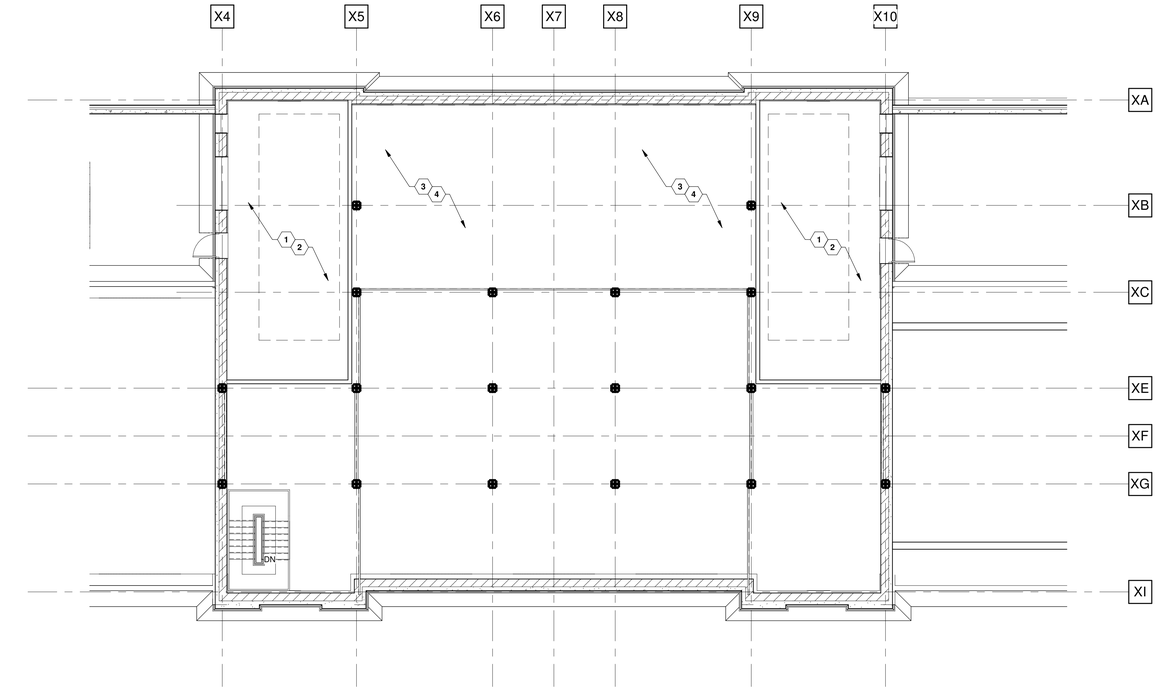
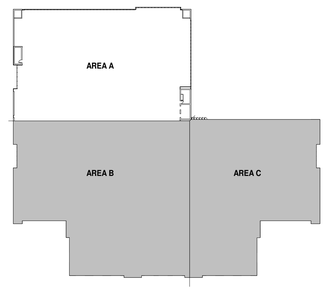


1 Mechanical Floor Level
1/8" = 1'-0"

MECHANICAL FLOOR LEVEL CODED NOTES

1. Remove all existing waterproof flooring down to concrete slab Including flashings, turned up base, etc. Prepare surfaces for new fluid applied flooring.
2. Install new fluid applied waterproof flooring throughout mechanical room. New flooring to go under new air handling unit. Provide manufacturers recommended base all around room. Provide manufacturers recommended detailing at any penetrations, drain, or other items as required to provide a complete waterproof system.
3. Provide means to access piping in attic area such that existing construction is fully protected.
4. Provide protection of existing construction in attic area. Top of historic plaster ceiling vaults are exposed and shall be protected from the work including dropping tools or material, and water damage from the removal of old piping.

KEY PLAN



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Columbus OH 43215 F 614-628-0311
schooleycaldwell.com

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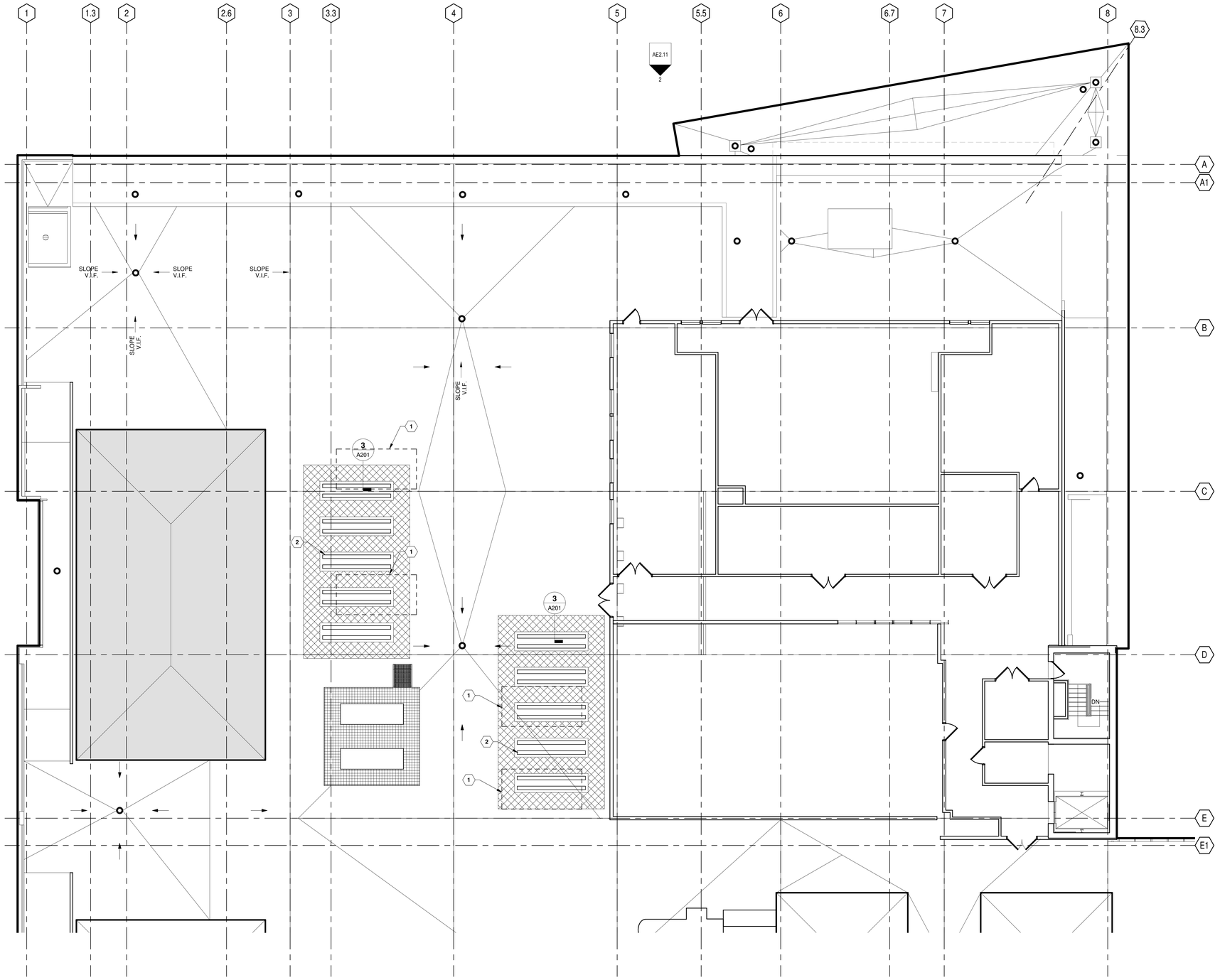
MECHANICAL FLOOR LEVEL

PROJECT STATUS:		BID/PERMIT SET
PROJECT NUMBER:		2022-0212
DRAWN BY: ZK	DATE	SHEET NUMBER
DESIGNED BY: BK	10/28/2022	A100
CHECKED BY: BK		



1 ROOF PLAN - AREA A
1/8" = 1'-0"

ROOF LEGEND

- EXISTING MECHANICAL PENTHOUSES
- EXISTING HVAC EQUIPMENT TO BE REMOVED
- PROVIDE WALKPADS AROUND NEW HVAC EQUIPMENT

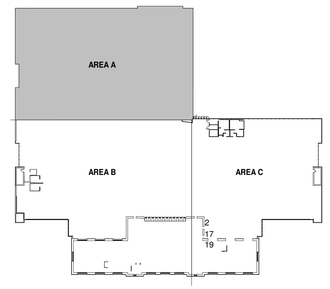
ROOFING NOTES

1. EXISTING ROOFING SYSTEM IS UNDER WARRENTY, FOLLOW ALL MANUFACTURER'S RECOMMENDATIONS TO MAINTAIN CURRENT WARRENTY.
2. PROVIDE PROTECTION FOR ROOFING AT ALL WORK LOCATIONS.
3. COORDINATE WITH MECHANICAL AND ELECTRICAL DRAWINGS FOR SPECIFIC LOCATION OF ROOFTOP EQUIPMENT AND PENETRATIONS.
4. PROVIDE CRICKETS AT ALL NEW EQUIPMENT RAILS TO DIRECT WATER AROUND THEM AND TO THE DRAINS.

ROOF - CODED NOTES

1. EXISTING HVAC EQUIPMENT TO BE REMOVED FROM ROOF. PATCH IN NEW ROOFING WHERE EQUIPMENT SUPPORTS ARE REMOVED
2. NEW HVAC EQUIPMENT RAILS. REFER TO HVAC DRAWINGS.

KEY PLAN



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ROOF PLAN A

PROJECT STATUS:		BID/PERMIT SET
PROJECT NUMBER:		2022-0212
DRAWN BY: ZK	DATE	SHEET NUMBER
DESIGNED BY: BK	10/28/2022	A121A
CHECKED BY: BK		

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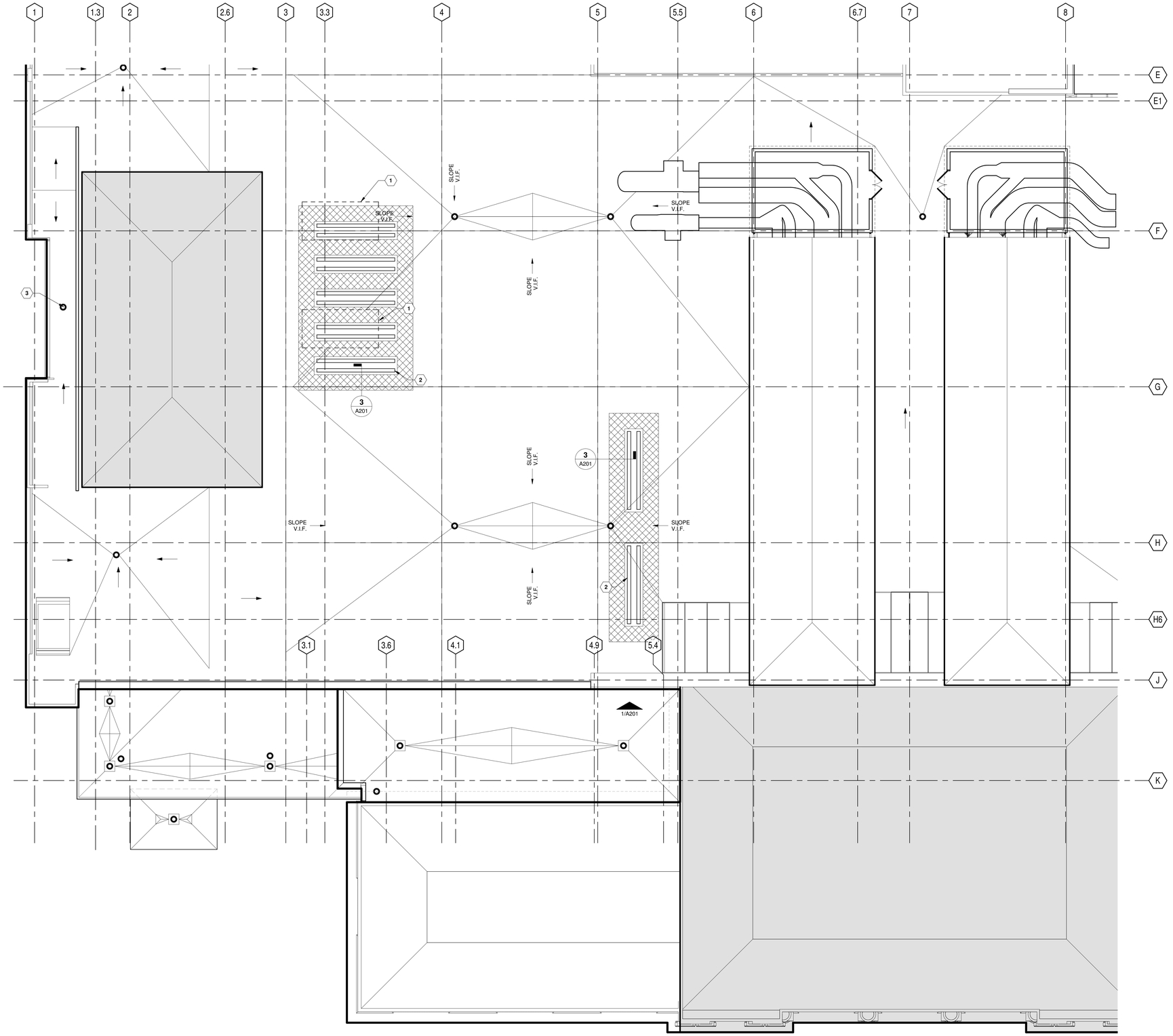


1 ROOF PLAN - AREA B
1/8" = 1'-0"

ROOF LEGEND

- EXISTING MECHANICAL PENTHOUSES
- EXISTING HVAC EQUIPMENT TO BE REMOVED
- PROVIDE WALKPADS AROUND NEW HVAC EQUIPMENT

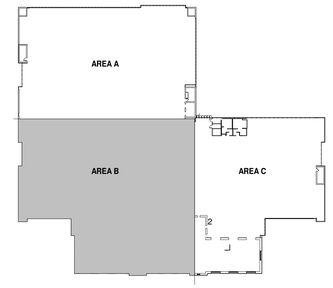
ROOFING NOTES

1. EXISTING ROOFING SYSTEM IS UNDER WARRENTY, FOLLOW ALL MANUFACTURER'S RECOMMENDATIONS TO MAINTAIN CURRENT WARRENTY.
2. PROVIDE PROTECTION FOR ROOFING AT ALL WORK LOCATIONS.
3. COORDINATE WITH MECHANICAL AND ELECTRICAL DRAWINGS FOR SPECIFIC LOCATION OF ROOFTOP EQUIPMENT AND PENETRATIONS.
4. PROVIDE CRICKETS AT ALL NEW EQUIPMENT RAILS TO DIRECT WATER AROUND THEM AND TO THE DRAINS.

ROOF - CODED NOTES

1. EXISTING HVAC EQUIPMENT TO BE REMOVED FROM ROOF. PATCH IN NEW ROOFING WHERE EQUIPMENT SUPPORTS ARE REMOVED
2. NEW HVAC EQUIPMENT RAILS. REFER TO HVAC DRAWINGS.

KEY PLAN



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ROOF PLAN B

PROJECT STATUS:		BID/PERMIT SET
PROJECT NUMBER:		2022-0212
DRAWN BY: ZK	DATE	SHEET NUMBER
DESIGNED BY: BK	10/28/2022	A121B
CHECKED BY: BK		

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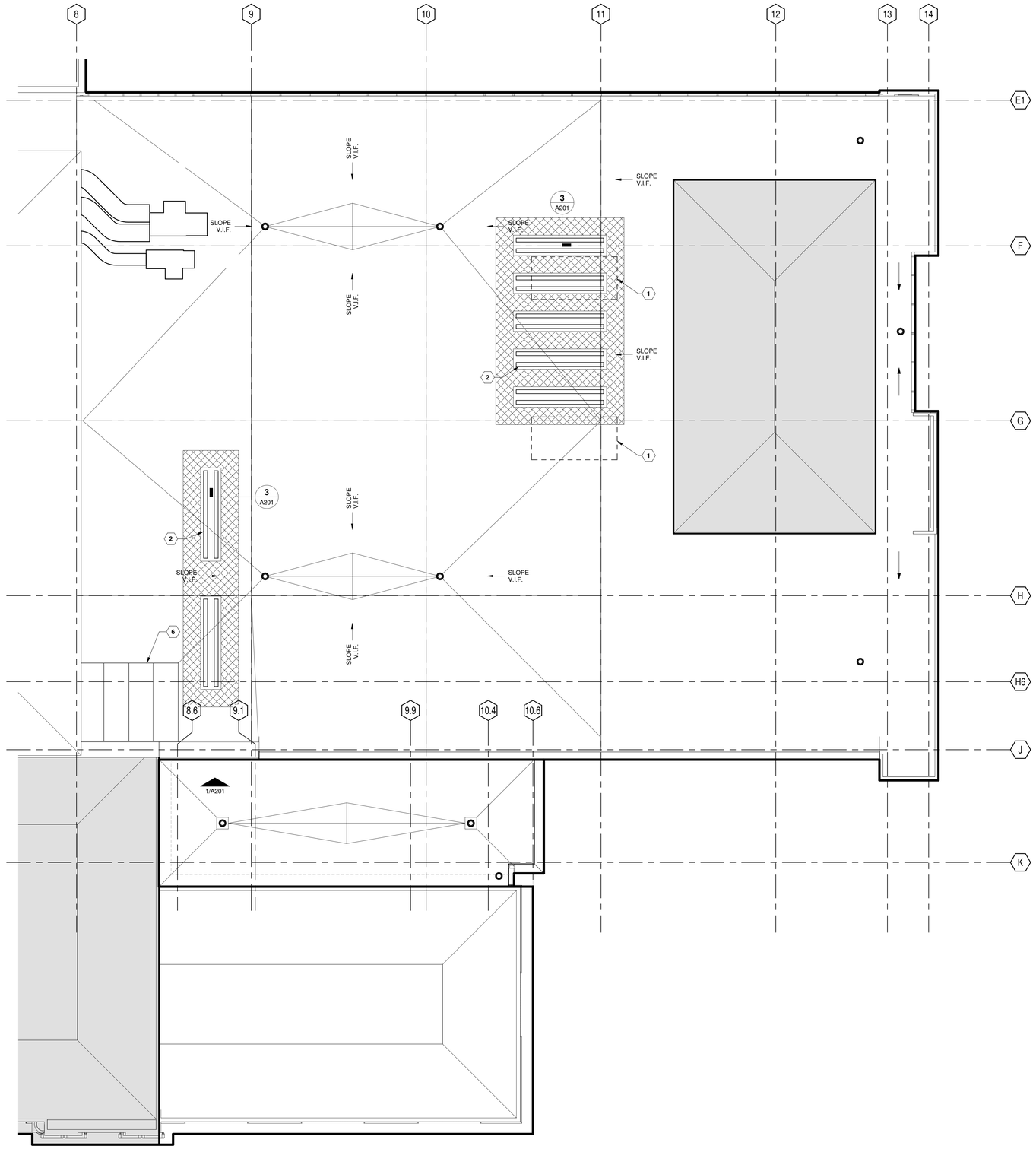


1 ROOF PLAN C
1/8" = 1'-0"

ROOF LEGEND

- EXISTING MECHANICAL PENTHOUSES
- EXISTING HVAC EQUIPMENT TO BE REMOVED
- PROVIDE WALKPADS AROUND NEW HVAC EQUIPMENT

ROOFING NOTES

1. EXISTING ROOFING SYSTEM IS UNDER WARRENTY, FOLLOW ALL MANUFACTURER'S RECOMMENDATIONS TO MAINTAIN CURRENT WARRENTY.

2. PROVIDE PROTECTION FOR ROOFING AT ALL WORK LOCATIONS.

3. COORDINATE WITH MECHANICAL AND ELECTRICAL DRAWINGS FOR SPECIFIC LOCATION OF ROOFTOP EQUIPMENT AND PENETRATIONS.

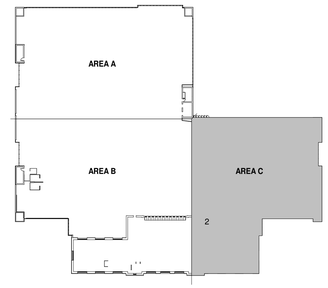
4. PROVIDE CRICKETS AT ALL NEW EQUIPMENT RAILS TO DIRECT WATER AROUND THEM AND TO THE DRAINS.

ROOF - CODED NOTES

1. EXISTING HVAC EQUIPMENT TO BE REMOVED FROM ROOF. PATCH IN NEW ROOFING WHERE EQUIPMENT SUPPORTS ARE REMOVED

2. NEW HVAC EQUIPMENT RAILS. REFER TO HVAC DRAWINGS.

KEY PLAN



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ROOF PLAN C

PROJECT STATUS:		BID/PERMIT SET
PROJECT NUMBER:		2022-0212
DRAWN BY: ZK	DATE	SHEET NUMBER
DESIGNED BY: BK	10/28/2022	A121C
CHECKED BY: BK		

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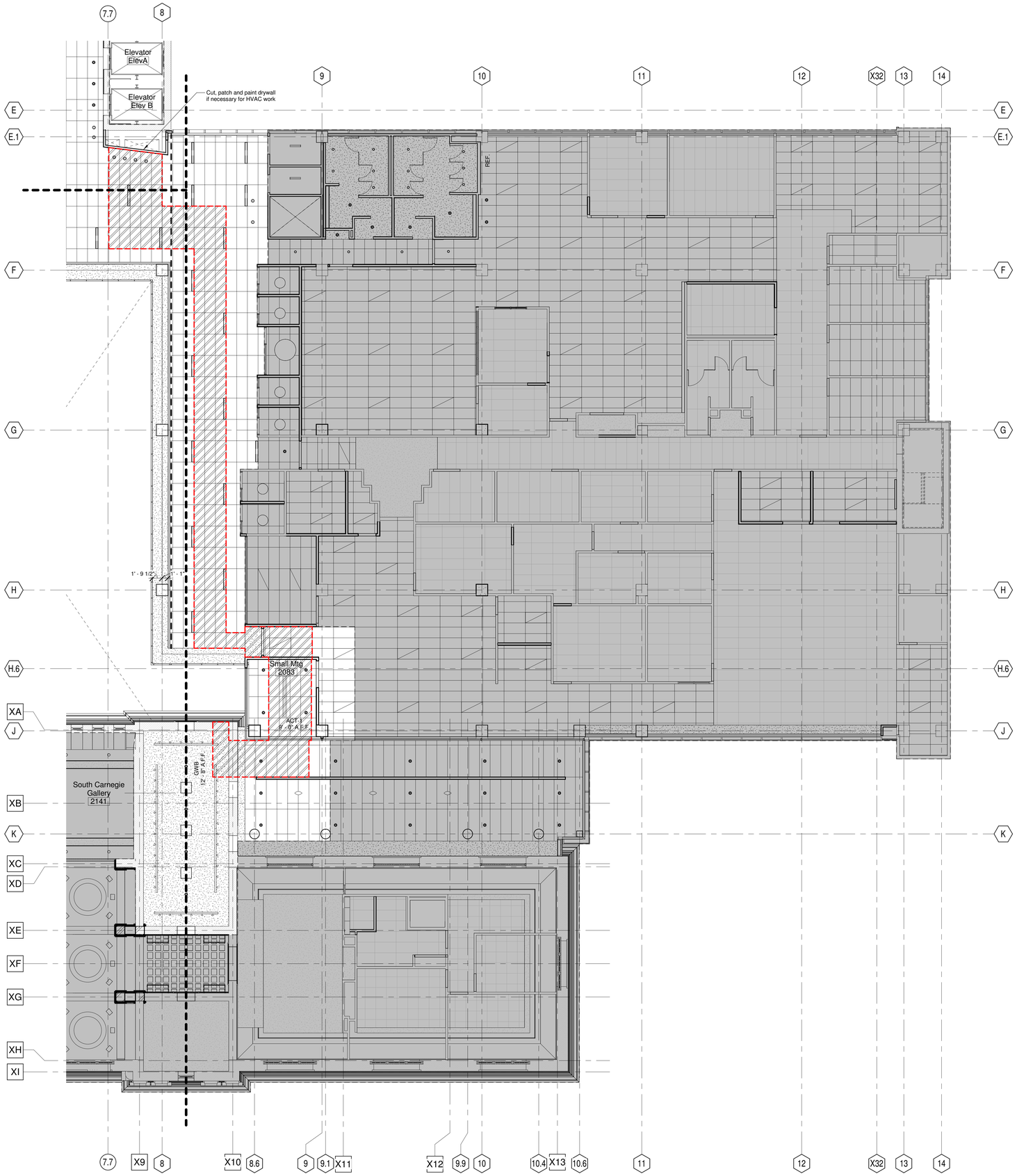


Second Level Reflected Ceiling Plan

1/8" = 1'-0"

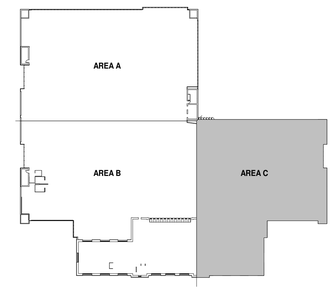
CEILING LEGEND

- AREAS OUTSIDE THE SCOPE OF WORK.
- GYPSUM WALL BOARD WITHIN THE AREAS OF WORK. DO NOT DISTURB.
- ACOUSTICAL CEILING TILE WITHIN THE AREAS OF WORK. DO NOT DISTURB.
- ACOUSTICAL CEILING TILE TO BE REMOVED AND REPLACED TO ALLOW HVAC PIPING WORK.

CEILING GENERAL NOTES

1. The building will remain open at all times during the project.
2. Work inside the building will need to done after library hours.
3. All ceiling work needs to be coordinated with MEP trades.
4. Do not disturb items above the ceiling other than those scheduled to be removed.
5. Do not disturb sprinkler heads. Owner will provide a fire watch due to the sprinkler heads not being in compliance with NFPA when the ceiling tiles are not installed.
6. Where acoustic ceiling are noted to be removed, store ceiling tiles in a location near their removal but out of public traffic.
7. Stored tiles shall be covered with plastic and secured from damage.
8. Ceiling grids may be removed only if necessary to remove HVAC piping. Reinstall when complete.
9. Do not remove light fixtures or other ceiling devices unless absolutely necessary.
10. Access to the work areas shall be though the loading dock. Elevators A and B may be used for vertical access.
11. Elevators are for personnel and small tools only. Provide protection of floors and walls of elevators.
12. Provide protection of carpet flooring in areas of work. Protection shall be sufficient to protect from rolling scaffold (or other means of reaching piping), dropped pipes, any residual water in pipes, etc. If protection is a tripping hazard such as plywood, it must be removed during the day and stored nearby.

KEY PLAN



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Columbus OH 43215 F 614-628-0311
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SECOND FLOOR REFLECTED CEILING PLAN C

PROJECT STATUS:		BID/PERMIT SET
PROJECT NUMBER:		2022-0212
DRAWN BY: ZK	DATE	SHEET NUMBER
DESIGNED BY: BK	10/28/2022	A152C
CHECKED BY: BK		

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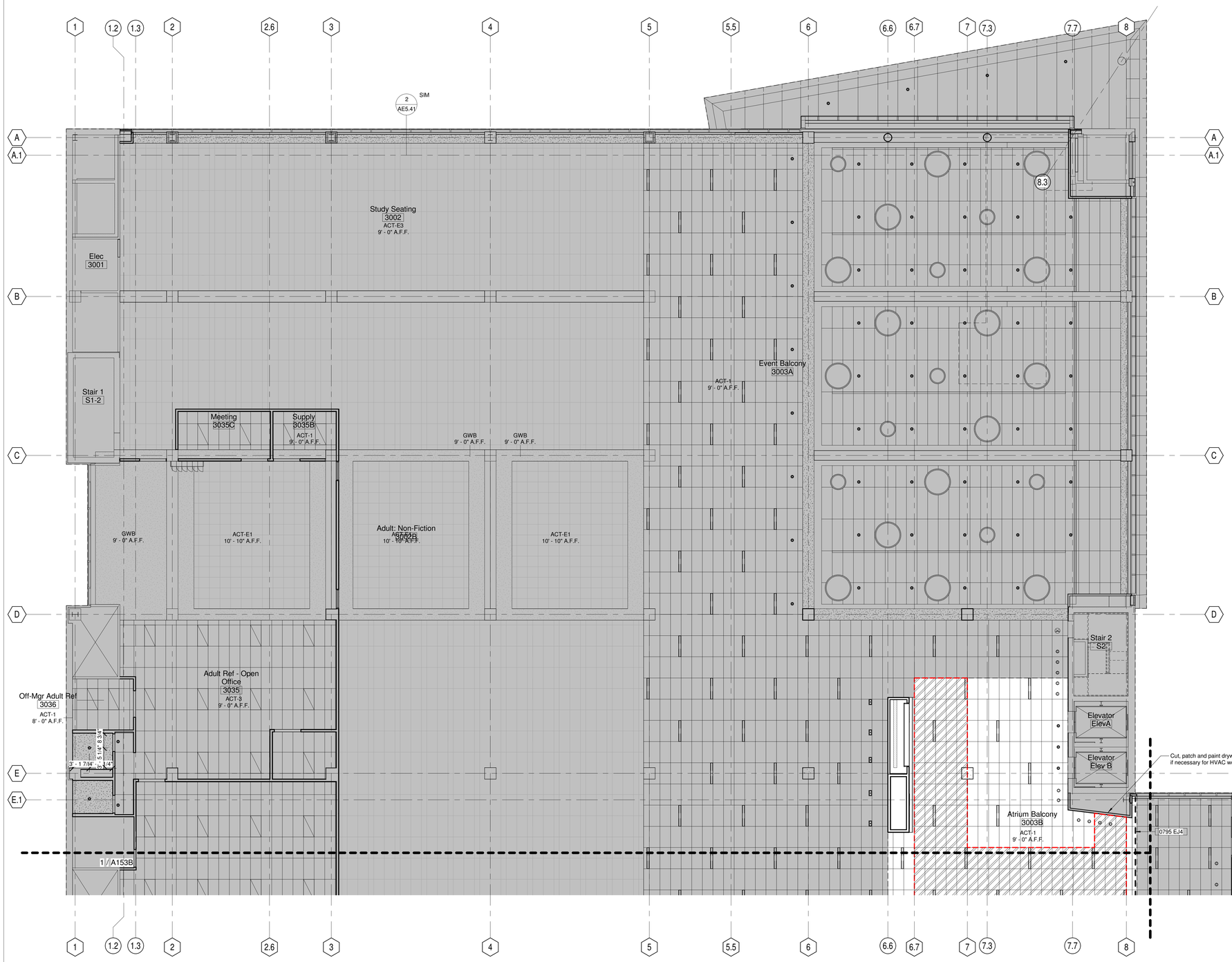


Third Floor Reflected Ceiling Plan

1/8" = 1'-0"

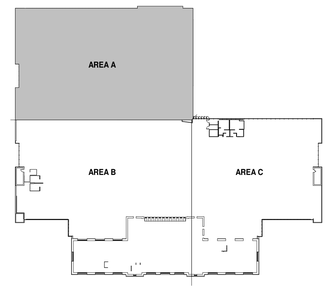
CEILING LEGEND

- AREAS OUTSIDE THE SCOPE OF WORK.
- GYPSUM WALL BOARD WITHIN THE AREAS OF WORK. DO NOT DISTURB.
- ACOUSTICAL CEILING TILE WITHIN THE AREAS OF WORK. DO NOT DISTURB.
- ACOUSTICAL CEILING TILE TO BE REMOVED AND REPLACED TO ALLOW HVAC PIPING WORK.

CEILING GENERAL NOTES

1. The building will remain open at all times during the project.
2. Work inside the building will need to done after library hours.
3. All ceiling work needs to be coordinated with MEP trades.
4. Do not disturb items above the ceiling other than those scheduled to be removed.
5. Do not disturb sprinkler heads. Owner will provide a fire watch due to the sprinkler heads not being in compliance with NFPA when the ceiling tiles are not installed.
6. Where acoustic ceiling are noted to be removed, store ceiling tiles in a location near their removal but out of public traffic.
7. Stored tiles shall be covered with plastic and secured from damage.
8. Ceiling grids may be removed only if necessary to remove HVAC piping. Reinstall when complete.
9. Do not remove light fixtures or other ceiling devices unless absolutely necessary.
10. Access to the work areas shall be though the loading dock. Elevators A and B may be used for vertical access.
11. Elevators are for personnel and small tools only. Provide protection of floors and walls of elevators.
12. Provide protection of carpet flooring in areas of work. Protection shall be sufficient to protect from rolling scaffold (or other means of reaching piping), dropped pipes, any residual water in pipes, etc.. If protection is a tripping hazard such as plywood, it must be removed during the day and stored nearby.

KEY PLAN



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THIRD FLOOR REFLECTED CEILING PLAN A

PROJECT STATUS:		BID/PERMIT SET
PROJECT NUMBER:		2022-0212
DRAWN BY: ZK	DATE	SHEET NUMBER
DESIGNED BY: BK	10/28/2022	A153A
CHECKED BY: BK		

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CEILING LEGEND

- AREAS OUTSIDE THE SCOPE OF WORK.
- GYPSUM WALL BOARD WITHIN THE AREAS OF WORK. DO NOT DISTURB.
- ACOUSTICAL CEILING TILE WITHIN THE AREAS OF WORK. DO NOT DISTURB.
- ACOUSTICAL CEILING TILE TO BE REMOVED AND REPLACED TO ALLOW HVAC PIPING WORK.

CEILING GENERAL NOTES

1. The building will remain open at all times during the project.
2. Work inside the building will need to done after library hours.
3. All ceiling work needs to be coordinated with MEP trades.
4. Do not disturb items above the ceiling other than those scheduled to be removed.
5. Do not disturb sprinkler heads. Owner will provide a fire watch due to the sprinkler heads not being in compliance with NFPA when the ceiling tiles are not installed.
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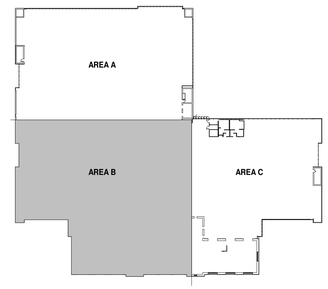
Third Floor Reflected Ceiling Plan
1/8" = 1'-0"

KEY PLAN



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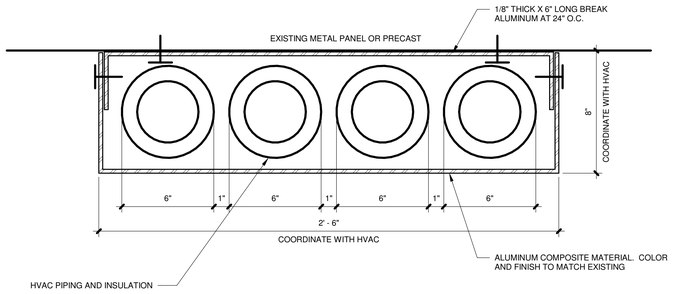
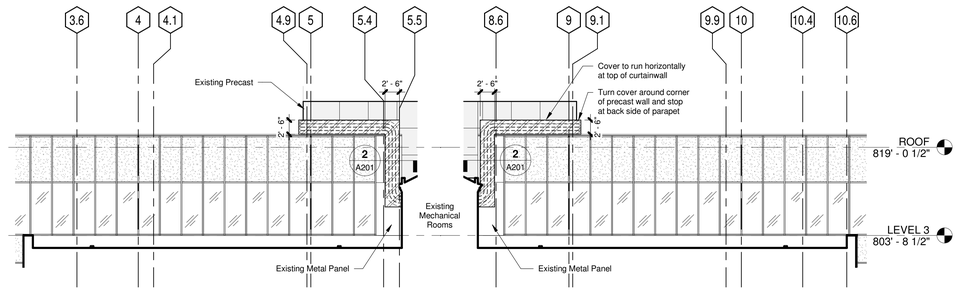
THIRD FLOOR REFLECTED CEILING PLAN B

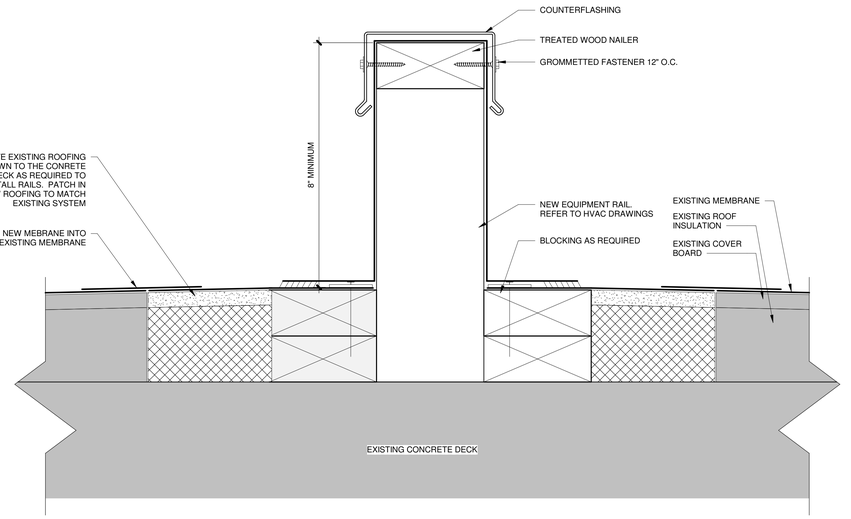
PROJECT STATUS:		BID/PERMIT SET
PROJECT NUMBER:		2022-0212
DRAWN BY: ZK	DATE	SHEET NUMBER
DESIGNED BY: BK	10/28/2022	A153B
CHECKED BY: BK		



2 METAL COVER DETAIL
3" = 1'-0"



1 EXTERIOR ELEVATION - WEST - BEYOND Copy 1
3/32" = 1'-0"



3 EQUIPMENT RAIL
6" = 1'-0"

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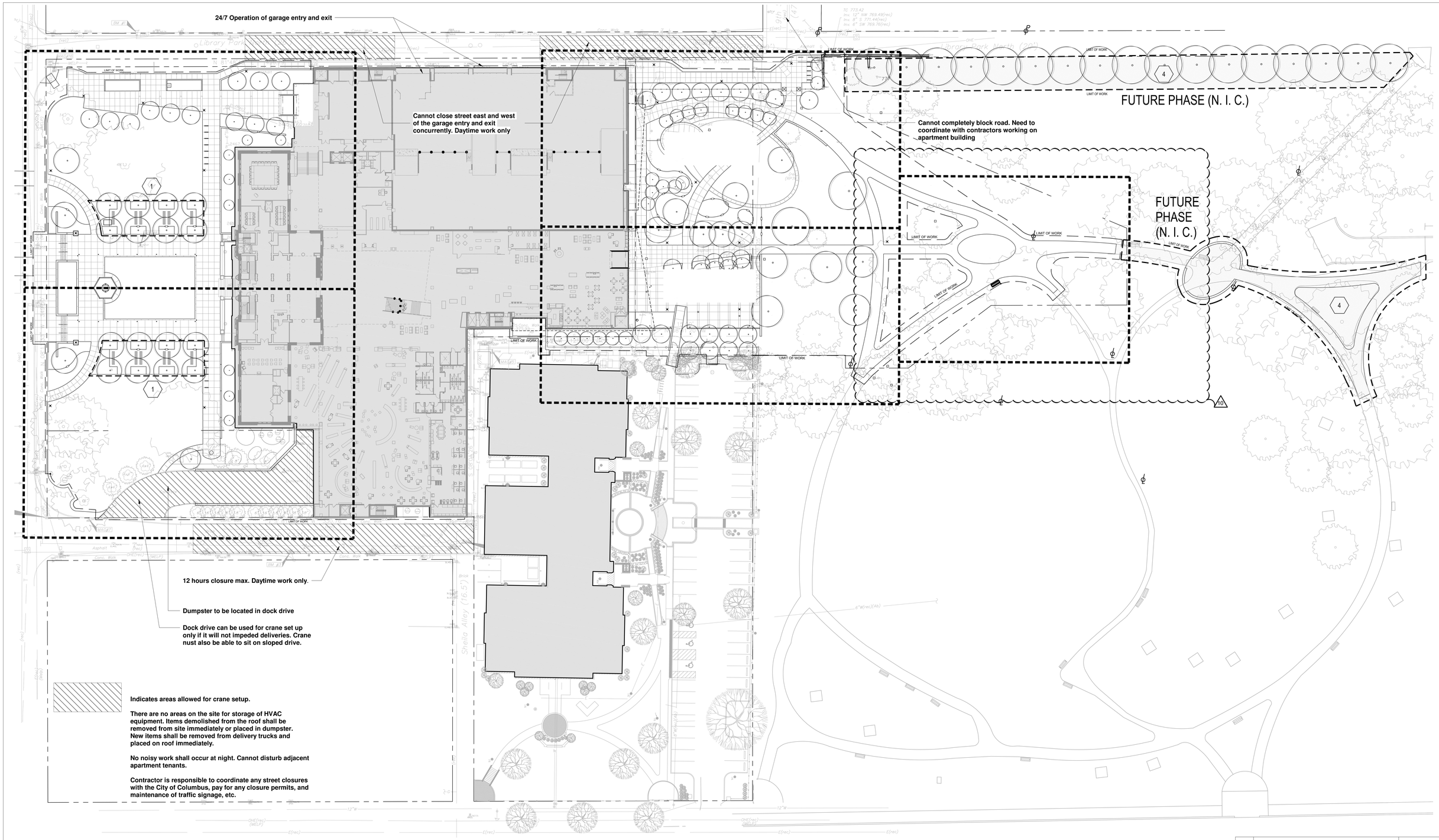
EXTERIOR ELEVATIONS AND DETAILS

PROJECT STATUS:		BID/PERMIT SET
PROJECT NUMBER:		2022-0212
DRAWN BY: ZK	DATE	SHEET NUMBER
DESIGNED BY: BK	10/28/2022	A201
CHECKED BY: BK		



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SITE LOGISTICS PLAN

PROJECT STATUS:		BID/PERMIT SET
PROJECT NUMBER:		2022-0212
DRAWN BY: ZK	DATE	SHEET NUMBER
DESIGNED BY: BK	10/28/2022	SL-100
CHECKED BY: BK		

STRUCTURAL NOTES

A. **GENERAL**

1. THE STRUCTURE IS DESIGNED TO BE SELF-SUPPORTING AND STABLE AFTER THE BUILDING IS FULLY COMPLETED. IT IS SOLELY THE CONTRACTOR'S RESPONSIBILITY TO DETERMINE ERECTION PROCEDURES AND SEQUENCE, AND TO ENSURE THE STABILITY OF THE BUILDING AND ITS COMPONENT PARTS, AND THE ADEQUACY OF TEMPORARY OR INCOMPLETE CONNECTIONS, DURING ERECTION. THIS INCLUDES THE ADDITION OF ANY SHORING, SHEETING, TEMPORARY GUYS, BRACING OR TIEDOWNS THAT MIGHT BE NECESSARY. SUCH MATERIAL IS NOT SHOWN ON THE DRAWINGS. IF APPLIED, THEY SHALL BE REMOVED AS CONDITIONS PERMIT, AND SHALL REMAIN THE CONTRACTOR'S PROPERTY. THE ENGINEER HAS NO EXPERTISE IN, AND TAKES NO RESPONSIBILITY FOR, CONSTRUCTION MEANS AND METHODS OR JOB SITE SAFETY DURING CONSTRUCTION. PROCESSING AND/OR APPROVING SUBMITTALS MADE BY THE CONTRACTOR WHICH MAY CONTAIN INFORMATION RELATED TO CONSTRUCTION METHODS OR SAFETY ISSUES, OR PARTICIPATION IN MEETINGS WHERE SUCH ISSUES MIGHT BE DISCUSSED, SHALL NOT BE CONSTRUED AS VOLUNTARY ASSUMPTION BY THE ENGINEER OF ANY RESPONSIBILITY FOR SAFETY PROCEDURES.

2. IT IS SOLELY THE RESPONSIBILITY OF EACH CONTRACTOR TO FOLLOW ALL APPLICABLE SAFETY CODES AND REGULATIONS DURING ALL PHASES OF CONSTRUCTION. THE ENGINEER IS NOT ENGAGED IN, AND DOES NOT SUPERVISE, CONSTRUCTION.

3. EQUIPMENT FRAMING LOADS, OPENINGS AND STRUCTURE IN ANY WAY RELATED TO HVAC, PLUMBING, OR ELECTRICAL REQUIREMENTS ARE SHOWN FOR BIDDING PURPOSES ONLY. CONTRACTOR SHALL COORDINATE THIS INFORMATION WITH THE INVOLVED TRADES BEFORE PROCEEDING WITH SUCH PORTION OF THE WORK. EXCESS COST RELATED TO VARIATION IN THESE REQUIREMENTS TO BE BORNE BY THE APPROPRIATE CONTRACTOR.

4. SHOULD ANY OF THE DETAILED INSTRUCTIONS SHOWN ON THE PLANS CONFLICT WITH THESE STRUCTURAL NOTES, THE SPECIFICATIONS, OR WITH EACH OTHER, THE STRICTEST PROVISION SHALL GOVERN.

5. GOVERNING CODE: OHIO BUILDING CODE.

6. EXISTING BUILDING: PROVIDE TEMPORARY SUPPORTS AND OTHER MEASURES AS REQUIRED TO PREVENT DAMAGE TO THE EXISTING BUILDING DURING CONSTRUCTION. FIELD VERIFY ALL EXISTING DIMENSIONS AND ELEVATIONS WHICH AFFECT THE NEW CONSTRUCTION.

7. ROOF LIVE LOAD:
   a. MINIMUM ROOF LIVE LOAD 20 PSF
   b. MECHANICAL ROOM, STORAGE 150 PSF

B. **STRUCTURAL STEEL**

1. THE STEEL FRAME AS DESIGNED IS A NON-SELF-SUPPORTING STEEL FRAME. COORDINATE THE ERECTION WITH THE INSTALLATION OF OTHER BUILDING ELEMENTS REQUIRED FOR THE STRUCTURE'S STABILITY. THESE ELEMENTS INCLUDE SLABS, METAL DECK, MASONRY WALLS, CONCRETE WALLS AND LIGHT GAGE METAL FRAMING.

2. MATERIALS:
   a. STRUCTURAL STEEL CHANNEL, ANGLES, PLATES, ETC.: ASTM A36, FY = 36 KSI; STRUCTURAL STEEL WIDE FLANGES: ASTM A572 OR ASTM A992, FY = 50 KSI; HIGH STRENGTH BOLTS: ASTM A325 OR A490; ANCHOR RODS: ASTM F1554 GR.36 OR GR.55; ELECTRODES: SERIES E70; STRUCTURAL PIPES OR ROUND TUBING: ASTM A53 OR A501; FY = 35 KSI MIN; SQUARE AND RECTANGULAR TUBING: ASTM A500, FY = 46 KSI; CONCRETE EXPANSION ANCHORS: HILTI "KWIK-BOLT TZ," SIMPSON STRONG-TIE "STRONG-BOLT 2"; MASONRY EXPANSION ANCHORS: HILTI "KWIK BOLT 3", SIMPSON STRONG-TIE "WEDGE-ALL", SCREW ANCHORS: HILTI "KWIK HUS-EZ", SIMPSON STRONG-TIE "TITEN HD"; ADHESIVE ANCHORS: HILTI "HIT HY 200-A" IN CONCRETE, HILTI "HIT HY 70" IN MASONRY, SIMPSON STRONG-TIE "AT-XP".

3. SPECIFICATION: WELDING PERSONNEL AND PROCEDURES ARE TO BE QUALIFIED PER AWS D1.1. UNLESS SPECIFICALLY SHOWN OTHERWISE, DESIGN, FABRICATION AND ERECTION TO BE GOVERNED BY:
   a. AISC SPECIFICATION FOR STRUCTURAL STEEL BUILDINGS (JUNE 22, 2010).
   b. AISC CODE OF STANDARD PRACTICE FOR STEEL BUILDINGS AND BRIDGES (APRIL 14, 2010).
   c. STRUCTURAL WELDING CODE, AWS D1.1/D1.1 M: 2015 OF THE AMERICAN WELDING SOCIETY.
   d. SPECIFICATIONS FOR STRUCTURAL JOINTS USING ASTM HIGH-STRENGTH BOLTS (DECEMBER 31, 2009).

4. CONNECTIONS:
   a. FIELD CONNECTIONS TO BE BOLTED. SHOP CONNECTIONS TO BE WELDED OR BOLTED. CONNECTIONS TO BE SELECTED BY THE FABRICATOR TO DEVELOP THE FULL UNIFORM LOAD CAPACITY OF THE MEMBER OR THE FORCES/REACTIONS SHOWN ON PLAN. FOR COMPOSITE BEAMS, SELECT CONNECTIONS FOR 1.5x THE FULL UNIFORM LOAD CAPACITY OF THE STEEL MEMBER OR THE FORCES/REACTIONS SHOWN ON PLAN. CONNECTIONS OF BEAMS FRAMING INTO A GIRDER FROM ONE SIDE ONLY, SUCH AS AT SPANDREL GIRDERS, SHALL BE MADE WITH DOUBLE ANGLE CONNECTIONS. UNLESS INDICATED OTHERWISE, ALL OTHER CONNECTIONS MAY BE DOUBLE ANGLE CONNECTIONS OR SINGLE PLATE SHEAR CONNECTIONS. FOLLOW INSTRUCTIONS ON DRAWINGS FOR GENERAL ARRANGEMENT OR PARTICULAR DETAILS.
   b. CONNECTIONS OF HSS BEAMS OR GIRTS TO BE END PLATES OR DOUBLE ANGLES (ORIENTED VERTICALLY) WITH BOLTS SELECTED BY THE FABRICATOR TO DEVELOP THE FULL UNIFORM LOAD CAPACITY OF THE MEMBER FOR THE MEMBER'S STRONG AXIS OR FORCES SHOWN ON PLANS. CONNECTIONS OF HORIZONTAL HSS MEMBERS TO HSS COLUMNS SHALL BE FIELD WELDED ALL AROUND WITH AISC MINIMUM FILLET WELDS (OR FLARE-BEVEL GROVE WELDS AT HSS CORNERS) WITH ALL WELDS GROUNDED SMOOTH PER AESS REQUIREMENTS.
   c. FULL PENETRATION AND PARTIAL PENETRATION FIELD WELDS IN MATERIAL OVER 5/16" THICK AND WELDED FIELD SPLICE OF MAIN MEMBERS SHALL BE SUBJECTED TO NON-DESTRUCTIVE TESTING (OTHER THAN VISUAL INSPECTION) BY AN INDEPENDENT LABORATORY.
   d. ALL BOLTS IN BRACED FRAMES AND BOLTS IN SHEAR CONNECTIONS USED IN CONJUNCTION WITH FULL OR PARTIAL PENETRATION FLANGE WELDS SHALL BE SLIP CRITICAL TYPE.

5. GALVANIZING: ALL EXTERIOR PERIMETER SHELF ANGLES, LINTELS IN EXTERIOR WALLS, ALL EXTERIOR STEEL EXPOSED TO THE ELEMENTS, AND ALL ITEMS INDICATED ON THE DRAWINGS AS "GALVANIZED" SHALL BE GALVANIZED.

6. PAINT:
   a. DO NOT PAINT STEEL OR ANCHOR BOLTS WHICH WILL BE GALVANIZED, ENCASED IN CONCRETE, STEEL THAT WILL RECEIVE SPRAYED-ON FIREPROOFING OR ANY STEEL NOT EXPOSED TO VIEW IN THE FINISHED STRUCTURE, EXCEPT COLUMNS AND PORTIONS OF BEAMS EMBEDDED IN OR BUILT WITHIN EXTERIOR WALLS, WHICH SHALL BE PAINTED WITH TWO COATS OF PRIMER.

7. MISCELLANEOUS:
   a. THE COLUMNS, ANCHOR BOLTS, BASE PLATES AND FOUNDATIONS ARE DESIGNED TO RESIST A GRAVITY LOAD MOMENT OF 675 FOOT-POUNDS DURING ERECTION, IF SHIM PACKS ARE PROVIDED AT THE EXTREME EDGES ALONG ALL FOUR SIDES OF THE BASE PLATE. FOR SAFETY CONSIDERATIONS DURING ERECTION, SEE STRUCTURAL NOTE A1.
   b. PROVIDE HOLES FOR OTHERS. IF OPENING IS NOT SHOWN ON THE STRUCTURAL DRAWINGS, OBTAIN PRIOR APPROVAL.
   c. STEEL SUPPORTING OR CONNECTING TO HVAC AND OTHER EQUIPMENT AND ROOF OPENINGS AS SHOWN ON DRAWINGS ARE SHOWN FOR BIDDING PURPOSES ONLY. CONTRACTOR SHALL COORDINATE EXACT SIZE AND LOCATION BEFORE PROCEEDING WITH HIS WORK.
   d. THE USE OF LEVELING PLATES AT COLUMN BASES IS PROHIBITED. SEE THE REINFORCED CONCRETE NOTES ABOVE FOR GROUT AND GROUTING REQUIREMENTS.
   e. STEEL BELOW GRADE IS TO BE PROTECTED BY A MINIMUM OF 3 INCHES OF CONCRETE.
   f. PROVIDE 1/4 INCH THICK SETTING PLATES FOR ALL BEAMS BEARING ON MASONRY OR CONCRETE WHICH DO NOT REQUIRE A BEARING PLATE.
   g. PROVIDE SHOP WELDED ANCHORS FOR ATTACHMENTS OF MASONRY. SPACING TO BE 16" ON COLUMNS AND BEAMS.
   h. PROVIDE WASHER AND HEAVY NUT AT ALL ANCHOR BOLTS (BOTH ENDS).
   i. FINISH ENDS OF ALL COLUMNS, STIFFENERS AND ALL OTHER MEMBERS IN DIRECT BEARING.
   j. PROVIDE BOLT HOLES FOR JOISTS BOLTED TO BEAMS AND COLUMNS AND STABILIZER PLATES AT COLUMNS OR ON BEAM CLOSEST TO COLUMN FOR JOIST BOTTOM CHORD EXTENSIONS.
   k. MINIMUM BEAM BEARING ON MASONRY = 7 1/2" UNLESS NOTED OTHERWISE.
   l. EMBEDMENT LENGTH OF EXPANSION BOLTS INTO SOLID MASONRY OR CONCRETE SHALL BE AS FOLLOWS:
      1/2" DIAMETER BOLTS --- 2 3/8" EMBEDMENT

8. CONTINGENCY:
   a. INCLUDE AN ALLOWANCE IN THE BID TO PROVIDE AND ERECT **** ADDITIONAL TONS(S) OF STRUCTURAL AND/OR MISCELLANEOUS STEEL (SHAPES, ANGLES, PLATES, ETC.). MATERIAL TO BE USED AND ITS APPLICATION SHALL BEDETERMINED BY THE ARCHITECT. CONNECTIONS, IF REQUIRED, SHALL BE FIELD-WELDED.

C. **STATEMENT OF SPECIAL INSPECTIONS**

THE OWNER OR THE REGISTERED DESIGN PROFESSIONAL IN RESPONSIBLE CHARGE, ACTING AS THE OWNER'S AGENT, SHALL EMPLOY ONE OR MORE APPROVED AGENCIES TO PERFORM INSPECTIONS DURING CONSTRUCTION ON THE TYPES OF WORK LISTED BELOW UNDER SECTION 1704 OF THE OHIO BUILDING CODE.

THE SPECIAL INSPECTOR SHALL BE A QUALIFIED PERSON WHO SHALL DEMONSTRATE COMPETENCE, TO THE SATISFACTION OF THE BUILDING OFFICIAL, FOR THE INSPECTION OF THE PARTICULAR TYPE OF CONSTRUCTION REQUIRING SPECIAL INSPECTION. RESUMES OF SPECIAL INSPECTORS SHALL BE SUBMITTED TO THE BUILDING OFFICIAL SHOWING THE QUALIFICATION AND/OR SPECIAL TRAINING PER 1704.1.

THE FOLLOWING STATEMENT OF SPECIAL INSPECTIONS HAS BEEN PREPARED BY THE REGISTERED DESIGN PROFESSIONAL IN RESPONSIBLE CHARGE. SPECIAL INSPECTORS SHALL KEEP RECORDS OF INSPECTIONS. THE SPECIAL INSPECTOR SHALL FURNISH INSPECTION REPORTS TO THE BUILDING OFFICIAL AND TO THE REGISTERED DESIGN PROFESSIONAL IN RESPONSIBLE CHARGE. DISCREPANCIES SHALL BE BROUGHT TO THE IMMEDIATE ATTENTION OF THE SPECIAL INSPECTOR FOR CORRECTION BY THE CONTRACTOR. IF THEY ARE NOT CORRECTED, THE DISCREPANCIES SHALL BE BROUGHT TO THE ATTENTION OF THE BUILDING OFFICIAL AND TO THE REGISTERED DESIGN PROFESSIONAL IN RESPONSIBLE CHARGE. A FINAL SPECIAL INSPECTION REPORT DOCUMENTING REQUIRED SPECIAL INSPECTIONS AND CORRECTIONS OF ANY DISCREPANCIES NOTED IN THE INSPECTIONS SHALL BE SUBMITTED TO THE BUILDING OFFICIAL.

INSPECTION OF FABRICATORS
WHERE FABRICATION OF STRUCTURAL LOAD-BEARING MEMBERS AND ASSEMBLIES IS BEING PERFORMED ON THE PREMISES OF A FABRICATOR'S SHOP, SPECIAL INSPECTION OF THE FABRICATED ITEMS SHALL BE REQUIRED UNLESS THE FABRICATOR IS REGISTERED AND APPROVED TO PERFORM SUCH WORK WITHOUT SPECIAL INSPECTION PER SECTION 1704.2.2 OF THE OHIO BUILDING CODE.

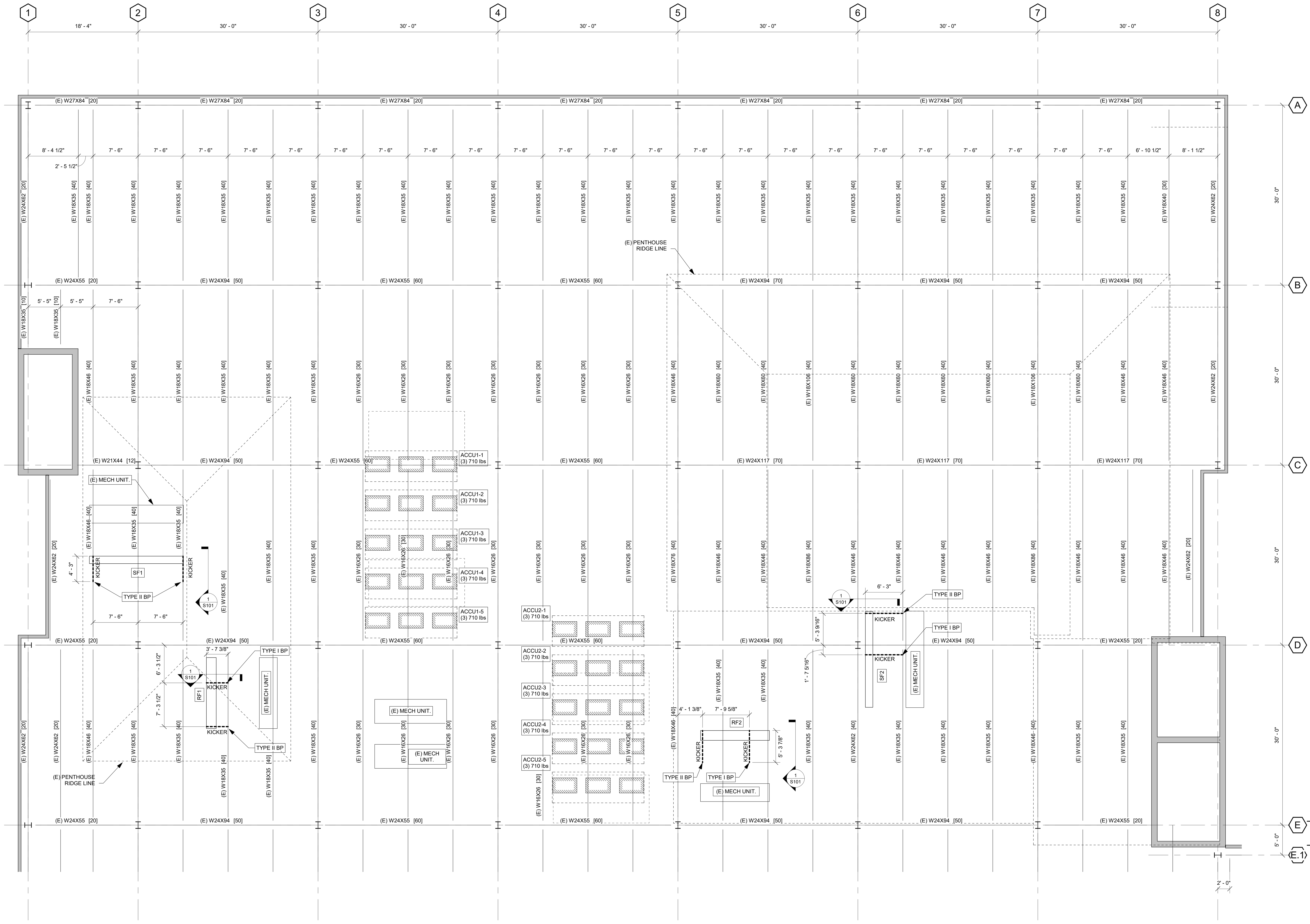
THE GENERAL CONTRACTOR SHALL NOTE ON THE SPACES BELOW THE AGENCY AND/OR INDIVIDUAL RETAINED TO PERFORM THE SPECIAL INSPECTIONS AND TESTS.

SCHEDULE OF SPECIAL INSPECTIONS PER SECTION 1704 OF THE OHIO BUILDING CODE

1. FABRICATORS	(1704.2)		AGENCY:________________
a. STRUCTURAL LOAD-BEARING MEMBERS		PERIODIC	
b. STRUCTURAL LOAD-BEARING ASSEMBLIES		PERIODIC	
2. STEEL CONSTRUCTION	(1704.3)		AGENCY:________________
a. HIGH STRENGTH BOLTS			
i. SNUG TIGHT JOINTS		PERIODIC	
ii. SLIP-CRITICAL JOINTS USING TWIST-OFF BOLTS		PERIODIC	
b. STRUCTURAL STEEL MATERIALS		PERIODIC	
c. STRUCTURAL STEEL WELDING			
i. COMPLETE AND PARTIAL JOINT PENETRATION		CONTINUOUS	
ii. FILLET WELDS LESS THAN OR EQUAL 5/16"		PERIODIC	
d. STRUCTURAL STEEL FRAME JOINT DETAILS		PERIODIC	
e. INSPECTION OF STEEL FRAME		PERIODIC	
9. SPRAYED APPLIED FIRE-RESISTANT MATERIALS (1704.10)			AGENCY:________________
a. SURFACE CONDITIONS		PERIODIC	
b. APPLICATION		PERIODIC	
c. SPRAY THICKNESS		PERIODIC	
d. SPRAY DENSITY		PERIODIC	
e. SPRAY BONDING STRENGTH		PERIODIC	
10. MASTIC/INTUMESCENT FIRE-RESISTANT COATINGS	(1704.11)		AGENCY:________________
11. EIFS SYSTEM	(1704.12)	PERIODIC	AGENCY:________________
12. SPECIAL CASES	(1704.13)	PERIODIC	AGENCY:________________
a. MATERIALS AND SYSTEMS NOT PRESCRIBED IN CODE		PERIODIC	
b. UNUSUAL DESIGN APPLICATIONS		PERIODIC	
c. ADDITIONAL REQUIREMENTS BY MANUFACTURER		PERIODIC	

D. **ABBREVIATIONS:**

B. =	BOTTOM	P.A.F. =	POWER ACTUATED FASTENERS
B.L. =	BRICK LEDGE EL	P.C. =	PRECAST
C.I.P. =	CAST IN PLACE	P.T. =	PRESSURE TREATED
CMU =	CONCRETE MASONRY UNIT	S.O.G. =	SLAB ON GRADE
E.E. =	EACH END	T. =	TOP
E.F. =	EACH FACE	T.O.F. =	TOP OF FOOTING ELEVATION
E.W. =	EACH WAY	T.O.P. =	TOP OF PIER ELEVATION
F.V. =	FIELD VERIFY	T.O.S. =	TOP OF SLAB ELEVATION
GALV. =	GALVANIZED	T.O.STL. =	TOP OF STEEL ELEVATION
LLH =	LONG LEG HORIZONTAL	T.O.W. =	TOP OF WALL ELEVATION
LLV =	LONG LEG VERTICAL	TYP. =	TYPICAL
N.T.S. =	NOT TO SCALE	U.N.O. =	UNLESS NOTED OTHERWISE
O.C. =	ON CENTER	W.W.F. =	WELDED WIRE FABRIC



A ROOF FRAMING PLAN - AREA A

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

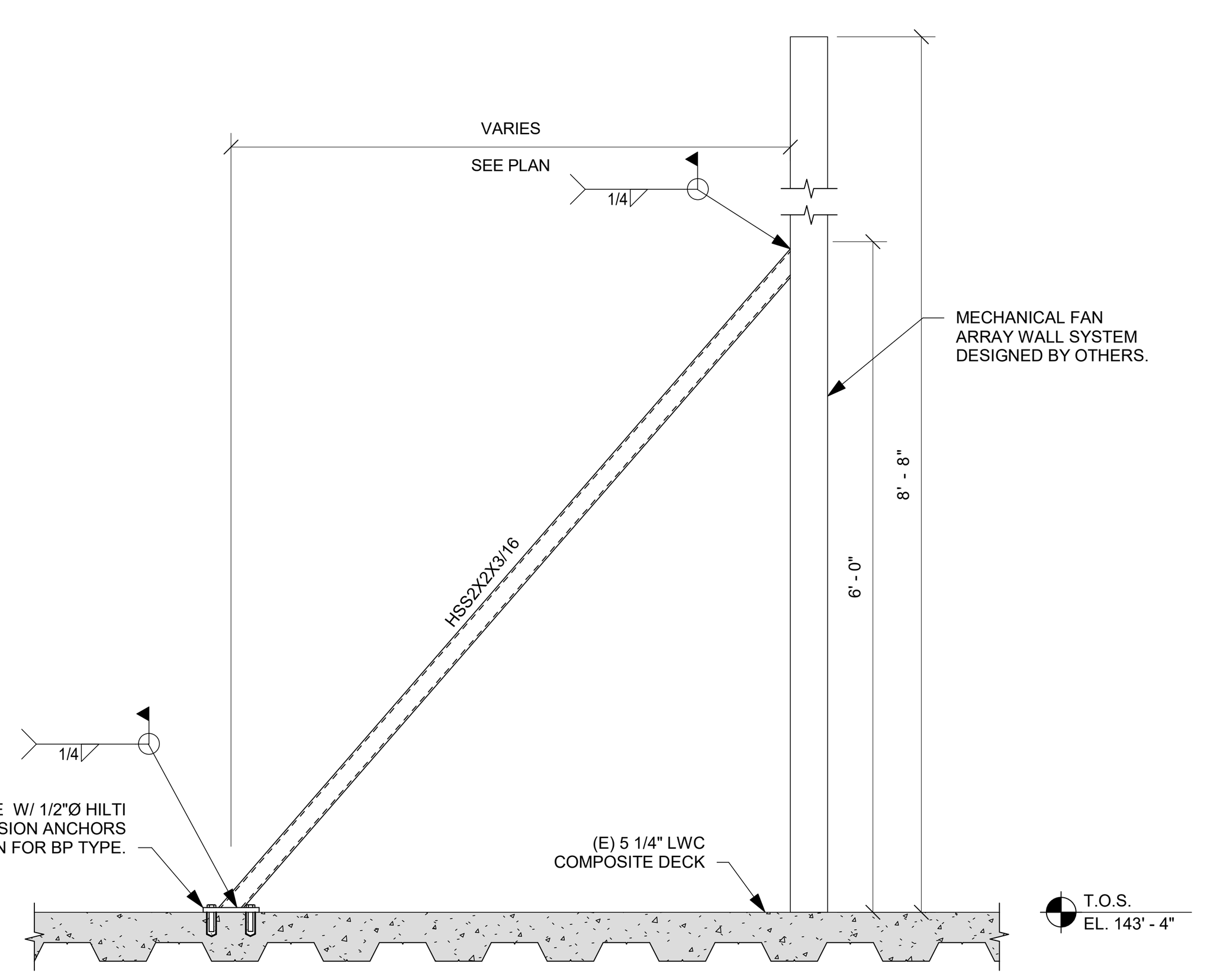
0' 3" 6" 1' 2'

ROOF FRAMING NOTES

1. DESIGN ROOF SNOW LOADS = 20 PSF PLUS THE EFFECTS OF DRIFTING SNOW PER OBC.
2. EXISTING ROOF CONSTRUCTION: 5-1/4" COMPOSITE SLAB - 3-1/4" LIGHT WT. CONCRETE W/ 6X6-W2.9XW2.9 W.W.F. OVER 2" DEEP 18 GAGE METAL DECK.
3. TOP OF STEEL ELEVATION (T.O.STL.) = EL. 143'-4" UNLESS NOTED THUS: (+/-).
4. ELEVATIONS SHOWN INDICATE THE FOLLOWING:

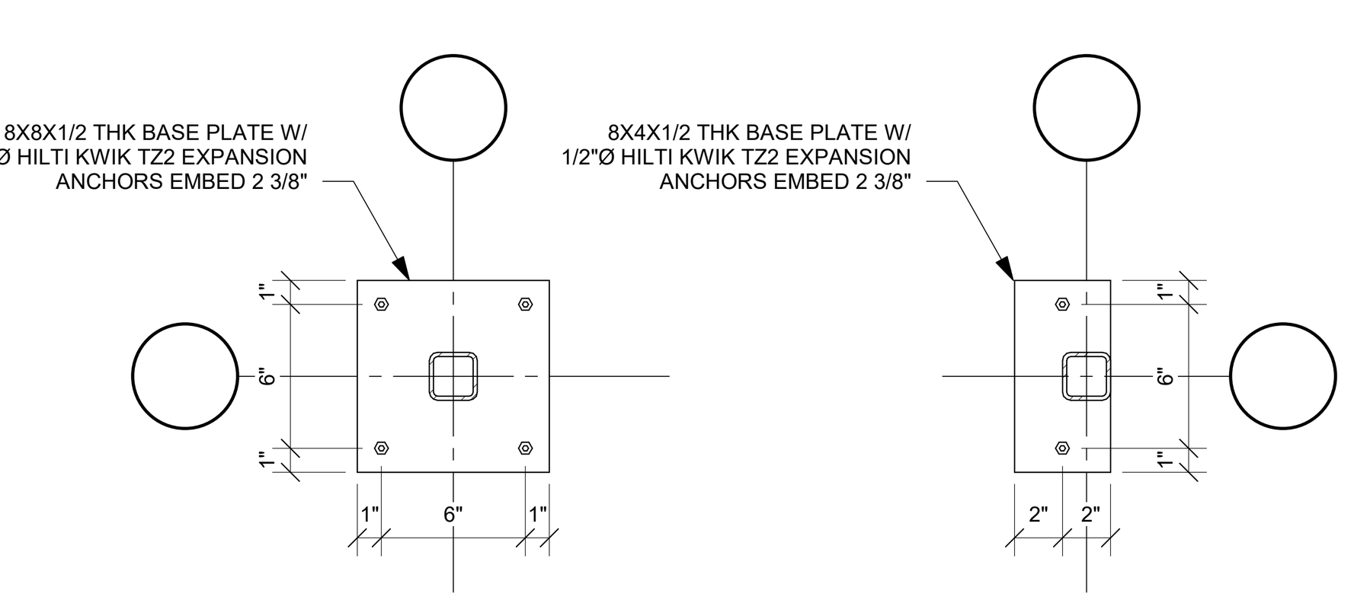
   AT BEAMS: TOP OF BEAM EL. (U.N.O.)

   WORKPOINTS OF SLOPING MEMBERS ARE LOCATED AT CENTERLINES OF COLUMNS & SUPPORTING BEAMS AND AT THE OUTSIDE FACE OF WALLS, U.N.O.
5. INDICATES MECHANICAL LOADS SUPPORTED ON THE ROOF. COORDINATE THE SIZE, LOCATION AND WEIGHTS OF ALL UNITS WITH THE MECHANICAL CONTRACTOR. PROVIDE A STEEL FRAME BENEATH ALL UNIT CURBS SIMILAR TO SECTION.
6. * - INDICATES A572 GRADE 50 STEEL FOR EXISTING BEAMS



1 SECTION

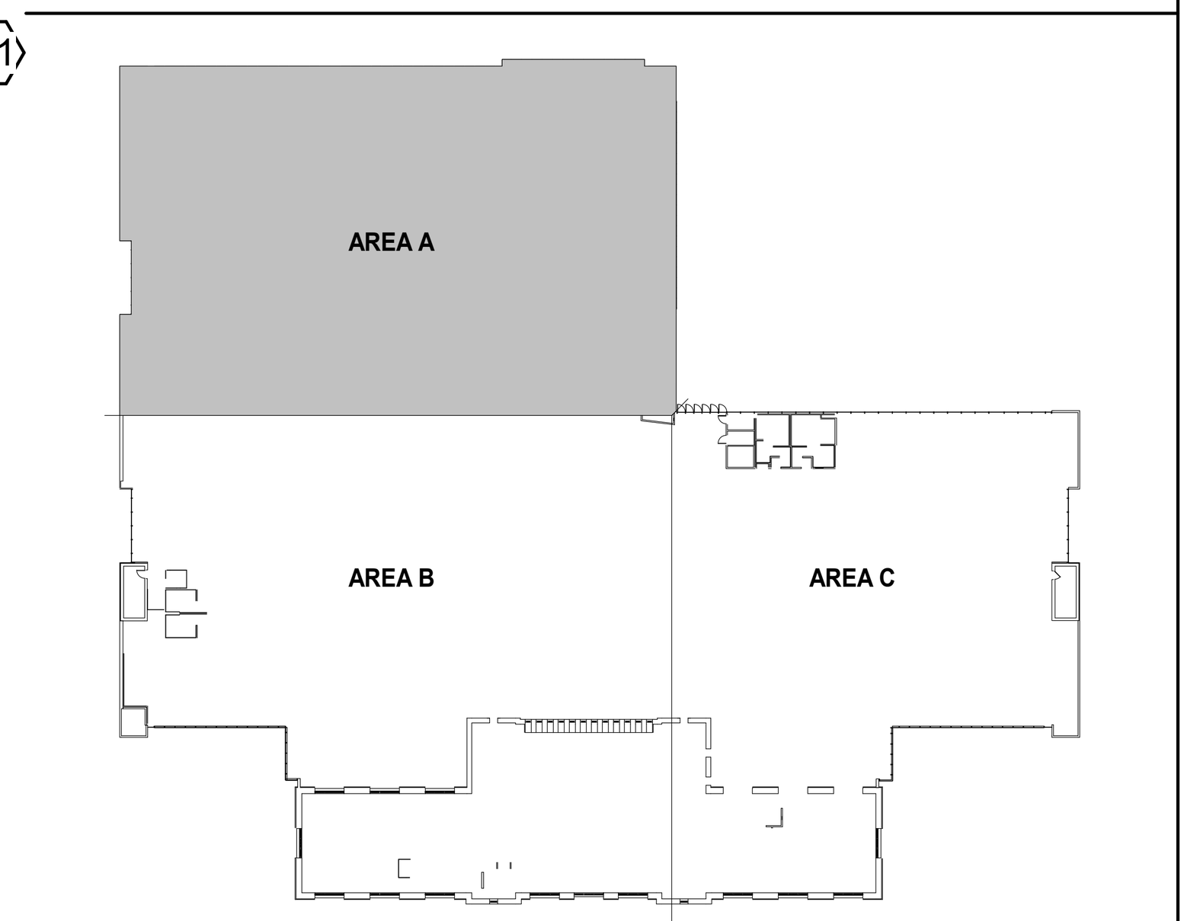
SCALE: 3/4" = 1'-0"



2 BASE PLATE

SCALE: 1 1/2" = 1'-0"

KEY PLAN



No.	Description	Date

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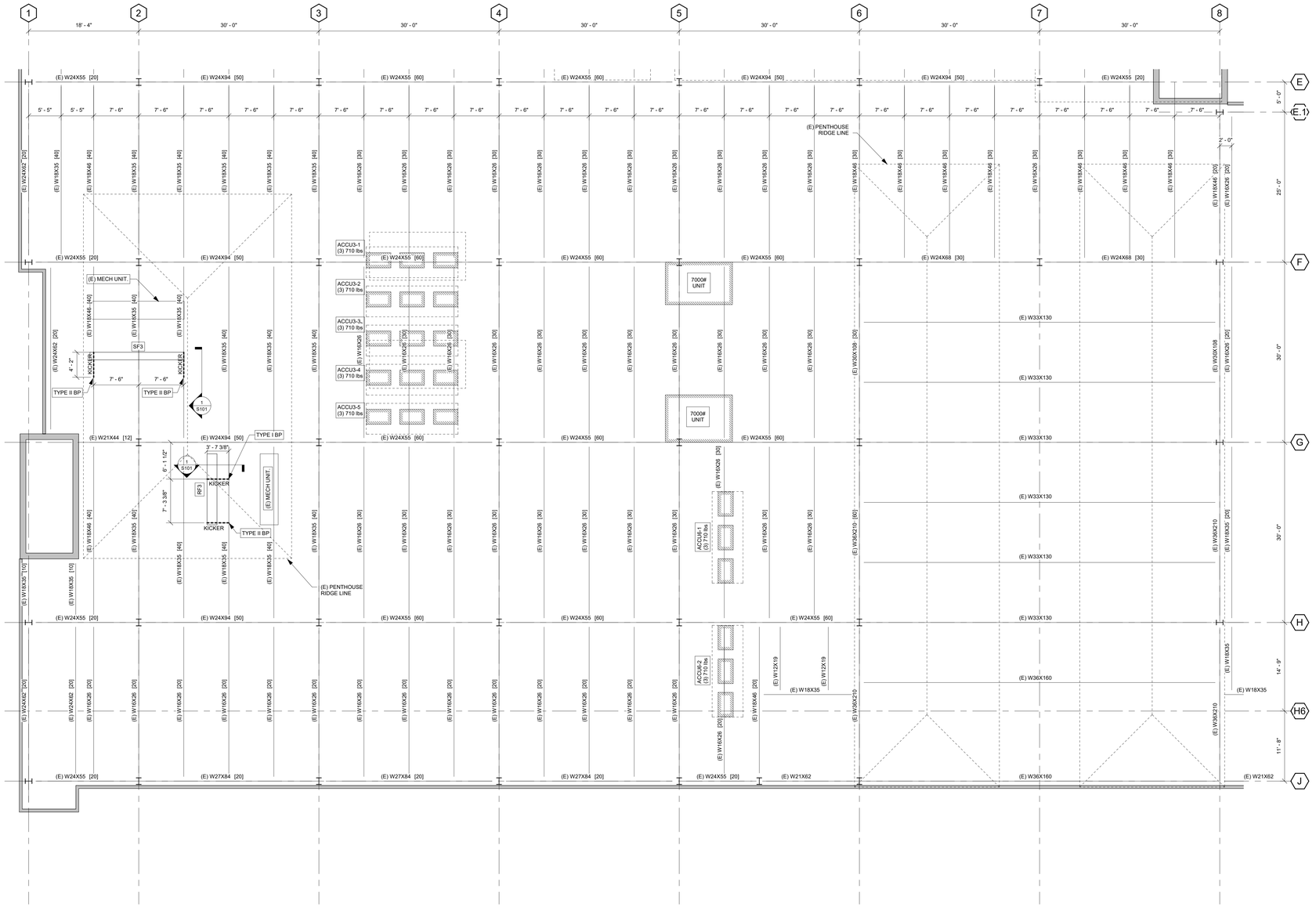
STATE OF OHIO JERRY P. FINLEY PE-63623 REGISTERED PROFESSIONAL ENGINEER

STRUCTURAL NOTES AND ROOF FRAMING PLAN A

PROJECT STATUS:		BID/PERMIT SET
PROJECT NUMBER:		2022-0212
DRAWN BY: WRH	DATE	SHEET NUMBER
DESIGNED BY: TDY	10/28/2022	S101
CHECKED BY: JPF		



ROOF FRAMING PLAN - AREA B

B

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

0' 1'-2" 4' 8'

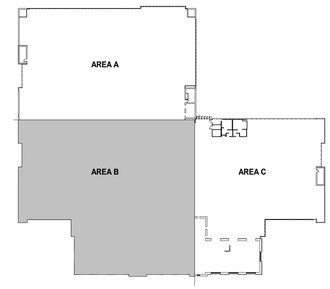
ROOF FRAMING NOTES

1. DESIGN ROOF SNOW LOADS = 20 PSF PLUS THE EFFECTS OF DRIFTING SNOW PER OBC.
2. EXISTING ROOF CONSTRUCTION: 5-1/4" COMPOSITE SLAB - 3-1/4" LIGHT WT. CONCRETE W/ 6X6-W2.9XW2.9 W.W.F. OVER 2" DEEP 18 GAGE METAL DECK.
3. TOP OF STEEL ELEVATION (T.O.STL.) = EL. 143'-4" UNLESS NOTED THUS: (+/-).
4. ELEVATIONS SHOWN INDICATE THE FOLLOWING:

   AT BEAMS: TOP OF BEAM EL. (U.N.O.)

   W/ORKPOINTS OF SLOPING MEMBERS ARE LOCATED AT CENTERLINES OF COLUMNS & SUPPORTING BEAMS AND AT THE OUTSIDE FACE OF WALLS, U.N.O.
5. INDICATES MECHANICAL LOADS SUPPORTED ON THE ROOF. COORDINATE THE SIZE, LOCATION AND WEIGHTS OF ALL UNITS WITH THE MECHANICAL CONTRACTOR. PROVIDE A STEEL FRAME BENEATH ALL UNIT CURBS SIMILAR TO SECTION.
6. * - INDICATES A572 GRADE 50 STEEL FOR EXISTING BEAMS

KEY PLAN



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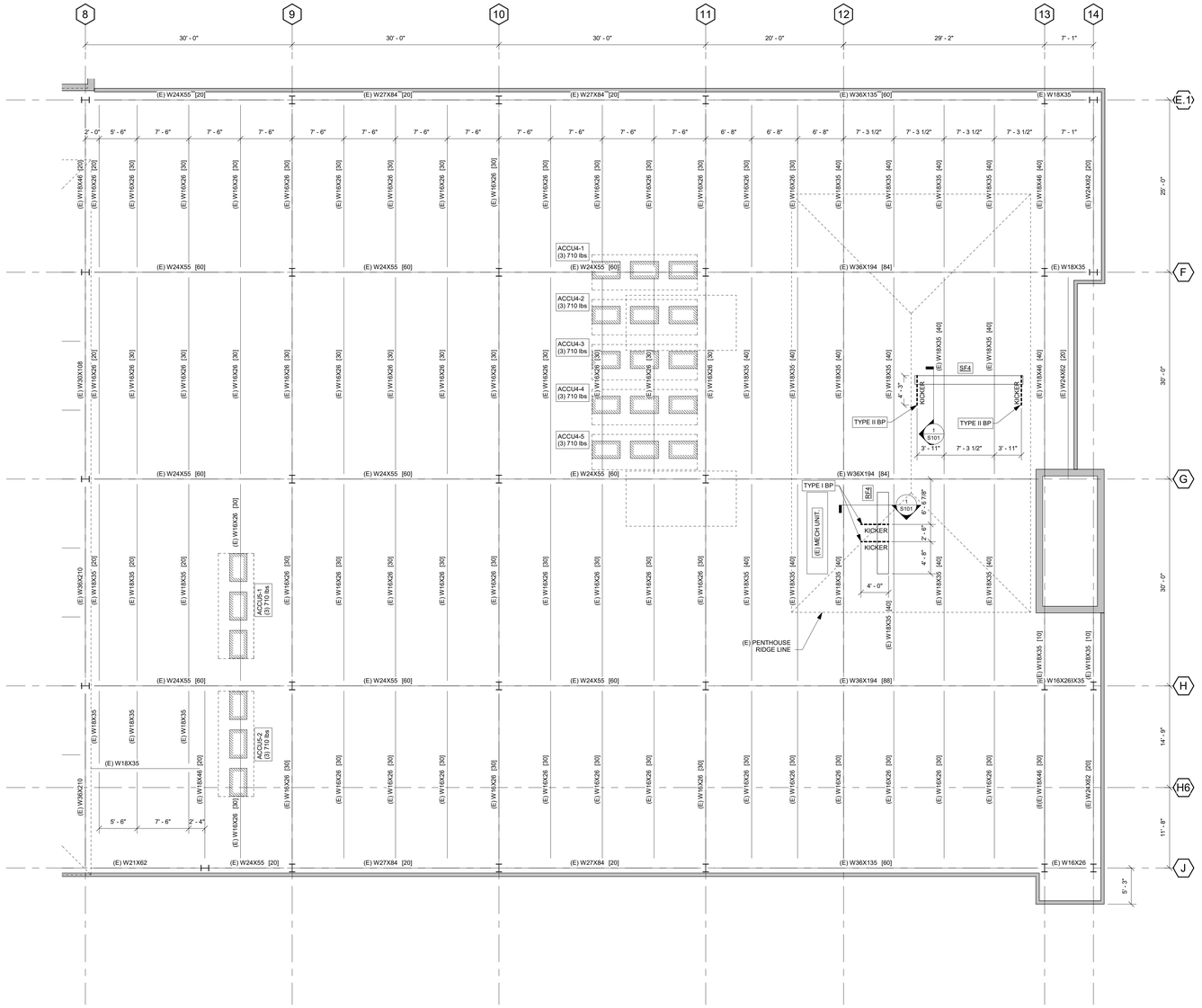
ROOF FRAMING PLAN - AREA B

STATE OF OHIO
JERRY P. FINLEY
PE-63623
REGISTERED
PROFESSIONAL ENGINEER

PROJECT STATUS:			BID/PERMIT SET
PROJECT NUMBER:			2022-0212
DRAWN BY: WRH	DESIGNED BY: TDY	DATE	SHEET NUMBER
	CHECKED BY: JPF	10/28/2022	S102


8
9
10
11
12
13
14
E.1
F
G
H
H6
J
30' - 0"
30' - 0"
30' - 0"
20' - 0"
29' - 2"
7' - 1"
(E) W24X55 [20]
(E) W27X84 [20]
(E) W27X84 [20]
(E) W36X135 [60]
(E) W18X35
2' - 0"
5' - 6"
7' - 6"
7' - 6"
7' - 6"
7' - 6"
7' - 6"
7' - 6"
7' - 6"
7' - 6"
7' - 6"
7' - 6"
6' - 8"
6' - 8"
6' - 8"
7' - 3 1/2"
7' - 3 1/2"
7' - 3 1/2"
7' - 3 1/2"
7' - 1"
(E) W16X26 [20]
(E) W16X48 [20]
(E) W24X62 [20]
25' - 0"
(E) W24X55 [60]
(E) W24X55 [60]
(E) W36X194 [84]
(E) W18X35
ACCU4-1
(3) 710 lbs
ACCU4-2
(3) 710 lbs
ACCU4-3
(3) 710 lbs
ACCU4-4
(3) 710 lbs
ACCU4-5
(3) 710 lbs
(E) W30X109
(E) W16X26 [30]
(E) W16X35 [40]
(E) W18X35 [40]
(E) W16X48 [40]
SF4
KICKER
TYPE II BP
4' - 2"
S101
3' - 11"
7' - 3 1/2"
30' - 0"
(E) W24X55 [60]
(E) W24X55 [60]
(E) W24X55 [60]
(E) W36X194 [84]
TYPE I BP
SF4
S101
6' - 7 3/8"
(E) MECH UNIT
KICKER
KICKER
2' - 4"
4' - 8"
4' - 0"
(E) W30X210
(E) W18X35 [20]
(E) W18X35 [20]
(E) W16X26 [30]
(E) W18X35 [20]
(E) W16X26 [30]
(E) PENTHOUSE RIDGE LINE
(E) W16X26 [10]
(E) W24X55 [60]
(E) W24X55 [60]
(E) W24X55 [60]
(E) W36X194 [88]
(E) W16X26 [35]
(E) W18X35
(E) W18X35
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(E) W18X35
(E) W18X35
(E) W18X35
ACCU4-6
(3) 710 lbs
(E) W18X35
(E) W18X35
(E) W18X35
(E) W18X35
(E) W18X35
(E) W18X35

HVAC SYMBOLS LIST
NOTE: ALL SYMBOLS NOT NECESSARILY USED

GENERAL

- UNDERFLOOR PIPING OR DUCTWORK
- EXISTING TO REMAIN
- EXISTING TO BE REMOVED
- EXISTING TO BE ABANDONED
- TEMPORARY WORK

PIPING

- HEATING WATER SUPPLY — HWS
- HEATING WATER RETURN — HWR
- CHILLED WATER SUPPLY — CWS
- CHILLED WATER RETURN — CWR
- CONDENSER WATER SUPPLY — CS
- CONDENSER WATER RETURN — CR
- LOW PRESSURE STEAM — LPS(#)
- LOW PRESSURE CONDENSATE — LPR(#)
- HIGH PRESSURE STEAM — HPS(#)
- HIGH PRESSURE CONDENSATE — HPR(#)
- CONDENSATE PUMP DISCHARGE — CPD
- REFRIGERANT LIQUID — L
- REFRIGERANT SUCTION — S
- REFRIGERANT HOT GAS — HG
- COOLING COIL CONDENSATE — C
- VENT — V
- HEAT PUMP WATER SUPPLY — HPWS
- HEAT PUMP WATER RETURN — HPWR

SPECIALTIES

- AUTOMATIC AIR VENT WITH BALL VALVE
- MANUAL AIR VENT
- CONCENTRIC INCREASER
- CONCENTRIC REDUCER
- ECCENTRIC INCREASER
- ECCENTRIC REDUCER
- FILL FUNNEL
- FLEXIBLE CONNECTION
- FLOW ARROW
- FLOW SWITCH
- GAUGE WITH BALL VALVE
- HEAT TRACED PIPE
- METER
- PIPE ANCHOR
- CAP
- DROP
- RISE
- PRESSURE/TEMPERATURE TEST PLUG
- PIPE ALIGNMENT GUIDE
- FIRE RATED PIPE SLEEVE
- SIGHT GLASS
- STRAINER
- THERMOMETER
- THRUST BLOCK
- STEAM TRAP
- UNION OR FLANGE
- VACUUM BREAKER
- VALVE IN RISER/DROP

VALVES

- 2-WAY CONTROL VALVE
- 3-WAY CONTROL VALVE
- BALANCE/SHUT-OFF VALVE
- BALL VALVE
- BUTTERFLY VALVE
- CHECK VALVE
- EXPANSION VALVE
- ISOLATION VALVE - SEE PROJECT SPECIFICATIONS FOR REQUIREMENTS
- GATE VALVE
- GLOBE VALVE
- PLUG VALVE
- PRESSURE REDUCING VALVE
- PRESSURE RELIEF VALVE
- SOLENOID VALVE

MISCELLANEOUS

- DUCT ACCESS DOOR — A.D.
- FIRE DAMPER — FD
- SMOKE DAMPER — SD
- COMB. FIRE/SMOKE DAMPER — CD
- DUCT VOLUME DAMPER
- MOTOR OPERATED DAMPER — M
- DUCT CHANGE IN ELEVATION — UP (OR DOWN)
- FLEX DUCT
- TURNING VANES
- SPIN-IN FITTING
- DUCT SECTIONS
  - POSITIVE PRESSURE (SUPPLY/OUTSIDE) — RISE / DROP
  - NEGATIVE PRESSURE (RETURN/RELIEF) — RISE / DROP
  - NEGATIVE PRESSURE (EXHAUST) — RISE / DROP
- CARBON DIOXIDE SENSOR — C
- HUMIDISTAT OR HUMIDITY SENSOR (MOUNT 48" A.F.F. U.N.O.) — H
- THERMOSTAT OR SPACE TEMPERATURE SENSOR (MOUNT 48" A.F.F. U.N.O.) — T
- SMOKE DETECTOR BY DIV. 26 DIV 23 TO PROVIDE DUCT ACCESS DOOR AT EACH OF THESE LOCATIONS — S
- DIFFUSER
- RETURN AIR DEVICE
- TERMINAL BOXES, WITH/WITHOUT REHEAT
- CONNECT TO EXISTING

GENERAL NOTES – HVAC (APPLY TO ALL HVAC DRAWINGS)

1. THE SYSTEM DESIGN IS BASED ON THE LATEST EDITION OF THE OHIO MECHANICAL CODE INCLUDING ALL AMENDMENTS THROUGH THE DATE OF DRAWING ISSUE.
2. VOLUME DAMPERS:
   A. PROVIDE DAMPERS AS NOTED ON THE DRAWINGS.
   B. THE FACT THAT SOME, BUT NOT NECESSARILY ALL, VOLUME DAMPERS ARE SHOWN ON THE CONTRACT DRAWINGS DOES NOT RELIEVE THE CONTRACTOR FROM THESE REQUIREMENTS. LOCATE VOLUME DAMPERS IN ACCESSIBLE LOCATIONS.
3. THE EXISTING AND DEMOLITION DRAWINGS HAVE BEEN GENERATED BASED ON RECORD DRAWINGS AND LIMITED FIELD INVESTIGATIONS. ALL EXISTING WORK MUST BE FIELD VERIFIED PRIOR TO BEGINNING CONSTRUCTION. FIELD VERIFY EXACT SIZES AND LOCATIONS OF ALL EXISTING EQUIPMENT, DUCTWORK AND PIPING BEFORE GENERATING COORDINATION DRAWINGS.
4. PRIOR TO ANY DEMOLITION, VERIFY WHICH EQUIPMENT IS TO BE REMOVED AND TURNED OVER TO THE OWNER. ALL OTHER ITEMS ARE TO BE REMOVED FROM THE SITE BY THE CONTRACTOR. PROTECT EXISTING EQUIPMENT THAT IS TO REMAIN IN SERVICE. ALL EXISTING DUCTWORK AND PIPING INSULATION THAT IS DAMAGED DURING THE DEMOLITION OR NEW WORK PROCESS SHALL BE REPLACED.
5. COORDINATE THE EXACT AREA OF CEILING REMOVAL NECESSARY FOR ALL WORK. THE CEILING REMOVAL SHALL BE BY THE GENERAL TRADES CONTRACTOR AT THE HVAC CONTRACTOR'S EXPENSE. COORDINATE THE REMOVAL AND TEMPORARY STORAGE OF THE CEILING TILES AND T-BAR CEILING GRID WITH THE OWNER.
6. PERFORM CEILING REMOVAL AND CHILLED WATER PIPE DEMOLITION WITHIN PUBLIC SPACES AFTER HOURS.
7. PRIOR TO BEGINNING ANY WORK, PROVIDE BALANCE MEASUREMENTS ON THE EXISTING SYSTEM(S) SERVING THE CONSTRUCTION AREA AND REPORT INFORMATION TO THE ENGINEER INDICATING THE FOLLOWING INFORMATION:
   A. AIR HANDLING UNIT SUPPLY AND RETURN FAN OPERATING CONDITIONS INCLUDING BRAKE HORSEPOWER, FAN RPM, FAN TOTAL PRESSURE, AND FAN MOTOR AMPS.
   B. AHU SUPPLY PLENUM STATIC PRESSURE.
   C. AHU RETURN PLENUM STATIC PRESSURE.
8. NOTE THAT ALL EXISTING SYSTEMS THAT SERVE AREAS OUTSIDE OF THE RENOVATION AND MUST REMAIN IN OPERATION THROUGHOUT THE PROJECT. COORDINATE REQUIRED SHUTDOWNS WITH OWNER'S REPRESENTATIVE. CAP AND SEAL ALL REMAINING DUCTWORK AND PIPING IMMEDIATELY AFTER DEMOLITION OF PORTIONS OF SYSTEM.
9. COORDINATE ALL CONSTRUCTION ACTIVITIES AND REQUIRED PHASING THAT MAY AFFECT NORMAL BUILDING OPERATIONS WITH THE OWNER'S REPRESENTATIVE. IT WILL BE NECESSARY FOR SOME WORK INDICATED ON THIS PLAN TO BE PERFORMED OUT OF PHASE AND/OR DURING NIGHTS OR WEEKENDS.
10. CLOSE ALL OPENINGS IN WALLS, CEILINGS, AND FLOORS, WHETHER EXPOSED OR CONCEALED, THAT ARE THE RESULT OF REMOVING DUCTWORK, PIPING, OR OTHER MECHANICAL ELEMENTS. MATCH ADJACENT SURFACE CONDITIONS.
11. ALL NEW WORK SHALL BE SUPPORTED BY NEW HANGERS AND SUPPORTS, FULLY INDEPENDENT OF EXISTING HANGERS. THE USE OF EXISTING HANGERS FOR NEW WORK IS PROHIBITED.

PHASING NOTES – (APPLY TO ALL HVAC DRAWINGS)

1. TEMPORARY HEATING AND COOLING IS REQUIRED WHILE EACH AHU IS BEING REFURBISHED. REFURBISHED AIR HANDLING UNITS 1, 2, 3 AND 4 ONE AT A TIME. REPLACE AIR HANDLING UNITS 5 AND 6 AT THE SAME TIME. CONSTRUCTION SHALL TAKE PLACE DURING THE MONTHS OF NOVEMBER THROUGH MARCH. TEMPORARY UNITS RTU1 AND RTU2 WILL PROVIDE A REDUCED AIRFLOW SUFFICIENT TO MEET THE HEATING AND COOLING DEMANDS IN THE WINTER MONTHS OF CONSTRUCTION.
2. PROPOSED SEQUENCE OF REFURBISHMENT:
   a. INSTALL TEMPORARY RTUS 1 AND 2, RF7, DUCTWORK AND CONTROLS.
   b. DEMOLISH AND REPLACE AHU5 AND AHU6.
   c. DEMOLISH CHILLED WATER SYTEM INCLUDING CHILLER. CHILLER IS SERVED BY A SWITCH THAT ALSO SERVES AHU2.
   d. REFURBISH AHU4 FOLLOWED BY AHU1.
3. CONTRACTOR IS RESPONSIBLE FOR COORDINATING THE FINAL PHASING PLAN.

HVAC SHEET INDEX

No.	Description	Date

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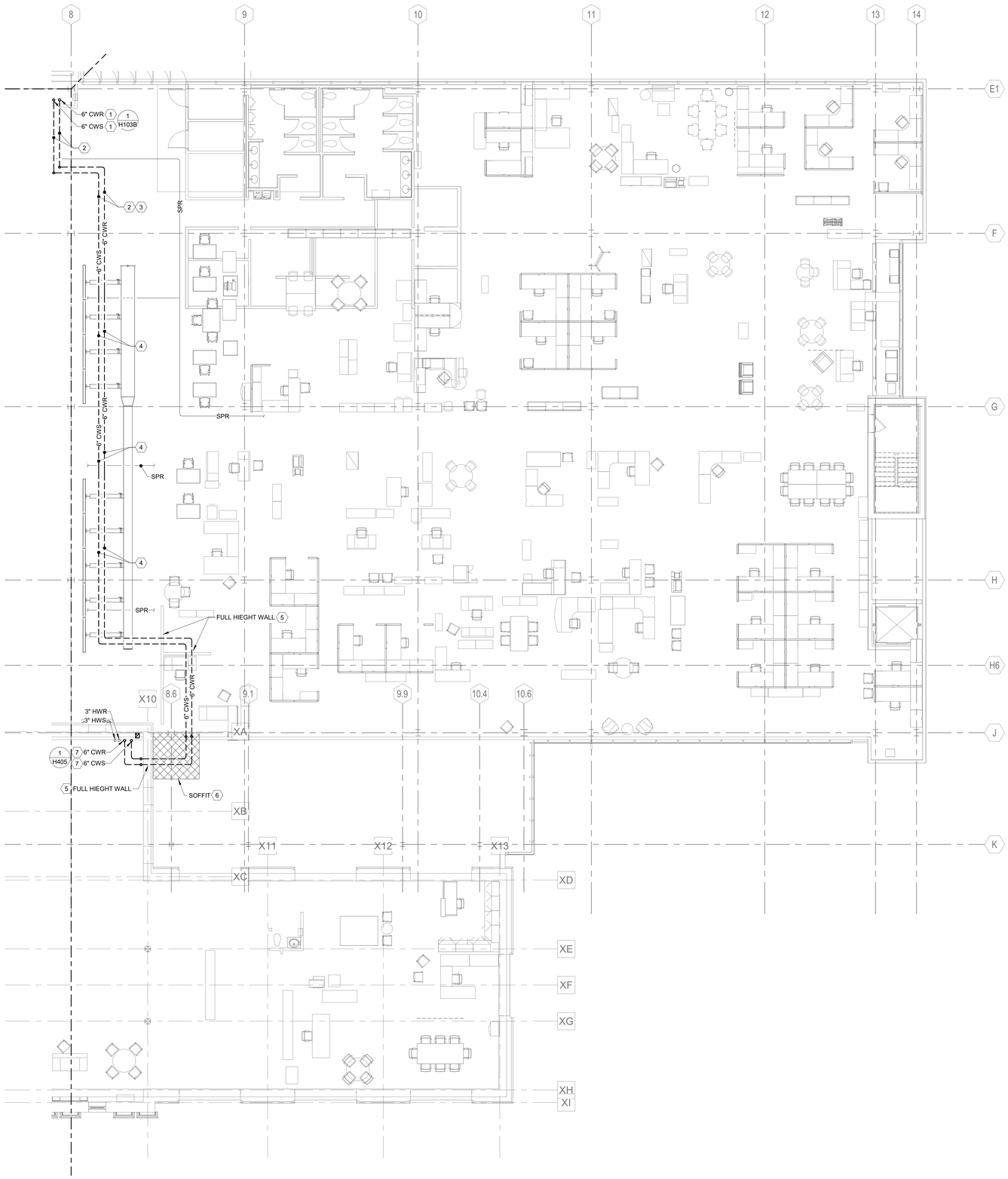
HVAC INDEX SHEET

STATE OF OHIO — DANIEL J EDWARTOSKI — 75218 — REGISTERED PROFESSIONAL ENGINEER — 10/28/22

PROJECT STATUS:		BID/PERMIT SET
PROJECT NUMBER:		2022-0212
DRAWN BY: Dave Balch	DATE	SHEET NUMBER
DESIGNED BY: Dan Edwartoski	10/28/2022	H001
CHECKED BY: Stephen Wilmoth		



1 FLOOR PLAN

DEMOLITION - AREA C

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

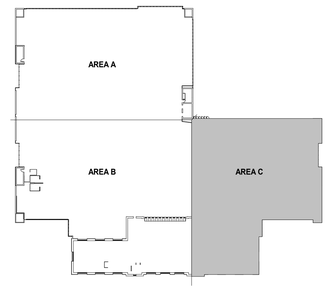
0' 1' 2' 4' 8'

N

CODED NOTES:

1. REMOVE 6 INCH CWS/R UP THROUGH THIRD FLOOR SLAB.
2. 6 INCH CWS/R LINES ARE INSTALLED ABOVE MULTIPLE ELECTRICAL CONDUITS AND BUNDLES OF DATA CABLE. TEMPORARILY REMOVE CONDUIT AND CABLE TO ALLOW ACCESS TO THE PIPE. REINSTALL AFTER DEMOLITION IS COMPLETE.
3. 6 INCH CWS/R LINES ARE INSTALLED ABOVE MULTIPLE FIRE PROTECTION BRANCH PIPES. TEMPORARILY REMOVE FIRE PROTECTION BRANCH PIPES TO ALLOW ACCESS TO THE PIPE. REINSTALL AFTER DEMOLITION IS COMPLETE.
4. 6 INCH CWS/R LINES ARE INSTALLED ABOVE THE BRANCH DUCTS SERVING THE LINEAR DIFFUSER PLENUMS. TEMPORARILY REMOVE BRANCH DUCTS TO ALLOW ACCESS TO THE PIPE. REINSTALL AFTER DEMOLITION IS COMPLETE.
5. REMOVE 6 INCH CWS/R THROUGH FULL HEIGHT WALL.
6. 6 INCH CWS/R IS INSTALLED IN A SOFFIT IN A TWO STORY SPACE.
7. REMOVE 6 INCH CWS/R UP THROUGH THIRD FLOOR SLAB INTO MECHANICAL ROOM.

KEY PLAN



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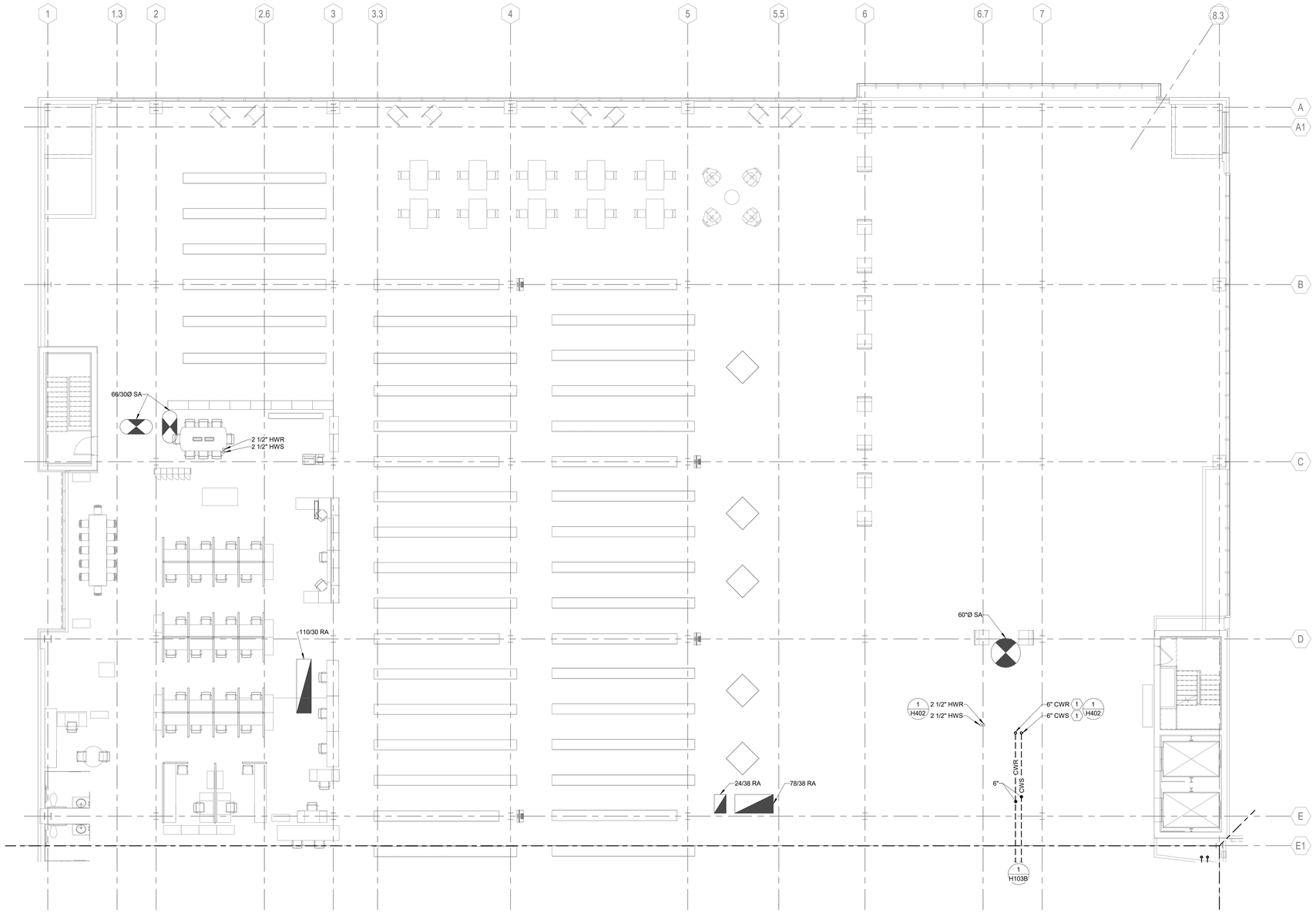
HVAC SECOND FLOOR DEMOLITION PLAN - AREA C

STATE OF OHIO DANIEL J. EDWARTOSKI E-75218 REGISTERED PROFESSIONAL ENGINEER 10/28/22

PROJECT STATUS:		BID/PERMIT SET
PROJECT NUMBER:		2022-0212
DRAWN BY: Dave Balch	DATE	SHEET NUMBER
DESIGNED BY: Dan Edwartoski	10/28/2022	H102C
CHECKED BY: Stephen Wilmoth		

CODED NOTES:

1. REMOVE 6 INCH CWS/R UP THROUGH ROOF SLAB INTO AHU2 PENTHOUSE.

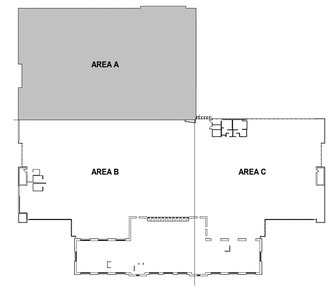


1 FLOOR PLAN
DEMOLITION - AREA A

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

N

KEY PLAN



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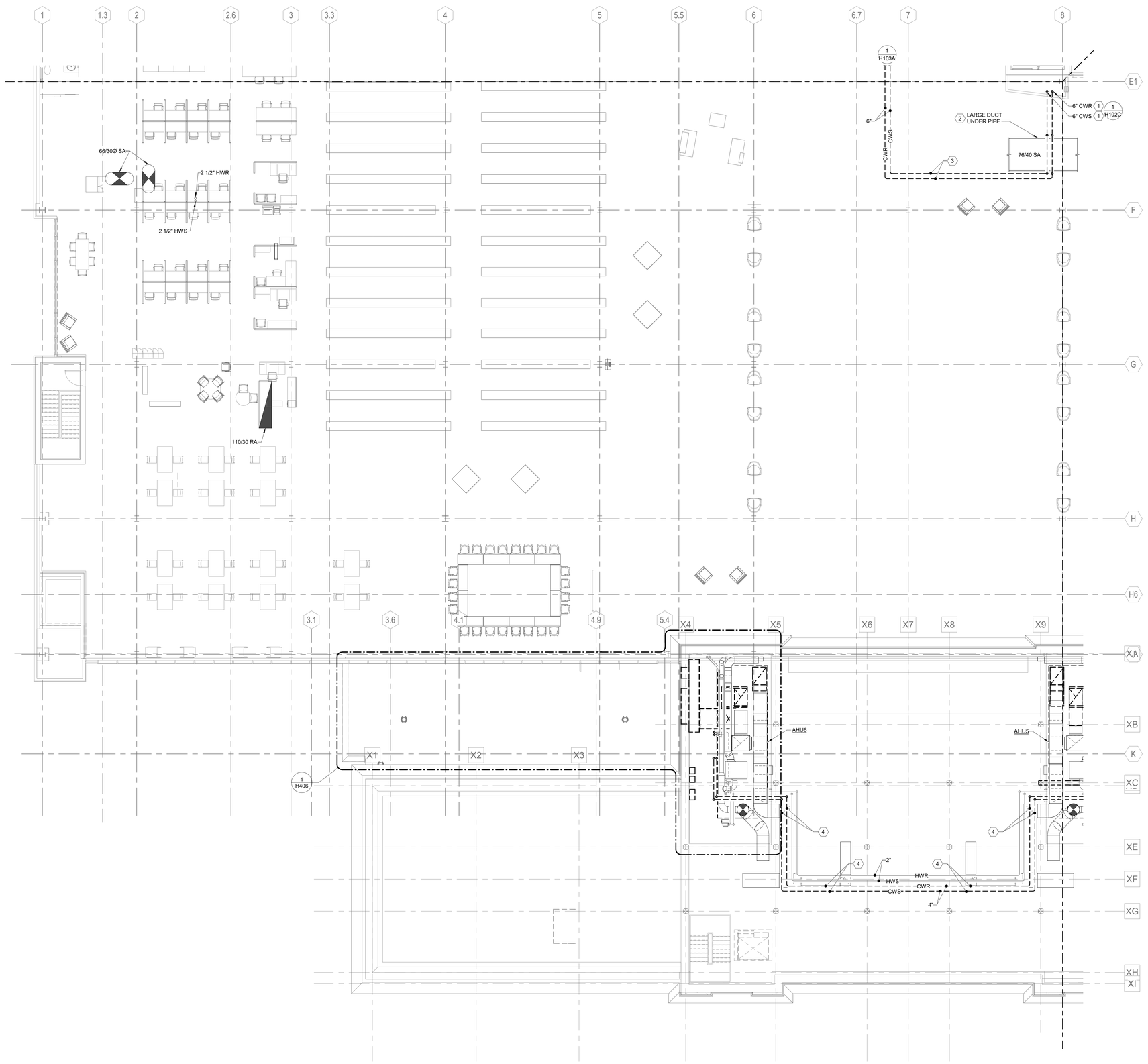
HVAC THIRD FLOOR DEMOLITION PLAN - AREA A

STATE OF OHIO
DANIEL J. EDWARTOSKI
E-75218
REGISTERED PROFESSIONAL ENGINEER
10/28/22

PROJECT STATUS:		BID/PERMIT SET
PROJECT NUMBER:		2022-0212
DRAWN BY: Dave Balch	DATE	SHEET NUMBER
DESIGNED BY: Dan Edwartoski	10/28/2022	H103A
CHECKED BY: Stephen Wilmoth		



1 FLOOR PLAN

DEMOLITION - AREA B

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

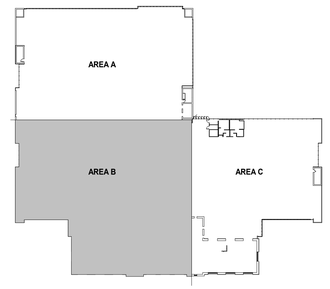
0' 1' 2' 4' 8'

N

CODED NOTES:

1. REMOVE 6 INCH CWS/R DOWN THROUGH THIRD FLOOR SLAB.
2. 6 INCH CWS/R LINES ARE INSTALLED ABOVE A LARGE DUCT. TEMPORARILY REMOVE DUCT TO ALLOW ACCESS TO THE PIPE. REINSTALL AFTER DEMOLITION IS COMPLETE.
3. 6 INCH CWS/R LINES ARE INSTALLED ABOVE A BRANCH DUCT AND TERMINAL BOX. TEMPORARILY REMOVE DUCT AND TERMINAL BOX TO ALLOW ACCESS TO THE PIPE. REINSTALL AFTER DEMOLITION IS COMPLETE.
4. THIS SEGMENT OF 4 INCH CWS AND 4 INCH CWR ARE INSTALLED ABOVE A DUCT. REMOVE PIPING IN SEGMENTS

KEY PLAN



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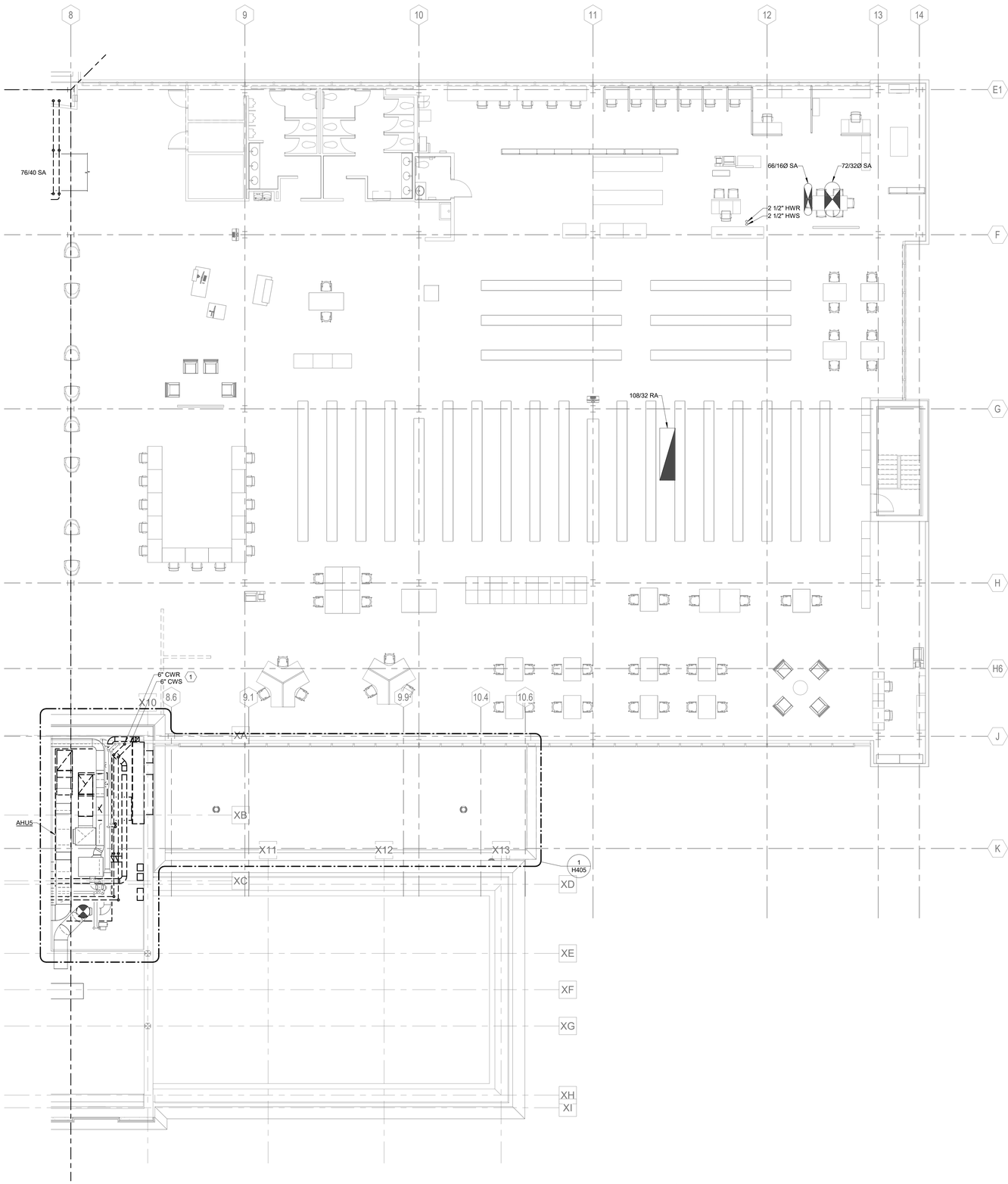
HVAC THIRD FLOOR DEMOLITION PLAN - AREA B

STATE OF OHIO
DANIEL J. EDWARTOSKI
E-75218
REGISTERED PROFESSIONAL ENGINEER
10/28/22

PROJECT STATUS:		BID/PERMIT SET
PROJECT NUMBER:		2022-0212
DRAWN BY: Dave Balch	DATE	SHEET NUMBER
DESIGNED BY: Dan Edwartoski	10/28/2022	H103B
CHECKED BY: Stephen Wilmoth		

CODED NOTES:

1. REMOVE 6 INCH CWS/R DOWN THROUGH THIRD FLOOR SLAB INTO SECOND FLOOR CEILING SPACE.



1 FLOOR PLAN

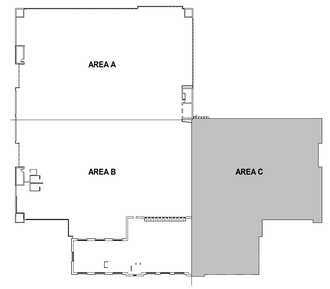
DEMOLITION - AREA C

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

0' 1'-2" 4' 8'

N

KEY PLAN



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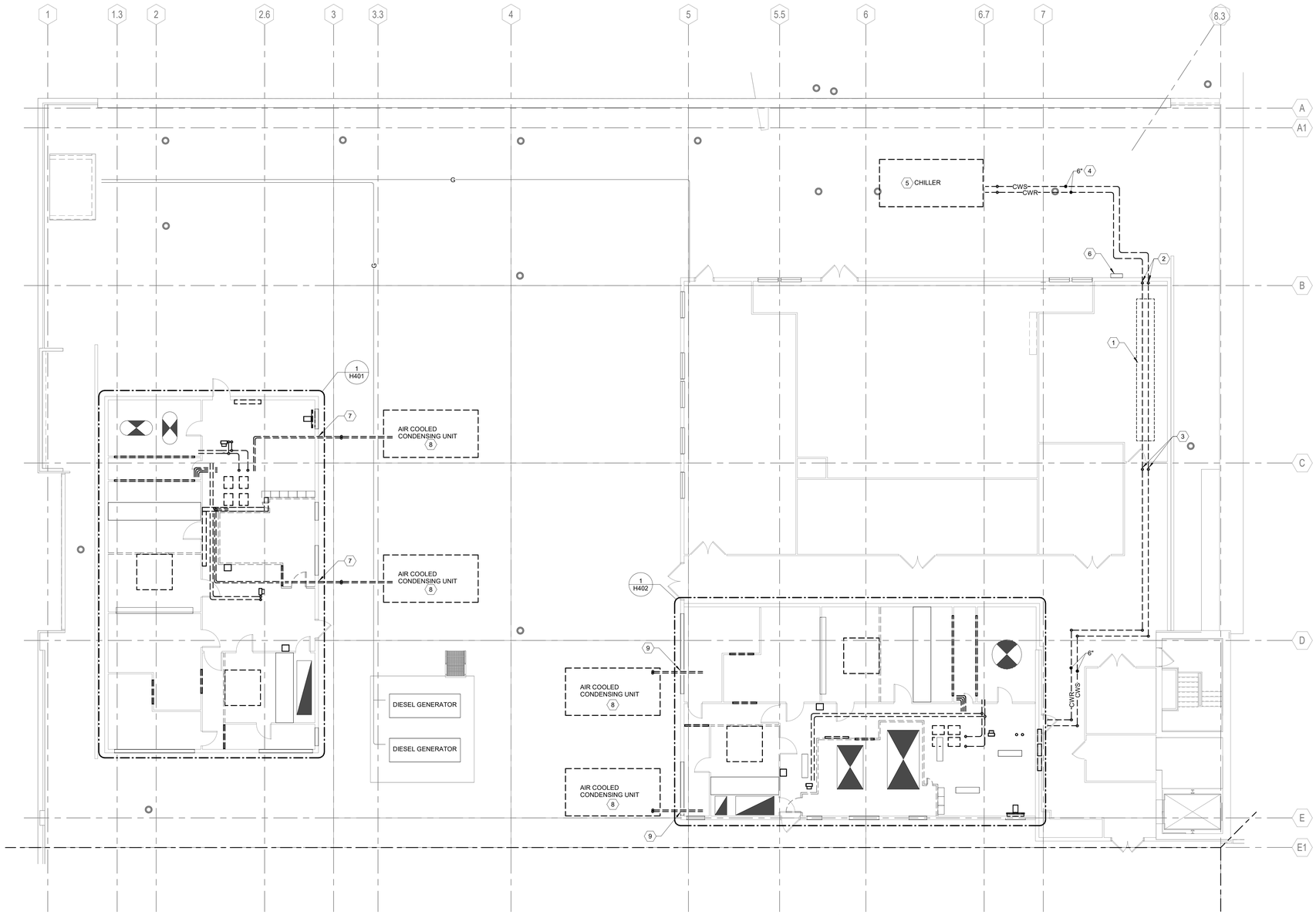
HVAC THIRD FLOOR DEMOLITION PLAN - AREA C

STATE OF OHIO
DANIEL J. EDWARTOSKI
E-78218
REGISTERED PROFESSIONAL ENGINEER
10/28/22

PROJECT STATUS:		BID/PERMIT SET
PROJECT NUMBER:		2022-0212
DRAWN BY: Dave Balch	DATE	SHEET NUMBER
DESIGNED BY: Dan Edwartoski	10/28/2022	H103C
CHECKED BY: Stephen Wilmoth		



1 ROOF PLAN

DEMOLITION - AREA A

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

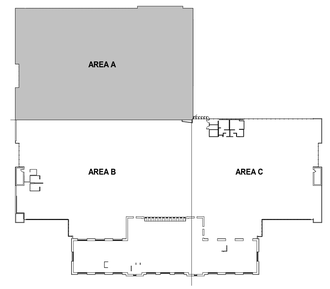
0' 1' 2' 4' 8'

N

CODED NOTES:

1. 6 INCH CWS/R LINES ARE INSTALLED ABOVE ELECTRICAL EQUIPMENT. THERE IS A DRAIN PAN ABOVE THE ELECTRICAL EQUIPMENT. REMOVE PIPING AND DRAIN PAN. PROVIDE MEANS OF TEMPORARY PROTECTION OVER ELECTRICAL EQUIPMENT DURING DEMOLITION.
2. REMOVE 6 INCH CWS/R LINES THROUGH EXTERIOR WALL.
3. REMOVE 6 INCH CWS/R LINES THROUGH FULL HEIGHT WALL.
4. REMOVE 6 INCH CWS/R LINES ACROSS ROOF IN THEIR ENTIRETY TO THE CHILLER.
5. REMOVE AIR COOLED CHILLER. EXISTING CHILLER DUNNAGE AND SCREENWALL TO REMAIN.
6. COORDINATE REMOVAL OF AIR COOLED CHILLER DISCONNECT., CONDUITS TO AIR COOLED CHILLER AND FEEDER THROUGH EXTERIOR WALL WITH THE ELECTRICAL CONTRACTOR.
7. REMOVE EXISTING REFRIGERANT LINES AND PATCH EXTERIOR WALL.
8. REMOVE AIR COOLED CONDENSING UNIT. REMOVE SUPPORT STEEL DOWN THROUGH ROOF. ROOFING CONTRACTOR SHALL PERFORM ALL ROOF REPAIRS.
9. REMOVE EXISTING REFRIGERANT LINES AND PATCH PENTHOUSE ROOF OF AHU2.

KEY PLAN



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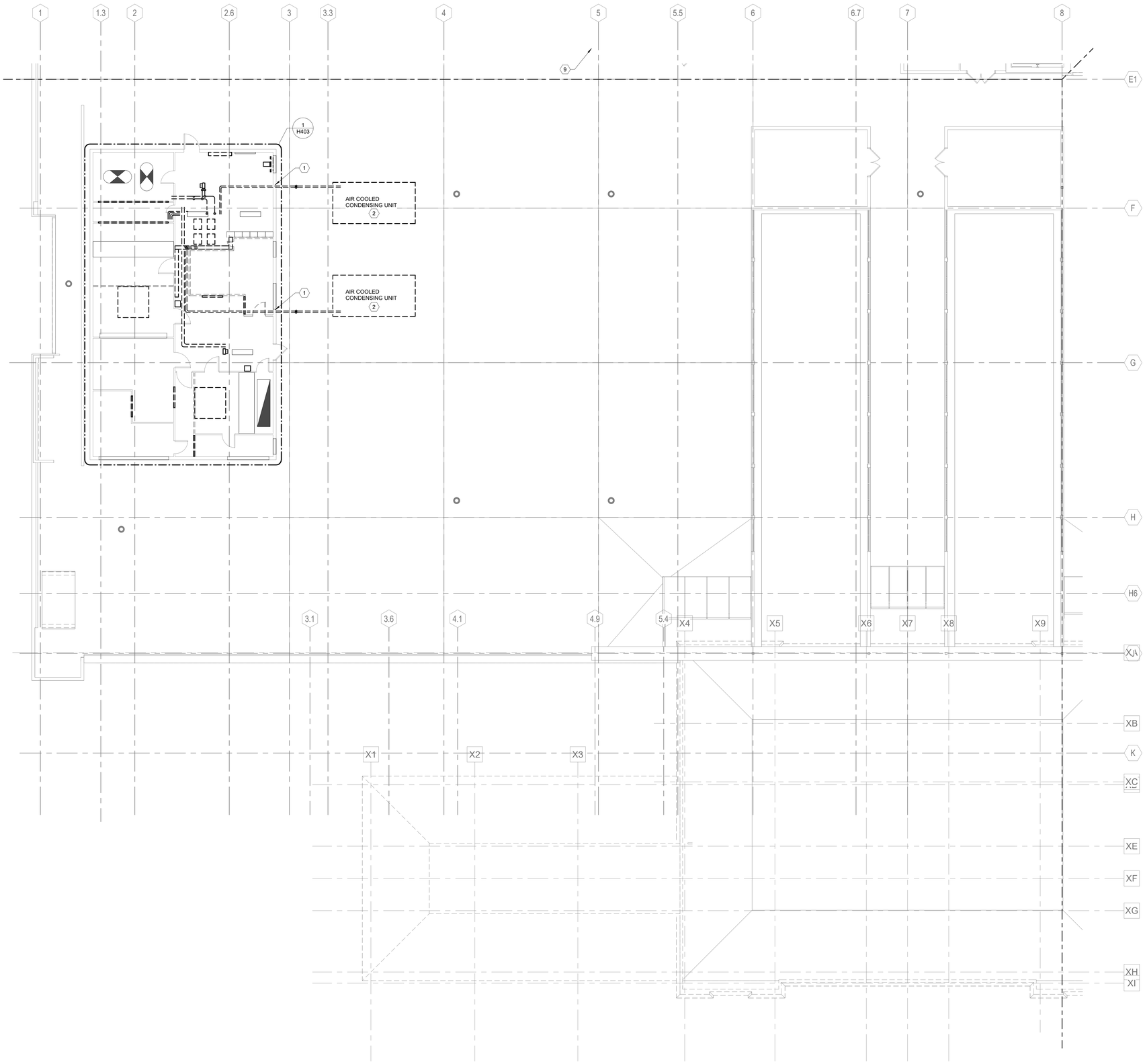
HVAC ROOF DEMOLITION PLAN - AREA A

STATE OF OHIO
DANIEL J EDWARTOSKI
E-75218
REGISTERED PROFESSIONAL ENGINEER
10/28/22

PROJECT STATUS:		BID/PERMIT SET
PROJECT NUMBER:		2022-0212
DRAWN BY: Dave Balch	DATE	SHEET NUMBER
DESIGNED BY: Dan Edwartoski	10/28/2022	H104A
CHECKED BY: Stephen Wilmoth		



1 ROOF PLAN
DEMOLITION - AREA B

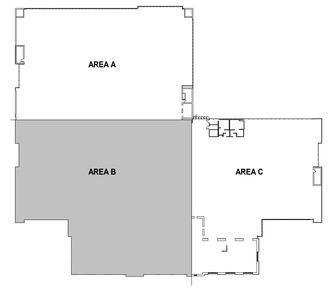
SCALE: 1/8" = 1'-0"
0' 1' 2' 4' 8'

N

CODED NOTES:

1. REMOVE EXISTING REFRIGERANT LINES AND PATCH EXTERIOR WALL.
2. REMOVE AIR COOLED CONDENSING UNIT. REMOVE SUPPORT STEEL DOWN THROUGH ROOF. ROOFING CONTRACTOR SHALL PERFORM ALL ROOF REPAIRS.

KEY PLAN



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HVAC ROOF DEMOLITION PLAN - AREA B

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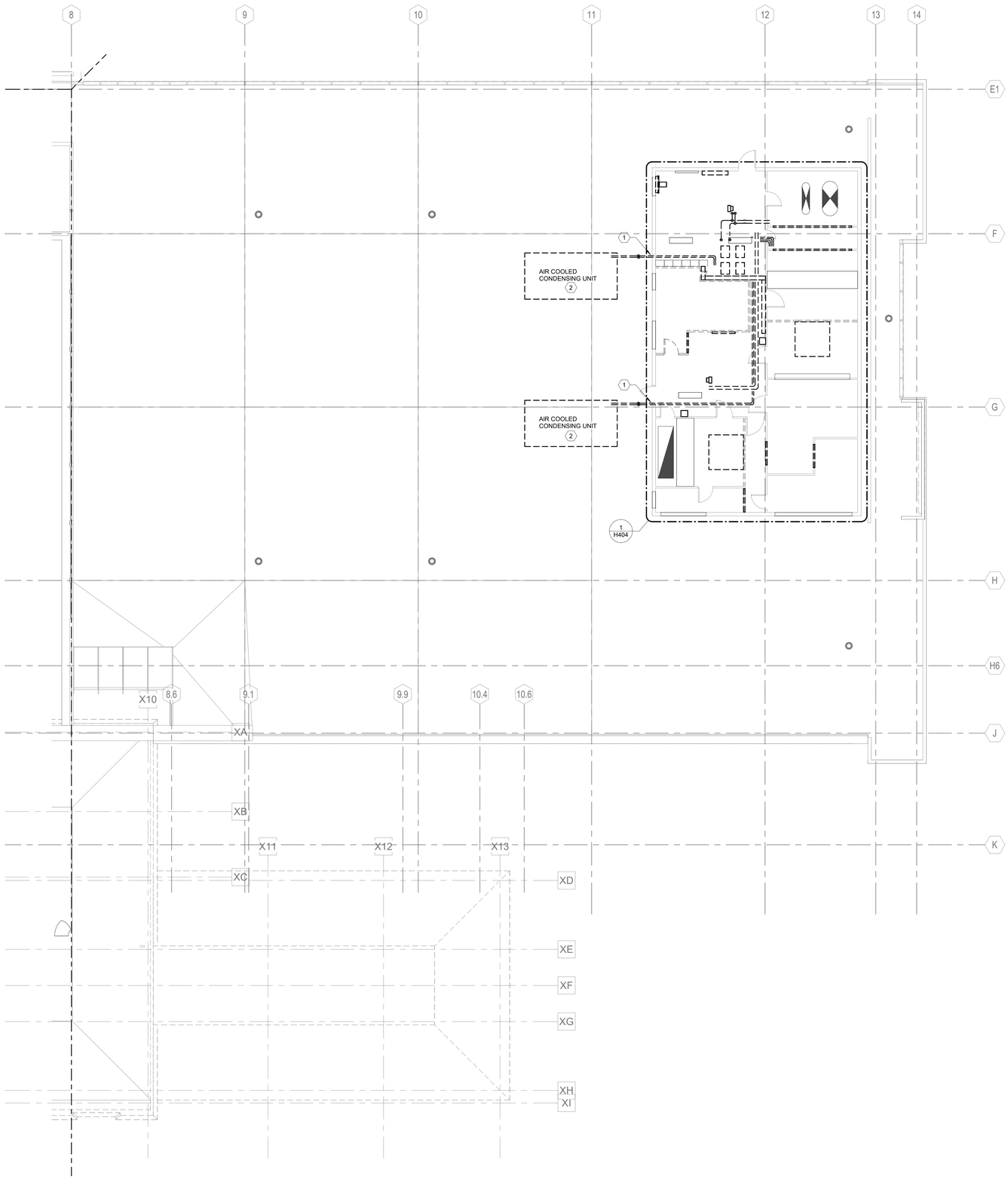
DRAWN BY: Dave Balch		DATE	SHEET NUMBER
DESIGNED BY: Dan Edwartoski		10/28/2022	H104B
CHECKED BY: Stephen Wilmoth			



1 ROOF PLAN
DEMOLITION - AREA C

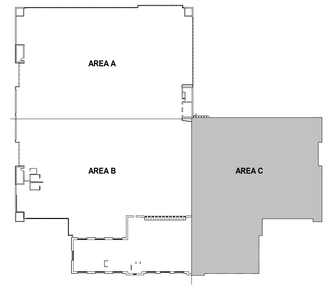
SCALE: 1/8" = 1'-0"
0' 1' 2' 4' 8'

N

CODED NOTES:

1. REMOVE EXISTING REFRIGERANT LINES AND PATCH EXTERIOR WALL.
2. REMOVE AIR COOLED CONDENSING UNIT. REMOVE SUPPORT STEEL DOWN THROUGH ROOF. ROOFING CONTRACTOR SHALL PERFORM ALL ROOF REPAIRS.

KEY PLAN



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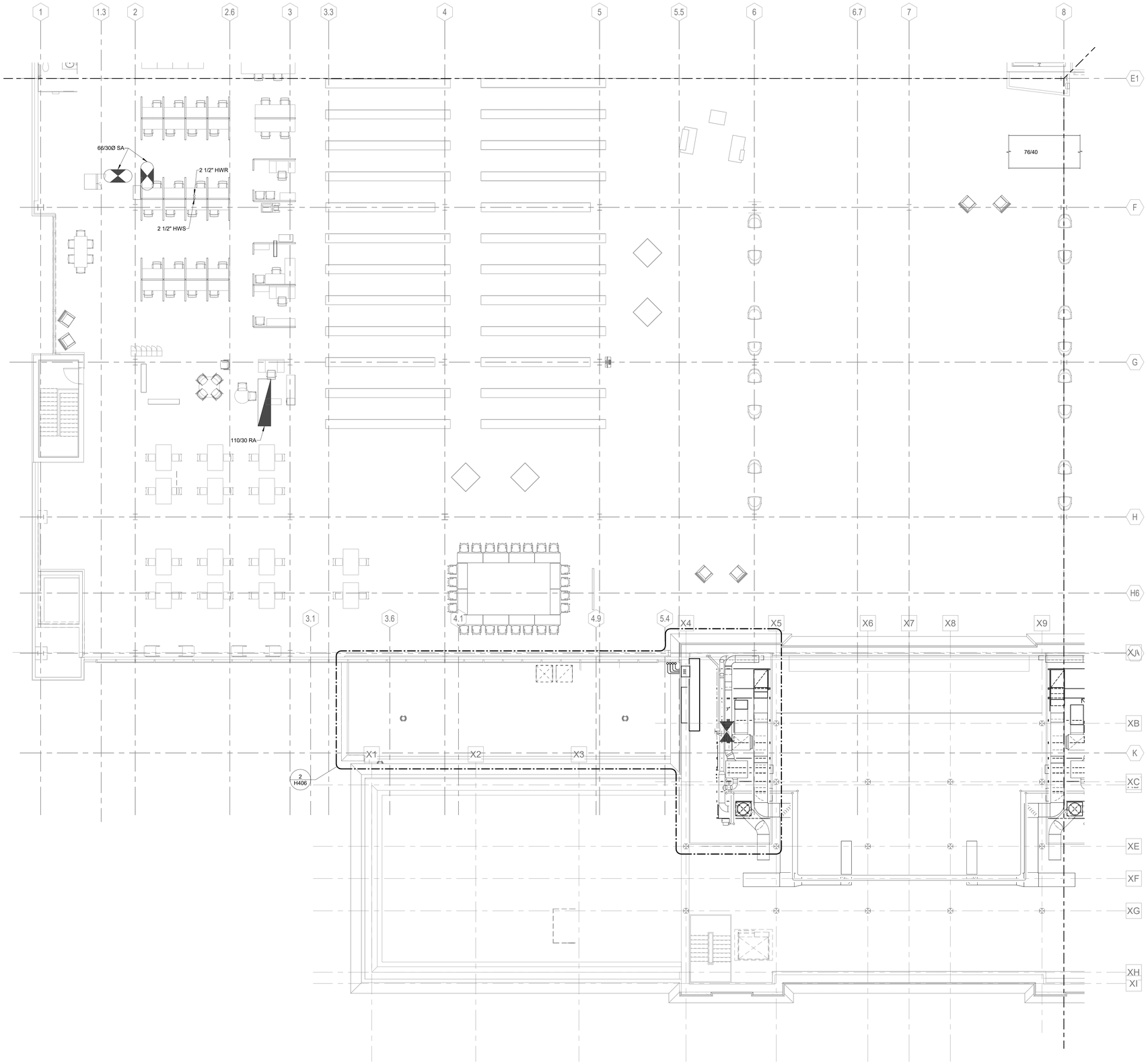
HVAC ROOF DEMOLITION PLAN - AREA C

STATE OF OHIO
DANIEL M. EDWARTOSKI
E-75218
REGISTERED PROFESSIONAL ENGINEER
10/28/22

PROJECT STATUS:			BID/PERMIT SET
PROJECT NUMBER:			2022-0212
DRAWN BY: Dave Balch	DATE	SHEET NUMBER	
DESIGNED BY: Dan Edwartoski	10/28/2022	H104C	
CHECKED BY: Stephen Wilmoth			

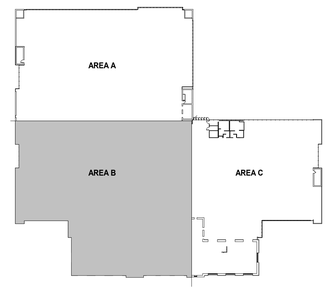


1 FLOOR PLAN
NEW WORK - AREA B

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

N

KEY PLAN



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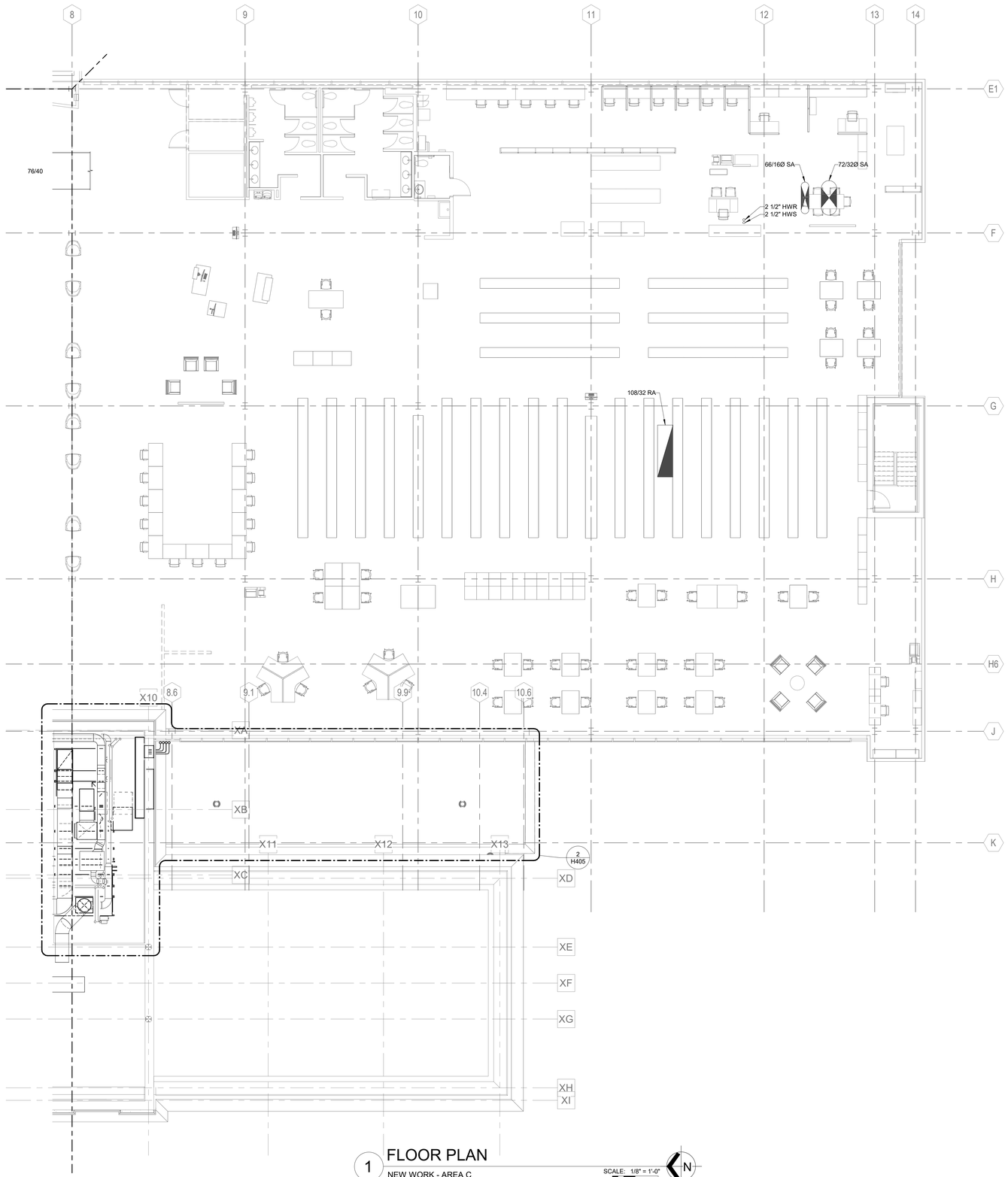
HVAC THIRD FLOOR NEW WORK PLAN - AREA B

DANIEL J. EDWARTOSKI 57-15218 REGISTERED PROFESSIONAL ENGINEER STATE OF OHIO 10/28/22

PROJECT STATUS:		BID/PERMIT SET
PROJECT NUMBER:		2022-0212
DRAWN BY: Dave Balch	DATE	SHEET NUMBER
DESIGNED BY: Dan Edwartoski	10/28/2022	H203B
CHECKED BY: Stephen Wilmoth		



1 FLOOR PLAN

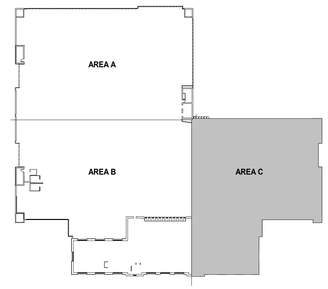
NEW WORK - AREA C

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

0' 1' 2' 4' 8'

N

KEY PLAN



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HVAC THIRD FLOOR NEW WORK PLAN - AREA C

STATE OF OHIO
DANIEL D. EDWARTOSKI
E-78218
REGISTERED PROFESSIONAL ENGINEER
10/28/22

PROJECT STATUS:			BID/PERMIT SET
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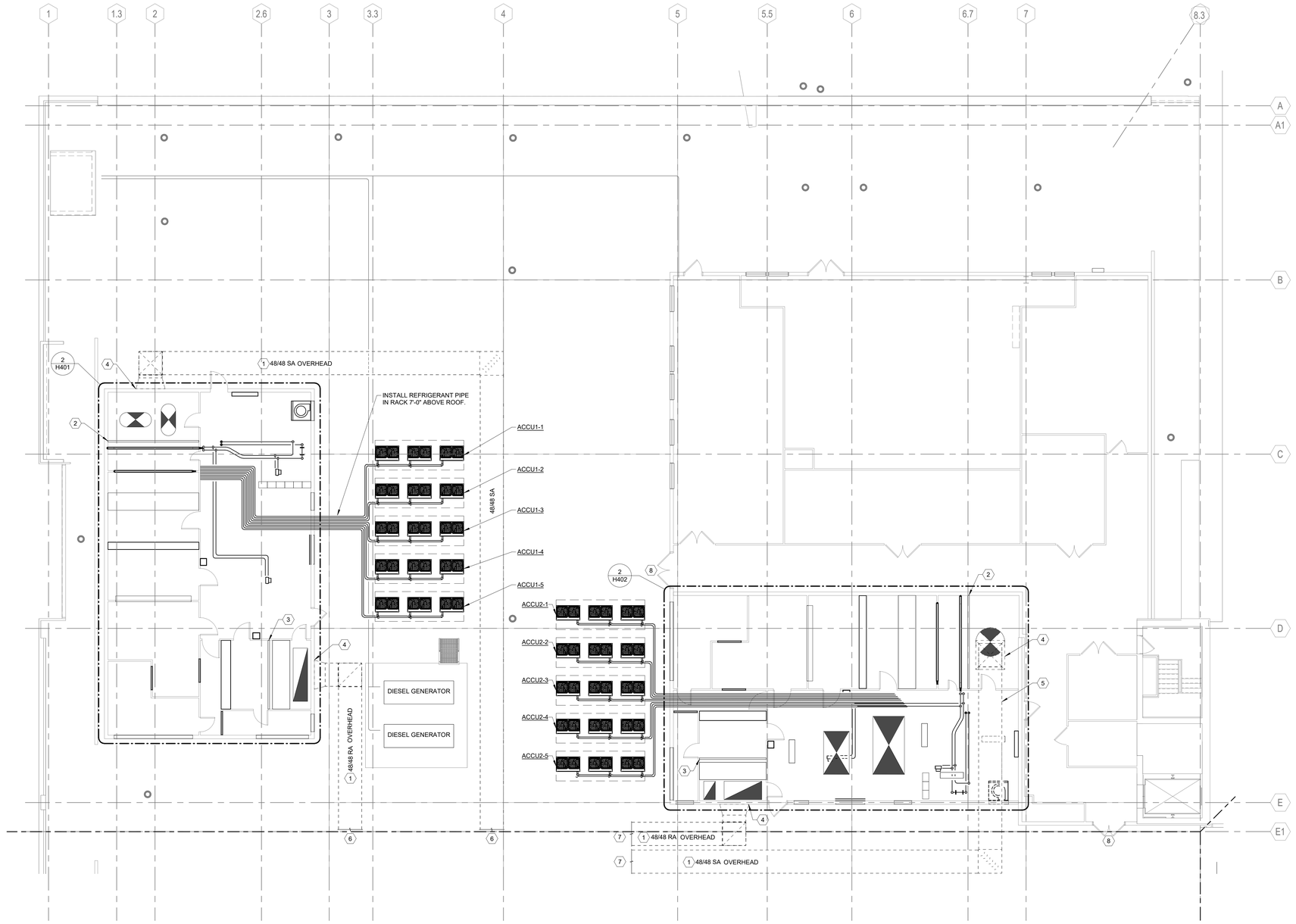


1 FLOOR PLAN
ROOF PLAN

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

N

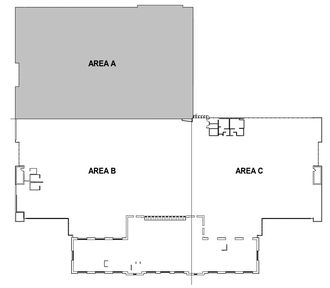
GENERAL/PHASING NOTES:

1. TEMPORARY HEATING AND COOLING IS REQUIRED WHILE EACH AHU IS BEING REFURBISHED. UNITS SHALL BE REFURBISHED ONE AT A TIME. CONSTRUCTION SHALL TAKE PLACE DURING THE MONTHS OF NOVEMBER THROUGH MARCH. TEMPORARY UNITS RTU1 AND RTU2 WILL PROVIDE A REDUCED AIRFLOW SUFFICIENT TO MEET THE HEATING AND COOLING DEMANDS IN THE WINTER MONTHS OF CONSTRUCTION.
2. DUCTWORK SHALL BE INSULATED DOUBLE WALL RIGID DUCTWORK THAT IS SECURELY ATTACHED TO STRUCTURE WITH DUCT STANCHIONS. CONTRACTOR IS RESPONSIBLE FOR DELEGATED DESIGN OF DUCT MOUNTING SYSTEM.
3. REPAIR AND PAINT TEMPORARY DUCT OPENINGS IN AHU WALLS TO PRE-CONSTRUCTION CONDITION.

CODED NOTES:

1. INSTALL SUPPLY AND RETURN MAINS A MINIMUM OF 8 FEET ABOVE ROOF WHERE REQUIRED TO ALLOW WALKING ACCESS BELOW.
2. BUILD FULL SIZE TEMPORARY WALL TO ISOLATE THE SUPPLY PLENUM FROM THE REMAINDER OF THE AHU WHILE THE AHU IS UNDER CONSTRUCTION. REMOVE TEMPORARY WALL WHEN WORK IS COMPLETE.
3. BUILD FULL SIZE TEMPORARY WALL TO ISOLATE THE RETURN PLENUM FROM THE REMAINDER OF THE AHU WHILE THE AHU IS UNDER CONSTRUCTION. REMOVE TEMPORARY WALL WHEN WORK IS COMPLETE.
4. 60/60 CONNECTION TO AIR HANDLING UNIT.
5. ROUTE SUPPLY DUCT ACROSS ROOF OF AHU2. CONNECT TO SUPPLY PLENUM THROUGH ROOF WITH 60/60 TRANSITION.
6. EXTEND TEMPORARY SUPPLY AND RETURN MAINS SERVING AHU1 TO THE POINT OF CONNECTION AT RTU1 AND RTU2 AND RF7. REMOVE TEMPORARY DUCTWORK WHEN WORK IS COMPLETE.
7. EXTEND TEMPORARY SUPPLY AND RETURN MAINS SERVING AHU2 TO THE POINT OF CONNECTION AT RTU1 AND RTU2 AND RF7. REMOVE TEMPORARY DUCTWORK WHEN WORK IS COMPLETE.
8. DO NOT IMPEDE EGRESS PATH IN FRONT OF PENTHOUSE DOORS.

KEY PLAN



No.	Description	Date

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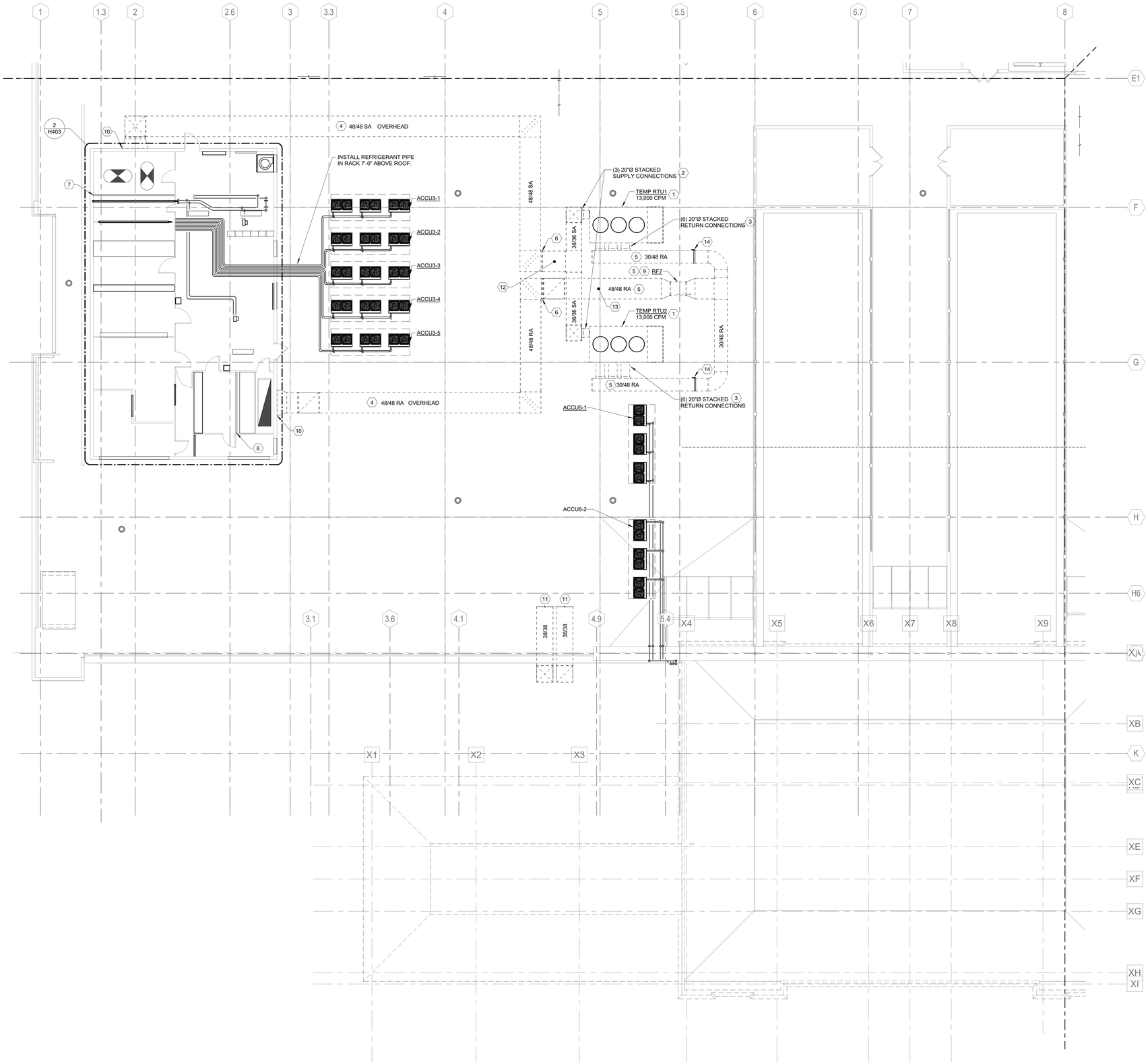
HVAC ROOF NEW WORK PLAN - AREA A

STATE OF OHIO
DANIEL D. EDWARTOSKI
E-78218
REGISTERED PROFESSIONAL ENGINEER
10/28/22

PROJECT STATUS:			BID/PERMIT SET
PROJECT NUMBER:			2022-0212
DRAWN BY: Dave Balch		DATE	SHEET NUMBER
DESIGNED BY: Dan Edwartoski		10/28/2022	H204A
CHECKED BY: Stephen Wilmoth			



1 FLOOR PLAN
ROOF PLAN

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

N

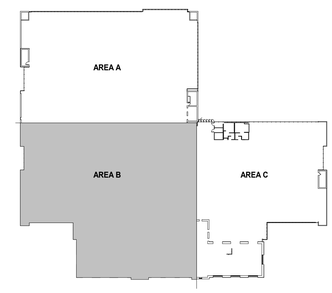
GENERAL/PHASING NOTES:

1. TEMPORARY HEATING AND COOLING IS REQUIRED WHILE EACH AHU IS BEING REFURBISHED. UNITS SHALL BE REFURBISHED ONE AT A TIME. CONSTRUCTION SHALL TAKE PLACE DURING THE MONTHS OF NOVEMBER THROUGH MARCH. TEMPORARY UNITS RTU1 AND RTU2 WILL PROVIDE A REDUCED AIRFLOW SUFFICIENT TO MEET THE HEATING AND COOLING DEMANDS IN THE WINTER MONTHS OF CONSTRUCTION.
2. DUCTWORK SHALL BE INSULATED DOUBLE WALL RIGID DUCTWORK THAT IS SECURELY ATTACHED TO STRUCTURE WITH DUCT STANCHIONS. CONTRACTOR IS RESPONSIBLE FOR DELEGATED DESIGN OF DUCT MOUNTING SYSTEM.
3. REPAIR AND PAINT TEMPORARY DUCT OPENINGS IN AHU WALLS TO PRE-CONSTRUCTION CONDITION.

CODED NOTES:

1. RTU1 AND RTU2. TEMPORARY 40 TON VERTICAL PACKAGED UNIT. 13,500 CFM, 4.25 TSP, 15 HP, 90 KW 3-STAGE HEAT 460/3, 144 MCA, 150 MOCP. 134"L X 84"W X 101"H. 7,000 LBS. TWO TEMPORARY UNITS ARE REQUIRED TO RUN SIMULTANEOUSLY. REMOVE TEMPORARY UNITS WHEN WORK IS COMPLETE.
2. (3) 20"Ø SUPPLY CONNECTIONS HARD DUCTED TO VERTICAL SUPPLY MAIN.
3. (6) 20"Ø RETURN CONNECTIONS HARD DUCTED TO RETURN MAIN.
4. INSTALL SUPPLY AND RETURN MAINS A MINIMUM OF 8 FEET ABOVE ROOF WHERE REQUIRED TO ALLOW WALKING ACCESS BELOW.
5. INSTALL RETURN MAIN, RETURN FAN RF7 AND BRANCH DUCTWORK TO RTU1 AND RTU2 LOW AT ROOF LEVEL. ENSURE A SERVICE PATH TO THE RTU1 AND RTU2 CONTROL PANELS. REMOVE TEMPORARY DUCTWORK WHEN WORK IS COMPLETE.
6. POINT OF CONNECTION TO TEMPORARY SUPPLY AND RETURN MAINS. CONNECT TEMPORARY DUCTS SERVING AHU1, AHU2, AHU3, AHU4, AHU5 AND AHU6 AT THIS LOCATION. REMOVE TEMPORARY DUCTWORK WHEN WORK IS COMPLETE.
7. BUILD FULL SIZE TEMPORARY WALL TO ISOLATE THE SUPPLY PLENUM FROM THE REMAINDER OF THE AHU WHILE THE AHU IS UNDER CONSTRUCTION. REMOVE TEMPORARY WALL WHEN WORK IS COMPLETE.
8. BUILD FULL SIZE TEMPORARY WALL TO ISOLATE THE RETURN PLENUM FROM THE REMAINDER OF THE AHU WHILE THE AHU IS UNDER CONSTRUCTION. REMOVE TEMPORARY WALL WHEN WORK IS COMPLETE.
9. INSTALL RETURN FAN ON ISOLATION RAILS.
10. 60/60 CONNECTION TO AIR HANDLING UNIT.
11. EXTEND TEMPORARY SUPPLY AND RETURN MAINS SERVING AHU6 TO THE POINT OF CONNECTION AT RTU1 AND RTU2 AND RF7. REMOVE TEMPORARY DUCTWORK WHEN WORK IS COMPLETE.
12. INSTALL DISCHARGE AIR TEMPERATURE SENSOR AND DUCT STATIC PRESSURE SENSOR IN THIS SEGMENT OF DUCT. REBALANCE SYSTEM UPON INSTALLATION OF TEMPORARY DUCTWORKS TO EACH AHU.
13. INSTALL RETURN AIR TEMPERATURE SENSOR AND DUCT STATIC PRESSURE SENSOR IN THIS SEGMENT OF DUCT. REBALANCE SYSTEM UPON INSTALLATION OF TEMPORARY DUCTWORKS TO EACH AHU.
14. HIGH VELOCITY BALANCE DAMPER.

KEY PLAN



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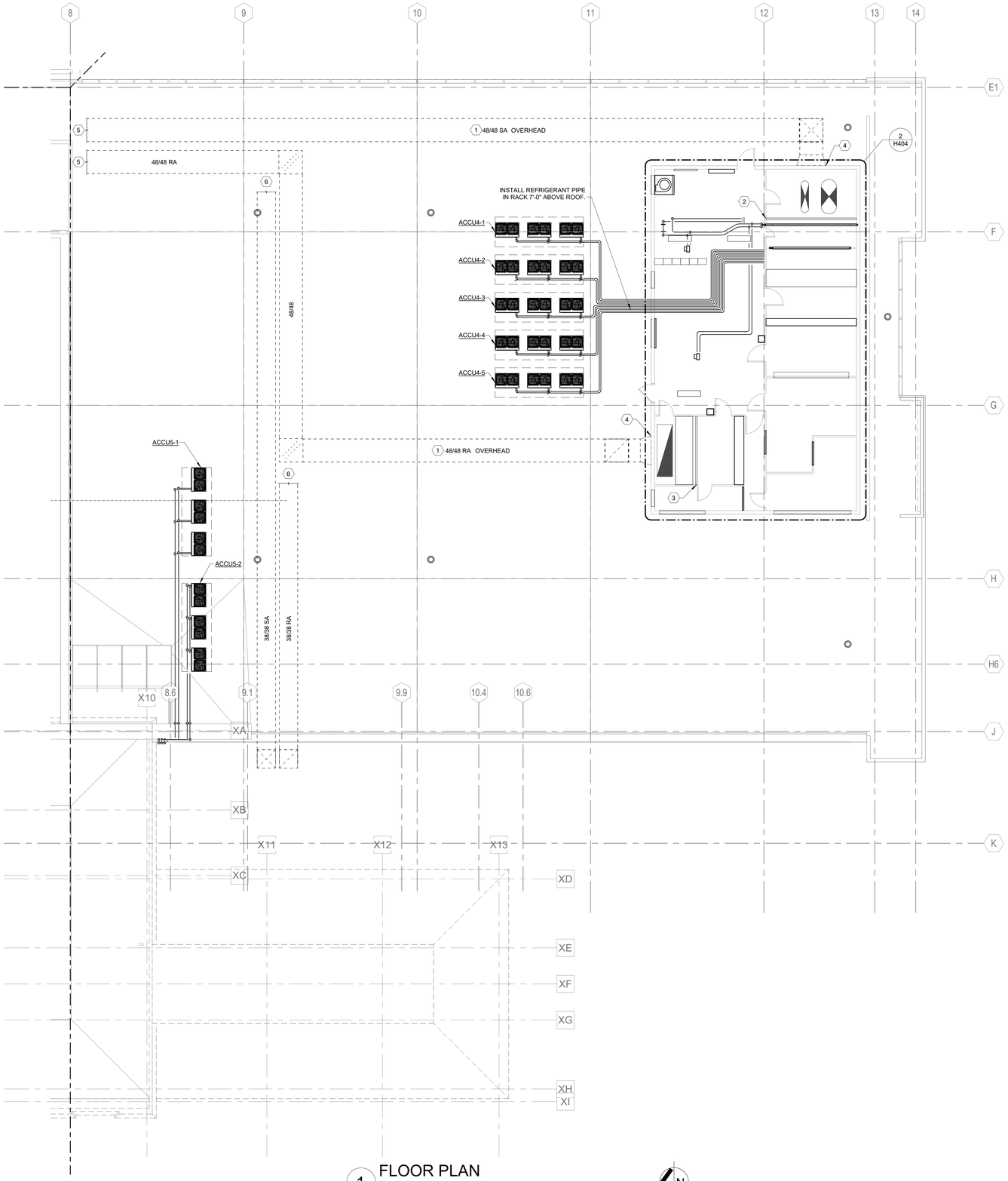
HVAC ROOF NEW WORK PLAN - AREA B

STATE OF OHIO
DANIEL J. EDWARTOSKI
E-78218
REGISTERED PROFESSIONAL ENGINEER
10/28/22

PROJECT STATUS:			BID/PERMIT SET
PROJECT NUMBER:			2022-0212
DRAWN BY: Dave Balch		DATE	SHEET NUMBER
DESIGNED BY: Dan Edwartoski		10/28/2022	H204B
CHECKED BY: Stephen Wilmoth			



1 FLOOR PLAN

ROOF PLAN

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

0' 1' 2' 4' 8'

N

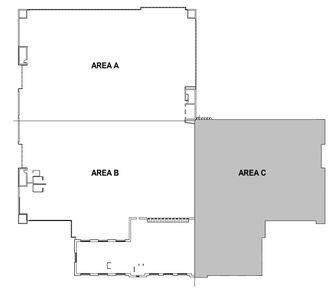
GENERAL/PHASING NOTES:

1. TEMPORARY HEATING AND COOLING IS REQUIRED WHILE EACH AHU IS BEING REFURBISHED. UNITS SHALL BE REFURBISHED ONE AT A TIME. CONSTRUCTION SHALL TAKE PLACE DURING THE MONTHS OF NOVEMBER THROUGH MARCH. TEMPORARY UNITS RTU1 AND RTU2 WILL PROVIDE A REDUCED AIRFLOW SUFFICIENT TO MEET THE HEATING AND COOLING DEMANDS IN THE WINTER MONTHS OF CONSTRUCTION.
2. DUCTWORK SHALL BE INSULATED DOUBLE WALL RIGID DUCTWORK THAT IS SECURELY ATTACHED TO STRUCTURE WITH DUCT STANCHIONS. CONTRACTOR IS RESPONSIBLE FOR DELEGATED DESIGN OF DUCT MOUNTING SYSTEM.
3. REPAIR AND PAINT TEMPORARY DUCT OPENINGS IN AHU WALLS TO PRE-CONSTRUCTION CONDITION.

CODED NOTES:

1. INSTALL SUPPLY AND RETURN MAINS A MINIMUM OF 8 FEET ABOVE ROOF WHERE REQUIRED TO ALLOW WALKING ACCESS BELOW.
2. BUILD FULL SIZE TEMPORARY WALL TO ISOLATE THE SUPPLY PLENUM FROM THE REMAINDER OF THE AHU WHILE THE AHU IS UNDER CONSTRUCTION. REMOVE TEMPORARY WALL WHEN WORK IS COMPLETE.
3. BUILD FULL SIZE TEMPORARY WALL TO ISOLATE THE RETURN PLENUM FROM THE REMAINDER OF THE AHU WHILE THE AHU IS UNDER CONSTRUCTION. REMOVE TEMPORARY WALL WHEN WORK IS COMPLETE.
4. 60/60 CONNECTION TO AIR HANDLING UNIT.
5. EXTEND TEMPORARY SUPPLY AND RETURN MAINS SERVING AHU4 TO THE POINT OF CONNECTION AT RTU1 AND RTU2 AND RF7. STACK DUCTS AS REQUIRED TO MAINTAIN SERVICE PATH BETWEEN AHU2 AND THIRD FLOOR CLERESTORY. REMOVE TEMPORARY DUCTWORK WHEN WORK IS COMPLETE.
6. EXTEND TEMPORARY SUPPLY AND RETURN MAINS SERVING AHU5 TO THE POINT OF CONNECTION AT RTU1 AND RTU2 AND RF7. REMOVE TEMPORARY DUCTWORK WHEN WORK IS COMPLETE.

KEY PLAN



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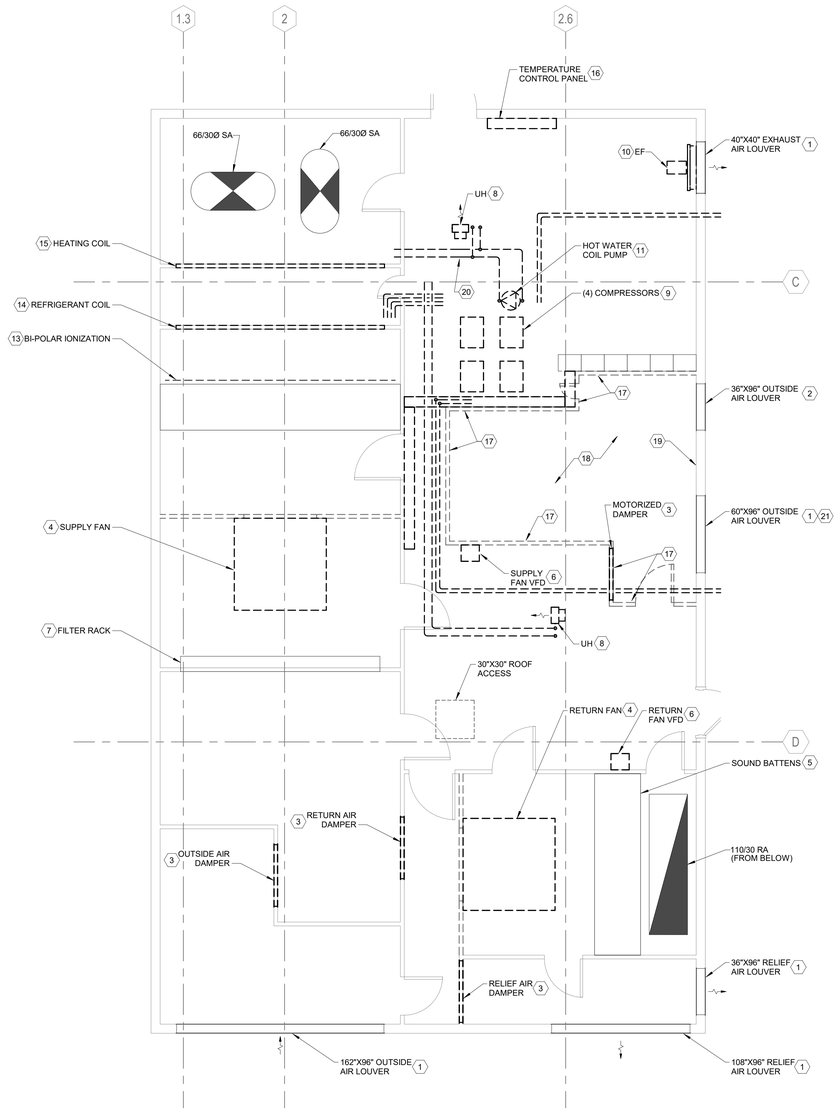
HVAC ROOF NEW WORK PLAN - AREA C

STATE OF OHIO
DANIEL D. EDWARTOSKI
E-78218
REGISTERED PROFESSIONAL ENGINEER
10/28/22

PROJECT STATUS:			BID/PERMIT SET
PROJECT NUMBER:			2022-0212
DRAWN BY:	Dave Balch	DATE	SHEET NUMBER
DESIGNED BY:	Dan Edwartoski	10/28/2022	H204C
CHECKED BY:	Stephen Wilmoth		

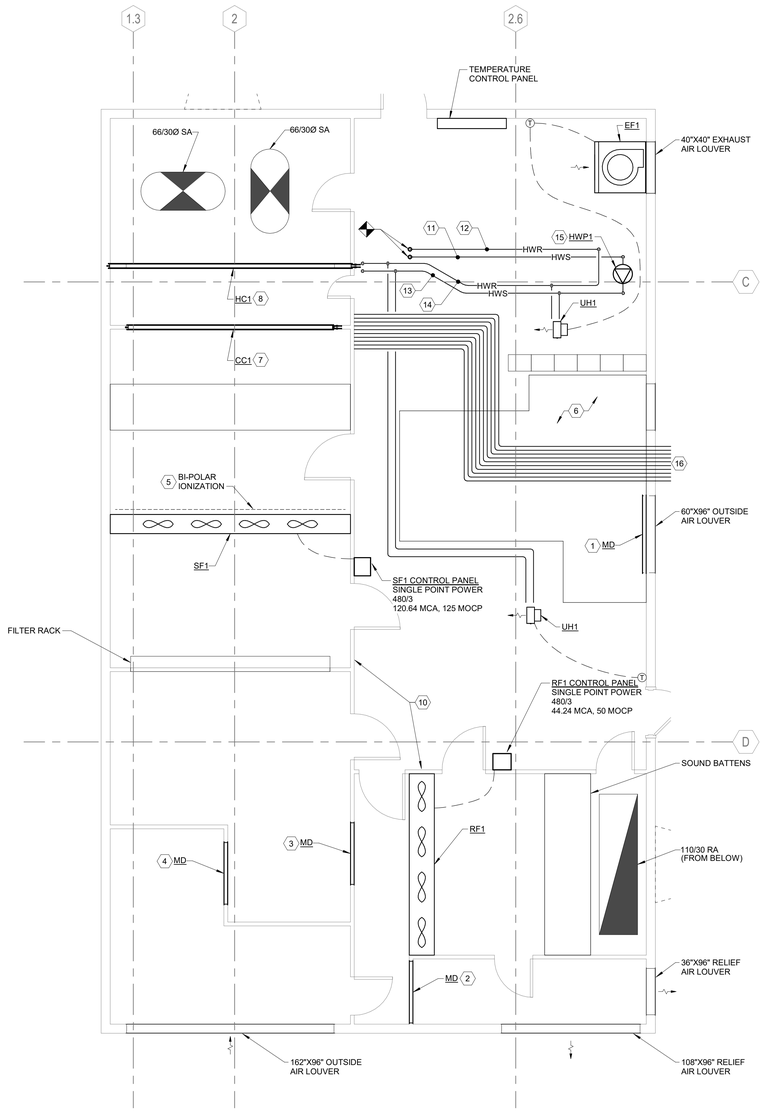


1 ENLARGED PLAN

DEMOLITION - AHU #1

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

0' 1' 2' 4'



2 ENLARGED PLAN

NEW WORK - AHU #1

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

0' 1' 2' 4'

DEMOLITION CODED NOTES:

1. EXISTING LOUVER TO REMAIN.
2. EXISTING ABANDONED LOUVER TO REMAIN. COVER INSIDE FACE OF LOUVER WITH GALVANIZED SHEET METAL. SEAL WATER TIGHT.
3. REMOVE MOTORIZED DAMPER, ACTUATOR AND CONTROLS.
4. REMOVE FAN IN ITS ENTIRETY INCLUDING HOUSING, MOTOR, DISCONNECT, FLEXIBLE CONNECTION, 12"X72"72" INERTIA BASE AND VIBRATION ISOLATORS.
5. EXISTING SOUND BATTENS TO REMAIN.
6. REMOVE FAN VFD.
7. EXISTING 156X96 FILTER RACK FOR 12 INCH MERV14 BAG FILTERS TO REMAIN.
8. REMOVE UNIT HEATER, CONTROLS AND BRANCH PIPING BACK TO HOT WATER MAIN.
9. REMOVE (3) REFRIGERANT COMPRESSORS, INERTIA BASES, DISCONNECTS AND REFRIGERANT PIPING TO COOLING COIL AND OUT TO CONDENSING UNITS.
10. REMOVE WALL PROP EXHAUST FAN.
11. TEMPORARILY REMOVE EXISTING HOT WATER COIL PUMP AND ALL PIPING AND APPURTENANCES BETWEEN PENTHOUSE FLOOR UP AND HEATING COIL TO ALLOW REMOVAL OF HEATING COIL. RETAIN FOR REINSTALLATION.
12. REFER TO ELECTRICAL DRAWINGS FOR ELECTRICAL SCOPE.
13. TEMPORARILY REMOVE UNISTRUT MOUNTED BI-POLAR IONIZATION EQUIPMENT. RETAIN FOR REINSTALLATION.
14. REMOVE REFRIGERANT COIL, CONTROLS, VALVES, PIPING, AND DRAIN PAN.
15. REMOVE HEATING COIL, CONTROLS, VALVES AND PIPING.
16. REMOVE TEMPERATURE CONTROL PANEL AND ALL TEMPERATURE CONTROLS THROUGHOUT AIR HANDLING UNIT.
17. REMOVE INTERNAL NON-BEARING WALLS.
18. REMOVE RUBBER MEMBRANE FLOOR. PATCH DRAIN HOLES IN FLOORING.
19. REMOVE BOTTOM 12 INCHES OF RUSTED WALL THE LENGTH OF THE DEMOLISHED FLOORING.
20. REMOVE HOT WATER PIPING TO FLOOR AND PREPARE FOR NEW CONSTRCTION PHASE.
21. BLANK OFF BOTTOM 36 INCHES OF INSIDE FACE OF LOUVER WITH GALVANIZED SHEET METAL. SEAL WATER TIGHT. UPPER 60 INCHES OF LOUVER WILL BE FITTED WITH A 60 INCH X 60 INCH MOTORIZED DAMPER FOR HEAT RELIEF.

NEW WORK CODED NOTES:

1. PROVIDE NEW 60 INCH X 60 INCH PENTHOUSE HEAT RELIEF MOTORIZED DAMPER ON UPPER PORTION OF EXISTING LOUVER. BLANK OFF BOTTOM OF EXISTING LOUVER.
2. PROVIDE NEW 96 INCH X 48 INCH RELIEF AIR MOTORIZED DAMPER IN PLACE OF THE DEMOLISHED RELIEF AIR DAMPER.
3. PROVIDE NEW 96 INCH X 48 INCH RETURN AIR MOTORIZED DAMPER IN PLACE OF THE DEMOLISHED RETURN AIR DAMPER.
4. PROVIDE NEW 96 INCH X 48 INCH OUTSIDE AIR MOTORIZED DAMPER IN PLACE OF THE DEMOLISHED OUTSIDE AIR DAMPER.
5. REINSTALL UNISTRUT RACK AND BI-POLAR IONIZATION EQUIPMENT.
6. REPLACE FLOORING WITH CONTINUOUSLY WELDED 3/16 INCH ALUMINUM TREADPLATE WELDED TO THE EXISTING STRUCTURAL MEMBERS.
7. PROVIDE CONTINUOUSLY WELDED STAINLESS STEEL DRAIN PAN FLOOR UNDER COOLING COIL. PAN SHALL HAVE A 2 INCH NPT MINIMUM THREADED DRAIN CONNECTION ON THE ACCESS SIDE OF THE COIL. PIPING SHALL BE ALUMINUM OR STAINLESS STEEL.
8. PROVIDE CONTINUOUSLY WELDED STAINLESS STEEL DRAIN PAN FLOOR UNDER HEATING COIL. PAN SHALL HAVE A 2 INCH NPT MINIMUM THREADED DRAIN CONNECTION ON THE ACCESS SIDE OF THE COIL. PIPING SHALL BE ALUMINUM OR STAINLESS STEEL.
9. RELOCATE HOT WATER COIL PUMP AND ALL ASSOCIATED VALVES, FITTINGS AND APPURTENANCES OUTSIDE THE COIL AREA. EXTEND 2.5 INCH HWS/R ACROSS FLOOR TO CONNECT TO EXISTING. PROVIDE STAINLESS STEEL DRAIN WITH 2 INCH NPT THREADED CONNECTION PAN UNDER THE PUMP ASSEMBLY. PIPE TO EXISTING DRAIN.
10. REPAIR WALLS WHERE PIPING, CONDUIT, TEMPERATURE CONTROLS AND EQUIPMENT WAS REMOVED. THIS APPLIES TO ALL REMAINING WALLS.
11. CONNECT TO EXISTING 2.5 INCH HWS PIPE AT FLOOR. ROUTE NEW ACROSS FLOOR TO HEATING COIL CIRCULATING PUMP ASSEMBLY.
12. CONNECT TO EXISTING 2.5 INCH HWR PIPE AT FLOOR. ROUTE NEW ACROSS FLOOR FROM HEATING COIL CIRCULATING PUMP ASSEMBLY.
13. HWS OVERHEAD FROM PUMP ASSEMBLY TO AHU HEATING COIL.
14. HWR OVERHEAD FROM AHU HEATING COIL BACK TO PUMP ASSEMBLY.
15. REASSEMBLE AND REINSTALL AHU COIL CIRCULATING PUMP ASSEMBLY OUTSIDE THE COIL PULL CLEARANCE. PROVIDE STAINLESS STEEL DRAIN PAN BELOW THE PUMP ASSEMBLY. PIPE ACROSS FLOOR TO EXISTING DRAIN PAN/CONDENSATE RECEPTOR IN PENTHOUSE FLOOR.
16. NEW REFRIGERANT LINES FORM NEW AIR COOLED CONDENSING UNITS.

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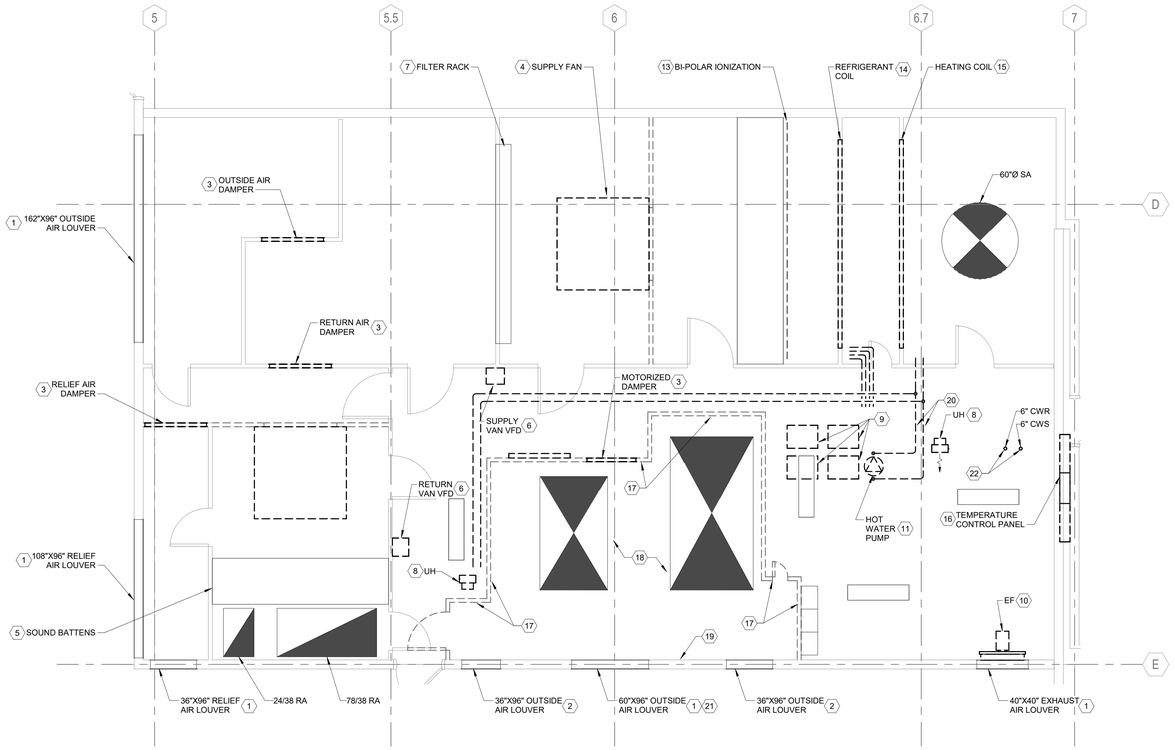
HVAC ENLARGED AHU #1 PLANS

STATE OF OHIO
DANIEL J. EDWARTOSKI
E-75218
REGISTERED PROFESSIONAL ENGINEER
10/28/22

PROJECT STATUS:			BID/PERMIT SET
PROJECT NUMBER:			2022-0212
DRAWN BY: Dave Balch		DATE	SHEET NUMBER
DESIGNED BY: Dan Edwartoski		10/28/2022	H401
CHECKED BY: Stephen Wilmoth			



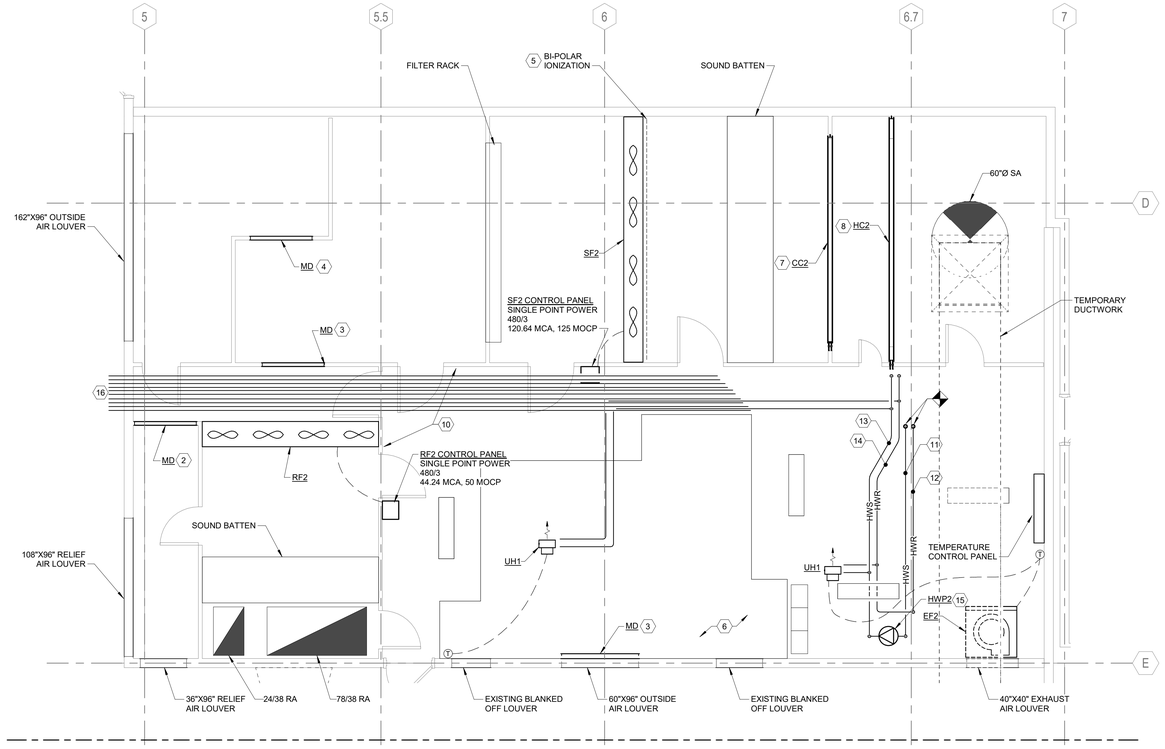
1 ENLARGED PLAN

DEMOLITION - AHU #2

SCALE: 1/4" = 1'-0"
0' 1' 2' 4'

DEMOLITION CODED NOTES:

1. EXISTING LOUVER TO REMAIN.
2. EXISTING ABANDONED LOUVER TO REMAIN. COVER INSIDE FACE OF LOUVER WITH GALVANIZED SHEET METAL. SEAL WATER TIGHT.
3. REMOVE MOTORIZED DAMPER, ACTUATOR AND CONTROLS.
4. REMOVE FAN IN ITS ENTIRETY INCLUDING HOUSING, MOTOR, DISCONNECT, FLEXIBLE CONNECTION, 12"X72"72" INERTIA BASE AND VIBRATION ISOLATORS.
5. EXISTING SOUND BATTENS TO REMAIN.
6. REMOVE FAN VFD.
7. EXISTING 156X96 FILTER RACK FOR 12 INCH MERV14 BAG FILTERS TO REMAIN.
8. REMOVE UNIT HEATER, CONTROLS AND BRANCH PIPING BACK TO HOT WATER MAIN.
9. REMOVE (4) REFRIGERANT COMPRESSORS, INERTIA BASES, DISCONNECTS AND REFRIGERANT PIPING TO COOLING COIL AND OUT TO CONDENSING UNITS.
10. REMOVE WALL PROP EXHAUST FAN.
11. TEMPORARILY REMOVE EXISTING HOT WATER COIL PUMP AND ALL PIPING AND APPURTENANCES BETWEEN PENTHOUSE FLOOR UP AND HEATING COIL TO ALLOW REMOVAL OF HEATING COIL. RETAIN FOR REINSTALLATION.
12. REFER TO ELECTRICAL DRAWINGS FOR ELECTRICAL SCOPE.
13. TEMPORARILY REMOVE UNISTRUT MOUNTED BI-POLAR IONIZATION EQUIPMENT. RETAIN FOR REINSTALLATION.
14. REMOVE REFRIGERANT COIL, CONTROLS, VALVES, PIPING, AND DRAIN PAN.
15. REMOVE HEATING COIL, CONTROLS, VALVES AND PIPING.
16. REMOVE TEMPERATURE CONTROL PANEL AND ALL TEMPERATURE CONTROLS THROUGHOUT AIR HANDLING UNIT.
17. REMOVE INTERNAL NON-BEARING WALLS.
18. REMOVE RUBBER MEMBRANE FLOOR. PATCH DRAIN HOLES IN FLOORING.
19. REMOVE BOTTOM 12 INCHES OF RUSTED WALL THE LENGTH OF THE DEMOLISHED FLOORING.
20. REMOVE HOT WATER PIPING TO FLOOR AND PREPARE FOR NEW CONSTRCTION PHASE.
21. BLANK OFF BOTTOM 36 INCHES OF INSIDE FACE OF LOUVER WITH GALVANIZED SHEET METAL. SEAL WATER TIGHT. UPPER 60 INCHES OF LOUVER WILL BE FITTED WITH A 60 INCH X 60 INCH MOTORIZED DAMPER FOR HEAT RELIEF.
22. DEMOLISHED CHILLED WATER PIPE FROM BELOW.



2 ENLARGED PLAN

NEW WORK - AHU #2

SCALE: 1/4" = 1'-0"
0' 1' 2' 4'

NEW WORK CODED NOTES:

1. PROVIDE NEW 60 INCH X 60 INCH PENTHOUSE HEAT RELIEF MOTORIZED DAMPER ON UPPER PORTION OF EXISTING LOUVER. BLANK OFF BOTTOM OF EXISTING LOUVER.
2. PROVIDE NEW 96 INCH X 48 INCH RELIEF AIR MOTORIZED DAMPER IN PLACE OF THE DEMOLISHED RELIEF AIR DAMPER.
3. PROVIDE NEW 96 INCH X 48 INCH RETURN AIR MOTORIZED DAMPER IN PLACE OF THE DEMOLISHED RETURN AIR DAMPER.
4. PROVIDE NEW 96 INCH X 48 INCH OUTSIDE AIR MOTORIZED DAMPER IN PLACE OF THE DEMOLISHED OUTSIDE AIR DAMPER.
5. REINSTALL UNISTRUT RACK AND BI-POLAR IONIZATION EQUIPMENT.
6. REPLACE FLOORING WITH CONTINUOUSLY WELDED 3/16 INCH ALUMINUM TREADPLATE WELDED TO THE EXISTING STRUCTURAL MEMBERS.
7. PROVIDE CONTINUOUSLY WELDED STAINLESS STEEL DRAIN PAN FLOOR UNDER COOLING COIL. PAN SHALL HAVE A 2 INCH NPT MINIMUM THREADED DRAIN CONNECTION ON THE ACCESS SIDE OF THE COIL. PIPING SHALL BE ALUMINUM OR STAINLESS STEEL.
8. PROVIDE CONTINUOUSLY WELDED STAINLESS STEEL DRAIN PAN FLOOR UNDER HEATING COIL. PAN SHALL HAVE A 2 INCH NPT MINIMUM THREADED DRAIN CONNECTION ON THE ACCESS SIDE OF THE COIL. PIPING SHALL BE ALUMINUM OR STAINLESS STEEL.
9. RELOCATE HOT WATER COIL PUMP AND ALL ASSOCIATED VALVES, FITTINGS AND APPURTENANCES OUTSIDE THE COIL AREA. EXTEND 2.5 INCH HWS/R ACROSS FLOOR TO CONNECT TO EXISTING. PROVIDE STAINLESS STEEL DRAIN WITH 2 INCH NPT THREADED CONNECTION PAN UNDER THE PUMP ASSEMBLY. PIPE TO EXISTING DRAIN.
10. REPAIR WALLS WHERE PIPING, CONDUIT, TEMPERATURE CONTROLS AND EQUIPMENT WAS REMOVED. THIS APPLIES TO ALL REMAINING WALLS.
11. CONNECT TO EXISTING 2.5 INCH HWS PIPE AT FLOOR. ROUTE NEW ACROSS FLOOR TO HEATING COIL CIRCULATING PUMP ASSEMBLY.
12. CONNECT TO EXISTING 2.5 INCH HWR PIPE AT FLOOR. ROUTE NEW ACROSS FLOOR FROM HEATING COIL CIRCULATING PUMP ASSEMBLY.
13. HWS OVERHEAD FROM PUMP ASSEMBLY TO AHU HEATING COIL.
14. HWR OVERHEAD FROM AHU HEATING COIL BACK TO PUMP ASSEMBLY.
15. REASSEMBLE AND REINSTALL AHU COIL CIRCULATING PUMP ASSEMBLY OUTSIDE THE COIL PULL CLEARANCE. PROVIDE STAINLESS STEEL DRAIN PAN BELOW THE PUMP ASSEMBLY. PIPE ACROSS FLOOR TO EXISTING DRAIN PAN/CONDENSATE RECEPTOR IN PENTHOUSE FLOOR.
16. NEW REFRIGERANT LINES FORM NEW AIR COOLED CONDENSING UNITS.

No.	Description	Date

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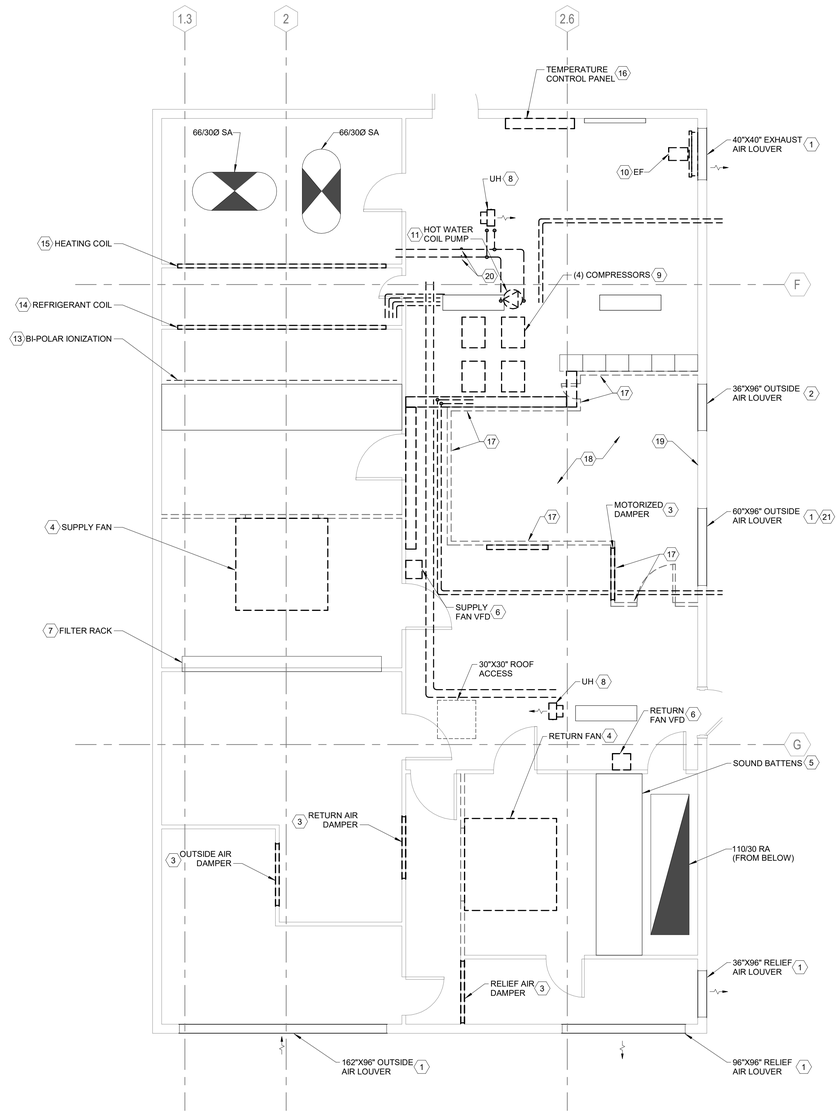
HVAC ENLARGED AHU #2 PLANS

STATE OF OHIO
DANIEL D. EDWARTOSKI
E-75218
REGISTERED PROFESSIONAL ENGINEER
10/28/22

PROJECT STATUS:			BID/PERMIT SET
PROJECT NUMBER:			2022-0212
DRAWN BY: Dave Balch		DATE	SHEET NUMBER
DESIGNED BY: Dan Edwartoski		10/28/2022	H402
CHECKED BY: Stephen Wilmoth			

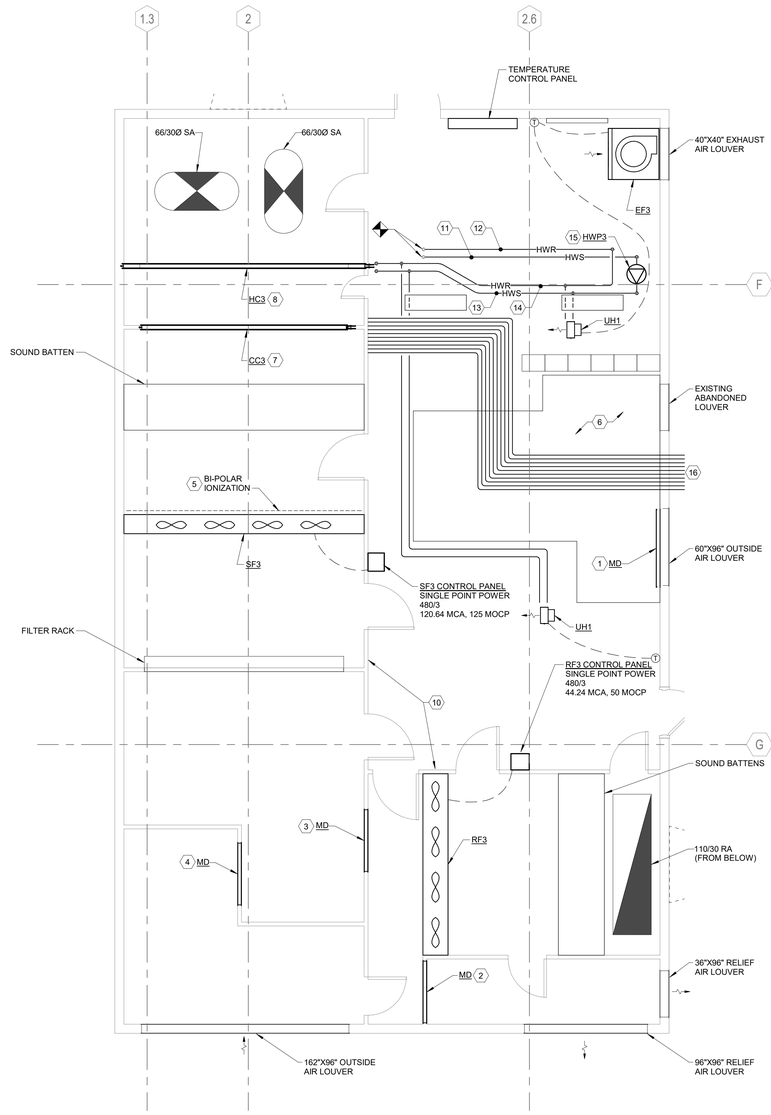


1 ENLARGED PLAN

DEMOLITION - AHU #3

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

0' 1' 2' 4'



2 ENLARGED PLAN

NEW WORK - AHU #3

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

0' 1' 2' 4'

DEMOLITION CODED NOTES:

1. EXISTING LOUVER TO REMAIN.
2. EXISTING ABANDONED LOUVER TO REMAIN. COVER INSIDE FACE OF LOUVER WITH GALVANIZED SHEET METAL. SEAL WATER TIGHT.
3. REMOVE MOTORIZED DAMPER, ACTUATOR AND CONTROLS.
4. REMOVE FAN IN ITS ENTIRETY INCLUDING HOUSING, MOTOR, DISCONNECT, FLEXIBLE CONNECTION, 12"X72"72" INERTIA BASE AND VIBRATION ISOLATORS.
5. EXISTING SOUND BATTENS TO REMAIN.
6. REMOVE FAN VFD.
7. EXISTING 156X96 FILTER RACK FOR 12 INCH MERV14 BAG FILTERS TO REMAIN.
8. REMOVE UNIT HEATER, CONTROLS AND BRANCH PIPING BACK TO HOT WATER MAIN.
9. REMOVE (4) REFRIGERANT COMPRESSORS, INERTIA BASES, DISCONNECTS AND REFRIGERANT PIPING TO COOLING COIL AND OUT TO CONDENSING UNITS.
10. REMOVE WALL PROP EXHAUST FAN.
11. TEMPORARILY REMOVE EXISTING HOT WATER COIL PUMP AND ALL PIPING AND APPURTENANCES BETWEEN PENTHOUSE FLOOR UP AND HEATING COIL TO ALLOW REMOVAL OF HEATING COIL. RETAIN FOR REINSTALLATION.
12. REFER TO ELECTRICAL DRAWINGS FOR ELECTRICAL SCOPE.
13. TEMPORARILY REMOVE UNISTRUT MOUNTED BI-POLAR IONIZATION EQUIPMENT. RETAIN FOR REINSTALLATION.
14. REMOVE REFRIGERANT COIL, CONTROLS, VALVES, PIPING, AND DRAIN PAN.
15. REMOVE HEATING COIL, CONTROLS, VALVES AND PIPING.
16. REMOVE TEMPERATURE CONTROL PANEL AND ALL TEMPERATURE CONTROLS THROUGHOUT AIR HANDLING UNIT.
17. REMOVE INTERNAL NON-BEARING WALLS.
18. REMOVE RUBBER MEMBRANE FLOOR. PATCH DRAIN HOLES IN FLOORING.
19. REMOVE BOTTOM 12 INCHES OF RUSTED WALL THE LENGTH OF THE DEMOLISHED FLOORING.
20. REMOVE HOT WATER PIPING TO FLOOR AND PREPARE FOR NEW CONSTRCTION PHASE.
21. BLANK OFF BOTTOM 36 INCHES OF INSIDE FACE OF LOUVER WITH GALVANIZED SHEET METAL. SEAL WATER TIGHT. UPPER 60 INCHES OF LOUVER WILL BE FITTED WITH A 60 INCH X 60 INCH MOTORIZED DAMPER FOR HEAT RELIEF.

NEW WORK CODED NOTES:

1. PROVIDE NEW 60 INCH X 60 INCH PENTHOUSE HEAT RELIEF MOTORIZED DAMPER ON UPPER PORTION OF EXISTING LOUVER. BLANK OFF BOTTOM OF EXISTING LOUVER.
2. PROVIDE NEW 96 INCH X 48 INCH RELIEF AIR MOTORIZED DAMPER IN PLACE OF THE DEMOLISHED RELIEF AIR DAMPER.
3. PROVIDE NEW 96 INCH X 48 INCH RETURN AIR MOTORIZED DAMPER IN PLACE OF THE DEMOLISHED RETURN AIR DAMPER.
4. PROVIDE NEW 96 INCH X 48 INCH OUTSIDE AIR MOTORIZED DAMPER IN PLACE OF THE DEMOLISHED OUTSIDE AIR DAMPER.
5. REINSTALL UNISTRUT RACK AND BI-POLAR IONIZATION EQUIPMENT.
6. REPLACE FLOORING WITH CONTINUOUSLY WELDED 3/16 INCH ALUMINUM TREADPLATE WELDED TO THE EXISTING STRUCTURAL MEMBERS.
7. PROVIDE CONTINUOUSLY WELDED STAINLESS STEEL DRAIN PAN FLOOR UNDER COOLING COIL. PAN SHALL HAVE A 2 INCH NPT MINIMUM THREADED DRAIN CONNECTION ON THE ACCESS SIDE OF THE COIL. PIPING SHALL BE ALUMINUM OR STAINLESS STEEL.
8. PROVIDE CONTINUOUSLY WELDED STAINLESS STEEL DRAIN PAN FLOOR UNDER HEATING COIL. PAN SHALL HAVE A 2 INCH NPT MINIMUM THREADED DRAIN CONNECTION ON THE ACCESS SIDE OF THE COIL. PIPING SHALL BE ALUMINUM OR STAINLESS STEEL.
9. RELOCATE HOT WATER COIL PUMP AND ALL ASSOCIATED VALVES, FITTINGS AND APPURTENANCES OUTSIDE THE COIL AREA. EXTEND 2.5 INCH HWS/R ACROSS FLOOR TO CONNECT TO EXISTING. PROVIDE STAINLESS STEEL DRAIN WITH 2 INCH NPT THREADED CONNECTION PAN UNDER THE PUMP ASSEMBLY. PIPE TO EXISTING DRAIN.
10. REPAIR WALLS WHERE PIPING, CONDUIT, TEMPERATURE CONTROLS AND EQUIPMENT WAS REMOVED. THIS APPLIES TO ALL REMAINING WALLS.
11. CONNECT TO EXISTING 2.5 INCH HWS PIPE AT FLOOR. ROUTE NEW ACROSS FLOOR TO HEATING COIL CIRCULATING PUMP ASSEMBLY.
12. CONNECT TO EXISTING 2.5 INCH HWR PIPE AT FLOOR. ROUTE NEW ACROSS FLOOR FROM HEATING COIL CIRCULATING PUMP ASSEMBLY.
13. HWS OVERHEAD FROM PUMP ASSEMBLY TO AHU HEATING COIL.
14. HWR OVERHEAD FROM AHU HEATING COIL BACK TO PUMP ASSEMBLY.
15. REASSEMBLE AND REINSTALL AHU COIL CIRCULATING PUMP ASSEMBLY OUTSIDE THE COIL PULL CLEARANCE. PROVIDE STAINLESS STEEL DRAIN PAN BELOW THE PUMP ASSEMBLY. PIPE ACROSS FLOOR TO EXISTING DRAIN PAN/CONDENSATE RECEPTOR IN PENTHOUSE FLOOR.
16. NEW REFRIGERANT LINES FORM NEW AIR COOLED CONDENSING UNITS.

No.	Description	Date

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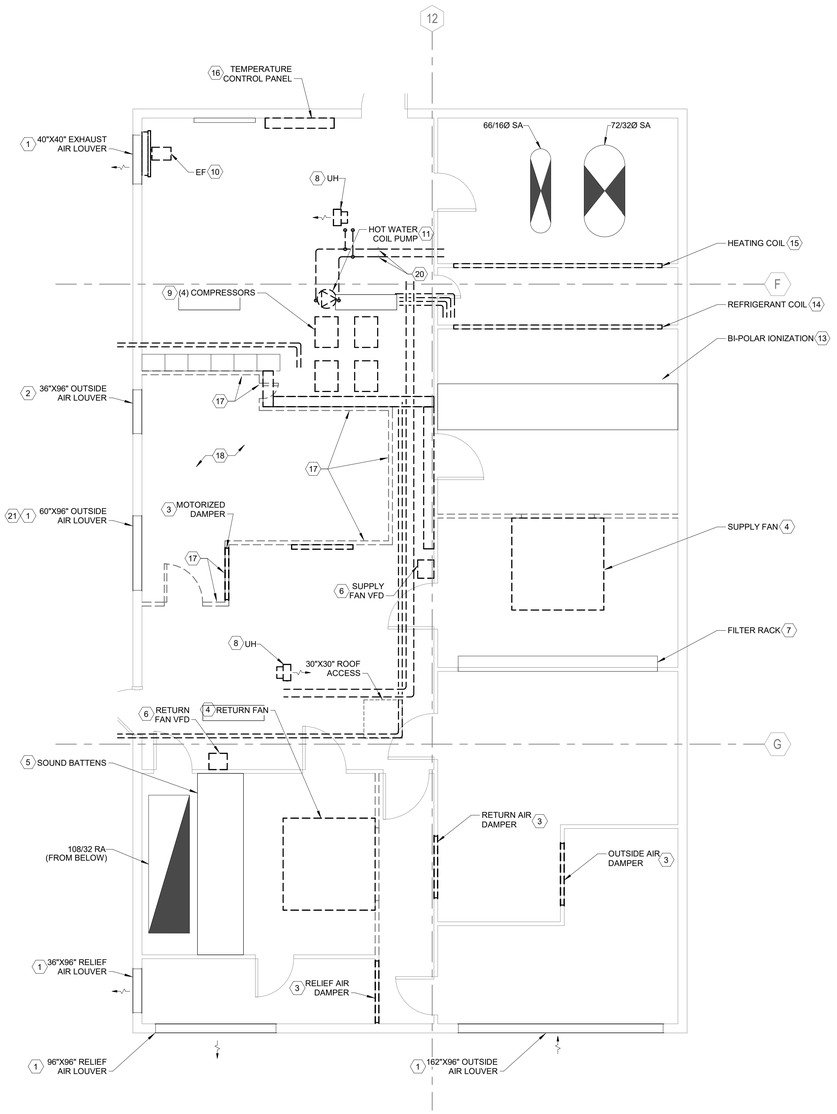
HVAC ENLARGED AHU #3 PLANS

STATE OF OHIO
DANIEL W EDWARTOSKI
E-75218
REGISTERED PROFESSIONAL ENGINEER
10/28/22

PROJECT STATUS:			BID/PERMIT SET
PROJECT NUMBER:			2022-0212
DRAWN BY: Dave Balch		DATE	SHEET NUMBER
DESIGNED BY: Dan Edwartoski		10/28/2022	H403
CHECKED BY: Stephen Wilmoth			

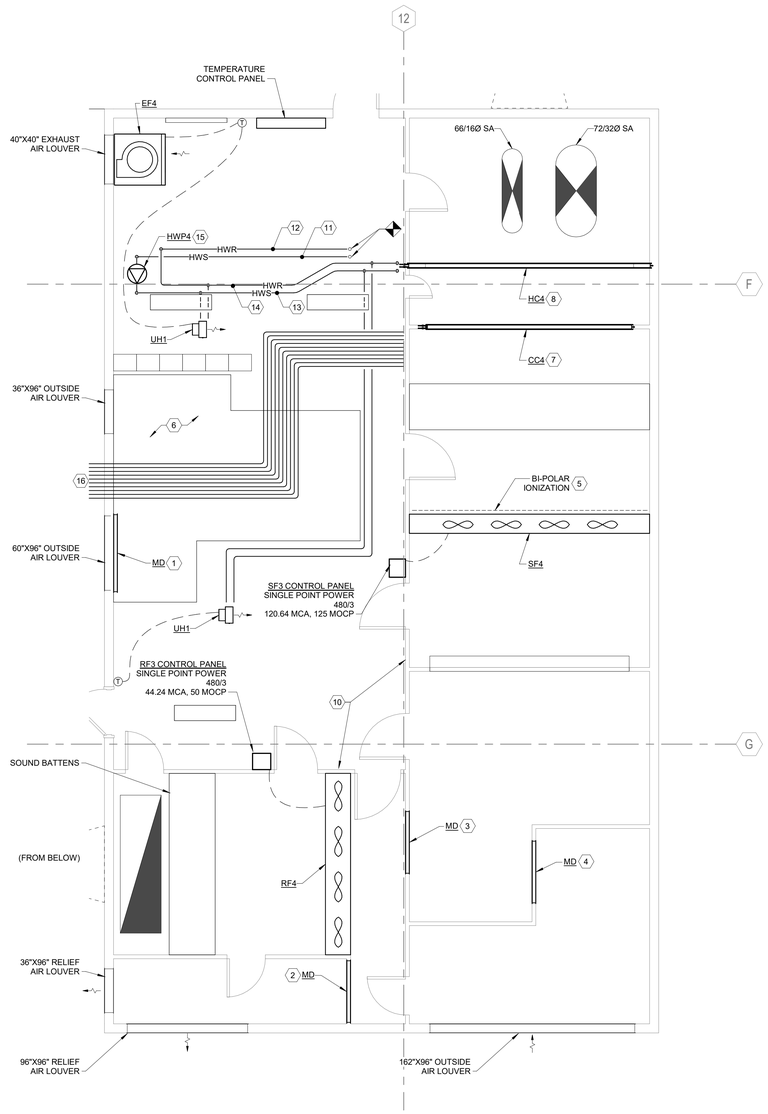


1 ENLARGED PLAN

DEMOLITION - AHU #4

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

0' 1' 2' 4'



2 ENLARGED PLAN

NEW WORK - AHU #4

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

0' 1' 2' 4'

DEMOLITION CODED NOTES:

1. EXISTING LOUVER TO REMAIN.
2. EXISTING ABANDONED LOUVER TO REMAIN. COVER INSIDE FACE OF LOUVER WITH GALVANIZED SHEET METAL. SEAL WATER TIGHT.
3. REMOVE MOTORIZED DAMPER, ACTUATOR AND CONTROLS.
4. REMOVE FAN IN ITS ENTIRETY INCLUDING HOUSING, MOTOR, DISCONNECT, FLEXIBLE CONNECTION, 12"X72"72" INERTIA BASE AND VIBRATION ISOLATORS.
5. EXISTING SOUND BATTENS TO REMAIN.
6. REMOVE FAN VFD.
7. EXISTING 156X96 FILTER RACK FOR 12 INCH MERV14 BAG FILTERS TO REMAIN.
8. REMOVE UNIT HEATER, CONTROLS AND BRANCH PIPING BACK TO HOT WATER MAIN.
9. REMOVE (4) REFRIGERANT COMPRESSORS, INERTIA BASES, DISCONNECTS AND REFRIGERANT PIPING TO COOLING COIL AND OUT TO CONDENSING UNITS.
10. REMOVE WALL PROP EXHAUST FAN.
11. TEMPORARILY REMOVE EXISTING HOT WATER COIL PUMP AND ALL PIPING AND APPURTENANCES BETWEEN PENTHOUSE FLOOR UP AND HEATING COIL TO ALLOW REMOVAL OF HEATING COIL. RETAIN FOR REINSTALLATION.
12. REFER TO ELECTRICAL DRAWINGS FOR ELECTRICAL SCOPE.
13. TEMPORARILY REMOVE UNISTRUT MOUNTED BI-POLAR IONIZATION EQUIPMENT. RETAIN FOR REINSTALLATION.
14. REMOVE REFRIGERANT COIL, CONTROLS, VALVES, PIPING, AND DRAIN PAN.
15. REMOVE HEATING COIL, CONTROLS, VALVES AND PIPING.
16. REMOVE TEMPERATURE CONTROL PANEL AND ALL TEMPERATURE CONTROLS THROUGHOUT AIR HANDLING UNIT.
17. REMOVE INTERNAL NON-BEARING WALLS.
18. REMOVE RUBBER MEMBRANE FLOOR. PATCH DRAIN HOLES IN FLOORING.
19. REMOVE BOTTOM 12 INCHES OF RUSTED WALL THE LENGTH OF THE DEMOLISHED FLOORING.
20. REMOVE HOT WATER PIPING TO FLOOR AND PREPARE FOR NEW CONSTRCTION PHASE.
21. BLANK OFF BOTTOM 36 INCHES OF INSIDE FACE OF LOUVER WITH GALVANIZED SHEET METAL. SEAL WATER TIGHT. UPPER 60 INCHES OF LOUVER WILL BE FITTED WITH A 60 INCH X 60 INCH MOTORIZED DAMPER FOR HEAT RELIEF.

NEW WORK CODED NOTES:

1. PROVIDE NEW 60 INCH X 60 INCH PENTHOUSE HEAT RELIEF MOTORIZED DAMPER ON UPPER PORTION OF EXISTING LOUVER. BLANK OFF BOTTOM OF EXISTING LOUVER.
2. PROVIDE NEW 96 INCH X 48 INCH RELIEF AIR MOTORIZED DAMPER IN PLACE OF THE DEMOLISHED RELIEF AIR DAMPER.
3. PROVIDE NEW 96 INCH X 48 INCH RETURN AIR MOTORIZED DAMPER IN PLACE OF THE DEMOLISHED RETURN AIR DAMPER.
4. PROVIDE NEW 96 INCH X 48 INCH OUTSIDE AIR MOTORIZED DAMPER IN PLACE OF THE DEMOLISHED OUTSIDE AIR DAMPER.
5. REINSTALL UNISTRUT RACK AND BI-POLAR IONIZATION EQUIPMENT.
6. REPLACE FLOORING WITH CONTINUOUSLY WELDED 3/16 INCH ALUMINUM TREADPLATE WELDED TO THE EXISTING STRUCTURAL MEMBERS.
7. PROVIDE CONTINUOUSLY WELDED STAINLESS STEEL DRAIN PAN FLOOR UNDER COOLING COIL. PAN SHALL HAVE A 2 INCH NPT MINIMUM THREADED DRAIN CONNECTION ON THE ACCESS SIDE OF THE COIL. PIPING SHALL BE ALUMINUM OR STAINLESS STEEL.
8. PROVIDE CONTINUOUSLY WELDED STAINLESS STEEL DRAIN PAN FLOOR UNDER HEATING COIL. PAN SHALL HAVE A 2 INCH NPT MINIMUM THREADED DRAIN CONNECTION ON THE ACCESS SIDE OF THE COIL. PIPING SHALL BE ALUMINUM OR STAINLESS STEEL.
9. RELOCATE HOT WATER COIL PUMP AND ALL ASSOCIATED VALVES, FITTINGS AND APPURTENANCES OUTSIDE THE COIL AREA. EXTEND 2.5 INCH HWS/R ACROSS FLOOR TO CONNECT TO EXISTING. PROVIDE STAINLESS STEEL DRAIN WITH 2 INCH NPT THREADED CONNECTION PAN UNDER THE PUMP ASSEMBLY. PIPE TO EXISTING DRAIN.
10. REPAIR WALLS WHERE PIPING, CONDUIT, TEMPERATURE CONTROLS AND EQUIPMENT WAS REMOVED. THIS APPLIES TO ALL REMAINING WALLS.
11. CONNECT TO EXISTING 2.5 INCH HWS PIPE AT FLOOR. ROUTE NEW ACROSS FLOOR TO HEATING COIL CIRCULATING PUMP ASSEMBLY.
12. CONNECT TO EXISTING 2.5 INCH HWR PIPE AT FLOOR. ROUTE NEW ACROSS FLOOR FROM HEATING COIL CIRCULATING PUMP ASSEMBLY.
13. HWS OVERHEAD FROM PUMP ASSEMBLY TO AHU HEATING COIL.
14. HWR OVERHEAD FROM AHU HEATING COIL BACK TO PUMP ASSEMBLY.
15. REASSEMBLE AND REINSTALL AHU COIL CIRCULATING PUMP ASSEMBLY OUTSIDE THE COIL PULL CLEARANCE. PROVIDE STAINLESS STEEL DRAIN PAN BELOW THE PUMP ASSEMBLY. PIPE ACROSS FLOOR TO EXISTING DRAIN PAN/CONDENSATE RECEPTOR IN PENTHOUSE FLOOR.
16. NEW REFRIGERANT LINES FORM NEW AIR COOLED CONDENSING UNITS.

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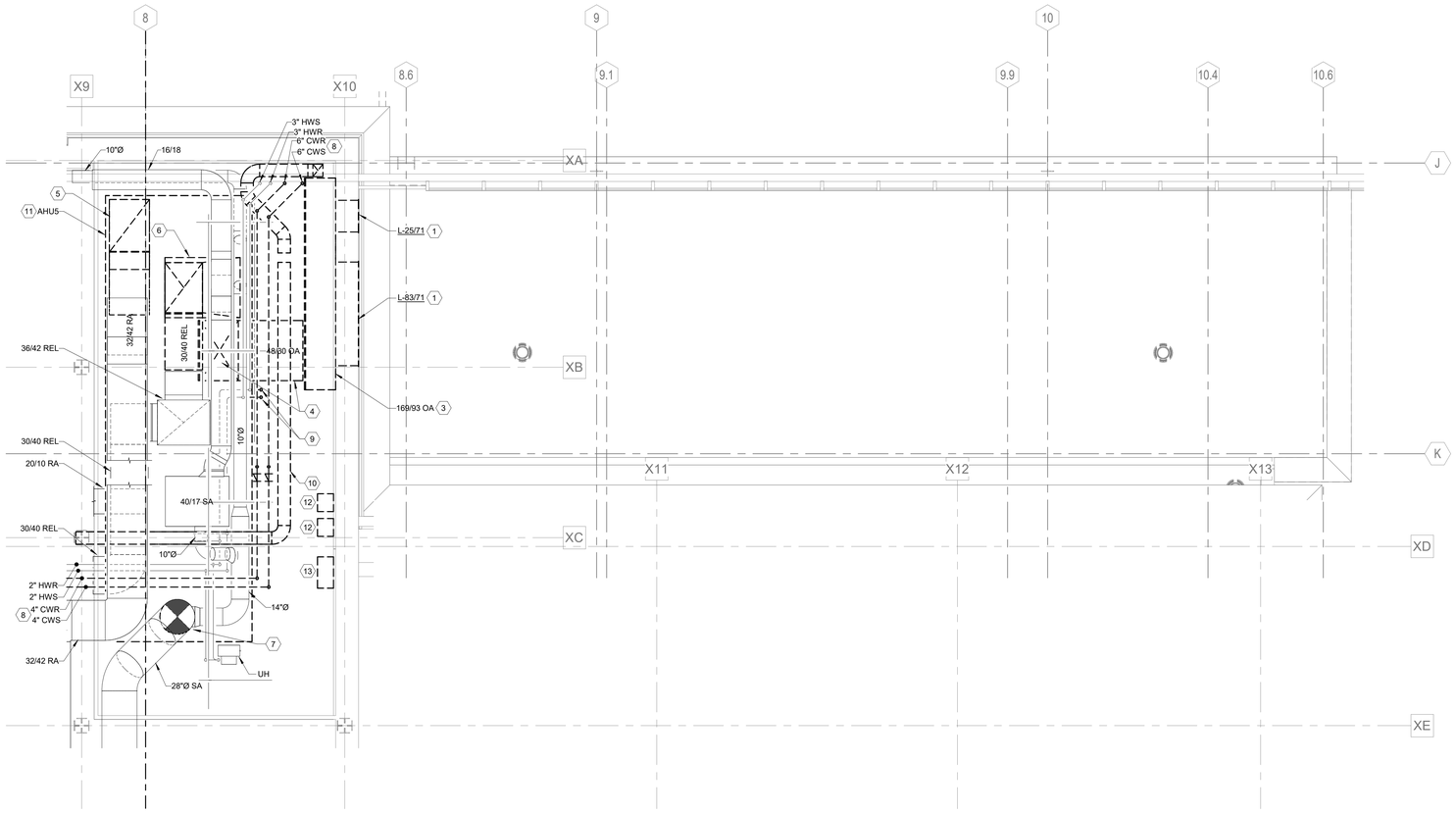
HVAC ENLARGED AHU #4 PLANS

STATE OF OHIO
DANIEL W. EDWARTOSKI
E-75218
REGISTERED PROFESSIONAL ENGINEER
10/28/22

PROJECT STATUS:			BID/PERMIT SET
PROJECT NUMBER:			2022-0212
DRAWN BY: Dave Balch	DESIGNED BY: Dan Edwartoski	DATE	SHEET NUMBER
CHECKED BY: Stephen Wilmoth		10/28/2022	H404



1 ENLARGED PLAN

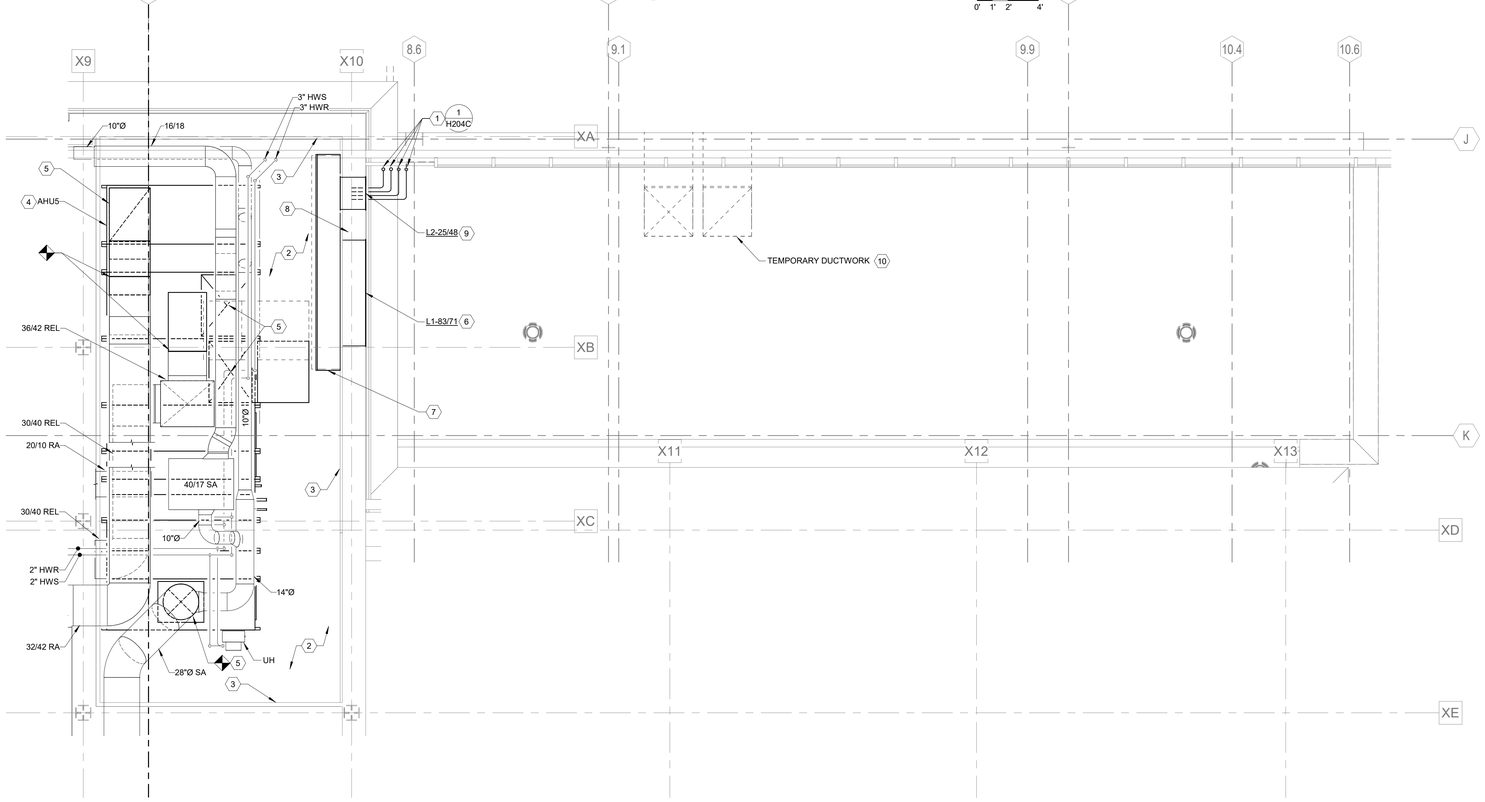
DEMOLITION - AHU #5

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

0' 1" 2" 4'

DEMOLITION CODED NOTES:

1. REMOVE OUTSIDE AIR LOUVERS.
2. NOT USED.
3. REMOVE OUTSIDE AIR PLENUM.
4. REMOVE OUTSIDE AIR DUCT BETWEEN PLENUM AND AHU.
5. REMOVE RETURN AIR DUCT CONNECTION TO UNIT.
6. REMOVE RELIEF AIR DUCT CONNECTION TO UNIT.
7. REMOVE LOWER 36 INCHES OF SUPPLY DUCT AT UNIT.
8. REMOVE CWS/R PIPING IN IT'S ENTIRETY.
9. REMOVE HWS/R BRANCH PIPING FROM AHU UP TO OVERHEAD MAIN.
10. REMOVE EXHAUST DUCT.
11. REMOVE AIR HANDLING UNIT THROUGH LOUVER OPENING.
12. REMOVE FAN VFD.
13. REMOVE TEMPERATURE CONTROL PANEL



2 ENLARGED PLAN

NEW WORK - AHU #5

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

0' 1" 2" 4'

CODED NOTES:

1. REFRIGERANT PIPES UP EXTERIOR OF BUILDING TO CONDENSING UNITS ON HIGH ROOF. SIZE AND INSTALL PER CONDENSING UNIT MANUFACTURER'S REQUIREMENTS.
2. REPLACE VINLY FLOORING THROUGHOUT MECHANICAL ROOM.
3. PAINT MECHANCIAL ROOM WALLS.
4. AHU5 WILL BE SHIPPED TO CONSTRUCTION SITE ASSEMBLED. DISASSEMBLE UNIT SO THAT IT CAN BE LIFTED ON TO ROOF AND MOVED INTO MECHANICAL ROOM. REASSEMBLE UNIT AND ANCHOR IN PLACE.
5. MAKE RETURN AIR, RELIEF AIR, OUTSIDE AIR AND SUPPLY AIR CONNECTIONS TO EXISTING DUCTWORK.
6. NEW OUTSIDE AIR LOUVER.
7. 169 X 92 X 18 OUTSIDE AIR PLENUM.
8. EXTEND REFIGERANT PIPING TO FINAL CONNECTION POINT AT AHU5.
9. INSTALL LOUVER IN BOTTOM PORTION OF EXISTING OPENING. BLANK OFF UPPER PORTION FOR INSTALLATION OF REFRIGERANT PIPING ABOVE LOUVER. SEAL REFRIGERANT PIPES THROUGH PANEL WATER TIGHT.
10. EXTEND TEMPORARY SUPPLY AND RETURN MAINS SERVING AHU5 DOWN THE SIDE OF THE BUILDING TO THE LOW ROOF. PROVIDE SUPPORTING STRUCTURE TO ENSURE DUCT DOES NOT DAMAGE GLAZING. ROUTE ACROSS ROOF INTO THE MECHANICAL ROOM AND CONNECT TO THE AHU SUPPLY AND RETURN DUCTS.

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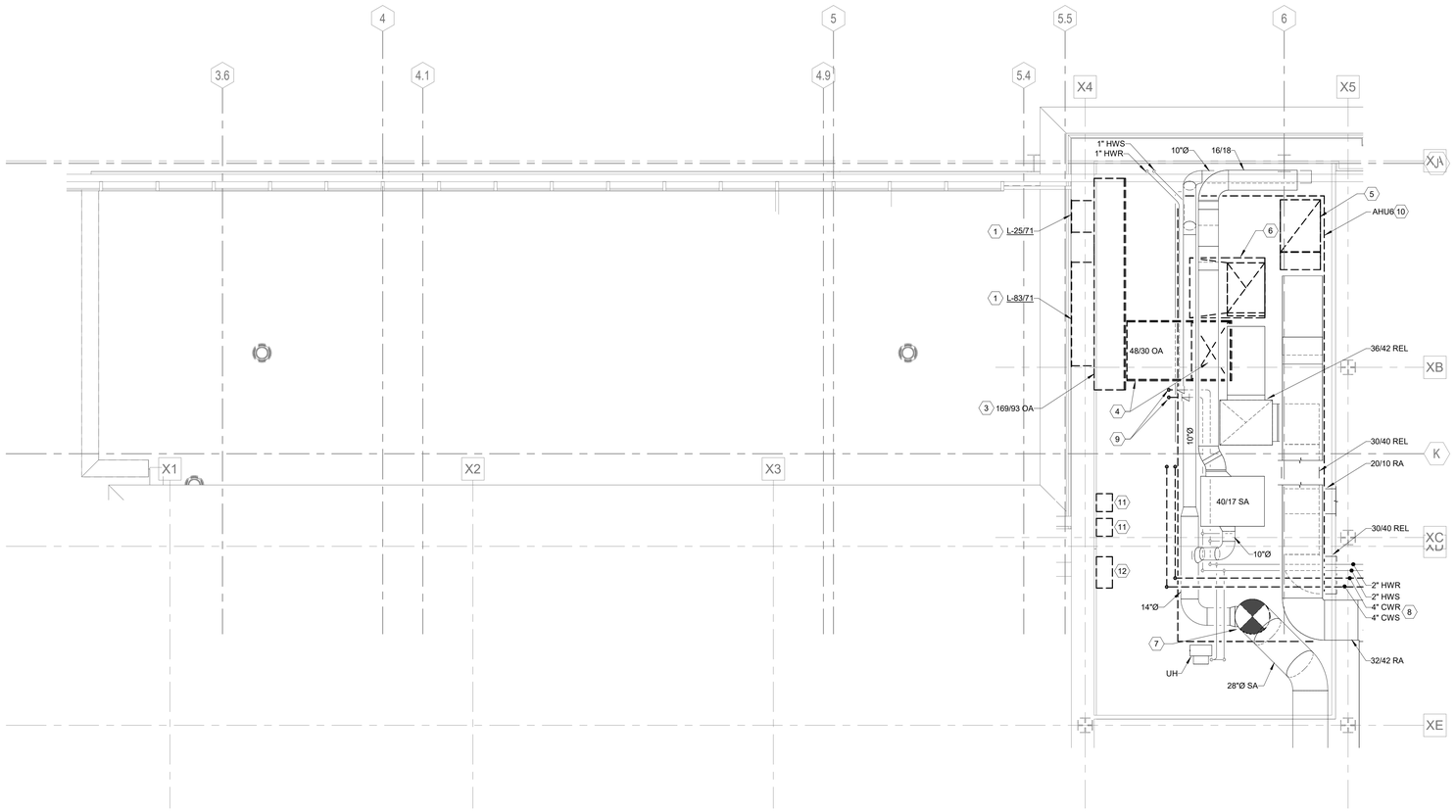
HVAC ENLARGED AHU #5 PLANS

STATE OF OHIO DANIEL J. EDWARTOSKI E-78218 REGISTERED PROFESSIONAL ENGINEER 10/28/22

PROJECT STATUS:			BID/PERMIT SET
PROJECT NUMBER:			2022-0212
DRAWN BY:	Dave Balch	DATE	SHEET NUMBER
DESIGNED BY:	Dan Edwartoski	10/28/2022	H405
CHECKED BY:	Stephen Wilmoth		



1 ENLARGED PLAN

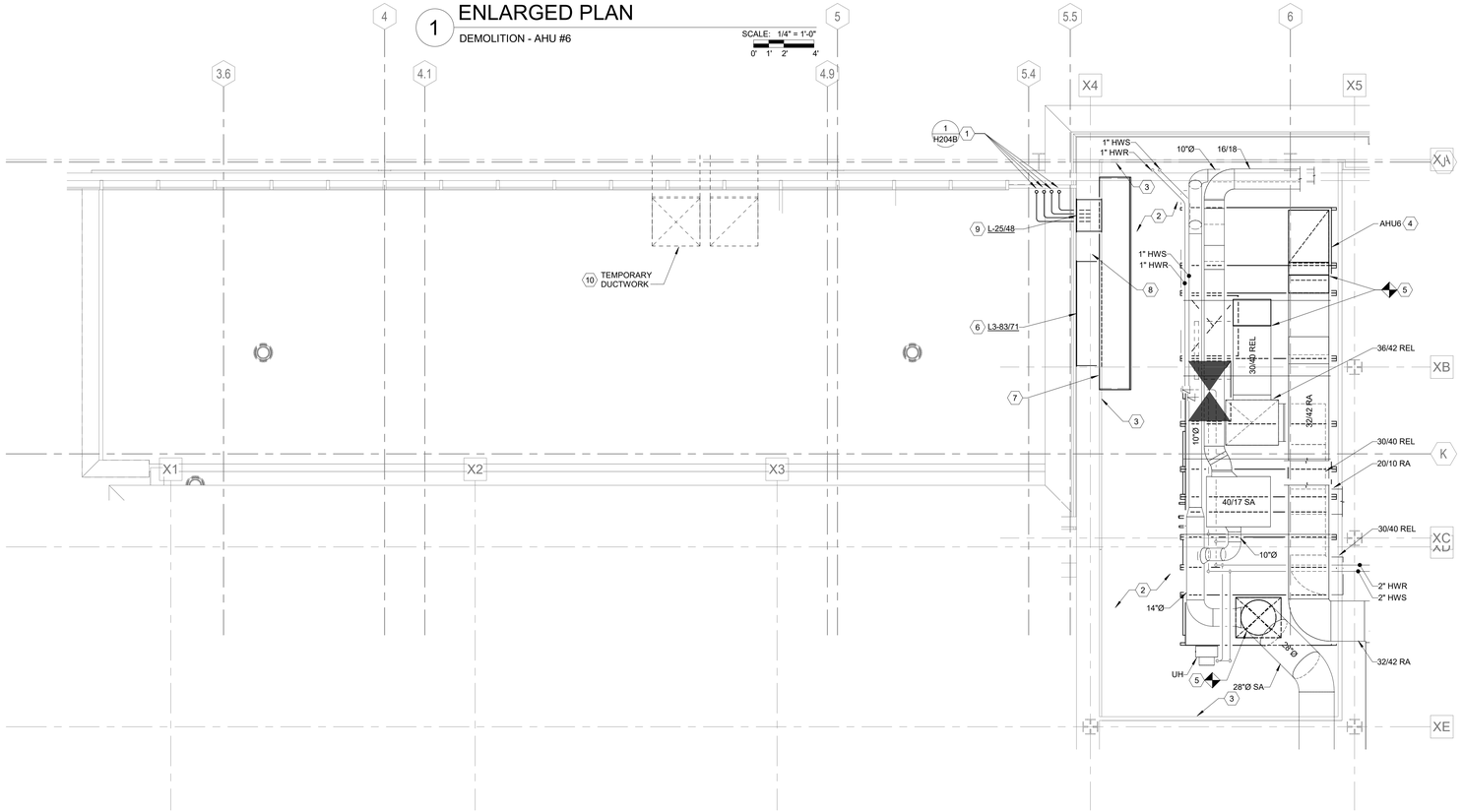
DEMOLITION - AHU #6

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

0' 1' 2' 4'

DEMOLITION CODED NOTES:

1. REMOVE OUTSIDE AIR LOUVER.
2. NOT USED.
3. REMOVE OUTSIDE AIR PLENUM.
4. REMOVE OUTSIDE AIR DUCT BETWEEN PLENUM AND AHU.
5. REMOVE RETURN AIR DUCT CONNECTION TO UNIT.
6. REMOVE RELIEF AIR DUCT CONNECTION TO UNIT.
7. REMOVE LOWER 36 INCHES OF SUPPLY DUCT AT UNIT.
8. REMOVE CWS/R PIPING IN IT'S ENTIRETY.
9. REMOVE HWS/R BRANCH PIPING FROM AHU UP TO OVERHEAD MAIN.
10. REMOVE AIR HANDLING UNIT THROUGH LOUVER OPENING.
11. REMOVE FAN VFD.
12. REMOVE TEMPERATURE CONTROL PANEL



2 ENLARGED PLAN

NEW WORK - AHU #6

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

0' 1' 2' 4'

CODED NOTES:

1. REFRIGERANT PIPES UP EXTERIOR OF BUILDING TO CONDENSING UNITS ON HIGH ROOF. SIZE AND INSTALL PER CONDENSING UNIT MANUFACTURER'S REQUIREMENTS.
2. REPLACE VINLY FLOORING THROUGHOUT MECHANICAL ROOM.
3. PAINT MECHANCIAL ROOM WALLS.
4. AHU6 WILL BE SHIPPED TO CONSTRUCTION SITE ASSEMBLED. DISASSEMBLE UNIT SO THAT IT CAN BE LIFTED ON TO ROOF AND MOVED INTO MECHANICAL ROOM. REASSEMBLE UNIT AND ANCHOR IN PLACE.
5. MAKE RETURN AIR, RELIEF AIR, OUTSIDE AIR AND SUPPLY AIR CONNECTIONS TO EXISTING DUCTWORK.
6. NEW OUTSIDE AIR LOUVER.
7. 169 X 92 X 18 OUTSIDE AIR PLENUM.
8. EXTEND REFIGERANT PIPING TO FINAL CONNECTION POINT AT AHU6.
9. INSTALL LOUVER IN BOTTOM PORTION OF EXISTING OPENING. BLANK OFF UPPER PORTION FOR INSTALLATION OF REFRIGERANT PIPING ABOVE LOUVER. SEAL REFRIGERANT PIPES THOUGH PANEL WATER TIGHT.
10. EXTEND TEMPORARY SUPPLY AND RETURN MAINS SERVING AHU6 DOWN THE SIDE OF THE BUILDING TO THE LOW ROOF. PROVIDE SUPPORTING STRUCTURE TO ENSURE DUCT DOES NOT DAMAGE GLAZING. ROUTE ACROSS ROOF INTO THE MECHANICAL ROOM AND CONNECT TO THE AHU SUPPLY AND RETURN DUCTS.

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HVAC ENLARGED AHU #6 PLANS

STATE OF OHIO
DANIEL D. EDWARTOSKI
E-78218
REGISTERED PROFESSIONAL ENGINEER
10/28/22

PROJECT STATUS:			BID/PERMIT SET
PROJECT NUMBER:			2022-0212
DRAWN BY:	Dave Balch	DATE	SHEET NUMBER
DESIGNED BY:	Dan Edwartoski	10/28/2022	H406
CHECKED BY:	Stephen Wilmoth		

AIR HANDLING UNIT SCHEDULE

UNLESS OTHERWISE NOTED EQUIPMENT BASED ON - DAIKIN
KEY: F.C.-FORWARD CURVED, B.I.-BACKWARD INCLINED, A.F.-AIRFOIL
H.C.-HVAC CONTRACTOR, E.C.-ELECTRICAL CONTRACTOR

UNIT DATA						SUPPLY FAN DATA								S.F. MOTOR DATA								RETURN FAN DATA								R.F. MOTOR DATA								RELATED COMPONENT TAGS	REMARKS
TAG	LOCATION	MODEL	SUPPLY CFM	RETURN CFM	MIN. O.A. CFM	TAG	CFM	QTY.	E.S.P. IN. WG	T.S.P. IN. WG	MODEL	WHEEL DIA. IN.	RPM	HP	BHP	MCA	MOCP	VOLTS	PHASE	PROVIDED BY H.C.	PROVIDED BY E.C.	TAG	CFM	QTY.	E.S.P. IN. WG	T.S.P. IN. WG	MODEL	WHEEL DIA. IN.	RPM	HP	BHP	MCA	MOCP	VOLTS	PHASE	PROVIDED BY H.C.	PROVIDED BY E.C.	(COILS, FILTERS, ETC.)	
AHU1	ROOF	-	50,000	45,000	12,500	SF1	3,333	15	3.5	6.5	FA1700076	15.7	2,968	7.5	5.28	120.6	125.0	480	3	B	-	RF1	7,500	6	2.0	2.0	FA1700081	22.0	1,644	6.71	4.32	44.2	50.0	480	3	B	-	CC1, HC1	-
AHU2	ROOF	-	50,000	45,000	12,500	SF2	3,333	15	3.5	6.5	FA1700076	15.7	2,968	7.5	5.28	120.6	125.0	480	3	B	-	RF2	7,500	6	2.0	2.0	FA1700081	22.0	1,644	6.71	4.32	44.2	50.0	480	3	B	-	CC2, HC2	-
AHU3	ROOF	-	50,000	45,000	12,500	SF3	3,333	15	3.5	6.5	FA1700076	15.7	2,968	7.5	5.28	120.6	125.0	480	3	B	-	RF3	7,500	6	2.0	2.0	FA1700081	22.0	1,644	6.71	4.32	44.2	50.0	480	3	B	-	CC3, HC3	-
AHU4	ROOF	-	50,000	45,000	12,500	SF4	3,333	15	3.5	6.5	FA1700076	15.7	2,968	7.5	5.28	120.6	125.0	480	3	B	-	RF4	7,500	6	2.0	2.0	FA1700081	22.0	1,644	6.71	4.32	44.2	50.0	480	3	B	-	CC4, HC4	-
AHU5	3RD FLOOR MECH ROOM	CAH034GHQM	15,150	13,620	3,790	SF5	2,525	6	3.0	6.7	FA1700076	15.7	2,858	7.5	4.90	49.1	50.0	480	3	B	-	RF5	4,540	3	1.5	2.0	FA1700076	15.7	2,854	7.5	4.45	25.5	30.0	480	3	B	-	CC5, HC5	-
AHU6	3RD FLOOR MECH ROOM	CAH034GHQM	15,150	13,620	3,790	SF6	2,525	6	3.0	6.7	FA1700076	15.7	2,858	7.5	4.90	49.1	50.0	480	3	B	-	RF6	4,540	3	1.5	2.0	FA1700076	15.7	2,854	7.5	4.45	25.5	30.0	480	3	B	-	CC6, HC6	-

INDICATED ELECTRICAL COMPONENTS:

A. DISCONNECT SWITCH
B. EC MOTOR CONTROL PANEL (SINGLE POINT POWER, SERVES ALL FANS IN ARRAY)

AHU HEATING HOT WATER COIL SCHEDULE

TAG	LOCATION	CFM	MIN. O.A. CFM	HEATING CFM	MBH	TOTAL GPM	E.W.T. °F	L.W.T. °F	W.P.D. FT. HD.	A.P.D. FT. HD.	TOTAL FT²	E.A.T. °F	L.A.T. °F	ROWS	FINS/ INCH	NO. OF SECTIONS HIGH	NO. OF SECTIONS WIDE	FACE VELOCITY	REMARKS
HWC1	AHU1	50,000	12,500	30,000	771	50.0	190.0	159.1	4.80	0.03	102.7	48.5	72.0	1	6	2	1	292	234#, 42"H X 176"L
HWC2	AHU2	50,000	12,500	30,000	771	50.0	190.0	159.1	4.80	0.03	102.7	48.5	72.0	1	6	2	1	292	234#, 42"H X 176"L
HWC3	AHU3	50,000	12,500	30,000	771	50.0	190.0	159.1	4.80	0.03	102.7	48.5	72.0	1	6	2	1	292	234#, 42"H X 176"L
HWC4	AHU4	50,000	12,500	30,000	771	50.0	190.0	159.1	4.80	0.03	102.7	48.5	72.0	1	6	2	1	292	234#, 42"H X 176"L
HWC5	AHU5	15,150	3,790	15,150	562	35.9	190.0	158.7	16.7	0.17	29.2	48.5	83.1	2	8	2	1	519	48#, 42"H X 100"L
HWC6	AHU6	15,150	3,790	15,150	562	35.9	190.0	158.7	16.7	0.17	29.2	48.5	83.1	2	8	2	1	519	48#, 42"H X 100"L

FAN SCHEDULE

UNLESS OTHERWISE NOTED EQUIPMENT BASED ON GREENHECK
KEY: CENT.-CENTRIFUGAL, PROP.-PROPELLER, F.C.-FORWARD CURVED,
B.I.-BACKWARD, INCLINED, A.F.-AIRFOIL.

UNIT DATA												MOTOR DATA				SOUND RATING IN SONES	INDICATED COMPONENTS PROVIDED BY DIV 23	INDICATED COMPONENTS PROVIDED BY DIV 26	REMARKS
TAG	LOCATION	FUNCTION	MODEL	CFM	T.S.P. IN. W.G.	FAN TYPE	WHEEL TYPE	RPM	CLASS	TYPE OF DRIVE	TYPE OF DAMPER	TYPE OF CONTROL	HP	RPM	VOLTS	PHASE			
EF1	AHU1	HEAT RELIEF	GREENHECK AER-24-VG	8,000	0.56	PROP	-	1,550	-	DIRECT	MD	BAS	3.0	1,550	480	3	29	A	-	B, D, E
EF2	AHU2	HEAT RELIEF	GREENHECK AER-24-VG	8,000	0.56	PROP	-	1,550	-	DIRECT	MD	BAS	3.0	1,550	480	3	29	A	-	B, D, E
EF3	AHU3	HEAT RELIEF	GREENHECK AER-24-VG	8,000	0.56	PROP	-	1,550	-	DIRECT	MD	BAS	3.0	1,550	480	3	29	A	-	B, D, E
EF4	AHU4	HEAT RELIEF	GREENHECK AER-24-VG	8,000	0.56	PROP	-	1,550	-	DIRECT	MD	BAS	3.0	1,550	480	3	29	A	-	B, D, E
RF7	ROOF C	TEMP. RETURN	GREENHECK QEID-36	27,000	1.5	CENT	-	910	-	DIRECT	-	DP	25.0	-	480	3	39	C	-	C, F, J, K

CODED NOTES:

A. DISCONNECT SWITCH
B. EC MOTOR
C. NEMA 3R VARIABLE FREQUENCY DRIVE
D. DIAL CONTROL FOR BALANCING
E. MOTOR ENCLOSURE WITH BIRD SCREEN
F. VFD RATED MOTOR
J. HOUSING SEALED FOR OUTDOOR USE
K. SHAFT GROUNDING RINGS

LOUVER SCHEDULE

UNLESS OTHERWISE NOTED EQUIPMENT BASED ON AIROLITE

TAG	LOCATION	MODEL	FUNCTION	DIMENSIONS H x W x D	FREE FACE AREA	CFM	MAXIMUM A.P.D. IN. W.G.	MAXIMUM VELOCITY FPM	VELOCITY FPM	DAMPER	REMARKS
L1	AHU5	K6776	OA	83X71X20	21.2	12,650	.1	596	596	NONE	CUSTOM COLOR SELECTED BY ARCHITECT
L2	AHU5	K6776	OA	25X48X20	4.3	2,500	.1	581	581	NONE	CUSTOM COLOR SELECTED BY ARCHITECT
L3	AHU6	K6776	OA	83X71X20	21.2	12,650	.1	596	596	NONE	CUSTOM COLOR SELECTED BY ARCHITECT
L4	AHU6	K6776	OA	25X48X20	4.3	2,500	.1	581	581	NONE	CUSTOM COLOR SELECTED BY ARCHITECT

HOT WATER UNIT HEATER SCHEDULE

UNLESS OTHERWISE NOTED EQUIPMENT BASED ON RITTLING

UNIT DATA					AIR DATA			WATER DATA				MOTOR DATA			INDICATED COMPONENTS PROVIDED BY		REMARKS
TAG	LOCATION	MODEL	TYPE	MBH	CFM	E.A.T. °F	L.A.T. °F	GPM	L.W.T. °F	L.W.T. °F	W.P.D. FT. HD.	HP	VOLTS	PHASE	DIV 23	DIV 26	
UH1	AHU 1,2,3,4	RH-33	HORIZ.	19.6	630	65	93	1.3	90.0	60.0	0.1	1/15	115	1	A	-	-

CODED NOTES:

A. INTEGRL DISCONNECT SWITCH

AIR COOLED CONDENSING UNIT SCHEDULE

UNLESS OTHERWISE NOTED EQUIPMENT BASED ON DAIKIN
UNIT CAPACITIES BASED ON FAN COIL ENTERING CONDITION OF 75°F DB/62°F WB IN COOLING AND 70°F DB IN HEATING

UNIT DATA								CONDENSER DATA			ELECTRICAL DATA				INDICATED COMPONENTS PROVIDED BY		REMARKS
TAG	LOCATION	MODEL	COOLING CAPACITY	HEATING CAPACITY	EER/IEER	COP47	COP17	E.A.T. °F	REFRIGERANT TYPE	NO. OF FANS	MCA	MOCP	VOLTS	PHASE	DIV 23	DIV 26	
ACCU1-1	ROOF	RXYQ384XAYDA	367 MBH	420 MBH	9.5/21.1	3.3	2.28	95	R-410A	2+2+2	25.9+20.6+ 20.6	35+25+25	460	3	G	A	-
ACCU1-2	ROOF	RXYQ384XAYDA	367 MBH	420 MBH	9.5/21.1	3.3	2.28	95	R-410A	2+2+2	25.9+20.6+ 20.6	35+25+25	460	3	G	A	-
ACCU1-3	ROOF	RXYQ384XAYDA	367 MBH	420 MBH	9.5/21.1	3.3	2.28	95	R-410A	2+2+2	25.9+20.6+ 20.6	35+25+25	460	3	G	A	-
ACCU1-4	ROOF	RXYQ384XAYDA	367 MBH	420 MBH	9.5/21.1	3.3	2.28	95	R-410A	2+2+2	25.9+20.6+ 20.6	35+25+25	460	3	G	A	-
ACCU1-5	ROOF	RXYQ384XAYDA	367 MBH	420 MBH	9.5/21.1	3.3	2.28	95	R-410A	2+2+2	25.9+20.6+ 20.6	35+25+25	460	3	G	A	-
ACCU2-1	ROOF	RXYQ384XAYDA	367 MBH	420 MBH	9.5/21.1	3.3	2.28	95	R-410A	2+2+2	25.9+20.6+ 20.6	35+25+25	460	3	G	A	-
ACCU2-2	ROOF	RXYQ384XAYDA	367 MBH	420 MBH	9.5/21.1	3.3	2.28	95	R-410A	2+2+2	25.9+20.6+ 20.6	35+25+25	460	3	G	A	-
ACCU2-3	ROOF	RXYQ384XAYDA	367 MBH	420 MBH	9.5/21.1	3.3	2.28	95	R-410A	2+2+2	25.9+20.6+ 20.6	35+25+25	460	3	G	A	-
ACCU2-4	ROOF	RXYQ384XAYDA	367 MBH	420 MBH	9.5/21.1	3.3	2.28	95	R-410A	2+2+2	25.9+20.6+ 20.6	35+25+25	460	3	G	A	-
ACCU2-5	ROOF	RXYQ384XAYDA	367 MBH	420 MBH	9.5/21.1	3.3	2.28	95	R-410A	2+2+2	25.9+20.6+ 20.6	35+25+25	460	3	G	A	-
ACCU3-1	ROOF	RXYQ384XAYDA	367 MBH	420 MBH	9.5/21.1	3.3	2.28	95	R-410A	2+2+2	25.9+20.6+ 20.6	35+25+25	460	3	G	A	-
ACCU3-2	ROOF	RXYQ384XAYDA	367 MBH	420 MBH	9.5/21.1	3.3	2.28	95	R-410A	2+2+2	25.9+20.6+ 20.6	35+25+25	460	3	G	A	-
ACCU3-3	ROOF	RXYQ384XAYDA	367 MBH	420 MBH	9.5/21.1	3.3	2.28	95	R-410A	2+2+2	25.9+20.6+ 20.6	35+25+25	460	3	G	A	-
ACCU3-4	ROOF	RXYQ384XAYDA	367 MBH	420 MBH	9.5/21.1	3.3	2.28	95	R-410A	2+2+2	25.9+20.6+ 20.6	35+25+25	460	3	G	A	-
ACCU3-5	ROOF	RXYQ384XAYDA	367 MBH	420 MBH	9.5/21.1	3.3	2.28	95	R-410A	2+2+2	25.9+20.6+ 20.6	35+25+25	460	3	G	A	-
ACCU4-1	ROOF	RXYQ384XAYDA	367 MBH	420 MBH	9.5/21.1	3.3	2.28	95	R-410A	2+2+2	25.9+20.6+ 20.6	35+25+25	460	3	G	A	-
ACCU4-2	ROOF	RXYQ384XAYDA	367 MBH	420 MBH	9.5/21.1	3.3	2.28	95	R-410A	2+2+2	25.9+20.6+ 20.6	35+25+25	460	3	G	A	-
ACCU4-3	ROOF	RXYQ384XAYDA	367 MBH	420 MBH	9.5/21.1	3.3	2.28	95	R-410A	2+2+2	25.9+20.6+ 20.6	35+25+25	460	3	G	A	-
ACCU4-4	ROOF	RXYQ384XAYDA	367 MBH	420 MBH	9.5/21.1	3.3	2.28	95	R-410A	2+2+2	25.9+20.6+ 20.6	35+25+25	460	3	G	A	-
ACCU4-5	ROOF	RXYQ384XAYDA	367 MBH	420 MBH	9.5/21.1	3.3	2.28	95	R-410A	2+2+2	25.9+20.6+ 20.6	35+25+25	460	3	G	A	-
ACCU5-1	ROOF	RXYQ384XAYDA	367 MBH	420 MBH	9.5/21.1	3.3	2.28	95	R-410A	2+2+2	25.9+20.6+ 20.6	35+25+25	460	3	G	A	-
ACCU5-2	ROOF	RXYQ384XAYDA	367 MBH	420 MBH	9.5/21.1	3.3	2.28	95	R-410A	2+2+2	25.9+20.6+ 20.6	35+25+25	460	3	G	A	-
ACCU6-1	ROOF	RXYQ384XAYDA	367 MBH	420 MBH	9.5/21.1	3.3	2.28	95	R-410A	2+2+2	25.9+20.6+ 20.6	35+25+25	460	3	G	A	-
ACCU6-2	ROOF	RXYQ384XAYDA	367 MBH	420 MBH	9.5/21.1	3.3	2.28	95	R-410A	2+2+2	25.9+20.6+ 20.6	35+25+25	460	3	G	A	-

CODED NOTES:

A. DISCONNECT SWITCH
B. CONTROL PANEL WITH INTEGRAL DISCONNECT SWITCH
C. CONTROL PANEL
D. LINE VOLTAGE PANEL
E. REDUCED VOLTAGE STARTER
F. TWO SPEED STARTERS
G. VARIABLE FREQUENCY DRIVE
H. EMERGENCY POWER

No.	Description	Date

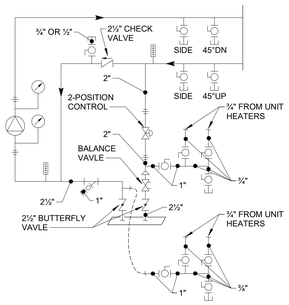
COLUMBUS METROPOLITAN LIBRARY
96 South Grant Avenue
Columbus, OH 43215
AIR HANDLING UNIT REPLACEMENT

KORDA
Korda/Nemeth Engineering, Inc. - Consulting Engineers
1650 Watermark Drive, Suite 200 - Columbus, Ohio 43215-7010
TEL 614-487-1650 - WEB www.korda.com

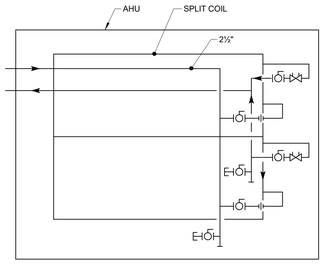
HVAC SCHEDULES

STATE OF OHIO
DANIEL J. EDWARTOSKI
E-75218
REGISTERED PROFESSIONAL ENGINEER
10/28/22

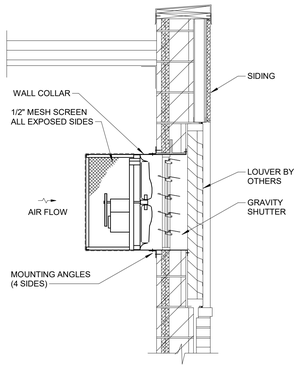
PROJECT STATUS:		BID/PERMIT SET
PROJECT NUMBER:		2022-0212
DRAWN BY: Dave Balch	DATE	SHEET NUMBER
DESIGNED BY: Dan Edwartoski	10/28/2022	H501
CHECKED BY: Stephen Wilmoth		



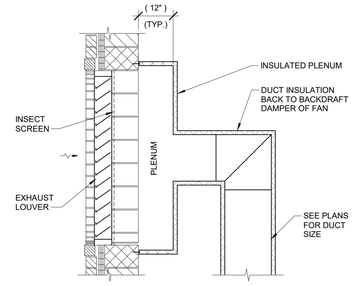
1 DETAIL
HOT WATER PIPING #1 N.T.S.



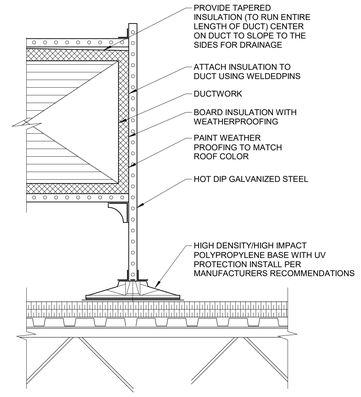
2 DETAIL
HOT WATER PIPING #2 N.T.S.



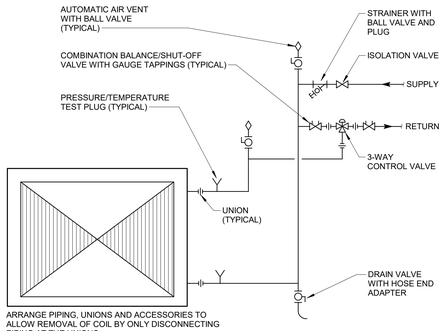
3 DETAIL
WALL MOUNTED EXHAUST FAN N.T.S.



4 DETAIL
EXHAUST LOUVER PLENUM N.T.S.



5 DETAIL
DUCT SUPPORT - ROOF TYPE WITH POLYMER BASE METAL DECK JOIST N.T.S.

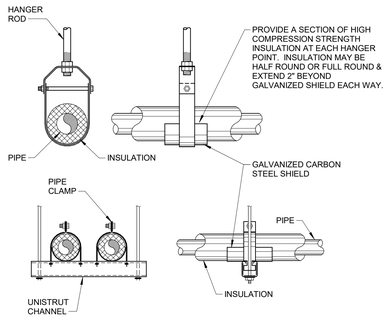


ARRANGE PIPING, UNIONS AND ACCESSORIES TO ALLOW REMOVAL OF COIL BY ONLY DISCONNECTING PIPING AT THE UNIONS.

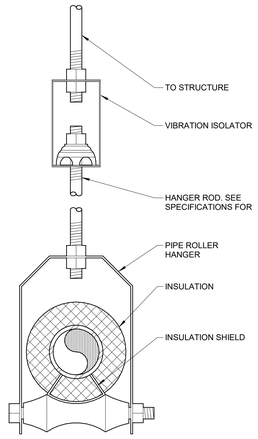
NOTES:

1. ALL PIPING AND VALVING TO BE OUTSIDE COIL PULL AREA.
2. PROVIDE UNIONS AT CONNECTIONS TO COIL FOR REMOVAL.
3. FOR ROOFTOP UNITS, ALL PIPING AND VALVES SHALL BE IN WEATHER PROTECTIVE ENCLOSURE.

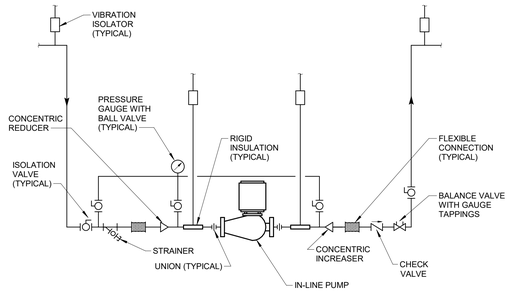
6 DETAIL
TERMINAL UNIT COIL PIPING (3-WAY VALVE) N.T.S.



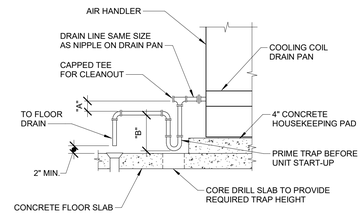
7 DETAIL
PIPE HANGER - TYPICAL N.T.S.



8 DETAIL
PIPE HANGER - TYPICAL INSIDE MECHANICAL ROOM N.T.S.



9 DETAIL
IN-LINE PUMP PIPING N.T.S.



	A(IN)	B(IN)
DRAWTHRU COIL	FAN INLET STATIC	"A"/2+1
BLOWTHRU COIL	2" MIN	FAN DISCHARGE STATIC PLUS 1"

10 DETAIL
CONDENSATION DRAIN TRAP PIPING N.T.S.

No.	Description	Date

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STATE OF OHIO
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PROJECT STATUS:		BID/PERMIT SET
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DRAWN BY: Dave Balch	DATE	SHEET NUMBER
DESIGNED BY: Dan Edwartoski	10/28/2022	H601
CHECKED BY: Stephen Wilmoth		

LIGHTING SYMBOLS

SYMBOL	DESCRIPTION	MOUNTING HEIGHT UNLESS NOTED OTHERWISE
R1 R1	LUMINAIRE: TYPE "R1"; SEE LUMINAIRE SCHEDULE	----
R1 R1 R1	ARCHITECTURAL LUMINAIRE: TYPE "R1"; SEE LUMINAIRE SCHEDULE	----
	EMERGENCY EGRESS LUMINAIRE	----
	CRITICAL LUMINAIRE	----
R2 W2 W2	CEILING OR WALL MOUNTED LUMINAIRE TYPE "R2", "W2"; SEE LUMINAIRE SCHEDULE	SEE DRAWINGS
	CEILING RECESSED WALL WASH LUMINAIRE	----
T4 T4	TRACK LUMINAIRE: TYPE "T4"; SEE LUMINAIRE SCHEDULE; QUANTITY OF HEADS AS SHOWN	----
X1 X1	EXIT SIGN FIXTURE (WITH DIRECTIONAL ARROWS AS SHOWN) (TYPE AND MOUNTING AS NOTED; SEE LUMINAIRE SCHEDULE) SHADED AREA DENOTES FACE	94"
W1 W1 C1	EMERGENCY LIGHTING BATTERY PACK W/INTEGRAL HEADS (TYPE AND MOUNTING AS NOTED; SEE LUMINAIRE SCHEDULE)	94"
P1 B1	SITE LUMINAIRE (TYPE AND MOUNTING AS NOTED; SEE LUMINAIRE SCHEDULE)	----
$X	LINE VOLTAGE SWITCH 0 - OCCUPANCY SENSOR SWITCH 2 - 2-POLE 3 - 3-WAY 4 - 4-WAY D - DIMMER D3 - 3 WAY DIMMER K - KEY OPERATED M - MOMENTARY CONTACT SWITCH P - SWITCH WITH PILOT LIGHT TM - SWITCH WITH TIMER VS - VACANCY SENSOR SWITCH	46"
VS	LOW VOLTAGE VACANCY SENSOR, CEILING MOUNTED	CEILING
OS	LOW VOLTAGE OCCUPANCY SENSOR, CEILING MOUNTED	CEILING
LV	LOW VOLTAGE SWITCH, 1 ZONE, 2 BUTTON, ON AND OFF	46"
LV	LOW VOLTAGE SWITCH AS INDICATED 2 - 2 ZONE, 4 BUTTON, ON AND OFF SC - 4 BUTTON SCENE SELECTOR	46"
D	LOW VOLTAGE DIMMER, 1 ZONE, 4 BUTTON, ON, OFF, RAISE, LOWER	46"
D	LOW VOLTAGE SWITCH AS INDICATED 2 - 2 ZONE, 6 BUTTON, ON/OFF, RAISE, LOWER G - GRAPHIC USER INTERFACE SC - 4 BUTTON SCENE SELECTOR	46"
RC	LIGHTING ROOM CONTROLLER	ABOVE CEILING
PC	DAYLIGHT HARVESTING PHOTOCELL SENSOR	CEILING
PR	PARTITION SENSOR	CEILING

FIRE ALARM SYMBOLS

SYMBOL	DESCRIPTION	MOUNTING HEIGHT UNLESS NOTED OTHERWISE
	COMBINATION FIRE ALARM AUDIBLE AND VISUAL DEVICE	LENS LOCATED WITHIN 80" TO 96"
	FIRE ALARM VISUAL DEVICE	LENS LOCATED WITHIN 80" TO 96"
	FIRE ALARM AUDIBLE DEVICE	≥ 90" TO TOP OF DEVICE ≥ 6" FROM CEILING TO TOP OF DEVICE
	FIRE ALARM MANUAL PULL STATION; K, KEY OPERATED TYPE	48"
DH	FIRE ALARM MAGNETIC DOOR HOLDER	72"
FL	FIRE ALARM FLOW SWITCH (BY DIVISION 22)	----
T	FIRE ALARM TAMPER SWITCH (BY DIVISION 22)	----
S H	CEILING MOUNTED FIRE ALARM SMOKE DETECTOR; HEAT DETECTOR	----
S	DUCT MOUNTED FIRE ALARM SMOKE DETECTOR	----
S ER	ELEVATOR RECALL	----
C	CARBON MONOXIDE DETECTOR	----

POWER SYMBOLS

SYMBOL	DESCRIPTION	MOUNTING HEIGHT UNLESS NOTED OTHERWISE
	SIMPLEX RECEPTACLE; DUPLEX RECEPTACLE; QUADRUPLEX (DOUBLE DUPLEX) RECEPTACLE	18"
	SIMPLEX RECEPTACLE; DUPLEX RECEPTACLE; QUADRUPLEX RECEPTACLE - ON EMERGENCY POWER	18"
	DUPLEX RECEPTACLE; QUADRUPLEX RECEPTACLE GROUND FAULT INTERRUPTER	46"
U	DUPLEX RECEPTACLE, WITH TWO USB PORTS	18"
X X X X	RECEPTACLE FOR EQUIPMENT AS INDICATED B - BLANKET WARMER CF - COPY/FAX MACHINE CM - COFFEE MAKER CW - CLOTHES WASHER D - DIALYSIS UNIT DH - DOOR HARDWARE EWC - ELECTRIC WATER COOLER GD - GARBAGE DISPOSAL IM - ICE MACHINE KE-* - KITCHEN EQUIPMENT; * DENOTES EQUIPMENT NUMBER M - MONITOR MW - MICROWAVE P - MEDICAL DISPENSER UNIT PR - PRINTER RF - FREEZER/REFRIGERATOR SP - ELEVATOR SUMP PUMP; MOUNT IN P/T TV - TELEVISION OUTLET MOUNTED IN AV BOX UC - UNDER COUNTER REFRIG./FREEZER V - PATIENT VITALS MONITOR VD - VENDING MACHINE	COORD HT 18" 46" 40" COORD HT ---- 18" 18" 46" COORD HT COORD HT COORD HT COORD HT 58" 46" SEE TECH COORD HT COORD HT 58"
J	JUNCTION BOX, CEILING OR WALL MOUNTED	SEE DRAWINGS
J X	JUNCTION BOX FOR EQUIPMENT AS INDICATED DH - DOOR HARDWARE DW - DISHWASHER EH - EXHAUST HOOD FN - SYSTEM FURNITURE H - ELECTRIC HAND DRYER HVAC - HVAC CONTROLS KE-* - KITCHEN EQUIPMENT; * DENOTES EQUIPMENT NUMBER MS - MOTORIZED SCREEN SD - SMOKE DAMPER WS - MOTORIZED WINDOW SHADES	---- 18" ---- ---- COORD HT ---- SEE KIT DWGS ---- ---- ----
*	FLOOR RECESSED OUTLET BOX * = # OF DATA REQUIRED, SYMBOL WILL BE ON DATA SHEET WITH QUANTITY	----
*	FLOOR RECESSED / FIRE RATED "POKE THRU" OUTLET ASSEMBLY * = # OF DATA REQUIRED, SYMBOL WILL BE ON DATA SHEET WITH QUANTITY	----
	POKE-THRU FLUSH RECEPTACLE AS INDICATED (SEE SPECIFICATIONS) A - FURNITURE POWER CONNECTION B - FURNITURE VOICE/DATA CONNECTION	---- ----
F	DUPLEX RECEPTACLE, FLUSH IN FLOOR	----
	RECEPTACLE CABLE DROP REFER TO DETAIL X ON SHEET E-XXX	CEILING
CR	CORD REEL	CEILING
6-30R	SPECIAL PURPOSE RECEPTACLE (TYPE AS NOTED) OR IN SPECIFICATIONS)	SEE DRAWINGS
	SPECIAL PURPOSE RECEPTACLE FOR EQUIPMENT AS INDICATED CD - NEMA 14-30R; CLOTHES DRYER RA - NEMA 6-50R; RANGE	 34" 4"
F	JUNCTION BOX WITH POWER CONNECTION TO ELECTRONIC FAUCET/DISPENSER	----
AO	AUTOMATIC DOOR OPERATOR 120V 1Ø. PROVIDE WIRING TO PUSHBUTTON	COORD HT
	SINGLE SERVICE PRE-WIRED MULTIPLE OUTLET RACEWAY	SEE DRAWINGS
	DUAL SERVICE FIELD WIRED MULTIPLE OUTLET RACEWAY	SEE DRAWINGS
M	MOTOR (BY DIVISION 1-25)	----
S M	MANUAL MOTOR STARTER	46"
S	TOGGLE DISCONNECT SWITCH	46"
S	SWITCH FURNISHED BY OTHERS FOR EQUIPMENT AS INDICATED MS - MOTORIZED SCREEN	46"
J 60/45/3 3R, NF	SAFETY SWITCH (SWITCH SIZE, FUSE SIZE, NO. OF POLES -AS NOTED) "3R" DENOTES NEMA "3R" ENCLOSURE, "NF" DENOTES NONFUSED	60"
J 1/25/3 3R	COMBINATION MOTOR STARTER (STARTER SIZE, FUSE SIZE, NO. OF POLES -AS NOTED) "3R" DENOTES NEMA "3R" ENCLOSURE "NF" DENOTES NONFUSED	60"
1/3 3R	MAGNETIC MOTOR STARTER (STARTER SIZE NO. OF POLES -AS NOTED) "3R" DENOTES NEMA "3R" ENCLOSURE "NF" DENOTES NONFUSED	60"
	PUSHBUTTON STATION	46"
CP	CONTROL PANEL	SEE DRAWINGS
VFD	VARIABLE FREQUENCY DRIVE	SEE DRAWINGS
	VOICE/DATA TERMINAL BOARD	60"
P1 P1	PANELBOARD: SURFACE MOUNTED, FLUSH MOUNTED PANEL DESIGNATION AS SHOWN	72"
	DISTRIBUTION PANELBOARD	----
	CONDUIT, RISER UP	----
	CONDUIT, RISER DOWN	----
	CONDUIT ROUTED UNDER FLOORSPACE OR UNDERGROUND	----
	HOME RUN BRANCH CIRCUIT (OVERHEAD)	----
	HOME RUN BRANCH CIRCUIT (UNDERFLOOR)	----
	FLEXIBLE CONDUIT OR CABLE	----
T1	TRANSFORMER: (SIZE AS NOTED OR IN TRANSFORMER SCHEDULE)	SEE DRAWINGS
MC	MOTORIZED SHADE CONTROLLER	COORD HT
HS	AUTOMATIC DOOR OPERATOR PUSHBUTTON	----
HW	HAND WAVE AUTOMATIC DOOR OPERATOR	
PS	POWER SUPPLY	----

POWER GENERAL NOTES
APPLIES TO EACH POWER DRAWING

1. REFER TO DRAWINGS AND SPECIFICATIONS OF OTHER CONSTRUCTION TRADES FOR ADDITIONAL ELECTRICAL WORK INCLUDED IN THIS CONTRACT.
2. COORDINATE EXACT LOCATIONS OF EQUIPMENT WITH OTHER CONSTRUCTION TRADES. VERIFY EXACT WIRING AND CONNECTION REQUIREMENTS WITH SUBMITTAL DOCUMENTS BEFORE INSTALLATION. SPECIALTY OUTLET TYPES SHALL BE VERIFIED BEFORE ORDERING. ALL ELECTRICAL WORK SHOWN HERE MUST BE VERIFIED AND COORDINATED IN FIELD BEFORE INSTALLATION.
3. REFER TO ARCHITECTURAL ELEVATIONS FOR OUTLET MOUNTING HEIGHTS.
4. EXACT LOCATIONS OF FLOOR RECESSED OUTLETS, FLOORBOXES, AND POKE-THRUS, SHALL BE COORDINATED WITH FURNITURE AND EQUIPMENT PLANS. OBTAIN LATEST PLANS FROM OWNERS REPRESENTATIVE.
5. ALL CONDUITS IN AREAS WITHOUT SUSPENDED CEILINGS SHALL BE RUN INCONSPICUOUSLY AS POSSIBLE, HIDDEN BEHIND BEAMS, CLOSE TO DECK, ETC. OBTAIN APPROVAL OF CONDUIT RUNS BELOW BEAMS WITH OWNER'S REPRESENTATIVE.
6. ALL DEVICES SHOWN ON THE EXTERIOR OF THE BUILDING SHALL BE WEATHERPROOF TYPE. ALL WEATHERPROOF RECEPTACLES HAVE WHILE-IN-USE COVERS UNLESS NOTED OTHERWISE
7. REFER TO ARCHITECTURAL DOOR SCHEDULES, AND DOOR HARDWARE SPECIFICATION FOR ELECTRICAL DEVICES INSTALLED AT DOORS.
8. PROVIDE ALL FINAL POWER CONNECTIONS TO EQUIPMENT. PROVIDE ALL CONDUIT, DEVICE BOXES, AND CONTROL WIRING TO EQUIPMENT UNLESS NOTED OTHERWISE.
9. RACEWAY SHALL RUN AS INCONSPICUOUSLY AS POSSIBLE. VERTICAL RUNS SHALL OCCUR IN CORNERS OF ROOMS. HORIZONTAL RUNS SHALL OCCUR ALONG BASEBOARD OF WALL WITH VERTICAL RUNS UP TO DEVICE BOXES BRANCHING OUT OF CORNER BOXES, TEES, ELBOWS AND ECT.
10. REFER TO ARCHITECTURAL PLANS FOR WALL CONSTRUCTION.
11. CIRCUIT NUMBER INDICATED WITH "GF" IS A CIRCUIT PROTECTED BY GROUND FAULT INTERRUPTING CIRCUIT BREAKER.

LIGHTING GENERAL NOTES
APPLIES TO EACH LIGHTING DRAWING

1. REFER TO ARCHITECTURAL REFLECTED CEILING PLANS FOR EXACT LOCATIONS OF LUMINAIRES. COORDINATE WITH OTHER TRADES CONTRACTORS, IN ADVANCE OF INSTALLATION, TO AVOID CONFLICTS OF SUFFICIENT SPACE ABOVE CEILINGS FOR RECESSED LIGHTING FIXTURES.
2. REFER TO ARCHITECTURAL ELEVATIONS, CASEWORK, AND DETAILS, ELECTRICAL DETAILS, AND LUMINAIRE SCHEDULE FOR LUMINAIRE MOUNTING HEIGHTS AND ADDITIONAL INSTALLATION INFORMATION.
3. LOCATIONS OF LUMINAIRES IN ROOMS WITH MECHANICAL EQUIPMENT SHALL BE COORDINATED IN FIELD WITH INSTALLED EQUIPMENT. FIXTURES TO BE LOCATED OVER ACCESS PATHWAYS AROUND EQUIPMENT AND NOT OVER TOP OF EQUIPMENT OR DUCTWORK. DO NOT SUSPEND FIXTURES FROM PIPING OR DUCTWORK. PROVIDE APPROPRIATE MOUNTING HARDWARE AS REQUIRED TO SUPPORT FIXTURES.
4. SOME SWITCHED LIGHTING CIRCUITING NOT SHOWN FOR CLARITY. ALL FIXTURES WITHIN A SPACE ARE TO BE CONTROLLED FROM SWITCHES/OCCUPANCY/VACANCY SENSORS SHOWN IN THAT SPACE UNLESS NOTED OTHERWISE.
5. OCCUPANCY/VACANCY SENSOR POWER PACKS ARE NOT SHOWN FOR CLARITY REFER TO OCCUPANCY/VACANCY SENSOR WIRING DIAGRAMS. POWER PACKS TO BE LOCATED WITHIN EACH ROOM ABOVE CEILING ADJACENT TO ENTRY DOOR. PROVIDE CONDUIT AND WIRING FROM POWER PACK TO SENSOR UNITS.
6. INSTALL DRIVER FOR LUMINAIRES PROVIDED WITH REMOTE DRIVERS, IN NEAREST MECHANICAL ROOM WITH SUFFICIENT WALL SPACE. PROVIDE DRIVER WIRING SIZED IN ACCORDANCE WITH MANUFACTURER'S RECOMMENDATION FOR DISTANCE.
7. PROVIDE STEEL BRIDGING BETWEEN PURLINS/JOISTS/BEAMS AS NECESSARY TO SUPPORT THE WEIGHT OF SUSPENDED LUMINAIRES.

DEMOLITION GENERAL NOTES
APPLIES TO EACH DEMOLITION DRAWING

1. TURN OVER ANY SALVAGEABLE EQUIPMENT.
2. COORDINATE EXACT EXTENT OF DEMOLITION WITH ARCHITECTURAL DEMOLITION DRAWINGS.
3. COORDINATE PHASING OF DEMOLITION AND CONSTRUCTION PER DRAWINGS.
4. REMOVE ALL LIGHTING FIXTURES, DEVICES, OUTLETS, CONDUIT, CABLING, PANELS, AND EQUIPMENT WITHIN AREAS OF DEMOLITION. REMOVE WIRING AND CONDUIT BACK TO SOURCE OR LAST POINT OF CONNECTION TO REMAIN.
5. EXISTING EQUIPMENT OUTSIDE OF SCOPE OF WORK BOUNDARIES SHALL BE MAINTAINED. RECONNECT ANY CIRCUITS CUT PASSING THROUGH DEMOLITION AREAS.
6. REMOVE ALL UNUSED WIRING AND CABLES BACK TO THEIR SOURCE. REMOVE ALL UNUSED CONDUIT THAT IS EXPOSED OR ABOVE ACCESSIBLE CEILINGS WHICH IS AFFECTED BY OR IS IN THE AREA OF THE DEMOLITION WORK.
7. THE INTENTION OF THE ELECTRICAL DEMOLITION DRAWINGS IS TO DISCONNECT AND REMOVE ALL ELECTRICAL WORK MADE VOID BY THE SCOPE OF THE CONSTRUCTION AND ALTERATION. FIELD VERIFY EXACT MATERIAL QUANTITIES REQUIRED TO BE REMOVED.
8. WHERE BURIED CONDUITS EXTENDING OUT OF A CONCRETE SLAB BECOME ABANDONED, CUT AND GRIND THE CONDUITS OFF FLUSH WITH TOP OF SLAB AND PLUG WITH NON-SHRINK WATERPROOF GROUT FILL.
9. COORDINATE ALL DEMOLITION WORK WITH ALL OTHER TRADES.
10. LEGALLY DISPOSE OF HAZARDOUS MATERIALS AND BALLAST OR OTHER EQUIPMENT CONTAINING PCBS AND LAMPS CONTAINING MERCURY. COMPLY WITH ALL FEDERAL, STATE AND LOCAL LAWS.

ELECTRICAL ABBREVIATIONS

ABBREVIATIONS USED ON DRAWINGS IN GENERAL ARE LISTED BELOW. REFER TO CSI DOCUMENT TD-2-4 FOR ANY ABBREVIATIONS LISTED ON THE DRAWINGS BUT ARE NOT LISTED BELOW.

A	AMPS
AC	AIR CONDITIONER
AFF	ABOVE FINISH FLOOR
AFG	ABOVE FINISH GRADE
AHU	AIR HANDLER UNIT
BRKR	BREAKER
C	CONDUIT
CATV	CABLE ANTENNA TELEVISION
CCTV	CLOSED CIRCUIT TELEVISION
CUH	CABINET UNIT HEATER
CKT	CIRCUIT
CPT	CONTROL POWER TRANSFORMER
Cu	COPPER
DISTR	DISTRIBUTION
DLH	DAYLIGHT HARVESTING
EF	EXHAUST FAN
ELEC	ELECTRICAL
EM	EMERGENCY
EMT	ELECTRICAL METALLIC TUBING
EWC	ELECTRIC WATER COOLER
EX	EXISTING
EXP	EXPLOSION PROOF TYPE DEVICE
F	FUSE
FAA	FIRE ALARM ANNUNCIATOR
FACP	FIRE ALARM CONTROL PANEL
FAP	FIRE ALARM PANEL
FARA	FIRE ALARM REMOTE ANNUNCIATOR
FC	FAN COIL UNIT
FIXT	LIGHT FIXTURE
FLUOR	FLUORESCENT
FLR	FLOOR
FS	FUSIBLE SWITCH
G	GROUND
GRC	GALVANIZED RIGID CONDUIT
GF	GROUND FAULT INTERRUPTING PROTECTION
HID	HIGH INTENSITY DISCHARGE
HVAC	HEATING, VENTILATION, AIR CONDITIONING
HP	HORSEPOWER
J	JUNCTION BOX
KEC	KITCHEN EQUIPMENT CONTRACTOR
KV	KILOVOLT
KVA	KILOVOLT AMPERE
KW	KILOWATTS
LC	LIGHTING CONTACTOR
LTG	LIGHTING
LV	LOW VOLTAGE
MCC	MOTOR CONTROL CENTER
MECH	MECHANICAL
MSB	MAIN SWITCHBOARD
MCC	MOTOR CONTROL CENTER
MTD	MOUNTED
+N	INDICATES MOUNTING HEIGHT (N) TO CENTER OF DEVICE FROM FINISH FLOOR UNLESS OTHERWISE NOTED.
NIC	NOT IN CONTRACT
NL	NIGHTLIGHT
NTS	NOT TO SCALE
OC OR O/C	ON CENTER
OH	OVERHEAD
P	POLE (PHASE)
PVC	POLYVINYL CHLORIDE
PE	PNEUMATIC/ELECTRIC
PNL	PANEL
Ø OR P	PHASE
RAF	RETURN AIR FAN
RTU	ROOFTOP UNIT
SW	SWITCH
TCP	TEMPERATURE CONTROL PANEL
TFMR	TRANSFORMER
TR	TAMPER RESISTANT
TV	TELEVISION
TYP	TYPICAL
UG	UNDERGROUND
UH	UNIT HEATER
UNO	UNLESS NOTED OTHERWISE
V	VOLTS
VAV	VARIABLE AIR VOLUME
VFD	VARIABLE FREQUENCY DRIVE
VIF	VERIFY IN FIELD
VC	VOLUME CONTROL
W	WATTS
WP	WEATHERPROOF TYPE DEVICE
1/E.1	MEANS DETAIL No. 1, DRAWING SHEET "E1"
IT	INFORMATION TECHNOLOGY

SYMBOL LIST GENERAL INFORMATION

1. SOME SYMBOLS MAY NOT BE USED.
2. MOUNTING HEIGHTS ARE TO CENTER OF DEVICE UNLESS NOTED OTHERWISE.
3. STRAIGHT LINES BETWEEN DEVICES INDICATE CONTROLLED CIRCUIT.
4. DASHED SYMBOLS INDICATE EXISTING DEVICES TO BE REMOVED.
5. SOLID SYMBOLS WITH SUBSCRIPT "R" INDICATE EXISTING DEVICES TO REMAIN.
6. DASHED SYMBOLS WITH SUBSCRIPT "REL" INDICATE EXISTING DEVICES TO BE RELOCATED.
7. SOLID SYMBOLS WITH SUBSCRIPT "RD" INDICATE RELOCATED DEVICES.

DEVICE SUFFIXES

AC	ABOVE COUNTER OUTLET
C	CEILING MOUNTED OUTLET
F	FLOOR MOUNTED OUTLET
L	LINE VOLTAGE TYPE
M	MODULAR FURNITURE OUTLET
W	WALL MOUNTED
WG	WIRE GUARD
WP	WEATHER PROOF

BRANCH CIRCUIT GENERAL NOTE

1. BRANCH CIRCUIT CONDUIT ROUTING IS NOT SHOWN ON THE PLANS AND LEFT TO THE DISCRETION OF THE CONTRACTOR. BRANCH CIRCUIT WIRE SIZE SHALL BE AS FOLLOWS BASED ON CONDUIT ROUTE LENGTHS. BEFORE WIRING INSTALLATION, VERIFY THAT THE FURTHEST DISTANCE FROM PANELBOARD TO OUTLET DOES NOT EXCEED THE FOLLOWING DISTANCE FOR WIRE SIZE SHOWN. INCREASE WIRE SIZE APPROPRIATELY FOR FARTHER DISTANCES.

CONDUCTOR SIZE	MAXIMUM LENGTH
#12 AWG	100 FEET
#10 AWG	150 FEET
#8 AWG	250 FEET
#6 AWG	400 FEET

ELECTRICAL SHEET INDEX

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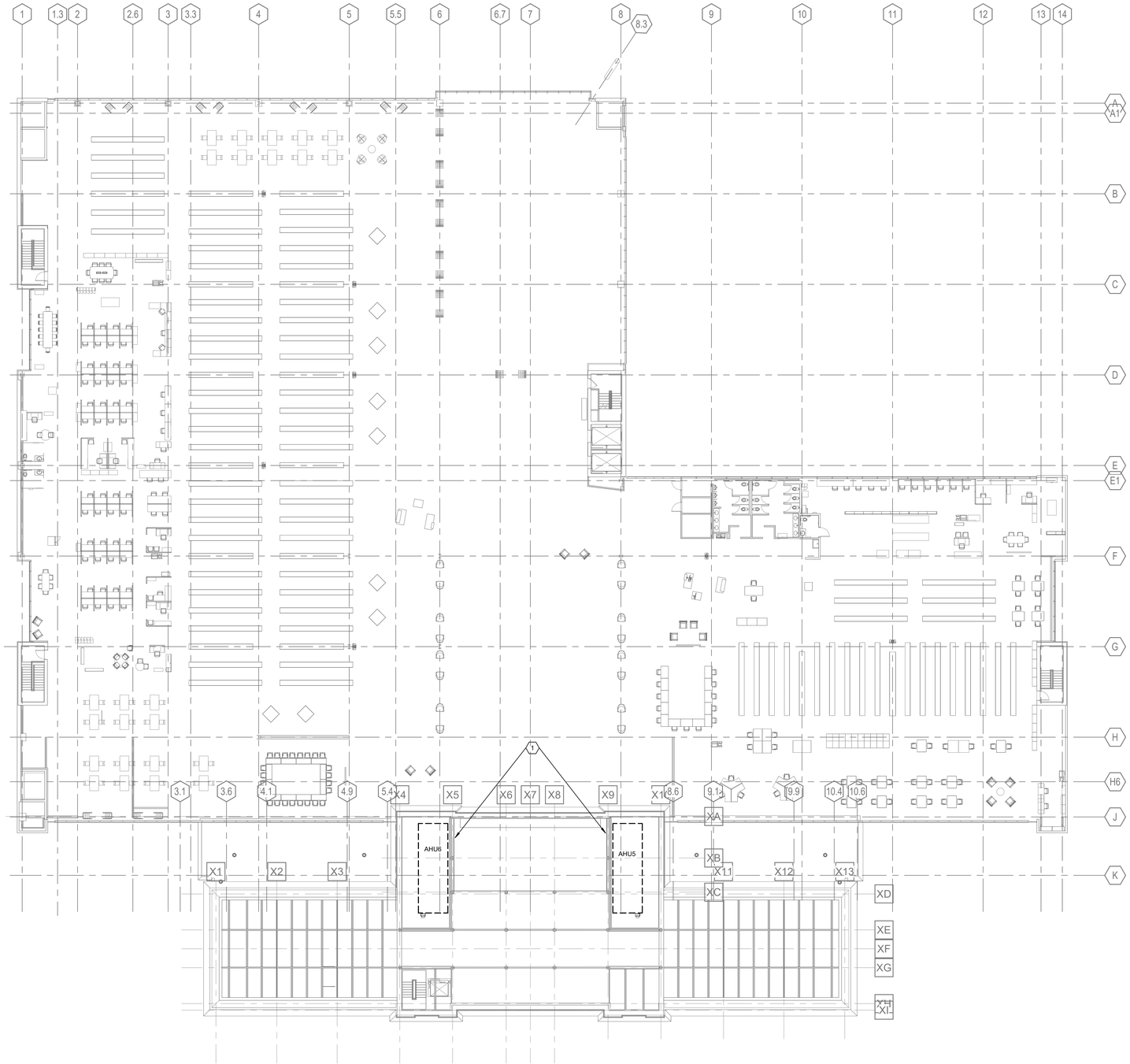
STATE OF OHIO · STANLEY J. KMONK · 71379 · REGISTERED PROFESSIONAL ENGINEER · 10-28-22

ELECTRICAL SYMBOLS AND LEGENDS

PROJECT STATUS:		BID/PERMIT SET
PROJECT NUMBER:		2022-0212
DRAWN BY: Garrett W. Strauss	DATE	SHEET NUMBER
DESIGNED BY: Stanley J. Kmonk	10/28/2022	E000
CHECKED BY: Checker		

CODED NOTES

1. REMOVE ALL ELECTRICAL FROM SOURCE TO EQUIPMENT.



1 FLOOR PLAN

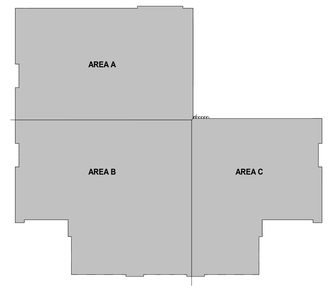
THIRD FLOOR DEMOLITION

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

0' 2' 4' 8' 16'

N

KEY PLAN



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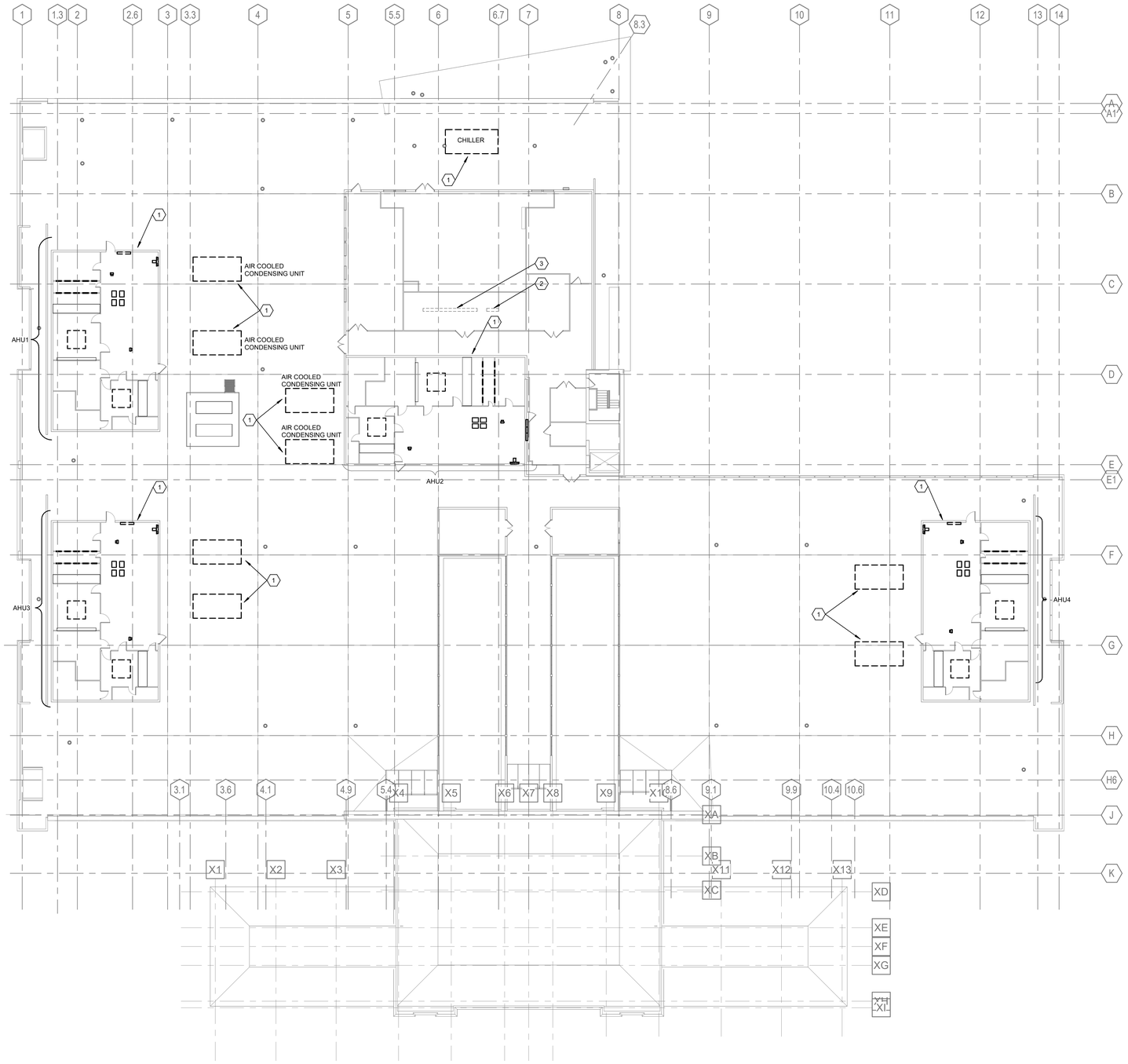
ELECTRICAL THIRD FLOOR DEMOLITION PLAN

STATE OF OHIO — STANLEY J. KMONK — 71379 — REGISTERED PROFESSIONAL ENGINEER — 10-28-22

PROJECT STATUS:		BID/PERMIT SET
PROJECT NUMBER:		2022-0212
DRAWN BY: Garrett W. Strauss	DATE	SHEET NUMBER
DESIGNED BY: Stanley J. Kmonk	10/28/2022	E103
CHECKED BY: Checker		



1 FLOOR PLAN
ROOF DEMOLITION

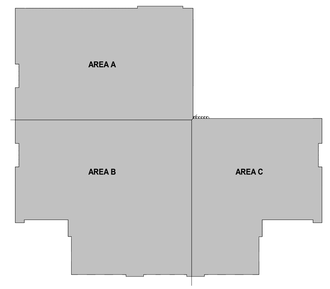
SCALE: 1/16" = 1'-0"
0' 2'4" 8' 16'

N

CODED NOTES

1. REMOVE ALL ELECTRICAL FEEDERS TO EQUIPMENT.
2. EXISTING SWITCHBOARD "HVAC" TO REMAIN.
3. EXISTING SWITCHBOARD "USBD" TO REMAIN.

KEY PLAN



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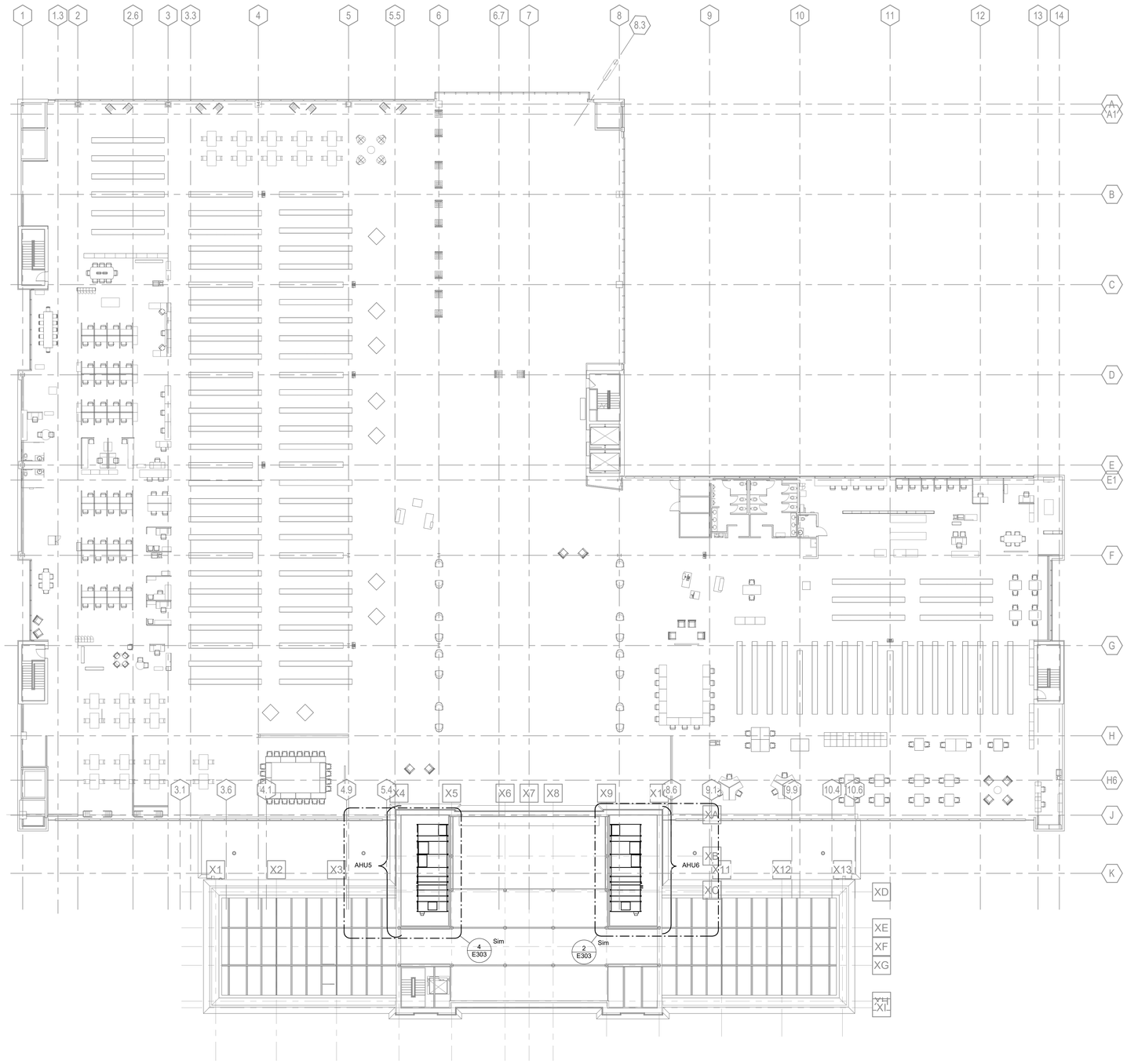
ELECTRICAL ROOF DEMOLITION PLAN

STATE OF OHIO
STANLEY J. KMONK
E-81379
REGISTERED PROFESSIONAL ENGINEER
10-28-22

PROJECT STATUS:		BID/PERMIT SET
PROJECT NUMBER:		2022-0212
DRAWN BY: Garrett W. Strauss	DATE	SHEET NUMBER
DESIGNED BY: Stanley J. Kmonk	10/28/2022	E104
CHECKED BY: Checker		

CODED NOTES

1. JUNCTION BOX FOR POWER CONNECTION TO TEMPERATURE CONTROL PANEL (120 V).



1 FLOOR PLAN

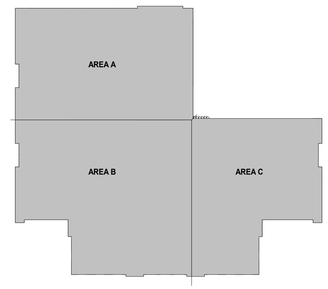
THIRD FLOOR POWER

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

0' 2' 4' 8' 16'

N

KEY PLAN



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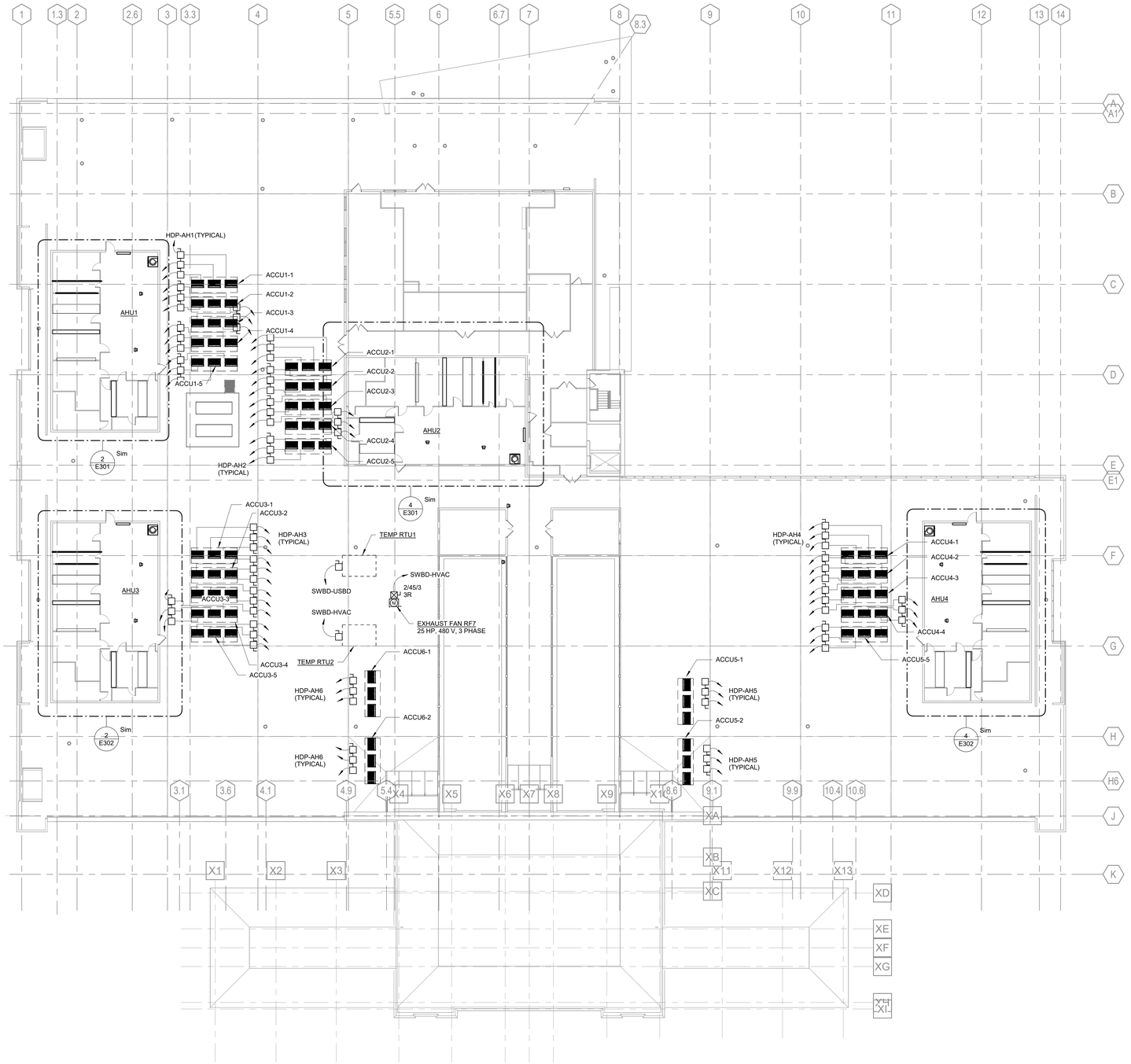
ELECTRICAL THIRD FLOOR POWER PLAN

STATE OF OHIO
STANLEY J. KMONK
E-11379
REGISTERED PROFESSIONAL ENGINEER
10-28-22

PROJECT STATUS:		BID/PERMIT SET
PROJECT NUMBER:		2022-0212
DRAWN BY: Garrett W. Strauss	DATE	SHEET NUMBER
DESIGNED BY: Stanley J. Kmonk	10/28/2022	E203
CHECKED BY: Checker		

CODED NOTES

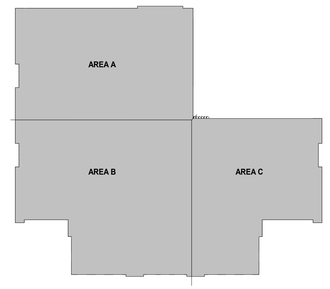
1. JUNCTION BOX FOR POWER CONNECTION TO TEMPERATURE CONTROL PANEL (120 V).



1 FLOOR PLAN
ROOF POWER

SCALE: 1/16" = 1'-0"
0' 2' 4' 8' 16'

KEY PLAN



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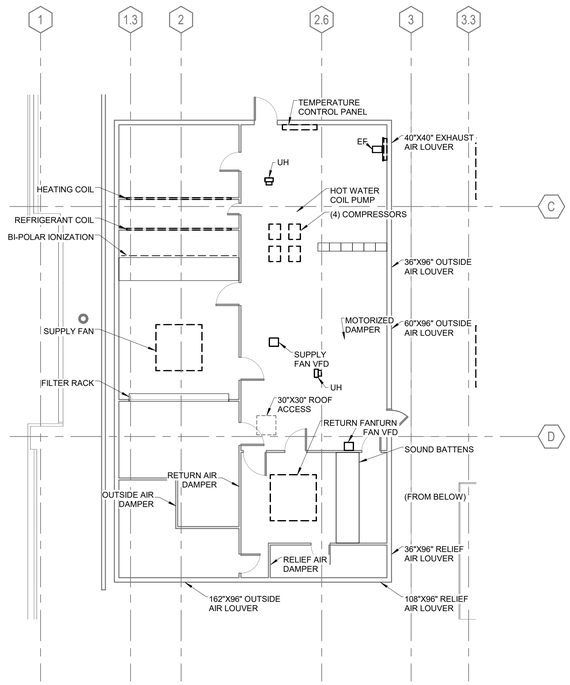
ELECTRICAL ROOF POWER PLAN

STATE OF OHIO
STANLEY J. KMONK
71379
PROFESSIONAL ENGINEER
10-28-22

PROJECT STATUS:		BID/PERMIT SET
PROJECT NUMBER:		2022-0212
DRAWN BY: Garrett W. Strauss	DATE	SHEET NUMBER
DESIGNED BY: Stanley J. Kmonk	10/28/2022	E204
CHECKED BY: Checker		

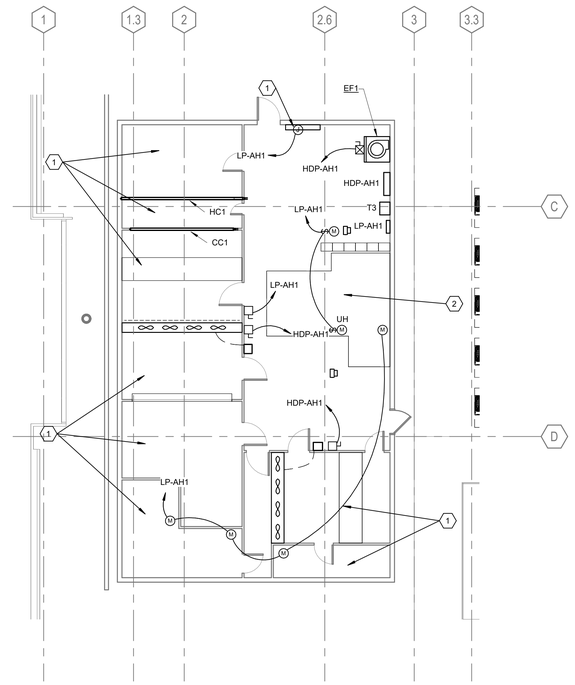


1 ENLARGED PLAN

DEMOLITION - AHU#1

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

0' 1'2' 4' 8'

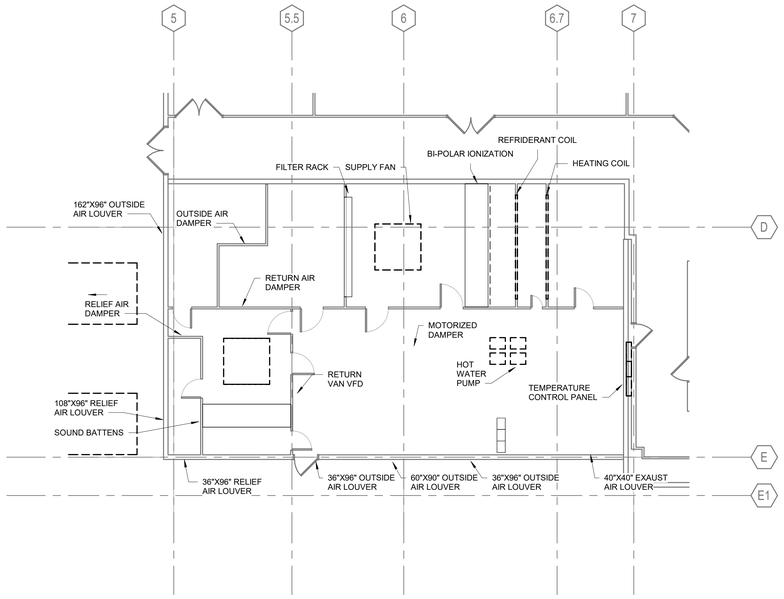


2 ENLARGED PLAN

NEW WORK - AHU#1

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

0' 1'2' 4' 8'

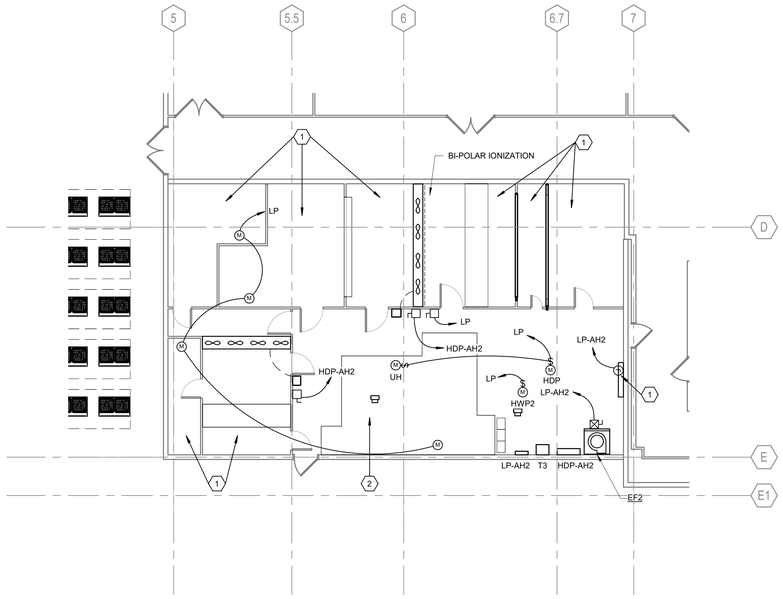


3 ENLARGED PLAN

DEMOLITION - AHU#2

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

0' 1'2' 4' 8'



4 ENLARGED PLAN

NEW WORK - AHU#2

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

0' 1'2' 4' 8'

CODED NOTES

1. PROVIDE NEW LED LIGHTING FIXTURE AND SWITCH IN EACH COMPARTMENT OF ROOM, FIELD LOCATE IN BEST POSITION, AND CONNECT TO 120V CIRCUIT IN PANEL LP.
2. PROVIDE 6 NEW LED 48" STRIP FIXTURES IN THIS SPACE AND CIRCUIT TO PANEL LP.

No.	Description	Date

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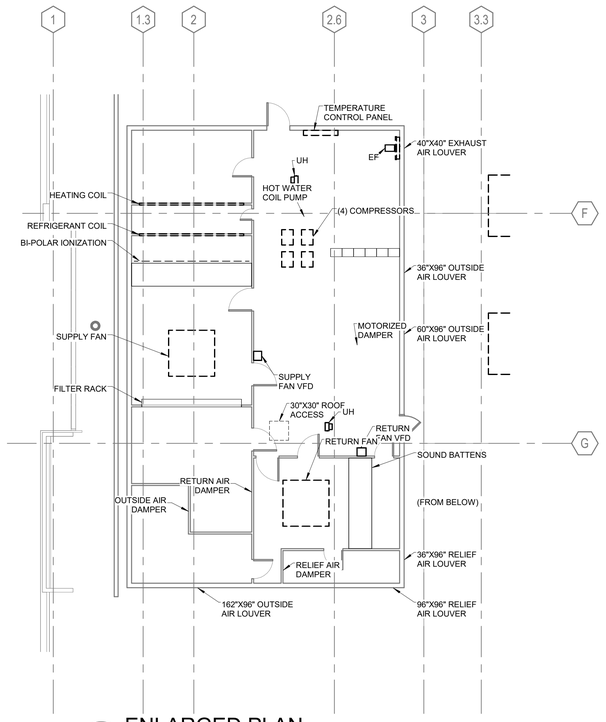
ELECTRICAL ENLARGED PLANS

STATE OF OHIO PROFESSIONAL ENGINEER STANLEY J. KMONK 71379 REGISTERED 10-28-22

PROJECT STATUS:		BID/PERMIT SET
PROJECT NUMBER:		2022-0212
DRAWN BY: Garrett W. Strauss	DATE	SHEET NUMBER
DESIGNED BY: Stanley J. Kmonk	10/28/2022	E301
CHECKED BY: Checker		

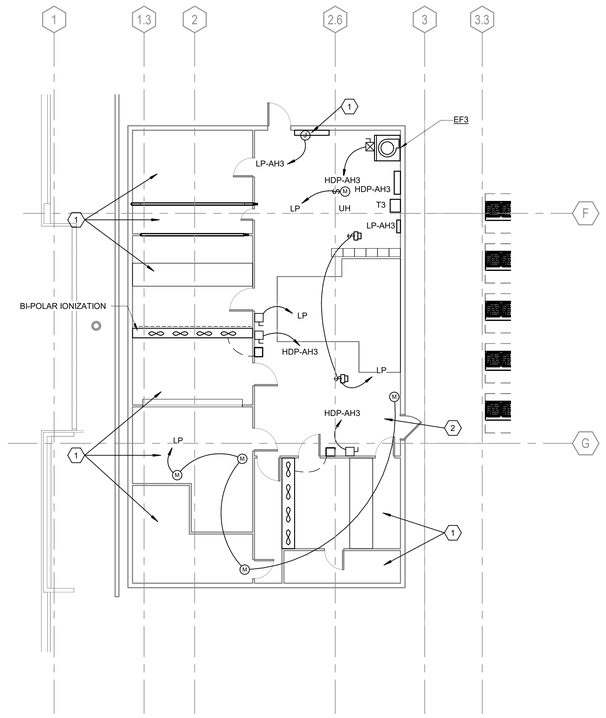


1 ENLARGED PLAN

DEMOLITION - AHU#3

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

0' 1' 2' 4' 8'

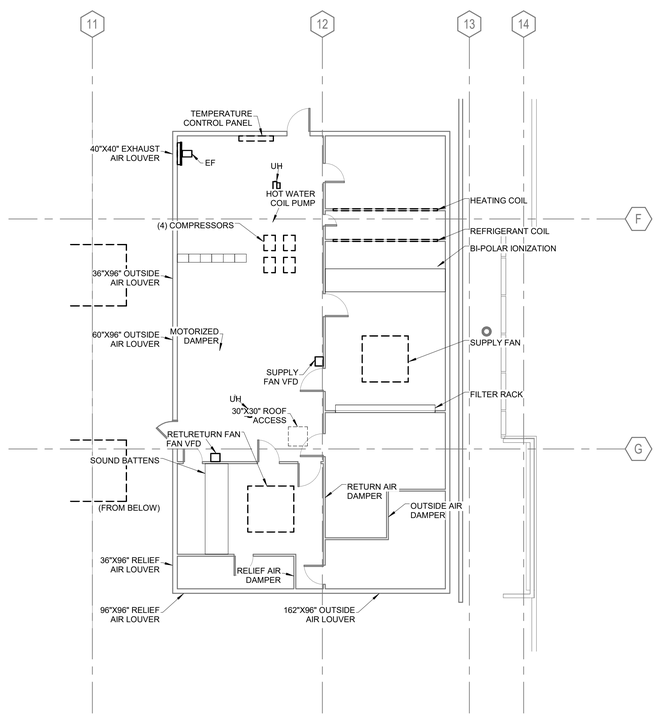


2 ENLARGED PLAN

NEW WORK - AHU#3

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

0' 1' 2' 4' 8'

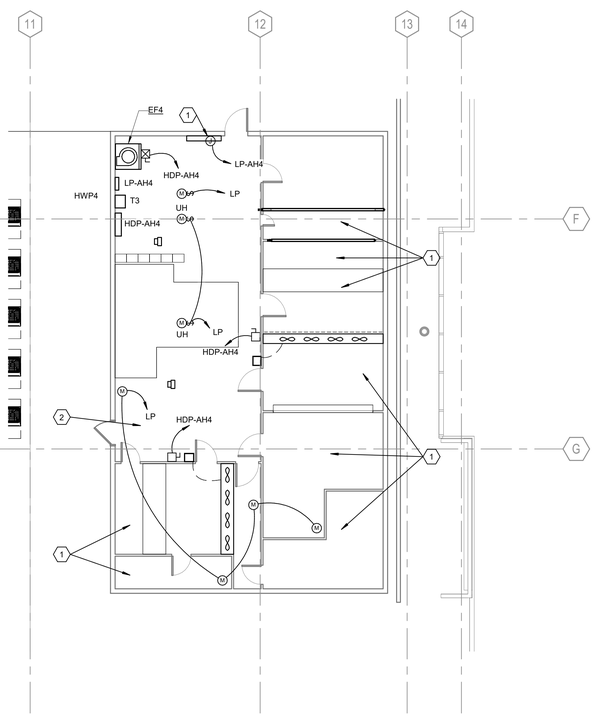


3 ENLARGED PLAN

DEMOLITION - AHU#4

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

0' 1' 2' 4' 8'



4 ENLARGED PLAN

NEW WORK - AHU#4

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

0' 1' 2' 4' 8'

CODED NOTES

1. PROVIDE NEW LED LIGHTING FIXTURE AND SWITCH IN EACH COMPARTMENT OF ROOM, FIELD LOCATE IN BEST POSITION, AND CONNECT TO 120V CIRCUIT IN LP.
2. PROVIDE 6 NEW LED 48" STRIP FIXTURES IN THIS SPACE AND CIRCUIT TO LP.

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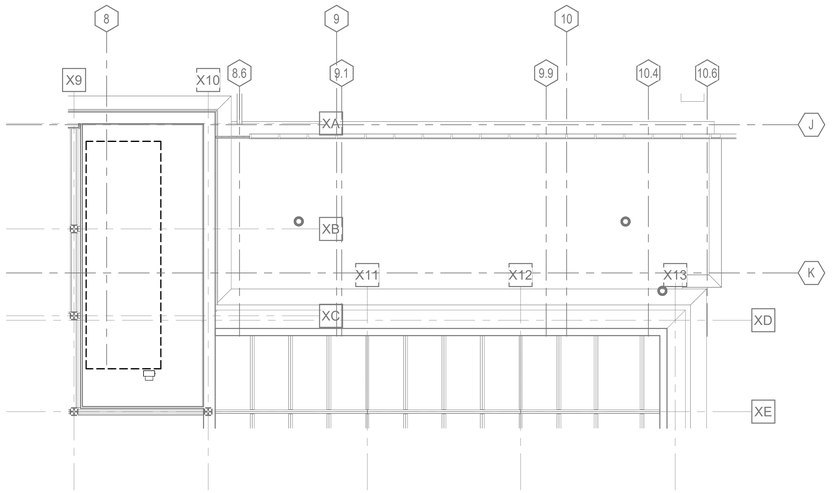
ELECTRICAL ENLARGED PLANS

STATE OF OHIO PROFESSIONAL ENGINEER STANLEY J. KMONK 71379 REGISTERED 10-28-22

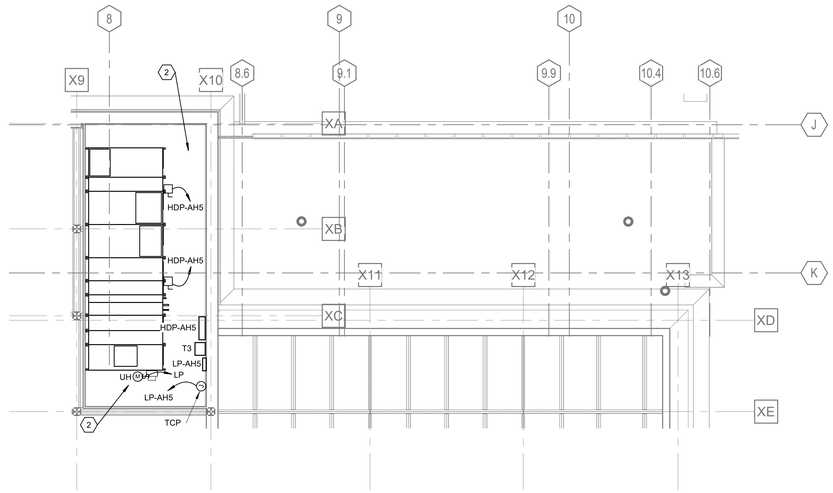
PROJECT STATUS:		BID/PERMIT SET
PROJECT NUMBER:		2022-0212
DRAWN BY: Garrett W. Strauss	DATE	SHEET NUMBER
DESIGNED BY: Stanley J. Kmonk	10/28/2022	E302
CHECKED BY: Checker		

CODED NOTES

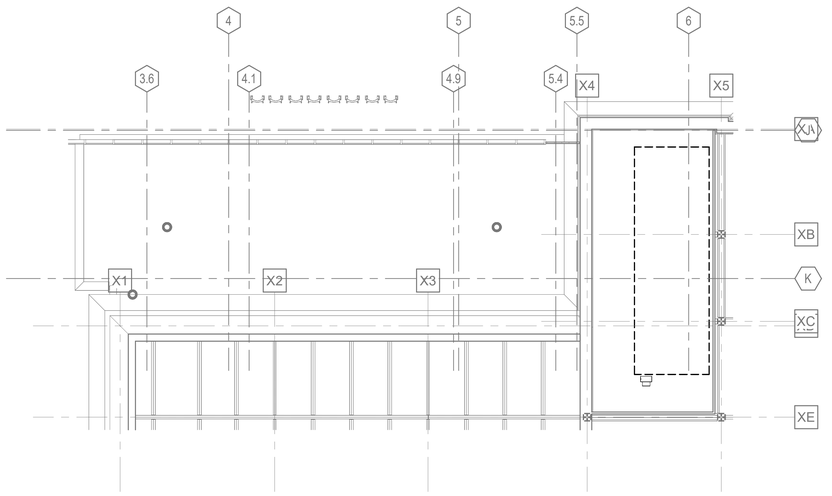
1. PROVIDE NEW LED LIGHTING FIXTURE AND SWITCH IN EACH COMPARTMENT OF ROOM, FIELD LOCATE IN BEST POSITION, AND CONNECT TO 120V CIRCUIT IN LP.
2. PROVIDE 6 NEW LED 48" STRIP FIXTURES IN THIS SPACE AND CIRCUIT TO LP.



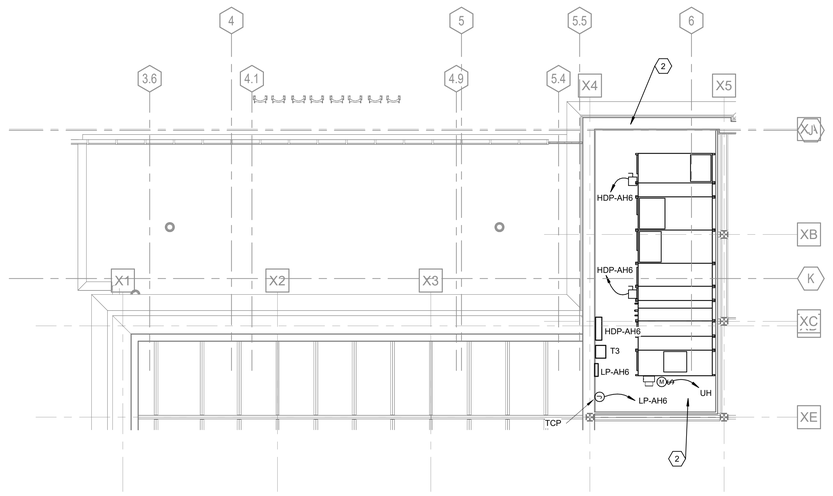
1 ENLARGED PLAN
DEMOLITION - AHU#5
SCALE: 1/8" = 1'-0"
0' 1' 2' 4' 8'



2 ENLARGED PLAN
NEW WORK - AHU#5
SCALE: 1/8" = 1'-0"
0' 1' 2' 4' 8'



3 ENLARGED PLAN
DEMOLITION - AHU#6
SCALE: 1/8" = 1'-0"
0' 1' 2' 4' 8'



4 ENLARGED PLAN
NEW WORK - AHU#6
SCALE: 1/8" = 1'-0"
0' 1' 2' 4' 8'

No.	Description	Date

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Columbus, OH 43215
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1650 Watermark Drive, Suite 200 - Columbus, Ohio 43215-7010
TEL 614-487-1650 - WEB www.korda.com

ELECTRICAL ENLARGED PLANS

STATE OF OHIO PROFESSIONAL ENGINEER STANLEY J. KMONK 71379 REGISTERED 10-28-22

PROJECT STATUS:		BID/PERMIT SET
PROJECT NUMBER:		2022-0212
DRAWN BY: Garrett W. Strauss	DATE	SHEET NUMBER
DESIGNED BY: Stanley J. Kmonk	10/28/2022	E303
CHECKED BY: Checker		

PANEL ID: LP-AH1 | VOLTAGE: 208 / 120
LOCATION: | PHASE: 3
MOUNTING: SURFACE | WIRE: 4
MAIN TYPE: MAIN CIRCUIT BREAKER | MAIN SIZE: 100 AMPS
LEGEND: | NOTES:

TOTAL LOAD (KVA)	GND SIZE	WIRE SIZE	BRANCH CIRCUIT DESCRIPTION	CIRCUIT BREAKER SIZE/TYPE	CIRCUIT NUMBER	CIRCUIT BREAKER SIZE/TYPE	BRANCH CIRCUIT DESCRIPTION	WIRE SIZE	GND SIZE	TOTAL LOAD (KVA)
0.81	12	12	EXHAUST FAN	20/1	1 *|| 2	30/2	UNIT HEATER	10	10	1.00
0.50	12	12	HOT WATER COIL PUMP	20/1	3 |*| 4	-	-	10	-	1.00
0.50	12	12	MOTORIZED DAMPER	20/1	5 ||* 6	20/2	BI-POLAR IONIZATION	12	12	1.00
0.50	12	12	MOTORIZED DAMPER	20/1	7 *|| 8	-	-	12	-	1.00
0.50	12	12	MOTORIZED DAMPER	20/1	9 |*| 10	20/1	AHU INTERNAL LIGHTING	12	12	1.00
0.50	12	12	TEMPERATURE CONTROL PANEL	20/1	11 ||* 12	20/1	RECEPTACLES	12	12	0.50
0.00			SPARE	20/1	13 *|| 14	20/1	RECEPTACLES	12	12	0.50
0.00			SPARE	20/1	15 |*| 16	20/1	SPARE			0.00
0.00			SPARE	20/1	17 ||* 18	20/1	SPARE			0.00
0.00			SPARE	20/1	19 *|| 20	20/1	SPARE			0.00
0.00			SPARE	20/1	21 |*| 22	20/1	SPARE			0.00
0.00			SPARE	20/1	23 ||* 24	20/1	SPARE			0.00
0.00			SPARE	20/1	25 *|| 26	20/1	SPARE			0.00
0.00			SPARE	20/1	27 |*| 28	20/1	SPARE			0.00
0.00			SPARE	20/1	29 ||* 30	20/1	SPARE			0.00
0.00			SPARE	20/1	31 *|| 32	20/1	SPARE			0.00
0.00			SPARE	20/1	33 |*| 34	20/1	SPARE			0.00
0.00			SPARE	20/1	35 ||* 36	20/1	SPARE			0.00
0.00			SPARE	20/1	37 *|| 38	20/1	SPARE			0.00
0.00			SPARE	20/1	39 |*| 40	20/1	SPARE			0.00
0.00			SPARE	20/1	41 ||* 42	20/1	SPARE			0.00

CONNECTED LOAD SUMMARY: LIGHTING: 1.0 KVA | PANEL AMP SUMMARY:
(ALL TOTALS INCLUDE BOTH TUBS) RECEPTACLES & MISC.: 3.5 KVA | 34.3 PHASE A
MOTOR: 2.8 KVA | 26.3 PHASE B
HEATING: 2.0 KVA | 22.1 PHASE C
TOTAL: 9.3 KVA

PANEL ID: LP-AH2 | VOLTAGE: 208 / 120
LOCATION: | PHASE: 3
MOUNTING: SURFACE | WIRE: 4
MAIN TYPE: MAIN CIRCUIT BREAKER | MAIN SIZE: 100 AMPS
LEGEND: | NOTES:

TOTAL LOAD (KVA)	GND SIZE	WIRE SIZE	BRANCH CIRCUIT DESCRIPTION	CIRCUIT BREAKER SIZE/TYPE	CIRCUIT NUMBER	CIRCUIT BREAKER SIZE/TYPE	BRANCH CIRCUIT DESCRIPTION	WIRE SIZE	GND SIZE	TOTAL LOAD (KVA)
0.81	12	12	EXHAUST FAN	20/1	1 *|| 2	30/2	UNIT HEATER	10	10	1.00
0.50	12	12	HOT WATER COIL PUMP	20/1	3 |*| 4	-	-	10	-	1.00
0.50	12	12	MOTORIZED DAMPER	20/1	5 ||* 6	20/2	BI-POLAR IONIZATION	12	12	1.00
0.50	12	12	MOTORIZED DAMPER	20/1	7 *|| 8	-	-	12	-	1.00
0.50	12	12	MOTORIZED DAMPER	20/1	9 |*| 10	20/1	AHU INTERNAL LIGHTING	12	12	1.00
0.50	12	12	TEMPERATURE CONTROL PANEL	20/1	11 ||* 12	20/1	RECEPTACLES	12	12	0.50
0.00			SPARE	20/1	13 *|| 14	20/1	RECEPTACLES	12	12	0.50
0.00			SPARE	20/1	15 |*| 16	20/1	SPARE			0.00
0.00			SPARE	20/1	17 ||* 18	20/1	SPARE			0.00
0.00			SPARE	20/1	19 *|| 20	20/1	SPARE			0.00
0.00			SPARE	20/1	21 |*| 22	20/1	SPARE			0.00
0.00			SPARE	20/1	23 ||* 24	20/1	SPARE			0.00
0.00			SPARE	20/1	25 *|| 26	20/1	SPARE			0.00
0.00			SPARE	20/1	27 |*| 28	20/1	SPARE			0.00
0.00			SPARE	20/1	29 ||* 30	20/1	SPARE			0.00
0.00			SPARE	20/1	31 *|| 32	20/1	SPARE			0.00
0.00			SPARE	20/1	33 |*| 34	20/1	SPARE			0.00
0.00			SPARE	20/1	35 ||* 36	20/1	SPARE			0.00
0.00			SPARE	20/1	37 *|| 38	20/1	SPARE			0.00
0.00			SPARE	20/1	39 |*| 40	20/1	SPARE			0.00
0.00			SPARE	20/1	41 ||* 42	20/1	SPARE			0.00

CONNECTED LOAD SUMMARY: LIGHTING: 1.0 KVA | PANEL AMP SUMMARY:
(ALL TOTALS INCLUDE BOTH TUBS) RECEPTACLES & MISC.: 3.5 KVA | 34.3 PHASE A
MOTOR: 2.8 KVA | 26.3 PHASE B
HEATING: 2.0 KVA | 22.1 PHASE C
TOTAL: 9.3 KVA

PANEL ID: LP-AH3 | VOLTAGE: 208 / 120
LOCATION: | PHASE: 3
MOUNTING: SURFACE | WIRE: 4
MAIN TYPE: MAIN CIRCUIT BREAKER | MAIN SIZE: 100 AMPS
LEGEND: | NOTES:

TOTAL LOAD (KVA)	GND SIZE	WIRE SIZE	BRANCH CIRCUIT DESCRIPTION	CIRCUIT BREAKER SIZE/TYPE	CIRCUIT NUMBER	CIRCUIT BREAKER SIZE/TYPE	BRANCH CIRCUIT DESCRIPTION	WIRE SIZE	GND SIZE	TOTAL LOAD (KVA)
0.81	12	12	EXHAUST FAN	20/1	1 *|| 2	30/2	UNIT HEATER	10	10	1.00
0.50	12	12	HOT WATER COIL PUMP	20/1	3 |*| 4	-	-	10	-	1.00
0.50	12	12	MOTORIZED DAMPER	20/1	5 ||* 6	20/2	BI-POLAR IONIZATION	12	12	1.00
0.50	12	12	MOTORIZED DAMPER	20/1	7 *|| 8	-	-	12	-	1.00
0.50	12	12	MOTORIZED DAMPER	20/1	9 |*| 10	20/1	AHU INTERNAL LIGHTING	12	12	1.00
0.50	12	12	TEMPERATURE CONTROL PANEL	20/1	11 ||* 12	20/1	RECEPTACLES	12	12	0.50
0.00			SPARE	20/1	13 *|| 14	20/1	RECEPTACLES	12	12	0.50
0.00			SPARE	20/1	15 |*| 16	20/1	SPARE			0.00
0.00			SPARE	20/1	17 ||* 18	20/1	SPARE			0.00
0.00			SPARE	20/1	19 *|| 20	20/1	SPARE			0.00
0.00			SPARE	20/1	21 |*| 22	20/1	SPARE			0.00
0.00			SPARE	20/1	23 ||* 24	20/1	SPARE			0.00
0.00			SPARE	20/1	25 *|| 26	20/1	SPARE			0.00
0.00			SPARE	20/1	27 |*| 28	20/1	SPARE			0.00
0.00			SPARE	20/1	29 ||* 30	20/1	SPARE			0.00
0.00			SPARE	20/1	31 *|| 32	20/1	SPARE			0.00
0.00			SPARE	20/1	33 |*| 34	20/1	SPARE			0.00
0.00			SPARE	20/1	35 ||* 36	20/1	SPARE			0.00
0.00			SPARE	20/1	37 *|| 38	20/1	SPARE			0.00
0.00			SPARE	20/1	39 |*| 40	20/1	SPARE			0.00
0.00			SPARE	20/1	41 ||* 42	20/1	SPARE			0.00

CONNECTED LOAD SUMMARY: LIGHTING: 1.0 KVA | PANEL AMP SUMMARY:
(ALL TOTALS INCLUDE BOTH TUBS) RECEPTACLES & MISC.: 3.5 KVA | 34.3 PHASE A
MOTOR: 2.8 KVA | 26.3 PHASE B
HEATING: 2.0 KVA | 22.1 PHASE C
TOTAL: 9.3 KVA

PANEL ID: LP-AH4 | VOLTAGE: 208 / 120
LOCATION: | PHASE: 3
MOUNTING: SURFACE | WIRE: 4
MAIN TYPE: MAIN CIRCUIT BREAKER | MAIN SIZE: 100 AMPS
LEGEND: | NOTES:

TOTAL LOAD (KVA)	GND SIZE	WIRE SIZE	BRANCH CIRCUIT DESCRIPTION	CIRCUIT BREAKER SIZE/TYPE	CIRCUIT NUMBER	CIRCUIT BREAKER SIZE/TYPE	BRANCH CIRCUIT DESCRIPTION	WIRE SIZE	GND SIZE	TOTAL LOAD (KVA)
0.81	12	12	EXHAUST FAN	20/1	1 *|| 2	30/2	UNIT HEATER	10	10	1.00
0.50	12	12	HOT WATER COIL PUMP	20/1	3 |*| 4	-	-	10	-	1.00
0.50	12	12	MOTORIZED DAMPER	20/1	5 ||* 6	20/2	BI-POLAR IONIZATION	12	12	1.00
0.50	12	12	MOTORIZED DAMPER	20/1	7 *|| 8	-	-	12	-	1.00
0.50	12	12	MOTORIZED DAMPER	20/1	9 |*| 10	20/1	AHU INTERNAL LIGHTING	12	12	1.00
0.50	12	12	TEMPERATURE CONTROL PANEL	20/1	11 ||* 12	20/1	RECEPTACLES	12	12	0.50
0.00			SPARE	20/1	13 *|| 14	20/1	RECEPTACLES	12	12	0.50
0.00			SPARE	20/1	15 |*| 16	20/1	SPARE			0.00
0.00			SPARE	20/1	17 ||* 18	20/1	SPARE			0.00
0.00			SPARE	20/1	19 *|| 20	20/1	SPARE			0.00
0.00			SPARE	20/1	21 |*| 22	20/1	SPARE			0.00
0.00			SPARE	20/1	23 ||* 24	20/1	SPARE			0.00
0.00			SPARE	20/1	25 *|| 26	20/1	SPARE			0.00
0.00			SPARE	20/1	27 |*| 28	20/1	SPARE			0.00
0.00			SPARE	20/1	29 ||* 30	20/1	SPARE			0.00
0.00			SPARE	20/1	31 *|| 32	20/1	SPARE			0.00
0.00			SPARE	20/1	33 |*| 34	20/1	SPARE			0.00
0.00			SPARE	20/1	35 ||* 36	20/1	SPARE			0.00
0.00			SPARE	20/1	37 *|| 38	20/1	SPARE			0.00
0.00			SPARE	20/1	39 |*| 40	20/1	SPARE			0.00
0.00			SPARE	20/1	41 ||* 42	20/1	SPARE			0.00

CONNECTED LOAD SUMMARY: LIGHTING: 1.0 KVA | PANEL AMP SUMMARY:
(ALL TOTALS INCLUDE BOTH TUBS) RECEPTACLES & MISC.: 3.5 KVA | 34.3 PHASE A
MOTOR: 2.8 KVA | 26.3 PHASE B
HEATING: 2.0 KVA | 22.1 PHASE C
TOTAL: 9.3 KVA

PANEL ID: LP-AH5 | VOLTAGE: 208 / 120
LOCATION: | PHASE: 3
MOUNTING: SURFACE | WIRE: 4
MAIN TYPE: MAIN CIRCUIT BREAKER | MAIN SIZE: 100 AMPS
LEGEND: | NOTES:

TOTAL LOAD (KVA)	GND SIZE	WIRE SIZE	BRANCH CIRCUIT DESCRIPTION	CIRCUIT BREAKER SIZE/TYPE	CIRCUIT NUMBER	CIRCUIT BREAKER SIZE/TYPE	BRANCH CIRCUIT DESCRIPTION	WIRE SIZE	GND SIZE	TOTAL LOAD (KVA)
0.81	12	12	EXHAUST FAN	20/1	1 *|| 2	30/2	UNIT HEATER	10	10	1.00
0.50	12	12	HOT WATER COIL PUMP	20/1	3 |*| 4	-	-	10	-	1.00
0.50	12	12	MOTORIZED DAMPER	20/1	5 ||* 6	20/2	BI-POLAR IONIZATION	12	12	1.00
0.50	12	12	MOTORIZED DAMPER	20/1	7 *|| 8	-	-	12	-	1.00
0.50	12	12	MOTORIZED DAMPER	20/1	9 |*| 10	20/1	AHU INTERNAL LIGHTING	12	12	1.00
0.50	12	12	TEMPERATURE CONTROL PANEL	20/1	11 ||* 12	20/1	RECEPTACLES	12	12	0.50
0.00			SPARE	20/1	13 *|| 14	20/1	RECEPTACLES	12	12	0.50
0.00			SPARE	20/1	15 |*| 16	20/1	SPARE			0.00
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0.00			SPARE	20/1	23 ||* 24	20/1	SPARE			0.00
0.00			SPARE	20/1	25 *|| 26	20/1	SPARE			0.00
0.00			SPARE	20/1	27 |*| 28	20/1	SPARE			0.00
0.00			SPARE	20/1	29 ||* 30	20/1	SPARE			0.00
0.00			SPARE	20/1	31 *|| 32	20/1	SPARE			0.00
0.00			SPARE	20/1	33 |*| 34	20/1	SPARE			0.00
0.00			SPARE	20/1	35 ||* 36	20/1	SPARE			0.00
0.00			SPARE	20/1	37 *|| 38	20/1	SPARE			0.00
0.00			SPARE	20/1	39 |*| 40	20/1	SPARE			0.00
0.00			SPARE	20/1	41 ||* 42	20/1	SPARE			0.00

CONNECTED LOAD SUMMARY: LIGHTING: 1.0 KVA | PANEL AMP SUMMARY:
(ALL TOTALS INCLUDE BOTH TUBS) RECEPTACLES & MISC.: 3.5 KVA | 34.3 PHASE A
MOTOR: 2.8 KVA | 26.3 PHASE B
HEATING: 2.0 KVA | 22.1 PHASE C
TOTAL: 9.3 KVA

PANEL ID: LP-AH6 | VOLTAGE: 208 / 120
LOCATION: | PHASE: 3
MOUNTING: SURFACE | WIRE: 4
MAIN TYPE: MAIN CIRCUIT BREAKER | MAIN SIZE: 100 AMPS
LEGEND: | NOTES:

TOTAL LOAD (KVA)	GND SIZE	WIRE SIZE	BRANCH CIRCUIT DESCRIPTION	CIRCUIT BREAKER SIZE/TYPE	CIRCUIT NUMBER	CIRCUIT BREAKER SIZE/TYPE	BRANCH CIRCUIT DESCRIPTION	WIRE SIZE	GND SIZE	TOTAL LOAD (KVA)
0.81	12	12	EXHAUST FAN	20/1	1 *|| 2	30/2	UNIT HEATER	10	10	1.00
0.50	12	12	HOT WATER COIL PUMP	20/1	3 |*| 4	-	-	10	-	1.00
0.50	12	12	MOTORIZED DAMPER	20/1	5 ||* 6	20/2	BI-POLAR IONIZATION	12	12	1.00
0.50	12	12	MOTORIZED DAMPER	20/1	7 *|| 8	-	-	12	-	1.00
0.50	12	12	MOTORIZED DAMPER	20/1	9 |*| 10	20/1	AHU INTERNAL LIGHTING	12	12	1.00
0.50	12	12	TEMPERATURE CONTROL PANEL	20/1	11 ||* 12	20/1	RECEPTACLES	12	12	0.50
0.00			SPARE	20/1	13 *|| 14	20/1	RECEPTACLES	12	12	0.50
0.00			SPARE	20/1	15 |*| 16	20/1	SPARE			0.00
0.00			SPARE	20/1	17 ||* 18	20/1	SPARE			0.00
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0.00			SPARE	20/1	21 |*| 22	20/1	SPARE			0.00
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0.00			SPARE	20/1	33 |*| 34	20/1	SPARE			0.00
0.00			SPARE	20/1	35 ||* 36	20/1	SPARE			0.00
0.00			SPARE	20/1	37 *|| 38	20/1	SPARE			0.00
0.00			SPARE	20/1	39 |*| 40	20/1	SPARE			0.00
0.00			SPARE	20/1	41 ||* 42	20/1	SPARE			0.00

CONNECTED LOAD SUMMARY: LIGHTING: 1.0 KVA | PANEL AMP SUMMARY:
(ALL TOTALS INCLUDE BOTH TUBS) RECEPTACLES & MISC.: 3.5 KVA | 34.3 PHASE A
MOTOR: 2.8 KVA | 26.3 PHASE B
HEATING: 2.0 KVA | 22.1 PHASE C
TOTAL: 9.3 KVA

No.	Description	Date

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AIR HANDLER UNIT REPLACEMENT

KORDA
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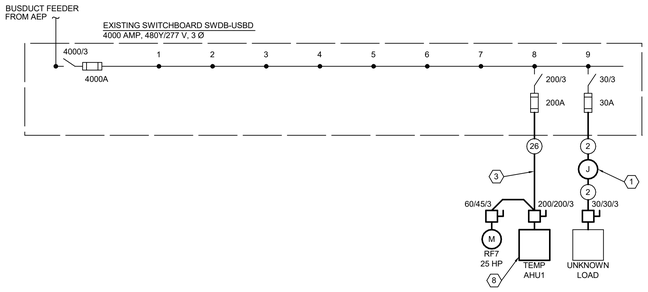
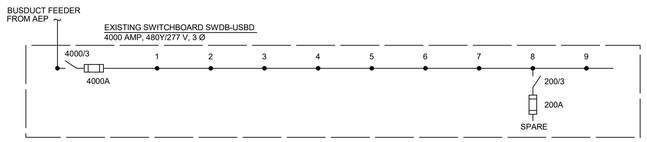
1650 Watermark Drive, Suite 200 - Columbus, Ohio 43215-7010
TEL 614-487-1650 - WEB www.korda.com

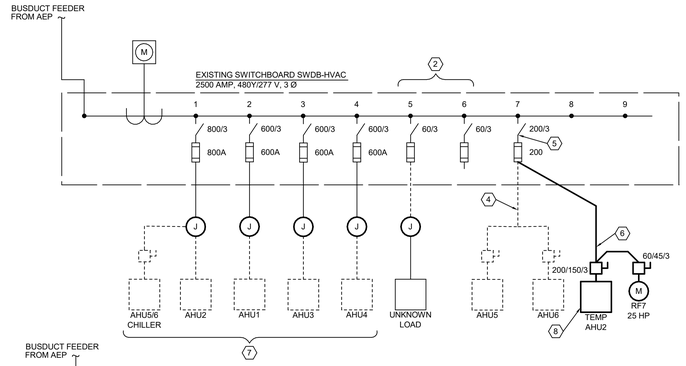
ELECTRICAL SCHEDULES

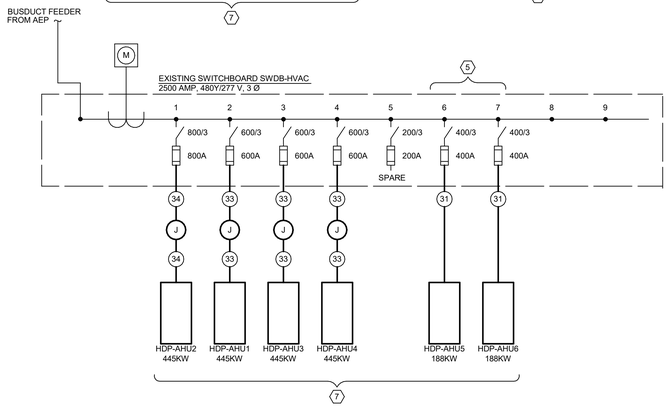
STATE OF OHIO
STANLEY J. KMONK
41379
REGISTERED
PROFESSIONAL ENGINEER

PROJECT STATUS:			BID/PERMIT SET
PROJECT NUMBER:			2022-0212
DRAWN BY: Garrett W. Strauss		DATE	SHEET NUMBER
DESIGNED BY: Stanley J. Kmonk		10/28/2022	E501
CHECKED BY: Checker			









CODED NOTES

1. MOVE UNKNOWN LOAD TO SPACE SWITCH AND RE-ROUTE FEEDER.
2. REMOVE 30/3 SWITCHES.
3. INSTALL TEMPORARY AHU1.
4. REMOVE FEEDER TO AHU5/6.
5. RELOCATE 200/3 IN SWITCHBOARD "HVAC" AND INSTALL NEW SWITCHES.
6. INSTALL FEEDER TO TEMORARY AHU2.
7. COMPLETE REST OF WORK PER PHASING SCHEDULE.
8. REMOVE TEMPORARY AHU AT END OF PROJECT.

A WIRING DIAGRAM
ONE LINE N.T.S.

No.	Description	Date

COLUMBUS METROPOLITAN LIBRARY
96 South Grant Avenue
Columbus, OH 43215

AIR HANDLER UNIT REPLACEMENT

KORDA
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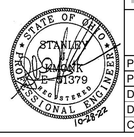
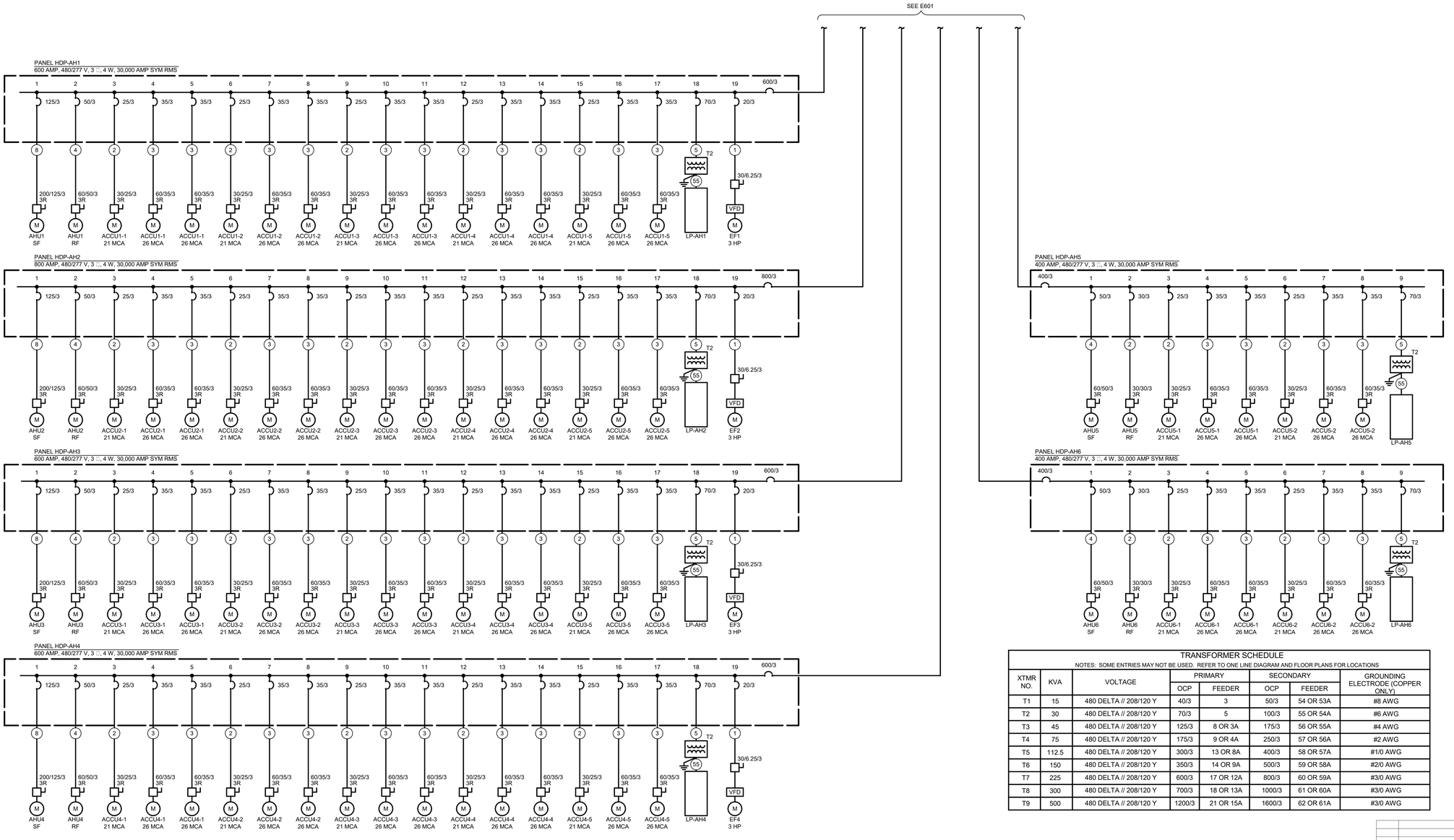
TEL 614-487-1650 - WEB www.korda.com

ELECTRICAL ONE LINE DIAGRAM



PROJECT STATUS:			BID/PERMIT SET
PROJECT NUMBER:			2022-0212
DRAWN BY: Author		DATE	SHEET NUMBER
DESIGNED BY: Designer		10/28/2022	E601
CHECKED BY: Checker			



TRANSFORMER SCHEDULE

NOTES: SOME ENTRIES MAY NOT BE USED. REFER TO ONE LINE DIAGRAM AND FLOOR PLANS FOR LOCATIONS

XTMR NO.	KVA	VOLTAGE	PRIMARY		SECONDARY		GROUNDING ELECTRODE (COPPER ONLY)
			OCP	FEEDER	OCP	FEEDER	
T1	15	480 DELTA // 208/120 Y	40/3	3	50/3	54 OR 53A	#8 AWG
T2	30	480 DELTA // 208/120 Y	70/3	5	100/3	55 OR 54A	#6 AWG
T3	45	480 DELTA // 208/120 Y	125/3	8 OR 3A	175/3	56 OR 55A	#4 AWG
T4	75	480 DELTA // 208/120 Y	175/3	9 OR 4A	250/3	57 OR 56A	#2 AWG
T5	112.5	480 DELTA // 208/120 Y	300/3	13 OR 8A	400/3	58 OR 57A	#1/0 AWG
T6	150	480 DELTA // 208/120 Y	350/3	14 OR 9A	500/3	59 OR 58A	#2/0 AWG
T7	225	480 DELTA // 208/120 Y	600/3	17 OR 12A	800/3	60 OR 59A	#3/0 AWG
T8	300	480 DELTA // 208/120 Y	700/3	18 OR 13A	1000/3	61 OR 60A	#3/0 AWG
T9	500	480 DELTA // 208/120 Y	1200/3	21 OR 15A	1600/3	62 OR 61A	#3/0 AWG

A WIRING DIAGRAM

ONE LINE N.T.S.

No.	Description	Date

COLUMBUS METROPOLITAN LIBRARY
96 South Grant Avenue
Columbus, OH 43215

AIR HANDLER UNIT REPLACEMENT

KORDA
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ELECTRICAL ONE LINE DIAGRAM

STATE OF OHIO STANLEY J. KMONIK 81379 REGISTERED PROFESSIONAL ENGINEER 10/28/22

PROJECT STATUS:		BID/PERMIT SET
PROJECT NUMBER:		2022-0212
DRAWN BY: Garrett W. Strauss	DATE	SHEET NUMBER
DESIGNED BY: Stanley J. Kmonik	10/28/2022	E602
CHECKED BY: Checker		

SYMBOLS LIST FOR WIRING DIAGRAMS AND DETAILS

1. SOME SYMBOLS MAY NOT BE USED.

SYMBOL	DESCRIPTION
100/3	
100	FUSIBLE SWITCH WITH FUSES (SIZE AS NOTED)
100/3	CIRCUIT BREAKER (SIZE AS NOTED)
100/3	SPACE FOR DEVICE (SIZE AS NOTED)
100/3	SPARE FUSIBLE SWITCH (WITHOUT FUSES)
K	KIRK KEY INTERLOCK
S	SHUNT TRIP
AS, VS	AMMETER, VOLTMETER SWITCH
AM	ANALOG AMMETER
VM	ANALOG VOLTMETER
GF	GROUND FAULT SENSOR/OPERATOR
	CURRENT TRANSFORMER
	POTENTIAL TRANSFORMER
WH	ANALOG WATTHOUR METER
M	UTILITY METER
M	ELECTRONIC METERING UNIT
	PANELBOARD
TX T1	POWER TRANSFORMER, "TX" DENOTES NAME "T1" NOTES TYPE (SEE TRANSFORMER SCHEDULE)
#6	GROUNDING ELECTRODE AND CONDUCTOR (CONDUCTOR SIZE AS NOTED)
1/25/3 3R, NF	COMBINATION MOTOR STARTER (STARTER SIZE, FUSE SIZE, NO. OF POLES -AS NOTED) "3R" DENOTES NEMA "3R" ENCLOSURE, "NF"=NONFUSED
1/25/3 3R, NF	MAGNETIC MOTOR STARTER (STARTER SIZE, FUSE SIZE, NO. OF POLES -AS NOTED) "3R" DENOTES NEMA "3R" ENCLOSURE, "NF"=NONFUSED
30/20/3 NF	SAFETY SWITCH (SWITCH SIZE, FUSE SIZE, NO. OF POLES AS NOTED) NF=NONFUSED
WP	WEATHERPROOF
CP	CONTROL PANEL (BY OTHERS)
VFD	VARIABLE FREQUENCY DRIVE
SPD	SURGE PROTECTION DEVICE
M	MOTOR
G	EMERGENCY GENERATOR
	AUTOMATIC TRANSFER SWITCH
	BYPASS/ISOLATION AUTOMATIC TRANSFER SWITCH
	MANUAL TRANSFER SWITCH
	EQUIPMENT (AS NOTED)
	PUSHBUTTON - NORMALLY OPEN
	PUSHBUTTON - NORMALLY CLOSED
	FIRE PUMP CONTROLLER (BY OTHERS)

GENERAL NOTE

ALL EQUIPMENT AND FEEDERS SHOWN IN SOLID, LIGHTWEIGHT LINES INDICATE EXISTING EQUIPMENT AND FEEDERS TO REMAIN. ALL EQUIPMENT AND FEEDERS SHOWN IN DASHED, LIGHTWEIGHT LINES INDICATE EXISTING EQUIPMENT AND FEEDERS TO BE DISCONNECTED AND REMOVED. ALL HEAVYWEIGHT LINES INDICATE NEW EQUIPMENT AND FEEDERS. PROVIDE NEW FUSES WHERE NEW FEEDERS ARE BEING CONNECTED TO EXISTING FUSIBLE SWITCHES.

ONE LINE DIAGRAM-FEEDER SCHEDULE

INSULATION TYPE: COMPACT XHHW-2, ALUMINUM CONDUCTORS
ALL CONDUIT EXCEPT SCHEDULE 80

OVERCURRENT PROTECTION AMPACITY	NOTE NUMBER	NUMBER OF SETS	PHASE WIRES QUANTITY - SIZE	NEUTRAL WIRE QUANTITY - SIZE	GROUND SIZE	ISOLATED GROUND SIZE	CONDUIT SIZE PER SET	COMMENTS/REMARKS
100	1A	1	3 - #1 AWG	-	1 - #6 AWG	-	1 1/4"	
125	2A	1	3 - #2/0 AWG	-	1 - #4 AWG	-	1 1/2"	
150	3A	1	3 - #3/0 AWG	-	1 - #4 AWG	-	2"	
175	4A	1	3 - #4/0 AWG	-	1 - #4 AWG	-	2"	
200	5A	1	3 - 250 KCMIL	-	1 - #4 AWG	-	2"	
225	6A	1	3 - 300 KCMIL	-	1 - #2 AWG	-	2 1/2"	
250	7A	1	3 - 350 KCMIL	-	1 - #2 AWG	-	2 1/2"	
300	8A	1	3 - 500 KCMIL	-	1 - #2 AWG	-	3"	
350	9A	2	3 - #4/0 AWG	-	1 - #1 AWG	-	2"	3 PHASE EQUIPMENT FEEDERS
400	10A	2	3 - 250 KCMIL	-	1 - #1 AWG	-	2"	
500	11A	2	3 - 350 KCMIL	-	1 - #1/0 AWG	-	2 1/2"	
600	12A	2	3 - 500 KCMIL	-	1 - #2/0 AWG	-	3	
700	13A	3	3 - 350 KCMIL	-	1 - #3/0 AWG	-	2 1/2"	
800	14A	3	3 - 400 KCMIL	-	1 - #3/0 AWG	-	3"	
1000	15A	3	3 - 600 KCMIL	-	1 - #4/0 AWG	-	3"	
1200	16A	4	3 - 500 KCMIL	-	1 - 250 KCMIL	-	3"	
1600	17A	5	3 - 600 KCMIL	-	1 - 350 KCMIL	-	3"	
2000	18A	6	3 - 600 KCMIL	-	1 - 400 KCMIL	-	3"	
100	19A	1	3 - #1 AWG	1 - #1 AWG	1 - #6 AWG	-	1 1/2"	
125	20A	1	3 - #2/0 AWG	1 - #2/0 AWG	1 - #4 AWG	-	1 1/2"	
150	21A	1	3 - #3/0 AWG	1 - #3/0 AWG	1 - #4 AWG	-	2"	
200	22A	1	3 - 250 KCMIL	1 - 250 KCMIL	1 - #4 AWG	-	2 1/2"	
225	23A	1	3 - 300 KCMIL	1 - 300 KCMIL	1 - #2 AWG	-	3"	
250	24A	1	3 - 350 KCMIL	1 - 350 KCMIL	1 - #2 AWG	-	3"	
300	25A	1	3 - 500 KCMIL	1 - 500 KCMIL	1 - #2 AWG	-	3 1/2"	
350	26A	2	3 - #4/0 AWG	1 - #4/0 AWG	1 - #1 AWG	-	2"	
400	27A	2	3 - 250 KCMIL	1 - 250 KCMIL	1 - #1 AWG	-	2 1/2"	
500	28A	2	3 - 350 KCMIL	1 - 350 KCMIL	1 - #1/0 AWG	-	3"	POWER PANELS, DISTRIBUTION PANELBOARDS, AND SWITCHBOARDS
600	29A	2	3 - 500 KCMIL	1 - 500 KCMIL	1 - #2/0 AWG	-	3 1/2"	
700	30A	3	3 - 350 KCMIL	1 - 350 KCMIL	1 - #3/0 AWG	-	3"	
800	31A	3	3 - 400 KCMIL	1 - 400 KCMIL	1 - #3/0 AWG	-	3"	
1000	32A	3	3 - 600 KCMIL	1 - 600 KCMIL	1 - #4/0 AWG	-	3 1/2"	
1200	33A	4	3 - 500 KCMIL	1 - 500 KCMIL	1 - 250 KCMIL	-	3 1/2"	
1600	34A	5	3 - 600 KCMIL	1 - 600 KCMIL	1 - 350 KCMIL	-	3 1/2"	
2000	35A	6	3 - 600 KCMIL	1 - 600 KCMIL	1 - 400 KCMIL	-	3 1/2"	
2500	36A	8	3 - 600 KCMIL	1 - 600 KCMIL	1 - 600 KCMIL	-	3 1/2"	
3000	37A	8	3 - 700 KCMIL	1 - 700 KCMIL	1 - 600 KCMIL	-	4"	
4000	38A	12	3 - 600 KCMIL	1 - 600 KCMIL	1 - 750 KCMIL	-	4"	
5000	39A	13	3 - 750 KCMIL	1 - 750 KCMIL	1 - 750 KCMIL	-	4"	
100	40A	1	3 - #2/0 AWG	1 - #2/0 AWG	1 - #6 AWG	-	2"	
125	41A	1	3 - #4/0 AWG	1-#4/0 AWG	1 - #4 AWG	-	2"	
150	42A	1	3 - 250 KCMIL	1 - 250 KCMIL	1 - #4 AWG	-	2 1/2"	
175	43A	1	3 - 300 KCMIL	1- 300 KCMIL	1 - #4 AWG	-	3"	
200	44A	1	3 - 350 KCMIL	1- 350 KCMIL	1 - #4 AWG	-	3"	
250	45A	2	3 - #3/0 AWG	1 - #3/0 AWG	1 - #2 AWG	-	2"	LIGHTING PANELS & MISC
300	46A	2	3 - 250 KCMIL	1 - 250 KCMIL	1 - #2 AWG	-	2 1/2"	
350	47A	2	3 - 300 KCMIL	1 - 300 KCMIL	1 - #1 AWG	-	3"	
400	48A	2	3 - 400 KCMIL	1 - 400 KCMIL	1 - #1 AWG	-	3"	
500	49A	2	3 - 500 KCMIL	1 - 500 KCMIL	1 - #1/0 AWG	-	3 1/2"	
600	50A	3	3 - 350 KCMIL	1 - 350 KCMIL	1 - #2/0 AWG	-	3"	
700	51A	3	3 - 500 KCMIL	1 - 500 KCMIL	1 - #3/0 AWG	-	3 1/2"	
800	52A	3	3 - 600 KCMIL	1 - 600 KCMIL	1 - #3/0 AWG	-	3 1/2"	
125	53A	1	2 - #2/0 AWG	1 - #2/0 AWG	1 - #4 AWG	-	1 1/2"	
100	54A	1	3 - #1 AWG	1 - #1 AWG	1 - #6 AWG	-	1 1/2"	30 KVA TXMR SEC
175	55A	1	3 - #4/0 AWG	1-#4/0 AWG	1 - #2 AWG	-	2.5"	45 KVA TXMR SEC
250	56A	1	3 - 350 KCMIL	1 - 350 KCMIL	1 - #1/0 AWG	-	3"	75 KVA TXMR SEC
400	57A	2	3 - 250 KCMIL	1 - 250 KCMIL	1 - #3/0 AWG	-	2 1/2"	112.5 KVA TXMR SEC
500	58A	2	3 - 350 KCMIL	1 - 350 KCMIL	1 - #3/0 AWG	-	3.5"	150 KVA TXMR SEC
800	59A	3	3 - 400 KCMIL	1 - 400 KCMIL	1 - #4/0 AWG	-	3"	225 KVA TXMR SEC
1000	60A	3	3 - 600 KCMIL	1 - 600 KCMIL	1 - 250 KCMIL	-	3 1/2"	300 KVA TXMR SEC
1600	61A	5	3 - 600 KCMIL	1 - 600 KCMIL	1 - 400 KCMIL	-	3 1/2"	500 KVA TXMR SEC

ONE LINE DIAGRAM-FEEDER SCHEDULE

INSULATION TYPE: THWN with COPPER CONDUCTORS
ELECTRICAL METALLIC TUBING (EMT)

OVERCURRENT PROTECTION AMPACITY	NOTE NUMBER	NUMBER OF SETS	PHASE WIRES QUANTITY - SIZE	NEUTRAL WIRE QUANTITY - SIZE	GROUND SIZE	ISOLATED GROUND SIZE	CONDUIT SIZE PER SET	COMMENTS/REMARKS
20	1	1	3 - #12 AWG	-	1 - #12 AWG	-	3/4"	
30	2	1	3 - #10 AWG	-	1 - #10 AWG	-	3/4"	
40	3	1	3 - #8 AWG	-	1 - #10 AWG	-	3/4"	
50	4	1	3 - #6 AWG	-	1 - #10 AWG	-	3/4"	
70	5	1	3 - #4 AWG	-	1 - #8 AWG	-	1"	
90	6	1	3 - #2 AWG	-	1 - #8 AWG	-	1-1/4"	
110	7	1	3 - #1 AWG	-	1 - #6 AWG	-	1-1/4"	
150	8	1	3 - #1/0 AWG	-	1 - #6 AWG	-	1-1/2"	
175	9	1	3 - #2/0 AWG	-	1 - #6 AWG	-	1-1/2"	
200	10	1	3 - #3/0 AWG	-	1 - #6 AWG	-	2"	
225	11	1	3 - #4/0 AWG	-	1 - #4 AWG	-	2"	
250	12	1	3 - 250 KCMIL	-	1 - #4 AWG	-	2"	3 PHASE EQUIPMENT AND MOTOR FEEDERS
300	13	1	3 - 350 KCMIL	-	1 - #4 AWG	-	2-1/2"	
350	14	1	3 - 500 KCMIL	-	1 - #3 AWG	-	3"	
400	15	1	3 - 600 KCMIL	-	1 - #3 AWG	-	3"	
500	16	2	3 - 250 KCMIL	-	1 - #2 AWG	-	2"	
600	17	2	3 - 350 KCMIL	-	1 - #1 AWG	-	2-1/2"	
700	18	2	3 - 500 KCMIL	-	1 - #1/0 AWG	-	3"	
800	19	2	3 - 600 KCMIL	-	1 - #1/0 AWG	-	3"	
1000	20	3	3 - 400 KCMIL	-	1 - #2/0 AWG	-	3"	
1200	21	3	3 - 600 KCMIL	-	1 - #3/0 AWG	-	3"	
1600	22	4	3 - 600 KCMIL	-	1 - #4/0 AWG	-	3-1/2"	
OPEN	23	-	-	-	-	-	-	
100	24	1	3 - #1 AWG	1 - #1 AWG	1 - #8 AWG	-	1-1/2"	
150	25	1	3 - #1/0 AWG	1 - #1/0 AWG	1 - #6 AWG	-	2"	
200	26	1	3 - #3/0 AWG	1 - #3/0 AWG	1 - #6 AWG	-	2"	
225	27	1	3 - #4/0 AWG	1 - #4/0 AWG	1 - #4 AWG	-	2-1/2"	
250	28	1	3 - 250 KCMIL	1 - 250 KCMIL	1 - #4 AWG	-	2-1/2"	
300	29	1	3 - 350 KCMIL	1 - 350 KCMIL	1 - #4 AWG	-	3"	
350	30	1	3 - 500 KCMIL	1 - 500 KCMIL	1 - #3 AWG	-	3-1/2"	
400	31	1	3 - 600 KCMIL	1 - 600 KCMIL	1 - #3 AWG	-	3-1/2"	
500	32	2	3 - 250 KCMIL	1 - 250 KCMIL	1 - #2 AWG	-	2-1/2"	POWER PANELS, DISTRIBUTION PANELBOARDS, AND SWITCHBOARDS
600	33	2	3 - 350 KCMIL	1 - 350 KCMIL	1 - #1 AWG	-	3"	
800	34	2	3 - 600 KCMIL	1 - 600 KCMIL	1 - #1/0 AWG	-	4"	
1000	35	3	3 - 400 KCMIL	1 - 400 KCMIL	1 - #2/0 AWG	-	3"	
1200	36	3	3 - 600 KCMIL	1 - 600 KCMIL	1 - #3/0 AWG	-	4"	
1600	37	4	3 - 600 KCMIL	1 - 600 KCMIL	1 - #4/0 AWG	-	4"	
2000	38	5	3 - 600 KCMIL	1 - 600 KCMIL	1 - 250 KCMIL	-	4"	
2500	39	6	3 - 600 KCMIL	1 - 600 KCMIL	1 - 350 KCMIL	-	4"	
3000	40	8	3 - 500 KCMIL	1 - 500 KCMIL	1 - 400 KCMIL	-	4"	
4000	41	10	3 - 600 KCMIL	1 - 600 KCMIL	1 - 500 KCMIL	-	4"	
100	42	1	3 - #1/0 AWG	1 - #1/0 AWG	1 - #8 AWG	-	1-1/2"	
200	43	1	3 - 250 KCMIL	1 - 250 KCMIL	1 - #6 AWG	-	2-1/2"	
225	44	1	3 - 300 KCMIL	1 - 300 KCMIL	1 - #4 AWG	-	3"	LIGHTING PANELS
400	45	2	3 - 250 KCMIL	1 - 250 KCMIL	1 - #3 AWG	-	3"	
600	46	2	3 - 500 KCMIL	1 - 500 KCMIL	1 - #1 AWG	-	3-1/2"	
800	47	3	3 - 500 KCMIL	1 - 500 KCMIL	1 - #1/0 AWG	-	3-1/2"	
FIRE PUMP	48	1	3 - #1 AWG	-	1 - #6 AWG	-	2"	2 HR FIRE RATED
FIRE PUMP	49	1	6 - #1 AWG	-	1 - #6 AWG	-	2"	Y- △ STARTER
TVSS	50	1	3 - #2 AWG	1 - #2 AWG	1 - #2 AWG	-	1-1/2"	MINIMIZE LENGTH
APT PNLS	51	1	3 - #1/0 AWG	-	1 - #4/0 AWG	-	5"	
15 KV	52	1	3 - 500 KCMIL	-	1 - #4/0 AWG	-	5"	
OPEN	53	-	-	-	-	-	-	
50	54	1	3 - #8 AWG	3 - #8 AWG	1 - #8 AWG	-	3/4"	15 KVA TXMR SEC
100	55	1	3 - #1 AWG	1 - #1 AWG	1 - #6 AWG	-	1-1/2"	30 KVA TXMR SEC
175	56	1	3 - #2/0 AWG	1 - #2/0 AWG	1 - #4 AWG	-	2"	45 KVA TXMR SEC
250	57	1	3 - 250 KCMIL	1 - 250 KCMIL	1 - #2 AWG	-	2-1/2"	75 KVA TXMR SEC
400	58	1	3 - 600 KCMIL	1 - 600 KCMIL	1 - #1/0 AWG	-	3-1/2"	112.5 KVA TXMR SEC
500	59	2	3 - 250 KCMIL	1 - 250 KCMIL	1 - #2/0 AWG	-	2-1/2"	150 KVA TXMR SEC
800	60	2	3 - 600 KCMIL	1 - 600 KCMIL	1 - #2/0 AWG	-	4"	225 KVA TXMR SEC
1000	61	3	3 - 400 KCMIL	1 - 400 KCMIL	1 - #2/0 AWG	-	3"	300 KVA TXMR SEC
1600	62	4	3 - 600 KCMIL	1 - 600 KCMIL	1 - 300 KCMIL	-	4"	500 KVA TXMR SEC

SYMBOLS LIST FOR WIRING DIAGRAMS AND DETAILS

1. SOME SYMBOLS MAY NOT BE USED.

SYMBOL	DESCRIPTION
100/3	CIRCUIT BREAKER (SIZE AS NOTED)
100/3	SPACE FOR DEVICE (SIZE AS NOTED)
100/3	SPARE FUSIBLE SWITCH (WITHOUT FUSES)
K	KIRK KEY INTERLOCK
S	SHUNT TRIP
GF	GROUND FAULT SENSOR/OPERATOR
	CURRENT TRANSFORMER
	POTENTIAL TRANSFORMER
M	UTILITY METER
M	ELECTRONIC METERING UNIT
	PANELBOARD
T1	POWER TRANSFORMER, DESIGNATION AS NOTED (SEE TRANSFORMER SCHEDULE)
#6	GROUNDING ELECTRODE AND CONDUCTOR (CONDUCTOR SIZE AS NOTED)
1/25/3 3R, NF	COMBINATION MOTOR STARTER (STARTER SIZE, FUSE SIZE, NO. OF POLES -AS NOTED) "3R" DENOTES NEMA "3R" ENCLOSURE, "NF"=NONFUSED
1/25/3 3R, NF	MAGNETIC MOTOR STARTER (STARTER SIZE, FUSE SIZE, NO. OF POLES -AS NOTED) "3R" DENOTES NEMA "3R" ENCLOSURE, "NF"=NONFUSED
30/20/3 NF	SAFETY SWITCH (SWITCH SIZE, FUSE SIZE, NO. OF POLES AS NOTED) NF=NONFUSED
WP	WEATHERPROOF
CP	CONTROL PANEL (BY OTHERS)
VFD	VARIABLE FREQUENCY DRIVE
M	MOTOR
G	EMERGENCY GENERATOR
	AUTOMATIC TRANSFER SWITCH
	EQUIPMENT (AS NOTED)
	FIRE PUMP CONTROLLER (BY OTHERS)

No.	Description	Date

COLUMBUS METROPOLITAN LIBRARY
96 South Grant Avenue
Columbus, OH 43215
AIR HANDLER UNIT REPLACEMENT

KORDA
Korda/Nemeth Engineering, Inc. - Consulting Engineers
1650 Watermark Drive, Suite 200 - Columbus, Ohio 43215-7010
TEL 614-487-1650 - WEB www.korda.com

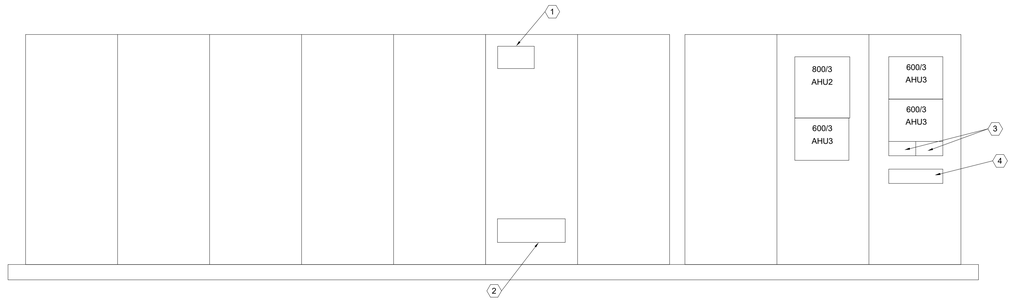
ELECTRICAL ONE LINE SCHEDULES

STATE OF OHIO · STANLEY J. KMONK · 61379 · REGISTERED PROFESSIONAL ENGINEER · 10/28/22

PROJECT STATUS:		BID/PERMIT SET
PROJECT NUMBER:		2022-0212
DRAWN BY: Garrett W. Strauss	DATE	SHEET NUMBER
DESIGNED BY: Stanley J. Kmonk	10/28/2022	E603
CHECKED BY: Checker		

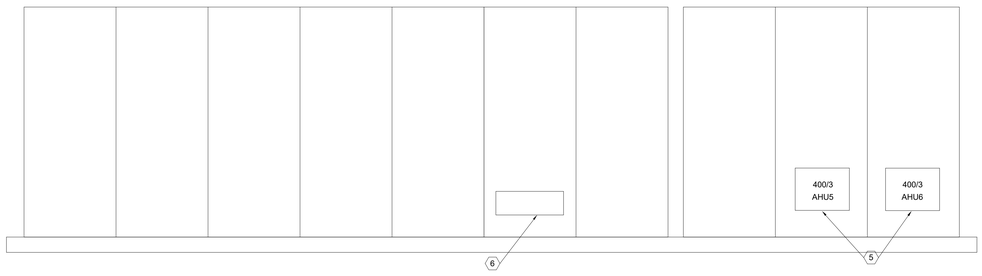
CODED NOTES

1. MOVE 60/3 "UNKNOWN" LOAD TO THIS SPARE SWITCH.
2. USE THIS SPARE SWITCH FOR TEMPORARY AHU1.
3. REMOVE 60/3 SWITCHES.
4. MOVE UP IN SECTION TO MAKE SPACE FOR NEW SWITCH.
5. PROVIDE NEW SWITCH.
6. RETURN TO SPARE.



1 DETAIL

SWITCHBOARD DEMOLITION ELEVATION N.T.S.



2 DETAIL

SWITCHBOARD NEW WORK ELEVATION N.T.S.

No.	Description	Date

COLUMBUS METROPOLITAN LIBRARY
96 South Grant Avenue
Columbus, OH 43215

AIR HANDLER UNIT REPLACEMENT

KORDA
Korda/Nemeth Engineering, Inc. - Consulting Engineers
1650 Watermark Drive, Suite 200 - Columbus, Ohio 43215-7010
TEL 614-487-1650 - WEB www.korda.com

ELECTRICAL DETAILS

STATE OF OHIO PROFESSIONAL ENGINEERS STANLEY J. KMONK 71379 REGISTERED 10-28-22

PROJECT STATUS:			BID/PERMIT SET
PROJECT NUMBER:			2022-0212
DRAWN BY: Garrett W. Strauss	DATE	SHEET NUMBER	
DESIGNED BY: Stanley J. Kmonk	10/28/2022	E701	
CHECKED BY: Checker			