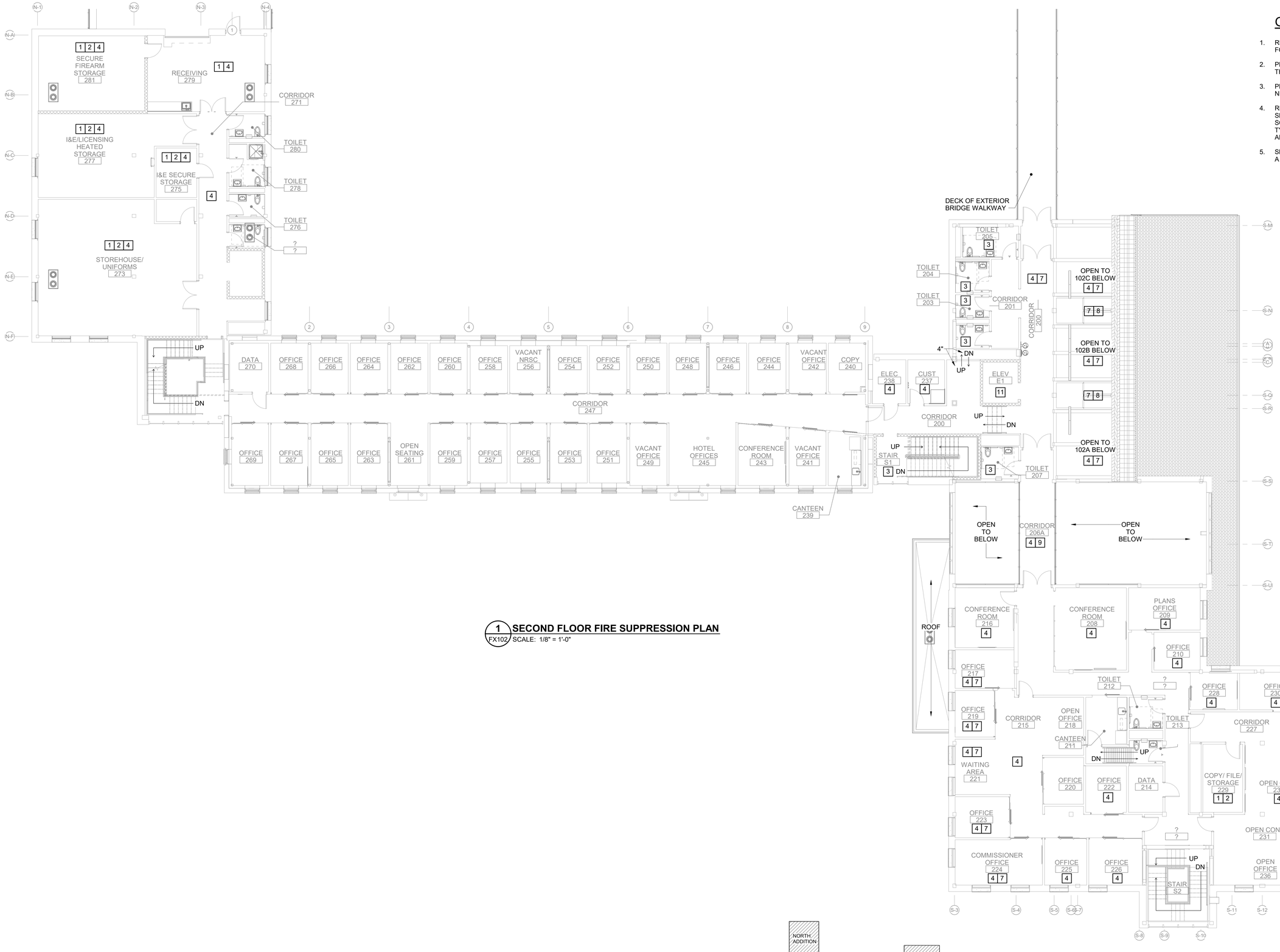


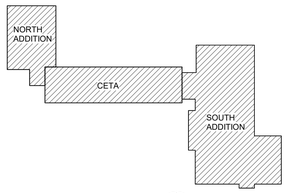
1 FX102 **SECOND FLOOR FIRE SUPPRESSION PLAN**
SCALE: 1/8" = 1'-0"

GENERAL NOTES

1. REFER TO FIRE SUPPRESSION GENERAL NOTES ON FX001 FOR SYSTEM REQUIREMENTS.
2. PROVIDE LIGHT HAZARD SPRINKLER COVERAGE THROUGHOUT UNLESS OTHERWISE NOTED.
3. PROVIDE QUICK RESPONSE HEADS WHERE PERMITTED BY NFPA.
4. REFER TO ARCHITECTURAL REFLECTED CEILING PLANS ON SHEETS AE701 TO AE708 FOR CEILING MATERIALS AND SOFFIT LOCATIONS FOR COORDINATION WITH SPRINKLER TYPES AND POSSIBLE CEILING OBSTRUCTIONS. SEE SHEETS AE220 TO AE223 FOR BUILDING SECTIONS.
5. SLOPED CEILINGS WITH SIDEWALL SPRINKLERS SHALL HAVE A SLOPE NOT EXCEEDING 2 IN 12.

KEYNOTES

1. PROVIDE ORDINARY HAZARD, GROUP 1 SPRINKLER COVERAGE IN ROOMS INDICATED.
2. PROVIDE SPRINKLER(S) WITH WIRE GUARD(S) IN ROOMS INDICATED.
3. GYPSUM BOARD CEILING.
4. EXPOSED STRUCTURE.
5. PROVIDE DRY TYPE PENDENT SPRINKLER(S) IN ROOMS INDICATED.
6. COORDINATE COLOR OF SPRINKLER PIPING WITH STRUCTURE. PAINT TO MATCH.
7. OPEN TO SLOPED ROOF ABOVE.
8. PROVIDE COVERAGE ABOVE AND BELOW RETRACTABLE WALL ASSEMBLY.
9. PROVIDE COVERAGE ABOVE AND BELOW ELEVATED WALKWAY.
10. PROVIDE SPRINKLER HEADS BELOW DUCTWORK IN COMPLIANCE WITH NFPA 13. MAINTAIN MINIMUM HEADROOM OF 7'-0" CLEAR AFF BELOW PIPES AND HEADS.
11. PROVIDE SPRINKLERS IN ELEVATOR SHAFT IN ACCORDANCE WITH ASME A17.1-2013. INSTALL SHAFT HEAD 24" OR LESS AFF OF PIT BOTTOM. PROVIDE FLOW AND TAMPER SWITCHES WITH TEST DRAIN.



KEYPLAN
NOT TO SCALE
PLAN NORTH

GRAPHIC SCALE
1/8"=1'-0"
8' 4' 0 8' 16'
CHECK GRAPHIC SCALE BEFORE USING

NO.	DATE	DESCRIPTION	BY
		REVISIONS	

STATE OF MAINE
MATTHEW S. ALBERT
No. 9235
LICENSED
PROFESSIONAL ENGINEER

DRAWN BY: SRW
CHECK BY: MSA
NO.
DATE 01/29/2025

DEPARTMENT OF INLAND FISHERIES & WILDLIFE
TITLE: NEW OFFICE HEADQUARTERS
LOCATION: AUGUSTA, ME
TITLE THIS DWG: SECOND FLOOR FIRE SUPRESSION PLAN

OAK POINT ASSOCIATES
231 Main Street, Biddeford, Maine 04005 207.283.0193

DRAWING NO. FX102
SHEET NO. 174 OF 239

1/28/2025 4:38:08 PM
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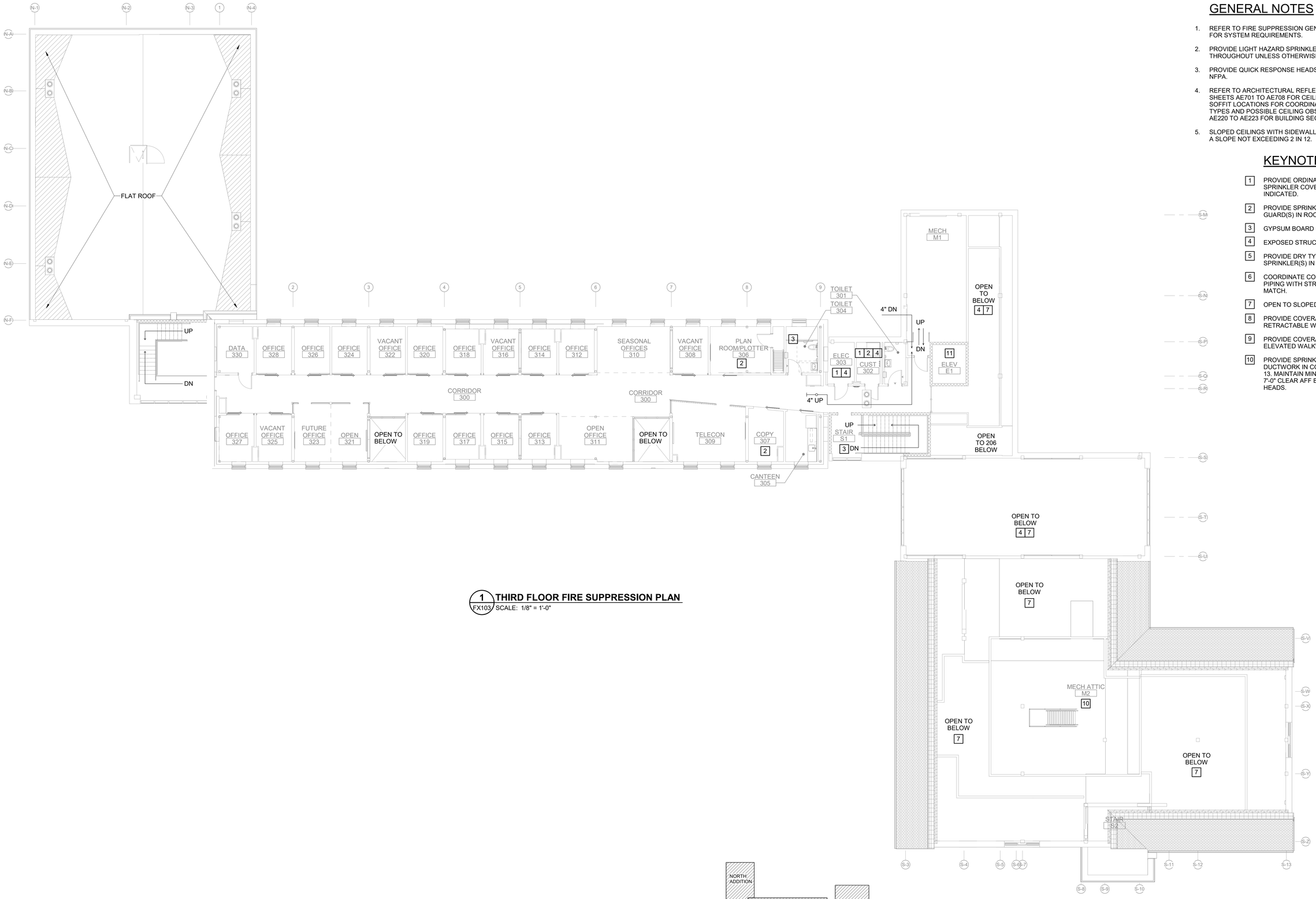


1 THIRD FLOOR FIRE SUPPRESSION PLAN

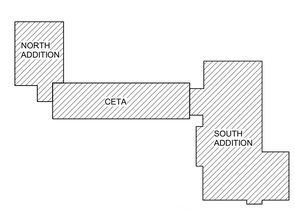
FX103 SCALE: 1/8" = 1'-0"

GENERAL NOTES

1. REFER TO FIRE SUPPRESSION GENERAL NOTES ON FX001 FOR SYSTEM REQUIREMENTS.
2. PROVIDE LIGHT HAZARD SPRINKLER COVERAGE THROUGHOUT UNLESS OTHERWISE NOTED.
3. PROVIDE QUICK RESPONSE HEADS WHERE PERMITTED BY NFPA.
4. REFER TO ARCHITECTURAL REFLECTED CEILING PLANS ON SHEETS AE701 TO AE708 FOR CEILING MATERIALS AND SOFFIT LOCATIONS FOR COORDINATION WITH SPRINKLER TYPES AND POSSIBLE CEILING OBSTRUCTIONS. SEE SHEETS AE220 TO AE223 FOR BUILDING SECTIONS.
5. SLOPED CEILINGS WITH SIDEWALL SPRINKLERS SHALL HAVE A SLOPE NOT EXCEEDING 2 IN 12.

KEYNOTES

1. PROVIDE ORDINARY HAZARD, GROUP 1 SPRINKLER COVERAGE IN ROOMS INDICATED.
2. PROVIDE SPRINKLER(S) WITH WIRE GUARD(S) IN ROOMS INDICATED.
3. GYPSUM BOARD CEILING.
4. EXPOSED STRUCTURE.
5. PROVIDE DRY TYPE PENDENT SPRINKLER(S) IN ROOMS INDICATED.
6. COORDINATE COLOR OF SPRINKLER PIPING WITH STRUCTURE. PAINT TO MATCH.
7. OPEN TO SLOPED ROOF ABOVE.
8. PROVIDE COVERAGE ABOVE AND BELOW RETRACTABLE WALL ASSEMBLY.
9. PROVIDE COVERAGE ABOVE AND BELOW ELEVATED WALKWAY.
10. PROVIDE SPRINKLER HEADS BELOW DUCTWORK IN COMPLIANCE WITH NFPA 13. MAINTAIN MINIMUM HEADROOM OF 7'-0" CLEAR AFF BELOW PIPES AND HEADS.



KEYPLAN
NOT TO SCALE

PLAN NORTH

GRAPHIC SCALE

1/8"=1'-0"

8' 4' 0 8' 16'

CHECK GRAPHIC SCALE BEFORE USING

NO.	DATE	DESCRIPTION	BY
		REVISIONS	

STATE OF MAINE
MATTHEW S. ALBERT
No. 9235
LICENSED
PROFESSIONAL ENGINEER

DRAWN BY: SRW
CHECK BY: MSA
DATE 01/29/2025

DEPARTMENT OF INLAND FISHERIES & WILDLIFE

TITLE: NEW OFFICE HEADQUARTERS
LOCATION: AUGUSTA, ME
TITLE THIS DWG: THIRD FLOOR FIRE SUPRRESSION PLAN

OAK POINT ASSOCIATES
231 Main Street, Biddeford, Maine 04005 207.283.0193

DRAWING NO. FX103
SHEET NO. 175 OF 239

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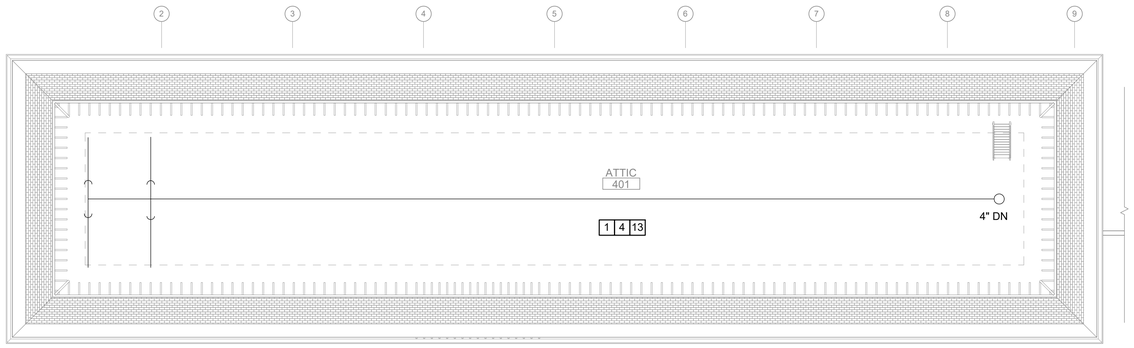
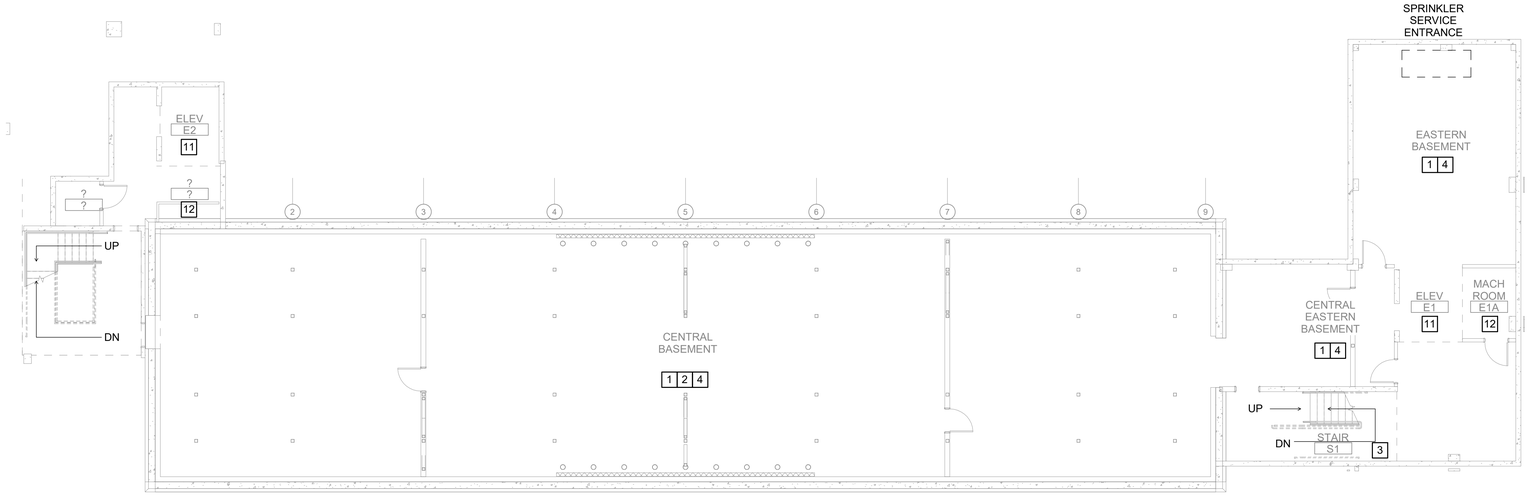


2 / FX104 ATTIC FIRE SUPPRESSION PLAN
SCALE: 1/8" = 1'-0"



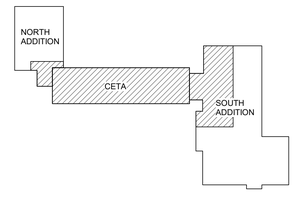
1 / FX104 BASEMENT FIRE SUPPRESSION PLAN
SCALE: 1/8" = 1'-0"

GENERAL NOTES

1. REFER TO FIRE SUPPRESSION GENERAL NOTES ON FX001 FOR SYSTEM REQUIREMENTS.
2. PROVIDE LIGHT HAZARD SPRINKLER COVERAGE THROUGHOUT UNLESS OTHERWISE NOTED.
3. PROVIDE QUICK RESPONSE HEADS WHERE PERMITTED BY NFPA.
4. REFER TO ARCHITECTURAL REFLECTED CEILING PLANS ON SHEETS AE701 TO AE708 FOR CEILING MATERIALS AND SOFFIT LOCATIONS FOR COORDINATION WITH SPRINKLER TYPES AND POSSIBLE CEILING OBSTRUCTIONS. SEE SHEETS AE220 TO AE223 FOR BUILDING SECTIONS.
5. SLOPED CEILINGS WITH SIDEWALL SPRINKLERS SHALL HAVE A SLOPE NOT EXCEEDING 2 IN 12.

KEYNOTES

1. PROVIDE ORDINARY HAZARD, GROUP 1 SPRINKLER COVERAGE IN ROOMS INDICATED.
2. PROVIDE SPRINKLER(S) WITH WIRE GUARD(S) IN ROOMS INDICATED.
3. GYPSUM BOARD CEILING.
4. EXPOSED STRUCTURE.
5. PROVIDE DRY TYPE PENDENT SPRINKLER(S) IN ROOMS INDICATED.
6. COORDINATE COLOR OF SPRINKLER PIPING WITH STRUCTURE. PAINT TO MATCH.
7. OPEN TO SLOPED ROOF ABOVE.
8. PROVIDE COVERAGE ABOVE AND BELOW RETRACTABLE WALL ASSEMBLY.
9. PROVIDE COVERAGE ABOVE AND BELOW ELEVATED WALKWAY.
10. PROVIDE SPRINKLER HEADS BELOW DUCTWORK IN COMPLIANCE WITH NFPA 13. MAINTAIN MINIMUM HEADROOM OF 7'-0" CLEAR AFF BELOW PIPES AND HEADS.
11. PROVIDE SPRINKLERS IN ELEVATOR SHAFT IN ACCORDANCE WITH ASME A17.1-2013. INSTALL SHAFT HEAD 24" OR LESS AFF OF PIT BOTTOM. PROVIDE FLOW AND TAMPER SWITCHES WITH TEST DRAIN.
12. PROVIDE SPRINKLERS IN ELEVATOR MACHINE ROOM IN ACCORDANCE WITH ASME A17.1-2013.
13. PROVIDE 18"x18"x1-1/2" PRECAST REINFORCED CONCRETE SPLASH BLOCK SET FLUSH WITH EXISTING GRADE (CONCRETE SHALL BE F'c=4000 PSI).
14. PROVIDE SIGN ABOVE FIRE DEPARTMENT CONNECTION USING 1" LETTERING. SIGN SHALL READ "AUTOSPKR".
15. PROVIDE SIGN ABOVE FIRE DEPARTMENT CONNECTION USING 1" LETTERING. SIGN SHALL READ "STAND PIPE".



KEYPLAN
NOT TO SCALE

PLAN NORTH

GRAPHIC SCALE
1/8"=1'-0"
8' 4' 0 8' 16'
CHECK GRAPHIC SCALE BEFORE USING

NO.	DATE	DESCRIPTION	BY
		REVISIONS	

STATE OF MAINE
MATTHEW S. ALBERT
No. 9235
LICENSED
PROFESSIONAL ENGINEER
1/29/25

DRAWN BY: SRW
CHECK BY: MSA
NO.
DATE 01/29/2025

DEPARTMENT OF INLAND FISHERIES & WILDLIFE

TITLE: NEW OFFICE HEADQUARTERS
LOCATION: AUGUSTA, ME
TITLE THIS DWG.: BASEMENT AND ATTIC FIRE SUPRRESSION PLANS

OAK POINT ASSOCIATES
231 Main Street, Biddeford, Maine 04005 207.283.0193

DRAWING NO. FX104
SHEET NO. 176 OF 239

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PLUMBING ABBREVIATIONS

ADA	AMERICANS WITH DISABILITIES ACT
AFF	ABOVE FINISHED FLOOR
AHU	AIR HANDLING UNIT
BFP	BACKFLOW PREVENTER
CD	CONDENSATE DRAIN
℄	CENTERLINE
CLG	CEILING
CO	CLEANOUT
CONN	CONNECTION
CONC	CONCRETE
COND	CONDENSATE
CU	CONDENSING UNIT
CW	COLD WATER
D	DRAIN
DHWR	DOMESTIC HOT WATER RETURN
ø, DIA	DIAMETER
DIV	DIVISION
DN	DOWN
DP	DROP
DWG	DRAWING
ELEC	ELECTRIC/ELECTRICAL
ELEV	ELEVATION, ELEVATOR
EM	EMERGENCY EYEWASH
EMV	EMERGENCY MIXING VALVE
EWC	ELECTRIC WATER COOLER
EWH	ELECTRIC WATER HEATER
EXT	EXPANSION TANK
°F	DEGREES FAHRENHEIT
FCO	FLOOR CLEANOUT
FD	FLOOR DRAIN
FF	FINISHED FLOOR
FLR	FLOOR
FT	FOOT, FEET
GAL	GALLONS
GPH	GALLONS PER HOUR
GPM	GALLONS PER MINUTE
H2O	WATER
HB	HOSE BIBB
HP	HORSEPOWER
HVAC	HEATING, VENTILATION, AND AIR CONDITIONING
HW	HOT WATER
ID	INSIDE DIAMETER
IN	INCH, INCHES
INV	INVERT
IOB	ICE MAKER OUTLET BOX
IW	INDIRECT WASTE
JAN	JANITOR (SINK)
KW	KILOWATT, KITCHEN WASTE
L	LAVATORY
LF	LINEAR FEET
MAX	MAXIMUM
MECH	MECHANICAL
MIN	MINIMUM
MR	MOP RECEPTOR
N/A	NOT APPLICABLE
NFPA	NATIONAL FIRE PROTECTION ASSOCIATION
NFWH	NON-FREEZE WALL HYDRANT
NO	NUMBER, NORMALLY OPEN
NPT	NATIONAL PIPE THREAD
NTS	NOT TO SCALE
OC	ON CENTER
OD	OUTSIDE DIAMETER, OVERFLOW DRAIN
ODN	OVERFLOW DOWNSPOUT NOZZLE
P	PUMP, PITCH, PRESSURE
PC	PUMPED CONDENSATE
PDI	PLUMBING DRAINAGE INSTITUTE
PEX	CROSS-LINKED POLYETHYLENE
PRESS	PRESSURE
PRV	PRESSURE REDUCING VALVE
PSI	POUNDS PER SQUARE INCH
PSIG	POUNDS PER SQUARE INCH GAUGE
PW	PUMPED WASTE
QTY	QUANTITY
R	RADON, RADIUS
RD	ROOF DRAIN
REQ'D	REQUIRED
RM	ROOM
RP	RECIRCULATING PUMP
RPM	REVOLUTIONS PER MINUTE
RPZ	REDUCED PRESSURE ZONE
S	SINK, SANITARY
SAN	SANITARY
SF	SQUARE FOOT/FEET
SH	SHOWER
SP	SUMP PUMP, SPRINKLER
SQ	SQUARE
ST	STORM DRAIN
TEMP	TEMPERATURE
TM	DOMESTIC HOT WATER TEMPERATURE MAINTENANCE ZONE
TMV	TEMPERATURE MIXING VALVE
TP	TRAP PRIMER
TPA	TRAP PRIMER ASSEMBLY
TYP	TYPICAL
UL	UNDERWRITERS LABORATORY
V	VENT
VTR	VENT TO ROOF
W	WASTE
W&T	WASTE AND TRAP
W/	WITH
WC	WATER CLOSET, WATER COLUMN
WCO	WALL CLEANOUT
WH	WALL HYDRANT, WATER HEATER
WHA	WATER HAMMER ARRESTOR
WPD	WATER PRESSURE DROP

PLUMBING SYMBOLS LEGEND

ANNOTATIONS

- P — SYMBOL PER ABBREVIATION LIST
- 2 — EQUIPMENT SEQUENCE NUMBER
- 1 — KEYNOTE
- 0.5 — GPM SETTING FOR BALANCING VALVE
- POINT OF ELEVATION

FIXTURES

- COUNTERTOP LAVATORY
- WALL HUNG LAVATORY
- WALL HUNG WATER CLOSET WITH FLUSH VALVE
- MOP RECEPTOR
- WALL MOUNTED, DUAL HEIGHT ELECTRIC WATER COOLER

PIPING AND VALVES

- PIPE ELBOW DOWN
- PIPE ELBOW UP, PIPE UP AND DOWN
- PIPE TEE DOWN
- PIPE TEE UP, PIPE UP AND DOWN
- PIPE CAP
- DIRECTION OF FLOW
- STRAINER
- BALL VALVE
- BUTTERFLY VALVE
- UNION
- GATE VALVE
- CHECK VALVE
- CALIBRATED BALANCING VALVE WITH POSITIVE SHUTOFF
- AUTOMATIC FLOW CONTROL VALVE
- P — PIPE PITCH DOWN
- PRESSURE RELIEF VALVE
- PRESSURE REDUCING VALVE
- PIPE REDUCER/INCREASER
- CONCENTRIC REDUCER
- ECCENTRIC REDUCER
- PRESSURE GAUGE AND COCK
- CO — CLEANOUT
- WCO — WALL CLEANOUT
- FCO — FLOOR CLEANOUT
- P-TRAP

EQUIPMENT AND SPECIALTIES

- TS — TEMPERATURE SENSOR
- T — INSERTION TEMPERATURE SENSOR (AQUASTAT)
- FLOOR DRAIN
- THERMOMETER
- WATER HAMMER ARRESTOR
- WATER OR GAS METER
- REDUCED PRESSURE ZONE BACKFLOW PREVENTER
- AIR VENT, AUTOMATIC
- AIR VENT, MANUAL
- VACUUM RELIEF VALVE
- AIR GAP FITTING
- HOSE BIBB OR HYDRANT
- IN-LINE PUMP
- PUMP
- TRAP PRIMER ASSEMBLY
- THERMOSTATIC MIXING VALVE

PLUMBING LINE TYPE LEGEND

	EXISTING ITEMS TO REMAIN
	PROVIDE ITEMS
—S—	SOIL PIPE
—W—	WASTE PIPE
—SAN—	SANITARY SEWER ABOVE FLOOR
— SAN —	SANITARY SEWER BELOW FLOOR OR GRADE
—ST—	STORM DRAIN ABOVE FLOOR
— ST —	STORM DRAIN BELOW FLOOR OR GRADE
—OD—	STORM DRAINAGE OVERFLOW DRAIN LINE
—CD—	CONDENSATE DRAIN ABOVE FLOOR OR GRADE
- - - - - -	VENT
—TP—	TRAP PRIMER LINE
—R—	RADON PIPE
— - — - —	DOMESTIC COLD WATER
— - - — - - —	DOMESTIC HOT WATER (110°F)
— - - - —	DOMESTIC HOT WATER RETURN
—PW—	PUMPED WASTE
— · — · —	CONTROL WIRING

GENERAL PLUMBING SYSTEM NOTES

1. PLUMBING WORK SHALL BE PERFORMED IN ACCORDANCE WITH THE MAINE STATE INTERNAL PLUMBING CODE - CURRENT EDITION AND THE INTERNATIONAL ENERGY AND CONSERVATION CODE (IECC) - CURRENT EDITION.
2. ROOF DRAINS AND RAIN WATER CONDUCTOR SIZES INDICATED ON PLANS ARE BASED UPON A MAXIMUM RAINFALL OF 2.4 INCHES PER HOURS PER THE MAINE STATE INTERNAL PLUMBING CODE, AND A 2% PITCH DOWN IN THE DIRECTION OF FLOW UNLESS OTHERWISE INDICATED ON PLANS.
3. INSTALL SANITARY DRAINAGE WITH A PITCH OF 1/4 INCH PER FOOT FOR BUILDING SANITARY PIPING 3 INCHES AND SMALLER AND A PITCH OF 1/8 INCH PER FOOT FOR BUILDING SANITARY PIPING 4 INCHES AND LARGER.
4. FOR PIPE SIZES NOT SHOWN ON PLANS, REFER TO THE APPROPRIATE PART PLANS, DETAILS, AND RISER DIAGRAMS.
5. PIPING IS SHOWN DIAGRAMMATICALLY. EXACT LOCATIONS SHALL BE DETERMINED IN THE FIELD.
6. COORDINATE LOCATION OF PIPING WITH WORK OF OTHER TRADES. PERFORM CUTTING WORK ASSOCIATED WITH PLUMBING SYSTEMS.
7. PIPING SHALL BE INSTALLED CONCEALED ABOVE CEILINGS, IN WALLS AND IN CHASES, UNLESS OTHERWISE NOTED. PIPING SHALL BE INSTALLED PARALLEL TO BUILDING LINES.
8. PROVIDE DRAINS AT DOMESTIC WATER PIPING LOW POINTS AND PITCH PIPING TO LOW POINT DRAINS.
9. INSTALL WATER PIPING ON THE WARM SIDE OF BUILDING INSULATION IN EXTERIOR WALLS.
10. PROVIDE WATER HAMMER ARRESTORS (WHA) AS SHOWN ON PLANS AND AS REQUIRED TO AVOID WATER HAMMER. SIZES INDICATED CONFORM TO THE PLUMBING AND DRAINAGE INSTITUTE (PDI) STANDARDS.
11. PROVIDE ACCESSIBLE CLEANOUTS AT THE BASE OF STACKS, AT HORIZONTAL CHANGES OF DIRECTION GREATER THAN 45°, AND WHERE SHOWN ON DIAGRAMS.
12. PIPING DROPS TO FIXTURES MUST BE ANCHORED SOLID TO WALL WITH STEEL SUPPORT BRACKET WITH ADJUSTABLE CLIP.
13. PROVIDE HOSE END VALVES WITH HOSE END VACUUM BREAKERS AND CAPS.
14. PROVIDE STEEL PIPE SLEEVES AT SLAB PENETRATIONS BOTH ON GRADE AND ABOVE GRADE, AND AT MASONRY WALL AND PARTITION PENETRATIONS. OPENING SHALL BE SEALED SMOKE AND WATER TIGHT. REFER TO PIPE PENETRATION DETAILS ON PLUMBING DETAILS SHEETS.
15. PIPING SHALL BE SUPPORTED FROM BUILDING STRUCTURE. PIPING SHALL BE SUPPORTED FROM TOP CHORD OF JOISTS. NO STRUCTURAL MEMBER SHALL BE CUT.
16. HOSE END VALVES SHALL BE PROVIDED WITH HOSE END VACUUM BREAKERS.
17. COORDINATE LOCATION OF PIPING WITH WORK OF OTHER TRADES. PERFORM CUTTING WORK ASSOCIATED WITH PLUMBING SYSTEMS.

NO.	DATE	DESCRIPTION	BY
		REVISIONS	

STATE OF MAINE — MATTHEW S. ALBERT — No. 9235 — LICENSED PROFESSIONAL ENGINEER

DRAWN BY: SRW
CHECK BY: DMA
NO.
DATE 01/29/2025

DEPARTMENT OF INLAND FISHERIES & WILDLIFE

TITLE: NEW OFFICE HEADQUARTERS
LOCATION: AUGUSTA, ME
TITLE THIS DWG: PLUMBING LEGEND, ABBREVIATIONS, AND GENERAL NOTES

OAK POINT ASSOCIATES
ARCHITECTS • ENGINEERS • PLANNERS
231 Main Street, Biddeford, Maine 04005 207.283.0193

DRAWING NO. P-001
SHEET NO. 177 OF 239

1/29/2025 4:36:57 PM
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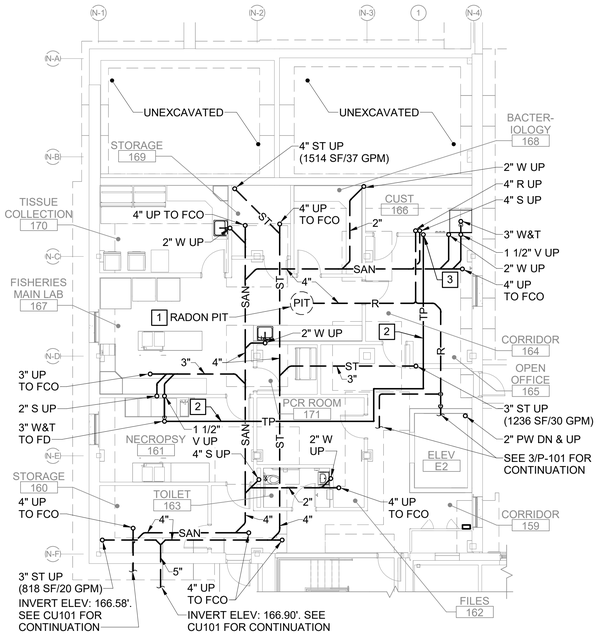
GENERAL NOTES

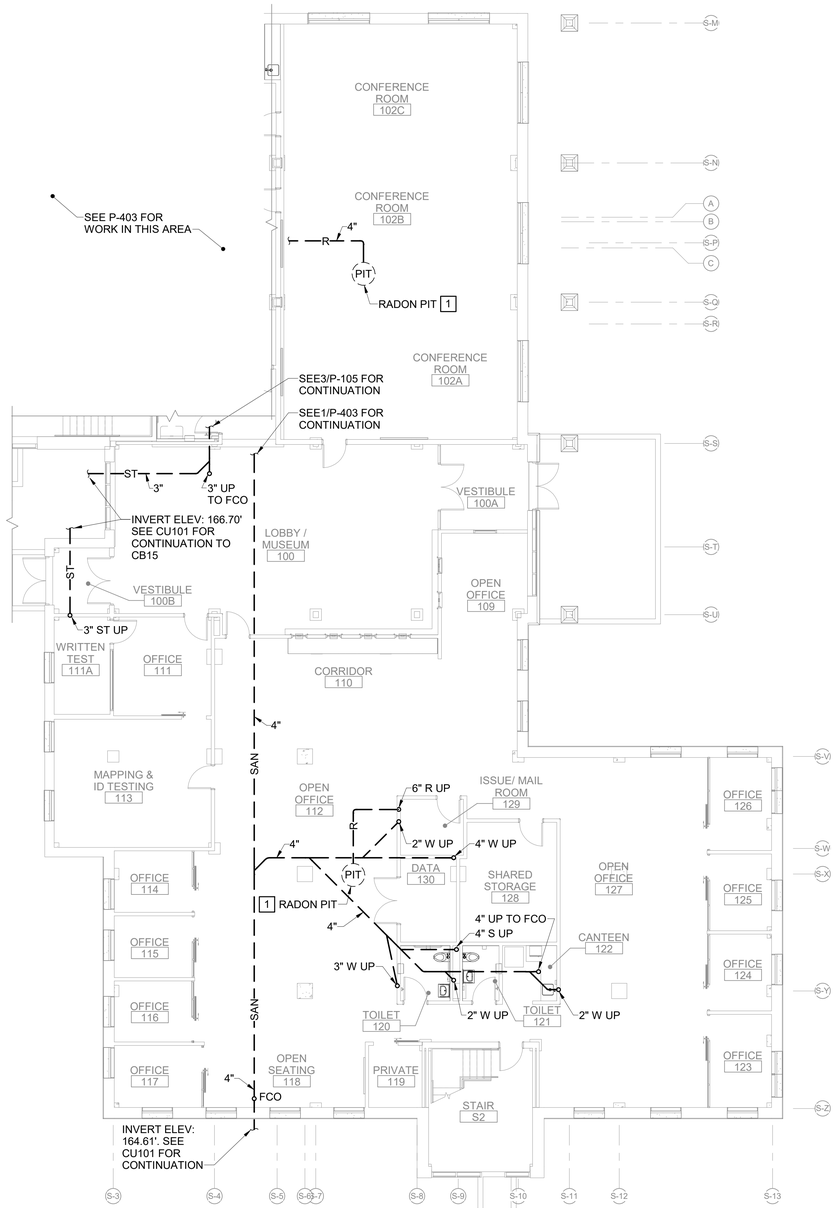
1. REFER TO GENERAL NOTES ON P-001 FOR REQUIRED PIPE SLOPES.
2. FOR FLOOR AND WALL PENETRATION DETAILS, REFER TO P-501.
3. FOR PIPE HANGER AND SUPPORT DETAILS, REFER TO P-501
4. BASEMENT FINISHED FLOOR ELEVATION IS 161.00'.
5. FIRST FLOOR FINISHED FLOOR ELEVATION IS 170.00'.

KEYNOTES

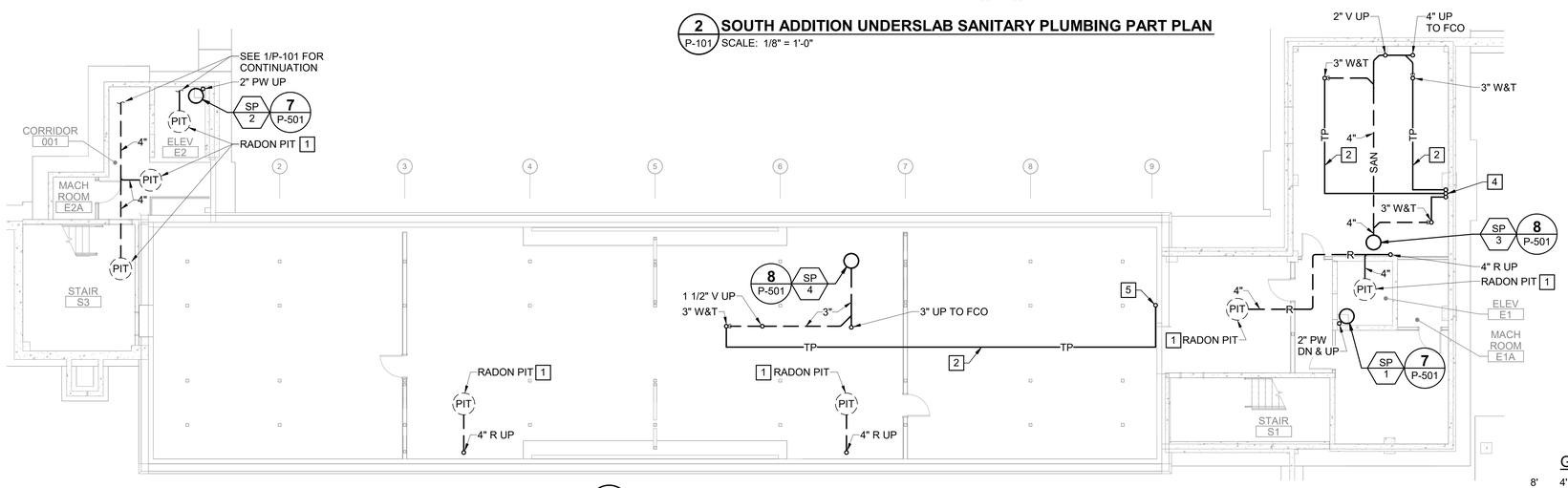
1. REFER TO 3/SB502 FOR RADON PIT DETAIL.
2. 1/2" TP IN PEX BELOW FLOOR SLAB FROM TRAP PRIMER CONNECTION.
3. ONE (1) 1/2" TP IN PEX UP IN WALL.
4. THREE (3) 1/2" TP IN PEX UP IN WALL TO TPA-1.
5. 1/2" TP UP.



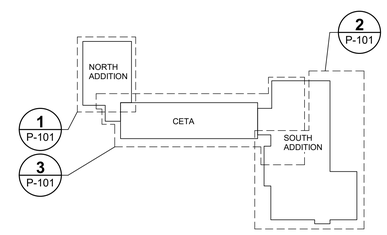
1 / P-101 NORTH ADDITION UNDERSLAB SANITARY PLUMBING PART PLAN
SCALE: 1/8" = 1'-0"



2 / P-101 SOUTH ADDITION UNDERSLAB SANITARY PLUMBING PART PLAN
SCALE: 1/8" = 1'-0"



3 / P-101 BASEMENT UNDERSLAB PLUMBING PLAN
SCALE: 1/8" = 1'-0"



KEYPLAN
NOT TO SCALE
PLAN NORTH

GRAPHIC SCALE
1/8"=1'-0"
8' 4' 0 8' 16'
CHECK GRAPHIC SCALE BEFORE USING

NO.	DATE	DESCRIPTION	BY
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STATE OF MAINE MATTHEW S. ALBERT No. 9235 LICENSED PROFESSIONAL ENGINEER

DRAWN BY: SRW
CHECK BY: DMA
DATE 01/29/2025

DEPARTMENT OF INLAND FISHERIES & WILDLIFE
TITLE: NEW OFFICE HEADQUARTERS
LOCATION: AUGUSTA, ME
TITLE THIS DWG: UNDERSLAB SANITARY PLUMBING PART PLANS

OAK POINT ASSOCIATES
231 Main Street, Biddeford, Maine 04005 207.283.0193

DRAWING NO. P-101
SHEET NO. 178 OF 239

1/28/2025 4:36:57 PM
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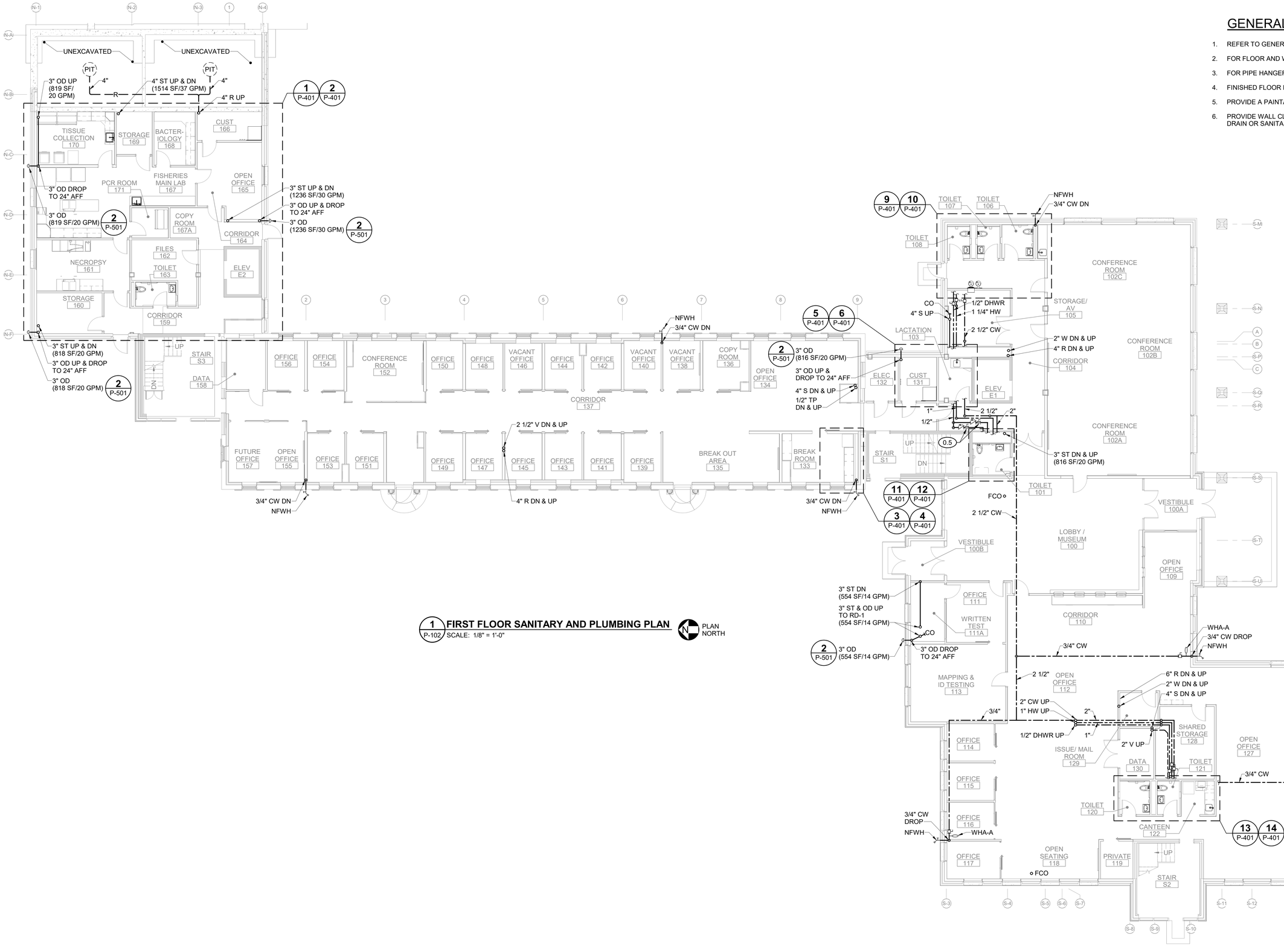
GENERAL NOTES

1. REFER TO GENERAL NOTES ON P-001 FOR REQUIRED PIPE SLOPES.
2. FOR FLOOR AND WALL PENETRATION DETAILS REFER TO P-501.
3. FOR PIPE HANGER AND SUPPORT DETAILS REFER TO P-501
4. FINISHED FLOOR ELEVATION IS 170.00'.
5. PROVIDE A PAINTABLE PVC JACKET ON EXPOSED, INSULATED PIPING.
6. PROVIDE WALL CLEANOUT AT ±12" AFF AT BASE OF EACH STORM DRAIN OR SANITARY RISER.



1 P-102 **FIRST FLOOR SANITARY AND PLUMBING PLAN**
SCALE: 1/8" = 1'-0"

PLAN NORTH

GRAPHIC SCALE
1/8"=1'-0"
8' 4' 0 8' 16'
CHECK GRAPHIC SCALE BEFORE USING

NO.	DATE	DESCRIPTION	BY
		REVISIONS	

STATE OF MAINE
MATTHEW S. ALBERT
No. 9235
LICENSED
PROFESSIONAL ENGINEER

DRAWN BY: SRW
CHECK BY: DMA
DATE 01/29/2025

DEPARTMENT OF INLAND FISHERIES & WILDLIFE

TITLE: NEW OFFICE HEADQUARTERS
LOCATION: AUGUSTA, ME
TITLE THIS DWG: FIRST FLOOR SANITARY AND PLUMBING PLAN

OAK POINT ASSOCIATES
231 Main Street, Biddeford, Maine 04005 207.283.0193

DRAWING NO. P-102
SHEET NO. 179 OF 239

1/28/2025 4:36:55 PM
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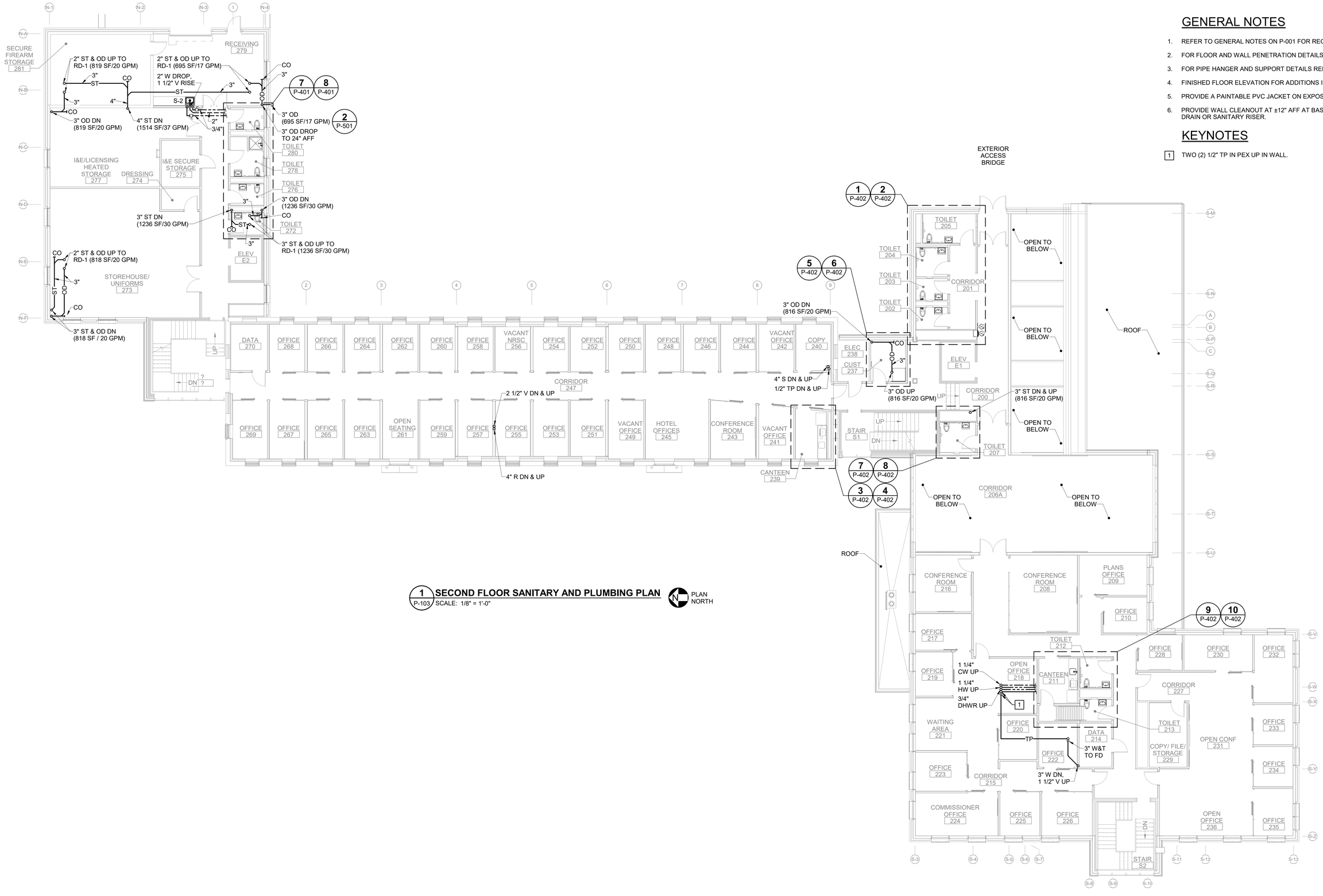

1 P-103 **SECOND FLOOR SANITARY AND PLUMBING PLAN**
SCALE: 1/8" = 1'-0"

PLAN NORTH

GENERAL NOTES

1. REFER TO GENERAL NOTES ON P-001 FOR REQUIRED PIPE SLOPES.
2. FOR FLOOR AND WALL PENETRATION DETAILS REFER TO P-501.
3. FOR PIPE HANGER AND SUPPORT DETAILS REFER TO P-501
4. FINISHED FLOOR ELEVATION FOR ADDITIONS IS 184.00', CETA IS 181.67'.
5. PROVIDE A PAINTABLE PVC JACKET ON EXPOSED, INSULATED PIPING.
6. PROVIDE WALL CLEANOUT AT ±12" AFF AT BASE OF EACH STORM DRAIN OR SANITARY RISER.

KEYNOTES

1 TWO (2) 1/2" TP IN PEX UP IN WALL.

GRAPHIC SCALE
1/8"=1'-0"
8' 4' 0 8' 16'
CHECK GRAPHIC SCALE BEFORE USING

NO.	DATE	DESCRIPTION	BY
		REVISIONS	

DRAWN BY: SRW
CHECK BY: DMA
DATE 01/29/2025

STATE OF MAINE MATTHEW S. ALBERT No. 9235 LICENSED PROFESSIONAL ENGINEER

DEPARTMENT OF INLAND FISHERIES & WILDLIFE

TITLE: NEW OFFICE HEADQUARTERS
LOCATION: AUGUSTA, ME
TITLE THIS DWG: SECOND FLOOR SANITARY AND PLUMBING PLAN

OAK POINT ASSOCIATES
231 Main Street, Biddeford, Maine 04005 207.283.0193

DRAWING NO. P-103
SHEET NO. 180 OF 239

1/28/2025 4:36:53 PM
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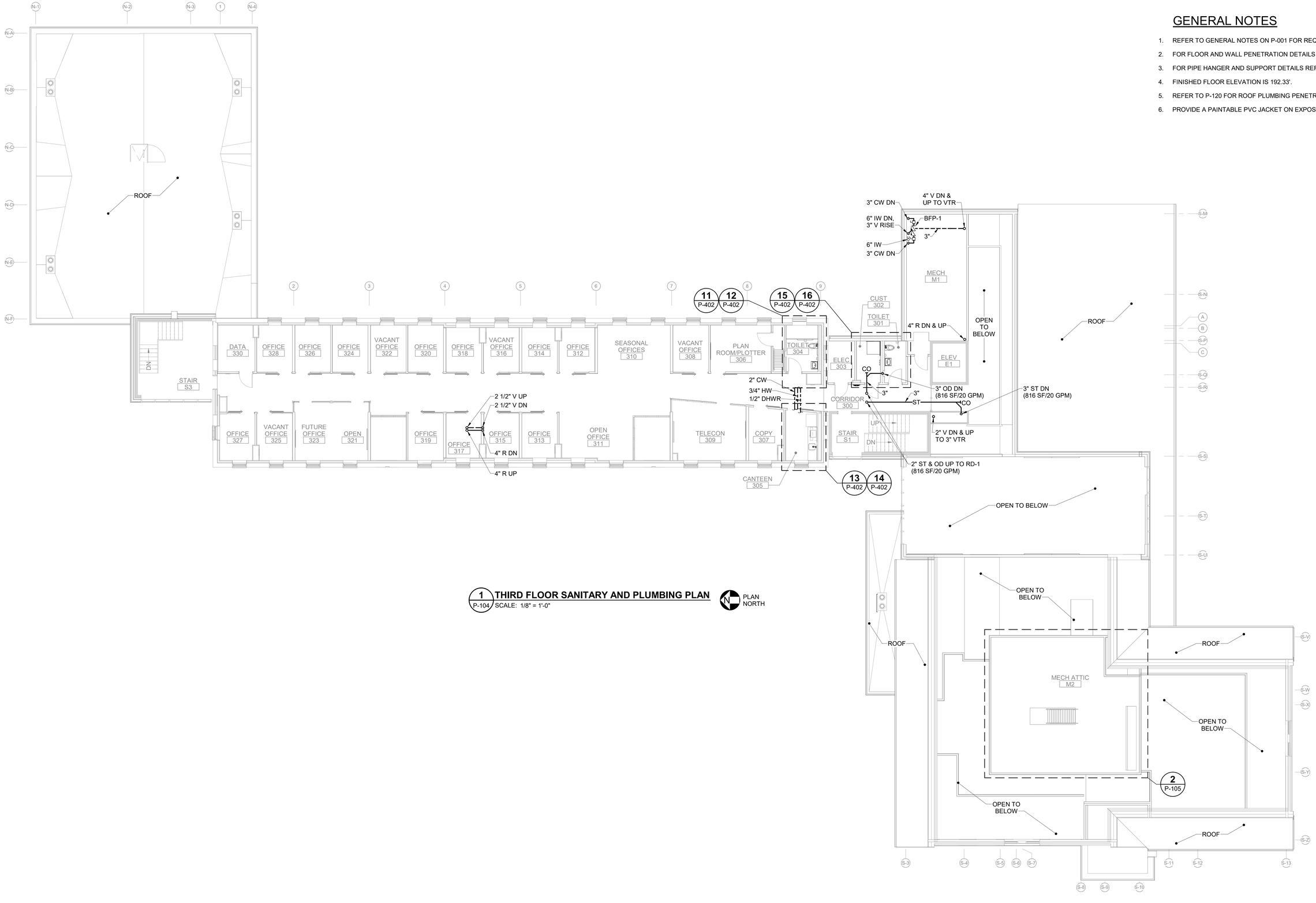
GENERAL NOTES

1. REFER TO GENERAL NOTES ON P-001 FOR REQUIRED PIPE SLOPES.
2. FOR FLOOR AND WALL PENETRATION DETAILS REFER TO P-501.
3. FOR PIPE HANGER AND SUPPORT DETAILS REFER TO P-501
4. FINISHED FLOOR ELEVATION IS 192.33'.
5. REFER TO P-120 FOR ROOF PLUMBING PENETRATIONS.
6. PROVIDE A PAINTABLE PVC JACKET ON EXPOSED, INSULATED PIPING.



1 THIRD FLOOR SANITARY AND PLUMBING PLAN
P-104 SCALE: 1/8" = 1'-0"

PLAN NORTH

GRAPHIC SCALE
1/8"=1'-0"
8' 4' 0 8' 16'
CHECK GRAPHIC SCALE BEFORE USING

NO.	DATE	DESCRIPTION	BY
		REVISIONS	

STATE OF MAINE MATTHEW S. ALBERT No. 9235 LICENSED PROFESSIONAL ENGINEER 1/29/25

DRAWN BY: SRW
CHECK BY: DMA
DATE 01/29/2025

DEPARTMENT OF INLAND FISHERIES & WILDLIFE

TITLE: NEW OFFICE HEADQUARTERS
LOCATION: AUGUSTA, ME
TITLE THIS DWG.: THIRD FLOOR SANITARY AND PLUMBING PLAN

OAK POINT ASSOCIATES
231 Main Street, Biddeford, Maine 04005 207.283.0193

DRAWING NO. P-104
SHEET NO. 181 OF 239

1/28/2025 4:36:51 PM
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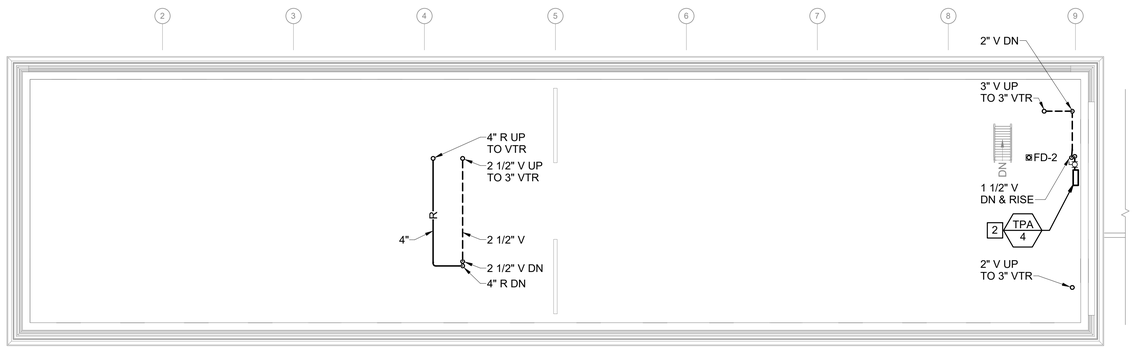
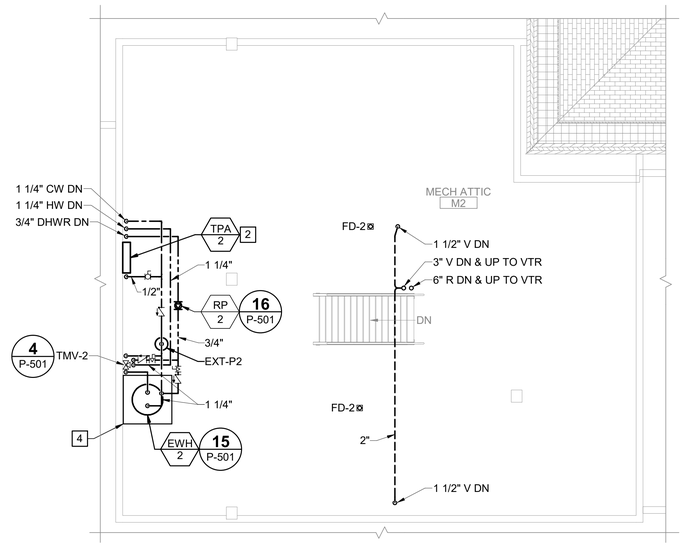


1 ATTIC PLUMBING PLAN

P-105 SCALE: 1/8" = 1'-0"



2 MECH ATTIC PLUMBING PLAN

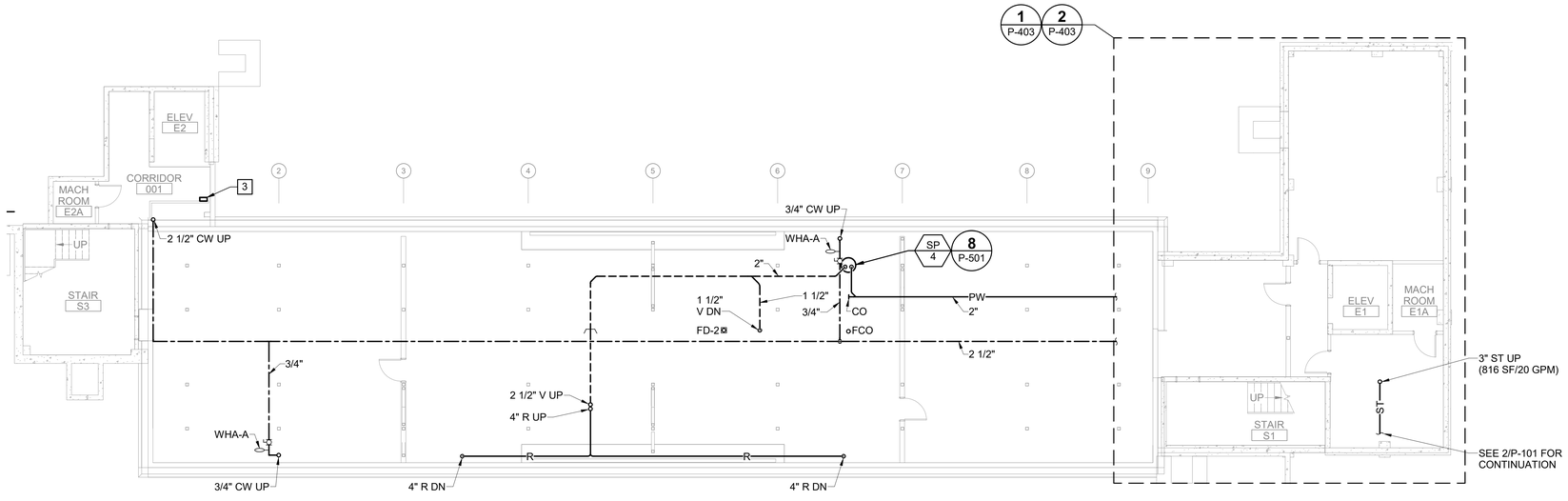
P-104 P-105 SCALE: 1/4" = 1'-0"

GENERAL NOTES

1. REFER TO GENERAL NOTES ON P-001 FOR REQUIRED PIPE SLOPES.
2. FOR FLOOR AND WALL PENETRATION DETAILS REFER TO P-501.
3. FOR PIPE HANGER AND SUPPORT DETAILS REFER TO P-501
4. BASEMENT FINISHED FLOOR ELEVATION IS 160.00'.
5. FIRST FLOOR FINISHED FLOOR ELEVATION IS 169.00'.
6. PROVIDE A PAINTABLE PVC JACKET ON EXPOSED, INSULATED PIPING IN FINISHED SPACES.

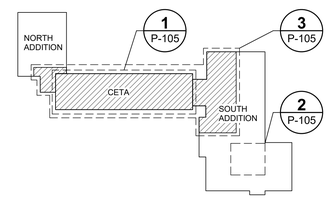
KEYNOTES

1. REFER TO 3/SB502 FOR RADON PIT DETAIL.
2. TRAP PRIMER. SEE DETAIL 5/P-501.
3. ELEVATOR SUMP PUMP CONTROL PANEL.
4. CONCRETE HOUSEKEEPING PAD. SEE DETAIL 2/SB502.



3 BASEMENT PLUMBING PLAN

P-105 SCALE: 1/8" = 1'-0"



KEYPLAN
NOT TO SCALE

PLAN NORTH

NO.	DATE	DESCRIPTION	BY
		REVISIONS	

STATE OF MAINE
MATTHEW S. ALBERT
No. 9235
LICENSED
PROFESSIONAL ENGINEER
01/29/25

DRAWN BY: SRW
CHECK BY: DMA
DATE 01/29/2025

DEPARTMENT OF INLAND FISHERIES & WILDLIFE

TITLE: NEW OFFICE HEADQUARTERS
LOCATION: AUGUSTA, ME
TITLE THIS DWG.: BASEMENT AND ATTIC PLUMBING PLANS

OAK POINT ASSOCIATES
231 Main Street, Biddeford, Maine 04005 207.283.0193

DRAWING NO. P-105
SHEET NO. 182 OF 239

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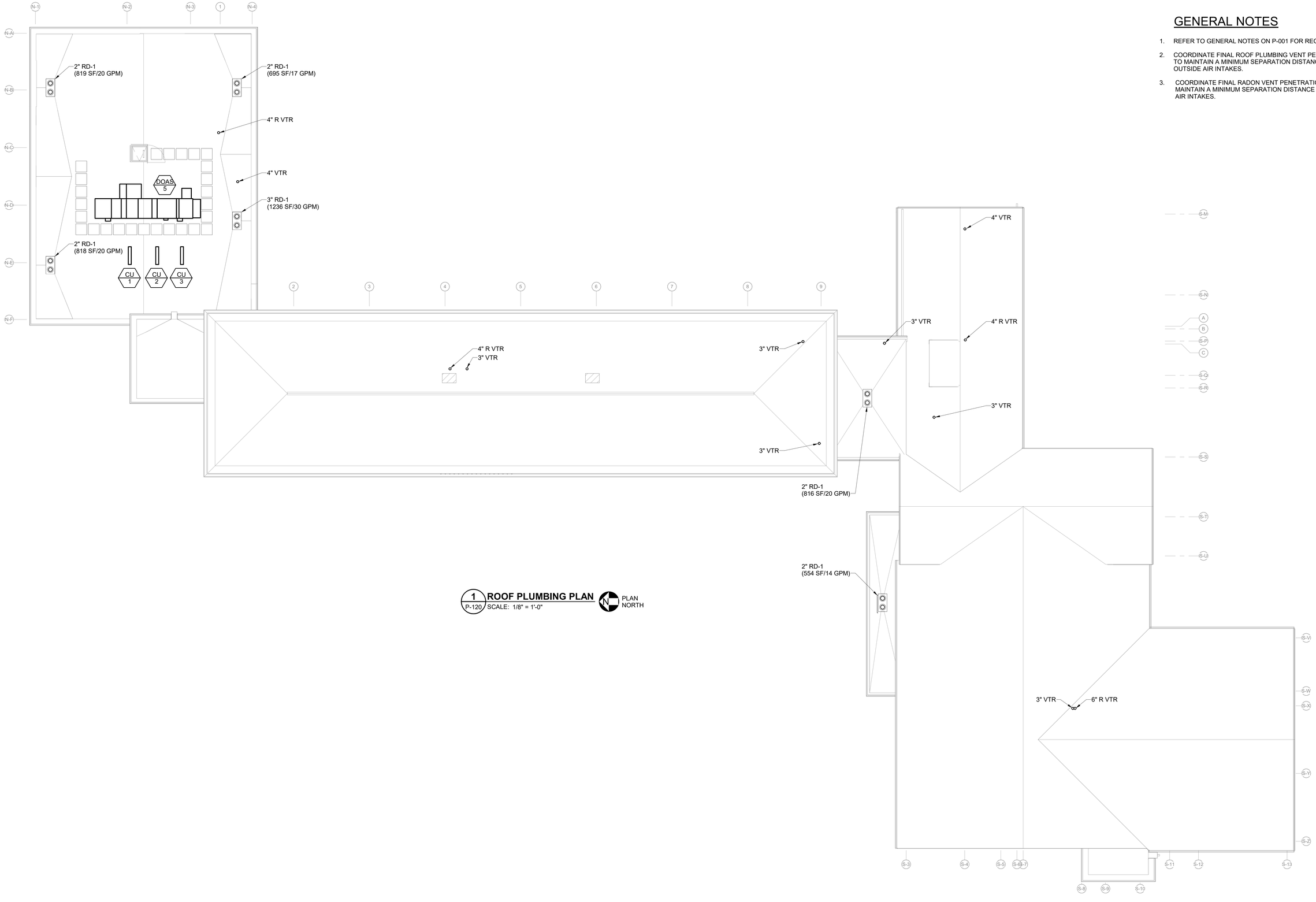

1 P-120 **ROOF PLUMBING PLAN**
SCALE: 1/8" = 1'-0"

PLAN NORTH

GENERAL NOTES

1. REFER TO GENERAL NOTES ON P-001 FOR REQUIRED PIPE SLOPES.
2. COORDINATE FINAL ROOF PLUMBING VENT PENETRATION LOCATIONS TO MAINTAIN A MINIMUM SEPARATION DISTANCE OF 10'-0" FROM OUTSIDE AIR INTAKES.
3. COORDINATE FINAL RADON VENT PENETRATION LOCATIONS TO MAINTAIN A MINIMUM SEPARATION DISTANCE OF 30'-0" FROM OUTSIDE AIR INTAKES.

GRAPHIC SCALE

1/8"=1'-0"

8' 4' 0 8' 16'

CHECK GRAPHIC SCALE BEFORE USING

NO.	DATE	DESCRIPTION	BY

REVISIONS

STATE OF MAINE
MATTHEW S. ALBERT
No. 9235
LICENSED
PROFESSIONAL ENGINEER

DRAWN BY: SRW
CHECK BY: DMA
DATE 01/29/2025

DEPARTMENT OF INLAND FISHERIES & WILDLIFE

TITLE NEW OFFICE HEADQUARTERS

LOCATION AUGUSTA, ME

TITLE THIS DWG. ROOF PLUMBING PLAN

OAK POINT ASSOCIATES
231 Main Street, Biddeford, Maine 04005 207.283.0193

DRAWING NO. P-120

SHEET NO. 183 OF 239

1/29/2025 4:36:49 PM
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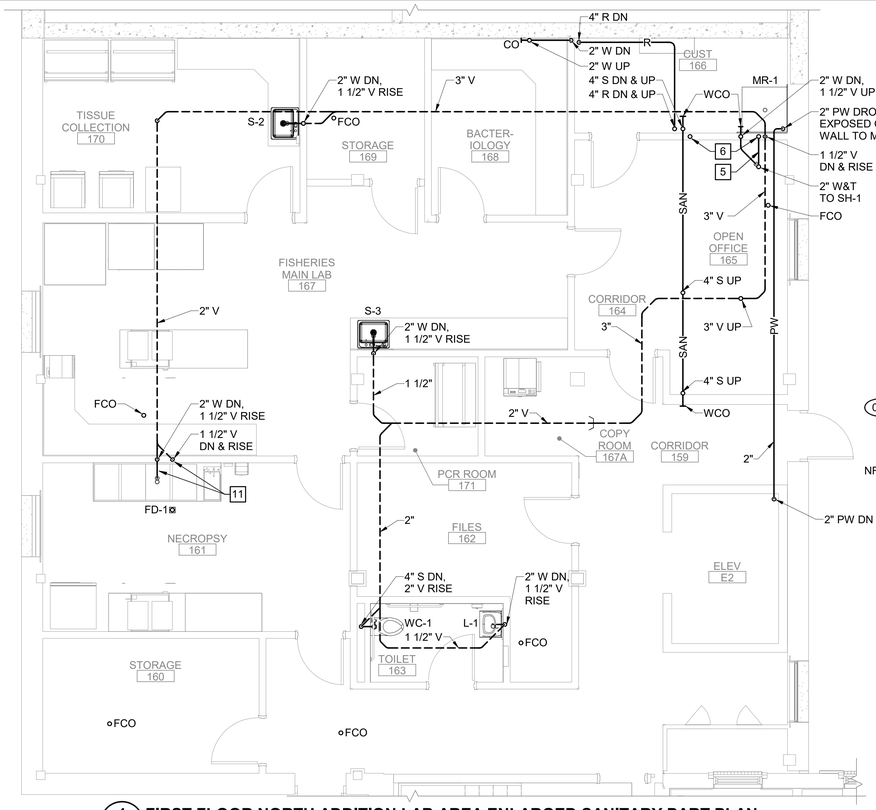
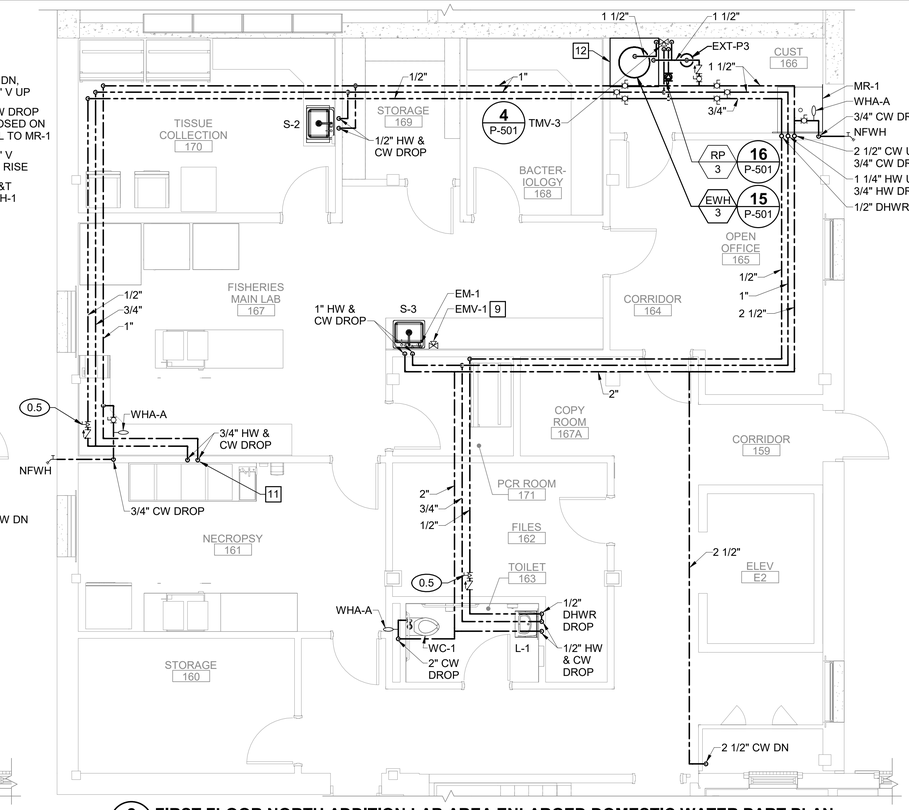


1 FIRST FLOOR NORTH ADDITION LAB AREA ENLARGED SANITARY PART PLAN
P-102 P-401 SCALE: 1/4" = 1'-0"



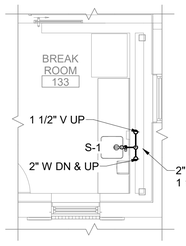
2 FIRST FLOOR NORTH ADDITION LAB AREA ENLARGED DOMESTIC WATER PART PLAN
P-102 P-401 SCALE: 1/4" = 1'-0"

GENERAL NOTES

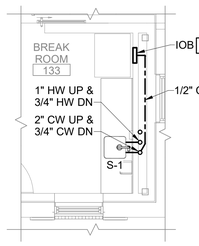
1. REFER TO GENERAL NOTES ON P-001 FOR REQUIRED PIPE SLOPES.
2. FOR FLOOR AND WALL PENETRATION DETAILS REFER TO P-501.
3. FOR PIPE HANGER AND SUPPORT DETAILS REFER TO P-501
4. PROVIDE A PAINTABLE PVC JACKET ON EXPOSED, INSULATED PIPING.

KEYNOTES

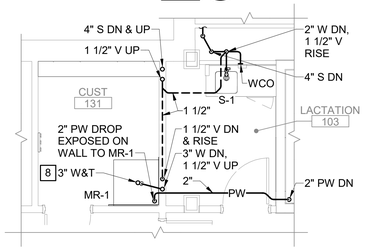
1. ICE MAKER OUTLET BOX WITH SHUT-OFF VALVE AND CONNECTION TO REFRIGERATOR.
2. PROVIDE ACCESS DOORS FOR WATER HAMMER ARRESTORS AND HOT WATER BALANCING VALVES.
3. VENT PIPING IS TO BE LOCATED IN CHASE AND IS SHOWN OFFSET FOR CLARITY.
4. TWO (2) 1/2" TP IN PEX UP IN WALL TO TPA-3 ABOVE.
5. 1/2" TP IN COPPER.
6. ONE (1) 1/2" TP IN PEX UP IN WALL.
7. INSTALL TPA-3 ABOVE CEILING. REFER TO DETAIL 5/P-501. PROVIDE ACCESS PANEL IN CEILING.
8. PIPING FOR MR-1 ON FLOOR ABOVE.
9. INSTALL SWING DOWN EMERGENCY EYEWASH (EM-1) ON SINK REAR DECK TO LEFT OF FAUCET. MOUNT EMERGENCY EYEWASH TEMPERING VALVE (EMV-1) BELOW COUNTERTOP, IN CABINET. EXTEND 1/2" HW AND 1/2" CW TO EMV-1 AND 1/2" TM FROM EMV-1 TO EM-1. REFER TO DETAIL 18/P-501.
10. PROVIDE FULL SIZE TEE FITTING WITH REDUCER TO 1" DRAIN DOWN.
11. PLUMBING ROUGH-IN FOR CONNECTION TO OWNER PROVIDED NECROPSY TABLE.
12. CONCRETE HOUSEKEEPING PAD. SEE DETAIL 2/SB502.



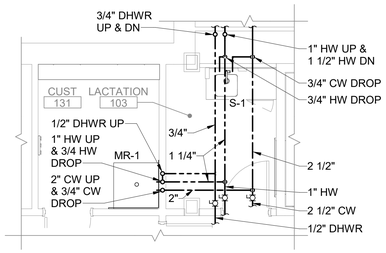
3 BREAK ROOM 133 ENLARGED SANITARY PART PLAN
P-102 P-401 SCALE: 1/4" = 1'-0"



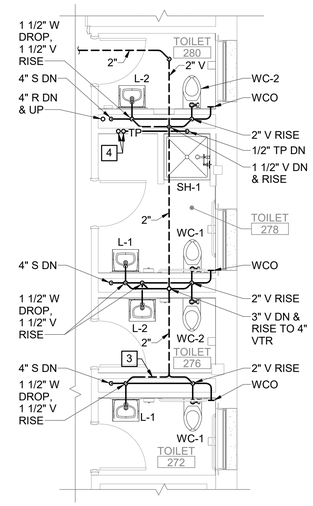
4 BREAK ROOM 133 ENLARGED DOMESTIC WATER PART PLAN
P-102 P-401 SCALE: 1/4" = 1'-0"



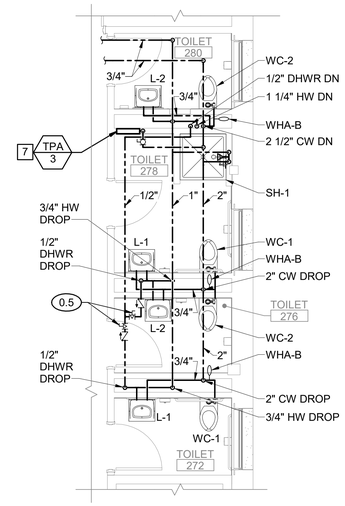
5 CUST 131 AND LACTATION 103 ENLARGED SANITARY PART PLAN
P-102 P-401 SCALE: 1/4" = 1'-0"



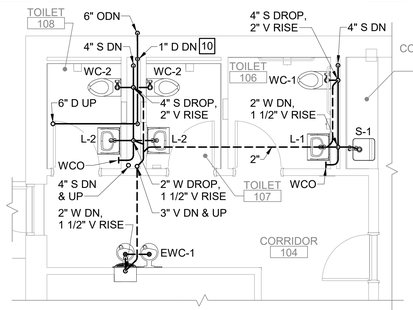
6 CUST 131 AND LACTATION 103 ENLARGED DOMESTIC WATER PART PLAN
P-102 P-401 SCALE: 1/4" = 1'-0"



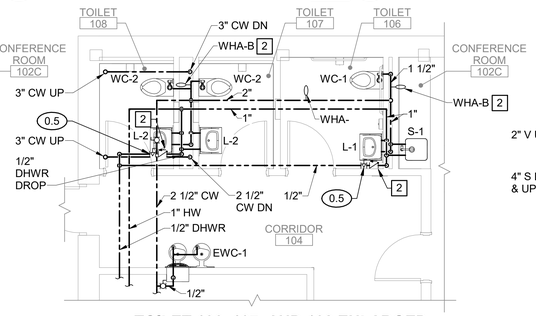
7 RM 276, 278, AND 280 ENLARGED SANITARY PART PLAN
P-103 P-401 SCALE: 1/4" = 1'-0"



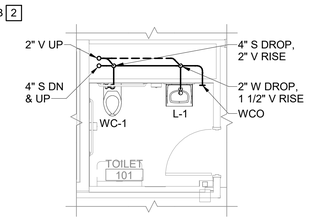
8 RM 276, 278, AND 280 ENLARGED DOMESTIC WATER PART PLAN
P-103 P-401 SCALE: 1/4" = 1'-0"



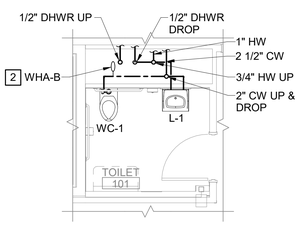
9 TOILET 106, 107, AND 108 ENLARGED SANITARY PART PLAN
P-102 P-401 SCALE: 1/4" = 1'-0"



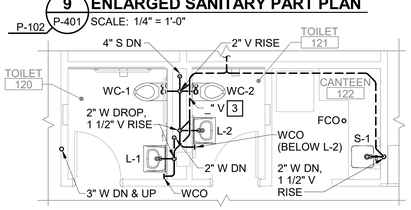
10 TOILET 106, 107, AND 108 ENLARGED DOMESTIC WATER PART PLAN
P-102 P-401 SCALE: 1/4" = 1'-0"



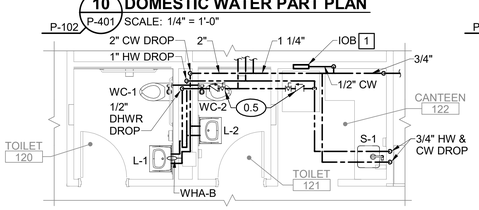
11 TOILET 101 ENLARGED SANITARY PART PLAN
P-102 P-401 SCALE: 1/4" = 1'-0"



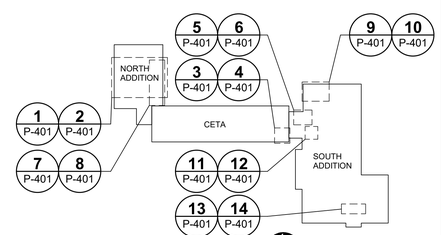
12 TOILET 101 ENLARGED DOMESTIC WATER PART PLAN
P-102 P-401 SCALE: 1/4" = 1'-0"



13 TOILET 120/121 AND CANTEEN 122 ENLARGED SANITARY PART PLAN
P-102 P-401 SCALE: 1/4" = 1'-0"



14 TOILET 120/121 AND CANTEEN 122 ENLARGED DOMESTIC WATER SUPPLY PART PLAN
P-102 P-401 SCALE: 1/4" = 1'-0"



KEYPLAN
NOT TO SCALE

PLAN NORTH

GRAPHIC SCALE
1/4"=1'-0"
4' 2' 0 4' 8'
CHECK GRAPHIC SCALE BEFORE USING

NO.	DATE	DESCRIPTION	BY
		REVISIONS	

STATE OF MAINE MATTHEW S. ALBERT No. 9235 LICENSED PROFESSIONAL ENGINEER

DRAWN BY: SRW
CHECK BY: DMA
DATE 01/29/2025

DEPARTMENT OF INLAND FISHERIES & WILDLIFE

TITLE: NEW OFFICE HEADQUARTERS
LOCATION: AUGUSTA, ME
TITLE THIS DWG: FIRST AND SECOND FLOOR ENLARGED PLUMBING PART PLANS

OAK POINT ASSOCIATES
231 Main Street, Biddeford, Maine 04005 207.283.0193

DRAWING NO. P-401
SHEET NO. 184 OF 239

1/28/2025 4:36:48 PM
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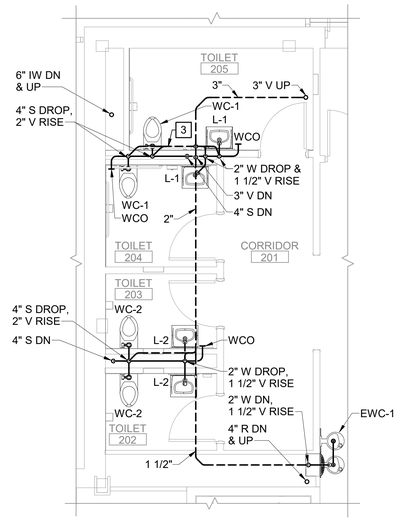
GENERAL NOTES

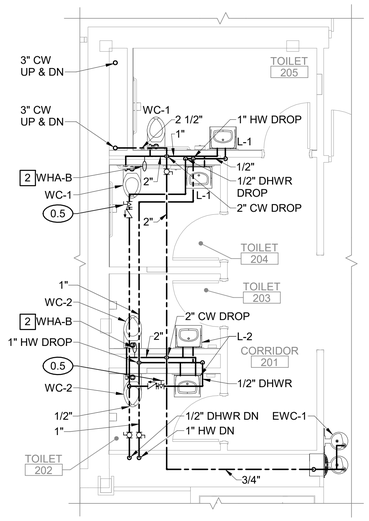
1. REFER TO GENERAL NOTES ON P-001 FOR REQUIRED PIPE SLOPES.
2. FOR FLOOR AND WALL PENETRATION DETAILS REFER TO P-501.
3. FOR PIPE HANGER AND SUPPORT DETAILS REFER TO P-501.
4. PROVIDE A PAINTABLE PVC JACKET ON EXPOSED, INSULATED PIPING.

KEYNOTES

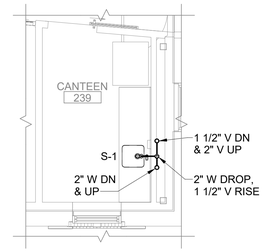
1. ICE MAKER OUTLET BOX WITH SHUT-OFF VALVE AND CONNECTION TO REFRIGERATOR.
2. PROVIDE ACCESS DOORS FOR WATER HAMMER ARRESTORS AND HOT WATER BALANCING VALVES.
3. PIPING IS TO BE LOCATED IN CHASE AND IS SHOWN OFFSET FOR CLARITY.



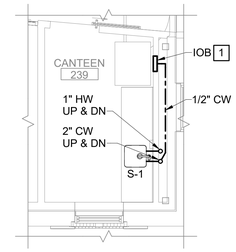
1 RM 202, 203, 204, AND 205 ENLARGED SANITARY PART PLAN
P-103 P-402 SCALE: 1/4" = 1'-0"



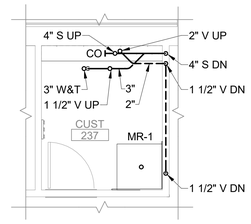
2 RM 202, 203, 204, AND 205 ENLARGED DOMESTIC WATER PART PLAN
P-103 P-402 SCALE: 1/4" = 1'-0"



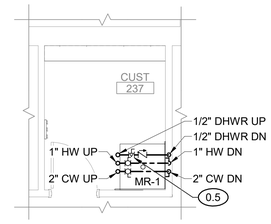
3 CANTEEN 239 ENLARGED SANITARY PART PLAN
P-103 P-402 SCALE: 1/4" = 1'-0"



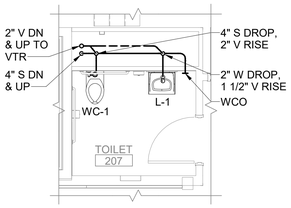
4 CANTEEN 239 ENLARGED DOMESTIC WATER PART PLAN
P-103 P-402 SCALE: 1/4" = 1'-0"



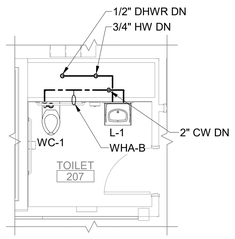
5 CUST 237 ENLARGED SANITARY PART PLAN
P-103 P-402 SCALE: 1/4" = 1'-0"



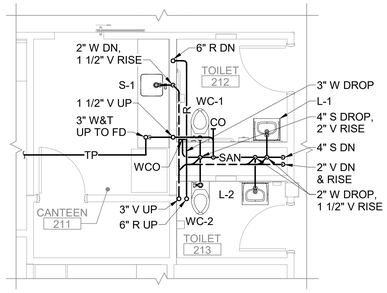
6 CUST 237 ENLARGED DOMESTIC WATER PART PLAN
P-103 P-402 SCALE: 1/4" = 1'-0"



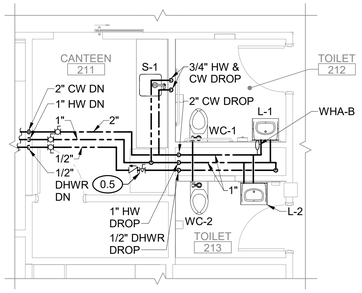
7 TOILET 207 ENLARGED SANITARY PART PLAN
P-103 P-402 SCALE: 1/4" = 1'-0"



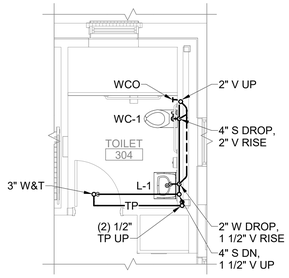
8 TOILET 207 ENLARGED DOMESTIC WATER PART PLAN
P-103 P-402 SCALE: 1/4" = 1'-0"



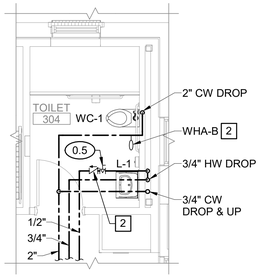
9 RM 211, 212, AND 213 ENLARGED SANITARY PART PLAN
P-103 P-402 SCALE: 1/4" = 1'-0"



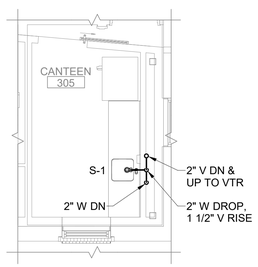
10 RM 211, 212, AND 213 ENLARGED DOMESTIC WATER PART PLAN
P-103 P-402 SCALE: 1/4" = 1'-0"



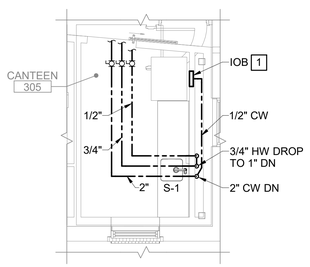
11 TOILET 304 ENLARGED SANITARY PART PLAN
P-104 P-402 SCALE: 1/4" = 1'-0"



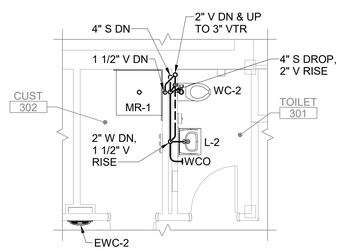
12 TOILET 304 ENLARGED DOMESTIC WATER PART PLAN
P-104 P-402 SCALE: 1/4" = 1'-0"



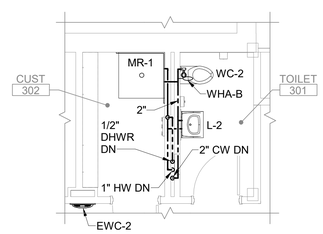
13 CANTEEN 305 ENLARGED SANITARY PART PLAN
P-104 P-402 SCALE: 1/4" = 1'-0"



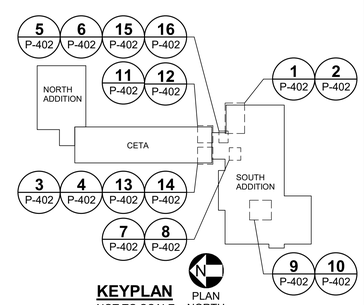
14 CANTEEN 305 ENLARGED DOMESTIC WATER PART PLAN
P-104 P-402 SCALE: 1/4" = 1'-0"



15 TOILET 301 AND CUST 302 ENLARGED SANITARY PART PLAN
P-104 P-402 SCALE: 1/4" = 1'-0"



16 TOILET 301 AND CUST 302 ENLARGED DOMESTIC WATER PART PLAN
P-104 P-402 SCALE: 1/4" = 1'-0"



KEYPLAN
NOT TO SCALE

GRAPHIC SCALE
1/4"=1'-0"
4' 2' 0 4' 8'
CHECK GRAPHIC SCALE BEFORE USING

NO.	DATE	DESCRIPTION	BY
		REVISIONS	

STATE OF MAINE MATTHEW S. ALBERT No. 9235 LICENSED PROFESSIONAL ENGINEER

DRAWN BY: SRW
CHECK BY: DMA
DATE 01/29/2025

DEPARTMENT OF INLAND FISHERIES & WILDLIFE
TITLE: NEW OFFICE HEADQUARTERS
LOCATION: AUGUSTA, ME
TITLE THIS DWG.: SECOND AND THIRD FLOOR ENLARGED PLUMBING PART PLANS

OAK POINT ASSOCIATES
231 Main Street, Biddeford, Maine 04005 207.283.0193

DRAWING NO. P-402
SHEET NO. 185 OF 239

1/29/2025 4:36:42 PM
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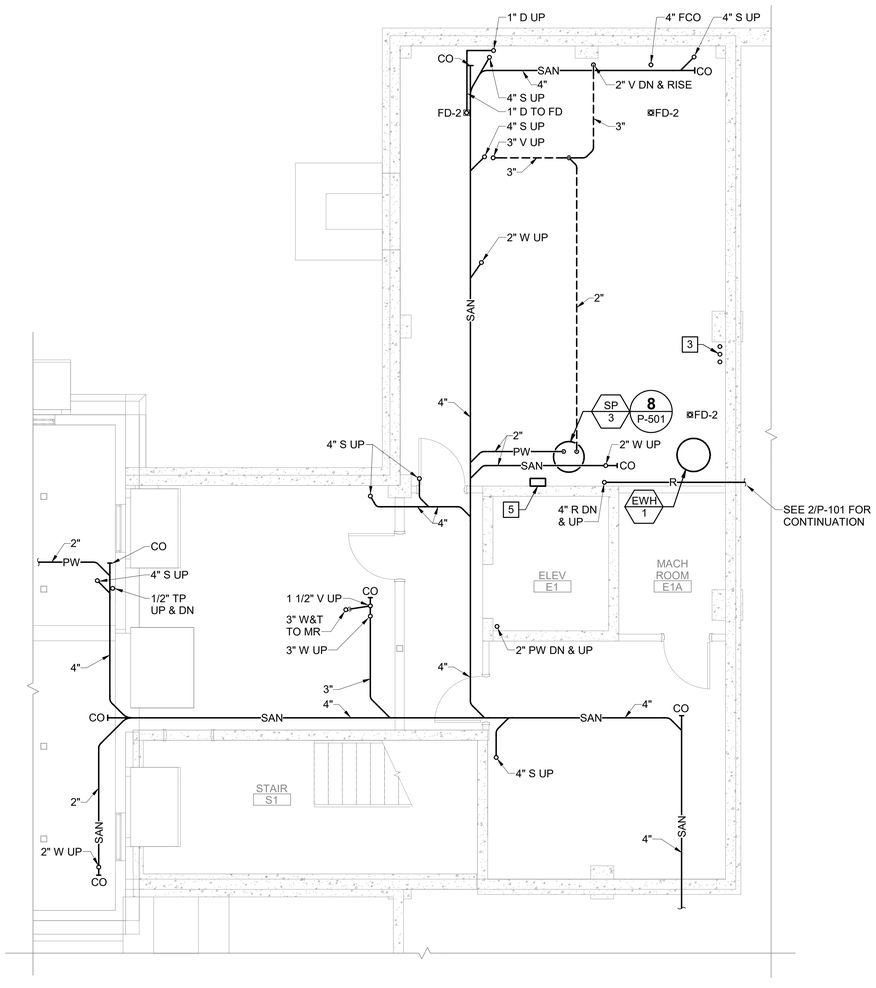
GENERAL NOTES

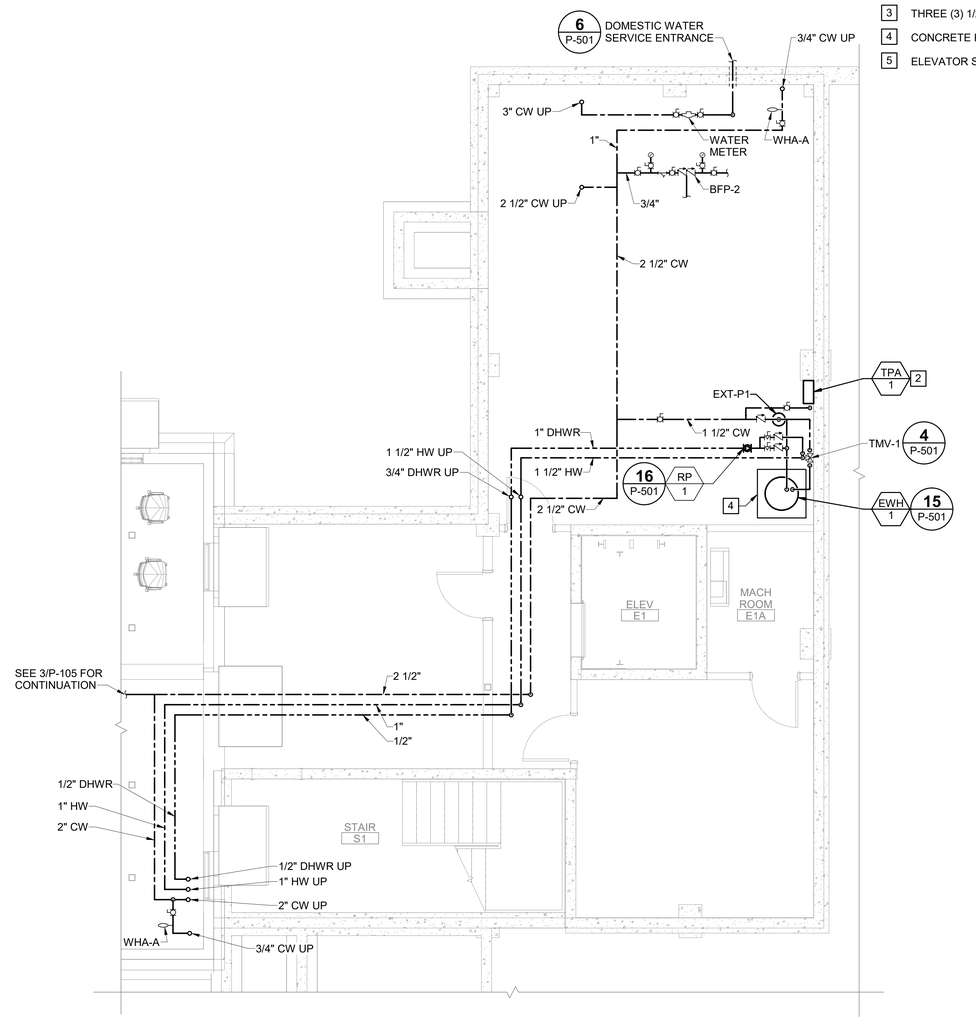
1. REFER TO GENERAL NOTES ON P-001 FOR REQUIRED PIPE SLOPES.
2. FOR FLOOR AND WALL PENETRATION DETAILS REFER TO P-501.
3. FOR PIPE HANGER AND SUPPORT DETAILS REFER TO P-501
4. PROVIDE A PAINTABLE PVC JACKET ON EXPOSED, INSULATED PIPING.

KEYNOTES

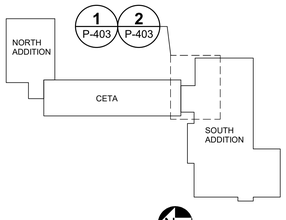
1. 3/4" MAKE-UP WATER LINE FOR COOLING AND HEATING SYSTEM. SEE 1/M-401 FOR CONTINUATION.
2. TRAP PRIMER. SEE DETAIL 5/P-501.
3. THREE (3) 1/2" TP IN COPPER UP TO TPA-1.
4. CONCRETE HOUSEKEEPING PAD. SEE DETAIL 2/SB502.
5. ELEVATOR SUMP PUMP CONTROL PANEL.



1 / P-403 BASEMENT ENLARGED SANITARY PART PLAN
SCALE: 1/4" = 1'-0"



2 / P-403 BASEMENT ENLARGED DOMESTIC WATER PART PLAN
SCALE: 1/4" = 1'-0"



KEYPLAN
NOT TO SCALE

PLAN NORTH

GRAPHIC SCALE
1/4"=1'-0"
4' 2' 0 4' 8'
CHECK GRAPHIC SCALE BEFORE USING

NO.	DATE	DESCRIPTION	BY
		REVISIONS	

STATE OF MAINE MATTHEW S. ALBERT No. 9235 LICENSED PROFESSIONAL ENGINEER

DRAWN BY: SRW
CHECK BY: DMA
NO.
DATE 01/29/2025

DEPARTMENT OF INLAND FISHERIES & WILDLIFE

TITLE: NEW OFFICE HEADQUARTERS
LOCATION: AUGUSTA, ME
TITLE THIS DWG: BASEMENT ENLARGED PLUMBING PART PLANS

OAK POINT ASSOCIATES
231 Main Street, Biddeford, Maine 04005 207.283.0193

DRAWING NO. P-403
SHEET NO. 186 OF 239

1/28/2025 4:36:41 PM
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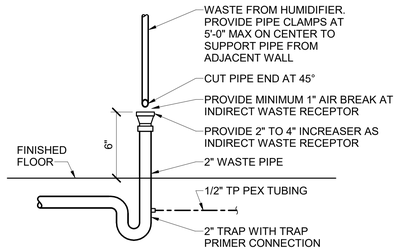
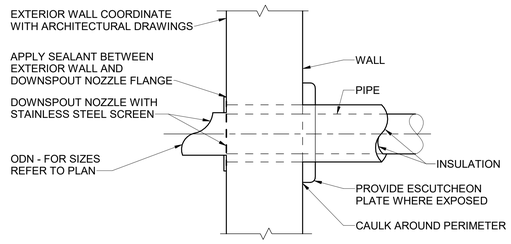
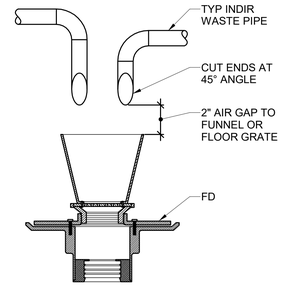


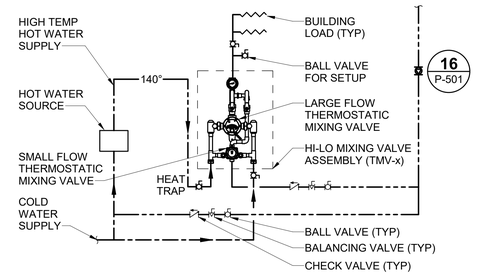
1 HUB DRAIN INSTALLATION DETAIL
P-501 SCALE: NTS



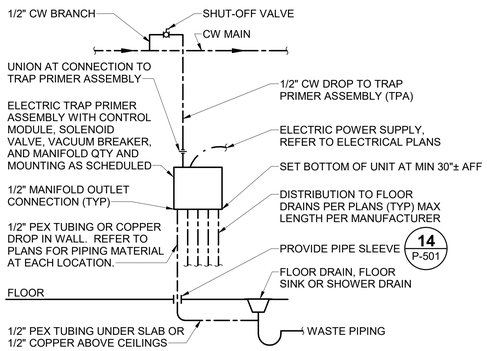
2 THRU WALL OVERFLOW DRAIN NOZZLE DETAIL
P-102 P-103 P-501 SCALE: NTS



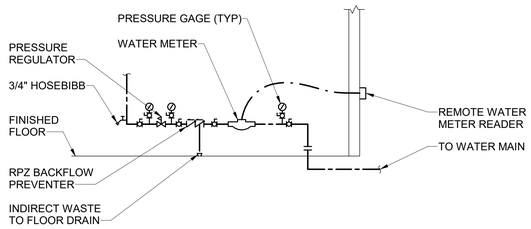
3 INDIRECT WASTE PIPING
P-501 SCALE: NTS



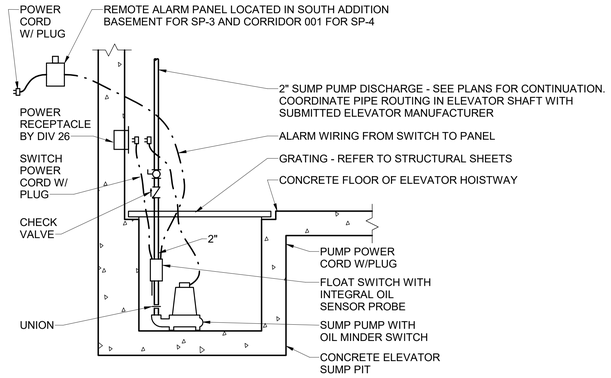
4 HI-LOW MIXING VALVE PIPING SCHEMATIC
P-105 P-401 P-403 P-501 SCALE: NTS



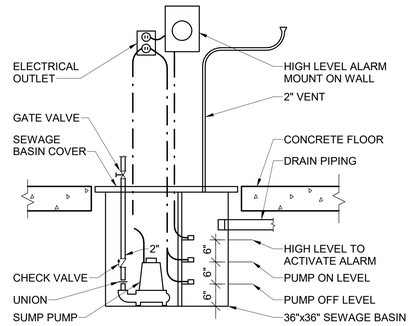
5 TYPICAL ELECTRONIC TRAP PRIMER ASSEMBLY SCHEMATIC
P-105 P-401 P-403 P-501 SCALE: NTS



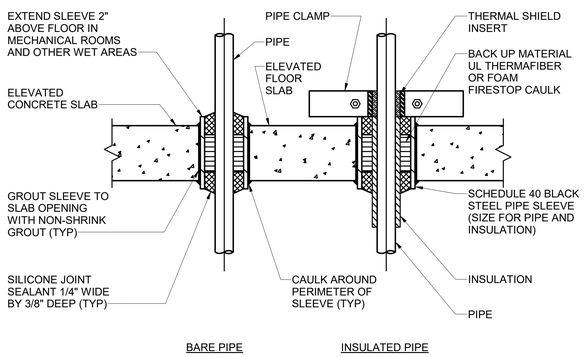
6 WATER SUPPLY ENTRANCE DETAIL
P-403 P-501 SCALE: NTS



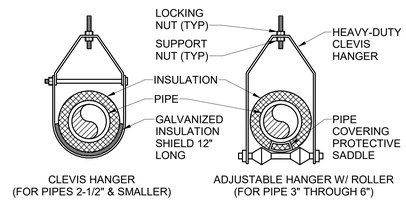
7 ELEVATOR SUMP PUMP DETAIL
P-101 P-105 P-403 P-501 SCALE: NTS



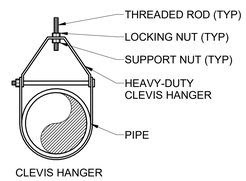
8 SUMP PUMP DETAIL
P-101 P-403 P-501 SCALE: NTS



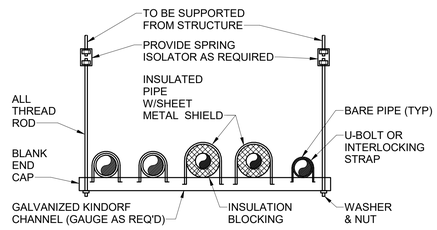
9 PIPE SLEEVE THROUGH ELEVATED FLOOR
P-501 SCALE: NTS



10 PIPE HANGER ATTACHMENT DETAILS
P-501 SCALE: NTS

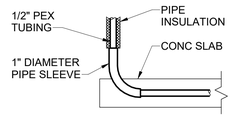


11 PIPE HANGER ATTACHMENT DETAIL
P-501 SCALE: NTS

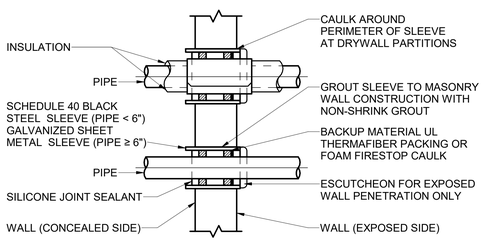


NOTES:
1. PIPING SUPPORT SYSTEM COMPONENTS SHALL HAVE A NON-CORROSIVE METAL FINISH.
2. COPPER PIPING SHALL BE PROTECTED FROM CONTACT W/DISSIMILAR METALS.

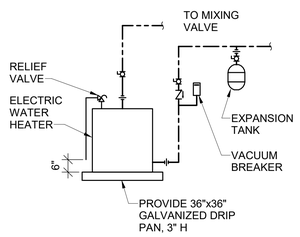
12 TRAPEZE PIPE SUPPORT DETAIL
P-501 SCALE: NTS



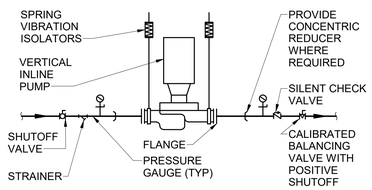
13 TRAP PRIMER TUBING ENTERING OR EXITING CONCRETE SLAB DETAIL
P-501 SCALE: NTS



14 PIPE SLEEVE THROUGH WALL
P-501 SCALE: NTS

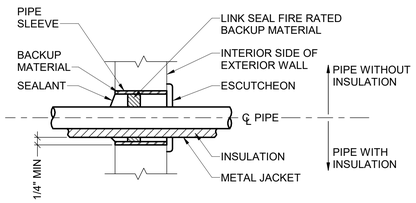


ELECTRIC WATER HEATER PIPING SCHEMATIC
P-105 P-401 P-403 P-501 SCALE: NTS

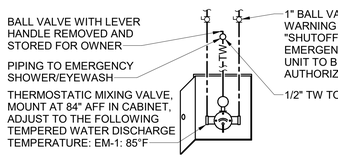


NOTES:
1. VALVES SHALL BE SAME SIZE AS PIPE.
2. PROVIDE SPRING VIBRATION ISOLATORS FOR PUMP.

16 PLUMBING INLINE PUMP PIPING DETAIL
P-105 P-401 P-403 P-501 SCALE: NTS



17 PIPE SLEEVE THRU UNDERGROUND WALL
P-501 SCALE: NTS



18 EMERGENCY MIXING VALVE (EMV-1) DETAIL
P-401 P-501 SCALE: NTS

NO.	DATE	DESCRIPTION	BY
		REVISIONS	

STATE OF MAINE — MATTHEW S. ALBERT — No. 9235 — LICENSED — PROFESSIONAL ENGINEER

DRAWN BY: SRW
CHECK BY: DMA
DATE 01/29/2025

DEPARTMENT OF INLAND FISHERIES & WILDLIFE

TITLE: NEW OFFICE HEADQUARTERS
LOCATION: AUGUSTA, ME
TITLE THIS DWG.: PLUMBING DETAILS

OAK POINT ASSOCIATES
231 Main Street, Biddeford, Maine 04005 207.283.0199

DRAWING NO. P-501
SHEET NO. 187 OF 239

1/29/2025 4:36:39 PM
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TRAP PRIMER ASSEMBLY SCHEDULE

UNIT NO	LOCATION	MOUNTING	# OF MANIFOLD OPENINGS	# OF DESIGN CONNECTIONS	CONNECTION SIZE (IN)	VOLTS / PHASE	BASIS OF DESIGN	NOTES
TPA-1	BASEMENT	SURFACE	4	3	1/2"	120 / 1	PRECISION PLUMBING PRODUCTS PT-4	1
TPA-2	MECH ATTIC M2	SURFACE	4	2	1/2"	120 / 1	PRECISION PLUMBING PRODUCTS PT-4	1
TPA-3	TOILET 278	RECESSED	4	2	1/2"	120 / 1	PRECISION PLUMBING PRODUCTS PT-4	1
TPA-4	ATTIC	SURFACE	4	2	1/2"	120 / 1	PRECISION PLUMBING PRODUCTS PT-4	1

NOTES: 1. PROVIDE CABINET WITH MANUFACTURER'S PRIMER COATED STEEL ACCESS DOOR.

EXPANSION TANK SCHEDULE

UNIT NO	LOCATION	SERVES	MIN TANK VOLUME (GAL)	ACCEPTANCE VOLUME	DIMENSIONS	BASIS OF DESIGN	NOTES
EXT-P1	BASEMENT	DOMESTIC WATER	5.5	1.14	14ø x 25	TACO PAX 30-150P	1
EXT-P2	MECH ATTIC M2	DOMESTIC WATER	3.0	0.70	14ø x 25	TACO PAX 30-150P	1
EXT-P3	CUST 166	DOMESTIC WATER	5.0	1.0	14ø x 25	TACO PAX 30-150P	1

NOTES: 1. POTABLE WATER.

GENERAL NOTE

1. NOTE ON BASIS OF DESIGN:
PRODUCTS OF OTHER MANUFACTURERS ARE ACCEPTABLE IF THEY MEET THE OPERATIONAL REQUIREMENTS INDICATED. ANY ADJUSTMENTS TO DUCTING, PIPING, WIRING OR CONFIGURATION DUE TO THE SELECTION OF A MANUFACTURER OTHER THAN THAT LISTED AS THE BASIS OF DESIGN WILL BE ACCOMPLISHED BY THE CONTRACTOR AT NO ADDITIONAL EXPENSE TO THE OWNER.

ELECTRIC WATER HEATER SCHEDULE

UNIT NO	LOCATION	STORAGE GALLONS	CW INLET TEMP °F	HW OUTLET TEMP °F	MIN GPH RECOVERY @ 95°F ΔT	WATTAGE PER ELEMENT	# OF ELEMENTS	TOTAL INPUT KW	VOLTS / PHASE	BASIS OF DESIGN	NOTES
EWH-1	BASEMENT	50	45	140	30	3000	3	9.0	208 / 1	STATE CSB 52 9 SFE	-
EWH-2	MECH ATTIC M2	30	45	140	12	4500	1	4.5	208 / 1	STATE EN6 30 DORT	-
EWH-3	CUST 166	50	45	140	28	3000	3	9.0	208 / 1	STATE CSB 52 9 SFE	-

NOTES: 1.

BACKFLOW PREVENTER SCHEDULE

UNIT NO	LOCATION	SYSTEM SERVED	TYPE	SIZE	DESIGN FLOW (GPM)	MAX WPD @ DESIGN (PSI)	BASIS OF DESIGN	NOTES
BFP-1	BASEMENT	DOMESTIC WATER SERVICE	RPZ	2 1/2"	108	12	WATTS LF 009	1
BFP-2	BASEMENT	HVAC MAKE-UP WATER	RPZ	3/4"	5	13	WATTS LF 009	2

NOTES: 1. PROVIDE WITH INLET STRAINER, NON-RISING STEM GATE VALVES AND AIR GAP FITTINGS FOR DRAINS; COATED CAST IRON BODY.
2. PROVIDE WITH INLET STRAINER, BALL TYPE ISOLATION VALVES AND AIR GAP FITTINGS FOR DRAINS; BRONZE BODY.

MIXING VALVE SCHEDULE

UNIT NO	LOCATION	SERVES	INLETS (IN)	OUTLET (IN)	SUPPLY TEMP °F	DESIGN GPM	MIN GPM	PRESSURE DROP (PSIG)	BASIS OF DESIGN	NOTES
TMV-1	BASEMENT	DOMESTIC HOT WATER	3/4"	1"	120	23	1.0	10	LEONARD TM-186-520B-LF	1
TMV-2	MECH ATTIC M2	DOMESTIC HOT WATER	3/4"	1"	120	14	1.0	10	LEONARD TM-186-420B-LF	1
TMV-3	CUST 166	DOMESTIC HOT WATER	3/4"	1"	120	19	1.0	5	LEONARD TM-186-520B-LF	1
EMV-1	FISHERIES MAIN LAB 167	EMERGENCY EYEWASH	1/2"	1/2"	85	-	0.5	2	GUARDIAN G3600	1

NOTES: 1. PROVIDE MANUFACTURER'S STAINLESS STEEL, SURFACE MOUNTED CABINET.

PUMP SCHEDULE

UNIT NO	SERVES	LOCATION	TYPE	GPM	TOTAL HEAD	MOTOR DATA			SUCTION / DISCHARGE (IN)	BASIS OF DESIGN	NOTES
						HP	RPM	VOLTS / PHASE			
RP-1	DOMESTIC HW RECIRC	BASEMENT	CIRC	4.0	13.8	1/8	3250	115 / 1	1 / 1	TACO 009	1
RP-2	DOMESTIC HW RECIRC	MECH ATTIC M2	CIRC	1.5	14.3	1/8	3250	115 / 1	3/4 / 3/4	TACO 009	1
RP-3	DOMESTIC HW RECIRC	CUST 166	CIRC	2.0	12.7	1/8	3250	115 / 1	3/4 / 3/4	TACO 009	1
SP-1	ELEVATOR SUMP PIT	ELEVATOR E1 PIT	SUMP	50	35.6	1/2	3450	115 / 1	- / 2	ZOELLER N161 OIL GUARD SYSTEM	2
SP-2	ELEVATOR SUMP PIT	ELEVATOR E2 PIT	SUMP	50	36.2	1/2	3450	115 / 1	- / 2	ZOELLER N161 OIL GUARD SYSTEM	2
SP-3	SUMP PIT	SOUTH BASEMENT	SUMP	35	12.2	1/2	-	115 / 1	- / 2	LITTLE GIANT BSP50	3
SP-4	SUMP PIT	CETA BASEMENT	SUMP	30	12.0	1/2	-	115 / 1	- / 2	LITTLE GIANT BSP50	3

NOTES: 1. PROVIDE PUMP WITH STAINLESS STEEL CONSTRUCTION.
2. PROVIDE PACKAGED PUMP SYSTEM WITH OIL SWITCH, FLOAT SWITCH, AND NEMA 4X ALARM AND CONTROL PANEL WITH H-O-A SWITCH, AUDIO AND VISUAL ALARM.
3. PROVIDE PACKAGED PUMP SYSTEM WITH FLOAT SWITCH, POLYETHYLENE BASIN AND COVER.

DRAIN SCHEDULE

UNIT NO	TYPE	DESCRIPTION	PIPE SIZE (IN)	STRAINER DIMENSIONS	BASIS OF DESIGN	NOTES
FD-1	FLOOR DRAIN	SQ DRAIN FOR FINISHED SPACES	3"	6" x 6"	ZURN ZN415-S-P	1
FD-2	FLOOR DRAIN	ROUND DRAIN WITH IW FUNNEL	3"	7ø	ZURN ZN415-B-4-Y-P	1, 2
FD-3	FLOOR DRAIN	ROUND DRAIN FOR UNFINISHED SPACES	3"	7ø	ZURN ZN415-B-Y-P	1, 2
RD-1	ROOF DRAIN	COMBINATION ROOF DRAIN & OVERFLOW DRAIN	SEE PLANS	15ø DOME	ZURN ZC163-EAE	
ODN	OVERFLOW DOWNSPOUT NOZZLE	FOR OVERFLOW DRAIN DISCHARGE	SEE PLANS	N/A	ZURN Z199-SS	

NOTES: 1. PROVIDE TRAP PRIMER CONNECTION TO FLOOR DRAIN.
2. PROVIDE WITH SEDIMENT BUCKET.

PLUMBING FIXTURE ROUGH-IN SCHEDULE

UNIT NO	DESCRIPTION	WASTE (IN)	VENT (IN)	HW (IN)	CW (IN)	REMARKS	NOTES
WC-1	WATER CLOSET	4"	2"	-	1"	WALL MOUNTED, WALL OUTLET, AUTOMATIC FLUSH VALVE, ADULT ADA HEIGHT	1,3
WC-2	WATER CLOSET	4"	2"	-	1"	WALL MOUNTED, WALL OUTLET, AUTOMATIC FLUSH VALVE, ADULT STANDARD HEIGHT	1,3
S-1	SINK	2"	1 1/2"	1/2"	1/2"	SINGLE BOWL, UNDER MOUNT, ADA, MANUAL FAUCET	3
S-2	SINK	2"	1 1/2"	1/2"	1/2"	SINGLE BOWL, UNDER MOUNT, ADA, FOOT PEDAL CONTROL FAUCET	3
S-3	SINK	2"	1 1/2"	1/2"	1/2"	SINGLE BOWL, UNDER MOUNT, ADA, FOOT PEDAL CONTROL WITH EYEWASH	3
L-1	LAVATORY	1 1/2"	1 1/2"	1/2"	1/2"	WALL HUNG, ADA, AUTOMATIC FAUCET, GRID STRAINER	1,3,4
L-2	LAVATORY	1 1/2"	1 1/2"	1/2"	1/2"	WALL HUNG, AUTOMATIC FAUCET, GRID STRAINER	1,3,4
EWC-1	WATER COOLER	1 1/2"	1 1/2"	-	1/2"	WALL MOUNTED, ADA, DUAL HEIGHT, WITH CHILLER UNIT, FILTER, AND INTEGRAL BOTTLE FILLER	1,3
MR-1	MOP RECEPTOR	3"	1 1/2"	1/2"	1/2"	FLOOR MOUNTED, 32" SQUARE, TERRAZZO, MANUAL FAUCET	3
NFWH	NON-FREEZE WALL HYDRANT	-	-	-	3/4"	NON-FREEZE, KEY OPERATED, RECESSED	
HB-1	HOSE BIBB	-	-	-	1/2"	SURFACE MOUNTED, WHEEL OPERATOR WITH VACUUM BREAKER	
FD-1	FLOOR DRAIN	3"	1 1/2"	-	1/2" TP	SEE DRAIN SCHEDULE	2,3
FD-2	FLOOR DRAIN	3"	1 1/2"	-	1/2" TP	SEE DRAIN SCHEDULE	2,3
FD-3	FLOOR DRAIN	3"	1 1/2"	-	1/2" TP	SEE DRAIN SCHEDULE	2,3
SH-1	SHOWER	2"	1 1/2"	1/2"	1/2" / 1/2" TP	ONE-PIECE FIBERGLASS SHOWER ENCLOSURE, ADA SIDE ENTRY, SHOWER VALVE AND DRAIN	2,3
IOB	ICE MAKER OUTLET BOX	-	-	-	1/2"	RECESSED WITH INTEGRAL WHA	
EM-1	EMERGENCY EYEWASH	-	-	1/2" TM	-	SWING ACTION, COUNTER-MOUNTED, DRAIN TO SINK	

NOTES: 1. REFER TO SHEETS AE420 FOR FIXTURE INSTALLATION HEIGHTS.
2. PROVIDE TRAP PRIMER CONNECTION TO FLOOR DRAINS, WHERE INDICATED ON PLANS AND SCHEDULES.
3. WHERE VENT CONNECTIONS TO FIXTURE ARE CALLED OUT ON PLANS AND DIAGRAMS TO BE LARGER THAN SCHEDULED ROUGH-IN, PROVIDE LARGER SIZE REQUIRED FOR LONG HORIZONTAL VENT LENGTHS OR COMBINATION WASTE AND VENT PIPING.
4. PROVIDE WITH ASSE 1070 TEMPERATURE LIMITING DEVICE, EITHER INTEGRAL WITH FAUCET, OR SUPPLIED ON HOT WATER LINE TO FAUCET.

NO.	DATE	DESCRIPTION	BY
		REVISIONS	

STATE OF MAINE
MATTHEW S. ALBERT
No. 9235
LICENSED
PROFESSIONAL ENGINEER

DRAWN BY: SRW
CHECK BY: DMA
NO.
DATE 01/29/2025

DEPARTMENT OF INLAND FISHERIES & WILDLIFE

TITLE: NEW OFFICE HEADQUARTERS
LOCATION: AUGUSTA, ME
TITLE THIS DWG: PLUMBING SCHEDULES

OAK POINT ASSOCIATES
ARCHITECTS ■ ENGINEERS ■ PLANNERS
231 Main Street, Biddeford, Maine 04005 207.283.0199

DRAWING NO. P-601
SHEET NO. 188 OF 239

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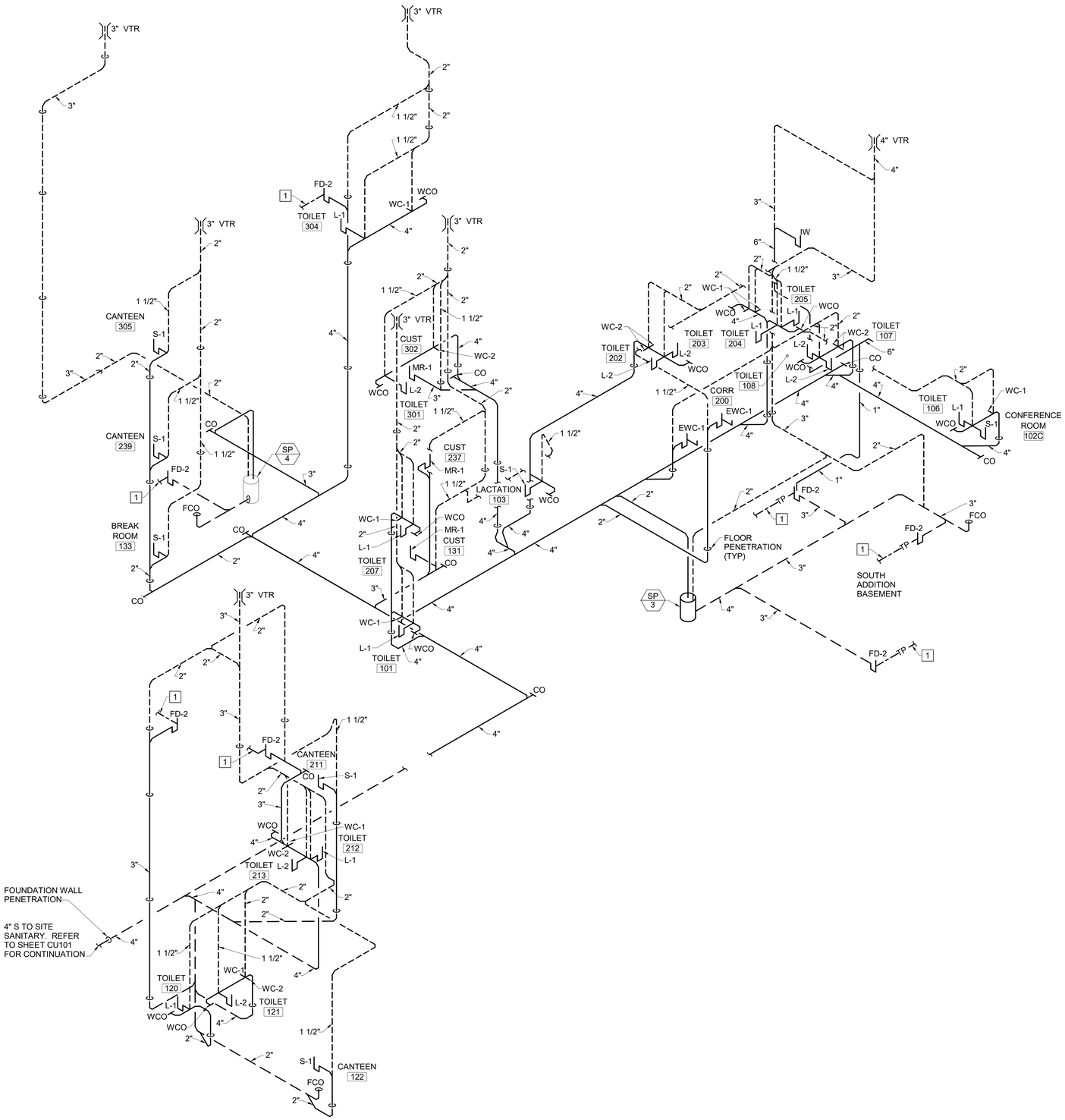
GENERAL NOTES

1. REFER TO GENERAL NOTES ON P-001 FOR REQUIRED PIPE SLOPES.
2. FOR FLOOR AND WALL PENETRATION DETAILS REFER TO P-501.
3. FOR PIPE HANGER AND SUPPORT DETAILS REFER TO P-501

KEYNOTES

1 1/2" TRAP PRIMER CONNECTION. FOR PIPE ROUTING, SEE PLANS.



1 P-701 **SANITARY AND VENT PLUMBING RISER DIAGRAM**
SCALE: 1/8" = 1'-0"

2 P-701 **NORTH ADDITION SANITARY AND VENT PLUMBING RISER DIAGRAM**
SCALE: 1/8" = 1'-0"

NO.	DATE	DESCRIPTION	BY
		REVISIONS	

STATE OF MAINE MATTHEW S. ALBERT No. 9235 LICENSED PROFESSIONAL ENGINEER

DRAWN BY: SRW
CHECK BY: DMA
NO.
DATE 01/29/2025

DEPARTMENT OF INLAND FISHERIES & WILDLIFE

TITLE: NEW OFFICE HEADQUARTERS
LOCATION: AUGUSTA, ME
TITLE THIS DWG: PLUMBING RISER DIAGRAMS

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SHEET NO. 189 OF 239

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MECHANICAL ABBREVIATIONS

A	AMPERE, AIR
AC	AIR CONDITIONING, AIR CONDITIONER
AD	ACCESS DOOR
ADA	AMERICANS WITH DISABILITIES ACT
AFF	ABOVE FINISHED FLOOR
AHU	AIR HANDLING UNIT
AMB	AMBIENT
AMS	AIRFLOW MEASURING STATION
APD	AIR PRESSURE DROP
APPROX	APPROXIMATELY
AS	AIR SEPARATOR
ASME	AMERICAN SOCIETY OF MECHANICAL ENGINEERS
ASTM	AMERICAN SOCIETY FOR TESTING AND MATERIALS ASSEMBLY
ASS'Y	ASSEMBLY
ATT	ACOUSTIC ATTENUATOR
BDD	BACKDRAFT DAMPER
BHP	BRAKE HORSEPOWER
BLDG	BUILDING
BTU	BRITISH THERMAL UNIT
BTUH	BTU PER HOUR
CAP	CAPACITY
CC	COOLING COIL
CD	CONDENSATE DRAIN
CENT	CENTRIFUGAL
CFM	CUBIC FEET PER MINUTE
CH	CHILLER
CHW	CHILLED WATER
CHWR	CHILLED WATER RETURN
CHWS	CHILLED WATER SUPPLY
℄	CENTERLINE
CLG	CEILING
CO	CLEANOUT, CARBON MONOXIDE
CO2	CARBON DIOXIDE
CONN	CONNECTION
CONC	CONCRETE
COND	CONDENSATE, CONDENSING, CONDITIONS
COP	COEFFICIENT OF PERFORMANCE
CS	CURRENT SENSOR
CU	CONDENSING UNIT
CUH	CABINET UNIT HEATER
CW	COLD WATER
CWS	COLD WATER SUPPLY
D	DEPTH, DAMPER
DB	DRY BULB
dB	DECIBELS
DDC	DIRECT DIGITAL CONTROLS
DEG	DEGREES
ø, DIA	DIAMETER
DIFF	DIFFERENTIAL
DISCH	DISCHARGE
DISPL	DISPLACEMENT
DL	DRUM SLOT LOUVER
DN	DOWN
DOM	DOMESTIC
DP	DIFFERENTIAL PRESSURE
DPDT	DOUBLE POLE, DOUBLE THROW
DPS	DIFFERENTIAL PRESSURE SWITCH
DWG	DRAWING
DX	DIRECT EXPANSION
E	EXISTING, EXHAUST
EA	EXHAUST AIR, EACH
EAT	ENTERING AIR TEMPERATURE
EDB	ENTERING DRY BULB TEMPERATURE
EER	ENERGY EFFICIENCY RATIO
EF	EXHAUST FAN
EFF	EFFICIENCY
ELEC	ELECTRIC/ELECTRICAL
ELEV	ELEVATION, ELEVATOR
EQUIP	EQUIPMENT
ERV	ENERGY RECOVERY VENTILATOR
ESP	EXTERNAL STATIC PRESSURE
EUH	ELECTRIC UNIT HEATER
EWB	ENTERING WET BULB TEMPERATURE
EWT	ENTERING WATER TEMPERATURE
EXIST	EXISTING
EXP	EXPANSION
EXT	EXPANSION TANK
°F	DEGREES FAHRENHEIT
FACP	FIRE ALARM CONTROL PANEL
FBO	FURNISHED BY OWNER
FC	FLEX CONNECTOR, FAN COIL
FCO	FLOOR CLEANOUT
FD	FLOOR DRAIN, FIRE DAMPER
FE	FIRE EXTINGUISHER
FF	FINISHED FLOOR
FLA	FULL LOAD AMPS
FLR	FLOOR
FPM	FEET PER MINUTE
FR	FINTUBE RADIATION
FS	FLOW SWITCH
FSD	FIRE AND SMOKE DAMPER
FT	FOOT, FEET
G	GAS
GA	GAUGE
GAL	GALLONS
GALV	GALVANIZED
GPH	GALLONS PER HOUR
GPM	GALLONS PER MINUTE
GRV	GRAVITY RELIEF VENTILATOR
GWB, GYP	GYPSUM WALLBOARD
H	HUMIDIFIER, HUMIDISTAT, HEIGHT
H2O	WATER
HC	HEATING COIL
HTG	HEATING
HGT	HEIGHT
HOA	HAND-OFF-AUTOMATIC
HORIZ	HORIZONTAL
HP	HORSEPOWER
HR	HOUR
HT	HEIGHT
HUMID	HUMIDIFIER
HV	HEATING AND VENTILATING UNIT
HVAC	HEATING, VENTILATION, AND AIR CONDITIONING (UNIT)
HW	HOT WATER
HWR	HOT WATER RETURN
HWS	HOT WATER SUPPLY
HX	HEAT EXCHANGER
HZ	HERTZ
ID	INSIDE DIAMETER
IN	INCH, INCHES
IW	INDIRECT WASTE
KW	KILOWATT
L	LOUVER, LENGTH
LAT	LEAVING AIR TEMPERATURE
LBG	LINEAR BAR GRILLE
LBS	POUNDS
LDB	LEAVING DRY BULB
LF	LINEAR FEET
LOC	LOCATION, LOCATED
LRA	LOCKED ROTOR AMPS
LW	LOW TEMPERATURE
LWB	LEAVING WET BULB
LWT	LEAVING WATER TEMPERATURE
M	MOTOR
MAX	MAXIMUM
MAX PD	MINIMUM PRESSURE DROP
MBH	1000 BTU PER HOUR
MBU	1000 BTU
MCA	MINIMUM CIRCUIT AMPERES
MECH	MECHANICAL
MERV	MINIMUM EFFICIENCY REPORTING VALUE
MFR	MANUFACTURER
MIN	MINIMUM
MTG	MOUNTING
N/A	NOT APPLICABLE
NAT'L	NATURAL
N/C	NOT IN CONTRACT
NC	NOISE CRITERIA, NORMALLY CLOSED
NFPA	NATIONAL FIRE PROTECTION ASSOCIATION
NO	NUMBER, NORMALLY OPEN
NPT	NATIONAL PIPE THREAD
NTS	NOT TO SCALE
OA	OUTSIDE AIR
OAT	OUTSIDE AIR TEMPERATURE
OBD	OPPOSED BLADE DAMPER
OC	ON CENTER
OD	OUTSIDE DIAMETER
OED	OPEN ENDED DUCT
OEP	OPEN ENDED PIPE
OS&Y	OUTSIDE STEM & YOKE
P	PUMP, PITCH, PRESSURE
PC	PUMPED CONDENSATE
PD	PRESSURE DIFFERENCE
PH	PHASE
POS	POSITIVE
PRESS	PRESSURE
PRV	PRESSURE REDUCING VALVE
PSI	POUNDS PER SQUARE INCH
PSIG	POUNDS PER SQUARE INCH GAUGE
PVS	POLY VINYL CHLORIDE
QTY	QUANTITY
R	RADIUS, RETURN
RA	RETURN AIR
RAT	RETURN AIR TEMPERATURE
RF	RETURN FAN
REFRIG	REFRIGERANT
REQ'D	REQUIRED
RH	RELATIVE HUMIDITY, RANGE HOOD
RL	REFRIGERANT LIQUID
RLA	RUNNING LOAD AMPERES
RM	ROOM
RPM	REVOLUTIONS PER MINUTE
RPZ	REDUCED PRESSURE ZONE
RS	REFRIGERANT SUCTION
S	SUPPLY
SA	SUPPLY AIR, SOUND ATTENUATOR
SAT	SUPPLY AIR TEMPERATURE, SUSPENDED ACOUSTICAL TILE
SC	SENSIBLE COOLING
SD	SMOKE DAMPER
SEER	SEASONAL ENERGY EFFICIENCY RATIO
SF	SQUARE FOOT/FEET, SUPPLY FAN
SIM	SIMILAR
SMACNA	SHEET METAL AND AIR CONDITIONING CONTRACTOR'S NATIONAL ASSOCIATION
SP	STATIC PRESSURE
SQ	SQUARE
SS	STAINLESS STEEL
T	THERMOSTAT, TRANSFER
TA	TRANSFER AIR
TC	TOTAL COOLING
TCP	TEMPERATURE CONTROL PANEL
TEMP	TEMPERATURE
TF	TRANSFER FAN
TS	TEMPERATURE SENSOR
TSP	TOTAL STATIC PRESSURE
TYP	TYPICAL
UH	UNIT HEATER
UL	UNDERWRITERS LABORATORY
V	VENT, VALVE, VOLT(S)
VAV	VARIABLE AIR VOLUME
VEL	VELOCITY
VFD	VARIABLE FREQUENCY DRIVE
VUH	VERTICAL UNIT HEATER
W	WIDTH
W/	WITH
WB	WET BULB
WC	WATER COLUMN
WG	WATER GAUGE
WH	WATER HEATER
WPD	WATER PRESSURE DROP

MECHANICAL SYMBOLS LEGEND

ANNOTATIONS

- ERV / 2 — SYMBOL PER ABBREVIATION LIST; EQUIPMENT SEQUENCE NUMBER
- S-1 / 100 — AIR INLET OR OUTLET WITH CFM
- RH-1 / 2.2 — FINTUBE DESIGNATION; MBH
- 1.2 — GPM SETTING FOR BALANCING VALVE
- 1 — KEYNOTE
- 1 — REMOVALS KEYNOTE
- CONNECT TO EXISTING
- INLET DIRECTION OF AIRFLOW
- OUTLET DIRECTION OF AIRFLOW

DUCTWORK

- RETURN GRILLE/REGISTER
- SUPPLY DIFFUSER/GRILLE/REGISTER
- EXHAUST GRILLE/REGISTER
- TRANSFER GRILLE
- SIDEWALL REGISTER/GRILLE
- LINEAR SLOT DIFFUSER/RETURN
- AD — ACCESS DOOR
- DUCT
- DUCT WITH FLEXIBLE CONNECTION
- RETURN DUCT UP
- RETURN DUCT DOWN
- SUPPLY DUCT UP
- SUPPLY DUCT DOWN
- EXHAUST DUCT UP
- EXHAUST DUCT DOWN
- RECTANGULAR ELBOW WITH TURNING VANES
- FLEXIBLE DUCT
- LINED DUCTWORK
- MANUAL DAMPER
- FD — FIRE DAMPER
- SD — SMOKE DAMPER
- M — MOTORIZED DAMPER, PARALLEL BLADE
- M — MOTORIZED DAMPER, OPPOSED BLADE
- H / C — HEATING COIL
- CC — CHILLED WATER COOLING COIL
- DX — DIRECT EXPANSION COOLING COIL

PIPING AND VALVES

- PIPE ELBOW DOWN
- PIPE ELBOW UP, PIPE UP AND DOWN
- PIPE TEE DOWN
- PIPE TEE UP, PIPE UP AND DOWN
- PIPE CAP
- DIRECTION OF FLOW
- STRAINER
- BALL VALVE
- BUTTERFLY VALVE
- UNION
- GATE VALVE
- PRESSURE GAUGE
- CHECK VALVE
- S — CHECK VALVE, SPRING TYPE
- GLOBE VALVE
- CALIBRATED BALANCING VALVE WITH POSITIVE SHUTOFF
- AUTOMATIC FLOW CONTROL VALVE
- P — PIPE PITCH DOWN
- PRESSURE RELIEF VALVE
- 2-WAY AUTOMATIC CONTROL VALVE
- 3-WAY AUTOMATIC CONTROL VALVE
- PRESSURE REDUCING VALVE
- PIPE ANCHOR
- ALIGNMENT GUIDE
- PIPE REDUCER/INCREASER
- OS&Y VALVE
- THERMOMETER
- AIR VENT, AUTOMATIC
- AIR VENT, MANUAL
- CONCENTRIC REDUCER
- ECCENTRIC REDUCER
- VACUUM BREAKER
- FLEXIBLE CONNECTOR
- IN-LINE PUMP
- AQUASTAT
- AIR SEPARATOR

CONTROLS AND METERING

- OS&Y VALVE IN VERTICAL
- BALL VALVE IN VERTICAL
- TS — TEMPERATURE SENSOR
- LT — LOW TEMPERATURE FREEZESTAT
- OC — OCCUPANCY SENSOR
- PS — PRESSURE SWITCH
- FS — FLOW SWITCH
- CO — CARBON MONOXIDE SENSOR
- CS — CS — CURRENT SENSOR
- DP — DIFFERENTIAL PRESSURE SWITCH
- VFD — VARIABLE FREQUENCY DRIVE
- AMS — AIRFLOW MEASURING STATION
- CO2 — CARBON DIOXIDE SENSOR
- $ — MANUAL SWITCH
- R — RELAY
- SD — DUCT MOUNTED SMOKE DETECTOR
- S / S — START/STOP CONTROLLER
- SP — L H — AIR PRESSURE SENSOR
- T — WALL MOUNTED TEMPERATURE SENSOR
- T — AVERAGING DUCT MOUNTED TEMPERATURE SENSOR
- T — PROBE TYPE DUCT MOUNTED TEMPERATURE SENSOR
- T — FLUID TEMPERATURE SENSOR WITH WELL
- T — WALL MOUNTED THERMOSTAT
- PSD — PUMP SUCTION DIFFUSER
- RS — RELATIVE HUMIDITY SENSOR

EQUIPMENT

- FINTUBE RADIATION AND ENCLOSURE
- UNIT HEATER
- TERMINAL UNIT, VARIABLE VOLUME
- ROOF VENTILATOR, EXHAUST/RELIEF
- PUMP
- MOTOR
- PROPELLER FAN
- CENTRIFUGAL FAN
- CONDENSER

GENERAL MECHANICAL SYSTEM NOTES

1. MECHANICAL WORK SHALL BE PERFORMED IN ACCORDANCE WITH THE INTERNATIONAL MECHANICAL CODE (-MC), CURRENT EDITION, AND THE INTERNATIONAL ENERGY AND CONSERVATION CODE (IECC), CURRENT EDITION.
2. PIPING AND DUCTWORK ARE SHOWN DIAGRAMMATICALLY. EXACT LOCATIONS SHALL BE DETERMINED IN THE FIELD.
3. PIPING AND DUCTWORK SHALL BE INSTALLED CONCEALED ABOVE CEILINGS, IN WALLS AND IN CHASES, UNLESS OTHERWISE NOTED. PIPING AND DUCTWORK SHALL BE INSTALLED PARALLEL TO BUILDING LINES AND PITCHED TO LOW POINTS.
4. COORDINATE LOCATIONS OF PIPING AND DUCTWORK WITH OTHER TRADES. PERFORM CUTTING WORK ASSOCIATED WITH MECHANICAL SYSTEMS.
5. PIPING AND DUCTWORK SHALL BE SUPPORTED FROM BUILDING STRUCTURE. PIPING AND DUCTWORK SHALL BE SUPPORTED FROM TOP CHORD OF JOIST. NO STRUCTURAL MEMBERS SHALL BE CUT.

MECHANICAL LINE TYPE LEGEND

- REMOVE ITEMS
- EXISTING ITEMS TO REMAIN
- PROVIDE ITEMS
- CHWS — CHILLED WATER SUPPLY
- CHWR — CHILLED WATER RETURN
- HWS — HOT WATER SUPPLY
- HWR — HOT WATER RETURN
- CD — CONDENSATE DRAIN
- PC — PUMPED CONDENSATE
- G — GAS
- GEOS — GEOTHERMAL SUPPLY
- GEOR — GEOTHERMAL RETURN
- CONTROL WIRING

NO.	DATE	DESCRIPTION	BY
		REVISIONS	

STATE OF MAINE — MATTHEW S. ALBERT — No. 9235 — LICENSED — PROFESSIONAL ENGINEER

DRAWN BY:
CHECK BY: MSA
NO.
DATE 01/29/2025

DEPARTMENT OF INLAND FISHERIES & WILDLIFE

TITLE: NEW OFFICE HEADQUARTERS
LOCATION: AUGUSTA, ME
TITLE THIS DWG: MECHANICAL LEGEND, ABBREVIATIONS, AND GENERAL NOTES

OAK POINT ASSOCIATES
231 Main Street, Biddeford, Maine 04005 207.283.0199

DRAWING NO. M-001
SHEET NO. 190 OF 239

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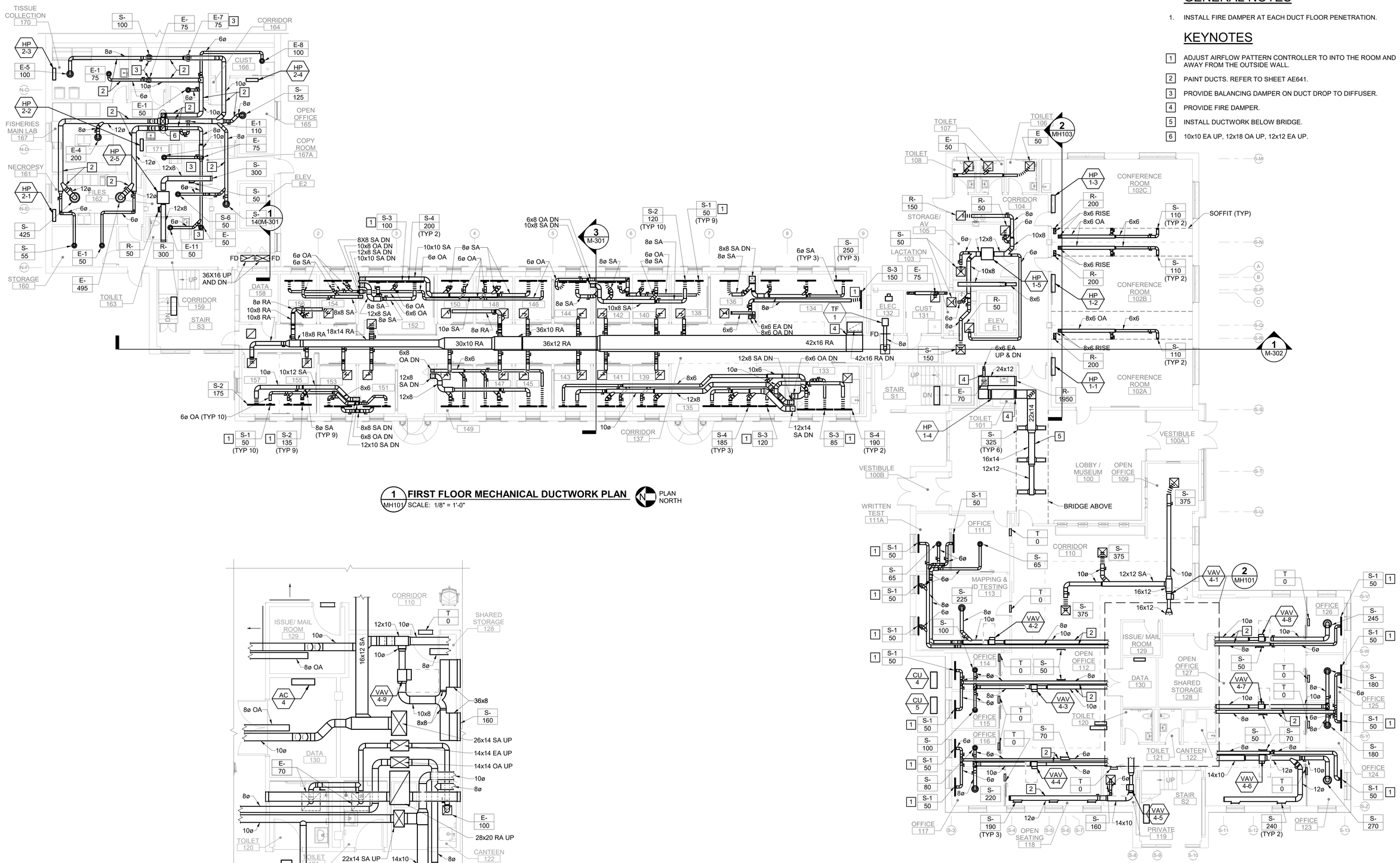
GENERAL NOTES

1. INSTALL FIRE DAMPER AT EACH DUCT FLOOR PENETRATION.

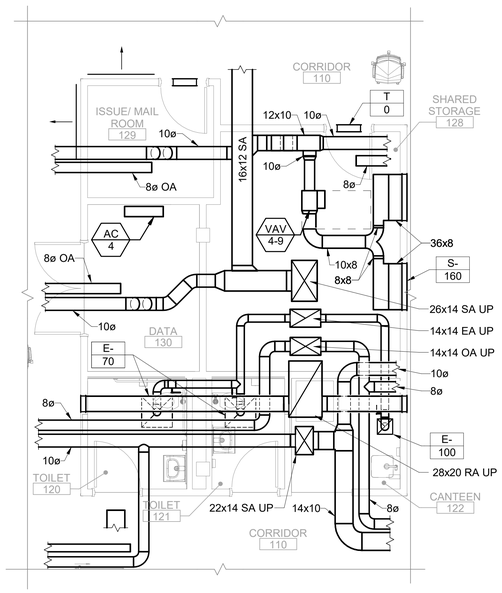
KEYNOTES

1. ADJUST AIRFLOW PATTERN CONTROLLER TO INTO THE ROOM AND AWAY FROM THE OUTSIDE WALL.
2. PAINT DUCTS. REFER TO SHEET AE641.
3. PROVIDE BALANCING DAMPER ON DUCT DROP TO DIFFUSER.
4. PROVIDE FIRE DAMPER.
5. INSTALL DUCTWORK BELOW BRIDGE.
6. 10x10 EA UP, 12x18 OA UP, 12x12 EA UP.



1 MH101 FIRST FLOOR MECHANICAL DUCTWORK PLAN
SCALE: 1/8" = 1'-0"

PLAN NORTH



2 MH101 FIRST FLOOR ENLARGED DUCTWORK PART PLAN
SCALE: 1/4" = 1'-0"

GRAPHIC SCALES

1/8"=1'-0" 8' 4' 0 8' 16'

1/4"=1'-0" 4' 2' 0 4' 8'

CHECK GRAPHIC SCALES BEFORE USING

NO.	DATE	DESCRIPTION	BY
		REVISIONS	

STATE OF MAINE MATTHEW S. ALBERT No. 9235 LICENSED PROFESSIONAL ENGINEER

DRAWN BY: CBM
CHECK BY: MSA
NO.
DATE 01/29/2025

DEPARTMENT OF INLAND FISHERIES & WILDLIFE

TITLE: NEW OFFICE HEADQUARTERS
LOCATION: AUGUSTA, ME
TITLE THIS DWG: FIRST FLOOR MECHANICAL DUCTWORK PLAN

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231 Main Street, Biddeford, Maine 04005 207.283.0199

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SHEET NO. 191 OF 239

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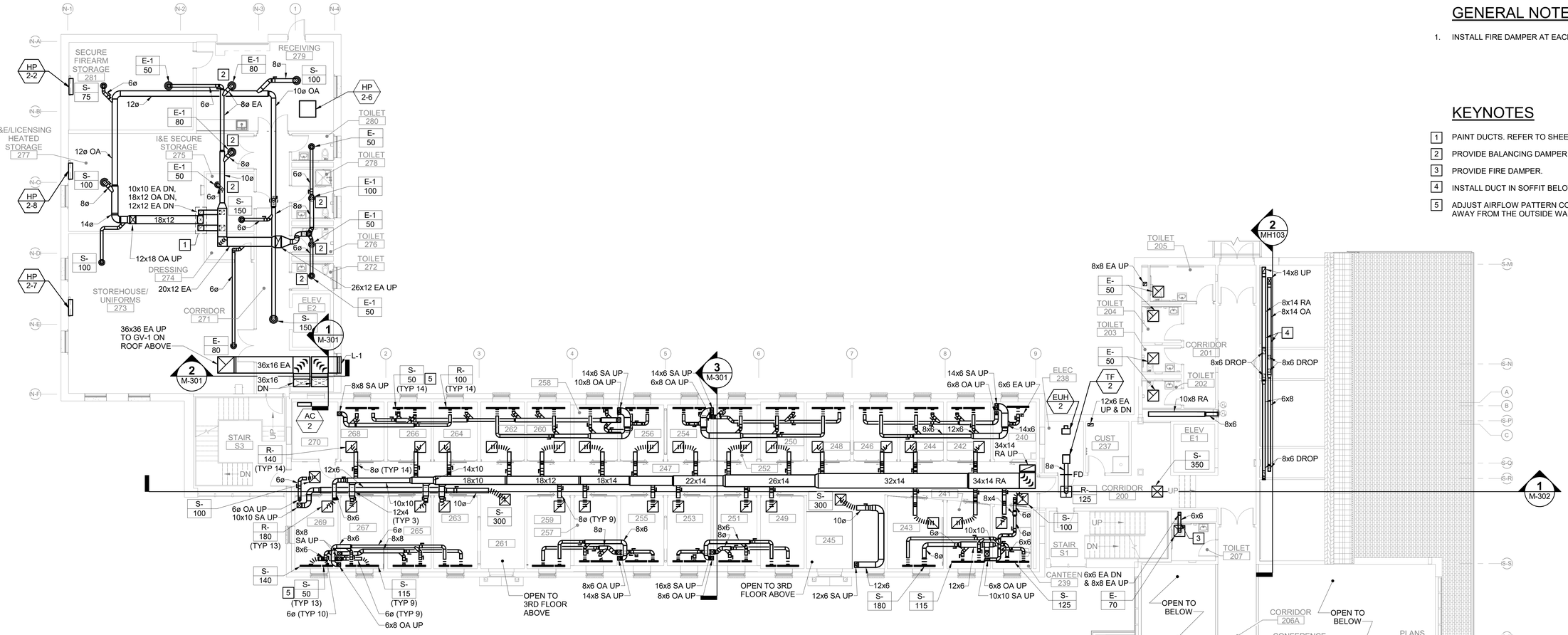
GENERAL NOTES

1. INSTALL FIRE DAMPER AT EACH DUCT FLOOR PENETRATION.

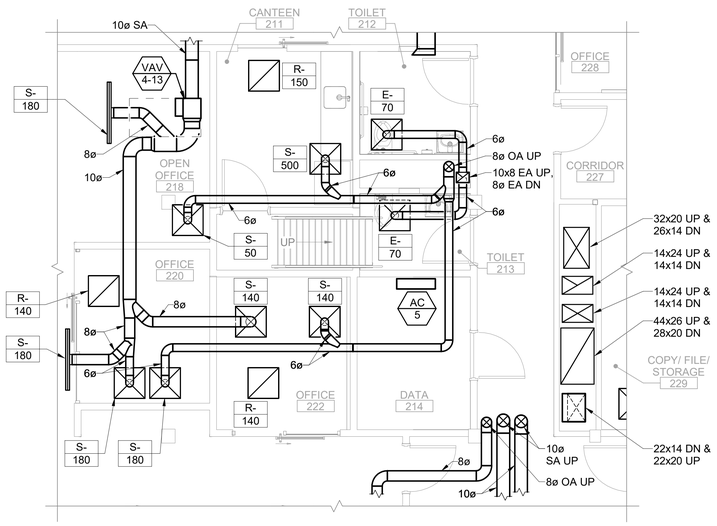
KEYNOTES

1. PAINT DUCTS. REFER TO SHEET AE641.
2. PROVIDE BALANCING DAMPER ON DUCT DROP TO DIFFUSER.
3. PROVIDE FIRE DAMPER.
4. INSTALL DUCT IN SOFFIT BELOW WINDOWS.
5. ADJUST AIRFLOW PATTERN CONTROLLER TO INTO THE ROOM AND AWAY FROM THE OUTSIDE WALL.



1 SECOND FLOOR MECHANICAL DUCTWORK PLAN (MH102) SCALE: 1/8" = 1'-0"

PLAN NORTH



2 SECOND FLOOR ENLARGED DUCTWORK PART PLAN (MH102) SCALE: 1/4" = 1'-0"

GRAPHIC SCALES

1/8"=1'-0" 8' 4' 0 8' 16'

1/4"=1'-0" 4' 2' 0 4' 8'

CHECK GRAPHIC SCALES BEFORE USING

NO.	DATE	DESCRIPTION	BY
		REVISIONS	

STATE OF MAINE MATTHEW S. ALBERT No. 9235 LICENSED PROFESSIONAL ENGINEER

DRAWN BY: CBM
CHECK BY: MSA
DATE 01/29/2025

DEPARTMENT OF INLAND FISHERIES & WILDLIFE

TITLE: NEW OFFICE HEADQUARTERS
LOCATION: AUGUSTA, ME
TITLE THIS DWG: SECOND FLOOR MECHANICAL DUCTWORK PLAN

OAK POINT ASSOCIATES
231 Main Street, Biddeford, Maine 04005 207.283.0193

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GENERAL NOTES

1. INSTALL FIRE DAMPER AT EACH DUCT FLOOR PENETRATION.

KEYNOTES

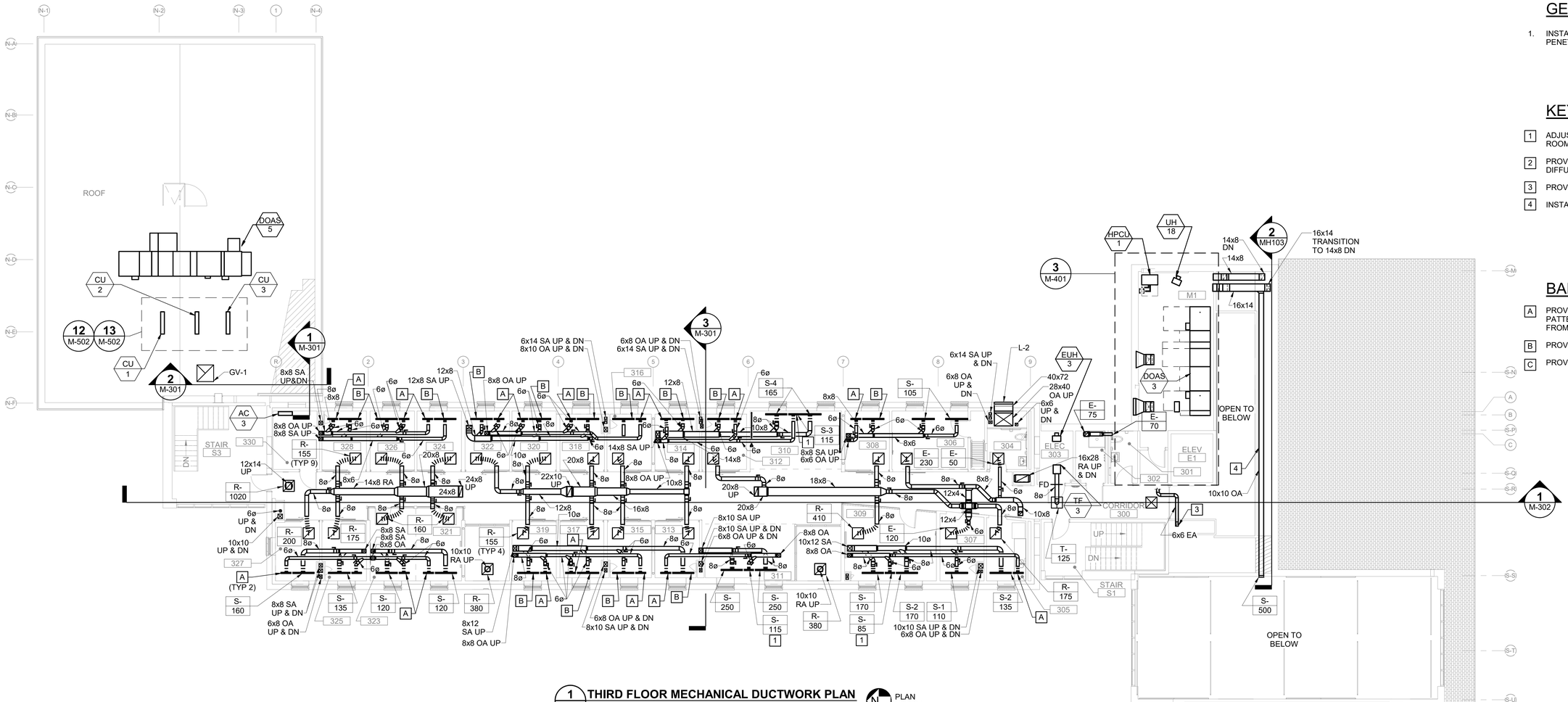
1. ADJUST AIRFLOW PATTERN CONTROLLER TO INTO THE ROOM AND AWAY FROM THE OUTSIDE WALL.
2. PROVIDE BALANCING DAMPER ON DUCT DROP TO DIFFUSER.
3. PROVIDE FIRE DAMPER.
4. INSTALL IN SOFFIT ABOVE WINDOWS.

BALANCING KEYNOTES

A. PROVIDE S-1 DIFFUSER @ 50-CFM. ADJUST AIRFLOW PATTERN CONTROLLER TO INTO THE ROOM AND AWAY FROM THE OUTSIDE WALL.

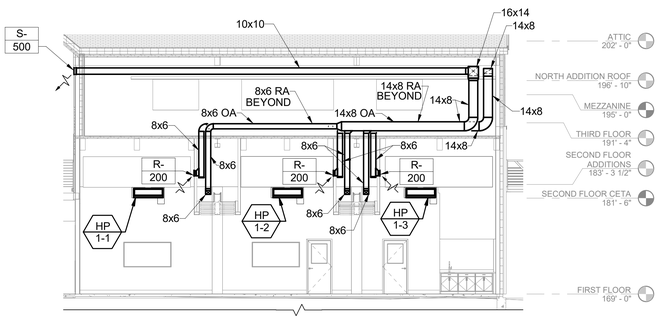
B. PROVIDE S-2 DIFFUSER @ 115-CFM.

C. PROVIDE R-1 GRILLE @ 155-CFM.



1 MH103 THIRD FLOOR MECHANICAL DUCTWORK PLAN
SCALE: 1/8" = 1'-0"

PLAN NORTH



2 MH103 CONFERENCE ROOM OA DUCT SECTION
SCALE: 1/8" = 1'-0"

GRAPHIC SCALE
1/8"=1'-0"
8' 4' 0 8' 16'
CHECK GRAPHIC SCALE BEFORE USING

NO.	DATE	DESCRIPTION	BY
		REVISIONS	

STATE OF MAINE MATTHEW S. ALBERT No. 9235 LICENSED PROFESSIONAL ENGINEER

DRAWN BY: CBM
CHECK BY: MSA
DATE 01/29/2025

DEPARTMENT OF INLAND FISHERIES & WILDLIFE
TITLE: NEW OFFICE HEADQUARTERS
LOCATION: AUGUSTA, ME
TITLE THIS DWG: THIRD FLOOR MECHANICAL DUCTWORK PLAN

OAK POINT ASSOCIATES
231 Main Street, Biddeford, Maine 04005 207.283.0199

DRAWING NO. MH103
SHEET NO. 193 OF 239

1/28/2025 4:37:16 PM
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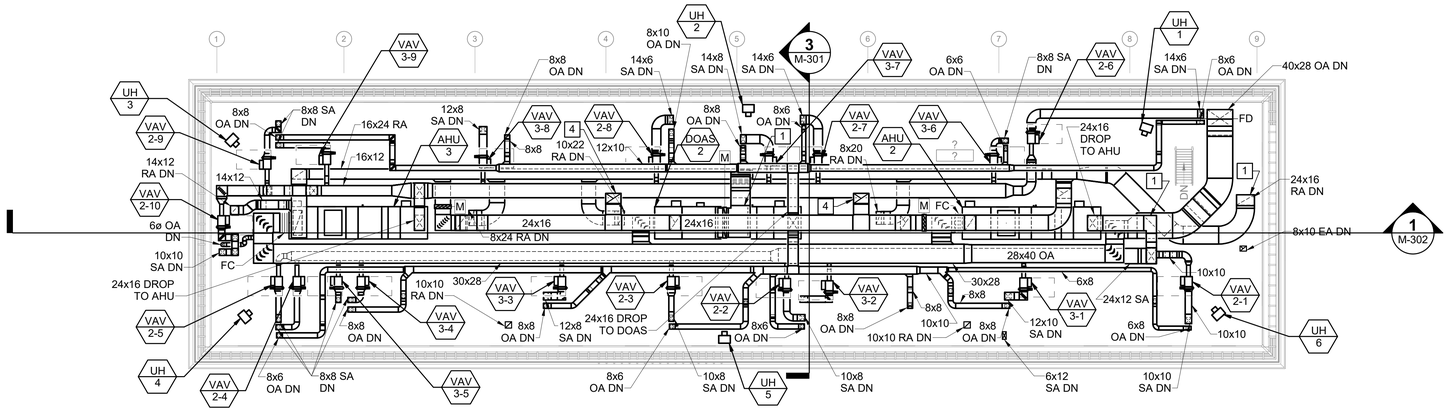
GENERAL NOTES

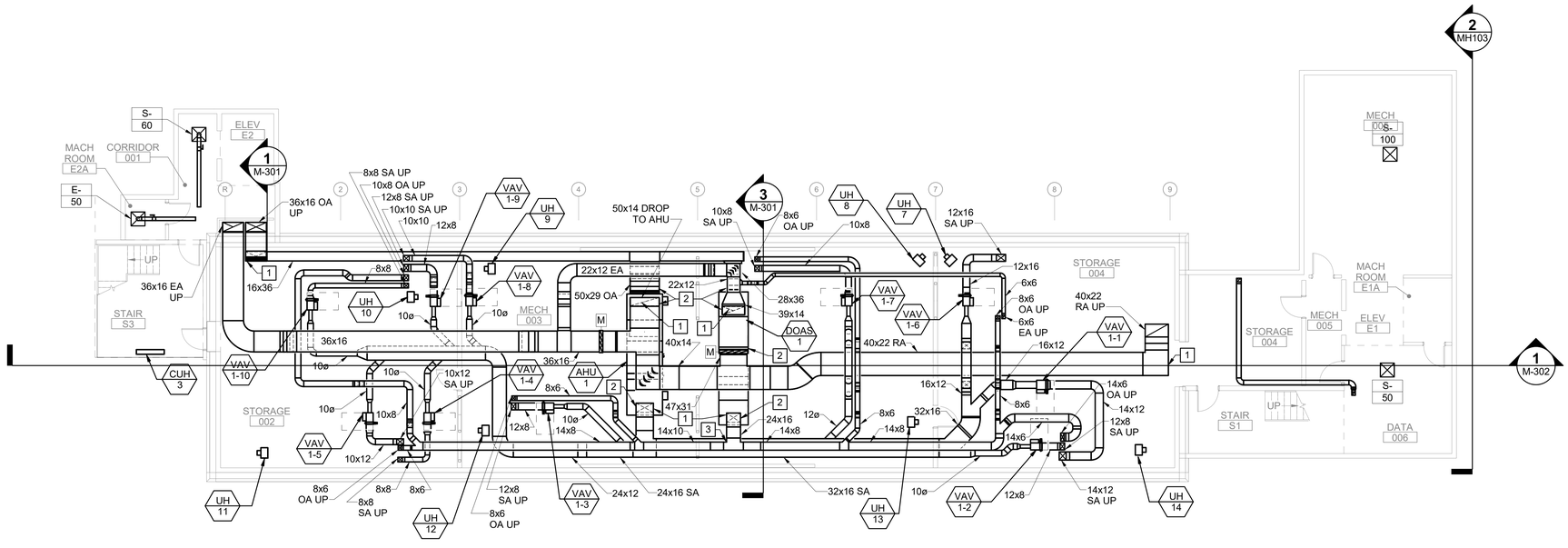
1. INSTALL FIRE DAMPER AT EACH DUCT FLOOR PENETRATION.

KEYNOTES

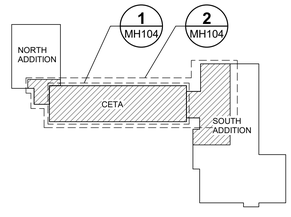
1. PROVIDE TURNING VANES IN ELBOW.
2. PROVIDE FLEXIBLE CONNECTOR AT AHU CONNECTION.
3. PROVIDE TURNING VANES IN TEE.
4. 24x16 EXHAUST AIR UP THROUGH CHIMNEY ABOVE, WITH ISOLATION DAMPER IN VERTICAL.



1 ATTIC MECHANICAL DUCTWORK PLAN
MH104 SCALE: 1/8" = 1'-0"



2 BASEMENT MECHANICAL DUCTWORK PLAN
MH104 SCALE: 1/8" = 1'-0"



KEYPLAN
NOT TO SCALE

PLAN NORTH

GRAPHIC SCALE
1/8"=1'-0"
8' 4' 0 8' 16'
CHECK GRAPHIC SCALE BEFORE USING

NO.	DATE	DESCRIPTION	BY
		REVISIONS	

STATE OF MAINE
MATTHEW S. ALBERT
No. 9235
LICENSED
PROFESSIONAL ENGINEER

DRAWN BY: CBM
CHECK BY: MSA
NO.
DATE 01/29/2025

DEPARTMENT OF INLAND FISHERIES & WILDLIFE

TITLE: NEW OFFICE HEADQUARTERS
LOCATION: AUGUSTA, ME
TITLE THIS DWG.: BASEMENT AND ATTIC MECHANICAL DUCTWORK PLANS

OAK POINT ASSOCIATES
231 Main Street, Biddeford, Maine 04005 207.283.0193

DRAWING NO. MH104
SHEET NO. 194 OF 239

1/28/2025 4:07:13 PM
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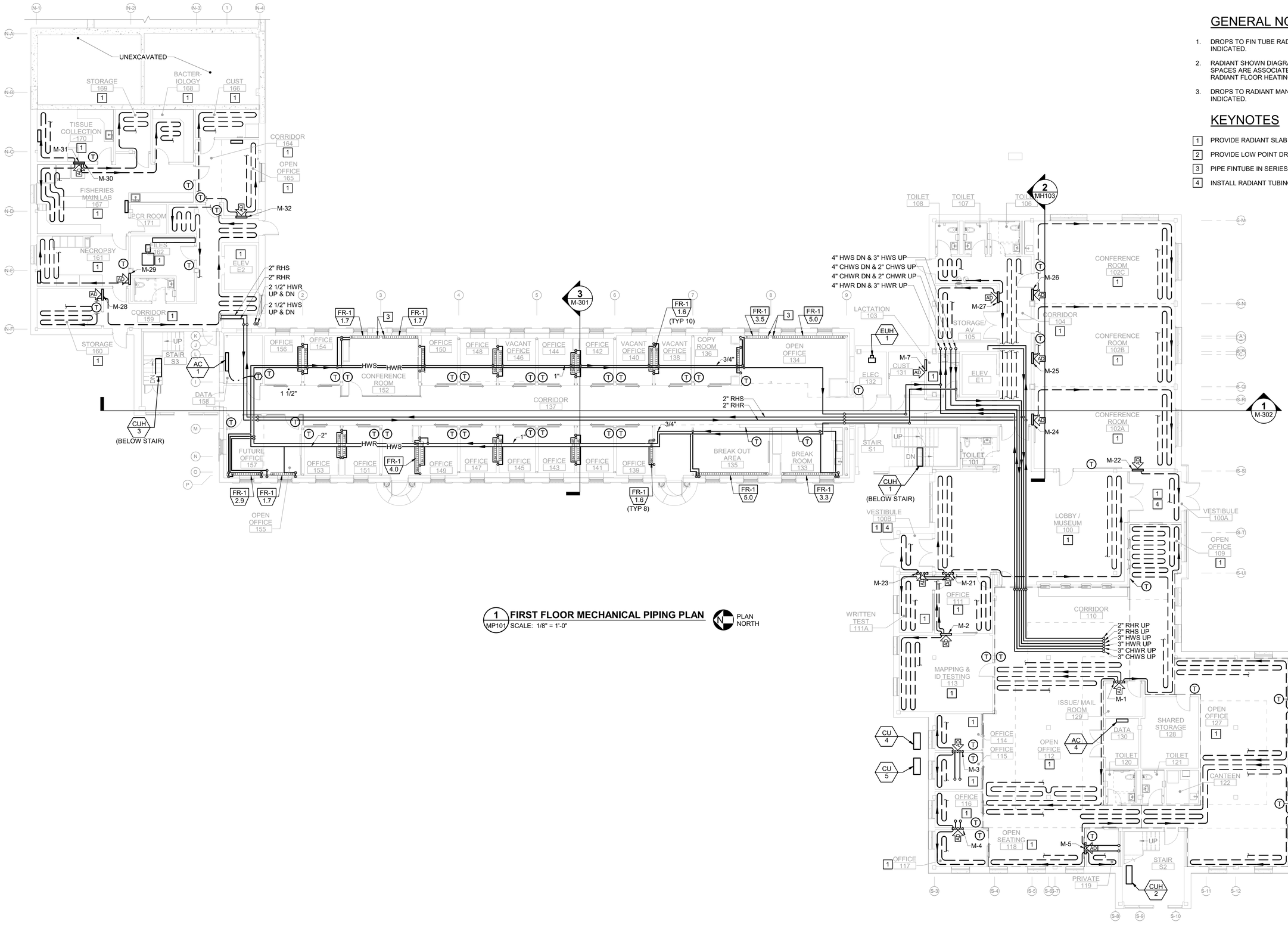

1 MP101 **FIRST FLOOR MECHANICAL PIPING PLAN**
SCALE: 1/8" = 1'-0"

PLAN NORTH

GENERAL NOTES

1. DROPS TO FIN TUBE RADIATION SHALL BE 3/4" UNLESS OTHERWISE INDICATED.
2. RADIANT SHOWN DIAGRAMATICALLY ONLY TO INDICATE WHICH SPACES ARE ASSOCIATED WITH A MANIFOLD. REFER TO THE RADIANT FLOOR HEATING SCHEDULE FOR REQUIREMENTS.
3. DROPS TO RADIANT MANIFOLDS SHALL BE 3/4" UNLESS OTHERWISE INDICATED.

KEYNOTES

1. PROVIDE RADIANT SLAB HEAT.
2. PROVIDE LOW POINT DRAIN.
3. PIPE FINTUBE IN SERIES. ROUTE PIPE AROUND COLUMN.
4. INSTALL RADIANT TUBING AT 6" SPACING IN THIS ZONE.

GRAPHIC SCALE

1/8"=1'-0"

8' 4' 0 8' 16'

CHECK GRAPHIC SCALE BEFORE USING

NO.	DATE	DESCRIPTION	BY
		REVISIONS	

STATE OF MAINE MATTHEW S. ALBERT No. 9235 LICENSED PROFESSIONAL ENGINEER 1/29/25

DRAWN BY: JTZ
CHECK BY: MSA
DATE 01/29/2025

DEPARTMENT OF INLAND FISHERIES & WILDLIFE

TITLE: NEW OFFICE HEADQUARTERS
LOCATION: AUGUSTA, ME
TITLE THIS DWG.: FIRST FLOOR MECHANICAL PIPING PLAN

OAK POINT ASSOCIATES
231 Main Street, Biddeford, Maine 04005 207.283.0193

DRAWING NO. MP101
SHEET NO. 195 OF 239

1/28/2025 4:37:10 PM
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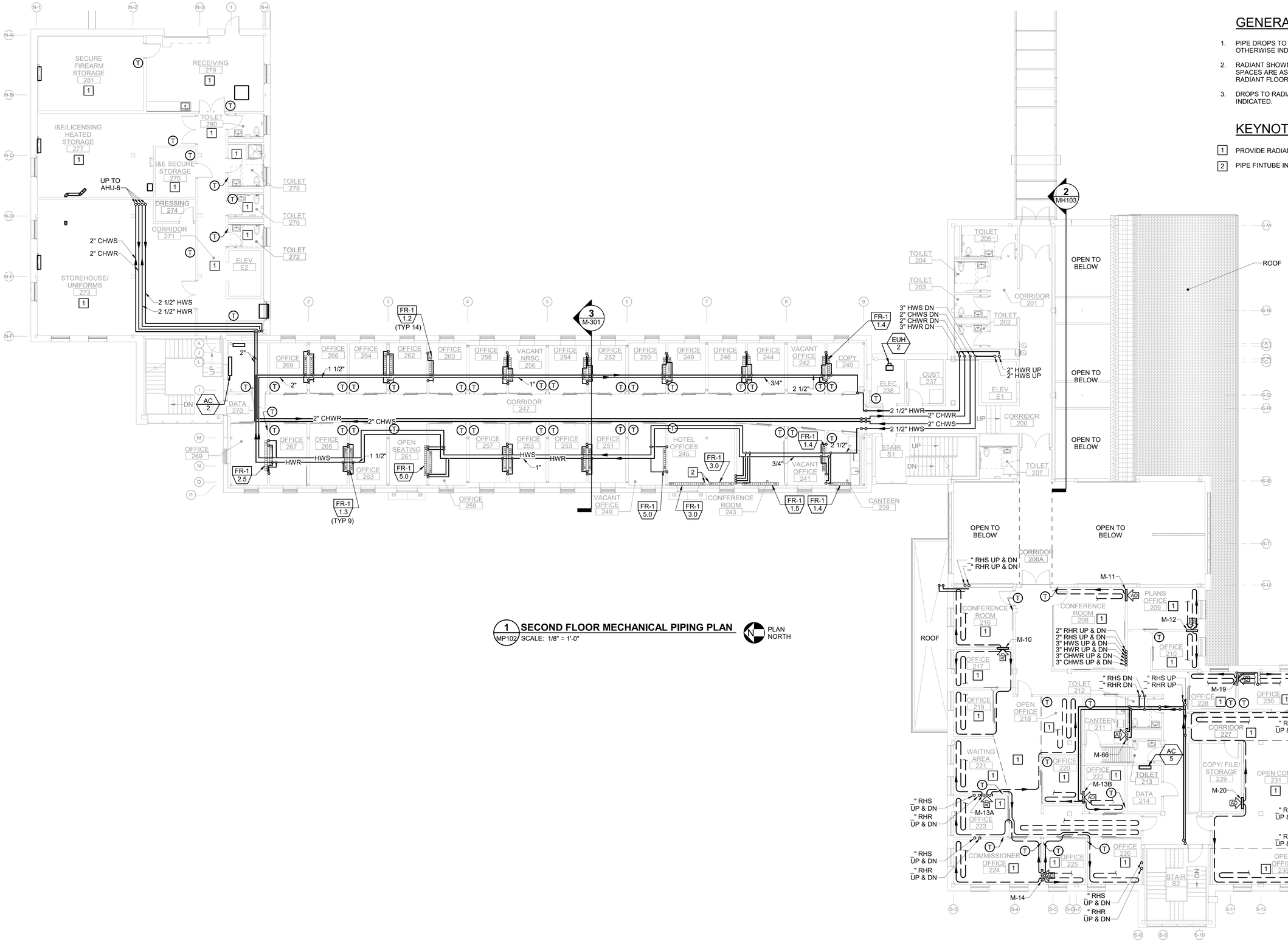
GENERAL NOTES

1. PIPE DROPS TO FIN TUBE RADIATION SHALL BE 3/4" UNLESS OTHERWISE INDICATED.
2. RADIANT SHOWN DIAGRAMATICALLY ONLY TO INDICATE WHICH SPACES ARE ASSOCIATED WITH A MANIFOLD. REFER TO THE RADIANT FLOOR HEATING SCHEDULE FOR REQUIREMENTS.
3. DROPS TO RADIANT MANIFOLDS SHALL BE 3/4" UNLESS OTHERWISE INDICATED.

KEYNOTES

1. PROVIDE RADIANT SLAB HEAT.
2. PIPE FINTUBE IN SERIES. ROUTE PIPE AROUND COLUMN.



1 SECOND FLOOR MECHANICAL PIPING PLAN
MP102 SCALE: 1/8" = 1'-0"

PLAN NORTH

GRAPHIC SCALE
1/8"=1'-0"
8' 4' 0 8' 16'
CHECK GRAPHIC SCALE BEFORE USING

NO.	DATE	DESCRIPTION	BY

REVISIONS

STATE OF MAINE MATTHEW S. ALBERT No. 9235 LICENSED PROFESSIONAL ENGINEER

DRAWN BY: JTZ
CHECK BY: MSA
NO.
DATE 01/29/2025

DEPARTMENT OF INLAND FISHERIES & WILDLIFE

TITLE: NEW OFFICE HEADQUARTERS
LOCATION: AUGUSTA, ME
TITLE THIS DWG: SECOND FLOOR MECHANICAL PIPING PLAN

OAK POINT ASSOCIATES
231 Main Street, Biddeford, Maine 04005 207.283.0193

DRAWING NO. MP102
SHEET NO. 196 OF 239

1/28/2025 4:37:05 PM
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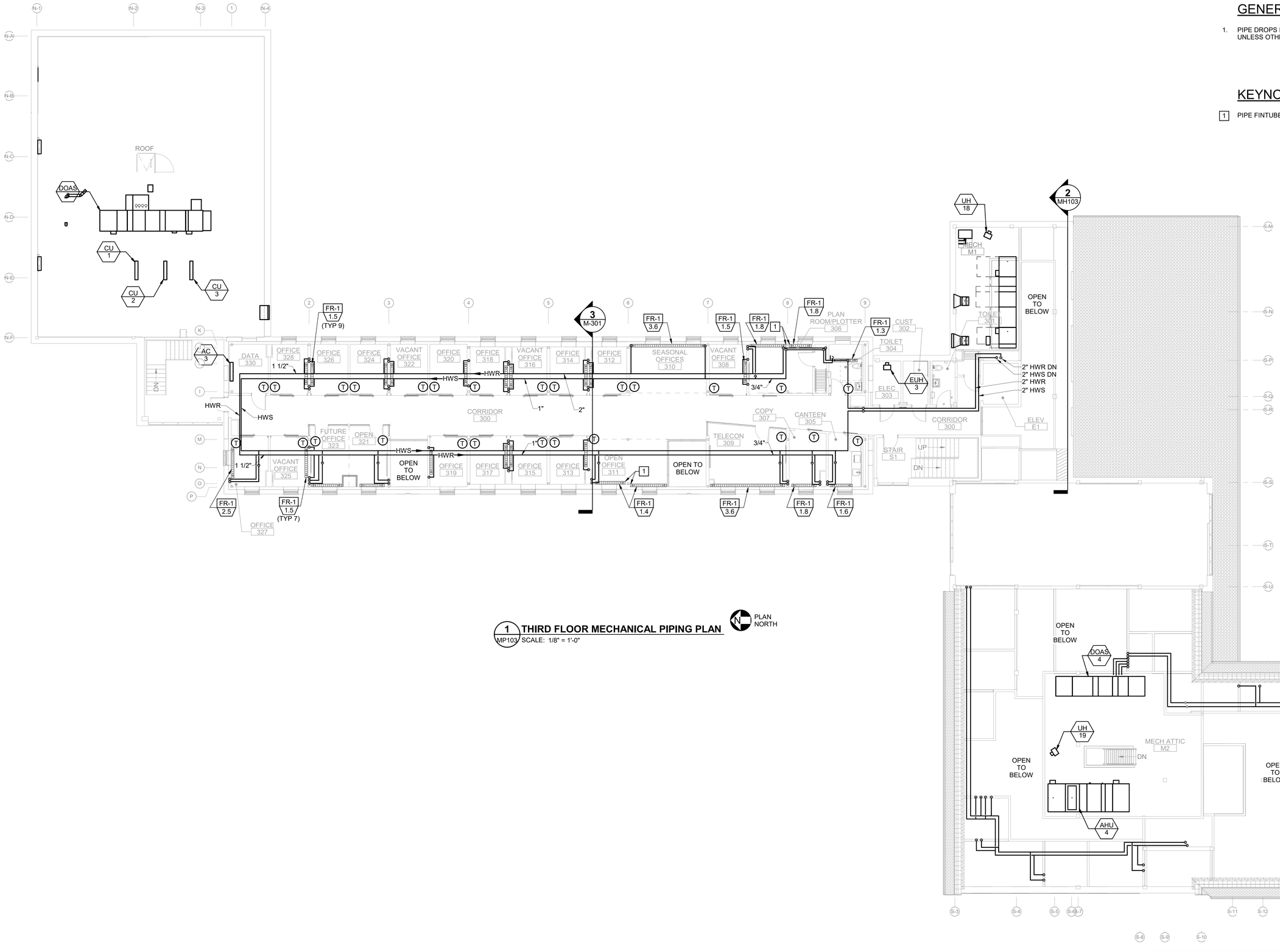
GENERAL NOTES

1. PIPE DROPS IN WALL TO FIN TUBE RADIATION SHALL BE 3/4" UNLESS OTHERWISE INDICATED.

KEYNOTES

1 PIPE FINTUBE IN SERIES. ROUTE PIPE AROUND COLUMN.



1 THIRD FLOOR MECHANICAL PIPING PLAN
MP103 SCALE: 1/8" = 1'-0"

GRAPHIC SCALE
1/8"=1'-0"
8' 4' 0 8' 16'
CHECK GRAPHIC SCALE BEFORE USING

NO.	DATE	DESCRIPTION	BY
		REVISIONS	

STATE OF MAINE MATTHEW S. ALBERT No. 9235 LICENSED PROFESSIONAL ENGINEER

DRAWN BY: JTZ
CHECK BY: MSA
DATE 01/29/2025

DEPARTMENT OF INLAND FISHERIES & WILDLIFE
TITLE NEW OFFICE HEADQUARTERS
LOCATION AUGUSTA, ME
TITLE THIS DWG THIRD FLOOR MECHANICAL PIPING PLAN

OAK POINT ASSOCIATES
231 Main Street, Biddeford, Maine 04005 207.283.0193

DRAWING NO. MP103
SHEET NO. 197 OF 239

1/28/2025 4:37:01 PM
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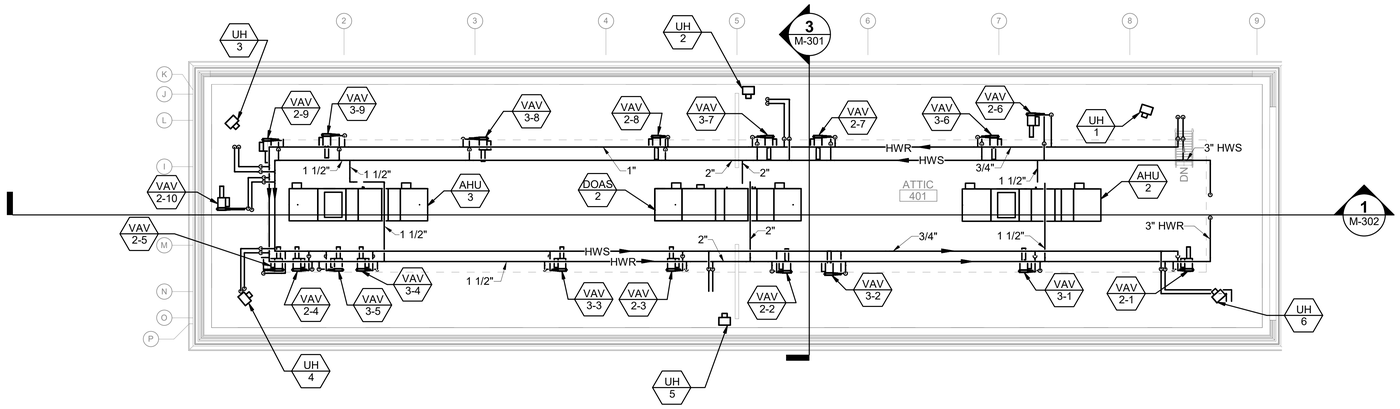
GENERAL NOTES

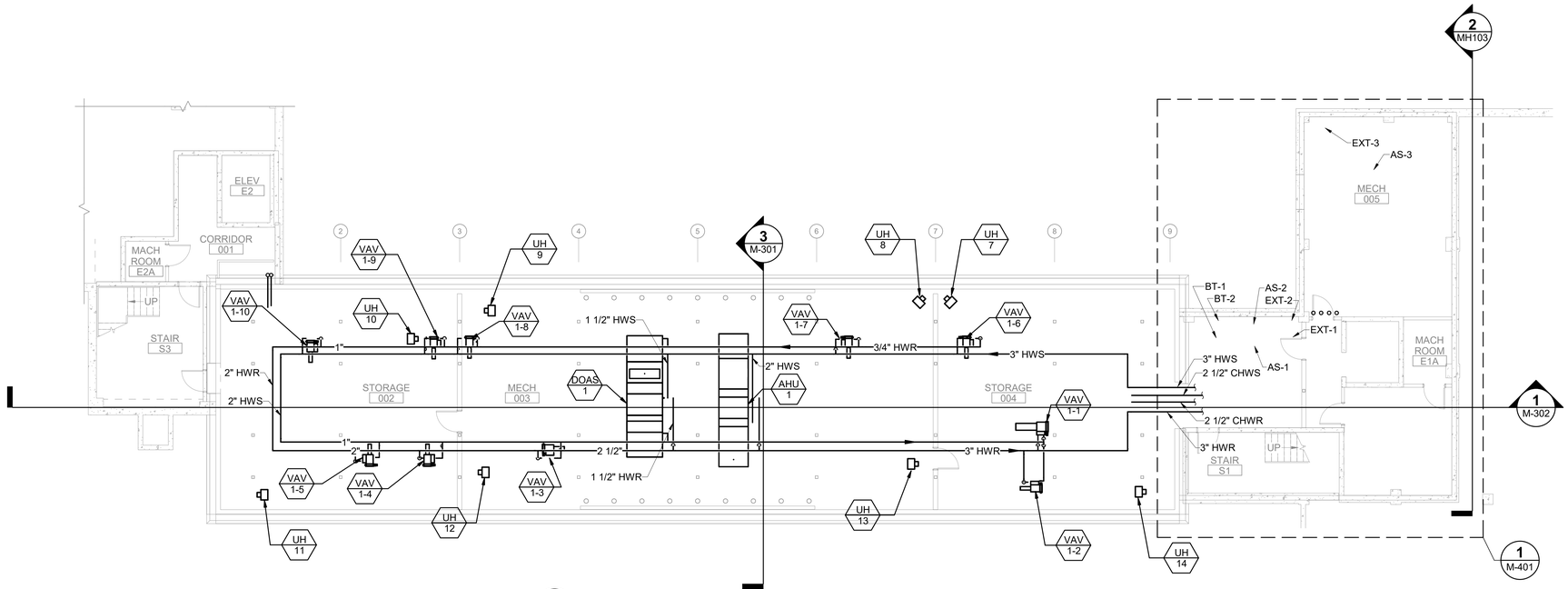
1. BRANCH PIPING TO VAV BOXES SHALL BE 3/4" UNLESS OTHERWISE INDICATED.
2. FOR VAV REHEAT COIL FLOWS REFER TO M-602.

KEYNOTES

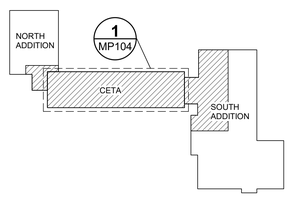
1 -



1 ATTIC MECHANICAL PIPING PLAN
MP104 SCALE: 1/8" = 1'-0"



2 BASEMENT MECHANICAL PIPING PLAN
MP104 SCALE: 1/8" = 1'-0"



KEYPLAN
NOT TO SCALE

PLAN NORTH

GRAPHIC SCALE
1/8"=1'-0"
8' 4' 0 8' 16'
CHECK GRAPHIC SCALE BEFORE USING

NO.	DATE	DESCRIPTION	BY
		REVISIONS	

STATE OF MAINE MATTHEW S. ALBERT No. 9235 LICENSED PROFESSIONAL ENGINEER

DRAWN BY: JTZ
CHECK BY: MSA
DATE 01/29/2025

DEPARTMENT OF INLAND FISHERIES & WILDLIFE

TITLE: NEW OFFICE HEADQUARTERS
LOCATION: AUGUSTA, ME
TITLE THIS DWG: BASEMENT AND ATTIC MECHANICAL PIPING PLANS

OAK POINT ASSOCIATES
231 Main Street, Biddeford, Maine 04005 207.283.0193

DRAWING NO. MP104
SHEET NO. 198 OF 239

1/28/2025 4:36:59 PM
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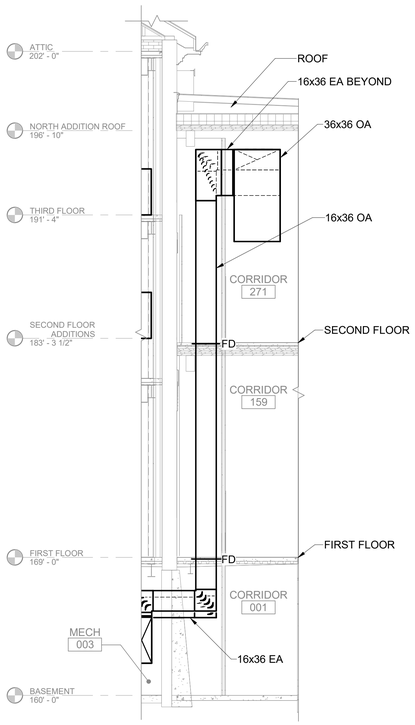
GENERAL NOTES

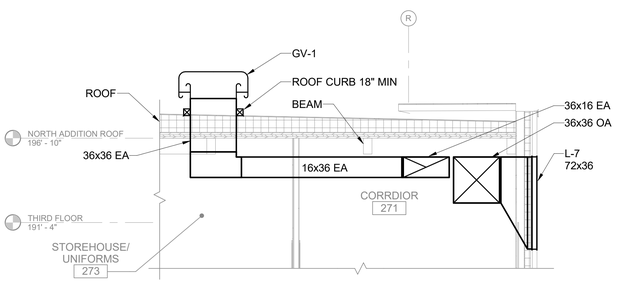
1. -

KEYNOTES

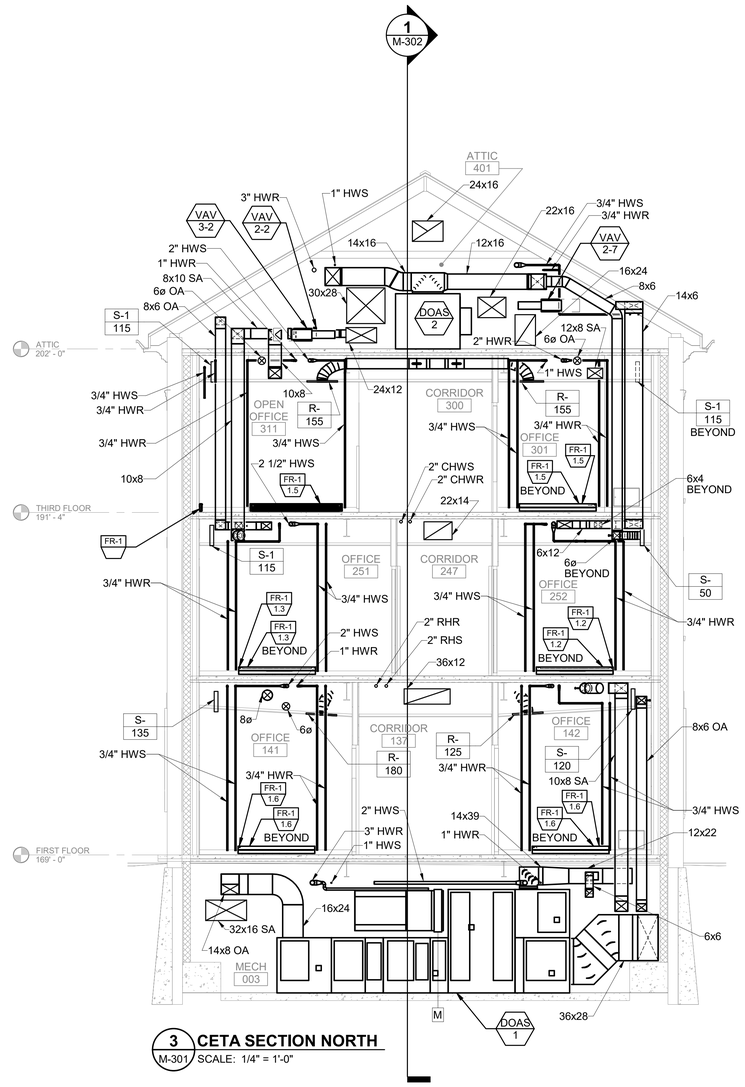
1 -



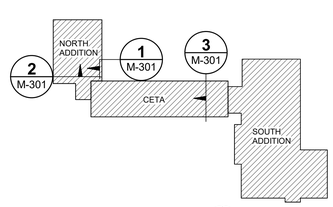
1 / M-301 DUCT SECTION IN CHASE
SCALE: 1/4" = 1'-0"



2 / M-301 DUCT SECTION L-1/GV-1
SCALE: 1/4" = 1'-0"



3 / M-301 CETA SECTION NORTH
SCALE: 1/4" = 1'-0"



KEYPLAN
NOT TO SCALE

PLAN NORTH

GRAPHIC SCALE
1/8"=1'-0"
8' 4' 0 8' 16'
CHECK GRAPHIC SCALE BEFORE USING

NO.	DATE	DESCRIPTION	BY
		REVISIONS	

STATE OF MAINE
MATTHEW S. ALBERT
No. 9235
LICENSED
PROFESSIONAL ENGINEER

DRAWN BY: CBM
CHECK BY: MSA
NO.
DATE 01/29/2025

DEPARTMENT OF INLAND FISHERIES & WILDLIFE

TITLE NEW OFFICE HEADQUARTERS
LOCATION AUGUSTA, ME
TITLE THIS DWG. MECHANICAL SECTIONS 1

OAK POINT ASSOCIATES
231 Main Street, Biddeford, Maine 04005 207.283.0195

DRAWING NO. M-301
SHEET NO. 199 OF 239

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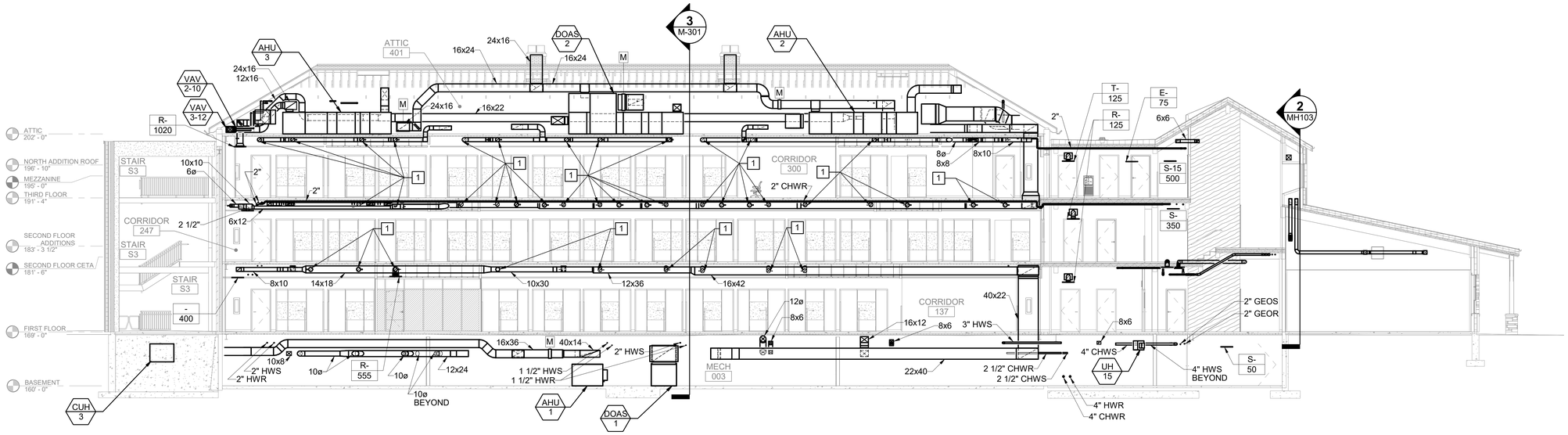
GENERAL NOTES

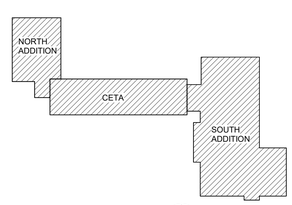
1. -

KEYNOTES

1 8ø RETURN AIR DUCT BEYOND.



1 CETA SECTION EAST
M-302 SCALE: 1/8" = 1'-0"



KEYPLAN
NOT TO SCALE

PLAN NORTH

GRAPHIC SCALE
1/8"=1'-0"
8' 4' 0 8' 16'
CHECK GRAPHIC SCALE BEFORE USING

NO.	DATE	DESCRIPTION	BY
		REVISIONS	

STATE OF MAINE MATTHEW S. ALBERT No. 9235 LICENSED PROFESSIONAL ENGINEER

DRAWN BY:
CHECK BY: Designer
NO.
DATE 01/29/2025

DEPARTMENT OF INLAND FISHERIES & WILDLIFE

TITLE NEW OFFICE HEADQUARTERS
LOCATION AUGUSTA, ME
TITLE THIS DWG MECHANICAL SECTIONS 2

OAK POINT ASSOCIATES
231 Main Street, Biddeford, Maine 04005 207.283.0193

DRAWING NO. M-302
SHEET NO. 200 OF 239

1/28/2025 4:37:57 PM
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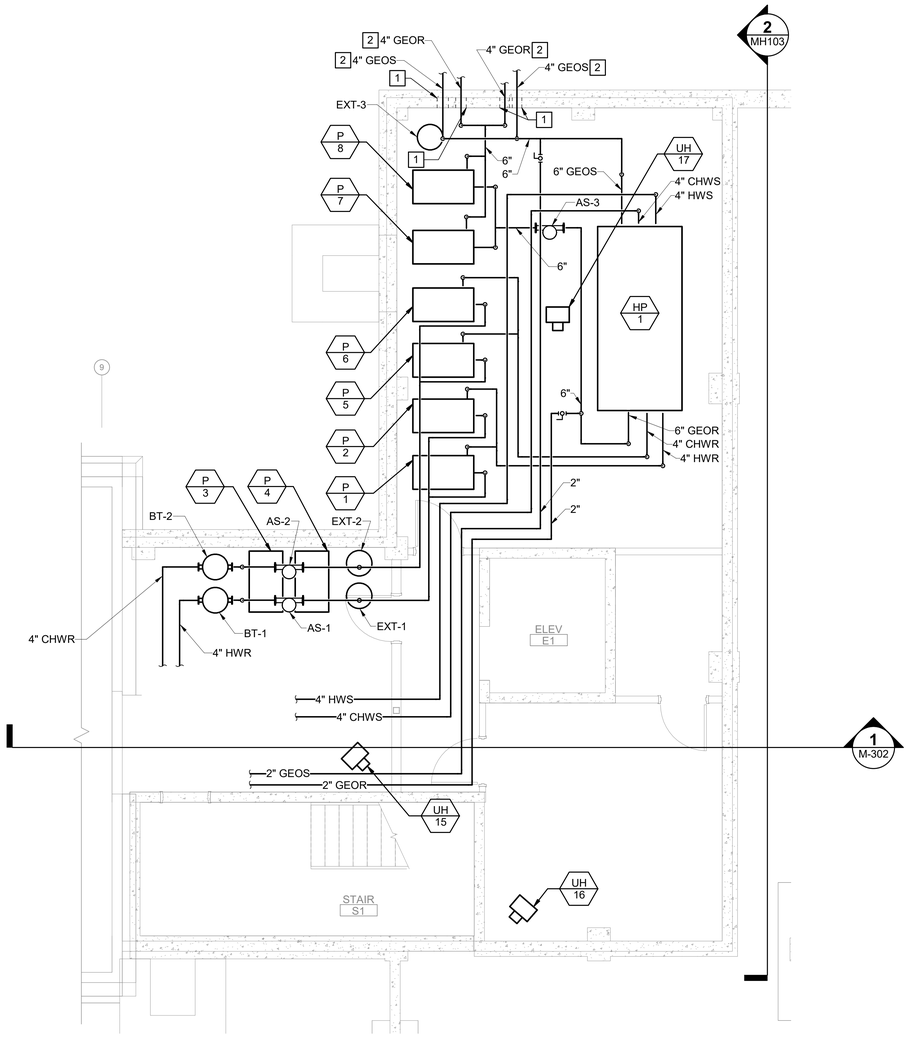
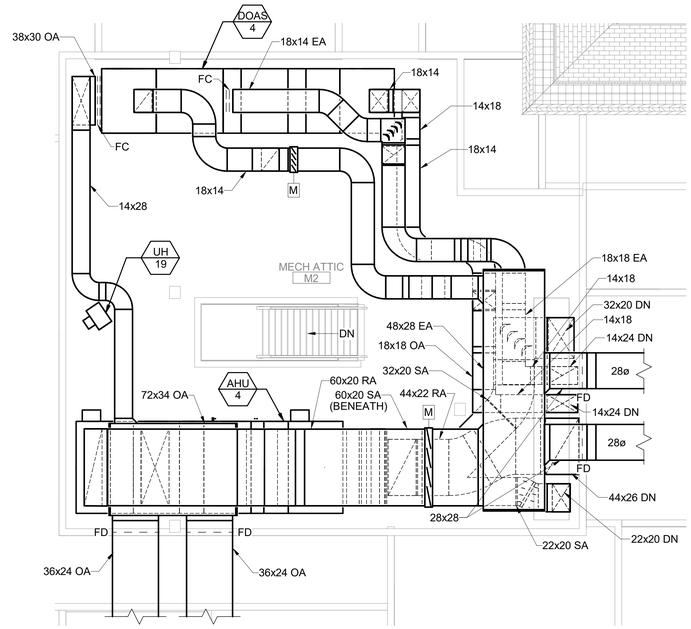
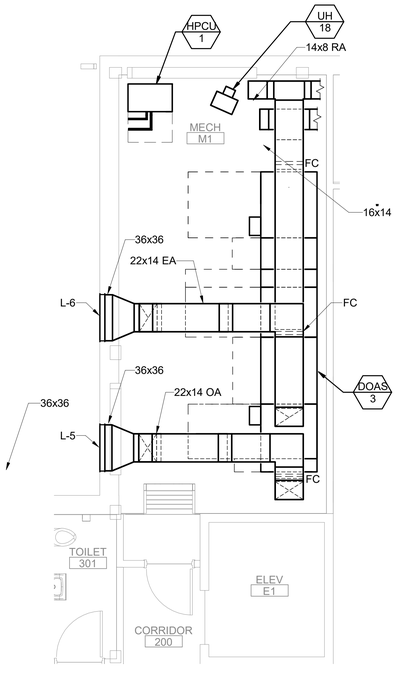


1 ENLARGED BASEMENT MECHANICAL PIPING PART PLAN
M-401 SCALE: 1/4" = 1'-0"



2 ATTIC M2 ENLARGED MECHANICAL PART PLAN
M-401 SCALE: 1/4" = 1'-0"



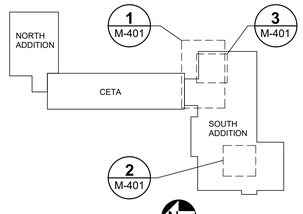
3 MEZZANINE M1 ENLARGED MECHANICAL PART PLAN
M-401 SCALE: 1/4" = 1'-0"

GENERAL NOTES

1. -

KEYNOTES

1 -



KEYPLAN
NOT TO SCALE
PLAN NORTH

GRAPHIC SCALE
1/4"=1'-0"
4' 2' 0 4' 8'
CHECK GRAPHIC SCALE BEFORE USING

NO.	DATE	DESCRIPTION	BY
		REVISIONS	

STATE OF MAINE
MATTHEW S. ALBERT
No. 9235
LICENSED
PROFESSIONAL ENGINEER
1/29/25

DRAWN BY:
CHECK BY: MSA
DATE 01/29/2025

DEPARTMENT OF INLAND FISHERIES & WILDLIFE
TITLE: NEW OFFICE HEADQUARTERS
LOCATION: AUGUSTA, ME
TITLE THIS DWG: ENLARGED MECHANICAL PART PLANS

OAK POINT ASSOCIATES
231 Main Street, Biddeford, Maine 04005 207.283.0199

DRAWING NO. M-401
SHEET NO. 201 OF 239

1/28/2025 4:37:51 PM
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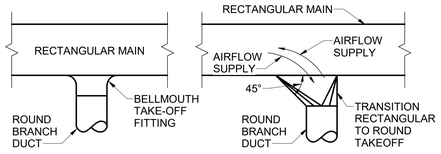
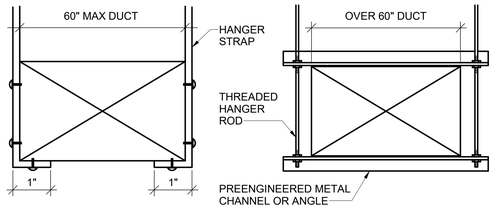


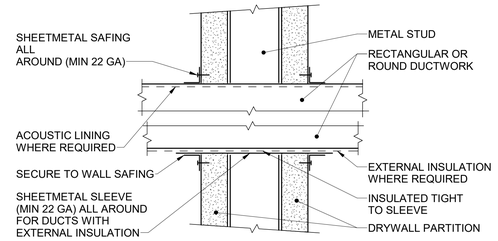
NOTE:
SPIN-IN TYPE STRAIGHT TAKE-OFF FITTINGS SHALL NOT BE PERMITTED.

1 TYPICAL ROUND BRANCH DUCT CONNECTIONS TO RECTANGULAR MAIN
M-501 SCALE: NTS

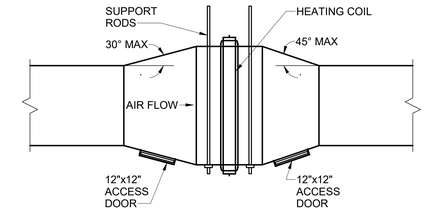


NOTE:
SIZE AND RATING OF HANGERS AND SUPPORTS SHALL BE PER LATEST SMACNA STANDARDS.

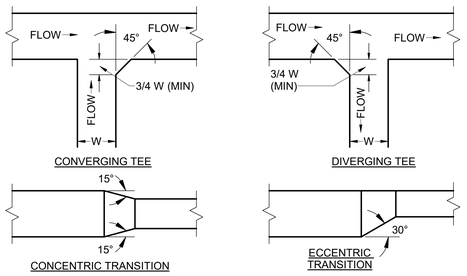
2 DUCT SUPPORT ATTACHMENTS DETAIL
M-501 SCALE: NTS



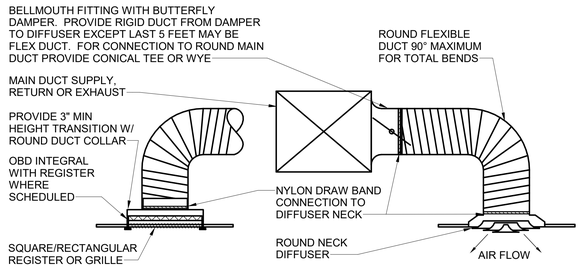
3 DUCT PENETRATION THRU NON-FIRE RATED WALL
M-501 SCALE: NTS



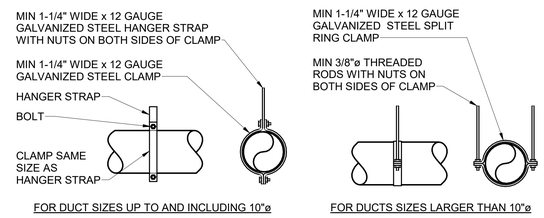
4 DUCT MOUNTED HEATING COIL DETAIL
M-501 SCALE: NTS



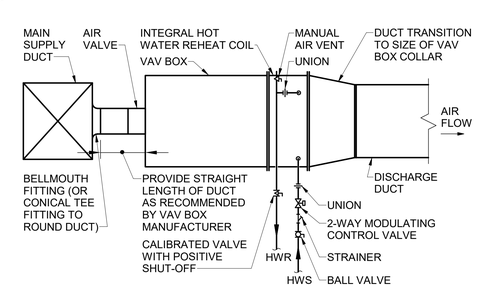
5 RECTANGULAR DUCT TRANSITIONS DETAIL
M-501 SCALE: NTS



6 DIFFUSER AND REGISTER RUNOUT DETAIL
M-501 SCALE: NTS

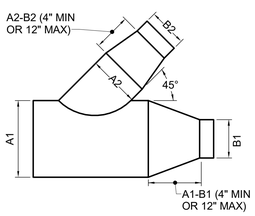


7 ROUND DUCT HANGER DETAIL
M-501 SCALE: NTS



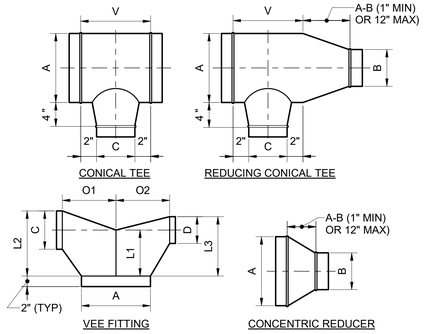
NOTES:
1. SUPPORT PIPE INDEPENDENTLY FROM COIL.
2. SUPPORT DUCT INDEPENDENTLY FROM COIL.
3. PIPING BRANCH RUNOUTS SHALL BE 3/4" UNLESS NOTED OTHERWISE.
4. HEIGHT OF BRANCH TAKE OFF SHALL BE MINIMUM 2" LESS THAN HEIGHT OF MAIN DUCT. SUBSTITUTE RECTANGULAR TO ROUND TRANSITION IN LIEU OF BELLMOUTH FITTING WHERE NECESSARY.

8 TYPICAL VAV BOX INSTALLATION DIAGRAM
M-501 SCALE: NTS



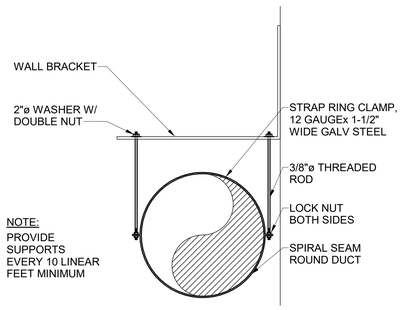
NOTE: 90° FLAT TEE FITTINGS SHALL NOT BE PERMITTED.

9 ROUND DUCT-CONICAL REDUCING LATERAL
M-501 SCALE: NTS



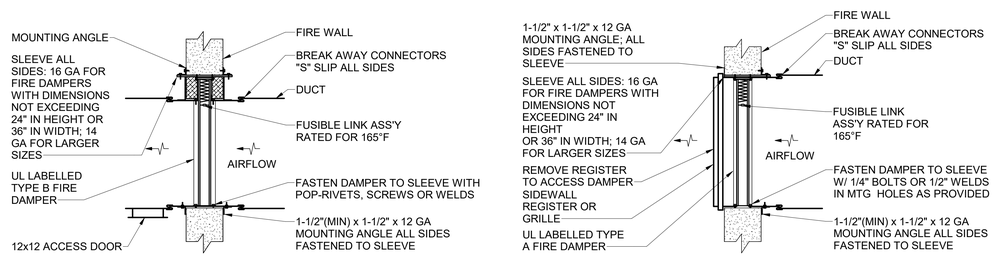
NOTE: 90° FLAT TAP OR TEE FITTINGS SHALL NOT BE PERMITTED.

10 TYPICAL ROUND DUCT FITTINGS DETAIL
M-501 SCALE: NTS



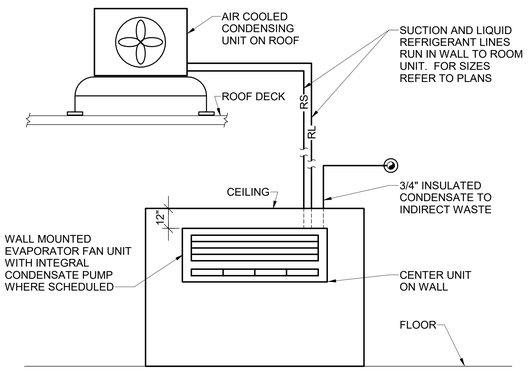
NOTE:
PROVIDE SUPPORTS EVERY 10 LINEAR FEET MINIMUM

11 EXPOSED SPIRAL DUCT SECTION
M-501 SCALE: NTS

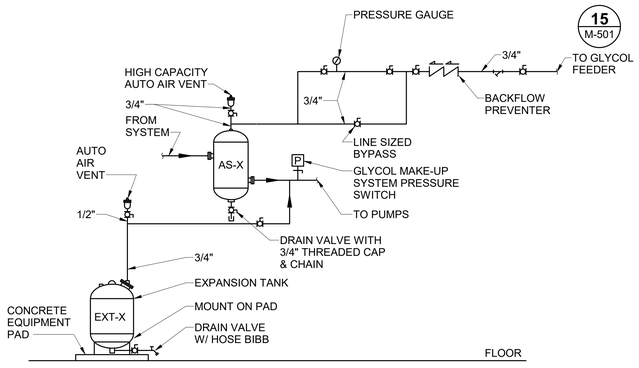


NOTES:
1. FOR HORIZONTAL FLOOR INSTALLATION PROVIDE FIRE DAMPER WITH SPRING LOADED DAMPER BLADES.
2. FASTEN ANGLES TO SLEEVE WITH POP-RIVETS, SCREWS OR WELDS AT 8-INCH ON CENTER, MINIMUM 2 PER SIDE, 4 SIDES OF OPENING ON BOTH SIDES OF DAMPER.
3. PROVIDE CLEARANCE BETWEEN DAMPER SLEEVE OR DAMPER AND THE FIRE-RATED WALL, PARTITION OR FLOOR IN ACCORDANCE WITH THE FIRE DAMPER MANUFACTURER. IF REQUIRED BY THE DAMPER MANUFACTURER, PROVIDE FIRESTOPPING IN THIS SPACE ON ALL SIDES TO MAINTAIN FIRE RATING.
4. USE FOR GALVANIZED SHEET METAL DUCT ONLY.

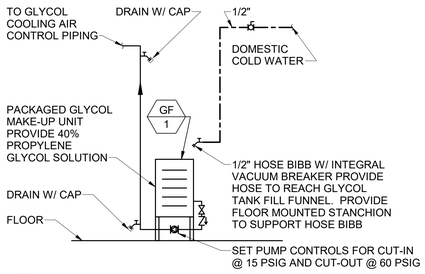
12 FIRE DAMPER DETAIL
M-501 SCALE: NTS



13 DUCTLESS SPLIT SYSTEM ELEVATION
M-501 SCALE: NTS



14 AIR CONTROL PIPING DIAGRAM
M-501 SCALE: NTS



15 GLYCOL FEEDER DETAIL
M-501 SCALE: NTS

NO.	DATE	DESCRIPTION	BY
		REVISIONS	

STATE OF MAINE
MATTHEW S. ALBERT
No. 9235
LICENSED
PROFESSIONAL ENGINEER

DRAWN BY:
CHECK BY: MSA
NO.
DATE 01/29/2025

DEPARTMENT OF INLAND FISHERIES & WILDLIFE

TITLE: NEW OFFICE HEADQUARTERS
LOCATION: AUGUSTA, ME
TITLE THIS DWG.: MECHANICAL DETAILS 1

OAK POINT ASSOCIATES
231 Main Street, Biddeford, Maine 04005 207.283.0193

DRAWING NO. M-501
SHEET NO. 202 OF 239

1/28/2025 4:37:50 PM
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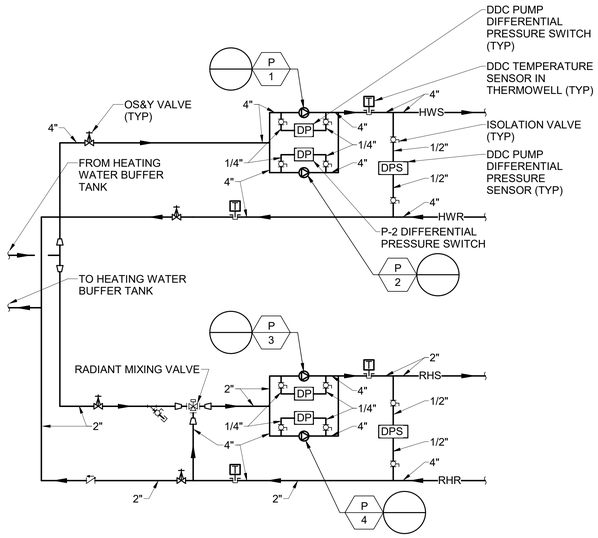
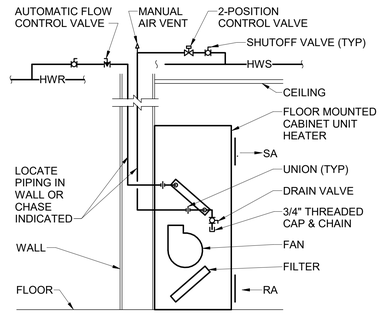
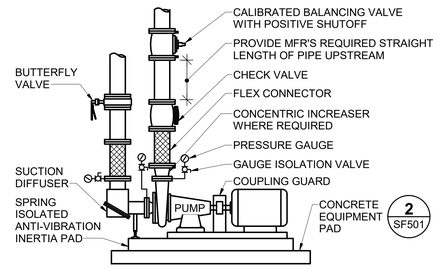


1 HEATING WATER PUMPING SCHEMATIC
M-502 SCALE: NTS

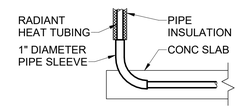


2 CABINET HEATER PIPING SCHEMATIC
M-502 SCALE: NTS

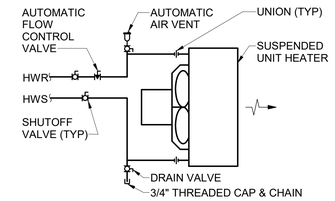


NOTE: VALVES AND SPECIALTIES SHALL BE SAME SIZE AS PIPE.

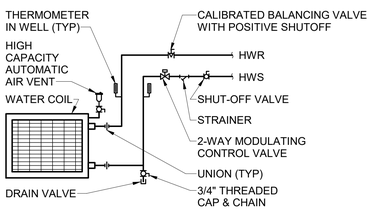
3 SEPARATELY COUPLED END SUCTION PUMP DETAIL
M-501 M-502 SCALE: NTS



4 TYPICAL RADIANT HEAT TUBING ENTERING OR EXITING CONCRETE SLAB DETAIL
M-502 SCALE: NTS

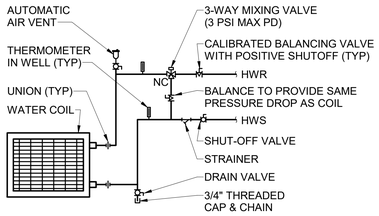


5 UNIT HEATER WATER COIL PIPING SCHEMATIC
M-502 SCALE: NTS



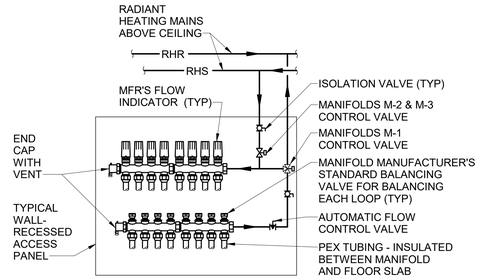
NOTES
1. VALVES SHALL BE SAME SIZE AS PIPE.
2. SHUT-OFF VALVES MAY BE BALL OR BUTTERFLY. REFER TO SPECIFICATIONS FOR VALVE TYPE AND SIZE RESTRICTIONS.
3. PROVIDE UNIONS AND/OR FLANGES AS REQUIRED FOR FIT-UP AND REMOVAL OF COIL.

6 COIL WITH 2-WAY VALVE PIPING SCHEMATIC
M-502 SCALE: NTS

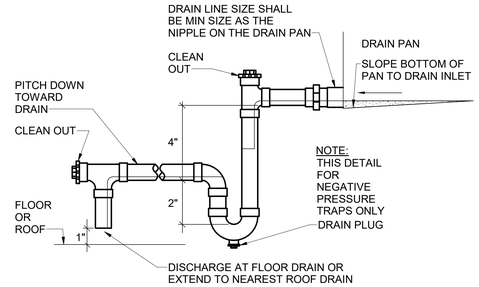


NOTES
1. VALVES SHALL BE SAME SIZE AS PIPE.
2. SHUT-OFF VALVES MAY BE BALL OR BUTTERFLY. REFER TO SPECIFICATIONS FOR VALVE TYPE AND SIZE RESTRICTIONS.
3. PROVIDE UNIONS AND/OR FLANGES AS REQUIRED FOR FIT-UP AND REMOVAL OF COIL.

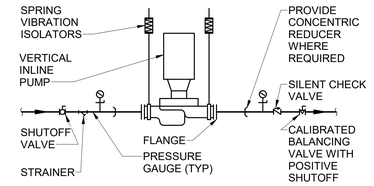
7 COIL WITH 3-WAY VALVE PIPING SCHEMATIC
M-502 SCALE: NTS



8 TYPICAL RADIANT HEAT MANIFOLD DIAGRAM
M-502 SCALE: NTS

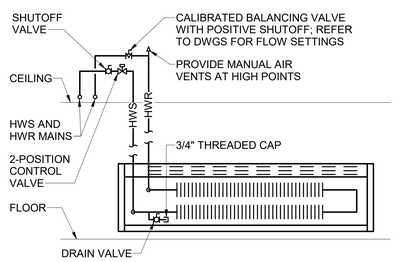


9 CONDENSATE TRAP DETAIL
M-502 SCALE: NTS

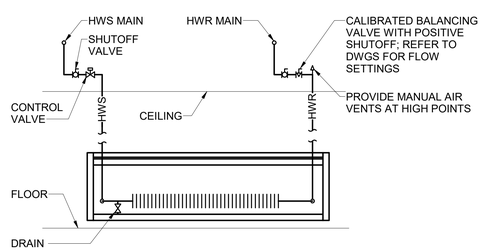


NOTES:
1. VALVES SHALL BE SAME SIZE AS PIPE.
2. PROVIDE SPRING VIBRATION ISOLATORS FOR PUMP.

10 INLINE PUMP PIPING DETAIL
M-502 SCALE: NTS



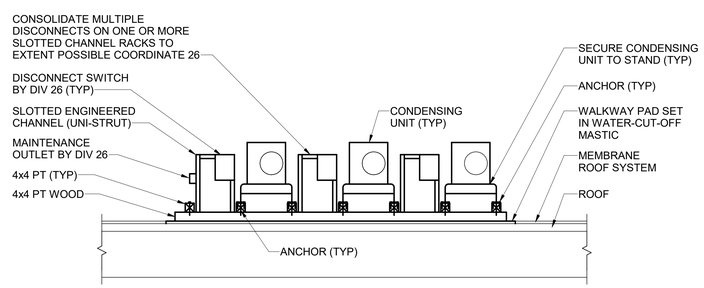
DOUBLE ROW - DOWN FEED



SINGLE ROW - DOWN FEED

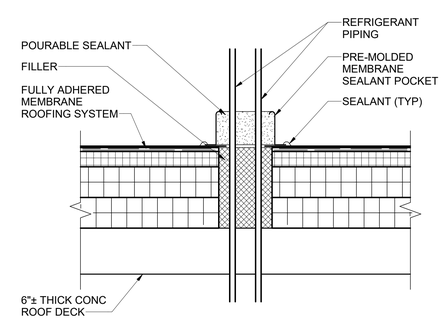
NOTE: LOCATE VALVES WITHIN ENCLOSURE ONLY WHERE SPECIFICALLY NOTED ON PLANS AND PROVIDE ACCESS DOORS IN ENCLOSURE

11 FINTUBE RADIATION DETAILS
M-502 SCALE: NTS



NOTES:
1. PERFORM WORK TO MAINTAIN ROOF WARRANTIES.
2. DETAIL SHOWS 3 CONDENSING UNITS, MOUNTING STANDS WITH 1 OR 2 CONDENSING UNITS TO BE SIMILAR CONSTRUCTION.
3. PROVIDE ADDITIONAL 100LBS OF BALLAST (IE... CMU, SANDBAGS) PER EACH CONDENSING UNIT.

12 TYPICAL CONDENSING UNIT MOUNTING STAND DETAIL
MH103 M-502 SCALE: NTS



13 TYPICAL PITCH POCKET DETAIL
MH103 M-502 SCALE: NTS

NO.	DATE	DESCRIPTION	BY
		REVISIONS	

STATE OF MAINE MATTHEW S. ALBERT No. 9235 LICENSED PROFESSIONAL ENGINEER

DRAWN BY:
CHECK BY: MSA
NO.
DATE 01/29/2025

DEPARTMENT OF INLAND FISHERIES & WILDLIFE

TITLE: NEW OFFICE HEADQUARTERS
LOCATION: AUGUSTA, ME
TITLE THIS DWG: MECHANICAL DETAILS 2

OAK POINT ASSOCIATES
231 Main Street, Biddeford, Maine 04005 207.283.0199

DRAWING NO. M-502
SHEET NO. 203 OF 239

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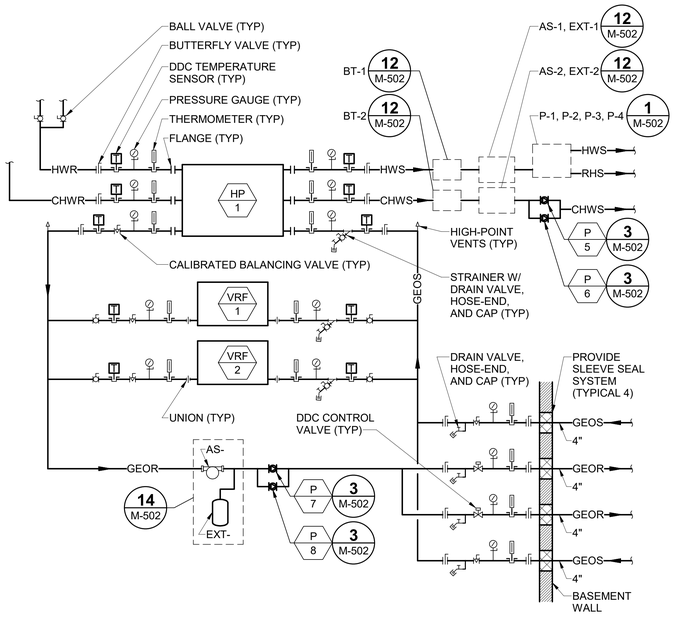
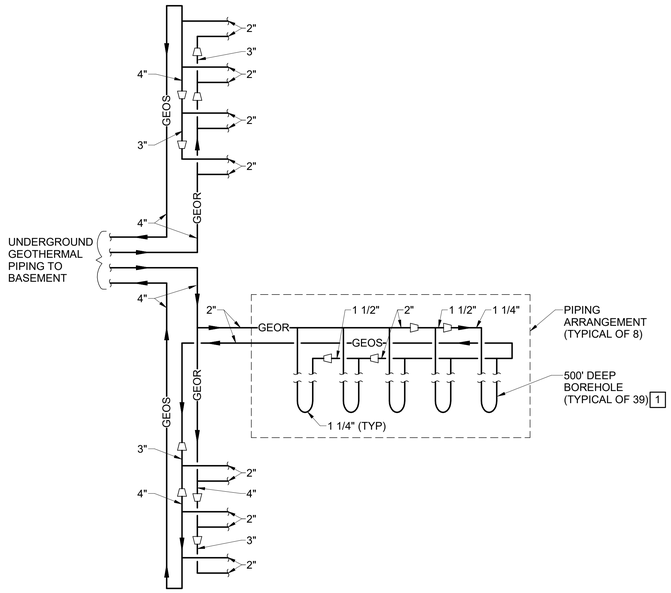


1 M-503 GEOTHERMAL HEATING AND COOLING SYSTEM PIPING DIAGRAM
SCALE: NTS



2 M-503 GEOTHERMAL BORE FIELD PIPING DIAGRAM
CU101
SCALE: NTS

GENERAL NOTE

1. REFER TO SHEET CU101 FOR BORE FIELD LAYOUT, LOCATION OF EXISTING BORE HOLE, AND TRENCHES.

KEYNOTE

1 IN ADDITION TO THE (39) 500' BOREHOLES. CONNECT TO EXISTING 460' DEEP BOREHOLE THAT WAS USED FOR THERMAL CONDUCTIVITY TESTING. TOTAL NUMBER OF BOREHOLES = 40.

NO.	DATE	DESCRIPTION	BY
		REVISIONS	

STATE OF MAINE
MATTHEW S. ALBERT
No. 9235
LICENSED
PROFESSIONAL ENGINEER
01/29/25

DRAWN BY:
CHECK BY: MSA
NO.
DATE 01/29/2025

DEPARTMENT OF INLAND FISHERIES & WILDLIFE

TITLE: NEW OFFICE HEADQUARTERS
LOCATION: AUGUSTA, ME
TITLE THIS DWG.: MECHANICAL DETAILS 3

OAK POINT ASSOCIATES
ARCHITECTS • ENGINEERS • CONSULTANTS
231 Main Street, Biddeford, Maine 04005 207.283.0199

DRAWING NO. M-503
SHEET NO. 204 OF 239

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AIR HANDLING UNIT SCHEDULE

UNIT NO	SERVES	LOCATION	SA FAN			RA FAN		ENERGY RECOVERY (HEATING)					CHILLED WATER COOLING COIL					HOT WATER COIL								ELECTRICAL								INSTALLED WEIGHT LBS	BASIS OF DESIGN	NOTES
			ESP IN H2O	MAX CFM	OA	ESP IN H2O	MAX CFM	SUPPLY		EXHAUST		MINIMUM EFFICIENCY	GPM	ENTERING AIR DB/WB °F	LEAVING AIR DB/WB °F	MAX WPD FTWC	SC/TC MBH	CFM	EAT °F	LAT °F	GPM	MAX WPD FT	EWT °F	LWT °F	MBH	SUPPLY FAN		EXHAUST FAN		VOLTS / PHASE	FLA A	MCA A	MOP A			
								EAT DB/WB °F	LAT DB/WB °F	EAT @ DB/WB °F	LAT °F															FAN HP	RPM	FAN HP	RPM							
AHU-1	1ST FLOOR CETA & BASEMENT	BASEMENT	2	4675	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	21.0	78 / 65	55 / 54	4	113/143	2000	65	95	13	10	120	110	65	10	3290	7.5	1790	460 / 3	15.4	17.5	25	2275	-	1
AHU-2	2ND FLOOR CETA	ATTIC	2	3680	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	17.5	78 / 65	55 / 54	4	95/120	1500	65	95	10	10	120	110	50	10	3040	7.5	1680	460 / 3	15.4	17.5	25	2100	-	1
AHU-3	3RD FLOOR CETA	ATTIC	2	3300	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	16.0	78 / 65	55 / 54	4	87/110	1500	65	95	10	10	120	110	50	10	2880	7.5	1615	460 / 3	15.4	17.5	25	2100	-	1
AHU-4	SOUTH OFFICES	MEZZ M2	2	8200	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	40.0	78 / 65	55 / 54	9	216/278	2500	65	95	16	10	120	110	81	2@10	3250	2@7.5	1840	460 / 3	30.0	31.8	40	3030	-	1
DOAS-1	1ST FLOOR CETA &BASEMENT	BASEMENT	1.0	3155	3155	1.0	2525	-7 / -8	44 / 36	70 / 53	23	69%	45	87 / 71	49.1/49	5	128/207	3155	-7	63	48	10	120	110	240	10	3240	10	2925	460 / 3	18.2	20.3	30	3000	-	1
DOAS-2	2ND & 3RD FLOOR CETA	ATTIC	1.0	3175	3175	1.0	2540	-7 / -8	44 / 36	70 / 53	23	69%	42	87 / 71	49.1/49	4	129/208	3175	-7	63	48	10	120	110	240	10	2815	10	2550	460 / 3	18.2	20.3	30	3000	-	1
DOAS-3	CONFERENCE ROOMS	MEZZ M1	1.0	1975	1975	1.0	1580	-7 / -8	44 / 36	70 / 53	23	69%	26	87 / 71	49.1/49	4	80/130	1975	-7	63	30	10	120	110	150	10	2850	10	2600	460 / 3	18.2	20.3	25	3000	-	1
DOAS-4	SOUTH OFFICES	MEZZ M2	1.0	2595	2595	1.0	2075	-7 / -8	44 / 36	70 / 53	23	69%	34	87 / 71	49.1/49	4	105/170	2595	-7	63	39	10	120	110	195	10	2815	10	2550	460 / 3	18.2	20.3	30	3000	-	1
DOAS-5	NORTH WING	ROOF	2	1995	1995	N/A	N/A	-7 / -8	44 / 36	70 / 53	23	69%	23.0	78 / 65	55 / 54	5	99/160	1200	-7	83	39	10	120	110	195	10	3100	10	2855	460 / 3	18.2	20.3	25	4841	-	1

NOTES: 1. PROVIDE SINGLE POINT OF POWER CONNECTION

GENERAL NOTES

1. NOTE ON BASIS OF DESIGN:
PRODUCTS OF OTHER MANUFACTURERS ARE ACCEPTABLE IF THEY MEET THE OPERATIONAL REQUIREMENTS INDICATED. ANY ADJUSTMENTS TO DUCTING, PIPING, WIRING OR CONFIGURATION DUE TO THE SELECTION OF A MANUFACTURER OTHER THAN THAT LISTED AS THE BASIS OF DESIGN WILL BE ACCOMPLISHED BY THE CONTRACTOR AT NO ADDITIONAL EXPENSE TO THE OWNER.

GEOTHERMAL HEAT PUMP SCHEDULE

UNIT NO	TYPE	LOCATION	HEATING						COOLING						WPD IN FT		ELECTRICAL			BASIS OF DESIGN	NOTES
			SOURCE 10° DROP		LOAD 20° RISE		HEATING CAPACITY MBTUH	HEATING COP	SOURCE 10° RISE		10° DROP LOAD		COOLING CAPACITY MBTUH	EER	SOURCE	LOAD	VOLTS / PHASE	MCA	MAX FUSE AMP		
			GPM	EWT	GPM	EWT			GPM	EWT	GPM	EWT									
HP-1	WATER-TO-WATER	BASEMENT	220	45	150	110	1450	3.2	395	60	210	57	1565	19.96	20	5	460 / 3	221	250	-	1, 2, 3, 4

NOTES: 1. PROVIDE MODULAR HEAT PUMP CAPABLE OF SIMULATANEOUS HEATING AND COOLING.
2. PROVIDE A MINIMUM OF 4 MODULES.
3. PROVIDE SINGLE POINT OF POWER CONNECTION.
4. PROVIDE BACNET INTERFACE.

FAN SCHEDULE

UNIT NO	SERVES	CFM	ESP IN WC	DRIVE TYPE	FAN TYPE	FAN RPM	SONES	HP	VOLTS/ PHASE	BASIS OF DESIGN	ACCESSORIES	NOTES
TF-1	ELEC 132	125	0.25	DIRECT	IN-LINE	-	-	1/10	115/1	GREENHECK SQ-95-VG	A,B,C,D	-
TF-2	ELEC 238	125	0.25	DIRECT	IN-LINE	-	-	1/10	115/1	GREENHECK SQ-95-VG	A,B,C,D	-
TF-3	ELEC 303	125	0.25	DIRECT	IN-LINE	-	-	1/10	115/1	GREENHECK SQ-95-VG	A,B,C,D	-

NOTES: 1. VFD CONTROLLED.

ACCESSORIES:
A. 12" INSULATED ROOF CURB.
B. GRAVITY BACKDRAFT DAMPER.
C. MOTORIZED DAMPER.
D. GALVANIZED BIRD SCREEN.
E. MFR FAN MOUNTED DISCONNECT SWITCH.
F. VENTED CURB EXTENSION, HINGED CURB CAP, AND GREASE TRAP WITH DRAIN CONNECTION.
G. BRICK VENT WITH BACKDRAFT DAMPER.
H. WALL COLLAR, WIRE MESH MOTOR GUARD AND SHUTTER DAMPER.
I. SPECIALTY COATING.
J. FAN SPEED CONTROLLER.
K. SOUND ATTENUATING ENCLOSURE.
L. SPRING VIBRATION ISOLATORS.
M. NEOPRENE VIBRATION ISOLATORS.
N. TIME DELAY SWITCH.

PUMP SCHEDULE

UNIT NO	SERVES	TYPE	GPM	TOTAL HEAD (FT)	PUMP EFF (%)	MOTOR DATA			SUCTION / DISCHARGE (IN)	BASIS OF DESIGN	NOTES
						HP	RPM	VOLTS / PHASE			
P-1	HEATING WATER	BASE-MOUNTED	300	75	70	7.5	1080	460/3	3 / 3	B&G e-1532 3GB	-
P-2	HEATING WATER	BASE-MOUNTED	300	75	70	7.5	1080	460/3	3 / 3	B&G e-1532 3GB	-
P-3	RADIANT SLAB	BASE-MOUNTED	120	45	70	3	1127	460/3	2 / 2	B&G e-1532 2EB	-
P-4	RADIANT SLAB	BASE-MOUNTED	120	45	70	3	1127	460/3	2 / 2	B&G e-1532 2EB	-
P-5	CHILLED WATER	BASE-MOUNTED	265	60	69	7.5	1080	460/3	3 / 3	B&G e-1532 3GB	-
P-6	CHILLED WATER	BASE-MOUNTED	265	60	69	7.5	1080	460/3	3 / 3	B&G e-1532 3GB	-
P-7	GEOTHERMAL WELLS	BASE-MOUNTED	395	105	78	20	3252	460/3	4 / 3	B&G e-1532 3AD	-
P-8	GEOTHERMAL WELLS	BASE-MOUNTED	395	105	78	20	3252	460/3	4 / 3	B&G e-1532 3AD	-

NOTES: 1.

BUFFER TANK SCHEDULE

UNIT NO	LOCATION	SERVES	ACCEPTANCE VOLUME	DIMENSIONS			BASIS OF DESIGN	NOTES
				DIAMETER	HEIGHT	CONNECTION SIZE		
BT-1	BASEMENT	HEATING WATER	300 GAL	36"	80"	4"	AMTROL CWBT300-4	1, 2
BT-2	BASEMENT	CHILLED WATER	300 GAL	36"	80"	4"	AMTROL CWBT300-4	1, 2

NOTES: 1. PROVIDE BUFFER TANK WITH INTERNAL BUFFER. 2. PROVIDE FLANGED CONNECTIONS

AUTOMATIC GLYCOL FEEDER SCHEDULE

UNIT NO	LOCATION	SERVES	TANK VOLUME	MAKE-UP CAPACITY	PRESSURE RANGE	VOLTS / PHASE	HP	BASIS OF DESIGN	NOTES
GF-1	BASEMENT	GEOTHERMAL	50 GAL	1.5 GPM	10-60 PSI	115/1	1/3	NEPTUNE G-50-1	-

NOTES: 1.

AIR CONDITIONING UNIT SCHEDULE

UNIT NO	INDOOR UNIT LOCATION	OUTDOOR UNIT LOCATION	CFM	MBH MAX / MIN	MINIMUM EFFICIENCY	ELECTRICAL DATA				BASIS OF DESIGN	NOTES
						VOLTS/ PHASE	INDOOR MCA	OUTDOOR MCA	OUTDOOR MOCP		
AC-1 / CU-1	158	ROOF	320-425	18 / 8	18 SEER	208/1	1	11	25	TRANE/MITSUBISHI PKA-18H47/PUY-A18NKA7	-
AC-2 / CU-2	270	ROOF	320-425	18 / 8	18 SEER	208/1	1	11	25	TRANE/MITSUBISHI PKA-18H47/PUY-A18NKA7	-
AC-3 / CU-3	330	ROOF	320-425	18 / 8	18 SEER	208/1	1	11	25	TRANE/MITSUBISHI PKA-18H47/PUY-A18NKA7	-
AC-4 / CU-4	130	GROUND	320-425	18 / 8	18 SEER	208/1	1	11	25	TRANE/MITSUBISHI PKA-18H47/PUY-A18NKA7	-
AC-5 / CU-5	214	GROUND	320-425	18 / 8	18 SEER	208/1	1	11	25	TRANE/MITSUBISHI PKA-18H47/PUY-A18NKA7	-

NOTES: 1.

FINTUBE RADIATION SCHEDULE

UNIT NO	ELEMENT		ENCLOSURE		CAPACITY BTUH/LF	AVERAGE WATER TEMP (°F)	BASIS OF DESIGN	NOTES
	TUBE SIZE	ROWS	MOUNTING HEIGHT (IN)	ENCLOSURE HEIGHT (IN)				
FR-1	1/2	3	NOTE 1	9	300	120	RUNTAL RF-3	1

NOTES: 1. BOTTOM OF ENCLOSURE SHALL BE MOUNTED 4-INCHES AFF

EXPANSION TANK SCHEDULE

UNIT NO	LOCATION	SERVES	ACCEPTANCE VOLUME	DIMENSIONS	BASIS OF DESIGN	NOTES
EXT-1	BASEMENT MECH	HW SYSTEM	34 GAL	24" x 47"	EXTROL AX-120V	-
EXT-2	BASEMENT MECH	CHW SYSTEM	34 GAL	24" x 47"	EXTROL-AX-120V	-
EXT-3	BASEMENT MECH	GEO LOOP	34 GAL	24" x 47"	EXTROL-AX-120V	-

NOTES:

UNIT HEATER AND CABINET UNIT HEATER SCHEDULE

UNIT NO	LOCATION	CFM	HEATING	WATER TEMP °F		GPM	MAX PRESSURE DROP IN WC	ELECTRICAL DATA			BASIS OF DESIGN	NOTES
				ENTERING	LEAVING			HP	RPM	VOLTS / PHASE		
UH-1 THRU UH-6	MECH SPACES	750	16 MBH	130	110	3.6	3.0	1/20	900	277/1	TRANE S-A36	
UH-7 THRU UH-19	MECH SPACES	750	16 MBH	130	110	3.6	3.0	1/20	900	115/1	TRANE S-A36	
CUH-1	STAIR S1	685	10 MBH	130	110	3.0	3.0	1/20	900	115/1	STERLING FS-08	
CUH-2	STAIR S2	685	18 MBH	130	110	3.0	3.0	1/20	900	115/1	STERLING FS-08	
CUH-3	STAIR S3	685	23 MBH	130	110	3.0	3.0	1/20	900	115/1	STERLING FS-08	
EUH-1	ELEC 132	-	3.3 KW	N/A	N/A	N/A	N/A	1/25	1550	277/1	TRANE UHEC-031	1
EUH-2	ELEC 238	-	3.3 KW	N/A	N/A	N/A	N/A	1/25	1550	277/1	TRANE UHEC-031	1
EUH-3	ELEC 303	-	3.3 KW	N/A	N/A	N/A	N/A	1/25	1550	277/1	TRANE UHEC-031	1

NOTES: 1. PROVIDE MOUNTING BRACKET

AIR SEPARATOR SCHEDULE

UNIT NO	LOCATION	SERVES	TYPE	CAPACITY (GPM)	PRESSURE DROP (FT)	BASIS OF DESIGN	NOTES
EXT-1	BASEMENT MECH	HW SYSTEM	TANGENTAIL	300	3	AMTROL 4-AS	-
EXT-2	BASEMENT MECH	CHW SYSTEM	TANGENTAIL	265	3	AMTROL 4-AS	-
EXT-3	BASEMENT MECH	GEO LOOP	TANGENTAIL	395	3	AMTROL 5-AS	-

NOTES:

NO.	DATE	DESCRIPTION	BY
		REVISIONS	

STATE OF MAINE
MATTHEW S. ALBERT
No. 9235
LICENSED
PROFESSIONAL ENGINEER

DRAWN BY:
CHECK BY: MSA
NO.
DATE 01/29/2025

DEPARTMENT OF INLAND FISHERIES & WILDLIFE

TITLE: NEW OFFICE HEADQUARTERS
LOCATION: AUGUSTA, ME
TITLE THIS DWG: MECHANICAL SCHEDULES 1

OAK POINT ASSOCIATES
231 Main Street, Biddeford, Maine 04005 207.283.0193

DRAWING NO. M-601
SHEET NO. 205 OF 239

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VAV TERMINAL UNIT SCHEDULE

UNIT NO	SERVES	PRIMARY CFM		HOT WATER COIL					NOTES
		MAX	MIN	EWT °F	LWT °F	GPM	EAT °F	LAT °F	
VAV 1-1	133, 135	935	280	120	110	0.5	65	75	1
VAV 1-2	139, 141, 143	405	120	120	110	0.5	65	75	1
VAV 1-3	145, 147, 149	405	120	120	110	0.5	65	75	1
VAV 1-4	151, 153	270	100	120	110	0.5	65	75	1
VAV 1-5	155, 157	310	100	120	110	0.5	65	75	1
VAV 1-6	134, 136, 137	870	240	120	110	0.5	65	75	1
VAV 1-7	138, 140, 142, 144	480	110	120	110	0.5	65	75	1
VAV 1-8	146, 148, 150	360	140	120	110	0.5	65	75	1
VAV 1-9	152	400	120	120	110	0.5	65	75	1
VAV 1-10	154, 156	240	100	120	110	0.5	65	75	1
VAV 2-1	239, 241, 243	505	150	120	110	0.5	65	75	1
VAV 2-2	245, 249, 251, 253	345	100	120	110	0.5	65	75	1
VAV 2-3	255, 257, 259, 261	345	100	120	110	0.5	65	75	1
VAV 2-4	263, 265	230	75	120	110	0.5	65	75	1
VAV 2-5	267, 269	255	75	120	110	0.5	65	75	1
VAV 2-6	240, 242, 244, 246	400	100	120	110	0.5	65	75	1
VAV 2-7	248, 250, 252, 254	400	115	120	110	0.5	65	75	1
VAV 2-8	256, 258, 260, 262	400	115	120	110	0.5	65	75	1
VAV 2-9	264, 266, 268	300	100	120	110	0.5	65	75	1
VAV 2-10	245, 247, 261	600	200	120	110	0.5	65	75	1
VAV 3-1	305, 307, 309	585	170	120	110	0.5	65	75	1
VAV 3-2	300, 304, 311	500	190	120	110	0.5	65	75	1
VAV 3-3	313, 315, 317, 319	460	130	120	110	0.5	65	75	1
VAV 3-4	321, 323	240	75	120	110	0.5	65	75	1
VAV 3-5	325, 327	295	75	120	110	0.5	65	75	1
VAV 3-6	306, 308	325	100	120	110	0.5	65	75	1
VAV 3-7	310, 312, 314	560	110	120	110	0.5	65	75	1
VAV 3-8	316, 318, 320, 322	460	115	120	110	0.5	65	75	1
VAV 3-9	324, 326, 328	345	100	120	110	0.5	65	75	1
VAV 4-1	109, 110, 112	1125	340	N/A	N/A	N/A	N/A	N/A	
VAV 4-2	111, 111A, 113	375	110	N/A	N/A	N/A	N/A	N/A	
VAV 4-3	114, 115	200	75	N/A	N/A	N/A	N/A	N/A	
VAV 4-4	116, 117	300	100	N/A	N/A	N/A	N/A	N/A	
VAV 4-5	118, 119	730	250	N/A	N/A	N/A	N/A	N/A	
VAV 4-6	123, 127W	750	250	N/A	N/A	N/A	N/A	N/A	
VAV 4-7	124, 125	360	110	N/A	N/A	N/A	N/A	N/A	
VAV 4-8	126	245	75	N/A	N/A	N/A	N/A	N/A	
VAV 4-9	127E	320	100	N/A	N/A	N/A	N/A	N/A	
VAV 4-10	216, 217, 219	410	125	N/A	N/A	N/A	N/A	N/A	
VAV 4-11	208	285	85	N/A	N/A	N/A	N/A	N/A	
VAV 4-12	209, 210	230	70	N/A	N/A	N/A	N/A	N/A	
VAV 4-13	215, 218, 220, 221, 222	370	110	N/A	N/A	N/A	N/A	N/A	
VAV 4-14	223, 224	465	140	N/A	N/A	N/A	N/A	N/A	
VAV 4-15	225, 226	360	110	N/A	N/A	N/A	N/A	N/A	
VAV 4-16	235	270	85	N/A	N/A	N/A	N/A	N/A	
VAV 4-17	233, 234	355	110	N/A	N/A	N/A	N/A	N/A	
VAV 4-18	232	260	75	N/A	N/A	N/A	N/A	N/A	
VAV 4-19	228, 230	350	105	N/A	N/A	N/A	N/A	N/A	
VAV 4-20	227, 231, 236	600	180	N/A	N/A	N/A	N/A	N/A	

NOTES: 1. HEATING COIL SIZE BASED ON MINIMUM AIRFLOW.

RADIANT FLOOR HEATING SCHEDULE

MANIFOLD ASSEMBLY	SERVES	TOTAL RADIANT LOAD MBH	# OF CIRCUITS	TOTAL MANIFOLD FLOW GPM	MANIFOLD GROSS AREA SQ FT	TUBE SPACING IN	NOTES
M-1	OFFICE 109/110/112	24.3	4	4.9	1534	12	-
M-2	OFFICE 111/111A/113	10.5	3	2.1	610	12	-
M-3	OFFICE 114/115	4.7	2	1.0	160	12	-
M-4	OFFICE 116/117	7.2	2	1.5	180	12	-
M-5	OPEN SEATING 118/119	12.1	3	2.5	410	12	-
M-6	OFFICE 123/127W	13.5	2	2.7	600	12	-
M-7	OFFICE 124/125	5.8	1	1.2	160	12	-
M-8	OFFICE 126	5.1	1	1.1	96	12	-
M-9	OPEN OFFICE 127E	6.7	2	1.4	500	12	-
M-10	CONFERENCE 216/217/219	9.0	3	1.8	367	12	-
M-11	CONFERENCE 208	3.2	1	0.7	274	12	-
M-12	OFFICE 209/210	4.7	2	1.0	220	12	-
M-13A	OPEN OFFICE 215/218/221	8.0	2	1.6	710	12	-
M-13B	OFFICE 220/222	2.0	2	0.5	160	12	-
M-14	OFFICE 223/224	1.0	1	0.5	80	12	-
M-15	OFFICE 225/226	6.2	2	1.3	214	12	-
M-16	OFFICE 235	5.3	1	1.1	98	12	-
M-17	OFFICE 233/234	5.7	2	1.2	160	12	-
M-18	OFFICE 232	5.4	1	1.1	141	12	-
M-19	OFFICE 228/230	6.1	2	1.3	205	12	-
M-20	OPEN OFFICE 231/236/227	10.8	2	2.2	709	12	-
M-21	LOBBY 100	55.9	4	11.2	1095	12	-
M-22	VESTIBULE 100A	5.7	1	1.2	120	6	-
M-23	VESTIBULE 100B	2.4	1	0.5	70	6	-
M-24	CONFERENCE 102A	14.2	2	2.9	545	12	-
M-25	CONFERENCE 102B	14.2	2	2.9	545	12	-
M-26	CONFERENCE 102C	21.0	2	4.2	545	12	-
M-27	CORRIDOR 104	4.7	2	2.4	475	12	-
M-28	OFFICE 159/160	10.0	2	2.0	490	12	-
M-29	NECROPSY 161	4.9	1	1.0	220	12	-
M-30	167/168/169	9.7	3	1.9	650	12	-
M-31	TISSUE COLLECTION 170	3.0	1	0.6	194	12	-
M-32	165/166	6.5	1	1.3	330	12	-

NOTES: 1.

LOUVER SCHEDULE

UNIT NO	SERVES	TYPE	CFM	DIMENSIONS			MIN FREE AREA SQUARE FT	BASIS OF DESIGN	NOTES
				LENGTH	HEIGHT	DEPTH			
L-1	OA - AHU-4/DOAS-4	FIXED	4000	36"	66"	6"	9.45	RUSKIN ELF6375DXH	-
L-2	OA - AHU-4/DOAS-4	FIXED	4000	36"	66"	6"	9.45	RUSKIN ELF6375DXH	-
L-3	EA - AHU-4/DOAS-4	FIXED	4000	36"	66"	6"	9.45	RUSKIN ELF6375DXH	-
L-4	EA - AHU-4/DOAS-4	FIXED	4000	36"	66"	6"	9.45	RUSKIN ELF6375DXH	-
L-5	OA - DOAS-3	FIXED	2000	36"	36"	6"	4.85	RUSKIN ELF6375DXH	-
L-6	EA - DOAS-3	FIXED	2000	36"	36"	6"	4.85	RUSKIN ELF6375DXH	-
L-7	OA - AHU-1/DOAS-1	FIXED	4675	36"	72"	6"	10.35	RUSKIN ELF6375DXH	-

NOTES: 1.

GENERAL NOTES

1. NOTE ON BASIS OF DESIGN:
PRODUCTS OF OTHER MANUFACTURERS ARE ACCEPTABLE IF THEY MEET THE OPERATIONAL REQUIREMENTS INDICATED. ANY ADJUSTMENTS TO DUCTING, PIPING, WIRING OR CONFIGURATION DUE TO THE SELECTION OF A MANUFACTURER OTHER THAN THAT LISTED AS THE BASIS OF DESIGN WILL BE ACCOMPLISHED BY THE CONTRACTOR AT NO ADDITIONAL EXPENSE TO THE OWNER.

WATER-COOLED REFRIGERANT CONDENSING UNIT SCHEDULE

UNIT NO	SERVES	NOMINAL COOLING TONS	NOMINAL HEATING MBH	COOLING EFFICIENCY IEER / EER	HEATING COP @ 47°F	DESIGN COOLING OUTDOOR DB (°F)	DESIGN HEATING OUTDOOR DB	REFRIG TYPE	ELECTRICAL			BASIS OF DESIGN	NOTES
									VOLTS/ PHASE	MCA	MOCP		
CU-1	CONF RMS & SOUTH CORE	12	160	- / -	-	70	50	-	460/3	16	25	-	1,2,3,4,5
CU-2	NORTH LABS & STORAGE	12	80	- / -	-	70	50	-	460/3	16	25	-	1,2,3,4,5
-	-	-	-	- / -	-	-	-	-	-	-	-	-	-

NOTES:
1. PROVIDE PRE-MANUFACTURED, GALVANIZED STEEL, MODULAR EQUIPMENT SUPPORT FRAME WITH EQUIPMENT CLAMPS FOR INSTALLATION ON ROOF AT ELEVATION REQUIRED BY VRF SYSTEM MANUFACTURER. PROVIDE SUPPORT MANUFACTURER'S RUBBER PAD FOR INSTALLATION BELOW SUPPORT FOOT FOR VIBRATION REDUCTION. EQUIPMENT SUPPORT FRAME SHALL BE SIMILAR TO BIGFOOT CO. SUPPORTS.
2. PROVIDE WITH LOW AMBIENT CONTROL.
3. PROVIDE DRAIN PAN HEATER.
4. PROVIDE SNOW/HAIL KIT.
5. PROVIDE BMS INTEGRATION.

SPLIT SYSTEM HEAT PUMP FANCOIL SCHEDULE (HP UNITS)

UNIT NO	SERVES	CABINET TYPE	NOMINAL CFM	ESP IN WC	COOLING LOAD TC/SC MBH	HEATING LOAD MBH	ELECTRIC COIL KW	ELECTRICAL		BASIS OF DESIGN	NOTES
								VOLTS/PH	MCA/MOCP		
HP 1-1	102 A	WALL-MOUNTED CASSETTE	-	-	20.8 / 4.0	10.0	-	208/1	0.57/15	TRANE MITSUBISHI	-
HP 1-2	102 B	WALL-MOUNTED CASSETTE	-	-	20.8 / 4.0	10.0	-	208/1	0.57/15	TRANE MITSUBISHI	-
HP 1-3	102 C	WALL-MOUNTED CASSETTE	-	-	25.1 / 8.5	15.3	-	208/1	0.57/15	TRANE MITSUBISHI	-
HP 1-4	100	MULTI-POSITION AIR HANDLER	-	-	5.7 / 1.0	6.2	-	208/1	16.5/20	TRANE MITSUBISHI	-
HP 1-5	103/104/105	WALL-MOUNTED CASSETTE	-	-	42.1 / 3.6	46.0	-	208/1	0.57/15	TRANE MITSUBISHI	-
											-
HP 2-1	161	WALL-MOUNTED CASSETTE	-	-	4.0 / 3.4	4.9	-	208/1	0.57/15	TRANE MITSUBISHI	-
HP 2-2	167/168/169/171	WALL-MOUNTED CASSETTE	-	-	9.7 / 8.4	5.8	-	208/1	0.57/15	TRANE MITSUBISHI	-
HP 2-3	170	WALL-MOUNTED CASSETTE	-	-	3.0 / 1.7	2.8	-	208/1	0.57/15	TRANE MITSUBISHI	-
HP 2-4	166	WALL-MOUNTED CASSETTE	-	-	5.2 / 4.7	2.3	-	208/1	0.57/15	TRANE MITSUBISHI	-
HP 2-5	159/162	MULTI-POSITION AIR HANDLER	-	-	7.0 / 6.9	7.2	-	208/1	16.5/20	TRANE MITSUBISHI	-
HP 2-6	271/272/276/278/279/280	MULTI-POSITION AIR HANDLER	-	-	19.5 / 19.0	21.0	-	208/1	16.5/20	TRANE MITSUBISHI	-
HP 2-7	273/274	WALL-MOUNTED CASSETTE	-	-	8.3 / 7.7	6.0	-	208/1	0.57/15	TRANE MITSUBISHI	-
HP 2-8	277	WALL-MOUNTED CASSETTE	-	-	3.3 / 2.7	2.3	-	208/1	0.57/15	TRANE MITSUBISHI	-
HP 2-9	281	WALL-MOUNTED CASSETTE	-	-	2.0 / 1.7	3.2	-	208/1	0.57/15	TRANE MITSUBISHI	-
											-
BCC-1	HP 1-1 TO HP 1-5	SUSPENDED 8-PORT BOX	-	-	- / -	-	-	208/1	0.83/-	TRANE MITSUBISHI TCMBM0108JA21N4	-
BCC-2	HP 2-1 TO HP-2-9	SUSPENDED 12-PORT BOX	-	-	- / -	-	-	208/1	1.19/-	TRANE MITSUBISHI TCMBM1012JA21N4	-

NOTES:
1. PROVIDE WITH CONDENSATE PUMP.
2. PROVIDE WITH MANUFACTURER'S WIRED, WALL MOUNTED CONTROLLER.
3. HEATING OR COOLING UNIT.
4. PROVIDE ELECTRIC AUXILIARY COIL, PROVIDE SINGLE POINT POWER CONNECTION FOR UNIT AND ELECTRIC HEAT ACCESSORY. PROVIDE WITH ELECTRIC HEAT LOCKOUT CONTROLLER.
5. POWERED BY CONDENSING UNIT.
6. INCLUDE FULL PORT BALL VALVES, 700 PSIG, 410A RATED.

NO.	DATE	DESCRIPTION	BY
		REVISIONS	

STATE OF MAINE
MATTHEW S. ALBERT
No. 9235
LICENSED
PROFESSIONAL ENGINEER

DRAWN BY:
CHECK BY: MSA
NO.
DATE 01/29/2025

DEPARTMENT OF INLAND FISHERIES & WILDLIFE

TITLE: NEW OFFICE HEADQUARTERS
LOCATION: AUGUSTA, ME
TITLE THIS DWG: MECHANICAL SCHEDULES 2

OAK POINT ASSOCIATES
231 Main Street, Biddeford, Maine 04005 207.283.0199

DRAWING NO. M-602
SHEET NO. 206 OF 239

1/29/2025 11:35:22 AM
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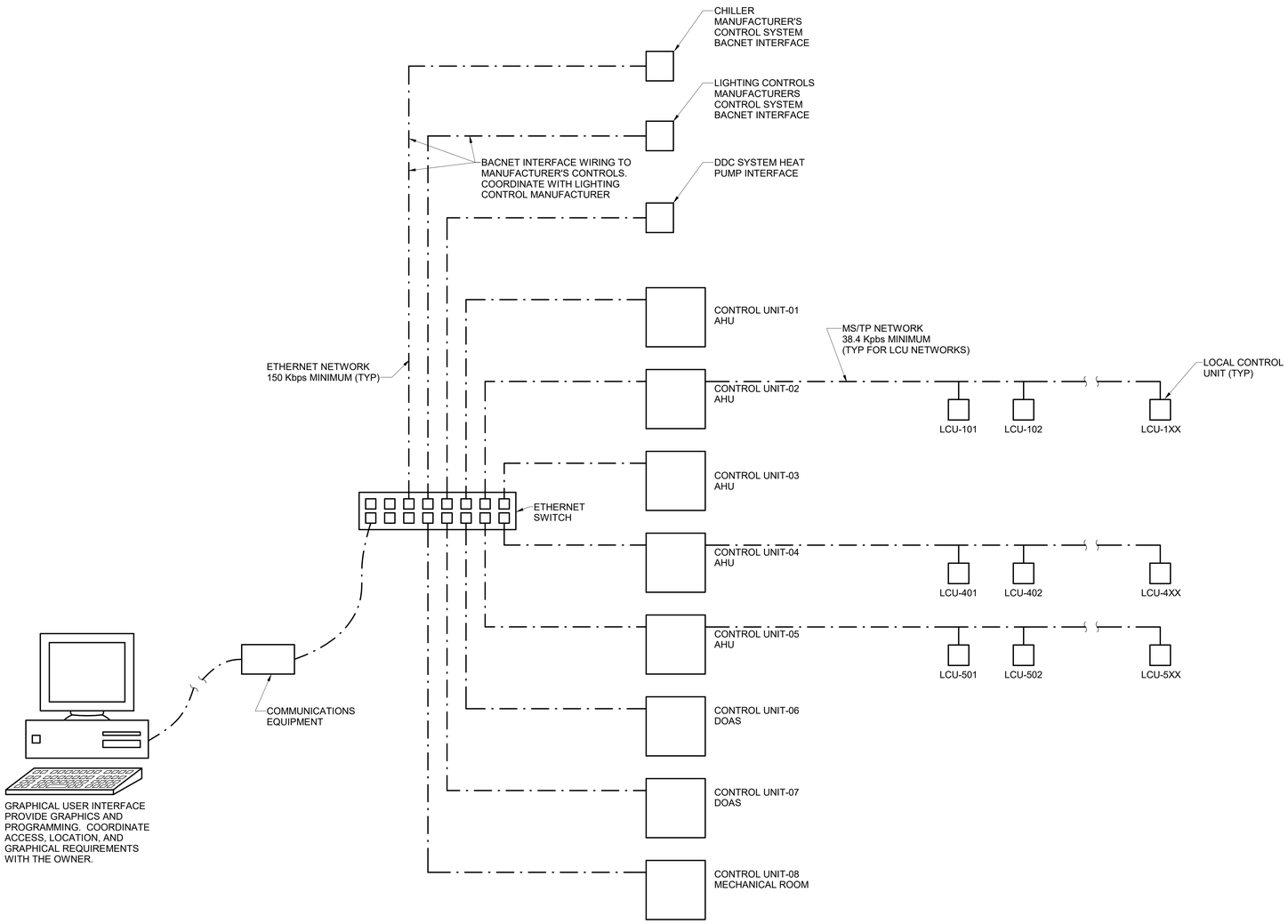
CONTROL SYSTEM GENERAL NOTES

1. ALARMS SHALL BE ANNUNCIATED ON THE EXISTING AND NEW GRAPHICAL USER INTERFACE (GUI) COMPUTERS AND SHALL BE FULLY INTEGRATED WITH EXISTING GRAPHICS.
2. SETTINGS, MODES, AND SETPOINTS THAT ARE INDICATED AS BEING ADJUSTABLE SHALL BE ADJUSTABLE BY THE BUILDING OPERATOR THROUGH THE GUI WITHOUT THE NEED TO CHANGE OR EDIT PROGRAMMING.
3. ALL INPUTS AND OUTPUTS SERVING A SINGLE PIECE OF EQUIPMENT (AHU, HEAT PUMP, ETC) SHALL BE WIRED TO A SINGLE CONTROLLER (WITH EXPANSION PANELS IF NECESSARY).
4. DISPLAY OF HISTORICAL TREND DATA SHALL BE AVAILABLE TO THE OWNER THROUGH A POINT-AND-CLICK ICON ON THE GUI COMPUTERS.
5. ANALOG DATA SHALL BE TRENDED AT REGULAR INTERVALS, DETERMINED BY THE EXPECTED RATE OF CHANGE OF THE DATA, AND SHALL BE ARCHIVED AND STORED ON THE GUI COMPUTER.
6. BINARY DATA SHALL BE TRENDED ON A CHANGE OF STATE BASIS AND SHALL BE ARCHIVED AND STORED ON THE GUI COMPUTER.
7. COORDINATE FINAL GUI COMPUTER LOCATION WITH OWNER.
8. ALL LOW-VOLTAGE AND CONTROL WIRING SHALL BE CONCEALED IN WALLS AND ABOVE CEILINGS.

KEYNOTES

1 -



1 DIRECT DIGITAL CONTROL SYSTEM ARCHITECTURE
M-701 SCALE: NTS

GLOBAL BUILDING POINTS LIST

SYSTEM POINT DESCRIPTION	GRAPHIC	ANALOG INPUT	ANALOG OUTPUT	BINARY INPUT	BINARY OUTPUT	ALARM	ANALOG VARIABLE	BINARY VARIABLE	TREND LOG	NOTES
OUTSIDE AIR CARBON DIOXIDE LEVEL	X	X							X	
OUTSIDE AIR TEMPERATURE	X	X							X	
OUTSIDE AIR RELATIVE HUMIDITY	X	X							X	
FIRE ALARM CONTROL PANEL	X			X					X	1
HVAC ELECTRIC SUB-METER	X			X					X	2
LIGHTING ELECTRIC SUB-METER	X			X					X	2
BUILDING ELECTRIC METER	X			X					X	2
BUILDING WATER METER	X			X					X	2

NOTES:
1. SHUT DOWN AIR HANDLING EQUIPMENT IF A FIRE ALARM CONDITION IS INDICATED. COORDINATE INTERFACE WITH FIRE ALARM CONTRACTOR.
2. PULSE INPUT. GRAPHICS AND TREND LOGS SHALL SHOW TOTAL USAGE FOR FOLLOWING TIME PERIODS:
   THE PREVIOUS 24 HOURS
   THE PREVIOUS DAY
   THE PREVIOUS WEEK
   THE PREVIOUS MONTH
   THE PREVIOUS YEAR

M BLDG — BUILDING ELECTRIC METER

BLDG — BUILDINGWATER METER

M HVAC — HVAC SYSTEMS ELECTRIC SUB-METER

M LIGHTING — LIGHTING SYSTEMS ELECTRIC SUB-METER

CO2 — OUTSIDE AIR CO2 SENSOR. MOUNT IN A WELL VENTILATED SPACE AWAY FROM SOURCES OF CO2.

T — OUTSIDE AIR TEMPERATURE SENSOR. MOUNT OUTSIDE, OUT OF DIRECT SUNLIGHT AND AWAY FROM SOURCES OF HEAT.

RH — OUTSIDE AIR RELATIVE HUMIDITY SENSOR. MOUNT OUTSIDE, OUT OF DIRECT SUNLIGHT AND AWAY FROM SOURCES OF SUNLIGHT.

FA — FIRE ALARM CONTROL PANEL

2 BUILDING GLOBAL POINTS CONTROL DIAGRAM
M-701 SCALE: NTS

NO.	DATE	DESCRIPTION	BY
		REVISIONS	

STATE OF MAINE — MATTHEW S. ALBERT No. 9235 — LICENSED PROFESSIONAL ENGINEER

DRAWN BY:
CHECK BY: MSA
NO.
DATE 01/29/2025

DEPARTMENT OF INLAND FISHERIES & WILDLIFE

TITLE: NEW OFFICE HEADQUARTERS
LOCATION: AUGUSTA, ME
TITLE THIS DWG: MECHANICAL CONTROL DIAGRAMS 1

OAK POINT ASSOCIATES
231 Main Street, Biddeford, Maine 04005 207.283.0199

DRAWING NO. M-701
SHEET NO. 207 OF 239

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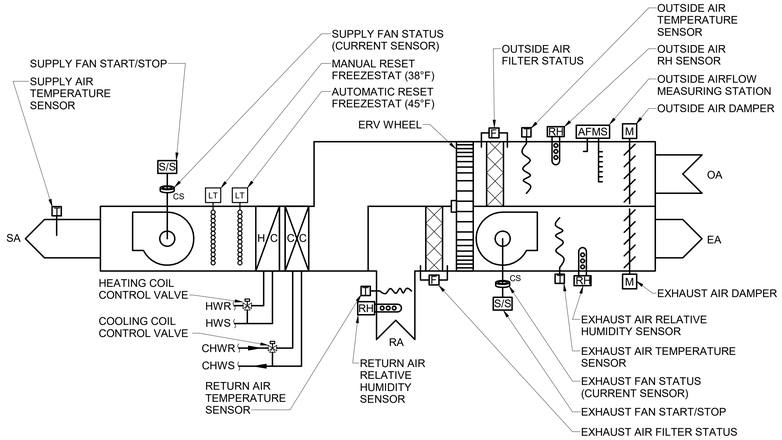
GENERAL NOTES

1. REFER TO M-701 CONTROL SYSTEM GENERAL NOTES FOR ADDITIONAL REQUIREMENTS.

KEYNOTES

1 -



SEQUENCE OF OPERATION

OCCUPIED / UNOCCUPIED MODES:
OCCUPIED:
DURING UNOCCUPIED MODE THE SUPPLY AND EXHAUST FANS SHALL OPERATE CONTINUOUSLY, THE OUTSIDE AND EXHAUST AIR DAMPERS SHALL REMAN OPEN, THE ERV WHEEL SHALL TURN CONTINUOUSLY, AND THE SUPPLY AIR TEMPERATURE SHALL BE MAINTAINED ACCORDING TO THE FOLLOWING USER ADJUSTABLE RESET SCHEDULE:

OUTSIDE AIR TEMPERATURE	SUPPLY AIR SET POINT
55°F	65°F
65°F	55°F

DURING THE DEAD-BAND MODE THE HEATING AND COOLING COIL CONTROL VALVES SHALL MODULATE (WITHOUT OVERLAP) TO MAINTAIN THE SUPPLY AIR TEMPERATURE SET POINT AND THE HUMIDIFIER SHALL REMAIN OFF.

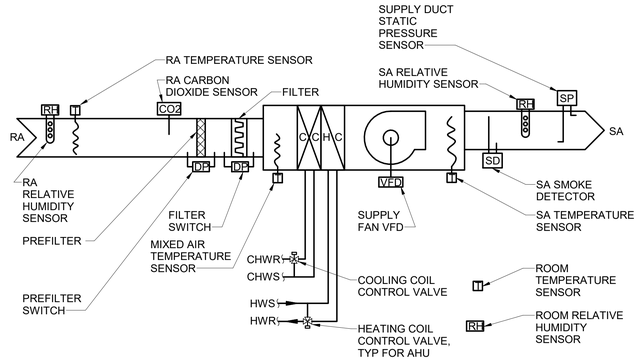
UNOCCUPIED:
DURING THE UNOCCUPIED MODE THE FANS SHALL REMAIN OFF, THE OUTSIDE AND EXHAUST AIR DAMPERS ASHALL REMAIN CLOSED, AND THE HUMIDIFIER SHALL REMAIN OFF.

TYPICAL DOAS POINTS LIST

SYSTEM POINT DESCRIPTION	GRAPHIC	ANALOG INPUT	ANALOG OUTPUT	BINARY INPUT	BINARY OUTPUT	ALARM	ANALOG VARIABLE	BINARY VARIABLE	TREND LOG	NOTES
COOLING COIL CONTROL VALVE	X		X		X				X	
HEATING COIL CONTROL VALVE	X		X						X	
MANUAL RESET FREEZESTAT	X	X							X	
AUTOMATIC RESET FREEZESTAT	X	X							X	
SUPPLY AIR TEMPERATURE SENSOR	X	X				X	X		X	
SUPPLY FAN START/STOP	X	X							X	
SUPPLY FAN STATUS CURRENT SENSOR	X	X							X	
EXHAUST AIR TEMPERATURE SENSOR	X	X				X	X		X	
EXHAUST AIR RELATIVE HUMIDITY SENSOR	X	X							X	
EXHAUST FAN STATUS CURRENT SENSOR	X	X							X	
EXHAUST AIRFLOW DAMPER	X		X						X	
EXHAUST FAN START/STOP	X	X							X	
EXHAUST AIR FILTER STATUS	X	X							X	
RETURN AIR TEMPERATURE SENSOR	X	X							X	
RETURN AIR RELATIVE HUMIDITY SENSOR	X	X							X	
OUTSIDE AIR TEMPERATURE SENSOR	X	X				X	X		X	
OUTSIDE AIR RELATIVE HUMIDITY	X	X							X	
OUTSIDE AFMS	X	X							X	
OUTSIDE AIRFLOW DAMPER	X		X						X	
OUTSIDE AIR FILTER STATUS	X	X							X	

NOTES:
1. GENERATE ALARM ON GUI IF TEMPERATURE IS NOT ±5°F OF SET POINT.
2. GENERATE ALARM ON GUI IF TEMPERATURE IS BELOW 15°F.
3. GENERATE ALARM ON GUI IF SMOKE DETECTOR INDICATES AN ALARM CONDITION.
4. GENERATE ALARM ON GUI IF FREEZESTAT INDICATES A LOW TEMPERATURE CONDITION.
5. GENERATE MAINTENANCE ALARM ON GUI IF FILTER PRESSURE DROP EXCEEDS 0.70 IN H2O.
6. GENERATE ALARM ON GUI IF VFD INDICATES AN ALARM CONDITION.
7. GENERATE ALARM ON GUI IF CARBON DIOXIDE LEVEL EXCEEDS 900 PPM.

1 TYPICAL DOAS CONTROL DIAGRAM
M-702 SCALE: NTS



SEQUENCE OF OPERATION

OCCUPIED / UNOCCUPIED MODES:
THE OCCUPIED AND UNOCCUPIED MODES SHALL BE DETERMINED BY USER- ADJUSTABLE 7 DAY / 24-HOUR SCHEDULES WHICH SHALL BE ADJUSTABLE BY THE BUILDING OPERATOR THROUGH THE GUI. SEPARATE SCHEDULES SHALL BE PROVIDED FOR HOLIDAYS, EVENTS AND EVERYDAY USE.

DE-HUMIDIFICATION MODE:
THE AHU SHALL ENTER DE-HUMIDIFICATION MODE IF THE MAJORITY OF THE RH SENSORS IN THE AREAS SERVED BY THE AHU INDICATE RELATIVE HUMIDITY ABOVE THE MAXIMUM RH SETPOINT (50%RH, ADJUSTABLE). DE-HUMIDIFICATION MODE WHEN ALL RH SENSORS IN SPACED SERVED BY THE AHU ARE BELOW THE MAXIMUM RH SETPOINT.

OCCUPIED:
DURING UNOCCUPIED MODE THE SUPPLY FAN SHALL OPERATE CONTINUOUSLY AND ITS SPEED SHALL MODULATE TO MAINTAIN THE SUPPLY DUCT STATIC PRESSURE SET POINT (1.0 IN H20, ADJUSTABLE), AND THE SUPPLY AIR TEMPERATURE SHALL BE MAINTAINED ACCORDING TO THE FOLLOWING USER ADJUSTABLE RESET SCHEDULE:

OUTSIDE AIR TEMPERATURE	SUPPLY AIR SET POINT
55°F	65°F
65°F	55°F

WHENEVER THE DE-HUMIDIFICATION MODE IS ENABLED THE COOLING COIL VALVE SHALL MODULATE TO MAINTAIN THE DE-HUMIDIFICATION MODE SUPPLY AIR RELATIVE HUMIDITY SET POINT (45%RH, ADJUSTABLE), AND THE HEATING COIL VALVE SHALL MODULATE TO MAINTAIN THE SUPPLY AIR TEMPERATURE SET POINT.

WHENEVER THE DE-HUMIDIFICATION IS DISABLED THE HEATING COIL VALVE AND COOLING COIL VALVE SHALL MODULATE (WITHOUT OVERLAP) TO MAINTAIN THE SUPPLY AIR SET POINT.

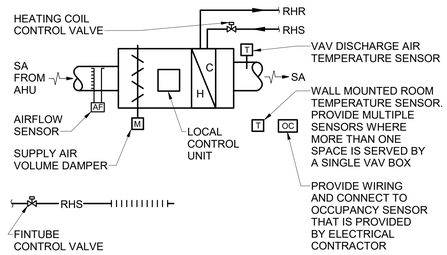
UNOCCUPIED:
DURING THE UNOCCUPIED MODE THE FAN SHALL REMAIN OFF, THE COOLING COIL VALVE SHALL REMAIN IN THE FULL BYPASS POSITION, AND THE HEATING COIL SHALL MODULATE TO MAINTAIN 50°F (ADJUSTABLE) AT THE MIXED AIR TEMPERATURE SENSOR.

TYPICAL AHU POINTS LIST

SYSTEM POINT DESCRIPTION	GRAPHIC	ANALOG INPUT	ANALOG OUTPUT	BINARY INPUT	BINARY OUTPUT	ALARM	ANALOG VARIABLE	BINARY VARIABLE	TREND LOG	NOTES
SUPPLY AIR TEMPERATURE	X	X				X	X		X	1
SUPPLY AIR RELATIVE HUMIDITY	X	X							X	
RETURN AIR TEMPERATURE	X	X							X	
RETURN AIR RELATIVE HUMIDITY	X	X							X	
RETURN AIR CARBON DIOXIDE	X	X				X			X	7
SUPPLY AIR SMOKE DETECTOR	X			X		X			X	3
PREFILTER SWITCH	X			X		X			X	5
FILTER SWITCH	X			X		X			X	5
MIXED AIR TEMPERATURE	X	X							X	
COOLING COIL CONTROL VALVE	X		X		X				X	
HEATING COIL CONTROL VALVE	X		X						X	
SUPPLY FAN VFD ENABLE	X				X				X	
SUPPLY FAN VFD SIGNAL	X		X						X	
SUPPLY FAN VFD ALARM	X			X		X			X	6
OUTSIDE AFMS	X	X							X	
OUTSIDE AIRFLOW DAMPER	X		X						X	
ROOM TEMPERATURE	X	X							X	
ROOM RELATIVE HUMIDITY SENSOR	X	X							X	
SUPPLY DUCT STATIC PRESSURE	X	X							X	

NOTES:
1. GENERATE ALARM ON GUI IF TEMPERATURE IS NOT ±5°F OF SET POINT.
2. GENERATE ALARM ON GUI IF TEMPERATURE IS BELOW 15°F.
3. GENERATE ALARM ON GUI IF SMOKE DETECTOR INDICATES AN ALARM CONDITION.
4. GENERATE ALARM ON GUI IF FREEZESTAT INDICATES A LOW TEMPERATURE CONDITION.
5. GENERATE MAINTENANCE ALARM ON GUI IF FILTER PRESSURE DROP EXCEEDS 0.70 IN H2O.
6. GENERATE ALARM ON GUI IF VFD INDICATES AN ALARM CONDITION.
7. GENERATE ALARM ON GUI IF CARBON DIOXIDE LEVEL EXCEEDS 900 PPM.

2 TYPICAL AHU CONTROL DIAGRAM
M-702 SCALE: NTS



SEQUENCE OF OPERATION

OCCUPIED MODE:
THE VAV BOX SHALL MODULATE THE SUPPLY AIR VOLUME DAMPER TO MAINTAIN THE SUPPLY AIRFLOW SETPOINT. THE ZONE TEMPERATURE SENSOR SHALL RESET THE SUPPLY AIRFLOW SETPOINT. AS THE ZONE TEMPERATURE RISES ABOVE THE ZONE COOLING SETPOINT (78° F ADJUSTABLE) THE SUPPLY AIRFLOW SETPOINT SHALL INCREASE. THE SUPPLY AIRFLOW SETPOINT SHALL DECREASE AS THE ZONE TEMPERATURE APPROACHES THE COOLING SETPOINT. AS THE ZONE TEMPERATURE FALLS BELOW THE ZONE HEATING SETPOINT (68° F ADJUSTABLE) THE AIRFLOW SETPOINT SHALL BE AT MINIMUM AND THE RADIANT HEATING VALVE SHALL CYCLE TO MAINTAIN THE HEATING SETPOINT. IF THE RADIANT HEATING VALVE IS OPEN FOR 20 MINUTES (ADJUSTABLE) AND THE ROOM TEMPERATURE IS STILL BELOW THE HEATING SET POINT THEN THE REHEAT COIL VALVE SHALL OPEN AND VAV BOX AIRFLOW SHALL SLOWLY INCREASE TO THE MAXIMUM SCHEDULED AIRFLOW. THE VAV BOX SHALL REMAIN IN THE OCCUPIED MODE FOR A MINIMUM OF 1 HOUR (ADJUSTABLE) AFTER THE OCCUPIED MODE IS STARTED.

UNOCCUPIED MODE: IF THE UNOCCUPIED OVERRIDE BUTTON IS PRESSED THE VAV BOX SHALL ENTER THE OCCUPIED MODE FOR 2 HOURS (ADJUSTABLE), OTHERWISE THE VAV BOX DAMPER SHALL REMAIN CLOSED.

NIGHT SETBACK MODE: THE RADIANT HEATING VALVE SHALL CYCLE TO MAINTAIN NIGHT HEATING SETBACK, (65° F ADJUSTABLE).

TYPICAL VAV BOX POINTS LIST

SYSTEM POINT DESCRIPTION	GRAPHIC	ANALOG INPUT	ANALOG OUTPUT	BINARY INPUT	BINARY OUTPUT	ALARM	ANALOG VARIABLE	BINARY VARIABLE	TREND LOG	NOTES
ROOM TEMPERATURE	x	x				x			x	1
HEATING SET POINT	x	x					x		x	
COOLING SET POINT	x	x					x		x	
AIR FLOW (CFM)	x	x				x			x	2
DAMPER POSITION	x		x						x	
RADIANT HEATING CONTROL VALVE	x				x				x	
NIGHT HEATING SET-BACK	x						x		x	
NIGHT COOLING SET-BACK	x						x		x	
OCCUPANCY SENSOR	x			x					x	3
HEATING COIL CONTROL VALVE	x		x						x	

NOTES:
1. GENERATE ALARM ON GUI IF ROOM TEMPERATURE IS GREATER THAN 3°F ABOVE THE COOLING SET POINT OR LOWER THAN 3°F BELOW THE HEATING SET POINT.
2. GENERATE ALARM ON GUI IF AIRFLOW IS NOT BETWEEN MINIMUM AND THE MAXIMUM AIRFLOW SETTINGS.
3. CONNECT TO OCCUPANCY SENSOR PROVIDED BY ELECTRICAL CONTRACTOR.

3 TYPICAL VAV BOX CONTROL DIAGRAM
M-702 SCALE: NTS

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DATE 01/29/2025

DEPARTMENT OF INLAND FISHERIES & WILDLIFE
TITLE NEW OFFICE HEADQUARTERS
LOCATION AUGUSTA, ME
TITLE THIS DWG MECHANICAL CONTROL DIAGRAMS 2

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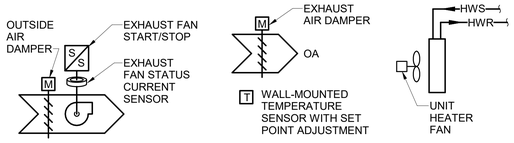


SEQUENCE OF OPERATION

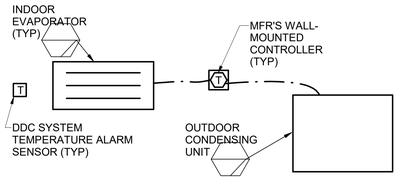
WHEN THE ROOM TEMPERATURE RISES 1°F ABOVE THE ROOM COOLING SETPOINT, 80°F (ADJUSTABLE), THE OUTSIDE AND EXHAUST AIR DAMPERS SHALL OPEN AND REMAIN OPEN UNTIL THE ROOM IS SATISFIED. IF THE ROOM RISES 3°F ABOVE THE COOLING SET POINT THEN THE EXHAUST FAN SHALL START AND RUN CONTINUOUSLY UNTIL THE ROOM IS SATISFIED. WHEN THE ROOM FALLS 1°F BELOW THE HEATING SETPOINT, ADJUSTABLE ON THE ROOM TEMPERATURE SENSOR BETWEEN 50°F AND 70°F, THE UNIT HEATER FAN SHALL START (IF THE BOILER SYSTEM PUMPS ARE RUNNING) AND RUN CONTINUOUSLY UNTIL THE ROOM IS SATISFIED.

MECHANICAL & ELECTRIC ROOM POINTS LIST

SYSTEM POINT DESCRIPTION	GRAPHIC	ANALOG INPUT	ANALOG OUTPUT	BINARY INPUT	BINARY OUTPUT	ALARM	ANALOG VARIABLE	BINARY VARIABLE	TREND LOG	NOTES
EXHAUST FAN START/STOP	x				x				x	1,2
EXHAUST FAN STATUS CURRENT SENSOR	x	x				x			x	1,2,3
OUTSIDE AIR DAMPER	x				x				x	1
EXHAUST AIR DAMPER	x				x				x	1
ROOM TEMPERATURE	x	x				x			x	1,4
ROOM SET POINT	x	x							x	1
UNIT HEATER FAN	x				x				x	1

NOTES:
1. TYPICAL OF 2; 1 IN BOILER ROOM & 1 IN ELECTRICAL ROOM.
2. EF-5 IN BOILER ROOM & EF-6 IN ELECTRICAL ROOM.
3. GENERATE AN ALARM ON THE GUI IF THE FAN FAILS TO SHOW PROOF OF AIRFLOW.
4. GENERATE AN ALARM ON THE GUI IF THE ROOM TEMPERATURE FALLS BELOW 50°F (ADJUSTABLE) OR RISES ABOVE 85°F (ADJUSTABLE).

1 MECHANICAL ROOM & ELECTRICAL ROOM HEATING & COOLING CONTROL DIAGRAM
M-703 SCALE: NTS



SEQUENCE OF OPERATION

DUCTLESS AIR CONDITIONING UNIT SHALL HAVE A STAND ALONE, WALL MOUNTED CONTROLLER WHICH SHALL HAVE A 24 HOUR, 7 DAY PROGRAMMABLE THERMOSTAT AND A COOLING ON/OFF SWITCH.

DUCTLESS SPLIT SYSTEM NOTES:

A. THE CONTROLS CONTRACTOR SHALL PROVIDE INTERCONNECTING WIRING BETWEEN SYSTEM DEVICES AS REQUIRED BY THE EQUIPMENT MANUFACTURERS WRITTEN INSTRUCTIONS.

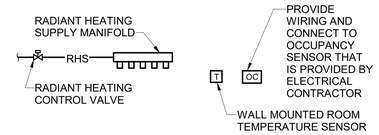
B. REFER TO EQUIPMENT SCHEDULE SHEETS FOR DUCTLESS SPLIT SYSTEM CONFIGURATIONS.

TYPICAL DUCTLESS AIR CONDITIONING UNIT POINTS LIST

SYSTEM POINT DESCRIPTION	GRAPHIC	ANALOG INPUT	ANALOG OUTPUT	BINARY INPUT	BINARY OUTPUT	ALARM	ANALOG VARIABLE	BINARY VARIABLE	TREND LOG	NOTES
ROOM TEMPERATURE	x	x				x			x	1

NOTES:
1. GENERATE ALARM IF TEMPERATURE IS NOT ±5°F OF SET POINT.

2 TYPICAL DUCTLESS AIR CONDITIONING UNIT CONTROL DIAGRAM
M-703 SCALE: NTS



SEQUENCE OF OPERATION

OCCUPIED – THE SPACE SHALL BE IN THE OCCUPIED MODE WHEN IT'S ASSOCIATED AHU IS IN THE OCCUPIED MODE AND THE ZONE OCCUPANCY SENSOR INDICATES THAT THE ZONE IS OCCUPIED.

UNOCCUPIED – THE SPACE SHALL BE IN THE UNOCCUPIED MODE WHEN IT'S ASSOCIATED AHU IS IN THE UNOCCUPIED MODE.

OCCUPIED MODE:
DURING THE OCCUPIED MODE THE RADIANT HEATING MANIFOLD VALVE SHALL CYCLE TO MAINTAIN THE ROOM SET POINT, 68°F (ADJUSTABLE). THE RADIANT HEATING CONTROL VALVE SHALL OPEN WHEN THE ROOM TEMPERATURE FALLS 1°F (ADJUSTABLE) BELOW THE ROOM SET POINT.

UNOCCUPIED MODE:
DURING THE UNOCCUPIED MODE THE RADIANT HEATING CONTROL VALVE SHALL CYCLE TO MAINTAIN THE NIGHT SETBACK ROOM TEMPERATURE OF 65°F (ADJUSTABLE).

TYPICAL RADIANT HEATING POINTS LIST

SYSTEM POINT DESCRIPTION	GRAPHIC	ANALOG INPUT	ANALOG OUTPUT	BINARY INPUT	BINARY OUTPUT	ALARM	ANALOG VARIABLE	BINARY VARIABLE	TREND LOG	NOTES
ROOM TEMPERATURE	x	x				x			x	1
ROOM SET POINT	x						x		x	
NIGHT SET-BACK	x						x		x	
OCCUPANCY SENSOR	x			x					x	2
RADIANT MANIFOLD CONTROL VALVE	x				x				x	

NOTES:
1. GENERATE ALARM ON GUI IF ROOM TEMPERATURE IS GREATER THAN 3°F ABOVE THE COOLING SET POINT OR LOWER THAN 3°F BELOW THE HEATING SET POINT.
2. CONNECT TO OCCUPANCY SENSOR PROVIDED BY ELECTRICAL CONTRACTOR.

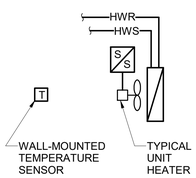
3 TYPICAL RADIANT HEATING CONTROL DIAGRAM
M-703 SCALE: NTS

GENERAL NOTES

1. REFER TO M-701 CONTROL SYSTEM GENERAL NOTES FOR ADDITIONAL REQUIREMENTS.

KEYNOTES

1 -



SEQUENCE OF OPERATION

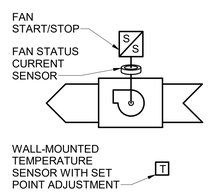
ON CALL FOR HEAT FROM THE TEMPERATURE SENSOR, (ADJUSTABLE) THE FAN SHALL RUN.

TYPICAL UNIT HEATER POINTS LIST

SYSTEM POINT DESCRIPTION	GRAPHIC	ANALOG INPUT	ANALOG OUTPUT	BINARY INPUT	BINARY OUTPUT	ALARM	ANALOG VARIABLE	BINARY VARIABLE	TREND LOG	NOTES
ROOM TEMPERATURE	x	x				x			x	1
ROOM SET POINT	x	x							x	1
UNIT HEATER FAN START/STOP	x				x				x	1

NOTES:
1. GENERATE AN ALARM ON THE GUI IF THE ROOM TEMPERATURE FALLS BELOW 50°F (ADJUSTABLE) OR RISES ABOVE 85°F (ADJUSTABLE).

4 TYPICAL UNIT HEATER CONTROL DIAGRAM
M-703 SCALE: NTS



SEQUENCE OF OPERATION

WHENEVER THE ROOM TEMPERATURE EXCEEDS THE ROOM SET POINT THE TRANSFER FAN SHALL RUN CONTINUOUSLY, OTHERWISE IT SHALL REMAIN OFF.

TYPICAL TRANSFER FAN POINTS LIST

SYSTEM POINT DESCRIPTION	GRAPHIC	ANALOG INPUT	ANALOG OUTPUT	BINARY INPUT	BINARY OUTPUT	ALARM	ANALOG VARIABLE	BINARY VARIABLE	TREND LOG	NOTES
FAN ENABLE	x				x				x	
FAN STATUS	x	x				x			x	1
ROOM TEMPERATURE	x	x				x			x	2
ROOM SETPOINT	x	x					x		x	

NOTES:
1. GENERATE AN ALARM ON THE GUI IF THE FAN FAILS TO SHOW PROOF OF AIRFLOW.
2. GENERATE AN ALARM ON THE GUI IF THE ROOM TEMPERATURE EXCEEDS 85°F (ADJUSTABLE).

5 TYPICAL TRANSFER FAN CONTROL DIAGRAM
M-703 SCALE: NTS

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STATE OF MAINE MATTHEW S. ALBERT No. 9235 LICENSED PROFESSIONAL ENGINEER

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DATE 01/29/2025

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TITLE NEW OFFICE HEADQUARTERS
LOCATION AUGUSTA, ME
TITLE THIS DWG. MECHANICAL CONTROL DIAGRAMS 3

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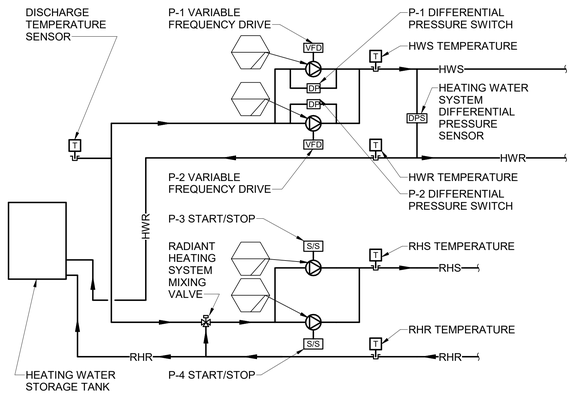
GENERAL NOTES

1. REFER TO M-701 CONTROL SYSTEM GENERAL NOTES FOR ADDITIONAL REQUIREMENTS.

KEYNOTES

1 -



SEQUENCE OF OPERATION

WINTER MODE SHALL BE ENABLED WHENEVER THE OUTSIDE AIR TEMPERATURE IS BELOW 60°F (ADJUSTABLE). DURING THE WINTER MODE THE HEATING WATER SUPPLY SET POINT SHALL BE RESET ACCORDING TO THE FOLLOWING OPERATOR ADJUSTABLE SCHEDULE;

OUTSIDE AIR TEMPERATURE	BOILER DISCHARGE SUPPLY SET POINT
60°F	120°F
40°F	140°F

THE RADIANT HEATING SYSTEM MIXING VALVE SHALL MODULATE TO MAINTAIN THE RHS ACCORDING TO THE FOLLOWING USER ADJUSTABLE RESET SCHEDULE;

OUTSIDE AIR TEMPERATURE	RADIANT HEATING SUPPLY SET POINT
60°F	80°F
20°F	120°F

DURING THE WINTER MODE PUMP P-1 OR P-2 SHALL RUN CONTINUOUSLY AND THE OTHER SHALL BE OFF. THE PUMPS SHALL OPERATE UNDER LEAD / LAG CONTROL. WHENEVER THE LEAD PUMP VFD SIGNALS AN ALARM OR THE LEAD PUMP DIFFERENTIAL PRESSURE SWITCH INDICATES AN ALARM THE LAG PUMP SHALL START AUTOMATICALLY, THE LEAD PUMP SHALL BE STOPPED AND AN ALARM SHALL BE ANNUNCIATED, OTHERWISE THE LAG PUMP SHALL REMAN OFF. THE LEAD PUMP SHALL BE ALTERNATED REGULARLY TO PROVIDE EQUAL WEAR.

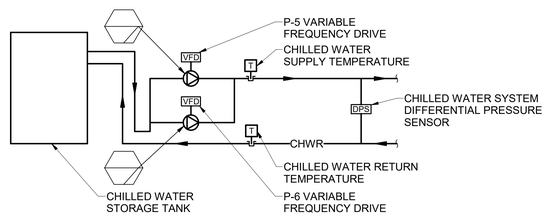
P-1 AND P-2 SHALL BE OPERATED BY VFD AND SHALL MODULATE TO MAINTAIN A CONSTANT DIFFERENTIAL PRESSURE BETWEEN THE SUPPLY AND RETURN PIPES. THE PUMP VFD SHALL MODULATE TO MAINTAIN 25-PSI (ADJUSTABLE) AS READ BY THE DIFFERENTIAL PRESSURE SENSOR. THE VFD SIGNAL SHALL NOT DROP BELOW 30%.

HEATING PLANT POINTS LIST

SYSTEM POINT DESCRIPTION	GRAPHIC	ANALOG INPUT	ANALOG OUTPUT	BINARY INPUT	BINARY OUTPUT	ALARM	ANALOG VARIABLE	BINARY VARIABLE	TREND LOG	NOTES
ENABLE HEATING MODE	X				X				X	1
HEATING WATER SUPPLY SETPOINT	X						X		X	1
HEATING WATER DISCHARGE TEMPERATURE	X	X					X		X	
HEATING WATER SYSTEM DIFFERENTIAL PRESSURE	X	X					X		X	
HWS TEMPERATURE	X	X							X	
HWR TEMPERATURE	X	X							X	
P-1 VFD ENABLE	X				X				X	
P-1 VFD SIGNAL	X		X						X	
P-1 VFD ALARM	X			X		X			X	2
P-1 STATUS DIFFERENTIAL PRESSURE SWITCH	X			X		X			X	3
P-2 VFD ENABLE	X				X				X	
P-2 VFD SIGNAL	X		X						X	
P-2 VFD ALARM	X			X		X			X	2
P-2 STATUS DIFFERENTIAL PRESSURE SWITCH	X			X		X			X	3
RHS TEMPERATURE	X	X					X		X	
RHR TEMPERATURE	X	X							X	
P-3 START/STOP	X				X				X	
P-3 STATUS	X			X		X			X	2
P-4 START/STOP	X				X				X	
P-4 STATUS	X			X		X			X	2

NOTES:
1. GENERATE AN ALARM ON THE GUI IF THE VFD INDICATES AN ALARM CONDITION.
2. GENERATE AN ALARM ON THE GUI IF THE PUMP FAILS TO SHOW PROOF OF FLOW.

1 HEATING PLANT CONTROL DIAGRAM
M-704 SCALE: NTS



SEQUENCE OF OPERATION

THE CHILLED WATER SYSTEM SHALL BE ENABLED WHENEVER THERE IS A CALL FOR COOLING AN AIR HANDLING UNIT OR A DOAS UNIT. THE CHILLED WATER SET POINT SHALL BE 42°F (ADJUSTABLE).

WHEN THE CHILLED WATER SYSTEM IS ENABLED THE CHILLED WATER PUMPS SHALL OPERATE CONTINUOUSLY AS DESCRIBED BELOW AND THE CHILLER SHALL BE ENABLED.

THE CHILLED WATER PUMPS (P-5 & P-6) SHALL OPERATE IN A LEAD LAG ARRANGEMENT. THE LEAD PUMP SHALL SWITCH MONTHLY OR WHENEVER THE LEAD PUMP VFD INDICATES AN ALARM CONDITION. THE CHILLED WATER PUMP SPEED SHALL MODULATE TO MAINTAIN THE CHILLED WATER SYSTEM DIFFERENTIAL PRESSURE SETPOINT, 30-PSI (ADJUSTABLE).

CHILLED WATER SYSTEM POINTS LIST

SYSTEM POINT DESCRIPTION	GRAPHIC	ANALOG INPUT	ANALOG OUTPUT	BINARY INPUT	BINARY OUTPUT	ALARM	ANALOG VARIABLE	BINARY VARIABLE	TREND LOG	NOTES
CHILLED WATER ENABLE	X			X					X	
CHILLED WATER ALARM	X			X				X	X	1
CHILLED WATER SUPPLY TEMPERATURE	X	X				X	X		X	2
CHILLED WATER RETURN TEMPERATURE	X	X							X	
P-5 VFD ENABLE	X				X				X	
P-5 VFD SIGNAL	X		X						X	
P-5 VFD ALARM	X			X				X	X	3
P-5 VFD ENABLE	X				X				X	
P-5 VFD SIGNAL	X		X						X	
P-5 VFD ALARM	X			X				X	X	3
CHILLED WATER SYSTEM DIFFERENTIAL PRESSURE	X	X							X	

NOTES:
1. GENERATE AN ALARM ON THE GUI IF THE CHILLER INDICATES AN ALARM CONDITION. GENERATE AN ALARM ON THE GUI IF THE CHILLED WATER TEMPERATURE IS 5°F (ADJUSTABLE) ABOVE THE CHILLED WATER SETPOINT 15 MINUTES (ADJUSTABLE) AFTER THE CHILLER IS ENABLED.
2. GENERATE AN ALARM ON THE GUI IF THE VFD INDICATES AN ALARM CONDITION.

2 CHILLED WATER SYSTEM CONTROL DIAGRAM
M-704 SCALE: NTS

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TITLE NEW OFFICE HEADQUARTERS
LOCATION AUGUSTA, ME
TITLE THIS DWG MECHANICAL CONTROL DIAGRAMS 4

OAK POINT ASSOCIATES
231 Main Street, Biddeford, Maine 04005 207.283.0193

DRAWING NO. M-704
SHEET NO. 210 OF 239

1/28/2025 4:37:44 PM
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ELECTRICAL SYMBOLS

LIGHTING

UPPER CASE SUBSCRIPTS INDICATE FIXTURE TYPES, REFER TO LIGHTING FIXTURE SCHEDULE

- S_{LV} — LOW VOLTAGE LIGHT SWITCH, SPECIFICATION GRADE. LOWER CASE SUBSCRIPT INDICATES CONTROL. BASIS OF DESIGN: HUBBELL NX SWITCH FOR NX CONTROLS,. ETC SWITCHES FOR ETC CONTROLS.
- S_3 — 120/277V, 20A 3-WAY LIGHT SWITCH, SPECIFICATION GRADE
- S — 120/277V, 20A LIGHT SWITCH, SPECIFICATION GRADE
- S_D — DIMMER SWITCH, SPECIFICATION GRADE, COMPATIBLE WITH LED FIXTURE
- LED PENDANT FIXTURES
- A a, A a, A a — LED LIGHT FIXTURES LOWER CASE SUBSCRIPTS INDICATE CONTROL (EM) = EMERGENCY FIXTURE
- LED INDUSTRIAL SURFACE MOUNT FIXTURE
- LED DOWNLIGHT
- F — WALL MOUNTED FIXTURE SUBSCRIPT INDICATES FIXTURE TYPE
- OCCUPANCY SENSOR - DUAL TECHNOLOGY. U = ULTRASONIC V = VACANCY W = WALL VACANCY
- E — ILLUMINATED EXIT SIGN, LED TYPE SINGLE FACE, ARROW INDICATES DIRECTION OF FLOW FOR THE FACE "E" INDICATES EDGE LIT TYPE BLANK INDICATES THERMOPLASTIC TYPE
- ILLUMINATED EXIT SIGN, LED TYPE DOUBLE FACE, ARROWS INDICATE DIRECTION OF FLOW FOR THE FACE
- PE — EXTERIOR PHOTOCELL
- PI — INTERIOR PHOTOCELL
- B — EMERGENCY INVERTER: BASIS OF DESIGN: LITEGEAR 250
- J C — SECURITY CAMERA JUNCTION BOX WITH 1" CONDUIT BACK TO IT ROOM
- VIDEO CAMERA D = DOME W = WALL MOUNTED

SECURITY

- CR — CARD READER
- KP — KEY PAD
- ELECTRONIC LOCK/ DOOR STRIKE
- MAGNETIC SWITCH
- MOTION DETECTOR
- PUSH BUTTON
- S WP — WEATHERPROOF EXTERIOR SPEAKER

RECEPTACLES

- DUPLEX RECEPTACLE, TAMPER RESISTANT, 120V, 20A, SPECIFICATION GRADE, NEMA 5-20 R M = MICROWAVE
- G — DUPLEX RECEPTACLE, 120V, 20A, SPECIFICATION GRADE, NEMA 5-20 R. SUBSCRIPT "G" INDICATES GROUND FAULT CIRCUIT INTERRUPTER, "WP" INDICATES WEATHERPROOF GROUND FAULT CIRCUIT INTERRUPTER, A INDICATES AUTOMATIC CONTROL
- C — CEILING MOUNTED RECEPTACLE
- SPECIALITY RECEPTACLE - PROVIDE NEMA CONFIGURATION AS REQUIRED.
- FLOOR RECEPTACLE - DUAL SERVICE WITH COMMUNIATIONS

FIRE ALARMS

- FACP — FIRE ALARM CONTROL PANEL
- FAA — FIRE SYSTEM ANNUNCIATOR
- HEAT DETECTOR
- SMOKE DETECTOR D = SMOKE DETECTOR
- FLOW SWITCH
- TAMPER SWITCH
- STROBE
- SPEAKER WITH STROBE "75" INDICATES CANDELA RATING "BLANK" INDICATES 15 CANDELA RATING
- F — MANUAL PULL STATION
- KB — KNOX BOX
- F — FIRE PROTECTION SYSTEM ALARM BELL
- FM — MASTER BOX
- M — MAGNETIC DOOR HOLDER
- CO — CARBON MONOXIDE SENSOR
- GV — GAS SHUT-OFF VALVES
- HSS — HOOD SUPPRESSION SYSTEM
- AIM — ADDRESSABLE INTERFACE MODULE
- R — REMOTE INDICATOR

GROUNDING

- G — GROUND WIRE, BARE
- GROUND ROD, COPPER CLAD.
- TMGB — TELECOMMUNICATIONS MAIN GROUNDING BUSBAR
- TGB — TELECOMMUNICATIONS GROUNDING BUSBAR

TELEPHONE, DATA AND VIDEO

- CATEGORY 6 DUPLEX DATA JACKS BLANK = 2 JACKS 4 = 4 JACKS
- CATEGORY 6 DUPLEX DATA JACKS (TWO JACKS) FLOOR BOX
- TV — CAT 6 TELEVISION JACK
- HDMI — HIGH DEFINITION MULTIMEDIA INTERFACE
- AV — AV INPUT BOX WITH NETWORK, HDMI AND USB

GENERAL

- MOTOR
- J — NON-FUSED DISCONNECT SWITCH UNLESS OTHERWISE INDICATED (REFER TO SCHEDULES ON DRAWING EP502).
- J — FUSED DISCONNECT SWITCH
- T — TRANSFORMER
- M — MANUAL STARTER WITH OVERLOADS
- J — COMBINATION MAGNETIC STARTER
- MAGNETIC STARTER
- J F — JUNCTION BOX F = FLOOR
- A-1 — BRANCH CIRCUIT HOMERUN, A-1 INDICATES PANEL DESIGNATION AND CIRCUIT NUMBER
- PUSHBUTTON STATION - PROVIDE QUANTITY OF BUTTONS REQUIRED
- SPD — SURGE PROTECTIVE DEVICE
- ATS — AUTOMATIC TRANSFER SWITCH
- LML — PANELBOARD
- TS — THERMAL CUTOUT SWITCH

SINGLE LINE DIAGRAM

- TRANSFORMER
- M — METER
- GROUND CONNECTION
- CIRCUIT BREAKER, MANUALLY OPERATED
- AUTOMATIC TRANSFER SWITCH BASIS OF DESIGN: ASCO 30C, WALL MOUNT, 1200A

TECHNOLOGY

- AP — DATA JACK FOR WIRELESS INTERNET ACCESS POINT, CEILING MOUNTED W = WALL MOUNT
- SS — SOUND SYSTEM RACK AND EQUIPMENT PANELS
- S — SPEAKER - CEILING MOUNT, SURFACE
- S — WALL MOUNT SPEAKER
- H — HORN TYPE SPEAKER

ELECTRICAL ABBREVIATIONS

A, AMP	AMPERE
A3P	AMPERES, 3-POLE
AC	ALTERNATING CURRENT
AFF	ABOVE FINISHED FLOOR
AIC	AMPERE INTERRUPTING CAPACITY
AIM	ADDRESSABLE INTERFACE MODULE
AHJ	AUTHORITY HAVING JURISDICTION
ATS	AUTOMATIC TRANSFER SWITCH
AWG	AMERICAN WIRE GAUGE
BPW	BUREAU OF PUBLIC WORKS
C	CONDUCTOR, CONDUIT
CAT	CATALOG, CATEGORY
CAV	CONSTANT AIR VOLUME
CB	CIRCUIT BREAKER
DFA	DOWN FROM ABOVE
DOT	DEPARTMENT OF TRANSPORTATION
EMT	ELECTRICAL METALLIC TUBING
FACP	FIRE ALARM CONTROL PANEL
FE/FEC	FIRE EXTINGUISHER /FIRE EXTINGUISHER CABINET
G	GROUND; GROUND FAULT CIRCUIT INTERRUPTER
GFCI	GROUND FAULT CIRCUIT INTERRUPTER
HP	HORSEPOWER
HVAC	HEATING, VENTILATION, AND AIR CONDITIONING
KCMIL	KILO-CIRCULAR MILS
KVA	KILO-VOLT-AMPERE
KW	KILO-WATT
L	LIGHTING LOAD TYPE FOR PANEL SCHEDULE
LCD	LIQUID CRYSTAL DISPLAY
LED	LIGHT EMITTING DIODE
LTG	LIGHTING
M	MOTOR LOAD TYPE FOR PANEL SCHEDULE
MAX	MAXIMUM
MCB	MAIN CIRCUIT BREAKER
MIN	MINIMUM
MLO	MAIN LUG ONLY
N	NEUTRAL
NEMA	NATIONAL ELECTRICAL MANUFACTURERS ASSOCIATION
NFPA	NATIONAL FIRE PROTECTION ASSOCIATION
NO, #	NUMBER
Ø	PHASE
P	POLE
POE	POWER OVER ETHERNET
POTS	PLAIN OLD TELEPHONE SERVICE
P/O	PART OF
R	RECEPTACLE LOAD TYPE FOR PANEL SCHEDULE
REC	RECEPTACLE
RGS	RIGID GALVANIZED STEEL
RM	ROOM
SPD	SURGE PROTECTIVE DEVICE
SW	SWITCH
TGB	TELECOM GROUND BUSBAR
TMGB	TELECOM MAIN GROUND BUSBAR
THHN	HEAT RESISTANT THERMOPLASTIC WIRE WITH NYLON JACKET
THWN	MOISTURE & HEAT RESISTANT THERMOPLASTIC WIRE WITH NYLON JACKET
TYP	TYPICAL
UE	UNDERGROUND ELECTRIC
UL	UNDERWRITERS LABORATORIES
USB	UNIVERSAL SERIAL BUS
V	VOLT
VA	VOLT AMPERE
VAV	VARIABLE AIR VOLUME
W	WATT, WIRE
W/	WITH
WG	WIRE GUARD
WP	WEATHERPROOF

ELECTRICAL GENERAL NOTES

1. ELECTRICAL INSTALLATION MUST COMPLY WITH THE REQUIREMENTS OF THE CURRENTLY ADOPTED EDITION OF THE NATIONAL ELECTRICAL CODE (NEC), NFPA AND STATE AND LOCAL CODES.
2. WORK MUST BE COORDINATED WITH ARCHITECTURAL, CIVIL, STRUCTURAL, MECHANICAL AND PLUMBING TRADES.
3. ELECTRICAL EQUIPMENT AND WIRING MUST BE NEW AND UL LISTED UNLESS OTHERWISE NOTED.
4. LIGHT FIXTURES AND OTHER CEILING MOUNTED ELECTRICAL EQUIPMENT MUST BE COORDINATED WITH ARCHITECTURAL, STRUCTURAL, MECHANICAL AND PLUMBING WORK TO AVOID INTERFERENCE.
5. A SEPARATE GREEN GROUNDING CONDUCTOR MUST BE PROVIDED FOR EACH INDIVIDUAL CIRCUIT. METAL CONDUIT MUST BE GROUNDED BUT MUST NOT BE USED AS THE EQUIPMENT GROUNDING CONDUCTOR.
6. CONDUCTORS MUST BE MINIMUM #12 AWG UNLESS NOTED OTHERWISE.
7. CONDUIT MUST BE MINIMUM 1/2" UNLESS OTHERWISE NOTED. COMMUNICATIONS CONDUIT MUST BE MINIMUM 1".
8. UNLESS OTHERWISE INDICATED, WIRE AND CONDUIT SIZE FOR EACH 15A 1P, 15A 2P, 20A 1P, 20A SP BRANCH CIRCUIT SHALL BE 2 #12G, IN 1/2"C.
9. A SEPARATE NEUTRAL CONDUCTOR MUST BE PROVIDED FOR EACH INDIVIDUAL CIRCUIT. MULTIWIRE CIRCUITS ARE NOT PERMITTED.
10. UNLESS OTHERWISE INDICATED, WIRE AND CONDUIT SIZE FOR EACH 15A 3P AND 20A 3P BRANCH CIRCUIT MUST BE 3 #12, 1 #12G, IN 1/2"C.
11. DO NOT DRILL THROUGH OR CUT STRUCTURE.
12. SEAL CONDUIT INTERIOR TO PROHIBIT PASSAGE OF MOISTURE. PROVIDE SEALANT PRODUCT INTENDED FOR SUCH USE. PROVIDE AT CONDUITS PENETRATING FOUNDATION WALLS, EXTERIOR WALLS, COLD ATTICS, KITCHEN REFRIGERATION WALL PENETRATIONS, ETC. BASIS OF DESIGN: AMERICAN POLYWATER FST.
13. DO NOT COMBINE FEEDERS AND DEDICATED HOMERUNS WITH OTHER FEEDERS OR DEDICATED HOMERUNS.
14. THE ACCESS CONTROL/SECURITY AND DVM SYSTEM MUST BE AN EXTENSION OF THE EXISTING HONEYWELL ENTERPRISE BUILDING INTEGRATOR SYSTEM WITH HOST SERVER HARDWARE LOCATED IN AUGUSTA, ME. SYSTEM IS FOR MONITORING AND CONTROLLING CAMERAS, SECURITY, AND ACCESS CONTROL. THE CONTROL SYSTEM MUST BE SEAMLESSLY INTEGRATED WITH THE STATE OF MAINE BUILDING CONTROL CETER (BCC) WHICH PROVIDES 24 HOURS A DAY, 7 DAYS A WEEK, 365 DAYS A YEAR MONITORING OF STATE FACILITIES. GRAPHICS, SUPPLYING, AND INTEGRATION OF PCSC IQ SERIES PANELBOARDS, AND FRONT END PROGRAMMING ARE PROPRIETARY TO HONEYWELL INTERNATIONAL INC. THE INSTALLATION OF HARDWARE, WIRING, PARTS, AND PIECES MUST BE COMPLETED BY A QUALIFIED INSTALLER.

EQUIVALENT CONDUCTOR SIZES SCHEDULE (FEEDERS ONLY)

COPPER	ALUMINUM
1/0	3/0
2/0	4/0
3/0	250 KCMIL
4/0	300 KCMIL
250 KCMIL	400 KCMIL
350 KCMIL	500 KCMIL
500 KCMIL	750 KCMIL

NOTE: CONDUCTOR SIZES SHOWN ON THE DRAWINGS ARE COPPER. INCREASE CONDUIT SIZE AS NEEDED IN ACCORDANCE WITH THE NEC IF ALUMINUM CONDUCTORS ARE USED.

MOUNTING HEIGHT SCHEDULE

(UNLESS NOTED OTHERWISE)

1. RECEPTACLES AND TELECOMMUNICATIONS OUTLETS 18" UNLES NOTED OTHERWISE.
2. RECEPTACLES AND TELECOMMUNICATIONS OUTLETS AT COUNTERS AND CABINETS: 6" ABOVE COUNTER TOP/BACKSPLASH.
3. SWITCHES 48".
4. MANUAL PULL STATIONS: 48"
5. FIRE ALARM STROBES: 80"
6. RECEPTACLES IN BATHROOMS: 48" ADJACENT TO SINK, HAND DRYER, ETC. 48".
7. TELEVISION (TV) RECEPTACLES: 60"

WIRE SIZE	HOME RUNS (20A CIRCUIT) MAXIMUM DISTANCE IN FEET			
	120V	208V	277V	480V
#12	60'	100'	140'	240'
#10	100'	160'	220'	360'
#8	150'	250'	325'	550'
#6	240'	400'	500'	800'

NORTH ADDITION FIRST FLOOR CONDUIT INSTALLATION NOTES

1. RECEPTACLE: CONDUITS FOR RECEPTACLE CIRCUITS ORIGINATING FROM SOURCE PANELBOARD FEEDING FIRST FLOOR RECEPTACLES MUST TRAVEL ABOVE SAT CEILINGS, THROUGH CHASE, EXPOSED ON CLT CEILING, AND DROP DOWN INTO WALLS TO FEED RECEPTACLES. CONDUITS EXPOSED ON CTL MUST BE RUN PARALLEL AND PERPENDICULAR TO BUILDING ELEMENTS.
2. LIGHTING: CONDUITS FOR LIGHTING CIRCUITS AND CONTRLS ORIGINATING FROM SOURCE PANELBOARD MUST TRAVEL ABOVE SAT CEILING, THROUGH CHASE, AND EXPOSED ON CLT. CONDUITS EXPOSED ON CLT CEILING MUST BE RUN PARALLEL AND PERPENDICULAR TO BUILDING ELEMENTS.
3. COMMUNICATIONS: CONDUITS FOR COMMUNICATION OUTLETS ORIGINATING IN DATA 158 MUST TRAVEL THROUGH CONDUIT SLEEVE, ON CLT CEILING AND DROP DOWN IN WALL TO FEED NETWORK JACKS.
4. SECURITY SYSTEM: CONDUITS FOR SECURITY SYSTEM DEVICES ORIGINATING IN DATA 158 MUST TRAVEL THROUGH CONDUIT SLEEVE, ON CLT CEILING, AND DROP DOWN IN WALL TO FEED SECURITY SYSTEM DEVICE.
5. FIRE ALARM: CONDUITS FOR FIRE ALARM DEVICES ORIGINATING FROM BASEMENT MUST TRAVEL UP THROUGH 158, THROUGH CONDUIT SLEEVE, ON CLT CEILING, AND DROP DOWN IN WALL TO FEED FIRE ALARM DEVICES.
6. EXPOSED CONDUIT RUNNING ON CEILING AND WALLS MUST BE PAINTED TO MATCH ADJACENT SURFACE. CONDUIT MUST BE PAINTED PRIOR TO INSTALLATION.
7. THE INTENT IS TO CONCEAL AS MUCH CONDUIT AS POSSIBLE AND RUN EXPOSED CONDUIT AS NEATLY AS POSSIBLE.
8. CONDUITS FOR LIKE SYSTEMS MUST BE COMBINED AND COORDINATED TO REDUCE SIZE AND QUANTITY OF CONDUITS.
9. PROVIDE CONDUIT COORDINATION DRAWINGS PRIOR TO CONSTRUCTION.

NORTH ADDITION SECOND FLOOR CONDUIT INSTALLATION NOTES

1. RECEPTACLE: CONDUITS FOR RECEPTACLE CIRCUITS ORIGINATING FROM SOURCE PANELBOARD FEEDING SECOND FLOOR RECEPTACLES MUST TRAVEL ABOVE SAT CEILINGS, THROUGH CHASE, EXPOSED ON CLT CEILING, AND DROP DOWN INTO WALLS TO FEED RECEPTACLES. CONDUITS EXPOSED ON CTL MUST BE RUN PARALLEL AND PERPENDICULAR TO BUILDING ELEMENTS.
2. LIGHTING: CONDUITS FOR LIGHTING CIRCUITS AND CONTRLS ORIGINATING FROM SOURCE PANELBOARD MUST TRAVEL ABOVE SAT CEILING, THROUGH CHASE, AND EXPOSED ON CLT. CONDUITS EXPOSED ON CLT CEILING MUST BE RUN PARALLEL AND PERPENDICULAR TO BUILDING ELEMENTS.
3. COMMUNICATIONS: CONDUITS FOR COMMUNICATION OUTLETS ORIGINATING IN DATA 270 MUST TRAVEL THROUGH CONDUIT SLEEVE, ON CLT CEILING AND DROP DOWN IN WALL TO FEED NETWORK JACKS.
4. SECURITY SYSTEM: CONDUITS FOR SECURITY SYSTEM DEVICES ORIGINATING IN DATA 158 MUST TRAVEL UP THROUGH 270, THROUGH CONDUIT SLEEVE, ON CLT CEILING AND DROP DOWN IN WALL TO FEED SECURITY SYSTEM DEVICE.
5. FIRE ALARM: CONDUITS FOR FIRE ALARM DEVICES ORIGINATING FROM BASEMENT MUST TRAVEL UP THROUGH 158, UP THROUGH 270, THROUGH CONDUIT SLEEVE, ON CLT CEILING, AND DROP DOWN IN WALL TO FEED FIRE ALARM DEVICES.
6. EXPOSED CONDUIT RUNNING ON CEILING AND WALLS MUST BE PAINTED TO MATCH ADJACENT SURFACE. CONDUIT MUST BE PAINTED PRIOR TO INSTALLATION.
7. THE INTENT IS TO CONCEAL AS MUCH CONDUIT AS POSSIBLE AND RUN EXPOSED CONDUIT AS NEATLY AS POSSIBLE.
8. CONDUITS FOR LIKE SYSTEMS MUST BE COMBINED AND COORDINATED TO REDUCE SIZE AND QUANTITY OF CONDUITS.
9. PROVIDE CONDUIT COORDINATION DRAWINGS PRIOR TO CONSTRUCTION.

SOUTH ADDITION FIRST FLOOR CONDUIT INSTALLATION NOTES

1. RECEPTACLE: CONDUITS FOR RECEPTACLE CIRCUITS ORIGINATING FROM SOURCE PANELBOARD FEEDING FIRST FLOOR RECEPTACLES MUST TRAVEL BELOW SLAB AND RISE UP IN WALL TO FEED RECEPTACLES.
2. LIGHTING: CONDUITS FOR LIGHTING CIRCUITS AND CONTRLS ORIGINATING FROM SOURCE PANELBOARD MUST TRAVEL IN SPACE UNDER LOBBY 100 BRIDGE. CONDUITS EXPOSED ON CTL MUST BE RUN PARALLEL AND PERPENDICULAR TO BUILDING ELEMENTS.
3. COMMUNICATIONS: CONDUITS FOR COMMUNICATION OUTLETS ORIGINATING IN DATA 130 MUST TRAVEL BELOW SLAB AND RISE UP IN WALL TO FEED NETWORK JACKS.
4. SECURITY SYSTEM: CONDUITS FOR SECURITY SYSTEM DEVICES ORIGINATING IN DATA 130 TRAVEL BELOW SLAB AND RISE UP IN WALL TO FEED SECURITY SYSTEM DEVICE.
5. FIRE ALARM: CONDUITS FOR FIRE ALARM DEVICES ORIGINATING FROM BASEMENT MUST TRAVEL BELOW SLAB AND RISE UP IN WALL TO FEED FIRE ALARM DEVICES.
6. EXPOSED CONDUIT RUNNING ON CEILING AND WALLS MUST BE PAINTED TO MATCH ADJACENT SURFACE. CONDUIT MUST BE PAINTED PRIOR TO INSTALLATION.
7. THE INTENT IS TO CONCEAL AS MUCH CONDUIT AS POSSIBLE AND RUN EXPOSED CONDUIT AS NEATLY AS POSSIBLE.
8. CONDUITS FOR LIKE SYSTEMS MUST BE COMBINED AND COORDINATED TO REDUCE SIZE AND QUANTITY OF CONDUITS.
9. PROVIDE CONDUIT COORDINATION DRAWINGS PRIOR TO CONSTRUCTION.

SOUTH ADDITION SECOND FLOOR CONDUIT INSTALLATION NOTES

1. RECEPTACLE: CONDUITS FOR RECEPTACLE CIRCUITS ORIGINATING FROM SOURCE PANELBOARD FEEDING SECOND FLOOR RECEPTACLES MUST TRAVEL DOWN FROM ATTIC TO ABOVE SAT CEILINGS AND DROP DOWN INTO WALLS TO FEED RECEPTACLES. CONDUITS EXPOSED ON CTL MUST BE RUN PARALLEL AND PERPENDICULAR TO BUILDING ELEMENTS.
2. LIGHTING: CONDUITS FOR LIGHTING CIRCUITS AND CONTRLS ORIGINATING FROM SOURCE PANELBOARD MUST TRAVEL UP CONCEALED IN WALL TO ABOVE SECOND FLOOR SAT CEILING. CONDUITS EXPOSED ON CTL MUST BE RUN PARALLEL AND PERPENDICULAR TO BUILDING ELEMENTS.
3. COMMUNICATIONS: CONDUITS FOR COMMUNICATION OUTLETS ORIGINATING IN DATA 214 MUST TRAVEL ABOVE SAT CEILING AN DROP DOWN IN WALL TO FEED NETWORK JACKS.
4. SECURITY SYSTEM: CONDUITS FOR SECURITY SYSTEM DEVICES ORIGINATING IN BASEMENT MAIN IT MUST TRAVEL BELOW SLAB AND RISE UP IN ROOM 130, CONTIUE UP TO ROOM 214, TRAVEL ABOVE SAT CEILING AND DROP DOWN IN WALL TO FEED SECURITY SYSTEM DEVICE.
5. FIRE ALARM: CONDUITS FOR FIRE ALARM DEVICES ORIGINATING FROM BASEMENT MUST TRAVEL BELOW SLAB AND RISE UP IN ROOM 130, CONTINUE TO ROOM 214, TRAVEL ABOVE SAT CEILING ADN DROP DOWN IN WALL TO FEED FIRE ALARM DEVICES.
6. EXPOSED CONDUIT RUNNING ON CEILING AND WALLS MUST BE PAINTED TO MATCH ADJACENT SURFACE. CONDUIT MUST BE PAINTED PRIOR TO INSTALLATION.
7. THE INTENT IS TO CONCEAL AS MUCH CONDUIT AS POSSIBLE AND RUN EXPOSED CONDUIT AS NEATLY AS POSSIBLE.
8. CONDUITS FOR LIKE SYSTEMS MUST BE COMBINED AND COORDINATED TO REDUCE SIZE AND QUANTITY OF CONDUITS.
9. PROVIDE CONDUIT COORDINATION DRAWINGS PRIOR TO CONSTRUCTION.

NO.	DATE	DESCRIPTION	BY
		REVISIONS	

STATE OF MAINE DALE C. LINCOLN, II No. 10463 1/29/25 LICENSED PROFESSIONAL ENGINEER

DRAWN BY: BPD
CHECK BY: DCL
DATE 01/29/2025

DEPARTMENT OF INLAND FISHERIES & WILDLIFE

TITLE: NEW OFFICE HEADQUARTERS
LOCATION: AUGUSTA, ME
TITLE THIS DWG.: ELECTRICAL SYMBOLS, ABBREVIATIONS AND GENERAL NOTES

OAK POINT ASSOCIATES
ARCHITECTURE ■ ENGINEERING ■ PLANNING
231 Main Street, Biddeford, Maine 04005 207.283.0193

DRAWING NO. E-001
SHEET NO. 211 OF 239

1/29/2025 7:21:59 PM
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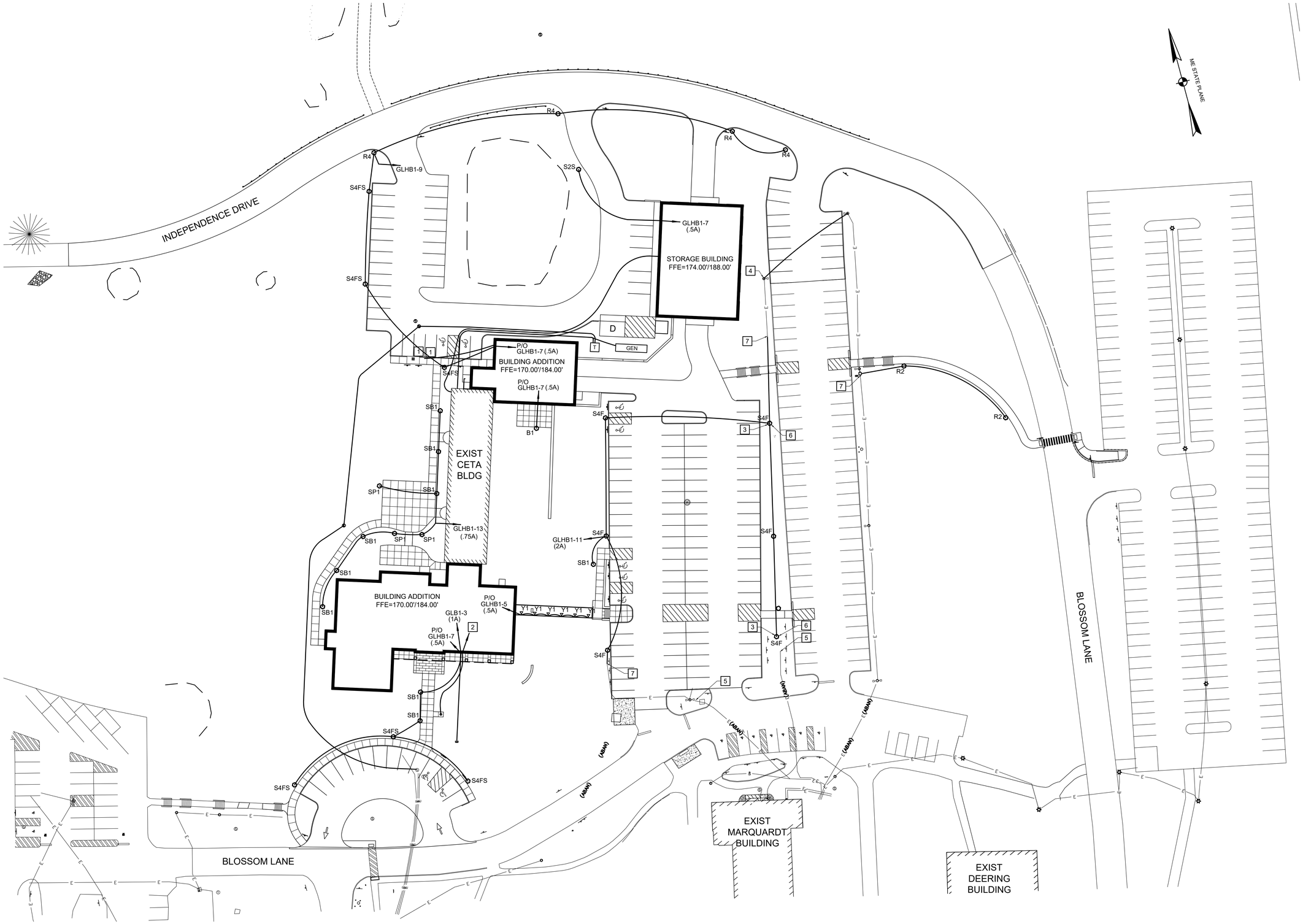


KEYNOTE: (THIS SHEET ONLY).

1. ERV CHARGING STATION.
2. 1" UNDERSLAB CONDUIT FROM FUTURE SCULPTURE LOCATION TO ELECTRICAL ROOM 132. RISE UP FOR FUTURE CONNECTION TO PANELBOARD RL11.
3. REMOVE EXISTING POLE AND FIXTURES. SALVAGE FIXTURE ON EAST SIDE FOR REUSE.
4. REMOVE FIXTURE ON WEST SIDE OF POLE FACING STORAGE BUILDING. EAST FACING FIXTURE AND POLE MUST REMAIN.
5. REMOVE CONDUCTORS AND CONDUIT BACK TO NEAREST PULL POINT. PORTIONS OF CIRCUIT NOT REMOVED MUST REMAIN OPERATIONAL.
6. POLE MUST ACCOMMODATE TWO FIXTURES. INSTALL SALVAGED FIXTURE ON EAST SIDE OF PROVIDED POLE.
7. PROVIDE CONDUCTORS AND CONDUIT AND CONNECT TO SITE LIGHTING CIRCUIT.

1 ELECTRICAL SITE PLAN
ES101 SCALE: 1"=30'

GRAPHIC SCALE
1"=30' 30' 15' 0 30' 90'
CHECK GRAPHIC SCALE BEFORE USING

NO.	DATE	DESCRIPTION	BY
REVISIONS			

STATE OF MAINE
DALE C. LINCOLN, II
No. 10443
1/29/25
LICENSED
PROFESSIONAL ENGINEER

DRAWN BY: BPD
CHECK BY: DCL
NO.
DATE 01/29/2025

DEPARTMENT OF INLAND FISHERIES & WILDLIFE

TITLE NEW OFFICE HEADQUARTERS
LOCATION AUGUSTA, MAINE
TITLE THIS DWG. ELECTRICAL SITE PLAN

OAK POINT ASSOCIATES
ARCHITECTURE ■ ENGINEERING ■ PLANNING
231 Main Street, Biddeford, Maine 04005 207.283.0103

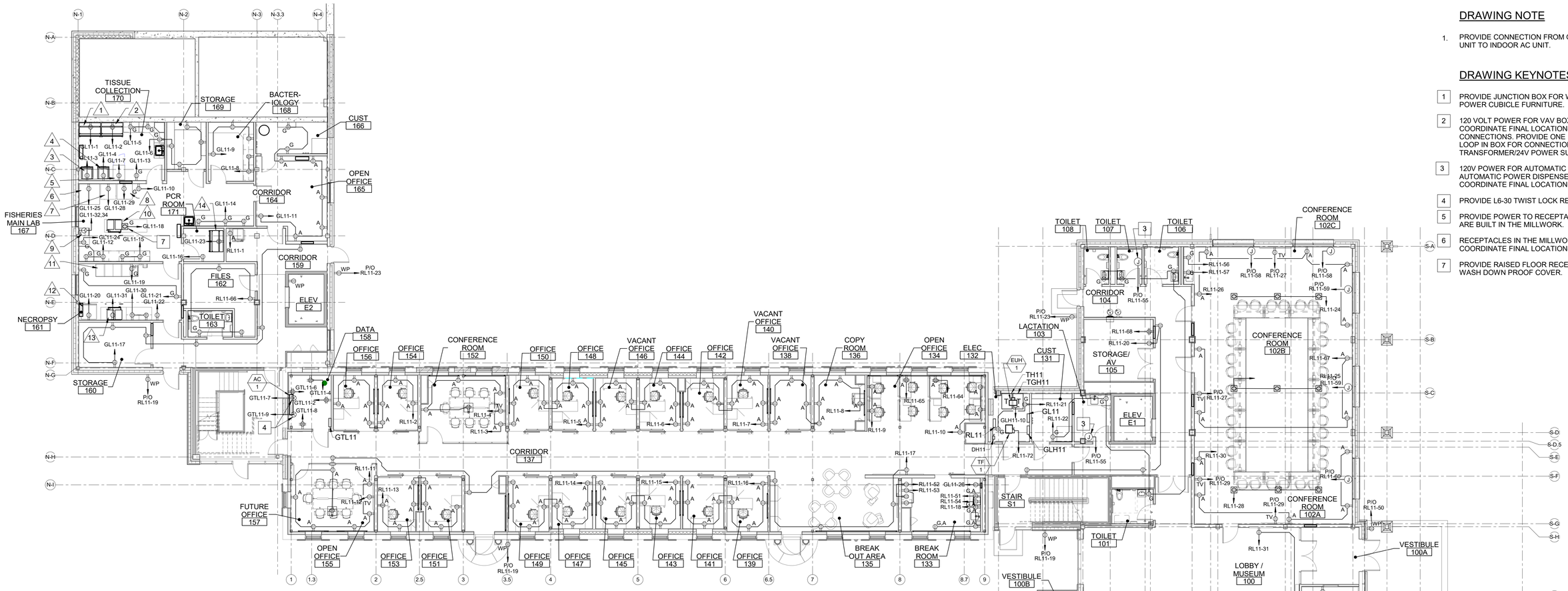
DRAWING NO. ES101
SHEET NO. 212 OF 239

DRAWING NOTE

1. PROVIDE CONNECTION FROM OUTDOOR CU UNIT TO INDOOR AC UNIT.

DRAWING KEYNOTES

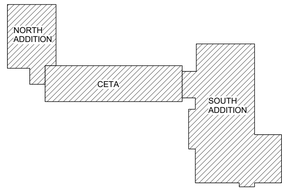
1. PROVIDE JUNCTION BOX FOR WHIP TO POWER CUBICLE FURNITURE.
2. 120 VOLT POWER FOR VAV BOXES. FIELD COORDINATE FINAL LOCATIONS AND CONNECTIONS. PROVIDE ONE FOOT SERVICE LOOP IN BOX FOR CONNECTION TO TRANSFORMER/24V POWER SUPPLY.
3. 120V POWER FOR AUTOMATIC VALVES AND AUTOMATIC POWER DISPENSERS. FIELD COORDINATE FINAL LOCATION.
4. PROVIDE L6-30 TWIST LOCK RECEPTACLE.
5. PROVIDE POWER TO RECEPTACLES THAT ARE BUILT IN THE MILLWORK.
6. RECEPTACLES IN THE MILLWORK. FIELD COORDINATE FINAL LOCATIONS.
7. PROVIDE RAISED FLOOR RECEPTACLE WITH WASH DOWN PROOF COVER.



1 FIRST FLOOR POWER PLAN
EP101 SCALE: 1/8" = 1'-0"

Electrical Rough-In Schedule

Item #	Description	Volts	Phase	HP	Watts	FL Amps	Connection Type	Plug Type	Rough-In Height	Remarks
1	TISSUE COLLECTION HOOD	120	1	-	-	12	RECEPTACLE	5-20	-	
2	TISSUE COLLECTION HOOD	120	1	-	-	12	RECEPTACLE	5-20	-	
3	LOW TEMPERATURE INCUBATOR	120	1	-	-	2.5	RECEPTACLE	5-20	-	
4	LOW TEMPERATURE INCUBATOR	120	1	-	-	2.5	RECEPTACLE	5-20	-	
5	REFRIGERATOR	120	1	-	-	12	RECEPTACLE	5-20	-	
6	CHEMICAL EXHAUST HOOD	120	1	-	-	12	RECEPTACLE	5-20	-	
7	ULTRA LOW FREEZER	120	1	-	-	12	RECEPTACLE	5-20	-	
8	FRIDGE/FREEZER	120	1	-	-	12	RECEPTACLE	5-20	-	
9	AUTOCLAVE	120	1	-	9.3KW	40	RECEPTACLE	6-50	-	3#8, #10G, 3/4"C
10	TABLE TOP HOOD	120	1	-	-	6	RECEPTACLE	5-20	-	
11	NECROPSY TABLE	120	1	-	-	6	RECEPTACLE	5-20	-	
12	FISH FREEZER	120	1	-	-	12	RECEPTACLE	5-20	-	
13	TABLE TOP HOOD	120	1	-	-	6	RECEPTACLE	5-20	-	
14	EXHAUST HOOD	120	1	-	-	12	RECEPTACLE	5-20	-	



KEYPLAN
NOT TO SCALE

PLAN NORTH

GRAPHIC SCALE

1/8"=1'-0"

8' 4' 0 8' 16'

CHECK GRAPHIC SCALE BEFORE USING

NO.	DATE	DESCRIPTION	BY
		REVISIONS	

STATE OF MAINE
DALE C. LINCOLN, II
No. 10443
11/29/25
LICENSED
PROFESSIONAL ENGINEER

DRAWN BY: RSW
CHECK BY: DCL
NO.
DATE 01/29/2025

DEPARTMENT OF INLAND FISHERIES & WILDLIFE

TITLE: NEW OFFICE HEADQUARTERS
LOCATION: AUGUSTA, ME
TITLE THIS DWG: FIRST FLOOR POWER PLAN

OAK POINT ASSOCIATES
ARCHITECTURE ■ ENGINEERING ■ PLANNING
231 Main Street, Biddeford, Maine 04005 207.283.0193

DRAWING NO. EP101
SHEET NO. 213 OF 239

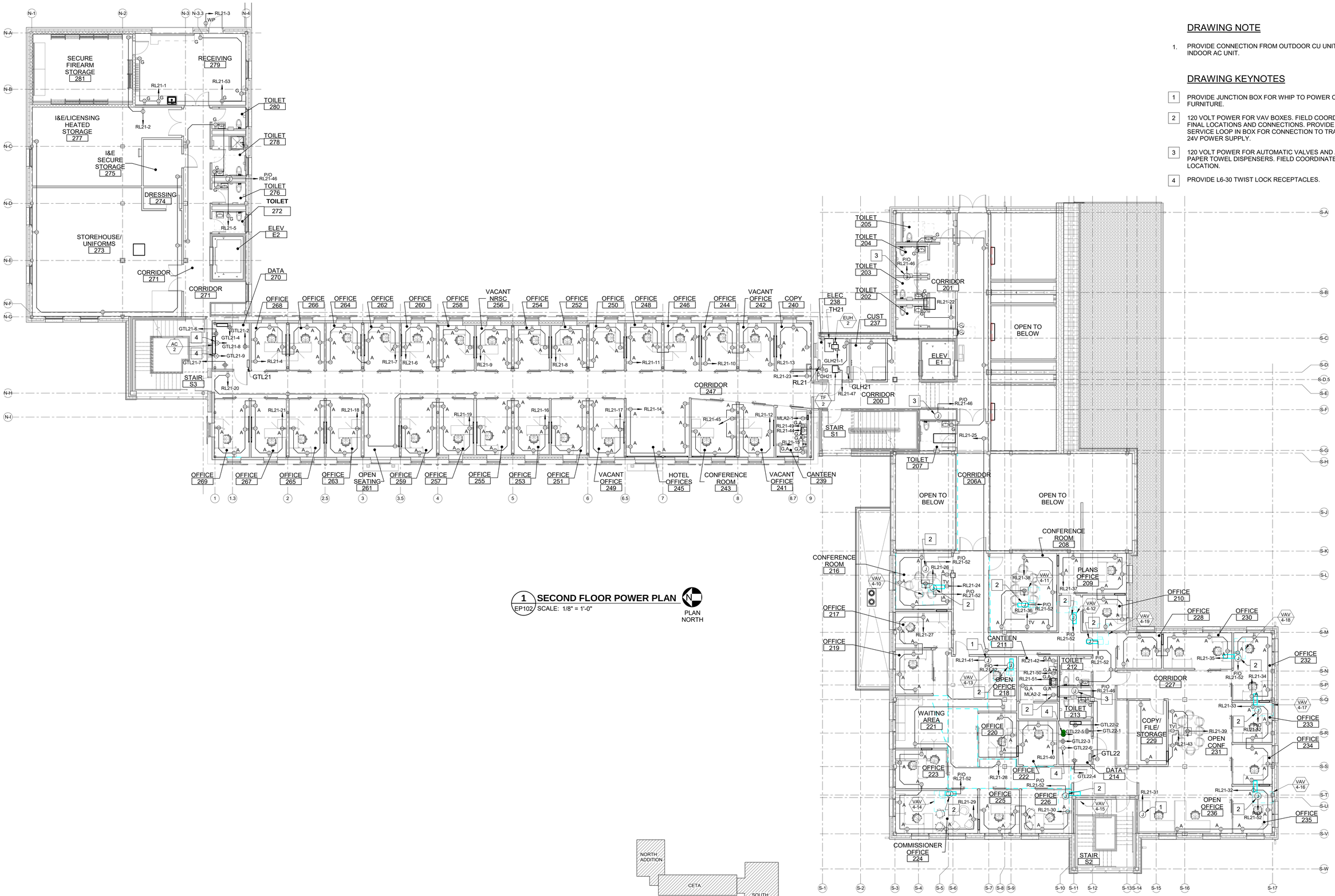
1/28/2025 7:28:41 PM
C:\Users\Randy\Documents\22205.04-IFBW-ELECTRICAL_v22_RandolphWilliams.rvt

DRAWING NOTE

1. PROVIDE CONNECTION FROM OUTDOOR CU UNIT TO INDOOR AC UNIT.

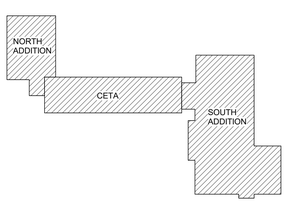
DRAWING KEYNOTES

1. PROVIDE JUNCTION BOX FOR WHIP TO POWER CUBICLE FURNITURE.
2. 120 VOLT POWER FOR VAV BOXES. FIELD COORDINATE FINAL LOCATIONS AND CONNECTIONS. PROVIDE ONE FOOT SERVICE LOOP IN BOX FOR CONNECTION TO TRANSFORMER 24V POWER SUPPLY.
3. 120 VOLT POWER FOR AUTOMATIC VALVES AND AUTOMATIC PAPER TOWEL DISPENSERS. FIELD COORDINATE FINAL LOCATION.
4. PROVIDE L6-30 TWIST LOCK RECEPTACLES.



1 EP102 **SECOND FLOOR POWER PLAN**
SCALE: 1/8" = 1'-0"

PLAN NORTH



KEYPLAN
NOT TO SCALE

PLAN NORTH

GRAPHIC SCALE

1/8"=1'-0"

8' 4' 0 8' 16'

CHECK GRAPHIC SCALE BEFORE USING

NO.	DATE	DESCRIPTION	BY
		REVISIONS	

STATE OF MAINE
DALE C. LINCOLN, II
No. 10443
1/29/25
LICENSED
PROFESSIONAL ENGINEER

DRAWN BY: RSW
CHECK BY: DCL
NO.
DATE 01/29/2025

DEPARTMENT OF INLAND FISHERIES & WILDLIFE

TITLE: NEW OFFICE HEADQUARTERS
LOCATION: AUGUSTA, ME
TITLE THIS DWG.: SECOND FLOOR POWER PLAN

OAK POINT ASSOCIATES
ARCHITECTURE ■ ENGINEERING ■ PLANNING
231 Main Street, Biddeford, Maine 04005 207.283.0193

DRAWING NO.: EP102
SHEET NO.: 214 OF 239

1/29/2025 7:29:44 PM
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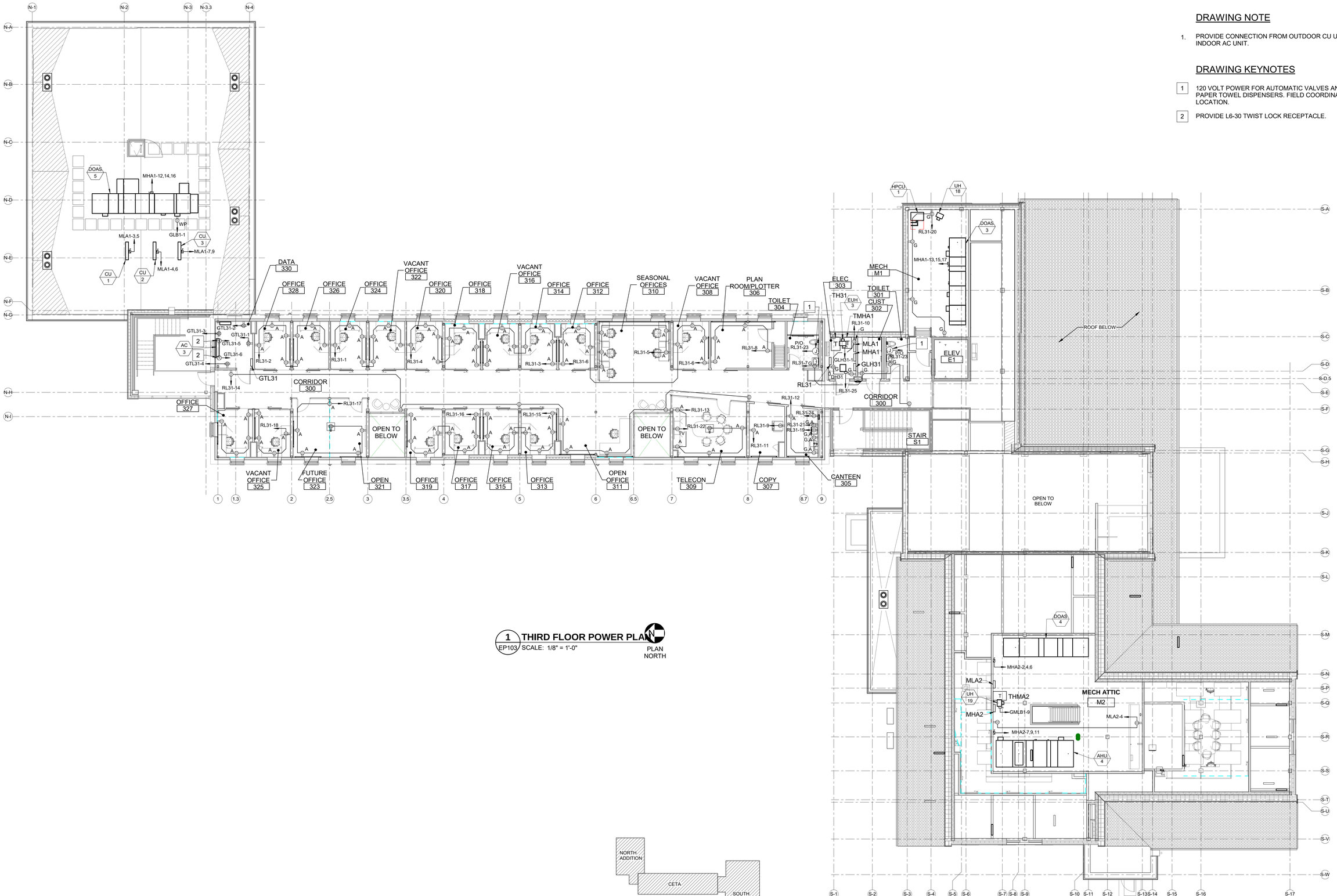
DRAWING NOTE

1. PROVIDE CONNECTION FROM OUTDOOR CU UNIT TO INDOOR AC UNIT.

DRAWING KEYNOTES

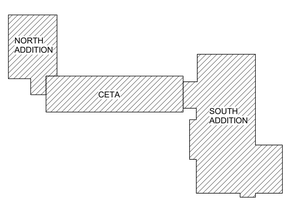
1 — 120 VOLT POWER FOR AUTOMATIC VALVES AND AUTOMATIC PAPER TOWEL DISPENSERS. FIELD COORDINATE FINAL LOCATION.

2 — PROVIDE L6-30 TWIST LOCK RECEPTACLE.



1 THIRD FLOOR POWER PLAN
EP103 SCALE: 1/8" = 1'-0"

PLAN NORTH



KEYPLAN
NOT TO SCALE

PLAN NORTH

GRAPHIC SCALE
1/8"=1'-0"
8' 4' 0 8' 16'
CHECK GRAPHIC SCALE BEFORE USING

NO.	DATE	DESCRIPTION	BY
		REVISIONS	

STATE OF MAINE — DALE C. LINCOLN, II — No. 10443 — 1/29/25 — LICENSED PROFESSIONAL ENGINEER

DRAWN BY: RSW
CHECK BY: DCL
NO.
DATE 01/29/2025

DEPARTMENT OF INLAND FISHERIES & WILDLIFE

TITLE: NEW OFFICE HEADQUARTERS
LOCATION: AUGUSTA, ME
TITLE THIS DWG: THIRD FLOOR POWER PLAN

OAK POINT ASSOCIATES
ARCHITECTURE ■ ENGINEERING ■ PLANNING
231 Main Street, Biddeford, Maine 04005 207.283.0193

DRAWING NO. EP103
SHEET NO. 215 OF 239

1/28/2025 7:30:26 PM
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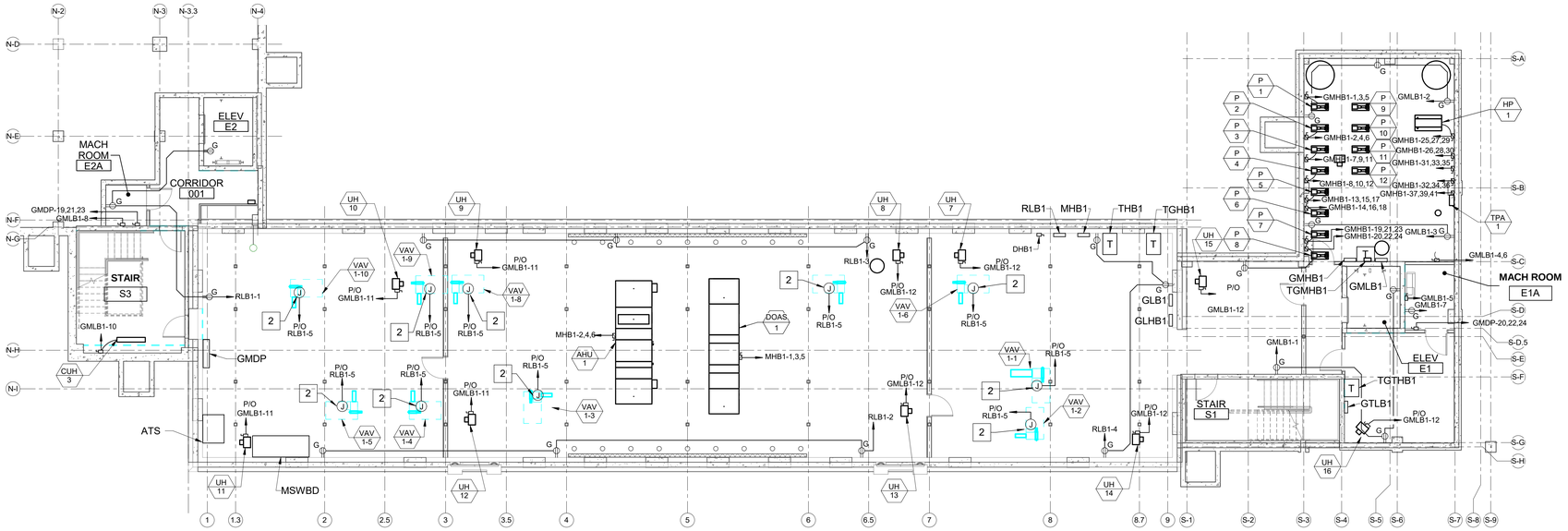


1 BASEMENT POWER PLAN

EP104 SCALE: 1/8" = 1'-0"

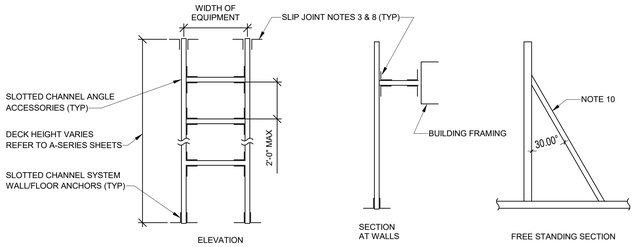
PLAN NORTH

DRAWING NOTE

1. CETA BUILDING BASEMENT IS 7'-1" FROM THE SLAB TO THE BOTTOM OF STRUCTURE. SWITCHBOARD, PANELBOARD, AND ATS MUST BE MANUFACTURED TO FIT THIS SPACE.

DRAWING KEYNOTES

1. MOUNT SERVICE RECEPTACLES ON CEILING COLLAR TIES.
2. 120 VOLT POWER FOR VAV BOXES. FIELD COORDINATE FINAL LOCATIONS AND CONNECTIONS. PROVIDE ONE FOOT SERVICE LOOP IN BOX FOR CONNECTION TO TRANSFORMER 24V POWER SUPPLY.

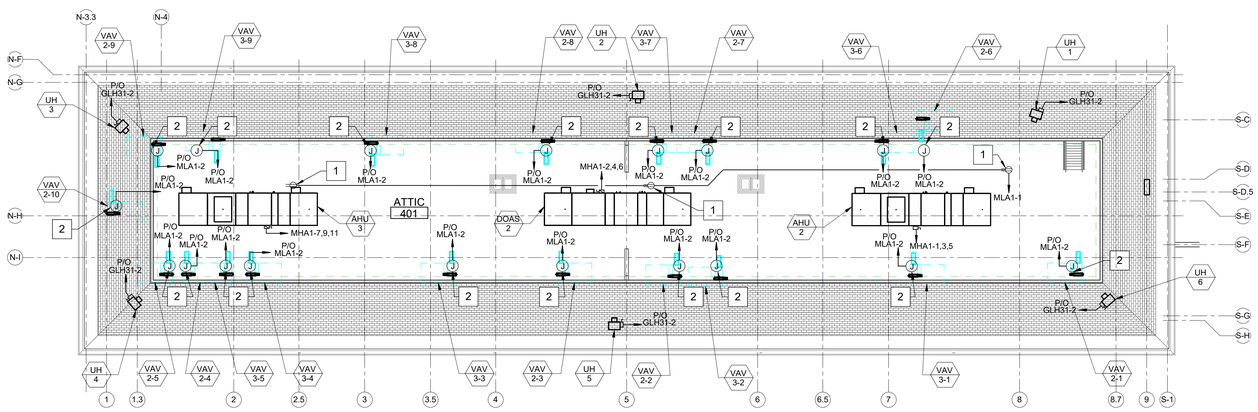


SLOTTED CHANNEL RACK DETAIL NOTES:

1. ANCHOR TO DECK ABOVE USING SLIP JOINTS WHERE NOT ADJACENT TO A WALL.
2. PROVIDE BOLTED CONNECTIONS.
3. PROVIDE 1/2" CLEAR SLIP JOINT AT VERTICAL SLOTTED CHANNEL TO ALLOW FOR STRUCTURAL DEFLECTION. SECURELY ANCHOR SLIP JOINT TO STRUCTURE.
4. PROVIDE AT PANELBOARDS AND EQUIPMENT WHERE EQUIPMENT CAN NOT BE WALL MOUNTED. PROVIDE SIMILAR AT CONDUIT DROP TO MECHANICAL PUMPS AND EQUIPMENT.
5. DO NOT SECURE TOP OF VERTICAL SLOTTED CHANNEL TO CEILING OR WALL.
6. PROVIDE ADDITIONAL VERTICAL SLOTTED CHANNEL EVERY 20 INCHES FOR WIDER PANELBOARDS OR CONTROL PANELS OR GROUPS OF PANELBOARDS OR CONTROL PANELS. PROVIDE ADDITIONAL HORIZONTAL SLOTTED CHANNEL PER DETAIL.
7. PROVIDE STEEL SLOTTED CHANNEL SUPPORT FOR MOUNTING PANELBOARDS, CONTROL PANELS, ASD'S, STARTERS AND DISCONNECT SWITCHES.
8. PROVIDE SLIP JOINT BOD: POWER STRUT PS764. PROVIDE SLOT VERTICAL. TIGHTEN BOLT THROUGH SLOTTED CHANNEL HAND TIGHT. PROVIDE LOCKNUT AND DOUBLE NUT. TIGHTEN NUTS AGAINST EACH OTHER.
9. PROVIDE GALVANIZED STEEL SLOTTED CHANNEL RACKS AT EXTERIOR LOCATIONS
10. PROVIDE SUPPORT CHANNEL AS ANGLED SECTION AT FREESTANDING AND EXTERIOR SLAB ON GRADE APPLICATIONS.
11. PROVIDE CHANNEL MANUFACTURERS NON-METALLIC END CAPS AT CHANNEL ENDS WHERE EXPOSED.

3 SLOTTED CHANNEL RACK DETAIL

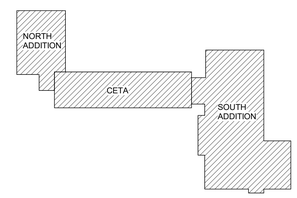
EP104 SCALE: NOT TO SCALE



2 ATTIC POWER PLAN

EP104 SCALE: 1/8" = 1'-0"

PLAN NORTH



KEYPLAN

NOT TO SCALE

PLAN NORTH

GRAPHIC SCALE

1/8"=1'-0"

8' 4' 0 8' 16'

CHECK GRAPHIC SCALE BEFORE USING

NO.	DATE	DESCRIPTION	BY
		REVISIONS	

STATE OF MAINE — DALE C. LINCOLN, II — No. 10443 — 1/29/25 — LICENSED PROFESSIONAL ENGINEER

DRAWN BY: RSW

CHECK BY: DCL

NO.

DATE 01/29/2025

DEPARTMENT OF INLAND FISHERIES & WILDLIFE

TITLE: NEW OFFICE HEADQUARTERS

LOCATION: AUGUSTA, ME

TITLE THIS DWG: BASEMENT AND ATTIC POWER PLANS

OAK POINT ASSOCIATES

ARCHITECTURE ■ ENGINEERING ■ PLANNING

231 Main Street, Biddeford, Maine 04005 207.283.0193

DRAWING NO. EP104

SHEET NO. 216 OF 239

1/28/2025 7:30:51 PM
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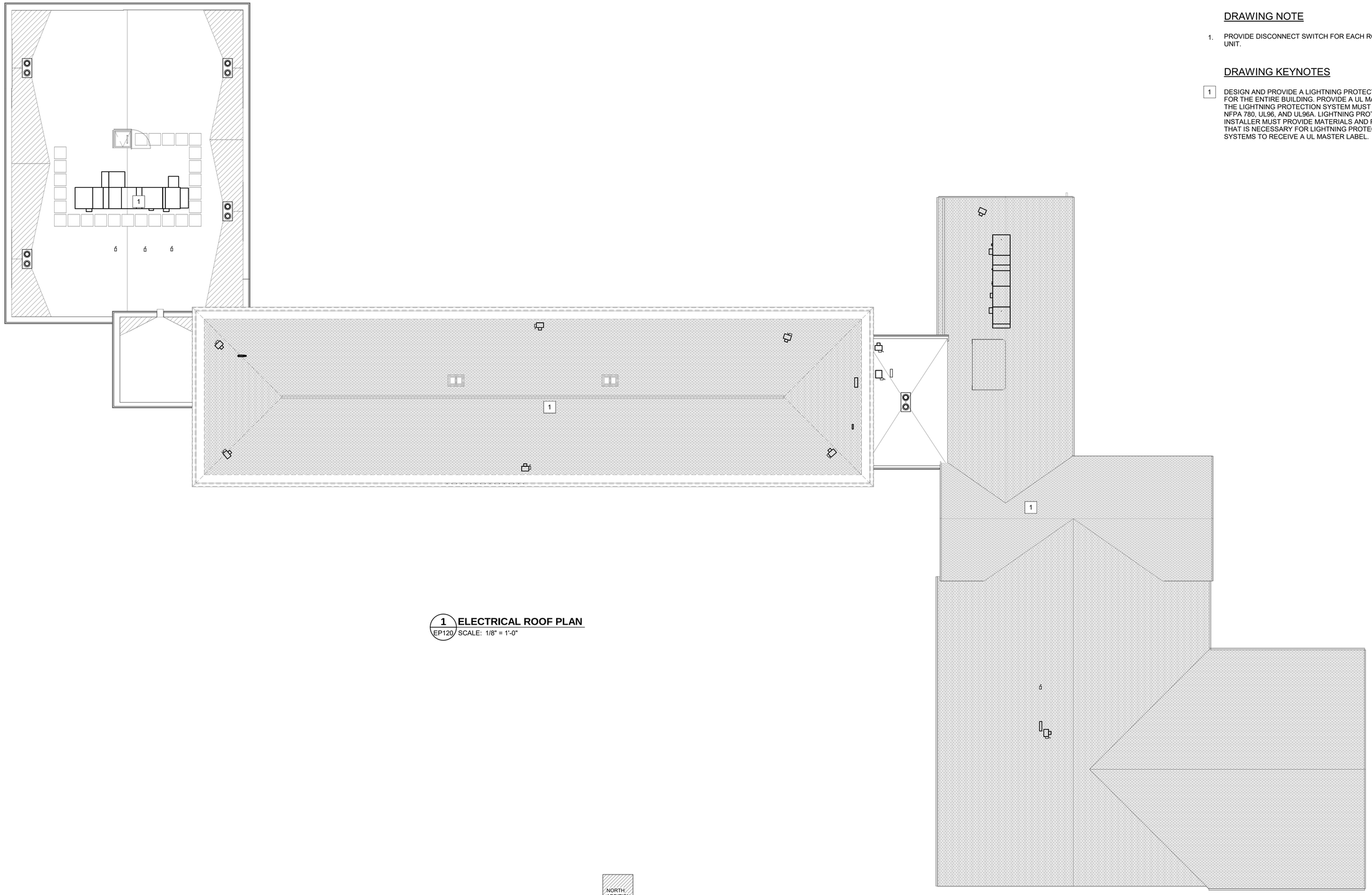
DRAWING NOTE

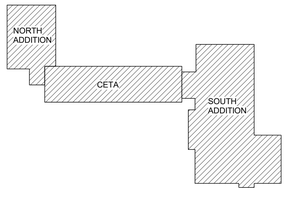
1. PROVIDE DISCONNECT SWITCH FOR EACH ROOF TOP HVAC UNIT.

DRAWING KEYNOTES

1 DESIGN AND PROVIDE A LIGHTNING PROTECTION SYSTEM FOR THE ENTIRE BUILDING. PROVIDE A UL MASTER LABEL. THE LIGHTNING PROTECTION SYSTEM MUST CONFORM TO NFPA 780, UL96, AND UL96A. LIGHTNING PROTECTION INSTALLER MUST PROVIDE MATERIALS AND PROVIDE LABOR THAT IS NECESSARY FOR LIGHTNING PROTECTION SYSTEMS TO RECEIVE A UL MASTER LABEL.



1 ELECTRICAL ROOF PLAN
EP120 SCALE: 1/8" = 1'-0"



KEYPLAN
NOT TO SCALE

PLAN NORTH

GRAPHIC SCALE

1/8"=1'-0"

8' 4' 0 8' 16'

CHECK GRAPHIC SCALE BEFORE USING

NO.	DATE	DESCRIPTION	BY
		REVISIONS	

STATE OF MAINE
DALE C. LINCOLN, II
No. 10443
1/29/25
LICENSED
PROFESSIONAL ENGINEER

DRAWN BY: BPD
CHECK BY: DCL
NO.
DATE 01/29/2025

DEPARTMENT OF INLAND FISHERIES & WILDLIFE

TITLE: NEW OFFICE HEADQUARTERS
LOCATION: AUGUSTA, ME
TITLE THIS DWG: ROOF PLAN

OAK POINT ASSOCIATES
ARCHITECTURE ■ ENGINEERING ■ PLANNING
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DRAWING NO. EP120
SHEET NO. 217 OF 239

1/28/2025 7:31:11 PM
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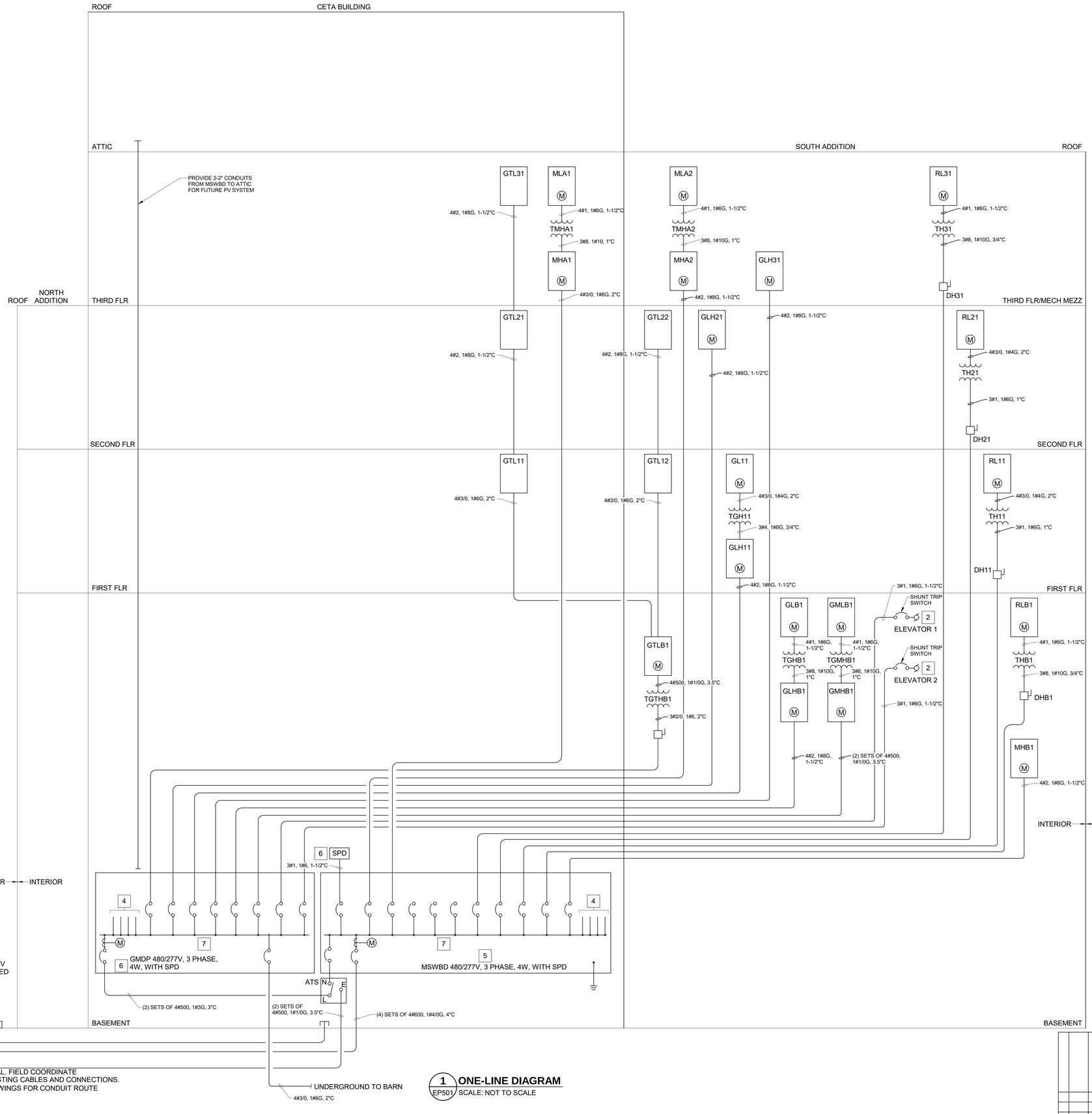
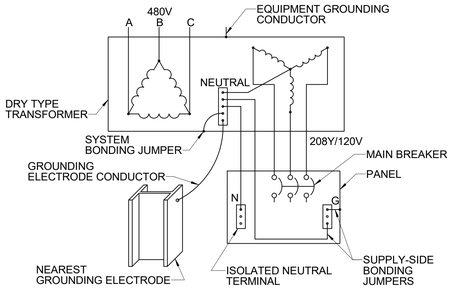
DRAWING KEYNOTES

1. GENERATOR IS PART OF OPTION 1. PAD, UNDERGROUND CONDUIT, AND ATS ARE BASE BID.
2. PROVIDE SHUNT TRIP CIRCUIT BREAKER FOR ELEVATOR.
3. CONNECT TO STATE OWNED PRIMARY SYSTEM LOOP. PROVIDE CABLES IN EXISTING CONDUIT TO TYSON AND GREENLAW TRANSOFRMERS RESPECTIVELY. APPROXIMATE DISTANCE IS 500 FEET FROM EXISTIN CETA TRANSFORMER TO BE REMOVED. COORDINATE OUTAGES WITH STATE OF MAINE BGS REPRESENTATIVES. SEE DRAWING CU101.
4. PROVIDE (4) 3-POLE SPACES. EACH SPACE MUST ACCOMODATE THE PHYSICAL SIZE OF A 400-AMP CIRCUIT BREAKER.
5. PROVIDE GROUND FAULT PROTECTION.
6. PROVIDE SURGE PROTECTION. SPD SHALL COMPLY WITH REQUIREMENTS OF UL MASTER LABEL LIGHTNING PROTECTION SYSTEM, TYPE 1 SPD.
7. REFER TO SHEET EP601 FOR CIRCUIT BREAKER SIZES.

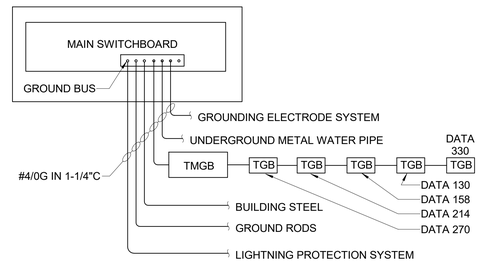


1 ONE-LINE DIAGRAM
EP501 SCALE: NOT TO SCALE



NOTES: 1. CONDUCTORS AND CONDUITS SHALL BE CONCEALED IN FINISHED SPACES AND ON BUILDING EXTERIOR.

2 TRANSFORMER GROUNDING DETAIL
EP501 SCALE: NOT TO SCALE



NOTES: 1. CONDUCTORS AND CONDUITS SHALL BE CONCEALED IN FINISHED SPACES AND ON BUILDING EXTERIOR.

3 GROUNDING ELECTRODE SYSTEM DETAIL
EP501 SCALE: NOT TO SCALE

TRANSFORMER SCHEDULE

TAG	KVA	VOLTS
THB1	30	480Δ- 208Y/120
TGMHB1	30	480Δ- 208Y/120
TGHB1	30	480Δ- 208Y/120
TGTHB1	112.5	480Δ- 208Y/120
TH11	75	480Δ- 208Y/120
TGH11	75	480Δ- 208Y/120
TH21	75	480Δ- 208Y/120
TH31	30	480Δ- 208Y/120
TMHA1	30	480Δ- 208Y/120
TMHA2	30	480Δ- 208Y/120

PANELBOARD DESIGNATIONS

G M H B 1

- PANELBOARD NUMBER
- B = BASEMENT; 1 = FIRST FLOOR; 2 = SECOND FLOOR; 3 = THIRD FLOOR; A = ATTIC
- H = HIGH VOLTAGE (480/277V); L = LOW VOLTAGE (208/120V)
- M = MECHANICAL; R = RECEPTACLE; L = LIGHTING; T = TECHNOLOGY/SECURITY/COMMUNICATIONS
- G = GENERATOR; BLANK = NORMAL USE

NO.	DATE	DESCRIPTION	BY
		REVISIONS	

STATE OF MAINE — DALE C. LINCOLN, II — No. 10443 — 1/29/25 — LICENSED — PROFESSIONAL ENGINEER

DRAWN BY: BPD
CHECK BY: DCL
NO.
DATE 01/29/2025

DEPARTMENT OF INLAND FISHERIES & WILDLIFE
TITLE: NEW OFFICE HEADQUARTERS
LOCATION: AUGUSTA, ME
TITLE THIS DWG.: ONE-LINE DIAGRAM AND DETAILS

OAK POINT ASSOCIATES
ARCHITECTURE ■ ENGINEERING ■ PLANNING
231 Main Street, Biddeford, Maine 04005 207.283.0193

DRAWING NO. EP501
SHEET NO. 218 OF 239

1/28/2025 7:31:21 PM
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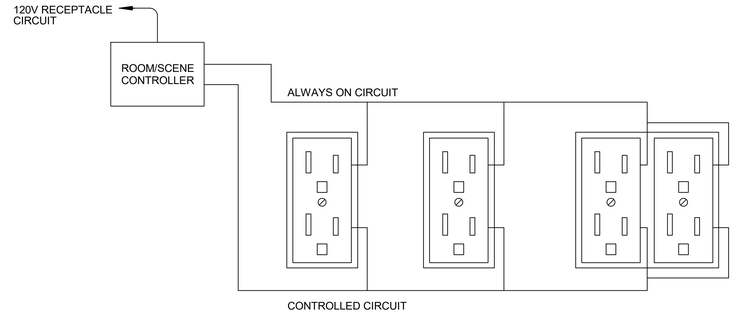
MECHANICAL EQUIPMENT WIRING SCHEDULE

EQUIPMENT	VOLTS/PHASE	WIRE SIZE	CONDUIT SIZE	FUSED/NON-FUSED	DISCONNECT SIZE	FUSE SIZE	STARTER
AHU-1	480/3	4#10, 1#10G	3/4"	FUSED	30	25	NOTE 1
AHU-2	480/3	4#10, 1#10G	3/4"	FUSED	30	25	NOTE 1
AHU-3	480/3	4#10, 1#10G	3/4"	FUSED	30	25	NOTE 1
AHU-4	480/3	4#8, 1#10G	3/4"	FUSED	60	40	NOTE 1
DOAS-1	480/3	4#10, 1#10G	3/4"	FUSED	30	30	NOTE 1
DOAS-2	480/3	4#10, 1#10G	3/4"	FUSED	30	30	NOTE 1
DOAS-3	480/3	4#10, 1#10G	3/4"	FUSED	30	30	NOTE 1
DOAS-4							
DOAS-5							
P-1	480/3	3#12, 1#12G	3/4"	FUSED	30	20	1
P-2	480/3	3#12, 1#12G	3/4"	FUSED	30	20	1
P-3	480/3	3#12, 1#12G	3/4"	FUSED	30	15	0
P-4	480/3	3#12, 1#12G	3/4"	FUSED	30	15	0
P-5	480/3	3#12, 1#12G	3/4"	FUSED	30	20	1
P-6	480/3	3#12, 1#12G	3/4"	FUSED	30	20	1
P-7	480/3	3#10, 1#10G	3/4"	FUSED	60	60	2
P-8	480/3	3#10, 1#10G	3/4"	FUSED	60	60	2
P-9	480/3	3#12, 1#12G	3/4"	FUSED	30	20	1
P-10	480/3	3#12, 1#12G	3/4"	FUSED	30	20	1
P-11	480/3	3#12, 1#12G	3/4"	FUSED	30	20	1
P-12	480/3	3#12, 1#12G	3/4"	FUSED	30	20	1
CU-1/AC-1	208/1	2#10, 1#10G	3/4"	FUSED	30	25	NOTE 1
CU-2/AC-2	208/1	2#10, 1#10G	3/4"	FUSED	30	25	NOTE 1
CU-3/AC-3	208/1	2#10, 1#10G	3/4"	FUSED	30	25	NOTE 1
CU-4/AC-4	208/1	2#10, 1#10G	3/4"	FUSED	30	25	NOTE 1
CU-5/AC-5	208/1	2#10, 1#10G	3/4"	FUSED	30	25	NOTE 1
UH-1	277/1	2#12, 1#12G	3/4"	FUSED	-	-	-
UH-2	277/1	2#12, 1#12G	3/4"	FUSED	-	-	-
UH-3	277/1	2#12, 1#12G	3/4"	FUSED	-	-	-
UH-4	277/1	2#12, 1#12G	3/4"	FUSED	-	-	-
UH-5	277/1	2#12, 1#12G	3/4"	FUSED	-	-	-
UH-6	277/1	2#12, 1#12G	3/4"	FUSED	-	-	-
UH-7	120/1	2#12, 1#12G	3/4"	FUSED	-	-	-
UH-8	120/1	2#12, 1#12G	3/4"	FUSED	-	-	-
UH-9	120/1	2#12, 1#12G	3/4"	FUSED	-	-	-
UH-10	120/1	2#12, 1#12G	3/4"	FUSED	-	-	-
UH-11	120/1	2#12, 1#12G	3/4"	FUSED	-	-	-
UH-12	120/1	2#12, 1#12G	3/4"	FUSED	-	-	-
UH-13	120/1	2#12, 1#12G	3/4"	FUSED	-	-	-
UH-14	120/1	2#12, 1#12G	3/4"	FUSED	-	-	-
UH-15	120/1	2#12, 1#12G	3/4"	FUSED	-	-	-
UH-16	120/1	2#12, 1#12G	3/4"	FUSED	-	-	-
UH-17	120/1	2#12, 1#12G	3/4"	FUSED	-	-	-
UH-18	120/1	2#12, 1#12G	3/4"	FUSED	-	-	-
UH-19	120/1	2#12, 1#12G	3/4"	FUSED	-	-	-
ELEVATOR 1	480/3	-	-	FUSED	-	-	-
ELEVATOR 2	480/3	-	-	FUSED	-	-	-
HP-1	480/3	4#3/0, 1#4G	2"	FUSED	400	250	NOTE 1
GF-1	120/1	2#12, 1#12G	3/4"	FUSED	30	15	0
WH-1	208/1	3#10, 1#10G	3/4"	FUSED	30	30	NOTE 1
RP-1	-	-	-	-	-	-	-
RP-2	-	-	-	-	-	-	-
SP-1	-	-	-	-	-	-	-
SP-2	-	-	-	-	-	-	-
CUH-1	120/1	2#12, 1#12G	3/4"	-	-	-	-
CUH-2	120/1	2#12, 1#12G	3/4"	-	-	-	-
CUH-3	120/1	2#12, 1#12G	3/4"	-	-	-	-
EUH-1	277/1	2#12, 1#12G	3/4"	FUSED	30	20	N/A
EUH-2	277/1	2#12, 1#12G	3/4"	FUSED	30	20	N/A
EUH-3	277/1	2#12, 1#12G	3/4"	FUSED	30	20	N/A
TF-1	120/1	2#12, 1#12G	3/4"	-	-	-	-
TF-2	120/1	2#12, 1#12G	3/4"	-	-	-	-
TF-3	120/1	2#12, 1#12G	3/4"	-	-	-	-

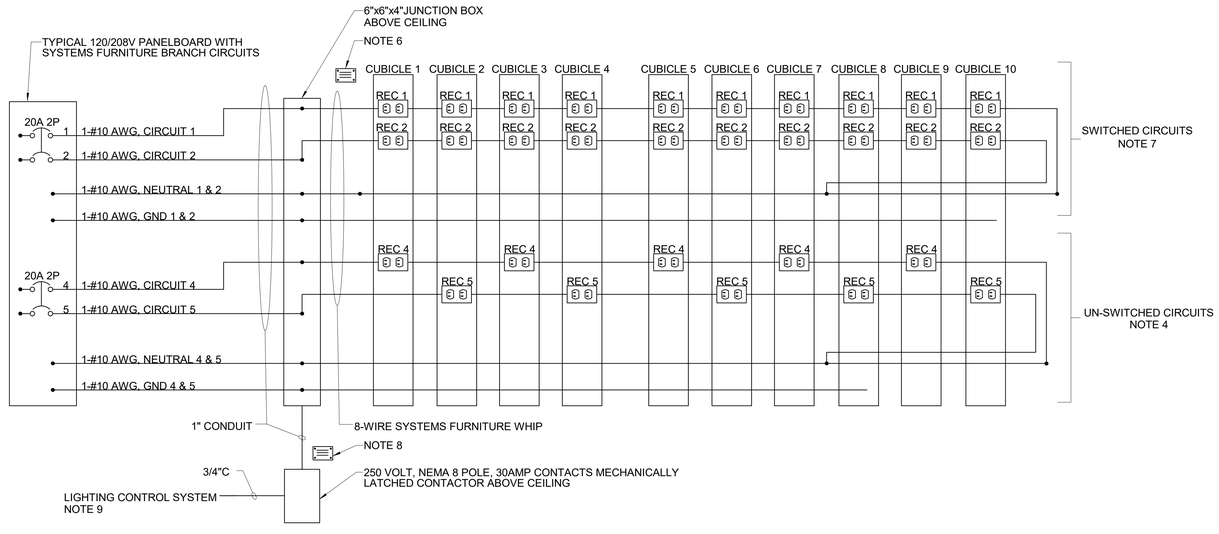
SCHEDULE NOTE:
1. STARTER/VFD PROVIDED WITH UNIT.



AUTOMATIC RECEPTACLE CONTROL DIAGRAM NOTES:

1. REFER TO PLANS FOR RECEPTACLE QUANTITIES AND CIRCUITS. AUTOMATICALLY CONTROLLED RECEPTALES ARE NOTED AS "A" RECEPTACLES ON PLANS.
2. CONNECT TO LIGHTING CONTROL SYSTEM. REFER TO DRAWING EL701.
3. WIRE DUPLEX RECEPTACLES WITH (1) AUTOMATIC SHUT OFF CONTROLLED OUTLET AND (1) NON-CONTROLLED OUTLET.
4. PROVIDE RECEPTACLE LABELED WITH CONTROLLED PER NEC 406.3.

1 / EP502 AUTOMATIC RECEPTACLE CONTROL DIAGRAM
SCALE: NOT TO SCALE



SYSTEMS FURNITURE WIRING DETAIL (10-WIRE) NOTES:

1. COORDINATE WITH THE FURNITURE INSTALLER FOR FINAL SYSTEMS FURNITURE WIRING CONFIGURATION.
2. THIS DETAIL APPLIES WHERE CUBICLES ARE FED FROM ONE 8-WIRE FURNITURE WHIP.
3. COMPLY WITH NFPA 70, SECTION 210.4 FOR MULTI-WIRE BRANCH CIRCUITS.
4. ONE 20A CIRCUIT MUST NOT SERVE MORE THAN FIVE UNSWITCHED RECEPTACLE.
5. PROVIDE ENGRAVED INFORMATIONAL LABEL LISTING SOURCE PANELBOARD AND CIRCUIT NUMBERS.
6. ONE 20A CIRCUIT MUST NOT SERVE MORE THAN TEN SWITCHED RECEPTACLES.
7. PROVIDE ENGRAVED INFORMATIONAL LABEL TO IDENTIFY MECHANICALLY HELD RELAY, CIRCUITS, LIGHTING CONTROL PANEL, AND LIGHTING CONTROL PANEL CIRCUIT NUMBER.
8. REFER TO LIGHTING CONTROL PANEL DETAILS FOR OUTPUT CIRCUITS FROM LIGHTING CONTROL PANELS WHICH PROVIDE AUTOMATICALLY CONTROLLED RECEPTACLES.
9. COORDINATE SWITCHED RECEPTACLE BUILDING OWNER AND FURNITURE INSTALLER.

3 / EP502 SYSTEMS FURNITURE WIRING DETAIL (10-WIRE)
SCALE: 12" = 1'-0"

NO.	DATE	DESCRIPTION	BY
		REVISIONS	

STATE OF MAINE
DALE C. LINCOLN, II
No. 10443
1/29/25
LICENSED
PROFESSIONAL ENGINEER

DRAWN BY: BPD
CHECK BY: DCL
NO.
DATE 01/29/2025

DEPARTMENT OF INLAND FISHERIES & WILDLIFE

TITLE: NEW OFFICE HEADQUARTERS
LOCATION: AUGUSTA, ME
TITLE THIS DWG: ELECTRICAL DETAILS AND WIRING SCHEDULE

OAK POINT ASSOCIATES
ARCHITECTURE ■ ENGINEERING ■ PLANNING
231 Main Street, Biddeford, Maine 04005 207.283.0193

DRAWING NO. EP502
SHEET NO. 219 OF 239

1/28/2025 7:31:30 PM
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PANELBOARD SCHEDULE GMDP

Location: STORAGE 002 **Volts:** 480/277 Wye **A.I.C. Rating:** 35000
Mounting: Surface **Phases:** 3 **Mains Type:** MCB
Enclosure: Type 1 **Wires:** 4 **Mains Rating:** 800 A
MCB Rating: 800 A

CKT	Circuit Description	Trip	Poles	A	B	C	A	B	C	Poles	Trip	Circuit Description	CKT
1	TGTHB1	175 A	3	55.7			8.1			3	100 A	GLHB1	2
3	--	--	--		29.9			4.5		--	--	--	4
5	--	--	--			47.9			2.9	--	--	--	6
7	GMHB1	800 A	3	338.5			66.8			3	100 A	GLH11	8
9	--	--	--		338.6			48.2		--	--	--	10
11	--	--	--			349			41.3	--	--	--	12
13	GLH21	100 A	3	18.9			18.9			3	100 A	GLH31	14
15	--	--	--		12			9.4		--	--	--	16
17	--	--	--			0			0	--	--	--	18
19	ELEVATOR E2	150 A	3	93.3			93.3			3	150 A	ELEVATOR E1	20
21	--	--	--		93.3			93.3		--	--	--	22
23	--	--	--			93.3			93.3	--	--	--	24
25													26
27													28
29													30
31													32
33													34
35													36
37	STORAGE BARN	200 A	3	75									38
39	--	--	--		75								40
41	--	--	--			75							42
			Total Load:	211097 VA	193878 VA	193392 VA							
			Total Amps:	762.1	699.9	700.1							

PANELBOARD SCHEDULE MSWBD

Location: STORAGE 002 **Volts:** 480/277 Wye **A.I.C. Rating:** 65000
Mounting: Surface **Phases:** 3 **Mains Type:** MCB
Enclosure: Type 1 **Wires:** 4 **Mains Rating:** 1600 A
MCB Rating: 1600 A

CKT	Circuit Description	Trip	Poles	A	B	C	A	B	C	Poles	Trip	Circuit Description	CKT
1	MHB1	100 A	3	33.6			64.2			3	100 A	TH21	2
3	--	--	--		33.6			63.3		--	--	--	4
5	--	--	--			33.6			53.4	--	--	--	6
7	TH31	40 A	3	34.3			60.6			3	100 A	TH11	8
9	--	--	--		24.7			60.1		--	--	--	10
11	--	--	--			26.7			58	--	--	--	12
13	MHA2	100 A	3	58.8			0			3	20 A	SPD	14
15	--	--	--		49.7			0		--	--	--	16
17	--	--	--			48.2			0	--	--	--	18
19	MHA1	200 A	3	108.1			4.4			3	40 A	THB1	20
21	--	--	--		115.1			4.4		--	--	--	22
23	--	--	--			110.6			0.4	--	--	--	24
25													26
27													28
29													30
31													32
33													34
35													36
37	GMDP	800 A	3	762.1									38
39	--	--	--		699.9								40
41	--	--	--			700.1							42
			Total Load:	311237 VA	290342 VA	285422 VA							
			Total Amps:	1126.3	1050.9	1030.4							

PANELBOARD SCHEDULE GLHB1

Location: STORAGE 004 **Volts:** 480/277 Wye **A.I.C. Rating:** 35000
Mounting: Surface **Phases:** 3 **Mains Type:** MCB
Enclosure: Type 1 **Wires:** 4 **Mains Rating:** 100 A
MCB Rating: 100 A

CKT	Circuit Description	Trip	Poles	A	B	C	A	B	C	Poles	Trip	Circuit Description	CKT
1	LTG - BASEMENT	20 A	1	4									2
3	LTG - STAIR S3	20 A	1		2			0.9		1	20 A	LTG - STAIR S1	4
5	LTG - ELEV E1	20 A	1			0.5			0.4	1	20 A	LTG - ELEV E2	6
7	LTG - SITE AND BLDG MOUNT	20 A	1	2.5									8
9	LTG - INDEPENDENCE DRIVE	20 A	1		1								10
11	LTG - EAST PARKING LOTS	20 A	1			2							12
13	LTG - WEST PATIO AND BOLLARDS	20 A	1	0.8									14
15													16
17													18
19													20
21													22
23													24
25													26
27													28
29													30
31													32
33													34
35													36
37	TGHB1	20 A	3	0.7									38
39	--	--	--		0.5								40
41	--	--	--			0							42
			Total Load:	2175 VA	1190 VA	795 VA							
			Total Amps:	8.1	4.5	2.9							

PANELBOARD SCHEDULE MHB1

Location: STORAGE 004 **Volts:** 480/277 Wye **A.I.C. Rating:** 14000
Mounting: Surface **Phases:** 3 **Mains Type:** MCB
Enclosure: Type 1 **Wires:** 4 **Mains Rating:** 100 A
MCB Rating: 100 A

CKT	Circuit Description	Trip	Poles	A	B	C	A	B	C	Poles	Trip	Circuit Description	CKT
1	DOAS-1	30 A	3	18.2			15.4			3	25 A	AHU-1	2
3	--	--	--		18.2			15.4		--	--	--	4
5	--	--	--			18.2			15.4	--	--	--	6
7													8
9													10
11													12
13													14
15													16
17													18
19													20
21													22
23													24
25													26
27													28
29													30
31													32
33													34
35													36
37													38
39													40
41													42
			Total Load:	9310 VA	9310 VA	9310 VA							
			Total Amps:	33.6	33.6	33.6							

PANELBOARD SCHEDULE GMHB1

Location: MECH 005 **Volts:** 480/277 Wye **A.I.C. Rating:** 35000
Mounting: Surface **Phases:** 3 **Mains Type:** MCB
Enclosure: Type 1 **Wires:** 4 **Mains Rating:** 800 A
MCB Rating: 800 A

CKT	Circuit Description	Trip	Poles	A	B	C	A	B	C	Poles	Trip	Circuit Description	CKT
1	P-1	20 A	3	11			11			3	20 A	P-2	2
3	--	--	--		11			11		--	--	--	4
5	--	--	--			11			11	--	--	--	6
7	P-3	20 A	3	4.8			4.8			3	15 A	P-4	8
9	--	--	--		4.8			4.8		--	--	--	10
11	--	--	--			4.8			4.8	--	--	--	12
13	P-5	20 A	3	11			11			3	20 A	P-6	14
15	--	--	--		11			11		--	--	--	16
17	--	--	--			11			11	--	--	--	18
19	P-7	60 A	3	27			27			3	60 A	P-8	20
21	--	--	--		27			27		--	--	--	22
23	--	--	--			27			27	--	--	--	24
25	HP-1	250 A	3	177.1			11			3	20 A	P-9	26
27	--	--	--		177.1			11		--	--	--	28
29	--	--	--			177.1			11	--	--	--	30
31	P-10	20 A	3	11			11			3	20 A	P-11	32
33	--	--	--		11			11		--	--	--	34
35	--	--	--			11			11	--	--	--	36
37	P-12	20 A	3	11			9.7			3	40 A	TGMHB1	38
39	--	--	--		11			9.8		--	--	--	40
41	--	--	--			11			20.3	--	--	--	42
43													44
45													46
47													48
49													50
51													52
53													54
55													56
57													58
59													60
			Total Load:	93759 VA	93782 VA	96674 VA							
			Total Amps:	338.5	338.6	349							

PANELBOARD SCHEDULE GLB1

Location: STORAGE 004 **Volts:** 120/208 Wye **A.I.C. Rating:** 10000
Mounting: Surface **Phases:** 3 **Mains Type:** MCB
Enclosure: Type 1 **Wires:** 4 **Mains Rating:** 100 A
MCB Rating: 100 A

CKT	Circuit Description	Trip	Poles	A	B	C	A	B	C	Poles	Trip	Circuit Description	CKT
1	REC - AHU-6 (WP)	20 A	1	1.5									2
3	LTG - FLAGPOLE	20 A	1		1								4
5													6
7													8
9													10
11													12
13													14
15													16
17													18
19													20
21													22
23													24
25													26
27													28
29													30
31													32
33													34
35													36
37													38
39													40
41													42
			Total Load:	180 VA	120 VA	0 VA							
			Total Amps:	1.7	1.2	0							

PANELBOARD SCHEDULE RLB1

Location: STORAGE 004 **Volts:** 120/208 Wye **A.I.C. Rating:** 10000
Mounting: Surface **Phases:** 3 **Mains Type:** MCB
Enclosure: Type 1 **Wires:** 4 **Mains Rating:** 100 A
MCB Rating: 100 A

CKT	Circuit Description	Trip	Poles	A	B	C	A	B	C	Poles	Trip	Circuit Description	CKT
1	REC - BASEMENT NORTH	20 A	1	4.5			4.5			1	20 A	REC - BASEMENT WEST	2
3	REC - BASEMENT EAST	20 A	1		4.5			4.5		1	20 A	REC - BASEMENT SOUTH	4
5	VAV BOXES BASEMENT	20 A	1			1							6
7													8
9													10
11													12
13													14
15													16
17													18
19													20
21													22
23													24
25													26
27													28
29													30
31													32
33													34
35													36
37													38
39													40
41													42
			Total Load:	1080 VA	1080 VA	120 VA							
			Total Amps:	10.2	10.2	1							

PANELBOARD SCHEDULE GMLB1

Location: MECH 005 **Volts:** 120/208 Wye **A.I.C. Rating:** 10000
Mounting: Surface **Phases:** 3 **Mains Type:** MCB
Enclosure: Type 1 **Wires:** 4 **Mains Rating:** 100 A
MCB Rating: 100 A

CKT	Circuit Description	Trip	Poles	A	B	C	A	B	C	Poles	Trip	Circuit Description	CKT
1	REC - BASEMENT ADDITION...	20 A	1	4.5			4.5			1	20 A	REC - BASEMENT ADDITION...	2
3	REC - BASEMENT	20 A	1		4.5			17.3		2	30 A	WH-1	4
5	ELEVATOR CAB E1	30 A	1			12			17.3	--	--	--	6
7	REC - MACHINE RM E1A	20 A	1	1.5			12			1	20 A	ELECATOR CAB E2	8
9	UH-19	20 A	1		2.2			1		1	20 A	CUH-3	10
11	UH-9,10,11,12	20 A	1			8.8			11	1	20 A	UH-7,8,13,14,15,16	12
13													14
15													16
17													18
19													20
21													22
23													24
25													26
27													28
29													30
31													32
33													34
35													36
37													38
39													40
41													42
			Total Load:	2700 VA	2723 VA	5615 VA							
			Total Amps:	22.5	22.7	46.8							

PANELBOARD SCHEDULE GTLB1

Location: DATA 006 **Volts:** 120/208 Wye **A.I.C. Rating:** 10000
Mounting: Surface **Phases:** 3 **Mains Type:** MCB
Enclosure: Type 1 **Wires:** 4 **Mains Rating:** 400 A
MCB Rating: 350 A

CKT	Circuit Description	Trip	Poles	A	B	C	A	B	C	Poles	Trip	Circuit Description	CKT
1	GTL11	200 A	3	66.9			63.5			3	200 A	GTL12	2
3	--	--	--		60.9			9		--	--	--	4
5	--	--	--			54			57.5	--	--	--	6
7													8
9													10
11													12
13													14
15													16
17													18
19													20
21													22
23													24
25													26
27													28
29													30
31													32
33													34
35													36
37													38
39													40
41													42
			Total Load:	14760 VA	8280 VA	12600 VA							
			Total Amps:	128.5	69	110.5							

DRAWING KEYNOTES

1 PROVIDE GFCI CIRCUIT BREAKER.

NO.	DATE	DESCRIPTION	BY
		REVISIONS	

STATE OF MAINE
DALE C. LINCOLN, II
No. 10443
1/29/25
LICENSED
PROFESSIONAL ENGINEER

DRAWN BY: BPD
CHECK BY: DCL
DATE 01/29/2025

DEPARTMENT OF INLAND FISHERIES & WILDLIFE

TITLE NEW OFFICE HEADQUARTERS
LOCATION AUGUSTA, ME
TITLE THIS DWG. PANELBOARD SCHEDULES

OAK POINT ASSOCIATES
ARCHITECTURE ■ ENGINEERING ■ PLANNING
231 Main Street, Biddeford, Maine 04005 207.283.0193

DRAWING NO. EP601
SHEET NO. 220 OF 239

1/28/2025 7:31:42 PM
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PANELBOARD SCHEDULE RL11

Location: ELEC 132 **Volts:** 120/208 Wye **A.I.C. Rating:** 10000
Mounting: Surface **Phases:** 3 **Mains Type:** MCB
Enclosure: Type 1 **Wires:** 4 **Mains Rating:** 200 A
MCB Rating: 200 A

CKT	Circuit Description	Trip	Poles	A	B	C	A	B	C	Poles	Trip	Circuit Description	CKT
1	REC - COPIER RM 167	20 A	1	1.5			12			1	20 A	REC - RMS 154 AND 156	2
3	REC - CONF RM 152	20 A	1		9			1.5		1	20 A	REC - CONF RM 152 TV	4
5	REC - RMS 148 AND 150	20 A	1			12			12	1	20 A	REC - RMS 144 AND 146	6
7	REC - RMS 140 AND 142	20 A	1	12			12			1	20 A	REC - RMS 136 AND 138	8
9	REC - RM 134	20 A	1		3			4.5		1	20 A	REC - RM 134	10
11	REC - CONF RM 155	20 A	1			12			1.5	1	20 A	REC - CONF RM 155 TV	12
13	REC - RMS 151 AND 153	20 A	1	12			12			1	20 A	REC - RMS 147 AND 149	14
15	REC - RMS 143 AND 145	20 A	1		12			12		1	20 A	REC - RMS 139 AND 141	16
17	REC - RMS 135 AND 137	20 A	1			9			4.5	1	20 A	REC - RM 133 COUNTER 1	18
19	REC - EXTERIOR FRONT	20 A	1	4.5			6			1	20 A	REC - RMS 104 AND 105	20
21	REC - ELEC RM 132	20 A	1		3			9		1	20 A	REC - RMS 101,103,106,107,108 AND 131	22
23	REC - EXTERIOR BACK	20 A	1			3			4.5	1	20 A	REC - CONF RM 102C	24
25	REC - CONF RM 102B	20 A	1	4.5			7.5			1	20 A	REC - CONF RM 102B	26
27	REC - CONF RM 102B TV	20 A	1		3			4.5		1	20 A	REC - CONF RM 102A	28
29	REC - CONF RM 102A TV	20 A	1			3			1.5	1	20 A	REC - CONF RM 102A	30
31	REC - LOBBY/MUSEUM RM 100	20 A	1	4.5			6			1	20 A	REC - OFFICE RM 111	32
33	REC - RMS 111A AND 113	20 A	1		12			9		1	20 A	REC - RMS 114 AND 115	34
35	REC - RMS 116 AND 117	20 A	1			9			9	1	20 A	REC - RMS 118 AND 119	36
37	REC - RMS 123 AND 124	20 A	1	9			9			1	20 A	REC - RMS 125 AND 126	38
39	REC - RMS 110 AND 112	20 A	1		6			1.5		1	20 A	REC - COPIER RM 110	40
41	REC - RMS 109 AND 112	20 A	1			10.5			2.4	2	20 A	JUNCTION BOX FURNITURE 112	42
43	JUNCTION BOX FURNITURE 112	20 A	2	2.4			2.4			--	--	--	44
45	--	--	--		2.4			4.5		1	20 A	REC - RM 122 COUNTER	46
47	JUNCTION BOX FURNITURE 112	20 A	2			2.4			7.5	1	20 A	REC - RMS 120,121,128, AND 129	48
49	--	--	--	2.4			3			1	20 A	REC - EXTERIOR	50
51	REC - MICROWAVE RM 133	20 A	1		12			3		1	20 A	REC - RM 133 COUNTER 2	52
53	REC - COUNTER BREAK RM 133	20 A	1			3			1.5	1	20 A	REC - MICROWAVE SHELF	54
55	JUNCTION BOX RM 103	20 A	1	1			1.5			1	20 A	REC - COUNTER RM 102C	56
57	REC - COUNTER RM 102C	20 A	1		1.5			10		1	20 A	MOTORIZED SHADE NORTH WALL RM 102C	58
59	MOTORIZED SHADE EAST WALL RM 102C, 102B	20 A	1			10			5	1	20 A	MOTORIZED SHADE EAST WALL RM 102A	60
61	VAV BOXES	20 A	1	1			1			1	20 A	AUTOMATIC VALVE TOILET 120,121	62
63	REC - MICROWAVE CANTEEN RM 122	20 A	1		12			3		1	20 A	REC - QUAD OPEN OFFICE 134	64
65	REC - QUAD OPEN OFFICE 134	20 A	1			3			6	1	20 A	REC - FILES 162, TOILET 163	66
67	REC - CONF 102B	20 A	1	1.5			16			1	20 A	REC - AV CABINET	68
69	REC -QUAD OPEN OFFICE 112	20 A	1		3			1.5		1	20 A	REC - DUPLEX OPEN OFFICE...	70
71	REC - QUAD OPEN OFFICE 112	20 A	1			3			3.6	1	20 A	TF-1	72
73													74
75	Spare	20 A	1		0			0		1	20 A	Spare	76
77	Spare	20 A	1			0			0	1	20 A	Spare	78
79	Spare	20 A	1	0			0			1	20 A	Spare	80
81	Spare	20 A	1		0			0		1	20 A	Spare	82
83	Spare	20 A	1			0			0	1	20 A	Spare	84
			Total Load:	16719 VA	16579 VA	16061 VA							
			Total Amps:	140	138.8	133.8							

PANELBOARD SCHEDULE GLH11

Location: ELEC 132 **Volts:** 480/277 Wye **A.I.C. Rating:** 14000
Mounting: Surface **Phases:** 3 **Mains Type:** MCB
Enclosure: Type 1 **Wires:** 4 **Mains Rating:** 100 A
MCB Rating: 100 A

CKT	Circuit Description	Trip	Poles	A	B	C	A	B	C	Poles	Trip	Circuit Description	CKT
1	TGH11	70 A	3	57.3			1.2			1	20 A	LTG - STAIR S2	2
3	--	--	--		36.1			0.4		1	20 A	LTG - EMERG ATTIC MECH M2	4
5	--	--	--			26.8			0.7	1	20 A	LTG - ATTIC MECH M2	6
7													8
9								12		1	20 A	EUH-1	10
11	LTG - FIRST FLOOR NORTH	20 A	1			4.7			9.2	1	20 A	LTG - FIRST FLOOR CENTER	12
13	LTG - FIRST FLOOR SOUTH	20 A	1	9.3									14
15													16
17													18
19													20
21													22
23													24
25													26
27													28
29													30
31													32
33													34
35													36
37													38
39													40
41													42
			Total Load:	18254 VA	13091 VA	11444 VA							
			Total Amps:	66.8	48.2	41.3							

PANELBOARD SCHEDULE GTL12

Location: DATA 130 **Volts:** 120/208 Wye **A.I.C. Rating:** 10000
Mounting: Surface **Phases:** 3 **Mains Type:** MCB
Enclosure: Type 1 **Wires:** 4 **Mains Rating:** 200 A
MCB Rating: 200 A

CKT	Circuit Description	Trip	Poles	A	B	C	A	B	C	Poles	Trip	Circuit Description	CKT
1	GTL22	200 A	3	6			3			1	20 A	REC - DATA RM 130	2
3	--	--	--		6			3		1	20 A	REC - DATA RM 130	4
5	--	--	--			48			3	1	20 A	REC - DATA RM 130	6
7	TWIST LOCK DATA RM 130	30 A	1	24			24			1	30 A	TWIST LOCK DATA RM 130	8
9													10
11													12
13													14
15													16
17													18
19													20
21													22
23													24
25													26
27													28
29													30
			Total Load:	6840 VA	1080 VA	6120 VA							
			Total Amps:	63.5	9	57.5							

PANELBOARD SCHEDULE GL11

Location: ELEC 132 **Volts:** 120/208 Wye **A.I.C. Rating:** 10000
Mounting: Surface **Phases:** 3 **Mains Type:** MCB
Enclosure: Type 1 **Wires:** 4 **Mains Rating:** 200 A
MCB Rating: 200 A

CKT	Circuit Description	Trip	Poles	A	B	C	A	B	C	Poles	Trip	Circuit Description	CKT
1	REC - RM 170 HOOD	20 A	1	12			12			1	20 A	REC - RM 170 HOOD	2
3	REC - RM 170 INCUBATOR	20 A	1		2.5			2.5		1	20 A	REC - RM 170 INCUBATOR	4
5	REC - RM 170 COUNTER	20 A	1			1.5			7.5	1	20 A	REC - RM 170 COUNTER/STOR	6
7	REC - RM REFRIG.	20 A	1	12			3			1	20 A	REC - RM 169 COUNTER	8
9	REC - RM 169 COUNTER	20 A	1		4.5			1.5		1	20 A	REC - RM 167 LAB EQPT	10
11	REC - OFFICE 165/CUST 166	20 A	1			12			3	1	20 A	REC - RM 167 LAB EQPT	12
13	REC - RM 170	20 A	1	1.5			4.5			1	20 A	REC - RM 167 COUNTER	14
15	REC - RM 167 LAB EQPT	20 A	1		3			1.5		1	20 A	REC - RM 171	16
17	REC - RM 159,160,162,163	20 A	1			9			6	1	20 A	REC - 171 CLEAN HOOD	18
19	REC - RM 161 NECROPSY TABLE	20 A	1	6			12			1	20 A	REC - RM 161 FISH FREEZER	20
21	REC - RM 161 LAB EQPT	20 A	1		3			1.5		1	20 A	REC - RM 161 LAB EQPT	22
23	REC - RM 171 HOOD	20 A	1			12			1.5	1	20 A	REC - RM 167 COUNTER	24
25	REC - RM 167 HOOD	20 A	1	12			12			1	20 A	REC - REFRIGERATOR RM 133	26
27	REC - REFRIGERATOR RM 122	20 A	1		12			12		1	20 A	REC - RM 167 ULTRA LOW FREEZER	28
29	REC - RM 167 FRIDGE/FREEZER	20 A	1			12			3	1	20 A	REC - RM 161	30
31	REC - 161 CLEAN HOOD	20 A	1	6			42			2	50 A	REC - RM 167 AUTOCLAVE	32
33								42		--	--	--	34
35													36
37													38
39													40
41													42
			Total Load:	15529 VA	9649 VA	7415 VA							
			Total Amps:	132.3	83.3	61.8							

1 1

PANELBOARD SCHEDULE GTL11

Location: DATA 158 **Volts:** 120/208 Wye **A.I.C. Rating:** 10000
Mounting: Surface **Phases:** 3 **Mains Type:** MCB
Enclosure: Type 1 **Wires:** 4 **Mains Rating:** 200 A
MCB Rating: 200 A

CKT	Circuit Description	Trip	Poles	A	B	C	A	B	C	Poles	Trip	Circuit Description	CKT
1	GTL21	100 A	3	36.5			3			1	20 A	REC - DATA RM 158	2
3	--	--	--		33			3		1	20 A	REC - DATA RM 158	4
5	--	--	--			51.5			3	1	20 A	REC - DATA RM 158	6
7	TWIST LOCK DATA RM 158	30 A	1	24			3			1	20 A	REC - DATA RM 158	8
9	TWIST LOCK DATA RM 158	30 A	1		24								10
11													12
13													14
15													16
17													18
19													20
21													22
23													24
25													26
27													28
29													30
			Total Load:	7920 VA	7200 VA	6480 VA							
			Total Amps:	66.9	60.9	54							

DRAWING KEYNOTE

1 PROVIDE GFCI CIRCUIT BREAKER.

NO.	DATE	DESCRIPTION	BY
		REVISIONS	

STATE OF MAINE
DALE C. LINCOLN, II
No. 10443
1/29/25
LICENSED
PROFESSIONAL ENGINEER

DRAWN BY: BPD
CHECK BY: DCL
NO.
DATE 01/29/2025

DEPARTMENT OF INLAND FISHERIES & WILDLIFE

TITLE: NEW OFFICE HEADQUARTERS
LOCATION: AUGUSTA, ME
TITLE THIS DWG: PANELBOARD SCHEDULES 2

OAK POINT ASSOCIATES
ARCHITECTURE ■ ENGINEERING ■ PLANNING
231 Main Street, Biddeford, Maine 04005 207.283.0193

DRAWING NO. EP602
SHEET NO. 221 OF 239

1/28/2025 7:40:56 PM
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PANELBOARD SCHEDULE RL21

Location: | **Volts:** 120/208 Wye | **A.I.C. Rating:** 10000
Mounting: Surface | **Phases:** 3 | **Mains Type:** MCB
Enclosure: Type 1 | **Wires:** 4 | **Mains Rating:** 200 A
MCB Rating: 200 A

CKT	Circuit Description	Trip	Poles	A	B	C	A	B	C	Poles	Trip	Circuit Description	CKT
1	REC - RECEIVING RM 279	20 A	1	4.5			10.5			1	20 A	REC - RMS 273,275,277,281	2
3	REC - EXT. RECEIVING RM 279	20 A	1		1.5			12		1	20 A	REC - RMS 266 AND 268	4
5	REC - RMS...	20 A	1			9			12	1	20 A	REC - RMS 258 AND 260	6
7	REC - RMS 262 AND 264	20 A	1	12			12			1	20 A	REC - RMS 250 AND 252	8
9	REC - RMS 254 AND 256	20 A	1		12			12		1	20 A	REC - RMS 242 AND 244	10
11	REC - RMS 246 AND 248	20 A	1			12			12	1	20 A	REC - RMS 241 AND 243	12
13	REC - COPY RM 240	20 A	1	4.5			9			1	20 A	REC - RM 245	14
15	REC - CANTEEN RM 239	20 A	1		4.5			12		1	20 A	REC - RMS 253 AND 255	16
17	REC - RMS 249 AND 251	20 A	1			12			12	1	20 A	REC - RMS 263 AND 265	18
19	REC - RMS 257 AND 259	20 A	1	12			9			1	20 A	REC - RM 261	20
21	REC - RMS 267 AND 269	20 A	1		12			12		1	20 A	REC - RMS...	22
23	REC - RMS 237 AND 238	20 A	1			7.5			1.5	1	20 A	REC - CONFERENCE RM 216 TV	24
25	REC - RMS 206,212,213	20 A	1	9			10.5			1	20 A	REC - CONFERENCE RM 216	26
27	REC - RMS 217 AND 219	20 A	1		9			6		1	20 A	REC - RMS 215,218,221	28
29	REC - RMS 223 AND 224	20 A	1			10.5			9	1	20 A	REC - RMS 225 AND 226	30
31	REC - RM 236 FURNITURE	20 A	1	4.2			7.5			1	20 A	REC - RMS 235 AND 236	32
33	REC - RMS 233 AND 234	20 A	1		9			7.5		1	20 A	REC - RM 232	34
35	REC - RM 230	20 A	1			10.5			1.5	1	20 A	REC - CONFERENCE RM 208 TV	36
37	REC - RM 209	20 A	1	12			9			1	20 A	REC - CONFERENCE RM 208	38
39	REC - RMS 229 AND 231	20 A	1		9			9		1	20 A	REC - RMS 220 AND 222	40
41	REC - RM 218 FURNITURE	20 A	1			4.2			1.5	1	20 A	REC - RM	42
43	REC - RM 231 TV	20 A	1	1.5			12			1	20 A	REC - MICROWAVE RM 239	44
45	REC - RM 243 TV	20 A	1		1.5			1		1	20 A	AUTOMATIC VALVES 2ND FLR	46
47	TF-2	20 A	1			3.6							48
49	REC - COUNTER RM 239	20 A	1	1.5			4.5			1	20 A	REC - CANTEEN RM 211	50
51	REC - MICROWAVE CANTEEN...	20 A	1		12			1		1	20 A	VAV BOXES	52
53	REC - RECEIVING RM 279	20 A	1			4.5							54
55													56
57													58
59													60
61													62
63													64
65													66
67													68
69													70
71													72
73													74
75													76
77													78
79													80
81													82
83													84
			Total Load:	17420 VA	17160 VA	14792 VA							
			Total Amps:	148.2	146	123.3							

PANELBOARD SCHEDULE MHA1

Location: ELEC 303 | **Volts:** 480/277 Wye | **A.I.C. Rating:** 35000
Mounting: Surface | **Phases:** 3 | **Mains Type:** MCB
Enclosure: Type 1 | **Wires:** 4 | **Mains Rating:** 200 A
MCB Rating: 200 A

CKT	Circuit Description	Trip	Poles	A	B	C	A	B	C	Poles	Trip	Circuit Description	CKT
1	AHU-2	25 A	3	15.4			18.2			3	30 A	DOAS-2	2
3	--	--	--		15.4			18.2		--	--	--	4
5	--	--	--			15.4			18.2	--	--	--	6
7	AHU-3	25 A	3	15.4									8
9	--	--	--		15.4								10
11	--	--	--			15.4			18.2	3	25 A	AHU-6	12
13	DOAS-3	40 A	3	34			18.2			--	--	--	14
15	--	--	--		34			18.2		--	--	--	16
17	--	--	--			34							18
19													20
21													22
23													24
25													26
27													28
29													30
31													32
33													34
35													36
37	TMHA1	45 A	3	6.9									38
39	--	--	--		13.8								40
41	--	--	--			9.3							42
			Total Load:	29950 VA	31786 VA	30538 VA							
			Total Amps:	108.1	115.1	110.6							

PANELBOARD SCHEDULE MLA1

Location: ELEC 303 | **Volts:** 120/208 Wye | **A.I.C. Rating:** 10000
Mounting: Surface | **Phases:** 3 | **Mains Type:** MCB
Enclosure: Type 1 | **Wires:** 4 | **Mains Rating:** 100 A
MCB Rating: 100 A

CKT	Circuit Description	Trip	Poles	A	B	C	A	B	C	Poles	Trip	Circuit Description	CKT
1	REC - ATTIC	20 A	1	4.5			1			1	20 A	VAV BOXES ATTIC	2
3	CU-1	25 A	2		12			12		2	25 A	CU-2	4
5	--	--	--			12			12	--	--	--	6
7	CU-3	25 A	2	12									8
9	--	--	--		12								10
11													12
13													14
15													16
17													18
19													20
21													22
23													24
25													26
27													28
29													30
31													32
33													34
35													36
37													38
39													40
41													42
			Total Load:	1908 VA	3744 VA	2496 VA							
			Total Amps:	15.9	32	21.6							

PANELBOARD SCHEDULE GTL21

Location: DATA 270 | **Volts:** 120/208 Wye | **A.I.C. Rating:** 10000
Mounting: Surface | **Phases:** 3 | **Mains Type:** MCB
Enclosure: Type 1 | **Wires:** 4 | **Mains Rating:** 100 A
MCB Rating: 100 A

CKT	Circuit Description	Trip	Poles	A	B	C	A	B	C	Poles	Trip	Circuit Description	CKT
1	GTL31	200 A	3	6			3			1	20 A	REC - DATA RM 270	2
3	--	--	--		6			3		1	20 A	REC - DATA RM 270	4
5	--	--	--			48			3	1	20 A	REC - DATA RM 270	6
7	REC - DATA RM 270	20 A	1	3			24			1	30 A	TWIST LOCK DATA RM 270	8
9	TWIST LOCK DATA RM 270	30 A	1		24								10
11													12
13													14
15													16
17													18
19													20
21													22
23													24
25													26
27													28
29													30
			Total Load:	4320 VA	3960 VA	6120 VA							
			Total Amps:	36.5	33	51.5							

PANELBOARD SCHEDULE GLH21

Location: ELEC 238 | **Volts:** 480/277 Wye | **A.I.C. Rating:** 14000
Mounting: Surface | **Phases:** 3 | **Mains Type:** MCB
Enclosure: Type 1 | **Wires:** 4 | **Mains Rating:** 100 A
MCB Rating: 100 A

CKT	Circuit Description	Trip	Poles	A	B	C	A	B	C	Poles	Trip	Circuit Description	CKT
1	EUH-2	20 A	1	12			5.4			1	20 A	LTG - SECOND FLOOR SOUTH	2
3	LTG - SECOND FLOOR CENTER	20 A	1		7.5			2.9		1	20 A	LTG - SECOND FLOOR NORTH	4
5													6
7													8
9													10
11													12
13													14
15													16
17													18
19													20
21													22
23													24
25													26
27													28
29													30
31													32
33													34
35													36
37													38
39													40
41													42
			Total Load:	4802 VA	2879 VA	0 VA							
			Total Amps:	18.9	12	0							

PANELBOARD SCHEDULE GTL22

Location: DATA 214 | **Volts:** 120/208 Wye | **A.I.C. Rating:** 10000
Mounting: Surface | **Phases:** 3 | **Mains Type:** MCB
Enclosure: Type 1 | **Wires:** 4 | **Mains Rating:** 100 A
MCB Rating: 100 A

CKT	Circuit Description	Trip	Poles	A	B	C	A	B	C	Poles	Trip	Circuit Description	CKT
1	REC - DATA RM 214	20 A	1	3			3			1	20 A	REC - DATA RM 214	2
3	REC - DATA RM 214	20 A	1		3			3		1	20 A	REC - DATA RM 214	4
5	TWIST LOCK DATA RM 214	30 A	1			24			24	1	30 A	TWIST LOCK DATA RM 214	6
7													8
9													10
11													12
13													14
15													16
17													18
19													20
21													22
23													24
25													26
27													28
29													30
31													32
33													34
35													36
37													38
39													40
41													42
			Total Load:	720 VA	720 VA	5760 VA							
			Total Amps:	6	6	48							

DRAWING KEYNOTE

1 PROVIDE GFCI CIRCUIT BREAKER.

NO.	DATE	DESCRIPTION	BY
		REVISIONS	

STATE OF MAINE
DALE C. LINCOLN, II
No. 10443
1/29/25
LICENSED
PROFESSIONAL ENGINEER

DRAWN BY: BPD
CHECK BY: DCL
NO.
DATE 01/29/2025

DEPARTMENT OF INLAND FISHERIES & WILDLIFE

TITLE: NEW OFFICE HEADQUARTERS
LOCATION: AUGUSTA, ME
TITLE THIS DWG: PANELBOARD SCHEDULES 3

OAK POINT ASSOCIATES
ARCHITECTURE ■ ENGINEERING ■ PLANNING
231 Main Street, Biddeford, Maine 04005 207.283.0193

DRAWING NO. EP603
SHEET NO. 222 OF 239

1/28/2025 7:41:14 PM
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PANELBOARD SCHEDULE RL31

Location: ELEC 303 **Volts:** 120/208 Wye **A.I.C. Rating:** 10000
Mounting: Surface **Phases:** 3 **Mains Type:** MCB
Enclosure: Type 1 **Wires:** 4 **Mains Rating:** 100 A
MCB Rating: 100 A

CKT	Circuit Description	Trip	Poles	A	B	C	A	B	C	Poles	Trip	Circuit Description	CKT	
1	REC - RMS 322 AND 324	20 A	1	12			12			1	20 A	REC - RMS 326 AND 328	2	
3	REC - RMS 314 AND 316	20 A	1		12			12		1	20 A	REC - RMS 318 AND 320	4	
5	REC - RM 310	20 A	1			7.5			12	1	20 A	REC - RMS 308 AND 312	6	
7	REC - RMS 301, 302, AND 304	20 A	1	6			6			1	20 A	REC - RM 306 PLOTTER	8	
9	REC - RMS 307...	20 A	1		1.5			4.5		1	20 A	REC - ELEC RM 302	10	
11	REC - COPIER RM 307	20 A	1			1.5			4.5	1	20 A	REC - COUNTER RM 305	12	
13	REC - RM 309	20 A	1	9			12			1	20 A	REC -RMS 300 AND 311	14	
15	REC - RMS 313 AND 315	20 A	1		12			12		1	20 A	REC - RMS 317 AND 319	16	
17	REC - CONFERENCE RM 323	20 A	1			10.5			12	1	20 A	REC - RMS 325 AND 327	18	
19	REC - MICROWAVE RM 305	20 A	1	12			6			1	20 A	REC - MECH RM M1	20	
21	REC - COUNTER RM 305	20 A	1		1.5			1.5		1	20 A	REC - RM 309 TV	22	
23	AUTOMATIC VALVES 3RD FLR	20 A	1			1			12	1	20 A	REC - REFRIGERATOR RM 305	24	1
25	TF-3	20 A	1	3.6									26	
27													28	
29													30	
31													32	
33													34	
35													36	
37													38	
39													40	
41													42	
			Total Load:	9432 VA	6840 VA	7320 VA								
			Total Amps:	79.2	57	61.6								

PANELBOARD SCHEDULE GLH31

Location: ELEC 303 **Volts:** 480/277 Wye **A.I.C. Rating:** 14000
Mounting: Surface **Phases:** 3 **Mains Type:** MCB
Enclosure: Type 1 **Wires:** 4 **Mains Rating:** 100 A
MCB Rating: 100 A

CKT	Circuit Description	Trip	Poles	A	B	C	A	B	C	Poles	Trip	Circuit Description	CKT
1	EUH-3	20 A	1	12			5.7			1	20 A	UH-1,2,3,4,5,6	2
3	LTG - ATTIC EMERGENCY	20 A	1		8.1								4
5													6
7													8
9													10
11													12
13													14
15													16
17													18
19													20
21													22
23													24
25													26
27													28
29													30
31													32
33													34
35													36
37													38
39													40
41													42
			Total Load:	4900 VA	2254 VA	0 VA							
			Total Amps:	18.9	9.4	0							

PANELBOARD SCHEDULE GTL31

Location: DATA 330 **Volts:** 120/208 Wye **A.I.C. Rating:** 10000
Mounting: Surface **Phases:** 3 **Mains Type:** MCB
Enclosure: Type 1 **Wires:** 4 **Mains Rating:** 100 A
MCB Rating: 100 A

CKT	Circuit Description	Trip	Poles	A	B	C	A	B	C	Poles	Trip	Circuit Description	CKT
1	REC - DATA RM 330	20 A	1	3			3			1	20 A	REC - DATA RM 330	2
3	REC - DATA RM 330	20 A	1		3			3		1	20 A	REC - DATA RM 330	4
5	TWIST LOCK DATA RM 330	30 A	1			24			24	1	30 A	TWIST LOCK DATA RM 330	6
7													8
9													10
11													12
13													14
15													16
17													18
19													20
21													22
23													24
25													26
27													28
29													30
			Total Load:	720 VA	720 VA	5760 VA							
			Total Amps:	6	6	48							

PANELBOARD SCHEDULE MHA2

Location: MECH ATTIC M2 **Volts:** 480/277 Wye **A.I.C. Rating:** 14000
Mounting: Surface **Phases:** 3 **Mains Type:** MCB
Enclosure: Type 1 **Wires:** 4 **Mains Rating:** 100 A
MCB Rating: 100 A

CKT	Circuit Description	Trip	Poles	A	B	C	A	B	C	Poles	Trip	Circuit Description	CKT	
1	THMA2	45 A	3	10.6			18.2			3	20 A	DOAS-4	2	1
3	--	--	--		1.5			18.2		--	--	--	4	
5	--	--	--			0			18.2	--	--	--	6	
7	AHU-4	40 A	3	30									8	
9	--	--	--		30								10	
11	--	--	--			30							12	
13													14	
15													16	
17													18	
19													20	
21													22	
23													24	
25													26	
27													28	
29													30	
31													32	
33													34	
35													36	
37													38	
39													40	
41													42	
			Total Load:	16236 VA	13716 VA	13356 VA								
			Total Amps:	58.8	49.7	48.2								

PANELBOARD SCHEDULE MLA2

Location: CORRIDOR 215 **Volts:** 120/208 Wye **A.I.C. Rating:** 10000
Mounting: Surface **Phases:** 3 **Mains Type:** MCB
Enclosure: Type 1 **Wires:** 4 **Mains Rating:** 100 A
MCB Rating: 100 A

CKT	Circuit Description	Trip	Poles	A	B	C	A	B	C	Poles	Trip	Circuit Description	CKT	
1	REC - REFRIGERATOR RM 239	20 A	1	12			12			1	20 A	REC - REFRIGERATOR RM 211	2	1
3								3		1	20 A	REC - MECH ATTIC M2	4	
5													6	
7													8	
9													10	
11													12	
13													14	
15													16	
17													18	
19													20	
21													22	
23													24	
25													26	
27													28	
29													30	
31													32	
33													34	
35													36	
37													38	
39													40	
41													42	
			Total Load:	2880 VA	360 VA	0 VA								
			Total Amps:	24.5	3.5	0								

DRAWING KEYNOTE

1 PROVIDE GFCI CIRCUIT BREAKER.

NO.	DATE	DESCRIPTION	BY
		REVISIONS	

STATE OF MAINE
DALE C. LINCOLN, II
No. 10443
1/29/25
LICENSED
PROFESSIONAL ENGINEER

DRAWN BY: BPD
CHECK BY: DCL
NO.
DATE 01/29/2025

DEPARTMENT OF INLAND FISHERIES & WILDLIFE

TITLE: NEW OFFICE HEADQUARTERS
LOCATION: AUGUSTA, ME
TITLE THIS DWG: PANELBOARD SCHEDULES 4

OAK POINT ASSOCIATES
ARCHITECTURE ■ ENGINEERING ■ PLANNING
231 Main Street, Biddeford, Maine 04005 207.283.0193

DRAWING NO. EP604
SHEET NO. 223 OF 239

1/28/2025 7:41:25 PM
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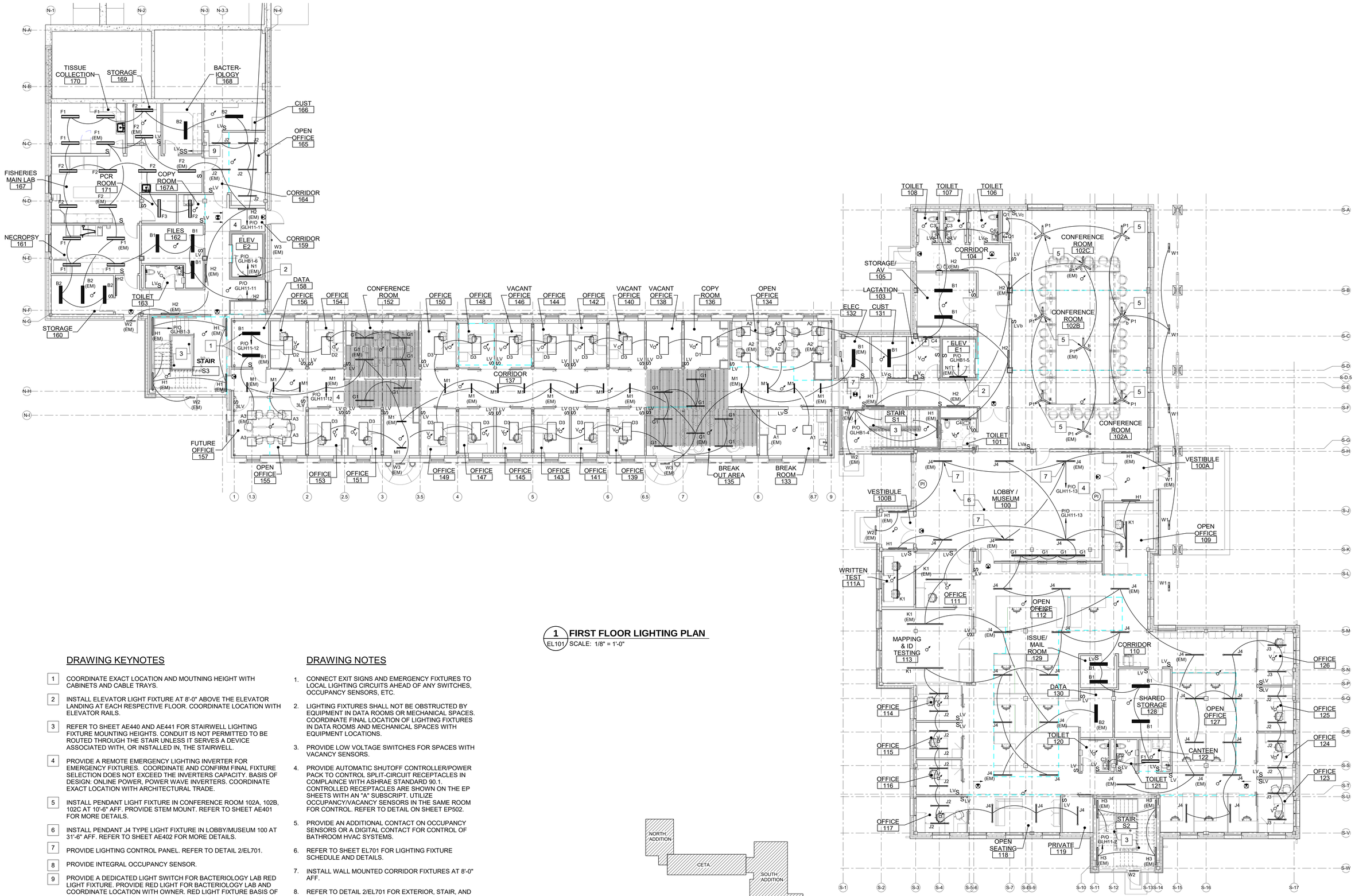


1 FIRST FLOOR LIGHTING PLAN

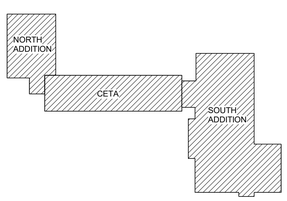
EL101 SCALE: 1/8" = 1'-0"

DRAWING KEYNOTES

1. COORDINATE EXACT LOCATION AND MOUTNING HEIGHT WITH CABINETS AND CABLE TRAYS.
2. INSTALL ELEVATOR LIGHT FIXTURE AT 8'-0" ABOVE THE ELEVATOR LANDING AT EACH RESPECTIVE FLOOR. COORDINATE LOCATION WITH ELEVATOR RAILS.
3. REFER TO SHEET AE440 AND AE441 FOR STAIRWELL LIGHTING FIXTURE MOUNTING HEIGHTS. CONDUIT IS NOT PERMITTED TO BE ROUTED THROUGH THE STAIR UNLESS IT SERVES A DEVICE ASSOCIATED WITH, OR INSTALLED IN, THE STAIRWELL.
4. PROVIDE A REMOTE EMERGENCY LIGHTING INVERTER FOR EMERGENCY FIXTURES. COORDINATE AND CONFIRM FINAL FIXTURE SELECTION DOES NOT EXCEED THE INVERTERS CAPACITY. BASIS OF DESIGN: ONLINE POWER, POWER WAVE INVERTERS. COORDINATE EXACT LOCATION WITH ARCHITECTURAL TRADE.
5. INSTALL PENDANT LIGHT FIXTURE IN CONFERENCE ROOM 102A, 102B, 102C AT 10'-6" AFF. PROVIDE STEM MOUNT. REFER TO SHEET AE401 FOR MORE DETAILS.
6. INSTALL PENDANT J4 TYPE LIGHT FIXTURE IN LOBBY/MUSEUM 100 AT 31'-6" AFF. REFER TO SHEET AE402 FOR MORE DETAILS.
7. PROVIDE LIGHTING CONTROL PANEL. REFER TO DETAIL 2/EL701.
8. PROVIDE INTEGRAL OCCUPANCY SENSOR.
9. PROVIDE A DEDICATED LIGHT SWITCH FOR BACTERIOLOGY LAB RED LIGHT FIXTURE. PROVIDE RED LIGHT FOR BACTERIOLOGY LAB AND COORDINATE LOCATION WITH OWNER. RED LIGHT FIXTURE BASIS OF DESIGN: KENALL CSESO SERIES.

DRAWING NOTES

1. CONNECT EXIT SIGNS AND EMERGENCY FIXTURES TO LOCAL LIGHTING CIRCUITS AHEAD OF ANY SWITCHES, OCCUPANCY SENSORS, ETC.
2. LIGHTING FIXTURES SHALL NOT BE OBSTRUCTED BY EQUIPMENT IN DATA ROOMS OR MECHANICAL SPACES. COORDINATE FINAL LOCATION OF LIGHTING FIXTURES IN DATA ROOMS AND MECHANICAL SPACES WITH EQUIPMENT LOCATIONS.
3. PROVIDE LOW VOLTAGE SWITCHES FOR SPACES WITH VACANCY SENSORS.
4. PROVIDE AUTOMATIC SHUTOFF CONTROLLER/POWER PACK TO CONTROL SPLIT-CIRCUIT RECEPTACLES IN COMPLAINCE WITH ASHRAE STANDARD 90.1. CONTROLLED RECEPTACLES ARE SHOWN ON THE EP SHEETS WITH AN "A" SUBSCRIPT. UTILIZE OCCUPANCY/VACANCY SENSORS IN THE SAME ROOM FOR CONTROL. REFER TO DETAIL ON SHEET EP502.
5. PROVIDE AN ADDITIONAL CONTACT ON OCCUPANCY SENSORS OR A DIGITAL CONTACT FOR CONTROL OF BATHROOM HVAC SYSTEMS.
6. REFER TO SHEET EL701 FOR LIGHTING FIXTURE SCHEDULE AND DETAILS.
7. INSTALL WALL MOUNTED CORRIDOR FIXTURES AT 8'-0" AFF.
8. REFER TO DETAIL 2/EL701 FOR EXTERIOR, STAIR, AND CORRIDOR LIGHTING CONTROL DIAGRAM.



KEYPLAN
NOT TO SCALE

PLAN NORTH

GRAPHIC SCALE

1/8"=1'-0"

8' 4' 0 8' 16'

CHECK GRAPHIC SCALE BEFORE USING

NO.	DATE	DESCRIPTION	BY
		REVISIONS	

STATE OF MAINE
DALE C. LINCOLN, II
No. 10443
1/29/25
LICENSED
PROFESSIONAL ENGINEER

DRAWN BY: RSW
CHECK BY: DCL
NO.
DATE 01/29/2025

DEPARTMENT OF INLAND FISHERIES & WILDLIFE

TITLE: NEW OFFICE HEADQUARTERS
LOCATION: AUGUSTA, ME
TITLE THIS DWG.: FIRST FLOOR LIGHTING PLAN

OAK POINT ASSOCIATES
ARCHITECTURE ◆ ENGINEERING ◆ PLANNING
231 Main Street, Biddeford, Maine 04005 207.283.0193

DRAWING NO. EL101
SHEET NO. 224 OF 239

1/28/2025 7:24:50 PM
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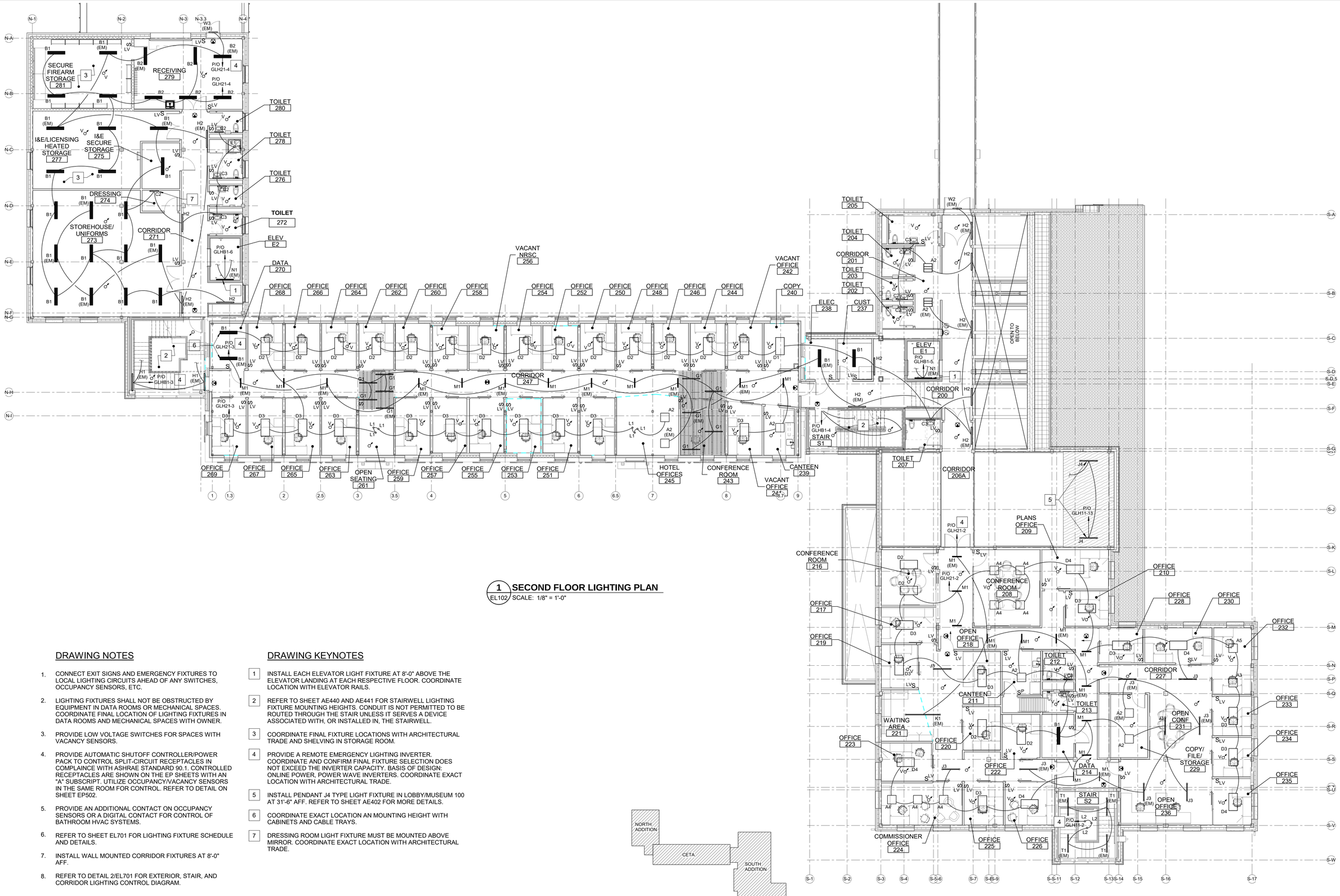

1 SECOND FLOOR LIGHTING PLAN

EL102 SCALE: 1/8" = 1'-0"

DRAWING NOTES

1. CONNECT EXIT SIGNS AND EMERGENCY FIXTURES TO LOCAL LIGHTING CIRCUITS AHEAD OF ANY SWITCHES, OCCUPANCY SENSORS, ETC.
2. LIGHTING FIXTURES SHALL NOT BE OBSTRUCTED BY EQUIPMENT IN DATA ROOMS OR MECHANICAL SPACES. COORDINATE FINAL LOCATION OF LIGHTING FIXTURES IN DATA ROOMS AND MECHANICAL SPACES WITH OWNER.
3. PROVIDE LOW VOLTAGE SWITCHES FOR SPACES WITH VACANCY SENSORS.
4. PROVIDE AUTOMATIC SHUTOFF CONTROLLER/POWER PACK TO CONTROL SPLIT-CIRCUIT RECEPTACLES IN COMPLAINCE WITH ASHRAE STANDARD 90.1. CONTROLLED RECEPTACLES ARE SHOWN ON THE EP SHEETS WITH AN "A" SUBSCRIPT. UTILIZE OCCUPANCY/VACANCY SENSORS IN THE SAME ROOM FOR CONTROL. REFER TO DETAIL ON SHEET EP502.
5. PROVIDE AN ADDITIONAL CONTACT ON OCCUPANCY SENSORS OR A DIGITAL CONTACT FOR CONTROL OF BATHROOM HVAC SYSTEMS.
6. REFER TO SHEET EL701 FOR LIGHTING FIXTURE SCHEDULE AND DETAILS.
7. INSTALL WALL MOUNTED CORRIDOR FIXTURES AT 8'-0" AFF.
8. REFER TO DETAIL 2/EL701 FOR EXTERIOR, STAIR, AND CORRIDOR LIGHTING CONTROL DIAGRAM.

DRAWING KEYNOTES

1. INSTALL EACH ELEVATOR LIGHT FIXTURE AT 8'-0" ABOVE THE ELEVATOR LANDING AT EACH RESPECTIVE FLOOR. COORDINATE LOCATION WITH ELEVATOR RAILS.
2. REFER TO SHEET AE440 AND AE441 FOR STAIRWELL LIGHTING FIXTURE MOUNTING HEIGHTS. CONDUIT IS NOT PERMITTED TO BE ROUTED THROUGH THE STAIR UNLESS IT SERVES A DEVICE ASSOCIATED WITH, OR INSTALLED IN, THE STAIRWELL.
3. COORDINATE FINAL FIXTURE LOCATIONS WITH ARCHITECTURAL TRADE AND SHELVING IN STORAGE ROOM.
4. PROVIDE A REMOTE EMERGENCY LIGHTING INVERTER. COORDINATE AND CONFIRM FINAL FIXTURE SELECTION DOES NOT EXCEED THE INVERTER CAPACITY. BASIS OF DESIGN: ONLINE POWER, POWER WAVE INVERTERS. COORDINATE EXACT LOCATION WITH ARCHITECTURAL TRADE.
5. INSTALL PENDANT J4 TYPE LIGHT FIXTURE IN LOBBY/MUSEUM 100 AT 31'-6" AFF. REFER TO SHEET AE402 FOR MORE DETAILS.
6. COORDINATE EXACT LOCATION AN MOUNTING HEIGHT WITH CABINETS AND CABLE TRAYS.
7. DRESSING ROOM LIGHT FIXTURE MUST BE MOUNTED ABOVE MIRROR. COORDINATE EXACT LOCATION WITH ARCHITECTURAL TRADE.

KEYPLAN
NOT TO SCALE

PLAN NORTH

GRAPHIC SCALE

1/8"=1'-0"

8' 4' 0 8' 16'

CHECK GRAPHIC SCALE BEFORE USING

NO.	DATE	DESCRIPTION	BY
		REVISIONS	

STATE OF MAINE
DALE C. LINCOLN, II
No. 10443
11/29/25
LICENSED
PROFESSIONAL ENGINEER

DRAWN BY: RSW
CHECK BY: DCL
NO.
DATE 01/29/2025

DEPARTMENT OF INLAND FISHERIES & WILDLIFE

TITLE: NEW OFFICE HEADQUARTERS
LOCATION: AUGUSTA, ME
TITLE THIS DWG.: SECOND FLOOR LIGHTING PLAN

OAK POINT ASSOCIATES
ARCHITECTURE ■ ENGINEERING ■ PLANNING
231 Main Street, Biddeford, Maine 04005 207.283.0193

DRAWING NO. EL102
SHEET NO. 225 OF 239

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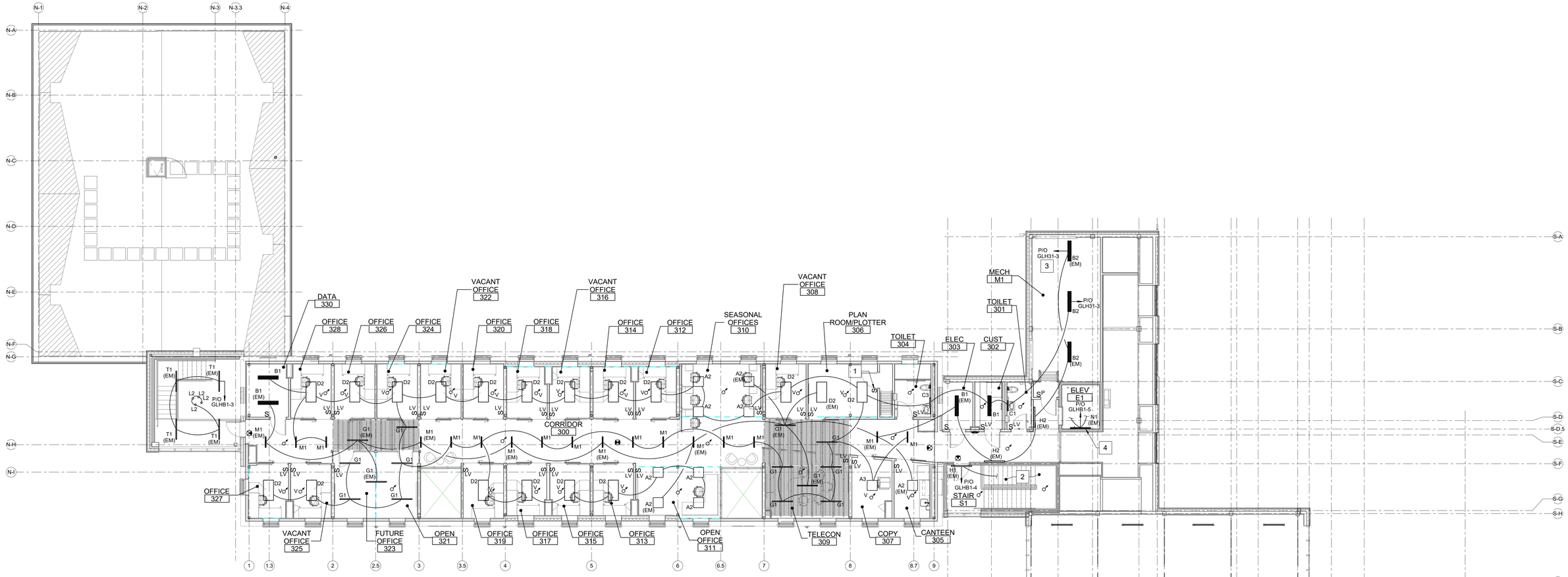


1 THIRD FLOOR LIGHTING PLAN

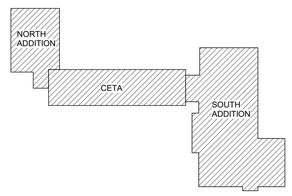
EL103 SCALE: 1/8" = 1'-0"

DRAWING NOTES

1. CONNECT EXIT SIGNS AND EMERGENCY FIXTURES TO LOCAL LIGHTING CIRCUITS AHEAD OF ANY SWITCHES, OCCUPANCY SENSORS, ETC.
2. LIGHTING FIXTURES SHALL NOT BE OBSTRUCTED BY EQUIPMENT IN DATA ROOMS OR MECHANICAL SPACES. COORDINATE FINAL LOCATION OF LIGHTING FIXTURES IN DATA ROOMS AND MECHANICAL SPACES WITH OWNER.
3. PROVIDE LOW VOLTAGE SWITCHES FOR SPACES WITH VACANCY SENSORS.
4. PROVIDE AUTOMATIC SHUTOFF CONTROLLER/POWER PACK TO CONTROL SPLIT-CIRCUIT RECEPTACLES IN COMPLAINCE WITH ASHRAE STANDARD 90.1. CONTROLLED RECEPTACLES ARE SHOWN ON THE EP SHEETS WITH AN "A" SUBSCRIPT. UTILIZE OCCUPANCY/VACANCY SENSORS IN THE SAME ROOM FOR CONTROL. REFER TO DETAIL ON SHEET EP502.
5. PROVIDE AN ADDITIONAL CONTACT ON OCCUPANCY SENSORS OR A DIGITAL CONTACT FOR CONTROL OF BATHROOM HVAC SYSTEMS.
6. REFER TO SHEET EL701 FOR LIGHTING FIXTURE SCHEDULE AND DETAILS.
7. INSTALL WALL MOUNTED CORRIDOR FIXTURES AT 8'-0" AFF.
8. REFER TO DETAIL 2/EL701 FOR EXTERIOR, STAIR, AND CORRIDOR LIGHTING CONTROL DIAGRAM.

DRAWING KEYNOTES

1. PROVIDE LIGHT SWITCH FOR MECHANICAL ATTIC SPACE.
2. REFER TO SHEET AE440 AND AE441 FOR STAIRWELL LIGHTING FIXTURE MOUNTING HEIGHTS. CONDUIT IS NOT PERMITTED TO BE ROUTED THROUGH THE STAIR UNLESS IT SERVES A DEVICE ASSOCAITED WITH, OR INSTALLED IN, THE STAIRWELL.
3. PROVIDE A REMOTE EMERGENCY LIGHTING INVERTER. COORDINATE AND CONFIRM FINAL FIXTURE SELECTION DOES NOT EXCEED THE INVERTER CAPACITY. BASIS OF DESIGN: ONLINE POWER, POWER WAVE INVERTERS. COORDINATE EXACT LOCATION WITH ARCHITECTURAL TRADE.
4. INSTALL ELEVATOR LIGHT FIXTURE AT 8'-0" ABOVE THE ELEVATOR LANDING AT EACH RESPECTIVE FLOOR. COORDINATE LOCATION WITH THE ELEVATOR RAILS.



KEYPLAN NOT TO SCALE — PLAN NORTH

GRAPHIC SCALE

1/8"=1'-0" 8' 4' 0 8' 16'

CHECK GRAPHIC SCALE BEFORE USING

NO.	DATE	DESCRIPTION	BY
		REVISIONS	

STATE OF MAINE — DALE C. LINCOLN, II — No. 10443 — 1/29/25 — LICENSED — PROFESSIONAL ENGINEER

DRAWN BY: RSW
CHECK BY: DCL
NO.
DATE 01/29/2025

DEPARTMENT OF INLAND FISHERIES & WILDLIFE

TITLE: NEW OFFICE HEADQUARTERS
LOCATION: AUGUSTA, ME
TITLE THIS DWG: THIRD FLOOR LIGHTING PLAN

OAK POINT ASSOCIATES
ARCHITECTURE ■ ENGINEERING ■ PLANNING
231 Main Street, Biddeford, Maine 04005 207.283.0193

DRAWING NO. EL103
SHEET NO. 226 OF 239

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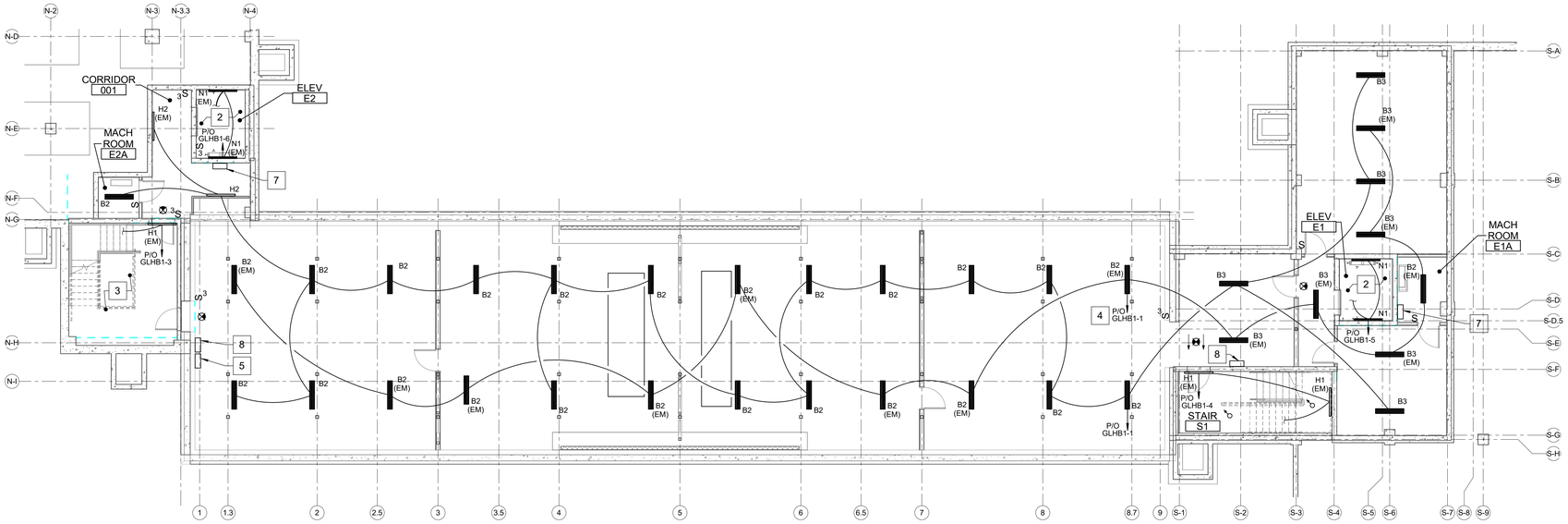


1 BASEMENT LIGHTING PLAN

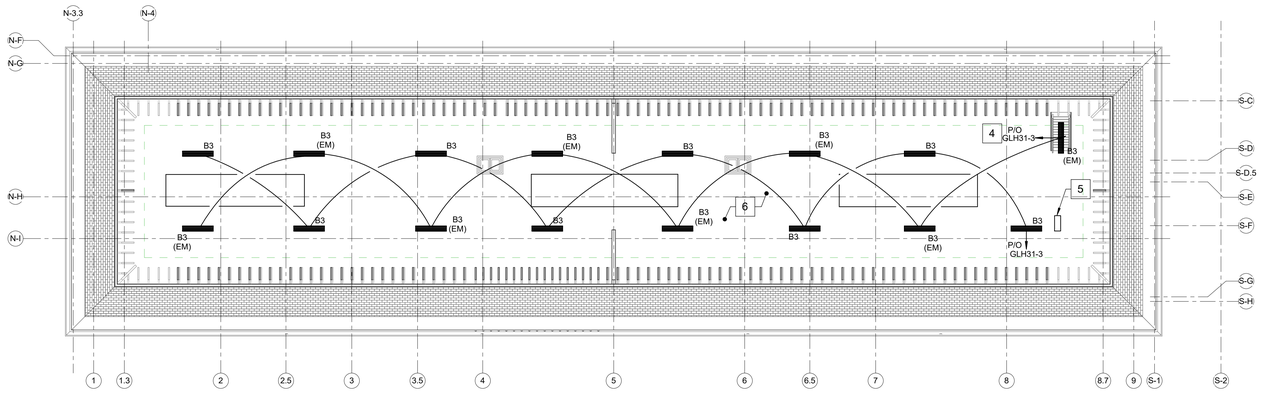
EL104 SCALE: 1/8" = 1'-0"

DRAWING NOTES

1. CONNECT EXIT SIGNS AND EMERGENCY FIXTURES TO LOCAL LIGHTING CIRCUITS AHEAD OF ANY SWITCHES, OCCUPANCY SENSORS, ETC.
2. LIGHTING FIXTURES SHALL NOT BE OBSTRUCTED BY EQUIPMENT IN DATA ROOMS OR MECHANICAL SPACES. COORDINATE FINAL LOCATION OF LIGHTING FIXTURES IN DATA ROOMS AND MECHANICAL SPACES WITH OWNER.
3. PROVIDE LOW VOLTAGE SWITCHES FOR SPACES WITH VACANCY SENSORS.

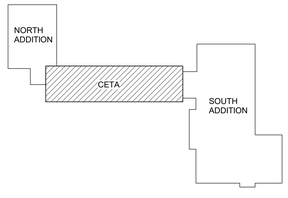
DRAWING KEYNOTES

1. PROVIDE FIXTURE WITH INTEGRAL EMERGENCY BATTERY.
2. INSTALL ELEVATOR PIT LIGHT FIXTURES AT 5'-0". COORDINATE LIGHTING FIXTURE AND SWITCH LOCATIONS IN ELEVATOR PIT WITH ELEVATOR RAILS. PROVIDE WEATHERPROOF SWITCH FOR ELEVATOR PIT.
3. REFER TO SHEET AE440 AND AE441 FOR STAIRWELL LIGHTING FIXTURE MOUNTING HEIGHTS. CONDUIT IS NOT PERMITTED TO BE ROUTED THROUGH THE STAIR UNLESS IT SERVES A DEVICE ASSOCIATED WITH, OR INSTALLED IN, THE STAIRWELL.
4. CONNECT EMERGENCY CIRCUIT TO REMOTE EMERGENCY LIGHTING INVERTER AHEAD OF NORMAL LIGHTING FIXTURES.
5. PROVIDE A REMOTE EMERGENCY LIGHTING INVERTER. COORDINATE AND CONFIRM FINAL FIXTURE SELECTION DOES NOT EXCEED THE INVERTERS CAPACITY. BASIS OF DESIGN: ONLINE POWER, POWER WAVE INVERTERS.
6. MECHANICAL ATTIC LIGHT SWITCH LOCATED IN PLAN ROOM/PLOTTER 306. REFER TO EL103 FOR EXACT LOCATION.
7. PROVIDE A DEDICATED REMOTE EMERGENCY LIGHTING INVERTER FOR ELEVATOR SHAFT LIGHTING. COORDINATE AND CONFIRM FINAL FIXTURE SELECTION DOES NOT EXCEED THE INVERTERS CAPACITY. BASIS OF DESIGN: ONLINE POWER, POWER WAVE INVERTERS.
8. PROVIDE A DEDICATED REMOTE EMERGENCY LIGHTING INVERTER FOR STAIRWELL LIGHTING. COORDINATE AND CONFIRM FINAL FIXTURE SELECTION DOES NOT EXCEED THE INVERTERS CAPACITY. BASIS OF DESIGN: ONLINE POWER, POWER WAVE INVERTERS.



2 ATTIC LIGHTING PLAN

EL104 SCALE: 1/8" = 1'-0"



KEYPLAN
NOT TO SCALE

PLAN NORTH

GRAPHIC SCALE

1/8"=1'-0"

8' 4' 0 8' 16'

CHECK GRAPHIC SCALE BEFORE USING

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STATE OF MAINE
DALE C. LINCOLN, II
No. 10443
1/29/25
LICENSED
PROFESSIONAL ENGINEER

DRAWN BY: RSW
CHECK BY: DCL
NO.
DATE 01/29/2025

DEPARTMENT OF INLAND FISHERIES & WILDLIFE

TITLE: NEW OFFICE HEADQUARTERS

LOCATION: AUGUSTA, ME

TITLE THIS DWG.: BASEMENT AND ATTIC LIGHTING PLANS

OAK POINT ASSOCIATES
ARCHITECTURE ■ ENGINEERING ■ PLANNING
231 Main Street, Biddeford, Maine 04005 207.283.0193

DRAWING NO.: EL104

SHEET NO.: 227 OF 239

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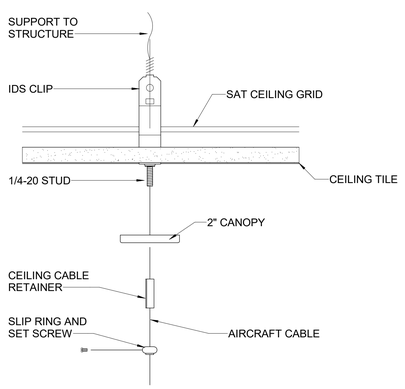
LIGHTING FIXTURE SCHEDULE

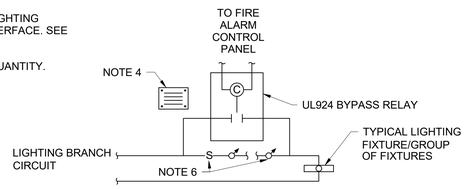
TYPE	DESCRIPTION	SOURCE	LUMENS	VOLTS	W/VA	MOUNTING	NOTES	MANUFACTURER	CATALOG NUMBER
A1	RECESSED 2' X 2' DIRECT/INDIRECT	LED	1597	277	13.4	RECESSED	1	COLUMBIA	LCAT22-35VWG-EDU-(ELL14)
A2	RECESSED 2' X 2' DIRECT/INDIRECT	LED	2228	277	16.4	RECESSED	1	COLUMBIA	LCAT22-35MWG-EDU-(ELL14)
A3	RECESSED 2' X 2' DIRECT/INDIRECT	LED	2870	277	20.6	RECESSED	1	COLUMBIA	LCAT22-35LWG-EDU-(ELL14)
A4	RECESSED 2' X 2' DIRECT/INDIRECT	LED	3493	277	25.8	RECESSED	1	COLUMBIA	LCAT22-35MLG-EDU-(ELL14)
A5	RECESSED 2' X 2' DIRECT/INDIRECT	LED	4000	277	35.1	RECESSED	1	COLUMBIA	LCAT22-35HLG-EDU-(ELL14)
B1	LOW PROFILE WRAPAROUND	LED	2368	277	18.8	SURFACE/CHAIN	1,4	COLUMBIA	LAW4-35XW-EU-(ELL14)
B2	LOW PROFILE WRAPAROUND	LED	3292	277	26.6	SURFACE/CHAIN	1,4	COLUMBIA	LAW4-35VW-EU-(ELL14)
B3	LOW PROFILE WRAPAROUND	LED	4405	277	37.4	SURFACE/CHAIN	1,4	COLUMBIA	LAW4-35LW-EU-(ELL14)
C1	2' X 4" WALL DIRECT/INDIRECT	LED	2800	277	23	WALL	1,2,4	LITECONTROL	2L-W-ID-LPAD-2-SOF-C1-35K-I030-D040-D01-1C-UNV-(EF)
C2	2' X 4" WALL DIRECT/INDIRECT	LED	3200	277	26	WALL	1,2,4	LITECONTROL	2L-W-ID-LPAD-2-SOF-C1-35K-I030-D050-D01-1C-UNV-(EF)
C3	2' X 4" WALL DIRECT/INDIRECT	LED	3600	277	30	WALL	1,2,4	LITECONTROL	2L-W-ID-LPAD-2-SOF-C1-35K-I030-D060-D01-1C-UNV-(EF)
C4	2' X 4" WALL DIRECT/INDIRECT	LED	4001	277	33	WALL	1,2,4	LITECONTROL	2L-W-ID-LPAD-2-SOF-C1-35K-I030-D070-D01-1C-UNV-(EF)
D1	RECESSED 2X4 DIRECT/INDIRECT	LED	3301	277	24.3	RECESSED	1	COLUMBIA	LCAT24-35VWG-EDU-(ELL14)
D2	RECESSED 2X4 DIRECT/INDIRECT	LED	4969	277	36	RECESSED	1	COLUMBIA	LCAT24-35MLG-EDU-(ELL14)
D3	RECESSED 2X4 DIRECT/INDIRECT	LED	5720	277	39.7	RECESSED	1	COLUMBIA	LCAT24-35HLG-EDU-(ELL14)
D4	RECESSED 2X4 DIRECT/INDIRECT	LED	7354	277	52.9	RECESSED	1	COLUMBIA	LCAT24-35VLG-EDU-(ELL14)
E1	6" SHOWER DOWNLIGHT	LED	614	277	7.3	RECESSED	1,6	PRESCOLITE	LFR-6RD-M-10L35K8-DM1 WITH LFR-6RD-T-SH-WTGML
F1	DECORATIVE WRAPAROUND	LED	4870	277	40.3	CABLE	1,4	COLUMBIA	RLW4-35ML-FAW-EDU-(ELL14)-CM48SCF3-KIT
F2	DECORATIVE WRAPAROUND	LED	5679	277	47.8	CABLE	1,4	COLUMBIA	RLW4-35HL-FAW-EDU-(ELL14)-CM48SCFC-KIT
F3	DECORATIVE WRAPAROUND	LED	7145	277	55.7	CABLE	1,4	COLUMBIA	RLW4-35VL-FAW-EDU-(ELL14)-CM48SCF3-KIT
G1	2" RECESSED WALL DIRECT	LED	2200	277	19.7	RECESSED	1,5,7	ALCON LTG	12100-10-P-4-BK-35K
H1	4' X 4" WALL DIRECT/INDIRECT	LED	3600	277	30	WALL	1,4	LITECONTROL	4L-W-ID-LPA-4-SOF-C1-35K-I030-D060-D01-1C-UNV-(EF)
H2	4' X 4" WALL DIRECT/INDIRECT	LED	4401	277	37	WALL	1,4	LITECONTROL	4L-W-ID-LPA-4-SOF-C1-35K-I030-D080-D01-1C-UNV-(EF)
H3	4' X 4" WALL DIRECT/INDIRECT	LED	2000	277	17	WALL	1,4	LITECONTROL	4L-W-ID-LPA-4-SOF-C1-35K-I030-D050-D01-1C-UNV-(EF)
J1	4' X 4" PENDANT DIRECT/INDIRECT	LED	3264	277	27.2	PENDANT	1,3,4,5	LITECONTROL	4L-P-ID-LPA-4-SOF-C1-35K-I030-D050-D01-1C-UNV-(EF)
J2	4' X 4" PENDANT DIRECT/INDIRECT	LED	3589	277	28.8	PENDANT	1,3,4,5	LITECONTROL	4L-P-ID-LPA-4-SOF-C1-35K-I030-D060-D01-1C-UNV-(EF)
J3	4' X 4" PENDANT DIRECT/INDIRECT	LED	3987	277	32.3	PENDANT	1,3,4,5	LITECONTROL	4L-P-ID-LPA-4-SOF-C1-35K-I030-D070-D01-1C-UNV-(EF)
J4	4' X 4" PENDANT DIRECT/INDIRECT	LED	4783	277	39.6	PENDANT	1,3,4,5	LITECONTROL	4L-P-ID-LPA-4-SOF-C1-35K-I030-D090-D01-1C-UNV-(EF)
K1	8' X 4" PENDANT DIRECT/INDIRECT	LED	9566	277	79.2	PENDANT	1	LITECONTROL	4L-P-ID-LPA-8-SOF-C1-35K-I030-D090-D01-1C-UNV-(EF)
L1	16" DIAMETER PENDANT	LED	1600	277	16	PENDANT	1,2,4	VISA LTG	CP2030-L35K-L35K-MVOLT-MED-RMD
M1	2' ARCHITECTURAL T-GRID LINEAR	LED	1269	277	10.9	RECESSED IN GRID	1	ALLURE	GD-L2F-35-916ML
N1	ELEVATOR SHAFT FIXTURE	LED	3600	277	26.8	SURFACE	2,9	COLUMBIA	MPS-4-35-MW-F-W-E-U-MPSWG2
P1	ARCHITECTURAL Y-SHAPED, PENDANT	LED	6148	277	72	PENDANT	1,2,4	ALCON LTG	12100-20-Y-P-4-D13-I4-35K-9-XX-FL-STX-SH-OS-BAA
Q1	3 INCH, DOWNLIGHT	LED	641	277	7.8	RECESSED	1,2,4	PRESCOLITE	LTR-3RD-H-SL-06L-DM1-LTR-ERD-T-SL-35K-90-MD-S
T1	2"X4' SURFACE DIRECT	LED	3200	277	26.8	SURFACE MOUNT	1,3,4,6	LITECONTROL	2L-S-D-4-SOF-XX-35K9-D080-D01-1C-UNV
R2	ROADWAY FIXTURE	LED	4211	277	39	16 FOOT POLE	4,8	HOLOPHANE	WFCL3-P10-40K-XXXX-FC2-CLGL
R4	ROADWAY FIXTURE	LED	4093	277	39	16 FOOT POLE	4,8	HOLOPHANE	WFCL3-P10-40K-XXXX-FC4-CLGL
S2S	SITE LIGHT - TYPE 2	LED	4345	277	33.2	16 FOOT POLE	4,8	LITHONIA	DSX0-LED-P1-40K-80CRI-T2M
SB1	GARDEN SHORT LED BOLLARD	LED	707	277	15	BOLLARD	10	LOUIS POULSEN	CHRISTIAN FLINDT GARDEN SHORT LED BOLLARD
SB3	BOLLARD LIGHT	LED	195	277	4.1	GROUND	4,8	LANDSCAPE FORMS	AH-001L3-050F-UV1
SP1	GARDEN LONG LED BOLLARD	LED	3244	277	37	BOLLARD	10	LOUIS POULSEN	CHRISTIAN FLINDT GARDEN LONG LED BOLLARD
S4F	SITE LIGHT - TYPE 4 - FORWARD THROW	LED	5795	277	45	20 FOOT POLE	4,8	LITHONIA	DSX0-LED-P2-40K-80CRI-TFTM
S4FS	SITE LIGHT - TYPE 4 - FORWARD THROW	LED	4492	277	33.2	14 FOOT POLE	4,8	LITHONIA	DSX0-LED-P1-40K-80CRI-TFTM
W1	SURFACE MOUNT EXTERIOR	LED	1138	277	13.1	SURFACE MOUNT	1,2,4	KIM	RN-D-2-3-3K8-SM-DL-UNV-S
W2	MULLION MOUNT EXTERIOR	LED	644	277	13.4	MULLION MOUNT	1,2,4	VISA LTG	OW2480-L35K-L
W3	WALL MOUNT EXTERIOR	LED	1138	277	13.1	WALL MOUNT	1,2,4	KIM	RN-D-2-3-3K8-SM-DL-UNV-W
Y1	RECESSED LED HANDRAIL LUMINAIRE	LED	160	277	1.5	RECESSED	10	WILA	PUCK-XT-RD-30K-ASB-RMTPS-UNV-20-500-DIM
E	EXIT SIGNS - EDGE LIT TYPE-SINGLE FACE	LED	-	277	3.3	RECESSED/SURFACE	1	DUAL LITE	LES-C/W-S-R-N-E
E	EXIT SIGNS - EDGE LIT TYPE	LED	-	277	3.3	RECESSED/SURFACE	1	DUAL LITE	LES-C/W-S-R-N-E
	EXIT SIGNS - THERMOPLASTIC TYPE	LED	-	277	3.3	RECESSED/SURFACE	1	DUAL LITE	EVE-U-R-W-E

FIXTURE SCHEDULE NOTES

1. COORDINATE MOUNTING TYPE (GRID (SAT), FLANGE (GYPSUM), OR SURFACE/SUSPENDED (NO CEILING) WITH CEILING/WALL/FLOOR TYPE.
2. VERIFY MOUNTING WITH ARCHITECT BEFORE INSTALLATION OF WIRE, CONDUIT AND JUNCTION BOXES.
3. VERIFY ACTUAL LENGTH OF CONTINUOUS ROWS AS SHOWN ON LIGHTING PLANS.
4. FINAL COLOR SELECTION MUST BE MADE BY ARCHITECT FROM MANUFACTURER'S SUBMITTALS.
5. CONFIRM PENDANT LENGTH PRIOR TO ORDERING.
6. PROVIDE ACCESSORIES FOR SHOWER APPLICATIONS, WHERE REQUIRED.
7. CONFIRM MOUNTING WITH WOOD CEILING PANEL MANUFACTURER PRIOR TO ORDERING.
8. EXTERIOR FIXTURES MUST BE CONTROLLED BY EXTERIOR PHOTOCELL AND PROGRAMMABLE TIMECLOCK VIA THE LIGHTING CONTROL SYSTEM. LIGHTING CONTROL SYSTEM MUST INTERFACE WITH THE DDC SYSTEM VIA THE DDC BACNET INTERFACE. SEE DETAIL 6/EL701.
9. PROVIDE INTEGRAL OR EXTERNAL LIGHT FIXTURE GUARD.
10. PROVIDE REMOTE POWER SUPPLY. CONFIRM AND COORDINATE FINAL POWER SUPPLY CAPACITY MEETS FIXTURE QUANTITY.



3 TYPICAL PENDANT FIXTURE MOUNTING DETAIL
EL701 SCALE: NOT TO SCALE



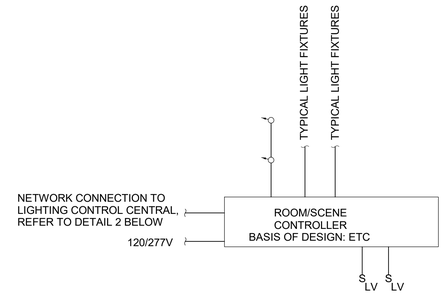
LIGHTING BYPASS CONTROL DIAGRAM NOTES:

1. PROVIDE 120V AC BYPASS RELAY WITH MINIMUM 20 AMP, 120V RATED NORMALLY OPEN AND NORMALLY CLOSED CONTACTS. NORMALLY CLOSED BYPASS RELAY CONTACTS MUST BE HELD OPEN BY 120 VOLT POWER. NORMALLY CLOSED CONTACT MUST CLOSE WHEN FIRE ALARM/MASS COMMUNICATION SYSTEM IS IN ALARM AND MUST BYPASS THE LIGHTING SWITCHES, CONTROLS AND OCCUPANCY/VACANCY SENSORS.
2. BYPASS RELAY MUST BE UL LISTED FOR EMERGENCY LIGHTING CONTROL USE.
3. PROVIDE ONE RELAY PER SEPARATELY CONTROLLED LIGHTING GROUP/CIRCUIT IN EACH AREA INDICATED AND ALONG PATHS OF EGRESS.
4. PROVIDE ENGRAVED INFORMATIONAL SIGN TO LABEL BYPASS RELAY WITH CIRCUIT NUMBER, FIRE ALARM CONTROL MODULE ADDRESS AND LIGHTING AREA SERVED. INDICATE RELAY LOCATIONS ON RECORD DRAWINGS. INCLUDE A LISTING OF BYPASS RELAYS WITH FIRE ALARM INFORMATION, CONTROL CIRCUIT, AND AREA CONTROLLED IN TABLE FORMAT AND INCLUDE TABLE IN OPERATION AND MAINTENANCE MANUAL.
5. COORDINATE WORK, INCLUDING LOCATIONS OF LIGHTING BYPASS RELAYS, WITH FIRE ALARM INSTALLER.
6. SINGLE POLE SWITCH AND LINE VOLTAGE MOTION SENSORS SHOWN. DETAIL ALSO APPLIES WHERE S_3 AND S_4 SWITCHES OR LOW VOLTAGE CONTROLS ARE INDICATED.
7. PROVIDE FOR PATH OF EGRESS AREAS, TO INCLUDE CORRIDORS AND OTHER AREAS AS INDICATED.
8. INSTALL BYPASS RELAY ABOVE SUSPENDED/ACCESSIBLE CEILING IN AN ACCESSIBLE LOCATION WITHIN THE ROOM CONTROLLED, IN AN ADJACENT ELECTRICAL ROOM, ADJACENT TO THE ASSOCIATED LIGHTING CONTROL PANEL, OR AS INDICATED. WHERE AN ACCESSIBLE LOCATION IS NOT PRESENT IN THE AREA BEING CONTROLLED, INSTALL RELAY ABOVE SUSPENDED CEILINGS IN AN ACCESSIBLE LOCATION IN AN ADJACENT SPACE AND LABEL. INDICATE RELAY LOCATIONS ON THE AS-BUILT DRAWINGS.
9. COORDINATE WITH FIRE ALARM INSTALLER. PROVIDE TESTING OF EACH RELAY. DOCUMENT TEST RESULTS ON RELAY SUMMARY TABLE.

4 LIGHTING BYPASS RELAY CONTROL DIAGRAM
EL701 SCALE: NOT TO SCALE

DRAWING NOTES

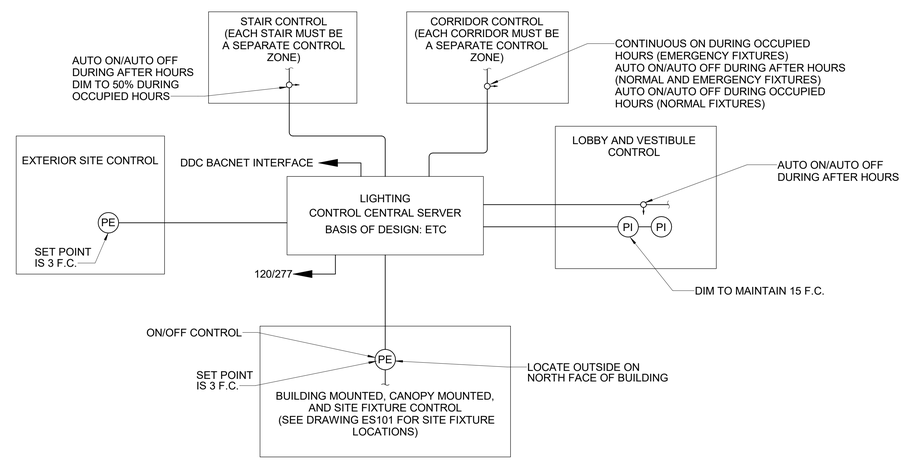
1. PROVIDE BACNET INTERFACE DEVICE SO BAS SYSTEM CAN MONITOR THE STATE OF EACH SENSOR.
2. EMERGENCY LIGHTS MUST DIM TO 50% AFTER HOURS DURING UNOCCUPIED CONDITIONS.



TYPICAL CONFERENCE RM LIGHTING CONTROL NOTES:

1. WIRING, COMPONENTS AND INSTALLATION REQUIREMENTS WILL VARY DEPENDING ON SYSTEM.
2. INSTALLATION OF PHOTOCELLS, OCCUPANCY SENSORS, WIRING, ETC. MUST BE PER MANUFACTURERS RECOMMENDATIONS.
3. CONTROL WIRING MUST BE PER MANUFACTURERS RECOMMENDATION.
4. OCCUPANCY SENSORS PROVIDE AUTO ON/OFF (FIELD SELECTABLE FOR MANUAL ON/AUTO OFF) WITH 20 MIN TIME DELAY DURING AFTER HOUR SERVICE.
5. LOSS OF POWER MUST TURN ALL RELAYS ON.
6. DIAGRAM INDICATES CONTROL DEVICES AND WIRING ONLY. REFER TO LIGHTING DRAWINGS FOR BRANCH CIRCUITS.
7. PROVIDE ADDITIONAL DEVICES FOR FULL COVERAGE OF SPACE AS DIAGRAMS INDICATE DESIGN INTENT.
8. EACH SWITCH STATION MUST BE ABLE TO TURN ON/OFF EACH LIGHTING ZONE, RAISE/LOWER EACH LIGHTING ZONE AND AUTOMATICALLY CONTROL THE LIGHTING ZONES FOR DAYLIGHT HARVESTING. THE NUMBER OF PUSHBUTTONS NEEDED WILL VARY FOR DIFFERENT MANUFACTURERS. SWITCH STATIONS MUST HAVE ENGRAVED, LABELED DIRECTORIES ASSIGNED TO PUSHBUTTONS INDICATING CONTROL ZONES (FOR EXAMPLE: "PENDANTS", "WEST WALL" OR "SECOND FLOOR MEZZANINE").
9. CLASSROOMS MUST HAVE A "RESTRICT OFF" FUNCTION WHICH WILL KEEP LIGHTS ON AT MINIMUM LEVEL WHEN AVAILABLE DAYLIGHT TURNS LIGHTS OFF.
10. THE LIGHTING CONTROL SYSTEM MUST BE ACCESSIBLE VIA A WEB BASED GRAPHICAL USER INTERFACE.
11. CONTROLLER MUST HAVE VOLTAGE DIVIDER FOR NORMAL AND EMERGENCY CIRCUITS.
12. PROVIDE BACNET INTERFACE DEVICE SO BAS SYSTEM CAN MONITOR THE STATE OF EACH SENSOR.

1 TYPICAL CONFERENCE RM LIGHTING CONTROL
EL701 SCALE: NOT TO SCALE



NOTES:
1. WIRING, COMPONENTS AND INSTALLATION REQUIREMENTS WILL VARY DEPENDING ON SYSTEM.
2. LIGHTING MUST BE CONTROLLED (ON/OFF) VIA LIGHTING CONTROL SYSTEM FOR NORMAL HOURS. OCCUPANCY SENSORS AND PHOTOCELLS MUST TRIGGER 20 MIN TEMPORARY OVERRIDE DURING AFTER HOUR SERVICE.
3. INSTALLATION OF PHOTOCELLS, OCCUPANCY SENSORS, WIRING, ETC. MUST BE PER MANUFACTURERS RECOMMENDATIONS.
4. TIME SCHEDULES MUST BE COORDINATED WITH OWNER AT STARTUP.
5. CONTROL WIRING MUST BE PER MANUFACTURERS RECOMMENDATION.
6. OCCUPANCY SENSORS PROVIDE AUTO ON/OFF WITH 20 MIN TIME DELAY DURING AFTER HOUR SERVICE.
7. LOSS OF POWER MUST TURN ALL RELAYS ON.
8. DIAGRAM INDICATES CONTROL DEVICES AND WIRING ONLY. REFER TO LIGHTING DRAWINGS FOR BRANCH CIRCUITS.
9. PROVIDE NUMBER OF CONTROL PANELS FOR COMPLETE COVERAGE.
10. THE LIGHTING CONTROL SYSTEM MUST BE ACCESSIBLE VIA A WEB BASED GRAPHICAL USER INTERFACE.
11. CONTROLLER MUST HAVE VOLTAGE DIVIDER FOR NORMAL AND EMERGENCY CIRCUITS.
12. PROVIDE BACNET INTERFACE DEVICE SO BAS SYSTEM CAN MONITOR THE STATE OF EACH SENSOR.
13. CONTROLLER MUST HAVE NETWORK JACK FOR FUTURE NETWORK CONNECTION.

2 TYPICAL LIGHTING CONTROLS DIAGRAM
EL701 SCALE: NOT TO SCALE

NO.	DATE	DESCRIPTION	BY
		REVISIONS	

STATE OF MAINE — DALE C. LINCOLN, II — No. 10443 — 1/29/25 — LICENSED PROFESSIONAL ENGINEER

DRAWN BY: RSW
CHECK BY: DCL
DATE 01/29/2025

DEPARTMENT OF INLAND FISHERIES & WILDLIFE
TITLE: NEW OFFICE HEADQUARTERS
LOCATION: AUGUSTA, ME
TITLE THIS DWG: LIGHTING FIXTURE SCHEDULE AND DETAILS

OAK POINT ASSOCIATES
ARCHITECTURE ■ ENGINEERING ■ PLANNING
231 Main Street, Biddeford, Maine 04005 207.283.0193

DRAWING NO. EL701
SHEET NO. 228 OF 239

1/28/2025 7:27:50 PM
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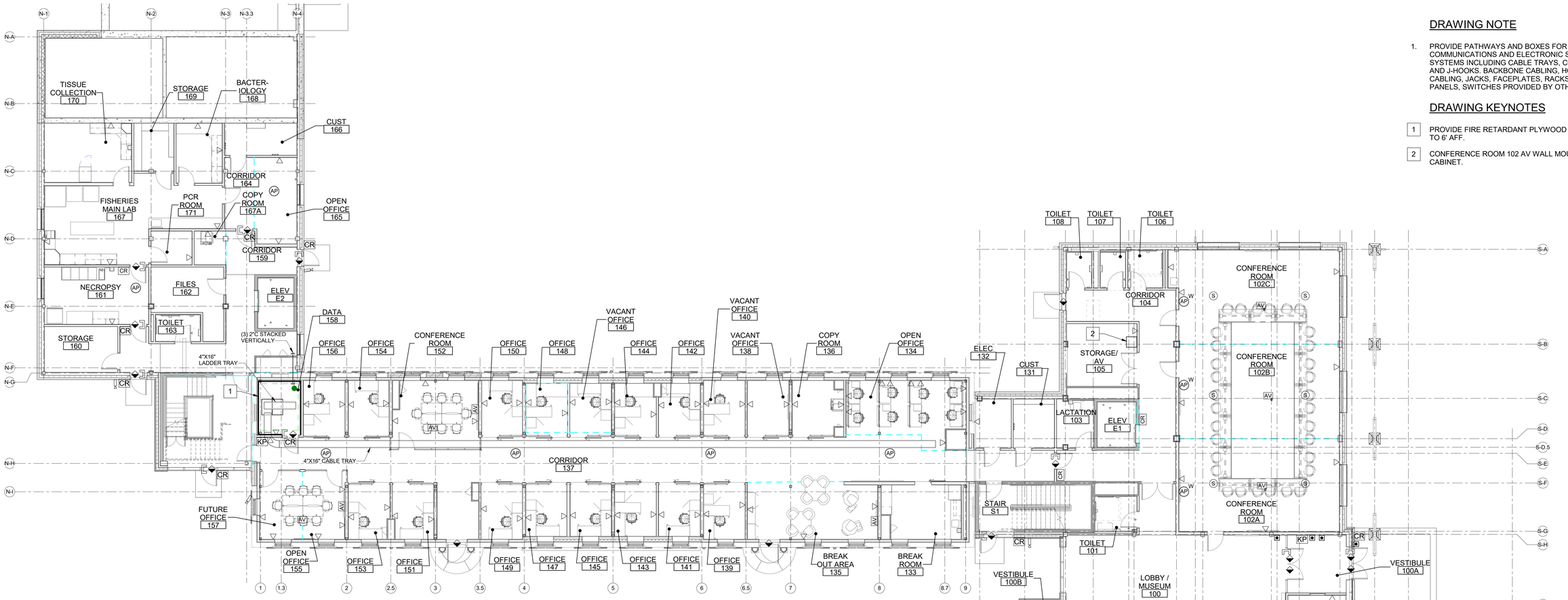
DRAWING NOTE

1. PROVIDE PATHWAYS AND BOXES FOR COMMUNICATIONS AND ELECTRONIC SECURITY SYSTEMS INCLUDING CABLE TRAYS, CONDUIT, AND J-HOOKS. BACKBONE CABLING, HORIZONTAL CABLING, JACKS, FACEPLATES, RACKS, PATCH PANELS, SWITCHES PROVIDED BY OTHERS.

DRAWING KEYNOTES

1. PROVIDE FIRE RETARDANT PLYWOOD FROM 2' AFF TO 6' AFF.
2. CONFERENCE ROOM 102 AV WALL MOUNTED CABINET.



1 FIRST FLOOR TECHNOLOGY PLAN
ET101 SCALE: 1/8" = 1'-0"

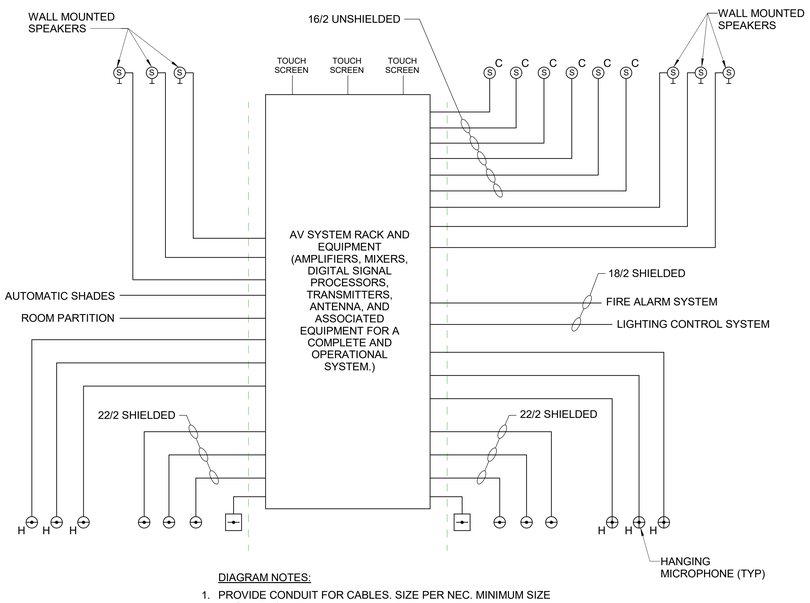
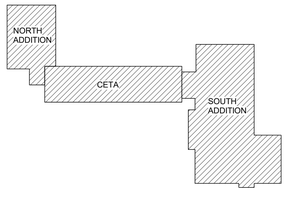


DIAGRAM NOTES:

1. PROVIDE CONDUIT FOR CABLES. SIZE PER NEC. MINIMUM SIZE MUST BE 1/2".

2 CONFERENCE 102 AV SYSTEM ONE-LINE DIAGRAM
ET101 SCALE: NOT TO SCALE



KEYPLAN
NOT TO SCALE

PLAN NORTH

GRAPHIC SCALE

1/8"=1'-0"

8' 4' 0 8' 16'

CHECK GRAPHIC SCALE BEFORE USING

NO.	DATE	DESCRIPTION	BY
		REVISIONS	

STATE OF MAINE DALE C. LINCOLN, II No. 10443 1/29/25 LICENSED PROFESSIONAL ENGINEER

DRAWN BY: RSW
CHECK BY: DCL
DATE 01/29/2025

DEPARTMENT OF INLAND FISHERIES & WILDLIFE

TITLE: NEW OFFICE HEADQUARTERS
LOCATION: AUGUSTA, ME
TITLE THIS DWG.: FIRST FLOOR TECHNOLOGY PLAN

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231 Main Street, Biddeford, Maine 04005 207.283.0193

DRAWING NO. ET101
SHEET NO. 229 OF 239

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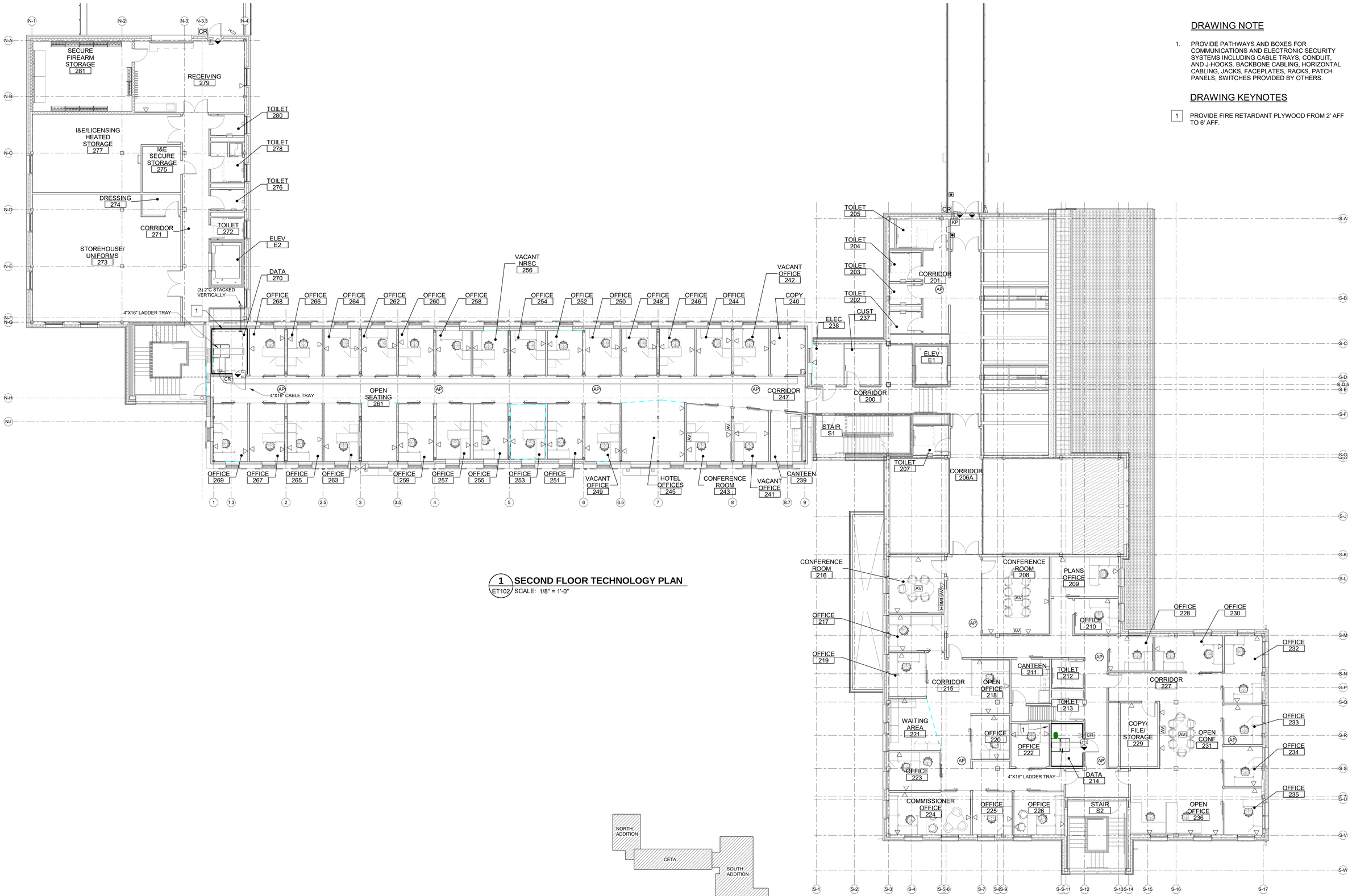

1 SECOND FLOOR TECHNOLOGY PLAN

ET102 SCALE: 1/8" = 1'-0"

DRAWING NOTE

1. PROVIDE PATHWAYS AND BOXES FOR COMMUNICATIONS AND ELECTRONIC SECURITY SYSTEMS INCLUDING CABLE TRAYS, CONDUIT, AND J-HOOKS. BACKBONE CABLING, HORIZONTAL CABLING, JACKS, FACEPLATES, RACKS, PATCH PANELS, SWITCHES PROVIDED BY OTHERS.

DRAWING KEYNOTES

1 PROVIDE FIRE RETARDANT PLYWOOD FROM 2' AFF TO 6' AFF.

KEYPLAN
NOT TO SCALE

PLAN NORTH

GRAPHIC SCALE

1/8"=1'-0"

8' 4' 0 8' 16'

CHECK GRAPHIC SCALE BEFORE USING

NO.	DATE	DESCRIPTION	BY
		REVISIONS	

STATE OF MAINE
DALE C. LINCOLN, II
No. 10443
1/29/25
LICENSED
PROFESSIONAL ENGINEER

DRAWN BY: RSW
CHECK BY: DCL
DATE 01/29/2025

DEPARTMENT OF INLAND FISHERIES & WILDLIFE

TITLE: NEW OFFICE HEADQUARTERS

LOCATION: AUGUSTA, ME

TITLE THIS DWG: SECOND FLOOR TECHNOLOGY PLAN

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DRAWING NO. ET102

SHEET NO. 230 OF 239

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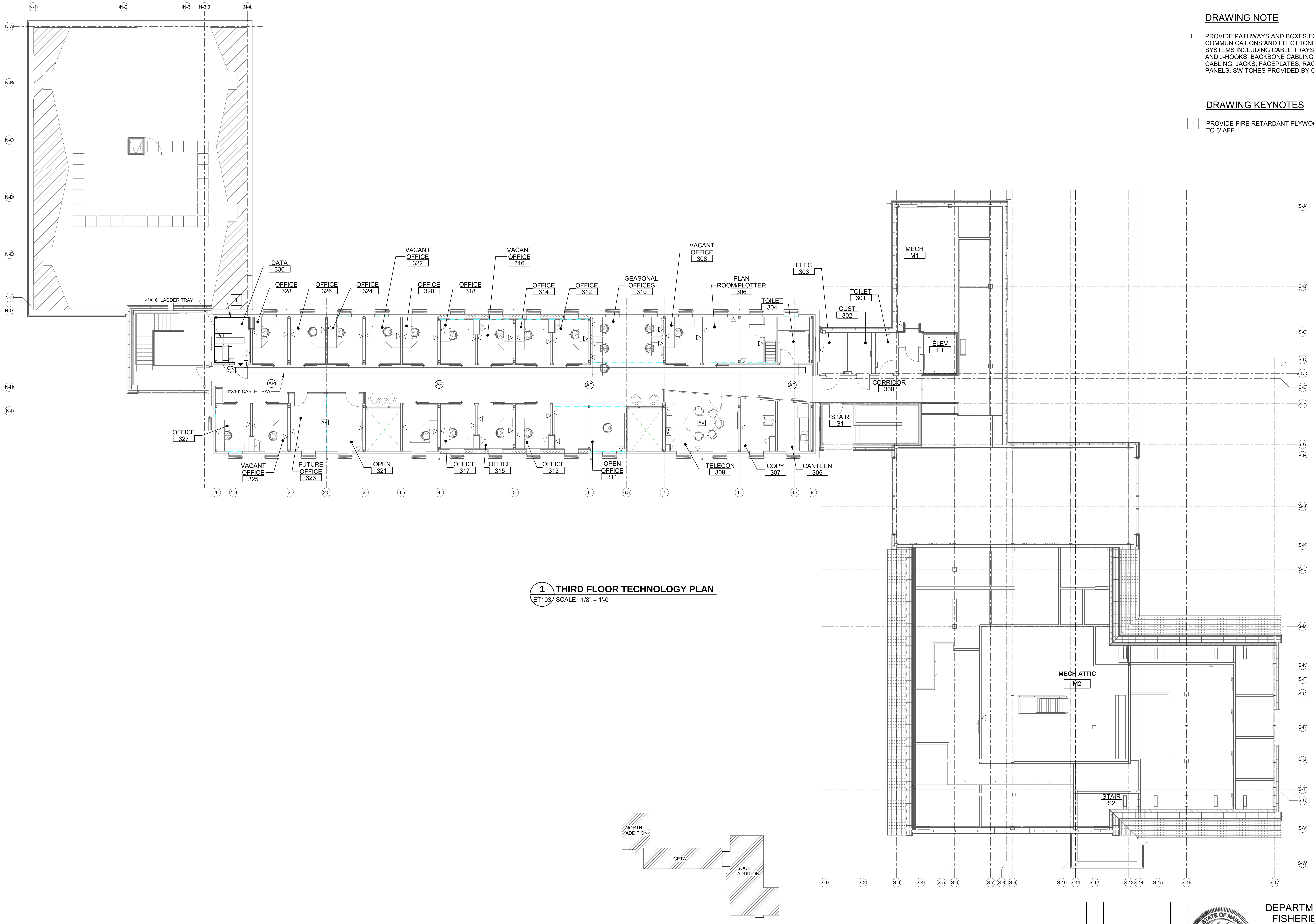
DRAWING NOTE

1. PROVIDE PATHWAYS AND BOXES FOR COMMUNICATIONS AND ELECTRONIC SECURITY SYSTEMS INCLUDING CABLE TRAYS, CONDUIT, AND J-HOOKS. BACKBONE CABLING, HORIZONTAL CABLING, JACKS, FACEPLATES, RACKS, PATCH PANELS, SWITCHES PROVIDED BY OTHERS.

DRAWING KEYNOTES

1	PROVIDE FIRE RETARDANT PLYWOOD FROM 2' AFF TO 6' AFF.

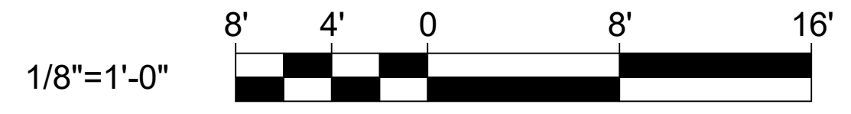


1 ET103 **THIRD FLOOR TECHNOLOGY PLAN**
SCALE: 1/8" = 1'-0"

KEYPLAN
NOT TO SCALE

PLAN NORTH

GRAPHIC SCALE



CHECK GRAPHIC SCALE BEFORE USING

NO.	DATE	DESCRIPTION	BY
		REVISIONS	

STATE OF MAINE
DALE C. LINCOLN, II
No. 10443
1/28/25
LICENSED PROFESSIONAL ENGINEER

DRAWN BY: RSW
CHECK BY: DCL
NO.
DATE 01/29/2025

DEPARTMENT OF INLAND FISHERIES & WILDLIFE
TITLE NEW OFFICE HEADQUARTERS
LOCATION AUGUSTA, ME
TITLE THIS DWG. THIRD FLOOR TECHNOLOGY PLAN

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DRAWING NO. ET103
SHEET NO. 231 OF 239

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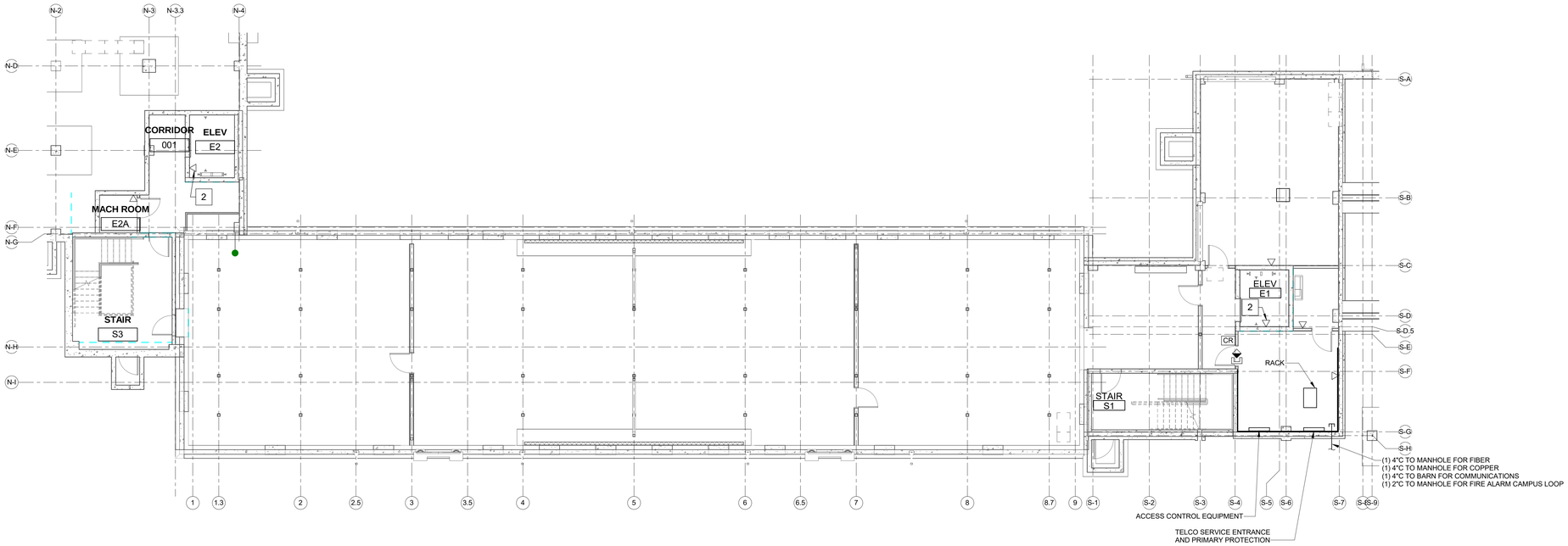


1 BASEMENT TECHNOLOGY PLAN

ET104 SCALE: 1/8" = 1'-0"

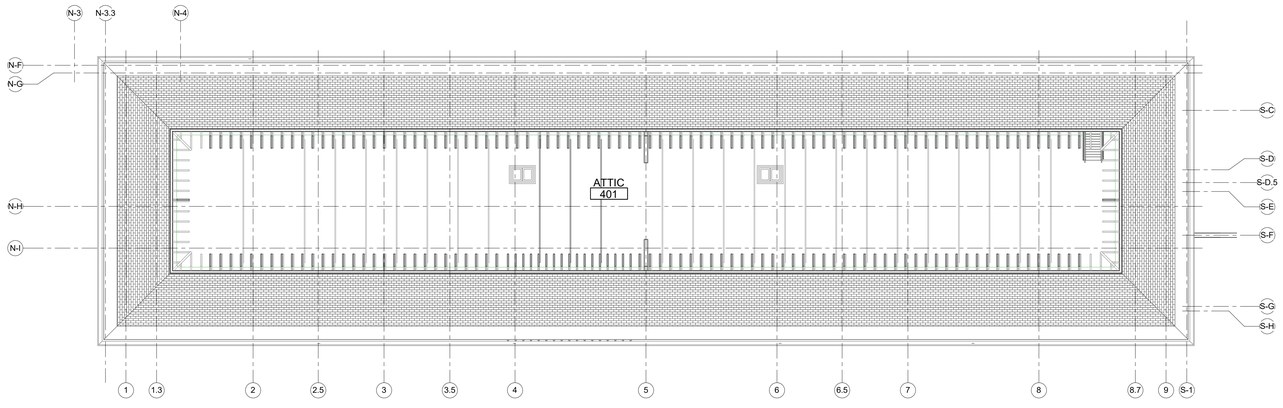
DRAWING NOTE

1. PROVIDE PATHWAYS AND BOXES FOR COMMUNICATIONS AND ELECTRONIC SECURITY SYSTEMS INCLUDING CABLE TRAYS, CONDUIT, AND J-HOOKS. BACKBONE CABLING, HORIZONTAL CABLING, JACKS, FACEPLATES, RACKS, PATCH PANELS, SWITCHES PROVIDED BY OTHERS.

DRAWING KEYNOTES

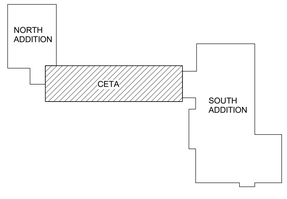
1 PROVIDE FIRE RETARDANT PLYWOOD FROM 2' AFF TO 6' AFF.

2 PROVIDE PATHWAY FOR ELEVATOR PHONE CONNECTION.



2 ATTIC TECHNOLOGY PLAN

ET104 SCALE: 1/8" = 1'-0"



KEYPLAN
NOT TO SCALE

PLAN NORTH

GRAPHIC SCALE

1/8"=1'-0"

8' 4' 0 8' 16'

CHECK GRAPHIC SCALE BEFORE USING

NO.	DATE	DESCRIPTION	BY
		REVISIONS	

STATE OF MAINE
DALE C. LINCOLN, II
No. 10443
1/29/25
LICENSED
PROFESSIONAL ENGINEER

DRAWN BY: RSW
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NO.
DATE 01/29/2025

DEPARTMENT OF INLAND FISHERIES & WILDLIFE

TITLE: NEW OFFICE HEADQUARTERS

LOCATION: AUGUSTA, ME

TITLE THIS DWG.: BASEMENT AND ATTIC TECHNOLOGY PLANS

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SHEET NO. 232 OF 239

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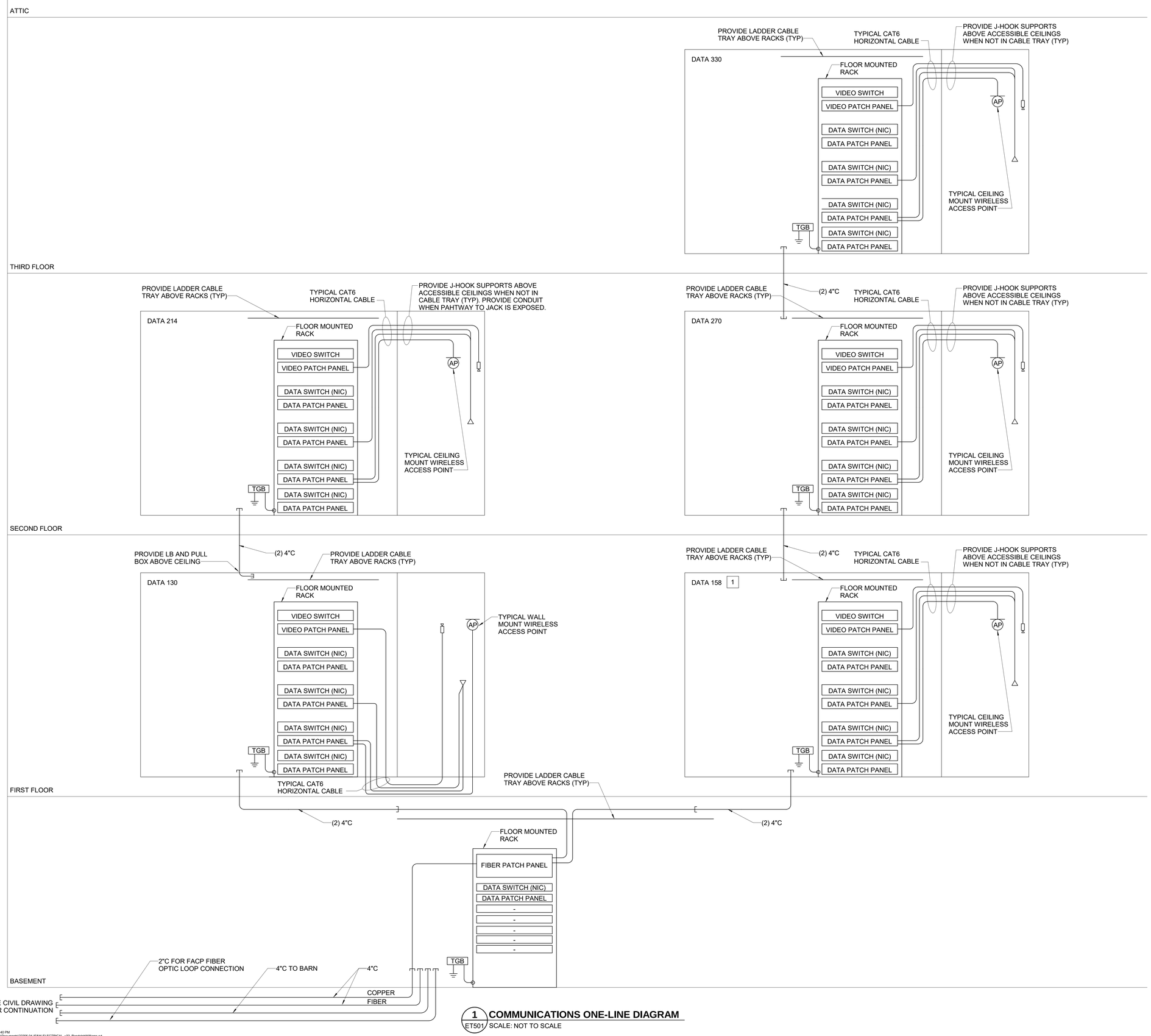
DRAWING NOTES

1. PROVIDE PATHWAYS AND BOXES FOR COMMUNICATIONS AND ELECTRONIC SECURITY SYSTEMS INCLUDING CABLE TRAYS, CONDUIT, AND J-HOOKS. BACKBONE CABLING, HORIZONTAL CABLING, JACKS, FACEPLATES, RACKS, PATCH PANELS, SWITCHES PROVIDED BY OTHERS.
2. REFER TO CONDUIT INSTALLATION NOTES ON E-001.

DRAWING KEYNOTES

1 -



1 ET501 **COMMUNICATIONS ONE-LINE DIAGRAM**
SCALE: NOT TO SCALE

NO.	DATE	DESCRIPTION	BY
		REVISIONS	

STATE OF MAINE DALE C. LINCOLN, II No. 10443 11/29/25 LICENSED PROFESSIONAL ENGINEER

DRAWN BY: RSW
CHECK BY: DCL
NO.
DATE 01/29/2025

DEPARTMENT OF INLAND FISHERIES & WILDLIFE

TITLE: NEW OFFICE HEADQUARTERS
LOCATION: AUGUSTA, ME
TITLE THIS DWG: TECHNOLOGY ONE-LINE DIAGRAM

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SHEET NO. 233 OF 239

1/28/2025 7:35:40 PM
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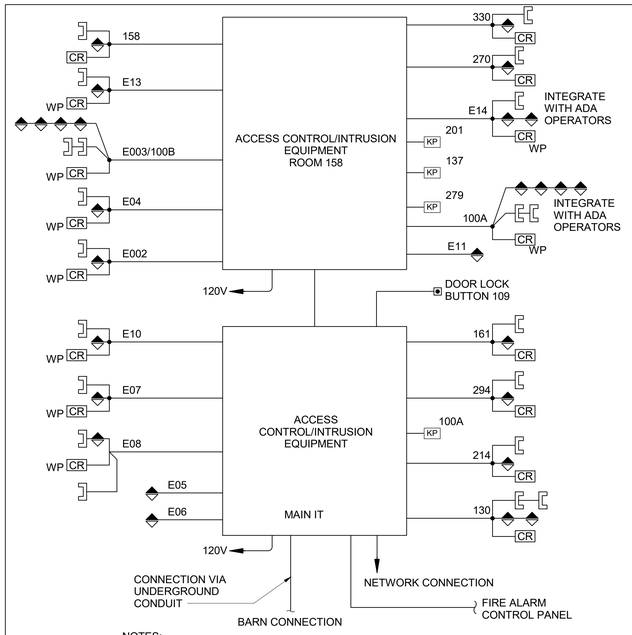
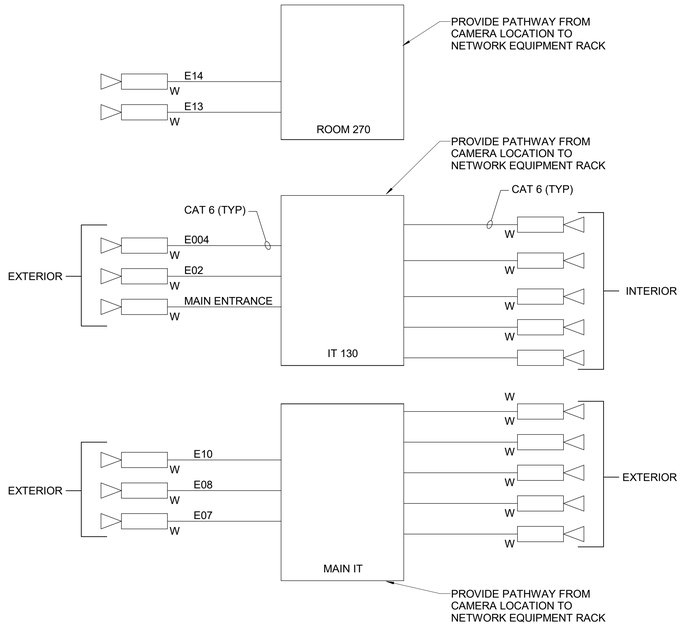


NOTES:

1. REFER TO FLOOR PLANS FOR DEVICE LOCATION AND QUANTITIES.
2. MOUNT EQUIPMENT ON WALL ABOVE 7' AFF.
3. MAGNETIC CONTACTS MUST BE DOUBLE POLE, DOUBLE THROW, AND INTEGRATE WITH THE INTRUSION DETECTION SYSTEM.

1 ACCESS CONTROL/INTRUSION DIAGRAM

ET502 SCALE: NOT TO SCALE

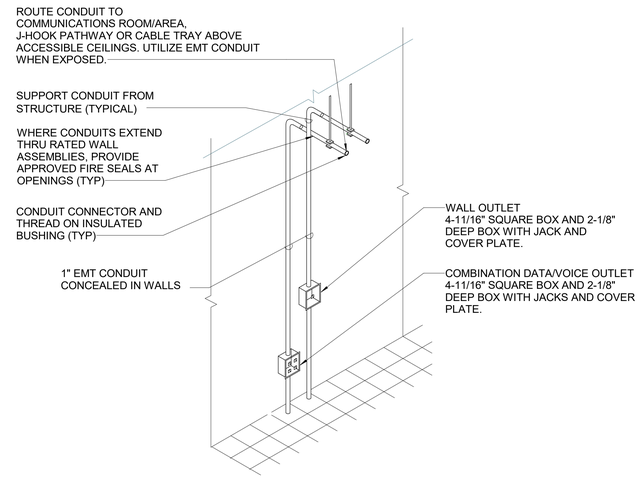


NOTES:

1. REFER TO FLOOR PLANS FOR DEVICE LOCATION AND QUANTITIES.

2 IP CAMERA SYSTEM (VIDEO SURVEILLANCE)

ET502 SCALE: NOT TO SCALE



TELECOMMUNICATIONS PATHWAY DETAIL NOTES:

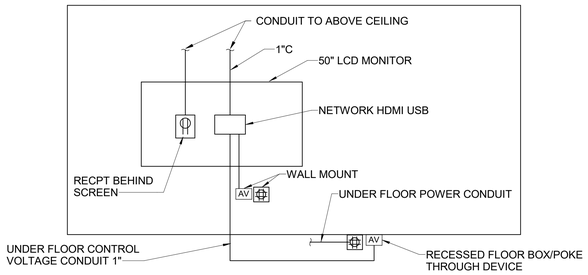
1. PROVIDE CONCEALED CONDUITS AND RECESSED BOXES EXCEPT WHERE SPECIFICALLY NOTED OTHERWISE.
2. PROVIDE SURFACE RACEWAYS AND SURFACE RACEWAY BOXES WHERE INDICATED. BASIS OF DESIGN: WIREMOLD 2000 SERIES PRODUCTS.
3. PROVIDE SEPARATE PATHWAYS SYSTEM FOR DATA SYSTEMS.
4. TYPICAL AT EACH DATA/TELEPHONE OUTLET SHOWN ON PLANS
5. PROVIDE ACOUSTIC AND AIR SEALING FOR BOXES. REFER TO ARCHITECTURAL AND ACOUSTIC SPECIFICATIONS.
6. CABLING FOR AV AND THEATRICAL SYSTEMS MUST BE COMPLETELY IN CONDUIT.

3 TELECOMMUNICATIONS PATHWAY DETAIL

ET502 SCALE: NTS

DRAWING NOTE

1. PROVIDE PATHWAYS AND BOXES FOR COMMUNICATIONS AND ELECTRONIC SECURITY SYSTEMS INCLUDING CABLE TRAYS, CONDUIT, AND J-HOOKS. BACKBONE CABLING, HORIZONTAL CABLING, JACKS, FACEPLATES, RACKS, PATCH PANELS, SWITCHES PROVIDED BY OTHERS.



TYPICAL CONFERENCE ROOM INTERIOR ELEVATION DETAIL NOTES:

1. REFER TO PLANS FOR LOCATION OF AV CONNECTIONS BOXES. EACH LOCATION WILL HAVE EITHER A WALL MOUNTED BOX OR FLOOR MOUNTED AV BOX.
2. FIELD COORDINATE FINAL LOCATION OF AV BOX.

4 TYPICAL CONFERENCE ROOM INTERIOR ELEVATION

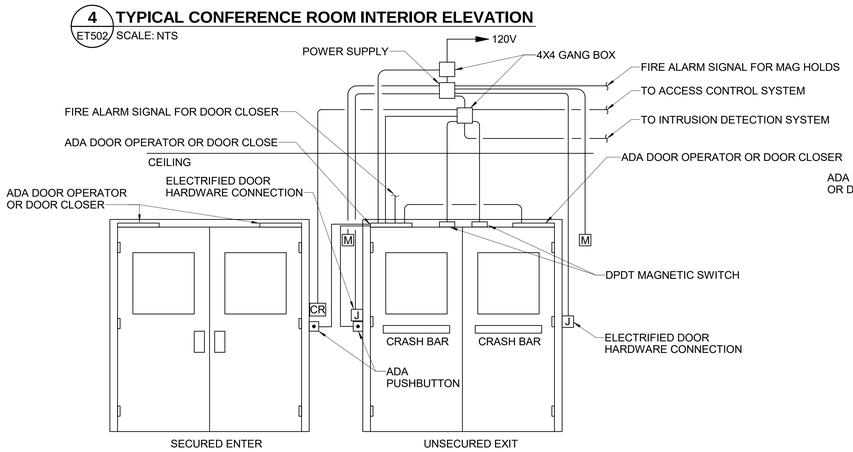
ET502 SCALE: NTS

CAMERA SCHEDULE

CAMERA ID NUMBER	TYPE	MOUNTING HEIGHT ABOVE GRADE	REPLACEMENT MANUFACTURER AND MODEL
MAIN ENTRANCE	PTZ	12'	AXIS P5654-E MKII
E02	PTZ	12'	AXIS P5654-E MKII
E004	PTZ	12'	AXIS P5654-E MKII
E07	PTZ	12'	AXIS P5654-E MKII
E08	PTZ	12'	AXIS P5654-E MKII
E10	PTZ	12'	AXIS P5654-E MKII
E13	PTZ	12'	AXIS P5654-E MKII
E14	PTZ	12'	AXIS P5654-E MKII

CAMERA SCHEDULE NOTES:

1. PROVIDE REPLACEMENT CAMERA AT EXISTING CAMERA LOCATION.
2. PROVIDE POE INJECTORS FOR CAMERAS OVER 30W. POE INJECTORS MUST SUPPORT 100MBPS. A POE BANK SUCH AS ALTRONIX NETWAY8G OR 16G IS ACCEPTABLE.
3. AIM AND FOCUS CAMERA AS DIRECTED BY STATE OF MAINE SECURITY PERSONNEL.
4. PROGRAM AND CONFIGURE CAMERA MOTION SENSING. COORDINATE WITH STATE OF MAINE SECURITY PERSONNEL.
5. PROVIDE CAMERA CABLING. CAMERA CABLING MUST BE INSTALLED IN EXISTING PATHWAY PRIOR TO EXISTING CAMERA REMOVAL.
6. PROVIDE CAMERA MOUNTING HARDWARE, ENCLOSURE AND ACCESSORIES FOR A COMPLETE AND FUNCTIONAL INSTALLATION.

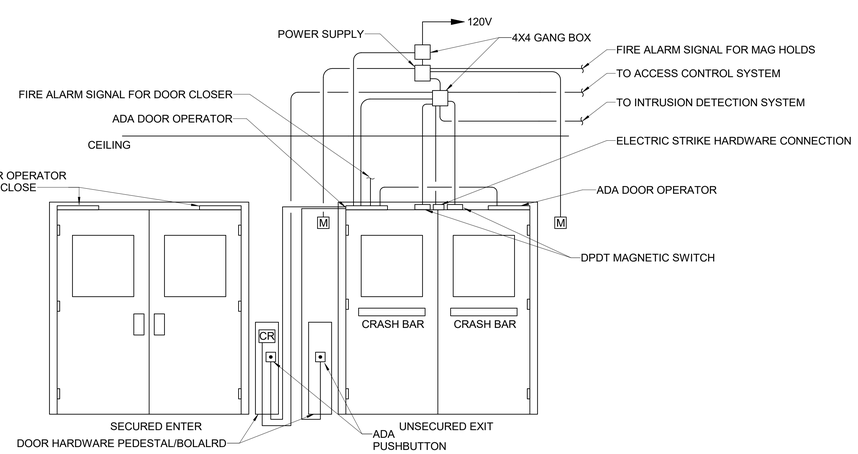


TYPICAL DOOR EQUIPPED FOR ACCESS CONTROL CONDUIT DETAIL NOTES:

1. PROVIDE PATHWAYS TO ABOVE CEILING AND CONNECT PATHWAY TO CONTROL PANELS.
2. COORDINATE FINAL LOCATIONS.
3. REFER TO FLOOR PLANS FOR LOCATIONS AND QUANTITIES OF DEVICES. NOT ALL LOCATIONS CONTAIN ALL DEVICES IN TYPICAL DETAIL.
4. PROVIDE 120V POWER AS REQUIRED.
5. PROVIDE CABLING IN DOOR FRAME WHEN POSSIBLE.
6. SOME LOCATIONS MAY HAVE ONE OR TWO DOOR LEAVES. COORDINATE WHICH LOCATIONS REQUIRE WHICH DEVICES AND WHICH DOOR LEAF THE DEVICE IS ASSOCIATED WITH.

5 TYPICAL CARD READER DOOR HARDWARE DETAIL (DOOR HARDWARE GROUPS)

ET502 SCALE: NOT TO SCALE



TYPICAL DOOR EQUIPPED FOR ACCESS CONTROL CONDUIT DETAIL NOTES:

1. PROVIDE PATHWAYS TO ABOVE CEILING AND CONNECT PATHWAY TO CONTROL PANELS.
2. COORDINATE FINAL LOCATIONS.
3. REFER TO FLOOR PLANS FOR LOCATIONS AND QUANTITIES OF DEVICES. NOT ALL LOCATIONS CONTAIN ALL DEVICES IN TYPICAL DETAIL.
4. PROVIDE 120V POWER AS REQUIRED.
5. PROVIDE CABLING IN DOOR FRAME WHEN POSSIBLE.
6. SOME LOCATIONS MAY HAVE ONE OR TWO DOOR LEAVES. COORDINATE WHICH LOCATIONS REQUIRE WHICH DEVICES AND WHICH DOOR LEAF THE DEVICE IS ASSOCIATED WITH.

6 TYPICAL CARD READER DOOR WITH STRIKE HARDWARE DETAIL (DOOR HARDWARE GROUP)

ET502 SCALE: NOT TO SCALE

NO.	DATE	DESCRIPTION	BY
		REVISIONS	

STATE OF MAINE DALE C. LINCOLN, II No. 10443 1/29/25 LICENSED PROFESSIONAL ENGINEER

DRAWN BY: BPD
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NO.
DATE 01/29/2025

DEPARTMENT OF INLAND FISHERIES & WILDLIFE

TITLE: NEW OFFICE HEADQUARTERS
LOCATION: AUGUSTA, ME
TITLE THIS DWG: TECHNOLOGY DETAILS 2

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DRAWING NO. ET502
SHEET NO. 234 OF 239

1/28/2025 7:35:48 PM
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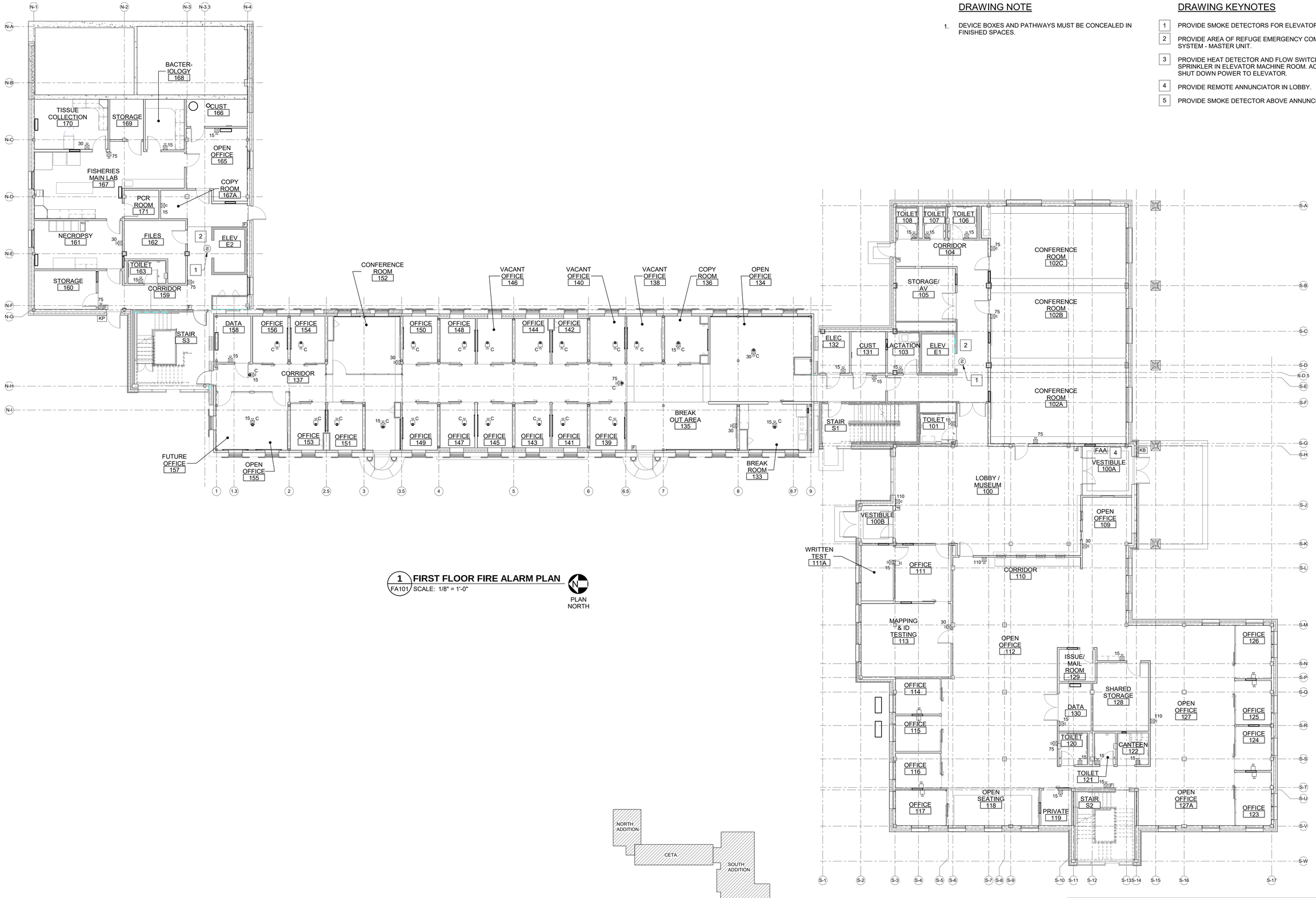
DRAWING NOTE

1. DEVICE BOXES AND PATHWAYS MUST BE CONCEALED IN FINISHED SPACES.

DRAWING KEYNOTES

1. PROVIDE SMOKE DETECTORS FOR ELEVATOR RECALL.
2. PROVIDE AREA OF REFUGE EMERGENCY COMMUNICATIONS SYSTEM - MASTER UNIT.
3. PROVIDE HEAT DETECTOR AND FLOW SWITCH FOR SPRINKLER IN ELEVATOR MACHINE ROOM. ACTUATION MUST SHUT DOWN POWER TO ELEVATOR.
4. PROVIDE REMOTE ANNUNCIATOR IN LOBBY.
5. PROVIDE SMOKE DETECTOR ABOVE ANNUNCIATOR.



1 FIRST FLOOR FIRE ALARM PLAN
FA101 SCALE: 1/8" = 1'-0"

KEYPLAN
NOT TO SCALE

GRAPHIC SCALE

1/8"=1'-0"

8' 4' 0 8' 16'

CHECK GRAPHIC SCALE BEFORE USING

NO.	DATE	DESCRIPTION	BY
		REVISIONS	

STATE OF MAINE — DALE C. LINCOLN, II — No. 10443 — 1/29/25 — LICENSED PROFESSIONAL ENGINEER

DRAWN BY: BPD
CHECK BY: DCL
NO.
DATE 01/29/2025

DEPARTMENT OF INLAND FISHERIES & WILDLIFE

TITLE: NEW OFFICE HEADQUARTERS
LOCATION: AUGUSTA, ME
TITLE THIS DWG: FIRST FLOOR FIRE ALARM PLAN

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DRAWING NO. FA101
SHEET NO. 235 OF 239

1/28/2025 7:42:48 PM
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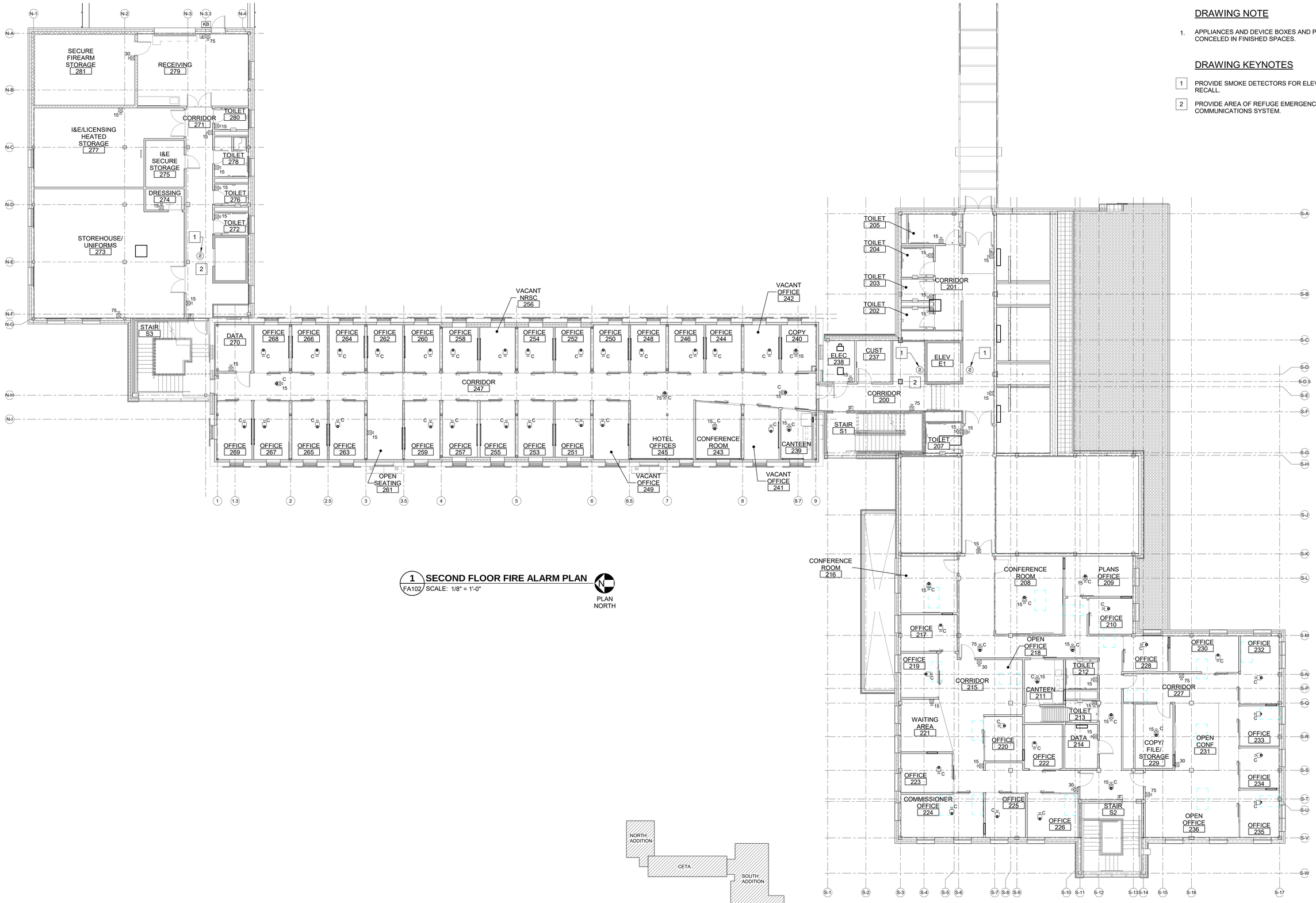
DRAWING NOTE

1. APPLIANCES AND DEVICE BOXES AND PATHWAYS MUST BE CONCELED IN FINISHED SPACES.

DRAWING KEYNOTES

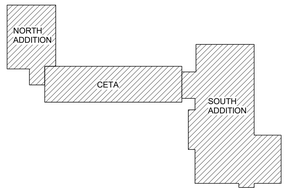
1 PROVIDE SMOKE DETECTORS FOR ELEVATOR RECALL.

2 PROVIDE AREA OF REFUGE EMERGENCY COMMUNICATIONS SYSTEM.



1 SECOND FLOOR FIRE ALARM PLAN
FA102 SCALE: 1/8" = 1'-0"

PLAN NORTH



KEYPLAN
NOT TO SCALE

PLAN NORTH

GRAPHIC SCALE

1/8"=1'-0"

8' 4' 0 8' 16'

CHECK GRAPHIC SCALE BEFORE USING

NO.	DATE	DESCRIPTION	BY
		REVISIONS	

STATE OF MAINE DALE C. LINCOLN, II No. 10443 LICENSED PROFESSIONAL ENGINEER 1/29/25

DRAWN BY: BPD
CHECK BY: DCL
DATE 01/29/2025

DEPARTMENT OF INLAND FISHERIES & WILDLIFE

TITLE: NEW OFFICE HEADQUARTERS
LOCATION: AUGUSTA, ME
TITLE THIS DWG: SECOND FLOOR FIRE ALARM PLAN

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DRAWING NO. FA102
SHEET NO. 236 OF 239

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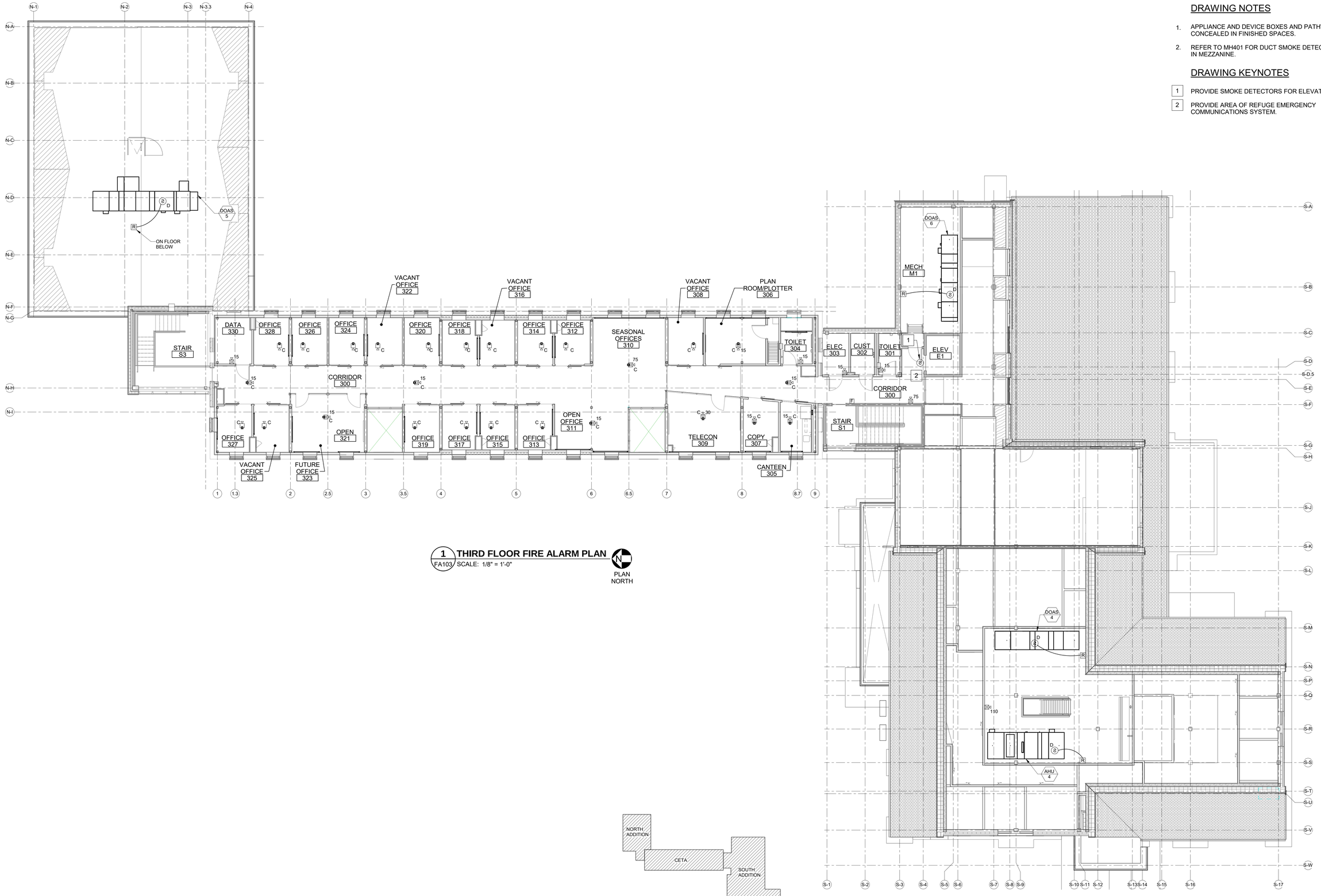
DRAWING NOTES

1. APPLIANCE AND DEVICE BOXES AND PATHWAYS MUST BE CONCEALED IN FINISHED SPACES.
2. REFER TO MH401 FOR DUCT SMOKE DETECTOR LOCATIONS IN MEZZANINE.

DRAWING KEYNOTES

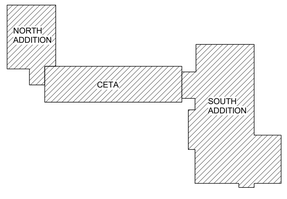
1 PROVIDE SMOKE DETECTORS FOR ELEVATOR RECALL.

2 PROVIDE AREA OF REFUGE EMERGENCY COMMUNICATIONS SYSTEM.



1 FA103 THIRD FLOOR FIRE ALARM PLAN
SCALE: 1/8" = 1'-0"

PLAN NORTH



KEYPLAN
NOT TO SCALE

PLAN NORTH

GRAPHIC SCALE
1/8"=1'-0"
8' 4' 0 8' 16'
CHECK GRAPHIC SCALE BEFORE USING

NO.	DATE	DESCRIPTION	BY
		REVISIONS	

STATE OF MAINE
DALE C. LINCOLN, II
No. 10443
1/29/25
LICENSED
PROFESSIONAL ENGINEER

DRAWN BY: BPD
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NO.
DATE 01/29/2025

DEPARTMENT OF INLAND FISHERIES & WILDLIFE

TITLE: NEW OFFICE HEADQUARTERS
LOCATION: AUGUSTA, ME
TITLE THIS DWG: THIRD FLOOR FIRE ALARM PLAN

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DRAWING NO. FA103
SHEET NO. 237 OF 239

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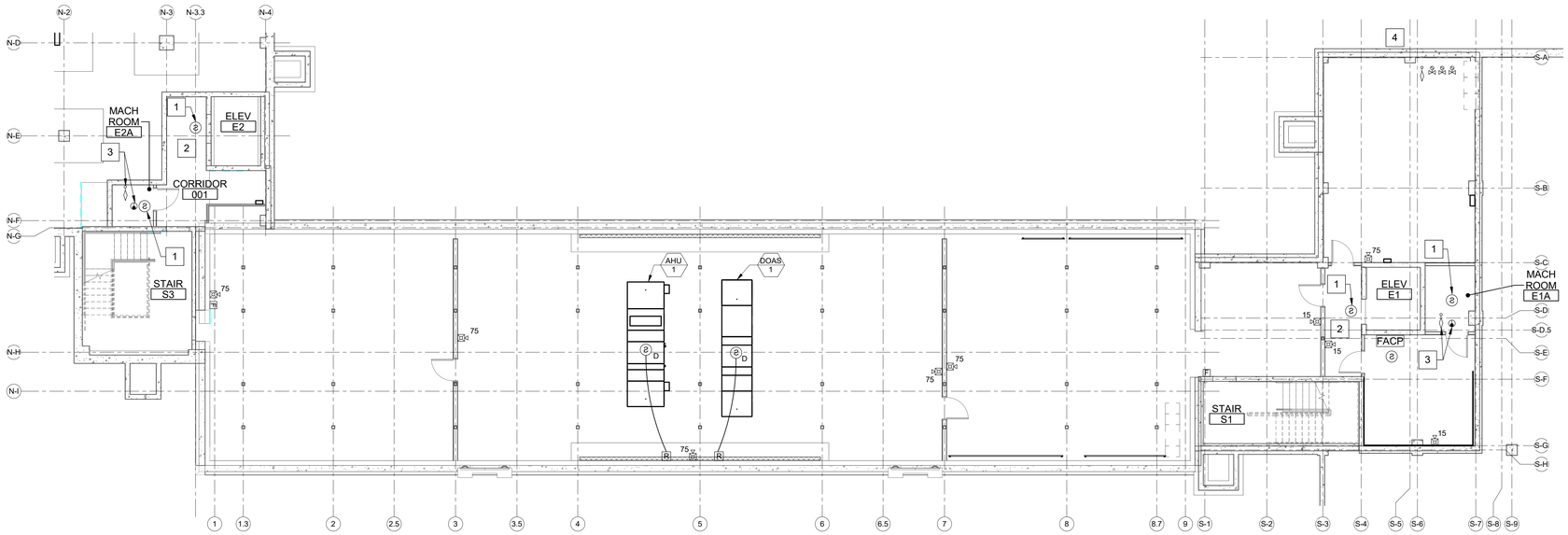
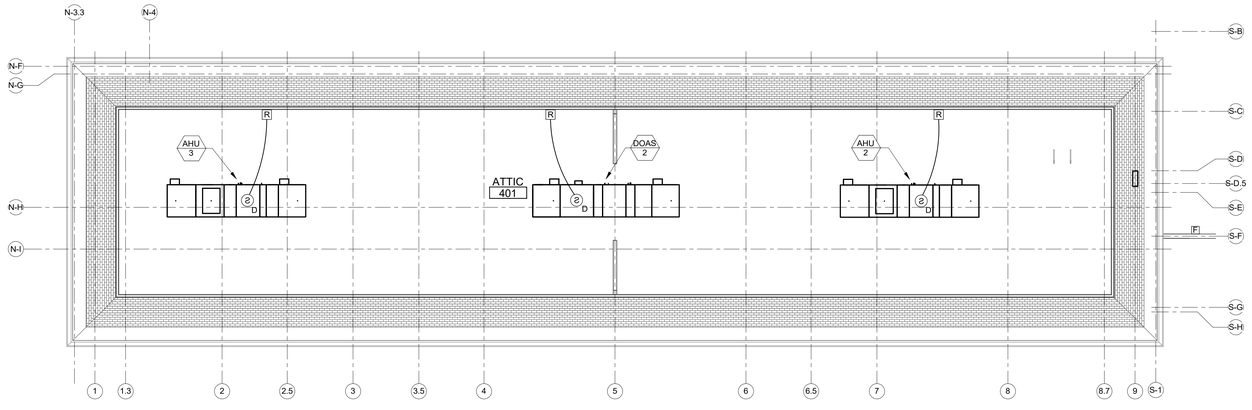
DRAWING KEYNOTES

1. PROVIDE SMOKE DETECTORS FOR ELEVATOR RECALL.
2. PROVIDE AREA OF REFUGE TWO-WAY EMERGENCY COMMUNICATIONS SYSTEM.
3. PROVIDE HEAT DETECTOR AND FLOW SWITCH FOR SPRINKLER IN ELEVATOR MACHINE ROOM. ACTUATION MUST SHUT DOWN POWER TO ELEVATOR.
4. PROVIDE SPRINKLER BELL.



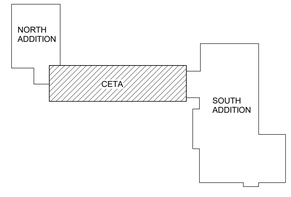
1 BASEMENT FIRE ALARM PLAN
FA104 SCALE: 1/8" = 1'-0"

PLAN NORTH



2 ATTIC FIRE ALARM PLAN
FA104 SCALE: 1/8" = 1'-0"

PLAN NORTH



KEYPLAN
NOT TO SCALE

PLAN NORTH

GRAPHIC SCALE

1/8"=1'-0"

8' 4' 0 8' 16'

CHECK GRAPHIC SCALE BEFORE USING

NO.	DATE	DESCRIPTION	BY
		REVISIONS	

STATE OF MAINE — DALE C. LINCOLN, II — No. 10443 — 1/29/25 — LICENSED — PROFESSIONAL ENGINEER

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DEPARTMENT OF INLAND FISHERIES & WILDLIFE

TITLE: NEW OFFICE HEADQUARTERS
LOCATION: AUGUSTA, ME
TITLE THIS DWG.: BASEMENT AND ATTIC FIRE ALARM PLAN

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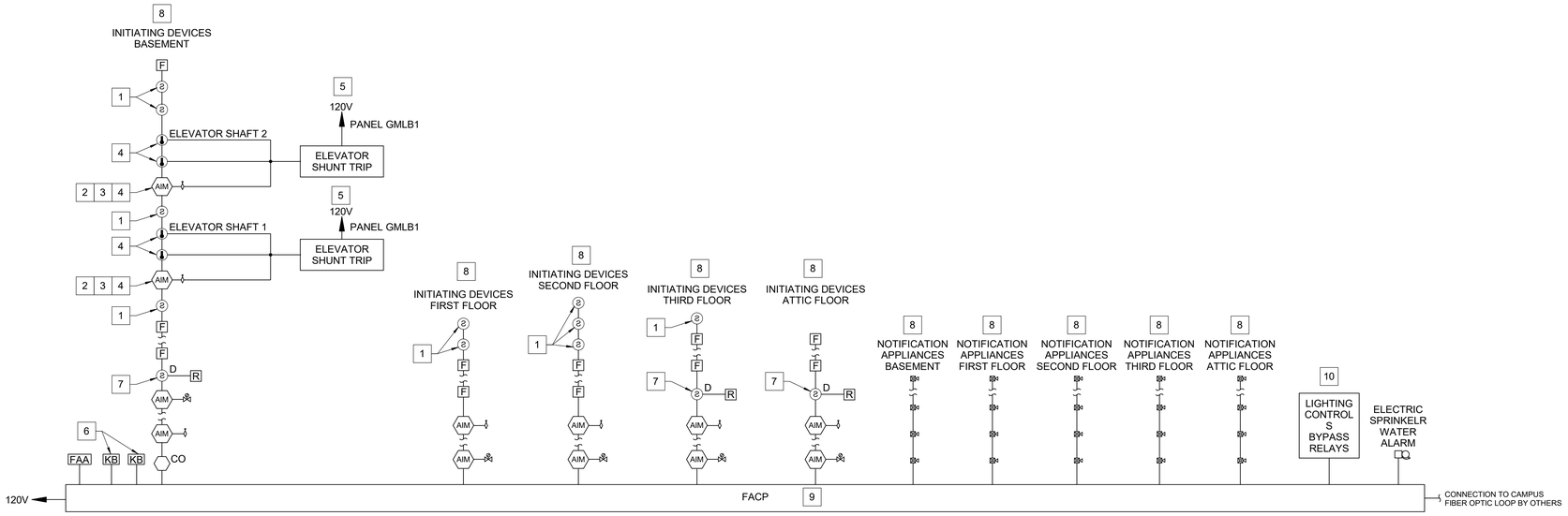

1 FIRE ALARM ONE-LINE DIAGRAM
FA501 SCALE: NOT TO SCALE

DRAWING NOTES

1. REFER TO SHEET E-001 FOR SYMBOLS, ABBREVIATIONS, AND GENERAL NOTES.
2. INITIATING CIRCUITS AND NOTIFICATION CIRCUITS MUST NOT BE LOADED MORE THAN 75% OF THEIR RATED CAPACITY. THE FIRE ALARM SYSTEM INSTALLING CONTRACTOR MUST VERIFY COMPLIANCE WITH THIS REQUIREMENT AND MUST FURNISH AND INSTALL ADDITIONAL CIRCUITS AND EXTENDER PANELS TO COMPLY. EACH EXTENDER PANEL MUST HAVE A SMOKE DETECTOR PROVIDED AT THE CEILING ABOVE THE PANEL. EXTENDER PANELS MUST BE LOCATED IN UTILITY ROOMS.
3. FIRE ALARM RISER DIAGRAM IS SHOWN FOR REFERENCE ONLY. DEVICE LOCATIONS AND QUANTITIES MUST BE AS SHOWN ON THE SHOP DRAWINGS. ADDITIONAL DEVICES AND EQUIPMENT BEYOND THOSE SHOWN MUST BE PROVIDED AT NO ADDITIONAL COST TO MEET THE REQUIREMENTS OF NFPA 101, NFPA 13, AND NFPA 72.

DRAWING KEYNOTES

1. FOR ELEVATOR RECALL.
2. ACTUATION MUST SHUT DOWN POWER TO ELEVATOR.
3. PROVIDE WATER FLOW SWITCH WITH DUAL CONTACTS. ONE FOR SHUT TRIPPING OF THE ELEVATOR AND ONE FOR INTERFACE WITH THE LIGHTING CONTROL PANEL. THE WATER FLOW SWITCH MUST BE WITHOUT TIME DELAY.
4. PROVIDE FOR ELEVATOR SHUTDOWN PER ASME A17.1-2013. MONITOR SHUNT TRIP VOLTAGE SUPPLY.
5. MONINTOR SHUNT TRIP VOLTAGE SUPPLY.
6. PROVIDE TAMPER ALARM FOR KNOX BOX.
7. PROVIDE DUCT SMOKE DETECTORS FOR MECHANICAL EQUIPMENT. REFER TO MH104 AND MH401 FOR LOCATIONS.
8. PROVIDE NUMBER OF CIRCUITS REQUIRED FOR THE LOAD.
9. PROVIDE QUANTITY OF DEVICES AND CIRCUITS SHOWN ON SHOP DRAWINGS.
10. PROVIDE ADDRESSABLE INTERFACE DEVICE AND PROGRAMMING FOR CONTROL OF LIGHTING CONTROLS BYPASS RELAYS. REFER TO DETAL 4/EL701.

SYSTEM OUTPUTS

	SYSTEM INPUTS	A TRANSMIT ALARM SIGNAL TO SUPERVISING STATION	B TRANSMIT TROUBLE SIGNAL TO SUPERVISING STATION	C TRANSMIT SUPERVISORY SIGNAL TO SUPERVISING STATION	D ACTUATE ALARM SIGNAL, AUDIO & VISUAL INDICATOR ON FACP AND FAA	E ACTUATE SUPERVISORY SIGNAL, AUDIO & VISUAL INDICATOR ON FACP AND FAA	F ACTUATE TROUBLE SIGNAL, AUDIO & VISUAL INDICATOR ON FACP AND FAA	G SHUT DOWN MECHANICAL EQUIPMENT	H OVERRIDE ACTIVE FIRE ALARM OUTPUT	I ACTIVATE ELEVATOR RECALL	J MUTE AV SYSTEM SPEAKERS IN THE LECTURE HALL	K BYPASS OCCUPANCY LIGHTING CONTROLS ALONG PATHS OF EGRESS	L OPEN POWER SUPPLY TO ELEVATOR SHUNT TRIP	M	
1	MANUAL PULL STATIONS	●			●			●				●	●		1
2	AREA SMOKE DETECTORS	●			●			●				●	●		2
3	DUCT SMOKE DETECTORS		●			●			●						3
4	AIM - SPRINKLER WATERFLOW (PRESSURE AND FLOW)	●			●			●				●	●		4
5	AIM - SPRINKLER WATERFLOW ELEVATOR	●			●			●				●	●	●	5
6	AIM - SPRINKLER CONTROL VALVES		●			●									6
7	AIM - TEMPERATURE SUPERVISORY SWITCH		●			●									7
8	FIRE ALARM AC POWER FAILURE			●			●								8
9	FIRE ALARM SYSTEM LOW BATTERY			●			●								9
10	FIRE ALARM OPEN CIRCUIT			●			●								10
11	FIRE ALARM GROUND FAULT			●			●								11
12	NOTIFICATION APPLIANCE CIRCUIT SHORT			●			●								12
13	HEAT DETECTORS ELEVATOR SHAFT AND CONTROL ROOM	●			●			●				●	●	●	13
14	AIM - VOLTAGE MONITOR RELAY FOR ELEVATOR SHUNT TRIP			●			●								14
15	ELEVATOR LOBBY AND MACHINE ROOM SMOKE DETECTORS	●			●			●			●	●	●		15
		A	B	C	D	E	F	G	H	I	J	K	L	M	

2 FIRE ALARM MATRIX
FA501 SCALE: NOT TO SCALE

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STATE OF MAINE
DALE C. LINCOLN, II
No. 10441
1/29/25
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DEPARTMENT OF INLAND FISHERIES & WILDLIFE

TITLE NEW OFFICE HEADQUARTERS
LOCATION AUGUSTA, ME
TITLE THIS DWG. FIRE ALARM MATRIX AND ONE-LINE DIAGRAM

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