STATE OF TENNESSEE
DEPARTMENT OF TRANSPORTATION
ENVIRONMENTAL DIVISION
REGION 3 ENVIRONMENTAL SECTION
6601 CENTENNIAL BOULEVARD
NASHVILLE, TENNESSEE 37243-1402
(615) 335-8783

BUTCH ELEY
DEPUTY GOVERNOR &
COMMISSIONER OF TRANSPORTATION

BILL LEE
GOVERNOR

MEMORANDUM

To: Brandon Chance
Headquarters Environmental

From: Madalyn Brown
Region 3 Environmental Section

Madalyn Brown
Digitally signed by Madalyn Brown
Date: 2024.10.04 11:32:00 -05'00'

Date: October 4, 2024

Subject: ENVIRONMENTAL BOUNDARIES FOR:
Davidson County, I-65, Bridge over Cumberland River and Cowan Street
PIN: 130874.02

An ecological evaluation of the subject project has been conducted in response to an initial evaluation request with the following results:

STREAMS: There are two (2) streams and one (1) wet weather conveyance (WWC) within the project area.

WETLANDS: There are no wetlands within the project area.

OTHER FEATURES: There are no other features within the project area.

SPECIES:

- USFWS: Coordination with USFWS was completed and it was determined there will be No Effect to federally listed species.

- TWRA: Coordination with TWRA was completed and resulted in one project commitment listed below.

- TDEC DNA: This project is covered under the 2023 Memorandum of Agreement between TDOT, FHWA, and TDEC DNA.

SPECIAL NOTES: There is one special note for the subject project:

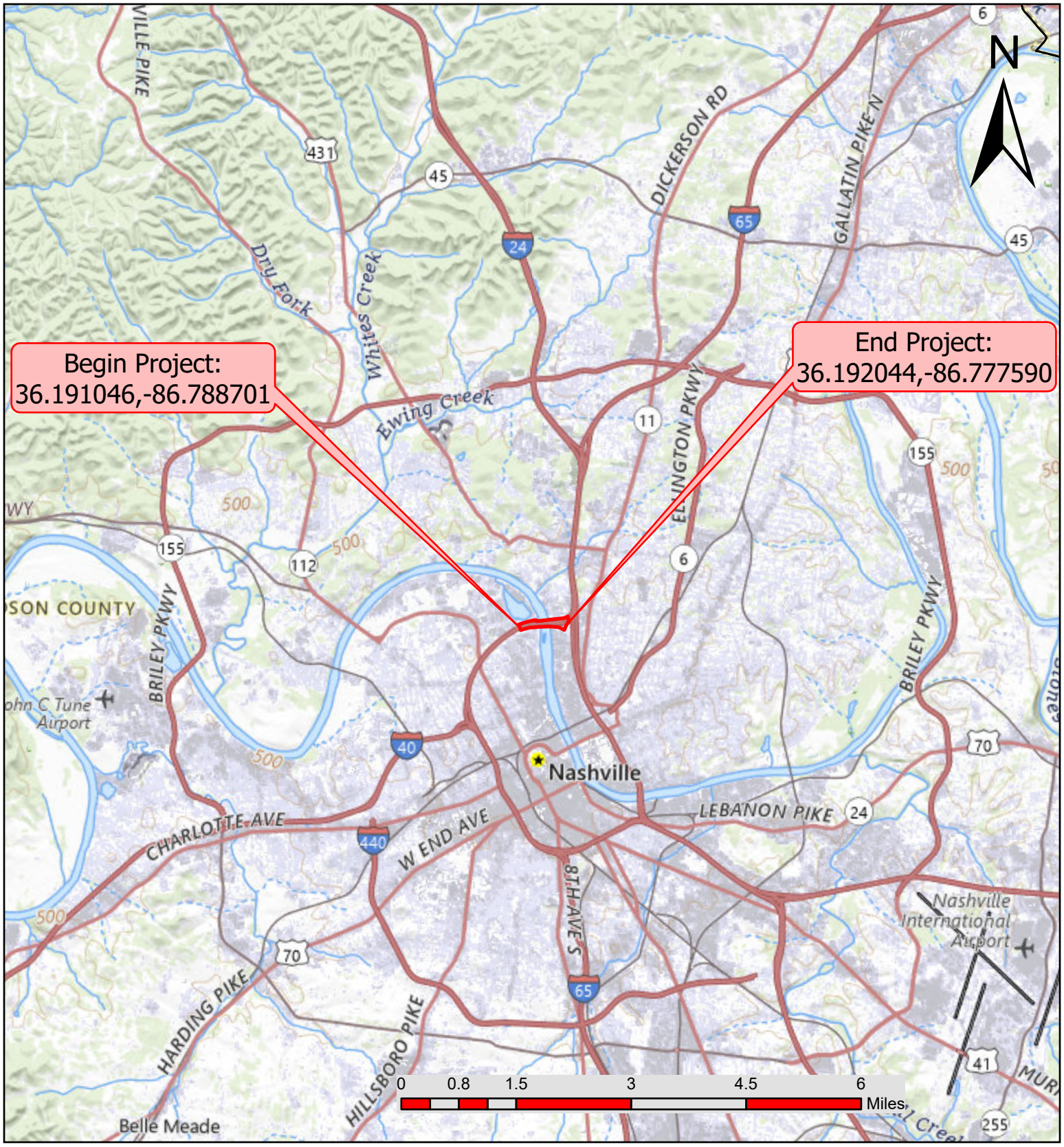
If blasting is required for the subject project, re-coordination with TWRA will be required.

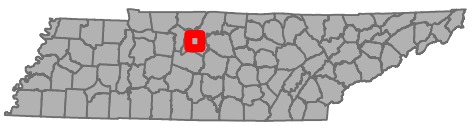
COMMITMENTS: The following is a commitment and will be added in PPRM:

In-stream construction is prohibited from April 1st through June 31st.

If the scope of work for this project is revised, please contact the Regional biologist for additional review and agency coordination as soon as possible. Your assistance is appreciated. If you have any questions or comments, please contact me at (615) 350-4209 or Madalyn.Brown@tn.gov.

xc: Anthony Myers
Kimberly Welch
R3.EnvTechOffice
TDOT.Env.Ecology



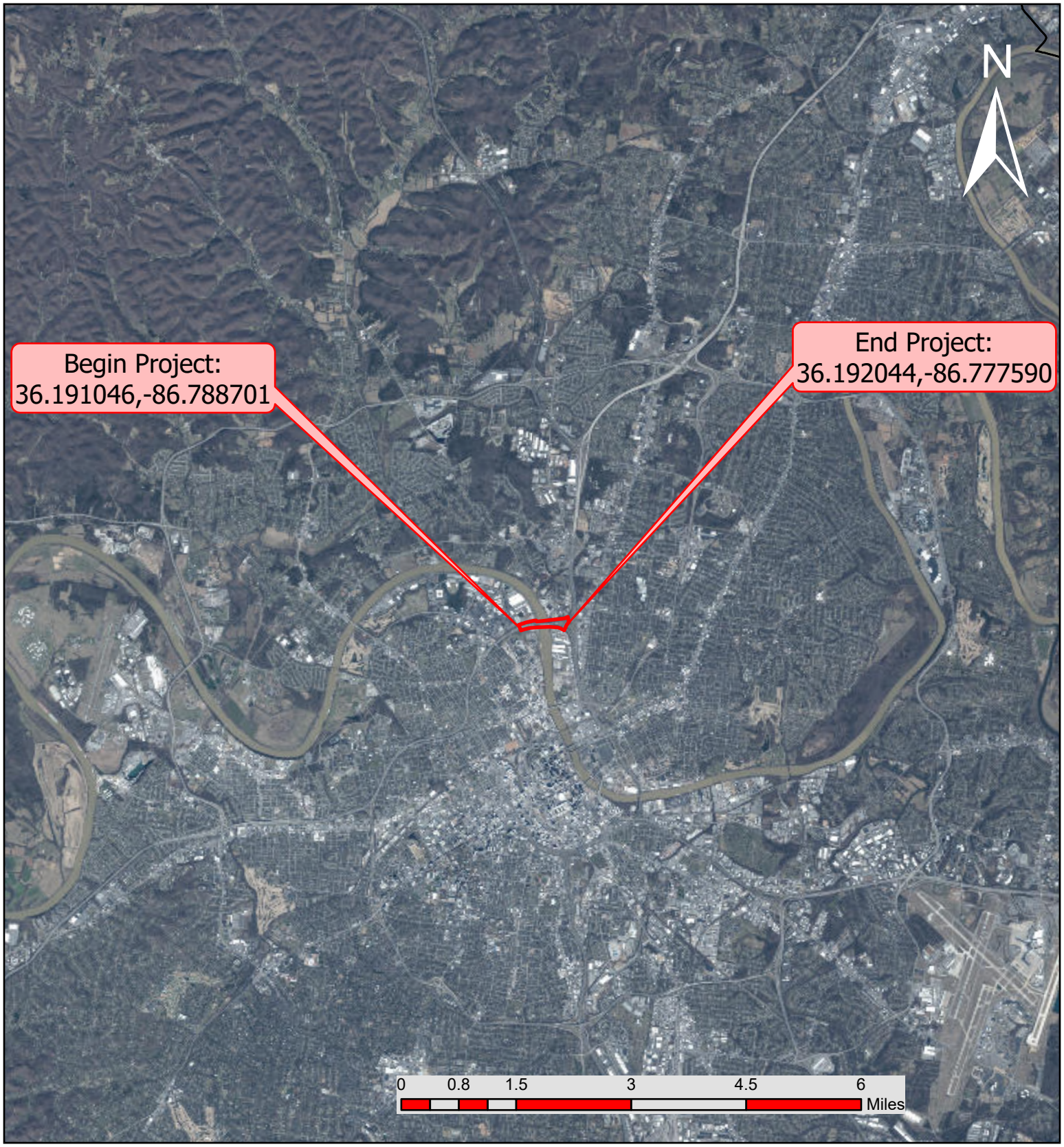


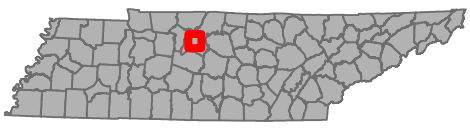
Davidson County

I-65, Bridge over Cumberland River and Cowan Street
9/16/24

PIN 130874.02

TN TDOT Department of Transportation





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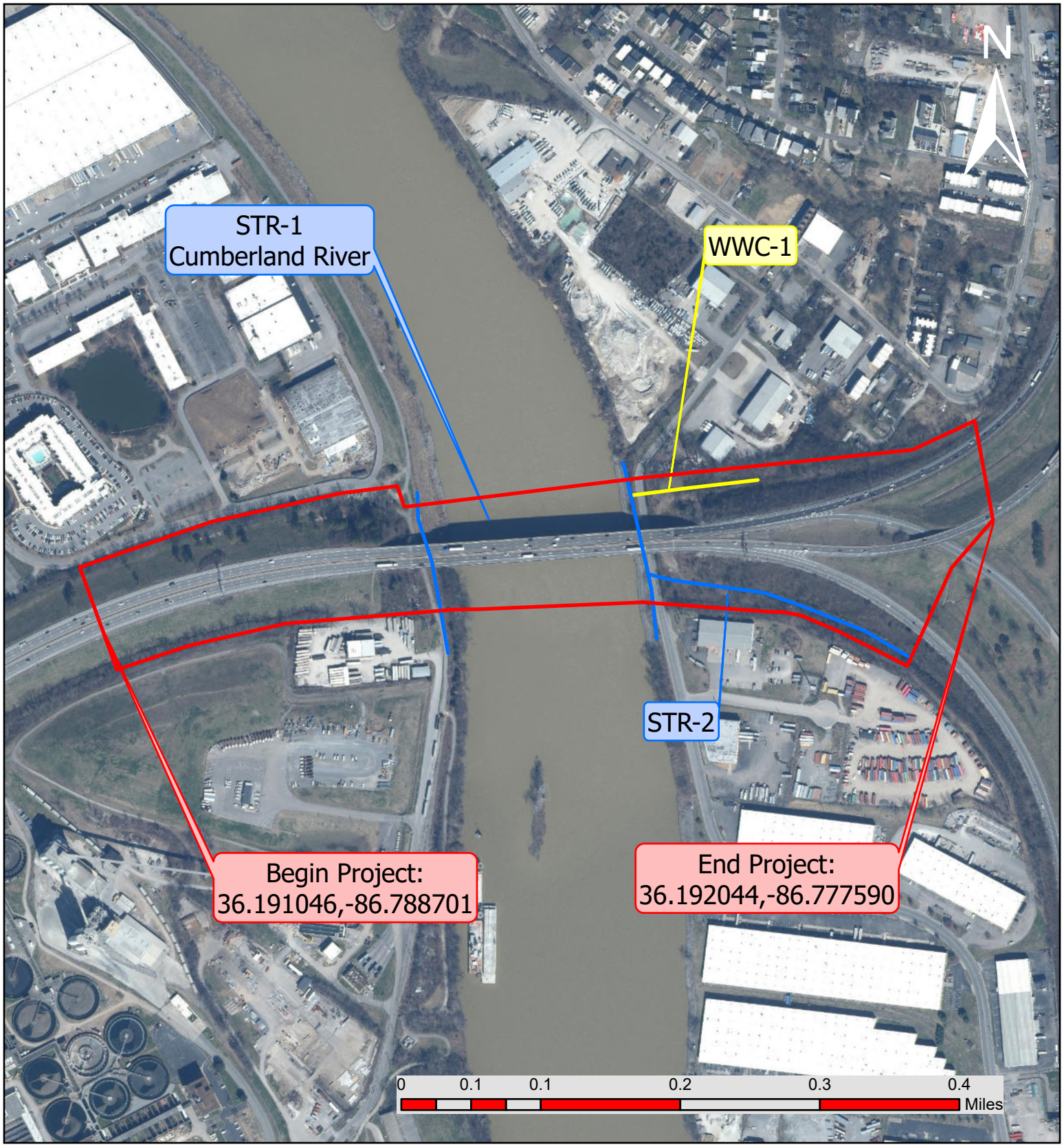
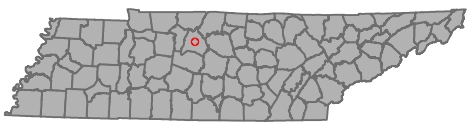
TN TDOT Department of Transportation





Davidson County

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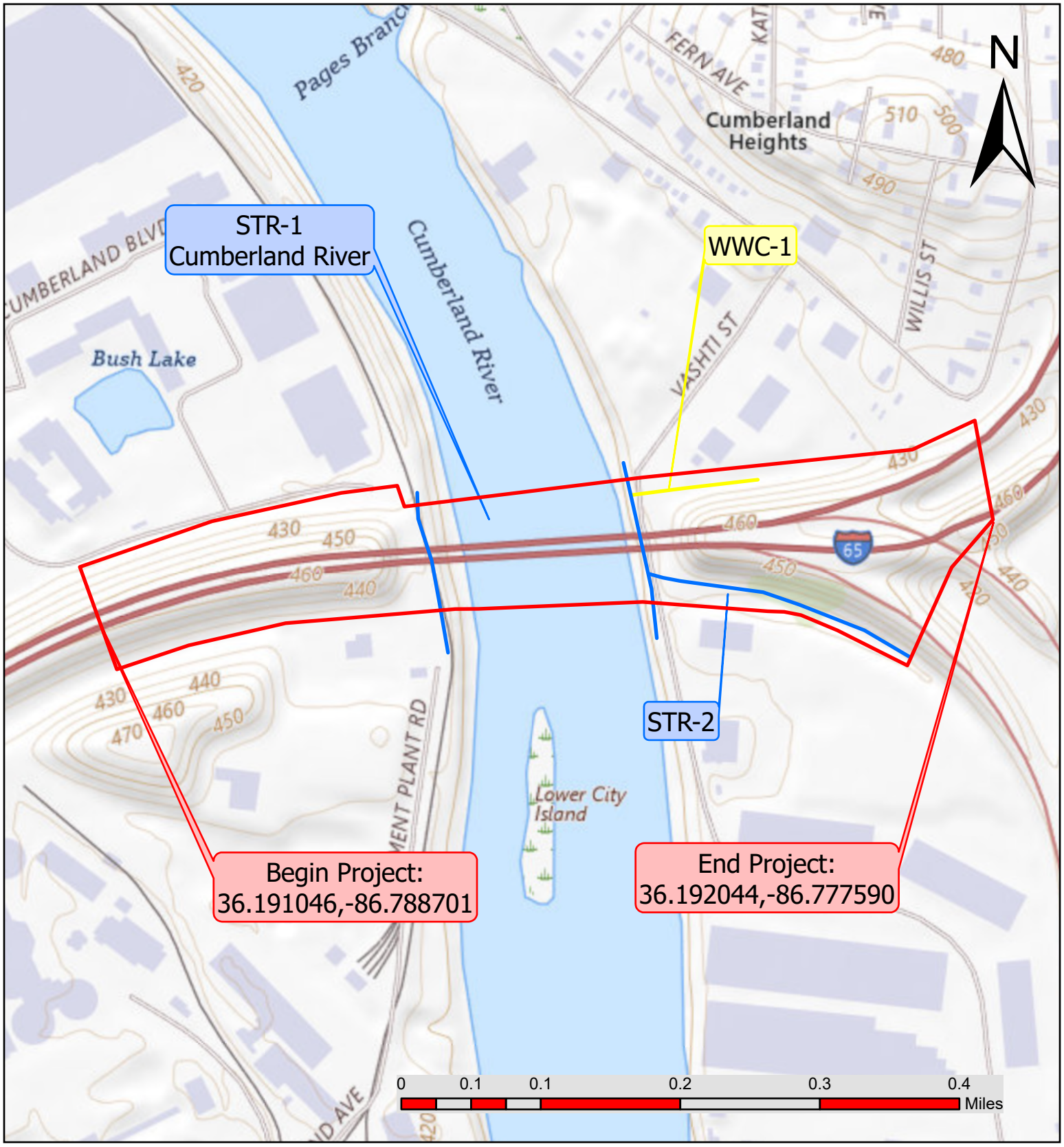
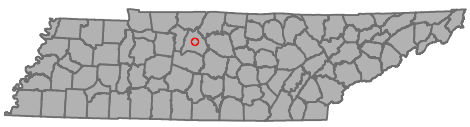




Davidson County

I-65, Bridge over Cumberland River and Cowan Street
9/16/24

PIN 130874.02

TN TDOT Department of Transportation

Project Name: Davidson Co., I-65, Bridge over Cumberland River and Cowan Street **PIN:** 130874.02

Water Resource Table

Based on: ETSA

Date: 7/10/2024

Water Resources (Non-Wetland)					
Label	**Type**	**Latitude**	**Longitude**	**Receiving Waters**	**Quality**
STR-1 Cumberland River	Perennial Stream	36.192094	-86.783071	Ohio River	ETW/Impaired (303(d))
STR-2	Perennial Stream	36.191344	-86.780065	Cumberland River	Unassessed
WWC-1	Wet Weather Conveyance	36.192438	-86.780677	Cumberland RIver	Unassessed

Ecology Field Data Sheet: **Water Resources**

Project: Davidson Co.	I-65, Bridge over Cumberland River at Cowan Street				PIN 130874.02
Biologist:	MLB, TNS	**Affiliation:**	-TDOT	**Date:**	9/9/24

1-Station: from plans	I-65, Lyle A Fulton Bridge										
2-Map label and name	STR-1, Cumberland River										
3-Latitude/Longitude	36.192054,-86.784149										
4-Feature description:											
-channel identification	perennial stream	✓	intermittent stream		ephemeral stream		wwc				
-HD score (if applicable)											
-OHWM indicators	bed & banks	✓	deposition	✓	presence of litter debris	✓	scour		veg absent, bent, matted		
	change in plant community	✓	destruction of terrestrial veg		multiple observe flow events	✓	sediment sorting		water staining	✓	
	change in soil character		leaf litter disturb or absent		natural line impressed on bank	✓	shelving		wracking		
-channel bottom width	645 ft		-top of bank width		730 ft						
-width and max depth at ordinary high water mark	655 ft		14 ft from TOB								
-width at bankfull	700 ft										
-bank height	LDB - 20 ft		RDB - 20 ft								
-riffle/pool complex or other specialized habitat present?	No										
-dominant riparian species: ----------(LDB /RDB)----------	LDB: smooth sumac, sycamore, trumpet creeper, box elder										
	RDB: bush honeysuckle, sycamore, trumpet creeper										
-particle size distribution %	Silt/Sand: N/A		Gravel: N/A		Cobble: N/A		Boulder: N/A		Bedrock: N/A		
5-photo numbers	1-2										
6-HUC -8 Code & Name	05130202, Cheatham Lake										
7-Assessed	yes	✓	no								
8-ETW	yes	✓	no								
9-303 (d) List	yes	✓	siltation		habitat:		other:	✓			
	no										

10-Notes

- Stream ID: TN05130202001_3000
- Particle size distribution is unknown due to lack of visibility
- ETW due to presence of Lake Sturgeon and Blue Sucker
- 303(d) listed due to E. coli

Culvert size and Condition

N/A

Ecology Field Data Sheet: **Water Resources**

Project: Davidson Co	I-65, Bridge over Cumberland River and Cowan Street		PIN 130874.02		
Biologist:	MLB, TNS	**Affiliation:**	-TDOT	**Date:**	9/9/24

1-Station: from plans	South of I-65 at LM 10.528										
2-Map label and name	STR-2										
3-Latitude/Longitude	36.191367,-86.780133										
4-Feature description:											
-channel identification	perennial stream	✓	intermittent stream		ephemeral stream		wwc				
-HD score (if applicable)											
-OHWM indicators	bed & banks	✓	deposition		presence of litter debris	✓	scour		veg absent, bent, matted	✓	
	change in plant community	✓	destruction of terrestrial veg		multiple observe flow events	✓	sediment sorting		water staining		
	change in soil character		leaf litter disturb or absent	✓	natural line impressed on bank		shelving		wracking		
-channel bottom width	4.1 ft		-top of bank width		8 ft						
-width and max depth at ordinary high water mark	W: 5.3 ft		D: 0.4 ft								
-width at bankfull	6.2 ft										
-bank height	LDB - 1.1 ft		RDB - 1.1 ft								
-riffle/pool complex or other specialized habitat present?	No										
-dominant riparian species: ----------(LDB /RDB)----------	LDB: honey locust, green ash, hackberry										
	RDB: honey locust, green ash, hackberry										
-particle size distribution %	Silt/Sand: 100		Gravel: 0		Cobble: 0		Boulder: 0		Bedrock: 0		
5-photo numbers	6-7										
6-HUC -8 Code & Name	05130202, Cheatham Lake										
7-Assessed	yes				no	✓					
8-ETW	yes				no	✓					
9-303 (d) List	yes				siltation		habitat:		other:		
	no	✓									

10-Notes

-Flowing water in channel and > 7 days since last precipitation >0.1" in local watershed
-Feature flows into 60" PVC pipe which goes into STR-1, Cumberland River

Culvert size and Condition

60" PVC, no perching at culvert inlet

Ecology Field Data Sheet: **Water Resources**

Project: Davidson Co.	I-65, Bridge over Cumberland River and Cowan Street, LM 10.528		PIN 130874.02
Biologist:	MLB, TNS	**Affiliation:** -TDOT	**Date:** 9/9/24

1-Station: from plans	North side of I-65 at LM 10.528										
2-Map label and name	WWC-1										
3-Latitude/Longitude	36.192473,-86.781139										
4-Feature description:											
-channel identification	perennial stream		intermittent stream		ephemeral stream		wwc	✓			
-HD score (if applicable)	4										
-OHWM indicators	bed & banks	✓	deposition		presence of litter debris	✓	scour		veg absent, bent, matted		
	change in plant community		destruction of terrestrial veg		multiple observe flow events		sediment sorting		water staining		
	change in soil character		leaf litter disturb or absent		natural line impressed on bank		shelving		wracking		
-channel bottom width	3.3 ft			-top of bank width		10.6 ft					
-width and max depth at ordinary high water mark	W: 3.3 ft				D: 0.3 ft						
-width at bankfull	4.8 ft										
-bank height	LDB - 0.75 ft				RDB - 0.75 ft						
-riffle/pool complex or other specialized habitat present?	No										
-dominant riparian species: ----------(LDB /RDB)----------	LDB: black willow, bush honeysuckle, box elder										
	RDB: box elder, bush honeysuckle										
-particle size distribution %	Silt/Sand:	100	Gravel:	0	Cobble:	0	Boulder:	0	Bedrock:	0	
5-photo numbers	3-5										
6-HUC -8 Code & Name	05130202, Cheatham Lake										
7-Assessed	yes		no	✓							
8-ETW	yes		no	✓							
9-303 (d) List	yes		siltation		habitat:		other:				
	no	✓									
10-Notes	-Feature goes into 22" culvert which goes into STR-1, Cumberland River										
Culvert size and Condition	22" culvert, no perching at inlet										

Hydrologic Determination Field Data Sheet

Tennessee Division of Water Pollution Control, Version 1.5

Named Waterbody: UT to Cumberland River	Date/Time: 9/9/24
Assessors/Affiliation: MLB, TNS -TDOT	Project ID : PIN 130874.02
Site Name/Description: I-65, Bridge over Cumberland River and Cowan Street, LM 10.528	
Site Location: WWC-1	
HUC (12 digit): 051302020305, Cumberland River-Browns Creek	Lat/Long: 36.192473,-86.781139
Previous Rainfall (7-days) : 0.04 inches in the last 7 days	
Precipitation this Season vs. Normal : abnormally wet elevated average low **abnormally dry** unknown Source of recent & seasonal precip data : NOAA past weather/AgACIS last 7 days	
Watershed Size : <2.0 square miles	County: Davidson Co.
Soil Type(s) / Geology : Lindell-Urban land complex	Source: NRCS
Surrounding Land Use : Commercial	
Degree of historical alteration to natural channel morphology & hydrology (circle one & describe fully in Notes) : Severe **Moderate** Slight Absent	

Primary Field Indicators Observed

Primary Indicators	NO	YES
1. Hydrologic feature exists solely due to a process discharge	✓	WWC
2. Defined bed and bank absent, vegetation composed of upland and FACU species	✓	WWC
3. Watercourse dry anytime during February through April 15th, under normal precipitation / groundwater conditions	✓	WWC
4. Daily flow and precipitation records showing feature only flows in direct response to rainfall	✓	WWC
5. Presence of multiple populations of obligate lotic organisms with ≥ 2 month aquatic phase	✓	Stream
6. Presence of fish (except *Gambusia*)	✓	Stream
7. Presence of naturally occurring ground water table connection	✓	Stream
8. Flowing water in channel and 7 days since last precip >0.1" in local watershed	✓	Stream
9. Evidence watercourse has been used as a supply of drinking water	✓	Stream

NOTE: If any Primary Indicators 1-9 = "Yes", then no further investigation is necessary. However, assessors may choose to score secondary indicators as supporting evidence.

In the absence of a primary indicator, or other definitive evidence, complete the secondary indicator table on page 2 of this sheet, and provide score below.

Guidance for the interpretation and scoring of both the primary & secondary indicators is provided in *TDEC-WPC Guidance For Making Hydrologic Determinations, Version 1.5*

Overall Hydrologic Determination = Wet Weather Conveyance

Secondary Indicator Score (if applicable) = 4

Justification / Notes :

Secondary Field Indicator Evaluation

A. Geomorphology (Subtotal = 3)		**Absent**	**Weak**	**Moderate**	**Strong**
1. Continuous bed and bank	2	0	1	2	3
2. Sinuous channel	0.5	0	1	2	3
3. In-channel structure: riffle-pool sequences	0	0	1	2	3
4. Sorting of soil textures or other substrate	0	0	1	2	3
5. Active/relic floodplain	0	0	0.5	1	1.5
6. Depositional bars or benches	0	0	1	2	3
7. Braided channel	0	0	1	2	3
8. Recent alluvial deposits	0	0	0.5	1	1.5
9. Natural levees	0	0	1	2	3
10. Headcuts	0	0	1	2	3
11. Grade controls	0	0	0.5	1	1.5
12. Natural valley or drainageway	0.5	0	0.5	1	1.5
13. At least second order channel on existing USGS or NRCS map	0	No = 0		Yes = 3	

B. Hydrology (Subtotal = 0)		**Absent**	**Weak**	**Moderate**	**Strong**	
14. Subsurface flow/discharge into channel	0	0	1	2	3	
15. Water in channel and >48 hours since sig. rain	0	0	1	2	3	
16. Leaf litter in channel (January – September)	0	1.5	1	0.5	0	N/A
17. Sediment on plants or on debris	0	0	0.5	1	1.5	
18. Organic debris lines or piles (wrack lines)	0	0	0.5	1	1.5	
19. Hydric soils in channel bed or sides of channel	0	No = 0		Yes = 1.5		

C. Biology (Subtotal = 1)		**Absent**	**Weak**	**Moderate**	**Strong**
20. Fibrous roots in channel bed [1]	0	3	2	1	0
21. Rooted plants in the thalweg [1]	1	3	2	1	0
22. Crayfish in stream (exclude in floodplain)	0	0	1	2	3
23. Bivalves/mussels	0	0	1	2	3
24. Amphibians	0	0	0.5	1	1.5
25. Macrobenthos (record type & abundance)	0	0	1	2	3
26. Filamentous algae; periphyton	0	0	1	2	3
27. Iron oxidizing bacteria/fungus	0	0	0.5	1	1.5
28.Wetland plants in channel bed [2]	0	0	0.5	1	1.5

[1] Focus is on the presence of terrestrial plants.

[2] Focus is on the presence of aquatic or wetland plants.

Total Points = 4

Under Normal Conditions, Watercourse is a Wet Weather Conveyance if Secondary Indicator Score < 19 points

Notes :

Davidson Co., I-65, Bridge over Cumberland River and Cowan Street	PIN 130874.02

Photo 1: STR-1, Cumberland River, view upstream

Photo 2: STR-1, Cumberland River, view downstream

TN TDOT Department of Transportation

Davidson Co., I-65, Bridge over Cumberland River and Cowan Street	PIN 130874.02

Photo 3: WWC-1, view upgradient

Photo 4: WWC-1, view downgradient

TN TDOT Department of Transportation

Davidson Co., I-65, Bridge over Cumberland River and Cowan Street	PIN 130874.02

Photo 5: WWC-1, view downgradient showing culvert inlet

Photo 6: STR-2, view upstream

TN TDOT Department of Transportation

Davidson Co., I-65, Bridge over Cumberland River and Cowan Street	PIN 130874.02

Photo 7: STR-2, view downstream showing culvert inlet

TN TDOT Department of Transportation

Steve A. Walker

From: Griffith, John <john_griffith@fws.gov>
Sent: Thursday, September 5, 2024 3:57 PM
To: Steve A. Walker
Cc: Sikula, Nicole R
Subject: [EXTERNAL] Re: IPaC delivered Official Species List for project: TDOT-Davidson Co; I-65 bridge over Cumberland River and Cowan Street; replacement; PIN 130874.02

Steve,

Thank you for the requesting our review of the proposed Interstate 65 Bridge replacement over the Cumberland River and Cowan Street in Davidson County, Tennessee. The project would involve replacing the bridge within the same general footprint and matching the existing capacity of the current structure. The elevation of the low girder of the proposed structure would be raised by 8 feet, increasing the vertical clearance from 40 feet to 48 feet between the low girder elevation and the regulated highwater elevation as required by the Coast Guard. The navigational width would also increase from 300 feet to 350 feet. The project is proposed for construction in early 2025. You are requesting a list of federally threatened or endangered species that may be present in the project area.

Our database indicates that historic populations of Cumberlandian combshell (*Epioblasma brevidens*), pink mucket (*Lampsilis abrupta*), and orange-foot pimpleback (*Plethobasus cooperianus*) once occurred in this reach of the Cumberland River. Cold water generation for the Old Hickory Lock and Dam began in 1954 and altered water temperatures downstream such that federally listed mussels are believed to be absent from the project area. We are not aware of any federally listed or proposed species that would be impacted by the project. Based on the best information available at this time, we believe that the requirements of the Endangered Species Act (ESA) are fulfilled for all species that currently receive protection under the ESA. Obligations under section 7 of the ESA should be reconsidered if (1) new information reveals impacts of the proposed action that may affect listed species or critical habitat in a manner not previously considered, (2) the proposed action is subsequently modified to include activities which were not considered during this consultation, or (3) new species are listed or critical habitat designated that might be affected by the proposed action.

This email will serve as our official project response. Please let me know if we can offer further assistance. Thanks,

John Griffith
Transportation Biologist
U.S. Fish and Wildlife Service
Tennessee Field Office
931-444-1393 (office)
931-261-3755 (cell)

From: Administrator Email <ecosphere_support@ecosphere.fws.gov>
Sent: Tuesday, August 13, 2024 12:01 PM
To: Griffith, John <john_griffith@fws.gov>; Tennessee ES, FWS <tennesseeES@fws.gov>; Sykes, Robbie <robbie_sykes@fws.gov>; Alexander, Steven <steven_alexander@fws.gov>

Subject: IPaC delivered Official Species List for project: TDOT-Davidson Co; I-65 bridge over Cumberland River and Cowan Street; replacement; PIN 130874.02

To: IPaC point(s) of contact for Tennessee Ecological Services Field Office
Project Location: Davidson County, Tennessee

IPaC has delivered an official Section 7 species list on behalf of your office. For your convenience, IPaC has created an ETK project (2024-0129762) with a new associated 'Species List Provided' event. A PDF file of the species list document is attached to the event and contact information for the project can be found on the last page of the PDF.

IPaC has automatically set the consultation status to "Closed". If you need to do any additional work in this project (*e.g.*, add staff, add events, change lead office, etc.), you must first change the status to "active" so that you can edit the project. You can access the project via the link, above.

Lead FWS Office:
The Tennessee Ecological Services Field Office is currently designated as the lead office for Section 7 on this project. The following additional offices have jurisdiction and have been notified: None. If another office is the lead office on this project, please access the project (via the link above) and update it. IPaC will not reset the Lead Office once it has been updated by a biologist.

*Projects created in ETK by IPaC have not been assigned to an FWS staff member. To identify the staff assigned to this project, please access the project (via the link above) and add their name(s).

TENNESSEE WILDLIFE RESOURCES AGENCY

ELLINGTON AGRICULTURAL CENTER
5107 EDMONDSON PIKE
NASHVILLE, TENNESSEE 37211

September 13, 2024

Re: Davidson County; I-65 over Cumberland River and Cowan Street; bridge replacement, PIN 130874.02

Mr. Steve Walker,

The Tennessee Wildlife Resources Agency has reviewed the information that you provided regarding the subject project in Davidson County, Tennessee. Your letter to us requested comments by our agency regarding potential impacts to endangered species, wetlands, and other areas of concern as we may think pertinent due to the proposed project.

This project involves replacing the bridge structure on Interstate 65 over the Cumberland River and Cowan Street, Bridge No. 19I00650145 is to be replaced to match existing capacity within the same general footprint of the existing structure and increase navigational width from 300' to 350' as required by the Coast Guard.

I have reviewed the information that you provided regarding the proposed bridge replacement in Davidson County, Tennessee. In-stream work is expected, therefore to minimize impacts to the State Endangered Lake Sturgeon (*Acipenser fulvescens*), State Threatened species, Blue Sucker (*Cycleptus elongatus*) and State Deemed-In-Need-of Management species, Highfin Carpsucker (*Carpiodes velifer*), I am requesting preference given to prohibit instream construction during the combined species spawning season from April 1 – June 31. Additionally, if blasting is the preferred method to remove bridge piers further coordination will be required.

Thank you for the opportunity to review and comment on this proposed project. If you have further questions regarding this matter; please contact me at (731) 431-0012.

Sincerely,

Casey Parker
West TN Transportation Biologist

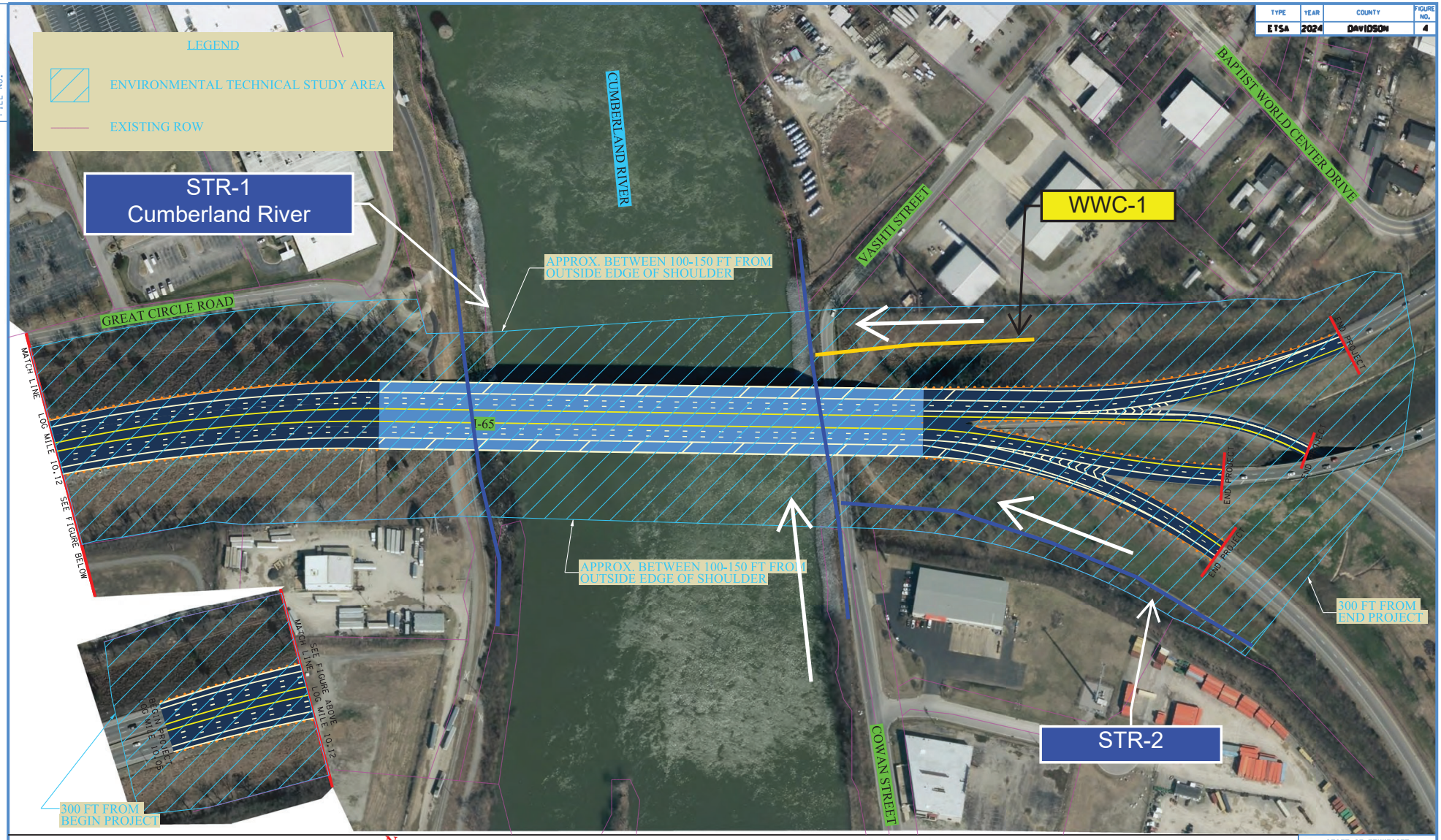
Steve A. Walker

From: twrasurveymgmt@gmail.com
Sent: Tuesday, August 13, 2024 1:50 PM
To: Steve A. Walker; Casey Parker
Subject: [EXTERNAL] Environmental Review Request: 1723568400000

Steve Walker
Auto-generated email
DO NOT REPLY
Tennessee Wildlife Resource Agency has received your submission. If additional information is required, Biodiversity Division staff will reach out via the contact information you provided. Although we strive to respond to review requests as quickly as possible, a formal response may take up to 30 days.
Thank you,
TWRA Biodiversity

TENNESSEE D.O.T.
PROJECT PLANNING DIVISION
FILE NO.

TYPE	YEAR	COUNTY	FIGURE NO.
ETSA	2024	DAVIDSON	4



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ENVIRONMENTAL TECHNICAL STUDY AREA

I-65 L.M. 10.05 TO L.M. 10.65
DAVIDSON COUNTY

STATE OF TENNESSEE
DEPARTMENT OF TRANSPORTATION
PROJECT PLANNING DIVISION

FIGURE 4
I-65
L.M. 10.05 to
L.M. 10.65

7/10/2024
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