

## 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

<b>Project Name</b>	SR 138 – Bridge over Overflow								
<b>PIN</b>	134864.00								
<b>Route Information</b>	<b>Route</b>	<b>NHS (Y/N)</b>	<b>Functional Class</b>			<b>City</b>		<b>County</b>	
	SR138	No	Rural Major Collector					Madison	
<b>Project Information</b>	<b>Begin Log Mile</b>	<b>End Log Mile</b>	<b>AADT<sup>1</sup></b>	<b>Design Hour Vol. (DHV)<sup>1</sup></b>	<b>Truck %<sup>1</sup></b>	<b>Design Speed (MPH)</b>	<b>Posted Speed (MPH)</b>	<b>Base Year</b>	<b>Design Year</b>
	4.69		1,000	110	5.00	35	30	2029	2049
<b>Project Description &amp; Standard Drawings Used</b>	<p>Proposed bridge: 1 span concrete bridge 60' in length. Typical section: 2-10' travel lanes with 4' shoulders. Out-to-out width will be 29'3". The grade will be raised 2'. Site distance should be investigated during the design phase. The road will either be realigned to the east or the bridge will remain on existing alignment as it is a strong candidate to use the ABC method and the road will be detoured. This will be determined at a later time during the design phase. State route detour is 37 minutes (30.6 miles); local route detour is 16 minutes (12.4 miles). Superstructure depth is 49.5"= 10" (deck)+ 36" (beam) + 3.5" (width (in inches) x0.02/2).</p> <p>RD11-TS-2</p>								
<b>Important Project History or Related Projects</b>	<p>Existing structure, built in 1949, 3 span timber bridge, 51' long with an out-to-out width of 28'6". The existing structure has 2-10' travel lanes with 2' shoulders. The posted weight limit is 40 tons (5/1/2023). The discharges for the drainage basin (StreamStats Version 4.19.4): no drainage characteristics.</p> <p>This project is NOT expected to utilize federal funding.</p>								
<b>Project Purpose/Need</b>	<p>The need to replace this bridge is due to the present condition of the existing bridge:</p> <ul style="list-style-type: none"> <li>-Timber bridges are being phased out and is near the end of its service life</li> <li>-Bridge is in FAIR condition</li> </ul>								
<b>Major Environmental Considerations</b>	<p>Madison County is in attainment for all regulated criteria pollutants. No evaluation of MSATs is required. A noise study is not needed. There are 3 previously recorded archaeological sites within one mile of the ETSA and a survey will be required. No previously surveyed historic resources within the project area but a survey will be required. No known hazardous materials sites. An asbestos survey has been scheduled. No Section 4(f) or 6(f) resources were identified in the project area. The state route detour is over 25 miles and FHWA coordination will be required.</p>								

Project Details

<b>Multi-Modal Considerations</b>	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.	
<b>Major Project Risks</b>	Approx. ROW to be acquired: 0.23 acres (realign), 0.00 acres (ABC). Overhead and underground electric/communication are present. Due to Mercer fire station possibly having response times significantly impacted if the bridge is closed for a long period of time, this bridge is a strong candidate for ABC. This bridge replacement should be coordinated with the replacements at L.M. 4.88 and L.M. 4.95 along SR 138. This document is covered by 23 USC § 407 and its production pursuant to fulfilling public planning requirements does not waive the provisions of § 407.	

<sup>1</sup> Traffic numbers reflect identified design year

**Approvals**

*Executed for approval of this Concept Report*

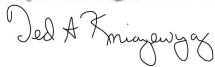


Jul 11, 2024

Project Management Division Director

Date

*The following individuals to execute if a bridge concept report:*



Jul 9, 2024

Structures Director

Date



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

Jul 11, 2024

Regional Project Management Division Director

Date

## Action Checklist

OSD1 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	04/15/2024
	✓	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	05/22/2024
✓		Request Concept Report Review	05/22/2024
0ST1 Develop Structures Recommendations			
Complete	NA		Date Completed
✓		Confirm Recommended Structure Type for Concept Report is Complete	03/25/2024
✓		Confirm Hydraulic Recommendations for Concept Report is Complete	03/25/2024
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	05/22/2024

## 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	04/15/2024
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	05/22/2024
	✓	Review and Confirm Preliminary Railroad Cost Estimate	
OSD3 Finalize Concept Report			
Complete	NA	Date Completed	
	✓	Compile and Review Initial Risk Assessment	
		Finalize Conceptual Layouts	
✓		Develop Environmental Technical Study Area (ETSA)	04/10/2024
✓		Address Comments and Finalize Concept Report	05/28/2024
	✓	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)	05/28/2024
		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  
Review and Confirm Preliminary Railroad Cost Estimate-no railroad within project limits  
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

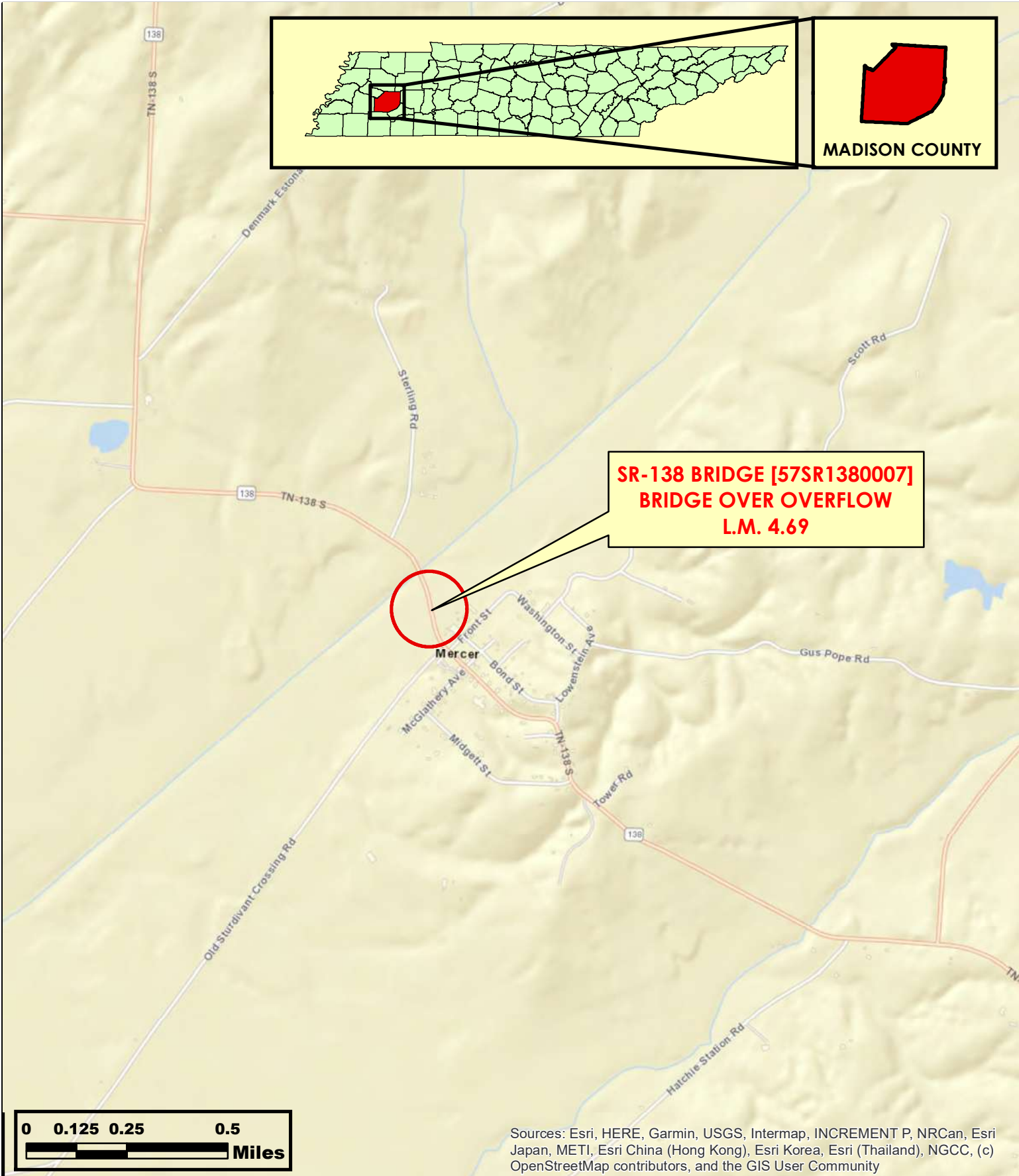
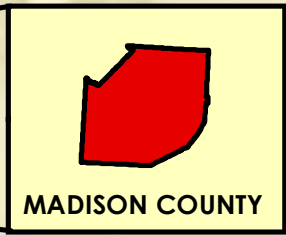
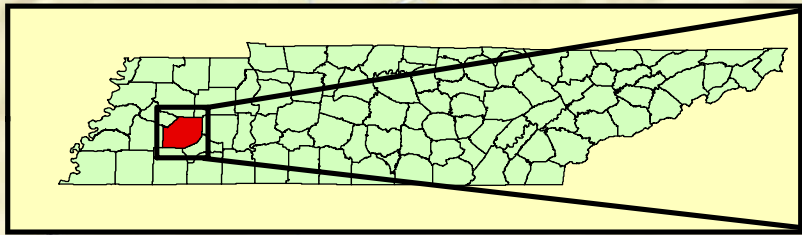
**Concept Report  
Table of Contents/Attachments**

	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 <sup>1</sup>		✓
ROW Form 44-A <sup>1</sup>		✓
Crash Packet <sup>1</sup>	✓	
Crash Prediction Analysis <sup>1</sup>		✓
Site Visit Attendee List		✓
Environmental Desktop Review Form <sup>1</sup>		
Multimodal Considerations & Recommendations <sup>1</sup>		✓
Existing Structure Summary <sup>1</sup>	✓	
Email or memo containing Structure Type Recommendations <sup>1</sup>	✓	
Email or memo containing Hydraulic Recommendations <sup>1</sup>	✓	
Hydraulic Data	✓	
Intersection and Interchange Evaluation (IIE) Analysis and Summary Form		✓
Traffic Analysis Summary/Tables	✓	
Forecasted Traffic Sheets <sup>1</sup>	✓	
Traffic Modeling (e.g., Synchro, VISSIM, Highway Capacity Software (HCS) Output) <sup>1</sup>		✓
Signal Warrant <sup>1</sup>		✓
Lighting Warrant <sup>1</sup>		✓
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 <sup>1</sup>		✓

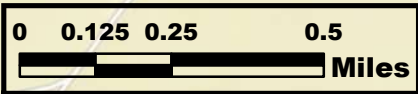
**NA Justification**

TSMO & ITS Scope and Budget-no ITS within project limits; ROW Form 44-A-form not needed for STID BCR document; Crash Prediction Analysis- 0 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- IIE Analysis not needed for STID BCR Traffic Modeling (e.g., Synchro, VISSIM, Highway Capacity Software (HCS) Output)- traffic modeling not needed for STID BCR 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

<sup>1</sup> External document to STID



**SR-138 BRIDGE [57SR1380007]  
BRIDGE OVER OVERFLOW  
L.M. 4.69**



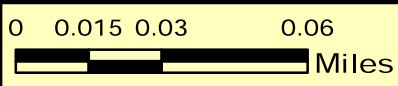
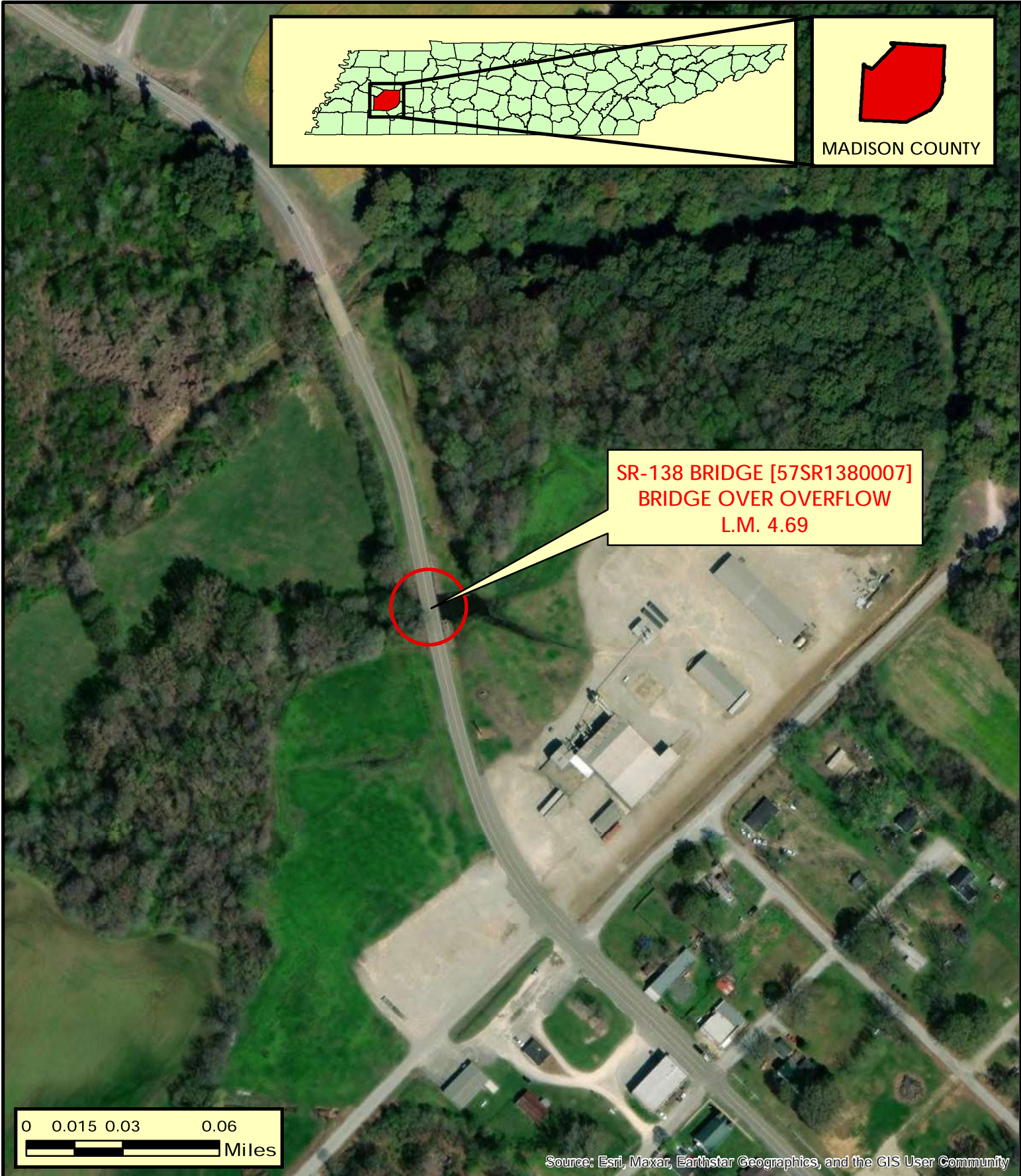
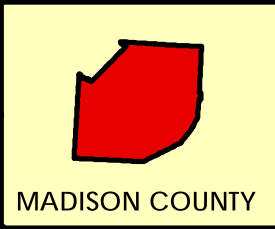
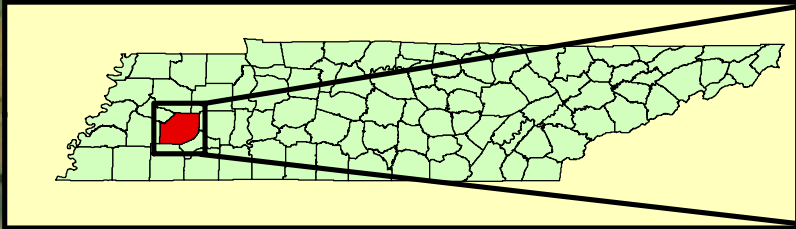
Sources: Esri, HERE, Garmin, USGS, Intermap, INCREMENT P, NRCan, Esri Japan, METI, Esri China (Hong Kong), Esri Korea, Esri (Thailand), NGCC, (c) OpenStreetMap contributors, and the GIS User Community



**AREA MAP**  
**SR-138 BRIDGE [57SR1380007]**  
**BRIDGE OVER OVERFLOW**  
**L.M. 4.69**  
**MADISON COUNTY**



**PIN 134864.00**



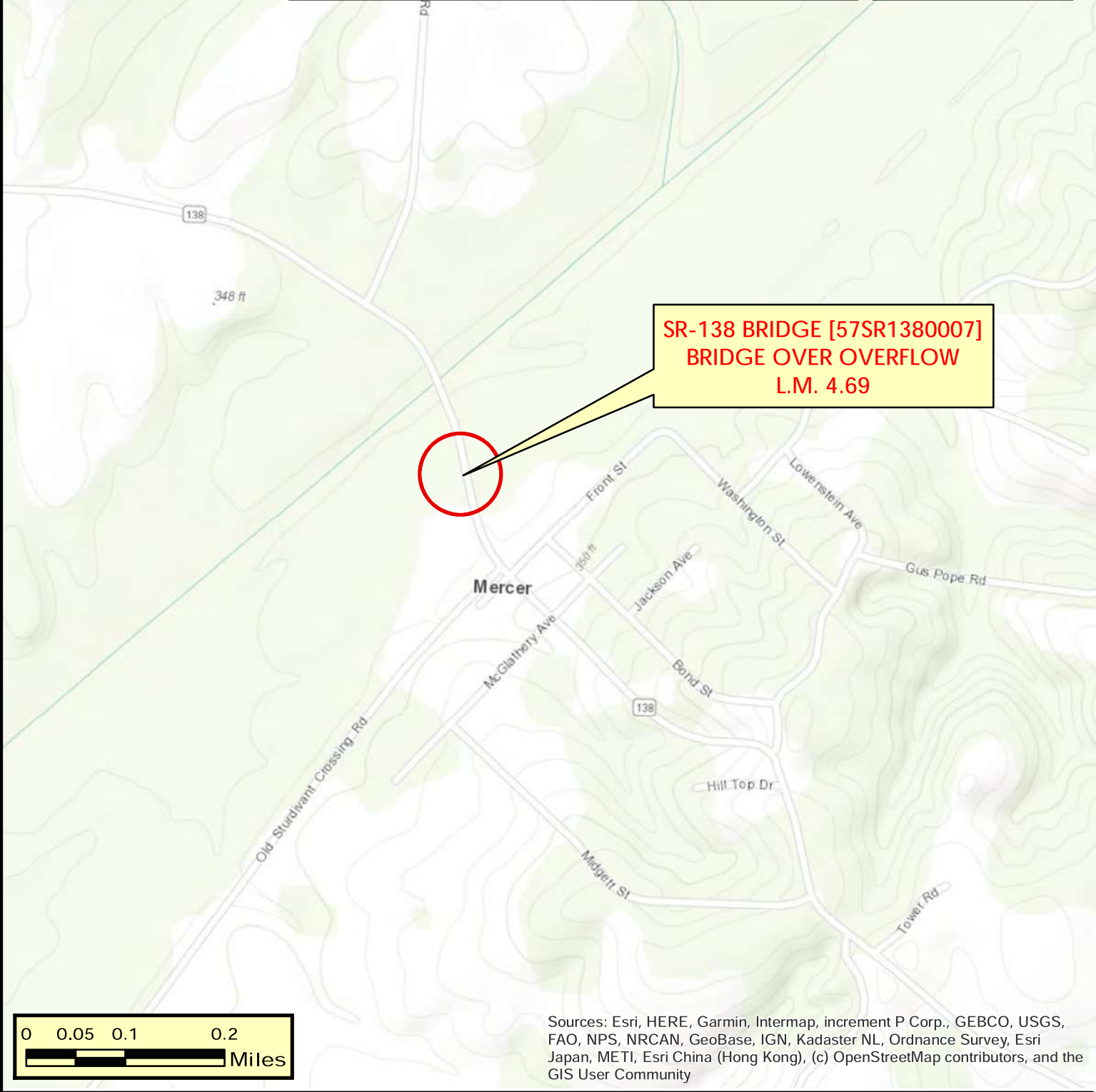
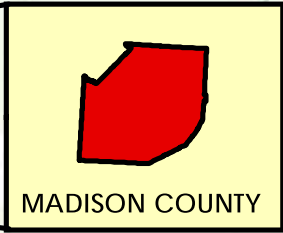
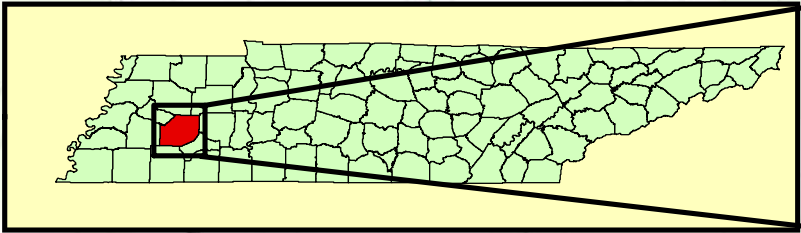
Source: Esri, Maxar, Earthstar Geographics, and the GIS User Community



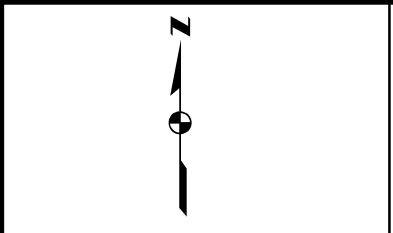
**LOCATION MAP**  
SR-138 BRIDGE [57SR1380007]  
BRIDGE OVER OVERFLOW  
L.M. 4.69  
MADISON COUNTY



**PIN 134864.00**



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

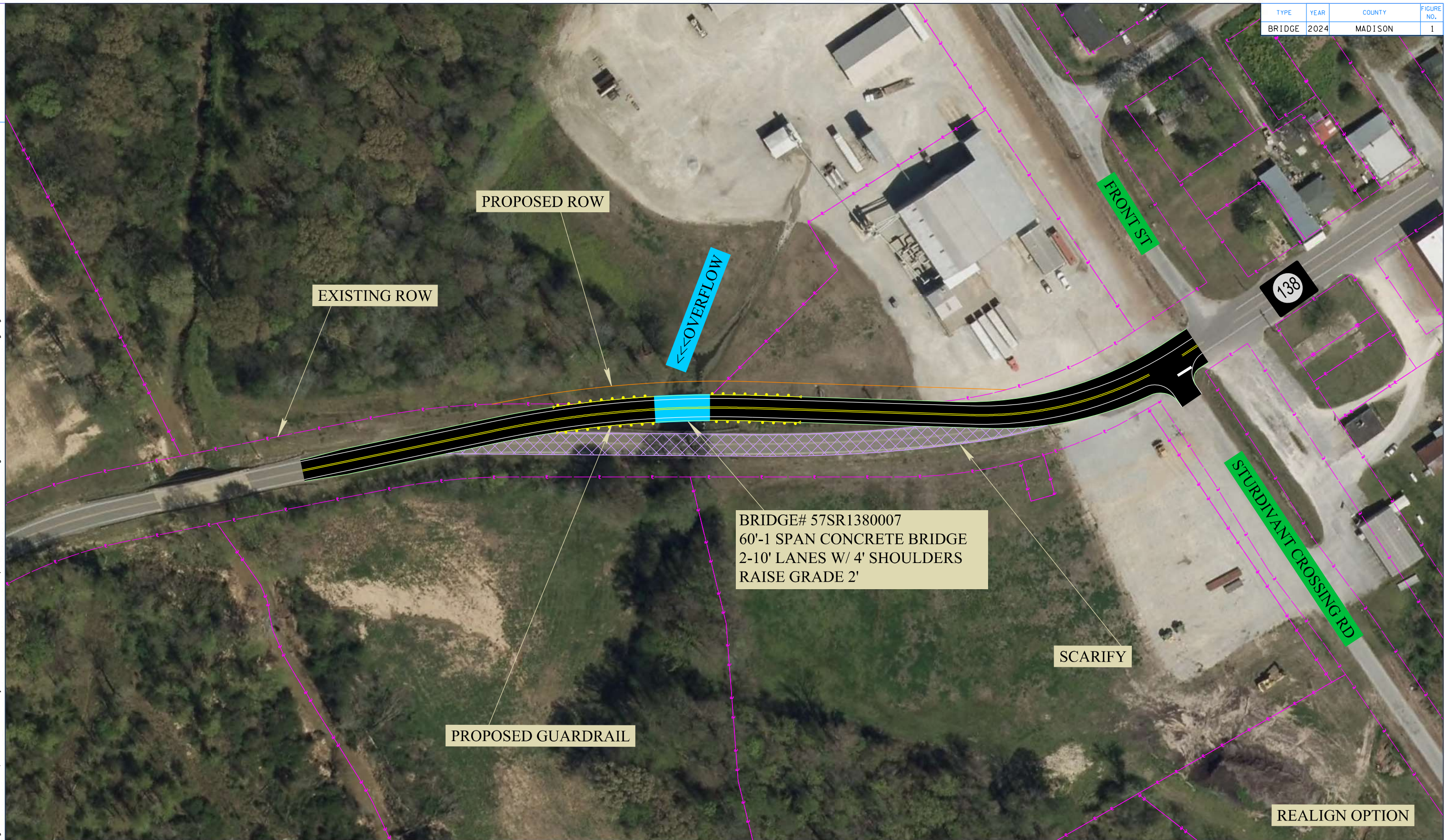


**TOPOGRAPHIC MAP**  
**SR-138 BRIDGE [57SR1380007]**  
**BRIDGE OVER OVERFLOW**  
**L.M. 4.69**  
**MADISON COUNTY**

**TN** **TDOT**  
Department of  
Transportation  
**PIN 134864.00**

TYPE	YEAR	COUNTY	FIGURE NO.
BRIDGE	2024	MADISON	1

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BRIDGE# 57SR1380007  
60'-1 SPAN CONCRETE BRIDGE  
2-10' LANES W/ 4' SHOULDERS  
RAISE GRADE 2'



## R4 TIMBER BRIDGE PROGRAM

STATE ROUTE 138  
BRIDGE OVER OVERFLOW, L.M. 4.69  
MADISON COUNTY

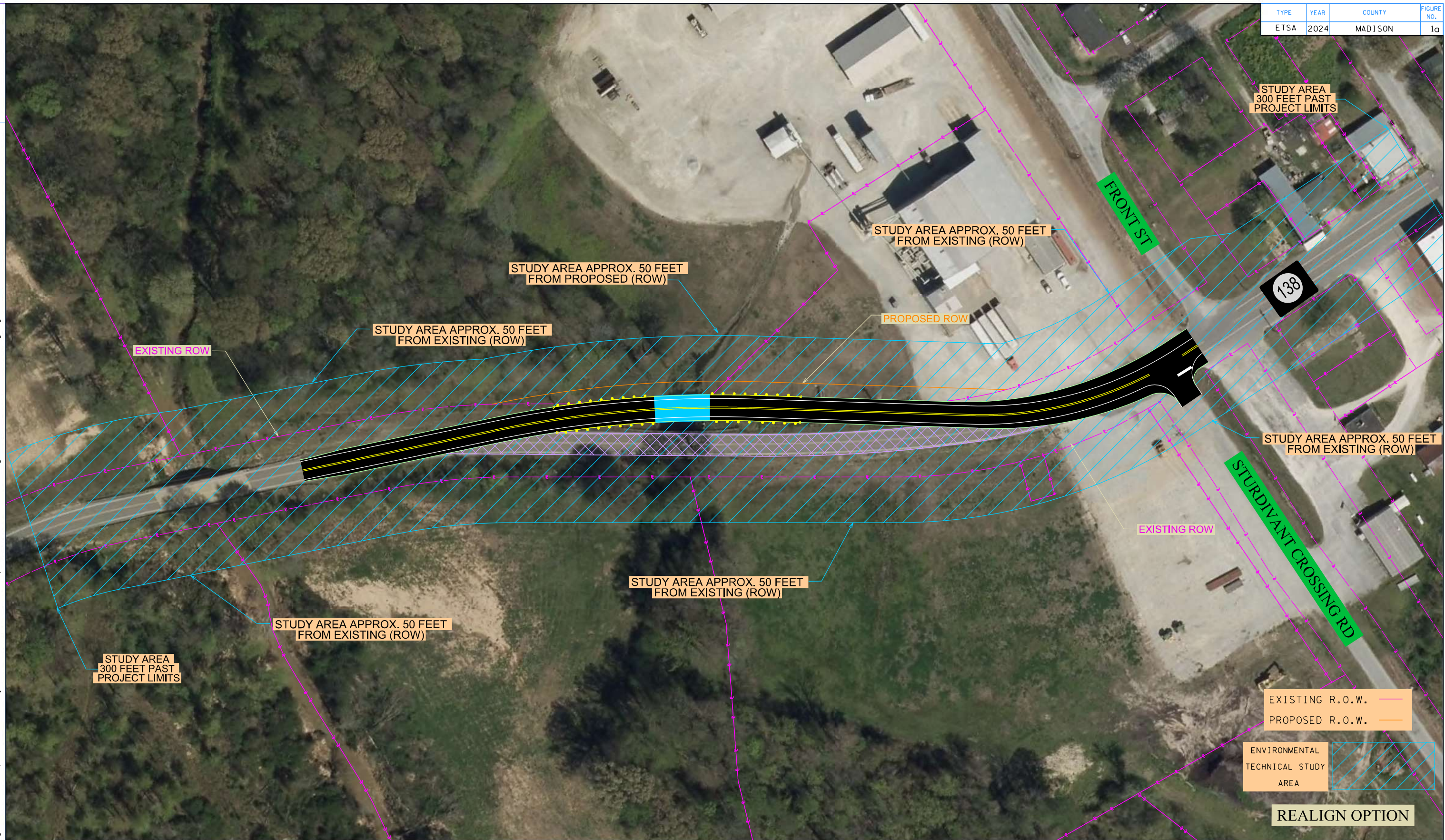
CAUTION!  
PRELIMINARY  
PLANS  
SUBJECT TO  
CHANGE

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

FIGURE 1  
S.R. 138  
L.M. 4.69

TYPE	YEAR	COUNTY	FIGURE NO.
ETSA	2024	MADISON	1a

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## ENVIRONMENTAL TECHNICAL STUDY AREA

STATE ROUTE 138  
BRIDGE OVER OVERFLOW, L.M. 4.69  
MADISON COUNTY

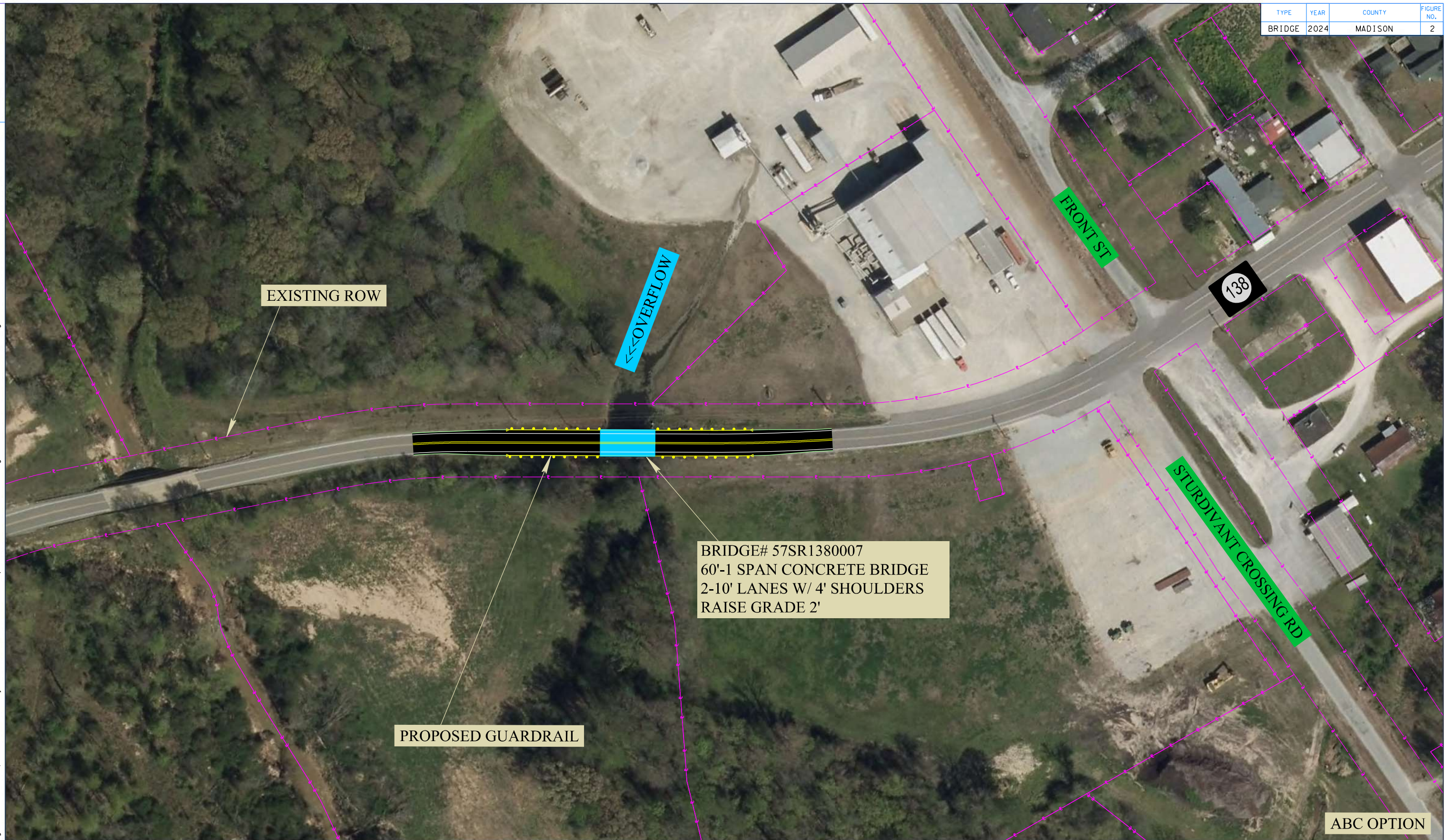
CAUTION!  
PRELIMINARY  
PLANS  
SUBJECT TO  
CHANGE

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

FIGURE 1a  
S.R. 138  
L.M. 4.69

TYPE	YEAR	COUNTY	FIGURE NO.
BRIDGE	2024	MADISON	2

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BRIDGE# 57SR1380007  
60'-1 SPAN CONCRETE BRIDGE  
2-10' LANES W/ 4' SHOULDERS  
RAISE GRADE 2'

ABC OPTION



## R4 TIMBER BRIDGE PROGRAM

STATE ROUTE 138  
BRIDGE OVER OVERFLOW, L.M. 4.69  
MADISON COUNTY

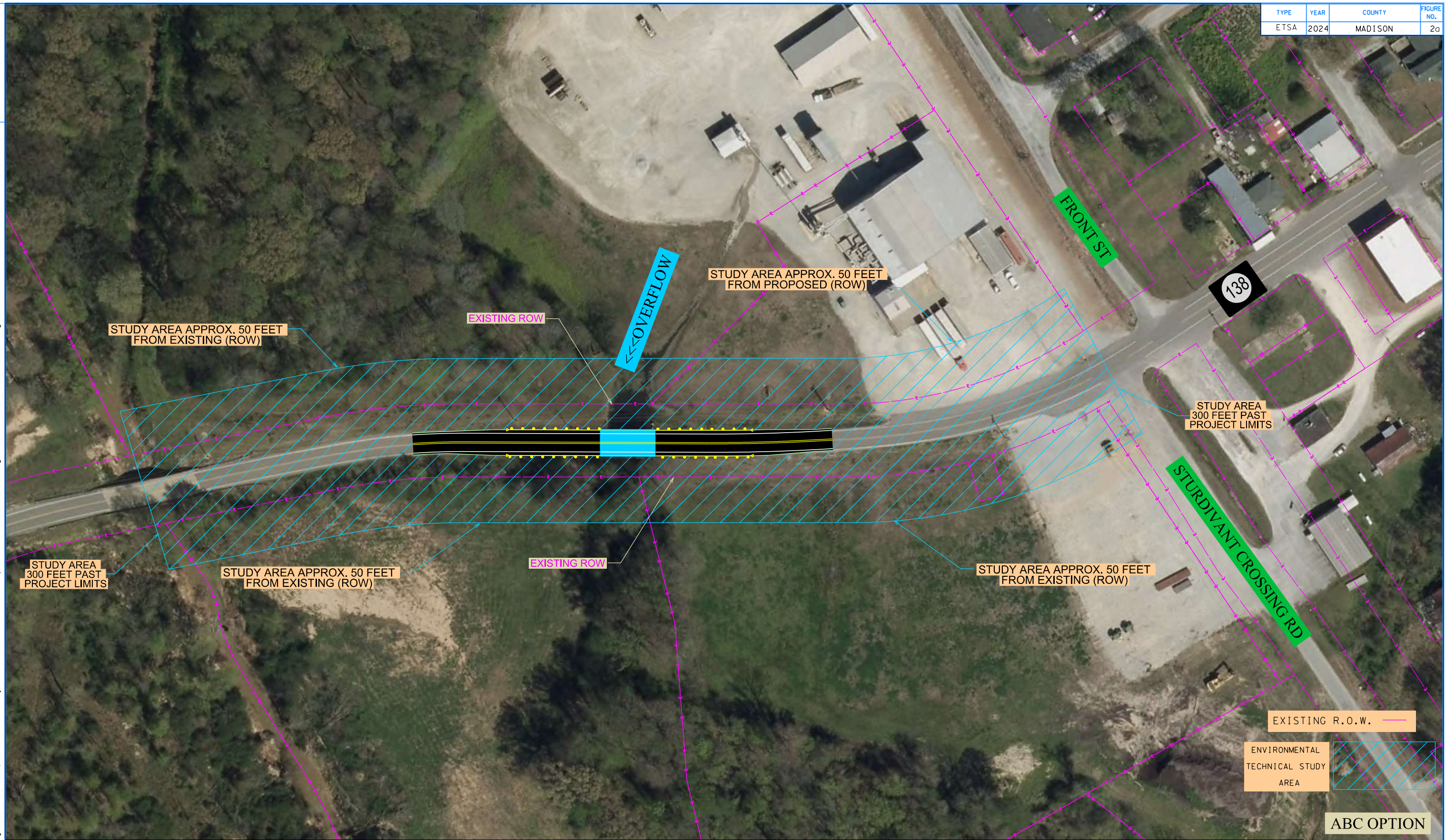
CAUTION!  
PRELIMINARY  
PLANS  
SUBJECT TO  
CHANGE

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

FIGURE 2  
S.R. 138  
L.M. 4.69

TYPE	YEAR	COUNTY	FIGURE NO.
ETSA	2024	MADISON	2a

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ENVIRONMENTAL TECHNICAL STUDY AREA

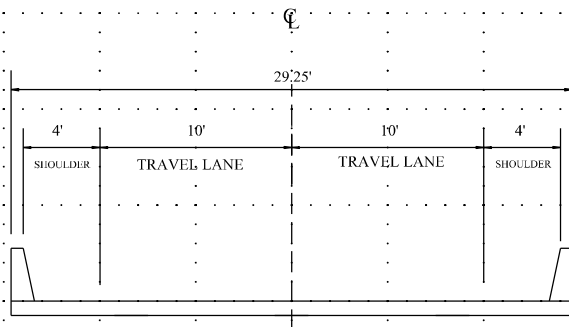
STATE ROUTE 138  
BRIDGE OVER OVERFLOW, L.M. 4.69  
MADISON COUNTY

CAUTION!  
PRELIMINARY  
PLANS  
SUBJECT TO  
CHANGE

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

FIGURE 2a  
S.R. 138  
L.M. 4.69

**PROPOSED COMPLETED**



**CROSS-SECTION DETAIL**

**REGION 4 TIMBER BRIDGE PROGRAM  
TRANSPORTATION MODERNIZATION ACT (TMA)**

**CAUTION!  
PRELIMINARY  
PLANS  
SUBJECT TO  
CHANGE**

# DETOUR MAP - STATE ROUTE

Icons for travel modes: Car (37 min), Bus, Pedestrian (11 hr), Bicycle (2 hr 43), and Airplane.

- 1679-1621 TN-138, Mercer, TN 38392
- Jackson-Madison County School System
- Jackson-Madison County School System
- Jackson-Madison County School System
- 1679-1621 TN-138, Mercer, TN 38392

+ Add destination

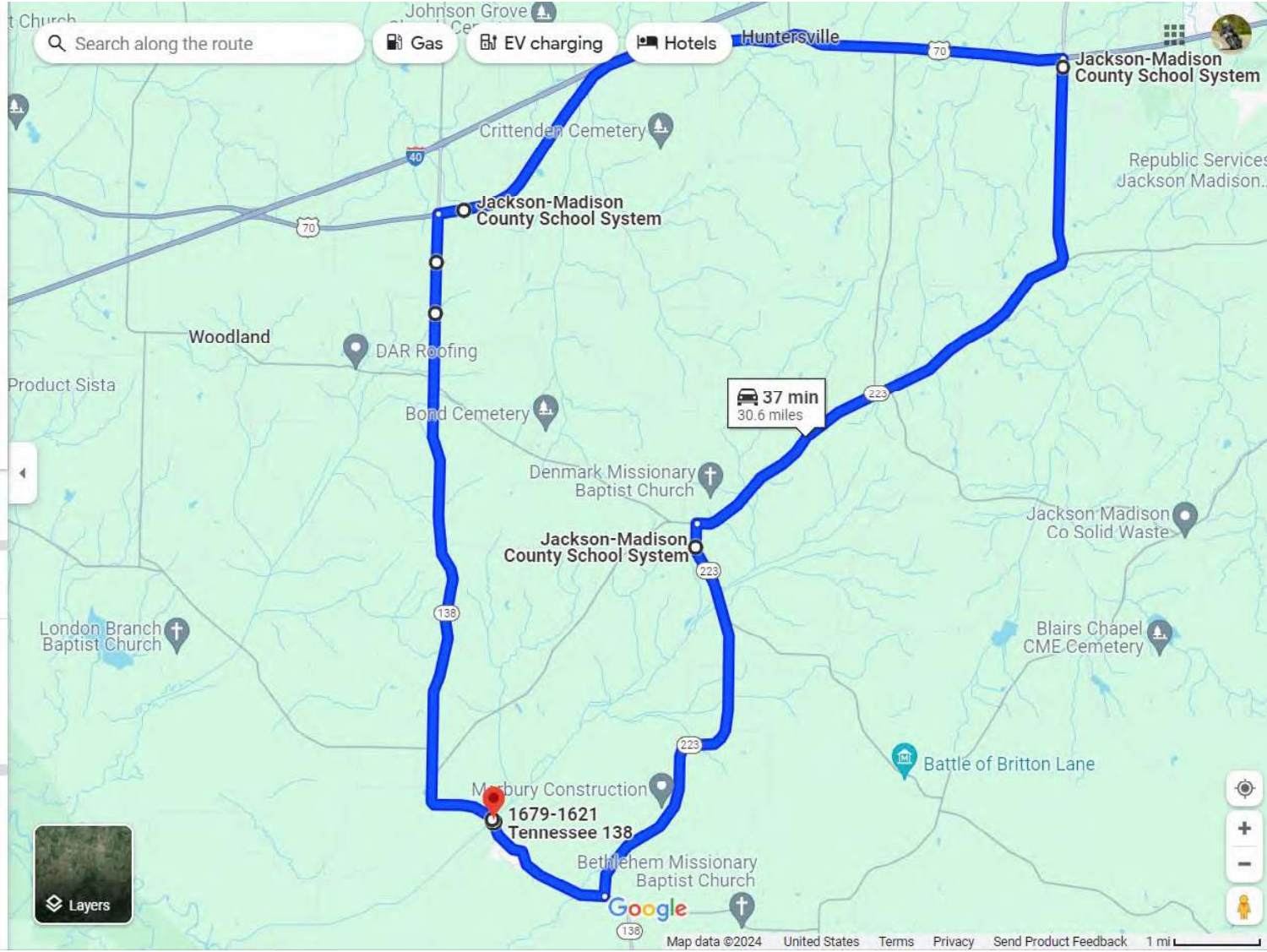
Options

Send directions to your phone Copy link

via TN-138 W 37 min  
37 min without traffic 30.6 miles  
Details

Explore nearby 1679-1621 TN-138

Icons for nearby services: Restaurant, Hotel, Gas station, Parking, and More.





# Madison Co SR138 - Bridge over Overflow (LM 4.69)

Created on April 5, 2024

Created by JOSHUA CLOUD

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



## Applied Filters

County = Madison Shape: Polygon



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

Summary	Crash
+ 6 more	0
Type of Crash	Crash
+ 5 more	0
Date of Crash (Year)	Crash
+ 11 more	0
Manner of First Collision	Crash
+ 10 more	0
First Harmful Event	Crash
+ 65 more	0
Crash Location	Crash

+ 7 more

0

---

**Light Conditions**

Crash

+ 8 more

0

---

**Weather Conditions**

Crash

+ 12 more

0

---



Bottom deck span #2 PCCS "F"



Bottom deck span #2 PCCS "E"



Bottom deck span #2 PCCS "C"



Abutment 1



Abutment 2



Bottom deck span 3



Bridge number



Direction of Route



Weight limit sign Direction of Route



Approach 1



Right side view



Span 2 view across deck



Left side view



Approach 2



Opposite Direction of Route



Weight limit sign Opposite Direction of Route



Right elevation



Left elevation



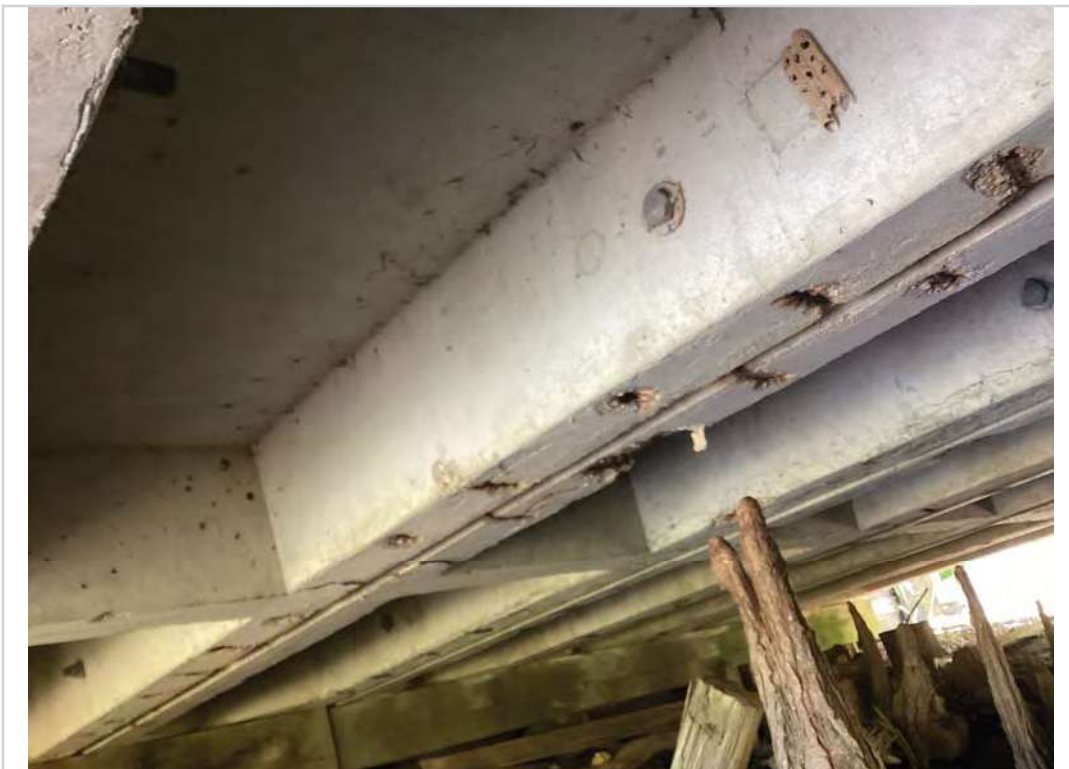
Bent 1 rear



Decay areas bent 1 rear



Bent 2



Span 1 bottom deck

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

PROJECT NO.: 57S138-S1-002 ROUTE: S.R. 138  
 COUNTY: MADISON CITY: \_\_\_\_\_  
 PROJECT PIN NUMBER: 134864.00  
 PROJECT DESCRIPTION: BRIDGE OVER OVERFLOW @ L.M. 4.69  
 \_\_\_\_\_  
 \_\_\_\_\_  
 \_\_\_\_\_

**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
910	2029	1,000	110	11	2049	65-35	5	8		

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)

## Ty Tucker

---

**From:** Wesley Peck  
**Sent:** Monday, March 25, 2024 3:03 PM  
**To:** Michael Gilbert  
**Cc:** Ted Kniazewycz; Steve Allen; Jim Waters; Michelle Hunt; David A. Duncan; Shane Hester; Brandon Akins; Daniel Pallme; Ty Tucker  
**Subject:** RE: Timber Bridge Hydraulic Recommendation Request

Mike,

In the interest of being timely, I am enclosing my staff recommendations below. Note, these are all hydraulically complex bridge sites and most have some sort of scour or stream stability issue and I think some additional notes will be necessary for your planning studies. I will do a more in depth review and provide you with additional information later this week.

134833.00 – Tentative recommendation is a 2 @16x16 box culvert. However this one has some scour and stream stability issues that I am still reviewing.

134846.00 – Tentative recommendation is single span 60 ft bridge using box beam. Raise grade approximately 1. Ft. This one also has stream stability issues.

134847.00 – Recommendation is single span 90 ft bridge, raise grade 2.0 ft. Superelevation should be kept off bridge deck if possible for safety reasons. Significant drift concerns.

134849.00 – Recommendation is a 3 @ 14x14 box culvert.

134850.00 – Recommendation is a 3 @ 30' girder bridge. Total length 90 ft. Raise grade 2 ft minimum. A two span could probably work, but it may result in a pier in the middle of the channel. We can be creative with it once we have survey data, but this is the best we can do for now.

134851.00 – Recommendation is 3 span 128 ft bridge, raise grade 2.5 ft.

134864.00 – Recommendation is a single span 60 ft bridge, raise grade approx. 2 ft.

134865.00 – Recommendation is a three span 90 ft bridge, raise grade approx. 2.0 ft

134866.00 – Recommendation is a 3 @ 14x7 reinforced concrete box culvert.



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**From:** Michael Gilbert <Michael.Gilbert@tn.gov>  
**Sent:** Monday, March 25, 2024 8:29 AM  
**To:** Wesley Peck <Wesley.Peck@tn.gov>  
**Cc:** Ted Kniazewycz <Ted.Kniazewycz@tn.gov>; Steve Allen <Steve.Allen@tn.gov>; Jim Waters <Jim.Waters@tn.gov>; Michelle Hunt <Michelle.Hunt@tn.gov>; David A. Duncan <David.A.Duncan@tn.gov>; Shane Hester



# Environmental Division

## 0EN1 Environmental Desktop Review Form

### Part 1 – Project Information

<b>PIN</b>	134864.00
<b>Project Number (if available)</b>	
<b>County</b>	Madison
<b>Route</b>	SR138
<b>Termini</b>	Bridge over Overflow, LM 4.69 (TMA)
<b>Type of Document</b>	
<b>Date ENV DIV Comments are Due</b>	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 Madison 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 three previously recorded sites within one mile of the ETSA. A survey will be required. There is a low probability of intact archaeological deposits in this location.

### **Historic Preservation**

There are no previously identified historic resources located within 0.1 miles of the project location. However, the bridge and additional resources are over 50 years old, so a survey will be 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 scheduled and the commitment will be submitted when the report is available.

### **NEPA**

This project was evaluated for the following:

- Detour: Detour over 25 miles, FHWA coordination needed.
- ROW Acquisition: ROW acquisition is less than 1.5 acres, coordination with FHWA is not required.
- Section 4(f): No Section 4(f) resources were identified in the proposed project area.
- Section 6(f): No Section 6(f) resources were identified in the proposed project area.
- Recreation and Wildlife Management Areas: No Recreation or Wildlife Management areas were identified in the proposed project area.
- Local/State Parks and Greenways: No parks or greenways were identified in the proposed project area.
- Floodplain Management: The project is located within the Statewide Flood Hazard Area Zone A.

PIN	County	Project	Utilities on Project	At Risk	Mitigation (if applicable)	Items	Footage
134864.00	Madison	S.R. 138- Bridge over Overflow	Electric (Southwest TN Electric Co-Op assumed)	Aerial Electric - Distribution Lines & Fiber	This can be avoided	(4) 55-2 poles, (4) 1" anchors, (4) downguys, (4) double cross arms, 3 phase with neutral power, (3) pole removals, (1) 48 fiber (assumed) (2) storage loop, (2) splice case (2) splice	400'
134864.00	Madison	S.R. 138- Bridge over Overflow	Telecommunications (AT&T or Frontier assumed)	Aerial fiber	This can be avoided	72 fiber (assumed) - 10F, 10M strand, (4) 1" anchors, (4) downguys, (1) 48 fiber (assumed) and (1) 144 fiber (assumed), (2) storage loop, (2) splice case (2) splice - remove (1) 144 fiber, remove 10M strand, Remove 48 fiber	400'
134864.00	Madison	S.R. 138- Bridge over Overflow	Telecommunications (AT&T or Frontier assumed)	Buried copper	Opposite side of bridge	Assuming 50 pair buried copper cable - (2) 6" pedestals, (2) dig pit, RIP copper, (2) splice	

Comment Stage	Division	Commenter	Date	Comment	Comment Addressed?	Additional Notes
Draft Report Review (OSD2)	Design	Samuel Reed	5/14/2024	Detour route may not be necessary. In the ABC case, phase construction may be possible. In the case of an alignment shift, preconstruction and connection may be possible.	No	Detour was selected as the preferred recommendation due to budgetary constraints and traffic operations general recommendations. The PDN team will be able to further explore the feasibility different options.
Draft Report Review (OSD2)	Design	Samuel Reed	5/14/2024	This project calls for raising the grade two feet. This may result in addition enviromental impact.	Yes	The ETSA boundary provided in the report accounts for the raise in grade.
Draft Report Review (OSD2)	Design	Samuel Reed	5/14/2024	The proposed realignment puts the bridge in a horizontal curve. Avoid using Superelevation on the bridge deck.	No	We have avoided superelevation transitions with the proposed alignment, but full super on the bridge may be necessary to avoid replacing the adjacent structure and to minimize approach work.
Draft Report Review (OSD2)	Design	Samuel Reed	5/14/2024	The report says this bridge has a 15 ton limit, but there is a sign that says the limit is 40 tons.	Yes	The most recent inspection report indicates that 40 tons is correct. The report will be updated.
Draft Report Review (OSD2)	Design	Samuel Reed	5/14/2024	Consider widening travel way to 11'.	No	ETRIMS shows the existing lane width at 10'. If the existing lane width are determined to be 11' then it would be recommended to widen to 11'. Additionally RD11-TS-2 recommends 2-10' lanes with 4' shoulders for design speed of 35 mph and ADT between 400-1500.
Draft Report Review (OSD2)	Design	Samuel Reed	5/14/2024	If the realignment design is used, the increased curve and raised grade may result in sight distance issues.	Yes	This should be investigated further during design to determine feasibility. Noted in report