



ASHCREEK MULTIFAMILY - 12 PLEX APARTMENTS

12673 W. ASHCREEK ST.
BOISE, IDAHO 83713

30 AUGUST, 2024

PERMIT REVIEW AND BID DOCUMENTS



CONSULTANTS

CIVIL

CK ENGINEERS
1300 E. STATE STREET STE 102
EAGLE, ID 83616
SHADOW JUNGENBERG
PHONE 208.639.1992
SHADOW@CK-ENGINEERS.COM

LANDSCAPE

KM ENGINEERING
5725 NORTH DISCOVERY WAY |
BOISE, ID 83713
PHONE 208.639.6939
AYENSEN@KMENGLP.COM

STRUCTURAL

MCEIL ENGINEERING
8610 S. SANDY PKWY, SUITE 200
SANDY, UT 84070
ALYSSA YENSEN
PHONE 801.255.7700
BRIAN WARNER
PHONE 801.255.7700
BRIAN@MCNEILENG.COM

MECHANICAL & PLUMBING

PVE INC.
1040 N. 2200 W., SUITE 100
SLC, UT 84116
JORDAN DAY
PHONE 801.359.3158
JDAY@PVE-UT.COM

ELECTRICAL

PVE INC.
1040 N. 2200 W., SUITE 100
SLC, UT 84116
TERRY GORSETH
PHONE 801.359.3158
TGORSETH@PVE-UT.COM

PROJECT TITLE AND ADDRESS
ASHCREEK
MULTIFAMILY - 12
PLEX APARTMENTS
12673 W. ASHCREEK ST.
BOISE, IDAHO 83713

REVISIONS	
DESCRIPTION	DATE

PROJECT INFORMATION
DATE: 30 AUGUST, 2024
PROJECT #: 23-091
PM / PA: AAS
PIC: MMA

DRAWING SET STATUS
PERMIT REVIEW AND
BID DOCUMENTS

THIS DRAWING SET IS INTENDED
TO BE PRINTED IN COLOR

SHEET TITLE

COVER SHEET

SHEET NUMBER

G000-T

CITY STAMP:

CORE
ARCHITECTURE
233 SOUTH PLEASANT GROVE BLVD.
SUITE #105
PLEASANT GROVE, UTAH 84062
PHONE: (801) 769-3000
core@coresearch.com

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PROFESSIONAL STAMP



CONSULTANT INFORMATION

KEYNOTES

01.22 ALIGN SOFFIT WITH FACE OF WALL.

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CONSULTANT INFORMATION

**SEPARATION LEGEND**

- ▼ ONE-HALF-HOUR CORRIDOR (FIRE PARTITION)
- ONE-HOUR-FIRE-RESISTANT CONSTRUCTION (TYPE V-B)
- ONE-HOUR-DWELLING SEPARATION (FIRE PARTITION)
- ONE-HOUR-FIRE-RESISTANT CONSTRUCTION (TYPE V-B)
- + ONE-HOUR-UTILITY SHAFT ENCLOSURE (FIRE BARRIER)
- ONE-HOUR-FIRE-RESISTANT CONSTRUCTION (TYPE V-B)

CEILING LEGEND

- A (2) LAYERS 5/8" TYPE 'X' GYPSUM BOARD, PAINTED, OVER 1/2" RC, ATTACHED TO FLOOR STRUCTURE. (SEE DETAIL A3/501-T)
- B PRE-FINISHED VENTED ALUMINUM SOFFIT PANEL ATTACHED TO STRUCTURE. (SEE DETAIL B3/501-T)
- C (1) LAYER 5/8" TYPE 'X' GYPSUM BOARD, PAINTED, OVER 1-5/8" METAL STUD, SUSPENDED CEILING. OVER (2) LAYERS 5/8" TYPE 'X' GYPSUM BOARD, PAINTED, OVER 1/2" RC, ATTACHED TO FLOOR STRUCTURE (SEE DETAIL C3/501-T)
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ELECTRICAL/MECHANICAL SYMBOLS

- SURFACE MOUNT LED LIGHT FIXTURE
- WALL SUPPLY DIFFUSER
- PENDANT LIGHT
- ▣ SUPPLY DIFFUSER
- STRIP LIGHT FIXTURE
- RETURN AIR DIFFUSER
- WALL-MOUNTED LIGHT FIXTURE
- EXHAUST FAN
- EXIT SIGN
- △ 24"x24" ACCESS PANEL

GENERAL NOTES

- A. GENERAL CONTRACTOR SHALL VERIFY ALL CONDITIONS, DIMENSIONS, AND ASSEMBLIES PRIOR TO CONSTRUCTION. REPORT ANY SIGNIFICANT DISCREPANCIES TO THE ARCHITECT.
- B. AN AUTOMATIC FIRE SPRINKLER SYSTEM IS TO BE INSTALLED THROUGHOUT THE ENTIRE BUILDING IN ACCORDANCE WITH NFPA 13R.
- C. MECHANICAL, PLUMBING, ELECTRICAL, FIRE SPRINKLER, AND CEILING SUBCONTRACTORS SHALL COORDINATE THEIR WORK. IN CASE OF CONFLICT, THE REFLECTED CEILING PLAN SHALL TAKE PRECEDENCE.
- D. SEE ENGINEERING SHEETS FOR ADDITIONAL REQUIREMENTS.
- E. SEE DETAILS ON SHEET A701-T FOR TYPICAL SEISMIC BRACING.
- F. SEE DETAILS ON SHEET A701-T FOR TYPICAL LIGHT BRACING.
- G. SEE DETAILS ON SHEET A701-T FOR TYPICAL WALL BRACING.
- H. CEILING HEIGHTS SHOWN ARE ABOVE FINISH FLOOR IN WHICH THEY ARE CALLED.
- I. COORDINATE LOCATION OF MECHANICAL DIFFUSERS IN WALLS WITH ARCHITECT.
- J. WHERE APPLICABLE, FIRE SPRINKLERS TO BE CENTERED ON CEILING TILES.
- K. SEE EXTERIOR ELEVATIONS AND ELECTRICAL LIGHTING PLAN FOR ADDITIONAL LIGHTING INSTRUCTIONS.
- L. PAINT UNDERSIDE OF EXPOSED OPEN CEILING. VERIFY WITH OWNER.
- M. DO NOT SCALE DRAWINGS.
- N. SEE A401-T FOR PAINTED CEILING COLORS.

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DRAWING SET STATUS

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SHEET TITLE

REFLECTED CEILING PLAN - LEVEL 1

SHEET NUMBER

A151-12

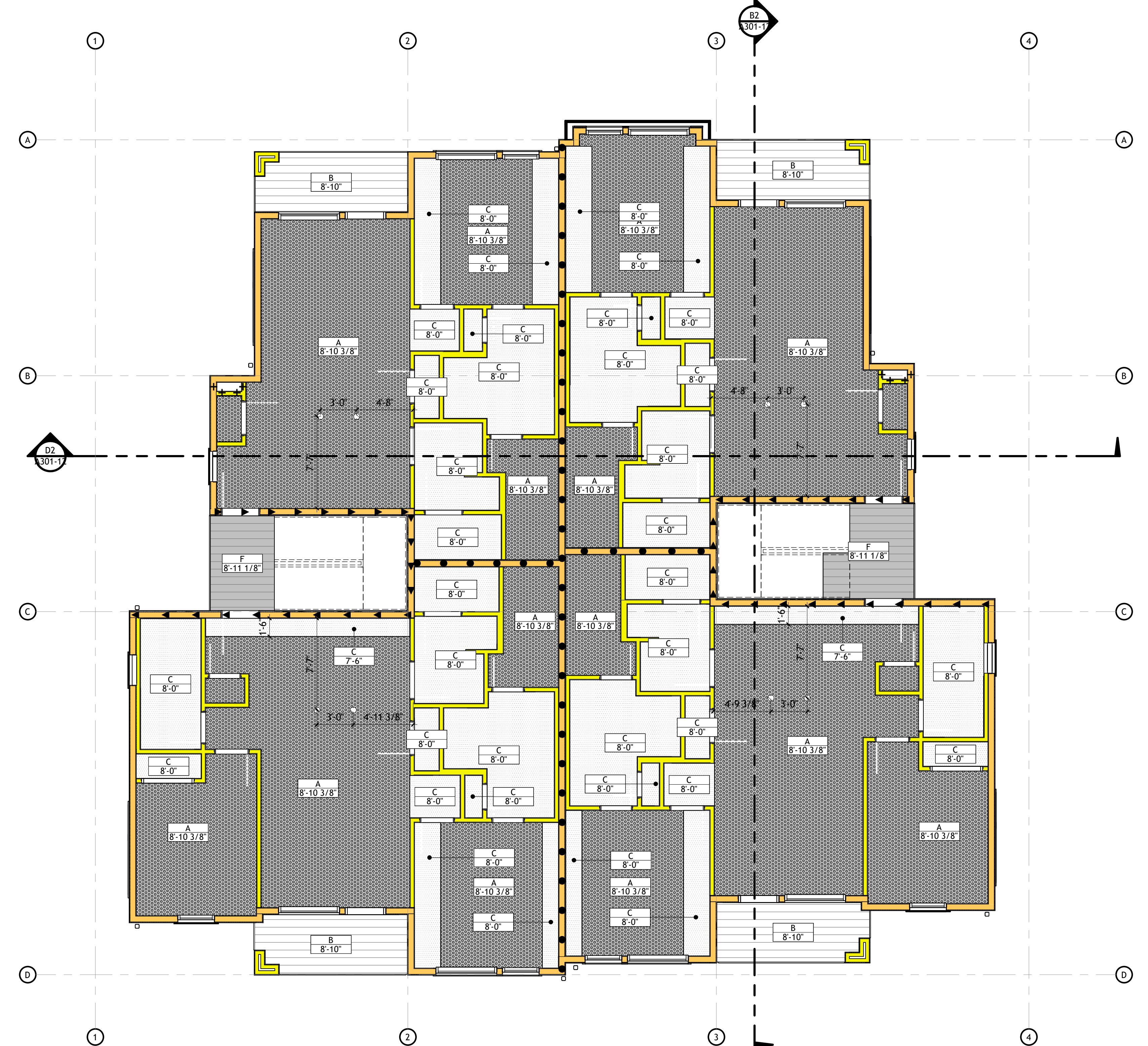
KEYNOTES

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PLEASANT GROVE, UTAH 84062
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core@corearch.com

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CONSULTANT INFORMATION

**SEPARATION LEGEND**

- ▼ ONE-HALF-HOUR CORRIDOR (FIRE PARTITION)
ONE-HOUR-FIRE-RESISTANT CONSTRUCTION (TYPE V-B)
- ONE-HALF-HOUR DWELLING SEPARATION (FIRE PARTITION)
ONE-HOUR-FIRE-RESISTANT CONSTRUCTION (TYPE V-B)
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ELECTRICAL/MECHANICAL SYMBOLS

- SURFACE MOUNT LED LIGHT FIXTURE
- WALL SUPPLY DIFFUSER
- PENDANT LIGHT
- SUPPLY DIFFUSER
- STRIP LIGHT FIXTURE
- RETURN AIR DIFFUSER
- WALL-MOUNTED LIGHT FIXTURE
- EXHAUST FAN
- EXIT SIGN
- △ 24"x24" ACCESS PANEL

GENERAL NOTES

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12675 W. ASHCREEK ST.
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SHEET TITLE

REFLECTED CEILING PLAN - LEVEL 2

SHEET NUMBER
A152-12

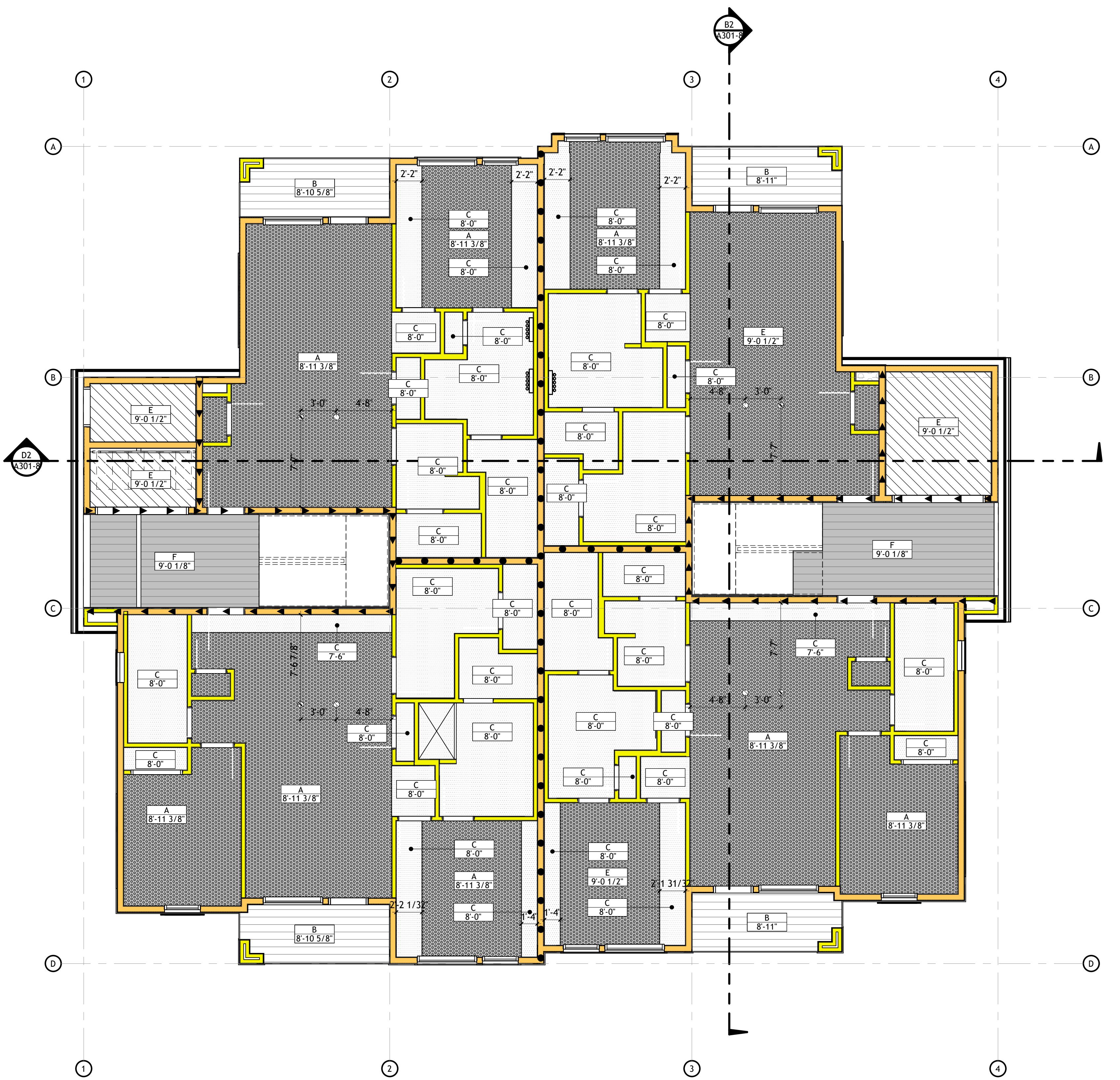
KEYNOTES

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ARCHITECTURE
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SUITE #105
PLEASANT GROVE, UTAH 84062
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core@corearch.com

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CEILING LEGEND

- | | |
|---|---|
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ELECTRICAL/MECHANICAL SYMBOLS

- | | |
|-----------------------------------|------------------------|
| □ SURFACE MOUNT LED LIGHT FIXTURE | △ WALL SUPPLY DIFFUSER |
| ○ PENDANT LIGHT | ▣ SUPPLY DIFFUSER |
| — STRIP LIGHT FIXTURE | ▨ RETURN AIR DIFFUSER |
| ● EXHAUST FAN | ■ EXHAUST FAN |
| ○ WALL-MOUNTED LIGHT FIXTURE | △ 24"x24" ACCESS PANEL |
| ○ EXIT SIGN | |

GENERAL NOTES

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ASHCREEK MULTIFAMILY - 8 PLEX APARTMENTS

PROJECT TITLE AND ADDRESS
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BOISE, IDAHO 83713

REVISIONS	
△ DESCRIPTION	DATE

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SHEET TITLE

REFLECTED CEILING PLAN - LEVEL 1

SHEET NUMBER
A151-8

CITY STAMP:

KEYNOTES

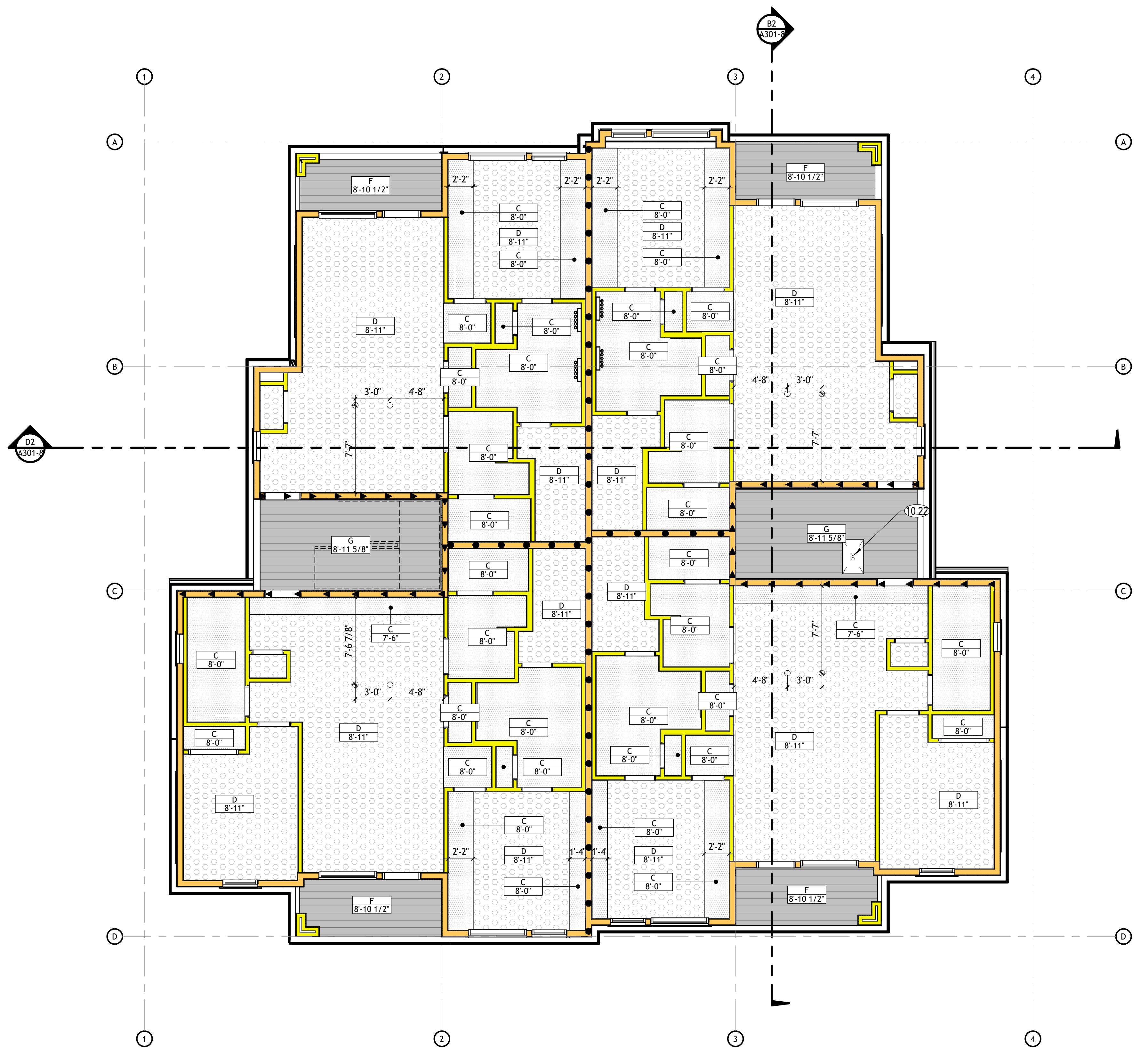
10.22 22 1/2" X 36" ATTIC ACCESS PANEL. PAINT AND TEXTURE TO MATCH CEILING.

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REFLECTED
CEILING PLAN -

LEVEL 2

SHEET NUMBER

A152-8

ELECTRICAL/MECHANICAL SYMBOLS

□ SURFACE MOUNT LED LIGHT FIXTURE	■ WALL SUPPLY DIFFUSER
○ PENDANT LIGHT	▣ SUPPLY DIFFUSER
— STRIP LIGHT FIXTURE	▨ RETURN AIR DIFFUSER
— WALL-MOUNTED LIGHT FIXTURE	■ EXHAUST FAN
○ EXIT SIGN	△ 24"x24" ACCESS PANEL

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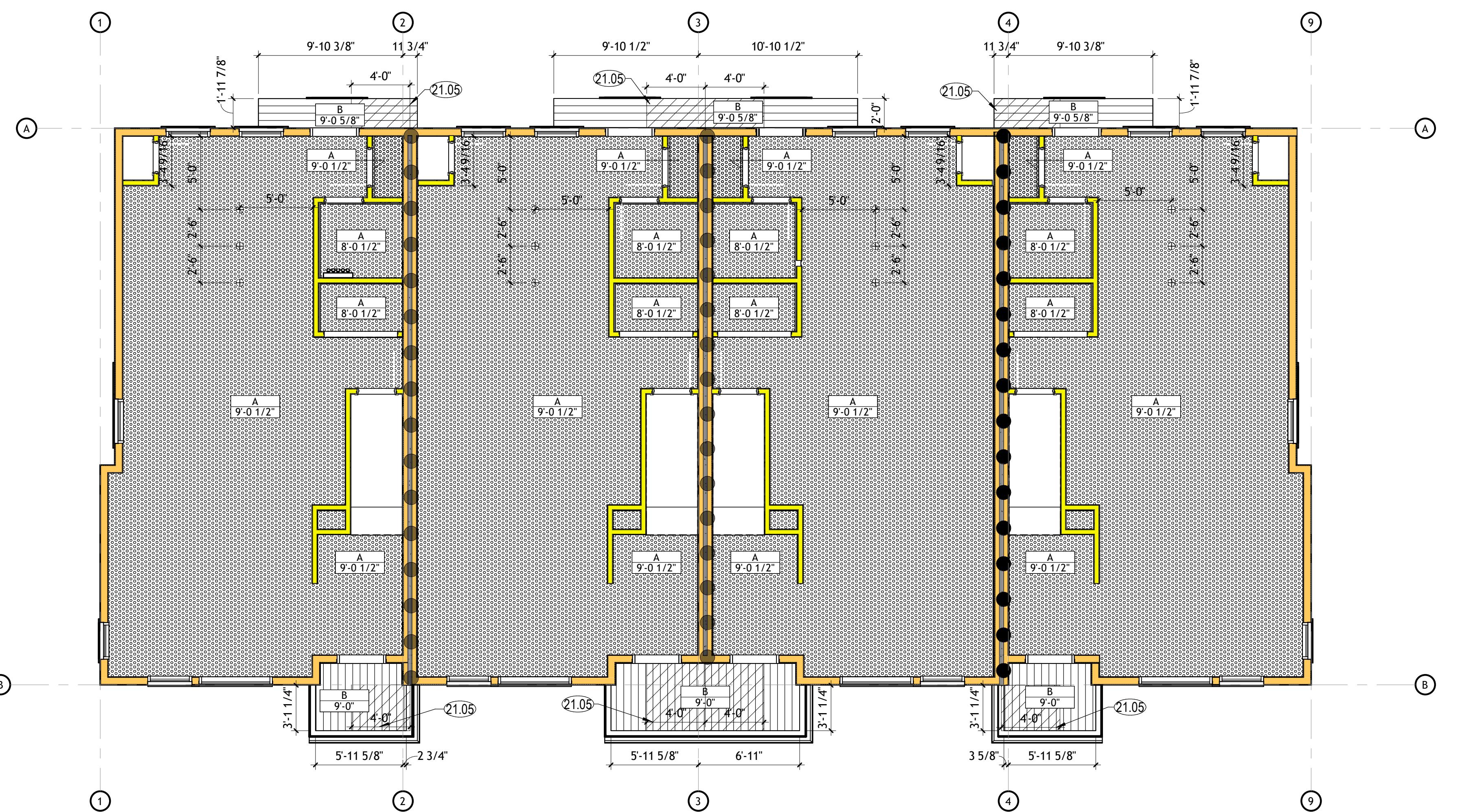
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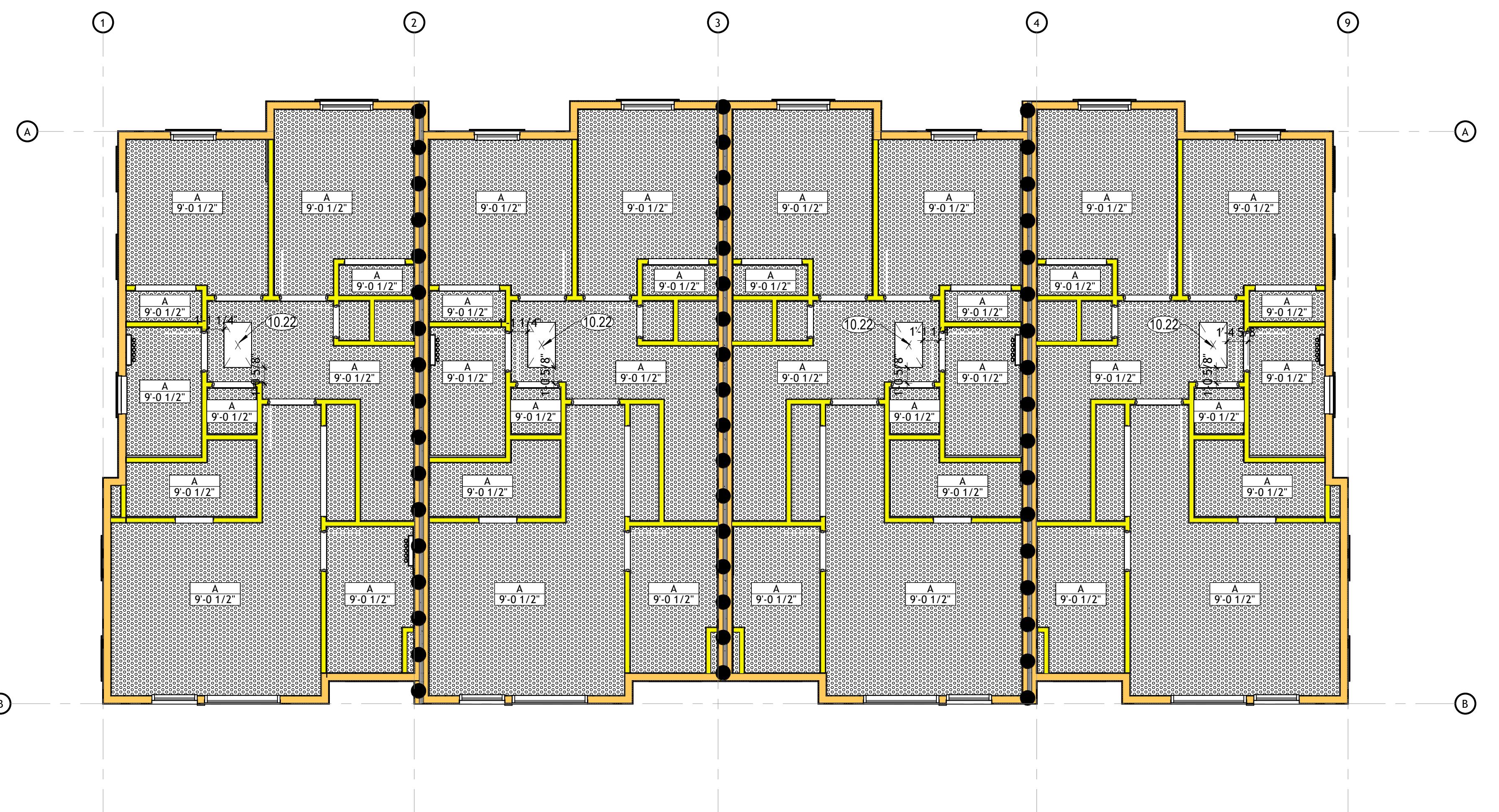
SHEET NUMBER

A152-8

B2 REFLECTED CEILING PLAN - LEVEL 1
 A151-4 | SCALE: 3/16" = 1'-0" | SEE SHEET AS101 FOR BUILDING ORIENTATION



D2 REFLECTED CEILING PLAN - LEVEL 2
 A151-4 | SCALE: 3/16" = 1'-0" | SEE SHEET AS101 FOR BUILDING ORIENTATION



KEYNOTES

- 10.22 22 1/2" X 36" ATTIC ACCESS PANEL. PAINT AND TEXTURE TO MATCH CEILING.
- 21.05 HATCHED AREA INDICATES FIRE RETARDANT TREATED PLYWOOD SHEATHING OR 5/8" GYPSUM BOARD MINIMUM 4'-0" MEASURED PERPENDICULAR FROM UNIT SEPARATION WALLS. SEE DETAILS ON SHEET A501-4.

ASHCREEK MULTIFAMILY 4-PLEX TOWNHOMES

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REFLECTED CEILING PLAN - LEVELS 1 & 2

SHEET NUMBER

A151-4

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- D. SEE DETAILS ON SHEET A701-4 FOR TYPICAL SEISMIC BRACING.
- E. SEE DETAILS ON SHEET A701-4 FOR TYPICAL SEISMIC LIGHT BRACING.
- F. SEE DETAILS ON SHEET A701-4 FOR TYPICAL WALL BRACING.
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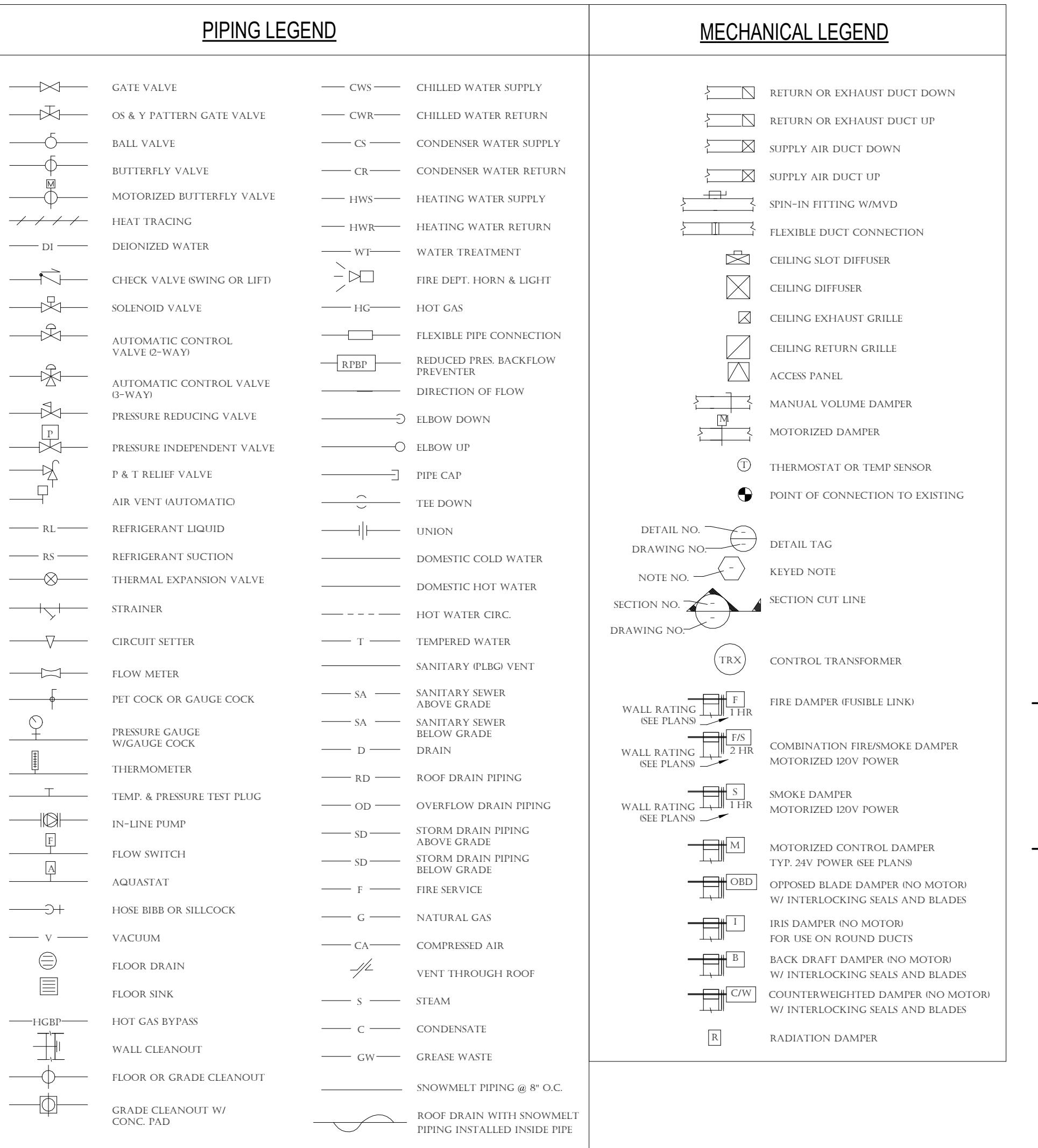
- TWO HOUR FIRE RATED ASSEMBLY. ASSEMBLY TO EXTEND TO ROOF DECK IN ALL CASES, INCLUDING ROOF OVERBUILDS.

CEILING LEGEND

- | | | |
|----------|--|---|
| A | | 5/8" TYPE "X" GYPSUM BOARD, PAINTED ATTACHED TO STRUCTURE. SEE DETAILS B4/A501, B5/A501, C4/A501. |
| B | | PRE-FINISHED ALUMINUM SOFFIT PANEL ATTACHED TO STRUCTURE. |

ELECTRICAL/MECHANICAL SYMBOLS

- | | | | |
|--|---------------------------------|--|----------------------|
| | SURFACE MOUNT LED LIGHT FIXTURE | | WALL SUPPLY DIFFUSER |
| | PENDANT LIGHT | | SUPPLY DIFFUSER |
| | STRIP LIGHT FIXTURE | | RETURN AIR DIFFUSER |
| | WALL-MOUNTED LIGHT FIXTURE | | EXHAUST FAN |
| | EXIT SIGN | | 24x24" ACCESS PANEL |



THE GENERAL CONTRACTOR IS FULLY RESPONSIBLE TO COORDINATE BETWEEN ALL TRADES AND ALL PLANS AND SPECS FROM ALL OTHER TRADES. EACH DIVISION CONTRACTOR IS ALSO FULLY RESPONSIBLE TO COORDINATE WITH THE OTHER TRADES AND COORDINATE WITH ALL TRADES DRAWINGS AND SPECS. IF THERE ARE ANY DISCREPANCIES, IT'S THE CONTRACTORS RESPONSIBILITY TO REQUEST CLARIFICATION FROM OWNERS, ARCHITECT, AND ENGINEERS PRIOR TO PROCEEDING WITH ANY WORK AND/OR BID ESTIMATES. IF FAILED TO DO SO, GENERAL CONTRACTOR WILL BE HELD RESPONSIBLE FOR ANY COST IMPACT.

2018 International Building Code
2018 International Mechanical Code
2017 Idaho State Plumbing Code (2015 UPC)
2018 International Fuel Gas Code
2018 International Energy Conservation Code
2018 International Fire Code
Seismic Design Category: Commercial B
Rainfall Rate = 1.0 in/hr
Frost Depth: 24 inches
Climate Zone: 5B

STREET CITY PRESSURE: 70 PSIG
AFTER METER WATER PRESSURE: 65 PSIG
AFTER RPBP PRESSURE: 50 PSIG

30' max building height (13 psi drop)
NTC id: 381000, 8' DOW load
37 GPM per 8-plex (2' meter, 2' line)
46 GPM per 8-plex (2' meter, 2' line)
54 GPM per 12-pex (2' meter, 2' line)
Sewer: 8' 2500, 2800 is max for 8' per 717.1

2' meter assumed for all pressure calculations, see civil.

SUDS RELIEF:

7.1.1 DRAINAGE CONNECTIONS SHALL NOT BE MADE INTO A DRAINAGE PIPING SYSTEM WITHIN 8 FEET OF A VERTICAL TO HORIZONTAL CHANGE OF DIRECTION OF A STACK CONTAINING SUDS-PRODUCING FIXTURES. BATHTUBS, LAUNDRIES, WASHING MACHINE STANDPIPES, KITCHEN SINKS, AND DISHWASHERS SHALL BE CONSIDERED SUDS-PRODUCING FIXTURES. WHERE PARALLEL VENT STACKS ARE REQUIRED, THEY SHALL CONNECT TO THE DRAINAGE STACK AT A POINT 8 FEET ABOVE THE LOWEST POINT OF THE DRAINAGE STACK.

INSULATION FIRE RATING AND FIRE DAMPER NOTES:

TERMAL AND SOUND INSULATION COVERING WHICH ARE INSTALLED IN CONCEALED AND EXPOSED SPACES AND AS COVERING PIPING AND TUBING SHALL BE TESTED IN ACCORDANCE WITH ASTM E 84 AND HAVE A FLAME SPREAD OF 0-25 AND A SMOKE INDEX OF 0-450.

TERMAL AND SOUND INSULATION COVERING WHICH ARE INSTALLED IN CONCEALED PLENUM SPACES AND AS COVERING PIPING AND TUBING SHALL BE TESTED IN ACCORDANCE WITH ASTM E 84 AND HAVE A FLAME SPREAD OF 0-25 AND A SMOKE INDEX OF 0-50.

FIRE DAMPERS MUST BE UL555 LISTED AND CONTROLLED BY AN AUTOMATIC FIRE DETECTOR, FUSIBLE LINK OR AN ELECTRICAL FUSIBLE LINK.

SMOKE DAMPERS MUST BE UL555 LISTED AND CONTROLLED BY AN AUTOMATIC SMOKE DETECTOR, EITHER IN THE DUCT WORK OR THE AREA OF SMOKE DETECTION.

FIRE SMOKE DAMPERS MUST BE UL555/UL555 LISTED AND CONTROLLED BY AN AUTOMATIC FIRE DETECTOR AND FUSIBLE LINK OR AN ELECTRICAL FUSIBLE LINK.

PROJECT GENERAL NOTES

- ① INDICATES POINT OF CONNECTION OF NEW TO EXISTING MECHANICAL EQUIPMENT, PIPING OR DUCTWORK.
- ② COORDINATE ALL FIRE SPRINKLER HEADS AND AIR DEVICE LOCATIONS WITH REFLECTED CEILING PLANS AND ELECTRICAL DRAWINGS. SEE ARCHS PLANS AND ELECTRICAL PLANS FOR CEILING PLANS.
- ③ ALL RIGID ROUND DUCTWORK IN UNCONDITIONED SPACES SHALL RECEIVE 2" - 0.75 LBS/CFUFT. FIBERGLASS DUCT WRAP - MIN. R-5. ALL LOW-PRESSURE RECTANGULAR DUCT SHALL RECEIVE 1" - 1.5 LBS/CFUFT. DUCT LINER. ATTACH TO DUCT WITH MECHANICAL FASTENERS AND TRIM AND SEAL JOINTS. LOW PRESSURE ROUND FLEXIBLE DUCT TO BE 1-1/2" THICK INSULATED AND A MAXIMUM OF 4 FT. LONG. ALL INSULATION TO MEET NFPA 90 PER UL 181-CLASS I. NO DUCT BOARD ALLOWED.
- ④ DUCTWORK AND PIPE ROUTING AS SHOWN ON DRAWINGS IS DIAGRAMMATIC AND IS NOT TO BE SCALED. WHERE ALTERNATE ROUTING, OFFSETS AND TRANSITIONS ARE REQUIRED FOR COORDINATION OF WORK, THIS CONTRACTOR SHALL MAKE CHANGE WITHOUT ADDITIONAL COSTS.
- ⑤ THIS CONTRACTOR SHALL CLOSELY COORDINATE NEW MECHANICAL WITH NEW AND EXISTING MECHANICAL, ELECTRICAL, ARCHITECTURAL AND BUILDING STRUCTURE.
- ⑥ THIS CONTRACTOR SHALL FIELD VERIFY ALL MECHANICAL ITEMS PRIOR TO STARTING NEW WORK. ADDITIONAL COST WILL NOT BE ALLOWED FOR CONTRACTORS FAILURE TO BECOME FAMILIAR WITH EXISTING SITE CONDITIONS.
- ⑦ THIS CONTRACTOR SHALL USE SMACNA DUCT CONSTRUCTION STANDARDS FOR SHEET METAL DUCTS. ALL HIGH-PRESSURE DUCTWORK UPSTREAM OF VAV TERMINAL BOXES SHALL BE CONSTRUCTED FOR 2" W.C. STATIC PRESSURE, SEAL CLASS "A". ALL OTHER DUCTWORK (UNLESS OTHERWISE NOTED ON FLOOR PLANS) SHALL BE CONSTRUCTED OF 1" W.C. SEAL CLASS "B".
- ⑧ ALL MECHANICAL SYSTEMS SHALL BE INSTALLED IN ACCORDANCE WITH THE CURRENT ADOPTED EDITION OF THE BUILDING CODES, FIRE CODES, MECHANICAL CODES AND PLUMBING CODES.
- ⑨ THIS CONTRACTOR SHALL PROVIDE SUBMITTALS ON ITEMS LISTED IN MECHANICAL EQUIPMENT LIST TO THE ENGINEER FOR REVIEW PRIOR TO THE ORDER, PURCHASE OR INSTALLATION.
- ⑩ WATER FLOW RATES AND DIFFUSERS MUST BE BALANCED TO THE VALUES INDICATED ON THE FLOOR PLANS. PROVIDE BALANCE REPORT TO ENGINEER PRIOR TO PROJECT CLOSEOUT.
- ⑪ DUCT DIMENSIONS SHOWN ARE INSIDE CLEAR DIMENSIONS.
- ⑫ FIRE SPRINKLER CONTRACTOR SHALL ADD AND/OR RELOCATE SPRINKLER HEADS PER REFLECTED CEILING PLAN AND THE CURRENT ADOPTED EDITION OF NFPA AND BUILDING CODE.
- ⑬ PIPING MATERIAL REQUIREMENTS:
DOMESTIC COLD WATER PIPING - TYPE 'L' COPPER, PEX (UPON APPROVAL OF ENGINEER), CPVC (UPON APPROVAL OF ENGINEER)
DOMESTIC HOT WATER PIPING - TYPE 'L' COPPER, PEEX (UPON APPROVAL OF ENGINEER)
WASTE AND VENT PIPING - CAST IRON, SCH. 40 PVC
REFRIGERANT PIPING - TYPE 'K' COPPER - 100% BRAZED, NOT SOLDERING ALLOWED.
NATURAL GAS PIPING - SCH. 40 BLACK IRON - 2" AND BELOW THREADED, 2.5" AND ABOVE WELDED.
CONDENSATE - COPPER, SCH. 40 PVC IN LOCATIONS WHEN PLENUM IS NOT USED FOR RETURN
- ⑭ VENT THE HIGH POINTS OF NEW MECHANICAL PIPING.
- ⑮ PROVIDE INSULATION FOR THE FOLLOWING IN UNCONDITIONED SPACES:
A. DOMESTIC HOT WATER PIPING:
1" THICK FOR ALL PIPE SIZES.
B. DOMESTIC COLD WATER PIPING IN UNCONDITIONED SPACES:
2" THICK FOR PIPE SIZES 1/2" TO 6" & HEAT TRACED W/ MIN. 5 WATTS PER FOOT.
C. PROVIDE CONTINUOUS VAPOR BARRIER
- ⑯ INSULATE PIPING WITH FIBERGLASS FOAM COVERING WITH ALL SERVICE JACKET AND SELF-CAP SEAL. FITTINGS SHALL BE MITERED PIPING COVERING OF GLASS FIBER MOLDED FITTINGS FOR USE IN A RETURN AIR PLENUM. THERMAL CONDUCTIVITY SHALL BE A MAXIMUM OF 20/inch THICKNESS AT 75°F.
- ⑰ INDICATES EXISTING OR FUTURE. INDICATES NEW MATERIAL. IF THERE ARE ANY DISCREPANCIES AS TO WHAT IS NEW AND WHAT IS EXISTING, CONTRACTOR IS TO CONTACT THE ARCHITECT AND/OR MECHANICAL ENGINEER. THE EXISTING SHELL DOCUMENTS ARE AVAILABLE THROUGH THE ARCHITECT. ADDITIONAL COSTS WILL NOT BE TOLERATED FOR THE CONTRACTOR'S FAILURE TO BECOME FAMILIAR WITH EXISTING SHELL AND SITE CONDITIONS.
- ⑲ EACH TRADE IS RESPONSIBLE FOR THEIR OWN FIRE CAULKING.
- ⑳ DIVISION 15 MUST PROVIDE AND INSTALL ALL ACCESS DOORS FOR FCUs, VALVES, FLOW METERS, ETC. COORDINATE LOCATION WITH GENERAL CONTRACTOR.
- ㉑ HOUSEKEEPING PADS FOR ALL EQUIPMENT IS PROVIDED AND INSTALLED BY GENERAL CONTRACTOR. COORDINATE LOCATION WITH MECHANICAL CONTRACTOR.
- ㉒ ALL TAKE-OFFS THROUGHOUT THE ENTIRE BUILDING SHALL BE HIGH EFFICIENCY TAKE-OFFS (HET'S). NO EXCEPTIONS TAKEN.
- ㉓ DIVISIONS 21-23 TO SUBMIT TO ENGINEER ALL AS-BUILDS OF BUILDINGS MECHANICAL AND PLUMBING SYSTEMS PRIOR TO JOB COMPLETION AND FINAL PAYMENT.
- ㉔ ALL EXPOSED PIPING IS TO BE INSULATED AND WEATHERPROOFED. SEE SPEC SECTION 15080.
- ㉕ ALL INVERT ELEVATIONS SHOWN ON PLANS ARE BASED OFF OF FINISHED FLOOR ELEVATION AT 100'. CONTRACTOR TO COORDINATE WITH ARCHITECTURAL AND CIVIL DRAWINGS FOR EXACT INVERT ELEVATIONS OF ALL LEVELS.
- ㉖ ALL FLOOR DRAINS / FLOOR SINKS THROUGH-OUT THE ENTIRE BUILDING ARE TO HAVE TRAP SEAL PRIMER VALVES PROVIDED / INSTALLED BY PLUMBING CONTRACTOR.
- ㉗ ALL GAS METER REGULATORS ARE TO BE VENTED TO THE OUTSIDE OF THE BUILDING BY THE MECHANICAL CONTRACTOR OR PROVIDE / INSTALL VENTLESS REGULATORS IF ALLOWED BY THE LOCAL JURISDICTION. NONE OF THE VENT PIPING OFF THE REGULATORS ARE SHOWN ON THE PLANS FOR CLARITY.
- ㉘ ALL DUCTWORK IS TO BE PROVIDED / INSTALLED AS HIGH UP AS POSSIBLE. ALL DUCTWORK MUST BE INSTALLED NO LOWER THAN 12' FROM WHERE IT IS BEING SUPPORTED OR SEISMIC BRACING WILL BE REQUIRED. IF DUCTWORK IS INSTALLED BELOW 12' FROM WHERE IT IS SUPPORTED, IT IS THE MECHANICAL CONTRACTOR'S RESPONSIBILITY TO HAVE SEISMIC SUPPORTS ENGINEERED FOR THE JOB BY A LICENSED ENGINEER.
- ㉙ MECHANICAL CONTRACTOR IS RESPONSIBLE FOR PROVIDING, INSTALLING, AND FILLING OUT GREEN GAS COMPLIANCE STICKERS FOR ALL GAS FIRED APPLIANCES. CONTRACTOR IS TO INSTALL ONE STICKER PER EVERY GAS FIRED APPLIANCE.
- ㉚ ALL DUCTWORK THAT IS LOCATED IN UNCONDITIONED SPACES (MEANING EXPOSED TO THE OUTSIDE OR IN ATTICS) IS TO HAVE MIN. OF R-8 INSULATION INSTALLED.
- ㉛ ALL T-STATS MUST BE MOUNTED AT 48° A.F.F. TO THE TOP OF THE STAT AND BE 7 DAY PROGRAMMABLE.
- ㉜ ALL DUCT ELBOWS ARE TO BE PROVIDED / INSTALLED WITH RADIUS ELBOWS. ANY ALTERATIONS OR CHANGES IN DUCTWORK FROM WHAT IS SHOWN ON THE PLANS MUST BE PRE-APPROVED BY THE ENGINEER IN WRITING PRIOR TO ORDERING, FABRICATION, OR INSTALLATION.
- ㉝ ALL EXHAUST AIR DUCTS ARE TO TERMINATE A MINIMUM OF 3' FROM ANY BUILDING OPENINGS AND 10' FROM ALL MECHANICAL AIR INTAKES.
- ㉞ FLEX DUCT MUST BE INSULATED TYPE FLEX AND NO LONGER THAN 5' PER BRANCH.
- ㉟ THE MAXIMUM LENGTH OF THE DRYER EXHAUST DUCT SHALL BE DETERMINED BY THE DRYER MANUFACTURER'S INSTALLATION INSTRUCTIONS. THE CODE OFFICIAL SHALL BE PROVIDED WITH A COPY OF THE INSTALLATION INSTRUCTIONS FOR THE MAKE AND MODEL OF THE DRYERS THAT ARE INSTALLED. IF NO MANUFACTURERS INSTRUCTIONS CAN BE PROVIDED THE MAX LENGTH OF RUN FOR DRYER EXHAUST SHALL NOT EXCEED 35' NO EXCEPTIONS.
- ㉟ ALL GRILLES, REGISTERS AND DIFFUSERS ARE TO BE PAINTED TO MATCH ADJACENT SURFACES BY THE GENERAL CONTRACTOR. FINAL COLOR TO BE DETERMINED BY ARCHITECT. ALL GRILLES ARE TO COME PRIMED FROM THE FACTORY AND FINAL PAINTING TO BE DONE IN FIELD BY G.C. GRILLES ARE TO BE PAINTED PRIOR TO FINAL INSTALLATION.
- ㉟ ALL EXTERIOR WALL VENTS, GRILLES, OR PIPING IS TO BE PAINTED BY THE GENERAL CONTRACTOR TO MATCH THE ADJACENT SURFACE. EXTERIOR WALL VENTS ARE TO BE AT THE SAME ELEVATION AND LINE UP ON EVERY FLOOR.
- ㉟ ALL DUCTWORK IS TO BE COMPLETELY SEALED USING DESIGN POLYMERS DP1010 DUCT SEALER OR APPROVED EQUAL.
- ㉟ CONTRACTORS TO COMPLY WITH MANUFACTURER'S INSTRUCTIONS, INCLUDING EACH STEP IN SEQUENCE. WHEN MANUFACTURER'S INSTRUCTIONS CONFLICT WITH CONTRACT DOCUMENTS, REQUEST CLARIFICATION FROM ARCHITECT/ENGINEER BEFORE PROCEEDING WITH ANY WORK. IF THIS IS NOT DONE, ITS THE CONTRACTOR'S FULL RESPONSIBILITY TO COVER ALL COSTS.
- ㉟ ALL THERMOSTAT LOCATIONS ON THE PLANS SHALL COORDINATE WITH FURNITURE PLANS AND VERIFIED WITH OWNER PRIOR TO ROUGH-IN. IF THERMOSTAT NEEDS TO BE INSTALLED IN A LOCATION OTHER THAN SHOWN ON THE PLANS, THIS CONTRACTOR SHALL MAKE ADJUSTMENTS AT NO ADDITIONAL COST.
- ㉟ IECC C303.13 REQUIRES THAT THE U-FACTORS FOR THE WINDOWS BE CERTIFIED BY AN INDEPENDENT LABORATORY PER NFRC 100 AND LABELED AS SUCH BY THE MANUFACTURER.

ASHCREEK MULTIFAMILY

Mechanical Sheet List		
Sheet #	Sheet Name	Issue Date
M000	Mechanical & Plumbing General Notes	8.26.2024
M001	Mechanical Schedules	8.26.2024
M002	Mechanical & Plumbing Compliance & Demands	8.26.2024
M201	Townhouse - Mechanical Plan	8.26.2024
M201A	8-Plex - Mechanical Plan	8.26.2024
M201B	12-Plex - Mechanical Plan	8.26.2024
M301	Rowhouses - Roof Plan	8.26.2024
M301A	8-Plex Roof Plans	8.26.2024
M301B	12-Plex Roof Plan	8.26.2024
M401	Enlarged Rowhouse- End Unit Mechanical Plan	8.26.2024
M402	Enlarged Rowhouse- Mid Unit Mechanical Plan	8.26.2024
M403	Enlarged Flats Units - Mechanical Plan	8.26.2024
M601	Mechanical & Plumbing Details	8.26.2024
M602	Mechanical & Plumbing Details	8.26.2024
M603	Mechanical & Plumbing Details	8.26.2024
M604	UL LISTINGS/FIRE RATED ASSEMBLY DRAWINGS	8.26.2024
M605	UL LISTINGS/FIRE RATED ASSEMBLY DRAWINGS	8.26.2024
M606	UL LISTINGS/FIRE RATED ASSEMBLY DRAWINGS	8.26.2024
P001	Plumbing Schedules	8.26.2024
P201	Townhomes Plumbing	8.26.2024
P201A	8-Plex - Plumbing Plan	8.26.2024
P201B	12-Plex - Plumbing Plan	8.26.2024
P401	Enlarged Townhouse - Plumbing Plan	8.26.2024
P402	Enlarged Flats Units - Plumbing Plan	8.26.2024
P403	Enlarged Flats Units ADA - Plumbing Plan	8.26.2024
P601	Plumbing Riser Diagrams	8.26.2024
PS101	Overall Plumbing Plan West	8.26.2024
PS102	Overall Plumbing Plan Center	8.26.2024
PS103	Overall Plumbing Plan East	8.26.2024

CORE
ARCHITECTURE
233 SOUTH PLEASANT GROVE BLVD.
SUITE #105
PLEASANT GROVE, UTAH 84062
PHONE: (801) 769-3000
core@corearch.com

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PROJECT TITLE AND ADDRESS
Ashcreek Multifamily
Boise, Idaho

REVISIONS		
△	DESCRIPTION	DATE

PROJECT INFORMATION
DATE: 26 August 2024
PROJECT #: PVE 24048.00

PM / PA:

PIC:

DRAWING SET STATUS

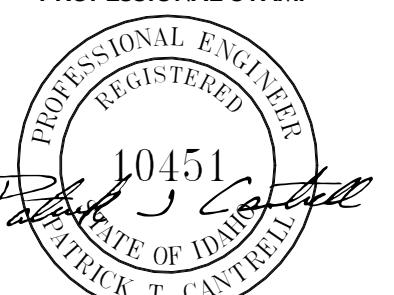
Permit Set

SHEET TITLE

Mechanical & Plumbing General Notes

SHEET NUMBER
M000

CITY STAMP:



10-151

RICHARD T. CANTRELL

P.E. STATE OF UTAH

08.26.2024

LOUVER SCHEDULE (L-)									
PLAN CODE	AREA SERVED	CFM	FREE AREA (SF)	VELOCITY (FPM)	AIR P.D. (in W.C.)	UNIT DIMENSIONS		MANUFACTURER & MODEL NO	COMMENTS
						W (in.)	H (in.)		
LV-0	SEE PLANS	SEE PLANS	-	500	0.40*	SEE DUCT SIZE ON PLANS	RUSKIN - ELF6375DX (DRAINABLE LOUVER)	- PROVIDE BIRD SCREEN - PROVIDE FACTORY FINISH, COORDINATE w/ARCHITECT ON COLOR. - PROVIDE 12x12 LOUVER FOR DUCTS <12" ROUND - SEE PLANS FOR ALL OTHER.	
LV-1	Maintenance	300	1.0	300	0.30*	20	18	6	RUSKIN - ELF6375DX (DRAINABLE LOUVER) - PROVIDE BIRD SCREEN - PROVIDE FACTORY FINISH, COORDINATE w/ARCHITECT ON COLOR.

ALL LOUVERS ARE TO BE MOUNTED AS HIGH AS POSSIBLE IN STRUCTURE

DIFFUSERS & GRILLE SCHEDULE							
GRILLE NUMBER	GRILLE CFM						
PLAN CODE	TYPE & DUTY	NECK SIZE	CEILING TYPE	N.C. LEVEL MAX	MAX. CFM	MANUFACTURER & MODEL NO.	REMARKS
LG-1	12x6 LVRD GRILLE SUPPLY	12 x 6	See Plans	23	310	PRICE 500/600 SERIES 12" x 6" 520D/F/A/B12	PROVIDE w/ OBD PROVIDE w/ FIRE RADIATION DAMPER PROVIDE w/ 3-HR FIRE RATING & 165°F FUSE-LINK
LG-2	8x4 LVRD GRILLE SUPPLY	8 x 4	See Plans	20	145	PRICE 500/600 SERIES 8" x 4" 520D/F/A/B12	PROVIDE w/ OBD PROVIDE w/ FIRE RADIATION DAMPER PROVIDE w/ 3-HR FIRE RATING & 165°F FUSE-LINK
LG-3	16x6 LVRD GRILLE SUPPLY	16 x 6	See Plans	20	365	PRICE 500/600 SERIES 16" x 6" 520D/F/A/B12	PROVIDE w/ OBD PROVIDE w/ FIRE RADIATION DAMPER PROVIDE w/ 3-HR FIRE RATING & 165°F FUSE-LINK
LG-4	22x6 LVRD GRILLE SUPPLY	22 x 6	See Plans	26	650	PRICE 500/600 SERIES 22" x 6" 520D/F/A/B12	PROVIDE w/ OBD PROVIDE w/ FIRE RADIATION DAMPER PROVIDE w/ 3-HR FIRE RATING & 165°F FUSE-LINK
LG-5	12x4 LVRD GRILLE SUPPLY	12 x 4	See Plans	21	210	PRICE 500/600 SERIES 12" x 4" 520D/F/A/B12	PROVIDE w/ OBD PROVIDE w/ FIRE RADIATION DAMPER PROVIDE w/ 3-HR FIRE RATING & 165°F FUSE-LINK
SP-1	12x12 SQR PLAQUE SUPPLY	8'0	See Plans	22	244	PRICE SPD SERIES	VERIFY COLOR WITH ARCH
SDG-1	12x10 SPIRAL DUCT SUPPLY	12 x 10	DUCT	21	485	PRICE SDGE SERIES	MOUNT AT 45 DEGREE DOWNWARD ANGLE. VERIFY COLOR WITH ARCH
PR-1	12x12 PERF. GRILLE RETRN/EXH.	10 x 10	See Plans	26	555	PRICE PDR SERIES	VERIFY COLOR WITH ARCH
TG-1	20x8 DRYER MAKEUP AIR	20 x 8	See Plans	23	200	PRICE STG SERIES STG1/BF/B15	MIN. 100+ SQ. IN. FREE AREA VERIFY COLOR WITH ARCH
TG-2	14x6 AIR TRNSFR	14 x 6	See Plans	22	230 @ 500fpm	PRICE 530 SERIES	VERIFY COLOR WITH ARCH, PROVIDE w/ OBD, FOR THRU-WALL TRANSFER INSTALL SOUND BAFFLE
LGR-1	24x12 LVRD. FILTER RETURN	24 x 12	See Plans	25	1112	PRICE 530 SERIES I530-FRB12	PROVIDE w/ MERV 6 FILTER PROVIDE w/ OBD VERIFY COLOR WITH ARCH
LGR-2	20x10 LVRD. GRILLE RETURN	20 x 10	See Plans	-	-	PRICE 530 SERIES	VERIFY COLOR WITH ARCH PROVIDE w/ OBD
LGR-3	LVRD. GRILLE RETURN	See Plans	See Plans	25	1112	PRICE 530 SERIES	VERIFY COLOR WITH ARCH PROVIDE w/ OBD
LGR-4	LVRD. GRILLE RETURN	See Plans	See Plans	-	-	PRICE 530 SERIES	VERIFY COLOR WITH ARCH PROVIDE w/ OBD
LGR-5	LVRD. GRILLE RETURN	See Plans	See Plans	25	2232	PRICE 530 SERIES	VERIFY COLOR WITH ARCH PROVIDE w/ OBD

NOTE:
 1. REGISTER AND GRILLE SIZES MAY BE CHANGED AS LONG AS THEY MEET THE SAME CFM, NOISE CRITERIA AND FACE VELOCITY AS AIR DEVICES SPECIFIED ABOVE.
 2. COORDINATE GRILLE MOUNTING FRAME WITH CEILING TYPES.
 3. SEE PLANS FOR QUANTITY REQUIRED.

4. ALTERNATE MANUFACTURERS: TEMPO, PRICE, TUTTLE BAILEY, CARNES, HART COOLEY, PRO SELECT & TITUS

INDOOR AIR HANDLER SCHEDULE ELEC [AH-__]																				
PLAN CODE	SYSTEM SERVED	UNIT TYPE	AREA SERVED	TOTAL CFM	O.A. CFM	E.S.P. (W/G)	HEATING SECTION		COOLING DATA		ELECTRICAL		OUTLET DIMS.	INLET DIMS. (INCH.)	SHIP WEIGHT (LBS.)	UNIT DIMENSIONS			MANUFACTURER & MODEL NO HEAT KIT NO	REMARKS / ACCESSORIES
							CAPACITY (BTU)	KW	NOM. TONS	SENSIBLE CAPACITY	MOP (AMPS)	MCA (AMPS)	VOLTS / PHASE			W (IN.)	D (IN.)	H (IN.)		
AH-1	RC-1	VERT. INDOOR	2 & 3-BEDROOM APT.	600	65	0.4	19,000	5	1.5	18	15/25	4.9/18	208-240 /1	15 X 18	19 X 10	20 1/2	21	49	115	COOPER & HUNTER CH-M18AHU EH05KW
AH-2	RC-2	VERT. INDOOR	TOWN HOUSE MID	800	65	0.4	26,000	10	2.0	23	15/ 50-60	4.9/ 46-53	208-240 /1	15 X 18	19 X 10	20 1/2	21	49	115	COOPER & HUNTER CH-M24AHU EH10KW
AH-3	RC-3	VERT. INDOOR	TOWN HOUSE END	1000	65	0.4	40,000	10	3.0	36	15/ 50-60	4.9/ 46-53	208-240 /1	15 X 18	19 X 10	20 1/2	21	49	115	COOPER & HUNTER CH-M36AHU EH10KW

* ALL VALUES ARE RATED AT 2800' ELEVATION.
 * DESIGN CONDITIONS: SUMMER = 98°F DB, WINTER = -17°F DB.
 * RETURN AIR TEMP. ARE 68°F FOR WINTER AND 74°F FOR SUMMER.
 * DISCONNECT PROVIDED/INSTALLED BY ELECTRICAL.
 * PROVIDE 24 VOLT TRANSFORMER AND CONTROL SYSTEM.
 * EVERY AC UNIT IS TO BE PROVIDED / INSTALLED WITH A PRIORITY CONTROLLER

REMOTE CONDENSING UNIT HEAT PUMP [RC-__]																
PLAN CODE	SYSTEM SERVED	TOTAL COOLING CAPACITY (MBH)	TOTAL HEATING CAPACITY (MBH)	SPEED (DUAL / SINGLE)	SEER RATING	MCA (AMP.)	MOP (AMP.)	VOLT/PH	UNIT DIMENSIONS			WEIGHT (LBS.)	MANUFACTURER & MODEL NO	REMARKS / ACCESSORIES		
									W (IN.)	D (IN.)	H (IN.)			REMARKS / ACCESSORIES		
RC-1	AH-1	18	19	SINGLE	17.6	16.5	20	208-240 /1	41 1/4	18	39	172	COOPER & HUNTER CH-HPR18-230VO	* PROVIDE CONDENSER W/ 12" TALL STAND * PROVIDE EACH UNIT WITH FILTER DRIER, TXV AND POLY MOUNTING BASE.		
RC-2	AH-2	23	26	SINGLE	18.4	25	35	208-240 /1	42 1/2	17 1/2	52 1/2	291	COOPER & HUNTER CH-HPR24-230VO	* FOLLOW MANUFACTURERS "LONG LINE" REQUIREMENTS FOR LINE SET SIZING. * MECHANICAL CONTRACTOR TO VACUUM ALL LINE SETS AND HOLD PRESSURE AT 20" HG (WITH VAC PUMP REMOVED) ON LINE SET FOR A MIN. OF 24 HOURS PRIOR TO CHARGING ANY SYSTEM TO VERIFY AND CONFIRM THERE ARE NO LEAKS. * ALL REFRIGERATION PIPING TO BE INSTALLED WITH HARD DRAWN TYPE "L" COPPER TUBING OR USE FACTORY SOFT COPPER. * ALL SUCTION PIPING SHALL BE INSULATED WITH ARMAFLEX INSULATION AND SEALED WITH ARMAFLEX GLUE. NO TAPE WILL BE ALLOWED! * SUCTION TRAPS ARE TO BE INSTALLED EVERY 20' OF VERTICAL RISE. NO EXCEPTIONS		
RC-3	AH-3	3														



10-151

MICHAEL T. CANFIELD

PROFESSIONAL ENGINEER

REGISTERED

STATE OF IDAHO

10-151

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MICHAEL T. CANFIELD

PROFESSIONAL ENGINEER

REGISTERED

STATE OF IDAHO

10-151

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PROFESSIONAL ENGINEER

REGISTERED

STATE OF IDAHO

10-151

MICHAEL T. CANFIELD

PROFESSIONAL ENGINEER

KEYNOTES

U14 MOUNT ALL RCU'S PER MANUFACTURER RECOMMENDATION.
CLEARANCES ARE TO BE KEPT AT ALL TIMES, NO EXCEPTIONS.

A. ALL FIRE SMOKE DAMPERS ARE TO BE 120V AND ARE TO BE
CONTROLLED BY FIRE ALARM CONTRACTOR AND INTERLOCKED
WITH FIRE SYSTEM. DAMPERS TO BE UL LISTED TO MEET OR
EXCEED THE RATING OF THE WALLS.

B. CONTRACTOR IS TO PROVIDE / INSTALL ALL DUCTWORK AS HIGH
UP AS POSSIBLE AND TIGHT TO BOTTOM OF BEAMS / JOISTS.

C. CONTROLS CONTRACTOR TO COORDINATE FINAL LOCATIONS OF
ALL T-STATS WITH OWNER / ARCHITECT PRIOR TO ANY
INSTALLATION.

D. ALL DUCT ELBOWS ARE TO BE RADIUS ELBOWS WHERE EVER
POSSIBLE TO INSTALL. IF SPACE CONSTRAINTS DOWN ALLOW FOR
THEM TO BE INSTALLED, RADIUS HEEL ELBOWS ARE TO BE USED.
NO EXCEPTIONS TAKEN.

E. ALL DUCT TAKE-OFFS ARE TO BE HIGH EFFICIENCY TAKE-OFFS
(HETS) NO EXCEPTIONS TAKEN.

F. CONTRACTOR TO PROVIDE / INSTALL ACCESS PANELS FOR ALL
EQUIPMENT, DAMPERS, ETC. LOCATED ABOVE HARD LID CEILINGS
AS REQUIRED.

G. ALL FAN COIL UNITS IN THE SHELL SPACES ARE TO BE PROVIDED /
INSTALLED AS HIGH UP AS POSSIBLE. ROUTE CONDENSATE DRAINS
FROM ALL UNITS TO THE NEAREST FLOOR DRAIN OR INDIRECT
DRAIN BELOW SINKS. PROVIDE CONDENSATE PUMPS AS
REQUIRED. CONTRACTOR TO FIELD COORDINATE THE ROUTING OF
ALL DRAIN PIPING.

GENERAL NOTES

233 SOUTH PLEASANT GROVE BLVD.
SUITE #105
PLEASANT GROVE, UTAH 84062
PHONE: (801) 769-3000
core@corearch.com

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PROFESSIONAL STAMP



08.26.2024

CONSULTANT INFORMATION

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PROJECT TITLE AND ADDRESS
Ashcreek Multifamily

Boise, Idaho

REVISIONS		
△	DESCRIPTION	DATE

PROJECT INFORMATION

DATE: 26 August 2024
PROJECT #: PVE 24048.00
PM / PA:
PIC:

DRAWING SET STATUS

Permit Set

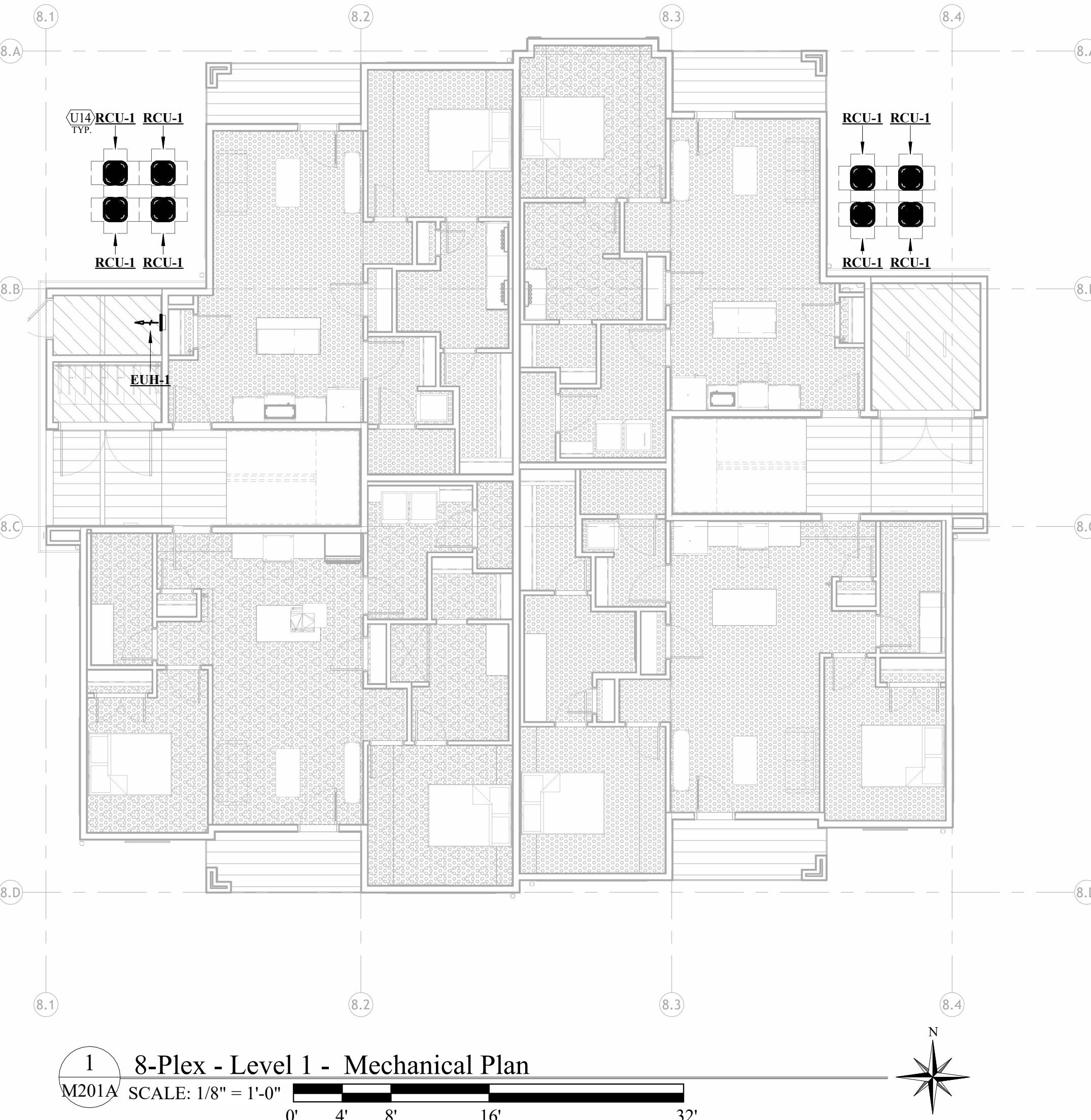
SHEET TITLE

**8-Plex -
Mechanical Plan**

SHEET NUMBER

M201A

CITY STAMP:





08.26.2024

CONSULTANT INFORMATION

GENERAL NOTES

- A. MECHANICAL CONTRACTOR IS TO PROVIDE / INSTALL A SUNLIGHT RESISTANT PERMANENT SIGN ON EACH REMOTE CONDENSING UNIT THAT IDENTIFIES THE SYSTEM NAME.
- B. ALL EQUIPMENT LOCATED ON THE ROOF IS TO BE A MIN. OF 10' AWAY FROM ANY ROOF EDGE. NO EXCEPTIONS.
- C. CONTRACTOR TO PROVIDE ALL MANUFACTURES INSTALLATION INSTRUCTION FOR ALL EQUIPMENT ON THE JOB SITE FOR LOCAL CODE REVIEWS AND APPROVALS.
- D. ALL OUTSIDE AIR INTAKES ARE TO BE A MINIMUM OF 10' AWAY FROM ANY FRESH AIR INTAKE INTO THE BUILDING AND 25' AWAY FROM AIR INTAKE TO SURGICAL AIR HANDLER(AHU). CONTRACTOR TO FIELD COORDINATE INSTALLATION.
- E. THE FRESH AIR INTAKE FOR THE SURGICAL AIR HANDLER MUST BE A MIN. OF 36" ABOVE THE ROOF. THE ROOF CURB HAS BEEN SIZED SO THAT INTAKE IS MIN. 36" ABOVE THE ROOF.
- F. ALL WEIGHTS, DIMENSIONS, AND SIZES OF UNITS ARE ESTIMATES AND ARE TO BE FINALIZED BY THE AIR HANDLER MANUFACTURER. ALL FINAL UNIT SIZES MUST BE COORDINATED WITH THE MECHANICAL AND STRUCTURAL ENGINEERS AND MUST BE APPROVED PRIOR TO STARTING ANY CONSTRUCTION.

- G. THE AIR HANDLERS HAVE BEEN DESIGNED AROUND CERTAIN MANUFACTURES (AS SPECIFIED ON THE SCHEDULES SHEETS). ALL OF THE STEEL SUPPORTS AND OPENINGS HAVE BEEN COORDINATED AROUND THESE MANUFACTURES. CONTRACTOR MUST SUBMIT TO BOTH MECHANICAL ENGINEER AND STRUCTURAL ENGINEER SO COORDINATION OF ALL SUPPORTS AND OPENINGS CAN TAKE PLACE PRIOR TO ANY CONSTRUCTION.
- H. CONTRACTOR TO VENT AS NEEDED THROUGH WALLS AND ROUTE TO ROOF. MINIMUM VENTING TERMINATION SIZE IS 3" PIPE, NO EXCEPTIONS.

KEYNOTES

- U15 ROUTE VENT UP THROUGH ROOF, SEE DETAIL & PLUMBING RISER DIAGRAMS FOR REFERENCE.

 PROJECT TITLE AND ADDRESS
Ashcreek Multifamily

Boise, Idaho

PROJECT INFORMATION

 DATE: 26 August 2024
 PROJECT #: PVE 24048.00
 PM / PA:
 PIC:

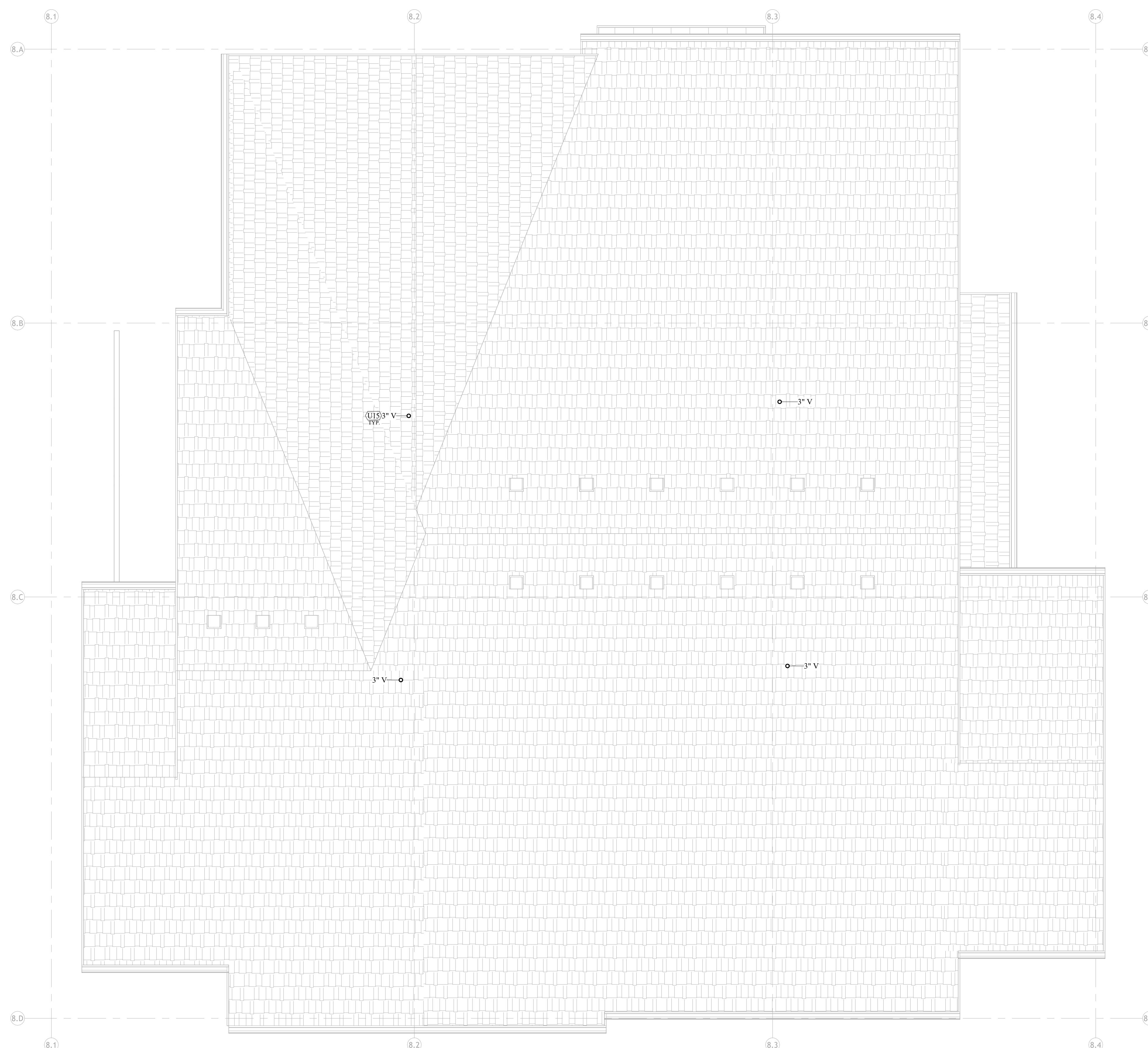
DRAWING SET STATUS

Permit Set

SHEET TITLE

8-Plex Roof Plans

SHEET NUMBER

M301A

1 8-Plex Roof Plan
 M301A SCALE: 1/4" = 1'-0" 0' 2' 4' 8' 16'



08.26.2024

GENERAL NOTES

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KEYNOTES

- U15 ROUTE VENT UP THROUGH ROOF, SEE DETAIL & PLUMBING RISER DIAGRAMS FOR REFERENCE.

 PROJECT TITLE AND ADDRESS
Ashcreek Multifamily
 Boise, Idaho

 PROJECT NUMBER
 M301B

REVISIONS		
△	DESCRIPTION	DATE

 PROJECT INFORMATION
 DATE: 26 August 2024
 PROJECT #: PVE 24048.00
 PM / PA:
 PIC:

DRAWING SET STATUS

Permit Set

SHEET TITLE

12-Plex Roof Plan

SHEET NUMBER

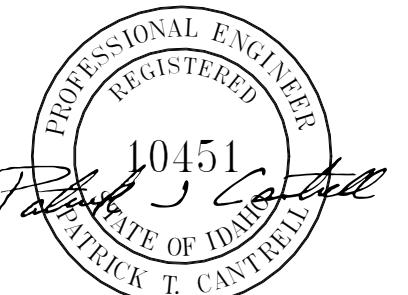
M301B

12-Plex Roof Plan

M301B SCALE: 1/4" = 1'-0"

0' 2' 4' 8' 16'

CITY STAMP:



08.26.2024

CONSULTANT INFORMATION



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KEYNOTES

- U15 ROUTE VENT UP THROUGH ROOF, SEE DETAIL & PLUMBING RISER DIAGRAMS FOR REFERENCE.

 PROJECT TITLE AND ADDRESS
Ashcreek Multifamily
 Boise, Idaho

 PROJECT INFORMATION
 DATE: 26 August 2024
 PROJECT #: PVE 24048.00
 PM / PA:
 PIC:

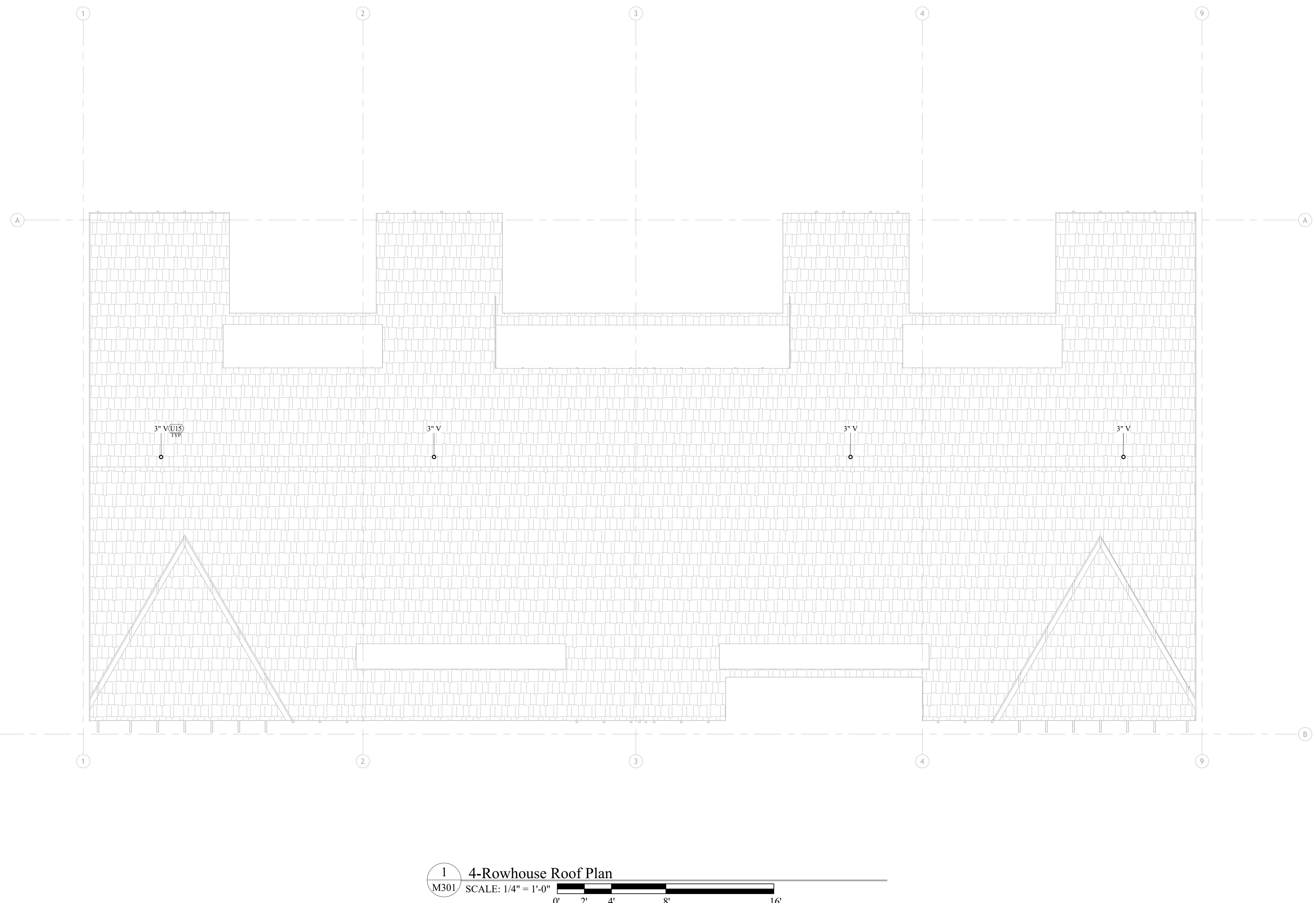
DRAWING SET STATUS

Permit Set

SHEET TITLE

 Rowhouses Roof
 Plan

SHEET NUMBER

M301




08.26.2024

CONSULTANT INFORMATION



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GENERAL NOTES

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- B. CONTRACTOR IS TO PROVIDE / INSTALL ALL DUCTWORK AS HIGH UP AS POSSIBLE AND TIGHT TO BOTTOM OF BEAMS / JOISTS.
- C. CONTROLS CONTRACTOR TO COORDINATE FINAL LOCATIONS OF ALL T-STATS WITH OWNER / ARCHITECT PRIOR TO ANY INSTALLATION.
- D. ALL DUCT ELBOWS ARE TO BE RADIUS ELBOWS WHERE EVER POSSIBLE TO INSTALL. IF SPACE CONSTRAINTS DOWN ALLOW FOR THEM TO BE INSTALLED, RADIUS HEEL ELBOWS ARE TO BE USED. NO EXCEPTIONS TAKEN.
- E. ALL DUCT TAKE-OFFS ARE TO BE HIGH EFFICIENCY TAKE-OFFS (HETS) NO EXCEPTIONS TAKEN.
- F. CONTRACTOR TO PROVIDE / INSTALL ACCESS PANELS FOR ALL EQUIPMENT, DAMPERS, ETC. LOCATED ABOVE HARD LID CEILINGS AS REQUIRED.
- G. ALL FAN COIL UNITS IN THE SHELL SPACES ARE TO BE PROVIDED / INSTALLED AS HIGH UP AS POSSIBLE. ROUTE CONDENSATE DRAINS FROM ALL UNITS TO THE NEAREST FLOOR DRAIN OR INDIRECT DRAIN BELOW SINKS. PROVIDE CONDENSATE PUMPS AS REQUIRED. CONTRACTOR TO FIELD COORDINATE THE ROUTING OF ALL DRAIN PIPING.

KEYNOTES

- M1 ROUTE DRYER EXHAUST AND GENERAL EXHAUST THROUGH DROPPED SOFFIT, PLENUM SPACE, AND BETWEEN TRUSSES AS SHOWN AND ROUTE TO EXTERIOR WALL. PROVIDE / INSTALL WALL LOUVER/CAP MAINAINCE CODE REQUIRED CLARANCE FROM ALL AIR INTAKES. SEAL / WATERPROOF ALL PENETRATIONS. (TYP). PROVIDE / INSTALL BACKDRAFT DAMPER AT THE END OF DUCT RUN AND AS CLOSE TO EXTERIOR WALL AS POSSIBLE.
- M2 DRYER VENT BOX TO BE PROVIDED / INSTALLED IN ALL AS AHOVN FOR DRYER VENT. COORDINATE HEIGHT WITH DRYER MANUFACTURERS INSTALLATION INSTRUCTIONS. CONTRACTOR TO PROVIDE / INSTALL PERMANENT TAG IN WALL JUST ABOVE DRYER VENT BOX IDENTIFYING THE TOTAL INTALLLED LENGTH OF DRYER DUCT. VERIFY FINAL LOCATION OF DRYER VENT BOX W/ ARCH. ALL DRYER DUCTS MUST A MIN OF 26 GA.
- M3 CONTRACTOR TO COORDINATE WITH TRUSSES & ROUTE IN-BETWEEN TRUSS SYSTEM. ROUTE DUCT AS HIGH POSSIBLE.
- M13 HVAC CONTRACTOR TO PROVIDE/INSTALL BACKDRAFT DRYER VENT CAP, COLOR BY OWNER. PROVIDE/INSTALL XVENT & OR DUAL PENETRATION XVENT AT EXTERIOR WALL FOR ALL EXHAUST VENTS. COORDINATE WITH EQUIPMENT. SEAL ALL PENETRATIONS WEATHER TIGHT.
- M16 TRANSFER GRILLES TO BE INSTALLED ABOVE DOOR WITH SHEET METAL DUCT BETWEEN THEM. SHEET METAL DUCT TO BE THE SAME SIZE AS GRILLES.
- M17 INSTALL THERMOSTAT AT 48" AFF.
- M24 TERMINATE WITH DIFFUSER ON FLOOR ABOVE.

 PROJECT TITLE AND ADDRESS
 Ashcreek Multifamily

Boise, Idaho

REVISIONS		
△	DESCRIPTION	DATE

PROJECT INFORMATION		
DATE:	26 August 2024	
PROJECT #:	PVE 24048.00	
PM / PA:		
PIC:		

DRAWING SET STATUS

Permit Set

SHEET TITLE

 Enlarged
 Rowhouse- End
 Unit Mechanical
 Plan

SHEET NUMBER

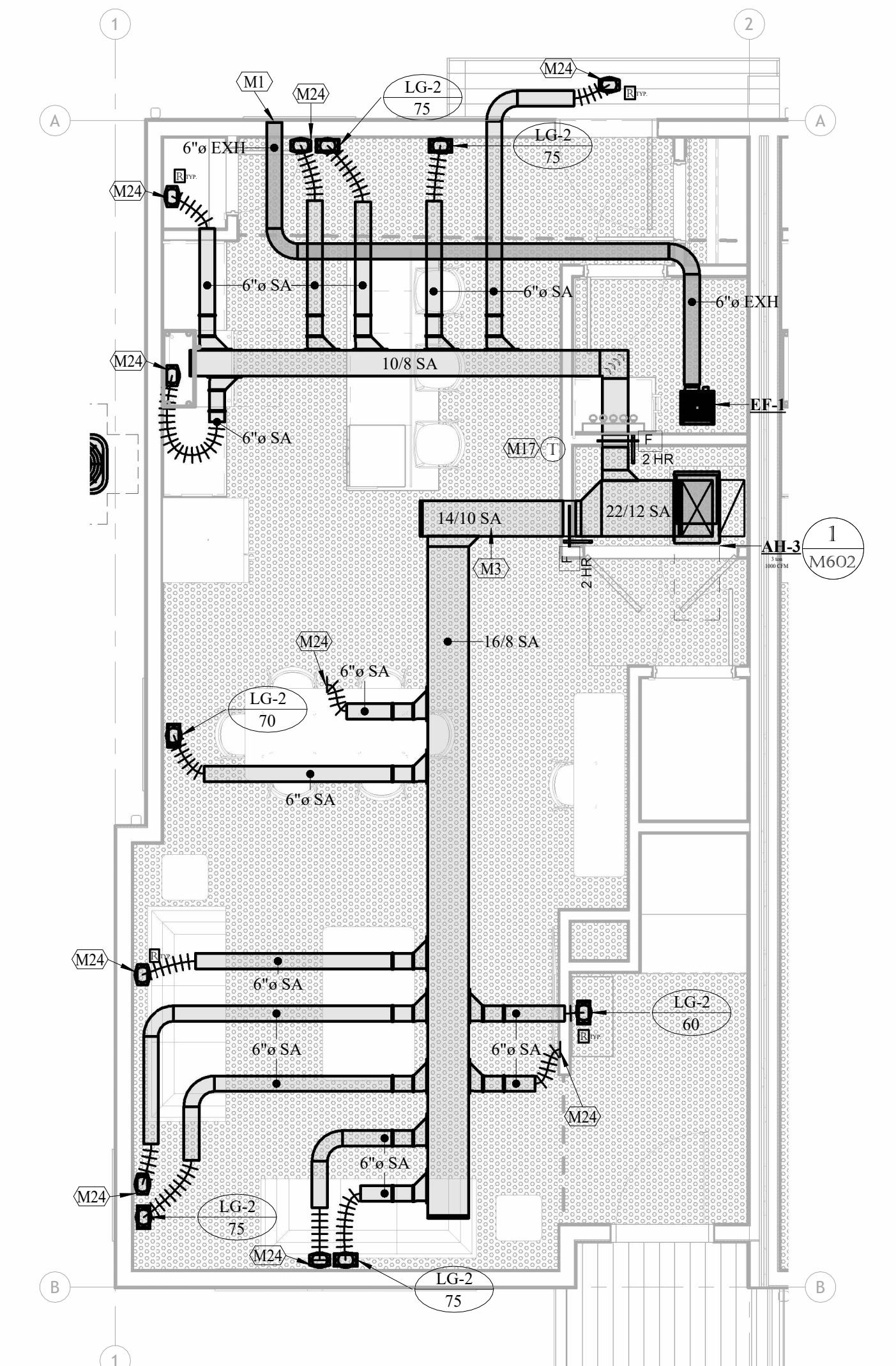
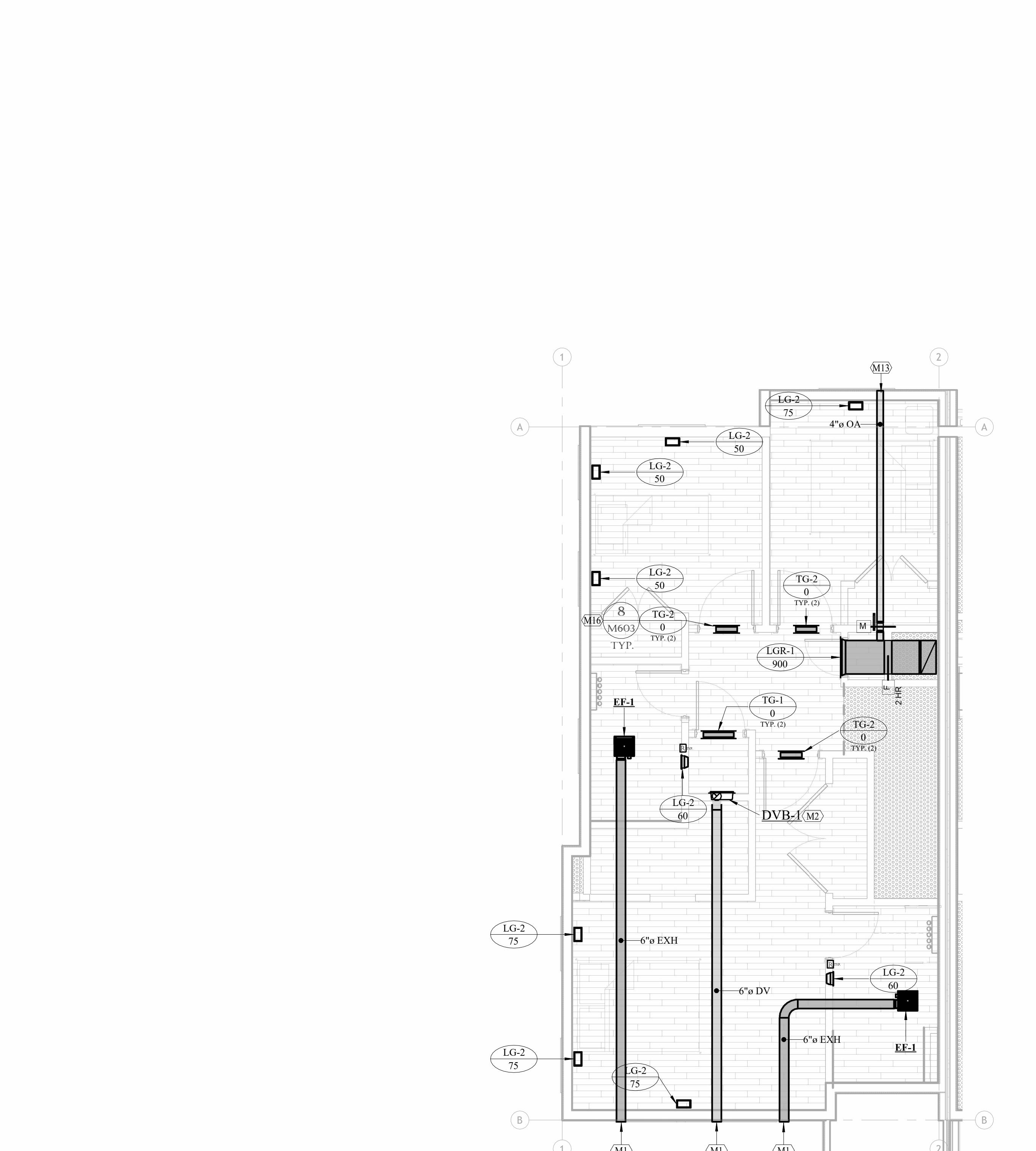
M401

 2 Townhouse Level 2 - Enlarged End Unit Mechanical Plan
 M401 SCALE: 1/4" = 1'-0"

0' 2' 4' 8' 16'

 1 Townhouse Level 1 - Enlarged End Unit Mechanical Plan
 M401 SCALE: 1/4" = 1'-0"

0' 2' 4' 8' 16'





08.26.2024

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GENERAL NOTES

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- C. CONTROLS CONTRACTOR TO COORDINATE FINAL LOCATIONS OF ALL T-STATS WITH OWNER / ARCHITECT PRIOR TO ANY INSTALLATION.
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- G. ALL FAN COIL UNITS IN THE SHELL SPACES ARE TO BE PROVIDED / INSTALLED AS HIGH UP AS POSSIBLE. ROUTE CONDENSATE DRAINS FROM ALL UNITS TO THE NEAREST FLOOR DRAIN OR INDIRECT DRAIN BELOW SINKS. PROVIDE CONDENSATE PUMPS AS REQUIRED. CONTRACTOR TO FIELD COORDINATE THE ROUTING OF ALL DRAIN PIPING.

KEYNOTES

- M1 ROUTE DRYER EXHAUST AND GENERAL EXHAUST THROUGH DROPPED SOFFIT, PLENUM SPACE, AND BETWEEN TRUSSES AS SHOWN AND ROUTE TO EXTERIOR WALL. PROVIDE / INSTALL WALL LOUVER/CAP MAINAIN CODE REQUIRED CLARANCE FROM ALL AIR INTAKES. SEAL / WATERPROOF ALL PENETRATIONS. (TYP). PROVIDE / INSTALL BACKDRAFT DAMPER AT THE END OF DUCT RUN AND AS CLOSE TO EXTERIOR WALL AS POSSIBLE.
- M2 DRYER VENT BOX TO BE PROVIDED / INSTALLED IN ALL AS AHOVN FOR DRYER VENT. COORDINATE HEIGHT WITH DRYER MANUFACTURERS INSTALLATION INSTRUCTIONS. CONTRACTOR TO PROVIDE / INSTALL PERMANENT TAG IN WALL JUST ABOVE DRYER VENT BOX IDENTIFYING THE TOTAL INTALLED LENGTH OF DRYER DUCT. VERIFY FINAL LOCATION OF DRYER VENT BOX W/ ARCH. ALL DRYER DUCTS MUST A MIN OF 26 GA.
- M3 CONTRACTOR TO COORDINATE WITH TRUSSES & ROUTE IN-BETWEEN TRUSS SYSTEM. ROUTE DUCT AS HIGH POSSIBLE.
- M13 HVAC CONTRACTOR TO PROVIDE/INSTALL BACKDRAFT DRYER VENT CAP, COLOR BY OWNER. PROVIDE/INSTALL XVENT & OR DUAL PENETRATION XVENT AT EXTERIOR WALL FOR ALL EXHAUST VENTS. COORDINATE WITH EQUIPMENT. SEAL ALL PENETRATIONS WEATHER TIGHT.
- M16 TRANSFER GRILLES TO BE INSTALLED ABOVE DOOR WITH SHEET METAL DUCT BETWEEN THEM. SHEET METAL DUCT TO BE THE SAME SIZE AS GRILLES.
- M17 INSTALL THERMOSTAT AT 48" AFF.
- M24 TERMINATE WITH DIFFUSER ON FLOOR ABOVE.

 PROJECT TITLE AND ADDRESS
 Ashcreek Multifamily
 Boise, Idaho

REVISIONS		
△	DESCRIPTION	DATE

 PROJECT INFORMATION
 DATE: 26 August 2024
 PROJECT #: PVE 24048.0
 PM / PA:
 PIC:

DRAWING SET STATUS

Permit Set

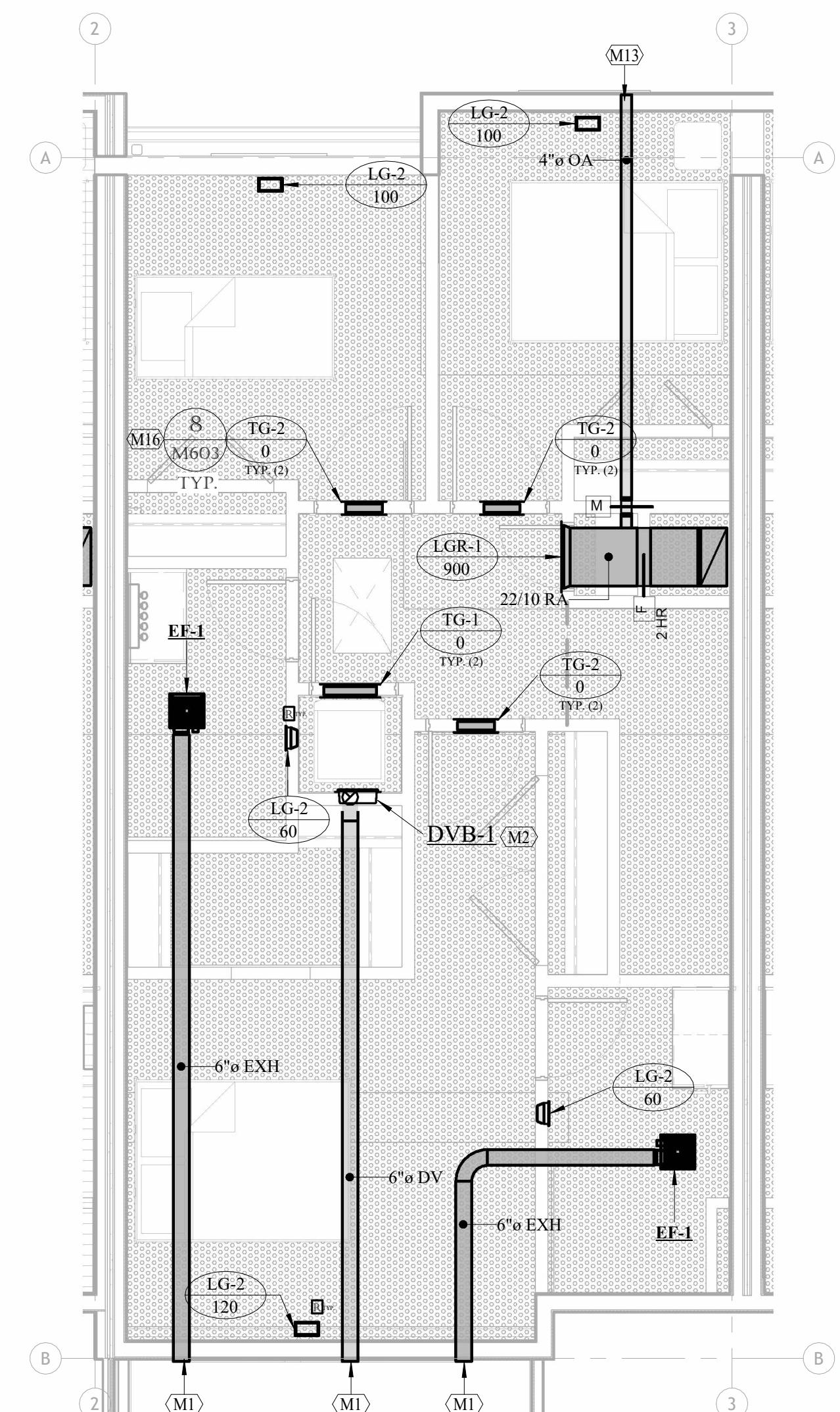
SHEET TITLE

 Enlarged
 Rowhouse- Mid
 Unit Mechanical
 Plan

SHEET NUMBER

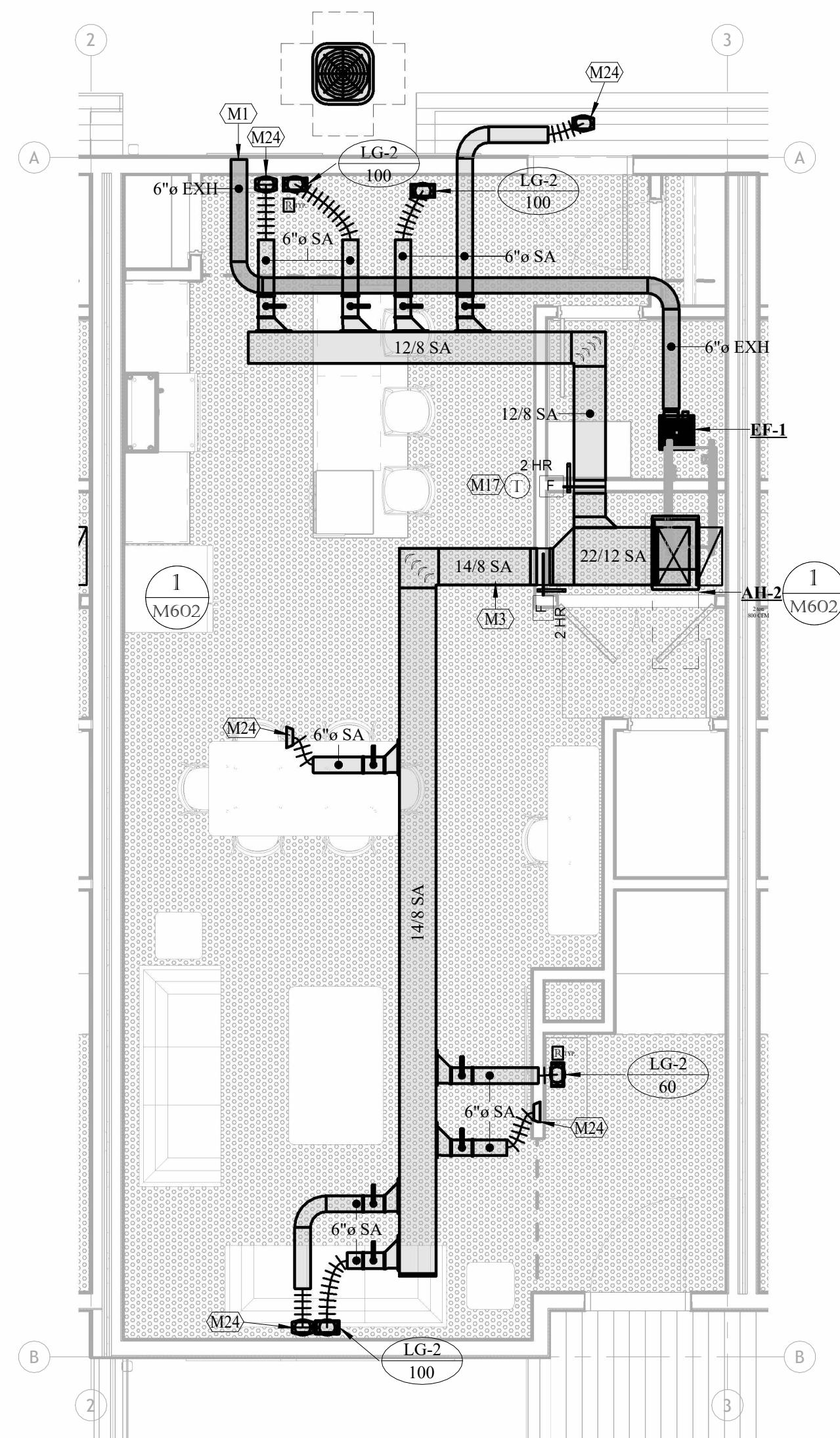
M402

A



2 Townhouse Level 2 - Enlarged Mid Unit Mechanical Plan
 M402 SCALE: 1/4" = 1'-0"

B



1 Townhouse Level 1 - Enlarged Mid Unit Mechanical Plan
 M402 SCALE: 1/4" = 1'-0"

C

D


GENERAL NOTES

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KEYNOTES

- M1 ROUTE DRYER EXHAUST AND GENERAL EXHAUST THROUGH DROPPED SOFFIT, PLUMED SPACER, AND BETWEEN TRUSS AS SHOWN AND ROUTE TO EXTERIOR WALL. PROVIDE / INSTALL WALL LOUVER/CAP. MAINTAIN CODE REQUIRED CLEARANCE FROM ALL AIR INTAKES. SEAL / WATERPROOF ALL PENETRATIONS. (TYP). PROVIDE / INSTALL BACKDRAFT DAMPER AT THE END OF DUCT RUN AND AS CLOSE TO EXTERIOR WALL AS POSSIBLE.
- M2 DRYER VENT BOX TO BE PROVIDED / INSTALLED IN ALL AS AHOHN FOR DRYER VENT. COORDINATE HEIGHT WITH DRYER MANUFACTURERS INSTALLATION INSTRUCTIONS. CONTRACTOR TO PROVIDE / INSTALL PERMANENT TAG IN WALL JUST ABOVE DRAYER VENT BOX IDENTIFYING THE TOTAL INTALLED LENGTH OF DRYER DUCT. VERIFY FINAL LOCATION OF DRYER VENT BOX W/ ARCH. ALL DRYER DUCTS MUST A MIN OF 26 GA.
- M4 CONTRACTOR TO ROUTE DUCTWORK UP & OVER &/OR UNDER OTHER DUCTING. IF TRANSITION OCCURS, DUCT FITTING IS TO BE AT A 30° INCLINE/DECLINE AS FIELD CONDITIONS ALLOW, IF NECESSARY. CONTRACTOR TO DETERMINE/COORDINATE IN THE FIELD (TYP).
- M8 RETURN GRILLE TO BE INSTALLED ON WALL ABOVE DOOR. ROUTE DUCT AS HIGH AS POSSIBLE.
- M13 HVAC CONTRACTOR TO PROVIDE/INSTALL BACKDRAFT DRYER VENT CAP. COLOR BY OWNER. PROVIDE/INSTALL XVENT &/OR DUAL PENETRATION XVENT AT EXTERIOR WALL FOR ALL EXHAUST VENTS. COORDINATE WITH EQUIPMENT. SEAL ALL PENETRATIONS WEATHER TIGHT.
- M16 TRANSFER GRILLES TO BE INSTALLED ABOVE DOOR WITH SHEET METAL DUCT BETWEEN THEM. SHEET METAL DUCT TO BE THE SAME SIZE AS GRILLES.
- M17 INSTALL THERMOSTAT AT 48" AFF.

 PROJECT TITLE AND ADDRESS
 Ashcreek Multifamily

Boise, Idaho

REVISIONS		
△	DESCRIPTION	DATE

 PROJECT INFORMATION
 DATE: 26 August 2024
 PROJECT #: PVE 24048.00
 PM / PA:
 PIC:

DRAWING SET STATUS

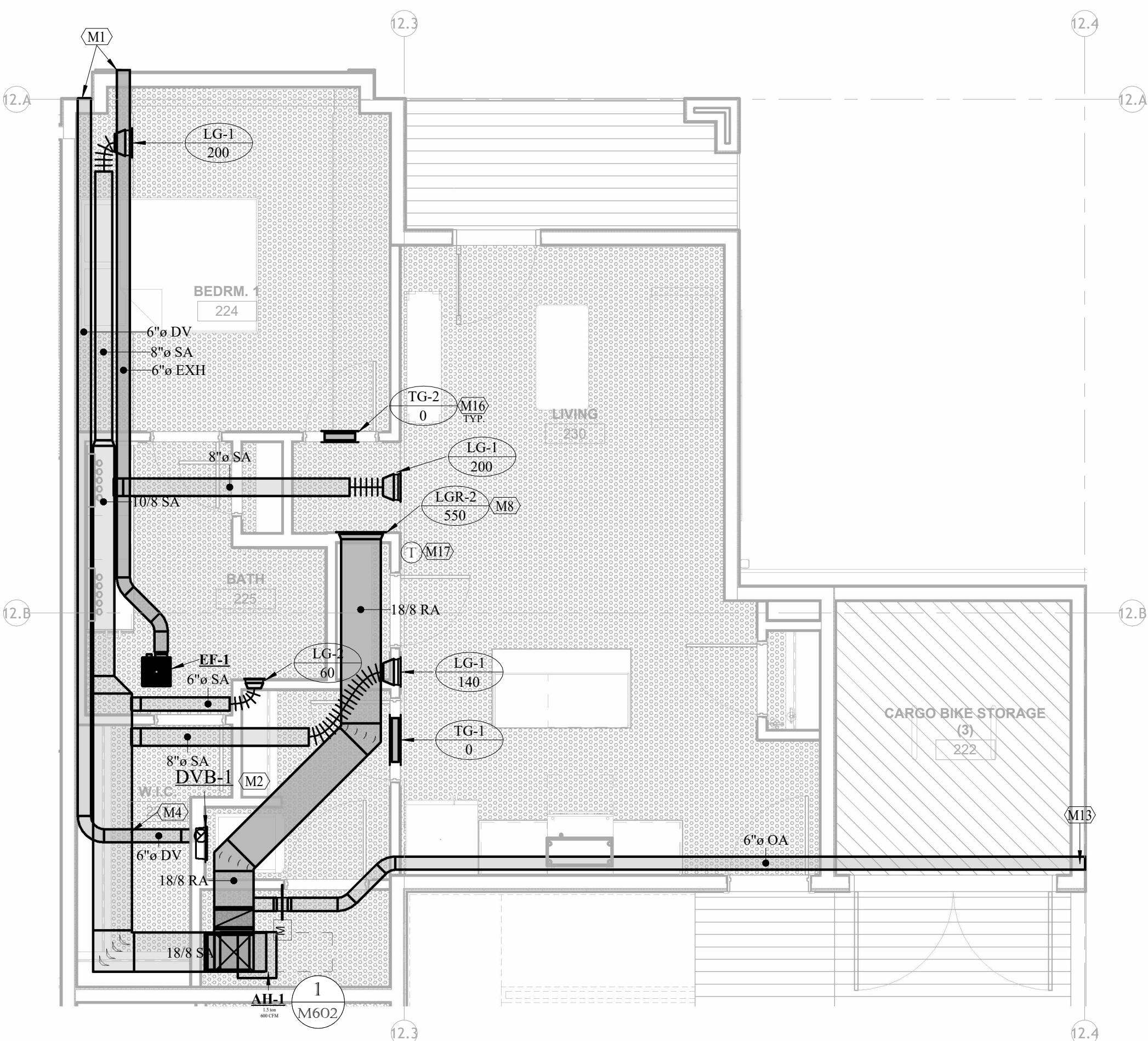
Permit Set

SHEET TITLE

 Enlarged Flats
 Units -
 Mechanical Plan

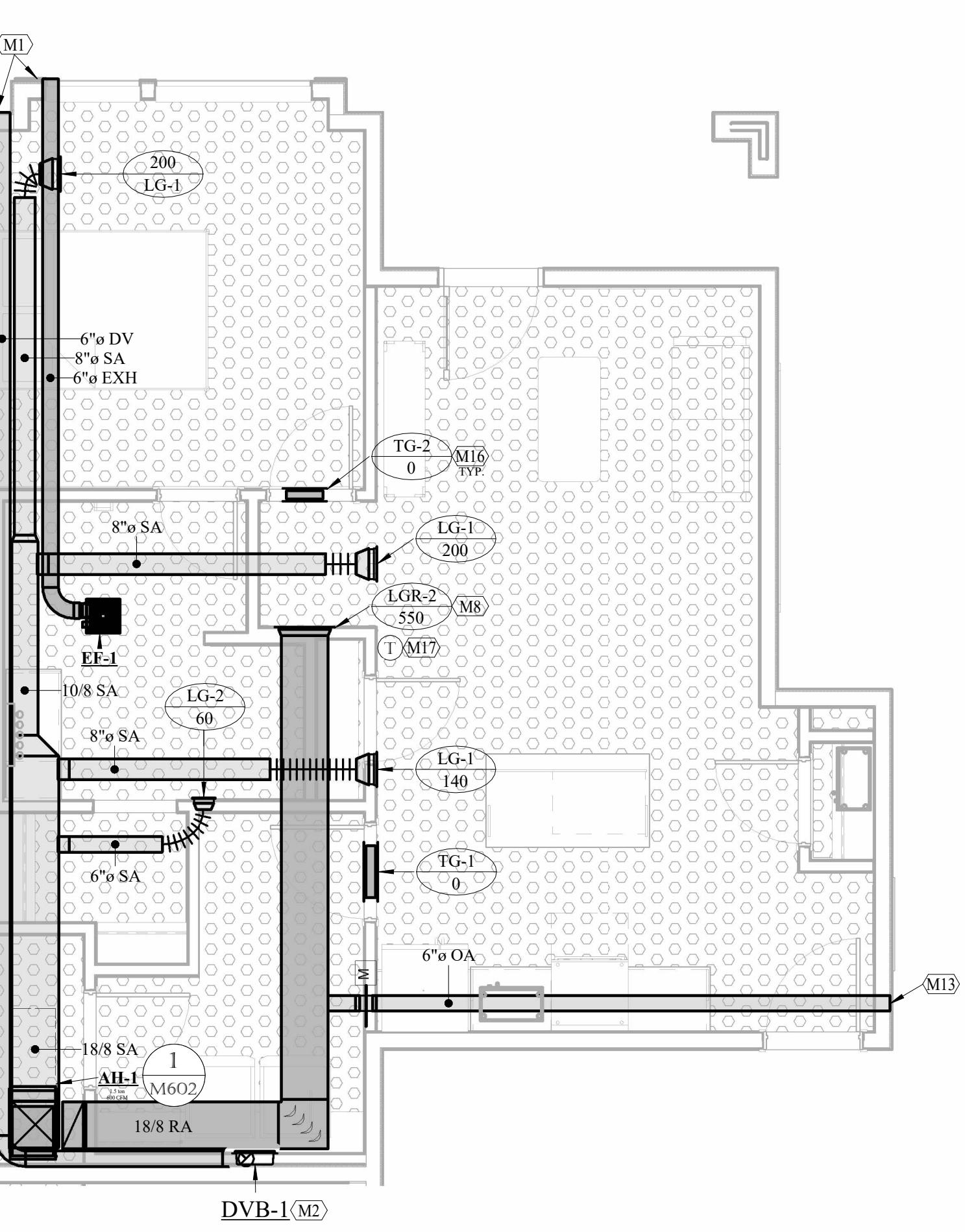
SHEET NUMBER

M403



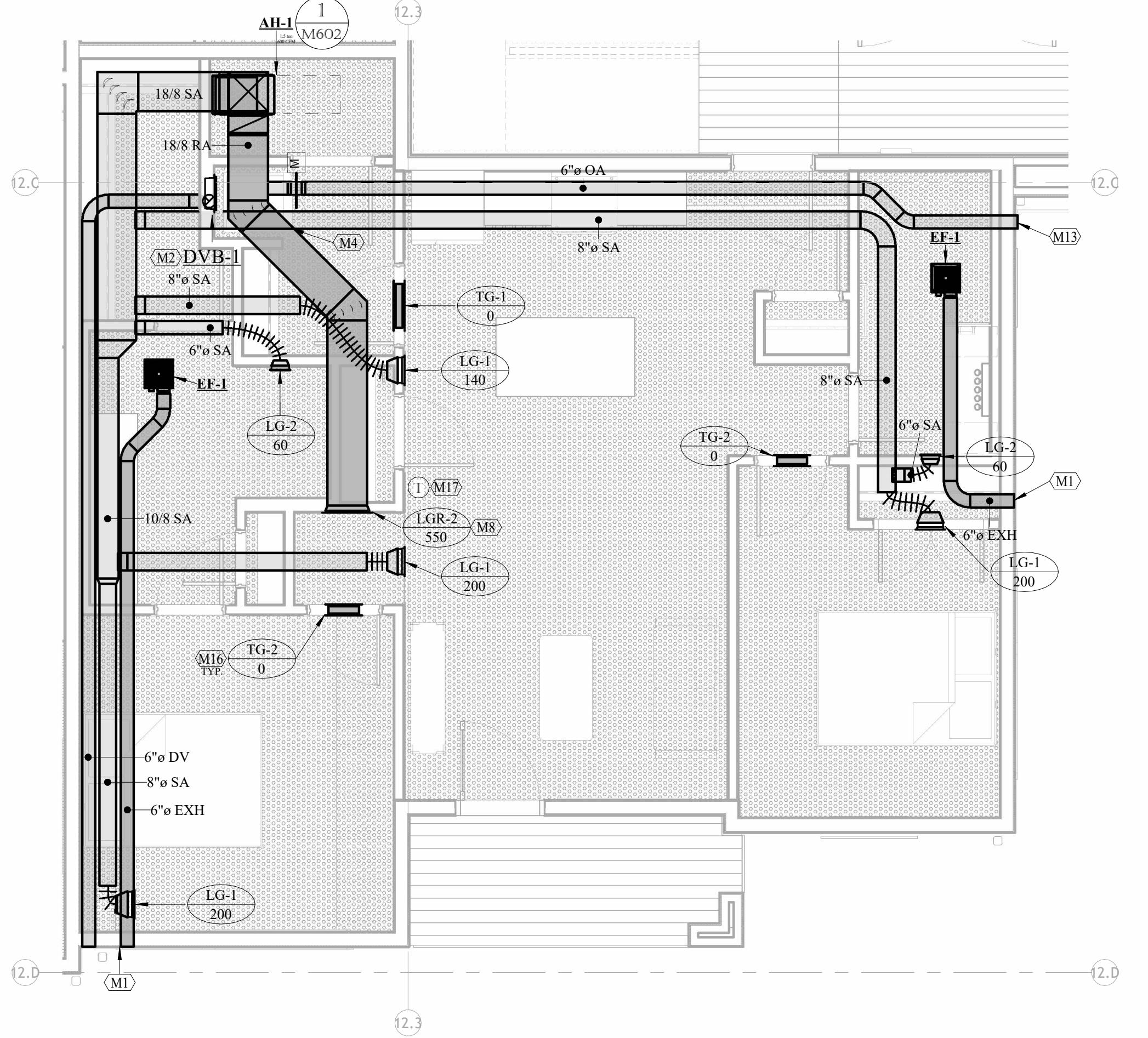
1 Level 1 - Enlarged 1-Bed Mechanical Plan

M403 SCALE: 1/4" = 1'-0"



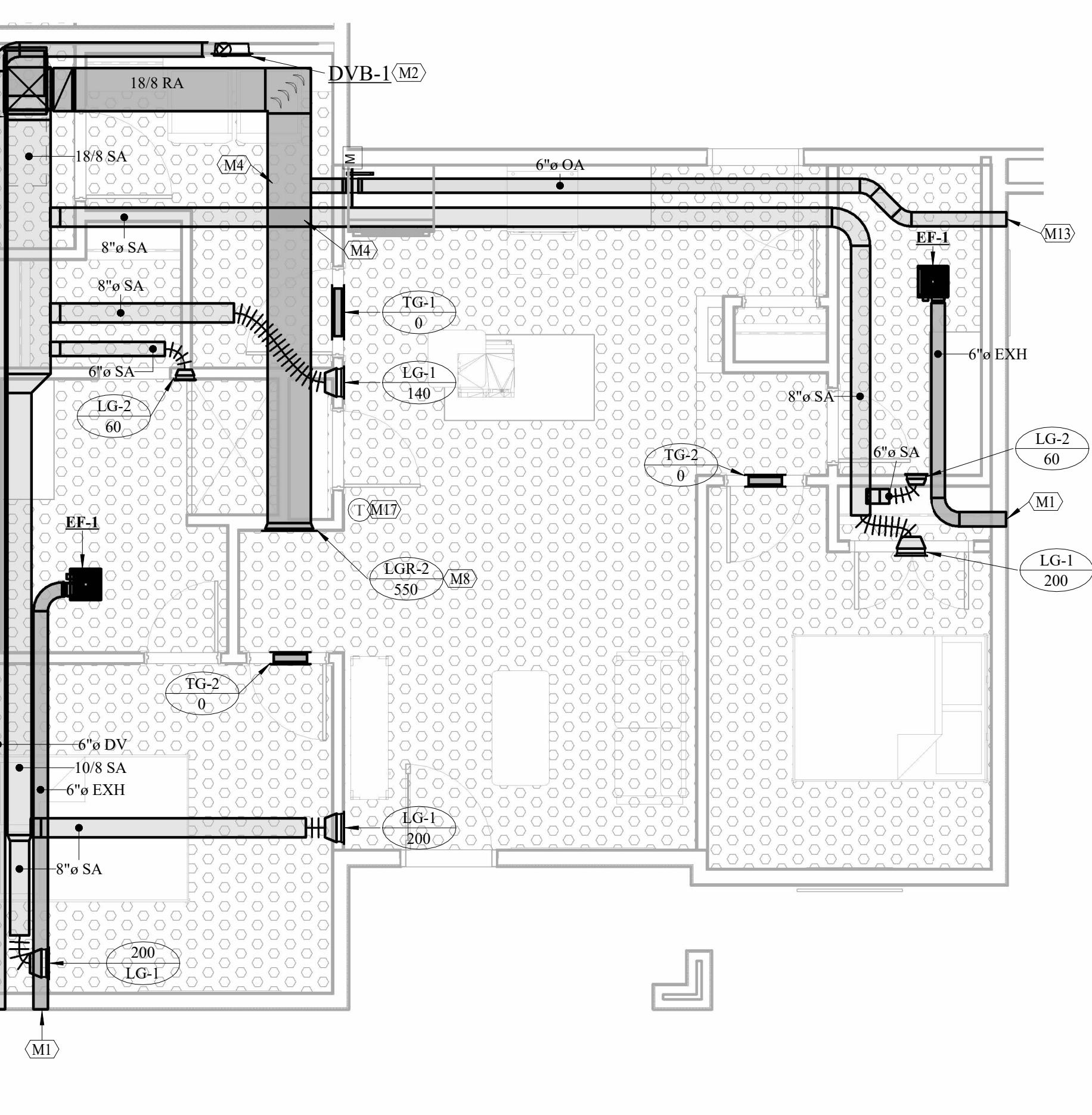
3 Level 1 - Enlarged 1-Bed Mechanical Plan A

M403 SCALE: 1/4" = 1'-0"



2 Level 1 - Enlarged 2-Bed Mechanical Plan

M403 SCALE: 1/4" = 1'-0"

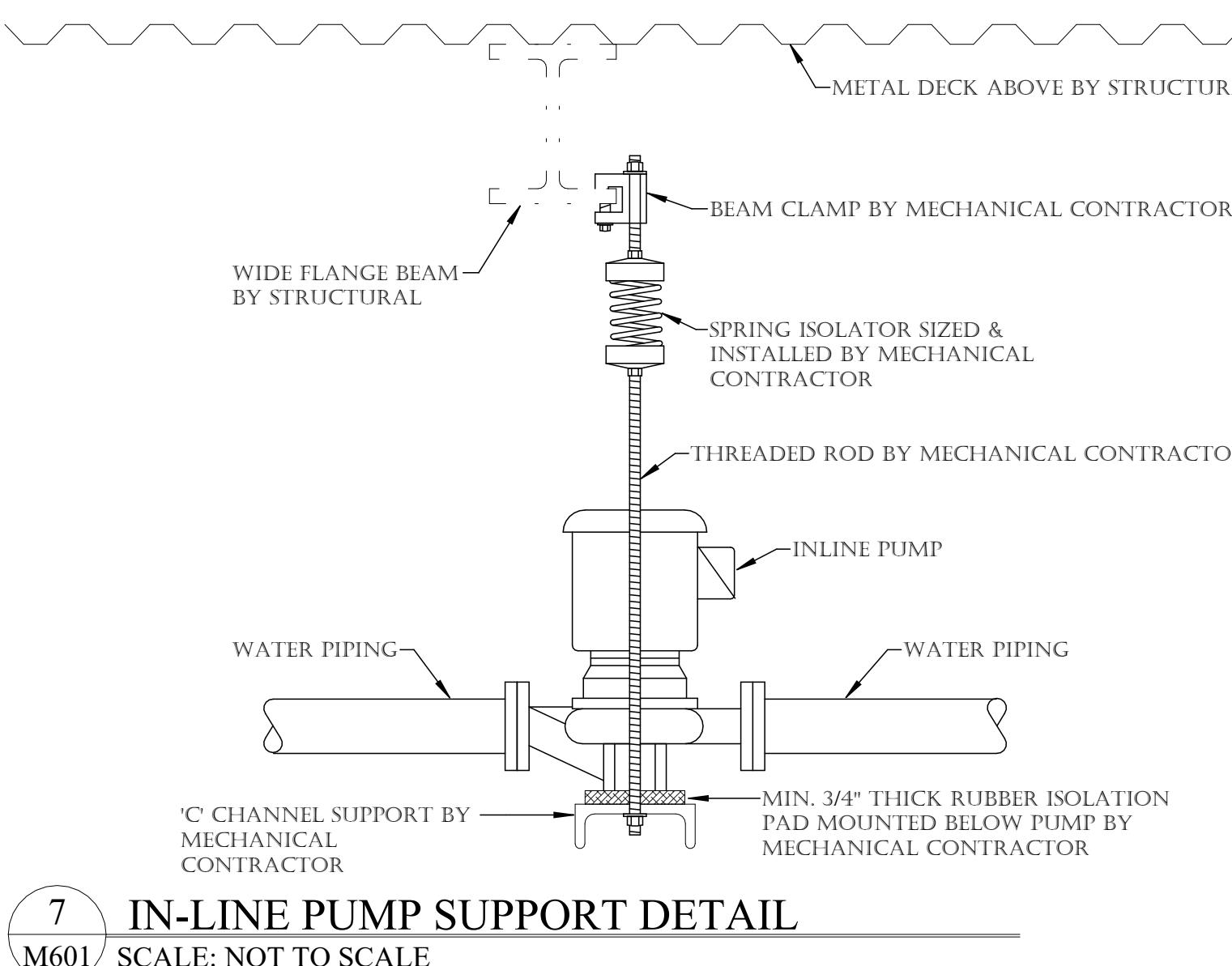


4 Level 1 - Enlarged 2-Bed Mechanical Plan A

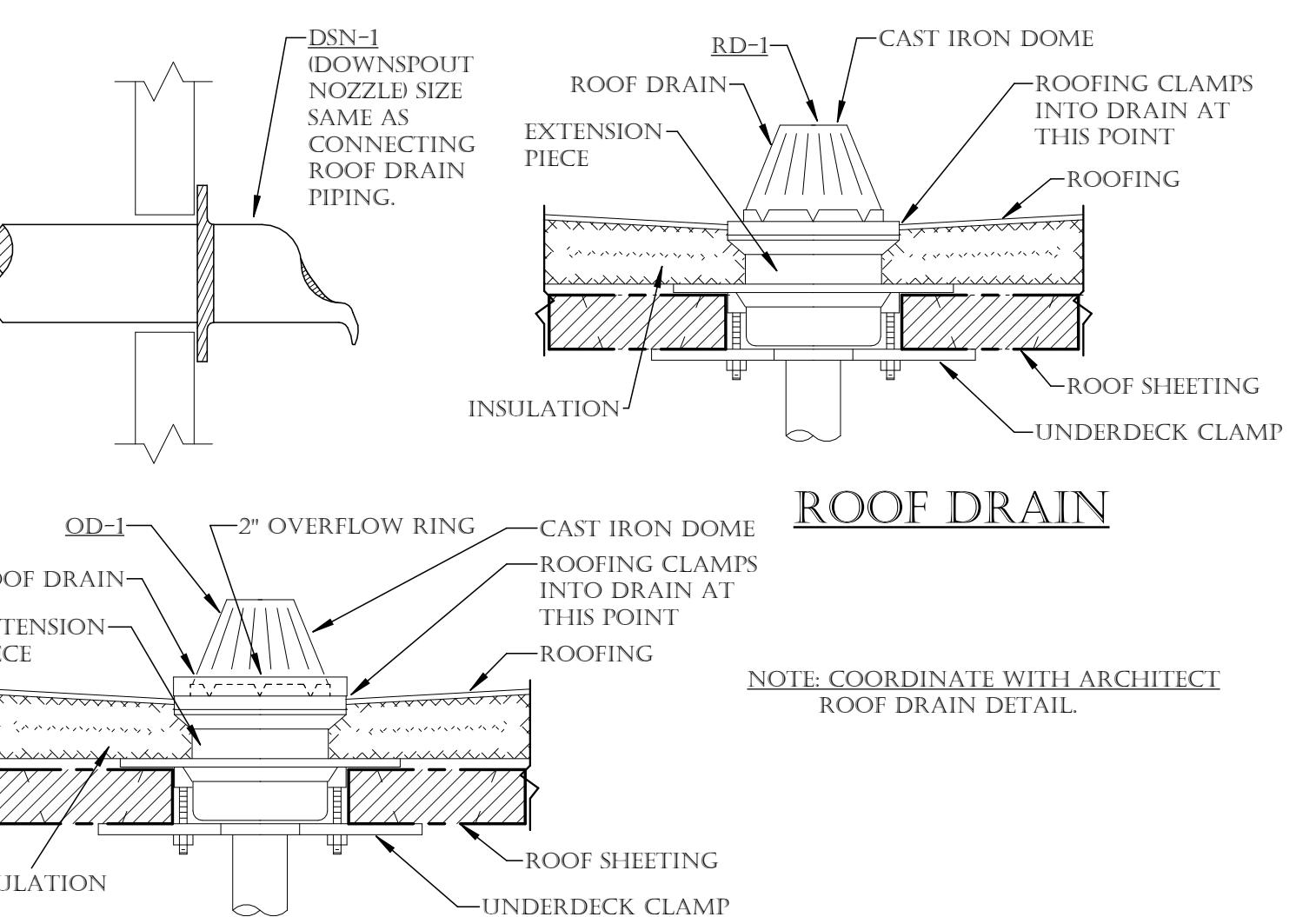
M403 SCALE: 1/4" = 1'-0"

CITY STAMP:

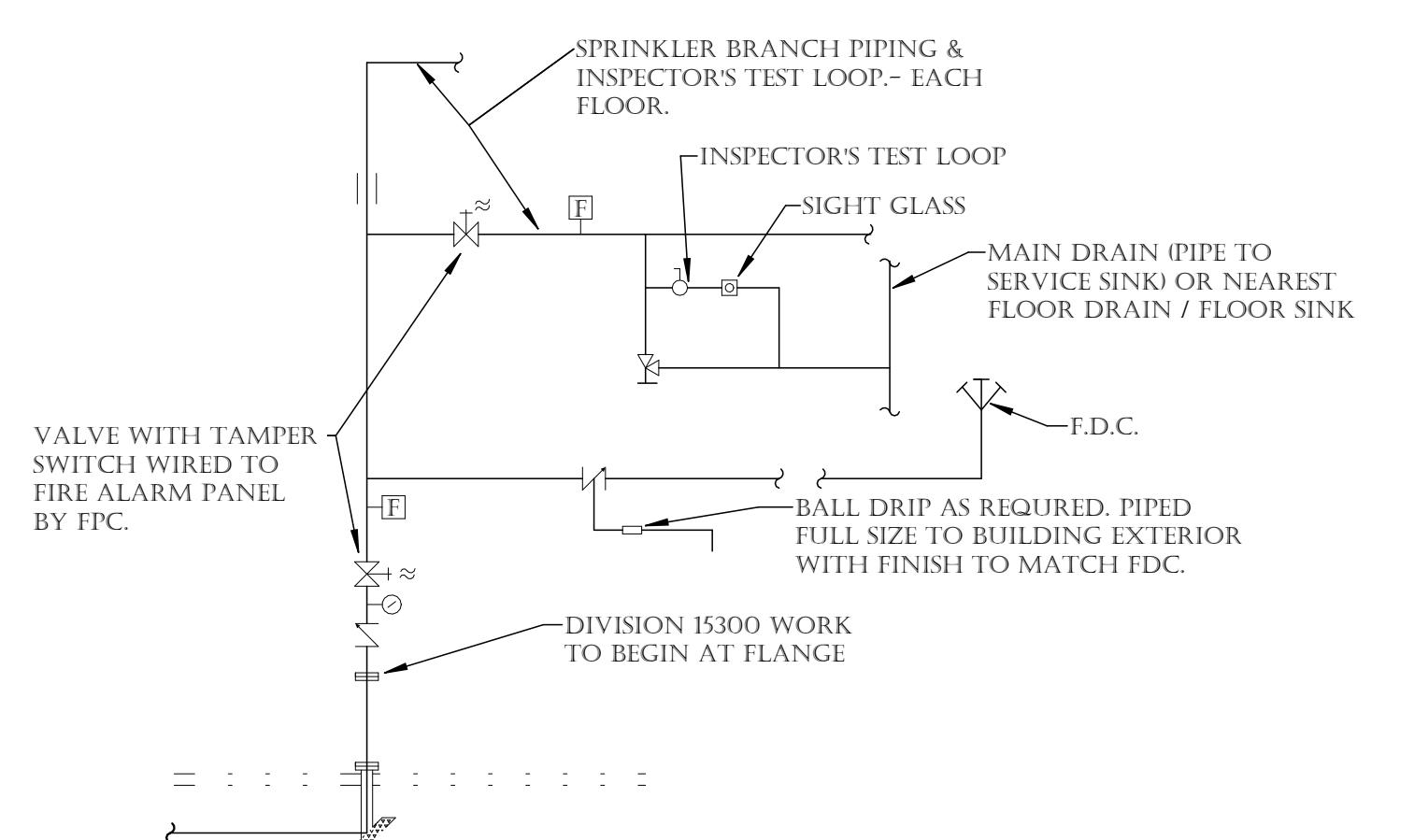
A



7 IN-LINE PUMP SUPPORT DETAIL
M601 SCALE: NOT TO SCALE

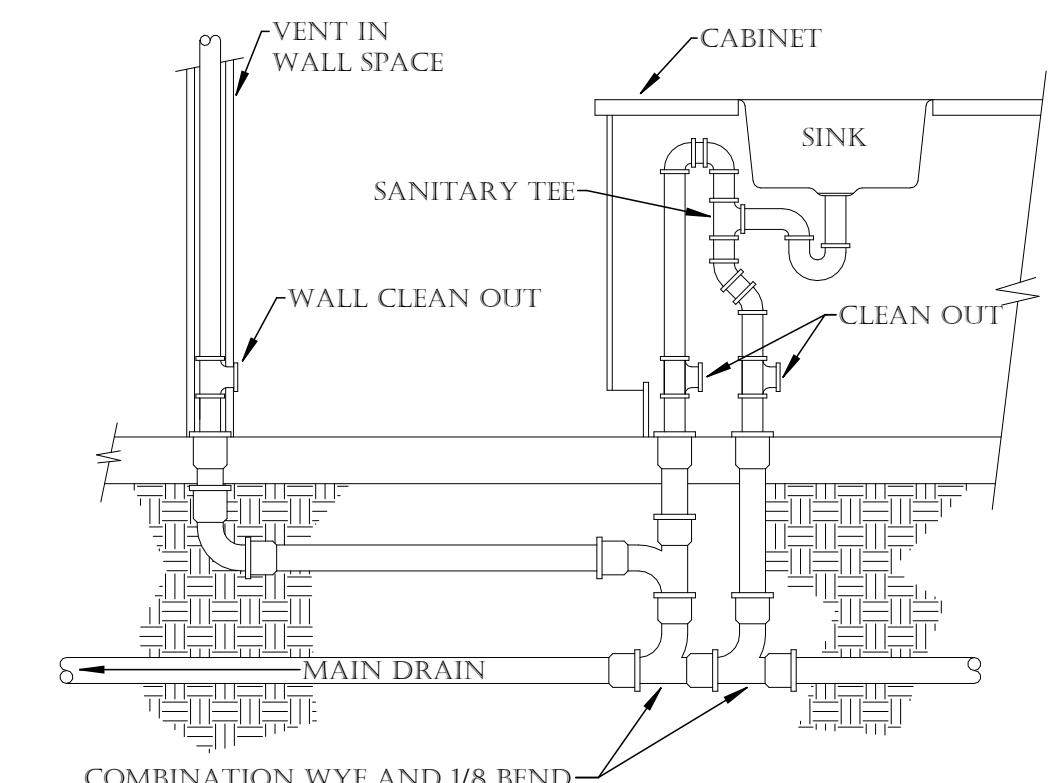


4 ROOF DRAIN & OVERFLOW ROOF DRAIN DETAIL
M601 SCALE: NOT TO SCALE

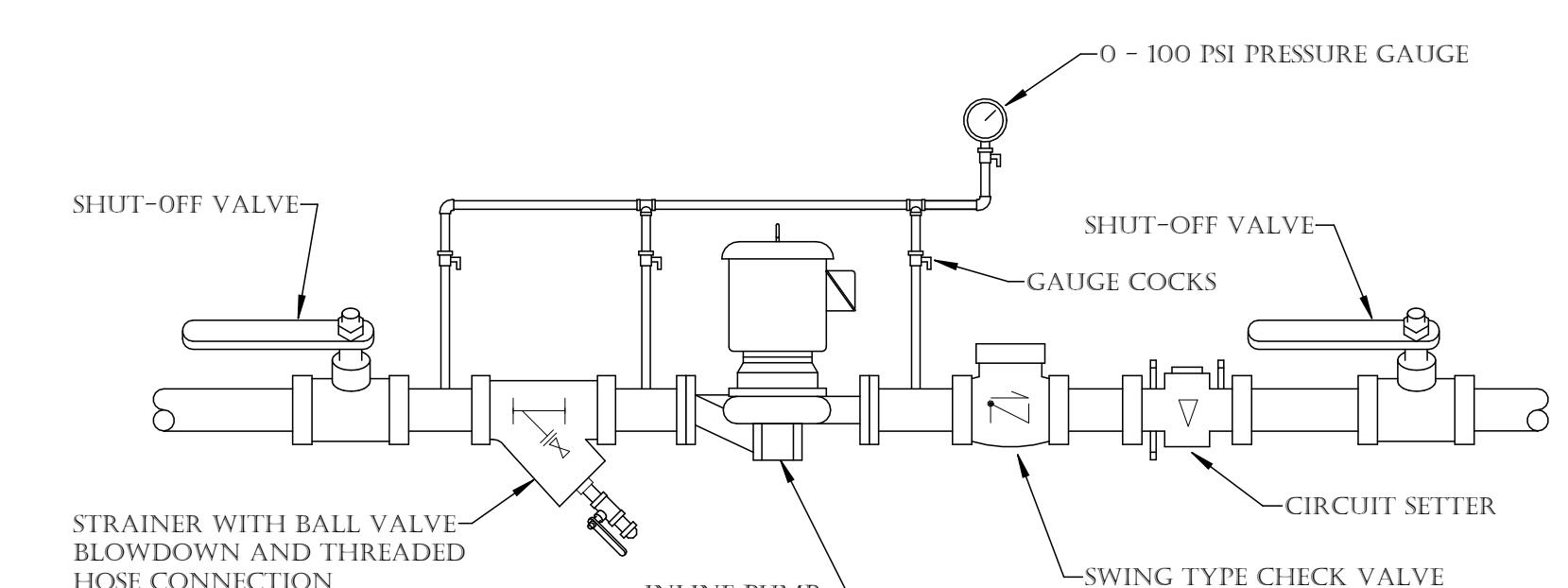


1 TYPICAL FIRE SPRINKLER SERVICE ENTRY DETAIL
M601 SCALE: NOT TO SCALE

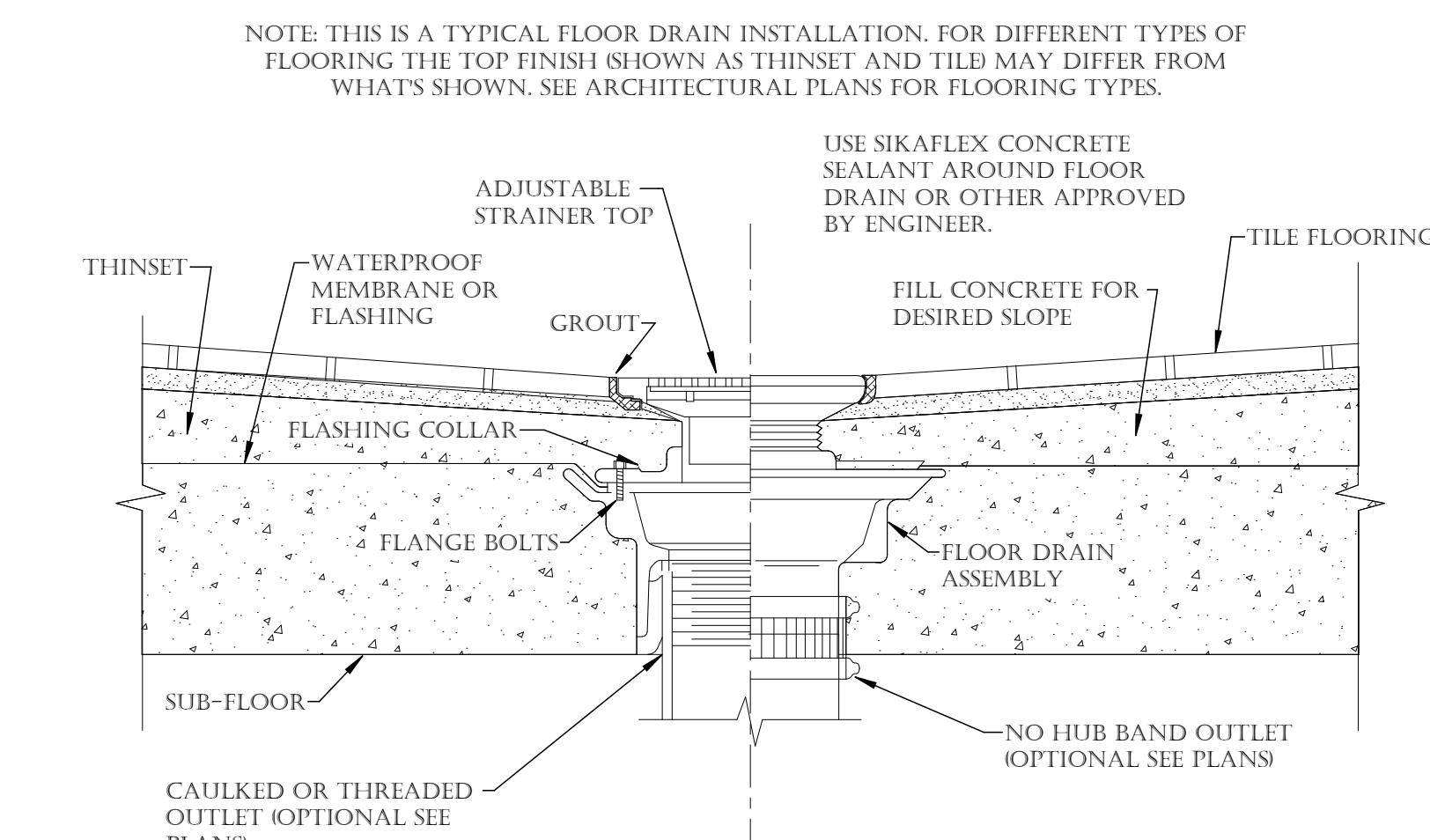
B



8 ISLAND SINK VENT DETAIL
M601 SCALE: NOT TO SCALE



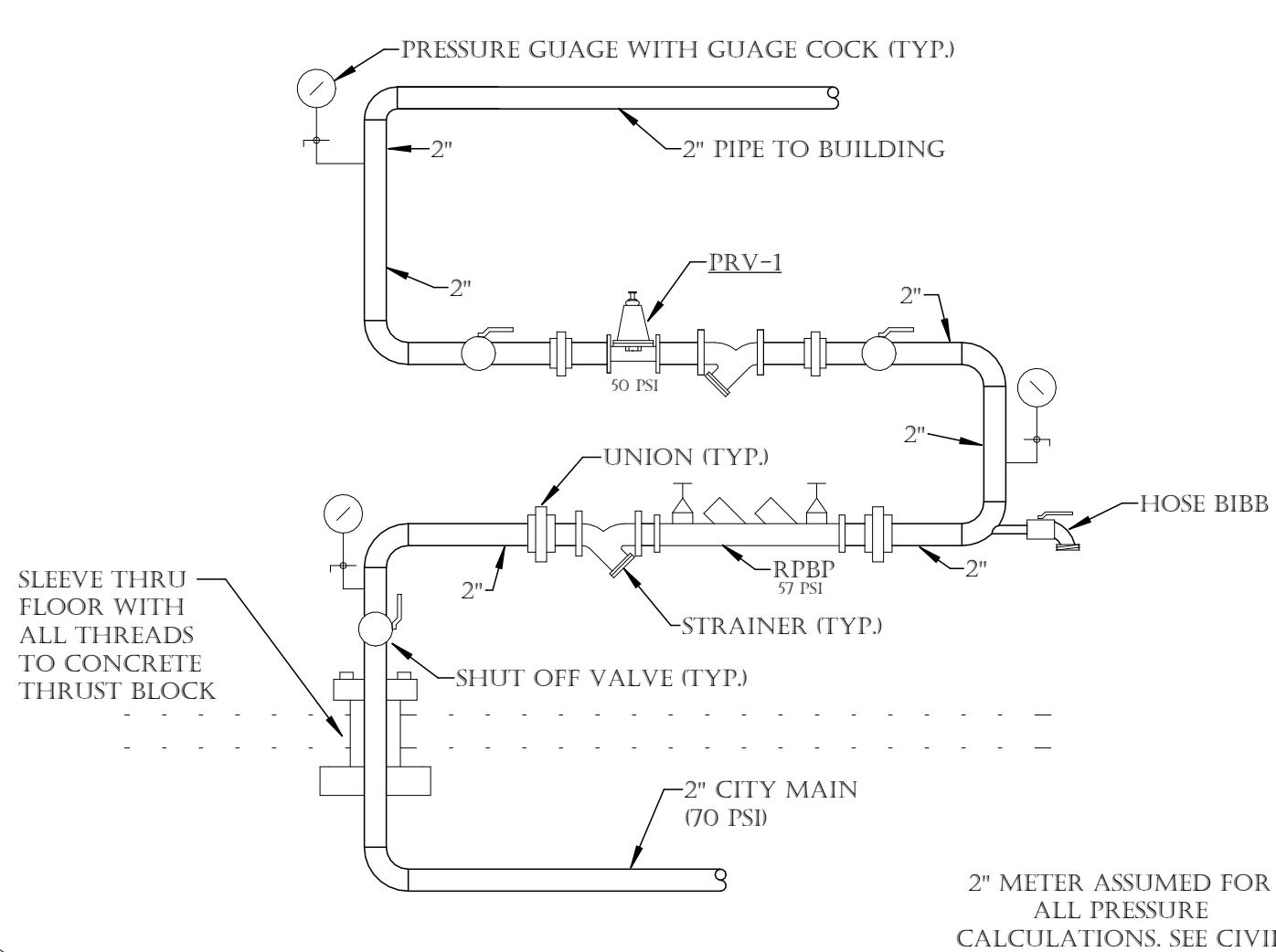
5 TYPICAL IN-LINE PUMP PIPING DETAIL 1
M601 SCALE: NOT TO SCALE



2 TYPICAL FLOOR DRAIN / SINK DETAIL 1
M601 SCALE: NOT TO SCALE

C

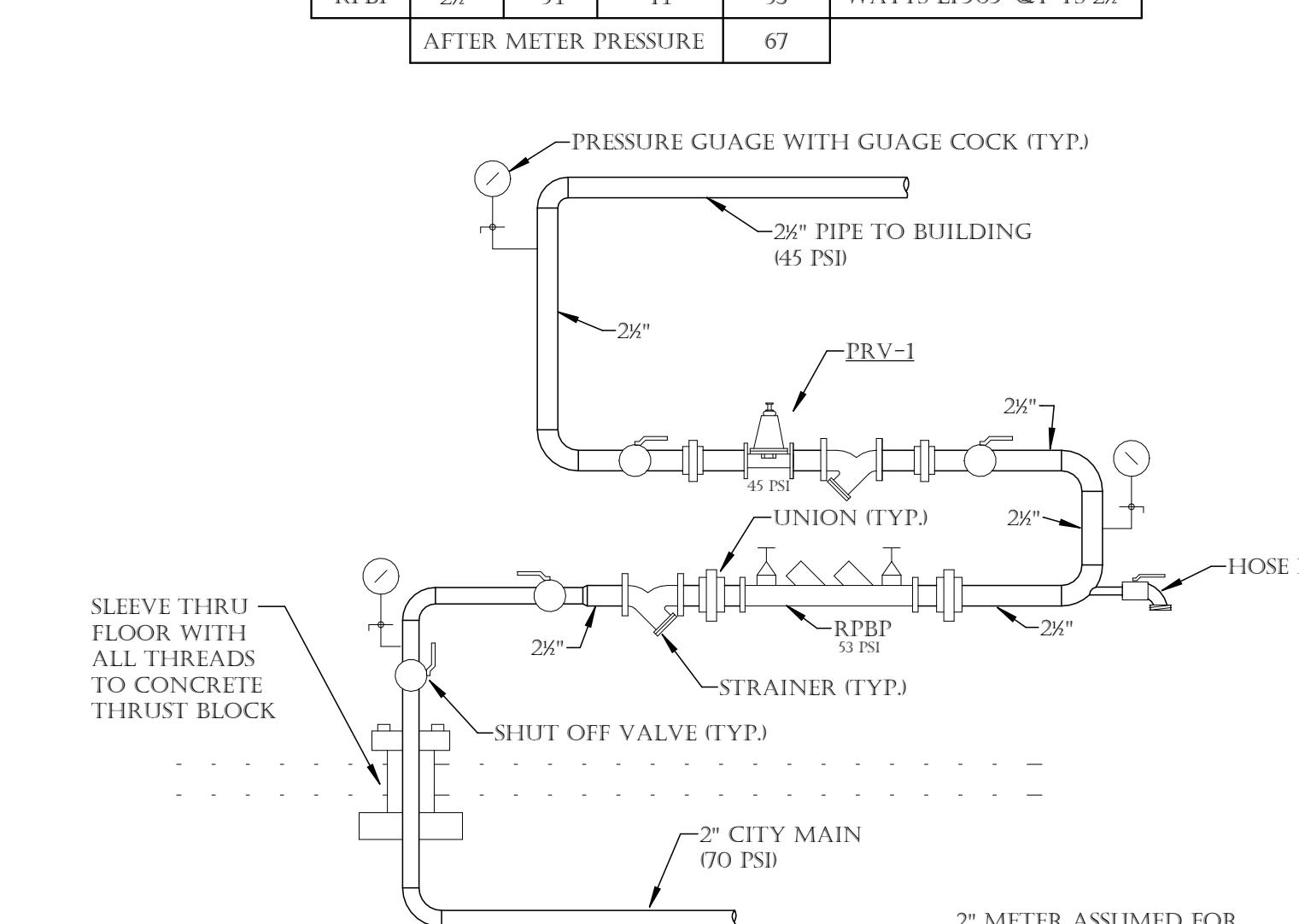
PRV STATION SCHEDULE					
PLAN CODE	SIZE	GPM	PRES. FALL-OFF (PSIG)	PRES. SETTING (PSIG)	MANUFACTURER & MODEL NO.
PRV-1	2"	46/37	7	50	WATTS LF223S
RPBP	2"	46/37	10	57	WATTS LFN909-QT-FS 2"
AFTER METER PRESSURE					67



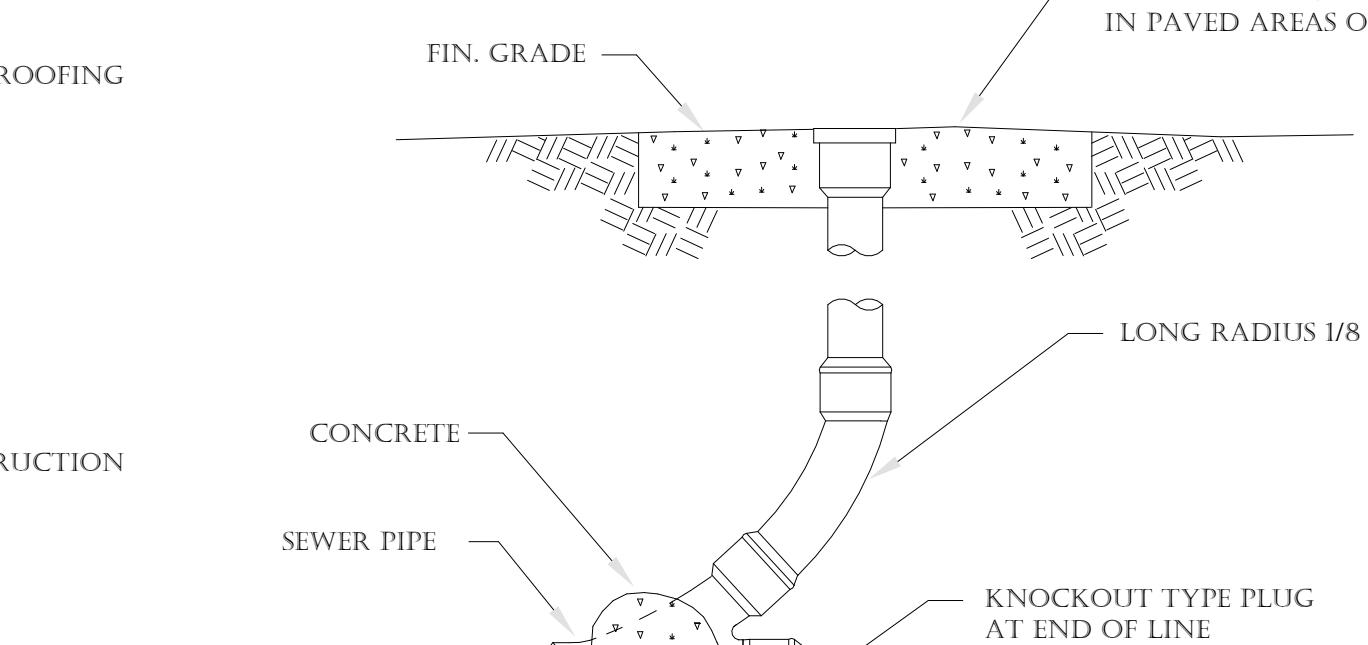
10 PRV 2" DETAIL
M601 SCALE: NOT TO SCALE

PRV STATION SCHEDULE					
PLAN CODE	SIZE	GPM	PRES. FALL-OFF (PSIG)	PRES. SETTING (PSIG)	MANUFACTURER & MODEL NO.
PRV-1	2 1/2"	54	8	45	WATTS LFN223B
RPBP	2 1/2"	54	14	53	WATTS LP909-QT-FS 2 1/2"
AFTER METER PRESSURE					67

9 PRV 2 1/2" DETAIL
M601 SCALE: NOT TO SCALE



6 VENT THROUGH ROOF DETAIL
M601 SCALE: NOT TO SCALE



3 SURFACE CLEANOUT DETAIL
M601 SCALE: NOT TO SCALE

 PROJECT TITLE AND ADDRESS
 Ashcreek Multifamily
 Boise, Idaho

REVISIONS		
△	DESCRIPTION	DATE

PROJECT INFORMATION		
DATE:	26 August 2024	
PROJECT #:	PVE 24048.00	
PM / PA:		
PIC:		

DRAWING SET STATUS		
Permit Set		

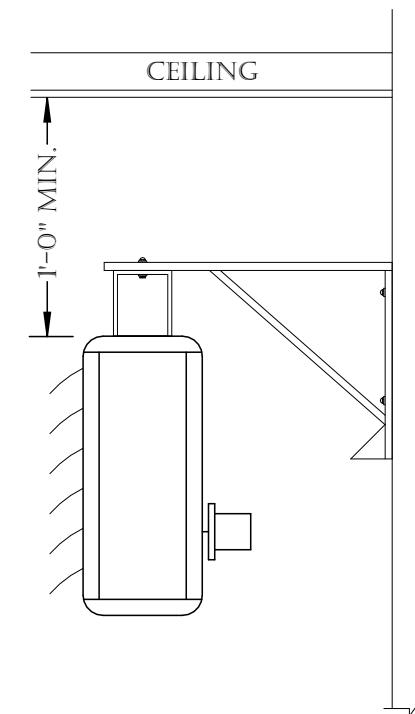
SHEET TITLE

 Mechanical &
 Plumbing Details

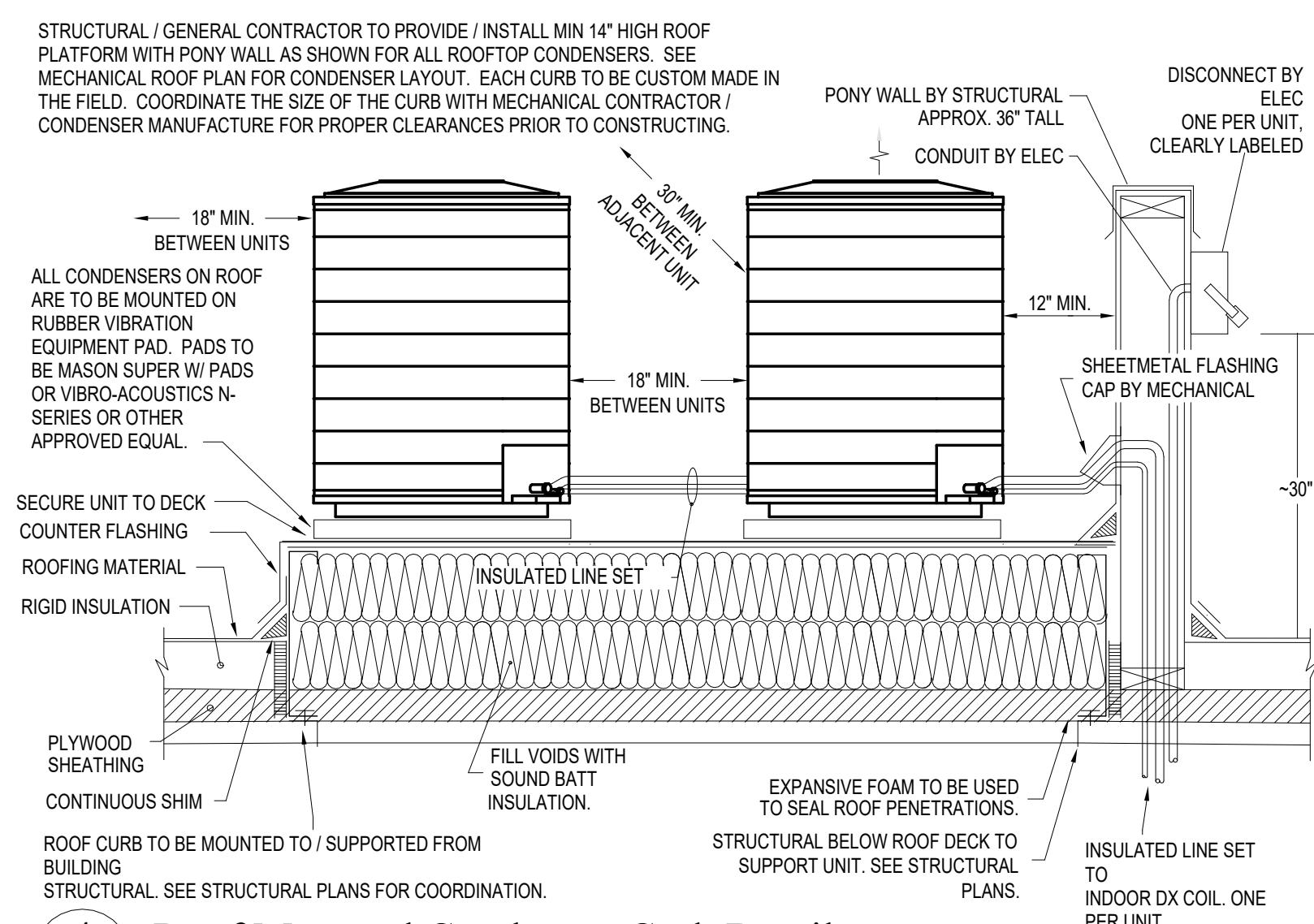
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M601

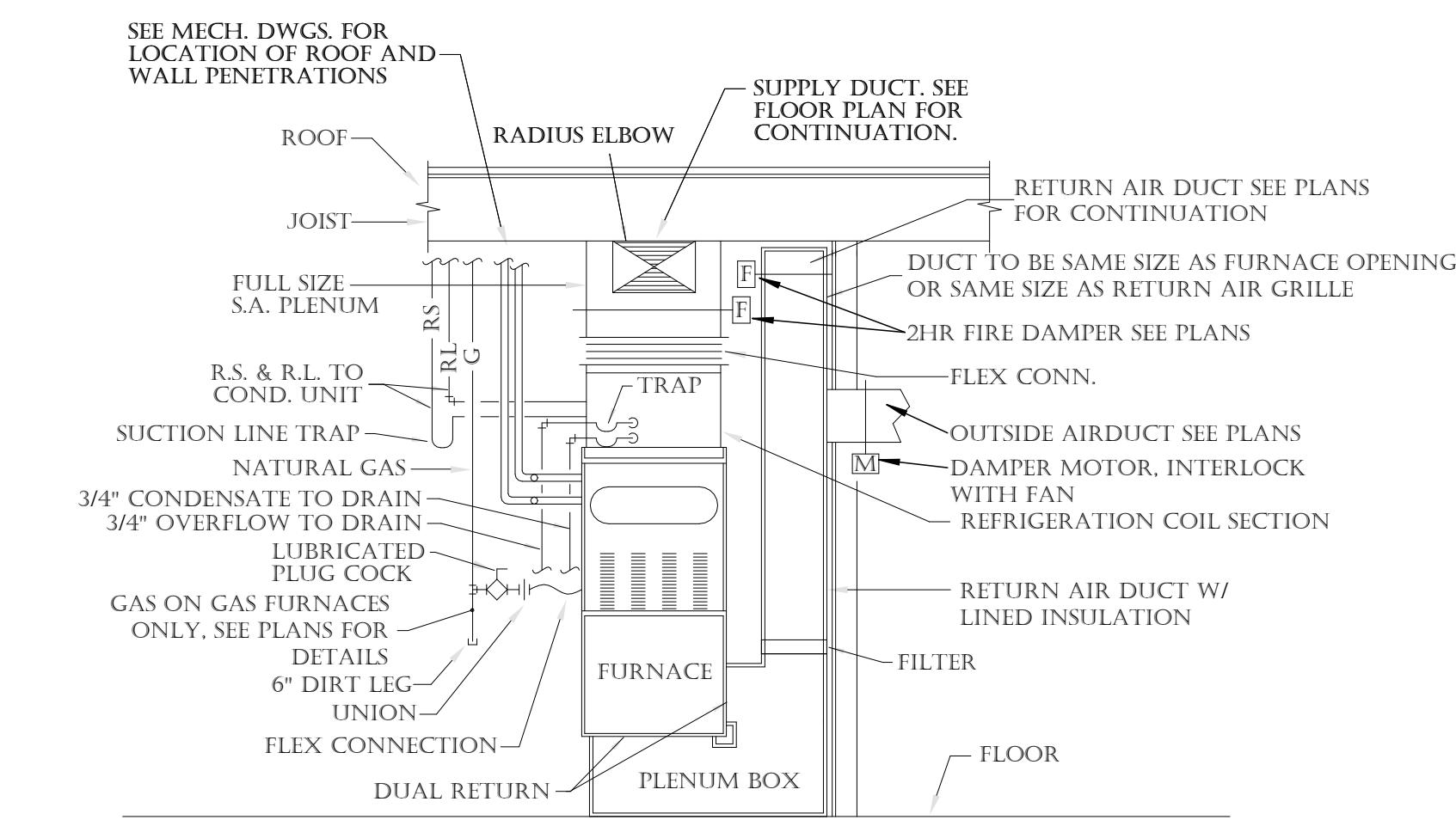
A



7 WALL MOUNT ELECTRIC UNIT HEATER DETAIL
M602 SCALE: NOT TO SCALE

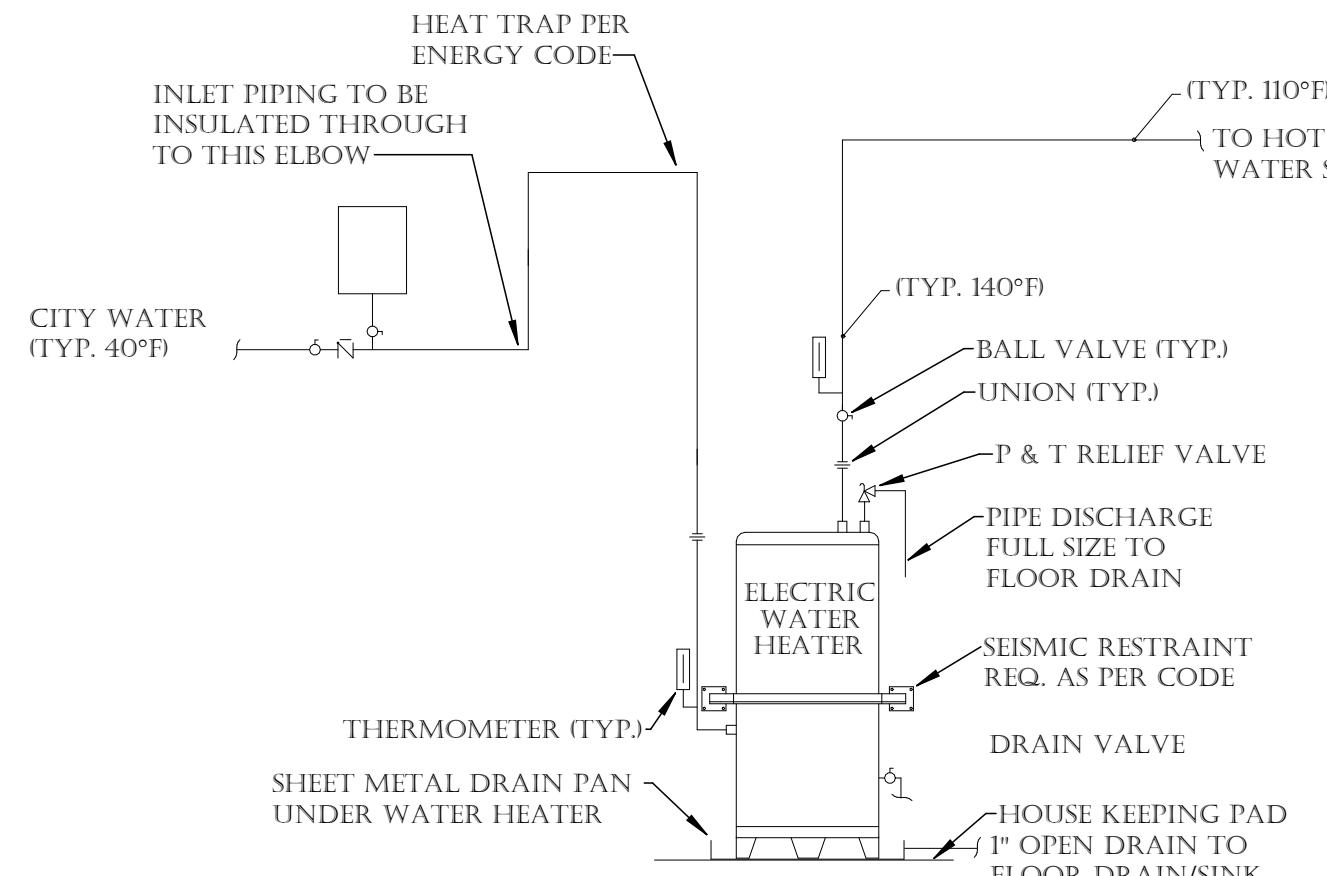


4 Roof Mounted Condenser Curb Detail
M602 SCALE: NOT TO SCALE

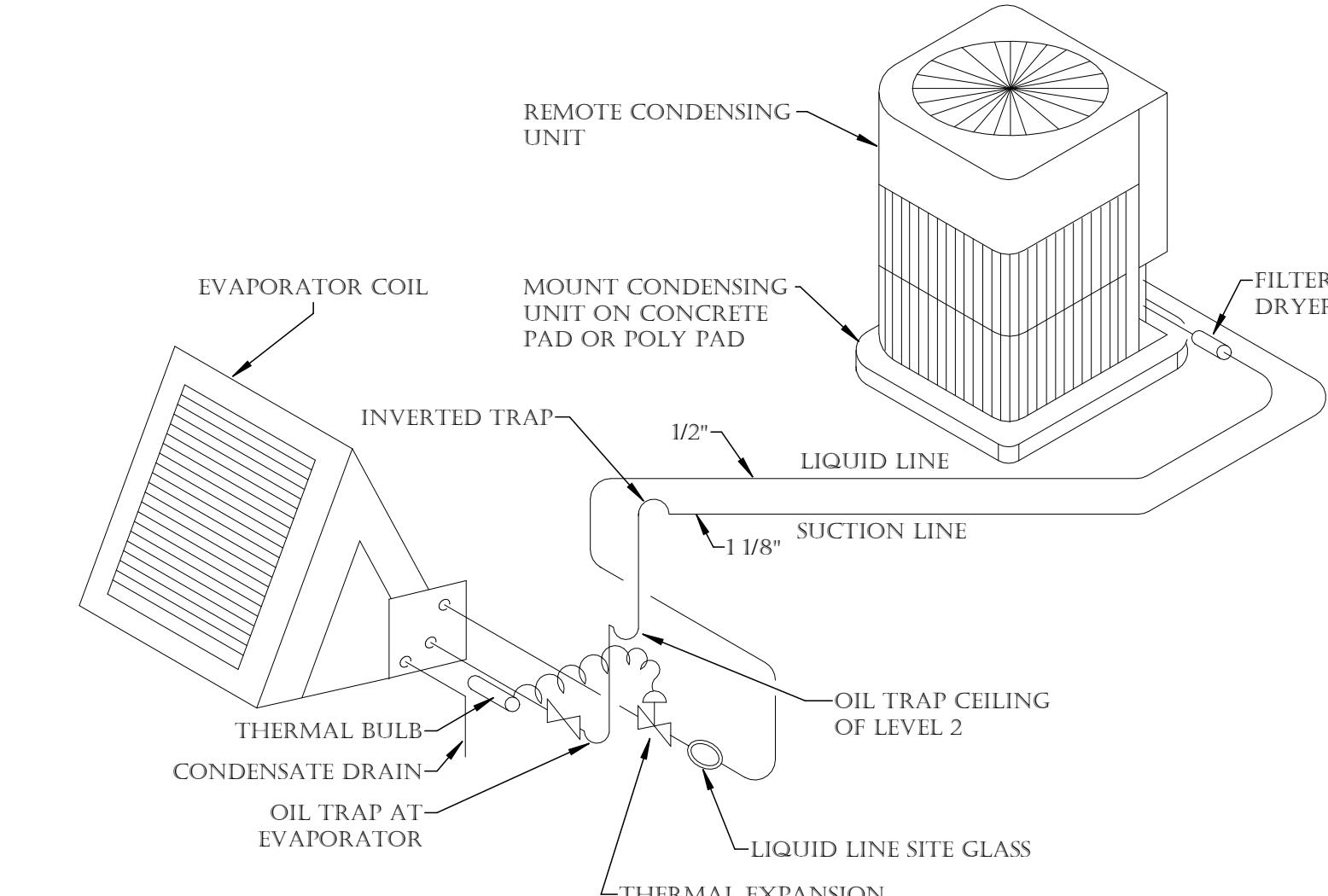


1 TYPICAL AH/FURNACE PIPING INSTALLATION DETAIL
M602 SCALE: NOT TO SCALE

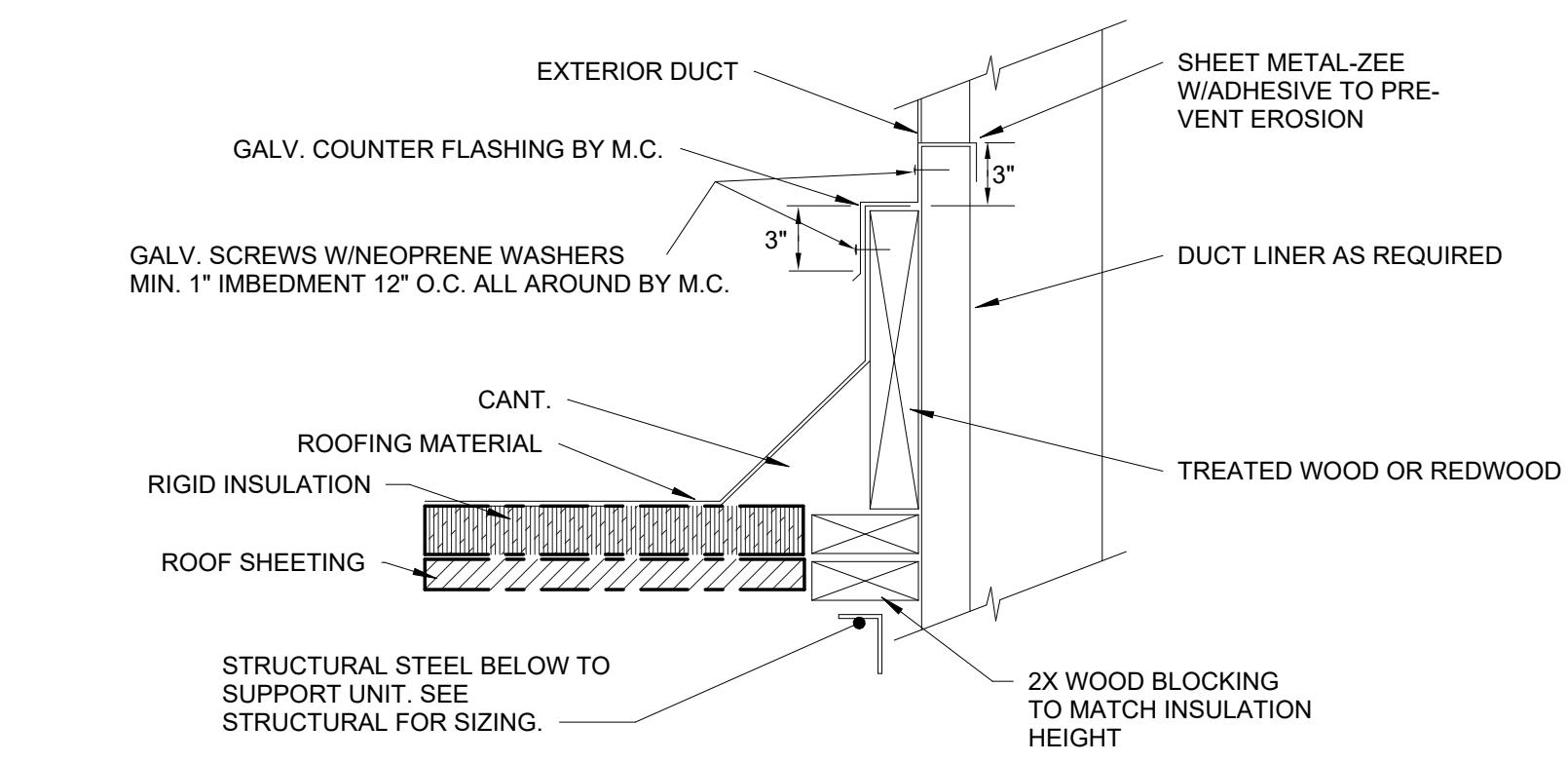
B



8 ELECTRIC WATER HEATER PIPING DETAIL NO RECIRC
M602 SCALE: NOT TO SCALE

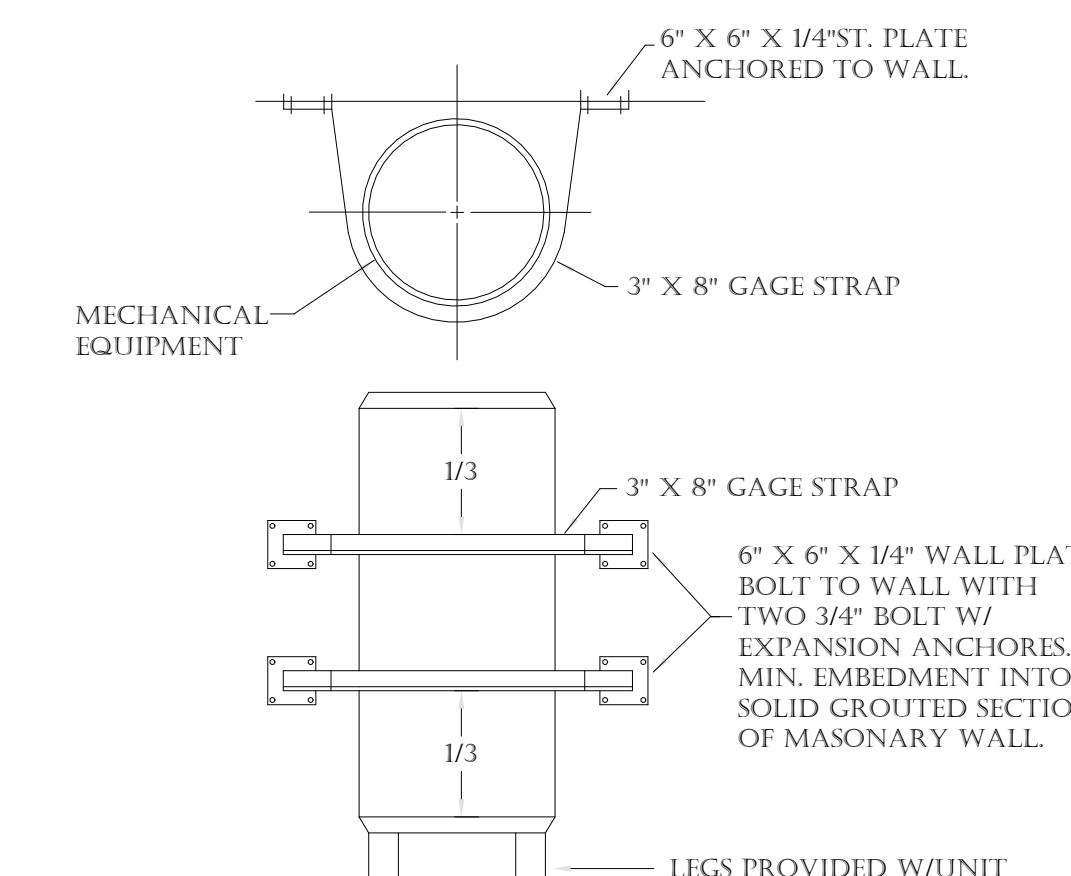


5 REFRIGERANT PIPING SCHEMATIC
M602 SCALE: NOT TO SCALE

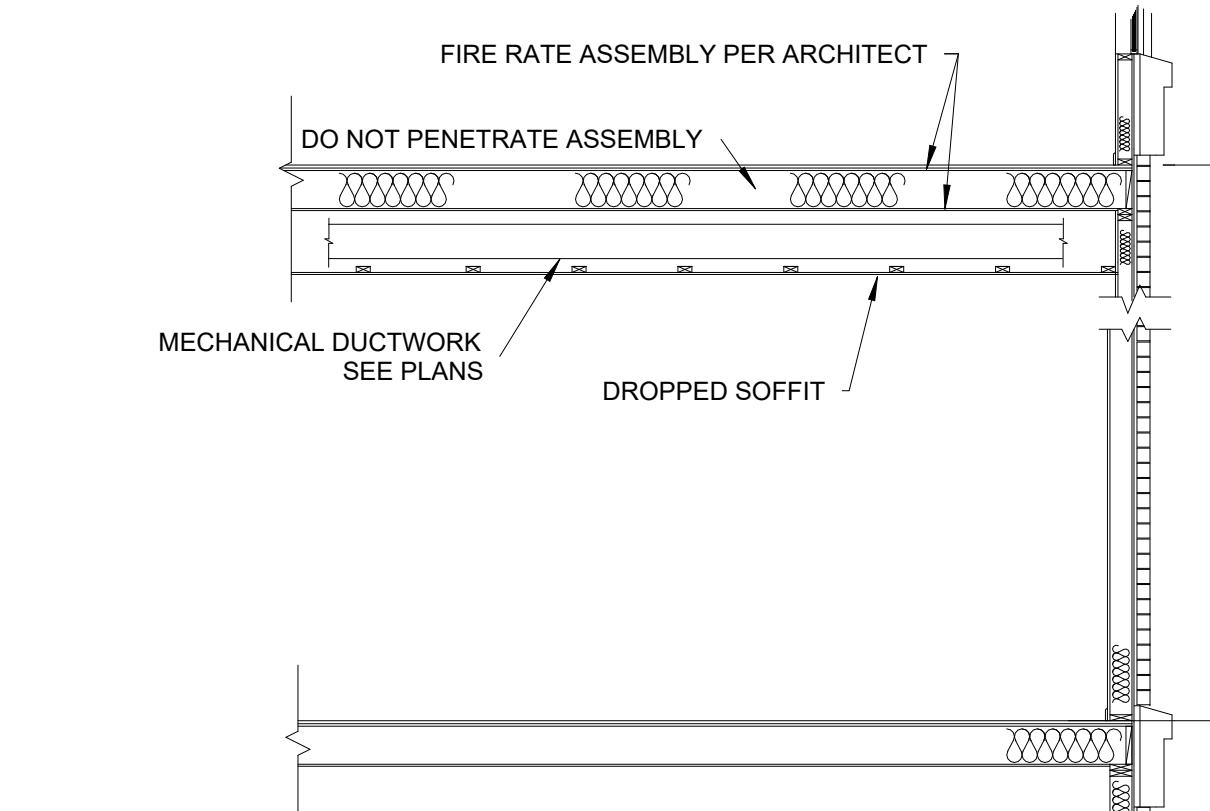


2 DUCT PENETRATION OF ROOF DETAIL
M602 SCALE: NOT TO SCALE

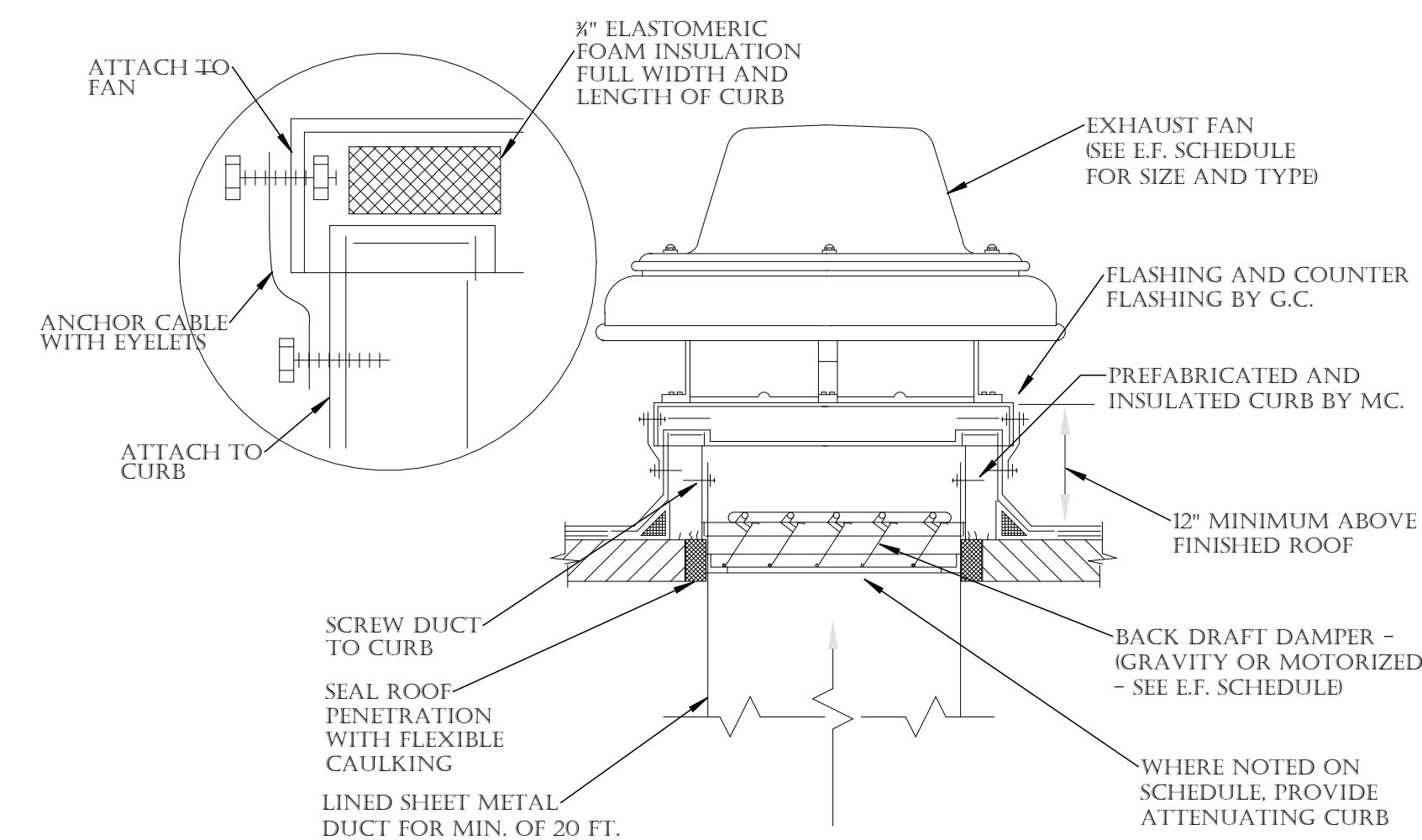
C



9 SEISMIC RESTRAINT FOR WATER HEATER DETAIL 1
M602 SCALE: NOT TO SCALE



6 TYPICAL DUCT INSTALLATION IN SOFFITS
M602 SCALE: NOT TO SCALE



3 EXHAUST FAN AND CURB DETAIL
M602 SCALE: NOT TO SCALE

Ashcreek Multifamily

PROJECT TITLE AND ADDRESS

Boise, Idaho

REVISIONS

△	DESCRIPTION	DATE

PROJECT INFORMATION

DATE:	26 August 2024
PROJECT #:	PVE 24048.00
PM / PA:	
PIC:	

DRAWING SET STATUS

Permit Set

SHEET TITLE

Mechanical & Plumbing Details

SHEET NUMBER

M602

CITY STAMP:

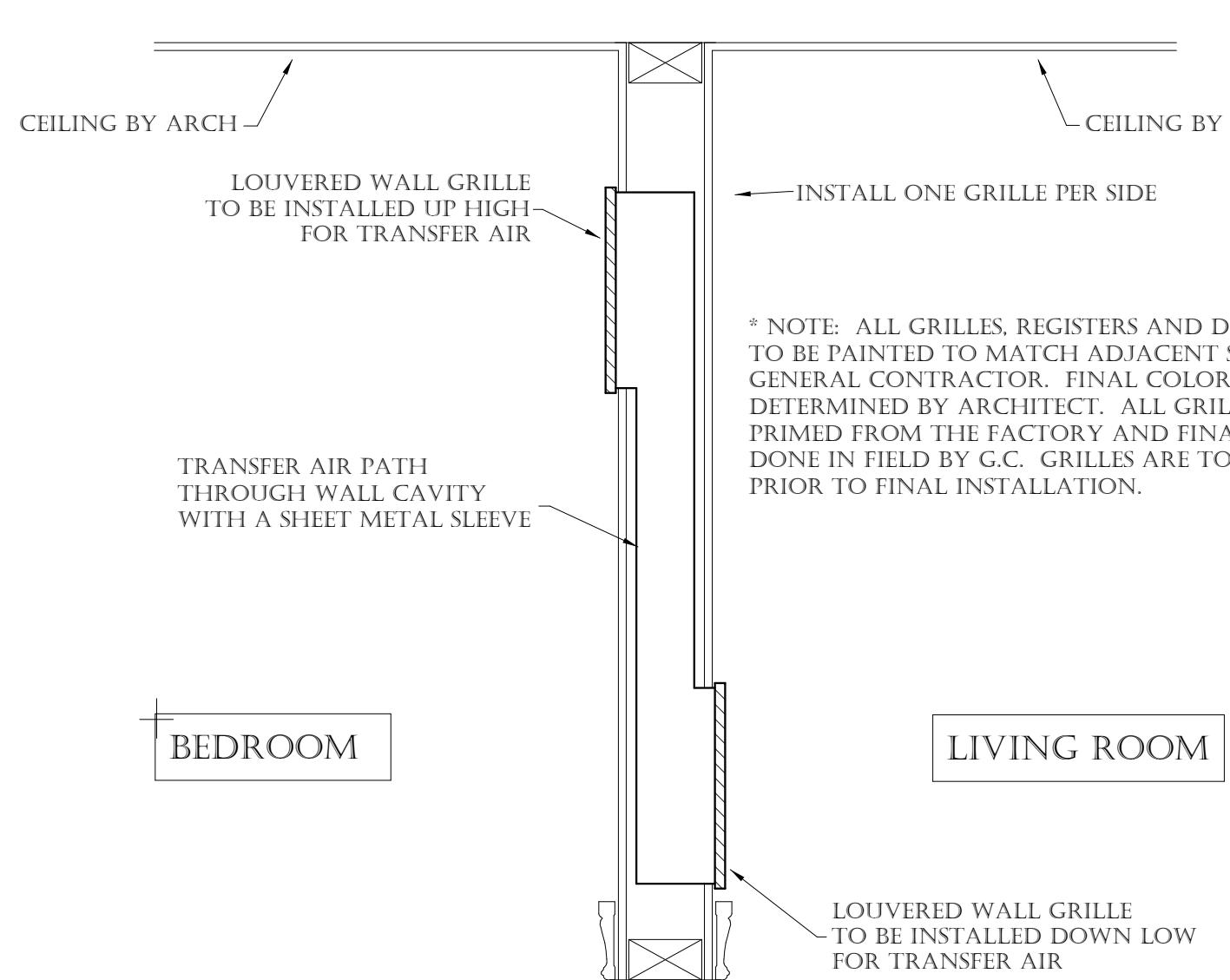
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233 SOUTH PLEASANT GROVE BLVD.
SUITE #105
PLEASANT GROVE, UTAH 84062
PHONE: (801) 769-3000
core@corearch.com

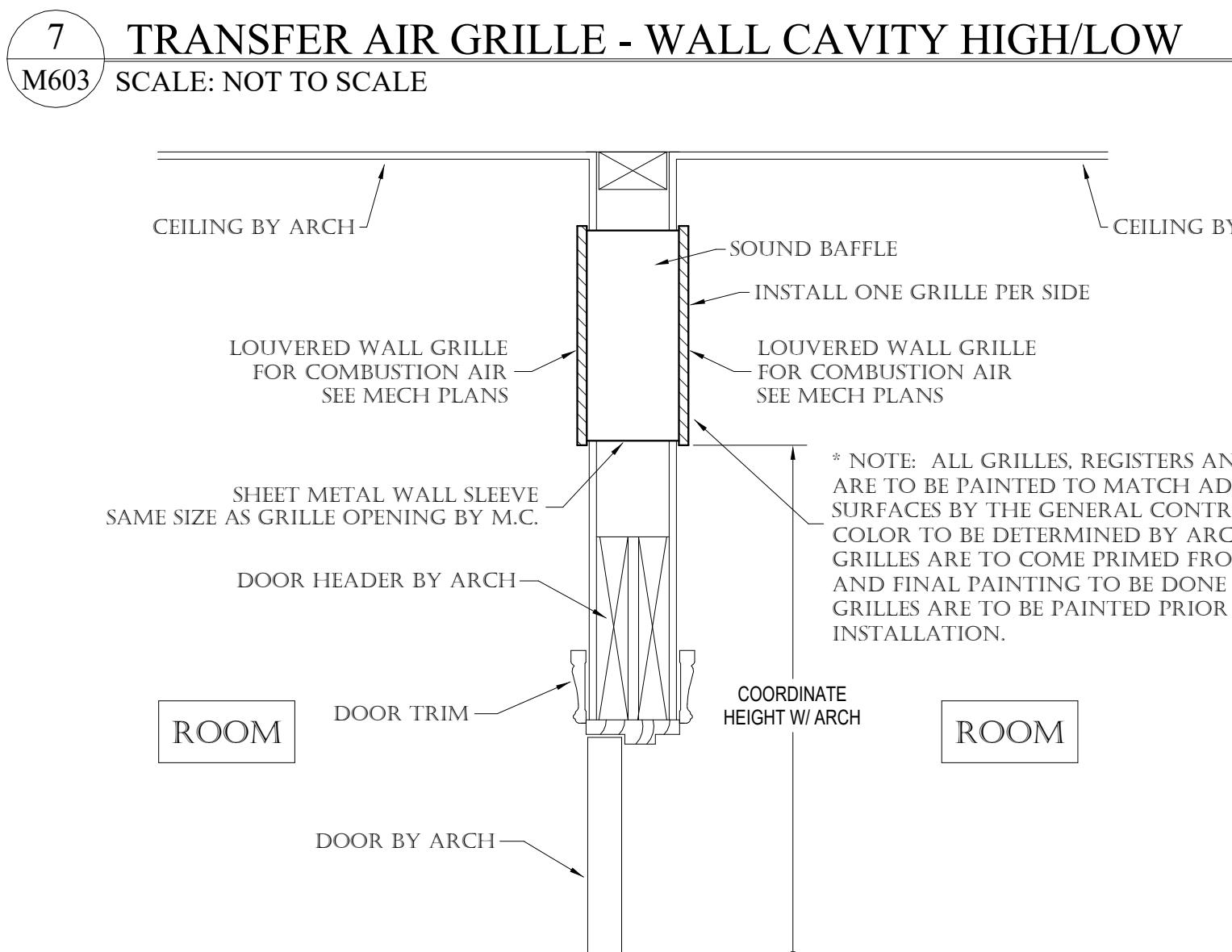
PROFESSIONAL STAMP

PROFESSIONAL ENGINEER
REGISTERED
STATE OF UTAH
THOMAS T. CANTRELL
08.26.2024

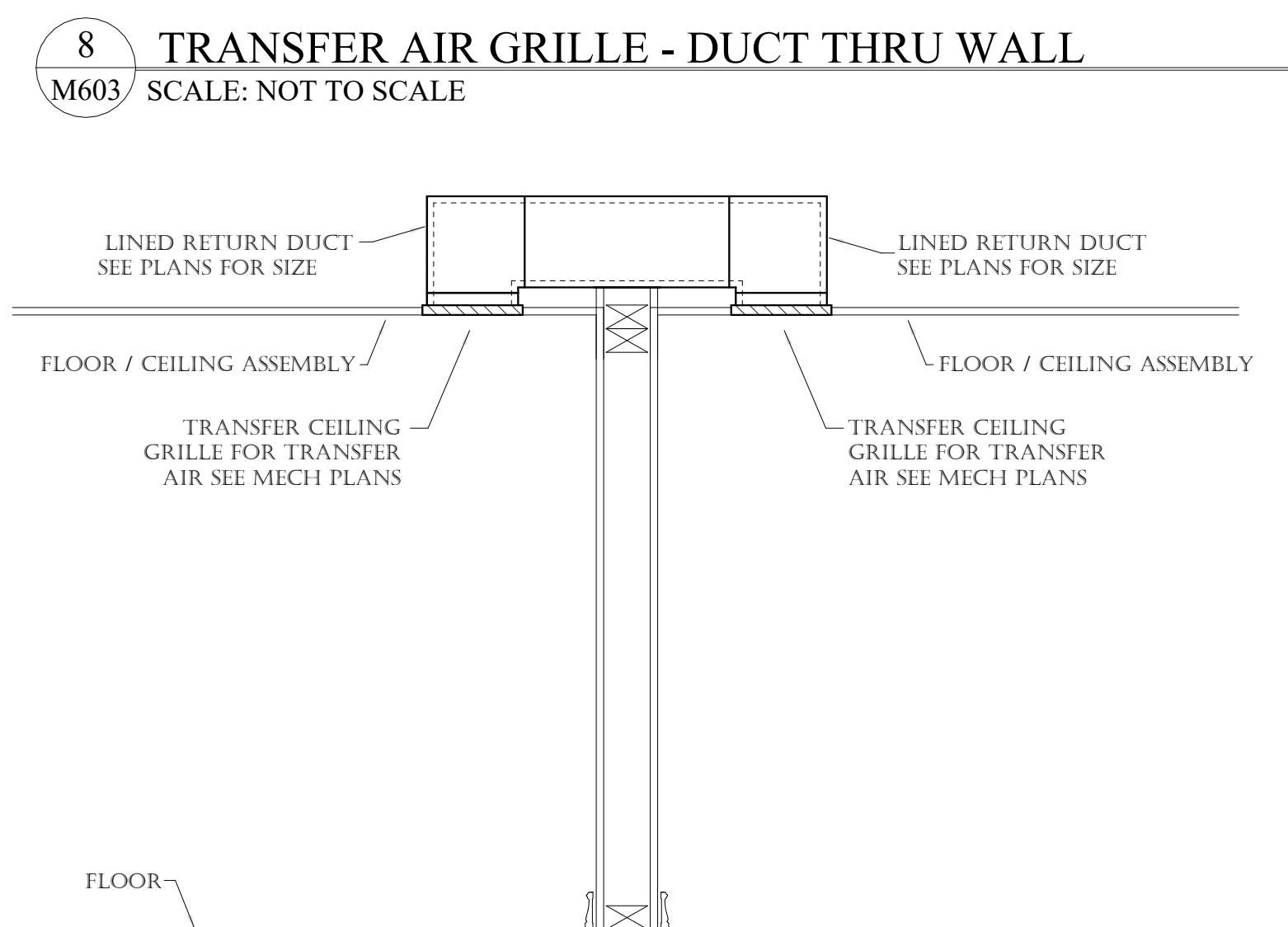
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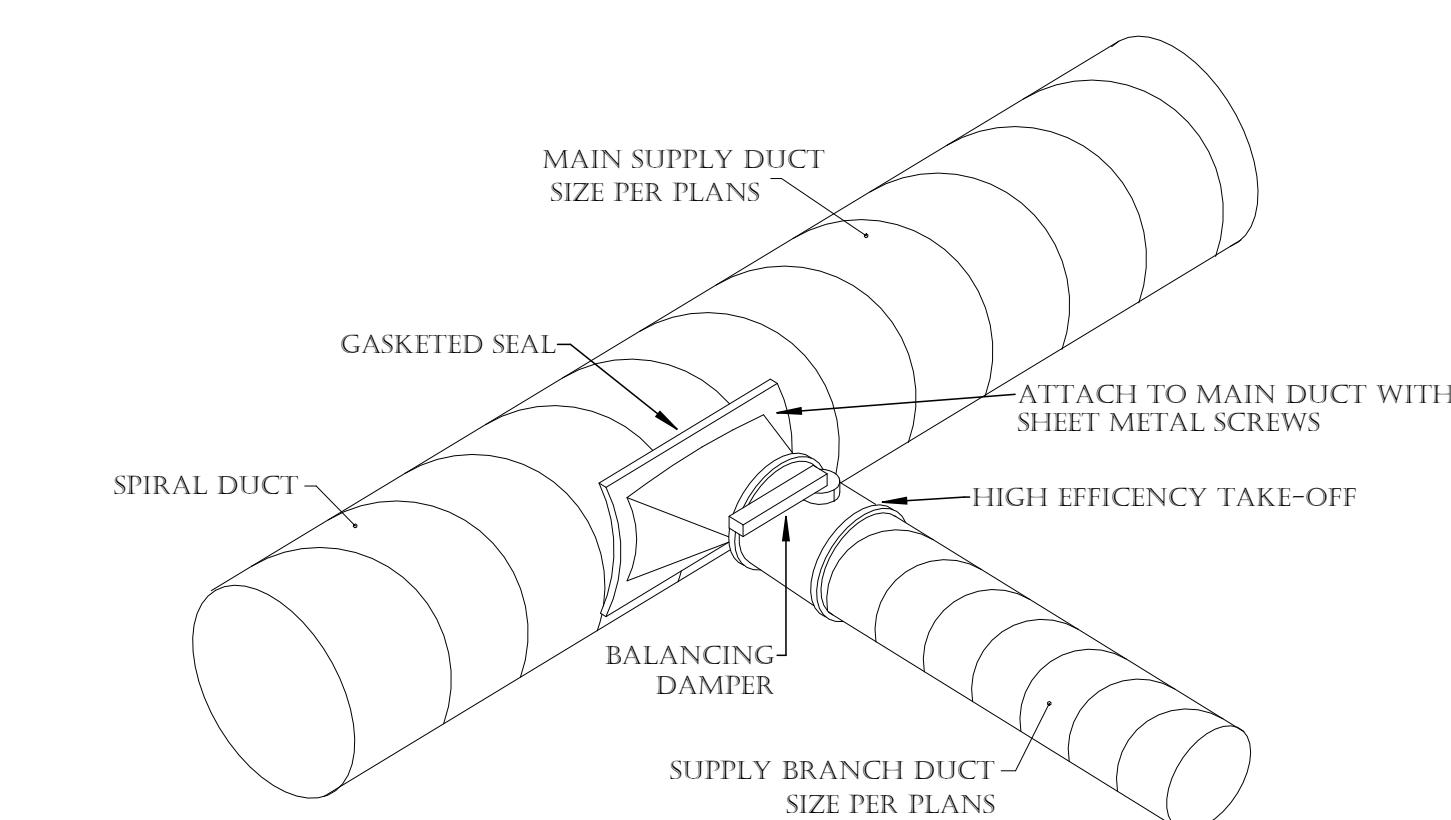
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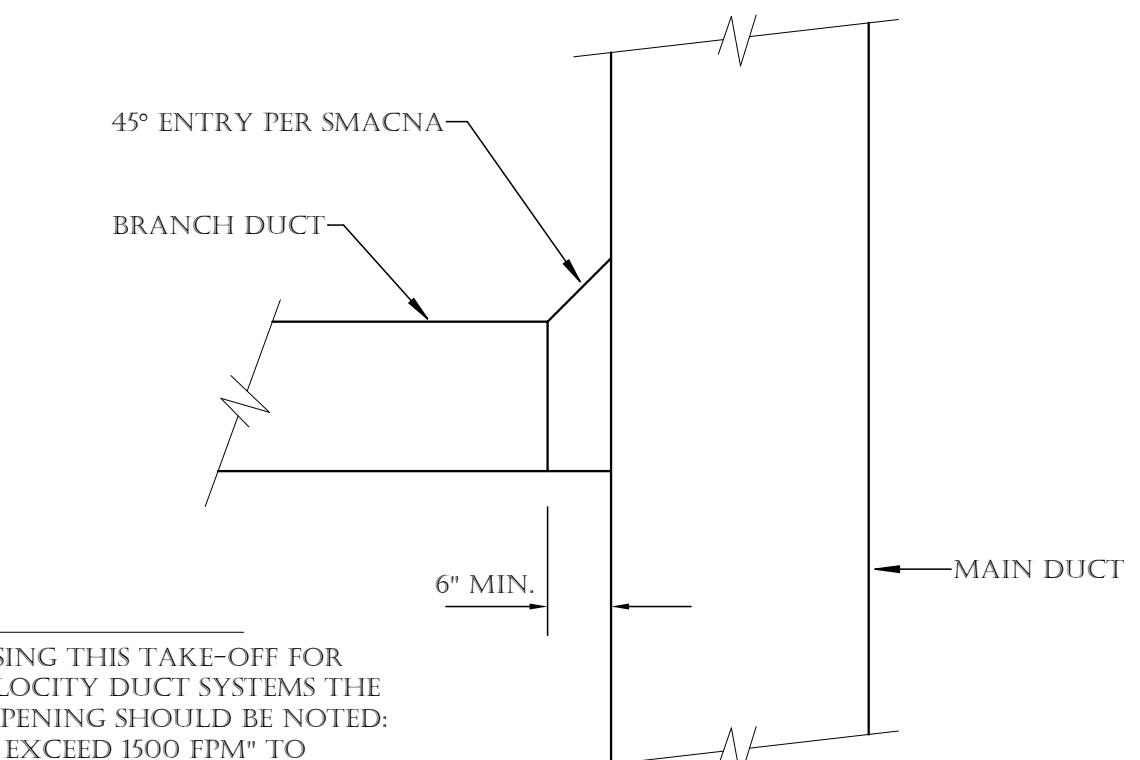
C



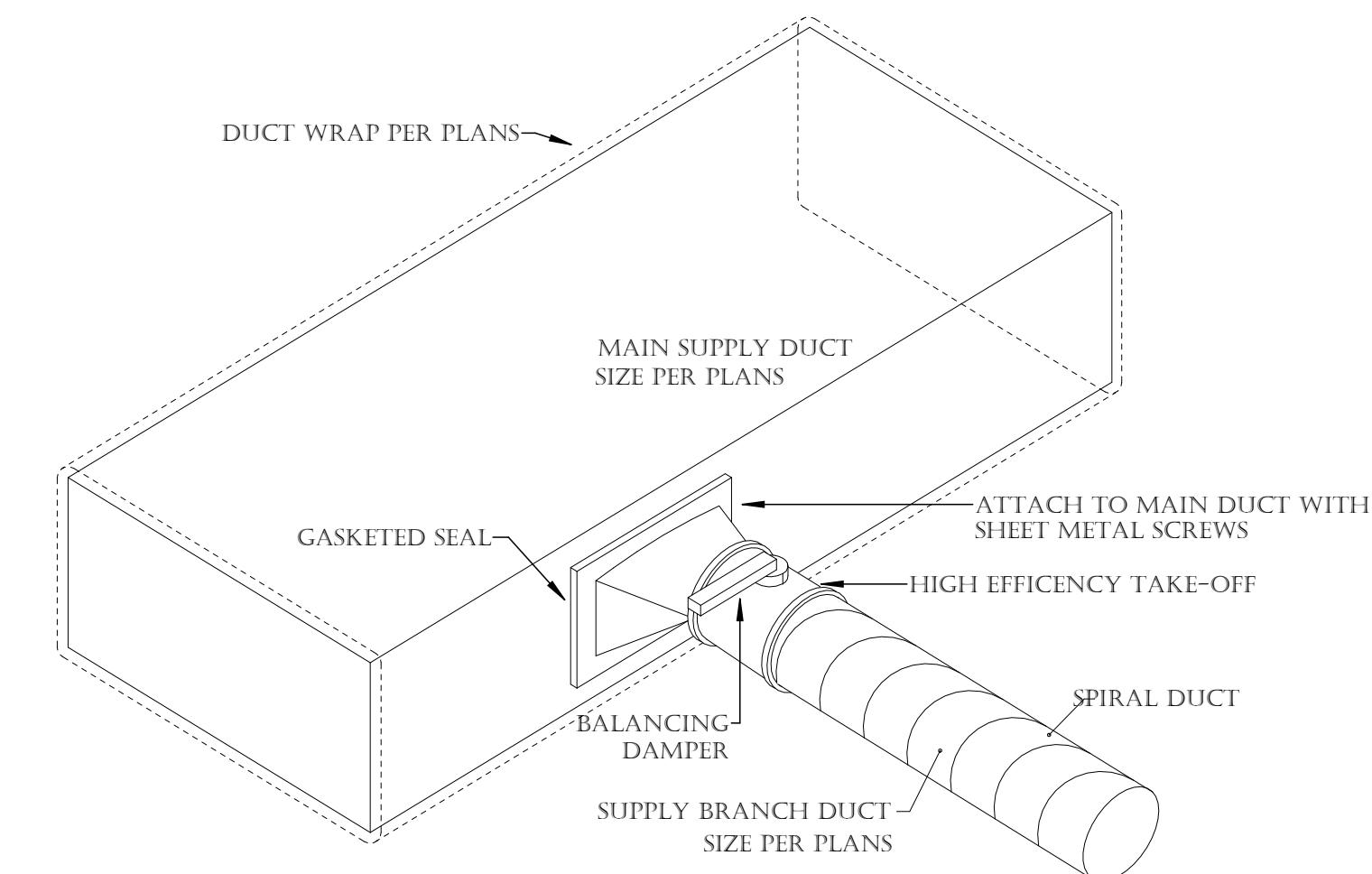
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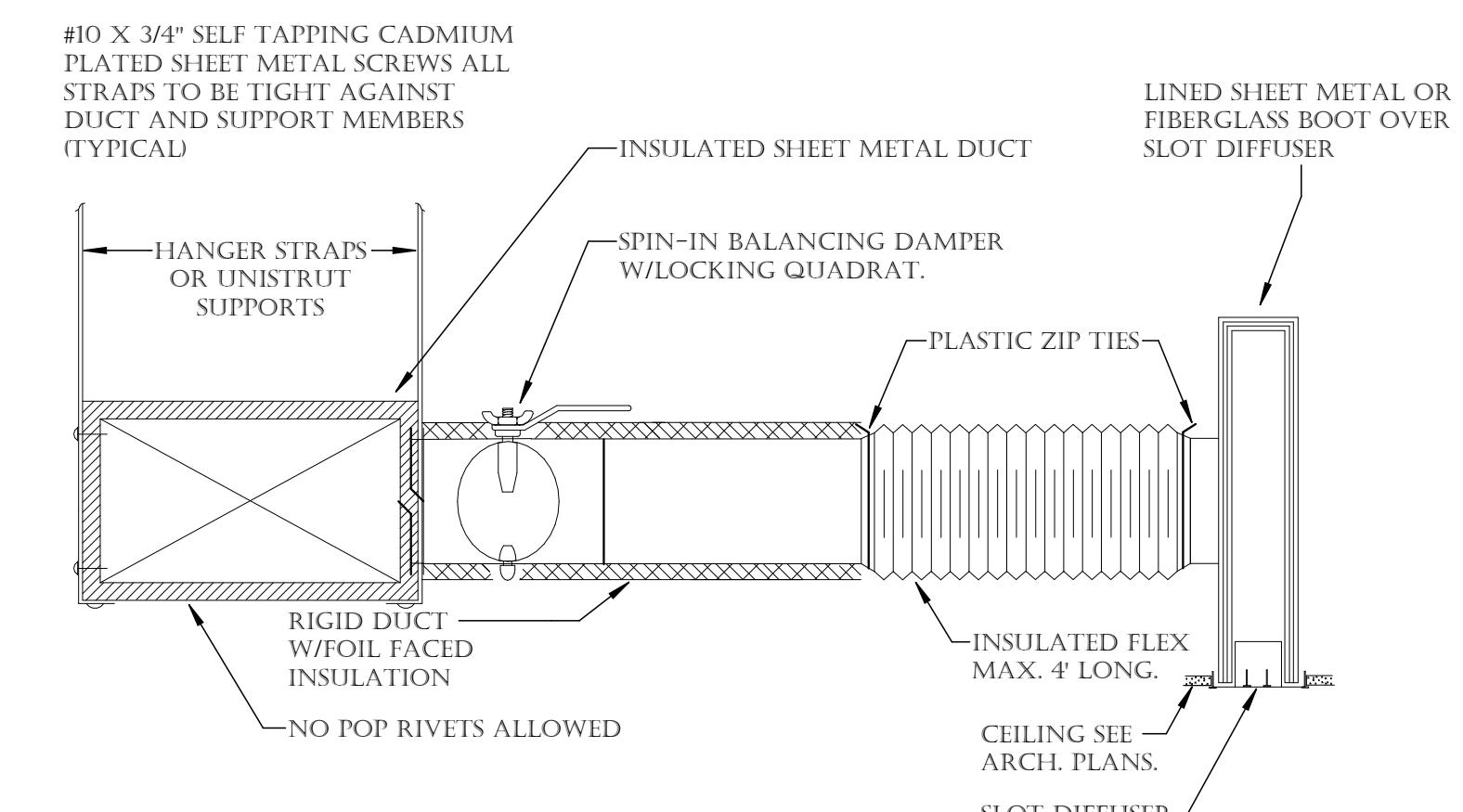
4 HIGH EFFICIENCY DUCT TAKEOFF DETAIL ROUND1
M603 SCALE: NOT TO SCALE



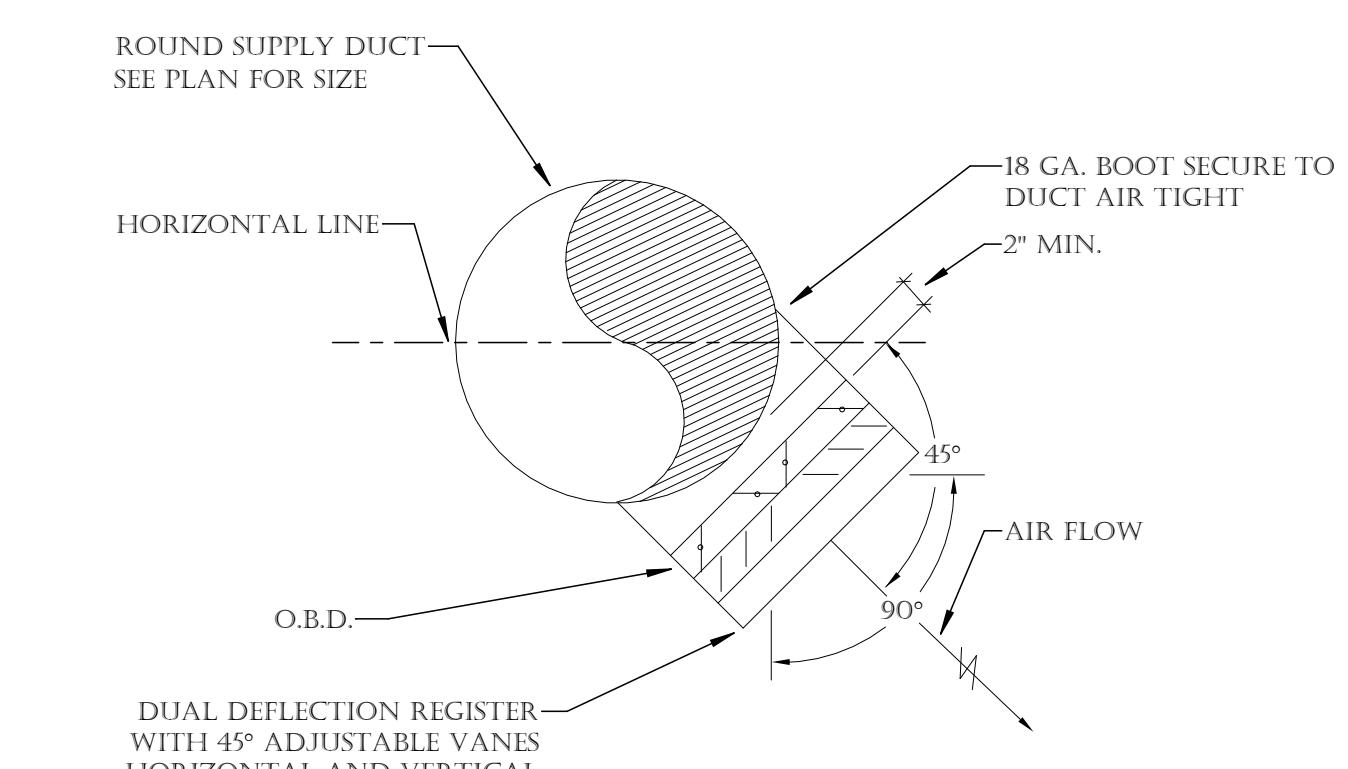
1 TYPICAL DUCT TAKEOFF DETAIL1
M603 SCALE: NOT TO SCALE



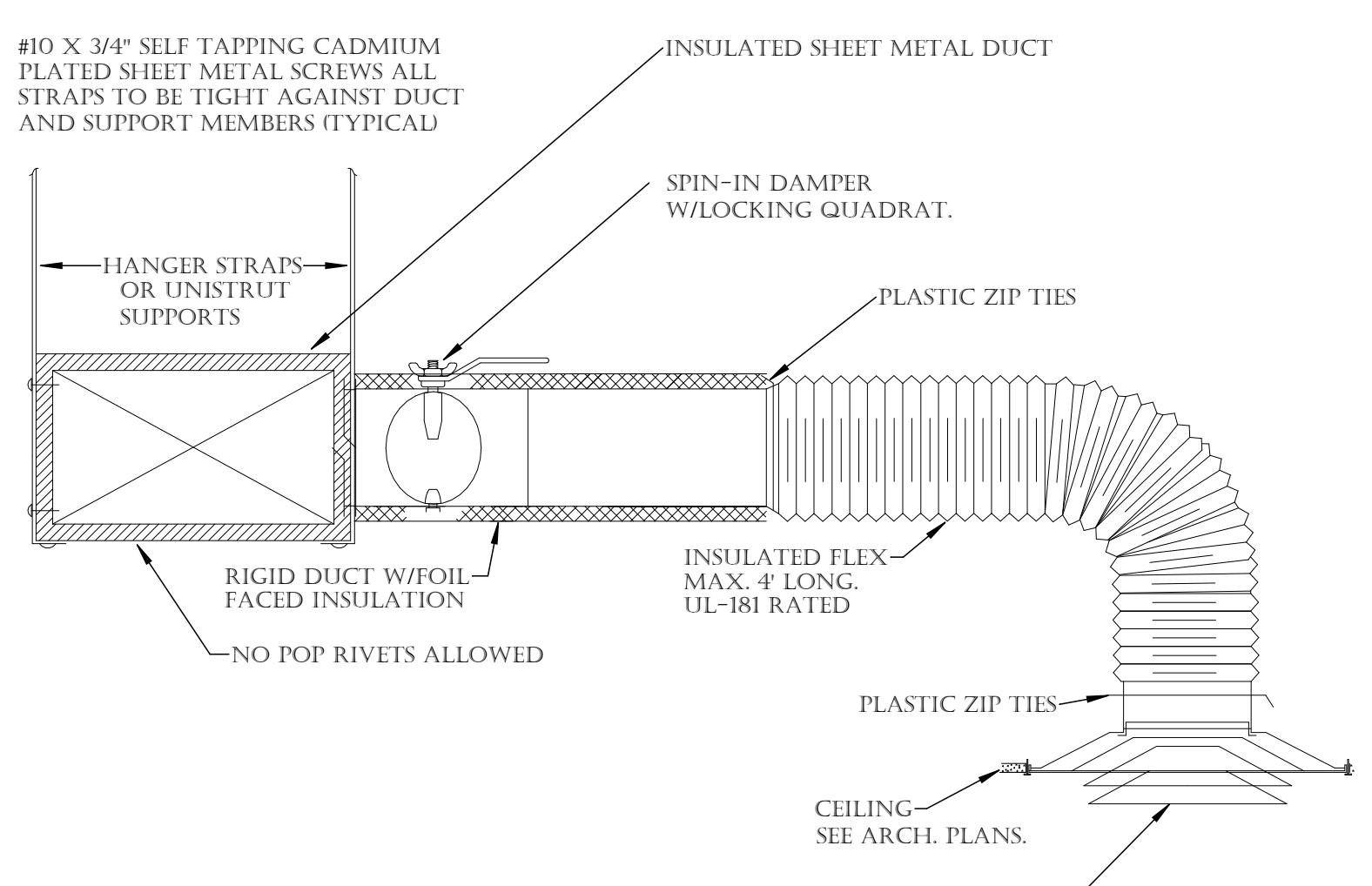
5 HIGH EFFICIENCY DUCT TAKEOFF DETAIL SQUARE1
M603 SCALE: NOT TO SCALE



2 DIFFUSER MOUNTING DETAIL (SLOT)1
M603 SCALE: NOT TO SCALE



6 DUCT MOUNTED DIFFUSER DETAIL
M603 SCALE: NOT TO SCALE



3 DIFFUSER MOUNTING DETAIL (SQUARE)1
M603 SCALE: NOT TO SCALE

 PROJECT TITLE AND ADDRESS
 Ashcreek Multifamily

REVISIONS		
△	DESCRIPTION	DATE

 PROJECT INFORMATION
 DATE: 26 August 2024
 PROJECT #: PVE 24048.00
 PM / PA:
 PIC:

 DRAWING SET STATUS
 Permit Set

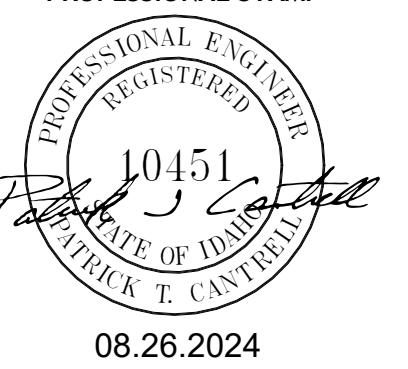
SHEET TITLE

 Mechanical &
 Plumbing Details

SHEET NUMBER

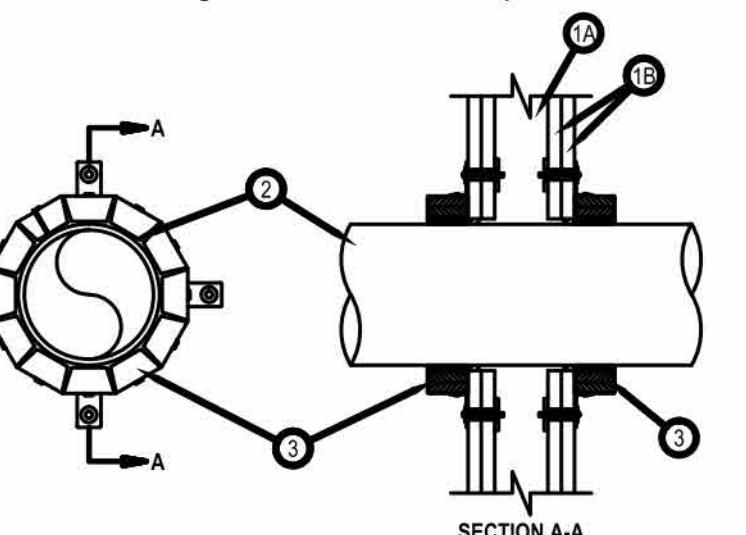
M603

CITY STAMP:



System No. W-L-2078
 UL Classified Concrete Blocks
 Underwriters Laboratories, Inc.
 to UL 1479

F Ratings — 1 and 2 Hr (See Item 1)
 T Ratings — 0, 1 and 2 Hr (See Items 2 and 3)
 L Rating At Ambient — 3 CFM/sq ft
 L Rating At 400 F — Less than 1 CFM/sq ft



1. Wall Assembly — The fire-rated gypsum board/stud wall assembly shall be constructed of the materials and in the manner specified in the individual U300, U400, V400 or W400 Series Wall and Partition Designs in the UL Fire Resistance Directory and shall include the construction features listed below:

A. Studs — Wall framing may consist of either wood studs or steel channel studs. Wood studs to consist of nom 2 by 4 in. (51 by 102 mm) lumber spaced 16 in. (406 mm) OC. Steel studs to be min 2-1/2 in. (64 mm) wide and spaced max 24 in. (610 mm) OC.

B. Gyproc Board — Non 5/8 in. (16 mm) thick gypsum board, as specified in the individual Wall and Partition Design. Max depth of opening is 1-1/2 in. (39 mm).

C. Hourly Rating — 2 hr (See Item 1)

D. Fire Retaining Polycarbonate (CPC) Pipe — Nom 10 in. (254 mm) diam (or smaller) SDR13.5 CPC pipe for use in closed (process or supply) piping systems.

E. Metal Retaining Polycarbonate (CPC) Pipe — Nom 6 in. (152 mm) diam (or smaller) Schedule 40 solid-core or cellular core ABS pipe for use in closed (process or supply) or vented (drain, waste or vent) piping systems.

F. Flame Retarding Polyethylene (FRPP) Pipe — Nom 6 in. (152 mm) diam (or smaller) Schedule 40 FRPP pipe for use in closed (process or supply) or vented (drain, waste or vent) piping systems.

G. Copper Tubing — Nom 1/2 in. (12.7 mm) diam (or smaller) Type L (or heavier) copper tubing.

H. Gypsum Board — Min 5/8 in. (16 mm) thick gypsum board, as specified in the individual Wall and Partition Design. Max depth of opening is 1-1/2 in. (39 mm).

I. Hourly Rating — 2 hr (See Item 1)

J. Through-Penetrants — One metallic pipe or tubing to be installed within the firestop system. Pipe or tubing to be rigidly supported on both sides of the wall assembly. The following types and sizes of metallic pipes or tubing may be used:

A. Steel Pipe — Nom 12 in. (305 mm) diam (or smaller) Schedule 10 (or heavier) steel pipe.

B. Copper Tubing — Nom 1/2 in. (12.7 mm) diam (or smaller) Type L (or heavier) copper tubing.

C. Copper Tubing — Nom 1/2 in. (12.7 mm) diam (or smaller) Type L (or heavier) copper tubing.

D. Copper Tubing — Nom 1/2 in. (12.7 mm) diam (or smaller) Type L (or heavier) copper tubing.

E. Copper Tubing — Nom 1/2 in. (12.7 mm) diam (or smaller) Type L (or heavier) copper tubing.

F. Copper Tubing — Nom 1/2 in. (12.7 mm) diam (or smaller) Type L (or heavier) copper tubing.

G. Copper Tubing — Nom 1/2 in. (12.7 mm) diam (or smaller) Type L (or heavier) copper tubing.

H. Copper Tubing — Nom 1/2 in. (12.7 mm) diam (or smaller) Type L (or heavier) copper tubing.

I. Copper Tubing — Nom 1/2 in. (12.7 mm) diam (or smaller) Type L (or heavier) copper tubing.

J. Copper Tubing — Nom 1/2 in. (12.7 mm) diam (or smaller) Type L (or heavier) copper tubing.

K. Copper Tubing — Nom 1/2 in. (12.7 mm) diam (or smaller) Type L (or heavier) copper tubing.

L. Copper Tubing — Nom 1/2 in. (12.7 mm) diam (or smaller) Type L (or heavier) copper tubing.

M. Copper Tubing — Nom 1/2 in. (12.7 mm) diam (or smaller) Type L (or heavier) copper tubing.

N. Copper Tubing — Nom 1/2 in. (12.7 mm) diam (or smaller) Type L (or heavier) copper tubing.

O. Copper Tubing — Nom 1/2 in. (12.7 mm) diam (or smaller) Type L (or heavier) copper tubing.

P. Copper Tubing — Nom 1/2 in. (12.7 mm) diam (or smaller) Type L (or heavier) copper tubing.

Q. Copper Tubing — Nom 1/2 in. (12.7 mm) diam (or smaller) Type L (or heavier) copper tubing.

R. Copper Tubing — Nom 1/2 in. (12.7 mm) diam (or smaller) Type L (or heavier) copper tubing.

S. Copper Tubing — Nom 1/2 in. (12.7 mm) diam (or smaller) Type L (or heavier) copper tubing.

T. Copper Tubing — Nom 1/2 in. (12.7 mm) diam (or smaller) Type L (or heavier) copper tubing.

U. Copper Tubing — Nom 1/2 in. (12.7 mm) diam (or smaller) Type L (or heavier) copper tubing.

V. Copper Tubing — Nom 1/2 in. (12.7 mm) diam (or smaller) Type L (or heavier) copper tubing.

W. Copper Tubing — Nom 1/2 in. (12.7 mm) diam (or smaller) Type L (or heavier) copper tubing.

X. Copper Tubing — Nom 1/2 in. (12.7 mm) diam (or smaller) Type L (or heavier) copper tubing.

Y. Copper Tubing — Nom 1/2 in. (12.7 mm) diam (or smaller) Type L (or heavier) copper tubing.

Z. Copper Tubing — Nom 1/2 in. (12.7 mm) diam (or smaller) Type L (or heavier) copper tubing.

AA. Copper Tubing — Nom 1/2 in. (12.7 mm) diam (or smaller) Type L (or heavier) copper tubing.

AB. Copper Tubing — Nom 1/2 in. (12.7 mm) diam (or smaller) Type L (or heavier) copper tubing.

AC. Copper Tubing — Nom 1/2 in. (12.7 mm) diam (or smaller) Type L (or heavier) copper tubing.

AD. Copper Tubing — Nom 1/2 in. (12.7 mm) diam (or smaller) Type L (or heavier) copper tubing.

AE. Copper Tubing — Nom 1/2 in. (12.7 mm) diam (or smaller) Type L (or heavier) copper tubing.

AF. Copper Tubing — Nom 1/2 in. (12.7 mm) diam (or smaller) Type L (or heavier) copper tubing.

AG. Copper Tubing — Nom 1/2 in. (12.7 mm) diam (or smaller) Type L (or heavier) copper tubing.

AH. Copper Tubing — Nom 1/2 in. (12.7 mm) diam (or smaller) Type L (or heavier) copper tubing.

AI. Copper Tubing — Nom 1/2 in. (12.7 mm) diam (or smaller) Type L (or heavier) copper tubing.

AJ. Copper Tubing — Nom 1/2 in. (12.7 mm) diam (or smaller) Type L (or heavier) copper tubing.

AK. Copper Tubing — Nom 1/2 in. (12.7 mm) diam (or smaller) Type L (or heavier) copper tubing.

AL. Copper Tubing — Nom 1/2 in. (12.7 mm) diam (or smaller) Type L (or heavier) copper tubing.

AM. Copper Tubing — Nom 1/2 in. (12.7 mm) diam (or smaller) Type L (or heavier) copper tubing.

AN. Copper Tubing — Nom 1/2 in. (12.7 mm) diam (or smaller) Type L (or heavier) copper tubing.

AO. Copper Tubing — Nom 1/2 in. (12.7 mm) diam (or smaller) Type L (or heavier) copper tubing.

AP. Copper Tubing — Nom 1/2 in. (12.7 mm) diam (or smaller) Type L (or heavier) copper tubing.

AQ. Copper Tubing — Nom 1/2 in. (12.7 mm) diam (or smaller) Type L (or heavier) copper tubing.

AR. Copper Tubing — Nom 1/2 in. (12.7 mm) diam (or smaller) Type L (or heavier) copper tubing.

AS. Copper Tubing — Nom 1/2 in. (12.7 mm) diam (or smaller) Type L (or heavier) copper tubing.

AT. Copper Tubing — Nom 1/2 in. (12.7 mm) diam (or smaller) Type L (or heavier) copper tubing.

AU. Copper Tubing — Nom 1/2 in. (12.7 mm) diam (or smaller) Type L (or heavier) copper tubing.

AV. Copper Tubing — Nom 1/2 in. (12.7 mm) diam (or smaller) Type L (or heavier) copper tubing.

AW. Copper Tubing — Nom 1/2 in. (12.7 mm) diam (or smaller) Type L (or heavier) copper tubing.

AX. Copper Tubing — Nom 1/2 in. (12.7 mm) diam (or smaller) Type L (or heavier) copper tubing.

AY. Copper Tubing — Nom 1/2 in. (12.7 mm) diam (or smaller) Type L (or heavier) copper tubing.

AZ. Copper Tubing — Nom 1/2 in. (12.7 mm) diam (or smaller) Type L (or heavier) copper tubing.

BA. Copper Tubing — Nom 1/2 in. (12.7 mm) diam (or smaller) Type L (or heavier) copper tubing.

CA. Copper Tubing — Nom 1/2 in. (12.7 mm) diam (or smaller) Type L (or heavier) copper tubing.

DA. Copper Tubing — Nom 1/2 in. (12.7 mm) diam (or smaller) Type L (or heavier) copper tubing.

EA. Copper Tubing — Nom 1/2 in. (12.7 mm) diam (or smaller) Type L (or heavier) copper tubing.

FA. Copper Tubing — Nom 1/2 in. (12.7 mm) diam (or smaller) Type L (or heavier) copper tubing.

GA. Copper Tubing — Nom 1/2 in. (12.7 mm) diam (or smaller) Type L (or heavier) copper tubing.

HA. Copper Tubing — Nom 1/2 in. (12.7 mm) diam (or smaller) Type L (or heavier) copper tubing.

IA. Copper Tubing — Nom 1/2 in. (12.7 mm) diam (or smaller) Type L (or heavier) copper tubing.

JA. Copper Tubing — Nom 1/2 in. (12.7 mm) diam (or smaller) Type L (or heavier) copper tubing.

KA. Copper Tubing — Nom 1/2 in. (12.7 mm) diam (or smaller) Type L (or heavier) copper tubing.

LA. Copper Tubing — Nom 1/2 in. (12.7 mm) diam (or smaller) Type L (or heavier) copper tubing.

MA. Copper Tubing — Nom 1/2 in. (12.7 mm) diam (or smaller) Type L (or heavier) copper tubing.

NA. Copper Tubing — Nom 1/2 in. (12.7 mm) diam (or smaller) Type L (or heavier) copper tubing.

OA. Copper Tubing — Nom 1/2 in. (12.7 mm) diam (or smaller) Type L (or heavier) copper tubing.

PA. Copper Tubing — Nom 1/2 in. (12.7 mm) diam (or smaller) Type L (or heavier) copper tubing.

QA. Copper Tubing — Nom 1/2 in. (12.7 mm) diam (or smaller) Type L (or heavier) copper tubing.

RA. Copper Tubing — Nom 1/2 in. (12.7 mm) diam (or smaller) Type L (or heavier) copper tubing.

SA. Copper Tubing — Nom 1/2 in. (12.7 mm) diam (or smaller) Type L (or heavier) copper tubing.

TA. Copper Tubing — Nom 1/2 in. (12.7 mm) diam (or smaller) Type L (or heavier) copper tubing.

UA. Copper Tubing — Nom 1/2 in. (12.7 mm) diam (or smaller) Type L (or heavier) copper tubing.

VA. Copper Tubing — Nom 1/2 in. (12.7 mm) diam (or smaller) Type L (or heavier) copper tubing.

WA. Copper Tubing — Nom 1/2 in. (12.7 mm) diam (or smaller) Type L (or heavier) copper tubing.

XA. Copper Tubing — Nom 1/2 in. (12.7 mm) diam (or smaller) Type L (or heavier) copper tubing.

YA. Copper Tubing — Nom 1/2 in. (12.7 mm) diam (or smaller) Type L (or heavier) copper tubing.

ZA. Copper Tubing — Nom 1/2 in. (12.7 mm) diam (or smaller) Type L (or heavier) copper tubing.

AA. Copper Tubing — Nom 1/2 in. (12.7 mm) diam (or smaller) Type L (or heavier) copper tubing.

BA. Copper Tubing — Nom 1/2 in. (12.7 mm) diam (or smaller) Type L (or heavier) copper tubing.

CA. Copper Tubing — Nom 1/2 in. (12.7 mm) diam (or smaller) Type L (or heavier) copper tubing.

DA. Copper Tubing — Nom 1/2 in. (12.7 mm) diam (or smaller) Type L (or heavier) copper tubing.

EA. Copper Tubing — Nom 1/2 in. (12.7 mm) diam (or smaller) Type L (or heavier) copper tubing.

FA. Copper Tubing — Nom 1/2 in. (12.7 mm) diam (or smaller) Type L (or heavier) copper tubing.

GA. Copper Tubing — Nom 1/2 in. (12.7 mm) diam (or smaller) Type L (or heavier) copper tubing.

HA. Copper Tubing — Nom 1/2 in. (12.7 mm) diam (or smaller) Type L (or heavier) copper tubing.

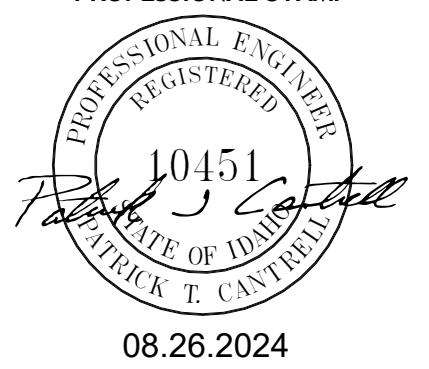
IA. Copper Tubing — Nom 1/2 in. (12.7 mm) diam (or smaller) Type L (or heavier) copper tubing.

JA. Copper Tubing — Nom 1/2 in. (12.7 mm) diam (or smaller) Type L (or heavier) copper tubing.

KA. Copper Tubing — Nom 1/2 in. (12.7 mm) diam (or smaller) Type L (or heavier) copper tubing.

LA. Copper Tubing — Nom 1/2 in. (12.7 mm) diam (or smaller) Type L (or heavier) copper tubing.

MA. Copper Tubing — Nom 1



Ashcreek Multifamily

PROJECT TITLE AND ADDRESS

Boise, Idaho

REVISIONS

△	DESCRIPTION	DATE
△		
△		
△		
△		

PROJECT INFORMATION

DATE: 26 August 2024

PROJECT #: PVE 24048.00

PM / PA: -

PIC: -

DRAWING SET STATUS

Permit Set

SHEET TITLE

 UL
 LISTINGS/FIRE
 RATED
 ASSEMBLY
 DRAWINGS

SHEET NUMBER

M606

Notes:

- Refer to section 15084 of the specifications. For Quality Control requirements, refer to the Quality Control portion of the specification.
- Details shown are typical details. If field conditions do not match requirements of typical details, approved alternate details shall be utilized. Field conditions and dimensions need to be verified for compliance with the details, including but not limited to the following:

- * Minimum and maximum Width of Joints
- * Type and thickness of fire-rated construction. The minimum assembly rating of the firestop assembly shall meet or exceed the highest rating of the adjacent construction.

- If alternate details matching the field conditions are not available, manufacturer's engineering judgment drawings are acceptable. Drawings shall follow the International Firestop Council (IFC) Guidelines for Evaluating Firestop Systems Engineering Judgments.

4. References:

- * 2013 Underwriter's Laboratories Fire Resistance Directory, Volume 2

- * NFPA 101 Life Safety Code

- * All governing local and regional building codes

5. Firestop System installation must meet requirements of ASTM E-814 (UL 1479) tested assemblies that provide a fire rating equal to that of construction being penetrated.

6. All rated through-penetrations shall be prominently labeled with the following information:

- * ATTENTION: Fire Rated Assembly
- * UL System #
- * Product(s) used
- * Hourly Rating (F-Rating)
- * Installation Date

System No. F-A-1102

ANSI/UL1479 (ASTM E814) CAN/ULC S115

F Ratings — 2 Hr FT Ratings — 2 Hr

T Rating — 2 Hr FT Rating — 2 Hr

L Rating At Ambient - Less Than 1 CFM/sq ft FH Rating — 2 Hr

L Rating At 400 F - 4 CFM/sq ft FH Rating — 2 Hr

W Rating - Class 1 (See Item 3B) L Rating At Ambient - Less Than 1 CFM/sq ft

L Rating At 400 F - 4 CFM/sq ft

SECTION A-A

CLASSIFIED	
ANSI/UL1479 (ASTM E814)	CAN/ULC S115
F Rating - 2 Hr	FT Rating - 2 Hr
T Rating - 2 Hr	FT Rating - 2 Hr
L Rating At Ambient - Less Than 1 CFM/sq ft	FH Rating - 2 Hr
L Rating At 400 F - 4 CFM/sq ft	FH Rating - 2 Hr
W Rating - Class 1 (See Item 3B)	L Rating At Ambient - Less Than 1 CFM/sq ft
	L Rating At 400 F - 4 CFM/sq ft

1. Floor Assembly — Min 4-1/2 in. (114 mm) thick reinforced lightweight or normal weight (100-150 pcf or 1600-2400 kg/m³) concrete. As an alternative, any min 2 hr fire rated D700, D800 or D900 Series Floor-Ceiling Design having a min 1-1/2 in. (38 mm) thickness of lightweight or normal weight (100-150 pcf or 1600-2400 kg/m³) concrete topping over the steel deck may be used. Max diam of opening is 12-3/8 in. (324 mm).

2. Through-Penetrant — One metallic pipe or tubing to be installed within the firestop device. Pipe or tubing to be rigidly supported on both sides of the floor assembly. The pipe or tubing may be:

A. Steel Pipe — Nom 4 in. (102 mm) diam (or smaller) or ductile pipe.

B. Iron Pipe — Nom 4 in. (102 mm) diam (or smaller) or (heavier) copper pipe.

C. Copper Tubing — Nom 4 in. (102 mm) diam (or smaller) or (heavier) copper pipe.

3. Firestop System — The firestop system shall consist of the following:

A. Packing Material — Min 2 in. (51 mm) thickness of min 4 of 4 in. (64 kg/m³) mineral wool batt insulation firmly packed into opening as a permanent fit. A. Packing Material — Min 2 in. (51 mm) thickness of min 4 of 4 in. (64 kg/m³) mineral wool batt insulation firmly packed into opening as a permanent fit.

B. Firestop Device — Water Barrier Module (Optional, Not Shown) — Used in combination with the CP 680-P Drop-in firestop device installed in a core-drilled or sleeved opening in concrete floor assembly. Device sized to nom diam of penetration. Device to be trim-set flush with the top surface of the floor.

C. Firestop Device — Water Barrier Module (Optional, Not Shown) — Used in combination with the CP 680-P Drop-in firestop device installed in a core-drilled or sleeved opening in concrete floor assembly. Device sized to nom diam of penetration. Device to be trim-set flush with the top surface of the floor.

D. Firestop Device — Water Barrier Module (Optional, Not Shown) — Used in combination with the CP 680-P Drop-in firestop device installed in a core-drilled or sleeved opening in concrete floor assembly. Device sized to nom diam of penetration. Device to be trim-set flush with the top surface of the floor.

E. Firestop Device — Water Barrier Module (Optional, Not Shown) — Used in combination with the CP 680-P Drop-in firestop device installed in a core-drilled or sleeved opening in concrete floor assembly. Device sized to nom diam of penetration. Device to be trim-set flush with the top surface of the floor.

F. Firestop Device — Water Barrier Module (Optional, Not Shown) — Used in combination with the CP 680-P Drop-in firestop device installed in a core-drilled or sleeved opening in concrete floor assembly. Device sized to nom diam of penetration. Device to be trim-set flush with the top surface of the floor.

G. Firestop Device — Water Barrier Module (Optional, Not Shown) — Used in combination with the CP 680-P Drop-in firestop device installed in a core-drilled or sleeved opening in concrete floor assembly. Device sized to nom diam of penetration. Device to be trim-set flush with the top surface of the floor.

H. Firestop Device — Water Barrier Module (Optional, Not Shown) — Used in combination with the CP 680-P Drop-in firestop device installed in a core-drilled or sleeved opening in concrete floor assembly. Device sized to nom diam of penetration. Device to be trim-set flush with the top surface of the floor.

I. Firestop Device — Water Barrier Module (Optional, Not Shown) — Used in combination with the CP 680-P Drop-in firestop device installed in a core-drilled or sleeved opening in concrete floor assembly. Device sized to nom diam of penetration. Device to be trim-set flush with the top surface of the floor.

J. Firestop Device — Water Barrier Module (Optional, Not Shown) — Used in combination with the CP 680-P Drop-in firestop device installed in a core-drilled or sleeved opening in concrete floor assembly. Device sized to nom diam of penetration. Device to be trim-set flush with the top surface of the floor.

K. Firestop Device — Water Barrier Module (Optional, Not Shown) — Used in combination with the CP 680-P Drop-in firestop device installed in a core-drilled or sleeved opening in concrete floor assembly. Device sized to nom diam of penetration. Device to be trim-set flush with the top surface of the floor.

L. Firestop Device — Water Barrier Module (Optional, Not Shown) — Used in combination with the CP 680-P Drop-in firestop device installed in a core-drilled or sleeved opening in concrete floor assembly. Device sized to nom diam of penetration. Device to be trim-set flush with the top surface of the floor.

M. Firestop Device — Water Barrier Module (Optional, Not Shown) — Used in combination with the CP 680-P Drop-in firestop device installed in a core-drilled or sleeved opening in concrete floor assembly. Device sized to nom diam of penetration. Device to be trim-set flush with the top surface of the floor.

N. Firestop Device — Water Barrier Module (Optional, Not Shown) — Used in combination with the CP 680-P Drop-in firestop device installed in a core-drilled or sleeved opening in concrete floor assembly. Device sized to nom diam of penetration. Device to be trim-set flush with the top surface of the floor.

O. Firestop Device — Water Barrier Module (Optional, Not Shown) — Used in combination with the CP 680-P Drop-in firestop device installed in a core-drilled or sleeved opening in concrete floor assembly. Device sized to nom diam of penetration. Device to be trim-set flush with the top surface of the floor.

P. Firestop Device — Water Barrier Module (Optional, Not Shown) — Used in combination with the CP 680-P Drop-in firestop device installed in a core-drilled or sleeved opening in concrete floor assembly. Device sized to nom diam of penetration. Device to be trim-set flush with the top surface of the floor.

Q. Firestop Device — Water Barrier Module (Optional, Not Shown) — Used in combination with the CP 680-P Drop-in firestop device installed in a core-drilled or sleeved opening in concrete floor assembly. Device sized to nom diam of penetration. Device to be trim-set flush with the top surface of the floor.

R. Firestop Device — Water Barrier Module (Optional, Not Shown) — Used in combination with the CP 680-P Drop-in firestop device installed in a core-drilled or sleeved opening in concrete floor assembly. Device sized to nom diam of penetration. Device to be trim-set flush with the top surface of the floor.

S. Firestop Device — Water Barrier Module (Optional, Not Shown) — Used in combination with the CP 680-P Drop-in firestop device installed in a core-drilled or sleeved opening in concrete floor assembly. Device sized to nom diam of penetration. Device to be trim-set flush with the top surface of the floor.

T. Firestop Device — Water Barrier Module (Optional, Not Shown) — Used in combination with the CP 680-P Drop-in firestop device installed in a core-drilled or sleeved opening in concrete floor assembly. Device sized to nom diam of penetration. Device to be trim-set flush with the top surface of the floor.

U. Firestop Device — Water Barrier Module (Optional, Not Shown) — Used in combination with the CP 680-P Drop-in firestop device installed in a core-drilled or sleeved opening in concrete floor assembly. Device sized to nom diam of penetration. Device to be trim-set flush with the top surface of the floor.

V. Firestop Device — Water Barrier Module (Optional, Not Shown) — Used in combination with the CP 680-P Drop-in firestop device installed in a core-drilled or sleeved opening in concrete floor assembly. Device sized to nom diam of penetration. Device to be trim-set flush with the top surface of the floor.

W. Firestop Device — Water Barrier Module (Optional, Not Shown) — Used in combination with the CP 680-P Drop-in firestop device installed in a core-drilled or sleeved opening in concrete floor assembly. Device sized to nom diam of penetration. Device to be trim-set flush with the top surface of the floor.

X. Firestop Device — Water Barrier Module (Optional, Not Shown) — Used in combination with the CP 680-P Drop-in firestop device installed in a core-drilled or sleeved opening in concrete floor assembly. Device sized to nom diam of penetration. Device to be trim-set flush with the top surface of the floor.

Y. Firestop Device — Water Barrier Module (Optional, Not Shown) — Used in combination with the CP 680-P Drop-in firestop device installed in a core-drilled or sleeved opening in concrete floor assembly. Device sized to nom diam of penetration. Device to be trim-set flush with the top surface of the floor.

Z. Firestop Device — Water Barrier Module (Optional, Not Shown) — Used in combination with the CP 680-P Drop-in firestop device installed in a core-drilled or sleeved opening in concrete floor assembly. Device sized to nom diam of penetration. Device to be trim-set flush with the top surface of the floor.

AA. Firestop Device — Water Barrier Module (Optional, Not Shown) — Used in combination with the CP 680-P Drop-in firestop device installed in a core-drilled or sleeved opening in concrete floor assembly. Device sized to nom diam of penetration. Device to be trim-set flush with the top surface of the floor.

BB. Firestop Device — Water Barrier Module (Optional, Not Shown) — Used in combination with the CP 680-P Drop-in firestop device installed in a core-drilled or sleeved opening in concrete floor assembly. Device sized to nom diam of penetration. Device to be trim-set flush with the top surface of the floor.

CC. Firestop Device — Water Barrier Module (Optional, Not Shown) — Used in combination with the CP 680-P Drop-in firestop device installed in a core-drilled or sleeved opening in concrete floor assembly. Device sized to nom diam of penetration. Device to be trim-set flush with the top surface of the floor.

DD. Firestop Device — Water Barrier Module (Optional, Not Shown) — Used in combination with the CP 680-P Drop-in firestop device installed in a core-drilled or sleeved opening in concrete floor assembly. Device sized to nom diam of penetration. Device to be trim-set flush with the top surface of the floor.

EE. Firestop Device — Water Barrier Module (Optional, Not Shown) — Used in combination with the CP 680-P Drop-in firestop device installed in a core-drilled or sleeved opening in concrete floor assembly. Device sized to nom diam of penetration. Device to be trim-set flush with the top surface of the floor.

FF. Firestop Device — Water Barrier Module (Optional, Not Shown) — Used in combination with the CP 680-P Drop-in firestop device installed in a core-drilled or sleeved opening in concrete floor assembly. Device sized to nom diam of penetration. Device to be trim-set flush with the top surface of the floor.

GG. Firestop Device — Water Barrier Module (Optional, Not Shown) — Used in combination with the CP 680-P Drop-in firestop device installed in a core-drilled or sleeved opening in concrete floor assembly. Device sized to nom diam of penetration. Device to be trim-set flush with the top surface of the floor.

HH. Firestop Device — Water Barrier Module (Optional, Not Shown) — Used in combination with the CP 680-P Drop-in firestop device installed in a core-drilled or sleeved opening in concrete floor assembly. Device sized to nom diam of penetration. Device to be trim-set flush with the top surface of the floor.

II. Firestop Device — Water Barrier Module (Optional, Not Shown) — Used in combination with the CP 680-P Drop-in firestop device installed in a core-drilled or sleeved opening in concrete floor assembly. Device sized to nom diam of penetration. Device to be trim-set flush with the top surface of the floor.

JJ. Firestop Device — Water Barrier Module (Optional, Not Shown) — Used in combination with the CP 680-P Drop-in firestop device installed in a core-drilled or sleeved opening in concrete floor assembly. Device sized to nom diam of penetration. Device to be trim-set flush with the top surface of the floor.

KK. Firestop Device — Water Barrier Module (Optional, Not Shown) — Used in combination with the CP 680-P Drop-in firestop device installed in a core-drilled or sleeved opening in concrete floor assembly. Device sized to nom diam of penetration. Device to be trim-set flush with the top surface of the floor.