Project Study Limits (PSL)
AJD Review Boundary
Wetland

Exhibit 6 - Waters Delineation Map
Floyd County Bridge No. 51
Bridge Replacement
New Albany Township, Floyd County and Jeffersonville Township, Clark County, Indiana
Des. 1700788
Metric Project No. 18-0145
Map Date; 6/25/20
Map Author: April Pape

All locations approximate

Source: Indiana Spatial Data Portal (2017)

N

Feet
0 20 40 80

METRIC ENVIRONMENTAL

Exh. 9

APPENDIX A

Wetland Determination Data Sheets

WETLAND DETERMINATION DATA FORM -- Midwest Region

Project/Site: Des. No. 1700788 - Floyd County Bridge No. 51 City/County: New Albany / Floyd County Sampling Date: 5/14/2020

Applicant/Owner: Jacobi, Toombs, and Lanz State: IN Sampling Point: SP-A1

Investigator(s): Cory Shumate Section, Township, Range: S 63, T 99, R 99

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

Slope (%): 0% Lat: 38.335269 Long: -85.795222 Datum: NAD83

Soil Map Unit Name: Urban land-Urdarents, fragipan substratum, complex, till plain, 0 to 12 percent slopes (UngB), 0% hydric 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 No, Soil No, or Hydrology No significantly disturbed? Are "Normal Circumstances" present? Yes X No ____

Are Vegetation No, Soil No, or Hydrology No 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 ____

Hydric Soil Present? Yes X No ____

Wetland Hydrology Present? Yes X No ____

Is the Sampled Area within a Wetland? Yes X No ____

Remarks: Wetland A Sampling Point (PSS1A). Precipitation occurred on the project site between 9:30 AM to 10:00 AM.Area had received approximately 0.09 in. of rain between 5/12/2020 to 5/14/2020.

VEGETATION -- Use scientific names of plants.

Tree Stratum (Plot size: 30' radius)	Absolute % Cover	Dominant Species?	Indicator Status
1. *Salix nigra*	50%	Yes	OBL
2.			
3.			
4.			
5.			
	50%	= Total Cover	

Sapling/Shrub Stratum (Plot size: 15' radius)			
1. *Salix nigra*	10%	Yes	OBL
2. *Fraxinus pennsylvanica*	10%	Yes	FACW
3.			
4.			
5.			
	20%	= Total Cover	

Herb Stratum (Plot size: 5' radius)			
1. *Juncus effusus*	40%	Yes	OBL
2. *Carex blanda*	20%	Yes	FAC
3. *Typha angustifolia*	5%	No	OBL
4.			
5.			
6.			
7.			
8.			
9.			
10.			
11.			
12.			
13.			
14.			
15.			
16.			
17.			
18.			
19.			
20.			
	65%	= Total Cover	

Woody Vine Stratum (Plot size: 30' radius)			
1.			
2.			
	0%	= Total Cover	

Dominance Test worksheet:

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

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

Percent of Dominant Species That Are OBL, FACW, or FAC: 100% (A/B)

Prevalence Index worksheet:

Total % Cover of:		Multiply by:	
OBL species	105%	x1 =	1.05
FACW species	10%	x2 =	0.2
FAC species	20%	x3 =	0.6
FACU species		x4 =	
UPL species		x5 =	
Column Totals:	1.35 (A)		1.85 (B)

Prevalence Index = B/A = 1.37

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.)
Bare ground and surface water were present.

SOIL

Sampling Point: SP-A1

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

Depth	Matrix		Redox Features					
(inches)	Color (moist)	%	Color (moist)	%	Type[1]	Loc[2]	Texture	Remarks
0-5	10YR 4/2	45	10YR 6/8	10	C	M	SiCL	Mixed Matrix; Prominent redox concentrations
	10YR 5/2	45						
5-16	10YR 5/2	65	10YR 6/8	30	C	M	SiCL	Prominent redox concentrations
			2.5YR 3/6	5	C	PL		Prominent redox concentrations
16-20	10YR 5/2	60	10YR 6/8	20	C	M	SiCL	Prominent redox concentrations
			2.5YR 3/6	20	C	PL		Prominent redox concentrations

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

Hydric Soil Indicators:

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

Indicators for Problematic Hydric Soils[3]:

- ___ Coast Prairie Redox (A16)
- ___ Iron-Manganese Masses (F12)
- ___ Dark Surface (S7)
- ___ Very Shallow Dark Surface (TF12)
- ___ Other (Explain in Remarks)

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

Restrictive Layer (if observed):

Type: _____

Depth (inches): _____

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

Remarks:

HYDROLOGY

Wetland Hydrology Indicators:

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

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

Secondary Indicators (minimum of two required)

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

Field Observations:

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

Water Table Present? Yes X No ___ Depth (inches): 0

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

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

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

Remarks:

Sampling point was located in a concave depression. Therefore, it meets the criteria for gemorphic position (D2).

WETLAND DETERMINATION DATA FORM -- Midwest Region

Project/Site: Des. No. 1700788 - Floyd County Bridge No. 51 City/County: New Albany / Floyd County Sampling Date: 5/14/2020

Applicant/Owner: Jacobi, Toombs, and Lanz State: IN Sampling Point: SP-A2

Investigator(s): Cory Shumate Section, Township, Range: S 63, T 99, R 99

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

Slope (%): 5% Lat: 38.335241 Long: -85.79513 Datum: NAD83

Soil Map Unit Name: Urban land-Urdarents, fragipan substratum, complex, till plain, 0 to 12 percent slopes (UngB), 0% hydric 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 No, Soil No, or Hydrology No significantly disturbed? Are "Normal Circumstances" present? Yes X No ____

Are Vegetation No, Soil No, or Hydrology No 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**	
Hydric Soil Present?	Yes ____	No X	**within a Wetland?**	Yes ____ No X
Wetland Hydrology Present?	Yes ____	No X		

Remarks: Wetland A Upland Sampling Point. Precipitation occurred on the project site between 9:30 AM to 10:00 AM.Area had received approximately 0.09 in. of rain between 5/12/2020 to 5/14/2020.

VEGETATION -- Use scientific names of plants.

Tree Stratum (Plot size: 30' radius)	Absolute % Cover	Dominant Species?	Indicator Status
1. *Gleditsia triacanthos*	5%	Yes	FACU
2.			
3.			
4.			
5.			
	5% = Total Cover		

Sapling/Shrub Stratum (Plot size: 15' radius)			
1.			
2.			
3.			
4.			
5.			
	0% = Total Cover		

Herb Stratum (Plot size: 5' radius)			
1. *Festuca rubra*	45%	Yes	FACU
2. *Poa pratensis*	45%	Yes	FAC
3. *Veronica arvensis*	10%	No	FACU
4. *Taraxacum officinale*	5%	No	FACU
5.			
6.			
7.			
8.			
9.			
10.			
11.			
12.			
13.			
14.			
15.			
16.			
17.			
18.			
19.			
20.			
	105% = Total Cover		

Woody Vine Stratum (Plot size: 30' radius)			
1. *Toxicodendron radicans*	5%	Yes	FAC
2.			
	5% = 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: 4 (B)

Percent of Dominant Species That Are OBL, FACW, or FAC: 50% (A/B)

Prevalence Index worksheet:

Total % Cover of:		Multiply by:	
OBL species		x1 =	
FACW species		x2 =	
FAC species	50%	x3 =	1.5
FACU species	65%	x4 =	2.6
UPL species		x5 =	
Column Totals:	1.15 (A)		4.1 (B)

Prevalence Index = B/A = 3.57

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.)

SOIL

Sampling Point: SP-A2

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

Depth	Matrix		Redox Features					
(inches)	Color (moist)	%	Color (moist)	%	Type[1]	Loc[2]	Texture	Remarks
0-10	10YR 4/2	50	10YR 6/8	5	C	M	SiCL	Mixed matrix; Prominent redox concentrations
	10YR 5/3	45						
10-20	10YR 4/2	25	10YR 6/8	10	C	M	SiCL	Mixed matrix; Prominent redox concentrations
	10YR 5/3	35	10YR 4/3	5	C	M		Faint redox concentrations
	10YR 4/1	25						

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

Hydric Soil Indicators:

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

Indicators for Problematic Hydric Soils[3]:

- ___ Coast Prairie Redox (A16)
- ___ Iron-Manganese Masses (F12)
- ___ Dark Surface (S7)
- ___ Very Shallow Dark Surface (TF12)
- ___ Other (Explain in Remarks)

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

Restrictive Layer (if observed):

Type: _____

Depth (inches): _____

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

Remarks:

HYDROLOGY

Wetland Hydrology Indicators:

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

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

Secondary Indicators (minimum of two required)

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

Field Observations:

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

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

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

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

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

Remarks:

WETLAND DETERMINATION DATA FORM -- Midwest Region

Project/Site: Des. No. 1700788 - Floyd County Bridge No. 51 City/County: New Albany / Floyd County Sampling Date: 5/14/2020

Applicant/Owner: Jacobi, Toombs, and Lanz State: IN Sampling Point: SP-1

Investigator(s): Cory Shumate Section, Township, Range: S 63, T 99, R 99

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

Slope (%): 1% Lat: 38.334962 Long: -85.795171 Datum: NAD83

Soil Map Unit Name: Urban land-Urdarents, fragipan substratum, complex, till plain, 0 to 12 percent slopes (UngB), 0% hydric 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 No, Soil No, or Hydrology No significantly disturbed? Are "Normal Circumstances" present? Yes X No ____

Are Vegetation No, Soil No, or Hydrology No 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**	
Hydric Soil Present?	Yes X	No ____	**within a Wetland?**	Yes ____ No X
Wetland Hydrology Present?	Yes ____	No X		

Remarks: Upland Sampling Point 1. Precipitation occurred on the project site between 9:30 AM to 10:00 AM. Area had received approximately 0.09 in. of rain between 5/12/2020 to 5/14/2020.

VEGETATION -- Use scientific names of plants.

Tree Stratum (Plot size: 30' radius)	Absolute % Cover	Dominant Species?	Indicator Status
1.			
2.			
3.			
4.			
5.			
	0%	= Total Cover	

Sapling/Shrub Stratum (Plot size: 15' radius)			
1. *Prunus serotina*	10%	Yes	FACU
2.			
3.			
4.			
5.			
	10%	= Total Cover	

Herb Stratum (Plot size: 5' radius)			
1. *Carex blanda*	40%	Yes	FAC
2. *Festuca rubra*	35%	Yes	FACU
3. *Solidago canadensis*	20%	No	FACU
4. *Juncus effusus*	10%	No	OBL
5. *Calystegia sepium*	15%	No	FAC
6.			
7.			
8.			
9.			
10.			
11.			
12.			
13.			
14.			
15.			
16.			
17.			
18.			
19.			
20.			
	120%	= Total Cover	

Woody Vine Stratum (Plot size: 30' radius)			
1.			
2.			
	0%	= 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% (A/B)

Prevalence Index worksheet:

Total % Cover of:		Multiply by:	
OBL species	10%	x1 =	0.1
FACW species		x2 =	
FAC species	55%	x3 =	1.65
FACU species	65%	x4 =	2.6
UPL species		x5 =	
Column Totals:	1.30 (A)		4.35 (B)

Prevalence Index = B/A = 3.35

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.)

SOIL

Sampling Point: SP-1

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 4/2	90	10YR 5/6	10	C	M	SiCL	Prominent redox concentrations
12-20	10YR 5/1	50					SiCL	Mixed matrix
	10YR 5/4	50						

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

Hydric Soil Indicators:

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

Indicators for Problematic Hydric Soils[3]:

- ___ Coast Prairie Redox (A16)
- ___ Iron-Manganese Masses (F12)
- ___ Dark Surface (S7)
- ___ Very Shallow Dark Surface (TF12)
- ___ Other (Explain in Remarks)

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

Restrictive Layer (if observed):

Type: ___

Depth (inches): ___

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

Remarks:

HYDROLOGY

Wetland Hydrology Indicators:

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

- ___ Surface Water (A1)
- ___ High Water Table (A2)
- ___ 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)
- X Geomorphic Position (D2)
- ___ FAC-Neutral Test (D5)

Field Observations:

Surface Water Present?	Yes ___ No X	Depth (inches):	
Water Table Present?	Yes X No ___	Depth (inches):	16
Saturation Present? (includes capillary fringe)	Yes X No ___	Depth (inches):	14

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

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

Remarks:

Sampling point was located at the toe of a hillslope. Therefore, it meets the criteria for geomorphic position (D2).

WETLAND DETERMINATION DATA FORM -- Midwest Region

Project/Site: Des. No. 1700788 - Floyd County Bridge No. 51 City/County: Clarksville / Clark County Sampling Date: 5/14/2020

Applicant/Owner: Jacobi, Toombs, and Lanz State: IN Sampling Point: SP-2

Investigator(s): Cory Shumate Section, Township, Range: S 63, T 99, R 99

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

Slope (%): 0% Lat: 38.334061 Long: -85.79414 Datum: NAD83

Soil Map Unit Name: Haymond silt loam, 0 to 2 percent slopes, frequently flooded, brief duration (HcgAH), 0% hydric 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 No, Soil No, or Hydrology No significantly disturbed? Are "Normal Circumstances" present? Yes X No ____

Are Vegetation No, Soil No, or Hydrology No 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 ____

Hydric Soil Present? Yes ____ No X

Wetland Hydrology Present? Yes ____ No X

Is the Sampled Area within a Wetland? Yes ____ No X

Remarks: Upland Sampling Point 2. Precipitation occurred on the project site between 9:30 AM to 10:00 AM. Area had received approximately 0.09 in. of rain between 5/12/2020 to 5/14/2020.

VEGETATION -- Use scientific names of plants.

Tree Stratum (Plot size: 30' radius)	Absolute % Cover	Dominant Species?	Indicator Status
1. *Platanus occidentalis*	35%	Yes	FACW
2. *Fraxinus pennsylvanica*	15%	Yes	FACW
3. *Acer negundo*	5%	No	FAC
4.			
5.			
	55%	= Total Cover	

Sapling/Shrub Stratum (Plot size: 15' radius)			
1. *Acer negundo*	10%	Yes	FAC
2.			
3.			
4.			
5.			
	10%	= Total Cover	

Herb Stratum (Plot size: 5' radius)			
1. *Solidago gigantea*	35%	Yes	FACW
2. *Viola sororia*	30%	Yes	FAC
3. *Verbesina alternifolia*	15%	No	FACW
4. *Leersia oryzoides*	15%	No	OBL
5. *Persicaria virginiana*	10%	No	FAC
6. *Impatiens capensis*	5%	No	FACW
7. *Glechoma hederacea*	5%	No	FACU
8.			
9.			
10.			
11.			
12.			
13.			
14.			
15.			
16.			
17.			
18.			
19.			
20.			
	115%	= Total Cover	

Woody Vine Stratum (Plot size: 30' radius)			
1. *Rosa multiflora*	5%	Yes	FACU
2.			
	5%	= Total Cover	

Dominance Test worksheet:

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

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

Percent of Dominant Species That Are OBL, FACW, or FAC: 83% (A/B)

Prevalence Index worksheet:

Total % Cover of:		Multiply by:	
OBL species	15%	x1 =	0.15
FACW species	105%	x2 =	2.1
FAC species	55%	x3 =	1.65
FACU species	10%	x4 =	0.4
UPL species		x5 =	
Column Totals:	1.85 (A)		4.3 (B)

Prevalence Index = B/A = 2.32

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.)

SOIL

Sampling Point: SP-2

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
0-20	10YR 4/2	50					SiL	Mixed matrix
	10YR 5/3	50						

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

Hydric Soil Indicators:

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

Indicators for Problematic Hydric Soils[3]:

- ___ Coast Prairie Redox (A16)
- ___ Iron-Manganese Masses (F12)
- ___ Dark Surface (S7)
- ___ Very Shallow Dark Surface (TF12)
- ___ Other (Explain in Remarks)

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

Restrictive Layer (if observed):

Type: _____

Depth (inches): _____

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

Remarks:

HYDROLOGY

Wetland Hydrology Indicators:

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

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

Secondary Indicators (minimum of two required)

- ___ Surface Soil Cracks (B6)
- ___ Drainage Patterns (B10)
- ___ Dry-Season Water Table (C2)
- ___ Crayfish Burrows (C8)
- ___ Saturation Visible on Aerial Imagery (C9)
- ___ Stunted or Stressed Plants (D1)
- ___ Geomorphic Position (D2)
- 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 ___ No x	Depth (inches):	

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

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

Remarks:

WETLAND DETERMINATION DATA FORM -- Midwest Region

Project/Site: Des. No. 1700788 - Floyd County Bridge No. 51 City/County: Clarksville / Clark County Sampling Date: 5/14/2020

Applicant/Owner: Jacobi, Toombs, and Lanz State: IN Sampling Point: SP-3

Investigator(s): Cory Shumate Section, Township, Range: S 63, T 99, R 99

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

Slope (%): 0% Lat: 38.333905 Long: -85.79446 Datum: NAD83

Soil Map Unit Name: Haymond silt loam, 0 to 2 percent slopes, frequently flooded, brief duration (HcgAH), 0% hydric 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 No, Soil No, or Hydrology No significantly disturbed? Are "Normal Circumstances" present? Yes X No ____

Are Vegetation No, Soil No, or Hydrology No 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 ____

Hydric Soil Present? Yes ____ No X

Wetland Hydrology Present? Yes ____ No X

Is the Sampled Area within a Wetland? Yes ____ No X

Remarks: Upland Sampling Point 3. Precipitation occurred on the project site between 9:30 AM to 10:00 AM. Area had received approximately 0.09 in. of rain between 5/12/2020 to 5/14/2020.

VEGETATION -- Use scientific names of plants.

Tree Stratum (Plot size: 30' radius)	Absolute % Cover	Dominant Species?	Indicator Status
1. *Acer negundo*	30%	Yes	FAC
2. *Platanus occidentalis*	20%	Yes	FACW
3. *Ulmus americana*	15%	No	FACW
4. *Acer saccharinum*	15%	No	FACW
5.			
	80%	= Total Cover	

Sapling/Shrub Stratum (Plot size: 15' radius)			
1. *Acer negundo*	15%	Yes	FAC
2. *Ulmus americana*	5%	Yes	FACW
3.			
4.			
5.			
	20%	= Total Cover	

Herb Stratum (Plot size: 5' radius)			
1. *Solidago gigantea*	15%	Yes	FACW
2. *Impatiens capensis*	15%	Yes	FACW
3. *Viola sororia*	10%	Yes	FAC
4. *Toxicodendron radicans*	5%	No	FAC
5.			
6.			
7.			
8.			
9.			
10.			
11.			
12.			
13.			
14.			
15.			
16.			
17.			
18.			
19.			
20.			
	45%	= Total Cover	

Woody Vine Stratum (Plot size: 30' radius)			
1. *Euonymus fortunei*	30%	Yes	UPL
2. *Rosa multiflora*	15%	Yes	FACU
3. *Parthenocissus quinquefolia*	5%	No	FACU
	50%	= Total Cover	

Dominance Test worksheet:

Number of Dominant Species That Are OBL, FACW, or FAC: 7 (A)

Total Number of Dominant Species Across All Strata: 9 (B)

Percent of Dominant Species That Are OBL, FACW, or FAC: 78% (A/B)

Prevalence Index worksheet:

Total % Cover of:		Multiply by:	
OBL species		x1 =	
FACW species	85%	x2 =	1.7
FAC species	60%	x3 =	1.8
FACU species	20%	x4 =	0.8
UPL species	30%	x5 =	1.5
Column Totals:	1.95 (A)		5.8 (B)

Prevalence Index = B/A = 2.97

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.)
Some bare ground was present.

SOIL

Sampling Point: SP-3

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
0-14	10YR 4/2	100					SiL	
14-17	10YR 4/2	90	10YR 6/8	10	C	M	SiL	Prominent redox concentrations
17-20	10YR 4/2	50					SiL	Mixed matrix
	10YR 6/8	50						

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

Hydric Soil Indicators:

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

Indicators for Problematic Hydric Soils[3]:

- ___ Coast Prairie Redox (A16)
- ___ Iron-Manganese Masses (F12)
- ___ Dark Surface (S7)
- ___ Very Shallow Dark Surface (TF12)
- ___ Other (Explain in Remarks)

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

Restrictive Layer (if observed):

Type: _____

Depth (inches): _____

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

Remarks:

HYDROLOGY

Wetland Hydrology Indicators:

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

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

Secondary Indicators (minimum of two required)

- ___ Surface Soil Cracks (B6)
- ___ Drainage Patterns (B10)
- ___ Dry-Season Water Table (C2)
- ___ Crayfish Burrows (C8)
- ___ Saturation Visible on Aerial Imagery (C9)
- ___ Stunted or Stressed Plants (D1)
- ___ Geomorphic Position (D2)
- 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 ___ No X Depth (inches): _____

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

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

Remarks:

WETLAND DETERMINATION DATA FORM -- Midwest Region

Project/Site: 18-0145 City/County: Clarksville / Clark Sampling Date: 5/11/2021

Applicant/Owner: Jacobi, Toombs, and Lanz State: IN Sampling Point: SP-4

Investigator(s): Cory Shumate & Zachary Root Section, Township, Range: S 63, T 99, R 99

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

Slope (%): 0% Lat: 38.333816 Long: -85.793197 Datum: NAD83

Soil Map Unit Name: Haymond silt loam, 0 to 2 percent slopes, frequently flooded, brief duration (HcgAH), 0% hydric 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 No, Soil No, or Hydrology No significantly disturbed? Are "Normal Circumstances" present? Yes X No ____

Are Vegetation No, Soil No, or Hydrology No 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

Hydric Soil Present? Yes ____ No X

Wetland Hydrology Present? Yes ____ No X

Is the Sampled Area within a Wetland? Yes ____ No X

Remarks: Upland Sampling Point 4

VEGETATION -- Use scientific names of plants.

Tree Stratum (Plot size: 30' radius)	Absolute % Cover	Dominant Species?	Indicator Status
1. *Acer negundo*	5%	Yes	FAC
2.			
3.			
4.			
5.			
	5% = Total Cover		

Sapling/Shrub Stratum (Plot size: 15' radius)			
1.			
2.			
3.			
4.			
5.			
	0% = Total Cover		

Herb Stratum (Plot size: 5' radius)			
1. *Symphyotrichum pilosum*	85%	Yes	FACU
2. *Lamium purpureum*	10%	No	UPL
3. *Schedonorus arundinaceus*	10%	No	FACU
4. *Glechoma hederacea*	5%	No	FACU
5. *Viola sororia*	2%	No	FAC
6. *Carex blanda*	2%	No	FAC
7.			
8.			
9.			
10.			
11.			
12.			
13.			
14.			
15.			
16.			
17.			
18.			
19.			
20.			
	114% = Total Cover		

Woody Vine Stratum (Plot size: 30' radius)			
1.			
2.			
	0% = 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% (A/B)

Prevalence Index worksheet:

Total % Cover of:		Multiply by:	
OBL species		x1 =	
FACW species		x2 =	
FAC species	9%	x3 =	0.27
FACU species	100%	x4 =	4
UPL species	10%	x5 =	0.5
Column Totals:	1.19 (A)		4.77 (B)

Prevalence Index = B/A = 4.01

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.)

SOIL

Sampling Point: SP-4

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 4/2	100					SiL	
6-10	10YR 4/2	70	10YR 4/3	30	C	M	SiL	Faint redox concentrations

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

Hydric Soil Indicators:

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

Indicators for Problematic Hydric Soils[3]:

- ___ Coast Prairie Redox (A16)
- ___ Iron-Manganese Masses (F12)
- ___ Dark Surface (S7)
- ___ Very Shallow Dark Surface (TF12)
- ___ Other (Explain in Remarks)

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

Restrictive Layer (if observed):

Type: Gravel

Depth (inches): 10

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

Remarks:

HYDROLOGY

Wetland Hydrology Indicators:

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

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

Secondary Indicators (minimum of two required)

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

Field Observations:

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

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

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

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

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

Remarks:

APPENDIX B

HHEI/QHEI Data Forms

Qualitative Habitat Evaluation Index and Use Assessment Field Sheet

QHEI Score: 62.5

Stream & Location: Silver Creek in New Albany, Floyd County, IN **RM:** N/A **Date:** 05 / 14 / 20

Des. No. 1700788 **Scorers Full Name & Affiliation:** Cory Shumate, Metric Environmental, LLC

River Code: N/A **STORET #:** N/A **Lat./ Long.:** (NAD 83 - decimal °) 38 . 33434 / 85 . 79447 **Office verified location** ☐

1] SUBSTRATE

Check ***ONLY*** **Two** substrate *TYPE BOXES*; estimate % or note every type present

BEST TYPES	POOL	RIFFLE	OTHER TYPES	POOL	RIFFLE
☐ ☐ BLDR /SLABS [10]	5		☐ ☐ HARDPAN [4]		
☐ ☐ BOULDER [9]			☐ ☐ DETRITUS [3]		
☐ ☐ COBBLE [8]	20	15	☐ ☐ MUCK [2]		
☑ ☐ GRAVEL [7]	25	35	☑ ☐ SILT [2]	25	35
☐ ☐ SAND [6]			☐ ☐ ARTIFICIAL [0]	5	15
☐ ☐ BEDROCK [5]	20				

(Score natural substrates; ignore sludge from point-sources)

NUMBER OF BEST TYPES: ☑ 4 or more [2] ☐ 3 or less [0]

Check ONE (*Or 2 & average*)

ORIGIN
- ☑ LIMESTONE [1]
- ☐ TILLS [1]
- ☐ WETLANDS [0]
- ☐ HARDPAN [0]
- ☐ SANDSTONE [0]
- ☐ RIP/RAP [0]
- ☐ LACUSTURINE [0]
- ☐ SHALE [-1]
- ☐ COAL FINES [-2]

QUALITY

SILT
- ☐ HEAVY [-2]
- ☑ MODERATE [-1]
- ☐ NORMAL [0]
- ☐ FREE [1]

EMBEDDEDNESS
- ☐ EXTENSIVE [-2]
- ☐ MODERATE [-1]
- ☑ NORMAL [0]
- ☐ NONE [1]

Substrate 11 *Maximum 20*

Comments

2] INSTREAM COVER

Indicate presence 0 to 3: **0**-Absent; **1**-Very small amounts or if more common of marginal quality; **2**-Moderate amounts, but not of highest quality or in small amounts of highest quality; **3**-Highest quality in moderate or greater amounts (e.g., very large boulders in deep or fast water, large diameter log that is stable, well developed rootwad in deep / fast water, or deep, well-defined, functional pools.

1 UNDERCUT BANKS [1]	1 POOLS > 70cm [2]	1 OXBOWS, BACKWATERS [1]
1 OVERHANGING VEGETATION [1]	1 ROOTWADS [1]	1 AQUATIC MACROPHYTES [1]
SHALLOWS (IN SLOW WATER) [1]	BOULDERS [1]	1 LOGS OR WOODY DEBRIS [1]
ROOTMATS [1]		

AMOUNT

Check ONE (*Or 2 & average*)
- ☐ EXTENSIVE >75% [11]
- ☑ MODERATE 25-75% [7]
- ☐ SPARSE 5-<25% [3]
- ☐ NEARLY ABSENT <5% [1]

Comments

Cover 16 *Maximum 20*

3] CHANNEL MORPHOLOGY

Check ONE in each category (*Or 2 & average*)

SINUOSITY
- ☐ HIGH [4]
- ☐ MODERATE [3]
- ☑ LOW [2]
- ☐ NONE [1]

DEVELOPMENT
- ☐ EXCELLENT [7]
- ☐ GOOD [5]
- ☑ FAIR [3]
- ☐ POOR [1]

CHANNELIZATION
- ☐ NONE [6]
- ☐ RECOVERED [4]
- ☐ RECOVERING [3]
- ☑ RECENT OR NO RECOVERY [1]

STABILITY
- ☐ HIGH [3]
- ☑ MODERATE [2]
- ☐ LOW [1]

Comments OHWM Width: 135 ft; OHWM Depth: 4.8 ft. based on USGS Stream gauge 03294000

Channel 8 *Maximum 20*

4] BANK EROSION AND RIPARIAN ZONE

Check **ONE** in each category for ***EACH BANK*** (*Or 2 per bank & average*)

River right looking downstream

EROSION

L	R	
☑	☑	NONE / LITTLE [3]
☐	☐	MODERATE [2]
☐	☐	HEAVY / SEVERE [1]

RIPARIAN WIDTH

L	R	
☐	☐	WIDE > 50m [4]
☑	☐	MODERATE 10-50m [3]
☐	☐	NARROW 5-10m [2]
☐	☐	VERY NARROW < 5m [1]
☐	☑	NONE [0]

FLOOD PLAIN QUALITY

L	R	
☑	☑	FOREST, SWAMP [3]
☐	☐	SHRUB OR OLD FIELD [2]
☑	☐	RESIDENTIAL, PARK, NEW FIELD [1]
☐	☐	FENCED PASTURE [1]
☐	☐	OPEN PASTURE, ROWCROP [0]

L	R	
☐	☐	CONSERVATION TILLAGE [1]
☐	☐	URBAN OR INDUSTRIAL [0]
☐	☐	MINING / CONSTRUCTION [0]

Indicate predominant land use(s) past 100m riparian.

Comments

Riparian 7.5 *Maximum 10*

5] POOL / GLIDE AND RIFFLE / RUN QUALITY

MAXIMUM DEPTH

Check **ONE** (*ONLY!*)
- ☑ > 1m [6]
- ☐ 0.7-<1m [4]
- ☐ 0.4-<0.7m [2]
- ☐ 0.2-<0.4m [1]
- ☐ < 0.2m [0]

CHANNEL WIDTH

Check ONE (*Or 2 & average*)
- ☐ POOL WIDTH > RIFFLE WIDTH [2]
- ☑ POOL WIDTH = RIFFLE WIDTH [1]
- ☐ POOL WIDTH > RIFFLE WIDTH [0]

CURRENT VELOCITY

Check ALL that apply
- ☐ TORRENTIAL [-1]
- ☐ VERY FAST [1]
- ☑ FAST [1]
- ☐ MODERATE [1]
- ☐ SLOW [1]
- ☐ INTERSTITIAL [-1]
- ☐ INTERMITTENT [-2]
- ☐ EDDIES [1]

Indicate for reach - pools and riffles.

Recreation Potential
Primary Contact
Secondary Contact
(circle one and comment on back)

Comments

Pool / Current 8 *Maximum 12*

Indicate for functional riffles; Best areas must be large enough to support a population of riffle-obligate species: Check ONE (*Or 2 & average*). ☐ NO RIFFLE [metric=0]

RIFFLE DEPTH
- ☑ BEST AREAS > 10cm [2]
- ☐ BEST AREAS 5-10cm [1]
- ☐ BEST AREAS < 5cm [metric=0]

RUN DEPTH
- ☑ MAXIMUM > 50cm [2]
- ☐ MAXIMUM < 50cm [1]

RIFFLE / RUN SUBSTRATE
- ☑ STABLE (e.g., Cobble, Boulder) [2]
- ☐ MOD. STABLE (e.g., Large Gravel) [1]
- ☐ UNSTABLE (e.g., Fine Gravel, Sand) [0]

RIFFLE / RUN EMBEDDEDNESS
- ☐ NONE [2]
- ☐ LOW [1]
- ☑ MODERATE [0]
- ☐ EXTENSIVE [-1]

Comments

Riffle / Run 6 *Maximum 8*

6] GRADIENT

(1 ft/mi)

DRAINAGE AREA (211.823 mi²)

- ☐ VERY LOW - LOW [2-4]
- ☑ MODERATE [6-10]
- ☐ HIGH - VERY HIGH [10-6]

%POOL: 20 **%GLIDE:** 15 **%RUN:** 50 **%RIFFLE:** 15

Gradient 6 *Maximum 10*

A] SAMPLED REACH

Check ALL that apply

METHOD

- ☐ BOAT
- ☑ WADE
- ☐ L. LINE
- ☐ OTHER

STAGE

1st -sample pass-	2nd
☐ HIGH	☐
☐ UP	☐
☐ NORMAL	☐
☐ LOW	☐
☐ DRY	☐

DISTANCE

- ☐ 0.5 Km
- ☐ 0.2 Km
- ☐ 0.15 Km
- ☐ 0.12 Km
- ☐ OTHER

102 meters

CLARITY

1st --sample pass--	2nd
☐ < 20 cm	☐
☐ 20-<40 cm	☐
☐ 40-70 cm	☐
☐ > 70 cm/ CTB	☐
☐ SECCHI DEPTH	☐

CANOPY

- ☐ > 85%- OPEN
- ☑ 55%-<85%
- ☐ 30%-<55%
- ☐ 10%-<30%
- ☐ <10%- CLOSED

1st pass _____ cm

2nd _____ cm

Comment RE: Reach consistency/ Is reach typical of steam?, *Recreation/* Observed - Inferred, *Other/* Sampling observations, Concerns, Access directions, etc.

Fish and crayfish were observed within the stream. Potential live mussels were observed.

B] AESTHETICS

- ☐ NUISANCE ALGAE
- ☐ INVASIVE MACROPHYTES
- ☐ EXCESS TURBIDITY
- ☐ DISCOLORATION
- ☐ FOAM / SCUM
- ☐ OIL SHEEN
- ☐ TRASH / LITTER
- ☐ NUISANCE ODOR
- ☐ SLUDGE DEPOSITS
- ☐ CSOs/SSOs/OUTFALLS

C] RECREATION

AREA DEPTH

POOL: ☐ >100ft² ☐ >3ft

D] MAINTENANCE

Circle some & *COMMENT*

PUBLIC / PRIVATE / BOTH / NA
ACTIVE / HISTORIC / BOTH / NA
YOUNG-SUCCESSION-OLD
SPRAY / SNAG / REMOVED
MODIFIED / DIPPED OUT / NA
LEVEED / ONE SIDED
RELOCATED / CUTOFFS
MOVING-BEDLOAD-STABLE
ARMOURED / SLUMPS
ISLANDS / SCOURED
IMPOUNDED / DESICCATED
FLOOD CONTROL / DRAINAGE

E] ISSUES

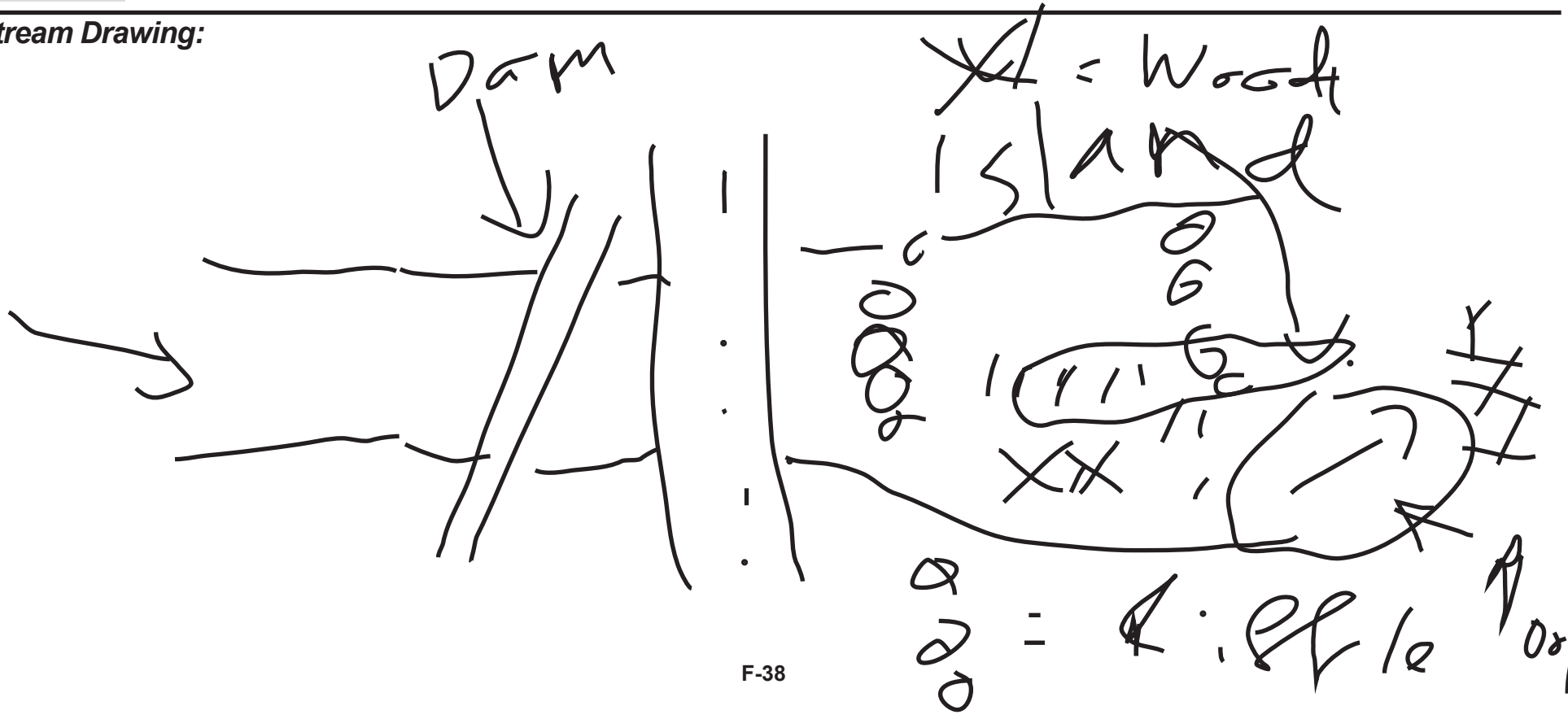
WWTP / CSO / NPDES / INDUSTRY
HARDENED / URBAN / DIRT&GRIME
CONTAMINATED / LANDFILL
BMPs-CONSTRUCTION-SEDIMENT
LOGGING / IRRIGATION / COOLING
BANK / EROSION / SURFACE
FALSE BANK / MANURE / LAGOON
WASH H_20 / TILE / H_20 TABLE
ACID / MINE / QUARRY / FLOW
NATURAL / WETLAND / STAGNANT
PARK / GOLF / LAWN / HOME
ATMOSPHERE / DATA PAUCITY

F] MEASUREMENTS

- $\bar{x}$ width
- $\bar{x}$ depth
- max. depth
- $\bar{x}$ bankfull width
- bankfull $\bar{x}$ depth
- W/D ratio
- bankfull max. depth
- floodprone x^2 width
- entrench. ratio

Legacy Tree:

Stream Drawing:



Ohio EPA Primary Headwater Habitat Evaluation Form

HHEI Score (sum of metrics 1, 2, 3) : 70

SITE NAME/LOCATION UNT 1 to Silver Creek in New Albany, Floyd County, IN

Des. No. 1700788 SITE NUMBER N/A RIVER BASIN N/A DRAINAGE AREA (mi²) <1

LENGTH OF STREAM REACH (ft) 215 LAT. 38.33484 LONG. -85.79427 RIVER CODE N/A RIVER MILE N/A

DATE 5/14/2020 SCORER Cory Shumate COMMENTS

NOTE: Complete All Items On This Form - Refer to "Field Evaluation Manual for Ohio's PHWH Streams" for Instructions

STREAM CHANNEL MODIFICATIONS: ☐ NONE / NATURAL CHANNEL ☐ RECOVERED ☐ RECOVERING ☑ RECENT OR NO RECOVERY

1. SUBSTRATE (Estimate percent of every type of substrate present. Check *ONLY* two predominant substrate *TYPE* boxes (Max of 40). Add total number of significant substrate types found (Max of 8). Final metric score is sum of boxes A & B.

TYPE		PERCENT	TYPE		PERCENT
☐☐	BLDR SLABS [16 pts]	5	☐☑	SILT [3 pt]	10
☐☐	BOULDER (>256 mm) [16 pts]		☐☐	LEAF PACK/WOODY DEBRIS [3 pts]	
☑☐	BEDROCK [16 pt]	70	☐☐	FINE DETRITUS [3 pts]	
☐☐	COBBLE (65-256 mm) [12 pts]	5	☐☐	CLAY or HARDPAN [0 pt]	
☐☐	GRAVEL (2-64 mm) [9 pts]	5	☐☐	MUCK [0 pts]	
☐☐	SAND (<2 mm) [6 pts]		☐☐	ARTIFICIAL [3 pts]	5

Total of Percentages of Bldr Slabs, Boulder, Cobble, Bedrock 85 (A) 19 (B) 6

SCORE OF TWO MOST PREDOMINATE SUBSTRATE TYPES: **TOTAL NUMBER OF SUBSTRATE TYPES:**

HHEI Metric Points

Substrate Max = 40 25

A + B

2. Maximum Pool Depth ***(Measure the maximum pool depth within the 61 meter (200 ft)*** evaluation reach at the time of evaluation. Avoid plunge pools from road culverts or storm water pipes) (Check *ONLY* one box):

- ☑ > 30 centimeters [20 pts]
- ☐ > 22.5 - 30 cm [30 pts]
- ☐ > 10 - 22.5 cm [25 pts]
- ☐ > 5 cm - 10 cm [15 pts]
- ☐ < 5 cm [5 pts]
- ☐ NO WATER OR MOIST CHANNEL [0 pts]

COMMENTS OHWM Width = 46.7"; Depth = 2.3" **MAXIMUM POOL DEPTH (centimeters):** 30.6

Pool Depth Max = 30 20

3. BANK FULL WIDTH (Measured as the average of 3-4 measurements) (Check *ONLY* one box):

- ☐ > 4.0 meters (> 13') [30 pts]
- ☑ > 3.0 m - 4.0 m (> 9' 7" - 13') [25 pts]
- ☐ > 1.5 m - 3.0 m (> 4' 8" - 9' 7") [20 pts]
- ☐ > 1.0 m - 1.5 m (> 3' 3" - 4' 8") [15 pts]
- ☐ ≤ 1.0 m (≤ 3' 3") [5 pts]

COMMENTS **AVERAGE BANKFULL WIDTH (meters)** 10

Bankfull Width Max=30 25

This information must also be completed

RIPARIAN ZONE AND FLOODPLAIN QUALITY ☆NOTE: River Left (L) and Right (R) as looking downstream☆

RIPARIAN WIDTH L	R	(Per Bank)	FLOODPLAIN QUALITY L	R	(Most Predominant per Bank)	L	R	
☐	☐	Wide >10m	☑	☐	Mature Forest, Wetland	☐	☐	Conservation Tillage
☐	☐	Moderate 5-10m	☐	☐	Immature Forest, Shrub or Old Field	☐	☐	Urban or Industrial
☐	☐	Narrow <5m	☐	☐	Residential, Park, New Field	☐	☐	Open Pasture, Row Crop
☑	☑	None	☐	☐	Fenced Pasture	☐	☐	Mining or Construction

COMMENTS

FLOW REGIME *(At Time of Evaluation)* (Check *ONLY* one box):

- ☑ Stream Flowing
- ☐ Subsurface flow with isolated pools (Interstitial)
- ☐ Moist Channel, isolated pools, no flow (Intermittent)
- ☐ Dry channel, no water (Ephemeral)

COMMENTS

SINUOSITY (Number of bends per 61 m (200 ft) of channel) (Check *ONLY* one box):

☐ None	☐ 1.0	☑ 2.0	☐ 3.0
☐ 0.5	☐ 1.5	☐ 2.5	☐ >3

STREAM GRADIENT ESTIMATE

☐ Flat (0.5 ft/100 ft) ☐ Flat to Moderate ☐ Moderate (2 ft/100 ft) ☑ Moderate to Severe ☐ Severe (10 ft/100 ft)

ADDITIONAL STREAM INFORMATION (This Information Must Also be Completed):

QHEI PERFORMED? - ☐ Yes ☑ No QHEI Score _____ (If Yes, Attach Completed QHEI Form)

DOWNSTREAM DESIGNATED USE(S)

☐ WWH Name: _____ Distance from Evaluated Stream _____

☐ CWH Name: _____ Distance from Evaluated Stream _____

☐ EWH Name: _____ Distance from Evaluated Stream _____

MAPPING: ATTACH COPIES OF MAPS, INCLUDING THE ENTIRE WATERSHED AREA. CLEARLY MARK THE SITE LOCATION

USGS Quadrangle Name:_____ NRCS Soil Map Page:_____ NRCS Soil Map Stream Order _____

County: _____ Township / City:_____

MISCELLANEOUS

Base Flow Conditions? (Y/N):_____ Date of last precipitation:_____ Quantity:_____

Photograph Information: _____

Elevated Turbidity? (Y/N): _____ Canopy (% open): _____

Were samples collected for water chemistry? (Y/N): _____ (Note lab sample no. or id. and attach results) Lab Number:_____

Field Measures: Temp (°C)_____ Dissolved Oxygen (mg/l) _____ pH (S.U.) _____ Conductivity (µmhos/cm) _____

Is the sampling reach representative of the stream (Y/N)_____ If not, please explain:_____

_____

Additional comments/description of pollution impacts: Stream was reddish-orange in color. Source of discoloration was off-site.

_____

BIOTIC EVALUATION

Performed? (Y/N): N (If Yes, Record all observations. Voucher collections optional. NOTE: all voucher samples must be labeled with the site ID number. Include appropriate field data sheets from the Primary Headwater Habitat Assessment Manual)

Fish Observed? (Y/N) N Voucher? (Y/N) N Salamanders Observed? (Y/N) N Voucher? (Y/N) N

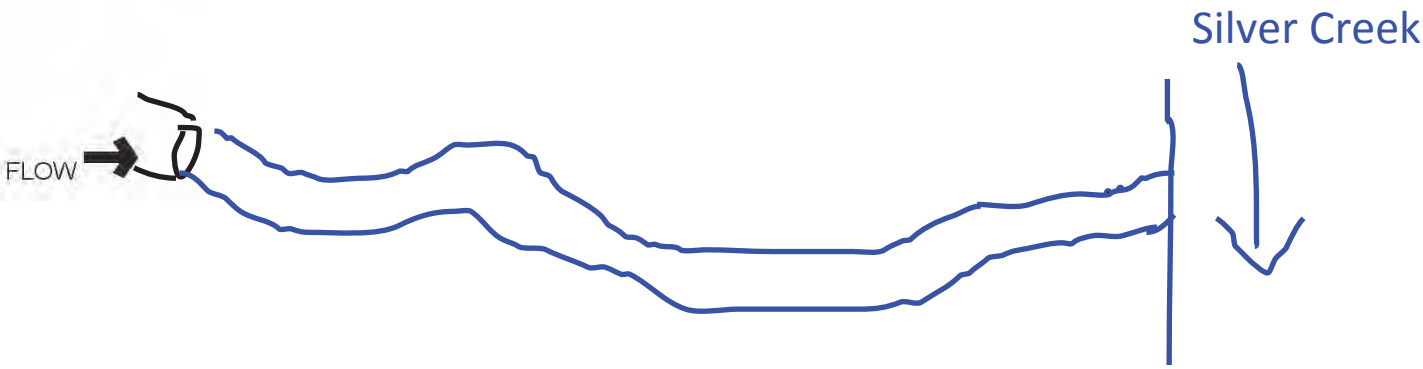
Frogs or Tadpoles Observed? (Y/N) Y Voucher? (Y/N) N Aquatic Macroinvertebrates Observed? (Y/N) N Voucher? (Y/N) N

Comments Regarding Biology: Dominant vegetation included green ash, winter creeper, rambler rose, American elm, and northern, spice bush. Frogs were observed.

_____

DRAWING AND NARRATIVE DESCRIPTION OF STREAM REACH (This must be completed):

Include important landmarks and other features of interest for site evaluation and a narrative description of the stream's location



Primary Headwater Habitat Evaluation Form

HHEI Score (sum of metrics 1, 2, 3) : 41

SITE NAME/LOCATION UNT 2 to Silver Creek

Des. No. 1700788 SITE NUMBER N/A RIVER BASIN N/A DRAINAGE AREA (mi²) <1

LENGTH OF STREAM REACH (ft) 347 LAT. 38.3348 LONG. -85.79499 RIVER CODE N/A RIVER MILE N/A

DATE 5/14/2020 SCORER Cory Shumate COMMENTS

NOTE: Complete All Items On This Form - Refer to "Field Evaluation Manual for Ohio's PHWH Streams" for Instructions

STREAM CHANNEL MODIFICATIONS: ☐ NONE / NATURAL CHANNEL ☐ RECOVERED ☐ RECOVERING ☑ RECENT OR NO RECOVERY

1. SUBSTRATE (Estimate percent of every type of substrate present. Check *ONLY* two predominant substrate *TYPE* boxes (Max of 40). Add total number of significant substrate types found (Max of 8). Final metric score is sum of boxes A & B.

TYPE		PERCENT	TYPE		PERCENT
☐ ☐	BLDR SLABS [16 pts]		☑ ☐	SILT [3 pt]	40
☐ ☐	BOULDER (>256 mm) [16 pts]		☐ ☐	LEAF PACK/WOODY DEBRIS [3 pts]	
☐ ☐	BEDROCK [16 pt]		☐ ☐	FINE DETRITUS [3 pts]	
☐ ☐	COBBLE (65-256 mm) [12 pts]	20	☐ ☐	CLAY or HARDPAN [0 pt]	
☐ ☑	GRAVEL (2-64 mm) [9 pts]	25	☐ ☐	MUCK [0 pts]	
☐ ☐	SAND (<2 mm) [6 pts]		☐ ☐	ARTIFICIAL [3 pts]	15

Total of Percentages of Bldr Slabs, Boulder, Cobble, Bedrock 2 (A) 12 (B) 4

SCORE OF TWO MOST PREDOMINATE SUBSTRATE TYPES: TOTAL NUMBER OF SUBSTRATE TYPES:

HHEI Metric Points

Substrate Max = 40: 16

A + B

2. Maximum Pool Depth ***(Measure the maximum pool depth within the 61 meter (200 ft)*** evaluation reach at the time of evaluation. Avoid plunge pools from road culverts or storm water pipes) (Check *ONLY* one box):

- ☑ > 30 centimeters [20 pts]
- ☐ > 22.5 - 30 cm [30 pts]
- ☐ > 10 - 22.5 cm [25 pts]
- ☐ > 5 cm - 10 cm [15 pts]
- ☐ < 5 cm [5 pts]
- ☐ NO WATER OR MOIST CHANNEL [0 pts]

COMMENTS OHWM Width = 26.4"; Depth = 1" MAXIMUM POOL DEPTH (centimeters): 33

Pool Depth Max = 30: 20

3. BANK FULL WIDTH (Measured as the average of 3-4 measurements) (Check *ONLY* one box):

- ☐ > 4.0 meters (> 13') [30 pts]
- ☐ > 3.0 m - 4.0 m (> 9' 7" - 13') [25 pts]
- ☐ > 1.5 m - 3.0 m (> 4' 8" - 9' 7") [20 pts]
- ☐ > 1.0 m - 1.5 m (> 3' 3" - 4' 8") [15 pts]
- ☑ ≤ 1.0 m (≤ 3' 3") [5 pts]

COMMENTS AVERAGE BANKFULL WIDTH (meters): 1.0

Bankfull Width Max=30: 5

This information must also be completed

RIPARIAN ZONE AND FLOODPLAIN QUALITY ☆NOTE: River Left (L) and Right (R) as looking downstream☆

RIPARIAN WIDTH L	R	(Per Bank)	FLOODPLAIN QUALITY L	R	(Most Predominant per Bank)	L	R	
☐	☐	Wide >10m	☑	☐	Mature Forest, Wetland	☐	☐	Conservation Tillage
☐	☐	Moderate 5-10m	☑	☐	Immature Forest, Shrub or Old Field	☐	☐	Urban or Industrial
☐	☐	Narrow <5m	☐	☑	Residential, Park, New Field	☐	☐	Open Pasture, Row Crop
☑	☑	None	☐	☐	Fenced Pasture	☐	☐	Mining or Construction

COMMENTS

FLOW REGIME *(At Time of Evaluation)* (Check *ONLY* one box):

- ☑ Stream Flowing
- ☐ Subsurface flow with isolated pools (Interstitial)
- ☐ Moist Channel, isolated pools, no flow (Intermittent)
- ☐ Dry channel, no water (Ephemeral)

COMMENTS

SINUOSITY (Number of bends per 61 m (200 ft) of channel) (Check *ONLY* one box):

- ☐ None
- ☐ 0.5
- ☐ 1.0
- ☐ 1.5
- ☐ 2.0
- ☐ 2.5
- ☑ 3.0
- ☐ >3

STREAM GRADIENT ESTIMATE

☐ Flat (0.5 ft/100 ft) ☐ Flat to Moderate ☐ Moderate (2 ft/100 ft) ☑ Moderate to Severe ☐ Severe (10 ft/100 ft)

ADDITIONAL STREAM INFORMATION (This Information Must Also be Completed):

QHEI PERFORMED? - ☐ Yes ☑ No QHEI Score _____ (If Yes, Attach Completed QHEI Form)

DOWNSTREAM DESIGNATED USE(S)

☐ WWH Name: _____ Distance from Evaluated Stream _____

☐ CWH Name: _____ Distance from Evaluated Stream _____

☐ EWH Name: _____ Distance from Evaluated Stream _____

MAPPING: ATTACH COPIES OF MAPS, INCLUDING THE ENTIRE WATERSHED AREA. CLEARLY MARK THE SITE LOCATION

USGS Quadrangle Name:_____ NRCS Soil Map Page:_____ NRCS Soil Map Stream Order _____

County: _____ Township / City:_____

MISCELLANEOUS

Base Flow Conditions? (Y/N):_____ Date of last precipitation:_____ Quantity:_____

Photograph Information: _____

Elevated Turbidity? (Y/N): _____ Canopy (% open): _____

Were samples collected for water chemistry? (Y/N): _____ (Note lab sample no. or id. and attach results) Lab Number:_____

Field Measures: Temp (°C)_____ Dissolved Oxygen (mg/l) _____ pH (S.U.) _____ Conductivity (µmhos/cm) _____

Is the sampling reach representative of the stream (Y/N)_____ If not, please explain:_____

_____

Additional comments/description of pollution impacts:_____

_____

BIOTIC EVALUATION

Performed? (Y/N): N (If Yes, Record all observations. Voucher collections optional. NOTE: all voucher samples must be labeled with the site ID number. Include appropriate field data sheets from the Primary Headwater Habitat Assessment Manual)

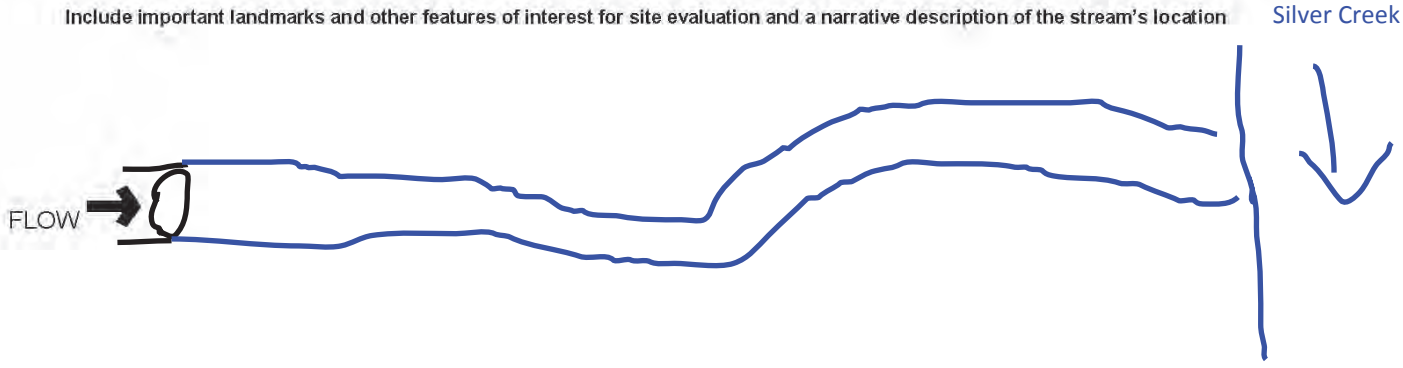
Fish Observed? (Y/N) N Voucher? (Y/N) N Salamanders Observed? (Y/N) N Voucher? (Y/N) N

Frogs or Tadpoles Observed? (Y/N) N Voucher? (Y/N) N Aquatic Macroinvertebrates Observed? (Y/N) N Voucher? (Y/N) N

Comments Regarding Biology: Dominant vegetation included red fescue, crownvetch, common dandelion, green ash, black cherry, sugar maple silver maple, eastern woodland sedge, and purple clover

DRAWING AND NARRATIVE DESCRIPTION OF STREAM REACH (This must be completed):

Include important landmarks and other features of interest for site evaluation and a narrative description of the stream's location



APPENDIX C

Site Photographs

1. View of SP-A1, Wetland A, soil profile. (Taken 5/14/2020)

2. View of SP-A1, Wetland A, and Culvert (CV) 1, looking north-east. (Taken 5/14/2020)

3. View of SP-A1, Wetland A, and Storm Drain (SD) 1, looking southwest. (Taken 5/14/2020)

4. View of SP-A2, Wetland A upland, soil profile. (Taken 5/14/2020)

SITE PHOTOGRAPHS—5/14/2020
Floyd County Bridge No. 51
Bridge Replacement
New Albany Township, Floyd County and Jeffersonville Township, Clark County, Indiana
Des. No. 1700788

METRIC ENVIRONMENTAL

5. View of SP-A2, Wetland A upland, Wetland A, and SD 1, looking southwest. (Taken 5/14/2020)

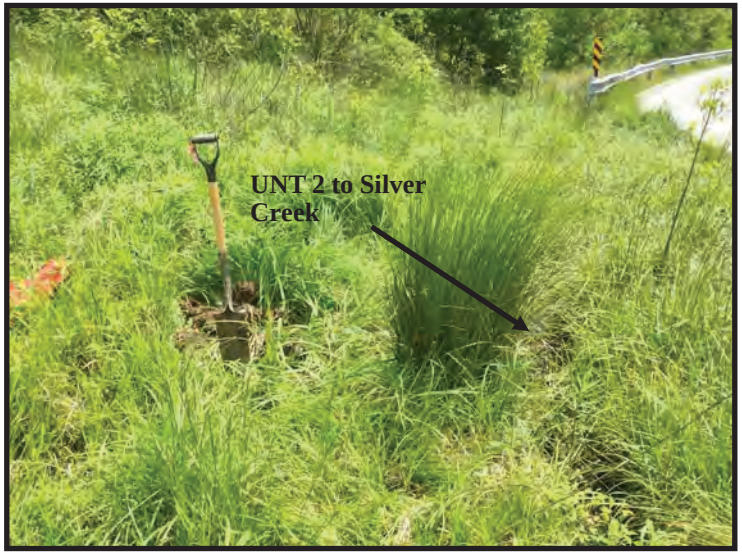
6. View of SP-A2, Wetland A upland, and CV 1, looking northeast. (Taken 5/14/2020)

7. View of CV 2, looking southwest. (Taken 5/14/2020)

8. View of Wetland A and SD 1 from CV 2, looking northeast. (Taken 5/14/2020)

9. View of SP-1, Upland Sampling Point 1, soil profile. (Taken 5/14/2020)

10. View of SP-1, Upland Sampling Point 1, and Blackiston Mill Rd right-of-way (ROW), looking northwest. (Taken 5/14/2020)



11. View of SP-1, Upland Sampling Point 1, and Unnamed Tributary (UNT) 2 to Silver Creek, looking southeast (downstream). (Taken 5/14/2020)

12. View of SP-2, Upland Sampling Point 2, soil profile. (Taken 5/14/2020)

13. View of SP-2, Upland Sampling Point 2, and Silver Creek, looking northwest. (Taken 5/14/2020)

14. View of SP-2, Upland Sampling Point 2, looking southeast. (Taken 5/14/2020)

15. View of SP-3, Upland Sampling Point 3, soil profile. (Taken 5/14/2020)

16. View of SP-3, Upland Sampling Point 3, looking southeast. (Taken 5/14/2020)

17. View of SP-3, Upland Sampling Point 3, looking northwest. (Taken 5/14/2020)

18. View of Silver Creek from the south bank of Silver Creek at the eastern PSL, looking northeast (upstream). (Taken 5/14/2020)

19. View of Silver Creek from the south bank of Silver Creek at the eastern PSL, looking north. (Taken 5/14/2020)

20. View of Silver Creek from the south bank of Silver Creek at the eastern PSL, looking northwest (downstream). (Taken

21. View of Silver Creek from the north bank of Silver Creek at the eastern PSL, looking east (upstream). (Taken 5/14/2020)

22. View of Silver Creek from the north bank of Silver Creek at the eastern PSL, looking south. (Taken 5/14/2020)

23. View of Silver Creek from the north bank of Silver Creek at the eastern PSL, looking southwest (downstream). (Taken 5/14/2020)

24. View of Silver Creek from the north bank of Silver Creek at the eastern PSL, looking northwest (downstream). (Taken

57. View of CV 6, looking northwest. (Taken 5/14/2020)

58. View of UNT 2 to Silver Creek from CV 6, looking southeast (downstream). (Taken 5/14/2020)

59. View of UNT 2 to Silver Creek and Blackiston Mill Rd ROW, looking northwest (upstream). (Taken 5/14/2020)

60. View of UNT 2 to Silver Creek, looking southeast (downstream). (Taken 5/14/2020)

APPENDIX G: Public Involvement

Jacobi, Toombs & Lanz, Inc.
Consulting Engineers & Land Surveyors

October 21, 2019

Sample Copy of Notice of Entry Letter

NOTICE OF SURVEY

SUBJECT: Floyd County Bridge 51 Replacement on Blackiston Mill Road over Silver Creek

Dear Property Owner:

Our information indicates that you own or occupy property near the above referenced project. Our employees will be performing a survey of the project area in the near future. It may be necessary for them to come onto your property to complete this work. This is permitted by law per Indiana Code IC 8-23-7-26. They will show you their identification, if you are available, before coming onto your property. If you have sold this property, or it is occupied by someone else, please let us know the name and address of the new owner or current occupant so we can contact them about the survey.

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, you will be contacted with additional information.

The survey work will include mapping the location of features such as trees, buildings, fences and drives, and obtaining ground elevations. The survey is needed for the proper planning and design of this project. Please be assured of our sincere desire to cause you as little inconvenience as possible during this survey. If any problems do occur, please contact our field crew or contact me at the telephone number or address shown below for our Corporate office.

Sincerely,
JACOBI, TOOMBS AND LANZ, INC.

Stephen L Marshall

Stephen L. Marshall P.E., P.L.S.
Director of Surveying

Cc: Tom L. Schellenberg, P.E., Project Manager
Don Lopp, Floyd County Director of Operations

Corporate
1829 E. Spring Street, Suite 201
New Albany, IN 47150
812-945-9585
812-945-6656 Fax

Kentucky
2307 River Road, Suite 203
Louisville, KY 40206
502-583-5994
502-583-7321 Fax

Central Indiana
1060 N. Capital Ave, Ste E360
Indianapolis, IN 46204
317-829-3474
317-829-3473 Fax

Southern Indiana
124 Bell Ave
Clarksville, IN 47129
812-288-6646
812-945-9585 Fax

LEGAL NOTICE
OF
PUBLIC INFORMATION MEETING

A public information meeting is scheduled with regards to the Floyd County Bridge No. 51 Replacement Corridor Study for Blackiston Mill Road over Silver Creek in New Albany and Clarksville, Indiana for **Tuesday, June 26, 2018, at 4:00 pm and 6:00 pm, at the Purdue Technology Center Campus on Technology Avenue off Innovation Boulevard in New Albany, Indiana.**

The Floyd County Commissioners, in conjunction with the Clark County Commissioners, City of New Albany and Town of Clarksville, plan to replace Bridge No. 51 over Silver Creek on Blackiston Mill Road and make improvements to the existing roadway. The Corridor Study is to develop different alternates for how the existing bridge will be replaced. New road approaches will be constructed and elevated in order to reduce the frequency Blackiston Mill Road is closed to traffic due to flooding. The public is cordially invited to attend the public information meeting. The purpose of the meeting is to offer all interested persons an opportunity to comment on current design plans for the proposed project.

The project limits is from Charlestown Road to approximately Jenny Wren Court. Existing Blackiston Mill Road consists of three lanes from Charlestown Road to Blackiston Boulevard, and two lanes from Blackiston Boulevard to just west of Potters Lane. The present highway right-of-way width varies. The improvements will include adding curb and gutter and sidewalk on both sides, new storm sewer systems and culverts where necessary.

This project will provide safety and congestion improvements by modifying the traffic signal system synchronization on Charlestown Road, and possibly the addition of turn lanes.

The tentative timetables for right-of-way acquisition and construction will be discussed during the formal presentation. Public statements will be taken after the presentation. Individuals interested in participating in the public statement session may sign the speaker's schedule prior to the presentation.

All comments collected before, during and after the meeting will be evaluated and addressed. Before and after the formal presentation, the plans will be available for anyone interested in talking to the engineers about the project.

The preliminary design plans along with other materials on the projects are available for viewing in the following office:

Jacobi, Toombs and Lanz, Inc., 1829 E. Spring Street, New Albany, Indiana 47150
Phone: (812) 945-9585, Thomas L. Schellenberg, Transportation Manager

16143

Proof of Publication

LEGAL NOTICE OF PUBLIC INFORMATION MEETING

A public information meeting is scheduled with regards to the Floyd County Bridge No. 51 Replacement Corridor Study for Blackiston Mill Road over Silver Creek in New Albany and Clarksville, Indiana for **Tuesday, June 26, 2018, at 4:00 pm and 6:00 pm, at the Purdue Technology Center Campus on Technology Avenue off Innovation Boulevard in New Albany, Indiana**.

The Floyd County Commissioners, in conjunction with the Clark County Commissioners, City of New Albany and Town of Clarksville, plan to replace Bridge No. 51 over Silver Creek on Blackiston Mill Road and make improvements to the existing roadway. The Corridor Study is to develop different alternates for how the existing bridge will be replaced. New road approaches will be constructed and elevated in order to reduce the frequency Blackiston Mill Road is closed to traffic due to flooding. The public is cordially invited to attend the public information meeting. The purpose of the meeting is to offer all interested persons an opportunity to comment on current design plans for the proposed project.

The project limits is from Charlestown Road to approximately Jenny Wren Court. Existing Blackiston Mill Road consists of three lanes from Charlestown Road to Blackiston Boulevard, and two lanes from Blackiston Boulevard to just west of Potters Lane. The present highway right-of-way width varies. The improvements will include adding curb and gutter and sidewalk on both sides, new storm sewer systems and culverts where necessary.

This project will provide safety and congestion improvements by modifying the traffic signal system synchronization on Charlestown Road, and possibly the addition of turn lanes.

The tentative timetables for right of way acquisition and construction will be discussed during the formal presentation. Public statements will be taken after the presentation. Individuals interested in participating in the public statement session may sign the speaker's schedule prior to the presentation.

All comments collected before, during and after the meeting will be evaluated and addressed. Before the formal presentation,

Publication Fee $ 250.20

1454307

STATE OF INDIANA
COUNTY OF CLARK -SS

Ginger Baxter on oath says that she is the bookkeeper of NEWS AND TRIBUNE and in the employ of the publisher of

NEWS AND TRIBUNE,

a daily newspaper of general circulation printed and published in the city of Jeffersonville, Clark County, State of Indiana, and further says that the annexed advertisement was published in said paper for #(2) time(s) to-wit: In issue of said NEWS AND TRIBUNE

Dated: 6/16, 6/19 2018

(x) Ginger Baxter

STATE OF INDIANA
COUNTY OF CLARK

Subscribed and sworn to before me this

20TH day of June 2018

(X) Joann Galligan

Joann Galligan

JOANN GALLIGAN
Notary Public - Seal
State of Indiana
Clark County
My Commission Expires Aug 27, 2022

Notary Public, Clark County, Indiana
(My Commission Expires August 27, 2022

Jacobi, Toombs & Lanz, Inc.
Consulting Engineers & Land Surveyors

PUBLIC INFORMATION MEETING – 6/26/2018
Project Fact Sheet

Project: Floyd County Bridge No. 51 Corridor Study – Blackiston Mill Road over Silver Creek

Owner: Floyd County (Local Public Agency – LPA)

Other LPA's: Town of Clarksville, City of New Albany, Clark County

Design Engineers: Jacobi, Toombs & Lanz, Inc., and United Consulting

Scope: Replace existing Bridge No. 51 on new alignment, provide sidewalks, and improve safety and traffic

Alternate 1: Follows Blackiston Mill Road from the intersection of Charlestown Road to Blackiston Blvd, then follows new alignment and crosses Silver Creek between the existing bridge and the dam, and ends just east of Walnut Grove Drive.

Alternate 2: Follows Blackiston Mill Road from the intersection of Charlestown Road to Blackiston Blvd, then follows new alignment and crosses Silver Creek upstream of the dam, and ends just east of Walnut Grove Drive.

Alternate 3: Follows Blackiston Blvd. from the intersection of Charlestown Road to the end of Blackiston Court, then follows new alignment and crosses Silver Creek upstream of the dam, and ends just east of Walnut Grove Drive.

Alternate 4: Follows the existing commercial drive across from Mt. Tabor Road at the intersection of Charlestown Road, then follows new alignment and crosses Silver Creek downstream of the existing bridge, and ends just east of Walnut Grove Drive.

Typical Section: 3-lanes west of the bridge and 2-lanes on the bridge and to the east
Curb & gutter and sidewalk

Estimated Project Cost: $5 M for the bridge and 700' of approaches on each side

Tentative Schedule: 2019 – Design
2020 – Right-of-Way acquisition
2021 – Construction

1829 E. Spring Street, Suite 201
New Albany, IN 47150
812-945-9585
812-945-6656 Fax

124 Bell Ave
Clarksville, I N 47129
812-945-9585
812-945-6656 Fax

1060 N. Capitol Avenue, Ste E360
Indianapolis, IN 46204
317-829-3474
317-829-3473 Fax

1400 South 1st Street
Louisville, KY 40208
502-583-5994
502-583-7321 Fax

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FLOYD COUNTY BRIDGE NO. 51 CORRIDOR STUDY
BLACKISTON MILL ROAD OVER SILVER CREEK
Public Information Meeting
Sign-In Sheet

June 2018
4:00

Name	Company	Phone	Address
DORIS M ANDRES		502 643-3884	400 PARKWOOD DR, CLARKSVILLE
Tom Ragland	CLARKSVILLE Collision	812 989 5183	2903 BLACKiston Mill Rd
Ed Wilkinson	N/A Sewer Board	812-948-9844	1028 CASTLEWOOD DR. N/A
Bradley Cummings	Town of Clarksville	812-283-8233	107 Roy Cole Dr.
Jerry Proffitt	The Garden Patch	812-207-0474	2520 Blackiston Mill Rd Clarksville
GREG FIFER	APPLEGATE FIFER PULLIAM	812-284-9499	428 MEIGS, JEFF, IN
TAMMI JONES	1806 Shirley Ave	812-725-5692	Clarksville (Disabled)
NAIDA MARSH	Ret. Dupont	812-981-7931	2321 Lombardy Dr. (Parkwood)
Mary Sebastian	Resident	502-641-3703	2013 Blackiston Circle
Christopher Perry	Resident	812-989-3450	" "
Greg Whith	Classic Tennis / Premier Homes	812-944-5821	2709 Blackiston Mill Rd Clarksville, IN 47129
Marty Scott	"	"	"
Bill Utz	3712 Kleaner Lane	812-945-3124	3712 Kleaner Lane
Sherri L Payne	Resident inheriting "S. Iverwood Ct"	812-948-5052	3338 Julian Drive, New Albany, IN 47150
Steve Pope		812-945-2443	3200 Blackiston Mill 47129
Chris Pope		812-944-3206	1710 Driftwood Dr
Jim Noble	3209 Blackiston mill RD	812-697-8147	8802 E Shady Ln Pekin IND 47165
Tom Rose O'Neil		812-944-8991	3514 Edgewood Village Dr.
RON GALBRAITH	~~RET SUPT~~	812 944 5491	1112 Silverwood Court 47150
Larry Warren	—	502-873-8935	200 Black Pine Blvd NA 47150
Drusilla Wood		812-945-1365	2714 Blackiston Mill Rd.
HEATHER KILGOUR	UNITED CONSULTING	317-895-2585	
Devin Stettler	United Consulting	317-895-2585	

FLOYD COUNTY BRIDGE NO. 51 CORRIDOR STUDY
BLACKISTON MILL ROAD OVER SILVER CREEK
Public Information Meeting
Sign-In Sheet

June 2018

4:00

Name	Company	Phone	Address
Jorge Lanz	JTL	812-945-9531	1929 E. Spring, N.A.
Don Lopp	Floyd County	812-948-4110	2524 Corydon Pike Suite 202, N.A.
Justin Tackett	Floyd County	812 948 5491	2524 Corydon Pike Suite 204 47150
Jacquelyn Koerber	Koerber's Fine Jewelry	502-523-8415	3095 Blackiston Mill Rd NA IN 47150
Felecia Koerber	Koerber's Fine Jewelry	502-523-8416	3095 Blackiston Mill Rd NA IN 47150
Jeanne Howard	Floyd Co.	812-948-8840	3309 Mellwood Dr. NA IN 47150
Ron Howard	Floyd Co	812-948-8840	3309 Mellwood DR, NA, IN 47150
Dave Disponett	Onsite Plumbing	502-773-4827	3013 Blackiston m.ll Rd - C-ville IN
Chad Bremer	TCB Properties	502-550-4357	8882 Kylies Ridge, Georgetown, IN 47122
George Nell	Floyd Co.	502-551-1835	3910 Payne Koehler Rd. NA. IN
* Ray & Becky Graf	Graf Properties LLC	812 9890053	7515 Old Hwy 111 Memphis IN 47143

* Owns Dam

FLOYD COUNTY BRIDGE NO. 51 CORRIDOR STUDY
BLACKISTON MILL ROAD OVER SILVER CREEK
Public Information Meeting
Sign-In Sheet

June 2018
6:00 p.m.

Name	Company	Phone	Address
BRIAN Couch	Couch's BODY SHOP	812-944-4044	2803 BLACKISTON MILL RD.
FRED PULLEY	—	812-949-3788	1 JENNY WREN CT.
DAVE NELSON	ERSHCO, LLC/ERSHIG P.rep	270-826-0595	PO Box 1127 Henderson KY 42419
MARK HENGARTNER	—	5024456936	2504 LARKWOOD DR NEW ALBANY
Leo: Rebecca Schmidt		(502) 681-3467	1888 Woodside Dr. Clarksville
Sue Speerbrecker	—	(608) 436-2308	3805 Old Kenosha La N.A.
Paul Speerbrecker	—	608-774-9720	" " " " "
Belinda Bishop		812-949-9566	2201 & 2203 Blackiston Cr. Clarksville
Matt Bauer	resident	5026396708	2808 B Mill Rd.
MARY GRIFFEY	RESIDENT - WALNUT GR	502-991-4981	117 WALNUT GROVE
Portia Nixe	=	812-670-6503	193 Tyler Dr
LaVonne McCarty	resident	502 592 8407	2913 Blackiston Mill Rd, Clarksville, IN

Bridge 51 Public Meeting – June 26, 2018 4:00 PM

- Will the bridge be wider than the existing?
    - Yes, the bridge will be wider.
- Can you see from the bridge?
    - Safety of cars a priority. Historic railings may be possible.
- Start at Jenny Wren Ct? Silver Creek Drive?
    - The bridge and approaches are the County's responsibility. Town of Clarksville may improve BMR at the same time.
    - (Brittany Montgomery) Jenny Wren was selected because it's close to Potter's improvement. No Town commitment yet.
    - Depends of funding, multiple funding sources are possible.
- Will the road be raised? 100-yr?
    - Road will be raised to the 10-year flood elevation so the road is still passable. (most bang for the buck) 100-yr is so much higher, may move flood further to the south, about 10 feet higher.
    - May look at "waterproof" to allow for future growth
- Felisha Kerber – the bridge does need to be replaced, but 3 or 4 hurts businesses on BMR, just purchased/installed a new sign. If 3 is selected, cars will be connecting to a county road traveling too fast. Could the area around BMR (Clark County) be made into a park? Existing bridge remain for pedestrian use? Need a study for park/nice area – restaurants along Silver Creek possible?
- Clarksville side floods – will property owners have a chance to raise their property?
    - Flooding is from Ohio River backwater
    - Fill in a floodway requires compensatory storage from the Town
    - Property owners should contact the Town directly
- Alternate 3 will require a signalized intersection, another signal is a negative
- Will road be reinforced for the truss company? Weight limits?
    - Yes, the road/bridge will be designed to Federal Standards – 65' semi, 36 ton loading
- Is there anyone from the ACOE to contact when Silver Creek flows backwards? Lost hillside in 2012 & 2018
    - Don't know what the ACOE would be able to do
- Are solar cells/lighting being considered?
    - Yes, lighting is being considered.

- Alternate 3's advantageous – property owner inherited property/ gravel drive, has been trying to get the government to take road. It will help the drainage bottleneck.
- What effect will there be for those that live there – what will be done to help flooding? Floodwall?
    - Residents depends on where you live. We will look at the flooding. Clark County may be able to help flood proof the property, or purchase it outright.
- Can old bridge remain as a by-pass when there are wrecks?
    - Bridge needs improvements/repairs. Would be more for the County to maintain.
- With the road raised, will you need a frontage road? (Greg)
    - We will look at the best way to connect existing drives, maybe a park on the north side, new connection at Walnut Grove
- How much frontage (R/W) will be taken for the road? (Onsite Plumbing owner) What about parking lot?
    - Don't know yet, will try to minimize
    - May have to buy property or relocate
- What are impacts to traffic?
    - New signal will on Alt 3 will lower level of service on 311 because they will have to stop now.
    - 1 and 2 same as now, may need additional turn lanes for Alt 2
- Can the road be shifted North and raised higher?
    - It could be if possible
- How long will the road be closed?
    - Bridge will stay open during construction, working on closure coordination with Clarksville
- Traffic flow on BMR and 311, when its gridlocked on 311 there are no business entrances blocked, but Alt 3 will cause backups in front of businesses

Bridge 51 Public Meeting – June 26, 2018 6:00 PM

- Difference between alternates 1 and 2
- Elevation – how much higher would the new bridge be
    - About 5’
- In 1997 the water was over bridge and guardrail. Doesn’t look like much of an improvement?
- Need to raise the road to cover the Feb. 2018 flood
- Need to flatten curve on NA side because you can’t turn left out of road. (Belinda Bishop 2201/2203 BMR)
- Adding pedestrian traffic? Connection of sidewalks
- Alt 4 no good. Count in turn lanes! Include buy in from all government agencies.
- Felicia Kerber – accidents on curve. They call 911. Police are charging for 911 calls
- No bicycle lanes?
- Alternate 2 most feasible
- Build in traffic growth for future growth
- Us as wide as lanes as possible
- When was traffic count done?
    - We need to update counts
- Put drawings on Floyd County website, send alts to Don PDF

APPENDIX H: Air Quality

KIPDA FY20 - 25 TIP through Admin Mod 28
Indiana Project Listings as of March 29, 2022

State	KIPDA ID #	State ID #	Primary Contact Agency	Project Name	Secondary Identifier	Description	County/ Counties	Open to Public	Ongoing Project	Project Purpose	Parent Project	Group ID	Phase	Year	Federal	State/Local	Total	Federal Funding Category	Project Status	TIP
Indiana	1558	1700788	Floyd Co.	Replacement of Bridge 51		Replacement of Bridge 51 over Silver Creek and reconstruction of approaches on Blackiston Mill Road. Total project length is approximately 0.312 miles.	Clark, Floyd	2027	FALSE	The proposed replacement bridge will be approximately 250 feet long, with 700 foot approaches. Bridge 51 carries Blackiston Mill Road over Silver Creek and currently serves as a critical link between the City of New Albany and the Town of Clarksville. The bridge structure itself is the responsibility of Floyd County, with the northern approach being in the City of New Albany and the southern approach in the Town of Clarksville and Clark County. In our 2018 Bridge Inspection Report, Bridge 51 scored a 39.2 Sufficiency Rating.		2676 - Roadway & Bridge Preservation & Rehabilitation - Indiana	PE	2020	$404,420.00	$101,105.00	$505,525.00	STBG-MPO	Active	TRUE
Indiana	2119	1382612	INDOT	Heavy Haul Transportation Corridor		Construction of a new 2 lane road from the Port of Indiana to I-265, and construction of a 3 lane road from the I-265/Old Salem Road interchange through River Ridge to IN 62. The project will also identify a direct railroad route from the Port of Indiana to River Ridge.	Clark	2022	FALSE	The Heavy Haul Road provides direct access to IN 265 from both the Port of Indiana and River Ridge and also direct access between the Port of Indiana and River Ridge which will alleviate the mixing of truck and passenger vehicles on IN 62 and Port Road by reducing the amount of trucks in the future. The future railroad will provide a direct connection between the Port of Indiana and River Ridge and also give better connectivity to two Class I railroads.			C	2020	$0.00	$468,221.00	$468,221.00	Local	Active	TRUE
Indiana	2119	1382612	INDOT	Heavy Haul Transportation Corridor		Construction of a new 2 lane road from the Port of Indiana to I-265, and construction of a 3 lane road from the I-265/Old Salem Road interchange through River Ridge to IN 62. The project will also identify a direct railroad route from the Port of Indiana to River Ridge.	Clark	2022	FALSE	The Heavy Haul Road provides direct access to IN 265 from both the Port of Indiana and River Ridge and also direct access between the Port of Indiana and River Ridge which will alleviate the mixing of truck and passenger vehicles on IN 62 and Port Road by reducing the amount of trucks in the future. The future railroad will provide a direct connection between the Port of Indiana and River Ridge and also give better connectivity to two Class I railroads.			U	2020	$89,000.00	$0.00	$89,000.00	SMFR	Active	TRUE

Indiana Maintenance Projects

Sponsor Agency: Clark County **Project Name:** Clark County Bridge 413

KIPDA ID:	State ID/DES #:	Open to Public:	County/Counties:	Project Cost:	AQ Analysis Status:
2836	1902768	2027	Clark	$4,672,650	Exempt

Project Description:
Clark County Bridge 413 is located over abandoned railroad tracks that have been removed and converted to a pedestrian path. The bridge will be removed and replaced with a three-sided culvert. Following construction, Clark County will relinquish the structure to the Town of Clarksville.

Justification:
The Clark County Bridge 413 is located on Brown's Station Way over an abandoned CSX line. Brown's Station Way is classified as a freeway. The latest round on inspections identified the surface of Bridge 413 as "poor" and improvements were recommended. According to the latest bridge design codes a bridge located on a freeway must have 8-10 foot shoulders on either side of the throughway. Bridge 413 does not have shoulders. Any improvements to the bridge should include adding shoulders to the bridge.

Phase:	Year:	Funding Category:	Federal:	State/Local:	Total:
ROW	2024	Bridge	$155,200	$38,800	$194,000
U	2025	Bridge	$258,000	$64,500	$322,500
C	2025	Bridge	$387,000	$96,750	$483,750
C	2025	Bridge	$2,580,000	$645,000	$3,225,000
		Total	$3,380,200	$845,050	$4,225,250

Sponsor Agency: Floyd County **Project Name:** Replacement of Bridge 51

KIPDA ID:	State ID/DES #:	Open to Public:	County/Counties:	Project Cost:	AQ Analysis Status:
1558	1700788	2027	Clark, Floyd	$7,000,000	Exempt

Project Description:
Replacement of Bridge 51 over Silver Creek and reconstruction of approaches on Blackiston Mill Road. Total project length is approximately 0.312 miles.

Justification:
The proposed replacement bridge will be approximately 250 feet long, with 700 foot approaches. Bridge 51 carries Blackiston Mill Road over Silver Creek and currently serves as a critical link between the City of New Albany and the Town of Clarksville. The bridge structure itself is the responsibility of Floyd County, with the northern approach being in the City of New Albany and the southern approach in the Town of Clarksville and Clark County. In our 2018 Bridge Inspection Report, Bridge 51 scored a 39.2 Sufficiency Rating.

Phase:	Year:	Funding Category:	Federal:	State/Local:	Total:
ROW	2024	STBG-MPO	$1,200,000	$300,000	$1,500,000
C	2024	STBG-MPO	$3,608,183	$1,000,000	$4,608,183
		Total	$4,808,183	$1,300,000	$6,108,183

Sponsor Agency: INDOT **Project Name:** Bridge Over I-65

KIPDA ID:	State ID/DES #:	Open to Public:	County/Counties:	Project Cost:	AQ Analysis Status:
2843	2000346	2024	Clark	$1,556,281	Exempt

Project Description:
Bridge deck overlay project over I-65, 0.44 miles south of I-265.

Justification:
The purpose of this project is to correct the deficiencies in the wearing surface and deck to help further protect the structure and extend the service life of the bridge.

Phase:	Year:	Funding Category:	Federal:	State/Local:	Total:
C	2024	NHPP	$495,000	$55,000	$550,000
C	2024	NHPP	$731,413	$81,268	$812,681
		Total	$1,226,413	$136,268	$1,362,681

APPENDIX I: Additional Studies

Excerpt

Bridge Inspection Report

22-00051
BLACKISTON MILL RD
over
SILVER CREEK

Inspection Date: 03/27/2021

Inspected By: Kurt Fowerbaugh

Inspection Type(s): Routine

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Inspector: Kurt Fowerbaugh

Inspection Date: 03/27/2021

Asset Name: 22-00051

Facility Carried: BLACKISTON MILL RD

Bridge Inspection Report

Latitude: 38.33429

Longitude: -85.794876

The bridge was built in 1920 and reconstructed in 1966.

Wearing Surface - CRACKS OVER PIER & AT ENDS, POTHOLES FILLED W/ HMA, CRACKS THROUGHOUT.
Deck - HAIRLINE CRACKS & LEACHING.
Superstructure - NO MAJOR DEFECTS.
Substructure - OPEN JOINTS BETWEEN STONES, EROSION, STONES IN UPSTREAM END OF PIER BROKEN WITH SOME MISSING PIECES.
Channel - BRUSHY BANKS, EROSION BEHIND WINGS, EROSION AT NW & SW WINGS.

The bridge is not scour critical

Overall the bridge is in poor condition.

IDENTIFICATION

(1) STATE CODE:	**185 - Indiana**
(8) STRUCTURE:	**2200050**
(5 A-B-C-D-E) INV. ROUTE:	**1 - 5 - 1 - 00000 - 0**
(2) HIGHWAY AGENCY DISTRICT:	**05 - Seymour**
(3) COUNTY CODE:	**022 - FLOYD**
(4) PLACE CODE:	**52326 - NEW ALBANY**
(6) FEATURES INTERSECTED:	**SILVER CREEK**
(7) FACILITY CARRIED:	**BLACKISTON MILL RD**
(9) LOCATION:	**00.20 E PAYNE KOEHLER**
(11) MILEPOINT:	**0000.000**
(12) BASE HIGHWAY NETWORK:	**0**
(13A) INVENTORY ROUTE:	
(13B) SUBROUTE NUMBER:	
(16) LATITUDE:	**38.33429**
(17) LONGITUDE:	**-85.794876**
(98) BORDER	
A) STATE NAME:	
B) PERCENT	**%**
(99) BORDER BRIDGE STRUCT. NO:	

STRUCTURE TYPE AND MATERIAL

(43) STRUCTURE TYPE, MAIN:	
A) KIND OF MATERIAL/DESIGN:	**5 - Prestressed concrete**
B) TYPE OF DESIGN/CONSTR:	**02 - Stringer/Multi-beam or Girder**
(44) STRUCTURE TYPE, APPROACH SPANS:	
A) KIND OF MATERIAL/DESIGN:	**0 - Other**
B) TYPE OF DESIGN/CONSTR:	**00 - Other**
(45) NUMBER OF SPANS IN MAIN UNIT:	**002**
(46) NUMBER OF APPROACH SPANS:	**0000**
(107) DECK STRUCTURE TYPE:	**1 - Concrete Cast-in-Place**
(108) WEARING SURFACE/PROT SYS:	
A) WEARING SURFACE:	**6 - Bituminous**
B) DECK MEMBRANE:	**8 - Unknown**
C) DECK PROTECTION:	**0 - None**

AGE OF SERVICE

(27) YEAR BUILT:	**1920**
(106) YEAR RECONSTRUCTED:	**1966**
(42) TYPE OF SERVICE:	
A) ON BRIDGE:	**1 - Highway**
B) UNDER BRIDGE:	**5 - Waterway**
(28) LANES:	
A) ON BRIDGE:	**02**
B) UNDER BRIDGE:	**00**
(29) AVERAGE DAILY TRAFFIC:	**004441**
(30) YEAR OF AVERAGE DAILY TRAFFIC:	**2016**
(109) AVERAGE DAILY TRUCK TRAFFIC:	**06 %**
(19) BYPASS DETOUR LENGTH:	**006 MI**

GEOMETRIC DATA

(48) LENGTH OF MAX SPAN:	**0087.9**	**FT**
(49) STRUCTURE LENGTH:	**00176.0**	**FT**
(50) CURB/SIDEWALK WIDTHS:		
A) LEFT	**01.0**	**FT**
B) RIGHT:	**01.0**	**FT**
(51) BRDG RDWY WIDTH CURB-TO-CURB:	**021.9**	**FT**
(52) DECK WIDTH, OUT-TO-OUT:	**024.1**	**FT**
(32) APPROACH ROADWAY	**023.0**	**FT**
(33) BRIDGE MEDIAN:	**0 - No median**	
(34) SKEW:	**00**	**DEG**

(35) STRUCTURE FLARED:	**0 - No flare**	
(10) INV RTE, MIN VERT CLEARANCE:	**99.99**	**FT**
(47) TOT HORIZ CLEARANCE:	**021.9**	**FT**
(53) VERT CLEAR OVER BR RDWY:	**99.99**	**FT**
(54) MIN VERTICAL UNDERCLEARANCE:		
A) REFERENCE FEATURE:	**N**	
B) MIN VERT UNDERCLEAR:	**0**	**FT**
(55) LATERAL UNDERCLEARANCE RIGHT:		
A) REFERENCE FEATURE:	**N**	
B) MIN LATERAL UNDERCLEAR:	**000.0**	**FT**
(56) MIN LATERAL UNDERCLEAR ON LEFT:	**000.0**	**FT**

INSPECTIONS

(90) INSPECTION DATE:	**03/27/2021**
(92) CRITICAL FEATURE INSPECTION:	
A) FRACTURE CRITICAL REQUIRED/FREQUENCY:	**N**
B) UNDERWATER INSPECTION REQUIRED/FREQUENCY:	**N**
C) OTHER SPECIAL INSPECTION REQUIRED/FREQUENCY:	**N**

(91) DESIGNATED INSPECTION FREQUENCY:	**12 MONTHS**
(93) CRITICAL FEATURE INSPECTION DATE:	
A) FRACTURE CRITICAL DATE:	
B) UNDERWATER INSP DATE:	
C) OTHER SPECIAL INSP DATE:	

CONDITION

(58) DECK:	**6 - Satisfactory Condition (minor deterioration)**
(58.01) WEARING SURFACE:	**4 - Poor Condition**
(59) SUPERSTRUCTURE:	**7 - Good Condition (some minor problems)**

(60) SUBSTRUCTURE:	**4 - Poor Condition (advanced deterioration)**
(61) CHANNEL/CHANNEL PROTECTION:	**5 - Bank eroded.. major damage**
(62) CULVERTS:	**N - Not Applicable**

CONDITION COMMENTS

(58) DECK: **6 - Satisfactory Condition (minor deterioration)**

Comments:
SATIS - HAIRLINE CRACKS AND EFFLORESCENCE, WEST SPAN NEAR SOUTH COPING BEAM
Material:
CONCRETE

(58.01) WEARING SURFACE: **4 - Poor Condition**

Comments:
POOR - CRACKS OVER PIER AND AT ENDS, POTHOLES FILLED WITH HMA, CRACKS THROUGHOUT, ROUGH UNEVEN
Material:
BITUMINOUS (2")

(59) SUPERSTRUCTURE: **7 - Good Condition (some minor problems)**

Comments:
GOOD - NO MAJOR DEFECTS NOTED
Material:
CONCRETE

(60) SUBSTRUCTURE: **4 - Poor Condition (advanced deterioration)**

Comments:
POOR - OPEN JOINTS BETWEEN STONES, EROSION, STONES IN UPSTREAM END OF PIER BROKEN WITH SOME MISSING PIECES, STONE ABUTMENTS AND PIERS WERE SPRAYED WITH THIN COAT OF GUNITE IN PAST TO COVEI AND PROTECT STONE, CRACKS, SPALLS WITH CONCRETE CAP OVER THE UPSTREAM NOSE OF PIER.
Material:
CONC.

(61) CHANNEL/CHANNEL PROTECTION **5 - Bank eroded.. major damage**

Comments:
FAIR - BRUSHY BANKS, EROSION BEHIND WINGS, EROSION AT NORTHWEST, NORTHEAST AND SOUTHWEST WINGS, APPROXIMATELY 8' HIGH CONCRETE DAM UPSTREAM
Material:
NATURAL

(62) CULVERTS: **N - Not Applicable**

Comments:
N/A
Material:
N/A

LOAD RATING AND POSTING

(31) DESIGN LOAD:	**0 - Unknown**	(66) INVENTORY RATING:	**36**
(70) BRIDGE POSTING	**5 - Equal to or above legal loads**	(65) INVENTORY RATING METHOD:	**0 - Field evaluation and documented engineering judgment**
(41) STRUCTURE OPEN/POSTED/CLOSED:	**A - Open**	(66B) INVENTORY RATING (H):	**20**
(64) OPERATING RATING:	**36**	(66C) TONS POSTED :	
(63) OPERATING RATING METHOD:	**0 - Field evaluation and documented engineering judgment**	(66D) DATE POSTED/CLOSED:	

APPRAISAL

SUFFICIENCY RATING:	**44.9**	(36) TRAFFIC SAFETY FEATURE:	
STATUS:	**1**	36A) BRIDGE RAILINGS:	**1**
(67) STRUCTURAL EVALUATION:	**4**	36B) TRANSITIONS:	**0**
(68) DECK GEOMETRY:	**2**	36C) APPROACH GUARDRAIL:	**1**
(69) UNDERCLEARANCES, VERTICAL & HORIZONTAL:	**N**	36D) APPROACH GUARDRAIL ENDS:	**1**

(71) WATERWAY ADEQUACY: **9 - Bridge Above Flood Water Elevations**
Comments:
ADEQUATE

(72) APPROACH ROADWAY ALIGNMENT: **3 - Basically intolerable requiring high priority of corrective action**

Comments:
LONGITUDINAL CRACKS AND PATCHES, SETTLING AND ROUGH AT BRIDGE ENDS
Material:
BITUMINOUS
72: CURVE EACH END, DIP SO., HILL NORTH

(113) SCOUR CRITICAL BRIDGES: **4 - Action is required to protect exposed foundations**

Comments:

CLASSIFICATION

(20) TOLL:	**3 - On Free Road**	(21) MAINT. RESPONSIBILITY:	**02 - County Highway Agency**
(22) OWNER:	**02 - County Highway Agency**	(26) FUNCTIONAL CLASS OF INVENTORY RTE:	**17 - Urban - Collector**
(37) HISTORICAL SIGNIFICANCE:	**5 - Not eligible**	(100) STRAHNET HIGHWAY:	**Not a STRAHNET route**
(101) PARALLEL STRUCTURE:	**N - No parallel structure**	(102) DIRECTION OF TRAFFIC:	**2-way traffic**
(103) TEMPORARY STRUCTURE:		(104) HIGHWAY SYSTEM OF INVENTORY ROUTE:	**0 - Structure/Route is NOT on NHS**
(105) FEDERAL LANDS HIGHWAYS:	**0-Not Applicable**	(110) DESIGNATED NATIONAL NETWORK:	**Inventory route not on network**
(112) NBIS BRIDGE LENGTH:	**Yes**		

NAVIGATION DATA

(38) NAVIGATION CONTROL:	**0 - No navigation control on waterway (bridge permit not required)**	(39) NAVIGATION VERTICAL CLEAR:	**000.0 FT**
(111) PIER OR ABUTMENT PROTECTION:		(116) MINIMUM NAVIGATION VERT. CLEARANCE, VERT. LIFT BRIDGE:	**FT**
		(40) NAV HORIZONTAL CLEARANCE:	**0000.0 FT**

PROPOSED IMPROVEMENTS

(75A) TYPE OF WORK:	**31 - Replacement - Load/Geometry**	(95) ROADWAY IMPROVEMENT COST:	**$ 000467**
(75B) WORK DONE BY:	**1 - Work to be done by contract**	(96) TOTAL PROJECT COST:	**$ 001830**
(76) LENGTH OF IMPROVEMENT:	**000210 FT**	(97) YR OF IMPROVEMENT COST EST:	**2020**
(94) BRIDGE IMPROVEMENT COST:	**$ 000983**	(114) FUTURE AVG DAILY TRAFFIC:	**006546**
		(115) YR OF FUTURE ADT:	**2036**

PHOTO 1

Description LOOKING NORTH FROM ROADWAY

PHOTO 2

Description LOOKING SOUTH FROM ROADWAY

PHOTO 3

Description LOOKING WEST AT UPSTREAM ELEVATION

PHOTO 4

Description LOOKING NE AT DOWNSTREAM ELEVATION

PHOTO 5

Description STONE LOSS AT CENTER PIER NOSE

PHOTO 6

Description LOOKING NORTH ALONG SOUTH SPAN, DECK EFFL.

Miscellaneous Asset Data

Asset Management

Load Rating 2:

Has the dead load or the structural condition of the primary load carrying members changed since the last inspection?

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.*

Comments:

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

Comments:

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

Comments:

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

Comments:

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

Comments:

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

Comments:

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

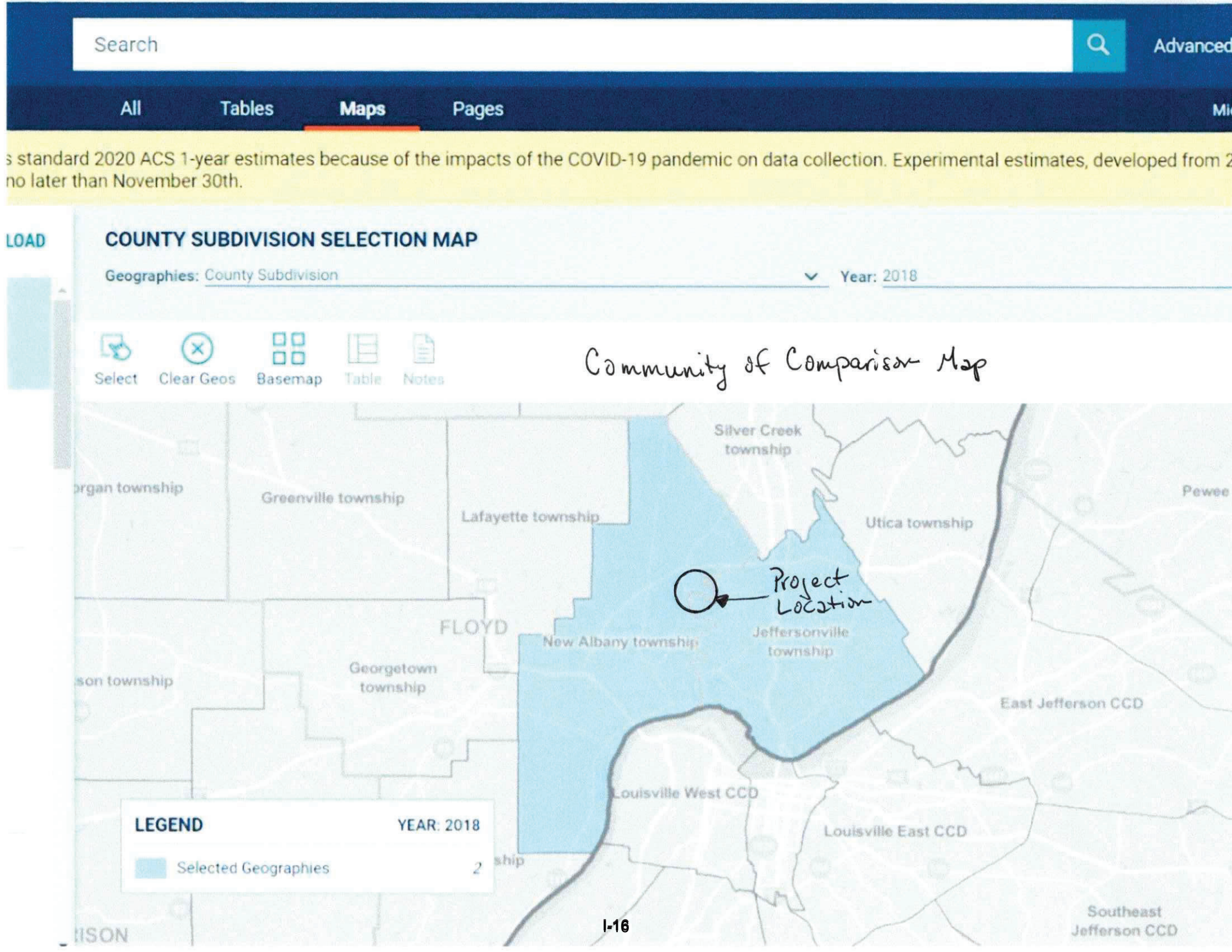
BRIDGE Culvert Geometry:

Barrel Length:	000.0
Height:	00.0
Width:	00.0

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

ProjectNumber	SubProjectCode	County	Property
1800014	1800014	Clark	Henry Lansden Park
1800029	1800029	Clark	Northaven Park (Connie Sellmer)
1800029.1	1800029.1	Clark	Highland Park
1800041	1800041	Clark	Moser Park
1800053	1800053	Clark	Vissing Park
1800075	1800075	Clark	Henry Lansden Park Duplicate
1800123	1800123	Clark	Deam Lake State Recreation Area
1800124	1800124	Clark	Lapping Park, Wooded View Golf Course
1800154	1800154	Clark	Deam Lake State Recreation Area Duplicate
1800166	1800166	Clark	Deam Lake State Recreation Area Duplicate
1800171	1800171AA	Clark	Deam Lake State Recreation Area Duplicate
1800205	1800205	Clark	Lapping Park, Wooded View Golf Course Duplicate
1800216	1800216	Clark	Vissing Park Duplicate
1800248	1800248	Clark	Henry Lansden Park Duplicate
1800305	1800305B	Clark	Deam Lake State Recreation Area Duplicate
1800342	1800342	Clark	Lapping Park, Wooded View Golf Course Duplicate
1800363	1800363E	Clark	Clark State Forest
1800363	1800363G	Clark	Deam Lake State Recreation Area Duplicate
1800446	1800446	Clark	Clark State Forest Duplicate
1800616	1800616	Clark	Borden Community Park
1800285	1800285	Floyd	Edwardsville Park
1800405	1800405E	Floyd	Brock Sampson Ridge Nature Preserve
1800546	1800546	Floyd	Budd Road Woodlands Park

*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.


Search
Advanced
All
Tables
Maps
Pages
s standard 2020 ACS 1-year estimates because of the impacts of the COVID-19 pandemic on data collection. Experimental estimates, developed from 2
no later than November 30th.
LOAD
COUNTY SUBDIVISION SELECTION MAP
Geographies: County Subdivision
Year: 2018
Select
Clear Geos
Basemap
Table
Notes
Community of Comparison Map
Silver Creek township
Greenville township
Lafayette township
Utica township
Pewee
Project Location
FLOYD
New Albany township
Jeffersonville township
Georgetown township
East Jefferson CCD
Louisville West CCD
Louisville East CCD
Southeast Jefferson CCD
LEGEND
YEAR: 2018
Selected Geographies
2

Search

Advanced Sea

All | Tables | Maps | Pages

standard 2020 ACS 1-year estimates because of the impacts of the COVID-19 pandemic on data collection. Experimental estimates, developed from 2020
er than November 30th.

Total:—Estimate in 6 Geos in 2019

Survey/Program: American Community Survey

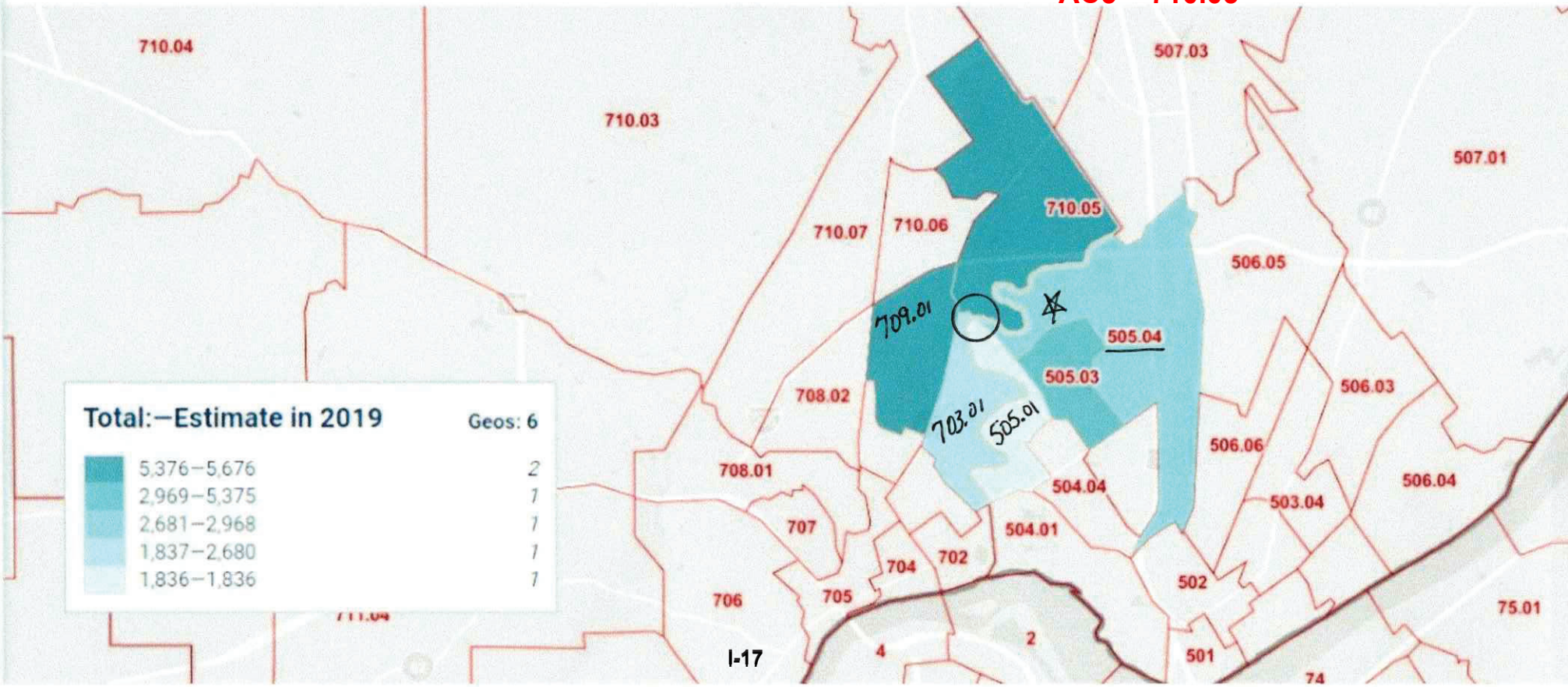
Product: 2019: ACS 5-Year Estimates Detailed Tables

Geographies: Census Tract

Select | Clear Geos | Basemap | Table | Notes

Affected Community Map

AC1 = 505.04
AC2 = 505.01
AC3 = 703.01
AC4 = 709.01
AC5 = 710.05



US Census 2021 American Community Survey 5 year Estimates	**COC** Jeffersonville and New Albany, Clark and Floyd Counties, IN	**AC1** Census Tract 505.04, Clark County, IN	**AC2** Census Tract 505.01, Clark County, IN *(2019 5YR data)*	**AC3** Census Tract 703.01, Floyd County IN	**AC4** Census Tract 709.01, Floyd County, IN	**AC5** Census Tract 710.05, Floyd County, IN
LOW-INCOME						
Population for whom poverty status is determined: Total	84,285	2,932	1,836	3,313	5,284	5,595
Population for whom poverty status is determined: Income in 2019 below poverty level	11,834	924	139	76	390	238
Percent Low-Income (Income in 2019 below poverty level) (Total population)	14.04%	31.51%	7.57%	2.29%	7.38%	4.25%
125 Percent of COC (125 x COC Percent Low-Income)	17.55%	**AC < 125% COC**	**AC < 125% COC**	**AC < 125% COC**	**AC < 125% COC**	**AC < 125% COC**
Low-Income EJ Impact		**YES**	**NO**	**NO**	**NO**	**NO**
MINORITY						
Total Population: Total	86,528	3,146	1,836	3,313	5,327	5,754
Not Hispanic or Latino	81,712	2,651	1,750	3,304	4,968	5,726
White alone	67,185	2,305	1,604	3,234	4,230	5,299
Black or African American alone	8,803	267	57	54	469	42
American Indian and Alaska Native alone	58	0	0	4	39	0
Asian alone	1,047	52	8	12	146	176
Native Hawaiin and Other Pacific Islander alone	15	0	0	0	0	0
Some other race alone	340	0	8	0	0	0
Two or more races	4,264	27	73	0	84	209
Hispanic or Latino	4,816	495	86	9	359	28
Number Non-white/minority	19,343	841	232	79	1,097	455
Percent Non-white/Minority (Total population - white alone) Total population	22.35%	26.73%	12.64%	2.38%	20.59%	7.91%
125 Percent of COC (125 x COC Percent Non-white/Minority)	27.94%	**AC < 125% COC**	**AC < 125% COC**	**AC < 125% COC**	**AC < 125% COC**	**AC < 125% COC**
Minority EJ Impact		**NO**	**NO**	**NO**	**NO**	**NO**

Table: ACSDT5Y2019.B03002

Raw Census Data

	Census Tract 505.01, Clark County, Indiana	
Label	**Estimate**	**Margin of Error**
Total:	1,836	±210
Not Hispanic or Latino:	1,750	±188
White alone	1,604	±155
Black or African American alone	57	±69
American Indian and Alaska Native alone	0	±12
Asian alone	8	±13
Native Hawaiian and Other Pacific Islander alone	0	±12
Some other race alone	8	±13
Two or more races:	73	±59
Two races including Some other race	0	±12
Two races excluding Some other race, and three or more races	73	±59
Hispanic or Latino:	86	±103
White alone	86	±103
Black or African American alone	0	±12
American Indian and Alaska Native alone	0	±12
Asian alone	0	±12
Native Hawaiian and Other Pacific Islander alone	0	±12
Some other race alone	0	±12
Two or more races:	0	±12
Two races including Some other race	0	±12

	Census Tract 505.01, Clark County, Indiana	
Label	**Estimate**	**Margin of Error**
Two races excluding Some other race, and three or more races	0	±12

Table: ACSDT5Y2021.B03002

	Indiana		Clark County, Indiana	
Label	**Estimate**	**Margin of Error**	**Estimate**	**Margin of Error**
Total:	6,751,340	*****	120,185	*****
Not Hispanic or Latino:	6,256,932	±210	113,362	*****
White alone	5,255,601	±2,523	98,580	±321
Black or African American alone	625,756	±3,947	8,103	±549
American Indian and Alaska Native alone	6,863	±578	12	±17
Asian alone	162,123	±2,234	1,112	±178
Native Hawaiian and Other Pacific Islander alone	1,982	±278	15	±24
Some other race alone	19,449	±1,939	443	±311
Two or more races:	185,158	±4,874	5,097	±564
Two races including Some other race	20,447	±1,768	179	±100
Two races excluding Some other race, and three or more races	164,711	±4,561	4,918	±559
Hispanic or Latino:	494,408	±211	6,823	*****
White alone	227,695	±4,641	4,669	±480
Black or African American alone	9,320	±1,348	36	±37
American Indian and Alaska Native alone	4,536	±695	220	±201
Asian alone	1,534	±463	25	±31
Native Hawaiian and Other Pacific Islander alone	294	±163	0	±29
Some other race alone	148,234	±4,556	1,163	±354
Two or more races:	102,795	±4,440	710	±281
Two races including Some other race	86,302	±3,959	523	±215
Two races excluding Some other race, and three or more races	16,493	±1,771	187	±147

Table: ACSDT5Y2021.B03002

	Floyd County, Indiana		Census Tract 505.04, Clark County, Indiana	
Label	**Estimate**	**Margin of Error**	**Estimate**	**Margin of Error**
Total:	79,594	*****	3,146	±485
Not Hispanic or Latino:	76,738	*****	2,651	±480
White alone	69,338	±93	2,305	±525
Black or African American alone	3,925	±339	267	±181
American Indian and Alaska Native alone	71	±58	0	±12
Asian alone	986	±103	52	±72
Native Hawaiian and Other Pacific Islander alone	0	±29	0	±12
Some other race alone	50	±47	0	±12
Two or more races:	2,368	±358	27	±30
Two races including Some other race	139	±82	0	±12
Two races excluding Some other race, and three or more races	2,229	±352	27	±30
Hispanic or Latino:	2,856	*****	495	±236
White alone	1,321	±204	237	±186
Black or African American alone	38	±33	0	±12
American Indian and Alaska Native alone	13	±16	50	±82
Asian alone	0	±29	0	±12
Native Hawaiian and Other Pacific Islander alone	9	±17	0	±12
Some other race alone	527	±207	109	±142
Two or more races:	948	±191	99	±133
Two races including Some other race	810	±224	99	±133
Two races excluding Some other race, and three or more races	138	±101	0	±12

Table: ACSDT5Y2021.B03002

	Census Tract 703.01, Floyd County, Indiana		Census Tract 709.01, Floyd County, Indiana	
Label	**Estimate**	**Margin of Error**	**Estimate**	**Margin of Error**
Total:	3,313	±618	5,327	±717
Not Hispanic or Latino:	3,304	±621	4,968	±701
White alone	3,234	±632	4,230	±702
Black or African American alone	54	±43	469	±260
American Indian and Alaska Native alone	4	±10	39	±57
Asian alone	12	±18	146	±139
Native Hawaiian and Other Pacific Islander alone	0	±12	0	±17
Some other race alone	0	±12	0	±17
Two or more races:	0	±12	84	±68
Two races including Some other race	0	±12	17	±28
Two races excluding Some other race, and three or more races	0	±12	67	±61
Hispanic or Latino:	9	±17	359	±207
White alone	0	±12	273	±190
Black or African American alone	0	±12	0	±17
American Indian and Alaska Native alone	0	±12	0	±17
Asian alone	0	±12	0	±17
Native Hawaiian and Other Pacific Islander alone	9	±17	0	±17
Some other race alone	0	±12	0	±17
Two or more races:	0	±12	86	±110
Two races including Some other race	0	±12	86	±110
Two races excluding Some other race, and three or more races	0	±12	0	±17

Table: ACSDT5Y2021.B03002

	Census Tract 710.05, Floyd County, Indiana		Jeffersonville, Indiana	
Label	**Estimate**	**Margin of Error**	**Estimate**	**Margin of Error**
Total:	5,754	±468	49,178	±631
Not Hispanic or Latino:	5,726	±470	46,532	±755
White alone	5,299	±430	36,725	±1,091
Black or African American alone	42	±40	5,716	±675
American Indian and Alaska Native alone	0	±17	0	±26
Asian alone	176	±134	765	±275
Native Hawaiian and Other Pacific Islander alone	0	±17	15	±24
Some other race alone	0	±17	310	±280
Two or more races:	209	±111	3,001	±566
Two races including Some other race	0	±17	82	±69
Two races excluding Some other race, and three or more races	209	±111	2,919	±565
Hispanic or Latino:	28	±38	2,646	±543
White alone	28	±38	1,737	±494
Black or African American alone	0	±17	24	±34
American Indian and Alaska Native alone	0	±17	50	±60
Asian alone	0	±17	8	±12
Native Hawaiian and Other Pacific Islander alone	0	±17	0	±26
Some other race alone	0	±17	466	±251
Two or more races:	0	±17	361	±189
Two races including Some other race	0	±17	284	±174
Two races excluding Some other race, and three or more races	0	±17	77	±74

Table: ACSDT5Y2021.B03002

	New Albany, Indiana	
Label	**Estimate**	**Margin of Error**
Total:	37,350	±45
Not Hispanic or Latino:	35,180	±244
White alone	30,460	±442
Black or African American alone	3,087	±421
American Indian and Alaska Native alone	58	±59
Asian alone	282	±138
Native Hawaiian and Other Pacific Islander alone	0	±26
Some other race alone	30	±34
Two or more races:	1,263	±286
Two races including Some other race	71	±67
Two races excluding Some other race, and three or more races	1,192	±279
Hispanic or Latino:	2,170	±238
White alone	985	±232
Black or African American alone	38	±33
American Indian and Alaska Native alone	6	±13
Asian alone	0	±26
Native Hawaiian and Other Pacific Islander alone	9	±17
Some other race alone	453	±194
Two or more races:	679	±154
Two races including Some other race	541	±159
Two races excluding Some other race, and three or more races	138	±101

Table: ACSDT5Y2019.B17001

	Census Tract 505.01, Clark County, Indiana	
Label	**Estimate**	**Margin of Error**
Total:	1,836	±210
Income in the past 12 months below poverty level:	139	±73
Male:	77	±57
Under 5 years	0	±12
5 years	0	±12
6 to 11 years	6	±10
12 to 14 years	0	±12
15 years	0	±12
16 and 17 years	0	±12
18 to 24 years	15	±24
25 to 34 years	0	±12
35 to 44 years	5	±7
45 to 54 years	7	±10
55 to 64 years	37	±44
65 to 74 years	0	±12
75 years and over	7	±9
Female:	62	±35
Under 5 years	5	±8
5 years	0	±12
6 to 11 years	5	±8
12 to 14 years	0	±12
15 years	0	±12
16 and 17 years	0	±12
18 to 24 years	0	±12
25 to 34 years	16	±16
35 to 44 years	0	±12
45 to 54 years	7	±10
55 to 64 years	14	±16
65 to 74 years	0	±12

	Census Tract 505.01, Clark County, Indiana	
Label	**Estimate**	**Margin of Error**
75 years and over	15	±14
Income in the past 12 months at or above poverty level:	1,697	±218
Male:	907	±142
Under 5 years	56	±39
5 years	0	±12
6 to 11 years	64	±29
12 to 14 years	44	±27
15 years	0	±12
16 and 17 years	34	±33
18 to 24 years	86	±42
25 to 34 years	82	±42
35 to 44 years	139	±58
45 to 54 years	98	±43
55 to 64 years	123	±41
65 to 74 years	95	±34
75 years and over	86	±28
Female:	790	±102
Under 5 years	20	±17
5 years	12	±14
6 to 11 years	20	±20
12 to 14 years	29	±25
15 years	0	±12
16 and 17 years	7	±8
18 to 24 years	117	±59
25 to 34 years	73	±35
35 to 44 years	116	±52
45 to 54 years	98	±47
55 to 64 years	119	±41
65 to 74 years	102	±25

	Census Tract 505.01, Clark County, Indiana	
Label	**Estimate**	**Margin of Error**
75 years and over	77	±32

Table: ACSDT5Y2021.B17001

	Indiana		Clark County, Indiana	
Label	**Estimate**	**Margin of Error**	**Estimate**	**Margin of Error**
Total:	6,550,921	±2,082	118,378	±382
Income in the past 12 months below poverty level:	819,005	±12,122	11,783	±1,192
Male:	362,924	±6,573	5,363	±636
Under 5 years	39,871	±1,591	421	±184
5 years	7,285	±787	58	±61
6 to 11 years	45,570	±2,139	581	±193
12 to 14 years	19,525	±1,059	408	±151
15 years	8,321	±936	152	±87
16 and 17 years	12,711	±882	233	±112
18 to 24 years	55,131	±2,085	469	±193
25 to 34 years	39,906	±1,517	765	±195
35 to 44 years	35,771	±1,644	603	±184
45 to 54 years	33,569	±1,592	489	±194
55 to 64 years	36,832	±1,603	489	±137
65 to 74 years	18,031	±1,010	550	±292
75 years and over	10,401	±711	145	±65
Female:	456,081	±7,082	6,420	±813
Under 5 years	37,892	±1,661	432	±200
5 years	8,182	±726	150	±78
6 to 11 years	41,651	±1,905	660	±223
12 to 14 years	20,710	±1,306	251	±121
15 years	6,623	±645	61	±56
16 and 17 years	12,840	±925	231	±135
18 to 24 years	67,661	±2,091	535	±190
25 to 34 years	68,807	±1,938	1,010	±231
35 to 44 years	52,726	±2,316	786	±246
45 to 54 years	41,328	±1,448	565	±176
55 to 64 years	47,159	±1,584	732	±270
65 to 74 years	26,371	±1,080	543	±220
75 years and over	24,131	±1,050	464	±152

Table: ACSDT5Y2021.B17001

	Floyd County, Indiana		Census Tract 505.04, Clark County, Indiana	
Label	**Estimate**	**Margin of Error**	**Estimate**	**Margin of Error**
Total:	77,992	±303	2,932	±470
Income in the past 12 months below poverty level:	7,401	±817	924	±420
Male:	2,878	±437	354	±186
Under 5 years	350	±149	28	±31
5 years	70	±59	0	±12
6 to 11 years	213	±93	30	±28
12 to 14 years	223	±97	30	±28
15 years	150	±84	37	±53
16 and 17 years	204	±95	0	±12
18 to 24 years	257	±148	77	±92
25 to 34 years	225	±98	31	±37
35 to 44 years	226	±106	9	±19
45 to 54 years	405	±128	55	±57
55 to 64 years	373	±126	49	±45
65 to 74 years	104	±57	8	±13
75 years and over	78	±64	0	±12
Female:	4,523	±545	570	±302
Under 5 years	470	±172	84	±100
5 years	69	±53	0	±12
6 to 11 years	442	±140	74	±76
12 to 14 years	147	±84	39	±40
15 years	110	±60	22	±25
16 and 17 years	110	±55	31	±40
18 to 24 years	388	±119	0	±12
25 to 34 years	828	±253	37	±39
35 to 44 years	602	±160	123	±79
45 to 54 years	562	±140	40	±36
55 to 64 years	438	±115	0	±12
65 to 74 years	240	±94	61	±54
75 years and over	117	±53	59	±49

Table: ACSDT5Y2021.B17001

	Census Tract 703.01, Floyd County, Indiana		Census Tract 709.01, Floyd County, Indiana	
Label	**Estimate**	**Margin of Error**	**Estimate**	**Margin of Error**
Total:	3,313	±618	5,284	±712
Income in the past 12 months below poverty level:	76	±86	390	±277
Male:	41	±51	100	±99
Under 5 years	8	±12	34	±45
5 years	0	±12	0	±17
6 to 11 years	0	±12	0	±17
12 to 14 years	0	±12	0	±17
15 years	0	±12	0	±17
16 and 17 years	0	±12	0	±17
18 to 24 years	0	±12	0	±17
25 to 34 years	13	±20	26	±35
35 to 44 years	0	±12	0	±17
45 to 54 years	0	±12	38	±55
55 to 64 years	14	±19	1	±2
65 to 74 years	0	±12	0	±17
75 years and over	6	±10	1	±2
Female:	35	±42	290	±191
Under 5 years	7	±11	0	±17
5 years	0	±12	0	±17
6 to 11 years	0	±12	82	±108
12 to 14 years	0	±12	0	±17
15 years	0	±12	21	±33
16 and 17 years	0	±12	0	±17
18 to 24 years	0	±12	67	±62
25 to 34 years	12	±19	34	±45
35 to 44 years	0	±12	14	±23
45 to 54 years	0	±12	36	±42
55 to 64 years	16	±27	18	±30
65 to 74 years	0	±12	18	±28
75 years and over	0	±12	0	±17

Table: ACSDT5Y2021.B17001

	Census Tract 710.05, Floyd County, Indiana		Jeffersonville, Indiana	
Label	**Estimate**	**Margin of Error**	**Estimate**	**Margin of Error**
Total:	5,595	±458	48,132	±696
Income in the past 12 months below poverty level:	238	±195	5,540	±676
Male:	91	±104	2,890	±453
Under 5 years	11	±17	195	±151
5 years	0	±17	41	±60
6 to 11 years	0	±17	359	±151
12 to 14 years	0	±17	173	±102
15 years	0	±17	89	±61
16 and 17 years	38	±52	187	±113
18 to 24 years	27	±55	182	±115
25 to 34 years	0	±17	422	±172
35 to 44 years	10	±15	256	±127
45 to 54 years	0	±17	232	±153
55 to 64 years	5	±8	341	±117
65 to 74 years	0	±17	352	±257
75 years and over	0	±17	61	±51
Female:	147	±105	2,650	±427
Under 5 years	0	±17	245	±154
5 years	0	±17	137	±78
6 to 11 years	13	±22	309	±152
12 to 14 years	0	±17	95	±71
15 years	0	±17	39	±49
16 and 17 years	0	±17	58	±58
18 to 24 years	9	±13	188	±137
25 to 34 years	11	±16	470	±163
35 to 44 years	47	±73	265	±112
45 to 54 years	5	±8	282	±138
55 to 64 years	22	±26	295	±103
65 to 74 years	7	±10	96	±54
75 years and over	33	±34	171	±85

Table: ACSDT5Y2021.B17001

	New Albany, Indiana	
Label	**Estimate**	**Margin of Error**
Total:	36,157	±257
Income in the past 12 months below poverty level:	6,294	±735
Male:	2,490	±394
Under 5 years	339	±146
5 years	70	±59
6 to 11 years	213	±93
12 to 14 years	209	±94
15 years	146	±85
16 and 17 years	141	±80
18 to 24 years	194	±118
25 to 34 years	193	±90
35 to 44 years	186	±100
45 to 54 years	375	±126
55 to 64 years	288	±100
65 to 74 years	67	±50
75 years and over	69	±63
Female:	3,804	±509
Under 5 years	470	±172
5 years	69	±53
6 to 11 years	387	±131
12 to 14 years	139	±83
15 years	106	±60
16 and 17 years	100	±52
18 to 24 years	310	±102
25 to 34 years	664	±235
35 to 44 years	513	±142
45 to 54 years	478	±137
55 to 64 years	330	±99
65 to 74 years	178	±80
75 years and over	60	±33

Table: ACSDT5Y2021.B17001

	Indiana		Clark County, Indiana	
Label	**Estimate**	**Margin of Error**	**Estimate**	**Margin of Error**
Income in the past 12 months at or above poverty level:	5,731,916	±12,568	106,595	±1,263
Male:	2,868,014	±7,055	52,589	±704
Under 5 years	168,173	±1,876	3,255	±202
5 years	35,192	±1,474	588	±224
6 to 11 years	218,632	±2,625	3,658	±374
12 to 14 years	120,845	±2,373	2,150	±339
15 years	40,742	±1,416	686	±205
16 and 17 years	78,612	±1,611	1,368	±205
18 to 24 years	240,493	±2,193	4,080	±202
25 to 34 years	386,881	±1,755	7,497	±260
35 to 44 years	374,976	±1,898	7,527	±259
45 to 54 years	379,613	±1,761	7,093	±266
55 to 64 years	391,292	±1,791	7,333	±160
65 to 74 years	278,912	±1,345	4,790	±301
75 years and over	153,651	±811	2,564	±90
Female:	2,863,902	±7,385	54,006	±850
Under 5 years	159,588	±1,871	3,085	±212
5 years	33,152	±1,445	681	±188
6 to 11 years	210,498	±2,838	3,463	±408
12 to 14 years	113,063	±2,534	2,159	±346
15 years	37,861	±1,396	653	±155
16 and 17 years	77,626	±1,642	1,121	±173
18 to 24 years	213,766	±2,093	4,071	±240
25 to 34 years	365,260	±2,142	7,204	±293
35 to 44 years	365,225	±2,416	7,234	±273
45 to 54 years	375,654	±1,432	7,349	±203
55 to 64 years	399,079	±1,637	7,543	±298
65 to 74 years	304,694	±1,242	5,790	±242
75 years and over	208,436	±1,222	3,653	±170

Table: ACSDT5Y2021.B17001

	Floyd County, Indiana		Census Tract 505.04, Clark County, Indiana	
Label	**Estimate**	**Margin of Error**	**Estimate**	**Margin of Error**
Income in the past 12 months at or above poverty level:	70,591	±822	2,008	±446
Male:	35,130	±504	940	±295
Under 5 years	1,911	±146	74	±65
5 years	392	±117	0	±12
6 to 11 years	2,514	±281	91	±132
12 to 14 years	1,610	±238	7	±11
15 years	462	±122	12	±20
16 and 17 years	885	±143	49	±62
18 to 24 years	2,902	±166	44	±39
25 to 34 years	4,735	±197	153	±80
35 to 44 years	4,723	±176	80	±56
45 to 54 years	4,573	±144	163	±74
55 to 64 years	5,216	±138	128	±109
65 to 74 years	3,601	±76	105	±46
75 years and over	1,606	±101	34	±44
Female:	35,461	±561	1,068	±223
Under 5 years	1,701	±153	29	±41
5 years	376	±143	6	±11
6 to 11 years	2,736	±319	64	±47
12 to 14 years	1,305	±271	0	±12
15 years	442	±113	17	±22
16 and 17 years	866	±139	0	±12
18 to 24 years	2,612	±164	114	±67
25 to 34 years	4,250	±264	82	±86
35 to 44 years	4,731	±179	76	±55
45 to 54 years	4,749	±183	86	±68
55 to 64 years	5,289	±122	143	±67
65 to 74 years	4,047	±123	165	±58
75 years and over	2,357	±145	286	±139

Table: ACSDT5Y2021.B17001

	Census Tract 703.01, Floyd County, Indiana		Census Tract 709.01, Floyd County, Indiana	
Label	**Estimate**	**Margin of Error**	**Estimate**	**Margin of Error**
Income in the past 12 months at or above poverty level:	3,237	±621	4,894	±714
Male:	1,671	±415	2,531	±542
Under 5 years	33	±32	242	±195
5 years	25	±25	0	±17
6 to 11 years	115	±94	234	±186
12 to 14 years	77	±72	121	±85
15 years	11	±21	39	±53
16 and 17 years	0	±12	62	±72
18 to 24 years	27	±33	143	±104
25 to 34 years	399	±208	442	±210
35 to 44 years	192	±106	361	±148
45 to 54 years	203	±104	229	±105
55 to 64 years	282	±144	224	±94
65 to 74 years	253	±97	258	±84
75 years and over	54	±27	176	±77
Female:	1,566	±317	2,363	±356
Under 5 years	89	±79	89	±60
5 years	0	±12	0	±17
6 to 11 years	84	±73	131	±105
12 to 14 years	39	±41	14	±24
15 years	0	±12	35	±38
16 and 17 years	0	±12	37	±40
18 to 24 years	77	±60	251	±141
25 to 34 years	359	±200	304	±160
35 to 44 years	158	±75	285	±112
45 to 54 years	154	±58	351	±119
55 to 64 years	307	±185	226	±90
65 to 74 years	149	±56	349	±90
75 years and over	150	±78	291	±159

Table: ACSDT5Y2021.B17001

	Census Tract 710.05, Floyd County, Indiana		Jeffersonville, Indiana	
Label	**Estimate**	**Margin of Error**	**Estimate**	**Margin of Error**
Income in the past 12 months at or above poverty level:	5,357	±461	42,592	±802
Male:	2,638	±269	20,533	±742
Under 5 years	71	±42	1,271	±251
5 years	60	±45	365	±199
6 to 11 years	196	±95	1,304	±243
12 to 14 years	130	±51	788	±227
15 years	44	±39	309	±178
16 and 17 years	108	±75	499	±162
18 to 24 years	248	±107	1,254	±282
25 to 34 years	231	±94	3,332	±362
35 to 44 years	291	±80	2,905	±260
45 to 54 years	486	±120	2,626	±354
55 to 64 years	431	±139	3,091	±402
65 to 74 years	219	±63	1,875	±270
75 years and over	123	±46	914	±182
Female:	2,719	±280	22,059	±716
Under 5 years	105	±44	1,277	±209
5 years	10	±16	156	±87
6 to 11 years	332	±91	1,408	±271
12 to 14 years	230	±107	649	±209
15 years	56	±44	274	±112
16 and 17 years	74	±50	379	±174
18 to 24 years	115	±60	1,859	±295
25 to 34 years	176	±62	3,354	±529
35 to 44 years	321	±81	2,760	±320
45 to 54 years	469	±114	2,835	±300
55 to 64 years	495	±155	3,031	±328
65 to 74 years	201	±59	2,405	±263
75 years and over	135	±58	1,672	±260

Table: ACSDT5Y2021.B17001

	New Albany, Indiana	
Label	**Estimate**	**Margin of Error**
Income in the past 12 months at or above poverty level:	29,863	±770
Male:	14,778	±487
Under 5 years	655	±227
5 years	94	±52
6 to 11 years	992	±216
12 to 14 years	514	±148
15 years	149	±74
16 and 17 years	368	±124
18 to 24 years	1,106	±255
25 to 34 years	2,629	±284
35 to 44 years	2,221	±287
45 to 54 years	1,679	±203
55 to 64 years	2,084	±236
65 to 74 years	1,573	±185
75 years and over	714	±115
Female:	15,085	±603
Under 5 years	704	±138
5 years	172	±90
6 to 11 years	825	±216
12 to 14 years	305	±118
15 years	103	±61
16 and 17 years	291	±131
18 to 24 years	1,252	±225
25 to 34 years	2,246	±277
35 to 44 years	2,313	±282
45 to 54 years	1,624	±188
55 to 64 years	1,980	±253
65 to 74 years	1,964	±219
75 years and over	1,306	±162

From: Fair, Terri
To: Linda Zug
Cc: Passmore, Andrew D
Subject: Bridge 51 Blackiston Mill Road DES 1700788, Floyd and Clark Counties, IN
Date: Thursday, April 27, 2023 1:51:57 PM

INDOT-Environmental Services Division (ESD) has reviewed the project information along with the Environmental Justice (EJ) Analysis for the above referenced project. With the information provided, the project will require right-of-way. There will be relocations. With the information provided, the relocations would not disrupt community cohesion or create a physical barrier. INDOT-ESD would not consider the impacts associated with this project as causing a disproportionately high and adverse effect on minority and/or low-income populations of EJ concern relative to non-EJ populations in accordance with the provisions of Executive Order 12898 and FHWA Order 6640.23a. No further EJ Analysis is required.