

THE LATEST EDITIONS OF THE NEW YORK STATE ENERGY CODE, ASHRAE GUIDELINES, SMACNA, COUNTY GUIDELINES, NEC, CODE, AND ALL OTHER APPLICABLE CODES, ORDINANCES, ETC. LOCAL AUTHORITY HAVING JURISDICTION.




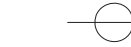



- ALL WORK SHALL CONFORM TO THE LATEST EDITIONS OF THE NEW YORK STATE ENERGY CODE, INTERNATIONAL MECHANICAL CODE, ASHRAE GUIDELINES, SMACNA, COUNTY GUIDELINES, NEC, NATIONAL STANDARD PLUMBING CODE, AND ALL OTHER APPLICABLE CODES, ORDINANCES, ETC. AND BY THE STATE AND THE LOCAL JURISDICTION.
2. MECHANICAL CONTRACTOR SHALL BE SOLELY RESPONSIBLE FOR ALL SAFE WORKING CONDITIONS AND SHALL OBSERVE ALL SAFETY REQUIREMENTS ESTABLISHED BY JURISDICTIONAL AGENCIES AND THE OWNER, WHERE CONFLICTS EXIST. THE MORE STRINGENT REQUIREMENT SHALL APPLY. CARE SHALL BE EXERCISED TO AVOID ENDANGERING PERSONNEL OR STRUCTURES.
3. MECHANICAL CONTRACTOR SHALL BE RESPONSIBLE FOR CONSTRUCTION METHODS, PROCEDURES AND THE CONDITION OF THE WORK AREA. ALL WORK SHALL BE PERFORMED IN SUCH A MANNER TO PROTECT WORKMEN, OCCUPANTS AND THE PUBLIC FROM INJURY AND ADJOINING PROPERTY SHALL BE PROTECTED FROM DAMAGE BY USE OF SCAFFOLDING, UNDERPINNING OR OTHER APPROVED METHOD. THE CONTRACTOR SHALL REPAIR ANY AND ALL DAMAGE CAUSED DURING OR RESULTING FROM HIS OPERATIONS IN KIND TO THE SATISFACTION OF THE OWNER AT NO ADDITIONAL COST TO THE OWNER.
4. MECHANICAL CONTRACTOR SHALL MAINTAIN THE JOB SITE IN A CLEAN, DEBRIS FREE CONDITION, THE DUST RESULTING FROM REMOVALS SHALL BE CONTROLLED SO AS TO PREVENT ITS SPREAD TO OCCUPIED PORTIONS OF THE BUILDING AND TO AVOID CREATION OF A NUISANCE IN THE SURROUNDING AREA.
5. MECHANICAL CONTRACTOR SHALL SECURE AND PAY FOR ALL REQUIRED PERMITS, FEES, APPROVALS, ETC. PRIOR TO COMMENCING WORK AND OBTAIN A CURRENT CERTIFICATE OF OCCUPANCY UPON COMPLETION OF WORK.
6. MECHANICAL CONTRACTOR SHALL BE RESPONSIBLE TO DISPOSE OF ALL EXCESS MATERIAL OFF SITE IN AN APPROVED MANNER. THE OWNER SHALL BE CONSIDERED PRIOR TO DISPOSAL OF ANY EXCESS MATERIALS AT THE COMPLETION OF THE PROJECT.
7. UPON COMPLETION OF WORK, ALL EXCESS MATERIAL, DEBRIS, ETC. SHALL BE REMOVED AND THE WORK AREA SHALL BE LEFT CLEAN TO THE OWNER'S SATISFACTION.
8. ALL WORK SHALL BE SCHEDULED IN COMPLIANCE WITH THE OWNER'S REQUIREMENTS FOR THE USE OF THE EXISTING FACILITY.
9. MECHANICAL CONTRACTOR SHALL FURNISH ALL EQUIPMENT THAT MAY BE REQUIRED TO PERFORM THE WORK INDICATED IN A SAFE AND ORDERLY MANNER, AND AS NECESSARY FOR A PROPER OPERATIONAL SYSTEM.
10. MECHANICAL CONTRACTOR SHALL BE RESPONSIBLE FOR THE RELOCATION AND TEMPORARY SUPPORT OF ANY UTILITIES ENCOUNTERED DURING THE COURSE OF HIS WORK AND TO ENSURE THE OWNER'S FACILITY TO BE OPERATIONAL.
11. MECHANICAL CONTRACTOR SHALL REVIEW DRAWINGS AND FIELD VERIFY ALL DIMENSIONS, CONDITIONS AND ELEVATIONS PRIOR TO COMMENCING WORK. THE CONTRACTOR SHALL REPORT ANY DISCREPANCIES AND ADDRESS ALL EXCEPTIONS TO ARCHITECT/ENGINEER PRIOR TO COMMENCING WORK.
12. MECHANICAL CONTRACTOR SHALL BE RESPONSIBLE FOR CUTTING, PATCHING, FILLING AND CLEANING UPON COMPLETION OF WORK.
13. MECHANICAL CONTRACTOR SHALL NOT SCALE DRAWINGS FOR DIMENSIONS. ALL WRITTEN OR DIMENSIONED INFORMATION TAKES PRECEDENCE OVER THE DRAWING.
14. MECHANICAL CONTRACTOR SHALL SUBMIT, WHERE REQUIRED BY THE ARCHENGR, SHOP DRAWINGS AND SUBMITTALS FOR APPROVAL PRIOR TO THE START OF FABRICATION OF THOSE ITEMS. THIS INCLUDES ALL EQUIPMENT, SCHEMATIC DUCTWORK AND PIPING LAYOUT, MECHANICAL ROOM LAYOUT, ETC. APPROVAL FOR IS REQUIRED FOR ENSURING EQUIPMENT ETC. WILL FIT (WITH PROPER MAINTENANCE CLEARANCES) AT ALL LOCATIONS. REVIEW OF SHOP DRAWINGS/SUBMITTALS BY THE ARCHENGR DOES NOT RELIEVE THE CONTRACTOR FROM PROVIDING THE CURRENT MODEL NUMBERS, TYPE, & FEATURES OF ALL EQUIPMENTS'S MATERIALS.
15. MECHANICAL CONTRACTOR SHALL PROVIDE THE OWNER AND ARCHITECT WITH CERTIFICATES OF INSURANCE PRIOR TO STARTING THE WORK.
16. MECHANICAL CONTRACTOR SHALL SHALL BE RESPONSIBLE FOR SHORING AND BRACING OF EXISTING STRUCTURES AS IN ACCORDANCE TO WITH MANUFACTURERS INSTRUCTIONS AND RECOMMENDATIONS.
17. ALL MANUFACTURER'S MATERIALS, COMPONENTS, FASTENERS, ASSEMBLIES, ETC. SHALL BE HANDLED AND STORED IN ACCORDANCE TO WITH MANUFACTURERS INSTRUCTIONS AND RECOMMENDATIONS. WHERE BRAND NAMES AND MANUFACTURED PRODUCTS ARE CALLED FOR, APPROVED EVALUES WHICH MEET APPLICABLE STANDARDS AND SPECIFICATIONS MAY BE SUBSTITUTED WITH WRITTEN PERMISSION FROM THE ARCHITECT AT THE OWNER. WHENEVER BRAND NAMES OR SPECIFIC PRODUCT SYSTEMS ARE INDICATED IT SHALL BE CLEARLY UNDERSTOOD THAT SUCH IDENTIFICATION IS FOR THE PURPOSE OF ILLUSTRATING THE TYPE OF PRODUCT AND DEGREE OF QUALITY DESIRED, SUCH IDENTIFICATION IN NO WAY INCLUDES THE CONTRACTOR FROM USING PRODUCTS OF OTHER MANUFACTURERS WHICH CAN BE SHOWN IN ADVANCE TO BE OF LIKE AND OF EQUAL OR BETTER QUALITY.
18. ALL CHANGES SHALL BE REQUESTED IN WRITING AND MAY ONLY BE APPROVED IN WRITING BY THE ARCHITECT/ENGINEER AND THE OWNER PRIOR TO ANY CHANGES BEING MADE.
19. THE ARCHITECT/ENGINEER HAS THE RIGHT TO REJECT ANY PORTION OF WORK THAT IS POORLY INSTALLED, DOES NOT MEET industry STANDARD, UNAUTHORIZED, OR WORK DONE CONTRARY TO THE REQUIREMENTS OF THE CONTRACT DOCUMENTS. SUCH WORK SHALL BE REPLACED, REPAIRED OR REMOVED AT THE CONTRACTOR'S EXPENSE.
20. **MECHANICAL CONTRACTOR SHALL GUARANTEE ALL HIS WORK AND THE WORK OF HIS SUBCONTRACTORS FOR A PERIOD ONE (1) YEAR AFTER RECEIVING FINAL ACCEPTANCE AND DO ALL REPAIR WORK AND REPLACEMENT AS NECESSARY DURING THAT PERIOD AT THE CONTRACTOR'S EXPENSE.**
21. IN NO EVENT SHALL STRUCTURAL MEMBERS BE CUT OR DRILLED WITHOUT THE WRITTEN APPROVAL OF A LICENSED STRUCTURAL ENGINEER.
22. ENGINEER/OWNER MAY ASK THE MECHANICAL CONTRACTOR TO PROVIDE DETAILED SHOP DRAWINGS & SUBMITTALS & OR ANY/ALL PARTS OF THIS PROJECT WHICH THE ENGINEER/OWNER DEMS NECESSARY FOR

UND

HVAC	=	HEAT/VENT/AIR COND
ID	=	INSIDE DIAMETER (DIM)
IN	=	INCH
INSUL	=	INSULATION

- |        |   |                            |       |   |                                |
|--------|---|----------------------------|-------|---|--------------------------------|
| A      | = | AND                        | HVAC  | = | HEAT/VENT/AIR COND             |
| @      | = | AT                         | ID    | = | INSIDE DIAMETER (DIM)          |
| Ø      | = | CENTER LINE                | IN    | = | INCH                           |
|        | = | DIAMETER OR ROUND          | INSUL | = | INSULATION                     |
| ABV    | = | ABOVE                      |       |   |                                |
| AC     | = | AIR CONDITIONING UNIT      | JAN   | = | JANITOR                        |
| ACC    | = | AIR COOLED CONDENSING UNIT | LSN   | = | LINEAR SLOT DIFFUSER           |
| AD     | = | ACCESS DOOR                |       |   |                                |
| ADDL   | = | ADDITIONAL                 | MAX   | = | MAXIMUM                        |
| ADJ    | = | ADJUSTABLE                 | MD    | = | MOTORIZED DAMPER               |
| AHU    | = | AIR HANDLING UNIT          | MECH  | = | MECHANICAL                     |
| ALT    | = | ALTERNATE                  | MEP   | = | MECHANICAL/ELECTRICAL/PLUMBING |
|        |   |                            | MFR   | = | MANUFACTURER                   |
| BB     | = | BASEBOARD                  | MIN   | = | MINIMUM                        |
| BDD    | = | BACK DRAFT DAMPER          | MISC  | = | MISCELLANEOUS                  |
| BLDG   | = | BUILDING                   | MO    | = | MASONRY OPENING                |
| BDD    | = | BOTTOM OF DUCT             |       |   |                                |
| BOS    | = | BOTTOM OF STEEL            | N.A.  | = | NOT APPLICABLE                 |
|        |   |                            | NK    | = | NECK SIZE                      |
| CD     | = | CONDENSATE DRAIN           | NTS   | = | NOT TO SCALE                   |
| CH     | = | CABINET HEATER             |       |   |                                |
| CL     | = | CLOSED                     | OA    | = | OUTSIDE AIR                    |
| CLG    | = | CEILING                    | OC    | = | ON CENTER                      |
| CO     | = | CARBON MONOXIDE            | OD    | = | OUTSIDE DIAMETER               |
| COL    | = | COLUMN                     | OPG   | = | OPENING                        |
| CONSTR | = | CONSTRUCTION               |       |   |                                |
| CONT   | = | CONTINUOUS                 | R     | = | RISER                          |
| CORR   | = | CORRIDOR                   | RA    | = | RETURN AIR                     |
| CTR    | = | CENTER                     | RAD   | = | RADIUS                         |
| CV     | = | CONVECTOR                  | RAG   | = | RETURN AIR GRILLE              |
| CW     | = | COLD WATER                 | RAK   | = | RETURN AIR REGISTER            |
|        |   |                            | RM    | = | ROOM                           |
|        |   |                            | RTU   | = | ROOF TOP HV/HVAC UNIT          |
| DET    | = | DETAIL                     | SA    | = | SUPPLY AIR                     |
| DIA    | = | DIAMETER                   | SAD   | = | SUPPLY AIR DIFFUSER            |
| DIM    | = | DIMENSION                  | SAR   | = | SUPPLY AIR REGISTER            |
| DN     | = | DOWN                       | SD    | = | SMOKE DETECTOR                 |
| DSD    | = | DUCT SMOKE DETECTOR        | SECT  | = | SECTION                        |
| DWG    | = | DRAWING                    | SP    | = | SUMP PUMP                      |
|        |   |                            | SPEC  | = | SPECIFICATION                  |
| EA     | = | EACH                       | STD   | = | STANDARD                       |
| EAR    | = | EXHAUST AIR REGISTER       | STG   | = | STORAGE                        |
| EF     | = | EXHAUST FAN                |       |   |                                |
| ELEC   | = | ELECTRIC                   | TG    | = | TRANSFER AIR GRILLE            |
| ENGR   | = | ENGINEER (ING)             | TOD   | = | TOP OF DUCT                    |
| EQ     | = | EQUAL                      | TXP   | = | TOLLET EXHAUST                 |
| EQUIP  | = | EQUIPMENT                  | TY    | = | TYPICAL                        |
|        |   |                            | UH    | = | UNIT HEATER                    |
|        |   |                            | UL    | = | UTILITY ROOM                   |
| FAI    | = | FRESH AIR INTAKE           | VFD   | = | VOLUME DAMPER                  |
| FC     | = | FLEXIBLE CONNECTION        | VG    | = | GAS VENT LINE                  |
| FCU    | = | FAN COIL UNIT              | VFV   | = | VARIABLE FREQUENCY DRIVE       |
| FD     | = | FIRE DAMPER                | VIF   | = | VERIFY IN FIELD                |
| FF     | = | FISHED FLOOR               |       |   |                                |
| FLR    | = | FLOOR                      |       |   |                                |
| FP     | = | FIRE PROTECTION            |       |   |                                |
| FSD    | = | FIRE/SMOKE DAMPER          |       |   |                                |
|        |   |                            |       |   |                                |
| GA     | = | GAUGE                      |       |   |                                |
| GALV   | = | GALVANIZED                 | W     | = | WITH                           |
| GPM    | = | GALLONS PER MINUTE         | W/O   | = | WITHOUT                        |
|        |   |                            | WMS   | = | WIRE MESH SCREEN               |
|        |   |                            | WT    | = | WEIGHT                         |

NOT TO SCALE

-  SUPPLY AIR CEILING DIFFUSER (SAD) WITH NECK SIZE AND AND CFM INDICATED ON PLANS  
 = 3-WAY SUPPLY AIR CEILING DIFFUSER (SAD) WITH NECK SIZE AND AND CFM INDICATED ON PLANS.  
 = 2-WAY SUPPLY AIR CEILING DIFFUSER (SAD) WITH NECK SIZE AND AND CFM INDICATED ON PLANS.  
 = RETURN AIR REGISTER (RAR) WITH NECK SIZE AND CFM INDICATED ON PLANS  
 = EXHAUST AIR REGISTER (EAR), GRAVITY RELIEF GRILLE (GRG) WITH NECK SIZE AND CFM INDICATED ON PLANS  
 = SUPPLY AIR WALL REGISTER/GRILLE (SAR) WITH NECK SIZE AND CFM INDICATED ON PLANS  
 = RETURN AIR WALL REGISTER (RAR) WITH NECK SIZE AND CFM INDICATED ON PLAN  
 OR  = INDICATES HARD DUCT WITH INTERNAL LINING (DIMENSIONS ARE INSIDE CLEAR WIDTH & DEPTH)  
 OR  = INDICATES FLEXIBLE DUCT (DIMENSIONS ARE INSIDE CLEAR WIDTH & DEPTH)  
  $\varnothing$ " = INDICATES FLEXIBLE DUCT (DIMENSIONS ARE INSIDE CLEAR DIAMETER; LENGTH NOT TO EXCEED FOUR (4) FEET (IN COMMONS AREA ONLY))  
 = DUCT TURN UP (SUPPLY, RETURN, EXHAUST)  
 = DUCT TURN DOWN (SUPPLY, RETURN, EXHAUST)  
 = DUCT SMOKE DETECTOR WITH ACCESS DOOR  
 = FIRE DAMPER WITH ACCESS DOOR  
 = FIRE/SMOKE DAMPER WITH ACCESS DOOR  
 = VOLUME DAMPER  
 = BACK DRAFT DAMPER  
 = MOTORIZED DAMPER  
 = INDICATES NEW WALL MOUNTED THERMOSTAT.  
 = CO2 SENSOR  
 = REFRIGERANT PIPING  
 = PIPE TURN UP  
 = PIPE TURN DOWN

1. PROCURE AND PAY ALL NECESSARY PERMITS AND LICENSES REQUIRED TO CARRY OUT THE WORK SHOWN. OBTAIN AND PAY FOR ALL FEES.
2. COMPLY WITH ALL FEDERAL, STATE AND MUNICIPAL LAWS AND CODES, ORDINANCES, RULES AND REGULATIONS OF HEALTH, PUBLIC OR OTHER AUTHORITIES CONTROLLING OR LIMITING THE METHODS, MATERIALS TO BE USED OR ACTIONS OF THOSE EMPLOYED.
3. GUARANTEE H.V.A.C. SYSTEMS FOR A PERIOD OF ONE YEAR FROM OWNER'S ACCEPTANCE TO BE FREE FROM DEFECTS AND REPAIR OR REPLACE, AT NO COST TO OWNER, FAILURES OR DEFECTS.

1. PROCURE AND PAY ALL NECESSARY PERMITS AND LICENSES REQUIRED TO CARRY OUT THE WORK SHOWN ON DRAWINGS AND PAY FOR ALL FEES.
2. COMPLY WITH ALL FEDERAL, STATE AND MUNICIPAL LAWS AND CODES, ORDINANCES, RULES AND REGULATIONS OF HEALTH, PUBLIC OR OTHER AUTHORITIES CONTROLLING OR LIMITING THE METHODS, MATERIALS TO BE USED OR ACTIONS OF THOSE EMPLOYED.
3. **GUARANTEE H.V.A.C. SYSTEMS FOR A PERIOD OF ONE YEAR FROM OWNER'S ACCEPTANCE TO BE FREE FROM DEFECTS AND REPAIR OR REPLACE, AT NO COST TO OWNER, FAILURES OR DEFECTS.**
4. **H.V.A.C. CONTRACTOR SHALL BE RESPONSIBLE FOR REMOVING ALL HIS DEBRIS.**
5. **BALANCE AIR AND WATER SYSTEMS TO QUANTITIES INDICATED. CONTRACTOR TO SUBMIT SIX (6) SETS OF AIR, WATER AND UNIT BALANCING REPORT TO ARCH/ENGR/OWNER PRIOR TO FINAL ACCEPTANCE OF THE SYSTEM.**
6. **BIDDERS FOR THIS WORK SHALL VISIT THE PREMISES AND CAREFULLY EXAMINE ALL EXISTING CONDITIONS BEFORE SUBMITTING BIDS. NOT ALL EXISTING CONDITIONS HAVE BEEN IDENTIFIED ON DRAWINGS. CONTRACTOR SHALL NOTIFY ARCH. & ENGR. OF ALL DISCREPANCIES PRIOR TO SUBMITTING BIDS.**
7. **ALL BIDDERS SHALL ALSO FAMILIARIZE THEMSELVES WITH THE MEANS OF ENTRANCE AND EXIT AT THE PROPERTY AND ALL OTHER INFORMATION NECESSARY TO PROPERLY CARRY OUT THE WORK.**
8. **THE CONTRACTOR SHALL, WITH THE APPROVAL OF THE ENGINEER AND WITHOUT ADDITIONAL COST TO THE OWNER, MAKE ALL NECESSARY CHANGES OR MODIFICATIONS TO LOCATIONS AS MAY BE NECESSARY TO SUIT REQUIREMENTS AND CONDITIONS FOR THE PROPER AND CONVENIENTLY ACCESSIBLE LOCATIONS OF ALL PARTS OF EACH SYSTEM.**
9. **SMALL DETAILS ARE NOT USUALLY SHOWN OR SPECIFIED BUT ALL MATERIALS & COMPONENTS NECESSARY FOR THE PROPER INSTALLATION AND OPERATION OR WORK SHALL BE FURNISHED AND INSTALLED AT NO ADDITIONAL COST.**
10. **THE CONTRACTOR SHALL NOTE THAT ALL SERVICE CONNECTIONS MAY NOT BE SHOWN IN TRUE POSITIONS. EACH BIDDER IS CAUTIONED, THEREFORE, TO VERIFY SAME WITH FIELD CONDITIONS.**
11. **CONTRACTOR SHALL CHECK FOR INTERFERENCE AND VERIFY ALL DIMENSIONS PRIOR TO FABRICATION OR INSTALLATION OF PIPING AND DUCTWORK.**
12. **IF AN ITEM OF EQUIPMENT OTHER THAN THE ITEM(S) SPECIFIED IS APPROVED, THE CONTRACTOR SHALL BE RESPONSIBLE FOR ALL NECESSARY COST ARISING OUT OF NOTICE OF OR PROPOSED GENERAL CONSTRUCTION AND MECHANICAL WORK REQUIRED TO ACCOMMODATE THE SUBSTITUTED EQUIPMENT.**
13. **ALL EQUIPMENT INSTALLATION SHALL BE IN ACCORDANCE WITH MANUFACTURERS DIRECTIONS AND RECOMMENDATIONS.**
14. **CONTRACTOR TO SUBMIT SIX (6) SETS OF DUCT AIR LEAKAGE TESTING REPORT FOR REVIEW.**
15. **PROVIDE ONE SET OF SPARE FILTERS FOR ALL INSTALLED HV/HVAC UNITS.**
16. **PROVIDE TWO YEAR MAINTENANCE SERVICE FOR ALL INSTALLED HV/HVAC/MECHANICAL SYSTEMS. THIS INCLUDES A MINIMUM OF THREE PERIODIC SERVICE VISITS TO INSPECT, TEST & CHECK ALL COMPONENTS OF HVAC/UTY UNITS AND ANY ADDITIONAL VISITS REQUIRED IF ANY HVAC/UTY UNIT FAILS. ALL NECESSARY BELT ALIGNMENTS, PROPER OPERATIONS OF ALL DAMPERS, ETC IS INCLUDED IN THIS SCOPE OF WORK.**
17. **PROVIDE FIRE DAMPERS/ACCESS DOORS AT ALL DUCT PENETRATIONS THROUGH CORRIDORS, SLABS AND OTHER RATED PARTITIONS, IRRESPECTIVE OF WHETHER IT IS INDICATED ON THE DRAWINGS OR NOT.**
18. **PROVIDE FIRE STOPPING AROUND ALL OPENINGS FOR DUCT, PIPING, CONDUIT, ETC. PENETRATIONS THROUGH CORRIDORS, SLABS AND OTHER RATED PARTITIONS.**
19. **MECHANICAL CONTRACTOR IS RESPONSIBLE FOR ALL CONTAINER SERVICES AND LABOR TO KEEP THE BUILDING FREE OF DEBRIS.**
20. **CONTRACTOR TO PROVIDE NEW WALL MOUNTED THERMOSTATS FOR ALL AHU'S, RTU'S, VAV BOXES, CABINET HEATERS, UVS, FCUs, AC UNITS, ETC. IRRESPECTIVE OF WHETHER THEY ARE INDICATED ON ALL DRAWINGS OR NOT. CONTRACTOR TO INDICATE THERMOSTAT LOCATIONS ON ALL SHOP DRAWINGS. PROVIDE TAMPER PROOF ENCLOSURES FOR ALL THERMOSTATS LOCATED IN PUBLIC SPACES.**
21. **CONTRACTOR TO NOTE THAT BOTH DWGS. & SPECS. ARE COLLECTIVELY A PART OF BID REQUIREMENTS. IN CASE OF ANY DIFFERENCES BETWEEN ANYWAYS DWGS. OR BETWEEN DWGS. & SPECS, THE MOST STRINGENT REQUIREMENT WILL PREVAIL.**
22. **CONTRACTOR TO SUBMIT SIX (6) SETS OF OPERATION & MAINTENANCE MANUALS, INCLUDING A SUMMARY SUMMARY OF ALL EQUIPMENT MFRS/MODEL #S/SERIAL #S, SHOP DRAWING SUBMITTALS, WARRANTY INFORMATION, O&M MANUALS, PROJECT INFORMATION, CONTACT DETAILS & AS-BUILT DRAWINGS.**
23. **CONTRACTOR TO PROVIDE SIX (6) SETS AND AN ELECTRONIC COPY OF AS-BUILT DRAWINGS OF THE ENTIRE SYSTEM.**
24. **PROVIDE PROPER IDENTIFICATION TAGS, ARROWS, AND LABELS FOR ALL EQUIPMENT INCLUDING RTUs, DUCTWORK, PIPING, VALVES, ELECTRICAL PANELS, ETC.**
25. **CONTRACTOR TO PROVIDE A MINIMUM OF TWO (2) TRAINING SESSIONS (TWO HOURS EACH) THAT ARE TO BE VIDEO TAPE FOR THE OWNERS USE. TO OWNERS STAFF ON PROPER OPERATION, MAINTENANCE & COMMON TROUBLE-SHOOTING GUIDELINES FOR ALL NEW EQUIPMENT.**

EQUIPMENT:

- REFER TO SCHEDULES FOR UNIT MANUFACTURER, SIZE, AND CAPACITY DATA

DUCTWORK:

- INDOOR SUPPLY, RETURN AND EXHAUST DUCTWORK, EXCEPT AS INDICATED BELOW, SHALL BE GALVANIZED STEEL CONSTRUCTION. WEIGHTS AND CONSTRUCTION DETAIL SHALL BE IN ACCORDANCE WITH THE LATEST ASHRAE GUIDE AND/OR SMACNA STANDARDS.
- SHOWER AREAS EXHAUST AND OUTDOOR AIR INTAKE DUCTWORK SHALL BE ALUMINUM CONSTRUCTION, CLASS 74 SEALS.
- FLEXIBLE DUCTWORK: SHALL NOT EXCEED 40' (4 FEET) IN LENGTH (IN COMMONS BUILDING ONLY). FOR ANY HORIZONTAL FLEX DUCT BRANCH TO A CEILING DIFFUSER, FURNISH A 90° BRACE TO MAINTAIN A LONG RADIUS ELBOW TO THE DIFFUSER ("TITUS" MAKE, MODEL "FLEXRIGHT").
- FIRE DAMPER: GREENHECK MAKE, MODEL FD-150 TYPE B (BLADES OUT OF AIRSTREAM), 1-1/2" HOUR RATING (UNLESS OTHERWISE NOTED) UL-55I LABELED DAMPER WITH STANDARD FRAME OR APPROVED EQUAL, PROVIDE WITH A RETAINING ANGLE AND AN ACCESS DOOR.

PIPING:

- GAS PIPING: SHALL BE SCHEDULE #40 BLACK STEEL WITH MALLEABLE IRON SCREWED FITTINGS (PIPE SIZE 2" AND SMALLER) AND WELDED FITTINGS (PIPE SIZE 2-1/2" AND LARGER)
- CONDENSATE DRAIN PIPING: SHALL BE HARD COPPER TYPE "L" WITH WROUGHT COPPER FITTINGS.
- REFRIGERANT PIPING: SHALL BE HARD COPPER TYPE "K" WITH WROUGHT COPPER FITTINGS.

INSULATION:

- EXTERNAL DUCT INSULATION: 1" THICK, MIN. 1.5 LB. DENSITY KLEAFLEX FIBERGLASS DUCT INSULATION WITH REINFORCED FOIL FACED FLAME RESISTANT KRAFT VAPOR BARRIER, ADHERED TO DUCT W/ SEALED LAPS AND TAPED JOINTS.
  - INTERNALLY LINED DUCT: 1" THICK, MIN. 1.0 LB. DENSITY RIGID INSULATION ADHERED TO DUCT. DUCTS WIDER THAN 18" TO HAVE 2" DIA. DRILL PINS AND WASHERS. DUCT DIMENSIONS AS INDICATE ARE CLEAR INSIDE DUCT DIMENSIONS.
- NOTES:
1. ALL SUPPLY & RETURN AIR DUCTWORK SHALL BE INTERNALLY LINED FOR A MIN. OF 25' TO AND FROM ANY RTU OR AHU.
  2. ALL SUPPLY AIR DUCTWORK SHALL BE INTERNALLY LINED FOR A MINIMUM OF 15' DOWNSTREAM OF ALL VAV BOXES
- DUCT INSULATION NOTE: PROVIDE A MINIMUM 6" OVERLAP WHERE INTERNAL INSULATION ENDS AND EXTERNAL INSULATION BEGINS.
  - ALL CONDENSATE DRAIN PIPING SHALL BE INSULATED WITH 1" THICK CLOSED-CELL ELASTOMERIC INSULATION ("AP ARMAFLEX BLACK LAPSEAL" OR EQUAL).
  - FRESH AIR INTAKE AND EXPOSED DUCT: 1" THICK, MIN. 2 LB. DENSITY RIGID FIBERGLASS DUCT INSULATION WITH FOIL FACED VAPOR BARRIER FASTENED WITH WELDED CLIPS, CEMENTED JOINTS WITH ALUMINUM TAPE.
  - OUTDOOR DUCTWORK INSULATION: ALL OUTDOOR DUCTWORK SHALL BE ALUMINUM CONSTRUCTION AND PROVIDED WITH BOTH 2" THICK, 6LB. DENSITY ACOUSTIC LINING WITH IAQ LINER AS WELL AS EXTERNAL INSULATION (MIN. 1.5" THICK AND 6 LB DENSITY). EXTERNAL INSULATION SHALL BE SLOPED (MIN. 1/4" PER FOOT) ON ALL UPWARD FACING HORIZONTAL SURFACES TO EFFECTIVELY DRAIN WATER OFF OF THE DUCTWORK. ALL DUCT CONNECTION JOINTS ETC SHALL BE GALVANIZED STEEL. DUCTWORK SHALL BE GLASS 1" SEALED AS PER SMACNA. PROVIDE SOLVENT BASED OUTDOOR DUCT SEALANT, RESISTANT TO UV LIGHT, UL 734 LISTED, WATER RESISTANT AS PER SMACNA. PROVIDE 2MM THICK ALUMINIZED FACED LOAD LINED LIMP VAV, SHEET LINED SPRING OPENED AROUND THE DUCT AND FASTENED WITH ADHESIVE TAPE AND BANDS FOR A WATER TIGHT CONSTRUCTION WHICH MEETS CLASS 1 REQUIREMENTS FOR SMOKE DEVELOPMENT AND FLAME SPREAD RATINGS. SUBMIT VINYL SHEET LAGGING SAMPLE FOR APPROVAL BEFORE INSTALLATION. (TYPICAL FOR ALL OUTDOOR DUCTWORK ON THIS PROJECT)
- AIR DEVICES:
- RAD - TITUS MAKE, MODEL OMNI
  - SAR - TITUS MAKE, MODEL 4FL
  - EAR - TITUS MAKE, MODEL 4FL
- NOTES:
1. ALL CEILING DIFFUSERS LOCATED IN ACOUSTIC CEILING GRID SHALL BE PROVIDED WITH FRAME TYPE FOR GRID MOUNTING. IF THE TILE IS SMALLER THAN TILE SIZE, THE DIFFUSER SHALL BE PROVIDED WITH FRAME TYPE FOR FRAME TYPE MOUNTING.
  2. ALL CEILING DIFFUSERS LOCATED IN GYPSUM BOARD OR/CONCRETE SPLIT CEILING SHALL BE PROVIDED WITH FRAME TYPE FOR SURFACE MOUNTING
  3. PRANK-FACE FACTORY INSTALLED 90° BLANK-OFF PLATE(S) IN ALL 2 AND 3 WAY DIFFUSERS.
  4. COLOR OF AIR OUTLETS/INLETS SHALL MATCH THE CEILING COLOR.
  5. ALL AIR OUTLETS/INLETS TOILETS, CORRIDORS, AND KITCHEN SHALL BE ALUMINUM CONSTRUCTION
- ACCESS DOORS
- FURNISH AND INSTALL ACCESS DOORS AT ALL LOCATIONS WHERE VALVES, DAMPERS, CONTROLS, VENTS, DRAINS, ETC. ARE TO BE INSTALLED ABOVE OR BEHIND ANY INACCESSIBLE SURFACE (GYPSUM BOARD, CMU, ETC.), IRRESPECTIVE OF WHETHER THEY ARE INDICATED ON ALL DRAWINGS OR NOT. ACCESS DOORS SHALL BE A SUITABLE SIZE TO MAINTAIN, OPERATE, REPAIR, AND REPLACE THE SURFACES. ACCESS DOORS SHALL BE FACTORY PRIMED AND PAINTED TO MATCH THE SURFACE IN WHICH THEY ARE INSTALLED.

MECHANICAL DRAWING LIST	
Drawing#	Title
M0.01	MECHANICAL NOTES, SYMBOLS & ABBREVIATIONS
M2.01	IL WEST LEVEL 0 MECHANICAL PLAN
M2.02	IL WEST LEVEL 1 MECHANICAL PLAN
M2.03	IL WEST LEVEL 2 MECHANICAL PLAN
M2.04	IL WEST LEVEL 3 MECHANICAL PLAN
M2.05	IL WEST LEVEL 4 MECHANICAL PLAN
M2.06	IL WEST ROOF MECHANICAL PLAN
M2.07	IL EAST LEVEL 0 MECHANICAL PLAN
M2.08	IL EAST LEVEL 1 MECHANICAL PLAN
M2.09	IL EAST LEVEL 2 MECHANICAL PLAN
M2.10	IL EAST LEVEL 3 MECHANICAL PLAN
M2.11	IL EAST LEVEL 4 MECHANICAL PLAN
M2.12	IL EAST ROOF MECHANICAL PLAN
M2.13	ENLARGED UNIT PLANS
M2.14	ENLARGED UNIT PLANS
M2.15	ENLARGED UNIT PLANS
M2.16	ENLARGED UNIT PLANS
M2.17	ENLARGED UNIT PLANS
M2.18	ENLARGED UNIT PLANS
M2.19	ENLARGED PARTIAL FLOOR PLANS
M3.01	IL WEST BUILDING MECHANICAL VRF ZONING PLAN
M3.02	IL EAST BUILDING MECHANICAL VRF ZONING PLAN
M6.01	MECHANICAL SCHEDULES
M6.02	MECHANICAL SCHEDULES
M6.03	MECHANICAL DETAILS
M6.04	MECHANICAL CONTROL DIAGRAMS

## ARCHITECT

**HCM Design, Inc.**  
700 E. Pratt St, Suite 1200, Baltimore, MD 21202  
p. 410. 837. 7311

## STRUCTURAL ENGINEER

**Morabito Consultants**  
952 Ridgebrook Road, suite 1700, Sparks MD 2115  
p. 410.467.2377

## FOOD SERVICE

Scopos Hospitality Group  
300 West Chestnut Street, Suite 201, Ephrata, PA 17305  
p. 717.733.5810

## INTERIOR DESIGNER

Merlino Design Partnership, Inc.  
2200 Renaissance Blvd, Suite 300, Gulph Mills, PA  
p. 610.313.9550

## MEPFP ENGINEER

LAN Associates  
Engineering, Planning, Architecture Surveying, LLP  
252 Main Street, Goshen, NY 10924  
p. 201.447.6400

## HCM/LCS



## SENIOR LIVING AT PURCHASE COLLEGE

BROADVIEW - SENIOR LIVING AT  
PURCHASE COLLEGE - 11 BUILDINGS

## hord | coplan | macht

ARCHITECTURE

LANDSCAPE ARCHITECTURE

## PLANNING

## INTERIOR DESIGN



LAN ASSOCIATES  
Engineering, Planning, Architecture, Surveying, LLP  
LAN JOB #1158/01  
PROFESSIONAL CERTIFICATION: I CERTIFY THAT THESE DOCUMENTS WERE  
PREPARED OR APPROVED BY ME, AND THAT I AM A DULY LICENSED ENGINEER  
UNDER THE LAWS OF THE STATE OF NEW YORK.  
LICENSE NUMBER: 090365  
EXPIRATION DATE: 10/31/23

[illegible]

Project Name  
BROADVIEW - SENIOR LIVING AT PURCHASE  
COLLEGE - IL BUILDINGS  
Project Number  
4.1308.01

Date \_\_\_\_\_

4/30/2021

Scale \_\_\_\_\_

$$1/8'' = 1'-0''$$

## Drawing

---

### MECHANICAL NOTES, SYMBOLS & ABBREVIATIONS

# M0.01

PERMIT / GMP SET



© Hord Coplan Macht, Inc.



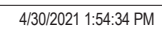


Hord Coplan Macht, Inc.





© Hord Coplan Macht, Inc.









**MEPFP ENGINEER**  
LAN Associates  
Engineering, Planning, Architecture Surveying, LLP  
252 Main Street, Goshen, NY 10924  
p. 201.447.6400



## hord | coplan | macht

ARCHITECTURE  
LANDSCAPE ARCHITECTURE  
PLANNING  
INTERIOR DESIGN



LAN ASSOCIATES  
Engineering, Planning, Architecture, Surveying, LLP  
LAN JOB #1358/01  
PROFESSIONAL CERTIFICATION: I CERTIFY THAT THESE DOCUMENTS WERE  
PREPARED OR APPROVED BY ME, AND THAT I AM A DULY LICENSED ENGINEER  
UNDER THE LAWS OF THE STATE OF NEW YORK.  
LICENSE NUMBER: 090385  
EXPIRATION DATE: 10/31/23

no.	date	revision

Project Name  
BROADVIEW - SENIOR LIVING AT PURCHASE  
COLLEGE - IL BUILDINGS  
Project Number  
4.1308.01

Date \_\_\_\_\_  
4/30/2021

Scale  
1/8" = 1'-0"

Drawing

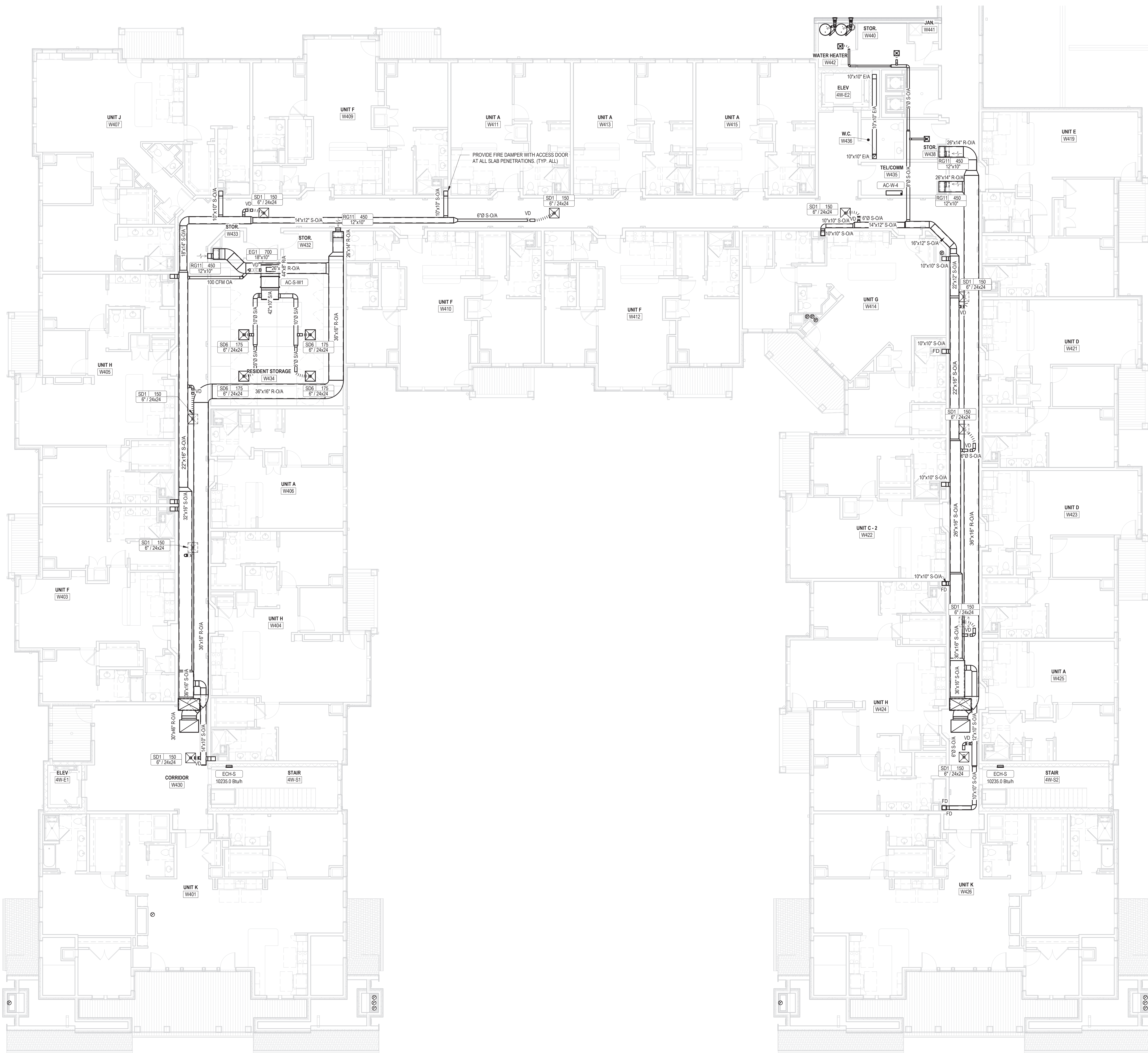
---

IL WEST LEVEL 4 MECHANICAL  
PLAN

## M2.05

PERMIT / GMP SET

© Hord Coplan Macht, Inc.



1 IL WEST LEVEL 4 MECHANICAL PLAN  
M2.05 1/8" = 1'-0"





1 IL WEST ROOF MECHANICAL PLAN  
M2.06 1/8" = 1'-0"

**ARCHITECT**  
HCM Design, Inc.  
700 E. Pratt St, Suite 1200, Baltimore, MD 21202  
p. 410. 837. 7311

**STRUCTURAL ENGINEER**  
Morabito Consultants  
952 Ridgebrook Road, suite 1700, Sparks MD 21152  
p. 410.467.2377

**FOOD SERVICE**  
Scopes Hospitality Group  
300 West Chestnut Street, Suite 201, Ephrata, PA 17522  
p. 717.733.5810

**INTERIOR DESIGNER**  
Merlino Design Partnership, Inc.  
2200 Renaissance Blvd, Suite 300, Gulph Mills, PA 19406  
p. 610.313.9550

**MEPP ENGINEER**  
LAN Associates  
Engineering, Planning, Architecture Surveying, LLP  
252 Main Street, Goshen, NY 10924  
p. 201.447.6400



BROADVIEW - SENIOR LIVING AT  
PURCHASE COLLEGE - IL BUILDINGS

hord | coplan | macht

ARCHITECTURE  
LANDSCAPE ARCHITECTURE  
PLANNING  
INTERIOR DESIGN



LAN ASSOCIATES  
Engineering, Planning, Architecture, Surveying, LLP  
LAN 258 #1308.01  
PROFESSIONAL CERTIFICATION: I CERTIFY THAT THESE DOCUMENTS WERE  
PREPARED OR APPROVED BY ME, AND THAT I AM A DULY LICENSED ENGINEER  
UNDER THE LAWS OF THE STATE OF NEW YORK.  
LICENSE NUMBER: 090385  
EXPIRATION DATE: 12/31/23


no.	date	revision
-----	------	----------

Project Name  
BROADVIEW - SENIOR LIVING AT PURCHASE  
COLLEGE - IL BUILDINGS  
Project Number  
4.1308.01

Date  
4/30/2021

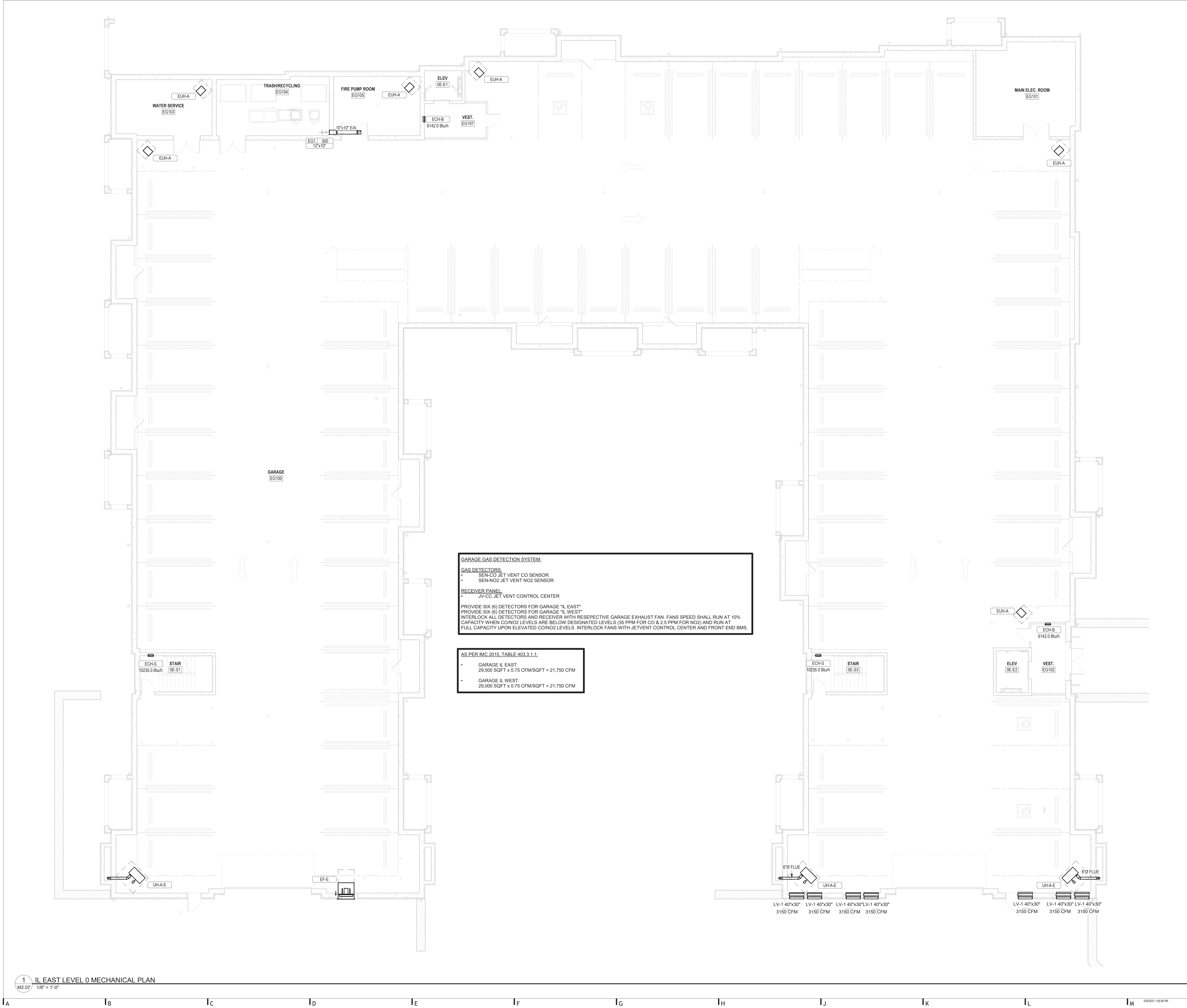
Scale  
1/8" = 1'-0"

Drawing  
IL WEST ROOF MECHANICAL  
PLAN

M2.06

PERMIT / GMP SET





ARCHITECT  
HCM Design, Inc.  
700 E. Pratt St, Suite 1200, Baltimore, MD 21202  
p. 410. 837. 7311

STRUCTURAL ENGINEER  
Morabito Consultants  
952 Ridgebrook Road, suite 1700, Sparks MD 21152  
p. 410.467.2377

FOOD SERVICE  
Scopes Hospitality Group  
300 West Chestnut Street, Suite 201, Ephrata, PA 17522  
p. 717.733.5810

INTERIOR DESIGNER  
Merlino Design Partnership, Inc.  
2200 Renaissance Blvd, Suite 300, Gulph Mills, PA 19406  
p. 610.313.9550

MEPPP ENGINEER  
LAN Associates  
Engineering, Planning, Architecture Surveying, LLP  
252 Main Street, Goshen, NY 10924  
p. 201.447.6400



BROADVIEW - SENIOR LIVING AT  
PURCHASE COLLEGE - IL BUILDINGS

hord | coplan | macht

ARCHITECTURE  
LANDSCAPE ARCHITECTURE  
PLANNING  
INTERIOR DESIGN



LAN ASSOCIATES  
Engineering, Planning, Architecture, Surveying, LLP  
LAN 258 #133611  
PROFESSIONAL CERTIFICATION: I CERTIFY THAT THESE DOCUMENTS WERE  
PREPARED OR APPROVED BY ME, AND THAT I AM A DULY LICENSED ENGINEER  
LICENSE NUMBER: 090385  
EXPIRATION DATE: 12/31/23

no.	date	revision

Project Name  
BROADVIEW - SENIOR LIVING AT PURCHASE  
COLLEGE - IL BUILDINGS  
Project Number  
4.1308.01  
Date  
4/30/2021  
Scale  
1/8" = 1'-0"  
Drawing  
IL EAST LEVEL 0 MECHANICAL  
PLAN

M2.07

PERMIT / GMP SET

© Hord Coplan Macht, Inc.



ARCHITECT  
HCM Design, Inc.  
700 E. Pratt St, Suite 1200, Baltimore, MD 21202  
p. 410. 837. 7311

STRUCTURAL ENGINEER  
Morabito Consultants  
952 Ridgeway Road, suite 1700, Sparks MD 21152  
p. 410.467.2377

FOOD SERVICE  
Scopes Hospitality Group  
300 West Chestnut Street, Suite 201, Ephrata, PA 17522  
p. 717.733.5810

INTERIOR DESIGNER  
Merlino Design Partnership, Inc.  
2200 Renaissance Blvd, Suite 300, Gulph Mills, PA 19406  
p. 610.313.9550

MEPP ENGINEER  
LAN Associates  
Engineering, Planning, Architecture Surveying, LLP  
252 Main Street, Goshen, NY 10924  
p. 201.447.6400

HCM/LCS



BROADVIEW - SENIOR LIVING AT  
PURCHASE COLLEGE - IL BUILDINGS

hord | coplan | macht

ARCHITECTURE  
LANDSCAPE ARCHITECTURE  
PLANNING  
INTERIOR DESIGN



LAN ASSOCIATES  
Engineering, Planning, Architecture, Surveying, LLP  
LAN #28 #1308.01  
PROFESSIONAL CERTIFICATION: I CERTIFY THAT THESE DOCUMENTS WERE  
PREPARED OR APPROVED BY ME, AND THAT I AM A FULLY LICENSED ENGINEER  
LICENSE NUMBER: 090385  
EXPIRATION DATE: 12/31/23

no.	date	revision

Project Name  
BROADVIEW - SENIOR LIVING AT PURCHASE  
COLLEGE - IL BUILDINGS  
Project Number  
4.1308.01  
Date  
4/30/2021  
Scale  
1/8" = 1'-0"  
Drawing  
IL EAST LEVEL 1 MECHANICAL  
PLAN

M2.08

PERMIT / GMP SET

© Hord Coplan Macht, Inc.



1 IL EAST LEVEL 1 MECHANICAL PLAN  
M2.08 1/8" = 1'-0"





1 IL EAST LEVEL 2 MECHANICAL PLAN  
M2.09 1/8" = 1'-0"

**ARCHITECT**  
HCM Design, Inc.  
700 E. Pratt St, Suite 1200, Baltimore, MD 21202  
p. 410. 837. 7311

**STRUCTURAL ENGINEER**  
Morabito Consultants  
952 Ridgeway Road, suite 1700, Sparks MD 21152  
p. 410.467.2377

**FOOD SERVICE**  
Scopes Hospitality Group  
300 West Chestnut Street, Suite 201, Ephrata, PA 17522  
p. 717.733.5810

**INTERIOR DESIGNER**  
Merlino Design Partnership, Inc.  
2200 Renaissance Blvd, Suite 300, Gulph Mills, PA 19406  
p. 610.313.9550

**MEPP ENGINEER**  
LAN Associates  
Engineering, Planning, Architecture Surveying, LLP  
252 Main Street, Goshen, NY 10924  
p. 201.447.6400

HCM/LCS



BROADVIEW - SENIOR LIVING AT  
PURCHASE COLLEGE - IL BUILDINGS

hord | coplan | macht

ARCHITECTURE  
LANDSCAPE ARCHITECTURE  
PLANNING  
INTERIOR DESIGN



LAN ASSOCIATES  
Engineering, Planning, Architecture, Surveying, LLP  
LAN 258 #133611  
PROFESSIONAL CERTIFICATION: I CERTIFY THAT THESE DOCUMENTS WERE  
PREPARED OR APPROVED BY ME, AND THAT I AM A DULY LICENSED ENGINEER  
UNDER THE LAWS OF THE STATE OF NEW YORK.  
LICENSE NUMBER: 090385  
EXPIRATION DATE: 12/31/23

no.	date	revision

Project Name  
BROADVIEW - SENIOR LIVING AT PURCHASE  
COLLEGE - IL BUILDINGS  
Project Number  
4.1308.01  
Date  
4/30/2021  
Scale  
1/8" = 1'-0"  
Drawing  
IL EAST LEVEL 2 MECHANICAL  
PLAN

M2.09

PERMIT / GMP SET

© Hord Coplan Macht, Inc.



**FOOD SERVICE**  
Scopos Hospitality Group  
300 West Chestnut Street, Suite 201, Ephrata, PA 17305  
p. 717.733.5810

**MEPFP ENGINEER**  
LAN Associates  
Engineering, Planning, Architecture Surveying, LLP  
252 Main Street, Goshen, NY 10924  
p. 201.447.6400

HCM/LCS



**BROADVIEW**

**SENIOR LIVING  
AT PURCHASE COLLEGE**

BROADVIEW - SENIOR LIVING AT  
PURCHASE COLLEGE - IL BUILDINGS

## hord | coplan | macht

ARCHITECTURE  
LANDSCAPE ARCHITECTURE  
PLANNING  
INTERIOR DESIGN



LAN ASSOCIATES  
Engineering, Planning, Architecture, Surveying, LLP  
LAN JOB #1358/01  
PROFESSIONAL CERTIFICATION: I CERTIFY THAT THESE DOCUMENTS WERE  
PREPARED OR APPROVED BY ME, AND THAT I AM A DULY LICENSED ENGINEER  
UNDER THE LAWS OF THE STATE OF NEW YORK.  
LICENSE NUMBER: 090385  
EXPIRATION DATE: 10/31/23

[illegible]

Project Name  
BROADVIEW - SENIOR LIVING AT PURCHASE  
COLLEGE - IL BUILDINGS  
Project Number  
4.1308.01

Date \_\_\_\_\_  
4/30/2021

Scale  
1/8" = 1'-0"

Drawing \_\_\_\_\_

IL EAST LEVEL 3 MECHANICAL  
PLAN

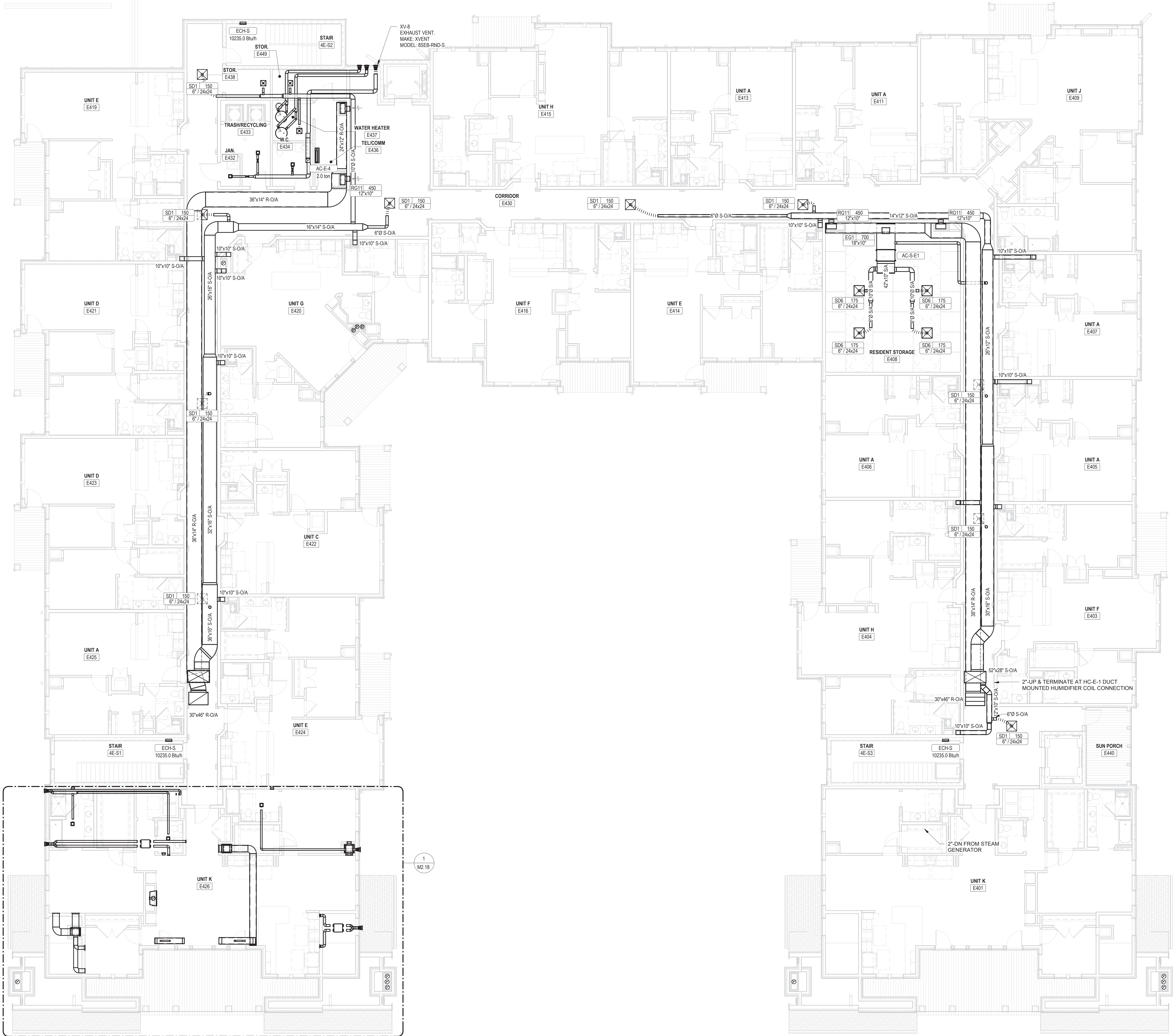
## M2.10

PERMIT / GMP SET

© Hord Coplan Macht, Inc.







1 IL EAST LEVEL 4 MECHANICAL PLAN  
M2.11 1/8" = 1'-0"

ARCHITECT  
HCM Design, Inc.  
700 E. Pratt St, Suite 1200, Baltimore, MD 21202  
p. 410. 837. 7311

STRUCTURAL ENGINEER  
Morabito Consultants  
952 Ridgeway Road, suite 1700, Sparks MD 21152  
p. 410.467.2377

FOOD SERVICE  
Scopes Hospitality Group  
300 West Chestnut Street, Suite 201, Ephrata, PA 17522  
p. 717.733.5810

INTERIOR DESIGNER  
Merlino Design Partnership, Inc.  
2200 Renaissance Blvd, Suite 300, Gulph Mills, PA 19406  
p. 610.313.9550

MEPP ENGINEER  
LAN Associates  
Engineering, Planning, Architecture Surveying, LLP  
252 Main Street, Goshen, NY 10924  
p. 201.447.6400

HCM/LCS



SENIOR LIVING  
AT PURCHASE COLLEGE

BROADVIEW - SENIOR LIVING AT  
PURCHASE COLLEGE - IL BUILDINGS

hord | coplan | macht

ARCHITECTURE  
LANDSCAPE ARCHITECTURE  
PLANNING  
INTERIOR DESIGN



LAN ASSOCIATES  
Engineering, Planning, Architecture, Surveying, LLP  
LAN 258 #133811  
PROFESSIONAL CERTIFICATION: I CERTIFY THAT THESE DOCUMENTS WERE  
PREPARED OR APPROVED BY ME, AND THAT I AM A DULY LICENSED ENGINEER  
UNDER THE LAWS OF THE STATE OF NEW YORK.  
LICENSE NUMBER: 090385  
EXPIRATION DATE: 12/31/23

no.	date	revision

Project Name  
BROADVIEW - SENIOR LIVING AT PURCHASE  
COLLEGE - IL BUILDINGS  
Project Number  
4.1308.01  
Date  
4/30/2021  
Scale  
1/8" = 1'-0"  
Drawing  
IL EAST LEVEL 4 MECHANICAL  
PLAN

M2.11

PERMIT / GMP SET





1 IL EAST ROOF MECHANICAL PLAN  
M2.12 1/8" = 1'-0"

**ARCHITECT**  
HCM Design, Inc.  
700 E. Pratt St, Suite 1200, Baltimore, MD 21202  
p. 410. 837. 7311

**STRUCTURAL ENGINEER**  
Morabito Consultants  
952 Ridgebrook Road, suite 1700, Sparks MD 21152  
p. 410.467.2377

**FOOD SERVICE**  
Scopes Hospitality Group  
300 West Chestnut Street, Suite 201, Ephrata, PA 17522  
p. 717.733.5810

**INTERIOR DESIGNER**  
Merlino Design Partnership, Inc.  
2200 Renaissance Blvd, Suite 300, Gulph Mills, PA 19406  
p. 610.313.9550

**MEPP ENGINEER**  
LAN Associates  
Engineering, Planning, Architecture Surveying, LLP  
252 Main Street, Goshen, NY 10924  
p. 201.447.6400

HCM/LCS



BROADVIEW - SENIOR LIVING AT  
PURCHASE COLLEGE - IL BUILDINGS

hord | coplan | macht

ARCHITECTURE  
LANDSCAPE ARCHITECTURE  
PLANNING  
INTERIOR DESIGN



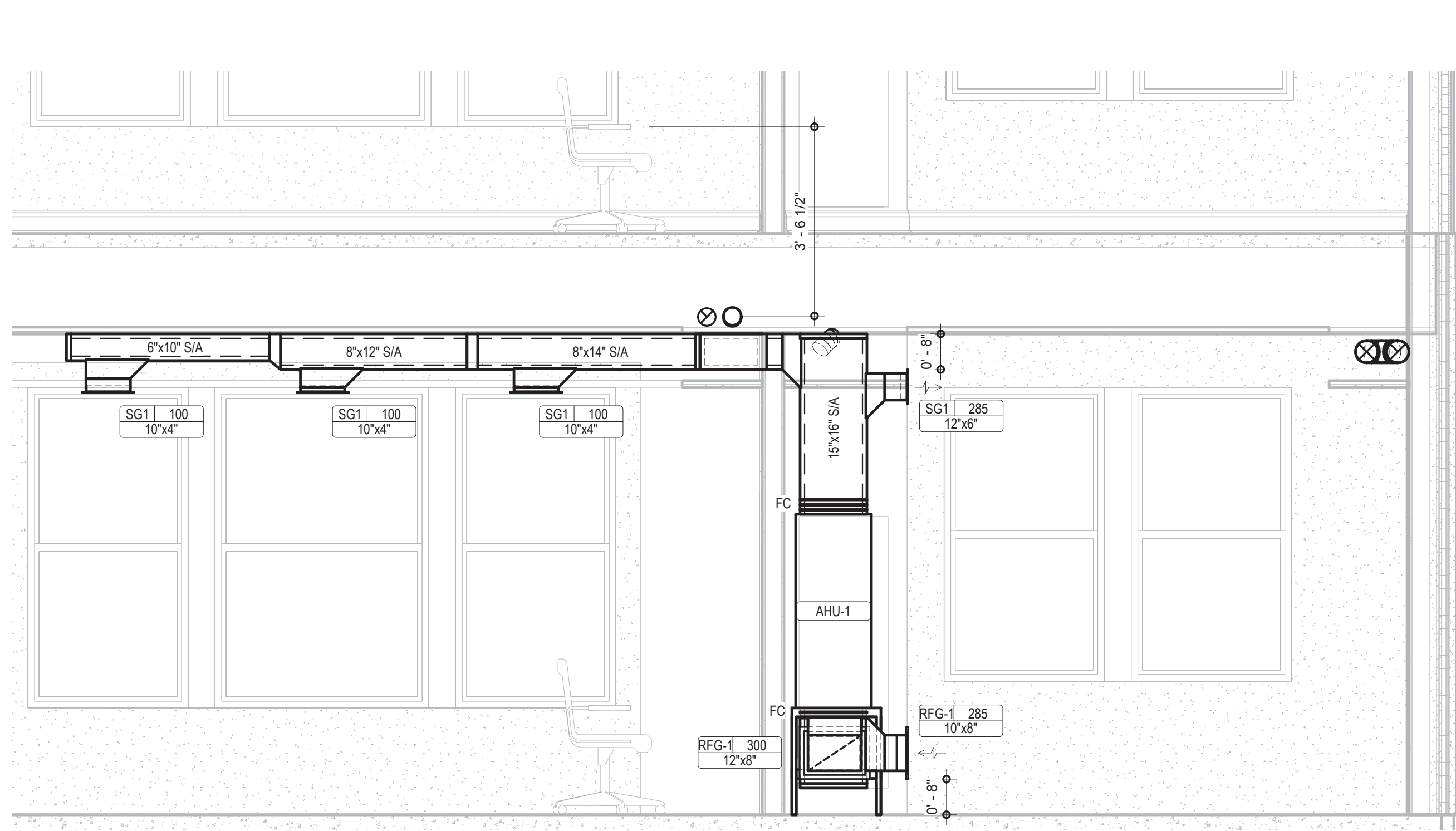
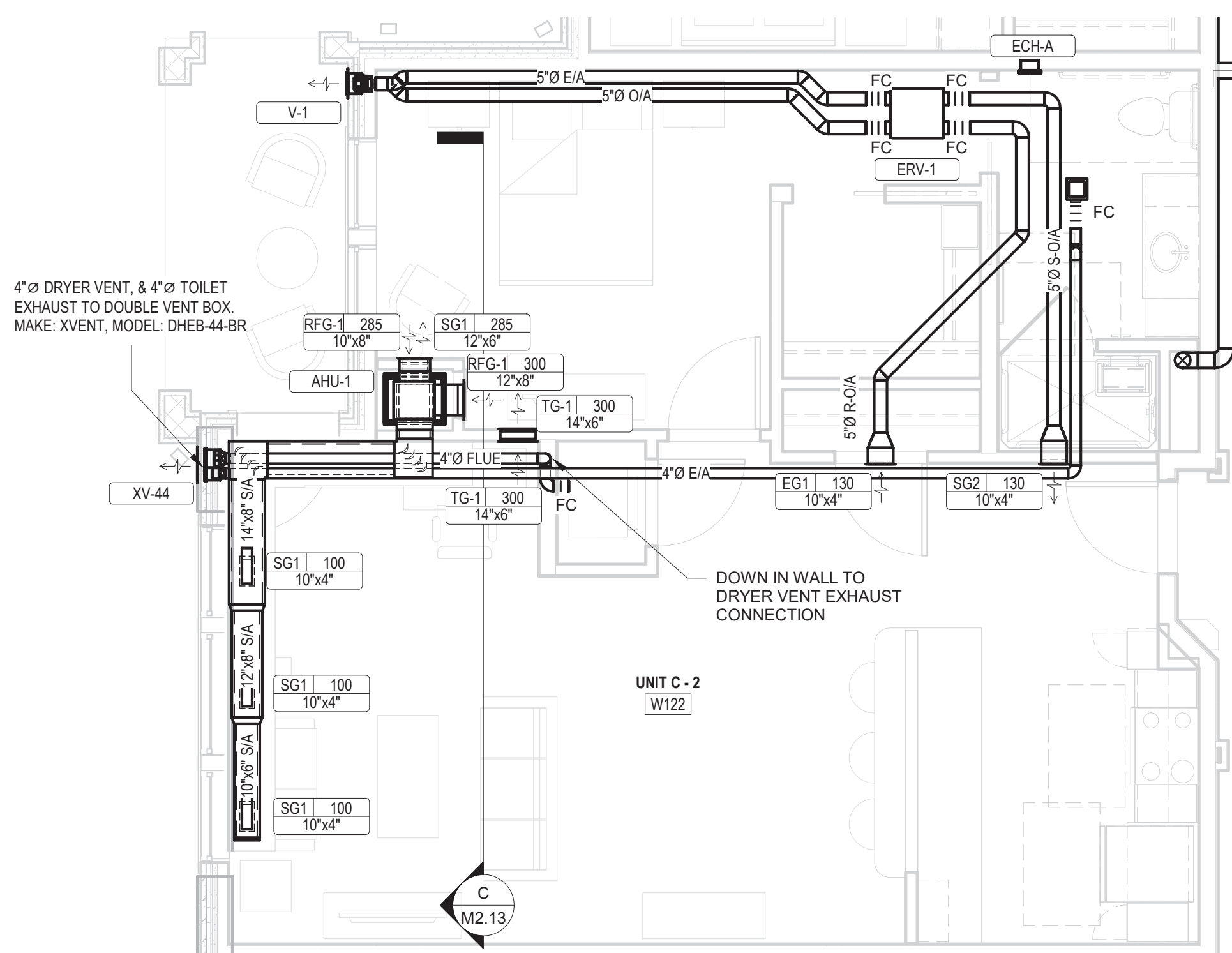
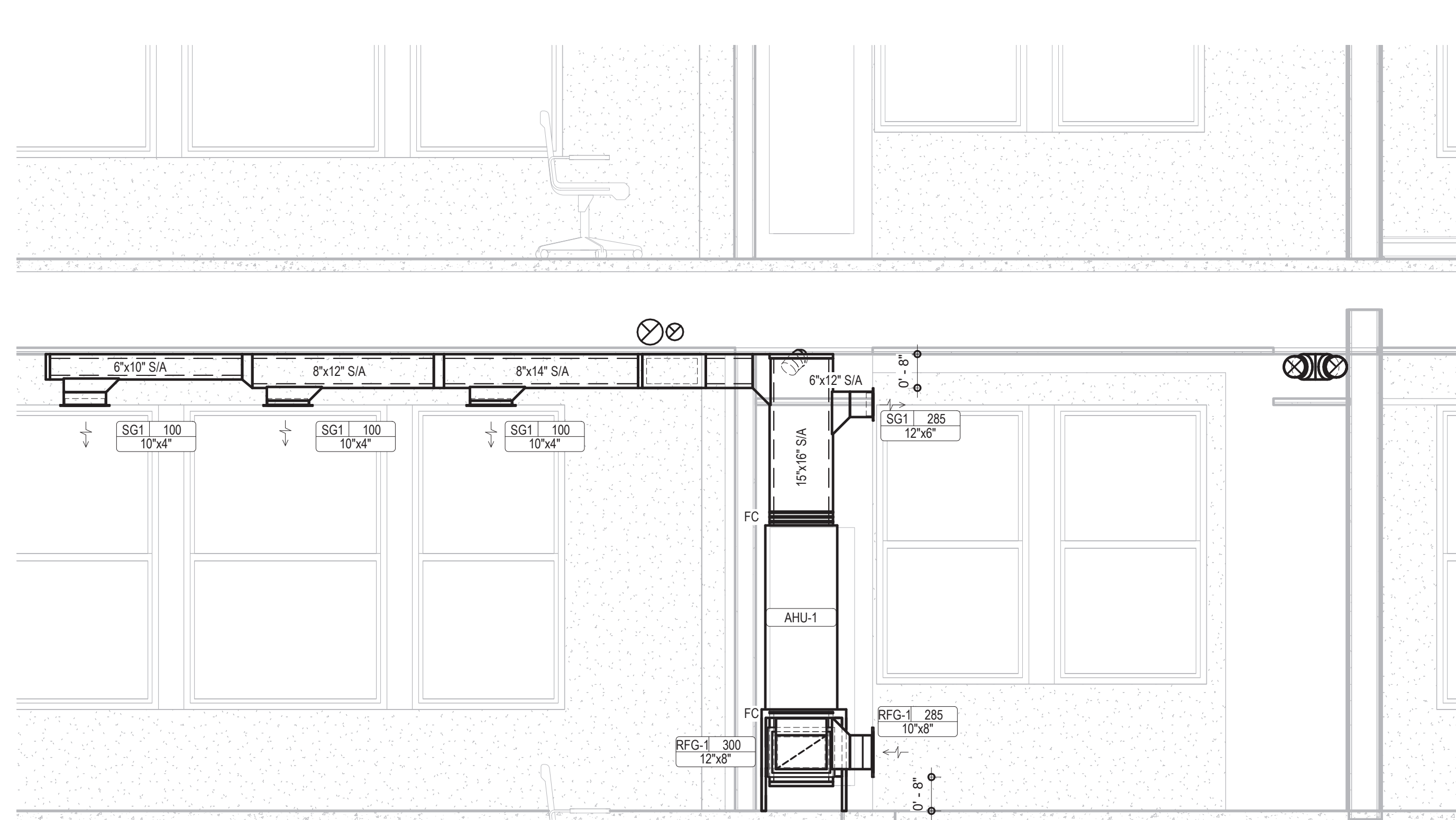
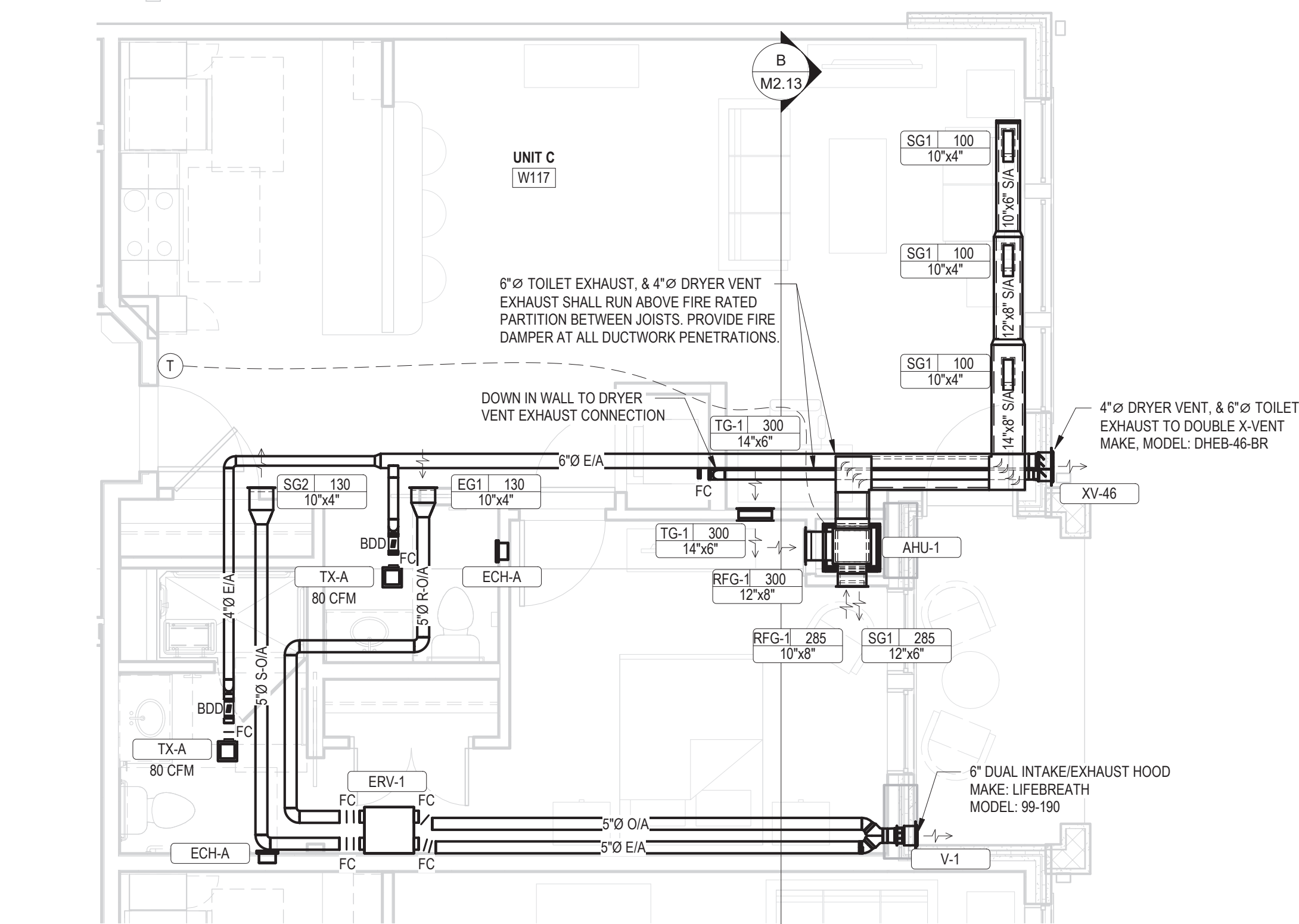
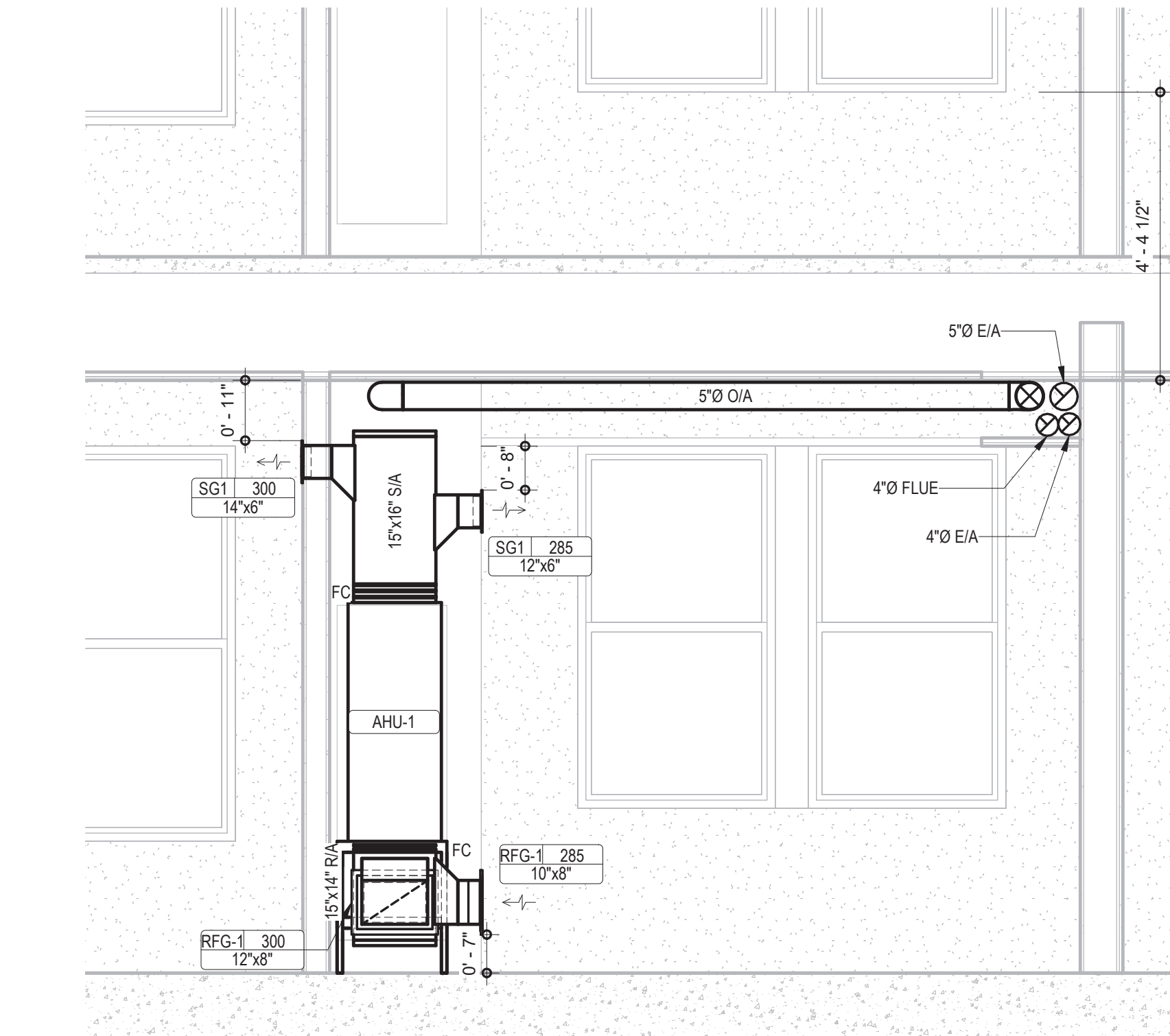
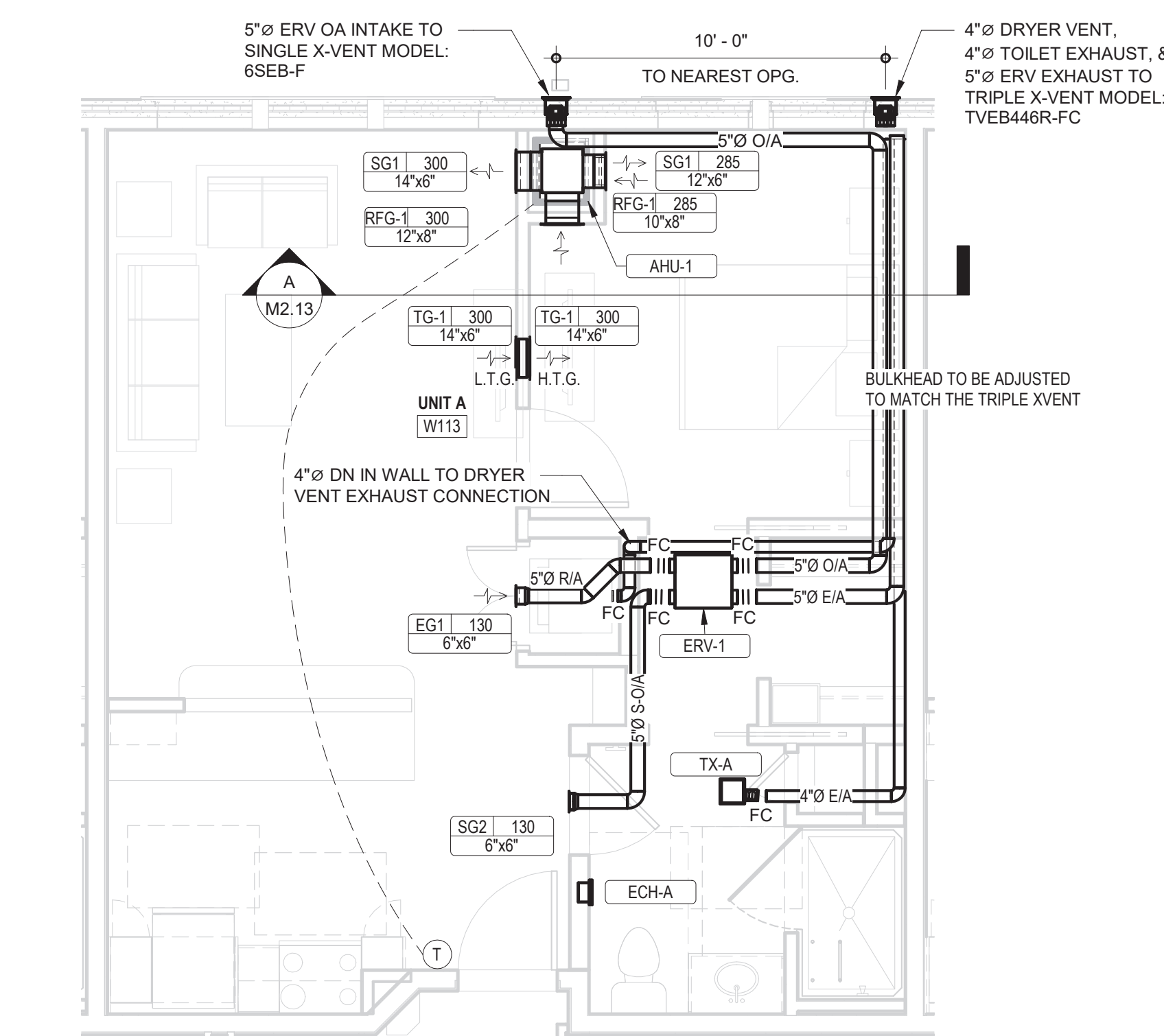
LAN ASSOCIATES  
Engineering, Planning, Architecture, Surveying, LLP  
LAN 258 #133611  
PROFESSIONAL CERTIFICATION: I CERTIFY THAT THESE DOCUMENTS WERE  
PREPARED OR APPROVED BY ME, AND THAT I AM A DULY LICENSED ENGINEER  
UNDER THE LAWS OF THE STATE OF NEW YORK.  
LICENSE NUMBER: 090385  
EXPIRATION DATE: 12/31/23

no.	date	revision

Project Name  
BROADVIEW - SENIOR LIVING AT PURCHASE  
COLLEGE - IL BUILDINGS  
Project Number  
4.1308.01  
Date  
4/30/2021  
Scale  
1/8" = 1'-0"  
Drawing  
IL EAST ROOF MECHANICAL  
PLAN

PERMIT / GMP SET





ARCHITECT

**HCM Design, Inc.**  
700 E. Pratt St, Suite 1200, Baltimore, MD 21202  
p. 410. 837. 7311

STRUCTURAL ENGINEER

**Morabito Consultants**  
952 Ridgebrook Road, suite 1700, Sparks MD 21152  
p. 410.467.2377

FOOD SERVICE

Scopos Hospitality Group  
300 West Chestnut Street, Suite 201, Ephrata, PA 1752  
p. 717.733.5810

## INTERIOR DESIGNER

Merlino Design Partnership, Inc.  
2200 Renaissance Blvd, Suite 300, Gulph Mills, PA 19406  
p. 610.313.9550

MEPFP ENGINEER

LAN Associates  
Engineering, Planning, Architecture Surveying, LLP  
252 Main Street, Goshen, NY 10924  
p. 201.447.6400

HCM/LCS



SENIOR LIVING  
AT PURCHASE COLLEGE

BROADVIEW - SENIOR LIVING AT  
PURCHASE COLLEGE - IL BUILDINGS

## hord | coplan | macht

ARCHITECTURE

LANDSCAPE ARCHITECTURE

## PLANNING

INTERIOR DESIGN



LAN ASSOCIATES

Engineering, Planning, Architecture, Surveying, LLP  
LAN JOB #1358/01  
PROFESSIONAL CERTIFICATION: I CERTIFY THAT THESE DOCUMENTS WERE  
PREPARED OR APPROVED BY ME, AND THAT I AM A DULY LICENSED ENGINEER  
UNDER THE LAWS OF THE STATE OF NEW YORK.  
LICENSE NUMBER: 090385  
EXPIRATION DATE: 1/31/23

no.	date	revision

Project Name  
BROADVIEW - SENIOR LIVING AT PURCHASE  
COLLEGE - IL BUILDINGS  
Project Number  
4.1308.01

Date \_\_\_\_\_

4/30/2021

Scale \_\_\_\_\_

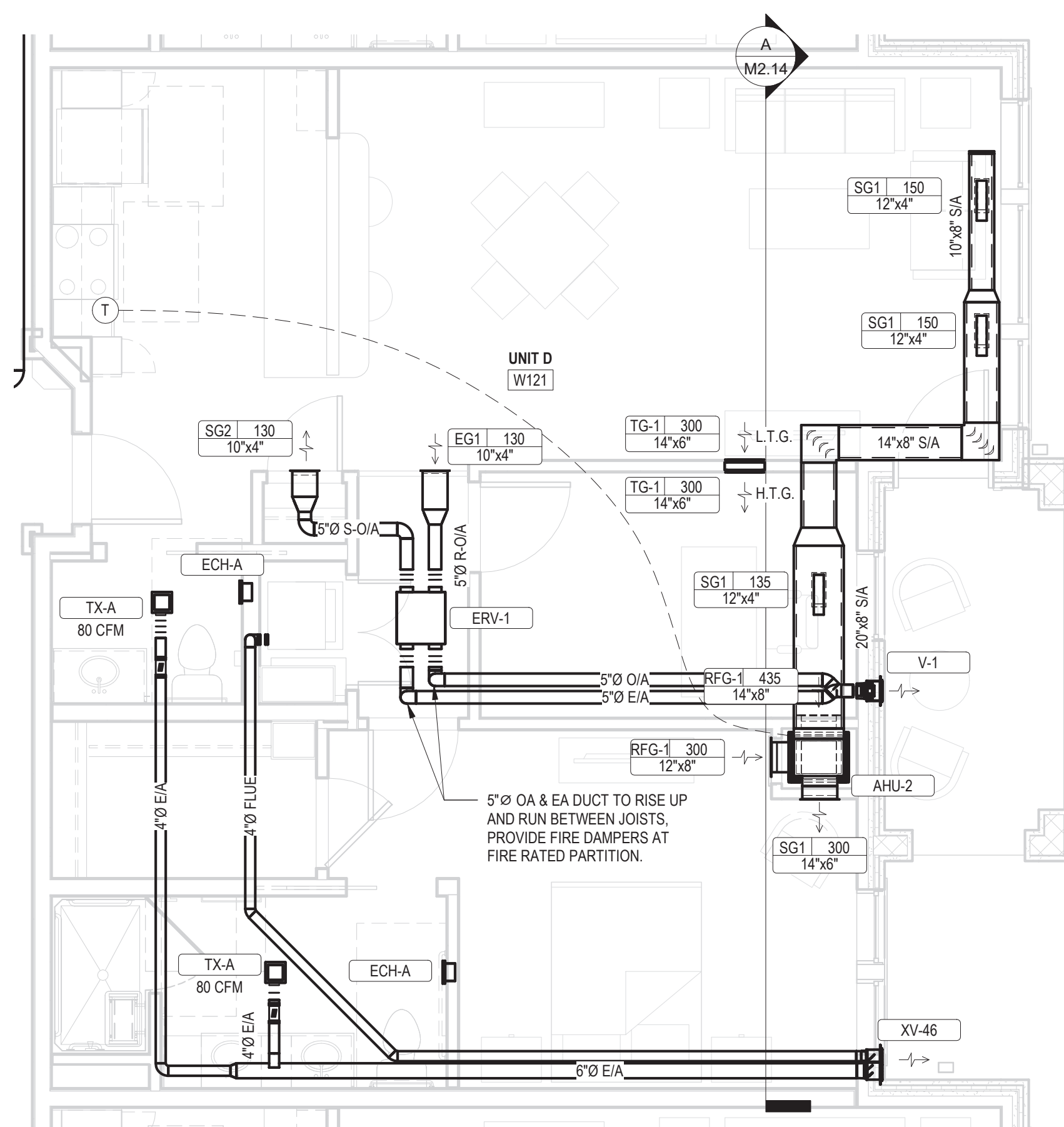
As indicated

## M2.13

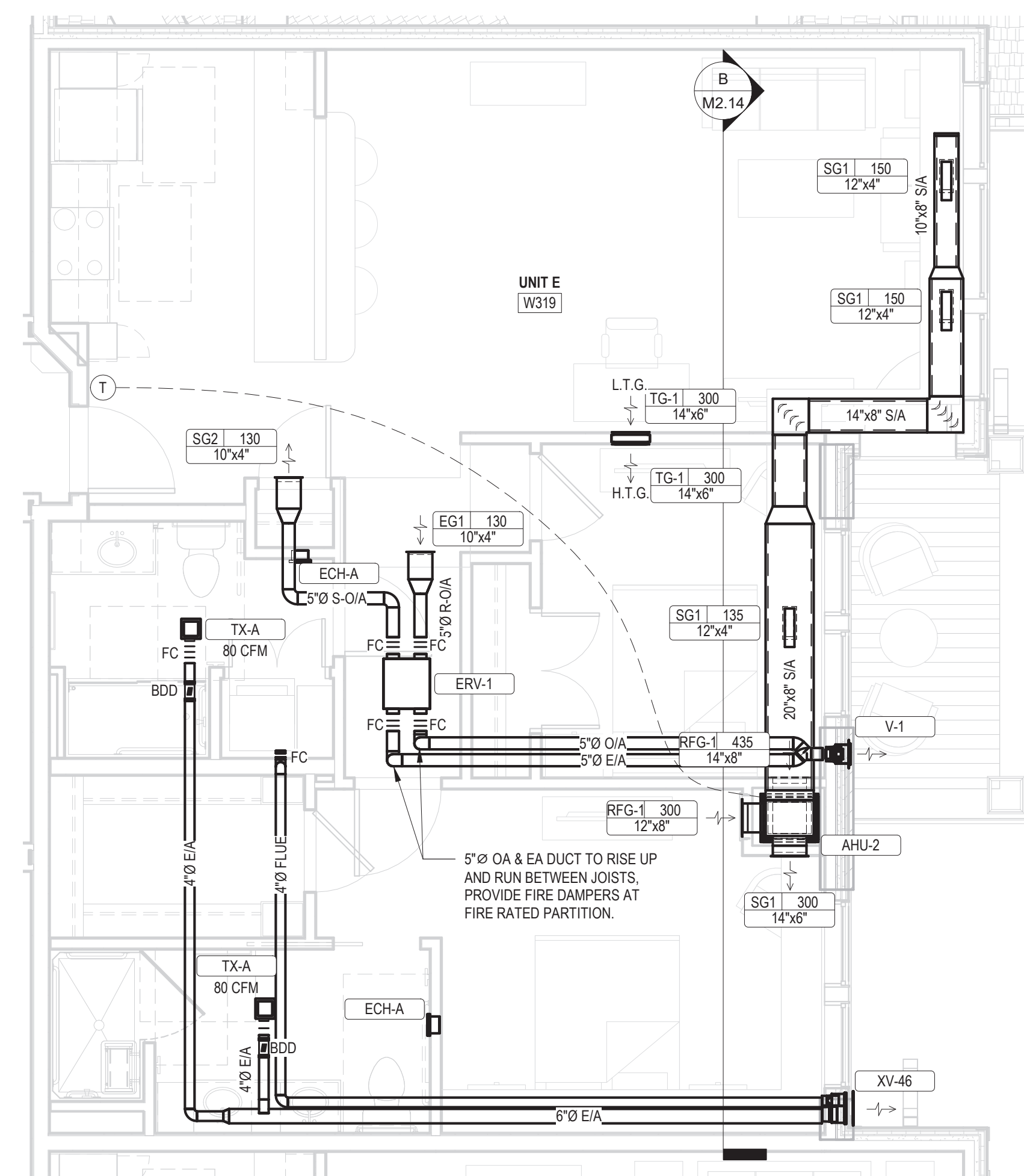
PERMIT / GMP SET

© Hord Coplan Macht, Inc.

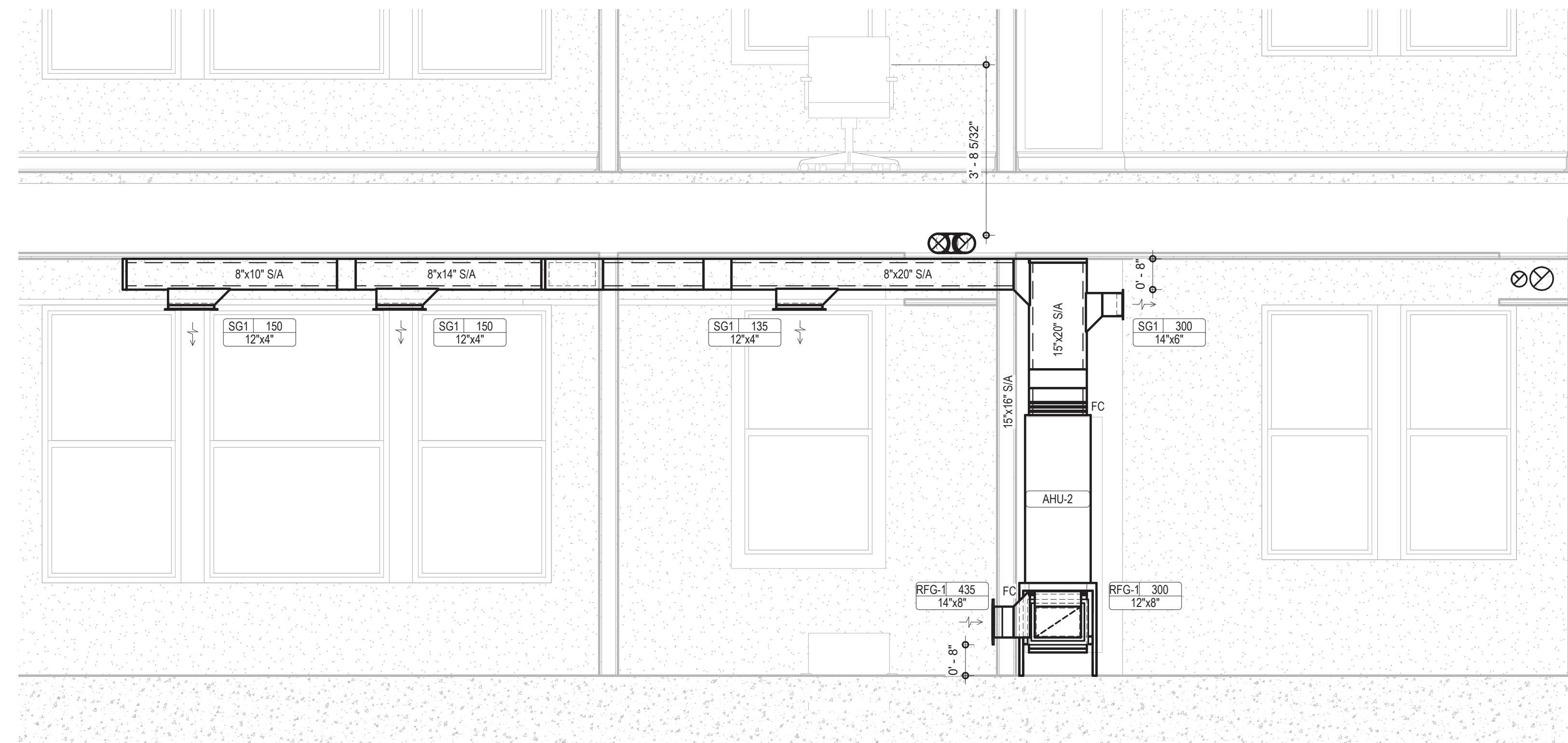




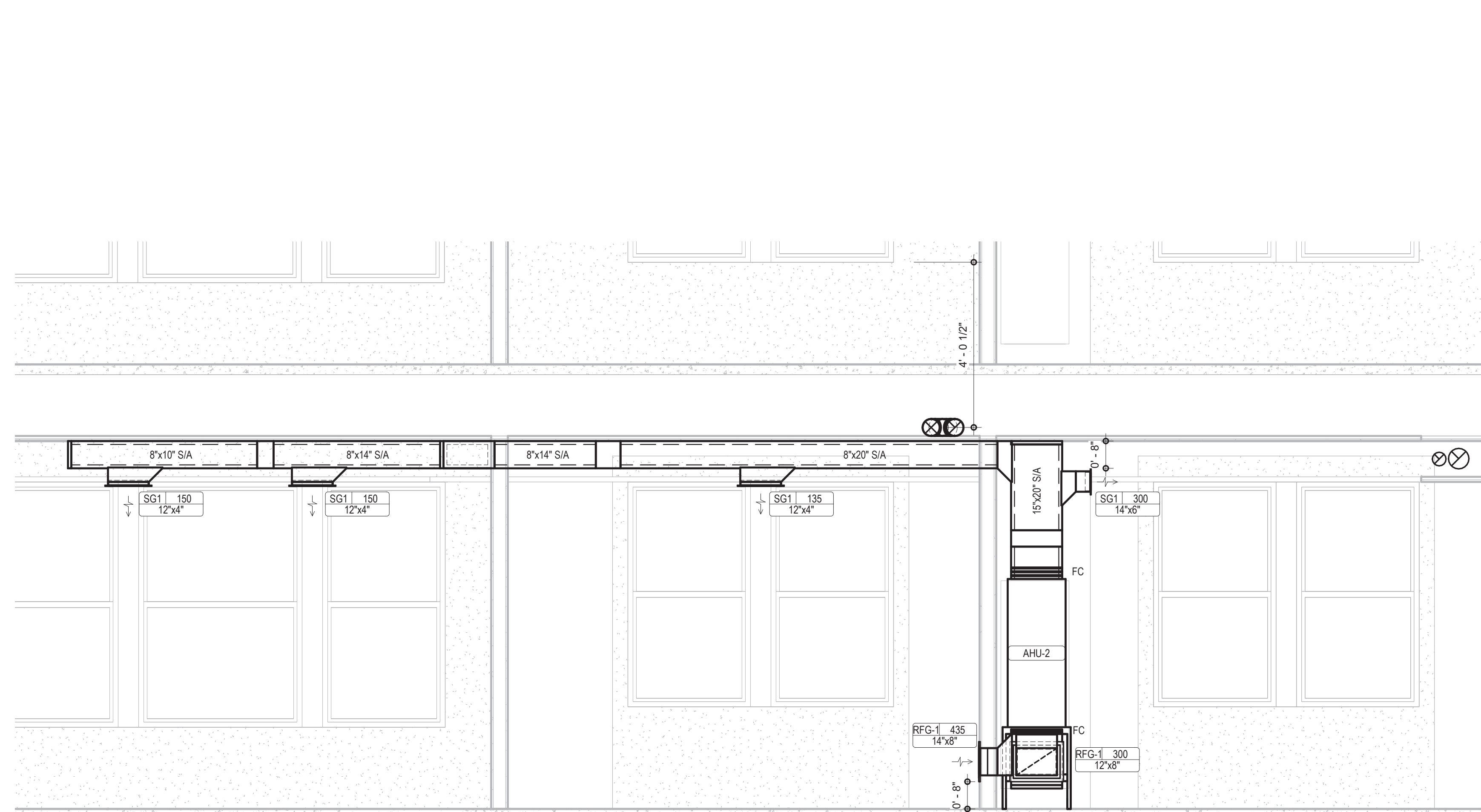
1 MECHANICAL ENLARGED UNIT D PLAN  
M2.14 1/4" = 1'-0"



2 MECHANICAL ENLARGED UNIT E PLAN  
M2.14 1/4" = 1'-0"



**A SECTION D**  
M2.14 1/2" = 1'-0"



B SECTION E  
M2.14 1/2" = 1'-0"

[illegible]



**MEPFP ENGINEER**  
LAN Associates  
Engineering, Planning, Architecture Surveying, LLP  
252 Main Street, Goshen, NY 10924  
p. 201.447.6400



**BROADVIEW**

**SENIOR LIVING**  
**AT PURCHASE COLLEGE**

BROADVIEW - SENIOR LIVING AT  
PURCHASE COLLEGE - IL BUILDINGS

ARCHITECTURE  
LANDSCAPE ARCHITECTURE  
PLANNING  
INTERIOR DESIGN



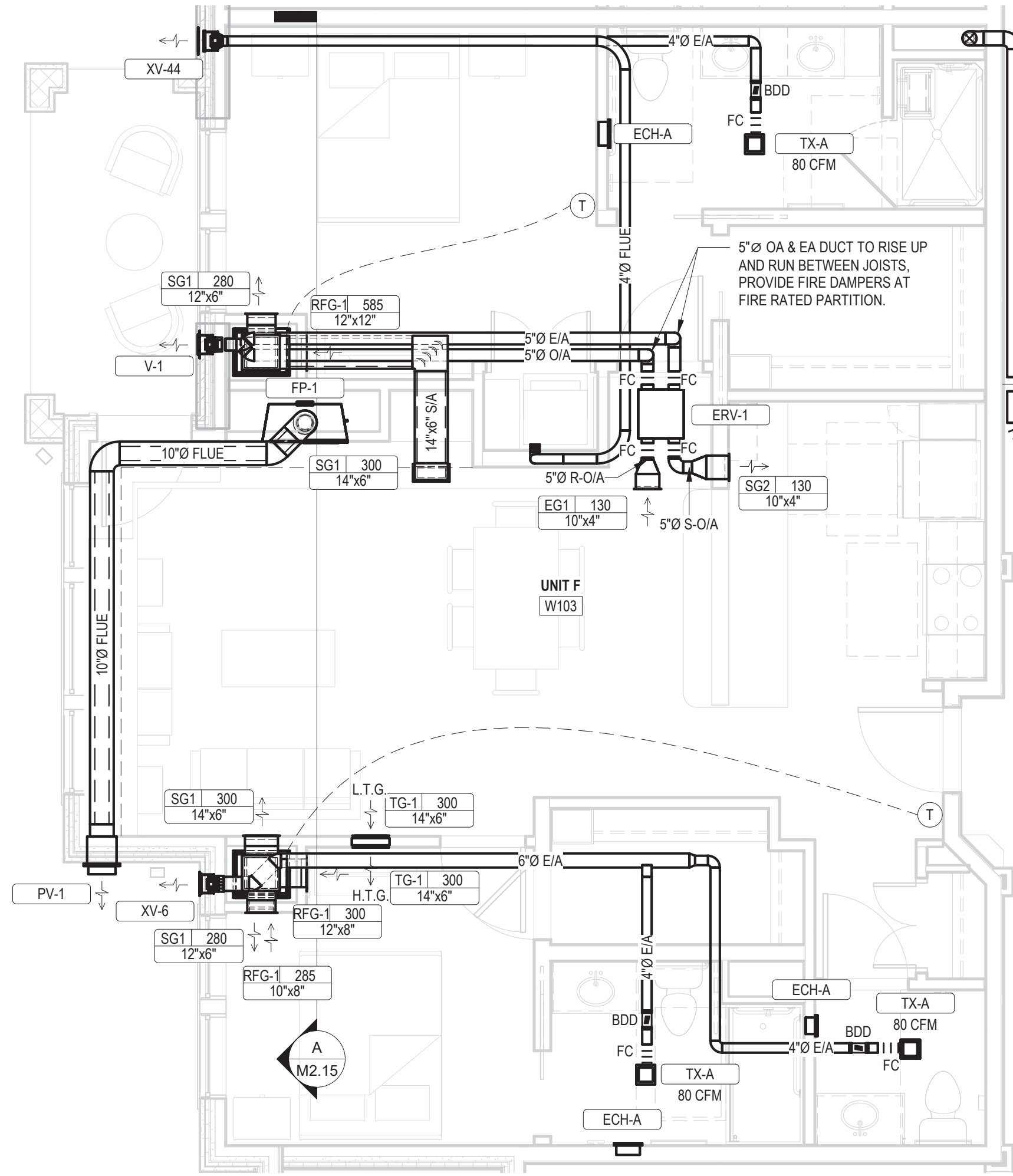
**LAN ASSOCIATES**  
Engineering, Planning, Architecture, Surveying, LLP  
LAN JOB #1308/01  
PROFESSIONAL CERTIFICATION: I CERTIFY THAT THESE DOCUMENTS WERE  
PREPARED OR APPROVED BY ME, AND THAT I AM A DULY LICENSED ENGINEER  
UNDER THE LAWS OF THE STATE OF NEW YORK.  
LICENSE NUMBER: 090385  
EXPIRATION DATE: 10/31/23

[illegible]

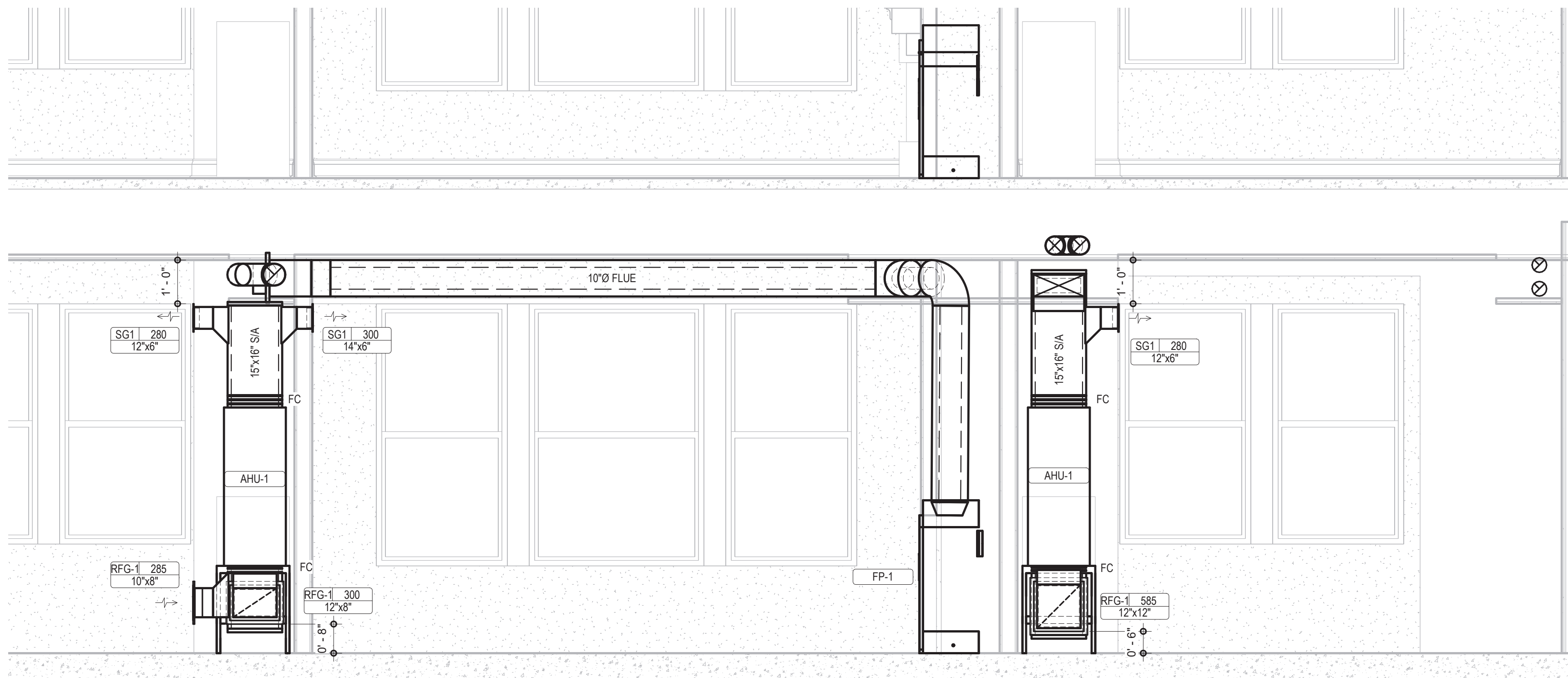
## M2.15

PERMIT / GMP SET

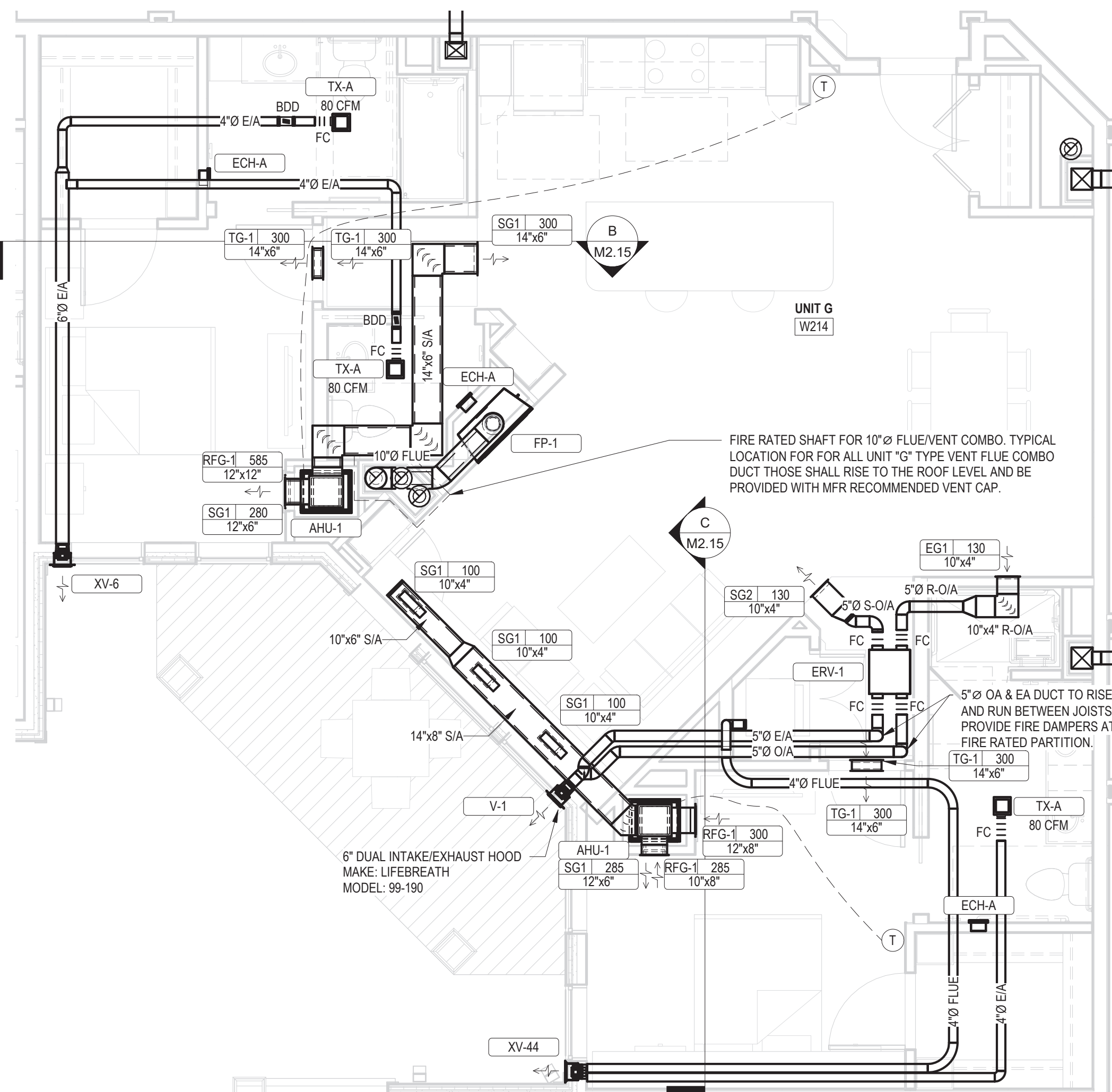
© Hord Coplan Macht, Inc.



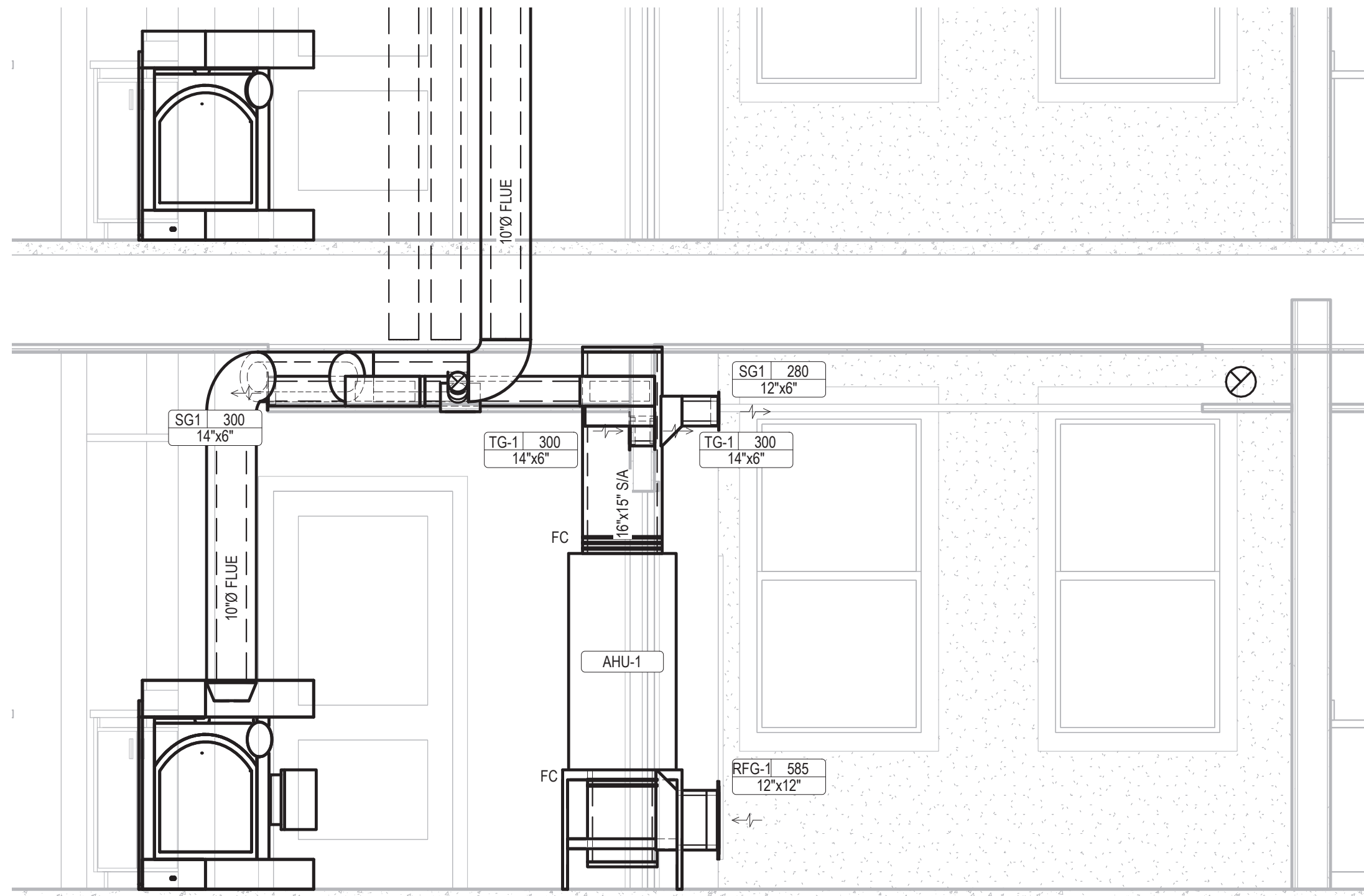
1 MECHANICAL ENLARGED UNIT F PLAN  
M2.15 1/4" = 1'-0"



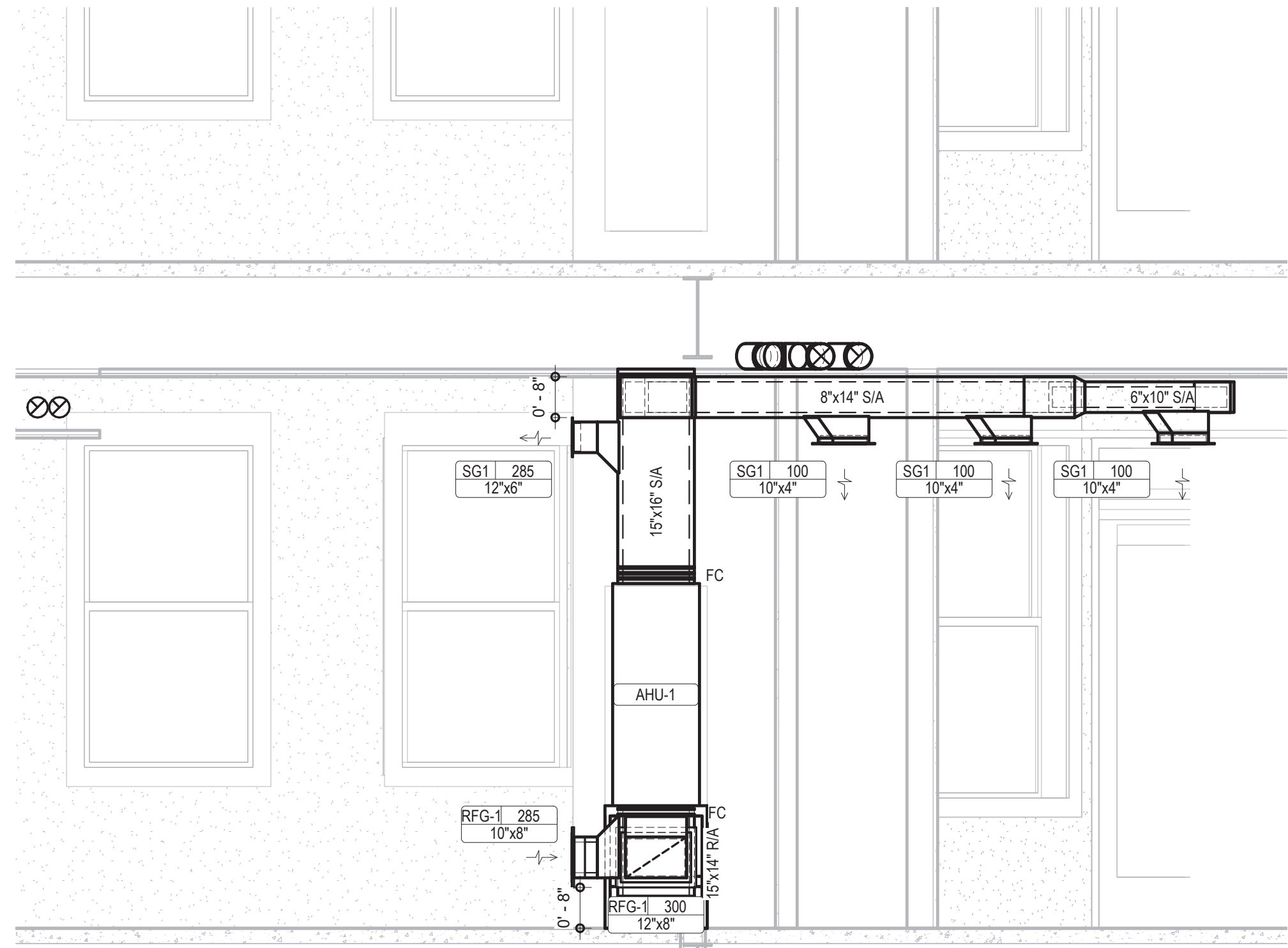
**A** SECTION F  
M2.15 1/2" = 1'-0"



2 MECHANICAL ENLARGED UNIT G PLAN  
M2.15 1/4" = 1'-0"



**B** SECTION G-1  
M2.15 1/2" = 1'-0"

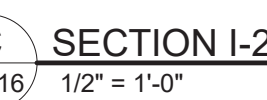


**C** SECTION G-2  
M2.15 1/2" = 1'-0"



no.	date	revision
Project Name		
BROADVIEW - SENIOR LIVING AT PURCHASE COLLEGE - IL BUILDINGS		
Project Number		
4.1308.01		
Date		
4/30/2021		
Scale		
As indicated		
Drawing		
ENLARGED UNIT PLANS		

© Hord Coplan Macht, Inc.









ARCHITECT  
HCM Design, Inc.  
700 E. Pratt St, Suite 1200, Baltimore, MD 21202  
p. 410. 837. 7311

STRUCTURAL ENGINEER  
Morabito Consultants  
952 Ridgeway Road, Suite 1700, Sparks MD 21152  
p. 410.467.2377

FOOD SERVICE  
Scopes Hospitality Group  
300 West Chestnut Street, Suite 201, Ephrata, PA 17522  
p. 717.733.5810

INTERIOR DESIGNER  
Merlino Design Partnership, Inc.  
2200 Renaissance Blvd, Suite 300, Gulph Mills, PA 19406  
p. 610.313.9550

MEPP ENGINEER  
LAN Associates  
Engineering, Planning, Architecture Surveying, LLP  
252 Main Street, Goshen, NY 10924  
p. 201.447.6400

HCM/LCS



BROADVIEW - SENIOR LIVING AT  
PURCHASE COLLEGE - IL BUILDINGS

hord | coplan | macht

ARCHITECTURE  
LANDSCAPE ARCHITECTURE  
PLANNING  
INTERIOR DESIGN



LAN ASSOCIATES  
Engineering, Planning, Architecture, Surveying, LLP  
LAN 258 #133811  
PROFESSIONAL CERTIFICATION: I CERTIFY THAT THESE DOCUMENTS WERE  
PREPARED OR APPROVED BY ME, AND THAT I AM A DULY LICENSED ENGINEER  
UNDER THE LAWS OF THE STATE OF NEW YORK.  
LICENSE NUMBER: 090385  
EXPIRATION DATE: 12/31/23

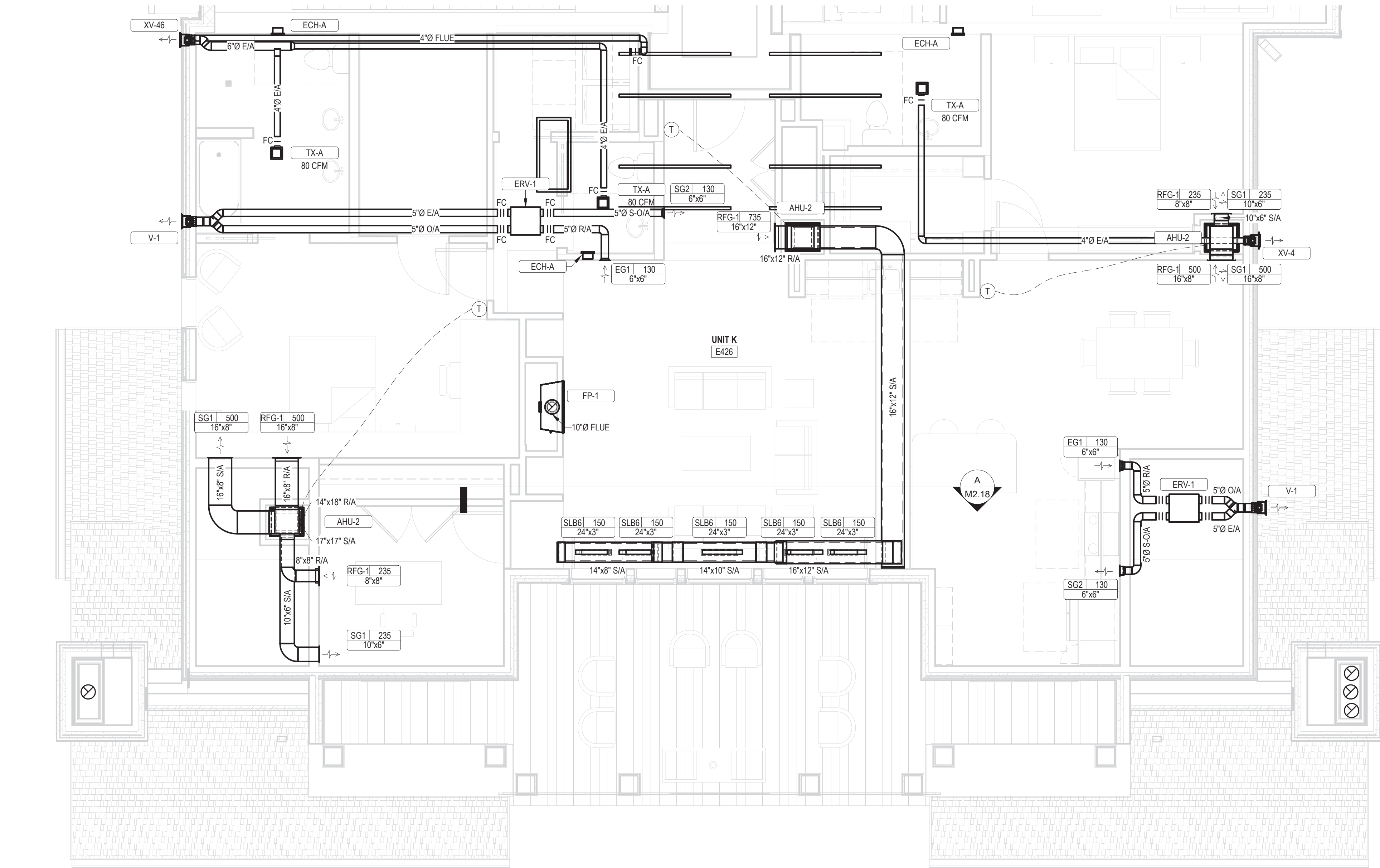
no.	date	revision
-----	------	----------

Project Name	BROADVIEW - SENIOR LIVING AT PURCHASE COLLEGE - IL BUILDINGS
Project Number	4.1308.01
Date	4/30/2021
Scale	As indicated
Drawing	ENLARGED UNIT PLANS

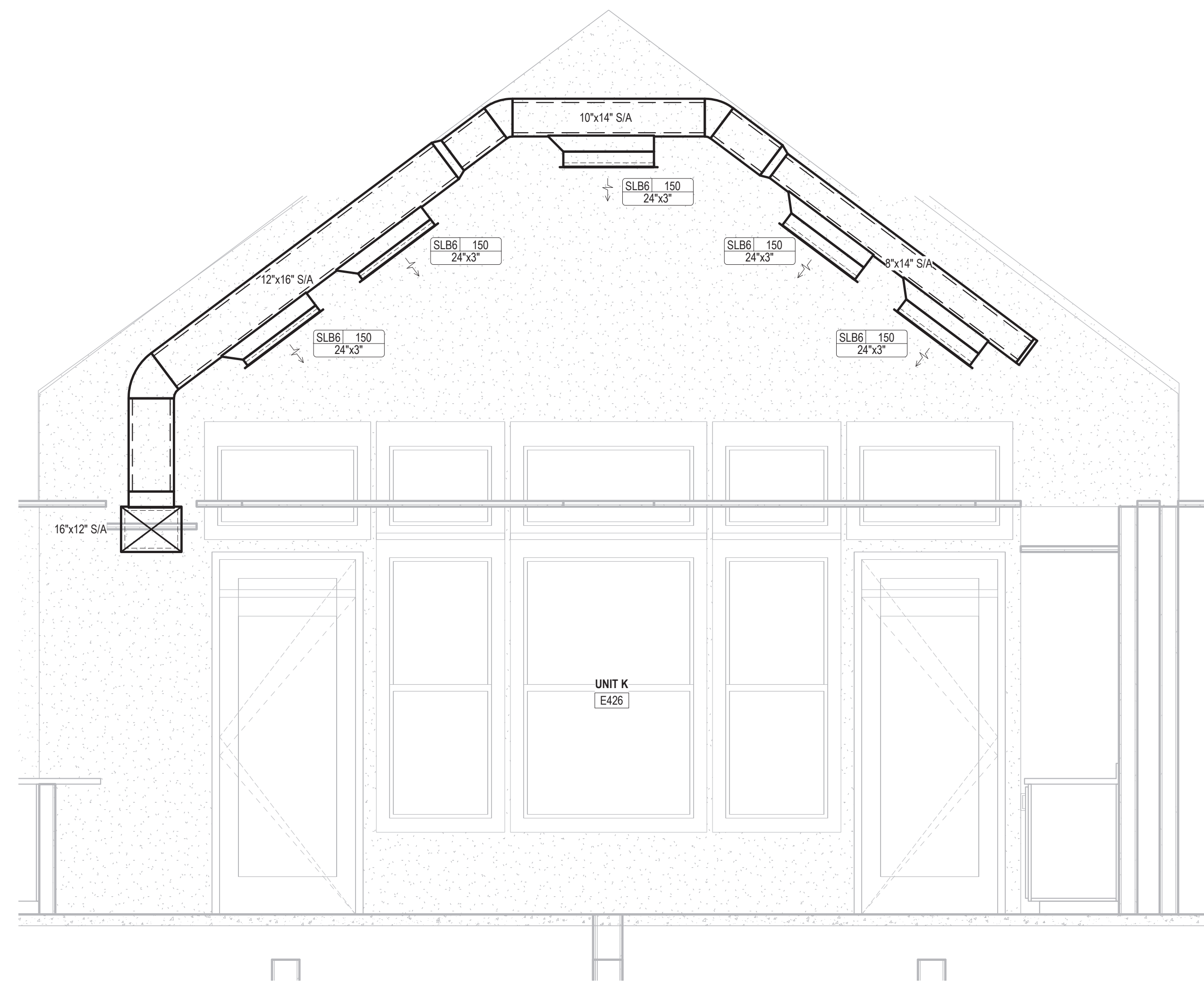
M2.18

PERMIT / GMP SET

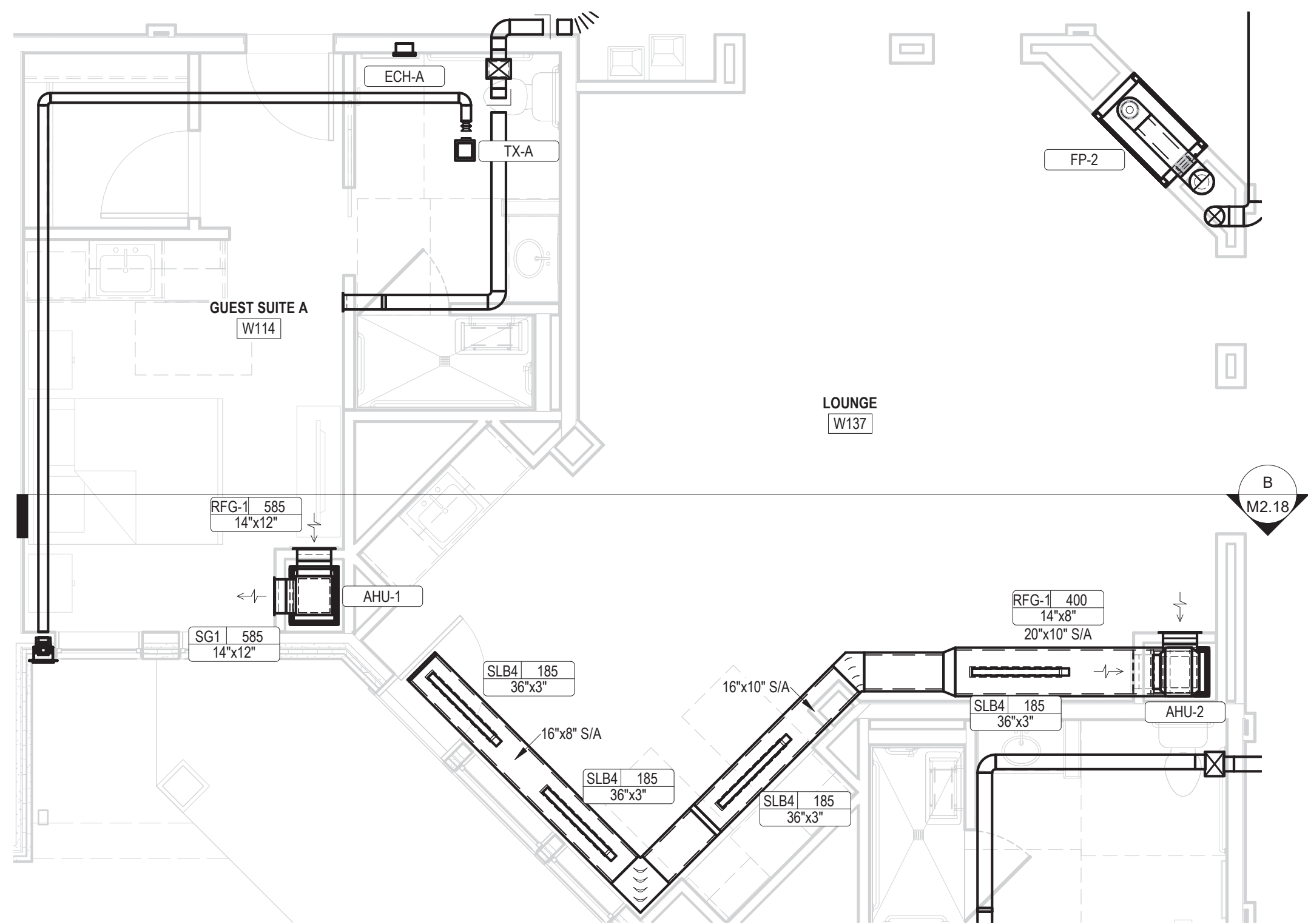
© Hord Coplan Macht, Inc.



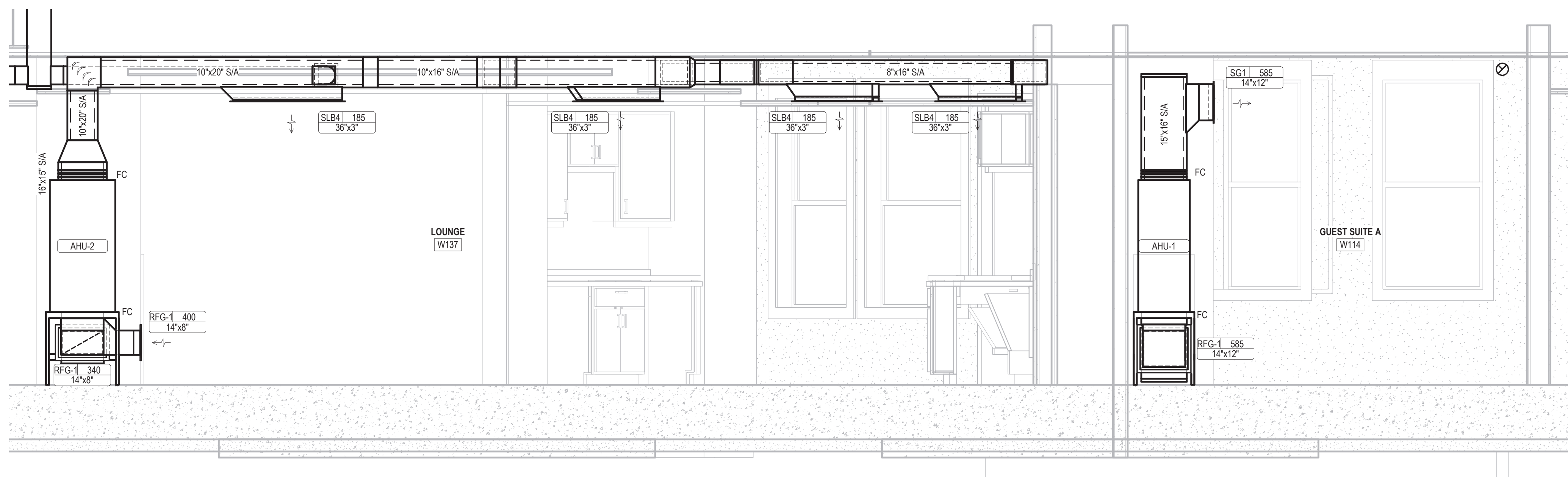
1 MECHANICAL ENLARGED UNIT K PLAN  
M2.18 1/4" = 1'-0"



A SECTION K  
M2.18 1/2" = 1'-0"

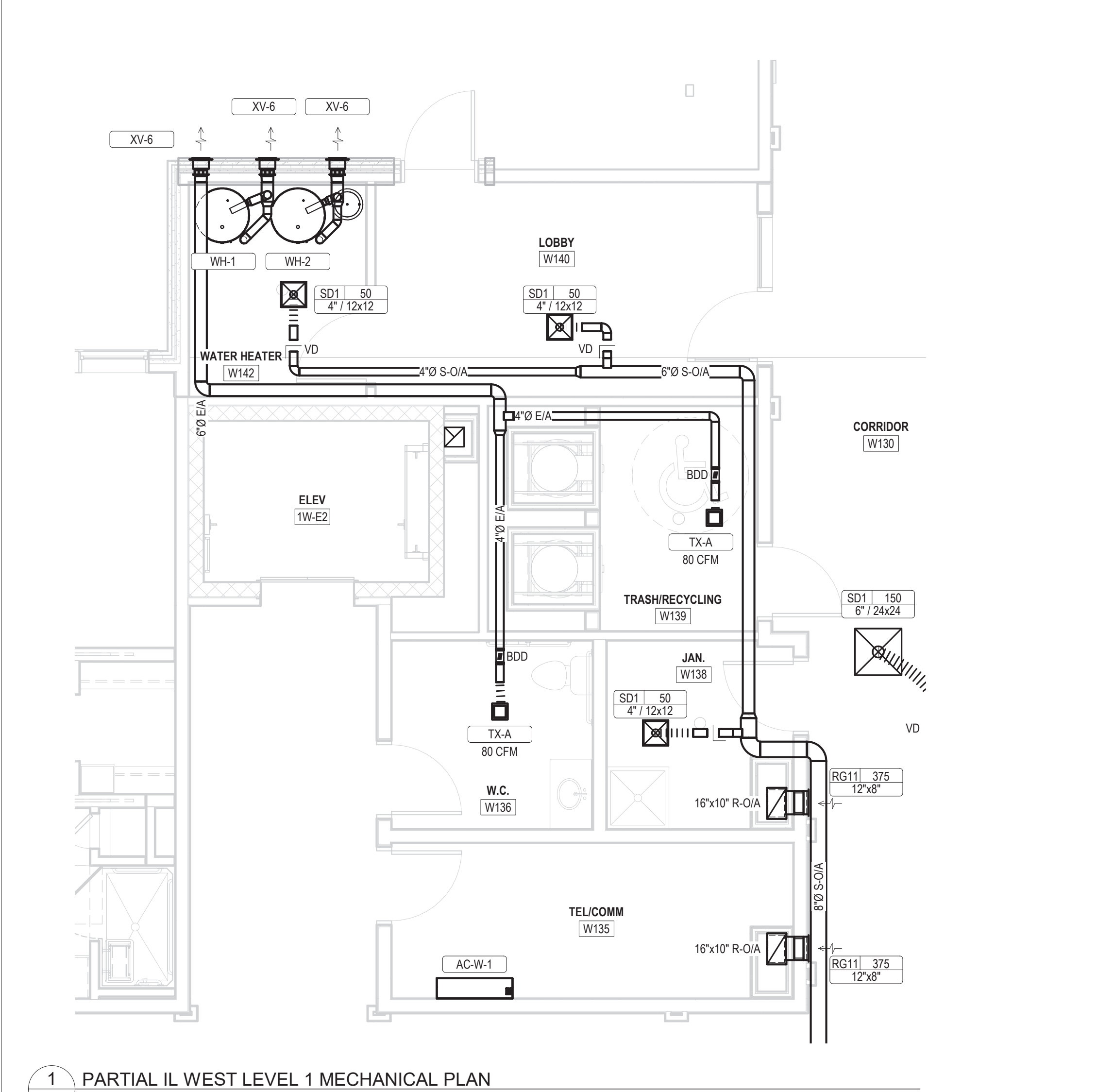


2 MECHANICAL ENLARGED GUEST SUITE AND LOUNGE PLAN  
M2.18 1/4" = 1'-0"

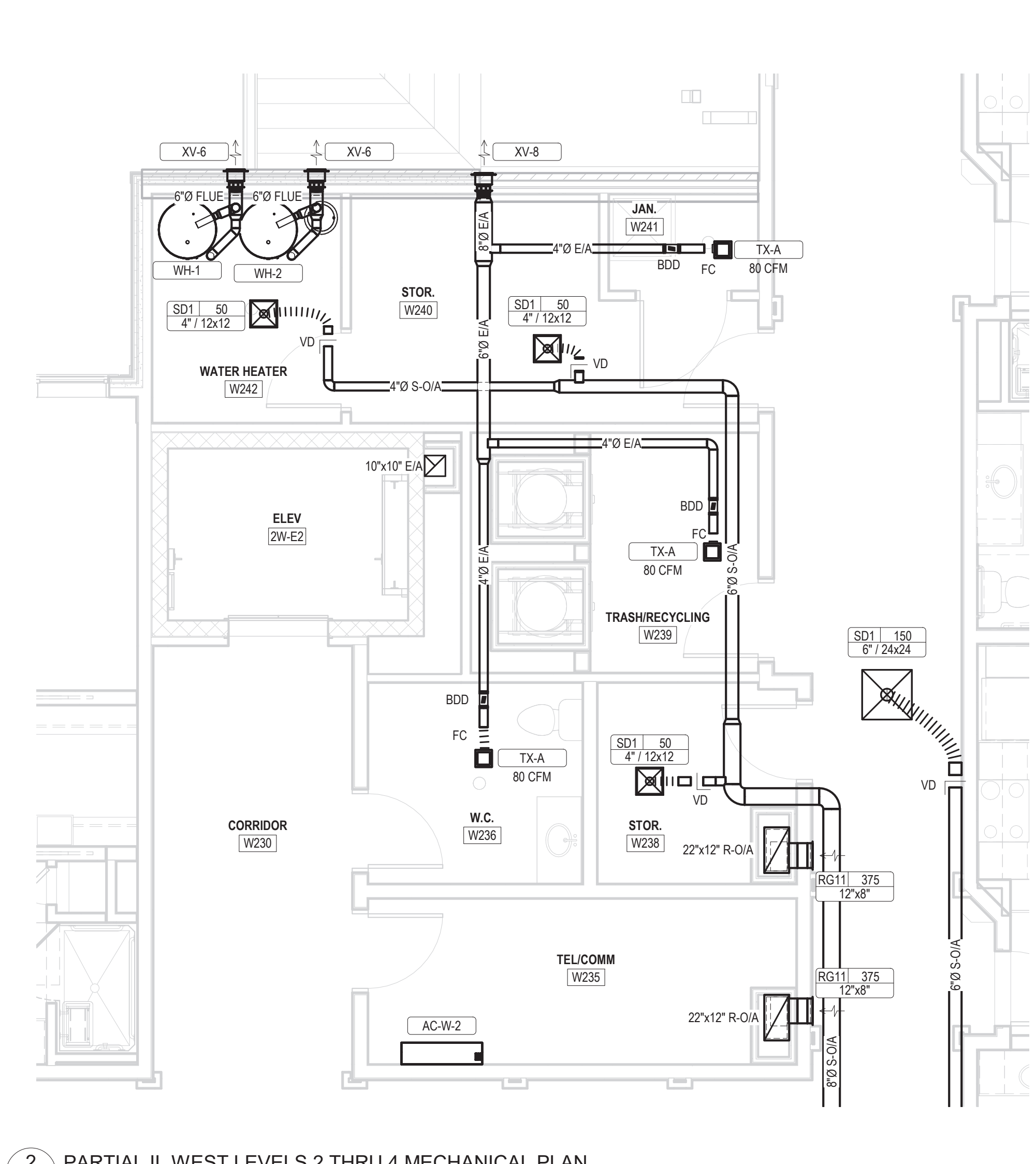


B SECTION G-S  
M2.18 1/2" = 1'-0"

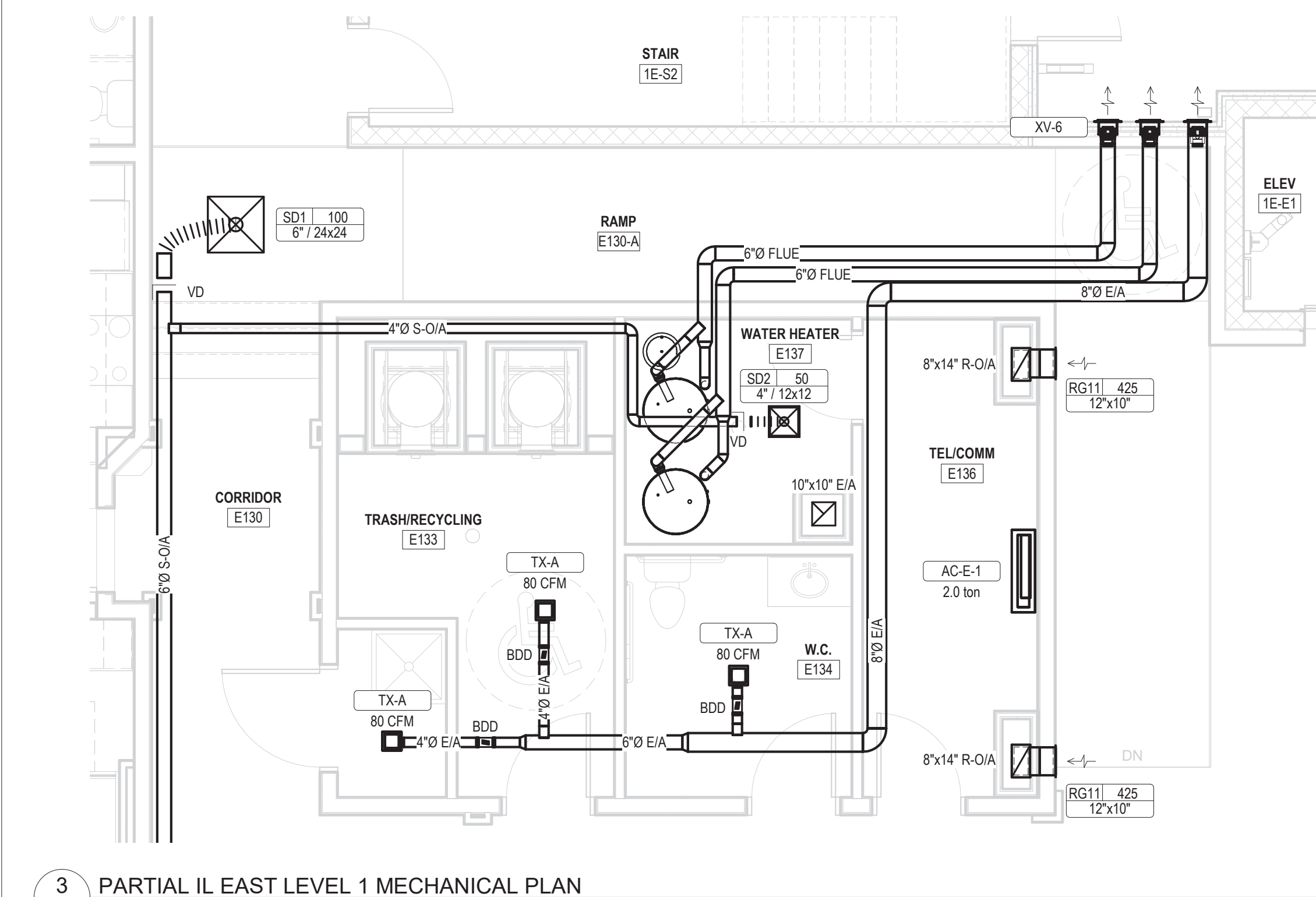




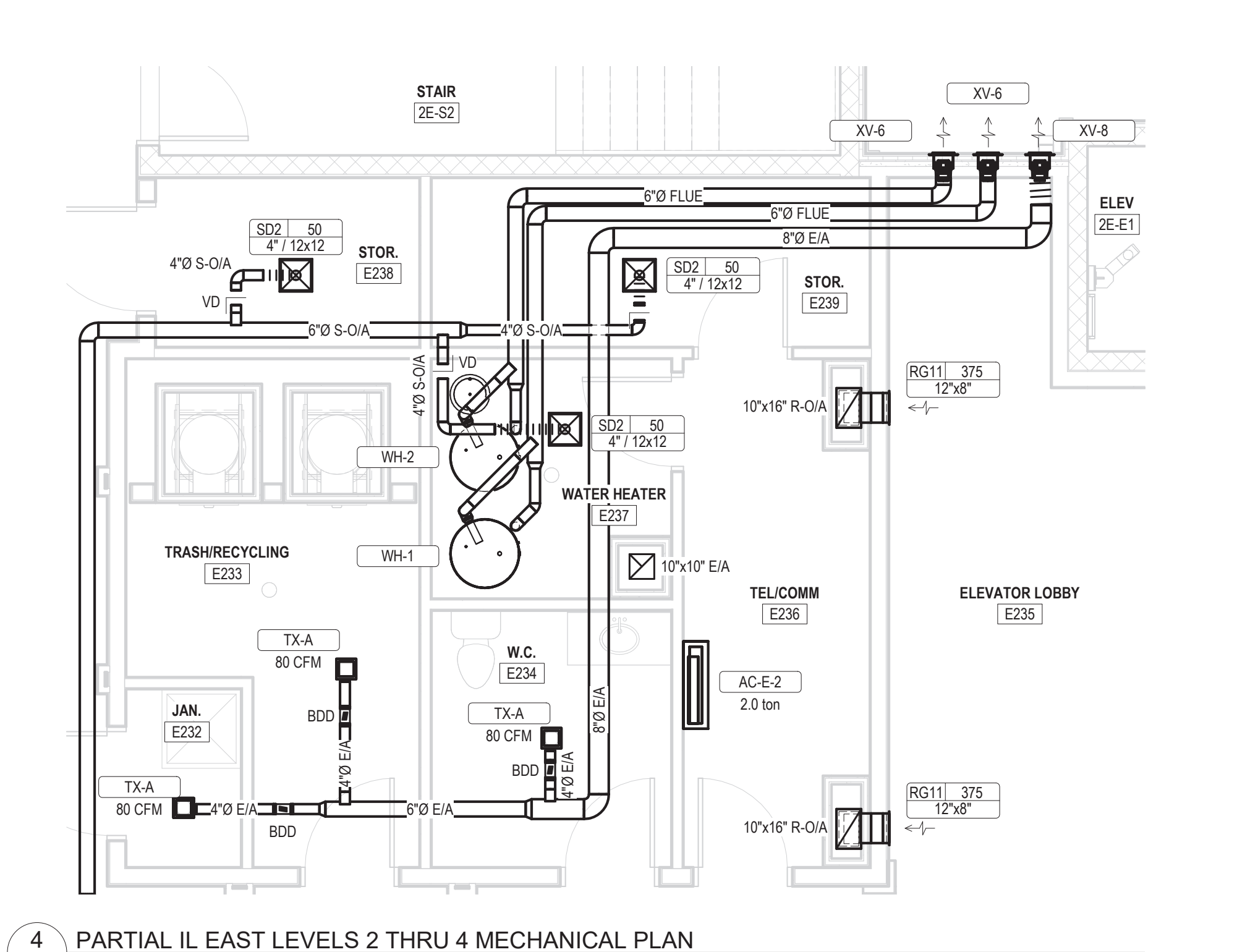
1 PARTIAL IL WEST LEVEL 1 MECHANICAL PLAN  
M2.19 1/4" = 1'-0"



2 PARTIAL IL WEST LEVELS 2 THRU 4 MECHANICAL PLAN  
M2.19 1/4" = 1'-0"



3 PARTIAL IL EAST LEVEL 1 MECHANICAL PLAN  
M2.19 1/4" = 1'-0"



4 PARTIAL IL EAST LEVELS 2 THRU 4 MECHANICAL PLAN  
M2.19 1/4" = 1'-0"

**ARCHITECT**  
HCM Design, Inc.  
700 E. Pratt St, Suite 1200, Baltimore, MD 21202  
p. 410. 837. 7311

**STRUCTURAL ENGINEER**  
Morabito Consultants  
952 Ridgeway Road, Suite 1700, Sparks MD 21152  
p. 410.467.2377

**FOOD SERVICE**  
Scopes Hospitality Group  
300 West Chestnut Street, Suite 201, Ephrata, PA 17522  
p. 717.733.5810

**INTERIOR DESIGNER**  
Merlino Design Partnership, Inc.  
2200 Renaissance Blvd, Suite 300, Gulph Mills, PA 19406  
p. 610.313.9550

**MEPP ENGINEER**  
LAN Associates  
Engineering, Planning, Architecture Surveying, LLP  
252 Main Street, Goshen, NY 10924  
p. 201.447.6400

HCM/LCS



BROADVIEW - SENIOR LIVING AT  
PURCHASE COLLEGE - IL BUILDINGS

hord | coplan | macht

ARCHITECTURE  
LANDSCAPE ARCHITECTURE  
PLANNING  
INTERIOR DESIGN



LAN ASSOCIATES  
Engineering, Planning, Architecture, Surveying, LLP  
LAN 258 #133611  
PROFESSIONAL CERTIFICATION: I CERTIFY THAT THESE DOCUMENTS WERE  
PREPARED OR APPROVED BY ME, AND THAT I AM A DULY LICENSED ENGINEER  
LICENSE NUMBER: 090385  
EXPIRATION DATE: 12/31/23


no.	date	revision
-----	------	----------

Project Name  
BROADVIEW - SENIOR LIVING AT PURCHASE  
COLLEGE - IL BUILDINGS  
Project Number  
4.1308.01

Date  
4/30/2021

Scale  
1/4" = 1'-0"

Drawing  
ENLARGED PARTIAL FLOOR  
PLANS

PERMIT / GMP SET

© Hord Coplan Macht, Inc.

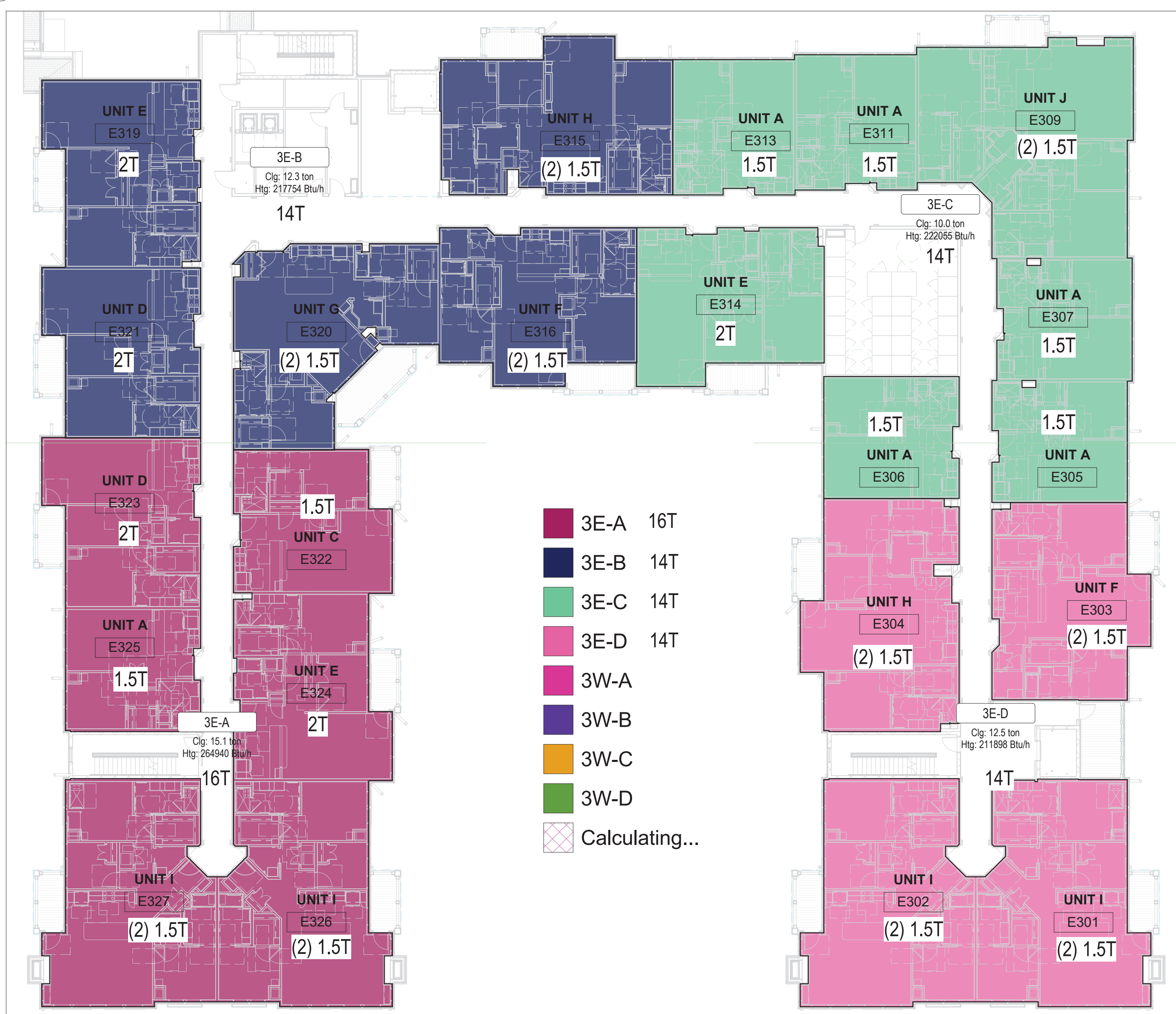




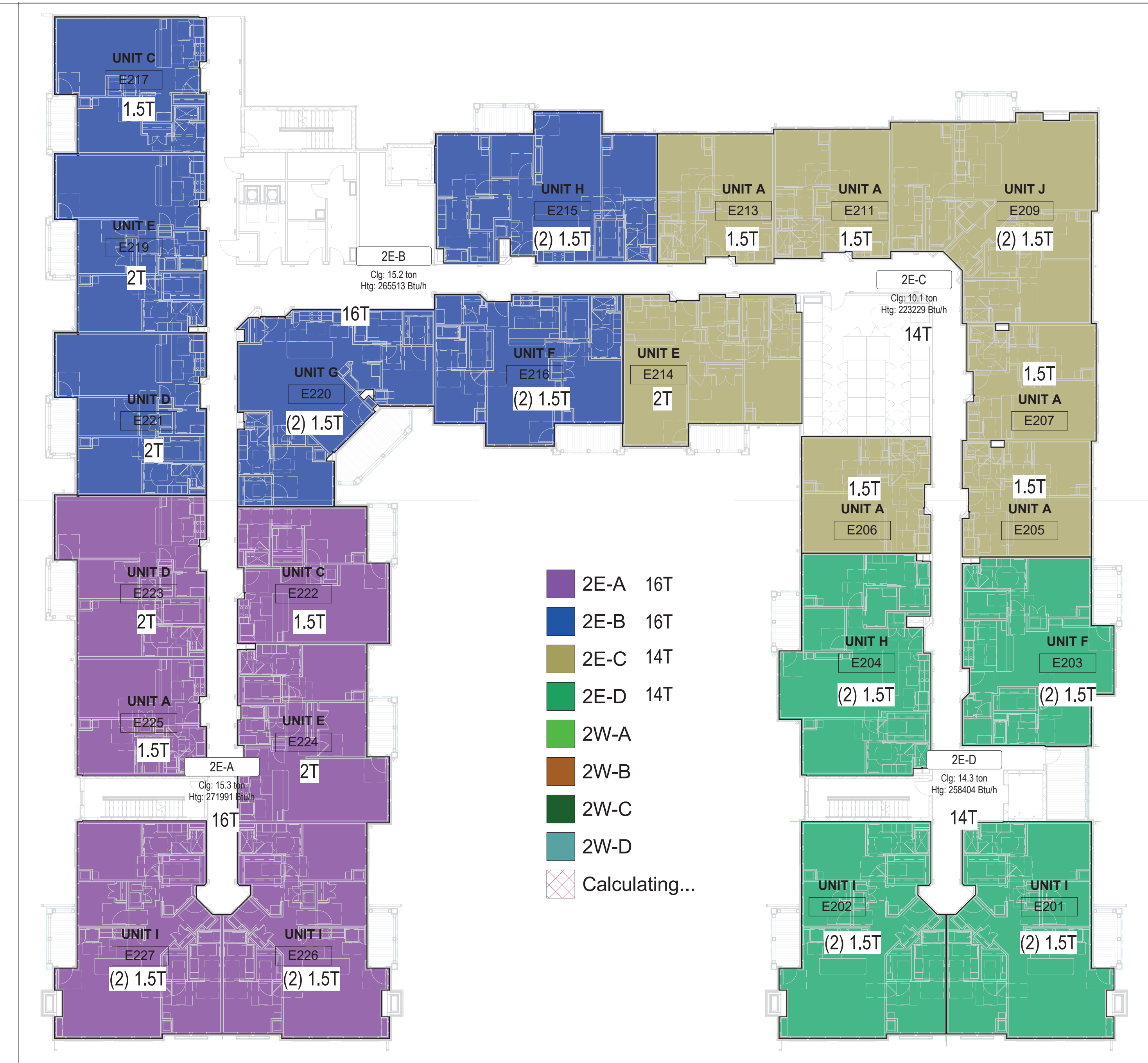




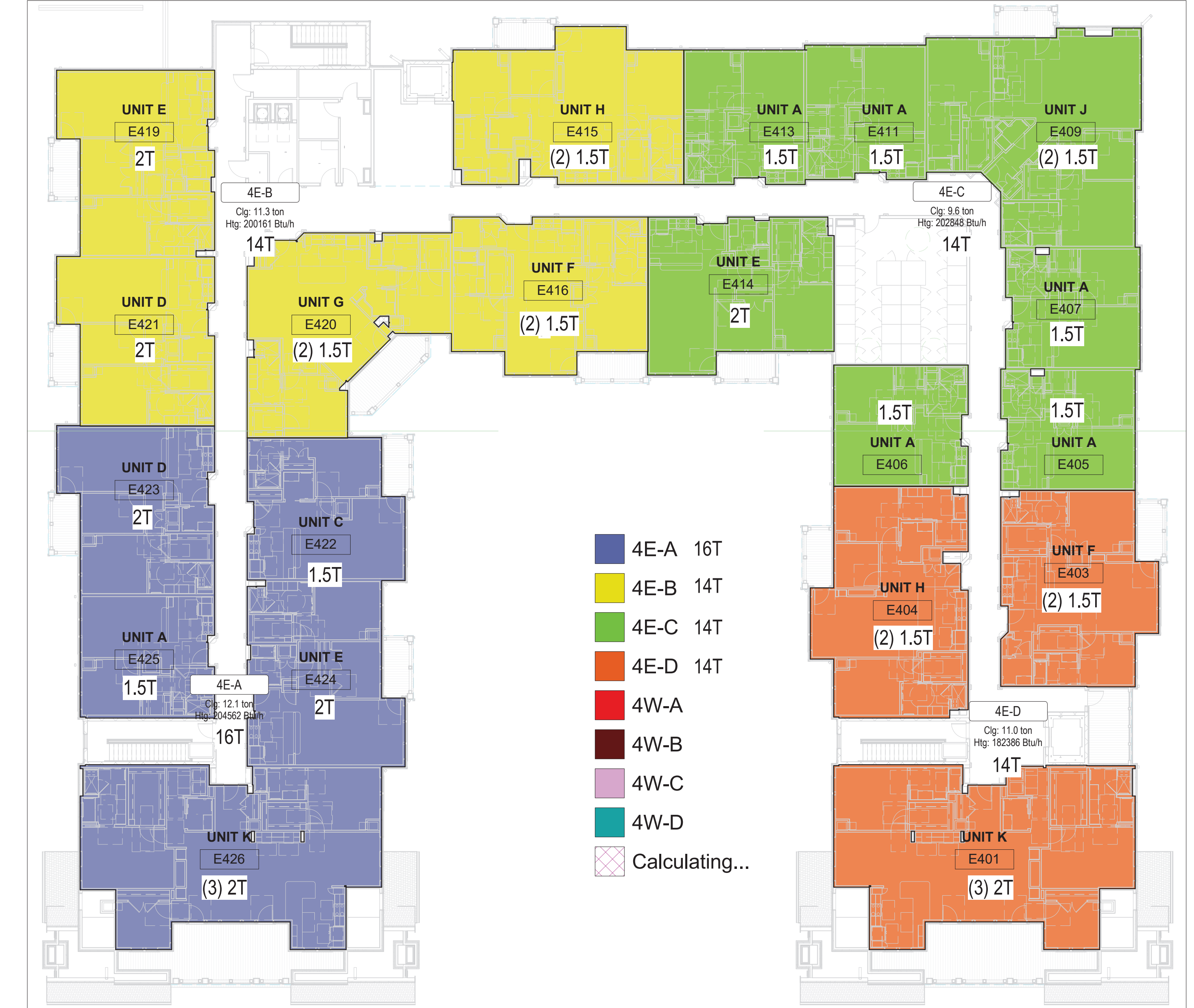
1 IL EAST 1 VRF ZONING PLAN  
M3.02 1/16" = 1'-0"



3 IL EAST 3 VRF ZONING PLAN  
M3.02 1/16" = 1'-0"



2 IL EAST 2 VRF ZONING PLAN  
M3.02 1/16" = 1'-0"



4 IL EAST 4 VRF ZONING PLAN  
M3.02 1/16" = 1'-0"

**ARCHITECT**  
HCM Design, Inc.  
700 E. Pratt St, Suite 1200, Baltimore, MD 21202  
p. 410. 837. 7311

**STRUCTURAL ENGINEER**  
Morabito Consultants  
952 Ridgebrook Road, suite 1700, Sparks MD 21152  
p. 410.467.2377

**FOOD SERVICE**  
Scopes Hospitality Group  
300 West Chestnut Street, Suite 201, Ephrata, PA 17522  
p. 717.733.5810

**INTERIOR DESIGNER**  
Merlino Design Partnership, Inc.  
2200 Renaissance Blvd, Suite 300, Gulph Mills, PA 19406  
p. 610.313.9550

**MEPP ENGINEER**  
LAN Associates  
Engineering, Planning, Architecture Surveying, LLP  
252 Main Street, Goshen, NY 10924  
p. 201.447.6400



BROADVIEW - SENIOR LIVING AT  
PURCHASE COLLEGE - IL BUILDINGS

hord | coplan | machi

ARCHITECTURE  
LANDSCAPE ARCHITECTURE  
PLANNING  
INTERIOR DESIGN



LAN ASSOCIATES  
Engineering, Planning, Architecture, Surveying, LLP  
LAN 258 #13361  
PROFESSIONAL CERTIFICATION: I CERTIFY THAT THESE DOCUMENTS WERE  
PREPARED OR APPROVED BY ME, AND THAT I AM A DULY LICENSED ENGINEER  
UNDER THE LAWS OF THE STATE OF NEW YORK.  
LICENSE NUMBER: 090385  
EXPIRATION DATE: 12/31/23

no.	date	revision

Project Name  
BROADVIEW - SENIOR LIVING AT PURCHASE  
COLLEGE - IL BUILDINGS  
Project Number  
4.1308.01  
Date  
4/30/2021  
Scale  
1/16" = 1'-0"  
Drawing  
IL EAST BUILDING MECHANICAL  
VRF ZONING PLAN

M3.02

PERMIT / GMP SET

© Hord Coplan Machi, Inc.



## PACKAGED ROOFTOP GAS-FIRED HEATING & DX COOLING UNIT SCHEDULE

TAG NO.	AREA SERVED	MFG'R.	MODEL No.	SUPPLY (CFM)	MIN. OUTDOOR AIR (CFM)	SUPPLY FAN DATA			DX COOLING				GAS HEATING				ENERGY RECOVERY WHEEL				COMPRESSOR	COND. FANS	POWER EXHAUST FAN			ELECTRICAL DATA			EFFICIENCY	FILTER	UNIT DIMENSIONS (L x W x H) (IN)	APPROX. UNIT WEIGHT (LBS)	REFRIGERANT TYPE	REMARKS												
						EXT SP (IN)	BHP	MHP	VFD	COOLING (TMBH)	COOLING (SMBH)	EADB (°F)	EAWB (°F)	LADB (°F)	LAWB (°F)	INPUT (MBH)	OUTPUT (MBH)	EAT (°F)	LAT (°F)	MIN GAS PRESSURE			COOLING		HEATING		RECOVERED COOLING (TMBH)	RECOVERED HEATING (MBH)																		
																							EADB	EAWB	LADB	LAWB									EADB	EAWB	LADB	LAWB								
RTU-E-1	IL EAST CORRIDORS	TRANE	QADG017C1-DAB10AG00	3,600	3,600	1	2.14	3.0	YES	209.9	125.2	82	69.2	50.5	50.1	250	200	47.1	98.5	7" - 14" W.C.	95.0	78.0	82.1	69.2	10	8.6	47.1	42.6	124.14	216.51	2	(2) 27.6 / (2) 191	2	4.2	1	3.0	YES	208/3/60	89.6	110	18.8	MERV 13	219 x 95 x 68	4,180	R410A	SEE NOTES
RTU-E-2	IL EAST CORRIDORS	TRANE	QADG017C1-DAB10AG00	3,600	3,600	1	2.14	3.0	YES	209.9	125.2	82	69.2	50.5	50.1	250	200	47.1	98.5	7" - 14" W.C.	95.0	78.0	82.1	69.2	10	8.6	47.1	42.6	124.14	216.51	2	(2) 27.6 / (2) 191	2	4.2	1	3.0	YES	208/3/60	89.6	110	18.8	MERV 13	219 x 95 x 68	4,180	R410A	SEE NOTES
RTU-W-1	IL WEST CORRIDORS	TRANE	QADG017C1-DAB10AG00	3,600	3,600	1	2.14	3.0	YES	209.9	125.2	82	69.2	50.5	50.1	250	200	47.1	98.5	7" - 14" W.C.	95.0	78.0	82.1	69.2	10	8.6	47.1	42.6	124.14	216.51	2	(2) 27.6 / (2) 191	2	4.2	1	3.0	YES	208/3/60	89.6	110	18.8	MERV 13	219 x 95 x 68	4,180	R410A	SEE NOTES
RTU-W-2	IL WEST CORRIDORS	TRANE	QADG017C1-DAB10AG00	3,600	3,600	1	2.14	3.0	YES	209.9	125.2	82	69.2	50.5	50.1	250	200	47.1	98.5	7" - 14" W.C.	95.0	78.0	82.1	69.2	10	8.6	47.1	42.6	124.14	216.51	2	(2) 27.6 / (2) 191	2	4.2	1	3.0	YES	208/3/60	89.6	110	18.8	MERV 13	219 x 95 x 68	4,180	R410A	SEE NOTES
NOTES:																																														
1. ALL UNITS SHALL BE PROVIDED W/ MODULATING GAS HEAT CONTROL. TURN DOWN RATIO IS 10:1																																														
2. ALL MOTORS SHALL BE PREMIUM EFFICIENCY TYPE.																																														
3. PROVIDE W/ CONDENSER FAN COIL, HAIL GUARDS, NON-FUSED DISCONNECT SWITCH, FACTORY INSTALLED UV LIGHTS IN THE SUPPLY AIR STREAM, & GFI CONVENIENCE OUTLET FOR EACH UNIT.																																														
4. ALL UNITS SHALL BE PROVIDED W/ SPRING VIBRATION ISOLATION ROOF CURBS.																																														
5. INTERNAL AUTOMATIC TEMPERATURE CONTROL SHALL BE PROVIDED BY THE ATC CONTRACTOR. THE ATC CONTRACTOR SHALL SHIP THE DDC CONTROLS FOR ALL UNITS TO THE UNIT MANUFACTURER FOR FACTORY MOUNTING. THE ATC CONTRACTOR SHALL PROVIDE, MOUNT, AND WIRE ALL EXTERNAL COMPONENTS. ALL UNITS SHALL BE TIED INTO NEW BUILDING MANAGEMENT SYSTEM (BMS). REFER TO ATC DIAGRAMS AND SPECIFICATIONS.																																														
6. ALL UNITS SHALL BE PROVIDED WITH VARIABLE SPEED COMPRESSOR ON THE LEAD CIRCUIT.																																														
7. ALL UNITS SHALL BE PROVIDED W/ DUAL ENTHALPY FULLY MODULATING POWER EXHAUST ECONOMIZER CONTROLS W/ STATI-TRAC BUILDING PRESSURIZATION, OUTDOOR AIR HOOD, EXHAUST DISCHARGE DAMPERS & HOOD.																																														
8. ALL SHALL BE PROVIDED W/ FULLY MODULATING POWER EXHAUST ECONOMIZER HOOD, ECONOMIZER HOOD, & DAMPERS.																																														
9. ALL UNITS SHALL BE PROVIDED W/ 2" MERV 13 FILTERS & TWO (2) SETS OF SPARE FILTERS OF ALL TYPES.																																														
10. ELECTRICAL SUBCONTRACTOR TO PROVIDE DUCT SMOKE DETECTOR IN RETURN AIR DUCT MAIN FOR EACH UNIT. INTERLOCK RTUs WITH FIRE ALARM SYSTEM. RTUs SHALL BE SHUT DOWN UPON ACTIVATION OF FIRE ALARM SYSTEM.																																														
11. UNIT SHALL BE PROVIDED WITH SINGLE POINT POWER CONNECTION.																																														
12. PROVIDE W/ A S.S. FLUE VENT EXTENSION FOR EACH UNIT.																																														
13. PROVIDE TWO-YEARS PART & LABOR WARRANTY FROM THE MANUFACTURER, 5 YEARS WARRANTY ON THE COMPRESSORS.																																														
14. PROVIDE MODULATING HOT GAS REHEAT FOR ALL UNITS.																																														

NOTES:  
1. ALL UNITS SHALL BE PROVIDED W/ MODULATING GAS HEAT CONTROL. TURN DOWN RATIO IS 10:1  
2. ALL MOTORS SHALL BE PREMIUM EFFICIENCY TYPE  
3. PROVIDE W/ CONDENSER FAN COIL HAIL GUARDS, NON-FUSED DISCONNECT SWITCH, FACTORY INSTALLED UV LIGHTS IN THE SUPPLY AIR STREAM, & GFI CONVENIENCE OUTLET FOR EACH UNIT.  
4. ALL UNIT SHALL BE PROVIDED W/ SPRING VIBRATION ISOLATION ROOF CURBS  
5. INTERNAL AUTOMATIC TEMPERATURE CONTROLS SHALL BE PROVIDED BY ATC CONTRACTOR. THE ATC CONTRACTOR SHALL SHIP THE DDC CONTROLS FOR ALL UNITS TO THE UNIT MANUFACTURER FOR FACTORY MOUNTING. THE ATC CONTRACTOR SHALL PROVIDE, MOUNT, AND WIRE ALL EXTERNAL COMPONENTS. ALL UNITS SHALL BE TIED INTO NEW BUILDING MANAGEMENT SYSTEM (BMS). REFER TO ATC DIAGRAMS AND SPECIFICATIONS.  
6. ALL UNITS SHALL BE PROVIDED WITH VARIABLE SPEED COMPRESSOR ON THE LEAD CIRCUIT.  
7. ALL UNITS SHALL BE PROVIDED W/ DUAL ENTHALPY FULLY MODULATING POWER EXHAUST ECONOMIZER CONTROLS W/ STATI-TRAC BUILDING PRESSURIZATION, OUTDOOR AIR HOOD, EXHAUST DISCHARGE DAMPERS & HOOD.  
8. ALL SHALL BE PROVIDED W/ FULLY MODULATING POWER EXHAUST ECONOMIZER FAN, ECONOMIZER HOOD & DAMPERS.  
9. ALL UNITS SHALL BE PROVIDED W/ 2" MERV 13 FILTERS & TWO (2) SETS OF SPARE FILTERS OF ALL TYPES.  
10. ELECTRICAL SUBCONTRACTOR TO PROVIDE DUCT SMOKE DETECTOR IN RETURN AIR DUCT MAIN FOR EACH UNIT. INTERLOCK RTUs WITH FIRE ALARM SYSTEM. RTUs SHALL BE SHUT DOWN UPON ACTIVATION OF FIRE ALARM SYSTEM.  
11. UNIT SHALL BE PROVIDED WITH SINGLE POINT POWER CONNECTION.  
12. PROVIDE W/ A S.S. FLUE VENT EXTENSION FOR EACH UNIT.  
13. PROVIDE TWO-YEARS PART & LABOR WARRANTY FROM THE MANUFACTURER, 5 YEARS WARRANTY ON THE COMPRESSORS.  
14. PROVIDE MODULATING HOT GAS REHEAT FOR ALL UNITS.

## ENERGY RECOVERY VENTILATOR SCHEDULE

UNIT No.	QTY	AREAS SERVED	MFG'R.	MODEL No.	SA (CFM)	EXHAUST AIR (CFM)	ENERGY RECOVERY WHEEL		FAN DATA		APPROX. UNIT WT. (LBS)	UNIT DIMENSIONS (LxWxH) (IN.)	ELECTRICAL	REMARKS
							SENSIBLE EFFICIENCY AT 32°F	TOTAL EFFICIENCY AT 90°F	EXT. S.P.*	WATTS				
ERV-1	178	ALL UNITS	LIFEBREATH	120ERV-ECM	109	110	73%	52%	0.4	74	67	20-3/4 x 19-3/8 x 9-3/4	120/1/60	SEE NOTES
NOTES:														
1. PROVIDE HINGED ACCESS DOORS, NON-FUSED DISCONNECT SWITCH, MOTORIZED DAMPERS.														
2. ALL MOTORS SHALL BE PREMIUM EFFICIENCY TYPE.														
3. THE UNIT SHALL HAVE HUMIDITY CONTROL.														
4. THE UNIT SHALL HAVE A 99-EXPLO2 WALL CONTROL.														
5. THE UNIT SHALL HAVE A 99-EAG8 TECHGRILLE.														

NOTES:  
1. PROVIDE HINGED ACCESS DOORS, NON-FUSED DISCONNECT SWITCH, MOTORIZED DAMPERS.  
2. ALL MOTORS SHALL BE PREMIUM EFFICIENCY TYPE.  
3. THE UNIT SHALL HAVE HUMIDITY CONTROL.  
4. THE UNIT SHALL HAVE A 99-DXPL02 WALL CONTROL.  
5. THE UNIT SHALL HAVE A 99-EG8 TECHGRILLE.

## TOILET EXHAUST FAN SCHEDULE

UNIT No.	QTY	AREA SERVED	LOCATION	CFM	S.P. LOSS (IN)	ELECTRICAL DATA		DIMENSIONS (LxWxH) (In.)	OUTLET DUCT	UNIT WEIGHT (LBS)	MANUFACTURER & MODEL	REMARKS
						AMPS	V-PH-Hz					
TX-A	443	ALL UNITS	CEILING MTD	80	0.10	1.6	120/1/60	8 x 8-1/4 x 5-3/4	4"	15	BRAUN 761BN	SEE NOTES
NOTES: INLINE, CEILING MOUNTED FAN WITH LIGHT FIXTURE. USE AS BATHROOM EXHAUST. PROVIDE LEED CERTIFIED BACKDRAFT DAMPER, HANGING SUPPORTS WITH VIBRATION ISOLATORS, AND DISCONNECT SWITCH. PROVIDE SEPARATE WALL SWITCH IN SAME GAN BOX AS LIGHT SWITCH.												

NOTES: IN-LINE, CEILING MOUNTED FAN WITH LIGHT FIXTURE. USE AS BATHROOM EXHAUST. PROVIDE LEED CERTIFIED BACKDRAFT DAMPER, HANGING SUPPORTS WITH VIBRATION ISOLATORS, AND DISCONNECT SWITCH. PROVIDE SEPARATE WALL SWITCH IN SAME GANG BOX AS LIGHT SWITCH.

## OUTDOOR AIR-COOLED VRF HEAT RECOVERY CONDENSING UNIT SCHEDULE

(MITSUBISHI AS STANDARD)																
TAG	LOCATION	ZONES SERVED	UNITS SERVED	COOLING (TMBH)	HEATING (TMBH)	AMBIENT TEMP (°F)	SUCTIION TEMP (°F)	ELECTRICAL DATA V - Ph - Hz	MCA	MOP	EER	DIMENSIONS (H x W x D) (In.)	APPROX WEIGHT (Lbs)	MODEL	MANUFACTURER	NOTES
CU-E-A1	EAST ROOF	ZONE A LEVEL 1 EAST	REFER TO DWG. M3.02	192	215	-13 / 126		460 - 3 - 60	30	40	11.3	71-5/8 x 68-29/32 x 29-5/32	918	PURY-EP192YNU-A	MTSUBISHI	SEE NOTES BELOW
CU-E-B1	EAST ROOF	ZONE B LEVEL 1 EAST	REFER TO DWG. M3.02	168	188	-13 / 126		460 - 3 - 60	26	40	11.2	71-5/8 x 68-29/32 x 29-5/32	807	PURY-EP168YNU-A	MTSUBISHI	SEE NOTES BELOW
CU-E-C1	EAST ROOF	ZONE C LEVEL 1 EAST	REFER TO DWG. M3.02	168	188	-13 / 126		460 - 3 - 60	26	40	11.2	71-5/8 x 68-29/32 x 29-5/32	807	PURY-EP168YNU-A	MTSUBISHI	SEE NOTES BELOW
CU-E-D1	EAST ROOF	ZONE D LEVEL 1 EAST	REFER TO DWG. M3.02	168	188	-13 / 126		460 - 3 - 60	26	40	11.2	71-5/8 x 68-29/32 x 29-5/32	807	PURY-EP168YNU-A	MTSUBISHI	SEE NOTES BELOW
CU-E-E1	EAST ROOF	ZONE E LEVEL 1 EAST	REFER TO DWG. M3.02	72	80	-13 / 126		460 - 3 - 60	10	30	13.4	71-5/8 x 36-1/4 x 29-5/32	552	PURY-EP72YNU-A	MTSUBISHI	SEE NOTES BELOW
CU-E-A2	EAST ROOF	ZONE A LEVEL 2 EAST	REFER TO DWG. M3.02	192	215	-13 / 126		460 - 3 - 60	30	40	11.3	71-5/8 x 68-29/32 x 29-5/32	918	PURY-EP192YNU-A	MTSUBISHI	SEE NOTES BELOW
CU-E-B2	EAST ROOF	ZONE B LEVEL 2 EAST	REFER TO DWG. M3.02	192	215	-13 / 126		460 - 3 - 60	30	40	11.3	71-5/8 x 68-29/32 x 29-5/32	918	PURY-EP192YNU-A	MTSUBISHI	SEE NOTES BELOW
CU-E-C2	EAST ROOF	ZONE C LEVEL 2 EAST	REFER TO DWG. M3.02	168	188	-13 / 126		460 - 3 - 60	26	40	11.2	71-5/8 x 68-29/32 x 29-5/32	807	PURY-EP168YNU-A	MTSUBISHI	SEE NOTES BELOW
CU-E-D2	EAST ROOF	ZONE D LEVEL 2 EAST	REFER TO DWG. M3.02	168	188	-13 / 126		460 - 3 - 60	26	40	11.2	71-5/8 x 68-29/32 x 29-5/32	807	PURY-EP168YNU-A	MTSUBISHI	SEE NOTES BELOW
CU-E-A3	EAST ROOF	ZONE A LEVEL 3 EAST	REFER TO DWG. M3.02	192	215	-13 / 126		460 - 3 - 60	30	40	11.3	71-5/8 x 68-29/32 x 29-5/32	918	PURY-EP192YNU-A	MTSUBISHI	SEE NOTES BELOW
CU-E-B3	EAST ROOF	ZONE B LEVEL 3 EAST	REFER TO DWG. M3.02	168	188	-13 / 126		460 - 3 - 60	26	40	11.2	71-5/8 x 68-29/32 x 29-5/32	807	PURY-EP168YNU-A	MTSUBISHI	SEE NOTES BELOW
CU-E-C3	EAST ROOF	ZONE C LEVEL 3 EAST	REFER TO DWG. M3.02	168	188	-13 / 126		460 - 3 - 60	26	40	11.2	71-5/8 x 68-29/32 x 29-5/32	807	PURY-EP168YNU-A	MTSUBISHI	SEE NOTES BELOW
CU-E-D3	EAST ROOF	ZONE D LEVEL 3 EAST	REFER TO DWG. M3.02	168	188	-13 / 126		460 - 3 - 60	26	40	11.2	71-5/8 x 68-29/32 x 29-5/32	807	PURY-EP168YNU-A	MTSUBISHI	SEE NOTES BELOW
CU-E-A4	EAST ROOF	ZONE A LEVEL 4 EAST	REFER TO DWG. M3.02	192	215	-13 / 126		460 - 3 - 60	30	40	11.3	71-5/8 x 68-29/32 x 29-5/32	918	PURY-EP192YNU-A	MTSUBISHI	SEE NOTES BELOW
CU-E-B4	EAST ROOF	ZONE B LEVEL 4 EAST	REFER TO DWG. M3.02	168	188	-13 / 126		460 - 3 - 60	26	40	11.2	71-5/8 x 68-29/32 x 29-5/32	807	PURY-EP168YNU-A	MTSUBISHI	SEE NOTES BELOW
CU-E-C4	EAST ROOF	ZONE C LEVEL 4 EAST	REFER TO DWG. M3.02	168	188	-13 / 126		460 - 3 - 60	26	40	11.2	71-5/8 x 68-29/32 x 29-5/32	807	PURY-EP168YNU-A	MTSUBISHI	SEE NOTES BELOW
CU-E-D4	EAST ROOF	ZONE D LEVEL 4 EAST	REFER TO DWG. M3.02	168	188	-13 / 126		460 - 3 - 60	26	40	11.2	71-5/8 x 68-29/32 x 29-5/32	807	PURY-EP168YNU-A	MTSUBISHI	SEE NOTES BELOW
CU-W-A1	WEST ROOF	ZONE A LEVEL 1 WEST	REFER TO DWG. M3.01	168	188	-13 / 126		460 - 3 - 60	26	40	11.2	71-5/8 x 68-29/32 x 29-5/32	807	PURY-EP168YNU-A	MTSUBISHI	SEE NOTES BELOW
CU-W-B1	WEST ROOF	ZONE B LEVEL 1 WEST	REFER TO DWG. M3.01	192	215	-13 / 126		460 - 3 - 60	30	40	11.3	71-5/8 x 68-29/32 x 29-5/32	918	PURY-EP192YNU-A	MTSUBISHI	SEE NOTES BELOW
CU-W-C1	WEST ROOF	ZONE C LEVEL 1 WEST	REFER TO DWG. M3.01	192	215	-13 / 126		460 - 3 - 60	30	40	11.3	71-5/8 x 68-29/32 x 29-5/32	918	PURY-EP192YNU-A	MTSUBISHI	SEE NOTES BELOW
CU-W-D1	WEST ROOF	ZONE D LEVEL 1 WEST	REFER TO DWG. M3.01	168	188	-13 / 126		460 - 3 - 60	26	40	11.2	71-5/8 x 68-29/32 x 29-5/32	807	PURY-EP168YNU-A	MTSUBISHI	SEE NOTES BELOW
CU-W-E1	WEST ROOF	ZONE E LEVEL 1 WEST	REFER TO DWG. M3.01	72	80	-13 / 126		460 - 3 - 60	10	30	13.4	71-5/8 x 36-1/4 x 29-5/32	552	PURY-EP72YNU-A	MTSUBISHI	SEE NOTES BELOW
CU-W-A2	WEST ROOF	ZONE A LEVEL 2 WEST	REFER TO DWG. M3.01	168	188	-13 / 126		460 - 3 - 60	26	40	11.2	71-5/8 x 68-29/32 x 29-5/32	807	PURY-EP168YNU-A	MTSUBISHI	SEE NOTES BELOW
CU-W-B2	WEST ROOF	ZONE B LEVEL 2 WEST	REFER TO DWG. M3.01	192	215	-13 / 126		460 - 3 - 60	30	40	11.3	71-5/8 x 68-29/32 x 29-5/32	918	PURY-EP192YNU-A	MTSUBISHI	SEE NOTES BELOW
CU-W-C2	WEST ROOF	ZONE C LEVEL 2 WEST	REFER TO DWG. M3.01	240	250	-13 / 126		460 - 3 - 60	37	50	10.5	71-5/8 x 68-29/32 x 29-5/32	918	PURY-EP240YNU-A	MTSUBISHI	SEE NOTES BELOW
CU-W-D2	WEST ROOF	ZONE D LEVEL 2 WEST	REFER TO DWG. M3.01	168	188	-13 / 126		460 - 3 - 60	26	40	11.2	71-5/8 x 68-29/32 x 29-5/32	807	PURY-EP168YNU-A	MTSUBISHI	SEE NOTES BELOW
CU-W-A3	WEST ROOF	ZONE A LEVEL 3 WEST	REFER TO DWG. M3.01	168	188	-13 / 126		460 - 3 - 60	26	40	11.2	71-5/8 x 68-29/32 x 29-5/32	807	PURY-EP168YNU-A	MTSUBISHI	SEE NOTES BELOW
CU-W-B3	WEST ROOF	ZONE B LEVEL 3 WEST	REFER TO DWG. M3.01	192	215	-13 / 126		460 - 3 - 60	30	40	11.3	71-5/8 x 68-29/32 x 29-5/32	918	PURY-EP192YNU-A	MTSUBISHI	SEE NOTES BELOW
CU-W-C3	WEST ROOF	ZONE C LEVEL 3 WEST	REFER TO DWG. M3.01	216	243	-13 / 126		460 - 3 - 60	33	50	10.9	71-5/8 x 68-29/32 x 29-5/32	918	PURY-EP216YNU-A	MTSUBISHI	SEE NOTES BELOW
CU-W-D3	WEST ROOF	ZONE D LEVEL 3 WEST	REFER TO DWG. M3.01	168	188	-13 / 126		460 - 3 - 60	26	40	11.2	71-5/8 x 68-29/32 x 29-5/32	807	PURY-EP168YNU-A	MTSUBISHI	SEE NOTES BELOW
CU-W-A4	WEST ROOF	ZONE A LEVEL 4 WEST	REFER TO DWG. M3.01	168	188	-13 / 126		460 - 3 - 60	26	40	11.2	71-5/8 x 68-29/32 x 29-5/32	807	PURY-EP168YNU-A	MTSUBISHI	SEE NOTES BELOW
CU-W-B4	WEST ROOF	ZONE B LEVEL 4 WEST	REFER TO DWG. M3.01	216	243	-13 / 126		460 - 3 - 60	33	50	10.9	71-5/8 x 68-29/32 x 29-5/32	918	PURY-EP216YNU-A	MTSUBISHI	SEE NOTES BELOW
CU-W-C4	WEST ROOF	ZONE C LEVEL 4 WEST	REFER TO DWG. M3.01	192	215	-13 / 126		460 - 3 - 60	30	40	11.3	71-5/8 x 68-29/32 x 29-5/32	918	PURY-EP192YNU-A	MTSUBISHI	SEE NOTES BELOW
CU-W-D4	WEST ROOF	ZONE D LEVEL 4 WEST	REFER TO DWG. M3.01	192	215	-13 / 126		460 - 3 - 60	30	40	11.3	71-5/8 x 68-29/32 x 29-5/32	918	PURY-EP192YNU-A	MTSUBISHI	SEE NOTES BELOW

NOTES: PROVIDE WITH LOW AMBIENT CONTROL TO 0°F, PATE EQUIPMENT ROOF SUPPORT, INTERLOCK WITH ASSOCIATED AC UNITS.

## STORAGE CLOSETS OUTDOOR HEAT PUMP CONDENSING UNIT SCHEDULE

(MITSUBISHI AS STANDARD)		
--------------------------	--	--



VENTILATION INDEX											
ROOM NAME & NUMBER	UNIT SERVED	FLOOR AREA (Sq Ft)	MAX OCCUPANTS	REQUIRED OA CFM(Sqft)	REQUIRED OA for SPACE	REQUIRED OA per PERSON	OA For OCCUPANTS	MIN OA REQUIRED	DESIGN OA (CFM)		REMARKS
GUEST SUITE A	DOAS-EW	304	2	0.06	19	5	10	29	50		TYPICAL FOR ALL GUEST SUITES
UNIT A	ERV-1	640	2	0.06	39	5	10	49	130		TYPICAL FOR ALL UNIT A APARTMENTS
UNIT C	ERV-1	829	2	0.06	50	5	10	60	130		TYPICAL FOR ALL UNIT C APARTMENTS
UNIT C-2	ERV-1	829	2	0.06	50	5	10	60	130		TYPICAL FOR ALL UNIT C-2 APARTMENTS
UNIT D	ERV-1	964	2	0.06	58	5	10	68	130		TYPICAL FOR ALL UNIT D APARTMENTS
UNIT E	ERV-1	1,050	3	0.06	63	5	15	78	130		TYPICAL FOR ALL UNIT E APARTMENTS
UNIT F	ERV-1	1,116	3	0.06	67	5	15	82	130		TYPICAL FOR ALL UNIT F APARTMENTS
UNIT G	ERV-1	1,260	3	0.06	76	5	15	91	130		TYPICAL FOR ALL UNIT G APARTMENTS
UNIT H	ERV-1	1,277	3	0.06	77	5	15	92	130		TYPICAL FOR ALL UNIT H APARTMENTS
UNIT I	ERV-1	1,329	3	0.06	80	5	15	95	130		TYPICAL FOR ALL UNIT I APARTMENTS
UNIT J	ERV-1	1,591	3	0.06	96	5	15	111	130		TYPICAL FOR ALL UNIT J APARTMENTS
UNIT K	ERV-1	1,875	3	0.06	113	5	15	128	260		TYPICAL FOR ALL UNIT K APARTMENTS
RESIDENT STORAGE	DOAS-E/W	777	-	0.12	93	-	-	93	100		TYPICAL FOR ALL RESIDENT STORAGE AREAS
CORRIDOR	DOAS-E/W	3662	-	0.06	220	-	-	220	1550		TYPICAL FOR ALL CORRIDORS

APARTMENTS ELECTRIC CABINET HEATER UNIT SCHEDULE											
TAG	LOCATION	TYPE	QTY.	HEATING (BTUH)	ELECTRICAL DATA		DIMENSIONS (WxDxH) (In.)	APPROX WEIGHT (Lbs)	MODEL	MANUFACTERER	NOTES
					KW	V / Ph / Hz					
ECH-A	REFER TO PLANS	WALL RECESSED	421	3,415	1	208 / 1 / 60	9" x 4" x 12"	7	CS102TW-C	COM-PAK	SEE NOTES BELOW
NOTES: WALL-RECESSED ELECTRIC CABINET HEATER. PROVIDE WITH UNIT MOUNTED TAMPER PROOF THERMOSTAT, & DISCONNECT SWITCH. TIE INTO NEW CAMPUS WIDE BMS.											

FIRE PLACE POWER VENT SCHEDULE										
UNIT No.	LOCATION	QTY	UNIT SERVED	ELECTRICAL DATA V-PH-Hz	DIMENSIONS (LxHxD) (In.)	WEIGHT (LBS)	MANUFACTURER	MODEL		REMARKS
PV-1	UNITS F, & H	56	FP-1	120/1/60	15.5 x 14 x 19.625	25	HEART & HOME	PVLP-SLP		SEE NOTES
PV-2	UNITS I, K, AND LOUNGE	22	FP-1 & 2	120/1/60	14"ø x 13.625	25	HEART & HOME	PVV-SLP		SEE NOTES
NOTES: 1. MODEL PVLP-SLP IS A LOW PROFILE SIDE WALL POWER VENT. INTERLOCK WITH ASSOCIATED FIREPLACE CONTROL PANEL. POWER VENT SHALL BE DUCTED/WIRED PER ALL MFR. GUIDELINES. PROVIDE WALL COLLAR, VENT CAP, & ALL REQUIRED OPTIONS/ACCESSORIES FOR A FULLY OPERABLE SYSTEM. 2. MODEL PVV-SLP IS A VERTICAL ROOFTOP POWER VENT. INTERLOCK WITH ASSOCIATED FIREPLACE CONTROL PANEL. POWER VENT SHALL BE DUCTED/WIRED PER ALL MFR. GUIDELINES. PROVIDE VENT TERMINATION CAP, STORM COLLAR, & ALL REQUIRED OPTIONS/ACCESSORIES FOR A FULLY OPERABLE SYSTEM.										

ROOF MOUNTED STEAM GENERATOR AND DUCT MOUNTED HUMIDIFIER SCHEDULE																				(CONDAIR AS STANDARD)
TAG	LOCATION	UNIT SERVED	CFM	EAT (°F)	EA RH (%)	LA RH (%)	HUMIDIFIER CAPACITY (LB/Hr)	GAS DATA			ELECTRICAL DATA			DUCT DIMENSIONS (LxW) (In.)	DISPERSION MODEL NO.	DIMENSIONS (LxWxH) (In.)	APPROX WEIGHT (Lbs)	MODEL	MANUFACTERER	REMARKS
								INPUT (CFH)	VENT Ø (IN.)	MIN-MAX PRESSURE (IN W.C.)	AMPS	POWER (KW)	V / Ph / Hz							
SG-IL-E1	IL EAST BLDG. ROOF	RTU-E-1	3,600	72	3.13	40	100	140	3"	4.5-9	---	---	120 / 1 / 60	52"x26"	SAM-e 48"	49.7 x 21.5 x 54.3	556	GSTC-100	CONDAIR	GAS FIRED STEAM GENERATOR, SEE NOTES BELOW.
SG-IL-E2	IL EAST BLDG. ROOF	RTU-E-2	3,600	72	3.13	40	100	140	3"	4.5-9	---	---	120 / 1 / 60	52"x26"	SAM-e 48"	49.7 x 21.5 x 54.3	556	GSTC-100	CONDAIR	GAS FIRED STEAM GENERATOR, SEE NOTES BELOW.
SG-IL-W1	IL WEST BLDG. ROOF	RTU-W-1	3,600	72	3.13	40	100	140	3"	4.5-9	---	---	120 / 1 / 60	52"x26"	SAM-e 48"	49.7 x 21.5 x 54.3	556	GSTC-100	CONDAIR	GAS FIRED STEAM GENERATOR, SEE NOTES BELOW.
SG-IL-W2	IL WEST BLDG. ROOF	RTU-W-2	3,600	72	3.13	40	100	140	3"	4.5-9	---	---	120 / 1 / 60	52"x26"	SAM-e 48"	49.7 x 21.5 x 54.3	556	GSTC-100	CONDAIR	GAS FIRED STEAM GENERATOR, SEE NOTES BELOW.
NOTES: PROVIDE AIR PRESSURE SWITCH, DUCT MOUNTED ON/OFF HIGH LIMIT HUMIDSTAT, 2" COPPER STEAM PIPE WITH LONG RADIUS ELBOWS AND MIN. 2" MINERAL FIBER INSULATION WITH FACTORY APPLIED ASJ. WALL MOUNTED MODULATING HUMIDITY CONTROLLER WITH ELECTRONIC DISPLAY AND ADJUSTABLE BUTTONS, ADJUSTABLE RANGE FROM 10-90% RH, SELECTABLE OUTPUT SIGNALS, 2%-10% PROPORTIONAL BAND AND DRY CONTACT OUTPUT, MULTISTEAM, INTERNAL DRAIN COOLER, DUCT MOUNTED HUMIDITY SENSOR AND BACnet INTERFACE TO NEW BUILDING MANAGEMENT SYSTEM.																				

GAS FIRED UNIT HEATER SCHEDULE																(MODINE AS STANDARD)
TAG	LOCATION	QTY.	CFM	HEAT THROW (FT.)	GAS HEATING				HP	ELECTRIC DATA Vol-Ph-Hz	DIMENSIONS (W x H x D) (In.)	APPROX WEIGHT (Lbs)	MODEL	MANUFACTURER	NOTES	
					INPUT (MBH)	OUTPUT (MBH)	TEMP RISE (°F)	VENT PIPE Ø (IN.)								MIN-MAX PRESSURE (IN.W.C.)
UH-A-E	GARAGE EG-100	3	5,280	65	350	287	50	6"	7-14"	1/2	115 - 1 - 60	42.5 x 35 x 39.5	310	PTP-350	MODINE	SEE NOTES BELOW
UH-A-W	GARAGE WG-100	3	5,280	65	350	287	50	6"	7-14"	1/2	115 - 1 - 60	42.5 x 35 x 39.5	310	PTP-350	MODINE	SEE NOTES BELOW
<b>NOTES:</b> CEILING HUNG UNIT HEATER. PROVIDE ALL REQUIRED HANGERS, SUPPORTS. PROVIDE MIN. TWO STAGE HEATING, DIRECT SPARK IGNITION, 100% SHUT-OFF WITH CONTINOUS RETRY. INTERLOCK WITH SMOKE DETECTION SYSTEM, AND BMS.																

ELECTRIC UNIT HEATER SCHEDULE											
TAG	LOCATION	THERMOSTAT	QUANTITY	ELECTRICAL DATA			DIMENSIONS (LxWxH) (In.)	APPROX WEIGHT (Lbs)	MODEL	MANUFACTERER	NOTES
				AMPS	WATTS	V / Ph / Hz					
EUH-A	GARAGE	WALL MOUNTED	8	14.5	3000	208 / 1 / 60	14 x 7-1/2 x 16	24	MUH0381	QMARK	SEE NOTE(S) BELOW
NOTES: CEILING HUNG UNIT HEATER. PROVIDE HANGING SUPPORTS, DISCONNECT SWITCH, DOUBLE POLE LINE BREAK THERMOSTAT W/ OFF OPTION. COORDINATE WITH G.C.											

ELECTRIC CABINET HEATER UNIT SCHEDULE											
TAG	LOCATION	TYPE	QTY.	HEATING (BTUH)	ELECTRICAL DATA		DIMENSIONS (WxDxH) (In.)	APPROX WEIGHT (Lbs)	MODEL	MANUFACTERER	NOTES
					KW	V / Ph / Hz					
ECH-B	REFER TO PLANS	WALL RECESSED	4	6,142	1.8	120 / 1 / 60	15.75 " x 4" x 19.25"	25	FRC1812F	BERKO	SEE NOTES BELOW
ECH-S	ALL STAIRS	WALL RECESSED	24	10,235 / 5,120	3 / 1.5	208 / 1 / 60	15.75 " x 4" x 19.25"	25	FRC4024F	BERKO	SEE NOTES BELOW
NOTES: WALL-RECESSED ELECTRIC CABINET HEATER. PROVIDE WITH UNIT MOUNTED TAMPER PROOF THERMOSTAT, & DISCONNECT SWITCH. TIE INTO NEW CAMPUS WIDE BMS.											

AIR PURIFICATION UNIT SCHEDULE									
TAG	LOCATION	QTY	MAKE	MODEL	QTY OF IONIZERS ON BAR	MAX RATED CFM	AMPS (mA)	DIMENSIONS (LxWxH) (IN)	NOTES
AP-1	ALL DOAS UNITS	4	PLASMA AIR	PB-018	3	3,750	90	18 x 0.5 x 3.5	SEE NOTES BELOW
NOTES: 1. BASIS OF DESIGN: PLASMA AIR. 2. AP SHALL BE FIELD INSTALLED AND WIRED TO THE EXISTING EQUIPMENT ON THE AIR INLET SIDE OF COOLING COIL. (A SEPARATE POWER FEED IS NOT NEEDED.) 3. IF CONTRACTOR SUBSTITUTES BASIS OF DESIGN WITH ANOTHER MANUFACTURER, CONTRACTOR SHALL COORDINATE ALL ELECTRICAL & MECHANICAL CHANGES. 4. BI-POLAR IONIZATION SYSTEMS REQUIRING PERISHABLE GLASS TUBES ARE NOT ACCEPTABLE. 5. ALL MANUFACTURERS MUST PASS UL-967-2007 OZONE CHAMBER TESTING BY EITHER UL OR ETL. 6. IONIZATION SYSTEM SHALL HAVE BEEN TESTED AND CERTIFIED BY UL 2998 AS AN OZONE FREE DEVICE. 7. UNIT LENGTH SHALL BE SIZED TO MATCH COIL WIDTH (VF). 8. ALL UNITS SHALL BE FACTORY MOUNTED ON ASSOCIATED RTUS. ACTUAL BARS NOT SHOWN ON PLANS.									

**ARCHITECT**  
**HCM Design, Inc.**  
700 E. Pratt St, Suite 1200, Baltimore, MD 21202  
p. 410. 837. 7311

**STRUCTURAL ENGINEER**  
**Morabito Consultants**  
952 Ridgebrook Road, suite 1700, Sparks MD 21152  
p. 410.467.2377

**FOOD SERVICE**  
Scopos Hospitality Group  
300 West Chestnut Street, Suite 201, Ephrata, PA 17522  
p. 717.733.5810

**INTERIOR DESIGNER**  
Merlino Design Partnership, Inc.  
2200 Renaissance Blvd, Suite 300, Gulph Mills, PA 19406  
p. 610.313.9550

**MEFP ENGINEER**  
LAN Associates  
Engineering, Planning, Architecture Surveying, LLP  
252 Main Street, Goshen, NY 10924  
p. 201.447.6400

HCM/LCS



BROADVIEW - SENIOR LIVING AT  
PURCHASE COLLEGE - IL BUILDINGS

hord | coplan | macht

ARCHITECTURE  
LANDSCAPE ARCHITECTURE  
PLANNING  
INTERIOR DESIGN



LAN ASSOCIATES  
Engineering, Planning, Architecture, Surveying, LLP  
LAN 258 #1308.01  
PROFESSIONAL CERTIFICATION: I CERTIFY THAT THESE DOCUMENTS WERE PREPARED OR APPROVED BY ME, AND THAT I AM A DULY LICENSED ENGINEER UNDER THE LAWS OF THE STATE OF NEW YORK.  
LICENSE NUMBER: 090385  
EXPIRATION DATE: 12/31/23

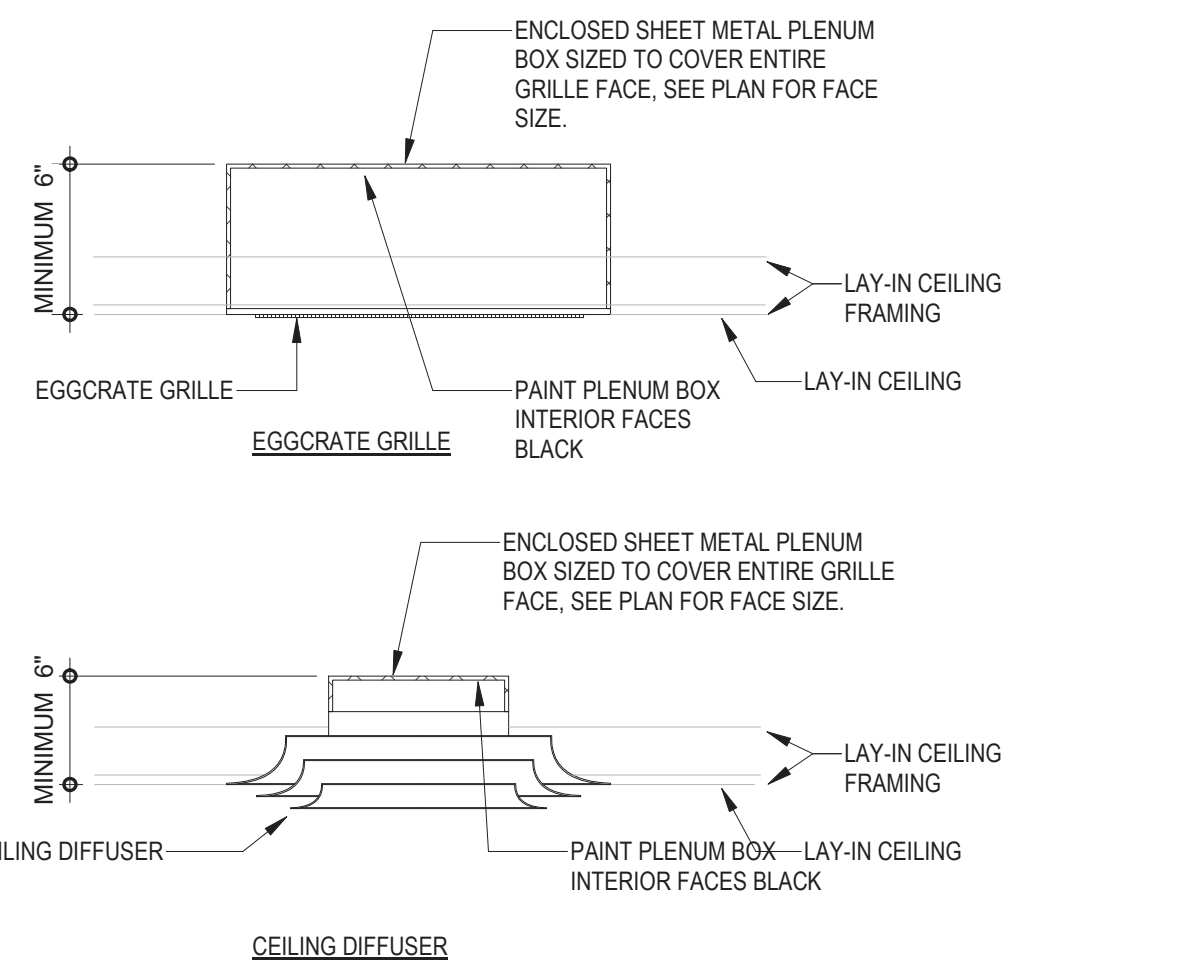
no.	date	revision

Project Name  
BROADVIEW - SENIOR LIVING AT PURCHASE COLLEGE - IL BUILDINGS  
Project Number  
4.1308.01  
Date  
4/30/2021  
Scale  
1/8" = 1'-0"  
Drawing  
MECHANICAL SCHEDULES

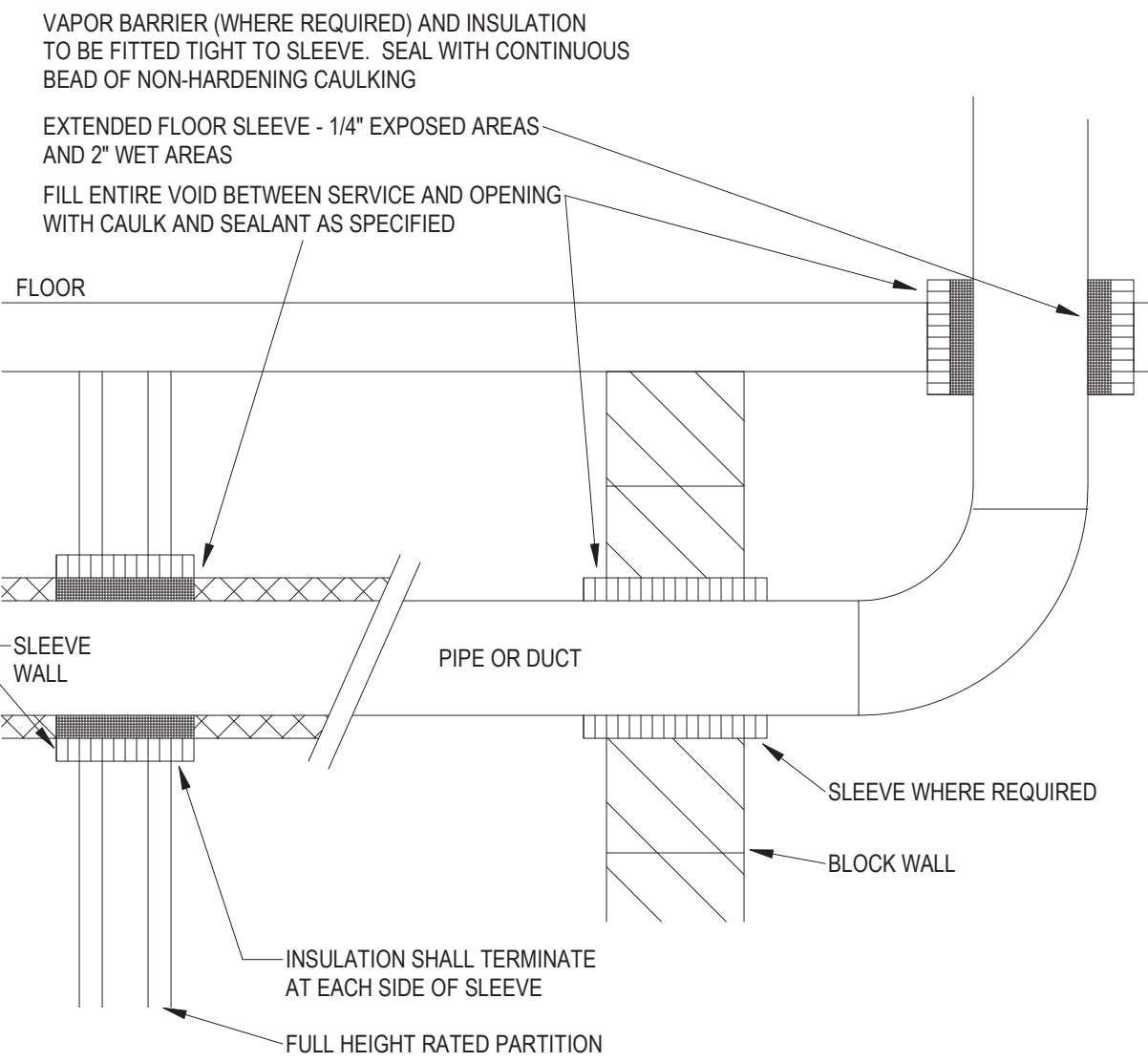
M6.02

PERMIT / GMP SET

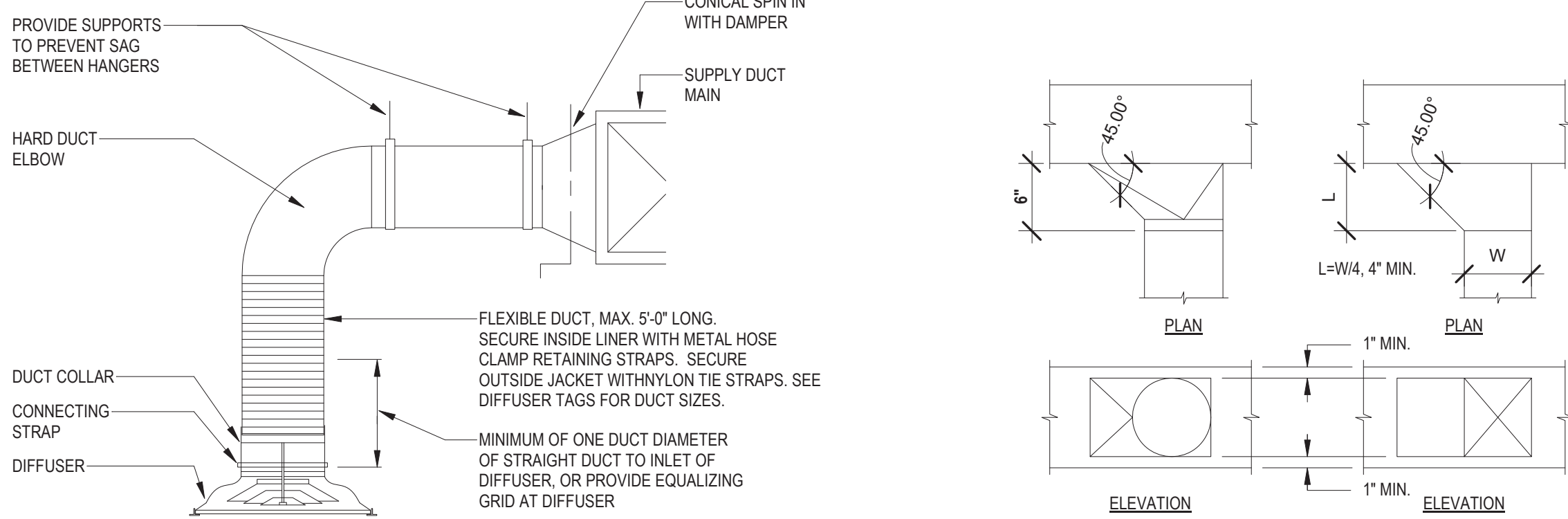




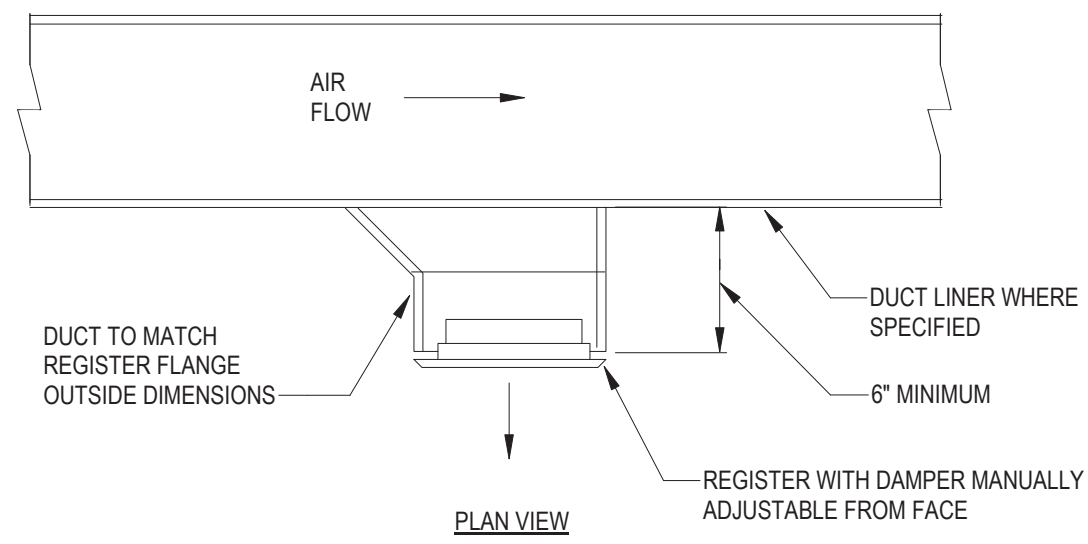
1  
M6.03 BLANK-OFF DETAIL  
NOT TO SCALE



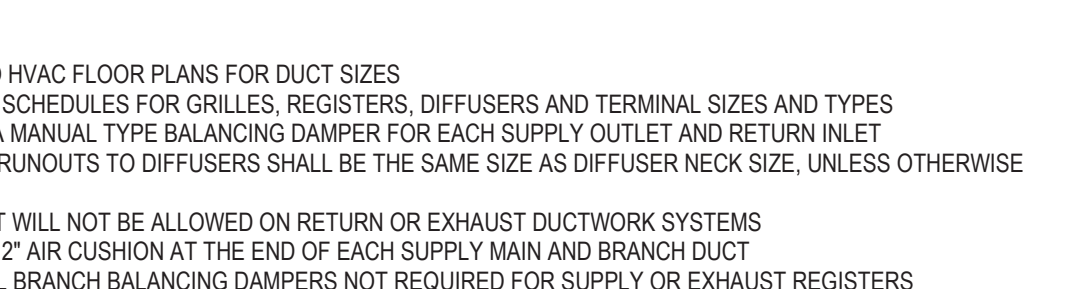
2  
M6.03 COMBINATION FIRE/SMOKE DAMPER INSTALLATION DETAIL  
NOT TO SCALE



3  
M6.03 DIFFUSER FLEXIBLE DUCT CONNECTION  
NOT TO SCALE

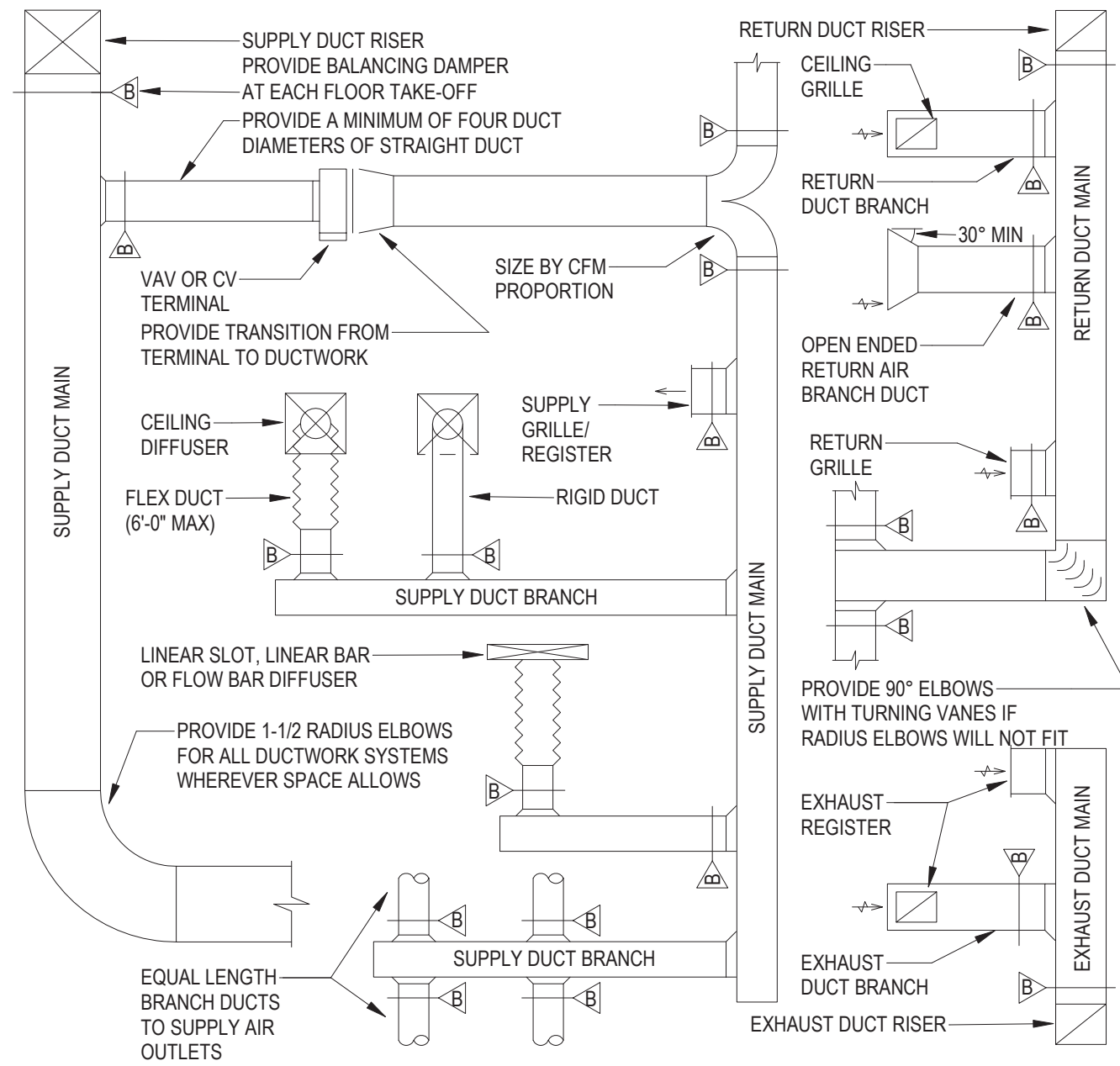


4  
M6.03 DUCT TAKE-OFF DETAIL  
NOT TO SCALE

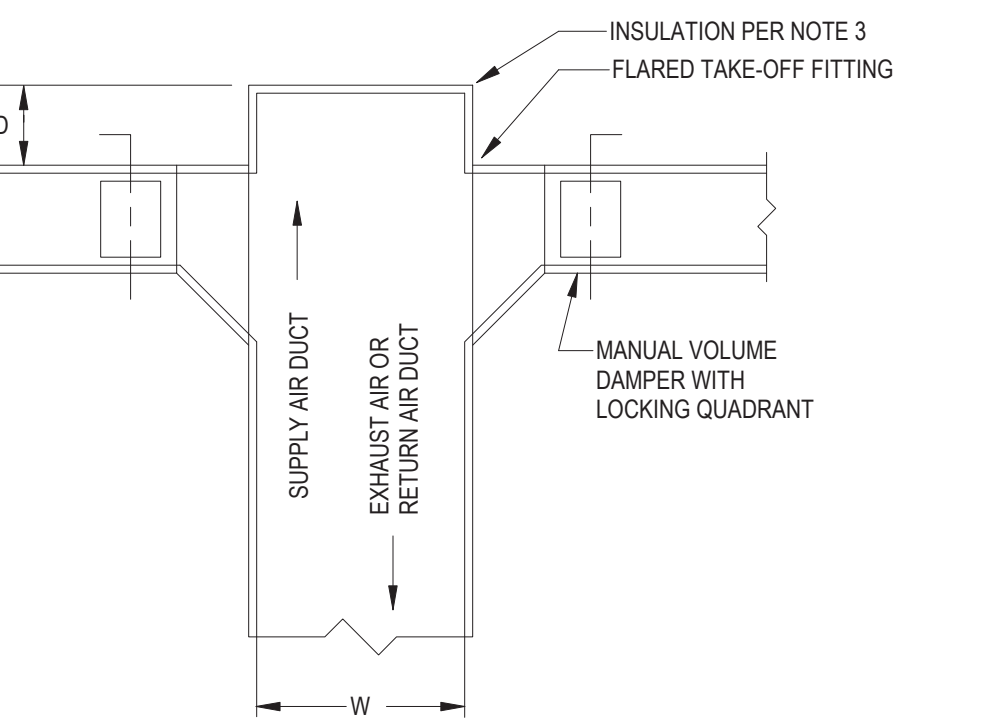


5  
M6.03 TYPICAL DUCT MOUNTED REGISTER (RECTANGULAR DUCT)  
NOT TO SCALE

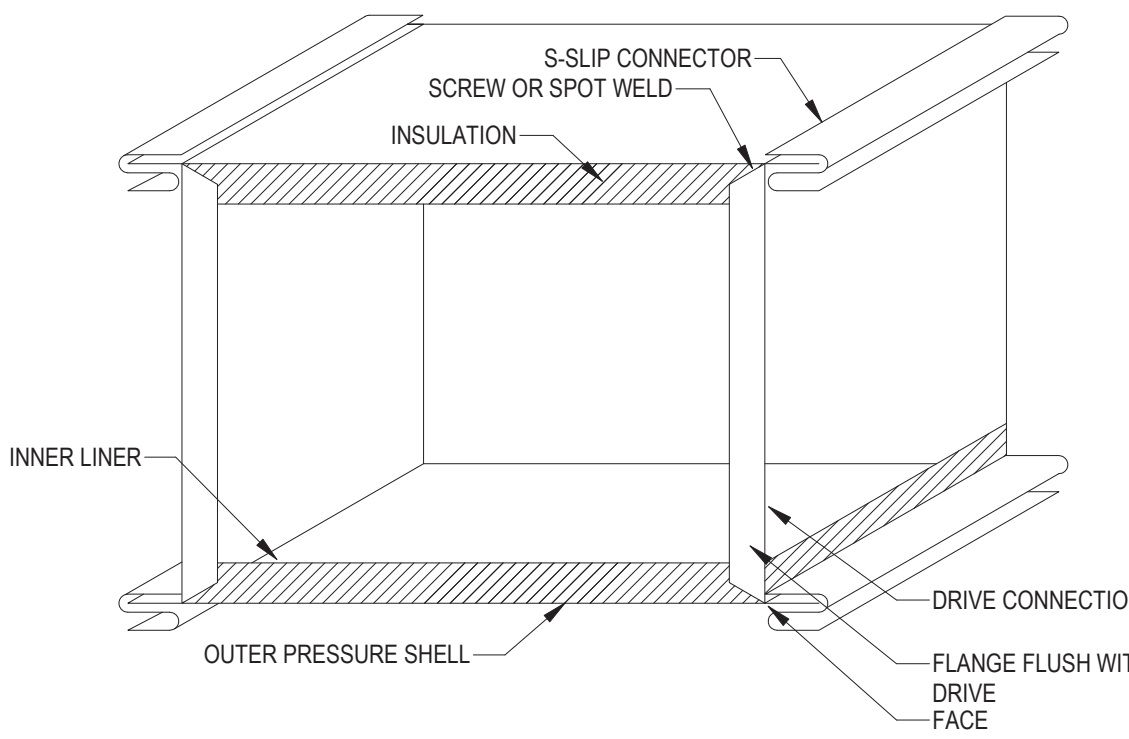
- NOTES:
1. REFER TO HVAC FLOOR PLANS FOR DUCT SIZES
  2. REFER TO SCHEDULES FOR GRILLES, REGISTERS, DIFFUSERS AND TERMINAL SIZES AND TYPES
  3. PROVIDE A MANUAL TYPE BALANCING DAMPER FOR EACH SUPPLY OUTLET AND RETURN INLET
  4. ALL DUCT RUNOUTS TO DIFFUSERS SHALL BE THE SAME SIZE AS DIFFUSER NECK SIZE, UNLESS OTHERWISE NOTED
  5. FLEX DUCT WILL NOT BE ALLOWED ON RETURN OR EXHAUST DUCTWORK SYSTEMS
  6. PROVIDE 12" AIR CUSHION AT THE END OF EACH SUPPLY MAIN AND BRANCH DUCT
  7. INDIVIDUAL BRANCH BALANCING DAMPERS NOT REQUIRED FOR SUPPLY OR EXHAUST REGISTERS



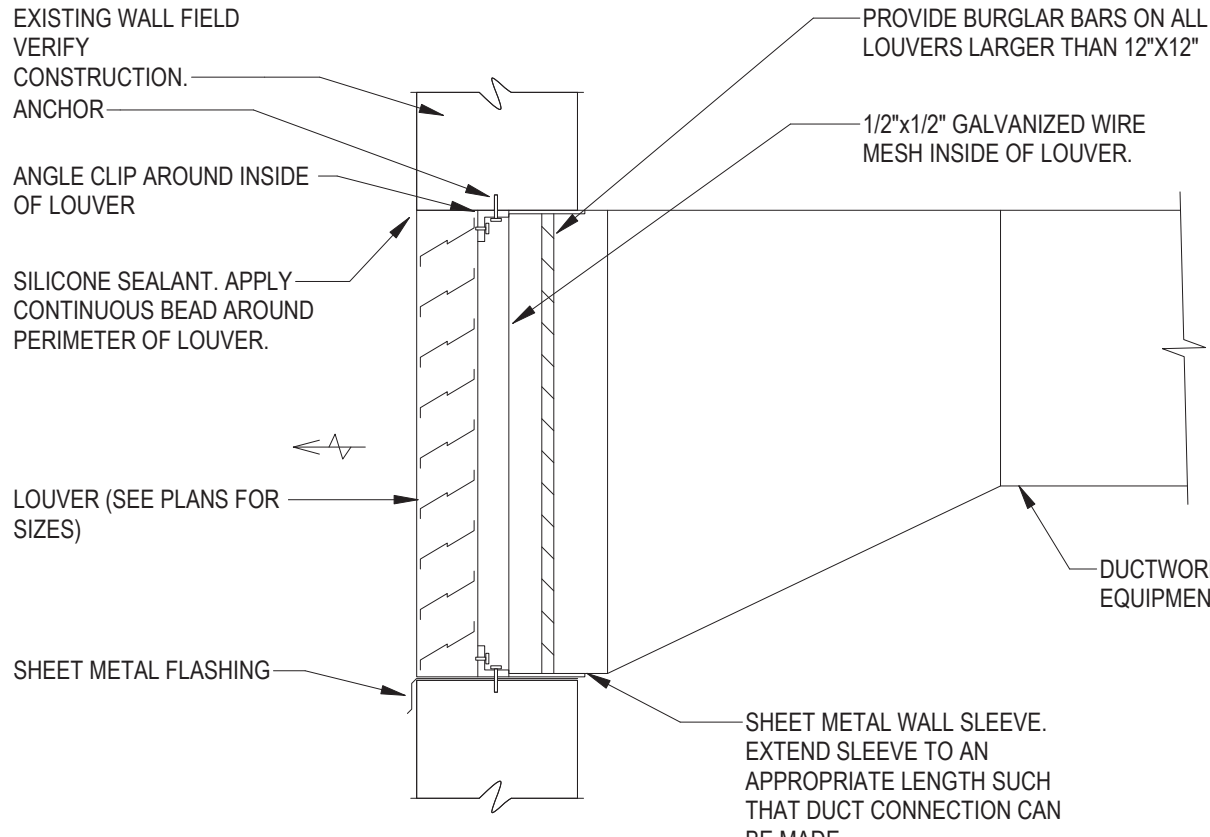
6  
M6.03 DUCT OR PIPE WALL AND FLOOR PENETRATION DETAIL  
NOT TO SCALE



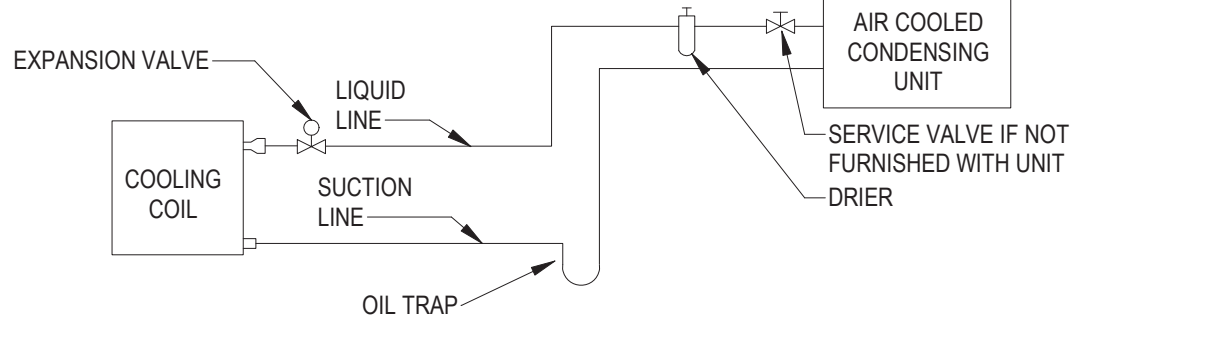
7  
M6.03 EXTERNALLY INSULATED DUCTWORK TEE  
NOT TO SCALE



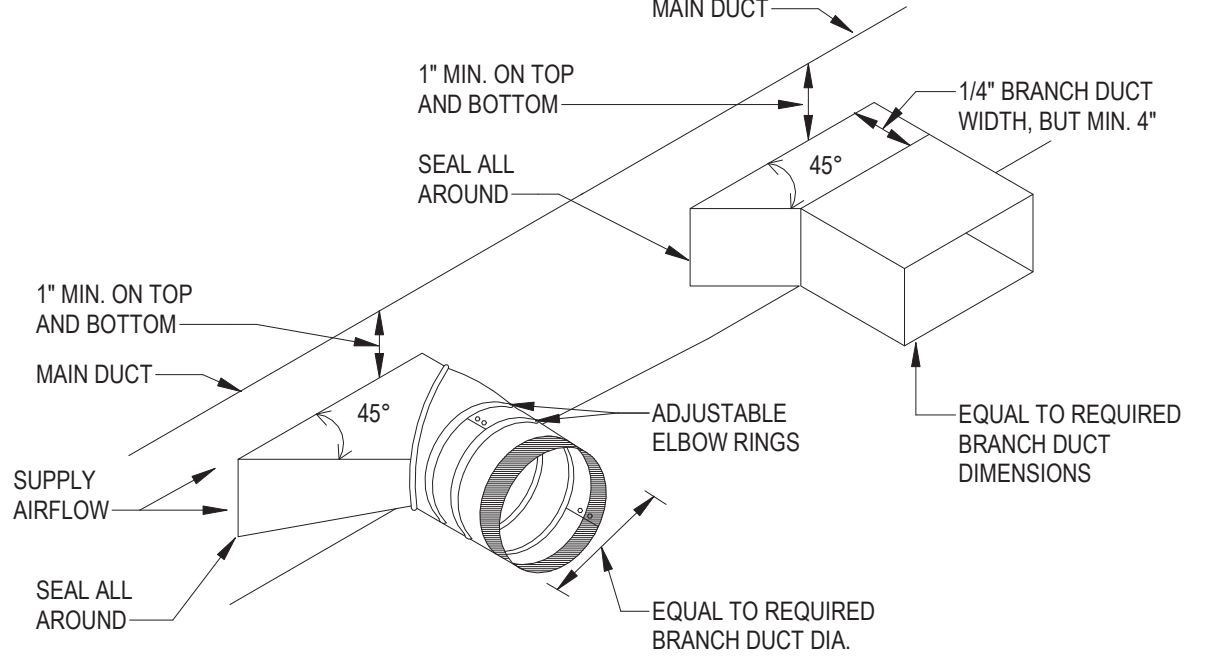
8  
M6.03 DOUBLE-WALL INSULATED DUCT DETAIL  
NOT TO SCALE



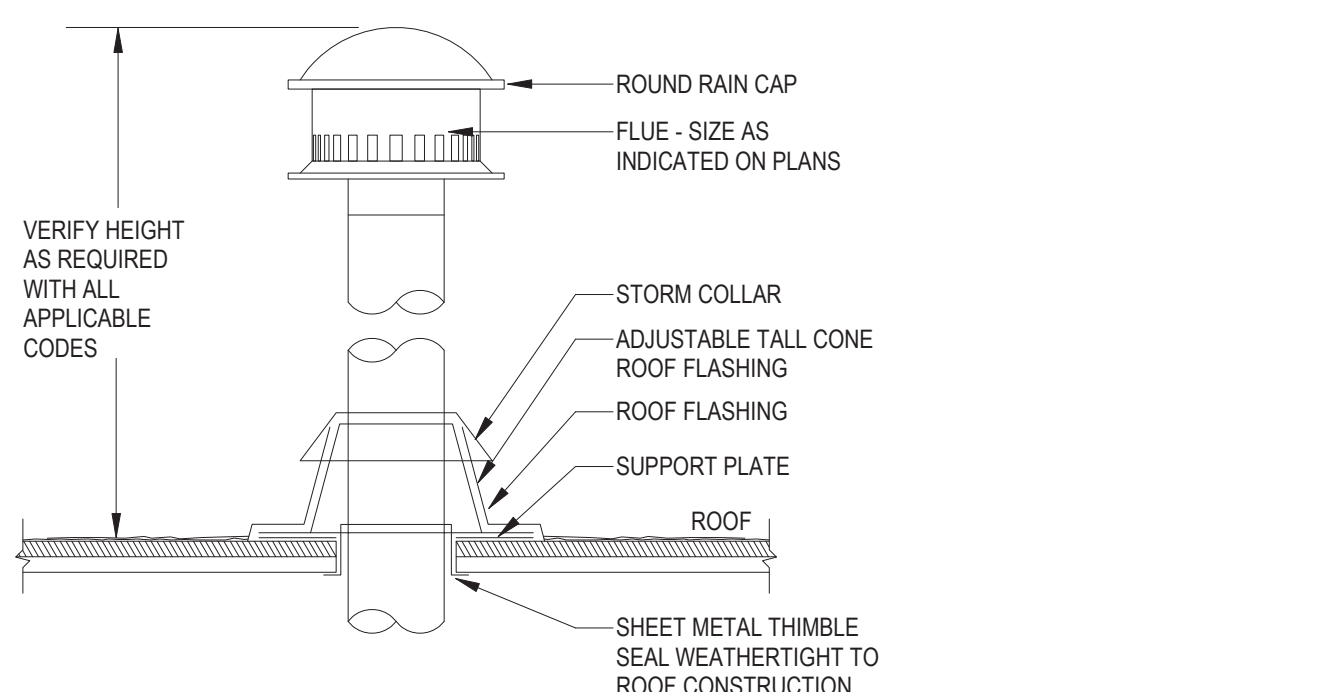
9  
M6.03 LOUVER ASSEMBLY DETAIL  
NOT TO SCALE



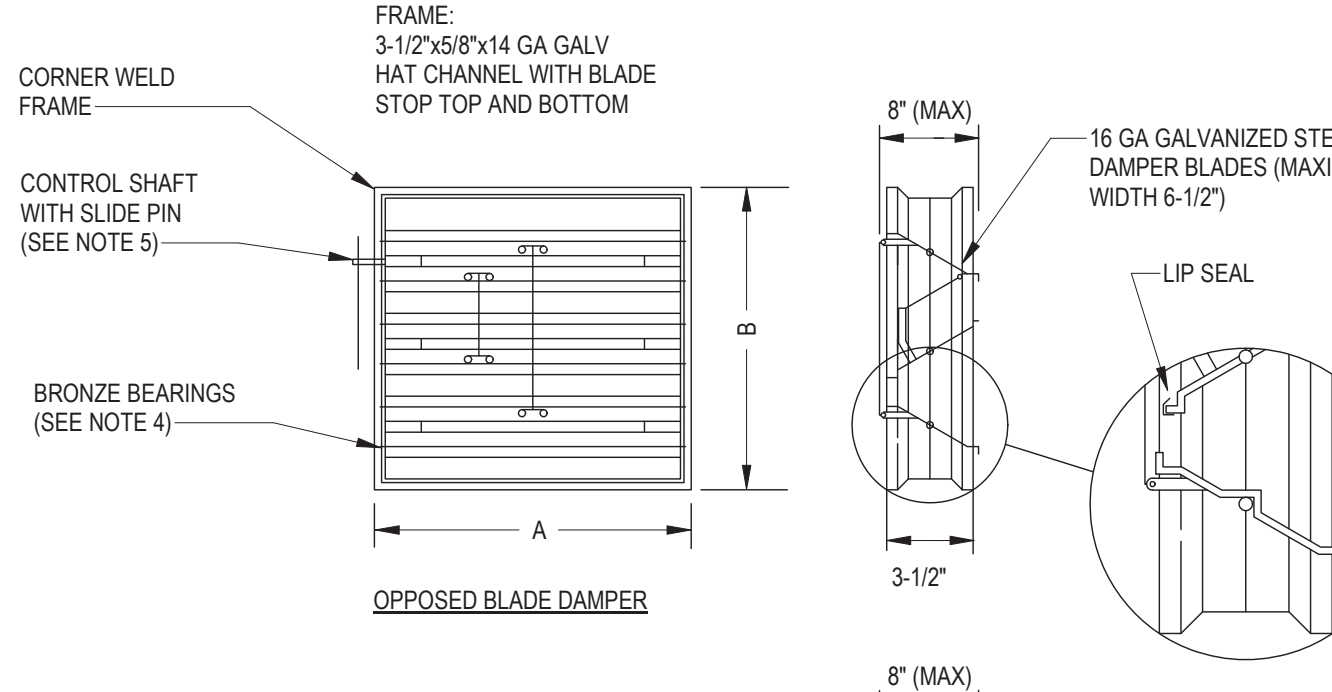
10  
M6.03 SPLIT SYSTEM FAN COIL UNIT PIPING SCHEMATIC  
NOT TO SCALE



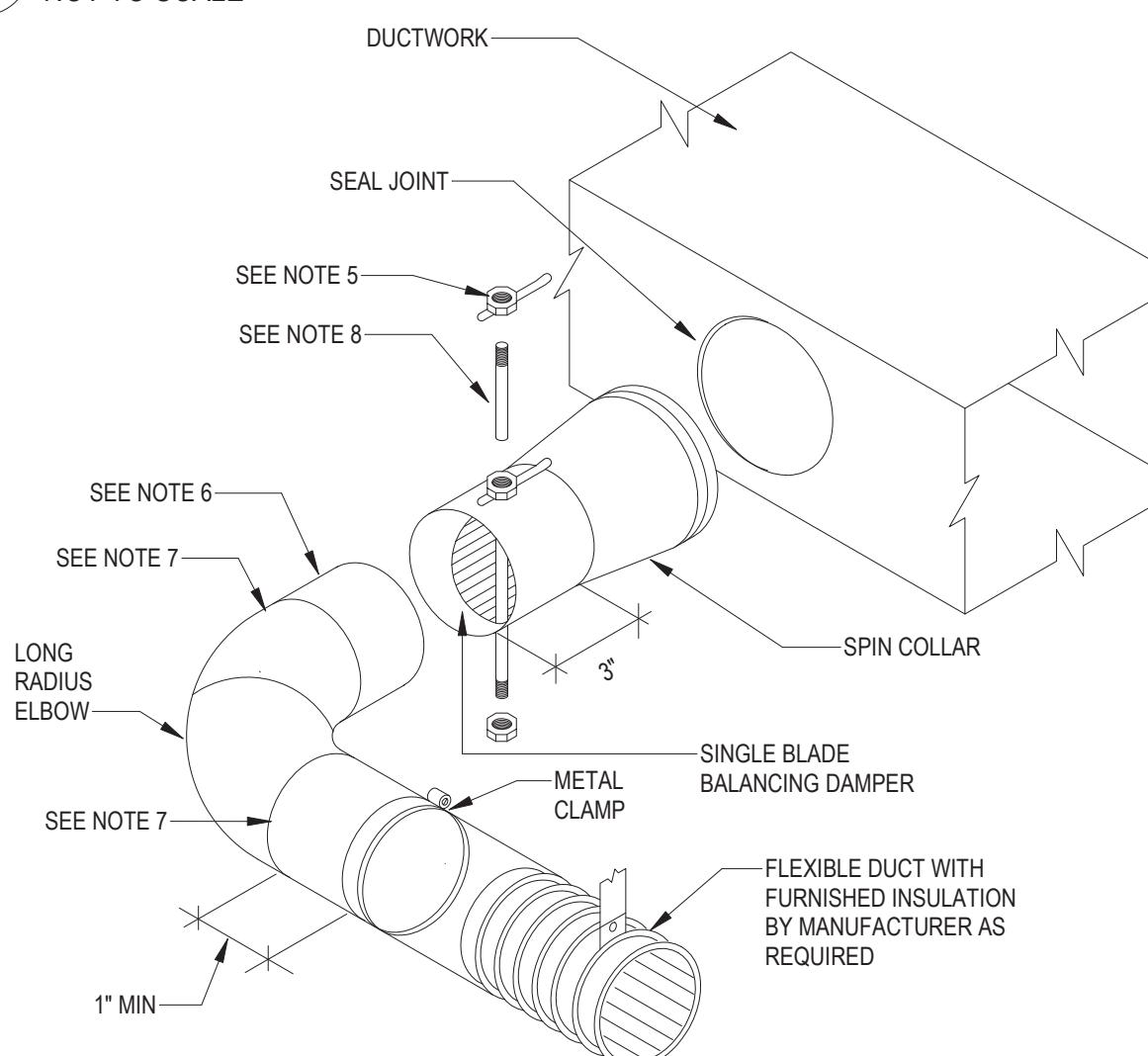
11  
M6.03 DUCTWORK INSTALLATION DIAGRAM  
NOT TO SCALE



15  
M6.03 FLUE VENT AND FLASHING DETAIL  
NOT TO SCALE



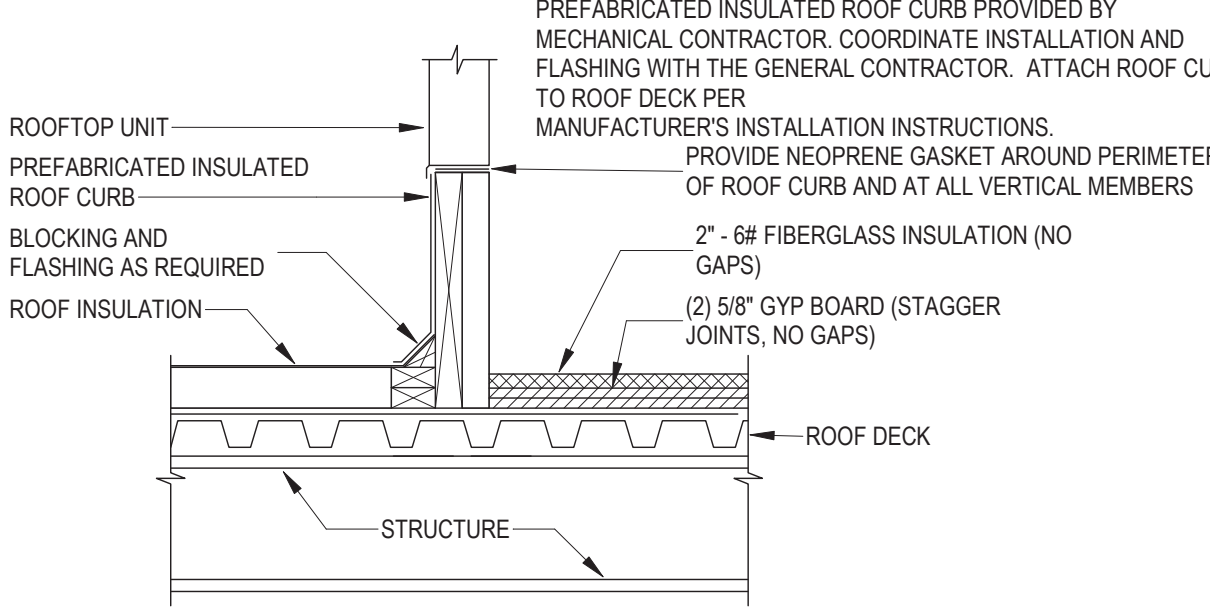
12  
M6.03 LOUVER PLENUM DRAIN DETAIL  
NOT TO SCALE



13  
M6.03 SPIN COLLAR FLEXIBLE DUCT CONNECTOR WITH DAMPER AND WITH LONG RADIUS ELBOW  
NOT TO SCALE

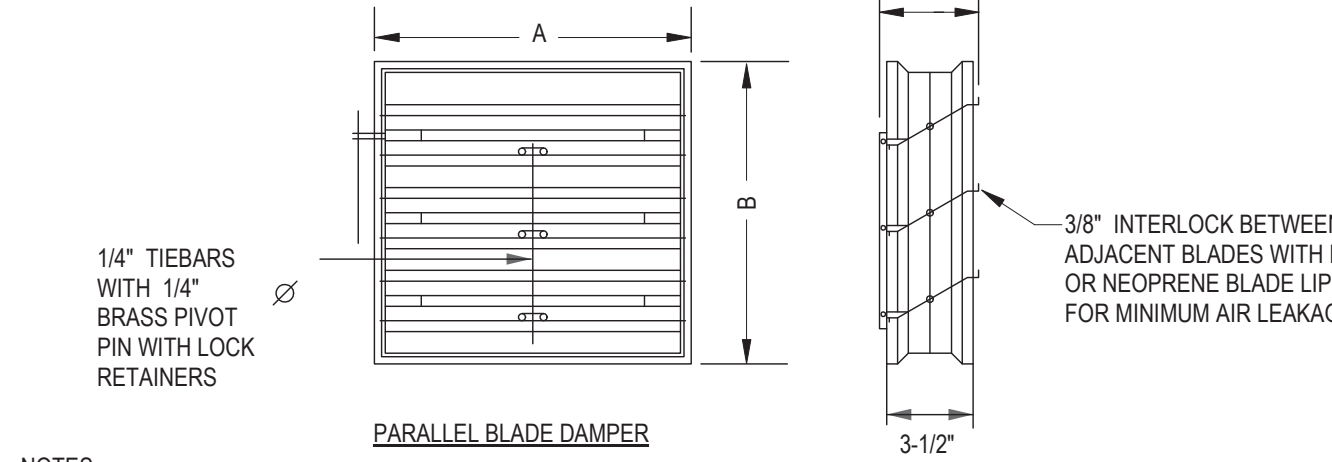
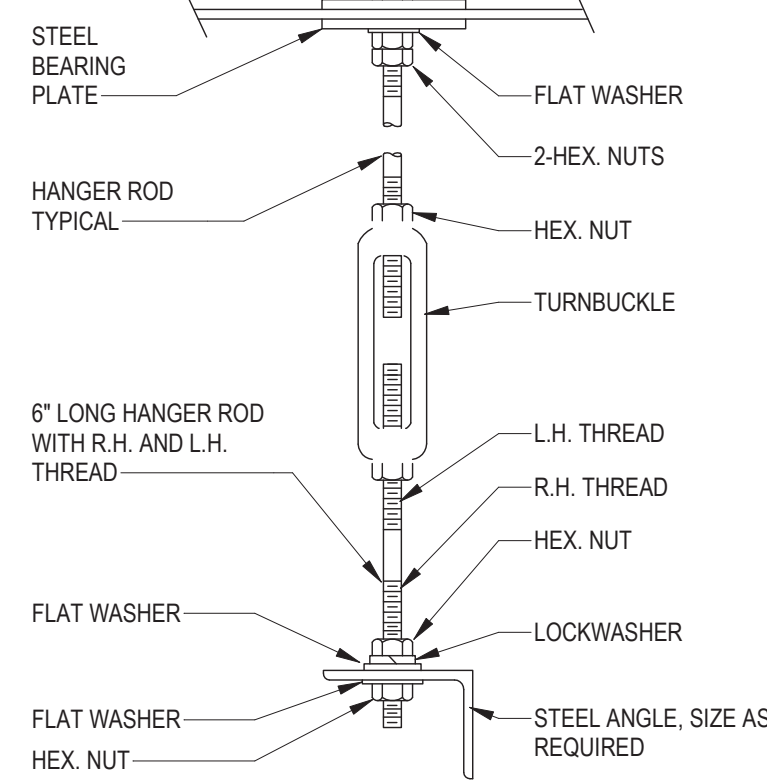
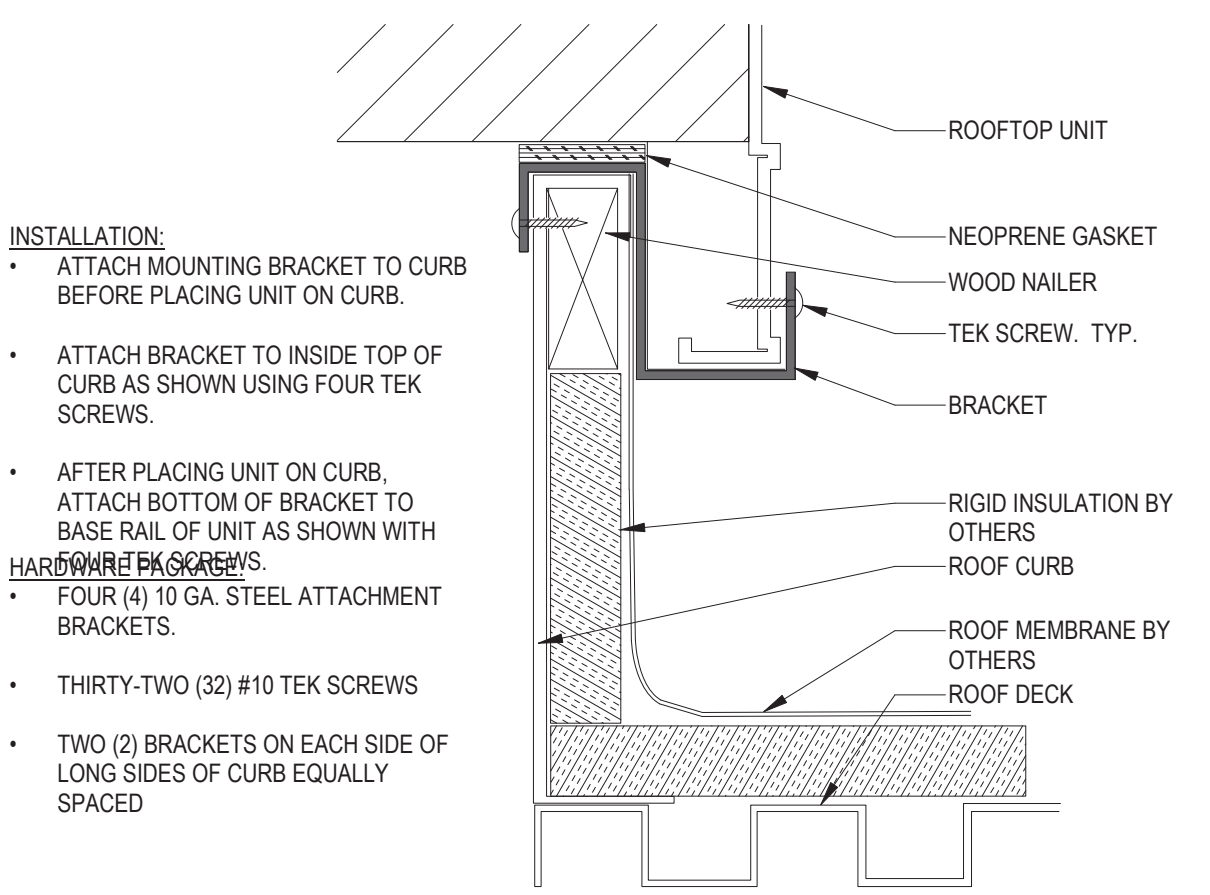
- NOTES:
1. SUPPORT DUCTWORK AS REQUIRED.
  2. BAND FLEX TO COLLAR 1/2" MINIMUM FROM OUTBOARD END OF COLLAR.
  3. INSTALL SPIN COLLAR DAMPER IN OPEN POSITION; FINAL ADJUSTMENT BY TAB CONTRACTOR.
  4. PULL FLEXIBLE DUCT INSULATION UP TO END OF SPIN COLLAR AT EDGE OF RECTANGULAR DUCTWORK; SEAL VAPOR BARRIER WITH GREY TAPE TO PREVENT MOISTURE MIGRATION.
  5. PROVIDE EXTENSION RODS TO ACCOMMODATE INSULATION, PULL TO EDGE OF DUCTWORK AS REQUIRED AND SEAL TO EFFECT VAPOR BARRIER.
  6. POP RIVET OR SHEET METAL SCREWS, MINIMUM 3 EACH AT 120" INTERVALS, CONNECTING STOVEPIPE TO COLLAR. ENSURE RIVETS OR SCREWS DO NOT INTERFERE WITH DAMPER.
  7. TAPE AND SEAL ALL JOINTS TO PREVENT LEAKAGE.
  8. INSTALL LOCKING QUADRANT AND HANDLE ON BOTTOM OF DUCT FOR EASY SERVICE (SHOWN ON TOP FOR EASE OF ILLUSTRATION ONLY).

19  
M6.03 RTU HOLD-DOWN BRACKET INSTALLATION DETAIL  
NOT TO SCALE



18  
M6.03 HEAT PUMP/ DRAIN PAN DETAIL  
NOT TO SCALE

20  
M6.03 ROOFTOP UNIT CURB INSTALLATION DETAIL  
NOT TO SCALE



- NOTES:
1. MAXIMUM WIDTH, A, 48" PER SECTION
  2. MAXIMUM HEIGHT, B, 72" PER SECTION
  3. S.S. JAMB TO BLADE WINDSTOP NOT SHOWN
  4. SELF LUBRICATING BRONZE BEARINGS WITH 1/2" SLIDE PINS ON END OF BLADES
  5. CADMIUM PLATED CONTROL SHAFT 1/2" OR 3/8" SQUARE EXTENDED 6" BEYOND FRAME WITH SLIDE PIN CONTROL
  6. PROVIDE OPPOSED BLADE DAMPERS FOR ALL AIR HANDLING UNIT OUTSIDE AIR, RELIEF AIR, AND RETURN DAMPERS.

22  
M6.03 LOW LEAKAGE RECTANGULAR DAMPERS  
NOT TO SCALE

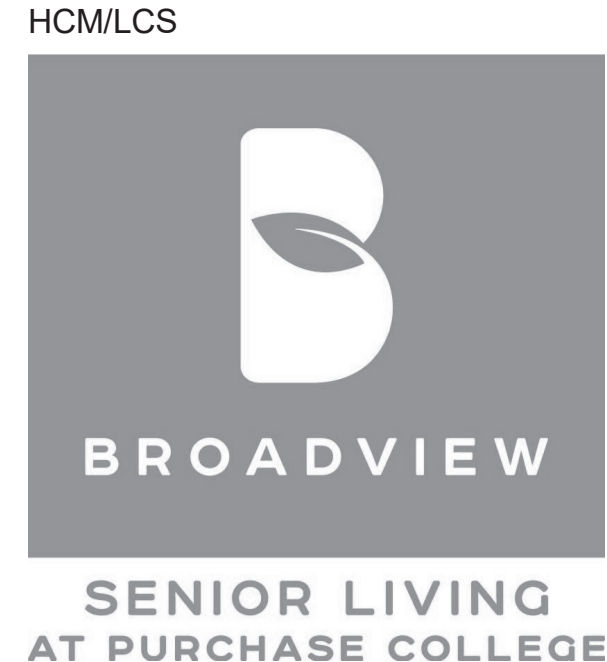
**ARCHITECT**  
HCM Design, Inc.  
700 E. Pratt St, Suite 1200, Baltimore, MD 21202  
p. 410. 837. 7311

**STRUCTURAL ENGINEER**  
Morabito Consultants  
952 Ridgebrook Road, suite 1700, Sparks MD 21152  
p. 410.467.2377

**FOOD SERVICE**  
Scopes Hospitality Group  
300 West Chestnut Street, Suite 201, Ephrata, PA 17522  
p. 717.733.5810

**INTERIOR DESIGNER**  
Merlino Design Partnership, Inc.  
2200 Renaissance Blvd, Suite 300, Gulph Mills, PA 19406  
p. 610.313.9550

**MEPP ENGINEER**  
LAN Associates  
Engineering, Planning, Architecture Surveying, LLP  
252 Main Street, Goshen, NY 10924  
p. 201.447.6400



**BROADVIEW - SENIOR LIVING AT PURCHASE COLLEGE - IL BUILDINGS**

**hord | coplan | macht**

ARCHITECTURE  
LANDSCAPE ARCHITECTURE  
PLANNING  
INTERIOR DESIGN



LAN ASSOCIATES  
Engineering, Planning, Architecture, Surveying, LLP  
LAN 258 #133611  
PROFESSIONAL CERTIFICATION: I CERTIFY THAT THESE DOCUMENTS WERE PREPARED OR APPROVED BY ME, AND THAT I AM A DULY LICENSED ENGINEER UNDER THE LAWS OF THE STATE OF NEW YORK.  
LICENSE NUMBER: 090385  
EXPIRATION DATE: 12/31/23

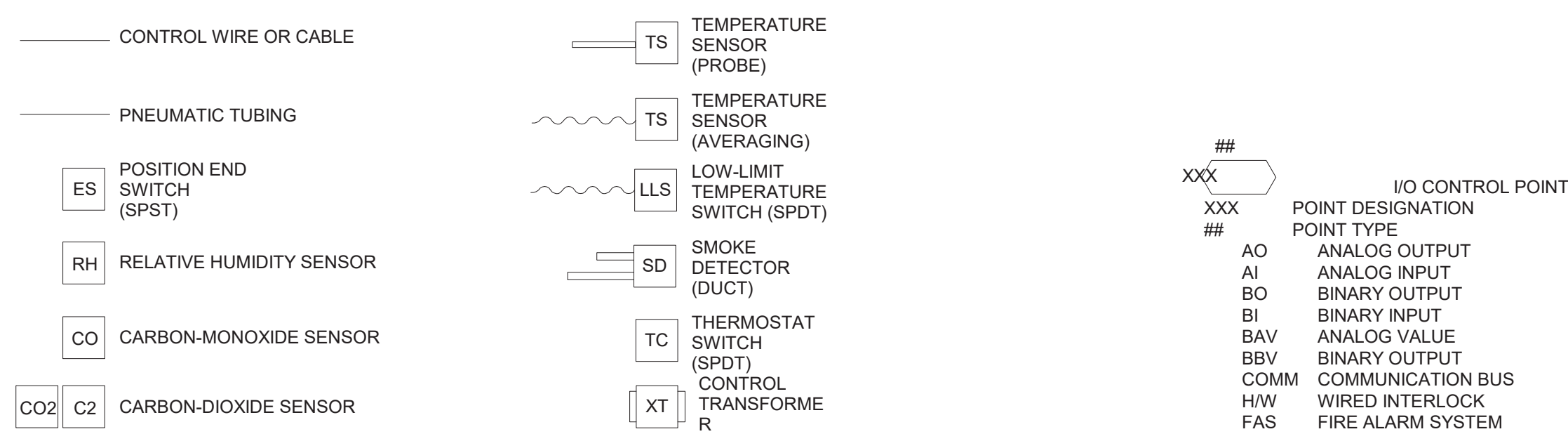
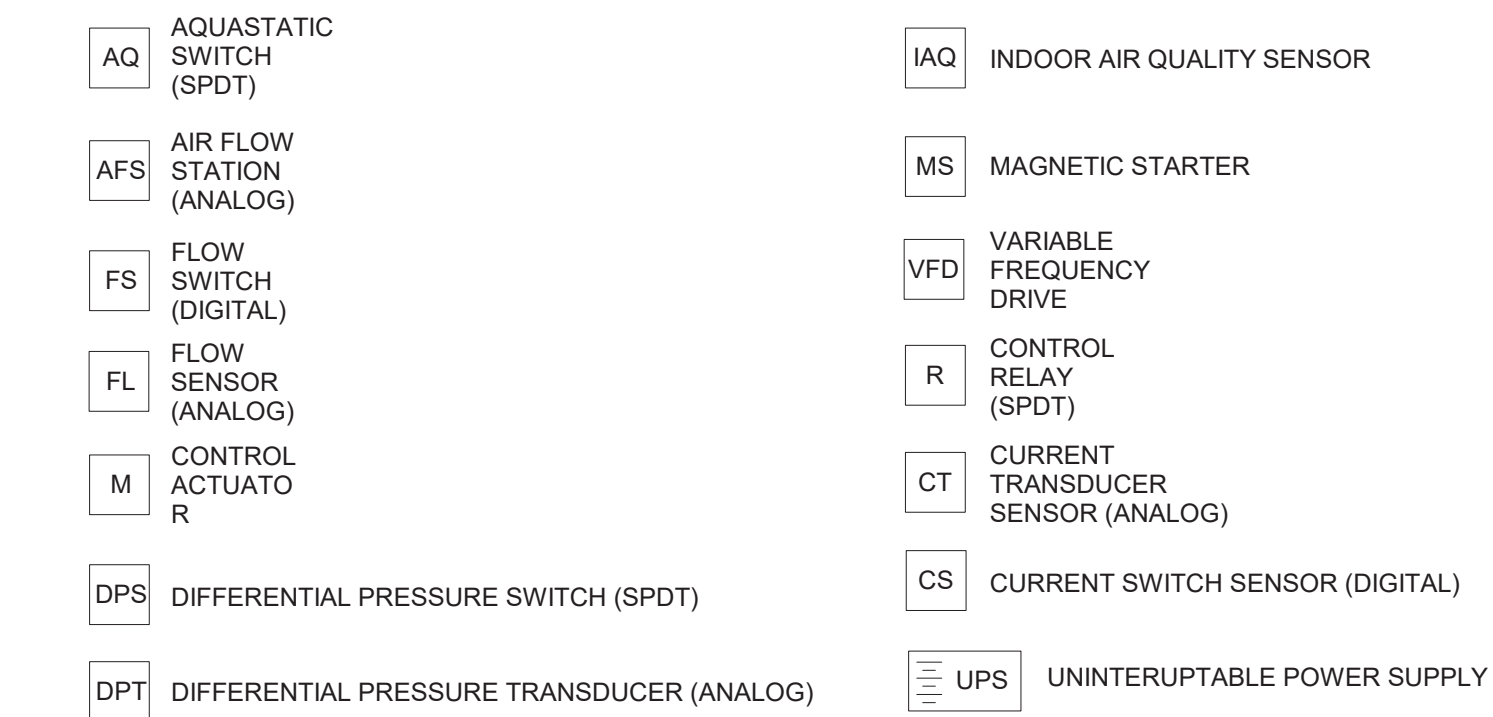
no.	date	revision

Project Name  
BROADVIEW - SENIOR LIVING AT PURCHASE COLLEGE - IL BUILDINGS  
Project Number  
4.1308.01  
Date  
4/30/2021  
Scale  
As indicated  
Drawing  
MECHANICAL DETAILS

**M6.03**

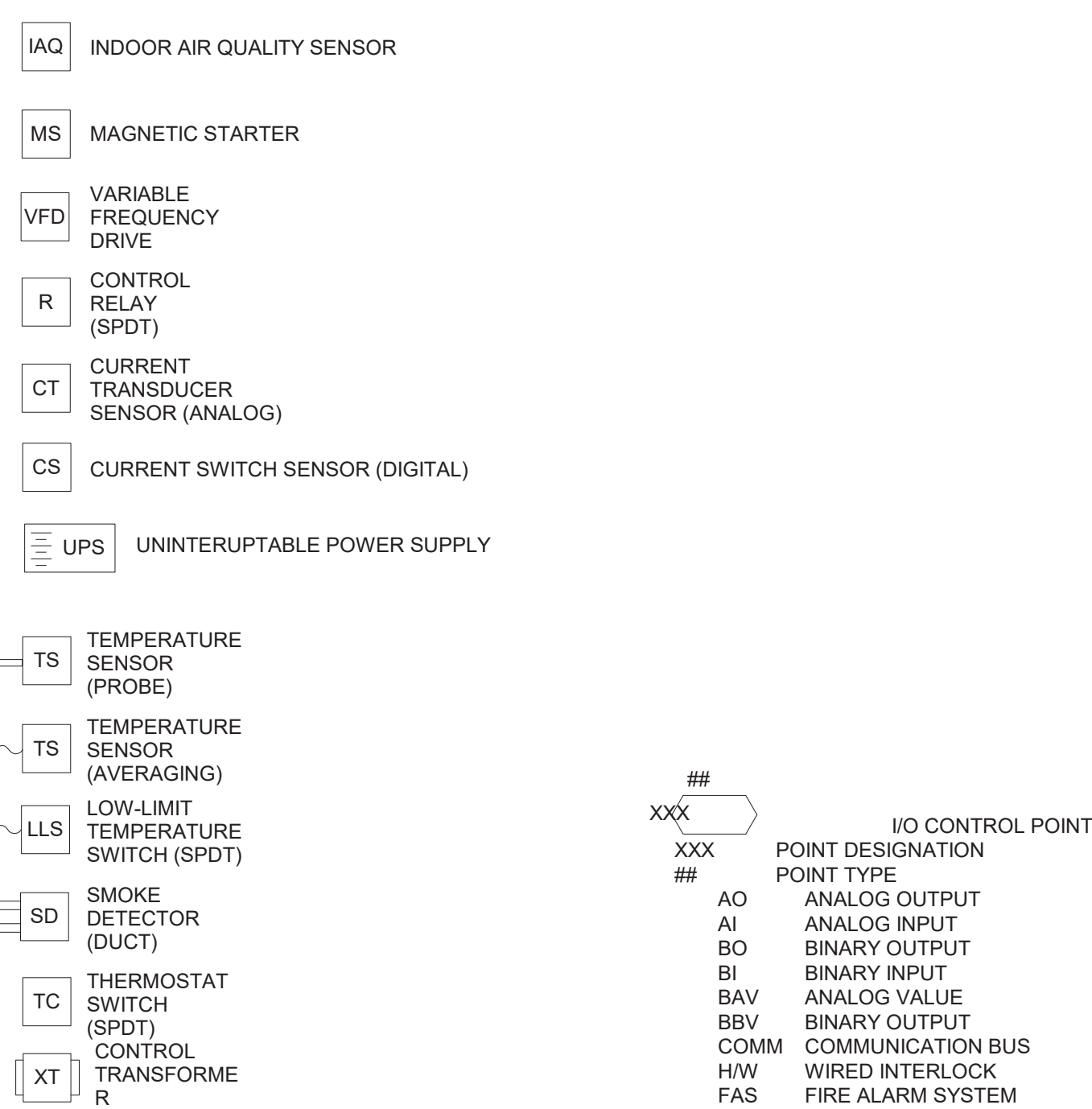
PERMIT / GMP SET





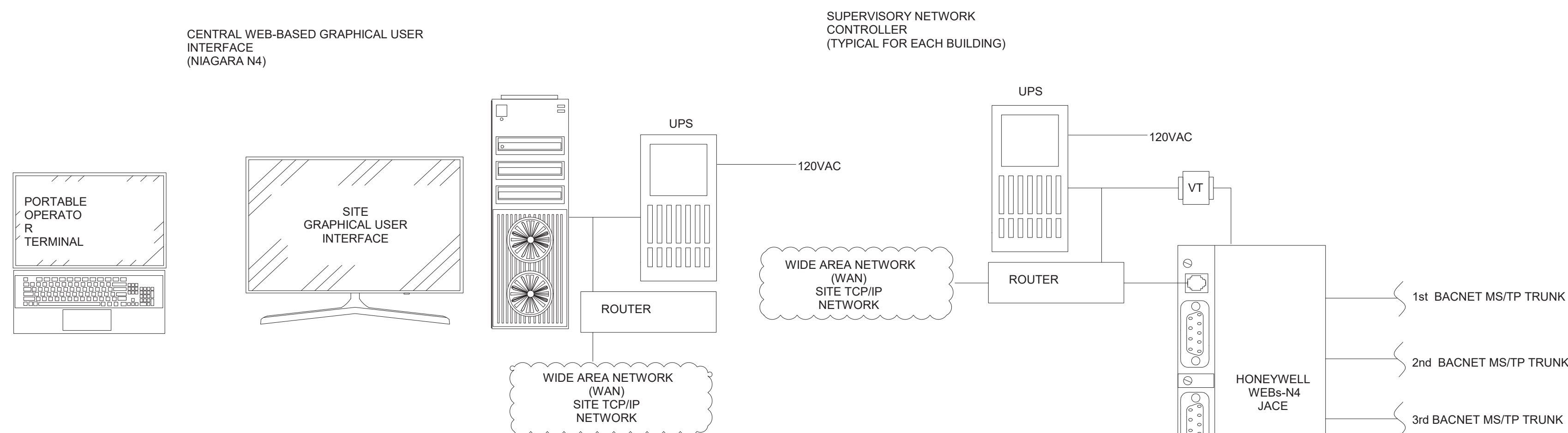
## BMS DEVICE LEGEND

N.T.S.



## BMS CONTROL POINT LEGEND

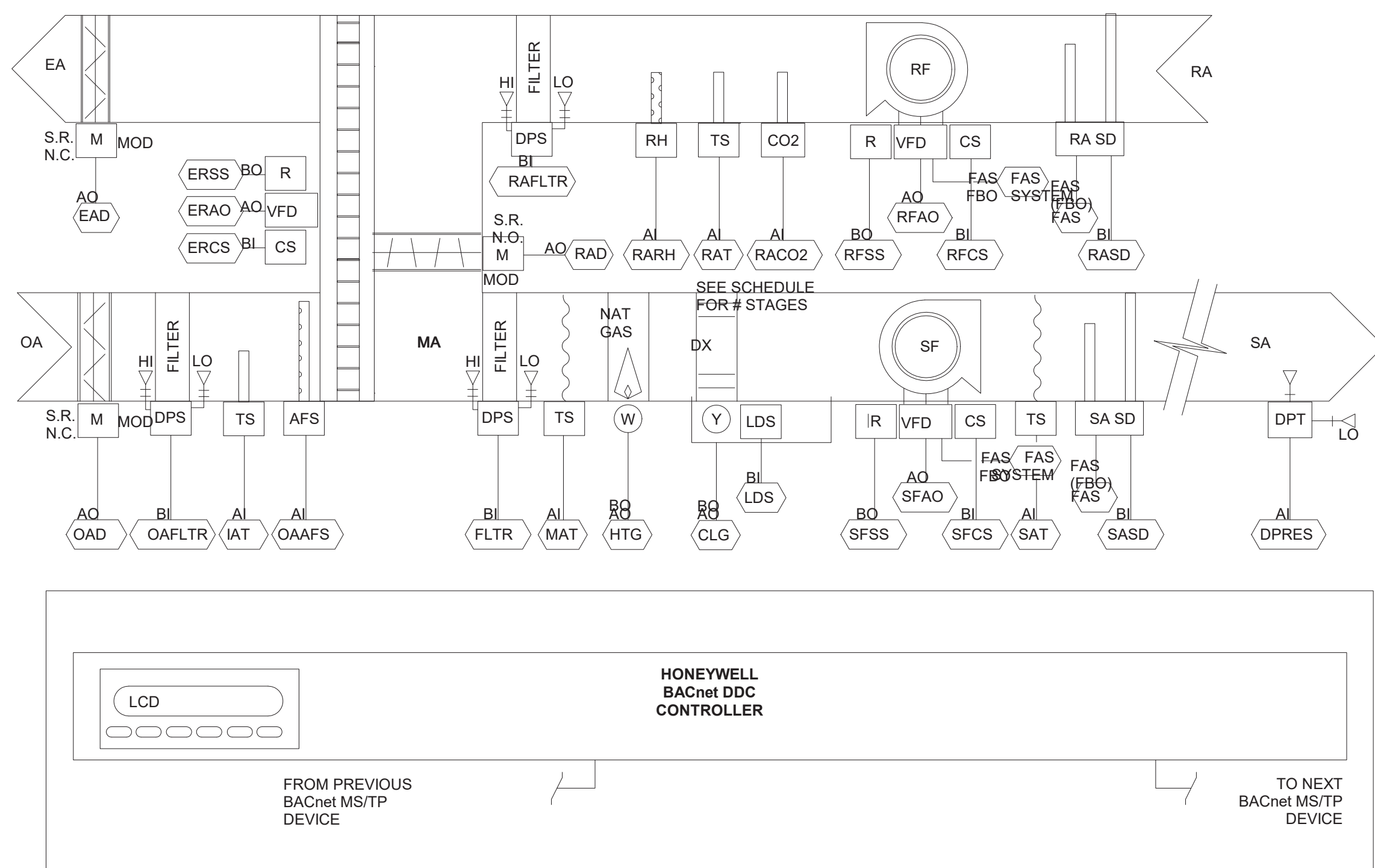
N.T.S.



- \* ALL NEW HVAC EQUIPMENT SHALL BE INCORPORATED INTO THE NEW BMS 3-D CUSTOMIZED WEB-BASED GRAPHICAL USER INTERFACE.
- \* PROVIDE NEW HONEYWELL WEB&N4 DCS SYSTEM UTILIZING THE 3-D CUSTOMIZED WEB-BASED GRAPHS VIEWABLE FROM A COMMON WEB BROWSER
- \* INCORPORATE ALL OF THE NEW DDC CONTROLLERS INTO ONE SEAMLESS AND COMPLETELY FUNCTIONAL SYSTEM.
- \* DDC CONTROLLERS TO BE CONNECTED TO 80% D.D.C. LOADING.
- \* ADDITIONAL JACE PANELS SHALL BE PROVIDED AS REQUIRED
- \* UNIT MANUFACTURER BACNET DDC CONTROLLERS TO BE CONNECTED TO RESPECTIVE MANUFACTURERS COMMUNICATIONS TRUNK.
- \* MANUFACTURER TO PROVIDE ALL NECESSARY COMMUNICATIONS CABLES, FIELD STATION SETUP AND PROGRAMMING.
- \* INSTALLATION OF THE BACNET COMMUNICATIONS WIRING TO BE PERFORMED BY THE A/C CONTRACTOR

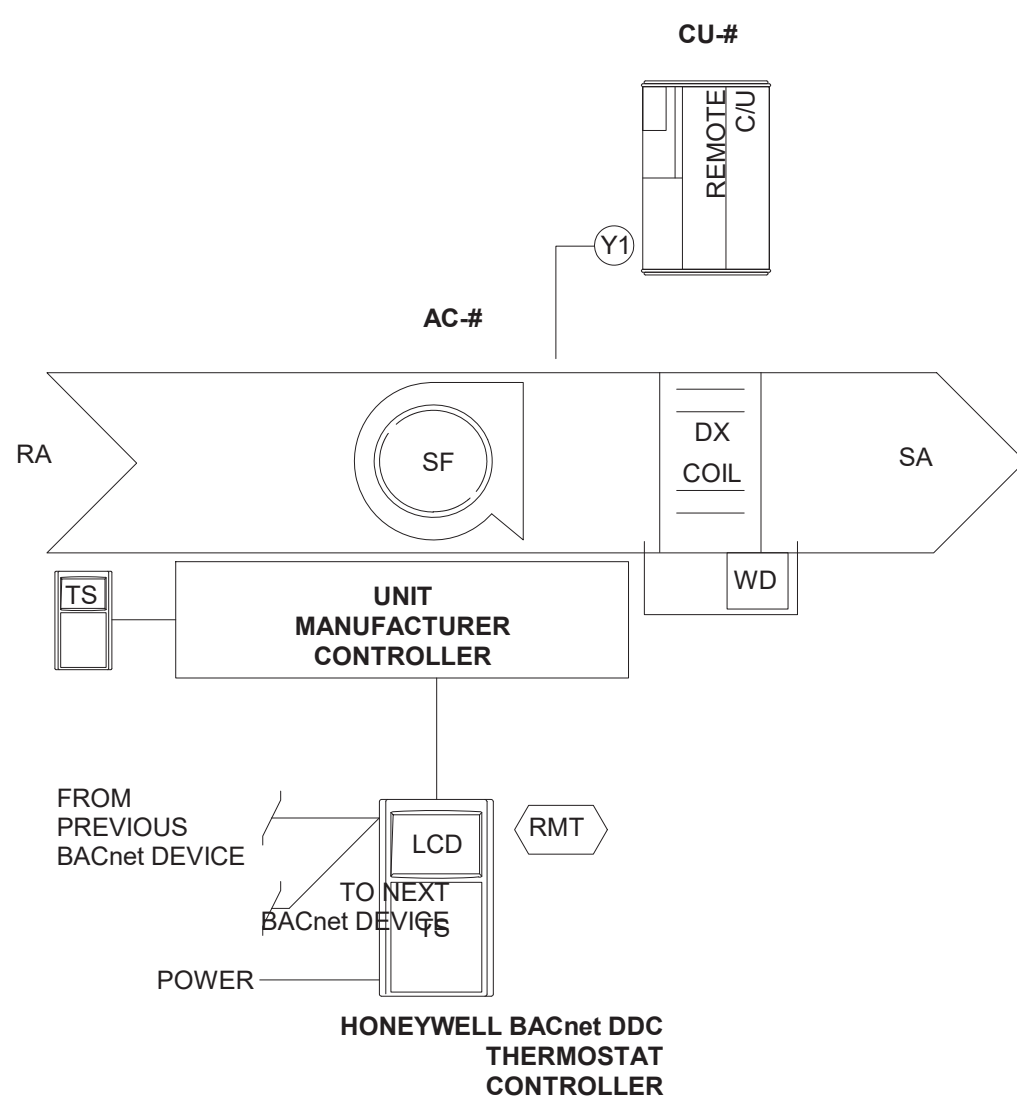
## BUILDING MANAGEMENT SYSTEM NETWORK

N.T.S.



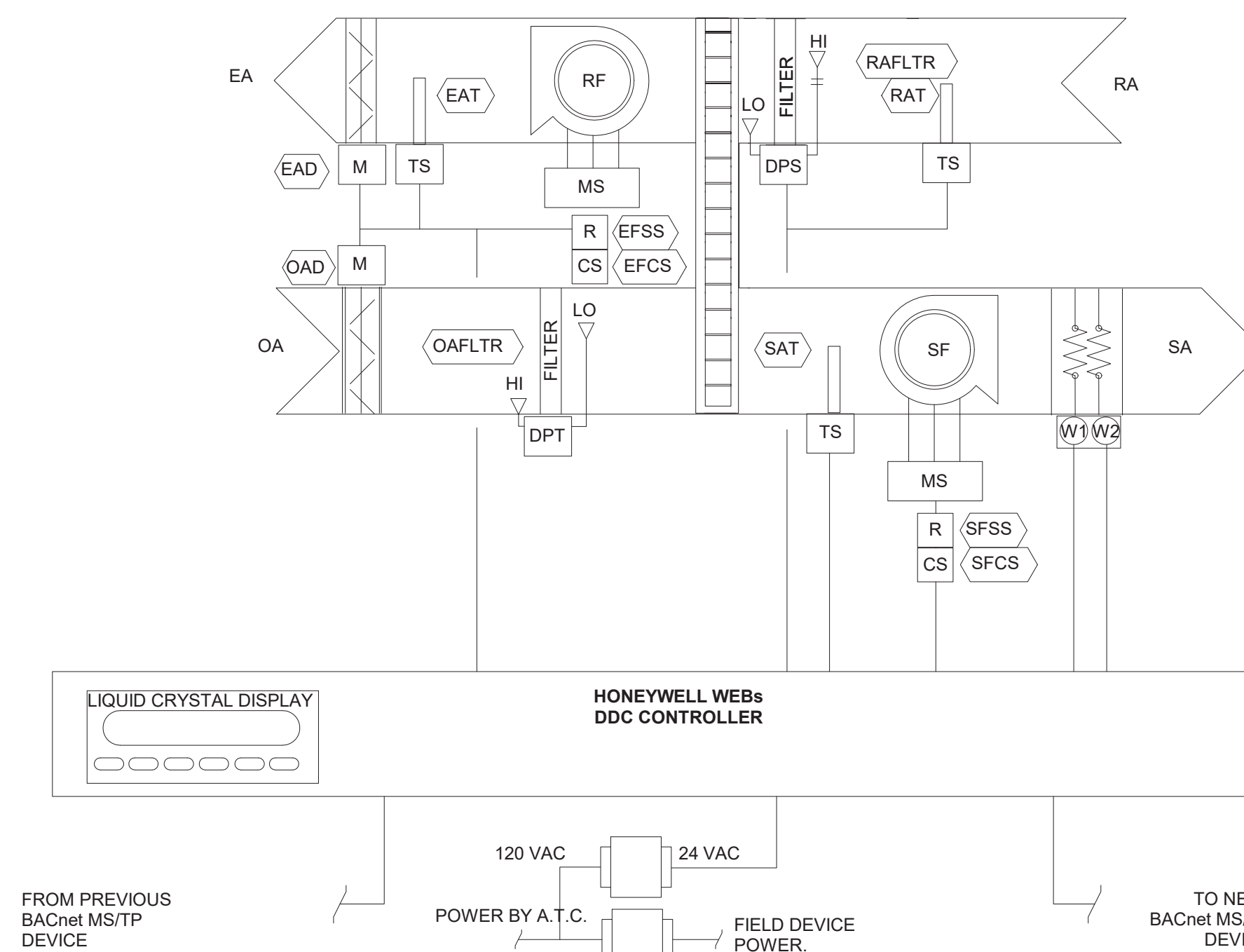
## RTU-E1/2 & RTU-W1/2 CONTROL DIAGRAM

N.T.S



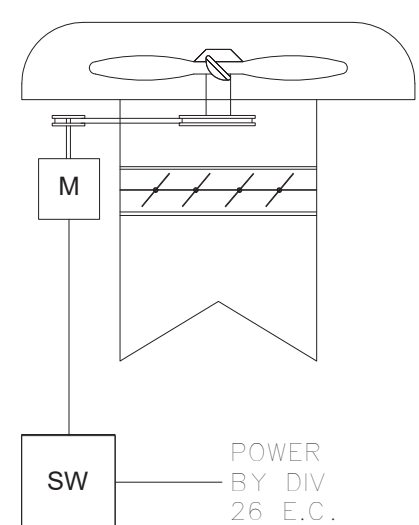
## AC & CU UNITS CONTROL DIAGRAM

N.T.S.



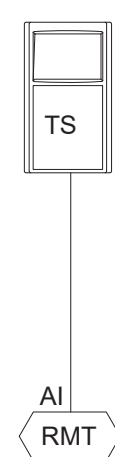
ERV UNIT CONTROL DIAGRAM

N.T.S.



## TX-A CONTROL DIAGRAM

NTS



## TEMPERATURE CONTROL DIAGRAM

N.T.S.