Photograph 1. View of the SR 66 northern roadway swale, Wetland B and standing water in scour pool, west of N CR 500 W, flowing into CV 066-074-51.61, looking west.

Photograph 2. View of the SR 66 northern roadway swale, UNT to Willow Pond Ditch, east of N CR 500 W, flowing into CV 066-074-51.62, looking east.

Photograph 3. View of the N CR 500 W eastern roadway swale, UNT to Willow Pond Ditch and Wetland C, downstream from CV 066-074-51.62, looking south.

Photograph 4. View of the N CR 500 W western roadway swale, Wetland A and RSD 1, downstream from CV 066-074-51.61, looking west.

Photograph 5. View of SP1, representing Wetland A, within the western roadway swale of N CR 500 W, looking west.

Photograph 6. View of the soil profile of SP1 within Wetland A, which met the A2, A3, C2, C3, D2, and D5 wetland hydrology indicators. Saturation was observed at 7 inches.

Photograph 7. View of the soil pit of SP1 within Wetland A where a high water table was found at 12 inches.

Photograph 8. View of SP1 and Wetland A which was dominated by narrowleaf cattail (*Typha angustifolia*) and rice cut grass (*Leersia oryzoides*), looking southwest.

Photograph 9. View of Wetland A from the southern investigation area limits, looking north.

Photograph 10. View of SP2 and RSD1 upslope to the west of Wetland A on the terrace between the roadway and an active agricultural field, looking southwest.

Photograph 11. View of RSD 1 and SP2 upslope from Wetland A within the southern SR 66 roadway swale and dominated by rough cocklebur (*Xanthium strumarium*) and Japanese bristlegrass (*Setaria faberi*), looking east.

Photograph 12. View of RSD 1 and SP2 upslope from Wetland A within the southern SR 66 roadway swale, looking west.

Photograph 13. View of the soil profile of SP2.

Photograph 14. View of standing water and potential wildlife crossing from the northern culvert inlet within CV 066-074-51.61, between Wetlands A and B, where no evidence of bats nor birds were observed, looking south.

Photograph 15. View of the standing water within the scour pool of Wetland B, northwest of CV 066-074-51.61, west of N CR 500 W, and north of SR 66, looking southeast.

Photograph 16. View of Wetland B within the northern SR 66 roadway swale, west of N CR 500 W, dominated by invasive narrowleaf cattail (*Typha angustifolia*), looking west.

Photograph 17. View of SP3, representing Wetland B within the northern concave SR 66 roadway swale, where several primary and secondary wetland hydrology indicators were observed, looking east.

Photograph 18. View of the soil profile of SP3, representing Wetland B, within the northern SR 66 roadway swale.

Photograph 19. View of the upland shoulder slopes along the north bank of Wetland B and the northern SR 66 roadway swale where no natural OHWM was observed, represented in SP4, looking east.

Photograph 20. View of the upland soil profile of SP4 which did not meet any hydric soil indicator.

Photograph 21. View of the northern SR 66 roadway swale, Wetland B, and adjacent active agricultural field from SP4, looking west.

Photograph 22. View of Wetland B near the western investigation area limits where no OHWM or bed and bank were observed, looking east.

Photograph 23. View of a painted turtle (*Chrysemys picta*) found in the standing water of Wetland B, north of CV 066-074-51.61. Fish, amphibians, and reptiles were directly observed within and adjacent to both culverts found on site.

Photograph 24. View of Wetland C from N CR 500 W, looking toward SR 66 and CV 066-074-51.62, looking northeast.

Photograph 25. View of SP5, representing Wetland C, within the eastern roadway swale of N CR 500 W, south of CV 066-074-51.62, looking east.

Photograph 26. View of SP5, representing Wetland C, which was dominated by rice cut grass (*Leersia oryzoides*) and wingstem (*Verbesina alternifolia*), looking north.

Photograph 27. View of SP5, which was found within a managed depressional swale and receives hydrology from UNT to Willow Pond Ditch, looking southeast.

Photograph 28. View from the northern limits of Wetland C towards CV 066-074-51.62 and the terminus of UNT to Willow Pond Ditch, looking north.

Photograph 29. View of the northern limits of Wetland C where UNT to Willow Pond Ditch, within the roadway swale, loses bed and bank and becomes completely vegetated, looking south.

Photograph 30. View of the boundary between UNT to Willow Pond Ditch and Wetland C, south of SR 66 and east of N CR 500 W, looking east.

Photograph 31. View of the upland eastern bank of Wetland C dominated by silver maple (*Acer saccharinum*), Japanese bristlegrass (*Setaria faberi*) and hophornbeam copperleaf (*Acalypha ostryifolia*), looking east.

Photograph 32. View of the top slope upland area between Wetland C and the active agricultural field, represented by SP6, looking east.

Photograph 33. View of the soil profile of SP6 which did not meet any hydric soil indicators.

Photograph 34. View of SP6 where no evidence of wetland hydrology was observed, looking south.

Photograph 35. View of the right-of-way south of SR 66 and east of N CR 500 W, where no evidence of a roadway swale or hydrophytic vegetation was observed, looking east.

Photograph 36. View of upland SP7, south of SR 66 between the roadway and active agricultural field, looking east.

Photograph 37. View of SP7, which was dominated by Japanese bristlegrass (*Setaria faberi*), Johnson grass (*Sorghum halepense*), and fall panic grass (*Panicum dichotomiflorum*), looking south.

Photograph 38. View of SP7, where no evidence of wetland hydrology was observed, and near the eastern investigation limits, looking west.

Photograph 39. View of the soil profile of SP7 which did not meet any hydric soil indicator.

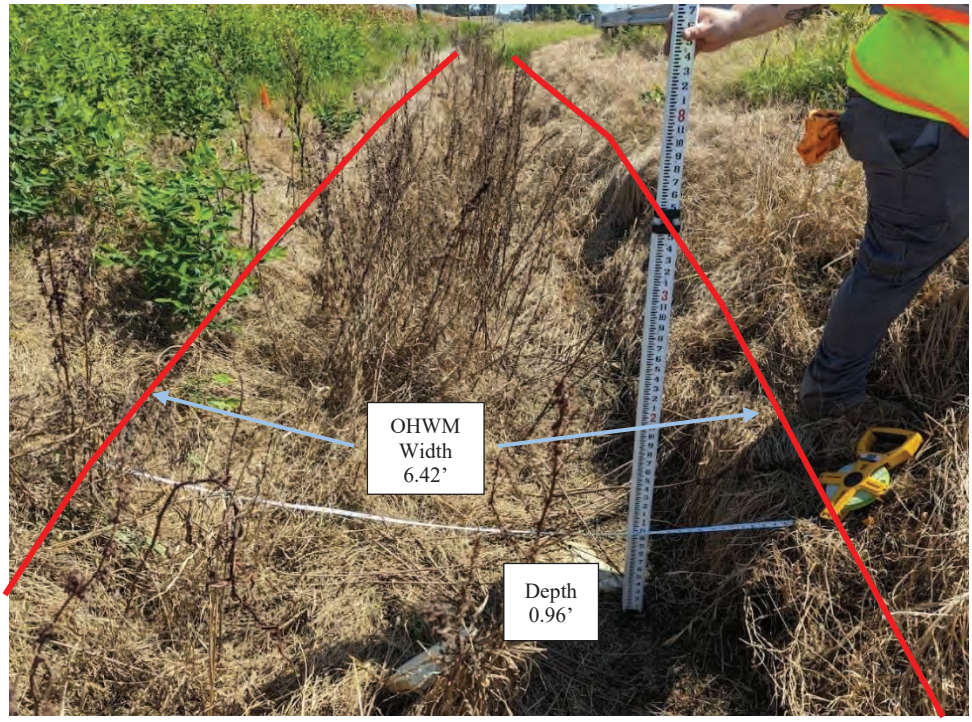
Photograph 40. View of the UNT to Willow Pond Ditch channel as it enters the eastern investigation limits, north of SR 66, looking east.

Photograph 41. View of UNT to Willow Pond Ditch, which drains to the west within the northern SR 66 roadway swale between the roadway and agricultural field, looking west.

Photograph 42. View of the unvegetated stream bed and substrate of UNT to Willow Pond Ditch which included sand, silt, and gravel and contained no flow during the time of the field investigation.

Photograph 43. View of UNT to Willow Pond Ditch with evidence of drift deposits and extreme sedimentation under SR 66 and CV 066-074-51.62, looking southwest.

Photograph 44. View of the slab and abutments of CV 066-074-51.62, where no evidence of bird or bat use was observed, looking southeast.



Photograph 45. The upstream view of the OHWM for UNT to Willow Pond Ditch, taken upstream and away from the influence of CV 066-074-51.62 (37.902116, -87.150336), looking east.

Photograph 46. The downstream view of the OHWM taken for UNT to Willow Pond Ditch, which contains minor intermittent vegetation below scour marks, looking west.

Photograph 47. View of RSD 1, south of SR 66, near the western investigation limits which is dominated by upland vegetation, looking west.

Photograph 48. View of the nearly flat RSD 1 as it slopes east between SR 66 and the adjacent active agricultural field, looking east.

Photograph 49. View of RSD 1 west of N CR 500 W where no hydrophytic vegetation was observed, looking west.

Photograph 50. View of RSD 1, west of CV 066-074-51.61, looking east.

Photograph 51. View of the confluence of RSD 1 and Wetland A, south of CV 066-074-51.61 and SR 66, looking west.

Photograph 52. View of N CR 500 W, north of SR 66, looking north.

Photograph 53. View of Wetland B, CV 066-074-51.61, and the agricultural field from N CR 500 W, north of SR 66, looking southwest.

U.S. Army Corps of Engineers
WETLAND DETERMINATION DATA SHEET – Midwest Region
See ERDC/EL TR-10-16; the proponent agency is CECW-CO-R

OMB Control #: 0710-0024, Exp:11/30/2024
Requirement Control Symbol EXEMPT:
(Authority: AR 335-15, paragraph 5-2a)

Project/Site: SR 66 Small Structure Replacement (DES#2100830 & 2100831) City/County: Spencer County Sampling Date: 9/14/2023

Applicant/Owner: INDOT State: IN Sampling Point: SP1

Investigator(s): Ken Safranek, Rose Snyder; ASC Group, Inc. Section, Township, Range: S23 T7S R7W

Landform (hillside, terrace, etc.): Swale/Depression Local relief (concave, convex, none): Concave

Slope (%): 1-3 Lat: 37.901884 Long: -87.150771 Datum: WGS84

Soil Map Unit Name: Ragsdale silt loam (Ra) NWI classification: R5UBFx

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:
The Sample Point represents Wetland A which was found in the roadway drainage swale north of SR 66, turning south under culvert CV 066.074-51.61, west of N County Road 500 W.

VEGETATION – Use scientific names of plants.

Tree Stratum (Plot size: 30)	Absolute % Cover	Dominant Species?	Indicator Status
1.			
2.			
3.			
4.			
5.			
	=Total Cover		
Sapling/Shrub Stratum (Plot size: 15)			
1.			
2.			
3.			
4.			
5.			
	=Total Cover		
Herb Stratum (Plot size: 5)			
1. *Typha angustifolia*	50	Yes	OBL
2. *Leersia oryzoides*	20	Yes	OBL
3. *Asclepias incarnata*	15	No	OBL
4. *Urtica dioica*	15	No	FACW
5.			
6.			
7.			
8.			
9.			
10.			
	100 =Total Cover		
Woody Vine Stratum (Plot size: 30)			
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: 100.0% (A/B)

Prevalence Index worksheet:

Total % Cover of:		Multiply by:	
OBL species	85	x 1 =	85
FACW species	15	x 2 =	30
FAC species	0	x 3 =	0
FACU species	0	x 4 =	0
UPL species	0	x 5 =	0
Column Totals:	100 (A)		115 (B)

Prevalence Index = B/A = 1.15

Hydrophytic Vegetation Indicators:

X 1 - Rapid Test for Hydrophytic Vegetation
X 2 - Dominance Test is >50%
X 3 - Prevalence Index is ≤3.0[1]
____ 4 - 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.)
The Sample Point passes the Rapid Test, Dominance Test, and Prevalence Index for hydrophytic vegetation.

SOIL

Sampling Point: SP1

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
0-6	10YR 3/2	87	10YR 3/6	3	C	PL	Loamy/Clayey	Prominent redox concentrations
			10YR 5/6	10	C	M		Prominent redox concentrations
6-20	10YR 4/1	85	10YR 4/6	15	C	M	Loamy/Clayey	Prominent redox concentrations

[1]Type: C=Concentration, D=Depletion, RM=Reduced Matrix, MS=Masked 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)
- X 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)
- ___ Dark Surface (S7)
- ___ Loamy Mucky Mineral (F1)
- ___ Loamy Gleyed Matrix (F2)
- X Depleted Matrix (F3)
- X 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)
- ___ Red Parent Material (F21)
- ___ Very Shallow Dark Surface (F22)
- ___ 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:

The Sample Point meets the Depleted Below Dark Surface, A11, Depleted Matrix, F3, and Redox Dark Surface, F6, hydric soil indicators.

HYDROLOGY

Wetland Hydrology Indicators:

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

- ___ 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)
- X 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 X	No ___	Depth (inches): 12
Saturation Present? (includes capillary fringe)	Yes X	No ___	Depth (inches): 7

Wetland Hydrology Present? **Yes** X **No** ___

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

Remarks:

Several primary and secondary indicators of wetland hydrology were observed at the Sample Point.

U.S. Army Corps of Engineers
WETLAND DETERMINATION DATA SHEET – Midwest Region
See ERDC/EL TR-10-16; the proponent agency is CECW-CO-R

OMB Control #: 0710-0024, Exp:11/30/2024
Requirement Control Symbol EXEMPT:
(Authority: AR 335-15, paragraph 5-2a)

Project/Site: SR 66 Small Structure Replacement (DES#2100830) City/County: Spencer County Sampling Date: 9/14/2023

Applicant/Owner: INDOT State: IN Sampling Point: SP2

Investigator(s): Ken Safranek, Rose Snyder; ASC Group, Inc. Section, Township, Range: S23 T7S R7W

Landform (hillside, terrace, etc.): Top Slope Terrace Local relief (concave, convex, none): None

Slope (%): 1-3 Lat: 37.901980 Long: -87.150809 Datum: Flat

Soil Map Unit Name: Ragsdale silt loam (Ra) NWI classification: R5UBFx

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:
The Sample Point represents the maintained RSD 1, south of SR 66, and at a top slope terrace directly adjacent to Wetland A.

VEGETATION – Use scientific names of plants.

Tree Stratum (Plot size: 30)	Absolute % Cover	Dominant Species?	Indicator Status
1.			
2.			
3.			
4.			
5.			
	=Total Cover		
Sapling/Shrub Stratum (Plot size: 15)			
1.			
2.			
3.			
4.			
5.			
	=Total Cover		
Herb Stratum (Plot size: 5)			
1. *Xanthium strumarium*	30	Yes	FAC
2. *Stetaria faberi*	30	Yes	FACU
3. *Zea mays*	10	No	UPL
4. *Solanum carolinense*	5	No	FACU
5. *Sorghum halepense*	5	No	FACU
6. *Schedonorus arundinaceus*	5	No	FACU
7.			
8.			
9.			
10.			
	85 =Total Cover		
Woody Vine Stratum (Plot size: 30)			
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: 50.0% (A/B)

Prevalence Index worksheet:

Total % Cover of:		Multiply by:	
OBL species	0	x 1 =	0
FACW species	0	x 2 =	0
FAC species	30	x 3 =	90
FACU species	45	x 4 =	180
UPL species	10	x 5 =	50
Column Totals:	85 (A)		320 (B)
Prevalence Index = B/A =			3.76

Hydrophytic Vegetation Indicators:

___ 1 - Rapid Test for Hydrophytic Vegetation
___ 2 - Dominance Test is >50%
___ 3 - Prevalence Index is ≤3.0[1]
___ 4 - 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.)
The Sample Point does not pass any test for hydrophytic vegetation.

SOIL

Sampling Point: SP2

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
0-7	10YR 4/3	100					Loamy/Clayey	
7-16	10YR 4/2	98	10YR 4/3	2	C	M	Loamy/Clayey	Faint redox concentrations

[1]Type: C=Concentration, D=Depletion, RM=Reduced Matrix, MS=Masked 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)
- ___ Dark Surface (S7)
- ___ 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)
- ___ Red Parent Material (F21)
- ___ Very Shallow Dark Surface (F22)
- ___ 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:

The Sample Point does not meet any hydric soil indicator.

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)
- X 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:

One secondary indicator of wetland hydrology, Drainage Patterns, B10, was observed at the Sample Point. However, no other evidence of wetland hydrology was found, thus, the Sample Point does not contain wetland hydrology.

U.S. Army Corps of Engineers
WETLAND DETERMINATION DATA SHEET – Midwest Region
See ERDC/EL TR-10-16; the proponent agency is CECW-CO-R

OMB Control #: 0710-0024, Exp:11/30/2024
Requirement Control Symbol EXEMPT:
(Authority: AR 335-15, paragraph 5-2a)

Project/Site: SR 66 Small Structure Replacement (DES#2100830 & 2100831) City/County: Spencer County Sampling Date: 9/14/2023

Applicant/Owner: INDOT State: IN Sampling Point: SP3

Investigator(s): Ken Safranek, Rose Snyder; ASC Group, Inc. Section, Township, Range: S14 T7S R7W

Landform (hillside, terrace, etc.): Top Slope Local relief (concave, convex, none): Concave

Slope (%): 1-3 Lat: 37.902148 Long: -87.151032 Datum: WGS84

Soil Map Unit Name: Ragsdale silt loam (Ra) NWI classification: R5UBFx

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:
The Sample Point represents Wetland B within the northern roadway swale of SR 66. The wetland flows through a box culvert under SR 66 and provides hydrology to Wetland A.

VEGETATION – Use scientific names of plants.

Tree Stratum (Plot size: 30)	Absolute % Cover	Dominant Species?	Indicator Status
1.			
2.			
3.			
4.			
5.			
	=Total Cover		
Sapling/Shrub Stratum (Plot size: 15)			
1.			
2.			
3.			
4.			
5.			
	=Total Cover		
Herb Stratum (Plot size: 5)			
1. *Typha angustifolia*	30	Yes	OBL
2. *Asclepias incarnata*	15	Yes	OBL
3. *Setaria pumila*	10	No	FAC
4. *Amaranthus spinosus*	5	No	FACU
5. *Euphorbia prostrata*	5	No	FACU
6.			
7.			
8.			
9.			
10.			
	65 =Total Cover		
Woody Vine Stratum (Plot size: 30)			
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: 100.0% (A/B)

Prevalence Index worksheet:

Total % Cover of:		Multiply by:	
OBL species	45	x 1 =	45
FACW species	0	x 2 =	0
FAC species	10	x 3 =	30
FACU species	10	x 4 =	40
UPL species	0	x 5 =	0
Column Totals:	65 (A)		115 (B)

Prevalence Index = B/A = 1.77

Hydrophytic Vegetation Indicators:

____ 1 - Rapid Test for Hydrophytic Vegetation
X 2 - Dominance Test is >50%
X 3 - Prevalence Index is ≤3.0[1]
____ 4 - 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.)
The Sample Point passes the Dominance Test and the Prevalence Index for hydrophytic vegetation.

SOIL

Sampling Point: SP3

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
0-10	10YR 4/2	70	10YR 5/6	30	C	M	Loamy/Clayey	Prominent redox concentrations
10-19	10YR 4/2	90	10YR 5/4	10	C	M	Loamy/Clayey	Distinct redox concentrations

[1]Type: C=Concentration, D=Depletion, RM=Reduced Matrix, MS=Masked 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)
___ Dark Surface (S7)
___ 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)
___ Red Parent Material (F21)
___ Very Shallow Dark Surface (F22)
___ 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:
The Sample Point meets the Depleted Matrix, F3, hydric soil indicator.

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)
x Sediment Deposits (B2)
x 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)

X Surface Soil Cracks (B6)
X Drainage Patterns (B10)
X 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 X No ____ Depth (inches): 15
Saturation Present? (includes capillary fringe) Yes ____ No X Depth (inches): ____

Wetland Hydrology Present? **Yes** X **No** ____

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

Remarks:
Several primary and secondary indicators of wetland hydrology were observed at the Sample Point. The primary hydrological input is stormwater runoff from SR 66

U.S. Army Corps of Engineers
WETLAND DETERMINATION DATA SHEET – Midwest Region
See ERDC/EL TR-10-16; the proponent agency is CECW-CO-R

OMB Control #: 0710-0024, Exp:11/30/2024
Requirement Control Symbol EXEMPT:
(Authority: AR 335-15, paragraph 5-2a)

Project/Site: SR 66 Small Structure Replacement (DES#2100830) City/County: Spencer County Sampling Date: 9/14/2023

Applicant/Owner: INDOT State: IN Sampling Point: SP4

Investigator(s): Ken Safranek, Rose Snyder; ASC Group, Inc. Section, Township, Range: S14 T7S R7W

Landform (hillside, terrace, etc.): Shoulder Slope Local relief (concave, convex, none): Convex

Slope (%): 1-3 Lat: 37.902176 Long: -87.151228 Datum: WGS84

Soil Map Unit Name: Ragsdale silt loam (Ra) NWI classification: R5UBFx

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:
The Sample Point represents the minor maintained shoulder slope north of Wetland B within the ROW and adjacent to an active agricultural field.

VEGETATION – Use scientific names of plants.

Tree Stratum (Plot size: 30)	Absolute % Cover	Dominant Species?	Indicator Status
1.			
2.			
3.			
4.			
5.			
	=Total Cover		
Sapling/Shrub Stratum (Plot size: 15)			
1.			
2.			
3.			
4.			
5.			
	=Total Cover		
Herb Stratum (Plot size: 5)			
1. *Sorghum halepense*	35	Yes	FACU
2. *Schedonorus arundinaceus*	30	Yes	FACU
3. *Amaranthus spinosus*	15	No	FACU
4. *Glycine max*	15	No	UPL
5.			
6.			
7.			
8.			
9.			
10.			
	95 =Total Cover		
Woody Vine Stratum (Plot size: 30)			
1.			
2.			
	=Total Cover		

Dominance Test worksheet:

Number of Dominant Species That Are OBL, FACW, or FAC: 0 (A)

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

Percent of Dominant Species That Are OBL, FACW, or FAC: 0.0% (A/B)

Prevalence Index worksheet:

Total % Cover of:		Multiply by:	
OBL species	0	x 1 =	0
FACW species	0	x 2 =	0
FAC species	0	x 3 =	0
FACU species	80	x 4 =	320
UPL species	15	x 5 =	75
Column Totals:	95 (A)		395 (B)

Prevalence Index = B/A = 4.16

Hydrophytic Vegetation Indicators:

____ 1 - Rapid Test for Hydrophytic Vegetation
____ 2 - Dominance Test is >50%
____ 3 - Prevalence Index is ≤3.0[1]
____ 4 - 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.)
The Sample Point does not pass any test for hydrophytic vegetation.

SOIL

Sampling Point: SP4

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
0-12	10YR 3/3	100					Loamy/Clayey	
12-17	10YR 4/3	95	10YR 4/6	5	C	M	Loamy/Clayey	Distinct redox concentrations

[1]Type: C=Concentration, D=Depletion, RM=Reduced Matrix, MS=Masked 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)
- ___ Dark Surface (S7)
- ___ 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)
- ___ Red Parent Material (F21)
- ___ Very Shallow Dark Surface (F22)
- ___ 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:

The Sample Point does not meet any hydric soil indicator.

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 ____ Depth (inches): ____

Water Table Present? Yes ____ No ____ Depth (inches): ____

Saturation Present? (includes capillary fringe) Yes ____ No ____ Depth (inches): ____

Wetland Hydrology Present? **Yes** ____ **No** X

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

Remarks:

No evidence of wetland hydrology was observed at the Sample Point.

U.S. Army Corps of Engineers
WETLAND DETERMINATION DATA SHEET – Midwest Region
See ERDC/EL TR-10-16; the proponent agency is CECW-CO-R

OMB Control #: 0710-0024, Exp:11/30/2024
Requirement Control Symbol EXEMPT:
(Authority: AR 335-15, paragraph 5-2a)

Project/Site: SR 66 Small Structure Replacement (DES#2100830 & 2100831) City/County: Spencer County Sampling Date: 9/14/2023

Applicant/Owner: INDOT State: IN Sampling Point: SP5

Investigator(s): Ken Safranek, Rose Snyder; ASC Group, Inc. Section, Township, Range: S24 T7S R7W

Landform (hillside, terrace, etc.): Swale/Depression Local relief (concave, convex, none): Concave

Slope (%): 1-3 Lat: 37.901842 Long: -87.150641 Datum: WGS84

Soil Map Unit Name: Ragsdale silt loam (Ra) NWI classification: R5UBFx

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:
The Sample Point represents Wetland C which was found in the roadway drainage swale south of SR 66 and east of N County Road 500 W.

VEGETATION – Use scientific names of plants.

Tree Stratum (Plot size: 30)	Absolute % Cover	Dominant Species?	Indicator Status
1.			
2.			
3.			
4.			
5.			
	=Total Cover		
Sapling/Shrub Stratum (Plot size: 15)			
1.			
2.			
3.			
4.			
5.			
	=Total Cover		
Herb Stratum (Plot size: 5)			
1. *Leersia oryzoides*	50	Yes	OBL
2. *Verbesina alternifolia*	20	Yes	FACW
3. *Echinochloa crus-galli*	10	No	FACW
4. *Persicaria punctata*	10	No	OBL
5. *Ludwigia palustris*	8	No	OBL
6.			
7.			
8.			
9.			
10.			
	98 =Total Cover		
Woody Vine Stratum (Plot size: 30)			
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: 100.0% (A/B)

Prevalence Index worksheet:

Total % Cover of:		Multiply by:	
OBL species	68	x 1 =	68
FACW species	30	x 2 =	60
FAC species	0	x 3 =	0
FACU species	0	x 4 =	0
UPL species	0	x 5 =	0
Column Totals:	98 (A)		128 (B)

Prevalence Index = B/A = 1.31

Hydrophytic Vegetation Indicators:

X 1 - Rapid Test for Hydrophytic Vegetation
X 2 - Dominance Test is >50%
X 3 - Prevalence Index is ≤3.0[1]
____ 4 - 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.)
The Sample Point passes the Rapid Test, Dominance Test, and Prevalence Index for hydrophytic vegetation.

SOIL

Sampling Point: SP5

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
0-10	10YR 4/2	75	10YR 4/6	5	C	M	Loamy/Clayey	Prominent redox concentrations
			10YR 5/2	20	D	M		
10-18	10YR 5/2	72	10YR 4/2	10	D	M	Loamy/Clayey	
			10YR 5/6	15	C	M		Prominent redox concentrations
			10YR 5/8	3	C	M		Prominent redox concentrations

[1]Type: C=Concentration, D=Depletion, RM=Reduced Matrix, MS=Masked 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)
___ Dark Surface (S7)
___ 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)
___ Red Parent Material (F21)
___ Very Shallow Dark Surface (F22)
___ 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:
The Sample Point meets the Depleted Matrix, F3, hydric soil indicator.

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)
X 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): 11

Wetland Hydrology Present? **Yes** X **No** ___

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

Remarks:
Several primary and secondary indicators of wetland hydrology were observed at the Sample Point.

U.S. Army Corps of Engineers
WETLAND DETERMINATION DATA SHEET – Midwest Region
See ERDC/EL TR-10-16; the proponent agency is CECW-CO-R

OMB Control #: 0710-0024, Exp:11/30/2024
Requirement Control Symbol EXEMPT:
(Authority: AR 335-15, paragraph 5-2a)

Project/Site: SR 66 Small Structure Replacement (DES#2100830) City/County: Benton County Sampling Date: 9/14/2023

Applicant/Owner: INDOT State: IN Sampling Point: SP6

Investigator(s): Ken Safranek, Rose Snyder; ASC Group, Inc. Section, Township, Range: S24 T7S R7W

Landform (hillside, terrace, etc.): Top Slope Local relief (concave, convex, none): Convex

Slope (%): 1-3 Lat: 37.901747 Long: -87.150614 Datum: WGS84

Soil Map Unit Name: Ragsdale silt loam (Ra) NWI classification: R5UBFx

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:
The Sample Point represents the maintained upland top slope area east of Wetland C within the ROW and directly adjacent to an active row cropped agricultural field.

VEGETATION – Use scientific names of plants.

Tree Stratum (Plot size: 30)	Absolute % Cover	Dominant Species?	Indicator Status
1.			
2.			
3.			
4.			
5.			
	=Total Cover		
Sapling/Shrub Stratum (Plot size: 15)			
1. *Acer saccharinum*	10	Yes	FACW
2.			
3.			
4.			
5.			
	10 =Total Cover		
Herb Stratum (Plot size: 5)			
1. *Setaria faberi*	45	Yes	FACU
2. *Acalypha ostryifolia*	15	Yes	UPL
3. *Digitaria sanguinalis*	12	No	FACU
4. *Ipomoea hederacea*	10	No	FAC
5. *Sorghum halepense*	10	No	FACU
6.			
7.			
8.			
9.			
10.			
	92 =Total Cover		
Woody Vine Stratum (Plot size: 30)			
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: 3 (B)

Percent of Dominant Species That Are OBL, FACW, or FAC: 33.3% (A/B)

Prevalence Index worksheet:

Total % Cover of:		Multiply by:	
OBL species	0	x 1 =	0
FACW species	10	x 2 =	20
FAC species	10	x 3 =	30
FACU species	67	x 4 =	268
UPL species	15	x 5 =	75
Column Totals:	102 (A)		393 (B)
Prevalence Index = B/A =			3.85

Hydrophytic Vegetation Indicators:

____ 1 - Rapid Test for Hydrophytic Vegetation
____ 2 - Dominance Test is >50%
____ 3 - Prevalence Index is ≤3.0[1]
____ 4 - 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.)
The Sample Point does not pass any test for hydrophytic vegetation.

SOIL

Sampling Point: SP6

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
0-7	10YR 4/3	100					Loamy/Clayey	
7-18	10YR 4/3	70	10YR 5/4	30	C	M	Loamy/Clayey	Faint redox concentrations

[1]Type: C=Concentration, D=Depletion, RM=Reduced Matrix, MS=Masked 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)
- ___ Dark Surface (S7)
- ___ 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)
- ___ Red Parent Material (F21)
- ___ Very Shallow Dark Surface (F22)
- ___ 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:

The Sample Point does not meet any hydric soil indicator.

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:

No evidence of wetland hydrology was observed at the Sample Point.

U.S. Army Corps of Engineers
WETLAND DETERMINATION DATA SHEET – Midwest Region
See ERDC/EL TR-10-16; the proponent agency is CECW-CO-R

OMB Control #: 0710-0024, Exp:11/30/2024
Requirement Control Symbol EXEMPT:
(Authority: AR 335-15, paragraph 5-2a)

Project/Site: SR 66 Small Structure Replacement (DES#2100830 & 2100831) City/County: Spencer County Sampling Date: 9/14/2023

Applicant/Owner: INDOT State: IN Sampling Point: SP7

Investigator(s): Ken Safranek, Rose Snyder; ASC Group, Inc. Section, Township, Range: S24 T7S R7W

Landform (hillside, terrace, etc.): Toe Slope Local relief (concave, convex, none): Flat

Slope (%): 2-4 Lat: 37.901972 Long: -87.149734 Datum: WGS84

Soil Map Unit Name: Ragsdale silt loam (Ra) NWI classification: None

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:
The Sample Point represents the maintained southern ROW between SR 66 and an agricultural field.

VEGETATION – Use scientific names of plants.

Tree Stratum (Plot size: 30)	Absolute % Cover	Dominant Species?	Indicator Status
1.			
2.			
3.			
4.			
5.			
	=Total Cover		
Sapling/Shrub Stratum (Plot size: 15)			
1.			
2.			
3.			
4.			
5.			
	=Total Cover		
Herb Stratum (Plot size: 5)			
1. *Setaria faberi*	30	Yes	FACU
2. *Sorghum halepense*	25	Yes	FACU
3. *Panicum dichotomiflorum*	20	Yes	FACW
4. *Oxalis stricta*	15	No	FACU
5. *Solanum carolinense*	5	No	FACU
6. *Euphorbia dentata*	5	No	UPL
7.			
8.			
9.			
10.			
	100 =Total Cover		
Woody Vine Stratum (Plot size: 30)			
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: 3 (B)

Percent of Dominant Species That Are OBL, FACW, or FAC: 33.3% (A/B)

Prevalence Index worksheet:

Total % Cover of:		Multiply by:	
OBL species	0	x 1 =	0
FACW species	20	x 2 =	40
FAC species	0	x 3 =	0
FACU species	75	x 4 =	300
UPL species	5	x 5 =	25
Column Totals:	100 (A)		365 (B)
Prevalence Index = B/A =			3.65

Hydrophytic Vegetation Indicators:

____ 1 - Rapid Test for Hydrophytic Vegetation
____ 2 - Dominance Test is >50%
____ 3 - Prevalence Index is ≤3.0[1]
____ 4 - 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.)
The Sample Point does not pass any test for hydrophytic vegetation.

SOIL

Sampling Point: SP7

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
0-3	10YR 4/2	100					Loamy/Clayey	
3-12	10YR 4/3	97	10YR 5/3	3	C	M	Loamy/Clayey	Faint redox concentrations
12-18	10YR 5/2	80	10YR 4/3	15	C	M	Loamy/Clayey	Faint redox concentrations
			10YR 5/4	5	C	M		Distinct redox concentrations

[1]Type: C=Concentration, D=Depletion, RM=Reduced Matrix, MS=Masked 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)
___ Dark Surface (S7)
___ 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)
___ Red Parent Material (F21)
___ Very Shallow Dark Surface (F22)
___ 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:
The Sample Point does not meet any hydric soil indicator.

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:
No evidence of primary or secondary wetland hydrology indicators were observed at the Sample Point.

PRELIMINARY JURISDICTIONAL DETERMINATION (PJD) FORM

BACKGROUND INFORMATION

A. REPORT COMPLETION DATE FOR PJD: 2/16/2024

B. NAME AND ADDRESS OF PERSON REQUESTING PJD: Ken Safranek, 9376 Castlegate Drive, Indianapolis, IN 46256

C. DISTRICT OFFICE, FILE NAME, AND NUMBER:

D. PROJECT LOCATION(S) AND BACKGROUND INFORMATION:

The proposed projects (Indiana Department of Transportation [INDOT] Des. Nos. 2100830 and 2100831) are located at the intersection of State Road (SR) 66 and North (N) County Road (CR) 500 West (W) in Luce and Ohio townships, Spencer County, Indiana (Figures 1–8). These culvert replacements and minor relocations will be completed synchronously due to their close proximity. The need for this project is due to the deterioration of the existing structures (Structure Nos. CV 066-074-51.62, an 8- foot [ft] by 2.5 ft rise reinforced concrete box culvert, 34 ft in length [INDOT Des. No. 2100831], and CV 066-074-51.61, an 8 ft by 4 ft, rise reinforced concrete box culvert, 34- ft in length [INDOT Des. No. 2100830]). If no action is taken, the culverts will continue to deteriorate which will induce emergency repairs.

The combined project also consists of removal and replacement of existing guardrails, a hot mix asphalt (HMA) overlay, and possible embankment erosion repairs. A portion of the work on Structure No. CV 066-074-51.62 will take place below the ordinary high water mark (OHWM) of an unnamed tributary (UNT) to Willow Pond Ditch. The purpose of each project is to reset the condition of both culverts to a “good” rating. This project will require the acquisition of less than 2.0 acres (ac) of temporary and permanent right-of-way (ROW).

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

State: IN County/parish/borough: Spencer Township: Luce and Ohio

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

Lat.: 37.902059 Long.: -87.150698

Universal Transverse Mercator: 16N

Name of nearest waterbody: Willow Pond Ditch

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

☐ Office (Desk) Determination. Date:

☐ Field Determination. Date:

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

Site number	Latitude (decimal degrees)	Longitude (decimal degrees)	Estimated amount of aquatic resource in review area (acreage and linear feet, if applicable)	Type of aquatic resource (i.e., wetland vs. non-wetland waters)	Geographic authority to which the aquatic resource "may be" subject (i.e., Section 404 or Section 10/404)
Wetland A	37.901713	-87.150780	0.135 acre	Wetland	Section 404
Wetland B	37.902173	-87.151697	0.025 acre	Wetland	Section 404
Wetland C	37.901705	-87.150636	0.018 acre	Wetland	Section 404
UNT to Willow Pond Ditch	37.902116	-87.150336	0.153 acre 1,039 lft	Non-Wetland Waters	Section 404

1) The Corps of Engineers believes that there may be jurisdictional aquatic resources in the review area, and the requestor of this PJD is hereby advised of his or her option to request and obtain an approved JD (AJD) for that review area based on an informed decision after having discussed the various types of JDs and their characteristics and circumstances when they may be appropriate.

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

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

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

☒ Maps, plans, plots or plat submitted by or on behalf of the PJD requestor:
Map: Aerial photograph showing the stream, wetlands, RSD, sample points, and photograph locations for the SR 66 Culvert Replacement (INDOT Des. Nos. 2100830 and 2100831) investigation area.

☒ Data sheets prepared/submitted by or on behalf of the PJD requestor.
☐ Office concurs with data sheets/delineation report.
☐ Office does not concur with data sheets/delineation report. Rationale:_____

☐ Data sheets prepared by the Corps:_____

☐ Corps navigable waters' study:_____

☒ U.S. Geological Survey Hydrologic Atlas: (USGS, NHD 2023)
☒ USGS NHD data.
☒ USGS 8 and 12 digit HUC maps.

☒ U.S. Geological Survey map(s). Cite scale & quad name: Richland City, IN quadrangle (USGS 7.5')

☒ Natural Resources Conservation Service Soil Survey. Citation: Spencer County (USDA, NRCS 2023)

☒ National wetlands inventory map(s). Cite name: US Fish and Wildlife Service Wetlands Online Mapper web site (USFWS 2023)

☐ State/local wetland inventory map(s):_____

☐ FEMA/FIRM maps _____

☐ 100-year Floodplain Elevation is:

☒ Photographs: ☒ Aerial (Name & Date): 2023 Aerial
or ☒ Other (Name & Date): September 14, 2023 Site Photographs

☐ Previous determination(s). File no. and date of response letter:_____

☒ Other information (please specify): IDNR Floodplain Maps (2023)

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.

_____	*Kenneth Safranek 2/16/2024*
Signature and date of Regulatory staff member completing PJD	Signature and date of person requesting PJD (REQUIRED, unless obtaining the signature is impracticable)[1]

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

Floodplain Analysis & Regulatory Assessment (FARA)

Indiana Department of Natural Resources

Point of Interest

Base Flood Elevation Point

FLD_ZONE, SOURCE_DNR, ZONE_SUBTY

Not Mapped

Long: **-87.1506853723524**

Lat: **37.902046391906325**

The information provided below is based on the point of interest shown in the map above.

County: **Spencer**

Stream Name:
Willow Pond Ditch

Approximate Ground Elevation: **402.4 feet (NAVD88)**

Base Flood Elevation: **Not Available**

Drainage Area: **Not Available**

Best Available Flood Hazard Zone: **Not Mapped**

National Flood Hazard Zone: **Not Mapped**

Is a Flood Control Act permit from the DNR needed for this location? **See following pages**

Is a local floodplain permit needed for this location? **Contact your local Floodplain Administrator-**

Floodplain Administrator: **Kay Irwin, Floodplain Administrator**

Community Jurisdiction: **Spencer County, County proper**

Phone: **(812) 649-6010**

Email: **spencerplan@psci.net**

US Army Corps of Engineers District: **Louisville**

Date Generated: 12/21/2023

APPENDIX G: PUBLIC INVOLVEMENT

Notice of Survey/Entry Letter

Sample Notice of Survey/Entry Letter

HWC ENGINEERING

Confidence in the built environment.
135 N. Pennsylvania, Suite 2800
Indianapolis, Indiana 46204
www.hwcengineering.com

July 25, 2023

RE: Des No.: 2100830/2100831
Road: SR 66 in Spencer County
Description: Small Structure Replacements

Notice of Survey/Entry

Dear Property Owner:

The Indiana Department of Transportation (INDOT) will perform a survey for the proposed project. A portion of this survey work may be performed on your property in order to provide information to design engineers for project design. The survey work will include mapping the location of features such as trees, buildings, fences, drives, ground elevations, etc. The survey is needed for the proper planning and design of this project.

At this stage we generally do not know what effect, if any, our project may eventually have on your property. If we determine later that your property is involved, we will contact you with additional information.

INDOT employees or subcontractors will show you their identification, if you are available, before coming onto your property.

If you own but are not the tenant of this property (i.e. rental, sharecrop), please inform us so that we may also contact the actual tenant of the property prior to commencement of our work.

If you have any questions or concerns regarding our proposed survey work or schedule, please contact one of the following listed below. This contact information is as follows:

General Questions:
Junette Toe, PE
Roadway Project Manager
HNTB Corporation
111 Monument Circle, Suite 1200
Indianapolis, IN 46204
463-777-3700
jtoe@HNTB.com

Survey Questions:
Austin Yake, PS
Survey Project Manager
HWC Engineering, Inc.
135 N. Pennsylvania Street, Suite 2800
Indianapolis, IN 46204
812-787-0969
ayake@hwcengineering.com

Thank you in advance for your cooperation in this matter.

Sincerely,

Austin K Yake

Austin Yake, PS
Survey Project Manager

(https://www.in.gov/indot/2888.htm)

If you have received a Notice of Survey from INDOT or the Environmental Assessment Section, you may be wondering what it means. In the early stages of a project's development, INDOT must collect as much information as possible to ensure that sound decisions are made in designing the project. Before entering onto private property to collect that data, INDOT is required to notify landowners that personnel will be in the area and may need to enter onto their property. INDOT's authority to enter onto any property in Indiana is addressed in the Indiana Code.

Receipt of a Notice of Survey does not necessarily mean that INDOT will be buying property from you. It doesn't even necessarily mean that the project will involve your property at all. Since the Notice of Survey is sent out in the very early stages and since INDOT wants to collect data within and surrounding the project's limits, more landowners are contacted than will actually fall within the eventual project limits. It may also be that your property falls within the project limits but we will not need to purchase property from you to make improvements to the roadway. Another thing to keep in mind is that when you receive a Notice of Survey, very few specifics have been worked out and actual construction of the project is at least three years away.

Before INDOT begins a project that requires it to purchase property from landowners, INDOT must first offer the opportunity for a public hearing. If you were on the list of people who received a Notice of Survey, you should also receive a notice informing you of your opportunity to request a public hearing. These notices will also be published in your local papers so that interested individuals who are not adjacent to the project will also have the opportunity to request a public hearing.

If a public hearing is to be held, INDOT will publicize the date, location, and time. INDOT will present detailed project information at the public hearing, comments will be taken from the public in spoken and written form, and question and answer sessions will be offered. Based on the feedback INDOT receives from the public, a project can be modified and improved to better serve the public.

So, if you have received a Notice of Survey, remember:

1. You do not need to take any action at this time. It is merely letting you know that people in orange vests are going to be in your neighborhood.

2. The project is still in its very early planning stage.

3. Construction is a long way off.

4. You will be notified of your opportunity to comment on the project at a later date.

	ParcelId	OwnerName	OwnerAddress1	OwnerAddress2	OwnerAddress3	OwnerCityStZip	Deed Inst. Or Book/Page	Date	Notes
1	74-14-23-100-007.000-016	D & J REXING PROPERTIES, LLC	9144 OLD BOONVILLE HWY			CHANDLER, IN 47610			
3	74-14-24-200-001.000-017	Brian & Guldemond Kramer, Anne Elizabeth Roth, Jason A. Andrew, Andrea Elaine Winegar, c/o Michael Roth	3039 GARDENIA DR			EVANSVILLE, IN 47715			
4	74-14-13-300-016.000-017	DANNY STEEN & LINDA A. STEEN	1218 N COUNTY ROAD 500 W			RICHLAND, IN 47634			

APPENDIX H: AIR QUALITY

STIP Pages

SPONSOR	CONTRACT # / LEAD DES	STIP NAME	ROUTE	WORK TYPE	DISTRICT	MILES	FEDERAL CATEGORY	Total Cost of Project*	PROGRAM	PHASE	FEDERAL	MATCH	2024	2025	2026	2027	2028
Performance Measure Impacted: Safety																	
Location: 2.05 miles West of SR-70 Jct																	
Comments:Include DES 1900287, 1900291, 1900294, 1900295, 1900300, 2000129, 2001057																	
Indiana Department of Transportation	43515 / 2000131	Init.	SR 66	Slide Correction	Vincennes	0	STBG	$11,442,007.00	Road Construction	CN	$8,043,200.00	$2,010,800.00		$10,054,000.00			
									Road ROW	RW	$30,400.00	$7,600.00	$38,000.00				
Performance Measure Impacted: Safety																	
Location: 1.35 miles West of SR 70 Jct																	
Comments:Include DES 1900288, 2000125, 2000131, 2000133																	
Indiana Department of Transportation	43515 / 2000131	A 05	SR 66	Slide Correction	Vincennes	0	STBG	$11,613,499.00	Road Consulting	PE	$115,280.00	$28,820.00	$144,100.00				
Performance Measure Impacted: Safety																	
Location: 1.35 miles West of SR 70 Jct																	
Comments:add PE in FY 2024 include DES 2000131, 1900288, 2000125, 2000133																	
Indiana Department of Transportation	43972 / 2100642	Init.	SR 66	Bridge Deck Overlay	Vincennes	0	NHPP	$3,995,720.00	Bridge Construction	CN	$2,544,800.00	$636,200.00			$3,181,000.00		
									Bridge Consulting	PE	$196,000.00	$49,000.00	$245,000.00				
Performance Measure Impacted: Bridge Condition																	
Location: EBL over RICHARDS DRAIN, 04.02 W SR 161																	
Comments:Include DES 2100633, 2100634, 2100642, 2100643																	
Indiana Department of Transportation	43979 / 2100169	Init.	SR 66	HMA Overlay, Preventive Maintenance	Vincennes	1.332	NHPP	$2,376,000.00	Road Construction	CN	$1,398,400.00	$349,600.00			$1,748,000.00		
									Bridge Construction	CN	$1,552,000.00	$388,000.00			$1,940,000.00		
									Bridge ROW	RW	$32,000.00	$8,000.00	$40,000.00				
									Road ROW	RW	$16,000.00	$4,000.00	$20,000.00				
Performance Measure Impacted: Pavement Condition																	
Location: From 2.52 mi W. US 231 (W. City Limits Rockport) to 1.19 W. of US 231																	
Comments:Include DES 2100169, 2100830, 2100831																	
Indiana Department of Transportation	43979 / 2100169	A 04	SR 66	HMA Overlay, Preventive Maintenance	Vincennes	1.332	NHPP	$5,292,085.00	Road Consulting	PE	$326,080.00	$81,520.00	$407,600.00				
Performance Measure Impacted: Pavement Condition																	
Location: From 2.52 mi W. US 231 (W. City Limits Rockport) to 1.19 W. of US 231																	
Comments:ADD PE in FY 2024																	

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SPONSOR	CONTRACT # / LEAD DES	STIP NAME	ROUTE	WORK TYPE	DISTRICT	MILES	FEDERAL CATEGORY	Total Cost of Project*	PROGRAM	PHASE	FEDERAL	MATCH	2024	2025	2026	2027	2028
Indiana Department of Transportation	43979 / 2100169	A 08	SR 66	HMA Overlay, Preventive Maintenance	Vincennes	1.332	NHPP	$2,679,717.00	Road Consulting	PE	$326,080.00	$81,520.00	$407,600.00				
Performance Measure Impacted: Pavement Condition																	
Location: From 2.52 mi W. US 231 (W. City Limits Rockport) to 1.19 W. of US 231																	
Comments:Add PE in FY 2026. include des 2100830 and 2100831																	
Indiana Department of Transportation	43979 / 2100169	M 63	SR 66	HMA Overlay, Preventive Maintenance	Vincennes	1.332	NHPP	$5,396,085.00	Statewide Construction	CN	$0.00	$0.00			$0.00		
Performance Measure Impacted: Pavement Condition																	
Location: From 2.52 mi W. US 231 (W. City Limits Rockport) to 1.19 W. of US 231																	
Comments:No fund change. DES includes 2100169, 2400693, 2100830, and 2100831																	
Indiana Department of Transportation	43979 / 2100169	A 15	SR 66	HMA Overlay, Preventive Maintenance	Vincennes	1.332	NHPP	$7,744,237.00	Bridge Consulting	PE	$47,360.00	$11,840.00		$59,200.00			
									Road Consulting	PE	$280,912.00	$70,228.00	$0.00	$351,140.00			
Performance Measure Impacted: Pavement Condition																	
Location: From 2.52 mi W. US 231 (W. City Limits Rockport) to 1.19 W. of US 231																	
Comments:Increase PE $411,000 in FY2025 DES includes 2100830, 2100831, 2400693, and 2400773																	
Indiana Department of Transportation	43980 / 2100259	Init.	SR 245	HMA Overlay, Preventive Maintenance	Vincennes	4.596	STBG	$3,482,000.00	Road Construction	CN	$1,929,600.00	$482,400.00		$10,000.00	$0.00	$2,402,000.00	
Performance Measure Impacted: Pavement Condition																	
Location: SR 245 From W. Jct. SR 162 to SR 62																	
Comments:Include DES 2100259																	
Indiana Department of Transportation	43985 / 2100261	Init.	SR 62	Slide Correction	Vincennes	.495	STBG	$1,920,000.00	Road ROW	RW	$24,000.00	$6,000.00	$30,000.00				
									Road Construction	CN	$1,044,800.00	$261,200.00			$1,306,000.00		
Performance Measure Impacted: Safety																	
Location: From 2.0 miles east of State Road 162 to 2.2 Miles East of State Road 162																	
Comments:Include DES 2100261																	
Indiana Department of Transportation	43985 / 2100261	M 53	SR 62	Slide Correction	Vincennes	.495	STBG	$1,905,152.00	Road ROW	RW	$0.00	$0.00	($30,000.00)	$30,000.00			
Performance Measure Impacted: Safety																	
Location: From 2.0 miles east of State Road 162 to 2.2 Miles East of State Road 162																	
Comments:Move RW to FY2025.																	
Indiana Department of Transportation	44496 / 2200975	Init.	SR 161	HMA Overlay, Preventive Maintenance	Vincennes	8.212	STBG	$5,366,000.00	Road Construction	CN	$3,918,400.00	$979,600.00			$60,000.00	$4,838,000.00	
									Road ROW	RW	$16,000.00	$4,000.00		$20,000.00			

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APPENDIX I: ADDITIONAL STUDIES/REPORTS

Land and Water Conservation Fund List - Spencer County
Culvert Inspection Reports
Bridge Scoping Application Reports
Hydraulic Memos
EJ Analysis

Land and Water Conservation Fund (LWCF) County Property List for Indiana (Last Updated March 2022)

ProjectNumber	SubProjectCode	County	Property
1800553	1800553	Spencer	Jim Yellig Park
1800553.1	1800553.1	Spencer	Jim Yellig Park
1800161	1800161A	Spencer	Lincoln State Park
1800171	1800171F	Spencer	Lincoln State Park
1800305	1800305E	Spencer	Lincoln State Park
1800312	1800312G	Spencer	Lincoln State Park
1800327	1800327F	Spencer	Lincoln State Park
1800363	1800363P	Spencer	Lincoln State Park
1800413	1800413M	Spencer	Lincoln State Park
1800428.1	1800428.2	Spencer	Lincoln State Park
1800003	1800003	Spencer	Lincoln State Park & Lincoln Woods Nature Preserve
1800174	1800174	Spencer	Lincoln State Park & Lincoln Woods Nature Preserve
1800430	1800430	Spencer	Lincoln State Park & Lincoln Woods Nature Preserve

*Park names may have changed. If acquisition of publically owned land or impacts to publically owned land is anticipated, coordination with IDNR, Division of Outdoor Recreation, should occur.

Found at: https://www.in.gov/indot/engineering/environmental-services/environmental-policy/

Culvert Inspection Report

CV 066-074-51.61
SR 66
over
UNT

Inspection Date: 10/24/2019

Inspected By: Jariah W. Besing

Inspection Type(s): Culvert

TABLE OF CONTENTS

Inspector: Jariah W. Besing

Inspection Date: 10/24/2019

Asset Name: CV 066-074-51.61

Facility Carried: SR 66

Culvert Inspection Report

Latitude: 37.90205

Longitude: -87.15078

Inspector: Jariah W. Besing
Structure Number: 93007717
Inspection Date: 10/24/2019
Facility Carried: SR 66

Culvert Inspection Report

Executive Summary

Structure Number: *CV 066-074-51.61* **Inspector:** Besing, Jariah W.

Large Culvert Inspection Report

(8) Asset Code:	*93007717*	(27) Year Built:	*0000*
Asset Name:	*CV 066-074-51.61*	(90) Inspection Date:	*10/24/2019*
OLD Culvert ID:	*66-74-51.61*	(91) Inspection Frequency:	*60*
Team Assignment:	*06*	☐ Additional Treatment Exists	

Identification

(2) Highway Agency District: *06* (3) County Code: *074*

Sub District: *6500* Ramp ID:

(42B) Type of Service (Under): *5* ☐ Adjacent to Roadway

(7) Facility Carried: *SR 66* (6) Features Intersected: *UNT*

(9) Location: *1+00 E W JCT SR 161* (9.01) Location Additional Description:

(11) Milepoint: *0* (16) Latitude: *37.90205* (17) Longitude: *-87.15078*

Classification:

(104) Highway System of the Inventory Route: *0* (26) Functional Classification of Inventory Route: *02*

Geometric Data

Culvert: Kind of Material: *1. Concrete* Culvert: Type of Structure: *19. 4 Sided Box Culvert* Min Est Fill Cover (ft): *2.00*

Culvert: Max. Horizontal Opening (ft.): *8* Culvert: Max. Vertical Opening (ft.): *4* (34) Skew:

Barrel Length (ft.): *34* Original Culvert Shape: *Box*

Measurement Remarks:

Structure Additional Description: *Reinforced Concrete Box 8' X 4' / 4-SIDED RCB*

Openings:

Direction	Opening Latitude	Opening Longitude	Direction	Opening Latitude	Opening Longitude
1.			3.		
2.			4.		

Openings Comments:

☐ **Follow Up Required:**

**If checked, please describe for follow up:

Endangered Species

Bats: seen or heard under structure? * *N*

Birds/swallows/nests seen? Empty nests present? *N*

* If yes, add one photo to the dropdown field

General Condition Ratings

(36A) Bridge Railings:	*1*	(36C) Approach Guardrail:	*1*
(36B) Transitions:	*1*	(36D) Approach Guardrail Ends:	*1*

Culvert:

(62) Culvert - Rating: *6*

(62) Culvert Rating Comments: *Moderate width vertical crack in west side wall. SE wingwall broke and leaning but appears largely unchanged since previous inspection. Minor delamination around guardrail attachment at top of box.*

Deck:

(58) Deck: *N*

(58a) Deck Comments:

Superstructure:

(59) Superstructure: *N*

(59.01) Superstructure Comments:

Substructure:

(60) Substructure: *N*

(60.01) Substructure Comments:

Channel:

(61) Channel and Channel Protection: *7*

(61.01) Channel and Channel Protection Comments:

Bank Erosion Rating: *7*

Drift/Sediment Rating *7*

Channel Alignment Rating *7*

☐ **Check this box if culvert has OBSTRUCTED flow**

Describe Obstruction:

Overtopping Frequency:

Overtopping Frequency Comments:

Pictures

PHOTO 1

Description Alignment looking east

PHOTO 2

Description South elevation

Pictures

PHOTO 3

Description North elevation

PHOTO 4

Description North interior overall condition

Pictures

PHOTO 5

Description Moderate vertical crack in west abutment

PHOTO 6

Description South interior overall condition

Pictures

PHOTO 7

Description Underside overall condition

PHOTO 8

Description Southeast wingwall broke off and cracking

Pictures

PHOTO 9

Description East wall overall condition

PHOTO 10

Description West wall overall condition

Pictures

PHOTO 11

Description South upstream channel conditions

Miscellaneous Asset Data

93007717

Asset Management

Load Rating 2:

Has the dead load or the structural condition of the primary load carrying members changed since the last inspection? No - Load Rating Update Not Required

---

Extended Frequency: Submittal Date:

Inspector:

INDOT Reviewer:

This bridge has been accepted into the Extended Frequency Program. Approval Date:

Joints: ** Indicate location, type, and rating of lowest rated joint.*

No Joints Present

Comments:

Terminal Joints: **Rating of lowest rated terminal joint.* N

Comments:

Concrete Slopewall: **Rating of lowest rated slopewall.* N

Comments:

Bearings: ** Indicate type, and rating of lowest rated bearing.*

N - No Bearing(s)

Comments:

Approach Slabs: ** Indicate if present & condition rating.*

N - No Approach Slabs

Comments:

Paint: ** Indicate if paint present , year painted & condition rating.*

N - No Paint

Comments:

Scour Analysis:	**Scour Critical:**	**Scour POA?**
NBI 113 Scour Comment:		N

Endangered Species: ** If yes, add one photo to the dropdown field*

Bats: seen or heard under structure? *	N
Birds/swallows/nests seen? Empty nests present? *	N

BRIDGE Culvert Geometry:

Barrel Length:	34
Height:	
Width:	

Inspector:	Besing,Jariah W.	**Structure Number:**	93007717
Inspection Date:	10/24/2019	**Facility Carried:**	SR 66

Culvert Inspection Report

Culvert Inspection Report

Structure Information

Structure:	CV 066-074-51.62	Facility Carried:	SR 66
Structure Number:	93007883	Features Intersected:	UNT

Inspection Information

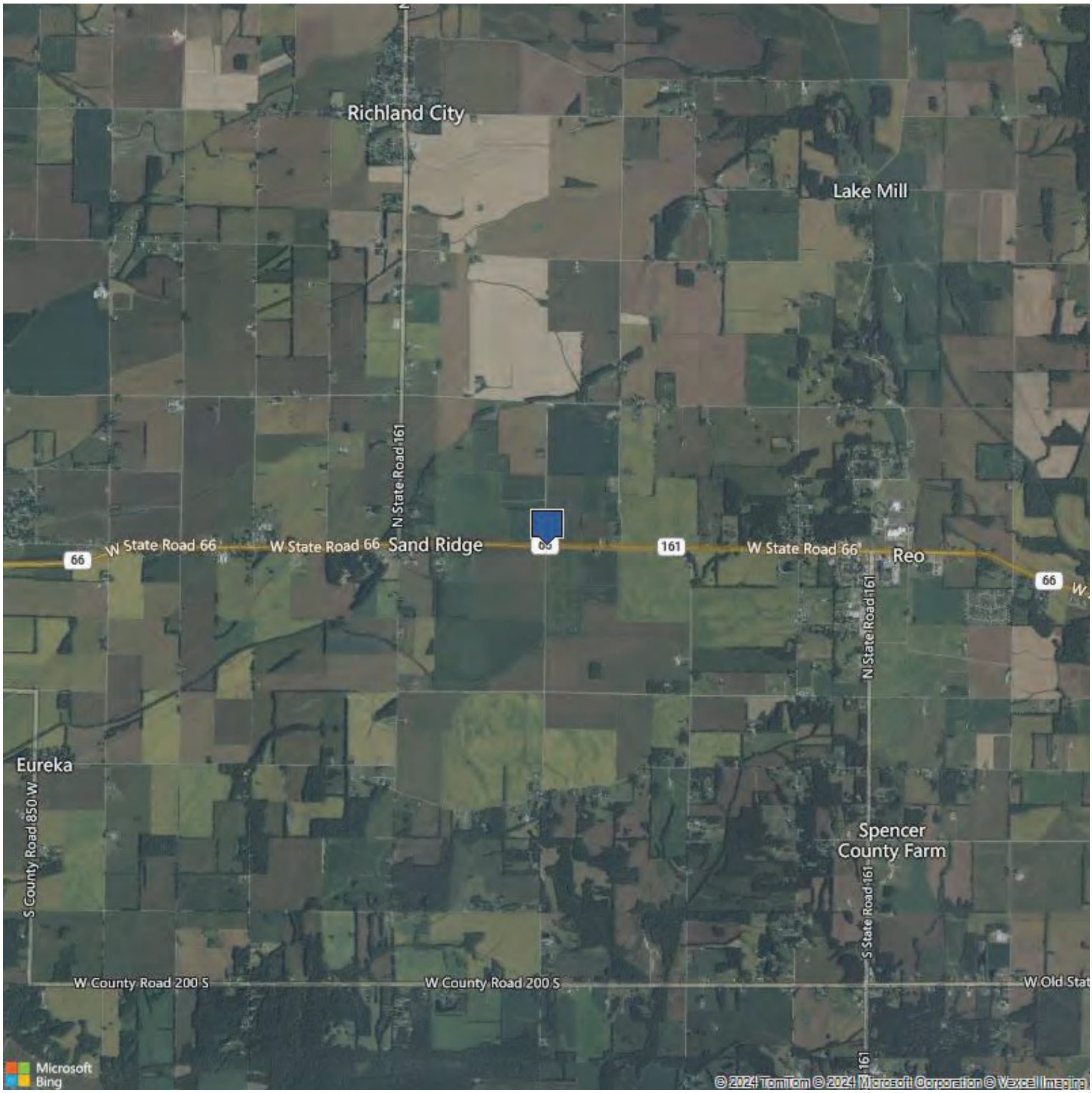
Inspection Date:	10/16/2024	Lead Inspector:	James Hefferman
Inspection Type:	Culvert	Additional Inspectors:	Tony Hoover, James Hefferman

Condition Ratings Summary

Culvert:	**4**	Substructure:	**7**
Deck:	**N**	Channel & Channel Protection:	**7**
Superstructure:	**4**		

Structure:	CV 066-074-51.62	Facility Carried:	SR 66	Inspector:	James Hefferman
Str. Number:	93007883	Features Intersected:	UNT	Inspection Date:	10/16/2024

Location Map



Location:	1+01 E W JCT SR 161	Latitude:	37.90205
County:	Spencer	Longitude:	-87.15061

Structure:	CV 066-074-51.62	Facility Carried:	SR 66	Inspector:	James Hefferman
Str. Number:	93007883	Features Intersected:	UNT	Inspection Date:	10/16/2024

Inspection Summary

Condition summary:

Significant map cracking with severe efflorescence at North coping of original slab. Minor width longitudinal cracking with moderate efflorescence throughout the remainder of slab. In addition, an isolated area of moderate spalling with exposed corroded reinforcement is visible in North widening beam near the drain hole. Both widening beams exhibit small holes; this appears to be for drainage purposes and is not an issue at this time. Moderate leaching is visible on the East abutment seat.

Recommendation:

Structure is currently programmed in SPMS for Small Structure Replacement under DES No. 2100831, Contract No. R-43979 with a letting date of August 6, 2025. No other work is recommended at this time.

Additional notes:

BIE: Core sample taken showed the WBL were in poor condition with sample showing only pieces after removal. The EBL sample showed striping and not sealed off. Superstructure/deck and overall rating lowered to '4' as a result with inspection interval set at 12 months. Pictures of sample added to files.

BAE comments from Jan 2021 BAE/BIE Meeting: Submitted for 2026 replacement. Most likely will be replaced with RP 51.61 as well due to proximity.

Structure:	CV 066-074-51.62	Facility Carried:	SR 66	Inspector:	James Hefferman
Str. Number:	93007883	Features Intersected:	UNT	Inspection Date:	10/16/2024

Identification

Structure Number:	93007883	Year Built:	0000
Structure:	CV 066-074-51.62	Inspection Date:	10/16/2024
Highway Agency District:	06 - Vincennes	Inspection Frequency:	12
Subdistrict:	6500 - Tell City Subdistrict	Addt'l Treatment Exist?	true
Type Of Service (Under):	0 - Other	County Code:	074 - Spencer
Facility Carried:	SR 66	Ramp Id:	
Features Intersected:	UNT	Offset:	62
Location:	1+01 E W JCT SR 161	Reference Post:	51
		Milepoint:	0
		Latitude:	37.90205
		Longitude:	-87.15061
Add'l Location Description:	At CR 500 W		

Classification

Maintenance Responsibility:	01 - State Highway Agency	Owner:	01 - State Highway Agency
National Highway System Inventory Route:	1 - Inventory Route is on the NHS	Functional Classification:	02 - Rural - Principal Arterial - Other

Geometric Data

Kind Of Material:	1	Max Vertical Opening (FT):	3
Max Horizontal Opening (FT):	8	Original Culvert Shape:	Box
Culvert Barrel Length (FT):	34	Skew:	
Minimum Estimated Fill Cover (FT):	2.00		
Measurement Remarks:	Length verified (includes widening beams).		
Structural Additional Description:	Concrete Slabtop 8' X 3' ST		

Structure:	CV 066-074-51.62	Facility Carried:	SR 66	Inspector:	James Hefferman
Str. Number:	93007883	Features Intersected:	UNT	Inspection Date:	10/16/2024

Culvert Condition Ratings

Culverts:	4 - Poor Condition

Structure is currently programmed in SPMS for Small Structure Replacement under DES No. 2100831, Contract No. R-43979 with letting date of August 6, 2025.

Core sample taken showed the WBL was in poor condition with sample showing only pieces after removal. The EBL sample showed striping and not sealed off. The overall rating lowered to '4' as a result.

Deck:	N - Not Applicable

Both guardrails damaged at NE and SW corner.

Superstructure:	4 - Poor Condition

Significant map cracking at north end of slab w/ heavy efflorescence. Minor width longitudinal cracking w/ moderate efflorescence throughout remainder of slab. Core sample taken showed the WBL was in poor condition with sample showing only pieces after removal. The EBL sample showed striping and not sealed off.

Substructure:	7 - Good Condition

Moderate scaling on abutments. Moderate leaching visible on East abutment seat throughout.

Channel / Channel Protection:	7 - Bank protection needs minor repairs

Sedimentation is present in structure (corn stalks); channel well vegetated.

Culvert Rails:	1 - Meets acceptable standards
Transitions:	1 - Meets acceptable standards
Approach Guardrail:	1 - Meets acceptable standards
Approach Guardrail Ends:	0 - Does not meet acceptable standards/safety feature is required
Is Culvert Obstructed?	False
Overtopping Frequency:	3 - Occasional - three to 10 Years

Headwall / Anchor Rating:	6	Channel Alignment Rating:	6
Wingwall Ratings:	6	Birds Present?:	No
Bank Erosion Ratings:	7	Bats Present?:	No
Drift / Sediment Rating:	7		

Structure:	CV 066-074-51.62	Facility Carried:	SR 66	Inspector:	James Hefferman
Str. Number:	93007883	Features Intersected:	UNT	Inspection Date:	10/16/2024

Additional Treatment #1

Treatment Type:	Extension	Material:	Concrete Precast
Structure Type:	Channel Beam	Year Constructed:	0000
Shape:		Treatment Vertical Opening:	8.0
Indicator Side:	North	Length Beyond Original Structure:	
Additional Treatment Rating:	6		
Treatment Description:	Widening Beam		
Comments:	small spalls with exposed reinforcement and small areas of delamination.		

Additional Treatment #2

Treatment Type:	Extension	Material:	Concrete Precast
Structure Type:	Channel Beam	Year Constructed:	0000
Shape:		Treatment Vertical Opening:	8.0
Indicator Side:	South	Length Beyond Original Structure:	
Additional Treatment Rating:	6		
Treatment Description:	Widening Beam		
Comments:	No noteworthy deficiencies found during this inspection.		

PHOTO #: Abutment 2 overall condition.

PHOTO #Abutment 1: Abutment 1 overall condition.

Structure:	CV 066-074-51.62	Facility Carried:	SR 66	Inspector:	James Hefferman
Str. Number:	93007883	Features Intersected:	UNT	Inspection Date:	10/16/2024

PHOTO #Abutment 1: Abutment 1 overall condition.

PHOTO #Abutment 2: Abutment 2 overall condition. Moderate scaling and leaching on Abutment 2.

Structure:	CV 066-074-51.62	Facility Carried:	SR 66	Inspector:	James Hefferman
Str. Number:	93007883	Features Intersected:	UNT	Inspection Date:	10/16/2024

PHOTO #Bituminous roadway: Bituminous roadway.

PHOTO #Culvert interior: South interior overall condition. Close spaced longitudinal cracking that runs full length with moderate to heavy efflorescence

Structure:	CV 066-074-51.62	Facility Carried:	SR 66	Inspector:	James Hefferman
Str. Number:	93007883	Features Intersected:	UNT	Inspection Date:	10/16/2024

PHOTO #Culvert interior: North interior overall condition. Significant map cracking at north end of slab w/ heavy efflorescence. Minor width longitudinal cracking w/ moderate efflorescence throughout remainder of slab.

PHOTO #East Alignment.: East Alignment.

Structure:	CV 066-074-51.62	Facility Carried:	SR 66	Inspector:	James Hefferman
Str. Number:	93007883	Features Intersected:	UNT	Inspection Date:	10/16/2024

PHOTO #North channel: North upstream channel condition.

PHOTO #North elevation.: North elevation.

Structure:	CV 066-074-51.62	Facility Carried:	SR 66	Inspector:	James Hefferman
Str. Number:	93007883	Features Intersected:	UNT	Inspection Date:	10/16/2024

PHOTO #Original Slab.: Underside overall condition. Significant map cracking at north end of slab w/ heavy efflorescence. Minor width longitudinal cracking w/ moderate efflorescence throughout remainder of slab.

PHOTO #South channel: South downstream channel condition.

Structure:	CV 066-074-51.62	Facility Carried:	SR 66	Inspector:	James Hefferman
Str. Number:	93007883	Features Intersected:	UNT	Inspection Date:	10/16/2024

PHOTO #South elevation: South elevation.

PHOTO #Widening Beam: North widening beam overall condition. Notice some small spalls with exposed reinforcement and small areas of delamination.

Structure:	CV 066-074-51.62	Facility Carried:	SR 66	Inspector:	James Hefferman
Str. Number:	93007883	Features Intersected:	UNT	Inspection Date:	10/16/2024

PHOTO #Widening Beam: South widening beam overall condition.

Structure Information

Structure Number:	CV 066-074-51.62	Facility Carried:	SR 66
NBI Number:	93007883	Features Intersected:	UNT
County / District:	Spencer	Location:	1+01 E W JCT SR 161

Bridge Scoping Application Report
NBI: 93007717 for 11/06/2020

4/5/2021

Bridge — Approved

Last Edited Date	1/10/2021	**Work Type**	Small Structure Replacement
Last Updated By	System, DTIMS	**Work Category**	District Small Structure Project
Proposed FY	2026	**Score**	16
Pre-DES		**NBI #**	93007717

Bridge Project Details

Route	SR 66	**CL Measure From**		**Updated By**	jheile@indot.in.gov
State Log Date	11/06/2020	**CL Measure To**			

Bridge Attributes

District	6	**Sub**	
County	74 - Spencer	**Route**	SR 66
Reference Post	51	**Offset**	61
Latitude	37.902	**Longitude**	-87.151
Existing Structure	CV 066-074-51.61	**Structure Type**	
Route Over	SR 66	**Route Under**	UNT
Year Built	0000	**Inspection Date**	10/24/2019
Year Reconstruct		**Load Rating**	Tons
Structure Length	34.00 Ft	**Deck Wear Surface**	5 - Fair Condition
Deck Width		**Condition Of Deck**	N - Not Applicable
Area	Sq Ft	**Condition Of Super Structure**	N
Lanes Over		**Condition Of Sub Structure**	N - Not Applicable
Lanes Under		**Scour Critical Evaluation Rating**	7
Max Length Span	8.00 Ft	**Number Of Main Spans**	
Historical Significance			
Functional Class	3 - Principal Arterial - Other		

Past and Committed Projects Completed on this NBI

Des	Status	Contract	Letting	CN $	Work Type	ADT	ADT Year

Project Proximity Search using 0.00 mile radius

FY	Awarded	To Let	Call	Prop.	Prov.	CN $

Purpose/Need of Project

Full Scope Needed? No **Historic Bridge Alt Analysis needed?** No

Purpose The purpose of this project is to provide structural adjustments to accommodate work on a nearby culvert with low condition ratings.

Own It:Alternatives

Preliminary Alternatives That Are Contemplated (Analyzed) With Costs

Due to the significance of the structural adjustment required at this location, it is anticipated that a box culvert replacement structure will be the most cost effective (life cycle cost) and hydraulically acceptable treatment option. Both an extension option and a replacement options were evaluated. A culvert replacement is the most economical option and also provides several benefits including, maintaining access for thorough inspections, resetting the condition rating, and an expectation of buying at least 50 years of service life and possibly quite longer.

A hydraulic request has been submitted to Central Office Hydraulics, but had not yet been completed at the time of this report.

Consequences If No Action Is Taken Do Nothing Alternative Is Selected)

If no action is taken, the culvert will continue to deteriorate to the point that it is no longer serviceable and has to be replaced. Prior to full replacement, the culvert will require temporary and sometimes emergency repairs in order to keep the road open to the safe flow of traffic. It is desirable to intervene prior to that occurrence as it creates significant user delay cost and probable road closures.

Secondary Considerations or Goals With Costs

Work should be accomplished with other needed preservation projects along the same corridor if possible . Work on this culvert is necessitated by work required for CV 066-074-51.62. Both culverts should be performed under the same contract. Minor relocation of this culvert and the associated stream should be anticipated. See attached summary sheet for additional details.

Will Further Analysis/Assessment Be Required Beyond This Form? No

Solve It: Project Recommendations And Costs

Potential Design Exceptions and Open Road Ideas

The use of "Open Roads" methodology by the designer is required. The designer should start from minimum standards and increase those standards as they can be demonstrated to add value to the asset(s). The designer is expected to perform any necessary design exceptions required. Accordingly, the designer shall incorporate the concepts of corridor uniformity and driver expectation into their design.

Estimated Total Project Costs

Phase	Amount	Comments
Right of Way Purchase	$ 20,000	
Right of Way Services		
Preliminary Engineering 1	[redacted]	
Railroad PE 1		
Utilities PE		
Utilities CN	$ 150,000	
Construction Total $820,000		
Construction	$ 820,000	
ADA		
Sidewalks/ Multi Use Paths		
Other Considerations		
Total	[redacted]	

Maintenance of Traffic

Can the road be closed to traffic?	Yes	Interstate Congestion Policy Waiver Required?	No
Traffic Management Plan Required?	No		
Anticipated MOT Scheme Value	Phased – Lane Closure		
Detour can be considered			

Other Considerations

Anticipated Number of Construction Seasons To Complete	2
Anticipated Number of Years To Complete Design	3
Environmental Document Type	CE2
Environmental Factors	

Additional Anticipated Complications

Tree Clearing	No
Fish	No
Bats	No
Historical	No
Potential Hazardous Coatings	No

Additional Comments

Bridge Scoping Application Report
NBI: 93007717 for 11/06/2020

The designer shall include the following items for consideration into the scope of work:
1.Assume removal and replacement of existing guardrail and survey information to achieve this task.
2.If guardrail is determined to be necessary, the designer shall check to see if the box can be extended in lieu of using guardrail.
3.A minimum 4 foot wide shoulder HMA is required between the travel lane and the face of guardrail. Depending on the roadway, additional offset width could be necessary.
4.A water proofing membrane will be used for RBC.
5.Transition milling/overlay shall be extended beyond the patching for the structure. In instances of shoulder widening, the milling and paving of the mainline shall be performed to the extents of the widening.
6.Evaluate embankments for erosion repairs.
7.A vertical grade raise may be necessary depending on the results of the hydraulic analysis.
8.See the attached pdf Summary Sheet and Estimates for more details.

Supporting Documents

Document Type	Document Name	Date
SupportingDocuments	CV 66-74-51.61 Supporting Documents.pdf	1/7/2021 1:05:43P
Other	93007717 Score (FY26-16).pdf	1/7/2021 1:05:45P
SupportingDocuments	CV 66-74-51.61 Summary Sheet and Estimates.pdf	1/7/2021 12:20:57F

Report Prepared By and Approved By

Title	Signature	
Submitted By Asset Engineer	Heile, Jason	1/8/2021
Concur By Scoping Engineer	Decker, Duane	1/8/2021
Approved By SAM	Dughaish, Khalil	1/10/2021

Submittal Type Major Submittal Year 2026

Images


STOP

Duplicate Culvert Inspection Report was removed and can be found earlier in this appendix.

Culvert:	CV 066-074-51 62

Exist. Rise	3 ft
Exist. Span	8 ft
Exist. Length	34 ft
Exist. Opening	24 sft
New Opening	24 sft
Proposed New Rise	4
Proposed Span	10
Proposed Length	50
Cover	2 ft
Pavement Width	32 ft

Total	$1,636,938 57
Subtotal with Contigency (20%)	$1,375,028.40
Subtotal	$1,145,857 00

	%				
Mobilization/Demobilization	5%	LS	$ 81,846.93	1	$81,846.93
Construction Engineering	2%	LS	$ 24,554.08	1	$24,554.08
Maintaining Traffic	3%	LS	$ 40,923.46	1	$40,923.46
Storm Water Management	5%	LS	$ 81,846.93	1	$81,846.93
Clearing R/W	2%	LS	$ 32,738.77	1	$32,738.77

Item No.	Description		Unit	Unit Cost	Quantity	Line tem Cost	
202-51330	Present Structure Remove		LS	$ 23,000.00	1	$23,000.00	
203-02000	Excavation Common		CYS	$ 55.00	1500	$82,500.00	
203-02070	Borrow		CYS	$ 30.00	1500	$45,000.00	
205-11625	Pump Around		LS	$ 10,000.00	1	$10,000.00	
207-08264	Subgrade Treatment Type II		SYS	$ 20.00	525	$10,500.00	
207-09935	Subgrade Treatment Type Ic		SYS	$ 25.00	1494	$37,350.00	
211-09265	Structure Backfill Type 2 for 51.62		CYS	$ 50.00	124	$6,200.00	
211-09268	Structure Backfill Type 5 for 51.62		CYS	$ 125.00	150	$18,750.00	
211-09268	Structure Backfill Type 5 for 51.62 for removal		CYS	$ 125.00	115	$14,375.00	
303-01180	Compacted Aggregate No 53		TON	$ 40.00	120	$4,800.00	
303-01180	Compacted Aggregate No 53 for county road approaches		TON	$ 40.00	320	$12,800.00	
306-08043	Milling Transition		SYS	$ 16.00	2850	$45,600.00	
401-07328	Qc/Qa-Hma 3 64 Surface 9.5 Mm For Mainline Lifting		TON	$ 285.00	176	$50,160.00	
401-07328	Qc/Qa-Hma 3 64 Surface 9.5 Mm		TON	$ 285.00	59	$16,815.00	
401-07390	Qc/Qa-Hma 2 64 Intermediate 19.0 Mm		TON	$ 280.00	98	$27,440.00	
401-07390	Qc/Qa-Hma 2 64 Intermediate 19.0 Mm For lifting		TON	$ 280.00	184	$51,520.00	
401-07423	Qc/Qa-Hma 2 64 Base 19.0 Mm		TON	$ 215.00	313	$67,295.00	
401-07423	Qc/Qa-Hma 2 64 Base 19.0 Mm For Lifting		TON	$ 215.00	350	$75,250.00	
401-10258	Joint Adhesive Surface		LFT	$ 1.50	1600	$2,400.00	
401-10259	Joint Adhesive Intermediate		LFT	$ 1.50	800	$1,200.00	
401-11785	Liquid Asphalt Sealant		LFT	$ 0.90	1600	$1,440.00	
406-05520	Asphalt For Tack Coat		TON	$ 615.00	1	$615.00	
601-02241	Guardrail Remove		LFT	$ 10.00	300	$3,000.00	
601-12281	Guardrail Mgs W-Beam, 6 Ft 3 In Spacing		LFT	$ 25.00	300	$7,500.00	
601-12288	Guardrail Mgs Long Span Type 2		EA	$ 1,500.00	2	$3,000.00	
601-94689	Guardrail End Treatment Os		EA	$ 3,500.00	4	$14,000.00	
601-94689	Guardrail End Treatment Os for county road		EA	$ 3,500.00	4	$14,000.00	
610-07487	HMA for Approaches Type B		TON	$ 200.00	640	$128,000.00	
615-06490	Right Of Way Marker		EACH	$ 170.00	8	$1,360.00	
616-05689	Riprap Class 2		TON	$ 90.00	167	$15,030.00	
616-06405	Riprap Revetment		TON	$ 80.00	40	$3,200.00	
616-12246	GEOTEXTILE FOR RIPRAP TYPE 1A		SYS	$ 5.00	74	$370.00	
621-01004	Mob And Demob For Seeding		EA	$ 1,500.00	2	$3,000.00	
621-06559	Mulched Seeding R		SYS	$ 2.00	1000	$2,000.00	
628-09402	Field Office B		MOS	$ 1,800.00	8	$14,400.00	
628-11976	Computer System Equipment		EA	$ 700.00	2	$1,400.00	
714-11654	Box Culvert	10x4	LFT	$ 1,250.00	50	$62,500.00	
715-08306	Hma For Structure Installation Type C		TON	$ 200.00	50	$10,000.00	
801-06207	Temporary Pvmt Marking 4 In		LFT	$ 1.00	3500	$3,500.00	
801-06640	Construction Sign A		EA	$ 175.00	15	$2,625.00	
801-08508	Temporary Traffic Barrier Type 2		LFT	$ 65.00	600	$39,000.00	
801-12042	Truck Mounted Attenuator		DAY	$ 450.00	60	$27,000.00	
801-12081	Portable Signal		LS	$ 20,000.00	1	$20,000.00	
808-06713	Line Paint Solid White 4 In		LFT	$ 1.35	600	$810.00	
808-06714	Line Paint Solid Yellow 4 In		LFT	$ 1.40	500	$700.00	
808-75996	Snowplowable Raised Pvmt Marker Remove		EA	$ 71.00	7	$497.00	
808-75998	Snowplowable Raised Pavement Marker		EA	$ 200.00	7	$1,400.00	
	Items below for 51.61 pipe with full structure Replacement						
202-51330	Present Structure Remove		LS	$ 23,000.00	1	$23,000.00	
205-11625	Pump Around		LS	$ 10,000.00	1	$10,000.00	
207-09935	Subgrade Treatment Type Ic		SYS	$ 25.00	60	$1,500.00	$162,555.00
211-09265	Structure Backfill Type 2 for 51.61		CYS	$ 50.00	124	$6,200.00	
211-09268	Structure Backfill Type 5 for 51.61		CYS	$ 125.00	150	$18,750.00	
211-09268	Structure Backfill Type 5 for 51.61 for removal		CYS	$ 125.00	115	$14,375.00	
616-05689	Riprap Class 2		TON	$ 90.00	167	$15,030.00	
616-06405	Riprap Revetment		TON	$ 80.00	40	$3,200.00	
714-11654	Box Culvert	10x4	LFT	$ 1,250.00	50	$62,500.00	
715-08306	Hma For Structure Installation Type C		TON	$ 200.00	40	$8,000.00	

Bridge Scoping Application Report
NBI: 93007883 for 11/06/2020

4/5/2021

Bridge — Approved

Last Edited Date	1/15/2021	**Work Type**	Small Structure Replacement
Last Updated By	System, DTIMS	**Work Category**	District Small Structure Project
Proposed FY	2026	**Score**	66
Pre-DES		**NBI #**	93007883

Bridge Project Details

Route	SR 66	**CL Measure From**		**Updated By**	jheile@indot.in.gov
State Log Date	11/06/2020	**CL Measure To**			

Bridge Attributes

District	6	**Sub**	
County	74 - Spencer	**Route**	SR 66
Reference Post	51	**Offset**	62
Latitude	37.902	**Longitude**	-87.151
Existing Structure	CV 066-074-51.62	**Structure Type**	
Route Over	SR 66	**Route Under**	UNT
Year Built	0000	**Inspection Date**	10/14/2020
Year Reconstruct		**Load Rating**	Tons
Structure Length	34.00 Ft	**Deck Wear Surface**	5 - Fair Condition
Deck Width		**Condition Of Deck**	N - Not Applicable
Area	Sq Ft	**Condition Of Super Structure**	4
Lanes Over		**Condition Of Sub Structure**	7 - Good Condition (some minor problems)
Lanes Under		**Scour Critical Evaluation Rating**	7
Max Length Span	8.00 Ft	**Number Of Main Spans**	
Historical Significance			
Functional Class	3 - Principal Arterial - Other		

Past and Committed Projects Completed on this NBI

Des	Status	Contract	Letting	CN $	Work Type	ADT	ADT Year

Project Proximity Search using 0.00 mile radius

FY	Awarded	To Let	Call	Prop.	Prov.	CN $

Purpose/Need of Project

Full Scope Needed? No **Historic Bridge Alt Analysis needed?** No

Purpose The purpose of this project is to reset the condition ratings of the structure which is showing signs of deterioration.

Own It:Alternatives

Preliminary Alternatives That Are Contemplated (Analyzed) With Costs

It is anticipated that a box culvert replacement structure will be the most effective and hydraulically acceptable treatment option . The primary goal of this project is to reset the useful service life of the culvert. When completed, the rehabilitated/replaced culvert will be restored to a good condition and its inspection ratings will increase accordingly. A culvert replacement is expected buy at least 50 years of service life and possibly quite longer.

A hydraulic analysis has been requested from Central Office Hydraulics, but the memo was not available at the time of this report.

Consequences If No Action Is Taken Do Nothing Alternative Is Selected)

If no action is taken, the culvert will continue to deteriorate to the point that it is no longer serviceable and has to be replaced. Prior to full replacement, the culvert will require temporary and sometimes emergency repairs in order to keep the road open to the safe flow of traffic. It is desirable to intervene prior to that occurrence as it creates significant user delay cost and probable road closures.

Secondary Considerations or Goals With Costs

Work should be accomplished with other needed preservation projects along the same corridor if possible . Due to this culvert replacement, work is also required for CV 066-074-51.61. Both culverts should be performed under the same contract. Minor relocation of this culvert and the associated stream should be anticipated. See attached summary sheet for additional details.

Will Further Analysis/Assessment Be Required Beyond This Form? No

Solve It: Project Recommendations And Costs

Potential Design Exceptions and Open Road Ideas

The use of "Open Roads" methodology by the designer is required. The designer should start from minimum standards and increase those standards as they can be demonstrated to add value to the asset(s). The designer is expected to perform any necessary design exceptions required. Accordingly, the designer shall incorporate the concepts of corridor uniformity and driver expectation into their design.

Estimated Total Project Costs

Phase	Amount	Comments
Right of Way Purchase	$ 20,000	
Right of Way Services		
Preliminary Engineering 1	[redacted]	
Railroad PE 1		
Utilities PE		
Utilities CN	$ 150,000	
Construction Total $820,000		
Construction	$ 820,000	
ADA		
Sidewalks/ Multi Use Paths		
Other Considerations		
Total	[redacted]	

Maintenance of Traffic

Can the road be closed to traffic?	Yes	Interstate Congestion Policy Waiver Required?	No
Traffic Management Plan Required?	No		
Anticipated MOT Scheme Value	Phased – Lane Closure		

Detour can be considered.

Other Considerations

Anticipated Number of Construction Seasons To Complete	2
Anticipated Number of Years To Complete Design	3
Environmental Document Type	CE2
Environmental Factors	

Additional Anticipated Complications

Tree Clearing	No
Fish	No
Bats	No
Historical	No
Potential Hazardous Coatings	No

Additional Comments