MUNICIPAL OFFICES

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NORTHFIELD, VERMONT 05663

TOWN OF NORTHFIELD, VERMONT
SELECT BOARD REGULAR MEETING
Tuesday, June 23, 2026
COMMUNITY ROOM - 6:00 P.M.

This ZOOM meeting can be attended either in person or from your computer, tablet, or smartphone.
https://us06web.zoom.us/j/82100329034?pwd=ibKxsvJaqasExUkYR2S4dg1r1ZbO3c.1
You can also dial in using your phone: 1-929-436-2866
Meeting ID: 821 0032 9034
Passcode: 391757

AGENDA

I. ROLL CALL

II. SET/ADJUST AGENDA

III. PUBLIC PARTICIPATION (SCHEDULED):

a. Laura Stone PE, Vermont Agency of Transportation: Cox Brook Road Covered Bridges Alternatives Presentation

b. Royal DeLegge, Planning Commission Chair: Town Forest Overlay District

IV. LIQUOR COMMISSION

a. Liquor License Renewal: American Legion

b. Outside Consumption Permit: American Legion

V. APPROVAL OF MINUTES

a. June 3, 2026 (Board Retreat)

b. June 9, 2026 (Regular Meeting)

VI. APPROVAL OF BILLS

a. Approval of Warrant #24-26 & 24-26A-B

b. Approval of Warrant #01-27A

c. Receipt of Biweekly Payroll through June 7, 2026: $97,656.82

VII. SELECT BOARD

a. Approval of VTrans Town Road and Bridge Standards

VIII. TOWN MANAGER'S REPORT

IX. BOARD MEMBERS' COMMENTS, CONCERNS, QUESTIONS

X. PUBLIC PARTICIPATION (UNSCHEDULED)

XI. EXECUTIVE SESSION (IF NEEDED)

a. Legal/Personnel/Contracts [1 VSA 313 (a)(1)]

XII. ADJOURNMENT

ALTERNATIVES PRESENTATION MEETING

VERMONT
AGENCY OF TRANSPORTATION

FOR IMMEDIATE RELEASE
June 1, 2026

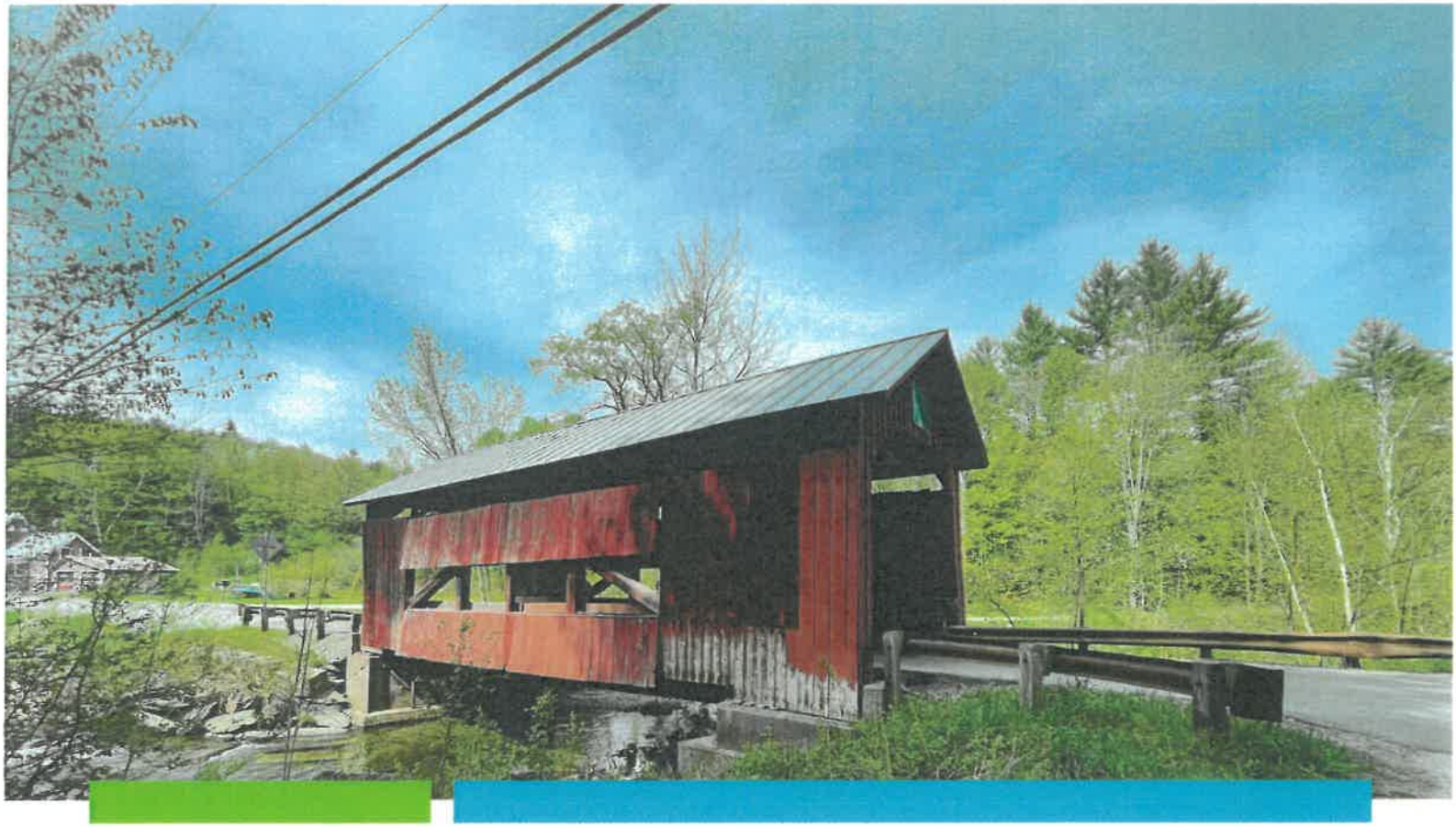
Northfield, VT – An Alternatives Presentation Meeting for the project listed below will be held on Tuesday June 23rd, 2026, beginning at 6:00 PM in the Community Room located in the Brown Public Library at 93 South Main Street in Northfield, VT. The meeting will be held by the Vermont Agency of Transportation (VTrans) and the Town of Northfield. This ZOOM meeting can be attended either in person or from your computer, tablet or smartphone. The link is: https://us06web.zoom.us/j/82100329034?pwd=ibKxsvJagasExUkYR2S4dg1r1ZbO3c.1 The telephone number is 929-436-2866, the Meeting ID is 821 0032 9034, and the Passcode is 391757.

Town Highway Bridge Project(s):

- NORTHFIELD BO CVBR(7) – Bridge 10, 'Upper Cox Brook Covered Bridge' on TH 3 (Cox Brook Road) over Cox Brook
- NORTHFIELD BO CVBR(8) – Bridge 11, 'Lower Cox Brook Covered Bridge' on TH 3 (Cox Brook Road) over Cox Brook
- NORTHFIELD BO CVBR(9) – Bridge 15, 'Northfield Falls Covered Bridge' on TH 3 (Cox Brook Road) over Dog River

The intent of the meeting is to provide an overview of this project to Town Officials, local residents and businesses, emergency services and other interested parties. There will be a review of the existing site conditions, proposed work, and overall schedule followed by a question-and-answer period. Representatives from both VTrans and the Town of Northfield will be available at the meeting to address public concerns about the project.

A copy of the *Scoping Reports* for this project is available online at: https://outside.vermont.gov/agency/vtrans/external/Projects/Structures/22J413



Draft Scoping Report
Upper Cox Brook Covered Bridge
Town Highway 3
Bridge 10 over Cox Brook

Northfield BO CVBR(7)

January 24, 2026

Prepared for:
Vermont Agency of Transportation

HOYLE TANNER

Trusted Experts | Innovative Results

Table of Contents

Location Map

1. SITE INFORMATION

The Upper Cox Covered Bridge (Bridge No. 10) is a Town-owned bridge located on Town Highway 3 (TH-3), Cox Brook Road, located approximately 0.3 miles from the intersection with VT Route 12. The bridge is a 42'-1" long single span queenpost truss which carries one lane alternating traffic over the Cox Brook near the center of the Village of Northfield Falls. Northfield Falls is an unincorporated village in the Town of Northfield, VT. The bridge is one of five covered bridges in the Town of Northfield, the second highest concentration by town of such bridges in Vermont. The sign on the west portal states that the bridge was built in 1872. The VTrans Structure Inspection, Inventory and Appraisal Sheet indicates that the bridge was built in 1900.

Due to its historic and national significance, the bridge is currently listed on the National Register of Historic Places, a federal program that is administered by the National Park Service.

This scoping report was compiled after the review of multiple sources of data including topographic ground survey, lidar scanning, previous rehabilitation plans, VTrans Structure Inspection, Inventory and Appraisal Sheet, field measurements, and photographs taken during site visits by Hoyle Tanner personnel. The intent of this report is to evaluate structural deficiencies and to recommend a solution which best addresses the project's need. For purposes of this report, the substructure units are numbered sequentially from north to south and all members are wood unless noted otherwise.

Upstream Elevation Looking East

Roadway Classification:	Local Road, Class 2 Town Highway
Bridge Type:	Single Span Queenpost Covered Bridge
Bridge Length:	42'-1" feet
Bridge Skew:	17 degrees
Year Built:	1872, Rehabilitated in 1967 and 1979
Ownership:	Town of Northfield

The bridge has undergone numerous changes or additions throughout its history with various degrees of documentation. Two major and documented rehabilitations were completed in 1967 and 1979.

The 1967 rehabilitation plans noted the work shown below. Record drawings of this rehabilitation are not available, and it is not known if all this work was completed at that time.

- Realignment of the bridge by shifting it 4'-0" west at the north end of the bridge from its original location onto new concrete abutments.
- Straightening and plumbing of the trusses.
- Replacing parts of the floor system, including new 2"x6" nail laminated deck and 3"x12" nailing strips, two new 21WF62 interior steel beams, lateral bracing, and intermediate and end diaphragms.
- Installing two new 3"x8" timber guardrail sections on both sides of roadway within the bridge.

- Removing and replacing existing knee braces.
- Removing and replacing bottom chord on the upstream side.
- Removing and replacing two Queen Posts on upstream side.
- Installing new bearings for all beams, including the exterior steel beams.
- Applying wood preservative to flooring, blocking, bottom chord, upper truss, queen posts, barrier planks, and sheathing replacement timbers.
- Removing and reinstalling or replacing the existing siding as required to complete the work noted above.

The 1979 rehabilitation plans noted the work shown below. Record drawings of this rehabilitation are not available, and it is not known if all this work was completed at that time.

- Clean and paint support brackets.
- Clean and paint steel beams.
- Clean and paint steel knee braces.
- Clean and paint metal roof.
- Install new approach guardrail.
- Remove cracked bridge seat at south abutment and bearing caps at north abutment and replace with new concrete and steel reinforcing .
- Reinstall or replace loose or damaged siding.

South Portal Looking North

There is load restriction posted for the bridge of 6-Ton for a Single Axle, 8-Ton for a Tandem, and 11-Ton Gross weight. The bridge provides a horizontal clearance of 13'-7" between the trusses and 12'-6" maximum vertical clearance, with vertical clearance at the edges of the travel lane of approximately 9'-10". The vertical clearance signs on each approach to the bridge indicate a height restriction of 12'-0".

Cox Brook Road (TH-3) is oriented in a north to south direction within the project limits. Pierson Hill is located on the north approach and Horse Lane is located just south of the bridge. Pierson Hill (Private Road) and Horse Lane (Town Highway 87) (TH-87) are oriented north to south. The Upper Cox Covered Bridge is located approximately 0.3 miles west of the intersection of Cox Brook Road and VT Route 12.

Tangent weathering steel w-beam guardrail is used at all four approaches to the bridge. There are no crashworthy end units on the guardrail. Side slopes are generally level off the roadway except in the vicinity of the bridge. The north approach to the bridge intersects with Pierson Hill approximately 150' north of the bridge. There is also a paved driveway apron that splits into two gravel drives directly south of the bridge. There is no curbing on any of the approaches to the bridge. The approach grades to the bridge are relatively flat and stormwater generally sheet flows off the roadway.

a. Need

The Upper Cox Covered Bridge was last inspected by VTrans personnel on August 20, 2024. Hoyle Tanner personnel also inspected the bridge and performed in-depth field measurements and gathered field data for this Scoping Study on November 6 and 12, 2023. The bridge (superstructure, deck, substructure) is considered to be in poor condition, and several deficiencies have been noted. The following is a list of deficiencies of Bridge No. 10 and TH-3 at this location:

Private Drive at South Approach

Roof and Siding Members:

- Metal roof is in fair condition; however, removal and replacement will likely be required to provide access for the roof member replacements.
- There are leaks due to failing screw attachments of the metal roofing to the roof boards.
- The roofboards and rafters exhibit through splits, breaks, and rot. It is estimated that all the roofboards and 14% of the roof rafters will require replacement due to condition.
- The siding boards are in good condition; however, removal and replacement will likely be required to provide access for the truss member replacements.

Upper Lateral Bracing Members:

- The upper lateral bracing members exhibit splits, breaks, rot, and impact damage.
- The crossbeams have been hit by vehicles, causing impact damage and moving them off their vertical post seats.
- The knee braces have been previously damaged from oversized vehicles, and some are not well connected to the cross beams or truss members.

Truss Chord Members:

- Exterior vertical members on both the east and west trusses exhibit extensive rot and splits. Refer to Appendix E for deteriorated vertical members that were identified in need of replacement due to condition.
- Several nailers and vertical members have loose connections.
- End diagonal and bottom chords at the ends exhibit extensive rot, heavy weathering, and checking. Refer to Appendix E for deteriorated diagonal and bottom chord members that were identified in need of replacement due to condition.
- The top chord and vertical member between the two queen posts on the east truss exhibit extensive rot and require replacement due to the deteriorated condition.
- The moisture content of the truss members was measured to be a maximum of 50% in the lower portions of the trusses.
- Debris and dirt accumulate near the bearings between the truss and the siding.

Floor System Members:

- The steel beams have areas of heavy lamination and section losses up to ⅛" along the length of the flanges, and areas of complete section loss up to 18" long by 4" tall on the web at the bottom flange at the bearing.
- There are several locations where steel plates have been welded to the beams to repair areas of heavy corrosion and section loss, including a plate at approximately midspan of one beam. Some of the repair plates do not appear to be welded to the beams.
- Two pipe columns are being used to support one of the exterior and one interior beam at the north abutment.
- The deck is comprised of 2"x6" nail laminated timber and is in fair condition; however, removal and replacement will be required to provide access for the extensive floor member replacements.

Truss Bearing Blocks:

- The wooden bearing blocks exhibit heavy rot and decay at each end of the bridge.

Substructure:

- Both abutments exhibit some areas of concrete spalling, delamination, efflorescence staining, and vertical, horizontal and map cracking.
- The backwall at the south abutment has spalled and reinforcing steel is exposed.
- A section of the footing at the south abutment has spalled and broken off.
- The laid stone at the south abutment has voids at the interface with the concrete abutment and there is also a 6' deep void in the stones at the waterline.

General:

- The bridge lacks fire protection.
- The vertical clearance is substandard and there is evidence of vehicular damage at each portal.

b. Traffic

A traffic study of this site was performed by the Vermont Agency of Transportation. The traffic volumes are projected for the years 2029 and 2049.

Traffic Data	2029	2049
AADT	886	957
DHV	130	130
ADTT	64	82
%T	6.1%	7.2%
%D	50%	50%

c. Design Criteria

The design standards for this bridge project are the Vermont State Design Standards (VSDS), dated October 22, 1997. Minimum standards are based on an ADT of 957, a DHV of 130, and a design speed of 35 mph for a Local Road.

Design Criteria	Source	Existing Condition	Minimum Standard	Comment
Approach Lane and Shoulder Widths	VSDS Table 6.3	Varies (23' to 25' Total Width)	9'/2' (22')	
Bridge Lane and Shoulder Widths	VSDS Table 6.3	13' Between Trusses/0' (13')	9'/2' (22')	Substandard
Clear Zone Distance	VSDS Table 6.5	Varies (No Issues Noted)	12' Fill / 10' Cut	
Banking	VSDS Section 6.12	Varies	Low Speed Road – No Super Elevation Required	
Speed	VSDS Section 6.2	25 mph (Signed)	35 mph (Design)	
Horizontal Alignment	AASHTO Green Book, Table 3.10	R = ∞ over bridge	At e_{max} = 8%: super = 8%, R_{min} = 314' NC, R_{min} = 614'	
Vertical Grade	VSDS Table 6.6	2.54% over bridge	7% (Max) for Level Terrain	
K Values for Vertical Curves	VSDS Table 6.1	No Vertical Curve over Bridge Approach K = 26 Min	40 Crest / 50 Sag	Substandard
Vertical Clearance	VSDS Section 6.7	12'-6" Vertical Clearance Provided	14'-3"	Substandard
Stopping Sight Distance	VSDS Table 6.1	200'	225'	Substandard
Bicycle/Pedestrian Criteria	VSDS Table 6.7	No Shoulders	1' Paved Shoulder	Substandard
Hydraulics	VTrans Hydraulics Manual, Table 6.1	Passes 4% AEP (Q_{25}) storm event with X' of freeboard Clear Span: 39'-9"	Pass 4% AEP (Q_{25}) Storm Event with 1' of Freeboard Bank Full: X'	Surpasses Hydraulic Standards
Structural Capacity	Structures Design Manual, Ch. 3.4.1	Posted: Single Axle = 6 Tons Tandem = 8 Tons Gross = 11 Tons	Design Live Load: HL-93	Substandard

d. VTrans Inspection Report Summary

The ratings provided below are from the most recent inspection performed by VTrans in August 2024. The bridge is on a 24-month inspection frequency.

Deck Rating:	5 Fair
Superstructure Rating:	5 Fair
Substructure Rating:	7 Good
Channel Rating:	8 Very Good

From the Structure Inspection, Inventory and Appraisal Sheet:

The steel beams have rust scale throughout with developing section loss and the deck has moderate saturation throughout with scattered mildew staining. The boards are starting to split and check apart from decaying wood in the surrounding areas of the beams. The beams should be considered for extensive cleaning and painting and the deck will need replacing within the next few years.

e. Hoyle Tanner Field Observations

On November 6 and 12, 2023 a three-person inspection team from Hoyle Tanner visited the covered bridge to perform in-depth field measurements and gather field data for this Scoping Report. The roof framing members, upper lateral bracing, truss members above the deck, interior of the siding, deck, underside of the deck, truss members below the bridge deck, and steel beams were inspected using extension and folding ladders. Field observations were used as a basis for this report and expanded as appropriate. Lumber dimensions referenced throughout this report are nominal unless otherwise noted.

Several small wood samples were removed from the bridge on members that will be replaced for the purpose of species identification (see Appendix D).

Bridge Orientation Conventions

The truss upper chord is referred to as the top chord and the lower chord is referred to as the bottom chord. The bottom chord consists of two plies, which are denoted as plies "A" and "B". Ply "A" is the most exterior ply while ply "B" is the most interior ply. The node points are numbered from north to south with the northern most node point designated as 1 at the northern most end post member. Each consecutive node number is numbered in ascending order at each intersection of vertical members to the top chord.

i. Roof Framing and Siding

The roof framing consists of a standing seam metal roof on 1" thick roof boards with variable width which are supported by roof rafters. The roof rafters are 2" wide x 6" deep and are spaced at 2'-0" on center and supported on a rafter support beam that is 3" deep x 7" wide. The siding is ¾" thick (actual dimension) and is nailed to nailers attached to truss members.

The siding boards were not tested but assumed to be Eastern White Pine. The roof board wood species were also not tested but assumed to be Eastern Spruce and assigned a grade of Common Premium. The roof rafters were identified to be Eastern Spruce and assigned a grade of Select Structural. The grades were selected for structural analysis based on a visual examination of knots, checks, slope of grain of the wood and the growth rate characteristics of the wood.

Roof Ridge Cap

Splits and Breaks in Roof Boards and Rafters

The roof framing is generally considered to be in fair to satisfactory condition with the following deficiencies noted:

- The metal roof ridge cap is attached to the roof boards with nails and screws and is not mechanically field-seamed or watertight. There is some moss growth under the roof ridge cap.
- The roof boards and rafters exhibit through splits, breaks, rot and insect damage. Rafters sit on a 3"x7" rafter support beam.
- The siding boards exhibit areas of faded paint. The siding is in good condition; however, removal and replacement will likely be required to provide access for the extensive superstructure member replacements.

ii. Upper Lateral Bracing

The upper bracing consists of 6"x6" cross beams spaced at each truss vertical, which varies in spacing from 6'-10" to 9'-0", 2"x8" diagonal bracing between cross beams between Nodes 2 East & 2 West, 3 East & 3 West, 6 East & 6 West, 7 East & 7 West, and steel knee braces. Two ½" bolts connect the knee braces to the cross beams.

The upper bracing wood species were identified to be Eastern Spruce and assigned a grade of Select Structural based on a visual examination of knots, checks, slope of grain of the wood and the growth rate characteristics of the wood.

Split in Cross Bream

Broken Connection at Cross Beam and Diagonal

The upper lateral bracing members are generally considered to be in fair to satisfactory condition with the following deficiencies noted:

- Two cross beams exhibit splits. One of the split cross beams is also broken at a connection to a diagonal bracing member.
- Cross beams have been previously damaged from oversized vehicles and are not well connected to the vertical truss members.
- Some of the steel knee braces on the east truss have moderate section loss.

iii. Trusses

West Queenpost Truss

The queenpost truss has a central panel that is comprised of two chords (a single top and single, longer bottom chord), which are connected outside of the queen post vertical members by diagonal members. The bottom chord members have multiple splices along their length. Most of the steel connectors at splices exhibit rusting and section losses.

The top chord is 14'-0" long and the bottom chord is 45'-9" long and support a roof length of 53'-1". The clear span from face of south abutment to face of north abutment is approximately 40' long. Top chord truss members consist of a single member, varying in size from 9⅝"x9⅝" to 9¾"x9¾", and built-up bottom chords consisting of two 6"x12" plies. Truss diagonal members consist of single timbers varying in size from 9⅝"x9⅝" to 9¾"x9¾". Truss vertical members consist of 6"x6" single timber columns.

The truss chord members' wood species were identified to be Eastern Spruce. All truss members have been assigned a grade of Select Structural for the structural analysis based on a visual examination of knots, checks, slope of grain of the wood and the growth rate characteristics of the wood.

The truss members are generally considered to be in poor condition with the following deficiencies noted:

Top Chord Members:

- The top chord of the east truss exhibits extensive rot and needs replacement due to its deteriorating condition. Refer to Appendix E for deteriorated chord members that were identified in need of replacement due to condition.
- The top chord of the west truss is in satisfactory condition with no deficiencies noted at the time of inspection.

East Truss Top Chord Rot

Bottom Chord Members:

- The bottom chord on the west truss had excessive moisture at the north abutment, with readings up to 50% moisture.
- Ply B of the bottom chord of the east truss is split at the notch for the diagonal member bearing on the bottom chord at the south abutment.
- Both plies of the west truss bottom chord at the north abutment are rotted with up to 50% moisture content.
- The through bolt at node 7 West has extensive section loss with a reduced diameter of 0.6" remaining.

North End of the East Truss Bottom Chord to Diagonal

Diagonal Members:

- All of the diagonals exhibit heavy weathering and checking.
- The northwest, northeast, and southeast diagonals have excessive rot and moisture content up to 50% at the end near the connection to the bottom chord.
- The bearing of the diagonal members are notched at the interface with the bottom chord. There is a 4' long x ⅜" wide split in the bottom of the southeast truss diagonal at the bearing location of the bottom chord, resulting a bearing width of only ¾" at the lower notch. There is also a 3" gap between the end of the upper notch of the diagonal and the bottom chord.

Vertical Members:

- The vertical members exhibit rot, heaving checking, and splits. Several cross beams are not bearing on the vertical post members.
- Several vertical members on the east truss have holes up to ¾" and cutouts for an old knee braces.
- Many of the nailers are not connected to the vertical members and are loose.

- Several vertical post members are excessively rotted and need replacement due to their deteriorated condition. Refer to Appendix E for deteriorated chord members that were identified in need of replacement due to condition.

iv. Floor System

The floor framing consists of two exterior 24WF100 and two interior 21WF62 longitudinal steel beams spaced at 3'-8" on center, transverse 2"x6" nail laminated deck boards placed edgewise, and longitudinal 1½" thick runner planks across the entire deck. There are 15W33.9 steel diaphragms at the midspan and beam ends.

The nail laminated deck board wood species was identified to be Southern Pine. The runner planks are not shown in the 1979 plans and are assumed to be Eastern Spruce. The nail laminated deck board members have been assigned a grade of No. 1 for the structural analysis based on a visual examination of knots, checks, slope of grain of the wood, and the growth rate characteristics of the wood.

Interior Beam Rusting

The floor system members are generally considered to be in poor condition with the following deficiencies noted:

- The runner boards are in good condition.
- The flanges are clipped at the abutments to accommodate the skewed centerline of bearing.
- The exterior beam on the west side (B1) has areas of section loss at the north abutment and at midspan that has been repaired using steel plates. The plate at the abutment does not appear to be welded. There is section loss up to ⅛" along the bottom flange for the entire length of the beam.
- The western interior beam (B2) has heavy laminar corrosion at both faces of the bottom flange along the entire length of the beam. There is a hole in the web at the south abutment up to 18" wide x 4" tall.
- The eastern interior beam (B3) has heavy laminar corrosion at both faces of the top and bottom flanges along the entire length of the beam.
- The exterior beam on the east side (B4) has areas of section loss at the north abutment up to ⅛" and has heavy laminar corrosion at both faces of the top and bottom flanges along the entire length of the beam.

f. Truss Bearing Blocks

The truss bearing blocks consist of 6"x10" hardwood blocks with varying length that sit on 2"x6" blocking at each end of the bridge as described in 1967 plans and as measured in the field.

The truss bearing blocks are considered to be in poor condition with the following deficiencies noted:

- The wooden bearing blocks exhibit extensive rot and need to be replaced.

g. Substructure

The bridge substructure consists of two concrete abutments. It is not clear if original abutments were constructed with stone masonry and encased with concrete during previous undocumented rehabilitations. Both bridge abutments have areas of exposed ledge outcrop in front of them and abutments bear on ledge. The channel bed consists of ledge and large cobbles.

North Abutment

The abutments are considered to be in good condition with the following deficiencies noted:

- Both abutments exhibit some areas of concrete spalling, delamination, exposed rebar, efflorescence staining, and vertical, horizontal, and map cracking.
- At the spalled areas the concrete was observed to contain rebar.

h. Wood Species Identification

Eight small wood samples were removed from the bridge for the purpose of species identification. The samples were taken from deteriorated members that will most likely be replaced during the course of potential bridge rehabilitation or from non-critical sections of the members. To identify the wood species, the samples were sent to Doug Gardner, Ph.D., a Professor of Forest Operations, Bioproducts, and Bioenergy, at the University of Maine at Orono. A summary of the species identification can be found in Appendix D.

i. Hydraulics

Upstream Channel with Exposed Bedrock

The bridge crosses over the Cox Brook which flows primarily west to east at the bridge site. A hydraulic study at this location was completed on February X, 2026 by Hoyle Tanner. The preliminary findings indicate that under the current conditions, there is XX.X' and XX.X' of freeboard during the 4% (Q_{25} flood event) and 1% (Q_{100} flood event) storm event, respectively. The Q_{100} storm event is defined as a flood having a one percent (1%) chance of being met or exceeded in any given year (base flood designation Q_{100}). The Q_{25} storm event is defined as a flood having a four percent (4%) chance of being met or exceeded in any given year (base flood designation Q_{25}). The existing bridge opening has sufficient hydraulic capacity to pass the 1% storm event flow with adequate freeboard.

The primary purpose of the hydraulics section is to determine if the rehabilitated covered bridge is at an elevation high enough to provide adequate freeboard during the 100-year flood event. The existing bridge opening has sufficient hydraulic capacity to pass the 1% storm event flow with adequate freeboard.

j. Utilities

The VTrans Utilities and Permits Unit will investigate the required relocation of existing utilities within the project limits during the design phase of project development. The existing utilities identified based on the site visit are as follows:

Aerial Utilities

- Overhead utility lines (power and telecommunication) cross Cox Brook on the upstream (west) side of the bridge.
- A service line runs across the road at the Pierson Hill intersection.

An aerial utility relocation plan will be needed if a temporary bridge is selected for the traffic control.

k. Right-of-Way

The existing Right-Of-Way (ROW) is shown on the Layout sheet in Appendix E. It is anticipated that temporary and permanent easements will be required to construct the proposed project.

l. Resources

The biological, historic, archaeological, hazardous material and stormwater resources present at this project are shown on the Resource Site Plan Sheet in Appendix E and are based on information provided by VTrans. See Appendix E for Resource Site Plan Sheet and Appendix I for Natural Resource ID memo.

i. Biological

Wetlands/Watercourses

Upper Cox Covered Bridge crosses over the Cox Brook, a tributary of the Dog River, and a watercourse regulated by the US Army Corps of Engineers.

There are no wetlands within the review area.

Wildlife Habitat

This area has three habitat blocks adjacent to the project area and ranks high for surface water riparian community connectivity and has a high priority connectivity block adjacent to it. Aquatic Organism Passage (AOP) will be prioritized by the design team.

Rare, Threatened and Endangered Species

The only listed species within the review area is the wood turtle (Glyptemys insculpta). It has not been recorded under Bridge 10, but it has been spotted under Bridge 15 and the watercourses are connected. A wood turtle survey should be conducted.

Also listed within the review area is the federally endangered northern long-eared bat, however it was determined that this location may effect, not likely to adversely effect the northern long-eared bat, and no critical habitat was located near the bridge location.

Agricultural

The review area noted prime statewide and prime agricultural soils were mapped in the vicinity and around the project location.

ii. Historic

One Historic resource was identified within the immediate project area. The historic resource is considered a Section 4(f) property and is as follows:

- Bridge No. 10 (Upper Cox Covered Bridge) which is individually listed in the National Register of Historic Places (NRHP) and it remains significant under Criterion C.

The Upper Cox Covered Bridge was listed on the National Register of Historic Places on October 1, 1974 (National Register of Historic Place Inventory Nomination Form). The project was initially presented at the Historic Covered Bridge Preservation Committee (HCBPC) meeting on September 4th and 12th, 2024. The committee reviewed the proposed project based on the Historic Covered Bridge Preservation Plan and Section 106 review process set forth by the National Historic Preservation Act of 1966, as amended, and the Advisory Council on Historic Preservation's Procedures for the Protection of Historic Properties (36 CFR 800c) and recommended replacing the existing beams with steel beams. They did not recommend an alternative based on live loading.

iii. Archaeological

The VTrans archaeological unit will investigate the project limits during the next phase of project development to determine any archaeologically sensitive areas.

iv. Hazardous Materials

According to the Vermont Agency of Natural Resources (VANR) Vermont Hazardous Sites List, there are no hazardous waste sites or hazardous waste generators related to the vicinity of the project location. See the figure below for a map of Hazardous Sites. The project area also does not show in the VT Hazardous Waste Urban Soils Map.

v. Stormwater

There are no stormwater concerns at this site. The project area is relatively flat with no roadway curbing and stormwater runoff involves overland flow into Cox Brook.

2. SAFETY

There have been no reported crashes along Cox Brook Road in Northfield within the last 5-year period.

There are no High Crash Location segments located within the project area.

3. COMMUNITY NEEDS AND CONSIDERATIONS

A community questionnaire was sent to the Town to fill out. The town noted seasonal visitors to the bridges in the summer months, including bus tours, but the slow season is considered winter and spring. For a long-term closure, emergency services and school buses would take a 4-mile Class 4 town road detour. Cox Brook Road connects Northfield to Berlin and Moretown, so users would need to take the same detour as emergency services, which is a gravel road and not designed for significant traffic. The town noted significant numbers of bicycle and pedestrian users on the bridge, which should be accommodated during construction. There were no known instances of flood waters impacting the bridge.

The Local and Regional Input Questionnaire can be found in Appendix J.

Public involvement for this project included a Local Concerns Meeting and Alternatives Presentation Meeting held in-person and as summarized below.

a. Local Concerns Meeting

A Local Concerns Meeting was held on March 26, 2024, at the Brown Public Library. Attendees included the Northfield Selectboard, VTrans and Hoyle Tanner personnel, and members of the public. The Local Concerns Meeting was regarding three different covered bridges that were inspected by Hoyle Tanner. Many of the discussion topics were applicable to all three bridges. The following were discussed:

- *Oversized Vehicles:* The bridge has substandard vertical clearance. Despite warning signs, oversized vehicles have repeatedly crossed the bridge, hitting and damaging the upper lateral bracing and cross beams. Many residents expressed concern about this and asked about mitigation measures that could be taken to deter oversized vehicles from using the bridge, including an over-height bar, cameras, alerts in map apps, and increasing the vertical clearance in the bridge. Over-height bars can be a safety concern if they are rigid, but a swinging bar could be an option. There are many mapping apps and it is difficult to get alerts in all apps that the traveling public use.
- *Enforcement:* The Town is responsible for enforcing load restrictions on any Town structure currently posted.
- *Guardrail and Signage:* It was noted that the approach guardrail is in poor condition, and the approach signing is covered by foliage. The Town is responsible for maintaining approach guardrail and clearing vegetation.
- *Bridge Closure During Construction:* There was a question about how long the bridge would be closed during construction. The bridge would be closed for an entire construction season. The shortest route around is Cox Brook Road, to VT Route 12, Water Street, Union Street, Union Brook Road, and Aseltine Road, and back to Cox Brook Road which has an end-to-end distance of 6.1 miles. Several concerns were bought up at the meeting about the detour route. Participants

expressed concern that Aseltine Road is not well maintained. It was noted that in the past, Pearson Hill was connected to Dunham Drive as a temporary detour. These will be investigated during the scoping process. Because this is a Town owned structure, the Town would ultimately be responsible for choosing and signing the detour route according to the Manual on Uniform Traffic Control Devices (MUTCD). VTrans often encourages Towns to reach out to our district offices for questions regarding what signs are required and where they should be placed. The Town would also be responsible to obtain permits from VTrans Operations Bureau for any signs that would be placed within the State Right-of-Way. The requirements for the detour will be detailed in the Finance and Maintenance Agreement.

- *Temporary Bridge:* A resident expressed interest in a temporary bridge option. A temporary bridge could be installed for access during construction, but the site conditions would make turning movements difficult to meet design standards.

b. Alternatives Presentation Meeting

An Alternatives Presentation Meeting was held on March X, 2026 at the Brown Public Library. Attendees included the Northfield Selectboard, VTrans and Hoyle Tanner personnel and members of the public. The following were discussed:

- Discussion Topics

4. MAINTENANCE OF TRAFFIC

In accordance with Vermont Agency of Transportation guidance this project was reviewed to determine suitability for the Accelerated Bridge Program which focuses on faster delivery of construction plans, permitting, and Right-of-Way, as well as faster construction of projects in the field. One practice that will help in this endeavor is closing bridges for portions of the construction period, rather than maintaining traffic on a portion of the existing bridge during construction or providing temporary bridges. In addition to minimizing project costs, the intention is to minimize the closure period with accelerated construction techniques and incentives to allow contractors to complete projects sooner. The Agency will consider the closure option on most projects where rapid reconstruction or rehabilitation is feasible.

a. Off-Site Detour

This option would close the bridge and reroute traffic onto an offsite detour. Since the bridge is located on a Class 2 Town Highway, it would be the responsibility of the Town of Northfield to choose the preferred detour route and to sign it according to the MUTCD manual. If the preferred detour route goes through an adjacent Town, it will be the responsibility of the Town of Northfield to coordinate with that Town.

The most likely detour route has an end-to-end distance of 6.1 miles and adds 4.8 miles to the through route. This route is as follows:

- Cox Brook Road, to VT Route 12, Water Street, Union Street, Union Brook Road, and Aseltine Road, and back to Cox Brook Road (6.1 mi end-to-end)

Advantages: This option eliminates the need for a temporary bridge to maintain traffic during construction, significantly reducing both construction time and cost. It also minimizes impacts to adjacent properties and environmental resources. Overall, this approach lowers project expenses and duration during both design and construction phases. Additionally, it provides the safest traffic control method by removing the traveling public from the active construction area.

Disadvantages: Traffic flow would not be maintained through the project site during construction. Additionally, the detour route contains portions of Class 4 Town Highways which typically are narrow, steep, and not well maintained.

Due to the above-mentioned disadvantages of an off-site detour, it is not recommended that this option for maintenance of traffic be utilized for this project.

b. Temporary Bridge

From a constructability standpoint, a temporary bridge could be placed on the upstream side of Upper Cox Covered Bridge. A temporary bridge on the west side would have impact on aerial utilities that would require relocation and would require additional tree clearing.

If a temporary bridge is utilized, borings should be drilled at the temporary abutment locations.

Based on the daily traffic volumes and length of the bridge, a one lane alternating temporary bridge would be recommended.

Advantages: A temporary bridge will maintain traffic flow through the project corridor during construction. A temporary bridge is considered safer during construction than phased construction.

Disadvantages: This traffic control option would be costly and time-consuming, as additional time is needed to construct the temporary bridge and approaches.

Due to the above-mentioned advantages of a temporary bridge, and the disadvantages associated with an off-site detour, it is recommended that this option for maintenance of traffic be utilized for this project. The Cost Matrix, shown in Section 6 below, includes the temporary bridge cost in the Bridge category subtotal and overall project costs. By using a temporary bridge instead of an off-site detour, the Town's share of the construction costs is 5%.

c. Phased Construction

Another method of maintaining traffic along a corridor during construction is to build a new structure one lane at a time, or in phases.

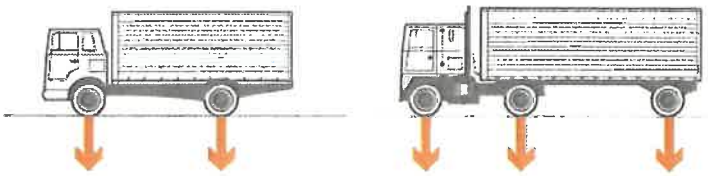
Advantages: This would maintain traffic along the existing corridor during construction.

Disadvantages: Typically, the time required to construct a phased construction project is longer than a project constructed without phasing, because some of the construction tasks must be performed multiple times and cannot be performed concurrently. The costs of construction also increase over unphased work because of this increase in the length of time, the additional inconvenience of working around traffic, and the effort involved in coordinating the joints between the phases.

The existing bridge is a one-lane structure with a 13'-7" width face of truss to face of truss typical. This does not provide enough width to phase construction and the type of construction required for covered bridges does not allow phasing of work. As such, phased construction is not feasible and will not be considered further.

5. ALTERNATIVES DISCUSSION

a. Structural Analysis



H Truck on the left, HS Truck on the Right

A structural analysis and load rating was performed of all primary live load carrying members of the bridge superstructure. Superstructure roof framing members were also checked for the applied wind, snow, and dead loads. The Service Load (Allowable Stress) Rating method was used for all members in accordance with the provisions of the American Association of State Highway and Transportation Officials (AASHTO) Standard Specifications for Highway Bridges, 17th Edition, AASHTO Manual for Bridge Evaluation Third Edition with 2019 Interim Revisions (MBE), and the 2010 VTrans Structures Design Manual. The bridge was rated to determine the allowable rating vehicle in terms of H Truck, which is a truck with two axles spaced at 14 feet with 20% of the load on the front axle and 80% on the rear axle. Per the scope of services, the bridge was rated for four AASHTO live load: H15 (15 tons), HS15 (27 tons), H20 (20 tons) and HS20 (36 tons). All structural members were rated for single lane loading configurations. The controlling live load force effect for each AASHTO live load was taken as the maximum of the design truck or the lane load. Excel spreadsheets, MIDAS bridge design software, MathCAD computer program, and hand calculations were utilized to calculate the as-inspected section properties, capacities, and load rating values.

Since the timber floor system was previously replaced with steel beams, the timber trusses of the bridge only carry their own self-weight, wind loads, and snow loads. The steel beams support their own self-weight and the vehicular live loads. To differentiate these two different types of loadings in the ratings below, live-load carrying members are reported in terms of Load Factors, while non-live-load carrying members are reported in terms Performance Factors.

For the floor system (steel beams and decking) the inventory rating was determined by combining the maximum effects of live load with the dead load effects compared to the allowable inventory stress levels, while the operating rating was determined by combining the maximum effects of the live load, dead load, and snow load (as applicable) as compared to the higher operating stress levels.

Allowable stress values for wood members were obtained from the 2018 National Design Specification for Wood Construction and Supplement (NDS). The wood species used in the superstructure was identified through testing. The grade assigned to each member was based on a visual examination of knots, checks, slope of grain of the wood, and growth rate characteristics of the wood. All superstructure members are wood unless noted otherwise. The substructure was not analyzed as part of the load rating since it was not expected to control the load rating of the bridge.

The steel beams were analyzed using the Load Factor Method (LFR) per the MBE. A refined analysis using a grillage model was used to account for the variable stiffness of the beams. An as-built and as-inspected model were created and enveloped and the largest dead load moment and live load moment were used for each beam. The inventory rating was determined by combining the maximum effects of the dead and live load effects compared to the allowable inventory stress levels, while the operating rating was determined by combining the maximum effects of the dead and live load (as applicable) as compared to the higher operating stress levels.

Our initial recommendations for repair or replacement of each member are detailed in the following sections. These were reviewed by the Historic Covered Bridge Preservation Committee (HCBPC) so the structural and historical issues could be weighed to determine a rehabilitation live load that met the project goals, while preserving as much of the original fabric of the covered bridge as possible. We have also identified the priority treatment number (PTN) from the Historic Covered Bridge Preservation Plan to aid in review of the recommendations.

It should be noted that not all members to be replaced can be identified based on our inspection due to inaccessible areas (i.e. top-face rafters, etc.). The estimate of cost in this study includes an additional amount of conditional replacement based on Hoyle Tanner's experience with similar structures to determine an appropriate budget for the project.

Roof Framing

Analysis

The roof rafters and roof boards were analyzed for dead load, wind load (8.7 pounds per square foot (psf) upward on the windward roof and 13.8 psf uplift on the leeward roof) and a ground snow load of 60.0 psf (30.8 psf roof applied) per the 2015 Vermont Fire and Building Safety Code snow load and the 2022 ASCE 7 Minimum Design Loads for Buildings and Other Structures. Our structural analyses showed that roof boards and rafters are adequate for the applied dead, wind, and snow loads (22% utilized for the roof boards and 41% utilized for the roof rafters).

Recommendations

The existing standing-seam metal roof is in fair condition, although the ridge cap is attached with nails and screws which allow water to seep into the bridge over time. During rehabilitation, the existing metal roof would most likely be damaged by the removal of certain truss and roof members will need to be replaced. We recommend that the entire metal roof, all roofboards, and 14% of the rafters be replaced in-kind (Priority Treatment No. 2) (PTN 2) due to condition. Roof boards are 1" thick Eastern Spruce and rafters are 2"x6" Eastern Spruce. These roof framing recommendations apply to Alternatives 1 through 5.

Upper Lateral Bracing

Analysis

The existing upper lateral bracing, which consists of diagonal braces, cross beams, and steel knee braces, was analyzed for wind loading in conformance with ASCE 7-22. A grade of Select Structural was assigned to all upper lateral bracing wood members based on a visual examination of the wood. A portion of the lateral wind load based on the tributary area is applied to the existing upper later cross beams. The analysis showed the diagonal bracing system is not adequate to keep the bridge square and plumb and to resist code required wind loads.

Recommendations

The following recommendations are expected to improve and strengthen the upper lateral bracing:

- Replace all seven upper bracing members in-kind (PTN 2).
- Replace two cross beams in-kind due to condition (PTN 2).
- Replace all steel knee braces with timber knee braces (PTN 2).

These upper lateral bracing recommendations apply to Alternatives 1 through 5.

Trusses

Analysis

The Queenpost Truss members were assigned a grade of select structural based on a visual examination of the wood.

The trusses were analyzed to determine their current and proposed dead load capacity. A 2-Dimensional bridge computer model of the Queenpost Trusses was utilized for structural analysis.

To determine the current capacity of all truss members, full dead and snow loads were applied and compared to allowable stress levels. See Table 1 below for a summary of all members rated.

Table 1 – Queenpost Truss Members Rating Summary

Member	No. of Members – Size	Performance Factor[1]
Top Chord	1 – 10"x10"	4.35
Bottom Chord	1 – 12"x12"	1.95
Queenpost (Vertical 2)	2 – 10"x10"	6.06
Diagonals	2 – 10"x10"	3.21
Verticals	5 – 6"x6"	6.90

1. Performance factors greater than 1.0 indicate that the member has sufficient capacity to safely carry the design loads.

To determine the current capacity of all truss member connection details, full dead and snow loads were applied and compared to allowable stress levels. See Table 2 below for a summary of all member connection ratings.

Table 2 – Member Connections Rating Summary

Connection #	Location	Performance Factor[2]
Connection #1	Vertical, Top Chord, and Diagonal	2.41
Connection #2	Diagonal and Bottom Chord	2.13
Connection #3	Vertical and Bottom Chord	1.0
Connection #4	Bottom Chord Splice, East Truss	2.60
Connection #5	Bottom Chord Splice, West Truss	1.0

2. Performance factors greater than 1.0 indicate that the member has sufficient capacity to safely carry the design loads.

Recommendations

Since the truss members are not carrying any live load and all rate over 1.0, the removal and replacement of the truss members is due to condition and the same for all alternatives (PTN 2). See Appendix E for members that are required to be replaced. Some members that do not need to be replaced can be

repaired with epoxy injection into the large splits or to fill in areas where rot has been removed. These recommended repairs can be applied to all alternatives to lessen further splitting and deterioration to these members (PTN 1).

Some connections will require strengthening to meet sufficient capacity to safely carry design loads.

Recommendations for member replacements are detailed below.

East Truss member replacements:

- Replace verticals at nodes 1E and 8E in-kind (PTN 2)
- Replace end portion of diagonal in-kind at node 8E (PTN 2)
- Replace top chord in-kind between nodes 4E and 6E (PTN 2)
- Replace vertical post in-kind at Node 5E between top and bottom chord (PTN 2)
- Replace bottom chord in-kind at node 8E (PTN 2)
- Replace sleeper slab in-kind at node 2E (PTN 2)
- Strengthen vertical to bottom connections (PTN 3)
- Epoxy repair deteriorated members (PTN 1)

Note: E – indicates East Truss, W, indicates West Truss.

West Truss member replacements and repairs:

- Replace verticals at nodes 1W and 8W in-kind (PTN 2)
- Replace end portion of diagonal in-kind at node 1W (PTN 2)
- Replace vertical post in-kind at Node 6W between bottom nailer and bottom chord (PTN 2)
- Replace both plies of the bottom chord between nodes 1W and 4W in-kind (PTN 2)
- Strengthen bottom chord splice (PTN 3)
- Epoxy repair deteriorated members (PTN 1)

Floor System

Analysis

The existing decking and steel stringers were analyzed to determine the live load capacity. The load rating summary for the deck is shown in Table 3. The tire contact area used for the deck load rating varies based on the applied load. As such, the deck rating for each design truck varies and the Rating Factor for each design truck is reported below. The load rating summary (in "H tons") for the stringers is shown in Table 3. The rear axle of the design truck controlled the load rating of all floor system members. The deck has been assigned a grade of No. 1 for the structural analysis based on a visual examination of knots, checks, slope of grain of the wood and the growth rate characteristics of the wood.

Table 3 - Existing Deck Load Rating Summary

Live Load Alternative	Inventory Rating Factor[3]	Operating Rating Factor[3]
Alternative 1 – H15	1.5	2.0
Alternative 2 – HS15	1.5	2.0
Alternative 3 – H20	1.2	1.6
Alternative 4 – HS20	1.2	1.6

3. Rating factors greater than 1.0 indicate that the member has sufficient capacity to safely carry the design live load.

Table 4 - Existing Interior (21WF62) Stringer Load Rating Summary

Live Load Alternative	Inventory Rating Factor[4]	Operating Rating Factor[4]
Alternative 1 – H15	0.54	0.90
Alternative 2 – HS15	0.30	0.50
Alternative 3 – H20	0.41	0.68
Alternative 4 – HS20	0.23	0.38

4. Rating factors greater than 1.0 indicate that the member has sufficient capacity to safely carry the design live load.

Table 5 - Existing Exterior (24WF100) Stringer Load Rating Summary

Live Load Alternative	Inventory Rating Factor[5]	Operating Rating Factor[5]
Alternative 1 – H15	1.24	2.07
Alternative 2 – HS15	0.69	1.15
Alternative 3 – H20	0.93	1.55
Alternative 4 – HS20	0.52	0.86

5. Rating factors greater than 1.0 indicate that the member has sufficient capacity to safely carry the design live load.

Recommendations

Although the existing exterior stringers are adequate for the current posted weight limit, it is recommended that all stringers be replaced due to age and condition for Alternatives 1, 2, 3, and 4 (H15, HS15, H20, and HS20, respectively) (PTN 2). The existing stringers have deteriorated beyond meaningful cleaning and repair work, and given their age, are due for replacement. The existing nail laminated deck is adequate for alternatives H15 and H20; however, the deck will need to be removed to facilitate stringer replacement. This work will likely damage the deck as removal of a nail laminated deck is difficult, requiring a replacement with nail laminated deck (PTN 2) or glue laminated deck (PTN 4) to be installed for the steel stringer alternatives. For all steel stringer alternatives, it is recommended that the existing 1½" Eastern Pine runner boards be replaced with 1½" thick White Oak full-width runner boards (PTN 2). This helps to provide a smoother and wider traffic surface and could help prevent vehicles from losing control if a tire runs off the runner boards.

In addition, we recommend that a new wood curb (PTN 3) be added to the bridge to help keep vehicles from impacting the trusses for the steel stringer alternatives. This curb has previously been used by VTrans on many other covered bridges we have designed the rehabilitations throughout the State.

Alternative-specific recommendations for stringer replacements or strengthening are detailed below in sections 5.d. through 5.g.

A concrete deck beam system was also evaluated as a potential replacement for the existing floor system. This option would improve the bridge's hydraulic capacity and provide a smooth underside that helps prevent debris accumulation during high-flow events. If selected, the concrete deck would remain exposed, eliminating the need for a timber deck, curbing, or running boards. A pigment could be added to the concrete to replicate the appearance of a timber wearing surface, helping to preserve the historic character of the bridge. Alternative-specific recommendations for stringer replacements are provided in Section 5.h.

b. Substructure

The existing abutments have not been analyzed for overturning and sliding per the VTrans structures manual since they appear stable with no signs of distress and there is exposed bedrock at the bridge location.

Overall, the existing abutments appear sound and globally stable with no apparent sign of movement, settlement, or tipping. Some isolated cracks and spalls were found on various surfaces of the existing substructure elements. The scope of work does not include the stability analysis of the existing substructure.

Recommendations

The following recommendations are made for the bridge substructure:

- Modify bridge seat elevation to accommodate steam beam replacement (PTN 1).
- Reconstruct upper portions of both backwalls (PTN 1).
- Conduct minor partial depth concrete repairs to all existing substructure elements (PTN 1).
- Grout and seal the concrete cracks greater than ⅛" in width (PTN 1).
- Stain and seal all exposed concrete surfaces with a water-based sealant in order to provide long-term protection of the concrete (PTN 1).
- Remove all vegetation and small trees at both abutments (PTN 1).

c. No Action

This alternative would leave the bridge as it currently exists. A general guideline for evaluating a "No Action" alternative is determining whether the structure can remain in service for at least the next 10 years without requiring any work. The existing bridge superstructure is in poor condition, with multiple components—including truss members, bearing blocks, and upper lateral bracing—with numerous deficiencies. For safety reasons, maintaining the bridge in its present state is not recommended. No cost estimate is provided for this alternative, as it does not involve any immediate expenditures.

d. Alternative 1: Rehabilitation for H15 (15-Ton) Loading using Steel Beams

This alternative consists of work necessary to extend the useful life of the bridge and to upgrade the bridge live load carrying capacity to carry a 15-ton design vehicle. Refer to Appendix E for replacement members that are required to be replaced for this alternative. This work includes:

- Steel Beams
    - Replacement of all steel beams with galvanized W21x62 steel stringers (PTN 2)

e. Alternative 2: Rehabilitation for HS15 (27-Ton) Loading using Steel Beams

This alternative consists of work necessary to extend the useful life of the bridge and to upgrade the bridge live load carrying capacity to carry a 27-ton design vehicle. Refer to Appendix E for replacement members that are required to be replaced for this alternative. This work includes:

- Steel Beams
    - Replacement of all steel beams with galvanized W21x93 steel stringers (PTN 2)

f. Alternative 3: Rehabilitation for H20 (20-Ton) Loading using Steel Stringers

This alternative consists of work necessary to extend the useful life of the bridge and to upgrade the bridge live load carrying capacity to carry a 20-ton design vehicle. Refer to Appendix E for replacement members that are required to be replaced for this alternative. This work includes:

- Steel Beams
    - Replacement of all steel beams with galvanized W21x83 steel stringers (PTN 2)

g. Alternative 4: Rehabilitation for HS20 (36-Ton) Loading using Steel Stringers

This alternative consists of work necessary to extend the useful life of the bridge and to upgrade the bridge live load carrying capacity to carry a 36-ton design vehicle. Refer to Appendix E for replacement members that are required to be replaced for this alternative. This work includes:

- Steel Beams
    - Replacement of all steel beams with galvanized W21x111 steel stringers (PTN 2)

h. Alternative 5: Rehabilitation for Hs20 (36-Ton) Loading using Concrete Deck Beams

This alternative consists of work necessary to extend the useful life of the bridge and to upgrade the bridge live load carrying capacity to carry a 36-ton design vehicle. Refer to Appendix E for replacement members that are required to be replaced for this alternative. This work includes:

- Concrete Deck Beams
    - Replacement of all steel stringers with four 18" deep x 36" wide interior concrete deck beams and closure pours between the beams (PTN 10).

i. Proposed Roadway Improvements

Along the northern approach, the roadway will mimic existing conditions and transition approximately 100' before the bridge to a 11'-8" paved roadway at the bridge. The proposed roadway typical paved section north of the bridge will consist of removal of existing pavement and existing subbase material to provide suitable draining roadway fill beneath the pavement. Final pavement design will be provided by VTrans.

The southern approach roadway width will mimic measuring 11'-8"at the bridge and gradually widening to match the existing width at the end of the project limits. The proposed roadway typical section between the bridge and project limits will match the proposed paved typical section north of the bridge.

Stormwater flow patterns will mimic existing conditions with sheet flow of the roadway to vegetated side slopes. New steel backed timber guardrail is proposed on both approaches and will closely match existing guardrail lengths.

It is recommended that tree removal and trimming take place on both sides of the bridge as many of the nearby tree branches have potential to grow over the bridge and could fall and damage the bridge and are also promoting insect infestation of the bridge.

j. Fire Protection

As part of this Scoping Report, the bridge was assessed for improvements against the potential for loss or damage from fire. There are no known fire detection or protection systems at the covered bridge site. Three fire detection/protection systems are generally used for covered bridges, each of which was evaluated for this project.

Intumescent or Fire-Retardant Coatings (Nochar/Polaseal)

These coatings are water-based, water repellent treatments that are specifically designed to protect exterior and interior wood surfaces. They penetrate the wood and then cure by reaction with air to lock into the pore structure of the wood. These coatings work by raising the flashpoint of the wood making it difficult to start a fire. The fire-retardant coatings contain a proven fire retardant *to reduce* flame spread in the event of a fire and a blend of special preservatives to fight against the causes of decay. The coatings are available in colored and clear versions that are applied to the wood by brush or spray. The coatings do not affect the strength of the wood. It is also recommended the application of a fungicide to the bridge members to defend against fungal growth. Infestation by fungi causes the wood to rot, lowering the capacity of affected members.

The application of fire-retardant coatings is recommended for all alternatives considered.

Fire Detection System (Protectowire)

If a fire is started, it is advantageous to notify the local fire department as soon as possible. The "Protectowire" is a proprietary alert system that works by running a small wire through key locations in the bridge. The sensor cable is comprised of steel conductors individually insulated with a heat sensitive polymer. The insulated conductors are twisted together to impose a spring pressure between them and wrapped with a protective tape. If a rapid rise in temperature is detected or if a wire is cut, the system alerts the local mutual aid or fire department. This advanced warning can greatly reduce fire damage to a bridge and hopefully prevent the fire from making the bridge a total loss.

It should be noted that there is an annual maintenance cost associated with this system. The system requires power and a phone line (land or cell) to contact mutual aid. In addition, the control box contains batteries that have small electric strip heaters on them to prevent damage from freezing during cold weather. The control box is typically hidden at the end of the bridge in the siding and can be well insulated to reduce electrical costs.

The fire detection system will be discussed with the Town at the alternatives presentation meeting.

Dry Deluge Sprinkler System

The purpose of a deluge sprinkler system is to prevent the spread of fire by wetting down the entire fire area. The sprinkler system typically used includes dry pipes with a fire department connection away from

the ends of the bridge. During a fire, the fire department feeds the system which directs water to the source of the fire. The majority of the piping and heads are in the roof; however, coverage is also provided under the bridge at the abutments. These systems are typically used on long or multi-span bridges where the fire department cannot effectively fight the fire near the center of the bridge.

The sprinkler system will be discussed with the Town at the alternatives presentation meeting.

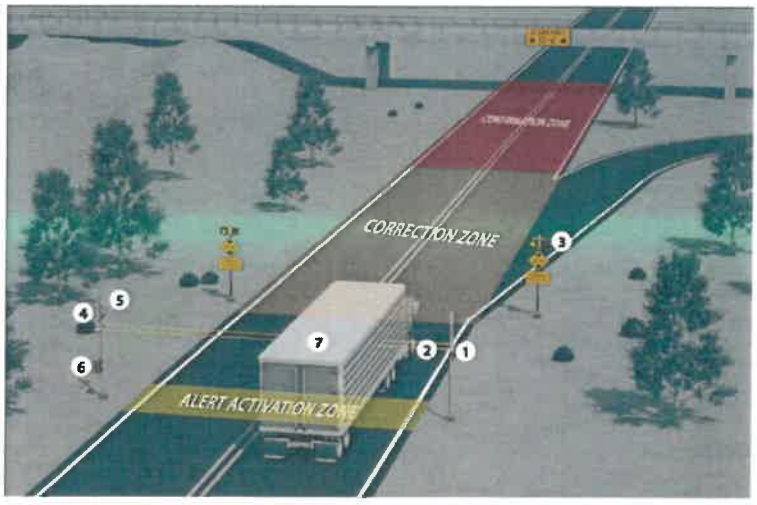
k. Lighting

There is currently no lighting on the bridge or immediate approaches to it. Lighting can be an effective means to deter vandalism and improve visibility. The decision to add lighting to the bridge should be made by the Town. Interior lighting in the form of high-pressure sodium lights controlled by photocells may be added if desired. This type of lighting provides a light brown color and is the type preferred by state historic resource agencies. The fixtures proposed in this study have a good long-term performance record, are unobtrusive as they are installed in between the upper lateral bracing, and are reasonably vandal proof. The photocell is specified to help ensure that the lights are only on when needed.

The lighting system will be discussed with the Town at the alternatives presentation meeting.

l. Vertical Clearance

The existing vertical clearance on the bridge is approximately 12'-6", which is substandard and causing impact damage to the portals, cross braces, upper lateral bracing, and knee braces due to oversized vehicles. The same is true of the other two covered bridges on Cox Brook Road. It is proposed to increase the vertical clearance of all three bridges to a uniform 13'-0". At the Upper Cox Covered Bridge, this would be done by replacing the existing steel lateral bracing with a new bottom chord assembly and blocking that would raise the truss members enough to achieve the desired vertical clearance. The siding will extend down enough to cover this assembly unit, so it is not visible on the exterior. Curbing and deck widening on the inside would cover the assembly unit from view on the inside of the truss. This option was presented to the HCBPC and was approved as an acceptable modification to the existing structure.



Additionally, early detection and vehicle warning systems can be incorporated into the project. These systems use sensors within an "activation zone" to identify vehicles that exceed the clearance height of an upcoming structure and alert drivers to the restriction. Drivers are then guided toward a safe alternate route within the "correction zone". The system also collects data, such as license plate information, for vehicles that trigger the warning and notifies local authorities when a vehicle enters the "confirmation zone". A potential layout of this system for the three covered bridges along Cox Brook Road is shown below. The associated cost, estimated at approximately $125,000, is not included in the Cost Matrix in Section 6, as the system is proposed as an optional enhancement.

m. Construction Schedule

Upper Cox Covered Bridge is one of three bridges on Cox Brook Road scheduled for rehabilitation. The rehabilitation of this bridge is expected to take approximately one construction season (about eight months). Lower Cox Covered Bridge, located 0.1 miles to the south, is also anticipated to require one construction season, while Northfield Falls Covered Bridge, located 0.3 miles to the south, will likely require two construction seasons.

Because these projects are in close proximity, there may be opportunities for cost and schedule savings by bundling two or all three bridges into a single contract. Temporary bridge alternatives for Bridges 10 and 11 share the same span length and width requirements, allowing the same temporary structure to be reused at both sites. Bridge 15 has a short local detour available for traffic maintenance.

Covered bridge rehabilitation is a highly specialized type of construction, and contractors often have limited crews with the required expertise. For this reason, the Town may consider bundling Bridges 10 and 11 into a single contract. Under this approach, one contractor could complete both projects over two construction seasons, using the same specialized crew and the same temporary bridge at each site. Bridge 15 could then be bid separately and constructed over the same two seasons, allowing all three bridges to be completed within a two-year period.

Alternatively, all three bridges could be bid together as one project and completed over four years, or they could be bid individually, giving contractors the flexibility to pursue one, two, or all three projects.

6. COST MATRIX

Northfield BO CVBR(7)		Do Nothing	Alternative 1	Alternative 2	Alternative 3	Alternative 4	Alternative 5
			Steel Beam Alternatives				Concrete Deck Beam
			Rehabilitation for H15 (15-Ton, 2 Axle) Loading	Rehabilitation for HS15 (27-Ton, 3 Axle) Loading	Rehabilitation for H20 (20-Ton, 2 Axle) Loading	Rehabilitation for HS20 (36-Ton, 3 Axle) Loading	Rehabilitation for HS20 (36-Ton, 3 Axle) Loading
COST[1]	Roadway	$0	$381,170.00	$391,170.00	$391,170.00	$391,170.00	$381,170.00
	Erosion Control	$0	$50,000.00	$50,000.00	$50,000.00	$50,000.00	$50,000.00
	Bridge[2]	$0	$995,930.00	$1,046,930.00	$1,029,930.00	$1,072,430.00	$938,230.00
	Full CE Items	$0	$40,000.00	$40,000.00	$40,000.00	$40,000.00	$40,000.00
	Construction Costs	$0	$1,468,000.00	$1,529,000.00	$1,512,000.00	$1,555,000.00	$1,411,000.00
	Construction Engineering & Contingencies (CEC)	$0	$367,000.00	$383,000.00	$378,000.00	$389,000.00	$353,000.00
	Accelerated Premium	$0	$0	$0	$0	$0	$0
	Total Construction Costs with CEC	$0	$1,835,000.00	$1,912,000.00	$1,890,000.00	$1,944,000.00	$1,764,000.00
	Preliminary Engineering	$0	$367,000.00	$383,000.00	$378,000.00	$389,000.00	$353,000.00
	Right of Way	$0	$20,000.00	$20,000.00	$20,000.00	$20,000.00	$20,000.00
	Total Project Costs	$0	$2,222,000.00	$2,315,000.00	$2,288,000.00	$2,353,000.00	$2,137,000.00
	Annualized Costs	$0	$55,550.00	$57,875.00	$57,200.00	$58,825.00	$53,425.00
	TOWN SHARE[3]	$0	$111,100.00	$115,750.00	$114,400.00	$117,650.00	$106,850.00
	TOWN %[3]	0%	5.0%	5.0%	5.0%	5.0%	5.0%
SCHEDULING	Project Development Duration	N/A	3 years	3 years	3 years	3 years	3 years
	Construction Duration	N/A	8 to 12 months	8 to 12 months	8 to 12 months	8 to 12 months	8 to 12 months
	Closure Duration (If Applicable)	N/A	8 months	8 months	8 months	8 months	8 months
ENGINEERING	Typical Section - Roadway (feet)	23'	23'	23'	23'	23'	23'
	Typical Section - Bridge (feet)	13'-7"	11'	11'	11'	11'	11'
	Geometric Design Criteria	Substandard Width	Substandard Width	Substandard Width	Substandard Width	Substandard Width	Substandard Width
	Traffic Safety	No Change	Improved	Improved	Improved	Improved	Improved
	Alignment Change	No Change	No Change	No Change	No Change	No Change	No Change
	Bicycle Access	Substandard	Substandard	Substandard	Substandard	Substandard	Substandard
	Pedestrian Access	Substandard	Substandard	Substandard	Substandard	Substandard	Substandard
	Hydraulics	Meets Minimum Standard	Meets Minimum Standard	Meets Minimum Standard	Meets Minimum Standard	Meets Minimum Standard	Meets Minimum Standard
	Utilities	No Change	No Change	No Change	No Change	No Change	No Change
OTHER	ROW Acquisition	No	Yes	Yes	Yes	Yes	Yes
	Road Closure	No	No	No	No	No	No
	Design Life (years)[4]	<10	40	40	40	40	40

[1] Costs are estimates only, used for comparison purposes.

[2] Bridge subtotal includes the cost of a temporary bridge.

[3] The Town Share and Town % of projects using a temporary bridge is 5%. Town Share and Town % decreases to 2.5% if an off-site detour is used.

[4] A design life of 40 years will be assumed for the deck and superstructure rehabilitation options. Substructure rehabilitation is assumed to have a design life of 50 years.

7. CONCLUSION

The Upper Cox Covered Bridge (Bridge No. 10), built in 1872, is a Town-owned bridge located on Town Highway 3 (Cox Brook Road) located approximately 0.3 miles from the intersection with VT Route 12. It is a 42'-1" long single span queenpost truss which carries one lane alternating traffic over the Cox Brook near Northfield Falls, an unincorporated village in the Town of Northfield. The bridge has undergone numerous changes and additions throughout its history with various degrees of documentation.

A detailed inspection and load rating of the bridge was completed to determine if the bridge can meet the project purpose and need. The roof framing was determined to be adequate for code required dead, wind, and snow loads. The bridge lateral bracing system was determined to not be adequate for code required wind loads and modifications to the bracing system are recommended. The truss members were determined to be adequate for code required dead, wind, and snow loads, however modifications are recommended to repair some select members due to their deteriorated condition. The floor system was determined to not be adequate for H15 (15-ton) loading at inventory or operating level. The substructure shows no sign of distress and appears to be adequate with minor repairs recommended.

Based upon our inspection and analysis of the Upper Cox Covered Bridge, it appears feasible to rehabilitate the bridge for vehicular loading to meet the project's purpose and need. Several alternatives were considered and studied as described above in Section 5.

The Town Selectboard and public at the March DATE, 2026 meeting approved Alternative X – Rehabilitation for HXX (XX-ton) loading. Alternative X promotes a safe transportation system, increases the load carrying capacity of the crossing for the emergency responses vehicles, promotes economic development and growth of the Town of Northfield, and maintains the historic character of the covered bridge.

The total estimated construction cost of all recommended work items for Alternative X, in 2026 dollars, is $X,XXX,XXX.

This Scoping Report has been completed utilizing information available as of March 2026. This information may include the Design Criteria listed above, permitting requirements, field data obtained by Hoyle Tanner, and reports or survey information prepared by others, which are subject to change. The condition of an existing bridge can change rapidly, or the bridge be damaged through manmade or natural events that could alter the conclusions reached herein. Therefore, the conceptual design, estimate of probable construction costs, and conclusions reached in this Scoping Report should not be relied upon for an extended period.

APPENDIX A

VTrans Bridge Inspection Report

VERMONT
AGENCY OF TRANSPORTATION

Route C2003 /
Structure #00010 / (Routine)
C2003 over COX BROOK
Team Lead: Justin White, **Inspection Date:** 08/20/2024

Town: 155 - NORTHFIELD

District 6, 23 - WASHINGTON County

Owner: 3 - Town or Township Highway Agency

Maintenance Responsibility: 3 - Town or Township Highway Agency

VERMONT
AGENCY OF TRANSPORTATION

Route C2003 /
Structure #00010 / (Routine)
C2003 over COX BROOK
Team Lead: Justin White, **Inspection Date:** 08/20/2024

44.17371, -72.65558

VERMONT
AGENCY OF TRANSPORTATION

Route C2003 /
Structure #00010 / (Routine)
C2003 over COX BROOK
Team Lead: Justin White, **Inspection Date:** 08/20/2024

IDENTIFICATION	
(1) State Names	50 - Vermont
(8) Structure Number	101213001012131
(5) Inventory Route	1
(2) Highway Agency District	6 - District 6
(3) County Code	23 - WASHINGTON
(4) Place Code	50275
(6) Features Intersected	COX BROOK
(7) Facility Carried	C2003
(9) Location	0.4 MI TO JCT W VT12
(11) Mile Point	0 mi
(12) Base Highway Network	No
(13) LRS Inventory Rte & Subrte	
(16) Latitude	44.1737111111111
(17) Longitude	-72.6555833333333
(98) Border Bridge State Code	
(99) Border Bridge Structure No.	

STRUCTURE TYPE AND MATERIAL	
(43) Main Structure Type	32
Material	3 - Steel
Type	2 - Stringer/Multi-beam or girder
(44) Approach Structure Type	00
Material	0 - Other
Type	0 - Other
(45) No. of Spans in Main Unit	1
(46) No. of Approach Spans	0
(107) Deck Structure Type	8 - Wood or Timber
(108) Wearing Surface/Protective System	
Type of Wearing Surface	7 - Wood or Timber
Type of Membrane	0 - None
Type of Deck Protection	7 - Internally Sealed

AGE AND SERVICE	
(27) Year Built	1900
(106) Year Reconstructed	1967
(42) Type of Service	15
On	1 - Highway
Under	5 - Waterway
(28) Lane	
On	1
Under	0
(29) Average Daily Traffic	1200
(30) Year of ADT	2019
(109) Truck ADT	3 %
(19) Bypass, Detour Length	6 mi

GEOMETRIC DATA	
(48) Length of Maximum Span	43 ft
(49) Structure Length	54 ft
(50) Curb or Sidewalk Width	
Left	0 ft
Right	0 ft
(51) Bridge Roadway Width Curb to Curb	13.3 ft
(52) Deck Width Out to Out	14.2 ft
(32) Approach Roadway Width (W/Shoulders)	20 ft
(33) Bridge Median	0 - No median
(34) Skew	17 Deg
(35) Structure Flared	0 - No flare
(10) Inventory Route Min Vert Clear	11.83 ft
(47) Inventory Route Total Horiz Clear	13.3 ft
(53) Min Vert Clear Over Bridge Rdwy	10.83 ft
(54) Min Vert Underclear	0 ft
Ref:	
(55) Min Lat Underclear RT	0 ft
Ref:	
(56) Min Lat Underclear LT	0 ft

NAVIGATION DATA	
(38) Navigation Control	0 - No navigation control on w
(111) Pier Protection	
(39) Navigation Vertical Clearance	0 ft
(116) Vert-Lift Bridge Nav Min Vert Clear	0 ft
(40) Navigation Horizontal Clearance	0 ft

CLASSIFICATION	
(112) NBIS Bridge Length	Y
(104) Highway System	0
(26) Functional Class	8 - Rural Minor Collector
(100) Defense Highway	0 - The inventory route is not
(101) Parallel Structure	N - No parallel structure exis
(102) Direction of Traffic	3 - One lane bridge for 2 - way traffic
(103) Temporary Structure	
(105) Federal Lands Highways	0 - N/A
(110) Designated National Network	0 - The inventory route is not
(20) Toll	3 - On free road. The structu
(21) Maintain	3 - Town or Township Highway A
(22) Owner	3 - Town or Township Highway A
(37) Historical Significance	1 - Bridge is on the National

CONDITION	
(58) Deck	5
(59) Superstructure	5
(60) Substructure	7
(61) Channel & Channel Protection	8
(62) Culverts	N

LOAD RATING AND POSTING	
(31) Design Load	2 - M 13.5 / H 15
(63) Operating Rating Method	2
(64) Operating Rating	
Type	2 - Allowable Stress(AS)
Rating	17
(65) Inventory Rating Method	2 - Allowable Stress(AS)
(66) Inventory Rating	
Type	
Rating	10
(70) Bridge Posting	5 - Equal to or above legal loads
(41) Structure Open/Posted/Closed	P - Posted for load (may inclu

APPRAISAL	
(67) Structural Evaluation	2
(68) Deck Geometry	2
(69) Clearances, Vertical/Horizontal	N
(71) Waterway Adequacy	6
(72) Approach Roadway Alignment	6
(36A) Bridge Railings	0 - Inspected feature does not meet
(36B) Transitions	0 - Inspected feature does not meet
(36C) Approach Guardrail	0 - Inspected feature does not meet
(36D) Approach Guardrail Ends	0 - Inspected feature does not meet
(113) Scour Critical Bridges	8 - Bridge foundations determined t

PROPOSED IMPROVEMENTS	
(75) Type of Work	31 - Replacement of bridge or
(76) Length of Structure Improvement	76 ft
(94) Bridge Improvement Cost (Multiply value by 1000)	$ 360
(95) Roadway Improvement Cost (Multiply value by 1000)	$ 150
(96) Total Project Cost (Multiply value by 1000)	$ 510
(97) Year of Improvement Cost Estimate	2020
(114) Future ADT	1260
(115) Year of Future ADT	2029

INSPECTIONS *

(90) Inspection Date			08/20/2024
(91) Frequency			24
(92) Critical Feature Inspection	Done	Freq. (Mon)	Date
A: Fracture Critical Detail	No		
B: Underwater Inspection	No		
C: Other Special Inspection			

* The inspection date and frequency information in this box contains the current NBI date and frequency information. Please refer to the report header for the date this inspection was conducted.

VERMONT
AGENCY OF TRANSPORTATION

Route C2003 /
Structure #00010 / (Routine)
C2003 over COX BROOK
Team Lead: Justin White, **Inspection Date:** 08/20/2024

Maintenance Needs

Date Reported: 08/18/2022

Priority:

Status: Open

Type of Work: 21 - Superstructure - Superstructure replacement

Component: Superstructure

Deficiency Description

Rust scale and deep pitting throughout with moderate section loss. The grease coating has bubbled and is no longer adhered to much of the surface area of the beams allowing for saturation to stay trapped along the now bare steel. Beams 1 and 2 have had steel plate repairs made in the past and there is a steel post support under beam 1 where the beam previously had crushed. An additional steel post has been installed under beam 2 as there is visible crushing in the beam end over the bearing.

Remarks

Due to the continued section loss across the length of the beams a future project to replace the beams should be considered.

Superstructure

VERMONT
AGENCY OF TRANSPORTATION

Route C2003 /
Structure #00010 / (Routine)
C2003 over COX BROOK
Team Lead: Justin White, **Inspection Date:** 08/20/2024

Abutment 2 beam ends

Beam 2 abutment 2 end

Deck

ELEMENTS	DESCRIPTION	UNITS	TOTAL	CS1	CS2	CS3	CS4
31	Timber Deck	SF	767	0	0	767	0
1140	Decay/Section Loss	SF	767	0	0	767	0
510	Wearing Surfaces	SF	767	747	20	0	0
7000	Damage	SF	20	0	20	0	0

58 - Deck (5 - FAIR CONDITION - all primary structural elements are sound but may have minor section loss, cracking, spalling or scour.)
Heavy saturation throughout with mildew staining and fuzzy mold. The boards are starting to split and check apart from decaying wood in the surrounding areas of the beams.

200 - Existing Wearing Surface Depth (2")

A21 - Deck Wearing Surface Condition (Very Good)

A39 - Deck Fascia Condition (Fair)

B.C.05 Bridge Railing Condition Rating (FAIR - Some moderate defects; strength and performance of the component are not affected.)
Minor checks and splits scattered throughout. Upstream rail has been impacted by the plow and has splintered and broken ends.

B.C.08 Bridge Joints Condition Rating (NOT APPLICABLE - Bridge does not have deck joints.)

APPROACH

72 - Approach Roadway Alignment (6 - Equal to present minimum criteria)

A13 - Approach Rail Condition (Fair)
Perforations and minimal section remaining in some of the guardrail ends and surrounding some of the anchor points. Timber posts have advanced weathering with wide splits and checks and moss growth in some ends.

A16 - Approach Post Condition (Fair)
Wide splits and checks throughout with areas of dry rot and some moss growth in the ends. Some areas of the rail have been impacted with broken offset blocks.

A18 - Approach Erosion/Settlement (Moderate)
Deep wheel line depressions at the abutment 2 approach measuring 1.5"- 2.5" deep.

B.C.06 Bridge Railing Transitions Condition Rating (POOR - Widespread moderate or isolated major defects; strength and/or performance of the component is affected.)
Heavy rust scale and section loss with varying sized perforations at the connecting bridge ends in the abutment 2 rails and upstream abutment 1 rail.

VERMONT
AGENCY OF TRANSPORTATION

Route C2003 /
Structure #00010 / (Routine)
C2003 over COX BROOK
Team Lead: Justin White, **Inspection Date:** 08/20/2024

Superstructure

ELEMENTS	DESCRIPTION	UNITS	TOTAL	CS1	CS2	CS3	CS4
107	Steel Open Girder/Beam	LF	172	0	0	166	6
1000	Corrosion	LF	172	0	0	166	6
515	Steel Protective Coating	SF	838	0	0	0	838
3440	Effectiveness (Steel Protective Coatings)	LF	838	0	0	0	838
311	Movable Bearing	EA	4	0	0	4	0
1000	Corrosion	EA	4	0	0	4	0
313	Fixed Bearing	EA	4	0	0	4	0
1000	Corrosion	EA	4	0	0	4	0

59 - Superstructure (5 - FAIR CONDITION - all primary structural elements are sound but may have minor section loss, cracking, spalling or scour.)
Rust scale and deep pitting throughout with moderate section loss. The grease coating has bubbled and is no longer adhered to much of the surface area of the beams allowing for saturation to stay trapped along the now bare steel. Beams 1 and 2 have had steel plate repairs made in the past and there is a steel post support under beam 1 where the beam previously had crushed. An additional steel post has been installed under beam 2 as there is visible crushing in the beam end over the bearing.

A50 - Super Verticals/Diagonals Condition (Good)
Minor checks and splits scattered throughout. *The covered potion of the bridge does not structurally support the bridge.

A51 - Top Chords Condition (Good)
Minor checks and splits scattered throughout. *The covered potion of the bridge does not structurally support the bridge.

A52 - Bot. Chords Condition (Good)
Minor checks and splits scattered throughout. *The covered potion of the bridge does not structurally support the bridge.

A55 - Lateral Bracing Condition (Satisfactory)
Paint peel and rust scale throughout with pitting and minor section loss.
The upper timber lateral bracing of the covered bridge have had many impacts with some displaced members that no longer sit squarely on the verticals.

A65 - Roof/Siding Condition (Satisfactory)
The roof is in good condition. The siding over the abutment ends have areas of minor rot in the lower ends. The portals have been impacted with splintered/broken siding and framing

B.C.07 Bridge Bearings Condition Rating (FAIR - Some moderate defects; strength and performance of the component are not affected.)
Heavy rust scale deep pitting and moderate section loss throughout.

B.C.14 NSTM Inspection Condition (NOT APPLICABLE - Component does not exist.)

VERMONT
AGENCY OF TRANSPORTATION

Route C2003 /
Structure #00010 / (Routine)
C2003 over COX BROOK
Team Lead: Justin White, **Inspection Date:** 08/20/2024

Substructure

ELEMENTS	DESCRIPTION	UNITS	TOTAL	CS1	CS2	CS3	CS4
215	Reinforced Concrete Abutment	LF	40	28	12	0	0
1120	Efflorescence/Rust Staining	LF	6	0	6	0	0
1130	Cracking (RC and Other)	LF	6	0	6	0	0

60 - Substructure (7 - GOOD CONDITION - some minor problems.)
Abutment 1 has scattered shrinkage cracks throughout with small areas of rust stains. Abutment 2 small surface spall in the downstream end and fine vertical shrinkage crack in the upstream end with minor rust staining

A71 - Abutment End Walls Condition (Good)
The exposed upper end at abutment 2 has minor to moderate abrasion due to tire wear

A78 - Abutment Footings Condition (Satisfactory)
Moderate abrasion throughout with minor section loss.

CHANNEL

61 - Channel Condition (8 - Banks are protected or well vegetated. River control devices such as spur dikes and embankment protection are not required or are in a stable condition.)

B.C.10 Channel Protection Condition Rating (VERY GOOD - Some inherent defects.)

B.C.11 Scour Condition Rating (Insignificant scour.)

GENERAL OBSERVATION

The steel beams have rust scale throughout with developing section loss and the deck has moderate saturation throughout with scattered mildew staining. The boards are starting to split and check apart from decaying wood in the surrounding areas of the beams. The beams should be considered for extensive cleaning and painting and the deck will need replacing with in the next few years.

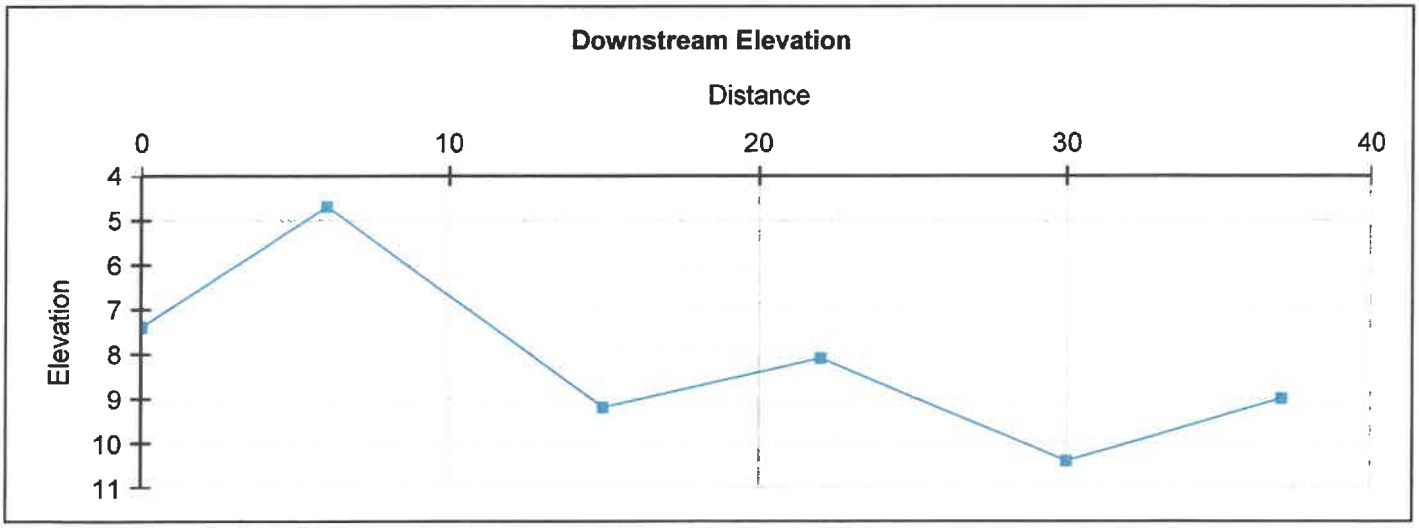
VERMONT
AGENCY OF TRANSPORTATION

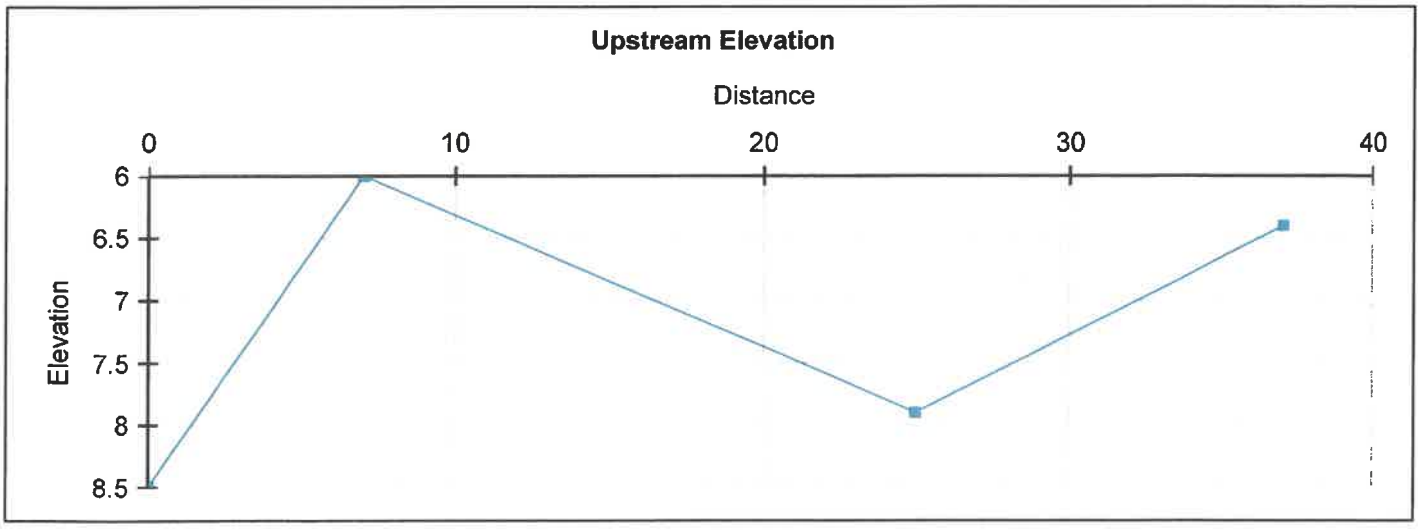
Route C2003 /
Structure #00010 / (Routine)
C2003 over COX BROOK
Team Lead: Justin White, **Inspection Date:** 08/20/2024

Channel Profile

Waterway Flow:	Left to right	Top of Water:	
Origin:	Deck soffit	Bottom of Beam:	

Station	Distance	Downstream	Upstream
Abutment 2	0	7.4	8.5
EOW	6	4.7	
	7		6
	15	9.2	
EOW	22	8.1	
EOW	25		7.9
	30	10.4	
	30	10.4	
Abutment 1	37	9	6.4





VERMONT
AGENCY OF TRANSPORTATION

Route C2003 /
Structure #00010 / (Routine)
C2003 over COX BROOK
Team Lead: Justin White, **Inspection Date:** 08/20/2024

Abutment 1 approach

Abutment 2 approach

Abutment 2 transition rail

Abutment 2 transition rail

VERMONT
AGENCY OF TRANSPORTATION

Route C2003 /
Structure #00010 / (Routine)
C2003 over COX BROOK
Team Lead: Justin White, **Inspection Date:** 08/20/2024

Downstream elevation

Upstream elevation

Span

Deck

VERMONT
AGENCY OF TRANSPORTATION

Route C2003 /
Structure #00010 / (Routine)
C2003 over COX BROOK
Team Lead: Justin White, **Inspection Date:** 08/20/2024

Superstructure

Beam 2 abutment 2 end

Beam 2 abutment 2 end

Abutment 2

VERMONT
AGENCY OF TRANSPORTATION

Route C2003 /
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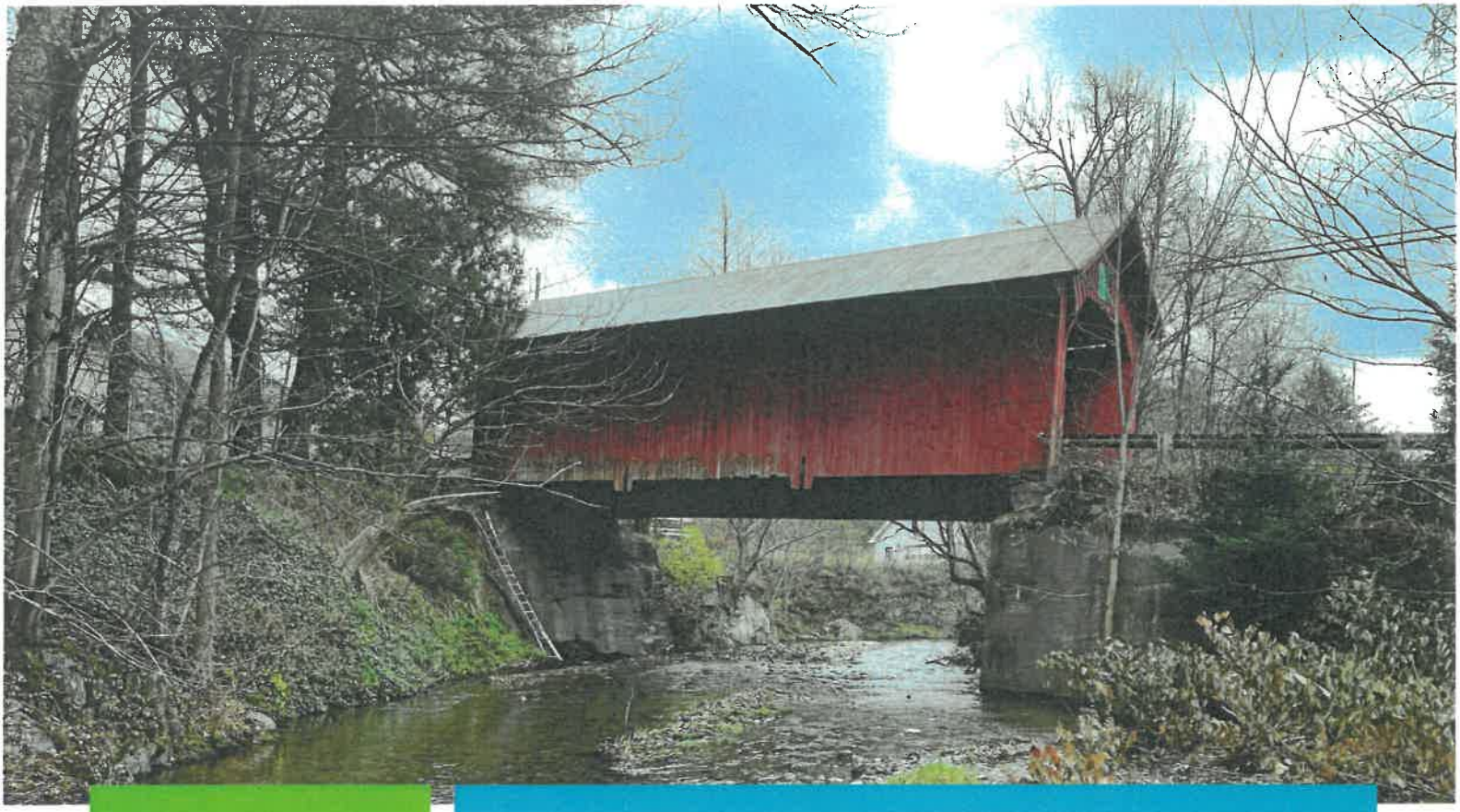
C2003 over COX BROOK
Team Lead: Justin White, **Inspection Date:** 08/20/2024

Abutment 1

Downstream

Upstream



Draft Scoping Report
Lower Cox Brook Covered Bridge
Town Highway 3
Bridge 11 over Cox Brook

Northfield BO CVBR(8)

January 24, 2026

Prepared for:
Vermont Agency of Transportation

HOYLE TANNER

Trusted Experts | Innovative Results

Table of Contents

Location Map

1. SITE INFORMATION

The Lower Cox Covered Bridge (Bridge No. 11) is a Town-owned bridge located on Town Highway 3 (TH-3), Cox Brook Road, just west of the intersection with Chandler Road. The bridge is a 55'-3" long single span queenpost truss which carries one lane alternating traffic over the Cox Brook near the center of the Village of Northfield Falls. Northfield Falls is an unincorporated village in the Town of Northfield, VT. The bridge is one of five covered bridges in the Town of Northfield, the second highest concentration by town of such bridges in Vermont. The sign on the west portal states that the bridge was built in 1872.

Due to its historic and national significance the bridge is currently listed on the National Register of Historic Places, a federal program that is administered by the National Park Service.

This scoping report was compiled after the review of multiple sources of data including topographic ground survey, lidar scanning, previous rehabilitation plans, VTrans Structure Inspection, Inventory and Appraisal Sheet, field measurements, and photographs taken during site visits by Hoyle Tanner personnel. The intent of this report is to evaluate structural deficiencies and to recommend a solution which best addresses the project's need. For purposes of this report, the substructure units are numbered sequentially from west to east and all members are wood unless noted otherwise.

Upstream Elevation Looking South

Roadway Classification:	Local Road, Class 2 Town Highway
Bridge Type:	Single Span Queenpost Covered Bridge
Bridge Length:	55'-3" feet
Bridge Skew:	No Skew
Year Built:	1872, Rehabilitated in 1967 and 1979
Ownership:	Town of Northfield

The bridge has undergone numerous changes or additions throughout its history with various degrees of documentation. Two major and documented rehabilitations were completed in 1967 and 1979.

The 1967 rehabilitation plans noted the work shown below. Record drawings of this rehabilitation are not available, and it is not known if all this work was completed at that time.

- Straightening and plumbing of the trusses.
- Replacing parts of the floor system, including new 2"x6" nail laminated deck and 3"x10" nailing strips, new 24WF84 steel stringers, lateral bracing, and intermediate and end diaphragms.
- Installing new bearings for all stringers.
- Applying wood preservative to flooring, blocking, and nailing strips replacement timbers.
- Facing northwest wingwall at Abutment 1 with concrete.
- Refacing Abutment 1 with concrete.
- Raising Abutment 1 backwall.
- Replacing truss bearing blocks.

- Removing and reinstalling or replacing the existing siding as required to complete the work noted above.

The 1979 rehabilitation plans noted the work shown below. Record drawings of this rehabilitation are not available, and it is not known if all this work was completed at that time.

- Clean and paint support brackets.
- Clean and paint steel stringers.
- Install new approach guardrail.
- Remove cracked concrete at south abutment and bearing caps at north abutment and replace with new concrete and steel reinforcing in both locations.
- Reinstall or replace loose or damaged siding.

East Portal Looking West

There is load restriction posted for the bridge of 12-Ton for a Single Axle, 15-Ton for a Tandem, and 21-Ton Gross weight. The bridge provides a horizontal clearance of 15'-5" between the trusses and 12'-11" maximum vertical clearance, with vertical clearance at the edges of the travel lane of approximately 10'-3". The vertical clearance signs on each approach to the bridge indicate a height restriction of 12'-0".

Cox Brook Road (TH-3) is oriented in a west to east direction within the project limits. Horse Lane is located to the west of the bridge and Chandler Road is located to the east. Horse Lane (TH-87) and Chandler Road (TH-13) are oriented north to south. The Lower Cox Covered Bridge is located 0.1 miles west of the intersection of Cox Brook Road and VT Route 12.

Tangent weathering steel w-beam guardrail is used at all four approaches to the bridge. There are no crashworthy end units on the guardrail. Side slopes are generally level off the roadway except in the vicinity of the bridge. The west approach to the bridge intersects with Horse Lane approximately 200' west of the bridge. There is a gravel drive directly east of the bridge. There is no curbing on any of the approaches to the bridge. The approach grades to the bridge are mostly flat and stormwater generally sheet flows off the roadway.

a. Need

The Lower Cox Covered Bridge was last inspected by VTrans personnel on August 20, 2024. Hoyle Tanner personnel also inspected the bridge and performed in-depth field measurements and gathered field data for this Scoping Study on November 7 and 11, 2023. The bridge (superstructure, deck, substructure) is considered to be in poor condition, and several deficiencies have been noted. The following is a list of deficiencies of Bridge No. 11 and TH-3 at this location:

Private Drive at East Approach

<u>Roof and Siding Members:</u>

- Metal roof is in fair condition.
- There are rusting and leaks due to failing screw attachments of the metal roofing to the roof boards.

- The roofboards and rafters exhibit through splits, breaks, insect damage, and rot. It is estimated that all of the roofboards and 8% of the roof rafters will require replacement due to condition.
- The siding boards are in good condition; however, removal and replacement will likely be required to provide access for the extensive truss member replacements.

Upper Lateral Bracing Members:

- The upper lateral bracing members exhibit splits, breaks, rot, and impact damage.
- The crossbeams have been hit by vehicles, causing impact damage and breaking the connection between the crossbeams and knee braces.
- The knee braces have been damaged from oversized vehicles, and some are not connected to the crossbeams or truss members.

Truss Chord Members:

- Trusses members exhibit splits, breaks, rot, and high moisture content. Refer to Appendix E for deteriorated chord members that were identified in need of replacement due to condition.
- Several nailers and vertical members have loose connections.
- Bottom chord at the end of the south truss exhibits extensive rot, heavy weathering, and checking. The bottom chord has a split and has been repaired used a steel plate. Refer to Appendix E for deteriorated chord members that were identified in need of replacement due to condition.
- The moisture content of the truss members was measured to be a maximum of 50% in the lower portions of the trusses.
- Debris and dirt accumulates near the bearings between the truss and the siding.

Floor System Members:

- The steel beams have areas of heavy lamination and areas of section losses up to ⅜" on the bottom flange, ¼" along the top flange, and ⅛" along the web.
- There are several locations where the section loss was 100% on the diaphragms.
- The runner boards are comprised of 1⅝" thick boards. They exhibit areas of moderate to heavy wear, rutting and splits.
- The deck is comprised of 2"x6" nail laminated timber and is in fair condition; however, removal and replacement will likely be required to provide access for the extensive floor member replacements.

Truss Bearing Blocks:

- The wooden bearing blocks exhibit heavy rot and decay at each end of the bridge.

Substructure:

- Both abutments exhibit areas of concrete spalling, delamination, efflorescence staining, vertical, horizontal and map cracking.

General:

- The bridge lacks fire protection.
- The vertical clearance is substandard and there is evidence of vehicular damage at each portal.

b. Traffic

A traffic study of this site was performed by the Vermont Agency of Transportation. The traffic volumes are projected for the years 2029 and 2049.

Traffic Data	2029	2049
AADT	886	957
DHV	130	130
ADTT	64	82
%T	6.1%	7.2%
%D	50%	50%

c. Design Criteria

The design standards for this bridge project are the Vermont State Design Standards (VSDS), dated October 22, 1997. Minimum standards are based on an ADT of 957, a DHV of 130, and a design speed of 35 mph for a Local Road.

Design Criteria	Source	Existing Condition	Minimum Standard	Comment
Approach Lane and Shoulder Widths	VSDS Table 6.3	9'/2' (22')	9'/2' (22')	
Bridge Lane and Shoulder Widths	VSDS Table 6.3	15'-5" Between Trusses/0' (15.5')	9'/2' (22')	Substandard
Clear Zone Distance	VSDS Table 6.5	Varies (No Issues Noted)	12' Fill / 10' Cut	
Banking	VSDS Section 6.12	NC	Low Speed Road – No Super Elevation Required	
Speed	VSDS Section 6.2	25 mph (Signed)	35 mph (Design)	Substandard
Horizontal Alignment	AASHTO Green Book, Table 3.10	R = ∞ over bridge	At e_{max} = 8%: super = 8%, R_{min} = 314' NC, R_{min} = 614'	
Vertical Grade	VSDS Table 6.6	3.7% over bridge	7% (Max) for Level Terrain	
K Values for Vertical Curves	VSDS Table 6.1	No Vertical Curve over Bridge Approach K = 21 Min	40 Crest / 50 Sag	Substandard
Vertical Clearance	VSDS Section 6.7	12'-11" Vertical Clearance Provided	14'-3"	Substandard
Stopping Sight Distance	VSDS Table 6.1	200'	225'	Substandard
Bicycle/Pedestrian Criteria	VSDS Table 6.7	No Shoulders	1' Paved Shoulder	Substandard

Hydraulics	VTrans Hydraulics Manual, Table 6.1	Passes 4% AEP (Q_{25}) storm event with X' of freeboard Clear Span: 44'-0"	Pass 4% AEP (Q_{25}) Storm Event with 1' of Freeboard Bank Full: X'	Surpasses Hydraulic Standards
Structural Capacity	Structures Design Manual, Ch. 3.4.1	Posted: Single Axle = 12 Tons Tandem = 15 Tons Gross = 21 Tons	Design Live Load: HL-93	Substandard

d. VTrans Inspection Report Summary

The ratings provided below are from the most recent inspection performed by VTrans in August 2024. The bridge is on a 24-month inspection frequency.

Deck Rating:	6 Satisfactory
Superstructure Rating:	5 Fair
Substructure Rating:	6 Satisfactory
Channel Rating:	7 Good

From the Structure Inspection, Inventory and Appraisal Sheet:

This structure should be considered for a paint project with extensive cleaning of the beams. Steel repairs are needed as well as channel beam diaphragms have extensive section loss and some members have failed. Further section loss in the abutment beam ends will result in more steel repairs or full replacement.

e. Hoyle Tanner Field Observations

On November 7 and 11, 2023 a four-person inspection team from Hoyle Tanner visited the covered bridge to perform in-depth field measurements and gather field data for this Scoping Report. The roof framing members, upper lateral bracing, truss members above the deck, interior of the siding, and deck were inspected using extension and folding ladders. The underside of the deck, truss members below the bridge deck, and steel stringers were inspected using rope access. Field observations were used as a basis for this report and expanded as appropriate. Lumber dimensions referenced throughout this report are nominal unless otherwise noted.

Several small wood samples were removed from the bridge for the purpose of species identification (see Appendix D).

Bridge Orientation Conventions

The truss upper chord is referred as the top chord and the lower chord is referred to as the bottom chord. The bottom chord consists of two plies, which are denoted as plies "A" and "B". Ply "A" is the most exterior ply while ply "B" is the most interior ply. The node points are numbered from west to east with the western most node point designated as 1 at the western most end post member. Each consecutive node number is numbered in ascending order at each intersection of vertical members to the top chord.

i. Roof Framing and Siding

The roof framing consists of a standing seam metal roof on 1" (assumed) thick roof boards with variable width which are supported by roof rafters. The roof rafters are 2" wide x 6" deep and are spaced at 2'-0½" on center and supported on a rafter support beam that is 2" deep x 6" wide. The siding is ⅞" thick (actual dimension) and is nailed to nailers attached to truss members.

The siding boards were not tested but assumed to be Eastern Spruce. The roof board wood species were also not tested but assumed to be Eastern Spruce and assigned a grade of Common Premium. The roof rafters were identified to be Eastern Spruce and assigned a grade of Select Structural. The grades were selected for structural analysis based on a visual examination of knots, checks, slope of grain of the wood and the growth rate characteristics of the wood.

Metal Roof

Splits and Breaks in Roof Boards and Rafters

The roof framing is generally considered to be in fair to satisfactory condition with the following deficiencies noted:

- The metal roof is attached with nails, which allow water penetrations to underlying members.
- The roof boards and rafters exhibit through splits, breaks, insect damage, and rot. Rafters sit on two 2"x6" rafter support beams.
- The siding boards exhibit areas of faded paint. The siding is in good condition; however, removal and replacement will likely be required to provide access for the extensive truss member replacements.

ii. Upper Lateral Bracing

The upper bracing consists of a mixture of 6"x6" and 6"x8" crossbeams spaced at each truss vertical, which varies in spacing from 5'-0" to 9'-6", 2"x8" diagonal bracing between crossbeams between Nodes 1E&2W, 2W&3E, and timber knee braces. Four nails connect the knee braces to the crossbeams.

The upper bracing wood species were identified to be Eastern Spruce and assigned a grade of Select Structural based on a visual examination of knots, checks, slope of grain of the wood and the growth rate characteristics of the wood. The knee braces wood species were identified to be Hemlock.

Split in Crossbeam

Broken Connection at Crossbeam and Knee Brace

The upper lateral bracing members are generally considered to be in fair to satisfactory condition with the following deficiencies noted:

- Two crossbeams are split and show signs of impact damage. The cross beam at the south portal is broken.
- Crossbeams have been previously damaged from oversized vehicles and are not well connected to the vertical truss members.
- Some of the timber knee braces on the west truss have impact damage and splits.

iii. Trusses

North Queenpost Truss

The queenpost truss has a central panel that is comprised of two chords (a single top and single, longer bottom chord), which are connected outside of the queenpost vertical members by diagonal members. The bottom chord members have multiple splices along their length. Most of the steel connectors at splices exhibit rusting and section losses.

The top chord is 16'-9" long and the bottom chord is 56'-0" long and support a roof length of approximately 56'-0". The clear span from face of west abutment to face of east abutment is approximately 50' long. Top chord truss members consist of one beam, 7¾"x9¾", and built-up lower chords consisting of two 5¾"x10" plies. Truss diagonal members consist of single timber beams varying in size from 7¾"x10" to 8"x10". Interior truss vertical members vary in size and consist of 5⅝"x7⅞" to 7⅞"x9⅝" single timber columns. Exterior truss vertical members consist of 3⅞"x5⅞" and 5⅞"x6" timber columns.

The truss chord members' wood species were identified to be Eastern Spruce except for the Truss Verticals at Nodes 3 and 5 which were identified to be Hard Maple. All truss members have been assigned a grade of Select Structural for the structural analysis based on a visual examination of knots, checks, slope of grain of the wood and the growth rate characteristics of the wood.

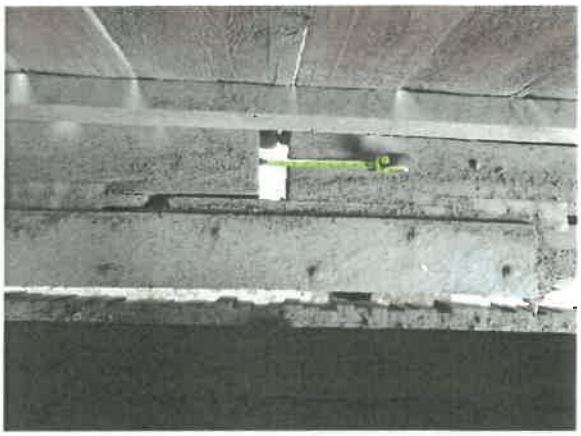
The truss members are generally considered to be in poor condition with the following deficiencies noted:

Top Chord Members:

- The top chord of the east truss exhibited checking at both connections to the queenpost verticals. The top chord is twisted at the connection to the queenpost vertical at node 5.
- The top chord of the west truss is twisted at the entire length between the queen posts at nodes 3 and 5.

Bottom Chord Members:

- There were no deficiencies noted at the time of inspection at bottom chord of the north truss.
- There is checking in the bottom chord of the south truss between nodes 5 and 6.
- There is a large gap of 2½" in Ply A of the bottom chord of the south truss at the splice location. Ply B is broken at the splice location, and the broken chord at Ply B has been repaired with an L-shaped steel plate and several bolts connecting both sides.



South Truss Splice at Bottom Chord

Diagonal Members:

- The southeast diagonal has a 4" deep check at the end near the connection to the bottom chord.

Vertical Members:

- The interior verticals in the south truss are out of plane up to 1½" over 2'.
- There is insect damage to one of the vertical sin the north truss.
- Several of the nailers are not connected to the vertical members and are loose.
- Many of the knee braces are not connected to the vertical members and are loose.

Southeast Diagonal Check at Bottom Chord

iv. Floor System

The floor framing consists of four 24WF84 longitudinal steel beams spaced at 4'-1" on center, transverse 2"x6" nail laminated deck boards placed edgewise, and longitudinal 1⅝" thick runner planks across the entire deck. There are C15x33.9 steel diaphragms at third points along the beams and at the beams ends.

The nail laminated deck board wood species was identified to be Southern Pine. The runner planks are not shown in the 1979 plans and are assumed to be Eastern Spruce. The nail laminated deck board members have been assigned a grade of No. 1 for the structural analysis based on a visual examination of knots, checks, slope of grain of the wood, and the growth rate characteristics of the wood.

Exterior Stringer

The floor system members are generally considered to be in poor condition with the following deficiencies noted:

- The runner boards exhibit areas of moderate to heavy wear, rutting and splits.
- The deck is not well attached to the steel beams and bounces vertically when live load moves across the deck.
- The diaphragm between the northern interior and exterior beams (B3 and B4) at the east abutment has 100% section loss.
- The exterior beams had section loss that reduced flange thickness to $^{7}/_{16}$" typical, with isolated areas only ⅜" thick. The top flange also had areas of section loss with a flange thickness of ½" throughout. The webs were in fair condition with some areas of rust and section loss. By inspection, it appears the web had approximately $^{1}/_{16}$" section loss on both sides of the web.

100% Section Loss in Diaphragm

- Access was limited for the interior stringers. By inspection from the exterior beams, it appeared the interior beams had the same amount of section losses exhibited in the exterior beams.

f. Truss Bearing Blocks

The trusses sit on sleepers consisting of two 4½"x4½" timbers of varying length at each bearing location. The sleepers sit on timber blocks consisting of 3"x10" hardwood blocks with varying length that sit on CMU blocks at each end of the bridge as measured in the field.

Timber Bearing and CMU Blocks

The truss bearing blocks are in poor to serious condition with the following deficiencies noted:

- The wooden bearing blocks exhibit extensive rot and need to be replaced.
- The CMU blocks are in poor condition and need to be replaced.

g. Substructure

The bridge substructure consists of two concrete abutments. It appears the original abutments were constructed with stone masonry and encased with concrete during previous rehabilitations. The east abutment has exposed ledge in front of it, so it is likely the east abutment bears on ledge. The channel bed consists of ledge and large cobbles.

East Abutment

The west abutment is considered to be in good condition, while the east abutment is considered to be in poor condition with the following deficiencies noted:

- Both abutments exhibit some areas of concrete spalling, delamination, efflorescence staining, and vertical, horizontal, and map cracking.
- At the spalled areas the concrete was not observed to contain rebar.
- The east abutment is in poor condition and needs to be replaced.

h. Wood Species Identification

Nine small wood samples were removed from the bridge for the purpose of species identification. The samples were taken from deteriorated members that will most likely be replaced during the course of potential bridge rehabilitation or from non-critical sections of the members. To identify the wood species, the samples were sent to Doug Gardner, Ph.D., a Professor of Forest Operations, Bioproducts, and Bioenergy, at the University of Maine at Orono. A summary of the species identification can be found in Appendix D.

i. Hydraulics

The bridge crosses over the Cox Brook which flows primarily north to south at the bridge site. A hydraulic study at this location was completed on February X, 2026 by Hoyle Tanner. The preliminary findings indicate that under the current conditions, there is XX.X' and XX.X' of freeboard during the 4% (Q_{25} flood event) and 1% (Q_{100} flood event) storm event, respectively. The Q_{100} storm event is defined as a flood having a one percent (1%) chance of being met or exceeded in any given year (base flood designation Q_{100}). The Q_{25} storm event is defined as a flood having a four percent (4%) chance of being met or exceeded in any given year (base flood designation Q_{25}). The existing bridge opening has sufficient hydraulic capacity to pass the 1% storm event flow with adequate freeboard.

Upstream Channel with Exposed Bedrock

The primary purpose of the hydraulics section is to determine if the rehabilitated covered bridge is at an elevation high enough to provide adequate free board during the 100-year flood event. The existing bridge

opening has sufficient hydraulic capacity to pass the 1% storm event flow with adequate freeboard.

j. Utilities

The VTrans Utilities and Permits Unit will investigate the required relocation of existing utilities within the project limits during the design phase of project development. The existing utilities identified based on the site visit are as follows:

Aerial Utilities

- Overhead utility lines (power and telecommunication) cross Cox Brook on the downstream (south) side of the bridge.
- A service lines runs across the road at each approach to the bridge

An aerial utility relocation plan will be needed if a temporary bridge is selected for the traffic control.

k. Right-of-Way

The existing Right-Of-Way (ROW) is shown on the Layout sheet in Appendix E. It is anticipated that temporary and permanent easements will be required to construct the proposed project.

l. Resources

The biological, historic, archaeological, hazardous material and stormwater resources present at this project are shown on the Resource Site Plan Sheet in Appendix E and are based on information provided by VTrans. See Appendix E for Resource Site Plan Sheet and Appendix I for Natural Resource ID memo.

i. Biological

Wetlands/Watercourses

Lower Cox Covered Bridge crosses over the Cox Brook, a tributary of the Dog River, and a watercourse regulated by the US Army Corps of Engineers.

There are no wetlands within the review area.

Wildlife Habitat

This area has three habitat blocks surrounding the project area and ranks high for surface water riparian community connectivity and has a high priority connectivity block adjacent to it. Aquatic Organism Passage (AOP) will be prioritized by the design team.

Rare, Threatened and Endangered Species

The only listed species within the review area is the wood turtle (Glyptemys insculpta). It has not been recorded under Bridge 11, but it has been spotted under Bridge 15 and the watercourses are connected. A wood turtle survey should be conducted.

Also listed within the review area is the federally endangered northern long-eared bat, however it was determined that this location may effect, not likely to adversely effect the northern long-eared bat, and no critical habitat was located near the bridge location.

Agricultural

The review area noted prime statewide and prime agricultural soils were mapped in the vicinity and around the project location.

ii. Historic

One Historic resource was identified within the immediate project area. The historic resource is considered a Section 4(f) property and is as follows:

- Bridge No. 11 (Lower Cox Covered Bridge) which is individually listed in the National Register of Historic Places (NRHP) and it remains significant under Criterion C.

The Lower Cox Covered Bridge was listed on the National Register of Historic Places on July 15, 1974 (National Register of Historic Place Inventory Nomination Form). The project was initially presented at the Historic Covered Bridge Preservation Committee (HCBPC) meeting on September 4th and 12th, 2024. The committee reviewed the proposed project based on the Historic Covered Bridge Preservation Plan and Section 106 review process set forth by the National Historic Preservation Act of 1966, as amended, and the Advisory Council on Historic Preservation's Procedures for the Protection of Historic Properties (36 CFR 800c) and recommended replacing the existing steel beams with glulam beams. They did not recommend an alternative based on live loading.

iii. Archaeological

The VTrans archaeological unit will investigate the project limits during the next phase of project development to determine any archaeologically sensitive areas.

iv. Hazardous Materials

According to the Vermont Agency of Natural Resources (VANR) Vermont Hazardous Sites List, there are no hazardous waste sites or hazardous waste generators related in the vicinity of the project location. See the figure below for a map of Hazardous Sites. The project area also does not show in the VT Hazardous Waste Urban Soils Map.

v. Stormwater

There are no stormwater concerns at this site. The project area is relatively flat with no roadway curbing and stormwater runoff involves overland flow into Cox Brook.

2. SAFETY

There have been no reported crashes along Cox Brook Road in Northfield within the last 5-year period.

There are no High Crash Location segments located within the project area.

3. COMMUNITY NEEDS AND CONSIDERATIONS

A community questionnaire was sent to the Town to fill out. The town noted seasonal visitors to the bridges in the summer months, including bus tours, but the slow season is considered winter and spring. For a long-term closure, emergency services and school buses would take a 4-mile Class 4 town road detour. Cox Brook Road connects Northfield to Berlin and Moretown, so users would need to take the same detour as emergency services, which is a gravel road and not designed for significant traffic. The town noted significant numbers of bicycle and pedestrian users on the bridge, which should be accommodated during construction. There were no known instances of flood waters impacting the bridge.

The Local and Regional Input Questionnaire can be found in Appendix J.

Public involvement for this project included a Local Concerns Meeting and Alternatives Presentation Meeting held in-person and as summarized below.

a. Local Concerns Meeting

A Local Concerns Meeting was held on March 26, 2024, at the Brown Public Library. Attendees included the Northfield Selectboard, VTrans and Hoyle Tanner personnel, and members of the public. The Local Concerns Meeting was regarding three different covered bridges that were inspected by Hoyle Tanner. Many of the discussion topics were applicable to all three bridges. The following were discussed:

- *Oversized Vehicles:* The bridge has substandard vertical clearance. Despite warning signs, oversized vehicles have repeatedly crossed the bridge, hitting and damaging the upper lateral bracing and cross beams. Many residents expressed concern about this and asked about mitigation measures that could be taken to deter oversized vehicles from using the bridge, including an over-height bar, cameras, alerts in map apps, and increasing the vertical clearance in the bridge. Over-height bars can be a safety concern if they are rigid, but a swinging bar could be an option. There are many mapping apps and it is difficult to get alerts in all apps that the traveling public use.
- *Enforcement:* The Town is responsible for enforcing load restrictions on any Town structure currently posted.
- *Guardrail and Signage:* It was noted that the approach guardrail is in poor condition, and the approach signing is covered by foliage. The Town is responsible for maintaining approach guardrail and clearing vegetation.
- *Bridge Closure During Construction:* There was a question about how long the bridge would be closed during construction. The bridge would be closed for an entire construction season. The shortest route around is Cox Brook Road, to VT Route 12, Water Street, Union Street, Union Brook Road, and Aseltine Road, and back to Cox Brook Road which has an end-to-end distance of 6.1 miles. Several concerns were bought up at the meeting about the detour route. Participants

expressed concern that Aseltine Road is not well maintained. It was noted that in the past, Pearson Hill was connected to Dunham Drive as a temporary detour. These will be investigated during the scoping process. Because this is a Town owned structure, the Town would ultimately be responsible for choosing and signing the detour route according to the Manual on Uniform Traffic Control Devices (MUTCD). VTrans often encourages Towns to reach out to our district offices for questions regarding what signs are required and where they should be placed. The Town would also be responsible to obtain permits from VTrans Operations Bureau for any signs that would be placed within the State Right-of-Way. The requirements for the detour will be detailed in the Finance and Maintenance Agreement.

- *Temporary Bridge:* A resident expressed interest in a temporary bridge option. A temporary bridge could be installed for access during construction, but the site conditions would make turning movements difficult to meet design standards.

b. Alternatives Presentation Meeting

An Alternatives Presentation Meeting was held on March X, 2026 at the Brown Public Library. Attendees included the Northfield Selectboard, VTrans and Hoyle Tanner personnel and members of the public. The following were discussed:

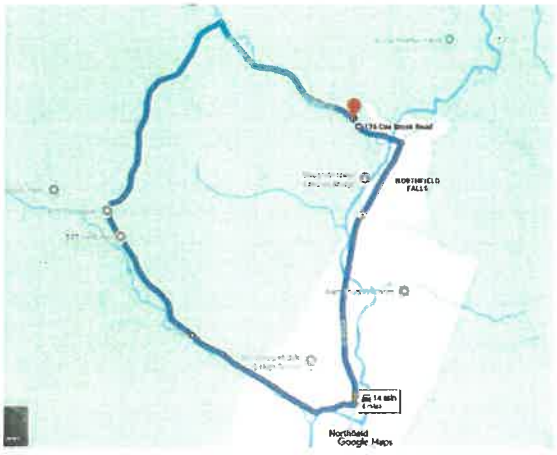
- Discussion Topics

4. MAINTENANCE OF TRAFFIC

In accordance with Vermont Agency of Transportation guidance this project was reviewed to determine suitability for the Accelerated Bridge Program which focuses on faster delivery of construction plans, permitting, and Right-of-Way, as well as faster construction of projects in the field. One practice that will help in this endeavor is closing bridges for portions of the construction period, rather than maintaining traffic on a portion of the existing bridge during construction or providing temporary bridges. In addition to saving money, the intention is to minimize the closure period with faster construction techniques and incentives to allow contractors to complete projects sooner. The Agency will consider the closure option on most projects where rapid reconstruction or rehabilitation is feasible.

a. Off-site Detour

This option would close the bridge and reroute traffic onto an offsite detour. Since the bridge is located on a Class 2 Town Highway, it would be the responsibility of the Town of Northfield to choose the preferred detour route and to sign it according to the MUTCD manual. If the preferred detour route goes through an adjacent Town, it will be the responsibility of the Town of Northfield to coordinate with that Town.



The most likely detour route has an end-to-end distance of 6.1 miles and adds 4.8 miles to the through route. This route is as follows:

- Cox Brook Road, to VT Route 12, Water Street, Union Street, Union Brook Road, and Aseltine Road, and back to Cox Brook Road (6.1 mi end-to-end)

Advantages: This option eliminates the need for a temporary bridge to maintain traffic during construction, significantly reducing both construction time and cost. It also minimizes impacts to adjacent properties and environmental resources. Overall, this approach lowers project expenses and duration during both design and construction phases. Additionally, it provides the safest traffic control method by removing the traveling public from the active construction area.

Disadvantages: Traffic flow would not be maintained through the project site during construction. Additionally, the detour route contains portions of Class 4 Town Highways which typically are narrow, steep, and not well maintained.

Due to the above-mentioned disadvantages of an off-site detour, it is not recommended that this option for maintenance of traffic be utilized for this project.

b. Temporary Bridge

From a constructability standpoint, a temporary bridge could be placed on the downstream side of Lower Cox Covered Bridge. A temporary bridge on the north side would have fewer impacts to aerial utilities but would still require some relocation. The downstream temporary bridge would require tree clearing.

If a temporary bridge is utilized, borings should be drilled at the temporary abutment locations.

Based on the daily traffic volumes and length of the bridge, a one lane alternating temporary bridge would be recommended.

Advantages: A temporary bridge will maintain traffic flow through the project corridor during construction. A temporary bridge is considered safer during construction than phased construction.

Disadvantages: This traffic control option would be costly and time-consuming, as additional time is needed to construct the temporary bridge and approaches.

Due to the above-mentioned advantages of a temporary bridge, and the disadvantages associated with an off-site detour, it is recommended that this option for maintenance of traffic be utilized for this project. The Cost Matrix, shown in Section 6 below, includes the temporary bridge cost in the Bridge category subtotal and overall project costs. By using a temporary bridge instead of an off-site detour, the Town's share of the construction costs is 5%.

c. Phased Construction

Another method of maintaining traffic along a corridor during construction is to build a new structure one lane at a time, or in phases.

Advantages: This would maintain traffic along the existing corridor during construction.

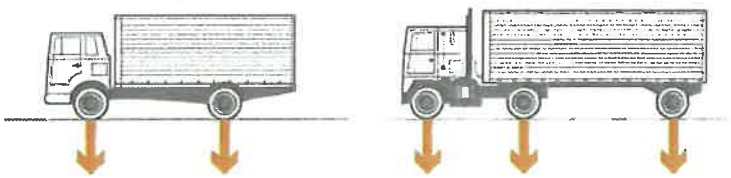
Disadvantages: Typically, the time required to construct a phased construction project is longer than a project constructed without phasing, because some of the construction tasks must be performed multiple times and cannot be performed concurrently. The costs of construction also increase over unphased work because of this increase in the length of time, the additional inconvenience of working around traffic, and the effort involved in coordinating the joints between the phases.

The existing bridge is a one-lane structure with a 15'-5" minimum width face of truss to face of truss typical. This does not provide enough width to phase construction and the type of construction required for covered bridges does not allow phasing of work. As such, phased construction will not be considered further.

5. ALTERNATIVES DISCUSSION

a. Structural Analysis

A structural analysis and load rating was performed of all primary live load carrying members of the bridge superstructure. Superstructure roof framing members were also checked for the applied wind, snow, and dead loads. The Service Load (Allowable Stress) Rating method was used for all members in accordance with the provisions of the American Association of State Highway and Transportation Officials (AASHTO) Standard Specifications for Highway Bridges, 17th Edition, AASHTO Manual for Bridge Evaluation Third Edition with 2019 Interim Revisions (MBE), and the 2010 VTrans Structures Design Manual. The bridge was rated to determine the allowable rating vehicle in terms of H Truck, which is a truck with two axles spaced at 14 feet with 20% of the load on the front axle and 80% on the rear axle. Per the scope of services, the bridge was rated for four AASHTO live loads; H20 (20 tons), HS20 (36 tons), H15 (15 tons), HS15 (27 tons). All structural members were rated for single lane loading configurations. The controlling live load force effect for each AASHTO live load was taken as the maximum of the design truck or the lane load. Excel spreadsheets, MathCAD computer program, STAAD, and hand calculations were utilized to calculate the as-inspected section properties, capacities, and load rating values.



H Truck on the left, HS Truck on the Right

Since the timber stringers were previously replaced with steel beams, the timber trusses of the bridge only carry their own self-weight, wind loads, and snow loads. The steel beams support their own self-weight and the vehicular live loads. To differentiate these two different types of loadings in the ratings below, live-load carrying members are reported in terms of Load Factors, while non-live-load carrying members are reported in terms Performance Factors.

For the floor system (steel beams and decking) the inventory rating was determined by combining the maximum design load effects of the dead and live load compared to the allowable inventory stress levels, while the operating rating was determined by combining the maximum effects of the live load, dead load, and snow load (as applicable) as compared to the higher operating stress levels.

Allowable stress values for wood members were obtained from the 2018 National Design Specification for Wood Construction and Supplement (NDS). The wood species used in the superstructure was identified through testing. The grade assigned to each member was based on a visual examination of knots, checks, slope of grain of the wood, and growth rate characteristics of the wood. All superstructure members are wood unless noted otherwise. The substructure was not analyzed as part of the load rating since it was not expected to control the load rating of the bridge.

The steel beams were analyzed using the Load Factor Method (LFR) per the MBE. The inventory rating was determined by combining the maximum effects of the dead and live load effects compared to the allowable inventory stress levels, while the operating rating was determined by combining the maximum effects of the dead and live load (as applicable) as compared to the higher operating stress levels.

Our initial recommendations for repair or replacement of each member are detailed in the following sections. These were reviewed by the Historic Covered Bridge Preservation Committee (HCBPC) so the structural and historical issues could be weighed to determine a rehabilitation live load that met the project goals, while preserving as much of the original fabric of the covered bridge as possible. We have

also identified the priority treatment number (PTN) from the Historic Covered Bridge Preservation Plan to aid in review of the recommendations.

It should be noted that not all members to be replaced can be identified based on our inspection due to inaccessible areas (i.e. top-face rafters, etc.). The estimate of cost in this study includes an additional amount of conditional replacement based on Hoyle Tanner's experience with similar structures to determine an appropriate budget for the project.

Roof Framing

Analysis

The roof rafters and roof boards were analyzed for dead load, wind load (9.0 pounds per square foot (psf) upward on the windward roof and 14.3 psf uplift on the leeward roof) and a ground snow load of 60.0 psf (30.9 psf roof applied) per the 2015 Vermont Fire and Building Safety Code snow load and the 2022 ASCE 7 Minimum Design Loads for Buildings and Other Structures. Our structural analyses showed that roof boards and rafters are adequate for the applied dead, wind, and snow loads (16% utilized for the roof boards and 52% utilized for the roof rafters).

Recommendations

The existing metal roof is in poor condition. It is attached to underlying members with nails, which allow water to seep into the bridge over time. During rehabilitation, the existing metal roof would most likely be damaged by the removal of certain truss and roof members and will need to be replaced. We recommend that the entire metal roof, all of the roof boards, 5 roof rafters (5%), 1 rafter support beam (8%) be replaced in-kind (Priority Treatment No.2) (PTN 2) due to condition. Roof boards are 1" thick Eastern Spruce, rafters are 2"x6" Eastern Spruce, and rafter support beams are 6"x6" Eastern Spruce. These roof framing recommendations apply to Alternatives 1 through 4.

Upper Lateral Bracing

Analysis

The existing upper lateral bracing, which consists of two diagonal braces, cross beams, and timber knee braces attached to truss verticals using nails, was analyzed for wind loading in conformance with ASCE 7-22. A grade of No. 1 was assigned to all upper lateral bracing wood members based on a visual examination of the wood. A portion of the lateral wind load based on the tributary area is applied to the existing upper later cross beams. Our analysis showed the diagonal bracing system is adequate to keep the bridge square and plumb and to resist code required wind loads.

Recommendations

The following recommendations are expected to improve and strengthen the upper lateral bracing:

- Replace both diagonal braces in-kind (PTN 2)
- Replace 2 crossbeams (29%) in-kind (PTN 2)
- Replace 7 knee braces (29%) in-kind (PTN 2)
- Strengthen all knee braces connections using lag bolts (PTN 3)

These upper lateral bracing recommendations apply to Alternatives 1 through 4.

Trusses

Analysis

The Queenpost Truss members were assigned a grade of select structural based on a visual examination of the wood.

The trusses were analyzed to determine their current and proposed dead load capacity. A 2-Dimensional bridge computer model of the Queenpost Trusses was utilized for the structural analysis.

To determine the current capacity of all truss members, full dead and snow loads were applied and compared to allowable stress levels. See Table 1 below for a summary of all members rated.

Table 1 – Queenpost Truss Members Rating Summary

Member	No. of Members – Size	Performance Factor[1]
Top Chord	1 – 8"x10"	2.00
Bottom Chord	2 – 6"x12"	1.90
Queen Posts (Vertical 2)	2 – 8"x10"	5.00
Diagonals	2 –8"x10"	3.56
Verticals	5 – 6"x6"	1.32

1. Performance factors greater than 1.0 indicate that the member has sufficient capacity to safely carry the design loads.

To determine the current capacity of all truss member connection details, full dead and snow loads were applied and compared to allowable stress levels. See Table 2 below for a summary of all member connection ratings.

Table 2 – Member Connections Rating Summary

Connection #	Location	Performance Factor[2]
Connection #1	Vertical, Top Chord, and Diagonal	2.99
Connection #2	Diagonal and Bottom Chord	1.27
Connection #3	Vertical and Bottom Chord	3.50
Connection #4	Bottom Chord Splice, North Truss	1.90
Connection #5	Bottom Chord Splice, South Truss	0.15

2. Performance factors greater than 1.0 indicate that the member has sufficient capacity to safely carry the design loads.

Recommendations

Since the truss members are not carrying any live load and all rate over 1.0, the removal and replacement of the truss members is due to condition and the same for all alternatives (PTN 2). See Appendix E for members that are required to be replaced. Epoxy injection into the large splits of a few members and rotted areas is also recommended to lessen further splitting and deterioration to these members (PTN 1).

One connection did not rate above a 1.0 and will require strengthening to meet sufficient capacity to safely carry design loads.

Recommendations for member replacements is detailed below. All replacement wood is to be Douglas Fir Select Structural grade unless noted otherwise.

North Truss member replacements and repairs:

- Epoxy repair deteriorated members (PTN 1)

South Truss member replacements and repairs:

- Replace bottom chord in-kind between nodes 1 & 4 (PTN 2)
- Strengthen bottom splice connection (PTN 3)
- Epoxy repair deteriorated members (PTN 1)

Floor System

Analysis

The existing decking and stringers were analyzed to determine the live load capacity. The load rating summary for the deck is shown in Table 3. The tire contact area used for the deck load rating varies based on the applied load. As such, the deck rating for each design truck varies and the Rating Factor for each design truck is reported below. The load rating summary (in "H tons") for the stringers is shown in Table 3. The rear axle of the design truck controlled the load rating of all floor system members. The deck has been assigned a grade of No. 1 for the structural analysis based on a visual examination of knots, checks, slope of grain of the wood and the growth rate characteristics of the wood.

Table 3 - Existing Deck Load Rating Summary

Live Load Alternative	Inventory Rating Factor[3]	Operating Rating Factor[3]
Alternative 1 – H15	1.5	2.0
Alternative 2 – HS15	1.5	2.0
Alternative 3 – H20	1.1	1.5
Alternative 4 – HS20	1.1	1.5

3. Rating factors greater than 1.0 indicate that the member has sufficient capacity to safely carry the design live load.

Table 4 – Existing Interior (24WF84) Stringer Load Rating Summary

Live Load Alternative	Inventory Rating Factor[4]	Operating Rating Factor[4]
Alternative 1 – H15	0.61	1.01
Alternative 2 – HS15	0.34	0.56
Alternative 3 – H20	0.46	0.76
Alternative 4 – HS20	0.25	0.42

4. Rating factors greater than 1.0 indicate that the member has sufficient capacity to safely carry the design live load.

Table 5 - Existing Exterior (24WF84) Stringer Load Rating Summary

Live Load Alternative	Inventory Rating Factor[5]	Operating Rating Factor[5]
Alternative 1 – H15	0.51	0.85
Alternative 2 – HS15	0.28	0.47
Alternative 3 – H20	0.38	0.64
Alternative 4 – HS20	0.21	0.35

5. Rating factors greater than 1.0 indicate that the member has sufficient capacity to safely carry the design live load.

Recommendations

It is recommended that all stringers be replaced due to strength, age, and condition for Alternatives 1, 2, 3, and 4 (H15, HS15, H20, and HS20, respectively). The existing stringers have deteriorated beyond meaningful cleaning and repair work, and given their age, are due for replacement. It is recommended that the steel stringers be replaced with glulam beams (PTN 2). See Sections 5.d through 5.g of this report for additional details on each rehabilitation alternative.

The existing nail laminated deck is adequate for all alternatives; however, the deck will need to be removed to facilitate stringer replacement. This work will likely damage the deck as removal of a nail laminated deck is difficult, requiring a replacement nail laminated deck (PTN 2) or glue laminated deck (PTN 4) to be installed. For all alternatives, it is recommended that the existing runner boards be replaced with 1½" thick full-width runner boards (PTN 2). This helps to provide a smoother and wider traffic surface and could help prevent vehicles from losing control if a tire runs off the runner boards.

In addition, it is recommended that a new wood curb be added to the bridge to help keep vehicles from impacting the trusses. This curb has previously been used by VTrans on the Hutchins, Comstock, and Longley Covered Bridges in Montgomery and many other covered bridges rehabilitations throughout the State.

b. Substructure

The existing abutments have not been analyzed for overturning and sliding per the VTrans structures manual since they appear stable with no signs of distress and there is exposed bedrock at the bridge location.

Overall, the west abutment appears sound and globally stable with no apparent sign of movement, settlement, or tipping. Some isolated voids, cracks, and spalls were found on various surfaces of the existing substructure elements. The east abutment has large voids, cracks, and spalls, with undermining at the footing. The scope of work does not include the stability analysis of the existing substructure.

Recommendations

The following recommendations are made for the east abutment bridge substructure:

- Replace the east abutment with a reinforced concrete abutment (PTN 2).
- Replace truss bearing blocks (PTN 2).
- Remove all vegetation and small trees (PTN 1).

The following recommendations are made for the west abutment bridge substructure:

- Replace the backwall (PTN 2).
- Modify west abutment bridge seat elevation to accommodate replacement stringers (PTN 1).
- Conduct minor partial depth concrete repairs to all existing west substructure elements (PTN 1).
- Grout and seal the concrete cracks greater than ⅛" in width (PTN 1).
- Stain and seal all exposed concrete surfaces with a water-based sealant in order to provide long-term protection of the concrete (PTN 1).
- Replace truss bearing blocks (PTN 2).
- Remove all vegetation and small trees (PTN 1).

c. No Action

This alternative would leave the bridge as it currently exists. A general guideline for evaluating a "No Action" alternative is determining whether the structure can remain in service for at least the next 10 years without requiring any work. The existing bridge superstructure is in poor condition, with multiple components—including truss members, bearing blocks, and upper lateral bracing—with numerous deficiencies. For safety reasons, maintaining the bridge in its present state is not recommended. No cost estimate is provided for this alternative, as it does not involve any immediate expenditures.

d. Alternative 1: Rehabilitation for H15 (15-Ton) Loading

This alternative consists of work necessary to extend the useful life of the bridge and to upgrade the bridge live load carrying capacity to carry a 15-ton design vehicle. Refer to Appendix E for replacement members that are required to be replaced for this alternative. This work includes:

- Replacement of all steel stringers with 10½"x27½" Southern Yellow Pine glulam beams (PTN 4).

e. Alternative 2: Rehabilitation for HS15 (27-Ton) Loading

This alternative consists of work necessary to extend the useful life of the bridge and to upgrade the bridge live load carrying capacity to carry a 27-ton design vehicle. Refer to Appendix E for replacement members that are required to be replaced for this alternative. This work includes:

- Replacement of all steel stringers with 10½"x33" Southern Yellow Pine glulam beams (PTN 4).

f. Alternative 3: Rehabilitation for H20 (20-Ton) Loading

This alternative consists of work necessary to extend the useful life of the bridge and to upgrade the bridge live load carrying capacity to carry a 20-ton design vehicle. Refer to Appendix E for replacement members that are required to be replaced for this alternative. This work includes:

- Replacement of all steel stringers with 10½"x30¼" Southern Yellow Pine glulam beams (PTN 4).

g. Alternative 4: Rehabilitation for HS20 (36-Ton) Loading

This alternative consists of work necessary to extend the useful life of the bridge and to upgrade the bridge live load carrying capacity to carry a 36-ton design vehicle. Refer to Appendix E for replacement members that are required to be replaced for this alternative. This work includes:

- Replacement of all steel stringers with 10½"x35¾" Southern Yellow Pine glulam beams (PTN 4).

h. Proposed Roadway Improvements

Along the southern approach, the roadway will mimic existing conditions and transition approximately 50' before the bridge to a 14'-3" paved roadway at the bridge. The proposed roadway typical paved section south of the bridge will consist of removal of existing pavement and enough subbase material to provide suitable draining roadway fill beneath the pavement. Final pavement design will be provided by VTrans.

The approach roadway width will mimic the existing conditions measuring 14'-3" at the bridge and gradually widening to match the existing width at the end of the project limits. The proposed roadway typical section between the bridge and project limits will match the proposed paved typical section.

Stormwater flow patterns will mimic existing conditions with sheet flow of the roadway to vegetated side slopes. Stop drains or lowering the grade at one end of the bridge will be considered in final design to improve drainage conditions. New steel backed timber guardrail is proposed on both approaches and will closely match existing guardrail lengths.

It is recommended that tree removal and trimming take place on both sides of the bridge as many of the nearby tree branches have potential to grow over the bridge and could fall and damage the bridge and are also promoting insect infestation of the bridge.

i. Fire Protection

As part of this Scoping Report, the bridge was assessed for improvements against the potential for loss or damage from fire. There are no known fire detection or protection systems at the covered bridge site. Three fire detection/protection systems are generally used for covered bridges, each of which was evaluated for this project.

Intumescent or Fire-Retardant Coatings (Nochar/Polaseal)

These coatings are water-based, water repellent treatments that are specifically designed to protect exterior and interior wood surfaces. They penetrate the wood and then cure by reaction with air to lock into the pore structure of the wood. These coatings work by raising the flashpoint of the wood making it difficult to start a fire. The fire-retardant coatings contain a proven fire retardant *to reduce* flame spread in the event of a fire and a blend of special preservatives to fight against the causes of decay. The coatings are available in colored and clear versions that are applied to the wood by brush or spray. The coatings do not affect the strength of the wood. It is also recommended the application of a fungicide to the bridge members to defend against fungal growth. Infestation by fungi causes the wood to rot, lowering the capacity of affected members.

The application of fire-retardant coatings is recommended for all alternatives considered.

Fire Detection System (Protectowire)

If a fire is started, it is advantageous to notify the local fire department as soon as possible. The "Protectowire" is a proprietary alert system that works by running a small wire through key locations in the bridge. The sensor cable is comprised of steel conductors individually insulated with a heat sensitive polymer. The insulated conductors are twisted together to impose a spring pressure between them and wrapped with a protective tape. If a rapid rise in temperature is detected or if a wire is cut, the system alerts the local mutual aid or fire department. This advanced warning can greatly reduce fire damage to a bridge and hopefully prevent the fire from making the bridge a total loss.

It should be noted that there is an annual maintenance cost associated with this system. The system requires power and a phone line (land or cell) to contact mutual aid. In addition, the control box contains batteries that have small electric strip heaters on them to prevent damage from freezing during cold weather. The control box is typically hidden at the end of the bridge in the siding and can be well insulated to reduce electrical costs.

The fire detection system will be discussed with the Town at the alternatives presentation meeting.

Dry Deluge Sprinkler System

The purpose of a deluge sprinkler system is to prevent the spread of fire by wetting down the entire fire area. The sprinkler system typically used includes dry pipes with a fire department connection away from the ends of the bridge. During a fire, the fire department feeds the system which directs water to the source of the fire. The majority of the piping and heads are in the roof; however, coverage is also provided under the bridge at the abutments. These systems are typically used in long or multi-span bridges where the fire department cannot effectively fight the fire near the center of the bridge.

The sprinkler system will be discussed with the Town at the alternatives presentation meeting.

j. Lighting

There is currently no lighting on the bridge or immediate approaches to it. Lighting can be an effective means to deter vandalism and improve visibility. The decision to add lighting to the bridge should be made by the Town. Interior lighting in the form of high-pressure sodium lights controlled by photocells may be added if desired. This type of lighting provides a light brown color and is the type preferred by state historic resource agencies. The fixtures proposed in this study have a good long-term performance record, are unobtrusive as they are installed in between the upper lateral bracing, and are reasonably vandal proof. The photocell is specified to help ensure that the lights are only on when needed.

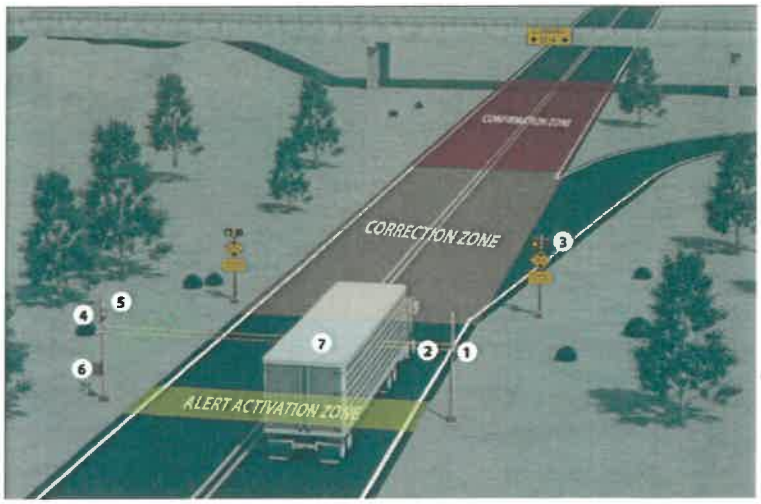
The lighting system will be discussed with the Town at the alternatives presentation meeting.

k. Vertical Clearance

The existing vertical clearance on the bridge is approximately 12'-10", which is substandard and causing impact damage to the portals, cross braces, upper lateral bracing, and knee braces due to oversized vehicles. The same is true of the other two covered bridges on Cox Brook Road. It is proposed to increase the vertical clearance of all three bridges to a uniform 13'-0". At the Lower Cox Covered Bridge, this would be done by replacing the existing steel lateral bracing with a new bottom chord assembly and blocking that would raise the truss members enough to achieve the desired vertical clearance. The siding will extend down enough to cover this assembly unit, so it is not visible on the exterior. Curbing and deck widening on the inside would cover the assembly unit from view on the inside of the truss.

This option was presented to the HCBPC and was approved as an acceptable modification to the existing structure.

Additionally, early detection and vehicle warning systems can be incorporated into the project. These systems use sensors within an "activation zone" to identify vehicles that exceed the clearance height of an upcoming structure and alert drivers to the restriction. Drivers are then guided toward a safe alternate route within the "correction zone". The system also collects data, such as license plate information, for vehicles that trigger the warning and notifies local authorities when a vehicle enters the "confirmation zone". A potential layout of this system for the three covered bridges along Cox Brook Road is shown below. The associated cost, estimated at approximately $125,000, is not included in the Cost Matrix in Section 6, as the system is proposed as an optional enhancement.



1. Construction Schedule

Lower Cox Covered Bridge is one of three bridges on Cox Brook Road scheduled for rehabilitation. The rehabilitation of this bridge is expected to take approximately one construction season (about eight months). Upper Cox Covered Bridge, located 0.1 miles to the north, is also anticipated to require one construction season, while Northfield Falls Covered Bridge, located 0.2 miles to the south, will likely require two construction seasons.

Because these projects are in close proximity, there may be opportunities for cost and schedule savings by bundling two or all three bridges into a single contract. Temporary bridge alternatives for Bridges 10 and 11 share the same span length and width requirements, allowing the same temporary structure to be reused at both sites. Bridge 15 has a short local detour available for traffic maintenance.

Covered bridge rehabilitation is a highly specialized type of construction, and contractors often have limited crews with the required expertise. For this reason, the Town may consider bundling Bridges 10 and 11 into a single contract. Under this approach, one contractor could complete both projects over two construction seasons, using the same specialized crew and the same temporary bridge at each site. Bridge 15 could then be bid separately and constructed over the same two seasons, allowing all three bridges to be completed within a two-year period.

Alternatively, all three bridges could be bid together as one project and completed over four years, or they could be bid individually, giving contractors the flexibility to pursue one, two, or all three projects.

6. COST MATRIX

Northfield BO CVBR(8)		Do Nothing	Alternative 1 Rehabilitation for H15 (15-Ton, 2 Axle) Loading	Alternative 2 Rehabilitation for HS15 (27-Ton, 3 Axle) Loading	Alternative 3 Rehabilitation for H20 (20-Ton, 2 Axle) Loading	Alternative 4 Rehabilitation for HS20 (36-Ton, 3 Axle) Loading
COST[1]	Roadway	$0	$522,392.50	$522,392.50	$522,392.50	$532,392.50
	Erosion Control	$0	$50,000.00	$50,000.00	$50,000.00	$50,000.00
	Bridge[2]	$0	$1,606,905.00	$1,621,905.00	$1,614,405.00	$1,630,905.00
	Full CE Items	$0	$40,000.00	$40,000.00	$40,000.00	$40,000.00
	Construction Costs	$0	$2,220,000.00	$2,235,000.00	$2,228,000.00	$2,254,000.00
	Construction Engineering & Contingencies (CEC)	$0	$555,000.00	$559,000.00	$557,000.00	$564,000.00
	Accelerated Premium	$0	$0	$0	$0	$0
	Total Construction Costs with CEC	$0	$2,775,000.00	$2,794,000.00	$2,785,000.00	$2,818,000.00
	Preliminary Engineering	$0	$555,000.00	$559,000.00	$557,000.00	$564,000.00
	Right of Way	$0	$25,000.00	$25,000.00	$25,000.00	$25,000.00
	Total Project Costs	$0	$3,355,000.00	$3,378,000.00	$3,367,000.00	$3,407,000.00
	Annualized Costs	$0	$83,875.00	$84,450.00	$84,175.00	$85,175.00
	TOWN SHARE[3]	$0	$167,750.00	$168,900.00	$168,350.00	$170,350.00
	TOWN %[3]	0%	5.0%	5.0%	5.0%	5.0%
SCHEDULING	Project Development Duration	N/A	3 years	3 years	3 years	3 years
	Construction Duration	N/A	8 to 12 months	8 to 12 months	8 to 12 months	8 to 12 months
	Closure Duration (If Applicable)	N/A	8 months	8 months	8 months	8 months
ENGINEERING	Typical Section - Roadway (feet)	23'	23'	23'	23'	23'
	Typical Section - Bridge (feet)	15'-5"	11'	11'	11'	11'
	Geometric Design Criteria	Substandard Width	Substandard Width	Substandard Width	Substandard Width	Substandard Width
	Traffic Safety	No Change	Improved	Improved	Improved	Improved
	Alignment Change	No Change	No Change	No Change	No Change	No Change
	Bicycle Access	Substandard	Substandard	Substandard	Substandard	Substandard
	Pedestrian Access	Substandard	Substandard	Substandard	Substandard	Substandard
	Hydraulics	Meets Minimum Standard	Meets Minimum Standard	Meets Minimum Standard	Meets Minimum Standard	Meets Minimum Standard
	Utilities	No Change	No Change	No Change	No Change	No Change
OTHER	ROW Acquisition	No	Yes	Yes	Yes	Yes
	Road Closure	No	No	No	No	No
	Design Life (years)[4]	<10	40	40	40	40

[1] Costs are estimates only, used for comparison purposes.

[2] Bridge subtotal includes the cost of a temporary bridge.

[3] The Town Share and Town % of projects using a temporary bridge is 5%. Town Share and Town % decreases to 2.5% if an off-site detour is used.

[4] A design life of 40 years will be assumed for the deck and superstructure rehabilitation options. Substructure rehabilitation is assumed to have a design life of 50 years.

7. CONCLUSION

The Lower Cox Covered Bridge (Bridge No. 11), built in 1872, is a Town-owned bridge located on Town Highway 3 (Cox Brook Road) just west of the intersection with Chandler Road. It is a 55'-3" long single span queenpost truss which carries one lane alternating traffic over the Cox Brook near Northfield Falls, an unincorporated village in the Town of Northfield. The bridge has undergone numerous changes and additions throughout its history with various degrees of documentation.

A detailed inspection and load rating of the bridge was completed to determine if the bridge can meet the project purpose and need. The roof framing was determined to be adequate for code required dead, wind, and snow loads. The bridge lateral bracing system was determined to be adequate for code required wind loads, however modifications to the bracing system are recommended to prevent bowing and racking of the truss. The truss members were determined to be adequate for code required dead, wind, and snow loads, however modifications are recommended to repair some select members due to their deteriorated condition and to increase the capacity of one of the connections of the bottom chord members. The floor system was determined to not be adequate for H15 (15-ton) loading at inventory or operating level. The west abutment appears to be adequate with minor repairs and modifications recommended to accommodate the new floor system, while the east abutment is in poor condition and recommended for complete replacement with reinforced concrete.

Based upon our inspection and analysis of the Lower Cox Covered Bridge it appears feasible to rehabilitate the bridge for vehicular loading to meet the project's purpose and need. Several alternatives were considered and studied as described above in Section 5.

The Town Selectboard and public at the March DATE, 2026 meeting approved Alternative X – Rehabilitation for HXX (XX-ton) loading. Alternative X promotes a safe transportation system, increases the load carrying capacity of the crossing for the emergency responses vehicles, promotes economic development and growth of the Town of Northfield, and maintains the historic character of the covered bridge.

The total estimated construction cost of all recommended work items for Alternative X, in 2026 dollars, is $X,XXX,XXX.

This Scoping Report has been completed utilizing information available as of March 2026. This information may include the Design Criteria listed above, permitting requirements, field data obtained by Hoyle Tanner, and reports or survey information prepared by others, which are subject to change. The condition of an existing bridge can change rapidly, or the bridge be damaged through manmade or natural events that could alter the conclusions reached herein. Therefore, the conceptual design, estimate of probable construction costs, and conclusions reached in this Scoping Report should not be relied upon for an extended period.

APPENDIX A

VTrans Bridge Inspection Report

VERMONT
AGENCY OF TRANSPORTATION

Route C2003 /
Structure #00011 / (Routine)
C2003 over COX BROOK
Team Lead: Justin White, **Inspection Date:** 08/20/2024

Town: 155 - NORTHFIELD

District 6, 23 - WASHINGTON County

Owner: 3 - Town or Township Highway Agency

Maintenance Responsibility: 3 - Town or Township Highway Agency

VERMONT
AGENCY OF TRANSPORTATION

Route C2003 /
Structure #00011 / (Routine)
C2003 over COX BROOK
Team Lead: Justin White, **Inspection Date:** 08/20/2024

44.17275, -72.65300

VERMONT
AGENCY OF TRANSPORTATION

Route C2003 /
Structure #00011 / (Routine)
C2003 over COX BROOK
Team Lead: Justin White, **Inspection Date:** 08/20/2024

IDENTIFICATION	
(1) State Names	50 - Vermont
(8) Structure Number	101213001112131
(5) Inventory Route	1
(2) Highway Agency District	6 - District 6
(3) County Code	23 - WASHINGTON
(4) Place Code	50275
(6) Features Intersected	COX BROOK
(7) Facility Carried	C2003
(9) Location	0.03 MI TO JCT W VT12
(11) Mile Point	0 mi
(12) Base Highway Network	No
(13) LRS Inventory Rte & Subrte	
(16) Latitude	44.1727527777778
(17) Longitude	-72.6530027777778
(98) Border Bridge State Code	
(99) Border Bridge Structure No.	

STRUCTURE TYPE AND MATERIAL	
(43) Main Structure Type	32
Material	3 - Steel
Type	2 - Stringer/Multi-beam or girder
(44) Approach Structure Type	00
Material	0 - Other
Type	0 - Other
(45) No. of Spans in Main Unit	1
(46) No. of Approach Spans	0
(107) Deck Structure Type	8 - Wood or Timber
(108) Wearing Surface/Protective System	
Type of Wearing Surface	7 - Wood or Timber
Type of Membrane	0 - None
Type of Deck Protection	7 - Internally Sealed

AGE AND SERVICE	
(27) Year Built	1872
(106) Year Reconstructed	1979
(42) Type of Service	15
On	1 - Highway
Under	5 - Waterway
(28) Lane	
On	1
Under	0
(29) Average Daily Traffic	1200
(30) Year of ADT	2019
(109) Truck ADT	3 %
(19) Bypass, Detour Length	6 mi

GEOMETRIC DATA	
(48) Length of Maximum Span	55 ft
(49) Structure Length	58 ft
(50) Curb or Sidewalk Width	
Left	0 ft
Right	0 ft
(51) Bridge Roadway Width Curb to Curb	14.9 ft
(52) Deck Width Out to Out	15.3 ft
(32) Approach Roadway Width (W/Shoulders)	18 ft
(33) Bridge Median	0 - No median
(34) Skew	0 Deg
(35) Structure Flared	0 - No flare
(10) Inventory Route Min Vert Clear	12.75 ft
(47) Inventory Route Total Horiz Clear	14.9 ft
(53) Min Vert Clear Over Bridge Rdwy	10.5 ft
(54) Min Vert Underclear	0 ft
Ref:	
(55) Min Lat Underclear RT	0 ft
Ref:	
(56) Min Lat Underclear LT	0 ft

NAVIGATION DATA	
(38) Navigation Control	0 - No navigation control on w
(111) Pier Protection	
(39) Navigation Vertical Clearance	0 ft
(116) Vert-Lift Bridge Nav Min Vert Clear	0 ft
(40) Navigation Horizontal Clearance	0 ft

CLASSIFICATION	
(112) NBIS Bridge Length	Y
(104) Highway System	0
(26) Functional Class	8 - Rural Minor Collector
(100) Defense Highway	0 - The inventory route is not
(101) Parallel Structure	N - No parallel structure exis
(102) Direction of Traffic	3 - One lane bridge for 2 - way traffic
(103) Temporary Structure	
(105) Federal Lands Highways	0 - N/A
(110) Designated National Network	0 - The inventory route is not
(20) Toll	3 - On free road. The structu
(21) Maintain	3 - Town or Township Highway A
(22) Owner	3 - Town or Township Highway A
(37) Historical Significance	1 - Bridge is on the National

CONDITION	
(58) Deck	6
(59) Superstructure	5
(60) Substructure	6
(61) Channel & Channel Protection	7
(62) Culverts	N

LOAD RATING AND POSTING	
(31) Design Load	2 - M 13.5 / H 15
(63) Operating Rating Method	2
(64) Operating Rating	
Type	2 - Allowable Stress(AS)
Rating	35
(65) Inventory Rating Method	2 - Allowable Stress(AS)
(66) Inventory Rating	
Type	
Rating	24
(70) Bridge Posting	5 - Equal to or above legal loads
(41) Structure Open/Posted/Closed	P - Posted for load (may inclu

APPRAISAL	
(67) Structural Evaluation	5
(68) Deck Geometry	2
(69) Clearances, Vertical/Horizontal	N
(71) Waterway Adequacy	7
(72) Approach Roadway Alignment	8
(36A) Bridge Railings	0 - Inspected feature does not meet
(36B) Transitions	0 - Inspected feature does not meet
(36C) Approach Guardrail	0 - Inspected feature does not meet
(36D) Approach Guardrail Ends	0 - Inspected feature does not meet
(113) Scour Critical Bridges	8 - Bridge foundations determined t

PROPOSED IMPROVEMENTS	
(75) Type of Work	35 - Bridge rehabilitation bec
(76) Length of Structure Improvement	58 ft
(94) Bridge Improvement Cost (Multiply value by 1000)	$ 311
(95) Roadway Improvement Cost (Multiply value by 1000)	$ 50
(96) Total Project Cost (Multiply value by 1000)	$ 361
(97) Year of Improvement Cost Estimate	2020
(114) Future ADT	1260
(115) Year of Future ADT	2029

INSPECTIONS *

(90) Inspection Date			08/20/2024
(91) Frequency			24
(92) Critical Feature Inspection	Done	Freq. (Mon)	Date
A: Fracture Critical Detail	No		
B: Underwater Inspection	No		
C: Other Special Inspection			

* The inspection date and frequency information in this box contains the current NBI date and frequency information. Please refer to the report header for the date this inspection was conducted.

VERMONT
AGENCY OF TRANSPORTATION

Route C2003 /
Structure #00011 / (Routine)
C2003 over COX BROOK
Team Lead: Justin White, **Inspection Date:** 08/20/2024

Maintenance Needs

Date Reported: 08/18/2022

Priority:

Status: Open

Type of Work: 25 - Superstructure - Bracing repair

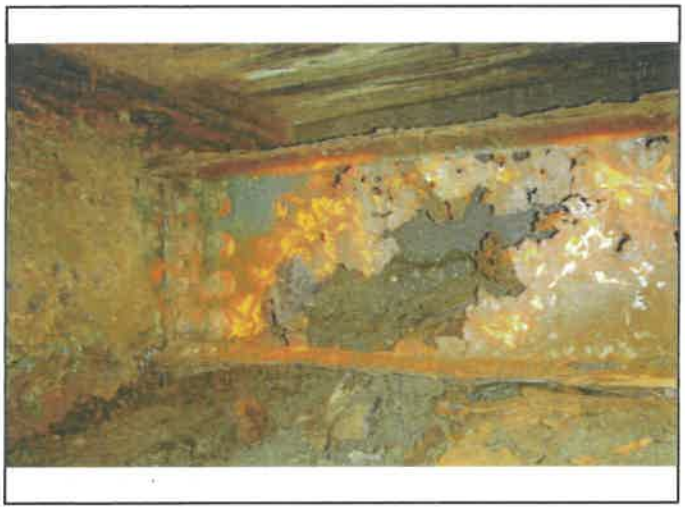
Component: Superstructure

Deficiency Description

The diaphragms have extensive section loss throughout with some perforations in the ends. The upstream diaphragm over abutment 2 has failed.

Remarks

Steel repairs are needed



VERMONT
AGENCY OF TRANSPORTATION

Route C2003 /
Structure #00011 / (Routine)
C2003 over COX BROOK
Team Lead: Justin White, **Inspection Date:** 08/20/2024

Maintenance Needs

Date Reported: 08/20/2024

Priority:	4 - Maintenance Finding - Next Inspection Cycle	**Status:**	Open
Type of Work:	27 - Superstructure - Clean and paint superstructure	**Component:**	Superstructure

Deficiency Description

Rust scale throughout with moderate to heavy section loss. Areas of deep pitting in the surrounding area of the angled bracing support of the covered bridge in the fascia beams. The beam ends remain heavily saturated due to the gravel build up on the bridge seats resulting in heavy section loss. Typical section remaining beam ends (extending out beyond the bridge seat) along the flanges is 3/8"+/- and 1/4"+/- in the lower area of the web.

Remarks

A project to clean and paint the beams should be considered as section loss in the beams continues increase.

Superstructure

Abutment 2 beam ends

VERMONT
AGENCY OF TRANSPORTATION

Route C2003 /
Structure #00011 / (Routine)
C2003 over COX BROOK
Team Lead: Justin White, **Inspection Date:** 08/20/2024

Deck

ELEMENTS	DESCRIPTION	UNITS	TOTAL	CS1	CS2	CS3	CS4
31	Timber Deck	SF	887	0	887	0	0
1140	Decay/Section Loss	SF	887	0	887	0	0
510	Wearing Surfaces	SF	887	887	0	0	0

58 - Deck (6 - SATISFACTORY CONDITION - structural elements show some minor deterioration.)
Mildew staining throughout with moderate to heavy saturation.

200 - Existing Wearing Surface Depth (2")

A21 - Deck Wearing Surface Condition (Good)
Areas of minor abrasion along the wheel paths.

A39 - Deck Fascia Condition (Satisfactory)

B.C.05 Bridge Railing Condition Rating (GOOD - Some minor defects.)

B.C.08 Bridge Joints Condition Rating (NOT APPLICABLE - Bridge does not have deck joints.)

APPROACH

72 - Approach Roadway Alignment (8 - Equal to present desirable criteria)

A13 - Approach Rail Condition (Fair)
Large perforations near and around the anchor points. Other areas are in good condition as they have been replaced with standard W beam.

A16 - Approach Post Condition (Fair)
HD pressure treated posts have wide splits and checks throughout with areas dry rot and some moss growth in the ends.

B.C.06 Bridge Railing Transitions Condition Rating (SATISFACTORY - Widespread minor or isolated moderate defects.)

VERMONT
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C2003 over COX BROOK
Team Lead: Justin White, **Inspection Date:** 08/20/2024

Superstructure

ELEMENTS	DESCRIPTION	UNITS	TOTAL	CS1	CS2	CS3	CS4
107	Steel Open Girder/Beam	LF	220	0	0	220	0
1000	Corrosion	LF	220	0	0	220	0
515	Steel Protective Coating	SF	1210	0	0	0	1210
3440	Effectiveness (Steel Protective Coatings)	LF	1210	0	0	0	1210
311	Movable Bearing	EA	4	0	0	4	0
1000	Corrosion	EA	4	0	0	4	0
313	Fixed Bearing	EA	4	0	0	4	0
1000	Corrosion	EA	4	0	0	4	0

59 - Superstructure (5 - FAIR CONDITION - all primary structural elements are sound but may have minor section loss, cracking, spalling or scour.)
Rust scale throughout with moderate to heavy section loss. Areas of deep pitting in the surrounding area of the angled bracing support of the covered bridge in the fascia beams. The beam ends remain heavily saturated due to the gravel build up on the bridge seats resulting in heavy section loss. Typical section remaining in the beam ends (extending out beyond the bridge seat) along the flanges is 3/8"+/- and 1/4"+/- in the lower area of the web.

A50 - Super Verticals/Diagonals Condition (Good)
Minor checks and splits scattered throughout. *The covered portion of the bridge does not aid in supporting the structure.

A51 - Top Chords Condition (Good)
Minor checks and splits scattered throughout. *The covered portion of the bridge does not aid in supporting the structure.

A52 - Bot. Chords Condition (Satisfactory)
The downstream bottom chord has a steel splice plate near the abutment 1 end due to a rotted and split member. *The covered portion of the bridge does not aid in supporting the structure.

A55 - Lateral Bracing Condition (Poor)
Extensive section loss throughout with some perforations in the ends. The upstream diaphragm over abutment 2 has failed.

A65 - Roof/Siding Condition (Good)

B.C.07 Bridge Bearings Condition Rating
Bearings are not visible due to gravel build

B.C.14 NSTM Inspection Condition (NOT APPLICABLE - Component does not exist.)

VERMONT
AGENCY OF TRANSPORTATION

Route C2003 /
Structure #00011 / (Routine)
C2003 over COX BROOK
Team Lead: Justin White, **Inspection Date:** 08/20/2024

Substructure

ELEMENTS	DESCRIPTION	UNITS	TOTAL	CS1	CS2	CS3	CS4
215	Reinforced Concrete Abutment	LF	40	5	20	15	0
1130	Cracking (RC and Other)	LF	30	0	20	10	0
1190	Abrasion/Wear (PSC/RC)	LF	5	0	0	5	0
800	Reinforced Concrete Wing/Retaining Wall	EA	4	0	2	2	0
1130	Cracking (RC and Other)	EA	4	0	2	2	0

60 - Substructure (6 - SATISFACTORY CONDITION - structural elements show some minor deterioration.)
Abutment 1 has map cracking throughout with minor saturation with scattered small areas of rust staining. Abutment 2 has lineal cracking with minor separation along the pour joints, map cracking throughout with light staining and scattered small voided spalls with scaling.

A71 - Abutment End Walls Condition (Satisfactory)
Minor abrasion and voided spalls throughout from tire wear. The added extension of the wall at abutment 1 is not attached and tips towards the backfill and is cracked through at the center.

A77 - Retaining/Wingwall Condition (Satisfactory)
Abutment 1 wall has fine map cracks throughout with light staining. Abutment 2 walls have lineal cracking with minor separation, map cracking with light staining and scattered voided spalling with scaling.

A78 - Abutment Footings Condition (Very Good)

CHANNEL

61 - Channel Condition (7 - Bank protection is in need of minor repairs. River control devices and embankment protection have a little minor damage. Banks and/or channel have minor amounts of drift.)
Small pocket of scour along upstream end of abutment 1 footing due to channel alignment.

B.C.10 Channel Protection Condition Rating (VERY GOOD - Some inherent defects.)

B.C.11 Scour Condition Rating ((Inactive) (Inactive) TEMP - Scour may exist but has not affected strength or stability - 5 or 6 or 7 or 8 or 9)

GENERAL OBSERVATION

This structure should be considered for a paint project with extensive cleaning of the beams. Steel repairs are needed as well as channel beam diaphragms have extensive section loss and some members have failed. Further section loss in the abutment beam ends will result in more steel repairs or full replacement.

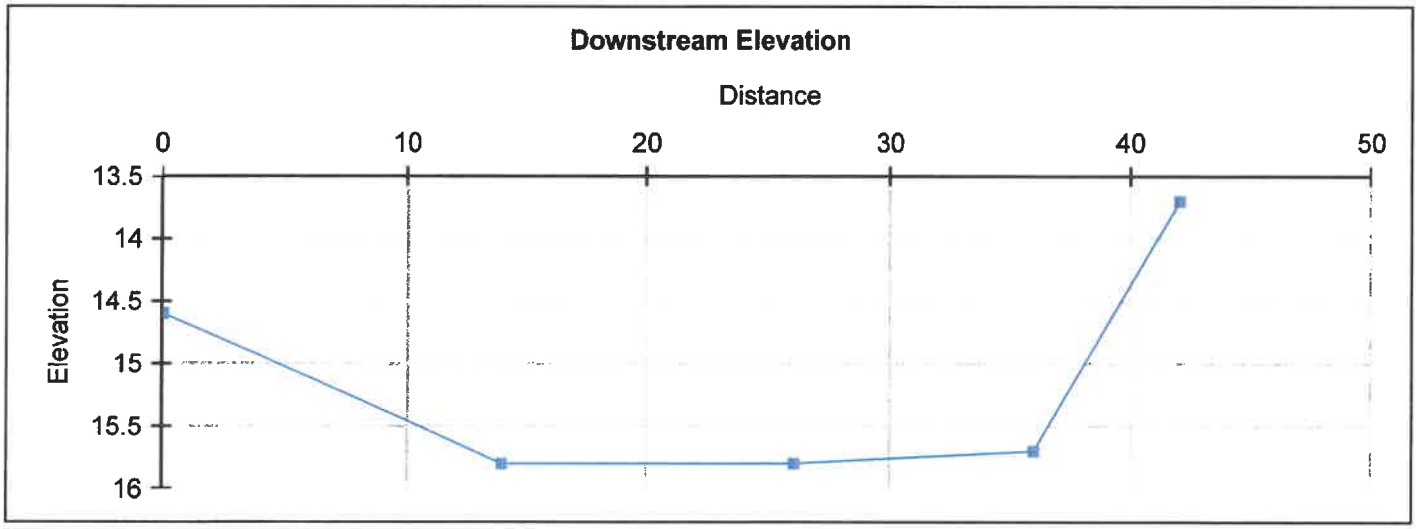
VERMONT
AGENCY OF TRANSPORTATION

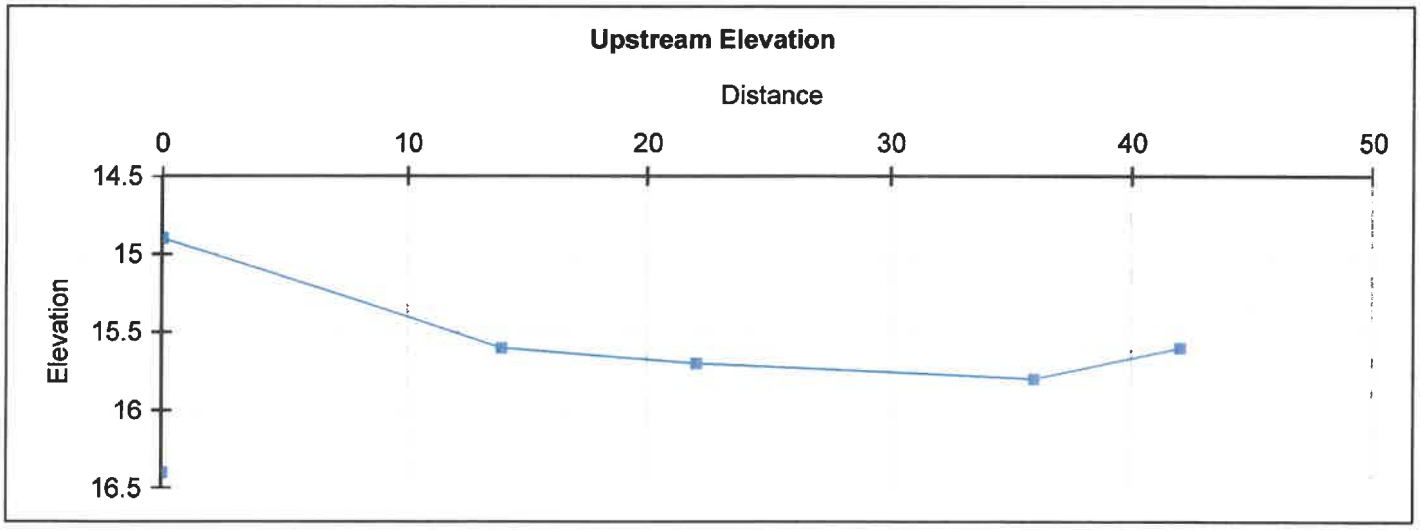
Route C2003 /
Structure #00011 / (Routine)
C2003 over COX BROOK
Team Lead: Justin White, **Inspection Date:** 08/20/2024

Channel Profile

Waterway Flow:	Left to right	Top of Water:	
Origin:	Bottom of fascia	Bottom of Beam:	

Station	Distance	Downstream	Upstream
Abutment 1	0	14.6	16.4
	0		14.9
	14	15.8	15.6
EOW	22		15.7
EOW	26	15.8	
	36	15.7	15.8
Abutment 2	42	13.7	15.6





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Route C2003 /
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C2003 over COX BROOK
Team Lead: Justin White, **Inspection Date:** 08/20/2024

Abutment 1 approach

Abutment 2 approach

Downstream abutment 2 approach

Upstream elevation

VERMONT
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Route C2003 /
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Downstream elevation

Span

Superstructure

Abutment 2 beam ends

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Beam 1 abutment 2 end

Abutment 2

Abutment 1

Abutment 1 backwall

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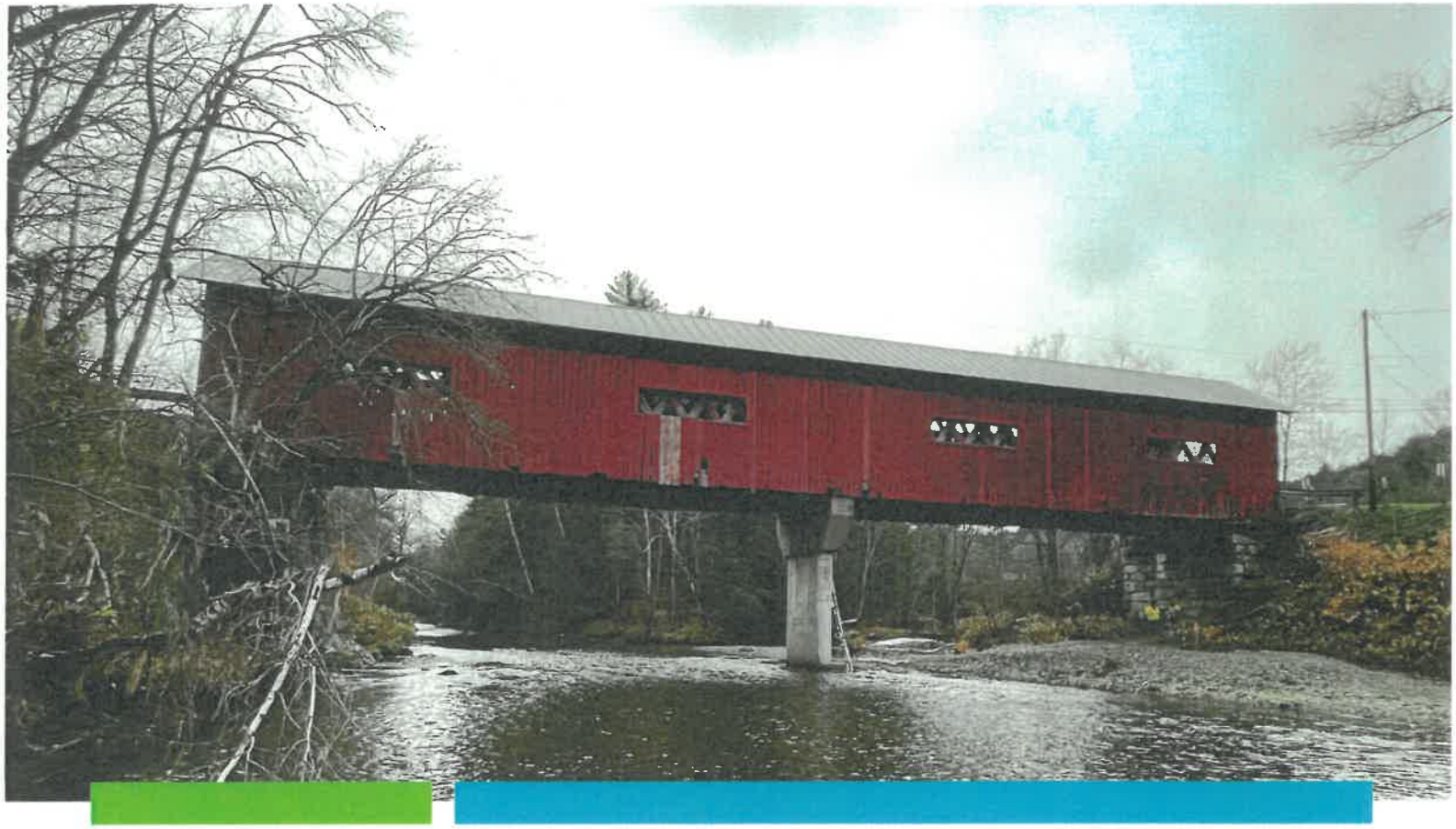
Upstream

Downstream



Draft Scoping Report
Northfield Falls Covered Bridge
Town Highway 3
Bridge 15 over Dog River

Northfield BO CVBR(9)

January 24, 2026

Prepared for:
Vermont Agency of Transportation

HOYLE TANNER

Trusted Experts | Innovative Results

Table of Contents

Location Map

1. SITE INFORMATION

The Northfield Falls Covered Bridge (Bridge No. 15) is a Town-owned bridge located on Town Highway 3 (TH-3), Cox Brook Road, just west of the intersection with VT Route 12. The bridge is a 131-0" long two-span continuous Town Lattice truss which carries one lane alternating traffic over the Dog River near the center of the Village of Northfield Falls. Northfield Falls is an unincorporated village in the Town of Northfield, VT. The bridge is one of five covered bridges in the Town of Northfield, the second highest concentration by town of such bridges in Vermont. The sign on the west portal states that the bridge was built in 1872.

Due to its historic and national significance the bridge is currently listed on the National Register of Historic Places, a federal program that is administered by the National Park Service.

This scoping report was compiled after the review of multiple sources of data including topographic ground survey, lidar scanning, previous rehabilitation plans, VTrans Structure Inspection, Inventory and Appraisal Sheet, field measurements, and photographs taken during site visits by Hoyle Tanner personnel. The intent of this report is to evaluate structural deficiencies and to recommend a solution which best addresses the project's need. For purposes of this report, the substructure units are numbered sequentially from west to east and all members are wood unless noted otherwise.

Downstream Elevation Looking South

Roadway Classification:	Local Road, Class 2 Town Highway
Bridge Type:	Two Span Town Lattice Truss Covered Bridge
Bridge Length:	131'-0" feet
Bridge Skew:	No Skew
Year Built:	1872, Rehabilitated in 1942, 1968, and 1979
Ownership:	Town of Northfield

The bridge has undergone numerous changes or additions throughout its history with various degrees of documentation. Three major and documented rehabilitations were completed in 1942, 1967, and 1979.

The 1942 rehabilitation plans noted the work shown below. Record drawings of this rehabilitation are not available, and it is not known if all this work was completed at that time.

- Replacing parts of the floor system, including new 2"x8" nail laminated deck and 12"x12" floor beams, new 10"x12" stringers, and new 10"x10"x8' sleepers.
- Replacing parts of upper lateral bracing system, including new 2"x8" knee braces and new 6"x8" cross beams.
- Replacing concrete bridge seat and pedestals.

The 1967 rehabilitation plans noted the work shown below. Record drawings of this rehabilitation are not available, and it is not known if all this work was completed at that time.

- Straightening and plumbing of the trusses.
- Installing new 6"x18"x10' shear beams below bottom chord.
- Replacing parts of the floor system, including new 2"x8" nail laminated deck and 4"x14" nailing strips, new 33WF118 steel stringers, lateral bracing, intermediate and end diaphragms.
- Installing new bearings for all stringers.
- Applying wood preservative to flooring, blocking, and nailing strips replacement timbers.
- Removing and replacing concrete backwall and bridge seat.
- Installing new concrete pier at midspan of the bridge.
- Removing and reinstalling or replacing the existing siding as required to complete the work noted above.

The 1979 rehabilitation plans noted the work shown below. Record drawings of this rehabilitation are not available, and it is not known if all this work was completed at that time.

- Clean and paint support brackets.
- Clean and paint steel stringers.
- Install new approach guardrail.
- Reinstall or replace loose or damaged siding.

West Portal Looking East

There is load restriction posted for the bridge of 10-tons. The bridge provides a horizontal clearance of 15'-5" between the trusses and 12'-6" maximum vertical clearance, with vertical clearance at the edges of the travel lane of approximately 10'-4". The vertical clearance signs on each approach to the bridge indicate a height restriction of 12'-0".

Cox Brook Road (TH-3) is oriented in a west to east direction within the project limits. Chandler Road is located to the west of the bridge and VT Route 12 is located to the east. Chandler Road (TH-13) and VT Route 12 are oriented north to south. The Northfield Falls Covered Bridge is located 230 feet northwest of the intersection of Cox Brook Road and VT Route 12.

Tangent weathering steel w-beam guardrail is used at all four approaches to the bridge. There are no crashworthy end units on the guardrail. Side slopes are generally level off the roadway except in the vicinity of the bridge. The west approach to the bridge intersects with Chandler Road approximately 300' west of the bridge. There are gravel drives directly southeast, northwest, and southwest of the bridge. There is a railroad grade crossing approximately 250' west of the bridge. There is no curbing on any of the approaches to the bridge. The approach grades to the bridge are mostly flat and stormwater generally sheet flows off the roadway.

a. Need

The Northfield Falls Covered Bridge was last inspected by VTrans personnel on August 20, 2024. Hoyle Tanner personnel also inspected the bridge and performed in-depth field measurements and gathered field data for this Scoping Study on November 8, 9, and 10, 2023. The bridge (superstructure, deck, substructure) is considered to be in poor condition, and several deficiencies have been noted. The following is a list of deficiencies of Bridge No. 15 and TH-3 at this location:

Roof and Siding Members:

- Metal roof is in fair condition. Replacement of the roof will be required for access for repairs to the truss members.
- The roof boards and rafters exhibit through splits, breaks, insect damage, and rot.
- The siding boards are in good condition; however, removal and replacement will likely be required to provide access for the extensive truss member replacements.

Commercial Drive at South Approach

Upper Lateral Bracing Members:

- The upper lateral bracing members exhibit splits, breaks, rot, and impact damage.
- The crossbeams have been hit by vehicles, causing impact damage and breaking the connection between the crossbeams and knee braces.
- The knee braces have been damaged from oversized vehicles, and some are not connected to the crossbeams or truss members.

Truss Members:

- Chord members exhibit splits, breaks, rot, misalignment, and high moisture content at lower sections.
- Chord trunnels exhibit rot, breakage, and walking.
- The lattice members exhibit splits, section loss, bark wane, and section loss.
- The moisture content of the truss members was as high as 50% in some members.
- Some minor amounts of debris and dirt have accumulated near the bearings between the truss and the siding.
- Refer to Appendix E for deteriorated Truss members that were identified in need of replacement due to condition.

Floor System Members:

- The steel beams exhibit advanced corrosion of the lower flange and paint failure of the webs.
- There are several locations where the section loss was 100% on the lateral bracing to the truss.
- The runner boards exhibit areas of minor wear and debris built up.
- The pavement on the approaches is flush with the runner boards.
- The deck is comprised of 2"x6" nail laminated timber and is in fair condition; however, removal and replacement will likely be required to provide access for the steel beam replacement.

Truss Bearing Blocks:

- The wooden bearing blocks have heavy rot and decay at each end of the bridge.

Substructure:

- The West abutment concrete exhibits heavy spalling, pulverized concrete, exposed rebar, efflorescence, deep voids in the masonry, and a cracked stone.
- The pier exhibits heavy spalling and exposed rebar, and the bearing of the steel beams is partially unsupported due to spalling.
- The East abutment exhibits heavy spalling, delamination, and exposed rebar.

General:

- The bridge lacks fire protection.
- The vertical clearance is substandard and there is evidence of vehicular damage at each portal.

b. Traffic

A traffic study of this site was performed by the Vermont Agency of Transportation. The traffic volumes are projected for the years 2029 and 2049.

Traffic Data	2029	2049
AADT	886	957
DHV	130	130
ADTT	64	82
%T	6.1%	7.2%
%D	50%	50%

c. Design Criteria

The design standards for this bridge project are the Vermont State Design Standards, dated October 22, 1997. Minimum standards are based on an ADT of 957, a DHV of 130, and a design speed of 35 mph for a Local Road.

Design Criteria	Source	Existing Condition	Minimum Standard	Comment
Approach Lane and Shoulder Widths	VSDS Table 6.3	9'/0' (20')	9'/2' (22')	Substandard
Bridge Lane and Shoulder Widths	VSDS Table 6.3	15'-5" Between Trusses/0' (15.33')	9'/2' (22')	Substandard
Clear Zone Distance	VSDS Table 6.5	No Issues Noted	12' Fill / 10' Cut	
Banking	VSDS Section 6.12	NC	Low Speed Road – No Super Elevation Required	
Speed	VSDS Section 6.2	25 mph (Signed)	35 mph (Design)	Substandard
Horizontal Alignment	AASHTO Green Book, Table 3.10	R = ∞ over bridge	At e_{max} = 8%: super = 8%, R_{min} = 314' NC, R_{min} = 614'	

Vertical Grade	VSDS Table 6.6	-0.54% over bridge	7% (Max) for Level Terrain	
K Values for Vertical Curves	VSDS Table 6.1	No Vertical Curve over Bridge Approach K = 7 Min	40 Crest / 50 Sag	Substandard
Vertical Clearance	VSDS Section 6.7	12'-10" Vertical Clearance Provided	14'-3"	Substandard
Stopping Sight Distance	VSDS Table 6.1	200'	225'	Substandard
Bicycle/Pedestrian Criteria	VSDS Table 6.7	No Shoulders	1' Paved Shoulder	Substandard
Hydraulics	VTrans Hydraulics Manual, Table 6.1	Passes 4% AEP (Q_{25}) storm event with X' of freeboard Clear Span: 115'	Pass 4% AEP (Q_{25}) Storm Event with 1' of Freeboard Bank Full: X'	Surpasses Hydraulic Standards
Structural Capacity	Structures Design Manual, Ch. 3.4.1	Posted: 10 Tons	Design Live Load: HL-93	Substandard

d. VTrans Inspection Report Summary

The ratings provided below are from the most recent inspection performed by VTrans in August 2024. The bridge is on a 24-month inspection frequency.

Deck Rating:	6 Satisfactory
Superstructure Rating:	6 Satisfactory
Substructure Rating:	5 Fair
Channel Rating:	8 Very Good

From the Structure Inspection, Inventory and Appraisal Sheet:

Erosion of the upstream embankment along the abutment 1 approach has caused the erosion of the asphalt in the shoulder area. Preventive repairs are needed so erosion doesn't extend further into the roadway. The structure should be considered for a paint project with extensive cleaning of the beams. Abutment 1 and the pier cap are in need of concrete repairs due to cracked and spalled out areas that extend up to and have undermined small portions of the neighboring bearings; see maintenance reports.

e. Hoyle Tanner Field Observations

On November 8, 9, and 11, 2023 a four-person inspection team from Hoyle Tanner visited the covered bridge to perform in-depth field measurements and gather field data for this Scoping Report. The roof framing members, upper lateral bracing, truss members above the deck, interior of the siding, and deck were inspected using extension and folding ladders. The underside of the deck, truss members below the bridge deck, and steel stringers were inspected using rope access. Field observations were used as a basis for this report and expanded as appropriate. Lumber dimensions are nominal unless otherwise noted.

Several small wood samples were removed from the bridge for the purpose of species identification (see Appendix D).

Bridge Orientation Conventions

The truss top chord is denoted as chord 1 and other chords are sequentially numbered down with the lower most chord designated as chord 4. Each chord consists of four plies, which are denoted as plies "A" through "D". Ply "A" is the most exterior ply while ply "D" is the most interior ply. The node points are numbered from west to east with the western most node point designated as 1. Each consecutive node number is numbered in ascending order at each trunnel connecting the lattice tails of the chord 1.

i. Roof Framing and Siding

The roof framing consists of a standing seam metal roof on 1" thick x 7" wide roofboards which are supported by roof rafters. The roof rafters are 2" wide x 6" deep and are spaced at 4' on center and supported on a rafter support beam that is 2" deep x 6" wide supported on chord 1 ply A and B. The siding is ¾" thick and is attached to the truss members.

The siding boards were not tested but assumed to be Eastern Spruce. The roofboard wood and rafter support beam species were also not tested but assumed to be Common Premium. The roof boards are less than 2" thick and are therefore not graded by NDS. A grade of construction was used for the roof boards to account for the lack of grading. The roof rafters were identified to be Eastern Spruce and assigned a grade of Select Structural. The grades were selected for structural analysis based on a visual examination of knots, checks, slope of grain of the wood and the growth rate characteristics of the wood.

Split in Rafter

Split in Roofboard and Spliced Rafters

The roof framing is generally considered to be in fair to satisfactory condition with the following deficiencies noted:

- The metal roof is in fair condition.
- The rafters exhibit spits, breakage, and dry rot throughout. Some split and broken members have been sistered to new members.
- The rafter support beam exhibits rotting in few locations.
- The roofboards are overall in satisfactory condition with some splits.
- The siding boards exhibit areas of faded paint. The siding is in good condition; however, removal and replacement will likely be required to provide access for the extensive truss member replacements.

ii. Upper Lateral Bracing

The upper bracing consists of 6"x8" crossbeams spaced every four nodes. Two diagonal bracing members are located between the cross beams with one continuous and the other cut at midspan connected to the continuous member. Each cross beam has two timber knee braces on each side (4 total) connecting to chord 2 of the truss.

The upper bracing wood species were identified to be Eastern Spruce and assigned a grade of Select Structural based on a visual examination of knots, checks, slope of grain of the wood and the growth rate characteristics of the wood. The knee brace wood species were identified to be Eastern Spruce.

Impact Damage in Diagonal Bracing

Broken Connection at Crossbeam and Knee Brace

The upper lateral bracing members are generally considered to be in fair to satisfactory condition with the following deficiencies noted:

- The cross beams exhibit significant impact damage from vehicles and dislodged and twisting in one location.
- Diagonal bracing members exhibit significant impact damage from vehicles, breakage, twisting and multiple are missing.
- Crossbeams have been previously damaged from oversized vehicles and are not well connected to the vertical truss members.
- The knee braces exhibit significant impact damage from vehicles and breakage.

iii. Trusses

The Town Lattice Truss was patented in 1820 by Ithiel Town and included lattice members and two (four-piece) chords (a single upper and single lower chord). The original design was sufficient for light loads and smaller spans but was subject to out of plane bending. A second patent was granted in 1835 that included four (four-piece) chords and two layers (planes) of lattice. The 1835 patent truss type was used primarily for railroad bridges, and the use of four chords was adopted for vehicular bridges. The Northfield Falls Covered Bridge has two each (four-piece) top and lower chords.

North Truss Looking East

The trusses are approximately 131'-0" long and support a roof length of approximately 136'-0". The clear span from face of south abutment to pier is approximately 61'-0" long and pier to face of north abutment is approximately 61'-0" long. Truss chord members consist of 4 plies of 3"x12" built-up double upper and lower chords. Truss lattice members consist of 3"x11" timber planks. Chords are connected to lattice members through 2" diameter wood trunnels. Three wood trunnels are present at each lattice and chord intersection and two are present at lattice intersections.

The truss chord and lattice members' wood species were identified as Eastern Hemlock, and the trunnels were identified as Red Oak. All truss members have been assigned a grade of Select Structural for the structural analysis based on a visual examination of knots, checks, slope of grain of the wood and the growth rate characteristics of the wood.

The truss members are generally considered to be in poor condition with the following deficiencies noted:

Truss Chord Members:

- The upper chord members of the South truss exhibit plies split up to 4' long at various locations and one location of surface dry rot up to 1½" deep.
- The upper chord members of the North truss exhibit breakage, splitting up to 4' long, waning, buckling and gaps at joints.
- The lower chord members of the South truss exhibit multiple locations of splitting and rotting.
- The lower chord members of the North truss exhibit plies split up to 2' long at various locations, holes up to 5" in diameter, rotting, lifting, waning, and gaps at joints. Multiple locations on chord 4 of the North truss have supplemental boards spliced to ply D.
- At the time of inspection, the lower chord members had a moisture content up to 50 percent.

Lattice Members:

- Many lattice members exhibit splitting, checking, full width section loss, cracks around trunnels, impact damage, insect infestation, and rot.
- Multiple top lattice tails are split with varying lengths. Multiple tail splits extend past the trunnel connections in chord 1.
- Multiple lattice bottom tails are split and extend past the trunnel connections in chord 4.
- The lattice lower tails are cut at the pier and abutments for the sleeper beam and bearing.

Gap in Chord 3 at Trunnels

Trunnels:

- Trunnels exhibit walking out of connection, breakage, and rotting.
- In one location on the South Truss the trunnel missed the lattice on chord 4.

Refer to Appendix E for deteriorated lattice members that were identified in need of replacement due to condition.

iv. Floor System

The floor framing consists of four 33WF118 longitudinal steel stringers spaced at 4'-6" on center that end at the pier, transverse 2"x8" nail laminated deck boards placed edgewise, and longitudinal 1½" (actual)

thick runner planks across the entire deck. There are C18x42.7 steel diaphragms spaced at 21' along the stringers. There are no diaphragms at the beam ends or over the pier. The exterior beams are connected to chord 4 of the truss for lower lateral bracing of the truss.

The nail laminated deck wood species was identified to be Southern Pine. The runner planks are not shown in the 1979 plans and are assumed to be Eastern Spruce. The nail laminated deck board members have been assigned a grade of No. 1 for the structural analysis based on a visual examination of knots, checks, slope of grain of the wood, and the growth rate characteristics of the wood.

Exterior Stringer

The floor system members are generally considered to be in poor condition with the following deficiencies noted:

- The runner boards exhibit areas of minor wear with sand debris build up at roadway shoulders.
- The beams exhibit significant corrosion along the bottom flange and paint failure of the webs.
- The truss lower lateral bracing connection to chord 4 exhibits moderate corrosion.
- The exterior stringers had section loss that reduced flange thickness to $^{7}/_{16}$" in isolated areas. The top flange also had areas of section loss with a flange thickness of $^{7}/_{16}$" throughout. The webs were in fair condition with areas of paint failure and rust. By inspection, it appears the web had approximately $^{1}/_{16}$" section loss on both sides of the web (⅛" total).

Concrete Spalling at Stringers Bearings

- Access was limited for the interior stringers. By inspection from the exterior stringers, it appeared the interior stringers had the same amount of section losses exhibited in the exterior stringers.

f. Truss Bearing Blocks

The trusses sit on sleepers consisting of two 6"x18" timbers approximately 9' long at each bearing location. The sleepers sit on timber blocks consisting of 2"x10" hardwood blocks with varying length that sit on the concrete beam seats.

The truss bearing blocks are considered to be in satisfactory condition.

g. Substructure

East Abutment Elevation

West Abutment Elevation

The bridge substructure consists of a concrete abutment on the east side, dry laid masonry abutment with a concrete cap on the west side, and a concrete pier at the center of the bridge. It is not clear if the original east abutment was constructed with stone masonry and encased with concrete during previous undocumented rehabilitations. Both abutments have exposed ledge in front and below them, so it is likely the abutments bear on ledge. The channel bed consists of ledge and large cobbles.

The abutments are considered to be in poor condition with the following deficiencies noted:

- The east abutment exhibits significant concrete spalling, efflorescence staining, delamination, and vertical, horizontal, and map cracking. The southeast beam seat corner has a large spall, and the concrete is coming loose from the structure. The concrete appears to be of poor quality with large round aggregates used.
- The west abutment masonry exhibits voids up to 5' deep. The concrete beam seat cap concrete has significantly deteriorated.
- The southwest wingwall is comprised of dry laid stacked stones which have failed, and the wall is no longer vertical.

West Abutment Beam Seat

- At the spalled areas, the concrete was observed to contain round river stones with no fractured faces, which significantly reduces the concrete strength and durability.
- The east abutment is in poor condition and needs to be replaced. The west abutment beam seat and backwall is in poor condition and needs to be replaced.

h. Wood Species Identification

Ten small wood samples were removed from the bridge for the purpose of species identification. The samples were taken from deteriorated members that will most likely be replaced during the course of potential bridge rehabilitation or from non-critical sections of the members. To identify the wood species,

the samples were sent to Doug Gardner, Ph.D., a Professor of Forest Operations, Bioproducts, and Bioenergy, at the University of Maine at Orono. A summary of the species identification can be found in Appendix D.

i. Hydraulics

Downstream Elevation

The bridge crosses over the Dog River which flows primarily north to south at the bridge site. A hydraulic study at this location was completed on January X, 2026 by Hoyle Tanner. The preliminary findings indicate that under the current conditions, there is XX.X' and XX.X' of freeboard during the 4% (Q_{25} flood event) and 1% (Q_{100} flood event) storm event, respectively. The Q_{100} storm event is defined as a flood having a one percent (1%) chance of being met or exceeded in any given year (base flood designation Q_{100}). The Q_{25} storm event is defined as a flood having a four percent (4%) chance of being met or exceeded in any given year (base flood designation Q_{25}). The existing bridge opening has sufficient hydraulic capacity to pass the 1% storm event flow with adequate freeboard.

The primary purpose of the hydraulics section is to determine if the rehabilitated covered bridge is at an elevation high enough to provide adequate free board during the 100-year flood event. The existing bridge opening has sufficient hydraulic capacity to pass the 1% storm event flow with adequate freeboard.

j. Utilities

The VTrans Utilities and Permits unit will investigate the existing utility within the project limits during the next phase of project development. The existing utilities identified based on the site visit are as follows:

Aerial Utilities

- Main service line crosses Cox Brook Road from the north to the south on the east approach of the bridge
- Main service line crosses the Dog River south of the bridge
- Utility pole carrying the main line located southeast of the bridge
- Service utility lines crosses Cox Brook Road to the home located northwest of the bridge
- A service pole and guy wires are located northwest of the bridge
- A guy wire is attached to the lower northwest corner of the bridge

Guy Wire Attached to NW Corner of Bridge

An aerial utility relocation will be needed. Utility relocation plans will be determined once design plans are available.

Underground Utilities

There appears to be a septic leach field vent on the southeast corner of the bridge. No underground utilities have been investigated.

k. Right-of-Way

The existing Right-Of-Way (ROW) is shown on the Layout sheet in Appendix E. It is not anticipated that permanent ROW will be required, however temporary construction easements will be required for the construction of the project.

l. Resources

The biological, historic, archaeological, hazardous material and stormwater resources present at this project are shown on the Resource Site Plan Sheet in Appendix E and are based on information provided by VTrans. See Appendix E for Resource Site Plan Sheet and Appendix I for Natural Resource ID memo.

i. Biological

Wetlands/Watercourses

Northfield Falls Covered Bridge crosses over the Dog River, a watercourse regulated by the US Army Corps of Engineers.

There are no wetlands within the review area.

Wildlife Habitat

This area has three habitat blocks adjacent to the project area and ranks high for surface water riparian community connectivity and has a high priority connectivity block adjacent to it. Aquatic Organism Passage (AOP) will be prioritized by the design team.

Rare, Threatened and Endangered Species

The only listed species within the review area is the wood turtle (Glyptemys insculpta), which has an occurrence recorded under Bridge 15. A wood turtle survey should be conducted.

Also listed within the review area is the federally endangered northern long-eared bat, however it was determined that this location may effect, not likely to adversely effect the northern long-eared bat, and no critical habitat was located near the bridge location.

Agricultural

The review area noted prime statewide and prime agricultural soils were mapped in the vicinity and around the project location.

ii. Historic

One Historic resource was identified within the immediate project area. The historic resource is considered a Section 4(f) property and is as follows:

Bridge No. 15 (Northfield Falls Covered Bridge) which is individually listed in the National Register of Historic Places (NRHP) and it remains significant under Criterion C.

The Northfield Falls Covered Bridge was listed on the National Register of Historic Places on August 13, 1974 (National Register of Historic Place Inventory Nomination Form). The project was initially presented at the Historic Covered Bridge Preservation Committee (HCBPC) meeting on September 4th and 12th, 2024. The committee reviewed the proposed project based on the Historic Covered Bridge Preservation Plan

and Section 106 review process set forth by the National Historic Preservation Act of 1966, as amended, and the Advisory Council on Historic Preservation's Procedures for the Protection of Historic Properties (36 CFR 800) and recommended replacing the existing beams with steel beams. They did not recommend an alternative based on live loading.

iii. Archaeological

The VTrans archaeological unit will investigate the project limits during the next phase of project development to determine any archaeologically sensitive areas.

iv. Hazardous Materials

According to the Vermont Agency of Natural Resources (VANR) Vermont Hazardous Sites List, there are no hazardous waste sites or hazardous waste generators related in the vicinity of the project location. See the figure below for a map of Hazardous Sites. The project area also does not show in the VT Hazardous Waste Urban Soils Map.

v. Stormwater

There are no stormwater concerns at this site. The project area is relatively flat with no roadway curbing and stormwater runoff involves overland flow into Cox Brook.

2. SAFETY

There have been no reported crashes along Cox Brook Road in Northfield within the last 5-year period.

There are no High Crash Location segments located within the project area.

3. COMMUNITY NEEDS AND CONSIDERATIONS

A community questionnaire was sent to the Town to fill out. The town noted seasonal visitors to the bridges in the summer months, including bus tours, but the slow season is considered winter and spring. For a long-term closure, emergency services and school buses would take a 4-mile Class 4 town road detour. Cox Brook Road connects Northfield to Berlin and Moretown, so users would need to take the same detour as emergency services, which is a gravel road and not designed for significant traffic. The town noted significant numbers of bicycle and pedestrian users on the bridge, which should be accommodated during construction. There were no known instances of flood waters impacting the bridge.

The Local and Regional Input Questionnaire can be found in Appendix J.

Public involvement for this project included a Local Concerns Meeting and Alternatives Presentation Meeting held in-person and as summarized below.

a. Local Concerns Meeting

A Local Concerns Meeting was held on March 26, 2024, at the Brown Public Library. Attendees included the Northfield Selectboard, VTrans and Hoyle Tanner personnel, and members of the public. The Local Concerns Meeting was regarding three different covered bridges that were inspected by Hoyle Tanner. Many of the discussion topics were applicable to all three bridges. The following were discussed:

- *Oversized Vehicles:* The bridge has substandard vertical clearance. Despite warning signs, oversized vehicles have repeatedly crossed the bridge, hitting and damaging the upper lateral bracing and cross beams. Many residents expressed concern about this and asked about mitigation measures that could be taken to deter oversized vehicles from using the bridge, including an over-height bar, cameras, alerts in map apps, and increasing the vertical clearance in the bridge. Over-height bars can be a safety concern if they are rigid, but a swinging bar could be an option. There are many mapping apps and it is difficult to get alerts in all apps that the traveling public use.
- *Enforcement:* The Town is responsible for enforcing load restrictions on any Town structure currently posted.
- *Guardrail and Signage:* It was noted that the approach guardrail is in poor condition, and the approach signing is covered by foliage. The Town is responsible for maintaining approach guardrail and clearing vegetation.
- *Bridge Closure During Construction:* There was a question about how long the bridge would be closed during construction. The bridge would be closed for an entire construction season. The shortest route around is Cox Brook Road, to VT Route 12, Water Street, Union Street, Union Brook Road, and Aseltine Road, and back to Cox Brook Road which has an end-to-end distance of 6.1 miles. Several concerns were bought up at the meeting about the detour route. Participants expressed concern that Aseltine Road is not well maintained. It was noted that in the past, Pearson Hill was connected to Dunham Drive as a temporary detour. These will be investigated during the scoping process. Because this is a Town owned structure, the Town would ultimately be responsible for choosing and signing the detour route according to the Manual on Uniform Traffic Control Devices (MUTCD). VTrans often encourages Towns to reach out to our district offices for questions regarding what signs are required and where they should be placed. The Town would also be responsible to obtain permits from VTrans Operations Bureau for any signs

that would be placed within the State Right-of-Way. The requirements for the detour will be detailed in the Finance and Maintenance Agreement.

- *Temporary Bridge:* A resident expressed interest in a temporary bridge option. A temporary bridge could be installed for access during construction, but the site conditions would make turning movements difficult to meet design standards.

b. Alternatives Presentation Meeting

An Alternatives Presentation Meeting was held on March DAY, 2026 at the Brown Public Library. Attendees included the Northfield Selectboard, VTrans and Hoyle Tanner personnel and members of the public. The following were discussed:

- Discussion Topics

4. MAINTENANCE OF TRAFFIC

In accordance with Vermont Agency of Transportation guidance this project was reviewed to determine suitability for the Accelerated Bridge Program which focuses on faster delivery of construction plans, permitting, and Right-of-Way, as well as faster construction of projects in the field. One practice that will help in this endeavor is closing bridges for portions of the construction period, rather than maintaining traffic on a portion of the existing bridge during construction or providing temporary bridges. In addition to saving money, the intention is to minimize the closure period with faster construction techniques and incentives to allow contractors to complete projects sooner. The Agency will consider the closure option on most projects where rapid reconstruction or rehabilitation is feasible.

a. Off-site Detour

This option would close the bridge and reroute traffic onto an offsite detour. Since the bridge is located on a Class 2 Town Highway, it would be the responsibility of the Town of Northfield to choose the preferred detour route and to sign it according to the MUTCD manual. If the preferred detour route goes through an adjacent Town, it will be the responsibility of the Town of Northfield to coordinate with that Town.

The most likely detour route has an end-to-end distance of 5.0 miles and adds 5.0 miles to the through route. This route is as follows:

- Cox Brook Road, to Chandler Road, VT Route 12, and back to Cox Brook Road (5.0 mi end-to-end)

Advantages: This option would eliminate the need for a temporary bridge to maintain traffic during construction, which would significantly decrease cost and time of construction. This option would have

the least impact to adjacent properties and environmental resources. This option reduces the time and cost of the project both at the development stage and construction. Additionally, this is the safest traffic control option since the traveling public is removed from the construction site.

Disadvantages: Traffic flow would not be maintained through the project site during construction. Additionally, the detour route contains portions of roads that are Class 3 Town Highways that are gravel and would require additional maintenance during construction.

Due to the advantages of an off-site detour and short detour route, it is recommended that this option for maintenance of traffic be utilized for this project.

b. Temporary Bridge

From a constructability standpoint, a temporary bridge could be placed on the upstream (south) side of Northfield Falls Covered Bridge. A temporary bridge on the north side would have fewer impacts to aerial utilities but would still require some relocation. The downstream temporary bridge would require tree clearing.

If a temporary bridge is utilized, borings should be drilled at the temporary abutment locations.

Based on the daily traffic volumes and length of the bridge, a one-way alternating temporary bridge would be recommended.

Advantages: A temporary bridge will maintain traffic flow through the project corridor during construction.

Disadvantages: This traffic control option would be costly and time-consuming, as construction activities will likely require an additional construction season in order to construct the temporary bridge and approaches. There would be decreased safety (in relation to road closure) for workers and vehicular traffic due to cars driving near the construction site and construction vehicles entering and exiting the site. A temporary bridge would be considered safer during construction than phased construction.

Despite the disadvantages, utilizing a temporary bridge during construction is certainly feasible for this project. However, the off-site detour is recommended for maintaining traffic during construction. The Cost Matrix, shown in Section 6 below, does not include the temporary bridge cost in the Bridge category subtotal or overall project costs. By using a temporary bridge instead of an off-site detour, the Town's share of the construction costs would increase from 2.5% to 5%.

c. Phased Construction

Another method of maintaining traffic along a corridor during construction is to build a new structure one lane at a time, or in phases.

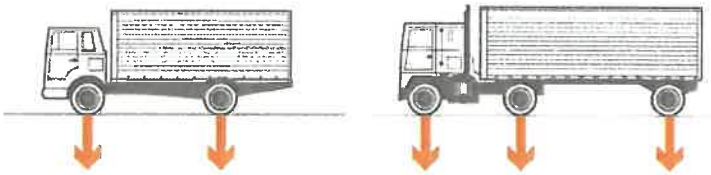
Advantages: This would maintain traffic along the existing corridor during construction.

Disadvantages: Typically, the time required to construct a phased construction project is longer than a project constructed without phasing, because some of the construction tasks must be performed multiple times and cannot be performed concurrently. The costs of construction also increase over un-phased work because of this increase in the length of time, the additional inconvenience of working around traffic, and the effort involved in coordinating the joints between the phases.

The existing bridge is a one-lane structure with a 15'-5" minimum width face of truss to face of truss typical. This does not provide enough width to phase construction and the type of construction required for covered bridges does not allow phasing of work. As such, phased construction will not be considered further.

5. ALTERNATIVES DISCUSSION

a. Structural Analysis



H Truck on the left, HS Truck on the Right

A structural analysis and load rating was performed of all primary live load carrying members of the bridge superstructure. Superstructure roof framing members were also checked for the applied wind, snow, and dead loads. The Service Load (Allowable Stress) Rating method was used for all members in accordance with the provisions of the American Association of State Highway and Transportation Officials (AASHTO) Standard Specifications for Highway Bridges, 17th Edition, AASHTO Manual for Bridge Evaluation Third Edition with 2019 Interim Revisions (MBE), and the 2010 VTrans Structures Design Manual. The bridge was rated to determine the allowable rating vehicle in terms of H Truck, which is a truck with two axles spaced at 14 feet with 20% of the load on the front axle and 80% on the rear axle. Per the scope of services, the bridge was rated for four AASHTO live loads; H20 (20 tons), HS20 (36 tons), H15 (15 tons), HS15 (27 tons). All structural members were rated for single lane loading configurations. The controlling live load force effect for each AASHTO live load was taken as the maximum of the design truck or the lane load. Excel spreadsheets, MIDAS bridge design software, MathCAD computer program, STAAD, and hand calculations were utilized to calculate the as-inspected section properties, capacities, and load rating values.

Since the timber stringers were previously replaced with steel beams, the timber components of the bridge only carry their own self-weight, wind loads, and snow loads. The steel beams support their own self-weight and the vehicular live loads. To differentiate these two different types of loadings in the ratings below, live-load carrying members are reported in terms of Load Factors, while non-live-load carrying members are reported in terms Performance Factors.

For the floor system (steel beams and decking) the inventory rating was determined by combining the maximum design load effects of the dead and live load compared to the allowable inventory stress levels, while the operating rating was determined by combining the maximum effects of the live load, dead load, and snow load (as applicable) as compared to the higher operating stress levels.

Allowable stress values for wood members were obtained from the 2018 National Design Specification for Wood Construction and Supplement (NDS). The wood species used in the superstructure was identified through testing. The grade assigned to each member was based on a visual examination of knots, checks, slope of grain of the wood, and growth rate characteristics of the wood. All superstructure members are wood unless noted otherwise. The substructure was not analyzed as part of the load rating since it was not expected to control the load rating of the bridge.

The steel beams were analyzed using the Load Factor Method (LFR) per the MBE. The inventory rating was determined by combining the maximum effects of the dead and live load effects compared to the allowable inventory stress levels, while the operating rating was determined by combining the maximum effects of the dead and live load (as applicable) as compared to the higher operating stress levels.

Our initial recommendations for repair or replacement of each member are detailed in the following sections. These were reviewed by the Historic Covered Bridge Preservation Committee (HCBPC) so the structural and historical issues could be weighed to determine a rehabilitation live load that met the project goals, while preserving as much of the original fabric of the covered bridge as possible. We have

also identified the priority treatment number (PTN) from the Historic Covered Bridge Preservation Plan to aid in review of the recommendations.

It should be noted that not all members to be replaced can be identified based on our inspection due to inaccessible areas (i.e. top-face rafters, etc.). The estimate of cost in this study includes an additional amount of conditional replacement based on Hoyle Tanner's experience with similar structures to determine an appropriate budget for the project.

Roof Framing

Analysis

The roof rafters and roof boards were analyzed for dead load, wind load (9.4 pounds per square foot (psf) upward on the windward roof and 15.0 psf uplift on the leeward roof) and a ground snow load of 60.0 psf (30.6 psf roof applied) per the 2015 Vermont Fire and Building Safety Code snow load and the 2022 ASCE 7 Minimum Design Loads for Buildings and Other Structures. Our structural analyses showed that roof boards and rafters are adequate for the applied dead, wind, and snow loads (9% utilized for the roof boards and 53% utilized for the roof rafters).

Recommendations

The existing standing-seam metal roof is in fair condition though the ridge cap is attached with nails and screws which allow water to seep into the bridge over time. During rehabilitation, the existing metal roof would most likely be damaged by the removal of certain truss and roof members and will need to be replaced. We recommend that the entire metal roof, all roof boards, and 14 roof rafters (20%) be replaced in-kind (Priority Treatment No. 2) (PTN 2) due to condition. Roof boards are 1" thick Eastern Spruce and rafters are 2"x6" Eastern Spruce. These roof framing recommendations apply to Alternatives 1 through 4.

Upper Lateral Bracing

Analysis

The existing upper lateral bracing, which consists of timber diagonal braces, cross beams, and knee braces, was analyzed for wind loading in conformance with ASCE 7-22. A grade of No. 1 was assigned to all upper lateral bracing wood members based on a visual examination of the wood. A portion of the lateral wind load based on the tributary area is applied to the existing upper later cross beams. Our analysis showed the diagonal bracing system is adequate to keep the bridge square and plumb and to resist code required wind loads.

Recommendations

Long span Lattice Trusses such as those of Northfield Falls Covered Bridge are notorious for bowing and racking during their life span. The following recommendations are expected to improve and strengthen the lateral bracing:

- Replace all diagonal braces in-kind (PTN 2)
- Replace 1 crossbeams (11%) in-kind (PTN 2)
- Repair knee brace connections (PTN 1)

These upper lateral bracing recommendations apply to Alternatives 1 through 4.

Trusses

Analysis

The Town Lattice Truss members were assigned a grade of Select Structural based on a visual examination of the wood.

The trusses were analyzed to determine their current and proposed dead load capacity. A 2-Dimensional bridge computer model of the Town Lattice Trusses was utilized for the structural analysis.

To determine the current capacity of all truss members, full dead and snow loads were applied and compared to allowable stress levels. No truss members are required to be replaced due to strength requirements.

Recommendations

Since the truss members are not carrying any live load and all rate over 1.0, the removal and replacement of the truss members is due to condition and the same for all alternatives (PTN 2). Epoxy injection into the large splits of a few members and rotted areas is also recommended to lessen further splitting and deterioration to these members (PTN 1). See Appendix E for members that are required to be replaced and repaired.

To prevent the spread of the splits in the tails we recommend that wood epoxy be applied to the splits and through bolts be added to prevent further splitting for all alternatives (PTN 1).

Recommendations for member replacements is detailed below. All replacement wood is to be Douglas Fir Select Structural grade unless noted otherwise.

North Truss member replacements and repairs:

- Epoxy repair deteriorated members (PTN 1)
- Replace several plies of chord 1, 2 and 4 in-kind between (PTN 2)

South Truss member replacements and repairs:

- Epoxy repair deteriorated members (PTN 1)
- Replace several plies of chord 1, 2 3, and 4 in-kind between (PTN 2)

Floor System

Analysis

The existing decking and stringers were analyzed to determine the live load capacity. The load rating summary for the deck is shown in Table 1. The tire contact area used for the deck load rating varies based on the applied load. As such, the deck rating for each design truck varies and the Rating Factor for each design truck is reported below. The load rating summary (in "H tons") for the stringers is shown in Table 3. The rear axle of the design truck controlled the load rating of all floor system members. The deck has been assigned a grade of No. 1 for the structural analysis based on a visual examination of knots, checks, slope of grain of the wood and the growth rate characteristics of the wood.

Table 1 - Existing Deck Load Rating Summary

Live Load Alternative	Inventory Rating Factor[2]	Operating Rating Factor[1]
Alternative 1 – H15	2.35	3.13
Alternative 2 – HS15	2.35	3.13
Alternative 3 – H20	1.76	2.35
Alternative 4 – HS20	1.76	2.35

1. Rating factors greater than 1.0 indicate that the member has sufficient capacity to safely carry the design live load.

Table 2 – Existing Interior (33WF118) Stringer Load Rating Summary

Live Load Alternative	Inventory Rating Factor[3]	Operating Rating Factor[2]
Alternative 1 – H15	0.68	1.13
Alternative 2 – HS15	0.38	0.63
Alternative 3 – H20	0.51	0.85
Alternative 4 – HS20	0.28	0.47

2. Rating factors greater than 1.0 indicate that the member has sufficient capacity to safely carry the design live load.

Table 3 - Existing Exterior (33WF118) Stringer Load Rating Summary

Live Load Alternative	Inventory Rating Factor[4]	Operating Rating Factor[4]
Alternative 1 – H15	0.78	1.30
Alternative 2 – HS15	0.43	0.72
Alternative 3 – H20	0.59	0.98
Alternative 4 – HS20	0.33	0.54

3. Rating factors greater than 1.0 indicate that the member has sufficient capacity to safely carry the design live load.

Recommendations

It is recommended that all stringers be replaced due to strength, age, and condition for Alternatives 1, 2, 3, and 4 (H15, HS15, H20, and HS20). The existing stringers have deteriorated beyond meaningful cleaning and repair work, and given their age, are due for replacement. The existing nail laminated deck is adequate for alternatives H15, H20, HS20; however, the deck will need to be removed to facilitate stringer replacement. This work will likely damage the deck as removal of a nail laminated deck is difficult, requiring a replacement deck to be installed. For all alternatives, it is recommended that the existing runner boards be replaced with full-width runner boards. This helps to provide a smoother and wider traffic surface and could help prevent vehicles from losing control if a tire runs off the runner boards.

In addition, it is recommended that a new wood curb be added to the bridge to help keep vehicles from impacting the trusses. This curb has previously been used by VTrans on the Hutchins, Comstock, and Longley Covered Bridges in Montgomery and many other covered bridges rehabilitations throughout the State.

b. Substructure

The existing abutments have not been analyzed for overturning and sliding per the VTrans structures manual since they appear stable with no signs of distress and there is exposed bedrock at the bridge location.

Overall, the existing abutments and pier appear sound and globally stable with no apparent sign of movement, settlement, or tipping. Some isolated voids, cracks, and spalls were found on various surfaces of the existing substructure elements. The scope of work does not include the stability analysis of the existing substructure.

Recommendations

The following recommendations are made for the east abutment bridge substructure:

- Replace the east abutment with a reinforced concrete abutment (PTN 2).
- Replace truss bearing blocks (PTN 2).
- Remove all vegetation and small trees (PTN 1).

The following recommendations are made for the west abutment bridge substructure:

- Replace the concrete backwall and bridge seat, including modifying bridge seat elevation to accommodate replacement stringers (PTN 2).
- Conduct minor repairs to all existing west substructure elements (PTN 1).
- Replace truss bearing blocks (PTN 2).
- Remove all vegetation and small trees (PTN 1).

The following recommendations are made for the pier:

- Modify bridge seat elevation to accommodate replacement stringers (PTN 1).
- Conduct minor partial depth concrete repairs to all existing pier substructure elements (PTN 1).
- Grout and seal the concrete cracks greater than ⅛" in width (PTN 1).
- Stain and seal all exposed concrete surfaces with a water-based sealant in order to provide long-term protection of the concrete (PTN 1).

c. No Action

This alternative would leave the bridge as it currently exists. A general guideline for evaluating a "No Action" alternative is determining whether the structure can remain in service for at least the next 10 years without requiring any work. The existing bridge superstructure is in poor condition, with multiple components—including truss members, bearing blocks, and upper lateral bracing—with numerous deficiencies. For safety reasons, maintaining the bridge in its present state is not recommended. No cost estimate is provided for this alternative, as it does not involve any immediate expenditures.

d. Alternative 1: Rehabilitation for H15 (15-Ton) Loading

This alternative consists of work necessary to extend the useful life of the bridge and to upgrade the bridge live load carrying capacity to carry a 15-ton design vehicle. Refer to Appendix E for replacement members that are required to be replaced for this alternative. This work includes:

- Stringers
    - Replacement of all steel stringers with galvanized W21x101 steel stringers (PTN 2)

e. Alternative 2: Rehabilitation for HS15 (27-Ton) Loading

This alternative consists of work necessary to extend the useful life of the bridge and to upgrade the bridge live load carrying capacity to carry a 27-ton design vehicle. Refer to Appendix E for replacement members that are required to be replaced for this alternative. This work includes:

- Stringers
    - Replacement of all steel stringers with galvanized W21x147 steel stringers (PTN 2)

f. Alternative 3: Rehabilitation for H20 (20-Ton) Loading

This alternative consists of work necessary to extend the useful life of the bridge and to upgrade the bridge live load carrying capacity to carry a 20-ton design vehicle. Refer to Appendix E for replacement members that are required to be replaced for this alternative. This work includes:

- Stringers
    - Replacement of all steel stringers with galvanized W24x117 steel stringers (PTN 2)

g. Alternative 4: Rehabilitation for HS20 (36-Ton) Loading

This alternative consists of work necessary to extend the useful life of the bridge and to upgrade the bridge live load carrying capacity to carry a 36-ton design vehicle. Refer to Appendix E for replacement members that are required to be replaced for this alternative. This work includes:

- Stringers
    - Replacement of all steel stringers with galvanized W24x162 steel stringers (PTN 2)

h. Proposed Roadway Improvements

Along the southern approach, the roadway will mimic existing conditions and transition approximately 50' before the bridge to a 15'-4" paved roadway at the bridge. The proposed roadway typical paved section south of the bridge will consist of removal of existing pavement and enough subbase material to provide suitable drainage roadway fill beneath the pavement. Final pavement design will be provided by VTrans.

The approach roadway width will mimic the existing conditions measuring 15'-5" at the bridge and gradually widening to match the existing width at the end of the project limits. The proposed roadway typical section between the bridge and project limits will match the proposed paved typical section.

Stormwater flow patterns will mimic existing conditions with sheet flow of the roadway to vegetated side slopes. Stop drains or lowering the grade at one end of the bridge will be considered in final design to improve drainage conditions. New steel backed timber guardrail is proposed on both approaches and will closely match existing guardrail lengths.

It is recommended that tree removal and trimming take place on both sides of the bridge as many of the nearby tree branches have potential to grow over the bridge and could fall and damage the bridge and are also promoting insect infestation of the bridge.

i. Fire Protection

As part of this Scoping Report, the bridge was assessed for improvements against the potential for loss or damage from fire. There are no known fire detection or protection systems at the covered bridge site. Three fire detection/protection systems are generally used for covered bridges, each of which was evaluated for this project.

Intumescent or Fire-Retardant Coatings (Nochar/Polaseal)

These coatings are water-based, water repellent treatments that are specifically designed to protect exterior and interior wood surfaces. They penetrate the wood and then cure by reaction with air to lock into the pore structure of the wood. These coatings work by raising the flashpoint of the wood making it difficult to start a fire. The fire-retardant coatings contain a proven fire retardant *to reduce* flame spread in the event of a fire and a blend of special preservatives to fight against the causes of decay. The coatings are available in colored and clear versions that are applied to the wood by brush or spray. The coatings do not affect the strength of the wood. It is also recommended the application of a fungicide to the bridge members to defend against fungal growth. Infestation by fungi causes the wood to rot, lowering the capacity of affected members.

The application of fire-retardant coatings is recommended for all alternatives considered.

Fire Detection System (Protectowire)

If a fire is started, it is advantageous to notify the local fire department as soon as possible. The "Protectowire" is a proprietary alert system that works by running a small wire through key locations in the bridge. The sensor cable is comprised of steel conductors individually insulated with a heat sensitive polymer. The insulated conductors are twisted together to impose a spring pressure between them and wrapped with a protective tape. If a rapid rise in temperature is detected or if a wire is cut, the system alerts the local mutual aid or fire department. This advanced warning can greatly reduce fire damage to a bridge and hopefully prevent the fire from making the bridge a total loss.

It should be noted that there is an annual maintenance cost associated with this system. The system requires power and a phone line (land or cell) to contact mutual aid. In addition, the control box contains batteries that have small electric strip heaters on them to prevent damage from freezing during cold weather. The control box is typically hidden at the end of the bridge in the siding and can be well insulated to reduce electrical costs.

The fire detection system will be discussed with the Town at the alternatives presentation meeting.

Dry Deluge Sprinkler System

The purpose of a deluge sprinkler system is to prevent the spread of fire by wetting down the entire fire area. The sprinkler system typically used includes dry pipes with a fire department connection away from the ends of the bridge. During a fire, the fire department feeds the system which directs water to the source of the fire. The majority of the piping and heads are in the roof; however, coverage is also provided under the bridge at the abutments. These systems are typically used in long or multi-span bridges where the fire department cannot effectively fight the fire near the center of the bridge.

The sprinkler system will be discussed with the Town at the alternatives presentation meeting.

j. Lighting

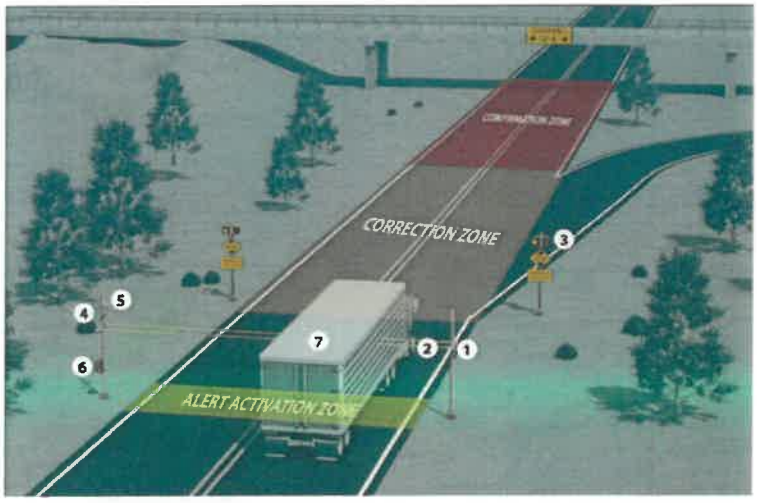
There is currently no lighting on the bridge or immediate approaches to it. Lighting can be an effective means to deter vandalism and improve visibility. The decision to add lighting to the bridge should be made by the Town. Interior lighting in the form of high-pressure sodium lights controlled by photocells may be added if desired. This type of lighting provides a light brown color and is the type preferred by state historic resource agencies. The fixtures proposed in this study have a good long-term performance record, are unobtrusive as they are installed in between the upper lateral bracing, and are reasonably vandal proof. The photocell is specified to help ensure that the lights are only on when needed.

The lighting system will be discussed with the Town at the alternatives presentation meeting.

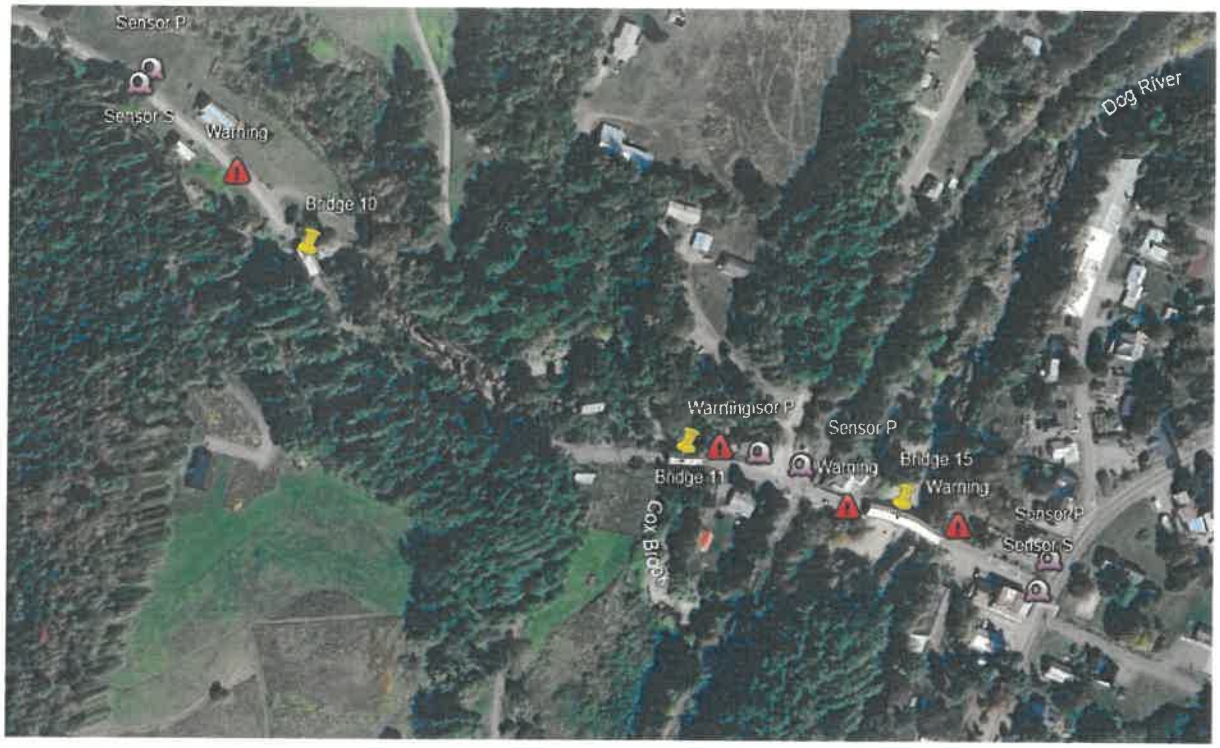
k. Vertical Clearance

The existing vertical clearance on the bridge is approximately 12'-6", which is substandard and causing impact damage to the portals, cross braces, upper lateral bracing, and knee braces due to oversized vehicles. The same is true of the other two covered bridges on Cox Brook Road. It is proposed to increase the vertical clearance of all three bridges to a uniform 13'-0". At the Northfield Falls Covered Bridge, this would be done by replacing the existing steel lateral bracing with a new bottom chord assembly and blocking that would raise the truss members enough to achieve the desired vertical clearance. The siding will extend down enough to cover this assembly unit, so it is not visible on the exterior. Curbing and deck widening on the inside would cover the assembly unit from view on the inside of the truss.

This option was presented to the HCBPC and was approved as an acceptable modification to the existing structure.



Additionally, early detection and vehicle warning systems can be incorporated into the project. These systems use sensors within an "activation zone" to identify vehicles that exceed the clearance height of an upcoming structure and alert drivers to the restriction. Drivers are then guided toward a safe alternate route within the "correction zone". The system also collects data, such as license plate information, for vehicles that trigger the warning and notifies local authorities when a vehicle enters the "confirmation zone". A potential layout of this system for the three covered bridges along Cox Brook Road is shown below. The associated cost, estimated at approximately $125,000, is not included in the Cost Matrix in Section 6, as the system is proposed as an optional enhancement.



1. Construction Schedule

Northfield Falls Covered Bridge is one of three bridges on Cox Brook Road scheduled for rehabilitation. The rehabilitation of this bridge is expected to take approximately two construction season (about eight months). Upper Cox Covered Bridge, located 0.3 miles to the north, and Lower Cox Covered Bridge, located 0.2 miles to the south, will likely require one construction season each.

Because these projects are in close proximity, there may be opportunities for cost and schedule savings by bundling two or all three bridges into a single contract. Temporary bridge alternatives for Bridges 10 and 11 share the same span length and width requirements, allowing the same temporary structure to be reused at both sites. Bridge 15 has a short local detour available for traffic maintenance.

Covered bridge rehabilitation is a highly specialized type of construction, and contractors often have limited crews with the required expertise. For this reason, the Town may consider bundling Bridges 10 and 11 into a single contract. Under this approach, one contractor could complete both projects over two construction seasons, using the same specialized crew and the same temporary bridge at each site. Bridge 15 could then be bid separately and constructed over the same two seasons, allowing all three bridges to be completed within a two-year period.

Alternatively, all three bridges could be bid together as one project and completed over four years, or they could be bid individually, giving contractors the flexibility to pursue one, two, or all three projects.

6. COST MATRIX

Northfield BO CVBR(9)		Do Nothing	Alternative 1 Rehabilitation for H15 (15-Ton, 2 Axle) Loading	Alternative 2 Rehabilitation for HS15 (27-Ton, 3 Axle) Loading	Alternative 3 Rehabilitation for H20 (20-Ton, 2 Axle) Loading	Alternative 4 Rehabilitation for HS20 (36-Ton, 3 Axle) Loading
COST[1]	Roadway	$0	$535,870.00	$555,870.00	$545,870.00	$565,870.00
	Erosion Control	$0	$50,000.00	$50,000.00	$50,000.00	$50,000.00
	Bridge	$0	$2,890,555.00	$3,098,805.00	$2,962,805.00	$3,166,805.00
	Full CE Items	$0	$40,000.00	$40,000.00	$40,000.00	$40,000.00
	Construction Costs	$0	$3,517,000.00	$3,745,000.00	$3,599,000.00	$3,823,000.00
	Construction Engineering & Contingencies (CEC)	$0	$880,000.00	$937,000.00	$900,000.00	$956,000.00
	Accelerated Premium	$0	$0	$0	$0	$0
	Total Construction Costs with CEC	$0	$4,397,000.00	$4,682,000.00	$4,499,000.00	$4,779,000.00
	Preliminary Engineering	$0	$880,000.00	$937,000.00	$900,000.00	$956,000.00
	Right of Way	$0	$25,000.00	$25,000.00	$25,000.00	$25,000.00
	Total Project Costs	$0	$5,302,000.00	$5,644,000.00	$5,424,000.00	$5,760,000.00
	Annualized Costs	$0	$132,550.00	$141,100.00	$135,600.00	$144,000.00
	TOWN SHARE	$0	$132,550.00	$141,100.00	$135,600.00	$144,000.00
	TOWN %	0%	2.50%	2.50%	2.50%	2.50%
SCHEDULING	Project Development Duration	N/A	3 years	3 years	3 years	3 years
	Construction Duration	N/A	16 months	16 months	16 months	16 months
	Closure Duration (If Applicable)	N/A	16 months	16 months	16 months	16 months
ENGINEERING	Typical Section - Roadway (feet)	23'	23'	23'	23'	23'
	Typical Section - Bridge (feet)	15'-5"	11'	11'	11'	11'
	Geometric Design Criteria	Substandard Width	Substandard Width	Substandard Width	Substandard Width	Substandard Width
	Traffic Safety	No Change	Improved	Improved	Improved	Improved
	Alignment Change	No Change	No Change	No Change	No Change	No Change
	Bicycle Access	Substandard	Substandard	Substandard	Substandard	Substandard
	Pedestrian Access	Substandard	Substandard	Substandard	Substandard	Substandard
	Hydraulics	Meets Minimum Standard	Meets Minimum Standard	Meets Minimum Standard	Meets Minimum Standard	Meets Minimum Standard
	Utilities	No Change	No Change	No Change	No Change	No Change
OTHER	ROW Acquisition	No	Yes	Yes	Yes	Yes
	Road Closure	No	Yes	Yes	Yes	Yes
	Design Life (years)[2]	<10	40	40	40	40

[1] Costs are estimates only, used for comparison purposes.

[2] A design life of 40 years will be assumed for the deck and superstructure rehabilitation options. Substructure rehabilitation is assumed to have a design life of 50 years.

7. CONCLUSION

The Northfield Falls Covered Bridge (Bridge No. 15), built in 1872, is a Town-owned bridge located on Town Highway 3 (Cox Brook Road) just west of the intersection with VT Route 12. It is a 131'-0" long two-span Town Lattice truss which carries one lane alternating traffic over the Dog River near Northfield Falls, an unincorporated village in the Town of Northfield. The bridge has undergone numerous changes and additions throughout its history with various degrees of documentation.

A detailed inspection and load rating of the bridge was completed to determine if the bridge can meet the project purpose and need. The roof framing was determined to be adequate for code required dead, wind, and snow loads, however modifications are recommended to repair some select members due to their deteriorated condition. The bridge lateral bracing system was determined to not be adequate for code required wind loads, however modifications are recommended to repair some select members due to their deteriorated condition. The truss members were determined to be adequate for code required dead, wind, and snow loads, however modifications are recommended to repair some select members due to their deteriorated condition. The floor system was determined to not be adequate for H15 (15-ton) loading at inventory or operating level. The substructure was visually reviewed and appears to be adequate with minor repairs recommended.

Based upon our inspection and analysis of the Northfield Falls Covered Bridge, it appears feasible to rehabilitate the bridge for vehicular loading to meet the project's purpose and need. Several alternatives were considered and studied as described above in Section 5.

The Town Selectboard and public at the March DATE, 2026 meeting approved Alternative X – Rehabilitation for HXX (XX-ton) loading. Alternative X promotes a safe transportation system, increases the load carrying capacity of the crossing for the emergency responses vehicles, promotes economic development and growth of the Town of Northfield, and maintains the historic character of the covered bridge.

The total estimated construction cost of all recommended work items for Alternative X, in 2026 dollars, is $X,XXX,XXX.

This Scoping Report has been completed utilizing information available as of March 2026. This information may include the Design Criteria listed above, permitting requirements, field data obtained by Hoyle Tanner, and reports or survey information prepared by others, which are subject to change. The condition of an existing bridge can change rapidly, or the bridge be damaged through manmade or natural events that could alter the conclusions reached herein. Therefore, the conceptual design, estimate of probable construction costs, and conclusions reached in this Scoping Report should not be relied upon for an extended period.

APPENDIX A

VTrans Bridge Inspection Report

VERMONT
AGENCY OF TRANSPORTATION

Route C2003 /
Structure #00015 / (Routine)
C2003 over DOG RIVER
Team Lead: Justin White, **Inspection Date:** 08/20/2024

Town: 155 - NORTHFIELD

District 6, 23 - WASHINGTON County

Owner: 3 - Town or Township Highway Agency

Maintenance Responsibility: 3 - Town or Township Highway Agency

VERMONT
AGENCY OF TRANSPORTATION

Route C2003 /
Structure #00015 / (Routine)
C2003 over DOG RIVER
Team Lead: Justin White, **Inspection Date:** 08/20/2024

44.17244, -72.65151

VERMONT
AGENCY OF TRANSPORTATION

Route C2003 /
Structure #00015 / (Routine)
C2003 over DOG RIVER
Team Lead: Justin White, **Inspection Date:** 08/20/2024

IDENTIFICATION	
(1) State Names	50 - Vermont
(8) Structure Number	101213001512131
(5) Inventory Route	1
(2) Highway Agency District	6 - District 6
(3) County Code	23 - WASHINGTON
(4) Place Code	50275
(6) Features Intersected	DOG RIVER
(7) Facility Carried	C2003
(9) Location	0.02 MI TO JCT W VT12
(11) Mile Point	0 mi
(12) Base Highway Network	No
(13) LRS Inventory Rte & Subrte	
(16) Latitude	44.1724444444444
(17) Longitude	-72.6515083333333
(98) Border Bridge State Code	
(99) Border Bridge Structure No.	

STRUCTURE TYPE AND MATERIAL	
(43) Main Structure Type	32
Material	3 - Steel
Type	2 - Stringer/Multi-beam or girder
(44) Approach Structure Type	00
Material	0 - Other
Type	0 - Other
(45) No. of Spans in Main Unit	2
(46) No. of Approach Spans	0
(107) Deck Structure Type	8 - Wood or Timber
(108) Wearing Surface/Protective System	
Type of Wearing Surface	7 - Wood or Timber
Type of Membrane	0 - None
Type of Deck Protection	7 - Internally Sealed

AGE AND SERVICE	
(27) Year Built	1872
(106) Year Reconstructed	1969
(42) Type of Service	15
On	1 - Highway
Under	5 - Waterway
(28) Lane	
On	1
Under	0
(29) Average Daily Traffic	1500
(30) Year of ADT	2019
(109) Truck ADT	3 %
(19) Bypass, Detour Length	3 mi

GEOMETRIC DATA	
(48) Length of Maximum Span	64 ft
(49) Structure Length	139 ft
(50) Curb or Sidewalk Width	
Left	0 ft
Right	0 ft
(51) Bridge Roadway Width Curb to Curb	15.6 ft
(52) Deck Width Out to Out	15.7 ft
(32) Approach Roadway Width (W/Shoulders)	20 ft
(33) Bridge Median	0 - No median
(34) Skew	0 Deg
(35) Structure Flared	0 - No flare
(10) Inventory Route Min Vert Clear	12.17 ft
(47) Inventory Route Total Horiz Clear	15.6 ft
(53) Min Vert Clear Over Bridge Rdwy	11.92 ft
(54) Min Vert Underclear	0 ft
Ref:	
(55) Min Lat Underclear RT	0 ft
Ref:	
(56) Min Lat Underclear LT	0 ft

NAVIGATION DATA	
(38) Navigation Control	0 - No navigation control on w
(111) Pier Protection	
(39) Navigation Vertical Clearance	0 ft
(116) Vert-Lift Bridge Nav Min Vert Clear	0 ft
(40) Navigation Horizontal Clearance	0 ft

CLASSIFICATION	
(112) NBIS Bridge Length	Y
(104) Highway System	0
(26) Functional Class	8 - Rural Minor Collector
(100) Defense Highway	0 - The inventory route is not
(101) Parallel Structure	N - No parallel structure exis
(102) Direction of Traffic	3 - One lane bridge for 2 - way traffic
(103) Temporary Structure	
(105) Federal Lands Highways	0 - N/A
(110) Designated National Network	0 - The inventory route is not
(20) Toll	3 - On free road. The structu
(21) Maintain	3 - Town or Township Highway A
(22) Owner	3 - Town or Township Highway A
(37) Historical Significance	1 - Bridge is on the National

CONDITION	
(58) Deck	6
(59) Superstructure	6
(60) Substructure	5
(61) Channel & Channel Protection	8
(62) Culverts	N

LOAD RATING AND POSTING	
(31) Design Load	4 - M 18 / H 20
(63) Operating Rating Method	2
(64) Operating Rating	
Type	2 - Allowable Stress(AS)
Rating	49
(65) Inventory Rating Method	2 - Allowable Stress(AS)
(66) Inventory Rating	
Type	
Rating	34
(70) Bridge Posting	5 - Equal to or above legal loads
(41) Structure Open/Posted/Closed	A - Open, no restriction

APPRAISAL	
(67) Structural Evaluation	5
(68) Deck Geometry	2
(69) Clearances, Vertical/Horizontal	N
(71) Waterway Adequacy	7
(72) Approach Roadway Alignment	8
(36A) Bridge Railings	0 - Inspected feature does not meet
(36B) Transitions	0 - Inspected feature does not meet
(36C) Approach Guardrail	1 - Inspected feature meets current
(36D) Approach Guardrail Ends	1 - Inspected feature meets current
(113) Scour Critical Bridges	8 - Bridge foundations determined t

PROPOSED IMPROVEMENTS	
(75) Type of Work	35 - Bridge rehabilitation bec
(76) Length of Structure Improvement	139 ft
(94) Bridge Improvement Cost (Multiply value by 1000)	$ 764
(95) Roadway Improvement Cost (Multiply value by 1000)	$ 50
(96) Total Project Cost (Multiply value by 1000)	$ 814
(97) Year of Improvement Cost Estimate	2020
(114) Future ADT	1575
(115) Year of Future ADT	2029

INSPECTIONS *

(90) Inspection Date			08/20/2024
(91) Frequency			24
(92) Critical Feature Inspection	Done	Freq. (Mon)	Date
A: Fracture Critical Detail	No		
B: Underwater Inspection	No		
C: Other Special Inspection			

* The inspection date and frequency information in this box contains the current NBI date and frequency information. Please refer to the report header for the date this inspection was conducted.

VERMONT
AGENCY OF TRANSPORTATION

Route C2003 /
Structure #00015 / (Routine)
C2003 over DOG RIVER
Team Lead: Justin White, **Inspection Date:** 08/20/2024

Maintenance Needs

Date Reported: 08/18/2022

Priority:	4 - Maintenance Finding - Next Inspection Cycle	**Status:**	Open
Type of Work:	4 - Approach - Approach settlement/erosion repair	**Component:**	Approach

Deficiency Description

A small area in the upstream shoulder of the abutment 1 approach is undermined and roadway asphalt has been eroded.

Remarks

A means of retaining the approach roadway should be considered with added roadway fill.

Upstream abutment 1 shoulder area

VERMONT
AGENCY OF TRANSPORTATION

Route C2003 /
Structure #00015 / (Routine)
C2003 over DOG RIVER
Team Lead: Justin White, **Inspection Date:** 08/20/2024

Maintenance Needs

Date Reported: 08/18/2022

Priority:

Status: Open

Type of Work: 27 - Superstructure - Clean and paint superstructure

Component: Superstructure

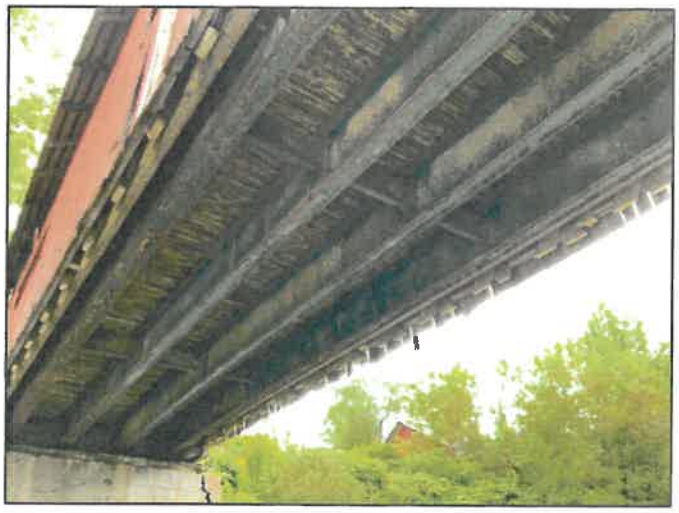
Deficiency Description

Heavy rust scale along the flanges and lower areas of the webs with minor to moderate section loss.

Remarks

A paint project with extensive cleaning of the beams should be considered.

Superstructure



Superstructure

VERMONT
AGENCY OF TRANSPORTATION

Route C2003 /
Structure #00015 / (Routine)
C2003 over DOG RIVER
Team Lead: Justin White, **Inspection Date:** 08/20/2024

Maintenance Needs

Date Reported: 08/18/2022

Priority:

Status: Open

Type of Work: 33 - Substructure - Pier repair

Component: Substructure

Deficiency Description

The area beneath beam 2 span 2 side has spalled out undermining the bearing 3"+/-.

Remarks

Patching repairs are needed.

Pier cap

VERMONT
AGENCY OF TRANSPORTATION

Route C2003 /
Structure #00015 / (Routine)
C2003 over DOG RIVER
Team Lead: Justin White, **Inspection Date:** 08/20/2024

Deck

ELEMENTS	DESCRIPTION	UNITS	TOTAL	CS1	CS2	CS3	CS4
31	Timber Deck	SF	2182	1882	300	0	0
1140	Decay/Section Loss	SF	300	0	300	0	0
510	Wearing Surfaces	SF	2182	1586	596	0	0
1180	Abrasion/Wear (Timber)	SF	556	0	556	0	0
7000	Damage	SF	40	0	40	0	0

58 - Deck (6 - SATISFACTORY CONDITION - structural elements show some minor deterioration.)
Areas of minor fuzzy mold growth and mildew staining with minor saturation throughout the soffit

200 - Existing Wearing Surface Depth (1.5")

A21 - Deck Wearing Surface Condition (Satisfactory)
Minor tire wear throughout with some split/broken ends ends at each portal.

A39 - Deck Fascia Condition (Very Good)

B.C.05 Bridge Railing Condition Rating (NOT APPLICABLE - Component does not exist.)

B.C.08 Bridge Joints Condition Rating (NOT APPLICABLE - Bridge does not have deck joints.)

APPROACH

72 - Approach Roadway Alignment (8 - Equal to present desirable criteria)

A13 - Approach Rail Condition (Good)
Scattered scape marks with areas of minor rust staining.

A16 - Approach Post Condition (Good)
Minor bending and twisting in the ends of some posts.

A18 - Approach Erosion/Settlement (Minor)
A small area in the upstream shoulder of the abutment 1 approach is undermined and asphalt has been eroded.

B.C.06 Bridge Railing Transitions Condition Rating (GOOD - Some minor defects.)

VERMONT
AGENCY OF TRANSPORTATION

Route C2003 /
Structure #00015 / (Routine)
C2003 over DOG RIVER
Team Lead: Justin White, **Inspection Date:** 08/20/2024

Superstructure

ELEMENTS	DESCRIPTION	UNITS	TOTAL	CS1	CS2	CS3	CS4
107	Steel Open Girder/Beam	LF	556	0	0	556	0
1000	Corrosion	LF	556	0	0	556	0
515	Steel Protective Coating	SF	4110	0	0	0	4110
3440	Effectiveness (Steel Protective Coatings)	LF	4110	0	0	0	4110
311	Movable Bearing	EA	8	0	0	8	0
1000	Corrosion	EA	8	0	0	8	0
313	Fixed Bearing	EA	8	0	0	8	0
1000	Corrosion	EA	7	0	0	7	0
2240	Loss of Bearing Area	EA	1	0	0	1	0

59 - Superstructure (6 - SATISFACTORY CONDITION - structural elements show some minor deterioration.)
Heavy rust scale along the flanges and lower areas of the webs with deep pitting and moderate section loss.

A50 - Super Verticals/Diagonals Condition (Good)

A51 - Top Chords Condition (Good)

A52 - Bot. Chords Condition (Satisfactory)
Minor splits and checks scattered throughout. The upper interior portion of the bottom chord has separation gaps at some of the splice joints with splintered/broke ends, leaving some of the timber pegs ends exposed.

A55 - Lateral Bracing Condition (Satisfactory)
Paint peel and areas of rust scale with minor pitting/section loss.

A65 - Roof/Siding Condition (Satisfactory)
The roof is in good condition. The siding has broken out and splintered with weathering along the lower ends.

B.C.07 Bridge Bearings Condition Rating (SATISFACTORY - Widespread minor or isolated moderate defects.)
Rust scale throughout with deep pitting and moderate section loss. The abutment 2 bearings are covered in debris and are not visible.

B.C.14 NSTM Inspection Condition (NOT APPLICABLE - Component does not exist.)

VERMONT
AGENCY OF TRANSPORTATION

Route C2003 /
Structure #00015 / (Routine)
C2003 over DOG RIVER
Team Lead: Justin White, **Inspection Date:** 08/20/2024

Substructure

ELEMENTS	DESCRIPTION	UNITS	TOTAL	CS1	CS2	CS3	CS4
210	Reinforced Concrete Pier Wall	LF	12	12	0	0	0
217	Masonry Abutment	LF	24	10	4	10	0
1640	Masonry Displacement	LF	14	0	4	10	0
218	Other Abutment	LF	24	0	0	24	0
1010	Cracking	LF	12	0	0	12	0
1080	Delamination/Spall/Patched Area	LF	12	0	0	12	0
234	Reinforced Concrete Pier Cap	LF	24	8	4	12	0
1130	Cracking (RC and Other)	LF	16	0	4	12	0

60 - Substructure (5 - FAIR CONDITION - all primary structural elements are sound but may have minor section loss, cracking, spalling or scour.)
Abutment 1 Lineal cracking along the pour joints and scattered vertical shrinkage cracks with minor separation throughout. The ends have map cracking with minor efflorescence staining and minor to moderate spalling in the base. The upstream end has a segmented corner section that has failed revealing laid up granite block behind it.

Abutment 2 laid up granite block wall has scattered small voids along the joints throughout. The concrete cap has voided spalling in each end end with scaling and surrounding delams.

A71 - Abutment End Walls Condition (Satisfactory)
Areas of minor spalling in the ends with surrounding delams and small areas of exposed reinforcing.

A81 - Pier Seat/Cap Condition (Satisfactory)
Scattered small delayed areas with rust staining along the top and bottom edges. The area beneath beam 2 span 2 side has spalled out under Ming the bearing approximately 3-4"

A83 - Pier Shaft Condition (Very Good)

A86 - Pier Footings Condition (Very Good)

CHANNEL

61 - Channel Condition (8 - Banks are protected or well vegetated. River control devices such as spur dikes and embankment protection are not required or are in a stable condition.)
Debris up against the pier has caused localized scour hole exposing the footing.

B.C.10 Channel Protection Condition Rating (VERY GOOD - Some inherent defects.)

B.C.11 Scour Condition Rating (Some minor scour.)

GENERAL OBSERVATION

Erosion of the upstream embankment along the abutment 1 approach has caused the erosion of the asphalt in the shoulder area. Preventive repairs are needed so erosion doesn't extend further into the roadway. The structure should be considered for a paint project with extensive cleaning of the beams. Abutment 1 and the pier cap are in need of concrete repairs due to cracked and spalled out areas that extend up to and have undermined small portions of the neighboring bearings; see maintenance reports.

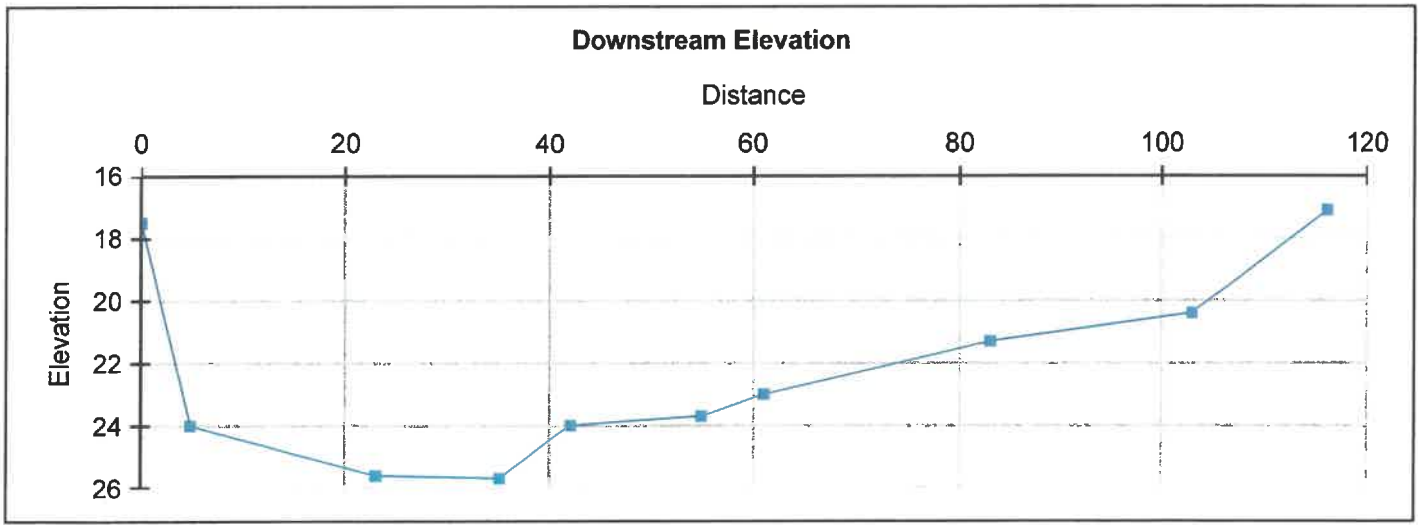
VERMONT
AGENCY OF TRANSPORTATION

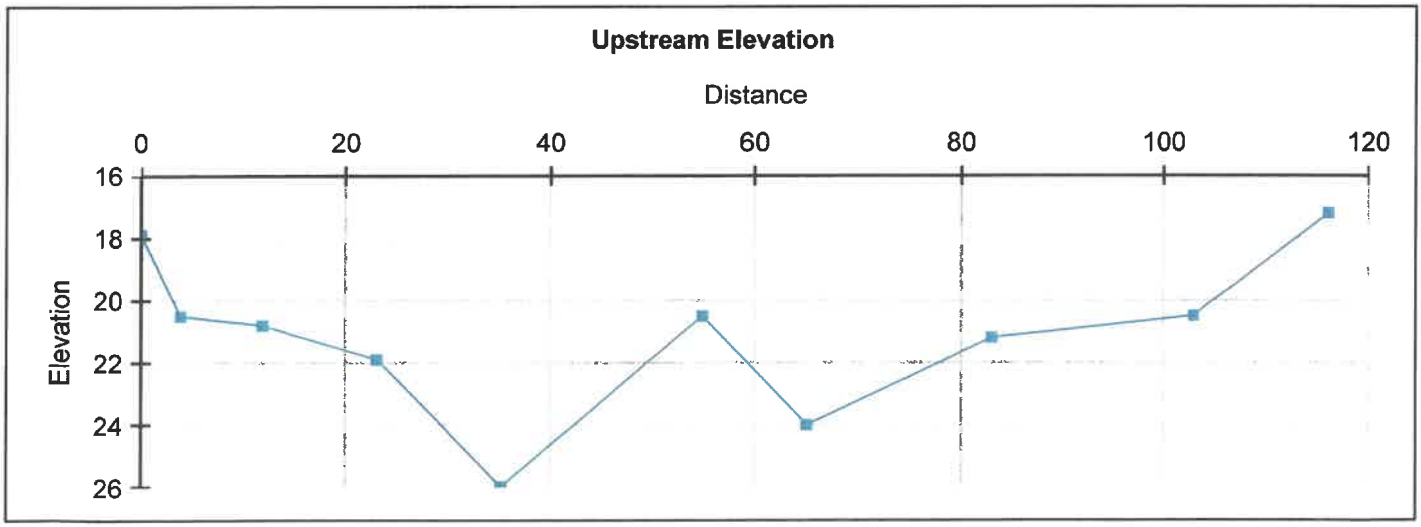
Route C2003 /
Structure #00015 / (Routine)
C2003 over DOG RIVER
Team Lead: Justin White, **Inspection Date:** 08/20/2024

Channel Profile

Waterway Flow:	Left to right	Top of Water:	
Origin:	Bottom of deck fascia	Bottom of Beam:	

Station	Distance	Downstream	Upstream
Abutment 1	0	17.5	17.9
EOW	4		20.5
EOW	5	24	
EOW	12		20.8
	23	25.6	21.9
	35	25.7	26
EOW	42	24	
Pier side 1	55	23.7	20.5
EOW	61	23	
EOW	65		24
	83	21.3	21.2
	103	20.4	20.5
Abutment 2	116	17.1	17.2





VERMONT
AGENCY OF TRANSPORTATION

Route C2003 /
Structure #00015 / (Routine)
C2003 over DOG RIVER
Team Lead: Justin White, **Inspection Date:** 08/20/2024

Abutment 2 approach

Abutment 1 approach

Upstream abutment 1 shoulder area

Wearing surface

VERMONT
AGENCY OF TRANSPORTATION

Route C2003 /
Structure #00015 / (Routine)
C2003 over DOG RIVER
Team Lead: Justin White, **Inspection Date:** 08/20/2024

Wearing surface

Downstream elevation

Upstream elevation

Lateral cross bracing

VERMONT
AGENCY OF TRANSPORTATION

Route C2003 /
Structure #00015 / (Routine)
C2003 over DOG RIVER
Team Lead: Justin White, **Inspection Date:** 08/20/2024

Span 1

Span 2

Superstructure

Abutment 1 beam ends

VERMONT
AGENCY OF TRANSPORTATION

Route C2003 /
Structure #00015 / (Routine)
C2003 over DOG RIVER
Team Lead: Justin White, **Inspection Date:** 08/20/2024

Abutment 1

Abutment 1

Pier span 1

Pier span 2

VERMONT
AGENCY OF TRANSPORTATION

Route C2003 /
Structure #00015 / (Routine)
C2003 over DOG RIVER
Team Lead: Justin White, **Inspection Date:** 08/20/2024

Pier cap

Abutment 2

Downstream

VERMONT
AGENCY OF TRANSPORTATION

Route C2003 /
Structure #00015 / (Routine)
C2003 over DOG RIVER
Team Lead: Justin White, **Inspection Date:** 08/20/2024

Upstream

Possible bylaw language defining a "Forest Reserve Overlay District" that could be used along with designating the Town Forest to fall within the district on the zoning map:

"Forest Reserve Overlay District: The purpose of the Forest Reserve Overlay District is to produce wood products, maintain wildlife habitat, protect water supplies, and provide forest recreation and conservation education. Within the Forest Reserve Overlay District, permitted uses include sustainable commercial forestry and related uses, and all other land development is prohibited."

Northfield Town Forest
Forest Reserve Overlay District

Purpose.
The general purpose of the Forest Reserve Overlay District is to produce wood products, maintain wildlife habitat, protect water supplies, and provide forest recreation and conservation education.

Permitted Uses.
Permitted uses include sustainable commercial forestry and related uses, and all other land development is prohibited.

Geographic Area of Application.
Maps delineating the boundaries of the Forest Reserve Overlay District are on file with the town clerk. Such maps, as amended, are incorporated into this chapter as if fully described and detailed herein.

Exemptions.
These provisions do not apply to properties owned by the Town of Northfield as they relate to the town water storage and distribution system, or regulation, intergovernmental agreement, or other form of cooperative agreement.

VERMONT

DEPARTMENT OF LIQUOR AND LOTTERY
DIVISION OF LIQUOR CONTROL

Application ID: DLL - Application - 78800

Application for: First Class Club License

Category of Business: First Class

Business/ Entity Information

Business/ Entity Name:
American Legion Club of Northfield #63, Inc.

Business Address:
48 Depot Sq.,
Northfield, Vermont 05663

Phone:
802-485-6713

Email:
allegion63@yahoo.com

Business ID:
0001647

Entity Type:
Nonprofit Corporation

Management Type if LLC:

People Information

- **Person:**
  SARAH GERDES

Business Role:
Business Principal

Business Address:
,
, ,

Phone:

Email:
allegion63@yahoo.com

US Citizen?

Political Position

Name: SARAH GERDES

Office:

Jurisdiction:

Violations:

Violation ID	Court/Traffic Bureau	Offense	Date of Offense
CV-5855	Washington Court	Negligent driving	Sun Feb 13 00:00:00 GMT 2022
CV-5856	Washington Court	Negligent driving	Sun Feb 13 00:00:00 GMT 2022

- **Person:**
  Eric Bramen

Business Role:
Business Principal

Business Address:
P.O. Box 412,
Northfield, Vermont, 05663

Phone:
8022790014

Email:
bluemax48i@yahoo.com

US Citizen?
Yes

Political Position

Name: Eric Bramen

Office:

Jurisdiction:

Violations:

Violation ID	Court/Traffic Bureau	Offense	Date of Offense

- **Person:**
  Lisa Pettry-Gill

Business Role:
Business Principal

Business Address:
96 Stagecoach Road,
Northfield, Vermont, 05663

Phone:
8023101831

Email:
lapettrey@gmail.com

US Citizen?
Yes

Political Position

Name: Lisa Pettry-Gill

Office:

Jurisdiction:

Violations:

Violation ID	Court/Traffic Bureau	Offense	Date of Offense

- **Person:**
  Randy Peace

Business Role:
Business Principal

Business Address:
1531 Rabbit Hollow Road,
Northfield, Vermont, 05663

Phone:
8024854355

Email:
nfldbarber1964@gmail.com

US Citizen?
Yes

Political Position

Name: Randy Peace

Office:

Jurisdiction:

Violations:

Violation ID	Court/Traffic Bureau	Offense	Date of Offense

- **Person:**
  Leslie Daniels

Business Role:
Business Principal

Business Address:
975 Steele Hill Road,
Randolph, Vermont, 05060

Phone:
8024857038

Email:
ltjdaniels83@gmail.com

US Citizen?
Yes

Political Position

Name: Leslie Daniels

Office:

Jurisdiction:

Violations:

Violation ID	Court/Traffic Bureau	Offense	Date of Offense

- **Person:**
  Glen French

Business Role:
Business Principal

Business Address:
468 Crosstown Rd.,
Berlin, Vermont, 05602

Phone:
8022290491

Email:
frenchievt@myfairpoint.net

US Citizen?
Yes

Political Position

Name: Glen French

Office:

Jurisdiction:

Violations:

Violation ID	Court/Traffic Bureau	Offense	Date of Offense

- **Person:**
  Dexter Landers

Business Role:
Officer/Director

Email:
dalanders@gmail.com

Business Address:
PO Box 147,
Northfield, Vermont, 05663-0147

Phone:
8025959317

US Citizen?

Political Position

Name: Dexter Landers

Office:

Jurisdiction:

Violations:

Violation ID	Court/Traffic Bureau	Offense	Date of Offense

- **Person:**
Eric Braman

Business Role:
Officer/Director

Business Address:
PO Box 412,
Northfield, Vermont, 05663-0412

Phone:
802-279-0014

Email:
bluemax48i@yahoo.com

US Citizen?

Political Position

Name: Eric Braman

Office:

Jurisdiction:

Violations:

Violation ID	Court/Traffic Bureau	Offense	Date of Offense

- **Person:**
Michael Krause

Business Role:
Officer/Director

Business Address:
1697 Winch Hill Rd,
Northfield, Vermont, 05663

Phone:
202-257-0704

Email:
mdetlefk@aol.com

US Citizen?
Yes

Political Position

Name: Michael Krause

Office:

Jurisdiction:

Violations:

Violation ID	Court/Traffic Bureau	Offense	Date of Offense

Location/ Premises Detail

Location Name:
American Legion Club of Northfield #63

Location Address:
48 Depot Square,
Northfield, Vermont 05663

Local Jurisdiction/ Town Clerk:
Northfield

Do you lease this Premises:

Health License:
Food:
Lodging:

Vermont Tax Department:

Education Details

Student Name:
Sarah Gerdes

Mode of Training:
DLC Online Training

Training Completion Date:
Mon Nov 10 00:00:00 GMT 2025

Type of Training:
First Class (On Premise)

Foundational License (if applicable)

License Type:
First Class

Licensee Name:
American Legion Club of Northfield #63

Licensee Address:
48 Depot Square ,
Northfield, Vermont 05663

License Number:
LP-012843

License Status:
License issued-renewed application

License Start Date:

License End Date:

Documents Attached

Name	Document Type	Assosicated With
D-28476	Other	American Legion Club of Northfield #63, Inc.

Payment and Acknowledgement

Signed by:
Eric Braman

Date of Submission:
2026-06-11 20:22:00

Local Application Fee:
115

State of Vermont / DLL Application Fee:
115.00

State of Vermont / DLL Payment Status:

Local Control Payment Status:
false

Home (/DLLLicenseManagment/s/)

Application
DLL - Application - 78800

Approve | Reject | Applicant Action Required | Town Payment Received | Download

APPLICATION DETAILS | RELATED INFORMATION

Application Information

DLL - Application Id
DLL - Application - 78800

External Status
Application sent to municipality

Business Entity Name
American Legion Club of Northfield #63, Inc.

Town Clerk/ Municipal Jurisdiction
Northfield

Applicant Email
allegion63@yahoo.com (mailto:allegion63@yahoo.com)

Application Type
License

Business Entity Phone
802-485-6713

Application Category
First Class

Renewal Application
✓

Application For
First Class Club License

Foundational License
LP-012843 (/DLLLicenseManagment/s/dll-licensemaster/a5At0000000CnmqEAC/lp012843)

Historical Id
1CLB

Town Fee
115

Holding Tobacco Licence

Application Fee
115.00

Not Holding Tobacco License

License/Permit Location Description

Applicant Action Comments

Expected start date of Half Year License

Town User Approval/Rejection Comments

Designated Caterers Details

Quantity of Alcohol required

Days Since Last Modified
0

what purpose this alcohol is used to be

Estimated time period for alcohol

Where is this alcohol to be used

Name and address from whom you purchase

Renewal Change Indicated

☐

Renewal Change Description

URL for Policies & Procedures

URL for Duties

Send Approval Email

☐

Location Details

Physical Location Name

American Legion Club of Northfield #63

Location

LN-016603 (/DLLLicenseManagment/s/detail/a0At0000002ZMffEAG)

Physical Location Street 1

48 Depot Square

Address of warehouse located in Vermont:

Physical Location Street 2/Unit/Suite

Name Address of Vermont Wholesale Dealer

Physical Location City/Town

Northfield

Physical Location State

Vermont

Physical Location Zip

05663

Education Details

Student Name

Sarah Gerdes

Training Completion Date

11/10/2025

Mode of Training
DLC Online Training

Valid Till
11/10/2027

Type of Training
First Class (On Premise)

Premises Lease Details

Do you Lease the Premises
No

Landlord Name

Landlord Email

Lease Expiration Date

Information

Food

Meal & Rooms Certificate/Business Accoun

Signer's Name
Eric Braman

Lodging(if licensed as a Hotel)

Question Poll

What would you like to know? Ask

Search this feed...

SARAH GERDES (/DLLLicenseManagment/s/profile/0058z000000pzv6AAA) (Customer) created this dll application.
15h ago (/DLLLicenseManagment/s/feed/0D5eq00001bmi06CAA)

DLL - Application - 78800

View more details

Like Comment

Write a comment...

Contact Violations

Violation Id	First Name	Last Name	Contact Role	Offense	Date of Off
CV-5855 (https://dllportal.my.v...	SARAH GERDES	GERDES	Business Principal	Negligent driving	2022-02-13
CV-5856 (https://dllportal.my.v...	SARAH GERDES	GERDES	Business Principal	Negligent driving	2022-02-13
CV-3615 (https://dllportal.my.v...	Paul Garcia	Garcia		Prior Conviction Reported	

VERMONT

DEPARTMENT OF LIQUOR AND LOTTERY
DIVISION OF LIQUOR CONTROL

Application ID: DLL - Application - 78798

Application for: Third Class Club License

Category of Business: Third Class

Business/ Entity Information

Business/ Entity Name:
American Legion Club of Northfield #63, Inc.

Business Address:
48 Depot Sq.,
Northfield, Vermont 05663

Phone:
802-485-6713

Email:
allegion63@yahoo.com

Business ID:
0001647

Entity Type:
Nonprofit Corporation

Management Type if LLC:

People Information

- **Person:**
  SARAH GERDES

Business Role:
Business Principal

Business Address:
,
, ,

Phone:

Email:
allegion63@yahoo.com

US Citizen?

Political Position

Name: SARAH GERDES

Office:

Jurisdiction:

Violations:

Violation ID	Court/Traffic Bureau	Offense	Date of Offense
CV-5855	Washington Court	Negligent driving	Sun Feb 13 00:00:00 GMT 2022
CV-5856	Washington Court	Negligent driving	Sun Feb 13 00:00:00 GMT 2022

- **Person:**
  Eric Bramen

Business Role:
Business Principal

Business Address:
P.O. Box 412,
Northfield, Vermont, 05663

Phone:
8022790014

Email:
bluemax48i@yahoo.com

US Citizen?
Yes

Political Position

Name: Eric Bramen

Office:

Jurisdiction:

Violations:

Violation ID	Court/Traffic Bureau	Offense	Date of Offense

- **Person:**
  Lisa Pettry-Gill

Business Role:
Business Principal

Business Address:
96 Stagecoach Road,
Northfield, Vermont, 05663

Phone:
8023101831

Email:
lapettrey@gmail.com

US Citizen?
Yes

Political Position

Name: Lisa Pettry-Gill

Office:

Jurisdiction:

Violations:

Violation ID	Court/Traffic Bureau	Offense	Date of Offense

- **Person:**
  Randy Peace

Business Role:
Business Principal

Business Address:
1531 Rabbit Hollow Road,
Northfield, Vermont, 05663

Phone:
8024854355

Email:
nfldbarber1964@gmail.com

US Citizen?
Yes

Political Position

Name: Randy Peace

Office:

Jurisdiction:

Violations:

Violation ID	Court/Traffic Bureau	Offense	Date of Offense

- **Person:**
  Leslie Daniels

Business Role:
Business Principal

Business Address:
975 Steele Hill Road,
Randolph, Vermont, 05060

Phone:
8024857038

Email:
ltjdaniels83@gmail.com

US Citizen?
Yes

Political Position

Name: Leslie Daniels

Office:

Jurisdiction:

Violations:

Violation ID	Court/Traffic Bureau	Offense	Date of Offense

- **Person:**
  Glen French

Business Role:
Business Principal

Business Address:
468 Crosstown Rd.,
Berlin, Vermont, 05602

Phone:
8022290491

Email:
frenchievt@myfairpoint.net

US Citizen?
Yes

Political Position

Name: Glen French

Office:

Jurisdiction:

Violations:

Violation ID	Court/Traffic Bureau	Offense	Date of Offense

- **Person:**
  Dexter Landers

Business Role:
Officer/Director

Email:
dalanders@gmail.com

Business Address:
PO Box 147,
Northfield, Vermont, 05663-0147

Phone:
8025959317

US Citizen?

Political Position

Name: Dexter Landers

Office:

Jurisdiction:

Violations:

Violation ID	Court/Traffic Bureau	Offense	Date of Offense

- **Person:**
Eric Braman

Business Role:
Officer/Director

Business Address:
PO Box 412,
Northfield, Vermont, 05663-0412

Phone:
802-279-0014

Email:
bluemax48i@yahoo.com

US Citizen?

Political Position

Name: Eric Braman

Office:

Jurisdiction:

Violations:

Violation ID	Court/Traffic Bureau	Offense	Date of Offense

- **Person:**
Michael Krause

Business Role:
Officer/Director

Business Address:
1697 Winch Hill Rd,
Northfield, Vermont, 05663

Phone:
202-257-0704

Email:
mdetlefk@aol.com

US Citizen?
Yes

Political Position

Name: Michael Krause

Office:

Jurisdiction:

Violations:

Violation ID	Court/Traffic Bureau	Offense	Date of Offense

Location/ Premises Detail

Location Name:
American Legion Club of Northfield #63

Location Address:
48 Depot Square,
Northfield, Vermont 05663

Local Jurisdiction/ Town Clerk:
Northfield

Do you lease this Premises:

Health License:
Food:
Lodging:

Vermont Tax Department:

Education Details

Student Name:
Sarah Gerdes

Mode of Training:
DLC Online Training

Training Completion Date:
Mon Nov 10 00:00:00 GMT 2025

Type of Training:
First Class (On Premise)

Foundational License (if applicable)

License Type:
Third Class

Licensee Name:
American Legion Club of Northfield #63

Licensee Address:
48 Depot Square ,
Northfield, Vermont 05663

License Number:
LP-012844

License Status:
License Active - Renewal in Process

License Start Date:

License End Date:

Documents Attached

Name	Document Type	Assosicated With
D-28476	Other	American Legion Club of Northfield #63, Inc.

Payment and Acknowledgement

Signed by:
Eric Braman

Date of Submission:
2026-06-11 20:04:47

Local Application Fee:
0

State of Vermont / DLL Application Fee:
1095.00

State of Vermont / DLL Payment Status:

Local Control Payment Status:
false

Home (/DLLLicenseManagment/s/)

Application
DLL - Application - 78798

Approve | Reject | Applicant Action Required | Town Payment Received | Download

APPLICATION DETAILS | RELATED INFORMATION

Application Information

DLL - Application Id
DLL - Application - 78798

External Status
Application sent to municipality

Business Entity Name
American Legion Club of Northfield #63, Inc.

Town Clerk/ Municipal Jurisdiction
Northfield

Applicant Email
allegion63@yahoo.com (mailto:allegion63@yahoo.com)

Application Type
License

Business Entity Phone
802-485-6713

Application Category
Third Class

Renewal Application
✓

Application For
Third Class Club License

Foundational License
LP-012844 (/DLLLicenseManagment/s/dll-licensemaster/a5At0000000CnmrEAC/lp012844)

Historical Id
3CLB

Town Fee
0

Holding Tobacco Licence

Application Fee
1,095.00

Not Holding Tobacco License

License/Permit Location Description

Applicant Action Comments

Expected start date of Half Year License

Town User Approval/Rejection Comments

Designated Caterers Details

Quantity of Alcohol required

Days Since Last Modified
0

what purpose this alcohol is used to be

Estimated time period for alcohol

Where is this alcohol to be used

Name and address from whom you purchase

Renewal Change Indicated

☐

Renewal Change Description

URL for Policies & Procedures

URL for Duties

Send Approval Email

☐

Location Details

Physical Location Name

American Legion Club of Northfield #63

Location

LN-016603 (/DLLLicenseManagment/s/detail/a0At0000002ZMffEAG)

Physical Location Street 1

48 Depot Square

Address of warehouse located in Vermont:

Physical Location Street 2/Unit/Suite

Name Address of Vermont Wholesale Dealer

Physical Location City/Town

Northfield

Physical Location State

Vermont

Physical Location Zip

05663

Education Details

Student Name

Sarah Gerdes

Training Completion Date

11/10/2025

Mode of Training
DLC Online Training

Valid Till
11/10/2027

Type of Training
First Class (On Premise)

Premises Lease Details

Do you Lease the Premises
No

Landlord Name

Landlord Email

Lease Expiration Date

Information

Food

Meal & Rooms Certificate/Business Accoun

Signer's Name
Eric Braman

Lodging(if licensed as a Hotel)

Question | Poll

What would you like to know? Ask

Search this feed...

SARAH GERDES (/DLLLicenseManagment/s/profile/0058z000000pzv6AAA) (Customer) created this dll application.
15h ago (/DLLLicenseManagment/s/feed/0D5eq00001bmJpQCAU)

DLL - Application - 78798

View more details

Like Comment

Write a comment...

Contact Violations

Violation Id	First Name	Last Name	Contact Role	Offense	Date of Off
CV-5855 (https://dllportal.myv...	SARAH GERDES	GERDES	Business Principal	Negligent driving	2022-02-13
CV-5856 (https://dllportal.myv...	SARAH GERDES	GERDES	Business Principal	Negligent driving	2022-02-13
CV-3615 (https://dllportal.myv...	Paul Garcia	Garcia		Prior Conviction Reported	

VERMONT

DEPARTMENT OF LIQUOR AND LOTTERY
DIVISION OF LIQUOR CONTROL

Application ID: DLL - Application - 78587

Application for: Outside Consumption Permit

Category of Business: OCP

Business/ Entity Information

Business/ Entity Name:
American Legion Club of Northfield #63, Inc.

Business Address:
48 Depot Sq.,
Northfield, Vermont 05663

Phone:
802-485-6713

Email:
allegion63@yahoo.com

Business ID:
0001647

Entity Type:
Nonprofit Corporation

Management Type if LLC:

People Information

- **Person:**
  SARAH GERDES

Business Role:
Business Principal

Business Address:
,
, ,

Phone:

Email:
allegion63@yahoo.com

US Citizen?

Political Position

Name: SARAH GERDES

Office:

Jurisdiction:

Violations:

Violation ID	Court/Traffic Bureau	Offense	Date of Offense
CV-5855	Washington Court	Negligent driving	Sun Feb 13 00:00:00 GMT 2022
CV-5856	Washington Court	Negligent driving	Sun Feb 13 00:00:00 GMT 2022

- **Person:**
  Eric Bramen

Business Role:
Business Principal

Business Address:
P.O. Box 412,
Northfield, Vermont, 05663

Phone:
8022790014

Email:
bluemax48i@yahoo.com

US Citizen?
Yes

Political Position

Name: Eric Bramen

Office:

Jurisdiction:

Violations:

Violation ID	Court/Traffic Bureau	Offense	Date of Offense

- **Person:**
  Lisa Pettry-Gill

Business Role:
Business Principal

Business Address:
96 Stagecoach Road,
Northfield, Vermont, 05663

Phone:
8023101831

Email:
lapettrey@gmail.com

US Citizen?
Yes

Political Position

Name: Lisa Pettry-Gill

Office:

Jurisdiction:

Violations:

Violation ID	Court/Traffic Bureau	Offense	Date of Offense

- **Person:**
  Randy Peace

Business Role:
Business Principal

Business Address:
1531 Rabbit Hollow Road,
Northfield, Vermont, 05663

Phone:
8024854355

Email:
nfldbarber1964@gmail.com

US Citizen?
Yes

Political Position

Name: Randy Peace

Office:

Jurisdiction:

Violations:

Violation ID	Court/Traffic Bureau	Offense	Date of Offense

- **Person:**
  Leslie Daniels

Business Role:
Business Principal

Business Address:
975 Steele Hill Road,
Randolph, Vermont, 05060

Phone:
8024857038

Email:
ltjdaniels83@gmail.com

US Citizen?
Yes

Political Position

Name: Leslie Daniels

Office:

Jurisdiction:

Violations:

Violation ID	Court/Traffic Bureau	Offense	Date of Offense

- **Person:**
  Glen French

Business Role:
Business Principal

Business Address:
468 Crosstown Rd.,
Berlin, Vermont, 05602

Phone:
8022290491

Email:
frenchievt@myfairpoint.net

US Citizen?
Yes

Political Position

Name: Glen French

Office:

Jurisdiction:

Violations:

Violation ID	Court/Traffic Bureau	Offense	Date of Offense

- **Person:**
  Dexter Landers

Business Role:
Officer/Director

Email:
dalanders@gmail.com

Business Address:
PO Box 147,
Northfield, Vermont, 05663-0147

Phone:
8025959317

US Citizen?

Political Position

Name: Dexter Landers

Office:

Jurisdiction:

Violations:

Violation ID	Court/Traffic Bureau	Offense	Date of Offense

- **Person:**
  Eric Braman

Business Role:
Officer/Director

Business Address:
PO Box 412,
Northfield, Vermont, 05663-0412

Phone:
802-279-0014

Email:
bluemax48i@yahoo.com

US Citizen?

Political Position

Name: Eric Braman

Office:

Jurisdiction:

Violations:

Violation ID	Court/Traffic Bureau	Offense	Date of Offense

Location/ Premises Detail

Location Name:
American Legion Club of Northfield #63

Location Address:
48 Depot Square,
Northfield, Vermont 05663

Local Jurisdiction/ Town Clerk:
Northfield

Do you lease this Premises:

Health License:
Food:
Lodging:

Vermont Tax Department:

Education Details

Student Name:

Mode of Training:

Training Completion Date:

Type of Training:

Foundational License (if applicable)

License Type:
First Class

License Number:
LP-012845

Licensee Name:
American Legion Club of Northfield #63

License Status:
License issued-renewed application

Licensee Address:
48 Depot Square ,
Northfield, Vermont 05663

License Start Date:

License End Date:

Documents Attached

Name	Document Type	Assosicated With
D-28476	Other	American Legion Club of Northfield #63, Inc.

Payment and Acknowledgement

Signed by:

Date of Submission:
2026-06-05 18:28:51

Local Application Fee:
0

State of Vermont / DLL Application Fee:
20.00

State of Vermont / DLL Payment Status:

Local Control Payment Status:
false

Home (/DLLLicenseManagment/s/)

Application
DLL - Application - 78587

Approve | Reject | Applicant Action Required | Town Payment Received | Download

APPLICATION DETAILS | RELATED INFORMATION

Application Information

Primary Phone No

Primary Contact Person

DLL - Application Id
DLL - Application - 78587

External Status
Application sent to municipality

Business Entity Name
American Legion Club of Northfield #63, Inc.

Historical Id
OUTC

Business Entity Phone
802-485-6713

Application Type
Permit

Foundational License
LP-012845 (/DLLLicenseManagment/s/dll-licensemaster/a5At0000000CnmsEAC/lp012845)

Application Category
OCP

Renewal Application
✓

Application For
Outside Consumption Permit

Town User Approval/Rejection Comments

Applicant Email
allegion63@yahoo.com (mailto:allegion63@yahoo.com)

Contact Engagement

Applicant Name:

Designated Caterers Details

Applicant Action Comments

Indoor Or Outdoor

License/Permit Location Description

Days Since Last Modified
2

Quantity of Alcohol required

Estimated time period for alcohol

what purpose this alcohol is used to be

Name and address from whom you purchase

Where is this alcohol to be used

Renewal Change Indicated

☐

Renewal Change Description

URL for Policies & Procedures

URL for Duties

Send Approval Email

☐

Event Details

Start date of event

End date of event

Physical Location Street 1

48 Depot Square

Physical Location Name

American Legion Club of Northfield #63

Physical Location Street 2/Unit/Suite

Physical Location State

Vermont

Town Clerk/ Municipal Jurisdiction

Northfield

Outside Side Consumption End time

Physical Location City/Town

Northfield

Outside Side Consumption Hours Requested

Do you Lease the Premises

Landlord Name

Lease Expiration Date

Landlord Email

Outside Side Consumption Start time

Business Location

Physical Location Zip

05663

Approximate Number of Persons Expected:

Location

LN-016603 (/DLLLicenseManagment/s/detail/a0At0000002ZMffEAG)

Outside Side Consumption Days Requested

Describe the type of event/ OCP Area

The area of use is sidewalk and parking spaces between the front of the building and Depot Square. When in use. the area (approx. 30'x50') is delineated by temporary posts and rope/plastic chain.

Days or specific bingo date(s)

Education Details

Student Name

Training Completion Date

Mode of Training

Valid Till

Type of Training

Post Question Poll

Share an update... Share

Search this feed...

SARAH GERDES (/DLLLicenseManagment/s/profile/0058z000000pzv6AAA) (Customer) created this dll application.
June 5, 2026 at 2:28 PM (/DLLLicenseManagment/s/feed/0D5eq00001arxTICAI)

DLL - Application - 78587

View more details

Like Comment

Write a comment...

Contact Violations

Violation Id	First Name	Last Name	Contact Role	Offense	Date of Off
CV-5855 (https://dllportal.my.v...	SARAH GERDES	GERDES	Business Principal	Negligent driving	2022-02-13

CV-5856 (https://dllportal.my.v...	SARAH GERDES	GERDES	Business Principal	Negligent driving	2022-02-13
CV-3615 (https://dllportal.my.v...	Paul Garcia	Garcia		Prior Conviction Reported	
CV-4967 (https://dllportal.my.v...	Matthew Gadbois	Gadbois		Prior Conviction Reported	

Application Documents

Name	Document Type	Associated With
D-28476 (https://dllportal.my.vermont.gov/DLLLicenseM...	Other Provisions	American Legion Club of Northfield #63, Inc.

TOWN OF NORTHFIELD, VERMONT
SELECT BOARD RETREAT
Minutes of June 3, 2026

I. ROLL CALL. Select Board Chair K. David Maxwell, Board members Tim Davis, Lydia Petty, Merry Shernock, and John Stevens. Also present were Manager Mary Smith, Katie Whitney, Curtis Dudley, Amie Dudley, Kristin Pollard, Melinda Davis, and Elroy Hill.

Chair Maxwell called the Board Retreat to order at 4:30 p.m.

II. PUBLIC PARTICIPATION (SCHEDULED): None.

III. DISCUSSION

Chair Maxwell said that the latest version (11/26/26) of the Board-generated list of community goals (see attached) had been distributed to the Select Board members beforehand for review. This list is broken down into annual goals/activities, short-term goals (16 months), medium-term goals (2-3 years), and long-term goals (4years plus). Manager Smith has asked Katie Whitney to serve as a facilitator for this meeting in order to assist the Select Board members in prioritizing these lists and to create a mechanism for future planning. Ms. Whitney is a lifelong Northfield resident and for the past fifteen (15) years has worked for the Vermont Agency of Human Services as the Director of Organizational and HR Development. She supports the state's workforce internally to further professional development, set personal work priorities and goals, assist with professional recruitment and retention, etc. Ms. Whitney has volunteered to help the Select Board members move beyond the written list of community goals in order to help identify shared visions for the community, which would allow for setting desired local outcomes for the future. Ms. Whitney has reviewed the current list of community goals and would like to encourage the Select Board members to move beyond this basic list and create the procedures required to reach common goals. Board member Petty said that in the past the Select Board members would go through the most recent list of community goals to discuss which have been fully or partially achieved and perhaps reorganize the priority list. Ms. Whitney said she would ask the Select Board members to go through a few exercises in order to identify community priorities as well as strategies to achieve them. She said not everything could be labeled as a priority but the Select Board members should be able to recognize the most pressing issues in this community. Board member Petty said the current list are items that individual Select Board members asked to be included but she doesn't believe there was ever a true consensus regarding whether certain items are true priorities.

Ms. Whitney said there is a need to develop a Northfield strategic plan. She then distributed erasable paddles to Manager Smith and the Select Board members on which they can write their views. Instead of starting with the current list of community goals, she asked them to imagine it is June 2031 and Northfield has become the community they want it to be. Manager Smith and the Select Board members then wrote down what they would like to see in Northfield. Board member Davis wrote that he would like Northfield to be a better place for people to come to. Chair Maxwell wrote that he would like a vibrant downtown, a strong school system, a strong municipal relationship with Norwich University, and one community. Board member Shernock would like a compact walkable community including Northfield Falls as well as a community that provides services to all residents. Board member Stevens would like a vibrant downtown, an expanded public sewer system, fixed covered bridges, and revived municipal pool. Board member Petty would like a vibrant walkable village that is welcoming to all ages, bustling storefronts, good sidewalks, inviting public spaces, and a well-maintained infrastructure including roads and bridges. Manager Smith would like community focused growth development and improved public safety.

Ms. Whitney put down that she would like Northfield to be vibrant and connected. This would include being a community that was accessible and welcoming. She then asked the Select Board members to focus less on specific projects and more on a grand vision for the future. One issue that arose consistently was economic development. Chair Maxwell felt Northfield would very likely remain a "bedroom community" as it is unlikely that it will ever become a shopping destination or industrial center. Board member Petty said when the Vermont Council on Rural Development (VCRD) held its community visit here in 2023, a number of key local concerns were identified and task forces were formed to address them.

This included plans to develop a community center; to improve accessibility, walkability, and pedestrian safety; improve the relationship between Northfield and Norwich University; and the promotion of Downtown Development. Some of these groups have been much more active than the others in the time since. Ms. Whitney said government effectiveness probably should be added to the list of general goals. Chair Maxwell agreed that making things happen is the main function of the Select Board and it is best to have tangible goals that they have the ability to make happen.

Ms. Whitney then asked the Select Board members to review the list of community goals last revised in November 2024 and note which items had been fully achieved or some progress made. Starting with the list of short-term goals, Chair Maxwell said the Common and Fountain haven't been rehabilitated but there was community engagement on this and a plan was developed based on this public input. Board member Shernock said the municipality doesn't currently have the funds to fully implement the rehabilitation plan. Chair Maxwell said it might be desirable to fully review the plan again and identify actions that could be taken over time to address the most pressing concerns. Ms. Whitney said the Select Board members would need to decide at some point what success would look like for this project. Board member Shernock believes significant progress has been made to achieve a long-term PILOT agreement with Norwich University. Chair Maxwell believes an agreement should be finalized in the next month or so. Board member Shernock added that the sidewalk inventory has been completed. Chair Maxwell noted that a major sidewalk project was completed last year on Vine Street. Board member Shernock said the goal of new sidewalks in Northfield Falls has not been pursued but there have been a number of pedestrian safety improvements installed there including a flashing crosswalk sign. Board member Petty noted that the municipality received a grant to update its zoning maps, which are now out of date. Although the restrooms there still are not fully ADA-compliant, it was noted that a number of accessibility improvement have been installed at and around the municipal pool. There also are designs now available for a fully-accessible new bathhouse. The riverwalk project will be significantly facilitated by the removal of the Cross Brothers Dam, which is now scheduled for later this year.

As regards the medium-term goals, it was noted that with a new Police Chief and Deputy Police Chief starting next month, the goal of Northfield Police Department (NPD) officer recruitment and retention should be within reach. As indicated earlier, there have been some safety improvements and new signage installed in Northfield Falls to deter speeding and promote pedestrian safety. Elroy Hill, who lives in Northfield Falls, felt that an improved police presence was necessary for real safety improvements there. Chair Maxwell said that increased law enforcement presence should be coming soon. One medium-term goal was to extend the municipal sewer system southward along Vermont Routes 12 & 12A. Chair Maxwell said the engineering plans for this project were developed several years ago and are now being updated. Therefore, there has been some progress on this and additional funding options for the construction phase of this project have been identified.

As for improving opportunities for housing developments, it was noted that Economic Development Director Thomas Davis has been working with several potential housing developers with some success to date. This includes the apartment conversations at the former Masonic Temple, the Habitat for Humanity project on North Main Street, and six (6) housing units to be built on Freight Yard Way. Manager Smith said Mr. Davis is now involved with some additional potential housing projects and soon will provide the Select Board members with updates. As for upgrades to the Wastewater Treatment Facility (WWTF), Chair Maxwell said the planning now is underway after the completion of a full engineering inspection. There also have been some developments regarding a potential trail connecting Memorial Park to the Northfield Falls Park as new property owners seem more amenable than the previous ones.

Turning to long-term goals, Board member Shernock said not much had been done on these. Some renovations have been made at the Municipal Building but nothing major. The task force that was created to explore the possibility of creating a community center is no longer active. As for annual goals/activities, it was noted that the drive for DEI training for all employees, board members, etc. has lost much of its initial momentum. However, there have been a number of joint board meetings with school board members and other committee members. Northfield's state legislators also have been invited to attend Select Board regular meetings in order to hear the concerns of Board members and the general public. Chair Maxwell felt scheduling these meetings would be the Town Manager's responsibility.

Board member Petty would prefer that all municipal board members, not just those that are required to do so, should attend training sessions regarding the Open Meeting Law and the Municipal Code of Ethics. She added that expanded marketing of our outside recreational facilities has been partly successful. In addition, local volunteers have been honored but perhaps not to the extent that the Select Board members originally envisioned. Ms. Whitney said it appears that a good amount of progress has been made on a number of the community goals and she asked how Northfield residents are kept informed of such developments. It was noted that in the Annual Town Report, municipal officials and board chairs provide summaries of their activities/ achievements from the past year. Board member Shernock thought that in her brief time here, Manager Smith has already done an admirable job of keeping Northfield residents, board members, and municipal staff informed of what has been going on through her weekly reports. In addition, Chair Maxwell has provided a monthly column in the *Northfield News* regarding what the Select Board members have done recently and what they plan to do. Board member Shernock felt it might be good to hold some staff appreciation events in future. It was noted that the past year saw various special challenges for several municipal departments.

Ms. Whitney asked what the concept of a "Community Center" meant to the Select Board members. Board member Petty said there is the Community Room but she also envisioned a much larger public meeting space that is fully accessible and available for a wide variety of larger scale events. As the Select Board members learned recently, the only large fully accessible spaces are located on the Norwich University campus, i.e. Plumley Armory. The task force that was working on developing a community center lost its momentum when disputes arose over the size and purpose of the new community center as well as questions about how the construction would be funded. Ms. Whitney said if Northfield residents are not ready for the process of creating a new community center, there might be other, less comprehensive options available.

The Select Board members then took a brief dinner break. Ms. Whitney took this time to draft a vision statement based on tonight's discussions. After the break ended, Ms. Whitney read the following statement, which was subject to Select Board wordsmithing: "Northfield is a vibrant, welcoming, connected community that balances small town character with opportunities for housing, recreation, economic vitality, and effective infrastructure." She felt this statement included public safety and effective government. Ms. Whitney then asked the Select Board members to think of four (4) to six (6) priorities that would accomplish this vision. Chair Maxwell said continued economic development, which could cover a lot of broad developments including additional affordable housing opportunities, etc. Board member Petty would like more effective maintenance of our infrastructure through a comprehensive plan that allows for proper annual budgeting. Board member Davis said the Town of Berlin has such a plan that does allow for proper long-term planning of its highway system. Chair Maxwell thought that the Select Board members need to identify reliable funding mechanisms to pay for both major projects as well as regular maintenance. Board member Petty thought keeping municipal policies up-to-date is important to her. Manager Smith felt the municipality should invest properly in public safety. Board member Petty felt local education was a major concern even though the Select Board members don't have a direct role in this. However, the Select Board could assume a more active role if plans are developed to close some educational facilities by merging class levels, etc. Board member Petty also believed it would be good for the Select Board to work closer with local public interest groups, such as the Accessibility, Walkability, & Pedestrian Safety Task Force, in order to achieve common goals.

Ms. Whitney then presented a priority list containing five (5) items: 1. Continued Economic Development; 2. Infrastructure Plan; 3. Operations Plan; 4. Public Safety; and 5. Community Connections. She believes all the major concerns that the Select Board members brought up today to could directly linked to an item on this list. Chair Maxwell felt this was a very strong list that represented about ninety percent (90%) of what the Select Board members are trying to achieve. Board member Shernock agreed that what was emphasized today fell into at least one of these categories. Ms. Whitney said the next step in this process is to break down these priorities in order to create a viable process for achieving these goals, i.e. "take to the granular." This could help develop a strategic plan for the next five (5) years. She felt that perhaps the Select Board members could incorporate such a discussion as a regular feature of their future meetings. This could result in a framework for future action.

Manager Smith said it probably would be useful to hold another retreat session in a couple of weeks. It was decided that the Select Board members will hold an additional meeting on Wednesday, June 17, 2026 in the Municipal Building starting at 4:00 p.m. Manager Smith felt tonight's meeting was a good move in the right direction.

IV. PUBLIC PARTICIPATION (UNSCHEDULED). There was none.

V. ADJOURNMENT. Motion by Board member Stevens, seconded by Board member Shernock, to adjourn. **Motion passed 5-0-0.**

The Board Retreat adjourned at 6:10 p.m.

Respectfully submitted,

Kenneth L. McCann

Kenneth L. McCann, Acting Clerk

A video recording of this meeting is available at: https://youtu.be/NorL0hGmFA0

These minutes are subject to approval at the next Select Board regular meeting.

Town of Northfield, Vermont
Short-, Medium-, and Long-Term Community Goals
(11/26/24)

Annual Goals/Activities

Open Meeting Law Training offered to all committees/commissions and SB
DEI Training- in person preferred
Honor Volunteers Annually
Joint Meetings with School Board and others
State Representative Updates
Review and Update Municipal Policies and Ordinances
Northfield Representation on the CVRPC TAC
Update Employee Succession Plan
Maintain Electronic Tickler File
Marketing of Town Parks, Pool, Trails (Events)

Short-Term Goals (16 Months)

Subcommittee Reclassification & Refine Duties
Rehabilitation of Town Common and Fountain
Address Municipal Building Deferred Maintenance Issues
Refine Town Policy for Road Discontinuance Process
Explore Options for Screening Junk Vehicles
Add Steel/Street Turnaround Slaughterhouse Bridge
Add Zoning Categories – Engage Professional
Paint/Clean Bridges – Develop Maintenance Plan
Refine costs/Sidewalk need (possible bonding)
Bridge Inventory/Repairs (Develop Capital Plan)
Work with NU on Long-term PILOT Agreement
Address Housing Issues (Task Force)
Support Working Groups (update) Reach out
Update RSMS
Recreation Vision 1-3-5 Year Combined Effort by Various Groups
Finish Covered Bridges Assessment
Create Social Infrastructure/Park Rec. F.T.

Town of Northfield, Vermont
Short-, Medium-, and Long-Term Community Goals
(11/26/24)

Pool & Sitework ADA Compliance

Complete Phase I of Riverwalk (Cross Bros. Dam)

RSMS Training for Highway Subcommittee Members (through VLCT)

Medium-Term Goals (2-3 Years)

Bonding/Funding Sidewalks Repair/Maintenance

Install New Sidewalk to Tops Market

Learn about Short Term Rentals in our Community

Redefine/Make Clearer Working Groups/Committees

Develop River Access in Falls

Help with Police Department Recruitment

Consider Community Oversight of Law Enforcement

Reduce Speed in Falls, Signage/Other

Skateboard Park- Possible location near Police Station

Connector Trails - Memorial Park to Falls

Construction of 12-12A Sewer Extension

Conduct Study – Sewer to Falls

Emergency Services Location Flooding Mitigation Steps

Pool House Renovation

Developing Opportunities for Housing Developments

Continue Engineering/Planning for Upgrades to Northfield Wastewater Treatment Facility

Explore Possibilities for Public-Private Development Opportunities

Long-Term Goals (4 Years Plus)

Improvements/Renovations Municipal Building

Extend Municipal Sewer to Northfield Falls

Extend Sidewalk along Route 12 to Northfield Falls

Extend Sidewalk Southward along Vermont Routes 12 and 12A

Explore possibilities for a Community Center

TOWN OF NORTHFIELD, VERMONT
SELECT BOARD REGULAR MEETING
Minutes of June 9, 2026

I. ROLL CALL. Chair K. David Maxwell, Board members Tim Davis, Lydia Petty, Merry Shernock, and John Stevens. Also present were Town Manager Mary Smith, Acting Clerk Kenneth McCann, David Mears (Chair, Northfield Conservation Commission [NCC]), Mead Binhammer (Project Director, Vermont Land Trust), Jeremy Whalen (Chair, Town Forest Stewardship Committee [TFSC]), Susan Stillinger (NCC), Desiree Matheson, Russ Barrett (NCC & TFSC), Carolyn Stevens, Kristin Pollard, Melinda Davis, Rhonda Doyon, Stephen Coley, and Elroy C. Hill.

Chair Maxwell called the meeting to order at 7:00 p.m.

II. SET/ADJUST AGENDA. Chair Maxwell said the municipality received a letter yesterday from the Vermont Agency of Transportation (VTrans) containing an inspection report on Bridge #56 on TH-54 over Sunny Brook. This letter asks the Select Board members to confirm as soon as possible how they will respond to this report so this matter will be added as an action item on tonight's agenda (see below).

III. PUBLIC PARTICIPATION (SCHEDULED):

a. David Mears (NCC), Jeremy Whalen (TFSC) and Mead Binhammer (Vermont Land Trust): Town Forest Conservation Easement. Mr. Mears said he has been an NCC member for about four (4) years but proposals to establish a conservation easement for the Town Forest have been discussed and debated for several more years. The last time a formal proposal was brought before the Select Board members they did not approve it but Mr. Mears said there have been some notable developments since then. For example, there now are grant funds available from the Vermont Land Trust that would cover a good part of the easement establishment expenses. Local matching funds would be required but Mr. Mears said that could be covered out of the NCC operations budget. He said approving a conservation easement would be a commitment by the municipality that there would be no future development in the Town Forest for perpetuity. The NCC have held a number of meetings on this topic and have learned that although they might be divided on the exact method to do so, Northfield residents do love their Town Forest and want steps taken to protect it for future generations. These meetings have been held in a number of venues such as the local schools, Senior Center, etc. Mr. Mears believes there was a sense of general support for the municipality establishing a conservation easement. Mr. Whalen said establishing this conservation easement would be consistent with the guidelines included in the Town Forest Stewardship Plan that the Select Board members approved in 2019 as well as provisions in the revised Northfield Town Plan adopted the following year. Adoption of a conservation easement would ensure that the Town Forest would be protected from future development for all time. Mr. Binhammer said the Select Board members have been provided with a written summary of the conservation easement process including a timeline. This summary includes the statement that "A town forest easement includes purposes of protecting wildlife habitat and natural features, productive forestland, public recreation and education, open space and scenic views, and access for the general public for non-commercial, non-motorized uses."

The summary also lists a number of prohibited uses such as mining activities, stream alterations, use of motorized vehicles, etc. Mr. Binhammer added that the State of Vermont is now providing municipalities with funds for town forest protection that would cover the expenses associated with the legal process as well as future easement oversight. Mr. Mears said if the Select Board members provide their authorization, the NCC will work with Manager Smith to submit a grant application within the next month to begin the process. Board member Davis believes that although approving a conservation easement is widely considered to be a permanent step, it is always possible that a future state legislature could change this. Mr. Binhammer said that as long as land records are kept as they are now, the easement very likely would be a permanent document. Board member Petty asked how many people attended the public meetings when the conservation easement possibility was discussed. Mr. Mears said there were probably a least a dozen people at each meeting and there did seem to be fairly strong support for conservation easements. Some people were concerned that new restrictions regarding Town Forest use would be imposed but the only new restriction would be to prevent future development. Board member Petty felt this was a big decision and would like to hear from a broader range of local public opinion. Mr. Binhammer said Vermont Land Trust does perform community outreach but those who attend their meetings usually have similar views about forest protection. Chair Maxwell asked if communities have been asked to hold public votes on this matter. Mr. Binhammer said that has happened in the past but usually as a result of a public petition to reconsider local legislative action. Chair Maxwell would like to engage Northfield residents more on this subject and perhaps holding some additional public hearings could accomplish this. Mr. Binhammer said it was possible to start the easement approval process while still taking in public input.

Mr. Mears said the NCC is tonight asking for Select Board authorization to work with the Town Manager on the grant application. There would be no binding commitment on the Select Board members to approve the conservation easement until the process has been played out. There certainly would be time for additional public meetings during this timeframe. Board member Petty felt it was good that the Select Board members could authorize the grant application without formally committing themselves to easement approval at this time. Board member Stevens asked if this easement would cover the section of the Northfield Town Forest that is located over the Berlin borderline. Mr. Mears said it would not. However, there might be a long-term opportunity to form linked forest conservation areas that included the Paine Mountain ridgeline from Northfield through Berlin. This also might include Norwich University lands at some future time. This would be a protected forested corridor that would benefit local wildlife as well as outdoor enthusiasts. Chair Maxwell then thanked Mr. Mears, Mr. Binhammer, and Mr. Whalen for tonight's presentation. As this matter was not warned as a possible action item, it will be put on the next regular meeting agenda (06/23/26).

b. **Desiree Matheson: Public Nudity Concerns.** Ms. Matheson said that as a mother of two (2) young daughters, she has serious concerns about a person who recently has been seen walking around naked in public places. This person at one point decided to put on an offensive display of himself near Ms. Matheson's home and she and her family members were very distressed by this. This person has also been seen walking around nude at Dog River Park and at the Shaw's supermarket in Berlin. Ms. Matheson doesn't care what people do in the privacy of their own homes but she did not feel such public displays were appropriate. She can see the both sides of the public nudity debate but draws the line when children become affected by this.

Ms. Matheson noted the communities of Burlington, Bennington, and Barre have approved local ordinances banning public nudity and would like the Select Board members to consider taking this action as well. Board member Petty would first like to hear from local law enforcement regarding whether there is a real need for a local ordinance and/or whether this person could be prosecuted through existing statutes. What this person did in front of Ms. Matheson's family certainly seems to fall under the category of "lewd and lascivious" behavior. Manager Smith said current state law says that if a person is simply naked outside and doesn't make displays of themselves, there is really nothing law enforcement can do. Board member Davis felt there was a big difference between someone skinny dipping at a local waterway and someone acting in a lewd and offensive manner around children. However, he does not believe an ordinance would totally solve this problem due to enforcement concerns. Board member Davis noted that the person involved is reported to be driving a vehicle with out-of-state license plates so he is probably just traveling through Northfield and not a permanent resident. He also is unaware of any more recent incidents. Board member Petty noted skinny dipping locations are usually well known to residents and kept out of view from the general public. She also felt passing an ordinance doesn't automatically solve the problem and it isn't good practice to write ordinances due to isolated incidents. Should this become a repeated problem, the Select Board certainly could revisit this matter and take appropriate action.

IV. LIQUOR CONTROL COMMISSION (7:45 p.m.)

a. Liquor License Renewals

1. **Norwich University (Sodexo).** Motion by Board member Shernock, seconded by Board member Davis, to approve the liquor license renewal. **Motion passed 5-0-0.**
2. **O'Maddi's Deli & Café.** Motion by Board member Shernock, seconded by Board member Davis, to approve the liquor license renewal. **Motion passed 5-0-0.**
3. **South Village Mobil (T.K. Ventures, Inc.).** Motion by Board member Shernock, seconded by Board member Davis, to approve the liquor license renewal. **Motion passed 5-0-0.**

b. Outside Consumption Permit

1. **O'Maddi's Deli & Café.** Motion by Board member Shernock, seconded by Board member Stevens, to approve the outside consumption permit. Board member Petty would like the Select Board members to develop a policy that governs the use of public sidewalks for private businesses. Chair Maxwell said perhaps future applications like this should include additional information like maps, etc. **Motion passed 5-0-0.**

V. APPROVAL OF MINUTES (7:48 p.m.)

a. **May 26, 2026 (Regular Meeting).** Motion by Board member Shernock, seconded by Board member Stevens, to approve the minutes. Board member Stevens had one minor correction. **Motion to approve the amended minutes passed 4-0-1, with Board member Petty abstaining.**

VI. APPROVAL OF BILLS (7:50 p.m.)

a. **Approval of Warrant #23-26.** Motion by Board member Shernock, seconded by Board member Stevens, to approve Warrant #23-26 in the amount of $2,001,512.61. Board member Petty noted that of the total warrant amount, $1,441,915.31 represents property taxes collected by the Town of Northfield and forwarded to the Paine Mountain School District. **Motion passed 5-0-0.**

b. **Approval of Warrant #23-26A.** Motion by Board member Shernock, seconded by Board member Stevens, to approve Warrant #23-26A in the amount of $110,831.92. This is a payment on a fire tanker truck bank note. **Motion passed 5-0-0.**

c. **Approval of Warrant #23-26B.** Motion by Board member Shernock, seconded by Board member Stevens, to approve Warrant #23-26B in the amount of $28,743.07. This is a payment on a fire pumper truck bank note. **Motion passed 5-0-0.**

d. **Receipt of Biweekly Payroll through May 24, 2026.** Motion by Board member Shernock, seconded by Board member Stevens, to receive the biweekly payroll in the amount of $85,947.01. **Motion passed 5-0-0.**

VII. SELECT BOARD (7:54 p.m.)

a. **Appointment of Clean Water State Revolving Loan Fund (CWSRF) Authorized Representative.** Motion by Board member Stevens, seconded by Board member Shernock, to appoint Mary Smith as the CWSRF Authorized Representative. **Motion passed 5-0-0.**

b. **Appointment of Municipal Planning Grant Authorized Officials and Grant Administrator.** Motion by Board member Shernock, seconded by Board member Davis, to appoint Mary Smith as the Municipal Planning Grant Authorized Official; K. David Maxwell as the Alternate Municipal Planning Grant Authorized Official; and Mary Smith as the Grant Administrator. **Motion passed 5-0-0.**

c. **Approval of Capital Expense Note (2021 Fire Tanker).** Motion by Board member Stevens, seconded by Board member Shernock, to approve and sign the Capital Expense Note in the amount of $90,986 at 4.59% interest; to approve the Capital Expense Borrowing Resolution; and to approve the No-Arbitrage and Use of Proceeds Certificate. Chair Maxwell noted that this is a refinanced bank note at a reduced interest rate. **Motion passed 5-0-0.**

d. **Request to Abate Property Tax Late Payment Penalty and Interest.** Motion by Board member Shernock, seconded by Board member Stevens, to approve the abatement of $43.36 in late payment penalties and $5.42 in interest charges for InFraUS Renewables. Town Clerk Kim Pedley had requested that the Select Board members approve this abatement because a new property owner had been misinformed that one of the tax installments had already been paid when it had not. **Motion passed 5-0-0.**

e. **Approval of Revised Northfield Ambulance Service (NAS) Rates.** Motion by Board member Shernock, seconded by Board member Stevens, to approve the revised Northfield Ambulance Services fees effective July 1, 2026. Manager Smith said NAS Chief Meggan McCusker had requested this rate increase last summer but it was not brought to the Select Board members at that time. The revised rates also include the amounts charged for various event standby packages. **Motion passed 5-0-0.**

f. **Awarding the Bid for Cross Brothers Dam Removal Project.** Motion by Board member Shernock, seconded by Board member Stevens, to award the Cross Brothers Dam Removal Project to Tatro Construction. Manager Smith said there had been three (3) well-qualified bidders for this project but she and the engineers working on this project recommended Tatro Construction due to their extensive experience with similar dam removal projects. They also exhibited significant technical expertise. Board member Davis asked if the project would be completed by October 15, 2026. Manager Smith said with their experience, she felt Tatro would be able to accomplish this. She added that this project has been a long time coming. **Motion passed 5-0-0.**

g. **Authorization for Select Board Regular Meeting Time Change.** Motion by Board member Shernock, seconded by Board member Petty, to change the regular meeting starting time for Select Board regular meetings to 6:00 p.m. beginning with the June 23. 2026 meeting. Chair Maxwell said the possibility of moving up the regular meeting starting time from 7:00 p.m. to 6:00 p.m. has been discussed in the past but we are now seeking formal action to enact this. Board member Stevens opposes this change as it would disrupt the normal dinner time for many residents, making it more difficult for them to attend. Board member Petty favors the change as 6:00 p.m. has become the normal starting time for most local boards and committees. She noted several recent Select Board regular meetings have run quite late in the evening and that also can create a real burden for board members and members of the public. Chair Maxwell said if problems do arise with public attendance, etc., the Select Board members could decide to revert back to 7:00 p.m. **Motion passed 4-1-0, with Board member Stevens voting in opposition.**

h. **Bridge #56 on TH-54 over Sunny Brook VTrans Inspection Report.** Manager Smith said VTrans recently provided an inspection report on this bridge that indicates it has a number of problems including "a gap of over 1" between the deck and the top of the steel beam." VTrans is asking that the municipality post a new weight limit of "Single Axle = 4 tons, Tandem = 9 tons, Gross = 13 tons." As an alternative, the municipality could close the bridge to traffic until it is repaired. There is a $110,000 current balance in the Highway Capital Improvement Plan (CIP) budget to repair this bridge with an additional $50,000 to be added in the next fiscal year. It was noted that the nearby retaining wall along Vermont Route 12 is now undergoing repairs so perhaps the contractor performing that work could be contacted about also doing the bridge repairs. Motion by Board member Shernock, seconded by Board member Stevens, to return the receipt confirmation form indicating that the bridge will be posted as recommended. **Motion passed 5-0-0.**

VIII. TOWN MANAGER'S REPORT (8:20 p.m.). Manager Smith submitted her written report to the Select Board members and department heads yesterday afternoon (06/08/26). Notable items include an additional meeting of the working group negotiating a contract with the collective bargaining unit now representing part-time NAS employees; interviewing candidates for the Finance Director position; moving forward on the smart meter installation process; etc. She noted that the Main Street Waterline Installation is still ongoing but the Cheney Field Water Tank Installation project has been completed. Manager Smith also reported that the Highway Department has been working diligently on a number of the backroads, i.e. Dole Hill Road, Bean Road, Hallstrom Road, etc. over the past couple of weeks.

IX. BOARD MEMBERS' COMMENTS, CONCERNS, QUESTIONS (8:24 p.m.)

a. **Street Paving Problems.** Board member Davis said there still remains some road debris on the roadsides due to recent paving projects including Union Brook Road, etc. Manager Smith has a meeting tomorrow with the paving contactors about this.

b. **Community Banner Problem.** Board member Petty said one of the community banners installed on the Main Street bridge needs to be better secured.

c. **Culvert Crawlers.** Board member Shernock said this volunteer organization based in Springfield VT is willing to work with local highway departments to help identify failing culverts and also can provide important information related to stormwater mitigation.

d. **Falls General Store Community Conversation.** Board member Shernock said there will be a meeting termed the "Northfield Falls General Store Strategy Session" held on Thursday, June 11, 2026 from 6:00 p.m. to 7:30 p.m. at the Falls General Store's top floor. This meeting is intended to provide public support for the store's owner-operator, who is having some difficulties in keeping the store open. This meeting will be facilitated by Ben Doyle, a coordinator from Preservation Trust of Vermont. Board member Shernock felt general stores are very important community centers and she hopes residents will take part in this discussion and provide some useful suggestions.

e. **350 Vermont.** Board member Shernock said this organization will work with utility customers to help reduce their energy consumption during peak usage periods. It was noted that the new battery storage facility to be built on King Street later this year will help mitigate this problem locally.

X. PUBLIC PARTICIPATION (UNSCHEDULED) (8:35 p.m.)

a. **Elroy Hill: Conservation Easement Alternatives.** Mr. Hill serves on the Northfield Planning Commission (PC) and he noted that the PC members previously presented the Select Board members with information about the possibility of establishing a conservation overlay for Northfield that would provide additional protections for the Town Forest without the loss of local control. After some discussion, it was decided that it would be a good idea to invite PC Chair Royal DeLegge and/or Zoning Administrator Mitch Osiecki to the next regular meeting when the conservation easement is again discussed in order to provide additional information about this alternative course of action.

XI. EXECUTIVE SESSION. Motion by Board member Stevens, seconded by Board member Petty, to go into executive session, in accordance with 1 VSA 313 (a)(1)], in order to discuss a legal matter and contract negotiations with Manager Smith present. **Motion passed 5-0-0.**

The Board went into executive session at 8:50 p.m.

Motion by Board member Shernock, seconded by Board member Stevens, to come out of executive session. **Motion passed 5-0-0.**

The Board came out of executive session at 9:12 p.m. No action was taken.

XII. ADJOURNMENT. Motion by Board member Shernock, seconded by Board member Stevens, to adjourn. **Motion passed 5-0-0.**

The Board adjourned at 9:12 p.m.

Respectfully submitted,

Kenneth L. McCann

Kenneth L. McCann, Acting Clerk

A video recording of this meeting is available at: https://youtu.be/SaQwW0pd1G4

These minutes are subject to approval at the next Select Board regular meeting.

TOWN OF NORTHFIELD

THE UNDERSIGNED HEREBY AUTHORIZE THE EXPENDITURES LISTED HEREIN, ACCORDING TO THE LAWS OF THE STATE OF VERMONT.

DISBURSEMENT DATE: 06/26/26 WARRANT 24-26, 24-26A-B

NORTHFIELD TOWN SELECT BOARD

TIMOTHY DAVIS _____

K. DAVID MAXWELL, Chair _____

LYDIA PETTY _____

MERRY SHERNOCK, Vice Chair _____

JOHN B. STEVENS _____

MARY SMITH, Manager _____

TOWN GENERAL	39,165.19	ELECTRIC FUND	18,687.88
MUNICIPAL PLANNING GRANT		WATER FUND	315,663.55
FLOOD BUYOUT GRANT		SEWER FUND	29,491.70
COMMON FUND			
COMMUNITY DEVELOPMENT FUND			
ARPA FUND			
TOWN CIP	16,326.80		
AMBULANCE DONATION FUND			
FIRE DONATION FUND			
RECREATION COMMITTEE FUND			
POOL DONATION FUND			
CONSERVATION FUND			
POLICE DONATION FUND			
ENERGY COMMITTEE DONATION FUND			
AGENCY FUND			
SUBTOTAL	**$55,491.99**	**SUBTOTAL**	**$363,843.13**

GRAND TOTAL **$419,335.12**

YEAR/PERIOD: 2026/1 TO 2026/12

ACCOUNT/VENDOR	DOCUMENT	VOUCHER	PO	YEAR/PR	TYP	S		WARRANT	CHECK	DESCRIPTION
10000 TOWN GEN - BALANCE SHEET										
10000 01100 ACCOUNTS RECEIVABLE AMBUL										
037007 MAYO, MAUREEN	91059		0	2026 12	INV	A	148.30	24-26		AMB REFUND-DOS 11/2
INVOICE:		FULL DESC: AMB REFUND-DOS 11/22/25								
063253 WEBTPA	91109		0	2026 12	INV	A	127.89	24-26		AMB REFUND-MCLELLAN
INVOICE:		FULL DESC: AMB REFUND-MCLELLAN								
063302 WELLFLEET GROUP, LLC	91071		0	2026 12	INV	A	850.86	24-26		AMB REFUND-C.LAWS
INVOICE:		FULL DESC: AMB REFUND-C.LAWS								
ACCOUNT TOTAL							1,127.05			
10000 01340 UNUSED POSTAGE INVENTORY										
040191 NEOPOST-NEOFUNDS	90987		0	2026 12	INV	A	1,500.00	24-26		JUN 26 POSTAGE
INVOICE:		FULL DESC: JUN 26 POSTAGE								
ACCOUNT TOTAL							1,500.00			
10000 02015 PARK DEPOSIT PAYABLE										
011030 ALLEN, JENNY	91041		0	2026 12	INV	A	75.00	24-26		6/13-PK DEPOSIT REF
INVOICE:		FULL DESC: 6/13-PK DEPOSIT REFUND-GRAD PTY								
026901 FERRIS, JOSHUA	91052		0	2026 12	INV	A	75.00	24-26		PK USE FEE REFUND-6
INVOICE:		FULL DESC: PK USE FEE REFUND-6/7 PTY								
ACCOUNT TOTAL							150.00			
ORG 10000 TOTAL							2,777.05			
10130 TOWN MANAGER										
10130 07010 TELEPHONE										
042768 TDS TELECOM	91064		0	2026 12	INV	A	68.04	24-26		JUN26-8024855411
INVOICE:		FULL DESC: JUN26-8024855411								
ACCOUNT TOTAL							68.04			
10130 07050 OFFICE SUPPLIES										
035892 MAGEE OFFICE PLUS	91024		0	2026 12	INV	A	59.33	24-26		8.5X11 COPY PAPER-6
INVOICE:		FULL DESC: 8.5X11 COPY PAPER-6 CASES								
035892 MAGEE OFFICE PLUS	91027		0	2026 12	INV	A	10.96	24-26		2X4 FLUOR YELLOW LA
INVOICE:		FULL DESC: 2X4 FLUOR YELLOW LABELS								
							70.29			
ACCOUNT TOTAL							70.29			
10130 07070 DUES/MEETINGS/SUBSCRIPTIONS										
021684 BUSINESS CREDIT CARD	90998		0	2026 12	INV	A	398.33	24-26		ICMA26 CONFERENCE-M
INVOICE:		FULL DESC: ICMA26 CONFERENCE-MGR SMITH								
021684 BUSINESS CREDIT CARD	90999		0	2026 12	INV	A	113.00	24-26		ICMA MEMBERSHIP-MGR
INVOICE:		FULL DESC: ICMA MEMBERSHIP-MGR SMITH								

YEAR/PERIOD: 2026/1 TO 2026/12

ACCOUNT/VENDOR	DOCUMENT	VOUCHER	PO	YEAR/PR	TYP	S		WARRANT	CHECK	DESCRIPTION
021684 BUSINESS CREDIT CARD	91001	0		2026 12	INV	A	10.74	24-26		5/21-6/21 GOTOMEET-
INVOICE:	FULL DESC: 5/21-6/21 GOTOMEET-TMGR									
021684 BUSINESS CREDIT CARD	91045	0		2026 12	INV	A	58.32	24-26		NAS UNION NEGOTIATI
INVOICE:	FULL DESC: NAS UNION NEGOTIATION LUNCH 6/9									
							580.39			
				ACCOUNT TOTAL			580.39			
10130 07170				ADVERTISING/LEGAL NOTICES						
055184 TIMES ARGUS	91067	0		2026 12	INV	A	104.55	24-26		6/5 COVERED BRIDGES
INVOICE: 177965	FULL DESC: 6/5 COVERED BRIDGES-OPEN MTG									
				ACCOUNT TOTAL			104.55			
				ORG 10130 TOTAL			823.27			
10140				TOWN CLERK/TREASURER						
10140 05152				HRA						
039617 MVP-HRA	90953	0		2026 12	DIR	P	108.96	24-26	3459	JUN 9, 2026 HRA CLA
INVOICE:	FULL DESC: JUN 9, 2026 HRA CLAIMS CARD									
				ACCOUNT TOTAL			108.96			
10140 07010				TELEPHONE						
042768 TDS TELECOM	91064	0		2026 12	INV	A	69.95	24-26		JUN26-8024855411
INVOICE:	FULL DESC: JUN26-8024855411									
				ACCOUNT TOTAL			69.95			
10140 07050				OFFICE SUPPLIES						
035892 MAGEE OFFICE PLUS	91024	0		2026 12	INV	A	52.50	24-26		8.5X11 COPY PAPER-6
INVOICE:	FULL DESC: 8.5X11 COPY PAPER-6 CASES									
				ACCOUNT TOTAL			52.50			
				ORG 10140 TOTAL			231.41			
10230				ACCOUNTING						
10230 06010				PROFESSIONAL SERVICES						
013521 LAURIE A BAROFFIO	91073	0		2026 12	INV	A	7,044.60	24-26		ACCTING/CONSULTING
INVOICE: 127	FULL DESC: ACCTING/CONSULTING 6/1-6/14									
				ACCOUNT TOTAL			7,044.60			
10230 07010				TELEPHONE						
042768 TDS TELECOM	91064	0		2026 12	INV	A	103.41	24-26		JUN26-8024855411
INVOICE:	FULL DESC: JUN26-8024855411									
				ACCOUNT TOTAL			103.41			
10230 07050				OFFICE SUPPLIES						

YEAR/PERIOD: 2026/1 TO 2026/12

ACCOUNT/VENDOR	DOCUMENT	VOUCHER	PO	YEAR/PR	TYP	S		WARRANT	CHECK	DESCRIPTION
035892 MAGEE OFFICE PLUS	91024		0	2026 12	INV	A	52.50	24-26		8.5X11 COPY PAPER-6
INVOICE:		FULL DESC:	8.5X11 COPY PAPER-6 CASES							
035892 MAGEE OFFICE PLUS	91025		0	2026 12	INV	A	12.72	24-26		MINI BINDER CLIPS
INVOICE:		FULL DESC:	MINI BINDER CLIPS							
035892 MAGEE OFFICE PLUS	91026		0	2026 12	INV	A	11.88	24-26		STAPLES
INVOICE:		FULL DESC:	STAPLES							
							77.10			
				ACCOUNT TOTAL			77.10			
				ORG 10230 TOTAL			7,225.11			
10260		LISTERS								
10260 07010				TELEPHONE						
042768 TDS TELECOM	91064		0	2026 12	INV	A	69.25	24-26		JUN26-8024855411
INVOICE:		FULL DESC:	JUN26-8024855411							
				ACCOUNT TOTAL			69.25			
				ORG 10260 TOTAL			69.25			
10320		FIRE DEPARTMENT								
10320 07010				TELEPHONE						
042768 TDS TELECOM	91064		0	2026 12	INV	A	38.78	24-26		JUN26-8024855411
INVOICE:		FULL DESC:	JUN26-8024855411							
				ACCOUNT TOTAL			38.78			
10320 08070				GASOLINE/DIESEL						
028560 GILLESPIE FUELS	90975		0	2026 12	INV	A	91.14	24-26		19.9 GALS DIESEL 5/
INVOICE:		FULL DESC:	19.9 GALS DIESEL 5/7 FD							
028560 GILLESPIE FUELS	90976		0	2026 12	INV	A	97.55	24-26		21.3 GALS DIESEL 5/
INVOICE:		FULL DESC:	21.3 GALS DIESEL 5/7 FD							
028560 GILLESPIE FUELS	90977		0	2026 12	INV	A	87.02	24-26		19.0 GALS OFF RD DI
INVOICE:		FULL DESC:	19.0 GALS OFF RD DIESEL 5/7 FD							
028560 GILLESPIE FUELS	90978		0	2026 12	INV	A	41.22	24-26		9.0 GALS OFF RD DIE
INVOICE:		FULL DESC:	9.0 GALS OFF RD DIESEL 5/8 FD							
							316.93			
				ACCOUNT TOTAL			316.93			
10320 08160				VEHICLE MAINTENANCE						
037776 LOWELL MCLEODS	90983		0	2026 12	INV	A	95.00	24-26		07ENGINE1 INSPECTIO
INVOICE:		FULL DESC:	07ENGINE1 INSPECTION							
037776 LOWELL MCLEODS	91074		0	2026 12	INV	A	618.04	24-26		00 TOWER-TIE ROD EN
INVOICE:		FULL DESC:	00 TOWER-TIE ROD ENDS/INSPECT							
							713.04			
				ACCOUNT TOTAL			713.04			

YEAR/PERIOD: 2026/1 TO 2026/12

ACCOUNT/VENDOR	DOCUMENT	VOUCHER	PO	YEAR/PR	TYP	S		WARRANT	CHECK	DESCRIPTION
10320 08300				DEPARTMENT SUPPLIES						
033557 KENYON'S TRUE VALUE	91012		0	2026 12	INV	A	74.94	24-26		BATTERIES-FD
INVOICE:		FULL DESC: BATTERIES-FD								
033557 KENYON'S TRUE VALUE	91023		0	2026 12	INV	A	8.99	24-26		BATTERY-FD
INVOICE:		FULL DESC: BATTERY-FD								
							83.93			
				ACCOUNT TOTAL			83.93			
				ORG 10320 TOTAL			1,152.68			
10330				POLICE DEPARTMENT						
10330 06090				JANITORIAL SERVICES						
053855 SPOTLESS CLEANING	90989		0	2026 12	INV	A	200.00	24-26		5/3-5/9 CLEANING SE
INVOICE:		FULL DESC: 5/3-5/9 CLEANING SERVICES								
053855 SPOTLESS CLEANING	90990		0	2026 12	INV	A	200.00	24-26		5/10-5/16 CLEANING
INVOICE:		FULL DESC: 5/10-5/16 CLEANING SERVICES								
053855 SPOTLESS CLEANING	90991		0	2026 12	INV	A	200.00	24-26		5/17-5/23 CLEANING
INVOICE:		FULL DESC: 5/17-5/23 CLEANING SERVICES								
053855 SPOTLESS CLEANING	90992		0	2026 12	INV	A	200.00	24-26		5/24-5/30 CLEANING
INVOICE:		FULL DESC: 5/24-5/30 CLEANING SERVICES								
053855 SPOTLESS CLEANING	90993		0	2026 12	INV	A	200.00	24-26		5/31-6/6 CLEANING S
INVOICE:		FULL DESC: 5/31-6/6 CLEANING SERVICES								
053855 SPOTLESS CLEANING	91029		0	2026 12	INV	A	200.00	24-26		6/7-6/13 CLEANING S
INVOICE:		FULL DESC: 6/7-6/13 CLEANING SERVICES								
							1,200.00			
				ACCOUNT TOTAL			1,200.00			
10330 07010				TELEPHONE						
042768 TDS TELECOM	91064		0	2026 12	INV	A	379.32	24-26		JUN26-8024855411
INVOICE:		FULL DESC: JUN26-8024855411								
				ACCOUNT TOTAL			379.32			
10330 08070				GASOLINE						
053596 SO. VILLAGE	91075		0	2026 12	INV	A	48.45	24-26		11.015 GALS GAS 22/
INVOICE: 4267		FULL DESC: 11.015 GALS GAS 22/24FORD-5/2								
053596 SO. VILLAGE	91080		0	2026 12	INV	A	43.91	24-26		9.548 GALS GAS 22/2
INVOICE: 7208		FULL DESC: 9.548 GALS GAS 22/24FORD-5/7								
053596 SO. VILLAGE	91083		0	2026 12	INV	A	21.65	24-26		4.708 GALS GAS 22/2
INVOICE: 9762		FULL DESC: 4.708 GALS GAS 22/24FORD-5/12								
053596 SO. VILLAGE	91087		0	2026 12	INV	A	38.45	24-26		8.360 GALS GAS 22/2
INVOICE: 2279		FULL DESC: 8.360 GALS GAS 22/24FORD-5/16								
053596 SO. VILLAGE	91088		0	2026 12	INV	A	45.46	24-26		9.884 GALS GAS 22/2
INVOICE: 2973		FULL DESC: 9.884 GALS GAS 22/24FORD-5/17								
053596 SO. VILLAGE	91093		0	2026 12	INV	A	38.19	24-26		8.304 GALS GAS 22/2
INVOICE: 7544		FULL DESC: 8.304 GALS GAS 22/24FORD-5/25								
053596 SO. VILLAGE	91096		0	2026 12	INV	A	58.11	24-26		12.635 GALS GAS 22/

YEAR/PERIOD: 2026/1 TO 2026/12

ACCOUNT/VENDOR	DOCUMENT	VOUCHER	PO	YEAR/PR	TYP	S		WARRANT	CHECK	DESCRIPTION
INVOICE: 631		FULL DESC: 12.635 GALS GAS 22/24FORD-5/30								
053596 SO. VILLAGE	91097		0	2026 12	INV	A	22.96	24-26		4.992 GALS GAS 22/2
INVOICE: 1373		FULL DESC: 4.992 GALS GAS 22/24FORD-5/31								
							317.18			
				ACCOUNT TOTAL			317.18			
10330 08380				BUILDING MAINT/SUPPLIES						
033557 KENYON'S TRUE VALUE	91018		0	2026 12	INV	A	14.99	24-26		Y CONNECTOR VALVE-P
INVOICE:		FULL DESC: Y CONNECTOR VALVE-PD GARAGE								
060315 VERMONT LIFE SAFETY	91070		0	2026 12	INV	A	843.00	24-26		5/28-FIRE ALARM TES
INVOICE: 57703		FULL DESC: 5/28-FIRE ALARM TEST/INSPECT/BATTERIES								
				ACCOUNT TOTAL			857.99			
				ORG 10330 TOTAL			2,754.49			
10340				AMBULANCE DEPARTMENT						
10340 07010				TELEPHONE						
042768 TDS TELECOM	91064		0	2026 12	INV	A	104.39	24-26		JUN26-8024855411
INVOICE:		FULL DESC: JUN26-8024855411								
				ACCOUNT TOTAL			104.39			
10340 07050				OFFICE SUPPLIES						
035892 MAGEE OFFICE PLUS	91024		0	2026 12	INV	A	26.25	24-26		8.5X11 COPY PAPER-6
INVOICE:		FULL DESC: 8.5X11 COPY PAPER-6 CASES								
				ACCOUNT TOTAL			26.25			
10340 07290				COLLECTION EXPENSE						
010301 RCMC	90988		0	2026 12	INV	A	254.30	24-26		MAY26 AMB COLL EXP
INVOICE:		FULL DESC: MAY26 AMB COLL EXP								
				ACCOUNT TOTAL			254.30			
10340 08150				MEDICAL SUPPLIES						
010461 HAUN WELDING SUPPLIY	90980		0	2026 12	INV	A	45.65	24-26		MAY26 CYLINDER RENT
INVOICE: 834777		FULL DESC: MAY26 CYLINDER RENT-AMB								
014864 BOUND TREE	91043		0	2026 12	INV	A	69.07	24-26		PRESSURE INFUSER BA
INVOICE: 86218422		FULL DESC: PRESSURE INFUSER BAG, IBUPROFEN								
017936 CVH	91044		0	2026 12	INV	A	2,050.72	24-26		MAY26 PHARMACY/SUPP
INVOICE:		FULL DESC: MAY26 PHARMACY/SUPPLIES								
				ACCOUNT TOTAL			2,165.44			
10340 08300				DEPARTMENT SUPPLIES						
033557 KENYON'S TRUE VALUE	91003		0	2026 12	INV	A	40.26	24-26		HOSE ADAPTER,SWIVEL

YEAR/PERIOD: 2026/1 TO 2026/12

ACCOUNT/VENDOR	DOCUMENT	VOUCHER	PO	YEAR/PR	TYP	S		WARRANT	CHECK	DESCRIPTION
INVOICE:		FULL DESC: HOSE ADAPTER,SWIVEL,SINK SUPPLY LINE-AMB ICE MACH								
033557 KENYON'S TRUE VALUE	91013	0		2026 12	INV	A	48.15	24-26		ROLLER COVER, PAINT
INVOICE:		FULL DESC: ROLLER COVER, PAINT,TAPE-AMB BAY LINE PAINTING								
033557 KENYON'S TRUE VALUE	91017	0		2026 12	INV	A	3.99	24-26		DISCONNECT-AMB
INVOICE:		FULL DESC: DISCONNECT-AMB								
							92.40			
			ACCOUNT TOTAL				92.40			
			ORG 10340 TOTAL				2,642.78			
10420		HIGHWAY DEPT								
10420 05152			HRA							
039617 MVP-HRA	90953	0		2026 12	DIR	P	16.63	24-26	3459	JUN 9, 2026 HRA CLA
INVOICE:		FULL DESC: JUN 9, 2026 HRA CLAIMS CARD								
			ACCOUNT TOTAL				16.63			
10420 07010			TELEPHONE							
042768 TDS TELECOM	91064	0		2026 12	INV	A	42.26	24-26		JUN26-8024855411
INVOICE:		FULL DESC: JUN26-8024855411								
			ACCOUNT TOTAL				42.26			
10420 07050			OFFICE SUPPLIES							
035892 MAGEE OFFICE PLUS	91024	0		2026 12	INV	A	26.25	24-26		8.5X11 COPY PAPER-6
INVOICE:		FULL DESC: 8.5X11 COPY PAPER-6 CASES								
			ACCOUNT TOTAL				26.25			
10420 08060			GRAVEL/STONE							
037457 MCCULLOUGH CRUSHING	91103	0		2026 12	INV	A	2,051.00	24-26		42YDS 1.5"PL MX,56Y
INVOICE: 125519		FULL DESC: 42YDS 1.5"PL MX,56YDS 8"DITCH STONE-BERLIN POND RD								
			ACCOUNT TOTAL				2,051.00			
10420 08070			GASOLINE/DIESEL							
028560 GILLESPIE FUELS	90968	0		2026 12	INV	A	1,607.51	24-26		348.7 GALS OFF RD D
INVOICE:		FULL DESC: 348.7 GALS OFF RD DIESEL-5/6								
028560 GILLESPIE FUELS	90969	0		2026 12	INV	A	941.82	24-26		204.3 GALS OFF RD D
INVOICE:		FULL DESC: 204.3 GALS OFF RD DIESEL-5/12								
028560 GILLESPIE FUELS	90970	0		2026 12	INV	A	103.45	24-26		22.2GALS ON RD DIES
INVOICE:		FULL DESC: 22.2GALS ON RD DIESEL-SWEEPER RENTAL 5/14								
028560 GILLESPIE FUELS	90971	0		2026 12	INV	A	94.80	24-26		21.4GALS ON RD DIES
INVOICE:		FULL DESC: 21.4GALS ON RD DIESEL SWEEPER RENTAL 5/19								
028560 GILLESPIE FUELS	90972	0		2026 12	INV	A	1,787.57	24-26		400.8 GALS OFF RD D
INVOICE:		FULL DESC: 400.8 GALS OFF RD DIESEL 5/19								
028560 GILLESPIE FUELS	90973	0		2026 12	INV	A	1,689.45	24-26		378.8GALS OFF RD DI
INVOICE:		FULL DESC: 378.8GALS OFF RD DIESEL 5/27								
028560 GILLESPIE FUELS	90974	0		2026 12	INV	A	89.93	24-26		20.3 GALS ON RD DIE
INVOICE:		FULL DESC: 20.3 GALS ON RD DIESEL SWEEPER RENTAL 5/26								

YEAR/PERIOD: 2026/1 TO 2026/12

ACCOUNT/VENDOR	DOCUMENT	VOUCHER	PO	YEAR/PR	TYP	S		WARRANT	CHECK	DESCRIPTION
							6,314.53			
053596 SO. VILLAGE	91076		0	2026 12	INV	A	135.09	24-26		30.709 GALS GAS 25C
INVOICE: 5258		FULL DESC:	30.709 GALS GAS 25CHEVY-5/4							
053596 SO. VILLAGE	91077		0	2026 12	INV	A	34.42	24-26		15.651 GALS GAS 21C
INVOICE: 5201		FULL DESC:	15.651 GALS GAS 21CHEVY-5/4							
053596 SO. VILLAGE	91084		0	2026 12	INV	A	99.20	24-26		21.569 GALS GAS 25C
INVOICE: 616		FULL DESC:	21.569 GALS GAS 25CHEVY-5/13							
053596 SO. VILLAGE	91089		0	2026 12	INV	A	59.64	24-26		25.937 GALS GAS 21C
INVOICE: 3484		FULL DESC:	25.937 GALS GAS 21CHEVY-5/18							
							328.35			
				ACCOUNT TOTAL			6,642.88			
10420 08110				ROAD CULVERTS/MAINTENANCE						
033557 KENYON'S TRUE VALUE	91008		0	2026 12	INV	A	19.58	24-26		MASON MIX-ELM ST CA
INVOICE:		FULL DESC:	MASON MIX-ELM ST CATCH BASIN							
033557 KENYON'S TRUE VALUE	91009		0	2026 12	INV	A	7.00	24-26		HAY-SLAUGHTERHOUSE-
INVOICE:		FULL DESC:	HAY-SLAUGHTERHOUSE-CATCH BASIN							
							26.58			
				ACCOUNT TOTAL			26.58			
10420 08130				HOT MIX/COLD PATCH						
047248 PIKE INDUSTRIES	91104		0	2026 12	INV	A	272.09	24-26		2.99 TONS ASPHALT-6
INVOICE: 1378290		FULL DESC:	2.99 TONS ASPHALT-6/4							
047248 PIKE INDUSTRIES	91105		0	2026 12	INV	A	271.18	24-26		2.98 TONS ASPHALT-6
INVOICE: 1377853		FULL DESC:	2.98 TONS ASPHALT-6/3							
047248 PIKE INDUSTRIES	91106		0	2026 12	INV	A	275.73	24-26		3.03 TONS ASPHALT-5
INVOICE: 1375871		FULL DESC:	3.03 TONS ASPHALT-5/28							
							819.00			
				ACCOUNT TOTAL			819.00			
10420 08160				VEHICLE/EQUIPMENT MAINTENANCE						
011015 ALLEGIANCE TRUCKS	91098		0	2026 12	INV	A	120.81	24-26		20CHEVY-BRAKE HOSE
INVOICE:		FULL DESC:	20CHEVY-BRAKE HOSE							
011015 ALLEGIANCE TRUCKS	91099		0	2026 12	INV	A	13.58	24-26		20CHEVY-HYD CYLINDE
INVOICE:		FULL DESC:	20CHEVY-HYD CYLINDER LINE							
							134.39			
022034 DMS MACHINING	91101		0	2026 12	INV	A	467.50	24-26		04 GRADER-BLADE
INVOICE: 49857		FULL DESC:	04 GRADER-BLADE							
033557 KENYON'S TRUE VALUE	91005		0	2026 12	INV	A	8.99	24-26		GAS LINE-LEAF BLOWE
INVOICE:		FULL DESC:	GAS LINE-LEAF BLOWER							

YEAR/PERIOD: 2026/1 TO 2026/12

ACCOUNT/VENDOR	DOCUMENT	VOUCHER	PO	YEAR/PR	TYP	S		WARRANT	CHECK	DESCRIPTION
050578 REED SUPPLY CO, INC.	91107		0	2026 12	INV	A	1,005.92	24-26		MV-SWEEPER BRUSHES
INVOICE: 152290		FULL DESC:	MV-SWEEPER BRUSHES							
				ACCOUNT TOTAL			1,616.80			
10420 08300				DEPARTMENT SUPPLIES						
011015 ALLEGIANCE TRUCKS	91100		0	2026 12	INV	A	169.99	24-26		DEF-HWY
INVOICE:		FULL DESC:	DEF-HWY							
033557 KENYON'S TRUE VALUE	91010		0	2026 12	INV	A	34.98	24-26		TRASH BAGS-HWY
INVOICE:		FULL DESC:	TRASH BAGS-HWY							
033557 KENYON'S TRUE VALUE	91014		0	2026 12	INV	A	3.49	24-26		PERMANENT MARKER-HW
INVOICE:		FULL DESC:	PERMANENT MARKER-HWY							
033557 KENYON'S TRUE VALUE	91020		0	2026 12	INV	A	67.99	24-26		SPRAYER-HWY
INVOICE:		FULL DESC:	SPRAYER-HWY							
033557 KENYON'S TRUE VALUE	91021		0	2026 12	INV	A	29.99	24-26		WRECKER BLADE-HWY
INVOICE:		FULL DESC:	WRECKER BLADE-HWY							
033557 KENYON'S TRUE VALUE	91102		0	2026 12	INV	A	10.99	24-26		MARKING SPRAY-HWY
INVOICE:		FULL DESC:	MARKING SPRAY-HWY							
							147.44			
056775 UNIFIRST CORP.	91034		0	2026 12	INV	A	21.92	24-26		5/7 UNIFORMS/TOWELS
INVOICE: 1070509890		FULL DESC:	5/7 UNIFORMS/TOWELS-HWY							
056775 UNIFIRST CORP.	91035		0	2026 12	INV	A	21.92	24-26		5/14 UNIFORMS/TOWEL
INVOICE: 1070511902		FULL DESC:	5/14 UNIFORMS/TOWELS-HWY							
056775 UNIFIRST CORP.	91036		0	2026 12	INV	A	21.92	24-26		5/21 UNIFORMS/TOWEL
INVOICE: 1070513988		FULL DESC:	5/21 UNIFORMS/TOWELS-HWY							
056775 UNIFIRST CORP.	91037		0	2026 12	INV	A	22.84	24-26		5/28 UNIFORMS/TOWEL
INVOICE: 1070515580		FULL DESC:	5/28 UNIFORMS/TOWELS-5/28							
							88.60			
				ACCOUNT TOTAL			406.03			
10420 08350				UNIFORMS						
034896 LENNY'S	90982		0	2026 12	INV	A	385.00	24-26		FY25-26 BOOT ALLOW-
INVOICE: 3595456		FULL DESC:	FY25-26 BOOT ALLOW-BAILEY							
056775 UNIFIRST CORP.	91034		0	2026 12	INV	A	118.90	24-26		5/7 UNIFORMS/TOWELS
INVOICE: 1070509890		FULL DESC:	5/7 UNIFORMS/TOWELS-HWY							
056775 UNIFIRST CORP.	91035		0	2026 12	INV	A	118.90	24-26		5/14 UNIFORMS/TOWEL
INVOICE: 1070511902		FULL DESC:	5/14 UNIFORMS/TOWELS-HWY							
056775 UNIFIRST CORP.	91036		0	2026 12	INV	A	118.90	24-26		5/21 UNIFORMS/TOWEL
INVOICE: 1070513988		FULL DESC:	5/21 UNIFORMS/TOWELS-HWY							
056775 UNIFIRST CORP.	91037		0	2026 12	INV	A	118.90	24-26		5/28 UNIFORMS/TOWEL
INVOICE: 1070515580		FULL DESC:	5/28 UNIFORMS/TOWELS-5/28							
							475.60			
				ACCOUNT TOTAL			860.60			

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ACCOUNT/VENDOR	DOCUMENT	VOUCHER	PO	YEAR/PR	TYP	S		WARRANT	CHECK	DESCRIPTION
							ORG 10420 TOTAL	12,508.03		
10430				CEMETERY						
10430 08300							DEPARTMENT SUPPLIES			
033557 KENYON'S TRUE VALUE	91015		0	2026	12	INV	A	19.99	24-26	CALVARY CEM-HOSE BI
INVOICE:		FULL DESC: CALVARY CEM-HOSE BIBB								
							ACCOUNT TOTAL	19.99		
							ORG 10430 TOTAL	19.99		
10440				TOWN GARAGE						
10440 07010							TELEPHONE			
042768 TDS TELECOM	91064		0	2026	12	INV	A	69.22	24-26	JUN26-8024855411
INVOICE:		FULL DESC: JUN26-8024855411								
							ACCOUNT TOTAL	69.22		
							ORG 10440 TOTAL	69.22		
10445				LIBRARY/HISTORICAL SOCIETY BLD						
10445 06090							JANITORIAL SERVICES			
053855 SPOTLESS CLEANING	90989		0	2026	12	INV	A	200.00	24-26	5/3-5/9 CLEANING SE
INVOICE:		FULL DESC: 5/3-5/9 CLEANING SERVICES								
053855 SPOTLESS CLEANING	90990		0	2026	12	INV	A	200.00	24-26	5/10-5/16 CLEANING
INVOICE:		FULL DESC: 5/10-5/16 CLEANING SERVICES								
053855 SPOTLESS CLEANING	90991		0	2026	12	INV	A	200.00	24-26	5/17-5/23 CLEANING
INVOICE:		FULL DESC: 5/17-5/23 CLEANING SERVICES								
053855 SPOTLESS CLEANING	90992		0	2026	12	INV	A	200.00	24-26	5/24-5/30 CLEANING
INVOICE:		FULL DESC: 5/24-5/30 CLEANING SERVICES								
053855 SPOTLESS CLEANING	90993		0	2026	12	INV	A	200.00	24-26	5/31-6/6 CLEANING S
INVOICE:		FULL DESC: 5/31-6/6 CLEANING SERVICES								
053855 SPOTLESS CLEANING	91029		0	2026	12	INV	A	200.00	24-26	6/7-6/13 CLEANING S
INVOICE:		FULL DESC: 6/7-6/13 CLEANING SERVICES								
								1,200.00		
							ACCOUNT TOTAL	1,200.00		
10445 07010							TELEPHONE			
042768 TDS TELECOM	91066		0	2026	12	INV	A	135.42	24-26	6/4LIBRARY802485462
INVOICE:		FULL DESC: 6/4LIBRARY8024854621								
							ACCOUNT TOTAL	135.42		
10445 08380							BUILDING MAINT/SUPPLIES			
028560 GILLESPIE FUELS	90979		0	2026	12	INV	A	130.00	24-26	5/19-LIBRARY- HEATI
INVOICE:		FULL DESC: 5/19-LIBRARY- HEATING SERVICE CALL								
							ACCOUNT TOTAL	130.00		
							ORG 10445 TOTAL	1,465.42		

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ACCOUNT/VENDOR	DOCUMENT	VOUCHER	PO	YEAR/PR	TYP	S		WARRANT	CHECK	DESCRIPTION
10447				MUNICIPAL BUILDING						
10447 06090				JANITORIAL SERVICES						
053855 SPOTLESS CLEANING	90989		0	2026 12	INV	A	200.00	24-26		5/3-5/9 CLEANING SE
INVOICE:		FULL DESC: 5/3-5/9 CLEANING SERVICES								
053855 SPOTLESS CLEANING	90990		0	2026 12	INV	A	200.00	24-26		5/10-5/16 CLEANING
INVOICE:		FULL DESC: 5/10-5/16 CLEANING SERVICES								
053855 SPOTLESS CLEANING	90991		0	2026 12	INV	A	200.00	24-26		5/17-5/23 CLEANING
INVOICE:		FULL DESC: 5/17-5/23 CLEANING SERVICES								
053855 SPOTLESS CLEANING	90992		0	2026 12	INV	A	200.00	24-26		5/24-5/30 CLEANING
INVOICE:		FULL DESC: 5/24-5/30 CLEANING SERVICES								
053855 SPOTLESS CLEANING	90993		0	2026 12	INV	A	200.00	24-26		5/31-6/6 CLEANING S
INVOICE:		FULL DESC: 5/31-6/6 CLEANING SERVICES								
053855 SPOTLESS CLEANING	91029		0	2026 12	INV	A	200.00	24-26		6/7-6/13 CLEANING S
INVOICE:		FULL DESC: 6/7-6/13 CLEANING SERVICES								
							1,200.00			
				ACCOUNT TOTAL			1,200.00			
10447 08380				BUILDING MAINT/SUPPLIES						
035892 MAGEE OFFICE PLUS	90984		0	2026 12	INV	A	39.57	24-26		PAPER TOWELS-MUN BL
INVOICE:		FULL DESC: PAPER TOWELS-MUN BLD								
035892 MAGEE OFFICE PLUS	90985		0	2026 12	INV	A	18.99	24-26		FACIAL TISSUE-MUN B
INVOICE:		FULL DESC: FACIAL TISSUE-MUN BLD								
							58.56			
				ACCOUNT TOTAL			58.56			
				ORG 10447 TOTAL			1,258.56			
10520				GROUNDS/PARKS/FACILITIES						
10520 08070				GASOLINE/DIESEL						
053596 SO. VILLAGE	91077		0	2026 12	INV	A	34.43	24-26		15.651 GALS GAS 21C
INVOICE: 5201		FULL DESC: 15.651 GALS GAS 21CHEVY-5/4								
053596 SO. VILLAGE	91078		0	2026 12	INV	A	33.59	24-26		7.636 GALS GAS-MOWE
INVOICE: 6667		FULL DESC: 7.636 GALS GAS-MOWERS-5/5								
053596 SO. VILLAGE	91085		0	2026 12	INV	A	42.69	24-26		9.283 GALS GAS-MOWE
INVOICE: 411		FULL DESC: 9.283 GALS GAS-MOWERS-5/13								
053596 SO. VILLAGE	91089		0	2026 12	INV	A	59.64	24-26		25.937 GALS GAS 21C
INVOICE: 3484		FULL DESC: 25.937 GALS GAS 21CHEVY-5/18								
053596 SO. VILLAGE	91092		0	2026 12	INV	A	4.61	24-26		1.002GALS GAS-MOWER
INVOICE: 5508		FULL DESC: 1.002GALS GAS-MOWER MIX-5/21								
053596 SO. VILLAGE	91094		0	2026 12	INV	A	42.70	24-26		9.284 GALS GAS-MOWE
INVOICE: 8082		FULL DESC: 9.284 GALS GAS-MOWERS-5/26								
							217.66			
				ACCOUNT TOTAL			217.66			
10520 08570				FACILITY MAINT/SUPPLIES						

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ACCOUNT/VENDOR	DOCUMENT	VOUCHER	PO	YEAR/PR	TYP	S		WARRANT	CHECK	DESCRIPTION
033557 KENYON'S TRUE VALUE	91016		0	2026 12	INV	A	8.69	24-26		WASP/HORNET SPRAY
INVOICE:		FULL DESC:	WASP/HORNET SPRAY							
036528 MARTIN	91112		0	2026 12	INV	A	32.00	24-26		WHEEL SEALS-SCAG MO
INVOICE:		FULL DESC:	WHEEL SEALS-SCAG MOWER-REIMBURSE							
056859 UNITED AG & TURF	91108		0	2026 12	INV	A	62.94	24-26		JD MOWER-V-BELT
INVOICE: 11664066		FULL DESC:	JD MOWER-V-BELT							
				ACCOUNT TOTAL			103.63			
10520 08575				GARDEN SUPPLIES						
033557 KENYON'S TRUE VALUE	91007		0	2026 12	INV	A	11.98	24-26		MULCH-GARDEN
INVOICE:		FULL DESC:	MULCH-GARDEN							
				ACCOUNT TOTAL			11.98			
				ORG 10520 TOTAL			333.27			
10550			POOL							
10550 08570				FACILITY MAINT/SUPPLIES						
021684 BUSINESS CREDIT CARD	90996		0	2026 12	INV	A	43.98	24-26		POOL DRAIN COVER
INVOICE:		FULL DESC:	POOL DRAIN COVER							
				ACCOUNT TOTAL			43.98			
				ORG 10550 TOTAL			43.98			
10610			MANAGEMENT SUPPORT							
10610 06020				LEGAL SERVICES						
037840 MCNEILL	91060		0	2026 12	INV	A	2,553.00	24-26		MAY26 AMB UNION
INVOICE:		FULL DESC:	MAY26 AMB UNION							
037840 MCNEILL	91061		0	2026 12	INV	A	2,264.00	24-26		MAY26 LEGAL-MISC
INVOICE:		FULL DESC:	MAY26 LEGAL-MISC							
							4,817.00			
				ACCOUNT TOTAL			4,817.00			
10610 06220				MAINTENANCE CONTRACTS						
021684 BUSINESS CREDIT CARD	90995		0	2026 12	INV	A	6.48	24-26		JUN 26 WEBHOSTING
INVOICE:		FULL DESC:	JUN 26 WEBHOSTING							
021684 BUSINESS CREDIT CARD	90997		0	2026 12	INV	A	150.00	24-26		GODADDY SERVER LICE
INVOICE:		FULL DESC:	GODADDY SERVER LICENSE-1 YR							
							156.48			
				ACCOUNT TOTAL			156.48			
10610 06380				HEALTH ADMIN/FEES						
010037 COMBINED SERVICES, L	90962		0	2026 12	INV	A	12.70	24-26		MAY26 HRA ADMIN FEE
INVOICE:		FULL DESC:	MAY26 HRA ADMIN FEE							

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ACCOUNT/VENDOR	DOCUMENT	VOUCHER	PO	YEAR/PR	TYP	S		WARRANT	CHECK	DESCRIPTION
039617 MVP-HRA	91062		0	2026 12	INV	A	33.48	24-26		MAY26 HRA ADMIN FEE
INVOICE:		FULL DESC:	MAY26 HRA ADMIN FEE							
				ACCOUNT TOTAL			46.18			
				ORG 10610 TOTAL			5,019.66			
10620			PLANNING/ZONING							
10620 07010				TELEPHONE						
042768 TDS TELECOM	91064		0	2026 12	INV	A	33.46	24-26		JUN26-8024855411
INVOICE:		FULL DESC:	JUN26-8024855411							
				ACCOUNT TOTAL			33.46			
				ORG 10620 TOTAL			33.46			
10645			ECONOMIC DEVELOPMENT							
10645 07010				TELEPHONE						
042768 TDS TELECOM	91064		0	2026 12	INV	A	35.79	24-26		JUN26-8024855411
INVOICE:		FULL DESC:	JUN26-8024855411							
				ACCOUNT TOTAL			35.79			
10645 07070				DUES/MEETINGS/SUBSCRIPTIONS						
021684 BUSINESS CREDIT CARD	90994		0	2026 12	INV	A	21.20	24-26		JUN 26 CHATGPT
INVOICE:		FULL DESC:	JUN 26 CHATGPT							
				ACCOUNT TOTAL			21.20			
				ORG 10645 TOTAL			56.99			
FUND 010 TOWN GENERAL FUND				TOTAL:			38,484.62			

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ACCOUNT/VENDOR	DOCUMENT	VOUCHER	PO	YEAR/PR	TYP	S	WARRANT	CHECK	DESCRIPTION
36012 CIP - SELECTBOARD									
36012 095601 COMMUNITY GARDEN-SPARK GRANT									
091241 SWARTZ, TIMOTHY	91063	0		2026 12	INV	A	947.15	24-26	MATERIALS-ACCESSIBL
INVOICE: FULL DESC: MATERIALS-ACCESSIBLE PICNIC TABLE-COMM GARDEN									
ACCOUNT TOTAL							947.15		
36012 09569 VOREC GRANT									
064801 WOOD & WOOD SIGNS,	91040	0		2026 12	INV	A	8,010.00	24-26	WAYFINDING SIGN
INVOICE: FULL DESC: WAYFINDING SIGN									
ACCOUNT TOTAL							8,010.00		
ORG 36012 TOTAL							8,957.15		
36034 CIP - AMBULANCE DEPT									
36034 09785 17 AMBULANCE									
023172 DESORCIE EM.PRODUCTS	91002	0		2026 12	INV	A	3,000.00	24-26	06AMB-REMOUNT PARTS
INVOICE: 21037 FULL DESC: 06AMB-REMOUNT PARTS									
ACCOUNT TOTAL							3,000.00		
ORG 36034 TOTAL							3,000.00		
36042 CIP - TOWN HIGHWAY									
36042 09243 BRIDGES-MAIN ST									
058000 VT AGCY TRANS.	91069	0		2026 12	INV	A	1,570.35	24-26	MAY26 MAIN ST BRIDG
INVOICE: FULL DESC: MAY26 MAIN ST BRIDGE60									
ACCOUNT TOTAL							1,570.35		
ORG 36042 TOTAL							1,570.35		
36047 CIP - MUNICIPAL BUILDING									
36047 095700 BUILDING/FACILITY IMPROVEMENTS									
017082 DELAIRS CARPET BARN	91072	0		2026 12	INV	A	2,799.30	24-26	FLOOR INSTALL-T.MGR
INVOICE: 20550 FULL DESC: FLOOR INSTALL-T.MGR OFFICE									
ACCOUNT TOTAL							2,799.30		
ORG 36047 TOTAL							2,799.30		
FUND 360 TOWN C.I.P. FUND TOTAL:							16,326.80		

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ACCOUNT/VENDOR	DOCUMENT	VOUCHER	PO	YEAR/PR	TYP	S		WARRANT	CHECK	DESCRIPTION
51000				ELECTRIC - BALANCE SHEET						
51000 23620				SANDERS-LOAN BILLED CUSTOMER						
061456 VT PUBLIC POWER SUPP	91038	0		2026 12	INV	A	11,484.38	24-26		JUN 2026 CABOT LOAN
INVOICE:		FULL DESC:	JUN 2026 CABOT LOAN PAYMENT							
				ACCOUNT TOTAL			11,484.38			
51000 39210				VEHICLES						
021684 BUSINESS CREDIT CARD	91000	0		2026 12	INV	A	57.00	24-26		07 INTL BUCKET TRUC
INVOICE:		FULL DESC:	07 INTL BUCKET TRUCK-TITLE/REGISTR XFR							
				ACCOUNT TOTAL			57.00			
				ORG 51000 TOTAL			11,541.38			
51047				ELECTRIC DEPARTMENT						
51047 58112				VELCO-SUBSTATION EQUIP FEE						
059792 VT ELEC POWER CO	91068	0		2026 12	INV	A	136.57	24-26		MAY26 SUB EQUIP FEE
INVOICE:		FULL DESC:	MAY26 SUB EQUIP FEE							
				ACCOUNT TOTAL			136.57			
51047 59310				OVERHEAD MAINT						
030352 GREEN MTN. POWER	91053	0		2026 12	INV	A	508.63	24-26		REATTACH SRVC-528 T
INVOICE: 46175		FULL DESC:	REATTACH SRVC-528 TURKEY HILL RD							
030352 GREEN MTN. POWER	91054	0		2026 12	INV	A	1,220.64	24-26		COVER LINE-KING ST
INVOICE:		FULL DESC:	COVER LINE-KING ST SUBSTATION 54G4							
030352 GREEN MTN. POWER	91055	0		2026 12	INV	A	303.66	24-26		19OVERLOOK-T116444
INVOICE:		FULL DESC:	19OVERLOOK-T116444 CK LINE-TREE BRANCH							
030352 GREEN MTN. POWER	91056	0		2026 12	INV	A	805.56	24-26		PICK UP SRVC LINE I
INVOICE:		FULL DESC:	PICK UP SRVC LINE IN RD-329 UNION BRK-T115980							
030352 GREEN MTN. POWER	91057	0		2026 12	INV	A	762.96	24-26		CHANGED 3 INSULATOR
INVOICE:		FULL DESC:	CHANGED 3 INSULATORS/CUTOUT CENTRAL ST-T116356							
030352 GREEN MTN. POWER	91058	0		2026 12	INV	A	514.28	24-26		CHANGED XFMR/CONNEC
INVOICE:		FULL DESC:	CHANGED XFMR/CONNECTIONS-CENTRAL ST T116356							
							4,115.73			
				ACCOUNT TOTAL			4,115.73			
51047 92111				TELEPHONE						
042768 TDS TELECOM	91064	0		2026 12	INV	A	138.65	24-26		JUN26-8024855411
INVOICE:		FULL DESC:	JUN26-8024855411							
042768 TDS TELECOM	91065	0		2026 12	INV	A	51.74	24-26		6/4-BONEHILL8024854
INVOICE:		FULL DESC:	6/4-BONEHILL8024854903							
							190.39			
				ACCOUNT TOTAL			190.39			
51047 92114				OFFICE SUPPLIES						

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ACCOUNT/VENDOR	DOCUMENT	VOUCHER	PO	YEAR/PR	TYP	S		WARRANT	CHECK	DESCRIPTION
035892 MAGEE OFFICE PLUS	91024	0		2026 12	INV	A	49.35	24-26		8.5X11 COPY PAPER-6
INVOICE:	FULL DESC:	8.5X11 COPY PAPER-6 CASES								
035892 MAGEE OFFICE PLUS	91027	0		2026 12	INV	A	4.27	24-26		2X4 FLUOR YELLOW LA
INVOICE:	FULL DESC:	2X4 FLUOR YELLOW LABELS								
							53.62			
056775 UNIFIRST CORP.	91030	0		2026 12	INV	A	1.40	24-26		5/7-UNIFORMS/MAT-EW
INVOICE: 1070509891	FULL DESC:	5/7-UNIFORMS/MAT-EWS								
056775 UNIFIRST CORP.	91031	0		2026 12	INV	A	1.40	24-26		5/14 UNIFORMS/MAT-E
INVOICE: 1070511908	FULL DESC:	5/14 UNIFORMS/MAT-EWS								
056775 UNIFIRST CORP.	91032	0		2026 12	INV	A	1.40	24-26		5/21 UNIFORMS/MAT-E
INVOICE: 1070513994	FULL DESC:	5/21 UNIFORMS/MAT-EWS								
056775 UNIFIRST CORP.	91033	0		2026 12	INV	A	1.40	24-26		5/28 UNIFORMS/MAT-E
INVOICE: 1070515594	FULL DESC:	5/28 UNIFORMS/MAT-EWS								
							5.60			
			ACCOUNT TOTAL				59.22			
51047 92119			MAINTENANCE CONTRACTS							
021684 BUSINESS CREDIT CARD	90995	0		2026 12	INV	A	3.24	24-26		JUN 26 WEBHOSTING
INVOICE:	FULL DESC:	JUN 26 WEBHOSTING								
021684 BUSINESS CREDIT CARD	90997	0		2026 12	INV	A	75.00	24-26		GODADDY SERVER LICE
INVOICE:	FULL DESC:	GODADDY SERVER LICENSE-1 YR								
							78.24			
			ACCOUNT TOTAL				78.24			
51047 92313			OTHER PROFESS SERVICES							
013521 LAURIE A BAROFFIO	91073	0		2026 12	INV	A	2,029.80	24-26		ACCTING/CONSULTING
INVOICE: 127	FULL DESC:	ACCTING/CONSULTING 6/1-6/14								
			ACCOUNT TOTAL				2,029.80			
51047 92338			HEALTH ADMIN/FEES							
039617 MVP-HRA	91062	0		2026 12	INV	A	6.28	24-26		MAY26 HRA ADMIN FEE
INVOICE:	FULL DESC:	MAY26 HRA ADMIN FEE								
			ACCOUNT TOTAL				6.28			
51047 92617			UNIFORMS							
034896 LENNY'S	90981	0		2026 12	INV	A	46.50	24-26		FY25-26 BOOT ALLOW-
INVOICE: 3596091	FULL DESC:	FY25-26 BOOT ALLOW-P.DEMASI								
056775 UNIFIRST CORP.	91030	0		2026 12	INV	A	17.10	24-26		5/7-UNIFORMS/MAT-EW
INVOICE: 1070509891	FULL DESC:	5/7-UNIFORMS/MAT-EWS								
056775 UNIFIRST CORP.	91031	0		2026 12	INV	A	16.81	24-26		5/14 UNIFORMS/MAT-E
INVOICE: 1070511908	FULL DESC:	5/14 UNIFORMS/MAT-EWS								
056775 UNIFIRST CORP.	91032	0		2026 12	INV	A	16.92	24-26		5/21 UNIFORMS/MAT-E
INVOICE: 1070513994	FULL DESC:	5/21 UNIFORMS/MAT-EWS								

YEAR/PERIOD: 2026/1 TO 2026/12

ACCOUNT/VENDOR	DOCUMENT	VOUCHER	PO	YEAR/PR	TYP	S		WARRANT	CHECK	DESCRIPTION
056775 UNIFIRST CORP.	91033		0	2026 12	INV	A	16.65	24-26		5/28 UNIFORMS/MAT-E
INVOICE: 1070515594		FULL DESC:	5/28 UNIFORMS/MAT-EWS							
							67.48			
				ACCOUNT TOTAL			113.98			
51047 93010				DUES/MEETINGS/SUBSCRIPTIONS						
021684 BUSINESS CREDIT CARD	90998		0	2026 12	INV	A	155.10	24-26		ICMA26 CONFERENCE-M
INVOICE:		FULL DESC:	ICMA26 CONFERENCE-MGR SMITH							
021684 BUSINESS CREDIT CARD	90999		0	2026 12	INV	A	44.00	24-26		ICMA MEMBERSHIP-MGR
INVOICE:		FULL DESC:	ICMA MEMBERSHIP-MGR SMITH							
021684 BUSINESS CREDIT CARD	91001		0	2026 12	INV	A	4.18	24-26		5/21-6/21 GOTOMEET-
INVOICE:		FULL DESC:	5/21-6/21 GOTOMEET-TMGR							
							203.28			
				ACCOUNT TOTAL			203.28			
51047 93310				VEHICLE/EQUIP MAINTENANCE						
033557 KENYON'S TRUE VALUE	91006		0	2026 12	INV	A	11.36	24-26		UPS RETURN GASKET C
INVOICE:		FULL DESC:	UPS RETURN GASKET COVER-VAC TRAILER							
033557 KENYON'S TRUE VALUE	91011		0	2026 12	INV	A	14.66	24-26		GALLON-MOTOMIX-EWS
INVOICE:		FULL DESC:	GALLON-MOTOMIX-EWS							
							26.02			
				ACCOUNT TOTAL			26.02			
51047 93311				GASOLINE						
053596 SO. VILLAGE	91079		0	2026 12	INV	A	21.63	24-26		9.832 GALS GAS 25BL
INVOICE: 7048		FULL DESC:	9.832 GALS GAS 25BLAZER-5/7							
053596 SO. VILLAGE	91081		0	2026 12	INV	A	63.86	24-26		27.771 GALS GAS 18C
INVOICE: 7853		FULL DESC:	27.771 GALS GAS 18CHEVY-5/8							
053596 SO. VILLAGE	91086		0	2026 12	INV	A	23.00	24-26		10.002 GALS GAS 25B
INVOICE: 6746		FULL DESC:	10.002 GALS GAS 25BLAZER-5/15							
053596 SO. VILLAGE	91091		0	2026 12	INV	A	78.50	24-26		34.139 GALS GAS 18C
INVOICE:		FULL DESC:	34.139 GALS GAS 18CHEVY-5/19							
							186.99			
				ACCOUNT TOTAL			186.99			
				ORG 51047 TOTAL			7,146.50			
FUND 510 ELECTRIC FUND				TOTAL:			18,687.88			

YEAR/PERIOD: 2026/1 TO 2026/12

ACCOUNT/VENDOR	DOCUMENT	VOUCHER	PO	YEAR/PR	TYP	S		WARRANT	CHECK	DESCRIPTION
53000 WATER - BALANCE SHEET										
53000 01324 RESERVOIR-CHENEY FARM										
025240 DUFRESNE GROUP	91049	0		2026 12	INV	A	583.73	24-26		MAY26 TANK C2 SPECI
INVOICE:	FULL DESC: MAY26 TANK C2 SPECIAL									
025240 DUFRESNE GROUP	91050	0		2026 12	INV	A	1,120.00	24-26		MAY26 TANK CONT2 RP
INVOICE:	FULL DESC: MAY26 TANK CONT2 RPR									
025240 DUFRESNE GROUP	91051	0		2026 12	INV	A	4,225.00	24-26		MAY26TANK CONT2 BAS
INVOICE:	FULL DESC: MAY26TANK CONT2 BASIC									
							5,928.73			
ACCOUNT TOTAL							5,928.73			
53000 01588 MAINS-PEARL ST										
048144 PRESCOTT, E. J.	91028	0		2026 12	INV	A	268.57	24-26		PEARL/SCHOOL ST-CUT
INVOICE: 6646930	FULL DESC: PEARL/SCHOOL ST-CUT OFF BLADES									
ACCOUNT TOTAL							268.57			
53000 01589 MAINS-SCHOOL ST										
048144 PRESCOTT, E. J.	91028	0		2026 12	INV	A	268.58	24-26		PEARL/SCHOOL ST-CUT
INVOICE: 6646930	FULL DESC: PEARL/SCHOOL ST-CUT OFF BLADES									
ACCOUNT TOTAL							268.58			
53000 01591 MAINS-MAIN ST										
025240 DUFRESNE GROUP	91046	0		2026 12	INV	A	1,991.56	24-26		MAY26 WM CONT1 SPEC
INVOICE:	FULL DESC: MAY26 WM CONT1 SPEC									
025240 DUFRESNE GROUP	91047	0		2026 12	INV	A	3,975.00	24-26		MAY26 WM CONT1 BASI
INVOICE:	FULL DESC: MAY26 WM CONT1 BASIC									
025240 DUFRESNE GROUP	91048	0		2026 12	INV	A	18,034.93	24-26		MAY26 WM CONT1 RPR
INVOICE:	FULL DESC: MAY26 WM CONT1 RPR									
							24,001.49			
ACCOUNT TOTAL							24,001.49			
53000 02280 BOND ANTICIPATION NOTE										
042384 NSB	90954	0		2026 12	INV	P	281,080.37	24-26	102097	ALLSTATE SB EL/TCIP
INVOICE:	FULL DESC: ALLSTATE SB EL/TCIP-6/12									
ACCOUNT TOTAL							281,080.37			
ORG 53000 TOTAL							311,547.74			
53045 WATER DEPARTMENT										
53045 06010 PROFESSIONAL SERVICES										
013521 LAURIE A BAROFFIO	91073	0		2026 12	INV	A	1,552.20	24-26		ACCTING/CONSULTING
INVOICE: 127	FULL DESC: ACCTING/CONSULTING 6/1-6/14									
ACCOUNT TOTAL							1,552.20			

YEAR/PERIOD: 2026/1 TO 2026/12

ACCOUNT/VENDOR	DOCUMENT	VOUCHER	PO	YEAR/PR	TYP	S		WARRANT	CHECK	DESCRIPTION
53045 06220				MAINTENANCE CONTRACTS						
021684 BUSINESS CREDIT CARD	90995		0	2026 12	INV	A	1.88	24-26		JUN 26 WEBHOSTING
INVOICE:		FULL DESC: JUN 26 WEBHOSTING								
021684 BUSINESS CREDIT CARD	90997		0	2026 12	INV	A	43.50	24-26		GODADDY SERVER LICE
INVOICE:		FULL DESC: GODADDY SERVER LICENSE-1 YR								
							45.38			
				ACCOUNT TOTAL			45.38			
53045 06380				HEALTH ADMIN/FEES						
039617 MVP-HRA	91062		0	2026 12	INV	A	5.56	24-26		MAY26 HRA ADMIN FEE
INVOICE:		FULL DESC: MAY26 HRA ADMIN FEE								
				ACCOUNT TOTAL			5.56			
53045 06510				TESTING						
026230 ENDYNE, INC	90964		0	2026 12	INV	A	50.00	24-26		6/10-COLIFORM TEST
INVOICE: 580542		FULL DESC: 6/10-COLIFORM TEST								
026230 ENDYNE, INC	90967		0	2026 12	INV	A	50.00	24-26		6/3-COLIFORM TEST
INVOICE: 579687		FULL DESC: 6/3-COLIFORM TEST								
							100.00			
				ACCOUNT TOTAL			100.00			
53045 07010				TELEPHONE						
042768 TDS TELECOM	91064		0	2026 12	INV	A	151.38	24-26		JUN26-8024855411
INVOICE:		FULL DESC: JUN26-8024855411								
				ACCOUNT TOTAL			151.38			
53045 07050				OFFICE SUPPLIES						
035892 MAGEE OFFICE PLUS	91024		0	2026 12	INV	A	28.36	24-26		8.5X11 COPY PAPER-6
INVOICE:		FULL DESC: 8.5X11 COPY PAPER-6 CASES								
035892 MAGEE OFFICE PLUS	91027		0	2026 12	INV	A	2.42	24-26		2X4 FLUOR YELLOW LA
INVOICE:		FULL DESC: 2X4 FLUOR YELLOW LABELS								
							30.78			
				ACCOUNT TOTAL			30.78			
53045 07070				DUES/MEETINGS/SUBSCRIPTIONS						
021684 BUSINESS CREDIT CARD	90998		0	2026 12	INV	A	88.13	24-26		ICMA26 CONFERENCE-M
INVOICE:		FULL DESC: ICMA26 CONFERENCE-MGR SMITH								
021684 BUSINESS CREDIT CARD	90999		0	2026 12	INV	A	25.00	24-26		ICMA MEMBERSHIP-MGR
INVOICE:		FULL DESC: ICMA MEMBERSHIP-MGR SMITH								
021684 BUSINESS CREDIT CARD	91001		0	2026 12	INV	A	2.38	24-26		5/21-6/21 GOTOMEET-
INVOICE:		FULL DESC: 5/21-6/21 GOTOMEET-TMGR								
							115.51			

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ACCOUNT/VENDOR	DOCUMENT	VOUCHER	PO	YEAR/PR	TYP	S		WARRANT	CHECK	DESCRIPTION
				ACCOUNT TOTAL			115.51			
53045 07140				MILEAGE						
037335 MCCANN, KENNETH	90986		0	2026 12	INV	A	10.53	24-26		6/10-MILE REIMBURSE
INVOICE:		FULL DESC:	6/10-MILE REIMBURSE-W/S SAMPLES							
				ACCOUNT TOTAL			10.53			
53045 08070				GASOLINE/DIESEL						
053596 SO. VILLAGE	91079		0	2026 12	INV	A	12.54	24-26		9.832 GALS GAS 25BL
INVOICE: 7048		FULL DESC:	9.832 GALS GAS 25BLAZER-5/7							
053596 SO. VILLAGE	91081		0	2026 12	INV	A	63.86	24-26		27.771 GALS GAS 18C
INVOICE: 7853		FULL DESC:	27.771 GALS GAS 18CHEVY-5/8							
053596 SO. VILLAGE	91086		0	2026 12	INV	A	13.34	24-26		10.002 GALS GAS 25B
INVOICE: 6746		FULL DESC:	10.002 GALS GAS 25BLAZER-5/15							
053596 SO. VILLAGE	91090		0	2026 12	INV	A	22.99	24-26		10 GALS GAS-GAS CAN
INVOICE:		FULL DESC:	10 GALS GAS-GAS CANS-5/19							
053596 SO. VILLAGE	91091		0	2026 12	INV	A	78.51	24-26		34.139 GALS GAS 18C
INVOICE:		FULL DESC:	34.139 GALS GAS 18CHEVY-5/19							
							191.24			
				ACCOUNT TOTAL			191.24			
53045 08100				CHEMICALS						
011024 ALLEN ENGIN	90958		0	2026 12	INV	A	1,065.50	24-26		200 GALS 25% CAUSTI
INVOICE:		FULL DESC:	200 GALS 25% CAUSTIC SODA-5/13							
011024 ALLEN ENGIN	90961		0	2026 12	INV	A	375.00	24-26		100 GALS LIQ CHLORI
INVOICE:		FULL DESC:	100 GALS LIQ CHLORINE-6/2							
							1,440.50			
				ACCOUNT TOTAL			1,440.50			
53045 08250				EQUIPMENT MAINTENANCE						
033557 KENYON'S TRUE VALUE	91006		0	2026 12	INV	A	11.36	24-26		UPS RETURN GASKET C
INVOICE:		FULL DESC:	UPS RETURN GASKET COVER-VAC TRAILER							
033557 KENYON'S TRUE VALUE	91011		0	2026 12	INV	A	14.66	24-26		GALLON-MOTOMIX-EWS
INVOICE:		FULL DESC:	GALLON-MOTOMIX-EWS							
							26.02			
				ACCOUNT TOTAL			26.02			
53045 08300				DEPARTMENT SUPPLIES						
033557 KENYON'S TRUE VALUE	91004		0	2026 12	INV	A	1.67	24-26		MARKER-W/S
INVOICE:		FULL DESC:	MARKER-W/S							
033557 KENYON'S TRUE VALUE	91019		0	2026 12	INV	A	7.79	24-26		HEX BUSHINGS-STOCK
INVOICE:		FULL DESC:	HEX BUSHINGS-STOCK							
033557 KENYON'S TRUE VALUE	91022		0	2026 12	INV	A	71.40	24-26		CONTRACTOR MIX-PEAR
INVOICE:		FULL DESC:	CONTRACTOR MIX-PEARL/SCHOOL ST/W/S							

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ACCOUNT/VENDOR	DOCUMENT	VOUCHER	PO	YEAR/PR	TYP	S		WARRANT	CHECK	DESCRIPTION
							80.86			
056775 UNIFIRST CORP.	91030		0	2026 12	INV	A	4.12	24-26		5/7-UNIFORMS/MAT-EW
INVOICE: 1070509891		FULL DESC:	5/7-UNIFORMS/MAT-EWS							
056775 UNIFIRST CORP.	91031		0	2026 12	INV	A	4.12	24-26		5/14 UNIFORMS/MAT-E
INVOICE: 1070511908		FULL DESC:	5/14 UNIFORMS/MAT-EWS							
056775 UNIFIRST CORP.	91032		0	2026 12	INV	A	4.12	24-26		5/21 UNIFORMS/MAT-E
INVOICE: 1070513994		FULL DESC:	5/21 UNIFORMS/MAT-EWS							
056775 UNIFIRST CORP.	91033		0	2026 12	INV	A	4.12	24-26		5/28 UNIFORMS/MAT-E
INVOICE: 1070515594		FULL DESC:	5/28 UNIFORMS/MAT-EWS							
							16.48			
				ACCOUNT TOTAL			97.34			
53045 08350				UNIFORMS						
034896 LENNY'S	90981		0	2026 12	INV	A	158.10	24-26		FY25-26 BOOT ALLOW-
INVOICE: 3596091		FULL DESC:	FY25-26 BOOT ALLOW-P.DEMASI							
056775 UNIFIRST CORP.	91030		0	2026 12	INV	A	48.60	24-26		5/7-UNIFORMS/MAT-EW
INVOICE: 1070509891		FULL DESC:	5/7-UNIFORMS/MAT-EWS							
056775 UNIFIRST CORP.	91031		0	2026 12	INV	A	47.63	24-26		5/14 UNIFORMS/MAT-E
INVOICE: 1070511908		FULL DESC:	5/14 UNIFORMS/MAT-EWS							
056775 UNIFIRST CORP.	91032		0	2026 12	INV	A	47.97	24-26		5/21 UNIFORMS/MAT-E
INVOICE: 1070513994		FULL DESC:	5/21 UNIFORMS/MAT-EWS							
056775 UNIFIRST CORP.	91033		0	2026 12	INV	A	47.07	24-26		5/28 UNIFORMS/MAT-E
INVOICE: 1070515594		FULL DESC:	5/28 UNIFORMS/MAT-EWS							
							191.27			
				ACCOUNT TOTAL			349.37			
				ORG 53045 TOTAL			4,115.81			
FUND 530 WATER FUND						TOTAL:	315,663.55			

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ACCOUNT/VENDOR	DOCUMENT	VOUCHER	PO	YEAR/PR	TYP	S		WARRANT	CHECK	DESCRIPTION
55046 SEWER DEPARTMENT										
55046 06010 PROFESSIONAL SERVICES										
013521 LAURIE A BAROFFIO	91073		0	2026 12	INV	A	1,313.40	24-26		ACCTING/CONSULTING
INVOICE: 127		FULL DESC: ACCTING/CONSULTING 6/1-6/14								
ACCOUNT TOTAL							1,313.40			
55046 06220 MAINTENANCE CONTRACTS										
021684 BUSINESS CREDIT CARD	90995		0	2026 12	INV	A	1.35	24-26		JUN 26 WEBHOSTING
INVOICE:		FULL DESC: JUN 26 WEBHOSTING								
021684 BUSINESS CREDIT CARD	90997		0	2026 12	INV	A	31.49	24-26		GODADDY SERVER LICE
INVOICE:		FULL DESC: GODADDY SERVER LICENSE-1 YR								
							32.84			
ACCOUNT TOTAL							32.84			
55046 06380 HEALTH ADMIN/FEES										
039617 MVP-HRA	91062		0	2026 12	INV	A	3.68	24-26		MAY26 HRA ADMIN FEE
INVOICE:		FULL DESC: MAY26 HRA ADMIN FEE								
ACCOUNT TOTAL							3.68			
55046 06500 SLUDGE MANAGEMENT										
026264 ENGLOBE CORP	91042		0	2026 12	INV	A	14,539.40	24-26		62.35 TONS WW BIOSO
INVOICE:		FULL DESC: 62.35 TONS WW BIOSOLID-MAY26								
ACCOUNT TOTAL							14,539.40			
55046 06510 TESTING-SAMPLING										
026230 ENDYNE, INC	90963		0	2026 12	INV	A	20.00	24-26		6/3-WW-PHOSPHORUS
INVOICE: 580849		FULL DESC: 6/3-WW-PHOSPHORUS								
026230 ENDYNE, INC	90965		0	2026 12	INV	A	25.00	24-26		6/10-WW-ECOLI
INVOICE: 580508		FULL DESC: 6/10-WW-ECOLI								
026230 ENDYNE, INC	90966		0	2026 12	INV	A	25.00	24-26		6/3-WW-ECOLI
INVOICE: 579655		FULL DESC: 6/3-WW-ECOLI								
							70.00			
ACCOUNT TOTAL							70.00			
55046 07010 TELEPHONE										
042768 TDS TELECOM	91064		0	2026 12	INV	A	58.55	24-26		JUN26-8024855411
INVOICE:		FULL DESC: JUN26-8024855411								
ACCOUNT TOTAL							58.55			
55046 07050 OFFICE SUPPLIES										
035892 MAGEE OFFICE PLUS	91024		0	2026 12	INV	A	20.46	24-26		8.5X11 COPY PAPER-6
INVOICE:		FULL DESC: 8.5X11 COPY PAPER-6 CASES								
035892 MAGEE OFFICE PLUS	91027		0	2026 12	INV	A	1.74	24-26		2X4 FLUOR YELLOW LA

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ACCOUNT/VENDOR	DOCUMENT	VOUCHER	PO	YEAR/PR	TYP	S		WARRANT	CHECK	DESCRIPTION
INVOICE:	FULL DESC: 2X4 FLUOR YELLOW LABELS						22.20			
				ACCOUNT TOTAL			22.20			
55046 07070				DUES/MEETINGS/SUBSCRIPTIONS						
021684 BUSINESS CREDIT CARD	90998	0		2026 12	INV	A	63.44	24-26		ICMA26 CONFERENCE-M
INVOICE:	FULL DESC: ICMA26 CONFERENCE-MGR SMITH									
021684 BUSINESS CREDIT CARD	90999	0		2026 12	INV	A	18.00	24-26		ICMA MEMBERSHIP-MGR
INVOICE:	FULL DESC: ICMA MEMBERSHIP-MGR SMITH									
021684 BUSINESS CREDIT CARD	91001	0		2026 12	INV	A	1.70	24-26		5/21-6/21 GOTOMEET-
INVOICE:	FULL DESC: 5/21-6/21 GOTOMEET-TMGR									
							83.14			
				ACCOUNT TOTAL			83.14			
55046 07140				MILEAGE						
037335 MCCANN, KENNETH	90986	0		2026 12	INV	A	7.02	24-26		6/10-MILE REIMBURSE
INVOICE:	FULL DESC: 6/10-MILE REIMBURSE-W/S SAMPLES									
				ACCOUNT TOTAL			7.02			
55046 08070				GASOLINE/DIESEL						
053596 SO. VILLAGE	91079	0		2026 12	INV	A	9.08	24-26		9.832 GALS GAS 25BL
INVOICE: 7048	FULL DESC: 9.832 GALS GAS 25BLAZER-5/7									
053596 SO. VILLAGE	91082	0		2026 12	INV	A	159.95	24-26		34.779 GALS GAS 24C
INVOICE: 9506	FULL DESC: 34.779 GALS GAS 24CHEVY-5/11									
053596 SO. VILLAGE	91086	0		2026 12	INV	A	9.66	24-26		10.002 GALS GAS 25B
INVOICE: 6746	FULL DESC: 10.002 GALS GAS 25BLAZER-5/15									
053596 SO. VILLAGE	91090	0		2026 12	INV	A	23.00	24-26		10 GALS GAS-GAS CAN
INVOICE:	FULL DESC: 10 GALS GAS-GAS CANS-5/19									
053596 SO. VILLAGE	91095	0		2026 12	INV	A	201.89	24-26		43.898 GALS GAS 24C
INVOICE: 9022	FULL DESC: 43.898 GALS GAS 24CHEVY-5/27									
							403.58			
				ACCOUNT TOTAL			403.58			
55046 08100				CHEMICALS						
011024 ALLEN ENGIN	90959	0		2026 12	INV	A	7,490.96	24-26		1514 GALS 25% CAUST
INVOICE:	FULL DESC: 1514 GALS 25% CAUSTIC SODA-5/13									
011024 ALLEN ENGIN	90960	0		2026 12	INV	A	4,915.00	24-26		1000 GALS LIQ CHLOR
INVOICE:	FULL DESC: 1000 GALS LIQ CHLORINE-5/13									
							12,405.96			
				ACCOUNT TOTAL			12,405.96			
55046 08250				EQUIPMENT MAINTENANCE						
033557 KENYON'S TRUE VALUE	91006	0		2026 12	INV	A	11.36	24-26		UPS RETURN GASKET C

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ACCOUNT/VENDOR	DOCUMENT	VOUCHER	PO	YEAR/PR	TYP	S		WARRANT	CHECK	DESCRIPTION
INVOICE:		FULL DESC:	UPS RETURN GASKET COVER-VAC TRAILER							
033557 KENYON'S TRUE VALUE	91011		0	2026 12	INV	A	14.67	24-26		GALLON-MOTOMIX-EWS
INVOICE:		FULL DESC:	GALLON-MOTOMIX-EWS							
							26.03			
063248 WEBB, F. W. CO.	91039		0	2026 12	INV	A	228.54	24-26		CHEM FEED LINES-1"P
INVOICE: 96322280		FULL DESC:	CHEM FEED LINES-1"PVC BALLVALVE							
			ACCOUNT TOTAL				254.57			
55046 08300			DEPARTMENT SUPPLIES							
033557 KENYON'S TRUE VALUE	91004		0	2026 12	INV	A	1.11	24-26		MARKER-W/S
INVOICE:		FULL DESC:	MARKER-W/S							
033557 KENYON'S TRUE VALUE	91019		0	2026 12	INV	A	5.20	24-26		HEX BUSHINGS-STOCK
INVOICE:		FULL DESC:	HEX BUSHINGS-STOCK							
033557 KENYON'S TRUE VALUE	91022		0	2026 12	INV	A	47.60	24-26		CONTRACTOR MIX-PEAR
INVOICE:		FULL DESC:	CONTRACTOR MIX-PEARL/SCHOOL ST/W/S							
							53.91			
056775 UNIFIRST CORP.	91030		0	2026 12	INV	A	2.71	24-26		5/7-UNIFORMS/MAT-EW
INVOICE: 1070509891		FULL DESC:	5/7-UNIFORMS/MAT-EWS							
056775 UNIFIRST CORP.	91031		0	2026 12	INV	A	2.71	24-26		5/14 UNIFORMS/MAT-E
INVOICE: 1070511908		FULL DESC:	5/14 UNIFORMS/MAT-EWS							
056775 UNIFIRST CORP.	91032		0	2026 12	INV	A	2.71	24-26		5/21 UNIFORMS/MAT-E
INVOICE: 1070513994		FULL DESC:	5/21 UNIFORMS/MAT-EWS							
056775 UNIFIRST CORP.	91033		0	2026 12	INV	A	2.71	24-26		5/28 UNIFORMS/MAT-E
INVOICE: 1070515594		FULL DESC:	5/28 UNIFORMS/MAT-EWS							
							10.84			
			ACCOUNT TOTAL				64.75			
55046 08350			UNIFORMS							
034896 LENNY'S	90981		0	2026 12	INV	A	105.40	24-26		FY25-26 BOOT ALLOW-
INVOICE: 3596091		FULL DESC:	FY25-26 BOOT ALLOW-P.DEMASI							
056775 UNIFIRST CORP.	91030		0	2026 12	INV	A	32.32	24-26		5/7-UNIFORMS/MAT-EW
INVOICE: 1070509891		FULL DESC:	5/7-UNIFORMS/MAT-EWS							
056775 UNIFIRST CORP.	91031		0	2026 12	INV	A	31.68	24-26		5/14 UNIFORMS/MAT-E
INVOICE: 1070511908		FULL DESC:	5/14 UNIFORMS/MAT-EWS							
056775 UNIFIRST CORP.	91032		0	2026 12	INV	A	31.91	24-26		5/21 UNIFORMS/MAT-E
INVOICE: 1070513994		FULL DESC:	5/21 UNIFORMS/MAT-EWS							
056775 UNIFIRST CORP.	91033		0	2026 12	INV	A	31.30	24-26		5/28 UNIFORMS/MAT-E
INVOICE: 1070515594		FULL DESC:	5/28 UNIFORMS/MAT-EWS							
							127.21			
			ACCOUNT TOTAL				232.61			
			ORG 55046 TOTAL				29,491.70			

YEAR/PERIOD: 2026/1 TO 2026/12

ACCOUNT/VENDOR	DOCUMENT	VOUCHER	PO	YEAR/PR	TYP	S	WARRANT	CHECK	DESCRIPTION

FUND 550 SEWER FUND	TOTAL:	29,491.70

** END OF REPORT - Generated by Tanya Law **

YEAR/PERIOD: 2026/12 TO 2026/12

ACCOUNT/VENDOR	DOCUMENT	VOUCHER	PO	YEAR/PR	TYP	S		WARRANT	CHECK	DESCRIPTION
10330 POLICE DEPARTMENT										
10330 05152 HRA										
010037 COMBINED SERVICES, L 90955		0		2026 12	DIR	P	622.04	24-26A	3460	JUN 15,2026 HRA CLA
INVOICE:	FULL DESC: JUN 15,2026 HRA CLAIMS									
ACCOUNT TOTAL							622.04			
ORG 10330 TOTAL							622.04			
FUND 010 TOWN GENERAL FUND			TOTAL:				622.04			

** END OF REPORT - Generated by Tanya Law **

YEAR/PERIOD: 2026/12 TO 2026/12

ACCOUNT/VENDOR	DOCUMENT	VOUCHER	PO	YEAR/PR	TYP	S		WARRANT	CHECK	DESCRIPTION
10140 TOWN CLERK/TREASURER										
10140 05152 HRA										
039617 MVP-HRA	90956		0	2026 12	DIR	P	56.79	24-26B	3461	JUN 16,2026 HRA CLA
INVOICE:		FULL DESC: JUN 16,2026 HRA CLAIMS CARD								
ACCOUNT TOTAL							56.79			
ORG 10140 TOTAL							56.79			
10230 ACCOUNTING										
10230 05152 HRA										
039617 MVP-HRA	90956		0	2026 12	DIR	P	1.74	24-26B	3461	JUN 16,2026 HRA CLA
INVOICE:		FULL DESC: JUN 16,2026 HRA CLAIMS CARD								
ACCOUNT TOTAL							1.74			
ORG 10230 TOTAL							1.74			
FUND 010 TOWN GENERAL FUND				TOTAL:			58.53			

** END OF REPORT - Generated by Tanya Law **

TOWN OF NORTHFIELD

THE UNDERSIGNED HEREBY AUTHORIZE THE EXPENDITURES LISTED HEREIN, ACCORDING TO THE LAWS OF THE STATE OF VERMONT.

DISBURSEMENT DATE: 07/01/26 WARRANT 01-27A

NORTHFIELD TOWN SELECT BOARD

TIMOTHY DAVIS _____

K. DAVID MAXWELL, Chair _____

LYDIA PETTY _____

MERRY SHERNOCK, Vice Chair _____

JOHN B. STEVENS _____

MARY SMITH, Manager _____

TOWN GENERAL - COUNTY TAX PAYMENT #1	15,226.00	ELECTRIC FUND	
TOWN C I P		WATER FUND-WEST PHASE BOND WIRE	30,925.89
MUNICIPAL PLANNING GRANT		SEWER FUND	
FIRE DONATION FUND			
AMBULANCE DONATION FUND			
POLICE DONATION FUND			
POOL DONATION FUND			
FLOOD BUYOUT GRANT			
RECREATION COMMITTEE FUND			
POLICE GRANT			
AGENCY FUND			
AOT GRANT- COMMON			
CONSERVATION FUND			
SUBTOTAL	**$15,226.00**	**SUBTOTAL**	**$30,925.89**

GRAND TOTAL **$46,151.89**

YEAR/PERIOD: 2027/1 TO 2027/1

ACCOUNT/VENDOR	DOCUMENT	VOUCHER	PO	YEAR/PR	TYP	S		WARRANT	CHECK	DESCRIPTION
10610 MANAGEMENT SUPPORT										
10610 06190 COUNTY TAX										
062480 WA COUNTY CLERK	90957		0	2027	1	INV	A	15,226.00	01-27A	1ST PYT COUNTY TAX
INVOICE:	FULL DESC: 1ST PYT COUNTY TAX 26									
ACCOUNT TOTAL								15,226.00		
ORG 10610 TOTAL								15,226.00		
FUND 010 TOWN GENERAL FUND TOTAL:								15,226.00		

** END OF REPORT - Generated by Tanya Law **

WILMINGTON TRUST

MEMBER OF THE M&T FAMILY

JOHN

RECEIVED

MAY 15 2026

TOWN OF NORTHFIELD

STATE OF VERMONT REVOLVING FUND

N041 VILLAGE OF NORTHFIELD
(AR3-041)

05/11/2026

NOTICE OF PAYMENT DUE 07/01/2026

PRINCIPAL	$25,145.58
INTEREST	$1,926.77
ADMIN FEE	$3,853.54
TOTAL CHARGES	**$30,925.89**

PLEASE RETURN A COPY OF THIS NOTICE WITH YOUR REMITTANCE

****NEW PAYMENT INSTRUCTIONS****

MAILING ADDRESS
M&T BANK/WILMINGTON TRUST
ATTN: DAN TOMARO
ONE FOUNTAIN PLAZA, 10TH FLOOR
BUFFALO, NY 14203

WIRE INSTRUCTIONS
M&T BANK
ABA NO. 031100092
M&T/WT ACCT. 72C012019
F/F/C T VILLAGE OF NORTHFIELD

ACH INSTRUCTIONS
M&T BANK
ABA NO. 022000046
M&T/WT ACCT. 16629826
FFC: 72C012019 VILLAGE OF NORTHFIELD

VILLAGE OF NORTHFIELD
ATTN: TREASURER
51 SOUTH MAIN ST
NORTHFIELD, VT 05663

Vendor # 19368 Approval MS

Jun0126

Account			Amount
53000	02342	Prin	$ 25,145.58
53045	07212	Int/Admin	$ 5,780.31
		Total	$ 30,925.89

West Plese Bond WIRE Transfer

Special warrant 7/1/26 W 01-27A

For selectboard meeting on 6/23/26

PLEASE CONTACT ELIZABETH KING 802-861-0075 / Elizabeth@VTBondAgency.org WITH INVOICING QUESTIONS
PLEASE CONTACT DAN TOMARO- MTB AT 716-842-5535 / dtomaro@wilmingtontrust.com WITH PAYMENT QUESTIONS

WEST PHASE BOND

VERMONT

AGENCY OF NATURAL RESOURCES
DEPARTMENT OF ENVIRONMENTAL CONSERVATION

Revised Repayment Schedule

Name of Entity
Village of Northfield

Relevant Loan Numbers and Grant Numbers
AR3-041

Loan Terms	
Principal Loan Amount:	$1,304,967.37
Principal Forgiven:	-$874,328.14
Principal Due:	$430,639.23
Loan Term Years:	20
Repayment Date Beginning:	07/01/13
Interest Rate:	1.00%
Admin Fee:	2.00%

Revised Loan Terms	
Principal Loan Amount:	$307,836.44
Principal Forgiven:	$0.00
Principal Due:	$307,836.44
Loan Term Years:	12
Repayment Date Beginning:	07/01/21
Interest Rate:	1.00%
Admin Fee:	2.00%

Repayment Date	Payment Number	Principal Due	Principal Payment	Interest Payment	Admin. Fee	Total Payment	Date of Repayment
7/1/2013	1	$430,639.23	$16,026.54	$4,306.39	$8,612.78	$28,945.71	
7/1/2014	2	$414,612.69	$16,507.34	$4,146.13	$8,292.25	$28,945.72	
7/1/2015	3	$398,105.35	$17,002.56	$3,981.05	$7,962.11	$28,945.72	
7/1/2016	4	$381,102.79	$17,512.64	$3,811.03	$7,622.06	$28,945.73	
7/1/2017	5	$363,590.15	$18,038.02	$3,635.90	$7,271.80	$28,945.72	
7/1/2018	6	$345,552.13	$18,579.16	$3,455.52	$6,911.04	$28,945.72	
7/1/2019	7	$326,972.97	$19,136.53	$3,269.73	$6,539.46	$28,945.72	
7/1/2020	8	$307,836.44	$0.00	$0.00	$0.00	$0.00	
7/1/2021	1	$307,836.44	$21,690.80	$3,078.36	$6,156.73	$30,925.89	
7/1/2022	2	$286,145.64	$22,341.52	$2,861.46	$5,722.91	$30,925.89	
7/1/2023	3	$263,804.12	$23,011.77	$2,638.04	$5,276.08	$30,925.89	
7/1/2024	4	$240,792.35	$23,702.12	$2,407.92	$4,815.85	$30,925.89	
7/1/2025	5	$217,090.23	$24,413.18	$2,170.90	$4,341.80	$30,925.88	
7/1/2026	6	$192,677.05	$25,145.58	$1,926.77	$3,853.54	$30,925.89	
7/1/2027	7	$167,531.47	$25,899.95	$1,675.31	$3,350.63	$30,925.89	
7/1/2028	8	$141,631.52	$26,676.95	$1,416.32	$2,832.63	$30,925.90	
7/1/2029	9	$114,954.57	$27,477.25	$1,149.55	$2,299.09	$30,925.89	
7/1/2030	10	$87,477.32	$28,301.57	$874.77	$1,749.55	$30,925.89	
7/1/2031	11	$59,175.75	$29,150.62	$591.76	$1,183.52	$30,925.90	
7/1/2032	12	$30,025.13	$30,025.13	$300.25	$600.50	$30,925.88	
Payments			$430,639.23	$47,697.16	$95,394.34	$573,730.73	

The parties hereto agree to the Terms of the Revised Repayment Schedule for Loan AR3-041. This Revised Repayment Schedule may be executed in counterparts, each of which together shall constitute the same instrument. When each party hereto has signed one copy of such counterparts, this Revised Repayment Schedule shall be in effect. ***This amendment is being applied as the Municipality chose to forgo its 2020 loan payment as allowed by DEC and VBB special ruling, and the loan is being reamortized accordingly.***

WATER INVESMENT DIVISION

By: E-SIGNED by Robert Fitch on 2021-03-31 09:42:08 EDT
Financial Manager

VERMONT BOND BANK

By: E-SIGNED by Michael Gaughan on 2021-03-31 10:28:16 EDT
Executive Director

TOWN OF NORTHFIELD

GENERAL LEDGER DISTRIBUTION JOURNAL: BIWEEKLY

WARRANT 252526 PAY PERIOD 05/25/2026 to 06/07/2026 CHECK DATE 06/12/2026

YEAR 2026 PERIOD 12
EXPENDITURE ENTRIES
SHORT DESC 06/12/26PR

GL EFF DATE 06/12/2026
REFERENCE 252526
REFERENCE2 1252526

ORG	OBJECT	PROJECT	ORGANIZATION TITLE	ACCOUNT DESCRIPTION	EXPENDITURE
YEAR 2026	PERIOD 12			GL EFF DATE 06/12/2026	
10130	05020		TOWN MANAGER	APPOINTED	2,607.69
10130	05050		TOWN MANAGER	CLERICAL	1,324.35
10130	05154		TOWN MANAGER	HEALTH INSURANCE PREMIUM	485.33
10130	05156		TOWN MANAGER	DENTAL INSURANCE	32.37
10130	05170		TOWN MANAGER	FICA	291.46
10130	05175		TOWN MANAGER	CHILD CARE CONTRIB TAX	14.88
10130	05180		TOWN MANAGER	RETIREMENT-VMERS	285.07
10140	05010		TOWN CLERK/TREASURER	ELECTED	2,846.40
10140	05012		TOWN CLERK/TREASURER	ELECTED TREASURER	212.00
10140	05020		TOWN CLERK/TREASURER	APPOINTED	1,889.26
10140	05154		TOWN CLERK/TREASURER	HEALTH INSURANCE PREMIUM	2,065.88
10140	05156		TOWN CLERK/TREASURER	DENTAL INSURANCE	101.53
10140	05170		TOWN CLERK/TREASURER	FICA	338.62
10140	05175		TOWN CLERK/TREASURER	CHILD CARE CONTRIB TAX	17.63
10140	05180		TOWN CLERK/TREASURER	RETIREMENT-VMERS	284.14
10230	05050		ACCOUNTING	CLERICAL	2,415.61
10230	05154		ACCOUNTING	HEALTH INSURANCE PREMIUM	429.50
10230	05156		ACCOUNTING	DENTAL INSURANCE	20.41
10230	05170		ACCOUNTING	FICA	176.58
10230	05175		ACCOUNTING	CHILD CARE CONTRIB TAX	9.45
10230	05180		ACCOUNTING	RETIREMENT-VMERS	175.13
10260	05010		LISTERS	ELECTED	900.00
10260	05070		LISTERS	PART-TIME	965.58
10260	05170		LISTERS	FICA	142.72
10260	05175		LISTERS	CHILD CARE CONTRIB TAX	8.21
10330	05040		POLICE DEPARTMENT	OFFICERS	3,930.36
10330	05050		POLICE DEPARTMENT	CLERICAL	2,873.60
10330	05081		POLICE DEPARTMENT	POLICE OT DUE TO HOLIDAYS	842.22
10330	05154		POLICE DEPARTMENT	HEALTH INSURANCE PREMIUM	2,255.87
10330	05156		POLICE DEPARTMENT	DENTAL INSURANCE	150.00
10330	05170		POLICE DEPARTMENT	FICA	559.35
10330	05175		POLICE DEPARTMENT	CHILD CARE CONTRIB TAX	28.59
10330	05180		POLICE DEPARTMENT	RETIREMENT-VMERS	761.96
10340	05030		AMBULANCE DEPARTMENT	SUPERVISOR	3,024.00
10340	05060		AMBULANCE DEPARTMENT	SPECIAL DETAIL	172.50
10340	05070		AMBULANCE DEPARTMENT	PART-TIME	5,592.75
10340	05072		AMBULANCE DEPARTMENT	RUN PAY	846.88
10340	05073		AMBULANCE DEPARTMENT	TRAINING PAY	241.50
10340	05083		AMBULANCE DEPARTMENT	OT - HALF RATE ONLY	114.57
10340	05090		AMBULANCE DEPARTMENT	STANDBY/ON CALL	1,106.00
10340	05091		AMBULANCE DEPARTMENT	WEEKEND SUPERVISOR	250.00
10340	05110		AMBULANCE DEPARTMENT	NON EMERGENCY TRANSFERS	218.81
10340	05111		AMBULANCE DEPARTMENT	TRANSFER CREW-PD SHIFT	856.25
10340	05156		AMBULANCE DEPARTMENT	DENTAL INSURANCE	64.65
10340	05170		AMBULANCE DEPARTMENT	FICA	950.10
10340	05175		AMBULANCE DEPARTMENT	CHILD CARE CONTRIB TAX	52.97
10340	05180		AMBULANCE DEPARTMENT	RETIREMENT-VMERS	219.24

TOWN OF NORTHFIELD

GENERAL LEDGER DISTRIBUTION JOURNAL: BIWEEKLY

WARRANT 252526 PAY PERIOD 05/25/2026 to 06/07/2026 CHECK DATE 06/12/2026

YEAR 2026 PERIOD 12
EXPENDITURE ENTRIES
SHORT DESC 06/12/26PR

GL EFF DATE 06/12/2026
REFERENCE 252526
REFERENCE2 1252526

ORG	OBJECT	PROJECT	ORGANIZATION TITLE	ACCOUNT DESCRIPTION	EXPENDITURE
10420	05040		HIGHWAY DEPT	TECHNICAL	15,269.20
10420	05154		HIGHWAY DEPT	HEALTH INSURANCE PREMIUM	2,488.10
10420	05156		HIGHWAY DEPT	DENTAL INSURANCE	164.55
10420	05170		HIGHWAY DEPT	FICA	1,139.85
10420	05175		HIGHWAY DEPT	CHILD CARE CONTRIB TAX	60.03
10420	05180		HIGHWAY DEPT	RETIREMENT-VMERS	1,073.26
10620	05020		PLANNING/ZONING	ZONING ADMINISTRATOR	1,078.14
10620	05170		PLANNING/ZONING	FICA	82.47
10620	05175		PLANNING/ZONING	CHILD CARE CONTRIB TAX	4.74
10645	05051		ECONOMIC DEVELOPMENT	ECONOMIC DEVEL COORDINATO	3,133.60
10645	05154		ECONOMIC DEVELOPMENT	HEALTH INSURANCE PREMIUM	429.50
10645	05156		ECONOMIC DEVELOPMENT	DENTAL INSURANCE	20.41
10645	05170		ECONOMIC DEVELOPMENT	FICA	239.30
10645	05175		ECONOMIC DEVELOPMENT	CHILD CARE CONTRIB TAX	12.52
10645	05180		ECONOMIC DEVELOPMENT	RETIREMENT-VMERS	227.19
				FUND TOTALS	68,574.83
51047	05154		ELECTRIC DEPARTMENT	HEALTH INSURANCE PREMIUM	1,723.24
51047	05156		ELECTRIC DEPARTMENT	DENTAL INSURANCE	114.40
51047	05170		ELECTRIC DEPARTMENT	FICA	497.85
51047	05175		ELECTRIC DEPARTMENT	CHILD CARE CONTRIB TAX	25.52
51047	05180		ELECTRIC DEPARTMENT	RETIREMENT-VMERS	469.96
51047	90210		ELECTRIC DEPARTMENT	METER READING	445.82
51047	92010		ELECTRIC DEPARTMENT	MUNICIPAL MANAGER	1,015.39
51047	92012		ELECTRIC DEPARTMENT	CLERICAL LABOR	1,811.69
51047	92013		ELECTRIC DEPARTMENT	OVERTIME LABOR	166.91
51047	92014		ELECTRIC DEPARTMENT	SUPERINTENDENT	892.59
51047	92016		ELECTRIC DEPARTMENT	ASSISTANT	1,337.47
51047	92018		ELECTRIC DEPARTMENT	TECHNICAL LABOR	1,228.87
51047	92019		ELECTRIC DEPARTMENT	STAND-BY	45.00
				FUND TOTALS	9,774.71
53045	05020		WATER DEPARTMENT	APPOINTED	576.92
53045	05030		WATER DEPARTMENT	SUPERVISOR	1,606.69
53045	05042		WATER DEPARTMENT	TECHNICAL/ADMIN/CLERICAL	5,529.65
53045	05080		WATER DEPARTMENT	OVERTIME	269.09
53045	05090		WATER DEPARTMENT	STANDBY/ON CALL	153.00
53045	05154		WATER DEPARTMENT	HEALTH INSURANCE PREMIUM	1,277.72
53045	05156		WATER DEPARTMENT	DENTAL INSURANCE	124.51
53045	05170		WATER DEPARTMENT	FICA	597.49
53045	05175		WATER DEPARTMENT	CHILD CARE CONTRIB TAX	30.85
53045	05180		WATER DEPARTMENT	RETIREMENT-VMERS	562.08
				FUND TOTALS	10,728.00
55046	05020		SEWER DEPARTMENT	APPOINTED	415.39

TOWN OF NORTHFIELD

GENERAL LEDGER DISTRIBUTION JOURNAL: BIWEEKLY

WARRANT 252526 PAY PERIOD 05/25/2026 to 06/07/2026 CHECK DATE 06/12/2026

YEAR 2026 PERIOD 12
EXPENDITURE ENTRIES
SHORT DESC 06/12/26PR

GL EFF DATE 06/12/2026
REFERENCE 252526
REFERENCE2 1252526

ORG	OBJECT	PROJECT	ORGANIZATION TITLE	ACCOUNT DESCRIPTION	EXPENDITURE
55046	05030		SEWER DEPARTMENT	SUPERVISOR	1,071.12
55046	05042		SEWER DEPARTMENT	TECHNICAL/ADMIN/CLERICAL	3,669.97
55046	05080		SEWER DEPARTMENT	OVERTIME	1,218.64
55046	05090		SEWER DEPARTMENT	STANDBY/ON CALL	102.00
55046	05154		SEWER DEPARTMENT	HEALTH INSURANCE PREMIUM	1,051.17
55046	05156		SEWER DEPARTMENT	DENTAL INSURANCE	100.11
55046	05170		SEWER DEPARTMENT	FICA	475.04
55046	05175		SEWER DEPARTMENT	CHILD CARE CONTRIB TAX	24.52
55046	05180		SEWER DEPARTMENT	RETIREMENT-VMERS	451.32
				FUND TOTALS	8,579.28
				GRAND TOTALS	97,656.82

VERMONT

AGENCY OF NATURAL RESOURCES
AGENCY OF TRANSPORTATION

January 21, 2026

Re: 2026 Town Road and Bridge Standards

Dear Municipal Officials,

The Vermont Agency of Natural Resources and the Vermont Agency of Transportation have jointly updated the Town Road and Bridge Standards, effective January 21, 2026. These standards are an updated version of the 2019 Town Road and Bridge Standards. Sections 1 and 2 (Municipal Roads and Class 4 Roads) are still required for hydrologically-connected roads under the Municipal Roads General Permit (MRGP). Section 3 (Perennial stream crossings) is still required statewide and must follow the DEC Stream Alteration Standard. Adoption of standards for non-hydrologically-connected roads remains optional. Municipalities may continue to use their own town road standards if the town standards meet or exceed the State template.

The major changes to the optional standards (Sections 4-8) apply to **Section 5 – Drainage Crossings**, cross culverts that move water from one side of the road to the other. When a municipally owned or maintained cross culvert is replaced, it must now be at least 18 inches in diameter, where road layout allows. Culverts that frequently plug, wash out, or fail during storms are expected to be upsized when replaced. Section 5 provides a clearly adopted standard for drainage (cross) culverts that are not otherwise covered by the MRGP or stream alteration standards. This section does not apply to intermittent or perennial streams, which continue to be handled under their own standards.

Municipalities are encouraged to consider adoption of additional optional standards to improve the resiliency of municipal highway infrastructure, enhance public safety, and to realize as many benefits as possible from the FEMA Public Assistance program. VTrans District personnel are available to work with any municipality in explaining the various options and to answer questions related to the new town road and bridge standards template. Please contact your nearest VTrans District Office for assistance and information.

Sincerely,

Julie Moore P.E.

Secretary

Vermont Agency of Natural Resources

Joe Flynn

Secretary

Vermont Agency of Transportation

VERMONT

State of Vermont
District 7
1068 US Route 5, Suite 2
St. Johnsbury, VT 05819-8501
www.aot.state.vt.us

[phone] 802-748-6670
[fax] 802-748-6671
[ttd] 800-253-0191

Agency of Transportation

2026 Town Road and Bridge Standards
Outline Summary of Updates

Major Change:

- New optional standard (Sections 4-8) **Section 5 – Drainage Crossings**, cross culverts that move water from one side of the road to the other. When a municipally owned or maintained cross culvert is replaced, it must now be at least 18 inches in diameter, where road layout allows. Culverts that frequently plug, wash out, or fail during storms are expected to be upsized when replaced. Section 5 provides a clearly adopted standard for drainage (cross) culverts that are not otherwise covered by the MRGP or stream alteration standards. This section does not apply to intermittent or perennial streams, which continue to be handled under their own standards.

Minor Changes:

- Updating reference and link for the latest version of the Vermont Better Roads manual that has been in place since 2024.
- Section 8 – updating standard drawing reference. Old B-71 standard was split into B-71a & B-71b for commercial and residential drives, respectfully.
- Updating of language in reference to ANR Stream Alteration Permits and permits through Army Corps of Engineers that denote those permits, including any requirements to have a permit or requirements within the permit, supersede these codes and standards. This was always the case, but was not stated in previous versions.
- Updated language that documents the existing practice to waive a code or standard when it would render the road unsafe for travel. Case by case basis with concurrence from local district office. This was always the case, but was not stated in previous versions.
- Updated language refers to green infrastructure stormwater practices that are more commonly used than during previous versions. This is not a requirement but to acknowledge that some cases may deem one of those practices more appropriate than the normal best management practices historically used.
- Updating new number 4 & 5 notes in Appendix A, Section 1, Part D in both Municipal and Private culverts to reference proper perennial and intermittent stream sizing. This was always the case, but was not stated in previous versions under these sections.
- Updating of the language and layout in Appendix B to better address proper sizing of intermittent stream crossings. These requirements did not change, but older versions did not describe the process/method well. This update is to best capture requirements in the sizing study.

TOWN ROAD AND BRIDGE STANDARDS

(January 21, 2026)

MUNICIPALITY OF Northfield, VERMONT

The Legislative Body of the Municipality of Northfield hereby adopts the following Town Road and Bridge Standards which shall apply to the construction, repair, and maintenance of town roads and bridges.

The standards below are considered minimums. Municipalities that have construction standards / specifications in place that meet or exceed the minimum standards: indicate adoption date and include as Appendix C. **Date of Adoption:** 6/23/2026

Municipalities must comply with all applicable state and federal approvals, permits and duly adopted standards when undertaking road and bridge activities and projects.

Any new road regulated by and/or to be conveyed to the municipality shall be constructed according to the minimum of these standards.

Circle **YES** or **NO** below to indicate town adoption of that section of the Standards

Road and Bridge Standards Sections	Hydrologically-connected road segments*	Non-hydrologically-connected road segments**
Section 1 – Municipal Road Standards	**YES** (Required by MRGP)	**YES** **NO**
Section 2 – Class 4 Road Standards	**YES** (Required by MRGP)	**YES** **NO**
	Town wide	
Section 3 - Perennial stream- bridge and culvert standards	**YES** (Required by DEC Stream Alteration Standard)	
Section 4 – Intermittent stream crossings	**YES** **NO**	
Section 5- Drainage crossings	**YES** **NO**	
Section 6 - Roadway construction standards	**YES** **NO**	
Section 7 - Guardrail standard	**YES** **NO**	
Section 8 - Driveway access standard	**YES** **NO**	

Road segments – ANR Resources Atlas includes a map layer of all of Vermont's municipal roads divided into 100-meter (328 foot) segments, each with a unique identification number.

***Hydrologically-connected road segments** - are those municipal road segments and catch basin outlets, Class 1-4, as shown on the ANR Natural Resources Hydrologically-connected municipal road segment layer (http://anrmaps.vermont.gov/websites/anra5/) or the Road Erosion Inventory Scoring (MRGP Implementation Table portal) layer (https://anrweb.vt.gov/DEC/IWIS/MRGPReportViewer.aspx?ViewParms=True&Report=Portal).

****Adoption of standards on non-hydrologically-connected road segments** does not indicate that these road segments are then subject to the Municipal Roads General Permit (MRGP).

Municipalities may also find additional resources in the latest version of the *Vermont Better Roads Manual*. https://vtrans.vermont.gov/sites/aot/files/Better%20Roads%20Manual%20Final%202024.pdf

Road and Bridge Standards Sections

Section 1 – Municipal Road Standards - See Appendix A

These standards are required by Act 64 and the DEC Municipal Roads General Permit (MRGP) for hydrologically-connected roads only.

Municipalities may adopt Section 1 Road standards by road type for non-hydrologically-connected roads/segments/catch basins.

Section 2 – Class 4 Road Standards - See Appendix A

Section 3 - Perennial stream - bridge and culvert standards

Bridge and culvert work on perennial stream crossings must conform with the statewide DEC Stream Alteration Standard.

"Perennial stream" means a watercourse or portion, segment, or reach of a watercourse, generally exceeding 0.25 square miles in watershed size, in which surface flows are not frequently or consistently interrupted during normal seasonal low flow periods. Perennial streams that begin flowing subsurface during low flow periods, due to natural geologic conditions, remain defined as perennial. All other streams, or stream segments of significant length, shall be termed intermittent. A perennial stream shall not include the standing waters in wetlands, lakes, and ponds.

Streambank stabilization and other in-stream work must conform with the statewide DEC Stream Alteration Standard.

For River Management Engineer Districts: https://dec.vermont.gov/sites/dec/files/wsm/rivers/docs/RME_districts.pdf

Section 4 – Intermittent stream crossings – See Appendix B for sizing table and graphic. These standards are above and beyond the culvert standards in Section 1.

"Intermittent streams" are defined as streams with beds of bare earthen material that run during seasonal high flows but are disconnected from the annual mean groundwater level.

Section 5 – Drainage crossings (NOT perennial or intermittent streams)- Upon replacement, municipally owned or maintained cross culverts shall be a minimum of 18". Undersized drainage crossings shall be upsized 6-12" if road geometry allows. Indications that a culvert is undersized include a culvert that plugs with sediment and/or gets washed out during rain events.

Section 6 - Roadway construction standards – Sub-base and gravel standards

All new or substantially reconstructed gravel roads shall have 12 inches* thick gravel sub-base, with an additional 12 inches* top course of crushed gravel.

All new or substantially reconstructed paved roads shall have 15 inches* thick gravel sub-base.

*Municipalities shall indicate their own construction criteria.

Section 7 - Guardrail standard

When a roadway, culvert, bridge, or retaining wall construction or reconstruction project results in hazards such as foreslopes, drop offs, or fixed obstacles within the designated clear-zone, the AASHTO Roadside Design Guide will govern the analysis of the hazard and the subsequent treatment of that hazard. For roadway situations, an approved barrier system may be steel beam guardrail with 6-foot posts and approved guardrail end treatment. If there is less than 3 feet from the rail to the hazard, then steel beam guardrail with 8-foot posts shall be used. The G-1D is an example of an approved guardrail end treatment. For bridge rails systems, VTrans bridge rail standards shall be referenced

Section 8 - Driveway access standard

The municipality has a process in place, formal or informal, to review all new drive accesses and development roads where they intersect town roads, as authorized under 19 V.S.A. Section 1111. Municipality may reference VTrans Standard *A-76 Standards for Town & Development Roads* and *B-71a and b Standards for Residential and Commercial Drives*; the VTrans *Access Management Program Guidelines*; and the latest version of the *Vermont Better Roads Manual* for other design standards and specifications.

Passed and adopted by the Legislative Body of the Municipality of Northfield **, State of Vermont on** June 23 **, 20** 26

Selectboard / City Council / Village Board of Trustees:

_____ _____

_____ _____

_____

Appendix A

MUNICIPAL ROAD STANDARDS

The following standards constitute the minimum required Best Management Practices (BMPs) for municipal roads. These standards shall apply to the construction, repair, and maintenance of all town roads and bridges.

It is the municipality's responsibility to maintain all practices after installation. Roads not meeting these standards must implement the BMPs listed below in order to meet the required town's standards.

Feasibility

Municipalities shall implement these standards to the extent feasible. In determining feasibility, municipalities may consider the following criteria: The implementation of a standard listed in Part 6 of this general permit does not require the acquisition of additional state or federal permits[3] or noncompliance with such permits, or noncompliance with any other state or federal law. The implementation of a standard does not require the condemnation of private property; impacts to significant environmental and historic resources, including historic stone walls, historic structures including structures registered on either the Vermont State Register of Historic Places or the National Register of Historic Places, or removing vegetation within 250 feet of a lakeshore; impacts to buried utilities; and excessive hydraulic hammering of ledge. Additionally, the implementation of any standard shall not be required if it would render the road unsafe for travel.

Municipalities shall document in the REI Reassessment each instance where feasibility affects implementation of the standards.

Standards for All Construction and Soil Disturbing Activities

Following construction and soil disturbance on a hydrologically-connected road segment, all bare or unvegetated areas shall be revegetated with seed and mulch, hydroseeded, or stone lined within 5 days of disturbance of soils, or, if precipitation is forecast, sooner. Projects authorized under the Construction General Permit (CGP 3-9020) or Individual Construction Stormwater Permit (INDC) shall instead comply with the terms and conditions of that permit.

Standards for Open Drainage Roads (Not Class 4)

The following are the required standards for all non-compliant hydrologically-connected open drainage roads. To maintain compliance with the requirements of this General Permit, municipalities shall apply these standards to all new construction, general BMP maintenance, and significant upgrades of stormwater treatment practices.

A. Roadway/Travel Lane Standards

1. Roadway Crown

a. Gravel roads shall be crowned, in or out-sloped:

Minimum: ¼" per foot

Recommended: ¼" – ½" per foot or 2% - 4%.

[3] Self-verification under a non-reporting permit category does not constitute a permit for purposes of this section.

b. Paved/ditched roads shall be crowned during new construction, redevelopment, or repaving where repaving involves removal of the existing paving.

Minimum: 1/8" per foot or 1% Recommended: 1% - 2%.

2. Shoulder berms (also called Grader/Plow Berm/Windrows)

Shoulder berms shall be removed to allow precipitation to shed from the travel lane into the road drainage system. Roadway runoff shall flow in a distributed manner to the drainage ditch or filter area and there shall be no shoulder berms or evidence of a "secondary ditch". Shoulder berms may remain in place if the road crown is in-sloped or out-sloped to the opposite side of the road from berm side of road. The shoulder berm standard only applies to open drainage gravel roads.

A. Road Drainage Standards

Roadway runoff shall flow in a distributed manner to grass or a forested area by lowering road shoulders or conversely by elevating the travel lane level above the shoulder. Road shoulders shall be lower than travel lane elevation. If distributed flow is not possible, roadway runoff may enter a drainage ditch, stabilized as follows:

1. For roads with slopes between 0% and 5%: At a minimum, grass-lined ditch, no bare soil. Geotextile and erosion matting may be used instead of seed and mulch. Alternatively, ditches may be stabilized using any of the practices identified for roads with slopes 5% or greater included in Sub-part B.2, below.

   Recommended shape: trapezoidal or parabolic cross section with mild side slopes; two foot horizontal per one foot vertical or flatter and 2-foot ditch depth.

2. For roads with slopes 5% or greater but less than 8%:

   a. Stone-lined ditch: minimum 6"- 8" minus stone or the equivalent for new practice construction. Recommended fractured stone with 2-foot ditch depth from top of stone-lined bottom,

   b. Grass-lined ditch with stone check dams[4], or

   c. Grass-lined ditch if installed with disconnection practices such as cross culverts and/or turnouts to reduce road stormwater runoff volume. There shall be at least <u>two</u> cross culverts or turnouts per segment disconnecting road stormwater out of the road drainage network into vegetated areas or spaced every 160'.

3. For roads with slopes of 8% or greater: Stone-lined ditch. Stone-lined ditches are not required if the toe of the ditch backslope is located outside of the town right-of-way.

   a. For slopes greater than or equal to 8% but less than 10%: minimum 6"-8" minus stone or the equivalent for new construction. Recommended fractured stone with 2-foot ditch depth from top of stone-lined bottom.

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[4] See check dam installation specifications.

b. For slopes greater than 10%: minimum 6-8" minus stone. Recommended 12" minus fractured stone or the equivalent. Recommended 2-foot ditch depth from top of stone-lined bottom.

4. If appropriate, bioretention areas, level spreaders, armored shoulders, and sub-surface drainage practices may be substituted for the above road drainage standards.

C. Drainage Outlets to Waters & Turnouts

Roadway drainage shall be disconnected from waterbodies and defined channels, since the latter can act as a stormwater conveyance, and roadway drainage shall flow in a distributed manner to a grass or forested filter area. Drainage outlets and conveyance areas shall be stabilized as follows:

1. Turn-outs - all drainage ditches shall be turned out to avoid direct outlet to surface waters.
2. There must be adequate outlet protection at the end of the turnout, based upon slope ranges below. Turnout slopes shall be measured on the bank where the practice is located and not based on the road slope.

a. For turnouts with slopes of 0% or greater but less than 5%: stabilize with grass at minimum. Alternatively, stabilize using the practices identified in Sub-parts (b)-(c), below, when possible.

b. For turnouts with slopes 5% or greater: stabilize with stone.

c. For slopes greater than 5% but less than 10%: minimum 6"-8" minus stone or the equivalent for new construction.

d. For slopes greater than 10%: minimum: 6-8" minus stone or equivalent for new construction. Recommended 12" minus fractured stone or the equivalent.

D. Municipal Cross Culverts and Intermittent Stream Culverts

1. All municipal culverts- Culvert end treatment or headwall required for areas with slopes 5% or greater, if erosion is due to absence of these structures. End treatment or headwall is required for new construction on road segment slopes 5% or greater.
2. All municipal culverts- Stabilize outlet such that there will be no scour erosion, if erosion is due to absence or inadequacy of outlet stabilization. Stone aprons or plunge pools required for new construction on road segment slopes 5% or greater.
3. Cross culverts- Upgrade to 18" culvert (minimum), if erosion is due to inadequate size or absence of structure.
4. In instances where intermittent streams enter the municipal road drainage network, the Secretary requires culvert sizing based on in-field and mapping techniques described in the Intermittent Stream Crossing Sizing Guidance, found in Appendix B.
5. Drainage culverts conveying perennial waters are subject to coverage under the DEC Stream Alteration General Permit. MRGP Standards do not apply to culverts conveying perennial waters.

6. A French Drain (also called an Under Drain) or French Mattress (also called a Rock Sandwich) sub-surface drainage practice may be substituted for a cross culvert.

E. Driveway Culverts within the municipal ROW

1. Culvert end treatment or headwall required for areas with road segment slopes of 5% or greater, if erosion is due to absence of these structures. End treatment or headwall is required for new construction.
2. Stabilize outlet such that there will be no scour erosion, if erosion is due to absence or inadequacy of outlet stabilization. Stone aprons or plunge pools required for new construction.
3. Upgrade to minimum 15" culvert, 18" recommended, if erosion is due to inadequate size or absence of structure.
4. Intermittent streams may enter the municipal road drainage network, and in these cases, the Secretary requires culvert sizing based on in-field and mapping techniques described in Appendix B.
5. Driveway culverts conveying perennial waters are subject to coverage under the DEC Stream Alteration General Permit.

Standards for Closed Drainage Roads

Catch Basin Outlet Stabilization: All hydrologically-connected catch basin outlets shall be stabilized to eliminate all rill and gully erosion. Catch basin outlet stabilization practices include: stone-lined ditch, stone apron, check dams, culvert header/headwall, and green stormwater infrastructure practices such bioretention practices, when appropriate.

Standards for Connected Class 4 Roads

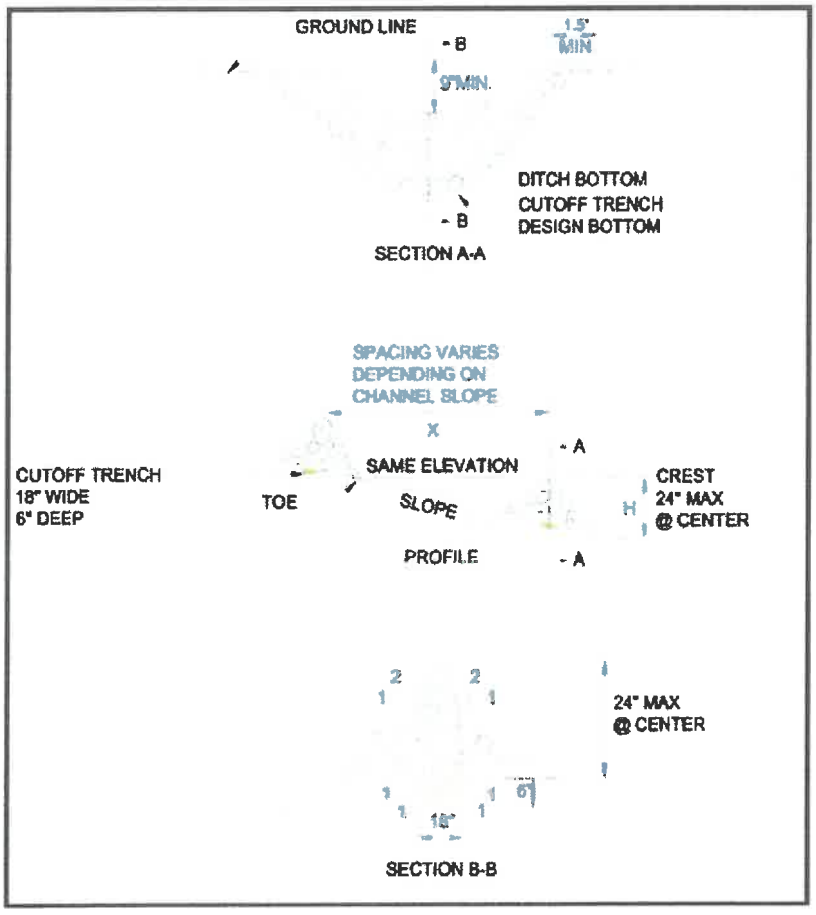
Stabilize any areas of gully erosion identified in the REI with the practices described above or equivalent practices. Disconnection practices such as broad-based dips and water bars may replace cross culverts and turnouts.

Stone Check Dam Specification

- Height: No greater than 2 feet. Center of dam should be 9 inches lower than the side elevation
- Side slopes: 2:1 or flatter
- Stone size: Use a mixture of 2 to 9 inch stone
- Width: Dams should span the width of the channel and extend up the sides of the banks
- Spacing: Space the dams so that the bottom (toe) of the upstream dam is at the elevation of the top (crest) of the downstream dam. This spacing is equal to the height of the check dam divided by the channel slope.

$$\text{Spacing (in feet)} = \frac{\text{Height of check dam (in feet)}}{\text{Slope in channel (ft/ft)}}$$

- Maintenance: Remove sediment accumulated behind the dam as needed to allow channel to drain through the stone check dam and prevent large flows from carrying sediment over the dam. If significant erosion occurs between check dams, a liner of stone should be installed.



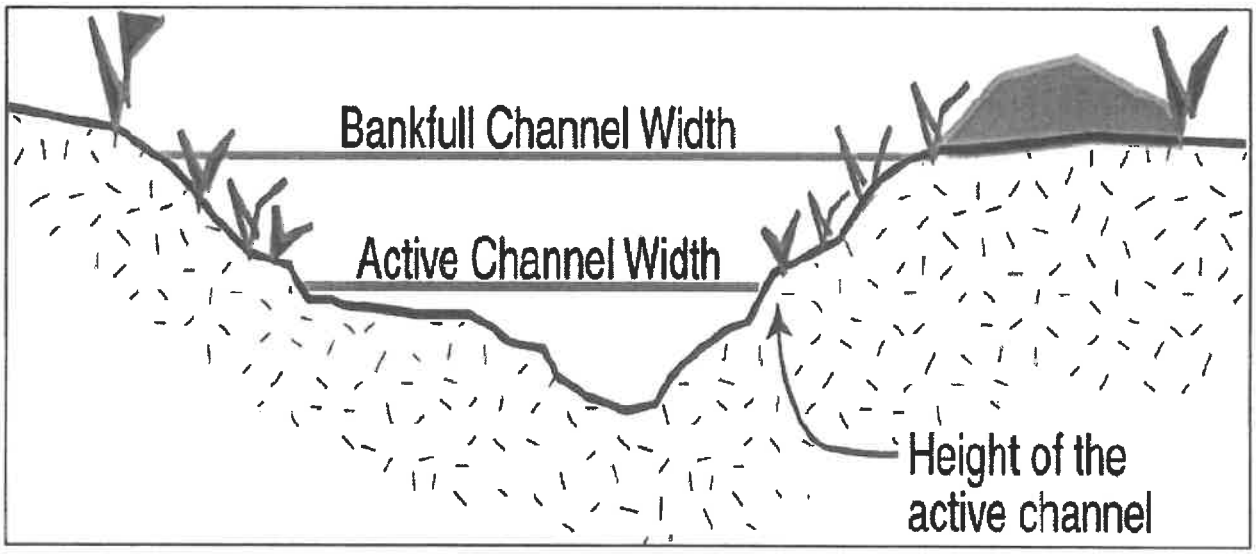
Appendix B. Intermittent Stream Crossing Specification

VT DEC Watershed Management Division Date: June 2022

Per 6.3.D of the Municipal Road General Permit, all municipal road crossings on intermittent streams require sizing of new and replacement structures to be based on the Active Channel Width (ACW).

1. Intermittent streams will be field identified and consist of a defined channel entering the road network and a define channel leaving the road network. The absence of surface base flows for an extended period of the year and the watershed size, typically under 0.25 mi2, differentiates these stream channels from perennial stream channels.
2. Hydraulics sizing of intermittent stream crossings will conform with the VTrans Hydraulics Manual for the roadway classification, Chapter 4 - Table 4-2. The design of these culverts will satisfy criteria in Chapter 6 - section 6.4.
3. Embedment of culverts on intermitted streams if often beneficial for sediment transport and to reduce the need to increase road heights when maintaining adequate cover above the pipe; minimum embedment of 1' for 4-6' culverts.
4. Culvert end treatments are required for intermittent stream crossings. Inlet and outlet headwalls must consist of any combination of VTrans stone fill with a grubbing layer, laid-up stone, reinforced concrete, and/or a culvert end section.
5. Culvert slope to match stream bed slope. Outlet apron at culvert end using of E-stone is recommended – see details.

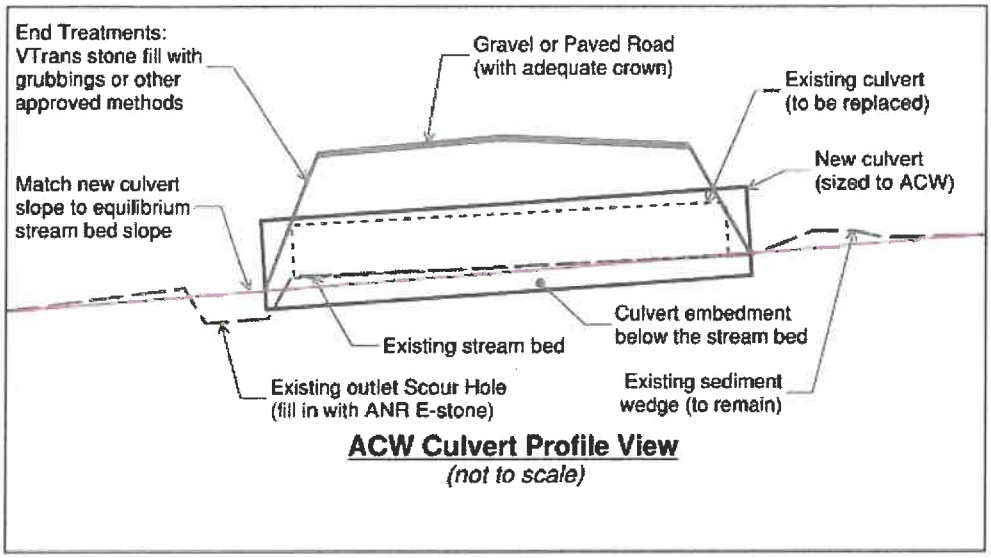
Determining the Active Channel Width on Intermittent Streams



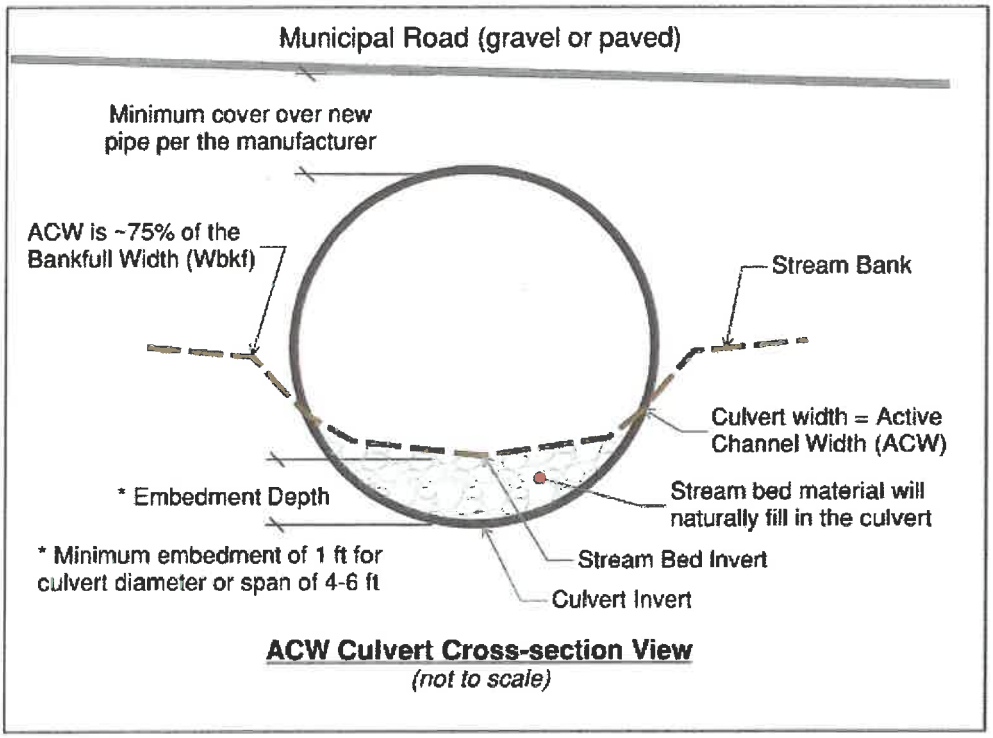
Active Channel Width (ACW) is defined as the limits of streambed scour on banks formed by prevailing stream discharges, measured perpendicular to streamflow. The active channel width is narrower than the bankfull width (~75%) and is defined by a break in slope on the channel bank, typically seen as the edge of permanent vegetation.

Culvert Sizing for Crossings on Intermittent Streams:

Determine the ACW through field measurements, ***the culvert sizing will meet or exceed the Active Channel Width.*** * To obtain the measurements, go to a typical crossing location and obtain several upstream and downstream Active Channel Width measurements in riffles or straighter sections which are often the narrower channel width locations. * The selected active channel width for the structure will be a representative average of these field measurements.



ACW Culvert Profile View
(not to scale)



ACW Culvert Cross-section View
(not to scale)

Good morning, Town Manager and members of the Select Board,

The Conservation Commission (NCC) and the Town Forest Stewardship Committee (TFSC) would like to thank you for your time during the recent board meeting. We would also like to take this opportunity to address some comments and discussions that occurred later in the meeting during the unscheduled public participation portion.

After watching the replay of that discussion, we felt it would be helpful to respond to some largely misleading comments made about conservation easements and the Vermont Land Trust (VLT). First, the VLT was established in 1977 as a private, non-governmental, 501(c)3 nonprofit organization. They have helped conserve over 38 town and community forests, including our neighboring town forest in Berlin. The VLT's efforts to conserve public land often occur alongside town or city officials, in alignment with local plans. Ultimately, these efforts protect cherished places, foster lasting relationships, and deepen connections to the land across the state in partnership with local communities. If you are interested in learning more, please read the article about the VLT partnership with the Hinesburg Town Forest, which highlights how Hinesburg embraces forest health and recreation at its town forest in partnership with the VLT. Hinesburg embraces forest health and recreation at its town forest

In response to the comments made by a public participant, we want to clarify that the creation of a conservation easement does not transfer control of the town forest to the state or legislature. Control of the town forest remains within the town's purview; the conservation easement only restricts the development, subdivision, and extractive (mining, etc.) uses of the property. In fact, as described in the handout we provided, the easement *requires* that management of the land be decided by the town in a public process. The Town Forest Stewardship Plan will continue to be the guiding document for the use and management of the town forest. Legislative approval will not be required for any activities on the property, including timber harvesting, trail creation, habitat management, programmatic offerings, etc. Furthermore, the legislature cannot decide to sell the property and profit from it; the property is owned by the town and will remain so. The state government has no stake in the easement at all. Vermont Land Trust also does not profit in any way from their conservation easements, as suggested during the meeting. As a 501c3 nonprofit land trust, their mission is to uphold the conservation values of the land by restricting development through the stewardship of a permanent conservation easement.

It was suggested that a zoning regulation overlay would be a better fit for the town forest. While zoning regulation does provide protection, that protection can be rescinded at any time. One comment raised the concern, "What if the Select Board decides to build a small development in the town forest in the future?" This statement underscores why the NCC and TFSC support a conservation easement for the property. Our goal is to protect the town forest for generations to come, aligning with the objectives outlined in The Northfield Town Plan and Town Forest Stewardship Plan. A development in the Town Forest is in direct opposition to these community-formed goals.

Another advantage of a conservation easement over a zoning regulation overlay is the ability to leverage grant funds for the maintenance and conservation of the town forest. A conservation easement will open up funding opportunities for trail projects and conservation initiatives that will benefit all users that an overlay will not.

There was also a discussion about bringing the issue of easements before the town for a town-wide vote, as it is the town's tax dollars that support the property. While the NCC and TFSC agree that there should be robust input from the town, we respectfully disagree with the assertion that a significant amount of taxpayers' dollars are being used to support the town forest. As you know, the town has not significantly funded Town Forest management and the fact that we have trails and signage in the Town Forest is due primarily to volunteer efforts coordinated by the NCC and TFSC. The NCC receives a small annual stipend for miscellaneous expenses. We were pleased to receive $40,000 in ARPA funds for trail maintenance and hope to work with the Town to take advantage of other federal and state grant programs when we can. Our ability to do so will be enhanced by a partnership with VLT.

Lastly, we wanted to make sure you understand that the members of the NCC and TFSC are skilled and knowledgeable about conservation, either through active engagement as volunteers or through conservation-related careers outside of these volunteer positions. We do not make our recommendations lightly and have put considerable thought and effort into our recommendation. We will of course respect and implement whatever decision the Select Board makes, and hope that you will include us in your deliberations.We share the Select Board's interest in engaging the Northfield public and look forward to further conversation with you and interested members of our community.

Respectfully

David Mears, NCC Chair

Jeremy Wahlen, TFSC Chair