BRIDGE INSPECTION REPORT
Routine Inspection

BRIDGE NO.: **10C0111**
STRUCTURE NAME: **MILL CREEK**
INSPECTION DATE: **August 7, 2024**

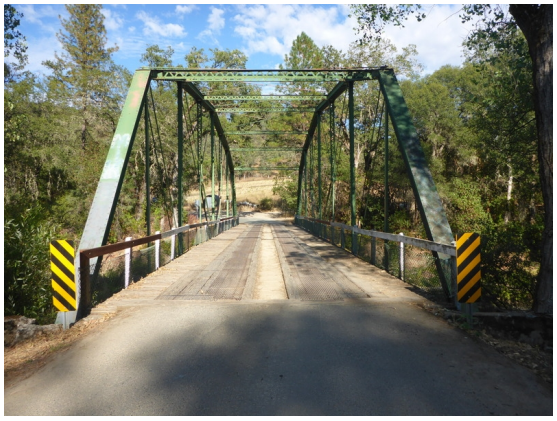
BRIDGE LOCATION INFORMATION

(9) LOCATION	2.0 MI E FAIRBANKS RD	(7) FACILITY CARRIED			HILL ROAD
(11) POSTMILE	0	(6) FEATURE INTERSECTED			MILL CREEK
(16) LATITUDE	39°44'56.65"	(5) INVENTORY RTE(ON/UNDER)	ON		140000000
(17) LONGITUDE	123°10'53.64"	(104) ON NATIONAL HIGHWAY SYSTEM			NOT ON NHS

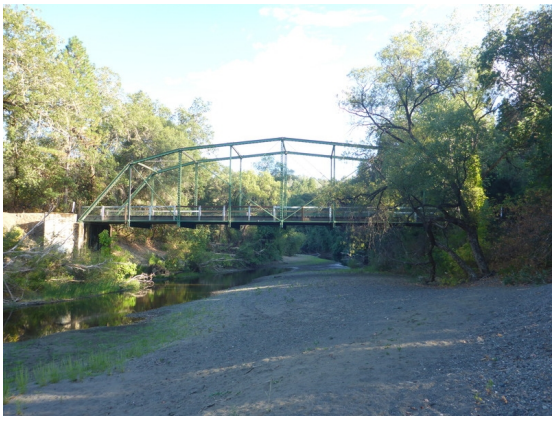
STRUCTURAL HEALTH CONDITION SUMMARY INFORMATION

(58) DECK	4 POOR	DECK AREA $(M)^2$	206
(59) SUPERSTRUCTURE	4 POOR	SUFFICIENCY RATING	29.0
(60) SUBSTRUCTURE	(6 SATISFACTORY)	PAINT CONDITION	0
(62) CULVERT	N N/A (NBI)	STRUCTURALLY DEFICIENT (SD) STATUS	SD
(67) STRUCTURE EVALUATION	2 INTOLERABLE - REPLACE	(113) SCOUR	5 STABLE W/IN FOOTING OR PIL

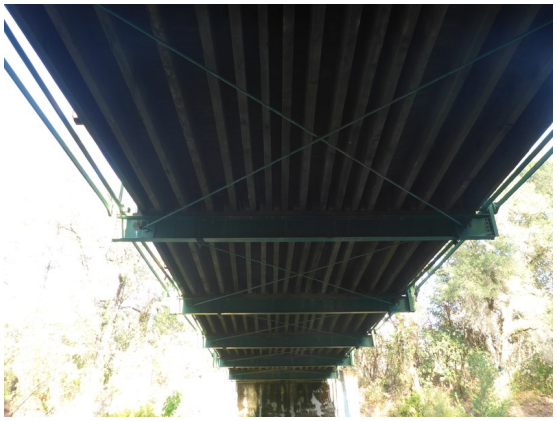
PHOTOGRAPH IDENTIFICATION



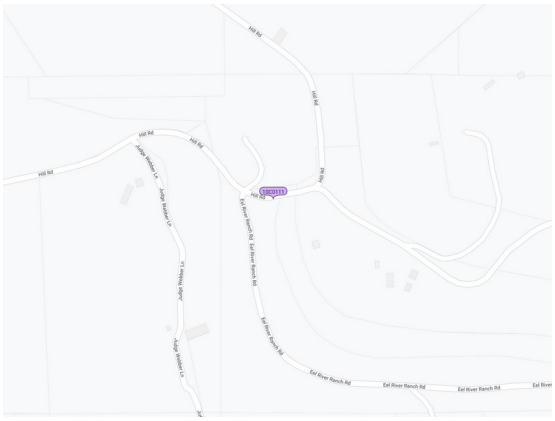
Routine-Roadway View (08/28/2019)



Routine-Elevation View (08/28/2019)



Routine-Underside View (08/28/2019)



Routine-Map View (08/21/2023)

TEAM LEADER: Pamela Gagnier

REPORT AUTHOR: Pamela Gagnier

INSPECTED BY: P.Gagnier/S.Anam

Anthony Fernandes (Registered Civil Engineer) — 12/12/2024 Date

PROFESSIONAL ENGINEER — REGISTERED — Anthony Fernandes — No. 60501 — Exp. 06/30/2026 — CIVIL — STATE OF CALIFORNIA

STRUCTURE OVERVIEW

AGENCY INFORMATION

(1) STATE NAME	CALIFORNIA 069
(2) HIGHWAY DISTRICT	01
(3) COUNTY CODE	(10)MENDOCINO
(4) PLACE CODE	(00000) _____
(21) MAINTAIN	02 COUNTY HWY AGENCY
(22) OWNER	02 COUNTY HWY AGENCY
(98) BORDER BRIDGE STATE CODE	N/A % SHARE N/A
(99) BORDER BRIDGE STRUCTURE NUMBER	N/A

INSPECTION INFORMATION

(90) INSPECTION DATE	08/24	(91) FREQUENCY	12 MO
(92) CRITICAL FEATURE INSPECTION		(93) CFI DATE	
A) NSTM INSP	Y-YES	24 MO A)	08/23
B) UNDERWATER INSP	N-NO	MO B)	N/A
C) OTHER SPECIAL INSP	N-NO	MO C)	N/A

CONSTRUCTION INFORMATION

(27) YEAR BUILT	1925	(45) MAIN SPANS	1	(43a) STRUCTURE TYPE MAIN	3: STEEL
(106) YEAR MODIFIED	N/A	(46) APPR SPANS	0	(43b) DESIGN TYPE MAIN	10: TRUSS - THRU
(34) SKEW	0	(48) MAX SPAN (M)	36.6	(44a) STRUCTURE TYPE APPR	0: OTHER/ NOT APPLICABLE
(49) LENGTH (M)	37.5	(35) STR FLARE	0-NO	(44b) DESIGN TYPE APPR	00: OTHER/NOT APPLICABLE
(112) NBIS BR LENGTH	Y	JOINTS	0	NO. OF HINGES	0

STRUCTURE DESCRIPTION

Simple span, steel, through Parker truss with a 2 x 6 inch nail laminated timber deck on 4 x 15 inch timber stringers (17) and steel floor beams on RC abutments with monolithic wingwalls. All founded on spread footings.

SPAN CONFIGURATION

1 @ 120 ft

OPERATIONAL INFORMATION

LOAD CAPACITY

(31) DESIGN LOAD	0 UNKNOWN	(65) CALC METHOD	1 LF LOAD FACTOR
(66) INVENTORY RATING	RF=0.20 =>6.5 metric tons	(63) CALC METHOD	1 LF LOAD FACTOR
(64) OPERATING RATING	RF=0.34 =>11.0 metric tons	(70) BRIDGE POSTING	0 >39.9% BELOW LEGAL
(41) STRUCTURE STATUS	P-POSTED FOR LOAD	PERMIT RATING	XXXXX
OVERLAY THICKNESS	1.5 inches		

POSTING LOADS

	Safe Loads	Existing Ordinance/Order	Posting Signs	
Type 3	10	10	10	U.S. Tons
Type 3S2	14	14	14	U.S. Tons
Type 3-3	20	20	20	U.S. Tons
Speed	35			MPH

Additional Ordinance/Order Requirements

NONE

Additional Signs

ONE LANE BRIDGE

Posting Order Date 05/16/2016
Load Rating Summary Date 06/10/15
Load Rating Type Calculated
Load Rating Tool - Date BrR 6.6.0 AASHTO, Hand Calcs - 05/18/15

MINIMUM VERTICAL CLEARANCE

(53) MIN VERT CLEAR OVER BRIDGE RDWY		**4.62 M**
(54) MIN VERT UNDERCLEAR REF	N-NOT H/RR	0.00 M

MINIMUM LATERAL UNDERCLEARANCE

(55) MIN LAT UNDERCLEAR RT REF	N-NOT H/RR	0.0 M
(56) MIN LAT UNDERCLEAR LT		0.0 M

OPERATIONAL SIGN PHOTOGRAPHS

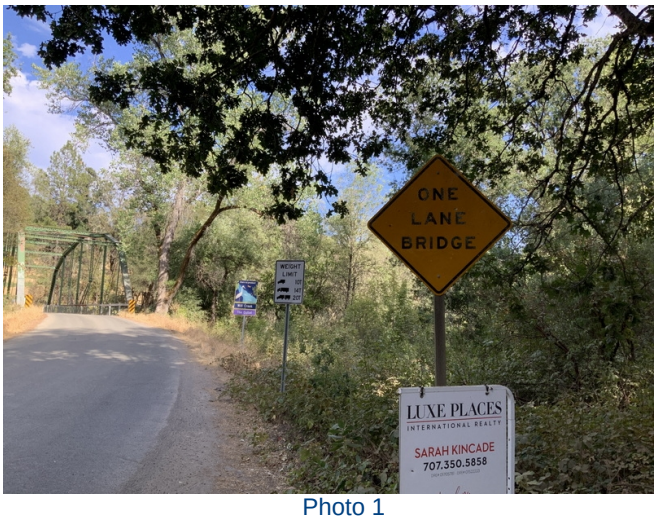


Photo 1
Operational signs at the Abutment 1 approach

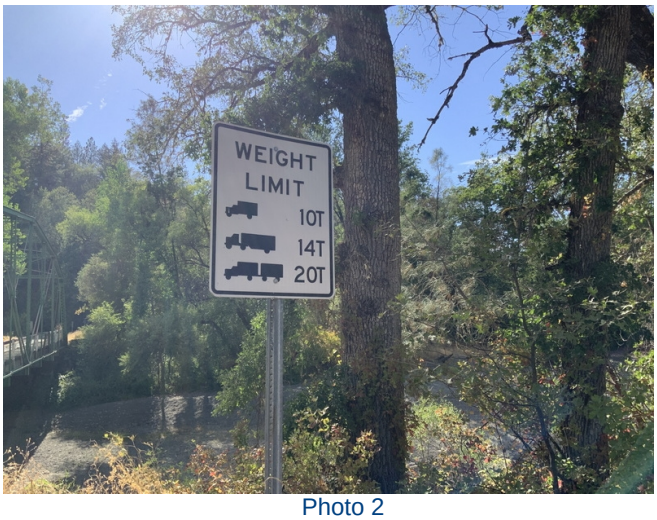


Photo 2
Load posting sign at the Abutment 2 approach

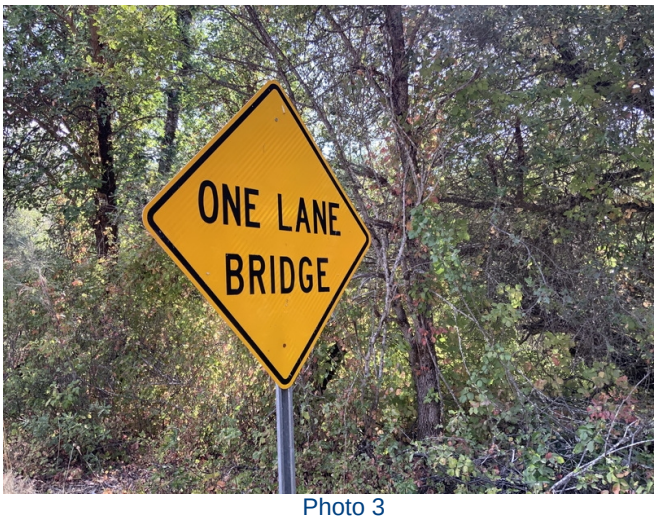


Photo 3
"One Lane Bridge" sign at the Abutment 2 approach

CONDITION INFORMATION

INSPECTION COMMENTARY

SCOPE AND ACCESS

All elements were accessible by foot on and around the structure. There was 3 inches water in the creek below the span near Abutment 2 during this investigation. No elements were submerged. All visible elements were fully inspected. A complete routine inspection was performed.

A Fracture Critical Inspection was last performed on 08/17/2023 by the Caltrans Fracture Critical Inspection team. The investigation was conducted in accordance with the Fracture Critical Member Inspection Plan, dated 09/13/2007. See the 08/17/2023 Fracture Critical Inspection Report and appropriate elements of this report for further details.

SAFE LOAD CAPACITY

A Load Rating Summary Sheet dated 06/10/2015 is on file for this structure. While this report does not include a check of that analysis, it does verify that the structural conditions observed during this inspection are consistent with those assumed in that analysis. The current rating is based on BrR 6.6.0 and hand calculations dated 05/18/2015.

Load capacity calculations dated 05/18/2015 indicate the safe load-carrying capacity of this structure to be:

10 TONS PER VEHICLE
14 TONS PER SEMI-TRAILER COMBINATION
20 TONS PER TRUCK AND FULL TRAILER

The capacity is controlled by the steel floor beams in bending. This was calculated using an allowable bending stress of 30ksi (Operating). No permit loads are allowed.

OPERATIONAL SIGNS

There are load posting signs at both approaches that indicate the following posting:

10 TONS PER VEHICLE
14 TONS PER SEMI-TRAILER COMBINATION
20 TONS PER TRUCK AND FULL TRAILER

There are "ONE LANE BRIDGE"" signs at both approaches.

See Photos 1 to 3.

SPECIAL INSPECTION INFORMATION

STEEL INVESTIGATION DETAILS

This structure qualifies for an in-depth Steel investigation because it possesses the following non-redundant steel tension members (NSTM) or fatigue prone details :

Floor Beams: NSTM,
Truss: NSTM with Eyebars

NSTMI Required	Yes	Last NSTMI	08/17/2023	NSTMI Freq.	24	months	Next NSTM Inspection	08/17/2025

UNDERWATER INVESTIGATION DETAILS - NOT APPLICABLE FOR THIS BRIDGE.

DECK AND ROADWAY

DECK CROSS SECTION

0.33 ft br, 17.33 ft, 0.33 ft br

DECK GEOMETRY

(49)	LENGTH	37.5 M
(51)	NET WIDTH	5.3 M
(52)	TOTAL WIDTH	5.5 M
(50)	CURB OR SIDEWALK	LEFT 0.0 M RIGHT 0.0 M
(32)	APPROACH RDWY WIDTH	5.3 M
(33)	BRIDGE MEDIAN	0 NO MEDIAN

DECK STRUCTURE INFORMATION

(107)	DECK STRUCTURE TYPE	8-TIMBER
(108)	WEARING SURFACE / PROTECTIVE SYSTEM	
A)	TYPE OF WEARING SURFACE	7-TIMBER
B)	TYPE OF MEMBRANE	0-NONE
C)	TYPE OF DECK PROTECTION	0-NONE
	OVERLAY THICKNESS (inches)	1.5 inches
(29)	AVERAGE DAILY TRAFFIC	78
(30)	YEAR OF ADT 2014	(109) TRUCK ADT % 2 %
(19)	BYPASS, DETOUR LENGTH	21 KM
(114)	FUTURE ADT	272
(115)	YEAR OF FUTURE ADT	2041
(37)	HISTORICAL SIGNIFICANCE	5: NOT ELIGIBLE FOR NRHP

DECK ROADWAY/OPERATIONAL INFORMATION

(42a)	TYPE OF SERVICE	1-HIGHWAY
(12)	BASE HIGHWAY NETWORK	0-NOT ON NET
(13)	LRS INVENTORY RTE & SUBRTE	
(104)	NATIONAL HIGHWAY SYSTEM	0-NOT ON NHS
(26)	FUNCTIONAL CLASS	09-LOCAL RURAL
(100)	DEFENSE HIGHWAY	0-NOT STRAHNET
(101)	PARALLEL STRUCTURE	N-NONE EXISTS
(102)	DIRECTION OF TRAFFIC	3-1 LANE, 2 WAY
(10)	INVENTORY ROUTE MIN VERT CLEAR	4.62 M
(47)	INVENTORY ROUTE TOTAL HORIZ CLEAR	5.3 M
(68)	DECK GEOMETRY	3 INTOLERABLE - CORRECT
(72)	APPR ROADWAY ALIGN	3 INTOLERABLE - CORRECT
(105)	FEDERAL LANDS HWY	0-NOT APPLICABLE
(110)	DESIGNATED NATIONAL NETWORK	0-NOT ON NET
(20)	TOLL	3-ON FREE ROAD
(28a)	LANES	1
	SPEED	35
(103)	TEMPORARY STRUCTURE	N/A

DECK ELEMENT INSPECTION RATINGS AND NOTES

(58) DECK RATING = 4

Elem No.	Defect/ Prot	Defect	Element Description	Env	Total Qty	Units	Qty in each Condition State CS 1	CS 2	CS 3	CS 4
31			**Deck-Timber**	2	206	sq.m	0	0	206	0
	1140		**Decay/Section Loss (Timber)**	2	206		0	0	206	0
	513		**Deck Wearing Surface-Timber**	2	91	sq.m	54	21	16	0
		1020	**Connection**	2	9		0	2	7	0
		1150	**Check/Shake (Timber)**	2	27		0	19	8	0
		1170	**Split/Delamination (Timber)**	2	1		0	0	1	0

(31) Deck-Timber

The timber joint header at Abutment 1 has a bolt protruding up approximately 1 inch. (See Photo 33 dated 08/16/2023). This condition has been previously reported and no significant changes were noted.

(31-1140) Decay/Section Loss (Timber)

In general, the top 3 inches of the transverse timber deck planks are showing signs of decay and generally probe soft. (See Photos 5 and 6 dated 08/16/2023). This condition has been previously reported and no significant changes were noted.

A work recommendation is on file to replace the timber deck.

(31-513) Deck Wearing Surface-Timber

There is a steel plate up to 3 feet long x 2 feet wide placed on the left timber wheel runner approximately 25 feet from Abutment 2. (See Photo 7 dated 08/16/2023). This condition has been previously reported and no significant changes were noted.

There are several locations of missing steel grate up to 18 inches long x 12 inches wide throughout the left and right wheel runners. (See Photos 7 and 8 dated 08/16/2023). This condition has been previously reported and no significant changes were noted.

(31-513-1020) Connection

There are missing and loose bolts and steel plates used to tie down timber wheel runners. (See Photos 9 and 10 dated 08/16/2023). This condition has been previously reported and no significant changes were noted.

(31-513-1150) Check/Shake (Timber)

There are longitudinal checks up to 0.25 inches wide x 2 inches deep x intermittent full board length throughout the wheel runners.

DECK ELEMENT INSPECTION RATINGS AND NOTES

(58) DECK RATING = 4

Elem No.	Defect/ Prot	Defect	Element Description	Env	Total Qty	Units	Qty in each Condition State CS 1	CS 2	CS 3	CS 4

(31-513-1150) Check/Shake (Timber)

(See Photo 11 dated 08/16/2023). This condition has been previously reported and no significant changes were noted.

(31-513-1170) Split/Delamination (Timber)

There is a split up to 0.5 inches wide x 18 inches long in right wheel runner at midspan. (See Photo 7 dated 08/28/2019). This condition has been previously reported and no significant changes were noted.

JOINT - APPROACH - RAIL

RAIL INFORMATION

(36a) Rail Code 0 (36b) Transition 0 (36c) Appr Guardrail 0 (36d) Appr Guardrail End 0 Roadway Speed 35 MPH

JOINT/APPROACH/RAIL ELEMENT INSPECTION RATINGS AND NOTES

Elem No.	Defect/ Prot	Defect	Element Description	Env	Total Qty	Units	Qty in each Condition State CS 1	CS 2	CS 3	CS 4
332			**Railing-Timber**	2	76	m	1	3	72	0
	1020		**Connection**	2	3		0	3	0	0
	1140		**Decay/Section Loss (Timber)**	2	72		0	0	72	0

(332) Railing-Timber

The previously reported missing 8 foot section of the horizontal left rail has been replaced. See Photo 4.

(332-1020) Connection

The timber rail posts are generally loose and deflected throughout the right rail. (See Photo 12 dated 08/16/2023). This condition has been previously reported and no significant changes were noted.

(332-1140) Decay/Section Loss (Timber)

In general, both timber bridge rails and posts are rotten and decayed, except where the missing sections were replaced. (See Photo 13 dated 08/16/2023). This condition has been previously reported and no significant changes were noted.

JOINT/APPROACH/RAIL PHOTOGRAPHS

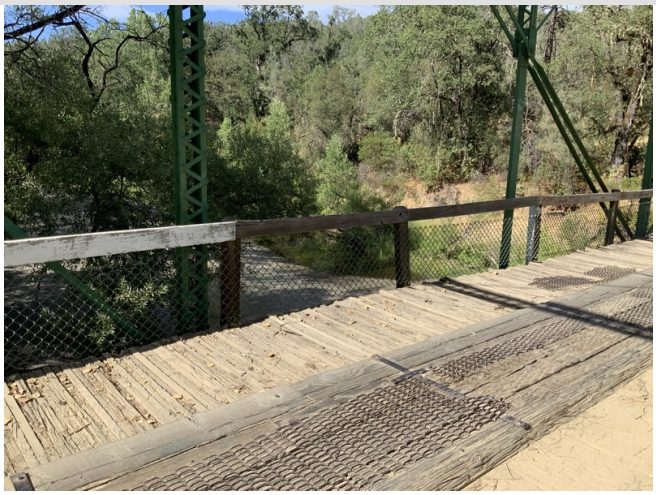


Photo 4
Replaced missing section in the left timber rail. Far right side of photo replaced

SUPERSTRUCTURE

SUPERSTRUCTURE ELEMENT INSPECTION RATINGS AND NOTES

(59) SUPERSTRUCTURE RATING = 4

Elem No.	Defect/ Prot	Defect	Element Description	Env	Total Qty	Units	Qty in each Condition State CS 1	CS 2	CS 3	CS 4
117			**Stringer-Timber**	2	622	m	299	225	95	3
	1020		**Connection**	2	4		0	0	2	2
	1140		**Decay/Section Loss (Timber)**	2	15		0	0	15	0

SUPERSTRUCTURE

SUPERSTRUCTURE ELEMENT INSPECTION RATINGS AND NOTES

(59) SUPERSTRUCTURE RATING = 4

Elem No.	Defect/ Prot	Element Description	Env	Total Qty	Units	Qty in each Condition State CS 1	CS 2	CS 3	CS 4
	1150	**Check/Shake (Timber)**	2	285		0	225	60	0
	1160	**Crack (Timber)**	2	2		0	0	1	1
	1170	**Split/Delamination (Timber)**	2	17		0	0	17	0

(117) Stringer-Timber

There are a few missing and displaced spacer blocks between the stringers.

Panel 1: Stringer 10 is twisted out 15 degrees out of plane.

Panel 2: Stringer 9 is beginning to crush at the supports.

Panel 3: Stringer 1 is twisted 30 degress out of plane at Floorbeam 4. See Photo 17 dated 08/16/2023.

Panel 7: Stringer 12 is twisted 20 degrees out of plane.

(117-1020) Connection

Stringers are migrating off the floor beams at the following locations: (Mendocino County Engineer was informed of the migrating stringers during this investigation).

Panel 2:

Stringer 1 has migrated off of Floor beam 2 (previously called Floor beam 1). (See Photo 5 dated 09/01/2020). This condition has been previously reported and no significant changes were noted.

Stringer 17 has migrated off Floor beam 2 and is no longer in contact with the transverse deck timbers. See Photo 15 dated 08/16/2023.

Panel 3:

Stringer 1 has migrated to the right on Floor beam 3. See Photo 19 dated 08/16/2023.

Panel 4:

Stringer 17 has migrating to the right on Floor beam 4. See Photo 16 dated 08/16/2023.

Panel 5:

Stringer 17 has completely migrated off Floor beam 5 and is no longer in contact with the transverse deck timbers or the floor beam. (See Photo 5). The Mendocino County office was informed of this condition.

There is an outstanding work recommendation dated 08/17/2016 to restore these members to their original position. Most of these conditions have been previously reported and no significant changes were noted.

(117-1140) Decay/Section Loss (Timber)

The following girders have a change in the cross section (knotched) due to unknown reasons:

In Panel 6:

Stringer 7, at the top of the stringer intermittently over its full length at a depth up to 1 inch. (Change in cross section was previously referred to as rot or decay). (See Photo 20 dated 08/16/2023). This condition has been previously reported and no significant changes were noted.

Stringer 12, the bottom of the stringer intermittently over its full length at a depth up to 2 inches. See Photos 20 and 21 dated 08/16/2023.

Stringer 15, at the top of the stringer intermittently over its full length at a depth up to 2 inches. (Change in cross section was previously referred to as rot or decay). See Photo 21 dated 08/16/2023.

These conditions have been previously reported and no significant changes were noted.

(117-1150) Check/Shake (Timber)

Panel 1:

SUPERSTRUCTURE

SUPERSTRUCTURE ELEMENT INSPECTION RATINGS AND NOTES

(59) SUPERSTRUCTURE RATING = 4

Elem No.	Defect/ Prot	Element Description	Env	Total Qty	Units	Qty in each Condition State CS 1	CS 2	CS 3	CS 4

(117-1150) Check/Shake (Timber)

Stringers 3, 8, 9, 10, 11, 12 & 13: There longitudinal checks, extending from Abutment 1, up to 0.03 inches wide in the bottom or side faces of each stringer. See Photos 22 & 23 dated 08/16/2023.

Panel 2:
Stringers 6, 7, 10, 11, 12, 13, 15 & 17: There longitudinal checks, intermittent full length, up to 0.02 inches wide primarily in the bottom face of the stringers except Stringer 17 the check is in the left face. See Photos 15 & 24 dated 08/16/2023.

Panel 3:
Stringers 1 & 17: There diagonal checks are up to 0.1 inches wide x full length diagonal in the faces of the stringers. See Photo 1 dated 09/01/2020.
Stringers 9, 13 and 15: There longitudinal checks up to 0.6 inches wide x full length in the bottoms of Stringer 9, 15 & the left face of Stringer 13. See Photo 26 dated 08/16/2023.

Panel 4:

Stringer 3: There is a check in the bottom corner up to 0.25 inches wide x 2 inch deep approximately 1 foot from Floor Beam 5. See Photo 6 dated 08/21/2018.
Stringers 13 & 15: There are longitudinal checks up to 0.1 inches wide at midspan.
Stringer 16 & 17: There are diagonal checks in the exterior faces up to 0.125 inches wide x intermittently full length.

Panel 5:
Stringers 1, 7 & 17: There are longitudinal checks in the left face of Stringer 1, bottom face of Stringer 7 & right face of Stringer 17 up to 0.25 inches wide x full length longitudinal checks. See Photo 27 dated 08/16/2023.

Panel 6:
Stringers 2 & 3: There diagonal checks up to 0.25 inches wide on the left side that runs from midspan to Floor Beam 7. See Photo 28.
Stringer 17: There are several full-length longitudinal checks up to 0.06 inches wide. See Photo 4 dated 09/01/2020.

Panel 8:
Stringer 1: There is a longitudinal check x full length up to 0.25 inches wide in the left side.
Stringer 2: There is a longitudinal check x full length up to 0.25 inches wide in the bottom.
See Photo 2 dated 08/21/2018.

These conditions have been previously reported and no significant changes were noted.

(117-1160) Crack (Timber)

There is a crack in Stringer 13 between Floor Beams 4 and 5. The crack emanates from a knot about 2.5 feet long located at the 1/4 span closer to Floor Beam 5. The remaining effective depth of the broken Stringer 13 is about 60%. See Photo 29 dated 08/16/2023.

A work request #11463 was submitted to SM&I Load Rating Branch to check this defect (refer to Safe Load Capacity notes). Load Rating Branch performed an analysis of the cracked Stringer 13 and determined that it does not effect the current load rating.

There is a diagonal crack up to 1.5 feet long in Stringer 15, Panel 2 near the bottom of the stringer.

These conditions have been previously reported and no significant changes were noted.

(117-1170) Split/Delamination (Timber)

Panel 2:

There is a split up to 12 inches long x 2 inches high in the Stringer 6 in the bottom of the stringer. See Photo 25 dated 08/16/2023.

Panel 3:

There is a split up to 4 feet long in Stringer 17 at Floor beam 4. (See Photo 26 dated 08/16/2023). This condition has been previously reported and no significant changes were noted. A work recommendation to replace Panel 3 Stringer 17 is on file.

Panel 4:

There is a split up to up to 12 inches in Stringer 3 at Floor beam 4 in the bottom corner of the stringer. See Photo 30 dated 08/16/2023.

Panel 5:

SUPERSTRUCTURE

SUPERSTRUCTURE ELEMENT INSPECTION RATINGS AND NOTES

(59) SUPERSTRUCTURE RATING = 4

Elem No.	Defect/ Prot	Defect	Element Description	Env	Total Qty	Units	Qty in each Condition State CS 1	CS 2	CS 3	CS 4
(117-1170) Split/Delamination (Timber)										
There is a split up to 12 inches long in Stringer 10 in the bottom of the stringer. See Photo 29 dated 08/16/2023.										
These conditions have been previously reported and no significant changes were noted.										
120			**Truss-Steel**	2	73	m	0	72	1	0
	1000		**Corrosion**	2	68		0	68	0	0
	1020		**Connection**	2	1		0	0	1	0
	1900		**Distortion**	2	4		0	4	0	0
	515		**Steel Coating-Paint**	2	712	sq.m	0	0	0	712
		3450	**Paint Sys Breakdown (Steel PC)**	2	712		0	0	0	712
(120) Truss-Steel										
Non-Routine Inspection Element Notes:										
NSTM Inspection(08/17/2023): See the report narrative for the list of members that were inspected.										
(120-1000) Corrosion										
There is light surface rust in areas throughout the truss, notably on the flange edges, cross members and eye bars. This condition accounts for approximately 20% of the truss by area but 100% by length. (See Photos 12 and 13 dated 08/21/2018). This condition has been previously reported and no significant changes were noted.										
(120-1020) Connection										
The nut on the left side U7 pin is loose but the pin does not appear to have shifted at this time. (See Photo 11 dated 08/2102018). This condition has been previously reported and no significant changes were noted.										
(120-1900) Distortion										
At the right side of Abutment 1, the lacing is slightly bent on member L0-U1 and the batten plate is bowed approximately 0.25 inch.										
At the right side of Abutment 1 there is a slight bend in the L0-U1 flange. This deflection is approximately 1 inch over a 1 foot length.										
The right side U5-L5 member has an eye bar that has been welded together.										
The left outside L6-L7 eye bar is deflected upward approximately 2 inches near the L6 pin. See Photo 9 dated 08/22/2017.										
The left side L7-U7 vertical member is bent approximately 2 inches inward and twisted near the L7 pin. See Photo 10 dated 08/22/2017.										
These conditions have been previously reported and no significant changes were noted.										
(120-515-3450) Paint Sys Breakdown (Steel PC)										
Approximately 20% of the paint by area no longer offers protection to the underlying steel. The remainder of the paint is in various stages of deterioration. (See Photos 12 and 13 dated 08/21/2018). This condition has been previously reported and no significant changes were noted.										
152			**Floor Beam-Steel**	2	49	m	0	49	0	0
	1000		**Corrosion**	2	49		0	49	0	0
	515		**Steel Coating-Paint**	2	37	sq.m	0	0	0	37
		3450	**Paint Sys Breakdown (Steel PC)**	2	37		0	0	0	37
(152) Floor Beam-Steel										
Routine Inspection Element Notes:										
A 10 foot center section of each floor beam has a rebar tack welded to the top and bottom flanges on both sides. There are also 3 vertical rebars 1.5 feet from each end of the floor beam spaced 1 foot on center. (See Photo 2 dated 10/24/2013). This condition has been previously reported and no significant changes were noted.										
Non-Routine Inspection Element Notes:										
NSTM Inspection (08/17/2023): See the report narrative for the list of members that were inspected.										
(152-1000) Corrosion										
There is light surface rust in places throughout the floor beams, notably on the flange edges. This condition accounts for approximately 20% of the floor beams by area but 100% by length. (See Photo 4 dated 08/21/2018). This condition has been previously reported and no significant changes were noted.										

SUPERSTRUCTURE

SUPERSTRUCTURE ELEMENT INSPECTION RATINGS AND NOTES

(59) SUPERSTRUCTURE RATING = 4

Elem No.	Defect/ Prot	Element Description	Env	Total Qty	Units	Qty in each Condition State CS 1	CS 2	CS 3	CS 4
(152-515-3450) Paint Sys Breakdown (Steel PC)									
Approximately 20% of the paint by area no longer offers protection to the underlying steel. The remainder of the paint is in various stages of deterioration. (See Photos 12 and 13 dated 08/21/2018). This condition has been previously reported and no significant changes were noted.									
311		**Bearing-Moveable**	2	2	each	2	0	0	0
(311) Bearing-Moveable									
There were no significant defects noted.									
313		**Bearing-Fixed**	2	2	each	2	0	0	0
(313) Bearing-Fixed									
There were no significant defects noted.									

SUPERSTRUCTURE PHOTOGRAPHS

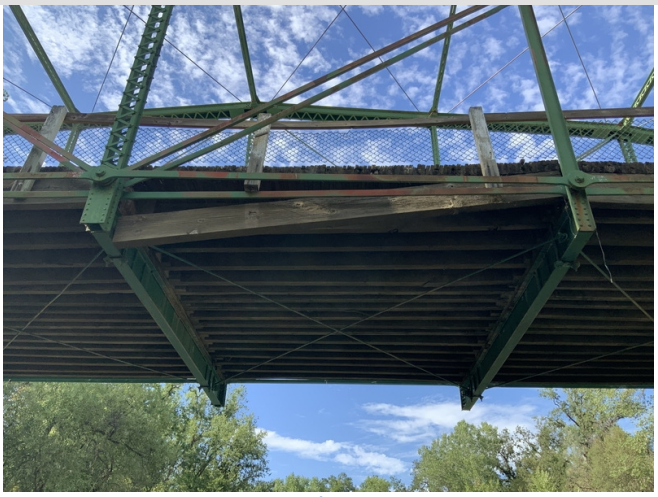


Photo 5
Stringer 17 has completely migrated off of Floor Beam 5

SUBSTRUCTURE

DESCRIPTION UNDER STRUCTURE

(42b) TYPE OF SERVICE UNDER	5-WATERWAY	(38) NAVIGATION CONTROL	0: NO CONTROL
(69) UNDERCLEARANCES V - H	N NOT APPLICABLE (NBI)	(111) PIER PROTECTION	**N/A**
(71) WATER ADEQUACY	7 ABOVE MINIMUM	(39) NAVIGATION VERTICAL CLEARANCE	0.0 M
(61) CHANNEL PROTECTION	6 BANK SLUMPING	(116) VERT-LIFT BRIDGE NAV MIN VERTICAL CLEAR	M
(113) SCOUR	5 STABLE W/IN FOOTING OR PILE	(40) NAVIGATION HORIZONTAL CLEARANCE	0.0 M
SCOUR POA DATE	N/A		

CHANNEL DESCRIPTION

Medium width, not-braided, moderate bend upstream, several gravel bars on both sides, no bank erosion, heavy well-established vegetation on banks. Gravel and sand channel.

SUBSTRUCTURE ELEMENT INSPECTION RATINGS AND NOTES

(60) SUBSTRUCTURE RATING = (6)

Elem No.	Defect/ Prot	Element Description	Env	Total Qty	Units	Qty in each Condition State CS 1	CS 2	CS 3	CS 4
215		**Abutment-RC**	3	21	m	20	0	1	0
	1080	**Delamination/Spall/Patched Area**	3	1		0	0	1	0
(215-1080) Delamination/Spall/Patched Area									
There is a corner spall up to 4 inches x 6 inches x 3 inches deep near the right bearing of Abutment 2. No rebar is exposed. (See									

SUBSTRUCTURE

SUBSTRUCTURE ELEMENT INSPECTION RATINGS AND NOTES

(60) SUBSTRUCTURE RATING = (6)

Elem No.	Defect/ Prot	Element Description	Env	Total Qty	Units	Qty in each Condition State CS 1	CS 2	CS 3	CS 4
(215-1080) Delamination/Spall/Patched Area									
Photo 31 dated 08/16/2023). This condition has been previously reported and no significant changes were noted.									
220		**Pile Cap/Footing-RC**	2	5	m	0	5	0	0
	6000	**Scour**	2	5		0	5	0	0
(220-6000) Scour									
The Abutment 2 footing is exposed up to 1 foot vertically over the left half of the footing with no undermining. (See Photo 32 dated 08/16/2023). This condition has been previously reported and no significant changes were noted.									

WORK RECOMMENDATIONS

DECK WORK RECOMMENDATIONS

Rec Date	08/23/2022	Work By	LOCAL AGENCY	Est Cost		Dist Target
Status	PROPOSED	Action	Deck-Misc	Str Target	ROUTINE	EA

Repair or replace the missing and broken portions of the metal grating over the timber wheel runners.

Rec Date	08/05/2008	Work By	LOCAL AGENCY	Est Cost		Dist Target
Status	PROPOSED	Action	Deck-Replace	Str Target	ROUTINE	EA

Replace the entire timber deck.

JOINT/APPR/RAIL WORK RECOMMENDATIONS

Rec Date	08/06/2013	Work By	LOCAL AGENCY	Est Cost		Dist Target
Status	PROPOSED	Action	Rail-Rehab	Str Target	ROUTINE	EA

Replace the timber bridge rail.

SUPERSTRUCTURE WORK RECOMMENDATIONS

Rec Date	08/23/2022	Work By	LOCAL AGENCY	Est Cost		Dist Target
Status	PROPOSED	Action	Super-Misc	Str Target	ROUTINE	EA

Replace missing and displaced spacer blocks between the timber stringers.

Rec Date	08/22/2017	Work By	LOCAL AGENCY	Est Cost		Dist Target
Status	PROPOSED	Action	Super-Misc	Str Target	ROUTINE	EA

Remove any transverse play in the pin and re-fasten the nut at the U7 left pin.

Rec Date	08/17/2016	Work By	LOCAL AGENCY	Est Cost		Dist Target
Status	PROPOSED	Action	Super-Rehab	Str Target	ROUTINE	EA

Restore bearing area to Stringers 1 and 17 in Bay 2 and Stringer 17 in Bay 5. These members have partially pulled away from their supporting floor beam.

Rec Date	08/05/2008	Work By	LOCAL AGENCY	Est Cost		Dist Target
Status	PROPOSED	Action	Super-Replace	Str Target	ROUTINE	EA

Relace the following stringers:

Panel 1 - Stringer 10 and 15
Panel 2 - Stringers 1, 7, 9, 12 and 15
Panel 3 - Stringers 1, 9, 15 and 17
Panel 4 - Stringer 13, 16 and 17
Panel 5 - Stringers 7, 13 and 17
Panel 6 - Stringers 2, 3, 7, 15 and 17
Panel 7 - Stringer 2

SUBSTRUCTURE WORK RECOMMENDATIONS - NONE

OTHER WORK RECOMMENDATIONS

Rec Date	09/01/2020	Work By	LOCAL AGENCY	Est Cost		Dist Target
Status	PROPOSED	Action	Paint Bridge Superst	Str Target	ROUTINE	EA

Blast clean and paint all of the steel members.

137 - Operational Signs

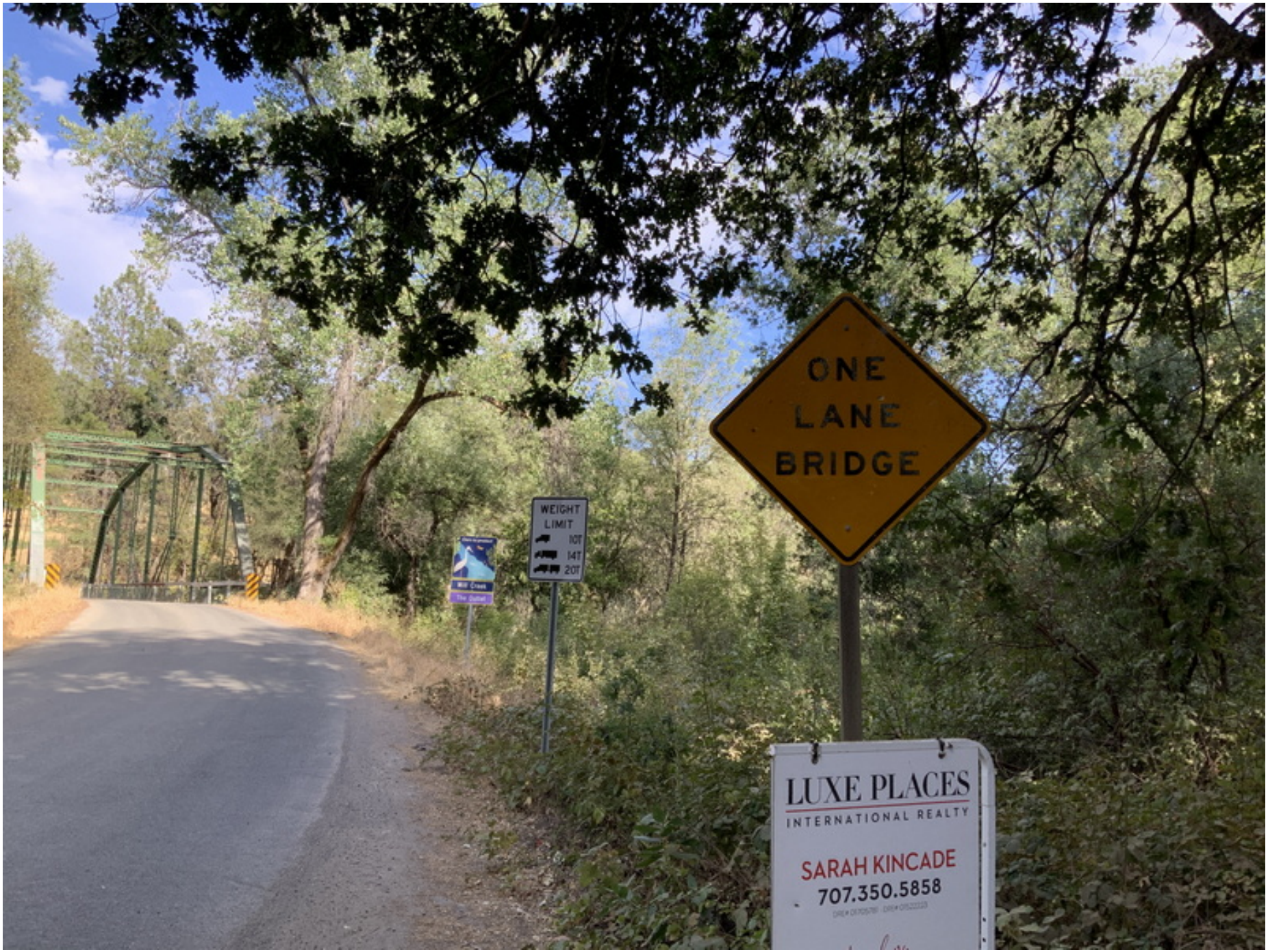


Photo #1

Operational signs at the Abutment 1 approach

137 - Operational Signs

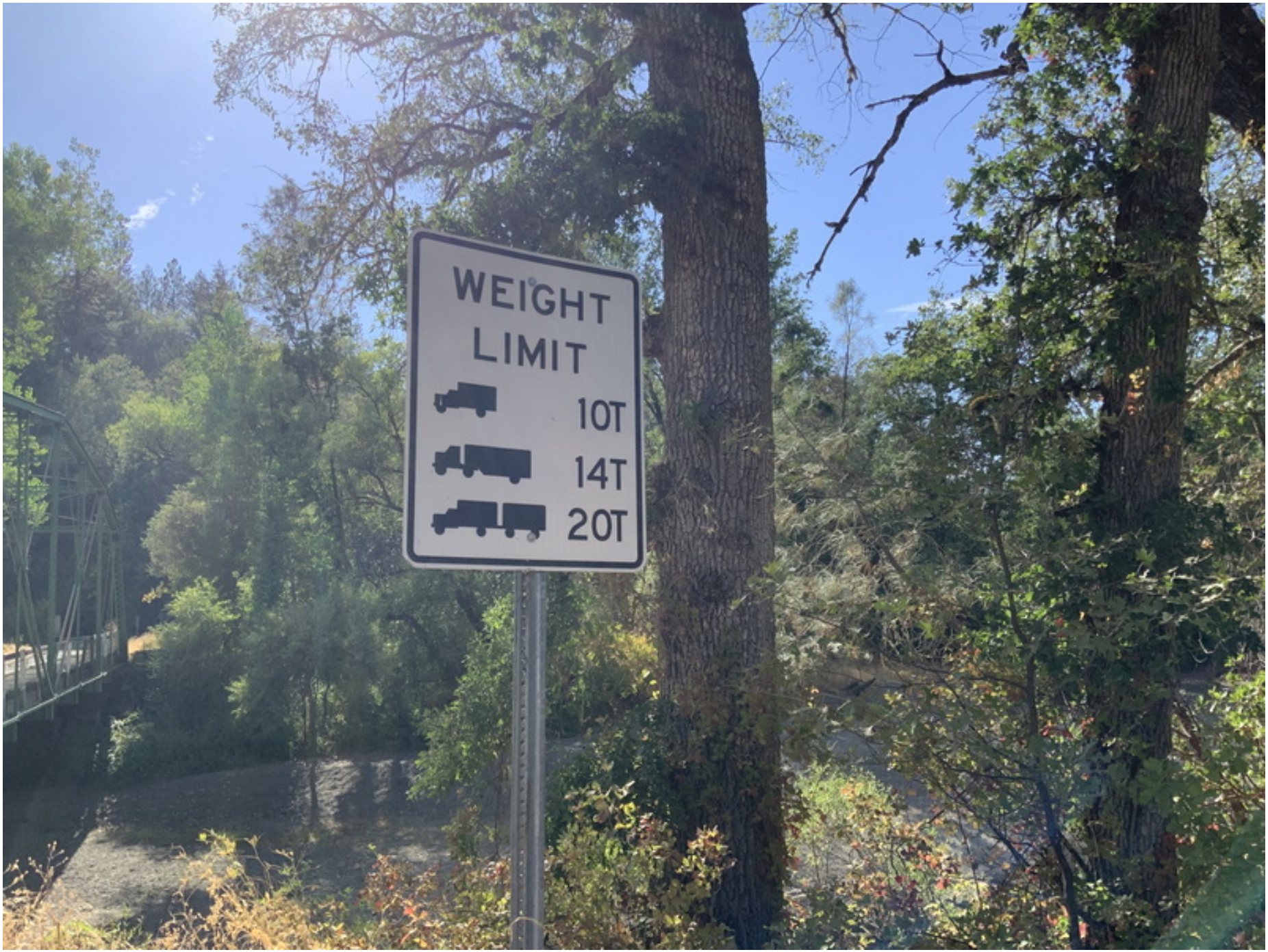


Photo #2

Load posting sign at the Abutment 2 approach

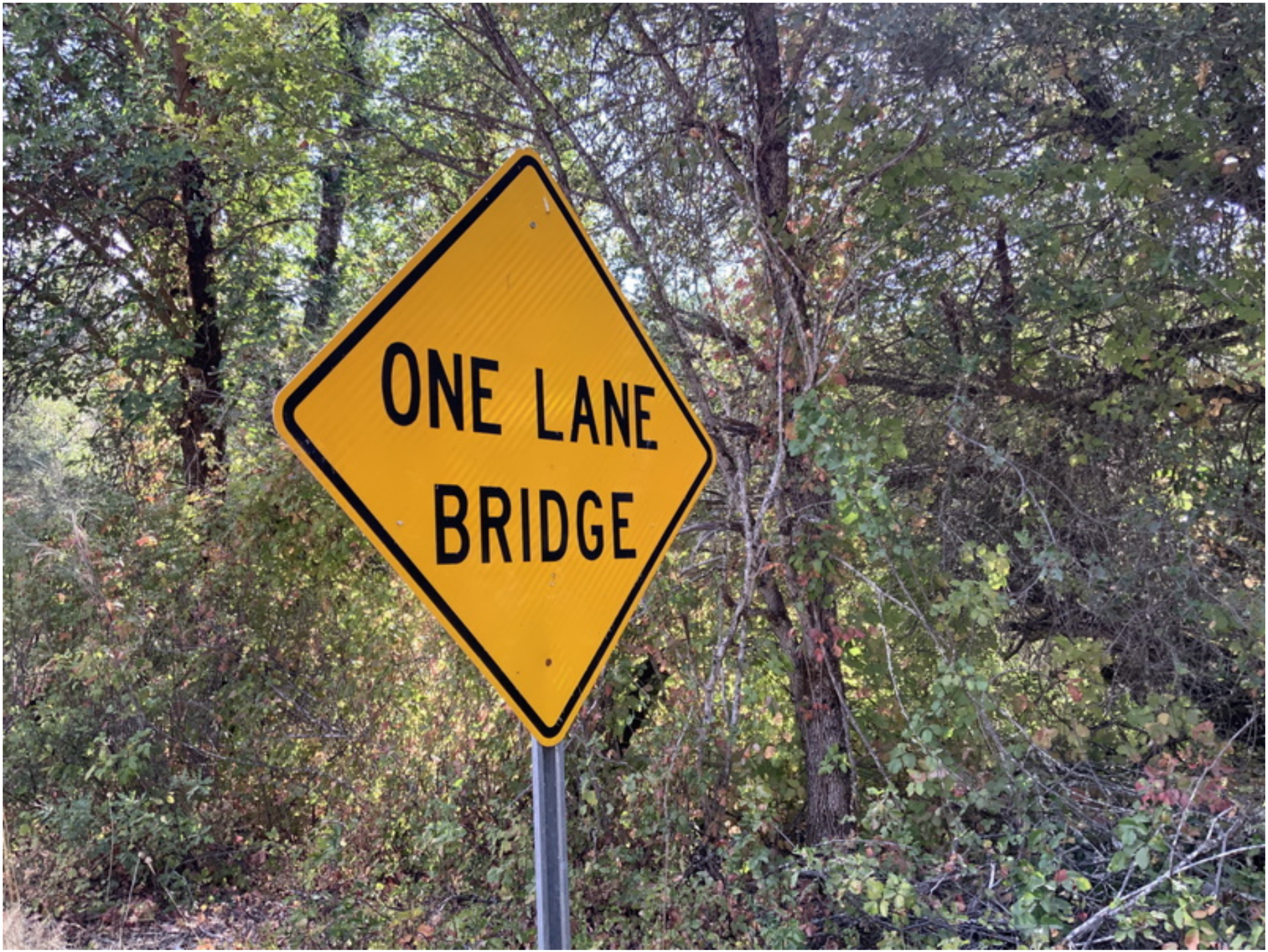


Photo #3
"One Lane Bridge" sign at the Abutment 2 approach

10C0111 MILL CREEK 2.0 MI E FAIRBANKS RD

Aug 07, 2024 [AABI]

123 - Rail-Repairs

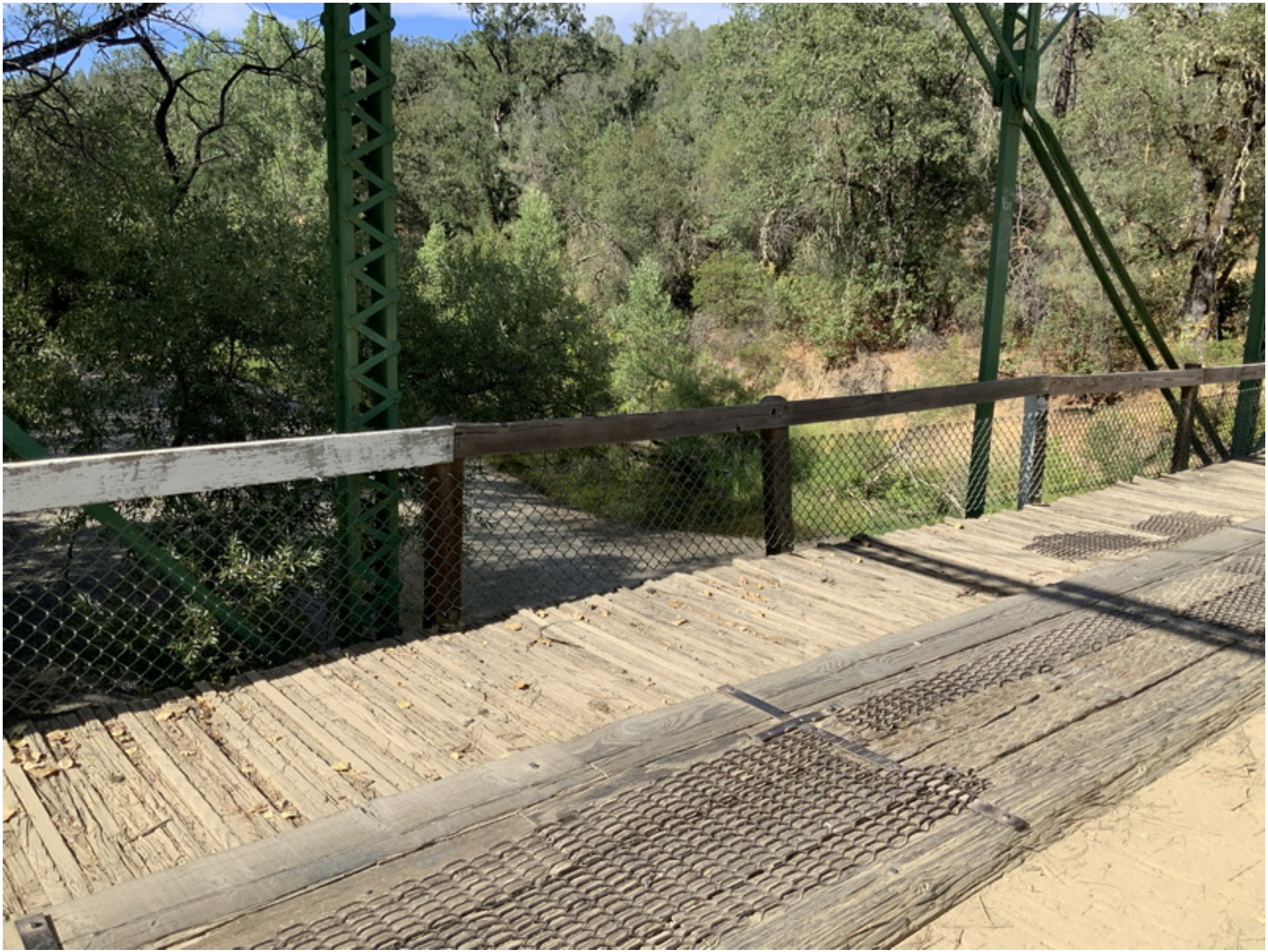


Photo #4

Replaced missing section in the left timber rail. Far right side of photo replaced

10C0111 MILL CREEK 2.0 MI E FAIRBANKS RD

Aug 07, 2024 [AABI]

107 - Super-Damage/Deterioration

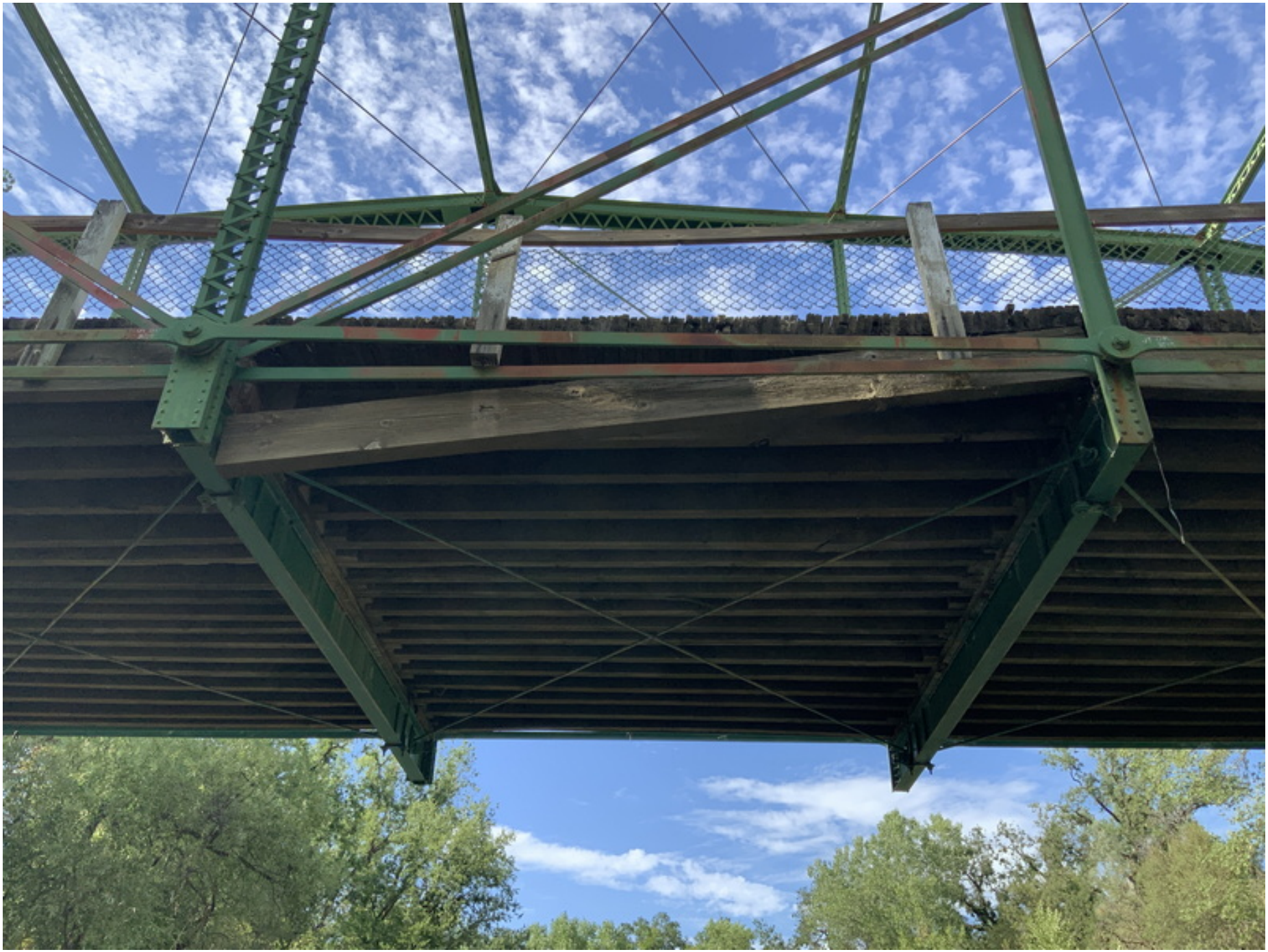


Photo #5

Stringer 17 has completely migrated off of Floor Beam 5