

Bridge Key: 29263 Structure Name: X994250 16.15

(6)Features Intersected: UPPER CROOKED RIVER (9)Location: 30.2 E 12.6 S GRANGEVILLE

Facility Carried(Route): CROOKED RIVER ROAD Admin Jurisdiction: 4900 Idaho County

Xref Structure Name: District: 02

Elm/Env	Element Description	Total Qty	Units	State 1	State 2	State 3	State 4
31/2	Timber Deck	395	sq.ft	0	395	0	0
	The timber deck is 2x6-inch timbers on edge, cove	red with a gravel we	aring su	ırface.			
	The gravel is well-packed and in good condition. T punky, per hammer sounding.	The timber ends have	e minor	splits. The	e top of the	e deck is	
1140	0/2 Decay/Section Loss	369	sq.ft	0	369	0	0
	The top of the deck is punky, per hammer sounding	g.					
1170	0/2 Split/Delamination (Timber) The timber ends have minor splits.	26	sq.ft	0	26	0	0
111/2	Timber Open Girder/Beam	178	ft	178	0	0	0
The pressure treated 19.5 x 8-inch timber beams are numbered from west to east.							

The timber has minor water staining from deck leakage. No rot was noted from hammer sounding; 2023 Resistance Drilling found rot in Beam 1 (CS1).

216/2 Timber Abutment

The integral lapped jointed pressure treated timber abutments and wingwalls are made with 10×10 -inch timbers. Each abutment has (11) deadman timbers placed for vertical support; 5/8-inch rebar is nailed through to lock the joints in place. No other rebar holds the abutments together. Each wingwall contains (6) deadman timbers.

The abutments are in poor condition and the south abutment is actively failing, due to rot, crushed timber, and bowing from back pressure. The top of the south abutment has settled by 1.5-inch.

- (CS4) South abutment: 2 timber from the top has 2-inch-bending over the member with a 2-foot-long split.
- (CS4) South abutment: 3rd timber from the top is fully rotten and has crushing and bulging with splits; it has collapsed by 1-inch.
- (CS4) South abutment: 4th timber from the top is fully rotten and has a 1.5-inch offset.
- (CS4) South abutment, 4th timber from top: 2023 Resistance drilling found rot up to 9-inch-wide.
- (CS4) North abutment, 6th timber from top: 2023 Resistance drilling found rot up to 8-inch-wide.
- (CS4) (11) rebar pin connections have failed due to rot or back pressure.
- (CS4) South abutment: bottom timber has a 2-inch offset.
- (CS4) North abutment: bottom timber has a 1.5-inch offset.
- (CS4) The wingwalls have all been heavily effected by the wildfire and are burnt to 50% structurally ineffective. The ends are particularly burnt and the timbers are cracked in half.
- (CS3) SW wingwall: structural failure from the burn with a 5-degree tilt.

1020/2 **Connection** 11 ft 0 0 0 11

- (CS4) (11) rebar pin connections have failed due to rot or back pressure.
- (CS4) South abutment: bottom timber has a 2-inch offset.
- (CS4) North abutment: bottom timber has a 1.5-inch offset.



Bridge Key: 29263 X994250 16.15 Structure Name: **UPPER CROOKED RIVER** 30.2 E 12.6 S GRANGEVILLE (6)Features Intersected: (9)Location: CROOKED RIVER ROAD 4900 Idaho County Facility Carried(Route): Admin Jurisdiction: Xref Structure Name: District: 02 0 0 0 ft 1140/2 Decay/Section Loss 47 47 The abutments are in poor condition and the south abutment is actively failing, due to rot, crushed timber, and sliding from back pressure. (CS4) South abutment: 3rd timber from the top is fully rotten and has crushing and bulging with splits; it has collapsed by 1-inch. (CS4) South abutment: 4th timber from the top is fully rotten and has a 1.5-inch offset. (CS4) South abutment, 4th timber from top: 2023 Resistance drilling found rot up to 9-inch-wide. (CS4) North abutment, 6th timber from top: 2023 Resistance drilling found rot up to 8-inch-wide. (CS4) The wingwalls have all been heavily effected by the wildfire and are burnt to 50% structurally ineffective. The ends are particularly burnt and the timbers are cracked in half. (CS3) SW wingwall: structural failure from the burn with a 5-degree tilt. 4000/2 Settlement 6 ft 0 0 6 0 (CS3) SW wingwall: structural failure from the burn with a 5-degree tilt. 6 26 ft 20 7000/2 **Damage** (CS4) The wingwalls have all been heavily effected by the wildfire and are burnt to the point of being 50% structurally ineffective. The ends are particularly burnt and the timbers are cracked in half. (CS3) SW wingwall: structural failure from the burn with a 5-degree tilt. 52 ft 330/2 Metal Bridge Railing The bridge rail is w-rail on timber posts on 8x8-inch timber curbs. The railing is in good condition. The w-rail coating is faded but still effective. The curbs are in fair condition with abrasion along the sides; the ends have impact damage from snow plows. 0 0 515/2 Steel Protective Coating sq.ft 130 0 The w-rail coating is faded but still effective.



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Xref Structure Name: District: 02

Additional Information

FILL: Average fill height is 1.5-inch; the gravel height along the curbs is up to 5-inch.

ROADWAY APPROACHES: South approach alignment is straight; north approach alignment has a slight curve. Both approaches are smooth and well-graveled.

EMBANKMENT: The embankment has recently been burned and is heavily impacted by the fire and by the heavy machinery used during the fire. Only young grasses are hold the soil in place; there is potential for heavy erosion during the spring runoff.

CHANNEL: The well-established channel is lined with medium to large rocks. The upstream channel is filled with small to large trees and woody debris from the fire. Channel cross section done in 2023.

SIDEWALKS/CURBS: Rail attached to curb.

DRAINS: The gravel buildup blocks the 4.5-inch gaps under the curbs, inhibiting drainage.

SIGNS: Hazard markers are set at three bridge corners; the NW marker is missing; the SE marker is badly faded. Both approaches have new [3 TON] load limit signs.

GUARDRAIL: None.

UTILITIES: None.

NOTES: The exact construction date is unknown, but a similar bridge in the area built in 1965; Idaho County notified ITD about the bridge and added it to the system in 2023. The substructure is rated a 3 due the south abutment settlement; the county will be going out to the bridge every 3-months to take photos of the south abutment.

SCOUR REVIEW: N/A

INSPECTION FREQUENCY: The bridge is on a 12-month frequency due to the abutment condition.

WORK ACCOMPLISHED: N/A

LOAD RATING: Request initial analysis. The analysis should take into account that the bridge carries heavy machinery on a regular basis.

Maintenance Recommendations

Recommendation	Priority	Suggested Work Assignment
Repair/replace the abutments.	High OKESSIONAL ENGINEER	Local Agency
Inspector's Signature: Inspector Number and Name: 146 - So	tt Hibbs Extreme Access J 3006	10/19/2023
	Exp 2/28/25 OF IOP	Original Signed By: Anthony Scott Hibbs Date Original Signed: 11/28/2023
	Nr scott	Original is stored on an Idaho Transportation Departmen Server, in care of the Bridge Section Database Manager



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Xref Structure Name: District: 02

IDENTIFICATION

(1)State: 16 Idaho (2)District: District 2

(3)County: 049 Idaho

(4)Place Code: Not within City/Town

(5)Inventory Route: 140000000

(7)Facility Carried: CROOKED RIVER ROAD

(11)Milepoint: 16.151374 Agency Milepost: 016.151

(12)Base Hwy Network: Not on Base Network

(13a)LRS Inventory Route:

(13b)LRS Sub Route:

(16)Latitude: 45° 41' 47.8" (17)Longitude: 115° 32' 49.6"

(98)Border Bridge Code:

(99)Border Bridge ID:

Segment Code: 001805

Segment Under Rte: Segment Other Rte:

Drawing Number: 18361

Project Key Number:

Inspection Area: 921 MPO: N/A

STRUCTURE TYPE AND MATERIALS

(43a/b)Main Span Material/Design:

7 Wood or Timber 2 Stringer/Girder

(44a/b)Approach Span Material/Design:

(45)No. of Spans Main Unit: 1

(46)No. of Approach Spans: 0

(107)Deck Type: 8 Wood or Timber

(108a)Wearing Surface:8 Gravel(108b)Membrane:0 None

(108c)Deck Protection: None

Deck Applications

CLASSIFICATION

(112)NBIS Length: Long Enough (104)Highway System: 0 Not on NHS

(26)Functional Class: 09 Rural Local

(100)Defense Highway: 0 Not a STRAHNET hwy

(101)Parallel Structure: No || bridge exists (102)Direction of Traffic: 2 2-way traffic

(103)Temporary Structure:

(105)Federal Lands Highway: 0 N/A (NBI)

(110)Design Natl Network: 0 Not part of natl netwo

(20)Toll Facility: 3 On free road

(21)Custodian: County Hwy Agency
 (22)Owner: County Hwy Agency
 (37)Historical Significance: 4 Hist sign not determin

GEOMETRIC DATA

(48)Maximum Span Length: 25.0 ft

(49)Structure Length: 26 ftTotal Length: 26 ft

(50a)Curb/Sidewalk Width Lt: 0.7 ft

(50b)Curb/Sidewalk Width Rt: 0.7 ft

(51)Width Curb to Curb: 14.2 ft (52)Width Out to Out: 15.5 ft

(32)App Roadway Width: 17 ft

(33)Median: 0 No median

(34)Skew: 0°

(35)Structure Flared: 0 No flare

(10)Vertical Clearance: 99.99 ft(47)Total Horiz Clearance: 14.2 ft

(53)Min Vert Clr Over Deck: 99.99 ft

(54a)Min Vert Underclr Ref: N Feature not hwy or RR

(54b)Min Vert Underclr: 0.00 ft

(55a)Min Lat Underclr Ref Rt: N Feature not hwy or RR

(55b)Min Lat Underclr Rt: 0.0 ft (56)Min Lat Underclr Lt: 0.0 ft

LRS

Route ID: 01805AOH000 Measure: 16.15137494

Route ID Under Rte:
Measure Under Rte:

Route ID 2nd Rte Under: Measure 2nd Rte Under:



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LOAD RATING

(31)Design Load: 5 MS 18 (HS 20)

 (64)Operating Rating:
 60 tons
 / HS33.3

 (66)Inventory Rating:
 36 tons
 / HS20.0

(70)Posting: 0 >39.9% below(41)Posting Status: P Posted for load

AGE AND SERVICE

(27)Year Built: 1965

(106)Year Reconstructed:

(42a)Type of Service On: 1 Highway(42b)Type of Service Under: 5 Waterway

(28a)Lanes On: 2 (28b)Lanes Under: 0

 (29)ADT:
 50

 (30)Year of ADT:
 2023

 (109)Truck ADT:
 30%

 (19)Detour Length:
 58 miles

 Speed Limit:
 15 MPH

PROPOSED IMPROVEMENTS

(75a)Type of Work:

(75b)Work Done By:

 (76)Length of Improvement:
 47 ft

 (94)Bridge Improvement Cost:
 \$217,000

 (95)Rdwy Improvement Cost:
 \$22,000

 (96)Total Project Cost:
 \$326,000

 (97)Year of Cost Estimate:
 2023

 (114)Future ADT:
 75

 (115)Year of Future ADT:
 2042

YEAR PROGRAMMED:

CONDITION

(58)Deck: 6 Satisfactory (59)Superstructure: 6 Satisfactory (60)Substructure: 3 Serious

(61)Channel/Protection: 5 Bank Prot Eroded

(62)Culvert: N N/A (NBI)

APPRAISAL

6 Equal Min Criteria

(67)Structure Condition: 3 Intolerable - Correct

(68)Deck Geometry: 2 Intolerable - Replace (69)Undrclear,Vert and Horiz: N Not applicable (NBI)

(71)Waterway Adequacy: 6 Equal Minimum

(72)Approach Alignment:(36)Traffic Safety Features:

(a)Bridge Rail: 1 Meets Standards
(b)Transition: 0 Substandard
(c)Approach Rail: 0 Substandard
(d)Approach Rail Ends: 0 Substandard

(113)Scour Critical: 6 Calcs not made

NAVIGATION DATA

(38)Navigation Control: Permit Not Required

(39)Vertical Clearance: (40)Horizontal Clearance: (111)Pier Protection: (116)Lift Bridge Vert Clr:

ENVIRONMENTAL

Environmental Concerns: No

INSPECTION

(90)Inspection Date: 10/19/2023 (91)Inspection Frequency: 12 months

(92)Supplemental Inspections Frequency: (93)Date of Inspections:

 (a)Fracture Critical Detail:
 NA
 (a)FC Inspection Date:

 (b)Underwater Inspection:
 NA
 (b)UW Inspection Date:

 (c)Fatigue Detail (OS) Inspection:
 NA
 (c)Fatigue Detail (OS) Date:

 (d)In-Depth Inspection:
 NA
 (d)In-Depth Date:

 (e)Confined Space Inspection:
 NA
 (e)Confined Space Date:

Channel Cross Section Year: 2023

Equipment Needed: None



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WEARING SURFACE and DEAD LOAD INFORMATION

Asphalt:0.0 inchesConcrete:0.0 inchesGranular:1.5 inchesTimber:0.0 inches

POSTING INFORMATION

WEIGHT

Load Analysis Date:

Bridge Factor:

Load Analysis Required:

B Initial Analysis Req

Route Color:

Load Rating Analysis Recommended Actual

IR (tons) OR (tons) Posting(tons) Posting(tons)

H Truck HS Truck

 Type3
 Type3
 3
 3

 Type 3S2
 Type 3S2
 3
 3

 Type 3-3
 Type 3-3
 3
 3

Axle Limit

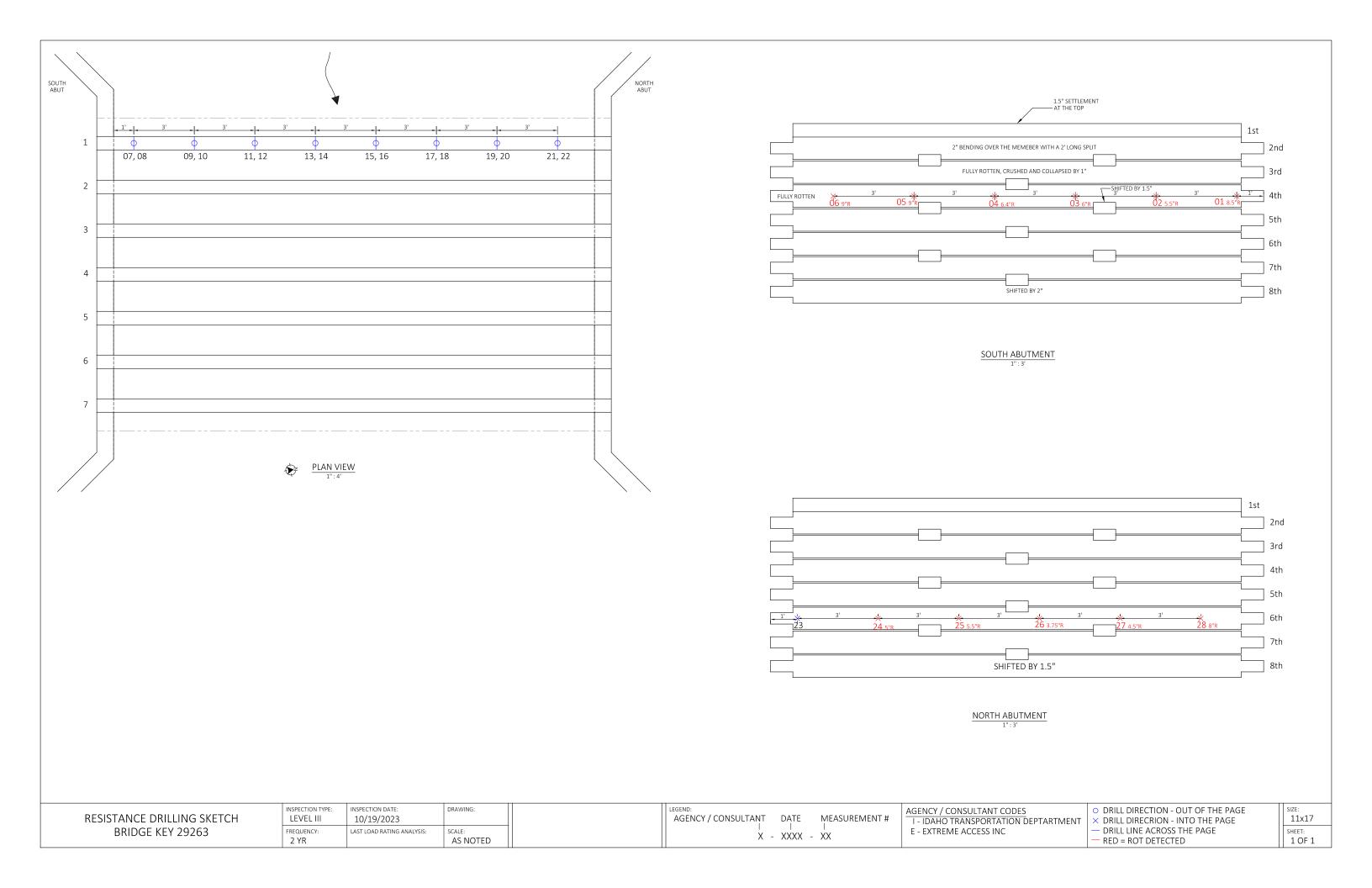
<u>HEIGHT</u>

Recommended Actual

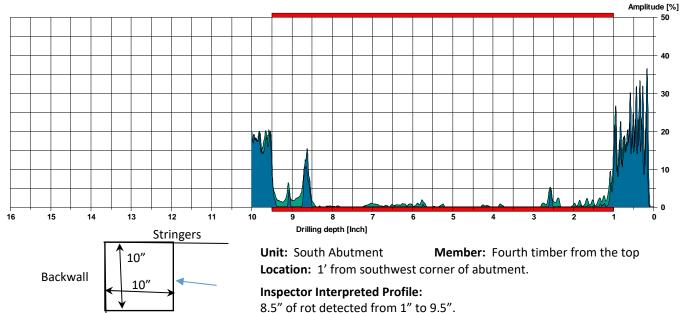
Height Posting:

ACTUAL WIDTH POSTING

Single Lane All Vehicles: N
Single Lane Trucks/Buses: N

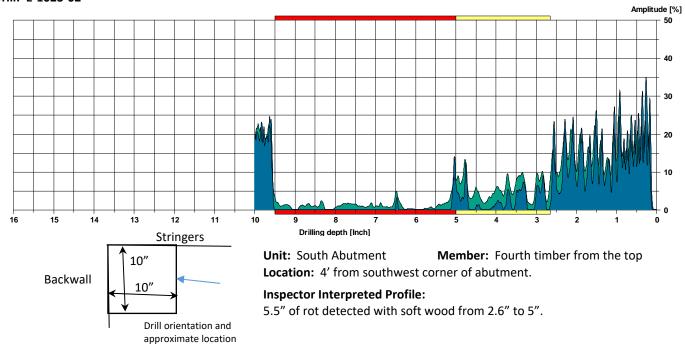


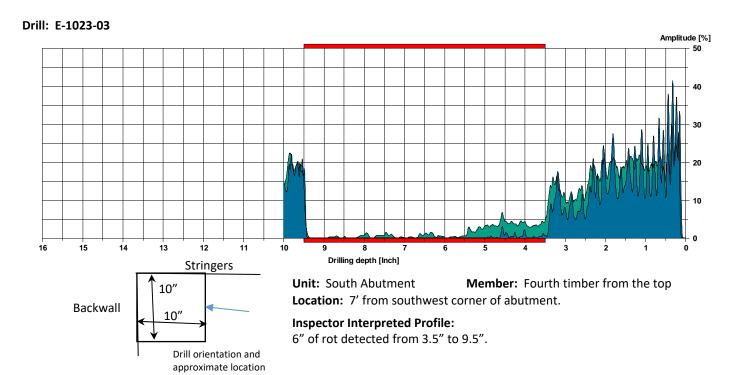


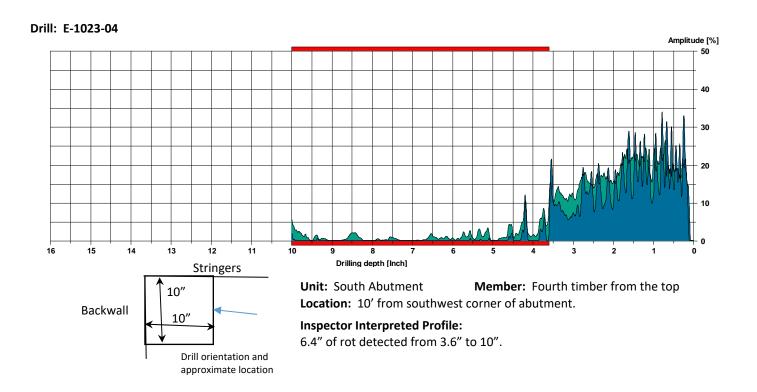


Drill: E-1023-02

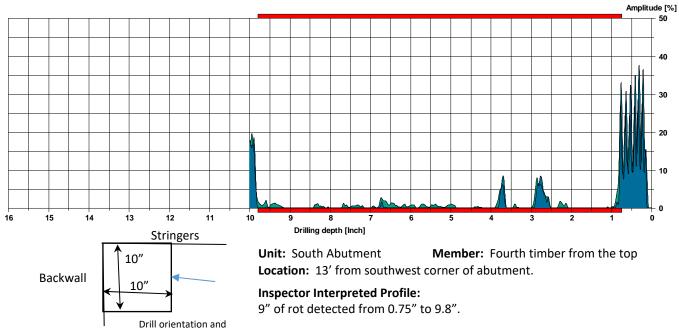
Drill orientation and approximate location





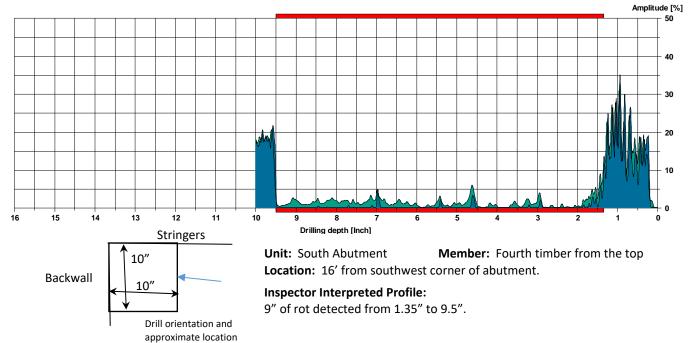






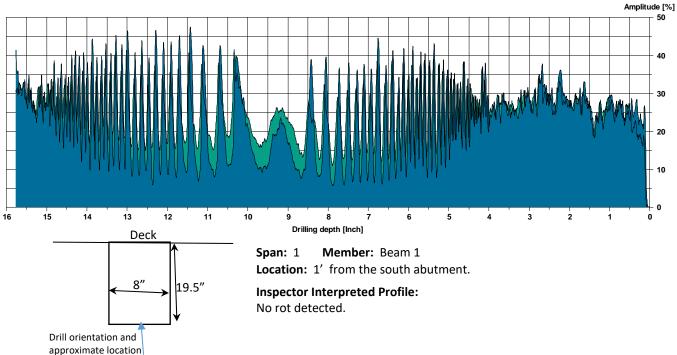


approximate location

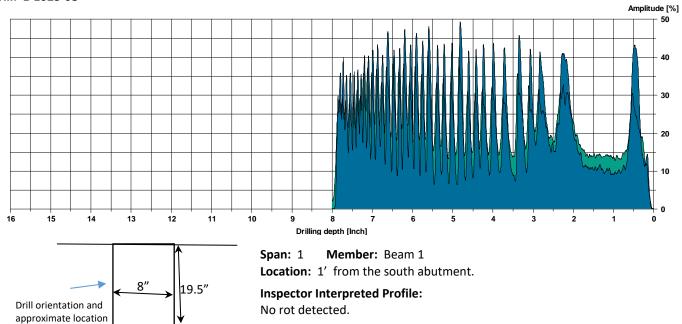


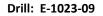
Bridge 29263 IML-RESI Power Drill PD400 10/19/2023

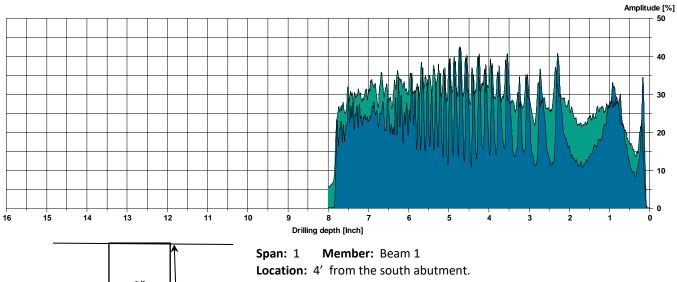


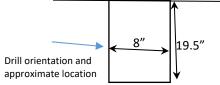


Drill: E-1023-08





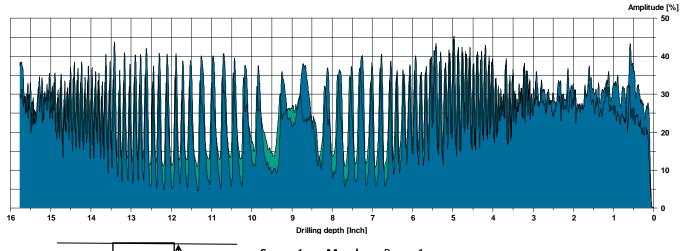


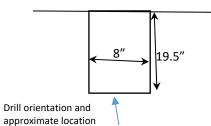


Inspector Interpreted Profile:

No rot detected.

Drill: E-1023-10

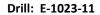


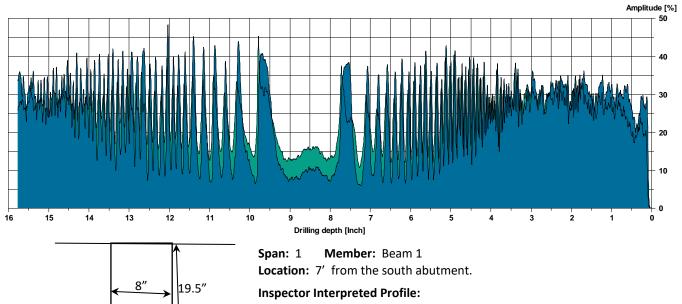


Span: 1 Member: Beam 1

Location: 4' from the south abutment.

Inspector Interpreted Profile:

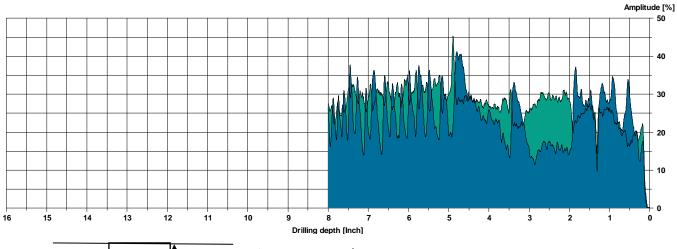


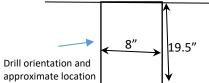


Drill orientation and approximate location

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Drill: E-1023-12

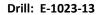


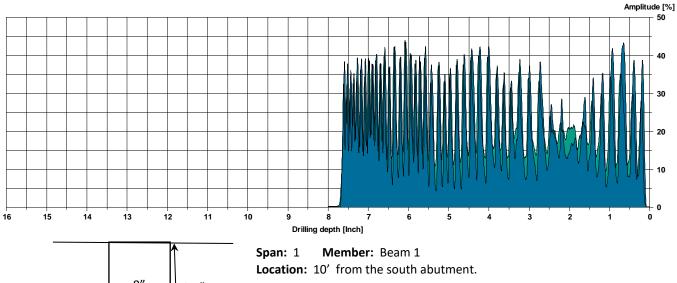


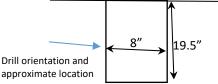
Span: 1 Member: Beam 1

Location: 7' from the south abutment.

Inspector Interpreted Profile:





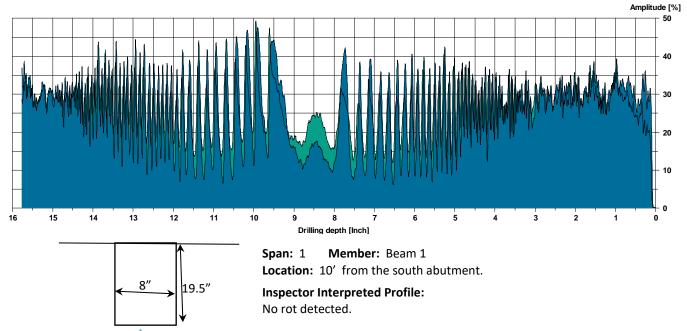


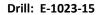
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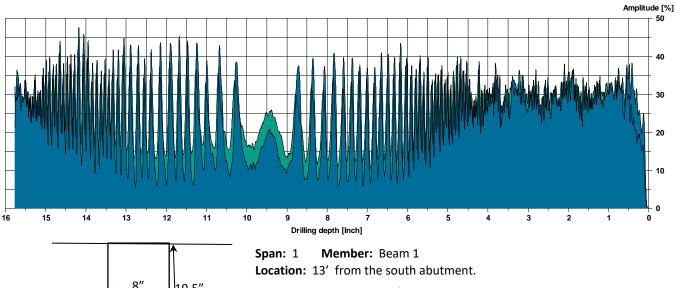
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Drill: E-1023-14

Drill orientation and approximate location







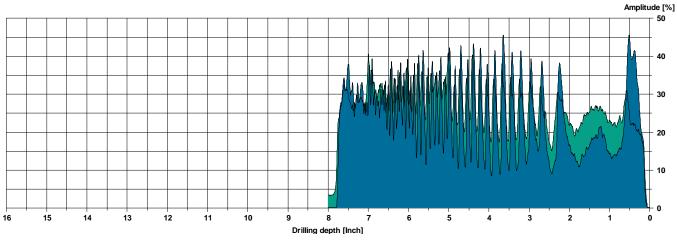
Drill orientation and

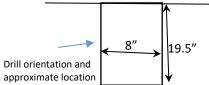
approximate location

Inspector Interpreted Profile:

No rot detected.

Drill: E-1023-16

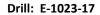


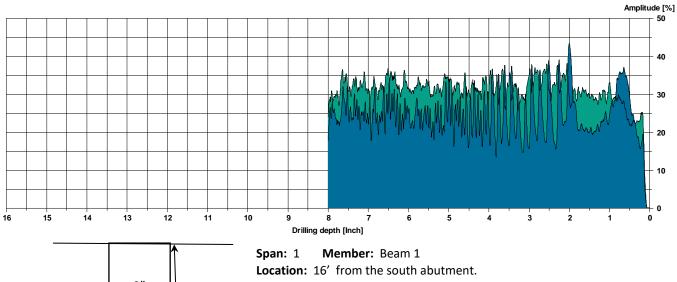


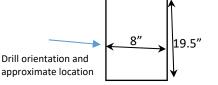
Span: 1 Member: Beam 1

Location: 13' from the south abutment.

Inspector Interpreted Profile:



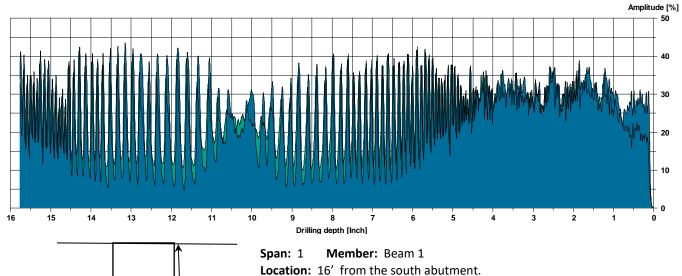


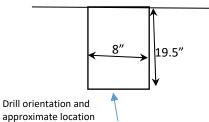


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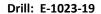
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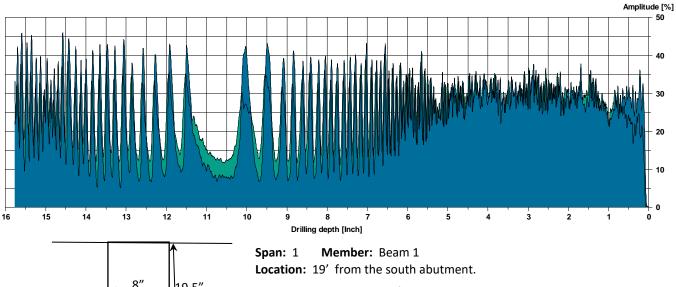
Drill: E-1023-18





Inspector Interpreted Profile:





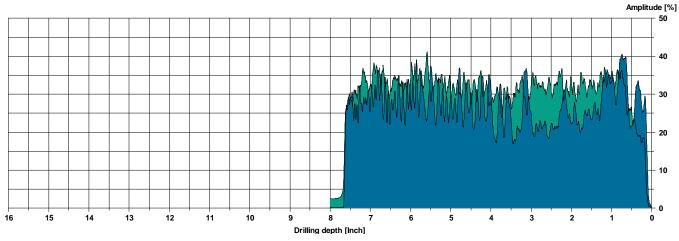
Drill orientation and

approximate location

Inspector Interpreted Profile:

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Drill: E-1023-20



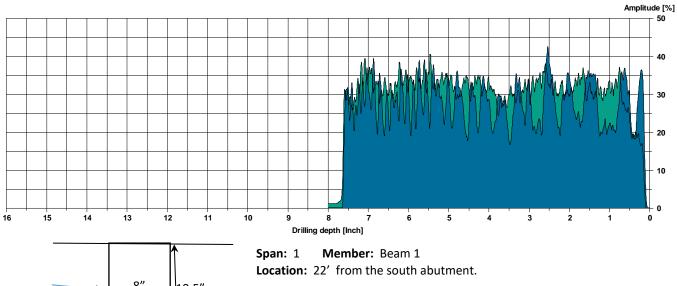
Drill orientation and approximate location

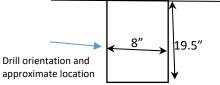
Span: 1 Member: Beam 1

Location: 19' from the south abutment.

Inspector Interpreted Profile:



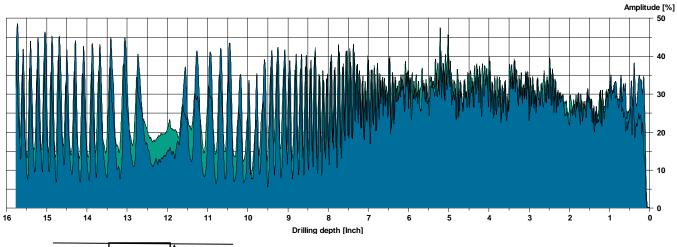


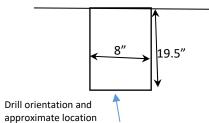


Inspector Interpreted Profile:

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Drill: E-1023-22

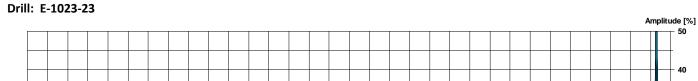


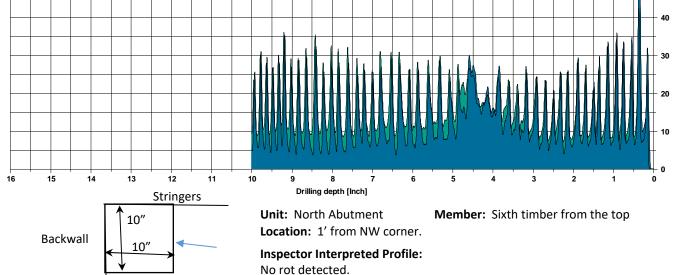


Span: 1 Member: Beam 1

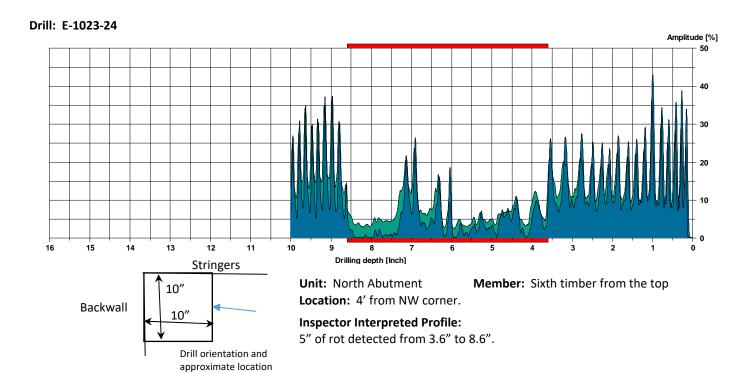
Location: 22' from the south abutment.

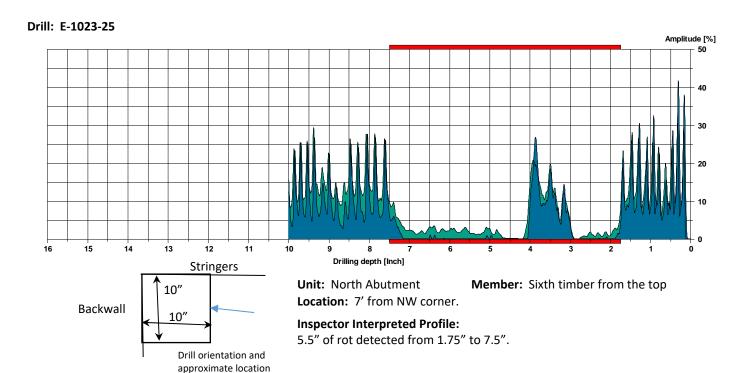
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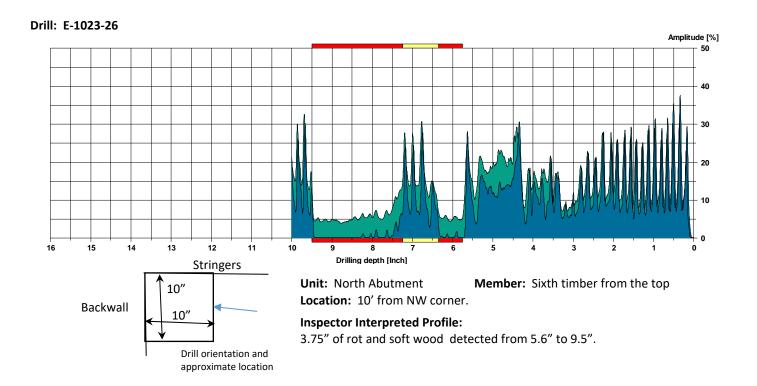


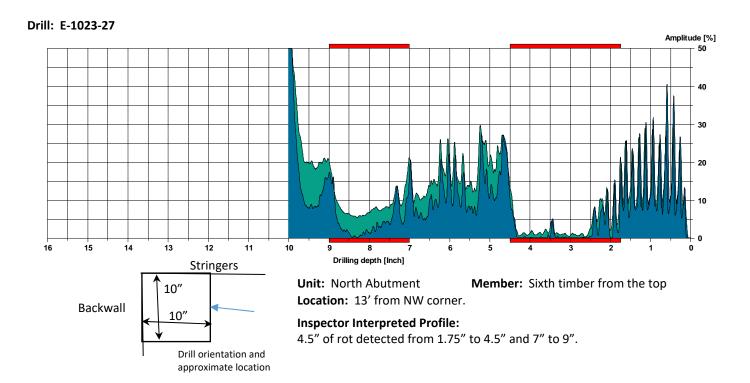


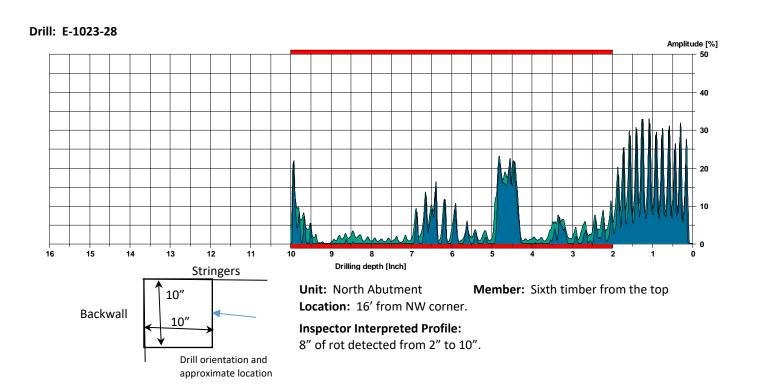
Drill orientation and approximate location

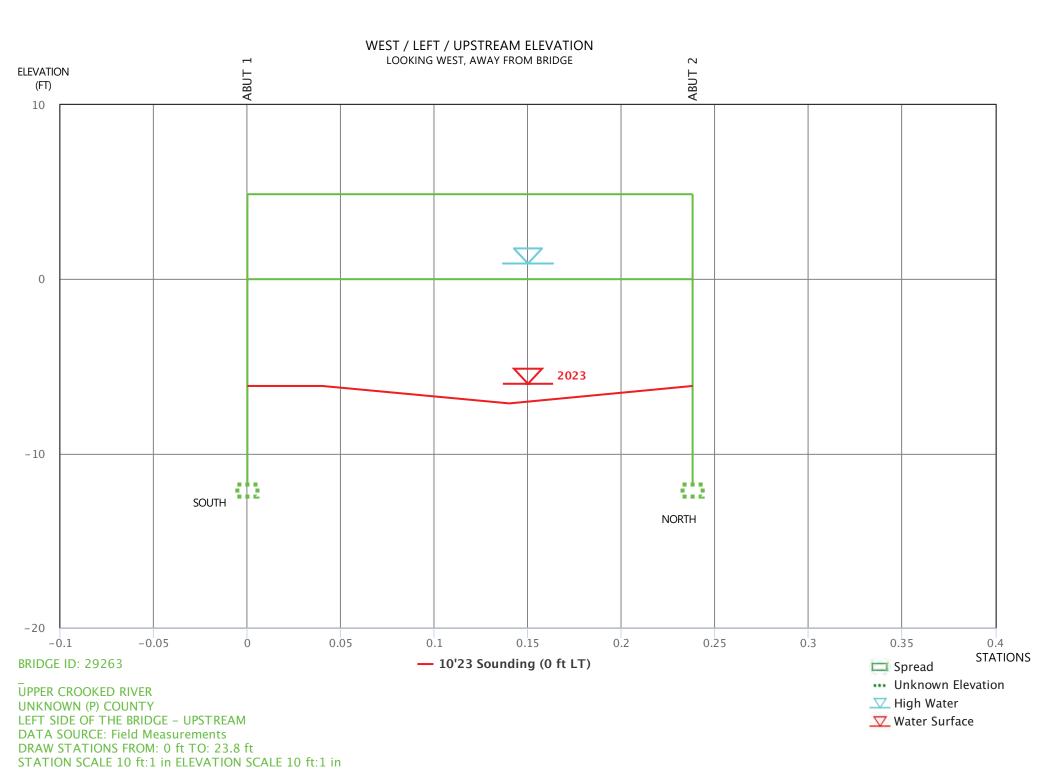














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Facility Carried(Route): CROOKED RIVER ROAD Admin Jurisdiction: 4900 Idaho County



South approach.



West elevation. The girders are numbered from west to east.



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Facility Carried(Route): CROOKED RIVER ROAD Admin Jurisdiction: 4900 Idaho County



West / upstream channel.



East / downstream channel.



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West / upstream channel.



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North approach: the old [WEIGHT LIMIT 12 TONS] sign which was later replaced.



South approach: the old [WEIGHT LIMIT 12 TONS] sign which was later replaced.



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11/2/2023: North approach new [WEIGHT LIMIT 12 TONS] sign.



11/2/2023: South approach new [WEIGHT LIMIT 12 TONS] sign.



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Soffit, superstructure, south abutment, and channel. The abutment has rot and shifting; the top has 1.5-inch settlement.



(CS4) South abutment: the third and fourth timbers from the top are fully rotten; the third timber has crushing.



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(CS4) South abutment: the 4th beam from the top has a 1.5-inch offset.



(CS4) South abutment: the bottom timber has a 2-inch offset.



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(CS4) SE wingwall: the timber is heavily burnt.



SW wingwall: (CS4) the timber is heavily burnt and is (CS3) leaning 5-degrees.



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(CS4) NW wingwall: the timber is heavily burnt.



(CS4) NE wingwall: the timber is heavily burnt.



Bridge Key: 29263 Structure Name: X994250 16.15

(6)Features Intersected: UPPER CROOKED RIVER (9)Location: 30.2 E 12.6 S GRANGEVILLE

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(CS4) North abutment: the bottom timber has a 1.5-inch offset.