

STATE OF MICHIGAN

DEPARTMENT OF TECHNOLOGY, MANAGEMENT AND BUDGET FOR DEPARTMENT OF TRANSPORTATION AERONAUTICS BUILDING - HVAC EQUIPMENT REPLACEMENT

2700 PORT LANSING RD.
LANSING, MI 48906
FILE NUMBER: 591/26063.KMM

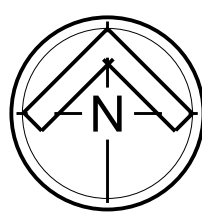
MECHANICAL/ELECTRICAL ENGINEER
MATRIX CONSULTING ENGINEERS, INC.
544 CHERBOURG DRIVE
LANSING, MI 48917
(517) 487-2511

MATRIX PROJECT NUMBER: 260466.00



APPLICABLE CODES AND REFERENCES

2021 MICHIGAN MECHANICAL CODE
2023 NATIONAL ELECTRICAL CODE



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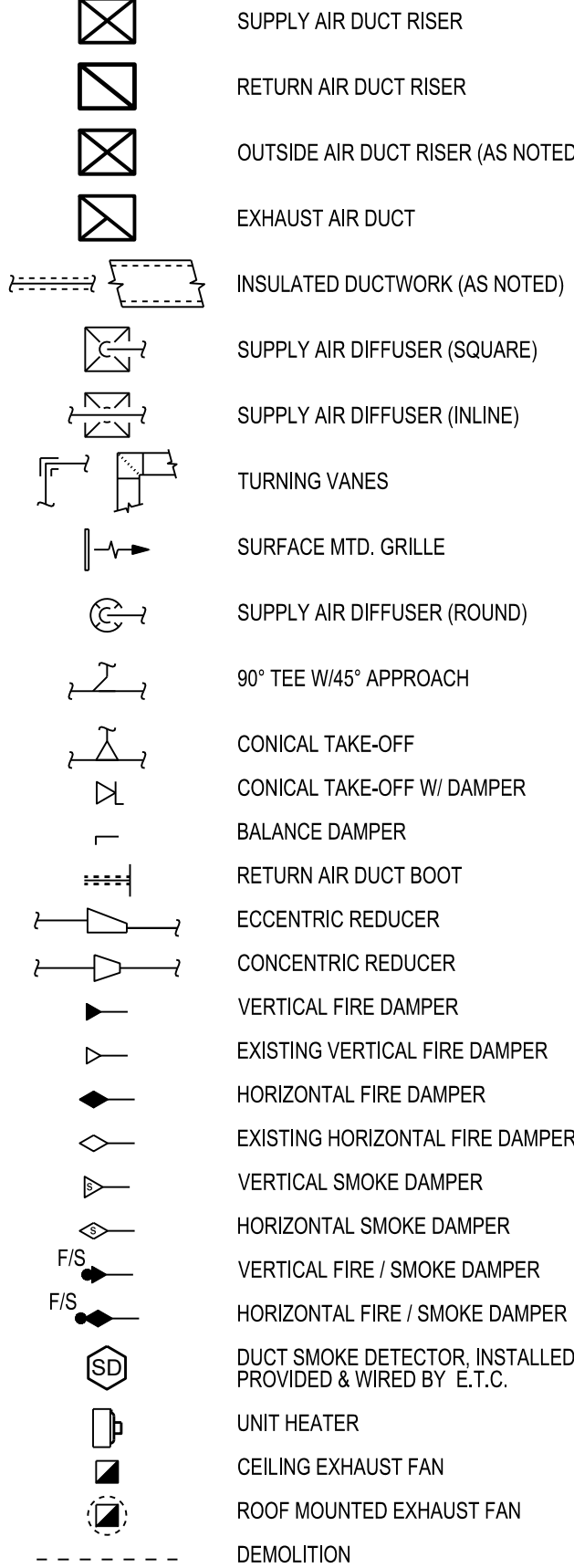
STATE OF MICHIGAN - DTMB
AERONAUTICS BUILDING -
HVAC EQUIPMENT REPLACEMENT
LANSING, MI 48906

MECHANICAL ABBREVIATIONS

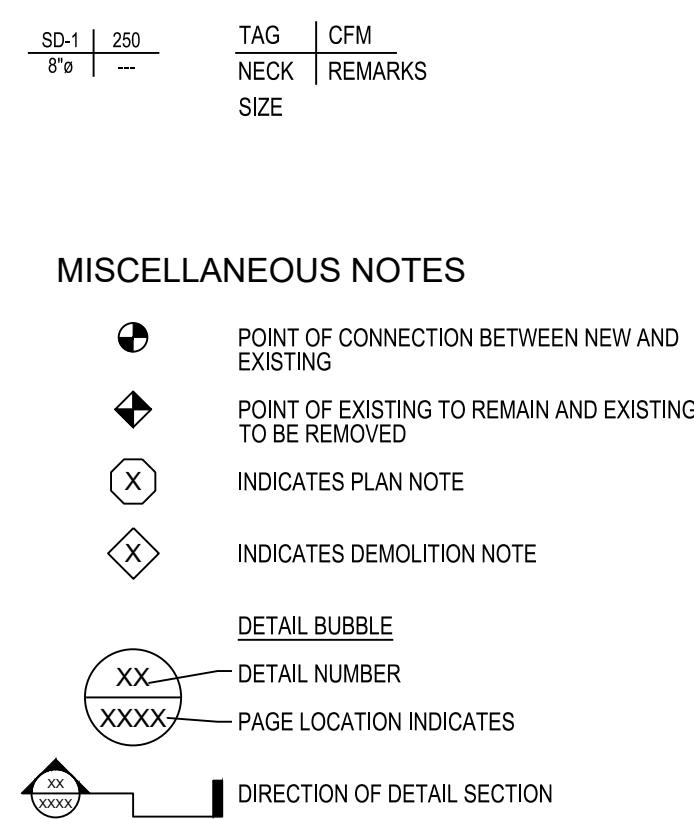
AFF	ABOVE FINISH FLOOR	ID	INSIDE DIAMETER
AC	AIR COMPRESSOR	I.E.	INVERT ELEVATION
AS	AIR HANDLING UNIT	IAH	INTAKE HOOD
AS	AIR SEPARATOR		
A.T.C.	ARCHITECTURAL TRADES CONTRACTOR	LAT	LEAVING AIR TEMPERATURE
		LH	LATENT HEAT (MBH)
B	BOILER	LWT	LEAVING WATER TEMPERATURE
B.A.S.	BUILDING AUTOMATION SYSTEM		
CAF	COMBUSTION AIR FAN	MAX	MAXIMUM
CC	COOLING COIL	MBH	BTU PER HOUR (THOUSAND)
CFM	CUBIC FEET PER MINUTE	MIN	MINIMUM
CHL	CHILLER	M.T.C.	MECHANICAL TRADES CONTRACTOR
CHP	CONSOLE HEAT PUMP		
CONV	CONVECTOR	N.C.	NOISE CRITERIA
CU	COOLING TOWER	NFPA	NATIONAL FIRE PROTECTION ASSOCIATION
CJ	CONDENSING UNIT	NTS	NOT TO SCALE
CH	CABINET UNIT HEATER	P	PUMP
CV	CONTROL VALVE	PCR	PUMPED CONDENSATE RETURN
CWP	CHILLED WATER PUMP	PD	PRESSURE DROP
DB	DRY BULB	RCP	RADIANT CEILING PANEL
DFU	DUCT FURNACE	REQD	REQUIRED
DIA	DIAMETER	RG	RETURN GRILLE
DN	DOWN	RH	RELATIVE HUMIDITY
DPR	DAMPER	RLH	RELIEF HOOD
DS	DUCT SLENDER	RTU	ROOF TOP UNIT
EAT	ENTERING AIR TEMPERATURE	SD	SUPPLY DIFFUSER
EF	EXHAUST FAN	SF	SUPPLY FAN
EG	EXHAUST GRILLE	SG	SUPPLY GRILLE
E.T.C.	ELECTRICAL TRADES CONTRACTOR	SH	SENSIBLE HEAT (MBH)
EVR	EVAPORATOR	SM	SHEET METAL
EWT	ENTERING WATER TEMPERATURE	SQ. FT.	SQUARE FEET
EXH	EXHAUST	SST	SATURATED SUCTION TEMPERATURE
EXST	EXISTING	STR	STRAINER
FF	FINISH FLOOR	TC	TOTAL COOLING (MBH)
FFM	FEET PER MINUTE	TCL	TEMPERATURE CONTROL
FT	FEET	T&P	TEMPERATURE & PRESSURE RELIEF VALVE
FTR	FINED TUBE RADIATION	TYP	TYPICAL
FU	FURNACE	UH	UNIT HEATER
GAL	GALLON	VAV	VARIABLE AIR VOLUME BOX
GFRH	GAS FIRED RADIANT HEATER	VRI	VARIABLE AIR VOLUME REHEAT BOX
GR	GRILLE	FPVAV	FAN POWERED VARIABLE AIR VOLUME BOX
H	HUMIDIFIER	V.F.D.	VARIABLE FREQUENCY DRIVE
HC	HEATING COIL	ZD	ZONE DAMPER
HD	HEAD (FT)		
HP	HORSE POWER		
HPP	HORIZONTAL HEAT PUMP		
HTG	HEATING		
HVAC	HEATING, VENTILATION, & AIR CONDITIONING		
HWP	HEATING WATER PUMP		
HX	HEAT EXCHANGER		

MECHANICAL SYMBOLS LEGEND

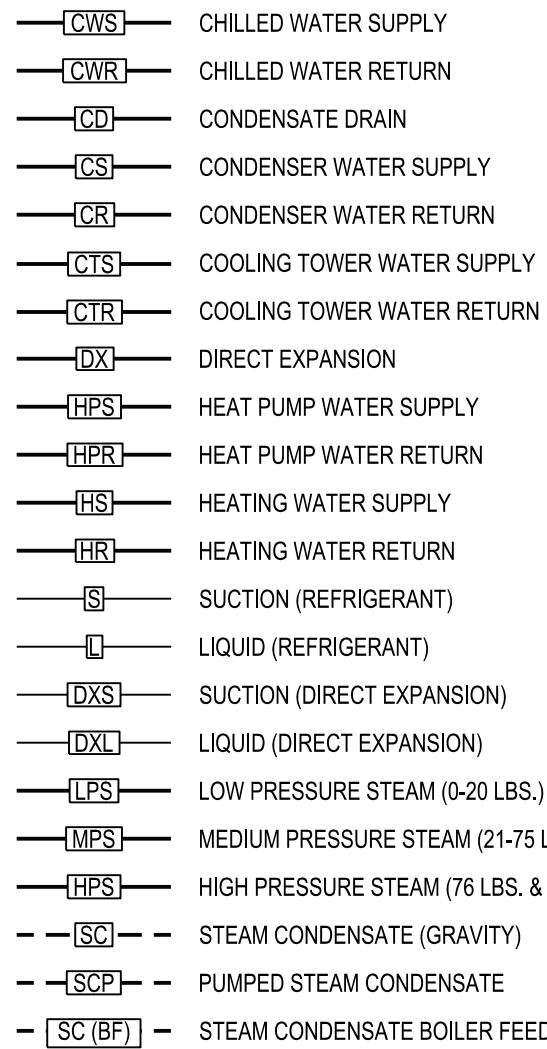
HVAC DUCTWORK SYMBOLS



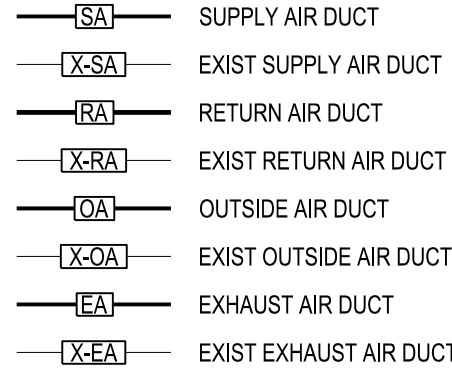
HVAC DUCTWORK & DIFFUSER TAGS



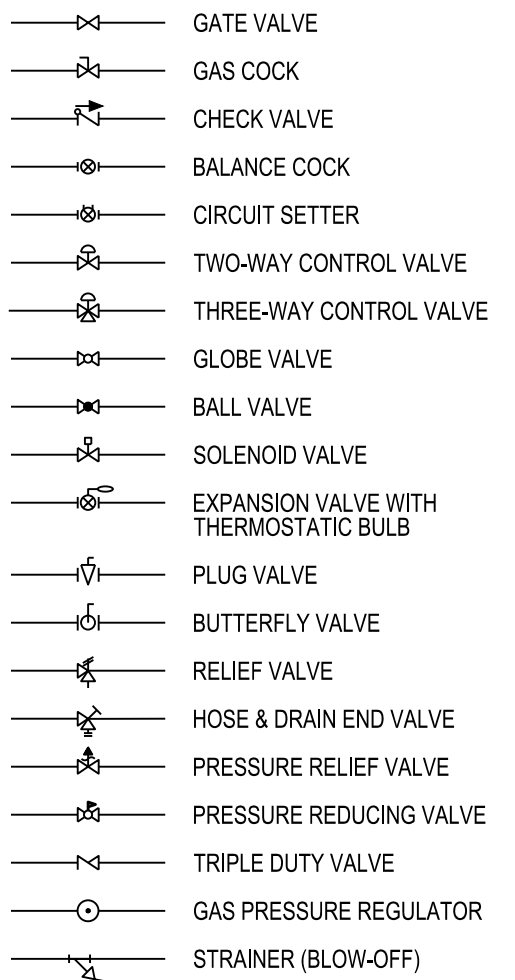
HVAC PIPING



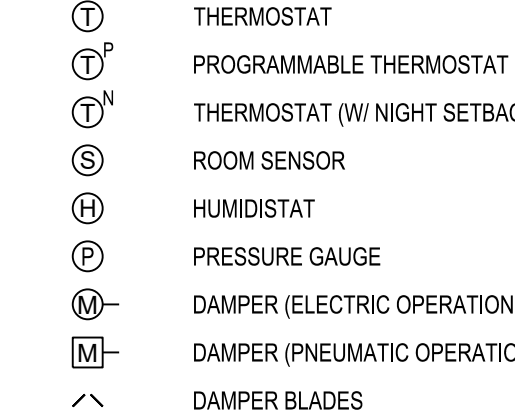
HVAC DUCTWORK



HVAC PIPING VALVES



TEMPERATURE CONTROL SYMBOLS

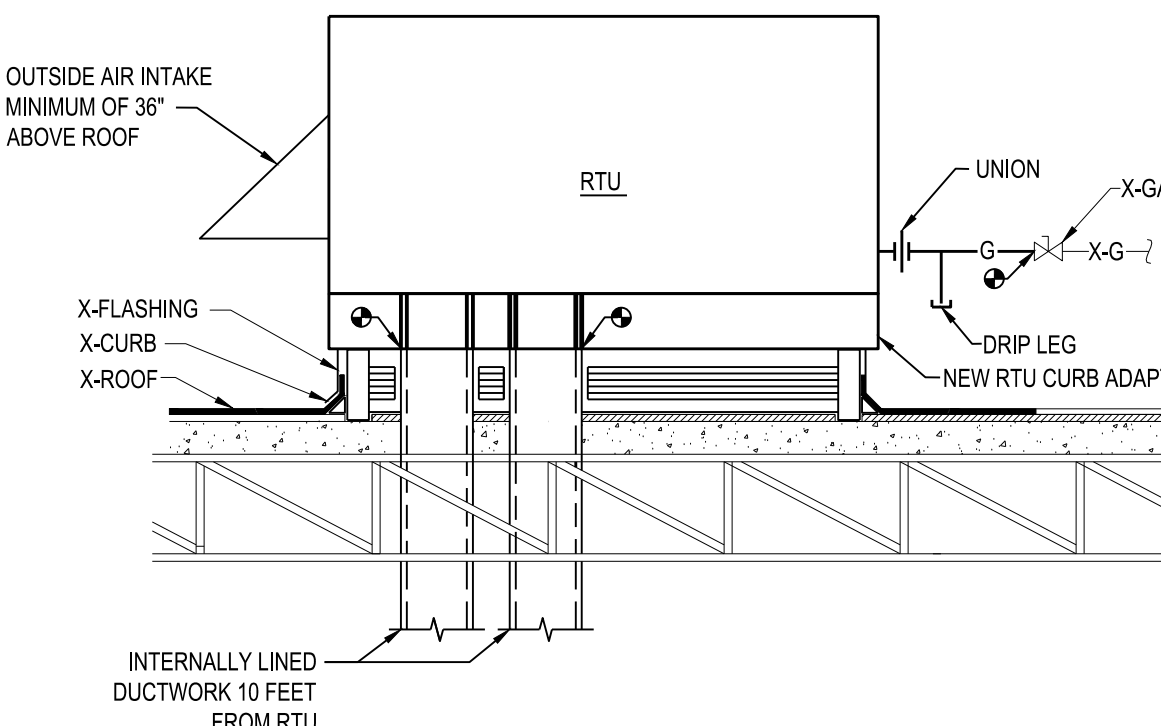


GENERAL DEMOLITION NOTES

- EXISTING EQUIPMENT LAYOUT IS SCHEMATIC; EXACT LOCATION OF EXISTING DUCT/PIPING AND EQUIPMENT SHALL BE COORDINATED WITH BUILDING STRUCTURE. EQUIPMENT FURNISHED; ARCHITECTURAL DRAWINGS AND ALL OTHER TRADES PRIOR TO DEMOLITION.
- PERFORM WORK IN ACCORDANCE WITH THE LATEST EDITIONS, REVISIONS, AMENDMENTS, OR SUPPLEMENTS OF APPLICABLE STATUTES, ORDINANCES, CODES OR REGULATIONS OF FEDERAL, STATE, AND LOCAL AUTHORITIES HAVING JURISDICTION IN EFFECT ON THE DATE BIDS ARE RECEIVED.
- WHERE APPROVED STANDARDS HAVE BEEN ESTABLISHED BY OSHA, UNDERWRITERS LABORATORIES, AMERICAN CODES, ASA, ASHRAE, ARI, NEC, STATE FIRE INSURANCE REGULATION BODY, NFPA OR OTHERS, THESE STANDARDS SHALL BE FOLLOWED WHETHER OR NOT INDICATED ON THE DRAWING AND SPECIFICATIONS.
- COORDINATE CUTTING AND PATCHING WITH GENERAL CONTRACTOR.
- ALL BOLD DASHED LINES INDICATE ITEMS TO BE REMOVED UNLESS NOTED BY KEYNOTE. ALL OTHER EXISTING SYSTEMS SHOWN FOR REFERENCE ONLY.
- PATCH AND REPAIR ALL FLOOR AND WALL SURFACES LEFT DAMAGED OR INCOMPLETE FROM REMOVAL OF FIXED ACCESSORIES AND EQUIPMENT WITH MATERIALS TO MATCH EXISTING, AS ACCEPTABLE TO THE ARCHITECT.
- NOTATIONS ARE MADE IN VARIOUS PLACES ON THE DRAWINGS TO CALL ATTENTION TO DEMOLITION WHICH IS REQUIRED; HOWEVER, THESE DRAWINGS ARE NOT INTENDED TO SHOW EACH AND EVERY ITEM TO BE REMOVED. CONTRACTOR SHALL REMOVE ALL MATERIALS RELATED TO THEIR RESPECTIVE TRADES AS REQUIRED TO PERMIT THE CONSTRUCTION OF THE NEW WORK AS SHOWN.
- THE GENERAL CONTRACTOR SHALL COORDINATE THE EXTENT OF THE REQUIRED DEMOLITION OF THE EXISTING BUILDING AS REQUIRED TO FACILITATE THE CONSTRUCTION OF THE PROJECT AS SHOWN AS PART OF THIS WORK.
- ALL DEMOLITION SHALL BE APPROVED BY THE OWNERTENANT PRIOR TO COMMENCEMENT AND SHALL BE PERFORMED UNDER REQUIREMENTS AND APPROVAL OF THE LOCAL CODE JURISDICTIONS.
- PROTECT ALL EXISTING WORK WHICH IS TO REMAIN AND RESTORE IN AN APPROVED MANNER ANY SUCH WORK WHICH BECOMES DAMAGED.
- RUBBISH AND DEBRIS RESULTING FROM THE WORK SHALL BE REMOVED IMMEDIATELY FROM THE SITE IN A SAFE AND LEGAL MANNER BY THE CONTRACTOR.
- DEMOLITION CONTRACTOR SHALL BE RESPONSIBLE TO CONTACT BUILDING REPRESENTATIVE TO CLARIFY ANY ITEMS NOT SHOWN ON THESE DOCUMENTS OR SHOWN NOT MATCHING FIELD CONDITIONS.

PROJECT PHASING SCHEDULE

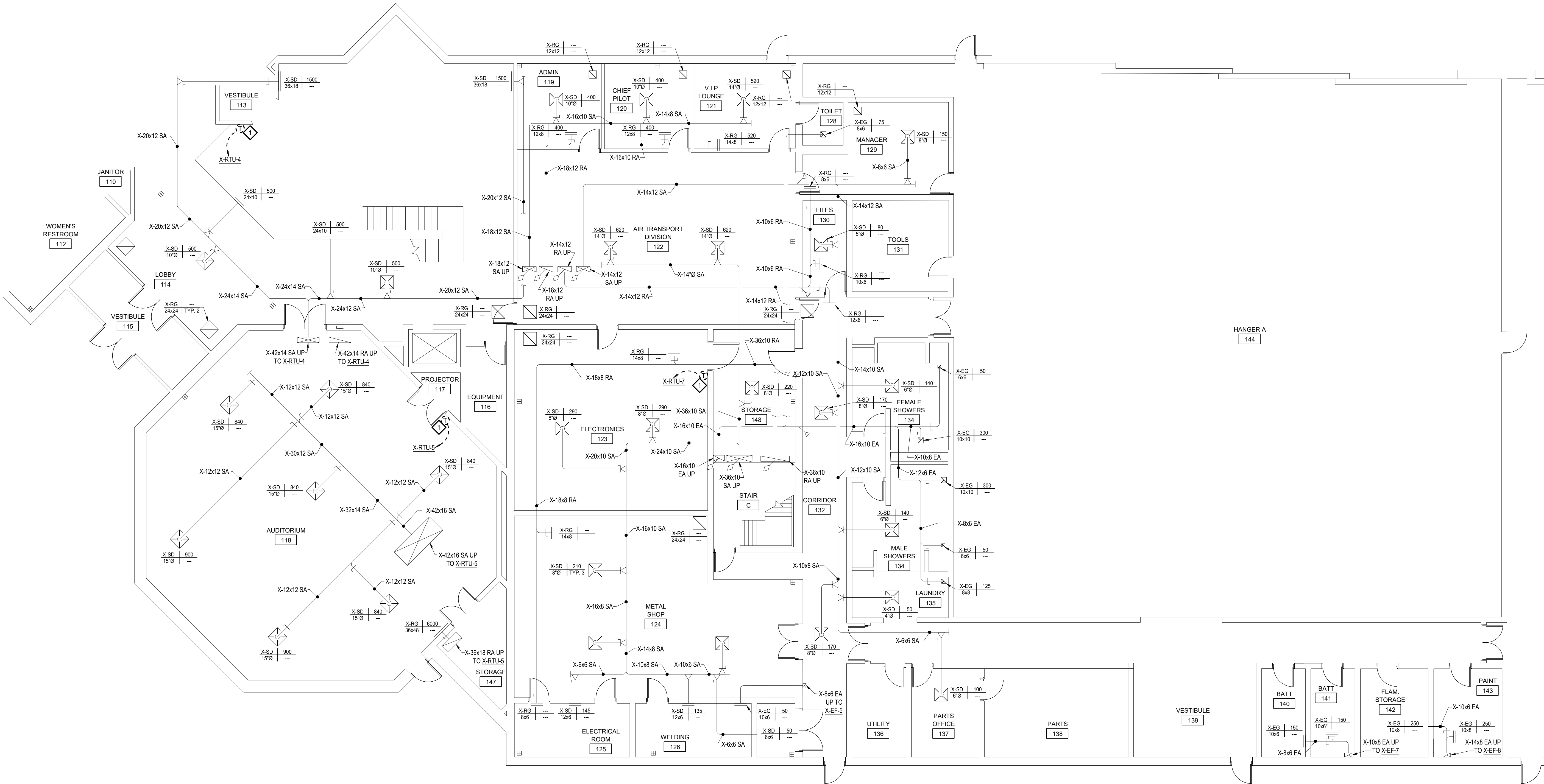
- CONTRACTOR IS TO NOT DEMOLISH ANY EXISTING EQUIPMENT OR ASSOCIATED MATERIALS UNTIL ALL OF THE REPLACEMENT EQUIPMENT, CONTROLS, AND OTHER COMPONENTS ARE RECEIVED AND READY TO BE INSTALLED.
- CONTRACTOR TO COMPLETE ALL ONSITE WORK BETWEEN 3/15/2027 AND 7/15/2027. OWNER WILL COORDINATE WITH CONTRACTOR ON EXACT DATES BETWEEN 3/15/2027 AND 5/15/2027 TO START ONSITE CONSTRUCTION DEPENDING ON THE WEATHER AND CONDITIONS INSIDE THE BUILDING FOR OCCUPANTS. THE PROJECT WILL BE COMPLETED IN (2) PHASES.
 - PHASE 1:**
 - CONTRACTOR TO COMPLETE THE PRE-CONSTRUCTION AIR SIDE TAB REPORT FOR ALL (9) ROOFTOP UNITS AND ASSOCIATED SUPPLY DIFFUSERS/RETURN GRILLES.
 - AFTER ALL AIR FLOW READINGS ARE TAKEN AND A PRE-CONSTRUCTION TAB REPORT IS COMPILED, CONTRACTOR TO DEMOLISH THE EXISTING (6) ROOFTOP UNITS, CONTROLS, CONTROL PANELS, AND ALL ASSOCIATED ACCESSORIES SHOWN ON THE CONSTRUCTION DOCUMENTS THAT SERVE THE NORTHEAST PORTION OF THE BUILDING (EXISTING THREE ROOFTOP UNITS, CONTROLS, AND ALL ASSOCIATED ACCESSORIES THAT SERVE THE WEST PORTION OF THE BUILDING ARE TO REMAIN FULLY OPERATIONAL).
 - CONTRACTOR TO INSTALL ALL (6) NEW ROOFTOP UNITS, CONTROLS, CONTROL PANELS, SENSORS, AND ALL ASSOCIATED ACCESSORIES SHOWN ON THE CONSTRUCTION DOCUMENTS THAT SERVE THE NORTHEAST PORTION OF THE BUILDING. CONTRACTOR TO HAVE ALL NEW ROOFTOP UNITS AND CONTROLS FULLY OPERATIONAL AND RE-BALANCE THE ASSOCIATED EXISTING SUPPLY DIFFUSERS/RETURN GRILLES TO THE CFM SHOWN ON THE NEW DRAWINGS.
 - PHASE 2:**
 - AFTER THE SCOPE OF WORK FOR THE (6) NORTHEAST IS FULLY COMPLETED, CONTRACTOR TO DEMOLISH THE EXISTING (3) ROOFTOP UNITS, CONTROLS, CONTROL PANELS, AND ALL ASSOCIATED ACCESSORIES SHOWN ON THE CONSTRUCTION DOCUMENTS THAT SERVE THE WEST PORTION OF THE BUILDING.
 - CONTRACTOR TO INSTALL ALL NEW (3) ROOFTOP UNITS, CONTROLS, CONTROL PANELS, SENSORS, AND ALL ASSOCIATED ACCESSORIES SHOWN ON THE CONSTRUCTION DOCUMENTS THAT SERVE THE WEST PORTION OF THE BUILDING. CONTRACTOR TO HAVE ALL NEW ROOFTOP UNITS AND CONTROLS FULLY OPERATIONAL AND RE-BALANCE THE ASSOCIATED EXISTING SUPPLY DIFFUSERS/RETURN GRILLES TO THE CFM SHOWN ON THE NEW DRAWINGS.



1 DOWNFLOW ROOF TOP UNIT DETAIL
SCALE: NTS

ROOFTOP UNIT SCHEDULE																		
TAG	MODEL	CFM	FAN HP (QTY)	MIN. OA CFM	E.S.P	COOLING				GAS HEATING MBH				ELECTRICAL			UNIT WEIGHT	COMMENTS
						MBH	TONS	EDB / EWB	LDB / LWB	INPUT (HIGH/LOW)	OUTPUT (HIGH/LOW)	EAT °F	LAT °F	VOLTS	PHASE	MCA		
RTU-1	YSK210A	6,500	3 (2)	1300	1.6	216.5	17.5	80.0/67.0	58.0/57.0	400 / 280.0	324 / 226.8	55.6	99.3	480	3	51	2795	1,2,3,4,5,6,7,8,9,10,11,12,13,14,15,16,17
RTU-2	YSK120A	4,000	4.6 (1)	450	1.4	126.5	10	80.0/67.0	57.4/56.7	240.0 / 168.0	194.4 / 136.0	62.8	107.4	480	3	34	1443	1,2,3,4,5,6,7,8,9,10,11,12,13,14,15,16,17,18
RTU-3	YSK150A	5,000	4.6 (1)	400	1.6	150.0	12.5	80.0/67.0	57.4/56.6	250.0 / 175.0	202.5 / 141.8	65.4	102.6	480	3	36	1654	1,2,3,4,5,6,7,8,9,10,11,12,13,14,15,16,17
RTU-4	YSK180A	6,000	3 (2)	1530	1.0	187.0	15	80.0/67.0	57.6/56.9	400.0 / 280.0	324.0 / 226.8	51.1	100.6	480	3	43	2765	1,2,3,4,5,6,7,8,9,10,11,12,13,14,15,16,17,18
RTU-5	YSK180A	6,000	3 (2)	1850	1.0	187.0	15	80.0/67.0	57.6/56.9	400.0 / 280.0	324.0 / 226.8	46.7	96.2	480	3	51	2765	1,2,3,4,5,6,7,8,9,10,11,12,13,14,15,16,17,19
RTU-6	YSK048A	1,400	1.5 (1)	125	1.6	49.0	4	80.0/67.0	56.2/55.3	130.0 / 91.0	105.3 / 73.7	64.7	128.9	480	3	17	892	1,2,3,4,5,6,7,8,9,10,11,12,13,14,15,16,17,18
RTU-7	YSK090A	3,000	3 (1)	350	1.6	93.7	7.5	80.0/67.0	57.2/56.8	200.0 / 140.0	162.0 / 113.4	62.4	111.9	480	3	25	1392	1,2,3,4,5,6,7,8,9,10,11,12,13,14,15,16,17
RTU-8	YSK090A	3,200	3 (1)	425	1.0	93.7	7.5	80.0/67.0	57.2/56.8	200.0 / 140.0	162.0 / 113.4	61.1	103.4	480	3	25	1392	1,2,3,4,5,6,7,8,9,10,11,12,13,14,15,16,17
RTU-9	YSK048A	1,400	1.5 (1)	310	1.0	49.0	4	80.0/67.0	56.2/55.3	130.0 / 91.0	105.3 / 73.7	53.8	123.1	480	3	17	892	1,2,3,4,5,6,7,8,9,10,11,12,13,14,15,16,17,19
NOTES:																		
1. BASED ON TRANE						6. MANUFACTURER PROVIDED PACKAGED CONTROLLER				11. INTEGRAL DISCONNECT BY MANU.				16. MODULATING HOT GAS REHEAT				
2. ESP INCLUDES 25" FOR DIRTY FILTER PLUS ECONOMIZER LOSSES						7. ENTHALPHY ECONOMIZER				12. DUAL SCROLL COMPRESSORS, 3-STAGE COOLING				17. BACNET INTERFACE CARD TO CONNECT TO DDC CONTROLS				
3. VARIABLE SPEED, DIRECT DRIVE SUPPLY FAN(S)						8. ROOF CURB ADAPTOR				13. HIGH GAS HEAT				18. OVERSIZED MOTOR				
4. 2-STAGE GAS BURNERS						9. UNPOWERED 120V CONVENIENCE BY MANU.				14. FLAT PLATE AVERAGING TEMPERATURE/HUMIDITY SENSOR(S)				19. SINGLE ZONE VAV SEQUENCE, VARIABLE SPEED FAN				
5. FACTORY INSTALLED UNIT MOUNTED POWER EXHAUST						10. DOWN FLOW SUPPLY AND RETURN				15. 2" MERV 8 CARBON PLEATED FILTER (BASED ON CAMFIL MODEL #CP-200)								

- NOTES:**
- BASED ON TRANE
 - ESP INCLUDES 25' FOR DIRTY FILTER PLUS ECONOMIZER LOSSES
 - VARIABLE SPEED, DIRECT DRIVE SUPPLY FAN(S)
 - 2-STAGE GAS BURNERS
 - FACTORY INSTALLED UNIT MOUNTED POWER EXHAUST
 - MANUFACTURER PROVIDED PACKAGED CONTROLLER
 - ENTHALPY ECONOMIZER
 - ROOF CURB ADAPTOR
 - UNPOWERED 120V CONVENIENCE BY MANU.
 - DOWN FLOW SUPPLY & RETURN
 - INTEGRAL DISCONNECT BY MANU.
 - DUAL SCROLL COMPRESSORS, 3-STAGE COOLING
 - HIGH GAS HEAT
 - FLAT PLATE AVERAGING TEMPERATURE/HUMIDITY SENSOR(S)
 - 15" 2" MERV 8 CARBON PLEATED FILTER (BASED ON CAMFI MODEL #CF-200)
 - MODULATING HOT GAS REHEAT
 - BAKNET INTERFACE CARD TO CONNECT TO DDC CONTROLS
 - OVERSIZE MOTOR
 - SINGLE ZONE VAV SEQUENCE, VARIABLE SPEED FAN





1. CONTRACTOR TO MODIFY EXISTING WALLS/CeilINGS AS REQUIRED TO COMPLETE THEIR WORK, CONTRACTOR TO PATCH, PRIME AND PAINT WALLS/CeilINGS AS REQUIRED TO MATCH EXISTING (NO DEMOLITION) WORK IS COMPLETE.
2. CONTRACTOR TO REMOVE AND REINSTALL EXISTING CEILING CEILING TILES AND PARTS AS REQUIRED TO COMPLETE THEIR WORK, CONTRACTOR IS RESPONSIBLE FOR REPLACEMENT OF DAMAGED/BROKEN CEILING TILES.
3. EXISTING EQUIPMENT, DUCTWORK, AND ALL ASSOCIATED ACCESSORIES TO REMAIN IN THEIR ENTIRETY UNLESS OTHERWISE NOTED.

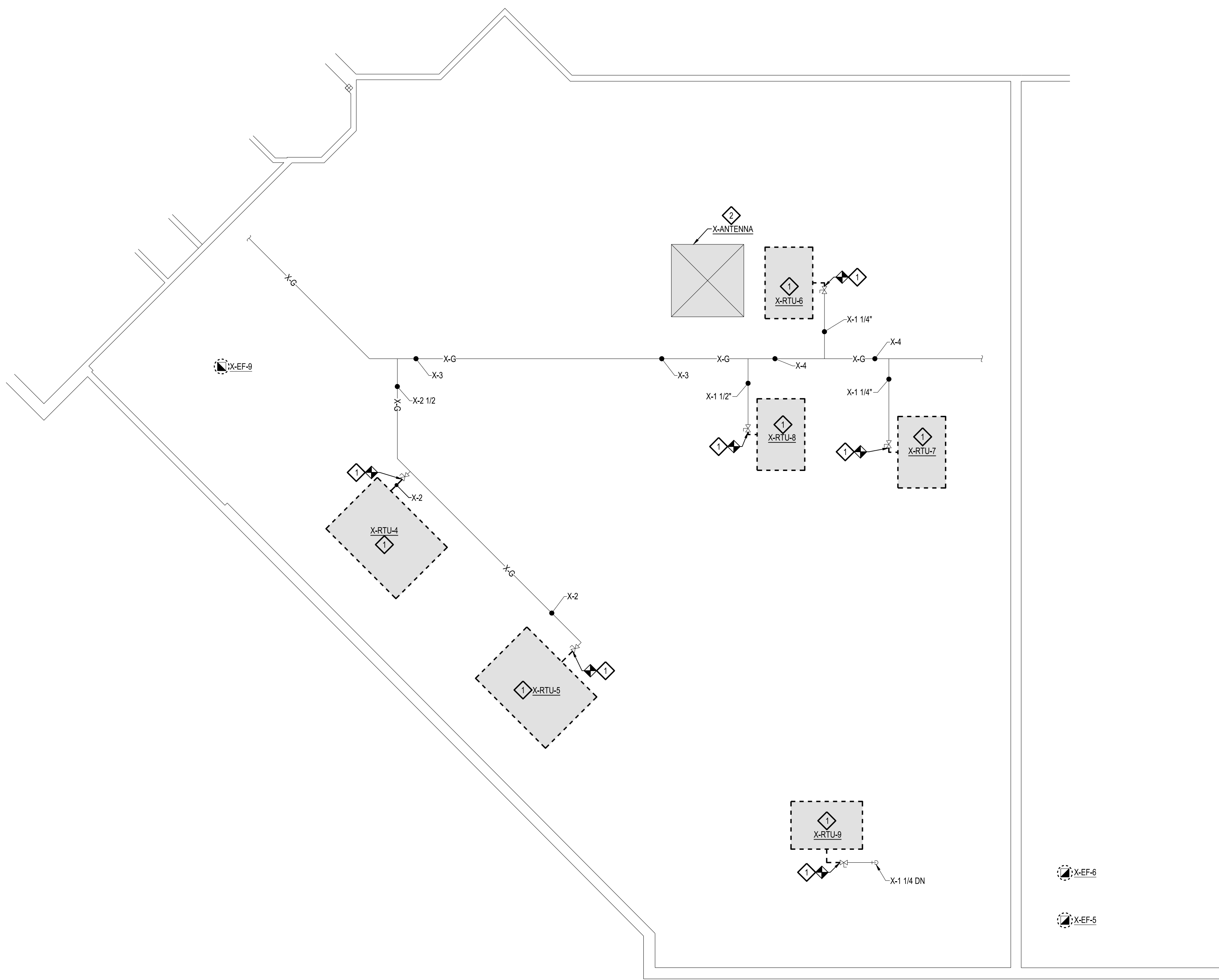
CONTRACTOR TO COMPLETE A PRE-CONSTRUCTION AIR SIDE TAB FOR ALL THE DIFFERENTIAL PRESSURES AND REPORTS TO SA, RA AND CA PRIOR TO BEGINNING ONSITE CONSTRUCTION, NO TABS ON THE EXHAUST GRILLES OR EXHAUST FANS
CONTRACTOR TO PROVIDE PRE-CONSTRUCTION AIR SIDE TAB REPORT TO MATRIX, DITD, AND MDO.
4. ALL DUCTWORK SHOWN IS ROUTED IN THE ABOVE CEILING SPACE, CHASES, OR

DISCONNECT, REMOVE, AND DEMO EXISTING ROOFTOP UNIT THERMOSTAT, CONTROLS, CONTROL WIRING, AND ALL ASSOCIATED ACCESSORIES IN THEIR ENTIRETY. CONTRACTOR TO PATCH, PRIME, AND PAINT WALL AS REQUIRED TO MATCH EXISTING WALL.

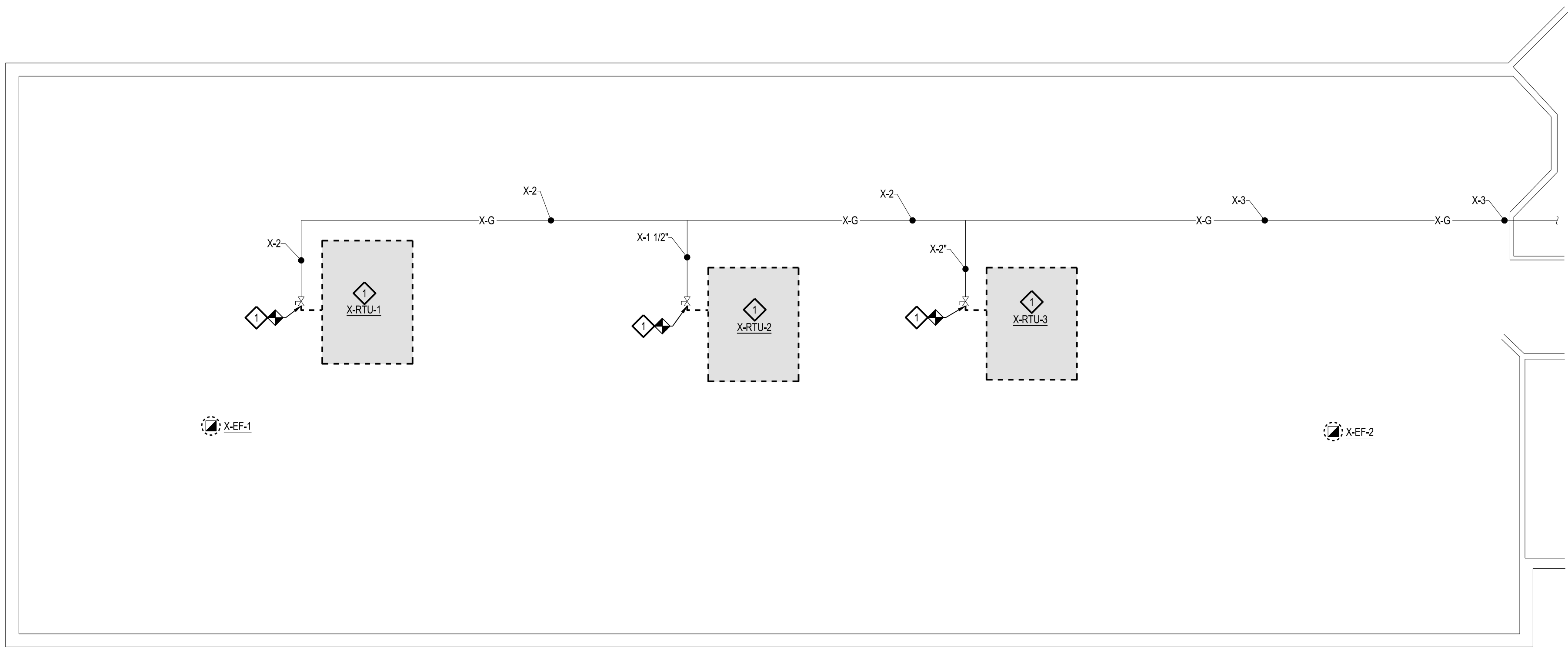
DISCONNECT, REMOVE, AND DEMO EXISTING CONTROL PANEL, CONTROLS, CONTROL WIRING, AND ALL ASSOCIATED ACCESSORIES IN THEIR ENTIRETY. CONTRACTOR TO PATCH, PRIME, AND PAINT EXISTING WALL AS REQUIRED TO MATCH EXISTING WALL.

DISCONNECT, REMOVE, AND DEMO EXISTING CONTROLS HEAD END COMPUTER, CONTROLS, CONTROL WIRING, AND ALL ASSOCIATED CONTROLS ACCESSORIES IN THEIR ENTIRETY IN THE MAINTENANCE MANAGERS OFFICE. THE MAINTENANCE MANAGERS OFFICE IS LOCATED ON THE SECOND FLOOR APPROXIMATELY 50' EAST OF ROOM MECHANICAL 230 WHERE THE EXISTING CONTROL PANELS ARE TO BE DEMOLISHED.





2 UNIT B - ROOF PLAN - MECHANICAL DEMOLITION
SCALE: 1/8" = 1'-0"



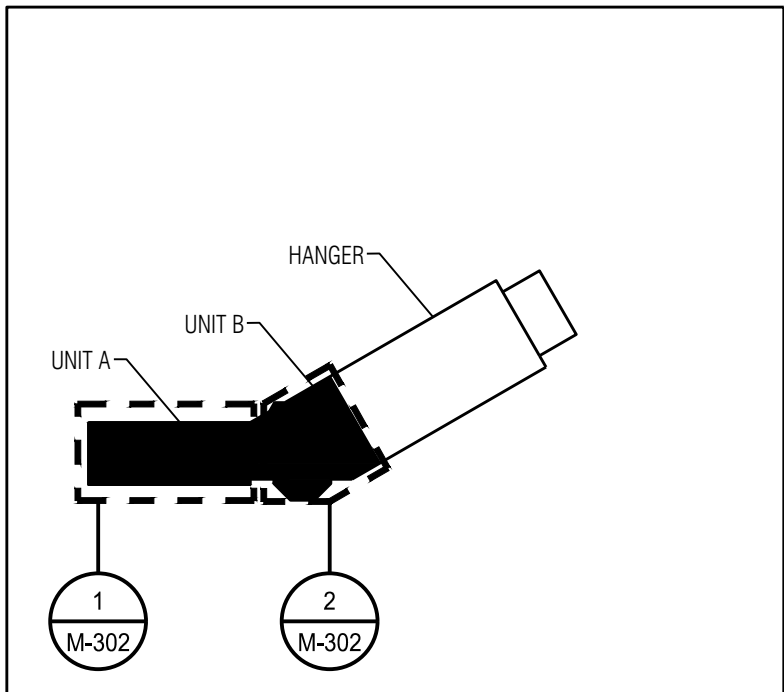
1 UNIT A - ROOF PLAN - MECHANICAL DEMOLITION
SCALE: 1/8" = 1'-0"

GENERAL DEMOLITION NOTES

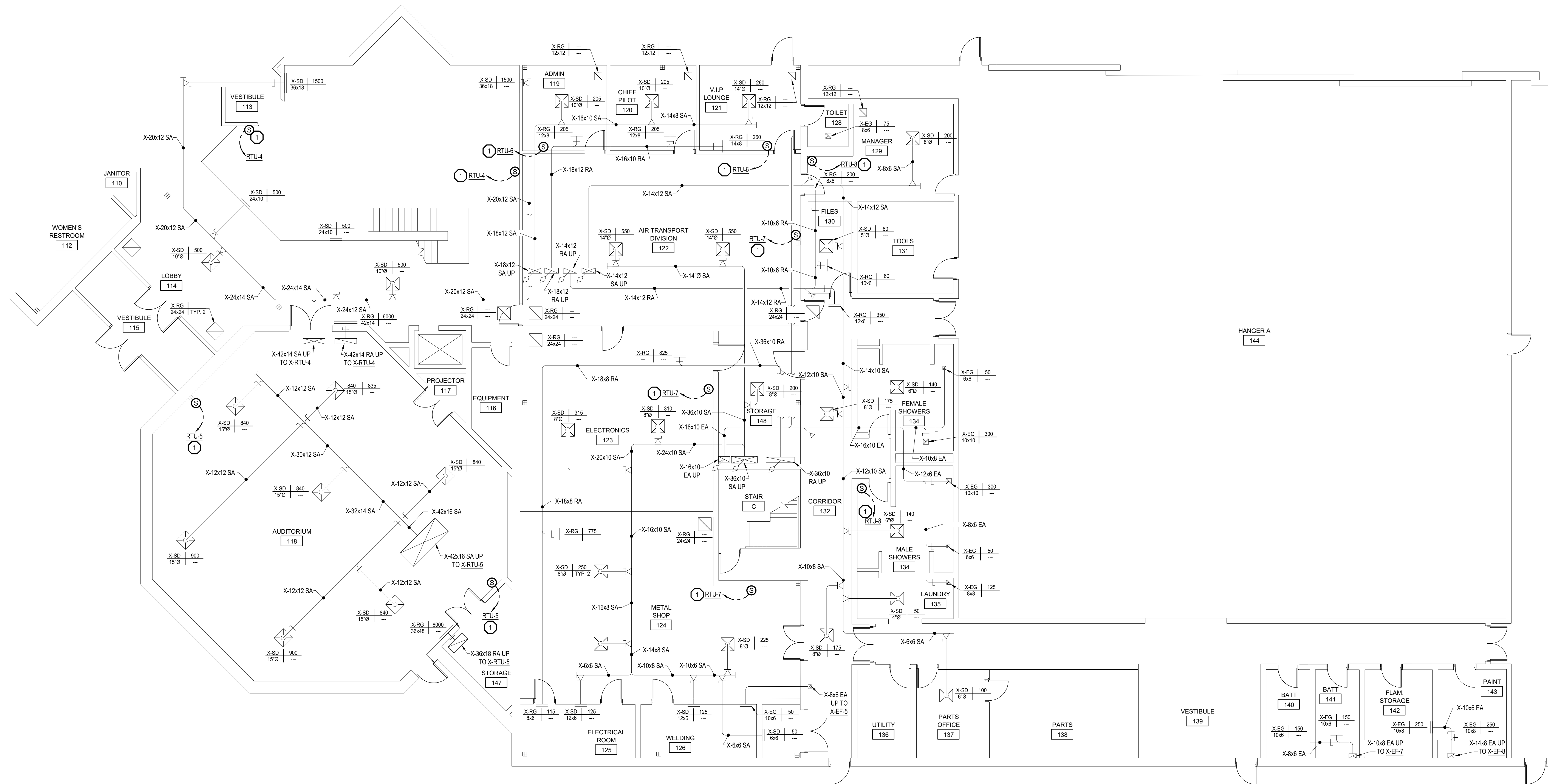
- CONTRACTOR TO PROTECT EXISTING ROOF THROUGHOUT THE DURATION OF CONSTRUCTION WITH PROTECTIVE COVERINGS WERE FOOT TRAFFIC AND/OR WORK IS OCCURRING. CONTRACTOR IS RESPONSIBLE FOR PATCHING/REPAIRING ANY DAMAGE TO THE ROOF AS REQUIRED TO MATCH EXISTING. SEAL WATER/TIGHT, AND MAINTAIN ANY EXISTING ROOF WARRANTIES.
- CONTRACTOR TO COMPLETE A PRE-CONSTRUCTION AIR SIDE TAB OF ALL THE DIFFUSERS/GRILLES AND ROOFTOP SA, RA, AND OA PRIOR TO BEGINNING ONSITE CONSTRUCTION. NO TAB ON THE EXHAUST GRILLES OR EXHAUST FANS. CONTRACTOR TO PROVIDE PRE-CONSTRUCTION AIR SIDE TAB REPORT TO MATRIX, DTMB, AND MDOT.

DEMOLITION NOTES

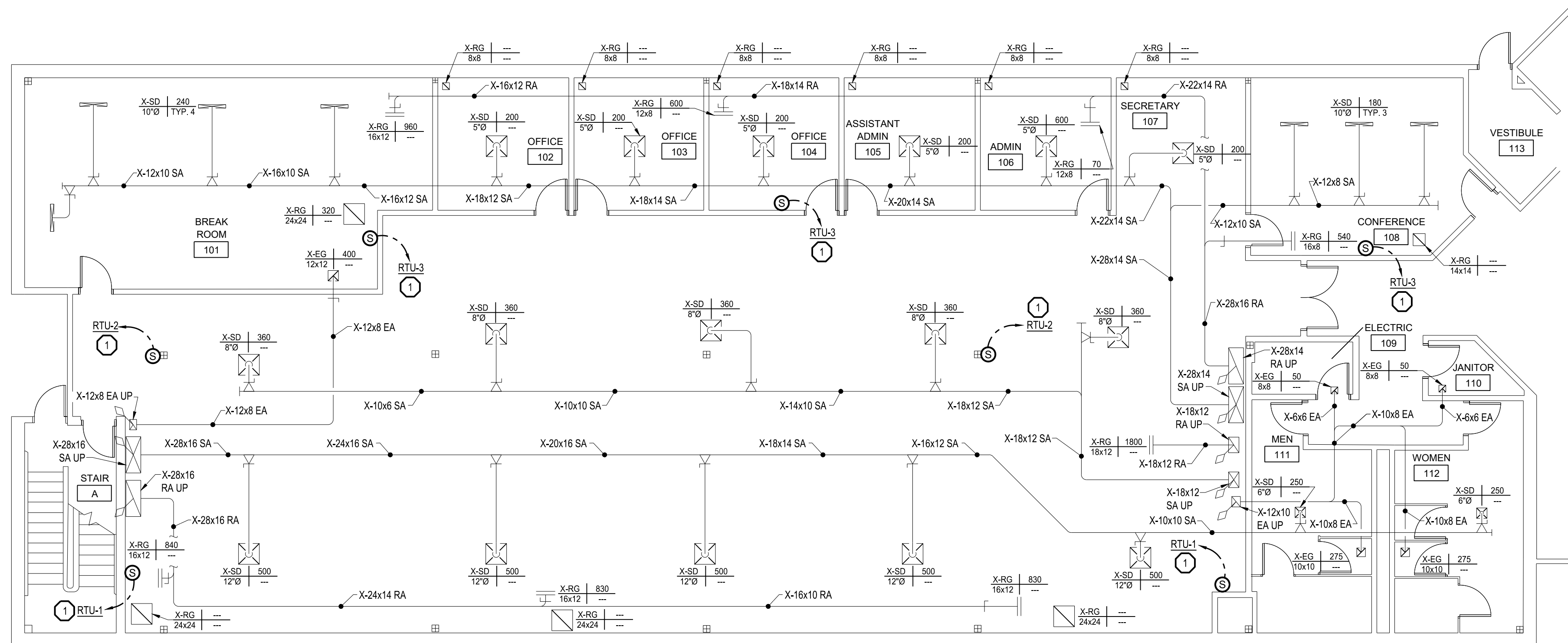
- DISCONNECT, REMOVE, AND DEMO EXISTING ROOFTOP UNIT, GAS PIPING, VALVES, FITTINGS, CONTROLS, CONTROL WIRING, AND ALL ASSOCIATED ACCESSORIES IN THEIR ENTIRETY TO THE EXTENTS SHOWN. MODIFY EXISTING GAS PIPING AS REQUIRED TO DEMOLISH EXISTING ROOFTOP UNIT AND MAKE NEW CONNECTION AS SHOWN ON NEW DRAWINGS. MODIFY EXISTING SUPPLY AND RETURN DUCTWORK AS NEEDED TO DEMOLISH EXISTING ROOFTOP UNIT AND TO CONNECT TO NEW ROOF TOP UNIT SHOWN ON NEW DRAWINGS. EXISTING ROOF CURB IS TO REMAIN AND BE REUSED AS SHOWN ON NEW DRAWINGS.
- EXISTING ANTENNA AND ALL ASSOCIATED ACCESSORIES TO REMAIN IN THEIR ENTIRETY.



KEY PLAN
SCALE: NTS



2 UNIT B - FIRST FLOOR PLAN - MECHANICAL NEW
SCALE: 1/8" = 1'-0"



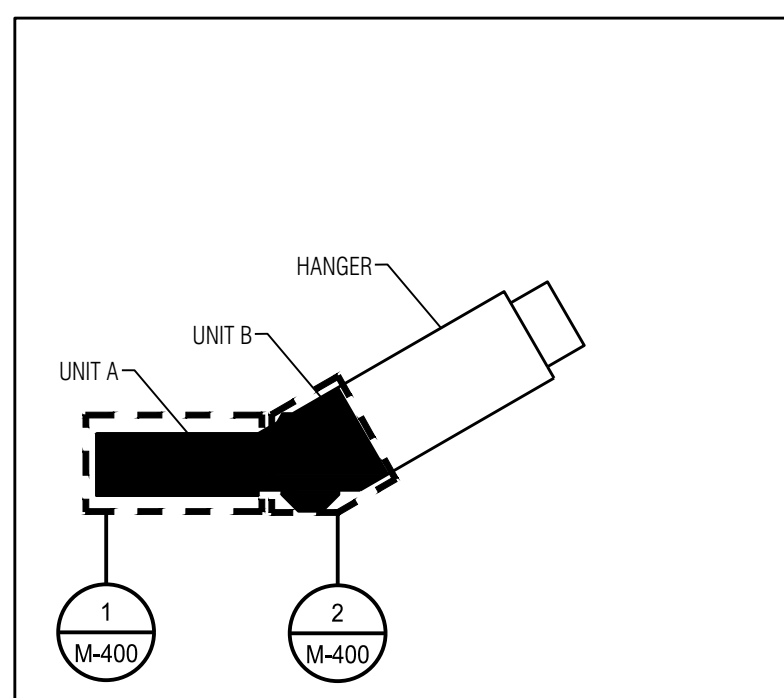
1 UNIT A - FIRST FLOOR PLAN - MECHANICAL NEW
SCALE: 1/8" = 1'-0"

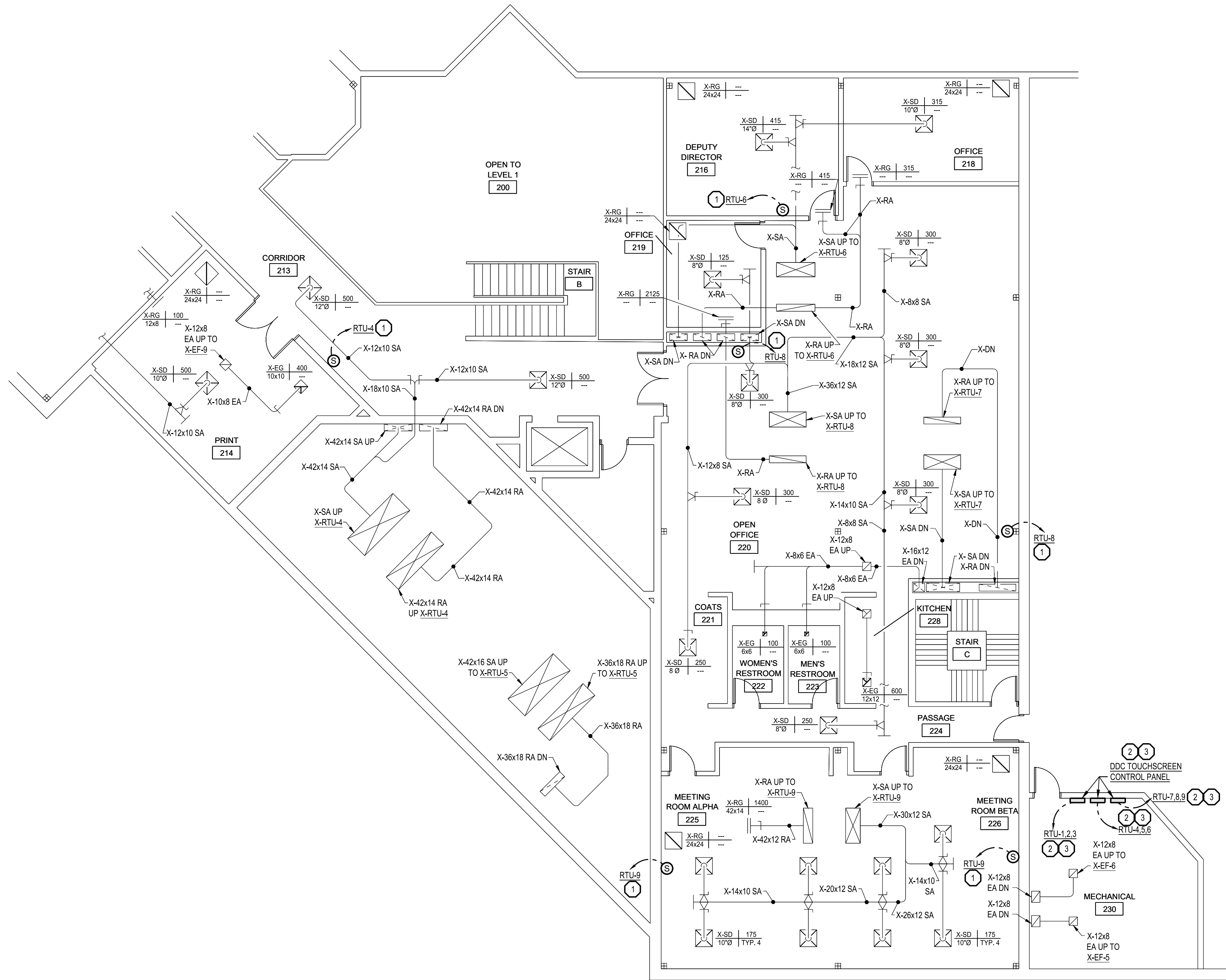
GENERAL MECHANICAL NOTES

- CONTRACTOR TO RE-BALANCE ALL EXISTING SUPPLY DIFFUSERS, RETURN GRILLES, AND EXHAUST GRILLES TO THE CPA SHOWN. CONTRACTOR TO COMPLETE FORMAL POST TAB REPORT TO SUBMIT AT THE END OF THE PROJECT. CONTRACTOR TO REMOVE AND REINSTALL EXISTING CEILING TILES AND CEILING GRID AS REQUIRED TO COMPLETE THEIR WORK. CONTRACTOR IS RESPONSIBLE FOR REPLACING ANY DAMAGED/BROKEN CEILING TILES.
- ALL NEW CONTROL WIRING IS TO BE INSTALLED/ROUTED IN WALLS, ABOVE CEILING SPACES, OR IN MECHANICAL SPACES. CONTRACTOR TO MODIFY WALLS AS REQUIRED TO COMPLETE THEIR WORK. CONTRACTOR TO PATCH, PRIME, AND PAINT WALLS AS REQUIRED TO MATCH EXISTING. CONTRACTOR TO REMOVE AND REINSTALL EXISTING CEILING TILES AS REQUIRED TO COMPLETE THEIR WORK. CONTRACTOR IS RESPONSIBLE FOR REPLACING ANY DAMAGED/BROKEN CEILING TILES.

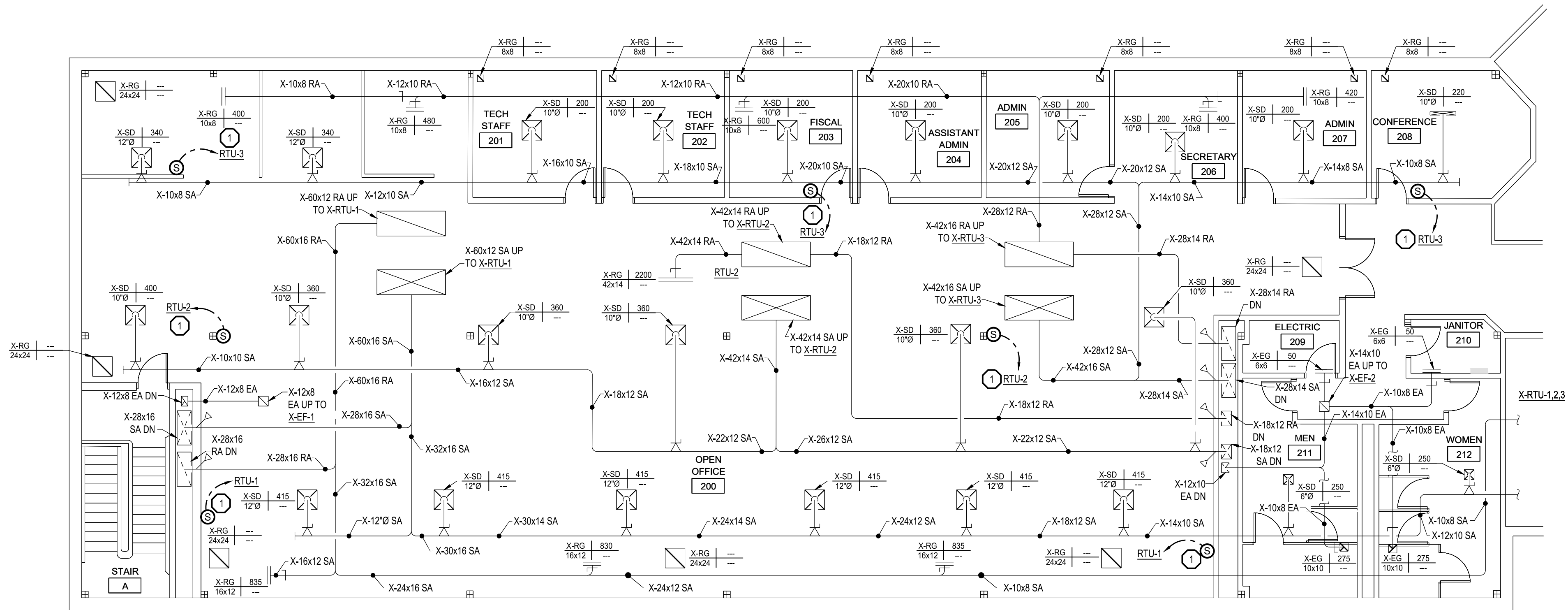
MECHANICAL KEYNOTES

- INSTALL NEW ROOFTOP UNIT FLAT PLATE AVERAGING TEMPERATURE AND HUMIDITY SENSOR, CONTROLS, CONTROL WIRING, AND ALL ASSOCIATED ACCESSORIES IN THE LOCATION SHOWN PER THE MANUFACTURER'S INSTALLATION INSTRUCTIONS. CONTRACTOR TO CONNECT NEW ROOFTOP UNIT AVERAGING TEMPERATURE/HUMIDITY SENSOR AND ALL ASSOCIATED ACCESSORIES TO THE NEW DDG CONTROL PANEL. CONTRACTOR TO PATCH, PRIME, AND PAINT EXISTING WALLS AS REQUIRED TO MATCH EXISTING.





UNIT B - SECOND FLOOR PLAN - MECHANICAL NEW
SCALE: 1/8" = 1'-0"



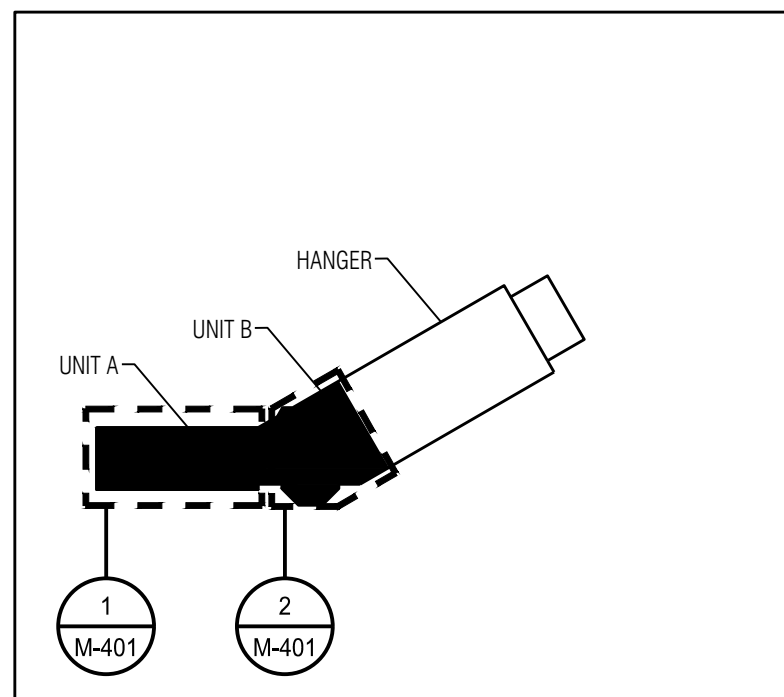
UNIT A - SECOND FLOOR PLAN - MECHANICAL NEW
SCALE: 1/8" = 1'-0"

GENERAL MECHANICAL NOTES

- CONTRACTOR TO RE-BALANCE ALL EXISTING SUPPLY DIFFUSERS, RETURN GRILLES, AND EXHAUST GRILLES TO THE CFM SHOWN. CONTRACTOR TO COMPILE FORMAL POST TAB REPORT TO SUBMIT AT THE END OF THE PROJECT. CONTRACTOR TO REMOVE AND REINSTALL EXISTING CEILING TILES AND CEILING GRID AS REQUIRED TO COMPLETE THEIR WORK. CONTRACTOR IS RESPONSIBLE FOR REPLACING ANY DAMAGED/BROKEN CEILING TILES.
- ALL NEW CONTROL WIRING IS TO BE INSTALLED/ROUTED IN WALLS, ABOVE CEILING SPACES, OR IN MECHANICAL SPACES. CONTRACTOR TO MODIFY WALLS AS REQUIRED TO COMPLETE THEIR WORK. CONTRACTOR TO PATCH, PRIME, AND PAINT WALLS AS REQUIRED TO MATCH EXISTING. CONTRACTOR TO REMOVE AND REINSTALL EXISTING CEILING TILES AS REQUIRED TO COMPLETE THEIR WORK. CONTRACTOR IS RESPONSIBLE FOR REPLACING ANY DAMAGED/BROKEN CEILING TILES.

MECHANICAL KEYNOTES

- INSTALL NEW ROOFTOP UNIT FLAT PLATE AVERAGING TEMPERATURE AND HUMIDITY SENSOR, CONTROLS, CONTROL WIRING, AND ALL ASSOCIATED ACCESSORIES IN THE LOCATION SHOWN PER THE MANUFACTURER'S INSTALLATION INSTRUCTIONS. CONTRACTOR TO CONNECT NEW ROOFTOP UNIT AVERAGING TEMPERATURE/HUMIDITY SENSOR AND ALL ASSOCIATED ACCESSORIES TO THE NEW DDC CONTROL PANEL. CONTRACTOR TO PATCH, PRIME, AND PAINT EXISTING WALLS AS REQUIRED TO MATCH EXISTING.
- INSTALL NEW DDC TOUCHSCREEN CONTROL PANEL, CONTROL WIRING, AND ALL ASSOCIATED ACCESSORIES IN THE LOCATION SHOWN PER THE MANUFACTURER'S INSTALLATION INSTRUCTIONS.
- CONTRACTOR TO PROVIDE NEW BAS LAPTOP, CONTROLS, CONTROL WIRING, AND ALL ASSOCIATED ACCESSORIES PER THE MANUFACTURER'S INSTALLATION INSTRUCTIONS. CONTRACTOR TO PROVIDE ALL CONTROL DEVICES AND ACCESSORIES REQUIRED FOR THE BAS LAPTOP TO CONNECT TO THE DDC CONTROL PANEL/DOC CONTROL SYSTEM TO HAVE THE BAS LAPTOP MONITOR/ADJUST ALL FRONT-END GRAPHICS, SETPOINTS, CONTROL POINTS, AND ALARMS LISTED IN THE SEQUENCE OF OPERATIONS. THE MAINTENANCE MANAGER'S OFFICE IS LOCATED ON THE SECOND FLOOR APPROXIMATELY 90' EAST OF ROOM MECHANICAL 230 WHERE THE DDC CONTROL PANELS ARE INSTALLED.



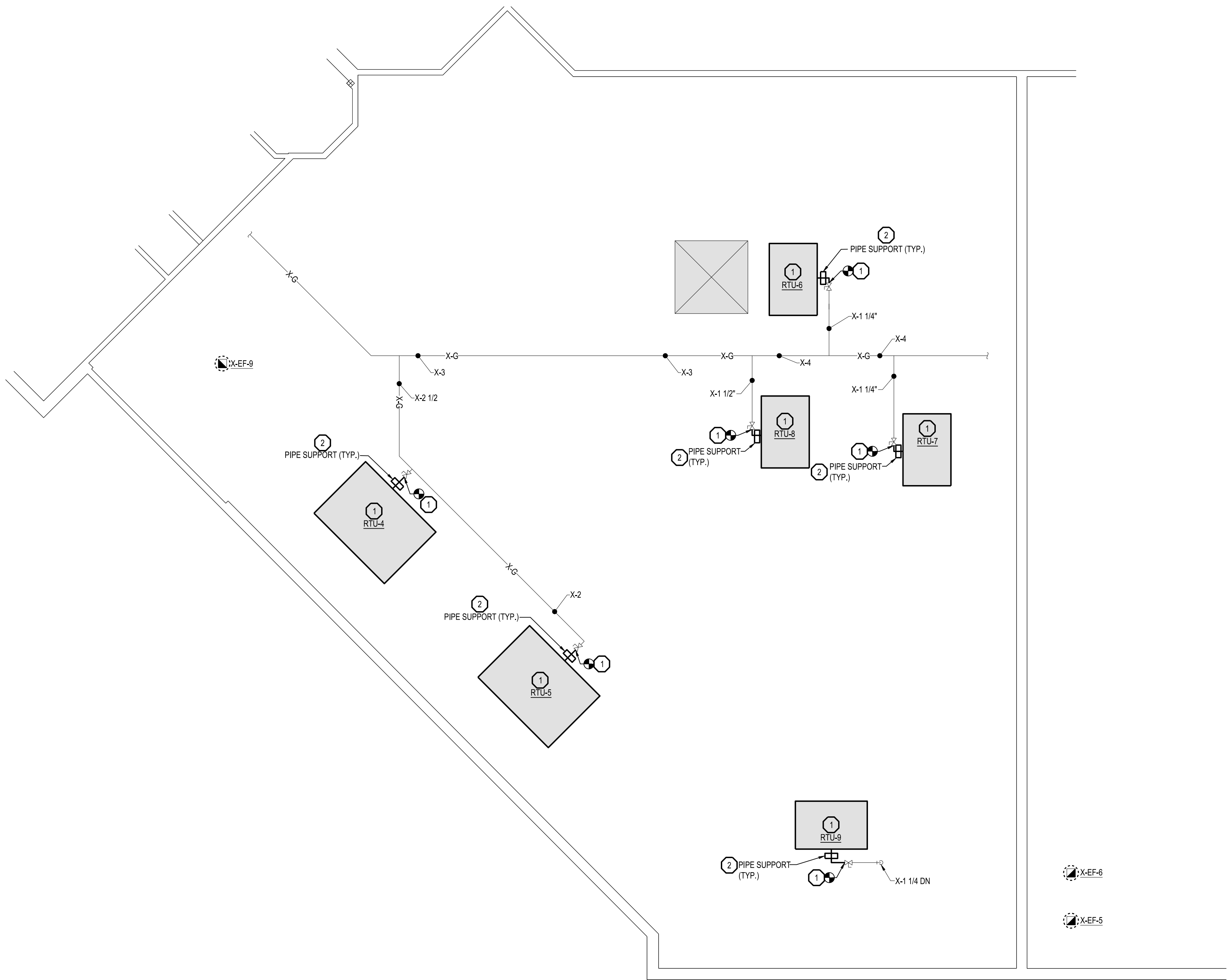
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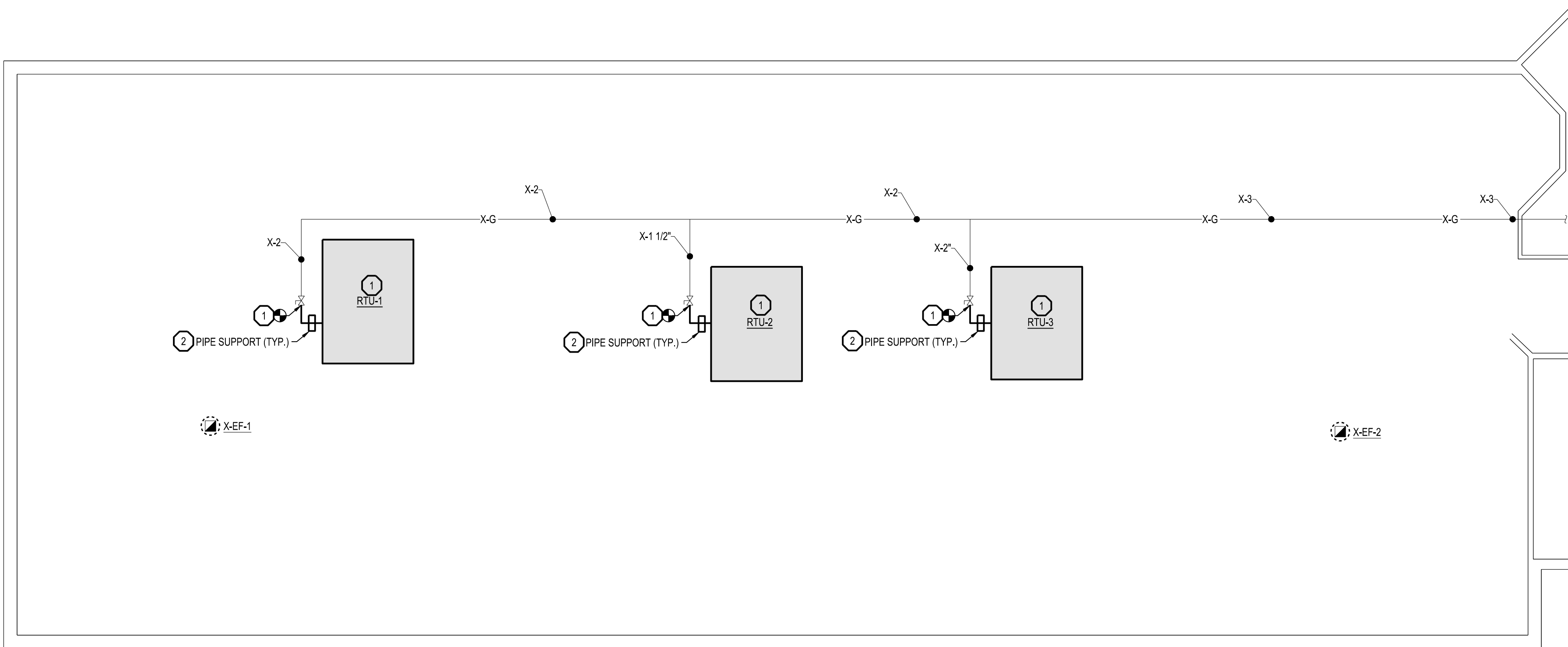
PARTIAL SECOND FLOOR
PLAN - MECHANICAL NEW

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2 UNIT B - ROOF PLAN - MECHANICAL NEW
SCALE: 1/8\" = 1'-0"



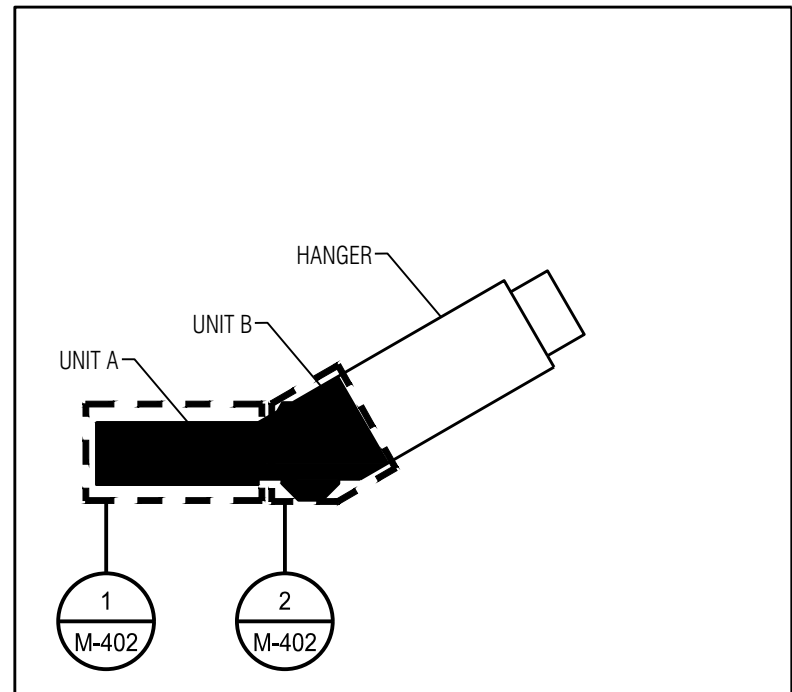
1 UNIT A - ROOF PLAN - MECHANICAL NEW
SCALE: 1/8\" = 1'-0"

GENERAL MECHANICAL NOTES

- CONTRACTOR TO PROTECT EXISTING ROOF THROUGHOUT THE DURATION OF CONSTRUCTION WITH PROTECTIVE COVERINGS WERE FOOT TRAFFIC AND/OR WORK IS OCCURRING. CONTRACTOR IS RESPONSIBLE FOR PATCHING/REPAIRING ANY DAMAGE TO THE ROOF AS REQUIRED TO MATCH EXISTING. SEAL WATERTIGHT, AND MAINTAIN ANY EXISTING ROOF WARRANTIES.
- NEW GAS PIPING AND ASSOCIATED FITTINGS ARE TO MATCH EXISTING GAS PIPING SIZE.
- CONTRACTOR MUST FOLLOW ALL PROVIDED FAA RULES/REGULATIONS FOR USE OF A CRANE NEAR THE AIRPORT. CONTRACTOR TO PROVIDE DETAIL CRANE PICK PLAN FOR FAA REVIEW/APPROVAL PRIOR TO COMPLETING THE CRANE PICKS.

MECHANICAL KEYNOTES

- INSTALL NEW ROOFTOP UNIT, GAS PIPING, VALVES, FITTINGS, CONTROLS, CONTROL WIRING, CURB ADAPTER, AND ALL ASSOCIATED ACCESSORIES IN THE LOCATION SHOWN PER THE MANUFACTURER'S INSTALLATION INSTRUCTIONS. CONTRACTOR TO MODIFY EXISTING CURB AS REQUIRED TO INSTALL NEW CURB ADAPTER, MODIFY EXISTING SUPPLY AND RETURN DUCTWORK AS NEEDED TO CONNECT TO NEW ROOFTOP UNIT. CONTRACTOR TO CONNECT NEW ROOFTOP UNIT AND ALL ASSOCIATED ACCESSORIES TO THE NEW DDC CONTROL PANEL. PRIME AND PAINT GAS PIPING YELLOW TO MATCH EXISTING.
- SUPPORT GAS PIPING ON ROOF WITH PIPE SUPPORTS BASED ON MIRC HS-RAN-1 OR APPROVED EQUIVALENT. SPACE PIPING SUPPORTS PER MANUFACTURER'S RECOMMENDATIONS. INSTALL PIPE SUPPORT PAD OR MANUFACTURER APPROVED EQUIVALENT BETWEEN ROOF AND PIPE SUPPORT.



KEY PLAN
SCALE: NTS

ABBREVIATIONS LEGEND

AC	AMPS	GC	GENERAL CONTRACTOR	P	POLE
ACU-	ABOVE COUNTER	GI	GROUND FAULT INTERRUPTER	P	PUMP
ACU-	AIR CONDITIONING UNIT	GD	GROUND	PB	PULL BOX
ADJ	ADJUSTED FLOOR	H		PNL	PANEL
AHJ	AUTHORITY HAVING JURISDICTION	HI	HUMIDIFIER	PRV-	POWER ROOF VENTILATOR
AHU	AIR HANDLING UNIT	HP	HIGH INTENSITY DISCHARGE	PVC	POLY VINYL CHLORIDE
ANC	AMPS INTERRUPTING CAPACITY	HD	HAND-OFF-AUTO	PWR	POWER
AS	ABOVE SHELF	HIP	HORSEPOWER		
ATS	AUTOMATIC TRANSFER SWITCH	HR	HOUR		
		HVAC	HEATING/VENTILATING/AIR CONDITIONING	RECEPT	RECEPTACLE
B-	BOILER	IG	ISOLATED GROUND	RTU-	RIGID GALVANIZED STEEL CONDUIT
BC	BELOW COUNTER	IMC	INTERMEDIATE METAL CONDUIT		ROOF TOP UNIT
BLDG	BUILDING	INC	INTERMEDIATE METAL CONDUIT	SF-	SUPPLY FAN
		JB	JUNCTION BOX	SPEC	SPECIFICATIONS
CHLR-	CHILLER	JC		SW	SWITCH
CND (C)	CONDUIT	LB	JUNCTION BOX	SWBD	SWITCHBOARD
CKT	CIRCUIT	LC	LIGHT CONTROL		
CKT BKR	CIRCUIT BREAKER	LT	LIGHT	TCC	TEMPERATURE CONTROL CONTRACTOR
CT-	COOLING TOWER	LTG	LIGHTING	TR	TAMPER PROOF RECEPTACLE
CU-	CONDENSING UNIT	LT FLEX	LIQUID TIGHT FLEXIBLE METAL CONDUIT	TS	TAMPER PROOF SWITCH
CUH-	CABINET UNIT HEATER			TYP	TYPICAL
		MAX	MAXIMUM		
DFU-	DUCT FURNACE	MC	MECHANICAL CONTRACTOR	UH-	UNDER FLOOR
DISCT	DISCONNECT	MCC	MOTOR CONTROL CENTER	UH-	UNIT HEATER
DWG	DRAWING	MCC	MOTOR CONTROL CENTER	UNO	UNDERWRITERS' LABORATORIES, INC.
DWH-	DOMESTIC WATER HEATER	MIN	MINIMUM		UNLESS NOTED OTHERWISE
		MLO	MIN LUG ONLY		
		MT	MOUNT		
EBB-	ELECTRIC BASEBOARD	MTD	MOUNTED	V	VOLTS
ECB	ELECTRICAL CONTRACTOR	MT	MOUNTING	V	VERIFY LOCATION WITH OWNER
EF-	EXHAUST FAN	MUJL-	MAKE-UP AIR UNIT		
EM	EMERGENCY			W	WATTS
EMT	ELECTRICAL METALLIC TUBING	NC	NORMALLY CLOSED	W/	WITH
EW	ELECTRIC WATER COOLER	NIC	NOT IN CONTRACT	W/O	WITHOUT
EXIST (E)	EXISTING	NL	NIGHT LIGHT	W/	WEATHER PROOF
		NO	NORMALLY OPEN		
		NTS	NOT TO SCALE	XFMR	TRANSFORMER
FLA	FULL LOAD AMPS				
FLEX	FLEXIBLE CONDUIT				
FLR	FLOOR				
FLUOR	FLUORESCENT				
FSES	FOOD SERVICE EQUIP. SUPPLIER				
FIS	FIRE/SMOKE				
FJ-	FURNACE				

GENERAL ELECTRICAL NOTES

1. ALL WALL AND FLOOR PENETRATIONS ARE TO BE SEALED TO MAINTAIN ORIGINAL RATING.
2. ALL CONDUITS TO BE FIELD ROUTED ALONG EXISTING PIPING AND STRUCTURAL STEEL.
3. THE DIVISION 26 CONTRACTOR SHALL VISIT THE PROJECT AND DETERMINE THE EXACT EXTENT OF THE DEMOLITION WORK REQUIRED BEFORE BIDDING THE PROJECT.
4. REMOVE ALL EXISTING OBSOLETE EXPONENT CONDUIT, WIRE AND UNUSED EQUIPMENT WHERE WORK IS BEING DONE EXCEPT ITEMS NOTED OTHERWISE.
5. WHERE BUILDING SURFACES ARE DAMAGED BY THE REMOVAL OF OLD WORK, SURFACES SHALL BE PATCHED TO MATCH ADJACENT.
6. EXISTING WORK WHICH IS PRESENTLY CONCEALED AND WHICH WILL REMAIN CONCEALED AND DOES NOT INTERFERE WITH ANY NEW WORK OF ANY TRADE NEED NOT BE REMOVED. HOWEVER, ALL CONDUIT SHALL BE CARRIED BELOW FINISH SURFACE AND THEN PATCHED TO MATCH, OR AS NOTED.
7. EXISTING OPENINGS, WHICH ARE TO BE REUSED, SHALL BE MODIFIED OR ENLARGED TO SUIT THE NEW SYSTEMS AS REQUIRED. PROVIDE ALL REQUIRED CUTTING AND PATCHING.
8. IF ASBESTOS IS PRESENT, IT WILL BE REMOVED OR RENDERED HARMLESS UNDER SEPARATE CONTRACT BY THE OWNER.
9. THE DIVISION 26 CONTRACTOR SHALL BE RESPONSIBLE FOR PATCHING THE EXISTING WALLS TO MATCH THE ADJACENT SURFACES BEHIND ALL SURFACE MOUNTED EQUIPMENT.
10. CONTRACTOR SHALL FIELD VERIFY ALL EQUIPMENT VOLTAGES AND LOADS PRIOR TO INSTALLING SERVICE TO EQUIPMENT.
11. DRAWINGS ARE BASED ON DISCREPANCY RECORD DOCUMENT AND CASUAL FIELD OBSERVATION. REPORT ANY DISCREPANCIES TO ENGINEER FOR CLARIFICATION.

ELECTRICAL SYMBOLS LEGEND

OUTLETS		FIXTURES		SERVICE AND EQUIPMENT	
⊕	SINGLE RECEPTACLE (120 VOLT)	☐	LIGHT FIXTURE	Ⓢ	TRANSIENT VOLTAGE SURGE SUPPRESSION
⊕	DUPLEX RECEPTACLE	☐	STRIP FIXTURE	Ⓢ	VARIABLE FREQUENCY DRIVE
⊕	EMERGENCY RECEPTACLE	☐	EMERGENCY LIGHT FIXTURE	☐	TRANSFORMER
⊕	DOUBLE DUPLEX RECEPTACLE	☐	IN-GRADE LIGHT FIXTURE	☐	DISCONNECT SWITCH (fuse size shown)
⊕	FLUSH FLOOR BOX	☐	SPOTLIGHT (number of heads shown)	☐	MAGNETIC STARTER (BY v/c U.O.N.)
⊕	SURFACE FLOOR BOX	☐	EXIT SIGN (face & direction as shown)	☐	COMB. STARTER (BY v/c U.O.N.)
⊕	SPECIAL EQUIPMENT RECEPTACLE	☐	WALL MOUNT LIGHT FIXTURE	☐	PANELBOARD, SURFACE MOUNTED
▼	TELEPHONE OUTLET	☐	CEILING LIGHT FIXTURE	☐	PANELBOARD, FLUSH MOUNTED
▼	DATA OUTLET	☐	TRACK & FIXTURE	☐	WEATHERHEAD
▼	TELEPHONE / DATA OUTLET	☐	STREET TYPE POLE FIXTURE	☐	UTILITY METER, AS REQUIRED
Ⓢ	POWER POLE	☐	POLE MOUNTED LIGHT FIXTURE	☐	CURRENT TRANSFORMERS
☐	JUNCTION BOX	☐	EXTERIOR WALL MOUNT LIGHT FIXTURE	☐	GENERATOR, KW SHOWN
☐	WALL JUNCTION BOX	☐	WALLPACK LIGHT FIXTURE	☐	TELEPHONE TERMINAL BOARD
☐	PULL JUNCTION BOX	☐	SPECIAL PURPOSE LIGHT FIXTURE	☐	GROUND CONNECTION PER N.E.C.
☐	UNDERFLOOR JUNCTION BOX	☐	HIGH BAY LIGHT FIXTURE	☐	WIREWAY
☐	CEILING MOUNTED WIFI	☐	EMERGENCY EGRESS LIGHT FIXTURE (number of heads shown)	☐	TRANSFER SWITCH
		☐	DOCK LIGHT FIXTURE	☐	ENCLOSED CIRCUIT BREAKER
		☐		☐	CAPACITOR
SWITCHES		CIRCUITRY AND RACEWAYS		CONTROL	
Ⓢ	SINGLE-POLE SWITCH	—	CONDUIT INSTALLED (BY E.C.)	☐	THERMOSTAT
Ⓢ	THREE-WAY SWITCH	---	CONDUIT INSTALLED (BY OTHERS)	☐	HUMIDISTAT
Ⓢ	FOUR-WAY SWITCH	→	CONDUIT STUB UP	☐	PHOTOCELL (voltage as required)
Ⓢ	SWITCH WITH PILOT LIGHT	→	CONDUIT STUB DOWN	☐	TIME CLOCK (24 hour on line)
Ⓢ	THERMAL OVERLOAD SWITCH	→	HOME RUN (with circuit numbers)	☐	PUSHBUTTON STATION (number of buttons indicated)
Ⓢ	MANUAL MOTOR SWITCH	→	END OF CONDUIT RUN	☐	CONTROL TRANSFORMER
Ⓢ	KEY SWITCH	→	END OF CONDUIT RUN, CAP AND STAKE	☐	LIGHTING CONTACTOR
Ⓢ	TIME SWITCH	→	"CONDUIT RUN CONTINUES" INDICATION	☐	IRRIGATION CONTROLLER (120 volt xVxA connection by v/c)
☐	DIMMER SWITCH	→	FLEXIBLE DIGITALS/CONNECTIONS	☐	WALL MOUNT DUAL TECHNOLOGY SENSOR
		→	WIREMOLD AS SPECIFIED	☐	SENSOR SWITCH WW-PDT-16 SERIES
		→	PLUMBLOM AS SPECIFIED	☐	OCCUPANCY SENSOR / PHOTOCELL
		→	BD - BUS DUCT	☐	SENSOR SWITCH CMR-PC-ACC SERIES
		→	UNDERFLOOR DUCT	☐	ULTRASONIC SENSOR - 360° - 2 CIRCUIT
		→	SOUND and SIGNAL	☐	SENSOR SWITCH CMR-PDT-10-2P
		→	SPEAKER	☐	ULTRASONIC SENSOR - 360° - 500 SQ FT
		→	WALL MOUNTED SPEAKER	☐	SENSOR SWITCH CMR-PDT SERIES
		→	WALL MOUNTED SPEAKER / CLOCK COMBO	☐	SWITCH STYLE OCCUPANCY SENSOR
		→	SINGLE FACE CLOCK	☐	SENSOR SWITCH WSD-PDT SERIES
		→	DUAL FACE CLOCK	☐	POWER PACK
		→	VIDEO INPUT	☐	SENSOR SWITCH MP20 SERIES
		→	AUDIO / VIDEO INPUT	☐	DIGITAL TIME SWITCH MP20-400
		→	BELL	☐	FIRE ALARM
		→	VOLUME CONTROL	☐	SMOKE DETECTOR
		→	BUZZER	☐	HEAT DETECTOR
		→	CHIME	☐	DUCT SMOKE DETECTOR
		→	TELEVISION OUTLET	☐	DUCT SMOKE DETECTOR
		→	MICROPHONE OUTLET	☐	HORN
		→	INTERCOM OUTLET	☐	HORN & LIGHT
		→	CAMERA	☐	SPEAKER
		→	DOOR CONTACT	☐	SPEAKER & LIGHT
		→	MOTION DETECTOR	☐	PULL STATION
		→	BEAM DETECTOR	☐	FIRE ALARM CONTROL PANEL
		→	KEY PAD	☐	ANNUNCIATOR PANEL
		→	SECURITY SYSTEM CONTROL PANEL	☐	END OF LINE DEVICE
		→	CCTV CONTROL PANEL	☐	REMOTE INDICATING LIGHT, WALL MTD.
		→	CARD READER	☐	REMOTE INDICATING LIGHT, CLG. MTD.
		→	STUDENT STATION	☐	MAGNETIC DOOR HOLDER
		→	ADMINISTRATION STATION	☐	FIREFIGHTER COMMUNICATION JACK
		→	TEACHER STATION	☐	FLOW SWITCH (furnished by FPI/C)
		→	GLASS BREAK	☐	TAMPER SWITCH (furnished by FPI/C)
		→		☐	VISUAL ONLY UNIT
		→		☐	FIRE CONTROL POWER SUPPLY
		→		☐	MONITOR MODULE
		→		☐	CONTROL MODULE
		→		☐	CARBON MONOXIDE DETECTOR

DEMOLITION NOTES

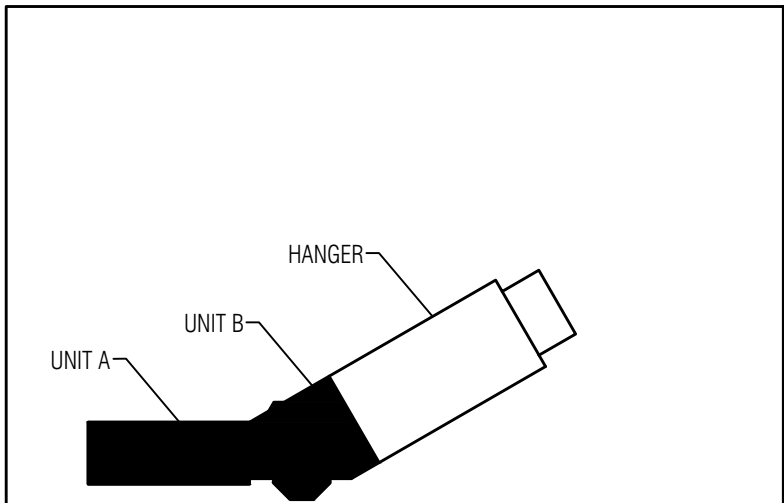
EXISTING EQUIPMENT TO REMAIN.

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 **UNIT B - FIRST FLOOR PLAN - ELECTRICAL DEMOLITION**
SCALE: 1/8" = 1'-0"



 **KEY PLAN**
SCALE: NTS

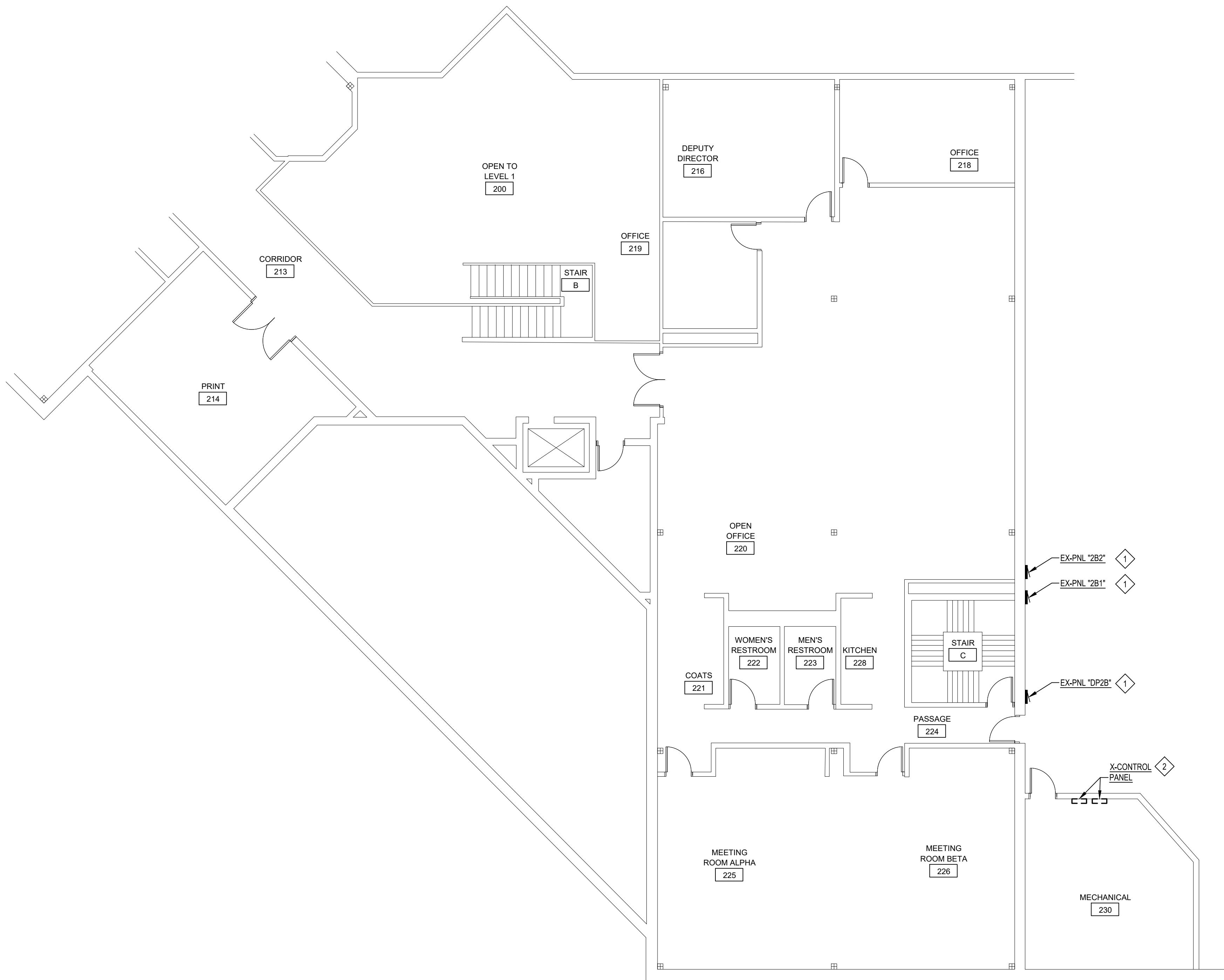
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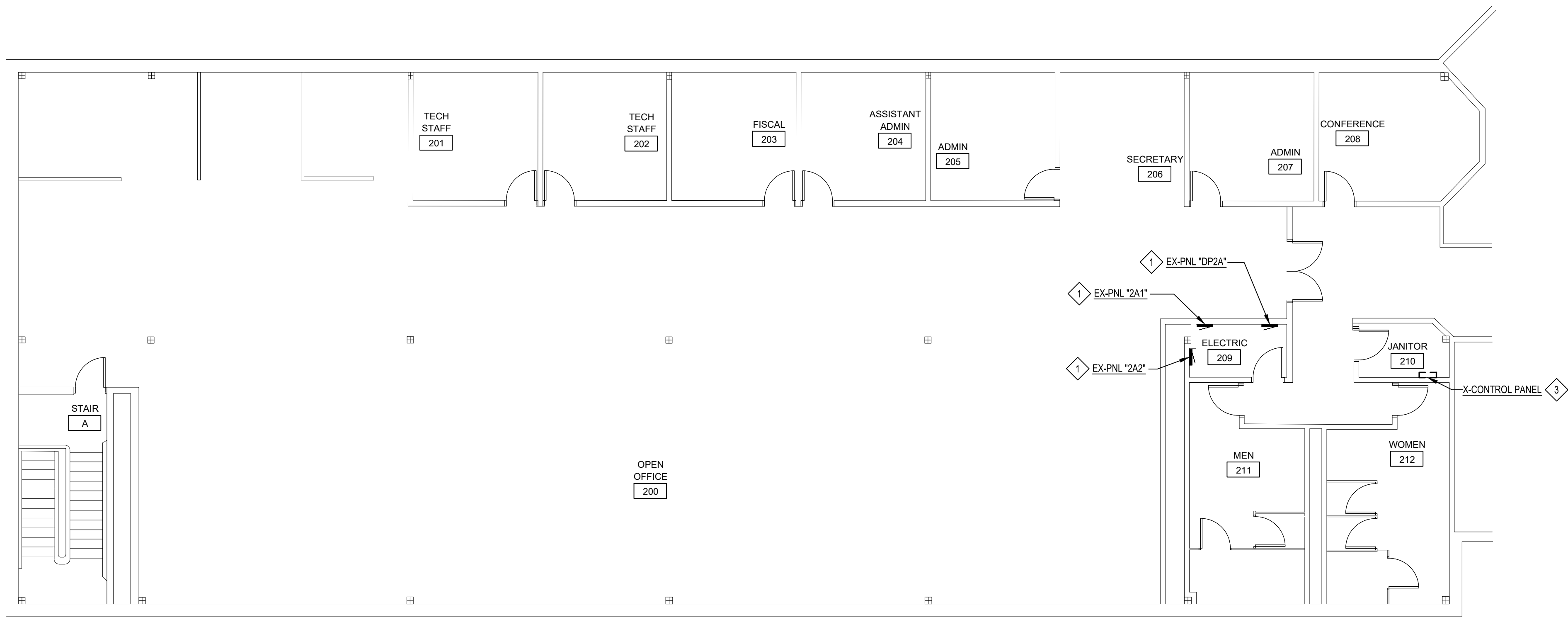


PARTIAL FIRST FLOOR
PLAN - ELECTRICAL
DEMOLITION

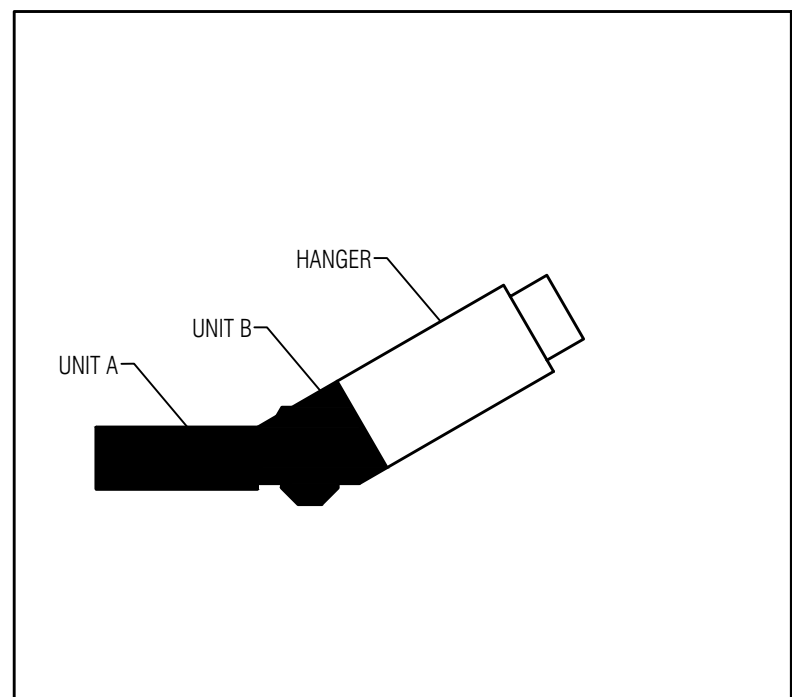
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 **UNIT B - SECOND FLOOR PLAN - ELECTRICAL DEMOLITION**
SCALE: 1/8" = 1'-0"



 **UNIT A - SECOND FLOOR PLAN - ELECTRICAL DEMOLITION**
SCALE: 1/8" = 1'-0"



 **KEY PLAN**
SCALE: NTS

DEMOLITION NOTES

- 1 EXISTING EQUIPMENT TO REMAIN.
- 2 DISCONNECT EXISTING CONTROL PANEL FOR REMOVAL BY OTHERS.
EXISTING CONDUIT AND WIRE TO REMAIN FOR RECONNECTION.
- 3 DISCONNECT EXISTING CONTROL PANEL FOR REMOVAL BY OTHERS.
REMOVE CONDUIT AND WIRE BACK TO SOURCE.

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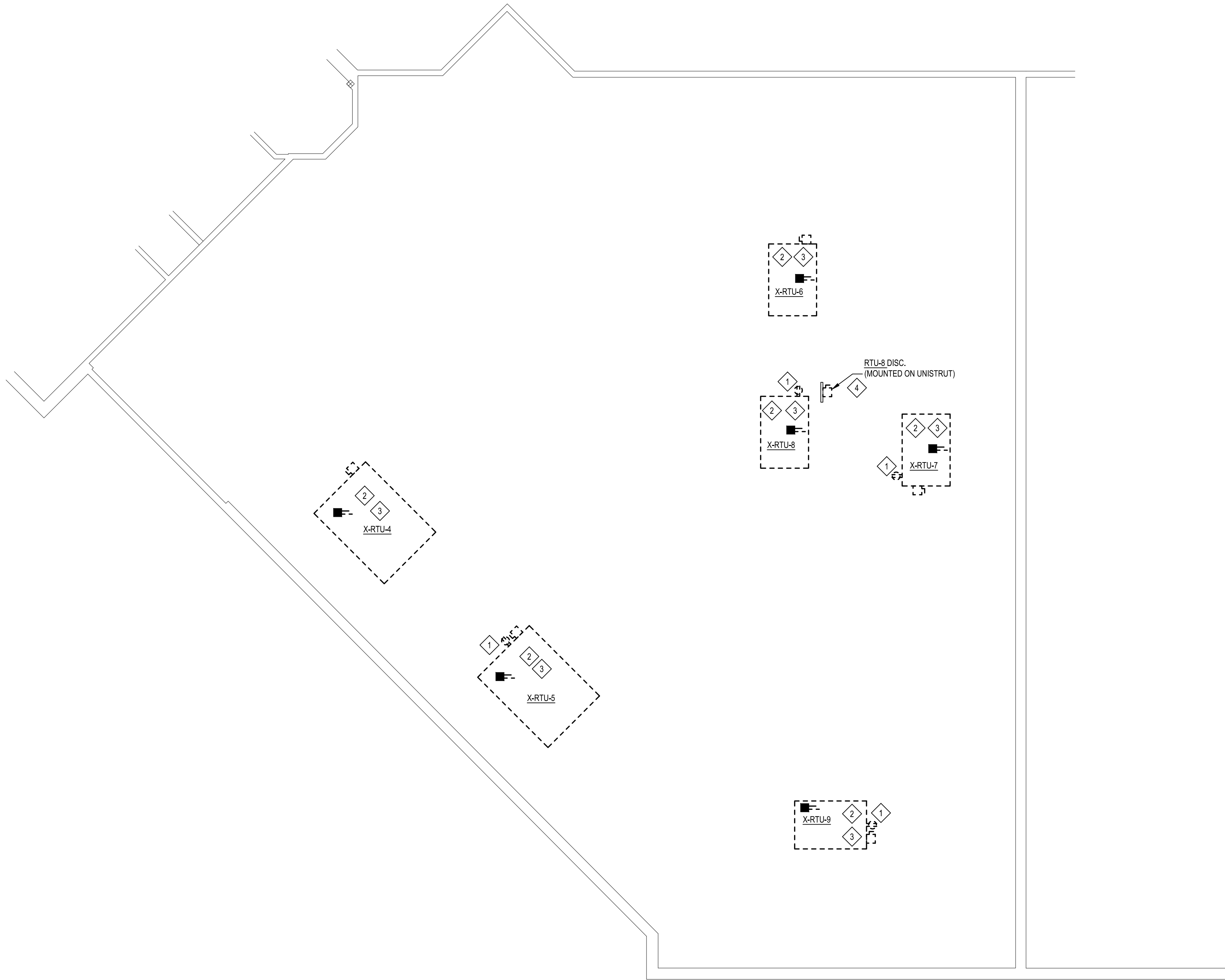
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PARTIAL SECOND FLOOR
PLAN - ELECTRICAL
DEMOLITION

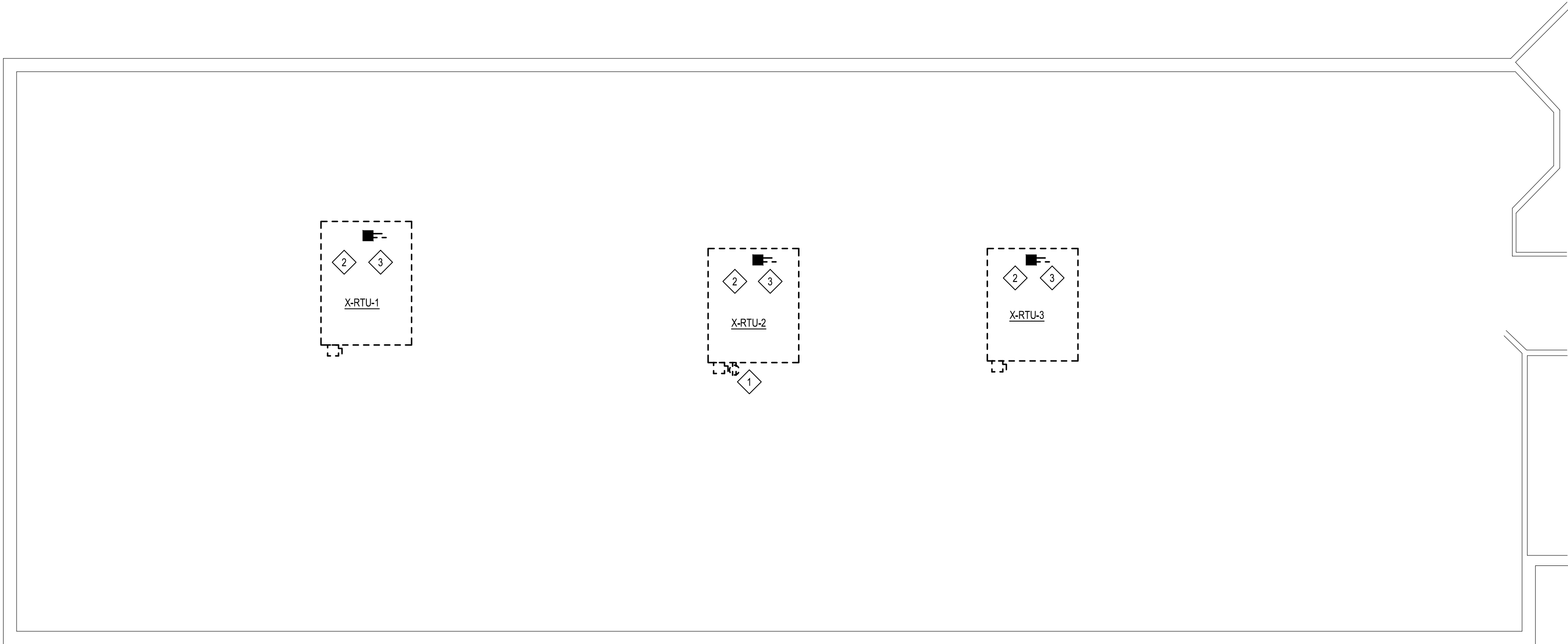
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UNIT B - ROOF PLAN - ELECTRICAL DEMOLITION

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



UNIT A - ROOF PLAN - ELECTRICAL DEMOLITION

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

DEMOLITION NOTES

- 1 DISCONNECT AND REMOVE EXISTING DEVICE. ASSOCIATED CONDUIT AND WIRING TO REMAIN.
- 2 DISCONNECT EXISTING EQUIPMENT FOR REMOVAL BY OTHERS. REMOVE ASSOCIATED DISCONNECT. CONDUIT AND WIRING TO REMAIN FOR CONNECTION TO NEW EQUIPMENT.
- 3 DISCONNECT AND REMOVE EXISTING DUCT DETECTOR. REMOVE ASSOCIATED WIRE BACK TO SOURCE.
- 4 REMOVE EXISTING UNISTRUT. PATCH ROOF TO MAINTAIN RATING.

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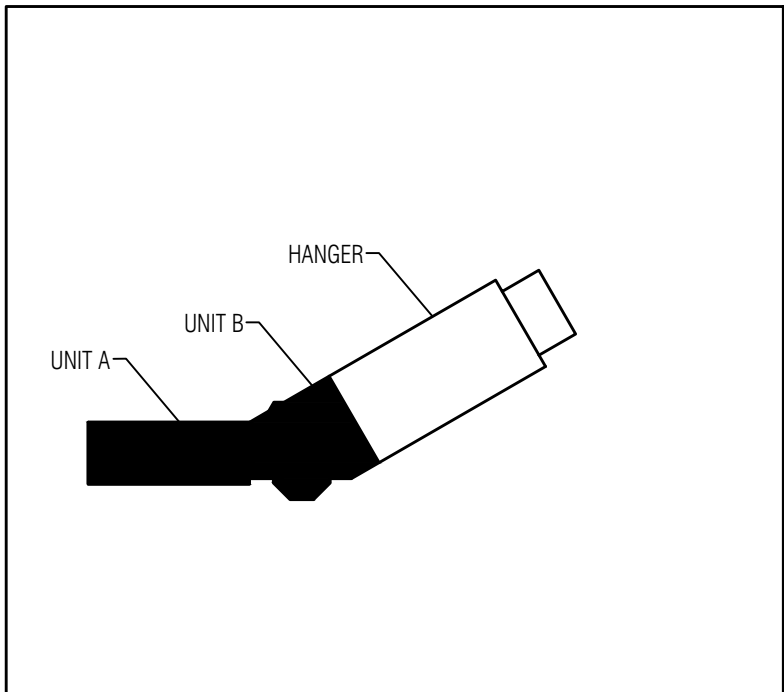
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ELECTRICAL DEMOLITION

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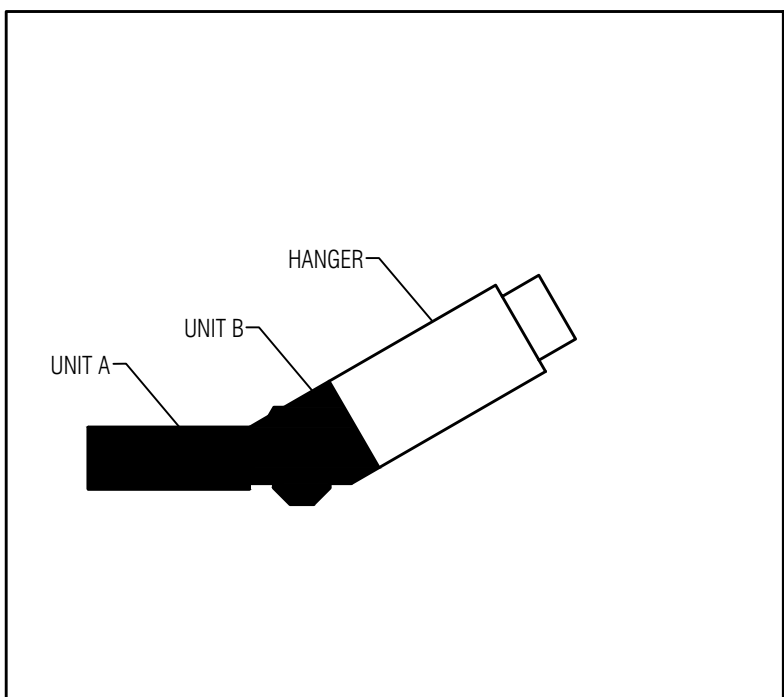


KEY PLAN
SCALE: NTS



UNIT B - FIRST FLOOR PLAN - ELECTRICAL POWER NEW

0 5 10 20
SCALE: 1/8" = 1'-0"



KEY PLAN
SCALE: NTS

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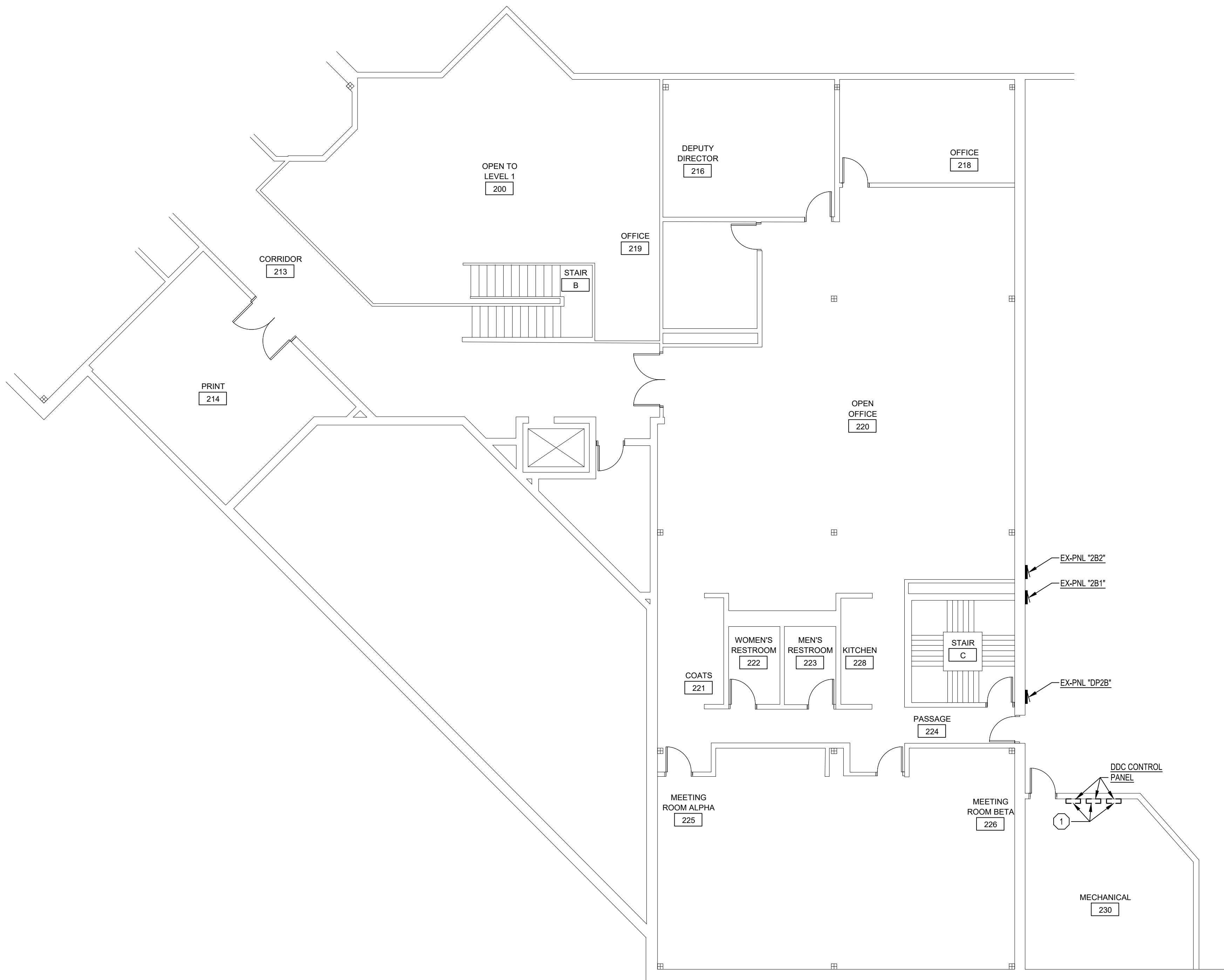


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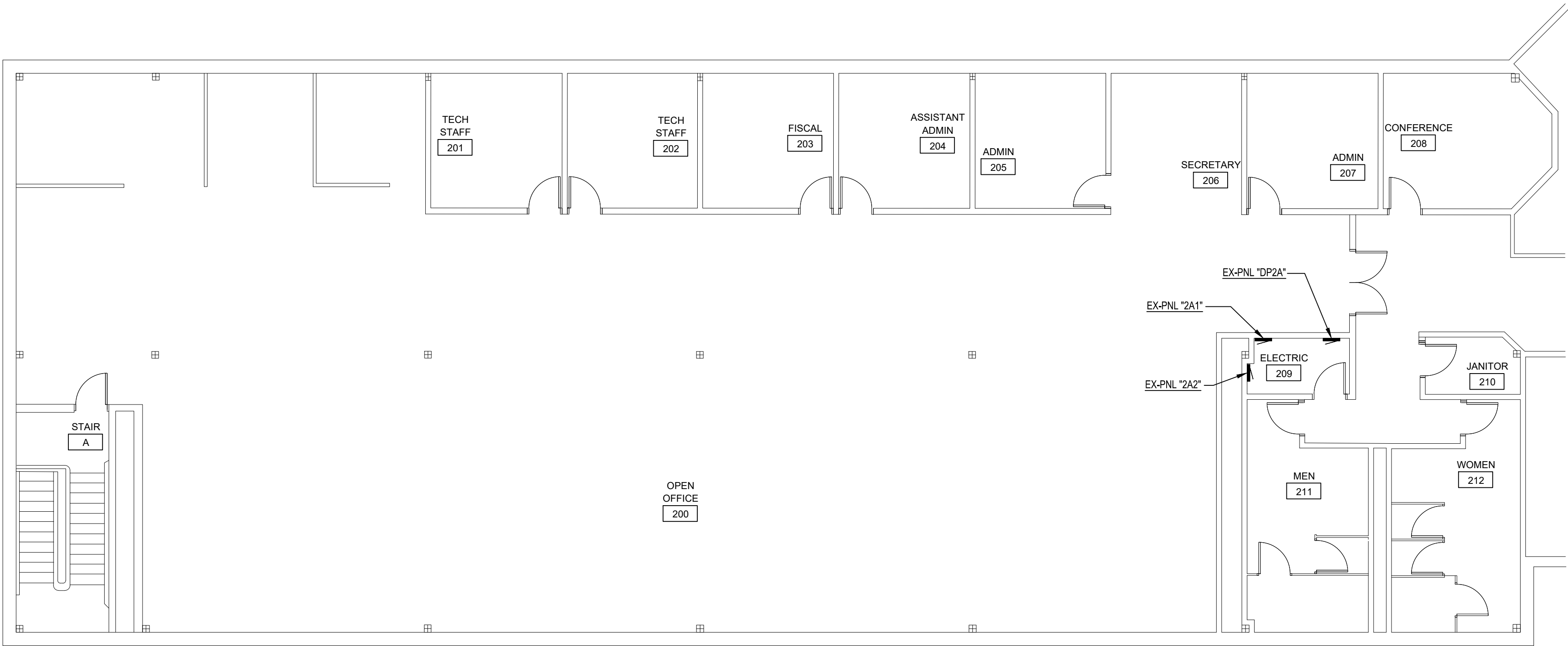
PARTIAL FIRST
FLOOR PLAN - ELECTRICAL
POWER NEW

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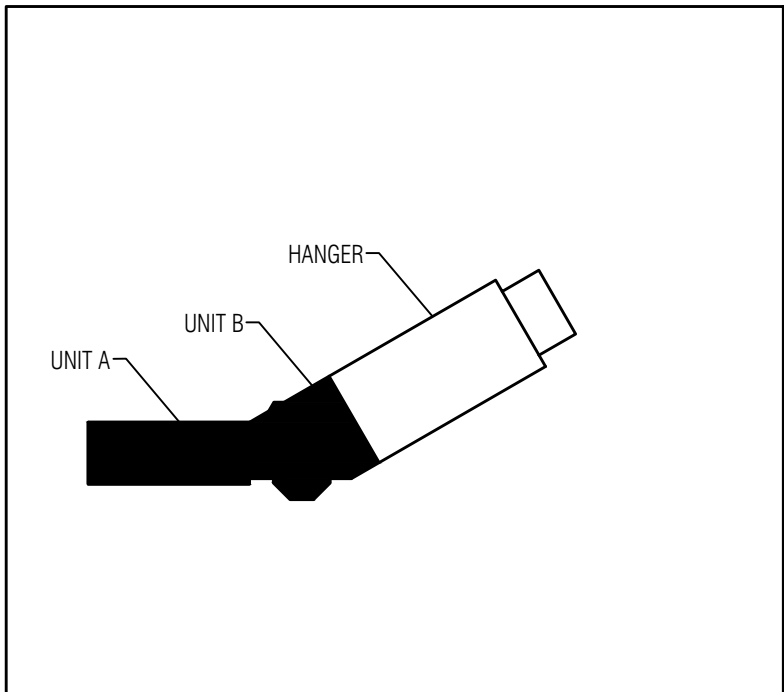
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 **UNIT B - SECOND FLOOR PLAN - ELECTRICAL POWER NEW**
SCALE: 1/8" = 1'-0"



 **UNIT A - SECOND FLOOR PLAN - ELECTRICAL POWER NEW**
SCALE: 1/8" = 1'-0"



 **KEY PLAN**
SCALE: NTS

ELECTRICAL KEY NOTES

- ① CONNECT NEW DDC CONTROL PANEL TO EXISTING AREA CONTROL PANEL CIRCUIT.

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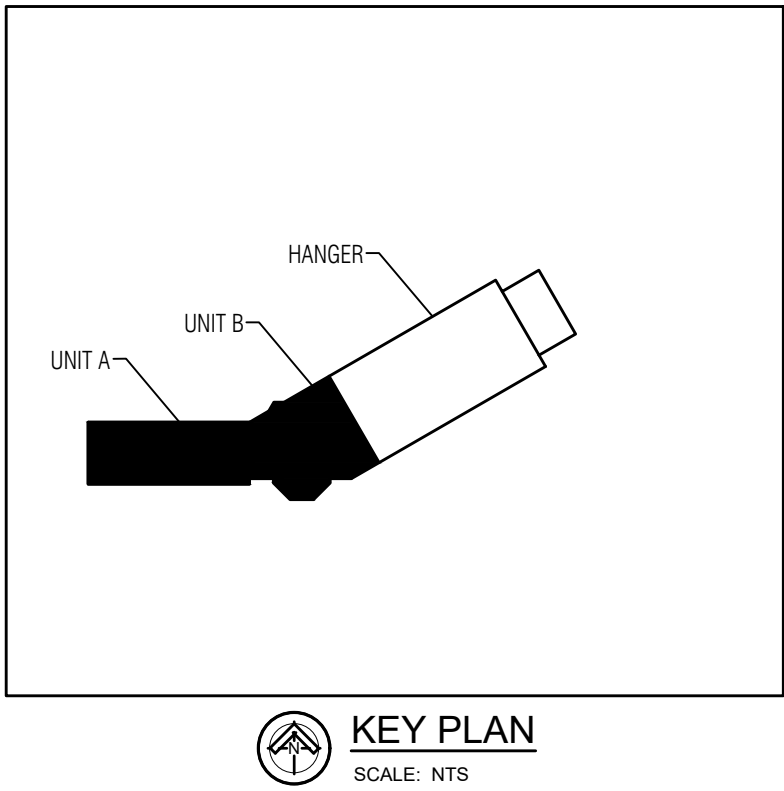
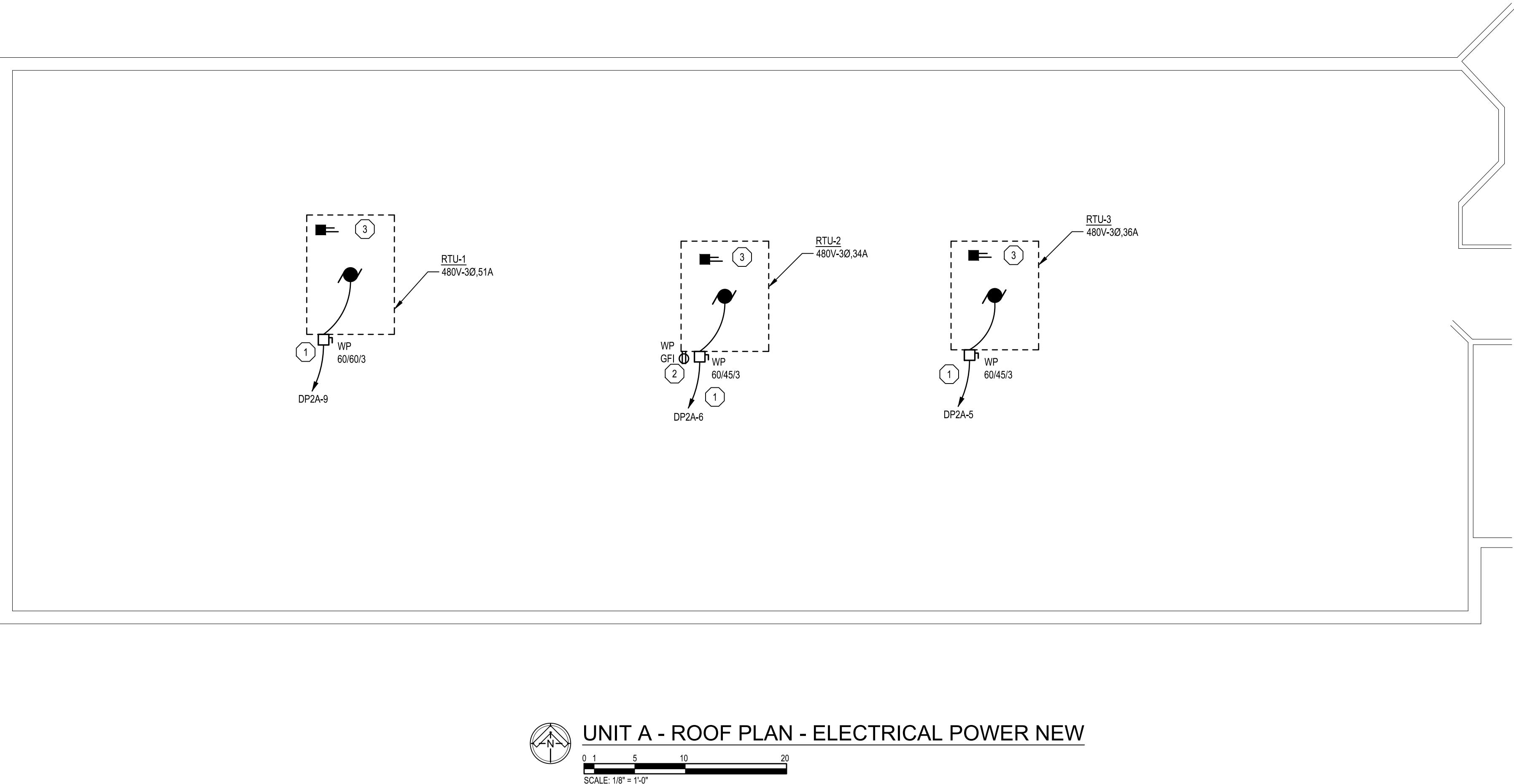
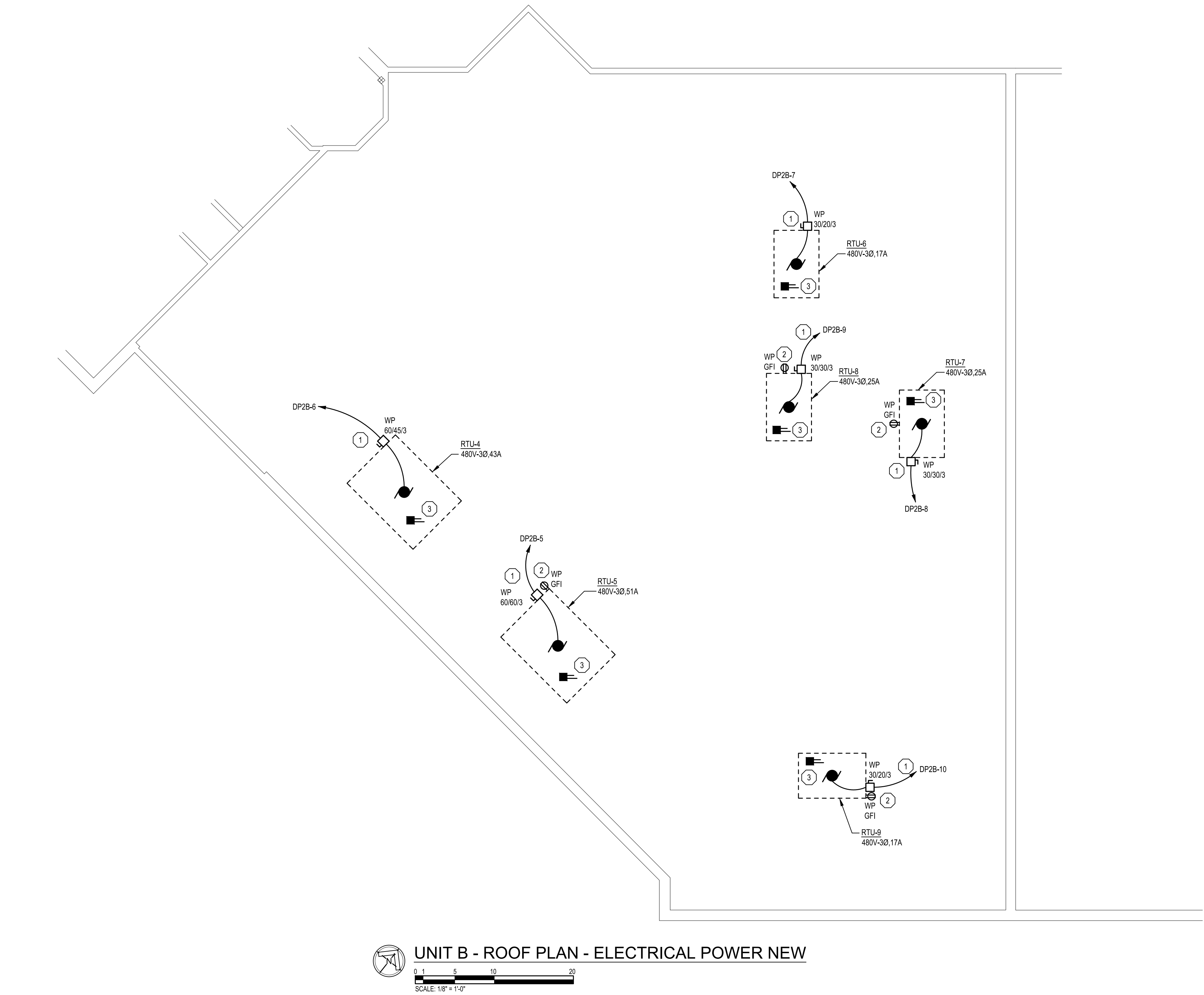
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FLOOR PLAN - ELECTRICAL
POWER NEW

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260466.00
SHEET NUMBER

EXISTING PANEL "DP2B"											
LOCATION: MEZZANINE 227				MOUNTING: SURFACE				A.I.C. RATING:			
SUPPLY FROM: MDP				ENCLOSURE:				NOTES:			
VOLTS: 480 /277				PHASE: 3				WIRE: 4			
				AMPS: 400				MAIN: MLO			
BRKR	DESCRIPTION		CIRCUIT		PHASE LOADS			CIRCUIT		DESCRIPTION	
A	P		VA		A	B	C	VA		A	P
150	3	LP2B		1	0	0	0	2		SPACE	
125	3	XFMR-2B1		3	0	0	0	4		XFMR-2B2	125 3
60	3	RTU-5		5	0	0	0	6		RTU-4	60 3
50	3	RTU-6		7	0	0	0	8		RTU-7	50 3
50	3	RTU-8		9	0	0	0	10		RTU-9	50 3
CONNECTED					0	0	0	TOTAL CONNECTED LOAD		0 VOLT-AMPS	
TOTAL CONNECTED					0					0.00 AMPS	

EXISTING PANEL "DP2A"											
LOCATION: ELECTRIC 209				MOUNTING: SURFACE				A.I.C. RATING:			
SUPPLY FROM: MDP				ENCLOSURE:				NOTES:			
VOLTS: 480 /277				PHASE: 3				WIRE: 4			
				AMPS: 400				MAIN: MLO			
BRKR	DESCRIPTION		CIRCUIT		PHASE LOADS			CIRCUIT		DESCRIPTION	
A	P		VA		A	B	C	VA		A	P
125	3	XFMR-2A1		1	0	0	0	2		XFMR-1A1	125 3
100	3	LP2A		3	0	0	0	4		LP1A	100 3
60	3	RTU-3		5	0	0	0	6		RTU-2	60 3
		SPACE		7	0	0	0	8			50 3
80	3	RTU-1		9	0	0	0	10		CUH-1	15 3
CONNECTED					0	0	0	TOTAL CONNECTED LOAD		0 VOLT-AMPS	
TOTAL CONNECTED					0					0.00 AMPS	

RTU SERVICE LOAD	
EXISTING LOAD:	230KW @ 480V-3Ø
NEW LOAD:	198KW @ 480V-3Ø



ELECTRICAL KEY NOTES

1. CONNECT NEW EQUIPMENT TO EXISTING RTU CIRCUIT. MODIFY CONDUIT AND WIRING AS REQUIRED FOR CONNECTION.
2. CONNECT NEW ROOFTOP RECEPTACLE TO EXISTING RECEPTACLE CIRCUIT. MODIFY CONDUIT AND WIRING AS REQUIRED FOR CONNECTION.
3. INSTALL NEW DUCT DETECTOR. CONNECT NEW DUCT DETECTOR TO EXISTING FIRE ALARM SYSTEM. FIRE ALARM SYSTEM SHALL BE RECERTIFIED UPON COMPLETION OF WORK.

Issue date
10/7/2026 CD SET

checked by
JFS
drawn by
AWB
consultant

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DEPARTMENT OF TECHNOLOGY, MANAGEMENT AND BUDGET
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ADAM P. LACH, RA, DIRECTOR

PARTIAL ROOF PLAN -
ELECTRICAL POWER NEW

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