

Concept Report Form

The Concept Report Form develops an initial project vision, basis of design and report (e.g., the Concept Report) to transition into the subsequent design stages (Stages 1 through 4 in the Project Delivery Network [PDN]). This form summarizes all project components using information to complete the Concept Report.

General Project Information

Project Name	SR-371 - Bridge over Branch (TMA)									
PIN	134862.00									
Route Information	Route	NHS (Y/N)	Functional Class		City		County			
	SR-371	Yes	Rural Major Collector		Henning		Lauderdale			
Project Information	Begin Log Mile	End Log Mile	AADT¹	Design Hour Vol. (DHV)¹	Truck %¹	Design Speed (MPH)	Posted Speed (MPH)	Base Year	Design Year	
	1.39		1,200	156	2.00	55	55	2029	2049	
Project Description & Standard Drawings Used	<p>The proposed bridge is to be a 65' single span using 33" box beam. The typical section for the approach and bridge will be 2-11' foot travel lanes with 4' shoulders. The out-to-out width based on the above recommendations will be 31'3". The proposed grade and vertical clearance will be raised 2'. A detour is recommended. The state route detour is 13 minutes (10.3 miles); the local route detour is 10 minutes (5.3 miles). Superstructure depth is 44.95" = 31.2" (beam) + 10" (deck) + 3.75" (width (in inches) x0.02/2).</p> <p>RD11-TS-2</p>								Project Details	
Important Project History or Related Projects	<p>The existing structure, built in 1991, is a 2 span channel beam timber bridge, 45.5' long with an out-to-out width of 28.7'. The existing structure has 2-10' travel lanes with 3' shoulders. The listed weight limit on the inspection report is 40 tons (12/4/2023). The discharges for the drainage basin (StreamStats Version 4.19.4) for drainage area of 0.45 square miles: Q10 is 472 cfs, Q50 is 622 cfs, and Q100 is 682 cfs.</p> <p>This project is NOT expected to utilize federal funding.</p>									
Project Purpose/Need	<p>The need to replace this bridge is due to the present condition of the existing bridge:</p> <ul style="list-style-type: none"> -Timber bridges are being phased out -The bridge is in FAIR Condition 									
Major Environmental Considerations	To be determined									

Multi-Modal Considerations	This project is in a rural area with a proposed 2-lane bridge width of less than 44 ft where the cost of dedicated multimodal accommodations are excessively disproportionate to the need and probable use. Excessively disproportionate is defined as exceeding 20 percent of the cost of the project.	
Major Project Risks	Approximately 0.66 acres of right of way are expected to be acquired. Overhead electric is present. This document is covered by 23 USC § 407 and its production pursuant to fulfilling public planning requirements does not waive the provisions of § 407.	

¹ Traffic numbers reflect identified design year

Approvals

Executed for approval of this Concept Report



Project Management Division Director

Jul 11, 2024

Date

The following individuals to execute if a bridge concept report:



Structures Director

Jul 9, 2024

Date



Brandon Akins (Jul 11, 2024 10:46 CDT)

Jul 11, 2024

Date

Regional Project Management Division Director

Action Checklist			
0SD1 Initiate Concept Report and Request Funding			
Complete	NA		Date Completed
✓		Request and Finalize Safety Data	04/05/2024
✓		Request Project Number, PIN, and Task Profile Numbers	01/22/2024
	✓	Coordinate with Long Range Planning	
✓		Request and Finalize Traffic Data	02/21/2024
	✓	Request Preliminary Survey Data	
	✓	Initiate Division Reviews	
	✓	Schedule Site Review (with appropriate Divisions)	
0EN1 Conduct Environmental Desktop Review			
Complete	NA		Date Completed
✓		Confirm Environmental Desktop Review is Complete	05/22/2024
0MM1 Conduct Multimodal Review			
Complete	NA		Date Completed
	✓	Confirm Multimodal Review is Complete	
	✓	Review Multimodal Considerations & Recommendations	
0TO1 Conduct Initial Traffic Ops/TSMO Review <i>(include HQ Traffic Ops and Regional Traffic Office)</i>			
Complete	NA		Date Completed
		Confirm Transportation Systems Management & Operations (TSMO) Alignment & Operations Review is Complete	
		Request Concept Report Review	
0ST1 Develop Structures Recommendations			
Complete	NA		Date Completed
✓		Confirm Recommended Structure Type for Concept Report is Complete	04/14/2024
✓		Confirm Hydraulic Recommendations for Concept Report is Complete	04/14/2024
0SY1 Provide Preliminary Survey Data			
Complete	NA		Date Completed
	✓	Confirm Control Ground Survey Set	
	✓	Review Preliminary Survey Data	
	✓	Determine Time to Complete the Aerial Survey	
0GT1 Conduct Preliminary Geotechnical Assessment			
Complete	NA		Date Completed
	✓	Confirm Geotechnical Division Review is Complete	
0RD1 Provide Roadway Desktop Review			
Complete	NA		Date Completed
		Confirm Roadway Division Review is Complete	

Action Checklist			
OSD2 Develop Draft Concept Report			
Complete	NA		Date Completed
	✓	Conduct Intersection and Interchange Evaluation (IIE)	
	✓	Complete Conceptual Signal Warrants	
	✓	Develop Draft Conceptual Layouts/Crash Figures for Site Visit	
	✓	Compile Initial Divisional Reviews for Site Visit	
	✓	Prepare & Send Site Visit Packet	
	✓	Lead Site Visit	
	✓	Initiate Interstate Access Requests (IAR) Concept Coordination with FHWA (if applicable)	
✓		Develop, Compile, and Distribute the Draft Concept Report	
OTO2 Develop TSMO Scope Items <i>(include HQ Traffic Ops and Regional Traffic Office)</i>			
Complete	NA		Date Completed
	✓	Confirm Signal Warrants Analysis is Complete	
	✓	Confirm Lighting Warrants Analysis is Complete	
	✓	Review and Confirm TSMO & ITS Scope and Budget	
ORW1 Complete Preliminary Right-of-Way Estimates			
Complete	NA		Date Completed
	✓	Review and Confirm Preliminary Right-of-Way Cost Estimates	
OUT1 Complete Utility Preliminary Estimates			
Complete	NA		Date Completed
		Review and Confirm Preliminary Utility Estimate	
		Review and Confirm Preliminary Railroad Cost Estimate	
OSD3 Finalize Concept Report			
Complete	NA		Date Completed
	✓	Compile and Review Initial Risk Assessment	
		Finalize Conceptual Layouts	
✓		Develop Environmental Technical Study Area (ETSA)	
✓		Address Comments and Finalize Concept Report	06/17/2024
	✓	Address Comments and Finalize Interstate Access Requests (IAR) Document and Memo (if applicable)	
	✓	Develop Roadway Safety Audit (RSA) No Plans Document	
		Submit the final Concept Report for Review and Signatures (as needed; see OSD3 for additional information)	
		Finalize Document and Upload All Needed Electronic Files	
		Notify the Project Management Director or Assigned Project Manager to Set Up Project (1PM1)	

NA Justification

Coordinate with Long Range Planning-Long Range Planning coordination not needed for STID BCR document
Request Preliminary Survey Data- survey data not needed for STID BCR document
Schedule a site visit-site visit not required
0MM1 Conduct Multimodal Review- multimodal coordination not required
0SY1 Provide Preliminary Survey Data- survey data not needed for STID BCR document
0GT1 Conduct Preliminary Geotechnical Assessment- geotechnical data not received for STID BCR document
0SD2 Develop Draft Concept Report-no site visit was held for this bridge and no interchange or signal warrants were required
0TO2 Develop TSMO Scope Items-no signals or lighting needed within project limits
0RW1 Complete Preliminary Right-of-Way Estimates-ROW estimate calculated in cost estimate
0UT1 Complete Utility Preliminary Estimates-utility cost calculated in cost estimate
Compile and Review Initial Risk Assessment-Risk Assessment not needed for STID BCR document
Address Comments and Finalize Interstate Access Requests (IAR) Document and Memo (if applicable)-no interstate within project limits
Develop Roadway Safety Audit (RSA) No Plans Document- no plans document not needed for STID BCR document

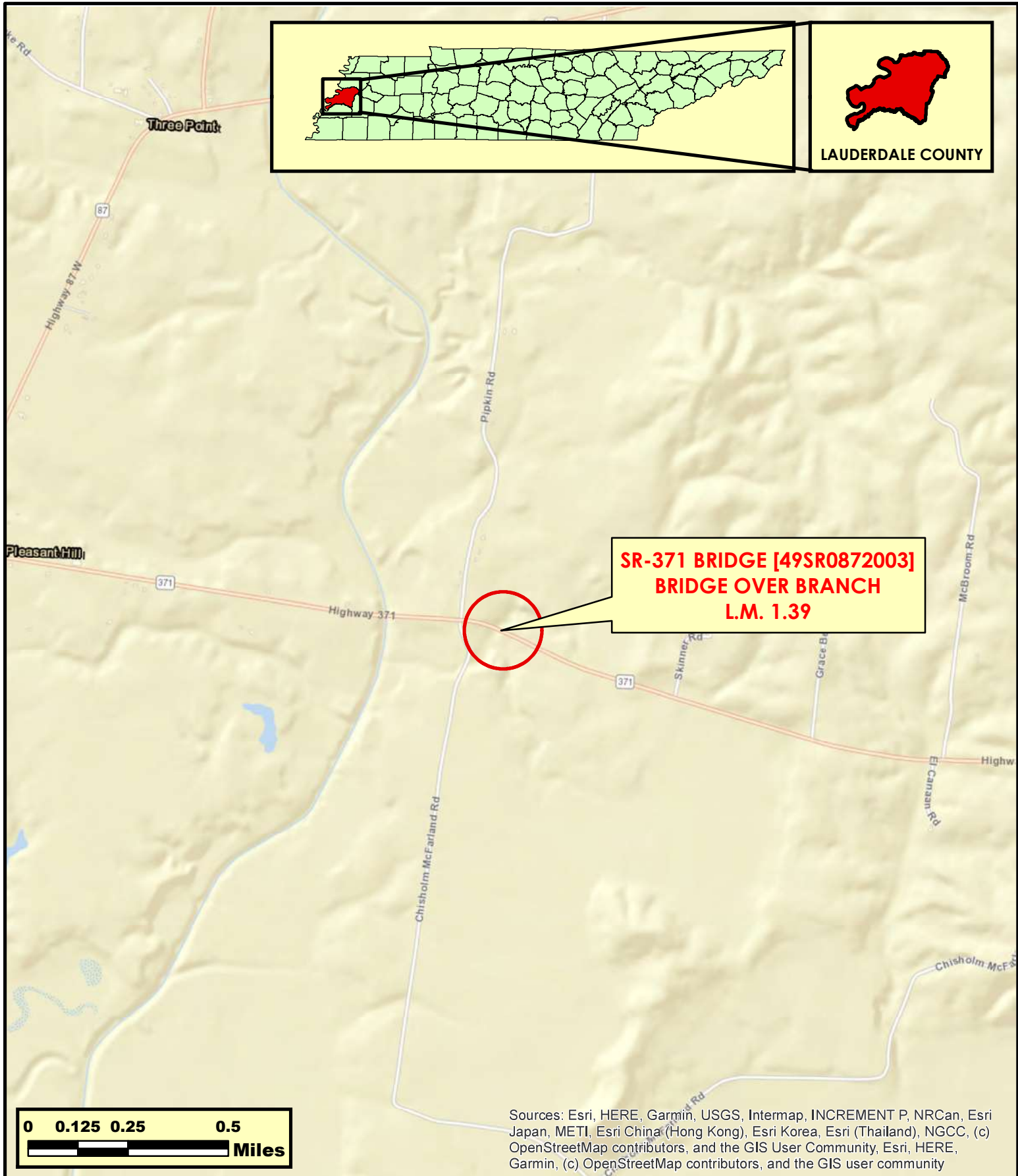
Concept Report Table of Contents/Attachments

	Included	NA
One-Page Summary (with project location map)	✓	
Conceptual Layout(s) and Cross Section	✓	
Environmental Technical Study Area (ETSA) Layout	✓	
Concept Cost Estimate (Construction Year Estimate)	✓	
TSMO & ITS Scope and Budget ¹		✓
ROW Form 44-A ¹		✓
Crash Packet ¹	✓	
Crash Prediction Analysis ¹		✓
Site Visit Attendee List		✓
Environmental Desktop Review Form ¹		
Multimodal Considerations & Recommendations ¹		✓
Existing Structure Summary ¹	✓	
Email or memo containing Structure Type Recommendations ¹	✓	
Email or memo containing Hydraulic Recommendations ¹	✓	
Hydraulic Data	✓	
Intersection and Interchange Evaluation (IIE) Analysis and Summary Form		✓
Traffic Analysis Summary/Tables	✓	
Forecasted Traffic Sheets ¹	✓	
Traffic Modeling (e.g., Synchro, VISSIM, Highway Capacity Software (HCS) Output) ¹		✓
Signal Warrant ¹		✓
Lighting Warrant ¹		✓
Initial Risk Assessment using the Risk Assessment Form		✓
Final Interstate Access Request (IAR) Document and Memo with Letter from STID Director		✓
Road Safety Audit (RSA) No Plans ¹		✓

NA Justification

TSMO & ITS Scope and Budget-no ITS within project limits; ROW Form 44-A-form not needed for STID BCR document; Crash Prediction Analysis- 5 crashes occurred within the project limits, crash prediction analysis not needed; Site Visit Attendee List-no site visit was held; Multimodal Considerations & Recommendation-no multimodal coordination; Intersection and Interchange Evaluation (IIE) Analysis and Summary Form- AADT is too low for IIE Analysis Traffic Modeling (e.g., Synchro, VISSIM, Highway Capacity Software (HCS) Output)- AADT too low to model Signal Warrant-no signals warranted within project limits; Lighting Warrant-no lighting warranted within project limits Initial Risk Assessment using the Risk Assessment Form-Risk Assessment not needed for STID BCR document Final IAR Document and Memo with Letter from STID Director-no interstate access within project limits Road Safety Audit (RSA) No Plans-RSA no plans document not needed for STID BTIR document

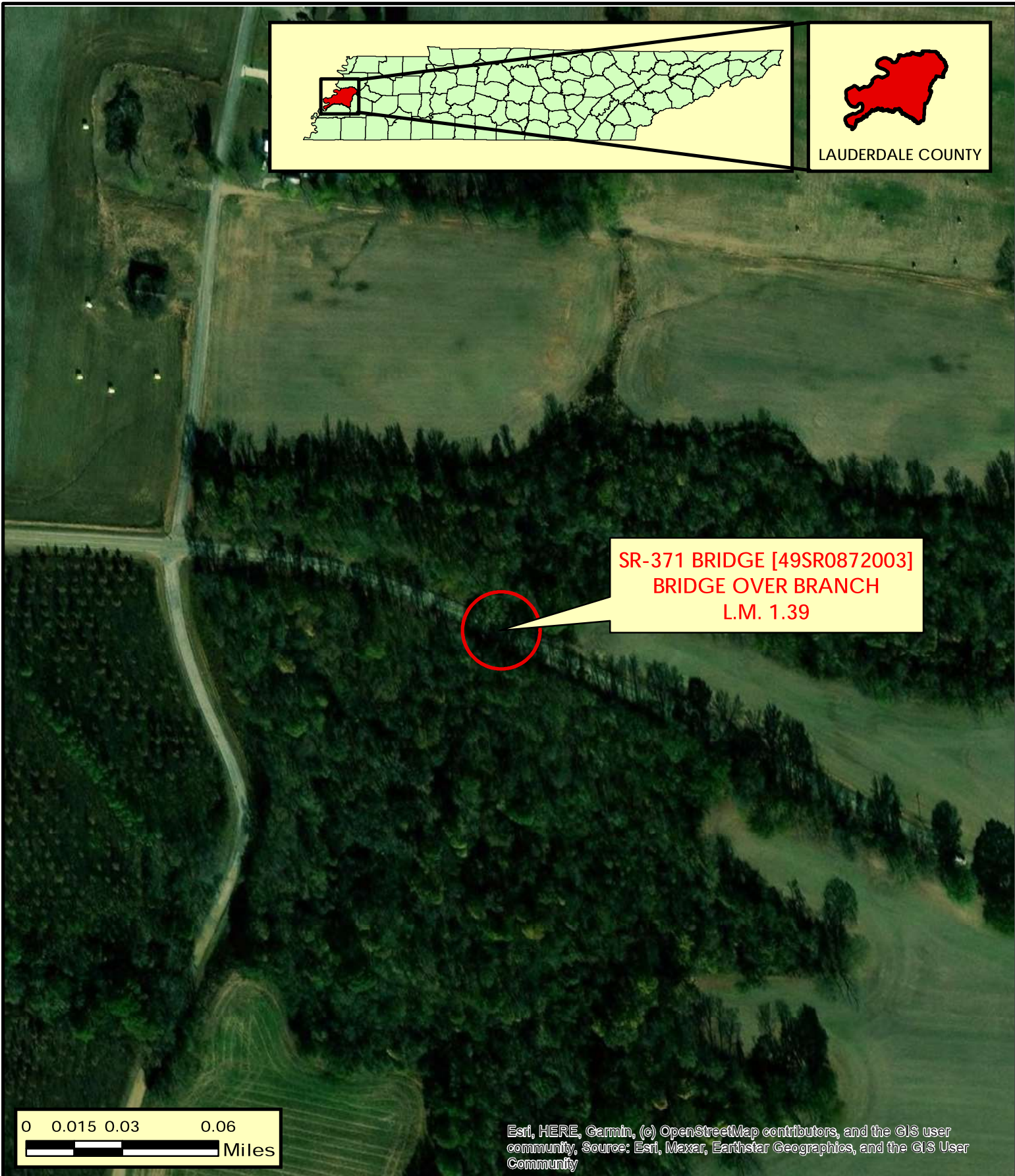
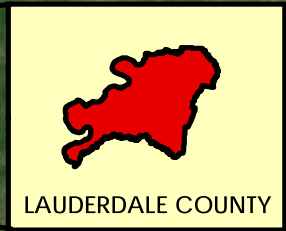
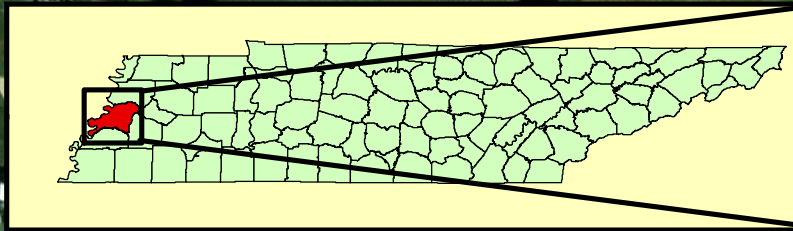
¹ External document to STID



Sources: Esri, HERE, Garmin, USGS, Intermap, INCREMENT P, NRCan, Esri Japan, METI, Esri China (Hong Kong), Esri Korea, Esri (Thailand), NGCC, (c) OpenStreetMap contributors, and the GIS User Community, Esri, HERE, Garmin, (c) OpenStreetMap contributors, and the GIS user community

AREA MAP
SR-371 BRIDGE [49SR0872003]
BRIDGE OVER BRANCH
L.M. 1.39
LAUDERDALE COUNTY

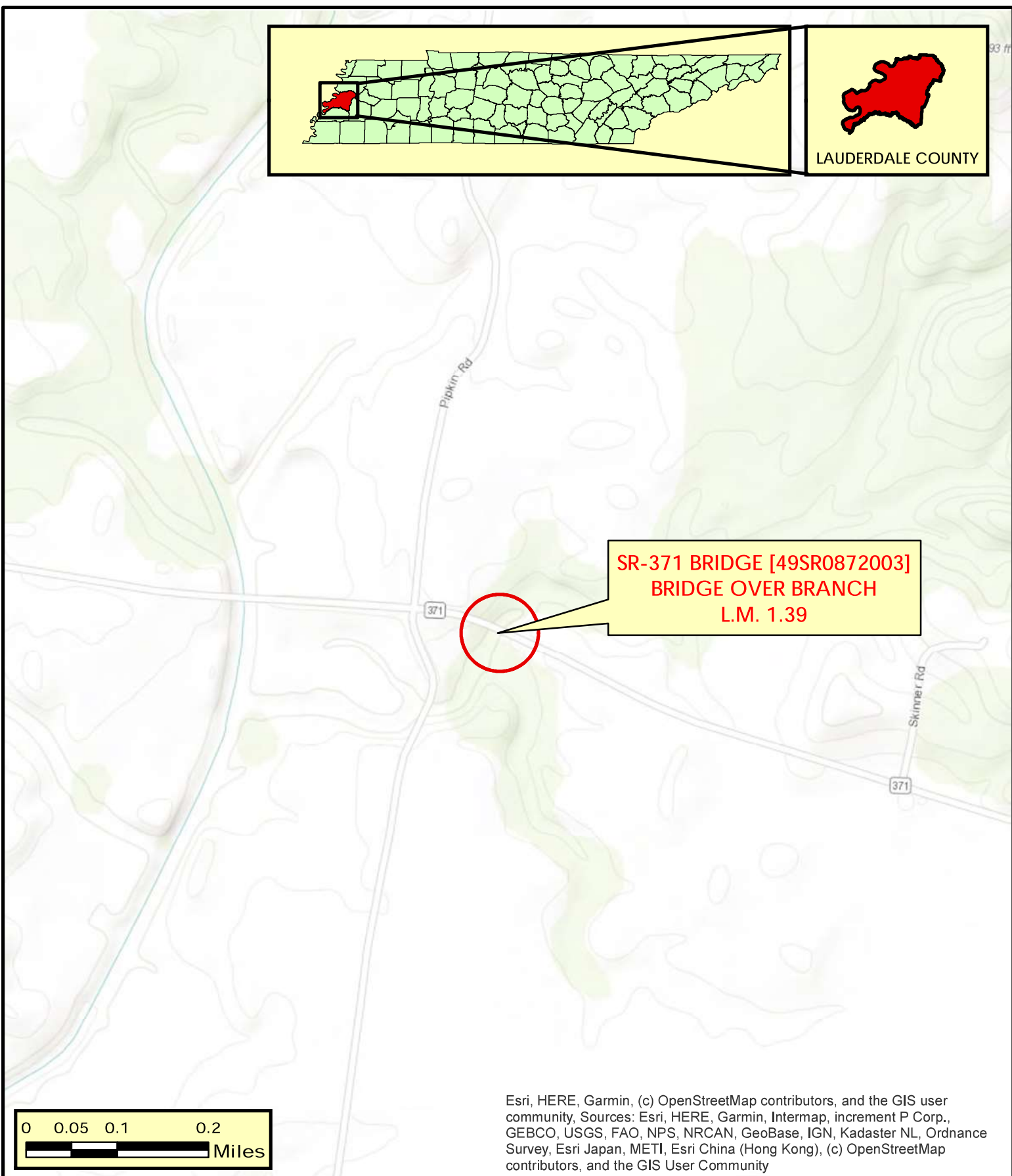
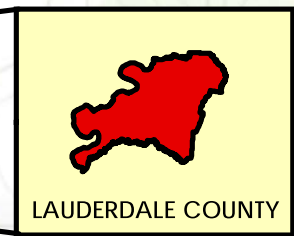
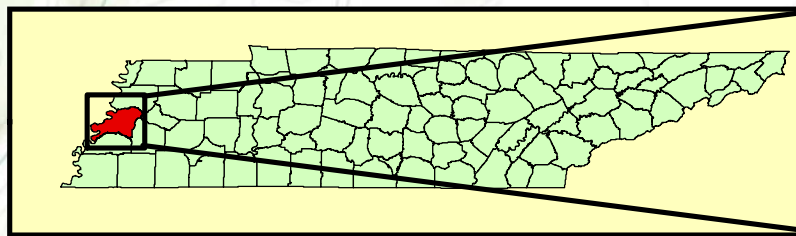
TN **TDOT**
Department of
Transportation
PIN 134862.00



LOCATION MAP
SR-371 BRIDGE [49SR0872003]
BRIDGE OVER BRANCH
L.M. 1.39
LAUDERDALE COUNTY



PIN 134862.00



Esri, HERE, Garmin, (c) OpenStreetMap contributors, and the GIS user community, Sources: Esri, HERE, Garmin, Intermap, increment P Corp., GEBCO, USGS, FAO, NPS, NRCAN, GeoBase, IGN, Kadaster NL, Ordnance Survey, Esri Japan, METI, Esri China (Hong Kong), (c) OpenStreetMap contributors, and the GIS User Community

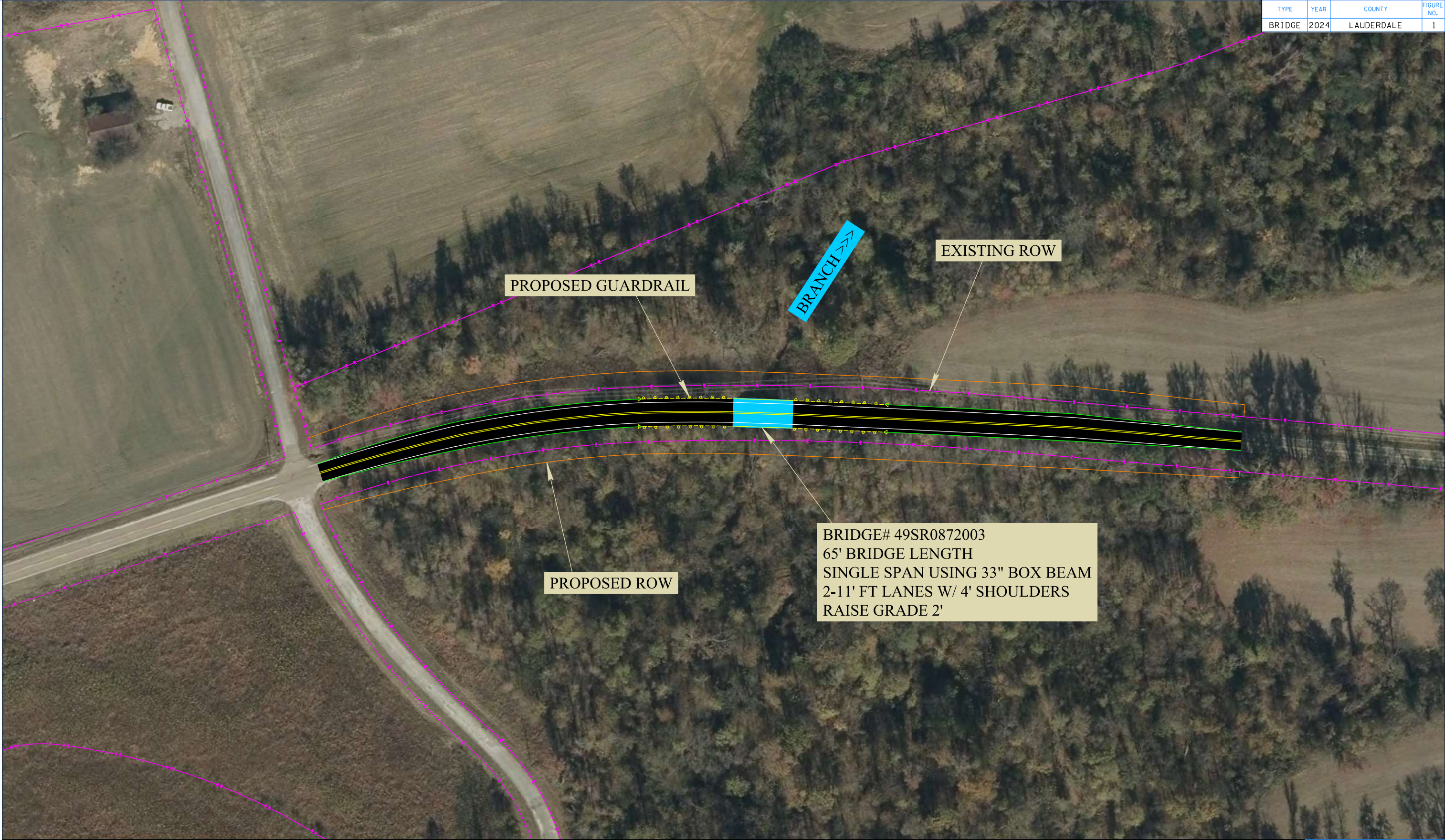


TOPOGRAPHIC MAP
SR-371 BRIDGE [49SR0872003]
BRIDGE OVER BRANCH
L.M. 1.39
LAUDERDALE COUNTY



PIN 134862.00

4/17/2024 4:21:04 PM
X:\Projects\Lauderdale\SR-371\Bridge over Branch, L.M. 1.39 (TMA)\Project Files\Microstation\ConceptualPlans (DCN & PDF)\Bridge over Branch, L.M. 1.39.dgn



BRIDGE# 49SR0872003
65' BRIDGE LENGTH
SINGLE SPAN USING 33" BOX BEAM
2-11' FT LANES W/ 4' SHOULDERS
RAISE GRADE 2'

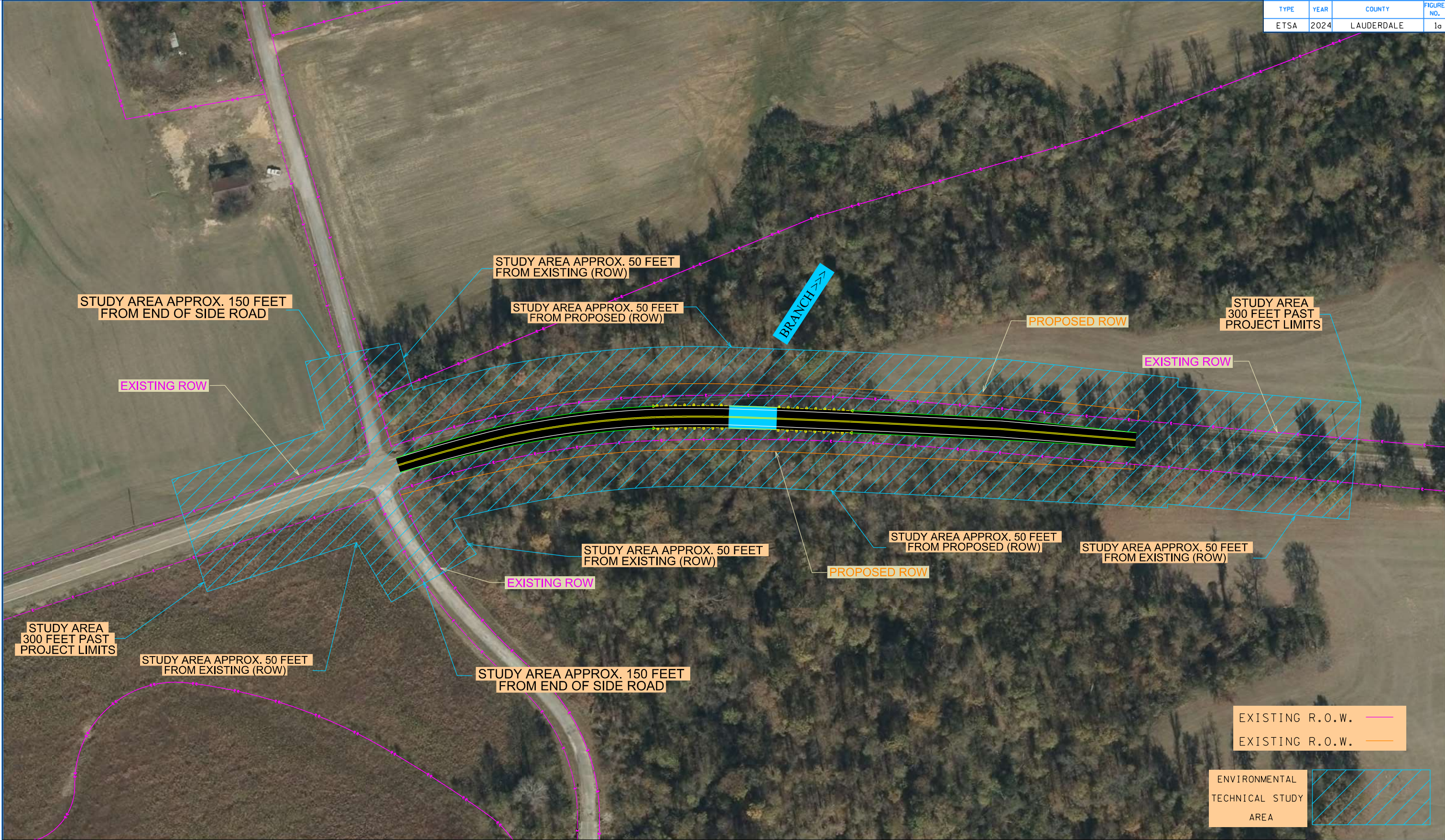


R4 TIMBER BRIDGE PROGRAM

STATE ROUTE 371
BRIDGE OVER BRANCH, L.M. 1.39
LAUDERDALE COUNTY

CAUTION!
PRELIMINARY
PLANS
SUBJECT TO
CHANGE

4/24/2024 8:50:25 AM X:\Projects\Lauderdale\SR-371\Bridge over Branch, LM 1.39 (TMA)\Project Files\Microstation\ConceptualPlans (00N & PDF)\ETSA-Bridge over Branch, L.M. 1.39.dgn



ENVIRONMENTAL TECHNICAL STUDY AREA

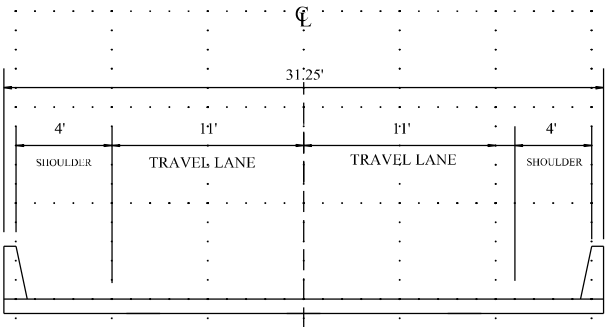
STATE ROUTE 371
BRIDGE OVER BRANCH, L.M. 1.39
LAUDERDALE COUNTY

CAUTION!
PRELIMINARY
PLANS
SUBJECT TO
CHANGE

STATE OF TENNESSEE
DEPARTMENT OF TRANSPORTATION
S.T.I.D.

FIGURE 1a
S.R. 371
L.M. 1.39

PROPOSED COMPLETED





CROSS-SECTION DETAIL


REGION 4 TIMBER BRIDGE PROGRAM
TRANSPORTATION MODERNIZATION ACT (TMA)


CAUTION !
PRELIMINARY
PLANS
SUBJECT TO
CHANGE

DETOUR MAP – STATE ROUTE


13 min


3 hr 47


51 min



Lauderdale County, Tennessee

Lauderdale County, Tennessee


Lauderdale County, Tennessee


4789 TN-371, Henning, TN 38041


Lauderdale County, Tennessee

Add destination

Options

 Send directions to your phone

 Copy link

 via TN-371 E


13 min


13 min without traffic


10.3 miles


Details


Explore Lauderdale County











Search along the route

Gas

EV charging

Hotels

Aardvark Construction

Pilgrims Rest Cemetery

Lightfoot Cemetery

El Canaan MB Church Cemetery

Lauderdale County

13 min








10.3 miles

Layers

Google

Imagery ©2024 Google, Airbus, Imagery ©2024 Airbus, Landsat / Copernicus, Maxar Technologies, State of Arkansas, USDA/FPAC/GEO, Map data ©2024 United States Terms Privacy 2000 ft

DETOUR MAP – LOCAL ROUTE



10 min

1 hr 57

27 min


Lauderdale County, Tennessee

Lauderdale County, Tennessee


Lauderdale County, Tennessee


Cherry, Tennessee 38041


Lauderdale County, Tennessee

 Add destination

Options

 Send directions to your phone

 Copy link

 via Pipkin Rd






10 min without traffic

10 min

5.3 miles

Details

Explore Lauderdale County



Search along the route

Gas

EV charging

Hotels

Pilgrims Rest Cemetery

Woodards Grocery

Lauderdale County

Lauderdale County

Cherry

Lauderdale County

Lauderdale County

Layers

Imagery ©2024 Google, Imagery ©2024 Airbus, Landsat / Copernicus, Maxar Technologies, State of Arkansas, USDA/FPAC/GEO, Map data ©2024

United States Terms Privacy 1000 ft

CRASH SUMMARY REPORT

Lauderdale Co SR371 - Bridge over Branch (LM 1.39)

Created on April 4, 2024

Created by JOSHUA CLOUD

Data extents: March 28, 2021 to March 28, 2024



Applied Filters

County = Lauderdale Shape: Polygon



Total Crashes

5

Fatal Crashes

0

Summary

Crash

Total Crashes

5

100.00%

+ 5 more

0

0%

Type of Crash

Crash

(O) Property-Damage Only

5

100.00%

+ 4 more

0

0%

Date of Crash (Year)

Crash

2023

3

60.00%

2022

1

20.00%

2021

1

20.00%

+ 8 more

0

0%

Manner of First Collision

Crash

No Collision W/ Vehicle

5

100.00%

+ 9 more	0	0%
First Harmful Event	Crash	
Deer (Animal)	4	80.00%
Thrown or Falling Object	1	20.00%
+ 63 more	0	0%
Crash Location	Crash	
Along Roadway	5	100.00%
+ 6 more	0	0%
Light Conditions	Crash	
Dark-Not Lighted	2	40.00%
Dawn	2	40.00%
Dusk	1	20.00%
+ 5 more	0	0%
Weather Conditions	Crash	
Clear	4	80.00%
Rain	1	20.00%
+ 10 more	0	0%



Bent 1 right side of cap "B" decay



Bent 1 left side of cap "A" decay



Bent 1 left side of cap "B" decay



Abutment 1 left side of cap decay



Abutment 1



Abutment 1 right side of cap decay



Right elevation



Left elevation



Bent 1 rear side



Span 2 precast concrete slab "D" spall to steel



Span 2 precast concrete slab "D" spall to steel



Span 2 bottom deck



Span 1 bottom deck



Abutment 2 cap left end decayed area



Abutment 2 cap left end decayed area



Abutment 2 cap splintered area. Medium weathering



Abutment 2 right end cap decayed area



Abutment 2 looking ahead



Bent 1 left end top side



Opposite Direction of Route with weight limit sign



Approach 2



Left side upstream



Right side downstream



View across deck



Weight limit sign Direction of Route



Direction of Route



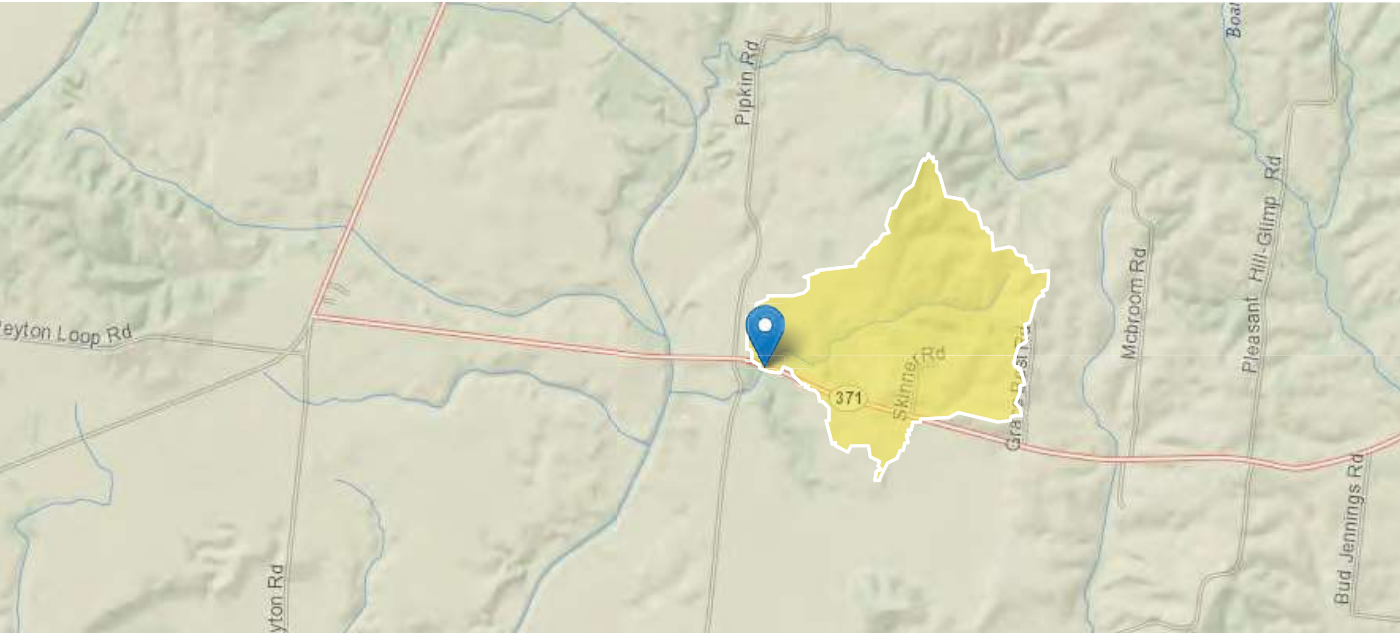
Approach 1



Bridge number

StreamStats

Region ID: TN
Workspace ID: TN20240404154209903000
Clicked Point (Latitude, Longitude): 35.67459, -89.68425
Time: 2024-04-04 10:42:43 -0500



+ Collapse All

Basin Characteristics

Parameter Code	Parameter Description	Value	Unit
CLIMFAC2YR	Two-year climate factor from Lichy and Karlinger (1990)	2.393	dimensionless
CONTDA	Area that contributes flow to a point on a stream	0.45	square miles
DRNAREA	Area that drains to a point on a stream	0.45	square miles
PERMGTE2IN	Percent of area underlain by soils with permeability greater than or equal to 2 inches per hour	32.454	percent
RECESS	Number of days required for streamflow to recede one order of magnitude when hydrograph is plotted on logarithmic scale	32	days per log cycle
SOILPERM	Average Soil Permeability	0.927	inches per hour

Peak-Flow Statistics

Peak-Flow Statistics Parameters [DAOnly Area 4]

Parameter Code	Parameter Name	Value	Units	Min Limit	Max Limit
CONTDA	Contributing Drainage Area	0.45	square miles	0.76	2308

Peak-Flow Statistics Disclaimers [DAOnly Area 4]

One or more of the parameters is outside the suggested range. Estimates were extrapolated with unknown errors.

Peak-Flow Statistics Flow Report [DAOnly Area 4]

Statistic	Value	Unit
50-percent AEP flood	286	ft ³ /s
20-percent AEP flood	400	ft ³ /s
10-percent AEP flood	472	ft ³ /s
4-percent AEP flood	560	ft ³ /s
2-percent AEP flood	622	ft ³ /s
1-percent AEP flood	682	ft ³ /s
0.2-percent AEP flood	820	ft ³ /s

Peak-Flow Statistics Citations

Law, G.S., and Tasker G.D.,2003, Flood-Frequency Prediction Methods for Unregulated Streams of Tennessee, 2000: U.S. Geological Survey Water-Resources Investigations Report 03-4176, 79p.
(<http://pubs.usgs.gov/wri/wri034176/>)

➤ Low-Flow Statistics

Low-Flow Statistics Parameters [Low Flow West Region 2009 5159]

Parameter Code	Parameter Name	Value	Units	Min Limit	Max Limit
DRNAREA	Drainage Area	0.45	square miles	2	2405
RECESS	Recession Index	32	days per log cycle	32	350
PERMGTE2IN	Percent permeability gte 2 in per hr	32.454	percent	2	98

Low-Flow Statistics Disclaimers [Low Flow West Region 2009 5159]

One or more of the parameters is outside the suggested range. Estimates were extrapolated with unknown errors.

Low-Flow Statistics Flow Report [Low Flow West Region 2009 5159]

Statistic	Value	Unit
7 Day 10 Year Low Flow	0.000368	ft ³ /s
30 Day 5 Year Low Flow	0.00117	ft ³ /s

Low-Flow Statistics Citations

Law, G.S., Tasker, G.D., and Ladd, D.E.,2009, Streamflow-characteristic estimation methods for unregulated streams of Tennessee: U.S. Geological Survey Scientific Investigations Report 2009-5159, 212 p., 1 pl.
(<http://pubs.usgs.gov/sir/2009/5159/>)

➤ Flow-Duration Statistics

Flow-Duration Statistics Parameters [Low Flow West Region 2009 5159]

Parameter Code	Parameter Name	Value	Units	Min Limit	Max Limit
DRNAREA	Drainage Area	0.45	square miles	2	2405
RECESS	Recession Index	32	days per log cycle	32	350
PERMGTE2IN	Percent permeability gte 2 in per hr	32.454	percent	2	98
CLIMFAC2YR	Tennessee Climate Factor 2 Year	2.393	dimensionless	2.307	2.455
SOILPERM	Average Soil Permeability	0.927	inches per hour	0.97	2.44

Flow-Duration Statistics Disclaimers [Low Flow West Region 2009 5159]

One or more of the parameters is outside the suggested range. Estimates were extrapolated with unknown errors.

Flow-Duration Statistics Flow Report [Low Flow West Region 2009 5159]

Statistic	Value	Unit
99.5 Percent Duration	0.000339	ft ³ /s
99 Percent Duration	0.000562	ft ³ /s
98 Percent Duration	0.000822	ft ³ /s
95 Percent Duration	0.00127	ft ³ /s
90 Percent Duration	0.00185	ft ³ /s
80 Percent Duration	0.00313	ft ³ /s
70 Percent Duration	0.00541	ft ³ /s
60 Percent Duration	0.0107	ft ³ /s
50 Percent Duration	0.0193	ft ³ /s
40 Percent Duration	0.0417	ft ³ /s
30 Percent Duration	0.133	ft ³ /s
20 Percent Duration	0.439	ft ³ /s
10 Percent Duration	0.964	ft ³ /s

Flow-Duration Statistics Citations

Law, G.S., Tasker, G.D., and Ladd, D.E., 2009, Streamflow-characteristic estimation methods for unregulated streams of Tennessee: U.S. Geological Survey Scientific Investigations Report 2009–5159, 212 p., 1 pl. (<http://pubs.usgs.gov/sir/2009/5159/>)

➤ Annual Flow Statistics

Annual Flow Statistics Parameters [Low Flow West Region 2009 5159]

Parameter Code	Parameter Name	Value	Units	Min Limit	Max Limit
DRNAREA	Drainage Area	0.45	square miles	2	2405

Parameter Code	Parameter Name	Value	Units	Min Limit	Max Limit
RECESS	Recession Index	32	days per log cycle	32	350
CLIMFAC2YR	Tennessee Climate Factor 2 Year	2.393	dimensionless	2.307	2.455
PERMGTE2IN	Percent permeability gte 2 in per hr	32.454	percent	2	98

Annual Flow Statistics Disclaimers [Low Flow West Region 2009 5159]

One or more of the parameters is outside the suggested range. Estimates were extrapolated with unknown errors.

Annual Flow Statistics Flow Report [Low Flow West Region 2009 5159]

Statistic	Value	Unit
Mean Annual Flow	0.508	ft ³ /s

Annual Flow Statistics Citations

Law, G.S., Tasker, G.D., and Ladd, D.E., 2009, Streamflow-characteristic estimation methods for unregulated streams of Tennessee: U.S. Geological Survey Scientific Investigations Report 2009–5159, 212 p., 1 pl. (<http://pubs.usgs.gov/sir/2009/5159/>)

USGS Data Disclaimer: Unless otherwise stated, all data, metadata and related materials are considered to satisfy the quality standards relative to the purpose for which the data were collected. Although these data and associated metadata have been reviewed for accuracy and completeness and approved for release by the U.S. Geological Survey (USGS), no warranty expressed or implied is made regarding the display or utility of the data for other purposes, nor on all computer systems, nor shall the act of distribution constitute any such warranty.

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USGS Product Names Disclaimer: Any use of trade, firm, or product names is for descriptive purposes only and does not imply endorsement by the U.S. Government.

Application Version: 4.19.4

StreamStats Services Version: 1.2.22

NSS Services Version: 2.2.1

**TENNESSEE DEPARTMENT OF TRANSPORTATION
STRATEGIC TRANSPORTATION INVESTMENTS DIVISION**

PROJECT NO.: 49S371-S1-003 ROUTE: S.R. 371
COUNTY: LAUDERDALE CITY: _____
PROJECT PIN NUMBER: 134862.00
PROJECT DESCRIPTION: BRIDGE OVER BRANCH @ L.M. 1.39

DIVISION REQUESTING:

MAINTENANCE <input type="checkbox"/>	PAVEMENT DESIGN <input type="checkbox"/>
S.T.I.D. <input checked="" type="checkbox"/>	STRUCTURES <input type="checkbox"/>
PROG. DEVELOPMENT & ADM. <input type="checkbox"/>	SURVEY & ROADWAY DESIGN <input type="checkbox"/>
PUBLIC TRANS. & AERO. <input type="checkbox"/>	TRAFFIC SIGNAL DESIGN <input type="checkbox"/>
	OTHER <input type="checkbox"/>

YEAR PROJECT PROGRAMMED FOR CONSTRUCTION: 2029
PROJECTED LETTING DATE: 2029

TRAFFIC ASSIGNMENT:

BASE YEAR		DESIGN YEAR					DESIGN ROADWAY % TRUCKS		DESIGN AVERAGE DAILY LOADS	
AADT	YEAR	AADT	DHV	%	YEAR	DIR.DIST.	DHV	AADT	FLEX	RIGID
940	2029	1,200	156	13	2049	65-35	2	3		

REQUESTED BY: NAME CALEB SMITH DATE 2/15/24
DIVISION S.T.I.D.
ADDRESS 1000 J. K. POLK BUILDING
NASHVILLE TN 37243

REVIEWED BY: RANDY BOGUSKIE Randy Boguskie DATE 2/21/2024
TRANSPORTATION MANAGER 1
SUITE 1000, JAMES K. POLK BUILDING

APPROVED BY: TONY ARMSTRONG Tony Armstrong DATE 2/21/2024
TRANSPORTATION MANAGER 2
SUITE 1000, JAMES K. POLK BUILDING

COMMENTS:

FURNISH THE 2029-2049 TRAFFIC DATA.

THIS TRAFFIC IS BASED ON A 2023 CYCLE COUNT. THE DESIGN YEAR TRAFFIC IS
BASED ON GROWTH RATE FROM THE TN-TIMES LINEAR REGRESSION TOOL.

DHV'S ARE NOT REQUIRED FOR SIDE ROADS LESS THAN 1000 AADT.

NOTE: FOR BRIDGE REPLACEMENT PROJECTS, ADLs ARE NOT REQUIRED FOR ADTs OF 1000 OR LESS AND
PERCENTAGE OF TRUCKS OF 7% OR LESS.

SEE ATTACHMENTS FOR TURNING MOVEMENTS AND/OR OTHER DETAILS.

(REV. 6/9/21)



Environmental Division

0EN1 Environmental Desktop Review Form

Part 1 – Project Information

PIN	134862.00
Project Number (if available)	
County	Lauderdale
Route	SR-371
Termini	Bridge over Branch, LM 1.39 (TMA)
Type of Document	
Date ENV DIV Comments are Due	5/22/24 by noon

Part 2: Provide information identifying known Environmental Resources within the proposed project area using the attached information. If no known resources are identified, each study area should note that none were identified.

Air & Noise

AIR QUALITY

Transportation Conformity

This project is in Lauderdale County which is in attainment for all regulated criteria pollutants. Therefore, conformity does not apply to this project.

Mobile Source Air Toxics (MSATs)

This project qualifies as a categorical exclusion under 23 CFR 771.117 and, therefore, does not require an evaluation of MSATs per FHWA's "Interim Guidance Update on Air Toxic Analysis in NEPA Documents" dated January 2023.

NOISE

This project is Type III in accordance with the FHWA noise regulation in 23 CFR 772 and TDOT's noise policy; therefore, a noise study is not needed.

Cultural Resources

Archaeology: There are no previously recorded sites or survey areas within one mile of the ETSA. A survey will be required. There is a moderate probability of intact archaeological deposits in this location.

Historic Preservation

There are no previously surveyed historic resources within .1 mile of the ETSA. The bridge over Branch was constructed in 1991 and does not meet the age requirement for survey. A survey is not required.

Ecology

Water resource features are likely to occur within the project area. Additionally, species records in the area will likely result in surveys and or sweeps.

HazMat

No known hazardous materials sites. The asbestos bridge survey has been completed.

An Asbestos Containing Material (ACM) survey was completed on Bridge No. 49SR0872003 SR-371 over Branch LM 1.39 (49-SR371-01.39). No asbestos was detected. Please see the report for further details and photographs. No special accommodations for demolition and waste disposal are anticipated for these structures and the material can be deposited in a C&D landfill. Prior to the demolition or rehabilitation of any structure (bridge or building), the contractor is required to submit the National Emission Standards for Hazardous Air Pollutants standard 10-day notice of demolition to the TDEC Division of Air Pollution Control (per TDOT Standard Specifications for Road and Bridge Construction (January 1, 2021) Sections 107.08.D and 202.03).

NEPA

This project was evaluated for the following:

- Detour: Detour under 25 miles, no FHWA coordination needed.
- ROW Acquisition: ROW acquisition is less than 1.5 acres, coordination with FHWA is not required.
- Section 4(f): Project is located near Lower Hatchie National Wildlife Refuge.
- Section 6(f): Project is located near Lower Hatchie National Wildlife Refuge (funded by the Land and Water Conservation Fund).

- Local/State Parks and Greenways: No parks or greenways were identified in the proposed project area.
- Floodplain Management: The project is located within "Zone AE" FEMA Floodplain designation.

PIN	County	Project	Utilities on Project	At Risk	Mitigation (if applicable)	Items	Footage
134862.00	Lauderdale	SR-371 Bridge over Branch	Electric (Southwest TN Electric Co-Op assumed)	Aerial Electric - Distribution Lines, Fiber, and Communications	This can be avoided - unsure of what appears to be a communication route in the power space	(1) 55-1 pole (1) 50-1 pole, (2) double cross arms, (4) 3 phase heavy conductors with neutral, (1) assumed 48 fiber, and (1) communication line, (1) 1" anchor, (1) downguy	650'