hydrophytic Vegetation Present? Yes X No _____

Remarks: (Include photo numbers here or on a separate sheet.)

SOIL

Sampling Point: A1

Profile Description: (Describe to the depth needed to document the indicator or confirm the absence of indicators.)

Depth (inches)	Matrix Color (moist)	%	Redox Features Color (moist)	%	Type[1]	Loc[2]	Texture	Remarks
0-18	10YR 5/2	75	7.5YR 5/8	20	C	PL/M	Clay+Silt	
			Gley1 6/5GY	5	C	M		

[1]Type: C=Concentration, D=Depletion, RM=Reduced Matrix, CS=Covered or Coated Sand Grains. [2]Location: PL=Pore Lining, M=Matrix.

Hydric Soil Indicators:

- ___ Histosol (A1)
- ___ Histic Epipedon (A2)
- ___ Black Histic (A3)
- ___ Hydrogen Sulfide (A4)
- ___ Stratified Layers (A5)
- ___ 2 cm Muck (A10)
- ___ Depleted Below Dark Surface (A11)
- ___ Thick Dark Surface (A12)
- ___ Sandy Mucky Mineral (S1)
- ___ 5 cm Mucky Peat or Peat (S3)
- ___ Sandy Gleyed Matrix (S4)
- ___ Sandy Redox (S5)
- ___ Stripped Matrix (S6)
- ___ Loamy Mucky Mineral (F1)
- ___ Loamy Gleyed Matrix (F2)
- X Depleted Matrix (F3)
- ___ Redox Dark Surface (F6)
- ___ Depleted Dark Surface (F7)
- ___ Redox Depressions (F8)

Indicators for Problematic Hydric Soils[3]:

- ___ Coast Prairie Redox (A16)
- ___ Iron-Manganese Masses (F12)
- ___ Other (Explain in Remarks)

[3]Indicators of hydrophytic vegetation and wetland hydrology must be present, unless disturbed or problematic.

Restrictive Layer (if observed):

Type: _____

Depth (inches): _____

Hydric Soil Present? Yes X No ___

Remarks:

HYDROLOGY

Wetland Hydrology Indicators:

Primary Indicators (minimum of one is required; check all that apply)

- X Surface Water (A1)
- X High Water Table (A2)
- X Saturation (A3)
- ___ Water Marks (B1)
- ___ Sediment Deposits (B2)
- ___ Drift Deposits (B3)
- X Algal Mat or Crust (B4)
- ___ Iron Deposits (B5)
- ___ Inundation Visible on Aerial Imagery (B7)
- ___ Sparsely Vegetated Concave Surface (B8)
- ___ Water-Stained Leaves (B9)
- ___ Aquatic Fauna (B13)
- ___ True Aquatic Plants (B14)
- ___ Hydrogen Sulfide Odor (C1)
- X Oxidized Rhizospheres on Living Roots (C3)
- ___ Presence of Reduced Iron (C4)
- ___ Recent Iron Reduction in Tilled Soils (C6)
- ___ Thin Muck Surface (C7)
- ___ Gauge or Well Data (D9)
- ___ Other (Explain in Remarks)

Secondary Indicators (minimum of two required)

- ___ Surface Soil Cracks (B6)
- X Drainage Patterns (B10)
- ___ Dry-Season Water Table (C2)
- ___ Crayfish Burrows (C8)
- ___ Saturation Visible on Aerial Imagery (C9)
- ___ Stunted or Stressed Plants (D1)
- X Geomorphic Position (D2)
- ___ FAC-Neutral Test (D5)

Field Observations:

Surface Water Present? Yes X No ___ Depth (inches): 5

Water Table Present? Yes X No ___ Depth (inches): 8

Saturation Present? (includes capillary fringe) Yes X No ___ Depth (inches): 0

Wetland Hydrology Present? Yes X No ___

Describe Recorded Data (stream gauge, monitoring well, aerial photos, previous inspections), if available:

Remarks:

Drains west into a drainage swale to a culvert under CR100E to RSD1 to UNT 1 to White Creek.

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WETLAND DETERMINATION DATA FORM – Midwest Region

Project/Site: SR 258 Sight Distance Improvement (Des No. 1295633) City/County: Jackson County Sampling Date: 9/28/21

Applicant/Owner: INDOT State: IN Sampling Point: A2

Investigator(s): Marion Wells & Claudia McAllister-Peterson, CMT Section, Township, Range: S6 T6N R5E

Landform (hillslope, terrace, etc.): Hillslope Local relief (concave, convex, none): None

Slope (%): 20 Lat: 38.979357 Long: -86.020844 Datum: NAD 83

Soil Map Unit Name: CkkC2 - Cincinnati silt loam, 6 to 12 percent slopes, eroded, not hydric NWI or WWI classification: N/A

Are climatic / hydrologic conditions on the site typical for this time of year? Yes X No _____ (If no, explain in Remarks.)

Are Vegetation _____, Soil _____, or Hydrology _____ significantly disturbed? Are "Normal Circumstances" present? Yes X No _____

Are Vegetation _____, Soil _____, or Hydrology _____ naturally problematic? (If needed, explain any answers in Remarks.)

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

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

Remarks:

VEGETATION – Use scientific names of plants.

Tree Stratum (Plot size: 30' radius)	Absolute % Cover	Dominant Species?	Indicator Status
1.			
2.			
3.			
4.			
5.			
	_____ = Total Cover		
Sapling/Shrub Stratum (Plot size: 15' radius)			
1.			
2.			
3.			
4.			
5.			
	_____ = Total Cover		
Herb Stratum (Plot size: 5' radius)			
1. *Paspalum notatum*	60	Y	FACU
2. *Setaria pumila*	20	Y	FAC
3. *Dipsacus fullonum*	10	N	FACU
4. *Trifolium repens*	10	N	FACU
5.			
6.			
7.			
8.			
9.			
10.			
	100 = Total Cover		
Woody Vine Stratum (Plot size: 30' radius)			
1.			
2.			
	_____ = Total Cover		

Dominance Test worksheet:

Number of Dominant Species That Are OBL, FACW, or FAC: 1 (A)

Total Number of Dominant Species Across All Strata: 2 (B)

Percent of Dominant Species That Are OBL, FACW, or FAC: 50.00 (A/B)

Prevalence Index worksheet:

Total % Cover of:		Multiply by:	
OBL species	0	x 1 =	0
FACW species	0	x 2 =	0
FAC species	20	x 3 =	60
FACU species	80	x 4 =	320
UPL species	0	x 5 =	0
Column Totals:	100 (A)		380 (B)

Prevalence Index = B/A = 3.80

Hydrophytic Vegetation Indicators:

___ Dominance Test is >50%

___ Prevalence Index is ≤3.0[1]

___ Morphological Adaptations[1] (Provide supporting data in Remarks or on a separate sheet)

___ Problematic Hydrophytic Vegetation[1] (Explain)

[1]Indicators of hydric soil and wetland hydrology must be present, unless disturbed or problematic.

Hydrophytic Vegetation Present? Yes _____ No X

Remarks: (Include photo numbers here or on a separate sheet.)

SOIL

Sampling Point: A2

Profile Description: (Describe to the depth needed to document the indicator or confirm the absence of indicators.)

Depth	Matrix		Redox Features					
(inches)	Color (moist)	%	Color (moist)	%	Type[1]	Loc[2]	Texture	Remarks
0-4	10YR 4/2	100					Loam	
4-18	10YR 4/2	25	10YR 5/8	75	C	M	Clay	

[1]Type: C=Concentration, D=Depletion, RM=Reduced Matrix, CS=Covered or Coated Sand Grains. [2]Location: PL=Pore Lining, M=Matrix.

Hydric Soil Indicators:

___ Histosol (A1)
___ Histic Epipedon (A2)
___ Black Histic (A3)
___ Hydrogen Sulfide (A4)
___ Stratified Layers (A5)
___ 2 cm Muck (A10)
___ Depleted Below Dark Surface (A11)
___ Thick Dark Surface (A12)
___ Sandy Mucky Mineral (S1)
___ 5 cm Mucky Peat or Peat (S3)
___ Sandy Gleyed Matrix (S4)
___ Sandy Redox (S5)
___ Stripped Matrix (S6)
___ Loamy Mucky Mineral (F1)
___ Loamy Gleyed Matrix (F2)
___ Depleted Matrix (F3)
___ Redox Dark Surface (F6)
___ Depleted Dark Surface (F7)
___ Redox Depressions (F8)

Indicators for Problematic Hydric Soils[3]:

___ Coast Prairie Redox (A16)
___ Iron-Manganese Masses (F12)
___ Other (Explain in Remarks)

[3]Indicators of hydrophytic vegetation and wetland hydrology must be present, unless disturbed or problematic.

Restrictive Layer (if observed):

Type: _____

Depth (inches): _____

Hydric Soil Present? **Yes** _____ **No** X

Remarks:

HYDROLOGY

Wetland Hydrology Indicators:

Primary Indicators (minimum of one is required; check all that apply)

___ Surface Water (A1)
___ High Water Table (A2)
___ Saturation (A3)
___ Water Marks (B1)
___ Sediment Deposits (B2)
___ Drift Deposits (B3)
___ Algal Mat or Crust (B4)
___ Iron Deposits (B5)
___ Inundation Visible on Aerial Imagery (B7)
___ Sparsely Vegetated Concave Surface (B8)
___ Water-Stained Leaves (B9)
___ Aquatic Fauna (B13)
___ True Aquatic Plants (B14)
___ Hydrogen Sulfide Odor (C1)
___ Oxidized Rhizospheres on Living Roots (C3)
___ Presence of Reduced Iron (C4)
___ Recent Iron Reduction in Tilled Soils (C6)
___ Thin Muck Surface (C7)
___ Gauge or Well Data (D9)
___ Other (Explain in Remarks)

Secondary Indicators (minimum of two required)

___ Surface Soil Cracks (B6)
___ Drainage Patterns (B10)
___ Dry-Season Water Table (C2)
___ Crayfish Burrows (C8)
___ Saturation Visible on Aerial Imagery (C9)
___ Stunted or Stressed Plants (D1)
___ Geomorphic Position (D2)
___ FAC-Neutral Test (D5)

Field Observations:

Surface Water Present? Yes _____ No X 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** X

Describe Recorded Data (stream gauge, monitoring well, aerial photos, previous inspections), if available:

Remarks:

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WETLAND DETERMINATION DATA FORM – Midwest Region

Project/Site: SR 258 Sight Distance Improvement (Des No. 1295633) City/County: Jackson County Sampling Date: 9/28/21

Applicant/Owner: INDOT State: IN Sampling Point: B1

Investigator(s): Marion Wells & Claudia McAllister-Peterson, CMT Section, Township, Range: S1 T6N R4E

Landform (hillslope, terrace, etc.): Roadside ditch Local relief (concave, convex, none): Concave

Slope (%): 5 Lat: 38.979006 Long: -86.031023 Datum: NAD 83

Soil Map Unit Name: StdAH - Stendal silt loam, 0 to 2 percent slopes, frequently flooded, brief duration NWI or WWI classification: N/A

Are climatic / hydrologic conditions on the site typical for this time of year? Yes X No _____ (If no, explain in Remarks.)

Are Vegetation _____, Soil _____, or Hydrology _____ significantly disturbed? Are "Normal Circumstances" present? Yes X No _____

Are Vegetation _____, Soil _____, or Hydrology _____ naturally problematic? (If needed, explain any answers in Remarks.)

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

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

Remarks:

VEGETATION – Use scientific names of plants.

Tree Stratum (Plot size: 30' radius)	Absolute % Cover	Dominant Species?	Indicator Status
1.			
2.			
3.			
4.			
5.			
	= Total Cover		
Sapling/Shrub Stratum (Plot size: 15' radius)			
1.			
2.			
3.			
4.			
5.			
	= Total Cover		
Herb Stratum (Plot size: 5' radius)			
1. *Phalaris arundinacea*	40	Y	FACW
2. *Echinochloa muricata*	20	Y	OBL
3. *Glyceria striata*	10	N	OBL
4. *Cyperus esculentus*	10	N	FACW
5. *Typha X glauca*	10	N	OBL
6.			
7.			
8.			
9.			
10.			
	90 = Total Cover		
Woody Vine Stratum (Plot size: 30' radius)			
1.			
2.			
	= Total Cover		

Dominance Test worksheet:

Number of Dominant Species That Are OBL, FACW, or FAC: 2 (A)

Total Number of Dominant Species Across All Strata: 2 (B)

Percent of Dominant Species That Are OBL, FACW, or FAC: 100.00 (A/B)

Prevalence Index worksheet:

Total % Cover of:		Multiply by:	
OBL species	40	x 1 =	40
FACW species	50	x 2 =	100
FAC species	0	x 3 =	0
FACU species	0	x 4 =	0
UPL species	0	x 5 =	0
Column Totals:	90 (A)		140 (B)

Prevalence Index = B/A = 1.56

Hydrophytic Vegetation Indicators:

X Dominance Test is >50%

X Prevalence Index is ≤3.0[1]

___ Morphological Adaptations[1] (Provide supporting data in Remarks or on a separate sheet)

___ Problematic Hydrophytic Vegetation[1] (Explain)

[1]Indicators of hydric soil and wetland hydrology must be present, unless disturbed or problematic.

Hydrophytic Vegetation Present? Yes X No _____

Remarks: (Include photo numbers here or on a separate sheet.)

SOIL

Sampling Point: B1

Profile Description: (Describe to the depth needed to document the indicator or confirm the absence of indicators.)

Depth (inches)	Matrix Color (moist)	Matrix %	Redox Features Color (moist)	Redox Features %	Type[1]	Loc[2]	Texture	Remarks
0-18	10YR 5/2	80	7.5YR 4/6	20	C	M	silty clay	W/ sand

[1]Type: C=Concentration, D=Depletion, RM=Reduced Matrix, CS=Covered or Coated Sand Grains. [2]Location: PL=Pore Lining, M=Matrix.

Hydric Soil Indicators:

- ___ Histosol (A1)
- ___ Histic Epipedon (A2)
- ___ Black Histic (A3)
- ___ Hydrogen Sulfide (A4)
- ___ Stratified Layers (A5)
- ___ 2 cm Muck (A10)
- ___ Depleted Below Dark Surface (A11)
- ___ Thick Dark Surface (A12)
- ___ Sandy Mucky Mineral (S1)
- ___ 5 cm Mucky Peat or Peat (S3)
- ___ Sandy Gleyed Matrix (S4)
- ___ Sandy Redox (S5)
- ___ Stripped Matrix (S6)
- ___ Loamy Mucky Mineral (F1)
- ___ Loamy Gleyed Matrix (F2)
- X Depleted Matrix (F3)
- ___ Redox Dark Surface (F6)
- ___ Depleted Dark Surface (F7)
- ___ Redox Depressions (F8)

Indicators for Problematic Hydric Soils[3]:

- ___ Coast Prairie Redox (A16)
- ___ Iron-Manganese Masses (F12)
- ___ Other (Explain in Remarks)

[3]Indicators of hydrophytic vegetation and wetland hydrology must be present, unless disturbed or problematic.

Restrictive Layer (if observed):

Type: _____

Depth (inches): _____

Hydric Soil Present? Yes X No _____

Remarks:

HYDROLOGY

Wetland Hydrology Indicators:

Primary Indicators (minimum of one is required; check all that apply)

- ___ Surface Water (A1)
- ___ High Water Table (A2)
- X Saturation (A3)
- ___ Water Marks (B1)
- ___ Sediment Deposits (B2)
- ___ Drift Deposits (B3)
- ___ Algal Mat or Crust (B4)
- ___ Iron Deposits (B5)
- ___ Inundation Visible on Aerial Imagery (B7)
- ___ Sparsely Vegetated Concave Surface (B8)
- ___ Water-Stained Leaves (B9)
- ___ Aquatic Fauna (B13)
- ___ True Aquatic Plants (B14)
- ___ Hydrogen Sulfide Odor (C1)
- ___ Oxidized Rhizospheres on Living Roots (C3)
- ___ Presence of Reduced Iron (C4)
- ___ Recent Iron Reduction in Tilled Soils (C6)
- ___ Thin Muck Surface (C7)
- ___ Gauge or Well Data (D9)
- ___ Other (Explain in Remarks)

Secondary Indicators (minimum of two required)

- ___ Surface Soil Cracks (B6)
- X Drainage Patterns (B10)
- ___ Dry-Season Water Table (C2)
- ___ Crayfish Burrows (C8)
- ___ Saturation Visible on Aerial Imagery (C9)
- ___ Stunted or Stressed Plants (D1)
- X Geomorphic Position (D2)
- X FAC-Neutral Test (D5)

Field Observations:

Surface Water Present? Yes _____ No X Depth (inches): _____

Water Table Present? Yes _____ No X Depth (inches): _____

Saturation Present? (includes capillary fringe) Yes X No _____ Depth (inches): 0

Wetland Hydrology Present? Yes X No _____

Describe Recorded Data (stream gauge, monitoring well, aerial photos, previous inspections), if available:

Remarks:

RSD 5 drains east into Wetland B. Wetland B drains west into a drainage swale (grass, then riprap), which drains into UNT 3 to White Creek.

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WETLAND DETERMINATION DATA FORM – Midwest Region

Project/Site: SR 258 Sight Distance Improvement (Des No. 1295633) City/County: Jackson County Sampling Date: 9/28/21

Applicant/Owner: INDOT State: IN Sampling Point: B2

Investigator(s): Marion Wells & Claudia McAllister-Peterson, CMT Section, Township, Range: S1 T6N R4E

Landform (hillslope, terrace, etc.): Hillslope Local relief (concave, convex, none): None

Slope (%): 5 Lat: 38.979050 Long: -86.030739 Datum: NAD 83

Soil Map Unit Name: StdAH - Stendal silt loam, 0 to 2 percent slopes, frequently flooded, brief duration NWI or WWI classification: N/A

Are climatic / hydrologic conditions on the site typical for this time of year? Yes X No _____ (If no, explain in Remarks.)

Are Vegetation _____, Soil _____, or Hydrology _____ significantly disturbed? Are "Normal Circumstances" present? Yes X No _____

Are Vegetation _____, Soil _____, or Hydrology _____ naturally problematic? (If needed, explain any answers in Remarks.)

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

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

Remarks:

VEGETATION – Use scientific names of plants.

Tree Stratum (Plot size: 30' radius)	Absolute % Cover	Dominant Species?	Indicator Status
1.			
2.			
3.			
4.			
5.			
	_____ = Total Cover		
Sapling/Shrub Stratum (Plot size: 15' radius)			
1. *Fraxinus pennsylvanica*	40	Y	FACW
2. *Tilia americana*	30	Y	FACU
3. *Ulmus americana*	20	Y	FACW
4.			
5.			
	90 = Total Cover		
Herb Stratum (Plot size: 5' radius)			
1. *Ambrosia trifida*	50	Y	FAC
2. *Phalaris arundinacea*	10	N	FACW
3. *Agrostis gigantea*	10	N	FACW
4.			
5.			
6.			
7.			
8.			
9.			
10.			
	70 = Total Cover		
Woody Vine Stratum (Plot size: 30' radius)			
1.			
2.			
	_____ = Total Cover		

Dominance Test worksheet:

Number of Dominant Species That Are OBL, FACW, or FAC: 3 (A)

Total Number of Dominant Species Across All Strata: 4 (B)

Percent of Dominant Species That Are OBL, FACW, or FAC: 75.00 (A/B)

Prevalence Index worksheet:

Total % Cover of:		Multiply by:	
OBL species	0	x 1 =	0
FACW species	80	x 2 =	160
FAC species	50	x 3 =	150
FACU species	30	x 4 =	120
UPL species	0	x 5 =	0
Column Totals:	160 (A)		430 (B)

Prevalence Index = B/A = 2.69

Hydrophytic Vegetation Indicators:

X Dominance Test is >50%

X Prevalence Index is ≤3.0[1]

___ Morphological Adaptations[1] (Provide supporting data in Remarks or on a separate sheet)

___ Problematic Hydrophytic Vegetation[1] (Explain)

[1]Indicators of hydric soil and wetland hydrology must be present, unless disturbed or problematic.

Hydrophytic Vegetation Present? Yes X No _____

Remarks: (Include photo numbers here or on a separate sheet.)

SOIL

Sampling Point: B2

Profile Description: (Describe to the depth needed to document the indicator or confirm the absence of indicators.)

Depth (inches)	Matrix Color (moist)	%	Redox Features Color (moist)	%	Type[1]	Loc[2]	Texture	Remarks
0-18	10YR 5/4	100					Clay+Silt	

[1]Type: C=Concentration, D=Depletion, RM=Reduced Matrix, CS=Covered or Coated Sand Grains. [2]Location: PL=Pore Lining, M=Matrix.

Hydric Soil Indicators:

- ___ Histosol (A1)
- ___ Histic Epipedon (A2)
- ___ Black Histic (A3)
- ___ Hydrogen Sulfide (A4)
- ___ Stratified Layers (A5)
- ___ 2 cm Muck (A10)
- ___ Depleted Below Dark Surface (A11)
- ___ Thick Dark Surface (A12)
- ___ Sandy Mucky Mineral (S1)
- ___ 5 cm Mucky Peat or Peat (S3)
- ___ Sandy Gleyed Matrix (S4)
- ___ Sandy Redox (S5)
- ___ Stripped Matrix (S6)
- ___ Loamy Mucky Mineral (F1)
- ___ Loamy Gleyed Matrix (F2)
- ___ Depleted Matrix (F3)
- ___ Redox Dark Surface (F6)
- ___ Depleted Dark Surface (F7)
- ___ Redox Depressions (F8)

Indicators for Problematic Hydric Soils[3]:

- ___ Coast Prairie Redox (A16)
- ___ Iron-Manganese Masses (F12)
- ___ Other (Explain in Remarks)

[3]Indicators of hydrophytic vegetation and wetland hydrology must be present, unless disturbed or problematic.

Restrictive Layer (if observed):

Type: _____

Depth (inches): _____

Hydric Soil Present? Yes _____ No X

Remarks:

HYDROLOGY

Wetland Hydrology Indicators:

Primary Indicators (minimum of one is required; check all that apply)

- ___ Surface Water (A1)
- ___ High Water Table (A2)
- ___ Saturation (A3)
- ___ Water Marks (B1)
- ___ Sediment Deposits (B2)
- ___ Drift Deposits (B3)
- ___ Algal Mat or Crust (B4)
- ___ Iron Deposits (B5)
- ___ Inundation Visible on Aerial Imagery (B7)
- ___ Sparsely Vegetated Concave Surface (B8)
- ___ Water-Stained Leaves (B9)
- ___ Aquatic Fauna (B13)
- ___ True Aquatic Plants (B14)
- ___ Hydrogen Sulfide Odor (C1)
- ___ Oxidized Rhizospheres on Living Roots (C3)
- ___ Presence of Reduced Iron (C4)
- ___ Recent Iron Reduction in Tilled Soils (C6)
- ___ Thin Muck Surface (C7)
- ___ Gauge or Well Data (D9)
- ___ Other (Explain in Remarks)

Secondary Indicators (minimum of two required)

- ___ Surface Soil Cracks (B6)
- ___ Drainage Patterns (B10)
- ___ Dry-Season Water Table (C2)
- ___ Crayfish Burrows (C8)
- ___ Saturation Visible on Aerial Imagery (C9)
- ___ Stunted or Stressed Plants (D1)
- ___ Geomorphic Position (D2)
- ___ FAC-Neutral Test (D5)

Field Observations:

Surface Water Present? Yes _____ No X 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 X

Describe Recorded Data (stream gauge, monitoring well, aerial photos, previous inspections), if available:

Remarks:

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WETLAND DETERMINATION DATA FORM – Midwest Region

Project/Site: SR 258 Sight Distance Improvement (Des No. 1295633) City/County: Jackson County Sampling Date: 9/28/21

Applicant/Owner: INDOT State: IN Sampling Point: C2

Investigator(s): Marion Wells & Claudia McAllister-Peterson, CMT Section, Township, Range: S1 T6N R4E

Landform (hillslope, terrace, etc.): Forest Local relief (concave, convex, none): None

Slope (%): 0 Lat: 38.979238 Long: -86.030074 Datum: NAD 83

Soil Map Unit Name: StdAH - Stendal silt loam, 0 to 2 percent slopes, frequently flooded, brief duration NWI or WWI classification: PFO!A

Are climatic / hydrologic conditions on the site typical for this time of year? Yes X No _____ (If no, explain in Remarks.)

Are Vegetation _____, Soil _____, or Hydrology _____ significantly disturbed? Are "Normal Circumstances" present? Yes X No _____

Are Vegetation _____, Soil _____, or Hydrology _____ naturally problematic? (If needed, explain any answers in Remarks.)

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

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

Remarks:

VEGETATION – Use scientific names of plants.

Tree Stratum (Plot size: 30' radius)	Absolute % Cover	Dominant Species?	Indicator Status
1. *Quercus alba*	40	Y	FACU
2. *Liquidambar styraciflua*	10	N	FACW
3. *Fraxinus pennsylvanica*	10	N	FACW
4.			
5.			
	60	= Total Cover	
Sapling/Shrub Stratum (Plot size: 15' radius)			
1. *Lindera benzoin*	30	Y	FACW
2. *Asimina triloba*	30	Y	FAC
3.			
4.			
5.			
	60	= Total Cover	
Herb Stratum (Plot size: 5' radius)			
1. *Asarum canadense*	40	Y	FACU
2. Geum canadense	10	N	FAC
3. *Urtica dioica*	10	N	FACW
4.			
5.			
6.			
7.			
8.			
9.			
10.			
	60	= Total Cover	
Woody Vine Stratum (Plot size: 30' radius)			
1. *Parthenocissus quinquefolia*	10	Y	FACU
2.			
	10	= Total Cover	

Dominance Test worksheet:

Number of Dominant Species That Are OBL, FACW, or FAC: 2 (A)

Total Number of Dominant Species Across All Strata: 5 (B)

Percent of Dominant Species That Are OBL, FACW, or FAC: 40.00 (A/B)

Prevalence Index worksheet:

Total % Cover of:		Multiply by:	
OBL species	0	x 1 =	0
FACW species	60	x 2 =	120
FAC species	40	x 3 =	120
FACU species	90	x 4 =	360
UPL species	0	x 5 =	0
Column Totals:	190 (A)		600 (B)

Prevalence Index = B/A = 3.16

Hydrophytic Vegetation Indicators:

___ Dominance Test is >50%

___ Prevalence Index is ≤3.0[1]

___ Morphological Adaptations[1] (Provide supporting data in Remarks or on a separate sheet)

___ Problematic Hydrophytic Vegetation[1] (Explain)

[1]Indicators of hydric soil and wetland hydrology must be present, unless disturbed or problematic.

Hydrophytic Vegetation Present? Yes _____ No X

Remarks: (Include photo numbers here or on a separate sheet.)

SOIL

Sampling Point: C2

Profile Description: (Describe to the depth needed to document the indicator or confirm the absence of indicators.)

Depth (inches)	Matrix Color (moist)	%	Redox Features Color (moist)	%	Type[1]	Loc[2]	Texture	Remarks
0-18	10YR 5/3	85	10YR 5/8	5	C	M	Silt+Loam	
	10YR 5/1	10						

[1]Type: C=Concentration, D=Depletion, RM=Reduced Matrix, CS=Covered or Coated Sand Grains. [2]Location: PL=Pore Lining, M=Matrix.

Hydric Soil Indicators:

- ___ Histosol (A1)
- ___ Histic Epipedon (A2)
- ___ Black Histic (A3)
- ___ Hydrogen Sulfide (A4)
- ___ Stratified Layers (A5)
- ___ 2 cm Muck (A10)
- ___ Depleted Below Dark Surface (A11)
- ___ Thick Dark Surface (A12)
- ___ Sandy Mucky Mineral (S1)
- ___ 5 cm Mucky Peat or Peat (S3)
- ___ Sandy Gleyed Matrix (S4)
- ___ Sandy Redox (S5)
- ___ Stripped Matrix (S6)
- ___ Loamy Mucky Mineral (F1)
- ___ Loamy Gleyed Matrix (F2)
- ___ Depleted Matrix (F3)
- ___ Redox Dark Surface (F6)
- ___ Depleted Dark Surface (F7)
- ___ Redox Depressions (F8)

Indicators for Problematic Hydric Soils[3]:

- ___ Coast Prairie Redox (A16)
- ___ Iron-Manganese Masses (F12)
- ___ Other (Explain in Remarks)

[3]Indicators of hydrophytic vegetation and wetland hydrology must be present, unless disturbed or problematic.

Restrictive Layer (if observed):

Type: _____

Depth (inches): _____

Hydric Soil Present? Yes _____ No X

Remarks:

HYDROLOGY

Wetland Hydrology Indicators:

Primary Indicators (minimum of one is required; check all that apply)

- ___ Surface Water (A1)
- ___ High Water Table (A2)
- ___ Saturation (A3)
- ___ Water Marks (B1)
- ___ Sediment Deposits (B2)
- ___ Drift Deposits (B3)
- ___ Algal Mat or Crust (B4)
- ___ Iron Deposits (B5)
- ___ Inundation Visible on Aerial Imagery (B7)
- ___ Sparsely Vegetated Concave Surface (B8)
- ___ Water-Stained Leaves (B9)
- ___ Aquatic Fauna (B13)
- ___ True Aquatic Plants (B14)
- ___ Hydrogen Sulfide Odor (C1)
- ___ Oxidized Rhizospheres on Living Roots (C3)
- ___ Presence of Reduced Iron (C4)
- ___ Recent Iron Reduction in Tilled Soils (C6)
- ___ Thin Muck Surface (C7)
- ___ Gauge or Well Data (D9)
- ___ Other (Explain in Remarks)

Secondary Indicators (minimum of two required)

- ___ Surface Soil Cracks (B6)
- ___ Drainage Patterns (B10)
- ___ Dry-Season Water Table (C2)
- ___ Crayfish Burrows (C8)
- ___ Saturation Visible on Aerial Imagery (C9)
- ___ Stunted or Stressed Plants (D1)
- ___ Geomorphic Position (D2)
- ___ FAC-Neutral Test (D5)

Field Observations:

Surface Water Present? Yes _____ No X 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 X

Describe Recorded Data (stream gauge, monitoring well, aerial photos, previous inspections), if available:

Remarks:

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WETLAND DETERMINATION DATA FORM – Midwest Region

Project/Site: SR 258 Sight Distance Improvement (Des No. 1295633) City/County: Jackson County Sampling Date: 9/28/21

Applicant/Owner: INDOT State: IN Sampling Point: D1

Investigator(s): Marion Wells & Claudia McAllister-Peterson, CMT Section, Township, Range: S1 T6N R4E

Landform (hillslope, terrace, etc.): Depression Local relief (concave, convex, none): Concave

Slope (%): 5 Lat: 38.979448 Long: -86.021750 Datum: NAD 83

Soil Map Unit Name: BocD3 - Bonnell silty clay loam, 10 to 18 percent slopes, severely eroded NWI or WWI classification: N/A

Are climatic / hydrologic conditions on the site typical for this time of year? Yes X No _____ (If no, explain in Remarks.)

Are Vegetation _____, Soil _____, or Hydrology _____ significantly disturbed? Are "Normal Circumstances" present? Yes X No _____

Are Vegetation _____, Soil _____, or Hydrology _____ naturally problematic? (If needed, explain any answers in Remarks.)

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

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

Remarks:

VEGETATION – Use scientific names of plants.

Tree Stratum (Plot size: 30' radius)	Absolute % Cover	Dominant Species?	Indicator Status
1.			
2.			
3.			
4.			
5.			
	= Total Cover		
Sapling/Shrub Stratum (Plot size: 15' radius)			
1.			
2.			
3.			
4.			
5.			
	= Total Cover		
Herb Stratum (Plot size: 5' radius)			
1. *Leersia oryzoides*	45	Y	OBL
2. *Carex lurida*	10	Y	OBL
3. *Senecio vulgaris*	10	Y	UPL
4. *Juncus effusus*	10	Y	OBL
5. *Schoenoplectus tabernaemontani*	10	Y	OBL
6. *Agrostis gigantea*	10	Y	FACW
7. *Verbena hastata*	5	N	FACW
8.			
9.			
10.			
	100 = Total Cover		
Woody Vine Stratum (Plot size: 30' radius)			
1.			
2.			
	= Total Cover		

Dominance Test worksheet:

Number of Dominant Species That Are OBL, FACW, or FAC: 5 (A)

Total Number of Dominant Species Across All Strata: 6 (B)

Percent of Dominant Species That Are OBL, FACW, or FAC: 83.33 (A/B)

Prevalence Index worksheet:

Total % Cover of:		Multiply by:	
OBL species	75	x 1 =	75
FACW species	15	x 2 =	30
FAC species	0	x 3 =	0
FACU species	0	x 4 =	0
UPL species	10	x 5 =	50
Column Totals:	100 (A)		155 (B)

Prevalence Index = B/A = 1.55

Hydrophytic Vegetation Indicators:

X Dominance Test is >50%

X Prevalence Index is ≤3.0[1]

___ Morphological Adaptations[1] (Provide supporting data in Remarks or on a separate sheet)

___ Problematic Hydrophytic Vegetation[1] (Explain)

[1]Indicators of hydric soil and wetland hydrology must be present, unless disturbed or problematic.

Hydrophytic Vegetation Present? Yes X No _____

Remarks: (Include photo numbers here or on a separate sheet.)

SOIL

Sampling Point: D1

Profile Description: (Describe to the depth needed to document the indicator or confirm the absence of indicators.)

Depth (inches)	Matrix Color (moist)	Matrix %	Redox Features Color (moist)	Redox Features %	Type[1]	Loc[2]	Texture	Remarks
0-18	10YR 4/2	80	10YR 5/8	20	C	PL/M	Clay+Silt	

[1]Type: C=Concentration, D=Depletion, RM=Reduced Matrix, CS=Covered or Coated Sand Grains. [2]Location: PL=Pore Lining, M=Matrix.

Hydric Soil Indicators:

- ___ Histosol (A1)
- ___ Histic Epipedon (A2)
- ___ Black Histic (A3)
- ___ Hydrogen Sulfide (A4)
- ___ Stratified Layers (A5)
- ___ 2 cm Muck (A10)
- ___ Depleted Below Dark Surface (A11)
- ___ Thick Dark Surface (A12)
- ___ Sandy Mucky Mineral (S1)
- ___ 5 cm Mucky Peat or Peat (S3)
- ___ Sandy Gleyed Matrix (S4)
- ___ Sandy Redox (S5)
- ___ Stripped Matrix (S6)
- ___ Loamy Mucky Mineral (F1)
- ___ Loamy Gleyed Matrix (F2)
- X Depleted Matrix (F3)
- ___ Redox Dark Surface (F6)
- ___ Depleted Dark Surface (F7)
- ___ Redox Depressions (F8)

Indicators for Problematic Hydric Soils[3]:

- ___ Coast Prairie Redox (A16)
- ___ Iron-Manganese Masses (F12)
- ___ Other (Explain in Remarks)

[3]Indicators of hydrophytic vegetation and wetland hydrology must be present, unless disturbed or problematic.

Restrictive Layer (if observed):

Type: _____

Depth (inches): _____

Hydric Soil Present? Yes X No ___

Remarks:

HYDROLOGY

Wetland Hydrology Indicators:

Primary Indicators (minimum of one is required; check all that apply)

- X Surface Water (A1)
- X High Water Table (A2)
- X Saturation (A3)
- ___ Water Marks (B1)
- ___ Sediment Deposits (B2)
- ___ Drift Deposits (B3)
- ___ Algal Mat or Crust (B4)
- ___ Iron Deposits (B5)
- ___ Inundation Visible on Aerial Imagery (B7)
- ___ Sparsely Vegetated Concave Surface (B8)
- ___ Water-Stained Leaves (B9)
- ___ Aquatic Fauna (B13)
- ___ True Aquatic Plants (B14)
- ___ Hydrogen Sulfide Odor (C1)
- X Oxidized Rhizospheres on Living Roots (C3)
- ___ Presence of Reduced Iron (C4)
- ___ Recent Iron Reduction in Tilled Soils (C6)
- ___ Thin Muck Surface (C7)
- ___ Gauge or Well Data (D9)
- ___ Other (Explain in Remarks)

Secondary Indicators (minimum of two required)

- ___ Surface Soil Cracks (B6)
- ___ Drainage Patterns (B10)
- ___ Dry-Season Water Table (C2)
- ___ Crayfish Burrows (C8)
- ___ Saturation Visible on Aerial Imagery (C9)
- ___ Stunted or Stressed Plants (D1)
- X Geomorphic Position (D2)
- ___ FAC-Neutral Test (D5)

Field Observations:

Surface Water Present? Yes X No ___ Depth (inches): 1

Water Table Present? Yes X No ___ Depth (inches): 6

Saturation Present? (includes capillary fringe) Yes X No ___ Depth (inches): 0

Wetland Hydrology Present? Yes X No ___

Describe Recorded Data (stream gauge, monitoring well, aerial photos, previous inspections), if available:

Remarks:

Recieves seeps from pond berm & drains to culvert under CR100E to RSD1 to UNT 1 to White Creek.

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WETLAND DETERMINATION DATA FORM – Midwest Region

Project/Site: SR 258 Sight Distance Improvement (Des No. 1295633) City/County: Jackson County Sampling Date: 9/28/21

Applicant/Owner: INDOT State: IN Sampling Point: D2

Investigator(s): Marion Wells & Claudia McAllister-Peterson, CMT Section, Township, Range: S1 T6N R4E

Landform (hillslope, terrace, etc.): Terrace Local relief (concave, convex, none): None

Slope (%): 0 Lat: 38.979368 Long: -86.021719 Datum: NAD 83

Soil Map Unit Name: BocD3 - Bonnell silty clay loam, 10 to 18 percent slopes, severely eroded NWI or WWI classification: N/A

Are climatic / hydrologic conditions on the site typical for this time of year? Yes X No _____ (If no, explain in Remarks.)

Are Vegetation _____, Soil _____, or Hydrology _____ significantly disturbed? Are "Normal Circumstances" present? Yes X No _____

Are Vegetation _____, Soil _____, or Hydrology _____ naturally problematic? (If needed, explain any answers in Remarks.)

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

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

Remarks:

VEGETATION – Use scientific names of plants.

Tree Stratum (Plot size: 30' radius)	Absolute % Cover	Dominant Species?	Indicator Status
1.			
2.			
3.			
4.			
5.			
	= Total Cover		
Sapling/Shrub Stratum (Plot size: 15' radius)			
1.			
2.			
3.			
4.			
5.			
	= Total Cover		
Herb Stratum (Plot size: 5' radius)			
1. *Poa pratensis*	75	Y	FAC
2. *Taraxacum officinale*	10	N	FACU
3. *Plantago lanceolata*	10	N	FACU
4.			
5.			
6.			
7.			
8.			
9.			
10.			
	95 = Total Cover		
Woody Vine Stratum (Plot size: 30' radius)			
1.			
2.			
	= Total Cover		

Dominance Test worksheet:

Number of Dominant Species That Are OBL, FACW, or FAC: 1 (A)

Total Number of Dominant Species Across All Strata: 1 (B)

Percent of Dominant Species That Are OBL, FACW, or FAC: 100.00 (A/B)

Prevalence Index worksheet:

Total % Cover of:		Multiply by:	
OBL species	0	x 1 =	0
FACW species	0	x 2 =	0
FAC species	75	x 3 =	225
FACU species	20	x 4 =	80
UPL species	0	x 5 =	0
Column Totals:	95 (A)		305 (B)

Prevalence Index = B/A = 3.21

Hydrophytic Vegetation Indicators:

X Dominance Test is >50%

___ Prevalence Index is ≤3.0[1]

___ Morphological Adaptations[1] (Provide supporting data in Remarks or on a separate sheet)

___ Problematic Hydrophytic Vegetation[1] (Explain)

[1]Indicators of hydric soil and wetland hydrology must be present, unless disturbed or problematic.

Hydrophytic Vegetation Present? Yes _____ No X

Remarks: (Include photo numbers here or on a separate sheet.)

SOIL

Sampling Point: D2

Profile Description: (Describe to the depth needed to document the indicator or confirm the absence of indicators.)

Depth	Matrix		Redox Features					
(inches)	Color (moist)	%	Color (moist)	%	Type[1]	Loc[2]	Texture	Remarks
0-5	10YR 3/2	98	10YR 3/6	2	C	M	silt+loam	
5-18	10YR 3/2	60	10YR 4/6	20	C	M	clay	
			Gley1 5/5GY	20	C	M		

[1]Type: C=Concentration, D=Depletion, RM=Reduced Matrix, CS=Covered or Coated Sand Grains. [2]Location: PL=Pore Lining, M=Matrix.

Hydric Soil Indicators:

___ Histosol (A1)
___ Histic Epipedon (A2)
___ Black Histic (A3)
___ Hydrogen Sulfide (A4)
___ Stratified Layers (A5)
___ 2 cm Muck (A10)
___ Depleted Below Dark Surface (A11)
___ Thick Dark Surface (A12)
___ Sandy Mucky Mineral (S1)
___ 5 cm Mucky Peat or Peat (S3)
___ Sandy Gleyed Matrix (S4)
___ Sandy Redox (S5)
___ Stripped Matrix (S6)
___ Loamy Mucky Mineral (F1)
___ Loamy Gleyed Matrix (F2)
___ Depleted Matrix (F3)
___ Redox Dark Surface (F6)
___ Depleted Dark Surface (F7)
___ Redox Depressions (F8)

Indicators for Problematic Hydric Soils[3]:

___ Coast Prairie Redox (A16)
___ Iron-Manganese Masses (F12)
___ Other (Explain in Remarks)

[3]Indicators of hydrophytic vegetation and wetland hydrology must be present, unless disturbed or problematic.

Restrictive Layer (if observed):

Type: _____

Depth (inches): _____

Hydric Soil Present? **Yes** _____ **No** X

Remarks:

HYDROLOGY

Wetland Hydrology Indicators:

Primary Indicators (minimum of one is required; check all that apply)

___ Surface Water (A1)
___ High Water Table (A2)
___ Saturation (A3)
___ Water Marks (B1)
___ Sediment Deposits (B2)
___ Drift Deposits (B3)
___ Algal Mat or Crust (B4)
___ Iron Deposits (B5)
___ Inundation Visible on Aerial Imagery (B7)
___ Sparsely Vegetated Concave Surface (B8)
___ Water-Stained Leaves (B9)
___ Aquatic Fauna (B13)
___ True Aquatic Plants (B14)
___ Hydrogen Sulfide Odor (C1)
___ Oxidized Rhizospheres on Living Roots (C3)
___ Presence of Reduced Iron (C4)
___ Recent Iron Reduction in Tilled Soils (C6)
___ Thin Muck Surface (C7)
___ Gauge or Well Data (D9)
___ Other (Explain in Remarks)

Secondary Indicators (minimum of two required)

___ Surface Soil Cracks (B6)
___ Drainage Patterns (B10)
___ Dry-Season Water Table (C2)
___ Crayfish Burrows (C8)
___ Saturation Visible on Aerial Imagery (C9)
___ Stunted or Stressed Plants (D1)
___ Geomorphic Position (D2)
___ FAC-Neutral Test (D5)

Field Observations:

Surface Water Present? Yes _____ No X 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** X

Describe Recorded Data (stream gauge, monitoring well, aerial photos, previous inspections), if available:

Remarks:

PRELIMINARY JURISDICTIONAL DETERMINATION FORM

BACKGROUND INFORMATION

A. REPORT COMPLETION DATE FOR PRELIMINARY JURISDICTIONAL DETERMINATION (JD): February 3, 2022

B. NAME AND ADDRESS OF PERSON REQUESTING PRELIMINARY JD:
Claudia McAllister-Peterson
Crawford, Murphy & Tilly, Inc.
8790 Purdue Rd
Indianapolis, IN 46268

C. DISTRICT OFFICE, FILE NAME, AND NUMBER: CENAP-OP-R-

D. PROJECT LOCATION(S) AND BACKGROUND INFORMATION:

Proposed improvements for the project (DES No: 1298633) includes lowering the existing State Road 258 (SR 258) roadway hill by approximately 5 feet and raising the existing roadway valleys on either side of the hill by approximately 15 feet to provide acceptable stopping sight distances to allow for safe and efficient movement of traffic. Roadway improvements are also required on N CR 100 E to accommodate the vertical profile change on SR 258. Drainage structure improvements are also required to accommodate the roadway profile changes. The existing 18 feet by 6 feet box culvert located at unnamed tributary 3 to White Creek will be lengthened with new headwalls/wingwalls constructed to accommodate the increased elevation of SR 258. 6 existing culverts in the project limits will be removed and replaced "in kind". An existing 12-inch pipe under the residential drives on the south side of SR 258 at the top of the hill will be removed, but no new structure will be placed at this location, as the roadside ditches will be graded to carry water away from these driveways.

Per the U.S. Geological Survey (USGS) Brownstown, Indiana Quadrangle Map, the project is situated within Sections 1 and 2, Township 6 North, and Range 4 East, and Sections 6 and 7, Township 6 North, and Range 5 East.

Land use in the vicinity of the project is residential and forested, surrounded by predominately forested areas.

(USE THE ATTACHED TABLE TO DOCUMENT MULTIPLE WATERBODIES AT DIFFERENT SITES)

State: IN County: Jackson City: -
Center coordinates of site (lat/long in degree decimal format):
Lat. 38.979213 ° N, Long. -86.021602 ° W
Universal Transverse Mercator: 16S 4314925.02 m Easting (x) 584746.85 m Northing (y)
Name of nearest waterbody: White Creek

Identify (estimate) amount of waters in the review area: **See table below**
Non-wetland waters:_____linear feet:_____width (ft) and/or_____acres.
Cowardin Class: _____
Stream Flow: _____
Wetlands:_____acres.
Cowardin Class: _____

Name of any water bodies on the site that have been identified as Section 10 waters:
Tidal: N/A
Non-Tidal: N/A

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

☐ Office (Desk) Determination. Date: _____
☐ Field Determination. Date(s): _____

1. The Corps of Engineers believes that there may be jurisdictional waters of the United States on the subject site, and the permit applicant or other affected party who requested this preliminary JD is hereby advised of his or her option to request and obtain an approved jurisdictional determination (JD) for that site. Nevertheless, the permit applicant or other person who requested this preliminary JD has declined to exercise the option to obtain an approved JD in this instance and at this time.

2. In any circumstance where a permit applicant obtains an individual permit, or a Nationwide General Permit (NWP) or other general permit verification requiring "pre-construction notification" (PCN), or requests verification for a non-reporting NWP or other general permit, and the permit applicant has not requested an approved JD for the activity, the permit applicant is hereby made aware of the following: (1) the permit applicant has elected to seek a permit authorization based on a preliminary JD, which does not make an official determination of jurisdictional waters; (2) that the applicant has the option to request an approved JD before accepting the terms and conditions of the permit authorization, and that basing a permit authorization on an approved JD could possibly result in less compensatory mitigation being required or different special conditions; (3) that 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) that 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) that undertaking any activity in reliance upon the subject permit authorization without requesting an approved JD constitutes the applicant's acceptance of the use of the preliminary JD, but that either form of JD will be processed as soon as is practicable; (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 preliminary JD constitutes agreement that all wetlands and other water bodies on the site affected in any way by that activity are jurisdictional waters of the United States, and precludes 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 approved JD or a preliminary JD, that JD will be processed as soon as is practicable. Further, an approved JD, 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, and that in any administrative appeal, jurisdictional issues can be raised (see 33 C.F.R. 331.5(a)(2)). If, during that administrative appeal, it becomes necessary to make an official determination whether CWA jurisdiction exists over a site, or to provide an official delineation of jurisdictional waters on the site, the Corps will provide an approved JD to accomplish that result, as soon as is practicable.
This preliminary JD finds that there *"may be"* waters of the United States on the subject project site, and identifies all aquatic features on the site that could be affected by the proposed activity, based on the following information:

SUPPORTING DATA: **Data reviewed for preliminary JD** (check all that apply - checked items should be included in case file and, where checked and requested, appropriately reference sources below):

- ■ Maps, plans, plots or plat submitted by or on behalf of the applicant/consultant: General location map, aerial photograph, USGS topographic map, picture key map, NRCS soils map, NWI map, NHD map, 12 Digit HUC map, FEMA map
- ■ Data sheets prepared/submitted by or on behalf of the applicant/consultant.
  - ☐ Office concurs with data sheets/delineation report. _____
  - ☐ Office does not concur with data sheets/delineation report.
- ☐ Data sheets prepared by the Corps:_.
- ☐ Corps navigable waters' study:_____.
- ■ U.S. Geological Survey Hydrologic Atlas:_____.
  - ■ USGS NHD data.
  - ■ USGS 8 and 12 digit HUC maps.
- ■ U.S. Geological Survey map(s). Cite scale & quad name: 1:24,000 Brownstown Quadrangle, Indiana.
- ■ USDA Natural Resources Conservation Service Soil Survey. Citation: http://websoilsurvey.nrcs.usda.gov/app/HomePage.htm___
- ■ National wetlands inventory map(s). Cite name: http://www.fws.gov/wetlands/Data/Mapper.html.
- ☐ State/Local wetland inventory map(s):____.
- ■ FEMA/FIRM maps: 18071C0185D, eff. 11/19/2014.
- ☐ 100-year Floodplain Elevation is:_____(National Geodetic Vertical Datum of 1929)
- ■ Photographs:
  - ■ Aerial (Name & Date): State of Indiana Orthophotography, 2019.
  - ■ Other (Name & Date): Site Photographs, 9/28/21.
- ☐ Previous determination(s). File no. and date of response letter:_____.
- ☐ Other 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.

2/3/2022

Signature and date of Regulatory Project Manager (REQUIRED)	Signature and date of person requesting preliminary JD (REQUIRED, unless obtaining the signature is impracticable)

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

Site number	Latitude	Longitude	Cowardin class	Estimated amount of aquatic resource in review area	Class of aquatic resource
UNT 1 to White Creek	38.979116	-86.021191	R4SBC	707 linear feet (2.3 feet wide)	Non-section 10 water; subject to 404 jurisdiction – non-wetland waters; ephemeral flow
UNT 2 to White Creek	38.978452	-86.021370	R4SBC	182 linear feet (1.6 feet wide)	Non-section 10 water; subject to 404 jurisdiction – non-wetland waters; ephemeral flow
UNT 3 to White Creek	38.978871	-86.030210	R5UBH*	180 linear feet (8.0 feet wide)	Non-section 10 water; subject to 404 jurisdiction – non-wetland waters; perennial flow
UNT 4 to White Creek	38.979478	-86.026407	R4SBC	93 linear feet (1.0 feet wide)	Non-section 10 water; subject to 404 jurisdiction – non-wetland waters; ephemeral flow
Wetland A	38.979345	-86.020861	PEM1	0.005 acre	Non-section 10 water; subject to 404 jurisdiction – wetland
Wetland B	38.979006	-86.031023	PEM1	0.017 acre	Non-section 10 water; subject to 404 jurisdiction – wetland
Wetland D	38.979448	-86.021750	PEM1	0.059 acre	Non-section 10 water; subject to 404 jurisdiction – wetland

* Cowardin Class determined from USFWS NWI online mapper.

From: Sperry, Steve <SSPERRY@indot.IN.gov>
Sent: Wednesday, February 9, 2022 8:57 AM
To: Claudia McAllister-Peterson <cmcallister-peterson@cmtengr.com>; Rhoads, Matthew <MRhoads@indot.IN.gov>
Cc: Curry, Jennifer <JCurry1@indot.IN.gov>; Romano, Dominick <dromano@blainc.com>
Subject: WOTUS Rpt. Approved: 1298633, SR 258, Jackson Co

Claudia,
Thank you for submitting the Waters report for the above referenced project.

Matt,
The 2/3/2022 WOTUS report has been stamped approved. It has been posted to ProjectWise in the following location, 1298633 Waters report Approved 2.9.2022.pdf . It can also be accessed using the following link, https://documentcloud.adobe.com/link/track?uri=urn:aaid:scds:US:d8f4d997-310e-42e7-bfb2-05020c32b15e

The approved copy is the only report recognized by this Office. Copies that do not contain our approval stamp will not be accepted for permitting or any other use.

The information in this report should be used by the Project Designer to determine if Waters of the U.S. will be impacted by the project. If it appears that impacts will occur, then action will need to be taken to avoid them to the maximum practical extent. If avoidance is not feasible then impacts will need to be minimized to the maximum practicable extent. These steps must be taken before any mitigation can be considered. If it is determined that mitigation will be required, the Project Manager or Project Designer will need to coordinate with the Ecology and Waterway Permitting Office to discuss how this will be provided.

The Project Manager or designer should notify the Ecology and Waterway Permitting Office if there is any change to the project footprint presented in the approved report. Changes may require additional fieldwork and a new report to cover areas not previously investigated.

The report is valid for a period of five years from the date of the earliest fieldwork. If this approved report expires prior to submittal of the waterway permit applications a new report will need to be generated.

This e-mail serves as notice that the Project Designer is to complete the attached Permit Determination questionnaire. Once completed please have them submit it to Steve Sperry.

Should you have any questions or need additional information please contact me.

Thanks

Steve Sperry,
Ecology and Permits Coordinator, Multi-district East Team
INDOT, Office of Ecology and Waterway Permitting
100 N. Senate Ave., *N758-ES*
Indianapolis, IN 46204
Phone: (317)-417-3623
Remote Work Hours: 7:00-3:30

From:	Sperry, Steve
To:	Rhoads, Matthew
Cc:	Curry, Jennifer; Slaymon, Shawn; Laura Sakach; Marion Wells; Dominick Romano
Subject:	Preliminary Permit Determination Verification: 1298633, SR 258, Jackson Co
Date:	Wednesday, April 13, 2022 2:46:26 PM
Attachments:	image001.png image002.png image003.png image004.png image005.png 1298633 PD EWPO Verification 4.13.2022.pdf Stage 2 Plans_SR 258 1298633.pdf

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Matthew,
Refer to the attached. I have reviewed the plans and permit determination questionnaire provided by the consultant for this project. The following permits will be required:

- Stormwater (CSGP)
- 404 RGP. The consultant will need to complete and submit SF 51821.
- 401 WQC, IP. The consultant will need to complete and submit SF 51821.

NOTE: 923 lf of mitigation will be required to compensate for permanent impacts to 923 lf of jurisdictional stream. The consultant will need to include a description of the mitigation in the 51821 application.

No other permits are required

Please have the consultant submit the applications to this Office in accordance with the following guidelines:

Timeline
1. The target permit approval/on-hand date is two (2) weeks prior to Stage 3 submittal.
2. To calculate the first draft permit application submittal to EWPO, use the following formula. Please note, EWPO review time is based on the complexity of the permit application or the project:

Stage 3 Date - (Agency Review Time + EWPO Review Time) = Submittal Date to EWPO

Agency Review Timeframes:
4 months – 404/401 NWP or RGP, County Regulated Drain
5 months – CSGP, USACE Section 5
6-9 months – 401 IP
7 months – Section 10
9-12 months – CIF
20 months – 404 IP

We are providing this preliminary permit determination based on the information available at the

time of the review. If the project scope, plans and/or impacts change the designer should contact EWPO for an updated permit determination. A final permit determination will be undertaken when the applications listed above have been received by this Office.

If you have any questions or comments, please contact me and cc others as appropriate.

Thanks

Steve Sperry,
Ecology and Permits Coordinator, Multi-district East Team
INDOT, Office of Ecology and Waterway Permitting
100 N. Senate Ave., *N758-ES*
Indianapolis, IN 46204
Phone: (317)-417-3623
Remote Work Hours: 7:30-4:00

1. PROJECT SPECIFIC INFORMATION		**Date: 4/7/2022**
Project Route/Type	State Route 258/Sight Distance Improvement	
INDOT Des. Number	1298633 Contract # R-41258	
County	Jackson County	
Letting Date	10/12/2023 RFC Date - 8/2/2023	**Stage 3 Due Date** – 3/3/2023
INDOT PM	Matthew Rhoads, PE	
2. Preparer Contact Information	Marion Wells, Crawford, Murphy & Tilly, Inc. mwells@cmtengr.com; (937) 701-6579	
3. Detailed Activity Description including Impacts to Regulated Resources (refer to permit checklists for required information)	The project includes lowering the existing State Road 258 (SR 258) roadway hill by approximately 5 feet and raising the existing roadway valleys on either side of the hill by approximately 15 feet to provide acceptable stopping sight distances to allow for safe and efficient movement of traffic. Roadway improvements are also required on N CR 100 E to accommodate the vertical profile change on SR 258. The following drainage structure improvements are also required to accommodate the roadway profile changes: • The existing 18 feet by 6 feet box culvert (CV 258-036-4.73) located at unnamed tributary (UNT) 3 to White Creek will be lengthened with new headwalls/wingwalls constructed to accommodate the increased elevation of SR 258. • 7 existing culverts in the project limits will be removed and replaced "in kind". • An existing 12-inch driveway pipe under the residential drives on the south side of SR 258 at the top of the hill will be removed, but no new structure will be placed at this location, as the roadside ditches will be graded to carry water away from these driveways. Tree clearing will be required for the project. No evidence of bats or birds was seen or heard under (or in) any of the culverts. The project will impact a total of approximately 0.022 acre of wetlands and 923 linear feet (0.077 acre) of streams. Due to the loss of more than 300 linear feet of stream and 0.03 acre of streambed, stream mitigation will be required. No wetland mitigation is anticipated. See attached Activity Description for detailed discussion of project information and impacts. Plan sheets showing design and construction limits are also attached.	
4. Materials Used	☑ Waters Report ☑ NEPA Documents ☑ Scope of Work	☑ Regulatory Guidance ☑ Project Plans ☑ IndianaMAP	☑ Waterway Permit Manual ☑ USGS IN StreamStats ☑ IPaC Official Species List

Timeline

1. The target permit approval/on-hand date is two (2) weeks prior to Stage 3 submittal.
2. To calculate the first draft permit application submittal to EWPO, use the following formula. Please note, EWPO review time is based on the complexity of the permit application or the project:

Stage 3 Date - (Agency Review Time + EWPO Review Time) = Submittal Date to EWPO

Agency Review Timeframes:

4 months – 404/401 NWP or RGP, County Regulated Drain
5 months – CSGP, USACE Section 5
6-9 months – 401 IP
7 months – Section 10
9-12 months – CIF
20 months – 404 IP

5. 401 WQC (IDEM)/ 404 (USACE)

a. Are there jurisdictional streams, wetlands and/or open water within the project area?
☑ Yes – Type: ☑ Stream(s) ☑ Wetland(s) ☑ Open Water ☐ No [NPR]

b. If yes, what are the total impacts to the resources (reference the waters report)?

	PERMANENT IMPACTS	TEMPORARY IMPACTS
Wetlands	0.022 ac	0
type(s)	See attached impact table	N/A
total acres	See attached impact table	N/A
jurisdictional status	See attached impact table	N/A
Streams	923 ft	0
LF below OHWM	See attached impact table	N/A
acres below OHWM	See attached impact table	N/A
LF stream relocation	762 ft	N/A
net gain/loss	Loss of 87 ft	N/A
Open Water	0	0
total acres	N/A	N/A
jurisdictional status	N/A	N/A

c. Determine the appropriate permit application form.

- **State Form 51937**
  ☐ Cumulative impacts are ☐ <500' ☐ <0.25 ac and/or ☐ <150' encapsulation
  ☐ There **is no** stream relocation associated with a structure.
- **State Form 51821**
  ☑ Cumulative impacts are ☑ >500' ☐ >0.25 ac and/or ☐ >150' encapsulation
  ☑ There **is** stream relocation.
  ☑ NWP and/or RGP conditions are not met.
- **USACE Form 4345**
  ☐ 404 IP – a single wetland or stream is impacted that is >1.0 acre or > 1,500'
- **Mitigation**
  ☑ If there is a loss of > 0.1 ac wetland or 0.03 ac of streambed (explain in Detailed Activity Description, item 3 above).
  ☑ Cumulative impacts > 300' stream and/or 0.1 ac wetland/stream.

6. IDNR Construction in a Floodway (CIF) State Form 42946

a. Is there any work being conducted below Q100 (including change in elevation?) ☐ Yes ☑ No [NPR]

b. Is any stream's individual drainage area ≥ 1 mile²? UNT 3 per StreamStats ☒ Yes ☐ No [NPR]
Each crossing that will impact a DNR jurisdictional floodway will require a permit.

c. Rural Bridge Exemption ☒ Yes [NPR] ☐ No

Project must meet the following five requirements:

☐ Construction/reconstruction project of a state highway bridge funded by INDOT.

☐ Upstream drainage area of the waterway is less than or equal to 50 square miles (does not exceed 50 square miles).

☐ Project is in a rural area (if within two miles of an urban planning zone, include coordination with the local entity with jurisdiction).

☐ Project is limited to a bridge or culvert (bank stabilization, roadway repair, and stream relocation are not exempt activities).

☐ Each building impacted by the project is higher than the regulatory flood elevation (lowest elevation in the structure including the basement).

d. Logjam and Sandbar Removal General License ☐ Yes [NPR] ☐ No

e. Qualified Outfall Projects General License ☐ Yes [NPR] ☐ No

f. Mitigation ☐ Yes ☐ No

7. Construction Stormwater General Permit

Will one (1) acre or more of soil be disturbed? ☑ Yes ☐ No [NPR]
(Such as tree clearing, full-depth replacement, shoulder work, construction access, etc.)
[Coordination with INDOT-ES Storm Water Team is required.]

8. County Regulated Drains

Is the project located on a regulated drain? ☐ Yes ☑ No [NPR]
NOTE - Designation as a regulated drain may prevent construction of on-site mitigation. Include coordination with the entity with jurisdiction.

9. Section 9 (USCG) and Section 10 (USACE)

Does the project impact a navigable waterway? ☐ Yes ☑ No [NPR]

10. Levee

Does the project impact a levee? ☐ Yes ☑ No [NPR]

11. Additional Considerations

☑ Fish Spawning (restriction of instream work between April 1 – June 30)
☑ Tree Clearing (restriction of clearing between April 1 – September 30)
☑ Wildlife Concerns (e.g. wildlife crossing, etc.)
☐ Adjacent project(s) - may be looked at cumulatively for impacts and mitigation
☐ Endangered, Threatened or Rare Species (see DNR Early Coordination letter, USFWS species list)
☐ Migratory Birds (see DNR Early Coordination letter, USFWS species list, visual evidence such as nests)
☑ Bats (see USFWS species list, visual evidence such as guano, staining, etc.)
☐ Other Protected Species (see DNR Early Coordination letter, USFWS species list)
☐ Indiana designated waters - salmonid or outstanding state resource waters, critical wetland and aquatic sites
☐ US EPA Class V Injection Well
☐ St. Joseph Aquifer System
☑ Waters Report <5 years from date of first field visit
☑ USFWS and IDNR Early Coordination requirements
☑ Section 106 consultation

If there are any special concerns, notify designer that the project should take these into consideration when completing the design and permit applications. Some special concerns may require extra coordination with agencies and possibly permits. If marked, notify the project manager in your permit determination response of these conflicts.

---

12. EWPO Preliminary Permit Determination Concurrence

This is a **preliminary** permit determination based on the information presented at the time of the request. **If scope and plans change the designer should contact us for a revised determination.** A final permit determination will be done at the time of permit application submittal and/or any changes to the scope of the project.

Permit Determination:

- ☐ 404 NWP
  - ☐ 3a ☐ 3b ☐ 3c ☐ 13 ☐ 14 ☐ 33 ☐ PCN ☐ no PCN
- ☐ 404 RGP
- ☐ 404 IP
- ☐ 401 WQC
  - ☐ NWP ☐ 3a ☐ 3b ☐ 3c ☐ 13 ☐ 14 ☐ 33 ☐ PCN ☐ no PCN
  - ☐ RGP
  - ☐ IP
- ☐ CIF
- ☐ County Drain
- ☐ Stormwater (CSGP)
- ☐ USACE Section 408
- ☐ USACE Section 10
- ☐ USCG Section 9
- ☐ Mitigation

Project Notes: (include special considerations such as wildlife crossings or protected species)

EWPO Reviewer Signature: Stephen C. Sperry Digitally signed by Stephen C. Sperry Date: 2022.04.13 14:12:28 -04'00' **Date:** 4/13/2022

For EWPO Use Only:

Email to:
- ☐ PM
- ☐ PD Preparer
- ☐ Storm Water Specialist
- ☐ Team Lead
- ☐ Other _____

Date sent: _____ Update: ☐ Milestones ☐ EWPS ☐ ProjectWise (file PD email)

Activity Description

Overview of Project Activities

The project includes lowering the existing SR 258 roadway hill by approximately 5 feet and raising the existing roadway valleys on either side of the hill by approximately 15 feet to provide acceptable stopping sight distances to allow for safe and efficient movement of traffic. Roadway improvements are also required on N CR 100 E to accommodate the vertical profile change on SR 258. The following drainage structure improvements are also required to accommodate the roadway profile changes:

- The existing 18 feet by 6 feet box culvert (CV 258-036-4.73) located at unnamed tributary (UNT) 3 to White Creek will be lengthened with new headwalls/wingwalls constructed to accommodate the increased elevation of SR 258.
- 7 existing culverts in the project limits will be removed and replaced "in kind". Two of these culvert replacements will result in impacts to streams, including UNT 1 to White Creek and UNT 2 to White Creek.
- An existing 12-inch driveway pipe under the residential drives on the south side of SR 258 at the top of the hill will be removed, but no new structure will be placed at this location, as the roadside ditches will be graded to carry water away from these driveways.

The project will require tree clearing. There are no other known wildlife concerns. No evidence of birds or bats was seen or heard under (or in) any of the culverts during the September 28, 2021 field reconnaissance site visit.

Four (4) streams and three (3) wetlands were identified within the project area. This project will result in impacts to streams and wetlands as described below.

The project will result in 923 LF (0.077 ac) of permanent impacts to streams and 0.022 acres of impacts to jurisdictional wetlands. No isolated wetlands are anticipated to be impacted by the project.

Approximately 10.5 acres of land disturbance will occur.

Permanent Impacts

Cumulative permanent impacts to streams impacted by the project are: 923 linear feet (0.077 acre) due to riprap placement for erosion control, roadway and drainage grading, culvert extensions, and two stream relocations. A total of 762 linear feet of stream will be relocated, resulting in 87 linear feet of net stream loss. The project will result in a total of 121 linear feet of new encapsulation. Cumulative permanent impacts to wetlands impacted by the project are 0.022 acre. Worst-case impacts were determined based on an estimate of the construction limits required for construction of the project. Impact summary tables are attached, and impacted water resources are shown on the attached plan sheets.

UNT 1 to White Creek – UNT 1 to White Creek will be impacted due to grading, placement of riprap for erosion control, a culvert extension, and stream relocation to accommodate the grade changes. Approximately 659 linear feet of UNT 1 to White Creek will be relocated to a new 685-foot segment, located approximately 67 feet south of the existing channel at N CR 100 E and approximately 13-50 feet south of the existing channel along SR 258. Within the relocated segment of the stream, the existing 40-foot culvert underneath N CR 100 E will be extended 74 feet to a new 114-foot culvert, resulting in 74 linear feet of new encapsulation. The stream relocation and new encapsulation will result in a net loss of 48 linear feet of open channel. Within the relocated segment of the stream, approximately 8 linear feet of riprap will be placed below the OHWM. An additional 10 linear feet of riprap will be placed below the OHWM outside of the stream relocation. Approximately 5 linear feet will be regraded. A total of approximately 674 linear feet (0.06 acre) of UNT 1 to White Creek will be impacted, resulting in 48 linear feet of net stream loss.

UNT 2 to White Creek – UNT 2 to White Creek will be impacted due to grading, placement of riprap for erosion control, a culvert extension, and stream relocation to accommodate the grade changes. Approximately 103 linear feet of UNT 2 to White Creek will be relocated to a new 100-foot segment, located approximately 10 feet south of the existing channel at N CR 100 E. Within the relocated segment of the stream, the existing 28-foot culvert underneath N CR 100 E will be extended 36 feet to a new 64-foot culvert, resulting in 36 linear feet of new encapsulation. The stream relocation and new encapsulation will result in a net loss of 39 linear feet of open channel. Within the relocated segment of the stream, approximately 30 linear feet will be regraded, and 6 linear feet of riprap will be placed below the OHWM. A total of approximately 103 linear feet (0.01 acre) of UNT 2 to White Creek will be impacted, resulting in 39 linear feet of net stream loss.

UNT 3 to White Creek – UNT 3 to White Creek will be impacted due to grading, placement of riprap for erosion control, and a culvert extension, to accommodate the increased elevation of SR 258. The culvert extension will result in approximately 11 linear feet new encapsulation, approximately 41 linear feet will be regraded, and 23 linear feet of riprap will be placed below the OHWM. A total of approximately 75 linear feet (0.01 acre) of UNT 3 to White Creek will be impacted.

UNT 4 to White Creek – UNT 4 to White Creek will be impacted due to grading to accommodate the grade changes. Approximately 71 linear feet (0.003 acre) of UNT 4 to White Creek will be impacted.

Wetlands– In order to construct the roadway profile improvements at the SR 258 and N CR 100 E intersection, and complete associated grading, three (3) jurisdictional wetlands will be impacted. See attached Summary of Wetland Impacts table.

Temporary Impacts

At this time, all impacts are expected to be permanent. Temporary impacts due to dewatering methods are not yet known but are expected to be located completely within the footprint of permanent impacts.

Mitigation

The preferred alternative minimizes surface water resource impacts to the greatest extent possible. Due to the loss of more than 300 linear feet of stream and 0.03 acre of streambed, mitigation will be required.

Wetland Permanent Impacts				
Name	**Type(s)**	**Jurisdictional Status**	**Perm. Impacts (ac)**	**Temp. Impacts (ac)**
Wetland A	Emergent, Palustrine (PEM)	Federally Jurisdictional	0.005	0
Wetland B	Emergent, Palustrine (PEM)	Federally Jurisdictional	0.017	0
Wetland D	Emergent, Palustrine (PEM)	Federally Jurisdictional	0.004	0
		Total	**0.022**	**0**

Stream Permanent Impacts				
Name	**LF below OHWM**	**Acres below OHWM**	**LF Stream Relocation**	**Net Gain/Loss**
UNT 1 to White Creek	674	0.06	659	48
UNT 2 to White Creek	103	0.01	103	39
UNT 3 to White Creek	75	0.01	0	0
UNT 4 to White Creek	71	0.003	0	0
Total	**923**	**0.077**	**762**	**87**

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: April 27, 2022
Project Code: 2022-0036674
Project Name: SR 258 Sight Distance Correction (Des No. 1298633)

Subject: List of threatened and endangered species that may occur in your proposed project location or may be affected by your proposed project

To Whom It May Concern:

The enclosed species list identifies threatened, endangered, proposed and candidate species, as well as proposed and final designated critical habitat, that may occur within the boundary of your proposed project and/or may be affected by your proposed project. The species list fulfills the requirements of the U.S. Fish and Wildlife Service (Service) under section 7(c) of the Endangered Species Act (Act) of 1973, as amended (16 U.S.C. 1531 *et seq.*).

New information based on updated surveys, changes in the abundance and distribution of species, changed habitat conditions, or other factors could change this list. Please feel free to contact us if you need more current information or assistance regarding the potential impacts to federally proposed, listed, and candidate species and federally designated and proposed critical habitat. Please note that under 50 CFR 402.12(e) of the regulations implementing section 7 of the Act, the accuracy of this species list should be verified after 90 days. This verification can be completed formally or informally as desired. The Service recommends that verification be completed by visiting the ECOS-IPaC website at regular intervals during project planning and implementation for updates to species lists and information. An updated list may be requested through the ECOS-IPaC system by completing the same process used to receive the enclosed list.

The purpose of the Act is to provide a means whereby threatened and endangered species and the ecosystems upon which they depend may be conserved. Under sections 7(a)(1) and 7(a)(2) of the Act and its implementing regulations (50 CFR 402 *et seq.*), Federal agencies are required to utilize their authorities to carry out programs for the conservation of threatened and endangered species and to determine whether projects may affect threatened and endangered species and/or designated critical habitat.

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.

A Biological Assessment is required for construction projects (or other undertakings having similar physical impacts) that are major Federal actions significantly affecting the quality of the human environment as defined in the National Environmental Policy Act (42 U.S.C. 4332(2)(c)). For projects other than major construction activities, the Service suggests that a biological evaluation similar to a Biological Assessment be prepared to determine whether the project may affect listed or proposed species and/or designated or proposed critical habitat. Recommended contents of a Biological Assessment are described at 50 CFR 402.12.

If a Federal agency determines, based on the Biological Assessment or biological evaluation, that listed species and/or designated critical habitat may be affected by the proposed project, the agency is required to consult with the Service pursuant to 50 CFR 402. In addition, the Service recommends that candidate species, proposed species and proposed critical habitat be addressed within the consultation. More information on the regulations and procedures for section 7 consultation, including the role of permit or license applicants, can be found in the "Endangered Species Consultation Handbook" at:

http://www.fws.gov/endangered/esa-library/pdf/TOC-GLOS.PDF

Migratory Birds: In addition to responsibilities to protect threatened and endangered species under the Endangered Species Act (ESA), there are additional responsibilities under the Migratory Bird Treaty Act (MBTA) and the Bald and Golden Eagle Protection Act (BGEPA) to protect native birds from project-related impacts. Any activity, intentional or unintentional, resulting in take of migratory birds, including eagles, is prohibited unless otherwise permitted by the U.S. Fish and Wildlife Service (50 C.F.R. Sec. 10.12 and 16 U.S.C. Sec. 668(a)). For more information regarding these Acts see https://www.fws.gov/birds/policies-and-regulations.php.

The MBTA has no provision for allowing take of migratory birds that may be unintentionally killed or injured by otherwise lawful activities. It is the responsibility of the project proponent to comply with these Acts by identifying potential impacts to migratory birds and eagles within applicable NEPA documents (when there is a federal nexus) or a Bird/Eagle Conservation Plan (when there is no federal nexus). Proponents should implement conservation measures to avoid or minimize the production of project-related stressors or minimize the exposure of birds and their resources to the project-related stressors. For more information on avian stressors and recommended conservation measures see https://www.fws.gov/birds/bird-enthusiasts/threats-to-birds.php.

In addition to MBTA and BGEPA, Executive Order 13186: *Responsibilities of Federal Agencies to Protect Migratory Birds*, obligates all Federal agencies that engage in or authorize activities that might affect migratory birds, to minimize those effects and encourage conservation measures that will improve bird populations. Executive Order 13186 provides for the protection of both migratory birds and migratory bird habitat. For information regarding the implementation of

Executive Order 13186, please visit https://www.fws.gov/birds/policies-and-regulations/executive-orders/e0-13186.php.

We appreciate your concern for threatened and endangered species. The Service encourages Federal agencies to include conservation of threatened and endangered species into their project planning to further the purposes of the Act. **Please include the Consultation Code 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
- Migratory Birds
- Wetlands

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

Project Code: 2022-0036674
Event Code: None
Project Name: SR 258 Sight Distance Correction (Des No. 1298633)
Project Type: Road/Hwy - Maintenance/Modification
Project Description: SR 258 Sight Distance Correction (Des No. 1298633)
This project (Des No. 1298633) is located approximately 6 miles west of Seymour, Indiana, near the intersection of SR 258 and N CR 100 E, within Sections 1 and 2, Township 6 North, and Range 4 East, and Sections 6 and 7, Township 6 North, and Range 5 East, on the U.S. Geological Survey (USGS) Brownstown, Indiana Quadrangle.

The project includes lowering the existing roadway crest by approximately 5 feet and raising the existing roadway sag vertical curves on either side of the crest by approximately 15 feet. The project limits are from approximately 0.55 mile west of N County Road (CR) 100 E to approximately 500 feet east of N CR 100 E. Roadway improvements are also required on N CR 100 E, from approximately 500 feet south and approximately 300 feet north of the SR 258 intersection, to accommodate the vertical profile change on SR 258.

Approximately 4.3 acres of permanent right of way and 1.9 acres of temporary right of way will be needed for the project. The construction of the project will require closure of SR 258 and detouring through-traffic using SR 135, US 50, and SR 11. The additional travel length due to this detour is approximately 10.5 miles. Other detours will be available for local traffic in the project vicinity using local and county roads. The project is planned to begin construction in Spring of 2024 and be completed by the end of Fall 2024.

Land use in the vicinity of the project is residential and forested. One stream flows east along the south side of SR 258 through an existing culvert underneath N CR 100 E. Another stream flows east through an existing culvert underneath N CR 100 E, south of SR 258. A third stream flows north through the forested area along the north side of SR 258. A fourth stream flows south underneath an existing SR 258 bridge near the west end of the study area.

A review of the USFWS database on September 27, 2021 did not indicate the presence of the Indiana bat or the northern long-eared bat within 0.5 mile of the study area. A total of eight culverts along SR 258 were inspected for bats. The September 28, 2021 culvert bat inspections state that no evidence of bats was seen or heard in any of the culverts. A BIAS inspection report was only available for one of the eight culverts, CV

258-036-4.73, which also indicated no evidence of bats using the culvert was observed. Suitable summer habitat is located within and adjacent to the study area. Suitable summer habitat will be impacted for the construction of the project. The dominant tree species for removal include white oak (Quercus alba), Eastern white pine (Pinus strobus), red maple (Acer rubrum), slippery elm (Ulmus rubra), green ash (Fraxinus pennsylvanica), and sweet-gum (Liquidambar styraciflua). No more than 9.2 acres of trees will be removed for the project. 8 acres may be removed within 100 feet of the roadway and 1.2 acres may be removed 100-300 feet from the roadway. All tree clearing activities will occur outside of the Indiana bat and/or NLEB active season.

The project will require compensatory mitigation under the Rangewide In-Lieu Fee Program, The Conservation Fund. A mitigation payment for tree removal between 100-300 feet from the existing roadway was calculated using the following In-lieu fee formula: (acres of tree removal=1.2) x (mitigation ratio = 1.5) x (current dollar amount for IN = $9,354) = $16,837.20.

The project activities will include the use of percussives. The project will not include installing new or replacing existing permanent lighting. Although temporary lighting is not expected to be required for the construction of the project, it is possible some night work will be performed.

Project Location:

Approximate location of the project can be viewed in Google Maps: https://www.google.com/maps/@38.979036750000006,-86.02623970813661,14z

Counties: Jackson County, Indiana

Endangered Species Act Species

There is a total of 3 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.

IPaC does not display listed species or critical habitats under the sole jurisdiction of NOAA Fisheries[1], as USFWS does not have the authority to speak on behalf of NOAA and the Department of Commerce.

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.

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1. NOAA Fisheries, also known as the National Marine Fisheries Service (NMFS), is an office of the National Oceanic and Atmospheric Administration within the Department of Commerce.

Mammals

NAME	STATUS
Indiana Bat *Myotis sodalis* There is **final** critical habitat for this species. The location of the critical habitat is not available. Species profile: https://ecos.fws.gov/ecp/species/5949	Endangered
Northern Long-eared Bat *Myotis septentrionalis* No critical habitat has been designated for this species. This species only needs to be considered under the following conditions: ▪ 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 Species profile: https://ecos.fws.gov/ecp/species/9045	Threatened

Insects

NAME	STATUS
Monarch Butterfly *Danaus plexippus* No critical habitat has been designated for this species. Species profile: https://ecos.fws.gov/ecp/species/9743	Candidate

Critical habitats

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

Migratory Birds

Certain birds are protected under the Migratory Bird Treaty Act[1] and the Bald and Golden Eagle Protection Act[2].

Any person or organization who plans or conducts activities that may result in impacts to migratory birds, eagles, and their habitats should follow appropriate regulations and consider implementing appropriate conservation measures, as described below.

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1. The Migratory Birds Treaty Act of 1918.
2. The Bald and Golden Eagle Protection Act of 1940.
3. 50 C.F.R. Sec. 10.12 and 16 U.S.C. Sec. 668(a)

The birds listed below are birds of particular concern either because they occur on the USFWS Birds of Conservation Concern (BCC) list or warrant special attention in your project location. To learn more about the levels of concern for birds on your list and how this list is generated, see the FAQ below. This is not a list of every bird you may find in this location, nor a guarantee that every bird on this list will be found in your project area. To see exact locations of where birders and the general public have sighted birds in and around your project area, visit the E-bird data mapping tool (Tip: enter your location, desired date range and a species on your list). For projects that occur off the Atlantic Coast, additional maps and models detailing the relative occurrence and abundance of bird species on your list are available. Links to additional information about Atlantic Coast birds, and other important information about your migratory bird list, including how to properly interpret and use your migratory bird report, can be found below.

For guidance on when to schedule activities or implement avoidance and minimization measures to reduce impacts to migratory birds on your list, click on the PROBABILITY OF PRESENCE SUMMARY at the top of your list to see when these birds are most likely to be present and breeding in your project area.

NAME	BREEDING SEASON
Bobolink *Dolichonyx oryzivorus* This is a Bird of Conservation Concern (BCC) throughout its range in the continental USA and Alaska.	Breeds May 20 to Jul 31
Lesser Yellowlegs *Tringa flavipes* This is a Bird of Conservation Concern (BCC) throughout its range in the continental USA and Alaska. https://ecos.fws.gov/ecp/species/9679	Breeds elsewhere

Probability Of Presence Summary

The graphs below provide our best understanding of when birds of concern are most likely to be present in your project area. This information can be used to tailor and schedule your project activities to avoid or minimize impacts to birds. Please make sure you read and understand the FAQ "Proper Interpretation and Use of Your Migratory Bird Report" before using or attempting to interpret this report.

Probability of Presence (■)

Each green bar represents the bird's relative probability of presence in the 10km grid cell(s) your project overlaps during a particular week of the year. (A year is represented as 12 4-week months.) A taller bar indicates a higher probability of species presence. The survey effort (see below) can be used to establish a level of confidence in the presence score. One can have higher confidence in the presence score if the corresponding survey effort is also high.

How is the probability of presence score calculated? The calculation is done in three steps:

1. The probability of presence for each week is calculated as the number of survey events in the week where the species was detected divided by the total number of survey events for that week. For example, if in week 12 there were 20 survey events and the Spotted Towhee was found in 5 of them, the probability of presence of the Spotted Towhee in week 12 is 0.25.
2. To properly present the pattern of presence across the year, the relative probability of presence is calculated. This is the probability of presence divided by the maximum probability of presence across all weeks. For example, imagine the probability of presence in week 20 for the Spotted Towhee is 0.05, and that the probability of presence at week 12 (0.25) is the maximum of any week of the year. The relative probability of presence on week 12 is 0.25/0.25 = 1; at week 20 it is 0.05/0.25 = 0.2.
3. The relative probability of presence calculated in the previous step undergoes a statistical conversion so that all possible values fall between 0 and 10, inclusive. This is the probability of presence score.

Breeding Season (■)

Yellow bars denote a very liberal estimate of the time-frame inside which the bird breeds across its entire range. If there are no yellow bars shown for a bird, it does not breed in your project area.

Survey Effort (|)

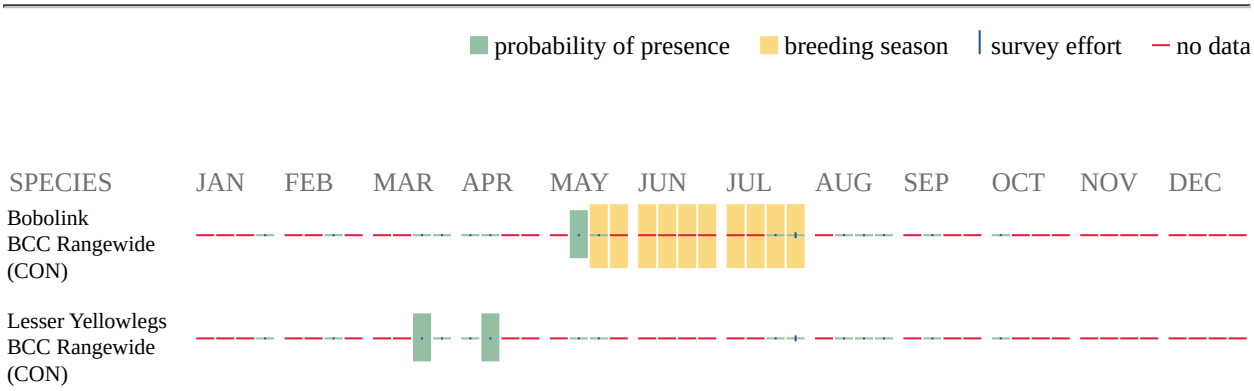
Vertical black lines superimposed on probability of presence bars indicate the number of surveys performed for that species in the 10km grid cell(s) your project area overlaps. The number of surveys is expressed as a range, for example, 33 to 64 surveys.

No Data (–)

A week is marked as having no data if there were no survey events for that week.

Survey Timeframe

Surveys from only the last 10 years are used in order to ensure delivery of currently relevant information. The exception to this is areas off the Atlantic coast, where bird returns are based on all years of available data, since data in these areas is currently much more sparse.



Additional information can be found using the following links:

- Birds of Conservation Concern https://www.fws.gov/program/migratory-birds/species
- Measures for avoiding and minimizing impacts to birds https://www.fws.gov/library/collections/avoiding-and-minimizing-incidental-take-migratory-birds
- Nationwide conservation measures for birds https://www.fws.gov/sites/default/files/documents/nationwide-standard-conservation-measures.pdf

Migratory Birds FAQ

Tell me more about conservation measures I can implement to avoid or minimize impacts to migratory birds.

Nationwide Conservation Measures describes measures that can help avoid and minimize impacts to all birds at any location year round. Implementation of these measures is particularly important when birds are most likely to occur in the project area. When birds may be breeding in the area, identifying the locations of any active nests and avoiding their destruction is a very helpful impact minimization measure. To see when birds are most likely to occur and be breeding in your project area, view the Probability of Presence Summary. Additional measures or permits may be advisable depending on the type of activity you are conducting and the type of infrastructure or bird species present on your project site.

What does IPaC use to generate the migratory birds potentially occurring in my specified location?

The Migratory Bird Resource List is comprised of USFWS Birds of Conservation Concern (BCC) and other species that may warrant special attention in your project location.

The migratory bird list generated for your project is derived from data provided by the Avian Knowledge Network (AKN). The AKN data is based on a growing collection of survey, banding, and citizen science datasets and is queried and filtered to return a list of those birds reported as occurring in the 10km grid cell(s) which your project intersects, and that have been identified as warranting special attention because they are a BCC species in that area, an eagle (Eagle Act

requirements may apply), or a species that has a particular vulnerability to offshore activities or development.

Again, the Migratory Bird Resource list includes only a subset of birds that may occur in your project area. It is not representative of all birds that may occur in your project area. To get a list of all birds potentially present in your project area, please visit the AKN Phenology Tool.

What does IPaC use to generate the probability of presence graphs for the migratory birds potentially occurring in my specified location?
The probability of presence graphs associated with your migratory bird list are based on data provided by the Avian Knowledge Network (AKN). This data is derived from a growing collection of survey, banding, and citizen science datasets .

Probability of presence data is continuously being updated as new and better information becomes available. To learn more about how the probability of presence graphs are produced and how to interpret them, go the Probability of Presence Summary and then click on the "Tell me about these graphs" link.

How do I know if a bird is breeding, wintering, migrating or present year-round in my project area?
To see what part of a particular bird's range your project area falls within (i.e. breeding, wintering, migrating or year-round), you may refer to the following resources: The Cornell Lab of Ornithology All About Birds Bird Guide, or (if you are unsuccessful in locating the bird of interest there), the Cornell Lab of Ornithology Neotropical Birds guide. If a bird on your migratory bird species list has a breeding season associated with it, if that bird does occur in your project area, there may be nests present at some point within the timeframe specified. If "Breeds elsewhere" is indicated, then the bird likely does not breed in your project area.

What are the levels of concern for migratory birds?
Migratory birds delivered through IPaC fall into the following distinct categories of concern:

1. "BCC Rangewide" birds are Birds of Conservation Concern (BCC) that are of concern throughout their range anywhere within the USA (including Hawaii, the Pacific Islands, Puerto Rico, and the Virgin Islands);
2. "BCC - BCR" birds are BCCs that are of concern only in particular Bird Conservation Regions (BCRs) in the continental USA; and
3. "Non-BCC - Vulnerable" birds are not BCC species in your project area, but appear on your list either because of the Eagle Act requirements (for eagles) or (for non-eagles) potential susceptibilities in offshore areas from certain types of development or activities (e.g. offshore energy development or longline fishing).

Although it is important to try to avoid and minimize impacts to all birds, efforts should be made, in particular, to avoid and minimize impacts to the birds on this list, especially eagles and BCC species of rangewide concern. For more information on conservation measures you can implement to help avoid and minimize migratory bird impacts and requirements for eagles, please see the FAQs for these topics.

Details about birds that are potentially affected by offshore projects

For additional details about the relative occurrence and abundance of both individual bird species and groups of bird species within your project area off the Atlantic Coast, please visit the Northeast Ocean Data Portal. The Portal also offers data and information about other taxa besides birds that may be helpful to you in your project review. Alternately, you may download the bird model results files underlying the portal maps through the NOAA NCCOS Integrative Statistical Modeling and Predictive Mapping of Marine Bird Distributions and Abundance on the Atlantic Outer Continental Shelf project webpage.

Bird tracking data can also provide additional details about occurrence and habitat use throughout the year, including migration. Models relying on survey data may not include this information. For additional information on marine bird tracking data, see the Diving Bird Study and the nanotag studies or contact Caleb Spiegel or Pam Loring.

What if I have eagles on my list?
If your project has the potential to disturb or kill eagles, you may need to obtain a permit to avoid violating the Eagle Act should such impacts occur.

Proper Interpretation and Use of Your Migratory Bird Report
The migratory bird list generated is not a list of all birds in your project area, only a subset of birds of priority concern. To learn more about how your list is generated, and see options for identifying what other birds may be in your project area, please see the FAQ "What does IPaC use to generate the migratory birds potentially occurring in my specified location". Please be aware this report provides the "probability of presence" of birds within the 10 km grid cell(s) that overlap your project; not your exact project footprint. On the graphs provided, please also look carefully at the survey effort (indicated by the black vertical bar) and for the existence of the "no data" indicator (a red horizontal bar). A high survey effort is the key component. If the survey effort is high, then the probability of presence score can be viewed as more dependable. In contrast, a low survey effort bar or no data bar means a lack of data and, therefore, a lack of certainty about presence of the species. This list is not perfect; it is simply a starting point for identifying what birds of concern have the potential to be in your project area, when they might be there, and if they might be breeding (which means nests might be present). The list helps you know what to look for to confirm presence, and helps guide you in knowing when to implement conservation measures to avoid or minimize potential impacts from your project activities, should presence be confirmed. To learn more about conservation measures, visit the FAQ "Tell me about conservation measures I can implement to avoid or minimize impacts to migratory birds" at the bottom of your migratory bird trust resources page.

Wetlands

Impacts to NWI wetlands and other aquatic habitats may be subject to regulation under Section 404 of the Clean Water Act, or other State/Federal statutes.

For more information please contact the Regulatory Program of the local U.S. Army Corps of Engineers District.

Please note that the NWI data being shown may be out of date. We are currently working to update our NWI data set. We recommend you verify these results with a site visit to determine the actual extent of wetlands on site.

RIVERINE

- R5UBH

FRESHWATER FORESTED/SHRUB WETLAND

- PFO1A

FRESHWATER POND

- PUBGh

Bridge/Structure Bat Assessment Form

Date & Time of Assessment	DOT Project Number	Route/Facility Carried	County
9/28/2021 11 AM	1298633	SR 258	Jackson
Federal Structure ID	**Structure Coordinates** (latitude and longitude)	**Structure Height** (approximate)	**Structure Length**
N/A	38.979322, -86.021428	2'	50'

Structure Type (check one)

Bridge Construction Style

- ○ Cast-in-place
- ○ Flat Slab/Box
- ○ Truss
- ○ Parallel Box Beam
- ○ Pre-stressed Girder
- ○ Steel I-beam
- ○ Covered
- ○ Other:

Culvert Type

- ⊙ Box
- ○ Pipe/Round
- ○ Other:

Other Structure

- ○

Structure Material (check all that apply)

Deck Material	*Beam Material*	*End/Back Wall Material*
☐ Metal	☐ None	☐ Concrete
☐ Concrete	☐ Concrete	☐ Timber
☐ Timber	☐ Steel	☐ Stone/Masonry
☐ Open grid	☐ Timber	☐ Other:
☐ Other:	☐ Other:	

Creosote Evidence

- ○ Yes ⊙ No
- ○ Unknown

Culvert Material

- ☐ Metal
- ☒ Concrete
- ☐ Plastic
- ☐ Stone/Masonry
- ☐ Other:

Notes:

5'x2' concrete box with 1.5' cover

Crossings Traversed (check all that apply)

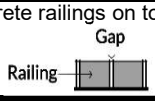
☐ Bare ground	☐ Open vegetation
☐ Rip-rap	☐ Closed vegetation
☐ Flowing water	☐ Railroad
☐ Standing water	☒ Road/trail - Type: SR 258
☐ Seasonal water	☐ Other:

Surrounding Habitat (check all that apply)

☐ Agricultural	☐ Grassland
☐ Commercial	☐ Ranching
☐ Residential-urban	☐ Riparian/wetland
☒ Residential-rural	☐ Mixed use
☒ Woodland/forested	☐ Other:

Areas Assessed (check all that apply)

Check all areas that apply. If an area is not present in the structure, check the "not present" box.
Document all bat indicators observed during the assessment. Include the species present, if known, and provide photo documentation as indicated.

Area (check if assessed)	**Assessment Notes**	**Evidence of Bats** (include photos if present)
☒ All crevices and cracks: **Bridges/culverts:** rough surfaces or imperfections in concrete **Other structures:** soffits, rafters, attic areas	☐ Not present	☐ Visual - live # dead # ☐ Guano ☐ Staining ☐ Audible ☐ Odor ☐ Photos ☐ Species
☒ Concrete surfaces (open roosting on concrete)	☐ Not present	☐ Visual - live # dead # ☐ Guano ☐ Staining ☐ Audible ☐ Odor ☐ Photos ☐ Species
☐ Spaces between concrete end walls and the bridge deck	☒ Not present	☐ Visual - live # dead # ☐ Guano ☐ Staining ☐ Audible ☐ Odor ☐ Photos ☐ Species
☐ Crack between concrete railings on top of the bridge deck 	☒ Not present	☐ Visual - live # dead # ☐ Guano ☐ Staining ☐ Audible ☐ Odor ☐ Photos ☐ Species
☐ Vertical surfaces on concrete I-beams	☒ Not present	☐ Visual - live # dead # ☐ Guano ☐ Staining ☐ Audible ☐ Odor ☐ Photos ☐ Species
☐ Spaces between walls, ceiling joists	☒ Not present	☐ Visual - live # dead # ☐ Guano ☐ Staining ☐ Audible ☐ Odor ☐ Photos ☐ Species
☐ Weep holes, scupper drains, and inlets/pipes	☒ Not present	☐ Visual - live # dead # ☐ Guano ☐ Staining ☐ Audible ☐ Odor ☐ Photos ☐ Species
☐ All guiderails	☒ Not present	☐ Visual - live # dead # ☐ Guano ☐ Staining ☐ Audible ☐ Odor ☐ Photos ☐ Species
☐ All expansion joints	☒ Not present	☐ Visual - live # dead # ☐ Guano ☐ Staining ☐ Audible ☐ Odor ☐ Photos ☐ Species

Name: Claudia McAllister-Peterson

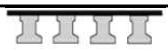
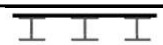
Signature: Claudia McAllister-Peterson

Bridge/Structure Bat Assessment Form

Date & Time of Assessment	DOT Project Number	Route/Facility Carried	County
9/28/2021 11 AM	1298633	SR 258	Jackson
Federal Structure ID	**Structure Coordinates (latitude and longitude)**	**Structure Height (approximate)**	**Structure Length**
N/A	38.979444, -86.021554	12"	42'

Structure Type (check one)

Bridge Construction Style

○ Cast-in-place		○ Pre-stressed Girder	
○ Flat Slab/Box		○ Steel I-beam	
○ Truss		○ Covered	
○ Parallel Box Beam		○ Other:	

Culvert Type

- ○ Box
- ⊙ Pipe/Round
- ○ Other:

Other Structure

- ○

Structure Material (check all that apply)

Deck Material	*Beam Material*	*End/Back Wall Material*
☐ Metal	☐ None	☐ Concrete
☐ Concrete	☐ Concrete	☐ Timber
☐ Timber	☐ Steel	☐ Stone/Masonry
☐ Open grid	☐ Timber	☐ Other:
☐ Other:	☐ Other:	

Creosote Evidence

- ○ Yes ⊙ No
- ○ Unknown

Culvert Material

- ☐ Metal
- ☐ Concrete
- ☒ Plastic
- ☐ Stone/Masonry
- ☐ Other:

Notes:

12" HDPE

Crossings Traversed (check all that apply)

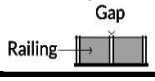
☐ Bare ground	☐ Open vegetation
☐ Rip-rap	☐ Closed vegetation
☐ Flowing water	☐ Railroad
☐ Standing water	☒ Road/trail - Type: driveway
☐ Seasonal water	☐ Other:

Surrounding Habitat (check all that apply)

☐ Agricultural	☐ Grassland
☐ Commercial	☐ Ranching
☐ Residential-urban	☐ Riparian/wetland
☒ Residential-rural	☐ Mixed use
☐ Woodland/forested	☐ Other:

Areas Assessed (check all that apply)

Check all areas that apply. If an area is not present in the structure, check the "not present" box.
Document all bat indicators observed during the assessment. Include the species present, if known, and provide photo documentation as indicated.

Area (check if assessed)	Assessment Notes	Evidence of Bats (include photos if present)		
☒ All crevices and cracks: **Bridges/culverts:** rough surfaces or imperfections in concrete **Other structures:** soffits, rafters, attic areas	☐ Not present	☐ Visual - live # dead # ☐ Guano ☐ Staining	☐ Audible ☐ Odor ☐ Photos	☐ Species
☐ Concrete surfaces (open roosting on concrete)	☒ Not present	☐ Visual - live # dead # ☐ Guano ☐ Staining	☐ Audible ☐ Odor ☐ Photos	☐ Species
☐ Spaces between concrete end walls and the bridge deck	☒ Not present	☐ Visual - live # dead # ☐ Guano ☐ Staining	☐ Audible ☐ Odor ☐ Photos	☐ Species
☐ Crack between concrete railings on top of the bridge deck 	☒ Not present	☐ Visual - live # dead # ☐ Guano ☐ Staining	☐ Audible ☐ Odor ☐ Photos	☐ Species
☐ Vertical surfaces on concrete I-beams	☒ Not present	☐ Visual - live # dead # ☐ Guano ☐ Staining	☐ Audible ☐ Odor ☐ Photos	☐ Species
☐ Spaces between walls, ceiling joists	☒ Not present	☐ Visual - live # dead # ☐ Guano ☐ Staining	☐ Audible ☐ Odor ☐ Photos	☐ Species
☐ Weep holes, scupper drains, and inlets/pipes	☒ Not present	☐ Visual - live # dead # ☐ Guano ☐ Staining	☐ Audible ☐ Odor ☐ Photos	☐ Species
☐ All guiderails	☒ Not present	☐ Visual - live # dead # ☐ Guano ☐ Staining	☐ Audible ☐ Odor ☐ Photos	☐ Species
☐ All expansion joints	☒ Not present	☐ Visual - live # dead # ☐ Guano ☐ Staining	☐ Audible ☐ Odor ☐ Photos	☐ Species

Name: Claudia McAllister-Peterson

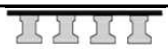
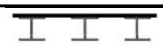
Signature: Claudia McAllister-Peterson

Bridge/Structure Bat Assessment Form

Date & Time of Assessment	DOT Project Number	Route/Facility Carried	County
9/28/2021 11 AM	1298633	SR 258	Jackson
Federal Structure ID	**Structure Coordinates (latitude and longitude)**	**Structure Height (approximate)**	**Structure Length**
N/A	38.978965, -86.029441	24"	40'

Structure Type (check one)

Bridge Construction Style

○ Cast-in-place		○ Pre-stressed Girder	
○ Flat Slab/Box		○ Steel I-beam	
○ Truss		○ Covered	
○ Parallel Box Beam		○ Other:	

Culvert Type

- ○ Box
- ⊙ Pipe/Round
- ○ Other:

Other Structure

- ○

Structure Material (check all that apply)

Deck Material	*Beam Material*	*End/Back Wall Material*
☐ Metal	☐ None	☐ Concrete
☐ Concrete	☐ Concrete	☐ Timber
☐ Timber	☐ Steel	☐ Stone/Masonry
☐ Open grid	☐ Timber	☐ Other:
☐ Other:	☐ Other:	

Creosote Evidence

- ○ Yes ⊙ No
- ○ Unknown

Culvert Material

- ☐ Metal
- ☐ Concrete
- ☒ Plastic
- ☐ Stone/Masonry
- ☐ Other:

Notes:

24" CPP with 1.5' cover

Crossings Traversed (check all that apply)

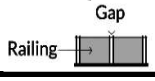
☐ Bare ground	☐ Open vegetation
☐ Rip-rap	☐ Closed vegetation
☐ Flowing water	☐ Railroad
☐ Standing water	☒ Road/trail - Type: driveway
☐ Seasonal water	☐ Other:

Surrounding Habitat (check all that apply)

☐ Agricultural	☐ Grassland
☐ Commercial	☐ Ranching
☐ Residential-urban	☐ Riparian/wetland
☒ Residential-rural	☐ Mixed use
☐ Woodland/forested	☐ Other:

Areas Assessed (check all that apply)

Check all areas that apply. If an area is not present in the structure, check the "not present" box.
Document all bat indicators observed during the assessment. Include the species present, if known, and provide photo documentation as indicated.

Area (check if assessed)	**Assessment Notes**	**Evidence of Bats** (include photos if present)
☒ All crevices and cracks: **Bridges/culverts:** rough surfaces or imperfections in concrete **Other structures:** soffits, rafters, attic areas	☐ Not present	☐ Visual - live # dead # ☐ Guano ☐ Staining ☐ Audible ☐ Odor ☐ Photos ☐ Species
☐ Concrete surfaces (open roosting on concrete)	☒ Not present	☐ Visual - live # dead # ☐ Guano ☐ Staining ☐ Audible ☐ Odor ☐ Photos ☐ Species
☐ Spaces between concrete end walls and the bridge deck	☒ Not present	☐ Visual - live # dead # ☐ Guano ☐ Staining ☐ Audible ☐ Odor ☐ Photos ☐ Species
☐ Crack between concrete railings on top of the bridge deck 	☒ Not present	☐ Visual - live # dead # ☐ Guano ☐ Staining ☐ Audible ☐ Odor ☐ Photos ☐ Species
☐ Vertical surfaces on concrete I-beams	☒ Not present	☐ Visual - live # dead # ☐ Guano ☐ Staining ☐ Audible ☐ Odor ☐ Photos ☐ Species
☐ Spaces between walls, ceiling joists	☒ Not present	☐ Visual - live # dead # ☐ Guano ☐ Staining ☐ Audible ☐ Odor ☐ Photos ☐ Species
☐ Weep holes, scupper drains, and inlets/pipes	☒ Not present	☐ Visual - live # dead # ☐ Guano ☐ Staining ☐ Audible ☐ Odor ☐ Photos ☐ Species
☐ All guiderails	☒ Not present	☐ Visual - live # dead # ☐ Guano ☐ Staining ☐ Audible ☐ Odor ☐ Photos ☐ Species
☐ All expansion joints	☒ Not present	☐ Visual - live # dead # ☐ Guano ☐ Staining ☐ Audible ☐ Odor ☐ Photos ☐ Species

Name: Claudia McAllister-Peterson

Signature: Claudia McAllister-Peterson

Bridge/Structure Bat Assessment Form

Date & Time of Assessment	DOT Project Number	Route/Facility Carried	County
9/28/2021 11 AM	1298633	SR 258	Jackson
Federal Structure ID	**Structure Coordinates (latitude and longitude)**	**Structure Height (approximate)**	**Structure Length**
N/A	38.979387, -86.021657	1.5'	35'

Structure Type (check one)

Bridge Construction Style

- ○ Cast-in-place
- ○ Flat Slab/Box
- ○ Truss
- ○ Parallel Box Beam
- ○ Pre-stressed Girder
- ○ Steel I-beam
- ○ Covered
- ○ Other:

Culvert Type

- ○ Box
- ○ Pipe/Round
- ◉ Other: Elliptical

Other Structure

- ○

Structure Material (check all that apply)

Deck Material	*Beam Material*	*End/Back Wall Material*
☐ Metal	☐ None	☐ Concrete
☐ Concrete	☐ Concrete	☐ Timber
☐ Timber	☐ Steel	☐ Stone/Masonry
☐ Open grid	☐ Timber	☐ Other:
☐ Other:	☐ Other:	

Creosote Evidence

- ○ Yes ◉ No
- ○ Unknown

Culvert Material

- ☒ Metal
- ☐ Concrete
- ☐ Plastic
- ☐ Stone/Masonry
- ☐ Other:

Notes:

2'x1.5' CMP with 3' cover

Crossings Traversed (check all that apply)

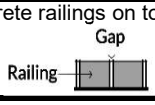
☐ Bare ground	☐ Open vegetation
☐ Rip-rap	☐ Closed vegetation
☐ Flowing water	☐ Railroad
☐ Standing water	☒ Road/trail - Type: N County Rd 100 E
☐ Seasonal water	☐ Other:

Surrounding Habitat (check all that apply)

☐ Agricultural	☐ Grassland
☐ Commercial	☐ Ranching
☐ Residential-urban	☐ Riparian/wetland
☒ Residential-rural	☐ Mixed use
☐ Woodland/forested	☐ Other:

Areas Assessed (check all that apply)

Check all areas that apply. If an area is not present in the structure, check the "not present" box.
Document all bat indicators observed during the assessment. Include the species present, if known, and provide photo documentation as indicated.

Area (check if assessed)	Assessment Notes	Evidence of Bats (include photos if present)
☒ All crevices and cracks: **Bridges/culverts:** rough surfaces or imperfections in concrete **Other structures:** soffits, rafters, attic areas	☐ Not present	☐ Visual - live # dead # ☐ Guano ☐ Staining ☐ Audible ☐ Odor ☐ Photos ☐ Species
☐ Concrete surfaces (open roosting on concrete)	☒ Not present	☐ Visual - live # dead # ☐ Guano ☐ Staining ☐ Audible ☐ Odor ☐ Photos ☐ Species
☐ Spaces between concrete end walls and the bridge deck	☒ Not present	☐ Visual - live # dead # ☐ Guano ☐ Staining ☐ Audible ☐ Odor ☐ Photos ☐ Species
☐ Crack between concrete railings on top of the bridge deck 	☒ Not present	☐ Visual - live # dead # ☐ Guano ☐ Staining ☐ Audible ☐ Odor ☐ Photos ☐ Species
☐ Vertical surfaces on concrete I-beams	☒ Not present	☐ Visual - live # dead # ☐ Guano ☐ Staining ☐ Audible ☐ Odor ☐ Photos ☐ Species
☐ Spaces between walls, ceiling joists	☒ Not present	☐ Visual - live # dead # ☐ Guano ☐ Staining ☐ Audible ☐ Odor ☐ Photos ☐ Species
☐ Weep holes, scupper drains, and inlets/pipes	☒ Not present	☐ Visual - live # dead # ☐ Guano ☐ Staining ☐ Audible ☐ Odor ☐ Photos ☐ Species
☐ All guiderails	☒ Not present	☐ Visual - live # dead # ☐ Guano ☐ Staining ☐ Audible ☐ Odor ☐ Photos ☐ Species
☐ All expansion joints	☒ Not present	☐ Visual - live # dead # ☐ Guano ☐ Staining ☐ Audible ☐ Odor ☐ Photos ☐ Species

Name: Claudia McAllister-Peterson

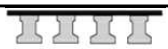
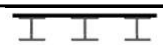
Signature: Claudia McAllister-Peterson

Bridge/Structure Bat Assessment Form

Date & Time of Assessment	DOT Project Number	Route/Facility Carried	County
9/28/2021 11 AM	1298633	SR 258	Jackson
Federal Structure ID	**Structure Coordinates (latitude and longitude)**	**Structure Height (approximate)**	**Structure Length**
N/A	38.978508, -86.021639	36"	36'

Structure Type (check one)

Bridge Construction Style

○ Cast-in-place		○ Pre-stressed Girder	
○ Flat Slab/Box		○ Steel I-beam	
○ Truss		○ Covered	
○ Parallel Box Beam		○ Other:	

Culvert Type

- ○ Box
- ⊙ Pipe/Round
- ○ Other:

Other Structure

- ○

Structure Material (check all that apply)

Deck Material	*Beam Material*	*End/Back Wall Material*
☐ Metal	☐ None	☐ Concrete
☐ Concrete	☐ Concrete	☐ Timber
☐ Timber	☐ Steel	☐ Stone/Masonry
☐ Open grid	☐ Timber	☐ Other:
☐ Other:	☐ Other:	

Creosote Evidence

- ○ Yes ⊙ No
- ○ Unknown

Culvert Material

- ☒ Metal
- ☐ Concrete
- ☐ Plastic
- ☐ Stone/Masonry
- ☐ Other:

Notes:

36" CMP with 3' cover

Crossings Traversed (check all that apply)

☐ Bare ground	☐ Open vegetation
☐ Rip-rap	☐ Closed vegetation
☐ Flowing water	☐ Railroad
☐ Standing water	☒ Road/trail - Type: N County Rd 100 E
☐ Seasonal water	☐ Other:

Surrounding Habitat (check all that apply)

☐ Agricultural	☐ Grassland
☐ Commercial	☐ Ranching
☐ Residential-urban	☐ Riparian/wetland
☒ Residential-rural	☐ Mixed use
☒ Woodland/forested	☐ Other:

Areas Assessed (check all that apply)

Check all areas that apply. If an area is not present in the structure, check the "not present" box.
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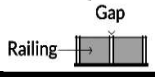
Area (check if assessed)	Assessment Notes	Evidence of Bats (include photos if present)
☒ All crevices and cracks: **Bridges/culverts:** rough surfaces or imperfections in concrete **Other structures:** soffits, rafters, attic areas	☐ Not present	☐ Visual - live # dead # ☐ Guano ☐ Staining ☐ Audible ☐ Odor ☐ Photos ☐ Species
☐ Concrete surfaces (open roosting on concrete)	☒ Not present	☐ Visual - live # dead # ☐ Guano ☐ Staining ☐ Audible ☐ Odor ☐ Photos ☐ Species
☐ Spaces between concrete end walls and the bridge deck	☒ Not present	☐ Visual - live # dead # ☐ Guano ☐ Staining ☐ Audible ☐ Odor ☐ Photos ☐ Species
☐ Crack between concrete railings on top of the bridge deck 	☒ Not present	☐ Visual - live # dead # ☐ Guano ☐ Staining ☐ Audible ☐ Odor ☐ Photos ☐ Species
☐ Vertical surfaces on concrete I-beams	☒ Not present	☐ Visual - live # dead # ☐ Guano ☐ Staining ☐ Audible ☐ Odor ☐ Photos ☐ Species
☐ Spaces between walls, ceiling joists	☒ Not present	☐ Visual - live # dead # ☐ Guano ☐ Staining ☐ Audible ☐ Odor ☐ Photos ☐ Species
☐ Weep holes, scupper drains, and inlets/pipes	☒ Not present	☐ Visual - live # dead # ☐ Guano ☐ Staining ☐ Audible ☐ Odor ☐ Photos ☐ Species
☐ All guiderails	☒ Not present	☐ Visual - live # dead # ☐ Guano ☐ Staining ☐ Audible ☐ Odor ☐ Photos ☐ Species
☐ All expansion joints	☒ Not present	☐ Visual - live # dead # ☐ Guano ☐ Staining ☐ Audible ☐ Odor ☐ Photos ☐ Species

Name: Claudia McAllister-Peterson

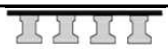
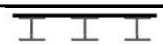
Signature: 

Bridge/Structure Bat Assessment Form

Date & Time of Assessment	DOT Project Number	Route/Facility Carried	County
9/28/2021 11 AM	1298633	SR 258	Jackson
Federal Structure ID	**Structure Coordinates (latitude and longitude)**	**Structure Height (approximate)**	**Structure Length**
N/A	38.979189, -86.02154	36"	40'

Structure Type (check one)

Bridge Construction Style

○ Cast-in-place		○ Pre-stressed Girder	
○ Flat Slab/Box		○ Steel I-beam	
○ Truss		○ Covered	
○ Parallel Box Beam		○ Other:	

Culvert Type

- ○ Box
- ⊙ Pipe/Round
- ○ Other:

Other Structure

- ○

Structure Material (check all that apply)

Deck Material	*Beam Material*	*End/Back Wall Material*
☐ Metal	☐ None	☐ Concrete
☐ Concrete	☐ Concrete	☐ Timber
☐ Timber	☐ Steel	☐ Stone/Masonry
☐ Open grid	☐ Timber	☐ Other:
☐ Other:	☐ Other:	

Creosote Evidence

- ○ Yes ⊙ No
- ○ Unknown

Culvert Material

- ☒ Metal
- ☐ Concrete
- ☐ Plastic
- ☐ Stone/Masonry
- ☐ Other:

Notes:

36" CMP with 6" cover

Crossings Traversed (check all that apply)

☐ Bare ground	☐ Open vegetation
☐ Rip-rap	☐ Closed vegetation
☐ Flowing water	☐ Railroad
☐ Standing water	☒ Road/trail - Type: N County Rd 100 E
☐ Seasonal water	☐ Other:

Surrounding Habitat (check all that apply)

☐ Agricultural	☐ Grassland
☐ Commercial	☐ Ranching
☐ Residential-urban	☐ Riparian/wetland
☒ Residential-rural	☐ Mixed use
☒ Woodland/forested	☐ Other:

Areas Assessed (check all that apply)

Check all areas that apply. If an area is not present in the structure, check the "not present" box.
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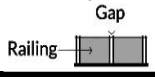
☐ Concrete surfaces (open roosting on concrete)	☒ Not present	☐ Visual - live # dead # ☐ Guano ☐ Staining	☐ Audible ☐ Odor ☐ Photos	☐ Species
☐ Spaces between concrete end walls and the bridge deck	☒ Not present	☐ Visual - live # dead # ☐ Guano ☐ Staining	☐ Audible ☐ Odor ☐ Photos	☐ Species
☐ Crack between concrete railings on top of the bridge deck 	☒ Not present	☐ Visual - live # dead # ☐ Guano ☐ Staining	☐ Audible ☐ Odor ☐ Photos	☐ Species
☐ Vertical surfaces on concrete I-beams	☒ Not present	☐ Visual - live # dead # ☐ Guano ☐ Staining	☐ Audible ☐ Odor ☐ Photos	☐ Species
☐ Spaces between walls, ceiling joists	☒ Not present	☐ Visual - live # dead # ☐ Guano ☐ Staining	☐ Audible ☐ Odor ☐ Photos	☐ Species
☐ Weep holes, scupper drains, and inlets/pipes	☒ Not present	☐ Visual - live # dead # ☐ Guano ☐ Staining	☐ Audible ☐ Odor ☐ Photos	☐ Species
☐ All guiderails	☒ Not present	☐ Visual - live # dead # ☐ Guano ☐ Staining	☐ Audible ☐ Odor ☐ Photos	☐ Species
☐ All expansion joints	☒ Not present	☐ Visual - live # dead # ☐ Guano ☐ Staining	☐ Audible ☐ Odor ☐ Photos	☐ Species

Name: Claudia McAllister-Peterson

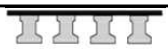
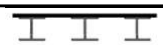
Signature: Claudia McAllister-Peterson

Bridge/Structure Bat Assessment Form

Date & Time of Assessment	DOT Project Number	Route/Facility Carried	County
9/28/2021 11 AM	1298633	SR 258	Jackson
Federal Structure ID	**Structure Coordinates** (latitude and longitude)	**Structure Height** (approximate)	**Structure Length**
N/A	38.979107, -86.029785	15"	65'

Structure Type (check one)

Bridge Construction Style

○ Cast-in-place		○ Pre-stressed Girder	
○ Flat Slab/Box		○ Steel I-beam	
○ Truss		○ Covered	
○ Parallel Box Beam		○ Other:	

Culvert Type

- ○ Box
- ⊙ Pipe/Round
- ○ Other:

Other Structure

- ○

Structure Material (check all that apply)

Deck Material	*Beam Material*	*End/Back Wall Material*
☐ Metal	☐ None	☐ Concrete
☐ Concrete	☐ Concrete	☐ Timber
☐ Timber	☐ Steel	☐ Stone/Masonry
☐ Open grid	☐ Timber	☐ Other:
☐ Other:	☐ Other:	

Creosote Evidence

- ○ Yes ⊙ No
- ○ Unknown

Culvert Material

- ☒ Metal
- ☐ Concrete
- ☐ Plastic
- ☐ Stone/Masonry
- ☐ Other:

Notes:

15" CMP with 1' cover

Crossings Traversed (check all that apply)

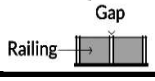
☐ Bare ground	☒ Open vegetation
☐ Rip-rap	☐ Closed vegetation
☐ Flowing water	☐ Railroad
☐ Standing water	☐ Road/trail - Type:
☐ Seasonal water	☐ Other:

Surrounding Habitat (check all that apply)

☐ Agricultural	☒ Grassland
☐ Commercial	☐ Ranching
☐ Residential-urban	☐ Riparian/wetland
☐ Residential-rural	☐ Mixed use
☒ Woodland/forested	☐ Other:

Areas Assessed (check all that apply)

Check all areas that apply. If an area is not present in the structure, check the "not present" box.
Document all bat indicators observed during the assessment. Include the species present, if known, and provide photo documentation as indicated.

Area (check if assessed)	Assessment Notes	Evidence of Bats (include photos if present)
☒ All crevices and cracks: **Bridges/culverts:** rough surfaces or imperfections in concrete **Other structures:** soffits, rafters, attic areas	☐ Not present	☐ Visual - live # dead # ☐ Guano ☐ Staining ☐ Audible ☐ Odor ☐ Photos ☐ Species
☐ Concrete surfaces (open roosting on concrete)	☒ Not present	☐ Visual - live # dead # ☐ Guano ☐ Staining ☐ Audible ☐ Odor ☐ Photos ☐ Species
☐ Spaces between concrete end walls and the bridge deck	☒ Not present	☐ Visual - live # dead # ☐ Guano ☐ Staining ☐ Audible ☐ Odor ☐ Photos ☐ Species
☐ Crack between concrete railings on top of the bridge deck 	☒ Not present	☐ Visual - live # dead # ☐ Guano ☐ Staining ☐ Audible ☐ Odor ☐ Photos ☐ Species
☐ Vertical surfaces on concrete I-beams	☒ Not present	☐ Visual - live # dead # ☐ Guano ☐ Staining ☐ Audible ☐ Odor ☐ Photos ☐ Species
☐ Spaces between walls, ceiling joists	☒ Not present	☐ Visual - live # dead # ☐ Guano ☐ Staining ☐ Audible ☐ Odor ☐ Photos ☐ Species
☐ Weep holes, scupper drains, and inlets/pipes	☒ Not present	☐ Visual - live # dead # ☐ Guano ☐ Staining ☐ Audible ☐ Odor ☐ Photos ☐ Species
☐ All guiderails	☒ Not present	☐ Visual - live # dead # ☐ Guano ☐ Staining ☐ Audible ☐ Odor ☐ Photos ☐ Species
☐ All expansion joints	☒ Not present	☐ Visual - live # dead # ☐ Guano ☐ Staining ☐ Audible ☐ Odor ☐ Photos ☐ Species

Name: Claudia McAllister-Peterson

Signature: Claudia McAllister-Peterson

Bridge/Structure Bat Assessment Form

Date & Time of Assessment	DOT Project Number	Route/Facility Carried	County
9/28/2021 11 AM	1298633	SR 258	Jackson
Federal Structure ID	**Structure Coordinates (latitude and longitude)**	**Structure Height (approximate)**	**Structure Length**
CV 258-36-4.73	38.97898, -86.03038	66"	24'

Structure Type (check one)

Bridge Construction Style

- ○ Cast-in-place
- ○ Flat Slab/Box
- ○ Truss
- ○ Parallel Box Beam
- ○ Pre-stressed Girder
- ○ Steel I-beam
- ○ Covered
- ○ Other:

Culvert Type

- ◉ Box
- ○ Pipe/Round
- ○ Other:

Other Structure

- ○

Structure Material (check all that apply)

Deck Material	*Beam Material*	*End/Back Wall Material*
☐ Metal	☐ None	☐ Concrete
☒ Concrete	☐ Concrete	☐ Timber
☒ Timber	☐ Steel	☐ Stone/Masonry
☐ Open grid	☐ Timber	☐ Other:
☐ Other:	☐ Other:	

Creosote Evidence

- ○ Yes ◉ No
- ○ Unknown

Culvert Material

- ☐ Metal
- ☐ Concrete
- ☐ Plastic
- ☐ Stone/Masonry
- ☐ Other:

Notes:

4 Sided box culvert with 2' cover

Crossings Traversed (check all that apply)

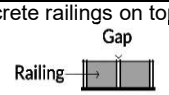
- ☐ Bare ground
- ☐ Rip-rap
- ☒ Flowing water
- ☐ Standing water
- ☐ Seasonal water
- ☐ Open vegetation
- ☐ Closed vegetation
- ☐ Railroad
- ☐ Road/trail - Type:
- ☐ Other:

Surrounding Habitat (check all that apply)

- ☐ Agricultural
- ☐ Commercial
- ☐ Residential-urban
- ☒ Residential-rural
- ☒ Woodland/forested
- ☐ Grassland
- ☐ Ranching
- ☐ Riparian/wetland
- ☐ Mixed use
- ☐ Other:

Areas Assessed (check all that apply)

Check all areas that apply. If an area is not present in the structure, check the "not present" box.
Document all bat indicators observed during the assessment. Include the species present, if known, and provide photo documentation as indicated.

Area (check if assessed)	**Assessment Notes**	**Evidence of Bats** (include photos if present)
☒ All crevices and cracks: **Bridges/culverts:** rough surfaces or imperfections in concrete **Other structures:** soffits, rafters, attic areas	☐ Not present	☐ Visual - live # dead # ☐ Guano ☐ Staining ☐ Audible ☐ Odor ☐ Photos ☐ Species
☒ Concrete surfaces (open roosting on concrete)	☐ Not present	☐ Visual - live # dead # ☐ Guano ☐ Staining ☐ Audible ☐ Odor ☐ Photos ☐ Species
☐ Spaces between concrete end walls and the bridge deck	☒ Not present	☐ Visual - live # dead # ☐ Guano ☐ Staining ☐ Audible ☐ Odor ☐ Photos ☐ Species
☐ Crack between concrete railings on top of the bridge deck 	☒ Not present	☐ Visual - live # dead # ☐ Guano ☐ Staining ☐ Audible ☐ Odor ☐ Photos ☐ Species
☐ Vertical surfaces on concrete I-beams	☒ Not present	☐ Visual - live # dead # ☐ Guano ☐ Staining ☐ Audible ☐ Odor ☐ Photos ☐ Species
☐ Spaces between walls, ceiling joists	☒ Not present	☐ Visual - live # dead # ☐ Guano ☐ Staining ☐ Audible ☐ Odor ☐ Photos ☐ Species
☐ Weep holes, scupper drains, and inlets/pipes	☒ Not present	☐ Visual - live # dead # ☐ Guano ☐ Staining ☐ Audible ☐ Odor ☐ Photos ☐ Species
☒ All guiderails	☐ Not present	☐ Visual - live # dead # ☐ Guano ☐ Staining ☐ Audible ☐ Odor ☐ Photos ☐ Species
☐ All expansion joints	☒ Not present	☐ Visual - live # dead # ☐ Guano ☐ Staining ☐ Audible ☐ Odor ☐ Photos ☐ Species

Name: Claudia McAllister-Peterson

Signature: Claudia McAllister-Peterson

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

IPaC Record Locator: 293-107416105 December 07, 2021

Subject: Consistency letter for the 'SR 258 Sight Distance Correction (Des No. 1298633)' project (no current TAILS record) under the revised February 5, 2018, FHWA, FRA, FTA Programmatic Biological Opinion for Transportation Projects within the Range of the Indiana Bat and Northern Long-eared Bat.

To whom it may concern:

The U.S. Fish and Wildlife Service (Service) has received your request to verify that the **SR 258 Sight Distance Correction (Des No. 1298633)** (Proposed Action) may rely on the revised February 5, 2018, FHWA, FRA, FTA Programmatic Biological Opinion for Transportation Projects within the Range of the Indiana Bat and Northern Long-eared Bat (PBO) to satisfy requirements under Section 7(a)(2) of the Endangered Species Act of 1973 (ESA) (87 Stat.884, as amended; 16 U.S.C. 1531 *et seq.*).

Based on the information you provided (Project Description shown below), you have determined that the Proposed Action is within the scope and adheres to the criteria of the PBO, including the adoption of applicable avoidance and minimization measures, and may affect, and is likely to adversely affect the endangered Indiana bat (*Myotis sodalis*) and/or the threatened Northern long-eared bat (*Myotis septentrionalis*). Consultation with the Service pursuant to Section 7(a)(2) of the Endangered Species Act of 1973 (ESA) (87 Stat. 884, as amended; 16 U.S.C. 1531 *et seq.*) is required.

For Proposed Actions that include bridge/structure removal, replacement, and/or maintenance activities: If your initial bridge/structure assessments failed to detect Indiana bats, but you later detect bats during construction, please submit the Post Assessment Discovery of Bats at Bridge/Structure Form (User Guide Appendix E) to this Service Office. In these instances, potential incidental take of Indiana bats may be exempted provided that the take is reported to the Service.

If the Proposed Action may affect any other federally-listed or proposed species and/or designated critical habitat, additional consultation between the lead Federal action agency and this Service Office is required. If the proposed action has the potential to take bald or golden eagles, additional coordination with the Service under the Bald and Golden Eagle Protection Act

may also be required. In either of these circumstances, please advise the lead Federal action agency accordingly.

The following species may occur in your project area and **are not** covered by this determination:

- Monarch Butterfly *Danaus plexippus* Candidate

Project Description

The following project name and description was collected in IPaC as part of the endangered species review process.

Name

SR 258 Sight Distance Correction (Des No. 1298633)

Description

SR 258 Sight Distance Correction (Des No. 1298633)
This project (Des No. 1298633) is located approximately 6 miles west of Seymour, Indiana, near the intersection of SR 258 and N CR 100 E, within Sections 1 and 2, Township 6 North, and Range 4 East, and Sections 6 and 7, Township 6 North, and Range 5 East, on the U.S. Geological Survey (USGS) Brownstown, Indiana Quadrangle.

The project includes lowering the existing roadway crest by approximately 5 feet and raising the existing roadway sag vertical curves on either side of the crest by approximately 15 feet. The project limits are from approximately 0.55 mile west of N County Road (CR) 100 E to approximately 500 feet east of N CR 100 E. Roadway improvements are also required on N CR 100 E, from approximately 500 feet south and approximately 300 feet north of the SR 258 intersection, to accommodate the vertical profile change on SR 258.

Approximately 4.3 acres of permanent right of way and 1.9 acres of temporary right of way will be needed for the project. The construction of the project will require closure of SR 258 and detouring through-traffic using SR 135, US 50, and SR 11. The additional travel length due to this detour is approximately 10.5 miles. Other detours will be available for local traffic in the project vicinity using local and county roads. The project is planned to begin construction in Spring of 2024 and be completed by the end of Fall 2024.

Land use in the vicinity of the project is residential and forested. One stream flows east along the south side of SR 258 through an existing culvert underneath N CR 100 E. Another stream flows east through an existing culvert underneath N CR 100 E, south of SR 258. A third stream flows north through the forested area along the north side of SR 258. A fourth stream flows south underneath an existing SR 258 bridge near the west end of the study area.

A review of the USFWS database on September 27, 2021 did not indicate the presence of the Indiana bat or the northern long-eared bat within 0.5 mile of the study area. A total of eight culverts along SR 258 were inspected for bats. The September 28, 2021 culvert bat inspections state that no evidence of bats was seen or heard in any of the culverts. A BIAS inspection report was only available for one of the eight culverts, CV 258-036-4.73, which also indicated no evidence of bats using the culvert was observed. Suitable summer habitat is located within and adjacent to the study area. Suitable summer habitat will be impacted for the construction of the project. The dominant tree species for removal include white oak (Quercus alba), Eastern white pine (Pinus strobus), red maple (Acer rubrum), slippery elm (Ulmus rubra), green ash (Fraxinus pennsylvanica), and sweet-gum (Liquidambar

styraciflua). No more than 9.2 acres of trees will be removed for the project. 8 acres may be removed within 100 feet of the roadway and 1.2 acres may be removed 100-300 feet from the roadway. All tree clearing activities will occur outside of the Indiana bat and/or NLEB active season.

The project will require compensatory mitigation under the Rangewide In-Lieu Fee Program, The Conservation Fund. A mitigation payment for tree removal between 100-300 feet from the existing roadway was calculated using the following In-lieu fee formula: (acres of tree removal=1.2) x (mitigation ratio = 1.5) x (current dollar amount for IN = $9,354) = $16,837.20.

The project activities will include the use of percussives. The project will not include installing new or replacing existing permanent lighting. Although temporary lighting is not expected to be required for the construction of the project, it is possible some night work will be performed.

Determination Key Result

Based on your answers provided, this project is likely to adversely affect the endangered Indiana bat and/or the threatened Northern long-eared bat. Therefore, consultation with the U.S. Fish and Wildlife Service pursuant to Section 7(a)(2) of the Endangered Species Act of 1973 (ESA) (87 Stat. 884, as amended 16 U.S.C. 1531 *et seq.*) is required. However, also based on your answers provided, this project may rely on the conclusion and Incidental Take Statement provided in the revised February 5, 2018, FHWA, FRA, FTA Programmatic Biological Opinion for Transportation Projects within the Range of the Indiana Bat and Northern Long-eared Bat.

Qualification Interview

1. Is the project within the range of the Indiana bat[1]?

   [1] See Indiana bat species profile

   Automatically answered
   Yes

2. Is the project within the range of the Northern long-eared bat[1]?

   [1] See Northern long-eared bat species profile

   Automatically answered
   Yes

3. Which Federal Agency is the lead for the action?

   A) Federal Highway Administration (FHWA)

4. Are *all* project activities limited to non-construction[1] activities only? (examples of non-construction activities include: bridge/abandoned structure assessments, surveys, planning and technical studies, property inspections, and property sales)

   [1] Construction refers to activities involving ground disturbance, percussive noise, and/or lighting.

   No

5. Does the project include *any* activities that are **greater than** 300 feet from existing road/rail surfaces[1]?

   [1] Road surface is defined as the actively used [e.g. motorized vehicles] driving surface and shoulders [may be pavement, gravel, etc.] and rail surface is defined as the edge of the actively used rail ballast.

   No

6. Does the project include *any* activities **within** 0.5 miles of a known Indiana bat and/or NLEB hibernaculum[1]?

   [1] For the purpose of this consultation, a hibernaculum is a site, most often a cave or mine, where bats hibernate during the winter (see suitable habitat), but could also include bridges and structures if bats are found to be hibernating there during the winter.

   No

7. Is the project located **within** a karst area?

   No

8. Is there *any* suitable[1] summer habitat for Indiana Bat or NLEB **within** the project action area[2]? (includes any trees suitable for maternity, roosting, foraging, or travelling habitat)

   [1] See the Service's summer survey guidance for our current definitions of suitable habitat.

   [2] The action area is defined as all areas to be affected directly or indirectly by the Federal action and not merely the immediate area involved in the action (50 CFR Section 402.02). Further clarification is provided by the national consultation FAQs.

   Yes

9. Will the project remove *any* suitable summer habitat[1] and/or remove/trim any existing trees **within** suitable summer habitat?

   [1] See the Service's summer survey guidance for our current definitions of suitable habitat.

   Yes

10. Will the project clear more than 20 acres of suitable habitat per 5-mile section of road/rail?

    No

11. Have presence/probable absence (P/A) summer surveys[1][2] been conducted[3][4] **within** the suitable habitat located within your project action area?

    [1] See the Service's summer survey guidance for our current definitions of suitable habitat.

    [2] Presence/probable absence summer surveys conducted within the fall swarming/spring emergence home range of a documented Indiana bat hibernaculum (contact local Service Field Office for appropriate distance from hibernacula) that result in a negative finding requires additional consultation with the local Service Field Office to determine if clearing of forested habitat is appropriate and/or if seasonal clearing restrictions are needed to avoid and minimize potential adverse effects on fall swarming and spring emerging Indiana bats.

    [3] For projects within the range of either the Indiana bat or NLEB in which suitable habitat is present, and no bat surveys have been conducted, the transportation agency will assume presence of the appropriate species. This assumption of presence should be based upon the presence of suitable habitat and the capability of bats to occupy it because of their mobility.

    [4] Negative presence/probable absence survey results obtained using the summer survey guidance are valid for a minimum of two years from the completion of the survey unless new information (e.g., other nearby surveys) suggest otherwise.

    No

12. Does the project include activities **within documented Indiana bat habitat**[1][2]?

    [1] Documented roosting or foraging habitat – for the purposes of this consultation, we are considering documented habitat as that where Indiana bats and/or NLEB have actually been captured and tracked using (1) radio telemetry to roosts; (2) radio telemetry biangulation/triangulation to estimate foraging areas; or (3) foraging areas with repeated use documented using acoustics. Documented roosting habitat is also considered as suitable summer habitat within 0.25 miles of documented roosts.)

    [2] For the purposes of this key, we are considering documented corridors as that where Indiana bats and/or NLEB have actually been captured and tracked to using (1) radio telemetry; or (2) treed corridors located directly between documented roosting and foraging habitat.

    No

13. Will the removal or trimming of habitat or trees occur **within** suitable but **undocumented Indiana bat** roosting/foraging habitat or travel corridors?

    Yes

14. What time of year will the removal or trimming of habitat or trees **within** suitable but **undocumented Indiana bat** roosting/foraging habitat or travel corridors occur[1]?

    [1] Coordinate with the local Service Field Office for appropriate dates.

    B) During the inactive season

15. Does the project include activities **within documented NLEB habitat**[1][2]?

    [1] Documented roosting or foraging habitat – for the purposes of this consultation, we are considering documented habitat as that where Indiana bats and/or NLEB have actually been captured and tracked using (1) radio telemetry to roosts; (2) radio telemetry biangulation/triangulation to estimate foraging areas; or (3) foraging areas with repeated use documented using acoustics. Documented roosting habitat is also considered as suitable summer habitat within 0.25 miles of documented roosts.)

    [2] For the purposes of this key, we are considering documented corridors as that where Indiana bats and/or NLEB have actually been captured and tracked to using (1) radio telemetry; or (2) treed corridors located directly between documented roosting and foraging habitat.

    No

16. Will the removal or trimming of habitat or trees occur **within** suitable but **undocumented NLEB** roosting/foraging habitat or travel corridors?

    Yes

17. What time of year will the removal or trimming of habitat or trees **within** suitable but **undocumented NLEB** roosting/foraging habitat or travel corridors occur?

    B) During the inactive season

18. Will *any* tree trimming or removal occur **within** 100 feet of existing road/rail surfaces?

    Yes

19. Will *any* tree trimming or removal occur **between** 100-300 feet of existing road/rail surfaces?

    Yes

20. Are *all* trees that are being removed clearly demarcated?

    Yes

21. Will the removal of habitat or the removal/trimming of trees include installing new or replacing existing **permanent** lighting?

    No

22. Does the project include wetland or stream protection activities associated with compensatory wetland mitigation?

    No

23. Does the project include slash pile burning?

    No

24. Does the project include *any* bridge removal, replacement, and/or maintenance activities (e.g., any bridge repair, retrofit, maintenance, and/or rehabilitation work)?

    Yes

25. Is there *any* suitable habitat[1] for Indiana bat or NLEB **within** 1,000 feet of the bridge? (includes any trees suitable for maternity, roosting, foraging, or travelling habitat)

    [1] See the Service's current summer survey guidance for our current definitions of suitable habitat.

    Yes

26. Has a bridge assessment[1] been conducted **within** the last 24 months[2] to determine if the bridge is being used by bats?

    [1] See User Guide Appendix D for bridge/structure assessment guidance

    [2] Assessments must be completed no more than 2 years 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 bridge/structure in subsequent years.

    Yes

    SUBMITTED DOCUMENTS

    - *BIAS CV 258-36-4.73_bat pages only.pdf* *https://ecos.fws.gov/ipac/project/YP2M3LTW55CE5EWFCNRHQSO3UA/projectDocuments/107483224*
    - *Culvert Inspection Forms-Combined Print.pdf* *https://ecos.fws.gov/ipac/project/YP2M3LTW55CE5EWFCNRHQSO3UA/projectDocuments/108009743*

27. Did the bridge assessment detect *any* signs of Indiana bats and/or NLEBs roosting in/under the bridge (bats, guano, etc.)[1]?

    [1] If bridge assessment detects signs of *any* species of bats, coordination with the local FWS office is needed to identify potential threatened or endangered bat species. Additional studies may be undertaken to try to identify which bat species may be utilizing the bridge prior to allowing *any* work to proceed.

    Note: There is a small chance bridge assessments for bat occupancy do not detect bats. Should a small number of bats be observed roosting on a bridge just prior to or during construction, such that take is likely to occur or does occur in the form of harassment, injury or death, the PBO requires the action agency to report the take. Report all unanticipated take within 2 working days of the incident to the USFWS. Construction activities may continue without delay provided the take is reported to the USFWS and is limited to 5 bats per project.

    No

28. Will the bridge removal, replacement, and/or maintenance activities include installing new or replacing existing **permanent** lighting?

    No

29. Does the project include the removal, replacement, and/or maintenance of *any* structure other than a bridge? (e.g., rest areas, offices, sheds, outbuildings, barns, parking garages, etc.)

    No

30. Will the project involve the use of **temporary** lighting *during* the active season?

    Yes

31. Is there *any* suitable habitat **within** 1,000 feet of the location(s) where **temporary** lighting will be used?

    Yes

32. Will the project install new or replace existing **permanent** lighting?

    No

33. Does the project include percussives or other activities (**not including tree removal/ trimming or bridge/structure work**) that will increase noise levels above existing traffic/ background levels?

    Yes

34. Will the activities that use percussives (**not including tree removal/trimming or bridge/ structure work**) and/or increase noise levels above existing traffic/background levels be conducted *during* the active season[1]?

    [1] Coordinate with the local Service Field Office for appropriate dates.

    Yes

35. Will *any* activities that use percussives (**not including tree removal/trimming or bridge/structure work**) and/or increase noise levels above existing traffic/background levels be conducted *during* the inactive season[1]?

    [1] Coordinate with the local Service Field Office for appropriate dates.

    Yes

36. Are *all* project activities that are **not associated with** habitat removal, tree removal/trimming, bridge and/or structure activities, temporary or permanent lighting, or use of percussives, limited to actions that DO NOT cause any additional stressors to the bat species?

    Examples: lining roadways, unlighted signage , rail road crossing signals, signal lighting, and minor road repair such as asphalt fill of potholes, etc.

    Yes

37. Will the project raise the road profile **above the tree canopy**?

    No

38. Are the project activities that use percussives (not including tree removal/trimming or bridge/structure work) consistent with a Not Likely to Adversely Affect determination in this key?

    Automatically answered
    Yes, because the activities are within 300 feet of the existing road/rail surface, greater than 0.5 miles from a hibernacula, and conducted during the active season within undocumented habitat.

39. Are the project activities that use percussives (not including tree removal/trimming or bridge/structure work) and/or increase noise levels above existing traffic/background levels consistent with a No Effect determination in this key?

    Automatically answered
    Yes, because the activities are within 300 feet of the existing road/rail surface, greater than 0.5 miles from a hibernacula, and conducted during the inactive season

40. Is the habitat removal portion of this project consistent with a Not Likely to Adversely Affect determination in this key?

    Automatically answered
    Yes, because the tree removal/trimming that occurs outside of the Indiana bat's active season occurs greater than 0.5 miles from the nearest hibernaculum, is less than 100 feet from the existing road/rail surface, includes clear demarcation of the trees that are to be removed, and does not alter documented roosts and/or surrounding summer habitat within 0.25 miles of a documented roost.

41. Is the habitat removal portion of this project consistent with a Likely to Adversely Affect determination in this key?

    Automatically answered
    Yes, because the tree removal that occurs outside the Indiana bat's active season is 100-300 feet from the existing road/rail surface, and is not in documented roosting/foraging habitat or travel corridors.

42. Is the habitat removal portion of this project consistent with a Not Likely to Adversely Affect determination in this key?

    Automatically answered
    Yes, because the tree removal/trimming that occurs outside of the NLEB's active season occurs greater than 0.5 miles from the nearest hibernaculum, is less than 100 feet from the existing road/rail surface, includes clear demarcation of the trees that are to be removed, and does not alter documented roosts and/or surrounding summer habitat within 0.25 miles of a documented roost.

43. Is the habitat removal portion of this project consistent with a Likely to Adversely Affect determination in this key?

    Automatically answered
    Yes, because the tree removal that occurs outside the NLEB's active season is 100-300 feet from the existing road/rail surface, and is not in documented roosting/foraging habitat or travel corridors.

44. Is the bridge removal, replacement, or maintenance activities portion of this project consistent with a No Effect determination in this key?

    Automatically answered
    Yes, because the bridge has been assessed using the criteria documented in the BA and no signs of bats were detected

45. **General AMM 1**
    Will the project ensure *all* operators, employees, and contractors working in areas of known or presumed bat habitat are aware of *all* FHWA/FRA/FTA (Transportation Agencies) environmental commitments, including all applicable Avoidance and Minimization Measures?

    Yes

46. **Tree Removal AMM 1**
    Can *all* phases/aspects of the project (e.g., temporary work areas, alignments) be modified, to the extent practicable, to avoid tree removal[1] in excess of what is required to implement the project safely?

    Note: Tree Removal AMM 1 is a minimization measure, the full implementation of which may not always be practicable. Projects may still be NLAA as long as Tree Removal AMMs 2, 3, and 4 are implemented and LAA as long as Tree Removal AMMs 3, 5, 6, and 7 are implemented.

    [1] The word “trees” as used in the AMMs refers to trees that are suitable habitat for each species within their range. See the USFWS’ current summer survey guidance for our latest definitions of suitable habitat.

    Yes

47. **Tree Removal AMM 3**
    Can tree removal be limited to that specified in project plans and ensure that contractors understand clearing limits and how they are marked in the field (e.g., install bright colored flagging/fencing prior to any tree clearing to ensure contractors stay within clearing limits)?

    Yes

48. **Lighting AMM 1**
    Will *all* **temporary** lighting be directed away from suitable habitat during the active season?

    Yes

49. For Indiana bat, if applicable, compensatory mitigation measures are required to offset adverse effects on the species (see Section 2.10 of the BA). Please select the mechanism in which compensatory mitigation will be implemented:

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

Project Questionnaire

1. Have you made a No Effect determination for *all* other species indicated on the FWS IPaC generated species list?

   N/A

2. Have you made a May Affect determination for *any* other species on the FWS IPaC generated species list?

   N/A

3. How many acres[1] of trees are proposed for removal between 0-100 feet of the existing road/rail surface?

   [1] If described as number of trees, multiply by 0.09 to convert to acreage and enter that number.

   8

4. How many acres[1] of trees are proposed for removal between 100-300 feet of the existing road/rail surface?

   [1] If described as number of trees, multiply by 0.09 to convert to acreage and enter that number.

   1.2

5. **Please verify:**
   All tree removal will occur greater than 0.5 mile from any hibernaculum.

   Yes, I verify that all tree removal will occur greater than 0.5 miles from any hibernaculum.

6. Is the project location 0-100 feet from the edge of existing road/rail surface?

   Yes

7. Is the project location 100-300 feet from the edge of existing road/rail surface?

   Yes

8. **Please verify:**
   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.

   Yes, I verify that no documented Indiana bat roosts or surrounding summer habitat within 0.25 mile of documented roosts will be impacted during this period.

9. **Please verify:**

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

Yes, I verify that no documented NLEB roosts or surrounding summer habitat within 150 feet of documented roosts will be impacted during this period.

10. Please describe the proposed bridge work:

    All eight culverts along SR 258 described below were inspected for bats. The September 28, 2021 culvert bat inspections state that no evidence of bats was seen or heard in any of the culverts. A BIAS inspection report was only available for one of the eight culverts, CV 258-036-4.73.

    • CV 258-36-4.73 -(Existing 18 x 6' box culvert): The existing headwalls/wingwalls will be removed and the structure will be lengthened by 8 LFT on the north side and 5 LFT on the south side of SR 258, and new headwalls/wingwalls will be constructed.

    There are 6 existing culverts in the project limits that will be removed and replaced "in kind". These replacements include:
    • 15" pipe under a field entrance on the north side of SR 258, ~ 100' east of the large box culvert
    • 24" pipe under a residential driveway on the south side of SR 258, ~ 250' east of the large box culvert
    • 36" pipe under the north approach of N CR 100 E
    • 36" pipe under the north approach of N CR 100 E
    • 36" pipe under SR 258, ~ 50' east of r the N CR 100 E intersection
    • 36" pipe under N CR 100 E, ~ 300' south of the SR 258 intersection

    • There is an existing 12" pipe under the residential drives on the south side of SR 258 at the top of the hill (~1,000' west of the N CR 100 E intersection) that will be removed, but no new structure will be placed at this location (the roadside ditches will be graded to carry water away from these driveways).

11. Please state the timing of all proposed bridge work:

    The project is anticipated to begin construction in Spring of 2024 and be completed by the end of Fall 2024.

12. Please enter the date of the bridge assessment:

    9/28/2021

Avoidance And Minimization Measures (AMMs)

This determination key result includes the committment to implement the following Avoidance and Minimization Measures (AMMs):

LIGHTING AMM 1

Direct temporary lighting away from suitable habitat during the active season.

TREE REMOVAL AMM 3

Ensure tree removal is limited to that specified in project plans and ensure that contractors understand clearing limits and how they are marked in the field (e.g., install bright colored flagging/fencing prior to any tree clearing to ensure contractors stay within clearing limits).

GENERAL AMM 1

Ensure all operators, employees, and contractors working in areas of known or presumed bat habitat are aware of all FHWA/FRA/FTA (Transportation Agencies) environmental commitments, including all applicable AMMs.

TREE REMOVAL AMM 1

Modify all phases/aspects of the project (e.g., temporary work areas, alignments) to avoid tree removal.

Determination Key Description: FHWA, FRA, FTA Programmatic Consultation For Transportation Projects Affecting NLEB Or Indiana Bat

This key was last updated in IPaC on April 22, 2021. Keys are subject to periodic revision.

This decision key is intended for projects/activities funded or authorized by the Federal Highway Administration (FHWA), Federal Railroad Administration (FRA), and/or Federal Transit Administration (FTA), which may require consultation with the U.S. Fish and Wildlife Service (Service) under Section 7 of the Endangered Species Act (ESA) for the endangered **Indiana bat** (*Myotis sodalis*) and the threatened **Northern long-eared bat** (NLEB) (*Myotis septentrionalis*).

This decision key should only be used to verify project applicability with the Service's February 5, 2018, FHWA, FRA, FTA Programmatic Biological Opinion for Transportation Projects. The programmatic biological opinion covers limited transportation activities that may affect either bat species, and addresses situations that are both likely and not likely to adversely affect either bat species. This decision key will assist in identifying the effect of a specific project/activity and applicability of the programmatic consultation. The programmatic biological opinion is not intended to cover all types of transportation actions. Activities outside the scope of the programmatic biological opinion, or that may affect ESA-listed species other than the Indiana bat or NLEB, or any designated critical habitat, may require additional ESA Section 7 consultation.

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, 2022

Karstin Carmany-George
Federal Highway Administration
575 N. Pennsylvania St. Room 254
Indianapolis, Indiana 46204
(sent via email)

TAILS: 03E12000-2022-SLI-0366

RE: SR 258 Sight Distance Correction (Des No. 1298633), Jackson County, IN

Dear Ms. Carmany-George:

The U.S. Fish and Wildlife Service (Service) is responding to your request dated December 7, 2021, to verify that the proposed SR 258 Sight Distance Correction Project (the Project) may rely on the February 5, 2018, 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 LAA Consistency Letter on January 22, 2022.

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.

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 LAA Consistency Letter. 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/trim no more than **9.2 acre(s)** of trees from habitat that is suitable for the Indiana bat. All tree removal will occur in winter (October 1 – March 30) and comply with all other conservation measures in the BO. Based on the BO, **8 acre(s)** of the removal are within 100 feet of the edge of pavement and therefore not anticipated to result in any adverse effects; **1.2 acre(s)** are within 100-300 feet and expected to result in adverse effects.

The Federal Highway Administration will use the mitigation ratio of **1.50** from Table 3 of the BO[1] to calculate the compensatory mitigation required to offset these adverse impacts for a total of **1.8 acres**[2]of trees that is suitable for the Indiana bat.

Based on the mitigation identified above[2] and the information provided in Table 2 of Exhibit E in The Conservation Fund's (TCF) In Lieu Fee (ILF) Instrument[3], the Federal Highway Administration will contribute **$16,837.20** to TCF prior to the start of construction in order to comply with the mitigation requirements of the program of transportation projects reviewed in the BO. These calculations are based on the 2020-2021 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. At the time of payment, the Federal Highway Administration or designated non-federal representative shall notify the Service of compliance with the compensatory mitigation requirements as described above.

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.

In addition, the Project may take up to 5 Indiana bats that were not detected during bridge/structure bat assessments conducted prior to implementing the proposed work. In these instances, potential incidental take of Indiana bats may be exempted provided that the take is reported to the Service (refer to User Guide Appendix E - Post Assessment Discovery of Bats at

[1] https://www.fws.gov/midwest/endangered/section7/fhwa/pdf/IBAT_ILF_ratios_transportation_agencies.pdf
[2] XX acres * XX ratio
[3]https://www.fws.gov/midwest/endangered/section7/fhwa/pdf/IBAT_ExhibitE_Table2__FeeSchedule_LandValues.pdf

Bridge/Structure Form). Although such take is reasonably certain to occur at up to 10 bridge/structure projects per year as included in the scope of the BO, it is a remote possibility for any individual project that is implemented consistent with the conservation measures of the BO.

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 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 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 of more than **1.2 acre(s)** of habitat suitable for the Indiana bat between 100-300 feet from the edge of pavement; or
- the Project takes more than 5 Indiana bats resulting from work on the bridge/structure.

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 Robin_Mcwilliams@fws.gov.

Sincerely,

SCOTT PRUITT Digitally signed by SCOTT PRUITT
Date: 2022.01.24 14:44:35 -05'00'

Scott Pruitt
Field Supervisor

Cc: (via email)
Sandy Bowman, INDOT, Indianapolis, IN
David Dye, INDOT, Indianapolis, IN
Laura Sakach, CMT Engineering, Indianapolis, IN
Ibat ILF coordinator – to be sent by INDOT at later date

From: Baker, Mindy <MBaker2@indot.IN.gov>
Sent: Monday, September 27, 2021 11:12 AM
To: Laura Sakach <lsakach@cmtengr.com>
Cc: Dye, David <DDYE@indot.IN.gov>
Subject: RE: State Road 258 Sight Distance Correction (DES No. 1298633) Bat Database Review

Laura,

I have conducted a check of the USFWS confidential bat database for Des No. 1298633, and the results are stated below.

A review of the USFWS database did not indicate the presence of endangered bat species within 0.5 mile of the project area. Additional investigation to confirm the presence or absence of bats in or on any culverts, bridges or structures affected by the project will be necessary. The range-wide programmatic consultation for the Indiana Bat and Northern Long-eared Bat will be completed according to the most recent "Using the USFWS's IPaC System for Listed Bat Consultation for INDOT Projects".

Also, although I am the contact for USFWS bat database checks, David Dye will be the contact for your IPAC review.

Mindy Baker
Environmental Manager
185 Agrico Lane
Seymour, IN 47274
Office: (812) 524-3746
Email: mbaker2@indot.in.gov