

Cole Hall Expansion
Request for Proposals for
Construction Management Services as Constructor
January 12, 2024

Project Overview

The Town of Shaftsbury, VT intends to construct a building addition and limited renovations to their Town Office Building, known as Cole Hall. The main purpose of the addition and renovations is to create a more accessible building for all people, including those with disabilities. The new addition will include a new fully accessible main entrance, lobby, elevator, and stairs. Renovations to the existing building could include repurposing existing HC lift and stair areas, minor wall layout revisions, new building-wide HVAC system, window restoration and new storm windows, main entry historic stone steps rebuilding and new handrails, and other miscellaneous minor revisions and improvements. The extent of renovation to the existing building will be dependent on cost and available funding.

The existing circa 1834 two-story gothic revival stone building exterior includes wood-framed steeple and roof structure, slate roofing, stone walls, painted wood doors, windows, and trim, and remains mostly unchanged apart from the revision of the top section of the steeple, and the added east side wood construction covered entry stair and ramp structure. The interior has been substantially changed from its original one-story single high-ceiling cathedral assembly space to a two-story office building with a bunch of smaller rooms.

The existing roof and steeple structure was significantly structurally stabilized and reinforced in the 1990's, and has recently been inspected by a structural engineer who found the structure to be in good repair with no indication of distress or structural deficiencies.

The Town of Shaftsbury is seeking Construction Management Services for the construction of the new two-story addition of approximately 900 SF (refer to attached preliminary drawings), including the demolition of the existing wood-framed covered entrance ramp and stair, and renovations of the existing building including removal of the existing wheelchair platform lift and conversion of the space for other uses, removal of the interior stair and conversion of the space for other uses, reconfiguration of some partitions in the first floor to make the spaces more functional and more accessible, building HVAC improvements, window restoration and new storm windows, and other possible minor revisions. The Construction Manager (CM) will become a member of the project team including the Owner, the Owner's Architect, Engineers, and other consultants. Preconstruction services are expected to commence immediately upon award of contract. In submitting proposals, please address all the items and include any relevant information regarding your firm and the proposal.

The Town is looking for a CM firm experienced with comparable construction projects of similar size and complexity. Proposals will be evaluated based on experience, references, proposed management team, organization and approach to the project, general conditions costs, schedule, and fees.

The budget for the project is dependent on approval of the Town’s funding opportunities, however the Owner has set a target budget of \$750,000 for construction costs. The scope of the project and budget will ultimately be established by the Owner with the help of the CM, Architect, and other members of the Team, during the preconstruction phase.

Project Team

The Construction Manager (CM) will become a member of the project team including the Owners, Architect, and Engineers. The project team includes the following:

Owner:	Town of Shaftsbury Vermont
Architect:	Goldstone Architecture
Civil Engineers:	MSK Engineers
Structural Engineer:	SB Engineering
Mechanical, Electrical, Plumbing Eng.	WV Engineering

Financing

The Owner anticipates the project will include a variety of funding sources including ARPA, MERP, State Accessibility Grant, and others. The CM will be required to comply with all requirements, terms, and conditions set forth by any and all finding sources.

Preliminary Project Timeline

Friday, January 12, 2024	CM RFP available
Wednesday, January 24, 2024	CM RFP Questions Due
Friday, February 2, 2024	CM Proposals due by 3 PM
Thursday, February 8, 2024	CM Selection and Notification
Monday, February 12, 2024	CM Pre-Construction Begins
Friday, March 1, 2024	CM First Construction Cost Estimate Due
June, 2024	Construction begins

CM Schedule

The Construction Manager’s pre-construction services will begin in early February, consulting with the design team to aid with major decisions regarding building and systems. A full construction cost estimate based on the Schematic Design drawings is anticipated by March 1st, 2024.

CM Scope of Work

Pre-Construction

The selected firm will be expected to provide the following preconstruction and bid services:

1. Attend initial team meeting.
2. Review existing design documentation and provide written comments, observations and specific recommendations regarding construction cost, schedule, coordination, omissions, and constructability. Meet to review findings and to plan for project moving forward.
3. Develop a timeline, in consultation with Owner and Architect, for completion of design and construction phases. The period of time in which the Owner will be unable to use the facility is of particular importance to the Owner and shall be addressed in the CM's schedule.
4. Attend a maximum of (4) additional in-person design team meetings to review progress, as well as conference call meetings as necessary.
5. Provide updated construction cost estimates and Value Engineering proposals to both the Owner and Architect as follows:
 - a. At the completion of Schematic Design
 - b. At Completion of Design Development drawings.
 - c. 90% completion of Construction Documents.
 - d. Final GMP.
6. Advise the Owner and Architect of construction methods, materials, and any trade coordination or permit related issues.
7. Offer Value Engineering suggestions and guidance at all stages of pre-construction.
8. Prepare bid packages in coordination with the Architect.
9. Identify and advise on long lead time material items, and availability meeting funding requirements.
10. Organize responsibilities and workflow/phasing/staging projections.
11. Solicit subcontract bidders; prepare bid requests; assess proposals in consultation with the Owner and Architect.
12. Award Subcontracts; execute and administer all required insurance and bond information.

Construction Period General Services and Requirements

The form of contract shall be the AIA Document A133 Standard Form of Agreement Between the Owner and Construction Manager as Constructor. Following the bid period and upon establishing and agreed upon project budget, the A133 contract shall amended using the A133 Exhibit A Guaranteed Maximum Price (GMP) Amendment. The General Conditions of the contract shall be the AIA A201 General Conditions of the Contract for Construction, latest edition. These documents may be amended by the Owner prior to finalizing.

1. The Construction Manager must review subcontractor bids with the Design Team before finalizing sub-contracts.

2. Solicitation of three (3) bids, at minimum, will be required for all aspects of the work from qualified subcontractors. If the CM intends to bid on any work to be performed by his/her own forces, three bids from qualified subcontractors must be obtained and all bids submitted directly to the architect in sealed envelopes. All subcontractors shall be subject to the acceptance of the Architect and Owner. In the event that the CM is selected by the Owner to perform a scope of work, the CM's work will be completed under the open book terms of the CM contract.
3. All conditions applicable to the Construction Manager shall apply to the subcontractors.
4. Wage Rates. The CM and all subcontractors are required to meet Davis Bacon wage regulations for commercial construction and associated reporting requirements including certified payroll.
5. The CM will comply with all required reporting requirements based on the funders' requirements.
6. All work must be in accordance with federal, state and local requirements and regulations.
7. 100% of any savings (remaining contingency) in the GMP at the time of final payment shall accrue to the Owner.

Proposal Submission Requirements

Please provide response to the following items in a clear fashion and labeled as noted below:

Contact Information

- A. Company Name, Address, Phone & Fax Numbers, Contact Person & Associated E-mail Address.

References, Proposed Team and Coordination

- B. Provide experience and a minimum of three references from projects of similar size and type completed in the past five years.
- C. Provide your proposed construction management team including, but not necessarily limited to company principles, project manager, project engineer, lead estimator, superintendent, support staff, etc. Provide resumes, project experience and a minimum of three references from projects of similar size for each. The proposed team must be available if your firm is selected to interview.

Fees

- D. Confirm the total costs of preconstruction services as defined above or may be required to reach the GMP construction costs.
- E. Provide a fee proposal for the CM Fee as a percentage of construction cost.
- F. Provide a fee proposal for any and all General Condition costs as it relates to project cost and duration.
- G. Confirm what estimating contingency percentage would be anticipated in the final GMP and what factors are considered in making this determination.

- H. Confirm the overhead and profit fee percentage to be applied to additive and deductive change orders.
- I. Provide a list of rental rates and hourly rates, including small tools, travel & vehicle expense for the following: Project Managers, Superintendent, Foreman, Carpenters, Laborers, and any other staff that may be involved in the project.

Company and General Information

- J. List the names and contract amounts of construction projects presently under contract with your firm and anticipated to be under contract during the duration of this project. Note those that are bonded or have letters of credit and for what amounts.
- K. Explain your approach to value engineering during the design process especially as related to systems and materials choice. Include example(s) of VE from similar project(s).
- L. Describe your experience and approach to constructing additions to historic buildings. Provide specific examples from recent projects.
- M. Describe your approach to maintaining accurate record drawings and project information, and the preparation of Operating & Maintenance Manuals. If construction project management software or cloud service is provided, what method will you use?
- N. Describe your firm's approach to on-site safety and provide a current, written copy of your Experience Modification Rate signed by your insurer.
- O. Provide indication of the historical accuracy of your estimating and scheduling activities.
- P. List all instances in last 10 years in which your firm was party to a lawsuit out of a construction contract.

General Information and Construction Management Proposal Submission

The **DEADLINE** for the proposal is Friday, February 2, 2024, by 3 PM. Proposals should be submitted by email to Jack A Byer at JByer@GoldstoneArchitecture.com and David Kiernan at administrator@shaftsburyvt.gov. Any questions should be directed to Jack A. Byer; JByer@GoldstoneArchitecture.com, 802-753-7469. All questions must be asked prior to end of business on Wednesday, January 24, 2024.

1. The development team assumes no responsibility or liability for any cost incurred by applicants in responding to this RFP.
2. The development team reserves the right to reject any proposal for any reason.
3. Candidates will be evaluated on the following categories:
 - a. All fees requested above including, but not limited to, O&P, general conditions, preconstruction services, and change order mark-up.
 - b. Experience with similar projects.
 - c. Proposed project team.
 - d. References.
 - e. General information.
 - f. Interview.

Marketing materials being provided should be added as a supplement to the submission requirements and at the end of the submission.

Attached Documentation

1. Cole Hall Existing Conditions Drawings; Goldstone Architecture, 9/11/23
2. Cole Hall Architectural Preliminary SD Drawings; Goldstone Architecture, 1/5/24.
3. Cole Hall Mechanical and Plumbing Preliminary SD Drawings; WV Engineering, 11/10/23
4. Cole Hall Electrical Preliminary Schematic Report; WV Engineering, 11/16/23

END OF RFP

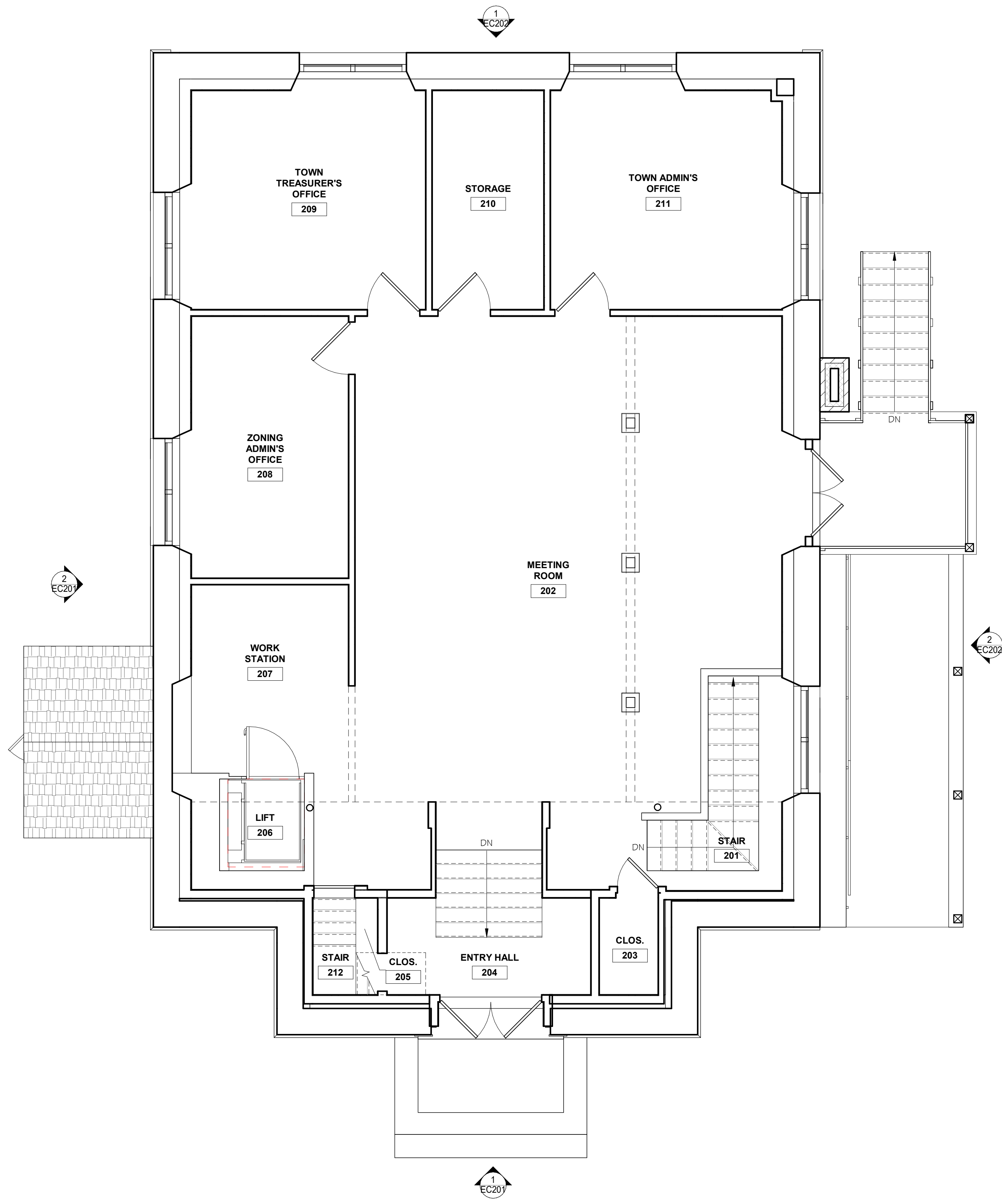
MARK	DATE	DESCRIPTION

PRELIMINARY
 NOT FOR CONSTRUCTION

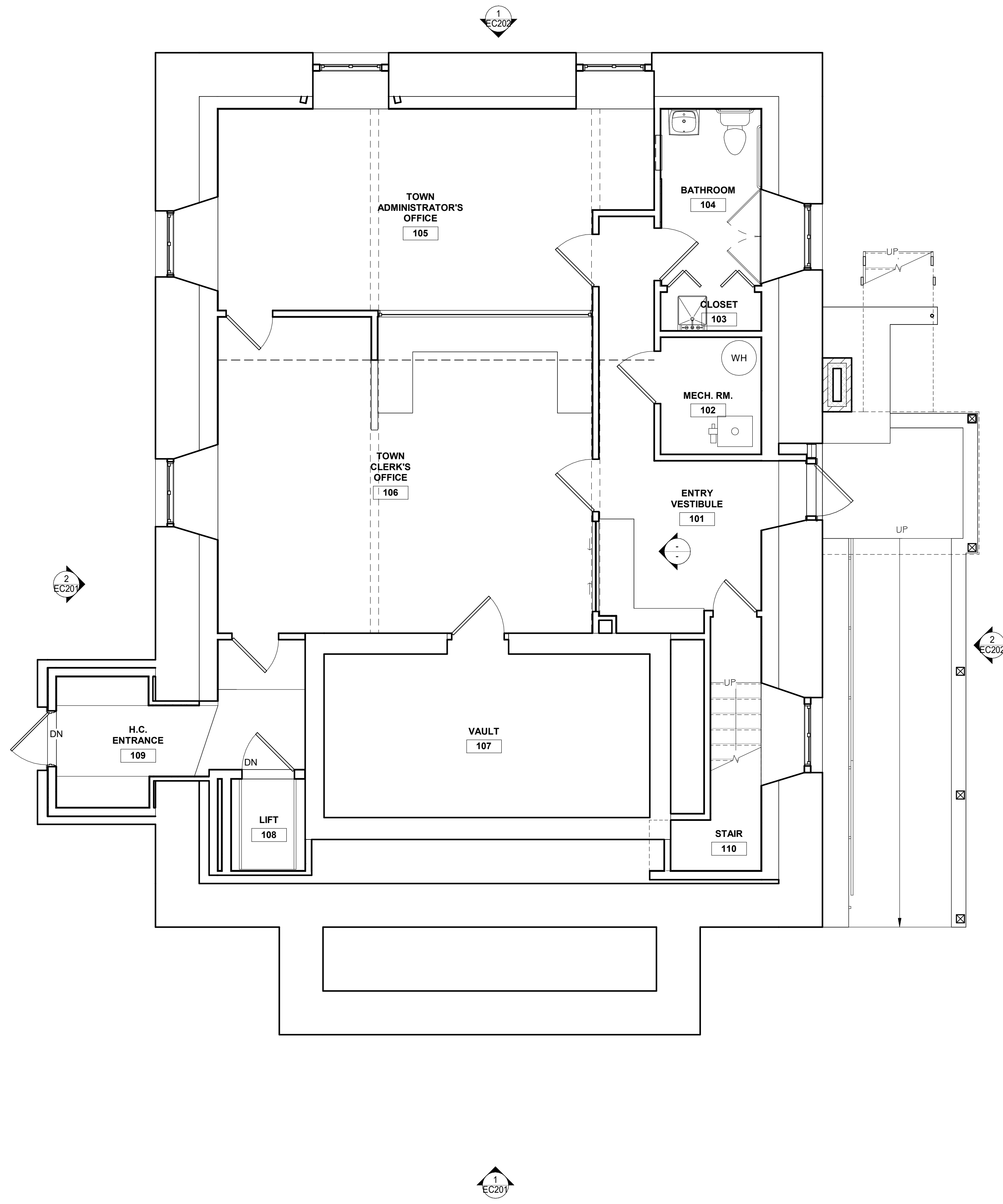
PROJECT NUMBER: 2020-09
 DATE: 09/11/2023
 DRAWN BY: EB
 CHECKED BY: JB

EXISTING FLOOR PLANS

EC101



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



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



GOLDSTONE ARCHITECTURE
150 DEPOT STREET
P.O. BOX 139
BENNINGTON, VERMONT 05201

(802) 753-7469



CONSULTANTS

PROJECT

COLE HALL

187 EAST STREET
SHAFTSBURY, VT
05262

PHASE: EXISTING CONDITIONS

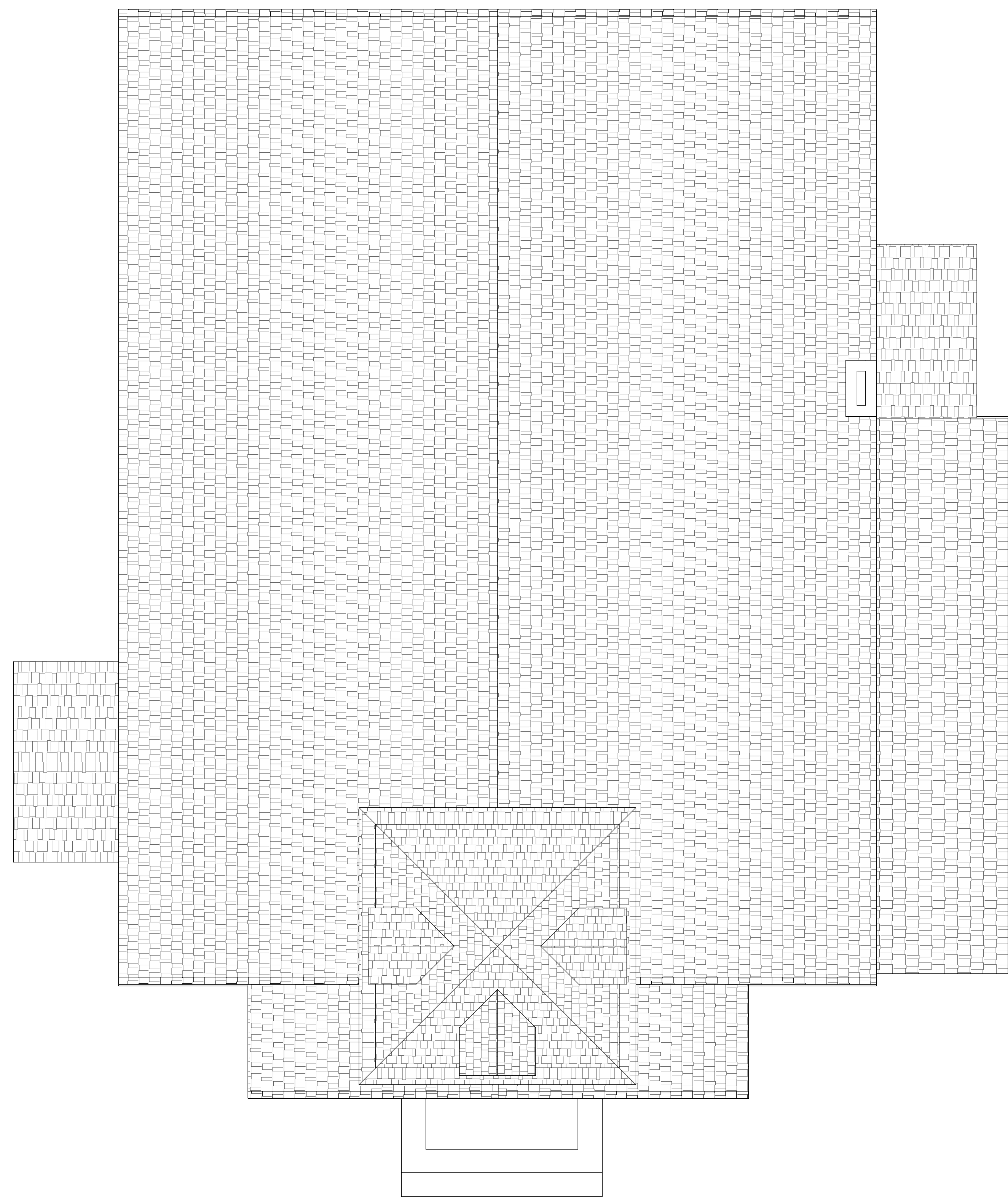
MARK	DATE	DESCRIPTION

PRELIMINARY
NOT FOR CONSTRUCTION

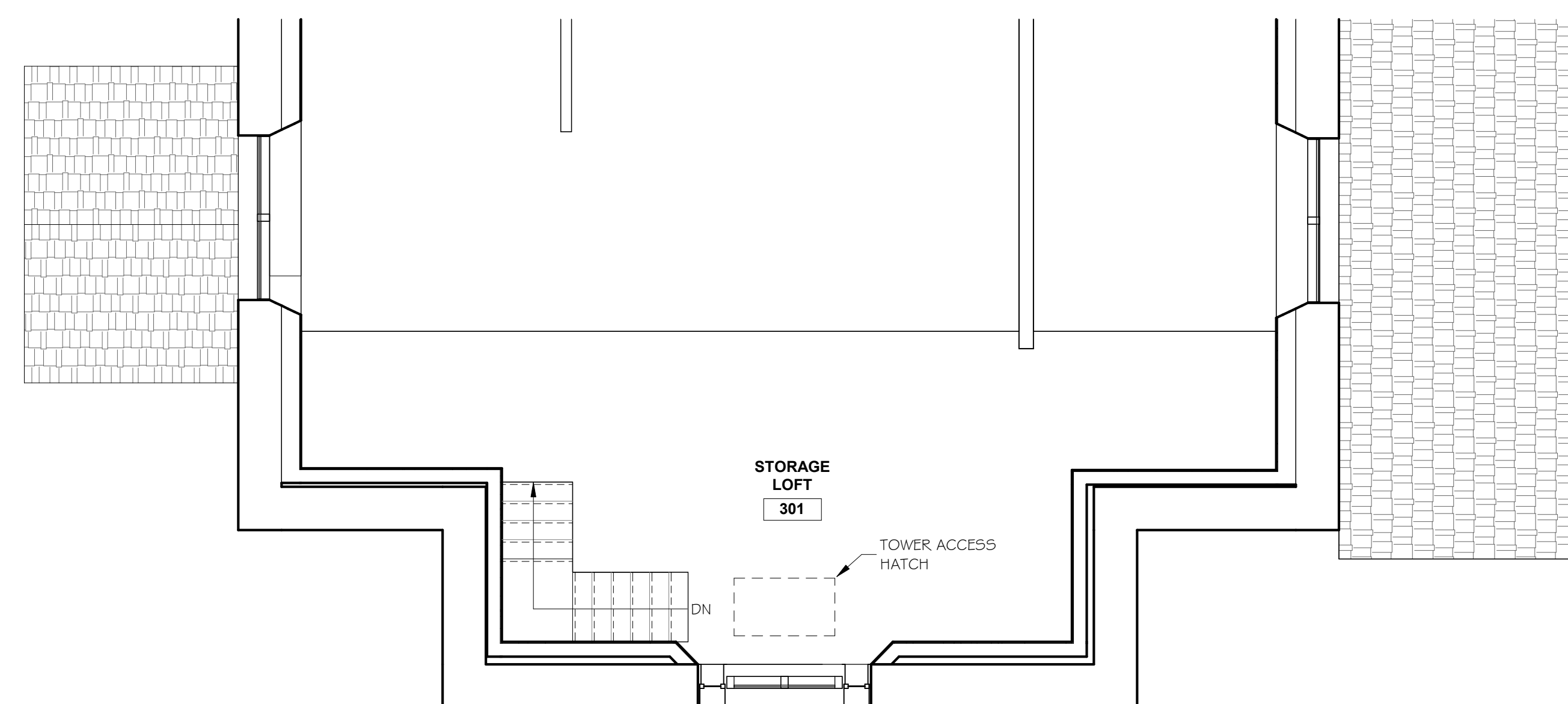
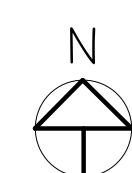
PROJECT NUMBER: 2020-09
DATE: 09/11/2023
DRAWN BY: EB
CHECKED BY: JB

MEZZANINE AND ROOF PLANS

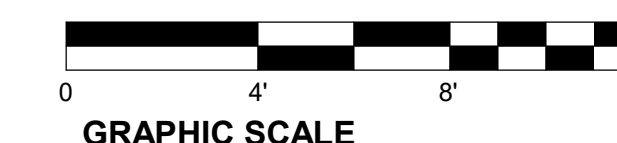
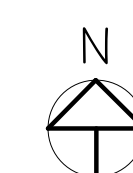
EC102



2 EXISTING ROOF PLAN
1/4" = 1'-0"



1 EXISTING THIRD FLOOR PLAN
1/4" = 1'-0"



GOLDSTONE ARCHITECTURE
150 DEPOT STREET
P.O. BOX 139
BENNINGTON, VERMONT 05201
(802) 753-7469



CONSULTANTS

PROJECT

COLE HALL
187 EAST STREET
SHAFTSBURY, VT
05262

PHASE: EXISTING CONDITIONS

MARK DATE DESCRIPTION

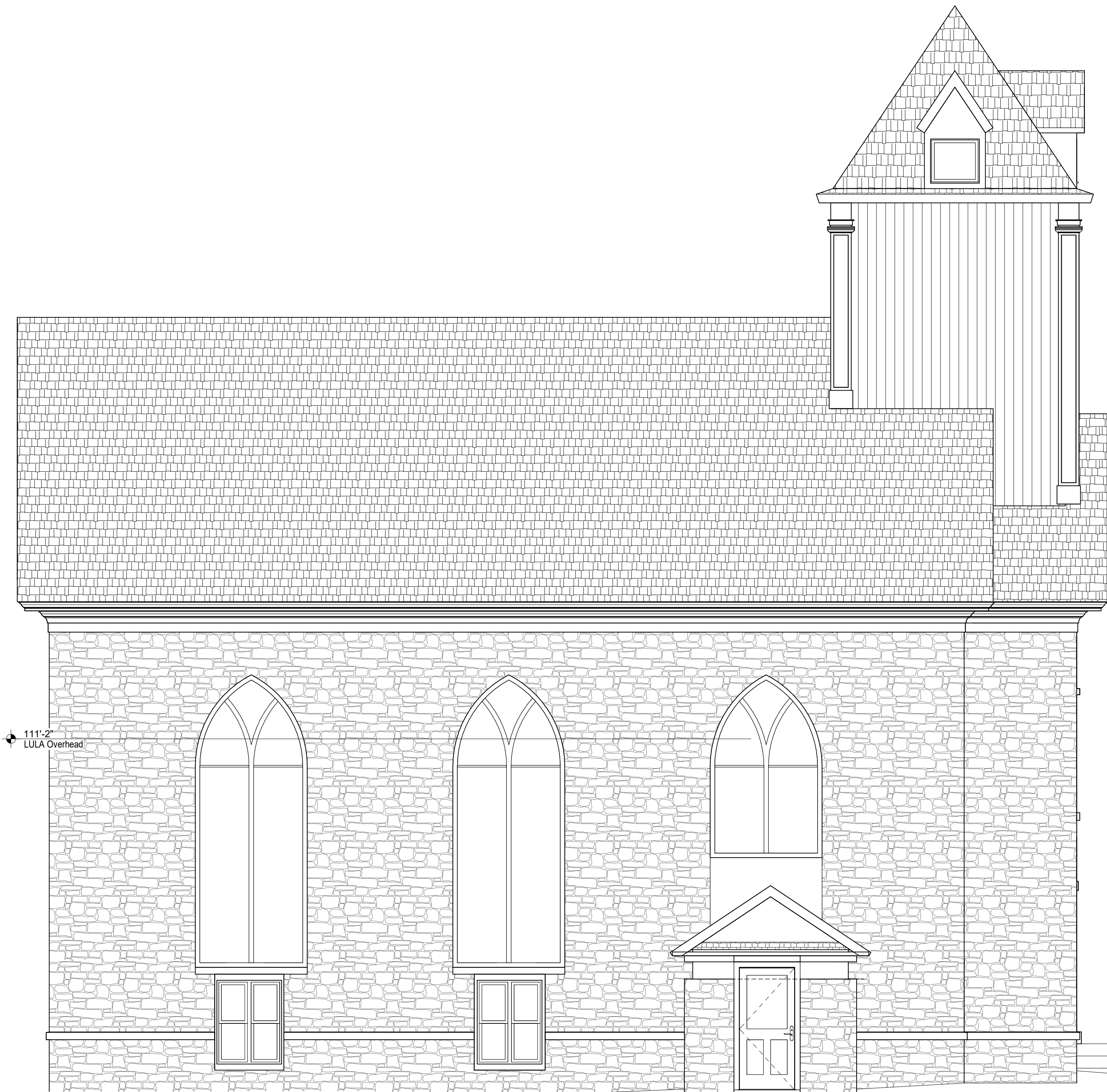
MARK	DATE	DESCRIPTION

PRELIMINARY
NOT FOR CONSTRUCTION

PROJECT NUMBER: 2020-09
DATE: 09/11/2023
DRAWN BY: EB
CHECKED BY: JB

EXISTING ELEVATIONS

EC201



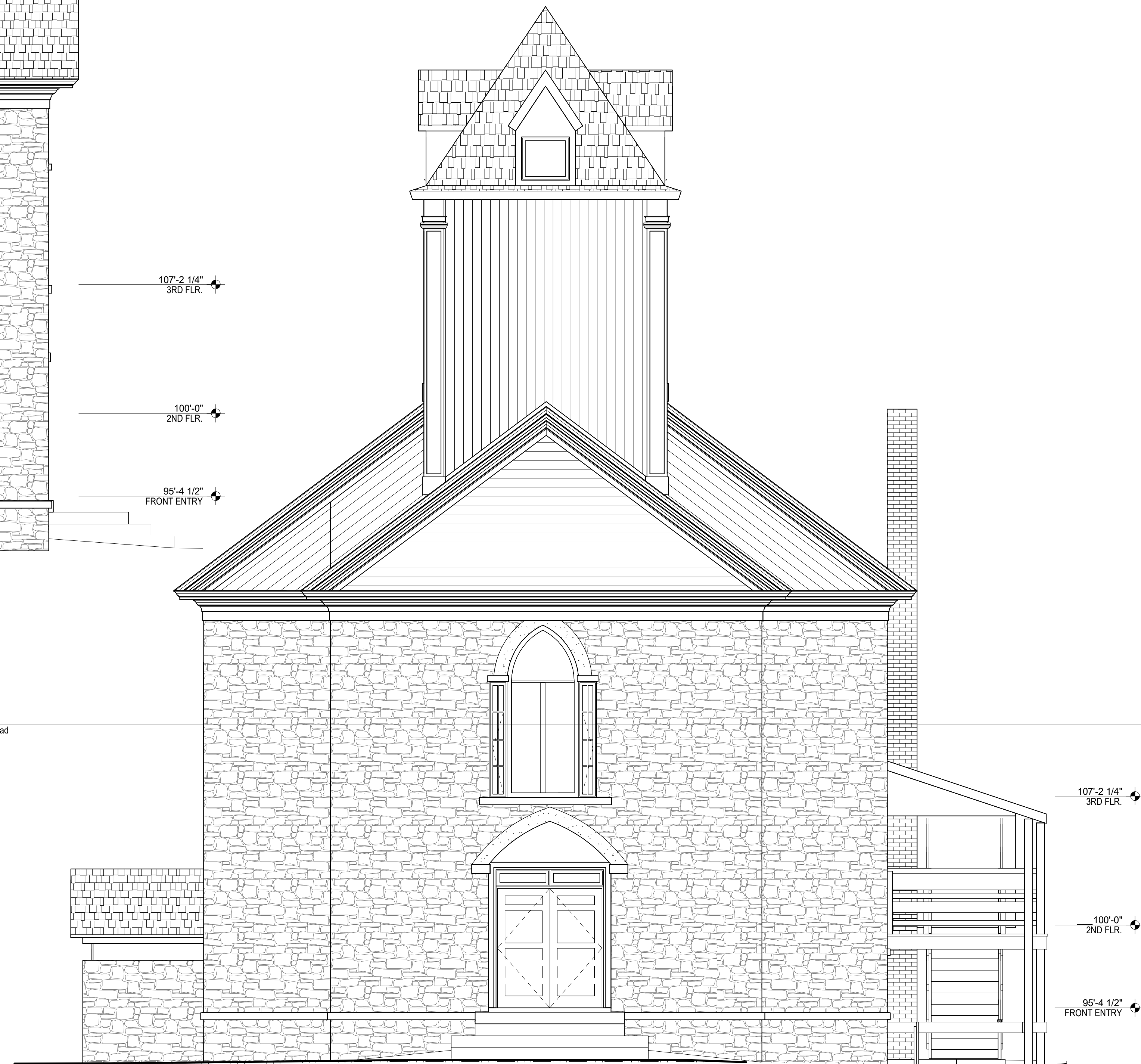
② EXISTING WEST ELEVATION
1/4" = 1'-0"

107'-2 1/4"
3RD FLR.

100'-0"
2ND FLR.

95'-4 1/2"
FRONT ENTRY

111'-2"
LULA Overhead



① EXISTING SOUTH ELEVATION
1/4" = 1'-0"

107'-2 1/4"
3RD FLR.

100'-0"
2ND FLR.

95'-4 1/2"
FRONT ENTRY

GOLDSTONE ARCHITECTURE
 150 DEPOT STREET
 P.O. BOX 139
 BENNINGTON, VERMONT 05201

(802) 753-7469



CONSULTANTS

PROJECT

COLE HALL

187 EAST STREET
 SHAFTSBURY, VT
 05262

PHASE: EXISTING CONDITIONS

MARK DATE DESCRIPTION

MARK	DATE	DESCRIPTION

PRELIMINARY
NOT FOR CONSTRUCTION

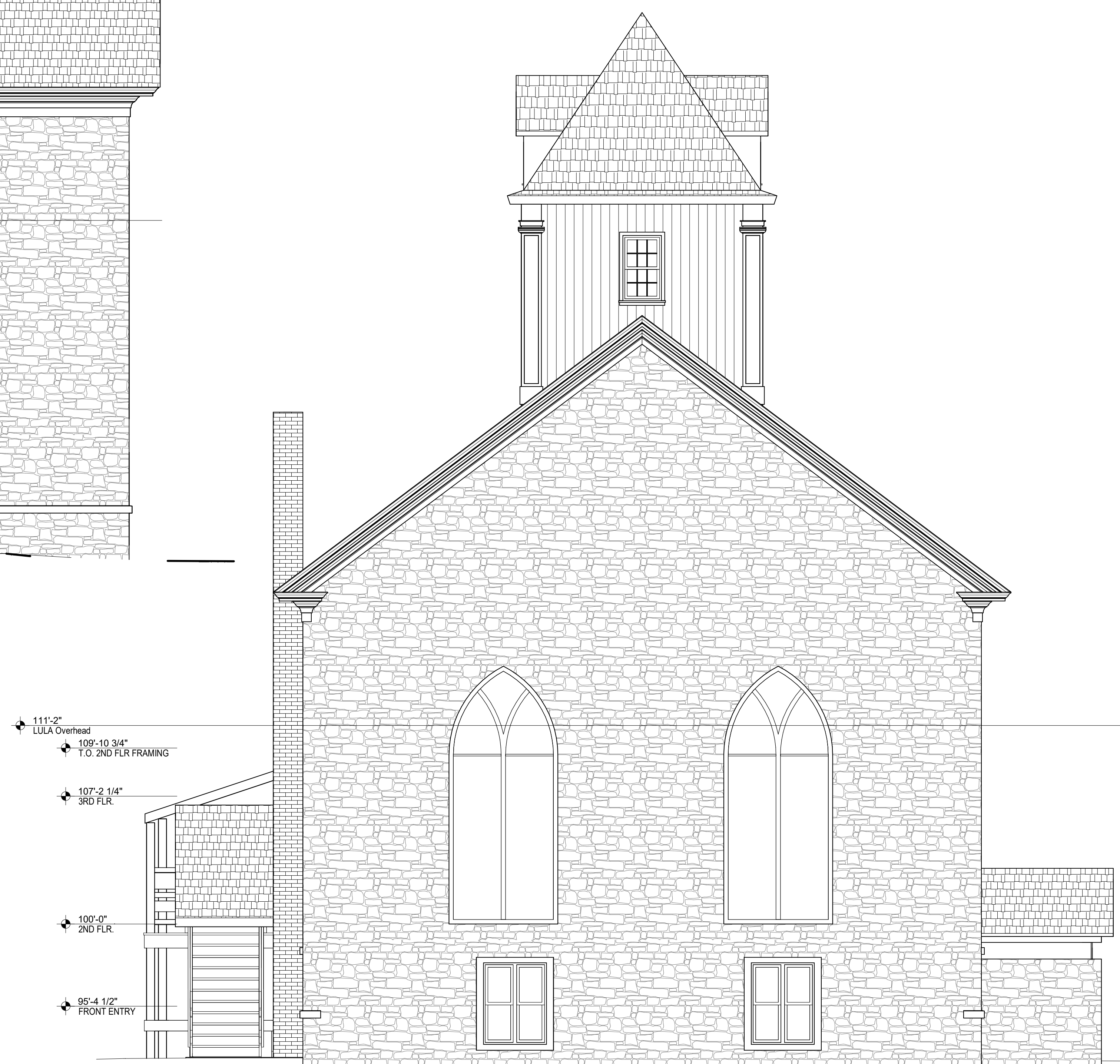
PROJECT NUMBER: 2020-09
 DATE: 09/11/2023
 DRAWN BY: EB
 CHECKED BY: JB

EXISTING ELEVATIONS

EC202



② EXISTING EAST ELEVATION
 1/4" = 1'-0"



① EXISTING NORTH ELEVATION
 1/4" = 1'-0"



CONSULTANTS

PROJECT

COLE HALL
 EXPANSION

61 BUCK HILL ROAD
 SHAFTSBURY, VT
 05262

PHASE: SCHEMATIC DESIGN

MARK	DATE	DESCRIPTION

PRELIMINARY
NOT FOR CONSTRUCTION

PROJECT NUMBER: ...
 DATE: 01/05/2024
 DRAWN BY: EB
 CHECKED BY: JB

PERSPECTIVAL VIEWS

G3D



2 VIEW LOOKING NORTH



3 VIEW LOOKING SOUTHWEST



1 VIEW LOOKING NORTHWEST



CONSULTANTS

PROJECT

COLE HALL
 EXPANSION

61 BUCK HILL ROAD
 SHAFTSBURY, VT
 05262

PHASE: SCHEMATIC DESIGN

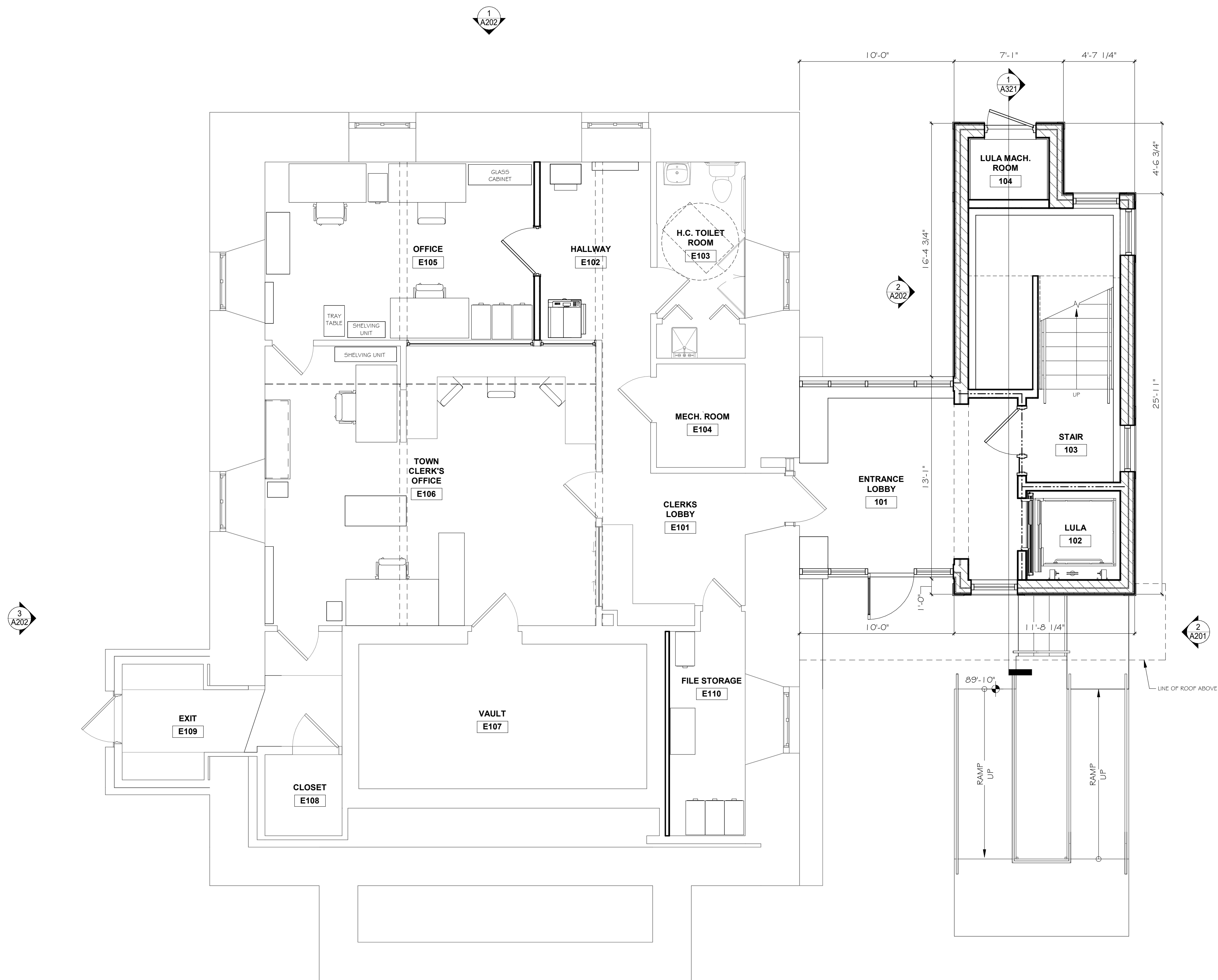
MARK	DATE	DESCRIPTION

PRELIMINARY
 NOT FOR CONSTRUCTION

PROJECT NUMBER: --
 DATE: 01/05/2024
 DRAWN BY: EB
 CHECKED BY: JB

FIRST FLOOR PLAN

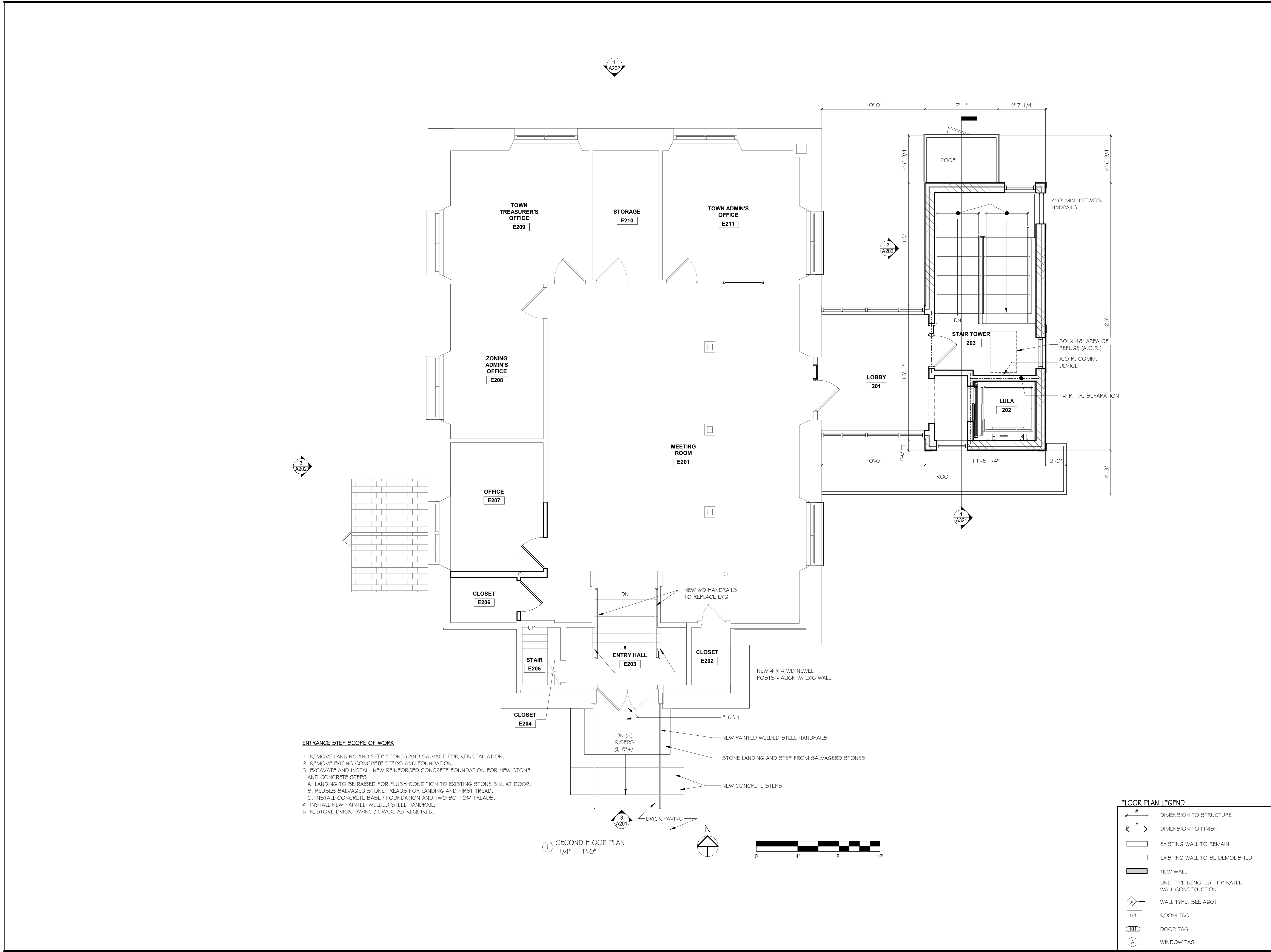
A101



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

FLOOR PLAN LEGEND

- #--- DIMENSION TO STRUCTURE
- #--- DIMENSION TO FINISH
- — — EXISTING WALL TO REMAIN
- - - EXISTING WALL TO BE DEMOLISHED
- ▬ NEW WALL
- · — · — LINE TYPE DENOTES 1 HR-RATED WALL CONSTRUCTION
- ◊ WALL TYPE, SEE AGO 1
- 101 ROOM TAG
- 101 DOOR TAG
- A WINDOW TAG



- ENTRANCE STEP SCOPE OF WORK**
1. REMOVE LANDING AND STEP STONES AND SALVAGE FOR REINSTALLATION.
 2. REMOVE EXISTING CONCRETE STEPS AND FOUNDATION.
 3. EXCAVATE AND INSTALL NEW REINFORCED CONCRETE FOUNDATION FOR NEW STONE AND CONCRETE STEPS.
 - A. LANDING TO BE RAISED FOR FLUSH CONDITION TO EXISTING STONE SILL AT DOOR.
 - B. REUSES SALVAGED STONE TREADS FOR LANDING AND FIRST TREAD.
 - C. INSTALL CONCRETE BASE / FOUNDATION AND TWO BOTTOM TREADS.
 4. INSTALL NEW PAINTED WELDED STEEL HANDRAIL.
 5. RESTORE BRICK PAVING / GRADE AS REQUIRED.

FLOOR PLAN LEGEND

- DIMENSION TO STRUCTURE
- DIMENSION TO FINISH
- EXISTING WALL TO REMAIN
- EXISTING WALL TO BE DEMOLISHED
- NEW WALL
- LINE TYPE DENOTES 1 HR.-RATED WALL CONSTRUCTION
- WALL TYPE, SEE AGO 1
- ROOM TAG
- DOOR TAG
- WINDOW TAG

PROJECT NUMBER:	--
DATE:	01/05/2024
DRAWN BY:	EB
CHECKED BY:	JB

SECOND FLOOR PLAN

A102



CONSULTANTS

PROJECT

COLE HALL
 EXPANSION

61 BUCK HILL ROAD
 SHAFTSBURY, VT
 05262

PHASE: SCHEMATIC DESIGN

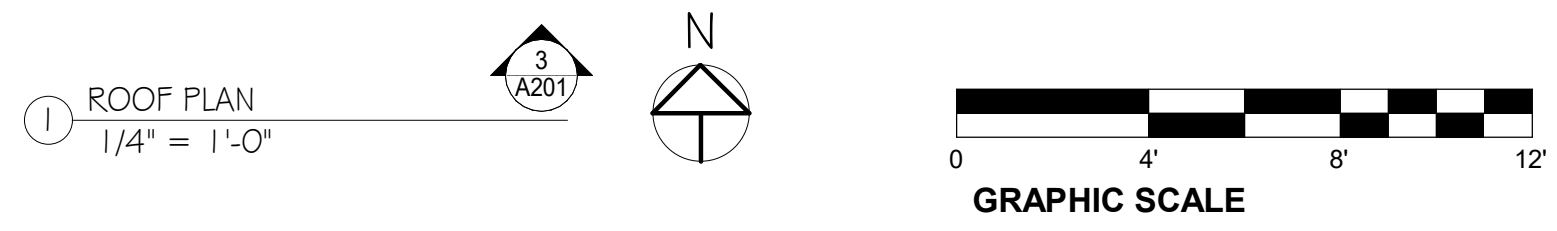
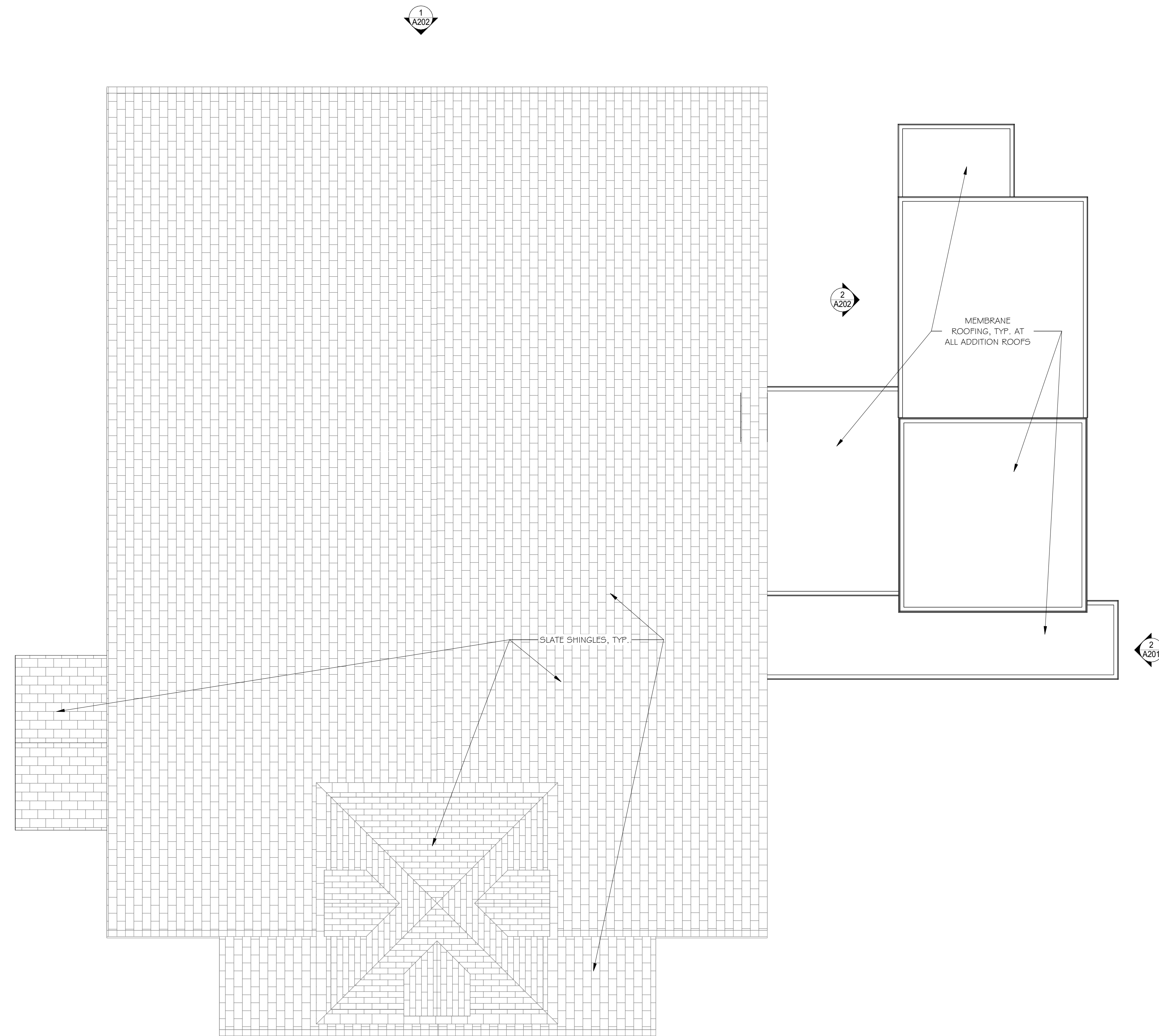
MARK	DATE	DESCRIPTION

PRELIMINARY
NOT FOR CONSTRUCTION

PROJECT NUMBER: --
 DATE: 01/05/2024
 DRAWN BY: EB
 CHECKED BY: JB

ROOF PLAN

A103



CONSULTANTS

PROJECT

COLE HALL
EXPANSION

61 BUCK HILL ROAD
SHAFTSBURY, VT
05262

PHASE: SCHEMATIC DESIGN

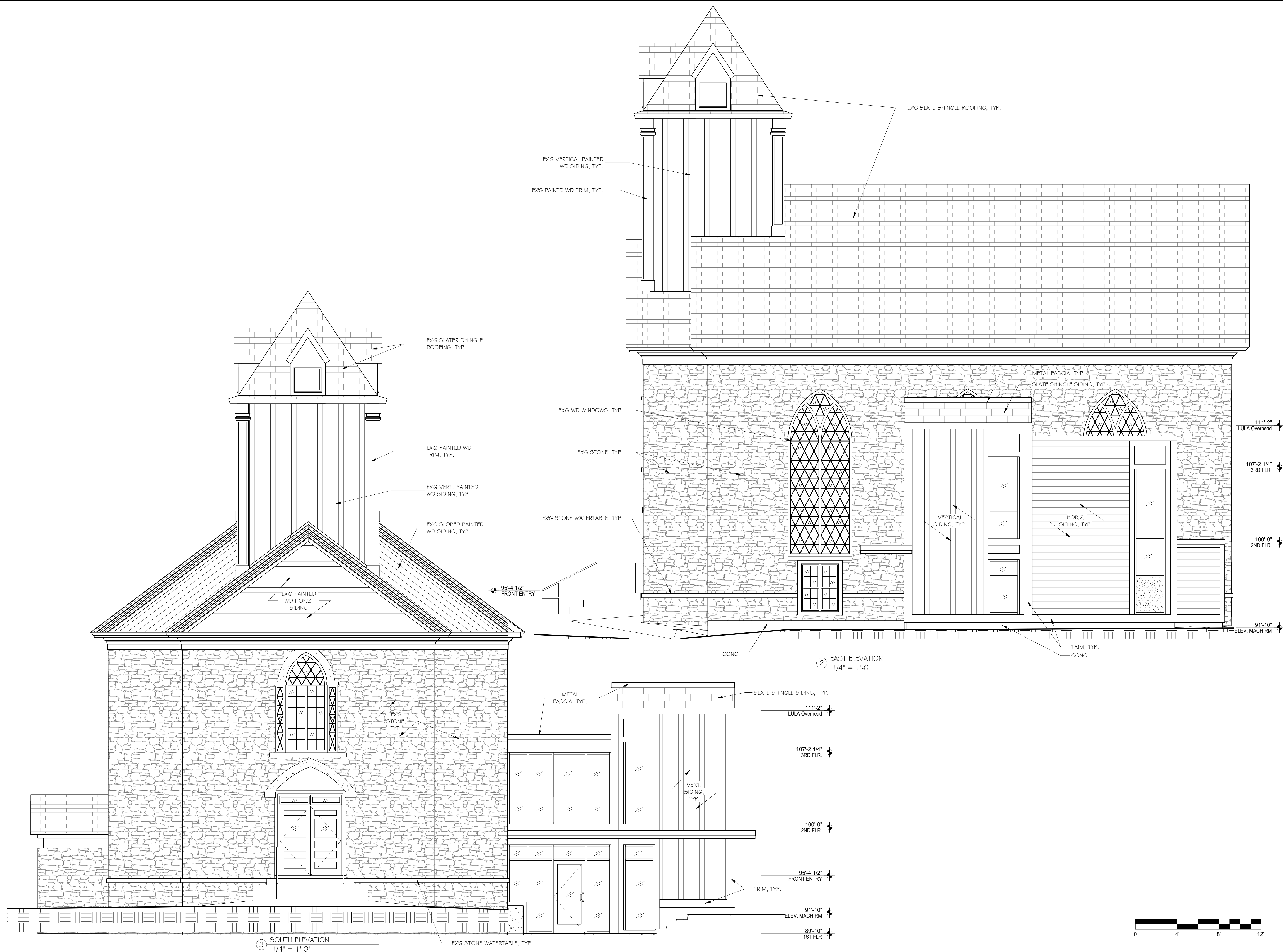
MARK DATE DESCRIPTION

PRELIMINARY
NOT FOR CONSTRUCTION

PROJECT NUMBER: --
DATE: 01/05/2024
DRAWN BY: EB
CHECKED BY: JB

ELEVATIONS

A201





CONSULTANTS

PROJECT

COLE HALL
EXPANSION

61 BUCK HILL ROAD
SHAFTSBURY, VT
05262

PHASE: SCHEMATIC DESIGN

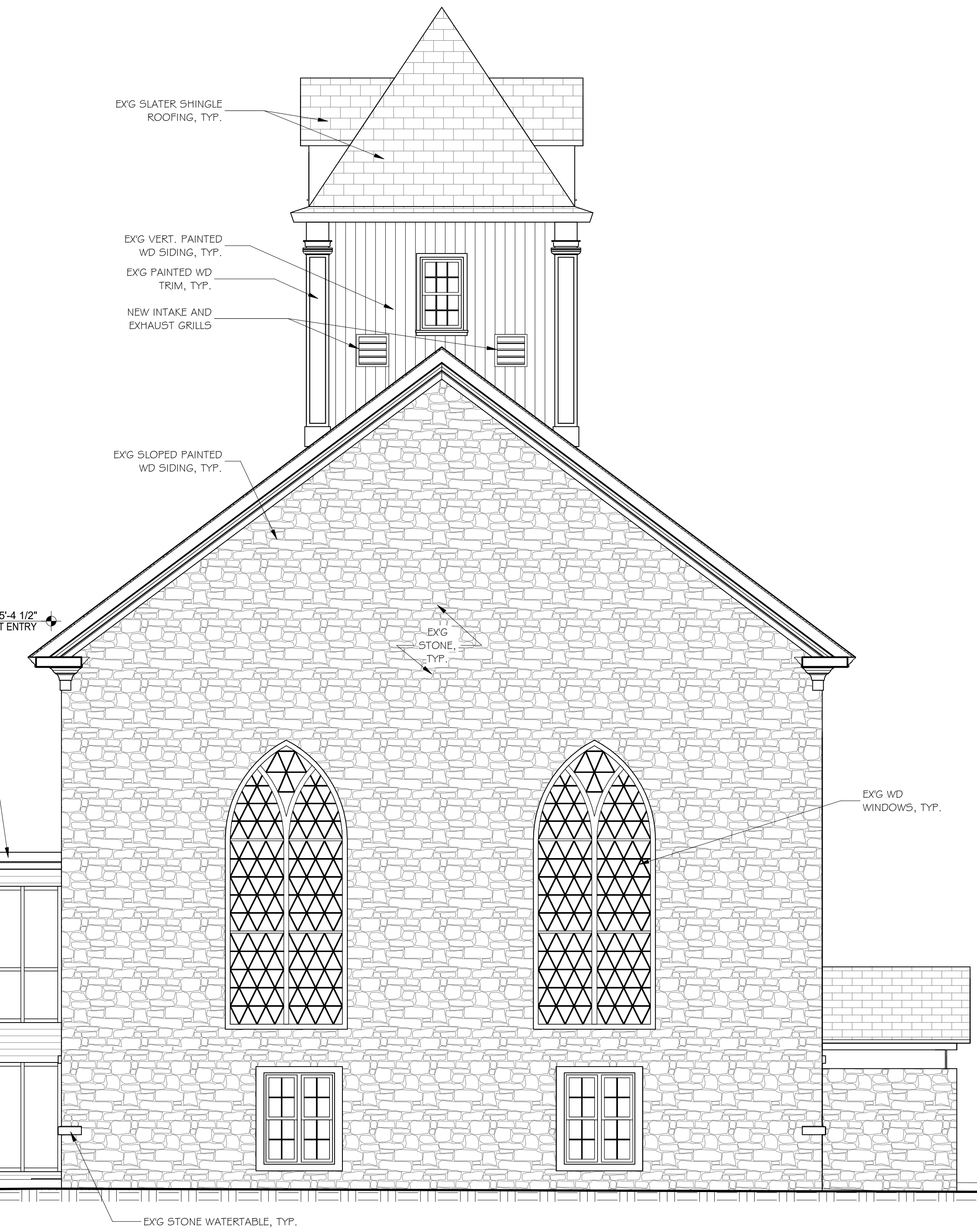
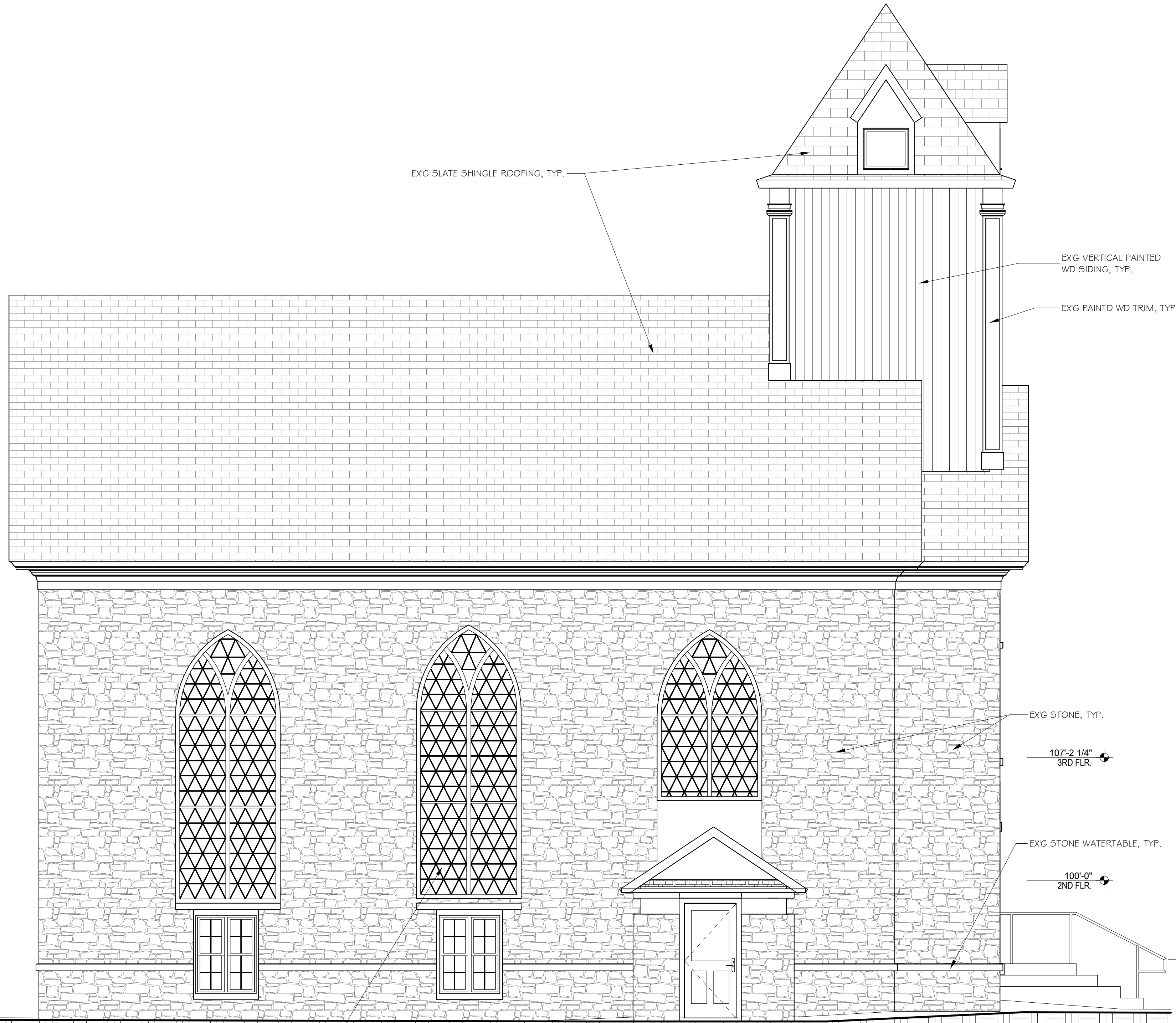
MARK	DATE	DESCRIPTION
------	------	-------------

PRELIMINARY
NOT FOR CONSTRUCTION

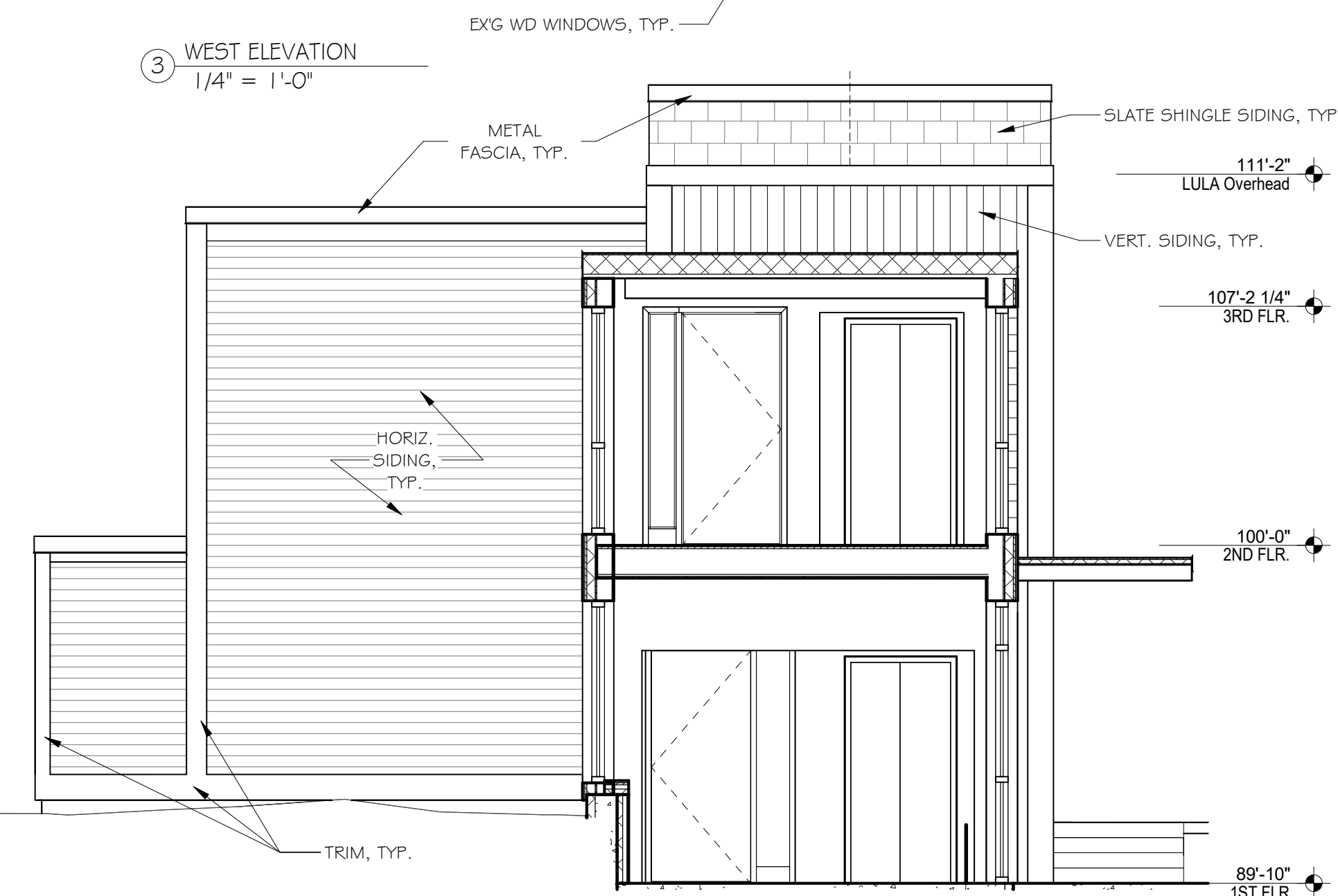
PROJECT NUMBER: --
DATE: 01/05/2024
DRAWN BY: EB
CHECKED BY: JB

ELEVATIONS

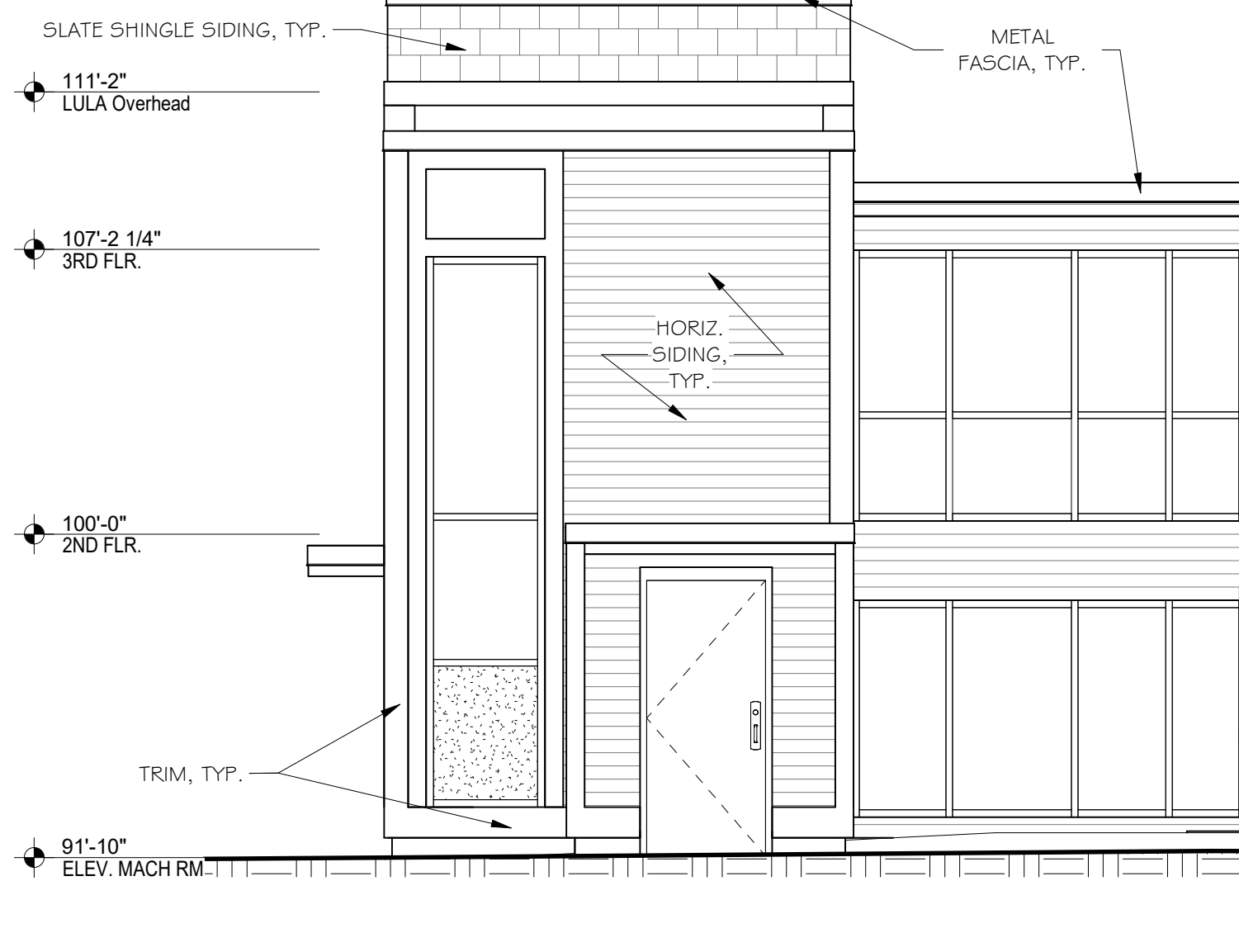
A202



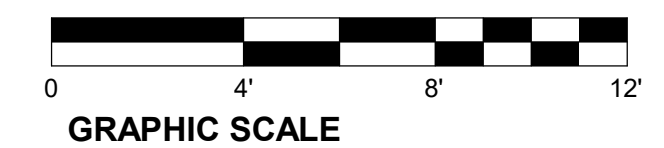
③ WEST ELEVATION
1/4" = 1'-0"



② WEST ELEVATION AT ADDITION
1/4" = 1'-0"



① NORTH ELEVATION
1/4" = 1'-0"



GOLDSTONE ARCHITECTURE
 150 DEPOT STREET
 P.O. BOX 139
 BENNINGTON, VERMONT 05201

(802) 753-7469



CONSULTANTS

PROJECT

COLE HALL
 EXPANSION

61 BUCK HILL ROAD
 SHAFTSBURY, VT
 05262

PHASE: SCHEMATIC DESIGN

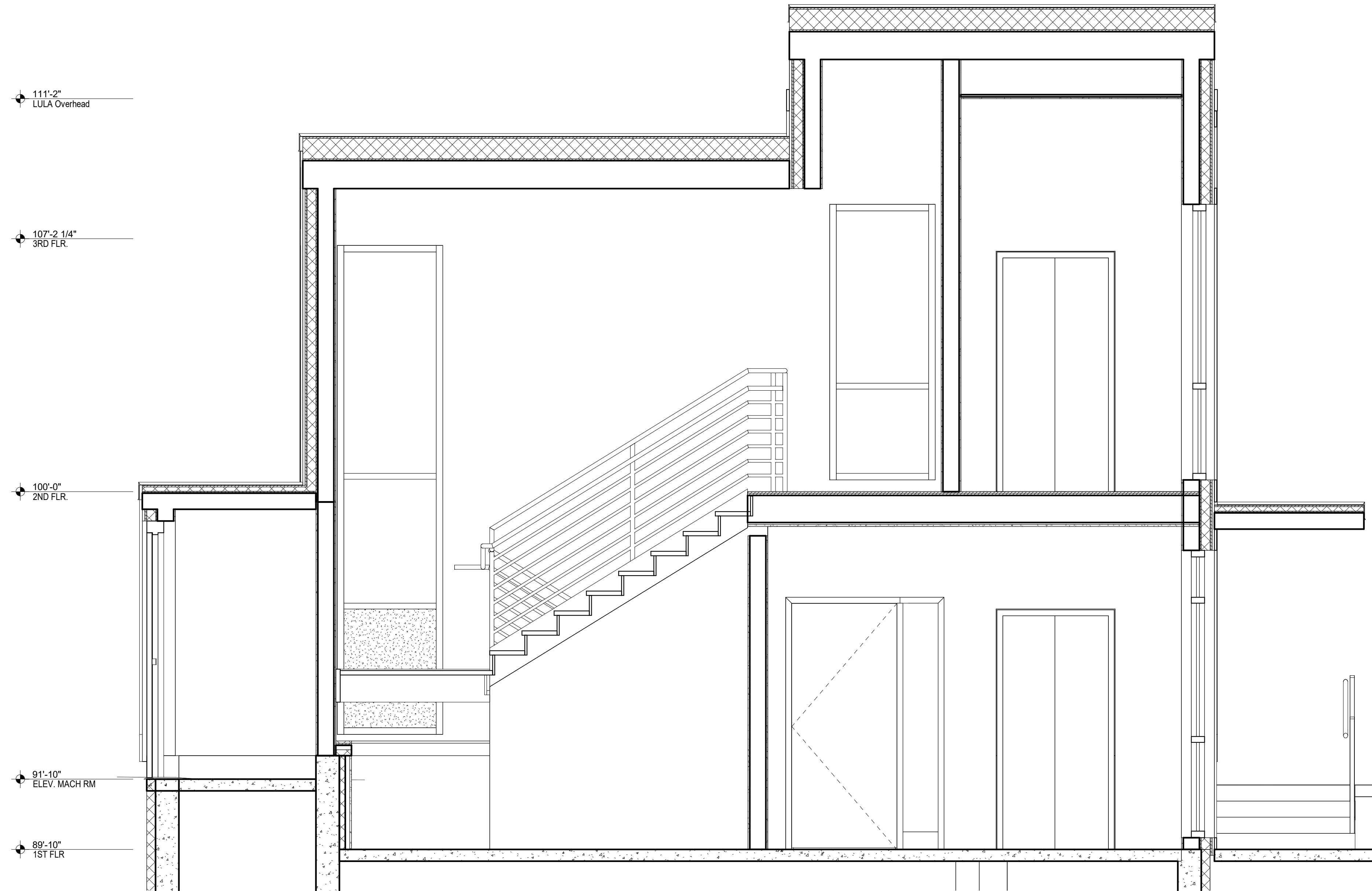
MARK	DATE	DESCRIPTION

PRELIMINARY
NOT FOR CONSTRUCTION

PROJECT NUMBER: --
 DATE: 01/05/2024
 DRAWN BY: EB
 CHECKED BY: JB

LONG BUILDING SECTION

A321



111'-2" LULA Overhead

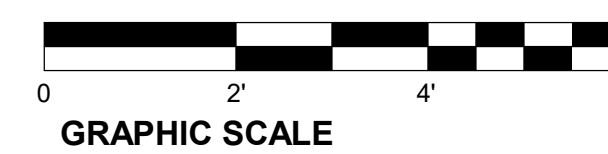
107'-2 1/4" 3RD FLR.

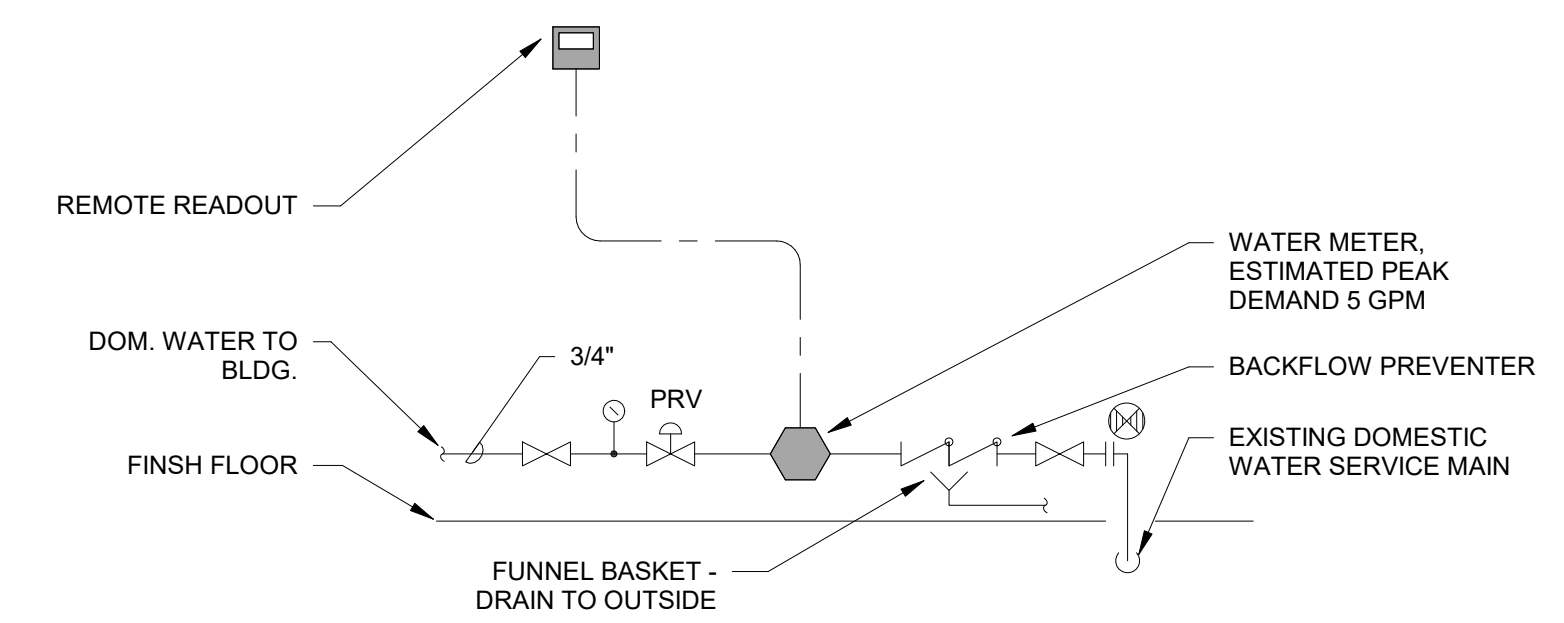
100'-0" 2ND FLR.

91'-10" ELEV. MACH RM

89'-10" 1ST FLR

① LONG BUILDING SECTION
 1/2" = 1'-0"



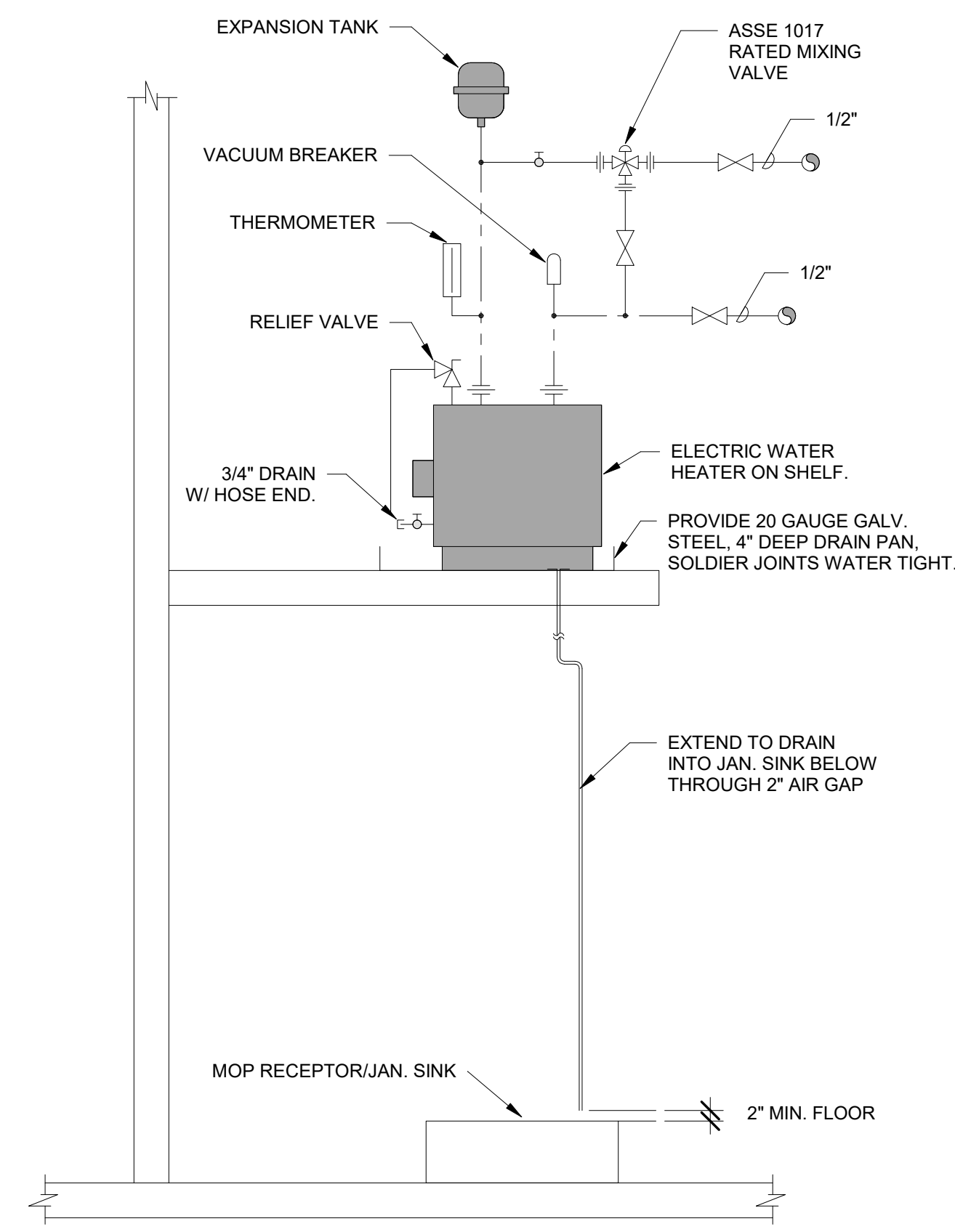


DOMESTIC WATER SERVICE ENTRANCE DETAIL

NO SCALE
NOTE: VERIFY PIPING ARRANGEMENT WITH MUNICIPAL WATER DEPARTMENT PRIOR TO ROUGH IN

PLUMBING SYMBOL LIST
ALL SYMBOLS ARE NOT NECESSARILY USED

SYMBOLS	DESCRIPTION	ABBREVIATION
---	SANITARY SOIL AND WASTE ABOVE GROUND	W
---	STORM WASTE	RL
- - - -	SANITARY VENT	V
· · · · ·	FOUNDATION DRAIN	FD
---	COLD WATER	CW
---	HOT WATER	HW
---	HOT WATER RECIRC	HWR
	SHUTOFF VALVE	
	SHUTOFF VALVE	
	CHECK VALVE	CV
	GLOBE VALVE	GLV
	FLOW (BALANCING VALVE)	FBV
	CONTROL VALVE	CLV
	PRESSURE REDUCING VALVE	PRV
	WATER METER	WM
	PIPING DROP OR DOWN THROUGH FLOOR	DROP, DN
	PIPING RISE OR UP THROUGH CEILING	RISE, UP
	CLEANOUT	CO
	WALL CLEANOUT	WCO
	DECK PLATE CLEANOUT	DPCO
	FLOOR OR ROOF DRAIN	FD, RD
	WATER HAMMER ARRESTER	WHA
	FUEL GAS	G
	LIQUID PETROLEUM GAS	LPG
	PRESSURE & TEMPERATURE RELIEF VALVE	PTV
	PRESSURE RELIEF VALVE	RV
	STRAINER	
	UNION	
	PRESSURE GAUGE	
	THERMOMETER	
	WATER HYDRANT	WH
	HOSE BIBB	HB
⊗	NEW TO EXISTING CONNECTION	
⊠	NEW TO FUTURE CONNECTION	
PC	PUMPED CONDENSATE	AR ARGON
PD	PUMPED DISCHARGE	O2 OXYGEN
COND	COIL CONDENSATE	VAC VACUUM
CA	COMPRESSED AIR	N2 NITROGEN
DI	DEIONIZED WATER	



WATER HEATER PIPING DETAIL

NO SCALE

FIXTURE CONNECTION SCHEDULE

SYM	FIXTURE	SUP	TRP	MINIMUM BRANCH SIZE			REMARKS
				WASTE	VENT	HOT	
P-1	WATER CLOSET	1/2	-	4	2	1/2	TANK TYPE, ADA COMPLIANT
P-2	LAVATORY	3/8	1-1/4	1-1/2	1-1/2	1/2	WALL HUNG
P-3	JANITOR SINK	1/2	2	3	2	1/2	

DOMESTIC HOT WATER HEATER - ELECTRIC ELEMENT

UNIT	LOCATION	SERVICE	STORAGE GALLONS	RECOVERY			VOLTS	PHASE	KW	DESIGN EQUIPMENT
				E.W.T. °F	E.W.T. °F	GPH				
DWH-1	AS SHOWN	DOM. HW	20	50	140	21	208	1Ø	4.5	AO SMITH DEL 20

CONSULTANTS

PROJECT

COLE HALL
 187 EAST STREET
 SHAFTSBURY, VT
 05262

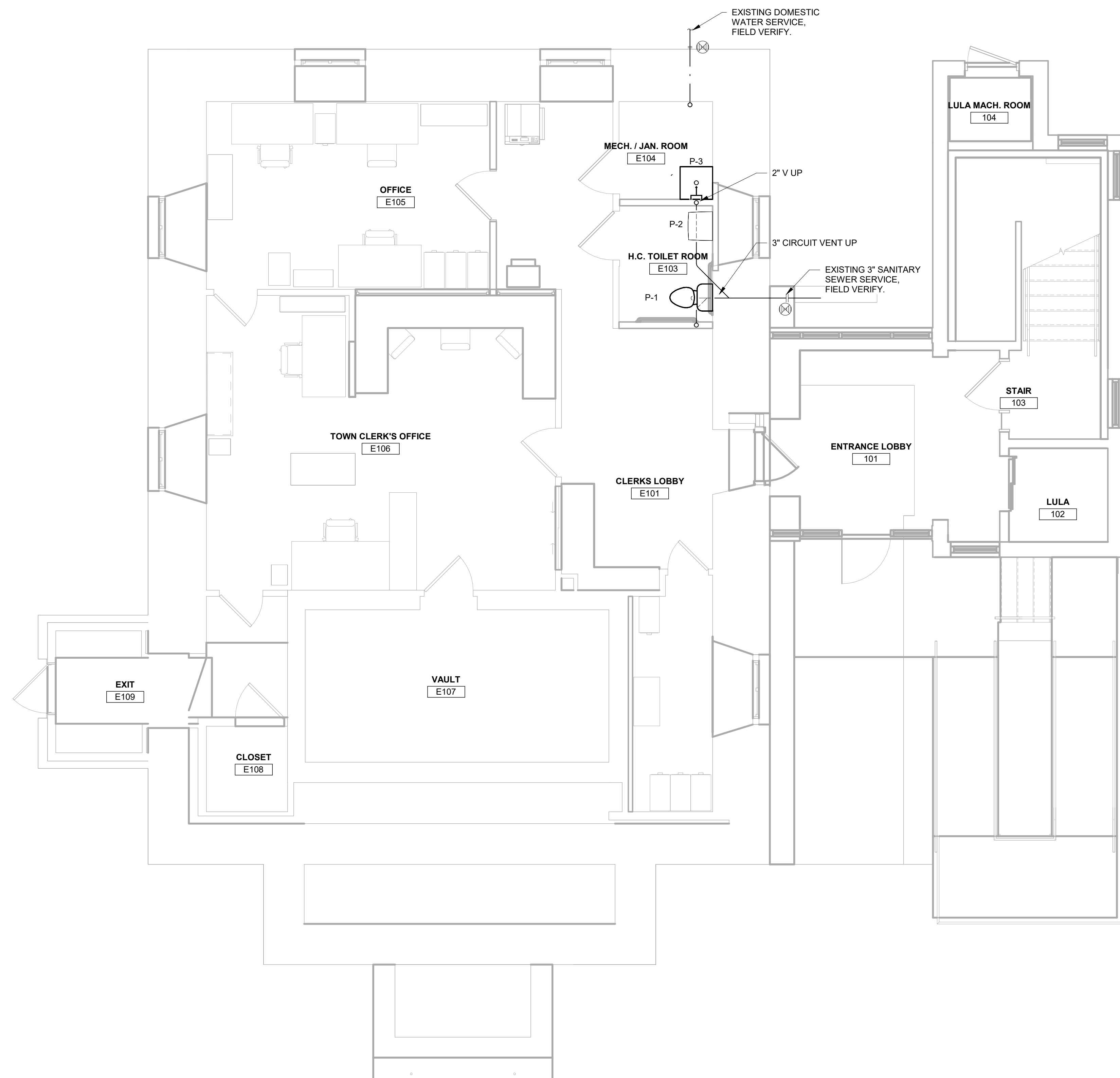
PHASE: SCHEMATIC DESIGN

MARK	DATE	DESCRIPTION

PRELIMINARY
 NOT FOR CONSTRUCTION

PROJECT NUMBER: 23091
 DATE: 11/10/23
 DRAWN BY: GB
 CHECKED BY: RAP

PLUMBING BURIED PIPING PLAN



① PLUMBING BURIED PIPING PLAN
 1/4" = 1'-0"



CONSULTANTS

PROJECT

COLE HALL
187 EAST STREET
SHAFTSBURY, VT
05262

PHASE: SCHEMATIC DESIGN

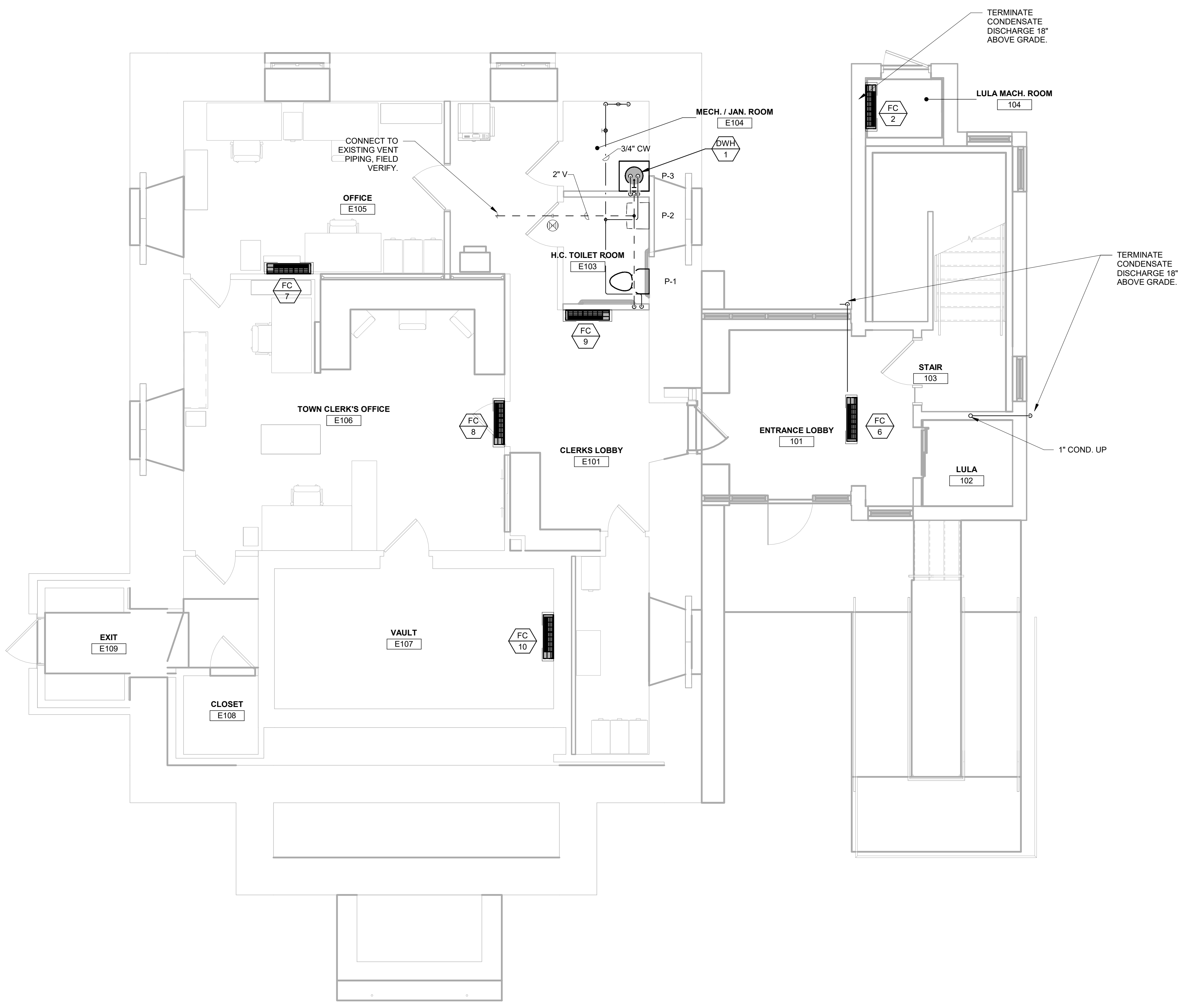
MARK DATE DESCRIPTION

MARK	DATE	DESCRIPTION

PRELIMINARY
NOT FOR CONSTRUCTION

PROJECT NUMBER:	23091
DATE:	11/10/23
DRAWN BY:	GB
CHECKED BY:	RAP

PLUMBING FIRST FLOOR PLAN



1 PLUMBING FIRST FLOOR PLAN
1/4" = 1'-0"

CONSULTANTS

CONSULTANTS

CONSULTANTS

CONSULTANTS

CONSULTANTS

CONSULTANTS

CONSULTANTS

CONSULTANTS

CONSULTANTS

CONSULTANTS

CONSULTANTS

CONSULTANTS

PROJECT

COLE HALL
 187 EAST STREET
 SHAFTSBURY, VT
 05262

PHASE: SCHEMATIC DESIGN

MARK	DATE	DESCRIPTION

PRELIMINARY
 NOT FOR CONSTRUCTION

PROJECT NUMBER:	23091
DATE:	11/10/23
DRAWN BY:	GB
CHECKED BY:	RAP

PLUMBING SECOND FLOOR
 PLAN



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

GOLDSTONE ARCHITECTURE
150 DEPOT STREET
P.O. BOX 139
BENNINGTON, VERMONT 05201

(802) 753-7469



CONSULTANTS

PROJECT

COLE HALL

187 EAST STREET
SHAFTSBURY, VT
05262

PHASE:
SCHEMATIC DESIGN

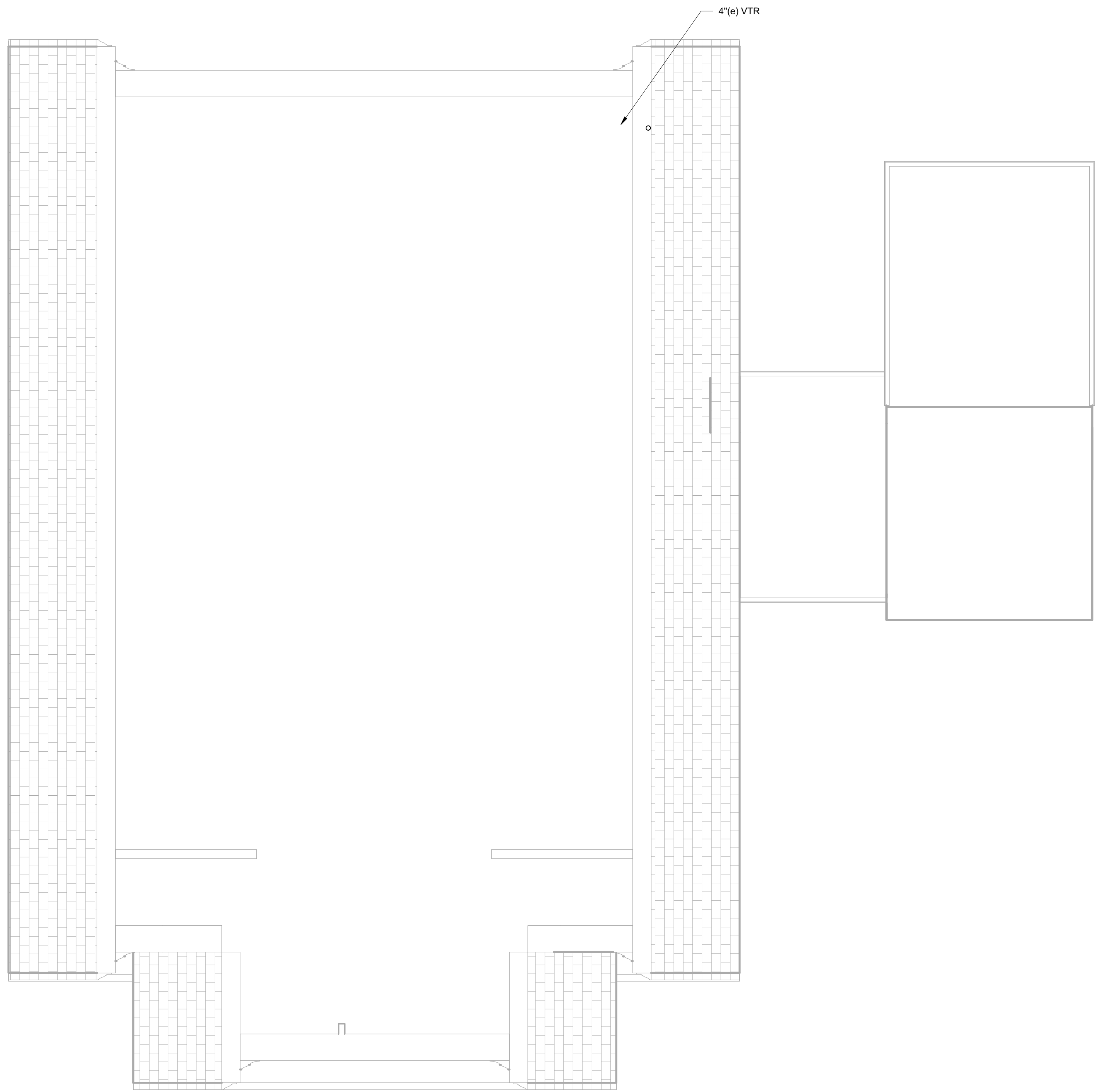
MARK	DATE	DESCRIPTION

PRELIMINARY
NOT FOR CONSTRUCTION

PROJECT NUMBER: 23091
DATE: 11/10/23
DRAWN BY: GB
CHECKED BY: RAP

PLUMBING ROOF/ATTIC PLAN

P-5



① PLUMBING ROOF/ATTIC PLAN
1/4" = 1'-0"

MARK	DATE	DESCRIPTION

PRELIMINARY
NOT FOR CONSTRUCTION

PROJECT NUMBER:	23091
DATE:	11/10/23
DRAWN BY:	GB
CHECKED BY:	RAP

MECHANICAL SCHEDULES AND DETAILS

M-1

HVAC SYMBOL LIST	
ALL SYMBOLS ARE NOT NECESSARILY USED	
LPS	LOW PRESSURE STEAM
LPC	LOW PRESSURE CONDENSATE
MPS	MEDIUM PRESSURE STEAM
MPC	MEDIUM PRESSURE CONDENSATE
HPS	HIGH PRESSURE STEAM
HPC	HIGH PRESSURE CONDENSATE
HWS	HOT WATER SUPPLY
HWR	HOT WATER RETURN
HPWS	HEAT PUMP WATER SUPPLY
HPWR	HEAT PUMP WATER RETURN
CWS	CHILLED WATER SUPPLY
CWR	CHILLED WATER RETURN
GS	GLYCOL SUPPLY
GR	GLYCOL RETURN
CS	CONDENSER WATER SUPPLY
CR	CONDENSER WATER RETURN
PC	PUMPED CONDENSATE
BF	BOILER FEED
BBD	BOILER BLOW DOWN
D	DRAIN
ATV	ATMOSPHERIC VENT
VAC	VACUUM
RD	REFRIGERANT DISCHARGE
RL	REFRIGERANT LIQUID
RS	REFRIGERANT SUCTION
RHG	REFRIGERANT HOT GAS
A	COMPRESSED AIR
G	GAS
FOS	FUEL OIL SUPPLY
FOR	FUEL OIL RETURN
FOV	FUEL OIL VENT
FOF	FUEL OIL FILL
FOG	FUEL OIL GAUGE
DCW	DOMESTIC COLD WATER (CW)
DF	DIRECTION OF FLOW
RED	REDUCER
CAP	CAP OR PLUG
BC	BOTTOM CONNECTION/TURN AWAY
TC	TOP CONNECTION/TURN TOWARDS
U	UNION (OR FLANGE)
V	VALVE (SHUT OFF)
G	GLOBE VALVE
C	CHECK VALVE
CV2	CONTROL VALVE (2-WAY)
CV3	PRESSURE RELIEF VALVE
CV3	CONTROL VALVE (3-WAY)
TDV	TRIPLE DUTY VALVE
PRV	PRESSURE REDUCING VALVE
BC	BALANCING COCK
FB	FLOW BALANCER
S	STRAINER
TT	THERMOSTATIC TRAP ASSEMBLY
F&T	FLOAT & THERMOSTATIC TRAP ASSEMBLY
BT	BUCKET TRAP ASSEMBLY
TD	THERMODYNAMIC TRAP
T	THERMOMETER
P	PRESSURE GAUGE
V	AIR VENT
TS	TEMPERATURE SENSOR WELL
BV	BUTTERFLY VALVE
R	PIPE PITCH UP/INCLINE RISE
D	PIPE PITCH DOWN/INCLINE DROP
FTRE	FINNED TUBE RADIATION ELEMENT
WWE	WALL TO WALL FIN TUBE ENCLOSURE
TSR	TRANSITION-SQUARE TO ROUND
SD	SUPPLY DUCT SECTION
RD	RETURN OR EXHAUST DUCT SECTION
RD	ROUND DUCT SECTION
FD	FIRE DAMPER
SD	SMOKE DAMPER
FSD	COMBINATION FIRE AND SMOKE DAMPER
BD	BACKDRAFT DAMPER
MD	VOLUME DAMPER
MD	MANUAL DAMPER
MOD	MOTOR OPERATED DAMPER
CFM	CUBIC FEET/MINUTE
FPM	FEET/MINUTE
NTS	NOT TO SCALE
DBD	DUCT SMOKE DETECTOR
MBH	THOUSAND BTU/HOUR
(e)	EXISTING
SA	SUPPLY AIR
RA	RETURN AIR
EA	EXHAUST AIR
OA	OUTSIDE AIR
OED	OPEN ENDED DUCT
AFF	ABOVE FINISH FLOOR
BFC	BELOW FINISH CEILING
AFS	AIR FLOW STATION
(P)	PRESSURE SENSOR
(T)	THERMOSTAT
(T ₂)	ELECTRIC THERMOSTAT WITH MULTIPLE SET POINTS
(T _G)	WITH A GUARD
(T _S)	TEMPERATURE SENSOR
(S)	SLAB SENSOR
(S)	STATIC PRESSURE SENSOR
(H)	HUMIDISTAT
UCD	UNDERCUT DOOR (1" BY THE G.C.)
L ₁	LOUVERED DOOR, INDICATES SQ. FT. FREE AREA
L ₂	AIR FLOW
AD	SHEET METAL CAP ON EXISTING DUCT
ACD	ACCESS DOOR, MIN 1.0 SQ.FT.
ATL	ACOUSTIC THERMAL LINING
ATT	SOUND ATTENUATOR
NR	WORK TO BE REMOVED
NE	NEW TO EXISTING CONNECTION
NE	NEW TO FUTURE CONNECTION
DF	DIFFUSER W/ FLEX. DUCT CONNECTION (REG. SIMILAR)
R	DIFFUSER W/ RIGID DUCT CONNECTION (REG. SIMILAR)
TYPE	REGISTER, DIFFUSER, OR GRILLE DESIGNATION
CFM	DUCT SIZE SERVING REGISTER, DIFFUSER, OR GRILLE
SIZE	
X" BRANCH	

PUMP SCHEDULE

PUM P NO.	LOCATION	SERVICE	GPM	HEAD FT. WATER	MAX WWP (PSI)	MOTOR				STARTER	PUMP TYPE	DESIGN EQUIPMENT
						RPM	H.P.	VOLTS	PHASE			
A	B	C	D	E	F	G	H	I	J	K	L	M

BOILER SCHEDULE - GAS

UNIT NO.	LOCATION	SERVICE	TYPE	OPER. PRES. PSIG	SYSTEM MEDIA	MINIMUM OUTPUT BTUH	GAS FIRING RATE BTUH	MIN. GAS PRES. BEFORE REGULATOR	SQ. FT. HEATING AREA	FLUE CONN. SIZE AND NUMBER	DESIGN EQUIPMENT

AIR TO AIR HEAT RECOVERY UNIT SCHEDULE

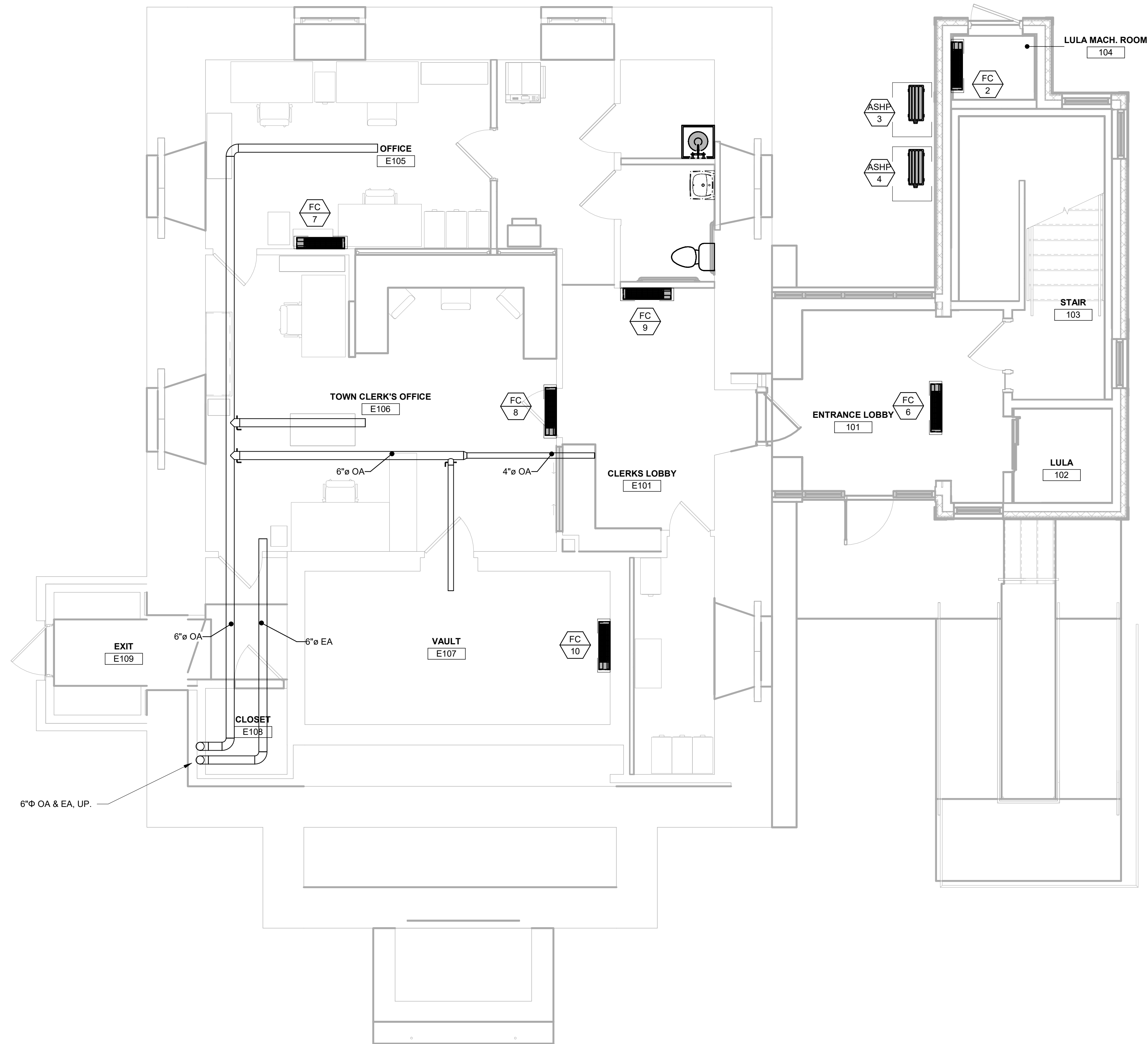
UNIT NO.	LOCATION	SERVICE	SUMMER		WINTER				SUPPLY / EXHAUST FAN											DESIGN EQUIPMENT	
			VENT. E.A.T.	VENT. L.A.T.	EXHAUST E.A.T.	EXHAUST L.A.T.	VENT. E.A.T.	VENT. L.A.T.	EXHAUST E.A.T.	EXHAUST L.A.T.	S.P. IN W.G. EXT	TOTAL	CFM	RPM	FAN HP	VOLTS	PHASE	STARTER			
																			L		L
			A	B	C	L	L	L	L	L	H	I	J	K	L	L	M	N	O		L

DUCTLESS AIR CONDITIONING UNIT SCHEDULE - [HEAT PUMP] [HEAT RECOVERY]

CONDENSER UNIT NO.	LOCATION	SERVICE	CAPACITY TONS	CONDENSER				COMPRESSOR				EVAPORATORS @ DESIGN											DESIGN EQUIPMENT	EVAPORATOR MODEL	CONDENSER MODEL
				NO. OF FANS	FAN MOTOR	REFRIG. TYPE	COOLING MBH	HEATING MBH	VOLTS	PHASE	MCA	UNIT #	TYPE	COOLING (MBH)	HEATING (MBH)	CFM	OA CFM	FAN POWER	VOLTS	PHASE	MCA				
A	B	C	D	E	F	F	J	J	H	I	I	J	J	J	J	K	L	M	I	N	N	N			

*PROVIDE EVAPORATOR WITH INTEGRAL CONDENSATE PUMP. PIPE CONDENSATE TO NEAREST INDIRECT WASTE CONNECTION.
**PROVIDE LOW AMBIEN WIND BAFFLES, ELEVATED SUPPORT FRAME AND PAN HEATER

CONSULTANTS



6"Ø OA & EA, UP.

1 MECHANICAL FIRST FLOOR PLAN
 1/4" = 1'-0"

PROJECT

COLE HALL
 187 EAST STREET
 SHAFTSBURY, VT
 05262

PHASE: SCHEMATIC DESIGN

MARK	DATE	DESCRIPTION

PRELIMINARY
 NOT FOR CONSTRUCTION

PROJECT NUMBER: 23091
 DATE: 11/10/23
 DRAWN BY: GB
 CHECKED BY: RAP

MECHANICAL FIRST FLOOR
 PLAN

M-2



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

GOLDSTONE ARCHITECTURE
150 DEPOT STREET
P.O. BOX 139
BENNINGTON, VERMONT 05201
(802) 753-7469



CONSULTANTS

PROJECT

COLE HALL
187 EAST STREET
SHAFTSBURY, VT
05262

PHASE: SCHEMATIC DESIGN

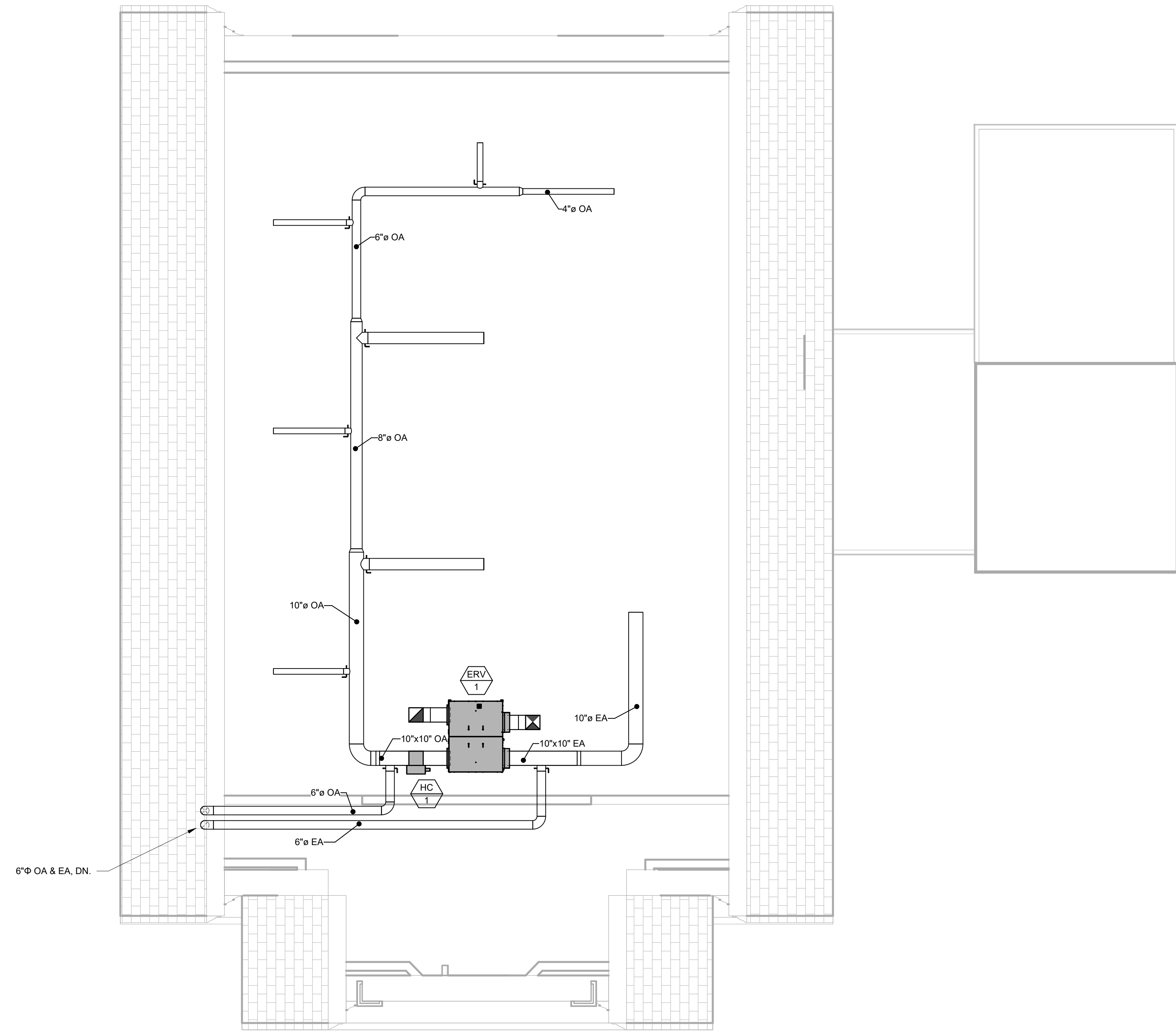
MARK	DATE	DESCRIPTION

PRELIMINARY
NOT FOR CONSTRUCTION

PROJECT NUMBER: 23091
DATE: 11/10/23
DRAWN BY: GB
CHECKED BY: RAP

MECHANICAL SECOND FLOOR PLAN

MARK	DATE	DESCRIPTION



1 MECHANICAL ROOF/ATTIC PLAN
 1/4" = 1'-0"



wv engineering associates, pa.
11 King Court, Keene, New Hampshire 03431

www.wvengineering.com
t: 603.352.7007

November 16, 2023

Mr. Jack Byer
Goldstone Architecture
P.O. Box 139
Bennington, VT 05201

Re: **Cole Hall - Renovations & Addition**
Shaftsbury, Vermont
Electrical Schematic Report
WVA Project No. 23091

Dear Jack:

The following is our schematic design description of MEP systems for the Cole Hall renovation/addition project:

Electrical

1. Provide new 200 amp, 120/240 volt, single phase electrical service underground from pole mounted transformer to meter with integral disconnect on the building exterior. Provide new 200 amp service entrance panel with main circuit breaker and feed-thru lugs in existing location. Reconnect existing circuits which are to remain to new panel. Provide a new 200 amp panel adjacent to service entrance panel, fed from feed-thru lugs. Provide underground service as wire in PVC conduit. Provide feeder from meter to main panel thru basement as wire in EMT conduit. Provide wire to exterior condensing units as wire in conduit. Provide branch circuits to equipment and devices throughout the building as MC cable where concealed, wire in conduit where exposed. Provide mechanical equipment fused disconnects and switches. Provide feeder to LULA, with disconnect for motor and car lighting in machine room. Provide convenience receptacles throughout basement renovation and addition, GFCI ratings as required by code.
2. Provide lighting in basement renovation and addition. Lights in dropped ceiling to be 2 x 2 LED troffers. Lights in machine room and vault to be LED strip light. Lights in addition to be recessed LED cans. Lights in basement rooms to be dimmable. Provide occupancy sensors and daylight dimming where required by code. Provide emergency lighting battery units and exit signs per code. Provide sharp cut-off lights over exterior entrances to addition.
3. Provide new fire alarm system for building with FACP, remote annunciator at building entrance, strobe and horn/strobe devices per code, smoke detectors per code, elevator recall functions, and dialer for alarm communications.

November 16, 2023
WVA Project No. 23091

Page 2

4. Provide data/phone outlets in basement renovation. Provide CAT 6 wiring, jacks, and terminations, pathways, and data patch panels at IT space.

Sincerely,

WV Engineering Associates, PA

A handwritten signature in cursive script that reads "Charles Herr".

Charles F. Herr, PE