

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	Bridge over Ditch									
PIN	134882.00									
Route Information	Route	NHS (Y/N)	Functional Class			City		County		
	SR-222	No	Rural Major Collector			Stanton		Haywood		
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	
	4.34		7,040	1,233	15.00	35	30	2029	2049	
Project Description & Standard Drawings Used	<p>The proposed bridge is to be a 60' single span bridge using 30" box beams . The typical section for the approach and bridge will be 2-10' foot travel lanes with 2' shoulders (Design Exception Required). The out-to-out width based on the above recommendations will be 25'3". Maintain existing grade. A detour is recommended. The state route detour is 19 minutes (15.0 miles) the local route detour is 5 minutes (1.6 miles). Superstructure depth is 43" = 30" (beam) + 10" (deck) + 3" (width (in inches) x0.02/2).</p> <p>RD11-TS-2</p>									
Important Project History or Related Projects	<p>The existing structure single span timber bridge, 28.5' long with an out-to-out width of 25'. The existing structure has 2-10' travel lanes with minimal to no shoulders. The listed weight limit on the inspection report is 40 tons 8/21/2023. The discharges for the drainage basin (StreamStats Version 4.19.4) for drainage area of 0.76 square miles: Q10 is 632 cfs, Q50 is 839 cfs, and Q100 is 922 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"> -Built in 1960 -Timber bridges are being phased out and is near the end of it's service life -Current typical section does not meet TDOT standards -The bridge is in POOR condition 									
Major Environmental Considerations	<p>Archaeology: A survey will be required. Historic Preservation: A survey will be required. Ecology: Will likely require surveys and/or time of year restrictions. NEPA:If the project remains state-funded, a TEER will be produced unless there is a federal nexus.</p>									

Project Details

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 is 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	Power, Gas, and Telecom Utilities are 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

David Duncan
[David Duncan \(Nov 25, 2024 14:11 CST\)](#)
 Engineering Concepts and Statewide Programs Director

11/25/2024
 Date

The following individuals to execute if a bridge concept report:

Jed A. Kmiegowyg
 Structures Director

11/25/2024
 Date

BLAZ
 Regional Project Management Director

11/26/2024
 Date

Action Checklist

OSD1 Initiate Concept Report and Request Funding		
Complete	NA	Date Completed
✓		Request and Finalize Safety Data
✓		Request Project Number, PIN, and Task Profile Numbers
	✓	Coordinate with Long Range Planning
✓		Request and Finalize Traffic Data
	✓	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
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
✓		Confirm Hydraulic Recommendations for Concept Report is Complete
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
10/02/2024		
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
10/17/2024		
	✓	Review and Confirm Preliminary Railroad Cost Estimate
OSD3 Finalize Concept Report		
Complete	NA	Date Completed
	✓	Compile and Review Initial Risk Assessment
✓		Finalize Conceptual Layouts
11/21/2024		
✓		Develop Environmental Technical Study Area (ETSA)
10/02/2024		
✓		Address Comments and Finalize Concept Report
11/21/2024		
	✓	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)
11/21/2024		
✓		Finalize Document and Upload All Needed Electronic Files
12/2/2024		
✓		Notify the Project Management Director or Assigned Project Manager to Set Up Project (1PM1)
12/2/2024		

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

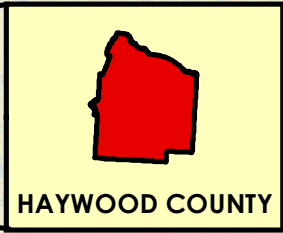
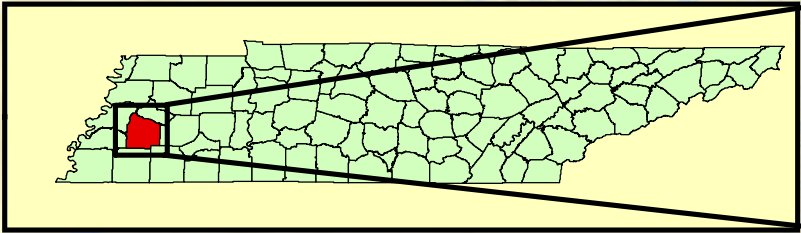
**Concept Report
Table of Contents/Attachments**

	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		✓

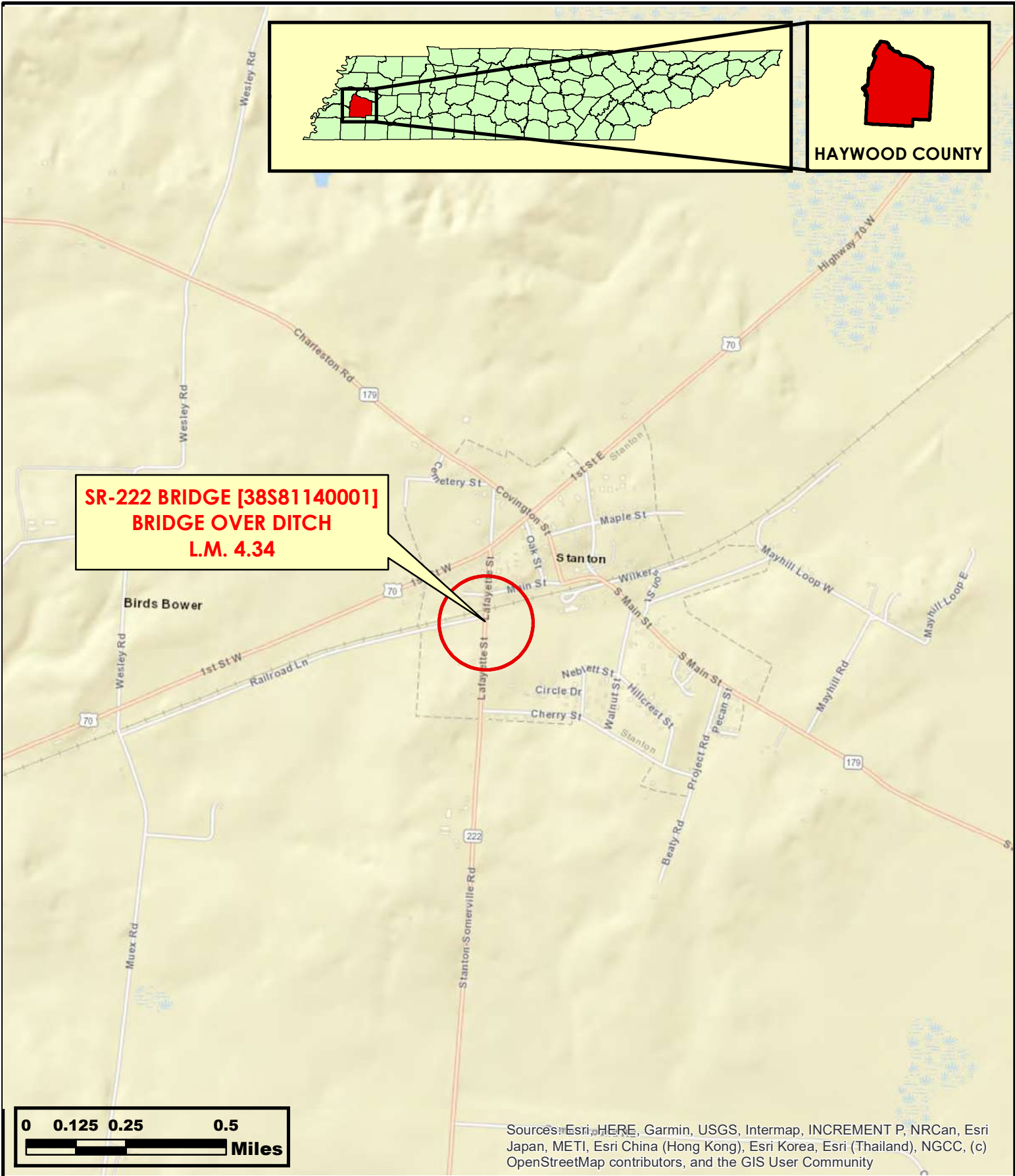
NA Justification

TSMO & ITS Scope and Budget-no ITS within project limits; ROW Form 44-A-form not needed for STID BCR document; Crash Prediction Analysis- 1 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



**SR-222 BRIDGE [38S81140001]
BRIDGE OVER DITCH
L.M. 4.34**



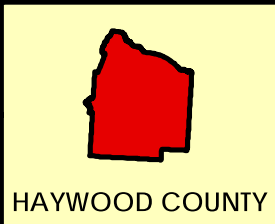
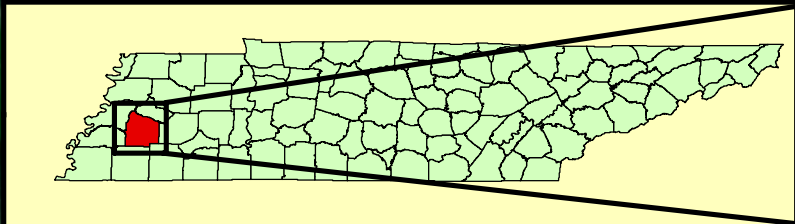
Sources: Esri, HERE, Garmin, USGS, Intermap, INCREMENT P, NRCan, Esri Japan, METI, Esri China (Hong Kong), Esri Korea, Esri (Thailand), NGCC, (c) OpenStreetMap contributors, and the GIS User Community



AREA MAP
SR-222 BRIDGE [38S81140001]
BRIDGE OVER DITCH
L.M. 4.34
HAYWOOD COUNTY



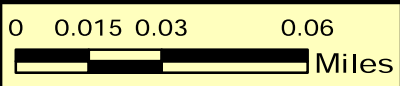
PIN 134882.00



HAYWOOD COUNTY



SR-222 BRIDGE [38S81140001]
BRIDGE OVER DITCH
L.M. 4.34



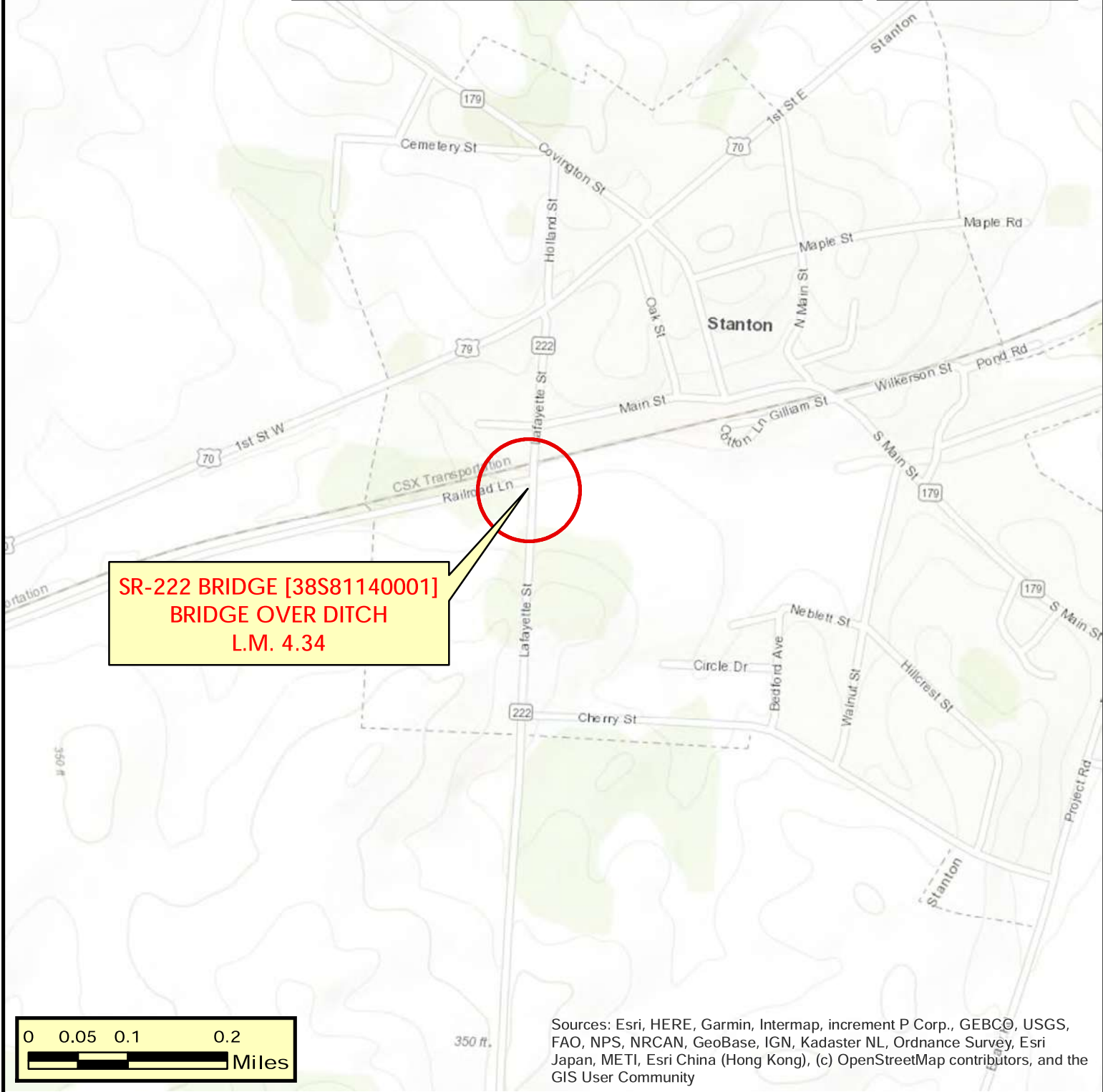
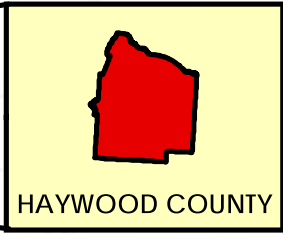
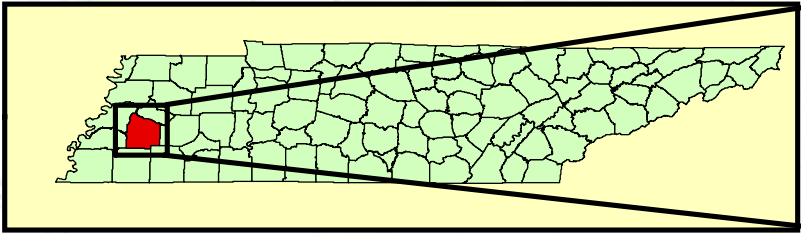
Source: Esri, Maxar, Earthstar Geographics, and the GIS User Community



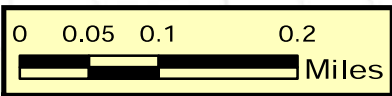
LOCATION MAP
SR-222 BRIDGE [38S81140001]
BRIDGE OVER DITCH
L.M. 4.34
HAYWOOD COUNTY



PIN 134882.00



**SR-222 BRIDGE [38S81140001]
BRIDGE OVER DITCH
L.M. 4.34**



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



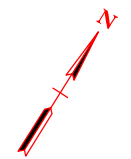
TOPOGRAPHIC MAP
SR-222 BRIDGE [38S81140001]
BRIDGE OVER DITCH
L.M. 4.34
HAYWOOD COUNTY



PIN 134882.00

TYPE	YEAR	COUNTY	FIGURE NO.
BCR	2024	HAYWOOD	1

0/4/2024 7:59:45 AM X:\Projects\Haywood\SR-222\Bridge over Ditch, L.M. 4.34 (TMA)\Project Files\Microstation\ConceptualPlans (IGN & PDF)\SR 222 Bridge over Ditch, L.M. 4.34.dgn



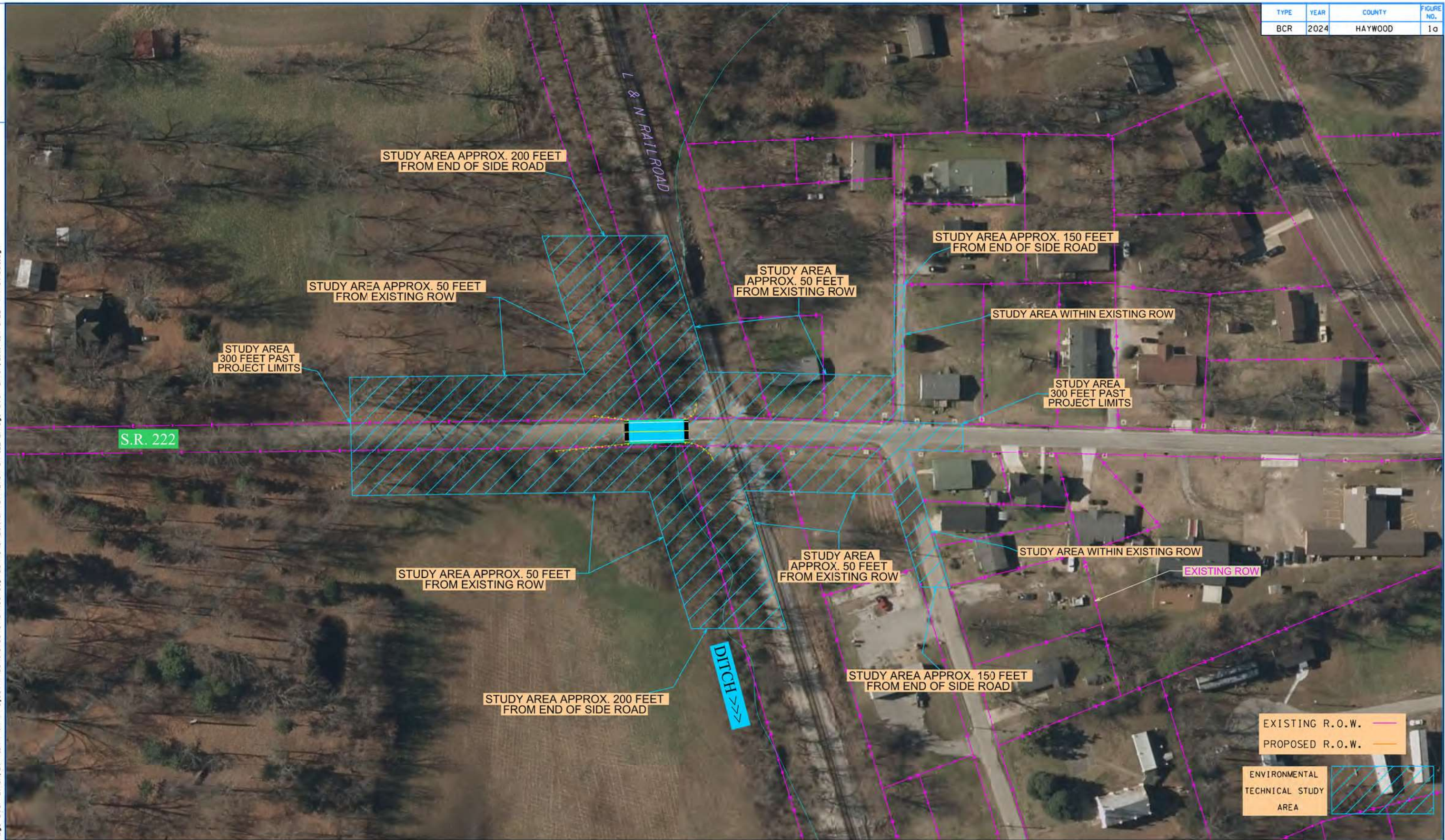
R4 TIMBER BRIDGE PROGRAM

STATE ROUTE 222
BRIDGE OVER DITCH, L.M. 4.34
HAYWOOD COUNTY

CAUTION!
PRELIMINARY
PLANS
SUBJECT TO
CHANGE

TYPE	YEAR	COUNTY	FIGURE NO.
BCR	2024	HAYWOOD	1a

11/12/2024 9:07:52 AM
 X:\Projects\Haywood\SR-222\Bridge over Ditch, L.M. 4.34 (TMA)\Project Files\Microstation\ConceptualPlans (DGN & PDF)\NETSA SR 222 Bridge over Ditch, L.M. 4.34 SHEET 1A revised.dgn



ENVIRONMENTAL TECHNICAL STUDY AREA

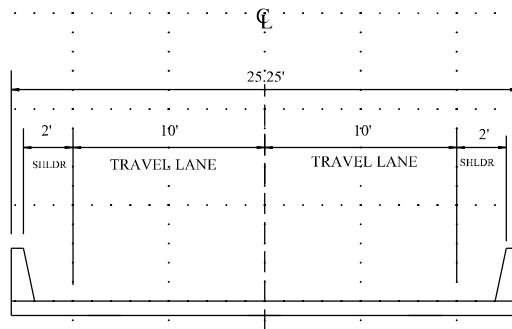
STATE ROUTE 222
BRIDGE OVER DITCH, L.M. 4.34
HAYWOOD COUNTY

CAUTION!
PRELIMINARY
PLANS
SUBJECT TO
CHANGE

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

FIGURE 1a
S.R. 222
L.M. 4.34

PROPOSED COMPLETED



CROSS-SECTION DETAIL

REGION 4 TIMBER BRIDGE PROGRAM
TRANSPORTATION MODERNIZATION ACT (TMA)

**CAUTION !
PRELIMINARY
PLANS
SUBJECT TO
CHANGE**

DETOUR MAP - STATE ROUTE

19 min 6 hr 1 hr 30

- Stanton, Tennessee 38069
- 25 Covington St, Stanton, TN 38069
- Haywood County School District, Tennes
- TN-222, Stanton, TN 38069
- Stanton, Tennessee 38069

Add destination

Options

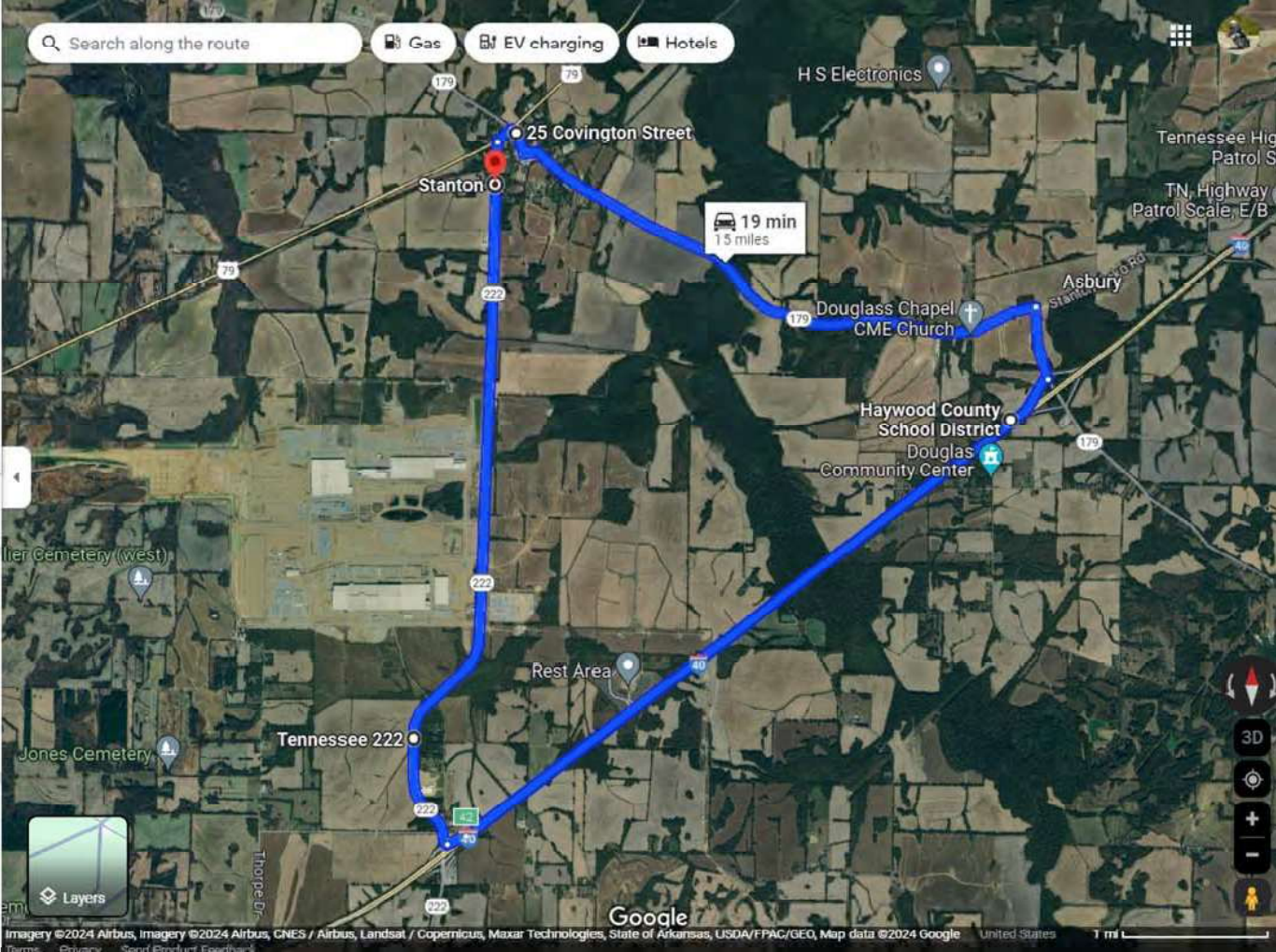
Send directions to your phone Copy link

via Lafayette St and Hwy 70 W 19 min
19 min without traffic 15.0 miles
Details

Explore Stanton

Layers

Icons: Restaurant, Hotel, Gas, Parking, More



DETOUR MAP - LOCAL ROUTE

Search along the route | Gas | EV charging | Hotels

5 min | 34 min | 10 min

- 43-15 TN-222, Stanton, TN 38069
- Stanton, Tennessee 38069
- Stanton, Tennessee 38069
- 23-21 Cherry St, Stanton, TN 38069
- Haywood County, Tennessee 38069

+ Add destination

Options

Send directions to your phone | Copy link

via Lafayette St and Hwy 70 W | 5 min
5 min without traffic | 1.6 miles
Details

Explore Haywood County

Layers

Imagery ©2024 Airbus, Imagery ©2024 Airbus, CNES / Airbus, Maxar Technologies, USDA/FPAC/GEQ, Map data ©2024 | United States | Terms | Privacy | Send Product Feedback | 500 ft

Haywood Co SR222 - Bridge over Ditch

Created on April 4, 2024

Created by JOSHUA CLOUD

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



Applied Filters

County = Haywood Shape: Polygon



Total Crashes	1	Fatal Crashes	0
---------------	---	---------------	---

Summary	Crash	
Total Crashes	1	100.00%
Truck/Bus Involved	1	100.00%
+ 4 more	0	0%

Type of Crash	Crash	
(O) Property-Damage Only	1	100.00%
+ 4 more	0	0%

Date of Crash (Year)	Crash	
2022	1	100.00%
+ 10 more	0	0%

Manner of First Collision	Crash	
Rear-End	1	100.00%
+ 9 more	0	0%

First Harmful Event		Crash
Vehicle in Transport	1	100.00%
+ 64 more	0	0%

Crash Location		Crash
Along Roadway	1	100.00%
+ 6 more	0	0%

Light Conditions		Crash
Daylight	1	100.00%
+ 7 more	0	0%

Weather Conditions		Crash
Clear	1	100.00%
+ 11 more	0	0%



Latitude:35.46111, Longitude:-89.40508

Region 04, 38 - Haywood County

Team Leader: Ronnie Moore

Inspectors: William Myers, Logan Naifeh, Jaylan Cox, Jordan Fitts



Abutment 1



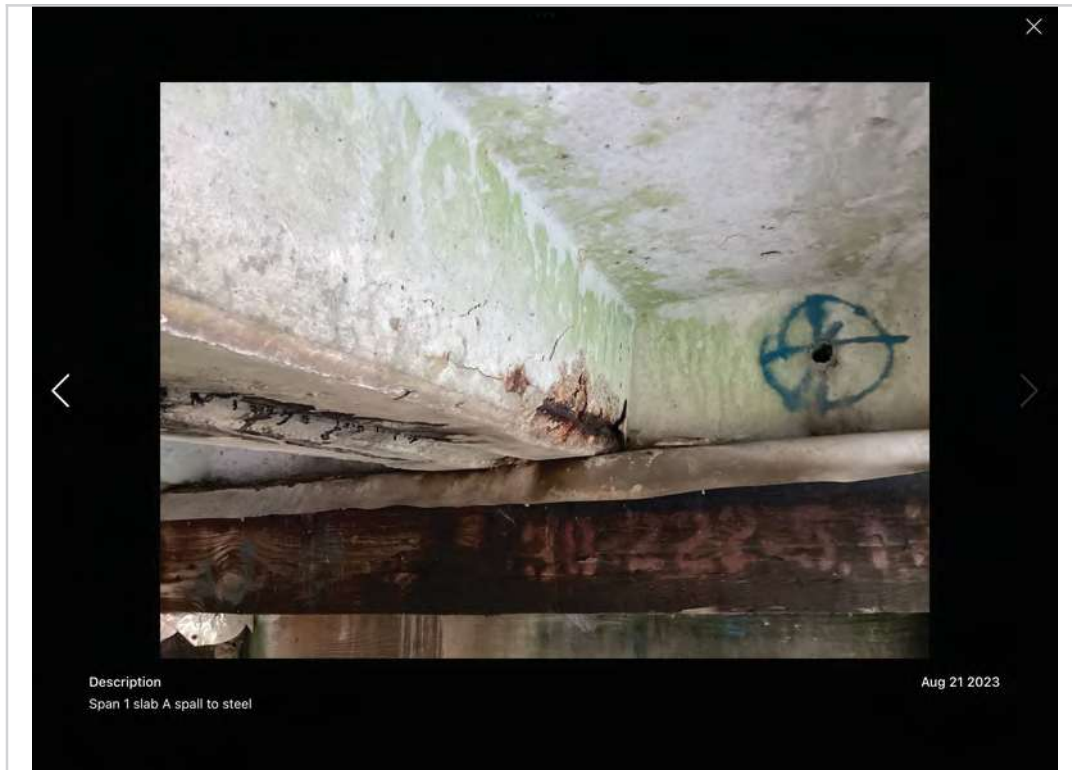
Abutment 2



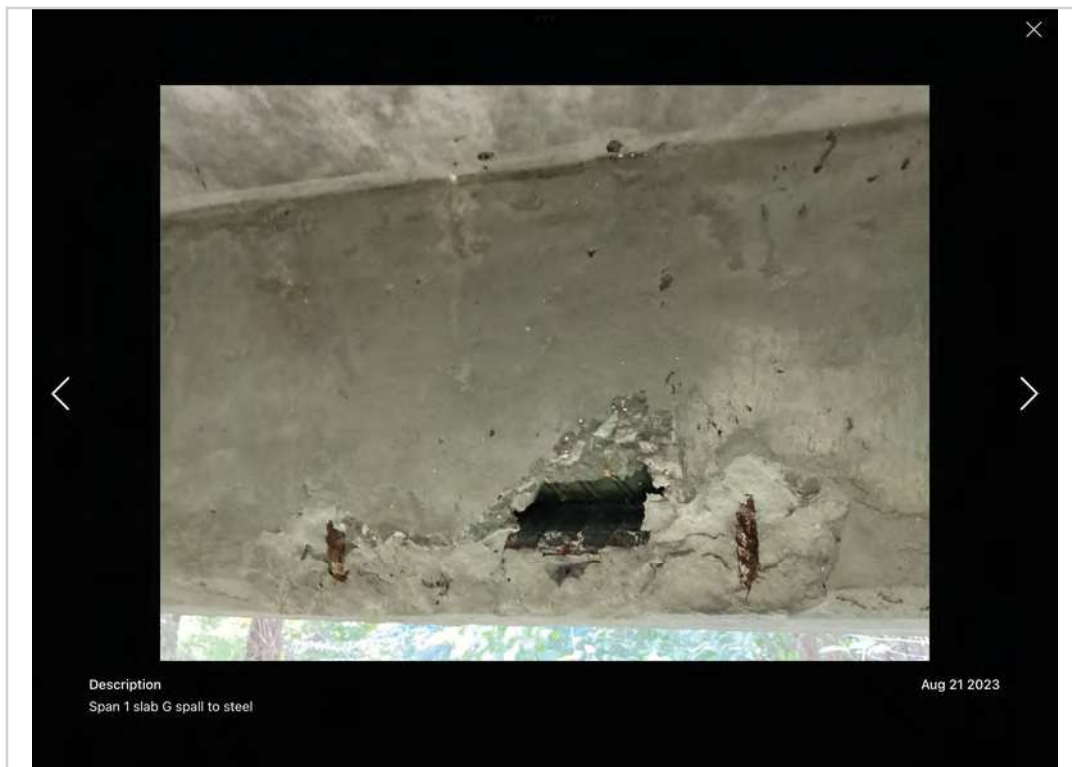
Split and splintering, pile C abutment 1



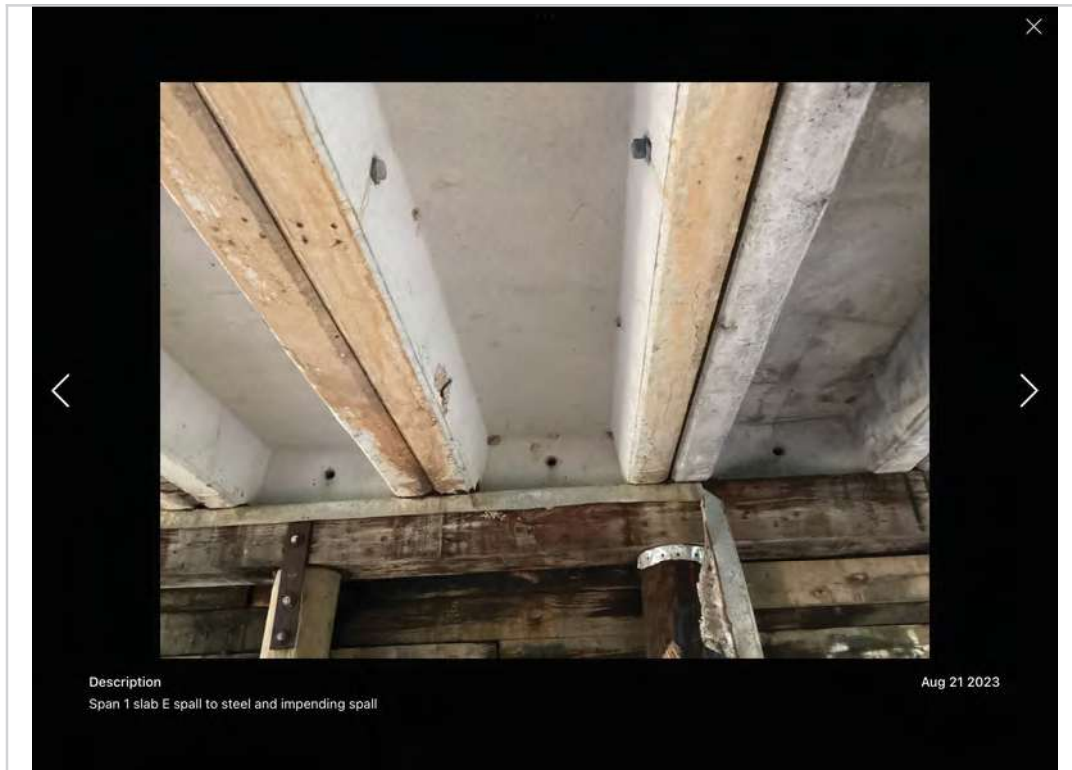
Bottom deck span 1 typical



Span 1 slab A spall to steel



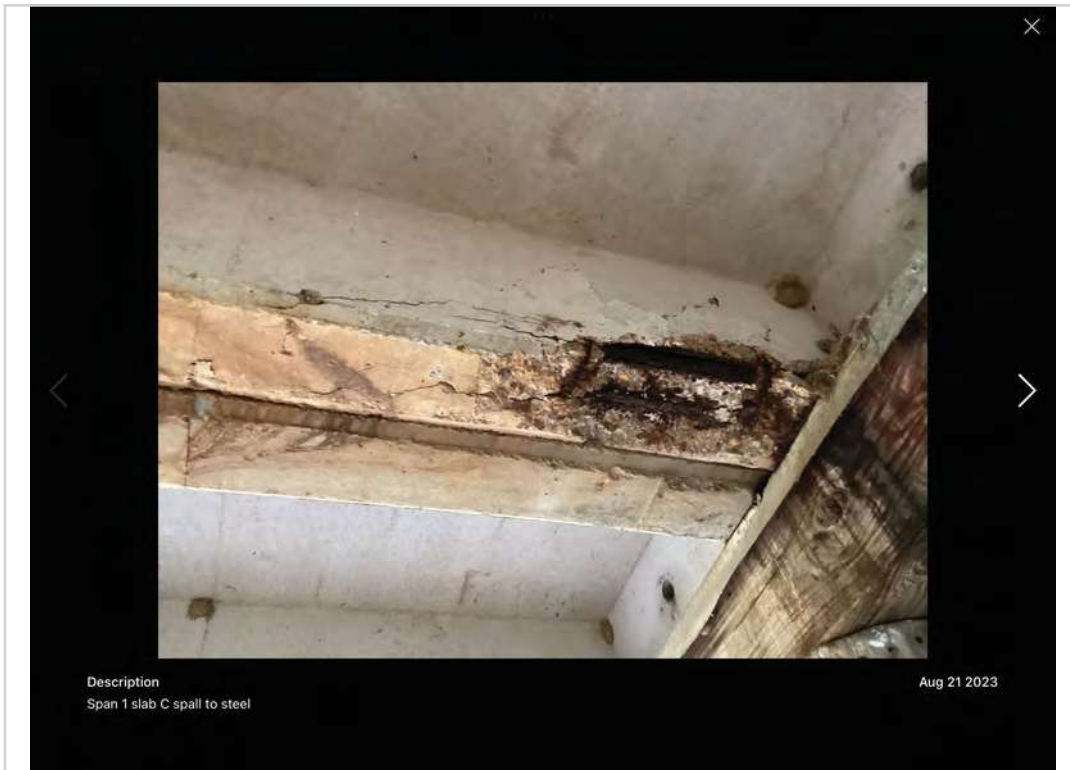
Span 1 slab G spall to steel



Span 1 slab E spall to steel and impending spall.



Span 1 slab A spall to steel



Description
Span 1 slab C spall to steel

Aug 21 2023

Span 1 slab C spall to steel



Abutment #2 breastwall decay



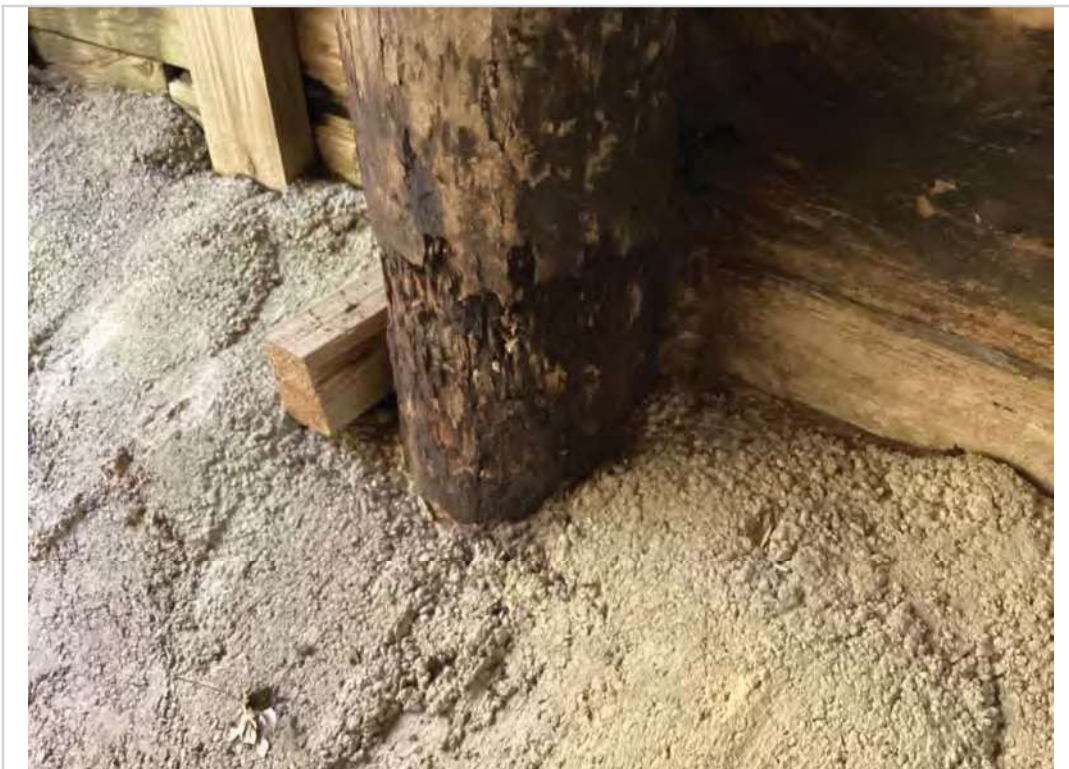
Abutment #2 breastwall decay



Abutment #2 breastwall decay



Abutment #2 cap splintering



Abutment #2 pile B decay



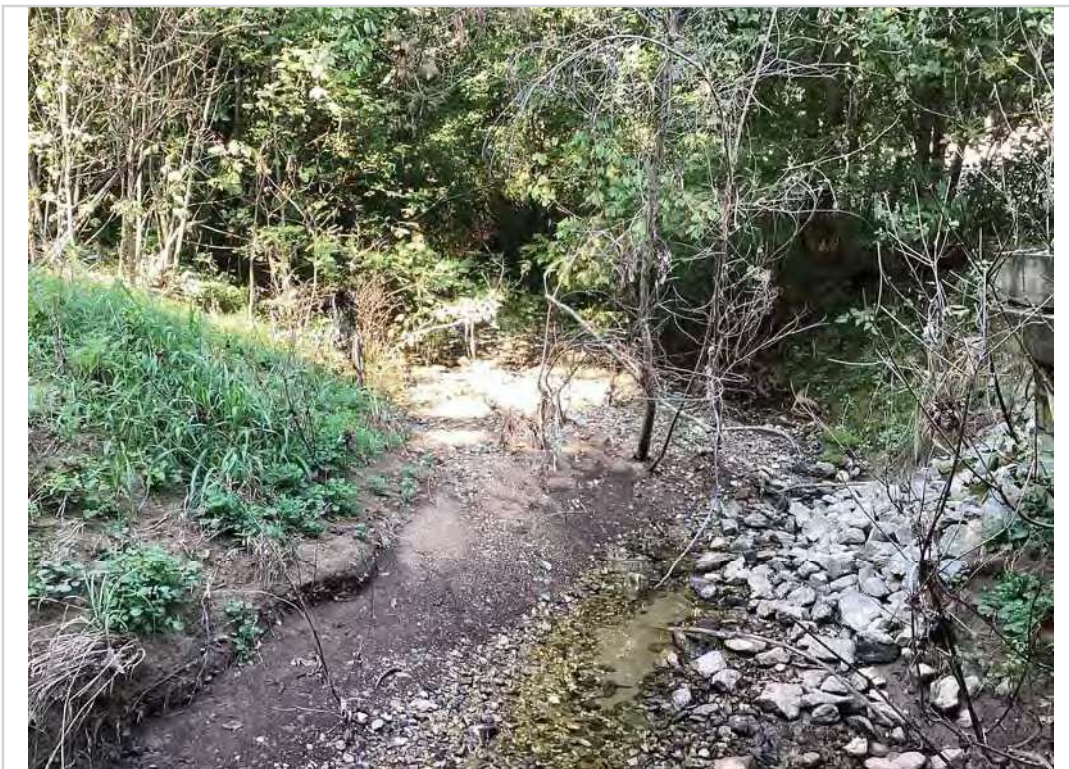
Abutment #2 pile B decay



Abutment #2 cap splintering



Left elevation



Looking upstream



Right elevation



Looking downstream



Opposite Direction of Route



Approach 2 weight limit sign



Direction of Route



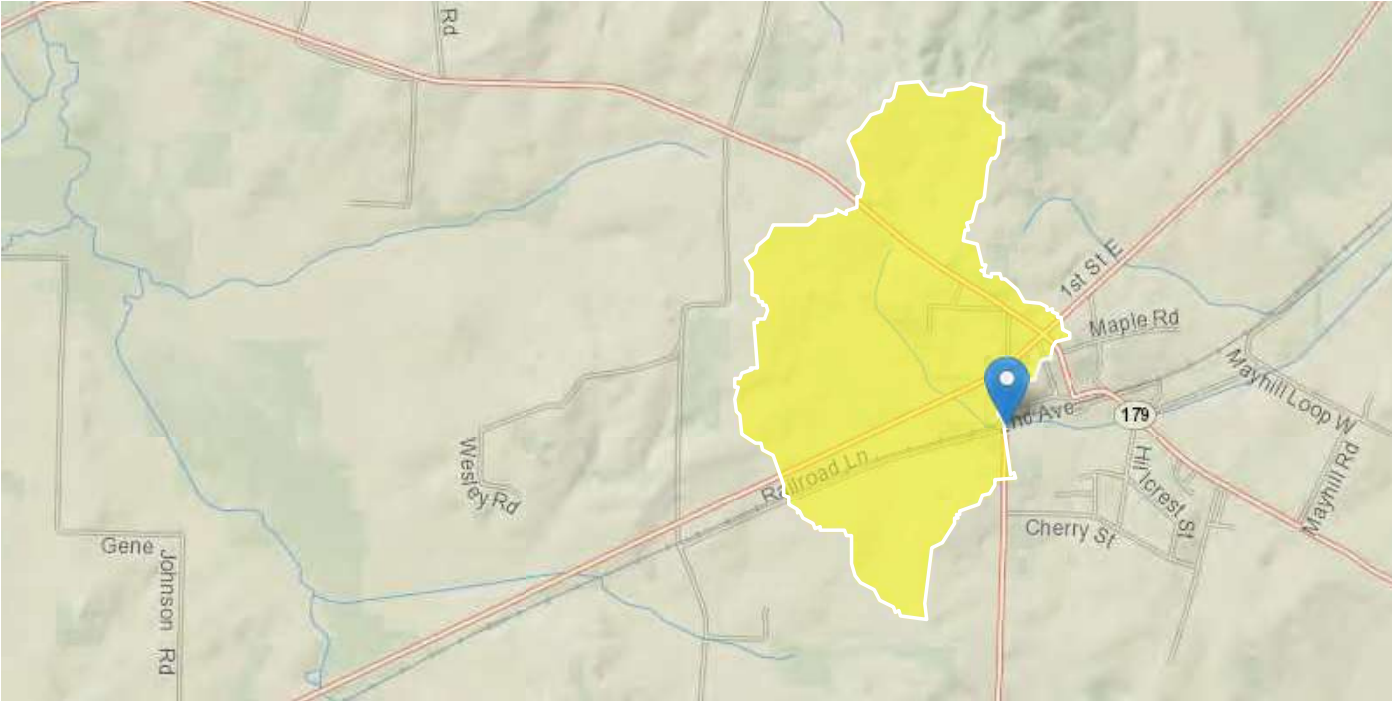
Approach 1 weight limit sign



Bridge number

Haywood Co SR222 - Bridge over Ditch (LM 4.34)

Region ID: TN
Workspace ID: TN20240409154320535000
Clicked Point (Latitude, Longitude): 35.46109, -89.40511
Time: 2024-04-09 10:43:46 -0500



Collapse All

➤ Basin Characteristics

Parameter Code	Parameter Description	Value	Unit
CONTDA	Area that contributes flow to a point on a stream	0.76	square miles
DRNAREA	Area that drains to a point on a stream	0.76	square miles

➤ Peak-Flow Statistics

Peak-Flow Statistics Parameters [DAOnly Area 4]

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

Peak-Flow Statistics Flow Report [DAOnly Area 4]

PIL: Lower 90% Prediction Interval, PIU: Upper 90% Prediction Interval, ASEp: Average Standard Error of Prediction, SE: Standard Error (other -- see report)

Statistic	Value	Unit	PIL	PIU	SE	ASEp	Equiv. Yrs.
50-percent AEP flood	377	ft ³ /s	197	721	38.7	38.7	1.8
20-percent AEP flood	532	ft ³ /s	284	996	37.2	37.2	2.4
10-percent AEP flood	631	ft ³ /s	333	1190	38	38	3.1
4-percent AEP flood	752	ft ³ /s	384	1470	40.1	40.1	3.8
2-percent AEP flood	839	ft ³ /s	414	1700	42.2	42.2	4.2
1-percent AEP flood	922	ft ³ /s	438	1940	44.7	44.7	4.4
0.2-percent AEP flood	1120	ft ³ /s	483	2600	51.1	51.1	4.7

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/>)

➤ Maximum Probable Flood Statistics

Maximum Probable Flood Statistics Parameters [Crippen Bue Region 3]

Parameter Code	Parameter Name	Value	Units	Min Limit	Max Limit
DRNAREA	Drainage Area	0.76	square miles	0.1	10000

Maximum Probable Flood Statistics Flow Report [Crippen Bue Region 3]

Statistic	Value	Unit
Maximum Flood Crippen Bue Regional	3710	ft ³ /s

Maximum Probable Flood Statistics Citations

Crippen, J.R. and Bue, Conrad D.1977, Maximum Floodflows in the Conterminous United States, Geological Survey Water-Supply Paper 1887, 52p. (<https://pubs.usgs.gov/wsp/1887/report.pdf>)

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

PROJECT NO.: 38S222-S1-004 ROUTE: S.R. 222
 COUNTY: HAYWOOD CITY: STANTON
 PROJECT PIN NUMBER: 134882.00
 PROJECT DESCRIPTION: BRIDGE OVER DITCH @ L.M. 4.34

DIVISION REQUESTING:

MAINTENANCE PAVEMENT DESIGN
 S.T.I.D. STRUCTURES
 PROG. DEVELOPMENT & ADM. SURVEY & ROADWAY DESIGN
 PUBLIC TRANS. & AERO. TRAFFIC SIGNAL DESIGN
 OTHER
 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
6,360	2029	7,040	1,233	17	2049	60-40	15	22		

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 2/23/2024
 TRANSPORTATION MANAGER 1
 SUITE 1000, JAMES K. POLK BUILDING

APPROVED BY: TONY ARMSTRONG Tony Armstrong DATE 2/23/2024
 TRANSPORTATION MANAGER 2
 SUITE 1000, JAMES K. POLK BUILDING

COMMENTS:

FURNISH THE 2029-2049 TRAFFIC DATA.

THIS TRAFFIC IS BASED ON THE BLUE OVAL TRAFFIC PROJECT PREPARED FOR THE PROPOSED FORD PLANT ON S.R. 222 NORTH OF I-40.

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)

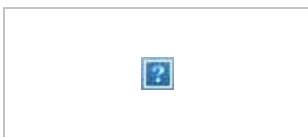
From: [Wesley Peck](#)
To: [David A. Duncan](#)
Subject: RE: Timber Bridge List - 7-29-2024.xlsx
Date: Friday, August 23, 2024 3:46:06 PM
Attachments: [image001.png](#)

Dave,

This should be the last of the timber hydraulic recommendations. If I have missed any, please let me know.

- PIN 134884.00: 50 ft single span using 24" box beam. Raise grade 1.5 ft. Appears to be acting as overflow to Nixon Creek. Survey should include both floodplains and structures. Proposed ROW and ETSA to include limits of riprap in channel and on banks.
- PIN 134885.00: 45 ft single span using 24" box beam. Raise grade 2.0 ft. Proposed ETSA and ROW to include channel 20 ft downstream of confluence of ditches on west side, as well as US limits of any riprap in channel.
- PIN 134883.00: 56 ft single span using 27" box beam. Raise grade 1.0 ft. FEMA Zone AE without floodway but potential structures in floodplain upstream so no-rise certification will be required. Survey should include floor elevations for buildings in immediate vicinity of structure. Inspection report photos show exposed utility in upstream channel and another under bridge running between piles. Utility under structure should be relocated.
- PIN 134876.00: 75 ft single span using 36" box beam. Raise grade 1.5 ft. Prop ETSA and ROW should include channel 10 ft up and downstream of existing riprap limits.
- PIN 134878.00: 70' single span using 36" deep box beam. Raise grade 1.5 ft. Include limits of riprap in channel in proposed ROW and ETSA.
- PIN 134879.00: 100 ft single span using type IV eye beam or BT-54. Raise grade 1 ft. Include channel and banks in proposed ROW and ETSA boundary to limits of existing riprap.
- PIN 134882.00: 60 ft single span using 30" Box beam. Maintain existing grade. If grade increase is feasible with RR crossing adjacent, could use type II or III eye beam instead. Prop additional length should be as symmetrical around channel as feasible with adjacent RR crossing. **This channel appears to be actively lowering over time.**

Thanks.



Wesley Peck, PE, MS | Manager
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Environmental Division

0SD2 Environmental Desktop Review Form

Part 1 – Project Information

PIN	134882.00
Project Number (if available)	
County	Haywood
Route	SR222
Termini	Bridge over Ditch (TMA)
Type of Document	
Date ENV DIV Comments are Due	10/17/24 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 Haywood 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 4 previously recorded sites and one previously surveyed area. A survey will be required.

Historic Preservation – There are 25 previously surveyed resources within 0.25 miles of the proposed project, including the National Register listed Stanton School. A survey will be required.



Ecology

Water resources likely within project area. Listed species will likely require surveys and/or time of year restrictions.

HazMat

Please note the discrepancy of the LM shown in the PPRM project description (LM 4.35) versus the LM of the bridge from the bridge safety report (38S81140001), LM 5.13. No known hazardous materials sites affect the area around this bridge replacement. No additional hazardous material studies are recommended at this time. The asbestos bridge survey has been completed and the following project commitments have been submitted in PPRM. In the event hazardous materials or wastes are encountered within the right-of-way, notification shall be made per TDOT Standard Specifications for Road and Bridge Construction (January

1, 2021) Section 107.08.C. Disposition of hazardous materials or wastes shall be subject to all applicable Federal, State, and local regulations, including the applicable sections of the Federal Resource Conservation and Recovery Act, as amended; the Comprehensive Environmental Response, Compensation, and Liability Act, as amended; and the Tennessee Hazardous Waste Management Act of 1983, as amended. Databases reviewed include Google Earth imagery, EPA National Priorities List, EPA EnviroMapper (Envirofacts), TDEC Registered Underground Storage Tanks Public Data Viewer and Data and Reports, TDEC Division of Water Resources Public Data Viewer and Oil and Gas Wells database, TDEC Division of Remediation Sites Public Data Viewer, TDOT Integrated Bridge Information System, and others, as necessary.

EDHZ001. An Asbestos Containing Material (ACM) survey was completed on Bridge No. 38S81140001 SR-222 over Branch LM 5.13 (38-SR222-05.13). 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

If the project remains state-funded, a TEER will be produced unless there is a federal nexus.

Based on a preliminary review, there are No Section 6(f) properties within the project area.

NEPA highly recommends expanding the ETSA to accommodate any potential ROW acquisition or design adjustments. Any design change outside of the ETSA could trigger a Reevaluation.

Based on 2022 ACS data, CT9305, BG 2 is a minority EJ population. Coordination with TDOT Civil Rights Division will be required. No delay to schedule is expected.

