

6. Photographs

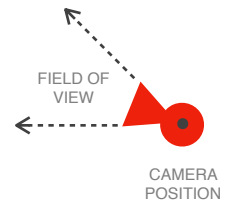
The following photographs were taken by James Perkins during site visits on November 3, 2023, March 28 and April 18, 2024, unless otherwise credited. All are captioned and include a location/direction key, indicated by a small red symbol on the relevant site or floor plan in the lower right corner.

For example:



SETTING

A-4: North facade and west gable.



APPENDIX A

Village Store / Union Hall
S. Acworth, New Hampshire
November 2023 – April 2024

EXTERIOR CONDITIONS



SETTING

A-1: Village store and the post-flood course of Bowers Brook.

PHOTO: APRIL 18, 2024





SETTING

PHOTO: APRIL 18, 2024

A-2: View between the store and warehouse barn towards the picnic area and pizza oven shed.



SETTING

PHOTO: NOVEMBER 4, 2024

A-3: Community greenhouse and farm shed towards the south of the property.





SETTING

A-4: North facade and west gable.

PHOTO: NOVEMBER 4, 2024



FACADE

A-5: Porch and store entrance. Deflection along eaves and roof ridge.

PHOTO: MARCH 28, 2024





FACADE

PHOTO: MARCH 28, 2024

A-6: View of Union Hall stair entrance. Paint loss under eaves.



EAST GABLE

PHOTO: MARCH 28, 2024

A-7: New garbage bin shed addition at east end. Crawlspce access through the shed.





SOUTH ELEVATION

PHOTO: APRIL 18, 2024

A-8: View from community garden area towards the pizza shed, store, and barn.

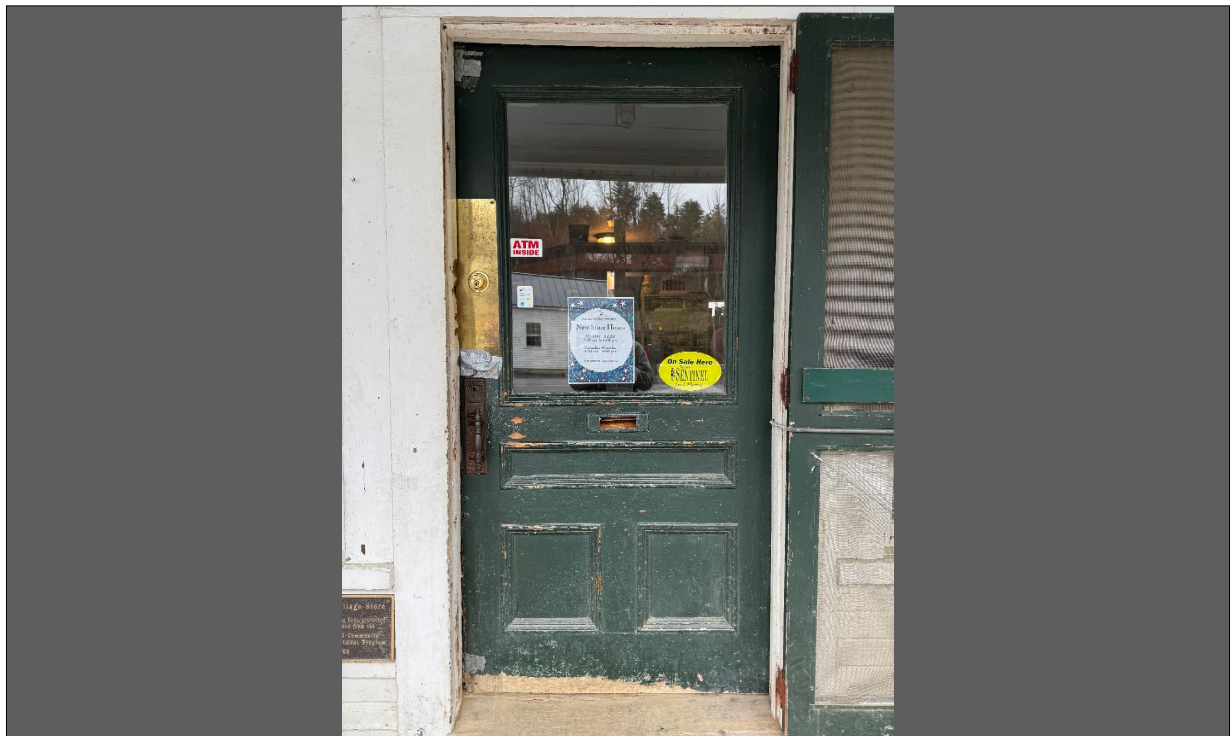


PORCH

PHOTO: DECEMBER 19, 2023

A-9: Partially chamfered porch posts with added “capitals” — details carried forward through time. Community notice board and display windows. Paint loss on upper clapboards and window sills.





STORE ENTRANCE

PHOTO: APRIL 18, 2024

A-10: Main entrance to the store. Door shows wear patterns and is patched with duct tape. Screen door propped fully open.



HALL ENTRANCE

PHOTO: DECEMBER 19, 2023

A-11: Six panel Union Hall door provides access to the upstairs apartment.

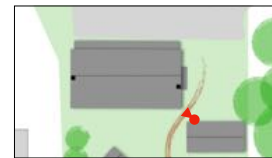




UNDERPINNING

PHOTO: NOVEMBER 4, 2023

A-12: Cornerboard damage. Note granite and plank underpinning below. New lower clapboards along the south side may indicate a location of previous foundation or sill repairs.



UNDERPINNING

PHOTO: NOVEMBER 4, 2023

A-13: More plank underpinning at the southwest corner.

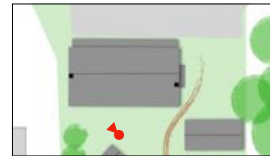




BULKHEAD

PHOTO: APRIL 18, 2024

A-14: Metal bulkhead covers a drop (i.e. no stairs) to the excavated portion of the basement. Note infill to the right of the bulkhead. Wide, six panel door (without stairs) is not in use; formerly led into a storage addition.



PROPANE TANK

PHOTO: MARCH 28, 2024

A-15: Exposed stone foundation and wood plank underpinning along the west end of the building. Propane tank serves the commercial stove.

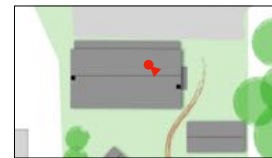




EAST CHIMNEY

PHOTO: APRIL 18, 2024

A-16: East chimney in poor condition and may require reconstruction from the roof plane or below.



WEST CHIMNEY

PHOTO: APRIL 18, 2024

A-17: West chimney has been a source of past roof leaks. Mortar and flashing should be inspected more closely. Note discoloration of step flashing and a missing strip of shingles.

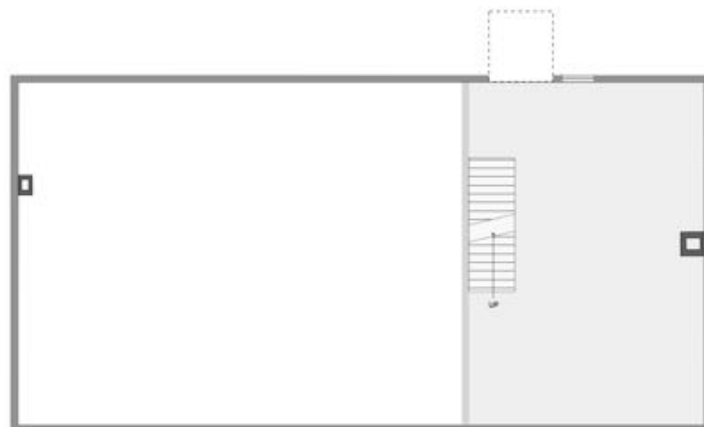


APPENDIX B

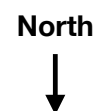
Village Store / Union Hall
S. Acworth, New Hampshire
June 2024

INTERIOR CONDITIONS

Basement



ROUTE 123A

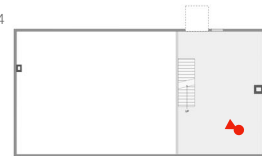




BASEMENT

PHOTO: MARCH 28, 2024

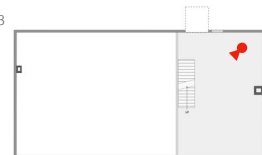
B-0.1: Basement stairs, still partially covered in silt from summer flooding. Note electrical wiring (multiple types) overhead.



BASEMENT

PHOTO: NOVEMBER 4, 2023

B-0.2: Basement still damp and littered with abandoned equipment months after the latest flood.

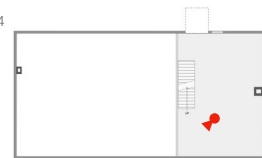




BASEMENT

B-0.3: Water supply pump.

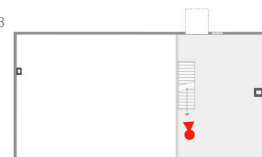
PHOTO: MARCH 28, 2024



BASEMENT

B-0.4: Basement stairs with silt residue from 2023 flooding.

PHOTO: NOVEMBER 3, 2023

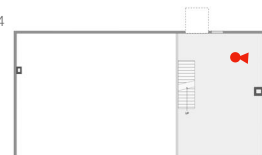




BASEMENT

PHOTO: MARCH 28, 2024

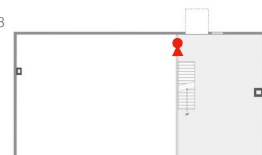
B-0.5: Basement window, note horizontal floodwater line about 3" above the window sill.



BASEMENT

PHOTO: DECEMBER 19, 2023

B-0.6: Upper partition between excavated utility room and crawlspace.





BASEMENT

PHOTO: DECEMBER 19, 2023

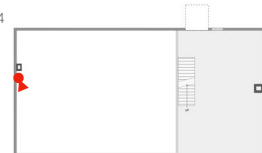
B-0.7: View into crawlspace under kitchen area; rigid foam panels block access under eastern half of the building.



BASEMENT

PHOTO: JUNE 7, 2024

B-0.8: View into crawlspace under the main store area, accessible through the trash shed (east), looking north. New concrete reinforcement visible along the east wall where the porch joins the building.

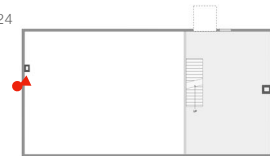




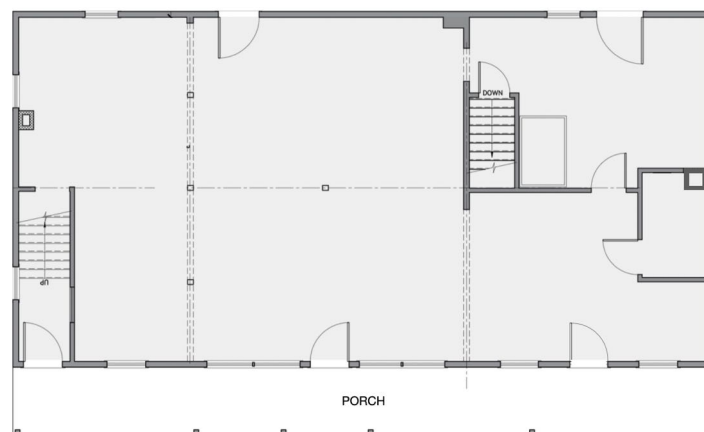
BASEMENT

PHOTO: JUNE 7, 2024

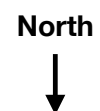
B-0.9: View into crawlspace under the main store area, looking southwest; conditions appear relatively dry and the flooring sound.



First Floor



ROUTE 123A

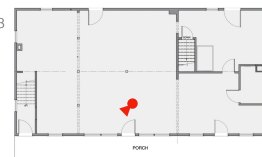




STORE

B-1.1: One of two large store display windows.

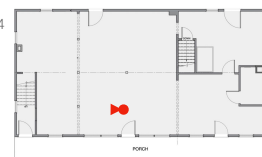
PHOTO: NOVEMBER 3, 2023



STORE

B-1.2: Shelving for dry goods, gifts, and souvenirs.

PHOTO: MARCH 28, 2024

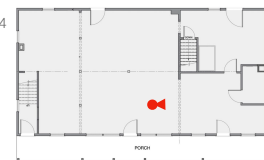




STORE

B-1.3: Refrigerated beverage cases.

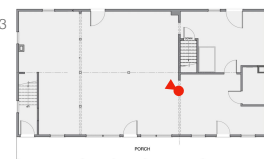
PHOTO: MARCH 28, 2024



STORE

B-1.4: Cash register with open kitchen prep and grill area behind.

PHOTO: NOVEMBER 3, 2023

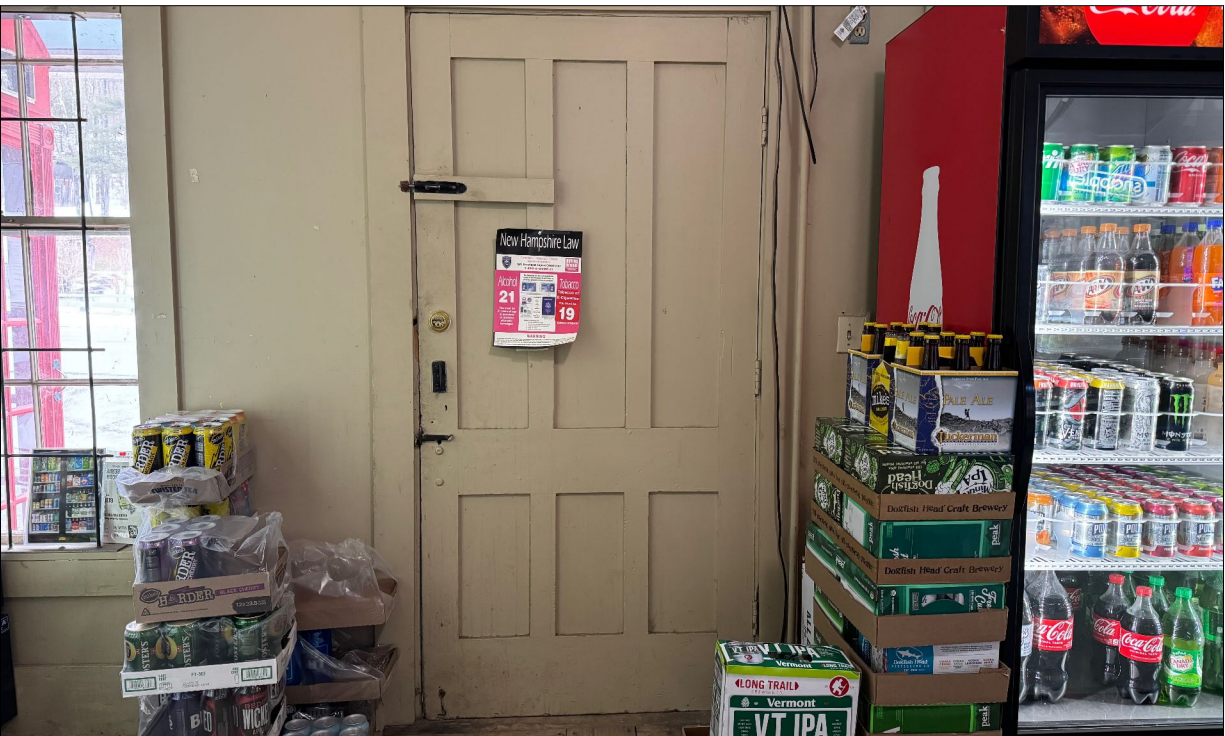




STORE

B-1.5: Counter seating, kitchen, and cashier area.

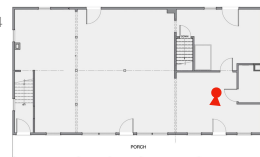
PHOTO: DECEMBER 19, 2023



STORE

B-1.6: Secondary/unused door into retail store.

PHOTO: MARCH 28, 2024





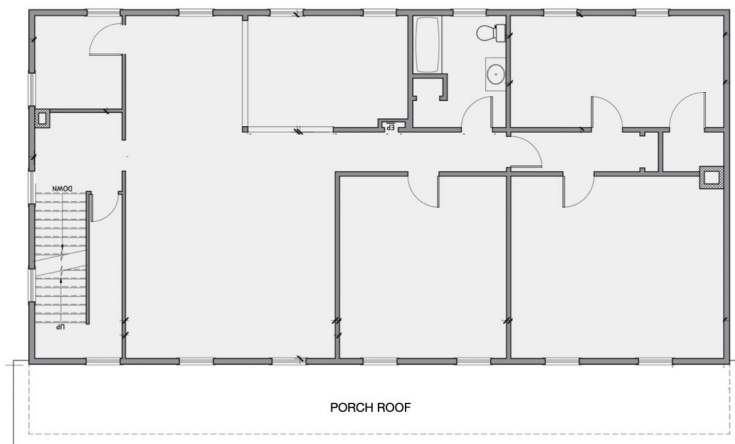
STORE

PHOTO: MARCH 28, 2024

B-1.7: Food storage shelves, walk-in freezer, and washing area. Floor tiles missing. Note variety of plumbing materials. Surface mounted electrical wiring for lighting.



Second Floor



ROUTE 123A

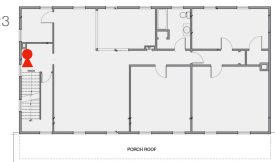
North
↓



STAIRS TO UNION HALL

PHOTO: NOVEMBER 3, 2023

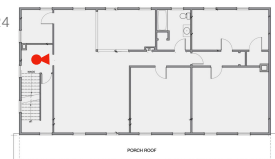
B-2.1: Original six panel door. Straight, steep flight of stairs from second floor.



APARTMENT

PHOTO: APRIL 18, 2024

B-2.2: Entrance to apartment residence.

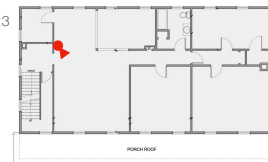




APARTMENT

B-2.3: Main living room area. Note ceiling repair.

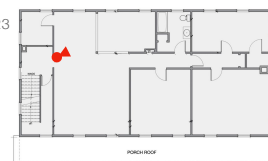
PHOTO: DECEMBER 19, 2023

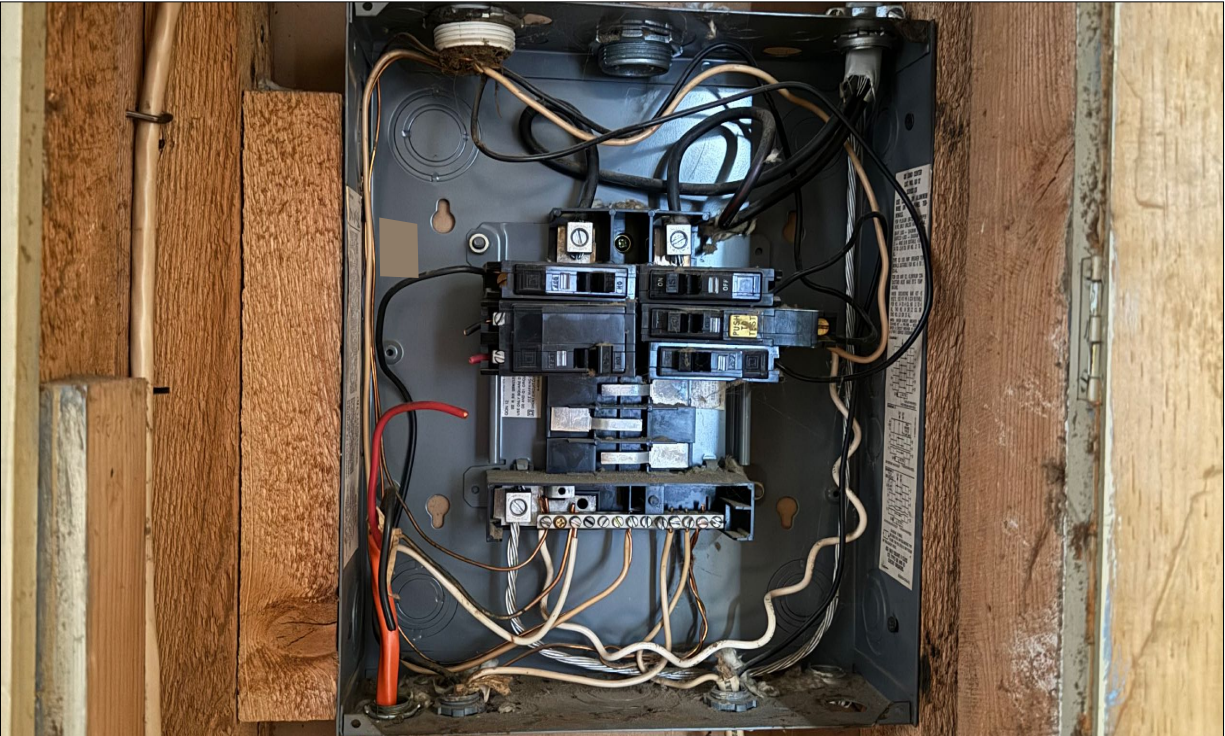


APARTMENT

B-2.4: Open kitchen area with decorative “beams.”

PHOTO: DECEMBER 19, 2023

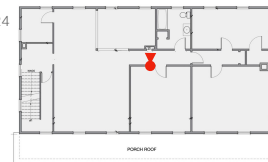




APARTMENT

PHOTO: APRIL 18, 2024

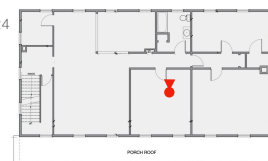
B-2.5: Sub-panel with exposed clipped wiring on large breaker; no box door.



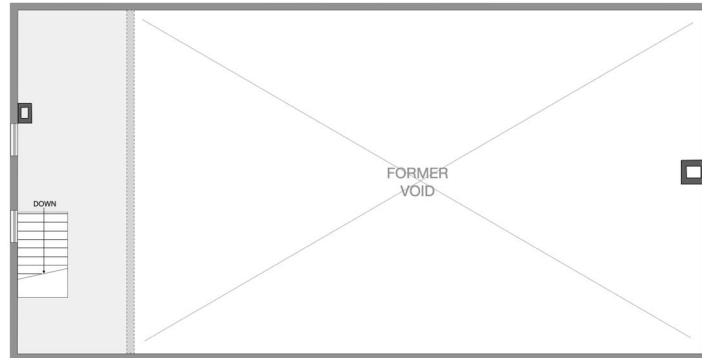
APARTMENT

PHOTO: APRIL 18, 2024

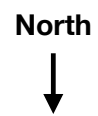
B-2.6: One of several missing or disconnected smoke detectors in the residential area.



Attic Level



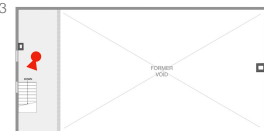
ROUTE 123A



STAIRS TO GALLERY

PHOTO: DECEMBER 19, 2023

B-3.1: Straight, steep stairs from the gallery, formerly overlooking the hall below.





ATTIC

PHOTO: DECEMBER 19, 2023

B-3.2: View towards west gable; sawn lath and one-coat plaster ceiling; vaulted apex. Note intermittent bracing/support for the new ceiling joists; this area was formerly an open void. A steel rod ties the north and south walls together near the mid-point of the structure.



ATTIC

PHOTO: NOVEMBER 3, 2023

B-3.3: Plaster and lath partially removed along this north section.

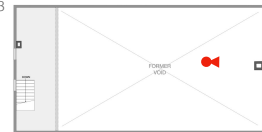




ATTIC

PHOTO: DECEMBER 19, 2023

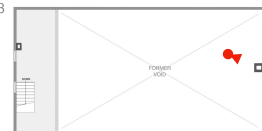
B-3.4: View of west gable with interior CMU chimney stack and evident water damage.



ATTIC

PHOTO: DECEMBER 19, 2023

B-3.5: View into chimney/brick transition and roof penetration.

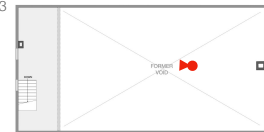




ATTIC

PHOTO: DECEMBER 19, 2023

B-3.6: View towards east gable with a pair of double-hung windows and older chimney stack; ductwork runs along right side.



SCOPE, CODE REVIEW,
&
ARCHITECTURAL PLANS

Village Store / Union Hall
S. Acworth, New Hampshire
February 2025

TABLE OF CONTENTS

SCOPE OF WORK.....	3
PHASE I BUDGET	5
CODE REVIEW	6
ARCHITECTURAL PLANS.....	12

Building Assessment Outline Scope of Work WITH ARCHITECT'S PRELIMINARY BUDGET ALLOWANCES		
DIVISION 01	GENERAL REQUIREMENTS	\$75,000
	Temporary services during construction. NFPA 241 Safeguards during construction.	
DIVISION 02	SITE WORK	\$145,000
	Regrade around building to direct surface run-off away from building, around to the south and towards the river. Consider new catch basin(s) to pipe stormwater back into river near bridge. Excavate for new addition foundation.	
DIVISION 03	CONCRETE	\$90,000
	New reinforced concrete frost wall with continuous footings and slab at new addition on the south of building, abutting existing building.	
DIVISION 04	MASONRY	\$32,000
	Repair areas of foundation as needed; create new access between new and existing crawlspace. Repair, re-point, re-flash existing chimneys. Stone repair at foundation.	
DIVISION 05	METALS	\$0
	(Not used at this time.)	
DIVISION 06	WOOD PLASTICS AND COMPOSITES	\$85,000
	Existing building: Miscellaneous rough and finish carpentry repairs. New addition: Rough carpentry - wood frame, floors, walls and roof sheathing, roof decking. Finish carpentry includes trim and stairs.	
DIVISION 07	THERMAL AND MOISTURE PROTECTION	\$80,000
	Bituminous waterproofing at new concrete walls; thermal insulation; weather barriers; roofing shingles; sealants; snow guards. Rigid foam panels between first floor joists.	
DIVISION 08	OPENINGS	\$18,000

	<p>Existing windows: Wood windows repair including weather-sealing at window jambs; new glazing compound at glazing; replace glazing as needed; new storm windows and trim.</p> <p>Exterior doors: Provide weather stripping at doors.</p> <p>New windows at addition.</p> <p>Interior stile and rail doors at apartments.</p>	
DIVISION 09	FINISHES	\$150,000
	<p>Maintenance repainting: New interior paint-surface prep all walls and ceilings; primer and two finish coats. New exterior paint and surface prep of existing wood clapboard sand all trim.</p> <p>Gypsum board at 2nd floor and new addition.</p> <p>Ceramic tile in new apartments.</p>	
DIVISION 10	SPECIALTIES	\$2,500
	<p>Toilet and bath accessories</p> <p>Fire extinguishers</p>	
DIVISION 21	FIRE SUPPRESSION	\$30,000
	<p>New NFPA 13D Residential fire suppression system for new 2nd floor apartments.</p> <p>Smoke detectors with audible notification at first floor.</p>	
DIVISION 22	PLUMBING	\$60,000
	<p>First floor: Replace bathroom fixtures; revise layout for ADA compliance.</p> <p>New plumbing services for new 2nd floor apartments – including full bath and kitchen in each unit.</p>	
DIVISION 23	HEATING VENTILATION AIR CONDITIONING	\$45,000
	<p>New boiler for domestic hot water and radiant heat under first floor.</p> <p>Separate controls for each zone - (3) occupied spaces.</p>	
DIVISION 24	ELECTRICAL	\$45,000
	<p>New electrical service panel to be located in new addition; sub-panels in each of (3) separate occupied spaces.</p> <p>Provide complete code-compliant fire alarm, smoke detectors, emergency lighting, exit signs as required throughout building.</p> <p>New wiring, devices, lighting for two 2nd floor apartments.</p> <p>1st floor to be re-wired to new panel. Provide new devices.</p>	
	PRELIMINARY BUDGET...	\$857,500

The following budget estimates pertain to the initial treatment recommendations which address the exterior envelope and improved accessibility (with surface floodwater diversion). *These estimates do not represent a formal quote for proposed work.*

917 ROUTE 12
WESTMORELAND, NH 03467



TELEPHONE: 603-357-0759
FAX: 603-357-9426

South Acworth Village Store

Treatment Recommendations- Initial Projects

- 1) Accessibility
 - a) Raise Porch floor, install impervious barrier, regrade parking lot and provide HC parking and ramp. \$41,270
 - b) Upgrade public restroom for ADA \$12,500
 - c) Modify section of service counter for ADA \$5,625
- 2) Building Envelope
 - a) Exterior painting- includes window repair, and \$6,500 L&M Allowance to replace deteriorated siding and trim. \$44,273
 - b) Replace asphalt roof \$30,000
 - c) Repair/re-point chimneys, 2 loc. \$22,500
 - d) Add storm window at east end stairs \$750
 - e) Repair, make wood sash operable \$12,750

d b architects LLC

D a n S. B a r t l e t t A I A

ACWORTH VILLAGE STORE
Historical Building Assessment
Mixed Use Building Preliminary Code Review

Jurisdiction: State of NH; Town of Acworth NH

Building Location: 122 NH Route 123A Acworth NH

Applicable Codes (including but not limited to):

New Hampshire Building Code
2019 NFPA 914 Code for Fire Protection of Historic Structures
NFPA 96 for commercial cooking equipment installation
2021 International Existing Building Code
2021 International Building Code
2021 International Residential Code
2021 International Plumbing Code
2021 International Mechanical Code
2018 International Energy Conservation Code
2020 NFPA 70 National Electric Code
2021 NFPA Life Safety Code
2017 ICC/ANSI A117.1 FHA/UFAS Accessible and Usable Buildings and Facilities

FEMA Flood Zone A; ASCE 24-14 Flood Design Class 3 (BFE +1'). Comply with IBC Section 1612. Per Section 1201.4 Flood Hazard Areas of the IEBC:

If a historic building will continue to be a historic building after the proposed work is completed, then the proposed work is not considered a substantial improvement.

Building Description:

This is an historic building project. This Code review is intended to provide general guidance for addressing issues that could come into play if the building undertakes work that would involve compliance with current codes. Proposed Work would likely fall under the IEBC Level 3 Alteration. There would not be a change of use because the Store would remain as is and the 2nd floor would remain residential (R-3 not exceeding two dwelling units).

This building is a mixed use with separated occupancies, non sprinklered except limited area NFPA 13R (residential) Sprinkler system to be provided in R-3 areas

Use and Occupancy Classification:

185 Winchester Street . Keene, NH . 03431 . p 603 352-0612
cell 603 762-1956 . dan@bartlett.net

First floor: Group M – Mercantile and Accessory Group A3 Assembly
Restaurant (< 10% of floor area).

Second floor: Residential Group R3 – Apartments (Two apartments max)

Type of Construction:

Type VB - Type V(000) per NFPA - IBC Table 601 0-hour fire resistance rating for building elements;

Fire separation distance (IBC Table 602): $10 < X < 30$ - 0-hour rating for Construction Type 5B, Use Group M or R.

Building Heights and Areas

Table 504.3 Allowable Building Height in feet:

R3	40'
M	40'

Table 504.4 Allowable Number of Stories:

R3	3
M	1

Table 506.2 Allowable Area Factor – SM

R3	UL SF
M	9,000 SF

PROJECT COMPLIES; No changes proposed.

Occupant Load

1st floor Group M - 1748 @ 60 gross SF per occupant = 30 Occupants
1ST FLOOR Group A3 -

2nd floor Group R 1748 @ 200 SF per occupant = 9 Occupants

Total Occupants: 39 Occupants

Mixed Use and Occupancy:

508.4 Separation of Occupancies:

Required separation of occupancies per Table 508.4:

Between Group M and Group R: (2) hour – non-sprinklered. Horizontal separation assembly per Section 711

Section 420 and 708 Fire Partitions:

Walls separating dwelling units in the same building shall be constructed as Fire Partitions in accordance with Section 708.

Floor between dwelling units and other occupancies shall be designed and constructed as Horizontal Assemblies in accordance with Section 711.

NOTE:

NFPA 914 has ways to deal with historic buildings – performance-based and prescriptive based. These methods allow a design professional to propose alternative equivalencies for review and approval by the State Fire Marshall's office. This in-depth process falls beyond the scope of this initial code review.

The main fire protection components being recommended at this time include:

- **NFPA 13R Residential sprinkler system throughout the residential areas only. Water supply to be located in (comparatively) small tanks in the proposed new addition. This is a smaller and less costly alternative to a fully sprinklered building.**
- **Fire rated, enclosed exterior staircase for main Residential access.**
- **Adding firecode gypsum board to ceiling of the store, pending historical appropriateness (see 'Horizontal Assemblies' below)**
- **Addressing fire protection of the few supporting columns, pending historical appropriateness.**

Section 711.2.3 Requires that the supporting construction shall be protected to afford the required protection of the horizontal assembly supported.

Fire Resistance Rated Construction Per IBC for New Construction

1. Horizontal Assembly
Location: 2nd floor framing
2. Exterior walls supporting horizontal assembly
(1) Hour; wood stud bearing wall with brick veneer
IBC Table 720.1(2) Item No. 16-1.3
3. Interior columns supporting horizontal assembly
Solid wood or steel columns within gypsum assembly to match exterior walls from basement floor to top of column.
(1) Hour – see IBC Section 704.2.
4. Exit enclosure stair way:
(1) Hour wood stud wall
UL listed assembly Design No. U305

5. Dwelling unit separation wall and 2nd floor corridor walls:
 (1)-hour wood stud wall. (30-minutes required for fire separation; STC 50 rating)
 UL listed assembly Design No. U305

Section 714 Penetrations

Penetrations through horizontal assemblies and fire-resistance-rated wall assemblies shall comply with Section 714.

Joints in or between fire-resistance-rated walls, floors or roof-ceiling assemblies shall be protected by an approved fire-resistance joint system in accordance with Section 715.

Section 718 Concealed Spaces:

Section 717.3 provides exception for firestopping and draftstopping in Group R buildings protected by sprinkler. However, consideration should be given to the possibility of adding fire blocking at the intersection of the 1st floor walls and 2nd floor joists.

Interior Finishes

IBC Table 803.9:

NON-SPRINKLED

Group M Sprinklered:

- | | |
|--|---------|
| • exit enclosures and exit passageways | Class A |
| • Corridors | Class B |
| • Rooms and enclosed spaces | Class C |

Group R3 Sprinklered

- | | |
|--|---------|
| • exit enclosures and exit passageways | Class C |
| • Corridors | Class C |
| • Rooms and enclosed spaces | Class C |

Class A Flame spread index 0-25; smoke-developed index 0-450

Class B Flame spread index 26-75; smoke-developed index 0-450

Class C Flame spread index 76-200; smoke-developed index 0-450

Means of Egress

Number of exits required Group M _____ 2

Exits provided: _____ 2

Dead-end corridor max _____ 20' (non sprinklered) complies

Accessibility

Scoping per IBC Chapter 11

Section 1104: Accessible Route is required from HCP parking into first floor of Mercantile space. See Site Plan for required number of parking spaces.

Section 1105: Accessible Entrance to Store is required; (1) is to be provided.

185 Winchester Street . Keene, NH . 03431 . p 603 352-0612

cell 603 762-1956 . dan@bartlett.net

Section 1109 Other Features and Facilities

- Toilet facilities are to be provided along the accessible route.
- Service counter shall be accessible (1109.11.3) See ANSI A117 for requirements. (Design to be provided others)

Section 1110 Signage – shall be provided as follows:

- Accessible parking spaces
- Accessible toilet rooms

Energy Efficiency – Per IEBC Section 907 Level 3 alterations are permitted without requiring the entire building to comply with the Energy Code, except for areas of new construction (addition).

It is the intent of the Historical Society to improve this building's energy efficiency to the greatest extent feasible.

Acworth Village Store Energy Compliance Notes

The primary Building Code document governing energy compliance in this State is the International Energy Conservation Code. Here is the provision in that Code that most applies to this Project:

C501.6 Historic Buildings. Provisions of this code relating to the construction, *repair, alteration*, restoration and movement of structures, and *change of occupancy* shall not be mandatory for *historic buildings* provided that a report has been submitted to the code official and signed by a *registered design professional* or a representative of the State Preservation Office or the historic preservation authority having jurisdiction, demonstrating that compliance with that provision would threaten, degrade or destroy the historic form fabric or function of the *building*.

(*Italicized words are terms defined in the Code.)

This paragraph appears to relieve or lessen the burden of compliance from many historic projects with full compliance with the energy code. However, careful scrutiny must be given to the wording. A report is required to be prepared that makes a valid argument for why certain energy retrofits might not be acceptable. That report must make thoughtful judgements regarding a number of variables while still providing meaningful compliance measures.

It is in everyone's interest to make all buildings more energy efficient and, more specifically, to minimize the use of non-renewable energy sources. It is the intent of this project to integrate energy efficiency measures as appropriate.

Implementing the following should be considered, at a minimum:

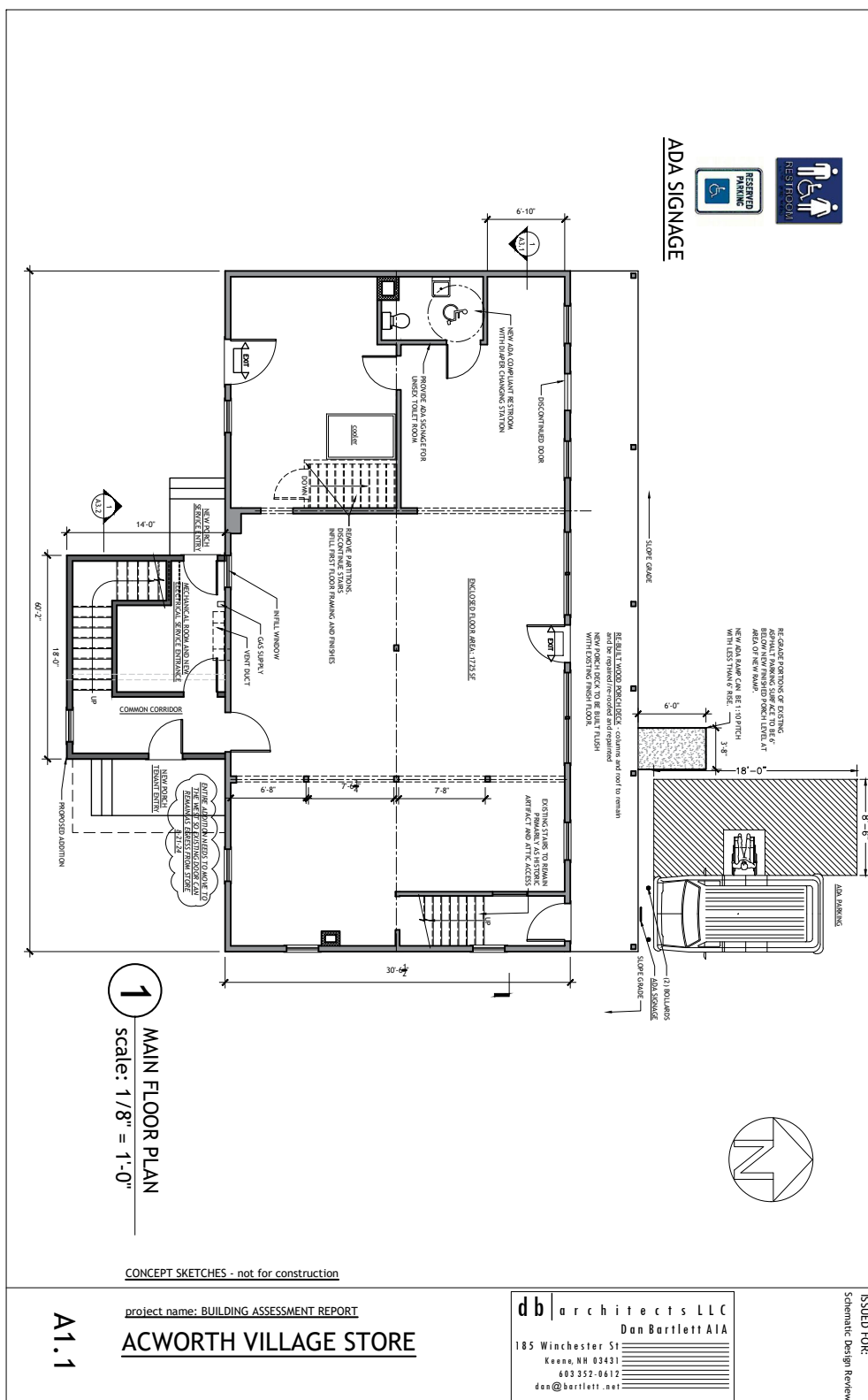
- Energy audit to evaluate the current energy use of the building and identify deficiencies in the building envelope or mechanical systems.

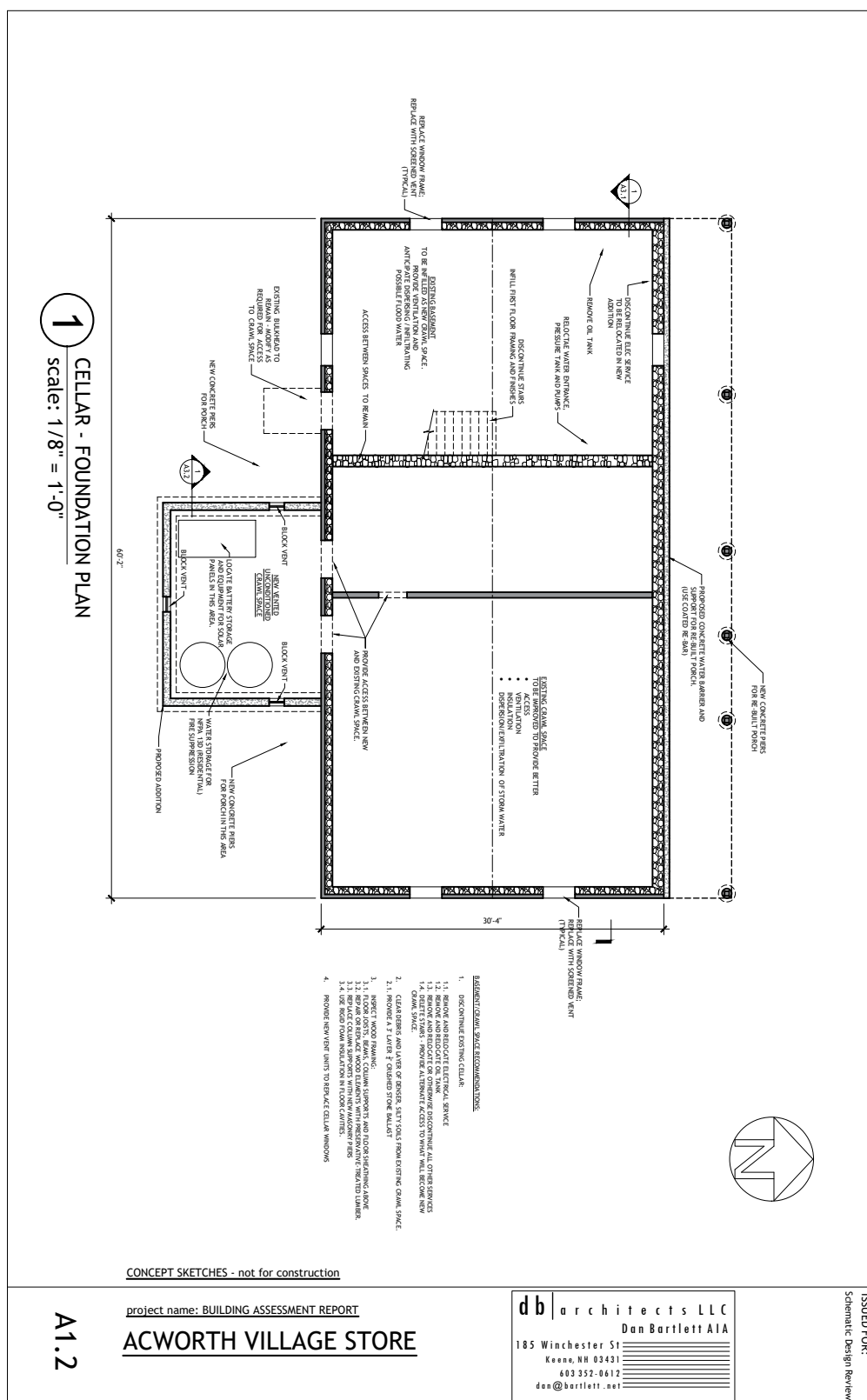
'Document the current energy use patterns in the building to establish an energy use history. This initial step includes obtaining the billing history from the local utility company over a one- or two-year period, as well as

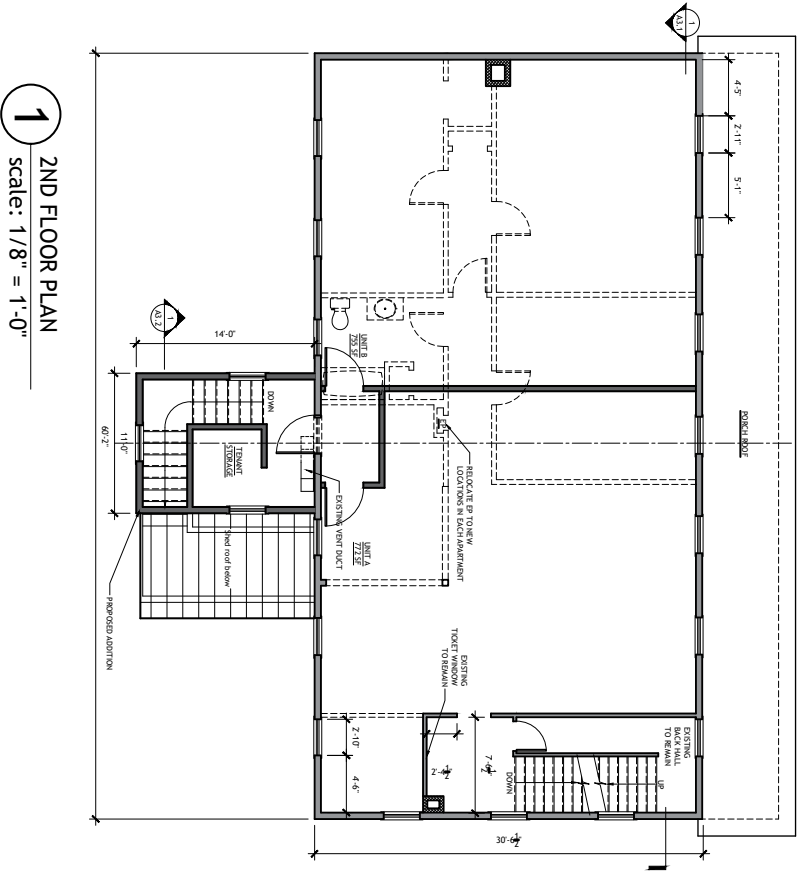
*documenting the number of building occupants, how the building is used, and the type of fuel consumed. The location of any existing insulation is recorded and the approximate R-value of various components of the building envelope including walls, ceilings, floors, doors, windows and skylights is calculated. The building envelope is inspected to identify areas of air infiltration and air loss. The type and age of mechanical systems and major appliances are also recorded.’**

- Photovoltaic panels.
- Energy retrofit for windows and doors, or upgrade storm windows and weather-stripping.
- Attic insulation
- Floor insulation and moisture protection above crawl space
- Seal air-leakage points at wall penetrations
- LED lighting; occupant sensors; efficient appliances in new apartments.

*From the National Park Service Preservation Brief







1 2ND FLOOR PLAN
scale: 1/8" = 1'-0"

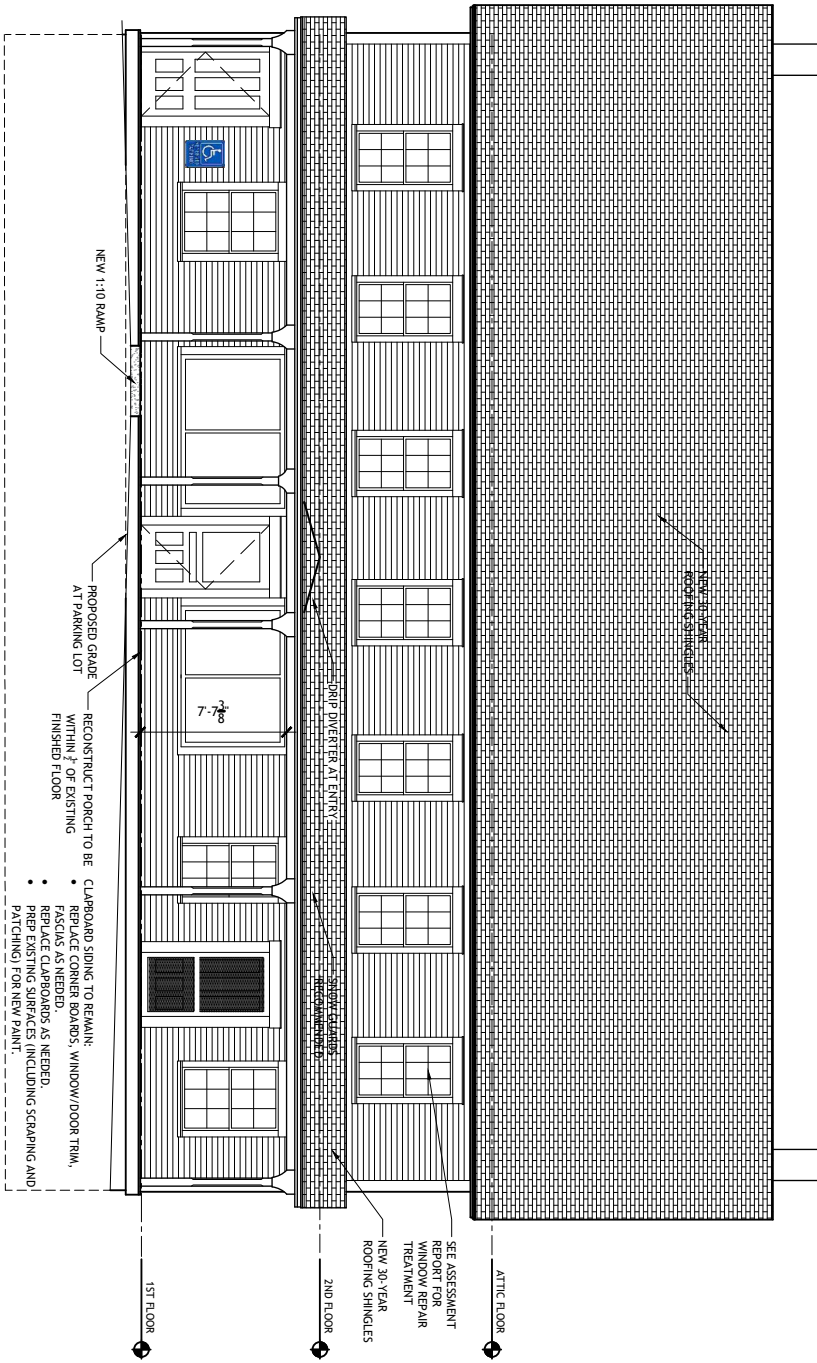
CONCEPT SKETCHES - not for construction

project name: BUILDING ASSESSMENT REPORT
ACWORTH VILLAGE STORE

A1.3

db architects LLC
Dan Bartlett AIA
185 Winchester St
Keene, NH 03401
603 352-0612
dan@bartlett.net

ISSUED FOR:
Schematic Design Review



1 NORTH ELEVATION - PROPOSED ADDITION
scale: 3/16" = 1'-0"

CONCEPT SKETCHES - not for construction

project name: BUILDING ASSESSMENT REPORT
ACWORTH VILLAGE STORE

A2.1

db | architects LLC
Dan Bartlett AIA

185 Winchester St
Keene, NH 03431
603.352.0612
dan@bartlett.net

ISSUED FOR:
Schematic Design Review

