Alice Ward Library
Carriage House Rehabilitation

27 Park St. | Canaan, VT 05903

ARCHITECT

R. Edwards & Co.
ARCHITECTS + PRESERVATIONISTS
CONTACT: Ryan Edwards, AIA
52 State St., 2nd Fl.
Montpelier, VT 05602
(802) 232-2628
redwards@redwardsandcompany.com

OWNER

Alice M. Ward Memorial Library (Town of Canaan)

CONTACT: Nancy Petro (Alice M. Ward Library Board of Trustees)
Georgiana Carr (Alice M. Ward Library Board of Trustees)
27 Park St.
Canaan, VT 05903
(802) 266-7135
alice.ward.library@gmail.com

STRUCTURAL ENGINEER

Engineering Ventures, PC

CONTACT: Bob Neeld, P.E.
Marc Nummelin, E.I.T.
208 Flynn Ave., Suite 2A
Burlington, VT 05401
(802) 863-6225
bobn@engineeringventures.com
marcn@engineeringventures.com

DEVELOPMENT CONSULTANT

North Hill Solutions, Ltd. Co.

CONTACT: Peder Rude
1623 Potter Hill Rd.
Readsboro, VT 05350
(802) 829-2900
hello@northhill.solutions

MEP ENGINEER

DuBois & King, Inc.

CONTACT: Joe Coutermarsh, P.E. (Mechanical, Plumbing)
Shawn Proulx, P.E. (Electrical)
10 Corporate Dr., Suite 210
Bedford, NH 03110
(603) 637-1043
jcoutermarsh@dubois-king.com
sproulx@dubois-king.com

HISTORIC PRESERVATION CONSULTANT

106 Associates

CONTACT: Scott Newman
11 Ward St.
Burlington, VT 05401
(802) 777-1572
scottnewman@106associates.com

BID SET
01.20.26

GENERAL
A.000 COVER SHEET
A.001 GENERAL INFORMATION
A.002 LIFE SAFETY PLANS

STRUCTURAL
S-2 STRUCTURAL : BASIS OF DESIGN
S-3 STRUCTURAL : SCHEDULES + TABLES
S-4 STRUCTURAL : FOUNDATION PLAN + 1ST FLOOR FRAMING PLAN
S-5 STRUCTURAL : 2ND FLOOR FRAMING PLAN + ROOF FRAMING COLLAR TIE PLAN
S-6 STRUCTURAL : ROOF FRAMING PLAN + CUPOLA FRAMING PLAN
S-7 STRUCTURAL : DETAILS
S-8 STRUCTURAL : STAIR AND ELEVATOR DETAILS

ARCHITECTURAL
AD.101 DEMOLITION PLANS : BASEMENT + 1ST FLOOR
AD.102 DEMOLITION PLANS : 2ND FLOOR
A.100 CONSTRUCTION PLANS : FOUNDATION + 1ST FLOOR
A.101 CONSTRUCTION PLANS : 2ND FLOOR
A.110 INTERIOR RENDERINGS
A.201 EXTERIOR ELEVATIONS
A.202 EXTERIOR ELEVATIONS
A.210 EXTERIOR RENDERINGS
A.601 SCHEDULES
A.602 SCHEDULES

PLUMBING *[DATED 09.30.25]*
P0.1 PLUMBING LEGENDS + NOTES
P1.1 BASEMENT PLAN – PLUMBING
P1.2 1ST + 2ND FLOOR PLAN – PLUMBING
P5.1 PLUMBING DETAILS

MECHANICAL *[DATED 09.30.25]*
M0.1 MECHANICAL LEGEND AND NOTES
M1.1 BASEMENT PLAN – DUCTWORK
M1.2 1ST FLOOR PLAN – DUCTWORK
M1.3 2ND FLOOR PLAN – DUCTWORK
M5.1 MECHANICAL DETAILS
M6.1 MECHANICAL SCHEDULES
M6.2 MECHANICAL SPECIFICATIONS
M6.3 MECHANICAL SPECIFICATIONS

ELECTRICAL *[DATED 09.30.25]*
E0.1 ELECTRICAL LEGENDS + NOTES
E1.1 BASEMENT FLOOR PLAN – LIGHTING
E1.2 FIRST FLOOR PLAN – LIGHTING
E1.3 SECOND FLOOR PLAN – LIGHTING
E1.4 BASEMENT FLOOR PLAN – POWER
E1.5 FIRST FLOOR PLAN – POWER
E1.6 SECOND FLOOR PLAN – POWER
E5.1 ELECTRICAL DETAILS
E5.2 ELECTRICAL DETAILS
E6.1 ELECTRICAL SCHEDULES

R. Edwards & Co.
ARCHITECTS + PRESERVATIONISTS
52 State St., 2nd Floor | Montpelier, VT 05602
(802) 232-2628 | info@redwardsandcompany.com
www.redwardsandcompany.com

SEAL

LICENSED ARCHITECT · RYAN NEAL EDWARDS · NO. 003.013.AGSR · STATE OF VERMONT

PROJECT
Alice Ward Library Carriage House Rehabilitation

27 Park St.
Canaan, VT 05903

PROJECT NUMBER
2023.20

PROJECT TEAM

STRUCTURAL ENGINEER
Engineering Ventures, PC
208 Flynn Ave., Suite 2A
Burlington, VT 05401
(802) 863-7225

MEP ENGINEER
DuBois & King, Inc.
10 Corporate Dr., Suite 210
Bedford, NH 03110
(603) 637-1043

RELEASE
BID SET

RELEASE DATE
01.20.26

RELEASE + REVISION LOG

MARK	DESCRIPTION	DATE
	BID SET	01.20.26

PROJECT NORTH

DRAWING NAME
COVER SHEET

DRAWN	RE	DATE	01.20.26
CHECKED		SCALE	

DRAWING NUMBER
A.000

ARCHITECTURAL DRAWING SYMBOLS

DIMENSION; DIMENSIONS 1/2" LESS THAN OR GREATER THAN THE NOTED DIMENSION SHOULD BE BROUGHT TO THE ATTENTION OF THE ARCHITECT

APPROXIMATE DIMENSION; DIMENSIONS LESS THAN OR GREATER THAN 1" OF THE NOTED DIMENSION SHOULD BE BROUGHT TO THE ATTENTION OF THE ARCHITECT

CLEAR DIMENSION; THE FINISHED CLEAR DIMENSION SHALL NOT BE LESS THAN THE NOTED DIMENSION

CENTERLINE DIMENSION; WITNESS LINES MARKED 'CL' INDICATE A DIMENSION TO THE CENTER OF THE MARKED OBJECT (E.G. PARTITION, COLUMN, ET AL)

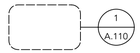
COLUMN GRID; GRIDLINES DRAWN THROUGH CENTERLINE OF STRUCTURAL FRAME, UNLESS OTHERWISE NOTED

ROOM NAME + NUMBER; THE FIRST DIGIT OF THE ROOM NUMBER CORRESPONDS TO FLOOR LEVEL: 1=1ST FLOOR, 2=2ND FLOOR, ETC.

BREAK LINE

KEYNOTE TAG

EXTERIOR ELEVATION MARKER



DETAIL, ENLARGED PLAN, OR ENLARGED SECTION CALLOUT

INTERIOR ELEVATION MARKER

BUILDING OR ENLARGED SECTION MARKER

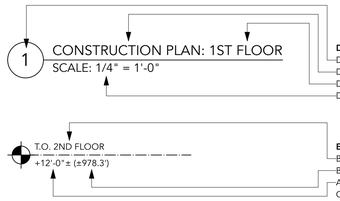
REVISION CLOUD AND MARKER; REFER TO TITLE BLOCK FOR REVISION MARKER DATE

WALL TAG

DOOR TAG

WINDOW TAG

EQUIPMENT TAG



GENERAL BID NOTES

1. THE CONTRACTOR SHALL VISIT THE SITE PRIOR TO BIDDING AND CAREFULLY EXAMINE THE ENTIRE SET OF DRAWINGS AND SPECIFICATIONS SO AS TO BE INFORMED OF ALL CONDITIONS AFFECTING THE EXECUTION OF THE WORK.
2. BY SUBMITTING A BID, THE CONTRACTOR AGREES AND WARRANTS THAT THEY HAVE EXAMINED THE EXISTING CONDITIONS, DRAWINGS, AND ALL SPECIFIED CONSTRUCTION, MATERIALS, FINISHES, AND PRODUCTS, AND HAS FOUND THEM WHOLLY ADEQUATE FOR COMPLETE EXECUTION OF THE WORK.
3. BY SUBMITTING A BID, THE CONTRACTOR ACKNOWLEDGES THAT THEY UNDERSTAND THE FULL SCOPE OF WORK AS IT PERTAINS TO THE DRAWINGS AND ALL SPECIFIED CONSTRUCTION, MATERIALS, FINISHES, AND PRODUCTS; NO ADDITIONAL CHARGES WILL BE ALLOWED DUE TO THE MISUNDERSTANDING OF THE DRAWINGS AND SPECIFICATIONS BY THE BIDDER.
4. THE CONTRACTOR SHALL REVIEW AND BECOME FAMILIAR WITH "THE SECRETARY OF THE INTERIOR'S STANDARDS FOR REHABILITATION" AND TO PROVIDE FOR ANY NECESSARY MEANS AND METHODS CONFORMANCE TO THESE STANDARDS IN THE EXECUTION OF THE WORK AS OUTLINED IN THE DRAWINGS AND SPECIFIED CONSTRUCTION, MATERIALS, FINISHES, AND PRODUCTS.

QUALITY REQUIREMENTS

QUALITY MONITORING: MONITOR QUALITY CONTROL OVER SUPPLIERS, MANUFACTURERS, PRODUCTS, SERVICES, SITE CONDITIONS, AND WORKMANSHIP, TO PRODUCE WORK OF SPECIFIED QUALITY. PERFORM QUALITY CONTROL PROCEDURES AND INSPECTIONS DURING INSTALLATION.

STANDARDS: COMPLY WITH SPECIFIED STANDARDS AS MINIMUM QUALITY FOR THE WORK EXCEPT WHERE MORE STRINGENT TOLERANCES, CODES, OR SPECIFIED REQUIREMENTS INDICATE HIGHER STANDARDS OR MORE PRECISE WORKMANSHIP.

TOLERANCES: MONITOR FABRICATION AND INSTALLATION TOLERANCE CONTROL OF PRODUCTS TO PRODUCE ACCEPTABLE WORK. DO NOT PERMIT TOLERANCES TO ACCUMULATE. COMPLY WITH MANUFACTURERS' TOLERANCES.

REFERENCE STANDARDS: FOR PRODUCTS OR WORKMANSHIP SPECIFIED BY ASSOCIATION, TRADE, OR OTHER CONSENSUS STANDARDS, COMPLY WITH REQUIREMENTS OF THE STANDARD, EXCEPT WHEN MORE RIGID REQUIREMENTS ARE SPECIFIED OR ARE REQUIRED BY APPLICABLE CODES.

APPLICABLE CODES

VERMONT FIRE AND BUILDING SAFETY CODE (2025)
–NFPA 101, LIFE SAFETY CODE (2021) (Amended)
–NFPA 1, FIRE CODE (2021) (Amended)
–IEBC, INTERNATIONAL EXISTING BUILDING CODE (2021) (Structural Requirements Only)

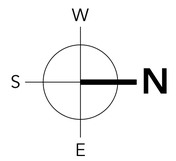
VERMONT ELECTRICAL SAFETY RULES (2025)
–NFPA 70, NATIONAL ELECTRICAL CODE (2023) (Amended)

VERMONT PLUMBING RULES (2025)
–IPC, INTERNATIONAL PLUMBING CODE (2024) (Amended)

VERMONT ACCESS RULES (2012)
–ADA STANDARDS FOR ACCESSIBLE DESIGN (2010) (Amended)

VERMONT COMMERCIAL BUILDING ENERGY STANDARDS (2024)

PROJECT NORTH



PROJECT NORTH IS AS INDICATED FOR ALL PLANS, UNLESS OTHERWISE NOTED

GENERAL NOTES

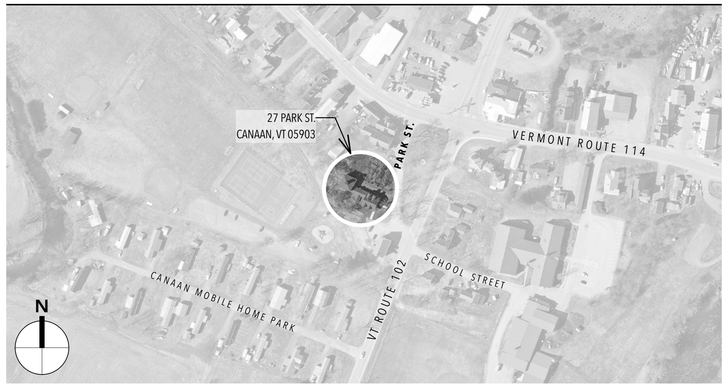
1. THESE CONTRACT DOCUMENTS HAVE BEEN DEVELOPED BASED ON FIELD OBSERVATIONS BY THE ARCHITECT AND THEIR CONSULTANTS IN A MANNER CONSISTENT WITH THE LEVEL OF CARE AND SKILL ORDINARILY EXERCISED BY MEMBERS OF THEIR RESPECTIVE PROFESSIONS PRACTICING IN THE SAME LOCALITY UNDER SIMILAR CONDITIONS.
2. THE CONTRACTOR SHALL FURNISH ALL LABOR, MATERIALS, EQUIPMENT, AND TOOLS NECESSARY FOR PROPER EXECUTION OF THE WORK; THE CONTRACTOR SHALL, UNLESS OTHERWISE PROVIDED FOR IN THE OWNER/CONTRACTOR AGREEMENT, SECURE AND PAY FOR THE REQUIRED PERMIT FEE(S), LICENSES, INSPECTIONS, AND ANY REQUISITE DESIGN/BUILD ENGINEERING NECESSARY FOR THE PROPER EXECUTION OF THE WORK.
3. IT IS THE RESPONSIBILITY OF THE CONTRACTOR TO CHECK AND VERIFY ALL DIMENSIONS AND EXISTING CONDITIONS; ANY DISCREPANCIES SHALL BE REPORTED TO THE ARCHITECT PRIOR TO PROCEEDING WITH THE WORK; ANY WORK STARTED BEFORE CONSULTATION AND ACCEPTANCE BY THE ARCHITECT SHALL BE THE SOLE RESPONSIBILITY OF THE CONTRACTOR AND SHALL BE SUBJECT TO CORRECTIONS BY THEM WITHOUT ADDITIONAL COMPENSATION.
4. ALL WORK SHALL CONFORM TO ALL APPLICABLE LOCAL, STATE, AND FEDERAL LAWS, BUILDING CODES, HEALTH CODES, FIRE DEPARTMENT REGULATIONS, NFPA AND UTILITY CODES, AND OSHA CODES IN FORCE; WHERE WORK IS SPECIFIED THAT DOES NOT CONFORM TO ALL APPLICABLE REGULATIONS, IT SHALL BE REPORTED TO THE ARCHITECT PRIOR TO PROCEEDING WITH THE WORK; ANY WORK STARTED BEFORE CONSULTATION AND APPROPRIATE REMEDY BY THE ARCHITECT SHALL BE THE SOLE RESPONSIBILITY OF THE CONTRACTOR AND SHALL BE SUBJECT TO CORRECTIONS BY THEM WITHOUT ADDITIONAL COMPENSATION.
5. DAMAGE CAUSED BY THE EXECUTION OF THE WORK AS DEFINED BY THESE CONTRACT DOCUMENTS TO THE EXISTING STRUCTURE NOT DRAWN OR SPECIFIED FOR DEMOLITION SUCH AS PIPES, DUCTS, WINDOWS, WALLS, ROOFING, ETC. SHALL BE REPAIRED TO ORIGINAL CONDITION OR REPLACED BY THE CONTRACTOR AT NO ADDITIONAL CHARGE TO THE OWNER.
6. THE CONTRACTOR SHALL BE HELD RESPONSIBLE FOR THE PROPER INSTALLATION AND COMPLETION OF THE WORK WITH APPROVED MATERIALS.
7. ALL WORK PERFORMED SHALL, AT A MINIMUM, BE COMPLETED IN A WORKMANLIKE MANNER CONSISTENT WITH THE LEVEL OF CARE AND SKILL ORDINARILY EXERCISED BY CONTRACTORS, BUILDERS, AND CRAFTSMEN PRACTICING IN THE SAME LOCALITY UNDER SIMILAR CONDITIONS.
8. THE CONTRACTOR SHALL PERFORM ALL REMOVAL WORK AS SHOWN ON THE DRAWINGS AND AS REQUIRED TO PERFORM THE WORK; THE CONTRACTOR SHALL REMOVE AND DISPOSE OF ALL DEBRIS IN ACCORDANCE WITH ALL APPLICABLE LAWS AND REGULATIONS
9. DRAWINGS SHALL NOT BE SCALED; USE DIMENSIONS ONLY; ALL DIMENSIONS AND CONDITIONS SHOWN AND ASSUMED ON THE DRAWINGS MUST BE VERIFIED AT THE SITE BY THE CONTRACTOR PRIOR TO ORDERING ANY MATERIALS OR EXECUTING ANY WORK; ANY DISCREPANCIES OR ERRORS IN THE PLANS, NOTES, SPECIFICATIONS, AND/OR DETAILS SHALL BE REPORTED TO THE ARCHITECT AT ONCE; NO CHANGE IN PLANS, DIMENSIONS, OR DETAILS IS PERMISSIBLE WITHOUT THE WRITTEN APPROVAL OF THE ARCHITECT.
10. THE CONTRACTOR SHALL RELOCATE/MODIFY AND PATCH ANY EXISTING ITEMS INTERFERING WITH THE INSTALLATION OF NEW WORK WHETHER SHOWN OR NOT ON THESE DRAWINGS.
11. DUE TO THE AGE OF THE BUILDING, ALL EXISTING PAINTED SURFACES SHALL BE CONSIDERED TO HAVE LEAD BASED PAINT UNLESS OTHERWISE TESTED; ALL WORK SHALL BE DONE IN STRICT ACCORDANCE WITH FEDERAL AND STATE WORKER SAFETY AND ENVIRONMENTAL REGULATIONS.
12. ANY EXISTING WORK DAMAGED DUE TO THE FIXING/REPLACEMENT AND OTHER RELATED WORK SHALL BE PATCHED, REPAIRED, REFINISHED, ETC. BY THE CONTRACTOR TO MATCH EXISTING FINISHES.
13. THE CONTRACTOR SHALL MAINTAIN FREE AND UNOBSTRUCTED ACCESS FROM ALL FLOORS AND ADJACENT SPACES INTO THE PATH OF EMERGENCY EGRESS TRAVEL AT ALL TIMES.
14. THE CONTRACTOR SHALL PROVIDE ALL NECESSARY TEMPORARY GUARDS, RAILS, BARRICADES, FENCES, CATCH PLATFORMS, DECKING, NIGHT LIGHTING, ETC. AS REQUIRED BY CODE AND AS FURTHER REQUIRED TO PROVIDE ADEQUATE PROTECTION TO ENSURE THE SAFETY OF ALL NON-PROFESSIONAL SITE VISITORS DURING THE COURSE OF THE WORK; THE BUILDING WILL NOT BE OCCUPIED OR OPEN TO THE PUBLIC FOR THIS PROJECT.
15. THE CONTRACTOR SHALL KEEP THE WORK SITE FREE FROM DEBRIS AND ACCUMULATED REFUSE, AND SHALL HAVE SOLE RESPONSIBILITY FOR PROTECTING ALL DANGEROUS AREAS FROM ENTRY BY UNAUTHORIZED PARTIES; THE SITE SHALL BE LEFT IN BROOM CLEAN CONDITION AT THE END OF EACH WORKING DAY.
16. ALL EXISTING TREES AND SHRUBS SHALL BE PROTECTED DURING CONSTRUCTION.
17. MINOR DETAILS NOT USUALLY SHOWN OR SPECIFIED, BUT NECESSARY FOR PROPER AND ACCEPTABLE CONSTRUCTION, INSTALLATION, OR OPERATION OF ANY PART OF THE WORK AS DETERMINED BY THE ARCHITECT OR THEIR CONSULTANTS, SHALL BE INCLUDED IN THE WORK IN THE SAME MANNER AS IF HEREIN SPECIFIED OR INDICATED.
18. AT THE COMPLETION OF THE PROJECT THE CONTRACTOR SHALL PROVIDE A FULL CLEANING OF THE INTERIOR AND EXTERIOR OF THE BUILDING, INCLUDING, BUT NOT LIMITED TO: ALL FLOORING, MILLWORK, WINDOWS AND DOORS, PLUMBING FIXTURES, AND LIGHTING FIXTURES.

SUBMITTAL SCHEDULE

ITEM	PRODUCT DATA	SHOP DRAWINGS	SAMPLES[1]	OTHER/NOTES
METAL FABRICATIONS		X		
MILLWORK	X*	X		*PROVIDE PRODUCT DATA FOR HARDWARE
DOORS	X	X		
DOOR HARDWARE	X			
WINDOWS	X	X		
TILE	X		X	
WOOD FLOORING			X	
PAINTS / STAINS / CLEAR FINISHES	X		X	
SPECIALTIES / TOILET ACCESSORIES	X			
PLUMBING FIXTURES + EQUIPMENT	X			
HVAC EQUIPMENT	X			
LIGHTING FIXTURES + EQUIPMENT	X			

1. SAMPLES PROVIDED SHOULD BE OF A SIZE SUITABLE FOR OWNER APPROVAL (I.E. CHAINRING SAMPLES WILL NOT BE ACCEPTED)
2. SEE SPECIFICATIONS (A.010) FOR OTHER SPECIFIC DIVISION SUBMITTAL REQUIREMENTS

PROJECT LOCATION



R. Edwards & Co.
ARCHITECTS + PRESERVATIONISTS
52 State St., 2nd Floor | Montpelier, VT 05602
(802) 232-2628 | info@redwardsandcompany.com
www.redwardsandcompany.com

SEAL

PROJECT

Alice Ward Library Carriage House Rehabilitation

27 Park St.
Canaan, VT 05903

PROJECT NUMBER

2023.20

PROJECT TEAM

STRUCTURAL ENGINEER
Engineering Ventures, PC
208 Flynn Ave., Suite 2A
Burlington, VT 05401
(802) 863-7225

MEP ENGINEER
DuBois & King, Inc.
10 Corporate Dr., Suite 210
Bedford, NH 03110
(603) 637-1043

RELEASE

BID SET

RELEASE DATE

01.20.26

RELEASE + REVISION LOG

MARK	DESCRIPTION	DATE
	BID SET	01.20.26

PROJECT NORTH

DRAWING NAME

GENERAL INFORMATION

DRAWN	RE	DATE	01.20.26
CHECKED		SCALE	

DRAWING NUMBER

A.001

LIFE SAFETY PLAN KEY

EXIT — EXIT ACCESS OR EXIT DISCHARGE

MEANS OF EGRESS PATH

EGRESS CAPACITY - LEVEL COMPONENTS (DOORS)

34" — CLEAR WIDTH (IN.)*
170 — CALCULATED EGRESS CAPACITY (CLEAR WIDTH (IN.) / 0.2 IN.)

EGRESS CAPACITY - STAIRWAYS

42" — CLEAR WIDTH (IN.)*
140 — CALCULATED EGRESS CAPACITY (CLEAR WIDTH (IN.) / 0.3 IN.)

CLEAR WIDTH:
DOORS (NEW): THE MEASUREMENT BETWEEN THE FACE OF THE OPEN DOOR LEAF OPEN 90 DEGREES AND THE STOP OF THE FRAME

DOORS (EXISTING): THE MEASUREMENT BETWEEN THE FACE OF THE DOOR LEAF IN THE FULLY OPEN POSITION AND THE STOP OF THE FRAME

STAIRS: THE WIDTH CLEAR OF ALL OBSTRUCTIONS ALONG THE STAIR EXCEPT PROJECTIONS NOT MORE THAN 4-1/2" AT OR BELOW HANDRAIL HEIGHT ON EACH SIDE

RATED ENCLOSURES

1 HOUR RATED ENCLOSURE
ALL DOORS WITHIN RATED PARTITIONS FORMING A RATED ENCLOSURE SHALL BE 1-HOUR (60-MIN.) RATED PER NFPA 101, TABLE 8.3.3.2.2

BUILDING OCCUPANCY SUMMARY

BASEMENT MAX. OCCUPANCY	1 PERSONS
1ST FLOOR MAX. OCCUPANCY	14 PERSONS
2ND FLOOR MAX. OCCUPANCY	25 PERSONS

TOTAL BUILDING MAX. OCCUPANCY 40 PERSONS

2ND FLOOR OCCUPANCY SUMMARY

OCCUPANCY TYPE	AREA + OCCUPANCY LOAD
ASSEMBLY – *LIBRARY READING ROOM*	AREA: **333 SF** (NET) CALCULATED MAX. OCCUPANCY: **7** (333 SF / 50)
ASSEMBLY – *LESS CONCENTRATED USE, WITHOUT FIXED SEATING*	AREA: **266 SF** (NET) CALCULATED MAX. OCCUPANCY: **18** (266 SF / 15)

2ND FLOOR TOTAL CALCULATED MAX. OCCUPANCY: 25 PERSONS

1ST FLOOR OCCUPANCY SUMMARY

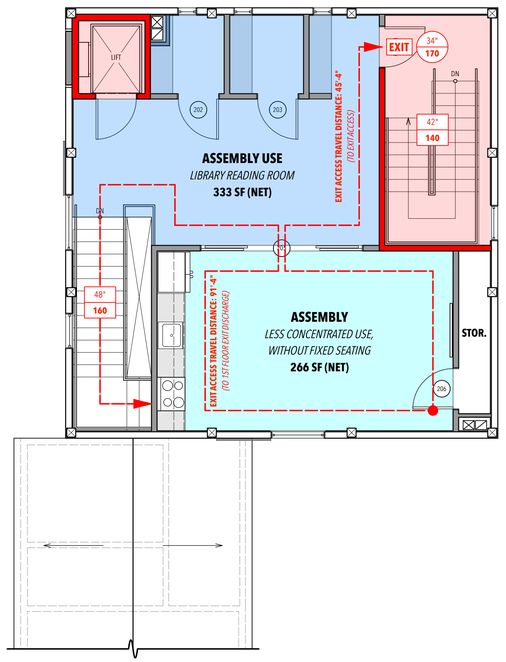
OCCUPANCY TYPE	AREA + OCCUPANCY LOAD
ASSEMBLY – *LIBRARY READING ROOM*	AREA: **687 SF** (NET) CALCULATED MAX. OCCUPANCY: **14** (687 SF / 50)

1ST FLOOR TOTAL CALCULATED MAX. OCCUPANCY: 14 PERSONS

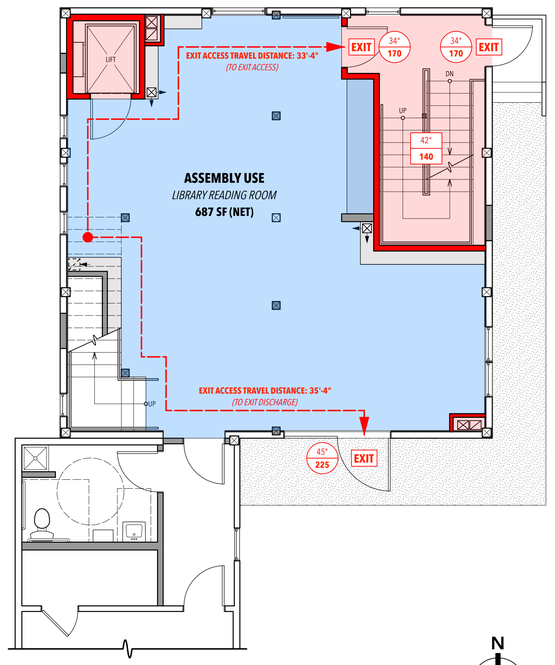
BASEMENT OCCUPANCY SUMMARY

OCCUPANCY TYPE	AREA + OCCUPANCY LOAD
STORAGE	AREA: **856 SF** (GROSS) CALCULATED MAX. OCCUPANCY: **1** (856 SF / 500)

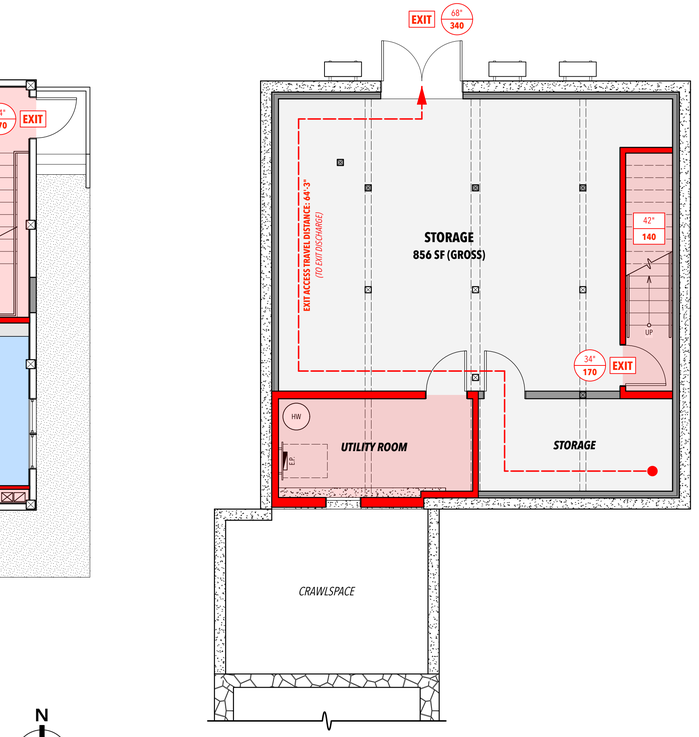
BASEMENT TOTAL CALCULATED MAX. OCCUPANCY: 1 PERSONS



3 **LIFE SAFETY PLAN : 2ND FLOOR**
SCALE: 3/16" = 1'-0"



2 **LIFE SAFETY PLAN : 1ST FLOOR**
SCALE: 3/16" = 1'-0"



1 **LIFE SAFETY PLAN : BASEMENT**
SCALE: 3/16" = 1'-0"

R. Edwards & Co.
ARCHITECTS + PRESERVATIONISTS
52 State St., 2nd Floor | Montpelier, VT 05602
(802) 232-2628 | info@redwardsandcompany.com
www.redwardsandcompany.com

SEAL

PROJECT
Alice Ward Library Carriage House Rehabilitation

27 Park St.
Canaan, VT 05903

PROJECT NUMBER
2023.20

PROJECT TEAM

STRUCTURAL ENGINEER
Engineering Ventures, PC
208 Flynn Ave., Suite 2A
Burlington, VT 05401
(802) 863-7225

MEP ENGINEER
DuBois & King, Inc.
10 Corporate Dr., Suite 210
Bedford, NH 03110
(603) 637-1043

RELEASE
BID SET

RELEASE DATE
01.20.26

RELEASE + REVISION LOG

MARK	DESCRIPTION	DATE
	BID SET	01.20.26

PROJECT NORTH

N

DRAWING NAME
LIFE SAFETY PLANS

DRAWN	RE	DATE	01.20.26
CHECKED		SCALE	

DRAWING NUMBER
A.002

A. GENERAL NOTES

1. ALL STRUCTURAL WORK SHALL CONFORM TO THE PROJECT SPECIFICATIONS, DRAWINGS, AND THE 2018 INTERNATIONAL BUILDING CODE.
2. CONTRACTOR SHALL COORDINATE STRUCTURAL WORK WITH RELATED TRADES AND WITH OTHER DESIGN DISCIPLINE REQUIREMENTS PRIOR TO MAKING SUBMITTALS. CONTRACTOR SHALL REPORT ANY DISCREPANCIES TO THE ARCHITECT PRIOR TO PERFORMING WORK.
3. REFER TO OTHER DESIGN DISCIPLINE DRAWINGS AND SPECIFICATIONS FOR ADDITIONAL INFORMATION REQUIRED FOR THE SUBMITTALS AND INSTALLATION OF STRUCTURES, INCLUDING BUT NOT LIMITED TO DIMENSIONS, ELEVATIONS, SLOPES, LOCATIONS OF OTHER SYSTEMS AND EQUIPMENT, OPENINGS, WALLS, STAIRS, FINISHES, COATINGS, AND OTHER NON-STRUCTURAL ITEMS. NOTES PROVIDED ON THE DRAWINGS ARE INTENDED FOR USE IN CONJUNCTION WITH PROJECT SPECIFICATIONS
4. DETAILS LABELED AS TYPICAL DETAILS ON THE DRAWINGS SHALL APPLY TO ALL SITUATIONS OCCURRING ON THE PROJECT THAT ARE THE SAME OR SIMILAR TO THOSE SPECIFICALLY DETAILED. SUCH TYPICAL DETAILS SHALL APPLY WHETHER OR NOT THEY ARE DEMARKED AT EACH LOCATION IN THE DRAWINGS. FOR CONDITIONS NOT SPECIFICALLY SHOWN, PROVIDE DETAILS OF A SIMILAR NATURE. VERIFY APPLICABILITY BY SUBMITTALS.
5. CONTRACTOR IS RESPONSIBLE FOR COORDINATION DETAILS AND ACCURACY OF THE WORK; FOR CONFIRMING AND CORRELATING ALL QUANTITIES AND DIMENSIONS; FOR SELECTING FABRICATION PROCESSES, FOR TECHNIQUES OF ASSEMBLY IN ACCORDANCE WITH GENERAL CONDITIONS AND DIVISION 1 SPECIFICATION REQUIREMENTS; AND FOR PERFORMING ALL WORK IN A SAFE AND SECURE MANNER IN ACCORDANCE WITH GOVERNING JOB SAFETY STANDARDS.
6. CONTRACTOR SHALL VERIFY ALL CONDITIONS AT THE SITE, INCLUDING LOCATIONS OF ALL EXISTING STRUCTURES AND EXISTING UTILITIES ABOVE AND BELOW GROUND (AS ANY INFORMATION SHOWN IS APPROXIMATE AND NOT NECESSARILY COMPLETE.) CONTRACTOR SHALL REPORT ANY DISCREPANCIES TO THE ARCHITECT PRIOR TO PERFORMING WORK.
7. LOADS APPLIED DURING CONSTRUCTION SHALL NOT EXCEED THE DESIGN LOADS NOTED ON THE DRAWINGS OR THE CAPACITY OF PARTIALLY COMPLETED CONSTRUCTIONS AS DETERMINED BY THE CONTRACTOR. THE STRUCTURAL ELEMENTS OF THE PROJECT AS SHOWN IN THE CONSTRUCTION DOCUMENTS HAVE BEEN DESIGNED FOR THE SPECIFIED VERTICAL AND LATERAL FORCES ACTING ON THE COMPLETED BUILDING. IT IS THE RESPONSIBILITY OF THE CONTRACTOR TO DESIGN AND PROVIDE ALL REQUIRED SHORING AND BRACING NEEDED DURING CONSTRUCTION TO MAINTAIN THE STABILITY AND SAFETY OF THE PARTIALLY-COMPLETED STRUCTURE AND FOR CONSTRUCTION LOADINGS THAT EXCEED THE SPECIFIED DESIGN LOADS
8. SHORING, BRACING, PROTECTING, AND MAINTAINING THE INTEGRITY OF ANY EXISTING, ADJACENT, AND/OR ONGOING PARTIALLY COMPLETED STRUCTURES IS THE RESPONSIBILITY OF THE CONTRACTOR.

B. EXISTING BUILDING NOTES

1. DIMENSIONS, ELEVATIONS, MEMBER SIZES, AND DETAILS OF EXISTING STRUCTURE SHOWN IN THE STRUCTURAL DRAWINGS HAVE BEEN EXTRACTED FROM RECORD DRAWINGS AND/OR LIMITED FIELD MEASUREMENTS. AS SUCH THEY ARE NOT TO BE CONSIDERED SUITABLY ACCURATE FOR ANY CONSTRUCTION WORK SHOWN, INCLUDING FABRICATIONS, SUBMITTALS, ETC. THE CONTRACTOR SHALL VERIFY ALL DIMENSIONS AND CONDITIONS OF THE EXISTING CONSTRUCTION, INCLUDING PLUMBNESS OR FLATNESS OF WALLS, FLOORS, ETC. AT THE JOB SITE PRIOR TO SUBMITTAL, FABRICATION OR CONSTRUCTION WORK. ANY DEVIATIONS FOUND IN THE FIELD FROM WHAT IS SHOWN ON THE DRAWINGS SHALL BE REPORTED TO THE ARCHITECT PRIOR TO FABRICATION OR CONSTRUCTION.
2. TEMPORARY SHORING AND BRACING OF FLOORS, WALLS, AND OTHER STRUCTURAL ELEMENTS OF THE EXISTING BUILDINGS REQUIRED TO ACHIEVE THE INSTALLATION OF NEW AND/OR THE REMOVAL OF EXISTING STRUCTURAL ELEMENTS SHALL BE THE RESPONSIBILITY OF THE CONTRACTOR. THE CONTRACTOR SHALL, AT THEIR DISCRETION AND WHERE SPECIFIED, EMPLOY ENGINEERING SERVICES FOR DESIGN OF TEMPORARY BRACING, SHORING AND PROTECTION. EXISTING BUILDING MOVEMENTS SHALL BE LIMITED TO PREVENT DISTRESS FROM OCCURRING.
3. REPORT EXISTING CONDITIONS UNCOVERED, REVEALED, FOUND OR DEVELOPED DURING CONSTRUCTION INDICATIVE OF STRUCTURAL INTEGRITY LOSS OR DETERIORATION, UNLESS SPECIFICALLY NOTED ON THE DRAWINGS.
4. DO NOT CUT, DRILL OR ALTER ANY EXISTING STRUCTURAL ELEMENTS UNLESS SHOWN OR NOTED ON THE STRUCTURAL DRAWINGS WITHOUT NOTIFY THE ARCHITECT FOR REVIEW, INCLUDING TEMPORARY MEASURES OR FOR THE INSTALLATION OF OTHER DESIGN DISCIPLINE WORK.

C. FOUNDATION RELATED EARTHWORK

1. FOUNDATIONS HAVE BEEN DESIGNED FOR A PRESUMPTIVE BEARING PRESSURE OF 2000 PSF BASED ON IBC 2018 TABLE 1806.2. THIS ASSUMPTION SHALL BE VERIFIED BY THE OWNER OF GENERAL CONTRACTOR AT THE TIME OF EXCAVATION. IF NECESSARY, THE OWNER SHALL EMPLOY A TESTING AGENCY OR GEOTECHNICAL ENGINEER TO ASSIST IN THIS EVALUATION. SOIL TESTING OR GEOTECHNICAL ENGINEER HAS NOT BEEN COMPLETED BY THE DESIGN TEAM.
2. IBC CHAPTER 18 "SOILS AND FOUNDATION" REQUIREMENTS APPLY, UNLESS SPECIFICALLY NOTED OTHERWISE BY DRAWINGS OR SPECIFICATIONS. REPORT CONFLICTS BETWEEN THE REPORTING AND THE DRAWINGS AND SPECIFICATIONS TO THE ARCHITECT PRIOR TO COMMENCING ANY AFFECTED WORK.
3. FOOTINGS, PILE CAPS, AND SLABS CAST DIRECTLY AGAINST THE EARTH SHALL BE SIDE-FORMED AS REQUIRED TO KEEP EARTH OUT OF THE CONCRETE. COMPACT DISTURBED LOAD BEARING SOIL IN DIRECT CONTACT WITH FOUNDATIONS TO ORIGINAL BEARING CAPACITY. AS WET WEATHER OR GROUND CONDITIONS WARRANT, PLACE A MINIMUM OF 6 INCHES OF CRUSHED STONE OR 12 INCHES OF SAND-GRAVEL WRAPPED IN GEOTEXTILE FABRIC FOR SUBGRADE PROTECTION BENEATH FOUNDATIONS, DO NOT ALLOW FOR STANDING WATER ON EARTH. IF OVER-EXCAVATION OCCURS, REPLACE MATERIAL WITH BACKFILL MEASURES SPECIFIED FOR USE UNDER FOUNDATIONS, AFTER ACCEPTANCE BY GEOTECHNICAL ENGINEER.
4. UNLESS NOTED OTHERWISE, PLACE AND COMPACT BACKFILL IN EQUAL CONTINUOUS LAYERS NOT EXCEEDING A MAXIMUM OF 8" OF COMPACTED DEPTH FOR HAND-HELD COMPACTION EQUIPMENT AND A MAXIMUM OF 12" INCHES COMPACTED DEPTH FOR VIBRATORY ROLLERS. MAINTAIN OPTIMUM MOISTURE CONTENT OF BACKFILL MATERIALS TO ATTAIN COMPACTION DENSITY.
5. AT EARTH RETAINING AND FOUNDATION WALLS, BACKFILL LIFTS TO NOT EXCEED 12 INCH DIFFERENCE IN ELEVATION UNTIL FINAL ELEVATION ARE REACHED ON BOTH SIDES OF THE WALL AT BASEMENT WALLS, DO NOT BACKFILL UNTIL GROUND FLOOR AND CONNECTED ELEVATED FRAMED LEVELS SLABS HAVE BEEN COMPLETED AND THE CONCRETE AT WALLS AND FLOORS HAS ACHIEVED FULL DESIGN STRENGTH.
6. THE CONSTRUCTION CONSIDERATIONS IN THE GEOTECHNICAL REPORTING AND PROJECT SPECIFICATIONS SHALL APPLY TO THIS PROJECT, INCLUDING BUT NOT LIMITED TO PROOFROLLING SUBGRADES AT THE EXCAVATION AND/OR BEARING ELEVATIONS; REMOVING AND REPLACING LOOSE OR SOFT POCKETS, FILL SLOPE CONSTRUCTIONS, ETC.
7. BACKFILL REQUIREMENTS:
   A. FILL WITHIN BUILDING ENVELOPE AND EXTENDING OUTWARD AT 1:1 SLOPE TO ACCEPTABLE NATIVE SOIL CONDITIONS:
      MATERIAL: "SAND-GRAVEL"; "GRANULAR"; "CRUSHED STONE" WITH GEOTEXTILE WRAP (SEE SECTIONS)
      COMPACTION: 95% MODIFIED PROCTOR
   B. BACKFILL DIRECTLY BELOW INTERIOR SLABS-ON-GRADE ASSEMBLIES (12 INCHES UNLESS NOTED OTHERWISE): "CRUSHED STONE" WITHOUT GEOTEXTILE
      COMPACTION: 95% MODIFIED PROCTOR
   C. BACKFILL BEHIND RETAINING WALLS AND BASEMENT WALLS, OUTSIDE BUILDING ENVELOPE AND UNDER PAVEMENT, WALKS, ENTRY SLABS:
      MATERIAL: "GRANULAR BACKFILL"
      COMPACTION: 95% MODIFIED PROCTOR
   D. BACKFILL ALONG EXTERIOR OF BUILDING AGAINST WALLS AND NOT UNDER PAVEMENT, WALKS, ENTRY SLABS:
      MATERIAL: "SUITABLE NATIVE SOIL" COVERED BY 2 FEET DEEP BY 4 FEET WIDTH OF "LESS PERMEABLE FILL
      COMPACTION: 92% MODIFIED PROCTOR
8. BACKFILL MATERIALS: RECYCLED CONCRETE AGGREGATE TO BE USED IN WHOLE OR BLENDED WITH OTHER AGGREGATES TO ACHIEVE GRADATIONS BELOW. ONSITE MATERIALS MEETING THE FOLLOWING CLASSIFICATIONS MAY BE USED:
   A. "SAND-GRAVEL":

SIEVE DESIGNATION	% BY WEIGHT PASSING SIEVES
4 INCH	100
1/2 INCH	50-85
No. 4	45-75
No. 100	10-35
No. 200	0-6

   B. "GRANULAR":

SIEVE DESIGNATION	% BY WEIGHT PASSING SIEVES
3 INCH	100
No. 4	45-70
No. 40	0-12
No. 200	0-6

   C. "CRUSHED STONE" WITH GEOTEXTILE FABRIC:

SIEVE DESIGNATION	% WEIGHT BY PASSING SIEVES
1 INCH	100
3/4 INCH	90-100
3/8 INCH	0-55
No. 4	0-10
No. 8	0-5

   D. "SUITABLE NATIVE SOIL": ON SITE SAND OR GRAVEL REASONABLY FREE OF LOAM, SILT, CLAY, OR ORGANIC MATTER.
   E. "LESS PERMEABLE FILL" GLACIAL TILL (SEE GEOTECHNICAL REPORT)
   F. "RECYCLED CONCRETE AGGREGATE" STOCKPILED ON SITE FROM DECONSTRUCTION PROJECT. SUBMIT GRADATIONS PRIOR TO ANY REQUIRED BLENDING; AS WELL AS FOR BLENDED AGGREGATES. MUST BE USED AS IS OR INTEGRAL WITH "SAND-GRAVEL"; "GRANULAR"; "CRUSHED STONE" FILLS OR BACKFILLS ABOVE.
9. GEOTEXTILE FABRIC: NON-WOVEN WITH 12 LAPPED SEAMS SEE GEOTECHNICAL REPORTING FOR USE AND MEETING:
   - GRAB STRENGTH OF 80 POUNDS MINIMUM MEETING ASTM D4632
   - PUNCTURE STRENGTH OF 25 POUNDS MINIMUM MEETING ASTM D4833
   - TRAPEZOID TEAR OF 25 POUNDS MINIMUM MEETING ASTM D4533
   - APPARENT OPENING SIZE OF NO. 70-100 (US SIEVE) MEETING ASTM D4751

D. CAST-IN-PLACE CONCRETE

1. CODES AND STANDARDS: COMPLY WITH THE PROVISIONS OF THE LATEST EDITIONS OF:
   A. ACI 318 "BUILDING CODE REQUIREMENTS FOR REINFORCED CONCRETE"
   B. ACI 301 "SPECIFICATIONS FOR STRUCTURAL CONCRETE"
   C. ACI 304 "GUIDE FOR MIXING, TRANSPORTING AND PLACING CONCRETE"
   D. ACI 305 "HOT WEATHER CONCRETING"
   E. ACI 306 "STANDARD SPECIFICATION FOR COLD WEATHER CONCRETING"
   F. ACI 308 "STANDARD PRACTICE FOR CURING CONCRETE".
2. CONCRETE TESTING: THE CONTRACTOR SHALL PREPARE A SET OF 4 CYLINDERS/TEST SET TO BE TESTED AT AN INDEPENDENT LABORATORY. THE CYLINDERS SHALL BE TAKEN FROM ONE CONCRETE TRUCK AND LABELED WITH DATE, TRUCK NUMBER, AND LOCATION OF CONCRETE PLACEMENT. EACH SAMPLE SHALL ALSO BE TESTED FOR SLUMP, AIR CONTENT, AND TEMPERATURE. THE CYLINDERS SHALL BE TESTED AS FOLLOWS: 1 AT 7 DAYS; 2 AT 28 DAYS; AND A THIRD HELD FOR A 56 DAY BREAK IF REQUIRED. TEST CYLINDERS SHALL BE TAKEN AT LEAST ONCE PER PLACEMENT OR AT THE FOLLOWING INCREMENTS:
   A. WALLS AND FOOTINGS: 50 CUBIC YARDS
   B. ISOLATED FOOTINGS: 25 CUBIC YARDS
   C. SLABS: 50 CUBIC YARDS

   FIELD TESTING SHALL BE PERFORMED BY A GRADE I ACI (MINIMUM)FIELD TESTING TECHNICIAN.
3. SUBMIT MIX DESIGN AND EITHER TRIAL MIX DESIGNS OR HISTORIC FIELD DATA FOR APPROVAL IN ACCORDANCE WITH ACI 318, CHAPTER 5, INCLUDE TECHNICAL DATA SHEETS, GRADATIONS, AND MATERIAL VERIFICATIONS ON ALL COMPONENTS. SUBMIT MIX DESIGNS, PRIOR TO PLACEMENT OF CONCRETE, TRANSIT MIX SHALL CONFORM TO ASTM C94.
4. COMPRESSIVE MIXTURES AS DELINEATED IN TABLE BELOW; SEE 03 3000 & NOTES BELOW FOR ADDITIONAL INFORMATION.
   A. SLUMP: 3"-5" BEFORE ADDITION OF WATER REDUCER, 6"-8" AFTER ADDITION OF WATER REDUCER
   B. ALL CONCRETE NORMALWEIGHT, UNLESS NOTED OTHERWISE.
5. MAXIMUM AGGREGATE SIZE IN ACCORDANCE WITH ACI 301; CLEARLY NOTE LOCATION WHERE AGGREGATES GREATER THAT 3/4" MAXIMUM SIZE ARE PROPOSED FOR USE.
6. NO CHLORIDE OR OTHER UNAUTHORIZED ADMIXTURES SHALL BE USED. MAINTAIN MAXIMUM WATER SOLUBLE CHLORIDE ION (CL-) IN CONCRETE, BY WEIGHT OF CEMENT AT LESS THAN 1.00 FOR NON-EXPOSED CONCRETES AND 0.30 FOR EXTERIOR EXPOSED CONCRETES
7. WHEN AMBIENT TEMPERATURE IS BELOW 40º FAHRENHEIT OR MORE THAN 90º FAHRENHEIT PLACE AND PROTECT CONCRETE IN ACCORDANCE WITH ACI STANDARDS LISTED ABOVE.
8. CONCRETE PLACEMENT MAY REQUIRE ADJUSTMENT OF REINFORCEMENT, EMBEDDED ITEMS OR ANCHOR BOLTS. REVIEW DRAWINGS IDENTIFY THESE LOCATIONS TO ARCHITECT PRIOR TO SUBMITTALS. PROVIDE ADDITIONAL SUPERVISION AT ALL STEEL TO CONCRETE CONNECTION LOCATIONS AND MODIFY PLACEMENT MEASURES TO ACCOUNT FOR CONGESTIONS.
9. COMPLY WITH ACI CODES AND PLACE CONCRETE IN A CONTINUOUS OPERATION WITHIN PLANNED JOINTS OR SECTIONS. DO NOT PERMIT COLD JOINTS TO OCCUR.

E. CONCRETE REINFORCEMENT

1. SHOP DRAWINGS SHALL BE PROVIDED PRIOR TO START OF CONCRETE PLACING AND BE IN ACCORDANCE WITH:
   A. ACI 301
   B. ACI 315 "DETAILS AND DETAILING OF CONCRETE REINFORCEMENT"
   C. ACI SP-66 "ACI DETAILING MANUAL"
   D. CRSI MSP "MANUAL OF STANDARD PRACTICE"

   SEE SPECIFICATIONS FOR ADDITIONAL REQUIREMENTS. SHOW ALL SLABS IN PLAN AND ALL WALLS IN ELEVATION WITH OPENINGS AND PENETRATIONS SHOWN BASED ON MEP COORDINATION SUBMITTALS AND ARCHITECTURAL REQUIREMENTS. SUBMIT PROPOSED CONTROL AND CONSTRUCTION JOINTS FOR REVIEW ON REINFORCING SUBMITTALS
2. REINFORCING STEEL SHALL BE DEFORMED BARS CONFORMING TO ASTM A615 GRADE 60, STEEL BARS PER ASTM A305, UNLESS NOTED OTHERWISE.
3. WHERE SPECIFICALLY SHOWN ON THE DRAWINGS, WELD REINFORCING BARS IN ACCORDANCE WITH AWSD1.4 PRE-QUALIFIED JOINT, ELECTRODE 9E90 LOW HYDROGEN) AND PROCESS REQUIREMENTS INCLUDING COORDINATED WITH MILL CERTIFIED CARBON EQUIVALENT. ALTERNATIVELY, ASTM A706, GRADE 60 MAY BE SUBSTITUTED, INDICATE MATERIAL AND WELDING REQUIREMENTS ON SUBMITTAL. DO NOT WELD AT LOCATIONS NOT DETAILED, UNLESS SUBMITTED AND REVIEWED BY ARCHITECT.
4. FIELD BENDING OR REINFORCEMENT SHALL CONFORM TO ACI 301, INCLUDING PRE-HEAT REQUIREMENTS.
5. WELDED WIRE FABRIC (WWF) SHALL CONFORM TO ASTM A185 WITH A MINIMUM ULTIMATE TENSILE STRENGTH OF 70,000 PSI. LAP ONE CROSS WIRE SPACING PLUS 2". SUPPORT MESH ON CHAIRS PER CRSI WITH #4 AT 4'-0"oc, EACH WAY.
6. PROVIDE MINIMUM CONCRETE COVER TO REINFORCEMENT AS FOLLOWS, UNLESS OTHERWISE NOTED:
   A. BOTTOM OF FOOTINGS, GRADE BEAMS, AND SLABS-ON-GRADE: 3"
   B. SIDES OF FOOTINGS AND GRADE BEAMS: 2"
   C. FOUNDATION WALLS, FROST WALLS, RETAINING WALLS, PIT WALLS: 2"
   D. FOUNDATION PIERS: 2" TO TIES
8. ALL LAPS SHALL BE FULL TENSION LAPS (CLASS B SPLICE) UNLESS SPECIFICALLY NOTED OTHERWISE. DOWELS SHALL MATCH SIZE AND SPACING OF MAIN REINFORCEMENT, UNLESS OTHERWISE NOTED.
9. CHAIRS AND SPACERS SHALL BE PLACED TO ADEQUATELY SUPPORT REINFORCING DURING PLACEMENT. FOREIGN MATERIALS SUCH AS WOOD, CLAY BRICK OR OTHER UNSUITABLE SUPPORTS SHALL NOT BE USED TO SUPPORT REINFORCING. SET WIRE TIES SO ENDS ARE DIRECTED INTO CONCRETE WHERE CONCRETE WILL BE EXPOSED. DO NOT USE CONCRETE SUPPORTS OR PUDDLING FOR SLABS UNLESS SUBMITTED AND ACCEPTABLY REVIEWED.

F. CONCRETE FORMWORK

1. CONCRETE FORMS SHALL BE CLEAN AND FREE FROM DEBRIS. IF FORMS ARE COATED WITH A VEGETABLE BASED (SOY) RELEASE AGENT, WHICH SHALL NOT STAIN CONCRETE OR ABSORB MOISTURE OR IMPAIR NATURAL BONDING OF CONCRETE.
2. COORDINATE WITH REINFORCING SUBMITTAL FOR OPENING AND ADDITIONAL REQUIREMENTS. SUBMIT, BEFORE FRAMING OPENINGS IN STRUCTURAL ELEMENTS WHICH ARE NOT INDICATED ON DRAWINGS.
3. PROVIDE BRACING TO ENSURE STABILITY OF FORMWORK. FOR PLACEMENT OPERATIONS. DO NOT REMOVE FORMS OR BRACING UNTIL CONCRETE HAS GAINED SUFFICIENT STRENGTH TO CARRY ITS OWN WEIGHT AND IMPOSED LOADS.
4. ALL WALL SIDES AND SLAB EDGES EXPOSED TO VIEW TO HAVE CLASS A – CLASS OF SURFACE. SEE SPECIFICATIONS FOR ADDITIONAL REQUIREMENTS.

G. POST-INSTALLED ANCHORS INTO CONCRETE AND MASONRY

1. WHERE A MANUFACTURER'S ANCHORS IS SPECIFICALLY CALLED OUT ON THE DRAWINGS, IT SHALL BE CONSIDERED THE DESIGN BASIS FOR THE REQUIRED ANCHOR. ALTERNATES MEETING OR EXCEEDING ANCHOR SYSTEM DEMANDS, INCLUDING, BUT NOT LIMITED TO CAPACITY LOADING, EDGE DISTANCE, SUBSTRATE THICKNESS FOR CONNECTION ELEMENTS AND BASE MATERIAL SHALL BE SUBMITTED FOR PROPOSED USE PENDING ACCEPTABLE REVIEW. SUBMIT ICC-ES CODE REPORTS.
2. ADHESIVE ANCHORS, WHERE NOT SPECIFICALLY DETAILED, SHALL BE:
   A. FOR CONCRETE AND CONCRETE MASONRY: HILTI HIT HY-200
   B. FOR EXISTING BRICK MASONRY: HILTI HIT-HY 270

   INSTALL IN ACCORDANCE WITH MANUFACTURERS' SPECIFICATIONS. USE 3/4 INCH DIAMETER AT MINIMUM EMBEDMENT UNLESS OTHERWISE INDICATED BY DETAIL. SEE NOTE 1.
3. EXPANSION ANCHORS, WHERE NOT SPECIFICALLY DETAILED, SHALL BE:
   A. FOR CONCRETE: HILTI KWIK BOLT TZ
   B. FOR MASONRY: HILTI KWIK BOLT 3.

   INSTALL IN ACCORDANCE WITH MANUFACTURERS' SPECIFICATIONS. USE 3/4 INCH DIAMETER AT MINIMUM EMBEDMENT UNLESS OTHERWISE INDICATED BY DETAIL. SEE NOTE 1.
4. SCREW TYPE ANCHORS: WHERE NOT SPECIFICALLY DETAILED, SHALL, FOR CONCRETE AND MASONRY: SIMPSON TITEN-HD INSTALL IN ACCORDANCE WITH MANUFACTURERS' SPECIFICATIONS. USE 3/4 INCH DIAMETER AT MINIMUM EMBEDMENT UNLESS OTHERWISE INDICATED BY DETAIL. SEE NOTE 1.

H. WOOD FRAMING NOTES

1. UNLESS OTHERWISE SPECIFIED, EACH PIECE OF LUMBER SHALL BEAR THE GRADE MARK, STAMP, OR OTHER IDENTIFYING MARKS INDICATING GRADES OF MATERIAL, AND RULES OR STANDARDS UNDER WHICH PRODUCED. SUCH IDENTIFYING MARKS ON A MATERIAL SHALL BE IN ACCORDANCE WITH THE RULE OR STANDARD UNDER WHICH MATERIAL IS PRODUCED, INCLUDING REQUIREMENTS FOR QUALIFICATIONS AND AUTHORITY OF THE INSPECTION ORGANIZATION, USAGE OF AUTHORIZED IDENTIFICATION, AND INFORMATION INCLUDED IN THE IDENTIFICATION. THE INSPECTION AGENCY FOR LUMBER SHALL BE APPROVED BY THE BOARD OF REVIEW, AMERICAN LUMBER STANDARDS COMMITTEE, TO GRADE SPECIES USED.
2. PROTECT LUMBER AND OTHER PRODUCTS FROM DAMPNESS BOTH DURING AND AFTER DELIVERY AT THE SITE. PILE PLYWOOD AND LUMBER IN STACKS IN SUCH A MANNER AS TO PROVIDE ADEQUATE AIR CIRCULATION AND TO PREVENT WARPING. LOCATE STACKS IN WELL DRAINED AREAS, SUPPORTED AT LEAST SIX INCHES ABOVE GRADE AND COVER WITH WELL VENTILATED SHEDS HAVING A FIRMLY CONSTRUCTED OVERHANGING ROOF AS WELL AS SUFFICIENT END WALL TO PROTECT LUMBER FROM DRIVING RAIN.
3. STORE SEASONED MATERIALS IN DRY PORTIONS OF BUILDING.
4. PROTECT SHEET MATERIALS FROM CORNERS BREAKING AND DAMAGING SURFACES WHILE UNLOADING.
5. NOMINAL SIZES ARE INDICATED EXCEPT AS SHOWN BY DETAIL DIMENSIONS. PROVIDE ACTUAL SIZES AS REQUIRED BY PRODUCT STANDARD 20, DEPARTMENT OF COMMERCE.
6. MAXIMUM MOISTURE CONTENT SHALL NOT EXCEED 19%.
7. LIGHT GAGE METAL CONNECTIONS SHALL BE SIMPSON, SUBMIT MANUFACTURERS SPECIFICATION SHEETS.

LUMBER GRADES:
1. 2x6 AND 2x4 BEARING WALLS, INTERIOR AND EXTERIOR LOCATIONS: SPRUCE-PINE-FIR No. 1 / No. 2 AS GRADED BY NLGA
2. STRUCTURAL ROOF AND FLOOR FRAMING: SPRUCE-PINE-FIR No. 1 / No. 2 AS GRADED BY NLGA
3. PRESERVATIVE PRESSURE TREATED (P.P.T. or P.T.) LUMBER: SOUTHERN PINE No. 2, AS GRADED BY SPIB
4. LAMINATED VENEER LUMBER (LVL):
   A. PROVIDE LVL HEADERS AND BEAMS AS INDICATED.
   B. LVL FRAMING SHALL BE LAMINATED DOUGLAS FIR OR SOUTHERN PINE (GP LAM BY GEORGIA PACIFIC OR MICROLAM BY TRUS-JOIST OR EQUAL) MEETING THE FOLLOWING MINIMUM ALLOWABLE STRESS CRITERIA:
      FB (BENDING STRESS) = 2600 PSI
      FV (HORIZ. SHEAR STRESS) = 285 PSI
      E (MODULUS OF ELASTICITY) = 1,900,000 PSI
      FC (COMPRESSIONS PERPENDICULAR TO GRAIN) = 750 PSI
5. MISCELLANEOUS LUMBER: PROVIDE WOOD FOR SUPPORT OR ATTACHMENT OF THE WORK INCLUDING NON-BEARING PARTITIONS, CANT STRIPS, BUCKS, NAILERS, BLOCKING, FURRING, GROUNDS, STRIPPING AND SIMILAR MEMBERS. PROVIDE LUMBER OF SIZES AND SHAPES INDICATED. GRADE: SPRUCE-PINE-FIR STUD GRADE AS GRADED BY NLGA.

MATERIALS:
1. ROOF SHEATHING: 5/8" ADVANTECH ROOF SHEATHING, STRUCTURAL 1 PANEL GRADE, MANUFACTURED BY HUBER ENGINEERED WOODS WITH A PS-2 SPAN RATING OF 40/20 AS DENOTED BY CODE EVALUATION REPORT ESR 1785.
2. FLOOR SHEATHING: 23/32" ADVANTECH SUBFLOOR SHEATHING, STRUCTURAL 1 PANEL GRADE, MANUFACTURED BY HUBER ENGINEERED WOODS WITH A PS-2 SPAN RATING OF 24-INCHES AS DENOTED BY CODE EVALUATION REPORT ESR 1785.
3. FASTENERS AND ANCHORS: FURNISH ITEMS OF ROUGH HARDWARE, METAL CONNECTORS, BOLTS, ETC., REQUIRED TO COMPLETE THE WORK. BOLTS, NUTS AND WASHERS SHALL BE HOT DIPPED ELECTRO GALVANIZED STEEL.
4. SILL GASKET ON TOP OF FOUNDATION WALL: 1/4 INCH THICK, PLATE WIDTH WIDE, CLOSED CELL POLYETHYLENE URETHANE FOAM FROM CONTINUOUS ROLLS.
5. SUBFLOOR GLUE: APA AFG-01, WATERPROOF OF WATER SOLVENT BASE, AIR CURE TYPE, CARTRIDGE DISPENSED.
6. BUILDING PAPER: NO. 15 ASPHALT FELT. PLAIN UNTREATED CELLULOSE BUILDING PAPER.
7. WOOD PRESERVATIVE (PRESSURE TREATMENT): AWPA TREATMENT ACQ USING WATER BORNE PRESERVATIVE WITH 0.40 PERCENT RETAINAGE.
8. SET STRUCTURAL MEMBERS LEVEL AND PLUMB, IN CORRECT POSITION.
9. MAKE PROVISIONS FOR ERECTION LOADS, AND FOR SUFFICIENT TEMPORARY BRACING TO MAINTAIN STRUCTURE SAFE, PLUMB, AND IN TRUE ALIGNMENT UNTIL COMPLETION OF ERECTION AND INSTALLATION OF PERMANENT BRACING.
10. PLACE HORIZONTAL MEMBERS, CROWN SIDE UP.
11. CONSTRUCT LOAD BEARING FRAMING FULL LENGTH WITHOUT SPLICES.
12. DOUBLE MEMBERS AT OPENINGS OVER 24 INCHES WIDE. SPACE SHORT STUDS OVER AND UNDER OPENING TO STUD SPACING.
13. CONSTRUCT DOUBLE JOIST HEADERS AT FLOOR AND CEILING OPENINGS AND UNDER WALL STUD PARTITIONS THAT ARE PARALLEL TO FLOOR JOISTS. FRAME RIGIDLY INTO JOISTS.
14. BRIDGE JOISTS FRAMING IN EXCESS OF 8 FEET SPAN AT MID-SPAN AND WHERE SHOWN ON DRAWINGS. FIT SOLID BLOCKING OR BRIDGING AT ENDS OF MEMBERS.
15. SECURE ROOF SHEATHING WITH LONGER EDGE PERPENDICULAR TO FRAMING MEMBERS AND WITH ENDS STAGGERED AND SHEET ENDS OVER BEARING.
16. USE SHEATHING CLIPS BETWEEN SHEETS BETWEEN ROOF FRAMING MEMBERS.
17. WHERE TONGUE AND GROOVE PLYWOOD IS USED, FULLY ENGAGE TONGUE AND GROOVE EDGES.
18. SECURE WALL SHEATHING WITH LONG DIMENSION PERPENDICULAR TO WALL STUDS, WITH ENDS OVER FIRM BEARING AND STAGGERED.
19. PLACE BUILDING PAPER HORIZONTALLY OVER WALL SHEATHING; WEATHER LAP EDGES AND ENDS.
20. SECURE SUB-FLOOR SHEATHING WITH LONGER EDGE PERPENDICULAR TO FLOOR FRAMING AND WITH END JOINTS STAGGERED AND SHEET ENDS OVER BEARING. ATTACH WITH SUB-FLOOR GLUE AND 8D NAILS AT 6" ON CENTER AT PERIMETER AND 12" ON CENTER ON INTERIOR OF PANEL.
21. TOLERANCES:
   A. FRAMING MEMBERS: 1/4 INCH FROM TRUE POSITION, MAXIMUM.
   B. SURFACE FLATNESS OF FLOOR: 1/4 INCH IN 10 FEET MAXIMUM, AND 1/2 INCH IN 30 FEET MAXIMUM.
22. ALL POSTS AND COLUMNS FROM HEADERS AND BEAMS SHALL BEAR CONTINUOUSLY TO CONCRETE FOUNDATIONS INCLUDING BLOCKING IN FLOOR AND ROOF SPACES. BLOCKING SHALL BE OF THE SIZE AND SHAPE TO CARRY THE REQUIRED LOADING.
23. ALL BOTTOM BEARING PLATES, FOR STUD WALLS OR BEAM BEARING, SHALL BE ANCHORED TO THE FOUNDATION WITH 1/2" DIAMETER ANCHOR BOLTS AT 4'-0" ON CENTER, UNLESS NOTED OTHERWISE.
24. ALL BEARING WALLS SHALL BE BLOCKED AT 4'-0" ON CENTER, VERTICALLY, UNLESS NOTED OTHERWISE.
25. ALL WOOD IN CONTACT WITH CONCRETE SHALL BE PRESERVATIVE PRESSURE TREATED, P.P.T.
26. ALL FASTENERS FOR PRESSURE TREATED WOOD TO BE G90 HOT-DIPPED GALVANIZED.
27. ALL HANGERS FOR PRESSURE TREATED WOOD TO BE G90 HOT-DIPPED GALVANIZED.
28. PROVIDE 1/4" NOMINAL GAP BETWEEN WOOD FRAMING AND HORIZONTAL FACES OF CONCRETE WALLS.

STATE OF VERMONT
DAVID A. NEELY
2026-01-20
Alice Ward Library
NO. 5443
Stamp

No.	Description	Date

ENGINEERING VENTURES PC
Vermont • New Hampshire • New York
209 Flynn Avenue, Suite 2A, Burlington, VT 05401 | (802)863-6226
85 Mechanic Street, Suite E2-3, Lebanon, NH 03766 | (603) 442-9333
366 Broadway, Suite 11, Saratoga Springs, NY 12866 | (518) 205-9141
www.engineeringventures.com

27 Park St.
Canaan, VT 05903

Sheet Title: GENERAL NOTES

Project Title: ALLICE WARD LIBRARY

Designed By:	MAN
Checked By:	RN
Drawn By:	MAN
Scale:	1/8" = 1'-0"
Date:	01/20/26

S-1

EV Project #24649

BASIS OF DESIGN

1.	Building Code:	2018 IBC & ASCE7-16
2.	Dead Loads:	
a.	Roof Dead Load:	20 psf
b.	Floor Dead Load:	20 psf
3.	Live Loads:	
a.	Roof Live Load:	Snow Load Governs
b.	First Floor Live Load (Stack rooms):	150 psf
c.	Second Floor Live Load (Reading Room and Meeting Room):	60 psf
4.	Roof Snow Load:	
a.	Ground Snow Load, P_g:	60 psf
b.	Flat Roof Snow Load, P_f:	46 psf
c.	Snow Exposure Factor, C_e:	1.0
d.	Snow Load Importance Factor, I:	1.0
e.	Thermal Factor, C_t:	1.1
5.	Wind Design Data:	
a.	Basic Wind Speed (3-second gust), V:	115 mph
b.	Wind Exposure:	C
c.	Internal Pressure Coefficients:	+/- 0.18
d.	Components and Cladding Wind Pressure:	per ASCE 7
6.	Allowable Soil Bearing Pressure:	2000 psf (Assumed to be verified)

ABBREVIATIONS

AB	ANCHOR BOLT	MC	MOMENT CONNECTION
AFF	ABOVE FINISH FLOOR	N.S.	NEAR SIDE
AL	ALUMINUM	oc	ON CENTER
B.O.F.	BOTTOM OF FOOTING	P#	PIER DESIGNATION
DWG	DRAWING	PL	PLATE
E.F.	EACH FACE	SS	STAINLESS STEEL
ELEV.	ELEVATION	STD	STANDARD
EP	EMBED PLATE	T.O.C.	TOP OF CONCRETE
EQ	EQUAL	T.O.S.	TOP OF STEEL
E.S.	EACH SIDE	T.O.SHELF	TOP OF SHELF
E.W.	EACH WAY	T.O.W.	TOP OF WALL
EX.	EXISTING	TYP.	TYPICAL
F#	FOOTING DESIGNATION	U.N.O.	UNLESS NOTED OTHERWISE
FND	FOUNDATION	V.I.F.	VERIFY IN FIELD
F.S.	FAR SIDE		
H.T.	HEAVY TIMBER		

DRAWING LEGEND

NOTE: NOT ALL SYMBOLS AND NOTATIONS USED

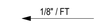

NORTH ARROW


ELEVATION

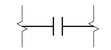
[XX' - XX"] TOP OF FOOTING ELEV.

SECTION NUMBER
DRAWING WHERE SHOWN

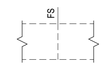
DECK SPAN DIRECTION OR
GRATING DIRECTION



SLOPE DIRECTION, and
MAGNITUDE


BEAM/COLUMN SPLICE

ROOF PITCH

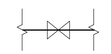


FOOTING STEP


OPENING


MOMENT CONNECTION

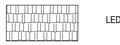

GUARDRAIL/RAILING

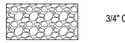

BEAM PENETRATION

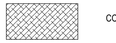

CONCRETE

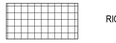

GROUT or
FINE CRUSHED GRAVEL


GRATING


LEDGE/ROCK


3/4" CRUSHED STONE


COMPACTED GRANULAR FILL

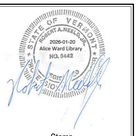

RIGID INSULATION


WOOD


UNDISTURBED SUBGRADE


CMU BLOCK

BRICK



Stamp

No.	Description	Date

ENGINEERING VENTURES PC
Vermont • New Hampshire • New York
208 Flynn Avenue, Suite 2A, Burlington, VT 05401 | (802)863-6228
85 Mechanic Street, Suite E2-3, Lebanon, NH 03766 | (603) 442-9333
368 Broadway, Suite 11, Saratoga Springs, NY 12866 | (518) 205-9141
www.engineeringventures.com

27 Park St.
Canaan, VT 05903

Sheet Title: B.O.D.

Project Title: ALLICE WARD LIBRARY

Designed By:	MAN
Checked By:	RN
Drawn By:	MAN
Scale:	1/8" = 1'-0"
Date:	01/20/26

S-2

EV Project #24649

FASTENING SCHEDULE

(TABLE 2304.10.1, IBC 2018)

	DESCRIPTION OF BUILDING ELEMENTS	NUMBER AND TYPE OF FASTENER	SPACING AND LOCATION
1.	Blocking between ceiling joists, rafters or trusses to top plate or other framing below	(3) 8d common (2-1/2" x 0.131"); or (3) 10d box (3" x 0.128"); or (3) 3"x0.131" nails; or (3) 3" 14 gage staples, 7/16" crown	Each end, toenail
	Blocking between rafters or truss at the wall top plate, to rafter or truss	(2) 8d common (2-1/2" x 0.131") (2) 3" x 0.131" nails (2) 3" 14 gage staples	Each end, toenail
		(2) 16d common (3-1/2" x 0.162") (3) 3" x 0.131" nails (3) 3" 14 gage staples	End nail
	Flat blocking to truss and web filler	16d common (3-1/2" x 0.162") 3" x 0.131" nails 3" x 14 gage staples	6"oc Face nails
2.	Ceiling joists to top plate	(3) 8d common (2-1/2" x 0.131"); or (3) 10d box (3" x 0.128"); or (3) 3"x0.131" nails; or (3) 3" 14 gage staples, 7/16" crown	Each joist, toe nails
3.	Ceiling joist not attached to parallel rafter, laps over partitions (no thrust) (see Section 2308.7.3.1, Table 2308.7.3.1)	(3) 16d common (3-1/2" x 0.162"); or (4) 10d box (3" x 0.126"); or (4) 3"x0.131" nails; or (4) 3" 14 gage staples, 7/16" crown	Face nails
4.	Ceiling joist attached to parallel rafter (heel joint) (see Section 2308.7.3.1, Table 2308.7.3.1)	Per Table 2308.7.3.1	Face nails
5.	Collar tie to rafter	(3) 10d common (3" x 0.148"); or (4) 10d box (3" x 0.128"); or (4) 3"x0.131" nails; or (4) 3" 14 gage staples, 7/16" crown	Face nails
6.	Rafter or roof truss to top plate (See section 2308.7.5, Table 2308.7.5)	(3) 10d common (3" x 0.148"); or (3) 16d box (3 1/2" x 0.135"); or (4) 10d box (3" x 0.128"); or (4) 3"x0.131" nails; or (4) 3" 14 gage staples, 7/16" crown	Toenail[c]
7.	Roof rafters to ridge valley or hip rafters; or roof rafter to 2-inch ridge beam	(2) 16d common (3 1/2" x 0.162"); or (3) 10d box (3" x 0.128"); or (3) 3"x0.131" nails; or (3) 3" 14 gage staples, 7/16" crown; or	End nail
		(3) 10d common (3" x 0.148"); or (4) 16d box (3 1/2" x 0.135"); or (4) 10d box (3" x 0.128"); or (4) 3"x0.131" nails; or (4) 3" 14 gage staples, 7/16" crown	Toenail
	Wall		
8.	Studs to stud (not at braced wall panels)	16d common (3-1/2" x 0.162")	24"oc face nail
		10d box (3" x 0.128"); or 3"x0.131" nails; or 3" 14 gage staples, 7/16" crown	16"oc face nail
9.	Stud to stud and abutting studs at intersecting wall corners (at braced wall panels)	16d common (3-1/2" x 0.162"); or	16"oc face nail
		16d box (3-1/2" x 0.135"); or	12"oc face nail
		3"x0.131" nails; or 3" 14 gage staples, 7/16" crown	12"oc face nail
10.	Built-up header (2" to 2" header)	16d common (3-1/2" x 0.162"); or	16"oc each edge, face nail
		16d box (3-1/2" x 0.135")	12"oc each edge, face nail
11.	Continuous header to stud	(3) 8d common (2-1/2" x 0.131"); or (3) 10d box (3" x 0.128")	Toenails
12.	Top plate to top plate	16d common (3-1/2" x 0.162"); or	16"oc face nail
		10d box (3" x 0.128"); or 3"x0.131" nails; or 3" 14 gage staples, 7/16" crown	12"oc face nail
13.	Top plate to top plate, at end joints	(8) 16d common (3 1/2" x 0.162"); or (12) 10d box (3" x 0.128"); or (12) 3"x0.131" nails; or (12) 3" 14 gage staples, 7/16" crown	Each side of end joint, face nail (minimum 24" lap splice length each side of end joint)
14.	Bottom plate to joist, rim joist, band joist or blocking (not at braced wall panels)	16d common (3-1/2" x 0.162"); or	16"oc face nail
		16d box (3" x 0.135"); or 3"x0.131" nails; or 3" 14 gage staples, 7/16" crown	12"oc face nail
15.	Bottom plate to joist, rim joist, band joist or blocking at braced wall panels	(2) 16d common (3 1/2" x 0.162"); or (3) 10d box (3" x 0.128"); or (4) 3"x0.131" nails; or (4) 3" 14 gage staples, 7/16" crown	16"oc face nail
16.	Stud to top or bottom plate	(4) 8d common (2 1/2" x 0.131"); or (4) 10d box (3" x 0.128"); or (4) 3"x0.131" nails; or (4) 3" 14 gage staples, 7/16" crown	Toenails
		(2) 16d common (3 1/2" x 0.162"); or (3) 10d box (3" x 0.128"); or (3) 3"x0.131" nails; or (3) 3" 14 gage staples, 7/16" crown	End nails
17.	Top plates, laps at corners and intersections	(2) 16d common (3 1/2" x 0.162"); or (3) 10d box (3" x 0.128"); or (3) 3"x0.131" nails; or (3) 3" 14 gage staples, 7/16" crown	Face nails
18.	1" brace to each stud and plate	(2) 8d common (2 1/2" x 0.131"); or (2) 10d box (3" x 0.128"); or (2) 3"x0.131" nails; or (2) 3" 14 gage staples, 7/16" crown	Face nails
19.	1" x 6" sheathing to each bearing	(2) 8d common (2-1/2" x 0.131"); or (2) 10d box (3" x 0.128")	Face nails
20.	1" x 8" and wider sheathing to each bearing	(3) 8d common (2-1/2" x 0.131"); or (3) 10d box (3" x 0.128")	Face nails

	DESCRIPTION OF BUILDING ELEMENTS	NUMBER AND TYPE OF FASTENER	SPACING AND LOCATION
	Wall		
21.	Joist to sill, top plate, or girder	(3) 8d common (2 1/2" x 0.131"); or (3) 10d box (3" x 0.128"); or (3) 3"x0.131" nails; or (3) 3" 14 gage staples, 7/16" crown	Toenail
22.	Rim joist, band joist, or blocking to top plate, sill or other framing below	8d common (2 1/2" x 0.131"); or 10d box (3" x 0.128"); or 3"x0.131" nails; or 3" 14 gage staples, 7/16" crown	6"oc, toenails
23.	1" x 6" subfloor or less to each joist	(2) 8d common (2-1/2" x 0.131"); or (2) 10d box (3" x 0.128")	Face nail
24.	2" subfloor to joist or girder	(2) 16d common (3-1/2" x 0.162")	Face nail
25.	2" planks (plank & beam - floor & roof)	(2) 16d common (3-1/2" x 0.162")	Each bearing, face nail
26.	Built-up girders and beams, 2" lumber layers	20d common (4" x 0.192")	32"oc face nails at top and bottom staggered on opposite sides
		10d box (3" x 0.128"); or 3"x0.131" nails; or 3" 14 gage staples, 7/16" crown	24"oc face nails at top and bottom staggered on opposite sides
		And: (2) 20d common (4" x 0.192"); or (3)10d box (3" x 0.128"); or (3) 3"x0.131" nails; or (3) 3" 14 gage staples, 7/16" crown	Ends and at each splice, face nail
27.	Ledger strip supporting joists or rafters	(3) 16d common (3 1/2" x 0.162"); or (4) 10d box (3" x 0.128"); or (4) 3"x0.131" nails; or (4) 3" 14 gage staples, 7/16" crown	Each joist or rafter, face nail
28.	Joist to band joist or rim joist	(3) 16d common (3 1/2" x 0.162"); or (4) 10d box (3" x 0.128"); or (4) 3"x0.131" nails; or (4) 3" 14 gage staples, 7/16" crown	End nail
29.	Bridging or blocking to joist, rafter or truss	(2) 8d common (2 1/2" x 0.131"); or (2) 10d box (3" x 0.128"); or (2) 3"x0.131" nails; or (2) 3" 14 gage staples, 7/16" crown	Each end, toenail
	Wood structural panels (WSP), subfloor, roof and interior wall sheathing to framing and particleboard wall sheathing to framing[a]		
			Edges (inches) / **Intermediate supports (inches)**
30.	3/8" - 1/2"	6d common or deformed (2" x 0.113") (subfloor and wall)	6 / 12
		8d common or deformed (2 1/2" x 0.131") (roof) or RSRS-01 (2 3/8" x 0.113") nail (roof)[c]	6 / 12
		2 3/8" x 0.113" nail (subfloor and wall)	6 / 12
		1 3/4" 16 gage staple, 7/16" crown (subfloor and wall)	4 / 8
		2 3/8" x 0.113" nail (roof)	4 / 8
		1 3/4" 16 gage staple, 7/16" crown (roof)	3 / 6
31.	19/32" - 3/4"	8d common (2 1/2" x 0.131"); or 6d deformed (2" x 0.113") (subfloor and wall)	6 / 12
		8d common or deformed (2 1/2" x 0.131") (roof) or RSRS-01 (2 3/8" x 0.113") nail (roof)[c]	6 / 12
		2 3/8" x 0.113" nail; or 2" 16 gage staple, 7/16" crown	6 / 12
32.	7/8" - 1 1/4"	10d common (3" x 0.148"); or 8d deformed (2 1/2" x 0.131")	4 / 8
	Other exterior wall sheathing		
33.	1/2" fiberboard sheathing[b]	1 1/2" galvanized roofing nail (7/16" head diameter); or 1 1/4" 16 gage staple with 7/16" or 1" crown	3 / 6
34.	25/32" fiberboard sheathing[b]	1 1/2" galvanized roofing nail (7/16" head diameter); or 1 1/4" 16 gage staple with 7/16" or 1" crown	3 / 6
	Wood structural panels, combination subfloor underlayment to framing		
35.	3/4" and less	8d common (2 1/2" x 0.131"); or 6d deformed (2" x 0.113") (subfloor and wall)	6 / 12
36.	7/8" - 1"	8d common (2 1/2" x 0.131"); or 6d deformed (2" x 0.113") (subfloor and wall)	6 / 12
37.	1 1/8" - 1 1/4"	10d common (3" x 0.148"); or 8d deformed (2 1/2" x 0.131")	6 / 12
	Panel siding to framing		
38.	1/2" and less	6d corrosion-resistant siding (1 7/8" x 0.106"); or 6d corrosion-resistant casing (2 1/2" x 0.113")	6 / 12
39.	5/8"	8d corrosion-resistant siding (1 7/8" x 0.106"); or 8d corrosion-resistant casing (2 1/2" x 0.113")	6 / 12
	Interior paneling		
40.	1/4"	4d casing (1 1/2" x 0.080"); or 4d finish (1 1/2" x 0.072")	6 / 12
41.	3/8"	6d casing (2" x 0.099"); or 6d finish (Panel supports at 24 inches)	6 / 12

FOR SI: 1" = 25.4 mm

a. Nails spaced at 6 inches at intermediate supports where spans are 48 inches or more. For nailing of wood structural panel and particleboard diaphragms and shear walls, refer to Section 2305. Nails for wall sheathing are permitted to be common, box or casing.

b. Spacing shall be 6 inches on center on the edges and 12 inches on center at intermediate supports for nonstructural applications. Panel supports at 16 inches (20 inches if strength axis in the long direction of the panel, unless otherwise marked).

c. Where a rafter is fastened to an adjacent parallel ceiling joist in accordance with this schedule and the ceiling joist is fastened to the top plate in accordance with this schedule, the number of toenails in the rafter shall be permitted to be reduced by one nail.

TABLE 1. CONCRETE MIXTURES

CONCRETE USAGE	MIN. COMPRESSIVE STRENGTH (f'_c)	CONCRETE TYPE	EXPOSURE CLASSES	MAX. W/CM RATIO	PERMISSIBLE AIR CONTENT	REQUIRED CEMENT REPLACEMENT	MAX. AGGREGATE SIZE	ADDITIONAL REMARKS
COMBINED FOOTINGS, CONTINUOUS FOOTINGS, SPREAD FOOTINGS	3,000 psi AT 56 DAYS	NWC	C0, F0	N/A	N/A	0 - 70%	1-1/2"	

NOTES:

1. ALL CONCRETE SHALL BE CONSIDERED TO BE IN EXPOSURE CLASS F0, S0, P0 AND C0 ACCORDING TO ACI 318-08 UNLESS NOTED OTHERWISE IN TABLE ABOVE, IN NOTES BELOW OR ELSEWHERE ON THE STRUCTURAL DRAWINGS.
2. CONCRETE NOTED ABOVE OR ON PLAN AS EXPOSURE CLASS F1, F2, S1, S2, S3, P1, C1 OR C2 SHALL BE PROPORTIONED TO COMPLY WITH ACI 318-08 TABLES 4.3.1, 4.4.1 AND 4.4.2 IN ADDITION TO THE NOTATIONS IN THE REQUIREMENTS FOR VARIOUS EXPOSURE CLASSES RELATIVE TO CEMENT TYPE, AIR ENTRAINMENT REQUIREMENTS, CHLORIDE ION LIMITS AND POZZOLAN LIMITS.
3. FOR SLAB, COORDINATE AND PROVIDE MIX DESIGNS MEETING MAXIMUM CEMENT CONTENT FOR AGGREGATE SIZE TO COMPLY WITH TABLE 8.4.1B OF ACI 302-15.
4. WHERE INDICATED IN THE "ADDITIONAL REMARKS" ABOVE, CONCRETE SHALL BE PROPORTIONED FOR A MAXIMUM ALLOWABLE UNIT SHRINKAGE OF 0.035% MEASURED 28 DAYS AFTER CURING IN LIME WAS AS DETERMINED BY ASTM C157, USING AIR STORAGE.
5. WALLS AND PIERS THAT ARE LOCATED EXTERIOR TO THE BUILDING FOOTPRINT AND EXTEND ABOVE THE FROST LINE ARE EXPOSURE CLASS C1 AND F1 AND SHALL ATTAIN A MINIMUM COMPRESSIVE STRENGTH OF 4,500 psi AT 28 DAYS, HAVE A MAXIMUM WATER/CEMENT RATIO OF 0.45 AND HAVE A MINIMUM 4.5% AIR ENTRAINMENT.

JOIST HANGER SCHEDULE

MARK	WOOD MEMBER	NAME	TYPE	NAILING	
				HEADER	JOIST
JH-1	(3) 1 3/4"x9 1/2" LVL	HU610	FACE MOUNT	(18) 1/4"x1 3/4" TITEN 2 SCREWS	(8) 16d
JH-2	(3) 1 3/4"x9 1/2" LVL	HUC0610-SDS	FACE MOUNT	(12) 1/4"x2 1/2" SDS SCREWS	(6) 1/4"x2 1/2" SDS SCREWS
JH-3	REINF. 2"x8" (5" TO 5 1/2" TOTAL WIDTH)	U66	FACE MOUNT	(8) 16d	(4) 10d
JH-4	(2) 2x8	U26-2	FACE MOUNT	(8) 16d	(4) 10d
JH-5	(2) 1 3/4"x11 1/4" LVL	HHUS48	FACE MOUNT	(22) 10d	(8) 10d
JH-6	REINF. 2"x8" (3 1/2" TOTAL WIDTH)	LUS46	FACE MOUNT	(4) 16d	(4) 16d
JH-7	2"x8"	APLH26	FACE MOUNT	(6) SD10112DBB	(4) SD10112DBB
JH-8	1 3/4"x8" LVL	HU1.81/5	FACE MOUNT	(12) 16d	(6) 16d
JH-9	(3) 1 3/4"x16" LVL	THGQ5.50-SDS	FACE MOUNT	(38) 1/4"x4 1/2" SDS SCREWS	(16) 1/4"x4 1/2" SDS SCREWS
JH-10	(3) 1 3/4"x16" LVL	HHGU5.50-SDS	FACE MOUNT	(44) 1/4"x2 1/2" SDS SCREWS	(28) 1/4"x2 1/2" SDS SCREWS
JH-11	2x8	LUS26	FACE MOUNT	(4) 10d	(4) 10d

NOTES:

1. JOIST HANGERS BY SIMPSON STRONG-TIE. ALL JOIST HANGERS SUPPORTING PT LUMBER SHALL BE GALVANIZED.
2. 10dx1 1/2" = 0.148"Ø x 1 1/2"
3. 10d = 0.148"Ø x 3"
4. 16d = 0.162"Ø x 3 1/2"
5. 1/4"x1 3/4" TITEN CONCRETE SCREW BY SIMPSON STRONG TIE.
6. SD10112DBB SCREW BY SIMPSON STRONG TIE.

FOOTING SCHEDULE

PLAN DESIGNATION	FOOTING SIZE	REINFORCING *(BOTTOM U.N.O.)*
F2.0	2'-0" x 2'-0" x 12" THICK	(2) #5 x 1'-8" EACH WAY TOP AND BOTTOM
F3.0	3'-0" x 3'-0" x 12" THICK	(3) #5 x 2'-6" EACH WAY TOP AND BOTTOM
F3.0X5.0	3'-0" x 5'-0" x 12" THICK	(5) #5 x 2'-6" SHORT WAY (4) #5 x 4'-6" LONG WAY TOP AND BOTTOM

STATE OF VERMONT — REGISTERED ARCHITECT — 2026-01-20 — Alice Ward Library — NO. 5443 — MICHAEL T. NORTON

Stamp

No.	Description	Date

ENGINEERING VENTURES PC
Vermont • New Hampshire • New York
209 Flynn Avenue, Suite 2A, Burlington, VT 05401 | (802)863-6226
85 Mechanic Street, Suite E2-3, Lebanon, NH 03766 | (603) 442-9333
366 Broadway, Suite 11, Saratoga Springs, NY 12866 | (518) 205-9141
www.engineeringventures.com

27 Park St.
Canaan, VT 05903

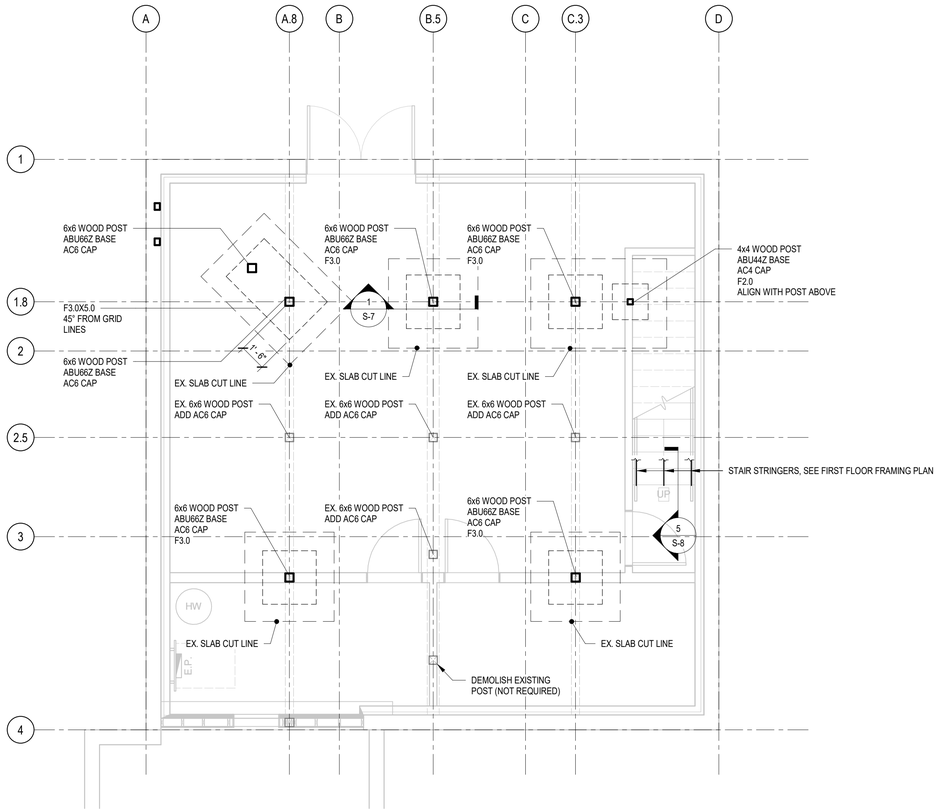
Sheet Title: SCHEDULES AND TABLES

Project Title: ALLICE WARD LIBRARY

Designed By:	MAN
Checked By:	RN
Drawn By:	MAN
Scale:	As indicated
Date:	01/20/26

S-3

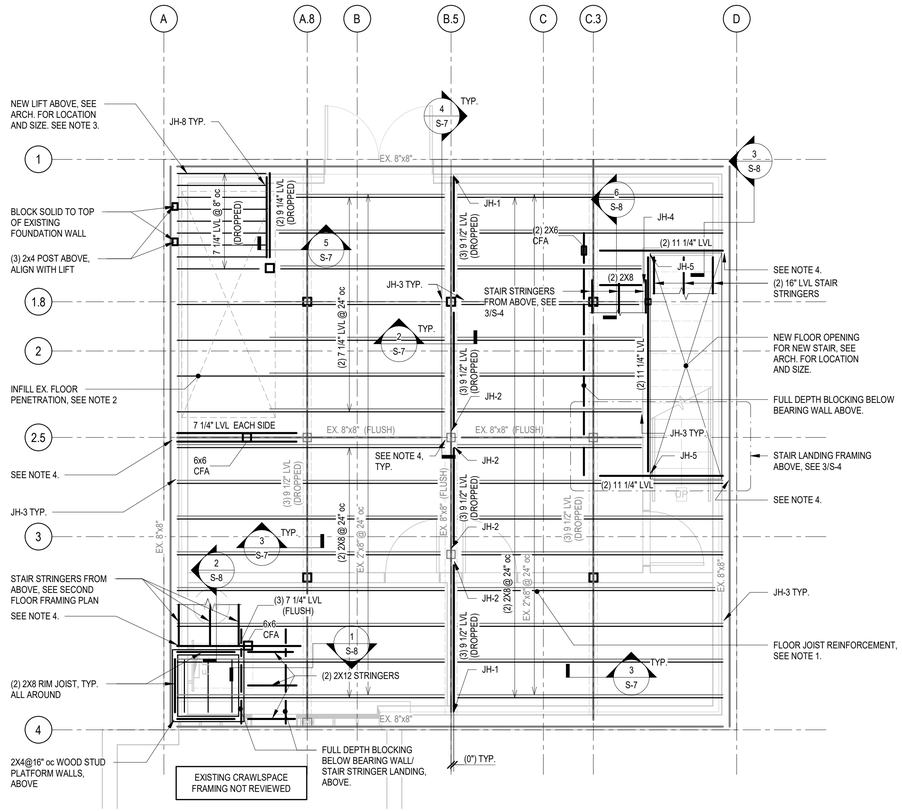
EV Project #24649



1 FOUNDATION PLAN
1/4" = 1'-0"

NOTES:

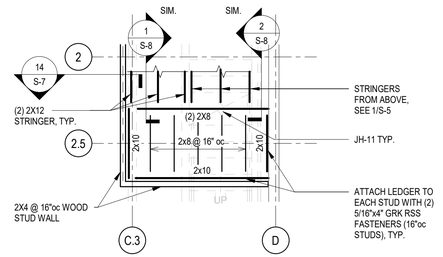
1. TOP OF NEW FOOTINGS SHALL MATCH TOP OF EXISITNG SLAB.
2. FX.0 INDICATES FOOTING, SEE FOOTING SCHEDULE FOR SIZE AND REINFORCING.



2 FIRST FLOOR FRAMING PLAN
1/4" = 1'-0"

NOTES:

1. REINFORCE EXISTING FLOOR JOISTS WITH (2) 2x8. SHIM NEW JOISTS WITH HARDWOOD SHIMS AS REQUIRED. FASTEN TOGETHER PER TYPICAL DETAILS.
2. AT EXISTING OPENING TO BE INFILLED, REMOVE HEADER AND REINFORCE EXISTING JOISTS WITH NEW 1 3/4" LVL ON EACH SIDE. MATCH DEPTH OF EXISTING JOISTS. FASTEN TOGETHER PER TYPICAL DETAILS.
3. AT NEW LIFT, DROP LVL JOISTS TO CREATE PIT FOR NEW LIFT. COORDINATE PIT DEPTH WITH LIFT DOCUMENTATION.
4. AT EXISTING 8"X8" BEAM AND 11 1/4" LVL ADD LS90 CLIP EACH SIDE.



3 STAIR LANDING FRAMING
1/4" = 1'-0"

Stamp

No.	Description	Date

ENGINEERING VENTURES PC
Vermont • New Hampshire • New York
209 Flynn Avenue, Suite 2A, Burlington, VT 05401 | (802)863-6226
85 Mechanic Street, Suite E2-3, Lebanon, NH 03766 | (603) 442-9333
368 Broadway, Suite 11, Saratoga Springs, NY 12866 | (518) 205-9141
www.engineeringventures.com

27 Park St.
Canaan, VT 05903

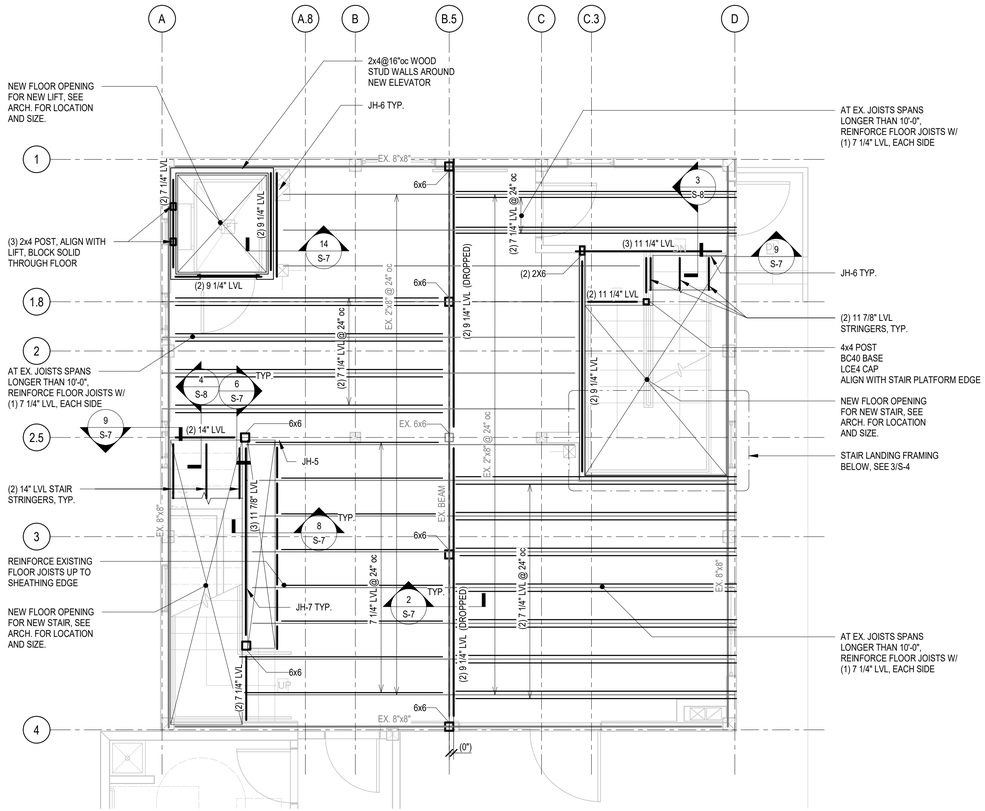
Sheet Title: PLANS

Project Title: ALLICE WARD LIBRARY

Designed By:	MAN
Checked By:	RN
Drawn By:	MAN
Scale:	1/4" = 1'-0"
Date:	01/20/26

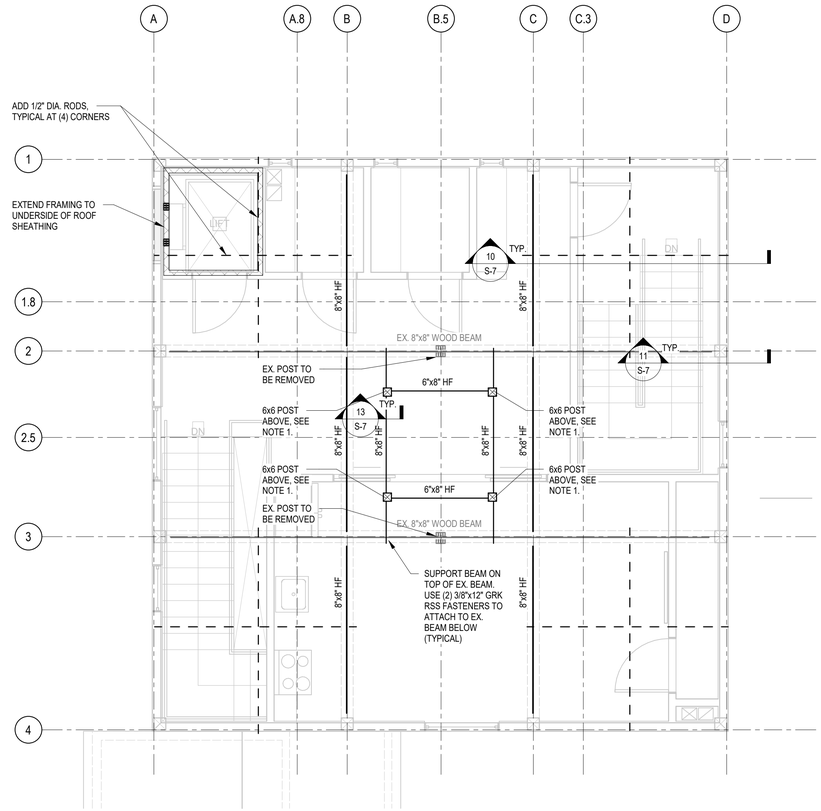
S-4

EV Project #24649



1 SECOND FLOOR FRAMING PLAN
1/4" = 1'-0"

NOTES:
1. REINFORCE EXISTING FLOOR JOISTS AS INDICATED. FASTEN TOGETHER PER DETAIL 12/S-7
2. EXISTING BEAM AND POST TO BE REMOVED.



2 ROOF FRAMING COLLAR TIE PLAN
1/4" = 1'-0"

NOTES:

1. REMOVE EX. POST FROM HIP JOIST TO BOTTOM AND REPLACE WITH NEW POST.

Stamp

No.	Description	Date

ENGINEERING VENTURES PC
Vermont • New Hampshire • New York
209 Flynn Avenue, Suite 2A, Burlington, VT 05401 | (802)863-6226
85 Mechanic Street, Suite E2-3, Lebanon, NH 03766 | (603) 442-9333
366 Broadway, Suite 11, Saratoga Springs, NY 12866 | (518) 205-9141
www.engineeringventures.com

27 Park St.
Canaan, VT 05903

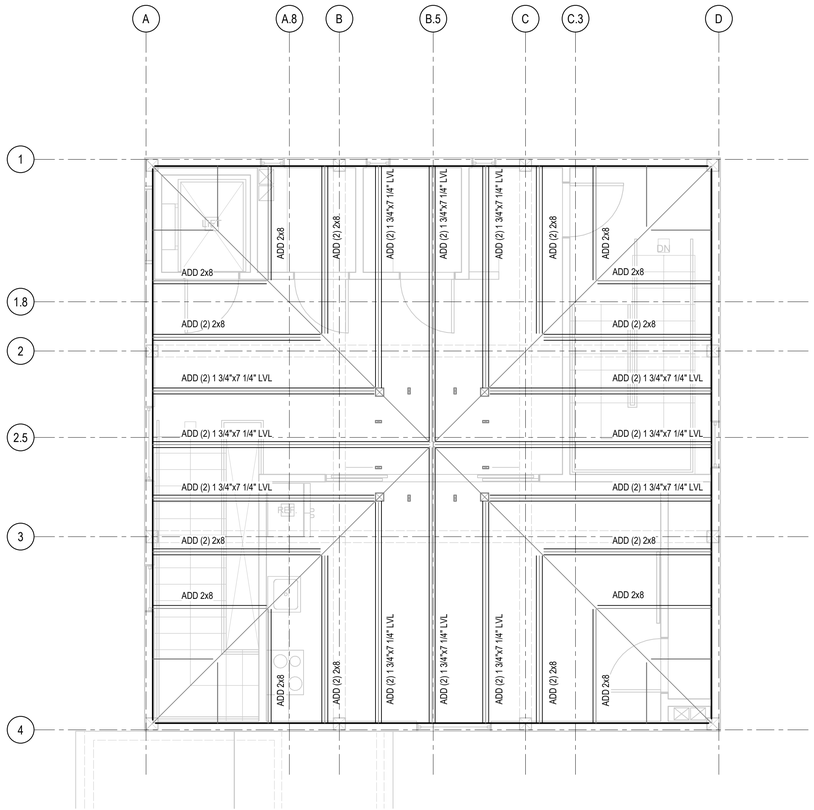
Project Title: ALLICE WARD LIBRARY

Sheet Title: PLANS

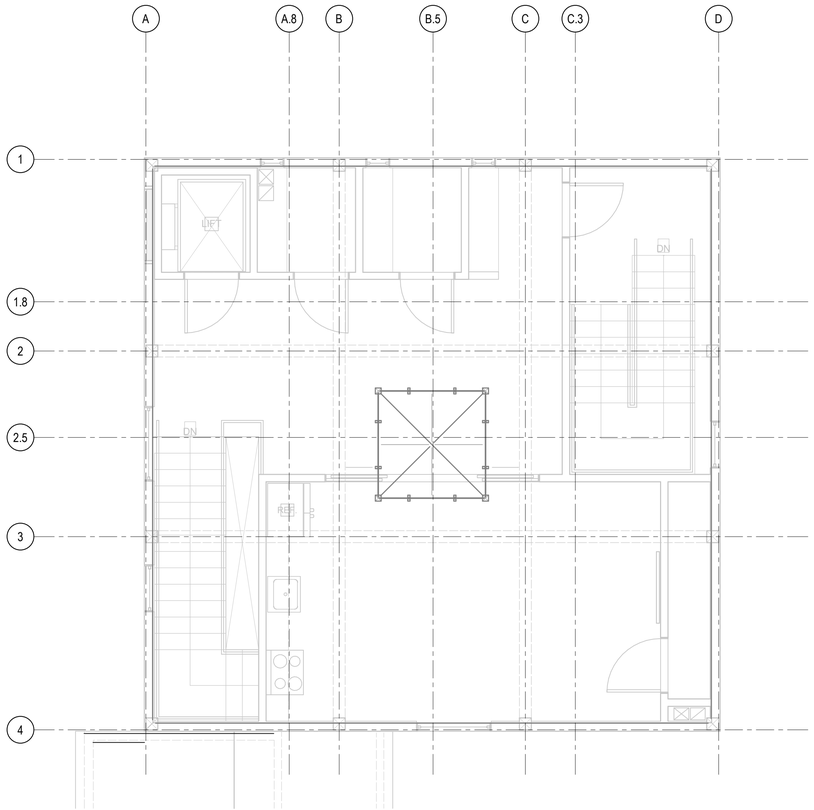
Designed By:	MAN
Checked By:	RN
Drawn By:	MAN
Scale:	1/4" = 1'-0"
Date:	01/20/26

S-5

EV Project #24649



1 ROOF FRAMING PLAN
1/4" = 1'-0"



2 CUPOLA FRAMING PLAN
1/4" = 1'-0"

STATE OF VERMONT
RANDI A. NELSON
2026-01-20
Alice Ward Library
NO. 5443
Stamp

No.	Description	Date

ENGINEERING VENTURES PC
Vermont • New Hampshire • New York
208 Flynn Avenue, Suite 2A, Burlington, VT 05401 | (802)863-6226
85 Mechanic Street, Suite E2-3, Lebanon, NH 03766 | (603) 442-9333
368 Broadway, Suite 11, Saratoga Springs, NY 12866 | (518) 205-9141
www.engineeringventures.com

27 Park St.
Canaan, VT 05903

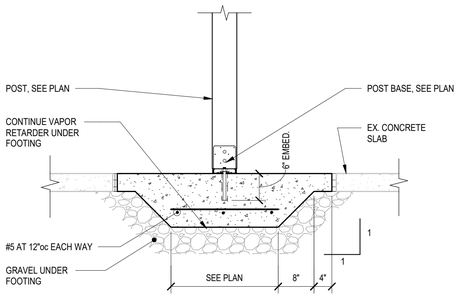
Sheet Title: PLANS

Project Title: ALLICE WARD LIBRARY

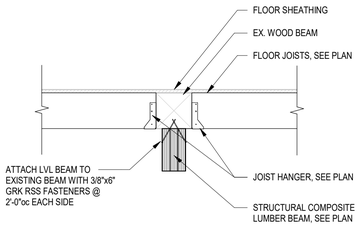
Designed By:	MAN
Checked By:	RN
Drawn By:	MAN
Scale:	1/4" = 1'-0"
Date:	01/20/26

S-6

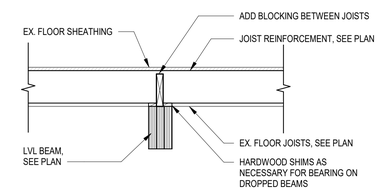
EV Project #24649



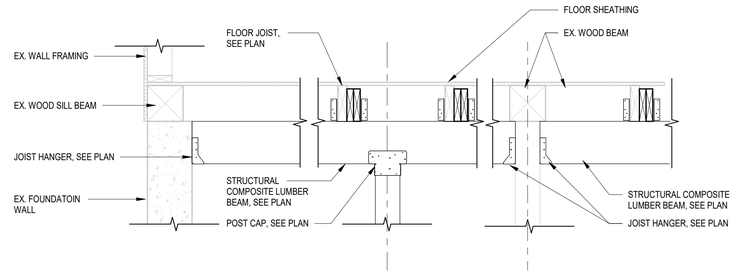
1 TYPICAL THICKENED SLAB-ON-GRADE AT STUD BEARING WALL
3/4" = 1'-0"



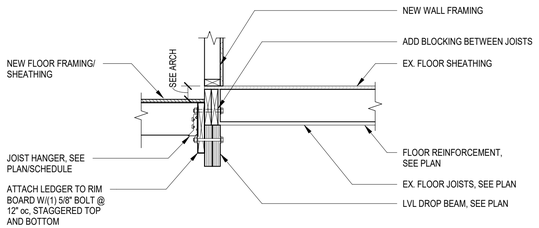
2 FIRST FLOOR SECTION
3/4" = 1'-0"



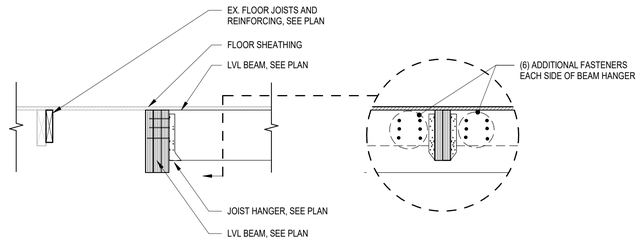
3 FIRST FLOOR SECTION
3/4" = 1'-0"



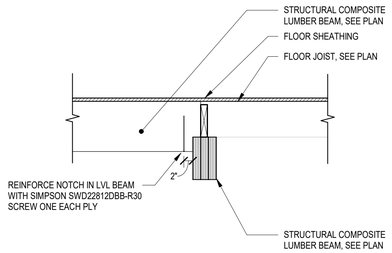
4 FIRST FLOOR SECTION
3/4" = 1'-0"



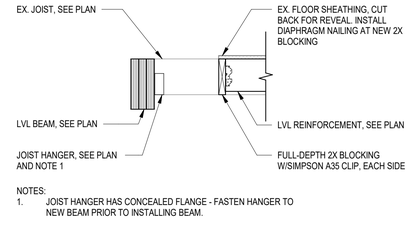
5 ELEVATOR PIT FRAMING
3/4" = 1'-0"



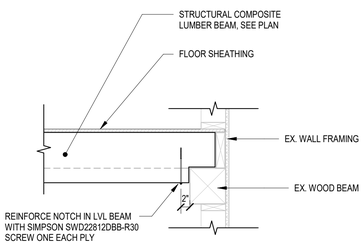
6 SECOND FLOOR SECTION
3/4" = 1'-0"



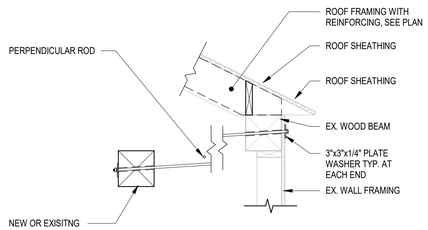
7 SECOND FLOOR SECTION
3/4" = 1'-0"



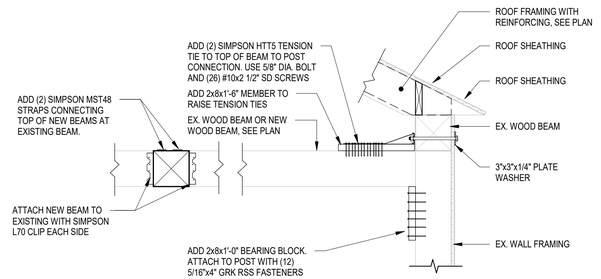
8 SECOND FLOOR SECTION
3/4" = 1'-0"



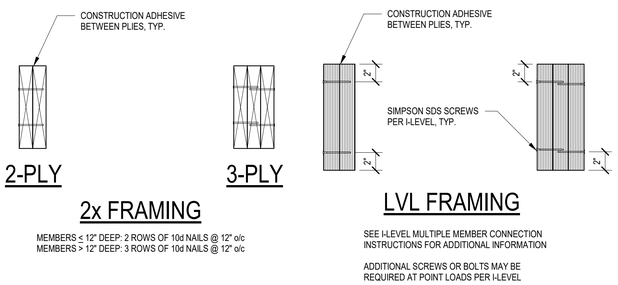
9 SECOND FLOOR SECTION
3/4" = 1'-0"



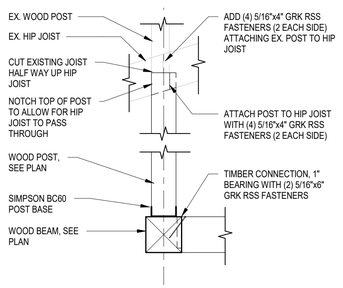
10 ROOF SECTION
3/4" = 1'-0"



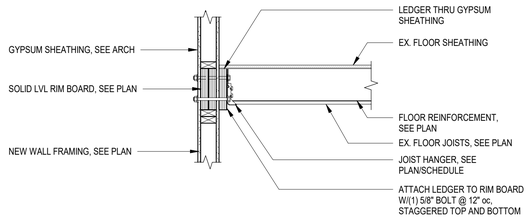
11 ROOF SECTION
3/4" = 1'-0"



12 TYPICAL MULTI-MEMBER BEAM CONNECTION
1 1/2" = 1'-0"



13 COUPALA POST REPLACEMENT
3/4" = 1'-0"



14 RATED WALL LEDGER
3/4" = 1'-0"

STATE OF VERMONT
DAVID A. NEELY
2026-01-20
Alice Ward Library
NO. 5443
REGISTERED PROFESSIONAL ENGINEER
Stamp

ENGINEERING VENTURES PC
Vermont • New Hampshire • New York
209 Flynn Avenue, Suite 2A, Burlington, VT 05401 | (802)863-8226
85 Mechanic Street, Suite E2-3, Lebanon, NH 03766 | (603) 442-9333
366 Broadway, Suite 11, Saratoga Springs, NY 12866 | (518) 205-9141
www.engineeringventures.com

No.	Description	Date

27 Park St.
Canaan, VT 05903

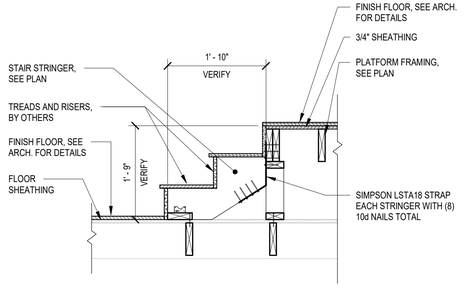
DETAILS
Sheet Title:

ALLICE WARD LIBRARY
Project Title:

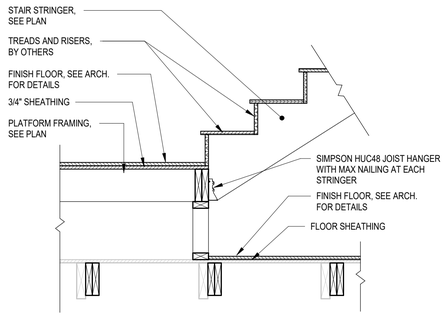
Designed By:	MAN
Checked By:	RN
Drawn By:	MAN
Scale:	As indicated
Date:	01/20/26

S-7

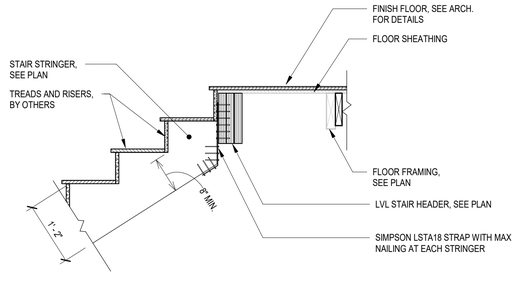
EV Project #24649



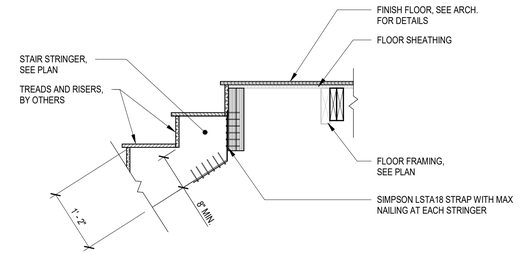
1 STAIR DETAIL 1
3/4" = 1'-0"



2 STAIR DETAIL 2
3/4" = 1'-0"



3 STAIR DETAIL 3
3/4" = 1'-0"



4 STAIR DETAIL 4
3/4" = 1'-0"

5 STAIR DETAIL 5
3/4" = 1'-0"

6 STAIR DETAIL 6
3/4" = 1'-0"

STATE OF VERMONT
RICHARD A. NEELY
2026-01-20
Allice Ward Library
NO. 5443
Richard Neely
Stamp

No.	Description	Date

ENGINEERING VENTURES PC
Vermont • New Hampshire • New York
209 Flynn Avenue, Suite 2A, Burlington, VT 05401 | (802)863-6226
85 Mechanic Street, Suite E2-3, Lebanon, NH 03766 | (603) 442-9333
368 Broadway, Suite 11, Saratoga Springs, NY 12866 | (518) 205-9141
www.engineeringventures.com

27 Park St.
Canaan, VT 05903

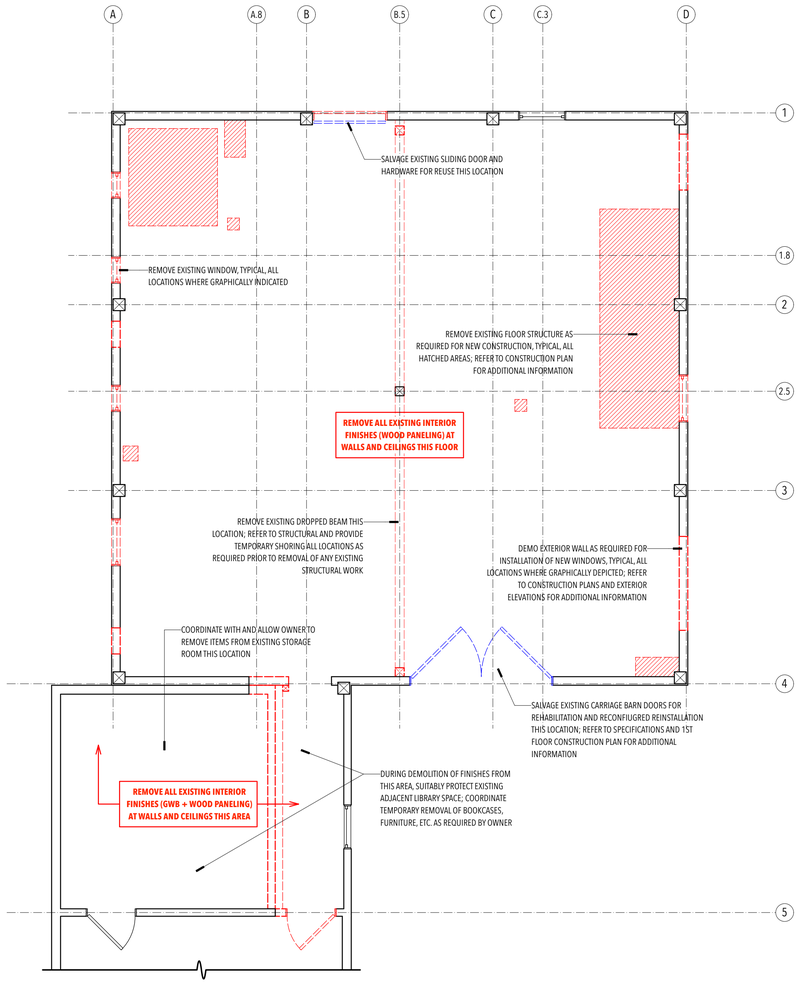
Sheet Title: STAIR AND ELEVATOR DETAILS

Project Title: ALLICE WARD LIBRARY

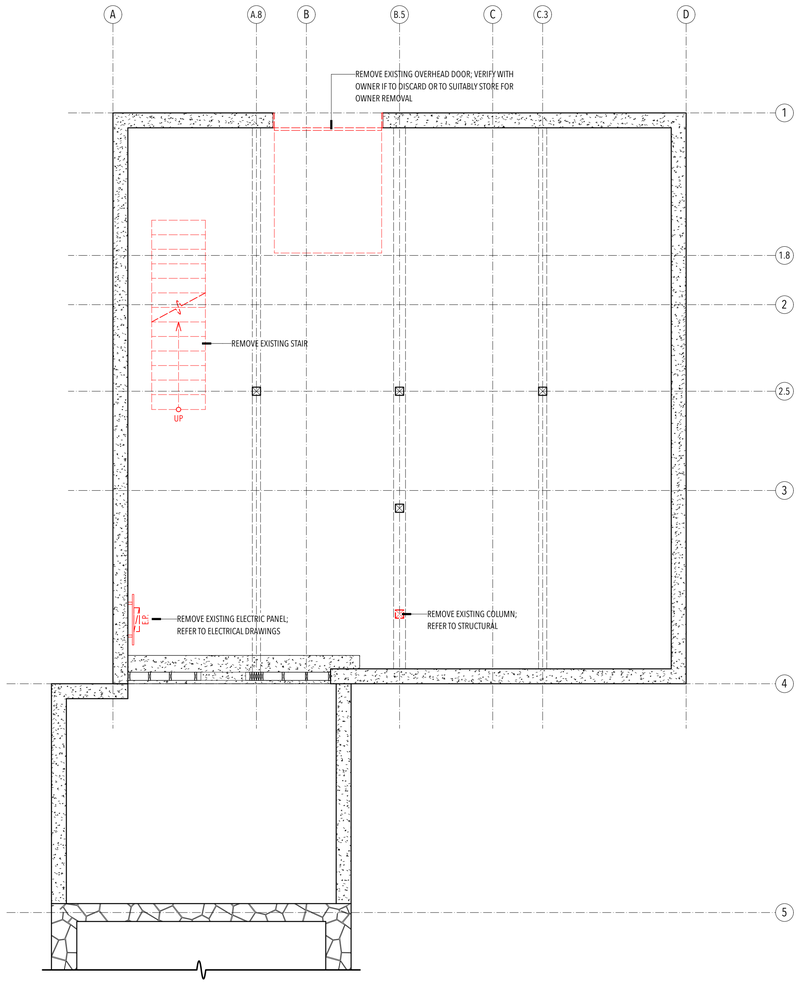
Designed By:	MAN
Checked By:	RN
Drawn By:	MAN
Scale:	3/4" = 1'-0"
Date:	01/20/26

S-8

EV Project #24649



2 DEMOLITION PLAN : 1ST FLOOR
SCALE: 1/4" = 1'-0"



1 DEMOLITION PLAN : BASEMENT
SCALE: 1/4" = 1'-0"

DEMOLITION PLAN DRAWING LEGEND

- EXISTING CONSTRUCTION TO REMAIN
- EXISTING CONSTRUCTION TO BE REMOVED
- EXISTING CONSTRUCTION TO BE REMOVED AND SUITABLY STORED FOR REUSE

DEMOLITION PLAN GENERAL NOTES

1. DEMOLITION DRAWINGS ARE DIAGRAMMATIC IN NATURE AND ARE PROVIDED TO CONVEY THE DEMOLITION INTENT REQUIRED TO SATISFY THE COMPLETED SCOPE OF WORK FOR THE PROJECT; THESE DRAWINGS MAY NOT SHOW ALL AREAS, ELEMENTS, SIZES OR QUANTITIES OF EQUIPMENT TO BE REMOVED; THE CONTRACTOR SHALL VERIFY ALL EXISTING CONDITIONS AND PROJECT DRAWINGS PRIOR TO THE START OF DEMOLITION OR REMOVALS FOR COORDINATION WITH THE INTENT OF THE COMPLETED WORK; ADDITIONAL REMOVALS AND/OR REPLACEMENT IN-KIND OF ELEMENTS OR EQUIPMENT MAY BE REQUIRED TO ACCOMMODATE THE COMPLETED PROJECT AND ALL SUCH WORK SHALL BE INCLUDED AS PART OF THE CONTRACT
2. THE CONTRACTOR SHALL FIELD LOCATE ALL EXISTING UTILITIES PRIOR TO COMMENCEMENT OF DEMOLITION AND SHALL PROTECT ANY EXISTING UTILITIES TO REMAIN IN SERVICE
3. IN AREAS INDICATING DEMOLITION OF EXISTING PARTITIONS, DEMOLITION SHALL INCLUDE THE REMOVAL OF ALL ASSOCIATED DOORS AND FRAMES, ATTACHED EQUIPMENT, AND MEP/FA COMPONENTS (PIPING, WIRING, DUCTWORK, ETC.) FOR COMPLETE REMOVAL
4. PROTECT ALL EXISTING CONSTRUCTION TO REMAIN DURING DEMOLITION AND CONSTRUCTION
5. PATCH, REPAIR, AND PAINT/REFINISH ALL SURFACES TO MATCH EXISTING WHERE EXISTING CONSTRUCTION IS REMOVED OR ALTERED
6. PATCH, REPAIR, AND PAINT/REFINISH ANY SURFACES AND BUILDING ELEMENTS DAMAGED BY DEMOLITION OF ANY MEP ELEMENTS
7. PROVIDE TEMPORARY BRACING AND SHORING OF EXISTING WALLS AND STRUCTURAL ELEMENTS TO REMAIN AS REQUIRED FOR DEMOLITION OR NEW CONSTRUCTION UNTIL NEW STRUCTURAL SYSTEMS AND MODIFICATIONS ARE SECURE AND IN PLACE
8. ANY AND ALL DISCOVERED ARTIFACTS FOUND DURING DEMOLITION ARE THE PROPERTY OF THE OWNER AND SHALL BE SUITABLY STORED FOR THE OWNER'S ACQUIREMENT

R. Edwards & Co.
ARCHITECTS + PRESERVATIONISTS
52 State St., 2nd Floor | Montpelier, VT 05602
(802) 232-2628 | info@redwardsandcompany.com
www.redwardsandcompany.com

SEAL

LICENSED ARCHITECT · RYAN NEAL EDWARDS · NO. 003.013420 · STATE OF VERMONT

PROJECT
Alice Ward Library Carriage House Rehabilitation

27 Park St.
Canaan, VT 05903

PROJECT NUMBER
2023.20

PROJECT TEAM

STRUCTURAL ENGINEER
Engineering Ventures, PC
208 Flynn Ave., Suite 2A
Burlington, VT 05401
(802) 863-7225

MEP ENGINEER
DuBois & King, Inc.
10 Corporate Dr., Suite 210
Bedford, NH 03110
(603) 637-1043

RELEASE
BID SET

RELEASE DATE
01.20.26

RELEASE + REVISION LOG

MARK	DESCRIPTION	DATE

PROJECT NORTH

N

DRAWING NAME
DEMOLITION PLANS : BASEMENT + 1ST FLOOR

DRAWN	RE	DATE	01.20.26
CHECKED		SCALE	1/4" = 1'-0"

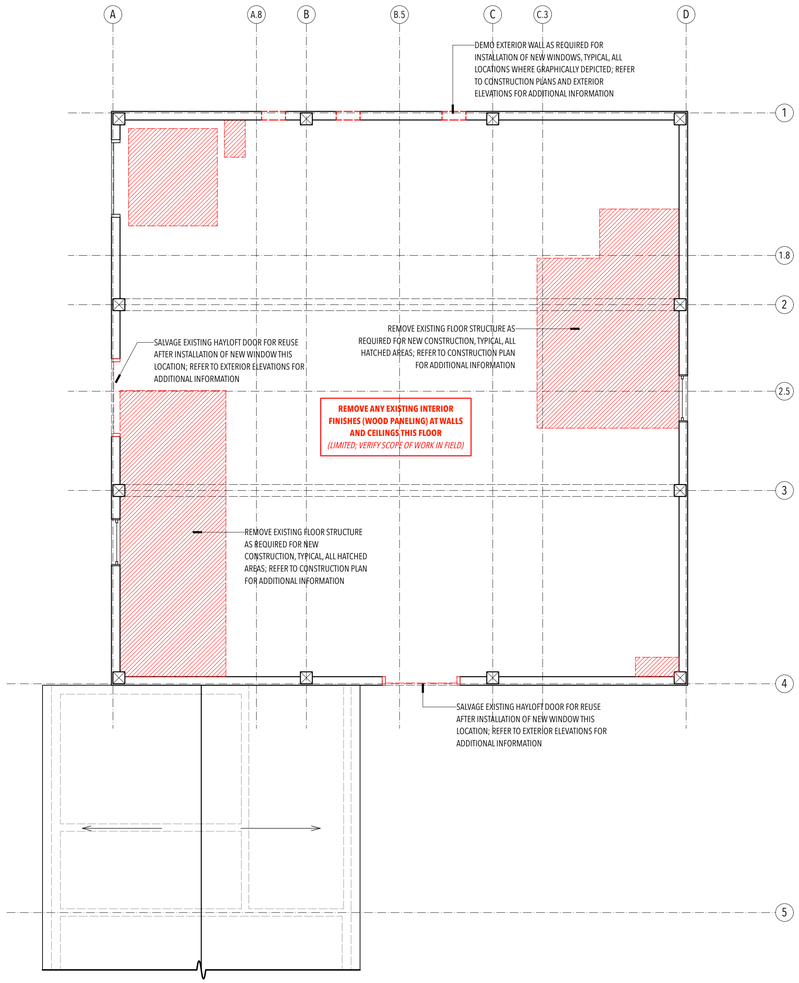
DRAWING NUMBER
AD.101

DEMOLITION PLAN DRAWING LEGEND

- EXISTING CONSTRUCTION TO REMAIN
- EXISTING CONSTRUCTION TO BE REMOVED
- EXISTING CONSTRUCTION TO BE REMOVED AND SUITABLY STORED FOR REUSE

DEMOLITION PLAN GENERAL NOTES

1. DEMOLITION DRAWINGS ARE DIAGRAMMATIC IN NATURE AND ARE PROVIDED TO CONVEY THE DEMOLITION INTENT REQUIRED TO SATISFY THE COMPLETED SCOPE OF WORK FOR THE PROJECT; THESE DRAWINGS MAY NOT SHOW ALL AREAS, ELEMENTS, SIZES OR QUANTITIES OF EQUIPMENT TO BE REMOVED; THE CONTRACTOR SHALL VERIFY ALL EXISTING CONDITIONS AND PROJECT DRAWINGS PRIOR TO THE START OF DEMOLITION OR REMOVALS FOR COORDINATION WITH THE INTENT OF THE COMPLETED WORK; ADDITIONAL REMOVALS AND/OR REPLACEMENT IN-KIND OF ELEMENTS OR EQUIPMENT MAY BE REQUIRED TO ACCOMMODATE THE COMPLETED PROJECT AND ALL SUCH WORK SHALL BE INCLUDED AS PART OF THE CONTRACT
2. THE CONTRACTOR SHALL FIELD LOCATE ALL EXISTING UTILITIES PRIOR TO COMMENCEMENT OF DEMOLITION AND SHALL PROTECT ANY EXISTING UTILITIES TO REMAIN IN SERVICE
3. IN AREAS INDICATING DEMOLITION OF EXISTING PARTITIONS, DEMOLITION SHALL INCLUDE THE REMOVAL OF ALL ASSOCIATED DOORS AND FRAMES, ATTACHED EQUIPMENT, AND MEP/FA COMPONENTS (PIPING, WIRING, DUCTWORK, ETC.) FOR COMPLETE REMOVAL
4. PROTECT ALL EXISTING CONSTRUCTION TO REMAIN DURING DEMOLITION AND CONSTRUCTION
5. PATCH, REPAIR, AND PAINT/REFINISH ALL SURFACES TO MATCH EXISTING WHERE EXISTING CONSTRUCTION IS REMOVED OR ALTERED
6. PATCH, REPAIR, AND PAINT/REFINISH ANY SURFACES AND BUILDING ELEMENTS DAMAGED BY DEMOLITION OF ANY MEP ELEMENTS
7. PROVIDE TEMPORARY BRACING AND SHORING OF EXISTING WALLS AND STRUCTURAL ELEMENTS TO REMAIN AS REQUIRED FOR DEMOLITION OR NEW CONSTRUCTION UNTIL NEW STRUCTURAL SYSTEMS AND MODIFICATIONS ARE SECURE AND IN PLACE
8. ANY AND ALL DISCOVERED ARTIFACTS FOUND DURING DEMOLITION ARE THE PROPERTY OF THE OWNER AND SHALL BE SUITABLY STORED FOR THE OWNER'S ACQUIREMENT



1 DEMOLITION PLAN : 2ND FLOOR
SCALE: 1/4" = 1'-0"

R. Edwards & Co.
ARCHITECTS + PRESERVATIONISTS
52 State St., 2nd Floor | Montpelier, VT 05602
(802) 232-2628 | info@redwardsandcompany.com
www.redwardsandcompany.com

SEAL

PROJECT
Alice Ward Library Carriage House Rehabilitation

27 Park St.
Canaan, VT 05903

PROJECT NUMBER
2023.20

PROJECT TEAM

STRUCTURAL ENGINEER
Engineering Ventures, PC
208 Flynn Ave., Suite 2A
Burlington, VT 05401
(802) 863-7225

MEP ENGINEER
DuBois & King, Inc.
10 Corporate Dr., Suite 210
Bedford, NH 03110
(603) 637-1043

RELEASE
BID SET

RELEASE DATE
01.20.26

RELEASE + REVISION LOG

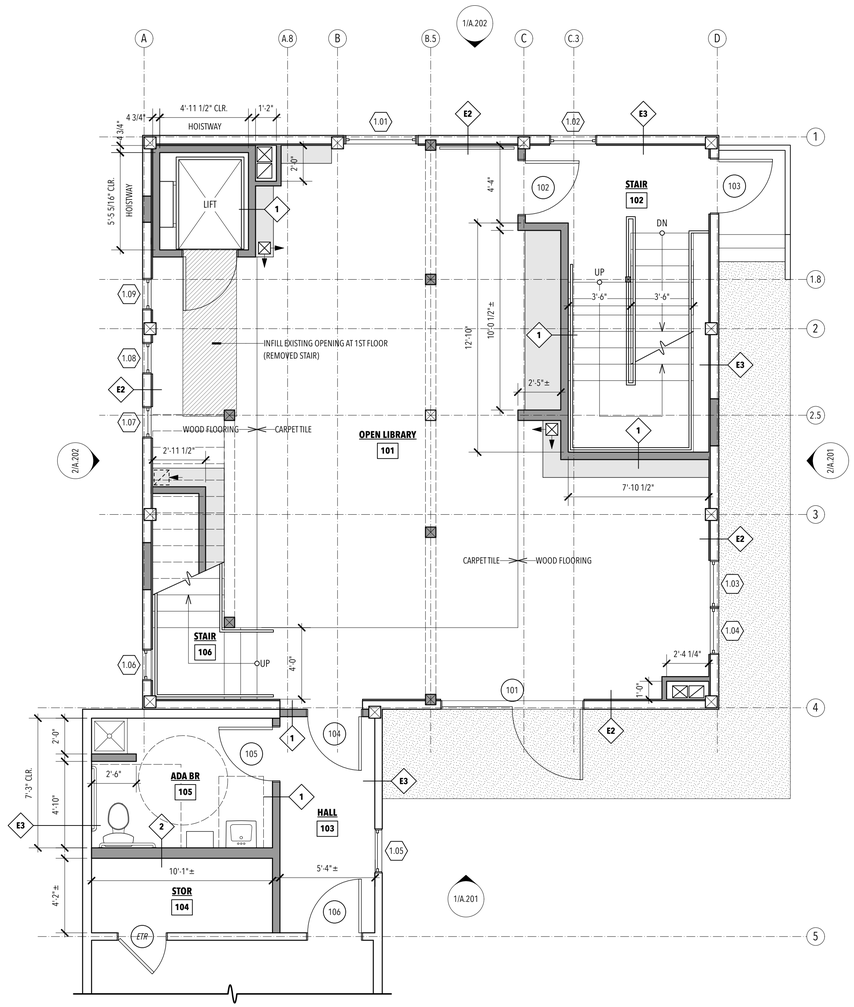
MARK	DESCRIPTION	DATE

PROJECT NORTH

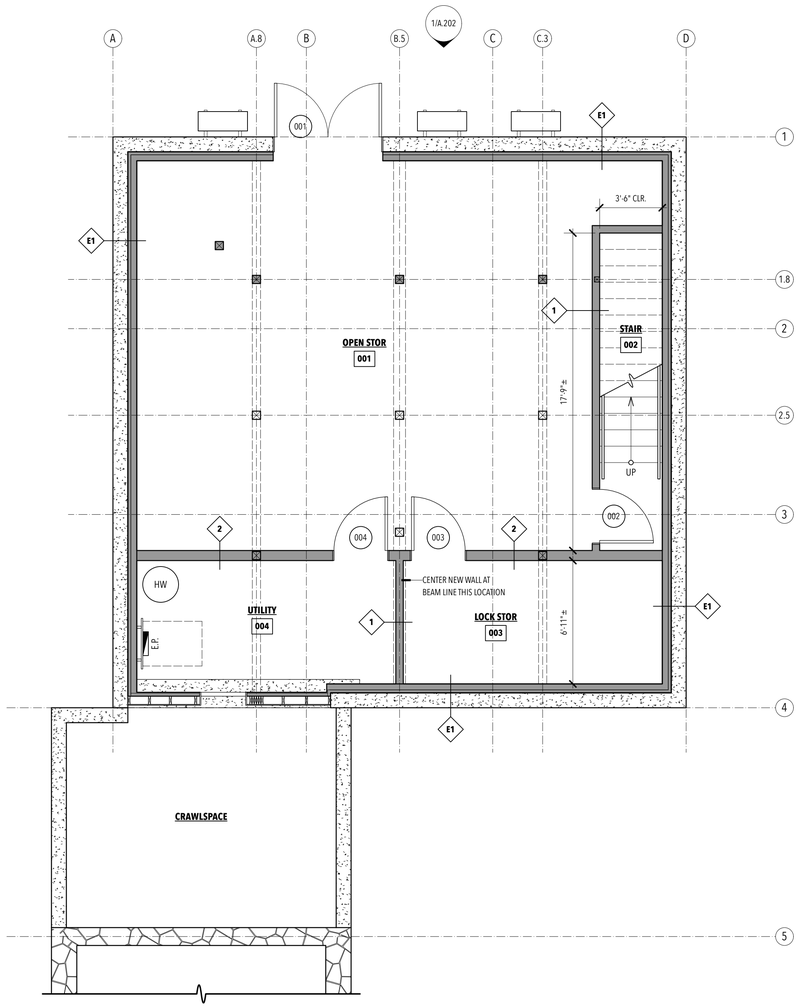
DRAWING NAME
DEMOLITION PLANS : 2ND FLOOR

DRAWN	RE	DATE	01.20.26
CHECKED		SCALE	1/4" = 1'-0"

DRAWING NUMBER
AD.102



2 CONSTRUCTION PLAN : 1ST FLOOR
SCALE: 1/4" = 1'-0"



1 CONSTRUCTION PLAN : BASEMENT
SCALE: 1/4" = 1'-0"

CONSTRUCTION PLAN DRAWING LEGEND

- EXISTING CONSTRUCTION TO REMAIN
- NEW CONSTRUCTION
- NEW BUILT-IN MILLWORK

CONSTRUCTION PLAN GENERAL NOTES

1. THE CONSTRUCTION PLANS SHALL BE READ IN CONJUNCTION WITH ALL ARCHITECTURAL, STRUCTURAL, MECHANICAL, PLUMBING, AND ELECTRICAL DRAWINGS; ANY DISCREPANCY SHALL BE BROUGHT TO THE ATTENTION TO THE ARCHITECT PRIOR TO THE EXECUTION OF THE WORK
2. ALL DIMENSIONS ARE TO FACE OF FINISHED WALL UNLESS OTHERWISE NOTED.
3. GIVEN THE AGE OF THE BUILDING IT SHALL BE ASSUMED THAT NOT ALL WALLS AND FLOORS ARE SQUARE, LEVEL, OR IN ALIGNMENT, AND THAT DIMENSIONS MAY VARY FROM FLOOR TO FLOOR AND SIDE TO SIDE OF THE BUILDING.
4. MAINTAIN REQUIRED FIRE-RESISTANCE RATINGS FOR ALL EXISTING AND NEW ASSEMBLIES
5. ALL NEW PARTITIONS CONSTRUCTED IN ALIGNMENT WITH OR AS A CONTINUATION OF AN EXISTING PARTITION SHALL MATCH THE WIDTH AND CONSTRUCTION OF THE EXISTING PARTITION, UNLESS OTHERWISE NOTED.
6. ALL NEW INTERIOR PARTITIONS SHALL CONSIST OF 2X4 WOOD STUD FRAMING AT 16" O.C. WITH 5/8" TYPE "X" GYPSUM WALLBOARD, EXCEPT WHERE OTHERWISE INDICATED; PROVIDE MOISTURE-RESISTANT GYPSUM WALLBOARD AT NEW ADA RESTROOM
7. AT ALL EXISTING PARTITIONS TO REMAIN, PATCH AND REPAIR EXISTING FINISH(ES) AS REQUIRED TO MATCH EXISTING WHERE INTERSECTING WALLS HAVE BEEN REMOVED OR WHERE DAMAGE HAS OCCURRED; PATCH AND REPAIR EXISTING FINISH(ES), INCLUDING ANY HOLES OR GAPS LEFT BY THE REMOVAL OF ANY OBSOLETE MEP COMPONENTS INCLUDING, BUT NOT LIMITED TO, CONDUIT, DUCTWORK, HANGERS, ETC.

R. Edwards & Co.
ARCHITECTS + PRESERVATIONISTS
52 State St., 2nd Floor | Montpelier, VT 05602
(802) 232-2628 | info@redwardsandcompany.com
www.redwardsandcompany.com

SEAL

PROJECT
Alice Ward Library Carriage House Rehabilitation

27 Park St.
Canaan, VT 05903

PROJECT NUMBER
2023.20

PROJECT TEAM

STRUCTURAL ENGINEER
Engineering Ventures, PC
208 Flynn Ave., Suite 2A
Burlington, VT 05401
(802) 863-7225

MEP ENGINEER
DuBois & King, Inc.
10 Corporate Dr., Suite 210
Bedford, NH 03110
(603) 637-1043

RELEASE
BID SET

RELEASE DATE
01.20.26

RELEASE + REVISION LOG

MARK	DESCRIPTION	DATE

PROJECT NORTH

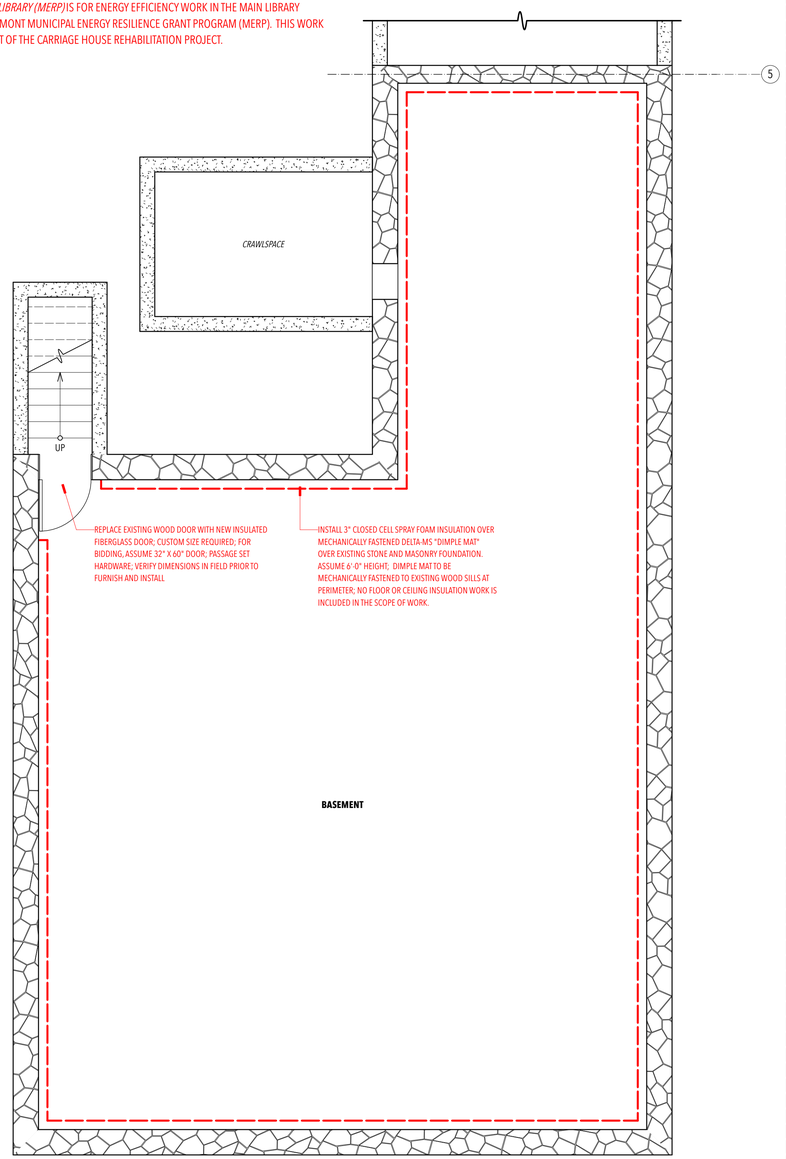
DRAWING NAME
CONSTRUCTION PLANS : BASEMENT + 1ST FLOOR

DRAWN	RE	DATE	01.20.26
CHECKED		SCALE	1/4" = 1'-0"

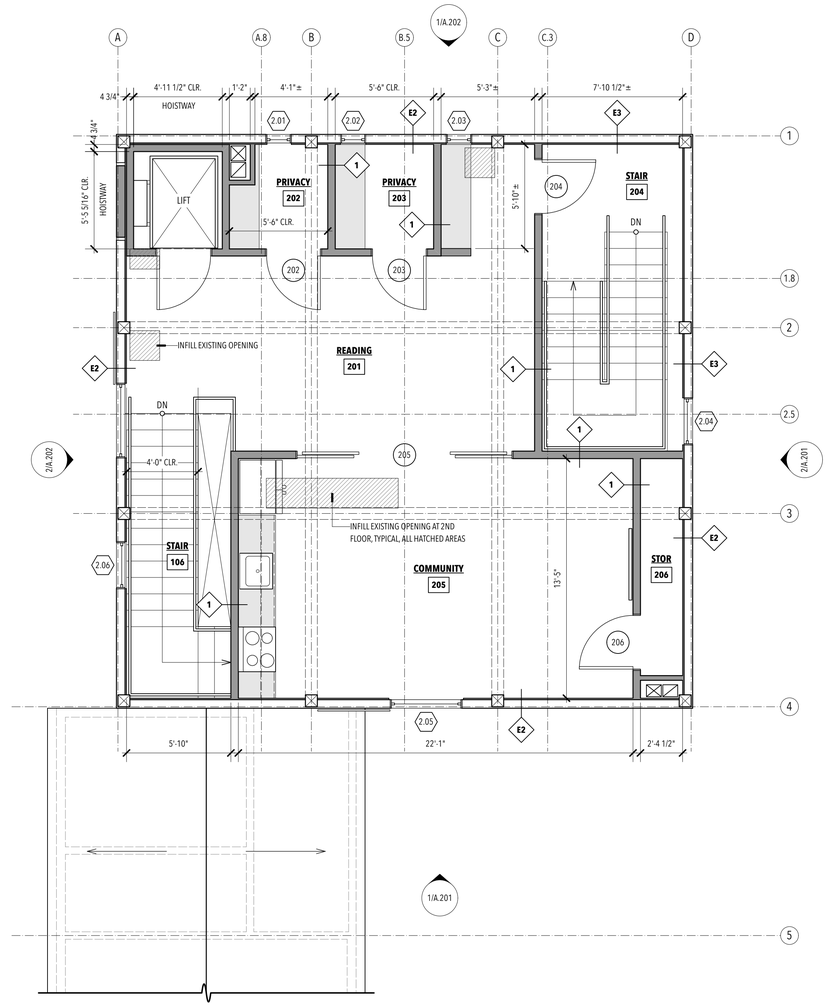
DRAWING NUMBER
A.101

MERP FUNDING SCOPE OF WORK

GENERAL NOTE:
THE LIMITED SCOPE OF WORK AS DEFINED HEREIN ON DRAWING 2/A.102, *CONSTRUCTION PLAN: BASEMENT @ MAIN LIBRARY (MERP)* IS FOR ENERGY EFFICIENCY WORK IN THE MAIN LIBRARY FUNDED BY THE VERMONT MUNICIPAL ENERGY RESILIENCE GRANT PROGRAM (MERP). THIS WORK IS INCLUDED AS PART OF THE CARRIAGE HOUSE REHABILITATION PROJECT.



2 **CONSTRUCTION PLAN : BASEMENT @ MAIN LIBRARY (MERP)**
SCALE: 1/4" = 1'-0"



1 **CONSTRUCTION PLAN : 2ND FLOOR**
SCALE: 1/4" = 1'-0"

CONSTRUCTION PLAN DRAWING LEGEND

- EXISTING CONSTRUCTION TO REMAIN
- NEW CONSTRUCTION
- NEW BUILT-IN MILLWORK

CONSTRUCTION PLAN GENERAL NOTES

1. THE CONSTRUCTION PLANS SHALL BE READ IN CONJUNCTION WITH ALL ARCHITECTURAL, STRUCTURAL, MECHANICAL, PLUMBING, AND ELECTRICAL DRAWINGS; ANY DISCREPANCY SHALL BE BROUGHT TO THE ATTENTION TO THE ARCHITECT PRIOR TO THE EXECUTION OF THE WORK
2. ALL DIMENSIONS ARE TO FACE OF FINISHED WALL UNLESS OTHERWISE NOTED.
3. GIVEN THE AGE OF THE BUILDING IT SHALL BE ASSUMED THAT NOT ALL WALLS AND FLOORS ARE SQUARE, LEVEL, OR IN ALIGNMENT, AND THAT DIMENSIONS MAY VARY FROM FLOOR TO FLOOR AND SIDE TO SIDE OF THE BUILDING.
4. MAINTAIN REQUIRED FIRE-RESISTANCE RATINGS FOR ALL EXISTING AND NEW ASSEMBLIES
5. ALL NEW PARTITIONS CONSTRUCTED IN ALIGNMENT WITH OR AS A CONTINUATION OF AN EXISTING PARTITION SHALL MATCH THE WIDTH AND CONSTRUCTION OF THE EXISTING PARTITION, UNLESS OTHERWISE NOTED.
6. ALL NEW INTERIOR PARTITIONS SHALL CONSIST OF 2X4 WOOD STUD FRAMING AT 16" O.C. WITH 5/8" TYPE "X" GYPSUM WALLBOARD, EXCEPT WHERE OTHERWISE INDICATED; PROVIDE MOISTURE-RESISTANT GYPSUM WALLBOARD AT NEW ADA RESTROOM
7. AT ALL EXISTING PARTITIONS TO REMAIN, PATCH AND REPAIR EXISTING FINISH(ES) AS REQUIRED TO MATCH EXISTING WHERE INTERSECTING WALLS HAVE BEEN REMOVED OR WHERE DAMAGE HAS OCCURRED; PATCH AND REPAIR EXISTING FINISH(ES), INCLUDING ANY HOLES OR GAPS LEFT BY THE REMOVAL OF ANY OBSOLETE MEP COMPONENTS INCLUDING, BUT NOT LIMITED TO, CONDUIT, DUCTWORK, HANGERS, ETC.

R. Edwards & Co.
ARCHITECTS + PRESERVATIONISTS
52 State St., 2nd Floor | Montpelier, VT 05602
(802) 232-2628 | info@redwardsandcompany.com
www.redwardsandcompany.com

SEAL

LICENSED ARCHITECT · RYAN NEAL EDWARDS · NO. 003.013.AGSP · STATE OF VERMONT

PROJECT
Alice Ward Library Carriage House Rehabilitation

27 Park St.
Canaan, VT 05903

PROJECT NUMBER
2023.20

PROJECT TEAM

STRUCTURAL ENGINEER
Engineering Ventures, PC
208 Flynn Ave., Suite 2A
Burlington, VT 05401
(802) 863-7225

MEP ENGINEER
DuBois & King, Inc.
10 Corporate Dr., Suite 210
Bedford, NH 03110
(603) 637-1043

RELEASE
BID SET

RELEASE DATE
01.20.26

RELEASE + REVISION LOG

MARK	DESCRIPTION	DATE

PROJECT NORTH

N

DRAWING NAME
CONSTRUCTION PLANS : 2ND FLOOR + ROOF

DRAWN	RE	DATE	01.20.26
CHECKED		SCALE	1/4" = 1'-0"

DRAWING NUMBER
A.102

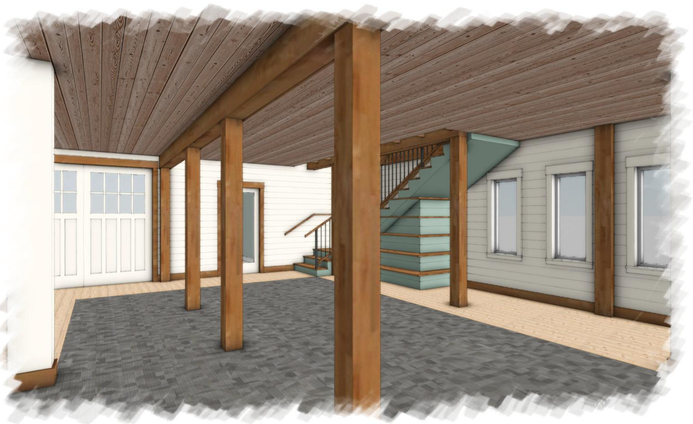
9 **2ND FLOOR PERSPECTIVE (LOOKING SOUTHWEST AT COMMUNITY ROOM)**
SCALE: NTS

8 **2ND FLOOR PERSPECTIVE (LOOKING NORTHEAST AT COMMUNITY ROOM)**
SCALE: NTS

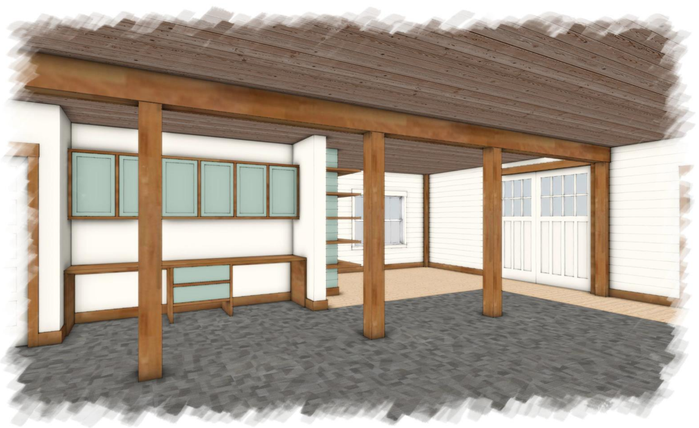
7 **2ND FLOOR PERSPECTIVE (LOOKING SOUTHEAST)**
SCALE: NTS

6 **2ND FLOOR PERSPECTIVE (LOOKING SOUTHWEST)**
SCALE: NTS

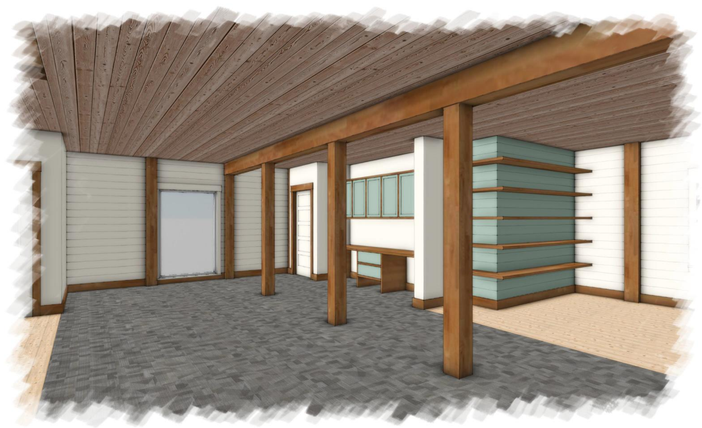
5 **2ND FLOOR PERSPECTIVE (LOOKING NORTHEAST)**
SCALE: NTS



4 **1ST FLOOR PERSPECTIVE (LOOKING SOUTHEAST)**
SCALE: NTS



3 **1ST FLOOR PERSPECTIVE (LOOKING NORTHEAST)**
SCALE: NTS



2 **1ST FLOOR PERSPECTIVE (LOOKING NORTHWEST)**
SCALE: NTS

1 **1ST FLOOR PERSPECTIVE (LOOKING SOUTHWEST)**
SCALE: NTS

R. Edwards & Co.
ARCHITECTS + PRESERVATIONISTS
52 State St., 2nd Floor | Montpelier, VT 05602
(802) 232-2628 | info@redwardsandcompany.com
www.redwardsandcompany.com

SEAL

LICENSED ARCHITECT
RYAN NEAL EDWARDS
NO. 003.013.4091
STATE OF VERMONT

PROJECT
Alice Ward Library Carriage House Rehabilitation

27 Park St.
Canaan, VT 05903

PROJECT NUMBER
2023.20

PROJECT TEAM

STRUCTURAL ENGINEER
Engineering Ventures, PC
208 Flynn Ave., Suite 2A
Burlington, VT 05401
(802) 863-7225

MEP ENGINEER
DuBois & King, Inc.
10 Corporate Dr., Suite 210
Bedford, NH 03110
(603) 637-1043

RELEASE
BID SET

RELEASE DATE
01.20.26

RELEASE + REVISION LOG

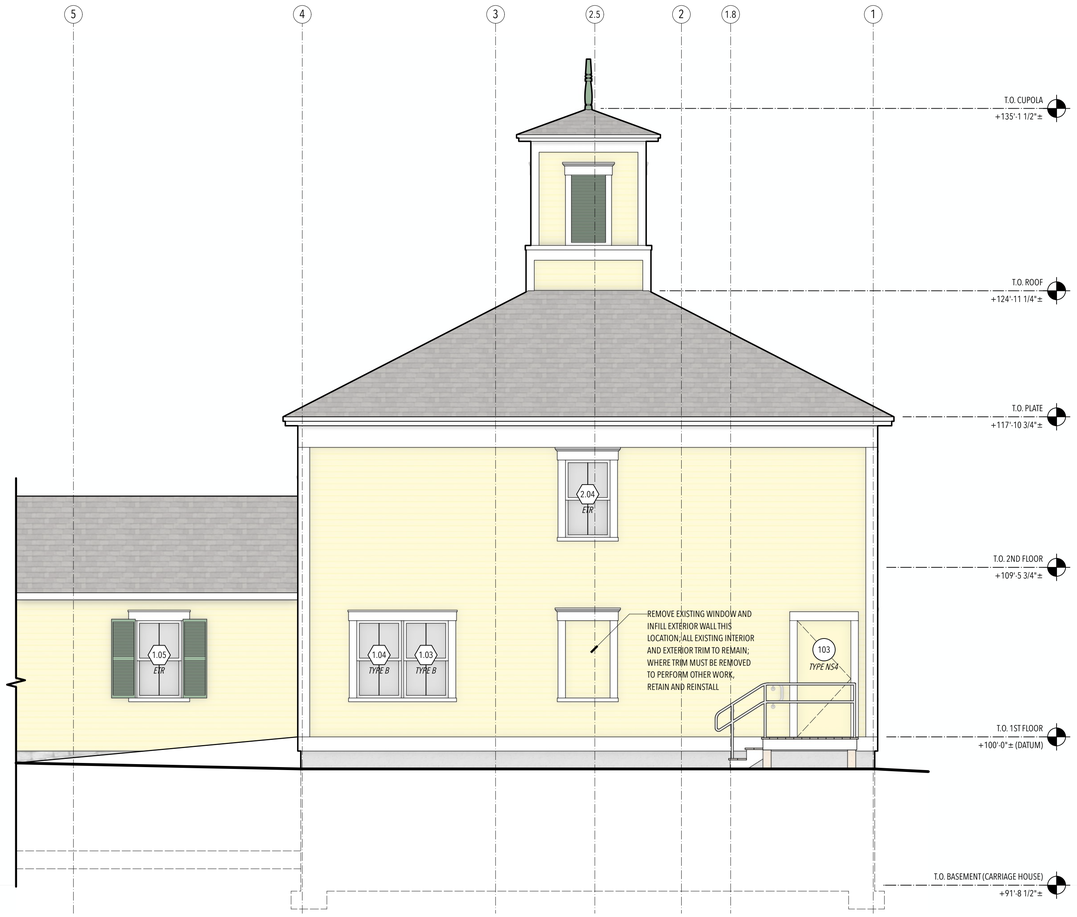
MARK	DESCRIPTION	DATE

PROJECT NORTH

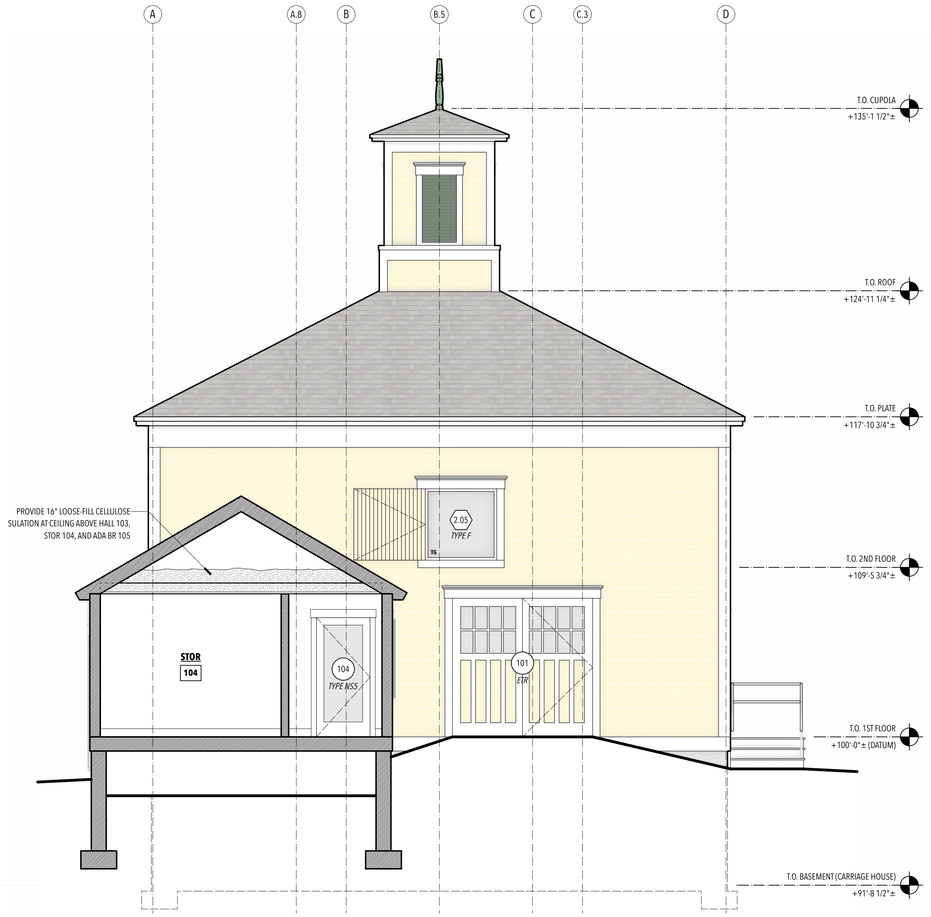
DRAWING NAME
INTERIOR RENDERINGS

DRAWN	RE	DATE	01.20.26
CHECKED		SCALE	NTS

DRAWING NUMBER
A.110



2 **NORTH (RIGHT) ELEVATION**
SCALE: 1/4" = 1'-0"



1 **EAST (FRONT) ELEVATION**
SCALE: 1/4" = 1'-0"

R. Edwards & Co.
ARCHITECTS + PRESERVATIONISTS
52 State St., 2nd Floor | Montpelier, VT 05602
(802) 232-2628 | info@redwardsandcompany.com
www.redwardsandcompany.com

SEAL

LICENSED ARCHITECT
RYAN NEAL EDWARDS
NO. 003.013.AGSB
STATE OF VERMONT

PROJECT
Alice Ward Library Carriage House Rehabilitation

27 Park St.
Canaan, VT 05903

PROJECT NUMBER
2023.20

PROJECT TEAM

STRUCTURAL ENGINEER
Engineering Ventures, PC
208 Flynn Ave., Suite 2A
Burlington, VT 05401
(802) 863-7225

MEP ENGINEER
DuBois & King, Inc.
10 Corporate Dr., Suite 210
Bedford, NH 03110
(603) 637-1043

RELEASE
BID SET

RELEASE DATE
01.20.26

RELEASE + REVISION LOG

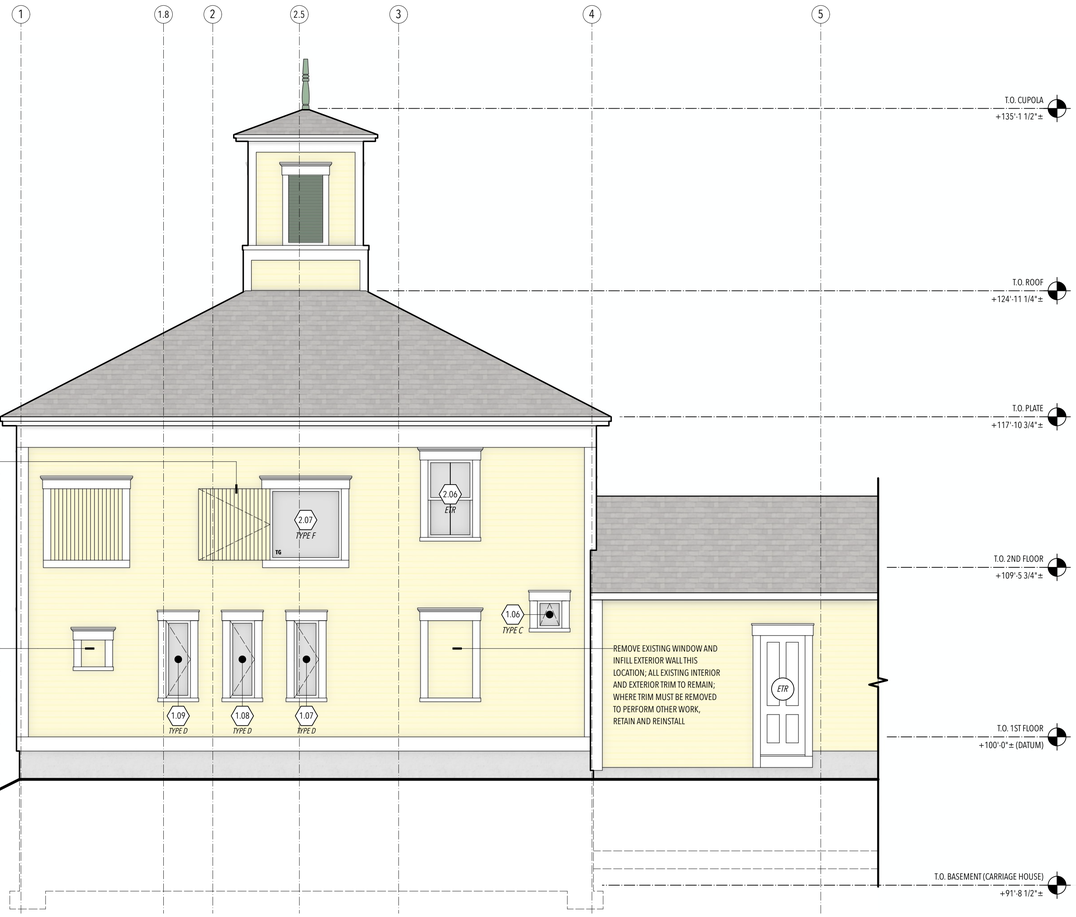
MARK	DESCRIPTION	DATE

PROJECT NORTH

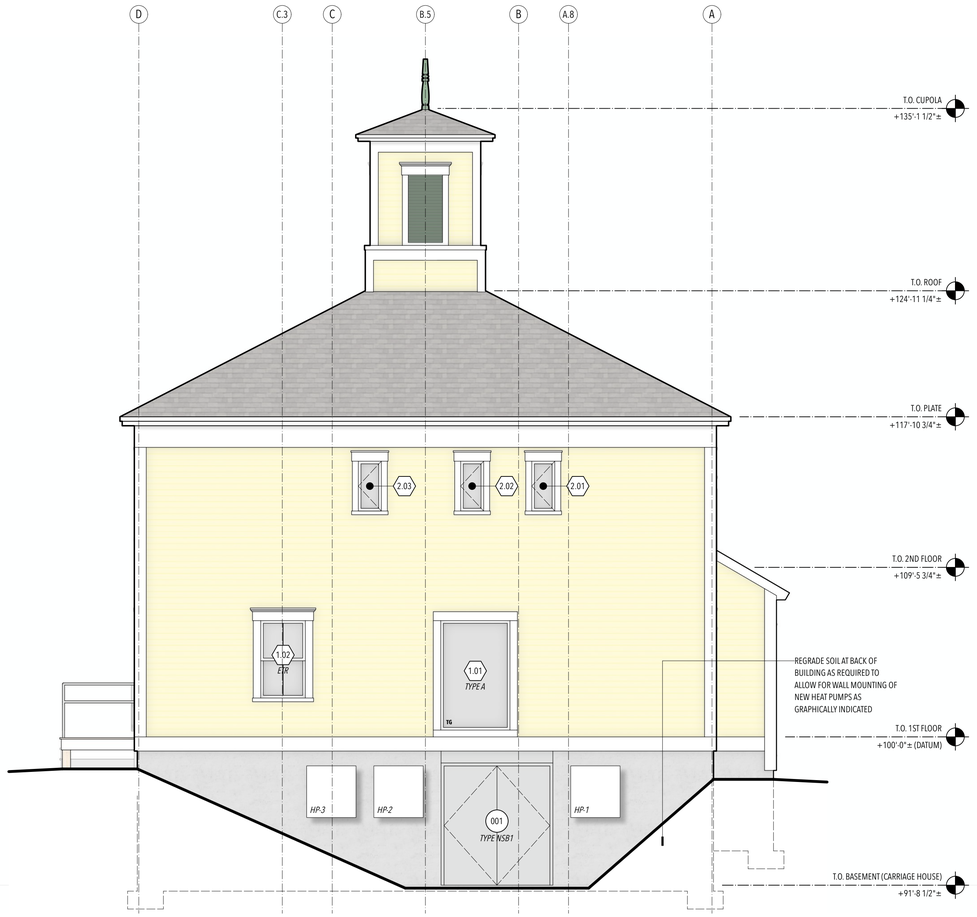
DRAWING NAME
EXTERIOR ELEVATIONS

DRAWN	RE	DATE	01.20.26
CHECKED		SCALE	1/4" = 1'-0"

DRAWING NUMBER
A.201



2 **SOUTH (LEFT) ELEVATION**
SCALE: 1/4" = 1'-0"



1 **WEST (REAR) ELEVATION**
SCALE: 1/4" = 1'-0"

R. Edwards & Co.
ARCHITECTS + PRESERVATIONISTS
52 State St., 2nd Floor | Montpelier, VT 05602
(802) 232-2628 | info@redwardsandcompany.com
www.redwardsandcompany.com

SEAL

LICENSED ARCHITECT
RYAN NEAL EDWARDS
NO. 003.013.AC01
STATE OF VERMONT

PROJECT
Alice Ward Library Carriage House Rehabilitation

27 Park St.
Canaan, VT 05903

PROJECT NUMBER
2023.20

PROJECT TEAM

STRUCTURAL ENGINEER
Engineering Ventures, PC
208 Flynn Ave., Suite 2A
Burlington, VT 05401
(802) 863-7225

MEP ENGINEER
DuBois & King, Inc.
10 Corporate Dr., Suite 210
Bedford, NH 03110
(603) 637-1043

RELEASE
BID SET

RELEASE DATE
01.20.26

RELEASE + REVISION LOG

MARK	DESCRIPTION	DATE

PROJECT NORTH

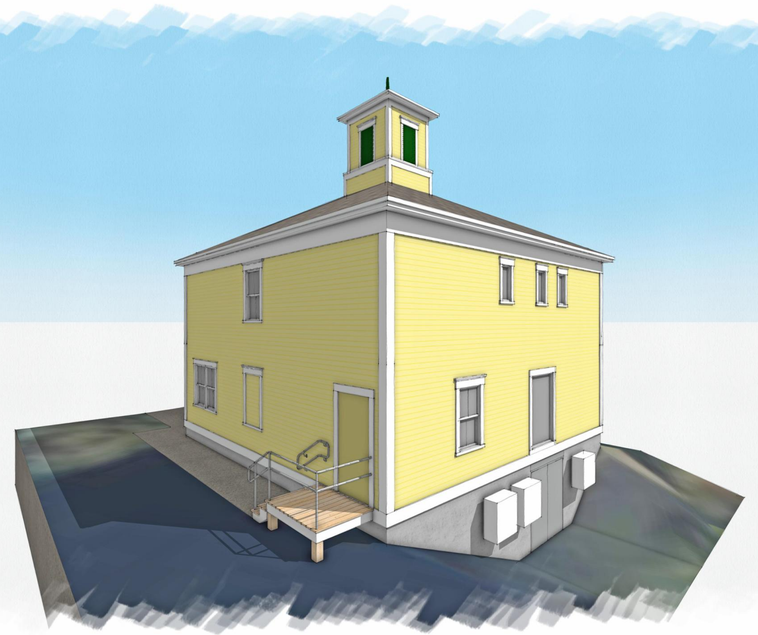
DRAWING NAME
EXTERIOR ELEVATIONS

DRAWN	RE	DATE	01.20.26
CHECKED		SCALE	1/4" = 1'-0"

DRAWING NUMBER
A.202

4 **SOUTHEAST PERSPECTIVE**
SCALE: NTS

3 **SOUTHWEST PERSPECTIVE**
SCALE: NTS



2 **NORTHWEST PERSPECTIVE**
SCALE: NTS

1 **NORTHEAST PERSPECTIVE**
SCALE: NTS

R. Edwards & Co.
ARCHITECTS + PRESERVATIONISTS
52 State St., 2nd Floor | Montpelier, VT 05602
(802) 232-2628 | info@redwardsandcompany.com
www.redwardsandcompany.com

SEAL

PROJECT
Alice Ward Library Carriage House Rehabilitation

27 Park St.
Canaan, VT 05903

PROJECT NUMBER
2023.20

PROJECT TEAM

STRUCTURAL ENGINEER
Engineering Ventures, PC
208 Flynn Ave., Suite 2A
Burlington, VT 05401
(802) 863-7225

MEP ENGINEER
DuBois & King, Inc.
10 Corporate Dr., Suite 210
Bedford, NH 03110
(603) 637-1043

RELEASE
BID SET

RELEASE DATE
01.20.26

RELEASE + REVISION LOG

MARK	DESCRIPTION	DATE

PROJECT NORTH

DRAWING NAME
EXTERIOR RENDERINGS

DRAWN	RE	DATE	01.20.26
CHECKED		SCALE	NTS

DRAWING NUMBER
A.210

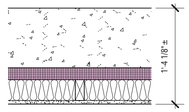
INTERIOR ROOM FINISH SCHEDULE

	ROOM #	ROOM NAME	FLOOR											WALL						BASE					CEILING			REMARKS
			EXISTING CONCRETE SLAB	EXISTING CRUSHED GRAVEL (CRAWLSPACE)	NEW WOOD FLOORING, SATIN POLYURETHANE FINISH	NEW CARPET TILE	NEW RUBBER FLOORING (LANDINGS) AND RUBBER TREADS AND RISERS (STAIRS)	EXISTING WOOD FLOORING	NEW PORCELAIN TILE FLOORING	NEW WOOD TREADS AND RISERS, SATIN POLYURETHANE FINISH		NEW GYPSUM WALL BOARD (GWB), PAINTED	EXISTING EXPOSED FOUNDATION	NEW 1X6 TONGUE-AND-GROOVE WOOD PANELING, PAINTED (OPAQUE) FINISH	NEW PARTIAL-HEIGHT BEADBOARD PANELING, PAINTED (OPAQUE) FINISH	EXISTING GYPSUM WALL BOARD (GWB)		NEW 1X4 WOOD BASE, NATURAL	NEW 1X6 WOOD BASE, STAINED	NEW 1X6 WOOD BASE, PAINTED	EXISTING WOOD BASE		NEW GYPSUM WALL BOARD (GWB), PAINTED	EXISTING GYPSUM WALL BOARD (GWB)	NEW 1X6 TONGUE-AND-GROOVE WOOD PANELING, TONGUE OIL FINISH	
BASEMENT	001	OPEN STOR	X									X						X					X			
	002	STAIR	X									X								X			X			
	003	LOCK STOR	X									X					X						X			
	004	UTILITY	X									X					X						X			
1ST FLOOR	101	OPEN LIBRARY			X	X						X		X						X						X	
	102	STAIR					X					X		X						X						X	
	103	HALL			X							X									X		X				
	104	STOR						X								X						X		X			
	105	ADA BR							X			X			X						X		X				
	106	STAIR									X			X					N/A							X	
2ND FLOOR	201	READING				X						X		X						X						X	
	202	PRIVACY				X						X		X						X						X	
	203	PRIVACY				X						X		X						X						X	
	204	STAIR					X					X		X						X						X	
	205	COMMUNITY				X						X		X						X						X	
	206	STOR				X						X		X						X						X	

PARTITION TYPES

EXTERIOR — E1 — **INTERIOR**

1. *EXISTING CONCRETE FOUNDATION*
2. **NEW** 2" RIGID INSULATION (XPS) (R-10)
3. **NEW** 2X4 WOOD STUDS @ 16" O.C. WITH MINERAL WOOL BATT INSULATION (R-15)
4. **NEW** 5/8" TYPE 'X' GYPSUM WALL BOARD, PAINTED

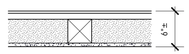


EXTERIOR — E2 — **INTERIOR**

1. *EXISTING WOOD CLAPBOARD SIDING*
2. *EXISTING 1" BOARD SHEATHING*
3. *EXISTING 4" X 4" STUD FRAMING @ 24" O.C. (VARIES)*
4. **NEW** 4" DEPTH DENSE PACK CELLULOSE INSULATION (ALL STUD BAYS)
5. **NEW** POLYPROPYLENE FABRIC NETTING (INSULWEB® OR SIM.)
6. **NEW** SMART VAPOR RETARDER (CERTAINTEED MEMBRAIN™ OR SIM.)
7. **NEW** 1X6 TONGUE-AND-GROOVE D-SELECT OR BETTER EASTERN WHITE PINE WOOD PANELING, PAINTED

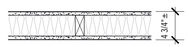
EXTERIOR — E3 — **INTERIOR**

1. *EXISTING WOOD CLAPBOARD SIDING*
2. *EXISTING 1" BOARD SHEATHING*
3. *EXISTING 4" X 4" STUD FRAMING @ 24" O.C. (VARIES)*
4. **NEW** 4" DEPTH DENSE PACK CELLULOSE INSULATION (ALL STUD BAYS)
5. **NEW** POLYPROPYLENE FABRIC NETTING (INSULWEB® OR SIM.)
6. **NEW** SMART VAPOR RETARDER (CERTAINTEED MEMBRAIN™ OR SIM.)
7. **NEW** 5/8" TYPE 'X GYPSUM WALL BOARD, PAINTED



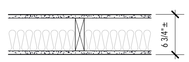
INTERIOR — 1 — **INTERIOR**

1. **NEW** 5/8" GYPSUM WALL BOARD, PAINTED
2. **NEW** 2X4 WOOD STUDS @ 16" O.C.; PROVIDE ACOUSTIC BATT INSULATION AT ALL BATHROOM AND PRIVACY ROOM PARTITIONS
3. **NEW** 5/8" GYPSUM WALL BOARD, PAINTED



INTERIOR — 2 — **INTERIOR**

1. **NEW** 5/8" GYPSUM WALL BOARD, PAINTED
2. **NEW** 2X6 WOOD STUDS @ 16" O.C.; PROVIDE ACOUSTIC BATT INSULATION AT ALL BATHROOM PARTITIONS
3. **NEW** 5/8" GYPSUM WALL BOARD, PAINTED



ROOF TYPE

EXTERIOR — R1 — **INTERIOR**

1. *EXISTING ASPHALT SHINGLES*
2. *EXISTING ROOF SHEATHING*
3. *EXISTING 2" X 8" ROOF RAFTERS*
4. **NEW** SISTERED 2X8s AND 7-1/4" LVLs (REF. STRUCTURAL)
5. **NEW** 2X4 WOOD STRAPPING; ATTACH TO UNDERSIDE OF RAFTERS
6. **NEW** CLOSED CELL SPRAY FOAM INSULATION (R-50 MIN.)
7. **NEW** 1X6 TONGUE-AND-GROOVE D-SELECT OR BETTER EASTERN WHITE PINE WOOD PANELING, TONGUE OIL FINISH

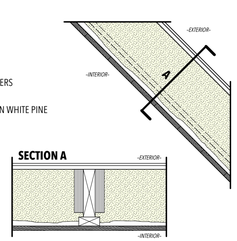
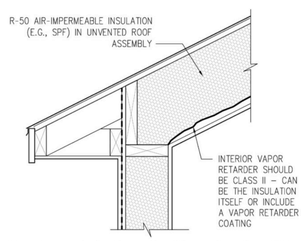


*Figure 2.27: Spray Polyurethane Foam (SPF) Cavity Insulation.**



*Framing and sheathing should test less than 15% moisture content before spraying foam. Vapor permeable sheathing and roof underlayment should be used.

VERMONT RESIDENTIAL BUILDING STANDARDS (RBES) ENERGY CODE HANDBOOK, 6TH ED.

DOOR SCHEDULE

FLOOR	TAG	TYPE	OPERATION	INTERIOR / EXTERIOR	MATERIAL	WIDTH	HEIGHT	THICKNESS	HARDWARE SET	WORK TYPE	FIRE RATING	REMARKS
BASEMENT	001	NSB1	SWING BI-PART	EXTERIOR	METAL	6'-0" *[(2)3'-0"]*	6'-8"	1-3/4"	01	NEW	—	*PROVIDE NEW DOOR AND FRAME AT EXISTING OPENING; VERIFY DIMENSIONS IN FIELD PRIOR TO FURNISH AND INSTALL*
	002	NS1	SWING SIMPLE	INTERIOR	METAL	3'-0"	6'-8"	1-3/4"	02	NEW	60-MIN.	
	003	NS2	SWING SIMPLE	INTERIOR	METAL	3'-0"	6'-8"	1-3/4"	03	NEW	—	
	004	NS2	SWING SIMPLE	INTERIOR	METAL	3'-0"	6'-8"	1-3/4"	03	NEW	45-MIN.	
1ST FLOOR	101	*ETR*	SWING BI-PART	EXTERIOR	WOOD	7'-10"± *[(2)3'-11"±]*	7'-9"±	1-3/8"±	04	REHABILITATE	—	*EXISTING HISTORIC CARRIAGE HOUSE DOORS TO BE REHABILITATED AND RECONFIGURED AS SHOWN; FINAL DETAILS PENDING*
	102	NS3	SWING SIMPLE	INTERIOR	WOOD	3'-0"	6'-8"	1-3/4"	05	NEW	60-MIN.	
	103	NS4	SWING SIMPLE	EXTERIOR	METAL	3'-0"	6'-8"	1-3/4"	05	NEW	—	
	104	NS5	SWING SIMPLE	INTERIOR	WOOD	3'-0"	7'-0"	1-3/4"	06	NEW	45-MIN.	
	105	NS3	SWING SIMPLE	INTERIOR	WOOD	3'-0"	6'-8"	1-3/8"	07	NEW	—	
	106	NS5	SWING SIMPLE	INTERIOR	WOOD	3'-0"	7'-0"	1-3/4"	06	NEW	—	
2ND FLOOR	201	-NOT USED-										
	202	NS5	SWING SIMPLE	INTERIOR	WOOD	3'-0"	7'-0"	1-3/4"	08	NEW	—	
	203	NS5	SWING SIMPLE	INTERIOR	WOOD	3'-0"	7'-0"	1-3/4"	08	NEW	—	
	204	NS3	SWING SIMPLE	INTERIOR	WOOD	3'-0"	6'-8"	1-3/4"	05	NEW	60-MIN.	
	205	NSLB1	SLIDE BI-PART (OXXO)	INTERIOR	WOOD	12'-0" *[(4)3'-2"]*	6'-8"	1 3/4"	09	NEW	—	
	206	NS3	SWING SIMPLE	INTERIOR	WOOD	3'-0"	6'-8"	1-3/4"	03	NEW	—	

DOOR SCHEDULE GENERAL NOTES

1. REFER TO DIVISION 08, OPENINGS, FOR ADDITIONAL INFORMATION AND SPECIFICATIONS
2. INSTALL ALL DOOR FRAMES, DOORS, AND DOOR HARDWARE PER MANUFACTURER'S SPECIFICATIONS; WHERE A DISCREPANCY EXISTS BETWEEN THE ARCHITECTURAL SPECIFICATIONS AND THE MANUFACTURER'S SPECIFICATIONS, THE MANUFACTURER'S SPECIFICATIONS SHALL GOVERN
3. ALL NEW EXTERIOR AND INTERIOR METAL DOORS SHALL BE INSTALLED IN KNOCKED-DOWN (KD) HOLLOW METAL FRAMES; WHERE FIRE-RESISTANCE RATINGS ARE REQUIRED, FULL DOOR ASSEMBLY SHALL COMPLY WITH NFPA 80, *STANDARD FOR FIRE DOORS AND OTHER OPENING PROTECTIVES (2019)*
4. ALL NEW NON-FIRE-RESISTANCE RATED INTERIOR DOOR FRAMES SHALL BE STAIN GRADE POPLAR WITH APPLIED FLAT STOPS
5. ALL NEW INTERIOR FIRE-RESISTANCE RATED JAMBS TO BE FERCHE MILLWORK, INC. F343 (45-MIN.) OR F344 (60-MIN.) FIRE RATED LAMINATED DOOR FRAMES, GRANDOR FRAMES WOOD VENEERED 45-60-MIN. FIRE FRAME, OR SIM.; RED OAK FINISH; PROVIDE SPECIFICATION FOR ARCHITECT APPROVAL
6. DOOR TYPE NS3 BASIS OF DESIGN: VT INDUSTRIES EGGERS COLLECTION, DOOR #E107 (5-PANEL); FLAT PANEL
7. DOOR TYPE NS5 BASIS OF DESIGN: VT INDUSTRIES EGGERS COLLECTION, DOOR #E201 (1-LITE); FLAT PANEL

WINDOW SCHEDULE

FLOOR	TAG	TYPE	CONFIGURATION	OPERATION	WIDTH	HEIGHT	SILL HEIGHT	HEAD HEIGHT	WORK TYPE	SCREEN	STORM WINDOW	REMARKS
1ST FLOOR	1.01	A	1-LITE	FIXED	4'-0"	6'-3"	0'-4"	6'-7"	NEW	—	—	*NEW WINDOW AT EXISTING OPENING; VERIFY DIMENSIONS IN FIELD; PROVIDE TEMPERED GLASS*
	1.02	*ETR*	2/2	DOUBLE-HUNG	2'-8"±	4'-6"±	2'-1"±	6'-7"±	REHABILITATE	—	—	
	1.03	B	2/2	DOUBLE-HUNG	2'-9"	4'-5"	2'-3"	6'-8"	NEW	YES	—	*PROVIDE FACTORY-MULLED ASSEMBLY, WINDOWS 1.03 + 1.04*
	1.04	B	2/2	DOUBLE-HUNG	2'-9"	4'-5"	2'-3"	6'-8"	NEW	YES	—	
	1.05	*ETR*	2/2	DOUBLE-HUNG	2'-8"±	4'-6"±	2'-1"±	6'-7"±	REHABILITATE	—	—	
	1.06	C	1-LITE	AWNING	1'-9"	1'-9"	5'-11"	7'-8"*	NEW	YES	—	*HEAD HEIGHT 6'-0"± ABOVE STAIR LANDING*
	1.07	D	1-LITE	CASEMENT	1'-9"	4'-5"	2'-3"	6'-8"	NEW	YES	—	
	1.08	D	1-LITE	CASEMENT	1'-9"	4'-5"	2'-3"	6'-8"	NEW	YES	—	
	1.09	D	1-LITE	CASEMENT	1'-9"	4'-5"	2'-3"	6'-8"	NEW	YES	—	
2ND FLOOR	2.01	E	1-LITE	CASEMENT	1'-5"	2'-11"	3'-1"	6'-0"	NEW	YES	—	*PROVIDE WINDOW OPENING CONTROL DEVICE (WOCD)*
	2.02	E	1-LITE	CASEMENT	1'-5"	2'-11"	3'-1"	6'-0"	NEW	YES	—	*PROVIDE WINDOW OPENING CONTROL DEVICE (WOCD)*
	2.03	E	1-LITE	CASEMENT	1'-5"	2'-11"	3'-1"	6'-0"	NEW	YES	—	*PROVIDE WINDOW OPENING CONTROL DEVICE (WOCD)*
	2.04	*ETR*	2/2	DOUBLE-HUNG	2'-8"±	4'-6"±	2'-1"±	6'-7"±	REHABILITATE	—	—	*FIX SASHES IN PLACE THIS WINDOW (NON-OPERABLE)*
	2.05	F	1-LITE	FIXED	4'-0"	4'-0"	0'-4"	4'-4"	NEW	—	—	*NEW WINDOW AT EXISTING OPENING; VERIFY DIMENSIONS IN FIELD; PROVIDE TEMPERED GLASS*
	2.06	*ETR*	2/2	DOUBLE-HUNG	2'-8"±	4'-6"±	2'-1"±	6'-7"±	REHABILITATE	—	—	*FIX SASHES IN PLACE THIS WINDOW (NON-OPERABLE)*
	2.07	F	1-LITE	FIXED	4'-0"	4'-0"	0'-4"	4'-4"	NEW	—	—	*NEW WINDOW AT EXISTING OPENING; VERIFY DIMENSIONS IN FIELD; PROVIDE TEMPERED GLASS*

WINDOW SCHEDULE GENERAL NOTES

1. REFER TO EXTERIOR ELEVATIONS FOR WINDOW TYPES
2. NEW WINDOWS BASIS OF DESIGN: PELLA RESERVE TRADITIONAL; ALUMINUM CLAD EXTERIOR (WHITE) WITH PRE-PRIMED WOOD INTERIOR; 5/8" GRILLES WHERE SHOWN
3. VERIFY WITH OWNER IF TO DISCARD OR SUITABLY STORE ALL EXISTING WINDOWS TO BE REPLACED OR REMOVED
4. PROVIDE ROUGH OPENINGS AS REQUIRED BY WINDOW MANUFACTURER; WHERE NEW WINDOWS ARE TO BE INSTALLED AT EXISTING WINDOW LOCATIONS WHERE THE NEW WINDOWS ARE LARGER THAN THE REMOVED WINDOW, MAINTAIN THE EXISTING CENTERLINE AND HEAD HEIGHT OF THE ROUGH OPENING; WHERE NEW WINDOWS ARE SCHEDULED TO INFILL AN EXISTING OPENING (E.G. 1.01, 2.05, AND 2.07), VERIFY DIMENSIONS IN FIELD AND BRING ANY DIMENSIONAL DISCREPANCIES TO THE ATTENTION OF THE ARCHITECT PRIOR TO FURNISH AND INSTALL
5. INSTALL ALL WINDOWS PER THE MANUFACTURER'S SPECIFICATIONS; WHERE A DISCREPANCY EXISTS BETWEEN THE ARCHITECTURAL SPECIFICATIONS AND THE MANUFACTURER'S SPECIFICATIONS, THE MANUFACTURER'S SPECIFICATIONS SHALL GOVERN
6. TYPICAL INTERIOR WOOD TRIM TO CONSIST OF THE FOLLOWING: 5/4 X 6 HEAD CASING WITH 1/2" REVEAL BOTH SIDES, 1X4 SIDE CASING, 1X SILL WITH 1/2" REVEAL ALL SIDES, 1X3 APRON, ALIGN WITH SIDE CASING ABOVE; WINDOW TRIM TO HAVE PAINTED (OPAQUE) FINISH

R. Edwards & Co.
ARCHITECTS + PRESERVATIONISTS
52 State St., 2nd Floor | Montpelier, VT 05602
(802) 232-2628 | info@redwardsandcompany.com
www.redwardsandcompany.com

SEAL

PROJECT

Alice Ward Library Carriage House Rehabilitation

27 Park St.
Canaan, VT 05903

PROJECT NUMBER

2023.20

PROJECT TEAM

STRUCTURAL ENGINEER
Engineering Ventures, PC
208 Flynn Ave., Suite 2A
Burlington, VT 05401
(802) 863-7225

MEP ENGINEER
DuBois & King, Inc.
10 Corporate Dr., Suite 210
Bedford, NH 03110
(603) 637-1043

RELEASE

BID SET

RELEASE DATE

01.20.26

RELEASE + REVISION LOG

MARK	DESCRIPTION	DATE

PROJECT NORTH

DRAWING NAME

SCHEDULES

DRAWN	RE	DATE	01.20.26
CHECKED		SCALE	

DRAWING NUMBER

A.601

R. Edwards & Co.
ARCHITECTS + PRESERVATIONISTS

APPLIANCE SCHEDULE

2023.20 : ALICE WARD LIBRARY CARRIAGE HOUSE REHABILITATION
RELEASE: BID SET (JANUARY 20, 2026)

APPLIANCE SCHEDULE GENERAL NOTES:

1. ALL APPLIANCES SHALL BE INSTALLED PER THE MANUFACTURER'S SPECIFICATIONS AND ALL APPLICABLE BUILDING CODES IN FORCE. WHERE DISCREPANCIES EXIST, BRING TO THE ATTENTION OF THE ARCHITECT.
2. COORDINATE INSTALLATION OF ALL APPLIANCES WITH ALL APPLICABLE TRADES AS REQUIRED.
3. ANY DISCREPANCIES BETWEEN REQUIRED APPLIANCE DIMENSIONAL CLEARANCES AND THE DRAWINGS OR EXISTING FIELD CONDITIONS SHALL BE BROUGHT TO THE ATTENTION OF THE ARCHITECT PRIOR TO INSTALL.
4. ALL APPLIANCES SPECIFIED FOR THIS PROJECT SHALL BE CONSIDERED BASIS OF DESIGN. SUBSTITUTIONS MAY BE PRESENTED TO THE OWNER AND ARCHITECT FOR CONSIDERATION.
5. PROVIDE SUBMITTALS OF ALL APPLIANCES FOR ARCHITECT APPROVAL.

TAG	QTY.	TYPE	MANUFACTURER	MODEL	COLOR / FINISH	NOTES
AP01	1	REFRIGERATOR	KITCHENAID	KRFF136SPS	SILVER	
AP02	1	30" ELECTRIC RANGE	KITCHENAID	KSEG700ESS	SILVER	ADA-COMPLIANT
AP03	1	RANGE HOOD	Z-LINE	617-30	SILVER	

R. Edwards & Co.
ARCHITECTS + PRESERVATIONISTS

TOILET ACCESSORIES SCHEDULE

2023.20 : ALICE WARD LIBRARY CARRIAGE HOUSE REHABILITATION
RELEASE: BID SET (JANUARY 20, 2026)

TOILET ACCESSORIES SCHEDULE GENERAL NOTES:

1. REFER TO SPECIFICATION SECTION 102800 – TOILET ACCESSORIES, FOR ADDITIONAL INFORMATION
2. ALL TOILET ACCESSORIES SHALL BE INSTALLED PER THE MANUFACTURER'S SPECIFICATIONS.
3. ALL TOILET ACCESSORIES INSTALLED AT ADA-COMPLIANT RESTROOMS SHALL BE INSTALLED WITH ALL APPLICABLE LOCAL, STATE, AND FEDERAL ACCESSIBILITY REGULATIONS IN FORCE. ANY DISCREPANCIES BETWEEN THE DRAWINGS AND THESE REGULATIONS SHALL BE BROUGHT TO THE ATTENTION OF THE ARCHITECT PRIOR TO INSTALL.
4. PROVIDE FIRE-TREATED IN-WALL BLOCKING FOR ALL TOILET ACCESSORIES AS REQUIRED.
5. COORDINATE INSTALLATION OF ALL TOILET ACCESSORIES WITH ALL APPLICABLE TRADES AS REQUIRED.
6. ALL TOILET ACCESSORIES SPECIFIED FOR THIS PROJECT SHALL BE CONSIDERED BASIS OF DESIGN. SUBSTITUTIONS MAY BE PRESENTED TO THE OWNER AND ARCHITECT FOR CONSIDERATION.
7. PROVIDE SUBMITTALS OF ALL TOILET ACCESSORIES FOR ARCHITECT APPROVAL.

TAG	QTY.	TYPE	MANUFACTURER	MODEL	COLOR / FINISH	NOTES
AC01	1	TOILET TISSUE DISPENSER	BOBRICK	B-9547	STAINLESS STEEL (SATIN)	
AC02	1	36" GRAB BAR	BOBRICK	B-9806x36	STAINLESS STEEL (SATIN)	
AC03	1	42" GRAB BAR	BOBRICK	B-9806x42	STAINLESS STEEL (SATIN)	
AC04	1	MIRROR	BOBRICK	B-290 2436	STAINLESS STEEL (SATIN)	
AC05	1	PAPER TOWEL DISPENSER	BOBRICK	B-35903	STAINLESS STEEL (SATIN)	
AC06	1	BABY CHANGING STATION	KOALA KARE	KB200-05	WHITE GRANITE	
AC07	1	COAT HOOK	BOBRICK	B.9542	STAINLESS STEEL (SATIN)	

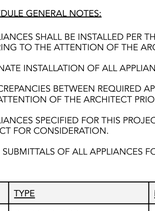
R. Edwards & Co.
ARCHITECTS + PRESERVATIONISTS

SIGNAGE SCHEDULE

2023.20 : ALICE WARD LIBRARY CARRIAGE HOUSE REHABILITATION
RELEASE: BID SET (JANUARY 20, 2026)

SIGNAGE SCHEDULE GENERAL NOTES:

1. REFER TO SPECIFICATION SECTION 101400 – SIGNAGE, FOR ADDITIONAL INFORMATION
2. INSTALL ALL SIGNAGE PER MANUFACTURER'S SPECIFICATIONS.
3. PROVIDE SUBMITTALS OF ALL SIGNAGE FOR ARCHITECT APPROVAL.
4. VERIFY ALL FINAL SIGN LOCATIONS IN FIELD WITH ARCHITECT PRIOR TO INSTALL.

TAG	QTY.	SIGN IMAGE	SIZE (W X H)	LOCATION	MOUNTING HEIGHT	NOTES
SI01	1		9" X 6"	1. INTERIOR; ADJACENT TO DOOR 105 (LATCH SIDE) @ HALL 103 (FOR ADA BR 105)	+57" A.F.F. (CENTERLINE)	BASIS OF DESIGN: COMPLIANCESIGNS.COM 'CHARCOAL GRAY ADA BRAILLE ACCESSIBLE RESTROOM SIGN WITH SYMBOL' (SKU: RRE-35193-White_on_CharcoalGray CS302345)
SI02	1		8" X 4"	1. INTERIOR; ADJACENT TO DOOR 004 (LATCH SIDE) @ OPEN STOR 001 (FOR UTILITY 004)	+54" A.F.F. (CENTERLINE)	BASIS OF DESIGN: COMPLIANCESIGNS.COM 'CHARCOAL GRAY ADA BRAILLE MECHANICAL ROOM SIGN WITH TACTILE TEXT' (SKU: RSME-426_White_on_CharcoalGray CS196222)

R. Edwards & Co.
ARCHITECTS + PRESERVATIONISTS
52 State St., 2nd Floor | Montpelier, VT 05602
(802) 232-2628 | info@redwardsandcompany.com
www.redwardsandcompany.com

SEAL

PROJECT
Alice Ward Library Carriage House Rehabilitation

27 Park St.
Canaan, VT 05903

PROJECT NUMBER
2023.20

PROJECT TEAM

STRUCTURAL ENGINEER
Engineering Ventures, PC
208 Flynn Ave., Suite 2A
Burlington, VT 05401
(802) 863-7225

MEP ENGINEER
DuBois & King, Inc.
10 Corporate Dr., Suite 210
Bedford, NH 03110
(603) 637-1043

RELEASE
BID SET

RELEASE DATE
01.20.26

RELEASE + REVISION LOG

MARK	DESCRIPTION	DATE

PROJECT NORTH

DRAWING NAME
SCHEDULES

DRAWN RE DATE 01.20.26
CHECKED SCALE

DRAWING NUMBER
A.602

PLUMBING GENERAL NOTES

QUALITY OF WORK

1. CONTRACT DOCUMENTS ARE IN PART DIAGRAMMATIC, INTENDED TO CONVEY SCOPE & ARRANGEMENT OF WORK. CONSULT ELECTRICAL AND STRUCTURAL CONSTRUCTION DRAWINGS FOR FAMILIARITY WITH CONDITIONS AFFECTING WORK. VERIFY SPACES IN WHICH WORK MUST BE PERFORMED BY ON-SITE MEASUREMENTS. DO NOT SCALE DRAWINGS.
2. CONTRACTOR MUST VERIFY EXISTING CONDITIONS AS THERE MAY BE VARIOUS CONDITIONS AT THE SITE WHICH DO NOT SHOW ON THE ACCOMPANYING DRAWINGS, OR WHICH ARE AT VARIANCE WITH THE CONDITIONS INDICATED ON THE DRAWINGS. IT IS IMPORTANT THAT EACH BIDDER VISIT THE SITE TO BECOME ACQUAINTED WITH THE EXISTING CONDITIONS, AND TO TAKE THESE CONDITIONS INTO CONSIDERATION WHEN PREPARING THEIR PROPOSAL. EACH BIDDER MUST OBTAIN INFORMATION OR MAKE MEASUREMENTS DESIRED. LACK OF KNOWLEDGE RELATIVE TO THE EXISTING SITE CONDITIONS IS NOT ALLOWED AS A BASIS FOR EXTRA COMPENSATION.
3. THE PLUMBING CONTRACTOR MUST PROVIDE MATERIALS, EQUIPMENT, AND LABOR TO FABRICATE NEW PLUMBING INSTALLATIONS AS SHOWN ON THE DRAWINGS AND AS SPECIFIED HEREIN:
   A. FURNISH AND INSTALL PIPING, CONNECTIONS, AND HARDWARE NECESSARY FOR AN ENTIRE OPERATING SYSTEM.
   B. A LICENSED PLUMBER MUST PERFORM PLUMBING WORK.
4. WHERE TWO OR MORE ITEMS OF THE SAME TYPE OF EQUIPMENT ARE REQUIRED, THE PRODUCT OF ONE MANUFACTURER MUST BE USED.
5. WORKSMANSHIP, MATERIALS, AND EQUIPMENT MUST BE GUARANTEED FOR A PERIOD OF ONE YEAR AFTER ACCEPTANCE BY THE OWNER.

CODES/PERMITS

1. WORK MUST BE PERFORMED IN STRICT ACCORDANCE WITH THE UNDERWRITERS LABORATORY STANDARDS AND MUNICIPAL, STATE AND OTHER AUTHORITIES' REGULATIONS, PUBLIC AND PRIVATE, HAVING JURISDICTION. REPORT DISCREPANCIES WITH SUCH REGULATIONS TO ENGINEER AND DO NOT PROCEED WITH WORK UNTIL WRITTEN AUTHORIZATION IS RECEIVED FROM THE ENGINEER.
2. NECESSARY FEES, PERMITS, AND APPROVALS AS REQUIRED BY THE WORK OF THESE DRAWINGS AND SPECIFICATIONS MUST BE OBTAINED AND PAID FOR BY THIS CONTRACTOR.
3. NOTHING CONTAINED IN THE SPECIFICATIONS OR INDICATED ON THESE DRAWINGS IS TO BE CONSTRUED TO CONFLICT WITH APPLICABLE PORTIONS OF LAWS, ORDINANCES, REGULATIONS, OR CODES.

COORDINATION OF WORK

1. COORDINATE CONSTRUCTION OF PLUMBING WORK WITH ARCHITECTURAL, STRUCTURAL, CIVIL, MECHANICAL, ELECTRICAL WORK, ETC., SHOWN ON OTHER CONTRACT DOCUMENT DRAWINGS.
2. PLUMBING CONTRACTOR MUST DISCONNECT, REMOVE, AND PROPERLY DISPOSE OF PLUMBING MATERIALS AND EQUIPMENT IN ORDER TO PREPARE EXISTING AREAS AND BUILDINGS FOR RENOVATION WORK. CONTRACTOR TO CLOSELY COORDINATE WITH THE GENERAL CONTRACTOR TO PROVIDE ENTIRE DEMOLITION OF NECESSARY AREAS AND SYSTEMS. CONTRACTOR MUST REVIEW PROJECT DOCUMENTS FOR EXTENT OF DEMOLITION REQUIREMENTS – ENTIRE DEMOLITION SCOPE IS NOT NECESSARILY NOTED ON THE PLUMBING DRAWINGS.
3. THE LOCATIONS OF ITEMS SHOWN ON THE DRAWINGS OR CALLED FOR IN THE SPECIFICATIONS THAT ARE NOT DEFINITIVELY FIXED BY DIMENSIONS ARE APPROXIMATE ONLY. THE EXACT LOCATIONS NECESSARY TO SECURE THE MOST DESIRABLE CONDITIONS AND RESULTS MUST BE DETERMINED BY THE PROJECT SITE CONDITIONS AND MUST HAVE THE APPROVAL OF THE ENGINEER BEFORE BEING INSTALLED. DO NOT SCALE THE DRAWINGS.
4. PROVIDE LOCATIONS OF REQUIRED ACCESS PANELS FOR INSTALLATION IN WALLS AND CEILINGS TO SERVICE VALVES, DAMPERS, AND OTHER CONCEALED PLUMBING EQUIPMENT. GENERAL CONTRACTOR MUST FURNISH & INSTALL ACCESS PANELS.
5. LOCATIONS AND SIZES OF FLOOR, WALL, AND ROOF OPENINGS MUST BE COORDINATED WITH OTHER TRADES INVOLVED. OPENINGS IN FIRE WALLS DUE TO PIPING MUST BE FIRE STOPPED.

PIPING

1. TAKE NECESSARY MEASUREMENTS AT THE BUILDING AND FABRICATE THE PIPING ON THE SITE, IF REQUIRED, TO PROVIDE AN APPROVABLE INSTALLATION.
2. INSTALL PIPING CONCEALED ABOVE CEILING OR IN WALL CHASES UNLESS OTHERWISE INDICATED. EXPOSED PIPING IS TO BE 3/4" MINIMUM FROM WALL SURFACE.
3. PROVIDE STOP VALVES AT FIXTURE AND EQUIPMENT SUPPLIES. EXPOSED FIXTURE CONNECTIONS MUST BE CHROME PLATED. PROVIDE VACUUM BREAKERS WHERE REQUIRED BY CODE.
4. PROVIDE NECESSARY HANGERS FOR SUPPORT OF HORIZONTAL AND VERTICAL PIPING IN ACCORDANCE WITH MANUFACTURER'S RECOMMENDATIONS.
5. PROVIDE NECESSARY UNIONS TO FACILITATE REPAIR OF EQUIPMENT AND FITTINGS.
6. IDENTIFICATION: CONTINUOUSLY IDENTIFY PIPING 8' ON CENTER.
7. PROVIDE NECESSARY VALVES, PIPES, FITTINGS, AND WATER HAMMER ARRESTORS THROUGHOUT THE SYSTEM TO ELIMINATE WATER HAMMER.
8. PROVIDE NECESSARY FLOOR AND WALL CLEANOUTS THROUGHOUT THE SYSTEM FOR A CODE COMPLIANT INSTALLATION.
9. PIPING AT FLOOR PENETRATIONS AND PENETRATIONS OF FIRE RATED WALLS MUST BE SEALED WITH FIRE CAULK (BOTH SIDES WHERE ACCESSIBLE).
10. COMPLY WITH LOW LEAD REQUIREMENTS. PIPING, FITTINGS, AND VALVES USED FOR HUMAN CONSUMPTION (WATER FOR DRINKING OF COOKING) MUST MEET THE MOST RECENT NSF/ANSI LOW LEAD STANDARD (<.025% WEIGHTED AVERAGE LEAD CONTENT FOR WETTED SURFACES).

PIPING INSULATION SCHEDULE

APPLICATION	FLUID OPERATING TEMPERATURE RANGE (°F)	TYPE	CONDUCTIVITY AT MEAN TEMP. (BTU-IN / HR-SF-°F AT °F)	PIPE DIAMETER	THICKNESS	JACKET	FITTINGS
DOMESTIC HOT WATER	105-140	FIBERGLASS WRAP	0.21-0.28 AT 100	<1.5"	1.0"	ALL SERVICE	PRE-MOLDED PVC PLASTIC COVER, WHITE
				≥1.5"	1.5"		
DOMESTIC COLD WATER & VENTS THROUGH ROOF	40-60	FIBERGLASS WRAP	0.21-0.27 AT 75	<1.5"	0.5"	ALL SERVICE	PRE-MOLDED PVC PLASTIC COVER, WHITE
				≥1.5"	1.0"		

NOTES:
1. INSULATE ALL VENTS THROUGH ROOF (VTR) WITHIN 8'-0" OF ROOF PENETRATION.

PLUMBING LEGENDS & ABBREVIATIONS

NOTE: NOT ALL SYMBOLS/ABBREVIATIONS SHOWN IN THE LEGEND ARE USED IN THIS DRAWING SET. IT IS THE CONTRACTOR'S RESPONSIBILITY TO VERIFY CONTENT SHOWN ON DRAWINGS.

PLUMBING SYSTEMS

- COLD WATER
- HOT WATER
- HOT WATER RECIRCULATION
- SANITARY
- SANITARY LINE BELOW FLOOR/GRADE
- SANITARY VENT
- SD — STORM DRAINAGE
- SD — STORM DRAINAGE BELOW FLOOR/GRADE
- CA — COMPRESSED AIR
- N — MEDICAL GAS: NITROGEN
- NO — MEDICAL GAS: NITROUS OXIDE
- O — MEDICAL GAS: OXYGEN
- VAC — MEDICAL GAS: VACUUM
- MA — MEDICAL GAS: COMPRESSED AIR

PIPE FITTINGS

- UNION
- STRAINER
- STRAINER WITH BLOW DOWN VALVE
- FLOW DIRECTION
- PIPE TURNED UP
- PIPE TURNED DOWN
- TEE BOTTOM TAKE-OFF
- TEE TOP TAKE-OFF
- PIPE CONTINUED
- PIPE CAPPED
- CONCENTRIC REDUCER
- ECCENTRIC REDUCER
- FLEXIBLE PIPE CONNECTOR
- FLOW SWITCH
- MANUAL AIR VENT
- AUTOMATIC AIR VENT

PIPE VALVES

- GATE VALVE
- GLOBE VALVE
- CHECK VALVE
- BACKFLOW PREVENTER
- BALL VALVE
- SAFETY RELIEF VALVE
- BUTTERFLY VALVE
- ELECTRIC SOLENOID ACTUATED SAFETY SHUTOFF VALVE
- PRESSURE REGULATING/REDUCING VALVE
- PRESSURE GAUGE WITH VALVE
- BALANCING VALVE

PLUMBING EQUIPMENT

- A — (PLUMBING & DRAINAGE INSTITUTE SIZE CATEGORY)
- WATER HAMMER ARRESTOR
- FLOOR DRAIN TRAP PRIMER
- FD — FLOOR DRAIN
- RD — ROOF DRAIN
- FCO — FLOOR CLEANOUT
- WCO — WALL CLEANOUT
- FIXTURE OR DRAIN TRAP
- HOSE BIBB
- WALL HYDRANT
- CIRCULATOR PUMP

DRAWING NOTATIONS

- ø — PHASE OR ROUND DIAMETER
- DEMO LINE
- EXISTING LINE
- 1 — REVISION CLOUD WITH REVISION NUMBER
- CONNECT TO EXISTING
- REMOVE EXISTING
- DWH 1 — MOTORIZED EQUIPMENT ABBREVIATION / MOTORIZED EQUIPMENT NUMBER
- TOPTXT BOTTXT — NON-MOTORIZED EQUIPMENT ABBREVIATION / NON-MOTORIZED EQUIPMENT NUMBER
- ?? ?? — DETAIL NUMBER / DRAWING NUMBER
- ?? ?? — SECTION LETTER / SHEET NUMBER WHERE SECTION VIEW IS SHOWN
- SANITARY WASTE, VENT RISER DIAGRAM
- WATER, LP GAS RISER DIAGRAM

ABBREVIATIONS

AD	AREA DRAIN
BTU	BRITISH THERMAL UNITS
CO	CLEANOUT
CPVC	CHLORINATED POLYVINYL CHLORIDE (PIPE)
DCW	DOMESTIC COLD WATER
DF	DRINKING FOUNTAIN
DFU	DRAINAGE FIXTURE UNIT
DHW	DOMESTIC HOT WATER
DHWC	DOMESTIC HOT WATER RECIRCULATION
DS	DOWNSPOUT
DW	DISHWASHER
DWH	DOMESTIC WATER HEATER
DWV	DRAIN, WASTE, AND VENT
<E>	EXISTING TO REMAIN
EF	EFFICIENCY FACTOR
Et	THERMAL EFFICIENCY
EWC	ELECTRIC WATER COOLER
FCO	FLOOR CLEANOUT
FD	FLOOR DRAIN
FDC	FIRE DEPARTMENT (SIAMESE) CONNECTION
FS	FLOOR SINK
GI	GREASE INTERCEPTOR
HB	HOSE BIBB
IDW	INDIRECT WASTE
LAV	LAVATORY
MS	MOP SINK
MTD	MOUNTED
NFHB	NON-FREEZE HOSE BIBB
PRV	PRESSURE REDUCING VALVE
PVC	POLYVINYL CHLORIDE (PIPE)
RD	ROOF DRAIN
RL	RAIN LEADER
S	SANITARY WASTE
SD	STORM DRAINAGE
TMV	THERMOSTATIC MIXING VALVE
U	URINAL
V	VENT
VTR	VENT THROUGH ROOF
WC	WATER CLOSET
WCO	WALL CLEANOUT
WH	WALL HYDRANT
WSFU	WATER SUPPLY FIXTURE UNITS

PLUMBING FIXTURE SCHEDULE

ITEM	DESCRIPTION	BASIS OF DESIGN MANUFACTURER	BASIS OF DESIGN MODEL	TRIM & ACCESSORIES	CONNECTION SIZE				REMARKS
					WASTE	VENT	CW	HW	
FPHB-1	Ecolotrol Ceramic Disc Wall Hydrant, Encased, Non-Freeze, Anti-Siphon, Automatic Draining	Zurn Industries, LLC	Z1320XL		0"	0"	1/2"	0"	
L-1	LUCERNE Basin, 4" (102mm) centres, 20-1/2" x 18-1/4" x 8-1/8" (521mm x 464mm x 206mm) deep, ADA compliant, wall hung, vitreous china, splash back, front overflow, self-draining deck, for concealed arm support.	AMERICAN STANDARD	0355.012	SYMMONS SYMMETRIX S202G FAUCET, ADA COMPLIANT SINGLE LEVER, NON-AERATED LAMINAR SPRAY AT 0.5 GPM, PROVIDE FLOOR MOUNTED WALL CARRIER ZURN Z1224 SERIES WITH BACK PLATE. PROVIDE WATTS 1/2" LEAD FREE LFE480 LAVATORY TEMPERING VALVE	2"	1 1/2"	1/2"	1/2"	LOW FLOW AERATOR TO BE PROVIDED WITH FAUCET. FAUCET MUST CONTAIN NO MORE THAN 0.25" WEIGHTED AVERAGE LEAD CONTENT.
MS-1	Mop Service Basin	FIAT	MSB2424	SERVICE FAUCET 830AA WITH VACUUM BREAKER, HOSE & BRACKET, MOP HOLDER	3"	1 1/2"	3/4"	3/4"	SS WALL GUARDS
S-1	Lustertone Single Bowl sink, ADA compliant	Elkay Manufacturing	LRAD19185	SYMMONS ORIGIN KITCHEN FAUCET SK23, ADA COMPLIANT, 1.0 GPM AERATOR	2"	1 1/2"	1/2"	1/2"	LOW FLOW AERATOR TO BE PROVIDED WITH FAUCET. FAUCET MUST CONTAIN NO MORE THAN 0.25" WEIGHTED AVERAGE LEAD CONTENT.
WC-1	Two-Piece Close Coupled Toilet, ADA compliant	TOTO	CST454CEF	AMERICAN STANDARD SEAT MODEL 5321.110 EVERCLEAN ELONGATED SEAT WITH SLOW CLOSE SNAP-OFF HINGES	3"	2"	1/2"	0"	PROVIDE WITH TRIP LEVER ON APPROACH SIDE

WATER HEATER SCHEDULE

TAG	BASIS OF DESIGN MANUFACTURER	BASIS OF DESIGN MODEL	TYPE	FIRST HOUR GPH	CONTINUOUS GPH	TEMPERATURE RISE	STORAGE GALLONS	HEATING ELEMENT KW	ELECTRICAL			REMARKS
									VOLTAGE	PHASE	HZ	
WH-1	BRADFORD WHITE	AEROTHERM RE2H65T10	HPWH	79	24	90 °F	65	4 kW	240 V	1	60 Hz	

CONDENSATE PUMP SCHEDULE

TAG	LOCATION	SERVES	BASIS OF DESIGN MANUFACTURER	BASIS OF DESIGN MODEL	GPH	WPD (FT)	WATTS	VOLTS	PH	HZ	REMARKS
CP-1	BASEMENT	WATER HEATER	LITTLE GIANT	VCMA-20UL	48	10.0	93	120	1	60	

CD SET
FOR BIDDING 09.30.25

R. Edwards & Co.
ARCHITECTS + PRESERVATIONISTS
52 State St, 2nd Floor | Montpelier, VT 05602
(802) 232-2628 | info@redwardsandcompany.com
www.redwardsandcompany.com

SEAL

STATE OF VERMONT — JOSEPH J. COUTERMARSH — No. 7327 — REGISTERED PROFESSIONAL ENGINEER

PROJECT
ALICE WARD LIBRARY

PROJECT NUMBER
530597

CONSULTANTS

DuBois & King inc.
ENGINEERING • PLANNING • MANAGEMENT • DEVELOPMENT
BEDFORD, NH
TEL: (802) 728-3376
FAX: (802) 783-7101
www.dubois-king.com.
OFFICES IN VERMONT, NEW HAMPSHIRE & MAINE

RELEASE

RELEASE DATE

RELEASE & REVISION LOG

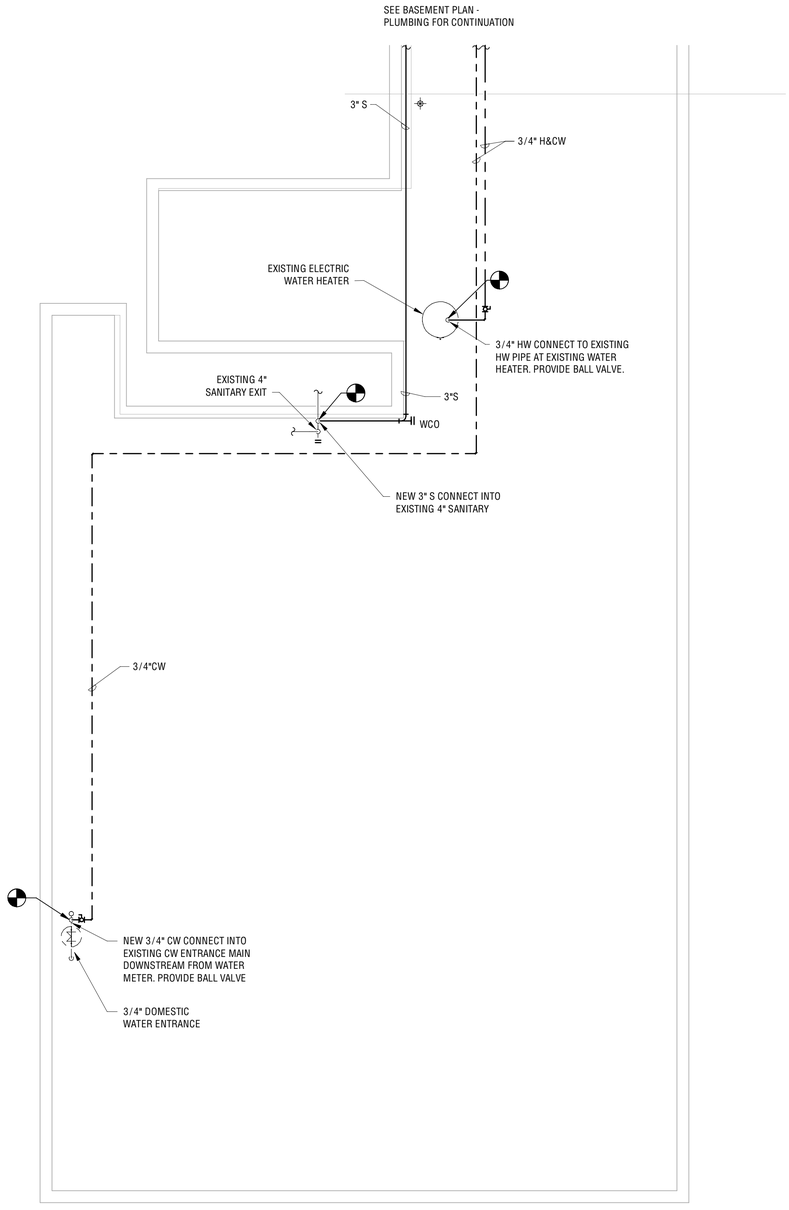
MARK	REVISION DESCRIPTION	DATE

PROJECT NORTH

DRAWING NAME
PLUMBING LEGENDS & NOTES

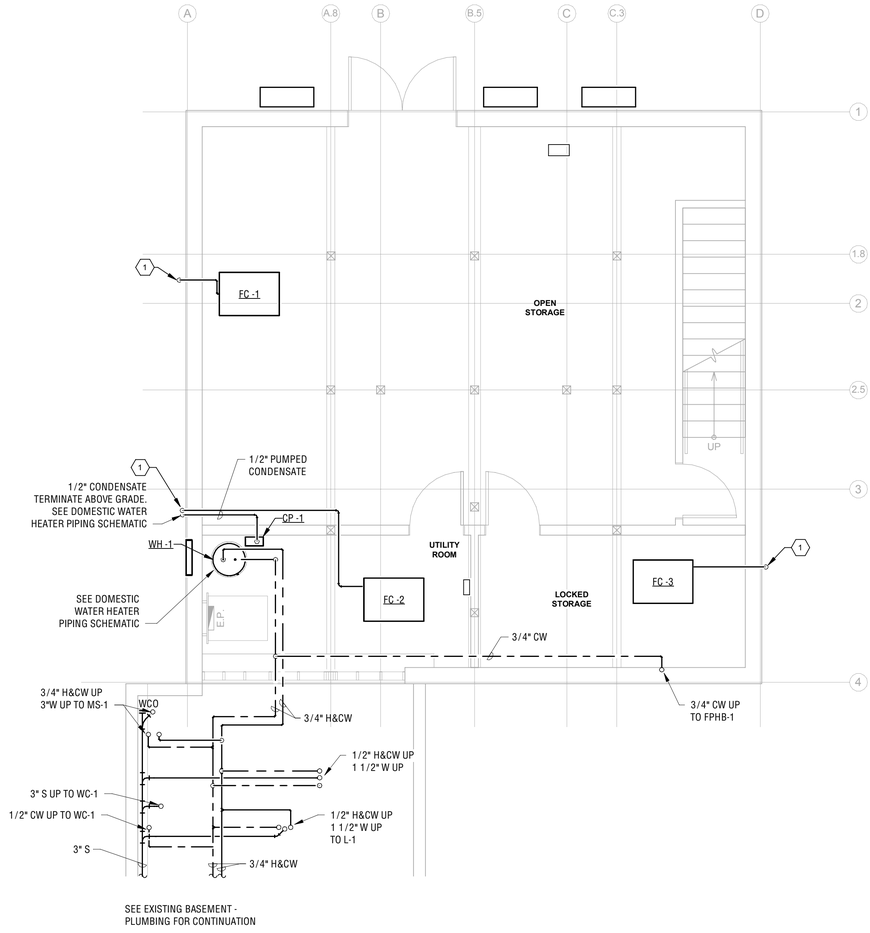
DRAWN JJC DATE 09.30.25
CHECKED JHP

DRAWING NUMBER
P0.1



EXISTING BASEMENT - PLUMBING

SCALE: 1/4" = 1'-0"



BASEMENT PLAN - PLUMBING

SCALE: 1/4" = 1'-0"

PLUMBING KEYNOTES	
1	SLOPE CONDENSATE DRAIN DOWN FROM FAN COIL UNITS. TERMINATE 12" MIN ABOVE FINISHED GRADE WITH DOWNTURN ELBOW AND INSECT SCREEN. INSULATE WITH 1/2" THICK FIBERGLASS WITH ASJ FACING.

R. Edwards & Co.
ARCHITECTS + PRESERVATIONISTS
52 State St. 2nd Floor | Montpelier, VT 05602
(802) 232-2628 | info@redwardsandcompany.com
www.redwardsandcompany.com

SEAL

STATE OF VERMONT
JOSEPH J. COUTERMARSH
No. 7327
REGISTERED
PROFESSIONAL ENGINEER

PROJECT
ALICE WARD
LIBRARY

PROJECT NUMBER
530597

CONSULTANTS

DuBois & King inc.
ENGINEERING • PLANNING •
MANAGEMENT • DEVELOPMENT
BEDFORD, NH
TEL: (802) 728-3376
FAX: (802) 783-7101
www.dubois-king.com.
OFFICES IN VERMONT,
NEW HAMPSHIRE & MAINE

RELEASE

RELEASE DATE

RELEASE & REVISION LOG

MARK	REVISION DESCRIPTION	DATE

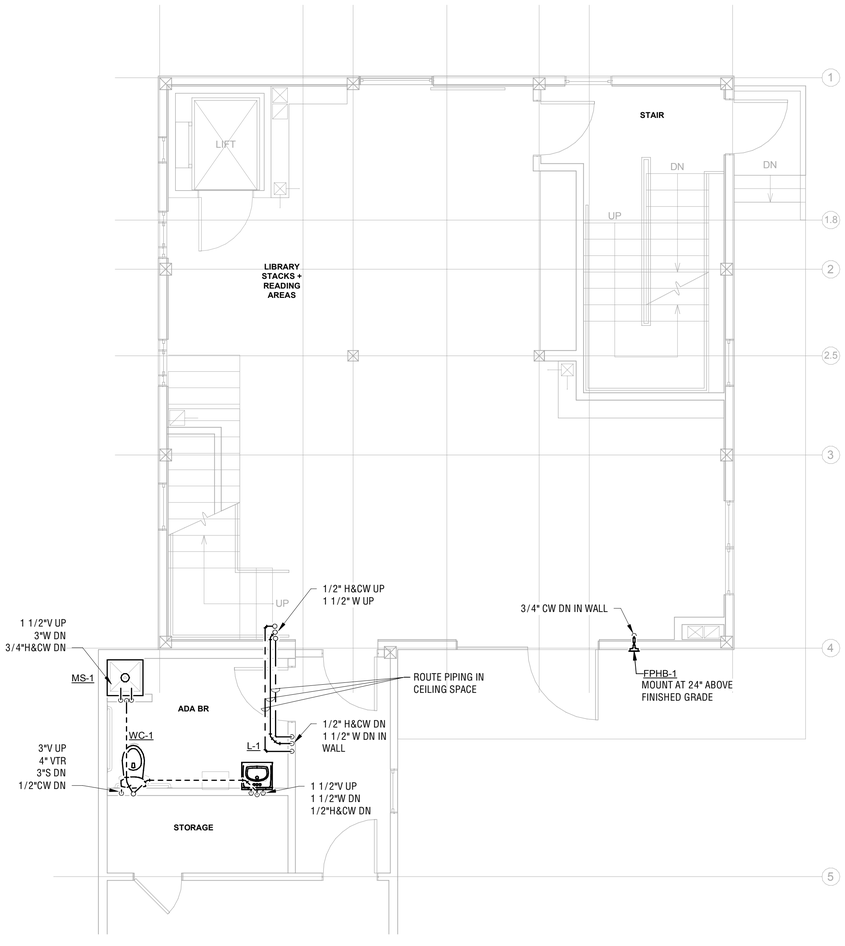
PROJECT NORTH

DRAWING NAME
BASEMENT PLAN - PLUMBING

DRAWN	JJC	DATE	09.30.25
CHECKED	JHP		

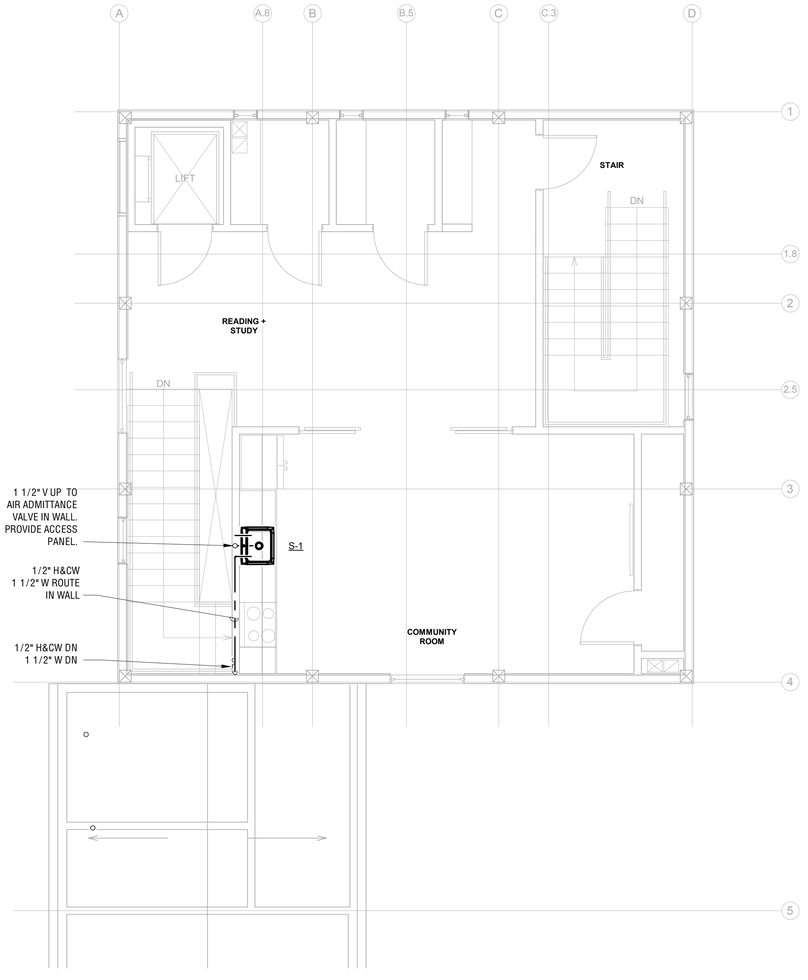
DRAWING NUMBER
P1.1

CD SET
FOR BIDDING
09.30.25



FIRST FLOOR PLAN - PLUMBING

SCALE: 1/4" = 1'-0"



SECOND FLOOR PLAN - PLUMBING

SCALE: 1/4" = 1'-0"

CD SET
FOR BIDDING 09.30.25

R. Edwards & Co.
ARCHITECTS + PRESERVATIONISTS

52 State St. 2nd Floor | Montpelier, VT 05602
(802) 232-2628 | info@redwardsandcompany.com

www.redwardsandcompany.com

SEAL

STATE OF VERMONT
JOSEPH J. COUTERMARSH
No. 7327
REGISTERED PROFESSIONAL ENGINEER

PROJECT
ALICE WARD LIBRARY

PROJECT NUMBER
530597

CONSULTANTS

DuBois & King inc.
ENGINEERING • PLANNING • MANAGEMENT • DEVELOPMENT
BEDFORD, NH
TEL: (802) 728-3376
FAX: (802) 783-7101
www.dubois-king.com.
OFFICES IN VERMONT, NEW HAMPSHIRE & MAINE

RELEASE

RELEASE DATE

RELEASE & REVISION LOG

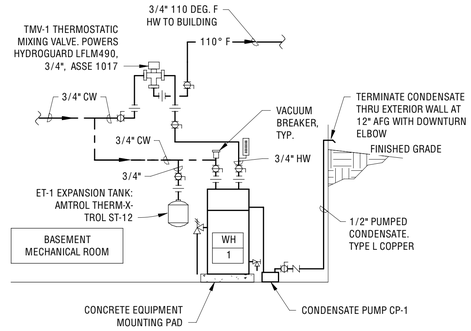
MARK	REVISION DESCRIPTION	DATE

PROJECT NORTH

DRAWING NAME
1ST & 2ND FLOOR PLAN - PLUMBING

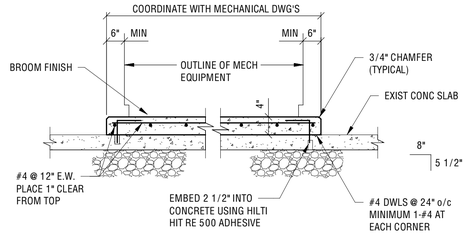
DRAWN	JJC	DATE	09.30.25
CHECKED	JHP		

DRAWING NUMBER
P1.2



DOMESTIC WATER HEATING PIPING SCHEMATIC

SCALE: NOT TO SCALE



1. CONCRETE SHALL BE STONE CONCRETE HAVING A MINIMUM COMPRESSIVE STRENGTH OF 3,000 PSI AT 28 DAYS.

2. COORDINATE SIZES, LOCATIONS AND QUANTITIES WITH MECHANICAL AND ARCHITECTURAL DRAWINGS.

TYPICAL INTERIOR EQUIPMENT PAD DETAIL

SCALE: NOT TO SCALE

CD SET
FOR BIDDING 09.30.25

R. Edwards & Co.
ARCHITECTS + PRESERVATIONISTS

52 State St. 2nd Floor | Montpelier, VT 05602
(802) 232-2628 | info@redwardsandcompany.com

www.redwardsandcompany.com

SEAL

STATE OF VERMONT
JOSEPH J. COUTERMARSH
No. 7327
REGISTERED
PROFESSIONAL ENGINEER

PROJECT
ALICE WARD
LIBRARY

PROJECT NUMBER
530597

CONSULTANTS

DuBois & King inc.
ENGINEERING • PLANNING •
MANAGEMENT • DEVELOPMENT
BEDFORD, NH
TEL: (802) 728-3376
FAX: (802) 783-7101
www.dubois-king.com.
OFFICES IN VERMONT,
NEW HAMPSHIRE & MAINE

RELEASE

RELEASE DATE

RELEASE & REVISION LOG

MARK	REVISION DESCRIPTION	DATE

PROJECT NORTH

DRAWING NAME
PLUMBING
DETAILS

DRAWN	JJC	DATE	09.30.25
CHECKED	JHP		

DRAWING NUMBER
P5.1

MECHANICAL LEGENDS & ABBREVIATIONS

NOTE: NOT ALL SYMBOLS/ABBREVIATIONS SHOWN IN THE LEGEND ARE USED IN THIS DRAWING SET. IT IS THE CONTRACTOR'S RESPONSIBILITY TO VERIFY CONTENT SHOWN ON DRAWINGS.

DUCTWORK

- 20x12 — RECTANGULAR DUCT, FIRST NUMBER IS DIMENSION IN VIEW OF DRAWING
- 20"ø — ROUND RIGID DUCT
- SUPPLY/OUTSIDE AIR DUCT ELBOW UP/DOWN
- RETURN DUCT ELBOW UP/DOWN
- EXHAUST DUCT ELBOW UP/DOWN
- 20x20 — RECTANGULAR DUCT 90° MITERED ELBOW WITH TURNING VANES
- 20x20 — TYPICAL LONG RADIUS ELBOW, RECTANGULAR/ROUND DUCT
- 20x20 — TYPICAL BRANCH DUCT 45° TAKE-OFF W/ VOLUME DAMPER
- DUCT RISE
- DUCT SET DOWN
- FLEXIBLE DUCT
- FIRE DAMPER
- SMOKE DAMPER
- S — FIRE & SMOKE DAMPER
- FD
- S — DUCT SMOKE DETECTOR
- DUCT SOUND ATTENUATION LINING
- BDD — BACKDRAFT DAMPER
- BRD — BAROMETRIC RELIEF DAMPER
- FLEXIBLE DUCT CONNECTOR
- FC — EQUIPMENT FLEX CONNECTOR
- 13'-7" / 12'-3" — ELEVATION OF TOP OF DUCT (TOD) AFF / ELEVATION OF BOTTOM OF DUCT (BOD) AFF
- TG — TRANSFER GRILLE
- DIRECTION OF SUPPLY AIR FLOW
- DIRECTION OF RETURN OR EXHAUST AIR FLOW
- SF — SUPPLY FAN ROOF MOUNTED
- EF — EXHAUST FAN ROOF MOUNTED
- S — SMOKE DETECTOR
- FAN (SCHEMATIC)
- SUPPLY AIR DIFFUSER, REGISTER, OR GRILLE
- RETURN AIR REGISTER OR GRILLE
- EXHAUST AIR REGISTER OR GRILLE

PIPING SYSTEMS

- PC — PUMPED STEAM
- CD — CONDENSATE DRAIN
- L — REFRIGERATED LIQUID
- S — REFRIGERANT SUCTION
- CWR — CONDENSER WATER RETURN
- CWS — CONDENSER WATER SUPPLY
- GHR — GLYCOL HEATING RETURN
- GHS — GLYCOL HEATING SUPPLY
- LPS — LOW PRESSURE STEAM
- MPS — MEDIUM PRESSURE STEAM
- HPS — HIGH PRESSURE STEAM
- LPC — LOW PRESSURE CONDENSATE
- MPC — MEDIUM PRESSURE CONDENSATE
- HPC — HIGH PRESSURE CONDENSATE
- HWR — HEATING HOT WATER RETURN
- HWS — HEATING HOT WATER SUPPLY
- MU — MAKE-UP WATER
- CHWR — CHILLED WATER RETURN
- CHWS — CHILLED WATER SUPPLY
- GCR — CHILLED GLYCOL RETURN
- GCS — CHILLED GLYCOL SUPPLY
- CTR — COOLING TOWER RETURN
- CTS — COOLING TOWER SUPPLY
- FOS — FUEL OIL SUPPLY
- FOR — FUEL OIL RETURN

PIPE FITTINGS

- UNION
- STRAINER
- STRAINER WITH BLOW DOWN VALVE
- FLOW DIRECTION
- PIPE TURNED UP
- PIPE TURNED DOWN
- TEE BOTTOM TAKE-OFF
- TEE TOP TAKE-OFF
- CONCENTRIC REDUCER
- ECCENTRIC REDUCER
- THERMOMETER
- AUTOMATIC AIR VENT
- CIRCULATOR PUMP
- F&T — FLOAT & THERMOSTATIC TRAP
- PIPE CAPPED
- PIPE ANCHOR

PIPE VALVES

- GATE VALVE
- GLOBE VALVE
- CHECK VALVE
- BACKFLOW PREVENTER RPZ ASSY
- BALL VALVE
- SAFETY RELIEF VALVE
- BUTTERFLY VALVE
- TRIPLE DUTY VALVE
- TRIPLE DUTY VALVE ANGLE
- TWO-WAY MOTORIZED VALVE
- THREE-WAY MOTORIZED VALVE
- PRESSURE REGULATING VALVE
- GAS COCK
- PRESSURE GAUGE WITH VALVE

CONTROLS & BALANCING

- CONTROLS WIRING
- T — H&C — WALL MOUNTED THERMOSTAT. SUBSCRIPTS: HEATING & COOLING. ARROW POINTS TO DEVICE CONTROLLED
- T — UNIT MOUNTED THERMOSTAT
- T 120 — THERMOSTAT, LINE VOLTAGE
- S — FAN SPEED CONTROL
- H — HUMIDISTAT
- T S — THERMAL SENSOR
- A — AQUASTAT
- PT — PRESSURE TRANSMITTER
- FS — FLOW SWITCH
- BALANCING VALVE
- DPS — DIFFERENTIAL PRESSURE SWITCH
- VD — MANUAL VOLUME DAMPER
- M — MOTOR OPERATED DAMPER
- FS — AIR FLOW SWITCH
- CO — CARBON MONOXIDE GAS SENSOR
- CO_2 — CARBON DIOXIDE GAS SENSOR
- HVAC — CONTROL PANEL

DRAWING NOTATIONS

- ø — PHASE OR ROUND DIAMETER
- DEMO LINE
- EXISTING LINE
- 1 — REVISION CLOUD WITH REVISION NUMBER
- POINT OF CONNECTION
- POINT OF DISCONNECT
- XXX / ### — MOTORIZED EQUIPMENT ABBREVIATION / MOTORIZED EQUIPMENT NUMBER
- XXX / ### — NON-MOTORIZED EQUIPMENT ABBREVIATION / NON-MOTORIZED EQUIPMENT NUMBER
- SIM / 1 / A101 — NOTES WHEN SIMILAR TO SECTION / DETAIL NUMBER / DRAWING NUMBER
- SIM / 1 / A101 — NOTES WHEN SIMILAR TO SECTION / SECTION LETTER / SHEET NUMBER WHERE SECTION VIEW IS SHOWN
- XXX / ### — RADIATION TAG / LENGTH OF RADIATION ELEMENT
- XXX / ### — REGISTER, GRILLE & DIFFUSER TAG / CFM

ABBREVIATIONS

ø	DIAMETER
A	AMPS/AMPERAGE
AA	ALL AROUND
ABV	AUTOMATIC BALANCE VALVE
ACV	MOTORIZED VALVE
AD	ACCESS DOOR
AFF	ABOVE FINISH FLOOR
AI	ANALOG INPUT
AO	ANALOG OUTPUT
APD	AIR PRESSURE DROP
ARCH	ARCHITECT(URAL)
ATC	AUTOMATIC TEMPERATURE CONTROL
AWT	AVERAGE WATER TEMPERATURE
BAS	BUILDING AUTOMATION SYSTEM
BF	BOILER FEEDWATER
BHP	BRAKE HORSEPOWER
BOD	BOTTOM OF DUCTWORK (ELEVATION)
BTU/H	BRITISH THERMAL UNITS PER HOUR
C	COMMON
CAP	CAPACITY
CFM	CUBIC FEET PER MINUTE
CKT	CIRCUIT
CM	CONSTRUCTION MANAGER
CONN.	CONNECTION
COP	COEFFICIENT OF PERFORMANCE
CP	CONTROL PANEL
db	DRY BULB TEMPERATURE
DCW	DOMESTIC COLD WATER
DDC	DIRECT DIGITAL CONTROL
DI	DIGITAL INPUT
DIA.	DIAMETER
DN	DOWN
DO	DIGITAL OUTPUT
DR	DRAIN
DWG	DRAWING
DWV	DRAIN, WASTE, VENT
DX	DIRECT EXPANSION
<E>	EXISTING
E/A	EXHAUST AIR
EAT	ENTERING AIR TEMPERATURE
EC	ELECTRICAL CONTRACTOR
ECON	ECONOMIZER
EDB	ENTERING DRY BULB
EER	ENERGY EFFICIENCY RATIO
EFF	EFFICIENCY
ESP	EXTERNAL STATIC PRESSURE
EWB	ENTERING WET BULB
EWT	ENTERING WATER TEMPERATURE
FA	FREE AREA
FLA	FULL LOAD AMPS
FOB	FLAT ON BOTTOM
FOT	FLAT ON TOP
FPI	FINS PER INCH
FPM	FEET PER MINUTE
FT	FEET
FVNR	FULL VOLTAGE ON-REVERSING
GAL	GALLON(S)
GC	GENERAL CONTRACTOR
GPM	GALLONS PER MINUTE
HOA	HAND-OFF-AUTOMATIC
HP	HORSEPOWER
Hz	HERTZ
ID	INSIDE DIAMETER
in	INCH(ES)
kW	KILOWATT(S)
LAT	LEAVING AIR TEMPERATURE
LDB	LEAVING DRY BULB
LF	LINEAR FEET
LRA	LOCKED ROTOR AMPS
LWB	LEAVING WET BULB
LWT	LEAVING WATER TEMPERATURE
MAX	MAXIMUM
MBH	1,000 BRITISH THERMAL UNITS PER HOUR
MC	MECHANICAL CONTRACTOR
MCA	MINIMUM CIRCUIT AMPACITY
MCC	MOTOR CONTROL CENTER
MEP	MECHANICAL, ELECTRICAL, PLUMBING
MIN	MINIMUM
MMBH	MILLIONS OF BTU/H
MOCP	MAXIMUM OVERCURRENT PROTECTION
MOD	MOTOR OPERATED DAMPER
MRE	MECHANICAL ROOM EQUIPMENT
MTD	MOUNTED
NC	NORMALLY CLOSED
NIC	NOT IN CONTRACTOR
NO	NORMALLY OPEN
NO.	NUMBER
NTS	NOT TO SCALE
O/A	OUTDOOR AIR
OAT	OUTSIDE AIR TEMPERATURE
OD	OUTSIDE DIAMETER
OED	OPEN ENDED DUCT
OIT	OPERATOR INTERFACE TERMINAL
P	PUMP
PC	PLUMBING CONTRACTOR
PD	PRESSURE DROP
PH	ELECTRICAL PHASE
PSI	POUNDS PER SQUARE INCH
R/A	RETURN AIR
RH	RELATIVE HUMIDITY
RLA	RATED LOAD AMPS
RPM	REVOLUTIONS PER MINUTE
S/A	SUPPLY AIR
SAT	SUPPLY AIR TEMPERATURE
SF	SQUARE FEET
SP	STATIC PRESSURE
SS	STAINLESS STEEL
TEMP	DEGREES FAHRENHEIT (°F) UNLESS OTHERWISE NOTED
TSP	TOTAL STATIC PRESSURE
TYP	TYPICAL
UD	UNDERCUT DOOR
VB	VACUUM BREAKER
VFD	VARIABLE FREQUENCY DRIVE
VIF	VERIFY IN FIELD
WB	WET BULB TEMPERATURE
WC	WATER COLUMN
WG	WATER GAUGE
WPD	WATER PRESSURE DROP

MECHANICAL GENERAL NOTES

A. QUALITY OF WORK

1. IT IS THE INTENT OF THE DRAWINGS AND SPECIFICATIONS TO OBTAIN A COMPLETE AND SATISFACTORY INSTALLATION. AN ATTEMPT HAS BEEN MADE TO SEPARATE AND DEFINE THE WORK OF THE CONTRACTOR. DRAWINGS ARE DIAGRAMMATIC, BUT MUST BE FOLLOWED AS CLOSELY AS ACTUAL CONSTRUCTION OF THE FACILITY AND WORK OF OTHER TRADES WILL PERMIT. THE DRAWINGS UTILIZE SYMBOLS AND SCHEMATIC DIAGRAMS TO INDICATE VARIOUS ITEMS OF WORK. THEREFORE, NO INTERPRETATION WILL BE MADE FROM THE LIMITATION OF SYMBOLS AND DIAGRAMS THAT ANY ELEMENTS NECESSARY FOR THE COMPLETE INSTALLATION ARE EXCLUDED. THE ENGINEER IS TO BE NOTIFIED OF ANY DISCREPANCIES, OMISSIONS, CONFLICTS, OR INTERFERENCE WHICH OCCUR BETWEEN VARIOUS DRAWINGS AND SPECIFICATIONS. IF SUCH NOTIFICATION IS NOT RECEIVED, THE INSTALLING CONTRACTOR(S) IS TO BE RESPONSIBLE FOR THEIR INTERPRETATIONS.
2. "PROVIDE" MEANS "FURNISH AND INSTALL" AND MUST INCLUDE ALL EQUIPMENT (THAT INCLUDE THE ACCESSORIES, SUPPORTS, FITTINGS AND OTHER INCIDENTAL MATERIAL NEEDED FOR THE EQUIPMENT), DEVICES, HARDWARE, MOUNTS, LABOR, RIGGING, SUBCONTRACTS, ETC., THAT RESULT IN A COMPLETE AND FUNCTIONAL PROJECT INDICATED ON THE DRAWINGS, AS SPECIFIED AND AS REQUIRED BY CODE. MINOR ITEMS TO FINISH THE WORK SUCH AS PATCHING, BLOCKING, TRIM, TOUCH-UP PAINT, ETC., SHALL BE PROVIDED WHETHER OR NOT INDICATED IN THE CONTRACT DOCUMENTS.
3. LOCATE ALL TEMPERATURE, PRESSURE, AND FLOW MEASURING DEVICES IN ACCESSIBLE LOCATIONS IN STRAIGHT SECTIONS OF PIPE OR DUCT AS RECOMMENDED BY THE MANUFACTURER. NOTIFY ENGINEER FOR FIELD REVIEW IF CONFIGURATION WILL NOT ALLOW.
4. WHERE TWO OR MORE ITEMS OF THE SAME TYPE OF EQUIPMENT ARE REQUIRED, THE PRODUCT OF ONE MANUFACTURER IS TO BE USED.
5. ALL WORKMANSHIP, MATERIALS, AND EQUIPMENT IS TO BE GUARANTEED FOR A PERIOD OF ONE YEAR AFTER ACCEPTANCE BY THE OWNER.
6. PROVIDE IDENTIFICATION LABELS FOR NEW EQUIPMENT. AFFIX PERMANENT IDENTIFYING TAGS OR LABELS TO FANS, TERMINAL UNITS, AIR-HANDLERS ETC. IDENTIFY SYSTEM ON PIPING AND DUCTWORK MAINS AND INDICATE DIRECTION OF FLOW ON PIPING. INDICATE THE CONTROLLED EQUIPMENT ON WALL MOUNTED CONTROLS.

B. CODES/PERMITS

1. WORK IS TO BE PERFORMED IN STRICT ACCORDANCE WITH STATE RECOGNIZED BUILDING CODES, NFPA, ASHRAE, UNDERWRITERS LABORATORIES AND ALL MUNICIPAL, STATE AND OTHER AUTHORITIES, PUBLIC AND PRIVATE, HAVING JURISDICTION. REPORT ALL DISCREPANCIES WITH SUCH REGULATIONS TO ENGINEER AND DO NOT PROCEED WITH ANY WORK UNTIL WRITTEN AUTHORIZATION IS RECEIVED FROM THE ENGINEER.
2. ALL NECESSARY FEES, PERMITS, AND APPROVALS AS REQUIRED BY THE WORK OF THESE DRAWINGS AND SPECIFICATIONS IS TO BE OBTAINED AND PAID FOR BY THIS CONTRACTOR.
3. NOTHING CONTAINED IN THE SPECIFICATIONS OR INDICATED ON THESE DRAWINGS IS TO BE CONSTRUED TO CONFLICT WITH APPLICABLE PORTIONS OF ANY LAWS, ORDINANCES, REGULATIONS, OR CODES.

C. COORDINATION OF WORK

1. COORDINATE CONSTRUCTION OF ALL MECHANICAL WORK WITH ARCHITECTURAL, STRUCTURAL, CIVIL, AND ELECTRICAL WORK - NEW OR EXISTING.
2. WHEN MECHANICAL WORK (HVAC, PLUMBING, FIRE PROTECTION, ETC.) IS SUBCONTRACTED, IT IS TO BE THE MECHANICAL CONTRACTOR'S RESPONSIBILITY TO COORDINATE SUBCONTRACTORS AND THE ASSOCIATED CONTRACTS. WHEN DISCREPANCIES ARISE PERTAINING TO WHICH CONTRACTOR PROVIDES A PARTICULAR ITEM OF THE MECHANICAL CONTRACT OR WHICH CONTRACTOR PROVIDES FINAL CONNECTIONS FOR A PARTICULAR ITEM OF THE MECHANICAL CONTRACT, IT MUST BE BROUGHT TO THE ATTENTION OF THE MECHANICAL CONTRACTOR, WHOSE DECISION IS FINAL.
3. THE LOCATIONS OF ALL ITEMS SHOWN ON THE DRAWINGS OR CALLED FOR IN THE SPECIFICATIONS ARE APPROXIMATE AND NOT DEFINITELY FIXED BY DIMENSIONS. THE EXACT LOCATIONS NECESSARY TO SECURE THE BEST CONDITIONS AND RESULTS MUST BE DETERMINED BY THE PROJECT SITE CONDITIONS. CASES WHERE THERE ARE MAJOR CONFLICTS THE CONTRACTOR MUST NOTIFY THE ENGINEER FOR FIELD REVIEW. DO NOT SCALE THE DRAWINGS.
4. PROVIDE LOCATIONS OF REQUIRED ACCESS PANELS FOR INSTALLATION IN WALLS AND CEILINGS TO SERVICE VALVES, DAMPERS, AND OTHER CONCEALED MECHANICAL EQUIPMENT. GENERAL CONTRACTOR IS TO FURNISH & INSTALL ACCESS PANELS.
5. COORDINATE LOCATIONS AND SIZES OF ALL FLOOR, WALL, AND ROOF OPENINGS WITH ALL OTHER TRADES INVOLVED. ALL OPENINGS IN FIRE WALLS, FLOORS AND RATED PARTITIONS FOR PIPING, CONDUIT, ETC., ARE TO BE FIRE STOPPED WITH A UL APPROVED SYSTEM.

D. PIPING

1. SEE PIPING PLAN SHEETS FOR PIPING GENERAL NOTES.

E. DUCTWORK

1. SEE DUCTWORK PLANS SHEETS FOR DUCTWORK GENERAL NOTES.

F. TESTING, ADJUSTING, AND BALANCING

1. WORK IS TO BE PERFORMED BY AN INDEPENDENT TESTING AND BALANCING AGENCY SPECIALIZING IN TESTING, ADJUSTING, AND BALANCING OF HEATING, VENTILATION, AND COOLING SYSTEMS. TESTING AND BALANCING CONTRACTOR MUST BE AABC OR NEBB CERTIFIED.
2. TOLERANCE OF HYDRONIC SYSTEMS: ADJUST FLUID FLOW RATES AT BALANCE VALVES AND ALL EQUIPMENT TO PLUS/MINUS 10% OF DESIGN FLOW RATES.
3. TOLERANCE OF AIR SYSTEMS: ADJUST AIR FLOW RATES AT AIR HANDLING UNITS TO PLUS/MINUS 5% OF DESIGN FOR SUPPLY SYSTEMS AND PLUS/MINUS 10% OF DESIGN FOR RETURN AND EXHAUST SYSTEMS. ADJUST AIR FLOW RATES AT AIR INLETS AND OUTLETS TO PLUS/MINUS 10% OF DESIGN TO THE SPACE. IN ALL CASES MAINTAIN REQUIRED FLOW OR SPACE PRESSURIZATION CRITERIA.
4. SCHEDULED EQUIPMENT IS TO BE BALANCED AND A PRELIMINARY REPORT SUBMITTED TO THE ENGINEER FOR REVIEW. PROVIDE ALLOWANCE FOR (2) RETURN TRIPS FOR ADDITIONAL REBALANCE WORK AFTER ENGINEER REVIEW OF INITIAL REPORTS. PROVIDE THE FINAL REPORT TO ENGINEER.

G. WARRANTY

1. GUARANTEE ALL WORK PERFORMED AND MATERIALS AND EQUIPMENT INSTALLED TO THE FULL EXTENT REQUIRED BY THE DRAWINGS AND SPECIFICATIONS TO BE FREE FROM INHERENT DEFECTS OF MATERIAL AND WORKMANSHIP FOR A PERIOD OF ONE (1) YEAR FROM THE DATE OF FINAL ACCEPTANCE.
2. REPLACE ANY MATERIAL AND EQUIPMENT PRIOR TO THE FINAL ACCEPTANCE WHICH IS CORRODED OR OTHERWISE DAMAGED THROUGH THE MECHANICAL CONTRACTOR'S FAILURE TO PROPERLY OPERATE AND MAINTAIN THE INSTALLATION DURING CONSTRUCTION OR RETESTING.
3. KEEP THE WORK IN REPAIR AND REPLACE ANY DEFECTIVE MATERIALS, EQUIPMENT, OR WORKMANSHIP UPON NOTICE FROM THE ENGINEER OR OWNER'S REPRESENTATIVE FOR A PERIOD OF ONE YEAR FROM DATE OF ACCEPTANCE.

H. INSURANCE

1. THE CONTRACTOR MUST, DURING THE LIFE OF THE CONTRACT, MAINTAIN IN FORCE, SUCH INSURANCE AS IS REQUIRED OF THE PRIME CONTRACTOR IN THE GENERAL CONDITIONS OF THE CONTRACT; AND TO FURNISH THE PRIME CONTRACTOR AND THE OWNER WITH CERTIFICATION OF SUCH INSURANCE BEFORE BEGINNING WORK ON THIS SECTION OF CONTRACT.

I. DOCUMENTATION

1. PROVIDE AN ENTIRE SET OF PROJECT CLOSE-OUT DOCUMENTS TO OWNER PER CONTRACT DOCUMENTS. PACKAGE MUST CONTAIN ENTIRE O&M MANUALS WITH PROJECT SUBMITTALS AND SUBMITTAL COMMENTS, TAB REPORTS, TEST REPORTS, AND RECORD DRAWINGS, PLUS ADMINISTRATIVE DOCUMENTS.

BASIS OF DESIGN

THE PROJECT INVOLVES HEATING, COOLING AND VENTILATING A RENOVATION TO A CARRAGE HOUSE TYPE STRUCTURE. AIR SOURCE HEAT PUMPS ARE THE DESIGNED SYSTEM. VENTILATION RATES ARE BASED ON ASHRAE 62.1 REQUIREMENTS.

APPLICABLE CODES AND STANDARDS:
2021 ASHRAE 62.1 VENTILATION FOR ACCEPTABLE INDOOR AIR QUALITY
2024 ASHRAE 15 SAFETY STANDARDS FOR REFRIGERATION SYSTEMS
2024 ASHRAE 34 DESIGNATION AND SAFETY CLASSIFICATION OF REFRIGERANTS
2015 INTERNATIONAL BUILDING CODE
2015 NFPA 1 FIRE CODE
2021 INTERNATIONAL PLUMBING CODE WITH VERMONT PLUMBIONG RULES
2024 VERMONT COMMERCIAL BUILDINGS ENERGY STANDARDS

BASIS OF DESIGN - REPLACE OIL-FIRED FURNACE AND AIR CONDITIONING UNIT WITH COLD CLIMATE HEAT PUMPS

1. REMOVE EXISTING OIL-FIRED FURNACE (140 MBH OUTPUT), BREECHING TO CHIMNEY, OIL TANK, DX COIL, AND EXTERIOR CONDENSING UNIT. INFILL OPENING INTO CHIMNEY WITH GROUT.
2. EXISTING SUPPLY AND RETURN BRANCH DUCTWORK TO REMAIN.
3. EXISTING E-Z-VENT ENERGY RECOVERY UNIT TO REMAIN. REMOVE SUPPLY AND RETURN DUCTS.
4. INSTALL FOUR (4) NEW INDOOR AIR HANDLING UNITS IN PLACE OF OIL-FIRED FURNACE. AIR HANDLING UNITS TO BE TRANE MITSUBISHI SVZ-AP60NL, 60 MBH COOLING AT 95 DEGF, 42.5 MBH HEATING AT 17 DEGF. 7.5 MCA, 750 WATTS, 208/1/60.
5. INSTALL TOTAL OF FOUR (4) EXTERIOR HEAT UNITS IN PLACE OF THE DEMO'D CONDENSING UNIT. HEAT PUMP UNITS TO BE TRANE MITSUBISHI SUZ-AK60NL, R454B REFRIGERANT, 5 TON COOLING CAPACITY. 38 MCA, 67 MOCP, 426 WATTS, 208/1/60.
6. DESIGN BUILD CONTRACTOR SHALL BE RESPONSIBLE FOR CALCULATING HEATING AND COOLING LOADS FOR EACH CONDITIONED SPACE WITHIN THE BUILDING.
7. BASED ON HEATING AND COOLING LOADS FOR INDIVIDUAL SPACES DESIGN BUILD CONTRACTOR SHALL DETERMINE HOW TO CONNECT THE FOUR AIR HANDLING UNITS INTO EXISTING BRANCH DUCTWORK TO MATCH SPACE HEATING AND COOLING DEMANDS WITH AIR HANDLING UNIT HEATING AND COOLING CAPACITIES. PROVIDE NEW SUPPLY AND RETURN DUCTS TO CONNECT TO EXISTING BRANCH DUCTS.
8. INSTALL AIR HANDLING UNITS HORIZONTALLY OR VERTICALLY BASED ON AVAILABLE SPACE AND CLEARANCES TO CEILING STRUCTURE. AIR HANDLING UNITS SHALL BE MOUNTED ON CONCRETE PADS ON THE BASEMENT FLOOR AND NOT SUSPENDED FROM THE FIRST FLOOR TO AVOID VIBRATION ISSUES.
9. DESIGN BUILD CONTRACTOR SHALL BE RESPONSIBLE FOR DETERMINING OUTSIDE AIR VENTILATION RATES TO EACH OF THE FOUR HANDLING UNITS. ROUTE SUPPLY AND RETURN DUCTWORK FROM THE ENERGY RECOVERY UNIT TO EACH AIR HANDLING UNIT. PROVIDE BALANCING DAMPERS IN ALL DUCTS.
10. INSULATE ALL NEW SUPPLY DUCTWORK WITH 1 1/2" THICK FIBERGLASS INSULATION WITH FOIL VAPOR BARRIER JACKET.
11. PROVIDE POURED REINFORCED CONCRETE PADS TO MOUNT THE EXTERIOR HEAT PUMP UNITS. MOUNT HEAT PUMP UNITS ON 18" HIGH METAL FRAMES (DIVERITECH OR EQUAL). MAINTAIN SPACING BETWEEN UNITS AS REQUIRED BY HEAT PUMP MANUFACTURER. LOCATE CONCRETE PAD AND HEAT PUMPS BEYOND THE DRIP EDGE OF THE ROOF LINE.
12. INSTALL INSULATED REFRIGERANT PIPING LINESETS FROM EXTERIOR HEAT PUMPS TO INTERIOR AIR HANDLING UNITS. PROVIDE EXTERIOR PIPING INSULATION AND SEAL KIT EQUAL TO AIREX PROSYSTEMKIT.
13. PROVIDE CONDENSATE DRAIN PIPING FROM AIR HANDLING UNITS TO A CONDENSATE PUMP. ROUTE DISCHARGE PIPE TO DRAIN OR BUILDING EXTERIOR.
14. ALL EQUIPMENT TO BE INSTALLED IN ACCORDANCE WITH MANUFACTURER'S WRITTEN DIRECTIONS AND ALL APPLICABLE CODES.

CD SET FOR BIDDING — 09.30.25

R. Edwards & Co.
ARCHITECTS + PRESERVATIONISTS
52 State St, 2nd Floor | Montpelier, VT 05602
(802) 232-2628 | info@redwardsandcompany.com
www.redwardsandcompany.com

SEAL

STATE OF VERMONT — JOSEPH J. COUTERMARSH — No. 7327 — REGISTERED PROFESSIONAL ENGINEER

PROJECT
ALICE WARD LIBRARY

PROJECT NUMBER
530597

CONSULTANTS

DuBois & King inc.
ENGINEERING • PLANNING • MANAGEMENT • DEVELOPMENT
BEDFORD, NH
TEL: (802) 728-3376
FAX: (802) 783-7101
www.dubois-king.com.
OFFICES IN VERMONT, NEW HAMPSHIRE & MAINE

RELEASE

RELEASE DATE

RELEASE & REVISION LOG

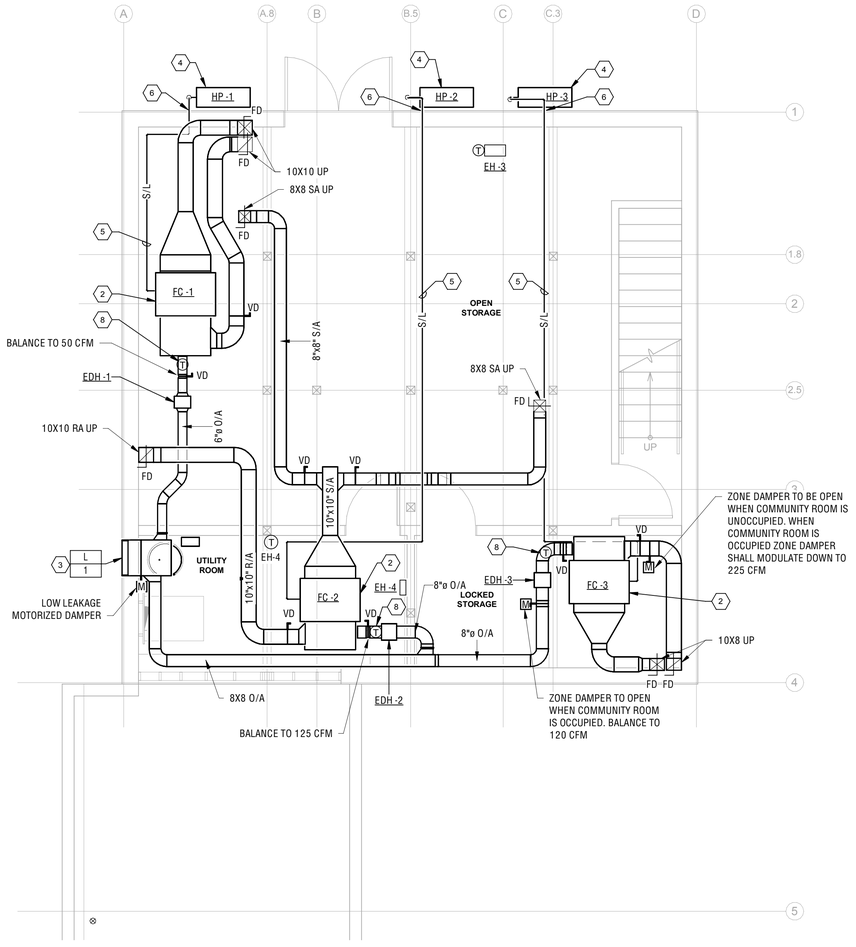
MARK	REVISION DESCRIPTION	DATE

PROJECT NORTH

DRAWING NAME
MECHANICAL LEGEND AND NOTES

DRAWN	JJC	DATE	09.30.25
CHECKED	JHP		

DRAWING NUMBER
M0.1



BASEMENT PLAN - DUCTWORK

SCALE: 1/4" = 1'-0"

MECHANICAL DUCTWORK NOTES

1. SEE SHEET M0.1 FOR MECHANICAL GENERAL NOTES.
2. FABRICATE DUCTWORK FROM FIELD VERIFIED DIMENSIONS. FABRICATE DUCTWORK IN ACCORDANCE WITH SMACNA GUIDELINES (LATEST EDITION). PRIOR TO FABRICATING DUCTWORK VERIFY CEILING CLEARANCES WITH STRUCTURE, PIPES, ETC. COORDINATE THE INSTALLATION OF DUCTWORK WITH SPRINKLER PIPING. INSTALL DUCTWORK PRIOR TO INSTALLING ANY PIPING AND ELECTRICAL WORK TO REDUCE CONFLICTS.
3. ALL DUCTWORK IS TO BE FABRICATED FROM G-90 GALVANIZED SHEET METAL IN LOCK-FORMING QUALITY, UNLESS SPECIFIED OTHERWISE.
4. ALL DUCTWORK DIMENSIONS SHOWN ON PLANS ARE CLEAR INTERNAL SIZES.
5. ALL SUPPLY, RETURN, EXHAUST, AND OUTSIDE AIR DUCTWORK SHALL BE FABRICATED AT A MINIMUM CLASS OF 2 INCH WATER GAGE SEAL CLASS 'A'.
6. ALL DUCT SEALANT TO BE WATER BASED LOW VOC.
7. ALL SUPPLY AND O/A DUCT WORK TO BE INSULATED TO MEET THE ENERGY CONSERVATION CODE ADOPTED BY THE STATE. SEE SPECIFICATIONS FOR ADDITIONAL INFORMATION.
8. COORDINATE THE LOCATION OF CEILING AIR INLETS AND OUTLETS WITH LIGHTS, SPRINKLER HEADS, AND LIFE SAFETY DEVICES.
9. PROVIDE ADJUSTABLE VOLUME DAMPERS AT ALL BRANCH DUCT TAKE OFFS. "RAP-IT" STYLE VOLUME DAMPERS AND HARDWARE IS NOT PERMITTED. FOR LOW FLOW BRANCHES, PROVIDE EDGE SEALED DAMPERS TO OBTAIN PROPER FLOW BALANCING.
10. INSTALL ALL DUCTS IN BASEMENT TIGHT TO CEILING STRUCTURE AND OFFSET BELOW BEAMS AS REQUIIRED.

MECHANICAL KEYNOTES

2	SUSPEND FAN COILS FROM CEILING STRUCTURE. MOUNT TIGHT TO CEILING TO MAINTAIN MAXIMUM HEADROOM.
3	24" X 12" OUTSIDE AIR LOUVER MOUNT IN EXISTING WINDOW OPENING. CONFIRM OPENING DIMENSIONS IN FIELD.
4	MOUNT HEAT PUMPS ON EXTERIOR MASONRY WALL WITH WALL MOUNT BRACKETS PROVIDED WITH THE HEAT PUMP UNIT. PROVIDE VIBRATION ISOLATORS.
5	1 /2"S AND 1/4"L INSULATED REFRIGERANT PIPING LINESETS ROUTE BUNDLED AND INSTALLED TIGHT TO CEILING STRUCTURE.
6	PROVIDE WALL PENETRATION SEAL KIT FOR BOTH REFRIGERANT SUCTION AND LIQUID PIPING. AIREX PRO-SYSTEM KIT WITH INSULATION PROTECTION.
8	DUCT MOUNTED TEMPERATURE SENSOR PROVIDED WITH ELECTRIC DUCT HEATER.

CD SET
FOR BIDDING 09.30.25

R. Edwards & Co.
ARCHITECTS + PRESERVATIONISTS
52 State St. 2nd Floor | Montpelier, VT 05602
(802) 232-2628 | info@redwardsandcompany.com
www.redwardsandcompany.com

SEAL

STATE OF VERMONT
JOSEPH J. COUTERMARSH
No. 7327
REGISTERED
PROFESSIONAL ENGINEER

PROJECT
ALICE WARD LIBRARY

PROJECT NUMBER
530597

CONSULTANTS

DuBois & King inc.
ENGINEERING • PLANNING •
MANAGEMENT • DEVELOPMENT
BEDFORD, NH
TEL: (802) 728-3376
FAX: (802) 783-7101
www.dubois-king.com.
OFFICES IN VERMONT,
NEW HAMPSHIRE & MAINE

RELEASE

RELEASE DATE

RELEASE & REVISION LOG

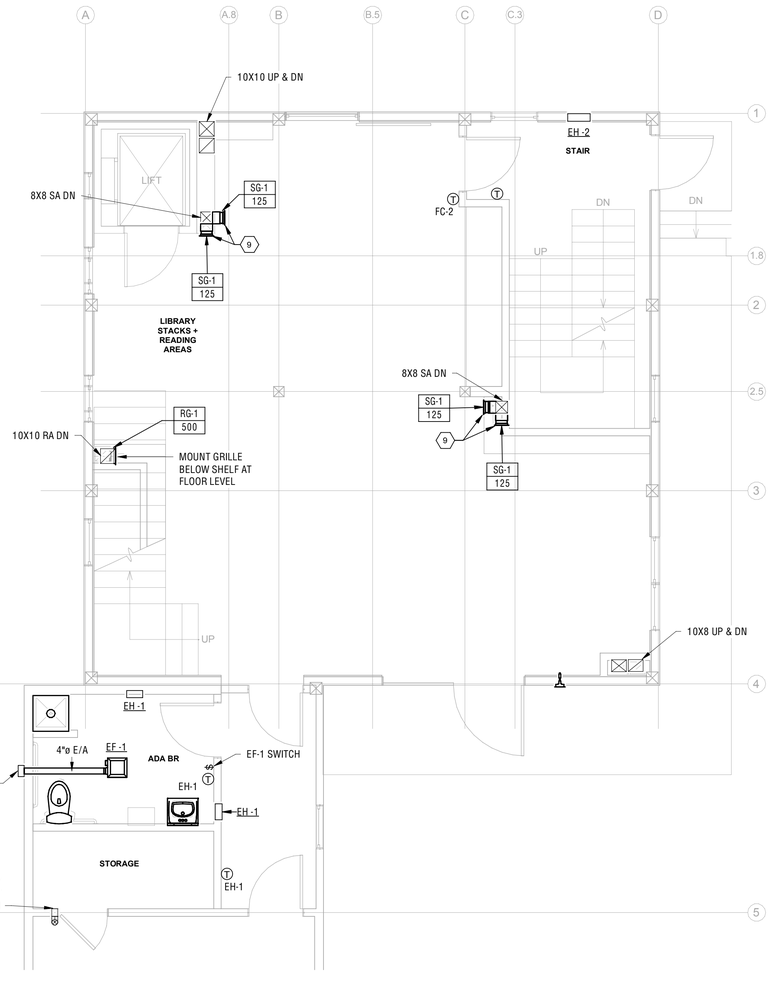
MARK	REVISION DESCRIPTION	DATE

PROJECT NORTH

DRAWING NAME
BASEMENT PLAN - DUCTWORK

DRAWN	JJC	DATE	09.30.25
CHECKED	JHP		

DRAWING NUMBER
M1.1



1st FLOOR PLAN - DUCTWORK

SCALE: 1/4" = 1'-0"

MECHANICAL KEYNOTES	
9	MOUNT GRILLES AT 8'-0" AFF

R. Edwards & Co.
ARCHITECTS + PRESERVATIONISTS

52 State St, 2nd Floor | Montpelier, VT 05602
(802) 232-2628 | info@redwardsandcompany.com

www.redwardsandcompany.com

SEAL

STATE OF VERMONT
JOSEPH J. COUTERMARSH
No. 7327
REGISTERED
PROFESSIONAL ENGINEER

PROJECT
ALICE WARD
LIBRARY

PROJECT NUMBER
530597

CONSULTANTS

DuBois & King inc.
ENGINEERING • PLANNING •
MANAGEMENT • DEVELOPMENT
BEDFORD, NH
TEL: (802) 728-3376
FAX: (802) 783-7101
www.dubois-king.com.
OFFICES IN VERMONT,
NEW HAMPSHIRE & MAINE

RELEASE

RELEASE DATE

RELEASE & REVISION LOG

MARK	REVISION DESCRIPTION	DATE

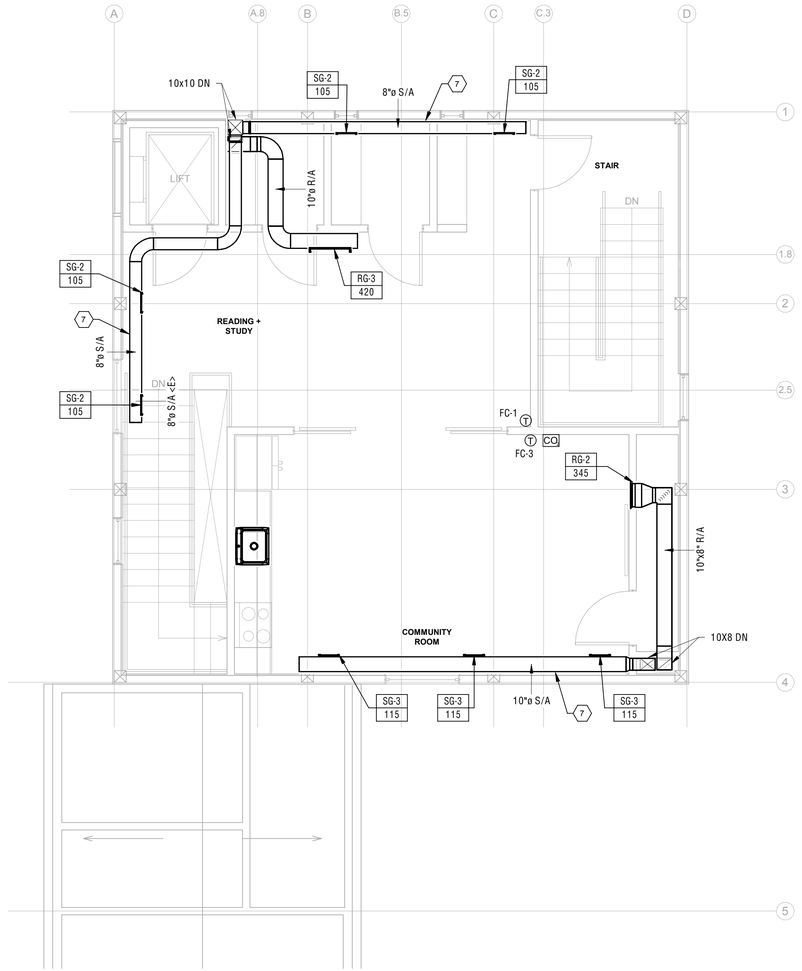
PROJECT NORTH

DRAWING NAME
1ST FLOOR PLAN - DUCTWORK

DRAWN	JJC	DATE	09.30.25
CHECKED	JHP		

DRAWING NUMBER
M1.2

CD SET
FOR BIDDING
09.30.25



2nd FLOOR - DUCTWORK

SCALE: 1/4" = 1'-0"

MECHANICAL KEYNOTES	
7	ALL EXPOSED DUCT TO BE ROUND SPIRAL WOUND WITH DUCT MOUNTED SUPPLY DIFFUERS AND RETURN GRILLES. MOUNT NEAR INTERFACE OF WALLS AND ROOFLINE.

R. Edwards & Co.
ARCHITECTS + PRESERVATIONISTS

52 State St. 2nd Floor | Montpelier, VT 05602
(802) 232-2628 | info@redwardsandcompany.com

www.redwardsandcompany.com

SEAL

STATE OF VERMONT
JOSEPH J. COUTERMARSH
No. 7327
REGISTERED
PROFESSIONAL ENGINEER

PROJECT

ALICE WARD
LIBRARY

PROJECT NUMBER

530597

CONSULTANTS

DuBois & King inc.
ENGINEERING • PLANNING •
MANAGEMENT • DEVELOPMENT
BEDFORD, NH
TEL: (802) 728-3376
FAX: (802) 783-7101
www.dubois-king.com.
OFFICES IN VERMONT,
NEW HAMPSHIRE & MAINE

RELEASE

RELEASE DATE

RELEASE & REVISION LOG

MARK	REVISION DESCRIPTION	DATE

PROJECT NORTH

DRAWING NAME

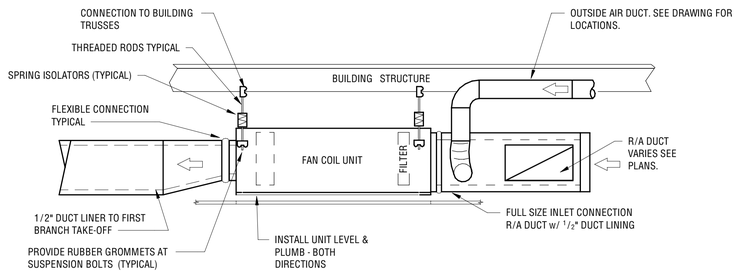
2ND FLOOR - DUCTWORK

DRAWN	JJC	DATE	09.30.25
CHECKED	JHP		

DRAWING NUMBER

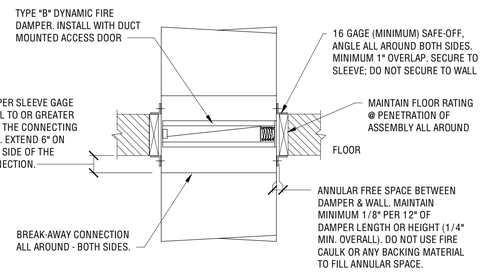
M1.3

CD SET
FOR BIDDING
09.30.25



DUCTED FAN COIL INSTALLATION DETAIL

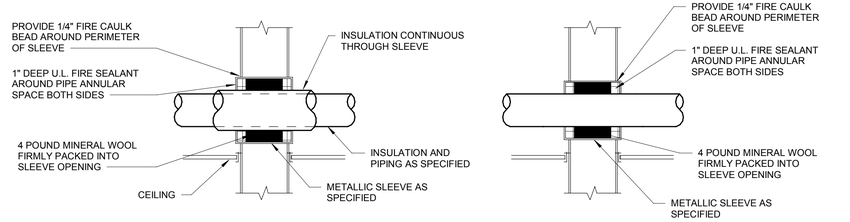
SCALE: NOT TO SCALE



NOTES:
1. PROVIDE ACCESS DOOR w/ LABEL AT EVERY DAMPER INSTALLATION.

FIRE DAMPER INSTALLATION DETAIL

SCALE: NOT TO SCALE

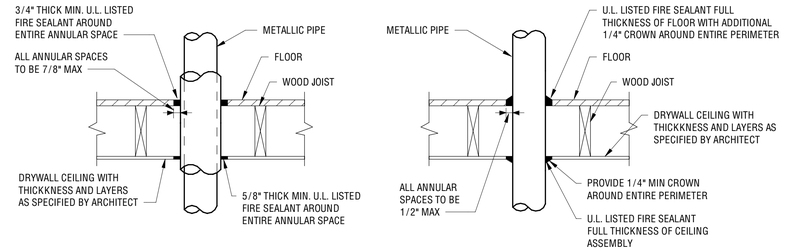


INSULATED PIPE - U.L 1 HOUR RATING

UNINSULATED PIPE - U.L 1 HOUR RATING

METALLIC PIPE WALL PENETRATION DETAILS

NOT TO SCALE



INSULATED PIPE - U.L 1 HOUR RATING

UNINSULATED PIPE - U.L 1 HOUR RATING

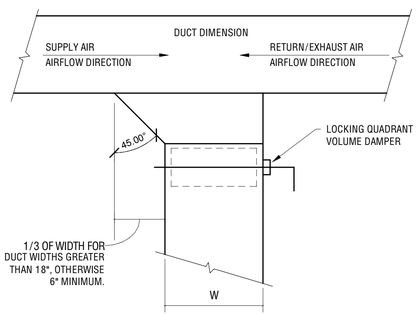
METALLIC PIPE FLOOR PENETRATION DETAILS

NOT TO SCALE

NOTES:
1. FOLLOW FIRE SEALANT MANUFACTURERS WRITTEN INSTALLATION INSTRUCTIONS IN CONJUNCTION WITH REQUIREMENTS AS DETAILED.
2. ALL WALL AND FLOOR PIPE PENETRATIONS SHALL BE INSTALLED PER THIS DETAIL.
3. DETAIL BASED ON STI "SPEC SEAL" FIRE STOPPING PRODUCTS, ALTERNATE MANUFACTURERS INSTALLATION REQUIREMENTS MAY VARY.
4. ALL WALL AND FLOOR PENETRATIONS SHALL BE INSTALLED TO MEET U.L. TESTED ASSEMBLIES. REFER TO ARCHITECTS DRWINGS FOR U.L. DESIGNATIONS OF WALL AND FLOOR ASSEMBLIES.
5. PROVIDE CHROME PLATED ESCUTCHEONS FOR ALL EXPOSED LOCATIONS.

WALL & FLOOR PIPE PENETRATION DETAIL

SCALE: NOT TO SCALE



DUCT BRANCH CONNECTION DETAIL

SCALE: NOT TO SCALE

R. Edwards & Co.
ARCHITECTS + PRESERVATIONISTS
52 State St. 2nd Floor | Montpelier, VT 05602
(802) 232-2628 | info@redwardsandcompany.com
www.redwardsandcompany.com

SEAL

STATE OF VERMONT JOSEPH J. COUTERMARSH No. 7327 REGISTERED PROFESSIONAL ENGINEER

PROJECT
ALICE WARD LIBRARY

PROJECT NUMBER
530597

CONSULTANTS

DuBois & King inc.
ENGINEERING • PLANNING • MANAGEMENT • DEVELOPMENT
BEDFORD, NH
TEL: (802) 728-3376
FAX: (802) 783-7101
www.dubois-king.com.
OFFICES IN VERMONT, NEW HAMPSHIRE & MAINE

RELEASE

RELEASE DATE

RELEASE & REVISION LOG

MARK	REVISION DESCRIPTION	DATE

PROJECT NORTH

DRAWING NAME
MECHANICAL DETAILS

DRAWN	JJC	DATE	09.30.25
CHECKED	JHP		

DRAWING NUMBER
M5.1

CD SET FOR BIDDING 09.30.25

HEAT PUMP, SPLIT TYPE OUTDOOR UNIT SCHEDULE

TAG	MATCHED UNIT TAG	SERVES	BASIS OF DESIGN MANUFACTURER	BASIS OF DESIGN MODEL	COOLING CONDITION					HEATING CONDITION 1				HEATING CONDITION MIN				ELECTRICAL							
					COOLING CAPACITY (TONS)	EAT DB	EAT WB	EFFICIENCY EER	EFFICIENCY SEER	HEATING CAPACITY	EAT DB	EAT WB	COP	HEATING CAPACITY	EAT DB	EAT WB	FAN AIRFLOW	VOLTS	PHASE	HZ	MCA	REFRIGERANT	SOUND (DBA)	WEIGHT (LBS)	REMARKS
HP-1	FC-1	READING STUDY	MITSUBISHI	SUZ-AA15NLHZ	1.25 ton	95 °F	75 °F	13.2	25.2	23,000 Btu/h	47 °F	43 °F	4.4	11,000 Btu/h	-13 °F	-13 °F	2,193 CFM	208 V	1	60 Hz	17.0 A	R454B	37	115	
HP-2	FC-2	LIBRARY STACKS	MITSUBISHI	SUZ-AA15NLHZ	1.25 ton	95 °F	75 °F	13.2	25.2	23,000 Btu/h	47 °F	43 °F	4.4	11,000 Btu/h	-13 °F	-13 °F	2,193 CFM	208 V	1	60 Hz	17.0 A	R454B	37	115	
HP-3	FC-3	COMMUNITY ROOM	MITSUBISHI	SUZ-AA12NLHZ	1 ton	95 °F	75 °F	13.6	17	18,000 Btu/h	47 °F	43 °F	3.6	9,000 Btu/h	-13 °F	-13 °F	1,590 CFM	208 V	1	60 Hz	25.0 A	R454B	37	99	

NOTES:
1. 1/4" REFRIGERANT LIQUID AND 1/2" REFRIGERANT GAS CONNECTIONS
2. INCLUDE WALL MOUNTING BRACKET.
3. ALL STARTERS FOR HVAC EQUIPMENT WHICH ARE NOT FACTORY MOUNTED SHALL BE FURNISHED UNDER DIVISION 23, AND INSTALLED UNDER DIVISION 26. ALL DISCONNECTS SHALL BE FURNISHED AND INSTALLED BY DIVISION 26.

HEAT PUMP, SPLIT TYPE INDOOR UNIT SCHEDULE

TAG	BASIS OF DESIGN MANUFACTURER	BASIS OF DESIGN MODEL	COOLING PERFORMANCE			HEATING PERFORMANCE			CFM	QTY	E.S.P.	POWER (WATTS)	VOLTS	PHASE	MCA	HZ	WEIGHT (LBS)	SOUND (DBA)	REMARKS
			CAPACITY	EAT DB	EAT WB	CAPACITY	EAT DB	EAT WB											
FC-1	MITSUBISHI	PEAD-AA15NL	15,000.0 Btu/h	80 °F	67 °F	23000.0 Btu/h	47 °F	43 °F	512 CFM	1	0.40 in-wg	121 W	208 V	1	2.3 A	60 Hz	60	34	
FC-2	MITSUBISHI	PEAD-AA15NL	15,000.0 Btu/h	80 °F	67 °F	23000.0 Btu/h	47 °F	43 °F	512 CFM	1	0.40 in-wg	121 W	208 V	1	2.3 A	60 Hz	60	34	
FC-3	MITSUBISHI	PEAD-AA12NL	12,000.0 Btu/h	80 °F	67 °F	18000.0 Btu/h	47 °F	43 °F	420 CFM	1	0.40 in-wg	121 W	208 V	1	2.5 A	60 Hz	58	31	

NOTES:
1. 1/4" REFRIGERANT LIQUID AND 1/2" REFRIGERANT GAS CONNECTIONS
2. PROVIDE WIRED WALL MOUNT CONTROLS
3. PROVIDE ALL LINE SETS, FILTERS, DRYERS, CONDENSATE DRAINS, CONDENSATE PUMP FOR A COMPLETE PACKAGE

SEQUENCE OF OPERATION

1. PROVIDE A PROGRAMMABLE TIMECLOCK TO CONTROL HVAC EQUIPMENT AS DESCRIBED. OWNER TO PROVIDE OCCUPIED/UNOCCUPIED HOURS OF FACILITY OPERATION.
2. FAN COILS FC-1, FC-2 & FC-3 AND HEAT PUMPS HP-1, HP-2 & HP-3 SHALL OPERATE BY ROOM MOUNTED THERMOSTATS PROVIDED WITH THE FAN COIL UNITS. PROGRAM THERMOSTATS WITH SETPOINTS FOR 70 DEGF HEATING AND 75 DEGF COOLING.
3. ELECTRIC DUCT HEATERS EDH-1, EDH-2 & EDH-3 SHALL OPERATE BY A DUCT MOUNTED AIR TEMPERATURE SENSOR LOCATED IN THE OUTSIDE AIR DUCT. PROVIDE SCR CONTROL FOR MODULATING OUTPUT TO MAINTAIN AN OUTSIDE AIR DUCT TEMPERATURE OF 70 DEGF (ADJUSTABLE).
4. MOTORIZED DAMPER AT LOUVER L-1 SHALL BE CONTROLLED BY A TIMECLOCK. WHEN BUILDING IS UNOCCUPIED MOTORIZED DAMPER SHALL BE CLOSED. WHEN BUILDING IS OCCUPIED DAMPER SHALL OPEN.
5. ZONE DAMPERS IN OUTSIDE AIR AND RETURN DUCTS SERVING FAN COIL FC-3 SHALL BE CONTROLLED BY A CO2 OCCUPANCY SENSOR LOCATED IN THE COMMUNITY ROOM. WHEN THE SPACE IS UNOCCUPIED ZONE DAMPER IN OUTSIDE AIR DUCT SHALL BE CLOSED. WHEN SPACE IS OCCUPIED AS DETERMINED BY THE OCCUPANCY SENSOR ZONE DAMPER IN OUTSIDE AIR DUCT SHALL OPEN TO INTRODUCE OUTSIDE AIR AT RATES INDICATED ON PLANS. ZONE DAMPER IN RETURN DUCT SHALL MODULATE DOWN TO REDUCE RETURN AIR RATE AS INDICATED ON THE PLANS.
6. ELECTRIC HEATERS EH-1, EH-2 & EH-3 SHALL BE CONTROLLED BY WALL MOUNTED OR INTEGRAL THERMOSTATS AS INDICATED ON THE PLANS.
7. EXHAUST FAN EF-1 SHALL BE CONTROLLED BY A WALL MOUNTED SWITCH.

ELECTRIC HEATER SCHEDULE

TAG	LOCATION	BASIS OF DESIGN MANUFACTURER	BASIS OF DESIGN MODEL	TYPE	HEATING CAPACITY BTU/HR	MOTOR				REMARKS
						KW	VOLTS	PHASE	AMPS	
EH-1	ADA BATH HALL 103	BERKO	SRA2027DSF	WALL RECESSED	5,120	1.5	240 V	1	6.3 A	PROVIDE WALL MOUNTED THERMOSTAT
EH-2	STAIR	BERKO	VFK304F	WALL RECESSED	10,200	3	240 V	1	12.5 A	PROVIDE WALL MOUNTED THERMOSTAT
EH-3	BASEMENT	QMARK	MUH03-21	HORIZONTAL UNIT HEATER	10,200	3	240 V	1	12.5 A	PROVIDE INTEGRAL THERMOSTAT AND CEILING MOUNT BRACKET
EH-4	UTILITY ROOM	BERKO	SRA2027DSF	SURFACE MOUNTED	0	0	240 V	1	6.3 A	PROVIDE WALL MOUNTED THERMOSTAT

ELECTRIC DUCT HEATER SCHEDULE

TAG	LOCATION	BASIS OF DESIGN MANUFACTURER	BASIS OF DESIGN MODEL	TYPE	HEATING CAPACITY	HEIGHT (INCHES)	WIDTH (INCHES)	KW	VOLTS	PHASE	FULL LOAD CURRENT (AMPS)	MCA	REMARKS
EDH-1	BASEMENT	RENEWAIRE	EDH 6"	ELECTRIC DUCT HEATER	3,410 Btu/h	8.0	11.5	1	240 V	1	4.2	20.0 A	SEE NOTES
EDH-2	UTILITY ROOM	RENEWAIRE	EDH 8"	ELECTRIC DUCT HEATER	10,200 Btu/h	10.0	11.5	3	240 V	1	12.5	20.0 A	SEE NOTES
EDH-3	LOCKED STORAGE	RENEWAIRE	EDH 8"	ELECTRIC DUCT HEATER	10,200 Btu/h	10.0	11.5	3	240 V	1	12.5	20.0 A	SEE NOTES

NOTES:
1. PROVIDE DUCT MOUNTED TEMPERATURE SENSOR AND SCR MODULATING CONTROL

DUCTWORK INSULATION SCHEDULE

APPLICATION	TYPE (NOTE 3)	THICKNESS	DENSITY	JACKET	REMARKS
SUPPLY DUCTWORK IN BASEMENT	FIBERGLASS WRAP	1.5" (MIN. R=40)	0.75 PCF	FOIL FACED	-
EXPOSED INTERIOR SUPPLY DUCTWORK	CLOSED CELL ELASTOMERIC FOAM DUCT LINER	0.5"	-	-	NOTES 1&2
OUTSIDE AIR DUCT FROM LOUVER PLENUM TO ELECTRIC DUCT COILS	FIBERGLASS WRAP	3.0" (MIN. R=8.0)	0.75 PCF	FOIL FACED	-
LOUVER PLENUMS	FIBERGLASS BOARD	3" (MIN. R=12.0)	-	FOIL FACED	-

NOTES:
1. EXPOSED DEFINED AS VISIBLE WITHIN CONDITIONED LIBRARY SPACES.
2. MEETS E84/UL723 FIRE/SMOKE REQUIREMENTS, GREENGUARD CERTIFIED, UL181 & ASTM G21/C1338 COMPLIANT.
3. REFER TO SPECIFICATIONS.

EXHAUST FAN SCHEDULE

TAG	BASIS OF DESIGN MANUFACTURER	BASIS OF DESIGN MODEL	TYPE	FLOW (CFM)	S.P. (IN)	RPM	WATTS	SONES	MOTOR			WEIGHT (LBS)	REMARKS
									VOLTS	PHASE	AMPS		
EF-1	PANASONIC	FV-0511VKSL2	WHISPER GREEN SELECT	110	0.25 in-wg	1203	10.5	0.8	120 V	1	0.11 A	20	ALL

LOUVER SCHEDULE

TAG	TYPE	APPLICATION	SCREEN	FRAME	Height	Length	CFM	MATERIAL	FINISH	FREE AREA	VELOCITY	BASIS OF DESIGN MANUFACTURER	BASIS OF DESIGN MODEL	REMARKS
L-1	DRAINABLE BLADE	OUTSIDE AIR	1/4" SS MESH	4" HEAVY GAUGE	1' - 0"	2' - 0"	295	ALUMINUM	BAKED ENAMEL	0.68 SF	434 FPM	GREENHECK	ESJ-401	

NOTES:
1. PROVIDE COLOR SELECTION CHART FOR SELECTION BY ARCHITECT.
2. PROVIDE BIRDSCREEN AND EXTENDED SILL.

GRILLES, REGISTERS & DIFFUSERS

TAG	MANUFACTURER	NECK SIZE	CFM	TYPE & MODEL	REMARKS
RG-1	PRICE	10"x20"	0 - 500	RETURN DIFFUSER SIDEWALL DUCT MOUNT/630L	--
RG-2	PRICE	16"x12"	0 - 345	RETURN DIFFUSER SIDEWALL SURFACE MOUNT/630L	--
RG-3	PRICE	26"x6"	0 - 420	SPIRAL DUCT GRILLE EXTRUDED ALUMINUN/SDGE Series	
SG-1	PRICE	8"x6"	0 - 125	SUPPLY DIFFUSER SIDEWALL SURFACE MOUNT/620L	--
SG-2	PRICE	12"x4"	0 - 105	SPIRAL DUCT GRILLE EXTRUDED ALUMINUN/SDGE Series	
SG-3	PRICE	12"x4"	0 - 115	SPIRAL DUCT GRILLE EXTRUDED ALUMINUN/SDGE Series	

NOTES:
1. PROVIDE OPPOSED BLADE DAMPER FOR BALANCING.
2. PROVIDE CLEAR ANODIZED FINISH.

CD SET
FOR BIDDING 09.30.25

R. Edwards & Co.
ARCHITECTS + PRESERVATIONISTS
52 State St, 2nd Floor | Montpelier, VT 05602
(802) 232-2628 | info@redwardsandcompany.com
www.redwardsandcompany.com

SEAL

STATE OF VERMONT
JOSEPH J. COUTERMARSH
No. 7327
REGISTERED
PROFESSIONAL ENGINEER

PROJECT
ALICE WARD LIBRARY

PROJECT NUMBER
530597

CONSULTANTS

DuBois & King inc.
ENGINEERING • PLANNING • MANAGEMENT • DEVELOPMENT
BEDFORD, NH
TEL: (802) 728-3376
FAX: (802) 783-7101
www.dubois-king.com.
OFFICES IN VERMONT, NEW HAMPSHIRE & MAINE

RELEASE

RELEASE DATE

RELEASE & REVISION LOG

MARK	REVISION DESCRIPTION	DATE

PROJECT NORTH

DRAWING NAME
MECHANICAL SCHEDULES

DRAWN JJC DATE 09.30.25
CHECKED JHP

DRAWING NUMBER
M6.1

DIVISION 22 - PLUMBING
SECTION 221005
PLUMBING PIPING

PART 1 GENERAL

1.01 SECTION INCLUDES

A Sanitary waste piping, above grade.
B Domestic water piping, above grade.

1.02 REFERENCE STANDARDS

A ASME B16.18 - Cast Copper Alloy Solder Joint Pressure Fittings; 2021.
B ASME B16.22 - Wrought Copper and Copper Alloy Solder-Joint Pressure Fittings; 2021.
C ASME B16.51 - Copper and Copper Alloy Press-Connect Pressure Fittings; 2021.
D ASME B31.9 - Building Services Piping; 2020.
E ASTM B32 - Standard Specification for Solder Metal; 2020.
F ASTM B88 - Standard Specification for Seamless Copper Water Tube; 2022.
G ASTM B813 - Standard Specification for Water Flushable Liquid and Paste Fluxes for Soldering of Copper and Copper Alloy Tube; 2024.
H ASTM D2564 - Standard Specification for Solvent Cements for Poly(Vinyl Chloride) (PVC) Plastic Piping Systems; 2020 (Reapproved 2024).
I ASTM D2729 - Standard Specification for Poly(Vinyl Chloride) (PVC) Sewer Pipe and Fittings; 2021.
J ASTM F877 - Standard Specification for Crosslinked Polyethylene (PEX) Hot- and Cold-Water Distribution Systems; 2024.
K ASTM F1960 - Standard Specification for Cold Expansion Fittings with PEX Reinforcing Rings for Use with Cross-Linked Polyethylene (PEX) and Polyethylene of Raised Temperature (PE-RT) Tubing; 2024.
L IAPMO/ANSI/CAN Z1117 - Standard for Press Connections; 2022.
M ICC (IPC) - International Plumbing Code; Most Recent Edition Adopted by Authority Having Jurisdiction, Including All Applicable Amendments and Supplements.
N MSS SP-58 - Pipe Hangers and Supports - Materials, Design, Manufacture, Selection, Application, and Installation; 2018, with Amendment (2019).
O MSS SP-110 - Ball Valves Threaded, Socket-Welding, Solder Joint, Grooved and Flared Ends; 2010, with Errata .
P NSF 372 - Drinking Water System Components - Lead Content; 2024.

1.03 DELIVERY, STORAGE, AND HANDLING

A Provide temporary end caps and closures on piping and fittings. Maintain in place until installation.
B Protect piping systems from entry of foreign materials by temporary covers, completing sections of the work, and isolating parts of completed system.

PART 2 PRODUCTS

2.01 GENERAL REQUIREMENTS

A Potable Water Supply Systems: Provide piping, pipe fittings, and solder and flux (if used), that comply with NSF 61 and NSF 372 for maximum lead content; label pipe and fittings.

2.02 SANITARY WASTE PIPING, ABOVE GRADE

A PVC Pipe: ASTM D2729.
1. Fittings: PVC.
2. Joints: Solvent welded, with ASTM D2564 solvent cement.

2.03 DOMESTIC WATER PIPING, ABOVE GRADE

A Copper Tube: ASTM B88 (ASTM B88M), Type L (B), Drawn (H).
1. Fittings: ASME B16.18, cast copper alloy or ASME B16.22, wrought copper and bronze.
2. Joints: ASTM B32, alloy Sn95 solder.
3. Mechanical Press Sealed Fittings: ASME B16.51 or IAPMO/ANSI/CAN Z1117, ICC (IPC), and IAPMO (UPC) approved, NSF 61 and NSF 372 certified, with EPDM seals.

B Cross-Linked Polyethylene (PEX) Pipe: ASTM F876 or ASTM F877.
1. PPI TR-4 Pressure Design Basis:
   a. 160 psig at maximum 73 degrees F.
   b. 100 psig at maximum 180 degrees F.
2. Fittings: Brass and copper.
3. Fittings: Brass and engineered polymer (EP) ASTM F1960.
4. Joints: Mechanical compression fittings.
5. Joints: ASTM F1960 cold-expansion fittings.

2.04 PIPE HANGERS AND SUPPORTS

A Provide hangers and supports that comply with MSS SP-58.
1. If type of hanger or support for a particular situation is not indicated, select appropriate type using MSS SP-58 recommendations.
2. Overhead Supports: Individual steel rod hangers attached to structure or to trapeze hangers.
3. Trapeze Hangers: Welded steel channel frames attached to structure.
4. Vertical Pipe Support: Steel riser clamp.

2.05 BALL VALVES

A Construction, 4 inch and Smaller: MSS SP-110, Class 150, 400 psi CWP, bronze body, 304 stainless steel or chrome plated brass ball, regular port, teflon seats and stuffing box ring, blow-out proof stem, lever handle with balancing stops, threaded or grooved ends with union.

PART 3 EXECUTION

3.01 PREPARATION

A Ream pipe and tube ends. Remove burrs. Bevel plain end ferrous pipe.
B Remove scale and dirt, on inside and outside, before assembly.
C Prepare piping connections to equipment with flanges or unions.

3.02 INSTALLATION

A Install in accordance with manufacturer's instructions.
B Provide non-conducting dielectric connections wherever jointing dissimilar metals.
C Route piping in orderly manner and maintain gradient. Route parallel and perpendicular to walls.
D Install piping to maintain headroom, conserve space, and not interfere with use of space.
E Group piping whenever practical at common elevations.
F Provide clearance in hangers and from structure and other equipment for installation of insulation and access to valves and fittings.
G Provide access where valves and fittings are not exposed.
H Copper Pipe and Tube: Make soldered joints in accordance with ASTM B828, using specified solder, and flux meeting ASTM B813; in potable water systems use flux also complying with NSF 61 and NSF 372.
I PVC Pipe: Make solvent-welded joints in accordance with ASTM D2855.
J Pipe Hangers and Supports:
1. Install in accordance with ASME B31.9.
2. Install hangers to provide minimum 1/2 inch space between finished covering and adjacent work.
3. Place hangers within 12 inches of each horizontal elbow.
4. Provide copper plated hangers and supports for copper piping.

3.03 APPLICATION

A Install ball valves for shut-off and to isolate equipment, part of systems, or vertical risers.

3.04 FIELD TESTS AND INSPECTIONS

A Verify and inspect systems according to requirements by the Authority Having Jurisdiction. In the absence of specific test and inspection procedures proceed as indicated below.

END OF SECTION 221005

SECTION 223000
PLUMBING EQUIPMENT

PART 1 GENERAL

1.01 SECTION INCLUDES

A Residential hybrid electric water heaters

1.02 REFERENCE STANDARDS

A ASHRAE Std 90.1 I-P - Energy Standard for Buildings Except Low-Rise Residential Buildings; Most Recent Edition Adopted by Authority Having Jurisdiction, Including All Applicable Amendments and Supplements.
B AWWA C652 - Disinfection of Water-Storage Facilities; 2019.
C ICC (IPC) - International Plumbing Code; Most Recent Edition Adopted by Authority Having Jurisdiction, Including All Applicable Amendments and Supplements.

1.03 DELIVERY, STORAGE, AND HANDLING

A Provide temporary inlet and outlet caps. Maintain caps in place until installation.

PART 2 PRODUCTS

2.01 WATER HEATERS

A Manufacturers:
1. A.O. Smith Water Products Co: www.hotwater.com/#sle.
2. Bradford White Corporation; _____: www.bradfordwhite.com/#sle.
3. Rheem Manufacturing Company: www.rheem.com/#sle.

B Residential Hybrid Electric Water Heaters:
1. Type: Vertical storage.
2. Minimum Efficiency: ASHRAE Std 90.1 I-P.
3. Maximum Working Pressure: 150 psig.
4. Heat Pump Air Temperature Operation Range: 35 to 120 deg. F.
5. Tank: Glass lined welded steel, thermally insulated with foam plastic; encased in corrosion-resistant steel jacket; baked-on enamel finish.
6. Heat Pump System: Integral to unit with compressor, heat exchangers, fan, refrigerant piping, R-134a refrigerant.
7. Display: LCD with integral diagnostic and troubleshooting information.
8. Controls: Automatic water thermostat with externally adjustable temperature range, flanged or screw-in nichrome elements, enclosed controls and electrical junction box. Wire double element units so elements do not operate simultaneously. Ability to operate in heat pump, hybrid, or electric-only modes.
9. Water Connections: 3/4" NPT brass.
10. Dip Tube: Brass.
11. Drain Valve.
12. Condensate Drain.
13. Anode: Magnesium.
14. Temperature and Pressure Relief Valve: ASME labeled.

PART 3 EXECUTION

3.01 INSTALLATION

A Install plumbing equipment in accordance with manufacturer's instructions, as required by code, and complying with conditions required for applicable certifications.
B Coordinate system, equipment, and piping work with applicable electrical, vent, drain, and waste support interconnections as included or provided by other trades.

3.02 CLEANING

A Clean interior of water tanks and disinfect in accordance with AWWA C652.

END OF SECTION 223000

SECTION 224000
PLUMBING FIXTURES

PART 1 GENERAL

1.01 SECTION INCLUDES

A Tank type water closets.
B Lavatories.
C Sinks.
D Under-lavatory pipe supply covers.
E Mop sinks.

1.02 REFERENCE STANDARDS

A ADA Standards - 2010 ADA Standards for Accessible Design; 2010.
B ASME A112.6.1M - Floor-Affixed Supports for Off-the-Floor Plumbing Fixtures for Public Use; 1997 (Reaffirmed 2017).
C ASME A112.18.1 - Plumbing Supply Fittings; 2024.
D ASME A112.18.9 - Protectors/Insulators for Exposed Waste and Supplies on Accessible Fixtures; 2011 (Reaffirmed 2022).
E ASME A112.19.2 - Ceramic Plumbing Fixtures; 2024.
F ASME A112.19.3 - Stainless Steel Plumbing Fixtures; 2022.
G NSF 61 - Drinking Water System Components - Health Effects; 2024.
H NSF 372 - Drinking Water System Components - Lead Content; 2024.

1.03 DELIVERY, STORAGE, AND HANDLING

A Accept fixtures on-site in factory packaging. Inspect for damage.

PART 2 PRODUCTS

2.01 GENERAL REQUIREMENTS

A Potable Water Systems: Provide drinking water system components certified as complying with NSF 61 and NSF 372.
B ADA: Where indicated to be ADA-compliant, provide fixtures complying with ADA Standards and ICC A117.1.

2.02 TANK TYPE WATER CLOSETS

A Floor-Mounted Bowl:
1. ASME A112.19.2; siphon jet, vitreous china, 16.5 inches high, close-coupled closet combination with elongated rim, insulated vitreous china closet tank with fittings and lever flushing valve, bolt caps, vandalproof cover locking device.
2. Water Consumption: 1.28 gal per flush, maximum.

B Toilet Seats:
1. Plastic: Solid, white, enlongated, closed front, slow-closing hinged seat cover, and brass bolts with covers.

2.03 LAVATORIES

A Wall-Hung Basin:
1. Vitreous China: ASME A112.19.2; white, rectangular basin with splash lip, front overflow, soap depression, and hanger. Size as indicated on drawings with 4-inch centerset spacing.
2. Carrier:
   a. ASME A112.6.1M; cast iron and steel frame with tubular legs, lugs for floor and wall attachment, threaded studs for fixture hanger, bearing plate and studs.

B Supply Faucet:
1. ASME A112.18.1; chrome plated combination supply fitting with pop-up waste, water economy aerator with maximum flow of 2.2 gpm, indexed handles.
2. Single-Lever Handle, Supply Faucet: ASME A112.18.1; deck-mount, ceramic cartridge disc valve, and maximum flow of 0.5 gpm, low-flow.

2.04 SINKS

A Single Compartment Bowl
1. ASME A112.19.3; 19 by 18 by 5 1/2 inch outside dimensions, 18 gauge, 0.050 inch thick, type 304 stainless steel, self-rimming and undercoated, with ledge back drilled for trim.
2. Drain: 3-1/2 inch crumb cup and tailpiece.

B Kitchen Faucets:
1. Single Handle Faucet with Side Spray:
   a. Type: Deck-mount spout faucet with mounting plate.
   b. Spray Type: Full stream spray at 1.5 gpm, maximum.
   c. ASME A112.18.1, ADA Standards, and NSF 61 compliant assembly.
   d. Materials: Ceramic disc-cartridge valve on brass body with polished chrome finish.

C Accessories: Provide braided water supply lines, slip-joint p-trap, and stainless steel basket strainer.

2.05 UNDER-LAVATORY PIPE SUPPLY COVERS

A General:
1. Insulate exposed drainage piping including hot, cold and tempered water supplies under lavatories or sinks per ADA Standards.
2. Construction: 1/8 inch PVC with antimicrobial, antifungal and UV resistant properties.
   a. Comply with ASME A112.18.9 for covers on accessible lavatory piping.
   b. Comply with ICC A117.1.

2.06 MOP SINKS

A Material: Molded stone one piece homogenous product.
B Type: Rectilinear, standard height.
C Tiling Flange Construction: Galvanized steel.
D Grid strainer: Stainless steel; integral; removable.
E Dimensions: As indicated on drawings.
F Accessories:
1. 5 feet of 1/2 inch diameter plain end reinforced plastic hose.
2. Hose clamp hanger.
3. Mop hanger.

PART 3 EXECUTION

3.01 EXAMINATION

A Verify walls, floors, and finishes are prepared and ready for installation of fixtures.
B Verify rough-ins for field connections match sizes and locations shown on drawings.

3.02 INSTALLATION

A Install products in accordance with manufacturer's instructions.
B Install components level and plumb.
C Secure fixtures in place.
D Install rigid or flexible supplies to fixtures. Provide supply stops, reducers, and escutcheons.

3.03 CLEANING

A Clean plumbing fixtures to remove dirt, fingerprints, paint, or other foreign material and restore finishes to match original factory finish.

3.04 PROTECTION

A Protect installed products from damage due to subsequent construction operations.

END OF SECTION 224000

DIVISION 23 - HEATING, VENTILATING, AND AIR-CONDITIONING (HVAC)
SECTION 233100
HVAC DUCTS AND CASINGS

PART 1 GENERAL

1.01 SECTION INCLUDES

A Metal ducts.

1.02 RELATED REQUIREMENTS

A Section 230130.51 - HVAC Air-Distribution System Cleaning: Post install duct cleaning.
B Section 230713 - Duct Insulation: External insulation and duct liner.
C Section 233300 - Air Duct Accessories.
D Section 233700 - Air Outlets and Inlets: Fabric air distribution devices.

1.03 REFERENCE STANDARDS

A ASHRAE (FUND) - ASHRAE Handbook - Fundamentals; Most Recent Edition Cited by Referring Code or Reference Standard.
B ASTM A36/A36M - Standard Specification for Carbon Structural Steel; 2019.
C ASTM A653/A653M - Standard Specification for Steel Sheet, Zinc-Coated (Galvanized) or Zinc-Iron Alloy-Coated (Galvannealed) by the Hot-Dip Process; 2023.
D ASTM E84 - Standard Test Method for Surface Burning Characteristics of Building Materials; 2024.
E NFPA 90A - Standard for the Installation of Air-Conditioning and Ventilating Systems; 2024.
F SMACNA (DCS) - HVAC Duct Construction Standards Metal and Flexible; 2020.

1.04 FIELD CONDITIONS

A Do not install duct sealants when temperatures are less than those recommended by sealant manufacturers.
B Maintain temperatures within acceptable range during and after installation of duct sealants.

PART 2 PRODUCTS

2.01 GENERAL REQUIREMENTS

A Provide UL Class 1 ductwork, fittings, hangers, supports, and appurtenances in accordance with NFPA 90A and SMACNA (DCS) guidelines unless stated otherwise.
B Provide metal duct unless otherwise indicated.
C Duct Shape and Material in accordance with Allowed Static Pressure Range:
1. Round: Plus or minus 2 in-wc of galvanized steel.

CD SET
FOR BIDDING 09.30.25

R. Edwards & Co.
ARCHITECTS + PRESERVATIONISTS
52 State St, 2nd Floor | Montpelier, VT 05602
(802) 232-2628 | info@redwardsandcompany.com
www.redwardsandcompany.com

SEAL

STATE OF VERMONT
JOSEPH J. COUTERMARSH
No. 7327
REGISTERED
PROFESSIONAL ENGINEER

PROJECT
ALICE WARD LIBRARY

PROJECT NUMBER
530597

CONSULTANTS

DuBois & King inc.
ENGINEERING • PLANNING •
MANAGEMENT • DEVELOPMENT
BEDFORD, NH
TEL: (802) 728-3376
FAX: (802) 783-7101
www.dubois-king.com
OFFICES IN VERMONT,
NEW HAMPSHIRE & MAINE

RELEASE

RELEASE DATE

RELEASE & REVISION LOG

MARK	REVISION DESCRIPTION	DATE

PROJECT NORTH

DRAWING NAME
SPECIFICATIONS

DRAWN JJC DATE 09.30.25
CHECKED JHP

DRAWING NUMBER
M6.2

2. Rectangular: Plus or minus 2 in-wc of galvanized steel.
3. Flexible Duct (Fabric and wire): Plus or minus 1/2 in-wc; see Section 233700.

D Duct Sealing and Leakage in accordance with the following:
1. Duct Pressure Class and Material for supply, return, outside, and general exhaust air: 2 in-wc, galvanized steel.
2. Low Pressure Service: Up to 2 in-wc:
   1) Seal: Class A, apply to seal off transverse joints, longitudinal seams and duct wall penetrations.
   2) Leakage:

E Duct Fabrication Requirements:
1. Duct and Fitting Fabrication and Support: SMACNA (DCS) including specifics for continuously welded round and oval duct fittings.
2. No variation of duct configuration or size permitted except by written permission. Size round duct installed in place of rectangular ducts in accordance with ASHRAE (FUND) Handbook - Fundamentals.
3. Use reinforced and sealed sheet-metal materials at recommended gauges for indicated operating pressures or pressure class.
4. Construct tees, bends, and elbows with radius of not less than 1-1/2 times width of duct on centerline. Where not possible and where rectangular elbows must be used, provide airfoil turning vanes of perforated metal with glass fiber insulation.
5. Provide turning vanes of perforated metal with glass fiber insulation when acoustical lining is indicated.
6. Increase duct sizes gradually, not exceeding 15 degrees divergence wherever possible; maximum 30 degrees divergence upstream of equipment and 45 degrees convergence downstream.
7. Provide turning vanes of perforated metal with glass fiber insulation when an acoustical lining is required.
8. Where ducts are connected to exterior wall louvers and duct outlet is smaller than louver frame, provide blank-out panels sealing louver area around duct. Use same material as duct, painted black on exterior side; seal to louver frame and duct.

2.02 METAL DUCTS

A Material Requirements:
1. Galvanized Steel: Hot-dipped galvanized steel sheet, ASTM A653/A653M FS Type B, with G90/Z275 coating.

B Rectangular Metal Duct:
1. Rectangular Single Wall: Rectangular, longitudinal lock seam duct with galvanized steel wall.

C Round Spiral Duct:
1. Round spiral lock seam duct with galvanized steel outer wall.

D Connectors, Fittings, Sealants, and Miscellaneous:
1. Joint Sealers and Sealants: Non-hardening, water resistant, mildew and mold resistant.
   a. Type Where Concealed and/or Insulated: Heavy mastic or liquid used alone or with tape, suitable for joint configuration and compatible with substrates, and recommended by manufacturer for pressure class of ducts.
   b. Type Where Exposed: Silicone caulking, paintable and permanently flexible and waterproof, clear. Wipe exposed areas clear of silicone.
   c. VOC Content: Maximum 250 g/L, excluding water.
   d. Surface Burning Characteristics: Flame spread index of zero and smoke developed index of zero, when tested in accordance with ASTM E84.
   e. For Use with Flexible Ducts: UL labeled.
2. Hanger Rod: ASTM A36/A36M; steel, galvanized; threaded both ends, threaded one end, or continuously threaded.
3. Hanger Fasteners: Attach hangers to structure using appropriate fasteners as follows:
   a. Concrete Wedge Expansion Anchors: Complying with ICC-ES AC193.
   b. Masonry Wedge Expansion Anchors: Complying with ICC-ES AC01.
   c. Concrete Screw Type Anchors: Complying with ICC-ES AC193.
   d. Masonry Screw Type Anchors: Complying with ICC-ES AC106.
   e. Concrete Adhesive Type Anchors: Complying with ICC-ES AC308.

PART 3 EXECUTION

3.01 INSTALLATION

A Install, support, and seal ducts in accordance with SMACNA (DCS).
B During construction, provide temporary closures of metal or taped polyethylene on open ductwork to prevent construction dust from entering the ductwork system.
C Flexible Ducts: Connect to metal ducts with adhesive.
D Duct sizes indicated are precise inside dimensions. For lined ducts, maintain sizes inside lining.
E Provide openings in ductwork as indicated to accommodate thermometers and controllers. Provide pilot tube openings as indicated for testing of systems, complete with metal can with spring device or screw to insure against air leakage. For openings, insulate ductwork and install insulation material inside a metal ring.
F Locate ducts with sufficient space around equipment to allow normal operating and maintenance activities.
G Use crimp joints with or without bead for joining round duct sizes 8 inch and smaller with a crimp in the direction of airflow.

3.02 CLEANING

A Clean thoroughly each duct system.

END OF SECTION 233100

SECTION 233700
AIR OUTLETS AND INLETS

PART 1 GENERAL

1.01 SECTION INCLUDES

A Registers/grilles:
1. Wall-mounted, supply register/grilles.
2. Wall-mounted, exhaust and return register/grilles.

B Duct-mounted supply and return grilles and registers.
C Louvers:

1.02 REFERENCE STANDARDS

A ASHRAE Std 70 - Method of Testing the Performance of Air Outlets and Air Inlets; 2023.
B ASTM E84 - Standard Test Method for Surface Burning Characteristics of Building Materials; 2024.

1.03 SUBMITTALS

A Product Data: Provide data for equipment required for this project. Review outlets and inlets as to size, finish, and type of mounting prior to submission. Submit schedule of outlets and inlets showing type, size, location, application, and noise level.
B Project Record Documents: Record actual locations of air outlets and inlets.

PART 2 PRODUCTS

2.01 MANUFACTURERS

A Greenheck; www.greenheck.com
B Price Industries: www.price-hvac.com.
C Ruskin Company: www.ruskin.com.

2.02 DUCT-MOUNTED SUPPLY AND RETURN REGISTERS/LOUVERS

A Type: Duct-mounted, rectangular register for round-spiral duct with adjustable pivot-ended blades, end caps, built-in volume damper, and dual cover flanges to lay flush on duct surface regardless of diameter. Performance to match manufacturer's catalog data.
B Material: 22 gauge, 0.0299 inch.
1. Provide crossing spiral fitting-body of matching duct diameter.
C Color: As indicated on drawings.

2.03 WALL SUPPLY REGISTERS/GRILLES

A Type: Streamlined and individually adjustable blades, 3/4 inch minimum depth, 3/4 inch maximum spacing with spring or other device to set blades, vertical face, single deflection.
B Frame: 1-1/4 inch margin with countersunk screw mounting and gasket.
C Fabrication: Steel with 20 gauge, 0.0359 inch minimum frames and 22 gauge, 0.0299 inch minimum blades, steel and aluminum with 20 gauge, 0.0359 inch minimum frame, or aluminum extrusions, with factory baked enamel finish.
D Fabrication: Aluminum extrusions with factory prime coat finish.
E Color: As indicated on the drawings.

2.04 WALL EXHAUST AND RETURN REGISTERS/GRILLES

A Type: Streamlined blades, 3/4 inch minimum depth, 3/4 inch maximum spacing, with spring or other device to set blades, vertical face.
B Frame: 1-1/4 inch margin with countersunk screw mounting.
C Fabrication: Aluminum extrusions, with factory baked enamel finish.
D Color: As indicated on the drawings.

2.05 LOUVERS

A Type: 4 inch deep frame with drainable brades, heavy channel frame.
B Screen: 1/2 inch square mesh.
C Fabrication: 12 gauge, 0.1046 inch (2.66 mm) thick extruded aluminum thick galvanized steel welded assembly, with factory fluoropolymer spray finish.
D Color: As indicated on the drawings.
E Mounting: Furnish with interior flat flange for installation.

PART 3 EXECUTION

3.01 INSTALLATION

A Install in accordance with manufacturer's instructions.
B Check location of outlets and inlets and make necessary adjustments in position to comply with architectural features, symmetry, and lighting arrangement.
C Install diffusers to ductwork with air tight connection.
D Provide balancing dampers on duct take-off to diffusers and grilles and registers, despite whether dampers are specified as part of diffuser, or grille and register assembly.
E Paint ductwork visible behind air outlets and inlets matte black, see Section 099123.

END OF SECTION 233700

SECTION 238126.13
SMALL-CAPACITY SPLIT-SYSTEM AIR CONDITIONERS

PART 1 GENERAL

1.01 SECTION INCLUDES

A Air-source heat pumps.
B Air cooled condensing units.
C Indoor air handling (fan and coil) units for ducted systems.
D Controls.

1.02 REFERENCE STANDARDS

A AHRI 210/240 - Performance Rating of Unitary Air-Conditioning and Air-Source Heat Pump Equipment; 2023.
B AHRI 520 - Performance Rating of Positive Displacement Condensing Units; 2004.
C NEMA MG 00001 - Motors and Generators; 2024.

1.03 SUBMITTALS

A See Section 013000 - Administrative Requirements, for submittal procedures.
B Product Data: Provide rated capacities, weights, accessories, electrical nameplate data, and wiring diagrams.

PART 2 PRODUCTS

2.01 SYSTEM DESIGN

A Split-System Heating and Cooling Units: Self-contained, packaged, matched factory-engineered and assembled, pre-wired indoor and outdoor units; UL listed.
1. Heating and Cooling: Air-source electric heat pump located in outdoor unit with evaporator; _____.
2. Provide refrigerant lines internal to units and between indoor and outdoor units, factory cleaned, dried, pressurized and sealed, with insulated suction line.

2.02 INDOOR AIR HANDLING UNITS FOR DUCTED SYSTEMS

A Indoor Units: Self-contained, packaged, factory assembled, pre-wired unit consisting of cabinet, supply fan, heating and cooling element(s), controls, and accessories; wired for single power connection with control transformer.
1. Air Flow Configuration: Horizontal.
2. Cabinet: Steel with baked enamel finish, easily removed and secured access doors with safety interlock switches, glass fiber insulation with reflective liner.

B Supply Fan: Centrifugal type rubber mounted with direct or belt drive with adjustable variable pitch motor pulley.
1. Motor: NEMA MG 1; 1750 rpm single speed, permanently lubricated, hinge mounted.

C Air Filters: 1 inch thick urethane, washable type arranged for easy replacement.
D Evaporator Coils: Copper tube aluminum fin assembly, galvanized or polymer drain pan sloped in all directions to drain, drain connection, refrigerant piping connections, restricted distributor or thermostatic expansion valve.
1. Construction and Ratings: In accordance with AHRI 210/240 and UL 207.
2. Manufacturers: System manufacturer.

2.03 OUTDOOR UNITS

A Outdoor Units: Self-contained, packaged, pre-wired unit consisting of cabinet, with compressor and condenser.100% heating capacity at 5 degF.
1. Refrigerant: R-454B.
2. Construction and Ratings: In accordance with AHRI 210/240 with testing in accordance with ASHRAE Std 23 and UL 207.

B Air Cooled Condenser: Aluminum fin and copper tube coil, AHRI 520 with direct drive axial propeller fan resiliently mounted, galvanized fan guard.
C Accessories: Filter drier, high-pressure switch (manual reset), low pressure switch (automatic reset), service valves and gauge ports, thermometer well (in liquid line).
1. Provide thermostatic expansion valves.
D Operating Controls:
1. Control by room thermostat to maintain room temperature setting.

PART 3 EXECUTION

3.01 EXAMINATION

A Verify that substrates are ready for installation of units and openings are as indicated on shop drawings.
B Verify that proper power supply is available and in correct location.

3.02 INSTALLATION

A Install in accordance with manufacturer's instructions and requirements of local authorities having jurisdiction.

END OF SECTION 238126.13

R. Edwards & Co.
ARCHITECTS + PRESERVATIONISTS
52 State St, 2nd Floor | Montpelier, VT 05602
(802) 232-2628 | info@redwardsandcompany.com
www.redwardsandcompany.com

SEAL

STATE OF VERMONT
JOSEPH J. COUTERMARSH
No. 7327
REGISTERED
PROFESSIONAL ENGINEER

PROJECT
ALICE WARD LIBRARY

PROJECT NUMBER
530597

CONSULTANTS

DuBois & King inc.
ENGINEERING • PLANNING •
MANAGEMENT • DEVELOPMENT
BEDFORD, NH
TEL: (802) 728-3376
FAX: (802) 783-7101
www.dubois-king.com
OFFICES IN VERMONT,
NEW HAMPSHIRE & MAINE

RELEASE

RELEASE DATE

RELEASE & REVISION LOG

MARK	REVISION DESCRIPTION	DATE

PROJECT NORTH

DRAWING NAME
SPECIFICATIONS

DRAWN	JJC	DATE	09.30.25
CHECKED	JHP		

DRAWING NUMBER
M6.3

CD SET
FOR BIDDING 09.30.25

ELECTRICAL ABBREVIATIONS

ABBREVIATION	DESCRIPTION
XX"	MOUNTED XX" AFF
AFF OR A.F.F.	ABOVE FINISHED FLOOR HEIGHT NOTED
AFG	ABOVE FINISHED GRADE
AIC	AMPERES INTERRUPTING CAPACITY SYMMETRICAL
ARCH.	ARCHITECTURAL
ATS	AUTOMATIC TRANSFER SWITCH
B-1	BOILER
BP-1	BOILER PUMP
C/B	CIRCUIT BREAKER
CLG.	CEILING
CU	COPPER
DWG	DRAWING
EC OR E.C.	ELECTRICAL CONTRACTOR
EF-1	EXHAUST FAN
ELEC.	ELECTRIC, ELECTRICAL
EM OR EMERG.	EMERGENCY
ETR	EXISTING TO REMAIN
ER	EXISTING TO REMOVED. REMOVE ALL ASSOCIATED CONDUIT AND CONDUCTORS.
ERP	EXISTING TO BE REPLACED WITH NEW. CONNECT TO EXISTING CIRCUIT.
ERR	EXISTING TO BE RELOCATED. JUNCTION AND EXTEND CONDUIT AND CONDUCTORS AS REQUIRED.
ERL	NEW LOCATION FOR EXISTING EQUIPMENT. JUNCTION AND EXTEND CONDUIT AND CONDUCTORS AS REQUIRED.
EXH.	EXHAUST
FBO OR F.B.O.	FURNISHED BY OTHERS
F&IBO OR F.&I.B.O.	FURNISHED AND INSTALLED BY OTHERS
FWU	FURNISHED WITH UNIT
G.	EQUIPMENT GROUNDING CONDUCTOR
GF OR GFI	GROUND FAULT INTERRUPTER
GF/CB	GROUND FAULT INTERRUPTING CIRCUIT BREAKER
GND.	GROUND
GFCI	GOVERNMENT FURNISHED, CONTRACTOR INSTALLED
GFGI	GOVERNMENT FURNISHED GOVERNMENT INSTALLED
HP	HORSEPOWER
HR-1	HOSE REEL - TYPICAL
HV	HIGH VOLTAGE
ID NO.	IDENTIFICATION NUMBER
JRC	JERICHO READINESS CENTER
KW	KILOWATTS
KVA	KILOVOLTS AMPERES
MAU-1	MAKE-UP AIR UNIT
MC	MECHANICAL CONTRACTOR
MFG	MANUFACTURER
MTS	MANUAL TRANSFER SWITCH
MIN	MINIMUM
M-1	MANIFOLD CABINET ASSEMBLY WITH PUMP - TYPICAL
NEC	NATIONAL ELECTRICAL CODE
NF	NON FUSED
N.I.C.	NOT IN CONTRACT
N.T.S.	NOT TO SCALE
PH	PHASE
P.F.	POWER FACTOR
SPD	SURGE PROTECTIVE DEVICE
TP	TAMPER PROOF
UG OR U.G.	UNDERGROUND
UNO	UNLESS NOTED OTHERWISE
V	VOLTS
VA	VOLT AMPERES
VEF-1	VEHICLE EXHAUST FAN
WP	WEATHERPROOF
VFD	VARIABLE FREQUENCY DRIVE

SEISMIC NOTE

ALL EQUIPMENT SHALL CONFORM TO ASCE 7 FOR SEISMIC QUALIFICATION BY ANALYSIS, TESTING OR EXPERIENCE. SUBMIT COMPLIANCE WITH SUBMITTALS.

ELECTRICAL SYMBOL NOTES

1. ALL SYMBOLS ARE NOT NECESSARILY USED.
2. ALL MOUNTING HEIGHTS SHOWN IN SYMBOL LEGEND SHALL BE AS PER ADA REQUIREMENTS UNLESS OTHERWISE NOTED ON THE DRAWINGS.
3. REFERENCE ARCHITECTURAL DOCUMENTS FOR DIMENSIONED LOCATION AND MOUNTING HEIGHT OF LIGHT FIXTURES AND MISCELLANEOUS ELECTRICAL DEVICES.

POWER AND CIRCUITRY SYMBOLS

SYMBOL	DESCRIPTION	MOUNTING	HEIGHT
4 CH IG USB	20A, 125V, 2 POLE, 3 WIRE GROUNDING DUPLEX RECEPTACLE, NEMA 5-20R, 'CH' DENOTES COUNTER HEIGHT, 'IG' DENOTES ISOLATED GROUND, 'USB' DENOTES (1) TYPE A PORT AND (1) TYPE B PORT, '4' DENOTES CIRCUIT NUMBER	WALL	18" AFF UNO
GF	20A, 125V, 2 POLE, 3 WIRE GFCI, GROUNDING DUPLEX RECEPTACLE, NEMA 5-20R	WALL	18" AFF UNO
GF WP	20A, 125V, 2 POLE, 3 WIRE, WEATHER RESISTANT, GFCI TYPE GROUNDING DUPLEX RECEPTACLE, NEMA 5-20R WITH WEATHERPROOF WHILE-IN-USE COVER PLATE	WALL	18" AFF UNO
	QUADRAPLEX RECEPTACLE 20A, 125V, 3 WIRE GROUNDING TYPE, NEMA 5-20R	WALL	18" AFF UNO
	SPECIAL POWER OUTLET - NEMA CONFIGURATION AS NOTED ON THE DRAWINGS	WALL	18" AFF UNO
	20 AMP, 125V, 2 POLE, 3 WIRE GROUNDING SIMPLEX RECEPTACLE, NEMA 5-20R	WALL	18" AFF UNO
	PLUGMOLD/SURFACE RACEWAY	WALL	
J HD	JUNCTION BOX - 'EHD' INDICATES ELECTRIC HAND DRYER	VARIES	-----
$a	SINGLE POLE SWITCH - 'a' DENOTES FIXTURE SWITCH CONTROL	WALL	44" AFF
$D	DIMMER SWITCH	WALL	44" AFF
$3	THREE POLE SWITCH	WALL	44" AFF
$4	FOUR POLE SWITCH	WALL	44" AFF
$OC	SINGLE POLE, LINE VOLTAGE, OCCUPANCY SENSOR SWITCH - SENSOR SWITCH #WSX-PDT-EZ-SA-COLOR	WALL	44" AFF
$OCD	SINGLE POLE, LINE VOLTAGE OCCUPANCY SENSOR DIMMER SWITCH - SENSOR SWITCH #WSX-PDT-EZ-D-SA-COLOR	WALL	44" AFF
$M	MOTOR RATED SWITCH WITH THERMAL MOTOR OVERLOAD PROTECTION - PROVIDE THERMAL UNIT SIZED FOR MOTOR LOAD ACTUALLY SERVED, VERIFY WITH EQUIPMENT MANUFACTURER	VARIES	-----
30/NF	NON-FUSED DISCONNECT SWITCH - SIZED TO MATCH OVER CURRENT PROTECTION DEVICE - '3R' INDICATES PROVIDE NEMA 3R DISCONNECT SWITCH	WALL	
30/30	FUSED DISCONNECT SWITCH - SUBSCRIPT INDICATES AMPS/FUSE SIZE - FUSES SHALL BE TIME DELAY TYPE - '3R' INDICATES PROVIDE NEMA 3R DISCONNECT SWITCH	WALL	
	MOTOR - SUBSCRIPT INDICATES HORSEPOWER	VARIES	-----
	120/208 VOLT PANELBOARD	WALL	
	EQUIPMENT CONNECTION	VARIES	
	HOMERUN TO PANELBOARD AND CIRCUIT BREAKER NUMBER(S) INDICATED ON THE DRAWINGS	-----	-----
	DIRECT CURRENT DC WIRING - 2 CONDUCTOR #12 AWG COPPER MINIMUM, UNLESS OTHERWISE NOTED OR REQUIRED	-----	-----
SPD	SURGE PROTECTION DEVICE	WALL	
MOD	MOTOR OPERATED DAMPER	VARIES	
CGB	CENTRAL GROUND BUSBAR	WALL	54" AFF
TV	TELEVISION	WALL	60" AFF
VFD	VARIABLE FREQUENCY DRIVE, INSTALLED BY OTHERS, WIRED BY E.C.	VARIES	
M	UTILITY METER		
PC	PHOTOELECTRIC CELL	WALL	
TC	TIME CLOCK	WALL	
EPO	EMERGENCY POWER OFF PUSH BUTTON		
BAS	BUILDING AUTOMATION SYSTEM CONTROL PANEL - FURNISHED AND INSTALLED BY MECHANICAL CONTRACTOR AND LINE VOLTAGE POWER WIRED BY THE ELECTRICAL CONTRACTOR	WALL	

LIGHTING SYMBOLS

SYMBOL	DESCRIPTION	MOUNTING
4 EM NL	1'x4' LIGHT FIXTURE -'EM' INDICATES EMERGENCY LIGHT FIXTURE, 'NL' INDICATES NIGHT LIGHT, '4' DENOTES CIRCUIT NUMBER	CEILING
	WALL MOUNTED LIGHT FIXTURE	WALL
	ONE POLE MOUNTED LIGHT FIXTURE	CONCRETE BASE
	EMERGENCY BATTERY UNIT 'EBU' WITH TWO, LED EMERGENCY LIGHTING HEADS	WALL
OS	DUAL TECHNOLOGY OCCUPANCY SENSOR	CEILING
	ULTRASONIC OCCUPANCY SENSOR, LONG RANGE FOR CORRIDORS	CEILING
LCP	LIGHTING CONTROL PANEL WITH UL924 RELAYS FOR OVERRIDE ON	WALL
	SINGLE FACED, LED EXIT SIGN - ARROW(S) INDICATE DIRECTION - 'P' INDICATES PENDANT MOUNT WITH BOTTOM AT 8'-0" AFF	CEILING/ WALL
	DOUBLE FACED, LED EXIT SIGN - ARROW(S) INDICATE DIRECTION - 'P' INDICATED PENDANT MOUNT WITH BOTTOM AT 8'-0" AFF	CEILING/ WALL

COMMUNICATION, SECURITY AND MUSIC/PAGING/SYSTEM SYMBOLS

SYMBOL	DESCRIPTION	MOUNTING	HEIGHT
4D 2D	DATA OUTLET (RJ45), PROVIDE BACK BOX, COVER PLATE, PATHWAY AND CAT6 DROP. '2D' DENOTES (2) CAT6 DROPS; '4D' DENOTES (4) CAT6 DROPS - SEE NOTE #1 BELOW.	WALL	18" AFF UNO
	COMBINATION TELEPHONE/DATA OUTLET (RJ45), PROVIDE BACK BOX, COVER PLATE, PATHWAY AND (2) CAT6 DROPS - SEE NOTE #1 BELOW.	WALL	18" AFF UNO
W	TELEPHONE OUTLET (RJ45), PROVIDE BACK BOX, COVER PLATE, PATHWAY AND (1) CAT6 DROP - SEE NOTE #1 BELOW.	WALL	48" AFF
WAP	WIRELESS ACCESS POINT, DEVICE AND TERMINATION BY OTHERS. PROVIDE BACK BOX AND (2) CAT6 DROPS WITH 10-FT SERVICE LOOP.		

NOTES

1. PROVIDE A FOUR INCH SQUARE BACK BOX AT EACH LOCATION OF A TELEPHONE/DATA/CATV/AV OUTLET. RUN A ONE INCH CONDUIT AND PULL STRING FROM EACH BACK BOX TO ABOVE THE NEAREST ACCESSIBLE CEILING. RUN 1-1/4" CONDUIT AND PULL STRING FOR AV OUTLET TO ABOVE ACCESSIBLE CEILING.
2. PROVIDE INSULATED BUSHINGS ON THE ENDS OF ALL CONDUITS.
3. PROVIDE A SINGLE GANG BACK BOX WITH A 3/4" CONDUIT AND PULL STRING FROM THE BACK BOX TO ABOVE THE NEAREST ACCESSIBLE CEILING. COORDINATE REQUIREMENTS/LOCATIONS WITH SECURITY AND DOOR HARDWARE CONTRACTOR.
4. PROVIDE A SINGLE GANG BACK BOX WITH A 3/4" CONDUIT AND PULL STRING FROM THE BACK BOX TO ABOVE THE NEAREST ACCESSIBLE CEILING. PROVIDE CABLE AS REQUIRED FROM DEVICE TO HEAD-END (NEAREST DATA CLOSET). COORDINATE REQUIREMENTS/LOCATIONS WITH OWNER'S I.T. PERSONNEL AND AUDIO/VISUAL CONTRACTOR.

LIGHTING CONTROL SEQUENCE, PROGRAMMING AND OPERATION NOTES '□'

1. OFFICES, BREAK ROOM: DUAL TECHNOLOGY, CEILING MOUNTED, LOW VOLTAGE OCCUPANCY SENSOR(S), LOW VOLTAGE, DIMMING RELAY POWER PACKS AND LOW VOLTAGE ON/OFF/RAISE LOWER DIMMING SWITCHES - PROGRAM SWITCHES FOR SEPARATE MANUAL ON/OFF/RAISE/LOWER CONTROL OF THE DESIGNATED FIXTURES. PROGRAM ALL LIGHT FIXTURES IN THIS ROOM FOR AUTOMATIC OFF VIA THE CEILING MOUNTED OCCUPANCY SENSOR(S) AFTER FIFTEEN MINUTES OF VACANCY. CONTROL OF THE LIGHT FIXTURES LOCATED IN THIS ROOM IS CONSIDERED TO COMPLY WITH THE WITH THE 2018 IECC C405.2.1.1. DAYLIGHT RESPONSIVE CONTROLS ARE PROVIDED AS REQUIRED PER 2018 IECC C405.2.3 IN AREAS WITH DAYLIGHT ZONES. CONTROLS WILL BE STAND-ALONE AND NOT PART OF A NETWORK LIGHTING CONTROL SYSTEM.
2. RESTROOMS, MECHANICAL/UTILITY SPACES, CUSTODIAL, STORAGE: LINE VOLTAGE, OCCUPANCY SENSOR SWITCH FOR ON/OFF CONTROL OF THE LIGHT FIXTURE AT THIS LOCATION - PROGRAM THIS SWITCH FOR AUTOMATIC ON WITH AUTOMATIC OFF AFTER FIFTEEN MINUTES OF VACANCY. CONTROL OF THIS LIGHT FIXTURE IS CONSIDERED TO COMPLY WITH THE 2018 IECC C405.2.1.1. CONTROLS WILL BE STAND-ALONE AND NOT PART OF A NETWORK LIGHTING CONTROL SYSTEM.
3. EXTERIOR SITE LIGHTING: LIGHTS SHALL BE CONTROLLED VIA LIGHTING CONTACTORS AND A PROGRAMMABLE TIME CLOCK WITH EXTERIOR LIGHT SENSOR. THE EXTERIOR LIGHT SENSOR SHALL TURN THE LIGHT FIXTURES ON AT DUSK AND OFF AT DAWN. CONTROL OF THIS LIGHT FIXTURE IS CONSIDERED TO COMPLY WITH 2018 IECC C405.2.6. IT SHOULD BE NOTED THAT IF THE OWNER DOES NOT WANT THESE FIXTURES TO OPERATE FROM DUSK TO DAWN, THEN THEY CAN BE PROGRAMMED VIA THE TIME CLOCK TO THE 'ON' AND 'OFF' TIMES DIRECTED BY THE OWNER. FIELD COORDINATE WITH THE OWNER PRIOR TO PROGRAMMING THE LIGHTING CONTROLS.
4. CORRIDORS, LOBBIES, VESTIBULES: PROGRAM ALL LIGHT FIXTURES IN THIS AREA TO REDUCE BY NOT LESS THAN 50 PERCENT VIA THE CEILING MOUNTED OCCUPANCY SENSOR(S) AFTER TWENTY MINUTES OF VACANCY DURING BUSINESS HOURS. THE OCCUPANCY SENSORS IN THIS AREA SHALL BE PROGRAMMED FOR AUTOMATIC ON/AUTOMATIC OFF AFTER FIFTEEN MINUTES (MINIMUM TIME PER NFPA 101 7.8.1.2.2) OF VACANCY DURING NON-BUSINESS HOURS. CONTROLS WILL BE STAND-ALONE AND NOT PART OF A NETWORK LIGHTING CONTROL SYSTEM. (CAFETERIA ONLY) PROVIDE LOW VOLTAGE, DIMMING RELAY POWER PACKS AND LOW VOLTAGE ON/OFF/RAISE LOWER DIMMING SWITCHES FOR LOCAL OVERRIDE CONTROL. ALL OTHER AREAS SHALL HAVE LOCAL OVERRIDE FOR ON/OFF CONTROL.

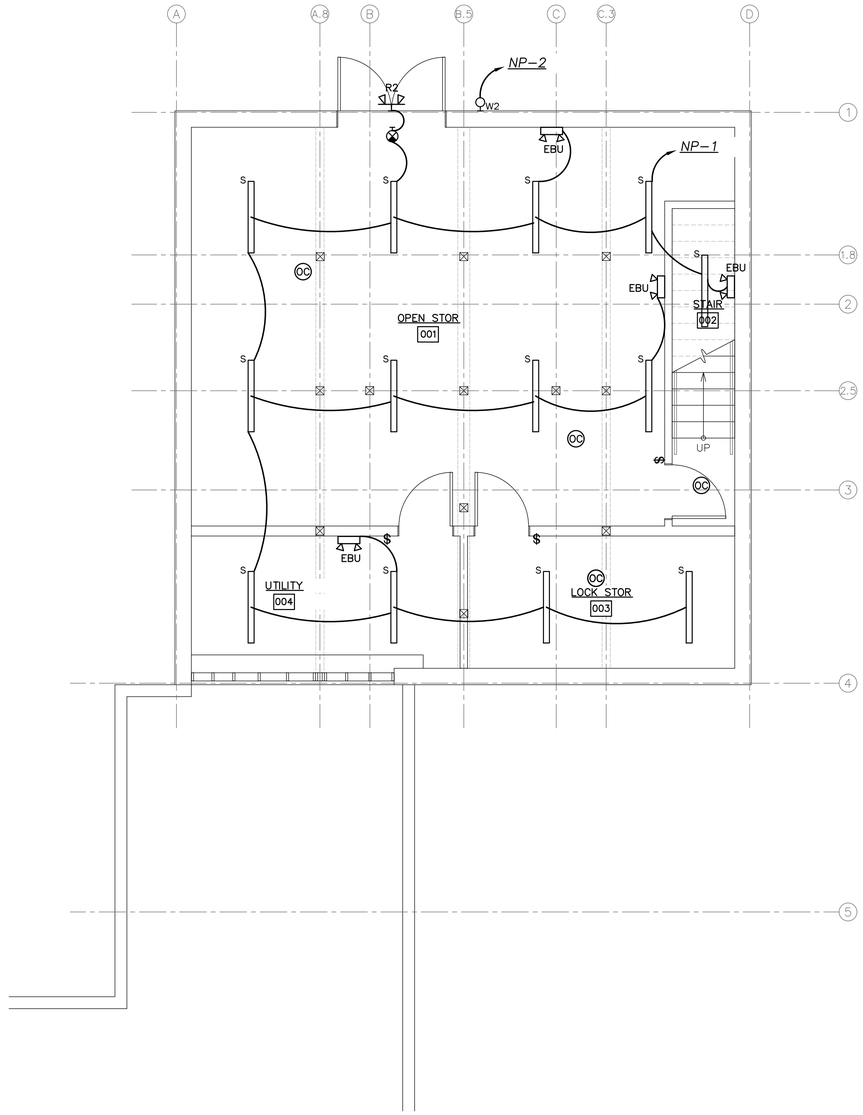
LIGHTING CONTROL SYMBOL LEGEND

SYMBOL	DESCRIPTION	MOUNTING
OS1	LOW VOLTAGE, CEILING MOUNTED DUAL TECHNOLOGY, SMALL MOTION, 360 DEGREES OCCUPANCY SENSOR - SENSOR SWITCH CM-PDT-9 - SEE NOTE 1 BELOW	CEILING
OS2	DIGITAL CEILING MOUNTED DUAL TECHNOLOGY, SMALL MOTION, 360 DEGREES OCCUPANCY SENSOR - NLIGHT #NCM-PDT-9-RJB - SEE NOTE 1	CEILING
OS	DIGITAL CEILING MOUNTED, DAYLIGHT SENSOR - NLIGHT #NCM-PDT-9-RJB-ADCX - 'a DS' INDICATES FOR CONTROL OF THE LIGHT FIXTURES DESIGNATED WITH 'a DS' IN ACCORDANCE WITH 2018 IECC SECTION C405.2.3.1 - TYPICAL	CEILING
PP	LOW VOLTAGE POWER PACK - SENSOR SWITCH #PP20 FOR ON/OFF CONTROL CONTROL - INSTALL ABOVE THE NEAREST ACCESSIBLE CEILING	ABOVE CEILING
PPND	DIGITAL NON-DIMMING RELAY POWER PACK - NLIGHT #NPP16-EFP FOR ON/OFF CONTROL - INSTALL ABOVE THE NEAREST ACCESSIBLE CEILING	ABOVE CEILING
PPD	DIGITAL DIMMING RELAY POWER PACK - NLIGHT #NPP16-D-EFP FOR ON/OFF/RAISE/LOWER CONTROL - INSTALL ABOVE THE NEAREST ACCESSIBLE CEILING	ABOVE CEILING
PPD2W	DIGITAL DIMMING RELAY POWER PACK (LINE VOLTAGE) - NLIGHT #NSP5PCD2W FOR ON/OFF/RAISE/LOWER CONTROL - INSTALL ABOVE THE NEAREST ACCESSIBLE CEILING	ABOVE CEILING
$OCD	LINE VOLTAGE, WALL BOX, DUAL TECHNOLOGY, DIMMING OCCUPANCY SENSOR SWITCH WITH MANUAL ON/OFF/RAISE/LOWER AND AUTO OFF AFTER 15 MINUTES OF VACANCY - SENSOR SWITCH #WSX-PDT-D-SA-COLOR - SEE NOTE 1	WALL 44" AFF
$OC	LINE VOLTAGE, WALL BOX, PIR OCCUPANCY SENSOR SWITCH WITH MANUAL ON/AUTO OFF AFTER 15 MINUTES OF VACANCY- SENSOR SWITCH #WSX-COLOR - SEE NOTE 1	WALL 44" AFF
$LV	DIGITAL WALL SWITCH FOR SINGLE CHANNEL ON/OFF CONTROL - NLIGHT #NPODM-COLOR	WALL 44" AFF
$R1	DIGITAL WALL SWITCH FOR SINGLE CHANNEL ON/OFF CONTROL - NLIGHT #NPODM-COLOR - 'R1' INDICATES CONTROL LCP RELAY #1 - TYPICAL	WALL 44" AFF
$D	DIGITAL WALL SWITCH FOR SINGLE CHANNEL ON/OFF/RAISE/LOWER CONTROL - NLIGHT #NPODM-DX-COLOR	WALL 44" AFF
$D a,b	DIGITAL WALL SWITCH FOR SINGLE CHANNEL ON/OFF/RAISE/LOWER CONTROL - NLIGHT #NPODM-2P-DX-COLOR - 'a,b' INDICATES THE TOP SET OF ON/OFF/RAISE/LOWER BUTTONS ARE TO CONTROL 'a' DESIGNATED LIGHT FIXTURES AND THE BOTTOM SET OF THE ON/OFF/RAISE/LOWER BUTTONS ARE TO CONTROL THE 'b' DESIGNATED FIXTURES - TYPICAL	WALL 44" AFF
$TS a,b	DIGITAL WALL SWITCH FOR SINGLE CHANNEL ON/OFF/RAISE/LOWER CONTROL - NLIGHT #NPODTOUCH - 'a,b' INDICATES THE TOP SET OF ON/OFF/RAISE/LOWER BUTTONS ARE TO CONTROL 'a' DESIGNATED LIGHT FIXTURES AND THE BOTTOM SET OF THE ON/OFF/RAISE/LOWER BUTTONS ARE TO CONTROL THE 'b' DESIGNATED FIXTURES - TYPICAL	
LCP	LIGHTING NETWORK CONTROLLER - NLIGHT ECLYPSE	WALL
SLP	SITE LIGHTING CONTROL RELAY PANEL WITH PROGRAMMABLE, DIGITAL TIME CLOCK AND A TOTAL OF EIGHT SINGLE, 120/277 VOLT RATED RELAYS IN A SURFACE MOUNTED, NEMA ONE ENCLOSURE WITH SCREW ON COVER - NLIGHT #ARP-INTENC08-NLT-MVOLT-1VB-SC-DTC	WALL

SEE THE LIGHTING CONTROL NOTES ON THIS DRAWING.

NOTES:
1. LIGHTING CONTROLS AND FLOOR PLANS ARE DIAGRAMMATIC. PROVIDE ALL WIRING, MODULES, AND DEVICES AS REQUIRED FOR A COMPLETE, FUNCTIONAL LIGHTING CONTROL SYSTEM.
2. PROVIDE PROPER EMERGENCY BYPASS RELAYS FOR LIGHTS CONTROLLED VIA AUTOMATIC LIGHTING CONTROLS - COORDINATE WITH LOAD TYPE BEING SERVED.

1. DO NOT SCALE THE FIXTURES, DEVICES,
2. REFER TO DIVISION REQUIREMENTS.
3. PROVIDE BRANCH
4. INSTALLATION SHALL
5. MINIMUM CIRCUIT S NOTED. TYPE 'MC' LAY-IN CEILINGS.
6. ALL NEW WIRING S CIRCUIT WIRING SHA 175-FT FOR 277V
7. PROVIDE SEPARATE
8. HOMERUN CONDUITS N.E.C.
9. PROVIDE SEPARATE
10. WHERE INDIVIDUAL MULTIWIRE BRANCH CODE AND STATE A
11. PROVIDE ROUGH-IN SHOWN ON THESE
12. CONTRACTOR SHALL PROTECTION, OWNE DISCREPANCIES WIT
13. THE MECHANICAL A SHOWN ON THE TI TO THE ELECTRONI DIMENSIONS SHOUL FOR ACTUAL DIMEN
14. PERMANENT TYPE M WHERE BOXES ARE DESIGNATION AND THE THE INSTALLAT AND INDICATE THE
15. THE COVERS ON AL ALARM SYSTEM SHA DEPARTMENT'S REQ
16. IT WILL BE THE CO AND MOTORIZED DA
17. PROVIDE ENGRAVED SERVICE SWITCHES, WILL NOT BE ACCE SHALL BE 1/4".
18. ALL PANELBOARDS SPARE CIRCUIT BRE IN THE OFF POSITI EACH PANELBOARD
19. COLOR OF DEVICES
20. DISCONNECT SWITCH
21. THE ELECTRICAL CO
22. UNDER NO CIRCUM CONSTRUCTION IN INSTALLED SURFACE THE SATISFACTION
23. ALL DEVICE COVER
24. IT WILL BE THE CO LOCK AND THE AUT FOLLOWS:
    A) POWER AS RE
    B) FIRE ALARM IN AS REQUIRED
25. COORDINATE WITH T OVERALL PROJECT
26. ALL 15- AND 20- ACCORDANCE WITH
27. TEMPORARY LIGHT ELECTRICITY SHALL



BASEMENT FLOOR PLAN - LIGHTING

SCALE: 1/4" = 1'–0"

HORIZONTAL SCALE IN FEET

4 2 0 4 8 12 16

ELECTRICAL GENERAL NOTES:

1. COORDINATE ALL LIGHTING FIXTURE LOCATIONS WITH ARCHITECTURAL REFLECTED CEILINGS PLANS AND ELEVATIONS. CONFIRM SWITCHING SCHEME AND SWITCH LOCATIONS WITH ARCHITECT/OWNER PRIOR TO INSTALL.
2. PROVIDE UNSWITCHED WIRING TO EXIT SIGNS. COORDINATE EXIT SIGN LOCATIONS WITH ARCHITECTURAL EMERGENCY EGRESS PLANS.
3. ALL LIGHT FIXTURE LOCATIONS SHALL BE COORDINATED WITH HVAC DUCTWORK AND OTHER EQUIPMENT IN FIELD TO AVOID INTERFERENCE PRIOR TO INSTALL.
4. ELECTRICAL CONTRACTOR SHALL BE RESPONSIBLE FOR WIRING ALL ELECTRICAL ITEMS SHOWN ON THIS DRAWING.
5. TYPE 'MC' CABLE WITH INTEGRAL GROUND WIRE MAY BE UTILIZED FOR POWER AND LIGHTING CIRCUITS ONLY WHERE COMPLETELY CONCEALED.
6. ALL MOUNTING HEIGHTS FOR LIGHTING FIXTURES ARE TO THE BOTTOM OF THE FIXTURES UNLESS INDICATED OTHERWISE.
7. SEE ARCHITECTURAL EXTERIOR ELEVATIONS FOR MOUNTING HEIGHTS OF EXTERIOR LIGHTING FIXTURES AND REFLECTED CEILING PLAN FOR INTERIOR LIGHTS.
8. PROVIDE PROPER NUMBER OF CONDUCTORS TO ACHIEVE CIRCUITING AND SWITCHING SHOWN.
9. USE #10 AWG CONDUCTORS FOR 20 AMPERE, 120 VOLT BRANCH CIRCUITS LONGER THAN 75 FEET, #8 AWG FOR 20 AMP, 120 VOLT BRANCH CIRCUITS LONGER THAN 150 FEET AND #10 AWG FOR 20 AMPERE, 277 VOLT CIRCUITS LONGER THAN 150 FEET, UNLESS SPECIFICALLY NOTED OTHERWISE. THIS INCREASED WIRE SIZE SHALL BE REQUIRED FOR THE ENTIRE LENGTH OF THE CIRCUIT.
10. OCCUPANCY SENSORS SHALL BE LOCATED A MINIMUM OF SIX FEET FROM MECHANICAL EQUIPMENT AIR FLOW VENTS.
11. THE ELECTRICAL CONTRACTOR SHALL AIM ALL EMERGENCY LIGHTING HEADS IN THE FIELD TO ENSURE PROPER ILLUMINATION OF EGRESS PATHS.

CD SET
FOR BIDDING
09.30.2025

R. Edwards & Co.
ARCHITECTS + PRESERVATIONISTS
52 State St., 2nd Floor | Montpelier, VT 05602
(802) 232-2628 | info@redwardsandcompany.com
www.redwardsandcompany.com

SEAL

STATE OF VERMONT
SHAWN PROULX
NO. 134688
ELECTRICAL
LICENSED
PROFESSIONAL ENGINEER

PROJECT
Alice Ward Library

27 Park St.
Canaan, VT 05903

PROJECT NUMBER
530597

CONSULTANTS

DuBois & King inc.
Building Services Division
Bedford, NH
MEP/FP Engineers
603.444.6578
Project # 530597

RELEASE

RELEASE DATE

RELEASE + REVISION LOG

MARK	DESCRIPTION	DATE

PROJECT NORTH

N

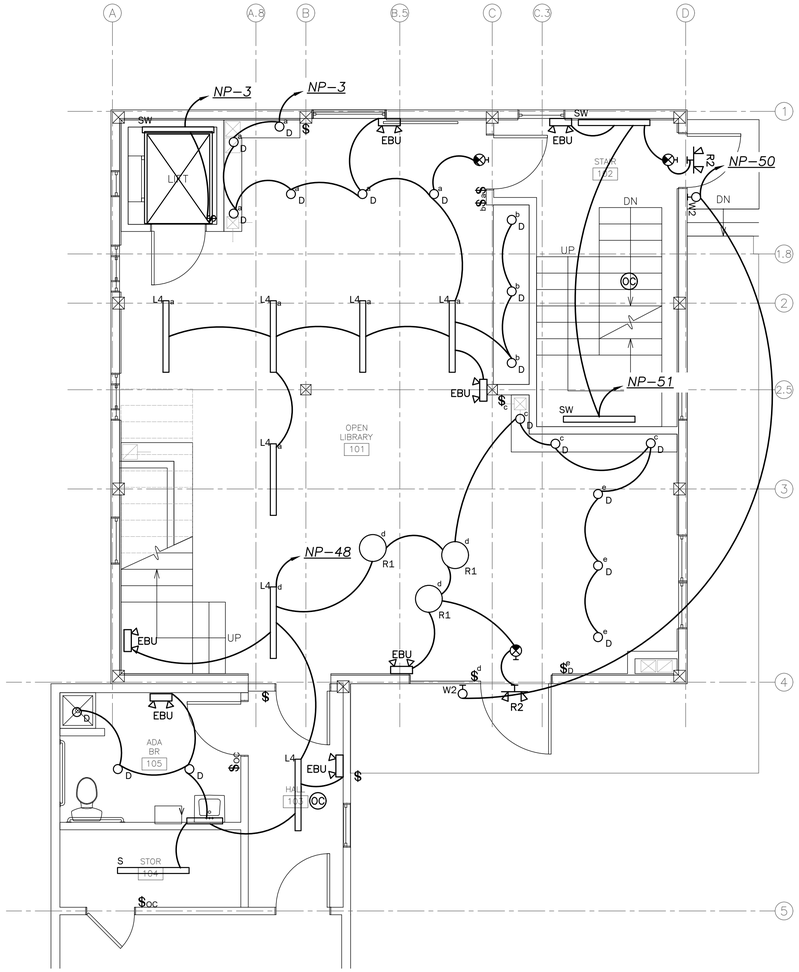
DRAWING NAME

BASEMENT FLOOR PLAN - LIGHTING

DRAWN	JKW	DATE	09.30.2025
CHECKED	SMP	SCALE	AS NOTED

DRAWING NUMBER

E1.1



FIRST FLOOR PLAN - LIGHTING

SCALE: 1/4" = 1'-0"

HORIZONTAL SCALE IN FEET

4 2 0 4 8 12 16

ELECTRICAL GENERAL NOTES:

1. COORDINATE ALL LIGHTING FIXTURE LOCATIONS WITH ARCHITECTURAL REFLECTED CEILINGS PLANS AND ELEVATIONS. CONFIRM SWITCHING SCHEME AND SWITCH LOCATIONS WITH ARCHITECT/OWNER PRIOR TO INSTALL.
2. PROVIDE UNSWITCHED WIRING TO EXIT SIGNS. COORDINATE EXIT SIGN LOCATIONS WITH ARCHITECTURAL EMERGENCY EGRESS PLANS.
3. ALL LIGHT FIXTURE LOCATIONS SHALL BE COORDINATED WITH HVAC DUCTWORK AND OTHER EQUIPMENT IN FIELD TO AVOID INTERFERENCE PRIOR TO INSTALL.
4. ELECTRICAL CONTRACTOR SHALL BE RESPONSIBLE FOR WIRING ALL ELECTRICAL ITEMS SHOWN ON THIS DRAWING.
5. TYPE 'MC' CABLE WITH INTEGRAL GROUND WIRE MAY BE UTILIZED FOR POWER AND LIGHTING CIRCUITS ONLY WHERE COMPLETELY CONCEALED.
6. ALL MOUNTING HEIGHTS FOR LIGHTING FIXTURES ARE TO THE BOTTOM OF THE FIXTURES UNLESS INDICATED OTHERWISE.
7. SEE ARCHITECTURAL EXTERIOR ELEVATIONS FOR MOUNTING HEIGHTS OF EXTERIOR LIGHTING FIXTURES AND REFLECTED CEILING PLAN FOR INTERIOR LIGHTS.
8. PROVIDE PROPER NUMBER OF CONDUCTORS TO ACHIEVE CIRCUITING AND SWITCHING SHOWN.
9. USE #10 AWG CONDUCTORS FOR 20 AMPERE, 120 VOLT BRANCH CIRCUITS LONGER THAN 75 FEET, #8 AWG FOR 20 AMP, 120 VOLT BRANCH CIRCUITS LONGER THAN 150 FEET AND #10 AWG FOR 20 AMPERE, 277 VOLT CIRCUITS LONGER THAN 150 FEET, UNLESS SPECIFICALLY NOTED OTHERWISE. THIS INCREASED WIRE SIZE SHALL BE REQUIRED FOR THE ENTIRE LENGTH OF THE CIRCUIT.
10. OCCUPANCY SENSORS SHALL BE LOCATED A MINIMUM OF SIX FEET FROM MECHANICAL EQUIPMENT AIR FLOW VENTS.
11. THE ELECTRICAL CONTRACTOR SHALL AIM ALL EMERGENCY LIGHTING HEADS IN THE FIELD TO ENSURE PROPER ILLUMINATION OF EGRESS PATHS.

R. Edwards & Co.
ARCHITECTS + PRESERVATIONISTS
52 State St., 2nd Floor | Montpelier, VT 05602
(802) 232-2628 | info@redwardsandcompany.com
www.redwardsandcompany.com

SEAL

STATE OF VERMONT
SHAWN PROULX
NO. 134688
ELECTRICAL
LICENSED
PROFESSIONAL ENGINEER

PROJECT
Alice Ward Library

27 Park St.
Canaan, VT 05903

PROJECT NUMBER
530597

CONSULTANTS

DuBois & King inc.
Building Services Division
Bedford, NH
MEP/FP Engineers
603.444.6578
Project # 530597

RELEASE

RELEASE DATE

RELEASE + REVISION LOG

MARK	DESCRIPTION	DATE

PROJECT NORTH

N

DRAWING NAME

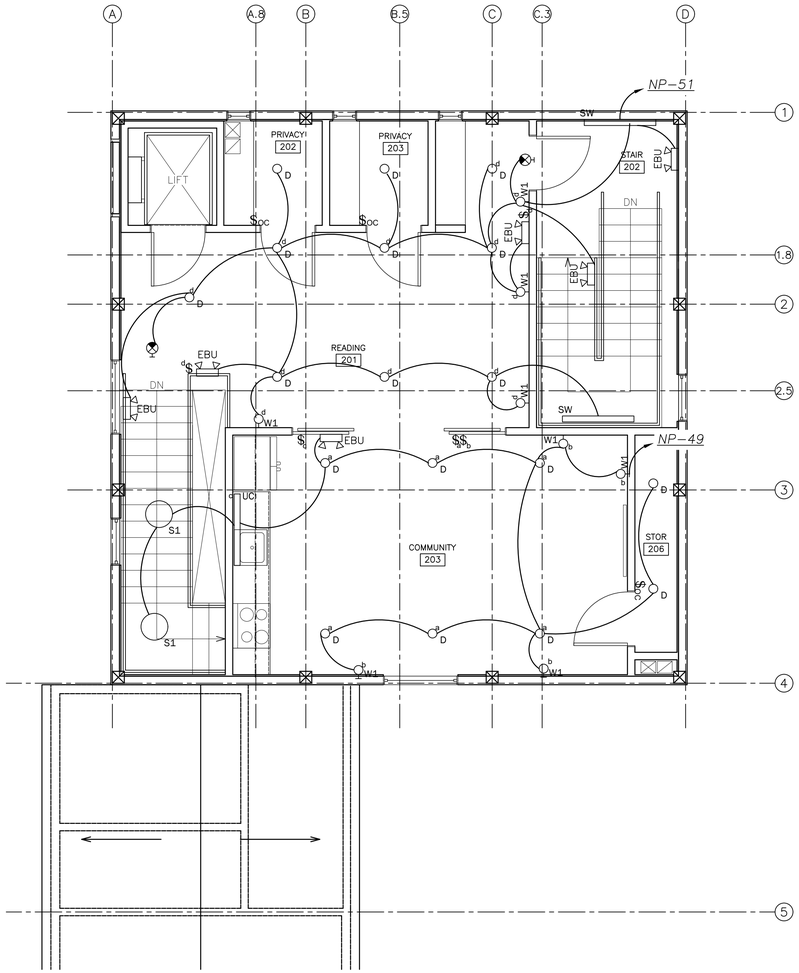
FIRST FLOOR PLAN - LIGHTING

DRAWN	JKW	DATE	09.30.2025
CHECKED	SMP	SCALE	AS NOTED

DRAWING NUMBER

E1.2

CD SET
FOR BIDDING
09.30.2025



SECOND FLOOR PLAN - LIGHTING

SCALE: 1/4" = 1'-0"

HORIZONTAL SCALE IN FEET

4 2 0 4 8 12 16

ELECTRICAL GENERAL NOTES:

1. COORDINATE ALL LIGHTING FIXTURE LOCATIONS WITH ARCHITECTURAL REFLECTED CEILINGS PLANS AND ELEVATIONS. CONFIRM SWITCHING SCHEME AND SWITCH LOCATIONS WITH ARCHITECT/OWNER PRIOR TO INSTALL.
2. PROVIDE UNSWITCHED WIRING TO EXIT SIGNS. COORDINATE EXIT SIGN LOCATIONS WITH ARCHITECTURAL EMERGENCY EGRESS PLANS.
3. ALL LIGHT FIXTURE LOCATIONS SHALL BE COORDINATED WITH HVAC DUCTWORK AND OTHER EQUIPMENT IN FIELD TO AVOID INTERFERENCE PRIOR TO INSTALL.
4. ELECTRICAL CONTRACTOR SHALL BE RESPONSIBLE FOR WIRING ALL ELECTRICAL ITEMS SHOWN ON THIS DRAWING.
5. TYPE 'MC' CABLE WITH INTEGRAL GROUND WIRE MAY BE UTILIZED FOR POWER AND LIGHTING CIRCUITS ONLY WHERE COMPLETELY CONCEALED.
6. ALL MOUNTING HEIGHTS FOR LIGHTING FIXTURES ARE TO THE BOTTOM OF THE FIXTURES UNLESS INDICATED OTHERWISE.
7. SEE ARCHITECTURAL EXTERIOR ELEVATIONS FOR MOUNTING HEIGHTS OF EXTERIOR LIGHTING FIXTURES AND REFLECTED CEILING PLAN FOR INTERIOR LIGHTS.
8. PROVIDE PROPER NUMBER OF CONDUCTORS TO ACHIEVE CIRCUITING AND SWITCHING SHOWN.
9. USE #10 AWG CONDUCTORS FOR 20 AMPERE, 120 VOLT BRANCH CIRCUITS LONGER THAN 75 FEET, #8 AWG FOR 20 AMP, 120 VOLT BRANCH CIRCUITS LONGER THAN 150 FEET AND #10 AWG FOR 20 AMPERE, 277 VOLT CIRCUITS LONGER THAN 150 FEET, UNLESS SPECIFICALLY NOTED OTHERWISE. THIS INCREASED WIRE SIZE SHALL BE REQUIRED FOR THE ENTIRE LENGTH OF THE CIRCUIT.
10. OCCUPANCY SENSORS SHALL BE LOCATED A MINIMUM OF SIX FEET FROM MECHANICAL EQUIPMENT AIR FLOW VENTS.
11. THE ELECTRICAL CONTRACTOR SHALL AIM ALL EMERGENCY LIGHTING HEADS IN THE FIELD TO ENSURE PROPER ILLUMINATION OF EGRESS PATHS.

R. Edwards & Co.
ARCHITECTS + PRESERVATIONISTS
52 State St., 2nd Floor | Montpelier, VT 05602
(802) 232-2628 | info@redwardsandcompany.com
www.redwardsandcompany.com

SEAL

STATE OF VERMONT
SHAWN PROULX
NO. 134688
ELECTRICAL
LICENSED
PROFESSIONAL ENGINEER

PROJECT
Alice Ward Library

27 Park St.
Canaan, VT 05903

PROJECT NUMBER
530597

CONSULTANTS

DuBois & King inc.
Building Services Division
Bedford, NH
MEP/FP Engineers
603.444.6578
Project # 530597

RELEASE

RELEASE DATE

RELEASE + REVISION LOG

MARK	DESCRIPTION	DATE

PROJECT NORTH

N

DRAWING NAME

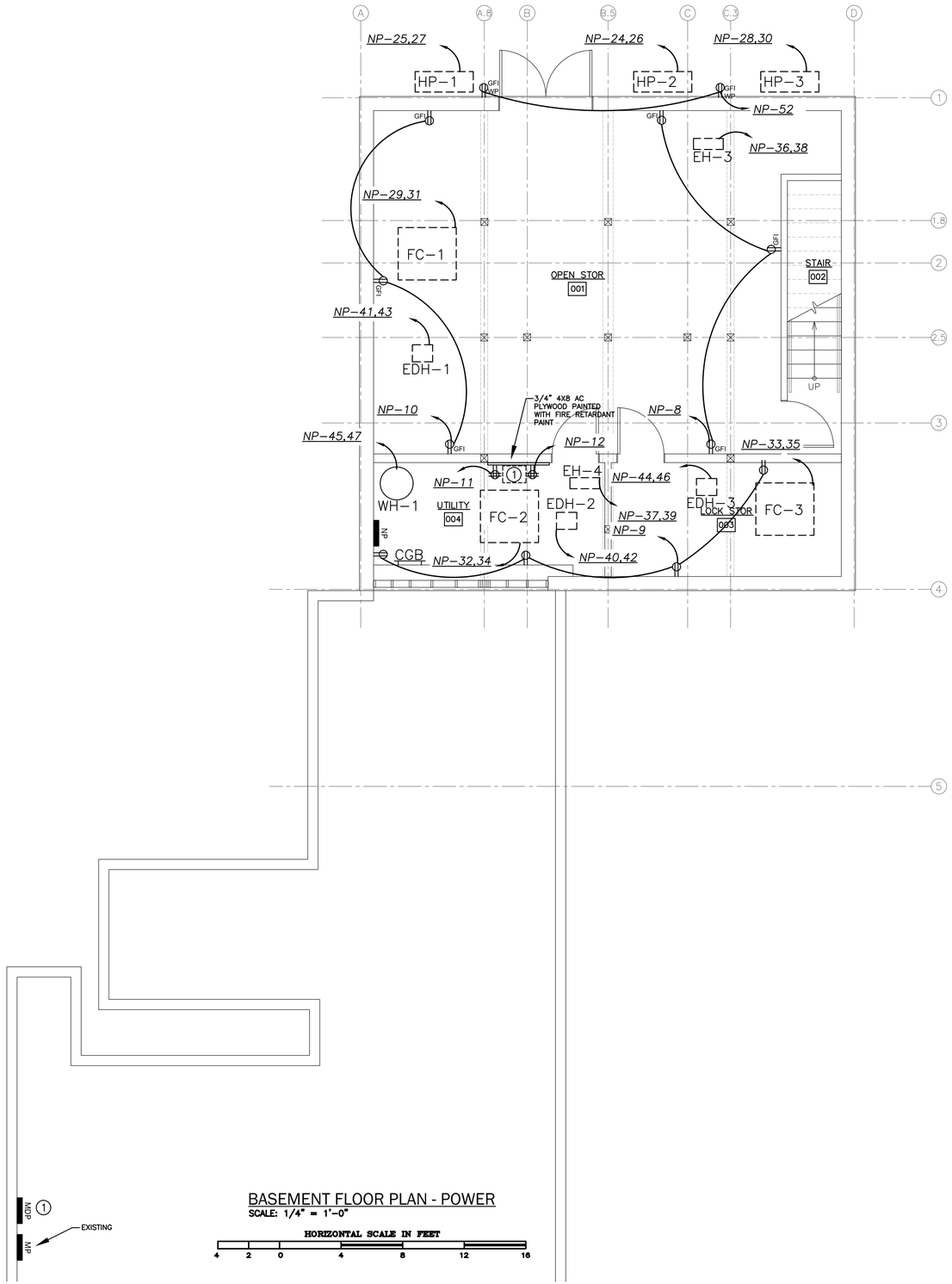
SECOND FLOOR PLAN - LIGHTING

DRAWN	JKW	DATE	09.30.2025
CHECKED	SMP	SCALE	AS NOTED

DRAWING NUMBER

E1.3

CD SET
FOR BIDDING
09.30.2025



BASEMENT FLOOR PLAN - POWER
SCALE: 1/4" = 1'–0"

HORIZONTAL SCALE IN FEET
4 2 0 4 8 12 16

ELECTRICAL GENERAL NOTES:

1. THE ELECTRICAL CONTRACTOR SHALL BE RESPONSIBLE FOR WIRING ALL MECHANICAL AND ELECTRICAL ITEMS SHOWN ON THIS DRAWING, UNLESS OTHERWISE NOTED.
2. TYPE 'MC' CABLE WITH INTEGRAL GROUND WIRE MAY BE UTILIZED FOR POWER AND LIGHTING CIRCUITS ONLY WHERE COMPLETELY CONCEALED.
3. VERIFY EQUIPMENT LOCATIONS, CIRCUIT BREAKER, FUSE SIZES, CONDUIT SIZES, WIRE SIZES AND ROUGH-IN REQUIREMENTS FOR ALL EQUIPMENT BEING FURNISHED BY ANOTHER TRADE OR BY THE OWNER PRIOR TO ROUGHING-IN.
4. PROVIDE THE PROPER NUMBER OF CONDUCTORS TO ACHIEVE CIRCUITING SHOWN ON THE DRAWINGS.
5. CIRCUIT NUMBERS AT EQUIPMENT AND AT HOMERUNS CORRESPOND TO PANELBOARD CIRCUIT BREAKERS (SEE PANELBOARD SCHEDULES). BRANCH CIRCUITS SHALL BE SIZED ACCORDING TO THE CIRCUIT BREAKER RATING, UNLESS OTHERWISE NOTED ON THE ELECTRICAL EQUIPMENT SCHEDULES. THE ELECTRICAL CONTRACTOR SHALL BE RESPONSIBLE FOR ENSURING THAT ALL LOADS CONNECTED TO EACH PANELBOARD ARE BALANCED EVENLY.
6. USE #10 AWG CONDUCTORS FOR 20 AMPERE, 120 VOLT BRANCH CIRCUITS LONGER THAN 75 FEET, #8 AWG FOR 20 AMP, AND 120 VOLT BRANCH CIRCUITS LONGER THAN 150 FEET, AND #10 AWG FOR 20 AMPERE, 277 VOLT CIRCUITS LONGER THAN 150 FEET, UNLESS SPECIFICALLY NOTED OTHERWISE. THIS INCREASED WIRE SIZE SHALL BE REQUIRED FOR THE ENTIRE LENGTH OF THE CIRCUIT.
7. UNLESS SPECIFICALLY NOTED OTHERWISE. THIS INCREASED WIRE SIZE SHALL BE REQUIRED FOR THE ENTIRE LENGTH OF THE CIRCUIT.
8. RECEPTACLES INSTALLED ON THE EXTERIOR OF THE BUILDING SHALL BE LISTED AS WEATHER RESISTANT AND SHALL BE PROVIDED WITH 'EXTRA-DUTY' LISTED, WEATHERPROOF WHILE-IN-USE COVERPLATES.
9. TYPE 'MC' CABLE WITH INTEGRAL GROUND WIRE MAY BE UTILIZED FOR POWER CIRCUITS ONLY WHERE COMPLETELY CONCEALED.
10. ALL PANELBOARDS, DISCONNECTS AND DEVICES SHALL BE PROPERLY LABELED. EXACT NAMING SHALL BE COORDINATED WITH OWNER.

ⓧ ELECTRICAL KEYED NOTES:

1. IDF WALL RACK LOCATION.
2. EXTEND EXISTING BACKBOARD OR PROVIDE NEW 3/4" AC PLYWOOD FOR THE NEW MDP PANEL.

CD SET
FOR BIDDING 09.30.2025

R. Edwards & Co.
ARCHITECTS + PRESERVATIONISTS
52 State St., 2nd Floor | Montpelier, VT 05602
(802) 232-2628 | info@redwardsandcompany.com
www.redwardsandcompany.com

SEAL
STATE OF VERMONT SHAWN PROULX NO. 134688 ELECTRICAL LICENSED PROFESSIONAL ENGINEER

PROJECT
Alice Ward Library

27 Park St.
Canaan, VT 05903

PROJECT NUMBER
530597

CONSULTANTS

DuBois & King inc.
Building Services Division
Bedford, NH
MEP/FP Engineers
603.444.6578
Project # 530597

RELEASE

RELEASE DATE

RELEASE + REVISION LOG

MARK	DESCRIPTION	DATE

PROJECT NORTH

N

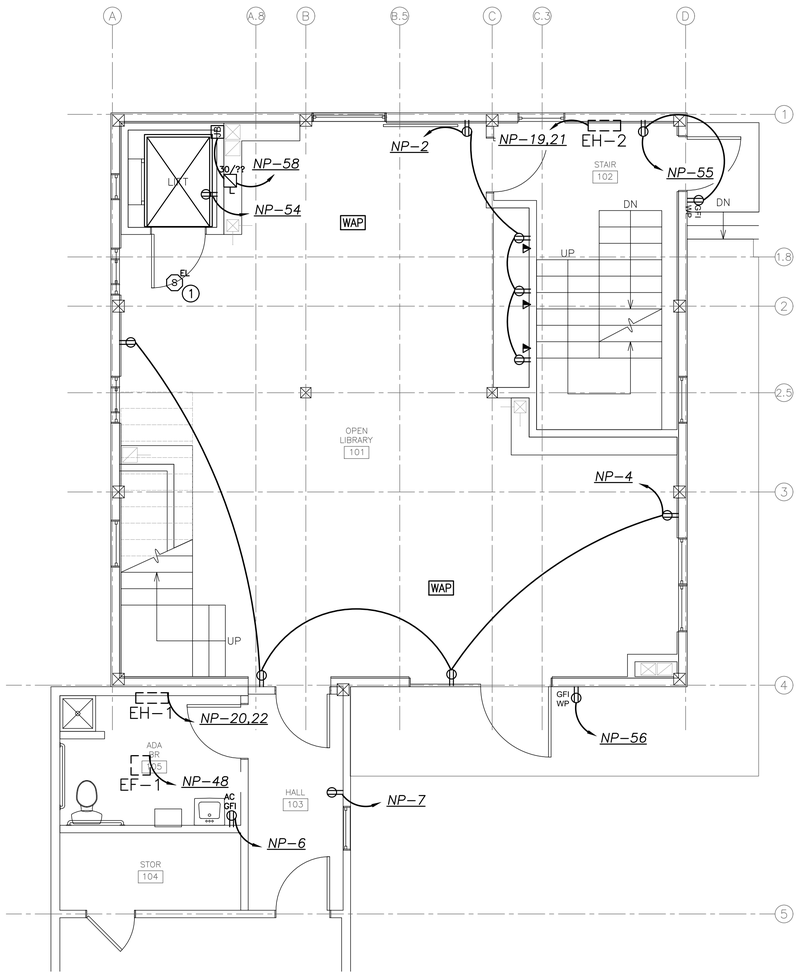
DRAWING NAME

BASEMENT FLOOR PLAN - POWER

DRAWN JKW DATE 09.30.2025
CHECKED SMP SCALE AS NOTED

DRAWING NUMBER

E1.4



FIRST FLOOR PLAN - POWER

SCALE: 1/4" = 1'-0"

HORIZONTAL SCALE IN FEET

4 2 0 4 8 12 16

ELECTRICAL GENERAL NOTES:

1. THE ELECTRICAL CONTRACTOR SHALL BE RESPONSIBLE FOR WIRING ALL MECHANICAL AND ELECTRICAL ITEMS SHOWN ON THIS DRAWING, UNLESS OTHERWISE NOTED.
2. TYPE 'MC' CABLE WITH INTEGRAL GROUND WIRE MAY BE UTILIZED FOR POWER AND LIGHTING CIRCUITS ONLY WHERE COMPLETELY CONCEALED.
3. VERIFY EQUIPMENT LOCATIONS, CIRCUIT BREAKER, FUSE SIZES, CONDUIT SIZES, WIRE SIZES AND ROUGH-IN REQUIREMENTS FOR ALL EQUIPMENT BEING FURNISHED BY ANOTHER TRADE OR BY THE OWNER PRIOR TO ROUGHING-IN.
4. PROVIDE THE PROPER NUMBER OF CONDUCTORS TO ACHIEVE CIRCUITING SHOWN ON THE DRAWINGS.
5. CIRCUIT NUMBERS AT EQUIPMENT AND AT HOMERUNS CORRESPOND TO PANELBOARD CIRCUIT BREAKERS (SEE PANELBOARD SCHEDULES). BRANCH CIRCUITS SHALL BE SIZED ACCORDING TO THE CIRCUIT BREAKER RATING, UNLESS OTHERWISE NOTED ON THE ELECTRICAL EQUIPMENT SCHEDULES. THE ELECTRICAL CONTRACTOR SHALL BE RESPONSIBLE FOR ENSURING THAT ALL LOADS CONNECTED TO EACH PANELBOARD ARE BALANCED EVENLY.
6. USE #10 AWG CONDUCTORS FOR 20 AMPERE, 120 VOLT BRANCH CIRCUITS LONGER THAN 75 FEET, #8 AWG FOR 20 AMP, AND 120 VOLT BRANCH CIRCUITS LONGER THAN 150 FEET, AND #10 AWG FOR 20 AMPERE, 277 VOLT CIRCUITS LONGER THAN 150 FEET, UNLESS SPECIFICALLY NOTED OTHERWISE. THIS INCREASED WIRE SIZE SHALL BE REQUIRED FOR THE ENTIRE LENGTH OF THE CIRCUIT.
7. UNLESS SPECIFICALLY NOTED OTHERWISE. THIS INCREASED WIRE SIZE SHALL BE REQUIRED FOR THE ENTIRE LENGTH OF THE CIRCUIT.
8. RECEPTACLES INSTALLED ON THE EXTERIOR OF THE BUILDING SHALL BE LISTED AS WEATHER RESISTANT AND SHALL BE PROVIDED WITH 'EXTRA-DUTY' LISTED, WEATHERPROOF WHILE-IN-USE COVERPLATES.
9. RECEPTACLES INSTALLED WITHIN 6'-0" OF A WATER SOURCE SHALL BE 5mA GFCI TYPE.
10. ALL TELECOMMUNICATION CABLES SHALL BE INSTALLED IN CONDUIT.
11. '??' INDICATES PROVIDE FUSES IN THE SIZE RECOMMENDED BY THE EQUIPMENT MANUFACTURER. THIS INFORMATION WAS NOT PROVIDED FOR THE ELECTRICAL DESIGN.
12. TYPE 'MC' CABLE WITH INTEGRAL GROUND WIRE MAY BE UTILIZED FOR POWER CIRCUITS ONLY WHERE COMPLETELY CONCEALED.
13. ALL PANELBOARDS, DISCONNECTS AND DEVICES SHALL BE PROPERLY LABELED. EXACT NAMING SHALL BE COORDINATED WITH OWNER.

ⓧ ELECTRICAL KEYED NOTES:

1. SMOKE DETECTOR BY BRK WITH RM-4 RELAY.

CD SET
FOR BIDDING 09.30.2025

R. Edwards & Co.
ARCHITECTS + PRESERVATIONISTS
52 State St., 2nd Floor | Montpelier, VT 05602
(802) 232-2628 | info@redwardsandcompany.com
www.redwardsandcompany.com

SEAL

STATE OF VERMONT
SHAWN PROULX
NO. 134688
ELECTRICAL
LICENSED
PROFESSIONAL ENGINEER

PROJECT
Alice Ward Library

27 Park St.
Canaan, VT 05903

PROJECT NUMBER
530597

CONSULTANTS

DuBois & King inc.
Building Services Division
Bedford, NH
MEP/FP Engineers
603.444.6578
Project # 530597

RELEASE

RELEASE DATE

RELEASE + REVISION LOG

MARK	DESCRIPTION	DATE

PROJECT NORTH

N

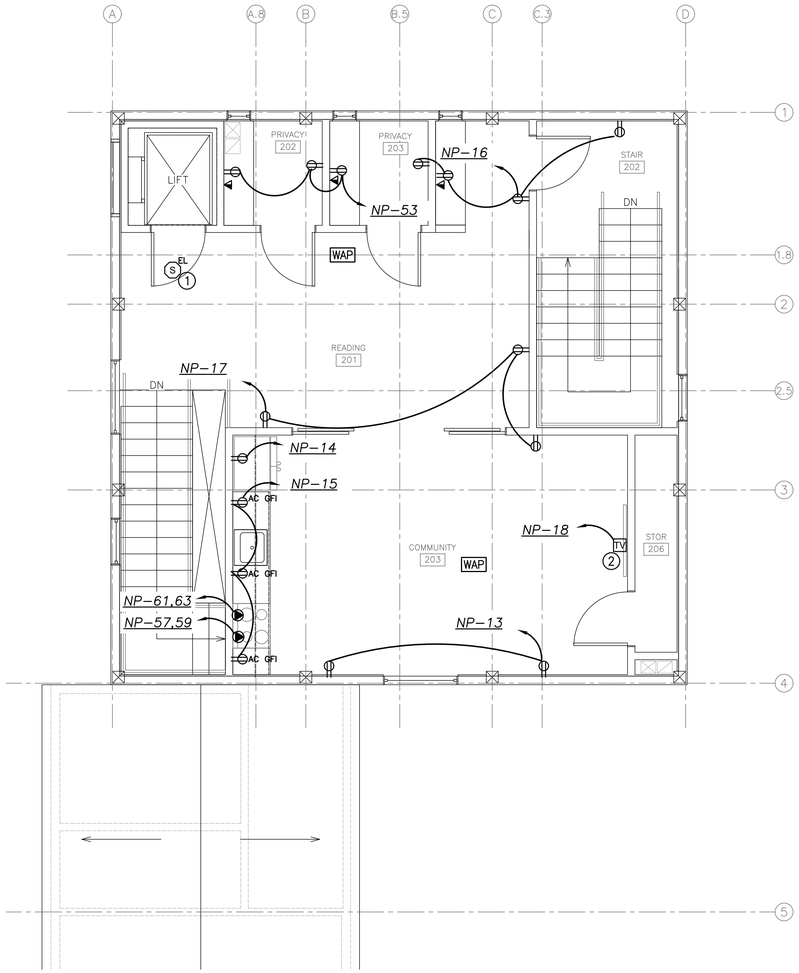
DRAWING NAME

FIRST FLOOR PLAN - POWER

DRAWN	JKW	DATE	09.30.2025
CHECKED	SMP	SCALE	AS NOTED

DRAWING NUMBER

E1.5



SECOND FLOOR PLAN - POWER

SCALE: 1/4" = 1'–0"

HORIZONTAL SCALE IN FEET

4 2 0 4 8 12 16

ELECTRICAL GENERAL NOTES:

1. THE ELECTRICAL CONTRACTOR SHALL BE RESPONSIBLE FOR WIRING ALL MECHANICAL AND ELECTRICAL ITEMS SHOWN ON THIS DRAWING, UNLESS OTHERWISE NOTED.
2. TYPE 'MC' CABLE WITH INTEGRAL GROUND WIRE MAY BE UTILIZED FOR POWER AND LIGHTING CIRCUITS ONLY WHERE COMPLETELY CONCEALED.
3. VERIFY EQUIPMENT LOCATIONS, CIRCUIT BREAKER, FUSE SIZES, CONDUIT SIZES, WIRE SIZES AND ROUGH–IN REQUIREMENTS FOR ALL EQUIPMENT BEING FURNISHED BY ANOTHER TRADE OR BY THE OWNER PRIOR TO ROUGHING–IN.
4. PROVIDE THE PROPER NUMBER OF CONDUCTORS TO ACHIEVE CIRCUITING SHOWN ON THE DRAWINGS.
5. CIRCUIT NUMBERS AT EQUIPMENT AND AT HOMERUNS CORRESPOND TO PANELBOARD CIRCUIT BREAKERS (SEE PANELBOARD SCHEDULES). BRANCH CIRCUITS SHALL BE SIZED ACCORDING TO THE CIRCUIT BREAKER RATING, UNLESS OTHERWISE NOTED ON THE ELECTRICAL EQUIPMENT SCHEDULES. THE ELECTRICAL CONTRACTOR SHALL BE RESPONSIBLE FOR ENSURING THAT ALL LOADS CONNECTED TO EACH PANELBOARD ARE BALANCED EVENLY.
6. USE #10 AWG CONDUCTORS FOR 20 AMPERE, 120 VOLT BRANCH CIRCUITS LONGER THAN 75 FEET, #8 AWG FOR 20 AMP, AND 120 VOLT BRANCH CIRCUITS LONGER THAN 150 FEET, AND #10 AWG FOR 20 AMPERE, 277 VOLT CIRCUITS LONGER THAN 150 FEET, UNLESS SPECIFICALLY NOTED OTHERWISE. THIS INCREASED WIRE SIZE SHALL BE REQUIRED FOR THE ENTIRE LENGTH OF THE CIRCUIT.
7. UNLESS SPECIFICALLY NOTED OTHERWISE. THIS INCREASED WIRE SIZE SHALL BE REQUIRED FOR THE ENTIRE LENGTH OF THE CIRCUIT.
8. RECEPTACLES INSTALLED ON THE EXTERIOR OF THE BUILDING SHALL BE LISTED AS WEATHER RESISTANT AND SHALL BE PROVIDED WITH 'EXTRA–DUTY' LISTED, WEATHERPROOF WHILE–IN–USE COVERPLATES.
9. RECEPTACLES INSTALLED WITHIN 6'–0" OF A WATER SOURCE SHALL BE 5mA GFCI TYPE.
10. ALL TELECOMMUNICATION CABLES SHALL BE INSTALLED IN CONDUIT.
11. '??' INDICATES PROVIDE FUSES IN THE SIZE RECOMMENDED BY THE EQUIPMENT MANUFACTURER. THIS INFORMATION WAS NOT PROVIDED FOR THE ELECTRICAL DESIGN.
12. TYPE 'MC' CABLE WITH INTEGRAL GROUND WIRE MAY BE UTILIZED FOR POWER CIRCUITS ONLY WHERE COMPLETELY CONCEALED.
13. ALL PANELBOARDS, DISCONNECTS AND DEVICES SHALL BE PROPERLY LABELED. EXACT NAMING SHALL BE COORDINATED WITH OWNER.

ⓧ ELECTRICAL KEYED NOTES:

1. SMOKE DETECTOR BY BRK WITH RM–4 RELAY.
2. WALL HUNG MONITOR. VERIFY LOCATION WITH ARCHITECT.

CD SET
FOR BIDDING 09.30.2025

R. Edwards & Co.
ARCHITECTS + PRESERVATIONISTS
52 State St., 2nd Floor | Montpelier, VT 05602
(802) 232–2628 | info@redwardsandcompany.com
www.redwardsandcompany.com

SEAL

STATE OF VERMONT
SHAWN PROULX
NO. 134688
ELECTRICAL
LICENSED
PROFESSIONAL ENGINEER

PROJECT
Alice Ward Library

27 Park St.
Canaan, VT 05903

PROJECT NUMBER
530597

CONSULTANTS

DuBois & King inc.
Building Services Division
Bedford, NH
MEP/FP Engineers
603.444.6578
Project # 530597

RELEASE

RELEASE DATE

RELEASE + REVISION LOG

MARK	DESCRIPTION	DATE

PROJECT NORTH

N

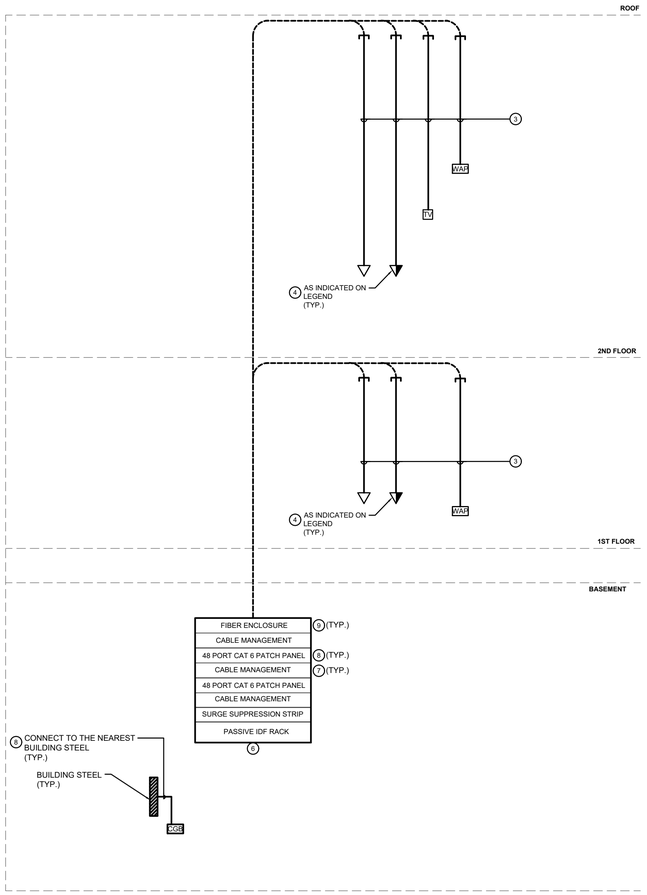
DRAWING NAME

SECOND FLOOR PLAN - POWER

DRAWN	JKW	DATE	09.30.2025
CHECKED	SMP	SCALE	AS NOTED

DRAWING NUMBER

E1.6

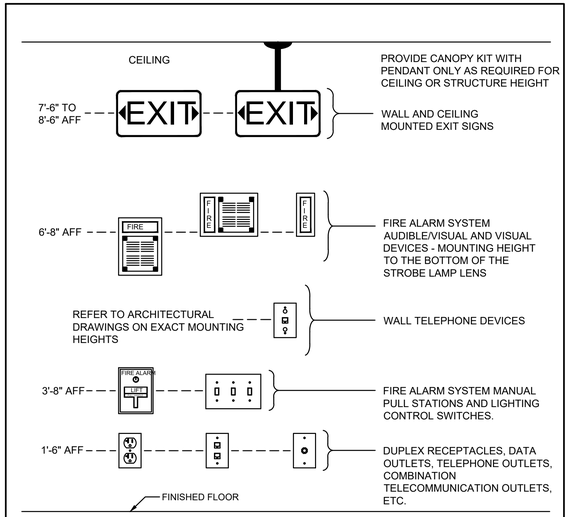


TELECOM RISER KEYED NOTES:

1. PROVIDE CAT6 48–PORT UNIVERSAL RJ45/110 PATCH PANELS AS REQUIRED FOR QUANTITY OF DATA DROPS WITH 20% SPARE CAPACITY. PROVIDE ALL INFRASTRUCTURE INCLUDING NETWORK SUPPORT RACKS, CABLE/LADDER TRAY, GROUNDING/BONDING, POWER RECEPTACLES AND PLYWOOD BACKBOARD AS REQUIRED. UPS UNITS ARE PROVIDED BY OTHERS. PROVIDE 3/4"C FIRE RATED PLYWOOD PAINTED BLACK ALL AROUND DATA ROOMS. CONTRACTOR SHALL COORDINATE WITH OWNER'S I.T. PERSONNEL FOR EXACT REQUIREMENTS PRIOR TO PURCHASING AND CONSTRUCTION.
2. CONTRACTOR SHALL COORDINATE EXACT REQUIREMENTS AND CONFIGURATION OF FLOOR BOX WITH OWNER PRIOR TO ROUGH–IN AND PURCHASING OF DEVICE. PROVIDE (2) DUPLEX RECEPTACLES, (2) DATA/(1) VOICE PORTS, (2) HDMI PORTS.
3. PROVIDE PLENUM RATED, CATEGORY 6 UTP CABLE (COLORED 'BLUE' FOR PHONE/DATA, 'GREEN' FOR SECURITY, 'YELLOW' FOR WIRELESS ACCESS POINTS) FROM OUTLET TO PATCH PANEL. '2D' DENOTES TWO DATA RJ45 JACKS AND TWO CATEGORY 6 UTP CABLES. WIRELESS ACCESS POINTS SHALL HAVE TWO DATA DROPS PER DEVICE LOCATION.
4. ELECTRICAL CONTRACTOR SHALL PROVIDE ALL HOMERUNS FROM DEVICE TO RESPECTIVE FLOOR IDF CLOSET. CONTRACTOR SHALL TERMINATE ALL HOMERUNS AT DEVICE END AND AT PATCH PANELS WITHIN IDF CLOSET. PROVIDE SERVICE LOOPS AT BOTH PATCH PANEL AND DEVICE END. PROVIDE 10–FT OF EXTRA LENGTH, LOOPED IN THE IDF CLOSET TO ALLOW FOR FUTURE ADJUSTMENT OF PATCH PANELS. CERTIFY AND TEST ALL CABLES IN ACCORDANCE WITH TIA/EIA STANDARDS. PROVIDE REPORT TO OWNER. WIRE PUNCH/TERMINATION PROTOCOL SHALL BE VERIFIED WITH OWNER FOR VOICE OVER INTERNET PROTOCOL (VOIP) PRIOR TO INSTALL. COORDINATE WITH OWNER'S I.T. PERSONNEL FOR LABELING CONVENTIONS OF JACKS AND CABLE.
5. NOT USED
6. PROVIDE 12U PASSIVE WALL MOUNTED ENCLOSURE, (1) PER FLOOR, EQUAL TO HUBBELL #HSO24. DIMENSIONS–20" DEEP AND 24" HIGH. PROVIDE MOUNTING SUPPORT AND GROUNDING TO TIA STANDARDS.
7. PROVIDE 2U CABLE MANAGEMENT, EQUAL TO HUBBELL # HM24C TYPICAL.
8. PROVIDE 48 PORT CATEGORY 6 PATCH PANELS, EQUAL TO HUBBELL # HP648 TYPICAL.
9. PROVIDE 2U, FIBER ENCLOSURE, EQUAL TO HUBBELL # FCR2U6SP WITH TWO OCSPLCD12M4 MULTI MODE FIBER SPLICE CASSETTES, AND TERMINATE ALL MULTIMODE FIBER STRANDS.

POWER RISER KEYED NOTES:

1. NEW 600A MCB, 120/240V, 1PH/3W PANELBOARD LABELED 'MDP'. EXISTING PANELBOARD LABELED 'MP' TO BE RE–FED BY NEW PANELBOARD. REMOVE EXISTING SERVICE FEEDER AND ITS ENTIRETY BACK TO SOURCE.
2. REPLACE EXISTING 200A PANEL WITH NEW 400A MCB, 120/240V, 1PH/3W PANELBOARD LABELED 'NP'. EXISTING PANELBOARD TO BE REPLACED WITH NEW.
3. COORDINATE WITH UTILITY AND OWNER FOR SCOPE OF WORK REQUIREMENTS FOR NEW SERVICE. E.C. SHALL CARRY AN ALLOWANCE OF XXX FOR UTILITY BACK CHARGES.
4. INCLUDE ALL EXCAVATION, BACKFILL, AND SITE RESTORATION.



NOTES:
1. ALL MOUNTING HEIGHTS SHALL BE MEASURED FROM THE FINISHED FLOOR TO THE CENTER OF THE DEVICE UNLESS OTHERWISE INDICATED.
2. DEVICES SHALL BE INSTALLED ON A COMMON HORIZONTAL CENTERLINE WHEN GROUPED TOGETHER.
3. ALL DEVICES SHALL BE INSTALLED AT MOUNTING HEIGHTS AS INDICATED ON THIS DETAIL UNLESS OTHERWISE NOTED ON THE PLANS.
4. ALL DEVICES SHOWN ON THIS DETAIL, MAY NOT BE PRESENT ON THIS PROJECT. THIS IS A TYPICAL DEVICE MOUNTING HEIGHT DETAIL, EACH PROJECT MAY HAVE MORE OR LESS VARIETY OF DEVICES AND SYSTEMS.

TYPICAL DEVICE MOUNTING HEIGHT DETAIL

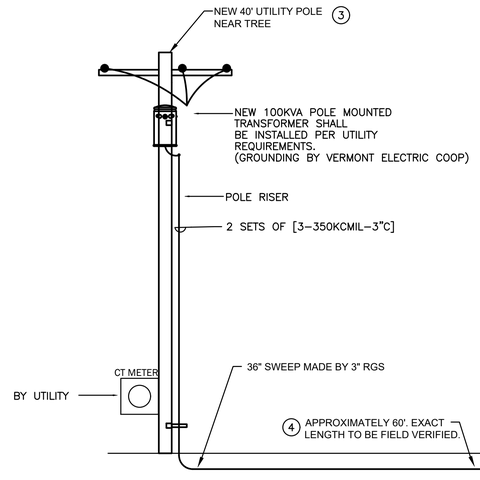
N.T.S.

FEEDER SCHEDULE – 600V MAXIMUM (COPPER)

TAG	DESCRIPTION	TAG	DESCRIPTION
15.3	3#12,#12G–3/4"C	250.3	3–250KCMIL,#4G–2 1/2"C
15.4	4#12,#12G–3/4"C	250.4	4–250KCMIL,#4G–2 1/2"C
20.3	3#12,#12G–3/4"C	300.3	3–350KCMIL,#4G–2 1/2"C
20.4	4#12,#12G–3/4"C	300.4	4–350KCMIL,#4G–3"C
30.3	3#10,#10G–3/4"C	400.3	3–500KCMIL,#3G–3"C
30.4	4#10,#10G–3/4"C	400.4	4–500KCMIL,#3G–3"C
40.3	3#8,#10G–3/4"C	500.3	2 SETS OF 3–250KCMIL,#2G–2 1/2"C
40.4	4#8,#10G–3/4"C	500.4	2 SETS OF 4–250KCMIL,#2G–2 1/2"C
50.3	3#6,#10G–3/4"C	600.3	2 SETS OF 3–350KCMIL,#1G–2 1/2"C
50.4	4#6,#10G–3/4"C	600.4	2 SETS OF 4–350KCMIL,#1G–3"C
60.3	3#4,#10G–1"C	800.3	2 SETS OF 3–500KCMIL,#1/0G–3"C
60.4	4#4,#10G–1 1/4"C	800.4	2 SETS OF 4–500KCMIL,#1/0G–3 1/2"C
70.3	3#4,#8G–1"C	900.3	3 SETS OF 3–350KCMIL,#2/0G–2 1/2"C
70.4	4#4,#8G–1 1/4"C	900.4	3 SETS OF 4–350KCMIL,#2/0G–3"C
80.3	3#3,#8G–1 1/4"C	1000.3	3 SETS OF 3–400KCMIL,#2/0G–2 1/2"C
80.4	4#3,#8G–1 1/4"C	1000.4	3 SETS OF 4–400KCMIL,#2/0G–3"C
90.3	3#2,#8G–1 1/4"C	1200.3	4 SETS OF 3–350KCMIL,#3/0G–2 1/2"C
90.4	4#2,#8G–1 1/4"C	1200.4	4 SETS OF 4–350KCMIL,#3/0G–3"C
100.3	3#2,#8G–1 1/4"C	1600.3	5 SETS OF 3–500KCMIL,#4/0G–3"C
100.4	4#2,#8G–1 1/4"C	1600.4	5 SETS OF 4–500KCMIL,#4/0G–3 1/2"C
125.3	3#1,#6G–1 1/4"C	2000.3	6 SETS OF 3–500KCMIL,1–250KCMILG–3"C
125.4	4#1,#6G–1 1/4"C	2000.4	6 SETS OF 4–500KCMIL,1–250KCMILG–3 1/2"C
150.3	3#1/0,#6G–1 1/2"C	2500.3	7 SETS OF 3–500KCMIL,1–350KCMILG–3"C
150.4	4#1/0,#6G–1 1/2"C	2500.4	7 SETS OF 4–500KCMIL,1–350KCMILG–3 1/2"C
175.3	3#2/0,#6G–2"C	3000.3	8 SETS OF 3–500KCMIL,1–400KCMILG–3"C
175.4	4#2/0,#6G–2"C	3000.4	8 SETS OF 4–500KCMIL,1–400KCMILG–3 1/2"C
200.3	3#3/0,#6G–2"C	4000.3	11 SETS OF 3–500KCMIL,1–500KCMILG–3"C
200.4	4#3/0,#6G–2"C	4000.4	11 SETS OF 4–500KCMIL,1–500KCMILG–3 1/2"C
225.3	3#4/0,#4G–2"C		
225.4	4#4/0,#4G–2 1/2"C		

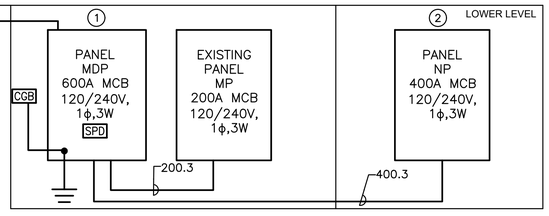
TELECOMMUNICATIONS RISER

N.T.S.



POWER RISER

N.T.S.



CD SET
FOR BIDDING 09.30.2025

R. Edwards & Co.
ARCHITECTS + PRESERVATIONISTS
52 State St., 2nd Floor | Montpelier, VT 05602
(802) 232–2628 | info@redwardsandcompany.com
www.redwardsandcompany.com

SEAL
STATE OF VERMONT SHAWN PROULX NO. 134688 ELECTRICAL LICENSED PROFESSIONAL ENGINEER

PROJECT
Alice Ward Library
27 Park St.
Canaan, VT 05903

PROJECT NUMBER
530597

CONSULTANTS
DuBois & King inc.
Building Services Division
Bedford, NH
MEP/FP Engineers
603.444.6578
Project # 530597

RELEASE

RELEASE DATE

RELEASE + REVISION LOG

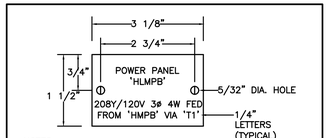
MARK	DESCRIPTION	DATE

PROJECT NORTH
N

DRAWING NAME
ELECTRICAL DETAILS

DRAWN JKW DATE 09.30.2025
CHECKED SMP SCALE AS NOTED

DRAWING NUMBER
E5.1

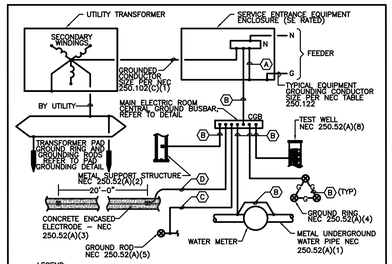


NOTES:

1. REFER TO SPECIFICATIONS FOR ADDITIONAL NAMEPLATE REQUIREMENTS.
2. NAMEPLATE TO 1/16" PLASTIC WITH CENTER LAMINATION.
3. SECURE NAMEPLATE TO SURFACES WITH (2) FLAT HEAD BRASS SCREWS.
4. 208Y/120 VOLT PANELBOARDS SHALL HAVE BLUE FACE PLATE WITH WHITE ENGRAVED LETTERS.
5. 480Y/277 VOLT PANELBOARDS SHALL HAVE ORANGE FACE PLATE WITH BLACK ENGRAVED LETTERS.
6. LIFE SAFETY PANELBOARDS SHALL HAVE RED FACE PLATE WITH WHITE ENGRAVED LETTERS.

TYPICAL NAMEPLATE DETAIL

N.T.S.



LEGEND:

(A) SIZE BONDING JUMPER PER NEC 250.28, TABLE 250.102(C)(1)

(B) SIZE PER NEC TABLE 250.66

(C) SIZE PER NEC 250.52 (A)(5)

(D) SIZE PER NEC 250.52 (A)(3). BARE COPPER CONDUCTOR NOT SMALLER THAN #4 AWG.

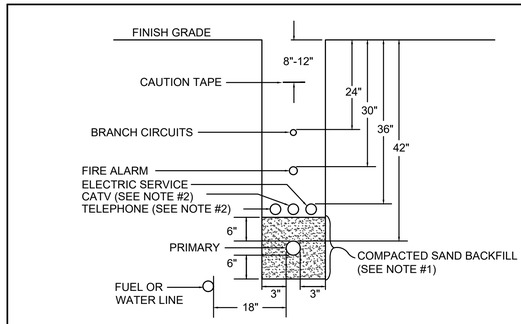
NOTES:

1. ALL GROUNDING SHALL BE IN ACCORDANCE WITH NEC 250.
2. GROUND ELECTRODE SYSTEM SHALL BE INSTALLED IN ACCORDANCE WITH NEC 250.53.

EXAMPLES OF ELECTRODES PERMITTED BY CODE ARE SHOWN HERE. NOT ALL ARE REQUIRED. IF INSTALLED AS PART OF THE BUILDING CONSTRUCTION, GROUNDING ELECTRODES (A)(1–3) SHALL BE USED AS COMPONENTS OF THE GROUNDING ELECTRODE SYSTEM.

UTILITY SERVICE ENTRANCE GROUNDING DETAIL

N.T.S.

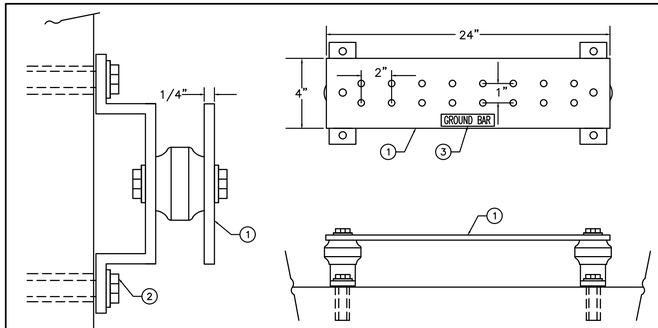


NOTES:

1. ALL CONDUITS SHALL BE ENCASED IN SELECT SAND BACKFILL, WITH THE SAME CLEARANCE DIMENSIONS AS SHOWN AROUND THE PRIMARY CONDUIT. SELECT SAND BACKFILL SHALL CONSIST OF FINE GRANULAR MATERIAL OF WHICH 100% SHALL PASS THROUGH A 1/4" SIEVE. BACKFILL SHALL BE THOROUGHLY COMPACTED IN 6 INCH LAYERS.
2. TELEPHONE, CATV AND FIRE ALARM CONDUITS MAY RUN IN THE SAME TRENCH AS ELECTRIC SERVICE CONDUITS AND/OR BRANCH CIRCUIT CONDUITS PROVIDING A MINIMUM OF 12 INCH HORIZONTAL SEPARATION IS MAINTAINED. IF RUN IN THE SAME TRENCH AS PRIMARY CONDUITS A MINIMUM OF 12 INCHES BOTH HORIZONTAL AND VERTICAL SEPARATION SHALL BE MAINTAINED. SEE NOTE #1 ABOVE.
3. ALL CONDUIT BENDS OF 45° OR MORE SHALL BE GALVANIZED RIGID STEEL. THE FIRST 10 FOOT SECTION OF CONDUIT BOTH HORIZONTAL AND VERTICAL AT UTILITY POLES, TRANSFORMER PADS AND AT BUILDING CONDUIT ENTRANCES, SHALL BE GALVANIZED RIGID STEEL. PROVIDE 3/8" NYLON PULL ROPE IN ALL EMPTY CONDUITS.
4. ALL NONMETALLIC CONDUIT AND FITTINGS SHALL BE ELECTRICAL GRADE, SCHEDULE 80 PVC AND SHALL CONFORM TO THE APPLICABLE SECTIONS OF NEMA TC2-1990 AND BE UL LISTED. ONLY GRAY COLORED CONDUIT WILL BE ACCEPTED. ANY PVC CONDUIT NOT HAVING THE PROPER NEMA OR UL MARKINGS WILL NOT BE ACCEPTED. ALL STEEL CONDUITS SHALL CONFORM TO ASTM A120 AND BE RIGID GALVANIZED STEEL. ALL PVC CONDUITS MUST BE CEMENTED. STEEL FITTINGS SHALL BE SEALED WITH COMPOUND.
5. ALL CONDUIT SYSTEMS, SHOWN ON THIS DETAIL, MAY NOT BE PRESENT ON THIS PROJECT. THIS IS A TYPICAL CONDUIT TRENCH DETAIL, EACH INDIVIDUAL PROJECT MAY HAVE MORE OR LESS CONDUIT SYSTEMS.

TYPICAL CONDUIT TRENCH DETAIL

N.T.S.



NOTES:

1. GROUND BAR WITH STAINLESS STEEL MOUNTING BRACKETS AND STANDOFF INSULATORS – 1/4" X 4" X 24" COPPER GROUND BAR WITH 7/16" HOLES SPACES 1" VERTICALLY AND 2" HORIZONTALLY.
2. PROVIDE WALL ANCHORS WITH MOUNTING HARDWARE APPROPRIATE TO WALL CONSTRUCTION. MINIMUM SIZE HARDWARE SHALL BE 3/8".
3. NAMEPLATE CGB – GREEN WITH 3/8" LETTERS ''GROUND BAR''.

CENTRAL GROUND BAR (CGB) DETAIL

N.T.S.

CD SET
FOR BIDDING
09.30.2025

R. Edwards & Co.
ARCHITECTS + PRESERVATIONISTS
52 State St., 2nd Floor | Montpelier, VT 05602
(802) 232-2628 | info@redwardsandcompany.com
www.redwardsandcompany.com

SEAL

PROJECT
Alice Ward Library

27 Park St.
Canaan, VT 05903

PROJECT NUMBER
530597

CONSULTANTS

DuBois & King inc.
Building Services Division
Bedford, NH
MEP/FP Engineers
603.444.6578
Project # 530597

RELEASE

RELEASE DATE

RELEASE + REVISION LOG

MARK	DESCRIPTION	DATE

PROJECT NORTH

DRAWING NAME

ELECTRICAL DETAILS

DRAWN	JKW	DATE	09.30.2025
CHECKED	SMP	SCALE	AS NOTED

DRAWING NUMBER

E5.2

LIGHT FIXTURE SCHEDULE

TYPE	DESCRIPTION	MANUFACTURER	MODEL	LUMENS	TEMP (K)	WATTAGE	VOLTAGE	NOTES
D	6IN Adjustable Wafer	JUNO LIGHTING	WF6 ALO20 SWW5 90CRI MVOLT 2700K	1014	2700	12.5	120	
EBU	Emergency Battery Unit	LITHONIA	ELM4L	-	-	-	120	
L4	GR20240927-09-03-47-ZP5INCH PRISM-HE55-4FT	LUMENWERX	SHLU3S-D-SMPO-SW-90CRI-750LMF-35K-4FT	3000	3500	26.4	120	
L8	GR20240927-09-03-47-ZP5INCH PRISM-HE55-4FT	LUMENWERX	SHLU3S-D-SMPO-SW-90CRI-750LMF-35K-4FT	3000	3500	52.8	120	
R1	Decorative Ring Light	TBD	TBD	TBD	TBD	TBD	120	
R2	Two Wet Location Remote Aimable Battery Powered LED Emergency Lighting Heads	LITHONIA	ERE-T-WP-SQ	-	-	2	120	
S	Contractor LED Single Strip,48", 4000 Lumens, 120-347V, 4000K, 80 CRI	LITHONIA	CSS L48 4000LM UVOLT 40K 80 CRI	4819	4000	37.89	120	
S1	Decorative Stair Light	TBD	TBD	TBD	TBD	TBD	120	
ST	Luminaire LED Dim. Vandal Resistant surface mount 1x2'.	LUMINAIRE LED	TSL9 24IN 25W FAM7 40K OP	16	4000	26.3	120	
SW	Slot 4 Wall Indirect/Direct 8FT90CRI 35K 800LMF Lambertian I1000LMF Lambertian Flush Lens	MARK ARCHITECTURAL LIGHTING	S4WID 8FT 90CRI 35K 800LMF STD I1000LMF AS FLL	5743	3500	50.09	120	
UC	Under Cabinet Light	KELVIX	EZ-502-I-TBD-35K-TBD	TBD	3500	TBD	120	
V	Vanity Light	BROWNLEE	5165-24-BN-H13-35K	1663	3500	13	120	
W1	Decorative Wall Pack	LUMENWERX	UBIW-DI-HLO-TIO-SW-90-500-750-35-4FT	5002	3500	48.49	120	WITH PHOTOCELL
W2	Exterior Wall Pack	RAB	WPLED10N	1287	4000	10	120	WITH PHOTOCELL
X1	Exit Sign	LITHONIA	ECRG-HO-SQ-M6	-	-	4	120	WITH REMOTE HEADS

PANEL 'NP', 400 AMP, 120/240 VOLT, 1-PHASE, 3-WIRE & GND

INTERRUPTING CAPACITY: 10,000 AMPS RMS SYM MAIN: 225A M.C.B. MOUNTING: SURFACE

LOAD DESCRIPTION	CB	CIRC NO.	kVA LOAD A	kVA LOAD B	CIRC NO.	CB	LOAD DESCRIPTION
BASEMENT LTG	1-20	1	0.45	0.72	2	1-20	RCPTS
BASEMENT EXT LTG	1-20	3	0.04	0.72	4	1-20	RCPTS
FIRST FLOOR LTG	1-20	5	0.50	0.18	6	1-20	RCPTS
RCPTS	1-20	7	0.18	0.54	8	1-20	RCPTS
RCPTS	1-20	9	0.54	0.36	10	1-20	RCPTS
RCPTS	1-20	11	0.18	0.18	12	1-20	RCPTS
RCPTS	1-20	13	0.36	0.18	14	1-20	REFRIGERATOR RCPT*
RCPTS	1-20	15	0.54	0.72	16	1-20	RCPTS
RCPTS	1-20	17	0.72	0.18	18	1-20	RCPTS
EH-2	2-20	19	1.50	0.76	20	2-20	EH-1
		21	1.50	0.76	22		
SPACE	1-20	23	0.00	2.04	24	2-20	HP-2
HP-1	2-20	25	2.04	2.04	26		
		27	2.04	3.00	28		
FC-1	2-20	29	0.28	3.00	30	2-20	HP-2
		31	0.28	0.28	32		FC-2
FC-3	2-20	33	0.28	0.28	34		
		35	0.28	1.50	36	2-20	EH-3
EH-4	2-20	37	0.76	1.50	38		
		39	0.76	1.50	40	2-20	EDH-2
EDH-1	2-20	41	0.50	1.50	42		
		43	0.50	1.50	44	2-20	EDH-3
WH-1	2-20	45	2.00	1.50	46		
		47	2.00	0.51	48	1-20	FIRST FLOOR LTG
SECOND FLOOR LTG	1-20	49	0.50	0.08	50	1-20	FIRST FLOOR EXT. LTG
SECOND FLOOR LTG	1-20	51	0.50	0.18	52	1-20	EXTERIOR RCPT
RCPTS	1-20	53	0.54		54	1-20	PIT RCPT
RCPTS	1-20	55	0.18		56	1-20	EXTERIOR RCPT
RANGE	2-20	57	16.67		58	1-20	ELEVATOR LIFT
		59	16.67	0.50	60	1-20	STAIR LTG
RANGE	2-20	61	2.08		62	1-20	SPARE
		63	2.08		64	1-20	SPARE
SPARE	1-20	65			66	1-20	SPARE
SPARE	1-20	67			68	1-20	SPARE
SPARE	1-20	69			70	1-20	SPARE
SPARE	1-20	71			72	1-20	SPARE
SPARE	1-20	73			74	1-20	SPARE
SPARE	1-20	75			76	1-20	SPARE
SPARE	1-20	77			78	1-20	SPARE
SPARE	1-20	79			80	1-20	SPARE
SPARE	1-20	81			82	1-20	SPARE
SPARE	1-20	83			84	1-20	SPARE

PHASE A 42.00 kVA PHASE B 41.66 kVA TOTAL LOAD 83.65 kVA

NOTES: CIRCUITS DENOTED WITH A *** ARE TO BE GFCI TYPE BREAKERS.

PANEL 'MDP', 600 AMP, 120/240 VOLT, 1-PHASE, 3-WIRE & GND

INTERRUPTING CAPACITY: 35,000 AMPS RMS SYM MAIN: 225A M.C.B. MOUNTING: SURFACE

LOAD DESCRIPTION	CB	CIRC NO.	kVA LOAD A	kVA LOAD B	CIRC NO.	CB	LOAD DESCRIPTION
EXISTING MP PANEL	2-200	1	18.00	42.00	2	2-400	PANEL NP
		3	18.00	41.66	4		
SPARE	1-20	5	0.00	0.00	6	1-20	SPARE
SPARE	1-20	7	0.00	0.00	8	1-20	SPARE
SPARE	1-20	9	0.00	0.00	10	1-20	SPARE
SPARE	1-20	11	0.00	0.00	12	1-20	SPARE
SPACE		13			14		SPACE
SPACE		15			16		SPACE
SPACE		17			18		SPACE
SPACE		19			20		SPACE
SPACE		21			22		SPACE
SPACE		23			24		SPACE
SPACE		25			26		SPACE
SPACE		27			28		SPACE
SPACE		29			30		SPACE
SPACE		31			32		SPACE
SPACE		33			34		SPACE
SPACE		35			36		SPACE
SPACE		37			38		SPACE
SPACE		39			40		SPACE
SPACE		41			42		SPACE

PHASE A 60.00 kVA PHASE B 59.66 kVA TOTAL LOAD 119.65 kVA SECTION 1

NOTES:

MECHANICAL & PLUMBING EQUIPMENT ELECTRICAL CONNECTION SCHEDULE

EQUIPMENT TAG	HP	AMPS (MCA)	VOLT	PHASE	DEVICE	PANEL CIRCUIT No.	CIRCUIT BREAKER AMP	POLE	GF	ST	BRANCH CIRCUIT	REMARKS
HP-1		17.00	240	1	PROVIDE WP DISCONNECT	NP-25,27	25	2			2-#10, 1-#10, 3/4"C	
HP-2		17.00	240	1	PROVIDE WP DISCONNECT	NP-24,26	25	2			2-#10, 1-#10, 3/4"C	
HP-3		25.00	240	1	PROVIDE WP DISCONNECT	NP-28,30	30	2			2-#10, 1-#10, 3/4"C	
FC-1		2.30	240	1	PROVIDE DISCONNECT	NP-29,31	15	2			2-#12, 1-#12, 3/4"C	
FC-2		2.30	240	1	PROVIDE DISCONNECT	NP-32,34	15	2			2-#12, 1-#12, 3/4"C	
FC-3		2.30	240	1	PROVIDE DISCONNECT	NP-33,35	15	2			2-#12, 1-#12, 3/4"C	
EH-1		6.30	240	1	PROVIDE DISCONNECT	NP-20,22	15	2			2-#12, 1-#12, 3/4"C	
EH-2		12.50	240	1	PROVIDE DISCONNECT	NP-19,21	20	2			2-#12, 1-#12, 3/4"C	
EH-3		12.50	240	1	PROVIDE DISCONNECT	NP-36,38	20	2			2-#12, 1-#12, 3/4"C	
EH-4		6.30	240	1	PROVIDE DISCONNECT	NP-37,39	15	2			2-#12, 1-#12, 3/4"C	
EDH-1		4.20	240	1	PROVIDE DISCONNECT	NP-41,43	20	2			2-#12, 1-#10, 3/4"C	
EDH-2		12.50	240	1	PROVIDE DISCONNECT	NP-40,42	25	2			2-#10, 1-#10, 3/4"C	
EDH-3		12.50	240	1	PROVIDE DISCONNECT	NP-44,46	25	2			2-#10, 1-#10, 3/4"C	
EF-1		0.11	120	1	PROVIDE DISCONNECT	NP-48	15	1			2-#12, 1-#12, 3/4"C	
WH-1		16.67	240	1	PROVIDE DISCONNECT	NP-45,47	20	2			2-#12, 1-#12, 3/4"C	

CD SET
FOR BIDDING 09.30.2025

R. Edwards & Co.
ARCHITECTS + PRESERVATIONISTS
52 State St., 2nd Floor | Montpelier, VT 05602
(802) 232-2628 | info@redwardsandcompany.com
www.redwardsandcompany.com

SEAL

PROJECT
Alice Ward Library

27 Park St.
Canaan, VT 05903

PROJECT NUMBER
530597

CONSULTANTS

DuBois & King inc.
Building Services Division
Bedford, NH
MEP/FP Engineers
603.444.6578
Project # 530597

RELEASE

RELEASE DATE

RELEASE + REVISION LOG

MARK	DESCRIPTION	DATE

PROJECT NORTH

DRAWING NAME

ELECTRICAL SCHEDULES

DRAWN JKW DATE 09.30.2025
CHECKED SMP SCALE AS NOTED

DRAWING NUMBER

E6.1