A-11 Tri Co/Cheese Country Bridge #45

State of Wisconsin
Department of Natural Resources
dnr.wi.gov

Due Date: April 15

Motorized Recreation Grant Application

For: (choose all that apply)
☒ ATV/UTV Trail Aid
☒ Snowmobile Trail Aid

Form 8700-159 (R 02/2024)

Notice: Completion of this form is required under Wisconsin Statutes 23.09(26) and 23.33. Failure to complete this form will result in denial of financial assistance. Personally identifiable information found on this form is not intended to be used for any other purpose. The Department of Natural Resources (DNR) may provide this information to requesters as required by Wisconsin's Public Records law {ss. 19.31 – 19.39, Wis. Stats.}.

Instructions: Applications may combine more than one source of funds. They may be submitted for consideration of traditional ATV, UTV, Snowmobile and Motorized Stewardship funding. Submit one copy of all forms and attachments. See Page 2 for necessary attachments. Send applications to your Community Services Specialist.

DNR Use Only	
Category	Number

Section 1: Applicant Information

Applicant / Organization Name			Check Recipient: Individual other than authorized individual to act on behalf of the applicant. ☒ Select if the same as applicant.		
Tri-County Trail Commission					
Individual Authorized to Act on Behalf of Applicant per Resolution			**Check Recipient Name** (Name to Appear on Check)		
Max Blackbourn			Max Blackbourn		
Title			Title		
Tri-County Trail Coordiantor			Tri-County Trail Coordiantor		
Address			Address		
700 Main Street			700 Main Street		
City	State	ZIP Code	City	State	ZIP Code
Darlington	WI	53530	Darlington	WI	53530
Telephone Number	Email Address				
(608) 776-4893	trails@lafayettecountywi.org				

Section 2: Project Information Required for all Projects

Project Title	**Current Funded Miles**	New Miles (if applicable)
Cheese Country Trail Bridge #45 Replacement		

County	Township	Range		Section	¼ ¼	¼	GPS Coordinates:
Green	01 N	6	◉ E ○ W	2	SW	SW	Lat. 42.578134 Long. -89.759829

Project Description Summary

Proposed project is the complete replacement of Bridge #45 on the Cheese Country Trail over Allen Road in Green County. Project scope is to include removing deteriorated components and replacement with a new structure.

During a routine bridge inspection, major deficiencies were found in the bridge structure indicating that is at the end of it's useful life (1 to 2 years of longevity left).

Currently here is the breakdown of the request from all grant programs:

RTP = $100,000.00 (23%)
ATV/UTV = $159,748.50 (38.5%)
Snowmobile = $159,748.50 (38.5%)

☒ I certify that all maintenance land use agreements are on file.

Estimated Cost

Maintenance	Acquisition	Insurance	Development	Bridge Rehab.	Trail Rehab.	Total Estimated Cost
				$419,497.00		$419,497.00

Leave Blank – DNR Use Only

Applicant Certification

Printed Name of Authorized Official	Official's Title
Max Blackbourn	Tri-County Trail Coordinator

As the applicant's authorized official, I certify that, to the best of my knowledge, the information in this application is true and correct.

Max Blackbourn
Signature of Authorized Official

2/27/2026
Date Prepared

Appendix A – Required for Bridge Rehab/Replace, New, or Reroute with New Bridge

☒ Bridge Rehab/Replace ☐ New Bridge ☐ Reroute with new bridge

County	Township	Range	Section	¼ ¼	¼	GPS Coordinates:
Green	01 N	6 ◉E ○W	2	SW	SW	Lat. 42.578134 Long. -89.759829

Water Body Name	Bridge Name	County Inventory Number
N/A - Public Road	Bridge #45	#45

Funded Trail Name or Number (SNARS if applicable): Cheese Country Trail

Has this bridge site ever received development or rehabilitation funds in the past? ○ Yes ◉ No Year: _____ $ _____

Bridge is located on: ◉ Private property ○ Public property

Old Bridge/Culvert Size: 12' X 111.5

New Bridge/Culvert Size: 12' X 112'

Landowner Where Bridge is Located	Telephone Number	Length of Trail Use Agreement (5 year minimum)
Pecatonica Rail Transit Commission		Non-Expiring

Current maximum load	Proposed maximum load	Age of Bridge	Bridge Material
25,000 lbs.	25,000 lbs.	50+	Wood foundations, wood & metal superstructure

Sponsoring Club Name	Club Contact	Telephone Number
Tri-County Trail Commission	Max Blackbourn	(608) 776-4983

Do you have your trail bridges posted as to maximum load? ○ Yes ◉ No

What is the maximum load of the other bridges on the system if groomed with this bridge?
At this time, maximum loads allowed on trail system are variable due to varying conditions of bridges.

What is the weight of your puller & drag/grading equipment?
~25,000

What other recreational trail uses are planned for this bridge?
Pedestrian, bicycle and e-bicycle

If there are other Recreational uses planned, how much of the bridge cost will be paid for by non-snowmobile or non-ATV users?
None

○ Yes ◉ No Have you contacted your local DNR Water Management Specialist (WMS) regarding a permit?
○ Yes ◉ No Is a permit needed? (Please provide any written correspondence from WMS.)
○ Yes ◉ No Have you contacted your County Zoning Dept. regarding a floodplain determination?
○ Yes ◉ No Will an H & H (hydrologic and hydraulic) study be required?

Bridge Project Detailed Description

Proposed project is the complete replacement of Bridge #45 on the Cheese Country Trail over Allen Road in Green County. Project scope is to include removing deteriorated components and replacement with a new structure.

During a routine bridge inspection, major deficiencies were found in the bridge structure indicating that is at the end of it's useful life (1 to 2 years of longevity left).

Although there won't be any permitting concerns with DNR due to no streams or wetlands present on site, we will need to coordinate with the Town of Cadiz to ensure proper public road clearance. Although the Township had asked for removal of the bridge, we are not allowed to remove the structure per the interim trail use agreement with Pecatonica Rail Transit Commission.

Appendix A (continued)

Summarize Costs in Appropriate Categories:

Bridge Structure

		Quote 1	Quote 2
		◉ Steel ○ Wooden	○ Steel ○ Wooden
Bridge Dimensions:		12' X 112'	
Bridge Manufacturer:		TBD	
Design Weight Load		25,000 lbs.	lbs.
Cost of Structure:	1. Engineering	$ 52,061	$
	2. Structure	$ 306,240	$
	Subtotal	$ 358,301	$

Installation Costs:	Quote 1 ◉ Contractor or ○ Sponsor Estimate	Quote 2 ○ Contractor or ○ Sponsor Estimate
1. Engineering (includes construction labor too see attached cost estimate)	$ 44,946	$
2. Site Preparation	$	$
3. Abutments	$	$
4. Pilings/Piers	$	$
5. Approaches	$	$
6. Riprap	$	$
7. Labor	$	$
8. Equipment Rental	$	$
9. Culverts	$	$
10. H & H Study	$	$
11. Wetland Delineation	$	$
12. Other Soil Borings	$ 16,250	$
Subtotal	$ 61,196	$
Total Cost	$ 419,497	$

For the application grant, you must take the lowest of the two quotes.

Entire Deck and Railing Projects ○ Contractor ○ Sponsor ○ Club

Bridge Dimensions:	
Design Weight Load	lbs.
1. Materials	$
2. Labor	$
Total	$

State of Wisconsin
Department of Natural Resources
PO Box 7921, Madison WI 53707-7921
dnr.wi.gov

Recreation Grant Project Cost Estimate Worksheet

Form 8700-014 (R 02/23)

For use with Recreation Grant Application Forms

Recieved estimates from Craig Hardy
Iowa Co. Hwy. Commissioner

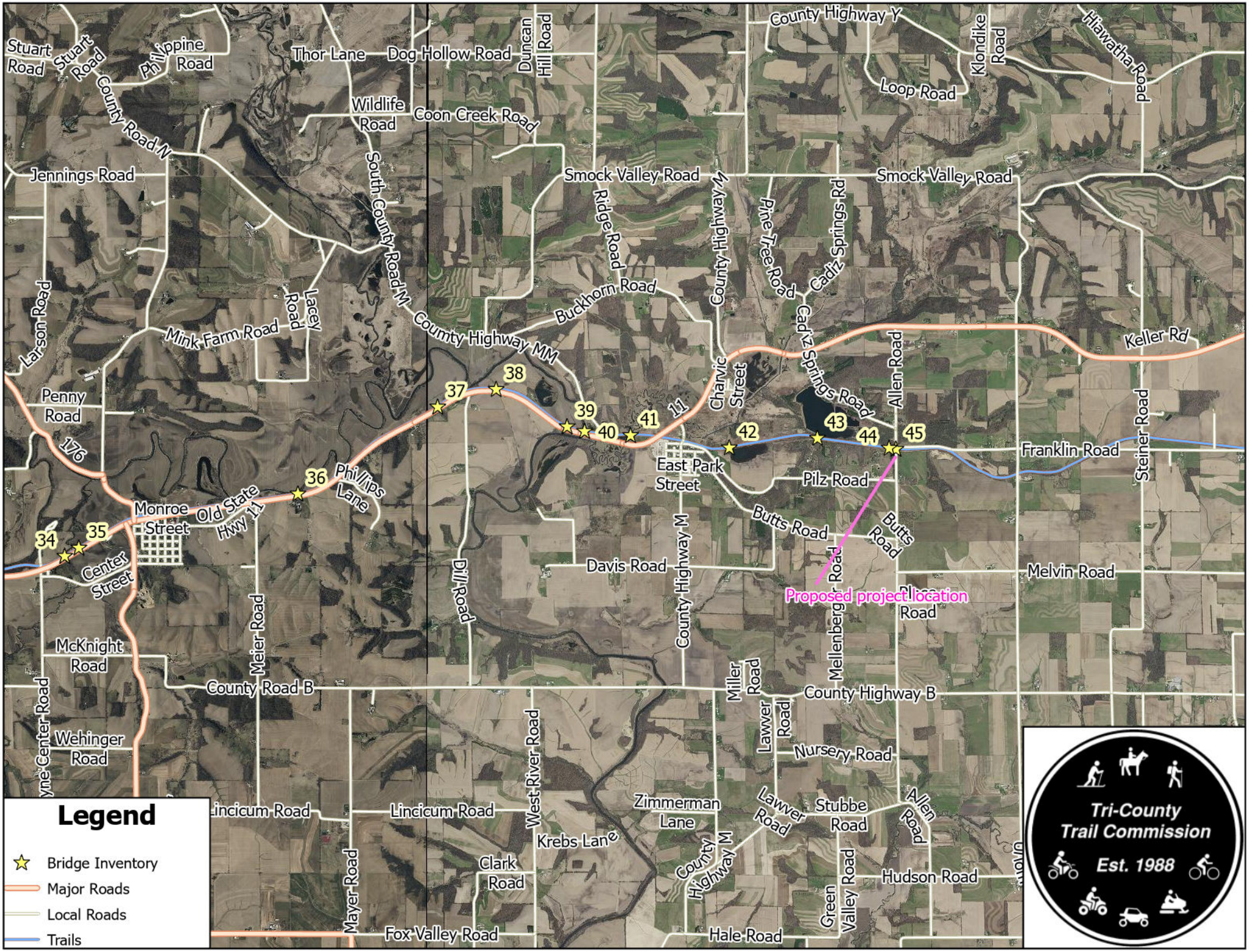
Project Name:		Prepared By:	Date
BRIDGE #45 REPLACEMENT		Max Blackbourn	02/27/2026
County	Project Applicant:	Landowner Name	○ Public ◉ Private
Green	Tri-County Trail Commission	Pecatonica Rail Transit Commission	

Indicate - (C) Contract , (F) Force Acct., (D) Donated

	DEVELOPMENT PROJECT ITEMS *List by individual item or break down by Use Areas* (See Item List On Back Of This Form)	Quantity	Unit of Measure	Component Costs	Estimated Total Item Cost
	Bridge Materials	1		$306,240.00	306,240.00
	Design	1		$52,061.00	52,061.00
	Soil Borings	1		$16,250.00	16,250.00
	Engineering & Construction	1		$44,946.00	44,946.00
				TOTAL $	$419,497.00

NOTE:

- **For development projects, contingency and indirect costs are <u>not</u> eligible expenses.**
- **For acquisition projects, complete the Acquisition Project Cost Estimate Section of this form.**


Stuart Road
Stuart Road
Philippine Road
County Road N
Thor Lane
Dog Hollow Road
Duncan Hill Road
Wildlife Road
Coon Creek Road
Jennings Road
South County Road M
Smock Valley Road
Ridge Road
County Highway M
Pine Tree Road
Cadiz Springs Rd
Smock Valley Road
County Highway Y
Klondike Road
Hiawatha Road
Loop Road
Larson Road
Lacey Road
Mink Farm Road
Buckhorn Road
County Highway MM
Cadiz Springs Road
Allen Road
Keller Rd
Charvic Street
Penny Road
176
37
38
39
40
41
11
42
43
44
45
East Park Street
Pilz Road
Franklin Road
Steiner Road
Phillips Lane
36
Old State Hwy 11
Monroe Street
34
35
Center Street
Butts Road
Butts Road
Davis Road
Melvin Road
Proposed project location
Mellenbergr Road
Road
Bill Road
County Highway M
Meier Road
McKnight Road
County Road B
Miller Road
County Highway B
Lawver Road
Wehinger Road
Nursery Road
West River Road
Zimmerman Lane
Lawver Road
Stubbe Road
Allen Road
Lincicum Road
Lincicum Road
Krebs Lane
Clark Road
County Highway M
Hudson Road
Green Valley Road
Mayer Road
Fox Valley Road
Hale Road
Legend
Bridge Inventory
Major Roads
Local Roads
Trails
Tri-County Trail Commission
Est. 1988

Bridge # 45

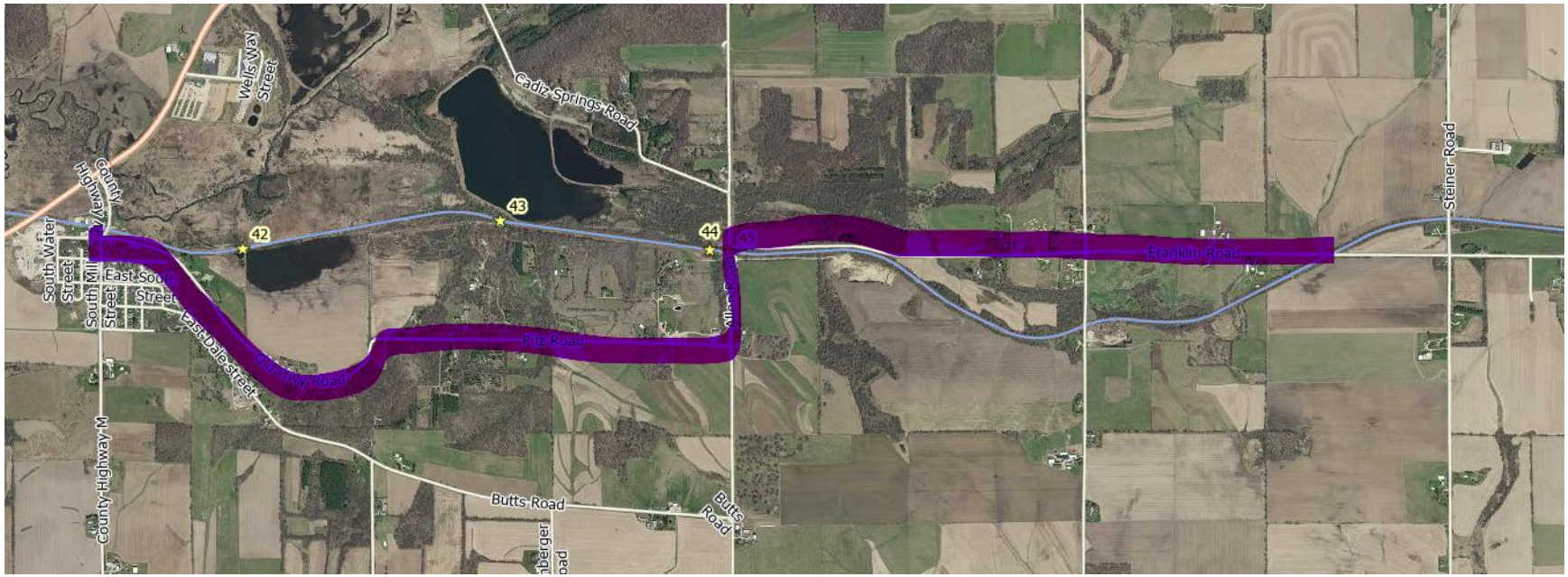
Guidelines for Applicant

Complete this form for each bridge structure you are submitting a grant application for. Provide any additional documents not requested on application checklist to substantiate your points, including actual deeded easements.

This ranking tool is used for both **Snowmobile** and **ATV/UTV** Trail Aids programs, though each program may score things differently. If you are seeking funding from BOTH programs for a dual use bridge, please score ALL questions

	Category	Possible Points	Snow Points	ATV/UTV Points
1	**Condition of the Structure** (max of 10 points)			
	Has a certified bridge inspection report that supports the project & demonstrates need. Copy of report needed. Snowmobile Funded Projects	10	10	
	Calculation: 10 minus NBI Rating Score (0-9) ATV Funded Projects *Use overall NBI # if provided, or an average of the components. Redecking projects should just use the deck NBI #.*	10		6
2	**Permits** (maximum points 4)			
	Consultation with DNR Water Mgmt Specialist has occurred & permit is likely, if needed	1	–	–
	Permit in hand / Bridge already permitted	3	–	–
3	**Funding** (maximum points 2) Has an application been submitted for other funding			
	50% or greater from other funding source(s)? (includes 50/50 Snow/ATV projects)	2	2	2
	11% - 49% from other funding source(s)?	1	–	–
4	**Length of Written Easements or Land Use Agreement** (max points 5)(ch. 23.09(26)(am)1 WI Stats)			
	On public land (County, State, Federal)	5	5	5
	10 or more year **deeded easement** on private land or other public land, for all portions of that trail to the nearest road on each side of the bridge	5	–	–
	3-9 year **deeded easement** on private land or other public land, for all portions of that trail to the nearest road on each side of the bridge	4	–	–
	10 or more year **deeded easement** on private land or other public land, for just the bridge site	3	–	–
	3-9 **deeded easement** on private land or other public land, for just the bridge site	2	–	–
	10 or more year land use agreement (LUA, not deeded) on private land or other public land	1	–	–
	3-9 year land use agreement (LUA, not deeded) on private land or other public land	0	–	–
5	**Miles Impacted** – How many miles will need to rerouted if the structure is not replaced? Measured from nearest intersection on both sides of the bridge. (max 4 points)			
	Less than 20 miles Snowmobile Funded Projects	1	1	
	20 miles or more Snowmobile Funded Projects	3	–	
	No other snowmobile trails connect. Snowmobile Funded Explain:	4	–	
	For ATV/UTV projects, describe the relocation (on routes? Trail?) Include sketch/map		✓	
6	**If ATV/UTV, Seasons of Use** (max 3 points)			
	Year-Round or Summer Only ATV/UTV Trail	3		3
	Winter Only ATV/UTV Trail	1		–
	DEDUCTIONS			
7	**County Active Project Deduction** (maximum deduction 1 point) A snowmobile active project is one that has exceeded it's initial grant period.			
	Two or more active projects - deduct 1 point	-1	-1	
	GRAND TOTAL		17	16

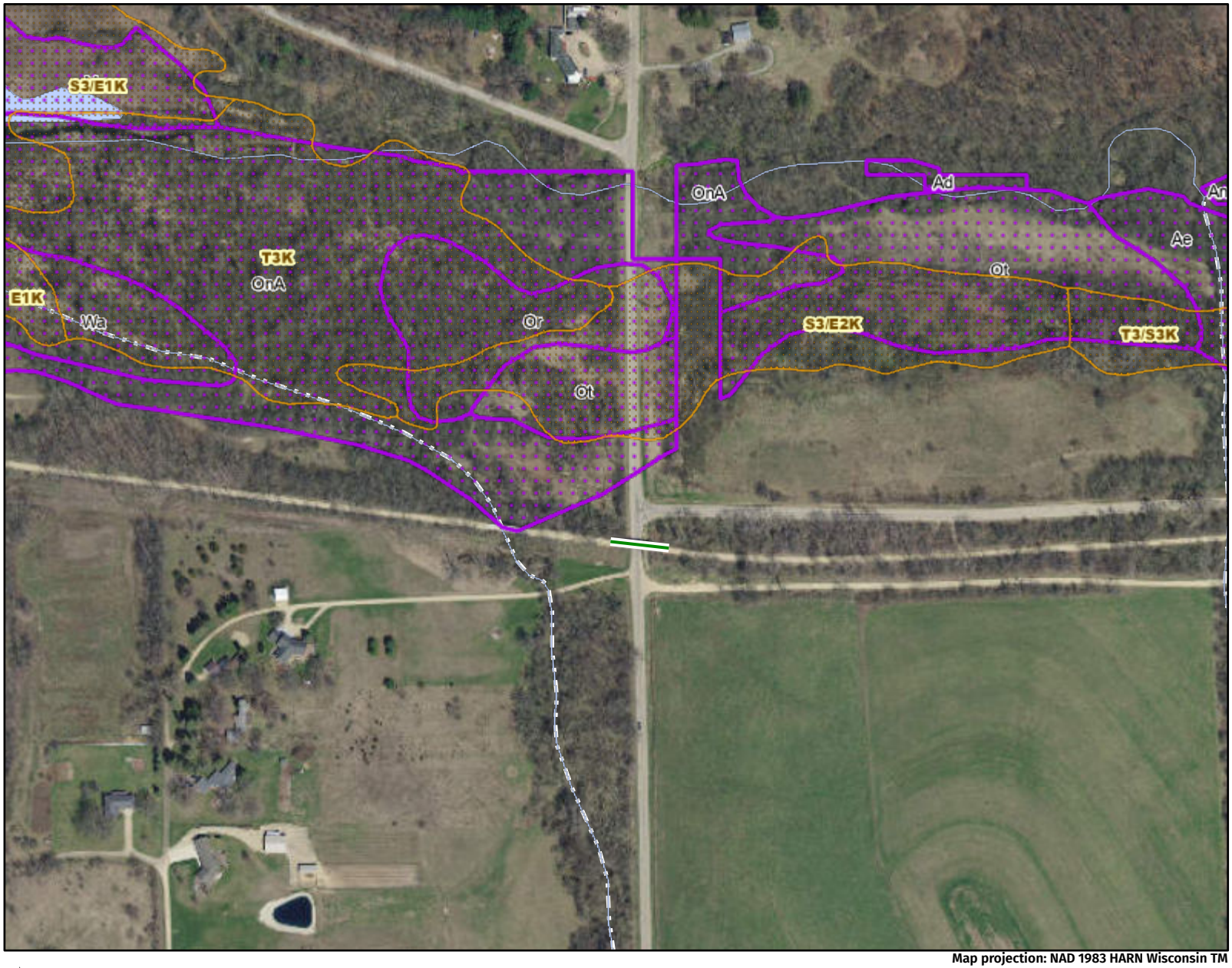
Substructure and superstructure rated a 2. 8 pnts.



Trail re-route for potential closure of #45 closure

WISCONSIN DEPARTMENT OF NATURAL RESOURCES

Bridge #45 Map



Legend: (some map layers may not be displayed)

- Wetland Class Areas
- Wetland Indicators
- Rivers and Streams
- Intermittent Streams
- Open Water
- Rivers and Streams
- Intermittent Streams
- Open Water
- 24K Intermittent Streams
- 24K Lakes and Open Water
- 24K Streams and Rivers
- Latest Leaf Off Index
- Latest Leaf Off Imagery

Notes:

Bridge is located with green line

Map projection: NAD 1983 HARN Wisconsin TM

N

Map: 0 310 620 Feet
0 90 180 Meters

Service Layer Credits:
Wetland Indicators & Soils^: Surface Water Data Viewer Team, DNR Basic Feature VTL (WTM): Wisconsin Department of Natural Resources, GIS Section, Latest Leaf Off: , Surface Water: WiDNR, USGS, and other data, Wetland Inventory NWI (Dynamic): Calvin Lawrence, Dennis Weise, Nina Rihn

Date Printed: 2/27/2026 1:44 PM

Inspection Report for

Bridge #45

Cheese Country Trail over Allen Road

Executive Summary

Recommended Inspection Frequency:

- 12 Months.
- *Monthly interim monitoring by local forces should be completed with supplemental inspections after any suspected overload crossing.*

Estimated Remaining Longevity:

- The remaining serviceable life of this structure can be reasonably estimated at 1 years.
- There are likely no feasible rehabilitation efforts that would extend the longevity of the structure.

Summary of Channel Conditions:

- Loose sandy fill at both abutment embankments are prone to erosion.

Summary of Structural Conditions:

- **Multiple beam ends crushed over piers and abutments. Advanced decay and splitting of pier piles and caps. One pile crushed in Pier W6.**
- Additional overload damage may require immediate closure.

Maintenance/Repair Recommendations: *Refer to subsequent element descriptions for detailed component specific maintenance recommendations, if appliable.*

- **Owner Notified of CS4 Conditions.**
- **Bridge should be evaluated for structural capacity and posted for load.**
- Posting for reduced load capacity may extend longevity**.**
- Schedule for complete replacement or closure.

Nathan W. Miller — 11.21.2025

Nathan W. Miller — Date

Bridge Inspection Team Leader, Inspector Number: 9601

Bridge ID / Structure No.		Inspection Date:	11.21.2025
Bridge #45		Inspection TL:	Nate Miller, PE
		NBI Project No:	2503501
Facility Owner/Managing Agency: Tri-County Trails Commission		Representative: Max Blackbourn	
Email: trails@lafayettecountywi.org		Phone: 608-776-4893	

Summary of Inspection Intent, Procedures, and Limitations

- NBI Engineering Services personnel visited the above referenced structure to observe the existing conditions and collect information on behalf of The Tri-County Trail Commission. The purpose of this inspection was to determine the physical and functional condition of the bridge.
- Observations have been limited to readily available surface conditions. No destructive or invasive testing procedures, load rating, or detailed measurements have been performed as part of this inspection. NBI Engineering Services reserves the right to revise our opinions if additional evidence becomes available.
- Timber conditions were evaluated by visual inspection and acoustic sounding.
- Due to access limitations, assessment of components above 6 ft above grade was limited primarily to visual observation. Beams and piers inspected from ground and deck via pole cam.
- The facility was open to traffic during the inspection.
- No plans or prior inspection information for the structure have been provided.

Time Log	Onsite: 3.75 Hours

Inventory Data

Feature On:	Cheese Country Trail	Feature Under: Allen Road
Lat./ Long.:	42.5782, -89.7598	
Orientation:	Traffic Direction: EB/WB	Channel Flow: Upstream: N/A - Downstream: N/A

Structure Type

No. Spans:	7	Wearing Surface: Concrete Deck
Deck	Cast-In-Place Concrete over Timber Cross-Ties	
Superstructure	1 Spans: Riveted Steel Deck Girder 6 Spans: 3-Ply Timber Beams	No. Beam Lines: 4 No. Beam Lines: 2
Substructure	Abutments: Timber Pile with Timber Backwall Plank	
	Pier(s): Timber Pile Bent	

Geometric - *Dimensions are approximate.*

Width (O-O):	12.0’	Deck Length (O-O): 111.5’
Width (C-C):	10.5’	Span Length(s): 13.5/14.0/11.5’/29.5’/14.0’/14.0’/13.0’

Assessments Quantity in CS

Assessment	Description	UOM	Total	1	2	3	4	Comments
9001	Drainage -Ends of Structure	EA	4		4			Well Vegetated. Erosion at Wingwalls.
9004	Drainage - Structure	EA	0					No Bridge Deck Drains.
9030	Signs – Object Markers	EA	4		1	2	1	Present at All 4 Corners. SE: Bent/Folded. All: Faded/Damaged.
9035	Signs – Other	EA	2		1		1	“BRIDGE XING”. W: None.
9035	Signs - Other	EA	2		1		1	“15 MPH ON BRIDGE”. W: None. E: Partially Obstructed.
9041	Slope Protection -Bare	EA	2		1	1		Natural Earth Embankments.
9324	Approach Roadway -Gravel	EA	2	1	1			Minor Rutting at Wheel Lines.

SNBI Condition Ratings & Commentary

Deck (C.01) | 4 | Poor Condition – Deteriorating

1. Concrete slab (wearing surface) over timber crossties(deck).
2. Minor wear of concrete throughout wearing surface, most pronounced along wheel lines. Multiple unsealed moderate/wide width transverse cracks throughout concrete slab.
3. Timber crossties decayed and split at ends. Signs of decay throughout all timber components. Timber preservative treatment is no longer effective.

Maintenance/Repair Recommendations

No feasible rehabilitation options to extend longevity of component.

Railings (C.05) | 4 | Poor Condition – Stable

1. (3) rows of W-beam bridge rail supported by angled timber posts.
2. Initial signs of incipient decay of timber components. Timber preservative treatment appears marginally effective.
3. Widespread areas of minor damage to w-beam rails. Ends of curb rails damaged.
4. Northwest rail post anchorage/deck embedment failed.

Maintenance/Repair Recommendations

Repair damaged rail post anchorage.

Transition Railings (C.06) | **N/A** | Not Applicable

Joints (C.08) | **N/A** | Not Applicable

Superstructure (C.02) | 2 | Critical Condition - Deteriorating

1. (2) lines of timber beams each comprised of (3) through-bolt connected laminations.
2. Beams are decayed 50%-90% throughout with widespread prominent checking and generally appear hollow when sounded. Widespread areas of horizontal shear cracking.
3. **Several beam ends show readily evident signs of crushing over abutments and piers.**
4. Beams are highly susceptible to overload damage.

Maintenance/Repair Recommendations

No feasible rehabilitation options to strengthen or extend longevity of component.

Bearings (C.07) | **N/A** | Not Applicable

Substructure (C.03) **| 2 | Critical Condition** – Deteriorating

Abutments:

1. Driven timber piles, timber pile caps, and timber backwall plank.
2. Decayed timber components throughout with no readily evident signs of crushing.
3. Caps are decayed +/- 75% throughout with widespread minor checking and generally appear hollow when sounded. Areas of more advanced decay and splitting at ends of caps.
4. Piles: Exposed bearing piles are starting sound hollow with an estimated 75%-90% loss of section.

Pier(s):

1. Driven timber piles with timber pile caps. Multi-layer timber cribbing at Piers W3 and W4.
2. **Decayed timber components throughout with readily evident signs of crushing.**
3. Caps are decayed +/-75% throughout with widespread splitting and generally appear hollow when sounded. **Caps are visibly hollow under steel beam bearing areas and are starting to crush. Multiple caps are split vertically through the full depth of the caps and have separated 1”-2”.**
4. Piles: Bearing piles are decayed +/-75% throughout with widespread splitting and generally appear hollow when sounded. **Multiple piles are split vertically and one pile in Pier W6 is crushed at the top.**

Maintenance/Repair Recommendations

No feasible rehabilitation options to strengthen or extend longevity of component.

Channel (C.09) | 5 | Fair Condition - Stable

1. Embankment Erosion: Loose sandy berms at both abutments are prone to erosion. Top of 1:1 berms are within 5ft of both abutments. Erosion at east abutment berm (2ft gully at north edge of bridge). West backwall plank undermined.
2. Drift: | N/A | Not Applicable.
3. Channel Change: | N/A | Not Applicable.
4. Adequacy of Opening: | N/A | Not Applicable.

Maintenance/Repair Recommendations

Installation of embankment stabilization/armoring would reduce likelihood of future erosion issues. Embankment stabilization may not be feasible, and/or recommended, given the expected longevity of the structure and current observed conditions.

Channel Protection (C.10) | **N/A** | Not Applicable

1. Vegetation: | N/A | Not Applicable.
2. Channel Protection: | N/A | Not Applicable.

Maintenance/Repair Recommendations

| N/A | Not Applicable.

Scour (C.11) | **N/A** | Not Applicable

1. Streambed Scour: | N/A | Not Applicable

Maintenance/Repair Recommendations

| *N/A* | *Not Applicable*

Bridge ID / Structure No.		Inspection Date:	11.21.2025
Bridge #45		Inspection TL:	Nate Miller, PE
		NBI Project No:	2503501

Deck

Deck Rating: 4

Quantity in Condition State

	Element	Defect	Description		OUM	Total	1	2	3	4
Wearing Surface	8514		**Wearing Surface-Concrete Overlay**	**6**	SF	1338		1264	74	
			Retrofit C-I-P concrete slab over timber crossties.							
		3220	WS-Crack		SF			632	74	
			CS3: 6 transverse lines of moderate/wide width cracks across width of deck. CS3: NW corner cracked/broken (2-SF)							
		8911	WS-Abrasion/ Wear/ Rutting or Loss of Friction		0			632		
			CS2: Concrete worn to large aggregate at wheel lines. Outside edges of deck covered with crushed stone/vegetation across 50% of length.							
Deck	31		**Deck-Timber**	**4**	SF	1115		558	557	
			Timber Crossties.							
		1150	TBR-Checks/ Shakes/ Cracks/ Splits/ Delamination		SF			558	557	
			CS2: Signs of timber decay throughout. CS3: Full depth splitting and/or decay at end 2ft of 25% of crossties. Assume 25% section loss across all crossties.							
	9004		**Drainage-Structure**	**N**	EA					
			None. No bridge deck drains.							

Bridge Railing

Bridge Railing Rating: 4

Bridge Railing Transition Rating: N

Quantity in Condition State

	Element	Defect	Description		OUM	Total	1	2	3	4
Railing	330		**Metal Bridge Railing**	**4**	LF	223		104	108	**11**
			(3) rows of W-beam bridge rail supported by angled timber posts.							
		1140	TBR-Decay/ Section Loss/ Abrasion/ Wear		LF			104		
			CS2: Timber posts show initial signs of incipient decay and weather checking.							
		3440	Steel Protective Coating		LF				104	
			CS2: Rail galvanizing substantially effective - chalking/surface dulling. CS3: Failed galvanizing with tightly adhered surface corrosion +/-50%.							
		7000	Damage		LF				4	**11**
			CS2: Widespread minor scraping to w-beam top rail. CS3: Collision damage to ends curb rail (4-lf). CS4: NW rail post anchorage/deck embedment failed (11-LF).							

Bridge Joints

Bridge Joints Rating: N

Quantity in Condition State

	Element	Defect	Description		OUM	Total	1	2	3	4
Joints	.		**Joint Type**	**N**	LF					
			None. Concrete bridge deck runs continuously over length of structure.							
		.	Defect		LF					
			N/A							

NBI Engineering Services
PO Box 188
Mount Horeb, WI 53572

Numbering convention increases from west to east or south to north.
Condition codes and methodology consistent with the Specifications for the National Bridge Inventory.

NBI ENGINEERING SERVICES, LLC

Bridge ID / Structure No.	Inspection Date:	11.21.2025
Bridge #45	Inspection TL:	Nate Miller, PE
	NBI Project No:	2503501

Superstructure

Superstructure Rating: **2**

Quantity in Condition State

	Element	Defect	Description		OUM	Total	1	2	3	4
Superstructure	111		**Superstructure-Timber-Open Girder/ Beam**	**2**	LF	82			22	**60**
			Spans W1/W2/W3/W5/W6/W7: [2] beam lines of 4-ply timber beams.							
		1140	TBR-Decay/ Section Loss/ Abrasion/ Wear		LF					
			CS3/CS4: All beams decayed and sound hollow with an estimated 50%-90% loss of section. See 1150/7000 for quantities.							
		1150	TBR-Checks/ Shakes/ Cracks/ Splits/ Delamination		LF				22	**40**
			CS3: Prominent checking (+/- 3/16") throughout length of beams. CS4: Prominent checking/horizontal shear cracking (> 3/16"): Span W1: S. Beam-S. Face/N. Beam-N. Face_Span W2: N. Beam-N. Face_Span W5: S. Beam-S. Face Span W6: S. Beam-S. Face							
		1020	Connection		LF					
			Through-bolts appear intact and functioning as intended.							
		1900	Distortion		LF					
			Beam appear properly aligned with no readily visible signs of distortion.							
		7000	Damage		LF					**20**
			CS4: Signs of overload distress (crushing) of beam ends: Span W1: S. Beam-N. Face over W. Abut._Span W3: N. Beam-N. Face over Pier W3. Span W5: N. Beam-S. Face over Pier W5._Span W7: S. Beam-S. Face over E. Abut.							
		Protective Coatings: CS4: Timber preservative treatment ineffective.								
Superstructure	107		**Superstructure-Steel-Girder Beam**	**4**	LF	120		30	90	
			Span W4: Riveted Steel Deck Girder.							
		1000	STL-Corrosion		LF			30	90	
			CS2: Surface corrosion throughout with widespread areas of freckled rust. CS3: Widespread areas of loose flaking rust along top flanges. Widespread areas of pack rust with no signs of deformation between faying surfaces of built-up members.							
		1020	Connection		LF					
			CS2: Widespread areas of pack rust with no distortion. Connections are in place and functioning as intended.							
		1900	Distortion		LF					
			Members generally appear properly aligned with no readily visible signs of distortion.							
		7000	Damage		LF					
			No readily visible signs of damage.							
		3440	Steel Protective Coating - CS4: Paint system has completely failed-protective coatings are ineffective.							

Bearings

Bearing Rating: **N**

Quantity in Condition State

	Element	Defect	Description		OUM	Total	1	2	3	4
Bearings	.		**Bearing Type**	**N**	EA					
			Timber beams and steel girders bear directly on timber caps/cribbing.							
		2210	BRG-Movement		EA					
			N/A							
		2240	BRG-Loss of Bearing Area		LF					
			N/A							
		3440	Steel Protective Coating - N/A.							

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Substructure

Substructure Rating: 2

Quantity in Condition State

	Element	Defect	Description		OUM	Total	1	2	3	4
Abutments	216		**Substructure-Timber-Abutment**	**4**	LF	28			28	
			Timber Backwall Plank - Timber pile with backwall plank abutment.							
		1140	TBR-Decay/ Section Loss/ Abrasion/ Wear		LF				14	
			CS3: Timber plank showing signs of incipient decay.							
		4000	Settlement		LF					
			No readily visible signs of settlement.							
		6000	Scour		LF				14	
			Both abutments beyond channel flow. CS3: Erosion at west abutment has undermined backwall plank (14-LF).							
	Protective Coatings: CS4: Timber preservative treatment ineffective.									
	235		**Substructure-Timber-Pile Cap-Abutment**	**3**	LF	28			14	14
			Timber Pile Cap - Timber Pile with Backwall Plank Abutment.							
		1140	TBR-Decay/ Section Loss/ Abrasion/ Wear		LF				14	**14**
			CS3/CS4: Caps sounds hollow throughout with soft/easily dented shell. Prominent horiz. and vert. checking throughout. No definitive signs of crushing. West Abutment: Horizontal shear cracking at north end of cap (5-LF). +/- 75% decay/section loss. East Abutment: +/- 50% decay/section loss.							
	Protective Coatings: CS4: Timber preservative treatment ineffective.									
	228		**Substructure-Timber-Pile-Abutment**	**2**	EA	10			5	5
			Timber Piles - Timber Pile with Backwall Plank Abutment.							
		1140	TBR-Decay/ Section Loss/ Abrasion/ Wear		EA				5	**5**
			[5] Bearing piles per abutment. CS3/CS4: Tops of piles sound hollow with moderate to wide checking throughout. No definitive signs of crushing. West Abutment: S1-90%_S2-75%_S3-75%_S4-90%_S5-75%. East Abutment: Piles not exposed - Assume +/- 50% decay/section loss-CS3.							
	Protective Coatings: CS4: Timber preservative treatment ineffective.									
	8400		**Wingwall-Timber**	**4**	EA	4			4	
			Integral timber wingwalls. Backwall plank extends beyond bearing piles-no supplemental wingwall piles.							
		8903	WW-Deterioration		EA				4	
			CS3: Wingwall plank showing signs of incipient decay.							
		6000	Scour		EA					
			CS1: Wingwalls beyond channel flow. No signs of undermining.							
	Protective Coatings: CS4: Timber preservative treatment ineffective.									

Quantity in Condition State

	Element	Defect	Description		OUM	Total	1	2	3	4
Pier(s)	235		**Substructure-Timber-Pile Cap Pier**	**2**	LF	90			15	75
			Piers W1/W2/W5/W6 - Timber Pile Caps - Assume 15-LF Per Pier *Piers W3/W4 - Timber Pile Caps/Cribbing - Assume 15-LF Per Pier*							
		1140	TBR-Decay/ Section Loss/ Abrasion/ Wear		LF				15	**75**
			CS3/CS4: Caps sound hollow throughout length with prominent horiz. and vert. checking/splitting throughout-more severe at ends. Visual assessments for elements above 6ft. All dimensions were estimated in the field and should be considered approximate. Pier W1: Full/partial depth split (N:1/4"_S:1/2") wide, vegetation growing through cap, 50%-75% decay. Pier W2: Partial depth split (N:1/4"_S:1/2") wide, vegetation growing through cap, 50%-75% decay. Pier W3_W. Row: Full depth split (3/4"). End of cap under timber beam bearing +/-75% decayed with full/partial depth split (N:1/4"_S:1/2"). Initial signs of crushing under steel beam bearings. Pier W3_E. Row: Pile cap decayed >75% and full depth split (1"). End of cap under steel girder bearing >90% decayed and split (1"-2"). Initial signs of crushing under steel beam bearings. Pier W4_W. Row: Full depth split (N:1/4"_S:1/2"). End of cap under steel girder bearing >90% decayed and split (1"). Initial signs of crushing under steel beam bearings. Pier W4_E. Row: All caps/cribbing full depth split (1/2"). End of cap under timber beam bearing >75% decayed. Pier W5: Partial depth split (3/4") at north end of cap, vegetation growing through cap, 50%-75% decay. Pier W6: Full depth split (1/2") at south end of cap, 50%-75% decay.							
	Protective Coatings: CS4: Timber preservative treatment ineffective.									
	228		**Substructure-Timber-Pile-Pier**	**3**	EA	40			2	38
			Timber Piles - [3 Rows] of [8] Bearing Piles Per Pier.							
		1140	TBR-Decay/ Section Loss/ Abrasion/ Wear		EA				2	**38**
			[5] Bearing piles per pier/row. Visual assessments for elements above 6ft. CS3/CS4: Piles sound hollow with prominent vertical checking/splitting throughout. Pile shells soft/easily damaged. (1)-Vertical Spilt in Pile (1/4"-1"). (2)-Pile Poorly Aligned Under Cap (1"-3" Offset). (3)-Top of Pile Crushed. Pier W1: S1-75%**(1)**_S2-75%_S3-75%_S4-95%**(1)**_S5-75%. Pier W2: S1-75%**(1)**_S2-75%**(1)**_S3-50%_S4-75%_S5-75%**(1)**. Pier W3_W. Row: S1-90%**(1)**_S2-75%_S3-75%**(1)**_S4-75%**(1)**_S5-75%**(1)**. Pier W3_E. Row: S1-90%**(1)**_S2-75%_S3-75%**(1)**_S4-75%_S5-90%**(1)**. Pier W4_W. Row: S1-90%**(1)**_S2-75%**(1)**_S3-90%**(1)**_S4-90%**(1)**_S5-90%**(1)**. Pier W4_E. Row: S1-75%**(1)**_S2-75%**(1)**_S3- 75%_S4-75%_S5-95%**(1-2")**. Pier W5: S1-75%**(1)**_S2-75%**(1)**_S3-75%_S4-75%_S5-75%**(1)**. Pier W6: S1-75%**(1)**_S2-50%_S3-95%**(1/2/3)**_S4-50%_S5-75%.							
		4000	Settlement		EA					
			No readily visible signs of settlement.							
		6000	Scour		EA					
			N/A-Bridge not over waterway.							
	Protective Coatings: CS4: Timber preservative treatment ineffective.									

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Inspection Photos: All photos taken at above referenced inspection date unless noted otherwise.

Photo 1 – Trail View Looking West.

Photo 2 – Trail View Looking East.

Photo 3 – Allen Road Looking North.

Photo 4 – Allen Road Looking South.

Photo 5 – Side View Looking South.

Photo 6 – Side View Looking North.

Photo 7 – Northwest Corner of Deck.

Photo 8 – West Abutment.

Photo 9 – Pier W1 Looking West.

Photo 10 – Pier W2 Looking West.

Photo 11 – Pier W3 Looking West.

Photo 12 – Pier W3 Looking East.

Photo 13 – Pier W4 Looking East.

Photo 14 – Pier W4 Looking West.

Photo 15 – Pier W5 Looking East.

Photo 16 – Pier W6 Looking East.

Photo 17 – East Abutment.

Photo 18 – Span W1-S. Beam-N. Face Over W. Abut.

Photo 19 – Span W1-S. Beam-S. Face Over W. Abut.

Photo 20 – Pier W1-Pile S4.

Photo 21 – Pier W1 Cap Looking North.

Photo 22 – Pier W3 Looking North.

Photo 23 – Pier W3.

Photo 24 – Pier W3.

Photo 25 – Pier W3-E. Row-Pile S5.

Photo 26 – Pier W3-E. Row-Pile S1.

Photo 27 – Pier W4-E. Row-Pile S5.

Photo 28 – Pier W4-E. Row-Pile S1.

Photo 29 – Pier W4 Looking North.

Photo 30 – Pier W3 Looking South.

Photo 31 – Pier W4 Looking South.

Photo 32 – Pier W5 Looking South.

Photo 33 – Pier W5-Pile S1 Looking East.

Photo 34 – Pier W6-Pile S3.

Photo 35 – N. Beam-S. Face Over Pier W5.

Photo 36 – Pier W6-Piles S1-S3 Looking West.

Photo 37 – Beams Over Pier W6 Looking West.

Photo 38 – South Beam Over East Abutment.

Photo 39 – Pier W4 Looking South.

Photo 40 – Pier W3 Looking South.

Photo 41 – Span W3-South Beam Looking East.

Photo 42 – Pier W1 Looking North.

Photo 43 – Pier W3 Looking East.

Photo 44 – Pier W3 Looking North.

Photo 45 – Pier W3-South End.

Photo 46 – Pier W4-South End.

Photo 47 – Pier W4-South End.

Photo 48 – Span W5-South Beam Looking East.

-End of Report-