

### MECHANICAL ABBREVIATIONS

A/C or AC	AIR CONDITIONING	KW	KILOWATT
AFF	ABOVE FINISHED FLOOR	KWH	KILOWATT HOUR
AHU	AIR HANDLING UNIT		
ASHRAE	AMERICAN SOCIETY OF HEATING, REFRIGERATION, AND AIR CONDITIONING ENGINEERS	LAT	LEAVING AIR TEMPERATURE
		LAV	LAVATORY
BTU	BRITISH THERMAL UNITS	LEED	LEADERSHIP IN ENERGY AND ENVIRONMENTAL DESIGN
BTUH	BTUS PER HOUR	LWT	LEAVING WATER TEMPERATURE
CA	COMBUSTION AIR	MAX	MAXIMUM
CC	COOLING COIL	MCA	MINIMUM CIRCUIT AMPS
CFM	AIR FLOW RATE (CUBIC FEET PER MINUTE)	MOC	MAXIMUM OVERCURRENT PROTECTION
CHWR	CHILLED WATER RETURN	MIN	MINIMUM
CHWS	CHILLED WATER SUPPLY	NC	NOISE CRITERIA
CLG	CEILING	NFPA	NATIONAL FIRE PROTECTION ASSOCIATION
CW	COLD WATER	NTS	NOT TO SCALE
DEG or °	DEGREE	OSA	OUTSIDE AIR
DIA or Ø	DIAMETER		
DB	DRY BULB	PD	PRESSURE DROP
EA	EXHAUST AIR	PH or Ø	PHASE
EAT	ENTERING AIR TEMPERATURE	PRV	PRESSURE REDUCING VALVE
EER	ENERGY EFFICIENCY RATIO		
ESP	EXTERNAL STATIC PRESSURE	RA	RETURN AIR
EWT	ENTERING WATER TEMPERATURE	RPM	REVOLUTIONS PER MINUTE
		RTU	ROOFTOP UNIT
FCO	FLOOR CLEANOUT		
FD	FIRE DAMPER	SA	SUPPLY AIR
FLA	FULL LOAD AMPS	SEER	SEASONAL ENERGY EFFICIENCY RATIO
FLR	FLOOR	SFD	COMBINATION SMOKE/FIRE DAMPER
FPM	FEET PER MINUTE	SP	STATIC PRESSURE
FT	FEET	SYM	SYMBOL
GA	GAUGE	T & P	TEMPERATURE AND PRESSURE
GCO	GRADE CLEANOUT	TEMP	TEMPERATURE
GPM	WATER FLOW RATE (GALLONS PER MINUTE)	TYP	TYPICAL
HC	HEATING COIL	UMC	UNIFORM MECHANICAL CODE
HP	HORSE POWER	UPC	UNIFORM PLUMBING CODE
HVAC	HEATING, VENTILATING, AIR CONDITIONING	URL	URINAL
HW	HOT WATER		
HWR	HOT WATER RETURN	VTR	VENT THROUGH ROOF
HWS	HOT WATER SUPPLY	V	VOLTS
IBC	INTERNATIONAL BUILDING CODE	W/	WITH
IEEC	INTERNATIONAL ENERGY CONSERVATION CODE	WB	WET-BULB
IFC	INTERNATIONAL FIRE CODE	WC	WATER CLOSET
IFGC	INTERNATIONAL FUEL GAS CODE	WCO	WALL CLEANOUT
IMC	INTERNATIONAL MECHANICAL CODE	WH	WATER HEATER
IPC	INTERNATIONAL PLUMBING CODE		

NOTE: THIS IS A STANDARD LIST OF COMMONLY USED MECHANICAL ABBREVIATIONS. SOME OF THE ABBREVIATIONS SHOWN ABOVE MAY NOT BE USED IN THIS DRAWING PACKAGE.

- ### MECHANICAL GENERAL NOTES
- ALL MECHANICAL EQUIPMENT AND SYSTEMS SHALL BE INSTALLED IN ACCORDANCE WITH THE INTERNATIONAL MECHANICAL CODE (IMC) LATEST EDITION, AND ALL LOCAL & STATE CODES.
  - ALL PLUMBING EQUIPMENT AND SYSTEMS SHALL BE INSTALLED IN ACCORDANCE WITH THE LATEST ADOPTED PLUMBING CODE, AND ALL LOCAL & STATE CODES.
  - ALL MECHANICAL AND PLUMBING EQUIPMENT SHALL BE INSTALLED PER THE MANUFACTURER'S RECOMMENDATIONS.
  - MECHANICAL CONTRACTORS SHALL RECEIVE PRIOR APPROVAL FROM THE STRUCTURAL ENGINEER BEFORE MAKING CUTS THROUGH ANY STRUCTURAL MEMBER.
  - MECHANICAL CONTRACTORS SHALL COORDINATE INSTALLATION WITH CONSTRUCTION SUPERVISOR AND WITH ALL OTHER TRADES TO AVOID CONFLICTS.
  - THE MECHANICAL CONTRACTORS SHALL VERIFY MOTOR VOLTAGES WITH THE ELECTRICAL DRAWINGS BEFORE ORDERING MOTORIZED EQUIPMENT AND CONTROLS.
  - SEE MECHANICAL SCHEDULE SHEET FOR SCHEDULED CAPACITIES OF ALL MECHANICAL EQUIPMENT AND MATERIALS SPECIFIED.
  - DOMESTIC WATER SERVICE IS PROVIDED WITH A DOUBLE CHECK BACKFLOW PREVENTER.
  - ALL MECHANICAL EQUIPMENT TO BE PROPOSED MUST BE ON THE APPROVED LIST PRIOR TO SUBMITTALS. ALL APPROVED MANUFACTURERS MUST BE CAPABLE OF MEETING THE REQUIREMENTS OF THE SPECIFIED EQUIPMENT.
  - RUNOUT AND HOOKUP SIZES TO INDIVIDUAL PLUMBING FIXTURE CAN BE FOUND ON THE PLUMBING FIXTURE SCHEDULE.
  - PROVIDE REMOTE CEILING ACCESS BALANCE DAMPERS WITH CONCEALED CHROME PLATE COVERS FOR BALANCE DAMPERS LOCATED ABOVE HARD CEILINGS.
  - PAINT ALL VTRS, FLUES, EXHAUST CAPS, AND OTHER MECHANICAL ITEMS ON THE ROOF TO MATCH THE ROOF COLOR.
  - INSULATED FLEXIBLE DUCTWORK MAY BE USED FOR RUNOUTS TO GRILLES AND DIFFUSERS, IN LENGTHS OF 6'-0" OR LESS.
  - MAINTAIN MINIMUM OF 10'-0" DISTANCE BETWEEN ALL FRESH AIR INTAKES AND EXHAUST OR GAS FLUE DISCHARGES.
  - THE PLUMBING CONTRACTOR IS RESPONSIBLE FOR ALL BACKFLOW DEVICES TO BE INSPECTED BY A CERTIFIED BACKFLOW TECHNICIAN BEFORE THE USE OF THE BUILDING POTABLE WATER SYSTEM.
  - LOCATE ACCESS HATCHES SO AS TO PROVIDE OPTIMUM SERVICEABILITY TO EQUIPMENT AND/OR VALVING. SEE ARCHITECTURAL SPECIFICATION FOR TYPE AND COLOR. COORDINATE LOCATION WITH STRUCTURAL & LIGHTING.
  - WHENEVER THERE IS A DISCREPANCY BETWEEN THE RUNOUT DUCT SIZE SHOWN ON THE PLANS AND THAT SHOWN IN THE SCHEDULE, ALWAYS USE THE LARGER OF THE TWO DUCT SIZES.
  - THE CONTRACTOR SHALL BE HELD RESPONSIBLE FOR VERIFICATION OF EXISTING JOB CONDITIONS PRIOR TO BID. NO ADDITIONAL COST SHALL BE AWARDED TO THE SUCCESSFUL CONTRACTOR (OR THEIR SUBCONTRACTORS) AFTER BIDS HAVE BEEN SUBMITTED AND CONTRACTS AWARDED FOR FAILURE TO VERIFY EXISTING FIELD CONDITIONS. DISCREPANCIES BETWEEN ACTUAL FIELD CONDITIONS AND CONTRACT DOCUMENTS SHALL BE BROUGHT TO THE ENGINEERS ATTENTION FOR ALTERNATIVE METHODS OF INSTALLATION PRIOR TO THE BIDDING OF THIS PROJECT.
  - UNLESS OTHERWISE NOTED ALL EXISTING MECHANICAL EQUIPMENT, PIPING, ETC. TO BE REMOVED SHALL BE DISPOSED OF BY THE CONTRACTOR UNDER THIS CONTRACT. THE OWNER SHALL RETAIN THE RIGHT TO KEEP ANY REMOVED ITEMS.
  - ALL DOMESTIC COLD AND HOT WATER LINES IN THE AREA OF WORK WHICH ARE NO LONGER IN USE DUE TO THIS PROJECT SHALL BE REMOVED BACK TO THE MAINS AND CAPPED.
  - HOLES IN EXISTING WALL OR FLOORS SHALL BE PATCHED TO MATCH EXISTING WHERE PIPING, DUCTWORK, ETC. WERE REMOVED OR ADDED DURING THIS PROJECT.
  - DAMAGE TO THE EXISTING FACILITY DURING THE CONSTRUCTION SHALL BE REPAIRED OR REPLACED BY THE CONTRACTOR AT NO COST TO THE OWNER.

### MECHANICAL AND PLUMBING DRAWINGS LEGEND

	FLEXIBLE DUCTWORK		THREE WAY CONTROL VALVE
	DUCTWORK		TWO WAY CONTROL VALVE
	DUCTWORK BREAK		PRESSURE REDUCING VALVE
	DUCTWORK OR PIPING RISE		GATE VALVE
	CONCENTRIC SQUARE TO ROUND TRANSITION		REDUCER
	MOTORIZED DAMPER		GLOBE VALVE
	MANUAL VOLUME DAMPER		BALL VALVE
	SPIN-IN FITTING W/ AIR EXTRACTOR AND HAND DAMPER		BUTTERFLY VALVE
	HIGH EFFICIENCY FITTING W/ HAND DAMPER		BALANCE VALVE
	SWITCH		CHECK VALVE
	THERMOSTAT		FLOOR CLEANOUT
	HUMIDISTAT		WALL CLEANOUT
	TEMPERATURE SENSOR		GRADE CLEANOUT
	CARBON DIOXIDE SENSOR		WATER HAMMER ARRESTOR
	CARBON MONOXIDE SENSOR		FLOOR DRAIN
	NITROGEN DIOXIDE SENSOR		FLOOR SINK
	DUCT SMOKE DETECTOR		GAS PRESSURE REGULATOR W/ GAS COCK
	COMBINATION SMOKE/FIRE DAMPER		PRESSURE RELIEF VALVE
	FIRE DAMPER		VENT-THROUGH-ROOF
	SMOKE DAMPER		VENT
	EQUIPMENT CALLOUT		SOIL, WASTE, OR SANITARY SEWER
	TURNING VANES		ACID WASTE LINE
	INTAKE OR EXHAUST		ACID VENT LINE
	DIRECTION OF AIRFLOW		STORM DRAIN
	SUPPLY DIFFUSER		ROOF DRAIN LINE
	RETURN GRILLE		OVERFLOW DRAIN LINE
	EXHAUST GRILLE		CONDENSATE DRAIN LINE
	FLOOR GRILLE		DOMESTIC COLD WATER (CW)
	CEILING EXHAUST FAN		DOMESTIC HOT WATER (HW)
	TEMPERATURE GAUGE		DOMESTIC HOT WATER RETURN (HWR)
	PRESSURE GAUGE (LIQUID FILLED W/ ISOLATION VALVE)		TEMPERED WATER (TW)
	TEMPERATURE SENSOR (DUCT OR PIPING)		MEDIUM PRESSURE NATURAL GAS
	FLOW SWITCH		LOW PRESSURE NATURAL GAS
	STAINLESS STEEL BRAIDED FLEX CONNECTION		FIRE SPRINKLER LINE
	ELASTOMETRIC FLEX CONNECTOR		GEO THERMAL WATER SUPPLY
	SUCTION DIFFUSER		GEO THERMAL WATER RETURN
	Y TYPE STRAINER (1 1/2" OR LARGER PROVIDED W/ BLOW DOWN VALVE)		CHILLED WATER SUPPLY
	FLOW DIRECTION		CHILLED WATER RETURN
	DEMOLITION / EQUIPMENT TO BE REMOVED		CONDENSER WATER SUPPLY
	NEW TO EXISTING CONNECTION POINT		CONDENSER WATER RETURN
	EXISTING		HEATING WATER SUPPLY
	FUTURE		HEATING WATER RETURN
	NEW		LIQUID REFRIGERANT LINE
	REDUCED PRESSURE BACKFLOW PREVENTER		SUCTION REFRIGERANT LINE
	DOUBLE CHECK BACKFLOW PREVENTER		SLOPE PIPE IN DIRECTION OF ARROW
	UNION		PIPE ANCHOR
	AIR VENT		PIPE GUIDE
	TRIPLE DUTY VALVE		CAP

NOTE: THIS IS A LIST OF COMMONLY USED MECHANICAL AND PLUMBING SYMBOLS. SOME OF THE SYMBOLS SHOWN ABOVE MAY NOT BE USED IN THIS DRAWING PACKAGE.

- ### ENERGY CODE COMPLIANCE
- A. COMPLIANCE WITH THE LATEST ADOPTED EDITION OF THE INTERNATIONAL ENERGY CONSERVATION CODE IS REQUIRED FOR THIS PROJECT. THESE NOTES COVER MANDATORY REQUIREMENTS OF THE CODE. ADDITIONAL REQUIREMENTS ARE NOTED ON THE DRAWINGS AND IN THE SPECIFICATIONS.
- B. MINIMUM REQUIREMENTS FOR SUPPLY AND RETURN DUCTWORK INSULATION:
- R-6: DUCTS LOCATED IN UNCONDITIONED SPACES (SPACE NEITHER HEATED NOR COOLED SUCH AS ABOVE CEILING SPACES, WALL SPACES, DUCT CHASES, SOFFITS, ATTICS, CRAWL SPACES, UNHEATED BASEMENTS, AND UNHEATED GARAGES).
  - R-12: DUCTS LOCATED OUTSIDE OF THE BUILDING'S INSULATION ENVELOPE (SUCH AS ABOVE THE ATTIC INSULATION).
- TYPICAL INSULATION THICKNESS REQUIRED TO MEET THESE REQUIREMENTS:
- DUCT WRAP:  
R-6 = 1-1/2"  
R-12 = 4"
  - DUCT LINER:  
R-6 = 1-1/2"  
R-12 = 3"
- C. CONTRACTOR SHALL VERIFY WITH THE MANUFACTURER, THE R-VALUES OF THE ACTUAL INSULATION USED. R-VALUES SHALL BE INSTALLED VALUES.
- D. WHERE DUCTS USED FOR COOLING ARE EXTERNALLY INSULATED, THE INSULATION SHALL BE COVERED WITH A VAPOR RETARDER HAVING A MAXIMUM PERMEANCE OF 0.05 PERM OR ALUMINUM FOIL HAVING A MINIMUM THICKNESS OF 2 MILS. INSULATION HAVING A PERMEANCE OF 0.05 PERMS OR LESS SHALL NOT BE REQUIRED TO BE COVERED. ALL JOINTS AND SEAMS SHALL BE SEALED TO MAINTAIN THE CONTINUITY OF THE VAPOR RETARDER.
- E. ALL DUCT JOINTS, SEAMS, AND CONNECTIONS SHALL BE FASTENED AND SEALED WITH WELDS, GASKETS, ADHESIVES, MASTIC-PLUS-EMBEDDED-FABRIC SYSTEMS, OR TAPES. TAPES AND MASTICS SHALL BE LISTED AND LABELED PER UL181A OR UL181B. DUCT TAPE IS NOT PERMITTED AS A SEALANT ON ANY METAL DUCTS. DUCT CONNECTIONS TO FLANGES OR EQUIPMENT SHALL BE SEALED AND MECHANICALLY FASTENED.
- F. MINIMUM REQUIREMENTS (THICKNESS) FOR PIPING INSULATION SHALL BE AS FOLLOWS:
- | FLUID                | NOMINAL PIPE DIAMETER |                |              |
|----------------------|-----------------------|----------------|--------------|
|                      | 1/2" TO < 1 1/2"      | 1 1/2" TO < 4" | 4" AND ABOVE |
| 1. HEATING WATER     | 1 1/2"                | 2"             | 2"           |
| 1. CHILLED WATER     | 1 1/2"                | 1"             | 1"           |
| 2. STEAM             | 2 1/2"                | 2 1/2"         | 3"           |
| 3. CONDENSATE RETURN | 2 1/2"                | 2 1/2"         | 3"           |
| 4. REFRIGERANT       | SEE SPECIFICATIONS    |                |              |
- THE ABOVE INSULATION IS BASED ON HAVING A CONDUCTIVITY NOT EXCEEDING 0.27 BTU-INCH/HOUR-FT<sup>2</sup>-°F.
- G. DOMESTIC HOT WATER PIPING SYSTEMS SHALL BE INSULATED WITH 1" INSULATION HAVING A CONDUCTIVITY NOT EXCEEDING 0.27 BTU-INCH/HOUR-FT<sup>2</sup>-°F.
- H. DOMESTIC WATER HEATERS WHICH ARE NOT PROVIDED WITH INTEGRAL HEAT TRAPS AND SERVE NONCIRCULATING SYSTEMS SHALL BE PROVIDED WITH HEAT TRAPS ON THE SUPPLY AND DISCHARGE PIPING AT THE WATER HEATER.
- I. DOMESTIC HOT WATER SYSTEMS WITH RECIRCULATION PUMPS OR ELECTRIC HEAT TRACE SHALL BE CONTROLLED WITH 7-DAY TIME CLOCKS.
- J. AN OPERATING AND MAINTENANCE MANUAL SHALL BE PROVIDED PRIOR TO ISSUANCE OF A CERTIFICATE OF OCCUPANCY. THE O&M MANUAL SHALL CONTAIN THE FOLLOWING INFORMATION AS A MINIMUM:
- EQUIPMENT CAPACITY (INPUT & OUTPUT).
  - EQUIPMENT OPERATING AND MAINTENANCE INSTRUCTIONS.
  - CONTROL SYSTEM MAINTENANCE AND CALIBRATION INFORMATION, INCLUDING WIRING DIAGRAMS, SCHEMATICS, AND CONTROL SEQUENCES.
  - CONTROL SYSTEM SETPOINTS SHALL BE SHOWN ON CONTROL DRAWINGS, AT CONTROL DEVICES, OR IN PROGRAMMING COMMENT ON DDC SYSTEMS.
  - A COMPLETE WRITTEN NARRATIVE ON HOW EACH MECHANICAL SYSTEM IS INTENDED TO OPERATE.



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Project No. 22-104

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NOT FOR CONSTRUCTION  
12/9/2022

Jefferson Elementary School  
Addition and Remodel  
600 N. Fillmore Street, Jerome, Idaho

DATE: December 9, 2022  
LKV PROJECT #: -  
REVISIONS:

DRAWN BY: CD  
CHECKED BY: BC

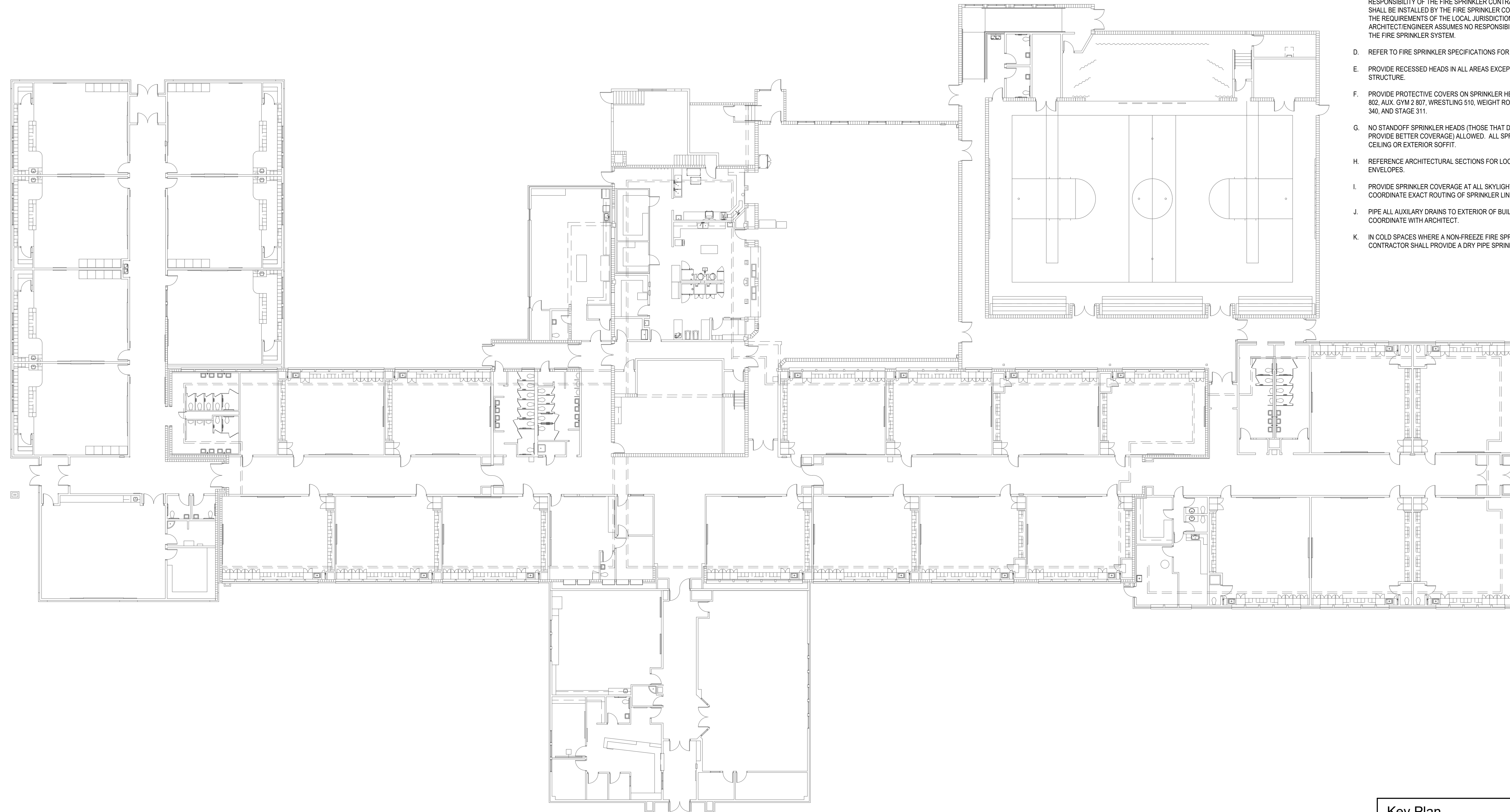
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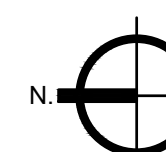
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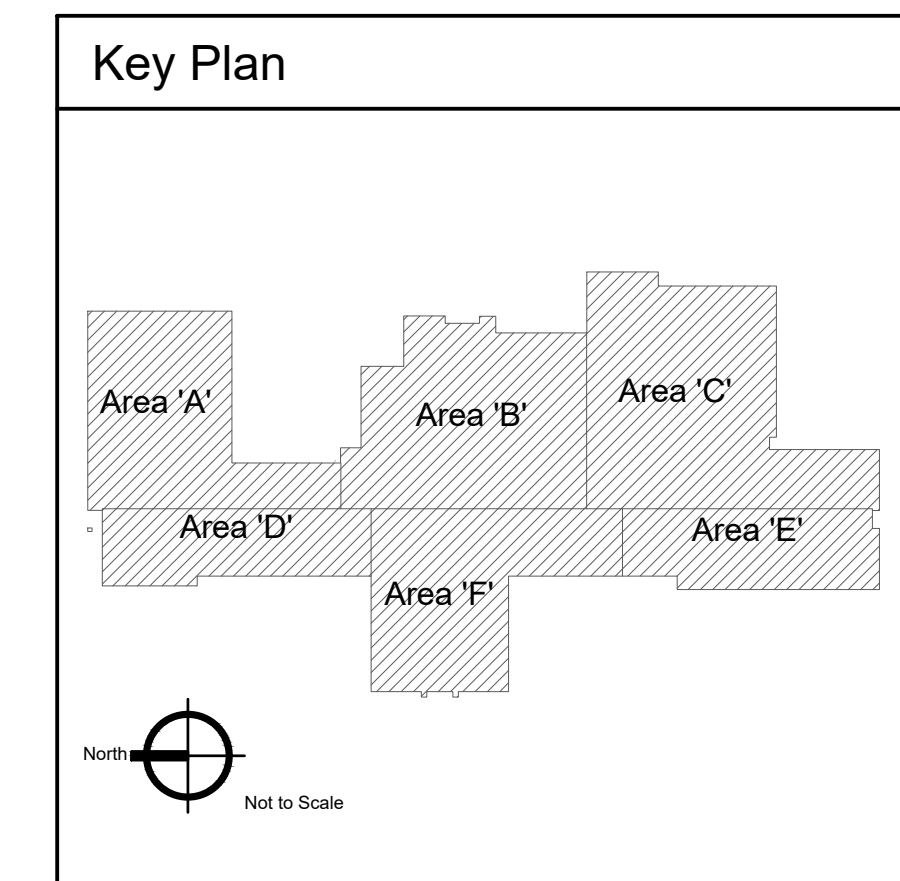
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## FIRE SPRINKLER NOTES:

- A. THE FIRE SPRINKLER SYSTEM SHALL BE DESIGNED AND INSTALLED BY THE FIRE SPRINKLER CONTRACTOR. THIS PLAN INDICATES GENERAL PARAMETERS THE FIRE SPRINKLER CONTRACTOR MUST DESIGN AND INSTALL AROUND. THE ENGINEER/ARCHITECT/OWNER RESERVES THE RIGHT TO REVIEW AND APPROVE TEST VALVES, ZONING VALVES, FLOW SENSORS, ETC. DURING THE SUBMITTAL PROCESS.
- B. FIRE SPRINKLER CONTRACTORS SHALL BE LICENSED BY THE IDAHO STATE FIRE MARSHAL AND SHALL HAVE IN HIS/HER EMPLOY AND WITHIN 50 MILES OF THE JOB SITE AN ENGINEERING TECHNICIAN (LEVEL III), CERTIFIED BY NICET (NATIONAL INSTITUTE FOR CERTIFICATION IN ENGINEERING TECHNOLOGIES). PROOF OF BOTH MUST BE SUBMITTED TO THE ENGINEER PRIOR TO THE START OF ANY FIRE SPRINKLING DESIGN AND/OR INSTALLATION. NO EXCEPTIONS.
- C. ALL WORK REQUIRED FOR THE FIRE PROTECTION SYSTEM SHALL BE THE RESPONSIBILITY OF THE FIRE SPRINKLER CONTRACTOR. THE FIRE SPRINKLER SYSTEM SHALL BE INSTALLED BY THE FIRE SPRINKLER CONTRACTOR AS REQUIRED TO SATISFY THE REQUIREMENTS OF THE LOCAL JURISDICTION AND NFPA 13, LATEST EDITION. ARCHITECT/ENGINEER ASSUMES NO RESPONSIBILITY OR LIABILITY FOR THE DESIGN OF THE FIRE SPRINKLER SYSTEM.
- D. REFER TO FIRE SPRINKLER SPECIFICATIONS FOR ADDITIONAL REQUIREMENTS.
- E. PROVIDE RECESSED HEADS IN ALL AREAS EXCEPT WHERE ROOM IS OPEN TO STRUCTURE.
- F. PROVIDE PROTECTIVE COVERS ON SPRINKLER HEADS IN GYMNASIUM 500, AUX. GYM 1 802, AUX. GYM 2 807, WRESTLING 510, WEIGHT ROOM 541, COMMONS 400, BAND ROOM 340, AND STAGE 311.
- G. NO STANDOFF SPRINKLER HEADS (THOSE THAT DROP BELOW CEILING OR SOFFIT TO PROVIDE BETTER COVERAGE) ALLOWED. ALL SPRINKLER HEADS MUST BE FLUSH WITH CEILING OR EXTERIOR SOFFIT.
- H. REFERENCE ARCHITECTURAL SECTIONS FOR LOCATION OF BUILDING INSULATION ENVELOPES.
- I. PROVIDE SPRINKLER COVERAGE AT ALL SKYLIGHTS REQUIRING COVERAGE. COORDINATE EXACT ROUTING OF SPRINKLER LINE WITH THE ARCHITECT.
- J. PIPE ALL AUXILIARY DRAINS TO EXTERIOR OF BUILDING OR APPROVED RECEPTACLE. COORDINATE WITH ARCHITECT.
- K. IN COLD SPACES WHERE A NON-FREEZE FIRE SPRINKLER SYSTEM IS REQUIRED, CONTRACTOR SHALL PROVIDE A DRY PIPE SPRINKLER SYSTEM.




**Fire Protection Criteria Plan**  
 Scale: 1/16" = 1'-0"



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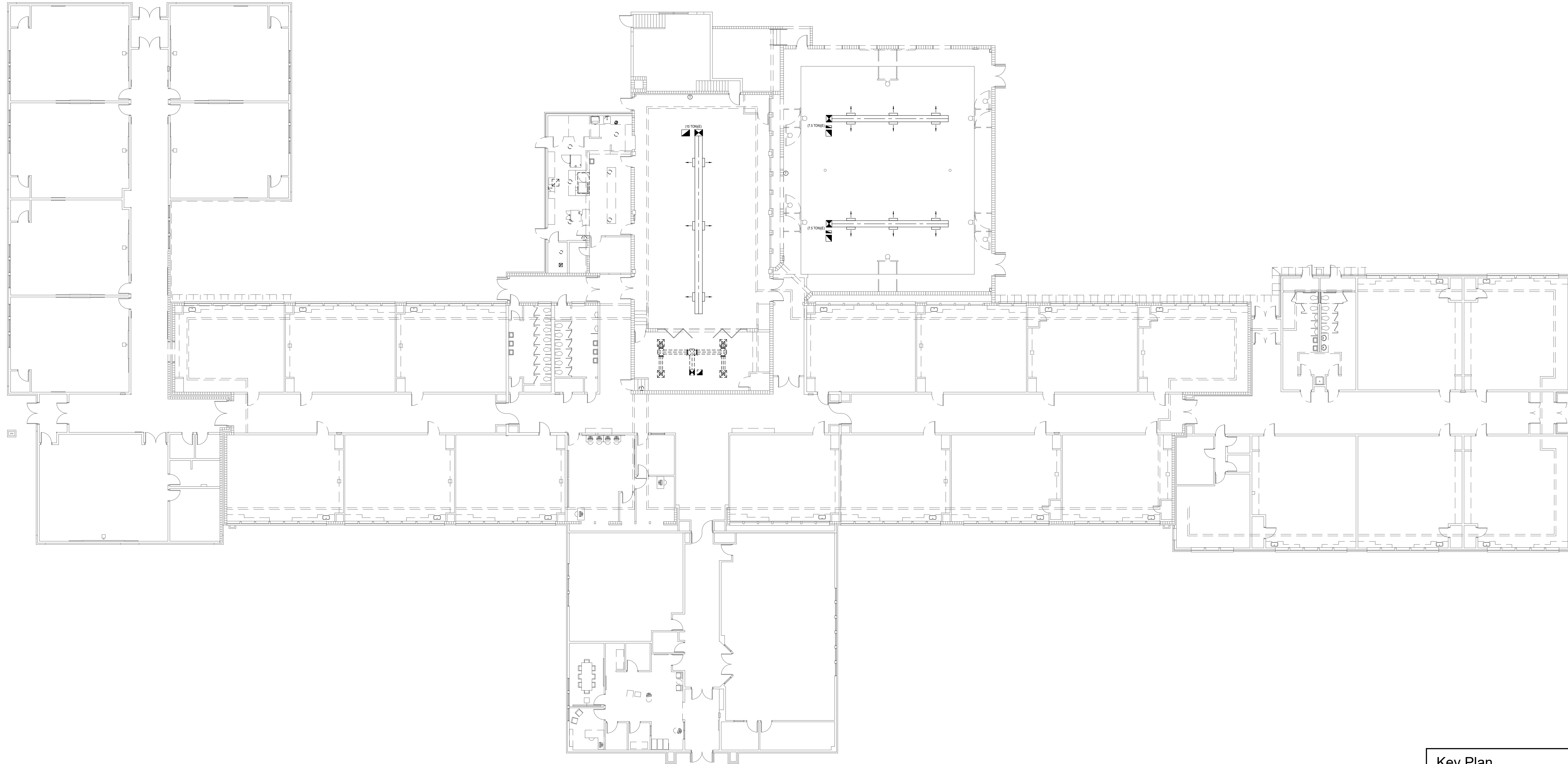
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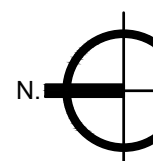
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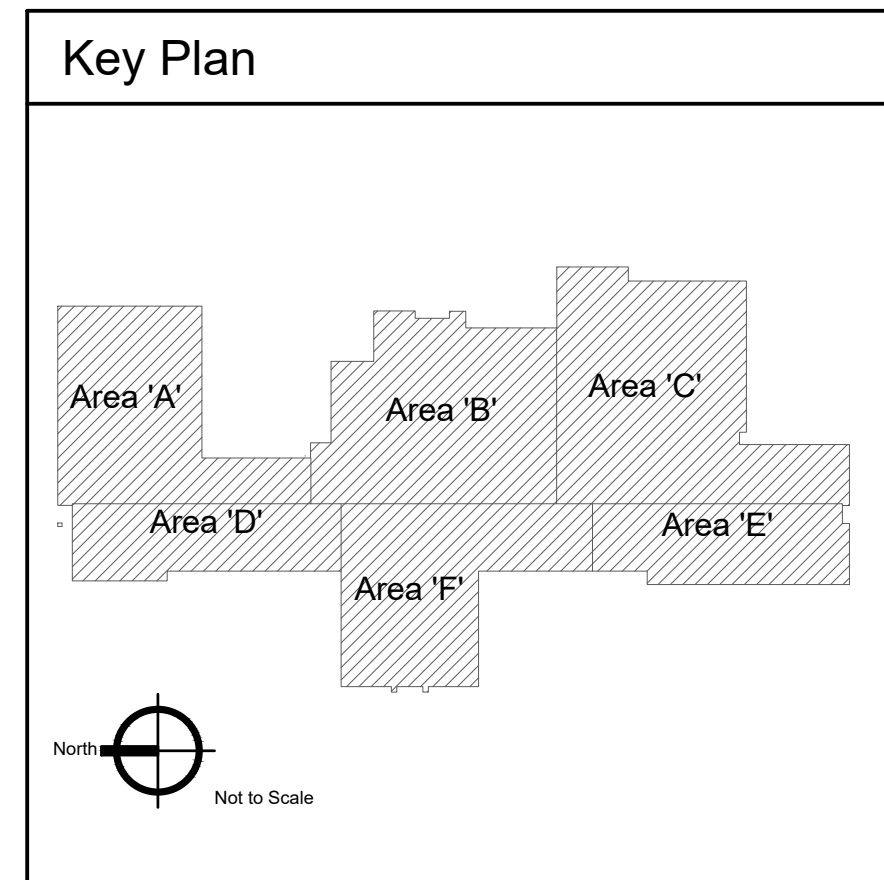
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**KEYED NOTES:**

- # SYMBOL USED FOR NOTE CALLOUT.
- 1. KEYNOTES



 Overall Mechanical Demolition Floor Plan  
Scale: 1/16" = 1'-0"



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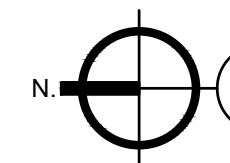
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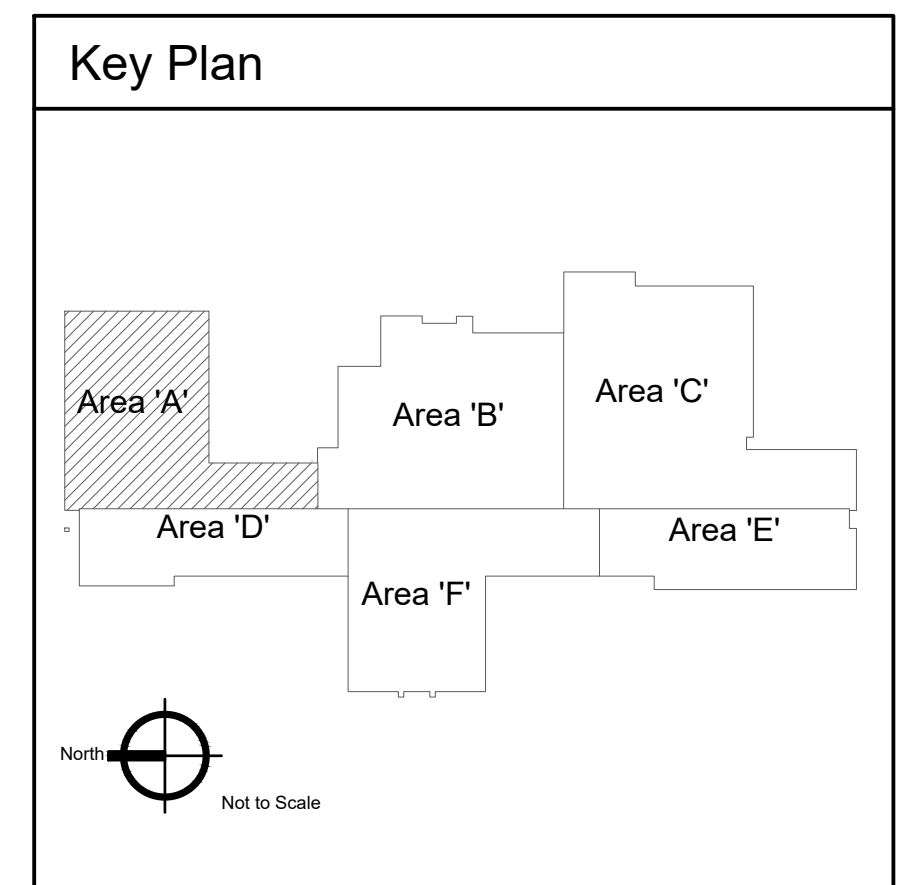
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**KEYED NOTES:**

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- 1. KEYNOTES



 **1** Mechanical Demolition Plan - Area 'A'  
Scale: 1/8" = 1'-0"

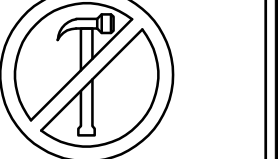


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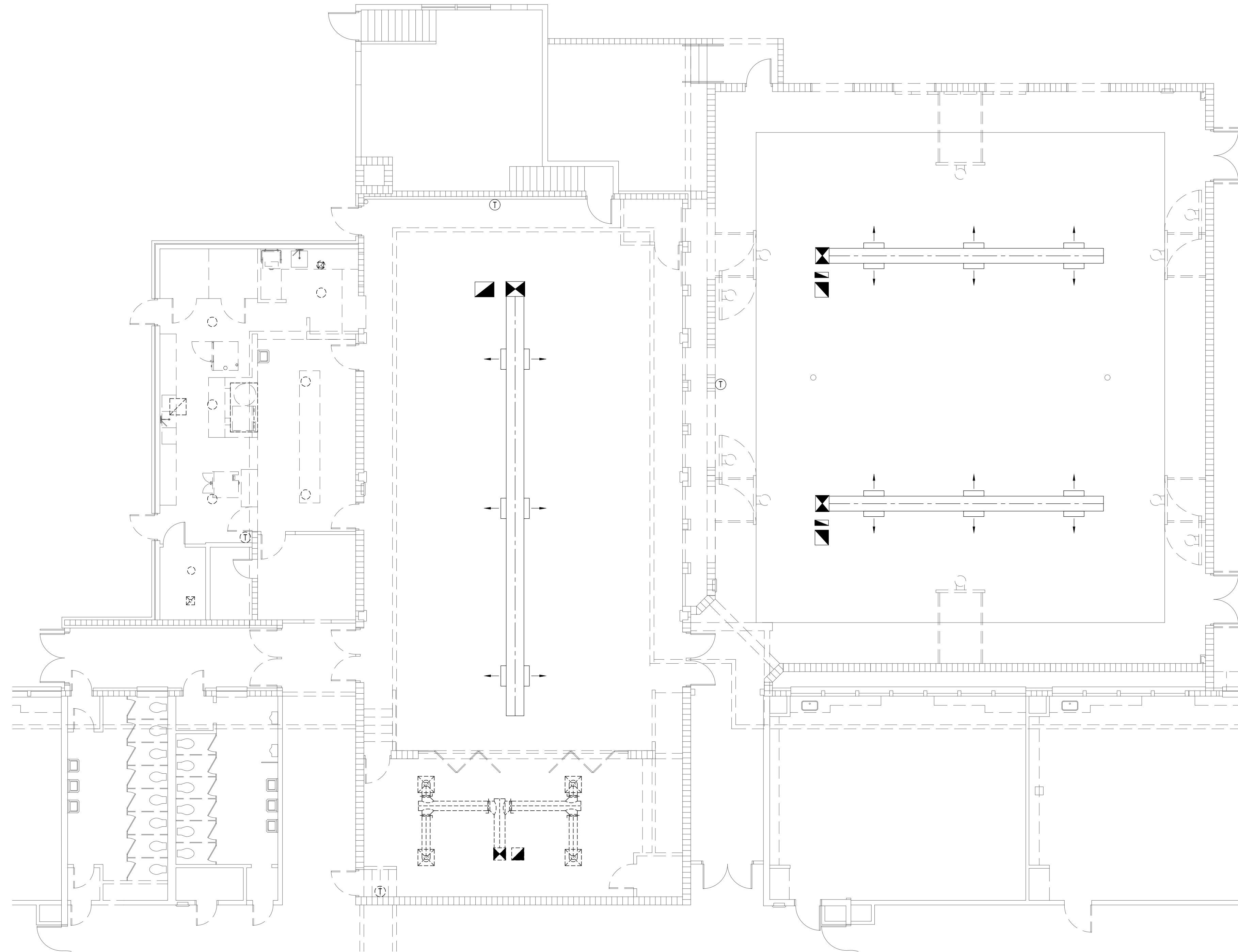
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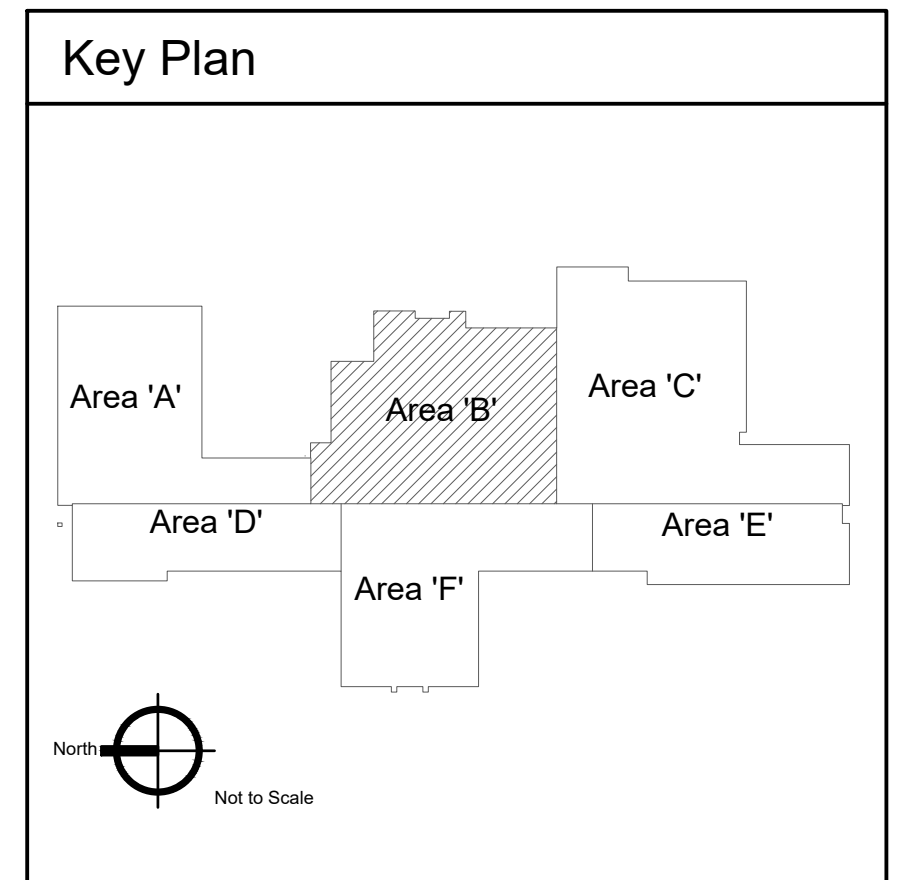
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- 1. KEYNOTES



1 Mechanical Demolition Plan - Area 'B'  
Scale: 1/8" = 1'-0"



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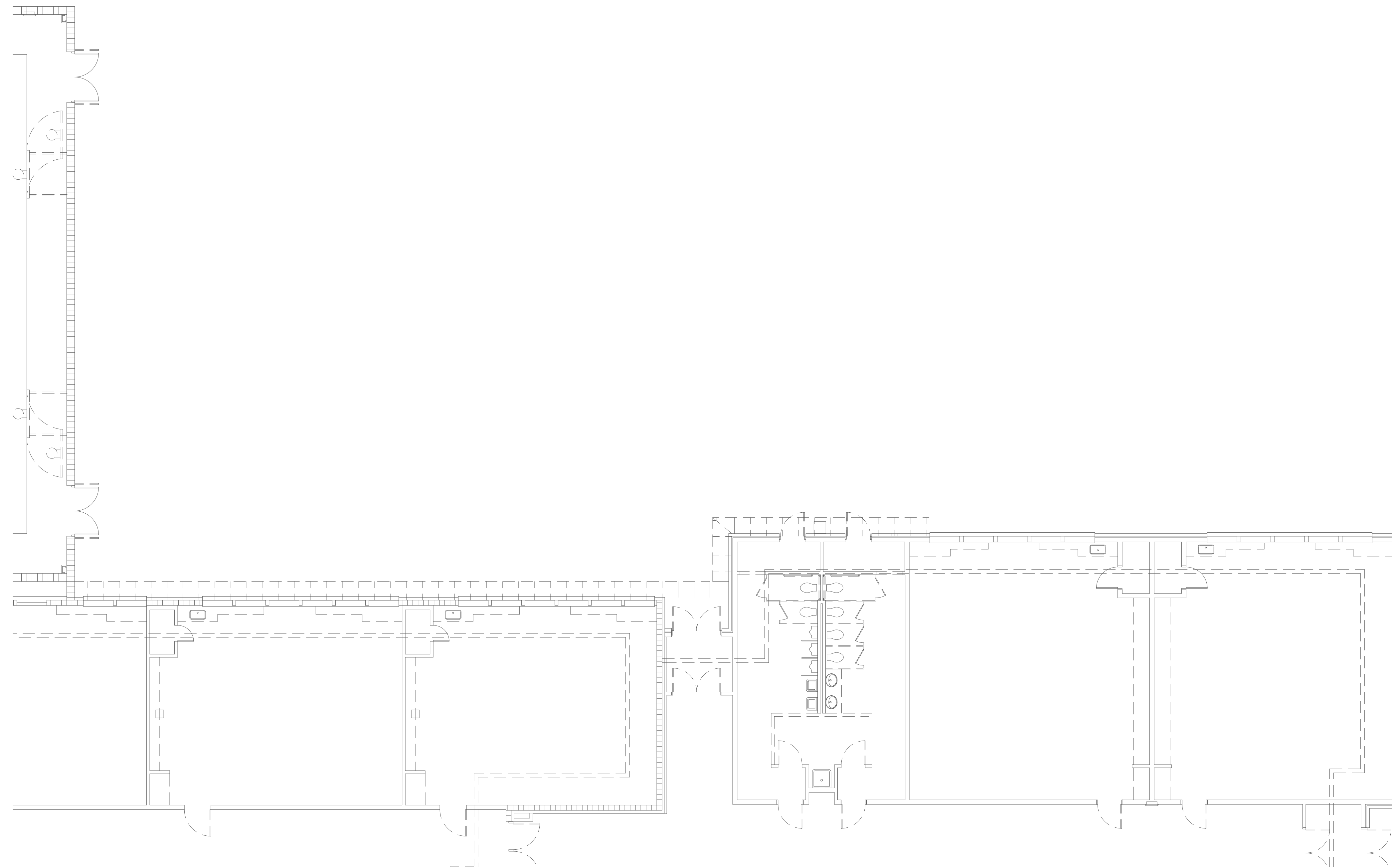
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1 Mechanical Demolition Plan - Area 'C'  
Scale: 1/8" = 1'-0"

**KEYED NOTES:**

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- 1. KEYNOTES



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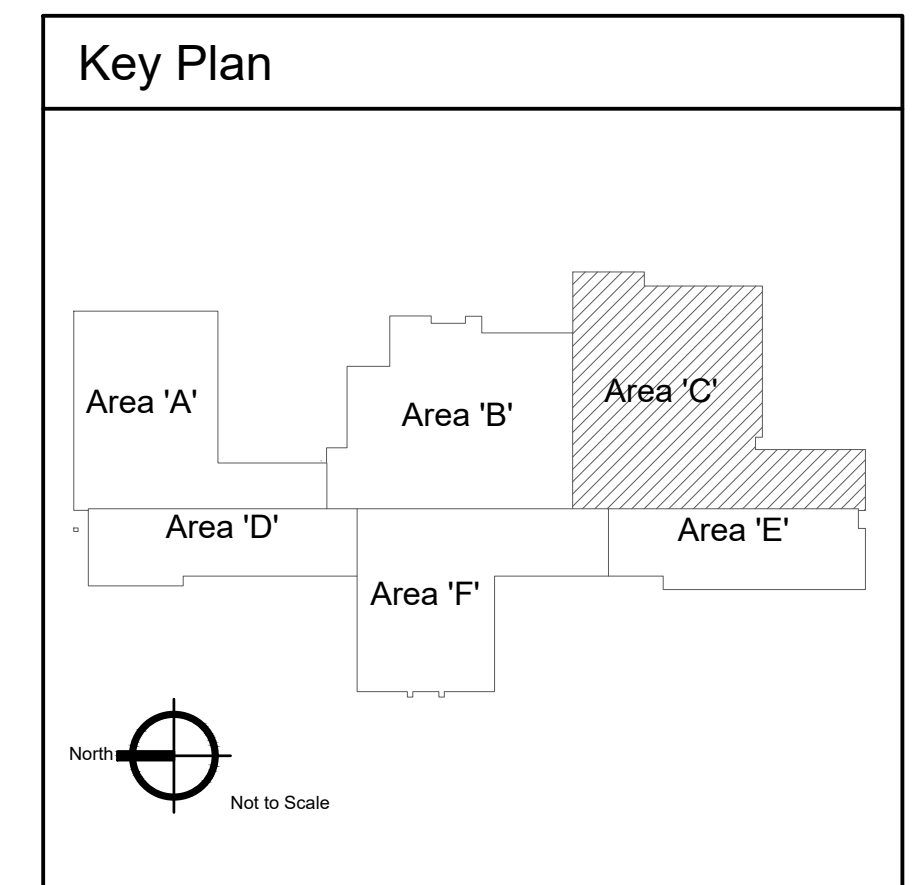
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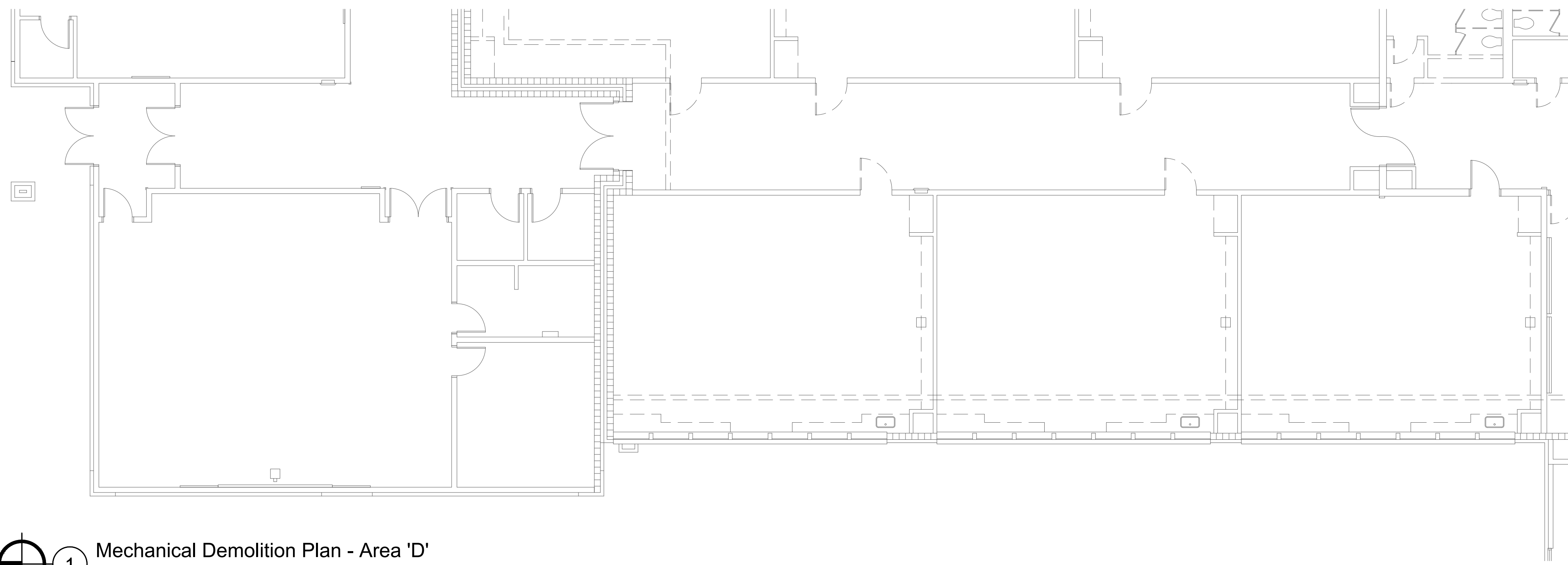
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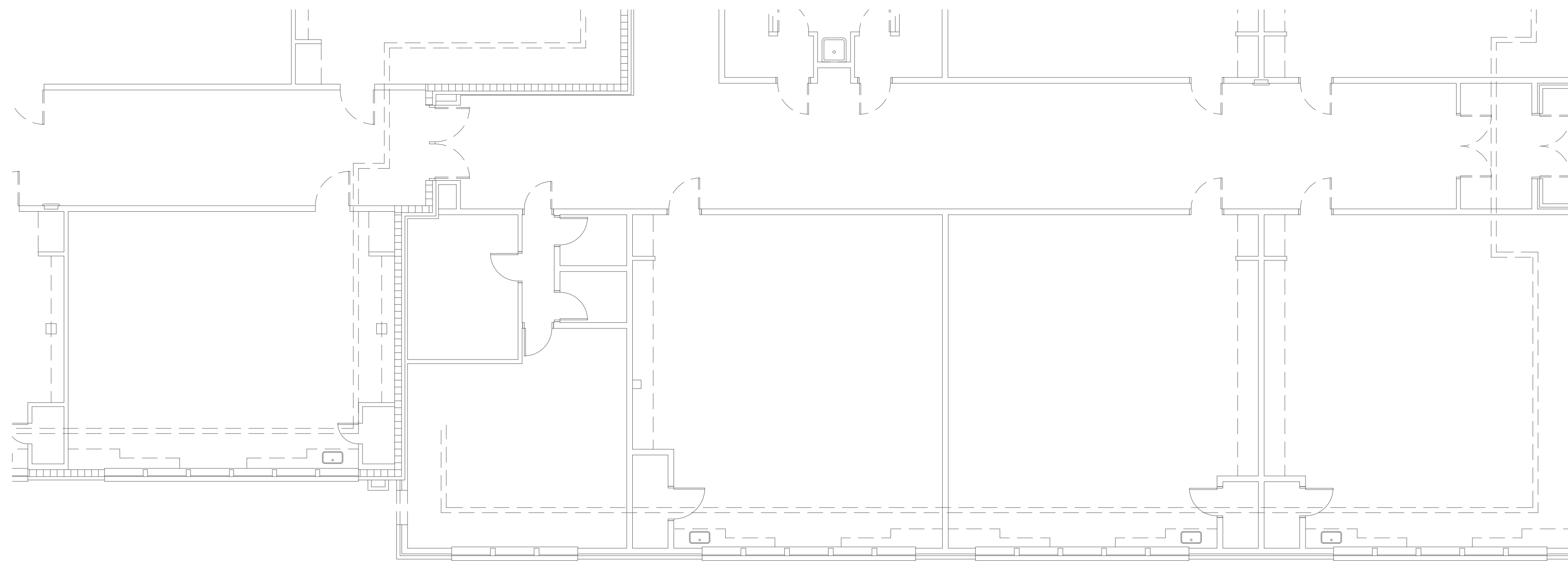
DRAWING NO.

**M-1.3**





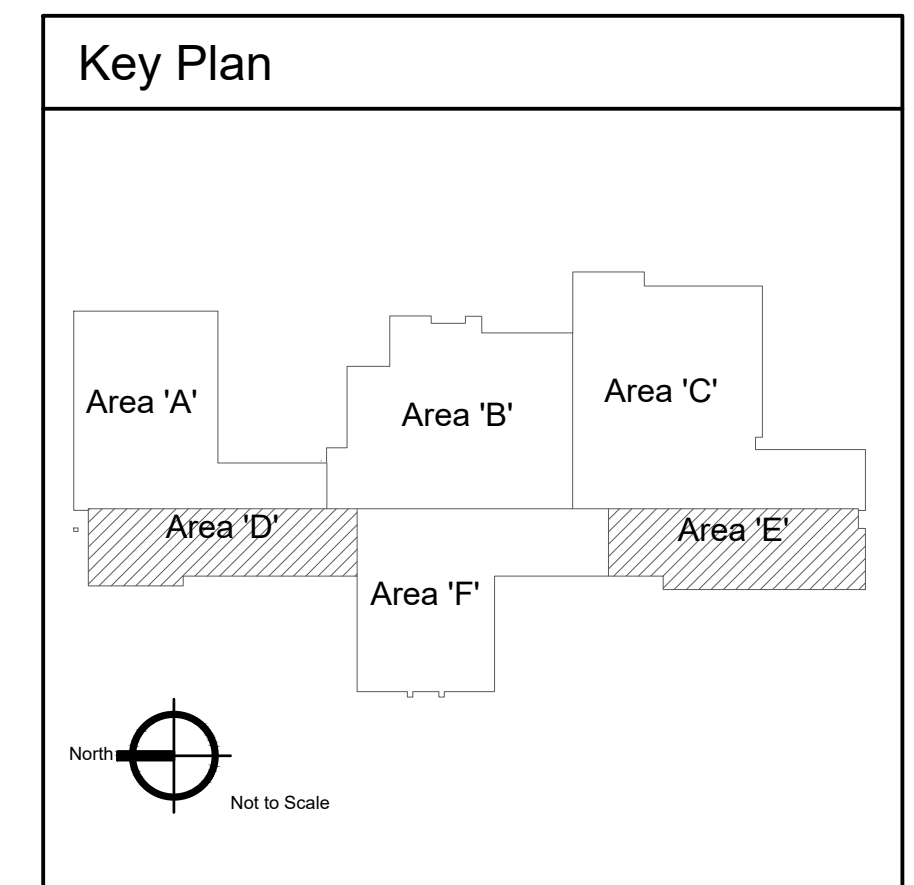
1 Mechanical Demolition Plan - Area 'D'  
Scale: 1/8" = 1'-0"



2 Mechanical Demolition Plan - Area 'E'  
Scale: 1/8" = 1'-0"

**KEYED NOTES:**

- # SYMBOL USED FOR NOTE CALLOUT.
- 1. KEYNOTES



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Addition and Remodel  
600 N. Fillmore Street, Jerome, Idaho

DATE: December 9, 2022  
LKV PROJECT #: -  
REVISIONS:

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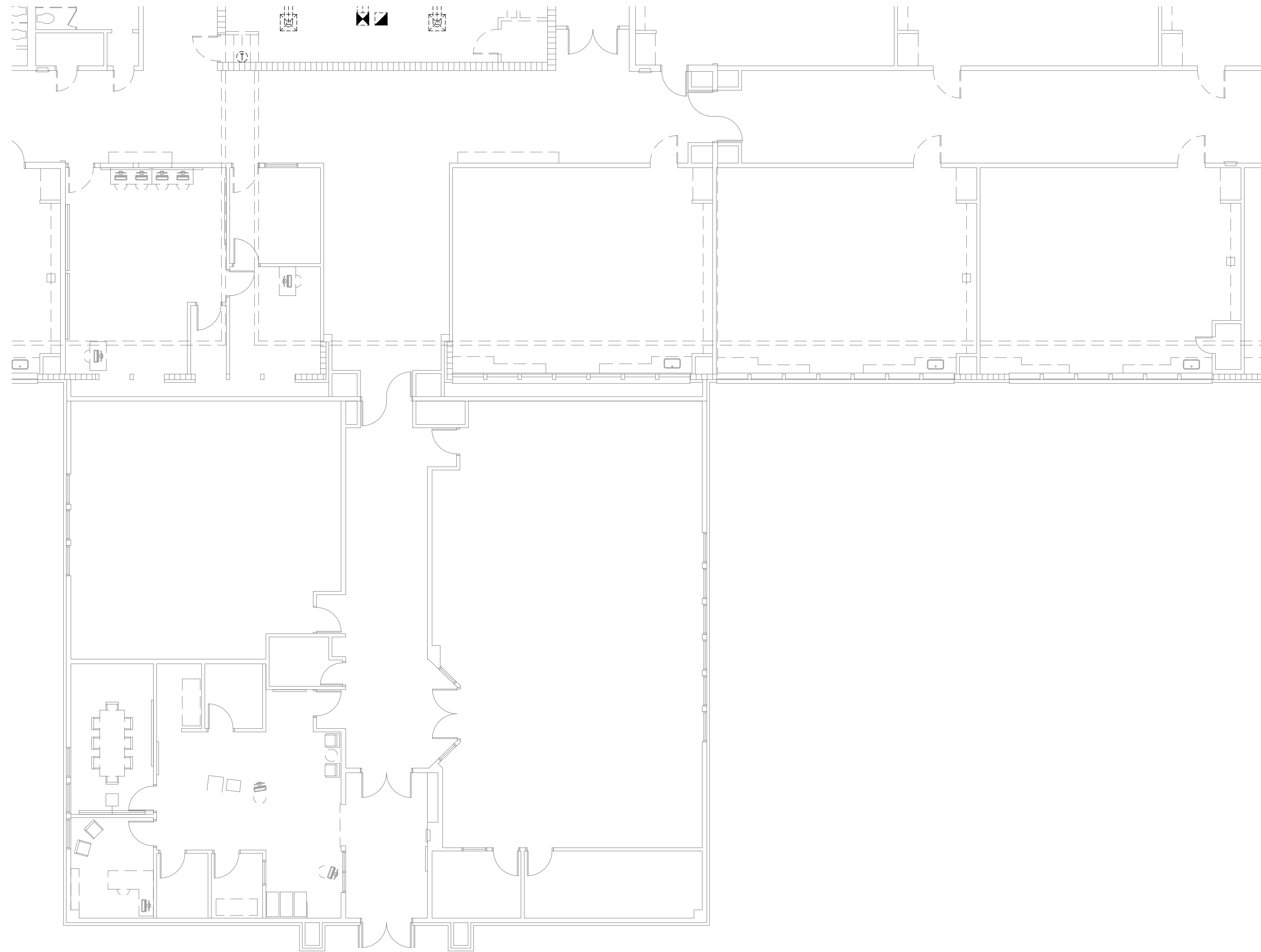
Design Development

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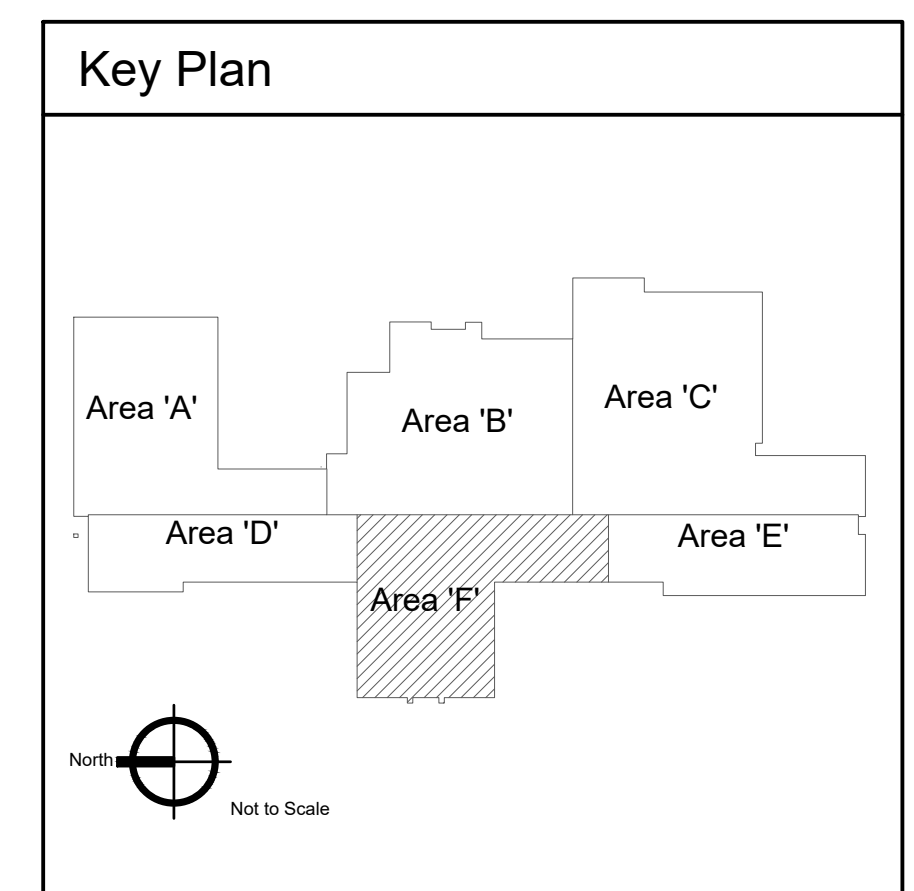
**M-1.4**

**KEYED NOTES:**

- # SYMBOL USED FOR NOTE CALLOUT.
- 1. KEYNOTES



1 Mechanical Demolition Plan - Area 'F'  
Scale: 1/8" = 1'-0"



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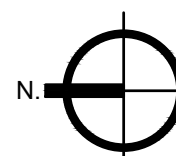
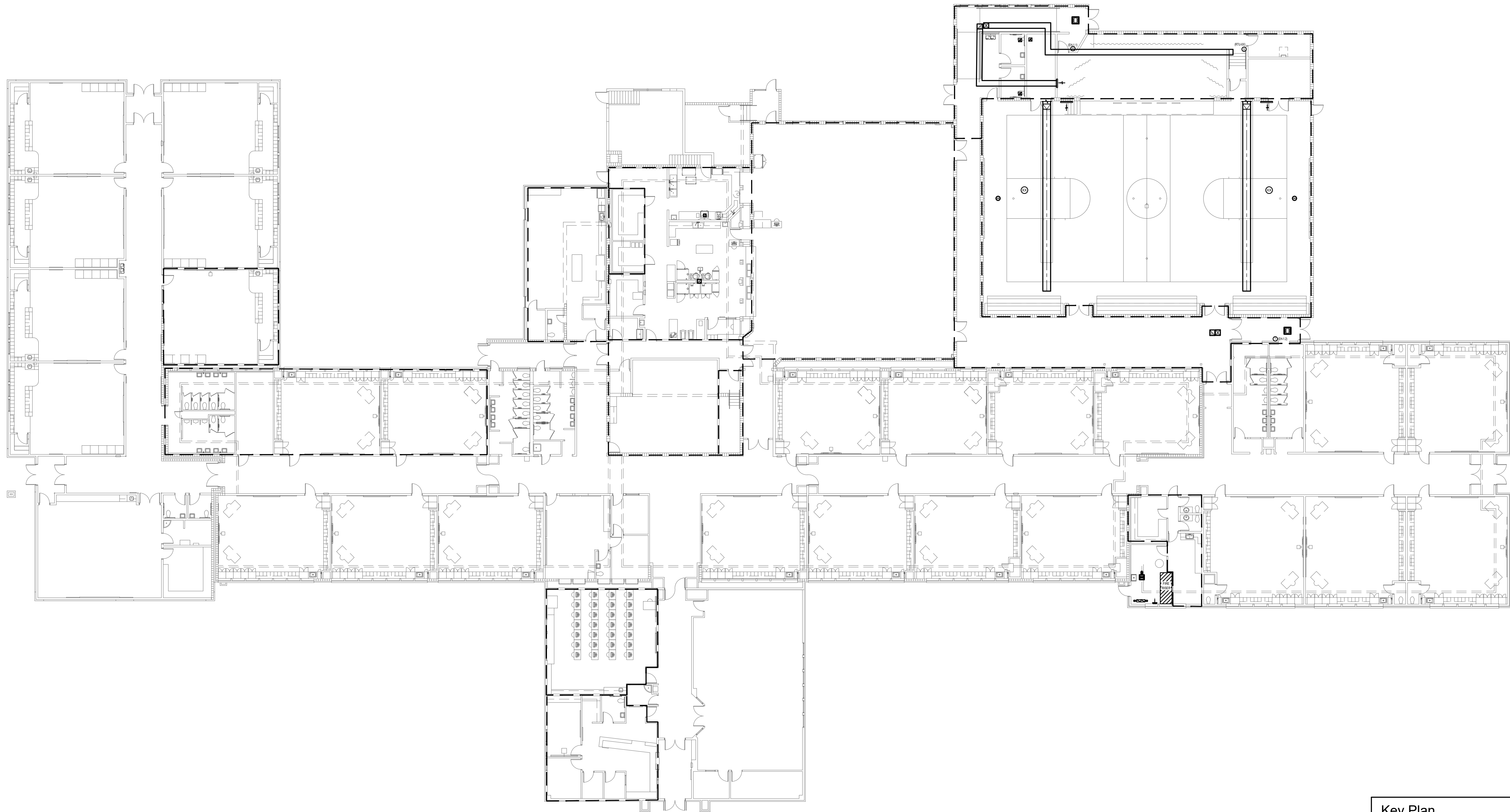
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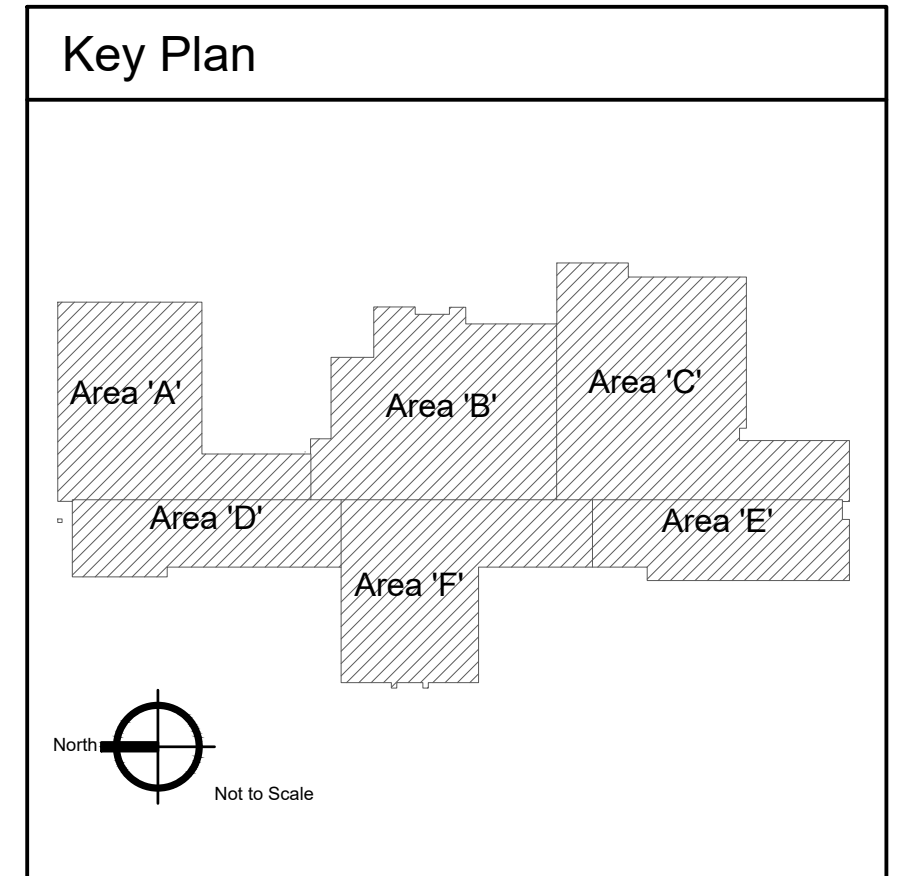
**M-1.5**





Overall Mechanical New Work Floor Plan

Scale: 1/16" = 1'-0"



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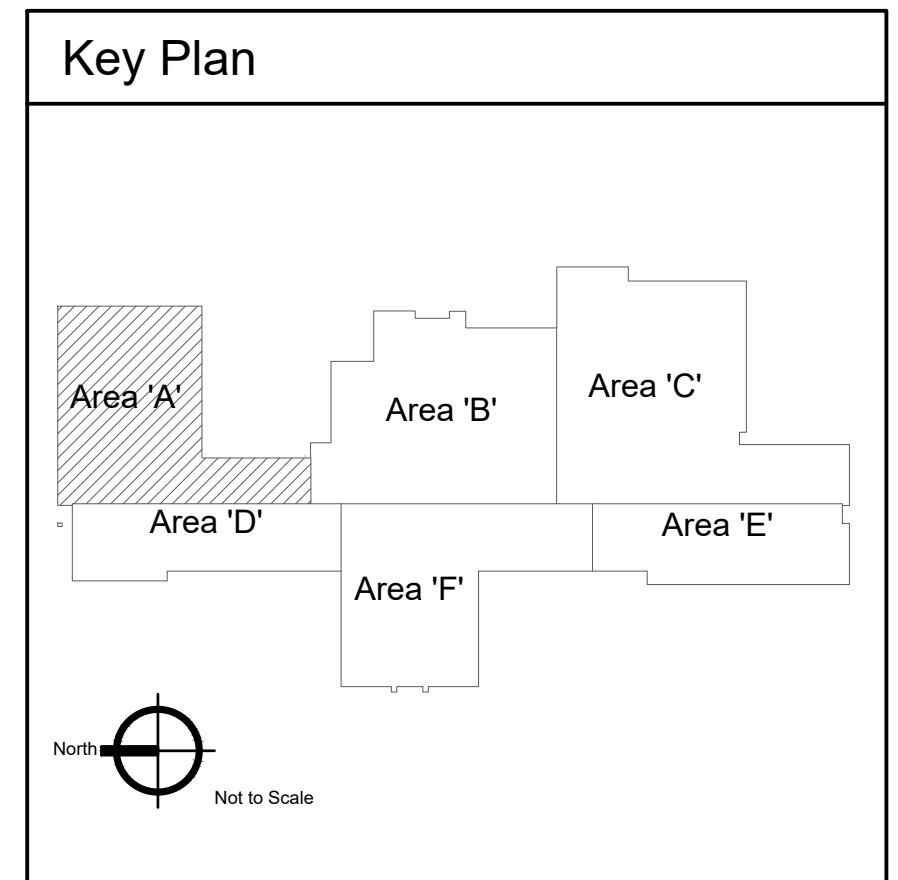
M-2.0

**KEYED NOTES:**

- # SYMBOL USED FOR NOTE CALLOUT.
- 1. KEYNOTES



1 Mechanical New Work Plan - Area 'A'  
Scale: 1/8" = 1'-0"



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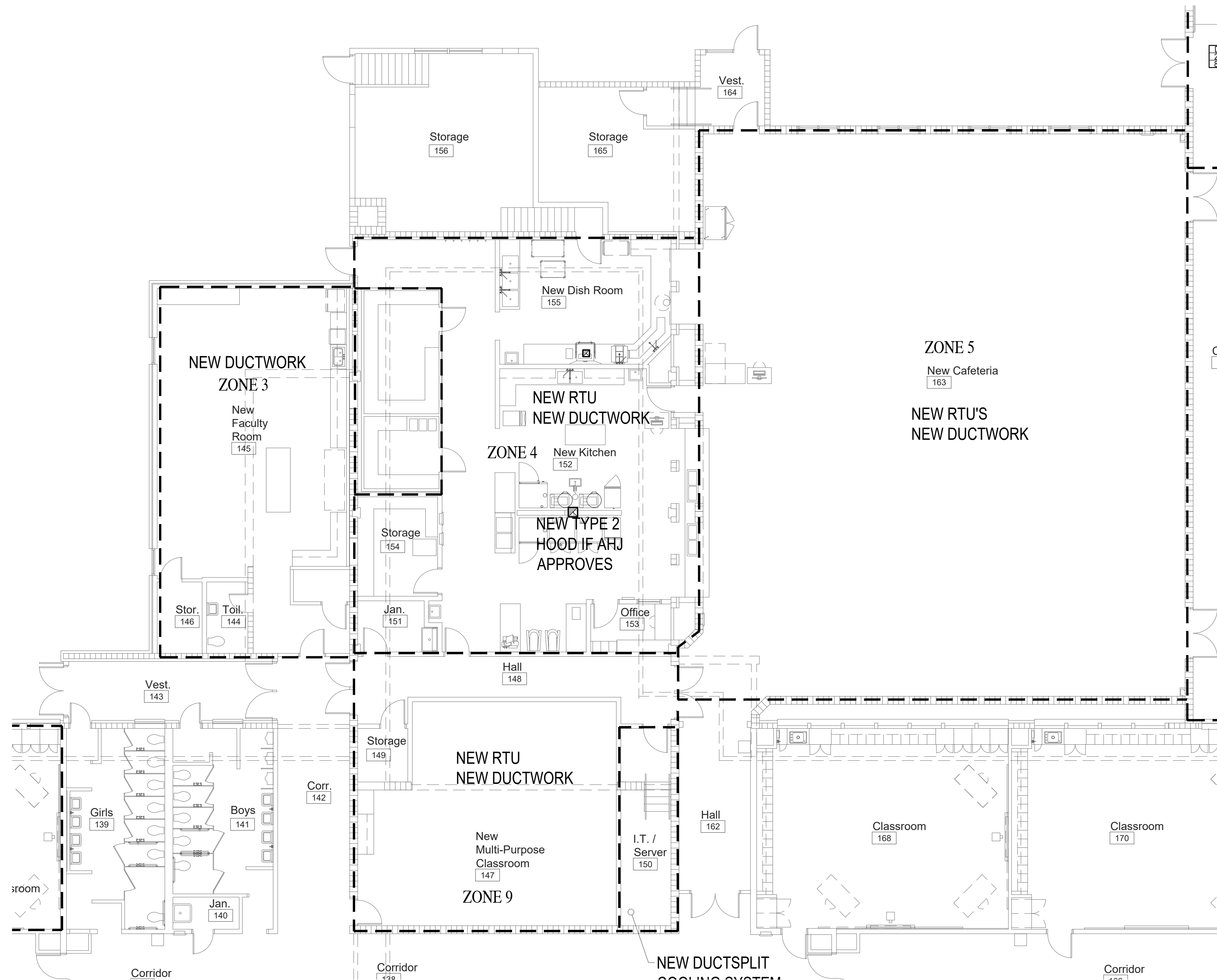
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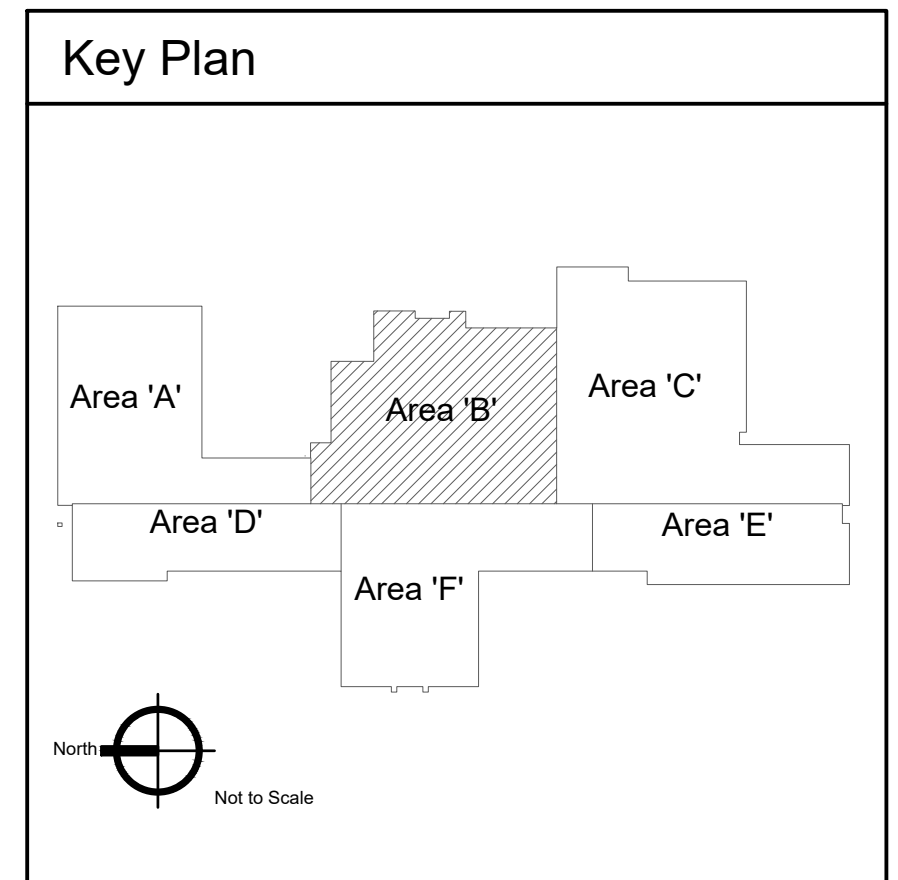
M-2.1

**KEYED NOTES:**

- # SYMBOL USED FOR NOTE CALLOUT.
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1 Mechanical New Work Plan - Area 'B'  
Scale: 1/8" = 1'-0"



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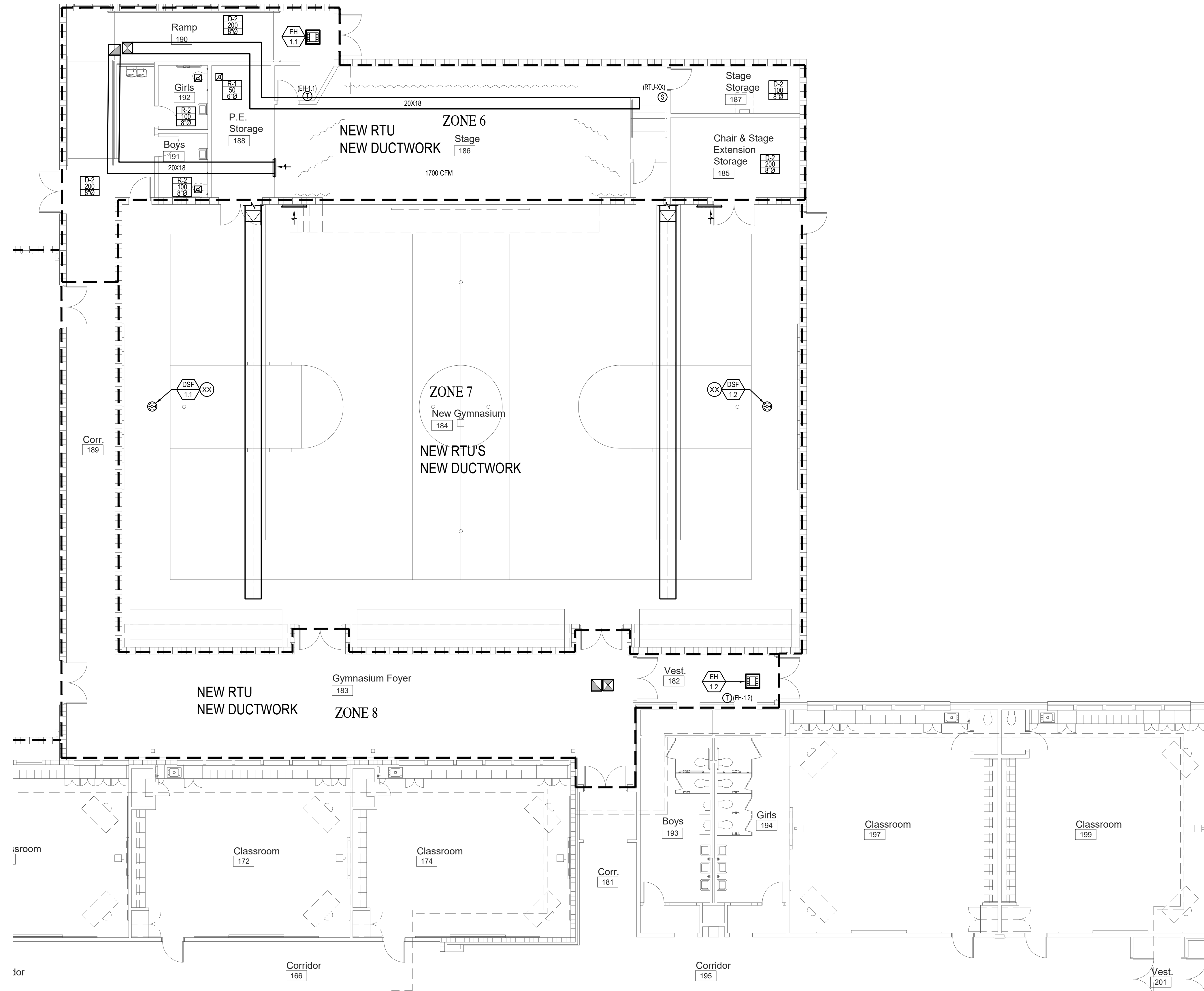
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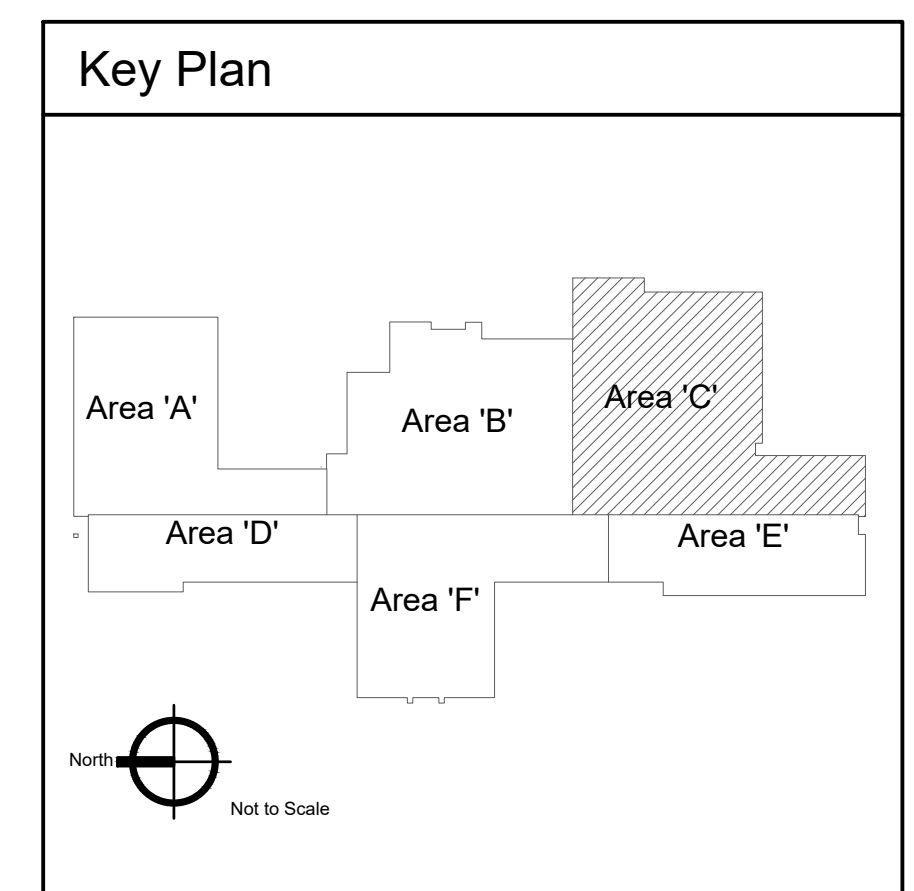
M-2.2

**KEYED NOTES:**

- # SYMBOL USED FOR NOTE CALLOUT.
- 1. KEYNOTES



1 Mechanical New Work Plan - Area 'C'  
Scale: 1/8" = 1'-0"



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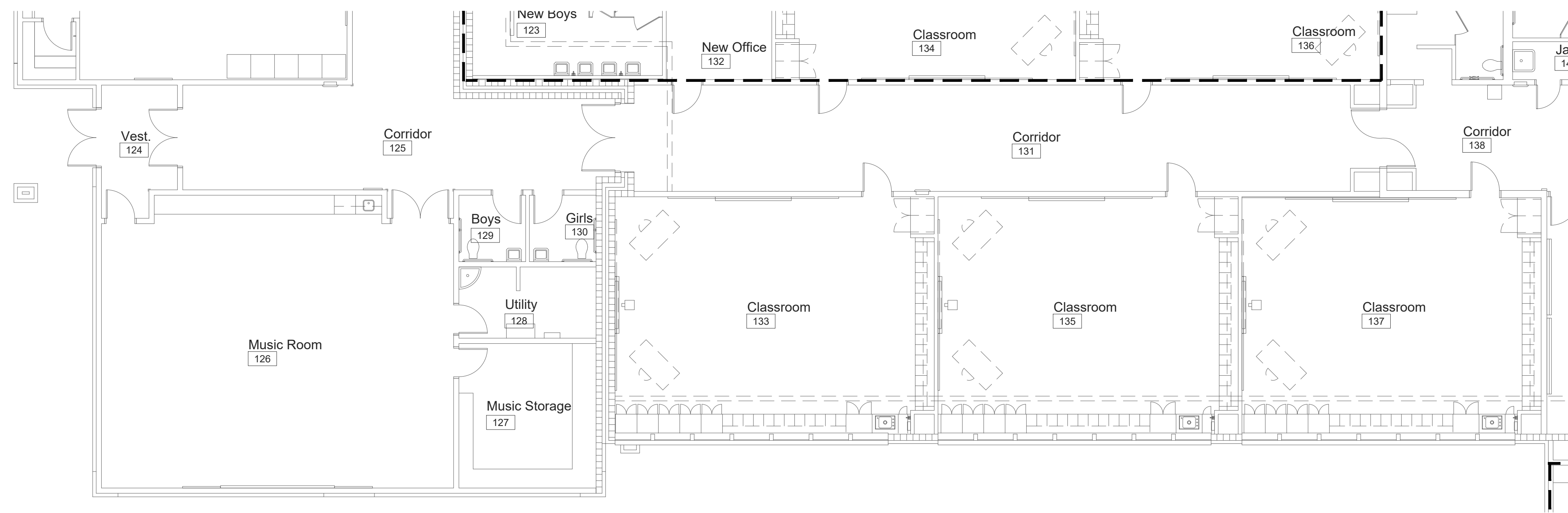
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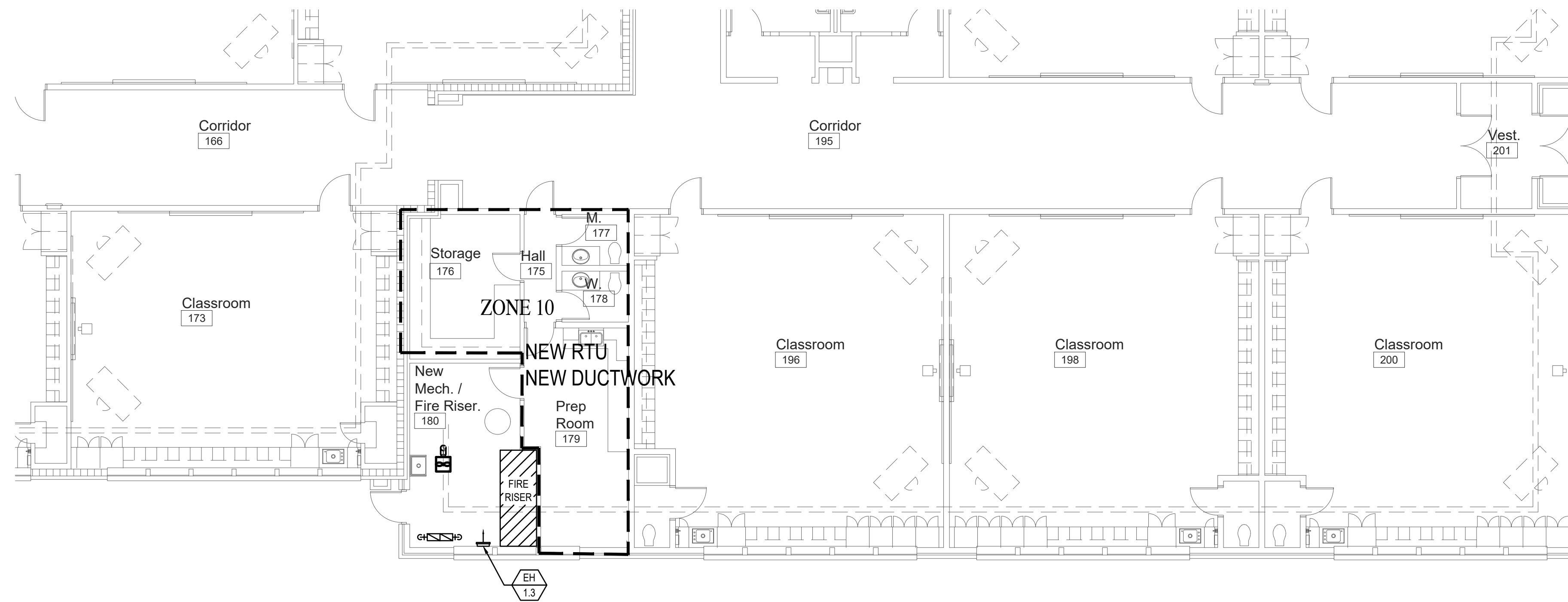
Design Development

DRAWING NO.

**M-2.3**



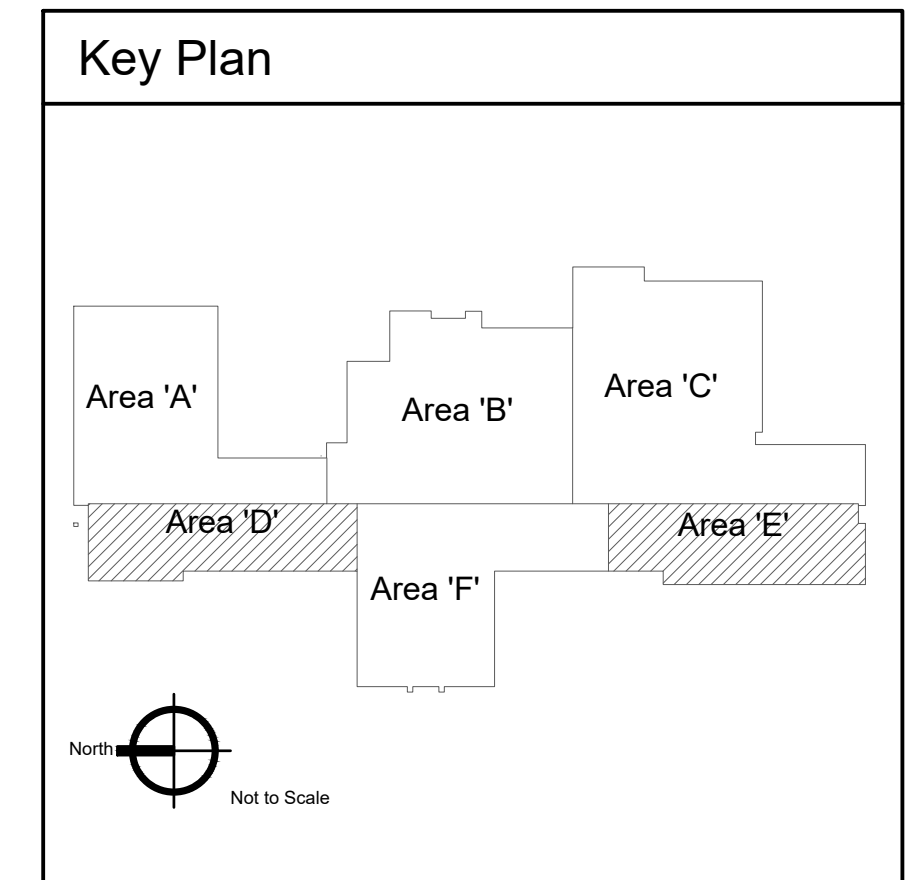
1 Mechanical New Work Plan - Area 'D'  
Scale: 1/8" = 1'-0"



2 Mechanical New Work Plan - Area 'E'  
Scale: 1/8" = 1'-0"

**KEYED NOTES:**

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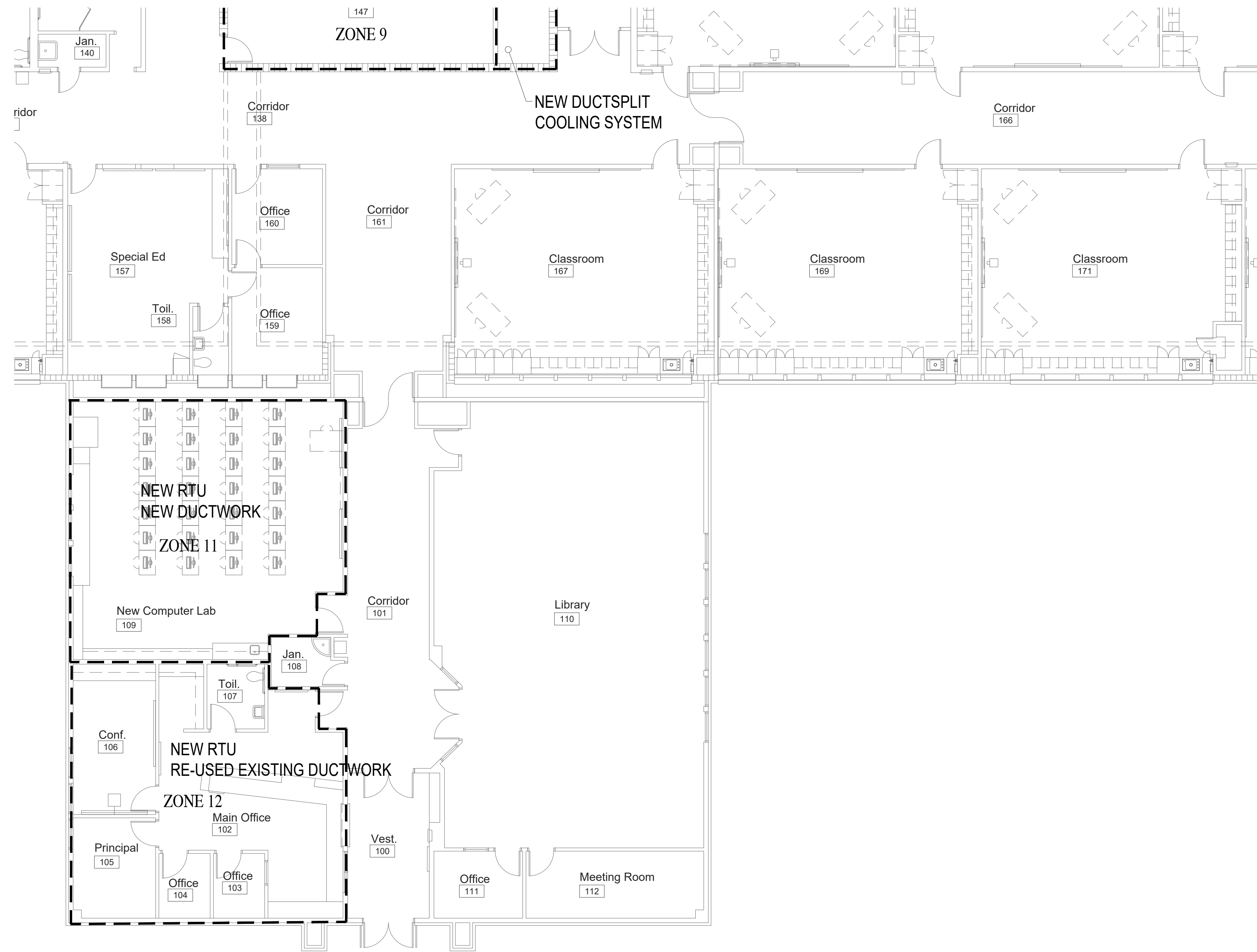
Design Development

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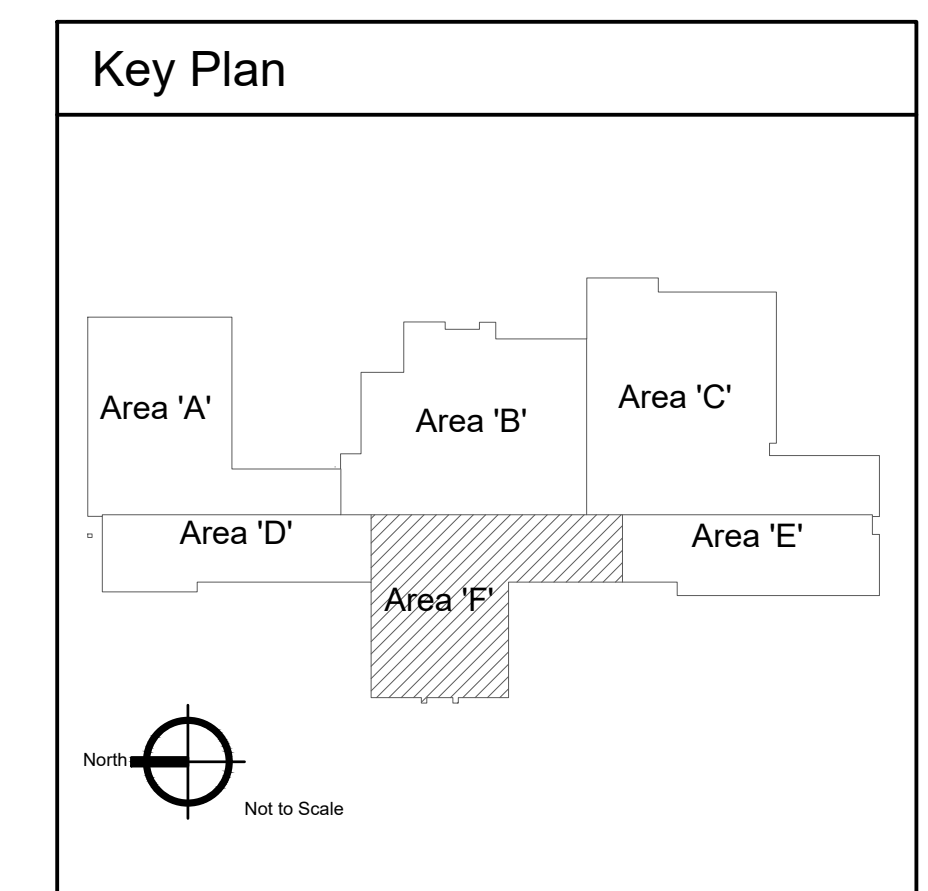
M-2.4

**KEYED NOTES:**

- # SYMBOL USED FOR NOTE CALLOUT.
- 1. KEYNOTES



1 Mechanical New Work Plan - Area 'F'  
Scale: 1/8" = 1'-0"



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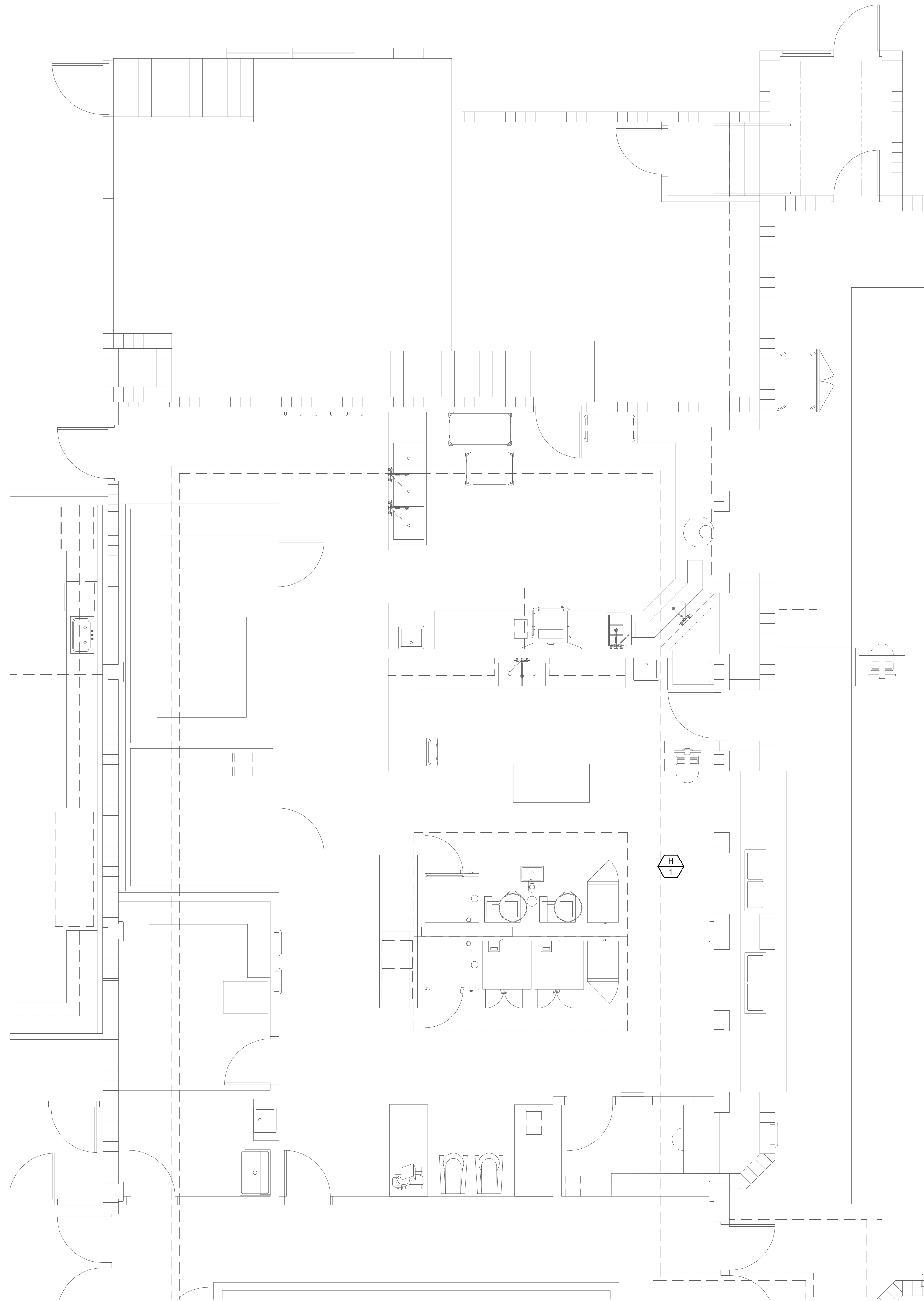
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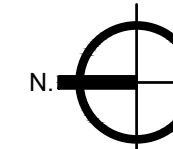
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Design Development

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**M-2.5**



N  HVAC Enlarged Kitchen Plan  
Scale: 1/4" = 1'-0"

**KEYED NOTES:**

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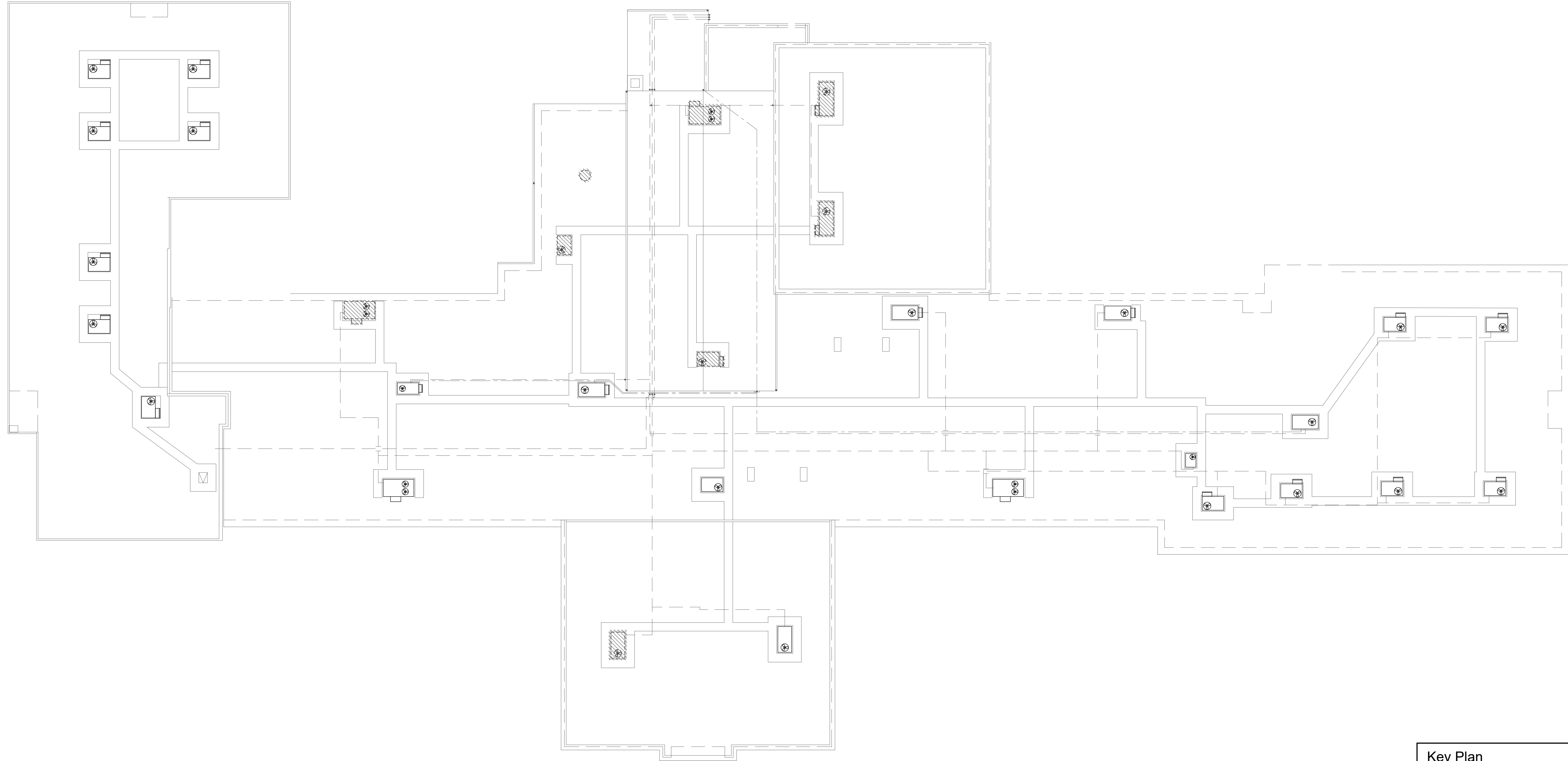
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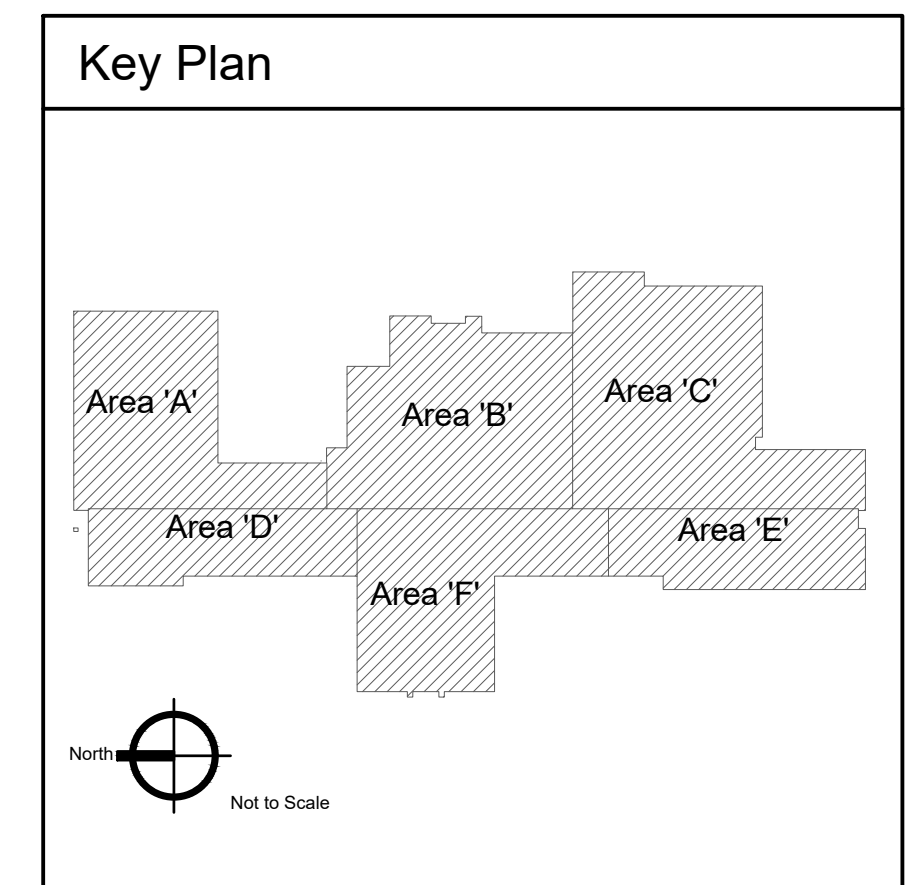
**M-2.6**

**KEYED NOTES:**

- # SYMBOL USED FOR NOTE CALLOUT.
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 Overall Demolition Mechanical Roof Plan  
Scale: 1/16" = 1'-0"



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DRAWING NO.

**M-3.0**

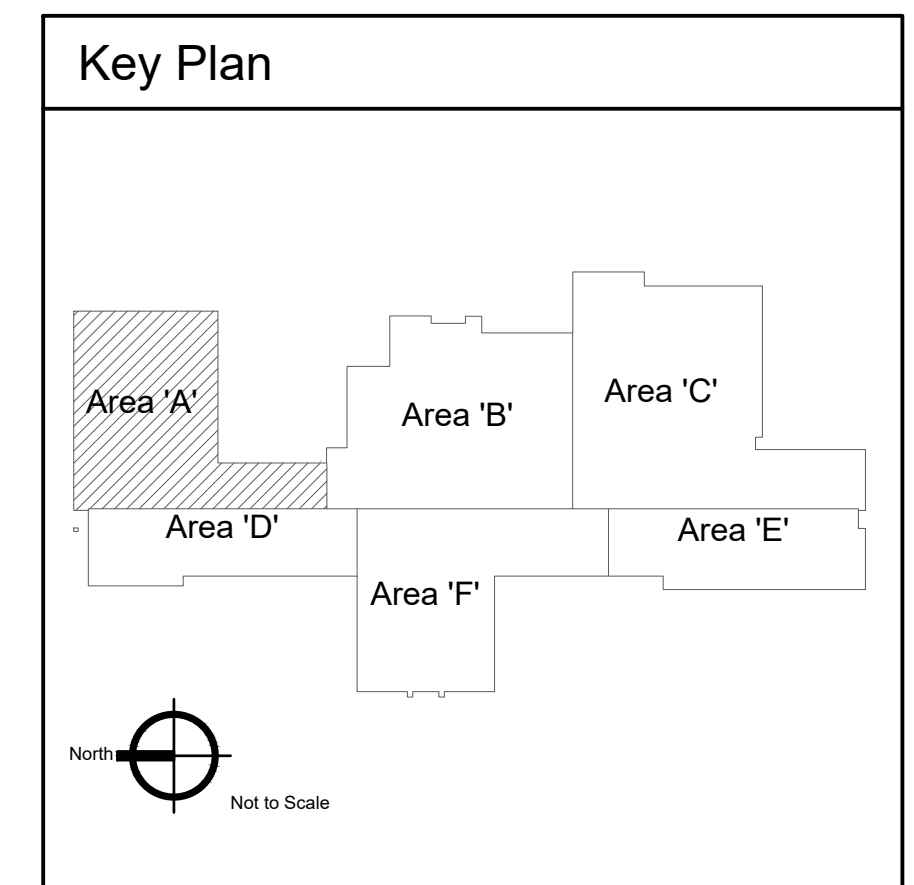


**KEYED NOTES:**

- ① SYMBOL USED FOR NOTE CALLOUT.
- 1. KEYNOTES



① Mechanical Demolition Roof Plan - Area 'A'  
Scale: 1/8" = 1'-0"



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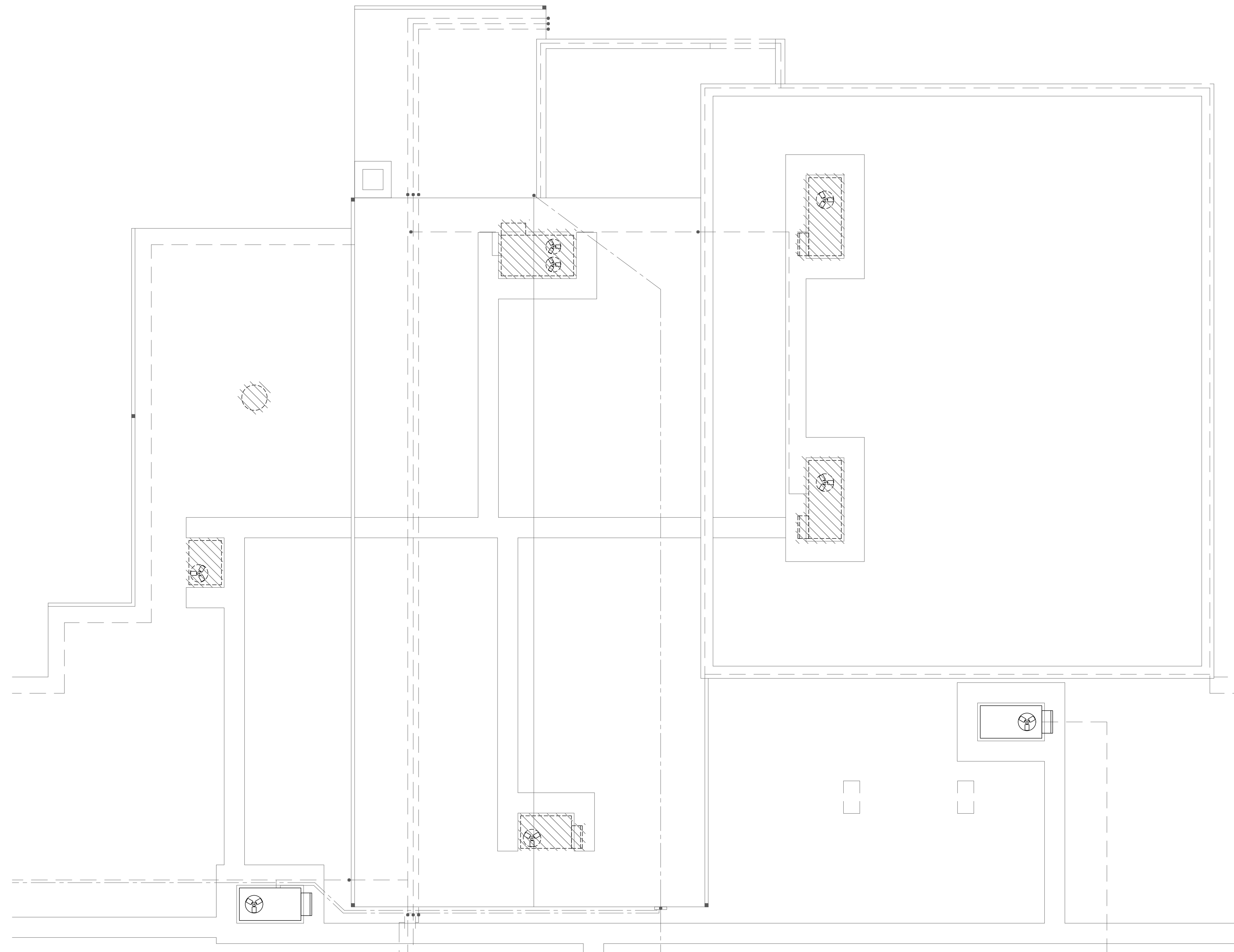
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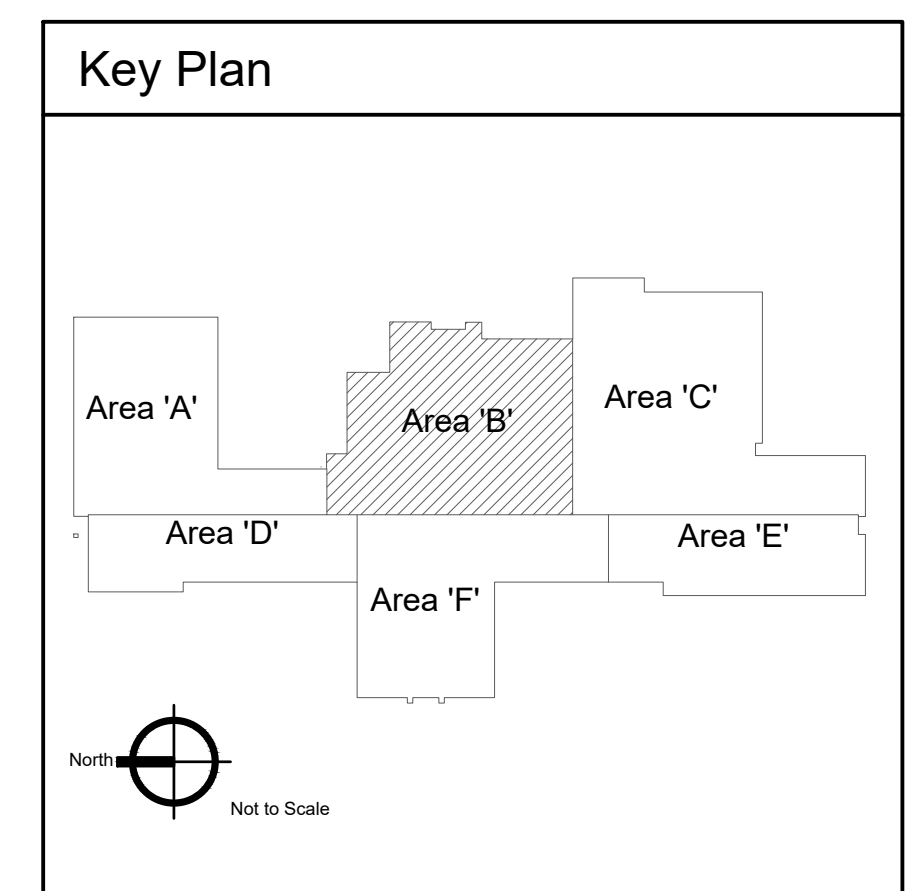
**M-3.1**

**KEYED NOTES:**

- # SYMBOL USED FOR NOTE CALLOUT.
- 1. KEYNOTES




1 Mechanical Demolition Plan - Area 'B'  
 Scale: 1/8" = 1'-0"



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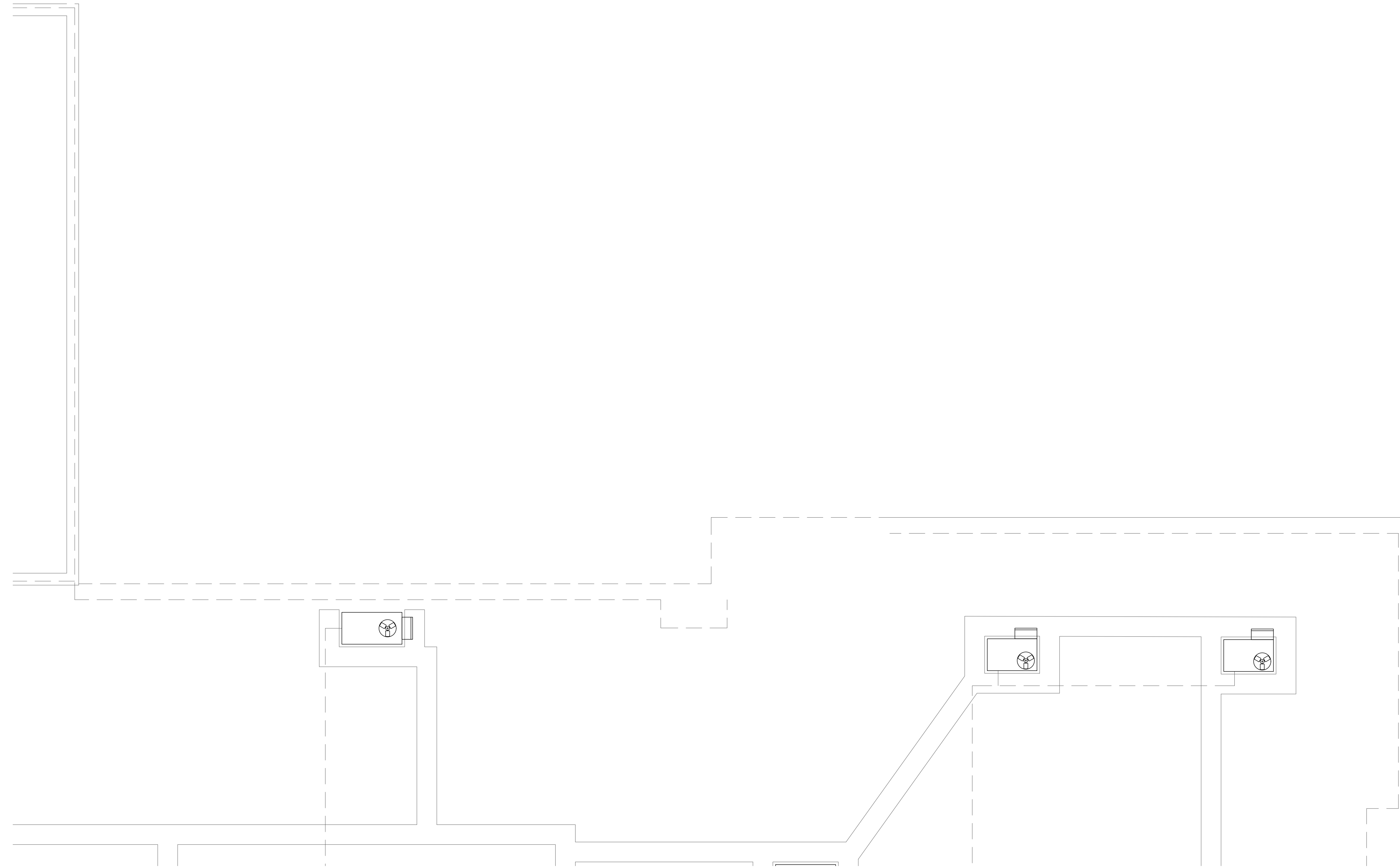
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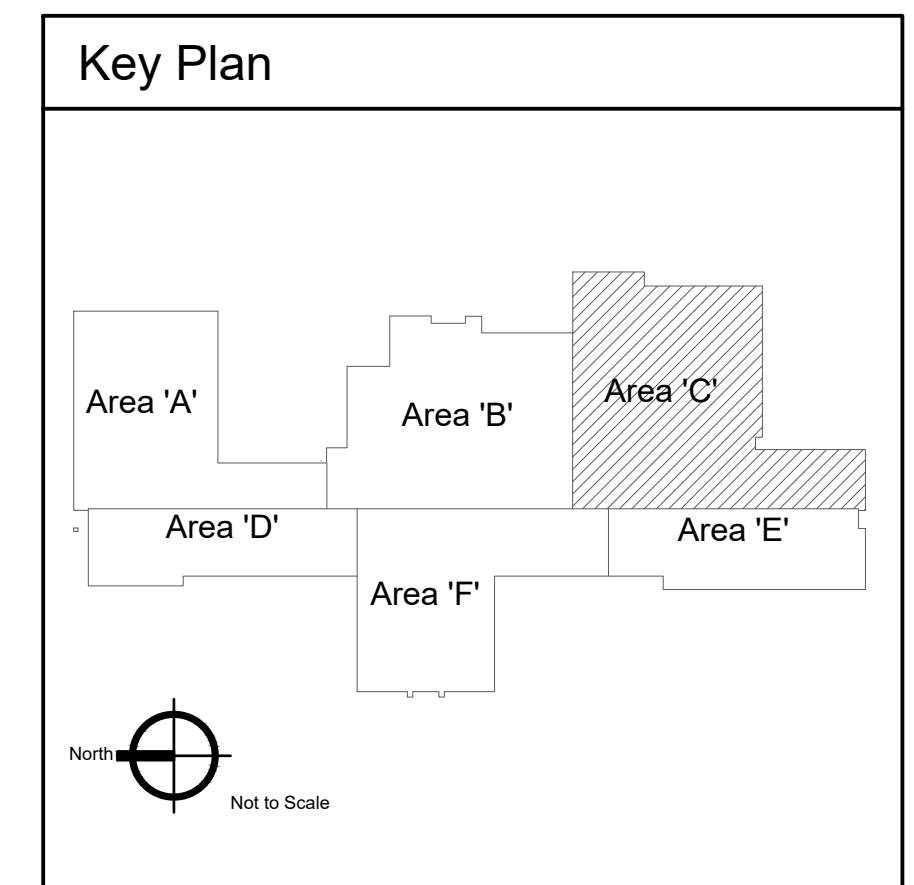
**M-3.2**

**KEYED NOTES:**

- ① SYMBOL USED FOR NOTE CALLOUT.
- 1. KEYNOTES



① Mechanical Demolition Roof Plan - Area 'C'  
Scale: 1/8" = 1'-0"



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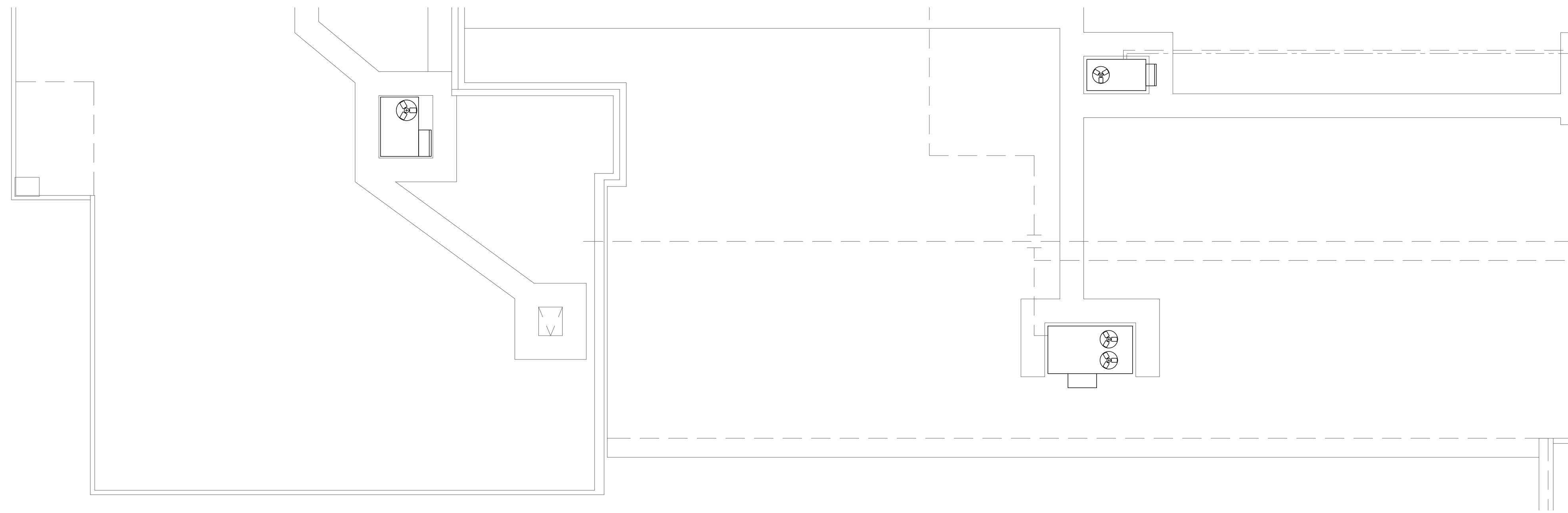
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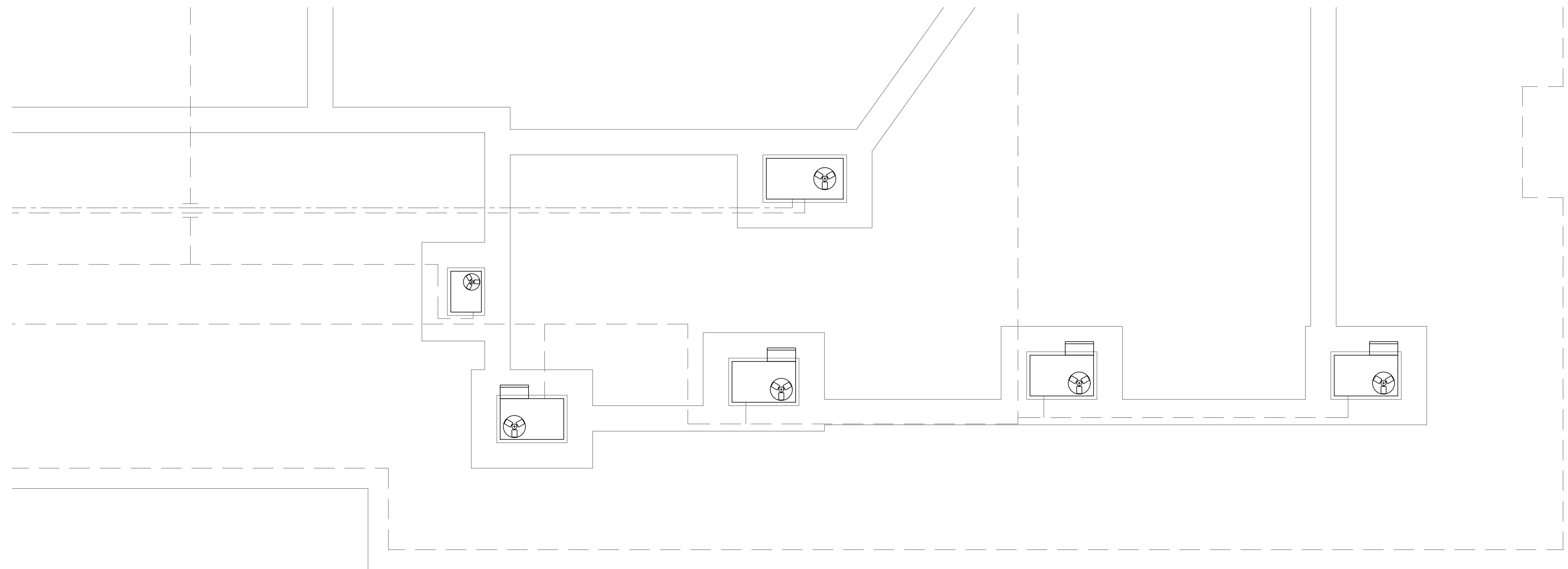
Design Development

DRAWING NO.

**M-3.3**



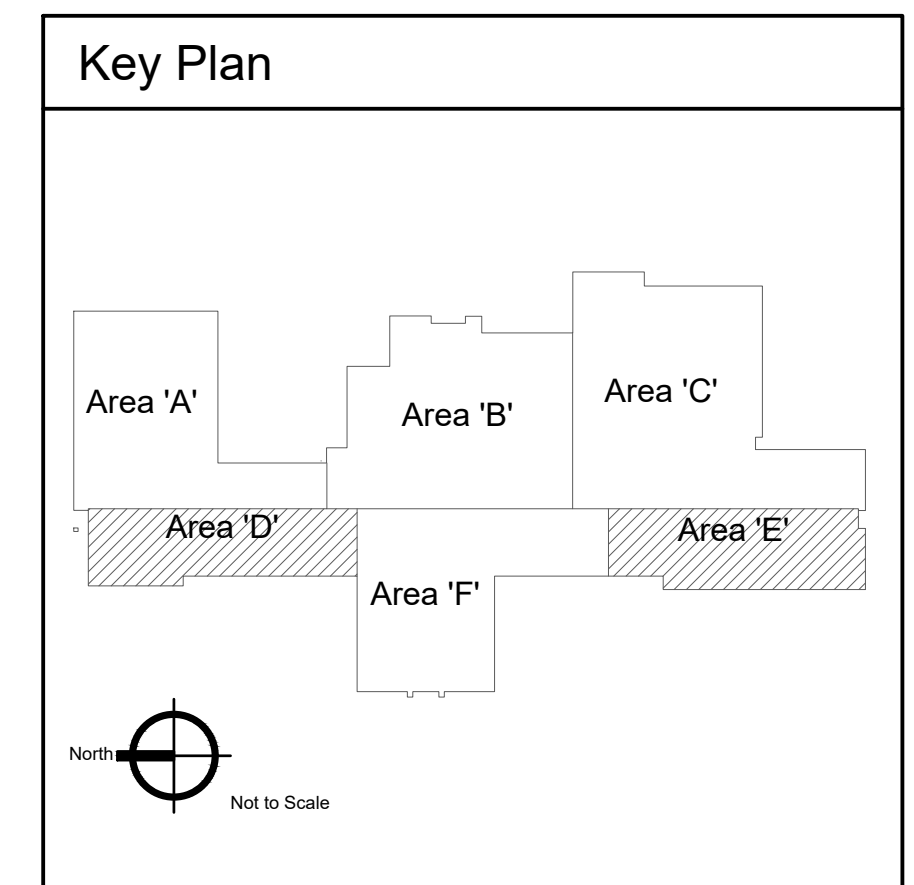
1 Mechanical Demolition Roof Plan - Area 'D'  
Scale: 1/8" = 1'-0"



2 Mechanical Demolition Roof Plan - Area 'E'  
Scale: 1/8" = 1'-0"

**KEYED NOTES:**

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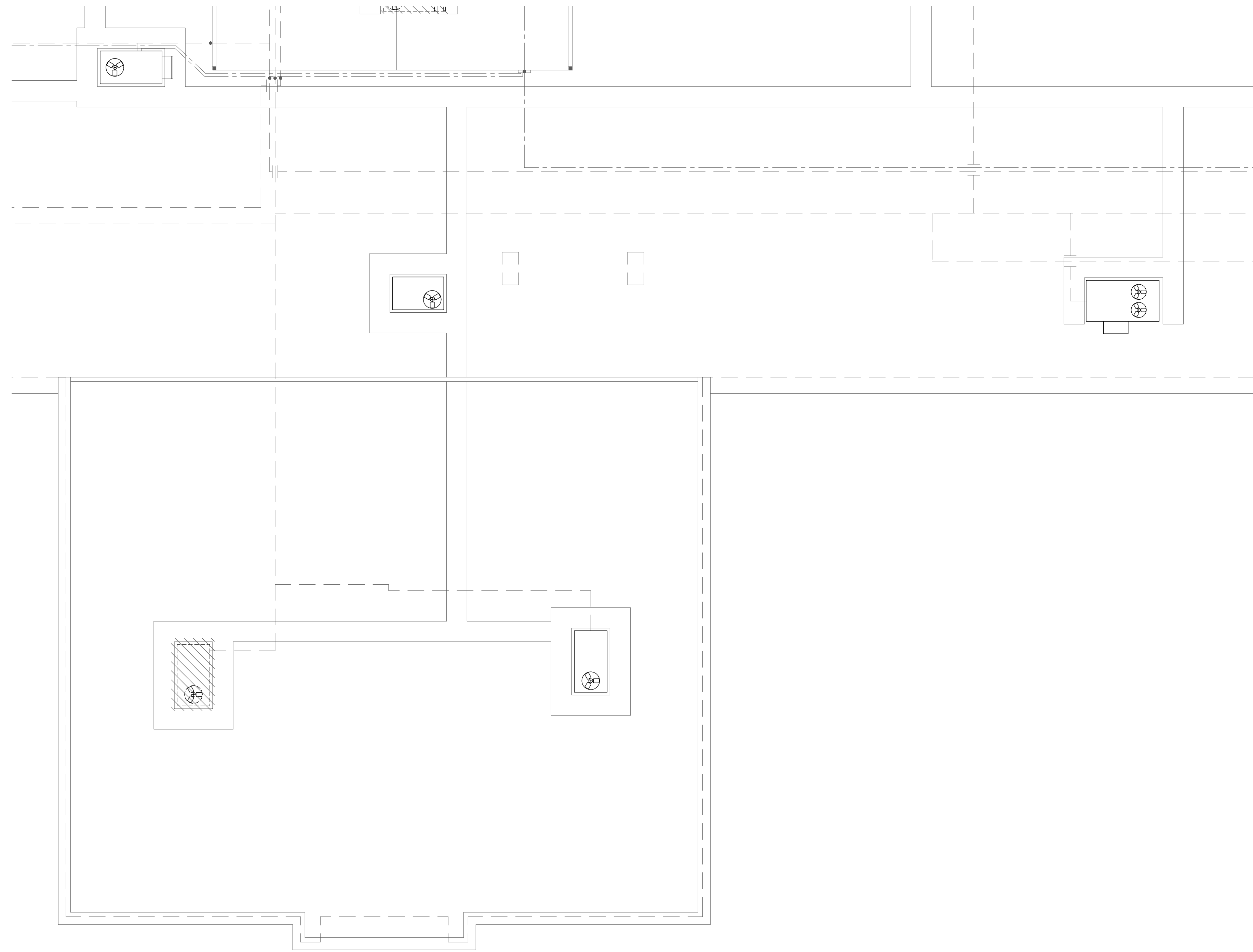
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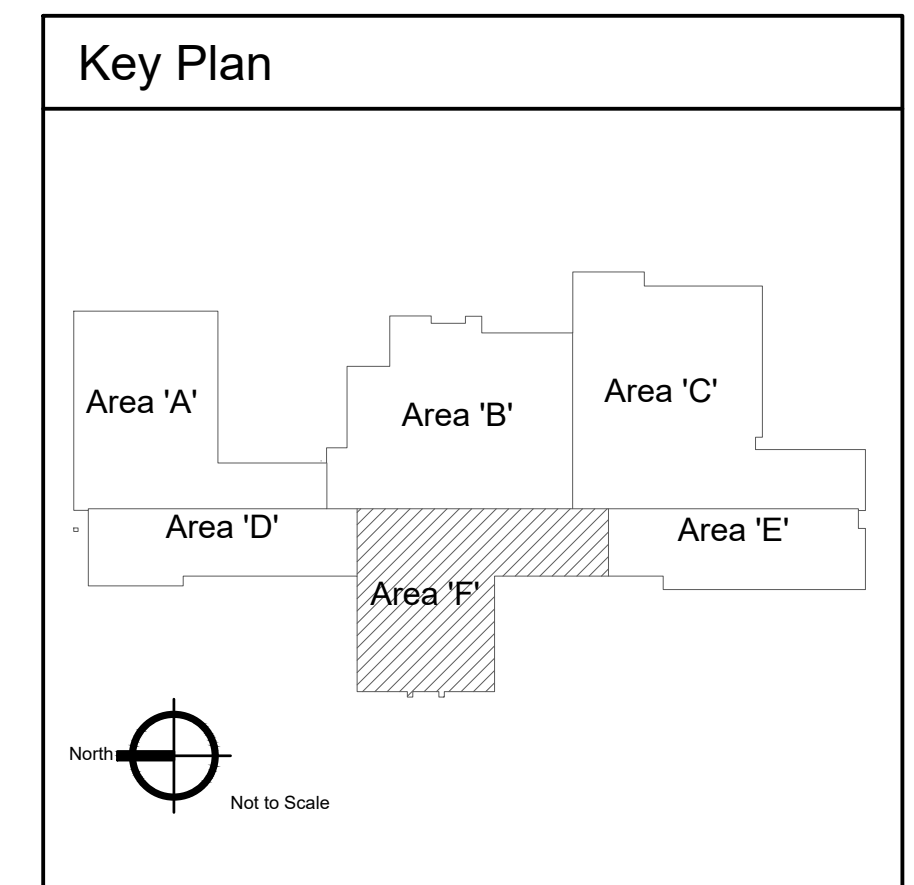
**M-3.4**

**KEYED NOTES:**

- # SYMBOL USED FOR NOTE CALLOUT.
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1 Mechanical Demolition Roof Plan - Area 'F'  
Scale: 1/8" = 1'-0"



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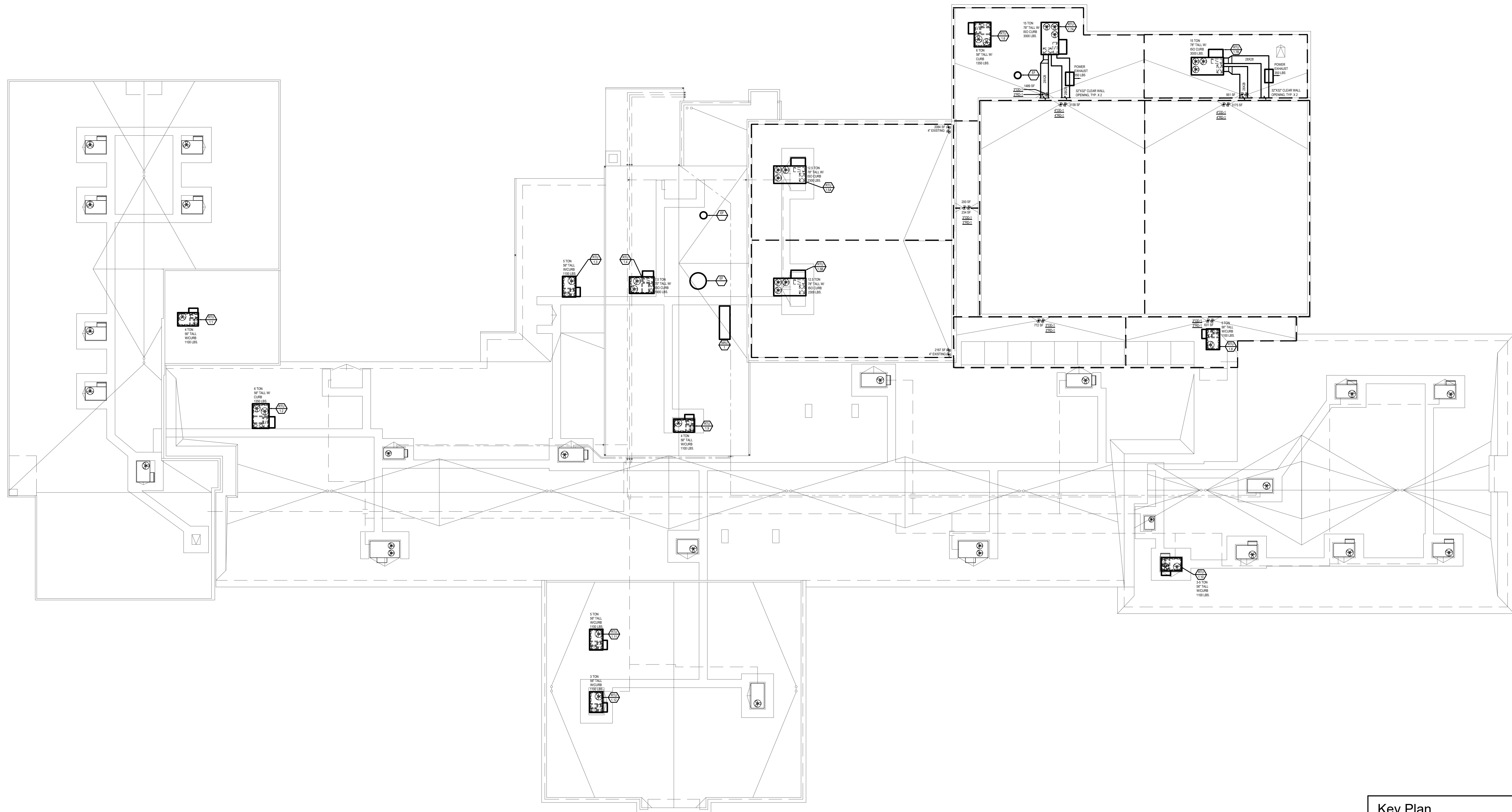
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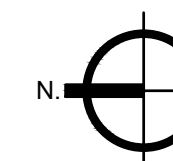
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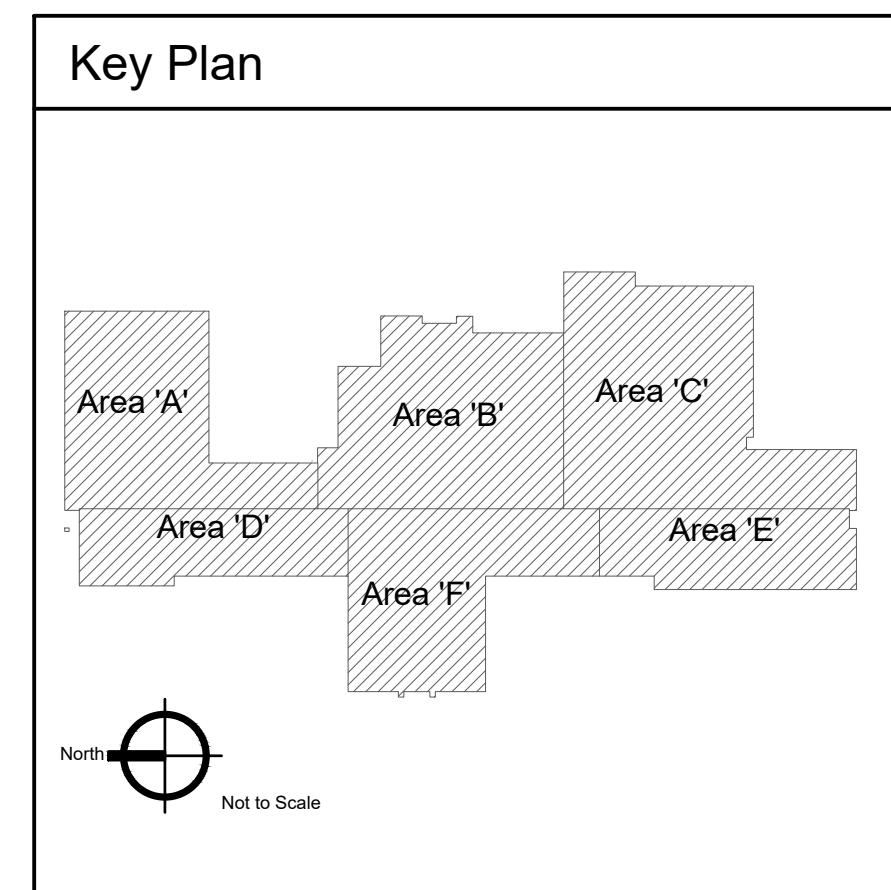
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**M-3.5**



 Overall Mechanical New Work Roof Plan  
 Scale: 1/16" = 1'-0"



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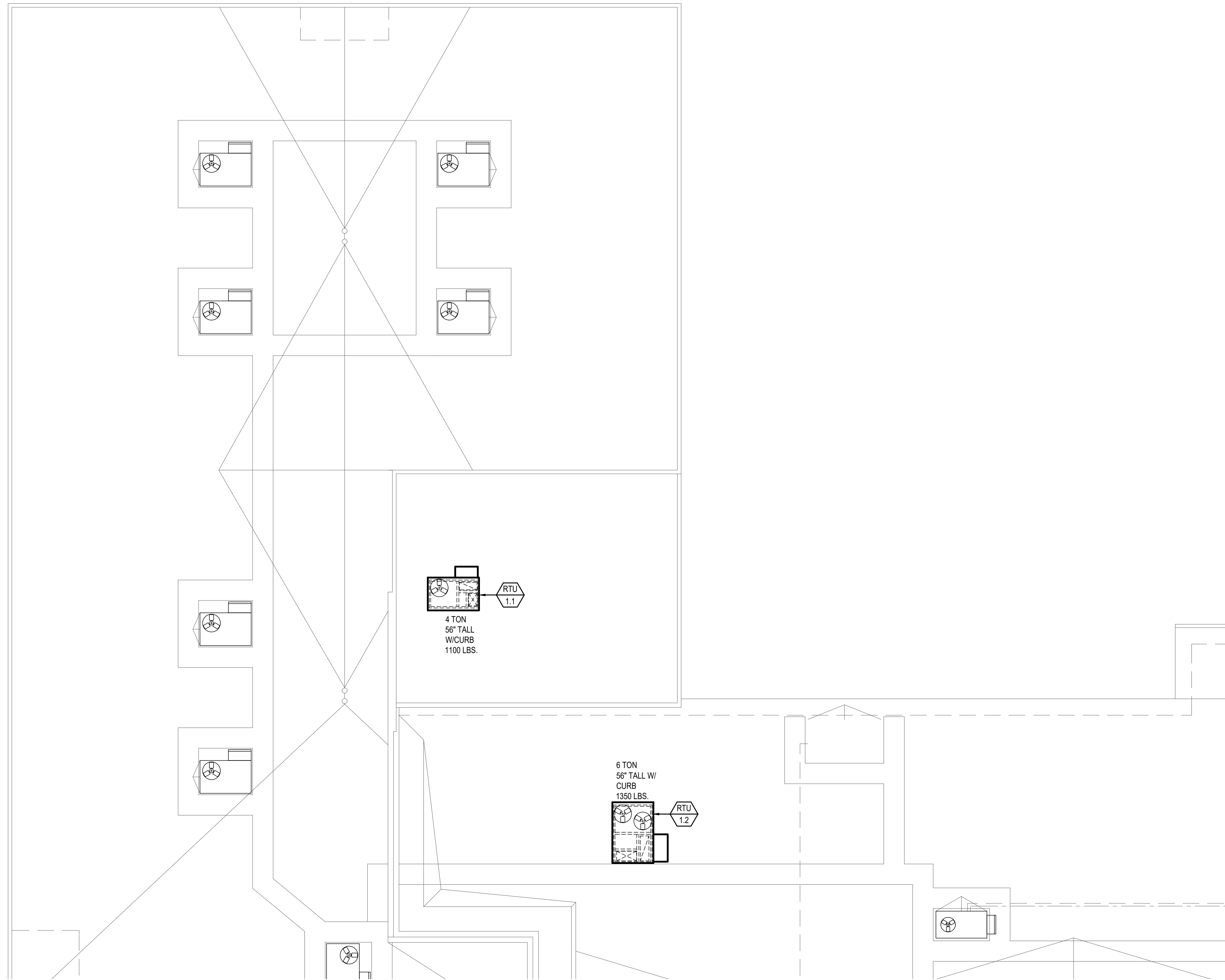
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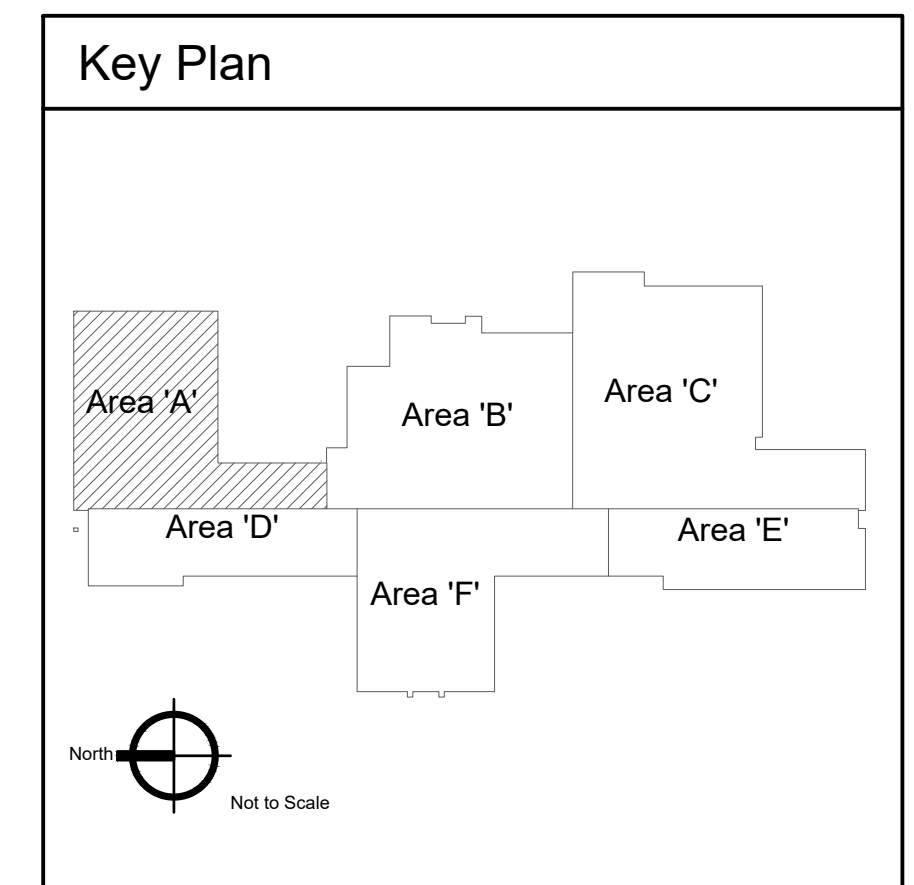
**M-4.0**

**KEYED NOTES:**

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1 Mechanical New Work Roof Plan - Area 'A'  
Scale: 1/8" = 1'-0"



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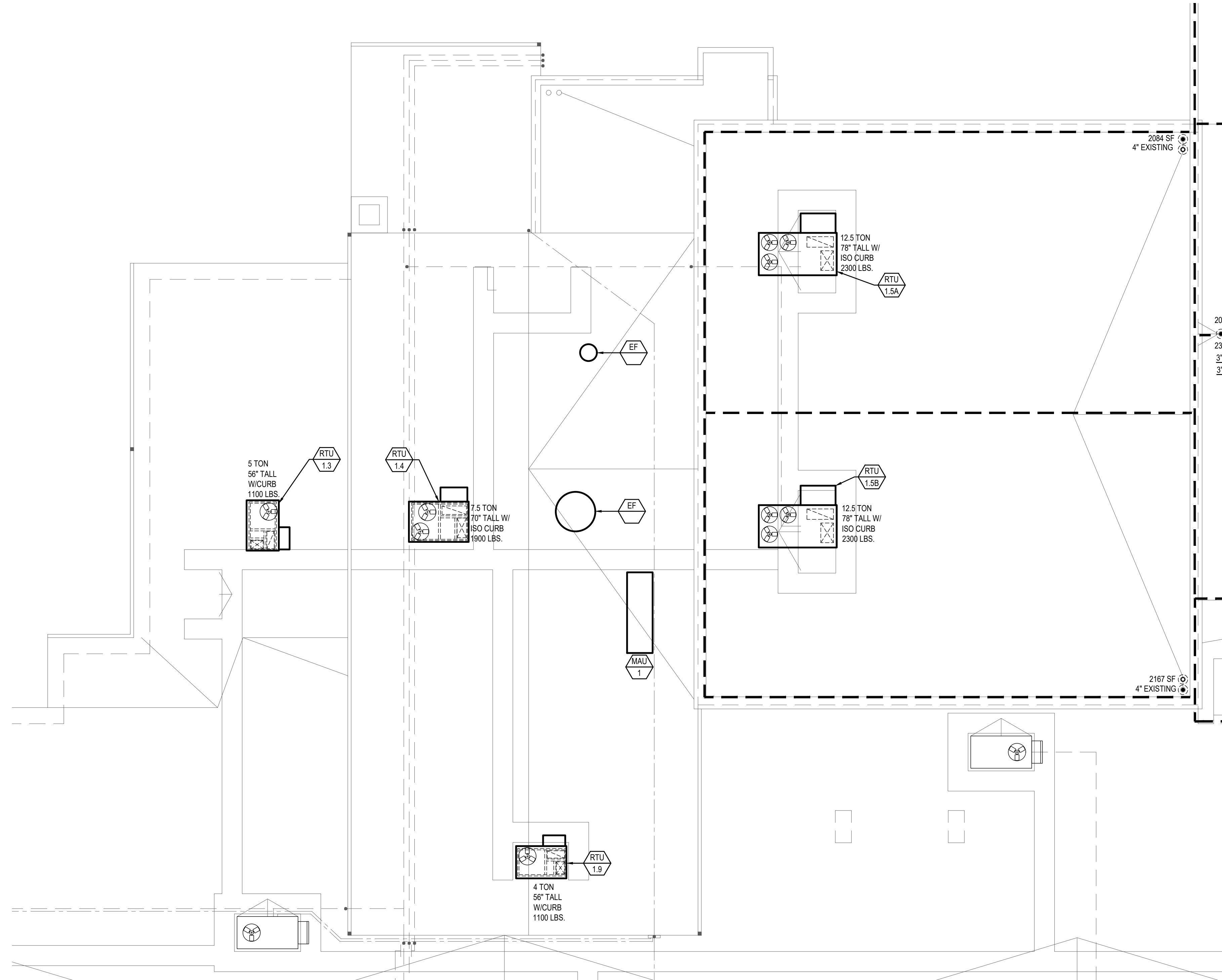
Design Development

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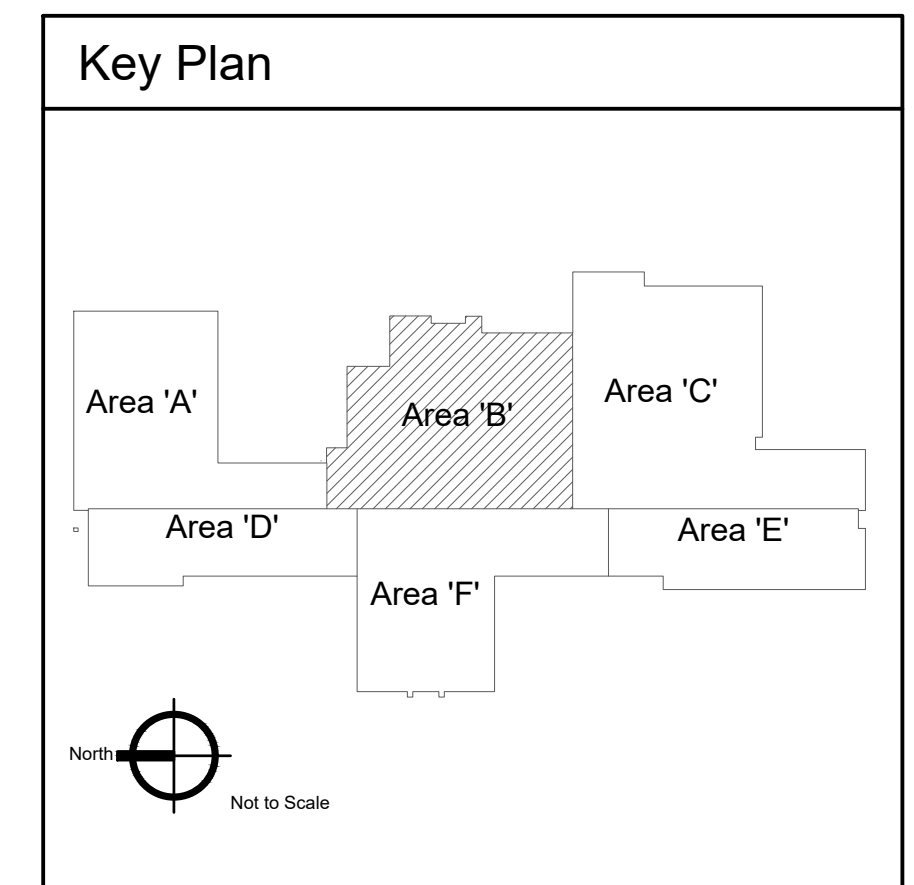
**M-4.1**

**KEYED NOTES:**

- # SYMBOL USED FOR NOTE CALLOUT.
- 1. KEYNOTES



**Mechanical New Work Roof Plan - Area 'B'**  
 Scale: 1/8" = 1'-0"



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 Project No. 22-104

**PRELIMINARY**



**Jefferson Elementary School  
 Addition and Remodel**  
 600 N. Fillmore Street, Jerome, Idaho

DATE: December 9, 2022  
 LKV PROJECT #: -  
 REVISIONS:

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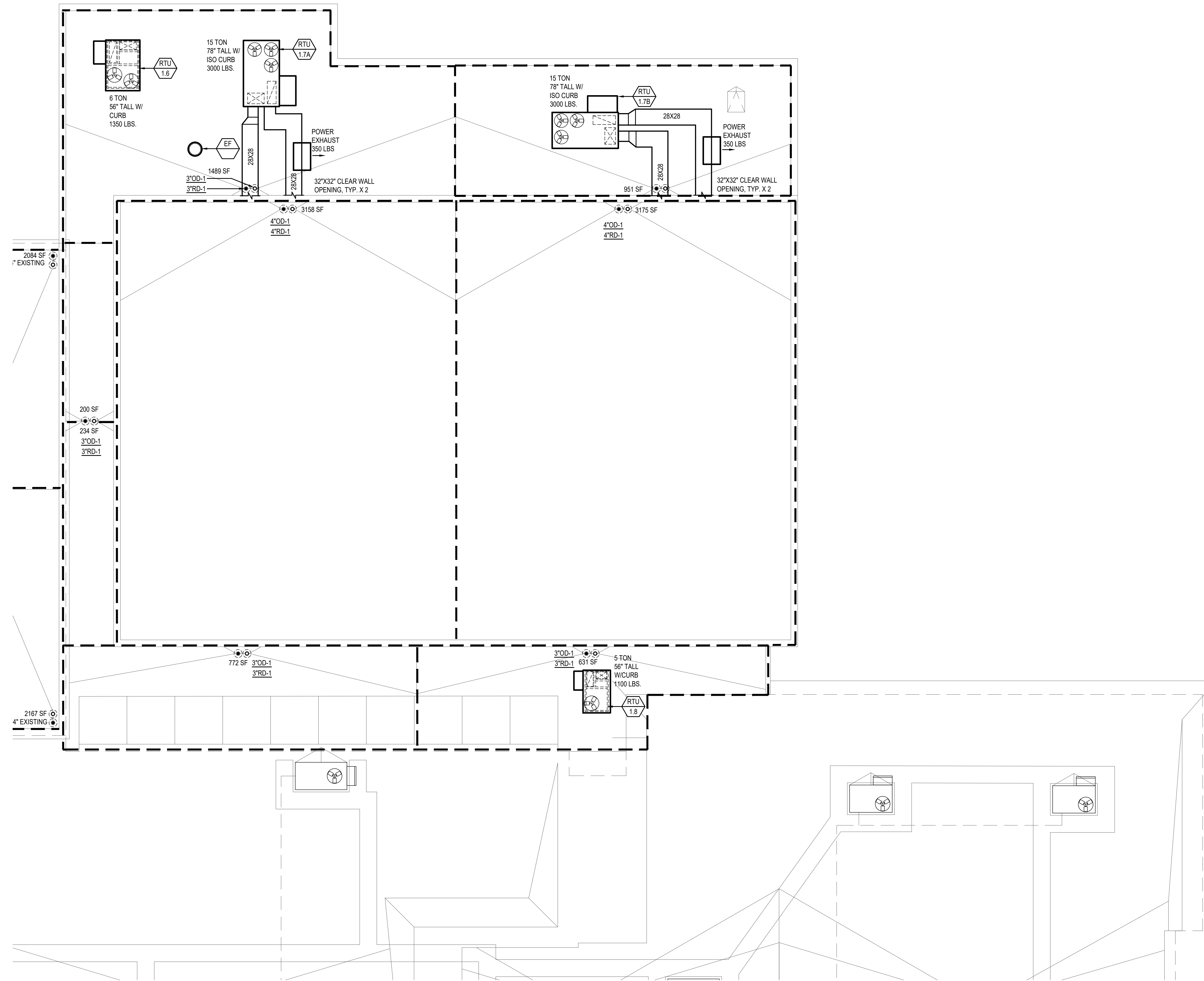
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**M-4.2**

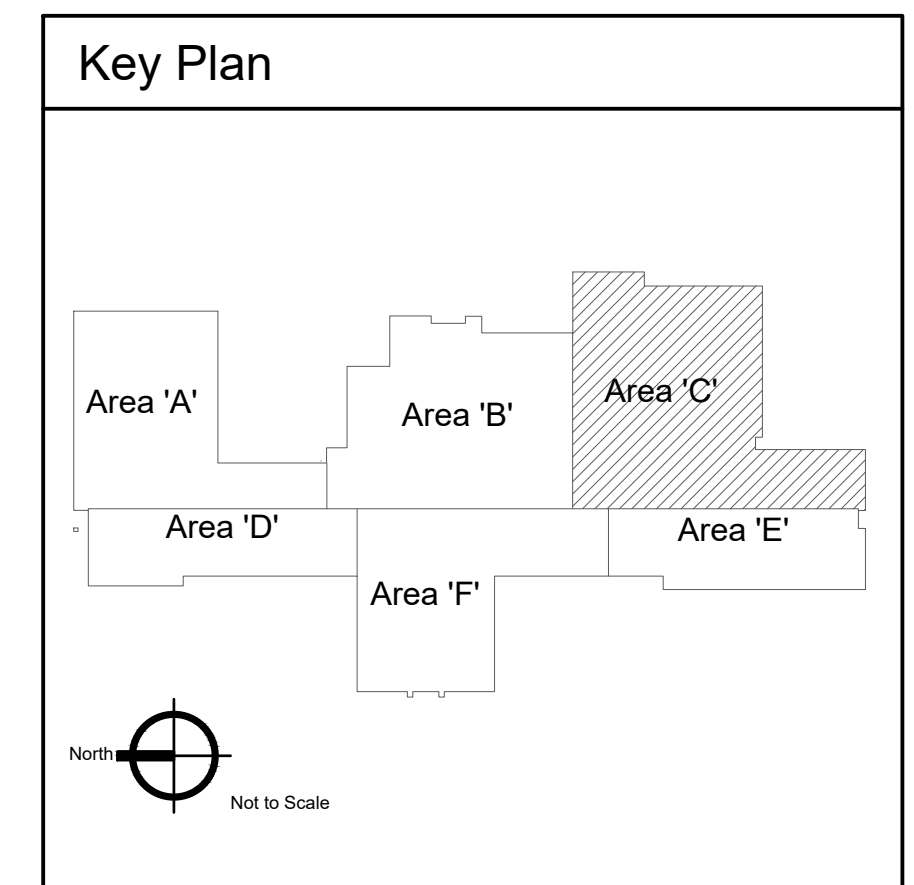


**KEYED NOTES:**

- # SYMBOL USED FOR NOTE CALLOUT.
- 1. KEYNOTES



1 Mechanical New Work Roof Plan - Area 'C'  
Scale: 1/8" = 1'-0"



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12/9/2022

Jefferson Elementary School  
Addition and Remodel  
600 N. Fillmore Street, Jerome, Idaho

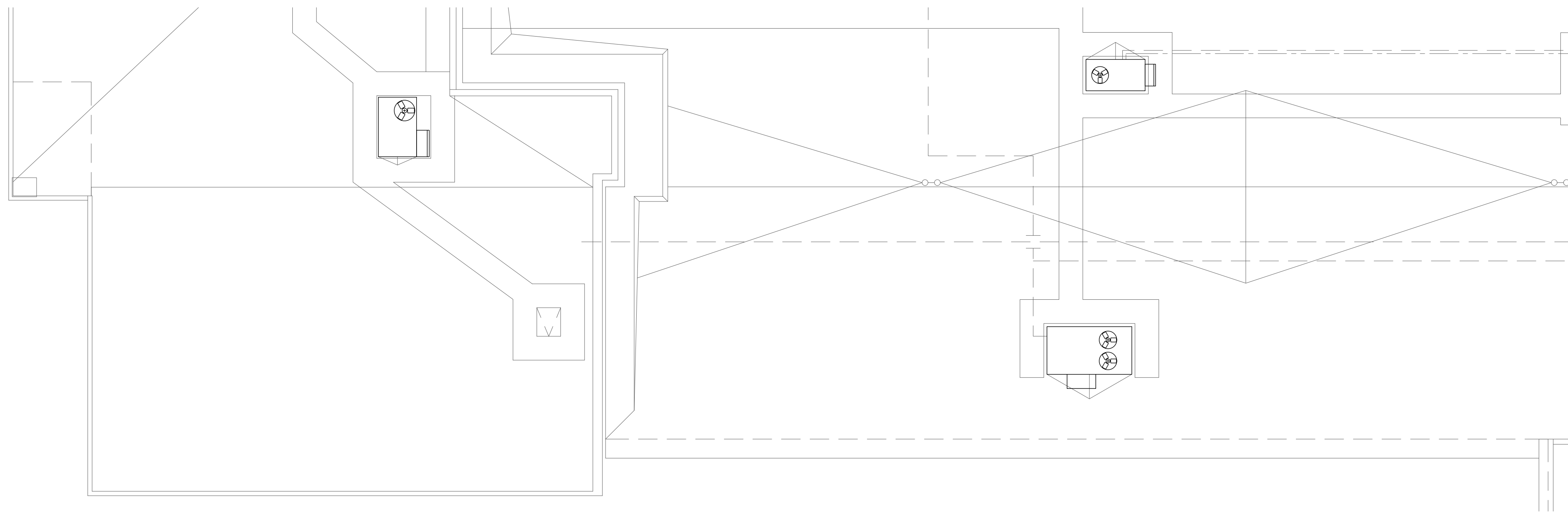
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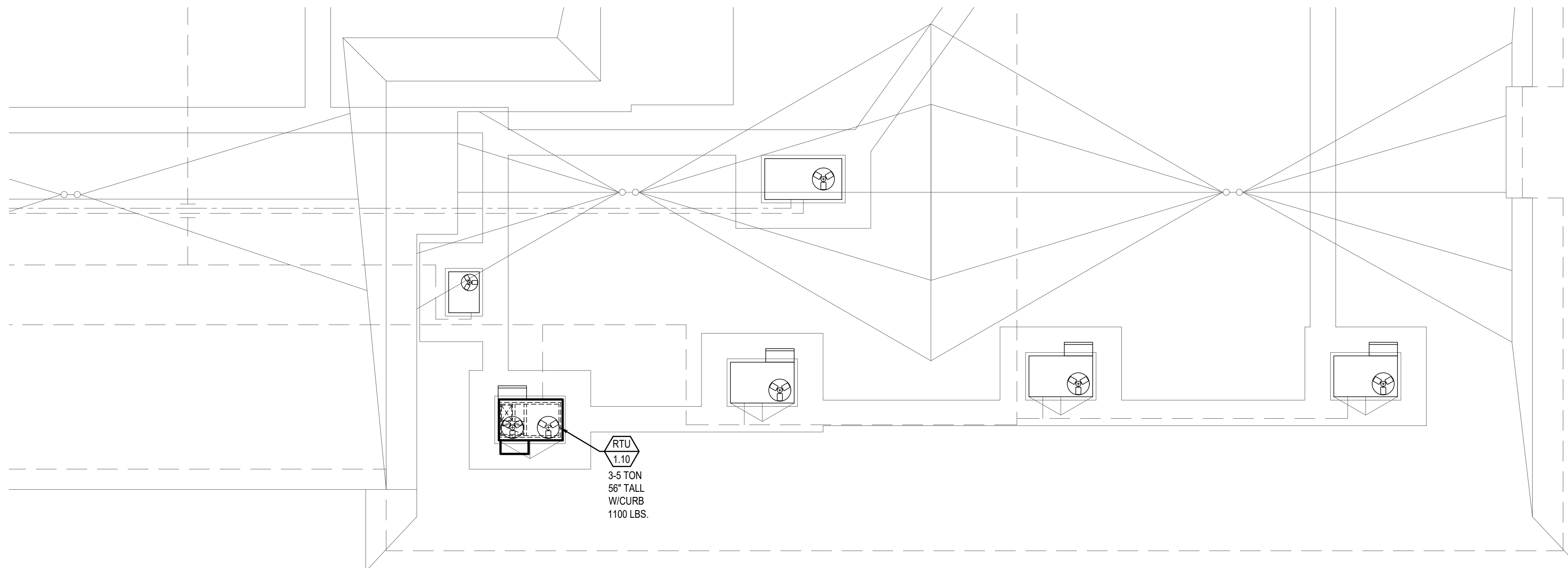
Design Development

DRAWING NO.

M-4.3



1 Mechanical New Work Roof Plan - Area 'D'  
Scale: 1/8" = 1'-0"



2 Mechanical New Work Roof Plan - Area 'E'  
Scale: 1/8" = 1'-0"

**KEYED NOTES:**

- # SYMBOL USED FOR NOTE CALLOUT.
- 1. KEYNOTES



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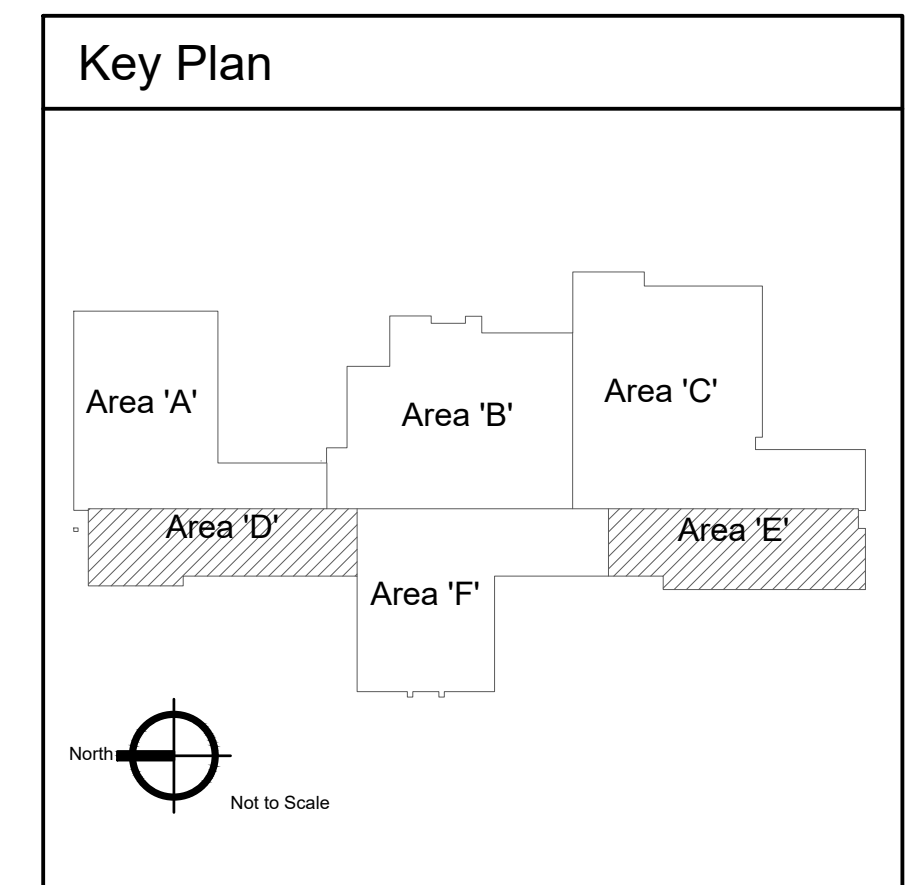
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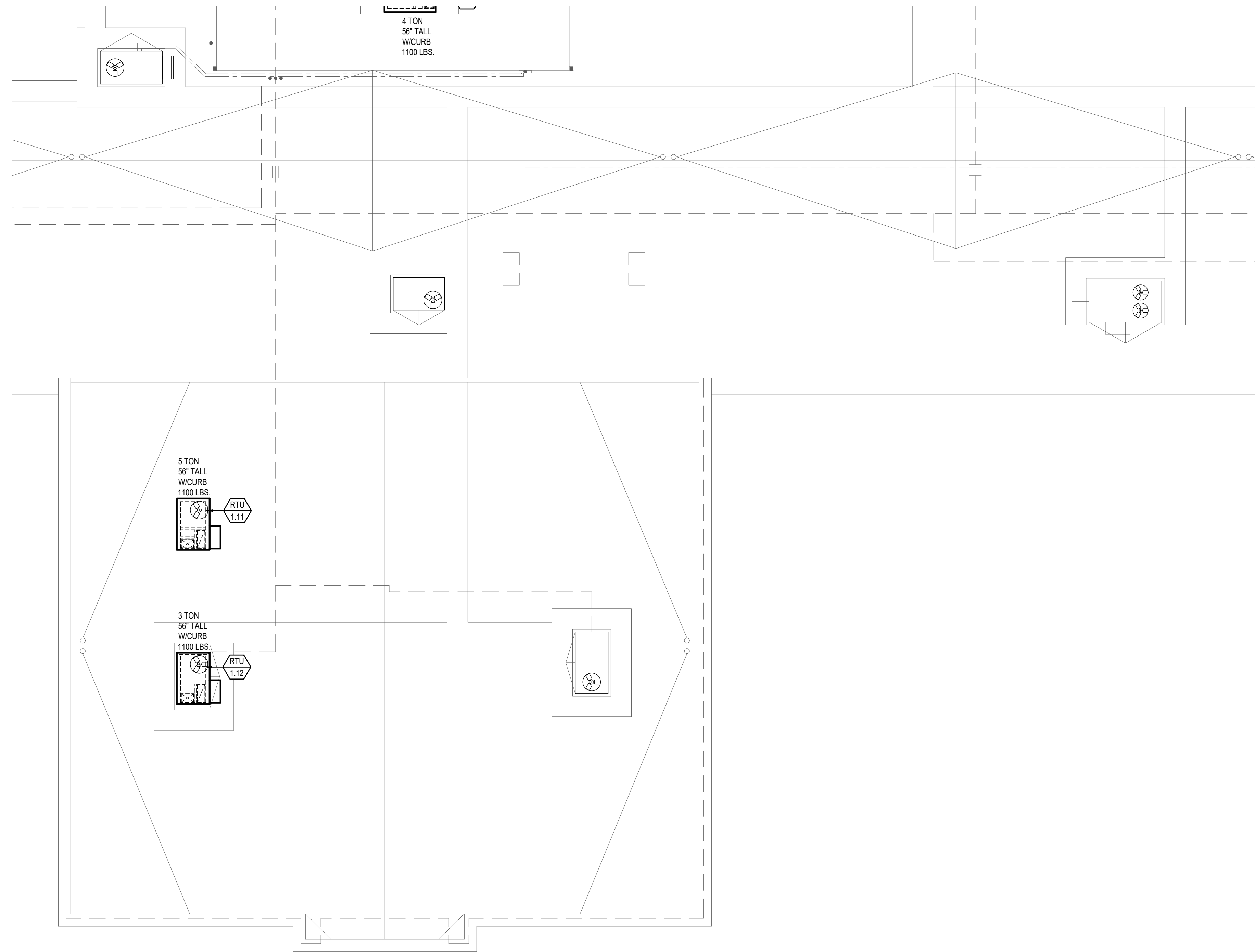
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**M-4.4**

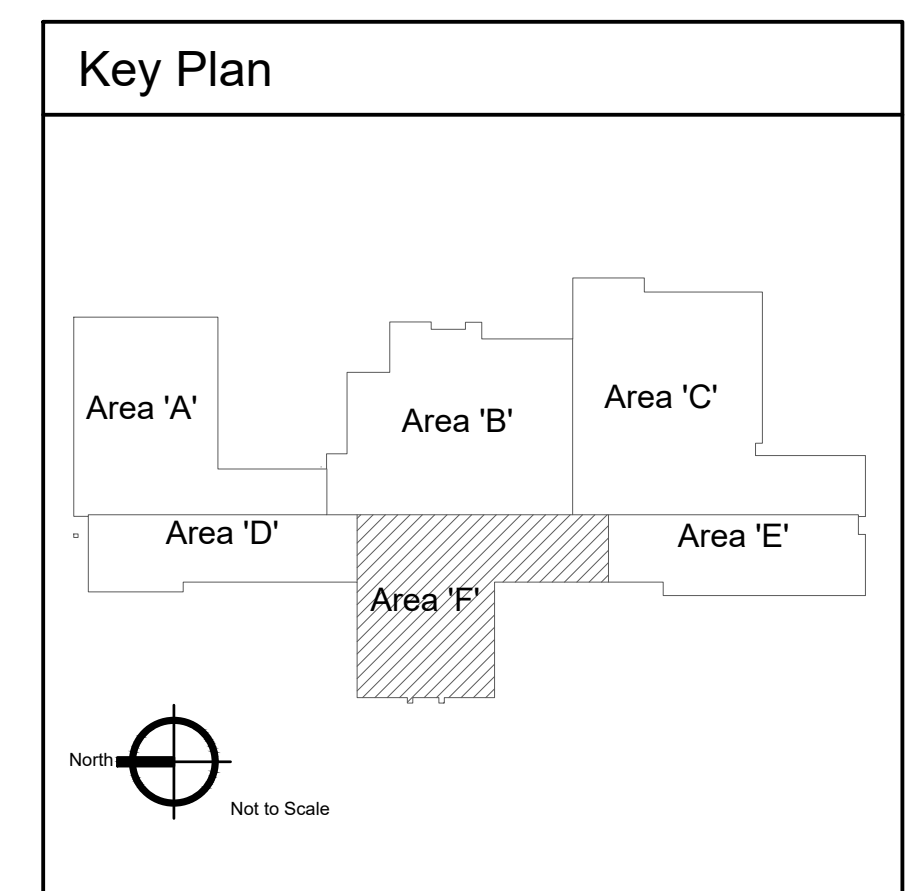


**KEYED NOTES:**

- # SYMBOL USED FOR NOTE CALLOUT.
- 1. KEYNOTES



1 Mechanical New Work Roof Plan - Area 'F'  
Scale: 1/8" = 1'-0"



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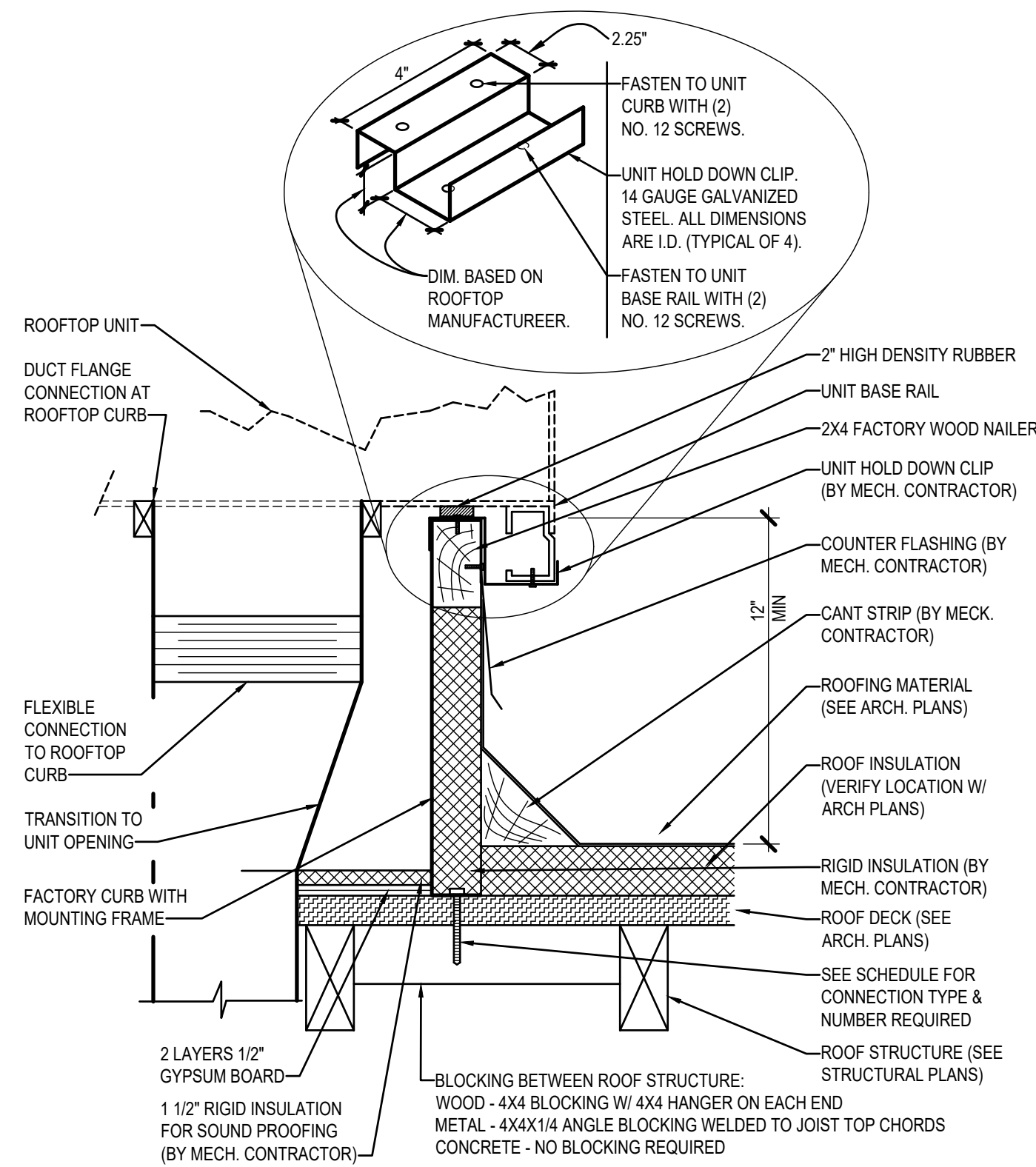
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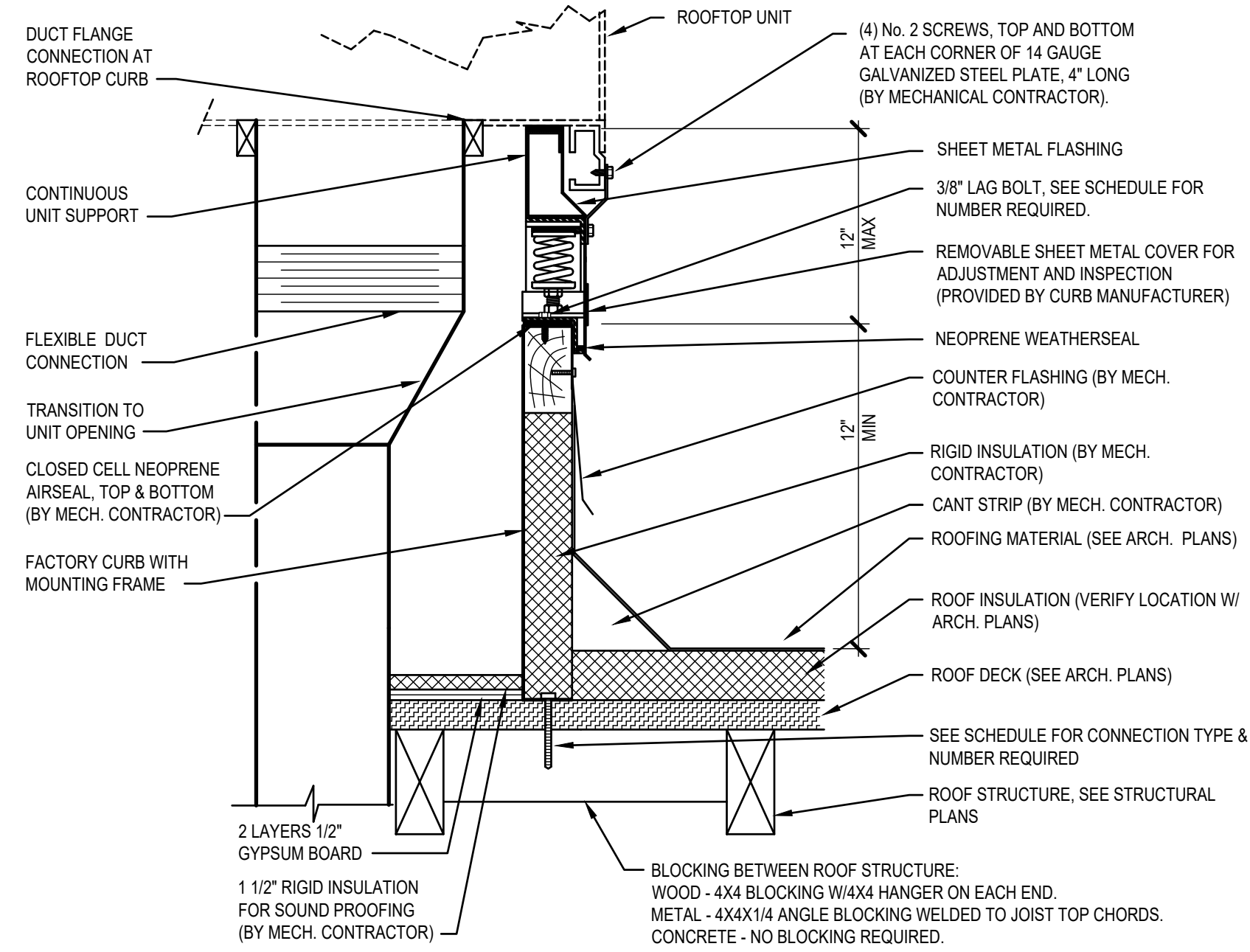
M-4.5



CURB TO ROOF CONNECTION SCHEDULE					
NOMINAL ROOFTOP UNIT CAPACITY	MAX. WEIGHTS	TOTAL LATERAL FORCE (Fp)	NO. & TYPE OF CONNECTION (EQUALLY SPACED)		
			ROOF STRUCTURE TYPE		
			METAL	WOOD	CONCRETE
3-6 TONS	750 LBS	810 LBS	(4) 1/2" LAG BOLT	(4) 1/2" LAG BOLT	(4) 3/8" EXPANSION BOLT

COMPLIES WITH THE INTERNATIONAL BUILDING CODE

**ROOFTOP UNIT - MOUNTING DETAIL**  
NOT TO SCALE

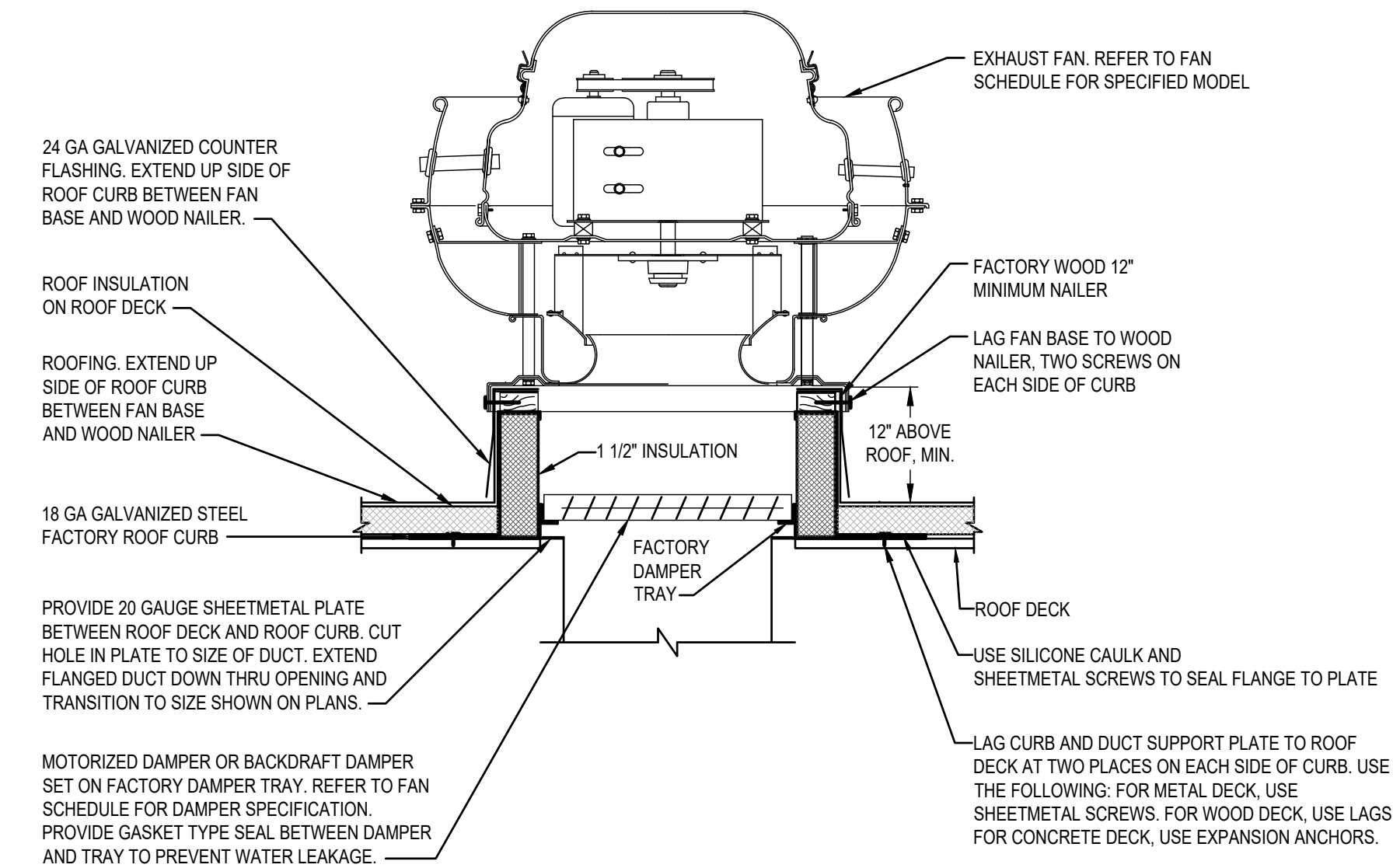


CURB TO ROOF CONNECTION SCHEDULE					
NOMINAL ROOFTOP UNIT CAPACITY	MAX. WEIGHTS	TOTAL LATERAL FORCE (Fp)	NO. & TYPE OF CONNECTION (EQUALLY SPACED)		
			ROOF STRUCTURE TYPE		
			METAL	WOOD	CONCRETE
7-8 TONS	1050 LBS	1135 LBS	(6) 1/2" LAG BOLT	(6) 1/2" LAG BOLT	(6) 3/8" EXPANSION BOLT
10-12 TONS	1300 LBS	1405 LBS	(8) 1/2" LAG BOLT	(8) 1/2" LAG BOLT	(8) 3/8" EXPANSION BOLT
15-18 TONS	2500 LBS	2700 LBS	(14) 1/2" LAG BOLT	(14) 1/2" LAG BOLT	(14) 3/8" EXPANSION BOLT
20-25 TONS	2800 LBS	3025 LBS	(16) 1/2" LAG BOLT	(16) 1/2" LAG BOLT	(16) 3/8" EXPANSION BOLT

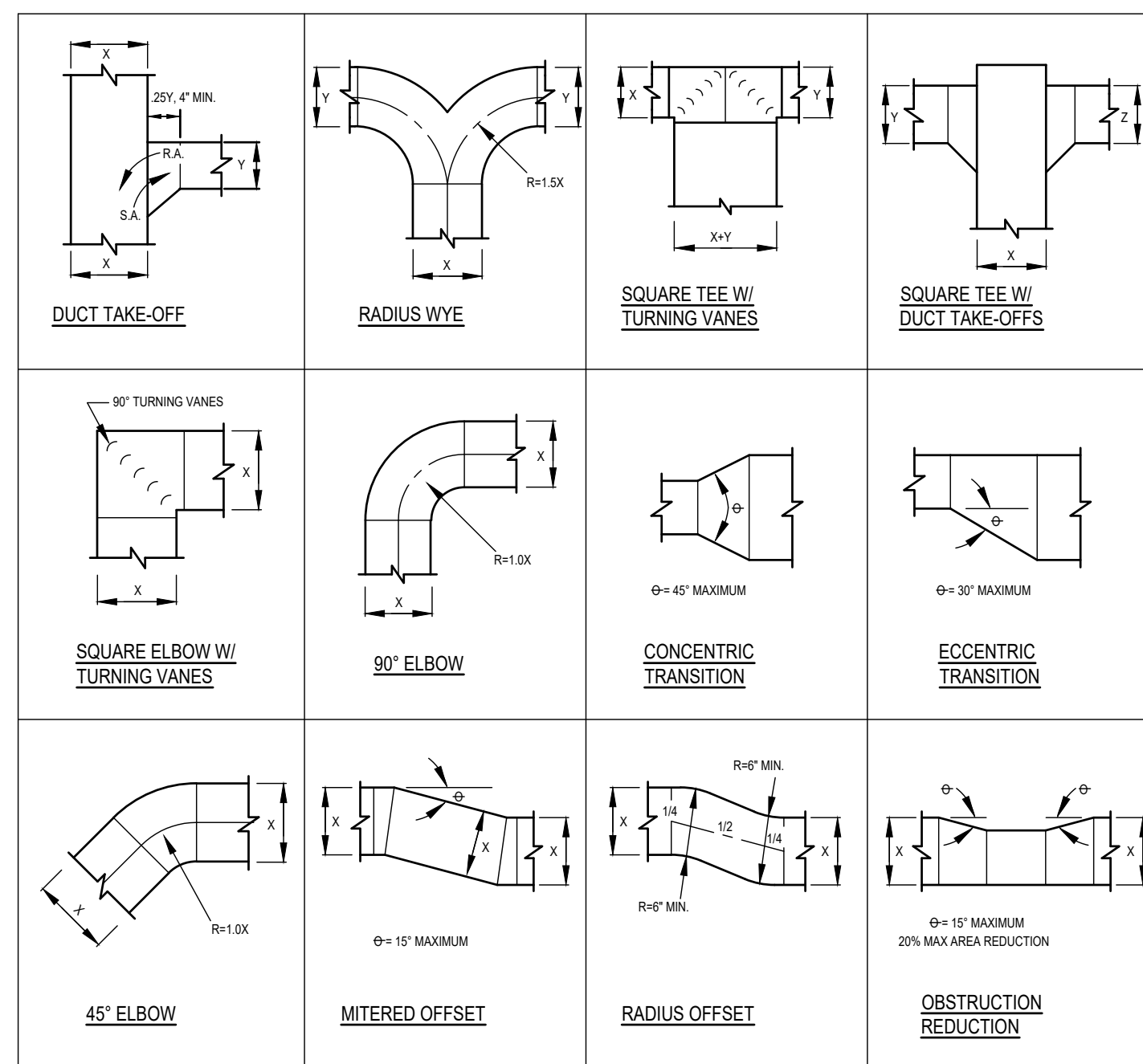
COMPLIES WITH THE INTERNATIONAL BUILDING CODE

MANUFACTURER SHALL PROVIDE CALCULATIONS FOR THE CURB MOUNTED SPRING RAIL SHOWING COMPLIANCE WITH THE INTERNATIONAL BUILDING CODE (LATEST ADOPTED EDITION).

**ROOFTOP UNIT - CURB MOUNTED SPRING RAIL DETAIL**  
NOT TO SCALE

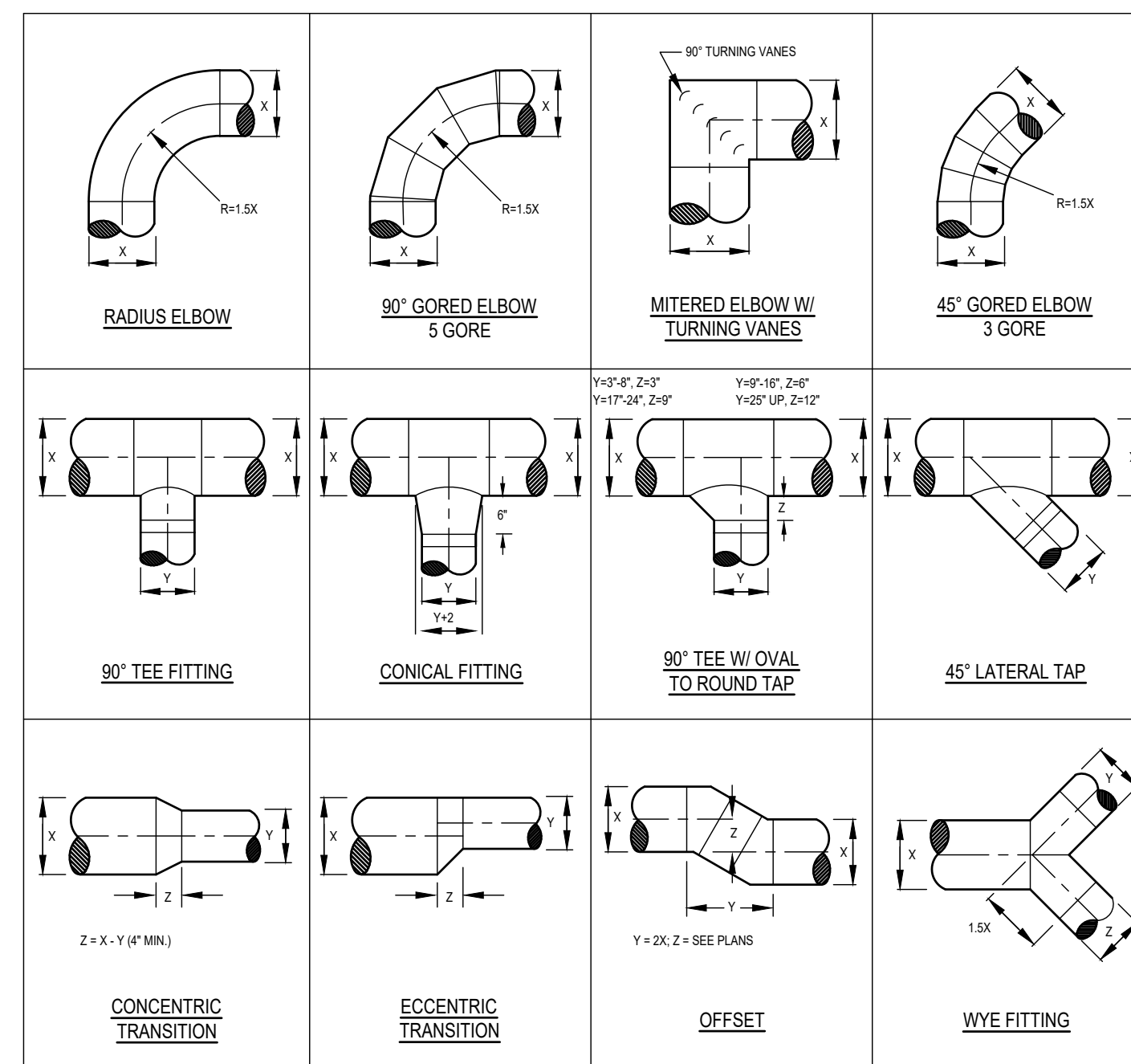


**EXHAUST FAN MOUNTING DETAIL**  
NOT TO SCALE



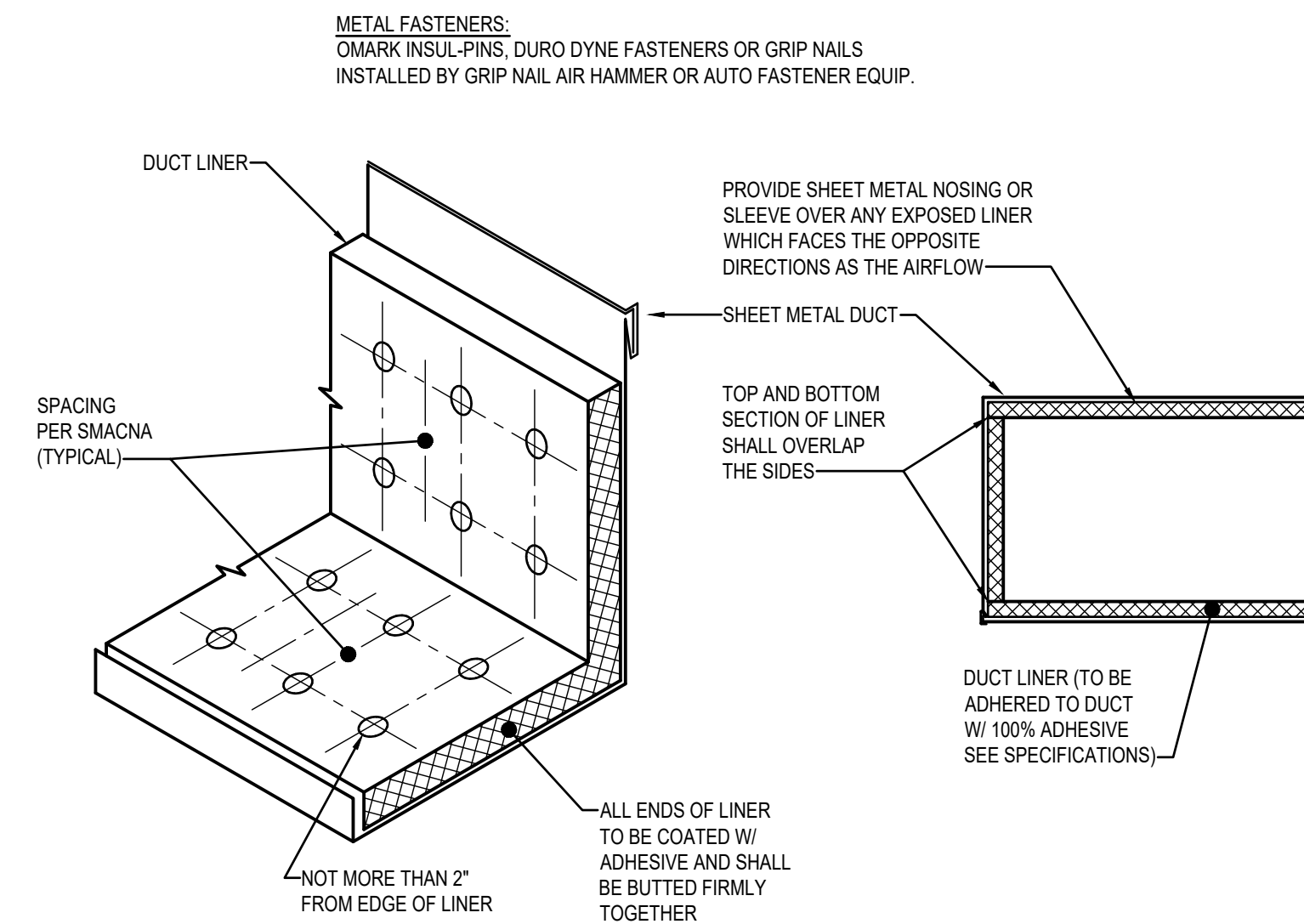
NOTE:  
1. ALL DUCTWORK TRANSITIONS SHALL BE CONSTRUCTED AND INSTALLED TO SMACNA, SPECIFICATIONS AND THE ABOVE NOTED STANDARDS. ANY DEVIATIONS SHALL BE COORDINATED WITH THE ENGINEER.

**RECTANGULAR DUCT FITTING DETAILS**  
NOT TO SCALE



NOTE:  
1. ALL DUCTWORK TRANSITIONS SHALL BE CONSTRUCTED AND INSTALLED TO SMACNA, SPECIFICATIONS, AND THE ABOVE NOTED STANDARDS. ANY DEVIATIONS SHALL BE COORDINATED WITH THE ENGINEER.

**ROUND DUCT FITTING DETAILS**  
NOT TO SCALE



**DUCT LINER DETAIL**  
NOT TO SCALE



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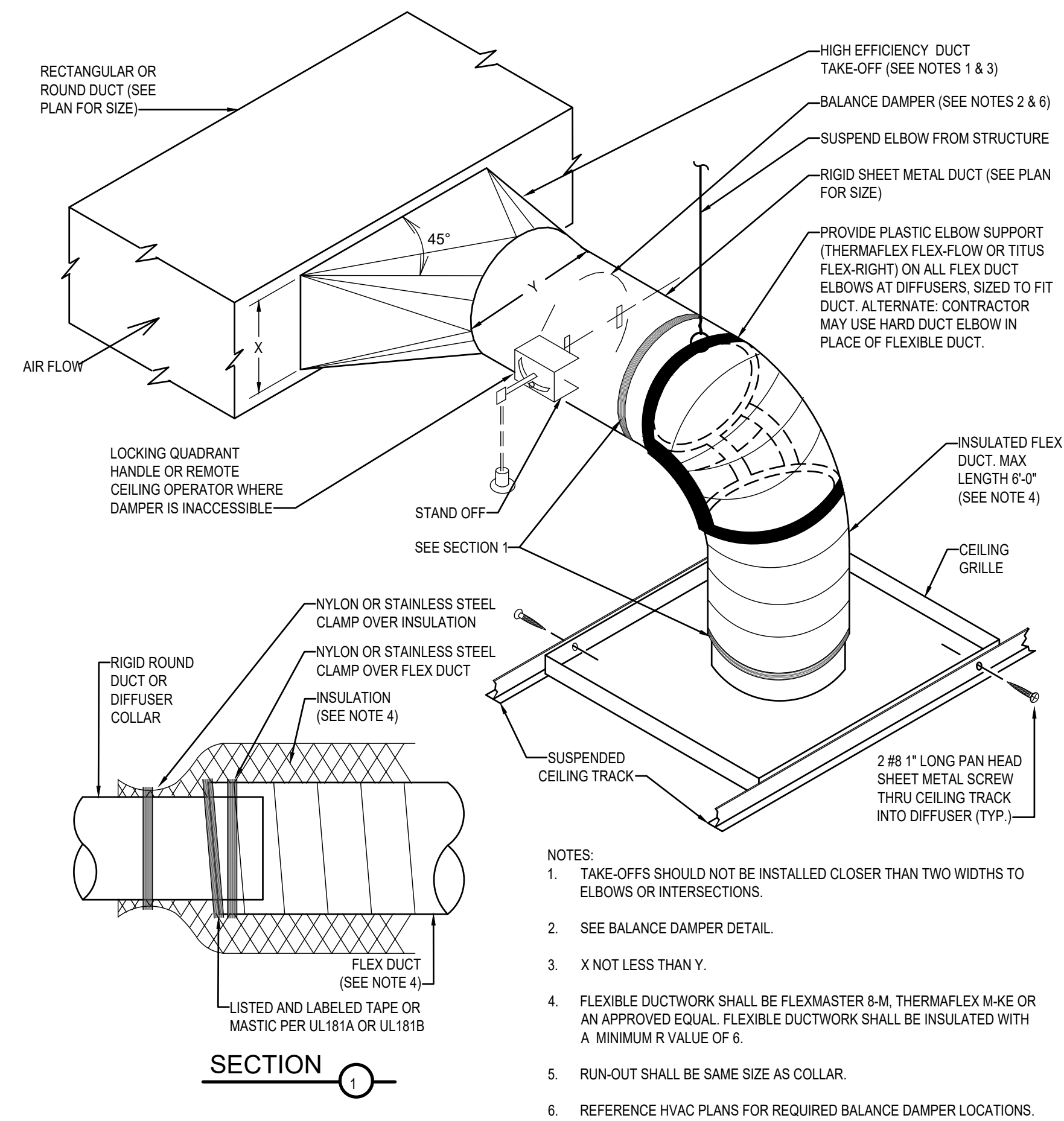
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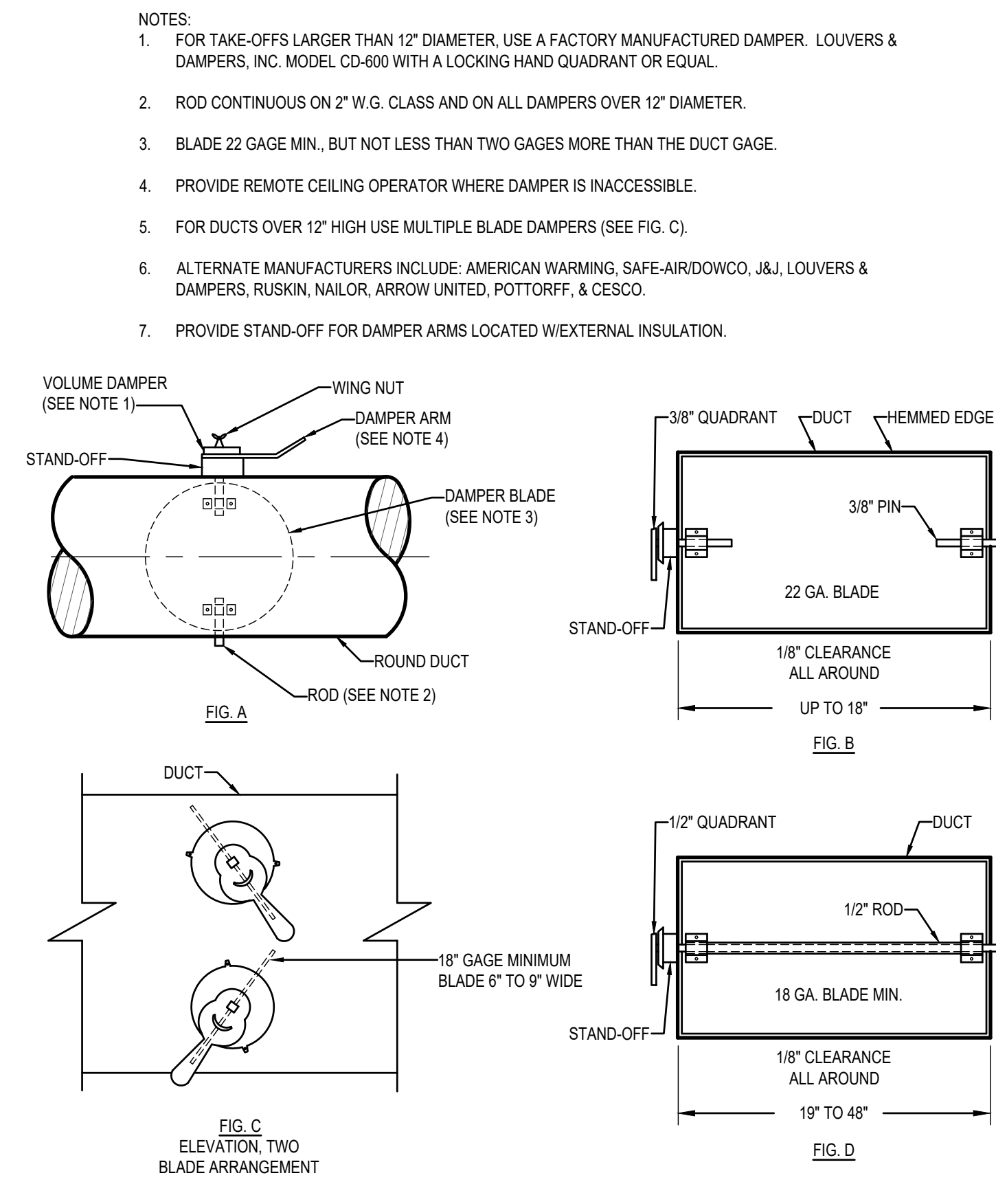
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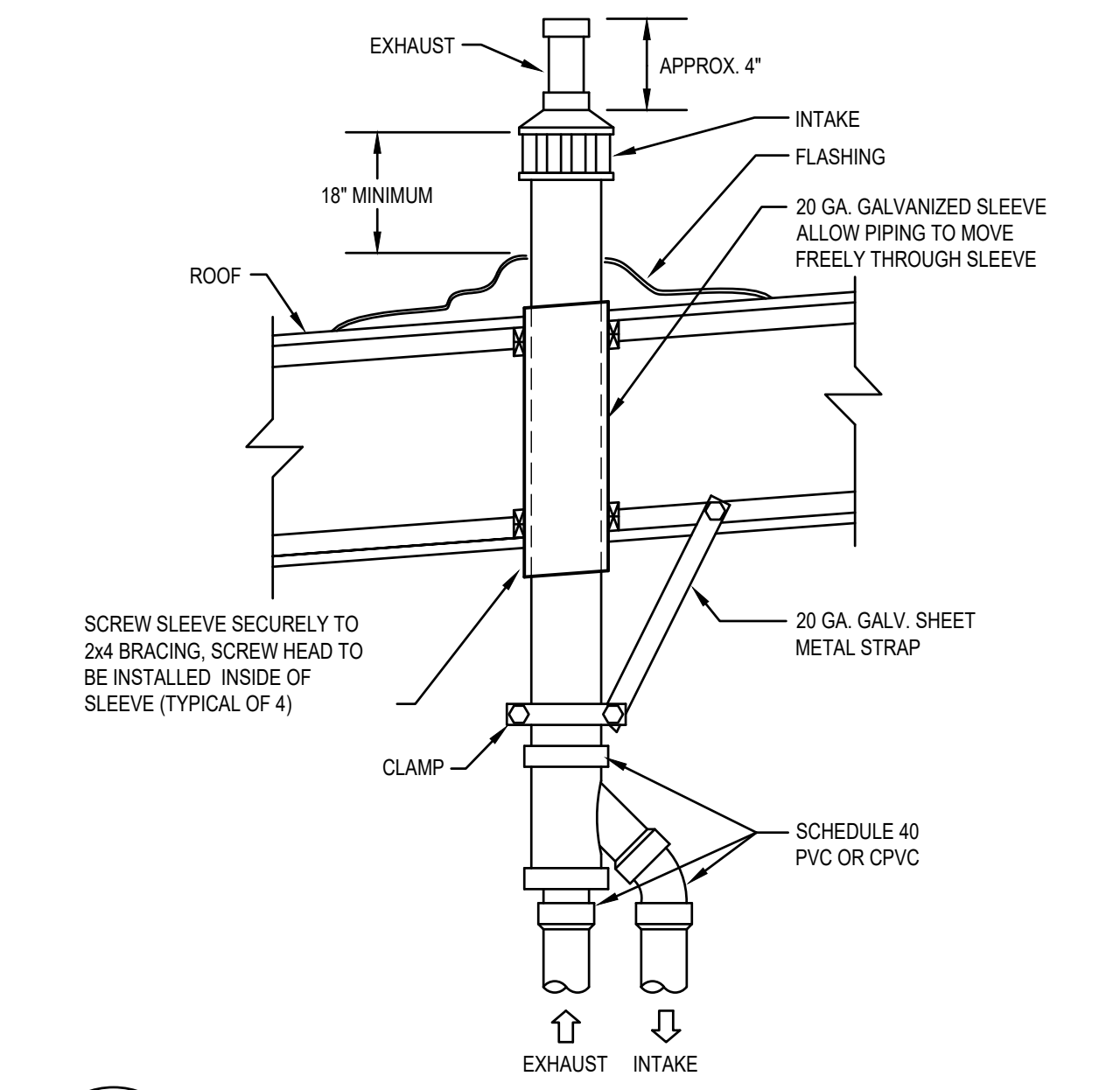
M-6.0



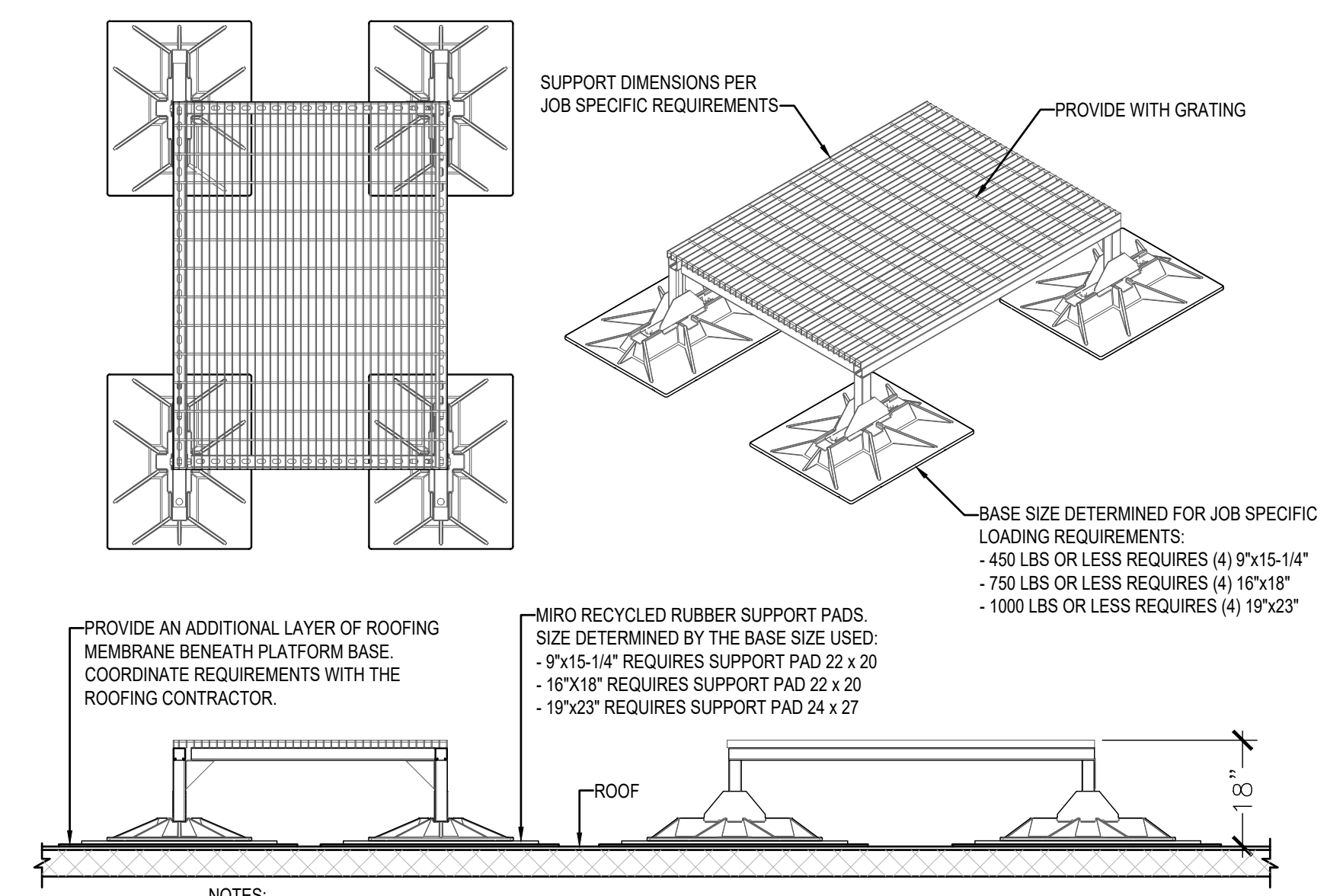
**HIGH EFFICIENCY TAKE-OFF DETAIL**  
NOT TO SCALE



**BALANCE DAMPER DETAIL**  
NOT TO SCALE



**CONCENTRIC GAS VENT DETAIL (90%)**  
NOT TO SCALE



- NOTES:
1. PROVIDE WITH MIRO INDUSTRIES MODEL HD, HEAVY DUTY MECHANICAL GALVANIZED ROOF SUPPORT WITH ADJUSTABLE SUPPORT LEGS.
  2. SUPPORT SHALL EXTEND A MINIMUM OF 6\"/>

**ROOFTOP CONDENSING UNIT PLATFORM DETAIL**  
NOT TO SCALE (EQUIPMENT WEIGHTS UP TO 1000 LBS)

- NOTES:
1. FOR TAKE-OFFS LARGER THAN 12\"/>



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M-6.1

PACKAGED AIR CONDITIONING SCHEDULE																							
SYMBOL	AREA SERVED	NOM. TONS	SUPPLY FAN				COOLING CAPACITY @ 95° OSA, 80° EDB, 62° EWB			GAS HEATING CAPACITY		RTU ELECTRICAL			ELECTRICAL POWER EXHAUST			OSA CFM	MIN. SEER / EER	OPER. WEIGHT (LBS)	MANUFACTURER AND MODEL	REMARKS	
			CFM	ESP	BRAKE BHP	DRIVE	STAGES	TOTAL MBH	SENS. MBH	INPUT MBH	OUTPUT MBH	MCA	MOCP	V/Ø	HP	MCA	MOCP						V/Ø
RTU-1.1	CLASSROOM 120	4	1600	.50	.72	DIRECT ECM	1	42.8	41.3	120.0 / 150.0	96.0 / 120.0	24.0	30	208/3	0.5	2.9	5.2	208/3	320	14.0	1100	CARRIER 48FC-05 STANDARD EFFICIENCY	1, 2, 3, 5, 6, 7, 8
RTU-1.2	CLASSES 132, 134 & 136	5	2000	.50	1.06	DIRECT ECM	1	53.7	53.7	120.0 / 150.0	96.0 / 120.0	29.0	40	208/3	0.5	2.9	5.2	208/3	320	14.0	1100	CARRIER 48FC-06 STANDARD EFFICIENCY	1, 2, 3, 5, 6, 7, 8
RTU-1.3	TEACHER LOUNGE	5	2000	.50	1.06	DIRECT ECM	1	53.7	53.7	120.0 / 150.0	96.0 / 120.0	29.0	40	208/3	0.5	2.9	5.2	208/3	320	14.0	1100	CARRIER 48FC-06 STANDARD EFFICIENCY	1, 2, 3, 5, 6, 7, 8
RTU-1.4	KITCHEN	7.5	3000	.50	2.4	DIRECT ECM	2	81.7	78.4	120.0 / 180.0	98.0 / 148.0	38.0	50	208/3	N/A	N/A	N/A	208/3	320	11.2 EER	1900	CARRIER 48FC-08 STANDARD EFFICIENCY	1, 2, 3, 5, 6, 7, 8
RTU-1.5A	CAFETERIA	12.5	5000	.50	3.0	DIRECT ECM	2	136.2	128.5	180.0 / 224.0	146.0 / 181.0	63.0	80	208/3	2	11.9	21.4	208/3	320	10.2 EER	2300	CARRIER 48FC-14 STANDARD EFFICIENCY	1, 2, 3, 5, 6, 7, 8
RTU-1.5B	CAFETERIA	12.5	5000	.50	3.0	DIRECT ECM	2	136.2	128.5	180.0 / 224.0	146.0 / 181.0	63.0	80	208/3	2	11.9	21.4	208/3	320	10.2 EER	2300	CARRIER 48FC-14 STANDARD EFFICIENCY	1, 2, 3, 5, 6, 7, 8
RTU-1.6	STAGE	6	2400	.50	1.31	DIRECT ECM	2	66.9	66.5	120.0 / 150.0	96.0 / 120.0	33.0	50	208/3	0.5	2.9	5.2	208/3	320	11.2 EER	1350	CARRIER 48FC-07 STANDARD EFFICIENCY	1, 2, 3, 5, 6, 7, 8
RTU-1.7A	GYM	15	6000	.50	3	DIRECT ECM	2	166.7	163.8	280.0 / 350.0	224.0 / 284.0	67.0	80	208/3	3	11.5	20.7	208/3	800	10.8 EER	3000	CARRIER 48FC-16 STANDARD EFFICIENCY HORIZONTAL DISCHARGE	1, 2, 4, 5, 6, 7, 8
RTU-1.7B	GYM	15	6000	.50	3	DIRECT ECM	2	166.7	163.8	280.0 / 350.0	224.0 / 284.0	67.0	80	208/3	3	11.5	20.7	208/3	800	10.8 EER	3000	CARRIER 48FC-16 STANDARD EFFICIENCY HORIZONTAL DISCHARGE	1, 2, 4, 5, 6, 7, 8
RTU-1.8	GYM FOYER	5	2000	.50	1.06	DIRECT ECM	1	53.7	53.7	120.0 / 150.0	96.0 / 120.0	29.0	40	208/3	0.5	2.9	5.2	208/3	320	14.0	1100	CARRIER 48FC-06 STANDARD EFFICIENCY	1, 2, 3, 5, 6, 7, 8
RTU-1.9	MULTIPURPOSE CLASS	4	1600	.50	.72	DIRECT ECM	1	42.8	41.3	120.0 / 150.0	96.0 / 120.0	24.0	30	208/3	0.5	2.9	5.2	208/3	320	14.0	1100	CARRIER 48FC-05 STANDARD EFFICIENCY	1, 2, 3, 5, 6, 7, 8
RTU-1.10	PREP ROOM	3	1200	.50	.44	DIRECT ECM	1	30.9	29.9	82.0 / 110.0	65.0 / 93.0	19.0	25	208/3	0.5	2.9	5.2	208/3	320	14.0	1100	CARRIER 48FC-04 STANDARD EFFICIENCY	1, 2, 3, 5, 6, 7, 8
RTU-1.11	COMPUTER LAB	5	2000	.50	1.06	DIRECT ECM	1	53.7	53.7	120.0 / 150.0	96.0 / 120.0	29.0	40	208/3	0.5	2.9	5.2	208/3	320	14.0	1100	CARRIER 48FC-06 STANDARD EFFICIENCY	1, 2, 3, 5, 6, 7, 8
RTU-1.12	ADMIN	3	1200	.50	.44	DIRECT ECM	1	30.9	29.9	82.0 / 110.0	65.0 / 93.0	19.0	25	208/3	0.5	2.9	5.2	208/3	320	14.0	1100	CARRIER 48FC-04 STANDARD EFFICIENCY	1, 2, 3, 5, 6, 7, 8

- REMARKS:
- APPROVED ALTERNATE MANUFACTURERS: BRYANT, TRANE, AAO, LENNOX, AND YORK.
  - PROVIDE UNIT WITH SEVEN-DAY PROGRAMMABLE AUTO-CHANGEOVER WITH 5 DEGREE DEADBAND, ADAPTIVE INTELLIGENT AUTOMATIC START/CONTROL, 3 STAGE HEAT, 2 STAGE COOLING THERMOSTAT HONEYWELL VISIONPRO MODEL TH8321R1001 WITH ECONOMIZER FAULT DETECTION. THERMOSTAT SHALL BE POWERED BY A 24VAC WIRE CONNECTION.
  - PROVIDE UNIT WITH MANUFACTURER'S ROOF CURB (SEE DETAIL FOR SEISMIC RESTRAINTS), HAIL GUARDS, LOW AMBIENT CONTROLS (TO 0°F), FLUE EXTENDER, HIGH ALTITUDE KIT, THRU-THE-BOTTOM OF CURB ELECTRICAL CONNECTION KIT, HINGED ACCESS PANELS, MICROMETL GEAR DRIVEN INTEGRATED DRY BULB ECONOMIZER WITH BELIMO LOGIC ACTUATORS, MICROMETL CENTRIFUGAL POWER EXHAUST (100% RELIEF) WITH WIRING HARNESS AND JADE CONTROLLER (STANDALONE TSTAT) ELECTRICAL CONTRACTOR TO PROVIDE THE POWER CONNECTION BETWEEN RTU AND THE POWER EXHAUST AND PROVIDE FUSED DISCONNECT AS REQUIRED.
  - PROVIDE UNIT WITH MANUFACTURER'S ROOF CURB (SEE DETAIL FOR SEISMIC RESTRAINTS), HAIL GUARDS, LOW AMBIENT CONTROLS (TO 0°F), FLUE EXTENDER, HIGH ALTITUDE KIT, THRU-THE-BOTTOM OF CURB ELECTRICAL CONNECTION KIT, HINGED ACCESS PANELS, MICROMETL GEAR DRIVEN INTEGRATED DRY BULB ECONOMIZER WITH BELIMO LOGIC ACTUATORS, MICROMETL CENTRIFUGAL POWER EXHAUST (100% RELIEF) WITH WIRING HARNESS AND JADE CONTROLLER (USE JADE ONLY FOR STANDALONE TSTAT), ELECTRICAL CONTRACTOR TO PROVIDE THE POWER CONNECTION BETWEEN RTU AND THE POWER EXHAUST AND PROVIDE FUSED DISCONNECT AS REQUIRED.
  - PROVIDE UNIT WITH MANUFACTURER'S ROOF CURB (SEE DETAIL FOR SEISMIC RESTRAINTS), HAIL GUARDS, LOW AMBIENT CONTROLS (TO 0°F), FLUE EXTENDER, HIGH ALTITUDE KIT, THRU-THE-BOTTOM OF CURB ELECTRICAL CONNECTION KIT, HINGED ACCESS PANELS, MICROMETL GEAR DRIVEN INTEGRATED DRY BULB ECONOMIZER WITH BELIMO LOGIC ACTUATORS, MICROMETL CENTRIFUGAL POWER EXHAUST (100% RELIEF) WITH WIRING HARNESS AND JADE CONTROLLER (USE JADE ONLY FOR STANDALONE TSTAT), ELECTRICAL CONTRACTOR TO PROVIDE THE POWER CONNECTION BETWEEN RTU AND THE POWER EXHAUST AND PROVIDE FUSED DISCONNECT AS REQUIRED.
  - PROVIDE UNIT WITH MANUFACTURER'S ROOF CURB (SEE DETAIL FOR SEISMIC RESTRAINTS), HAIL GUARDS, LOW AMBIENT CONTROLS (TO 0°F), FLUE EXTENDER, HIGH ALTITUDE KIT, THRU-THE-BOTTOM OF CURB ELECTRICAL CONNECTION KIT, HINGED ACCESS PANELS, MICROMETL GEAR DRIVEN INTEGRATED DRY BULB ECONOMIZER WITH BELIMO LOGIC ACTUATORS AND AUX END SWITCH, MICROMETL MODULATING POWER EXHAUST WITH VARIABLE SPEED MOTOR CONTROLLER (100% RELIEF) WIRING HARNESS AND JADE CONTROLLER (USE JADE ONLY FOR STANDALONE TSTAT), PRESSURE SENSOR SET TO .02 POSITIVE PRESSURE. ELECTRICAL CONTRACTOR TO PROVIDE THE POWER CONNECTION BETWEEN RTU AND THE POWER EXHAUST AND PROVIDE FUSED DISCONNECT AS REQUIRED.
  - PROVIDE UNIT WITH CARRIER WALL MOUNTED CO2 SENSOR. OUTSIDE AIR SHALL HAVE A MINIMUM SETPOINT OF ZERO AND THE DAMPER SHALL MODULATE OPEN AS REQUIRED TO SATISFY THE CO2 SENSOR. THE OSA CFM LISTED IN THIS SCHEDULE SHALL BE THE MAXIMUM OSA DAMPER SETPOINT (IF NOT IN ECONOMIZER MODE). THE OUTSIDE AIR DAMPER SHALL CLOSE DURING THE UNOCCUPIED MODE.
  - PROVIDE 2" PLEATED MERV 8 FILTER AND FILTER RACK WITH 4 EXTRA SETS PER UNIT.
  - MAXIMUM "A-WEIGHTED" SUPPLY AIR SOUND RATINGS FOR UNITS 2-18 TONS = 95 DB @ 125 HZ, 90 DB @ 250 HZ, PER ARI STANDARDS 270 & 370.
  - PROVIDE A WATER LEVEL MONITOR IN THE PRIMARY DRAIN PAN INTERLOCKED WITH UNIT FOR UNIT SHUT-DOWN ON DETECTION OF WATER WHEN THE PRIMARY DRAIN IS PLUGGED.

EXHAUST FAN SCHEDULE												
SYMBOL	AREA SERVED	UNIT TYPE	BLOWER				ELECTRICAL		MAXIMUM SONES	OPERATING WEIGHT (LBS)	MANUFACTURER AND MODEL	REMARKS
			CFM	ESP	MAXIMUM RPM	DRIVE	HP/W	V/Ø				
EF-1	---	CEILING CABINET	75	.375	900	DIRECT	36.2 W	115/1	1.5	15	COOK MODEL GC-146	1, 2, 3
EF-2	---	CEILING CABINET	100	.375	1075	DIRECT	46.5 W	115/1	2.5	15	COOK MODEL GC-148	1, 2, 3
EF-3	---	CEILING CABINET	150	.375	1160	DIRECT	67.7 W	115/1	3.5	15	COOK MODEL GC-166	1, 2, 3

- REMARKS:
- APPROVED ALTERNATE MANUFACTURERS: ACME, GREENHECK, PENNBARRY, TWIN CITY FAN COMPANY, SOLER & PALAU AND BARRY BLOWER.
  - PROVIDE UNIT WITH MANUFACTURER'S ALUMINUM ROOF CAP (FLAT ROOF) EQUAL TO COOK MODEL PR (W/ INTEGRAL BIRD SCREEN AND ROOF CURB), MANUFACTURER'S STEEL ROOF JACK (SLOPED ROOF) EQUAL TO COOK MODEL RJ (W/ INTEGRAL BIRD SCREEN, FLASHING FLANGE AND BLACK EPOXY FINISH), MANUFACTURER'S WALL CAP EQUAL TO COOK MODEL WCG (W/ INTEGRAL BIRDSCREEN), BACKDRAFT DAMPER, OUTLET FLEX DUCT CONNECTION, STANDARD PLUG DISCONNECT, PRE-WIRED FAN SPEED CONTROLLER, THERMAL OVERLOAD PROTECTION, HANGING VIBRATION ISOLATORS, AND WHITE ALUMINUM GRILLE.
  - PROVIDE UNIT WITH MANUFACTURER'S ALUMINUM ROOF CAP (FLAT ROOF) EQUAL TO COOK MODEL PR (W/ INTEGRAL BIRD SCREEN AND ROOF CURB), MANUFACTURER'S STEEL ROOF JACK (SLOPED ROOF) EQUAL TO COOK MODEL RJ (W/ INTEGRAL BIRD SCREEN, FLASHING FLANGE AND BLACK EPOXY FINISH), MANUFACTURER'S WALL CAP EQUAL TO COOK MODEL WCG (W/ INTEGRAL BIRDSCREEN), BACKDRAFT DAMPER, INLET AND OUTLET FLEX DUCT CONNECTIONS, STANDARD PLUG DISCONNECT, PRE-WIRED FAN SPEED CONTROLLER, THERMAL OVERLOAD PROTECTION, AND HANGING VIBRATION ISOLATORS.
  - PROVIDE UNIT WITH MANUFACTURER'S BACKDRAFT DAMPER, INLET AND OUTLET FLEX DUCT CONNECTIONS, PRE-WIRED ELECTRICAL DISCONNECT SWITCH, BSHA BELT GUARD MOTOR COVER, THERMAL OVERLOAD PROTECTION (120 VOLT ONLY), POWDER COAT STANDARD GRAY FINISH, AND HANGING VIBRATION ISOLATORS.
  - PROVIDE UNIT WITH MANUFACTURER'S ROOF CURB W/ DAMPER TRAY AND BACKDRAFT DAMPER, THERMAL OVERLOAD PROTECTION (120 VOLT ONLY), PRE-WIRED NEMA 3R ELECTRICAL DISCONNECT SWITCH, AND INTEGRAL BIRD SCREEN.
  - PROVIDE UNIT WITH MANUFACTURER'S ROOF CURB (VENTED ROOF CURB IF EXHAUST DUCT IS SHAFTED RATHER THAN WRAPPED), THERMAL OVERLOAD PROTECTION (120 VOLT ONLY), PRE-WIRED NEMA 3R ELECTRICAL DISCONNECT SWITCH, HINGED SUB BASE, GREASE TERMINATOR, AND U.L. 762 RATING.
  - CONTROL FAN WITH SEPARATE WALL SWITCH, INTERLOCK WITH LIGHT SWITCH, HEAT RISE T-STAT, PUSH BUTTON DIGITAL COUNTDOWN TIMER SWITCH WITH 5-15-30 MINUTE AND 1-2-4 HOUR PRESETS, 7-DAY PROGRAMMABLE TIMER SWITCH, LIGHTING CONTROL PANEL, 7-DAY PROGRAMMABLE T-STAT (COP-#) AUXILIARY CONTACT FOR FAN OPERATION DURING OCCUPIED HOURS

DUCTLESS SPLIT HIGH WALL COOLING UNIT SCHEDULE															
SYMBOL	AREA SERVED	NOMINAL TONS	UNIT TYPE	SUPPLY FAN		COOLING CAPACITY AT 95°F OSA		ELECTRICAL OUTDOOR UNIT			MINIMUM SEER	INDOOR / OUTDOOR WEIGHT (LBS)	MANUFACTURER AND MODEL	REMARKS	
				CFM	V/Ø	TOTAL (MBH)	SENSIBLE (MBH)	MCA	MOCP	V/Ø					
FC-1_CU-1	---	1.0	HIGH WALL COOLING ONLY	305	THRU O/U	12.0	8.5	11	15	208/1	19.0	20 / 65	CARRIER FAN COIL MODEL 40MHH12 CARRIER CONDENSING UNIT MODEL 38MHRBC12	1, 2, 3, 4, 5, 6	
FC-1_CU-1	---	1.5	HIGH WALL COOLING ONLY	550	THRU O/U	18.0	13.0	15	20	208/1	19.0	25 / 75	CARRIER FAN COIL MODEL 40MHH18 CARRIER CONDENSING UNIT MODEL 38MHRBC18	1, 2, 3, 4, 5, 6	
FC-1_CU-1	---	2.0	HIGH WALL COOLING ONLY	640	THRU O/U	25.0	18.0	18	25	208/1	18.5	35 / 95	CARRIER FAN COIL MODEL 40MHH24 CARRIER CONDENSING UNIT MODEL 38MHRBC24	1, 2, 3, 4, 5, 6	

- REMARKS:
- APPROVED ALTERNATE MANUFACTURERS: CARRIER, LENNOX, MITSUBISHI, PANASONIC, SAMSUNG, LG, DAIKIN, OR APPROVED EQUAL BY ENGINEER.
  - CONTROL UNIT WITH MANUFACTURER'S HARD-WIRED WALL MOUNTED 7 DAY PROGRAMMABLE THERMOSTAT.
  - PROVIDE MANUFACTURER'S CRANKCASE HEATER, LOW AMBIENT CONTROLS & (TO 0°F) WIND Baffles, REFRIGERATION LINE SET SIZED BY MANUFACTURER (LONG LINE APPLICATION), AND TAMPER PROOF PORT CAPS.
  - PROVIDE WITH MIRO INDUSTRIES HEAVY DUTY MECHANICAL GALVANIZED ROOF SUPPORT WITH ADJUSTABLE SUPPORT LEGS. SUPPORT SHALL EXTEND A MINIMUM OF 6" BEYOND EQUIPMENT IN EACH DIRECTION. BOLT EQUIPMENT TO MECHANICAL SUPPORT. OR PROVIDE 18" CURB, REFERENCE CONDENSING CURB DETAIL.
  - PROVIDE WITH MANUFACTURER'S CONDENSATE PUMP, LITTLE GIANT MINI CONDENSATE PUMP, CONCEAL PUMP BEHIND UNIT WITH MOUNTING BRACKET ASSEMBLY. PUMP SHALL BE POWERED BY FAN COIL.
  - ELECTRICAL TO PROVIDE DISCONNECT.

TYPE I EXHAUST FAN SCHEDULE												
SYMBOL	AREA SERVED	UNIT TYPE	BLOWER				ELECTRICAL		MAXIMUM SONES	OPERATING WEIGHT (LBS)	MANUFACTURER AND MODEL	REMARKS
			CFM	ESP	MAXIMUM RPM	DRIVE	HP	V/Ø				
GF-D5A	GREASE HOOD H-D5A	ROOF MOUNTED UP BLAST	2900	1.0	1725	DIRECT	2.0	460/3	18.9	200	CAPTIVEAIRE MODEL DU180HFA WITH DEMAND VENTILATION	1, 2, 3, 4
GF-D5B	GREASE HOOD H-D5B	ROOF MOUNTED UP BLAST	2900	1.0	1725	DIRECT	2.0	460/3	18.9	200	CAPTIVEAIRE MODEL DU180HFA WITH DEMAND VENTILATION	1, 2, 3, 4

- REMARKS:
- EXHAUST FANS SHALL BE THE SAME MANUFACTURER AS THE TYPE I HOOD(S).
  - PROVIDE UNIT WITH MANUFACTURER'S ROOF CURB, HINGED SUB BASE, GREASE TERMINATOR, AND U.L. 762 RATING.
  - CONTROL FAN WITH WALL MOUNTED CONTROL SYSTEM.
  - ELECTRICAL TO PROVIDE DISCONNECT.

EXHAUST HOOD SCHEDULE											
SYMBOL	TYPE	HOOD DIMENSIONS (CAPTURE AREA)		EXHAUST AIR			MAKE-UP AIR		WEIGHT (LBS)	MANUFACTURER AND MODEL	REMARKS
		LENGTH	WIDTH	AIRFLOW CFM	DUCT CONNECTION	MAX S.P. LOSS	AIRFLOW CFM	DUCT CONNECTION			
H-D5A	TYPE I EXHAUST HOOD (GF-D5A) EXHAUST FAN	15'-6"	60"	2900	(2) 12X12	-0.886	--	--	1350	CAPTIVEAIRE MODEL 6024 ND-2 DEMAND VENTILATION TYPE I	1, 2, 3, 4, 5
H-D5B	TYPE I EXHAUST HOOD (GF-D5B) EXHAUST FAN	15'-6"	60"	2900	(2) 12X12	-0.886	--	--	1350	CAPTIVEAIRE MODEL 6024 ND-2 DEMAND VENTILATION TYPE I	1, 2, 3, 4, 5
H-D5C	TYPE II EXHAUST DISH HOOD (EF-D5A) EXHAUST FAN	48"	48"	700	10"Ø	-0.123	--	--	200	CAPTIVEAIRE MODEL 4824 VHB-G TYPE II	1, 6, 7

- REMARKS:
- ALTERNATE MANUFACTURERS GREENHECK, ACCUREX, E-CON AIR, AND DUO-AIRE.
  - HOODS WILL BE MOUNTED ABOVE A HALF HEIGHT DIVIDING WALL.
  - PROVIDE WITH PRE-WIRED CONTROLS WITH WALL MOUNTED CONTROLS FOR TWO FANS (INCLUDING VFDs, CONTACTORS, AND TEMPERATURE SENSOR) AND ENERGY MANAGEMENT SYSTEM OVERRIDE.
  - PROVIDE HOOD WITH FILTERS, STAINLESS STEEL CEILING SKIRT, EXHAUST COLLARS AND INTERIOR LIGHTS.
  - PROVIDE HOOD WITH MANUFACTURER'S CHEMICAL FIRE SUPPRESSION SYSTEM INCLUDING MECHANICAL GAS VALVE FOR SHUTDOWN OF MAIN GAS LINE TO COOKING EQUIPMENT. SYSTEM SHALL BE CONNECTED TO BUILDING FIRE ALARM SYSTEM BY FIRE ALARM CONTRACTOR.
  - PROVIDE UNIT WITH EXHAUST COLLAR, STAINLESS STEEL CEILING SKIRT, DRAIN GUTTER.
  - CONTROL EXHAUST HOOD WITH WALL SWITCH. SEE EF-D5A EXHAUST FAN.



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Project No. 22-104

PRELIMINARY



Jefferson Elementary School  
Addition and Remodel  
600 N. Fillmore Street, Jerome, Idaho

DATE: December 9, 2022  
LKV PROJECT #: -  
REVISIONS:

DRAWN BY: CD  
CHECKED BY: BC

Design Development

DRAWING NO.

M-7.0



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NOT FOR CONSTRUCTION  
12/9/2022

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LKV PROJECT #: -  
REVISIONS:

DRAWN BY: CD  
CHECKED BY: BC

Design Development

DRAWING NO.

M-7.1

### ELECTRIC HEATER SCHEDULE

SYMBOL	AREA SERVED	UNIT TYPE	FAN			ELECTRICAL				MANUFACTURER AND MODEL	REMARKS
			CFM	RPM	HP	KW	STEPS	V/Ø	AMPS		
EH-1.1	VESTIBULE	CEILING RECESS MOUNTED	300	1400	1/8	2	1	208/1	9.6	QMARK MODEL CDF SERIES WITH RECESSED ENCLOSURE	1, 4, 6
EH-1.2	HALL ENTRY	CEILING RECESS MOUNTED	300	1400	1/8	2	1	208/1	9.6	QMARK MODEL CDF SERIES WITH RECESSED ENCLOSURE	1, 4, 6
EH-1.3	RISER	SURFACE MOUNTED	245	1400	1/8	2	1	208/1	9.6	MARKEL MODEL 3420 SERIES	1, 2, 3, 5

REMARKS:




- APPROVED ALTERNATE MANUFACTURERS: BRASCH, QMARK, MARKEL, INDEECO, OUELLET, AND CHROMALOX.
- PROVIDE UNIT WITH AN INTEGRAL THERMOSTAT. THERMOSTAT SHALL BE COVERED WITH A TAMPER-PROOF ACCESS COVER.
- PROVIDE SURFACE MOUNTING KIT.
- ADJUST HEATER TO OPERATE AT 60°F.
- ADJUST HEATER TO OPERATE AT 50°F.
- PROVIDE REMOTE LINE VOLTAGE THERMOSTAT ON WALL. FINISH THERMOSTAT WITH LOCKABLE COVER.

### DESTRATIFICATION FAN SCHEDULE

SYMBOL	AREA SERVED	FAN		ELECTRICAL			WEIGHT LBS.	MAXIMUM dBA	MAXIMUM MOUNTING HEIGHT	MANUFACTURER AND MODEL	REMARKS
		CFM	RPM	V/Ø	WATTS	AMPS					
DSF-1.1	GYM	1128	2700	120/1	175	1.48	14	64	45'	AIRIUS MODEL AIR PEAR A-45-P2	1, 2, 3, 4, 5
DSF-1.2	GYM	1128	2700	120/1	175	1.48	14	64	45'	AIRIUS MODEL AIR PEAR A-45-P2	1, 2, 3, 4, 5















REMARKS:

- APPROVED ALTERNATE MANUFACTURERS: WITH PRIOR APPROVAL OF ENGINEER.
- PROVIDE UNIT WITH PCS MOTOR, SEALED BEARINGS, 6' CORD, GUARD GRILLE, STATOR, 6' STEEL SAFETY CABLE AND HANGING BRACKET.
- CONTROL UNIT WITH MANUFACTURES WALL MOUNTED ( TRIAC-120-1.5 FOR PCS MOTOR) SPEED CONTROLLER, IN ADDITION TO THE SPEED CONTROLLER, CONTROL SCHEDULE OF USE BY DDC.
- PROVIDE OFF WHITE COLOR.
- FAN SHALL BE INTEGRATED TO THE FIRE CONTROL PANEL. INCLUDES A 10-30 VDC PILOT RELAY FOR SEAMLESS FIRE CONTROL PANEL INTEGRATION. THE PILOT RELAY CAN BE WIRED NORMALLY OPEN OR NORMALLY CLOSED IN THE FIELD.

SUPPLY GRILLE SCHEDULE				
SYMBOL	NOMINAL SIZE	NECK / RUNOUT SIZE	CFM RANGE	REMARKS
	6X6	6X6	0-180	1, 2, 3, 4
	12X10	12X10	180-575	1, 2, 3, 4
	14X10	14X10	400-700	1, 2, 3, 4





















REMARKS:

1. WALL GRILLE SIZES BASED ON TITUS MODEL 272F, DOUBLE DEFLECTION ADJUSTABLE BLADES, 3/4" SPACING, WHITE FINISH. APPROVED ALTERNATE MANUFACTURERS INCLUDE ANEMOSTAT, CARNES, J&J REGISTER, TUTTLE & BAILEY, NAILOR, METAL-AIRE, KRUEGER, PRICE, AND UNITED ENERTECH.
2. SIZES BASED ON A MAXIMUM NC LEVEL OF 25.
3. ALL OF THE GRILLES SHOWN IN THIS SCHEDULE MAY NOT BE USED. REFERENCE THE HVAC PLAN FOR GRILLE CALL-OUTS AND THE QUANTITY OF EACH SIZE REQUIRED.
4. WHENEVER THERE IS A DISCREPANCY BETWEEN THE RUNOUT DUCT SIZE SHOWN ON THE PLANS AND THAT SHOWN IN THE SCHEDULE, ALWAYS USE THE LARGER OF THE TWO DUCT SIZES.

DIFFUSER SCHEDULE				
SYMBOL	NOMINAL SIZE	NECK / RUNOUT SIZE	CFM RANGE	REMARKS
	6X6	6"Ø	0 - 90	1, 2, 3, 4, 5, 6, 7
	9X9	8"Ø	90 - 200	1, 2, 3, 4, 5, 6, 7
	12X12	10"Ø	200 - 350	1, 2, 3, 4, 5, 6, 7
	15X15	12"Ø	300 - 500	1, 2, 3, 4, 5, 6, 7
	15X15	14"Ø	400 - 650	1, 2, 3, 4, 5, 6, 7
	18X18	16"Ø	600 - 900	1, 2, 3, 4, 5, 6, 7
	21X21	21X21	900 - 1400	1, 2, 3, 4, 5, 6, 7
	48" (3)-3/4" SLOT, 8" OVAL	8"Ø	0 - 175	2, 4, 5, 6, 7, 8
	48" (3)-3/4" SLOT, 12" OVAL	12"Ø	0 - 240	2, 4, 5, 6, 7, 8
	72" (3)-3/4" SLOT, 10" OVAL	10"Ø	0 - 275	2, 4, 5, 6, 7, 8
	72" (3)-3/4" SLOT, 12" OVAL	12"Ø	250 - 360	2, 4, 5, 6, 7, 8
	24X24 MODULE 8"Ø NECK	8"Ø	0 - 200	2, 4, 5, 6, 7, 9
	24X24 MODULE 10"Ø NECK	10"Ø	100 - 400	2, 4, 5, 6, 7, 9
	40"Ø	18"Ø	700 - 1075	2, 4, 5, 6, 7, 10

REMARKS:

1. SIZES BASED ON TITUS MODEL TDCA SERIES, HORIZONTAL TO VERTICAL ADJUSTABLE DISCHARGE. APPROVED ALTERNATE MANUFACTURERS INCLUDE ANEMOSTAT, J&J REGISTER, NAILOR, METAL-AIRE, TUTTLE & BAILEY, KRUEGER, PRICE, AND UNITED ENERTECH.
2. SIZES BASED ON A MAXIMUM NC LEVEL OF 25.
3. ALL DIFFUSERS LOCATED IN LAY-IN CEILING AREAS SHALL BE BORDER TYPE 3 AND BE MOUNTED IN MANUFACTURER PROVIDED 24"X24" PANELS. ALL DIFFUSERS LOCATED IN HARD CEILING AREAS SHALL BE BORDER TYPE 6 (BEVELED) SURFACE MOUNTED. SEE ARCHITECTURAL PLANS FOR LOCATIONS OF VARIOUS CEILING TYPES.
4. SEE HVAC FLOOR PLANS FOR DIRECTIONAL THROW REQUIREMENTS FOR EACH DIFFUSER.
5. ALL OF THE DIFFUSERS SHOWN IN THIS SCHEDULE MAY NOT BE USED. REFERENCE THE HVAC PLAN FOR DIFFUSER CALL-OUTS AND THE QUANTITY OF EACH SIZE REQUIRED.
6. WHENEVER THERE IS A DISCREPANCY BETWEEN THE RUNOUT DUCT SIZE SHOWN ON THE PLANS AND THAT SHOWN IN THE SCHEDULE, ALWAYS USE THE LARGER OF THE TWO DUCT SIZES.
7. WHITE FINISH.
8. SIZES BASED ON TITUS MODEL ML-38 WITH PLENUM MP-38. DIFFUSERS LOCATED IN LAY-IN CEILING AREAS SHALL BE BORDER TYPE 3 AND HARD CEILING AREAS SHALL BE BORDER TYPE 6. SEE ARCHITECTURAL PLANS FOR LOCATIONS OF VARIOUS CEILING TYPES. HARD CEILING APPLICATION SHALL BE CLIP TYPE AND NO SCREWS SHALL BE USED ON DIFFUSER. APPROVED ALTERNATE MANUFACTURERS INCLUDE ANEMOSTAT, J&J REGISTER, NAILOR, METAL-AIRE, TUTTLE & BAILEY, KRUEGER AND PRICE.
9. SIZES BASED ON TITUS MODEL PCS-DF SERIES, 4-WAY ADJUSTABLE DEFLECTORS (PATTERN CONTROLLER), VERTICAL/HORIZONTAL WITH HINGED DROP PERFORATED FACE. APPROVED ALTERNATE MANUFACTURERS INCLUDE ANEMOSTAT, J&J REGISTER, NAILOR, METAL-AIRE, TUTTLE & BAILEY, KRUEGER, PRICE, AND UNITED ENERTECH.
10. SIZES BASED ON TITUS MODEL TMRA, TYPE 3, ROUND CEILING DIFFUSER, STEEL CONSTRUCTION. APPROVED ALTERNATE MANUFACTURERS INCLUDE ANEMOSTAT, J&J REGISTER, NAILOR, METAL-AIRE, TUTTLE & BAILEY, KRUEGER, PRICE, AND UNITED ENERTECH.

RETURN & EXHAUST GRILLE SCHEDULE				
SYMBOL	NOMINAL SIZE	NECK / RUNOUT SIZE	CFM RANGE	REMARKS
	8X8	6"Ø	0-80	1, 2, 3, 4, 5, 6
	10X10	8"Ø	80-180	1, 2, 3, 4, 5, 6
	12X12	10"Ø	180-300	1, 2, 3, 4, 5, 6
	22X10	6"Ø	0-80	1, 2, 3, 4, 5, 6
	22X10	8"Ø	80-180	1, 2, 3, 4, 5, 6
	22X10	10"Ø	180-300	1, 2, 3, 4, 5, 6
	22X22	12"Ø	300-500	1, 2, 3, 4, 5, 6
	22X22	14"Ø	500-750	1, 2, 3, 4, 5, 6
	22X10	22X10	500-1100	1, 2, 3, 4, 5, 6
	22X22	22X22	1100-2000	1, 2, 3, 4, 5, 6
	22X22	16"Ø	1100-1300	1, 2, 3, 4, 5, 6
	22X22	18"Ø	1100-1700	1, 2, 3, 4, 5, 6
	10X10	10X10	0-200	1, 2, 3, 4, 5, 6
	10X6	10X6	0-180	2, 4, 5, 6, 8
	12X6	12X6	0-200	2, 4, 5, 6, 7
	40X40	40X40	0-4200	2, 4, 5, 6, 7
	18X14	18X14	0-1000	2, 4, 5, 6, 8
	12X12	12X12	0-500	2, 4, 5, 6, 8
	12X10	12X10	0-400	2, 4, 5, 6, 7
	12X8	12X8	0-160	2, 4, 5, 6, 8

REMARKS:

1. SIZES BASED ON TITUS MODEL 50F, ALUMINUM EGGRATE RETURN GRILLE, 1/2" x 1/2" x 1" SPACING (SINGLE CORE). PROVIDE SQUARE TO ROUND TRANSITION (WHERE ROUND RUN-OUT INDICATED). APPROVED ALTERNATE MANUFACTURERS INCLUDE ANEMOSTAT, CARNES, PRICE, NAILOR, METAL-AIRE, TUTTLE & BAILEY, KRUEGER, J&J REGISTER, AND UNITED ENERTECH.
2. SIZES BASED ON A MAXIMUM NC LEVEL OF 25.
3. ALL GRILLES LOCATED IN LAY-IN CEILING AREAS SHALL HAVE BORDER #3, UNLESS OTHERWISE INDICATED. ALL GRILLES LOCATED IN HARD CEILING AREAS SHALL HAVE BORDER #1, UNLESS OTHERWISE INDICATED. REFER TO ARCHITECTURAL PLANS FOR LOCATIONS OF VARIOUS CEILING TYPES. SHEET METAL DUCTWORK VISIBLE BEHIND GRILLE SHALL BE PAINTED FLAT BLACK.
4. ALL OF THE GRILLES SHOWN IN THIS SCHEDULE MAY NOT BE USED. REFERENCE THE HVAC PLAN FOR GRILLE CALL-OUTS AND THE QUANTITY OF EACH SIZE REQUIRED.
5. WHENEVER THERE IS A DISCREPANCY BETWEEN THE RUNOUT DUCT SIZE SHOWN ON THE PLANS AND THAT SHOWN IN THE SCHEDULE, ALWAYS USE THE LARGER OF THE TWO DUCT SIZES.
6. WHITE FINISH.
7. LOW WALL GRILLE SIZES BASED ON TITUS MODEL 33R, HEAVY DUTY STEEL, 14 GAUGE BLADES, 1/2" SPACING, 35° DEFLECTION, ALL-WELDED CONSTRUCTION. APPROVED ALTERNATE MANUFACTURERS INCLUDE ANEMOSTAT, CARNES, J&J REGISTER, NAILOR, TUTTLE & BAILEY, KRUEGER, PRICE, AND UNITED ENERTECH.
8. HIGH WALL GRILLE SIZES BASED ON TITUS MODEL 355 RL, STEEL BAR GRILLE, FIXED BLADES, 1/2" SPACING, 35° DEFLECTION, ADJUSTABLE OPPOSED BLADE DAMPER. APPROVED ALTERNATE MANUFACTURERS INCLUDE ANEMOSTAT, CARNES, J&J REGISTER, NAILOR, TUTTLE & BAILEY, KRUEGER, PRICE, AND UNITED ENERTECH.



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Project No. 22-104

PRELIMINARY



NOT FOR CONSTRUCTION  
12/9/2022

Jefferson Elementary School  
Addition and Remodel  
600 N. Fillmore Street, Jerome, Idaho

DATE: December 9, 2022  
LKV PROJECT #: -  
REVISIONS:

DRAWN BY: CD  
CHECKED BY: BC

Design Development

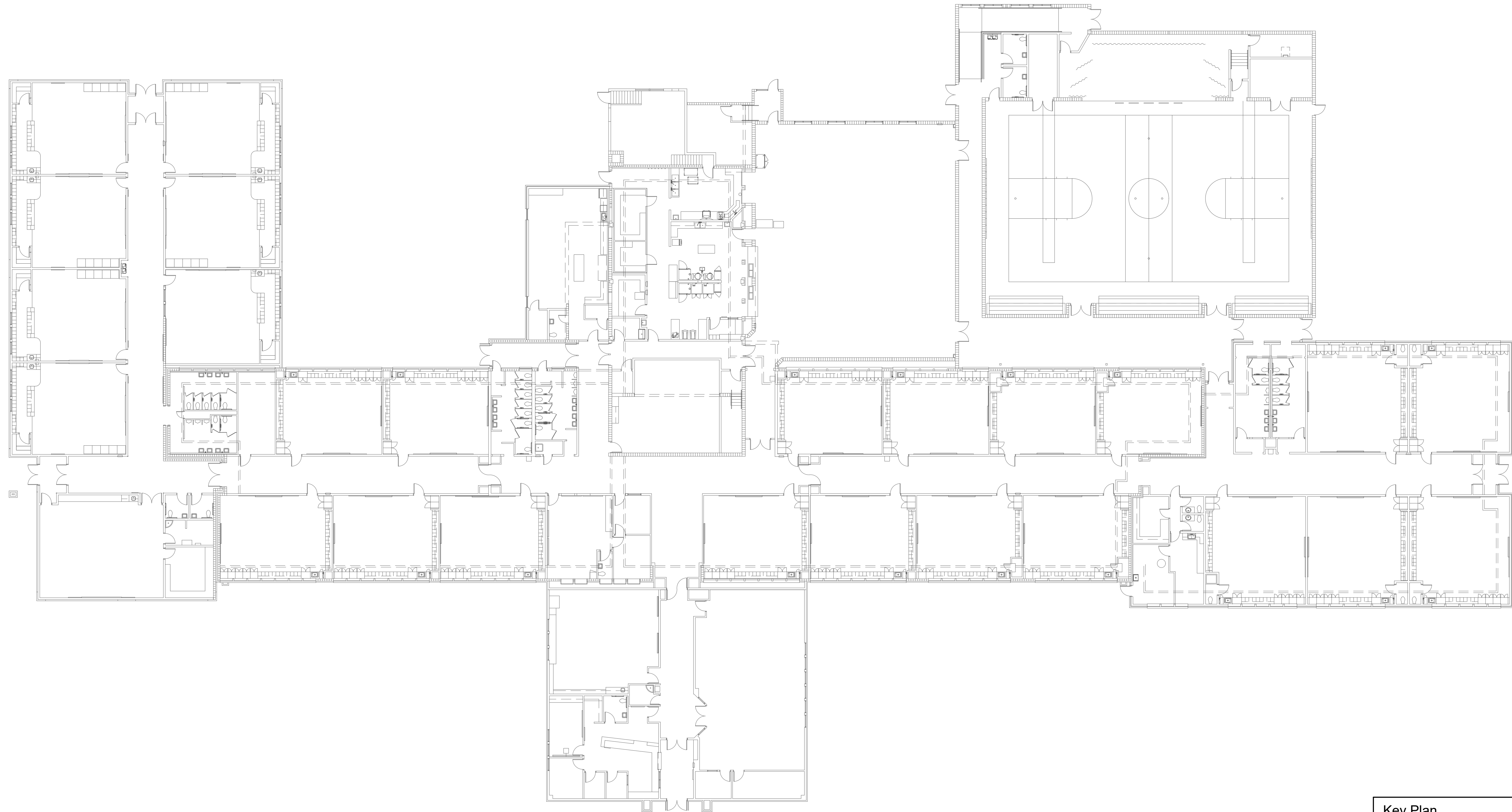
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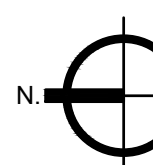
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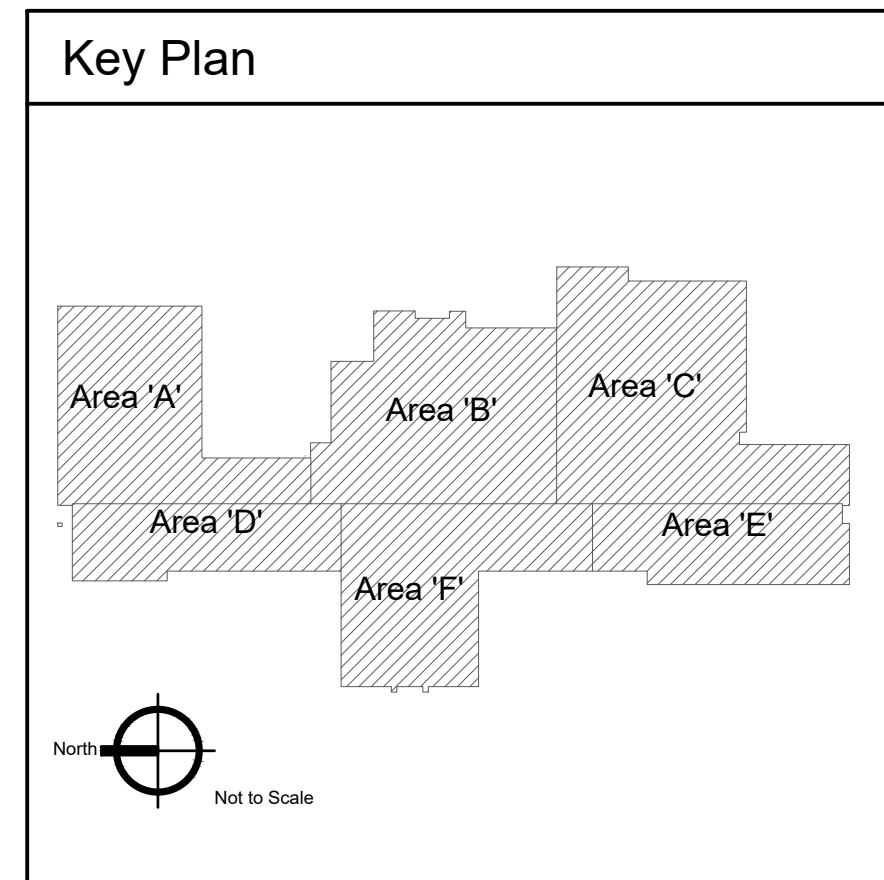


**KEYED NOTES:**

- ⊕ SYMBOL USED FOR NOTE CALLOUT.
- 1. KEYNOTES



 DDC New Work Plan  
Scale: 1/16" = 1'-0"



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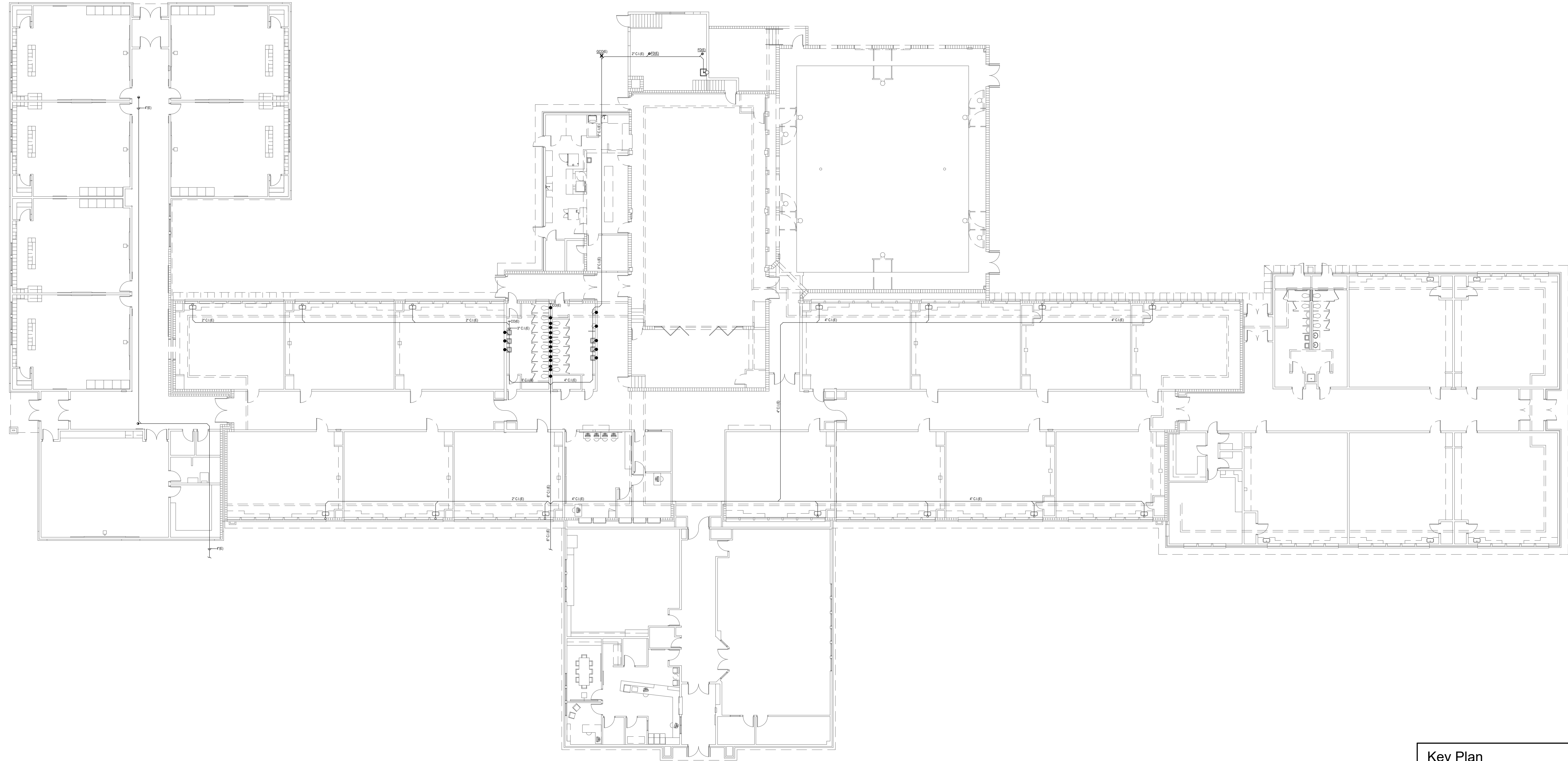
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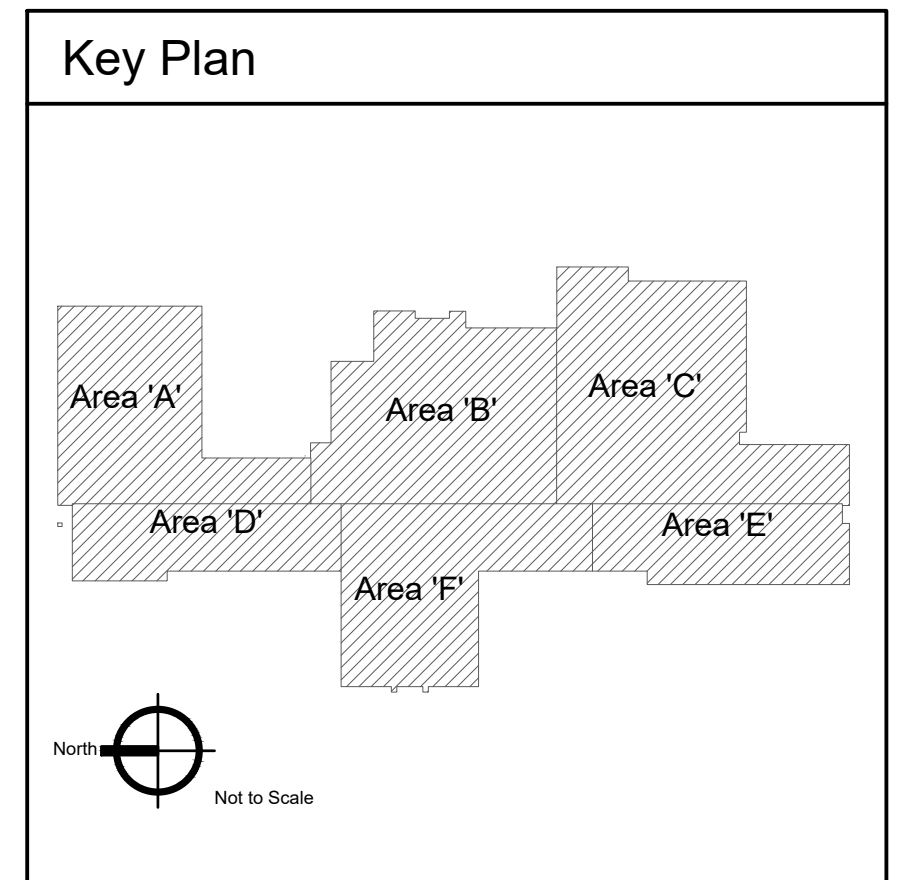
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**Overall Plumbing Demolition Floor Plan**  
 Scale: 1/16" = 1'-0"



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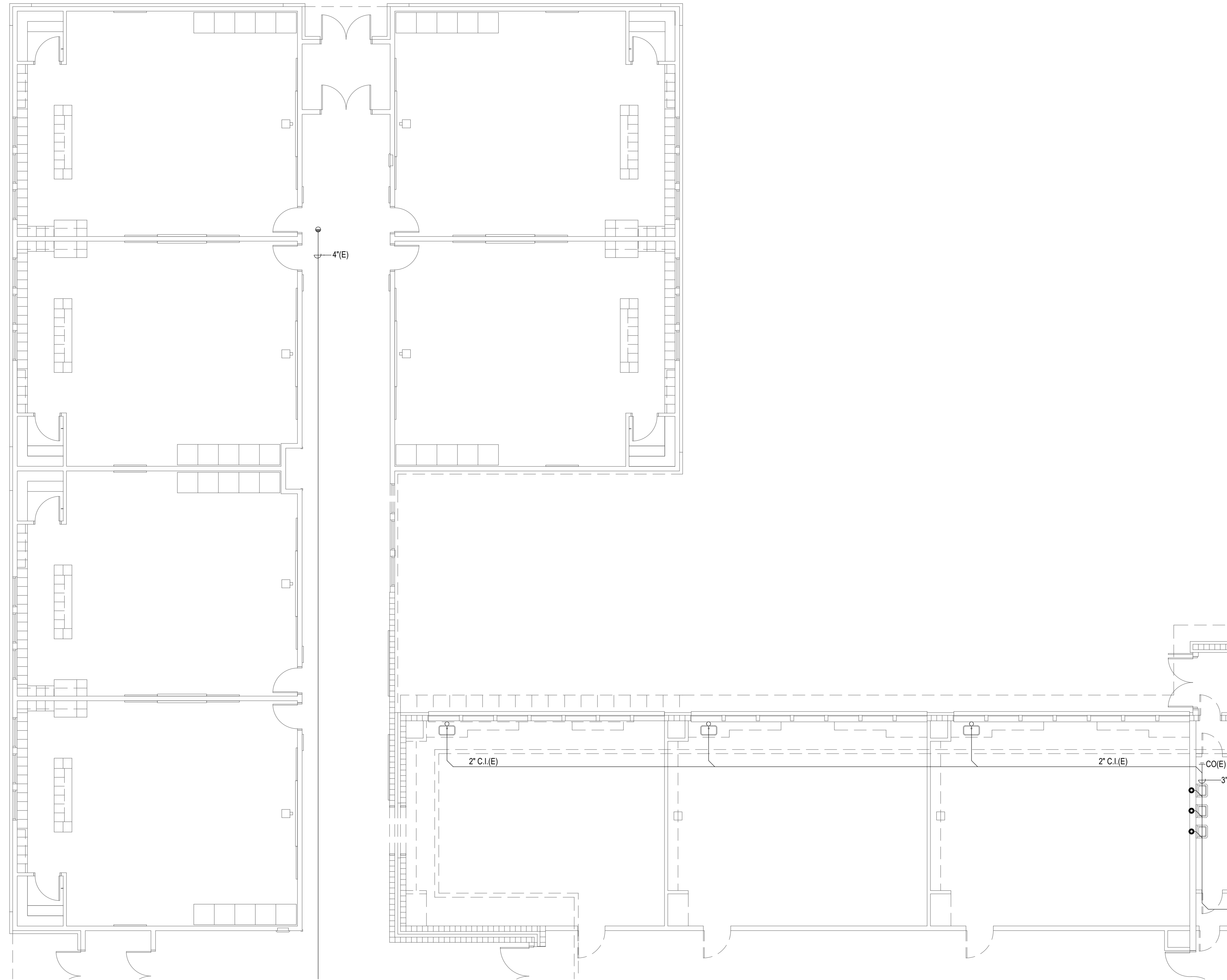
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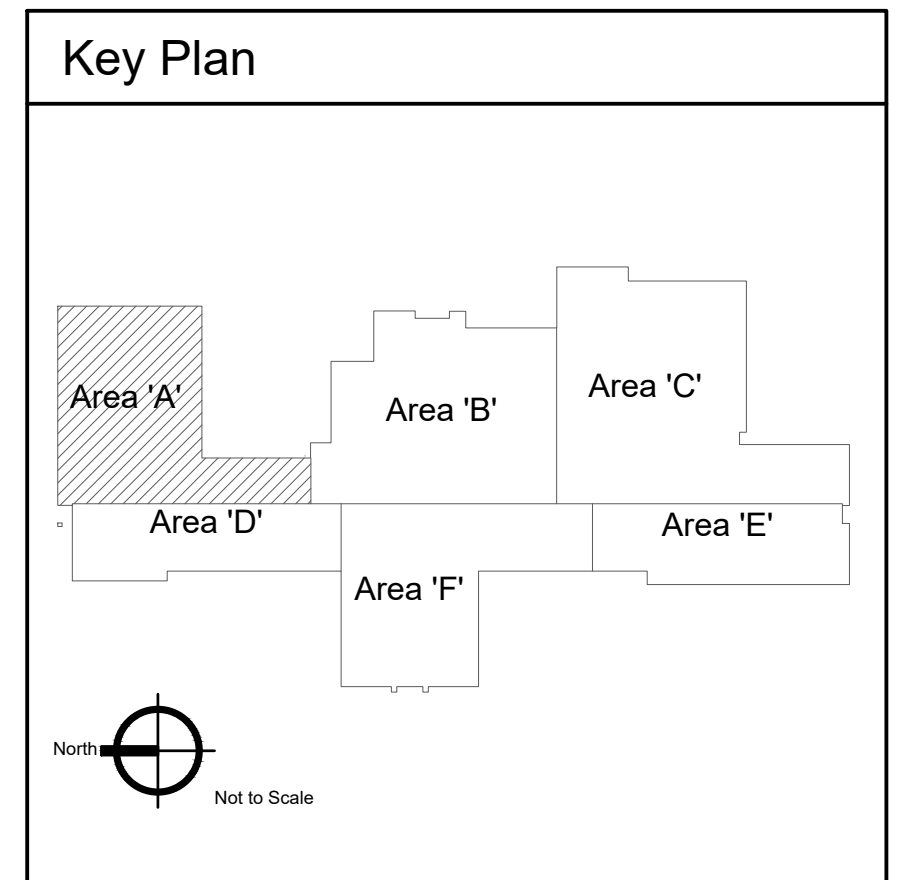
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**KEYED NOTES:**

- # SYMBOL USED FOR NOTE CALLOUT.
- 1. KEYNOTES




**1** Plumbing Demolition Plan - Area 'A'  
 Scale: 1/8" = 1'-0"



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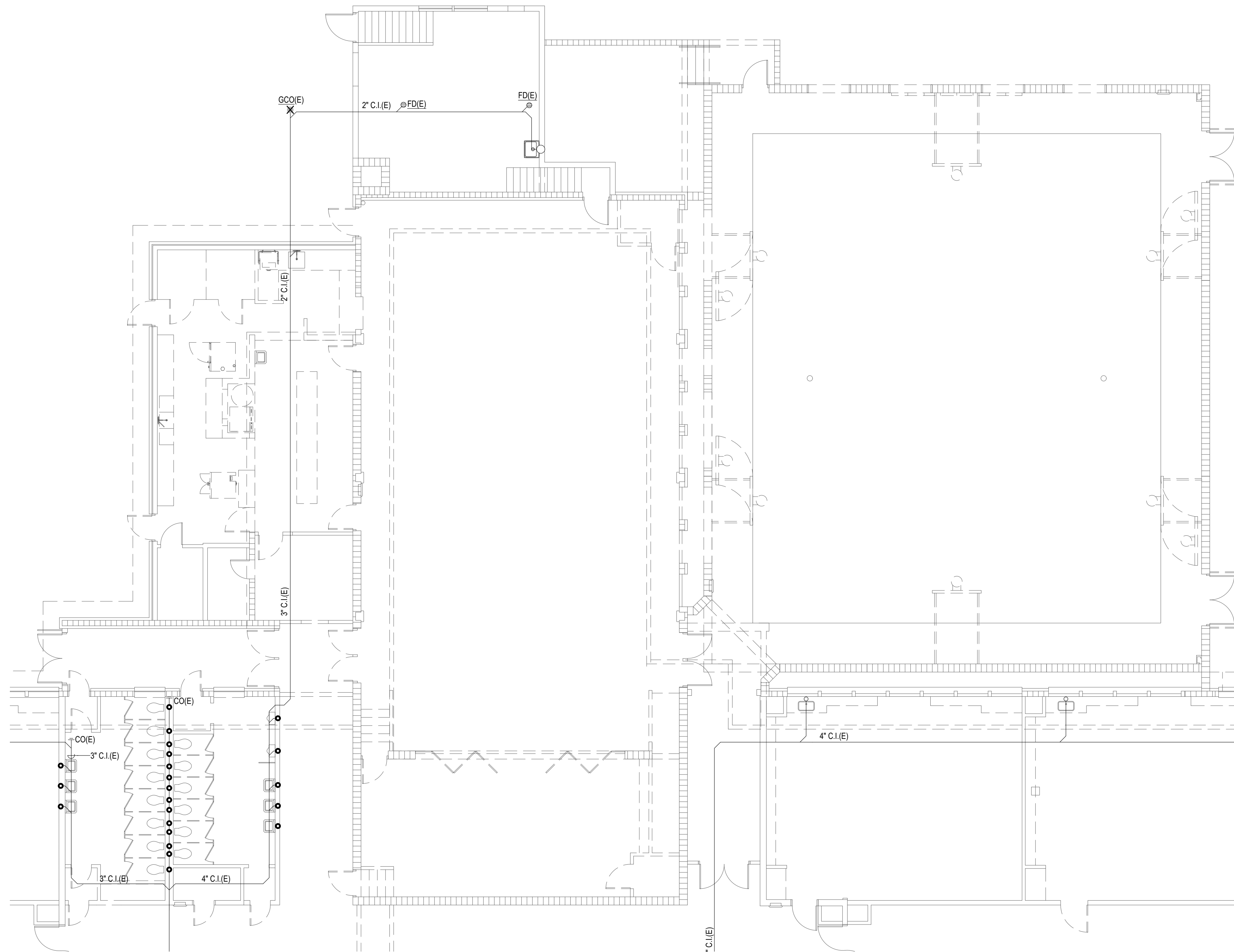
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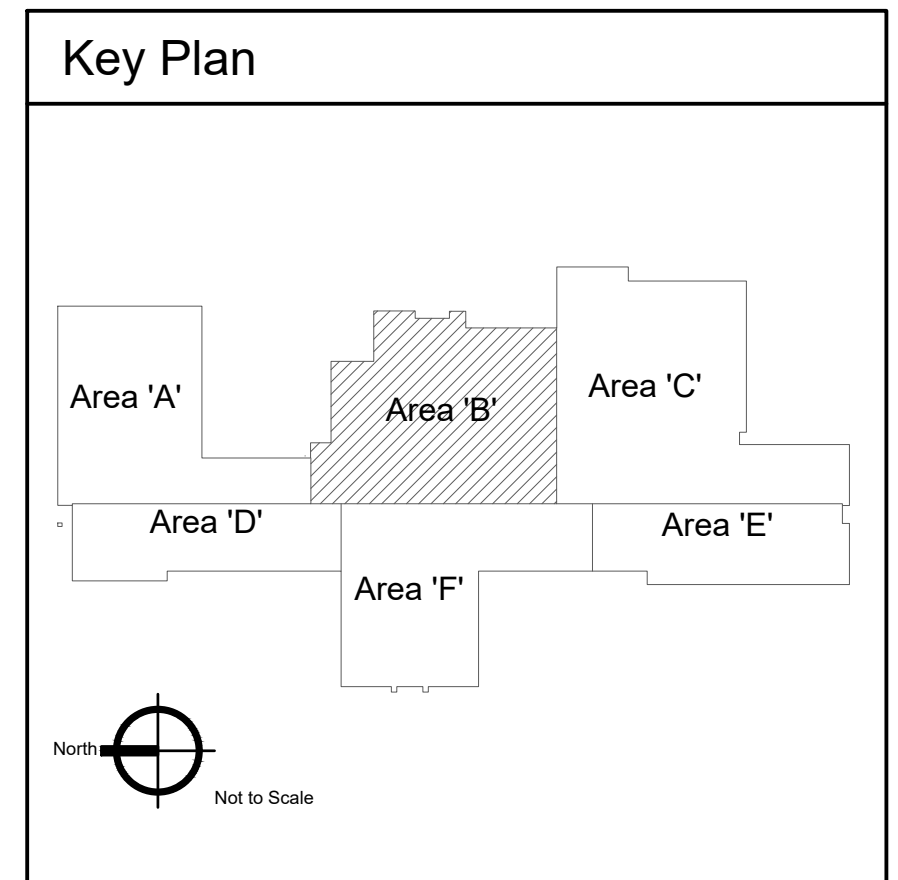
**P-1.1**

**KEYED NOTES:**

- # SYMBOL USED FOR NOTE CALLOUT.
- 1. KEYNOTES



1 Plumbing Demolition Plan - Area 'B'  
Scale: 1/8" = 1'-0"



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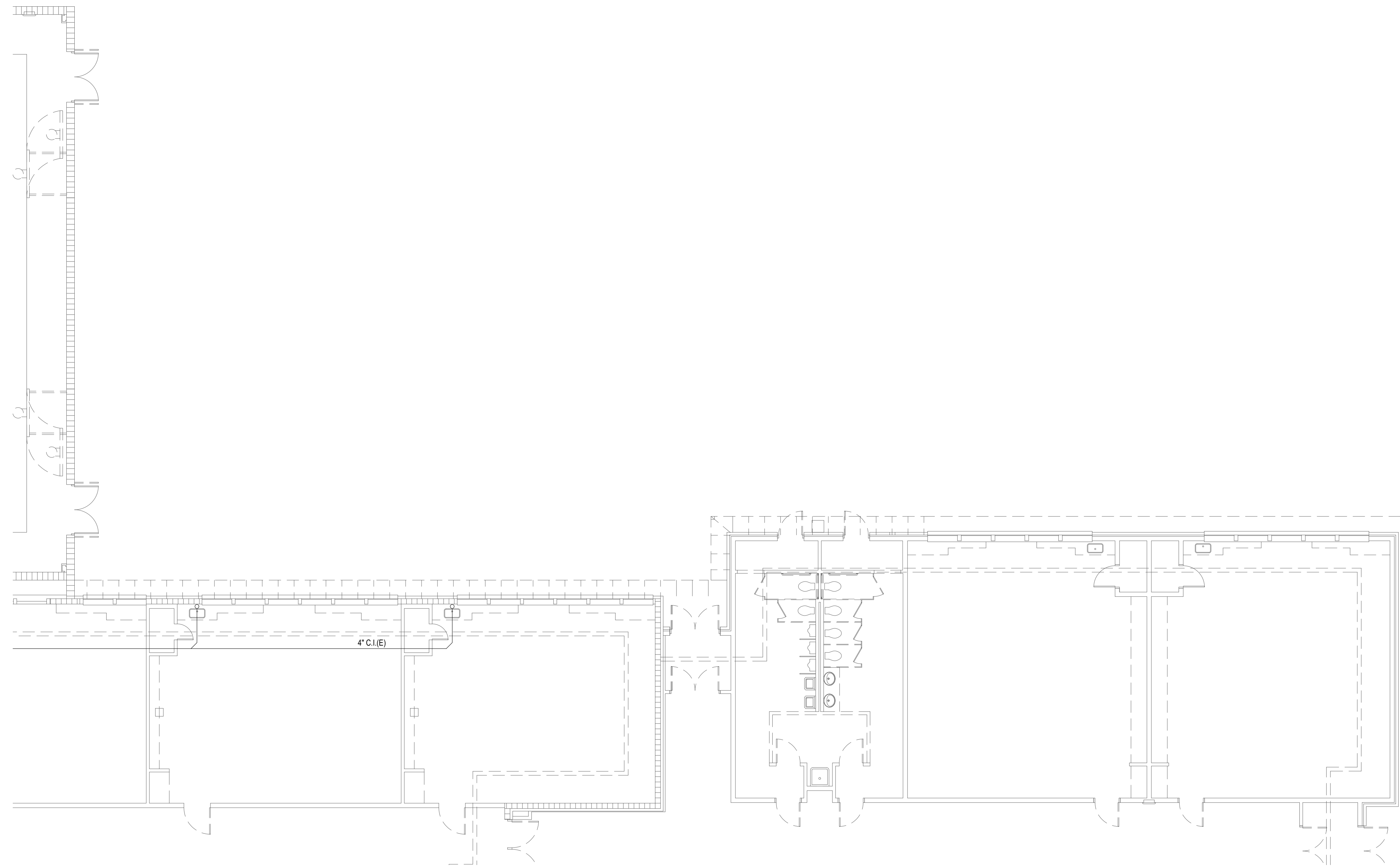
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**P-1.2**




1 Plumbing Demolition Plan - Area 'C'  
 Scale: 1/8" = 1'-0"

**KEYED NOTES:**

- # SYMBOL USED FOR NOTE CALLOUT.
- 1. KEYNOTES

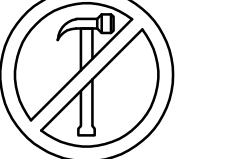


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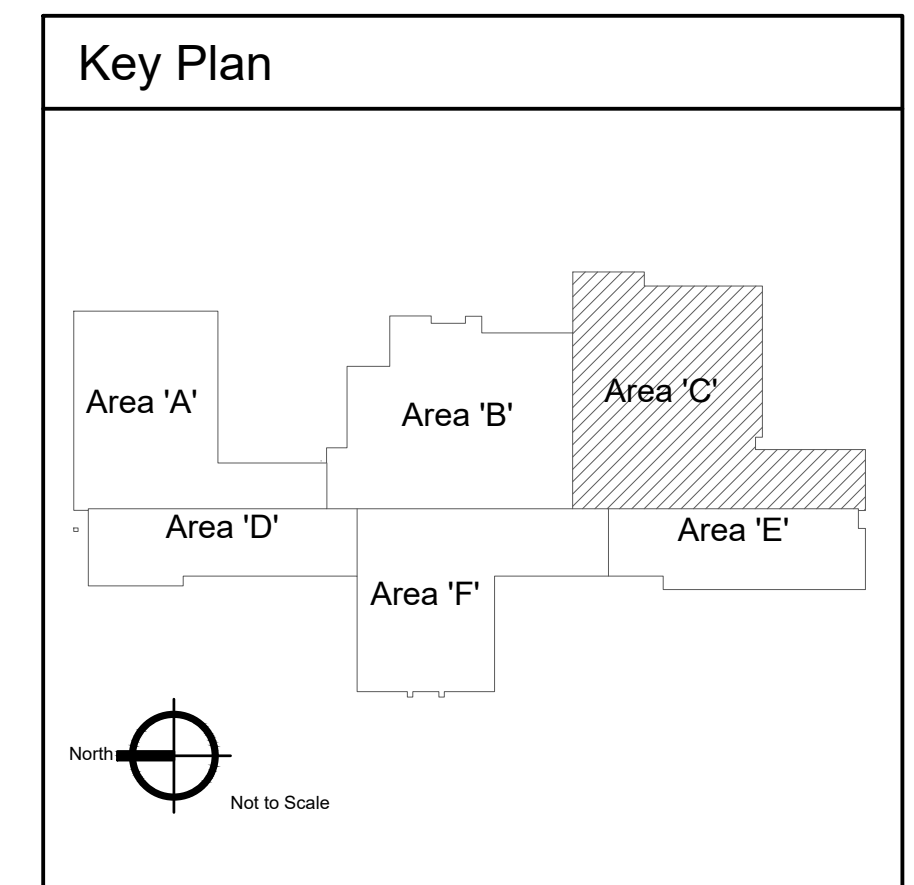
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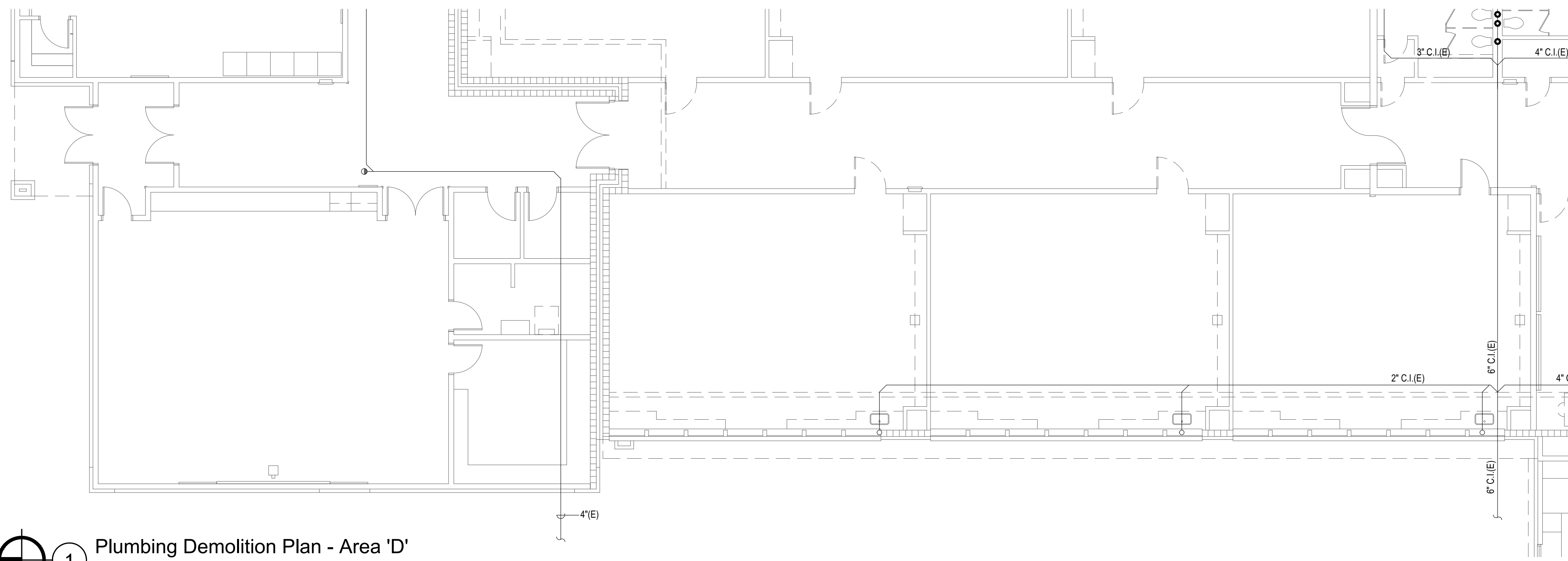
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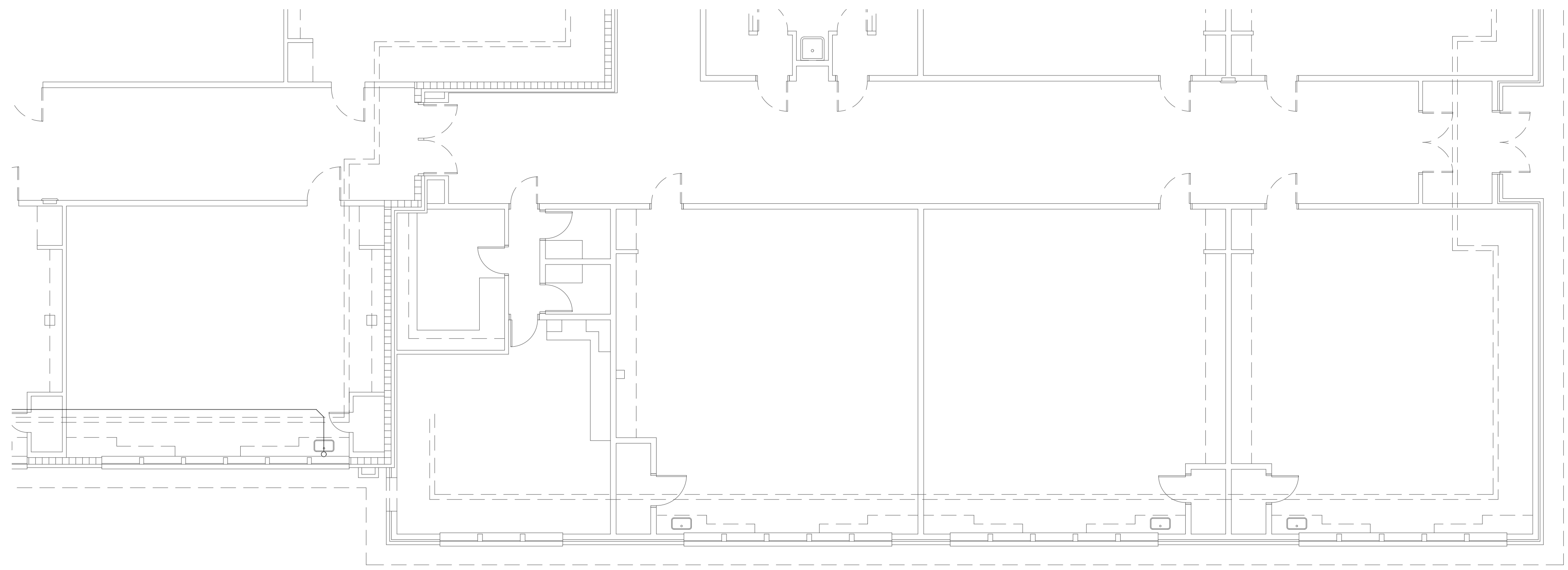
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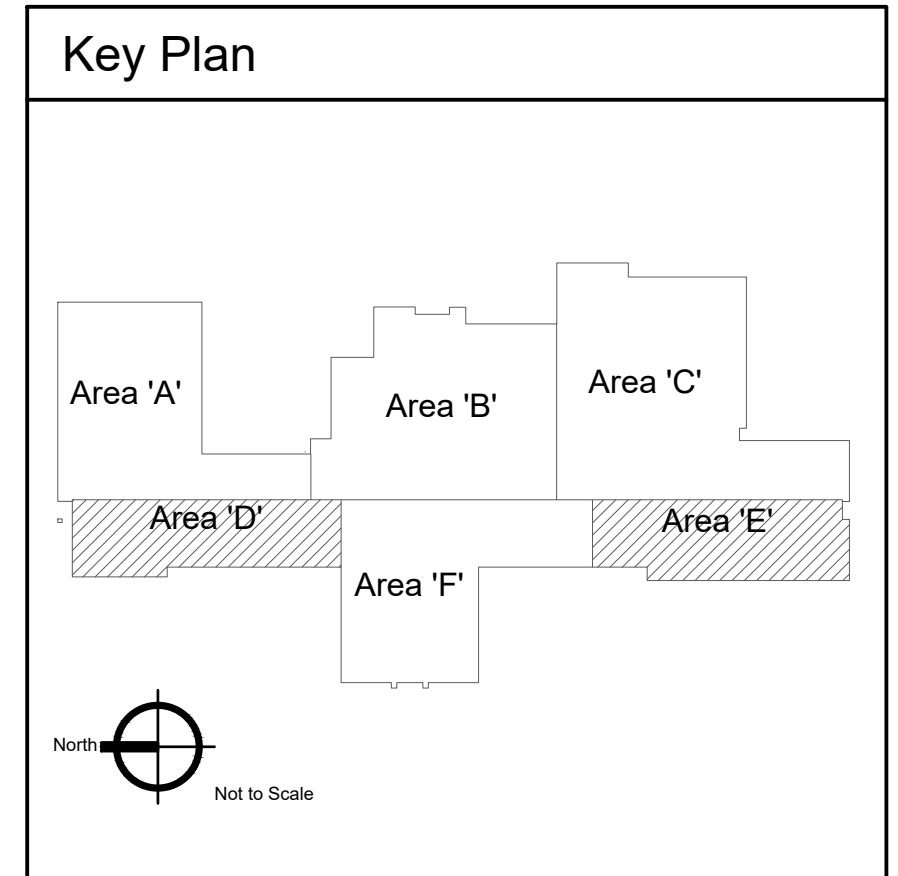
1 Plumbing Demolition Plan - Area 'D'  
Scale: 1/8" = 1'-0"



2 Plumbing Demolition Plan - Area 'E'  
Scale: 1/8" = 1'-0"

**KEYED NOTES:**

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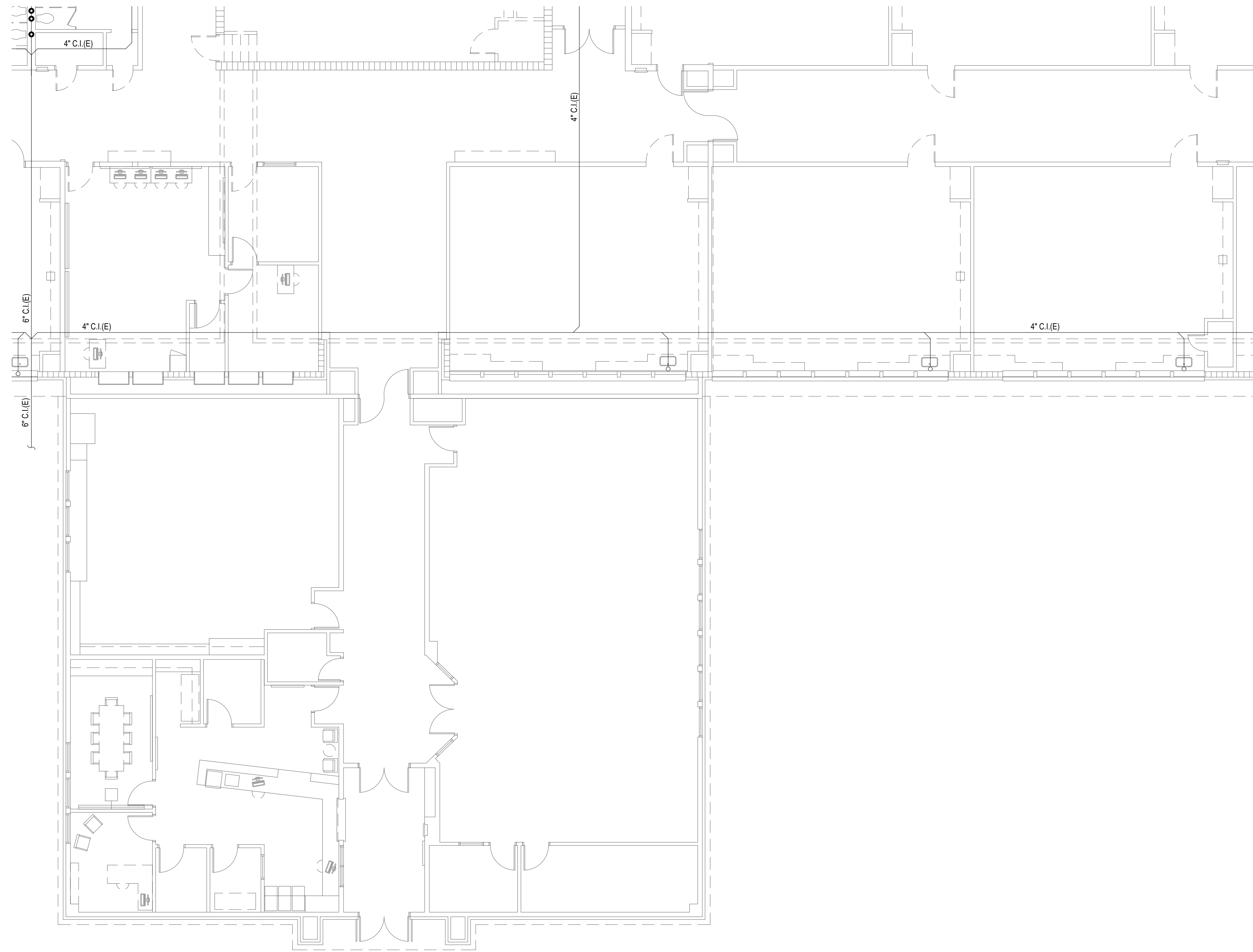
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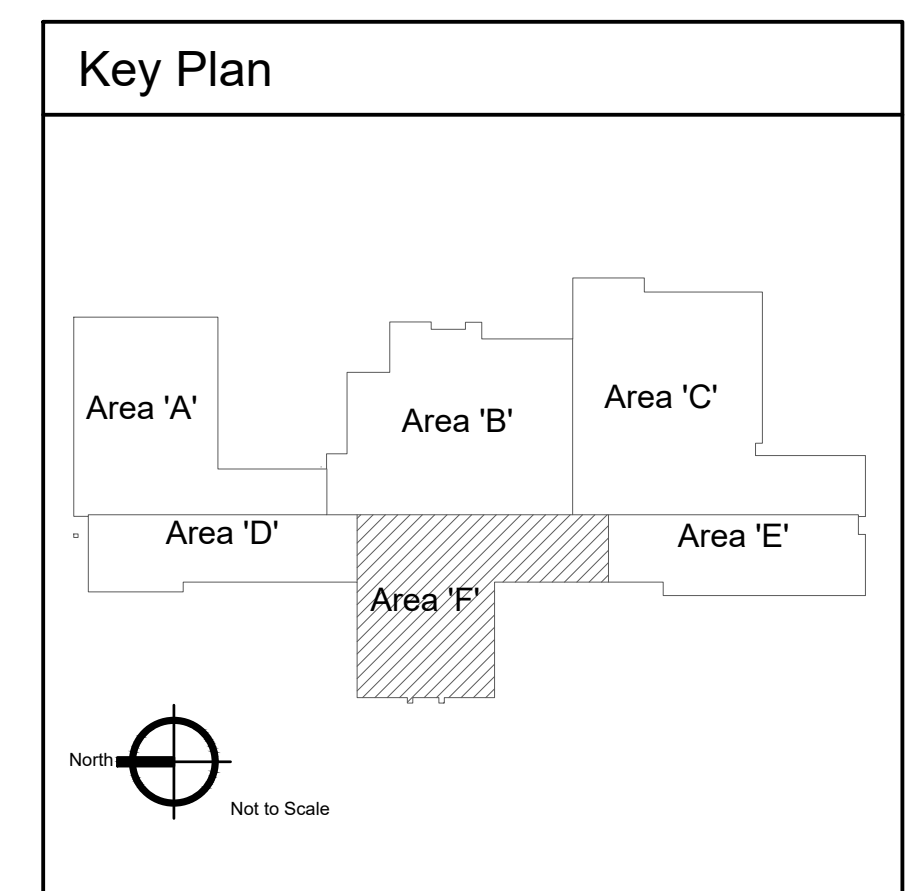
**P-1.4**

**KEYED NOTES:**

- # SYMBOL USED FOR NOTE CALLOUT.
- 1. KEYNOTES




**1** Plumbing Demolition Plan - Area 'F'  
 Scale: 1/8" = 1'-0"



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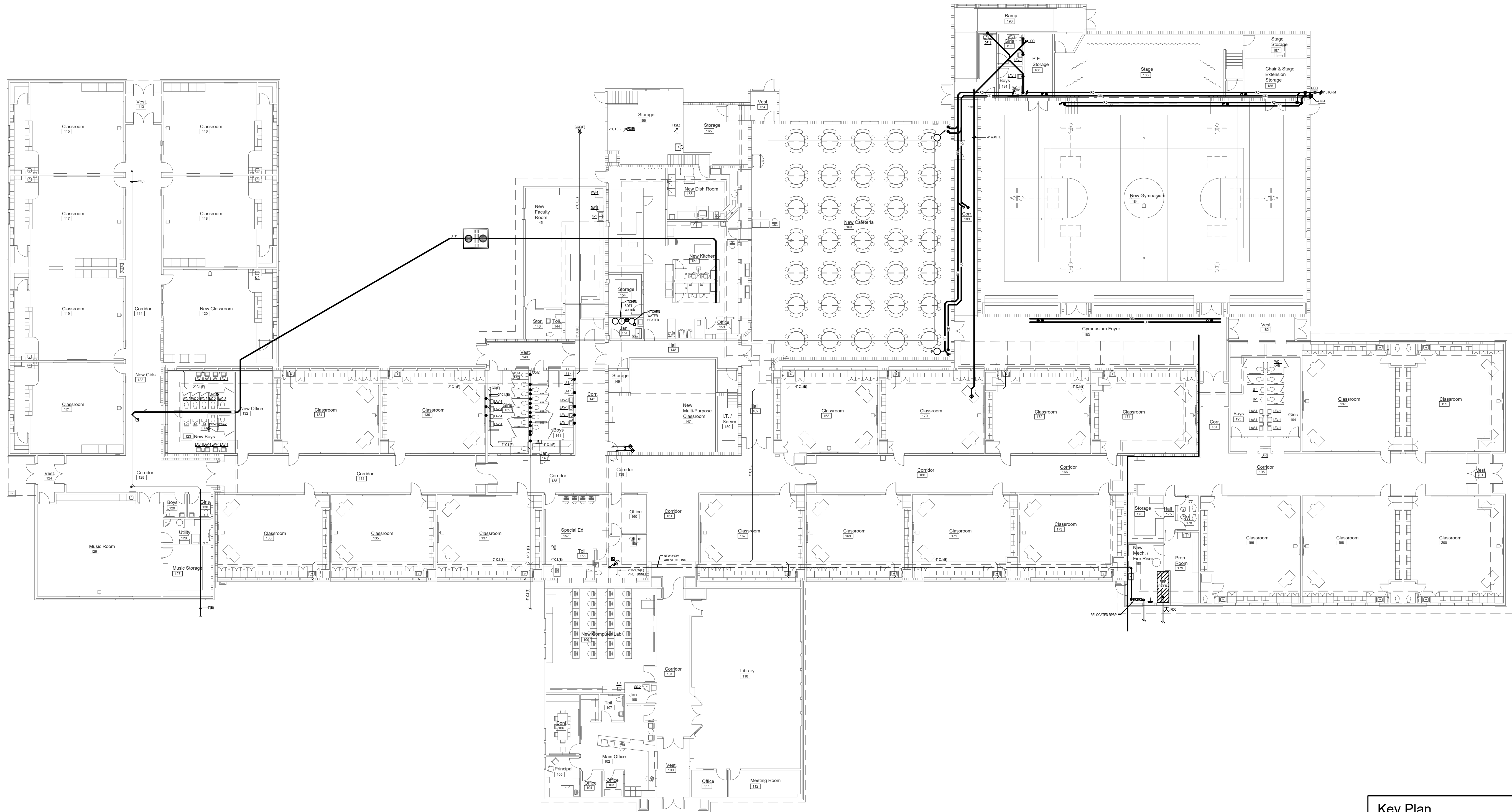
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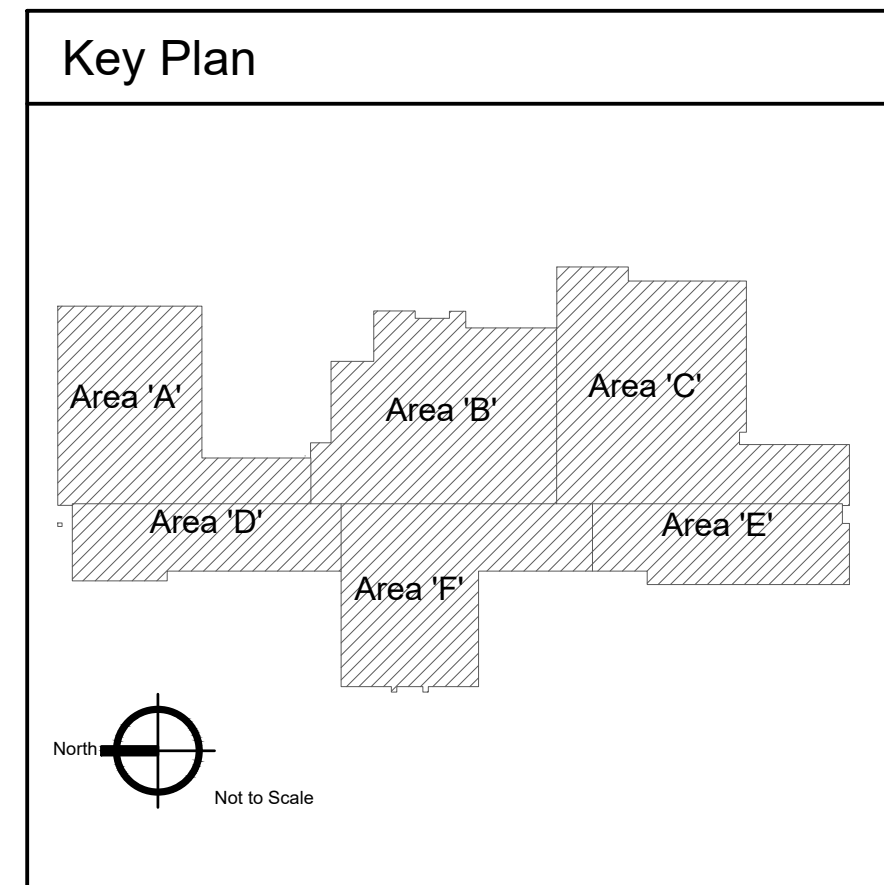
**P-1.5**

**KEYED NOTES:**

- # SYMBOL USED FOR NOTE CALLOUT.
- 1. KEYNOTES



Overall Plumbing New Work Floor Plan  
Scale: 1/16" = 1'-0"



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P-2.0

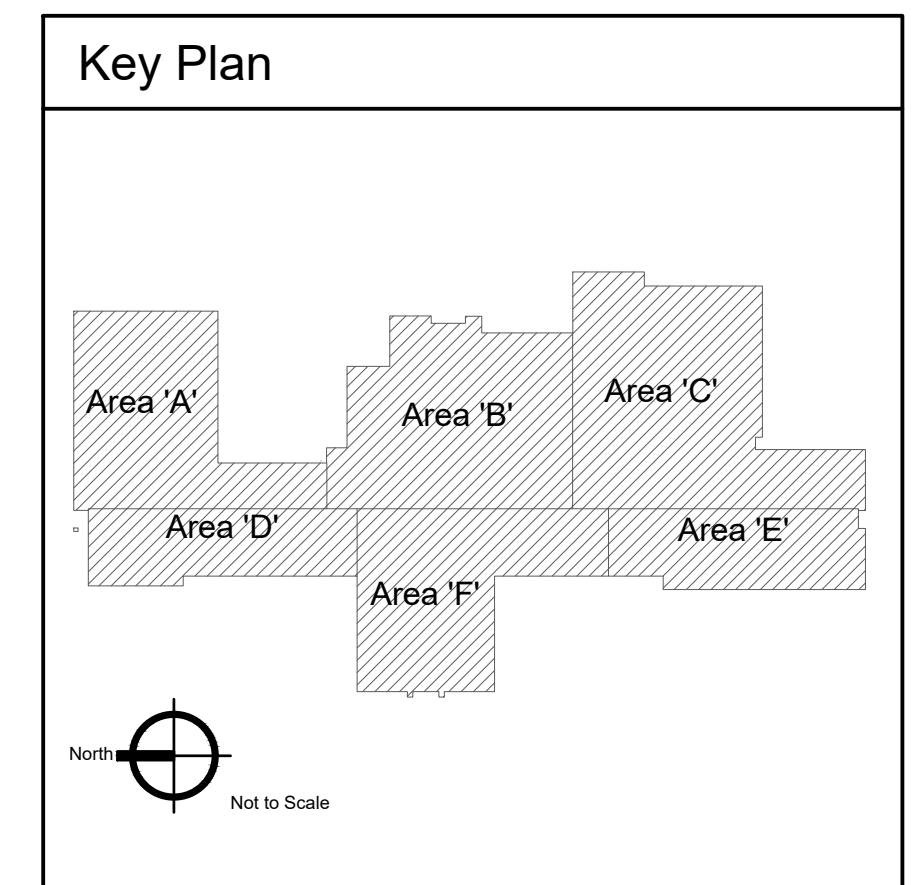


**KEYED NOTES:**

- # SYMBOL USED FOR NOTE CALLOUT.
- 1. KEYNOTES



1 Plumbing New Work Plan - Area 'A'  
Scale: 1/8" = 1'-0"



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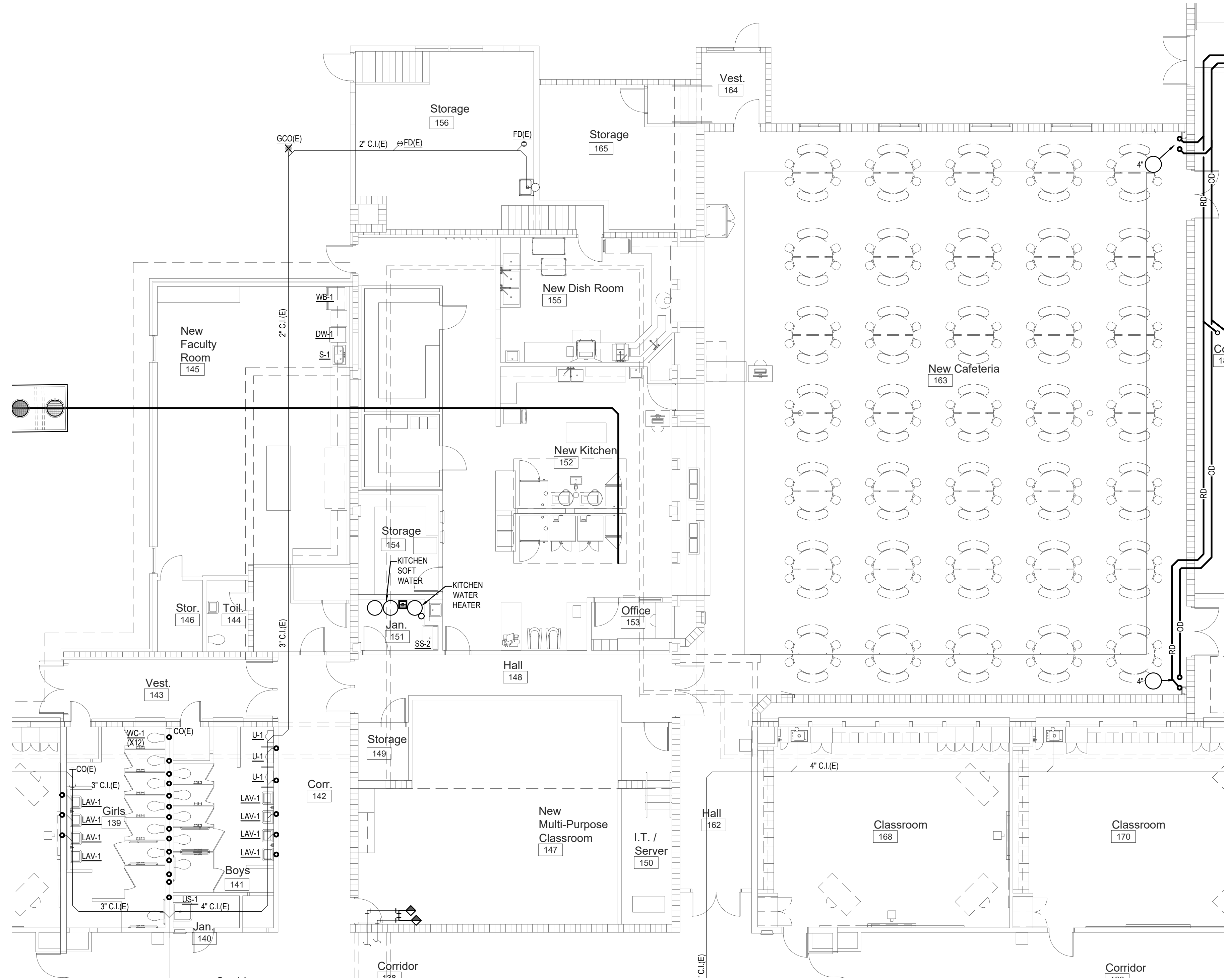
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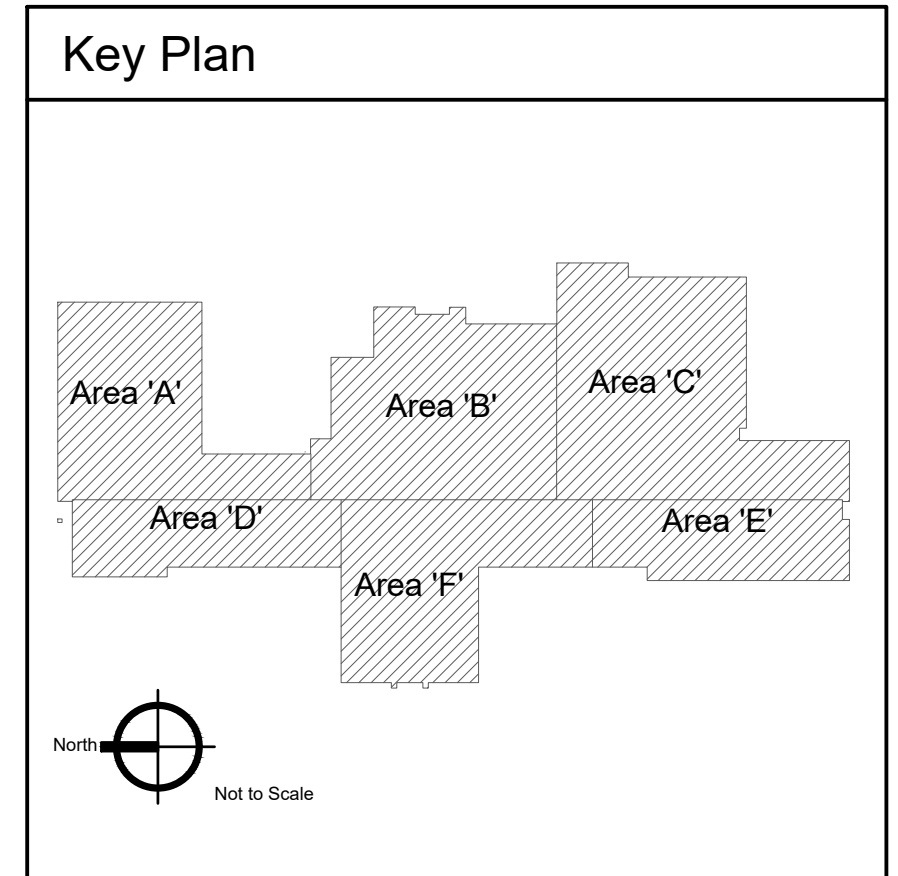
P-2.1

**KEYED NOTES:**

- # SYMBOL USED FOR NOTE CALLOUT.
- 1. KEYNOTES



1 Plumbing New Work Plan - Area 'B'  
Scale: 1/8" = 1'-0"



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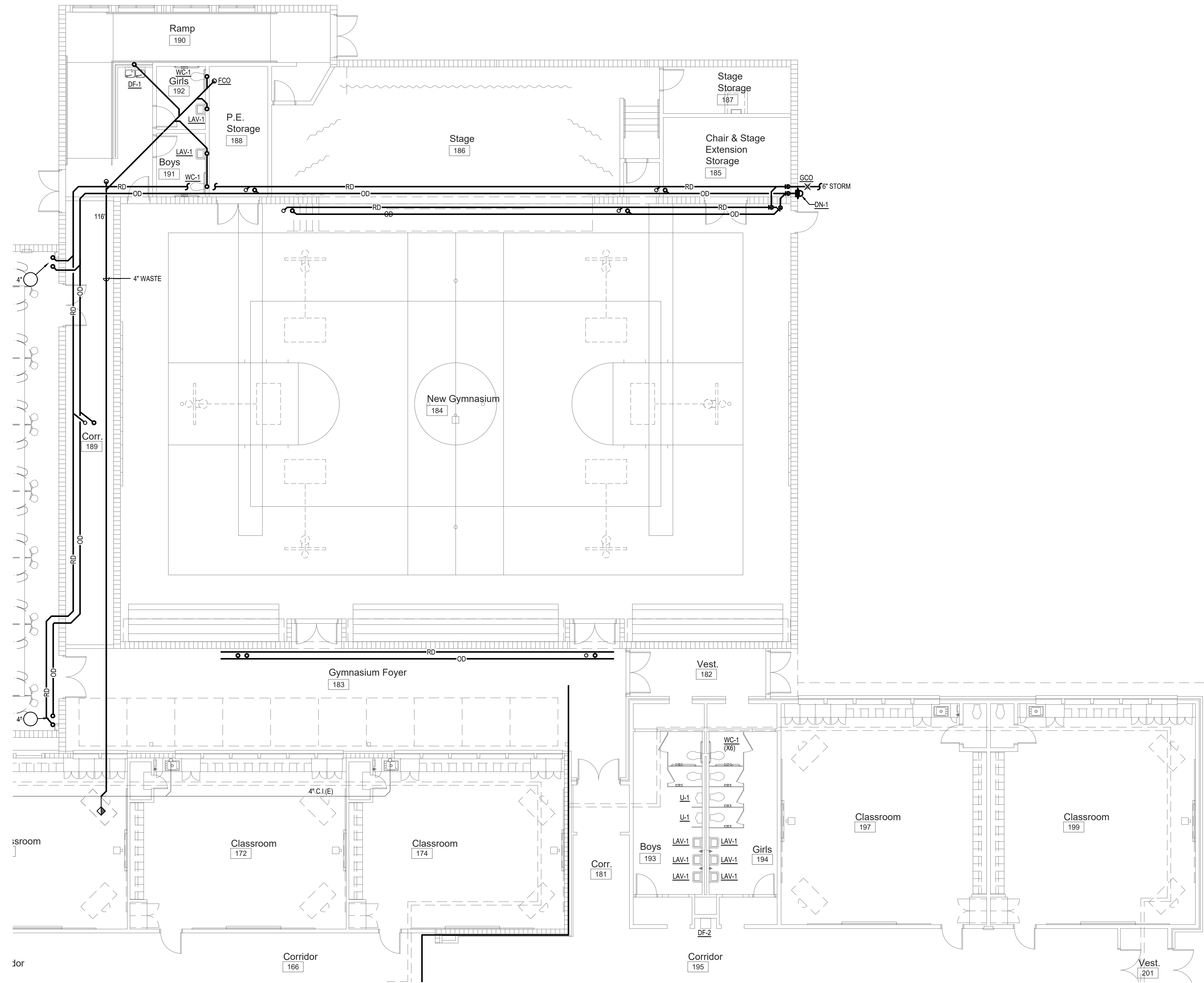
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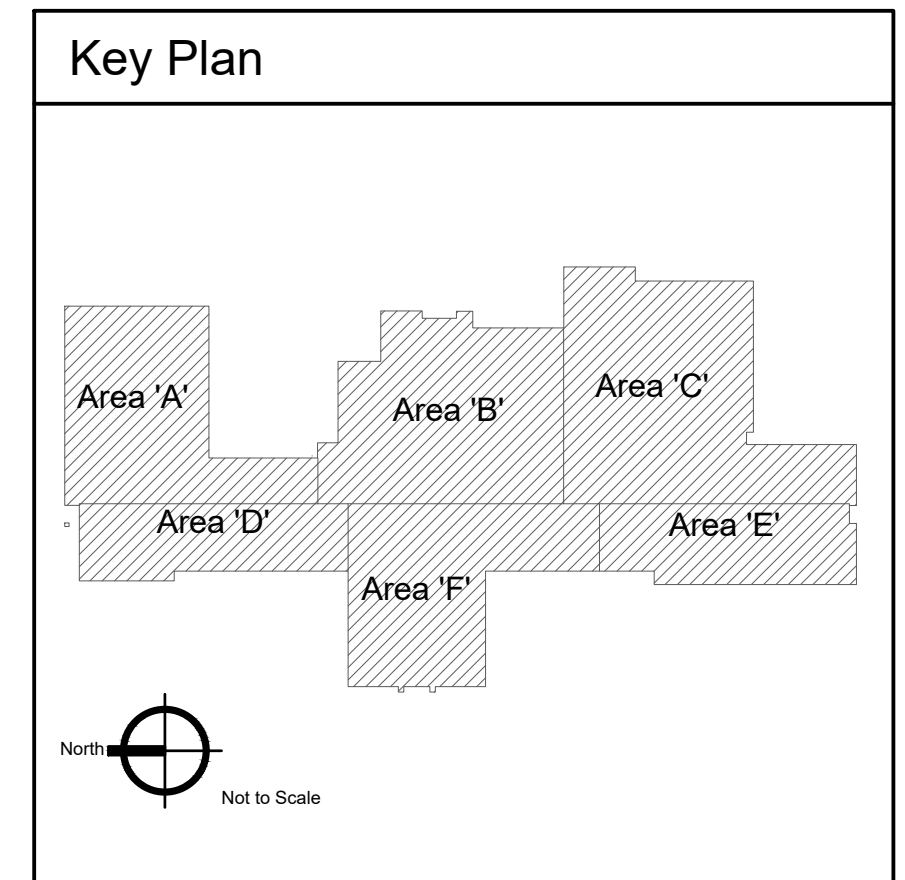
P-2.2



1 Plumbing New Work Plan - Area 'C'  
Scale: 1/8" = 1'-0"

**KEYED NOTES:**

- # SYMBOL USED FOR NOTE CALLOUT.
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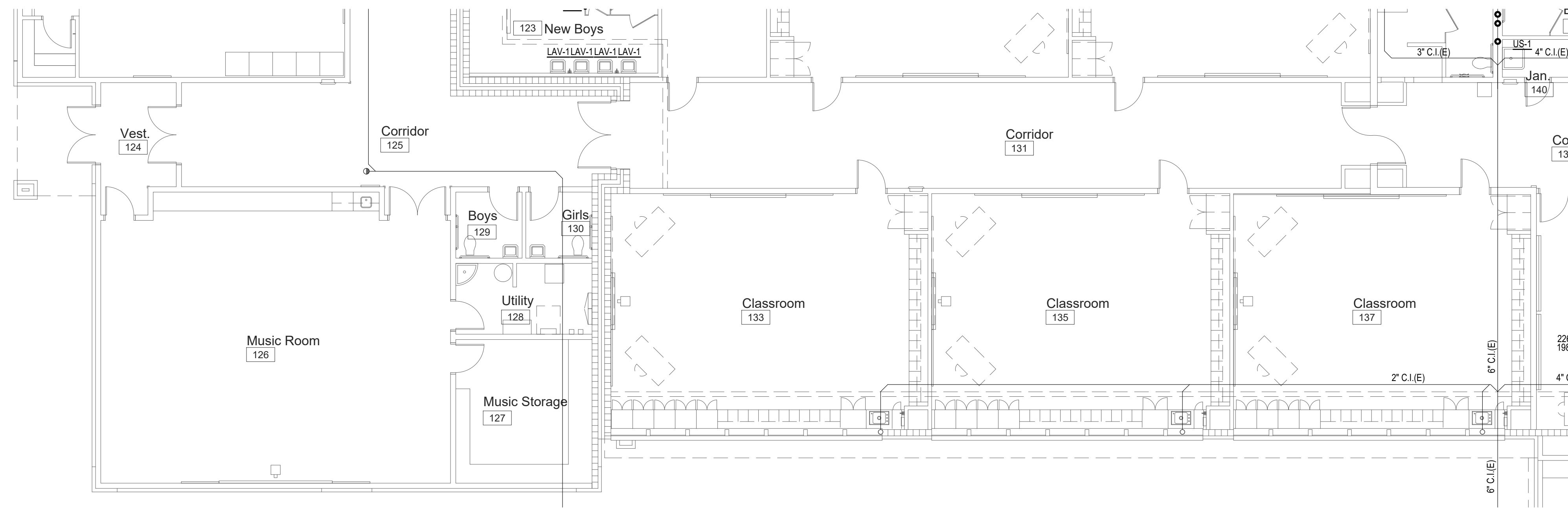
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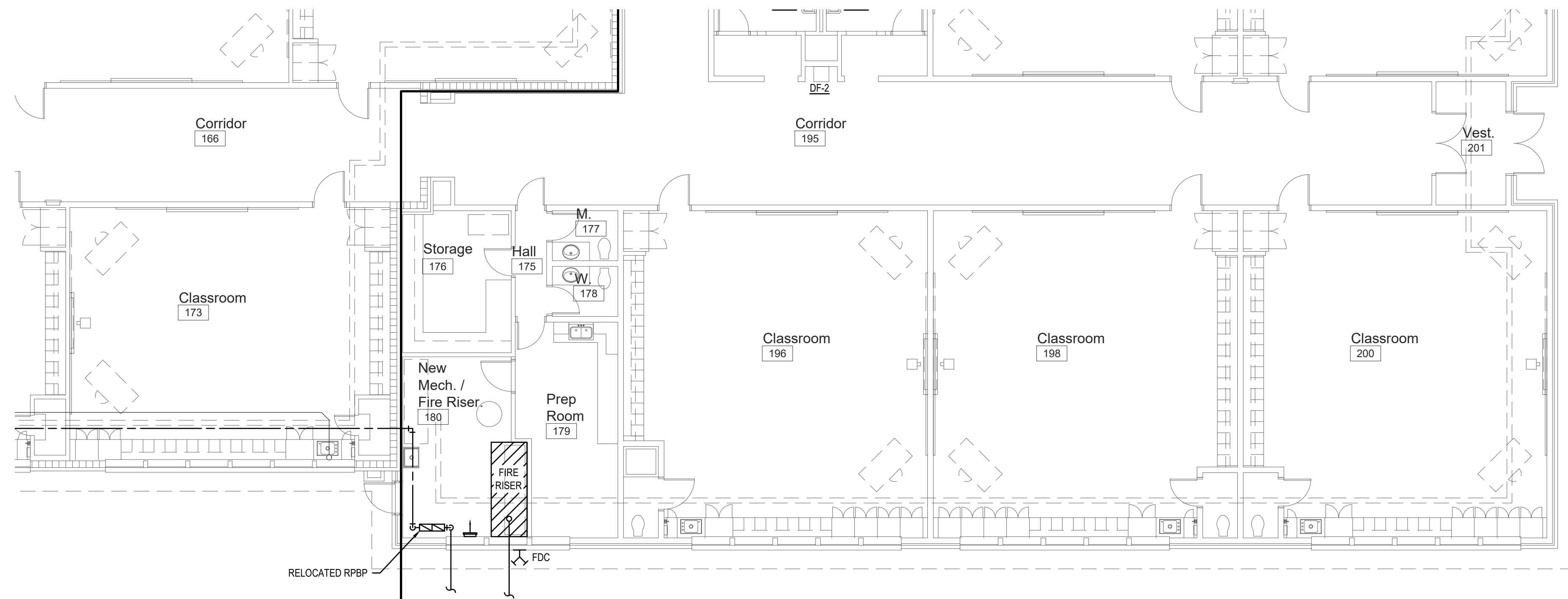
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**P-2.3**



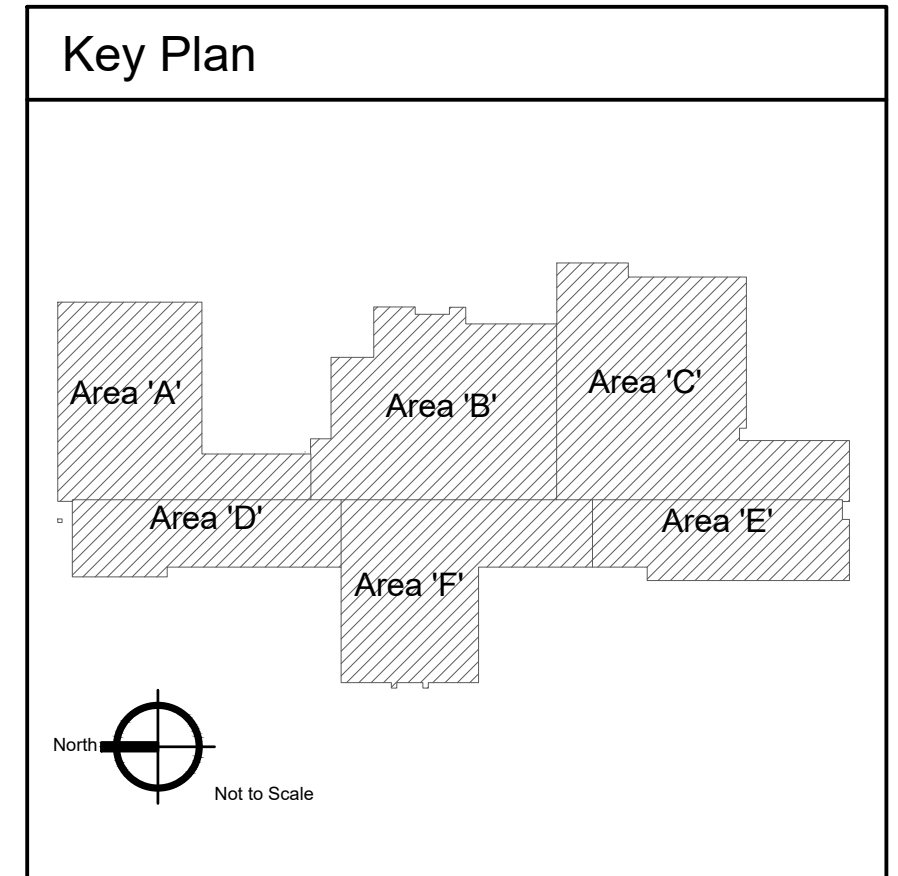
1 Plumbing New Work Plan - Area 'D'  
Scale: 1/8" = 1'-0"



2 Plumbing New Work Plan - Area 'E'  
Scale: 1/8" = 1'-0"

**KEYED NOTES:**

- # SYMBOL USED FOR NOTE CALLOUT.
- 1. KEYNOTES



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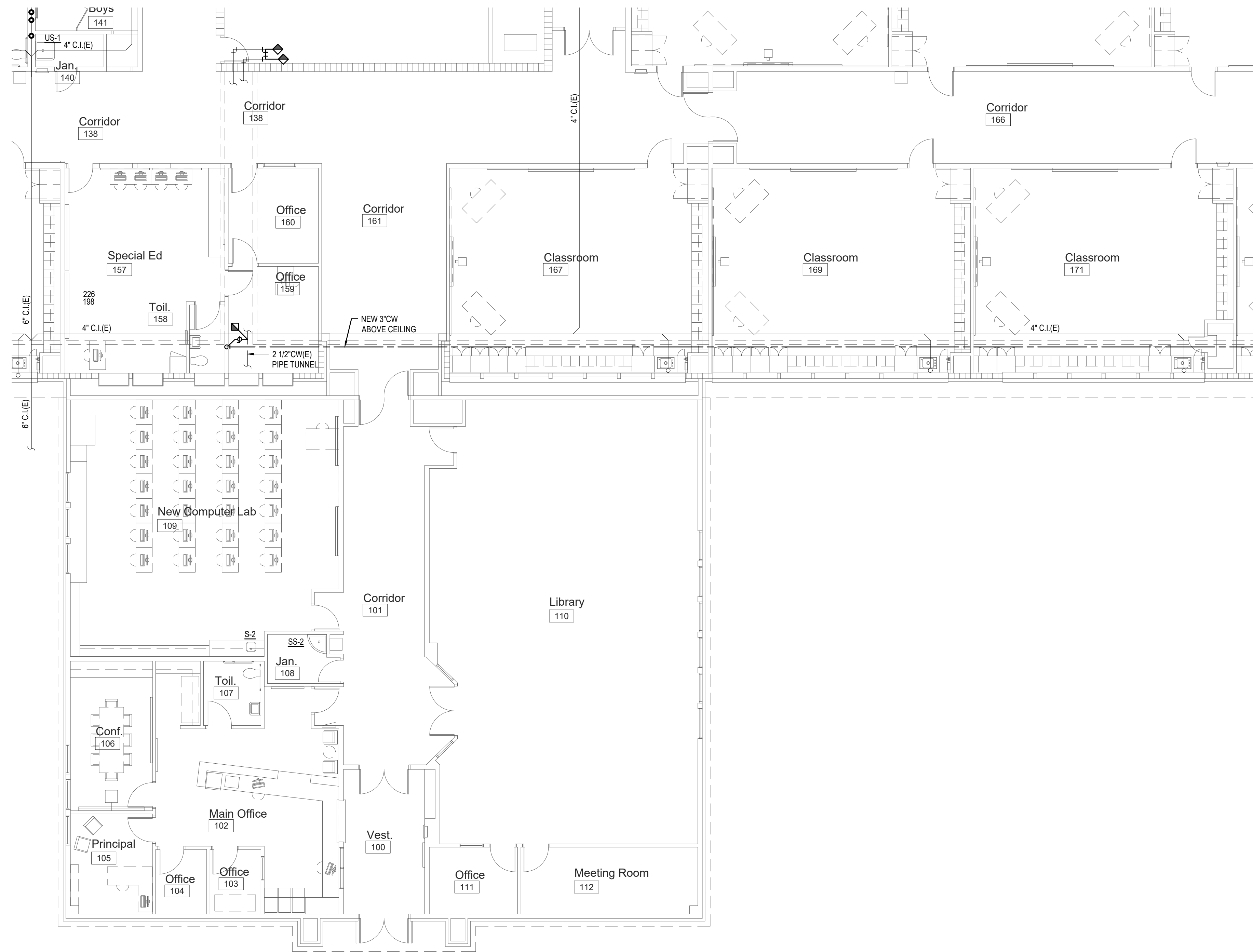
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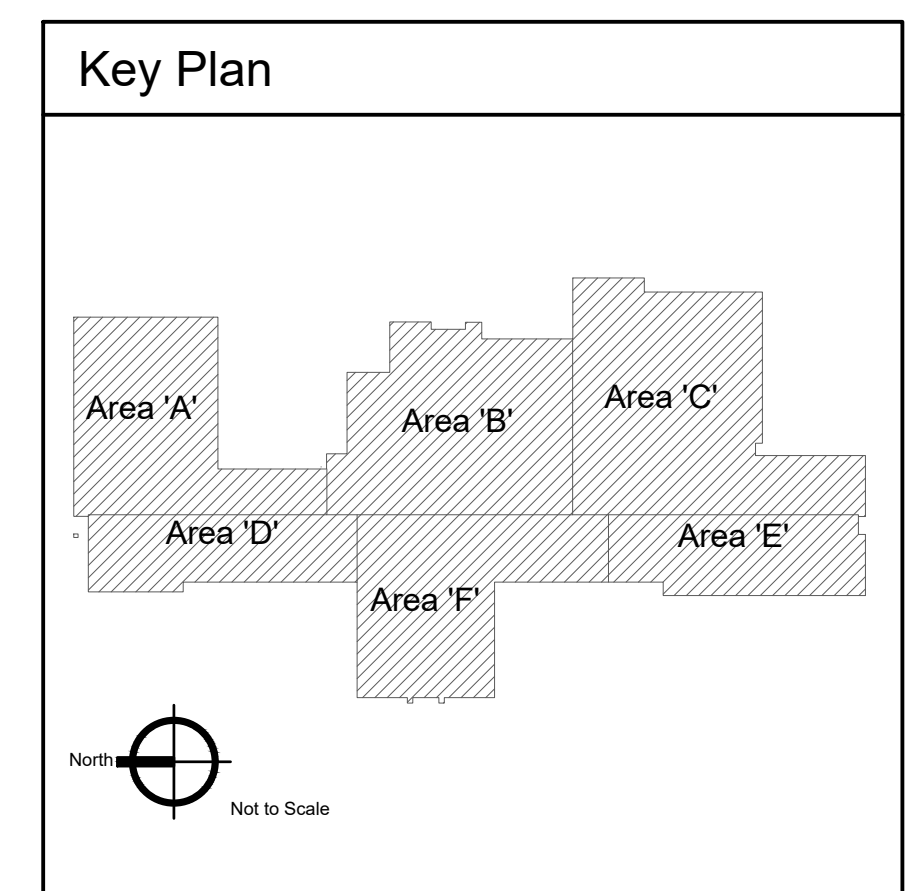
**P-2.4**

**KEYED NOTES:**

- # SYMBOL USED FOR NOTE CALLOUT.
- 1. KEYNOTES



1 Plumbing New Work Plan - Area 'F'  
Scale: 1/8" = 1'-0"

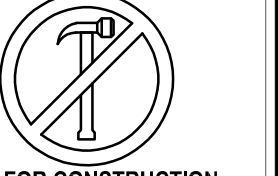


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NOT FOR CONSTRUCTION  
12/9/2022

Jefferson Elementary School  
Addition and Remodel  
600 N. Fillmore Street, Jerome, Idaho

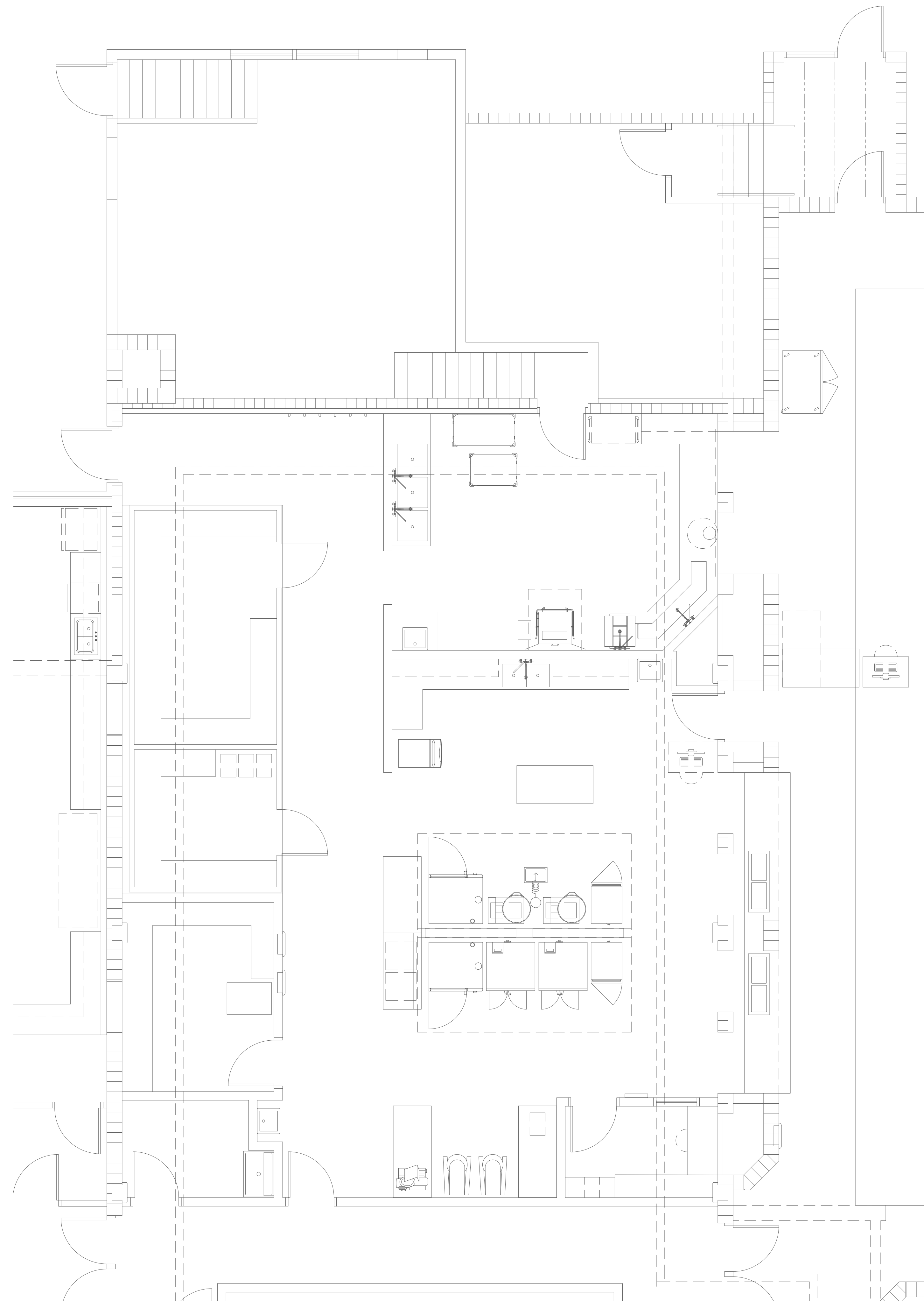
DATE: December 9, 2022  
LKV PROJECT #: -  
REVISIONS:

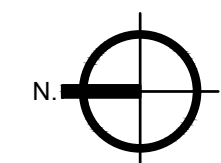
DRAWN BY: CD  
CHECKED BY: BC

Design Development

DRAWING NO.

**P-2.5**




**Enlarged Kitchen Plan**  
 Scale: 1/4" = 1'-0"

**KEYED NOTES:**

- # SYMBOL USED FOR NOTE CALLOUT.
- KEYNOTES

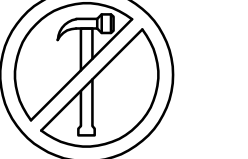


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**NOT FOR CONSTRUCTION**  
 12/9/2022

**Jefferson Elementary School**  
**Addition and Remodel**

600 N. Fillmore Street, Jerome, Idaho

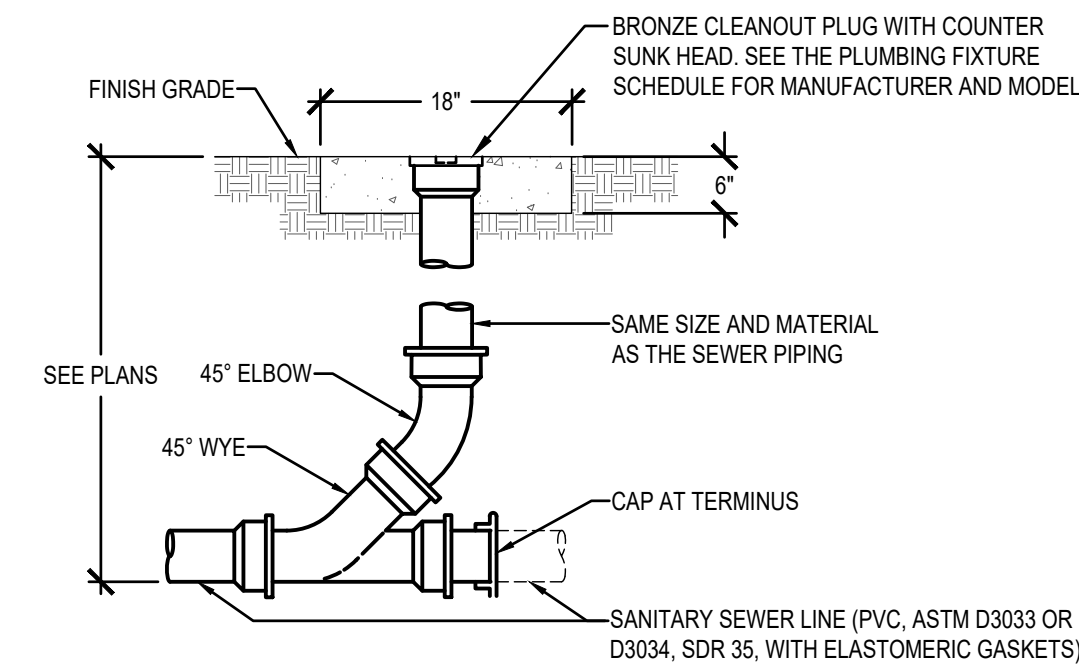
DATE: December 9, 2022  
 LKV PROJECT #: -  
 REVISIONS:

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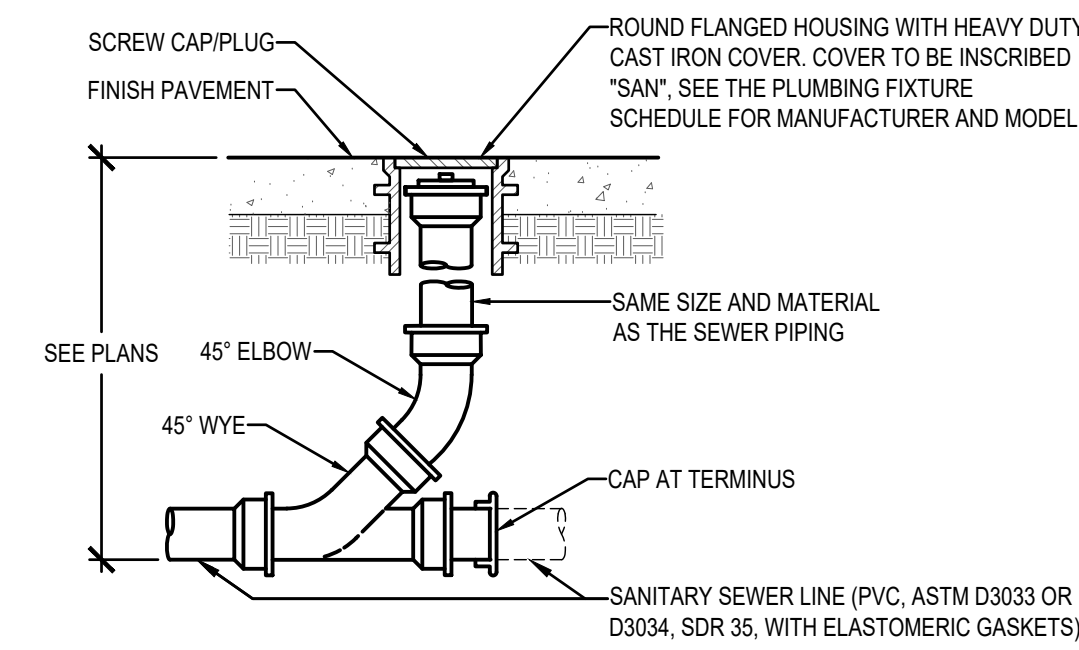
Design Development

DRAWING NO.

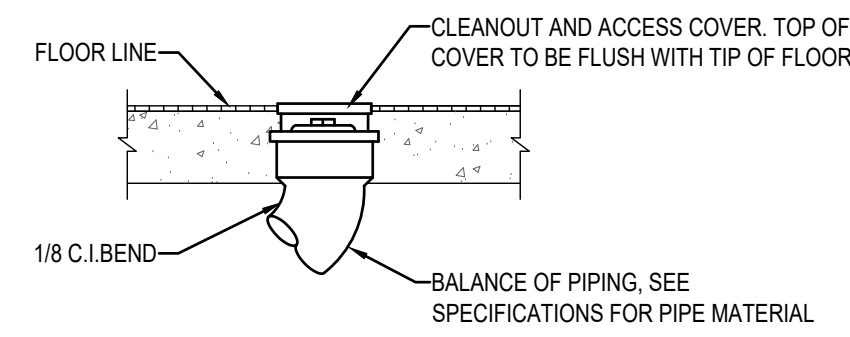
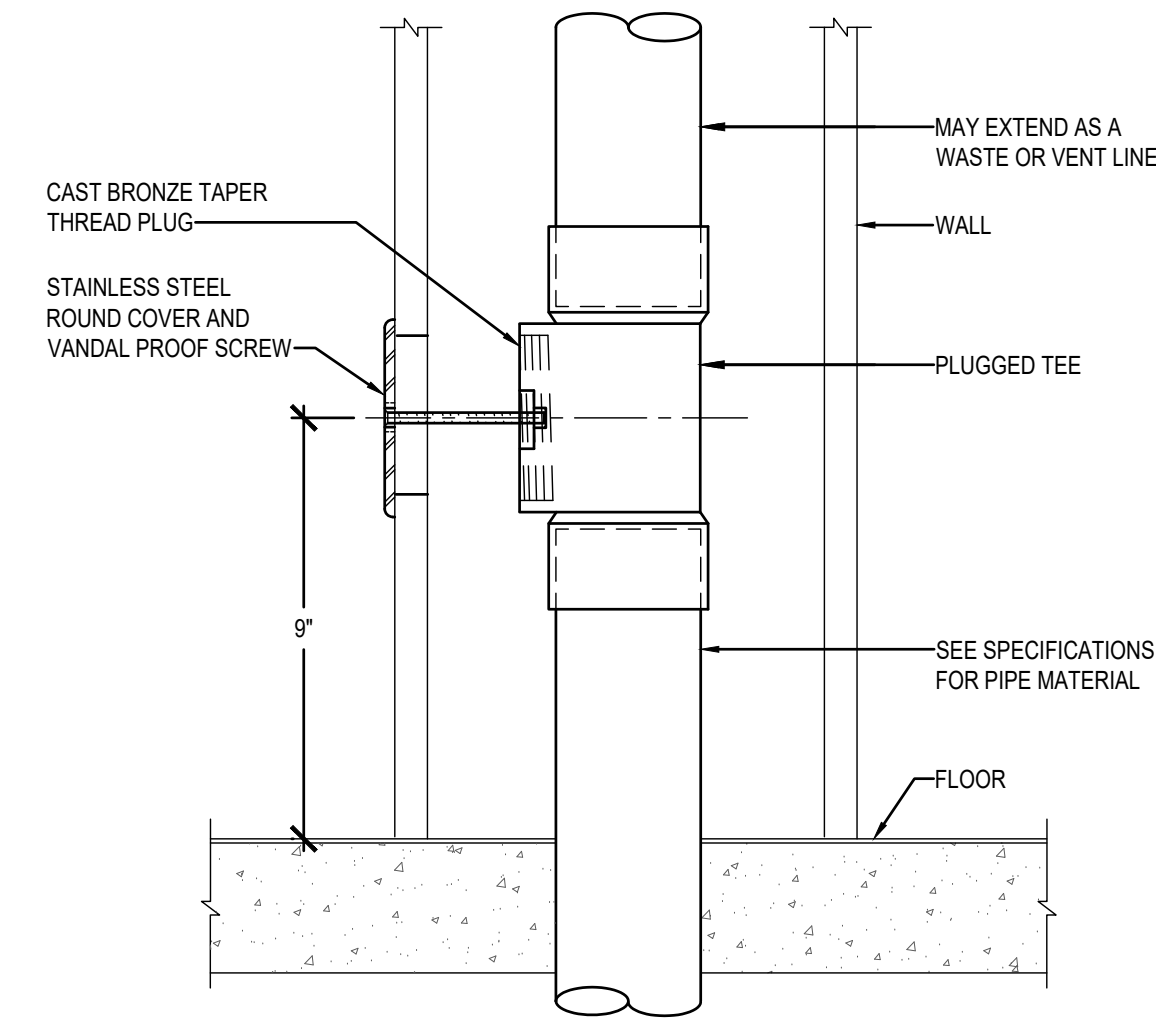
**P-2.6**



PEDESTRIAN TRAFFIC AREAS / NON-PAVED AREAS



VEHICULAR TRAFFIC AREAS / PAVED AREAS



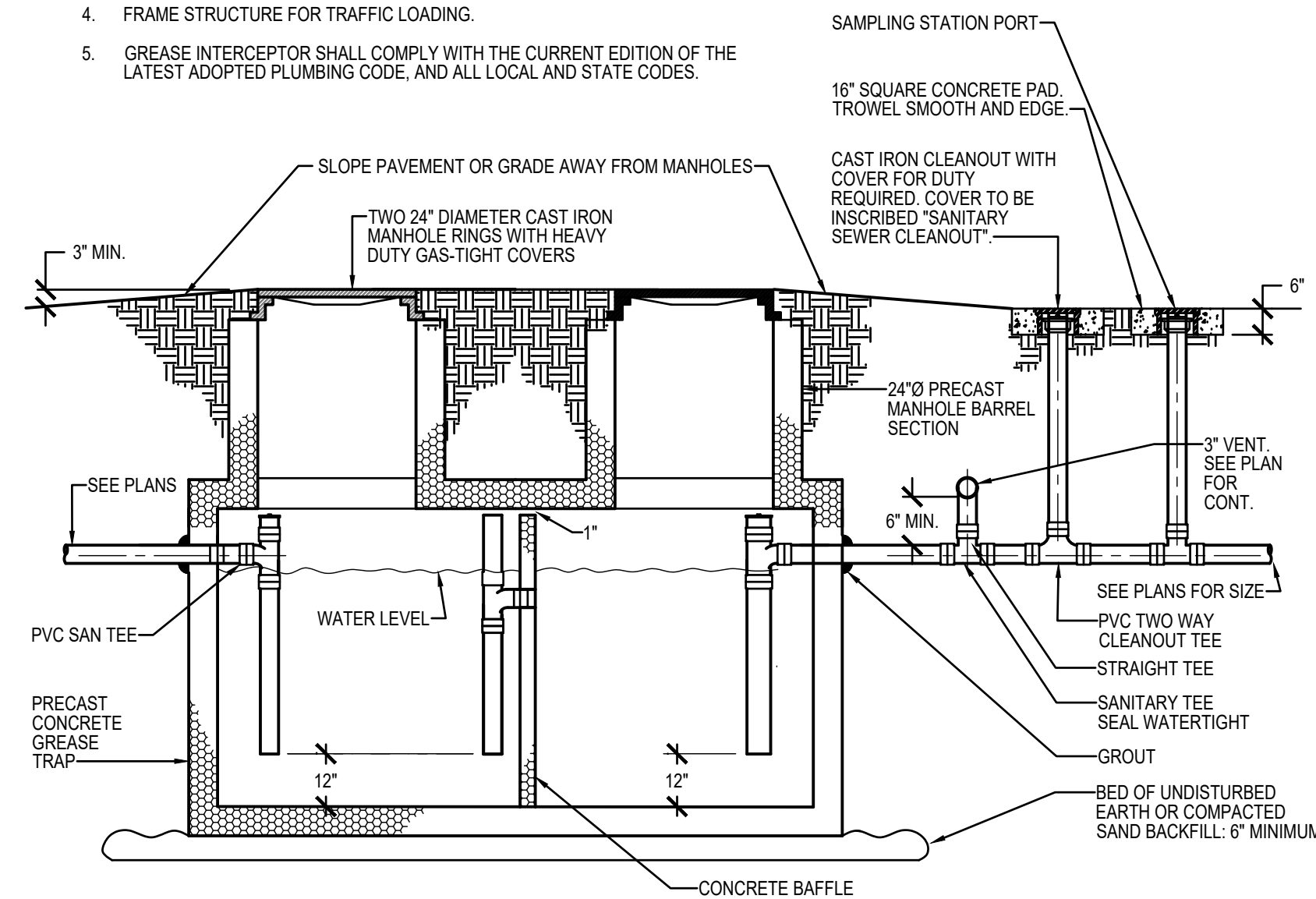
NOTE:  
1. CLEANOUTS SHALL BE PROVIDED AT EACH HORIZONTAL DRAINAGE PIPE AT ITS UPPER TERMINAL, AND EACH RUN OF PIPING WHICH IS MORE THAN 100 FEET, AND SHALL BE PROVIDED FOR EACH 100 FEET DEVELOPED LENGTH, OR FRACTION THEREOF OF SUCH PIPING. AN ADDITIONAL CLEANOUT SHALL BE PROVIDED FOR EACH AGGREGATE HORIZONTAL CHANGE OF DIRECTION EXCEEDING ONE HUNDRED THIRTY-FIVE DEGREES, PER APPLICABLE PLUMBING CODE. THIS SHALL BE PROVIDED REGARDLESS OF WHAT IS SHOWN ON THE DRAWINGS.

**FLOOR CLEANOUT (FCO) DETAIL**  
NOT TO SCALE

**GRADE CLEANOUT (GCO) DETAIL**  
NOT TO SCALE

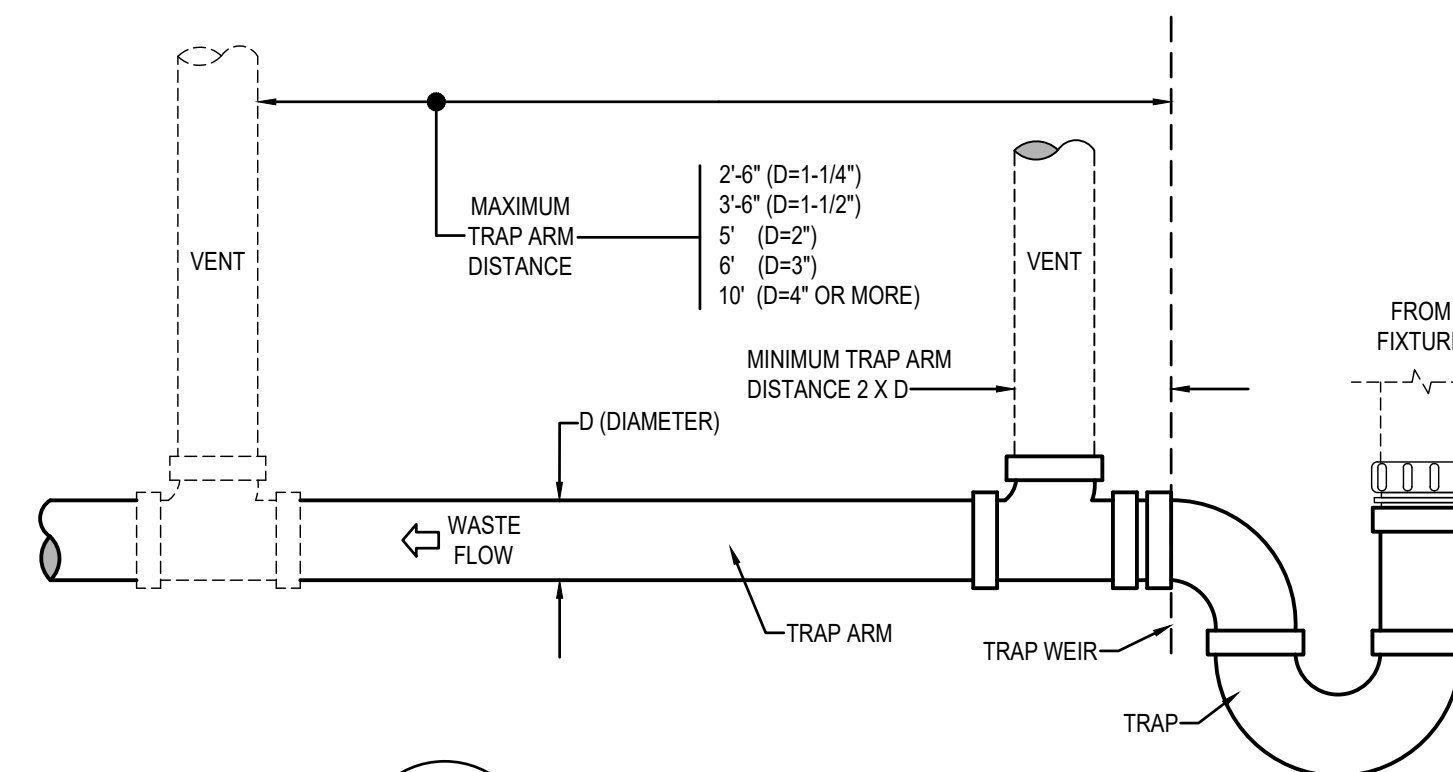
**WALL CLEANOUT (WCO) DETAIL**  
NOT TO SCALE

- NOTES:
1. ALL DIMENSIONS SHOWN SHALL BE VERIFIED WITH LOCAL AUTHORITY HAVING JURISDICTION.
  2. INTERCEPTOR EXCEEDING 6'-6" IN DEPTH MUST BE CONSTRUCTED OF REINFORCED CONCRETE.
  3. ALL SURFACE WATER TO DRAIN AWAY FROM INTERCEPTOR.
  4. FRAME STRUCTURE FOR TRAFFIC LOADING.
  5. GREASE INTERCEPTOR SHALL COMPLY WITH THE CURRENT EDITION OF THE LATEST ADOPTED PLUMBING CODE, AND ALL LOCAL AND STATE CODES.



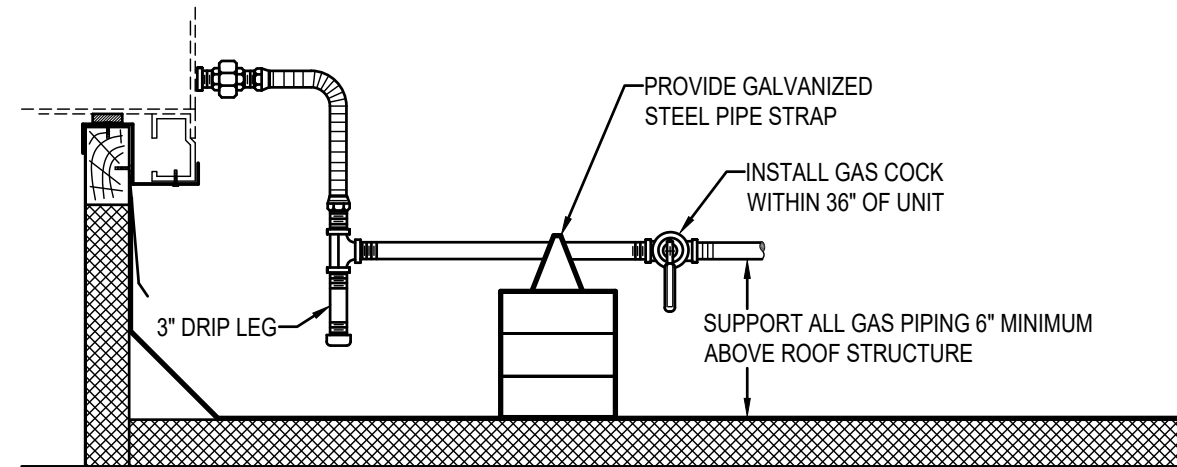
**GREASE INTERCEPTOR DETAIL (1500 GALLONS)**  
NOT TO SCALE

- NOTES:
1. MAINTAIN ONE-FOURTH (1/4) INCH PER FOOT SLOPE.
  2. THE DEVELOPED LENGTH BETWEEN THE TRAP OF A WATER CLOSET OR SIMILAR FIXTURE (MEASURED FROM THE TOP OF THE CLOSET FLANGE TO THE INNER EDGE OF THE VENT) AND ITS VENT SHALL NOT EXCEED SIX (6) FEET.
  3. ALL PLUMBING EQUIPMENT AND SYSTEMS SHALL BE INSTALLED IN ACCORDANCE WITH THE LATEST ADOPTED PLUMBING CODE, AND ALL LOCAL AND STATE CODES.



**TRAP ARM DETAIL**  
NOT TO SCALE

- NOTES:
1. INSTALL FLEX CONNECTION AT ALL ROOF TOP UNITS WHICH HAVE SPRING ISOLATION CURBS (36" MAXIMUM).
  2. INSTALL SOLID PIPE CONNECTION TO ALL ROOF TOP UNITS WHICH DO NOT HAVE SPRING ISOLATION CURBS.
  3. PAINT PIPE WITH RUST RESISTANT PRIMER, RED OR GRAY. SHERWIN WILLIAMS PRO INDUSTRIAL DTM OR APPROVED EQUAL.



APPROVED PIPE SUPPORT SYSTEMS:

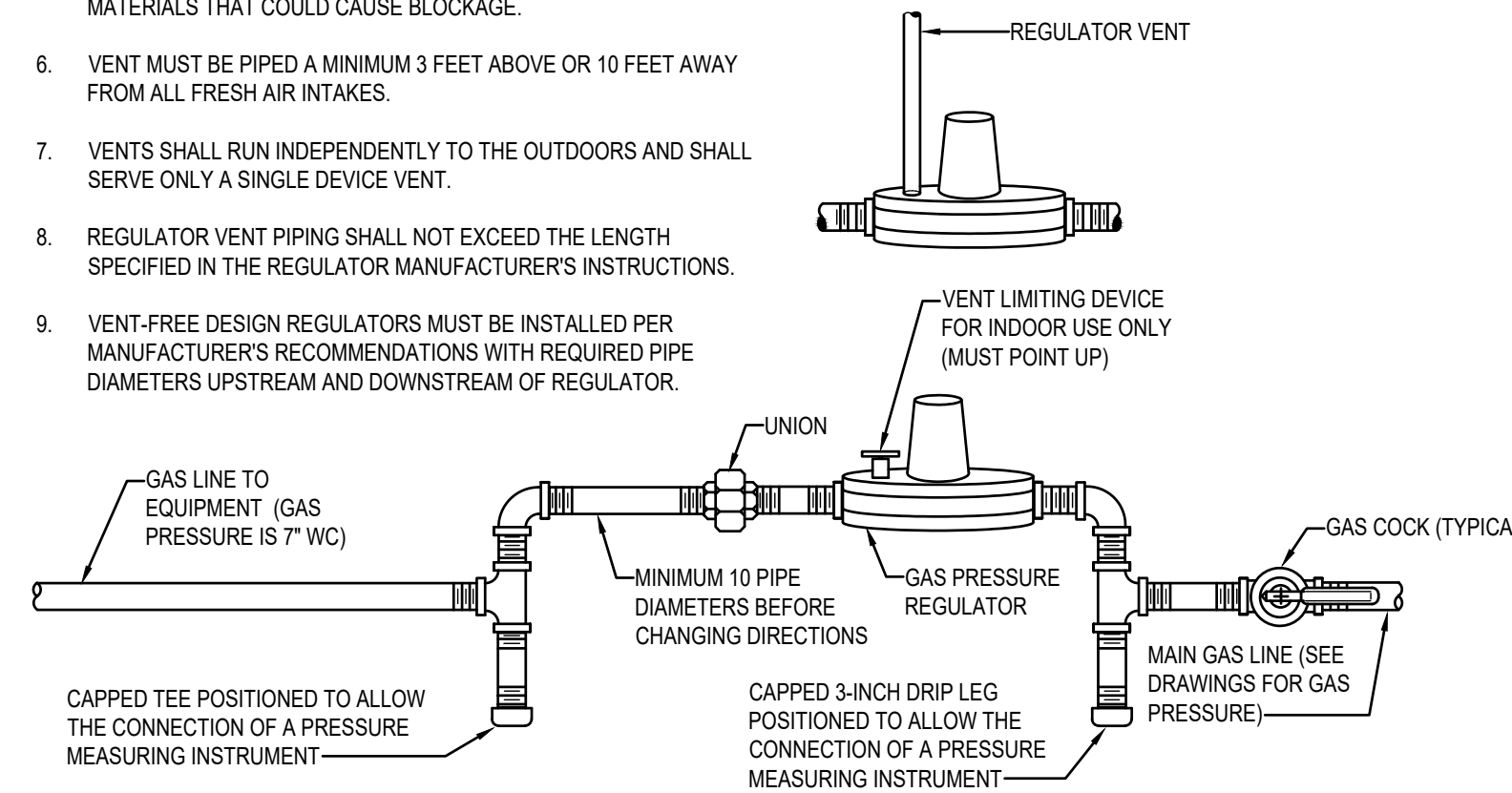
- MIRO MODEL 1.5 WITH SPACERS
- ADVANCED SUPPORT PRODUCTS
- VERSABLOCK BY FREEDOM INC

PIPE SUPPORT REQUIREMENTS	
SIZE OF PIPE	SUPPORT REQUIRED
1/2"	6' O.C.
3/4" - 1"	8' O.C.
1-1/4" OR LARGER	10' O.C.

**ROOFTOP UNIT - GAS PIPING DETAIL**  
NOT TO SCALE

1. PIPING SHALL BE INSTALLED SUCH THAT WATER HEATER CAN BE REPLACED WITHOUT ANY OBSTRUCTIONS FROM INSTALLED PIPING.

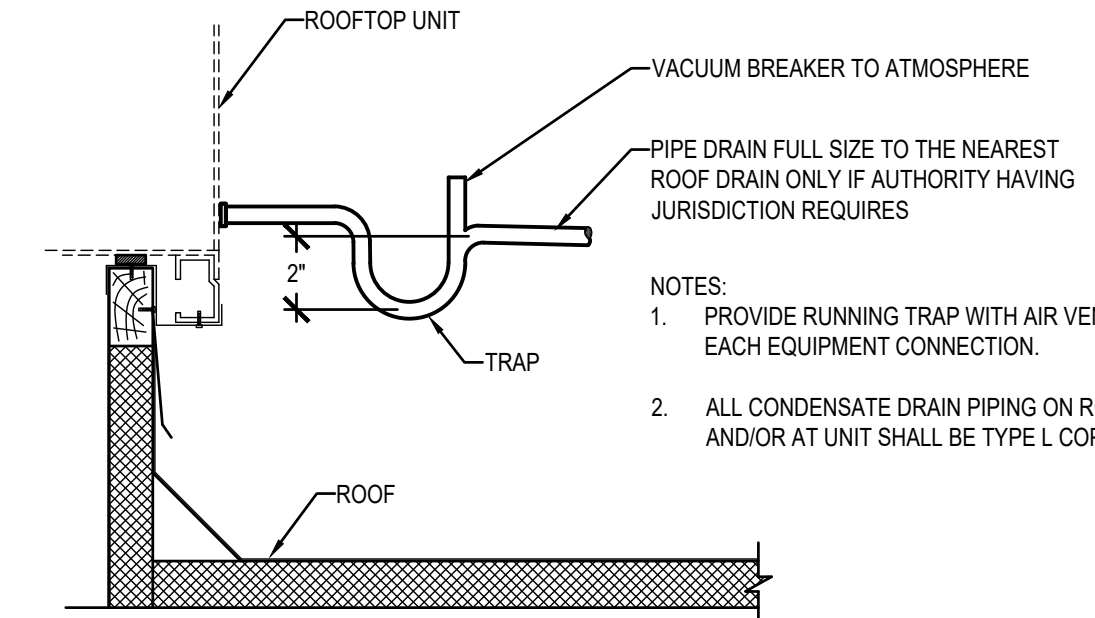
- NOTES:
1. VENT REGULATORS PER MANUFACTURER'S AND LOCAL GAS COMPANY'S REQUIREMENTS.
  2. DO NOT REDUCE THE VENT PIPE SIZE FROM THE REGULATOR.
  3. TO LIMIT THE CONSEQUENCES OF RAIN, SNOW OR DEBRIS GETTING INTO THE VENT, ALWAYS TURN THE OUTLET OF THE VENT DOWN AND ABOVE POTENTIAL WATER OR SNOW LINES.
  4. PROVIDE A BUG SCREEN ON THE VENT OUTLET TO DETER INSECTS FROM NESTING IN THE LINE. NEVER PAINT OVER THE BUG SCREEN.
  5. A VENT LINE PROTECTOR MAY BE USED IN OUTDOOR APPLICATIONS TO PREVENT ENTRY OF WATER, INSECTS OR OTHER FOREIGN MATERIALS THAT COULD CAUSE BLOCKAGE.
  6. VENT MUST BE PIPED A MINIMUM 3 FEET ABOVE OR 10 FEET AWAY FROM ALL FRESH AIR INTAKES.
  7. VENTS SHALL RUN INDEPENDENTLY TO THE OUTDOORS AND SHALL SERVE ONLY A SINGLE DEVICE VENT.
  8. REGULATOR VENT PIPING SHALL NOT EXCEED THE LENGTH SPECIFIED IN THE REGULATOR MANUFACTURER'S INSTRUCTIONS.
  9. VENT-FREE DESIGN REGULATORS MUST BE INSTALLED PER MANUFACTURER'S RECOMMENDATIONS WITH REQUIRED PIPE DIAMETERS UPSTREAM AND DOWNSTREAM OF REGULATOR.



CAPPED TEE POSITIONED TO ALLOW THE CONNECTION OF A PRESSURE MEASURING INSTRUMENT

CAPPED 3-INCH DRIP LEG POSITIONED TO ALLOW THE CONNECTION OF A PRESSURE MEASURING INSTRUMENT

**GAS PRESSURE REGULATOR DETAIL**  
NOT TO SCALE



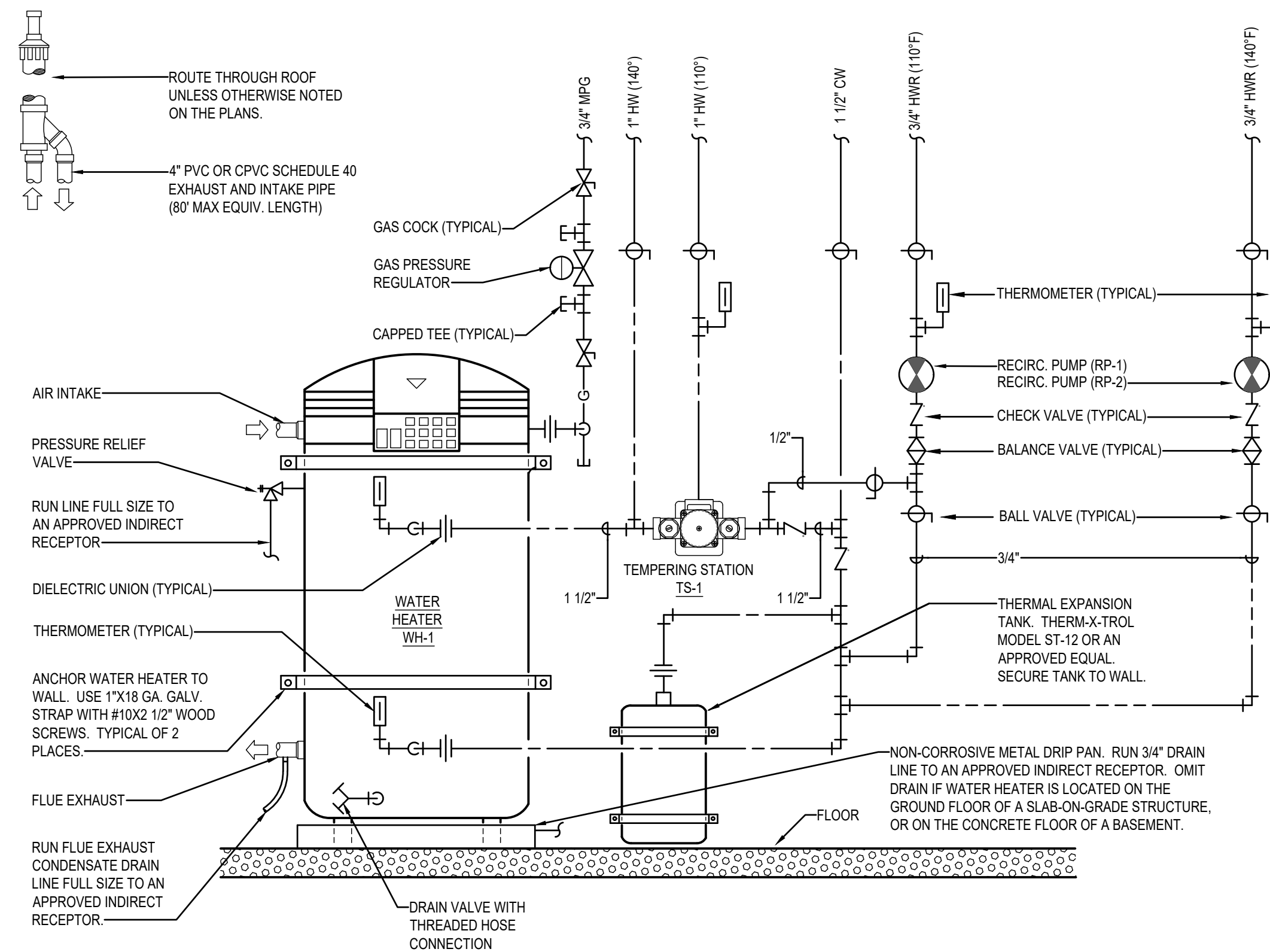
- NOTES:
1. PROVIDE RUNNING TRAP WITH AIR VENT AT EACH EQUIPMENT CONNECTION.
  2. ALL CONDENSATE DRAIN PIPING ON ROOF AND/OR AT UNIT SHALL BE TYPE L COPPER.

APPROVED PIPE SUPPORT SYSTEMS:

- MIRO MODEL 1.5 WITH SPACERS
- ADVANCED SUPPORT PRODUCTS
- VERSABLOCK BY FREEDOM INC

PIPE SUPPORT REQUIREMENTS	
SIZE OF PIPE	SUPPORT REQUIRED
1/2"	6' O.C.
3/4" - 1"	8' O.C.
1-1/4" OR LARGER	10' O.C.

**ROOFTOP UNIT - CONDENSATE DRAIN DETAIL**  
NOT TO SCALE



**HIGH EFFICIENCY WATER HEATER & TEMPERING STATION PIPING DETAIL**  
NOT TO SCALE

NOT TO SCALE



**PLUMBING FIXTURE SCHEDULE**

SYMBOL	FIXTURE DESCRIPTION	CONNECTION SIZE					MANUFACTURER / MODEL NUMBER / DESCRIPTION / ADDITIONAL COMMENTS
		WASTE	VENT	TRAP	CW	HW	
DF-1	DRINKING FOUNTAIN WITH BOTTLE FILLING STATION (INTERIOR DUAL BUBBLERS) (ELECTRIC WATER COOLER) (ADA COMPLIANT) (HIGH/LOW)	1 1/2	1 1/2	1 1/2	1/2	--	ELKAY MODEL LZSTL8WSLP (FILTERED) MODEL EZSTL8WSVRSK (NON-FILTERED) BI-LEVEL ADA COOLER WITH BOTTLE FILLING STATION FURNISHED WITH FLEXI-GUARD SAFETY BUBBLER. BUBBLER ACTIVATED BY PUSHBAR. BOTTLE FILLER ACTIVATED BY ELECTRONIC SENSOR WITH AUTOMATIC 30-SECOND SHUT-OFF TIMER. 115 VOLT, 5.0 AMPS, 60 HERTZ. PROVIDE WITH JAY R. SMITH 0834 FLOOR MOUNTED SUPPORT CARRIER. OPTION - CANE APRON TO BE INSTALLED ON HIGH COOLER.
DF-2	DRINKING FOUNTAIN WITH BOTTLE FILLING STATION (INTERIOR SINGLE BUBBLER) (ELECTRIC WATER COOLER) (ADA COMPLIANT)	1 1/2	1 1/2	1 1/2	1/2	--	ELKAY MODEL LZS8WSLP (FILTERED) MODEL EZS8WSLK (NON-FILTERED) SINGLE ADA COOLER WITH BOTTLE FILLING STATION FURNISHED WITH FLEXI-GUARD SAFETY BUBBLER. BUBBLER ACTIVATED BY PUSHBAR. BOTTLE FILLER ACTIVATED BY ELECTRONIC SENSOR WITH AUTOMATIC 30-SECOND SHUT-OFF TIMER. 115 VOLT, 5.0 AMPS, 60 HERTZ. PROVIDE WITH JAY R. SMITH 0830 FLOOR MOUNTED SUPPORT CARRIER. OPTION - CANE APRON.
DN-1	DOWN SPOUT NOZZLE (CAST IRON)	SEE PLANS	--	--	--	--	JAY R. SMITH FIGURE NUMBER 1770-NB CAST IRON NOZZLE WITH WALL FLANGE, NICKEL-BRONZE FINISH.
ET-1	EXPANSION TANK	--	--	--	3/4	--	AMTROL THERM-X-TROL ST-12, OR APPROVED EQUAL, NON-ASME SERIES THERMAL EXPANSION ABSORBER, ANTI-MICROBIAL LINER, AND 5 YEAR WARRANTY.
EYE-1	EMERGENCY EYE WASH (WALL MOUNTED w/ RECOIL HOSE) (USED WITH SERVICE SINK)	--	--	--	1/2	1/2	ACORN SAFETY MODEL S0406-CH12-BFP. WALL MOUNTED WITH DUAL 45° ANGLED HEADS AND RECOIL HOSE. PROVIDE WITH FLIP TOP DUST COVERS, UNIVERSAL EMERGENCY SIGN, DOUBLE CHECK VALVE, STAINLESS STEEL 90° WITH SHEET NIPPLE, AND ACORN MODEL ET71-4-BV5-OTG LEAD-FREE EMERGENCY THERMOSTATIC MIXING VALVE WITH 1/2" NPT INLETS & OUTLET, 4 GPM @ 5 PSID. PROVIDE WITH LOCKABLE INLET BALL VALVES, STANDARD OUTLET TEMPERATURE GAUGE, AND SELECTABLE TEMPERATURE RANGE FROM 60°F TO 95°F.
FD-1	FLOOR DRAIN (PVC BODY) (CONCRETE FLOOR)	2	2	2	--	--	SIOUX CHIEF SERIES NUMBER 832-2P-NR. POST-CONSTRUCTION LEVELING FLOOR DRAIN, NO-HUB OUTLET, 6-1/2" ROUND, ADJUSTABLE NICKEL STRAINER AND TRAP PRIMER PORT. INSTALL TOP OF DRAIN 1/8" BELOW FINISH FLOOR AND CAULK EDGE.
FS-1	FLOOR SINK (6" DEEP) (HALF GRATE, FOOT TRAFFIC RATED)	2	2	2	--	--	JAY R. SMITH FIGURE NUMBER 3100Y-12. CAST IRON RECEPTOR, ALUMINUM DOME STRAINER, NICKEL BRONZE GRATE, AND TRAP PRIMER. INSTALL TOP OF SINK 1/8" BELOW FINISH FLOOR AND CAULK EDGE.
FS-2	FLOOR SINK (10" DEEP) (HALF GRATE, FOOT TRAFFIC RATED)	4	2	4	--	--	JAY R. SMITH FIGURE NUMBER 3160Y-12. CAST IRON RECEPTOR, ALUMINUM DOME STRAINER, NICKEL BRONZE GRATE, AND TRAP PRIMER. INSTALL TOP OF SINK 1/8" BELOW FINISH FLOOR AND CAULK EDGE.
FS-3	FLOOR SINK (6" DEEP) (HALF GRATE, FOOT TRAFFIC RATED) COMMERCIAL KITCHEN BAR, OR PROCESSING LOCATIONS	2	2	2	--	--	JAY R. SMITH FIGURE NUMBER 3002Y-12. STAINLESS STEEL RECEPTOR, DOME STRAINER AND GRATE WITH TRAP PRIMER. INSTALL TOP OF SINK 1/8" BELOW FINISH FLOOR AND CAULK EDGE.
FS-4	FLOOR SINK (10" DEEP) (HALF GRATE, FOOT TRAFFIC RATED) COMMERCIAL KITCHEN BAR, OR PROCESSING LOCATIONS	4	2	4	--	--	JAY R. SMITH FIGURE NUMBER 3004Y-12. STAINLESS STEEL RECEPTOR, DOME STRAINER AND GRATE WITH TRAP PRIMER. INSTALL TOP OF SINK 1/8" BELOW FINISH FLOOR AND CAULK EDGE.
GCO	GRADE CLEANOUT (NON-PAVED AREAS)	SEE PLANS	--	--	--	--	JAY R. SMITH 4220 SERIES, ROUND EXTRA HEAVY DUTY CAST IRON TOP. FURNISH WITH WITH ABS PLUG. COVER TO BE INSCRIBED "SAN".
GCO	GRADE CLEANOUT (PAVED AREAS) (VEHICULAR TRAFFIC)	SEE PLANS	--	--	--	--	JAY R. SMITH 4250 SERIES, ROUND FLANGED HOUSING WITH HEAVY DUTY CAST IRON COVER. FURNISH WITH ABS PLUG. COVER TO BE INSCRIBED "SAN".
GI-1	GREASE INTERCEPTOR (1500 GALLONS)	4	3	--	--	--	PRE-CAST CONCRETE, 1500 GALLON CAPACITY, GREASE INTERCEPTOR. SEE DRAWING FOR DETAILS. NO SPLIT DESIGN VAULTS WITH GASKETS BELOW FLUID LEVEL ALLOWED.
HB-1	HOSE BIBB (EXTERIOR) (NON-FREEZE)	--	--	--	3/4	--	WOODFORD MODEL 67 - EXPOSED STYLE WITH MODEL 50HA BACKFLOW PREVENTER, 3/4" INLET, AND CHROME PLATED. PROVIDE WITH TEE KEY AND INSTALL AT 18" ABOVE FINISH GRADE.
LAV-6	MOTION SENSOR LAVATORY (WALL MOUNTED) (BATTERY OPERATED) (ADA COMPLIANT)	1 1/2	1 1/2	1 1/4	1/2	1/2	KOHLER KINGSTON MODEL K-2005, WITH GRID STRAINER, SLOAN OPTIMA PLUS MODEL EAF-350 BATTERY POWERED FAUCET WITH 4" TRIM PLATE AND WATTS SERIES LFUSG-B LEAD-FREE, THERMOSTATIC MIXING VALVE, ASSE STANDARD 1070 LISTED, BRONZE BODY, INTEGRAL CHECK VALVES, AND SELECTABLE TEMPERATURE RANGE FROM 80°F TO 120°F. PROVIDE WITH JAY R. SMITH FIGURE NUMBER 0700-Z SUPPORT WITH CONCEALED ARMS. PROVIDE WITH LS-1 LAV SHIELD.
LS-1	LAVATORY SHIELD (WALL MOUNTED SHIELD FOR CONCEALING PIPING, VALVES, AND INSTANTANEOUS WATER HEATERS)	--	--	--	--	--	TRUEBRO "LAV SHIELD" ADA COMPLIANT, TOTAL ENCLOSURE. SINGLE-PIECE CONSTRUCTION, SLOAN OPTISHIELD ET1F-529, OR APPROVED EQUAL.
OD-1	OVERFLOW ROOF DRAIN (METAL GRATE)	SEE PLANS	--	--	--	--	JAY R. SMITH FIGURE NUMBER 1070Y GENERAL PURPOSE DRAIN WITH LOW PROFILE DOME. PROVIDE WITH SUMP RECEIVER, UNDERDECK CLAMP, CAST IRON DOME, INTERNAL DAM STANDPIPE, AND RAIN SHIELD.
RD-1	ROOF DRAIN (LOW PROFILE DOME STYLE) (METAL GRATE)	SEE PLANS	--	--	--	--	JAY R. SMITH FIGURE NUMBER 1010Y GENERAL PURPOSE DRAIN WITH LOW PROFILE DOME. PROVIDE WITH SUMP RECEIVER, UNDERDECK CLAMP, AND CAST IRON DOME.
RH-1	ROOF HYDRANT (NON-FREEZE) (DRAIN LINE REQUIRED) (MUSGROVE STANDARD)	--	--	--	1	--	WOODFORD MODEL RHY2-MS NON-FREEZE STYLE ROOF HYDRANT WITH 3/4" HOSE CONNECTION AND INTEGRAL DOUBLE CHECK BACKFLOW PREVENTER. REQUIRES 1/8" DRAIN LINE PIPED TO APPROVED INTERCEPTOR. (SUEZ IS REQUIRING THAT ROOF HYDRANTS ARE PROVIDED WITH A REDUCED PRESSURE BACKFLOW PREVENTER)
RP-1	RECIRCULATION PUMP (HOT WATER RETURN SYSTEM) (MEDIUM SIZED SYSTEM)	--	--	--	--	3/4	BELL AND GOSSETT BRONZE MODEL NBF-22, 115 VOLT, 0.8 AMPS, 92 WATTS, AND SHALL PROVIDE 7 GPM AT 10 FEET HEAD. INCLUDE 7-DAY PROGRAMMABLE ELECTRONIC TIME CLOCK WITH BATTERY BACKUP. INTERMATIC MODEL GM40AVE-RD89. APPROVED ALTERNATE: ARMSTRONG, TACO, GRUNDFOS.
S-2	SINK - DOUBLE COMPARTMENT (14" X 14" X 6 1/2" - EACH) (ADA COMPLIANT)	2	1 1/2	1 1/2	1/2	1/2	ELKAY LUSTERTONE MODEL LRAD331965; 6-1/2" DEEP. STAINLESS STEEL SINK. PROVIDE AND INSTALL ELKAY MODEL LK3001CR SINGLE LEVER CHROME FAUCET WITH SWING SPOUT AND HOSE SPRAY, ELKAY MODEL LK35 STAINLESS STEEL STRAINER BASKET AND TAILPIECE, AND WATTS SERIES LFUSG-B LEAD-FREE, THERMOSTATIC MIXING VALVE, ASSE STANDARD 1070 LISTED, BRONZE BODY, INTEGRAL CHECK VALVES, AND SELECTABLE TEMPERATURE RANGE FROM 80°F TO 120°F.
S-2	SINK - SINGLE COMPARTMENT WITH BUBBLER (CLASSROOM / ADA COMPLIANT)	2	1 1/2	1 1/2	1/2	1/2	JUST CLASSROOM SINK # CRA-ADA-1725-A-GR (6 1/2" DEEP WITH JTR-51-R70-VR DOUBLE HANDLE FAUCET, JSB-10-VR-FLX BUBBLER, J-ADA-35 DRAIN, BRASS P-TRAP, AND ANGLE SUPPLY STOPS, AND WATTS SERIES LFUSG-B LEAD-FREE, THERMOSTATIC MIXING VALVE, ASSE STANDARD 1070 LISTED, BRONZE BODY, INTEGRAL CHECK VALVES, AND SELECTABLE TEMPERATURE RANGE FROM 80°F TO 120°F.
SS-1	SERVICE SINK (36" X 24" X 10") (FLOOR MOUNTED)	3	2	3	1/2	1/2	ACORN TERRAZZO-WARE MODEL TRH-242410. PROVIDE AND INSTALL WITH MODEL KFC CHROME UTILITY FAUCET, STAINLESS STEEL BUMPER GUARD, DRAIN GASKET, 36" HOSE AND WALL HANGER, MOP HANGER, AND (2) STAINLESS STEEL WALL GUARDS. MOUNT FAUCET 36" AFF.
SS-2	SERVICE SINK (28" RADIUS CORNER X 12") (FLOOR MOUNTED)	3	2	3	1/2	1/2	ACORN TERRAZZO-WARE MODEL TCR-28. PROVIDE AND INSTALL WITH MODEL KFC CHROME UTILITY FAUCET, STAINLESS STEEL BUMPER GUARD, DRAIN GASKET, 36" HOSE AND WALL HANGER, MOP HANGER, AND (2) STAINLESS STEEL WALL GUARDS. MOUNT FAUCET 36" AFF.
TP-1	TRAP PRIMER (PRESSURE ACTIVATED) (1 TO 4 TRAPS)	--	--	--	1/2"	--	PRECISION PLUMBING PRODUCTS MODEL CPO-500 WITH DU DISTRIBUTION UNIT IF REQUIRED FOR SERVING MORE THAN ONE TRAP.
TP-1	TRAP PRIMER (FLUSH VALVE PRIMER) (1 TRAP)	--	--	--	1/2"	--	PRECISION PLUMBING PRODUCTS MODEL FVP-1VB WITH VACUUM BREAKER. TRAP PRIMER TUBING SHALL BE INSTALLED OFF BACK OF FLUSH VALVE.
U-1	URINAL (MOTION SENSOR / BATTERY OPERATED) (SEE ARCH FOR MOUNTING HEIGHT)	2	1 1/2	INT.	3/4	--	KOHLER BARDON MODEL K-4991-ET WALL MOUNTED URINAL WITH 3/4" TOP SPUD. SLOAN REGAL 186 SFSM-0.5 SIDE MOUNT OPERATOR WITH MANUAL OVERRIDE FLUSH BUTTON, 0.5 GPF. INCLUDE BEEHIVE STRAINER AND JAY R. SMITH FIGURE NUMBER 0637 ADJUSTABLE FIXTURE SUPPORT.

US-1	UTILITY SINK (23" X 21" X 13") (FLOOR MOUNTED)	2	1 1/2	1 1/2	1/2	1/2	FIAT MOLDED STONE MODEL FL-1 FLOOR MOUNTED SINK WITH EASY LEVELING LEGS, DRAIN ASSEMBLY AND STOPPER WITH FIAT A1 CHROME FAUCET. DECK MOUNTED, 4" O.C. WITH 4" WRISTBLADES, 6-3/4" SWING SPOUT, AND WATTS SERIES LFUSG-B LF, THERMOSTATIC MIXING VALVE, ASSE STANDARD 1070 LISTED, BRONZE BODY, INTEGRAL CHECK VALVES, AND SELECTABLE TEMPERATURE RANGE FROM 80°F TO 120°F.
WB-1	WALL BOX (WATER SUPPLY TO ICE MAKER)	--	--	--	1/2	--	OATEY FIREMASTER MODEL 39121 WITH FACEPLATE AND ADJUSTABLE METAL SUPPORT BRACKETS. FIRE-RATED, LOW LEAD, OR APPROVED EQUAL.
WC-1	WATER CLOSET (FLUSH VALVE) (FLOOR MOUNTED) (PUBLIC STANDARD)	4	2	INT.	1	--	KOHLER WELLCOMME MODEL K-96053 / FLOOR MOUNTED, WITH ELONGATED BOWL. KOHLER LUSTRA MODEL K-4666-C ELONGATED OPEN FRONT SEAT WITH HINGE. SLOAN REGAL MODEL 111-1.6 FLUSHOMETER, 1.6 GPF.
WC-2	WATER CLOSET (MOTION SENSOR / BATTERY OPERATED) (WALL MOUNTED) (SEE ARCHITECTURAL ELEVATIONS FOR MOUNTING HEIGHT)	4	2	INT.	1	--	KOHLER KINGSTON MODEL K-4325 WALL MOUNTED WITH ELONGATED BOWL. KOHLER LUSTRA MODEL K-4666-C ELONGATED OPEN FRONT SEAT WITH HINGE. SLOAN REGAL XL111-SFSM FLUSHOMETER. JAY R. SMITH FIGURE NUMBER 0211Y-M54 ADJUSTABLE FIXTURE SUPPORT WITH LEG KIT AND 8" NIPPLE.
WCO	WALL CLEANOUT	SEE PLANS	--	--	--	--	JAY R. SMITH 4472T SERIES WITH CAST BRONZE TAPER THREAD PLUG, STAINLESS STEEL ROUND COVER, AND A STAINLESS STEEL VANDAL PROOF SCREW.
WH-9	WATER HEATER (NOMINAL 100 GALLON) (NATURAL GAS - HIGH EFFICIENCY)	--	--	--	SEE PLANS	SEE PLANS	BRADFORD WHITE MODEL EF-100T-199E-3N 199 MBH INPUT, 110V/1Ø, 1.8 AMPS, 28" DIAMETER, 78" TALL WITH SIDE CONNECTIONS. PROVIDE WITH PVC CONCENTRIC INTAKE/VENT KIT AND SEISMIC STRAP. PROVIDE WATER HEATER WITH HEAT TRAP.

NOTES:

- ALL ADA COMPLIANT FIXTURES MUST COMPLY WITH ICC/ANSI A117.1. SEE ARCHITECTURAL PLANS FOR HANDICAPPED FIXTURE DESIGNATIONS, LOCATIONS, CLEARANCES, AND MOUNTING HEIGHTS.
- ALL EXPOSED HW PIPING, CW PIPING, AND DRAIN LINES BENEATH ALL LAVATORIES AND ALL ADA COMPLIANT SINKS MUST BE INSULATED TO PREVENT INJURY. REFER TO ARCHITECTURAL PLANS. INSULATE WITH MOLDED CLOSED CELL VINYL INSULATION - TRUEBRO, PLUMBEREX, OR EQUAL.
- PROVIDE P-TRAP PRIMERS FOR ALL FLOOR DRAINS AND FLOOR SINKS (TRAP PRIMERS ARE NOT INDICATED ON PLANS - REFERENCE DETAILS AND SPECIFICATIONS FOR ADDITIONAL INFORMATION). PROVIDE A BALL TYPE SHUT-OFF VALVE UPSTREAM OF PRIMER VALVE. SEE SPECIFICATIONS.
- SEE SPECIFICATIONS FOR ALTERNATE APPROVED MANUFACTURERS.
- HIGH EFFICIENCY WATER HEATERS: PROVIDE WITH CONDENSATE NEUTRALIZATION KIT BY JIM BOILER WORKS MODEL JM (OR EQUAL), SIZED PER EQUIPMENT CAPACITY.
- BACKFLOW PREVENTION: THIS BUILDING IS PROVIDED WITH A BACKFLOW PREVENTION DEVICE ON THE MAIN WATER SERVICE AND REDUCED PRESSURE BACKFLOW PREVENTION ON THE FOLLOWING PIECES OF EQUIPMENT:  
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--  
--



2406 E RIVERWALK DRIVE  
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PRELIMINARY



NOT FOR CONSTRUCTION  
12/9/2022

Jefferson Elementary School  
Addition and Remodel  
600 N. Fillmore Street, Jerome, Idaho

DATE: December 9, 2022  
LKV PROJECT #: -  
REVISIONS:

DRAWN BY: CD  
CHECKED BY: BC

Design Development

DRAWING NO.

P-5.0



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### KITCHEN PLUMBING FIXTURE SCHEDULE

SYMBOL	FIXTURE DESCRIPTION	CONNECTION SIZE						MANUFACTURER / MODEL NUMBER / DESCRIPTION / ADDITIONAL COMMENTS
		WASTE	VENT	TRAP	CW	HW	GAS	
(K-1)	WALK IN FREEZER	CONDENSATE DRAIN FULL SIZE AND TERMINATE INDIRECT TO FLOOR SINK FS-5			--	--	--	PLUMBING CONTRACTOR TO ROUTE CONDENSATE LINE FULL SIZE AND TERMINATE INDIRECTLY. ELECTRICAL TO PROVIDE HEAT TAPE. INSULATE LINE AFTER HEAT TAPE HAS BEEN INSTALLED.
(K-2)	WALK IN COOLER	CONDENSATE DRAIN FULL SIZE AND TERMINATE INDIRECT TO FLOOR SINK FS-5			--	--	--	PLUMBING CONTRACTOR TO ROUTE CONDENSATE LINE FULL SIZE AND TERMINATE INDIRECTLY.
(K-5)	STEAM TABLE	ROUTE FULL SIZE AND TERMINATE INDIRECT TO FLOOR SINK FS-2			--	--	--	PLUMBING CONTRACTOR TO ROUTE DRAIN LINES FULL SIZE AND TERMINATE INDIRECTLY.
(K-12)	TABLE DOUBLE SINK	2" DRAIN, ROUTE AND TERMINATE INDIRECT TO FLOOR SINK FS-2			1/2	1/2	--	PROVIDED BY OTHERS, ROUGH-IN AND CONNECTED BY PLUMBING CONTRACTOR. PLUMBING CONTRACTOR TO PROVIDE DRAIN VALVE/GATES WITH HANDLE AT SINK FOR EACH TAILPIECE FROM EACH SEPARATE BASIN, COMBINE SEPARATE LINES TO (1) 2" LINE AND TERMINATE INDIRECTLY AT FLOOR SINK.
(K-13)	TABLE TRIPLE SINK	2" DRAIN, ROUTE AND TERMINATE INDIRECT TO FLOOR SINK FS-2			--	--	--	PROVIDED BY OTHERS, ROUGH-IN AND CONNECTED BY PLUMBING CONTRACTOR. PLUMBING CONTRACTOR TO PROVIDE DRAIN VALVE/GATES WITH HANDLE AT SINK FOR EACH TAILPIECE FROM EACH SEPARATE BASIN, COMBINE SEPARATE LINES TO (1) 2" LINE AND TERMINATE INDIRECTLY AT FLOOR SINK.
(K-14)	PRE-RINSE UNIT	--	--	--	1/2	1/2	--	PROVIDED BY OTHERS, ROUGH-IN AND CONNECTED BY PLUMBING CONTRACTOR
(K-16)	STEAM KETTLE WITH DRAIN DRAWER	1 1/4" DRAIN, ROUTE AND TERMINATE INDIRECT TO FLOOR SINK FS-3			1/2	1/2	--	PROVIDED BY OTHERS, ROUGH-IN AND CONNECTED BY PLUMBING CONTRACTOR
(K-19)	DISH TABLE WITH INTEGRAL SINKS	2" DRAIN, ROUTE AND TERMINATE INDIRECT TO FLOOR SINK FS-2			--	--	--	PROVIDED BY OTHERS, ROUGH-IN AND CONNECTED BY PLUMBING CONTRACTOR.
(K-19)	DISH TABLE WITH INTEGRAL LIQUIDS SINK	1 1/2" DRAIN INDIRECT TO FLOOR SINK FS-2			1/2	--	--	INTEGRAL SINK PROVIDED BY OTHERS, ROUGH-IN AND CONNECTED BY PLUMBING CONTRACTOR. COLD WATER CONNECTION SHALL BE CONTROLLED BY FOOT PEDAL. SEE FPL1 IN PLUMBING FIXTURE SCHEDULE.
(K-20)	DISHWASHER	1 1/2" DRAIN, ROUTE AND TERMINATE INDIRECT TO FLOOR SINK FS-2			--	3/4	--	PROVIDED BY OTHERS, ROUGH-IN AND CONNECTED BY PLUMBING CONTRACTOR. PLUMBING CONTRACTOR SHALL INSTALL DRAIN COOL DOWN KIT, PROVIDE WITH WASHER. ROUTE AND PROVIDE 3/4" HW LINE FROM BOOSTER HEATER, PLUMBING CONTRACTOR TO PROVIDE AND INSTALL SA-1.
(K-21)	BOOSTER HEATER FOR K-20	--	--	--	--	3/4	--	PROVIDED BY OTHERS, ROUGH-IN AND CONNECTED BY PLUMBING CONTRACTOR, CONNECT TO K-20
(K-25)	SINGLE COMBINATION OVEN	ROUTE FULL SIZE AND TERMINATE INDIRECT TO FLOOR SINK FS-3			3/8 & 3/4	--	--	PROVIDED BY OTHERS, ROUGH-IN AND CONNECTED BY PLUMBING CONTRACTOR. THIS OVEN HAS TWO CONNECTIONS, (1) FOR STEAM 3/8" AND (1) FOR TEMPERING DRAIN WATER 3/4". INSTALL FILTER PRIOR TO STEAM CONNECTION ONLY. FILTER PROVIDED WITH OVEN. ROUTE DRAIN FULL SIZE THROUGH HALF WALL OVER TO FS-3 AND TERMINATE INDIRECTLY.
(K-26)	ICE MACHINE	ROUTE FULL SIZE AND TERMINATE INDIRECT TO FLOOR SINK FS-4			1/2	--	--	PROVIDED BY OTHERS, ROUGH-IN AND CONNECTED BY PLUMBING CONTRACTOR. PROVIDE SHUT OFF VALVE AT WALL BEHIND ICE MACHINE. PROVIDE FLEXIBLE CONNECTION FROM VALVE TO UNIT ALLOWING UNIT TO BE PULLED AWAY FROM WALL A MINIMUM OF 8 FEET. WATER LINE FROM RFBP-1

NOTES:

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- ALL EXPOSED HW PIPING, CW PIPING, AND DRAIN LINES BENEATH ALL SINKS MUST BE INSULATED TO PREVENT INJURY. REFER TO ARCHITECTURAL PLANS. INSULATE WITH MOLDED CLOSED CELL VINYL INSULATION - TRUEBRE, PLUMBEREX, OR EQUAL.

### GAS SIZING CHART

SYMBOL	INPUT (MBH)	RUNOUT SIZE (2PSI) (INCHES)	EQUIPMENT CONNECTION SIZES (7" WC) (INCHES)
RTU-F1	108	1/2	1/2
RTU-F2	108	1/2	1/2
MAU-F1	512	3/4	1 1/4
MAU-F2	358	3/4	1
WH-1	199	3/4	1
WH-2	199	3/4	1
K-1.1	35	SEE PLANS	1/2
K-1.1	35	SEE PLANS	1/2
K-48	160	SEE PLANS	1
K-48	160	SEE PLANS	1
K-48.1	240	SEE PLANS	1
K-48.1	240	SEE PLANS	1
K-61	80	SEE PLANS	3/4
K-62	110	SEE PLANS	3/4
K-62	110	SEE PLANS	3/4
K-62	110	SEE PLANS	3/4
K-111	90	SEE PLANS	3/4
K-115	50	SEE PLANS	1/2
K-119	211	SEE PLANS	1
K-122	60	SEE PLANS	1/2
K-122	60	SEE PLANS	1/2
K-124	144	SEE PLANS	1
TOTAL	3379.0	EQUIVALENT LENGTH = 125 FT PRESSURE = 2 PSI MAIN SIZE = 1 1/2"	

NOTE: GAS SIZES TO EQUIPMENT ARE AS NOTED IN SCHEDULE ABOVE. ROUTE NOTED (2PSI) GAS LINE TO GAS EQUIPMENT. PROVIDE GAS COCK AND PRESSURE REGULATOR (2 PSI-7" WC) SIZED FOR GAS LOAD AT EACH PIECE OF EQUIPMENT. VENT TO ATMOSPHERE PER MANUFACTURERS RECOMMENDATIONS. ROUTE NOTED (7" WC) GAS LINE TO GAS FIRED EQUIPMENT WITH GAS COCK AND FLEX CONNECTOR AT UNIT. SEE GAS CONNECTION DETAILS.