

PROJECT NUMBER 22172

COBBLESTONE MANOR

1050 LAMPLIGHTER DRIVE
GROVE CITY, OH 43123

PREPARED FOR:



CMHA EXECUTIVE STAFF:

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TOM WILLIAMSON, CFO
SCOTT SCHARLACH, COO
DR. SIDNEY CHILDS, CDEIO

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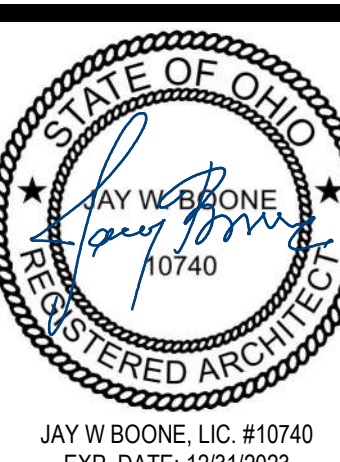
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PERMIT & BID SET 06/08/2023

VOL 2



SYMBOLS LEGEND

BUILDING SECTION

WALL SECTION

DETAIL SECTION

DETAIL / FLOOR PLAN CALLOUT

EXTERIOR ELEVATION

INTERIOR ELEVATION

WINDOW / CURTAIN WALL ELEVATION

VERTICAL ELEVATION / LEVEL MARK

SPOT ELEVATION

REVISION CLOUD & TAG

VIEW TITLE

GRAPHIC SCALE

MATCHLINE / VIEW REFERENCE

GRIDS HEADS / LINES

ROOM TAGS

ROOM OCCUPANCY TAG

ROOM FINISH TAG

DOOR TYPE TAG

WALL TYPE TAG

WINDOW TYPE TAG

CEILING TAG

CURTAIN PANEL TYPE TAG

CODED NOTE / ACCESSORY TAG

KEYNOTE

FURNITURE / EQUIPMENT TAG

CASEWORK TAG



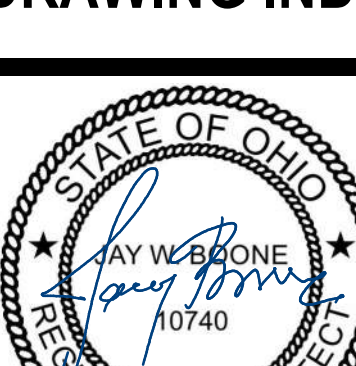
MILLWORK NOTE

NORTH ARROW

AREA TAG

MATERIALS LEGEND

	ALUMINUM		GRANULAR FILL
	ACOUSTIC CEILING		GYPSUM BOARD
	BRICK		INSULATION - BATT
	CONCRETE		INSULATION - RIGID
	CONCRETE MASONRY		PLYWOOD
	CONCRETE (SURFACE)		STEEL
	EARTH		WOOD - ROUGH FRAMING
	GLASS - LARGE SCALE		WOOD - ROUGH BLOCKING
	GLASS - SMALL SCALE		WOOD - FINISHED

<div>PROJECT SUMMARY</div>			
<p>COBBLESTONE MANOR IS AN (82) APARTMENT-UNIT SENIOR LIVING COMMUNITY FACILITY (AGES 55 WITH DISABILITY, 62 FOR ALL OTHER). THE BUILDING'S ORIENTATION AND SITE DESIGN TAKE ADVANTAGE OF THE GENTLY SLOPING SITE TOWARDS THE HEAVILY WOODED AND PROTECTED WETLAND TO THE NORTH. THE SITE/LANDSCAPE DESIGN FEATURES A NATURAL DRY "CREEK BED" ORIGINATING ALONG LAMPLIGHTER DRIVE. THE MAIN ENTRY DRIVE PASSES OVER AND THROUGH THE NATURALLY PLANTED "CREEK" AS IT WRAPS TOWARD THE BUILDING AND BLENDS WITH THE EXISTING TREE LINE. A WALKING PATH WRAPS THE POND AND CONNECTS THE EAST AND WEST WINGS OF THE BUILDING. THIS PATH WILL HAVE THE ABILITY TO CONNECT WITH FACILITIES NORTH OF THE WOODED WETLAND AREA. A DRIVE LANE WILL BE INSTALLED AROUND THE SOUTH OF THE BUILDING TO PROVIDE EMERGENCY RESPONDERS QUICK ACCESS TO THE BACK OF THE BUILDING.</p> <p>THE EXTERIOR BUILDING MATERIALS PROPOSED FOR THE PROJECT WILL REFLECT THE RURAL RESIDENTIAL VERNACULAR. BRICK AND STONE ARE PREDOMINANTLY USED AS BASE MATERIALS WITH ADDITIONAL LOOKING COMPOSITE SIDING (VERTICAL AND HORIZONTAL) USED ON THE STORIES ABOVE. THE EXTERIOR FORM OF THE BUILDING IS DESIGNED TO BREAK DOWN THE SCALE OF THE BUILDING AND RESPOND TO THE BUILDINGS IN THE NEIGHBORHOOD.</p> <p>THE THREE-STORY, 84,828 GSF BUILDING WILL HAVE (76) SINGLE-BEDROOM UNITS AND (6) TWO-BEDROOM UNITS. THE OVERALL HEIGHT OF THE BUILDING WILL BE (50') AT THE ROOF PEAK AND (32') AT THE EAVES.</p> <p>THE AVERAGE SQUARE FOOTAGE FOR THE SINGLE-BEDROOM UNITS IS 704 GSF AND AN AVERAGE OF 1,213 GSF FOR THE TWO-BEDROOM UNITS. THE PROPOSED DESIGN HAS 72 TOTAL PARKING SPACES (65 STANDARD + 7 ACCESSIBLE SPACES) THAT SERVE 82 UNITS.</p> <p>A LARGE MULTI-PURPOSE COMMUNITY SPACE JOINS THE TWO BUILDING WINGS AND OPENS TO AN OUTSIDE COVERED PATIO WITH VIEWS OF THE POND. OTHER AMENITIES OFFERED IN THIS PROJECT INCLUDE THE FOLLOWING: WELLNESS SPACE, KITCHENETTE, COFFEE BAR, COMMUNITY ROOM, COMMUNITY LIBRARY, COMPUTER ROOM, COMMON AREA LAUNDRY ROOM, DEDICATED MAIL AND PARCEL AREAS, COMMUNITY WALKING TRAIL, AND COMMUNITY MEETING ROOMS.</p>			
<div>UNIT SUMMARY</div>			
UNIT TYPE	COUNT	BEDS	AREA (AVG.)
2-BEDROOM UNITS	6 UNITS	12 BEDS	
TYPICAL	4 UNITS	8 BEDS	1,204 GSF
TYPE A / SENSOORY	1 UNIT	2 BEDS	1,258 GSF
SENSORY	1 UNIT	2 BEDS	1,200 GSF
1-BEDROOM UNITS	76 UNITS	76 BEDS	
TYPICAL	71 UNITS	71 BEDS	704 GSF
TYPE A / SENSOORY	4 UNITS	4 BEDS	701 GSF
SENSORY	1 UNIT	1 BEDS	710 GSF
	82 UNITS	88 BEDS	
REQUIRED NUMBER OF ANSI TYPE A UNITS (5%) = 82 x .05 = 4.1 / 5 PROVIDED *			
REQUIRED NUMBER OF SENSOORY (HEARING / VISUALLY IMPAIRED) UNITS (2%) = 82 x .02 = 1.64 REQUIRED / 2 PROVIDED (DEDICATED SENSOORY)			
*ANSI TYPE A UNITS WILL ALSO INCLUDE SENSOORY UNIT FEATURES			
#	DATE	CHANGE DESCRIPTION	
<div><div><div>COLUMBUS METROPOLITAN HOUSING AUTHORITY COMMUNITY DEVELOPMENT DEPARTMENT</div></div><div><div>COBBLESTONE MANOR</div><div>1050 LAMPLIGHTER DRIVE GROVE CITY, OH 43123</div><div>CMHA</div></div></div>			
<div><div><div>MOODY-NOLAN</div></div><div><div>300 SPRUCE STREET SUITE 300 COLUMBUS, OHIO 43215</div><div>PHONE: (614) 461-4664 FAX: (614) 280-8881</div></div></div>			
DRAWING TITLE:			
<div>DRAWING INDEX</div>			
<div><div><div>STATE OF OHIO DAY WEIRBONE 10740 REGISTERED ARCHITECT</div></div><div><div>06/08/2023</div><div>DRAWN BY: XXXX</div><div>CHECKED BY: XXXX</div><div>#20172.01</div><div>G001</div><div>PERMIT & BID SET</div></div></div>			

NOTE: NOT ALL ABBREVIATIONS MAY BE USED

SPRINKLER SYSTEM								
DESIGN DENSITY AND SPRINKLER COVERAGE CHART								
HAZARD CLASSIFICATION		SYSTEM TYPE	AREA	DENSITY (GPM/SQFT)	MAXIMUM COVERAGE ARE PER SPRINKLER (SQFT)	DESIGN AREA (SQFT)	HOSE STREAM (GPM)	SPRINKLER "K" FACTOR
LH1	LIGHT HAZARD	WET-PIPE	ALL SPACES UNLESS OTHERWISE NOTED	0.10	225	1500	250	5.6
OH1	ORDINARY HAZARD, GROUP 1	WET-PIPE	MECHANICAL/ELECTRICAL ROOMS, STORAGE ROOMS, TRASH ROOMS	0.15	130	1500	250	8.0
DOH1	ORDINARY HAZARD, GROUP 1	DRY-PIPE	ATTICS	0.15	130	2400	250	8.0

PIPING

FLOW TEST INFORMATION

GENERAL FIRE PROTECTION NOTES:

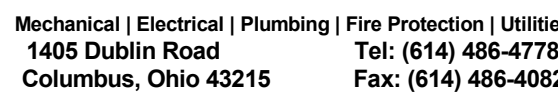
- | # | DATE | CHANGE DESCRIPTION |
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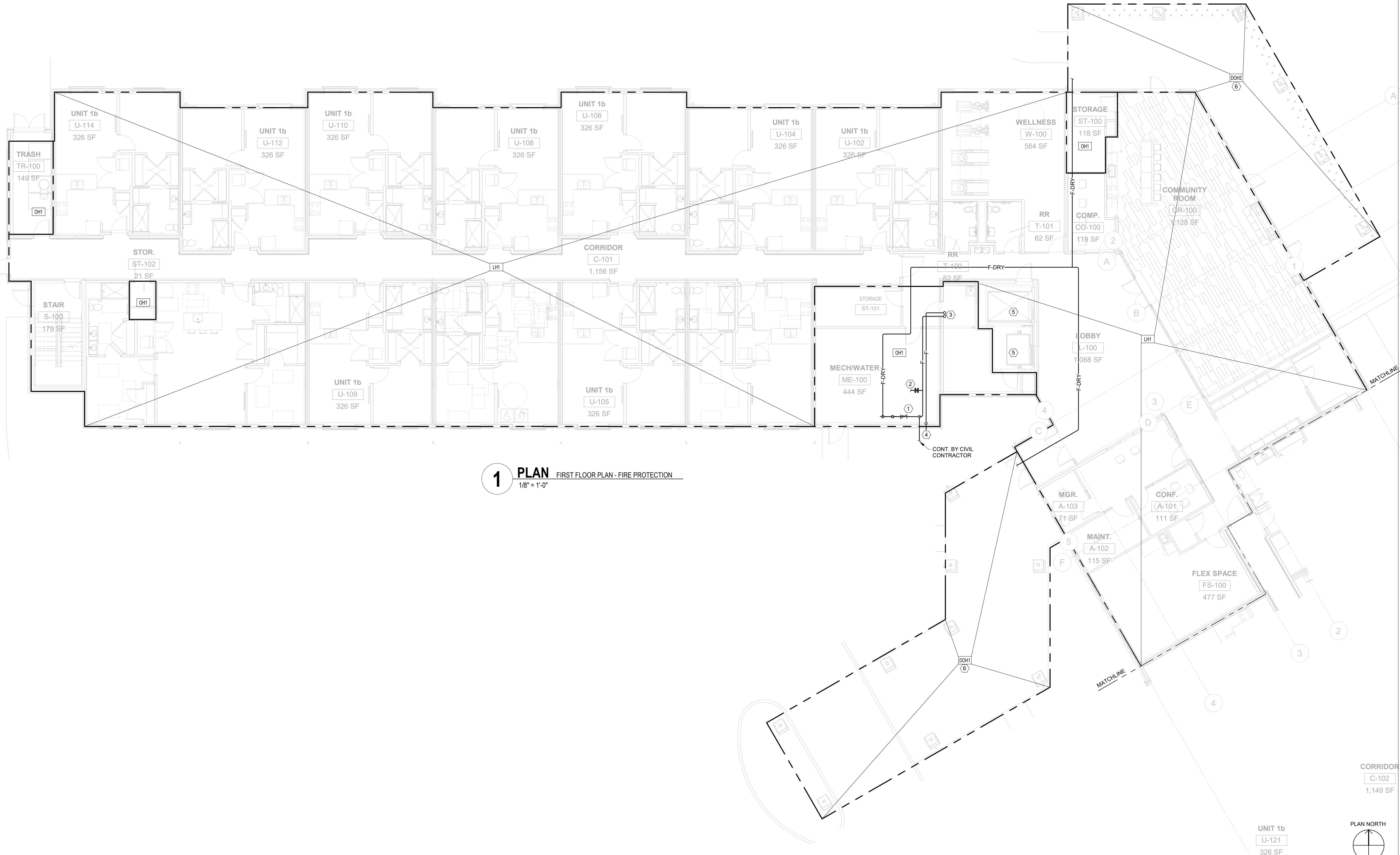
300 SPRUCE STREET
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	06/08/2023	
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	#22172.01	
	<div style="font-size: 48pt; font-weight: bold;">FP001</div>	
PERMIT & BID SET		



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1 PLAN FIRST FLOOR PLAN - FIRE PROTECTION
1/8" = 1'-0"

KEYNOTES

- 4" FIRE SERVICE ENTRANCE. SEE DETAIL ON SHEET F501.
- FLOOR CONTROL VALVE. SEE DETAIL ON SHEET F501.
- SPRINKLER RISER AND 2" DRAIN LEADER TO FLOOR ABOVE.
- TERMINATE DRAIN LEADER AT 12" ABOVE GRADE. PROVIDE SPLASH BLOCK.
- PROVIDE SPRINKLER HEAD AT BOTTOM OF ELEVATOR SHAFT.
- PROVIDE DRY PIPE SYSTEM BENEATH CANOPY.

GENERAL NOTES


- PROVIDE FIRE PROTECTION IN TRUSS SPACE BETWEEN FIRST AND SECOND FLOOR PER NFPA 13.

#	DATE	CHANGE DESCRIPTION
1	10/16/23	Grove City Comments

COBBLESTONE MANOR
1050 LAMPLIGHTER DRIVE
GROVE CITY, OH 43123
FOR
CMHA

MOODY-NOLAN
300 SPRUCE STREET
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DRAWING TITLE:
**FIRST FLOOR PLAN - AREA A -
FIRE PROTECTION**

	06/08/2023	
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	#22172.01	
	FP101A	
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1 PLAN FIRST FLOOR PLAN - FIRE PROTECTION
1/8" = 1'-0"

KEYNOTES

- 4" F FROM BELOW SLAB FROM REMOTE FIRE DEPARTMENT CONNECTION.

GENERAL NOTES

- PROVIDE FIRE PROTECTION IN TRUSS SPACE BETWEEN FIRST AND SECOND FLOOR PER NFPA 13.

#	DATE	CHANGE DESCRIPTION
1	10/16/23	Grove City Comments

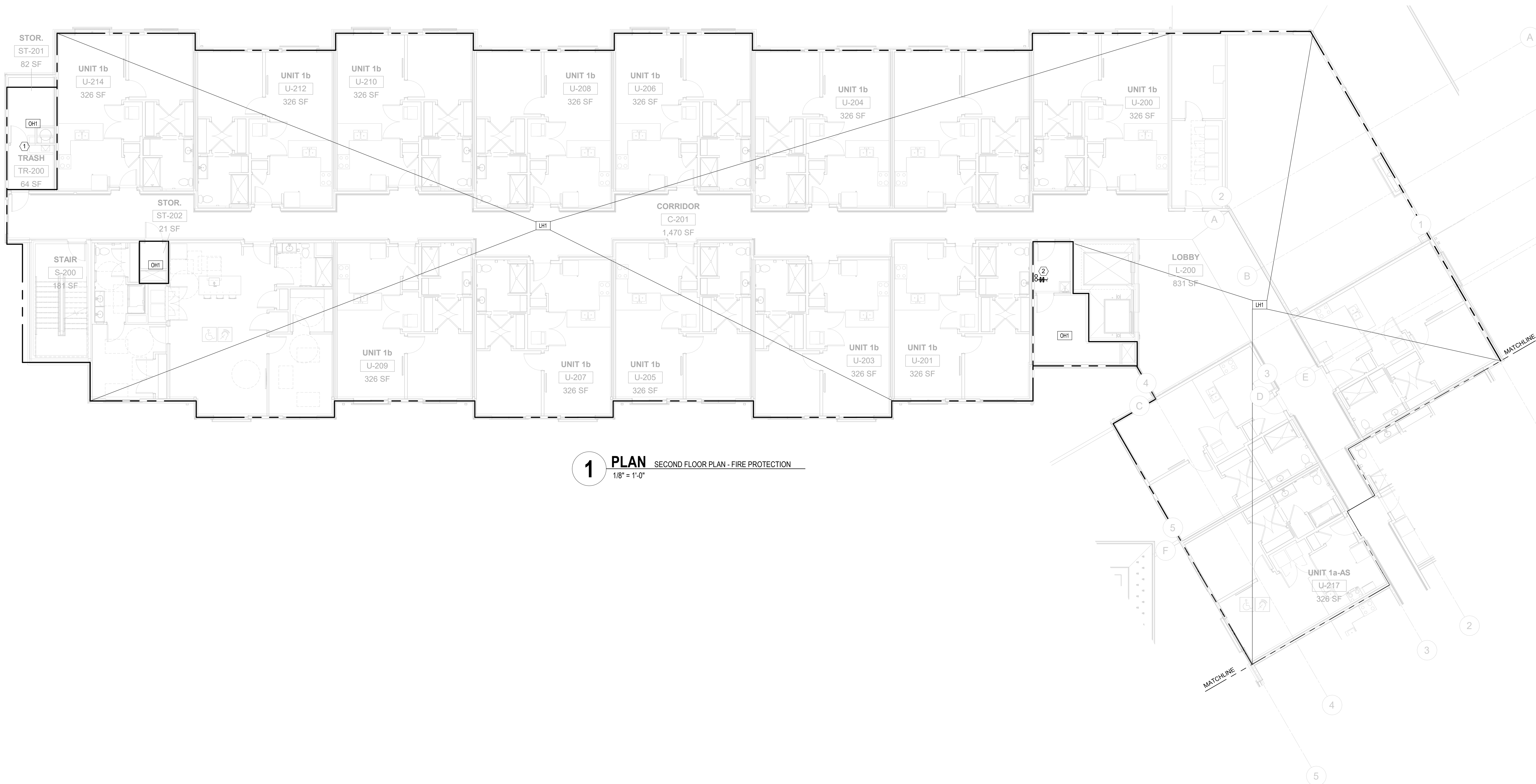
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DRAWING TITLE:
**FIRST FLOOR PLAN - AREA B -
FIRE PROTECTION**

	06/08/2023
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1 PLAN SECOND FLOOR PLAN - FIRE PROTECTION
1/8" = 1'-0"

KEYNOTES

1. PROVIDE SPRINKLER HEAD IN TRASH CHUTE PER NFPA 13.
2. SPRINKLER RISER AND DRAIN LEADER FROM FLOOR BELOW TO FLOOR ABOVE. PROVIDE FLOOR CONTROL VALVE. SEE DETAIL ON SHEET P501.

GENERAL NOTES

1. PROVIDE FIRE PROTECTION IN TRUSS SPACE BETWEEN SECOND AND THIRD FLOOR PER NFPA 13.

#	DATE	CHANGE DESCRIPTION
1	10/16/23	Grove City Comments

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DRAWING TITLE:
**SECOND FLOOR PLAN - AREA
A - FIRE PROTECTION**

	06/08/2023
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	FP102A
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1 PLAN SECOND FLOOR PLAN - FIRE PROTECTION
1/8" = 1'-0"

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KEYNOTES

1. PROVIDE SPRINKLER HEAD IN TRASH CHUTE PER NFPA 13.

GENERAL NOTES

1. PROVIDE FIRE PROTECTION IN TRUSS SPACE BETWEEN SECOND AND THIRD FLOOR PER NFPA 13.

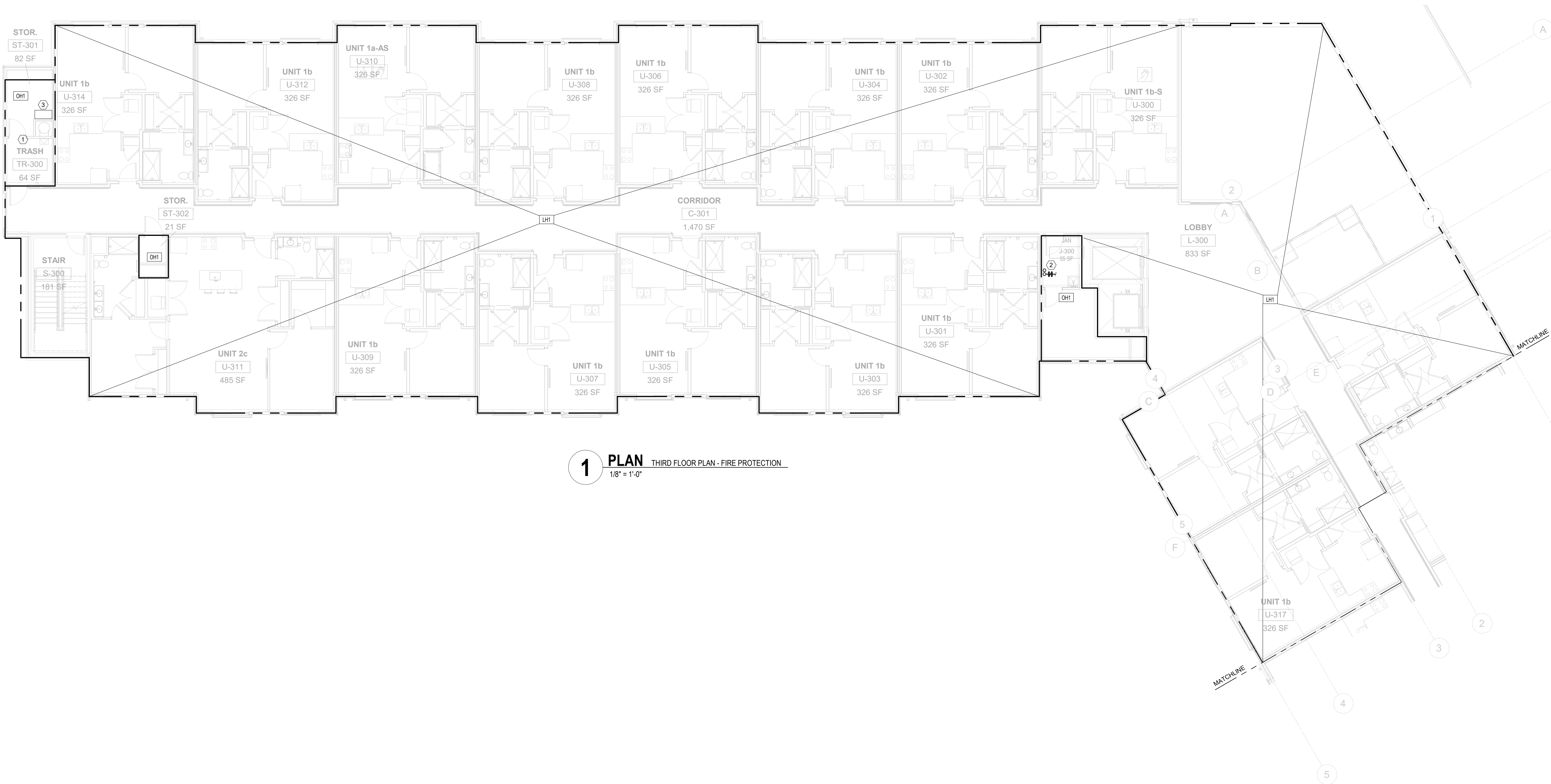
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DRAWING TITLE:
**SECOND FLOOR PLAN - AREA
B - FIRE PROTECTION**

	06/08/2023
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	#22172.01
	FP102B
PERMIT & BID SET	



1 PLAN THIRD FLOOR PLAN - FIRE PROTECTION
1/8" = 1'-0"


KEYNOTES

1. PROVIDE SPRINKLER HEAD IN TRASH CHUTE PER NFPA 13.
2. SPRINKLER RISER AND DRAIN LEADER FROM FLOOR BELOW TO FLOOR ABOVE. PROVIDE FLOOR CONTROL VALVE. SEE DETAIL ON SHEET P501.
3. DRY-PIPE VALVE ASSEMBLY TO SERVE ATTIC SPRINKLER SYSTEM. SEE DETAIL ON SHEET P501.

#	DATE	CHANGE DESCRIPTION

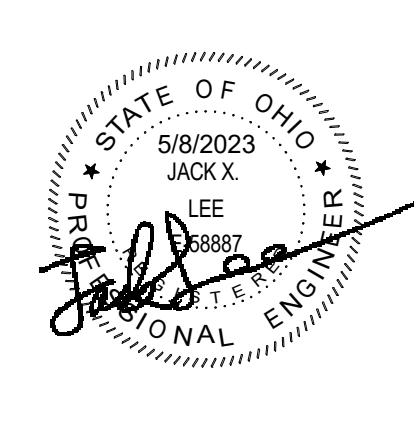


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FOR
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DRAWING TITLE:
**THIRD FLOOR PLAN - AREA A -
FIRE PROTECTION**



FP103A
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06/08/2023

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#22172.01	



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1 PLAN THIRD FLOOR PLAN - FIRE PROTECTION
1/8" = 1'-0"



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KEYNOTES


1. PROVIDE SPRINKLER HEAD IN TRASH CHUTE PER NFPA 13.
2. DRY-PIPE VALVE ASSEMBLY TO SERVE ATTIC SPRINKLER SYSTEM. SEE DETAIL ON SHEET P501.

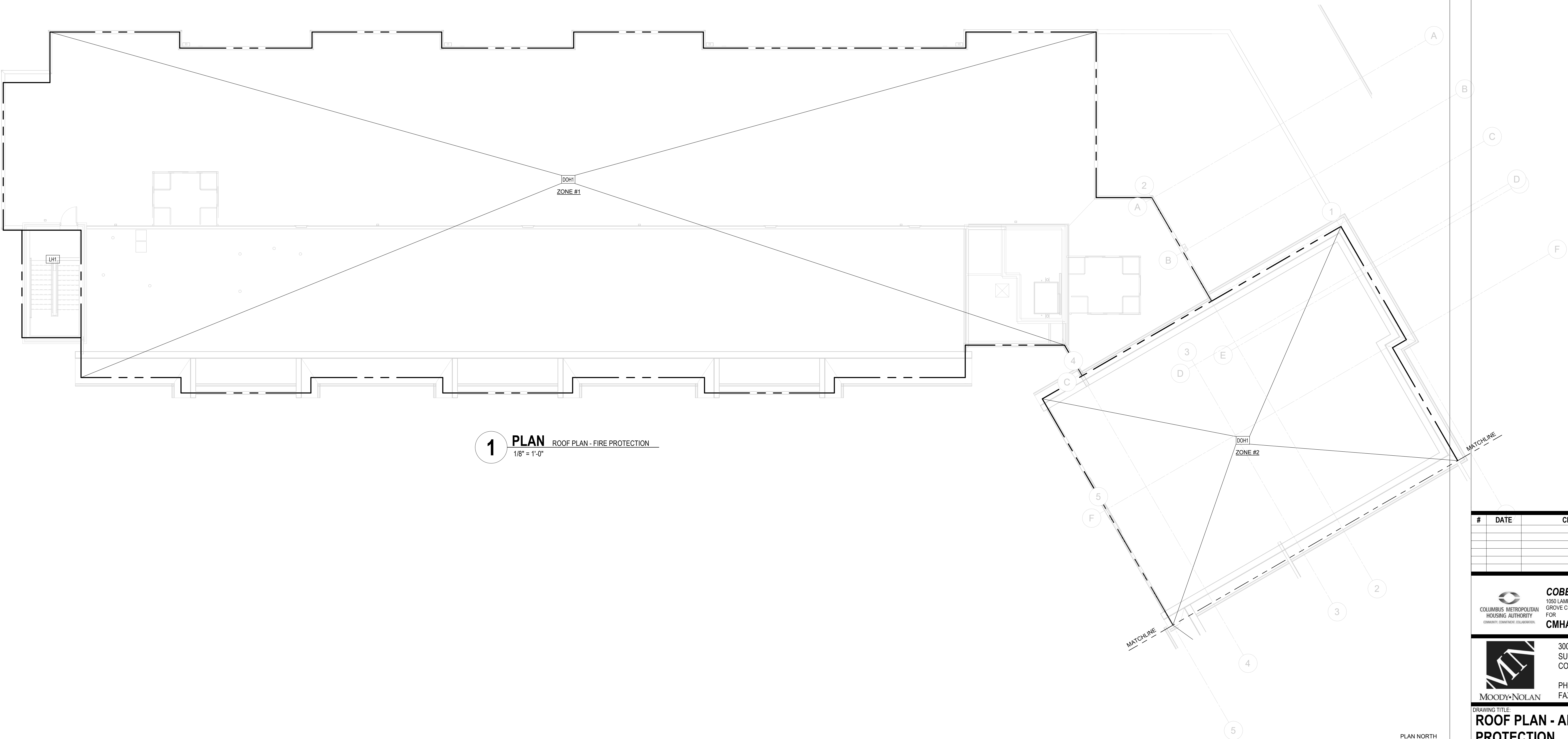
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DRAWING TITLE:
**THIRD FLOOR PLAN - AREA B -
FIRE PROTECTION**

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1 PLAN ROOF PLAN - FIRE PROTECTION
1/8" = 1'-0"

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#	DATE	CHANGE DESCRIPTION

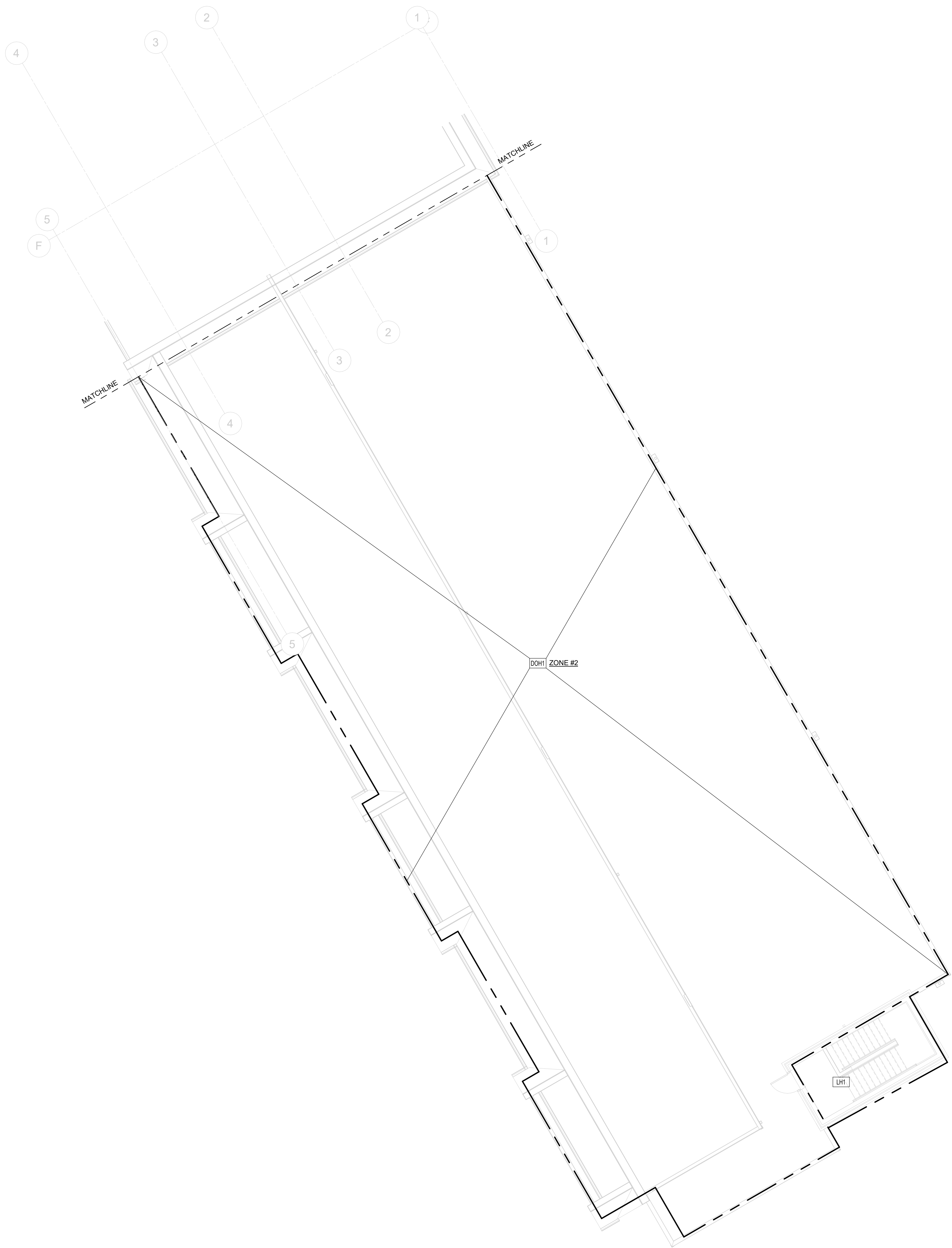
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DRAWING TITLE:
ROOF PLAN - AREA A - FIRE PROTECTION

5/8/2023
JACK X. LEE
P.E.
MOODY•NOLAN ENGINEERS

06/08/2023	
DRAWN BY: Author	CHECKED BY: Checker
#22172.01	
FP104A	
PERMIT & BID SET	



1 PLAN ROOF PLAN - FIRE PROTECTION
1/8" = 1'-0"



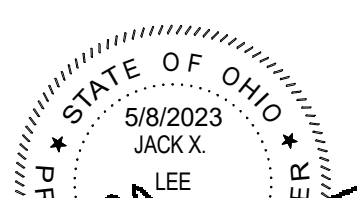
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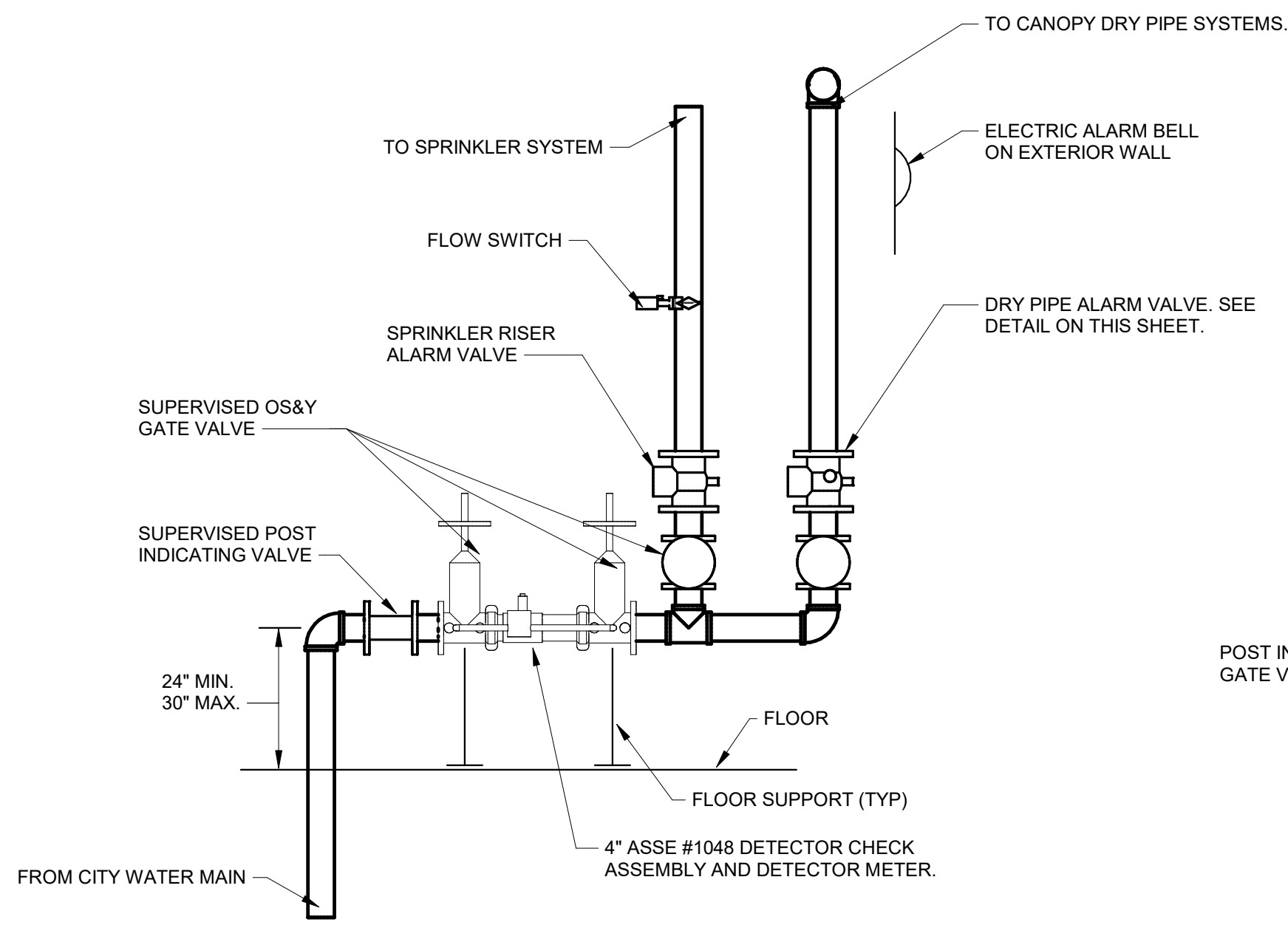
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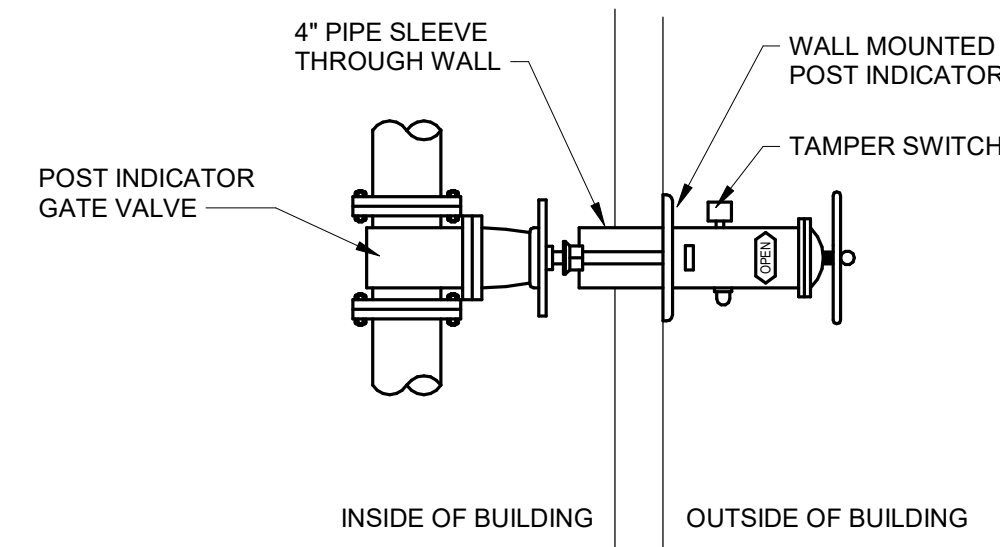
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DRAWING TITLE:
**ROOF PLAN - AREA B - FIRE
PROTECTION**

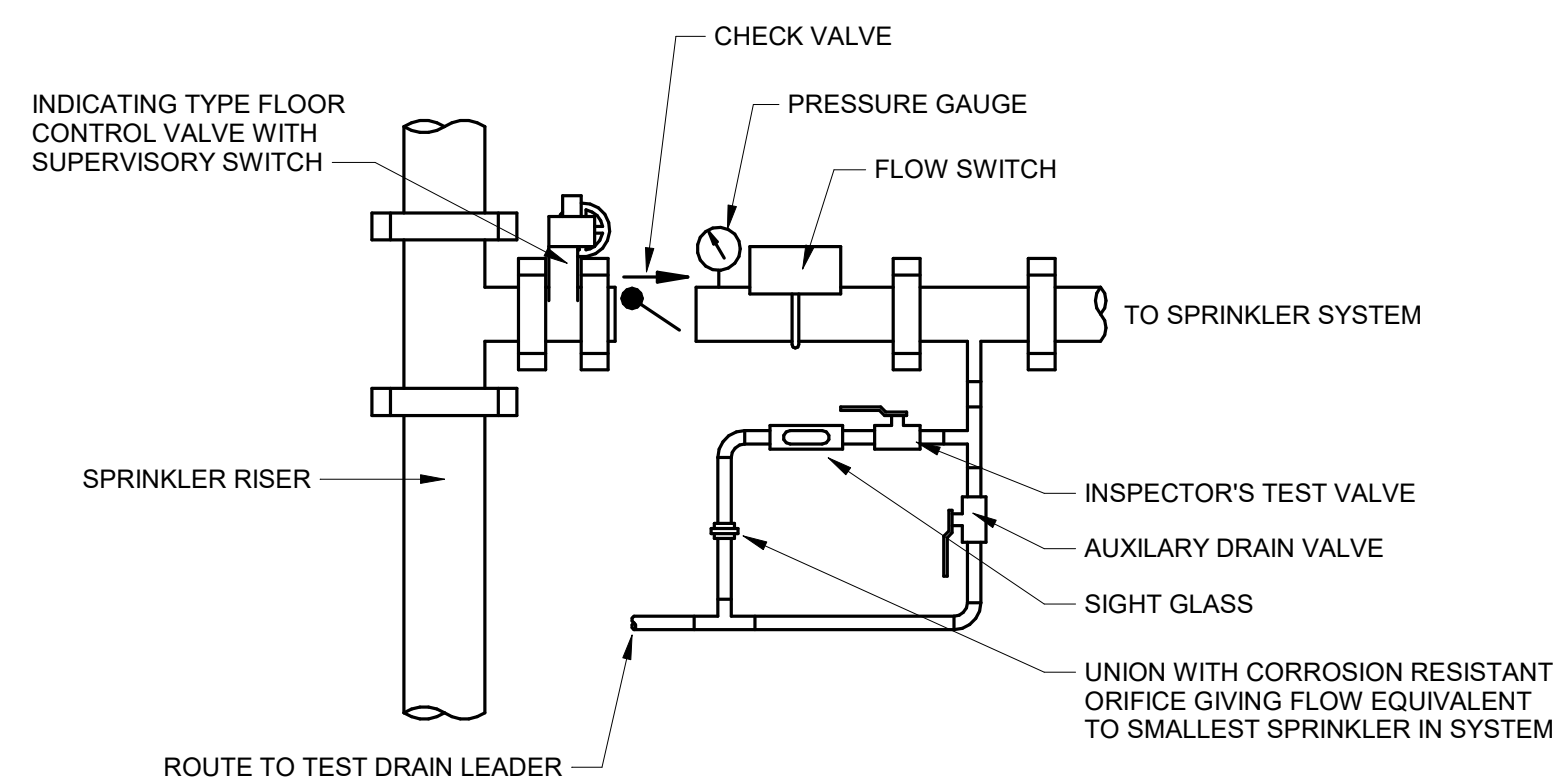
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	#22172.01	
	FP104B	
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1 **DETAIL** DETAIL - FIRE SERVICE ENTRANCE
1/2" = 1'-0"

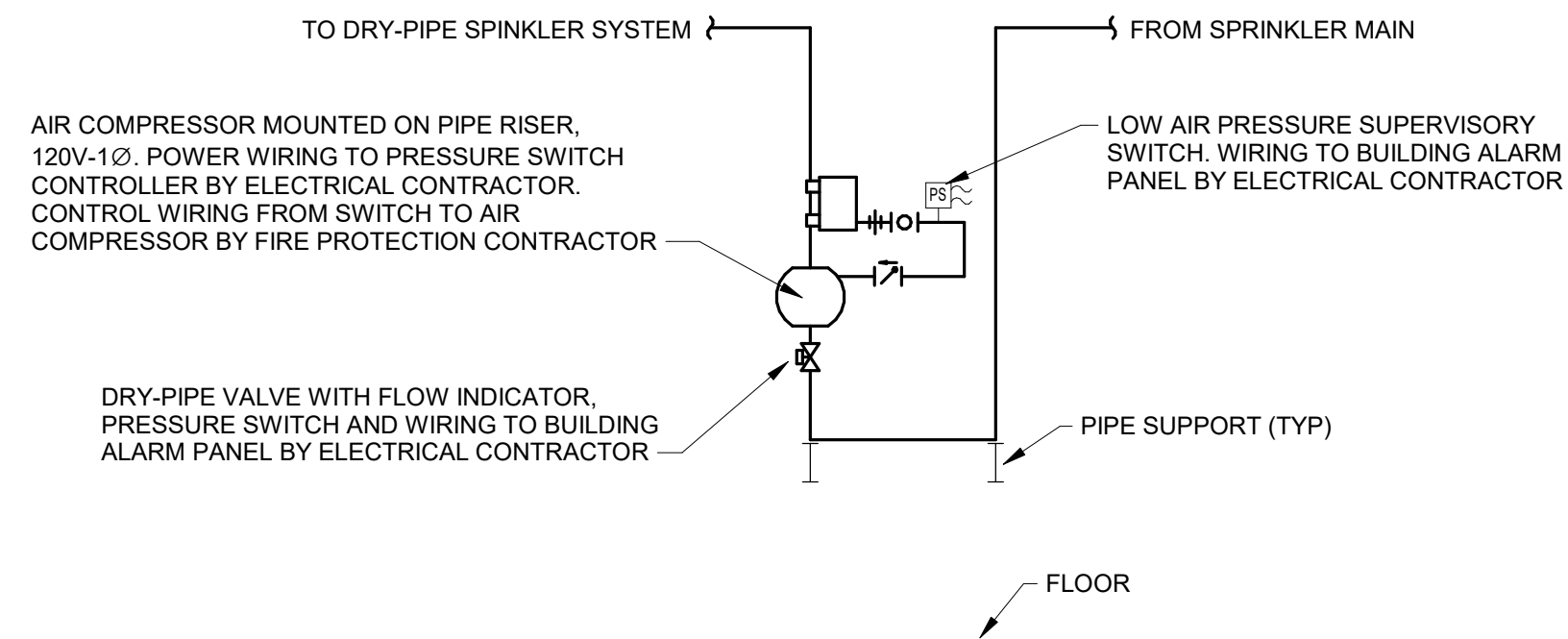


2 **DETAIL** DETAIL - WALL MOUNTED POST INDICATING VALVE
N.T.S.



NOTE: INSPECTOR'S TEST VALVES SHALL BE INSTALLED IN ACCESSIBLE LOCATION. MOUNT ADJACENT TO FIXED STRUCTURE IF LADDER ACCESS IS REQUIRED.

3 **DETAIL** DETAIL - FLOOR CONTROL VALVE
N.T.S.



4 **DETAIL** DETAIL - DRY-PIPE ALARM VALVE ASSEMBLY
N.T.S.

#	DATE	CHANGE DESCRIPTION



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DRAWING TITLE:

DETAILS - FIRE PROTECTION

	06/08/2023	
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	#22172.01	
	FP501	
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ABBREVIATIONS

NOTE: NOT ALL ABBREVIATIONS MAY BE USED.

AFF	ABOVE FINISHED FLOOR
AMP	AMPERE
APPROX	APPROXIMATE
ARCH	ARCHITECT
BLDG	BUILDING
CAP	CAPACITY
CFH	CUBIC FEET PER HOUR
CFM	CUBIC FEET PER MINUTE
CONN	CONNECTION OR CONNECT
CONT	CONTINUATION
CU FT	CUBIC FEET
CU IN	CUBIC INCH
D	DRAIN
DEPT	DEPARTMENT
DIA	DIAMETER
DWG	DRAWING
EQUIP	EQUIPMENT
EWC	ELECTRIC WATER COOLER
EXIST	EXISTING
°F	DEGREES FAHRENHEIT
FD	FLOOR DRAIN
FIN FL EL	FINISHED FLOOR ELEVATION
GA	GAUGE
GAL	GALLONS
GPD	GALLONS PER DAY
GPH	GALLONS PER HOUR
GPM	GALLONS PER MINUTE
HP	HORSEPOWER
HVAC	HEATING, VENTILATING, AND AIR CONDITIONING
HZ	HERTZ
IN	INCHES
INV EL	INVERT ELEVATION
KW	KILOWATT
L	LAVATORY
MAX	MAXIMUM
MECH	MECHANICAL
MFG	MANUFACTURER
MIN	MINIMUM
MS	MOP SINK
N/A	NOT APPLICABLE
NC	NORMALLY CLOSED
NO	NORMALLY OPEN
NO.	NUMBER
NTS	NOT TO SCALE
OS&Y	OUTSIDE STEM AND YOKE VALVE
PD	PUMPED DISCHARGE
PLBG	PLUMBING
PRESS	PRESSURE
PRV	PRESSURE REDUCING VALVE
PSI	POUNDS PER SQUARE INCH
PSIG	PSI GAUGE
RD	ROOF DRAIN
RPBP	REDUCED PRESSURE BACKFLOW PREVENTER
RPM	REVOLUTIONS PER MINUTE
S	SINK
SH	SHOWER
SPEC	SPECIFICATION
SRD	SECONDARY ROOF DRAIN
TEMP	TEMPERATURE
TMV	THERMOSTATIC MIXING VALVE
TYP	TYPICAL
UNO	UNLESS NOTED OTHERWISE
V	VOLT/VENT
VB	VACUUM BREAKER
VTR	VENT THRU ROOF
W	WATER
WC	WATER CLOSET

SYMBOLS LIST

PIPING	
DOMESTIC HOT WATER RETURN	_____HWR_____
DOMESTIC HOT WATER	_____HW_____
DOMESTIC COLD WATER	_____CW_____
SANITARY	_____SAN_____
VENT	_____V_____
NATURAL GAS	_____G_____
PIPING (FITTINGS, VALVES, AND MISCELLANEOUS)	
DROP	_____↘_____
RISE	_____↗_____
TEE	_____⊥_____
CAP	_____⊢_____
FLOW ARROW	_____→_____
GLOBE VALVE	_____⊞_____
PLUG VALVE	_____⊞⊞_____
SOLENOID VALVE	_____⊞⊞⊞_____
GAS PRESSURE REGULATOR	_____⊞⊞⊞_____
PRESSURE REDUCING VALVE	_____⊞⊞⊞_____
OUTSIDE STEM & YOKE VALVE	_____⊞⊞⊞_____
REDUCED PRESSURE BACKFLOW PREVENTER	_____⊞⊞⊞⊞⊞_____
BUTTERFLY VALVE	_____⊞⊞⊞_____
BALL VALVE	_____⊞⊞⊞_____
CHECK VALVE	_____⊞⊞⊞_____
BALANCE VALVE	_____⊞⊞⊞_____
STRAINER	_____⊞⊞⊞_____
UNION	_____⊞⊞⊞_____
TEMPERATURE & PRESSURE RELIEF VALVE	_____⊞⊞⊞_____
METER	_____⊞⊞⊞_____
PIPE SLEEVE	_____⊞⊞⊞_____
WATER HAMMER ARRESTOR	_____⊞⊞⊞_____
PRESSURE/TEMPERATURE TEST PLUG	_____⊞⊞⊞_____
AQUASTAT	_____⊞⊞⊞_____
WALL HYDRANT OR HOSE BIBB	_____⊞⊞⊞_____
CLEANOUT	_____⊞⊞⊞_____
CLEANOUT AT FLOOR OR AT GRADE	_____⊞⊞⊞_____
FLOOR OR AREA DRAIN	_____⊞⊞⊞_____
ROOF DRAIN	_____⊞⊞⊞_____
THERMOMETER	_____⊞⊞⊞_____
PRESSURE GAUGE WITH STOPCOCK	_____⊞⊞⊞_____

GENERAL NOTES:

- A. PROVIDE NEW DOMESTIC WATER, SANITARY WASTE, STORM DRAINAGE FOR THIS BUILDING. PROVIDE ALL NECESSARY COMPONENTS FOR FULLY OPERATIONAL SYSTEM. INSTALL SYSTEMS IN ACCORDANCE WITH STATE REQUIREMENTS AND LOCAL AUTHORITY HAVING JURISDICTION COORDINATE THE LOCATION OF ALL UTILITY CONNECTION POINTS, FLOOR DRAINS AND HUB DRAINS FOR EQUIPMENT WITH OTHER TRADES.
- B. ALL FLOOR PENETRATIONS TO BE SEALED WATER TIGHT AND COMPLETELY PACKED WITH FIRE STOP MATERIAL BY TRADE CONTRACTORS.
- C. THESE DRAWINGS ARE DIAGRAMMATIC IN NATURE AND ARE NOT INTENDED TO SHOW THE EXACT LOCATIONS OF COMPONENTS. NOR SHOW ALL SYSTEM COMPONENTS. CONTRACTOR SHALL PROVIDE ADDITIONAL OFFSETS OR FITTINGS REQUIRED FOR PROPER INSTALLATION. COORDINATION WITH OTHER TRADES, AND/OR TO MAINTAIN PROPER CLEARANCES.
- D. DRAWINGS ARE NOT TO BE SCALED. DIMENSIONS SHALL GOVERN. CONTRACTOR SHALL VERIFY ALL DIMENSIONS AND CONDITIONS AT THE JOB SITE CONCERNING EXISTING AND NEW WORK BEFORE PROCEEDING WITH EITHER FABRICATION OR INSTALLATION IN MECHANICAL AREAS WITH NUMEROUS OBSTRUCTIONS INCLUDING DUCTWORK, EQUIPMENT AND PIPING. THIS WILL REQUIRE ON SITE CUTTING AND VERIFICATION.
- E. ANY INFORMATION CONFLICTS BETWEEN THE SPECIFICATIONS AND DRAWINGS SHALL BE BROUGHT TO THE ENGINEER'S ATTENTION. THE CONTRACTOR(S) SHALL NOT PROCEED WITH ANY WORK, EXCEPT AT THEIR OWN RISK, UNTIL CLARIFICATIONS OF THE CONFLICTS ARE ISSUED TO THE CONTRACTOR(S) BY THE ENGINEER.
- F. ALL MATERIAL AND LABOR SHALL BE UNDER WARRANTY FOR ONE YEAR FROM THE DATE OF FINAL ACCEPTANCE BY THE OWNER. ANY NEW DEVICES OR EQUIPMENT FOUND FAULTY SHALL BE REPLACED AS PART OF THE WARRANTY.
- G. A SET OF APPROVED DRAWINGS SHALL BE MAINTAINED ON SITE AND ALL FIELD CHANGES SHALL BE RED LINED ON THE DRAWINGS. CONTRACTOR SHALL PREPARE "AS-BUILT" DRAWINGS IN ELECTRONIC (PDF) FORMAT, REFLECTING ACCURATE FIELD CONDITIONS.
- H. ALL PENETRATIONS THROUGH FIRE RESISTANCE RATED CONSTRUCTION SHALL BE PROVIDED A UL LISTED THROUGH PENETRATION FIRESTOP ASSEMBLY. THE RATINGS OF ALL FIRESTOP ASSEMBLIES SHALL BE GREATER THAN OR EQUAL TO THE RATING OF THE PENETRATED BARRIER.
- I. CORE DRILL PENETRATIONS IN CONCRETE FLOORS OR WALLS 1-2 INCHES LARGER THAN THE PIPE DIAMETER OF THE PENETRATING PIPE.
- J. DUCTWORK, PIPING, MECHANICAL EQUIPMENT AND CEILINGS SHALL NOT BE USED AS LADDERS, SCAFFOLDING OR WORK PLATFORMS.
- K. NO STRUCTURAL MEMBERS SHALL BE CUT, DRILLED, OR BURNED WITHOUT THE KNOWLEDGE AND WRITTEN APPROVAL OF THE OWNER.
- L. EQUIPMENT, MATERIALS, INSTALLATION WORKMANSHIP, EXAMINATION AND TESTING SHALL BE IN ACCORDANCE WITH CURRENT PLUMBING CODE. INSTALL PIPING STRAIGHT AND TRUE TO BEAR EVENLY ON HANGARS AND SUPPORTS. PIPE SHALL NOT INTERFERE WITH OTHER EQUIPMENT AND CONSTRUCTION.
- M. CONTRACTOR SHALL BE RESPONSIBLE FOR AVOIDING ALL CONFLICTS WITH LIGHTING FIXTURES, DIFFUSERS, GRILLES, DUCTS, STRUCTURAL MEMBERS, MECHANICAL EQUIPMENT AND PIPES.
- N. NO FABRICATION OR INSTALLATION IS ALLOWED WITHOUT APPROVED SHOP DRAWING SUBMITTALS.
- O. CONTRACTOR SHALL SUBMIT SYSTEM CATALOG PRODUCT DATA SHEETS OF ALL COMPONENTS PROPOSED FOR USE PRIOR TO INSTALLATION FOR APPROVAL. SHOP DRAWINGS SHALL BE SUBMITTED FOR APPROVAL.
- P. PIPING SHALL NOT SHARE SUPPORTS WITH OTHER BUILDING SYSTEMS. IN MECHANICAL AREAS, PIPING SHALL NOT BE ATTACHED TO THE DUCT WORK. STANCHIONS SHALL BE USED WHERE PIPING IS UNABLE TO BE HUNG FROM ABOVE.
- Q. PIPING IN AREAS WITH FINISHED CEILINGS SHALL BE INSTALLED ABOVE FINISHED CEILINGS.
- R. CONTRACTOR SHALL PROVIDE LABELS (WITH FLOW ARROWS) FOR ALL PIPING.
- S. PIPING SHALL NOT BE INSTALLED PASSING THROUGH ELECTRICAL ROOMS OR OVER ELECTRICAL PANELS / EQUIPMENT WHICH SERVES OTHER AREAS. COORDINATE THE LOCATION OF ALL PIPING WITH ELECTRICAL EQUIPMENT AND OTHER TRADES AND ADJUST AS NECESSARY.
- T. MAKE REASONABLE AND NECESSARY MODIFICATIONS IN LAYOUTS AND COMPONENTS NEEDED TO PREVENT CONFLICTS WITH WORK OF OTHER TRADES AND TO COORDINATE IN ACCORDANCE WITH SPECIFICATIONS.
- U. MAINTAIN MAXIMUM HEADROOM AT ALL LOCATIONS. ALL PIPING TO BE AS TIGHT TO THE UNDERSIDE OF DECK AS POSSIBLE. AL EXPOSED PIPING SHALL BE APPROVED BY ARCHITECT AND SHALL MAINTAIN REQUIRED CLEARANCES.

#	DATE	CHANGE DESCRIPTION



COLUMBUS METROPOLITAN HOUSING AUTHORITY
CORRECTLY. COORDINATE. COLLABORATE.

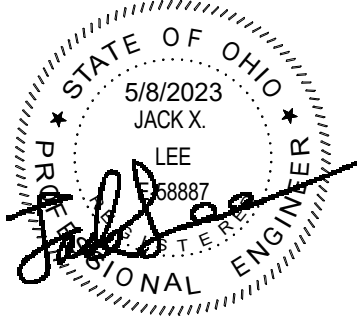
COBBLESTONE MANOR
1050 LAMPLIGHTER DRIVE
GROVE CITY, OH 43123
FOR
CMHA



300 SPRUCE STREET
SUITE 300
COLUMBUS, OHIO 43215

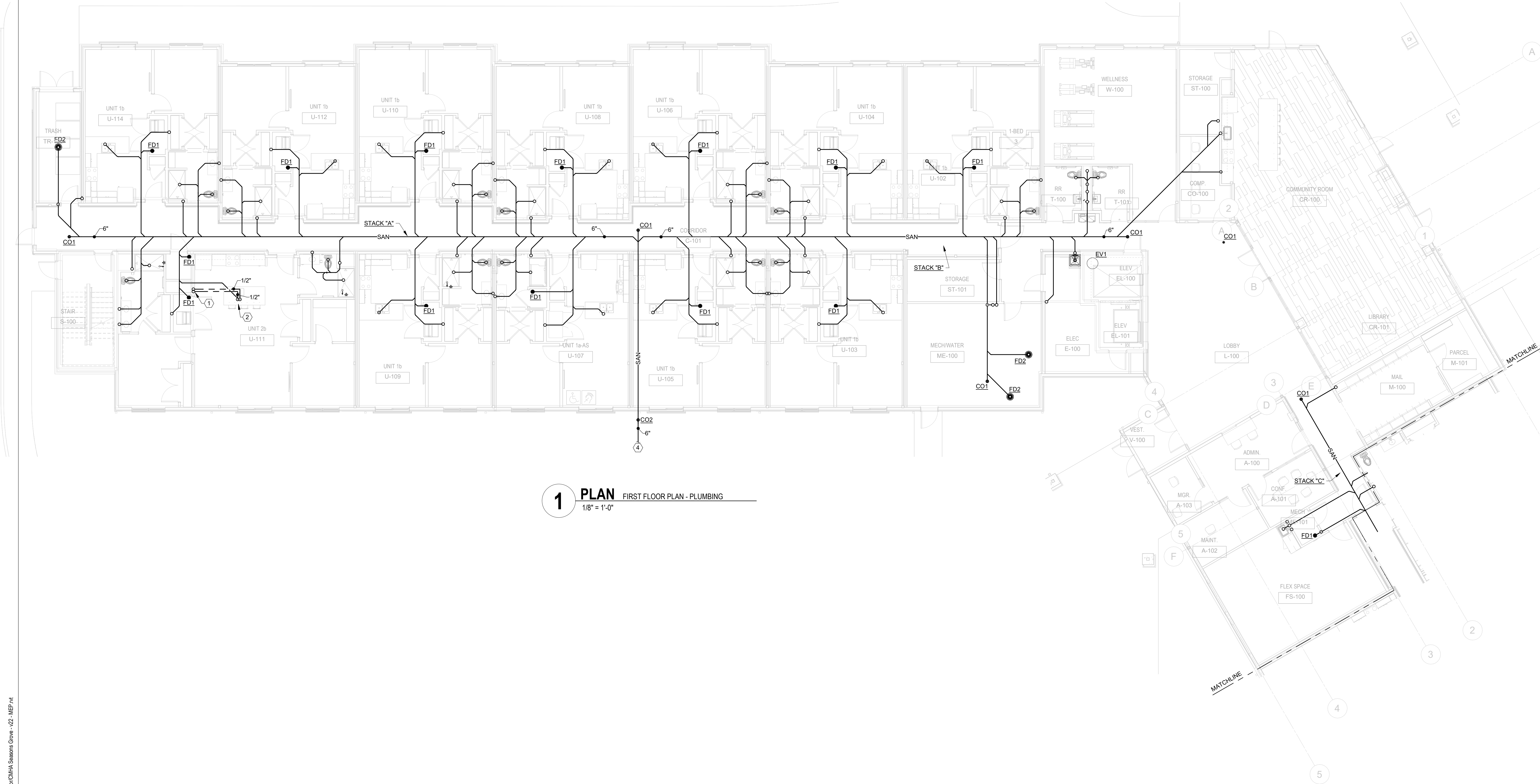
PHONE: (614) 461-4664
FAX: (614) 280-8881

DRAWING TITLE:
**GENERAL INFORMATION -
PLUMBING**



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1 PLAN FIRST FLOOR PLAN - PLUMBING
1/8" = 1'-0"

GENERAL NOTES

- A.
- KEYNOTES**
- 1/2" CW AND 1/2" HW FROM ABOVE.
 - 1/2" CW AND 1/2" HW TO ABOVE.
 - NOT USED.
 - INVERT ELEVATION OF 6" SAN = 96.00' WITH A FINISH FLOOR ELEVATION OF 100.00'

#	DATE	CHANGE DESCRIPTION

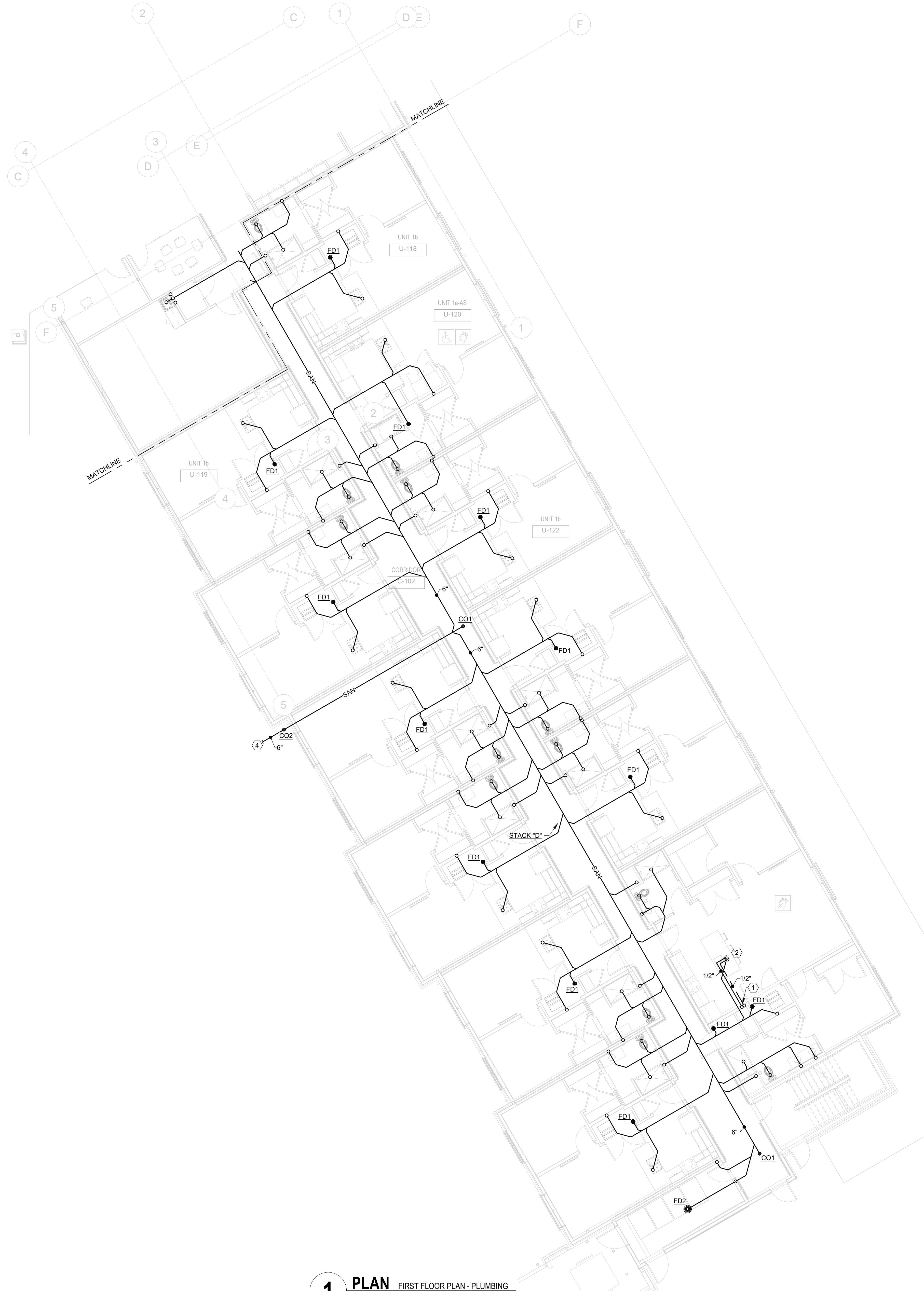
COBBLESTONE MANOR
100 LAMPLIGHTER DRIVE
GROVE CITY, OH 43123
FOR
CMHA

MOODY+NOLAN
300 SPRUCE STREET
SUITE 300
COLUMBUS, OHIO 43215
PHONE: (614) 461-4664
FAX: (614) 280-8881

DRAWING TITLE:
**UNDERSLAB PLAN - AREA A -
PLUMBING**

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1 PLAN FIRST FLOOR PLAN - PLUMBING
1/8" = 1'-0"

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1405 Dublin Road Columbus, Ohio 43215
Tel: (614) 486-4773 Fax: (614) 486-4082

GENERAL NOTES

- A .
- KEYNOTES**
- 1/2" CW AND 1/2" HW FROM ABOVE.
 - 1/2" CW AND 1/2" HW TO ABOVE.
 - NOT USED.
 - INVERT ELEVATION OF 6" SAN = 96.00' WITH A FINISH FLOOR ELEVATION OF 100.00'

#	DATE	CHANGE DESCRIPTION



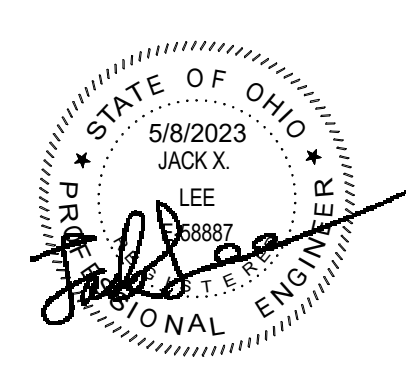
COBBLESTONE MANOR
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GROVE CITY, OH 43123
FOR
CMHA



300 SPRUCE STREET
SUITE 300
COLUMBUS, OHIO 43215

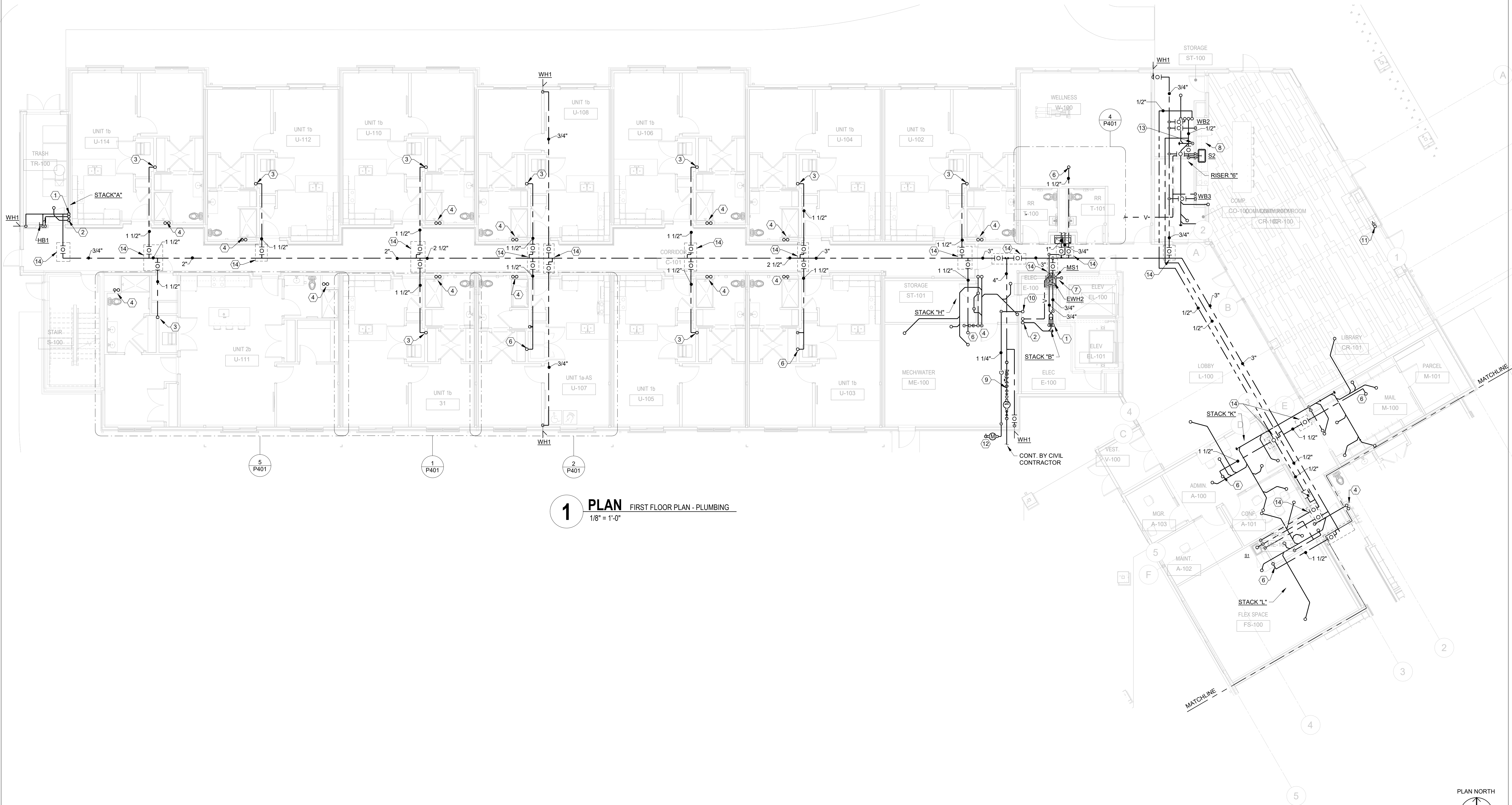
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DRAWING TITLE:
UNDERSLAB PLAN - AREA B - PLUMBING



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P100B	



1 PLAN FIRST FLOOR PLAN - PLUMBING
1/8" = 1'-0"

GENERAL NOTES

- 3/4" CW AND 3/4" HW TO FLOOR ABOVE.
- 3" SAN AND 3" V FROM FLOOR ABOVE. 3" SAN TO BELOW SLAB WITH CLEANOUT AT BASE.
- 1" CW TO BELOW. 1-1/2" CW TO FLOOR ABOVE.
- 4" SAN AND 3" V FROM FLOOR ABOVE. 4" SAN TO BELOW SLAB WITH CLEANOUT AT BASE.
- NOT USED.
- 1-1/2" CW TO FLOOR ABOVE.
- 2" PUMP DICHARGE FROM ELEVATOR SUMP PUMP. TURN DOWN TO MOP SINK.
- EXTEND 1/2" HW FROM SINK SUPPLY TO DISHWASHER. EXTEND DRAIN FROM DISHWASHER TO CONNECTION ON GARBAGE DISPOSAL. MAKE FINAL CONNECTIONS.
- WATER SERVICE ENTRANCE. SEE DETAIL ON SHEET P501.
- 1-1/4" G TO FLOOR ABOVE.
- 3/4" G FROM FLOOR ABOVE. PROVIDE SHUT-OFF VALVE AND DIRT LEG. MAKE FINAL CONNECTION TO GAS FIREPLACE.
- GAS METER ASSEMBLY.
- 3" SAN TO BELOW SLAB WITH CLEANOUT AT BASE.
- LOCATE VALVES ABOVE ACCESS PANEL IN CORRIDOR.

#	DATE	CHANGE DESCRIPTION

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100 LAMPLIGHTER DRIVE
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FIRST FLOOR PLAN - AREA A - PLUMBING

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1 PLAN FIRST FLOOR PLAN - PLUMBING
1/8" = 1'-0"

GENERAL NOTES

A.

KEYNOTES

- 3/4" CW TO FLOOR ABOVE.
- 3" SAN AND 3" V FROM FLOOR ABOVE. 3" SAN TO BELOW SLAB WITH CLEANOUT AT BASE.
- 1" CW TO BELOW. 1-1/2" CW TO FLOOR ABOVE.
- 4" SAN AND 3" V FROM FLOOR ABOVE. 4" SAN TO BELOW SLAB WITH CLEANOUT AT BASE.
- NOT USED.
- 1-1/2" CW TO FLOOR ABOVE.
- LOCATE VALVES ABOVE ACCESS PANEL IN CORRIDOR.

#	DATE	CHANGE DESCRIPTION

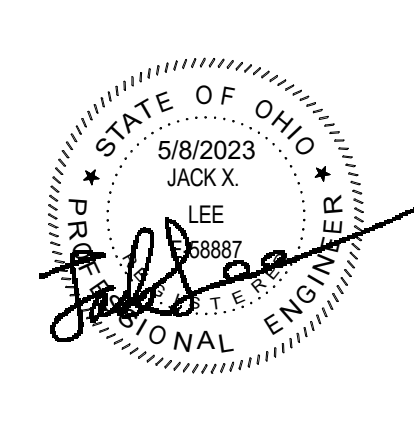


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DRAWING TITLE:
FIRST FLOOR PLAN - AREA B - PLUMBING

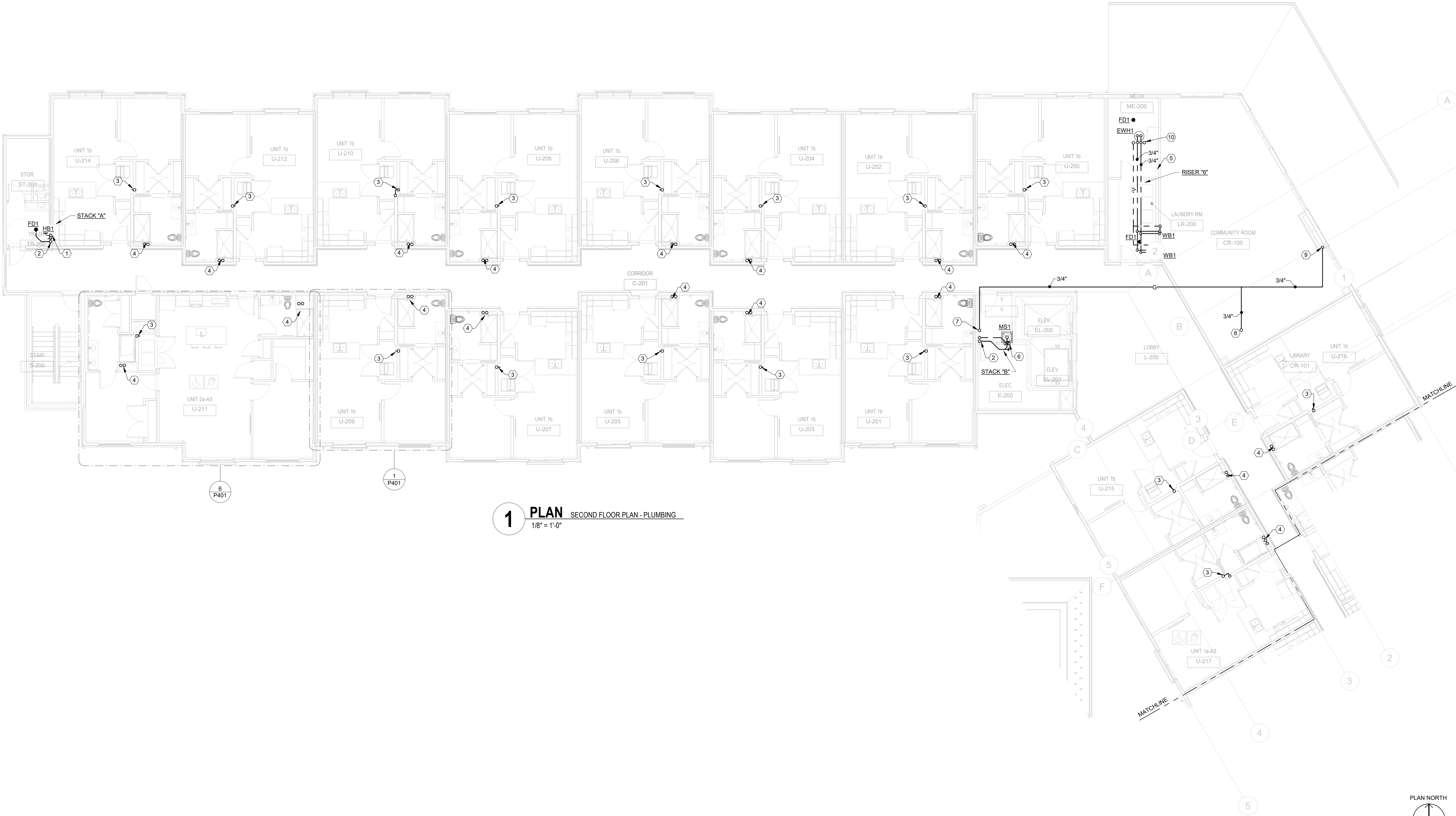


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GENERAL NOTES

1. 3/4" CW FLOOR BELOW. 3/4" CW TO FLOOR ABOVE.
2. 3" SAN AND 3" V FROM TO FLOOR BELOW FROM FLOOR ABOVE.
3. 1-1/2" CW FROM FLOOR BELOW. 1" CW TO FLOOR ABOVE.
4. 4" SAN AND 3" V FROM TO FLOOR BELOW FROM FLOOR ABOVE.
5. NOT USED.
6. 3/4" CW FROM FLOOR BELOW TO FLOOR ABOVE. 1/2" HW FROM FLOOR ABOVE.
7. 1-1/4" G FROM FLOOR BELOW TO FLOOR ABOVE.
8. 3/4" G TO ROOF.
9. 3/4" G TO FLOOR BELOW.
10. 3/4" CW AND 1/2" HWR FROM FLOOR BELOW. 1/2" HW TO FLOOR BELOW.

KEYNOTES

#	DATE	CHANGE DESCRIPTION




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FOR
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DRAWING TITLE:
SECOND FLOOR PLAN - AREA
A - PLUMBING



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1 PLAN SECOND FLOOR PLAN - PLUMBING
1/8" = 1'-0"

GENERAL NOTES

A .


KEYNOTES

- 3/4" CW FLOOR BELOW. 3/4" CW TO FLOOR ABOVE.
- 3" SAN AND 3" V FROM TO FLOOR BELOW FROM FLOOR ABOVE.
- 1'-12" CW FROM FLOOR BELOW. 1" CW TO FLOOR ABOVE.
- 4" SAN AND 3" V FROM TO FLOOR BELOW FROM FLOOR ABOVE.
- NOT USED.

#	DATE	CHANGE DESCRIPTION

**COBBLESTONE MANOR**
COLUMBUS METROPOLITAN
HOUSING AUTHORITY
COURTESY, COBBLESTONE COMMUNITIES


1050 LAMPLIGHTER DRIVE
GROVE CITY, OH 43123
FOR
CMHA

**MOODY•NOLAN**

300 SPRUCE STREET
SUITE 300
COLUMBUS, OHIO 43215

PHONE: (614) 461-4664
FAX: (614) 280-8881

DRAWING TITLE:
**SECOND FLOOR PLAN - AREA
B - PLUMBING**

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1 PLAN THIRD FLOOR PLAN - PLUMBING
1/8" = 1'-0"

GENERAL NOTES

A.

KEYNOTES

1. 3/4" CW FROM FLOOR BELOW.
2. 3" SAN AND 3" V TO FLOOR BELOW.
3. 1" CW FROM FLOOR BELOW.
4. 4" SAN AND 3" V TO FLOOR BELOW
5. 3/4" BACKFLOW PREVENTER FOR TRASH CHUTE SANITIZER.
6. 3/4" HW TO FLOOR BELOW, 3/4" CW FROM FLOOR BELOW.
7. 3/4" G FROM FLOOR BELOW, PROVIDE SHUT-OFF VALVE AND DIRT LEG. MAKE FINAL CONNECTION TO RTU.
8. 3/4" G TO ROOF.
9. 1-1/4" G FROM FLOOR BELOW.

#	DATE	CHANGE DESCRIPTION

COBBLESTONE MANOR
1050 LAMPLIGHTER DRIVE
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FOR
CMHA

MOODY-NOLAN
300 SPRUCE STREET
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PHONE: (614) 461-4664
FAX: (614) 280-8881

DRAWING TITLE:
**THIRD FLOOR PLAN - AREA A -
PLUMBING**

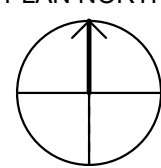
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1 **PLAN** THIRD FLOOR PLAN - PLUMBING
1/8" = 1'-0"

PLAN NORTH



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GENERAL NOTES

A.

KEYNOTES

1. 3/4" CW FROM FLOOR BELOW.
2. 3" SAN AND 3" V TO FLOOR BELOW.
3. 1" CW FROM FLOOR BELOW.
4. 4" SAN AND 3" V TO FLOOR BELOW.
5. 3/4" BACKFLOW PREVENTER FOR TRASH CHUTE SANITIZER.
6. 3/4" G TO ROOF.

#	DATE	CHANGE DESCRIPTION



COBBLESTONE MANOR
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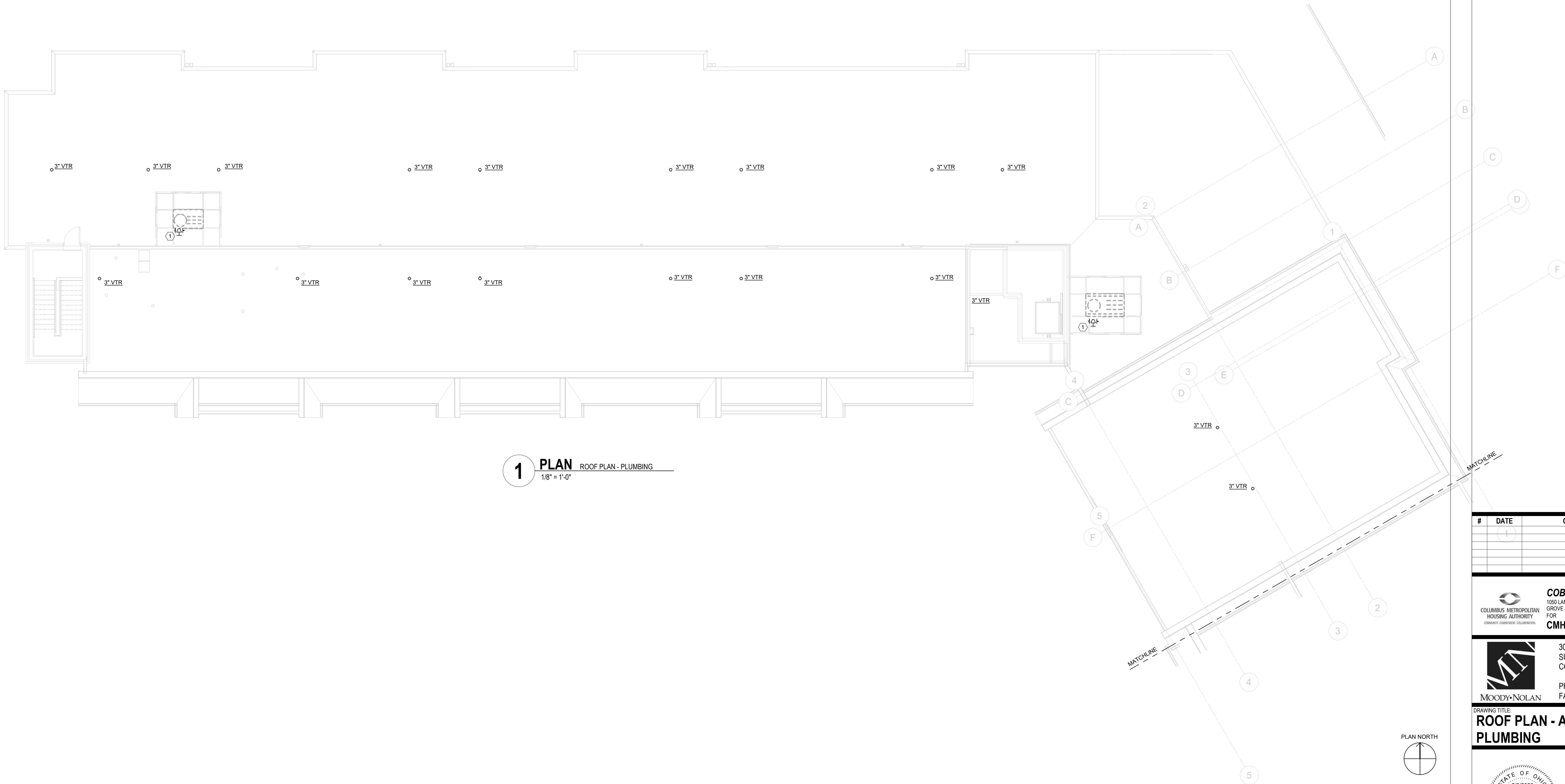


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DRAWING TITLE:
**THIRD FLOOR PLAN - AREA B -
PLUMBING**



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



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GENERAL NOTES

A.

KEYNOTES

1. 3/4" Ø FROM FLOOR BELOW, PROVIDE SHUT-OFF VALVE AND DIRT LEG. MAKE FINAL CONNECTION TO RTU.

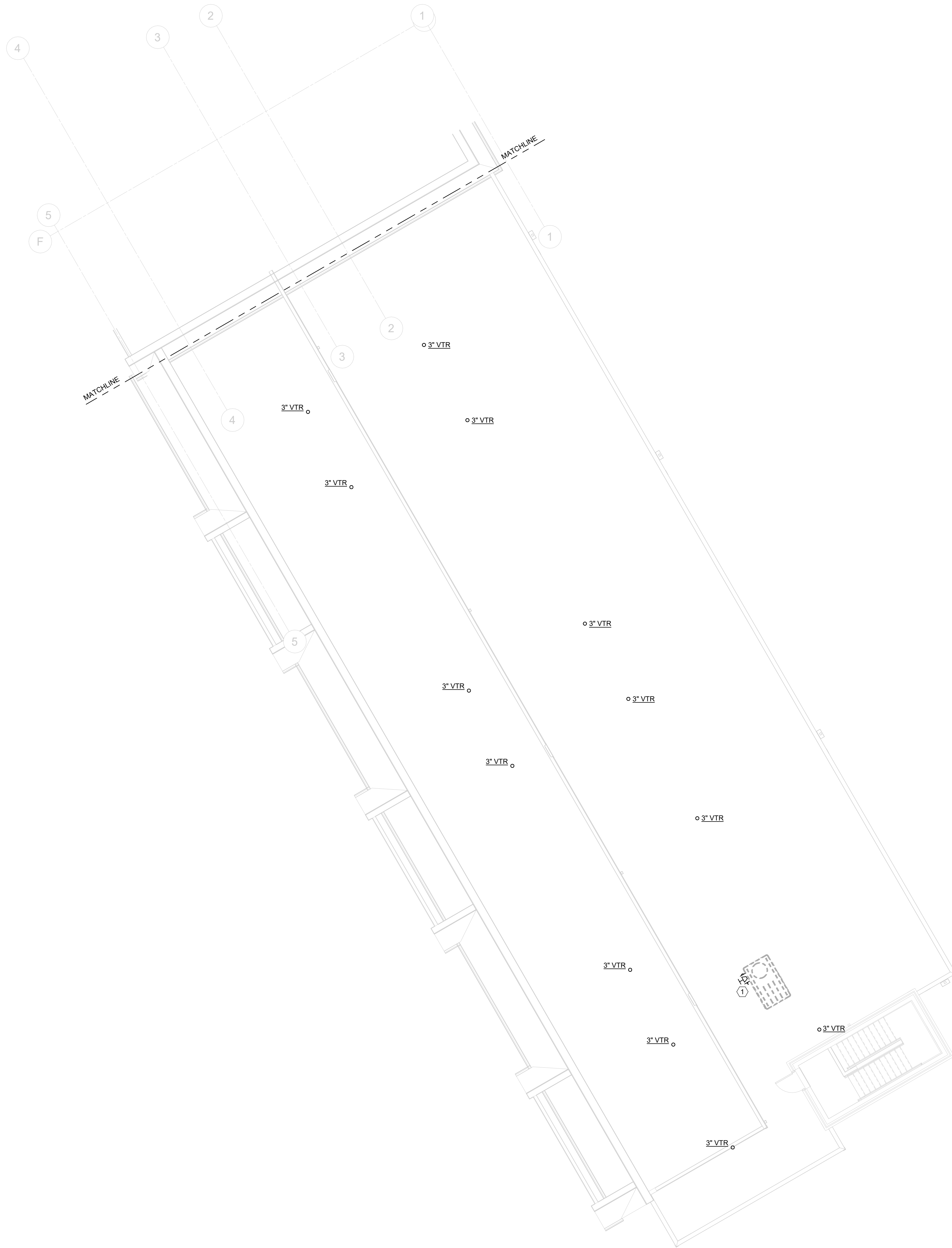
#	DATE	CHANGE DESCRIPTION
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COBBLESTONE MANOR
1050 LAMPLIGHTER DRIVE
GROVE CITY, OH 43123
FOR
CMHA

MOODY+NOLAN
300 SPRUCE STREET
SUITE 300
COLUMBUS, OHIO 43215
PHONE: (614) 461-4664
FAX: (614) 280-8881

DRAWING TITLE:
**ROOF PLAN - AREA A -
PLUMBING**

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	P104A PERMIT & BID SET



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



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GENERAL NOTES

A.

KEYNOTES

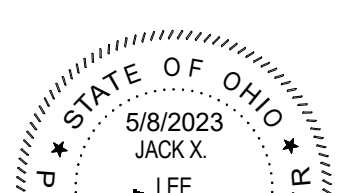
1. 3/4" Ø FROM FLOOR BELOW, PROVIDE SHUT-OFF VALVE AND DIRT LEG. MAKE FINAL CONNECTION TO RTU.

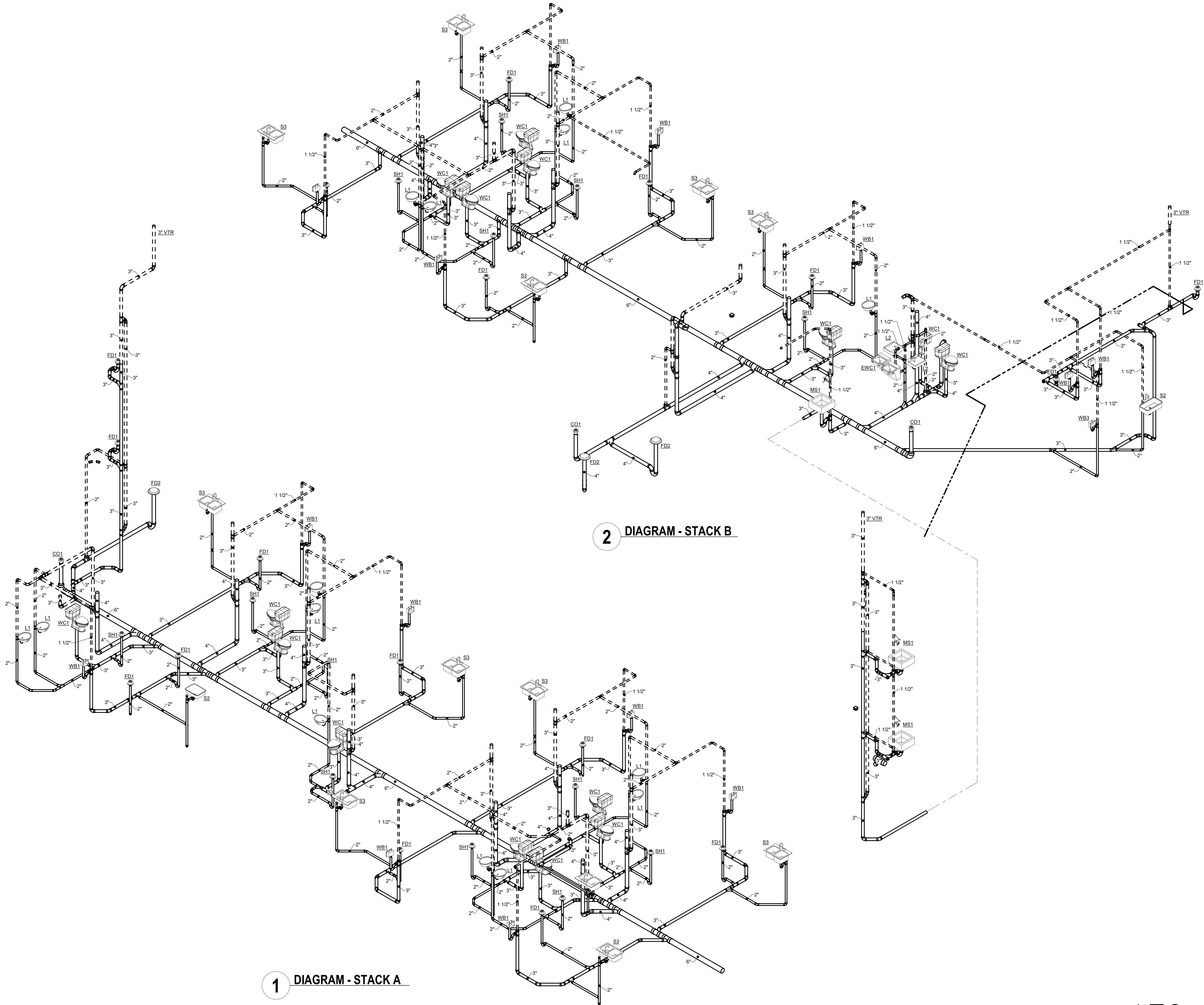
#	DATE	CHANGE DESCRIPTION

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1050 LAMPLIGHTER DRIVE
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CMHA

MOODY•NOLAN
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SUITE 300
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DRAWING TITLE:
**ROOF PLAN - AREA B -
PLUMBING**

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2 DIAGRAM - STACK B

1 DIAGRAM - STACK A

#	DATE	CHANGE DESCRIPTION




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1050 LAMPLIGHTER DRIVE
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FOR
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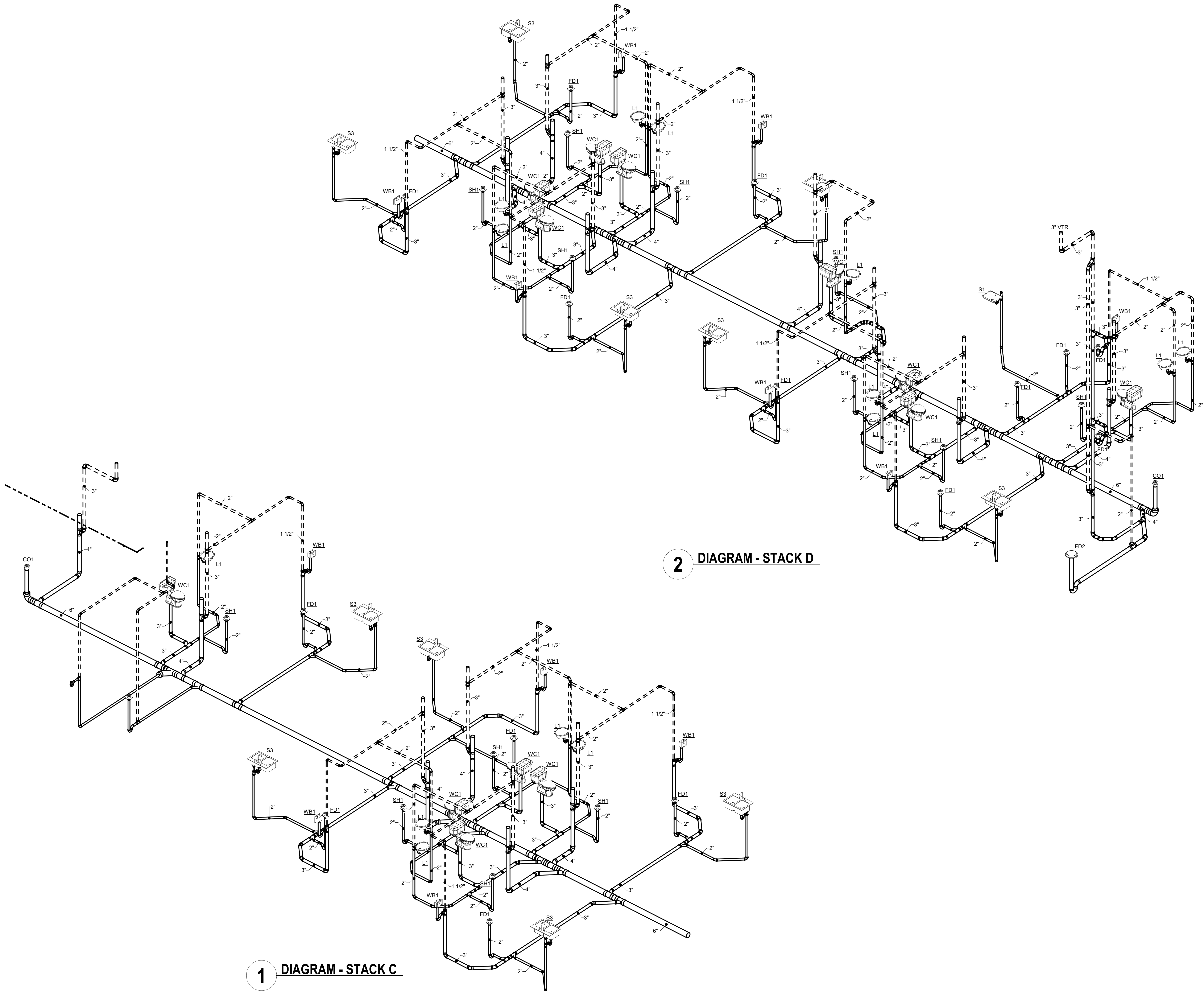


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DRAWING TITLE:
DIAGRAMS - PLUMBING



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1 DIAGRAM - STACK C

2 DIAGRAM - STACK D

#	DATE	CHANGE DESCRIPTION

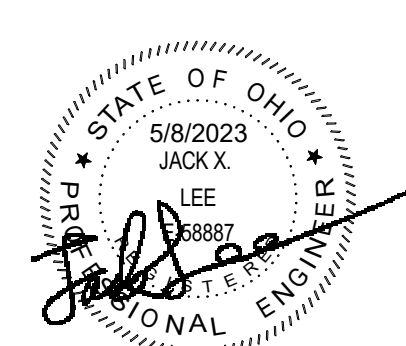


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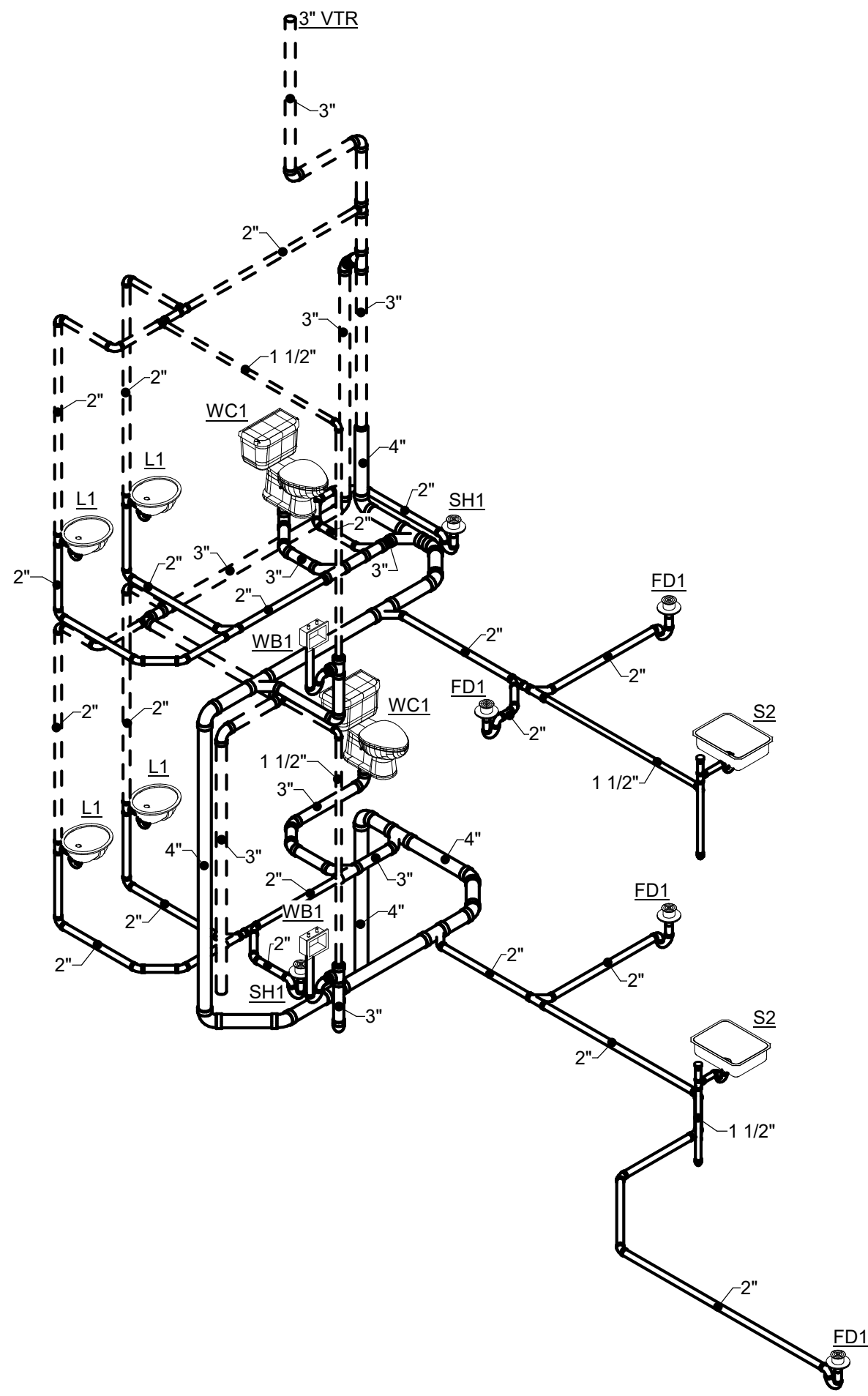
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DIAGRAMS - PLUMBING

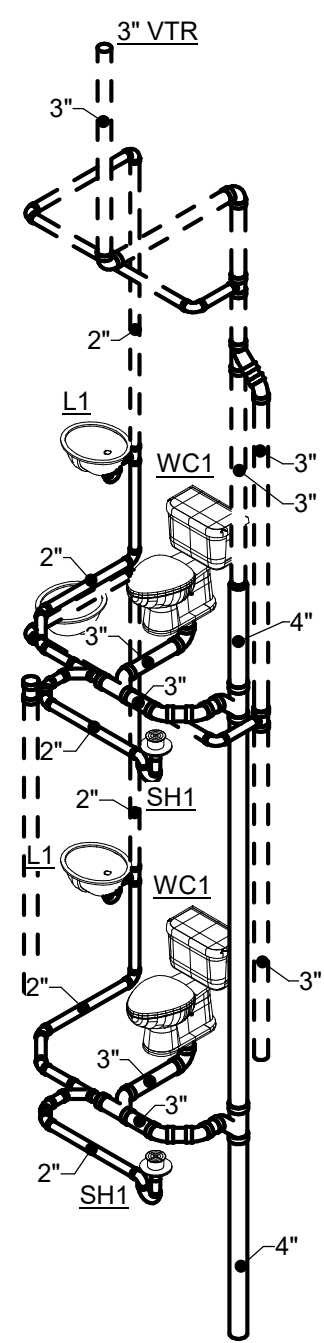


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5/8/2023
JACK X. NEE

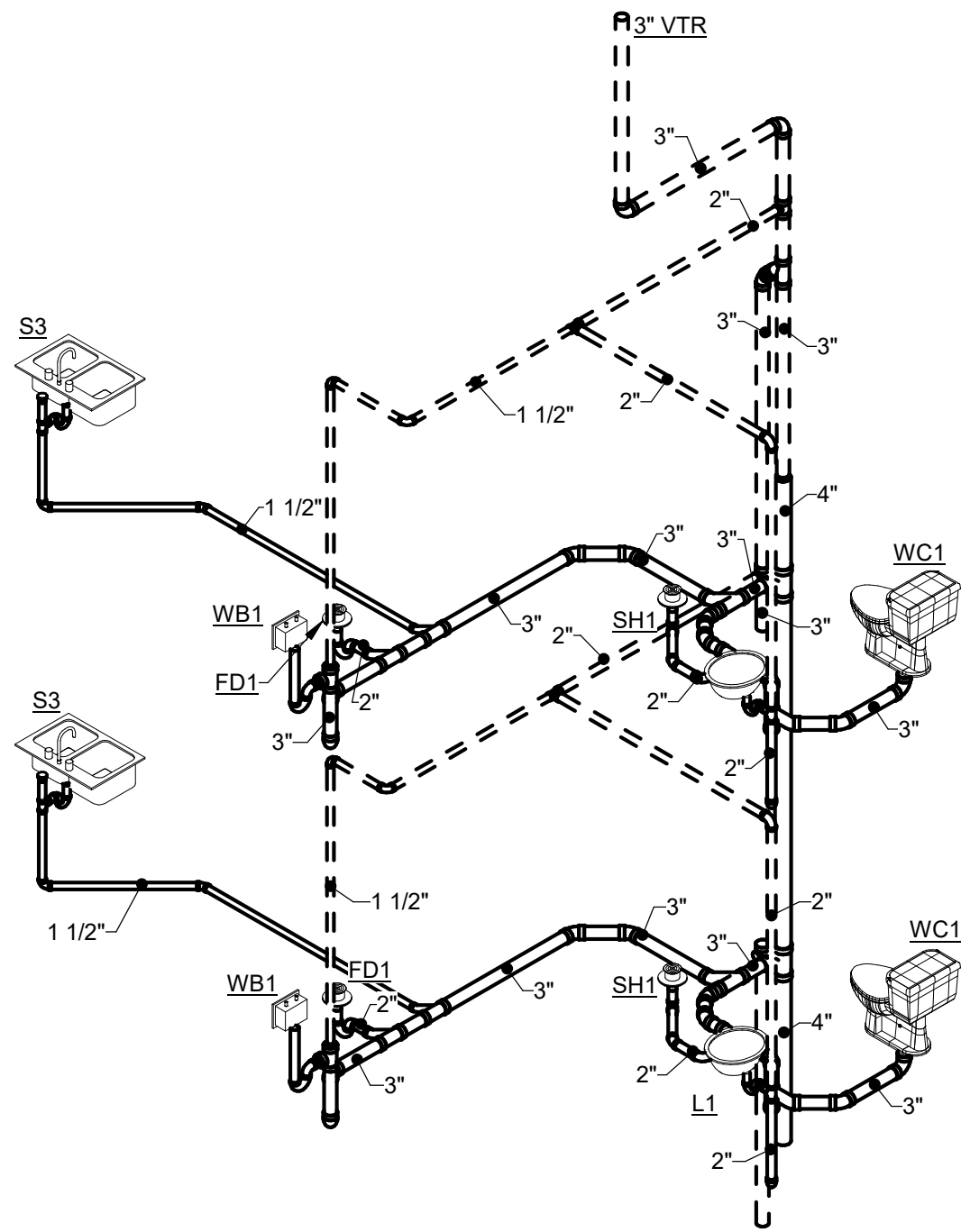
06/08/2023
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#22172.01
P302
PERMIT & BID SET



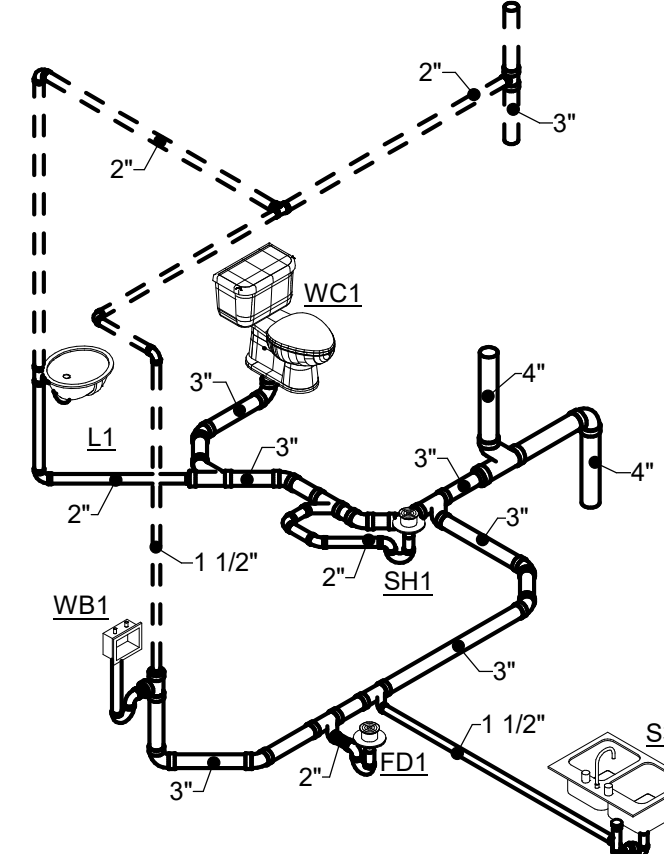
1 DIAGRAM - STACK E



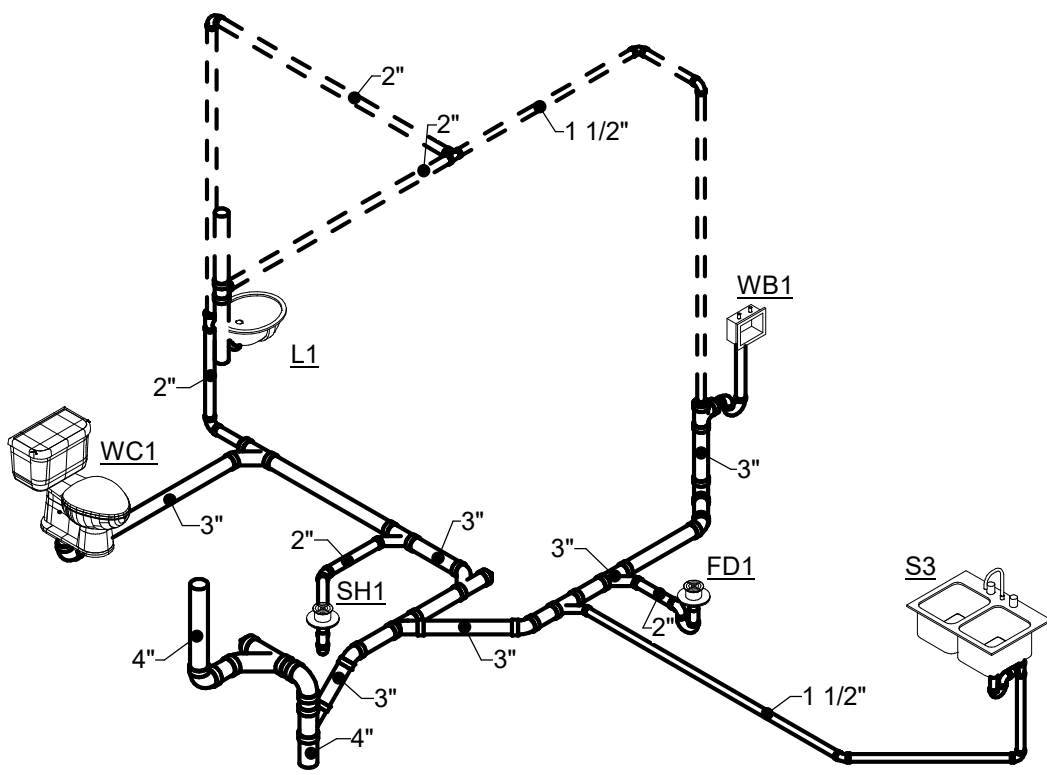
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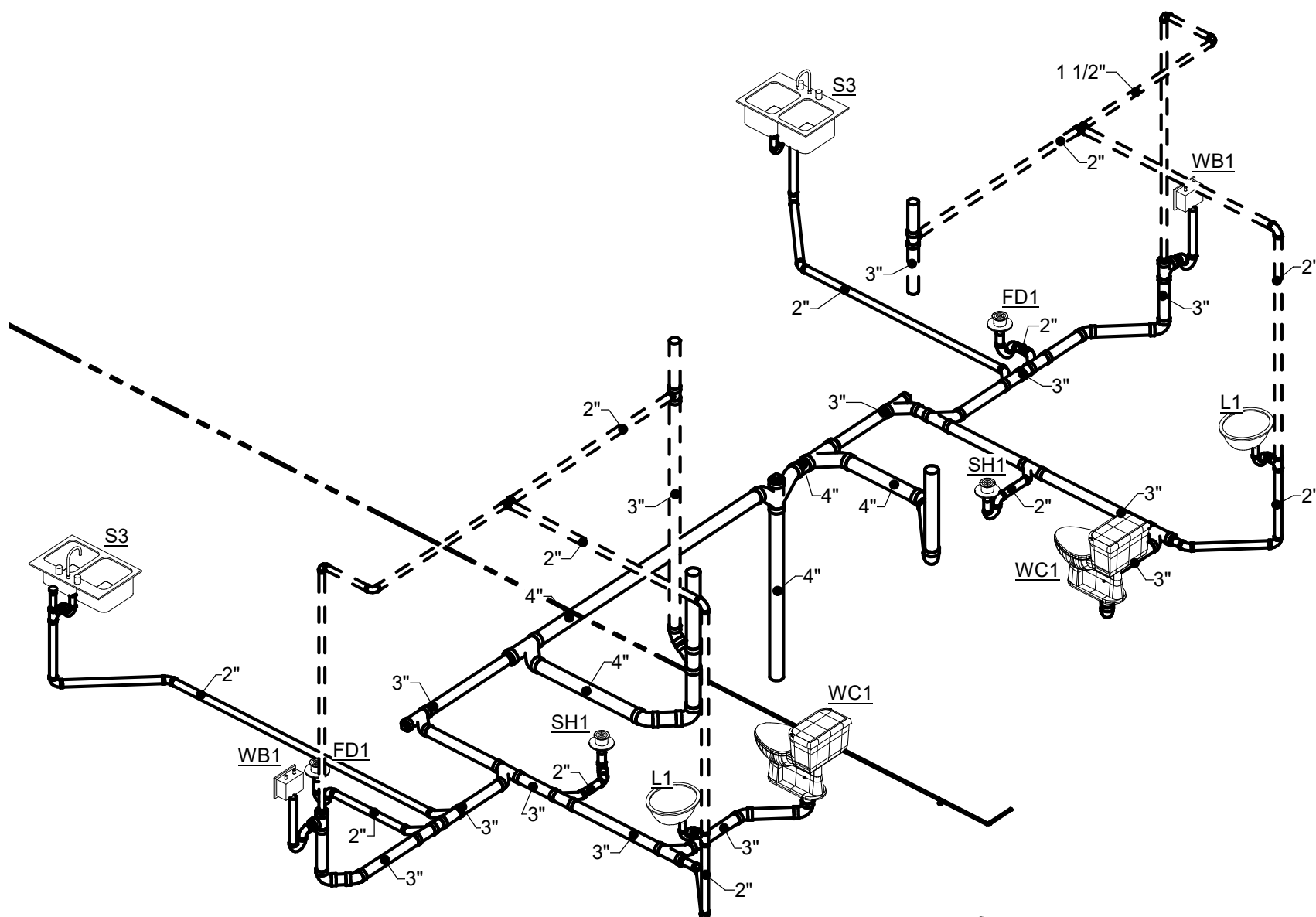
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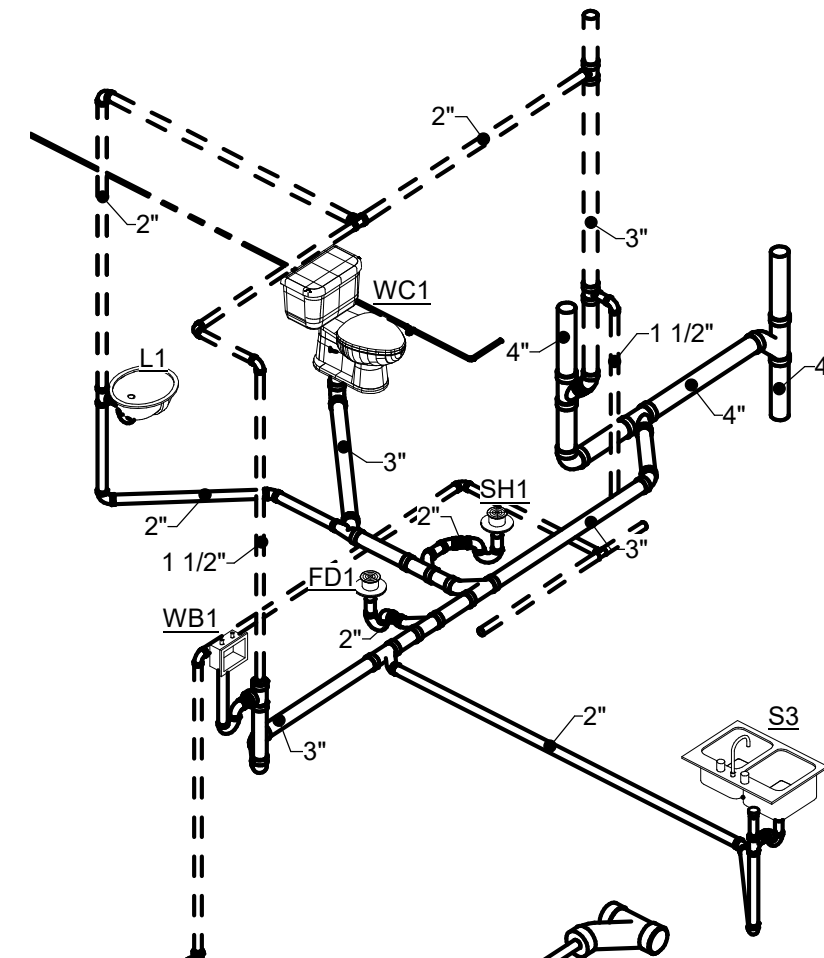
4 DIAGRAM - STACK H



5 DIAGRAM - STACK J



6 DIAGRAM - STACK K



7 DIAGRAM - STACK L

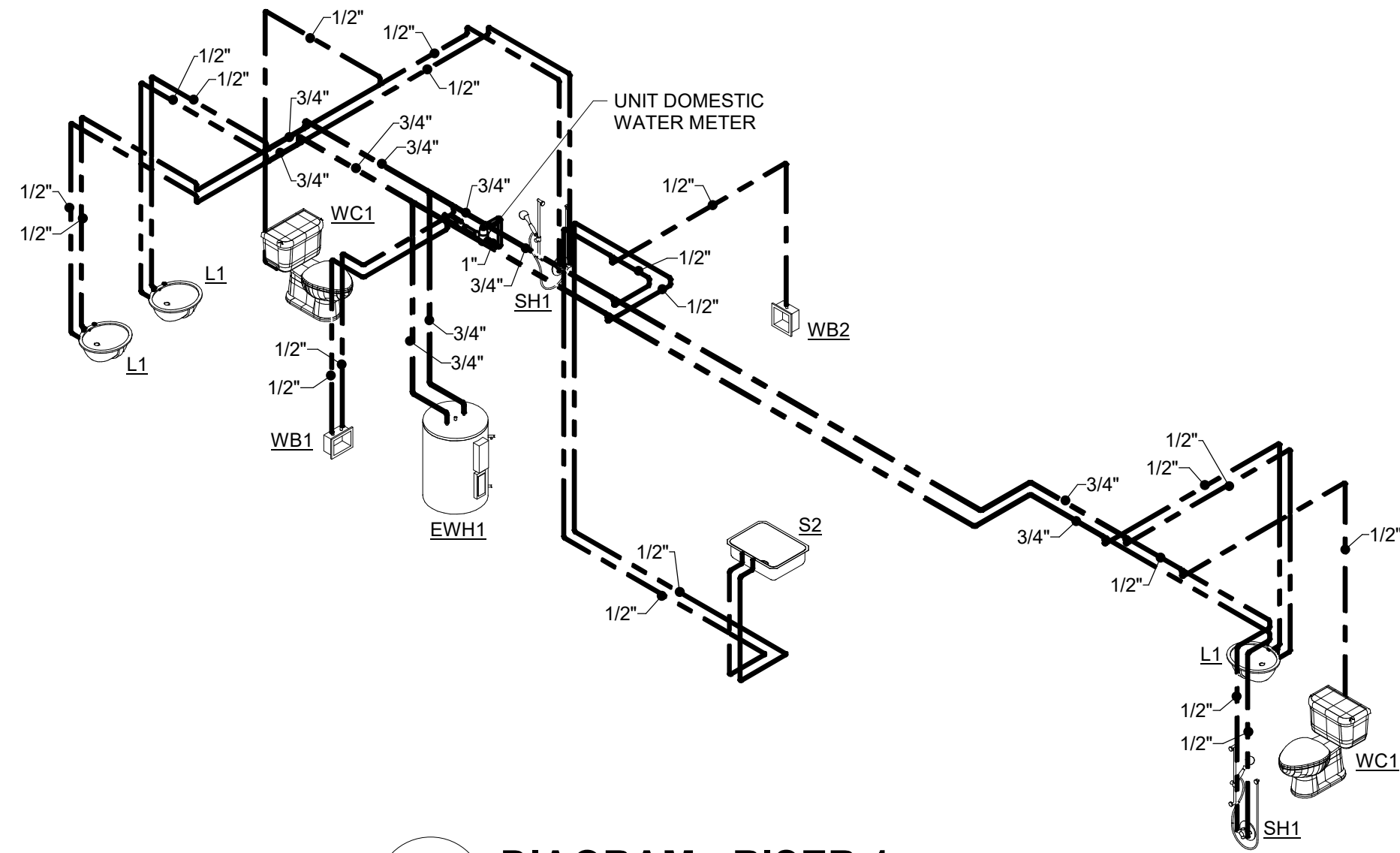
#	DATE	CHANGE DESCRIPTION

COBBLESTONE MANOR
1050 LAMPLIGHTER DRIVE
GROVE CITY, OH 43123
FOR
CMHA

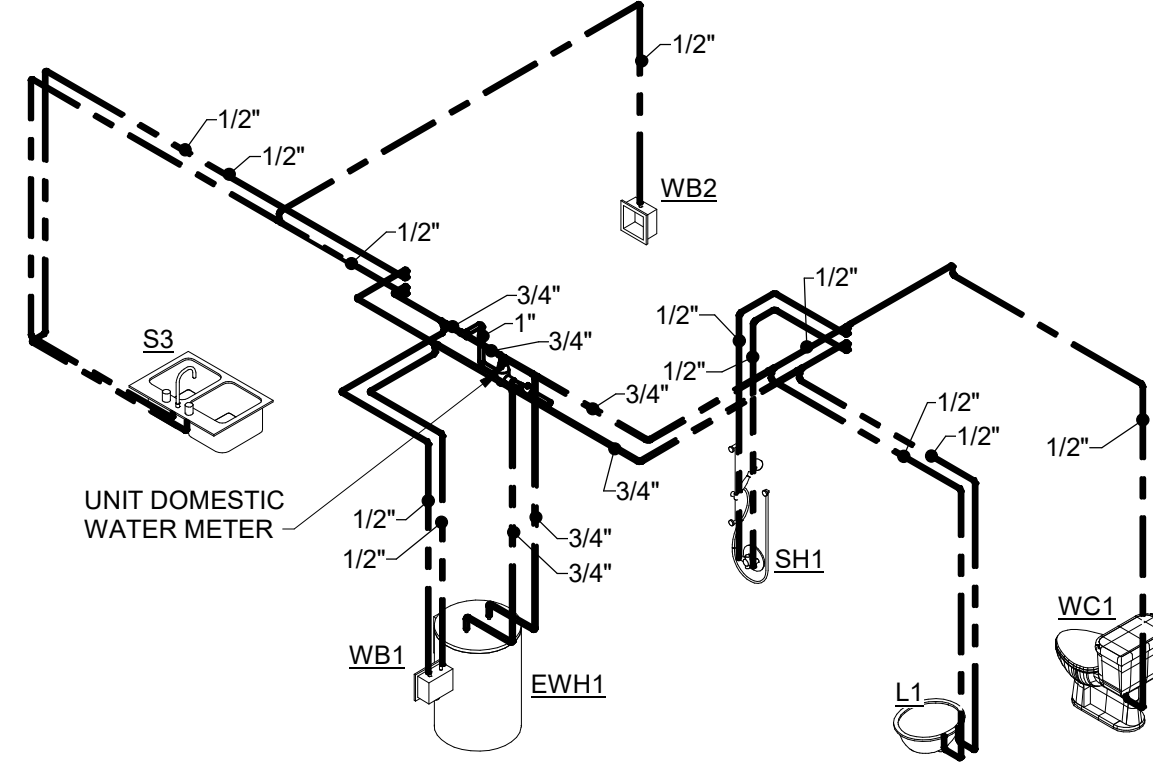
MOODY-NOLAN
300 SPRUCE STREET
SUITE 300
COLUMBUS, OHIO 43215
PHONE: (614) 461-4664
FAX: (614) 280-8881

DRAWING TITLE:
DIAGRAMS - PLUMBING

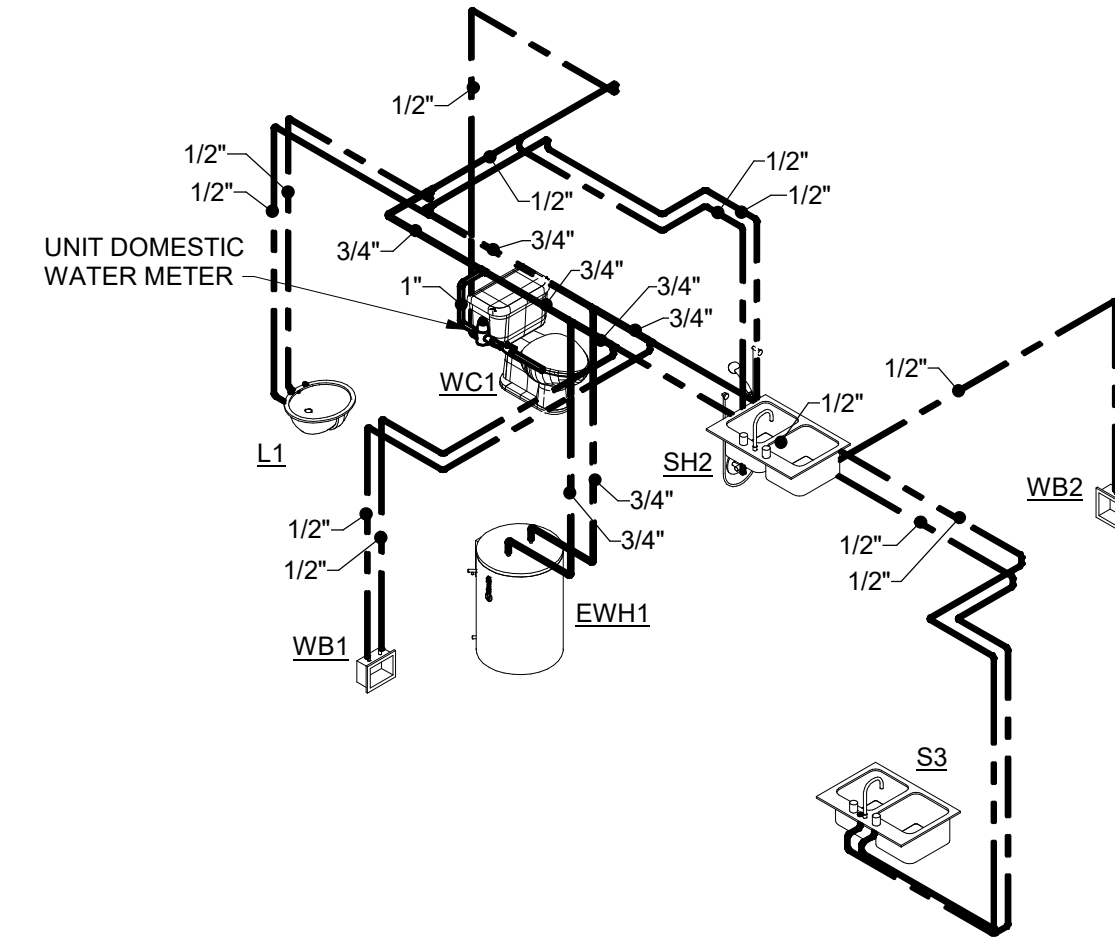
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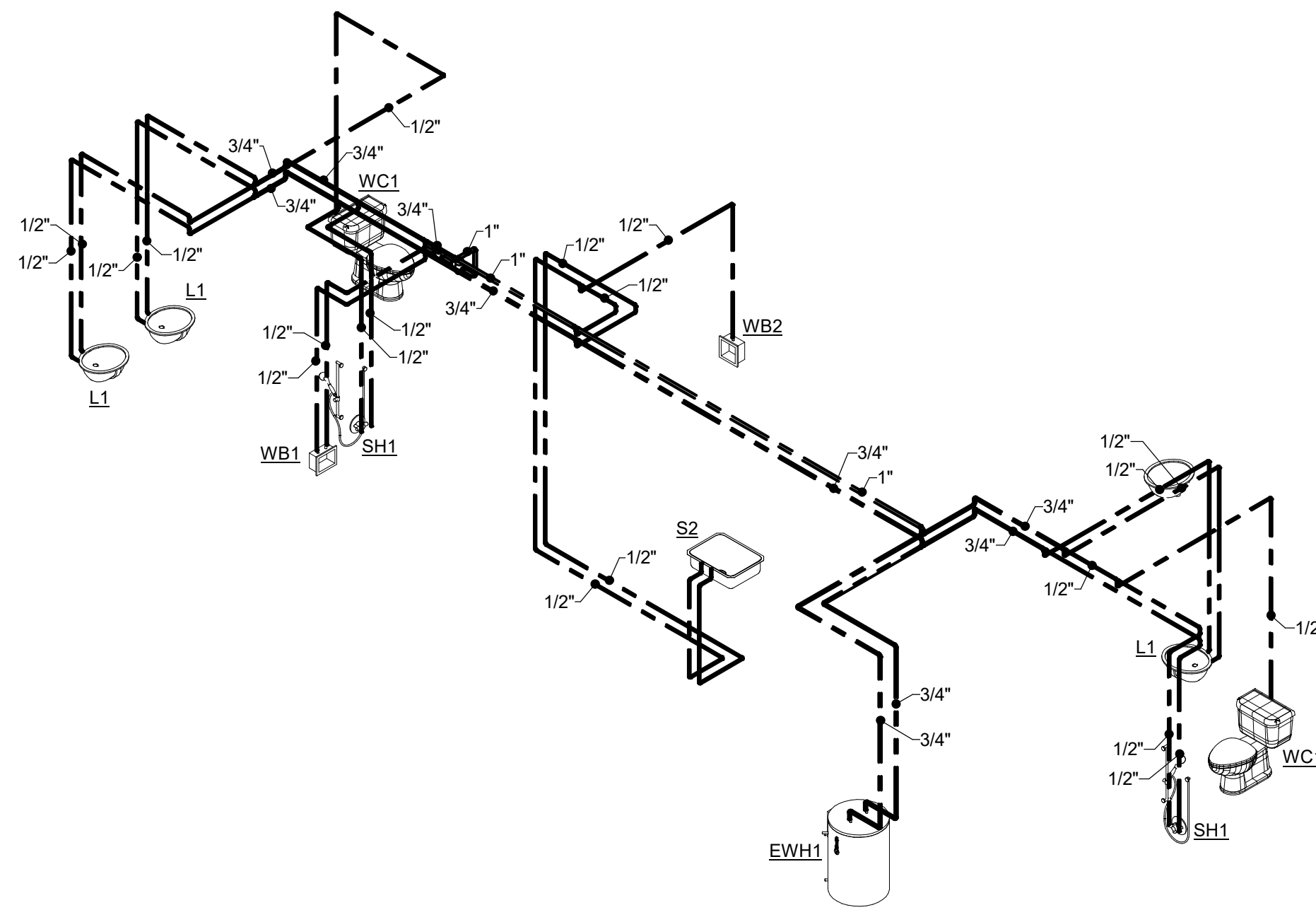
1 DIAGRAM - RISER 1



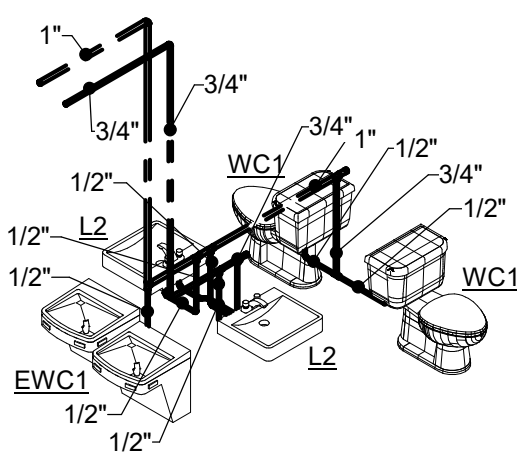
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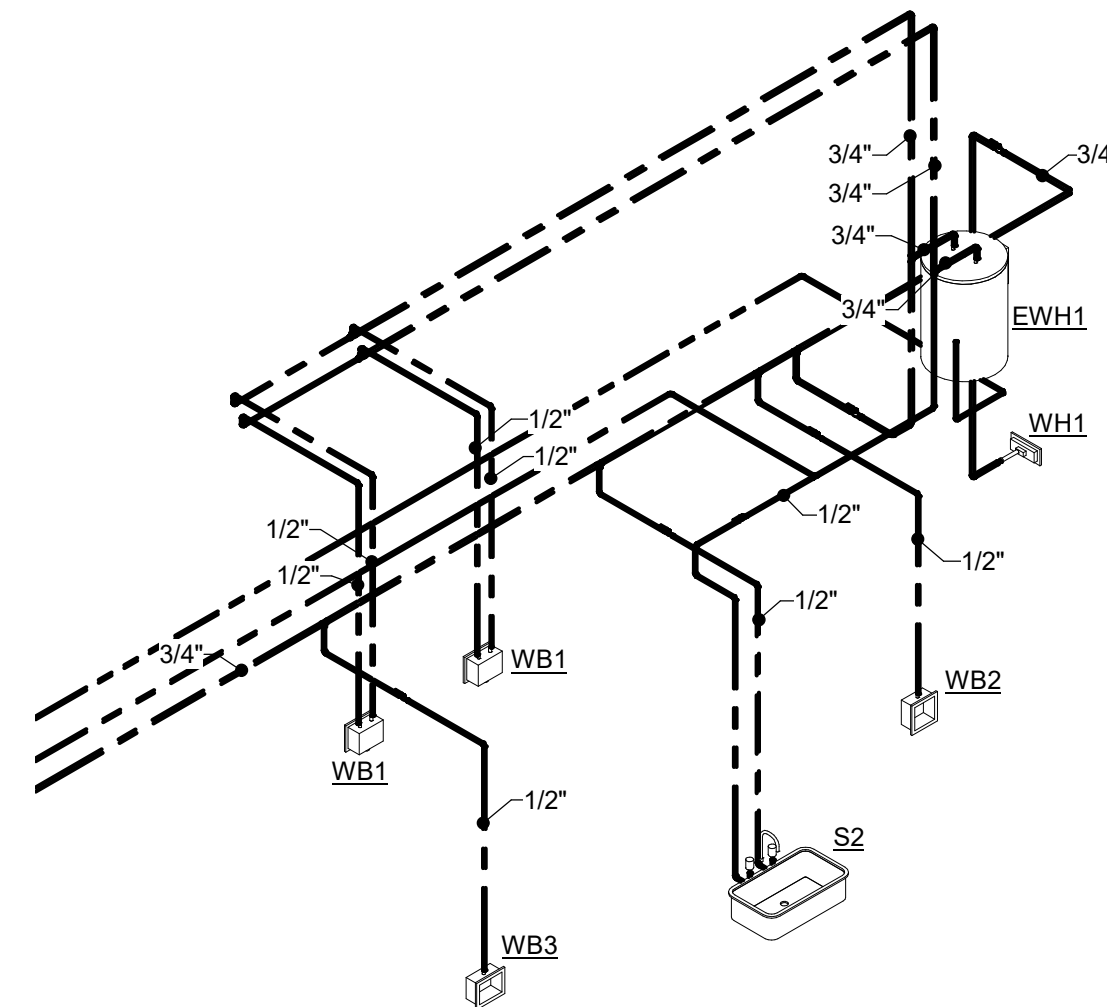
3 DIAGRAM - RISER 3



4 DIAGRAM - RISER 4



5 DIAGRAM - RISER 5



6 DIAGRAM - RISER 6

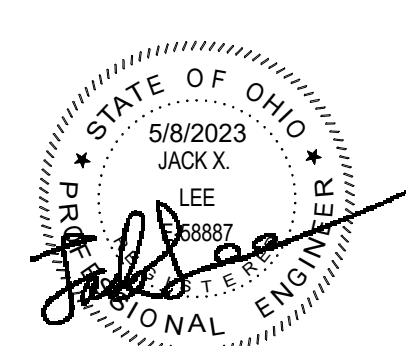
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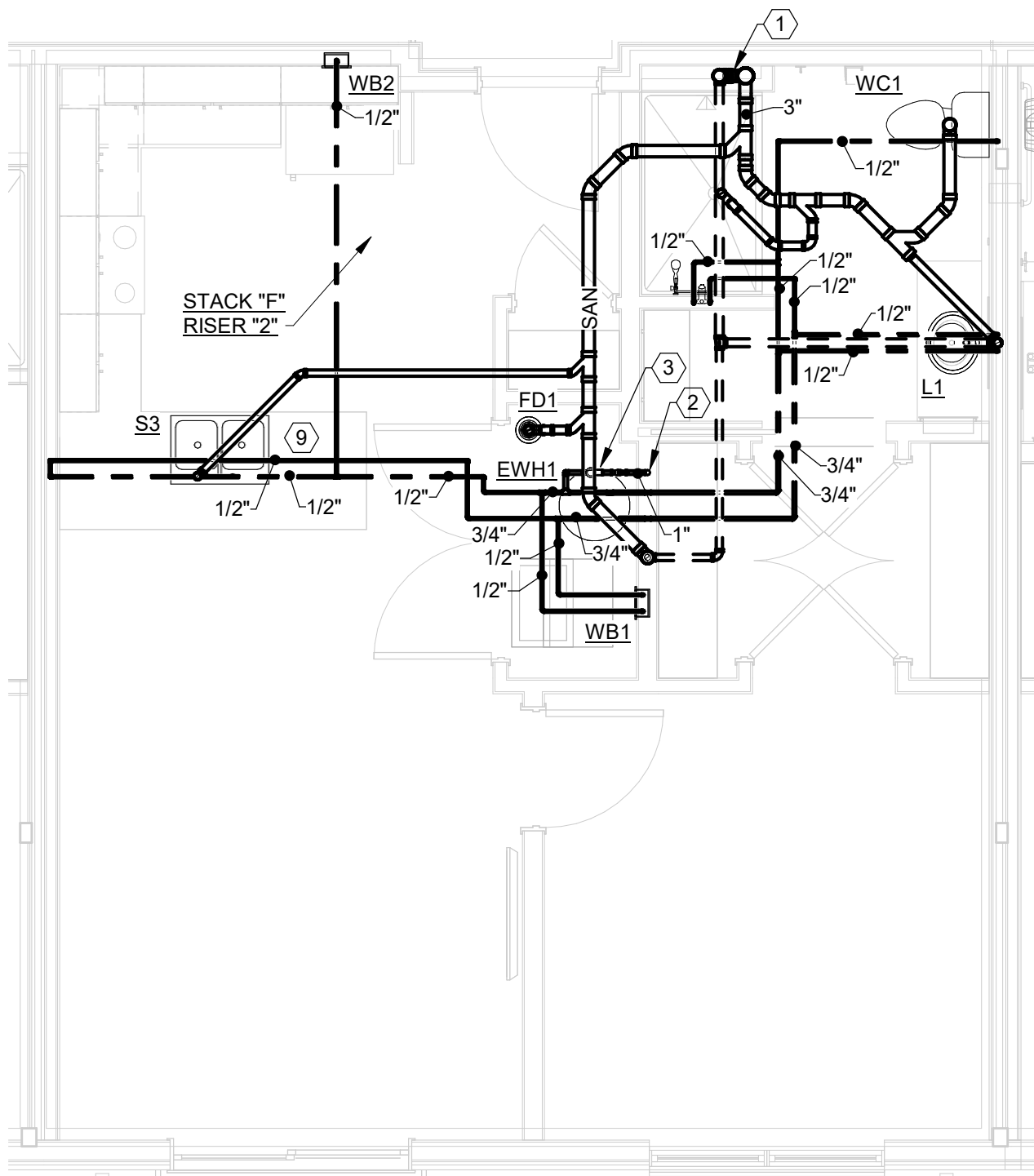


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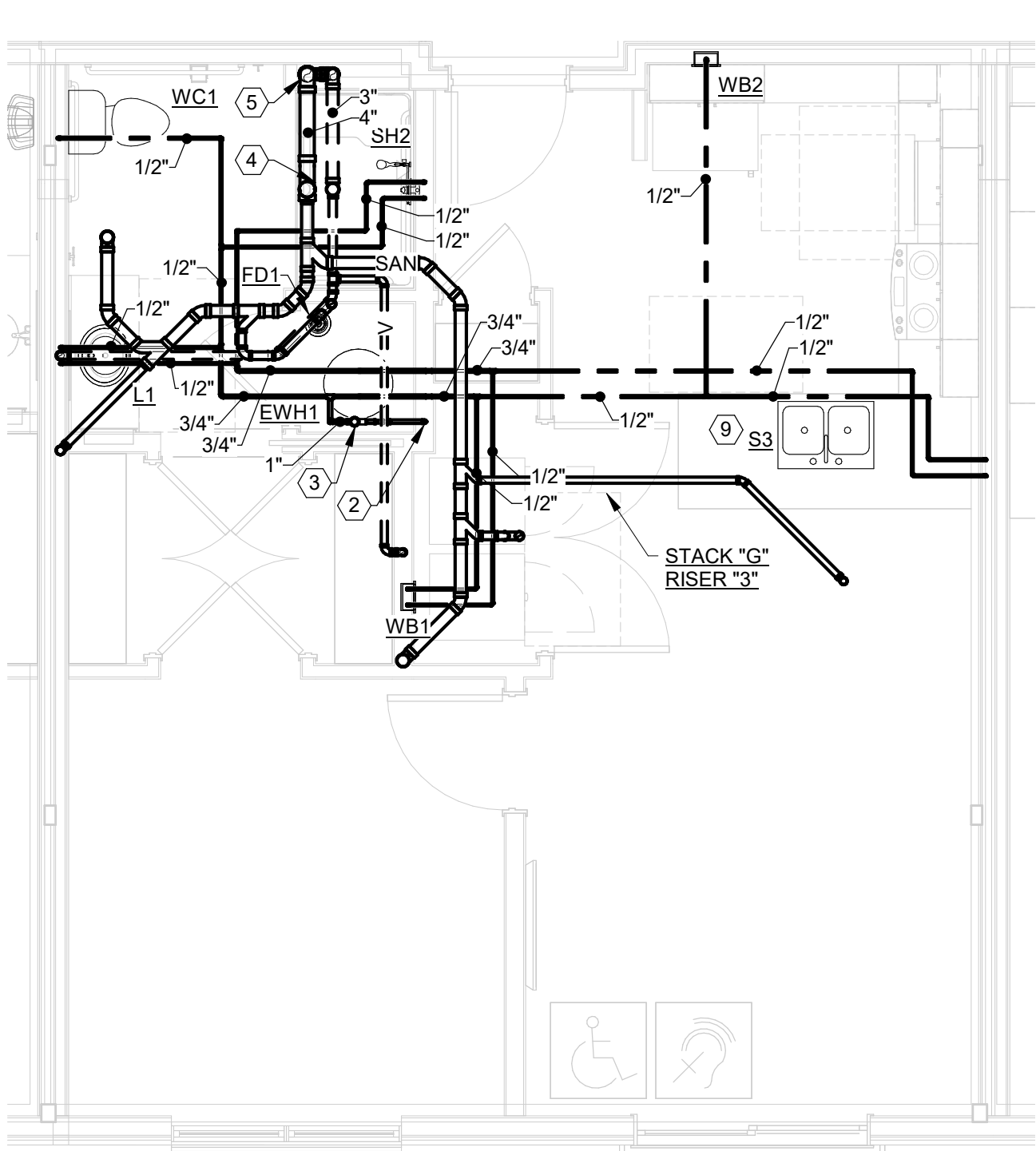


300 SPRUCE STREET
SUITE 300
COLUMBUS, OHIO 43215
PHONE: (614) 461-4664
FAX: (614) 280-8881

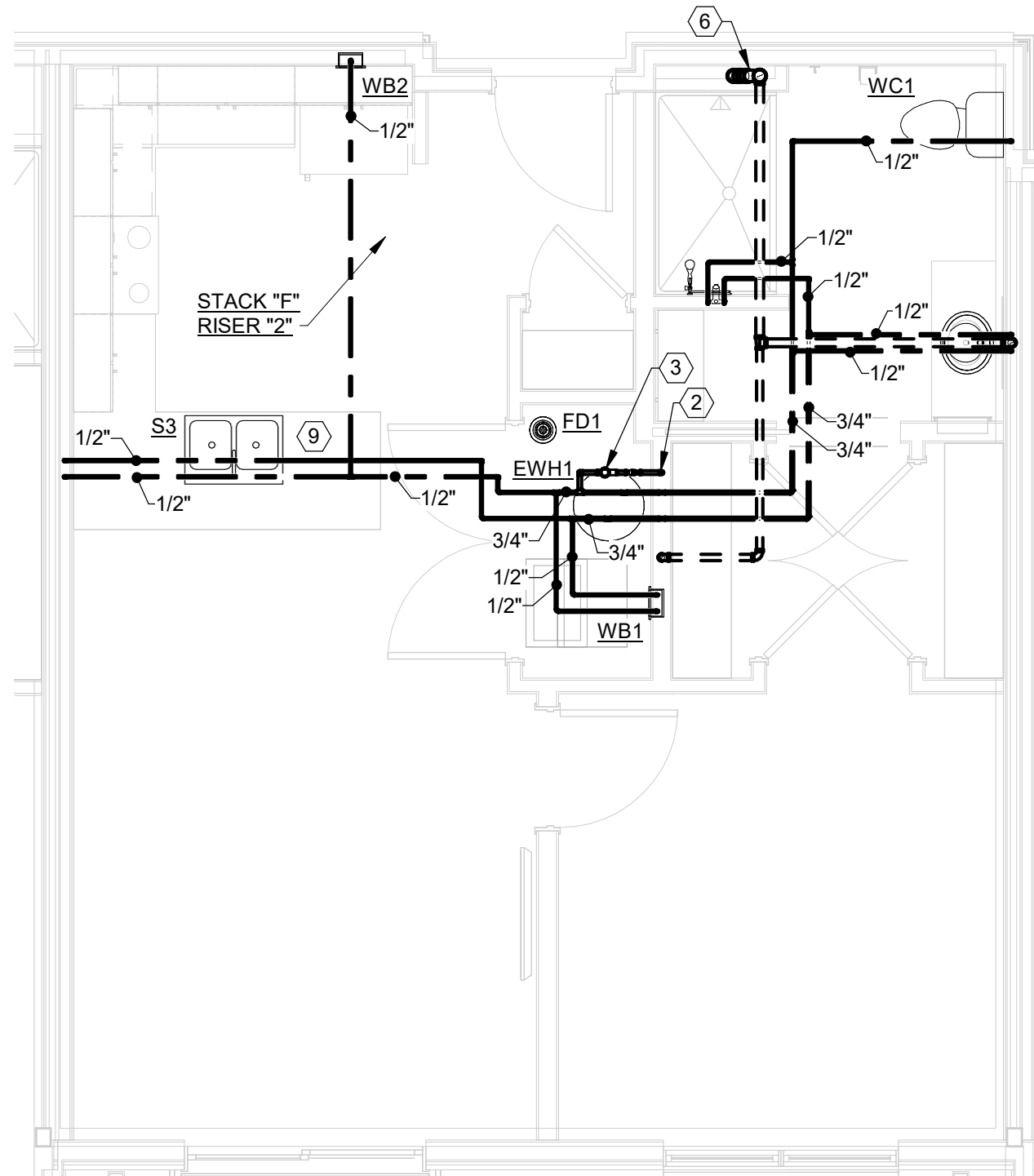
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	06/08/2023
	DRAWN BY: Author CHECKED BY: Checker
	#22172.01
P304	
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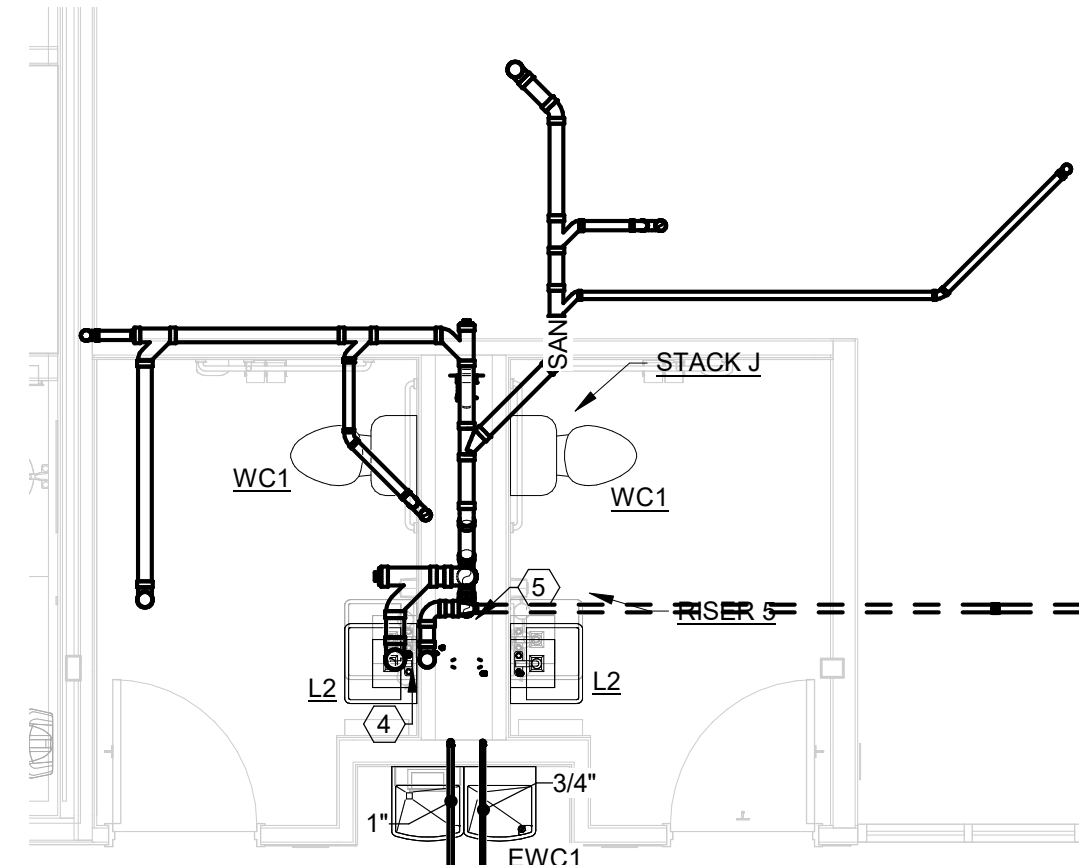
1 PLAN ENLARGED TYPICAL FLOOR PLAN - UNIT 1B - PLUMBING
1/4" = 1'-0"



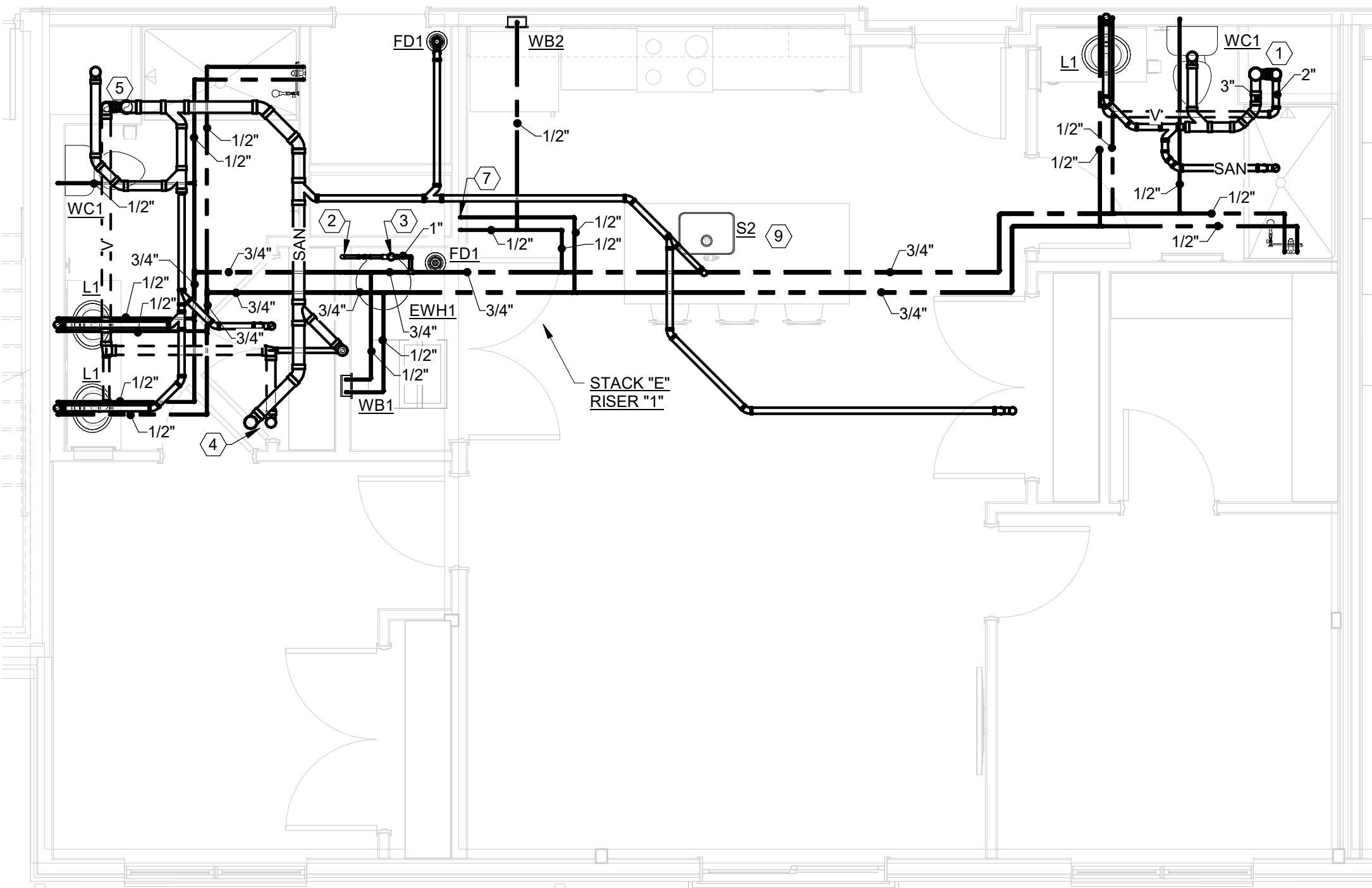
2 PLAN ENLARGED TYPICAL FLOOR PLAN - UNIT 1A-AS - PLUMBING
1/4" = 1'-0"



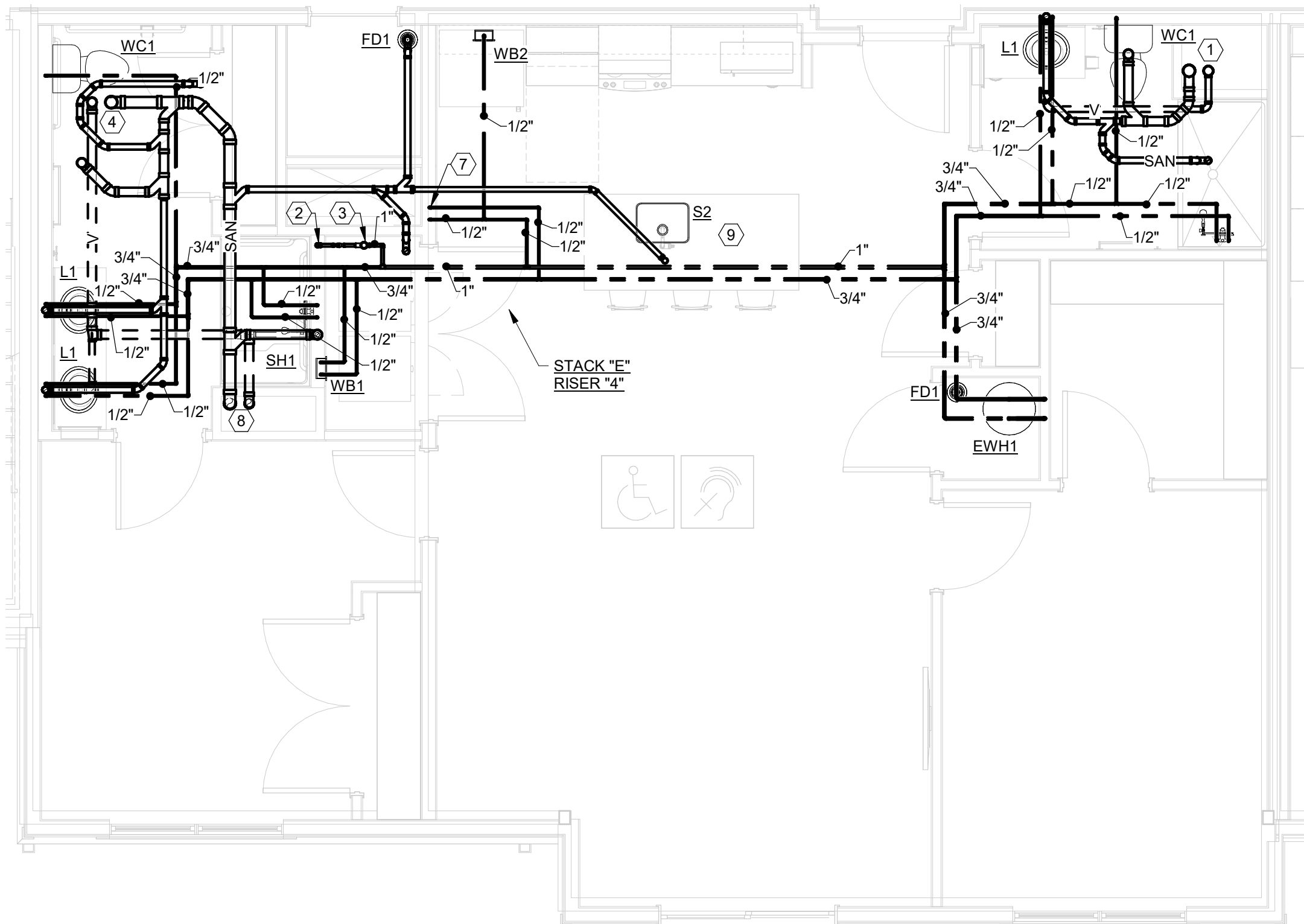
3 PLAN ENLARGED THIRD FLOOR PLAN - UNIT 1B - PLUMBING
1/4" = 1'-0"



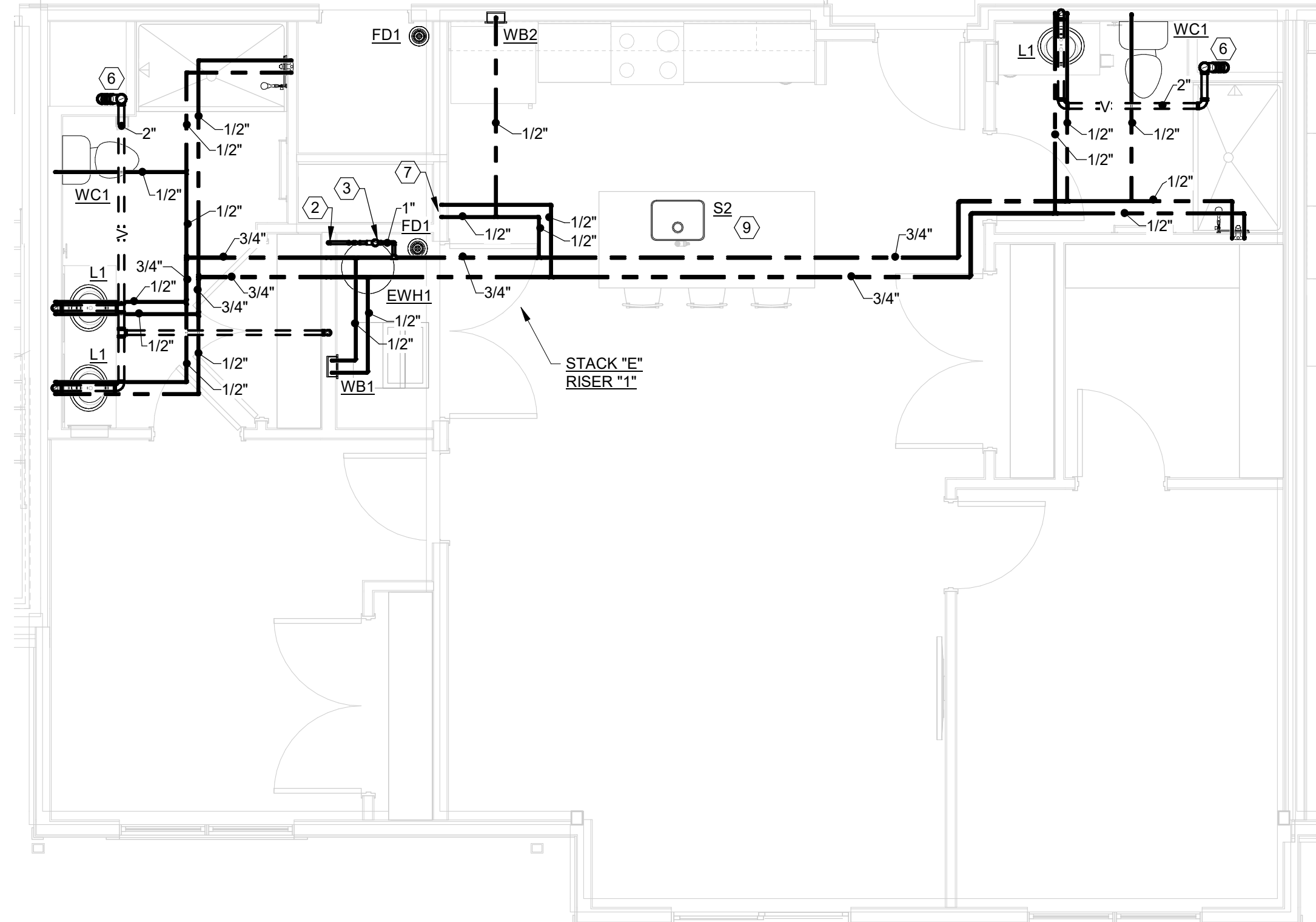
4 PLAN ENLARGED FIRST FLOOR PLAN - PLUMBING
1/4" = 1'-0"



5 PLAN ENLARGED TYPICAL FLOOR PLAN - UNIT 2B - PLUMBING
1/4" = 1'-0"



6 PLAN ENLARGED SECOND FLOOR PLAN - UNIT 2B-AS - PLUMBING
1/4" = 1'-0"



7 PLAN ENLARGED THIRD FLOOR PLAN - UNIT 2B - PLUMBING
1/4" = 1'-0"

GENERAL NOTES

A .

KEYNOTES

1. 4" SAN AND 3" V FROM ABOVE TO BELOW.
2. DOMESTIC WATER RISER.
3. UNIT DOMESTIC WATER METER.
4. 4" SAN AND 3" V FROM FLOOR ABOVE.
5. 4" SAN TO BELOW SLAB WITH CLEANOUT AT BASE.
6. 4" SAN AND 3" V TO FLOOR BELOW. 3" V TO 3" VTR.
7. 1/2" CW AND 1/2" HW TO BELOW.
8. 4" SAN AND 3" V TO FLOOR BELOW.
9. EXTEND 1/2" HW FROM SINK SUPPLY TO DISHWASHER. EXTEND DRAIN LINE FROM DISHWASHER TO CONNECTION ON GARBAGE DISPOSAL. MAKE FINAL CONNECTIONS.

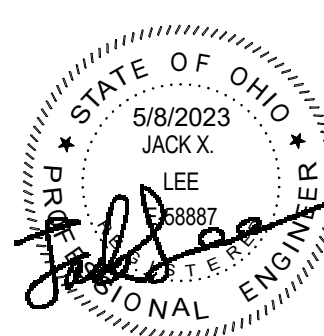
#	DATE	CHANGE DESCRIPTION

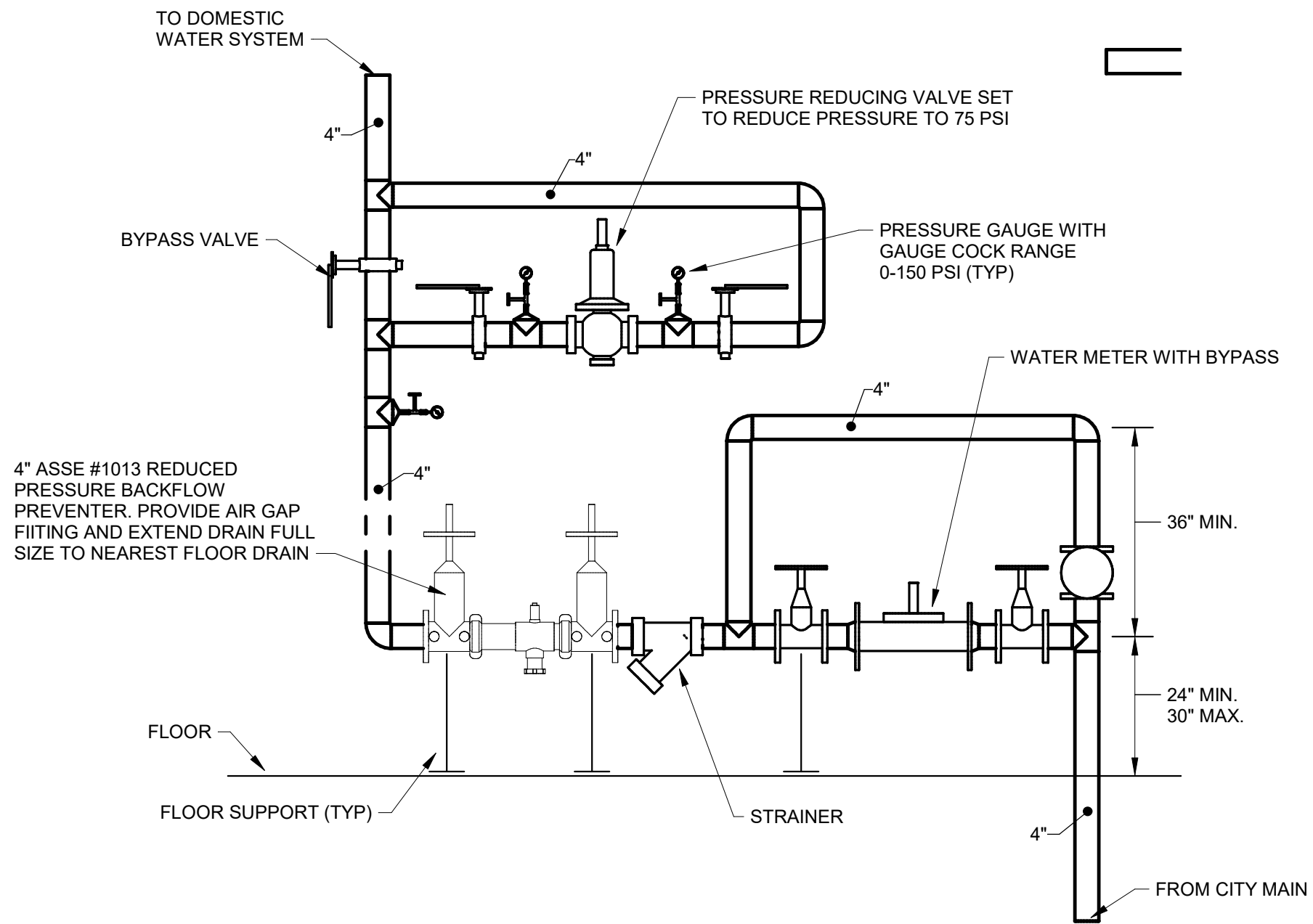
COBBLESTONE MANOR
1050 LAMPLIGHTER DRIVE
GROVE CITY, OH 43123
FOR
CMHA

MOODY•NOLAN 300 SPRUCE STREET
SUITE 300
COLUMBUS, OHIO 43215
PHONE: (614) 461-4664
FAX: (614) 280-8881

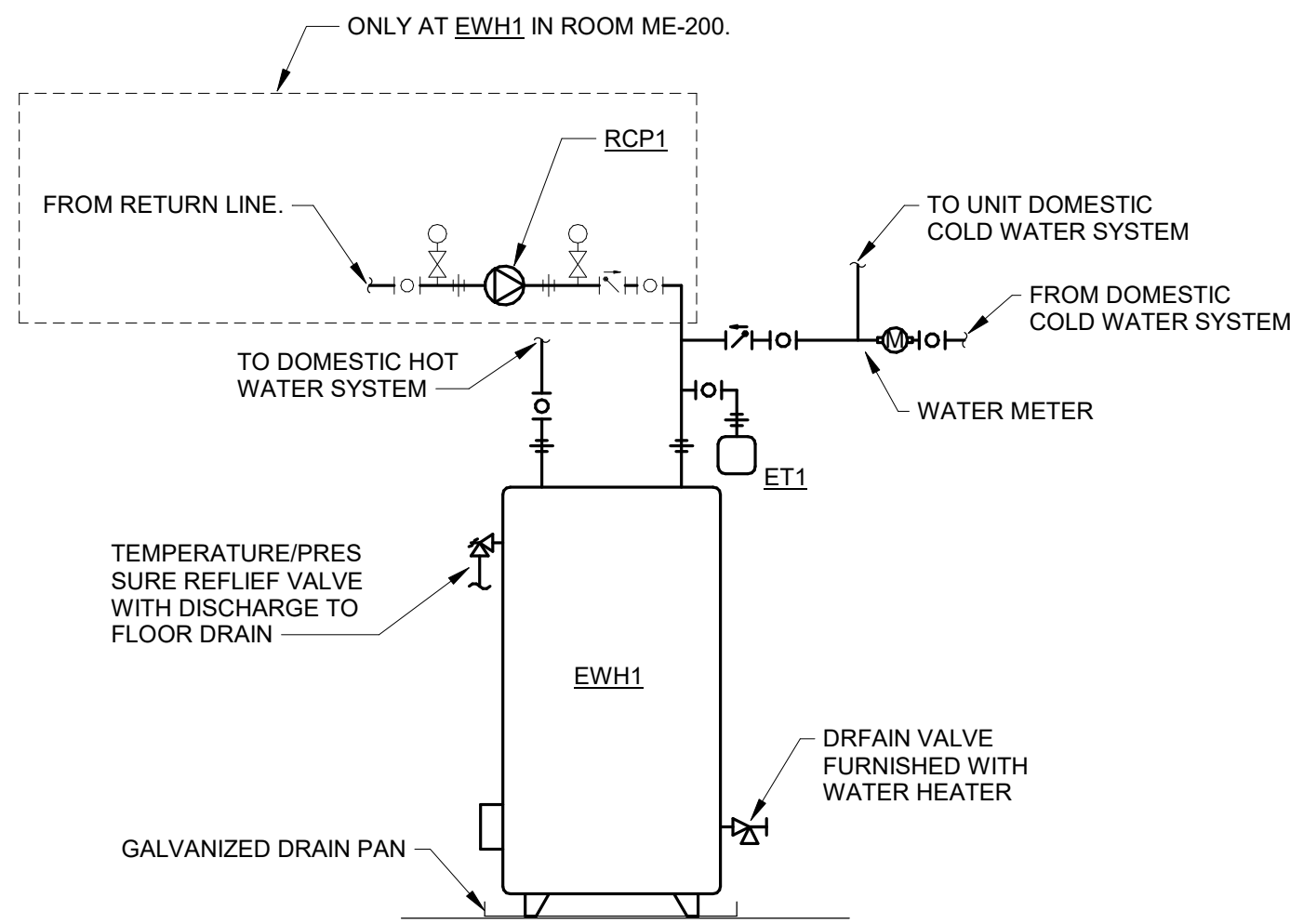
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ENLARGED PLANS - PLUMBING

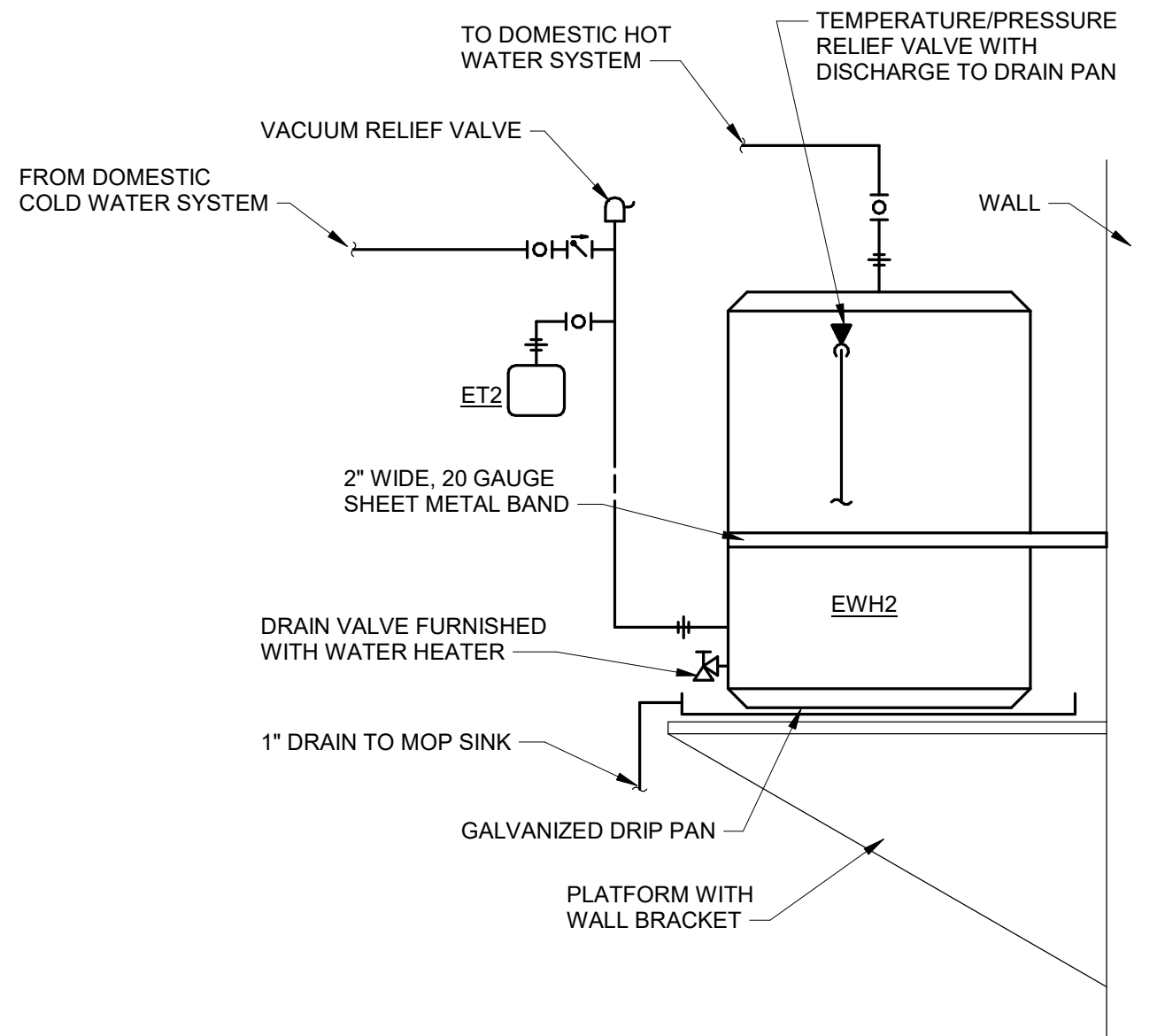
	06/08/2023	
	DRAWN BY: EL	CHECKED BY: EL
	#22172.01	
	P401	
	PERMIT & BID SET	



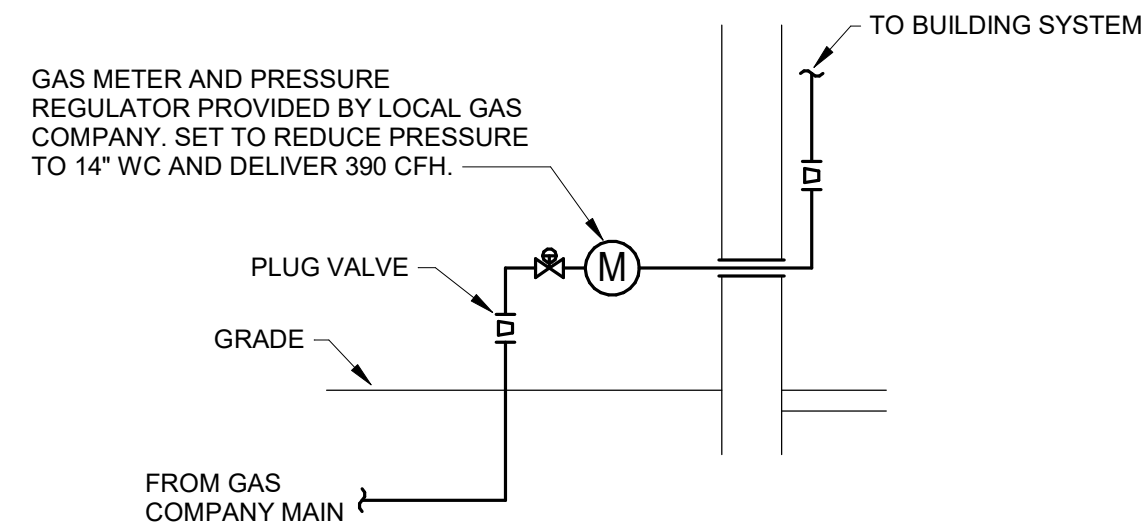
1 **DETAIL** DETAIL - WATER SERVICE ENTRANCE
1/2" = 1'-0"



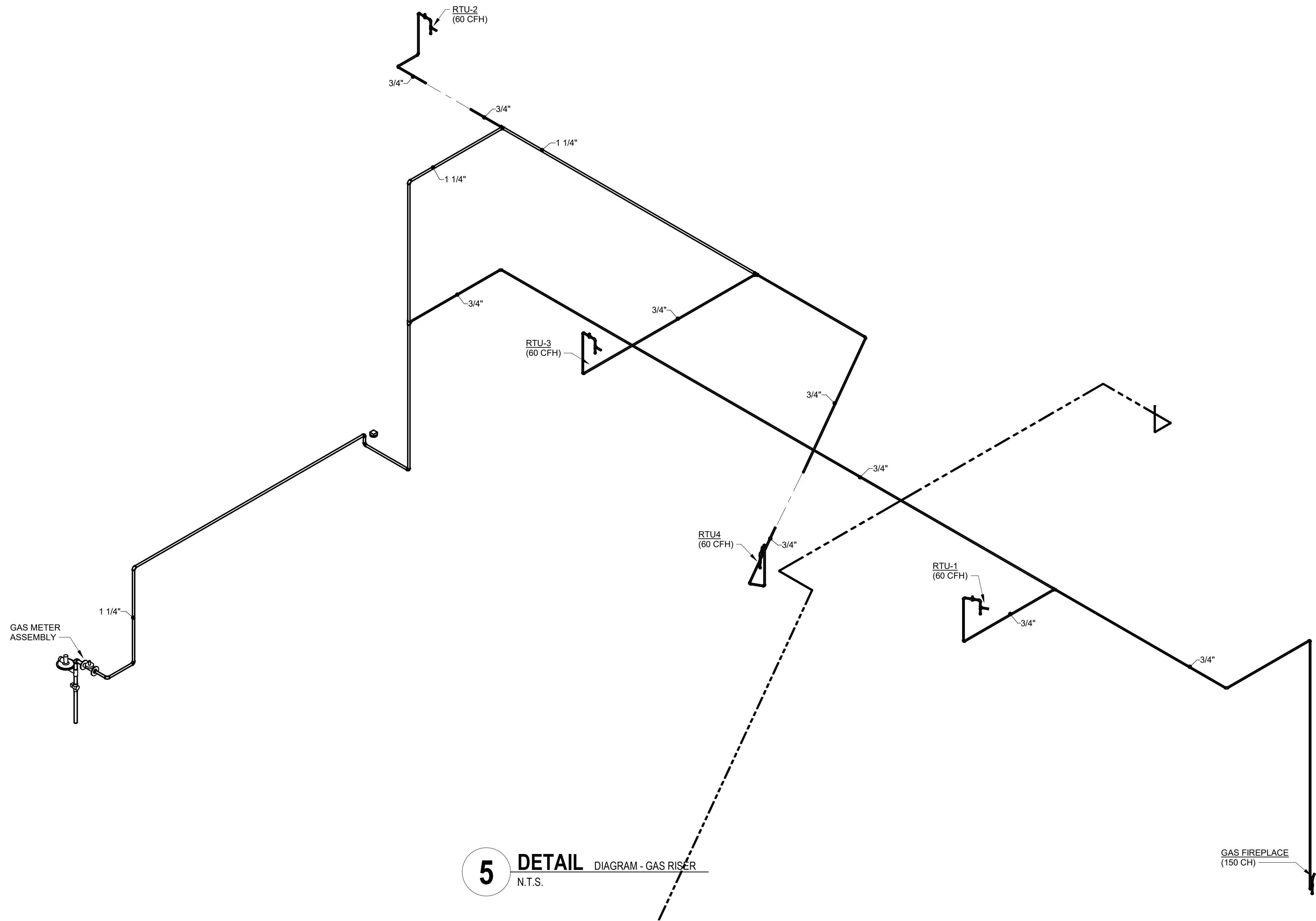
2 **DETAIL** DETAIL - ELECTRIC WATER HEATER
N.T.S.



3 **DETAIL** DETAIL - ELECTRIC WATER HEATER (PLATFORM)
N.T.S.



4 **DETAIL** DETAIL - GAS METER ASSEMBLY
N.T.S.



5 **DETAIL** DIAGRAM - GAS RISER
N.T.S.

#	DATE	CHANGE DESCRIPTION

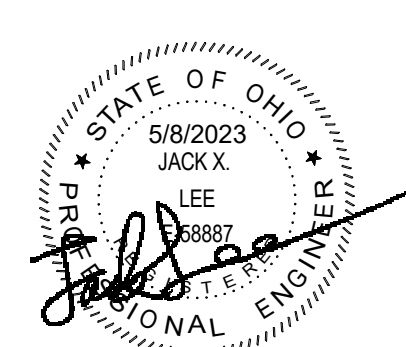


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1050 LAMPLIGHTER DRIVE
GROVE CITY, OH 43123
FOR
CMHA



300 SPRUCE STREET
SUITE 300
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PHONE: (614) 461-4664
FAX: (614) 280-8881

DRAWING TITLE:
DETAIL - PLUMBING



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RAINFALL PIPE SIZE						
PIPE SIZING BASED ON LOCAL RAINFALL RATE OF 3 IN/HR (100 YEAR STORM)						
PIPE SIZE (INCHES)	VERTICAL DRAIN		1/8 IN/FT SLOPE		1/4 IN/FT SLOPE	
	SQFT	GPM	SQFT	GPM	SQFT	GPM
3	2,788	87	1,763	55	2,532	79
4	5,769	180	3,686	115	5,224	163
6	17,244	538	11,026	344	15,609	487
8	35,801	1,117	22,885	714	32,372	1,010
10	65,705	2,050	42,019	1,311	59,455	1,855
12	104,872	3,272	67,083	2,093	94,872	2,960
15	177,660	5,543	113,654	3,546	160,769	5,016

ELECTRIC DOMESTIC WATER HEATER SCHEDULE									
TAG	ELECTRIC				GALLONS OF STORAGE	RECOVERY AT 100°F	MANUFACTURER	MODEL #	NOTES
	VOLT	PHASE	FLA	KW					
EW1	208	1	28.8	6	30	24	A.O. SMITH	DEL-30	SET TANK TEMPERATURE TO 120°F
EW2	208	1	12	2.5	10	10	A.O. SMITH	DEL-10	SET TANK TEMPERATURE TO 120°F

PUMP SCHEDULE								
TAG	ELECTRIC			GPM	FEET OF HEAD	MANUFACTURER	MODEL #	NOTES
	VOLT	PHASE	HP					
EV1	120	1	3/4	100	20	WEIL	2445	OIL DETECTION SYSTEM
RCP1	120	1	1/12	10	10	GRUNDFOS	UP15-42FR	HOT WATER RECIRCULATION PUMP



COBBLESTONE MANOR
 1050 LAMPLIGHTER DRIVE
 GROVE CITY, OH 43123
 FOR
CMHA

DRAWING TITLE:

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1. 4" PVC VENT RISER TO FLOOR ABOVE

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	<div style="font-size: 48pt; font-weight: bold;">R100</div>	
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1 PLAN FIRST FLOOR PLAN - PLUMBING
1/16" = 1'-0"

GENERAL NOTES

- A. RADON SYSTEM TO BE INSTALLED BY RADON CONTRACTOR.
B. COORDINATE ROUTING WITH ALL TRADES.


KEYNOTES

1. 4" PVC VENT RISER FROM BELOW TO FLOOR ABOVE.

#	DATE	CHANGE DESCRIPTION



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1050 LAMPLIGHTER DRIVE
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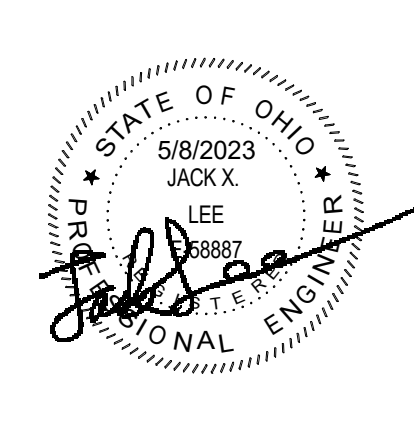


300 SPRUCE STREET
SUITE 300
COLUMBUS, OHIO 43215

PHONE: (614) 461-4664
FAX: (614) 280-8881

DRAWING TITLE:

FIRST FLOOR PLAN - RADON



DRAWN BY: Author
5/8/2023
JACK X. NEE
P.E.
10887

06/08/2023

CHECKED BY: Checker

#22172.01

R101

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CONSULTANTS

Mechanical | Electrical | Plumbing | Fire Protection | Utilities
1405 Dublin Road
Columbus, Ohio 43215

Tel: (614) 466-4773
Fax: (614) 466-4062





1 PLAN SECOND FLOOR PLAN - PLUMBING
1/16" = 1'-0"

GENERAL NOTES

- A. RADON SYSTEM TO BE INSTALLED BY RADON CONTRACTOR.
- B. COORDINATE ROUTING WITH ALL TRADES.


KEYNOTES

- 1. 4" PVC VENT RISER FROM FLOOR BELOW TO FLOOR ABOVE.

#	DATE	CHANGE DESCRIPTION



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1050 LAMPLIGHTER DRIVE
GROVE CITY, OH 43123
FOR
CMHA

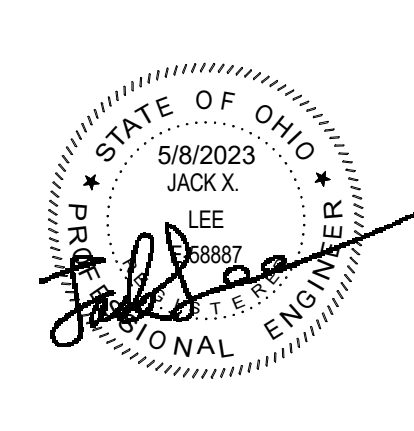


300 SPRUCE STREET
SUITE 300
COLUMBUS, OHIO 43215

PHONE: (614) 461-4664
FAX: (614) 280-8881

DRAWING TITLE:

SECOND FLOOR PLAN - RADON



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Fax: (614) 466-4082





1 **PLAN** THIRD FLOOR PLAN - PLUMBING
1/16" = 1'-0"

GENERAL NOTES

- A. RADON SYSTEM TO BE INSTALLED BY RADON CONTRACTOR.
B. COORDINATE ROUTING WITH ALL TRADES.


KEYNOTES

1. 4" PVC VENT RISER FROM FLOOR BELOW TO ABOVE.

#	DATE	CHANGE DESCRIPTION



COBBLESTONE MANOR
1050 LAMPLIGHTER DRIVE
GROVE CITY, OH 43123
FOR
CMHA

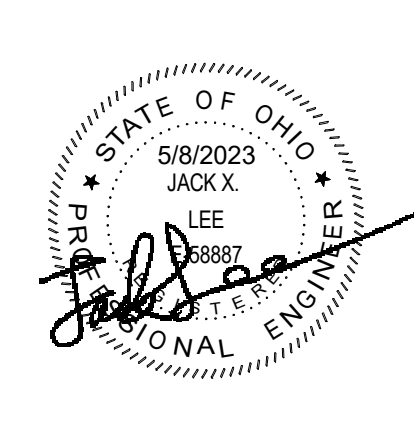


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SUITE 300
COLUMBUS, OHIO 43215


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FAX: (614) 280-8881

DRAWING TITLE:

THIRD FLOOR PLAN - RADON



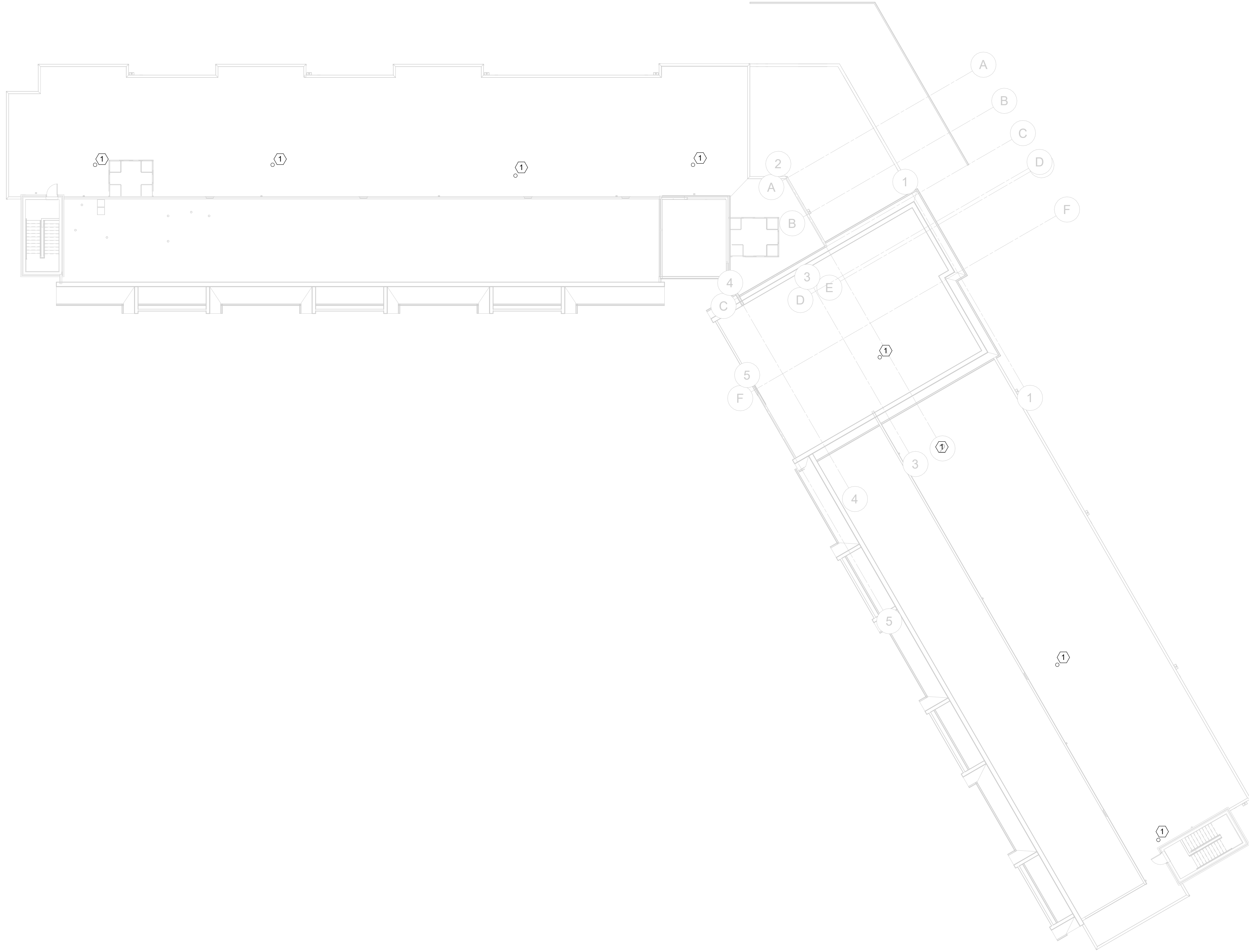
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Fax: (614) 466-4062





1 PLAN ROOF PLAN - PLUMBING
1/16" = 1'-0"

GENERAL NOTES

- A. RADON SYSTEM TO BE INSTALLED BY RADON CONTRACTOR.
- B. COORDINATE ROUTING WITH ALL TRADES.

KEYNOTES

- 1. 4" PVC VENT RISER THROUGH ROOF.

#	DATE	CHANGE DESCRIPTION



COBBLESTONE MANOR
1050 LAMPLIGHTER DRIVE
GROVE CITY, OH 43123
FOR
CMHA

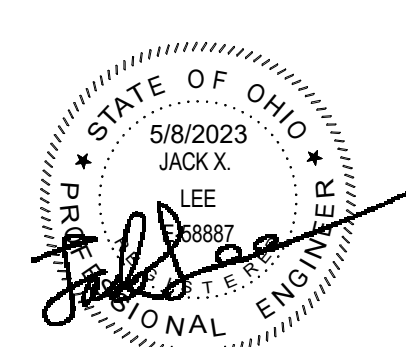


300 SPRUCE STREET
SUITE 300
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PHONE: (614) 461-4664
FAX: (614) 280-8881

DRAWING TITLE:

ROOF PLAN - RADON

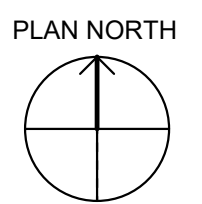


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ABBREVIATIONS	
NOTE: NOT ALL ABBREVIATIONS MAY BE USED.	
(A)	EXISTING TO BE ABANDONED
(D)	EXISTING TO BE DEMOLISHED
(E)	EXISTING TO REMAIN
(F)	FUTURE
(R)	EXISTING TO BE RELOCATED
AAV	AUTOMATIC AIR VENT
AFF	ABOVE FINISHED FLOOR
AMB	AMBIENT
APD	AIR PRESSURE DROP
A/E	ARCHITECT/ENGINEER
BAS	BUILDING AUTOMATION SYSTEM
B.E.	BOTTOM ELEVATION
BFP	BACKFLOW PREVENTOR
BLDG	BUILDING
BOB	BOTTOM OF BEAM
BOD	BOTTOM OF DUCT
BOP	BOTTOM OF PIPE
BOS	BOTTOM OF STRUCTURE
CL	CENTER LINE
CO	CLEAN OUT
DB	DRY BULB
DIA	DIAMETER
DN	DOWN
EA	EXHAUST AIR
EAT	ENTERING AIR TEMPERATURE
EC	ELECTRICAL CONTRACTOR
EFF	EFFICIENCY
EG	ETHYLENE GLYCOL
ESP	EXTERNAL STATIC PRESSURE
EWI	ENTERING WATER TEMPERATURE
EXH	EXHAUST
FPI	FINS PER INCH
GTC	GENERAL TRADES CONTRACTOR
ID	INNER DIAMETER
LAT	LEAVING AIR TEMPERATURE
LWT	LEAVING WATER TEMPERATURE
MFR	MANUFACTURER
N/A	NOT APPLICABLE
NC	NORMALLY CLOSED
NO	NORMALLY OPEN
NTS	NOT TO SCALE
OA	OUTSIDE AIR
OD	OUTSIDE DIAMETER
PD	PRESSURE DROP
PRV	PRESSURE REDUCING VALVE
RA	RETURN AIR
RBJ	ROUTE BETWEEN TRUSS JOIST
REL	RELIEF AIR
RTW	ROUTE THRU TRUSS WEB
SA	SUPPLY AIR
SCC	SENSIBLE COOLING CAPACITY
SP	STATIC PRESSURE
TCC	TOTAL COOLING CAPACITY
TCP	TEMPERATURE CONTROL PANEL
TSP	TOTAL STATIC PRESSURE
TYP	TYPICAL
UNO	UNLESS NOTED OTHERWISE
VFD	VARIABLE FREQUENCY DRIVE
WB	WET BULB
WG	WATER GAUGE
WPD	WATER PRESSURE DROP

SYMBOLS LIST	
NOTE: NOT ALL SYMBOLS MAY BE USED.	
LINE STYLES	DUCTWORK
NEW WORK (VISIBLE)	SUPPLY/O.A. DUCT RISE (SINGLE LINE)
NEW WORK (HIDDEN)	SUPPLY/O.A. DUCT RISE (DOUBLE LINE)
EXISTING WORK (VISIBLE)	SUPPLY/O.A. DUCT DROP (SINGLE LINE)
EXISTING WORK (HIDDEN)	SUPPLY/O.A. DUCT DROP (DOUBLE LINE)
EXISTING TO BE DEMOLISHED	
FUTURE	
PIPING	
HEATING WATER SUPPLY	HWS
HEATING WATER RETURN	HWR
CHILLED WATER SUPPLY	CWS
CHILLED WATER RETURN	CWR
CONDENSER WATER SUPPLY	CS
CONDENSER WATER RETURN	CR
COOLING COIL CONDENSATE	C
REFRIGERANT SUCTION	RS
REFRIGERANT LIQUID	RL
HIGH PRESSURE STEAM	HPS(#)
HIGH PRESSURE STEAM CONDENSATE	HPC
LOW PRESSURE STEAM	LPS(#)
LOW PRESSURE STEAM CONDENSATE	LPC
PUMPED STEAM CONDENSATE	PSC
PIPING (FITTINGS, VALVES, AND MISCELLANEOUS)	
DROP	
RISE	
TEE	
CAP	
REDUCER	
FLOW ARROW	
PUMP	
2-WAY CONTROL VALVE	
3-WAY CONTROL VALVE	
BUTTERFLY VALVE	
BALL VALVE	
CHECK VALVE	
COMBINATION BALANCE/SHUT-OFF VALVE	
TRIPLE DUTY VALVE	
GATE VALVE	
PLUG VALVE	
GLOBE VALVE	
PRESSURE RELIEF VALVE	
PRESSURE REDUCING VALVE	
STRAINER	
DRAIN VALVE WITH HOSE END ADAPTER	
UNION	
AUTOMATIC AIR VENT	
MANUAL AIR VENT	
THERMOMETER	
PRESSURE GAUGE (WITH STOPCOCK)	
PRESSURE/TEMPERATURE TEST PLUG	
FLOW SENSOR	
PRESSURE SENSOR	
TEMPERATURE SENSOR	
STEAM TRAP	
METER	
FLEXIBLE CONNECTION	
HEAT TRACED PIPE	
PIPE ANCHOR	
PIPE GUIDE	
EXPANSION JOINT	
	ACCESS DOOR
	90 DEGREE FITTING (WITH TURNING VANES)
	DIFFUSER
	SIDEWALL GRILLE/REGISTER/DIFFUSER
	GRILLE/REGISTER
	VOLUME DAMPER
	FIRE DAMPER WITH ACCESS DOOR
	SMOKE DAMPER WITH ACCESS DOOR
	COMB. FIRE/SMOKE DAMPER WITH ACCESS DOOR
	BACKDRAFT DAMPER
	MOTORIZED DAMPER WITH ACCESS DOOR
	AIR FLOW ARROW
	THERMOSTAT (MOUNT 48" AFF TO CENTER UNO)
	HUMIDISTAT (MOUNT 48" AFF TO CENTER UNO)
	MISCELLANEOUS SENSOR
	CO SENSOR
	CO ₂ SENSOR
	CONNECT TO EXISTING
	TERMINAL BOX
	WITHOUT REHEAT WITH REHEAT

GENERAL NOTES:

- A. THESE NOTES APPLY TO ALL DIVISION 23 DRAWINGS.
- B. ALL HVAC WORK SHALL BE PERFORMED IN ACCORDANCE WITH LOCAL, STATE, AND NATIONAL CODES.
- C. CONTRACTOR SHALL PROVIDE ALL MATERIALS, LABOR, FEES, AND PERMITS FOR A COMPLETE INSTALLATION. CONTRACTOR SHALL COMPLY WITH ALL GENERAL CONDITIONS LISTED ON THE ARCHITECTURAL DRAWINGS.
- D. IN CASE OF DIFFERENCE BETWEEN BUILDING CODES, SPECIFICATIONS, INDUSTRY STANDARDS, UTILITY COMPANY REGULATIONS, FIRE INSURANCE CARRIER'S REQUIREMENTS, AND CONTRACT DOCUMENTS, THE MOST STRINGENT SHALL GOVERN. PROMPTLY NOTIFY THE ENGINEER IN WRITING OF ANY SUCH DIFFERENCE.
- E. CONTRACTOR SHALL BE RESPONSIBLE FOR THE COMPLETE FUNCTIONALITY OF THE HVAC SYSTEM INCLUDING ELECTRICAL AND CONTROL ITEMS ASSOCIATED WITH THE MECHANICAL EQUIPMENT.
- F. THE DRAWINGS ARE DIAGRAMMATIC AND SHALL NOT BE SCALED TO DETERMINE EXACT LOCATION OF MECHANICAL, PLUMBING, AND EQUIPMENT. DRAWINGS ARE BASED ON "AS-BUILT" DRAWINGS AND LIMITED FIELD OBSERVATIONS. FOR PURPOSES OF CLEARNESS AND LEGIBILITY, SIZE AND LOCATION OF EQUIPMENT ARE SHOWN TO SCALE WHEREVER POSSIBLE.
- G. IN THE EVENT OF A CONFLICT OCCURS BETWEEN THE REQUIREMENTS OF THE CONTRACT DOCUMENTS AND THE ACTUAL FIELD CONDITIONS THE CONTRACTOR SHALL ADVISE ENGINEER IN WRITING PRIOR TO PROCEEDING WITH WORK. THE CONTRACTOR SHALL BEAR ALL COSTS ASSOCIATED WITH RESTOCKING, RELOCATING OF EQUIPMENT, SYSTEMS, PIPING, ETC. FROM FAILURE TO PROPERLY COORDINATE INSTALLATION AND NOT ADVISING IN WRITING OF CONFLICT PRIOR TO PURCHASE AND/OR INSTALLATION.
- H. CONTRACTOR IS TO MAINTAIN RECORDED "AS-BUILT" INFORMATION ON ALL EXISTING SERVICES UNCOVERED DURING CONSTRUCTION AND ALL NEW SERVICES BEING INSTALLED. "AS-BUILT" DRAWINGS SHALL BE MAINTAINED IN THE FIELD. THE "AS-BUILT'S" SHALL CAPTURE INFORMATION ON A CLEARLY MARKED IN COLOR PRINTED COPY OF CONTRACT DRAWING. RECORDED INFORMATION SHALL INCLUDE ROUTING AND INVERT ELEVATIONS. AT THE COMPLETION OF THE CONTRACT, THE CONTRACTOR SHALL PROVIDE ELECTRONIC (PDF FORMAT) OF RECORDED "AS-BUILT" INFORMATION TO THE ENGINEER.
- I. THE CONTRACTOR SHALL BE RESPONSIBLE FOR START-UP OF ALL EQUIPMENT AND SYSTEMS INSTALLED, MODIFIED, OR REVISED BY THIS WORK PER MANUFACTURER'S REQUIREMENTS AND/OR CONTRACT DOCUMENTS.
- J. AT THE END OF CONSTRUCTION, CONTRACTOR SHALL PERFORM A COMPLETE AIR AND WATER SYSTEM FLOW BALANCE FOR ALL EQUIPMENT AND SYSTEMS SHOWN, SCHEDULED OR OTHERWISE IDENTIFIED. CONTRACTOR SHALL INCLUDE TIME IN CONSTRUCTION SCHEDULE TO FULLY TEST AND BALANCE SYSTEMS PRIOR TO OWNER OCCUPANCY TO ASSURE ADJUSTMENTS CAN BE MADE TO MITIGATE COMFORT ISSUES FOR OCCUPANTS POST CONSTRUCTION.
- K. UPON COMPLETION OF HVAC SYSTEMS, THE MECHANICAL CONTRACTOR SHALL INSTRUCT THE OWNER IN THE COMPLETE OPERATION OF THE SYSTEMS.
- L. PRIOR TO AND DURING CONSTRUCTION, CONTRACTOR SHALL FULLY PROTECT THE AIR HANDLING AND DUCTWORK SYSTEMS. CONTRACTOR SHALL PROTECT EACH RETURN AIR GRILLE OPENING AND RETURN AIR DUCT WITH MINIMUM MERV 8 FILTER MEDIA, AIR HANDLING EQUIPMENT AND DUCTS COVERED WITH DRYWALL/CONSTRUCTION DUST SHALL BE CLEANED AT CONTRACTOR EXPENSE.
- M. THE CONTRACTOR SHALL ENSURE THAT ALL MECHANICAL EQUIPMENT, DUCTWORK, PIPING, VALVES, AND ACCESS LOCATIONS HAVE CLEARANCES IN ACCORDANCE TO THE DRAWINGS AND THE MANUFACTURER'S REQUIREMENTS FOR FULL ACCESSIBILITY AND OPERATION OF MECHANICAL SYSTEMS.
- N. THE CONTRACTOR SHALL PROVIDE ACCESS PANELS, IN WALLS OR CEILING, OR ACCESS DOORS, IN DUCTWORK, AS INDICATED OR REQUIRED FOR ACCESS TO CONCEALED MECHANICAL EQUIPMENT OR DEVICES.
- O. CONTRACTOR SHALL BE RESPONSIBLE FOR PROTECTION AND SHALL REPAIR ADJACENT EXISTING AND/OR NEW SURFACES, AREAS, AND PROPERTY THAT MAY BE DAMAGED AS A RESULT OF DEMOLITION AND/OR NEW WORK.
- P. UNLESS OTHERWISE INDICATED, ALL EQUIPMENT SHALL BE PROVIDED WITH A MINIMUM 4 INCH CONCRETE HOUSEKEEPING PAD SIZED TO SUIT EQUIPMENT.
- Q. COORDINATE THE LOCATION OF ALL UTILITY CONNECTION POINTS FOR EQUIPMENT WITH OTHER TRADES. COORDINATION INCLUDES ALLOWING PROPER CLEARANCE FOR ELECTRICAL DEVICES FURNISHED WITH EQUIPMENT INCLUDING CONTROLS, DISCONNECTS, VAV POWER/CONTROL PANELS, VFD, ETC.
- R. REFER TO ARCHITECTURAL REFLECTED CEILING PLANS FOR EXACT LOCATION OF CEILING DEVICES, INCLUDING CEILING MOUNTED FANS.
- S. COORDINATE CLOSELY WITH OTHER TRADES IN LOCATING AND INSTALLING ALL SYSTEMS ABOVE SUSPENDED CEILINGS. SPECIFICALLY, COORDINATE LAYOUT WITH ELECTRICAL AND PLUMBING CONTRACTORS TO ALLOW SUFFICIENT ROOM FOR RECESSED LIGHT FIXTURES, FIRE SPRINKLER, AND PLUMBING VENTS WHERE APPLICABLE.
- T. ANNULAR SPACE OF PIPE, CONDUIT, DUCT, AND OTHER SIMILAR PENETRATIONS OF FIRE RATED ASSEMBLIES SHALL BE FIRESTOPPED. IN ADDITION, PENETRATIONS THRU 6-HOUR RATED FLOORS SHALL ALSO BE FIRESTOPPED TO RETARD PASSAGE OF FIRE AND SMOKE. REFER TO FIRESTOPPING SPECIFICATION. REFER TO ARCHITECTURAL DRAWINGS FOR CONSTRUCTION, LAYOUT, AND FIRE RATINGS OF FLOORS, WALLS, PARTITIONS, AND OTHER BUILDING ELEMENTS.
- U. ALL EXPOSED WIRING SHALL BE RUN IN CONDUIT, EXCEPT WHEN RUNNING THOUGH FINISHED SPACES THAT HAVE CEILING "CLOUDS".
- V. THE CONTRACTOR SHALL PROVIDE ALL CUTTING, PATCHING, FINISHING, AND PENETRATIONS REQUIRED BY THE INSTALLATIONS. ALL FLOOR PENETRATIONS SHALL BE PATCHED AND SEALED TO BE WATERTIGHT. PROVIDE CHROME ESCHUTCHION FOR EXPOSED PIPING PENETRATIONS. CUTTING OF BUILDING CONSTRUCTION MATERIALS SHALL CONFORM TO THE CHARACTERISTICS OF THE PARTICULAR MATERIAL INVOLVED AND SHALL NOT CREATE ANY STRUCTURAL WEAKNESS OR UNSIGHTLY APPEARANCE. REFINISH ANY SURFACE DISTURBED UNDER THIS WORK TO MATCH EXISTING, EXCEPT WHERE REFINISHING OF THAT SURFACE IS INCLUDED UNDER THE GENERAL TRADES CONTRACT.
- W. PROVIDE ROOM TEMPERATURE THERMOSTATS FOR ALL UNITS. PREFERRED LOCATIONS ARE SHOWN ON THE PLANS. COORDINATE LOCATION OF THERMOSTATS AND OTHER WALL MOUNTED DEVICES WITH FURNITURE, WALL FRAMING, ELECTRICAL OUTLETS AND DEVICES, AND TECHNOLOGY OUTLETS AND DEVICES PRIOR TO ROUGH-IN. PROVIDE THERMOSTATS WITH ROOM TEMPERATURE INDICATOR AND WITH SET POINT ADJUSTMENT.
- X. ALL ROOF AND DECK PENETRATIONS SHALL BE COMPLETED BY THE GENERAL TRADES CONTRACTOR. COORDINATE EXACT SIZE AND LOCATION WITH ARCHITECT AND STRUCTURAL ENGINEER. COORDINATE SCOPE OF WORK WITH GENERAL CONTRACTOR PRIOR TO BIDDING.
- Y. COORDINATE EXACT LOCATION OF DIFFUSERS, GRILLES AND REGISTERS WITH AREA SMOKE DETECTORS, LIGHTS, AND ELECTRICAL DEVICES. AIR DEVICES SHALL NOT BE CLOSER THAN 3 FEET FROM AN AREA SMOKE DETECTOR.
- Z. BRANCH DUCT TO DIFFUSERS SHALL BE SAME SIZE AS DIFFUSER NECK UNLESS NOTED OTHERWISE. FLEXIBLE DUCT CONNECTION TO THE DIFFUSER SHALL BE NO MORE THAN 5 FEET IN LENGTH. FLEXIBLE DUCT SHALL NOT BE USED FOR ELBOW TO DIFFUSER WITH A FLEXFLOW SUPPORT ELBOW.
- AA. MECHANICAL CONTRACTOR IS RESPONSIBLE FOR MAKING ALL EXPOSED DUCTWORK PAINT READY.
- AB. PROVIDE VOLUME DAMPERS AS SHOWN ON THE DRAWINGS, AS REQUIRED BY THE SPECIFICATIONS, AND SHOWN IN TYPICAL DETAILS. LOCATE VOLUME DAMPERS IN ACCESSIBLE LOCATIONS. A VOLUME DAMPER SHALL BE PROVIDED FOR EACH DIFFUSER AND GRILLE IN ORDER TO BALANCE EACH AIR DEVICE INDEPENDENTLY PER SPECIFIED CFM STATED ON DRAWINGS.
- AC. DUCTWORK DIMENSIONS SHOWN ON DRAWINGS ARE INSIDE CLEAR, UNLESS NOTED OTHERWISE.
- AD. PROVIDE STRAIGHT INLET AND OUTLET DUCTS PER THE LENGTH THE EQUIPMENT MANUFACTURER RECOMMENDS. FAN INLETS SHALL BE MINIMUM 3 DUCT DIAMETERS OF STRAIGHT DUCT. INSTALL AND SUPPORT MECHANICAL EQUIPMENT PER MANUFACTURER'S RECOMMENDATIONS. PROVIDE FLEXIBLE CONNECTIONS AND VIBRATION ISOLATION FOR VIBRATING EQUIPMENT UNLESS NOTED OTHERWISE.
- AE. INSTALL AIRFOIL TURNING VANES IN ALL 90 DEGREE ELBOWS EXCEPT TRANSFER DUCTS AND OPEN RETURN AIR BOOTS.
- AF. CONTRACTOR SHALL COMPLY WITH SMACNA "HVAC DUCT CONSTRUCTION AND STANDARDS" AND OTHER APPLICABLE STANDARDS INCLUDED IN THE SPECIFICATIONS FOR THE CONSTRUCTION AND SUPPORT OF DUCTWORK, UNLESS OTHERWISE NOTED.
- AG. ALL DUCTS AND PIPES SHALL BE RUN ABOVE CEILING. WHERE NO CEILINGS ARE INSTALLED, INSTALL AS HIGH AS POSSIBLE TO STRUCTURE UNLESS NOTED OTHERWISE. IN GENERAL, KEEP DUCT AND PIPING MAINS NEXT TO UNDERSIDE OF STRUCTURE.
- AH. CHANGES IN HVAC DUCT AND PIPE ELEVATIONS SHALL BE PROVIDED AND BE COORDINATED WITH OTHER SYSTEMS INCLUDING, BUT NOT LIMITED, TO PLUMBING, FIRE PROTECTION, ELECTRICAL, AND BUILDING ELEMENTS SYSTEMS. OFFSET DUCTS INTO JOIST SPACE FOR WHERE SPACE ABOVE CEILING IS NOT SUFFICIENT FOR DUCTS TO CROSS OTHER DUCTS OR WORK OF OTHER CONTRACTORS.
- AI. DUCTWORK AND PIPING ON DRAWINGS DOES NOT INDICATE ALL REQUIRED OFFSETS AND FITTINGS. INCLUDE THESE OFFSETS AND FITTINGS TO COORDINATE WITH OTHER CONTRACTORS.
- AJ. SECURELY FASTEN ALL PIPING AND DUCTWORK WITHIN STRUCTURES TO THE BUILDING CONSTRUCTION BY MEANS OF HANGERS, SUPPORTS, GUIDES, ANCHORS, AND SWAY BRACES TO MAINTAIN PIPE AND DUCTWORK ALIGNMENT, TO PREVENT SAGGING, AND TO PREVENT NOISE AND EXCESSIVE STRAIN ON PIPING AND DUCTWORK DUE TO MOVEMENT UNDER OPERATING CONDITIONS. SUPPORTS FOR ALL PIPING AND DUCTWORK SHALL BE IN ACCORDANCE WITH LATEST ANSI AND SMACNA STANDARDS.
- AK. CONTRACTOR SHALL PROTECT THE PIPING AND DUCTWORK TO PREVENT ENTRY OF DIRT AND ANY OTHER FOREIGN MATERIAL DURING THE INSTALLATION.
- AL. COLOR CODE AND LABEL PIPING AND DUCTWORK IN ACCORDANCE WITH SPECIFICATIONS.
- AM. PROVIDE FLEXIBLE CONNECTIONS FOR ALL VIBRATING EQUIPMENT.
- AN. UNLESS NOTED OTHERWISE, MINIMUM PIPE SIZE SHALL BE 3/4 INCH. PIPING, VALVES, AND OTHER PIPING SPECIALTIES ROUTED TO TERMINAL UNITS AND FOR BRANCH LINES SHALL BE SAME SIZE INDICATED ON UNIT SCHEDULE UNLESS NOTED OTHERWISE.
- AO. INSTALL ALL PIPING IN LOCATIONS AND ELEVATIONS SUCH THAT COILS, TUBES, AND FILTERS CAN BE REMOVED AND REPLACED WITHOUT MAJOR PIPING REMOVAL. LOCATE VALVES IN APPROPRIATE PLACES TO ACCOMMODATE MAINTENANCE. MAINTAIN REQUIRED SERVICE ACCESS SPACE AT EQUIPMENT.
- AP. PIPE SLEEVES THRU FLOORS SHALL BE SEPARATED BY A MINIMUM OF 3" UNLESS APPROVED BY THE PROJECT STRUCTURAL ENGINEER. SUBMIT SLEEVE COORDINATION DRAWINGS FOR REVIEW AND APPROVAL. EXTEND SLEEVES A MINIMUM OF 2" AFF AND CAULK PERIMETER.
- AQ. ARRANGE ALL PIPING WITHIN STRUCTURES NEATLY ALONG WALLS AND/OR IN NEAT, HORIZONTAL GROUPS AND MAINTAIN REQUIRED SLOPES.
- AR. PROVIDE A HANGER NOT MORE THAN 12 INCHES FROM THE POINT OF CHANGE OF DIRECTION OF A PIPE RUN IN BOTH HORIZONTAL AND VERTICAL PLANE.
- AS. CONNECTION BETWEEN DISSIMILAR MATERIAL PIPES SHALL BE CONNECTED VIA DIELECTRIC NIPPLES OR FLANGES WITH DIELECTRIC GASKETS TO COUNTERACT ELECTROLYSIS.
- AT. ALL WORK, EQUIPMENT AND MATERIALS SHALL BE PROTECTED AT ALL TIMES. ALL DUCT AND PIPE OPENING SHALL BE PROPERLY CAPPED OR PLUGGED DURING INSTALLATION.

DUCT CONSTRUCTION SCHEDULE										
DUCT LOCATION	DUCT CONSTRUCTION								NOTES	
	SHAPE	TYPE	PRESSURE CLASS (IN WG)	LEAKAGE CLASS (CFM PER 100 SF @ IN WG)	GALVANIZED STEEL	GALVANIZED STEEL PVC COATED	ALUMINUM	STAINLESS STEEL TYPE 304		
	ROUND OR OVAL	RECTANGULAR	SINGLE WALL	DOUBLE WALL						
OUTDOOR AIR OR COMBUSTION AIR DUCT										
Indoors Concealed From View	X	X	-2 or +2	NA	X		X	X	X	
	X	X	-2 or +2	NA	X		X	X	X	
		X	X	-2 or +2	NA	X		X	X	X
Indoors Exposed to View in Unfinished Space	X	X	X	-2 or +2	NA	X		X	X	X
	X	X	X	-2 or +2	NA	X		X	X	X
	X	X	X	-2 or +2	NA	X		X	X	X
Outdoors	X	X	X	-2 or +2	4	X	X	X	X	X
SUPPLY AIR DUCT										
Indoors Concealed From View: VAV Downstream From Terminal Box or CAV <2000 CFM	X	X	X	+1	NA	X		X	X	X
	X	X	X	+1	NA	X		X	X	X
		X	X	X	+1	NA	X		X	X
Indoors Exposed to View in Unfinished Space: VAV Downstream From Terminal Box or CAV <2000 CFM	X	X	X	+1	NA	X		X	X	X
	X	X	X	+1	NA	X		X	X	X
	X	X	X	+1	NA	X		X	X	X
RETURN AIR OR MIXED AIR DUCT										
Indoors Concealed From View	X	X	X	-2 or +2	NA	X		X	X	X
	X	X	X	-2 or +2	NA	X		X	X	X
		X	X	X	-2 or +2	NA	X		X	X
Indoors Exposed to View in Unfinished Space	X	X	X	-2 or +2	NA	X		X	X	X
	X	X	X	-2 or +2	NA	X		X	X	X
	X	X	X	-2 or +2	NA	X		X	X	X
TRANSFER AIR DUCT										
Indoors Concealed From View	X	X	X	-1 or +1	NA	X		X	X	X
	X	X	X	-1 or +1	NA	X		X	X	X
CLASS 1 OR 2 EXHAUST AIR DUCT										
Indoors Concealed From View	X	X	X	-2 or +2	NA	X		X	X	X
	X	X	X	-2 or +2	NA	X		X	X	X

HVAC DESIGN DATA				
	OUTSIDE DESIGN TEMPERATURES:		91.1 F DB SUMMER	73.8 F WB SUMMER
	DESIGN ALTITUDE:		3.2 F DB WINTER	N/A WB WINTER
INTERIOR DESIGN AREA	COOLING SEASON (SUMMER)		817 FT	COLUMBUS, OH
	DB (F)	% HUMIDITY	DB (F)	% HUMIDITY
MECHANICAL AREAS	95 F	HUMIDITY WILL NOT BE CONTROLLED	60 F	NOT CONTROLLED
AMENITY SPACES	74 F	50% MAX.	70 F	HUMIDIFICATION IS NOT PROVIDED
OFFICE AREAS	74 F	50% MAX.	70 F	HUMIDIFICATION IS NOT PROVIDED
APARTMENTS	72 F	50% MAX.	70 F	HUMIDIFICATION IS NOT PROVIDED

#	DATE	CHANGE DESCRIPTION



COLUMBUS METROPOLITAN HOUSING AUTHORITY
COLUMBUS, OHIO 43215


COBBLESTONE MANOR
1000 LAMPLIGHTER DRIVE
GROVE CITY, OH 43123
FOR
CMHA



300 SPRUCE STREET
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COLUMBUS, OHIO 43215

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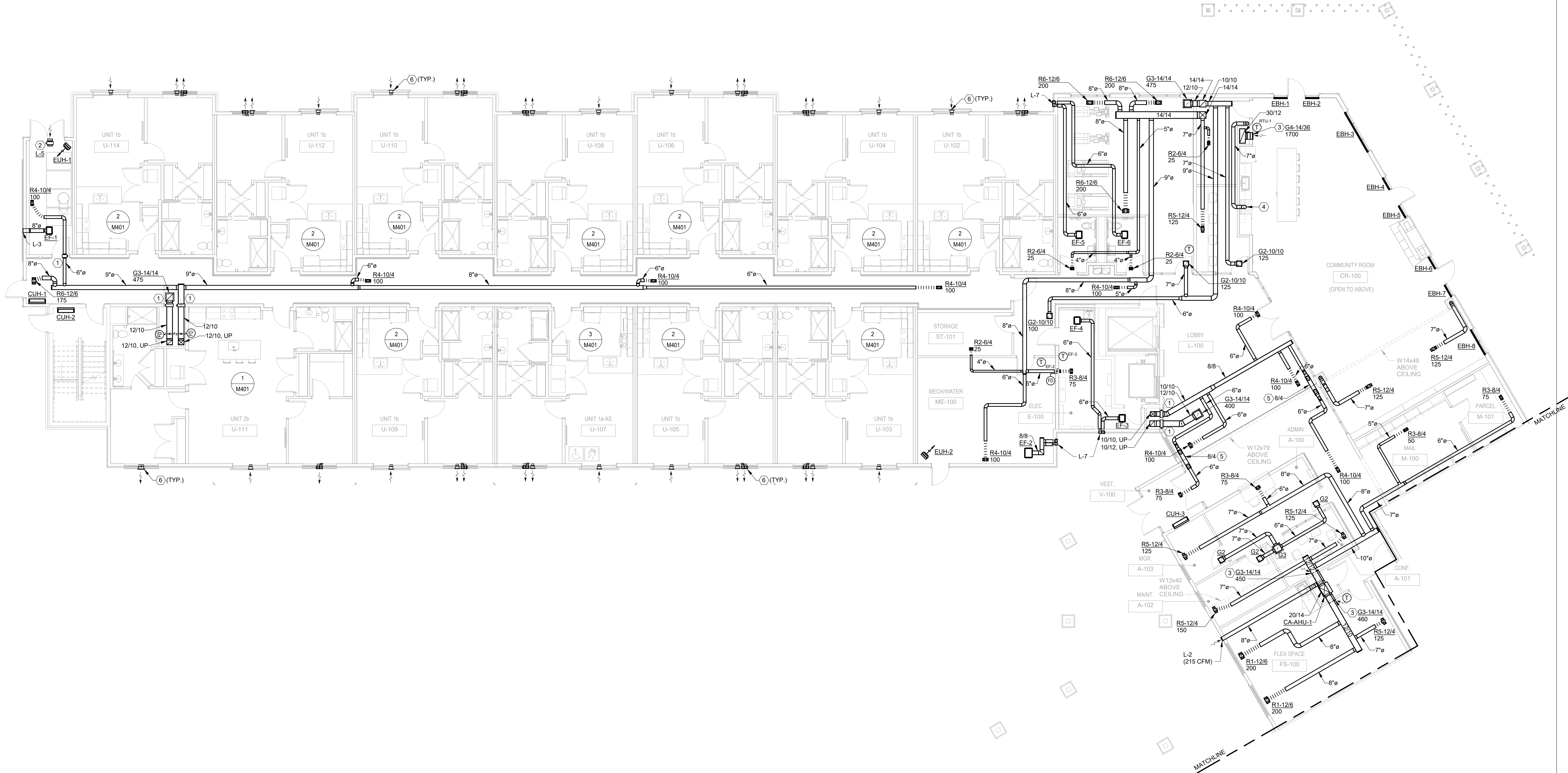
DRAWING TITLE: GENERAL INFORMATION - MECHANICAL



STATE OF OHIO
COLIN T. MOORE
LICENSED PROFESSIONAL ENGINEER
MECHANICAL
#22172.01

06/08/2023
DRAWN BY: Author
CHECKED BY: Checker
#22172.01
M001
PERMIT & BID SET

1 PLAN FIRST FLOOR PLAN - MECHANICAL - AREA A
1/8" = 1'-0"



GENERAL NOTES

- PER THE OHIO MECHANICAL CODE, OUTSIDE AIR INTAKES MUST BE AT LEAST 10'-0" FROM CONTAMINATED EXHAUST SOURCES SUCH AS BATHROOM EXHAUST OR DRYER EXHAUST.
- PER THE OHIO MECHANICAL CODE, CONTAMINATED EXHAUST OUTLET SOURCES SUCH AS BATHROOM EXHAUST OR DRYER EXHAUST OPENINGS MUST BE AT LEAST 3'-0" FROM ANY OPERABLE WINDOW OR DOOR OPENING.
- ALL EXHAUST DUCTWORK WITH CONNECTIONS TO THE OUTSIDE SHALL BE INSULATED A MINIMUM OF 10'-0" LINEAR FEET FROM THE EXTERIOR WALL CONNECTION.
- ALL OUTSIDE AIR INTAKE DUCTWORK SHALL BE INSULATED FROM AIR HANDLING UNIT TO THE EXTERIOR.
- ALL SUPPLY AIR DUCTWORK, INCLUDING FLEX DUCT, SHALL BE INSULATED FROM AIR HANDLING UNIT TO AIR DEVICE.
- PROVIDE CEILING RADIATION DAMPERS FOR ALL AIR DEVICES ON THIS FLOOR UNLESS NOTED OTHERWISE.
- GENERAL TRADES CONTRACTOR SHALL PROVIDE A CEILING ACCESS PANEL WHERE DUCT ACCESS DOORS ARE ABOVE DRYWALL CEILINGS. COORDINATE LOCATION OF THESE ACCESS POINTS.
- MECHANICAL CONTRACTOR TO ROUTE INSULATED REFRIGERANT PIPING FROM AIR HANDLING UNIT TO OUTDOOR UNITS ON ROOF. VERIFY EXACT ROUTING IN FIELD. REFRIGERANT VERTICAL D ROPS SHALL BE LOCATED IN STACKED APARTMENT TYPES WHERE APPLICABLE. OTHERWISE, VERTICAL DROPS CAN BE LOCATED IN STUD WALLS AND THEN ROUTED HORIZONTALLY. SIZE REFRIGERANT PIPES PER MANUFACTURERS RECOMMENDATIONS BASED ON FIELD INSTALLED LENGTH.
- GENERAL TRADES CONTRACTOR SHALL PROVIDE A CEILING ACCESS PANEL WHERE DUCT ACCESS DOORS FOR LIFE SAFETY DAMPERS ARE LOCATED ABOVE DRYWALL CEILINGS. COORDINATE LOCATION OF ACCESS POINTS.
- PROVIDE CONDENSATE DRAIN LINE WITH P-TRAP FOR ALL AHU UNITS. FULL SIZE UNIT OUTLET. ROUTE TO FLOOR DRAIN, SEE PLUMBING DRAWINGS FOR LOCATIONS.

KEYNOTES

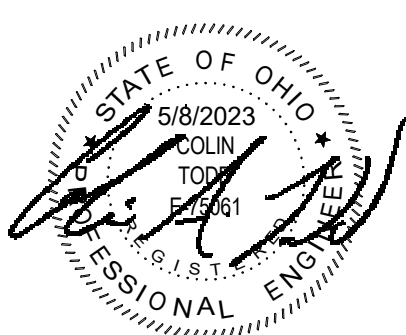
- PROVIDE COMBINATION FIRE/SMOKE DAMPER AT CORRIDOR WALL PENETRATION. COORDINATE SMOKE DETECTOR LOCATION AND 120V/1P POWER WITH EC.
- INTAKE LOUVER WITH MOTORIZED DAMPER, INTERLOCK WITH EF-1.
- B.E. = 0'-6" AFF.
- 7'0" EXHAUST DUCT FROM RANGE HOOD.
- 8"x4" SA DUCT UNDER BEAM. ROUTE IN SOFFIT. REFER TO ARCHITECTURAL REFLECTED CEILING PLAN. TURN DOWN 6'0" SA DUCT DOWN ON EACH SIDE OF BEAM. PROVIDE CSD AT PENETRATION OF THE FLOOR/CEILING ASSEMBLY.
- VENT INTAKE TO MATCH EXTERIOR COLOR. REFER TO ARCHITECTURAL PLANS TO DETERMINE COLOR OF EXTERIOR IN EACH LOCATION.

#	DATE	CHANGE DESCRIPTION

COBBLESTONE MANOR
100 LAMPLIGHTER DRIVE
GROVE CITY, OH 43123
FOR
CMHA

MOODY•NOLAN
300 SPRUCE STREET
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DRAWING TITLE:
**FIRST FLOOR PLAN -
MECHANICAL - AREA A**

	06/08/2023	
	DRAWN BY: Author	CHECKED BY: Checker
	#22172.01	
	M101A	
	PERMIT & BID SET	

AEC **ADVANCED**
ENGINEERING
CONSULTANTS
Mechanical | Electrical | Plumbing | Fire Protection | Utilities
1405 Dublin Road
Columbus, Ohio 43215
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Fax: (614) 466-4082





1 PLAN FIRST FLOOR PLAN - MECHANICAL - AREA B
1/8" = 1'-0"

GENERAL NOTES

- A. PER THE OHIO MECHANICAL CODE, OUTSIDE AIR INTAKES MUST BE AT LEAST 10'-0" FROM CONTAMINATED EXHAUST SOURCES SUCH AS BATHROOM EXHAUST OR DRYER EXHAUST.
- B. PER THE OHIO MECHANICAL CODE, CONTAMINATED EXHAUST OUTLET SOURCES SUCH AS BATHROOM EXHAUST OR DRYER EXHAUST OPENINGS MUST BE AT LEAST 3'-0" FROM ANY OPERABLE WINDOW OR DOOR OPENING.
- C. ALL EXHAUST DUCTWORK WITH CONNECTIONS TO THE OUTSIDE SHALL BE INSULATED A MINIMUM OF 10'-0" LINEAR FEET FROM THE EXTERIOR WALL CONNECTION.
- D. ALL OUTSIDE AIR INTAKE DUCTWORK SHALL BE INSULATED FROM AIR HANDLING UNIT TO THE EXTERIOR.
- E. ALL SUPPLY AIR DUCTWORK, INCLUDING FLEX DUCT, SHALL BE INSULATED FROM AIR HANDLING UNIT TO AIR DEVICE.
- F. PROVIDE CEILING RADIATION DAMPERS FOR ALL AIR DEVICES ON THIS FLOOR UNLESS NOTED OTHERWISE.
- G. GENERAL TRADES CONTRACTOR SHALL PROVIDE A CEILING ACCESS PANEL WHERE DUCT ACCESS DOORS ARE ABOVE DRYWALL CEILINGS. COORDINATE LOCATION OF THESE ACCESS POINTS.
- H. MECHANICAL CONTRACTOR TO ROUTE INSULATED REFRIGERANT PIPING FROM AIR HANDLING UNIT TO OUTDOOR UNITS ON ROOF. VERIFY EXACT ROUTING IN FIELD. REFRIGERANT VERTICAL D ROPS SHALL BE LOCATED IN STACKED APARTMENT TYPES WHERE APPLICABLE. OTHERWISE, VERTICAL DROPS CAN BE LOCATED IN STUD WALLS AND THEN ROUTED HORIZONTALLY. SIZE REFRIGERANT PIPES PER MANUFACTURERS RECOMMENDATIONS BASED ON FIELD INSTALLED LENGTH.
- I. GENERAL TRADES CONTRACTOR SHALL PROVIDE A CEILING ACCESS PANEL WHERE DUCT ACCESS DOORS FOR LIFE SAFETY DAMPERS ARE LOCATED ABOVE DRYWALL CEILINGS. COORDINATE LOCATION OF ACCESS POINTS.
- J. PROVIDE CONDENSATE DRAIN LINE WITH P-TRAP FOR ALL AHU UNITS. FULL SIZE UNIT OUTLET. ROUTE TO FLOOR DRAIN, SEE PLUMBING DRAWINGS FOR LOCATIONS.

KEYNOTES


- 1. PROVIDE COMBINATION FIRE/SMOKE DAMPER AT CORRIDOR WALL PENETRATION. COORDINATE SMOKE DETECTOR LOCATION AND 120V/1P POWER WITH EC.
- 2. INTAKE LOUVER WITH MOTORIZED DAMPER, INTERLOCK WITH EF-7.
- 3. VENT/INTAKE TO MATCH EXTERIOR COLOR. REFER TO ARCHITECTURAL PLANS TO DETERMINE COLOR OF EXTERIOR IN EACH LOCATION.

#	DATE	CHANGE DESCRIPTION



COLUMBUS METROPOLITAN HOUSING AUTHORITY
COLUMBUS, OHIO 43215

COBBLESTONE MANOR
1050 LAMPLIGHTER DRIVE
GROVE CITY, OH 43123
FOR
CMHA




MOODY+NOLAN

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DRAWING TITLE:
FIRST FLOOR PLAN - MECHANICAL - AREA B



STATE OF OHIO
COLIN T. NOLAN
PROFESSIONAL ENGINEER
10881

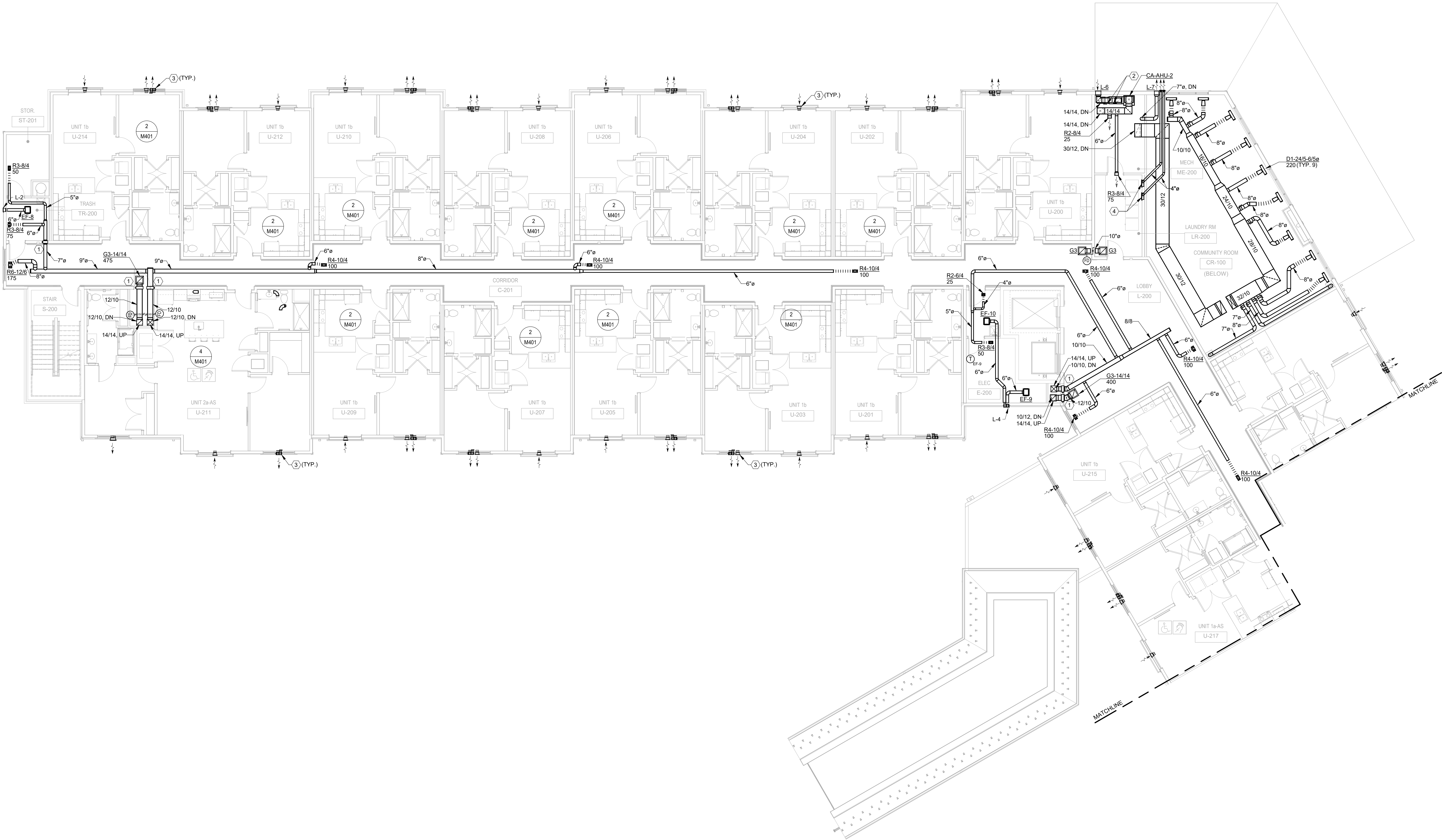
06/08/2023
DRAWN BY: Author CHECKED BY: Checker
#22172.01
M101B
PERMIT & BID SET



AEC

ADVANCED ENGINEERING CONSULTANTS
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Columbus, Ohio 43215
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1 PLAN SECOND FLOOR PLAN - MECHANICAL - AREA A
1/8" = 1'-0"



GENERAL NOTES

- PER THE OHIO MECHANICAL CODE, OUTSIDE AIR INTAKES MUST BE AT LEAST 10'-0" FROM CONTAMINATED EXHAUST SOURCES SUCH AS BATHROOM EXHAUST OR DRYER EXHAUST.
- PER THE OHIO MECHANICAL CODE, CONTAMINATED EXHAUST OUTLET SOURCES SUCH AS BATHROOM EXHAUST OR DRYER EXHAUST OPENINGS MUST BE AT LEAST 3'-0" FROM ANY OPERABLE WINDOW OR DOOR OPENING.
- ALL EXHAUST DUCTWORK WITH CONNECTIONS TO THE OUTSIDE SHALL BE INSULATED A MINIMUM OF 10'-0" LINEAR FEET FROM THE EXTERIOR WALL CONNECTION.
- ALL OUTSIDE AIR INTAKE DUCTWORK SHALL BE INSULATED FROM AIR HANDLING UNIT TO THE EXTERIOR.
- ALL SUPPLY AIR DUCTWORK, INCLUDING FLEX DUCT, SHALL BE INSULATED FROM AIR HANDLING UNIT TO AIR DEVICE.
- PROVIDE CEILING RADIATION DAMPERS FOR ALL AIR DEVICES ON THIS FLOOR UNLESS NOTED OTHERWISE.
- GENERAL TRADES CONTRACTOR SHALL PROVIDE A CEILING ACCESS PANEL, WHERE DUCT ACCESS DOORS ARE ABOVE DRYWALL CEILINGS. COORDINATE LOCATION OF THESE ACCESS POINTS.
- MECHANICAL CONTRACTOR TO ROUTE INSULATED REFRIGERANT PIPING FROM AIR HANDLING UNIT TO OUTDOOR UNITS ON ROOF. VERIFY EXACT ROUTING IN FIELD. REFRIGERANT VERTICAL D ROPS SHALL BE LOCATED IN STACKED APARTMENT TYPES WHERE APPLICABLE. OTHERWISE, VERTICAL DROPS CAN BE LOCATED IN STUD WALLS AND THEN ROUTED HORIZONTALLY. SIZE REFRIGERANT PIPES PER MANUFACTURERS RECOMMENDATIONS BASED ON FIELD INSTALLED LENGTH.
- GENERAL TRADES CONTRACTOR SHALL PROVIDE A CEILING ACCESS PANEL, WHERE DUCT ACCESS DOORS FOR LIFE SAFETY DAMPERS ARE LOCATED ABOVE DRYWALL CEILINGS. COORDINATE LOCATION OF ACCESS POINTS.
- PROVIDE CONDENSATE DRAIN LINE WITH P-TRAP FOR ALL AHU & DSS UNITS, FULL SIZE UNIT OUTLET, ROUTE TO FLOOR DRAIN. SEE PLUMBING DRAWINGS FOR LOCATIONS.

KEYNOTES

- PROVIDE COMBINATION FIRE/SMOKE DAMPER AT CORRIDOR WALL PENETRATION. COORDINATE SMOKE DETECTOR LOCATION AND 120V/1P POWER WITH EC.
- PROVIDE BALANCING DAMPERS.
- VENT INTAKE TO MATCH EXTERIOR COLOR. REFER TO ARCHITECTURAL PLANS TO DETERMINE COLOR OF EXTERIOR IN EACH LOCATION.
- PROVIDE DRYERBOX BY INOVATE TECHNOLOGIES MODEL NUMBER DB-425.

#	DATE	CHANGE DESCRIPTION

COBBLESTONE MANOR
100 LAMPLIGHTER DRIVE
GROVE CITY, OH 43123
FOR
CMHA

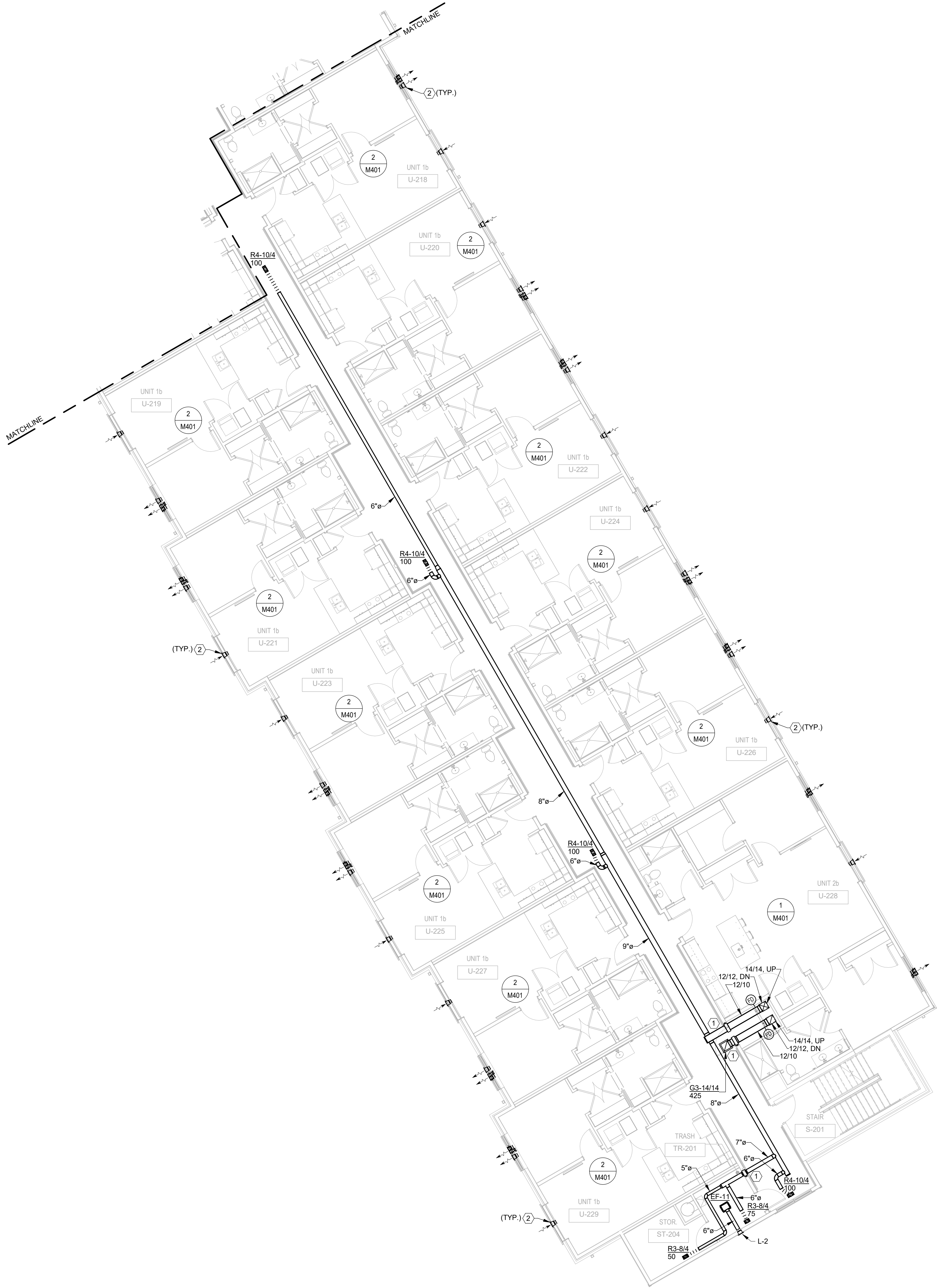
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DRAWING TITLE:
**SECOND FLOOR PLAN -
MECHANICAL - AREA A**

	06/08/2023
	DRAWN BY: Author CHECKED BY: Checker
	#22172.01
	M102A
PERMIT & BID SET	

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1405 Dublin Road Tel: (614) 466-4773
Columbus, Ohio 43215 Fax: (614) 466-4082





1 PLAN SECOND FLOOR PLAN - MECHANICAL - AREA B
1/8" = 1'-0"

GENERAL NOTES

- A. PER THE OHIO MECHANICAL CODE, OUTSIDE AIR INTAKES MUST BE AT LEAST 10'-0" FROM CONTAMINATED EXHAUST SOURCES SUCH AS BATHROOM EXHAUST OR DRYER EXHAUST.
- B. PER THE OHIO MECHANICAL CODE, CONTAMINATED EXHAUST OUTLET SOURCES SUCH AS BATHROOM EXHAUST OR DRYER EXHAUST OPENINGS MUST BE AT LEAST 3'-0" FROM ANY OPERABLE WINDOW OR DOOR OPENING.
- C. ALL EXHAUST DUCTWORK WITH CONNECTIONS TO THE OUTSIDE SHALL BE INSULATED A MINIMUM OF 10'-0" LINEAR FEET FROM THE EXTERIOR WALL CONNECTION.
- D. ALL OUTSIDE AIR INTAKE DUCTWORK SHALL BE INSULATED FROM AIR HANDLING UNIT TO THE EXTERIOR.
- E. ALL SUPPLY AIR DUCTWORK, INCLUDING FLEX DUCT, SHALL BE INSULATED FROM AIR HANDLING UNIT TO AIR DEVICE.
- F. PROVIDE CEILING RADIATION DAMPERS FOR ALL AIR DEVICES ON THIS FLOOR UNLESS NOTED OTHERWISE.
- G. GENERAL TRADES CONTRACTOR SHALL PROVIDE A CEILING ACCESS PANEL WHERE DUCT ACCESS DOORS ARE ABOVE DRYWALL CEILINGS. COORDINATE LOCATION OF THESE ACCESS POINTS.
- H. MECHANICAL CONTRACTOR TO ROUTE INSULATED REFRIGERANT PIPING FROM AIR HANDLING UNIT TO OUTDOOR UNITS ON ROOF. VERIFY EXACT ROUTING IN FIELD. REFRIGERANT VERTICAL D ROPS SHALL BE LOCATED IN STACKED APARTMENT TYPES WHERE APPLICABLE. OTHERWISE, VERTICAL DROPS CAN BE LOCATED IN STUD WALLS AND THEN ROUTED HORIZONTALLY. SIZE REFRIGERANT PIPES PER MANUFACTURERS RECOMMENDATIONS BASED ON FIELD INSTALLED LENGTH.
- I. GENERAL TRADES CONTRACTOR SHALL PROVIDE A CEILING ACCESS PANEL WHERE DUCT ACCESS DOORS FOR LIFE SAFETY DAMPERS ARE LOCATED ABOVE DRYWALL CEILINGS. COORDINATE LOCATION OF ACCESS POINTS.
- J. PROVIDE CONDENSATE DRAIN LINE WITH P-TRAP FOR ALL AHU & DSS UNITS. FULL SIZE UNIT OUTLET. ROUTE TO FLOOR DRAIN. SEE PLUMBING DRAWINGS FOR LOCATIONS.


KEYNOTES

- 1. PROVIDE COMBINATION FIRE/SMOKE DAMPER AT CORRIDOR WALL PENETRATION. COORDINATE SMOKE DETECTOR LOCATION AND 120V/1P POWER WITH EC.
- 2. VENTINTAKE TO MATCH EXTERIOR COLOR. REFER TO ARCHITECTURAL PLANS TO DETERMINE COLOR OF EXTERIOR IN EACH LOCATION.

#	DATE	CHANGE DESCRIPTION



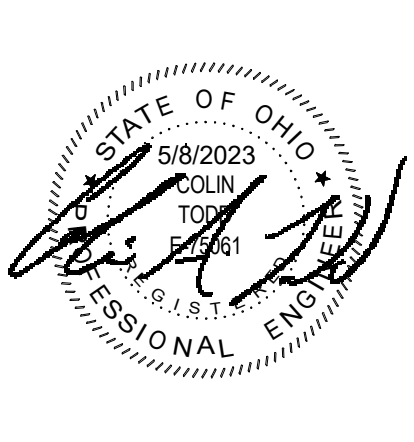
COBBLESTONE MANOR
1050 LAMPLIGHTER DRIVE
GROVE CITY, OH 43123
FOR
CMHA



300 SPRUCE STREET
SUITE 300
COLUMBUS, OHIO 43215

PHONE: (614) 461-4664
FAX: (614) 280-8881

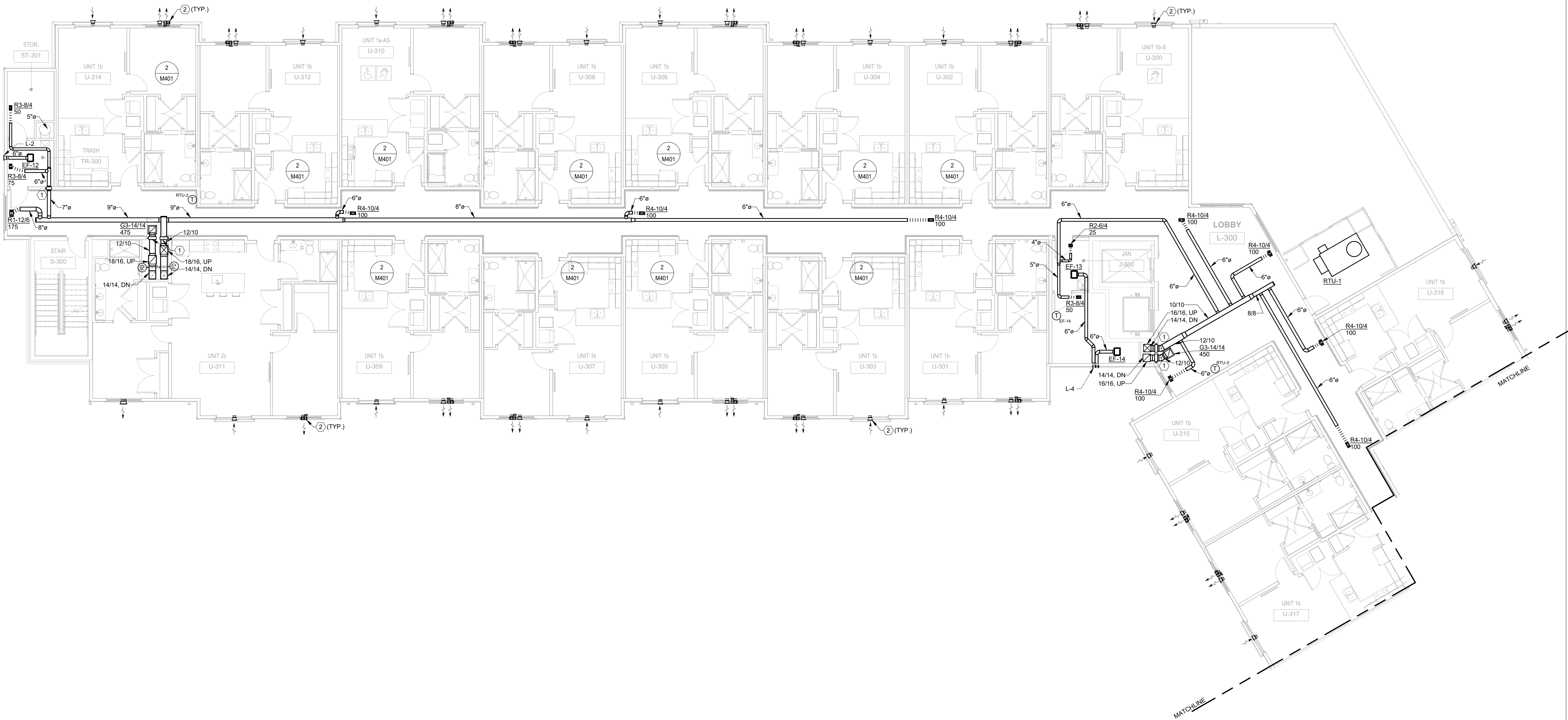
DRAWING TITLE:
SECOND FLOOR PLAN - MECHANICAL - AREA B



06/08/2023
DRAWN BY: Author
CHECKED BY: Checker
#22172.01
M102B
PERMIT & BID SET



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1405 Dublin Road
Columbus, Ohio 43215
Tel: (614) 466-4778
Fax: (614) 466-4082



1 PLAN THIRD FLOOR PLAN - MECHANICAL - AREA A
1/8" = 1'-0"



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1405 Dublin Road Columbus, Ohio 43215
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GENERAL NOTES

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- C. ALL EXHAUST DUCTWORK WITH CONNECTIONS TO THE OUTSIDE SHALL BE INSULATED A MINIMUM OF 10'-0" LINEAR FEET FROM THE EXTERIOR WALL CONNECTION.
- D. ALL OUTSIDE AIR INTAKE DUCTWORK SHALL BE INSULATED FROM AIR HANDLING UNIT TO THE EXTERIOR.
- E. ALL SUPPLY AIR DUCTWORK, INCLUDING FLEX DUCT, SHALL BE INSULATED FROM AIR HANDLING UNIT TO AIR DEVICE.
- F. PROVIDE CEILING RADIATION DAMPERS FOR ALL AIR DEVICES ON THIS FLOOR UNLESS NOTED OTHERWISE.
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#	DATE	CHANGE DESCRIPTION




COBBLESTONE MANOR
1050 LAMPLIGHTER DRIVE
GROVE CITY, OH 43123
FOR
CMHA



300 SPRUCE STREET
SUITE 300
COLUMBUS, OHIO 43215

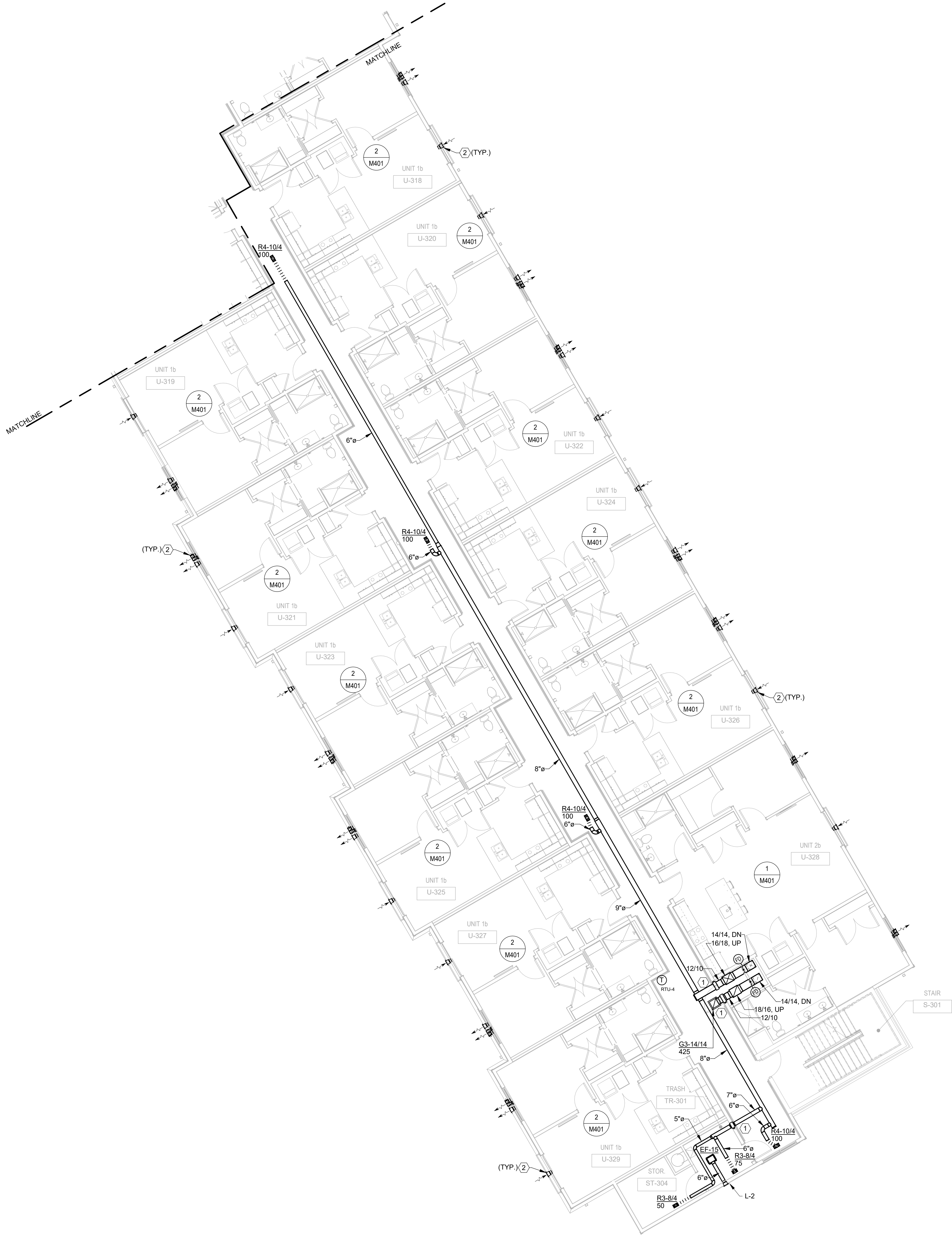
PHONE: (614) 461-4664
FAX: (614) 280-8881

DRAWING TITLE:
**THIRD FLOOR PLAN -
MECHANICAL - AREA A**



STATE OF OHIO
COLIN T. NOLAN
10881
MECHANICAL ENGINEER

06/08/2023	
DRAWN BY: Author	CHECKED BY: Checker
#22172.01	
M103A	
PERMIT & BID SET	



1 **PLAN** THIRD FLOOR PLAN - MECHANICAL - AREA B
1/8" = 1'-0"

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Columbus, Ohio 43215 Fax: (614) 486-4082

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- J. PROVIDE CONDENSATE DRAIN LINE WITH P-TRAP FOR ALL AHU & DSS UNITS. FULL SIZE UNIT OUTLET. ROUTE TO FLOOR DRAIN. SEE PLUMBING DRAWINGS FOR LOCATIONS.

KEYNOTES

- 1. PROVIDE COMBINATION FIRE/SMOKE DAMPER AT CORRIDOR WALL PENETRATION. COORDINATE SMOKE DETECTOR LOCATION AND 120V/1P POWER WITH EC.
- 2. VENT/INTAKE TO MATCH EXTERIOR COLOR. REFER TO ARCHITECTURAL PLANS TO DETERMINE COLOR OF EXTERIOR IN EACH LOCATION.

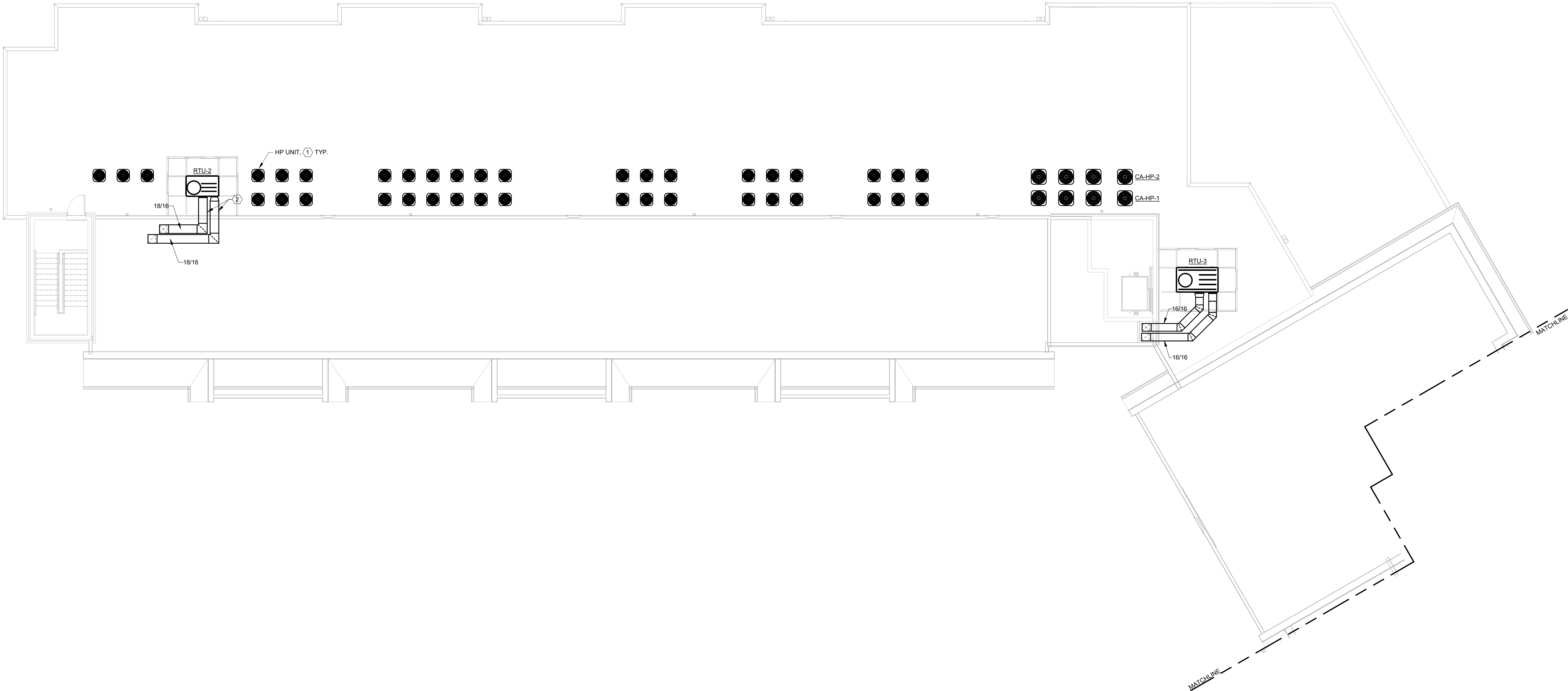
#	DATE	CHANGE DESCRIPTION

COBBLESTONE MANOR
1050 LAMPLIGHTER DRIVE
GROVE CITY, OH 43123
FOR
CMHA

MOODY•NOLAN 300 SPRUCE STREET
SUITE 300
COLUMBUS, OHIO 43215
PHONE: (614) 461-4664
FAX: (614) 280-8881

DRAWING TITLE:
**THIRD FLOOR PLAN -
MECHANICAL - AREA B**

06/08/2023
DRAWN BY: Author CHECKED BY: Checker
#22172.01
M103B
PERMIT & BID SET



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



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1405 Dublin Road
Columbus, Ohio 43215
Tel: (614) 486-4773
Fax: (614) 486-4082

GENERAL NOTES

- A. ALL OUTDOOR UNITS TO BE INSTALLED ABOVE PUBLIC CORRIDORS AND 10'-0" OR MORE FROM ROOF EDGE.
- B. MECHANICAL CONTRACTOR TO ROUTE INSULATED REFRIGERANT PIPING FROM AIR HANDLING UNIT TO OUTDOOR UNITS ON ROOF. VERIFY EXACT ROUTING IN FIELD. REFRIGERANT VERTICAL DROPS SHALL BE LOCATED IN STACKED APARTMENT TYPES WHERE APPLICABLE. OTHERWISE, VERTICAL DROPS CAN BE LOCATED IN STUD WALLS AND THEN ROUTED HORIZONTALLY. SIZE REFRIGERANT PIPES PER MANUFACTURERS RECOMMENDATIONS BASED ON FIELD INSTALLED LENGTH.

KEYNOTES

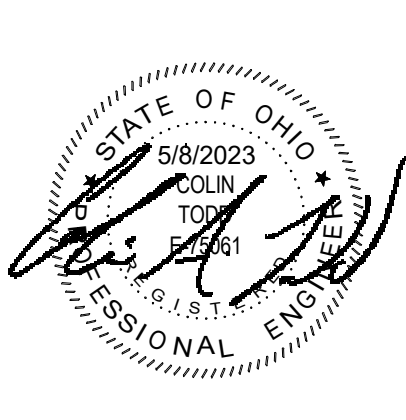
1. INSTALL OUTDOOR UNITS FOR APARTMENTS IN AREAS SHOWN. PROVIDE ONE OUTDOOR UNIT FOR EVERY APARTMENT UNIT. UNIQUELY TAG EACH UNIT WITH CORRESPONDING ROOM NUMBER. COORDINATE FINAL LOCATIONS WITH STRUCTURAL. REFER TO EQUIPMENT CURB DETAIL FOR SUPPORTING EQUIPMENT. COORDINATE DIRECTION OF SUPPORT RAILS WITH ROOF SLOPE FOR PROPER DRAINAGE.
2. PROVIDE EXTERIOR DUCT WITH ROOF SUPPORTS (ECOFOOT QUICKFRAME 120" OR EQUAL) SLOPE TOP OF DUCT INSULATION AND PROVIDE WEATHERPROOF JACKET.

#	DATE	CHANGE DESCRIPTION

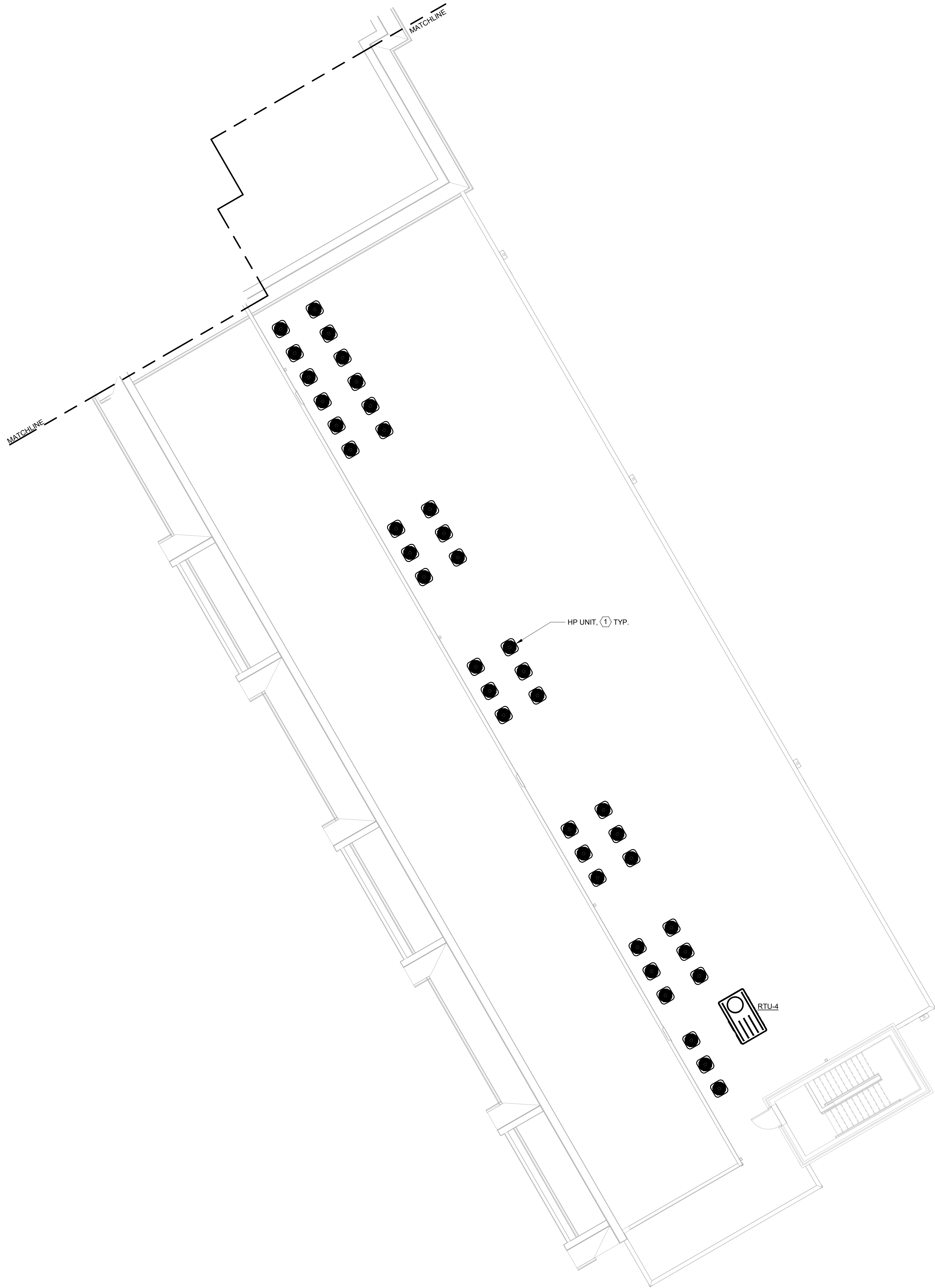
COBBLESTONE MANOR
1050 LAMPLIGHTER DRIVE
GROVE CITY, OH 43123
FOR
CMHA

MOODY•NOLAN
300 SPRUCE STREET
SUITE 300
COLUMBUS, OHIO 43215
PHONE: (614) 461-4664
FAX: (614) 280-8881

DRAWING TITLE:
**ROOF PLAN - OVERALL -
MECHANICAL - AREA A**



06/08/2023	
DRAWN BY: TO	CHECKED BY: CT
#22172.01	
M104A	
PERMIT & BID SET	



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

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1405 Dublin Road
Columbus, Ohio 43215

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ENGINEERING
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KEYNOTES

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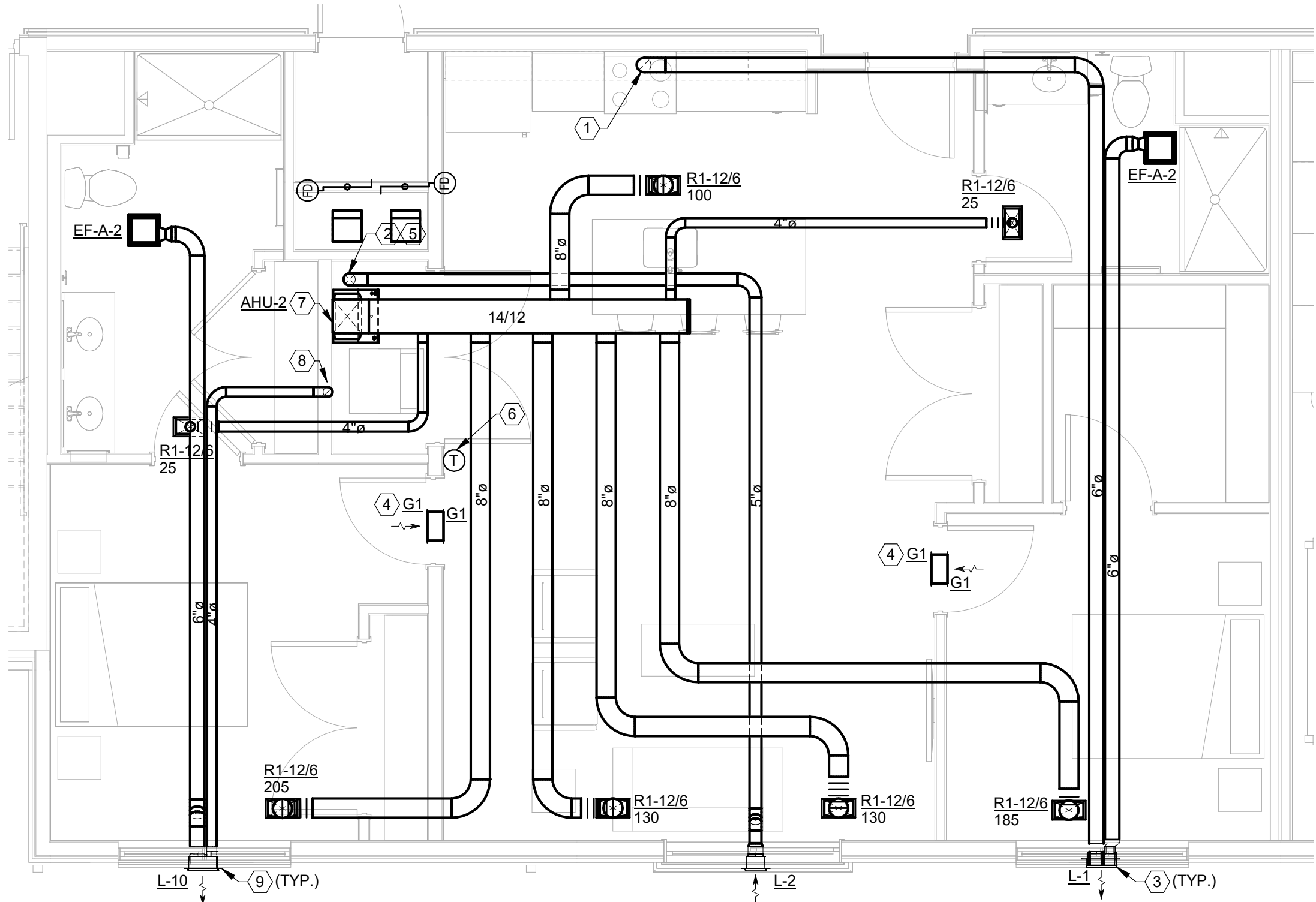
#	DATE	CHANGE DESCRIPTION

COBBLESTONE MANOR
1050 LAMPLIGHTER DRIVE
GROVE CITY, OH 43123
FOR
CMHA

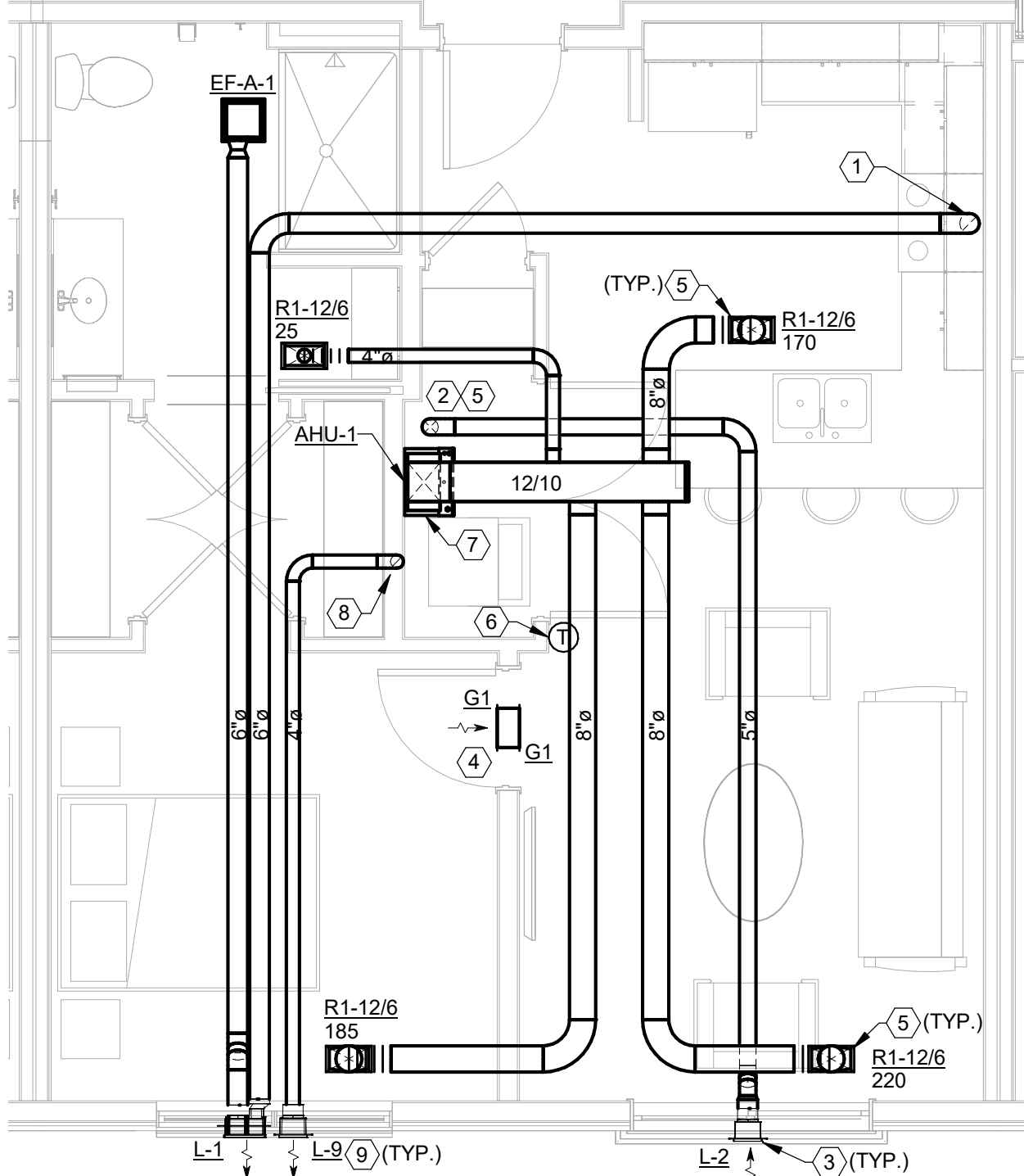
MOODY+NOLAN
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DRAWING TITLE:
**ROOF PLAN - OVERALL -
MECHANICAL - AREA B**

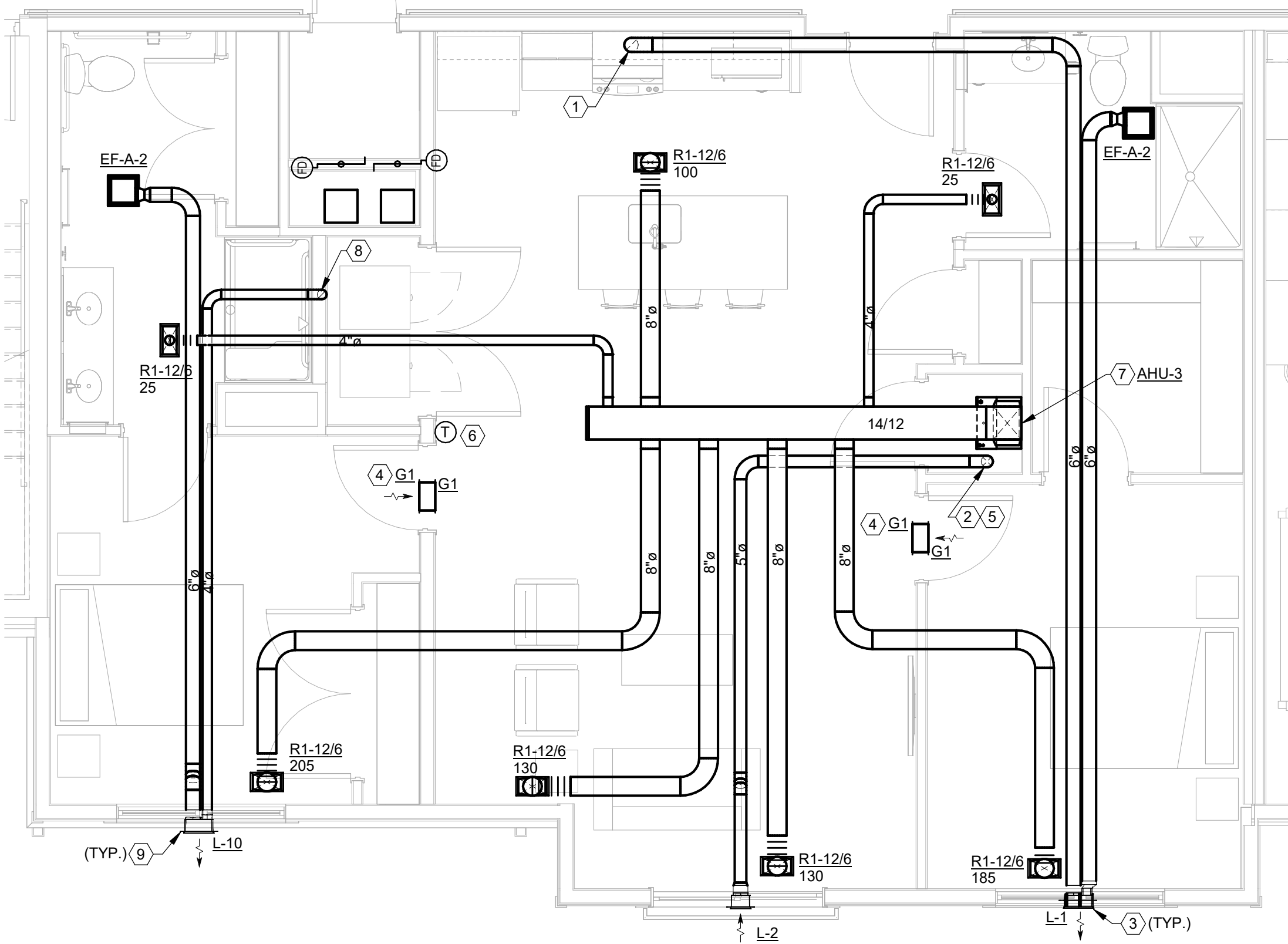
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	M104B
PERMIT & BID SET	



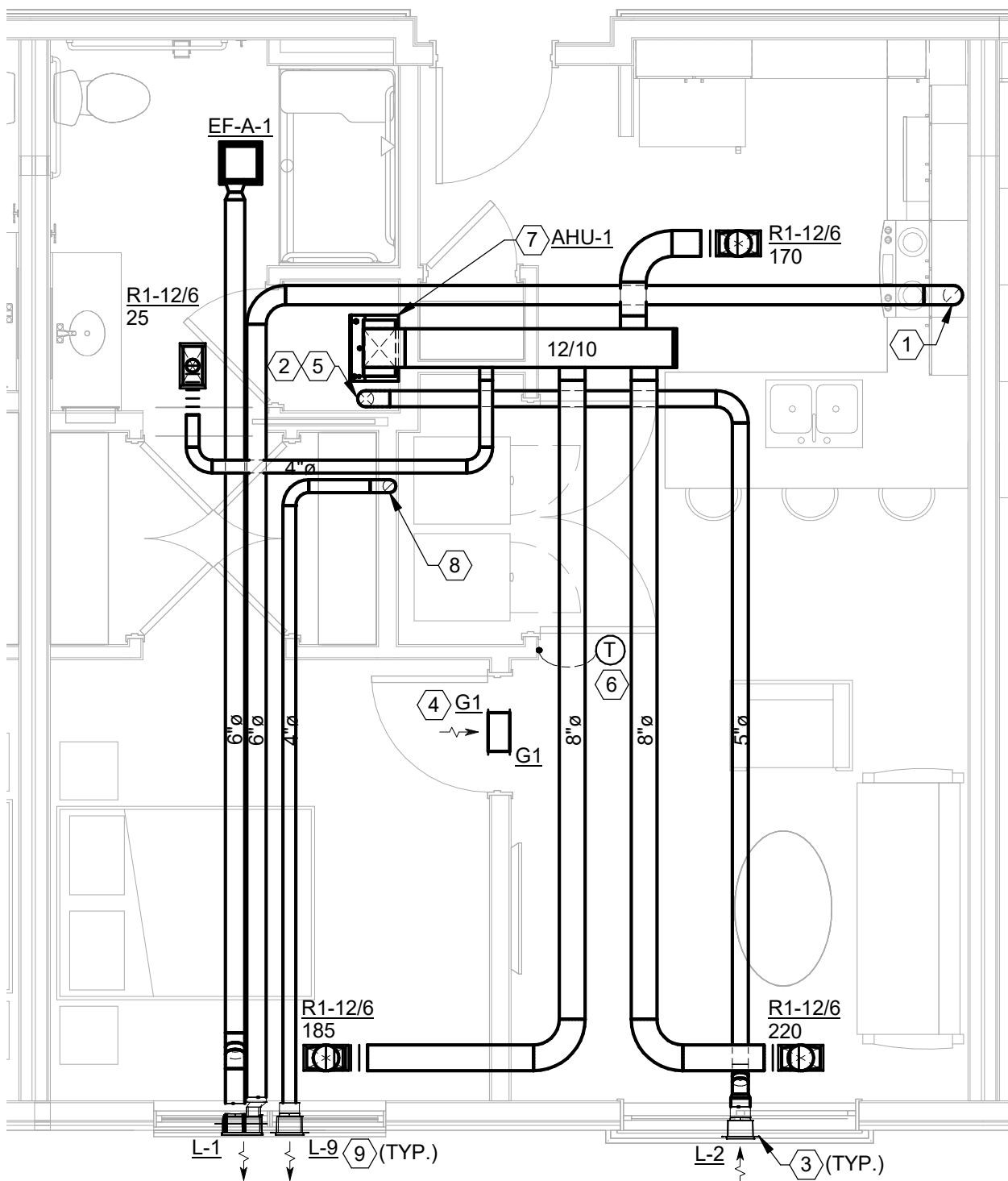
1 ENLARGED PLAN UNIT 2b
1/4" = 1'-0"



2 ENLARGED PLAN UNIT 1b
1/4" = 1'-0"



4 ENLARGED PLAN UNIT 2a-AS
1/4" = 1'-0"



3 ENLARGED PLAN UNIT 1a-AS
1/4" = 1'-0"

GENERAL NOTES

- A. EACH UNIT PLAN REPRESENTS MULTIPLE APARTMENT UNITS WITH SIMILAR LAYOUTS. COORDINATE EXACT UNIT LAYOUT INCLUDING ROUGH-INS WITH ARCHITECTURAL AND STRUCTURAL DRAWINGS FOR EACH UNIT.
- B. COORDINATE MOUNTING HEIGHT AND FINAL LOCATIONS OF THERMOSTATS WITH ARCHITECTURAL DETAILS AND ELEVATIONS PRIOR TO ROUGH-IN.
- C. COORDINATE ALL EQUIPMENT LOCATIONS WITH FRAMING MEMBERS PRIOR TO ROUGH-IN.
- D. PER THE OHIO MECHANICAL CODE, OUTSIDE AIR INTAKES MUST BE AT LEAST 10'-0" FROM CONTAMINATED EXHAUST SOURCES SUCH AS BATHROOM EXHAUST OR DRYER EXHAUST.
- E. PER THE OHIO MECHANICAL CODE, CONTAMINATED EXHAUST SOURCES SUCH AS BATHROOM EXHAUST OR DRYER EXHAUST OPENINGS MUST BE AT LEAST 3'-0" FROM ANY OPERABLE WINDOW OR DOOR OPENING.
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- G. ALL OUTSIDE AIR INTAKE DUCTWORK SHALL BE INSULATED FROM AIR HANDLING UNIT TO THE EXTERIOR.
- H. ALL SUPPLY AIR DUCTWORK, INCLUDING FLEX DUCT, SHALL BE INSULATED FROM AIR HANDLING UNIT TO AIR DEVICE.
- I. PROVIDE CEILING RADIATION DAMPERS AT ALL PENETRATIONS OF THE RATED FLOOR/CEILING ASSEMBLY.
- J. INSTALL ALL AIR HANDLING UNITS DIRECTLY BETWEEN STRUCTURAL TRUSSES OVERHEAD WHERE POSSIBLE.
- K. MECHANICAL CONTRACTOR TO ROUTE INSULATED REFRIGERANT PIPING FROM AIR HANDLING UNIT TO OUTDOOR UNITS ON ROOF ABOVE. VERIFY EXACT ROUTING IN FIELD. REFRIGERANT VERTICAL DROPS SHALL BE LOCATED IN STACKED APARTMENT TYPES WHERE APPLICABLE. OTHERWISE, VERTICAL DROPS CAN BE LOCATE IN STUD WALLS AND THEN ROUTED HORIZONTALLY. SIZE REFRIGERANT PIPES PER MANUFACTURERS RECOMMENDATIONS BASED ON FIELD INSTALLED EQUIVALENT LENGTH. PROVIDE LONG LINE ACCESSORIES AS NECESSARY.
- L. APARTMENT MECHANICAL CLOSETS ARE USED AS RETURN AIR PLENUMS. ALL MATERIALS THEREIN SHALL BE NON-COMBUSTIBLE OR OTHERWISE COMPLY WITH OHIO MECHANICAL CODE SECTION 602.2.1 REQUIREMENTS.

KEYNOTES


- 1. KITCHEN HOOD EXHAUST TO RUN ABOVE CEILING. PROVIDE RADIATION DAMPER AT CEILING PENETRATION.
- 2. PROVIDE HONEYWELL EARD MOTORIZED DAMPER 24V IN OUTSIDE AIR DUCT. DAMPER TO BE INTERLOCKED WITH AIR HANDLING UNIT. DAMPER TO OPEN ANY TIME FAN IS ENERGIZED.
- 3. FOR UNITS ON THE FIRST FLOOR WITH AN OVERHANG DUE TO AN EXTENDED UNIT ABOVE, THE CONTRACTOR SHALL EXTEND VENT/INTAKE TERMINATIONS TO THE EXTERIOR OF THE VERTICAL WALL. TERMINATIONS SHALL NOT BE TURNED DOWN INTO THE EAVE.
- 4. TRANSFER AIR GRILLES TO BE MOUNTED ABOVE DOOR.
- 5. PROVIDE CEILING RADIATION DAMPER AT RATED ASSEMBLY PENETRATION.
- 6. PROVIDE 7-DAY PROGRAMMABLE THERMOSTAT.
- 7. AIR HANDLING UNIT TO BE MOUNTED ON WALL ABOVE WATER HEATER. COORDINATE EXACT LOCATION WITH OTHER EQUIPMENT IN THIS AREA. EXTEND CONDENSATE DRAIN LINE TO FLOOR DRAIN IN THIS ROOM.
- 8. PROVIDE DRYERBOX BY INOVATE TECHNOLOGIES MODEL NUMBER DB-425.
- 9. VENT/INTAKE TO MATCH JAMES HARDIE SIDING COLORS OF ARCHITECTURAL PLANS TO DETERMINE COLOR OF EXTERIOR IN EACH LOCATION.

#	DATE	CHANGE DESCRIPTION



COLUMBUS METROPOLITAN HOUSING AUTHORITY
COLUMBUS, OHIO 43215

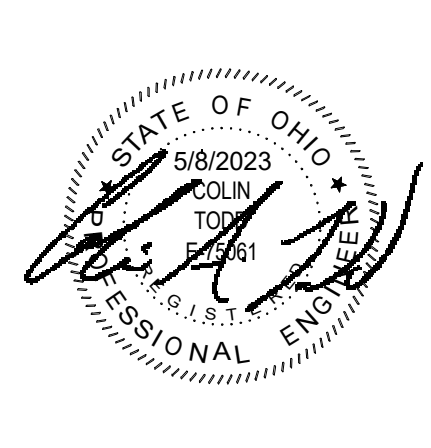
COBBLESTONE MANOR
1050 LAMPLIGHTER DRIVE
GROVE CITY, OH 43123
FOR
CMHA



MOODY-NOLAN


300 SPRUCE STREET
SUITE 300
COLUMBUS, OHIO 43215
PHONE: (614) 461-4664
FAX: (614) 280-8881

DRAWING TITLE:
ENLARGED PLANS - MECHANICAL



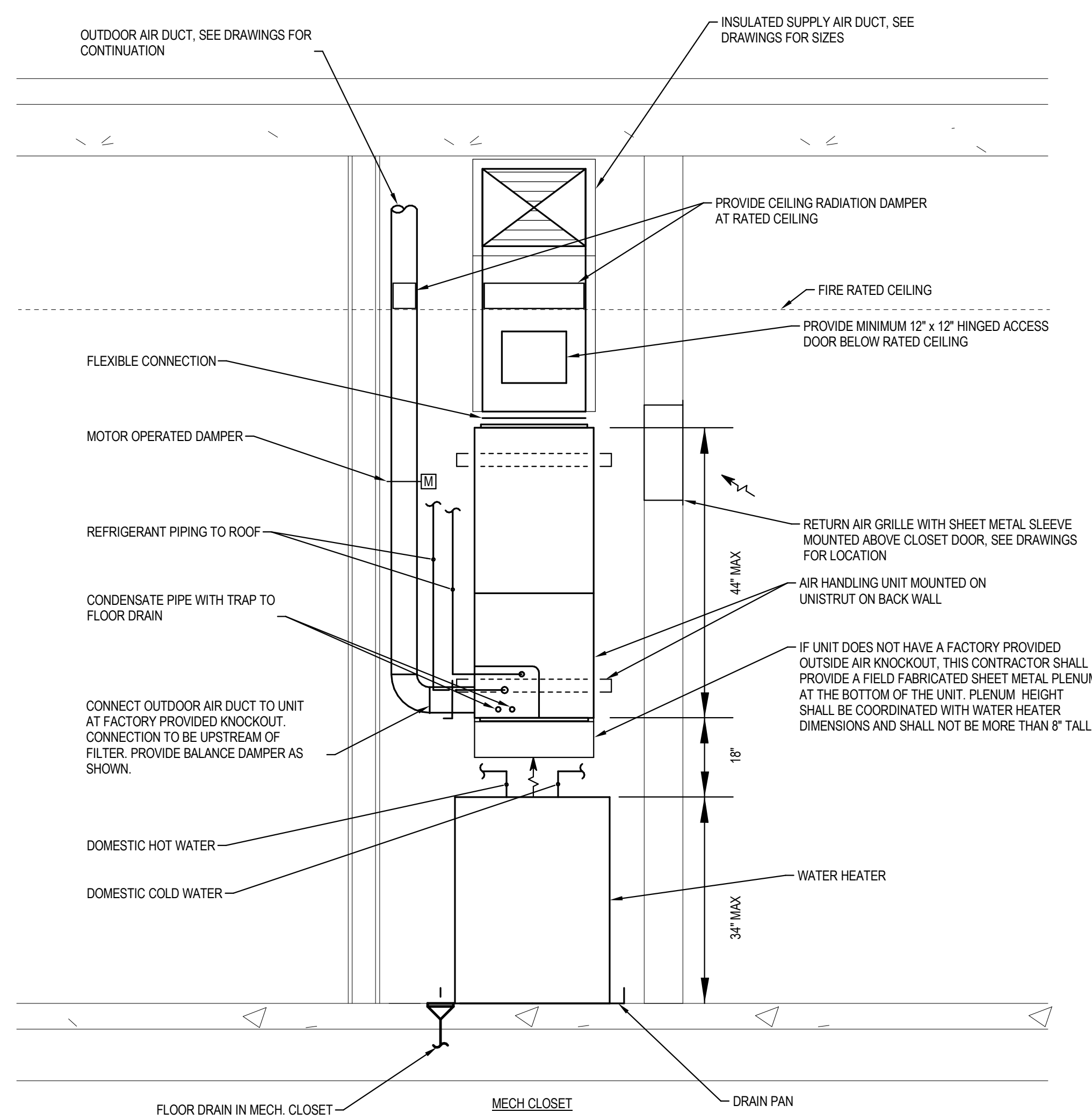
STATE OF OHIO
COLIN TOLAN
PROFESSIONAL ENGINEER
MECHANICAL
#22172.01

06/08/2023
DRAWN BY: TO CHECKED BY: CT
#22172.01
M401
PERMIT & BID SET

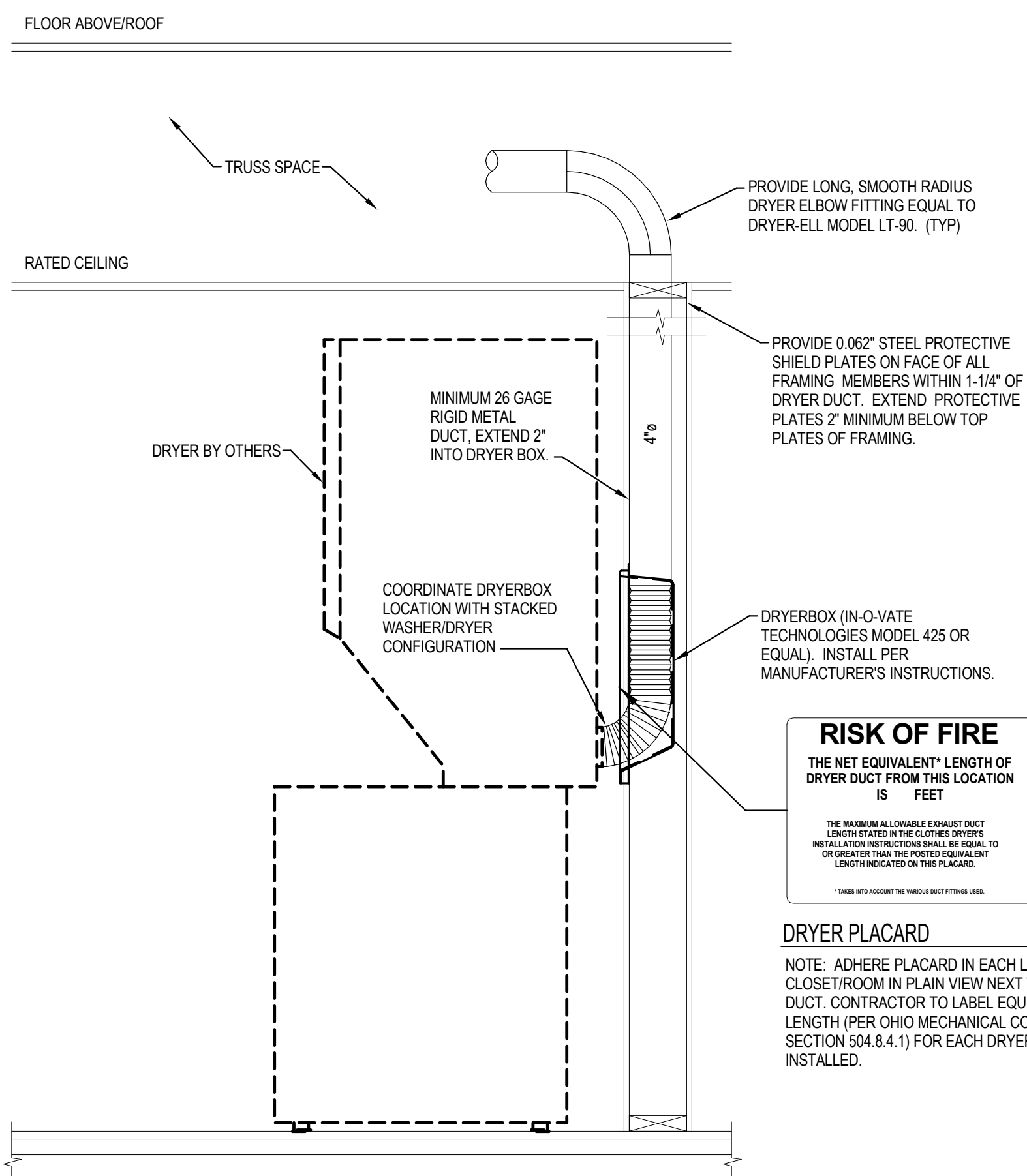


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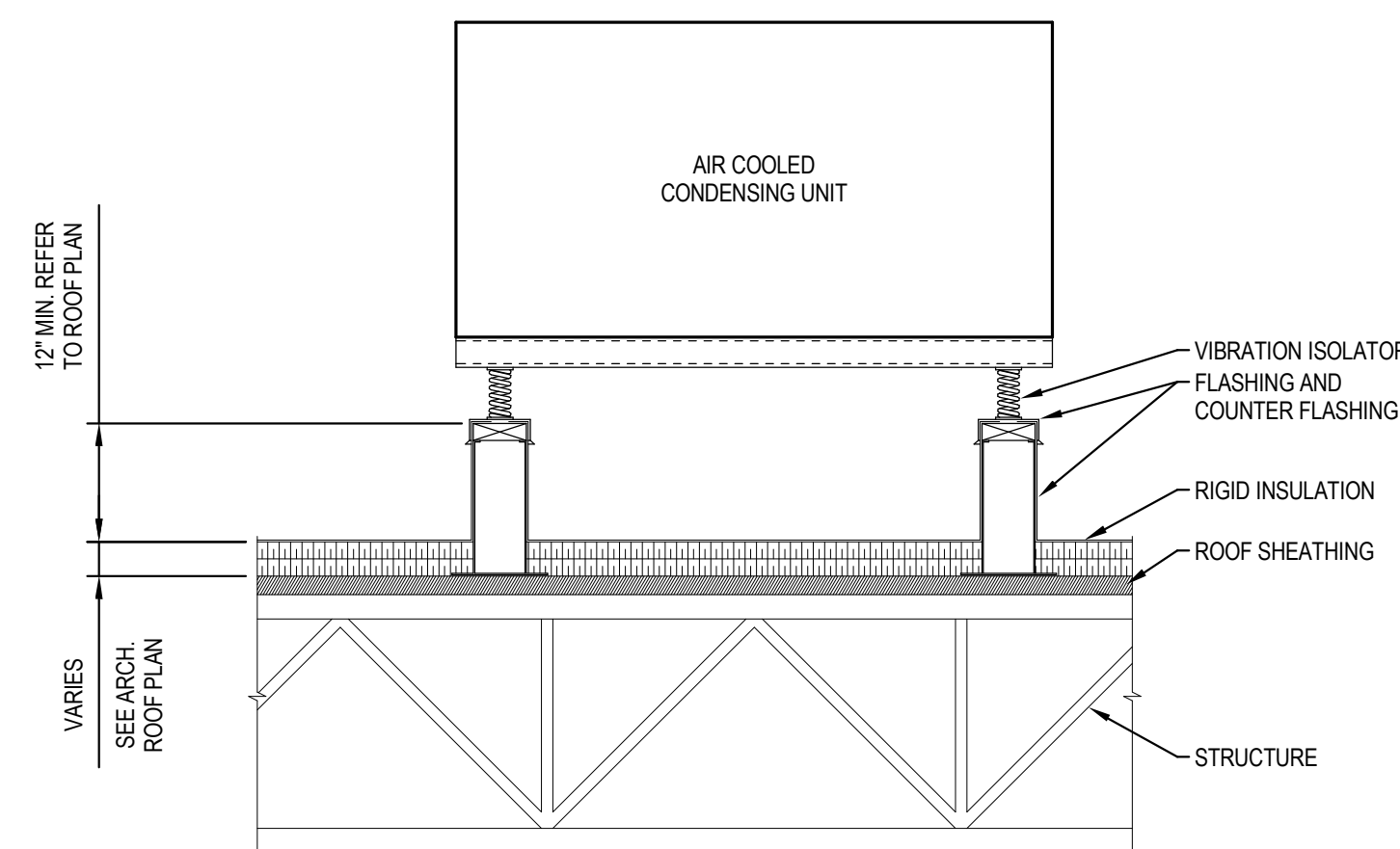
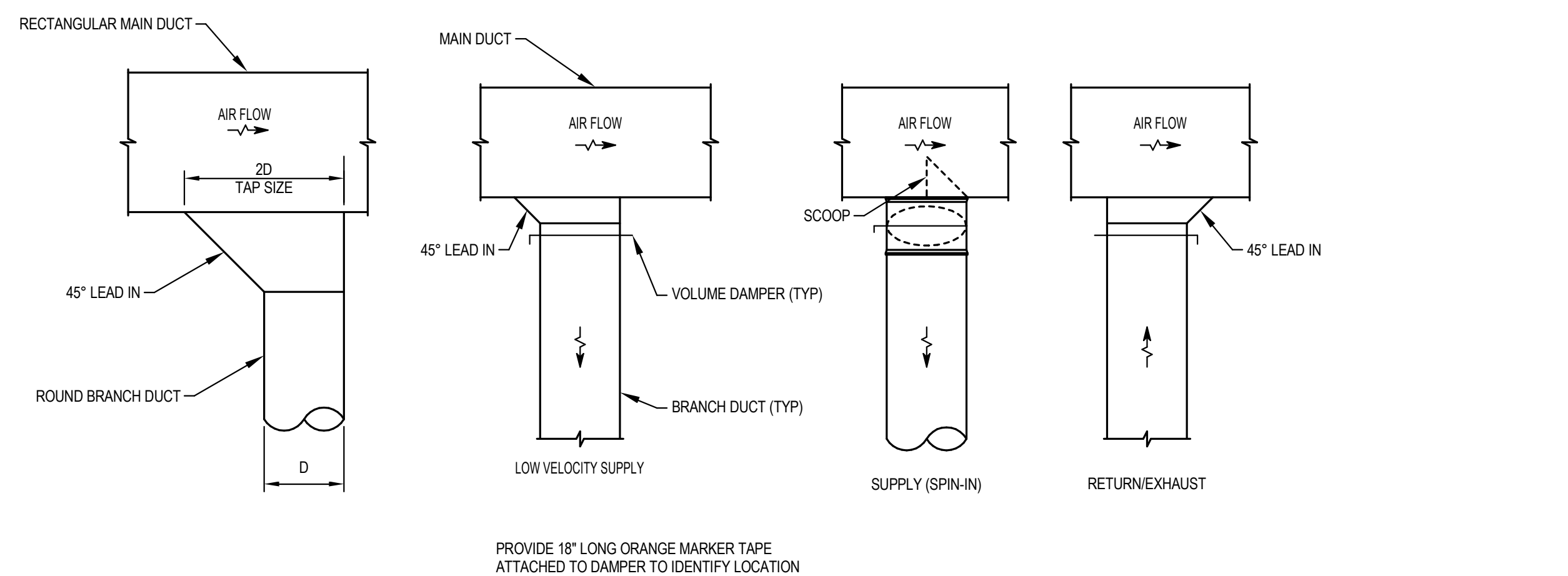


1 DETAIL APARTMENT MECHANICAL CLOSET
N.T.S.

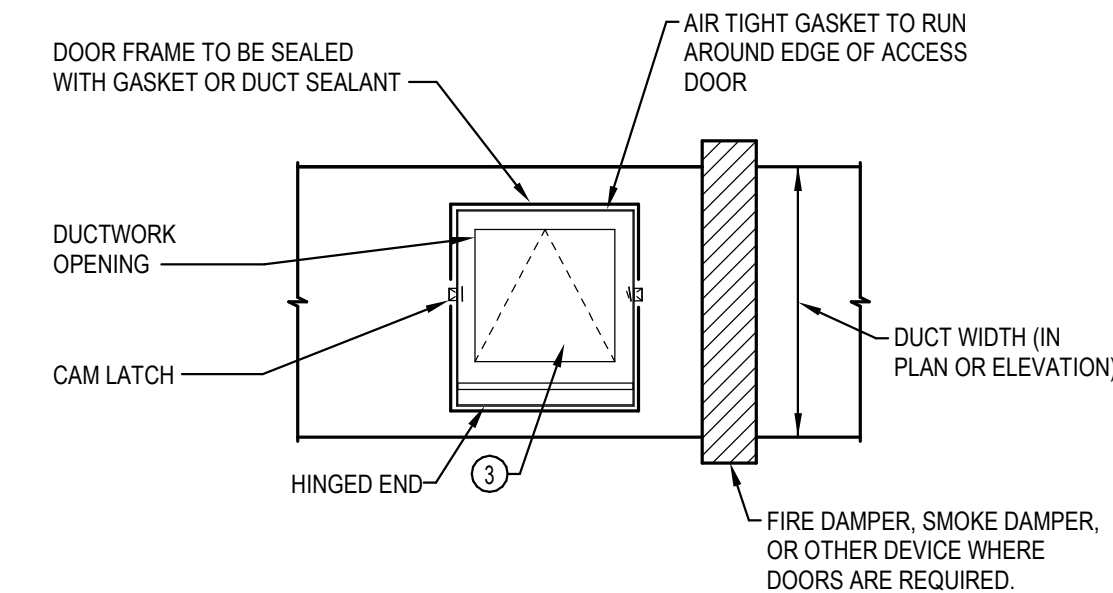


2 DETAIL DRYER VENT (STACKED)
N.T.S.

3 DETAIL TYPICAL DUCT CONNECTIONS
N.T.S.



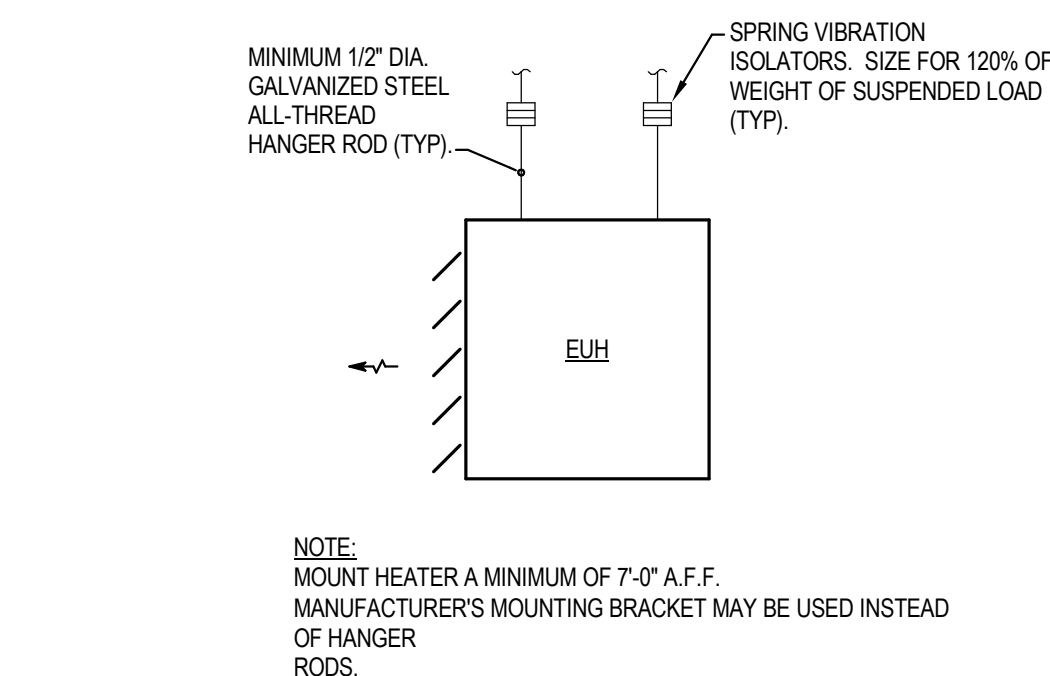
4 DETAIL EQUIPMENT CURB
N.T.S.



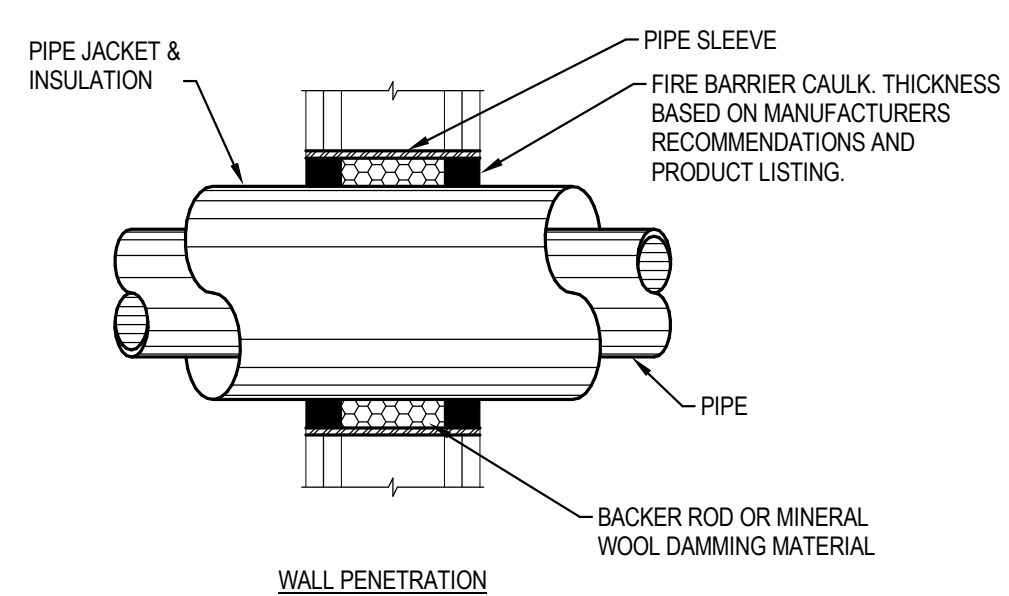
ACCESS DOOR SIZE SCHEDULE	
DUCT WIDTH	ACCESS DOOR SIZE
6" TO 10"	REMOVABLE DUCT SECTION
10" TO 12"	REMOVABLE DUCT SECTION
12" TO 21"	12" x 12" MINIMUM ①
21" & ABOVE	18" x 18" MINIMUM ②

- ① ACCESS DOORS TO 16\"/>

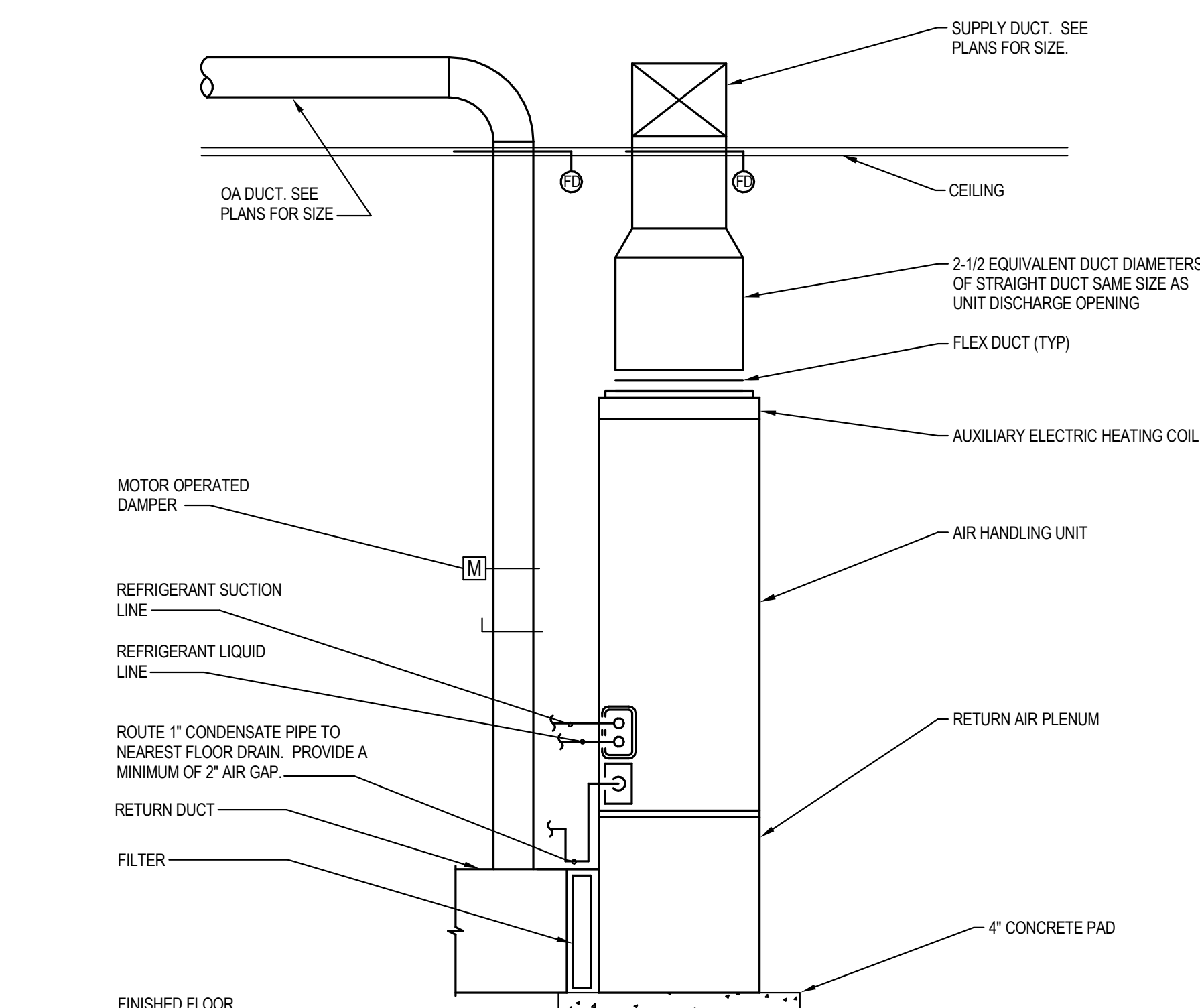
6 DETAIL CEILING MOUNTED ELECTRIC UNIT HEATER
N.T.S.



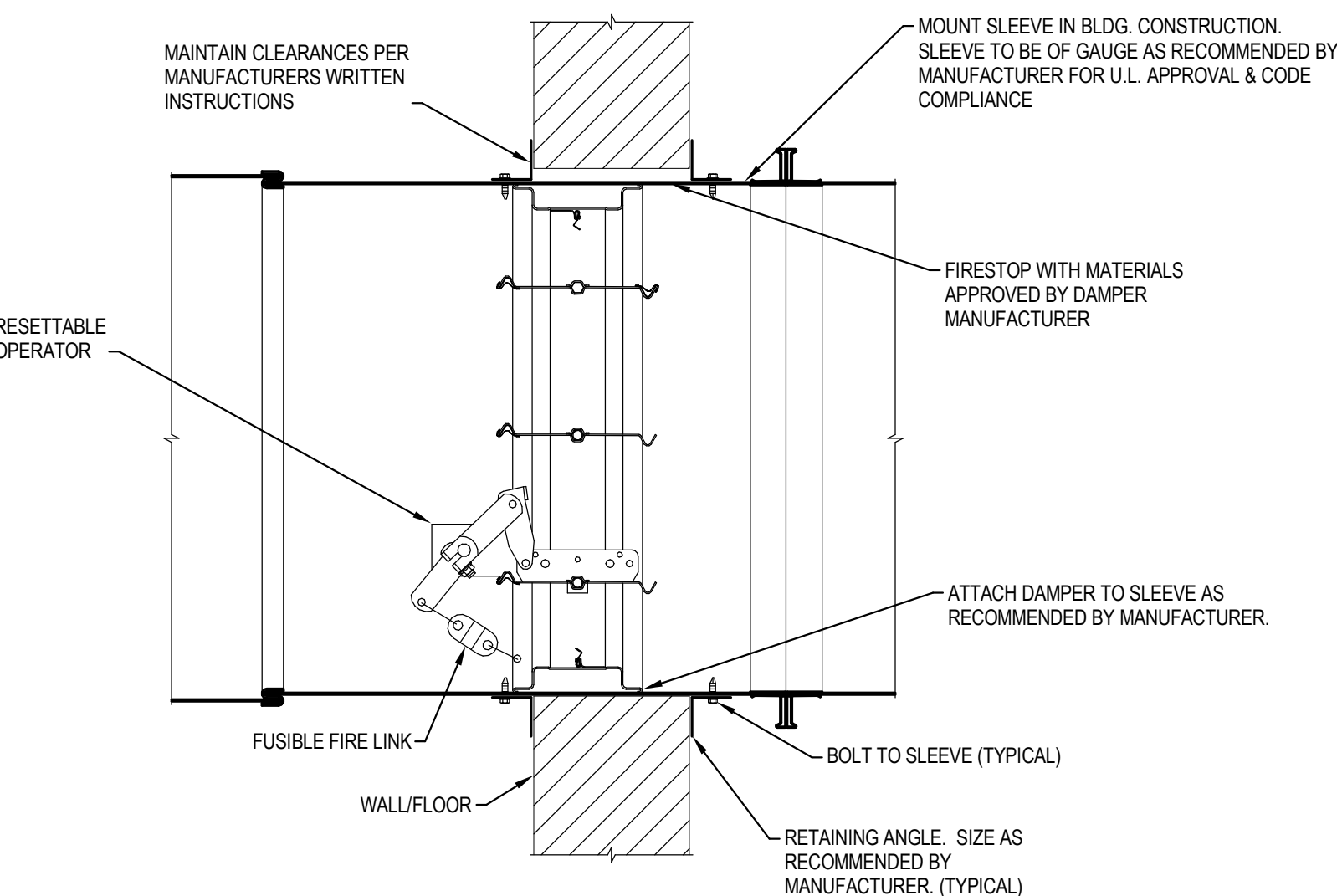
7 DETAIL FIRE RATED PIPING WALL PENETRATION
N.T.S.



8 DETAIL CA MECHANICAL CLOSET
N.T.S.

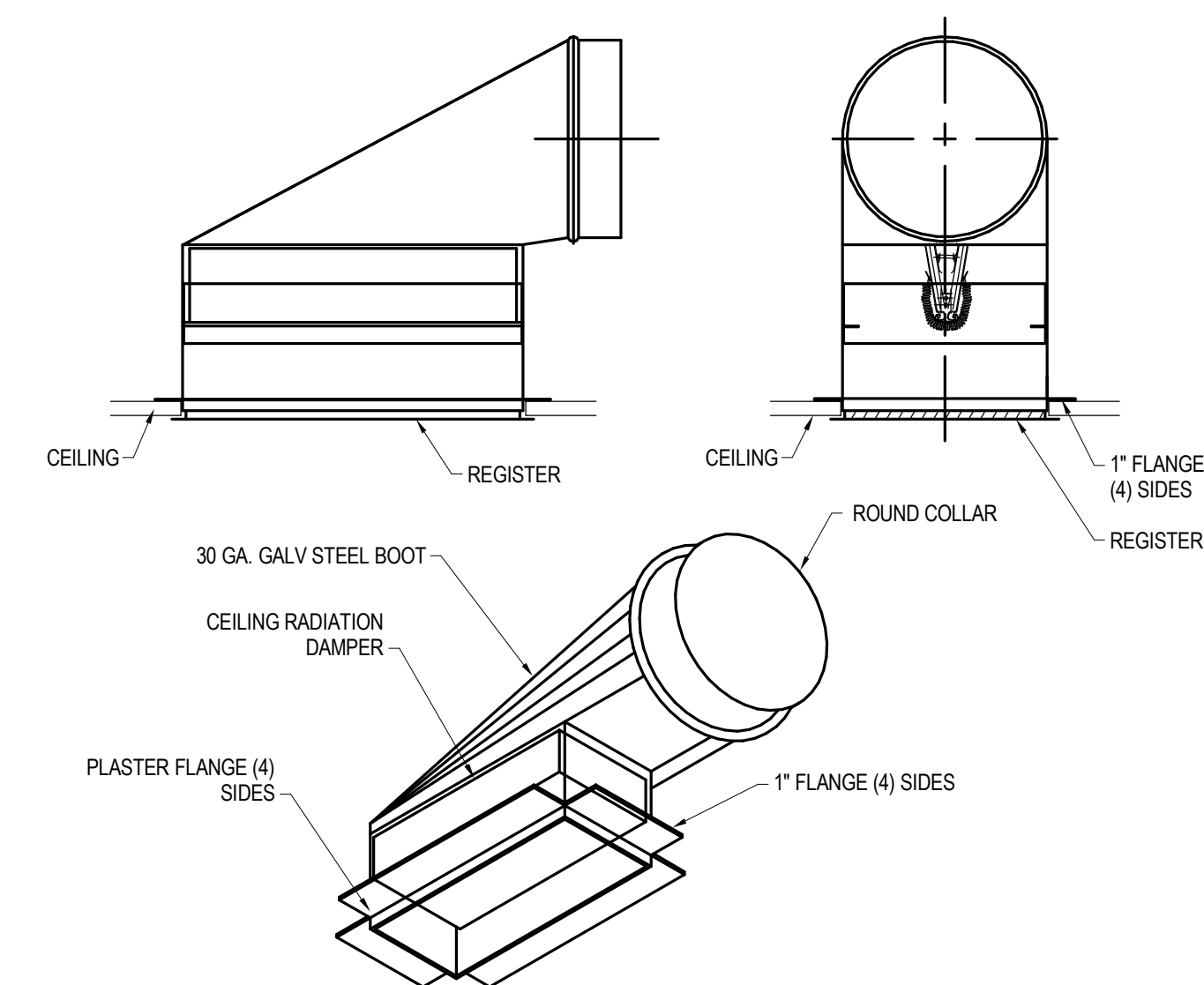


9 DETAIL COMBINATION FIRE/SMOKE DAMPER INSTALLATION
N.T.S.

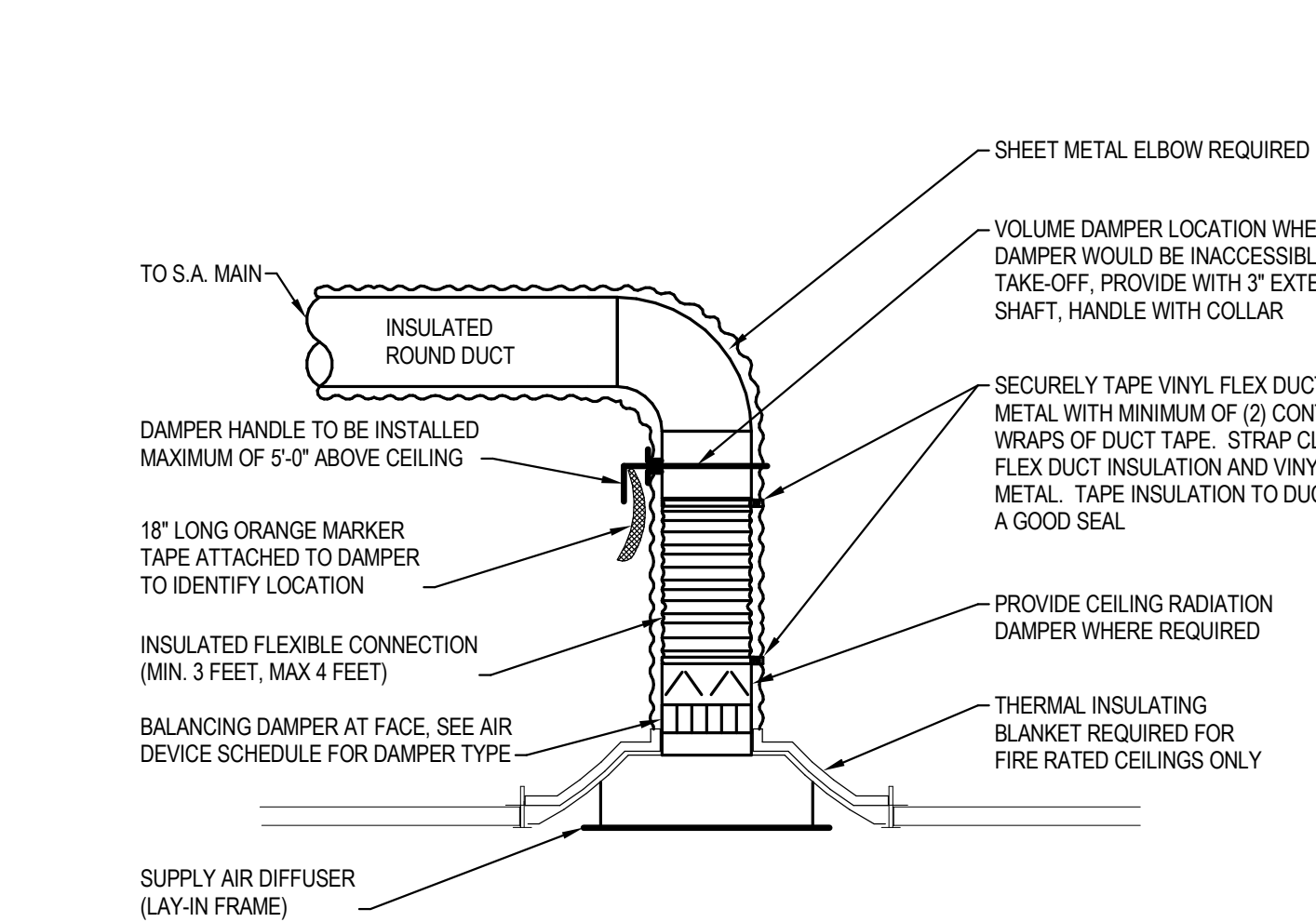


- NOTES:
1. PROVIDE HINGED ACCESS DOOR IN ADJACENT DUCTWORK FOR RESETTING THE DAMPER. MINIMUM DOOR SIZE 12\"/>

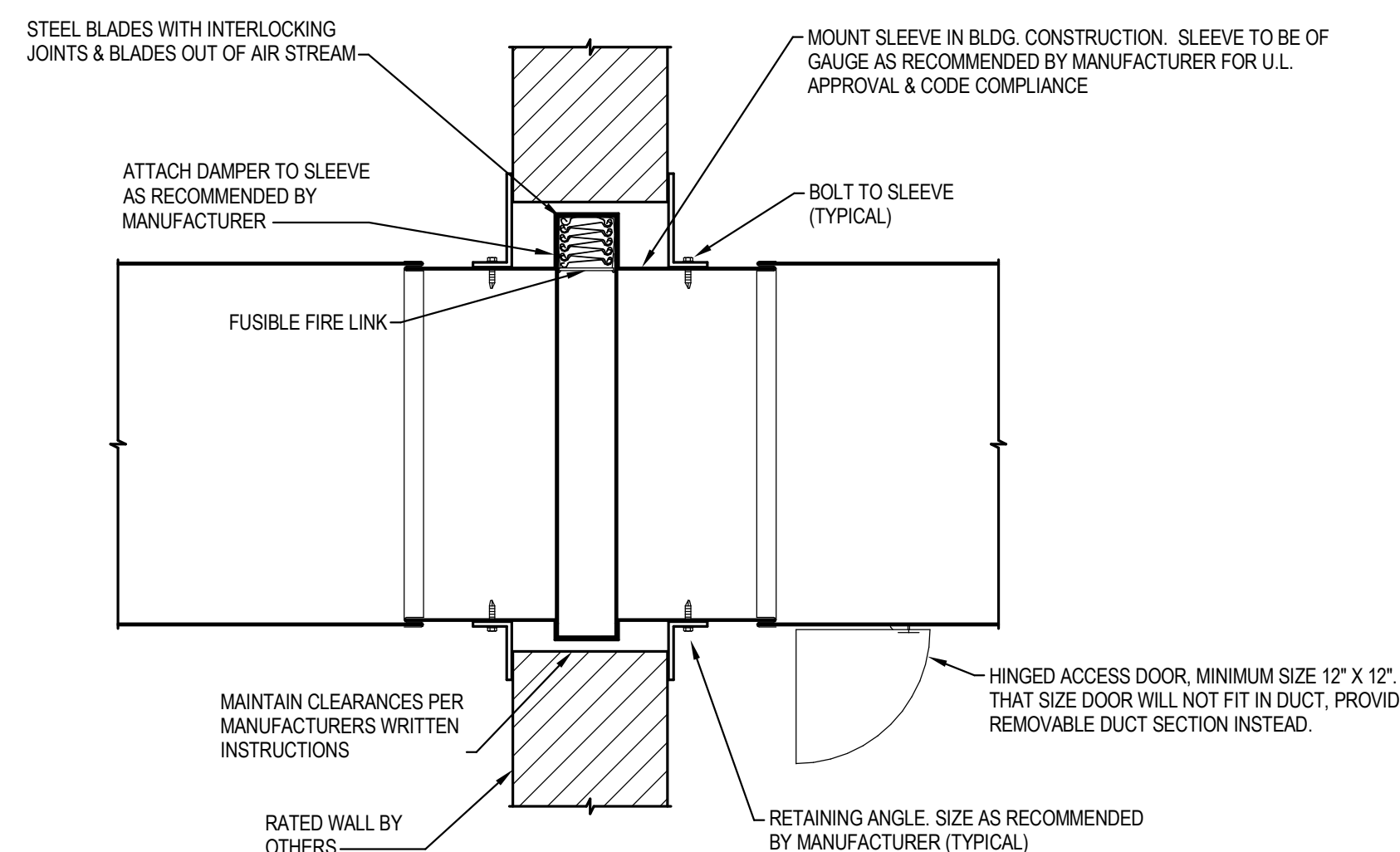
10 DETAIL CEILING RADIATION DAMPER AT REGISTER
N.T.S.



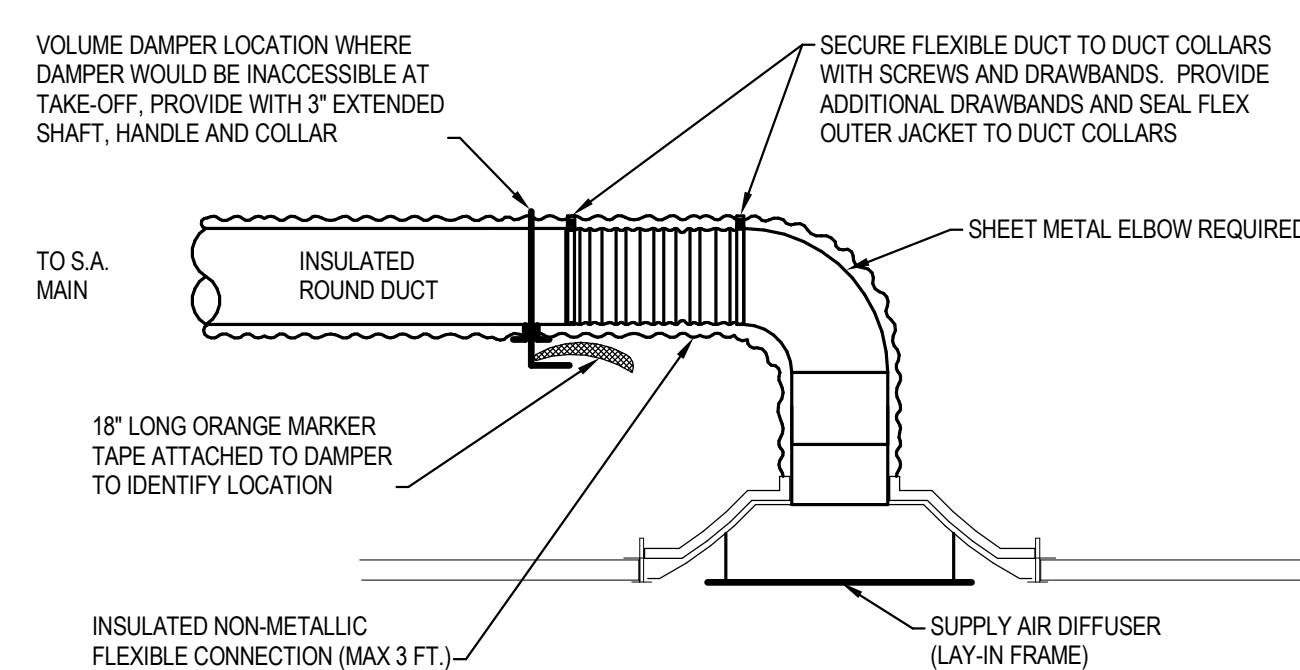
11 DETAIL CEILING RADIATION DAMPER AT DIFFUSER
N.T.S.



12 DETAIL FIRE DAMPER
N.T.S.



13 DETAIL DIFFUSER MOUNTING (SUPPLY DUCT CLOSE TO CEILING)
N.T.S.



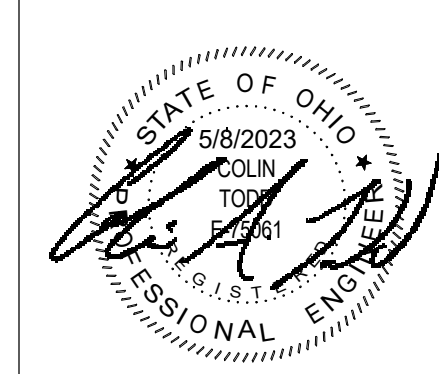
#	DATE	CHANGE DESCRIPTION

COBBLESTONE MANOR
COLUMBUS METROPOLITAN HOUSING AUTHORITY
1000 LAMPLIGHTER DRIVE
GROVE CITY, OH 43123
FOR
CMHA

MOODY•NOLAN
300 SPRUCE STREET
SUITE 300
COLUMBUS, OHIO 43215
PHONE: (614) 461-4664
FAX: (614) 280-8881

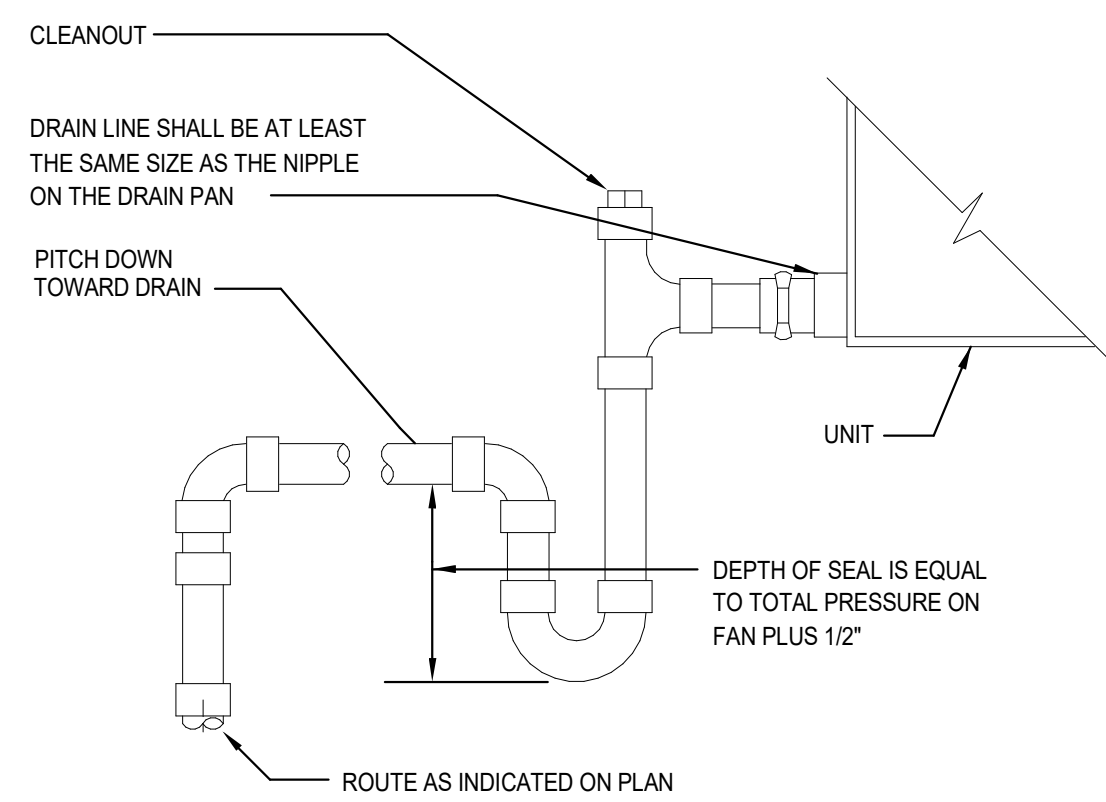
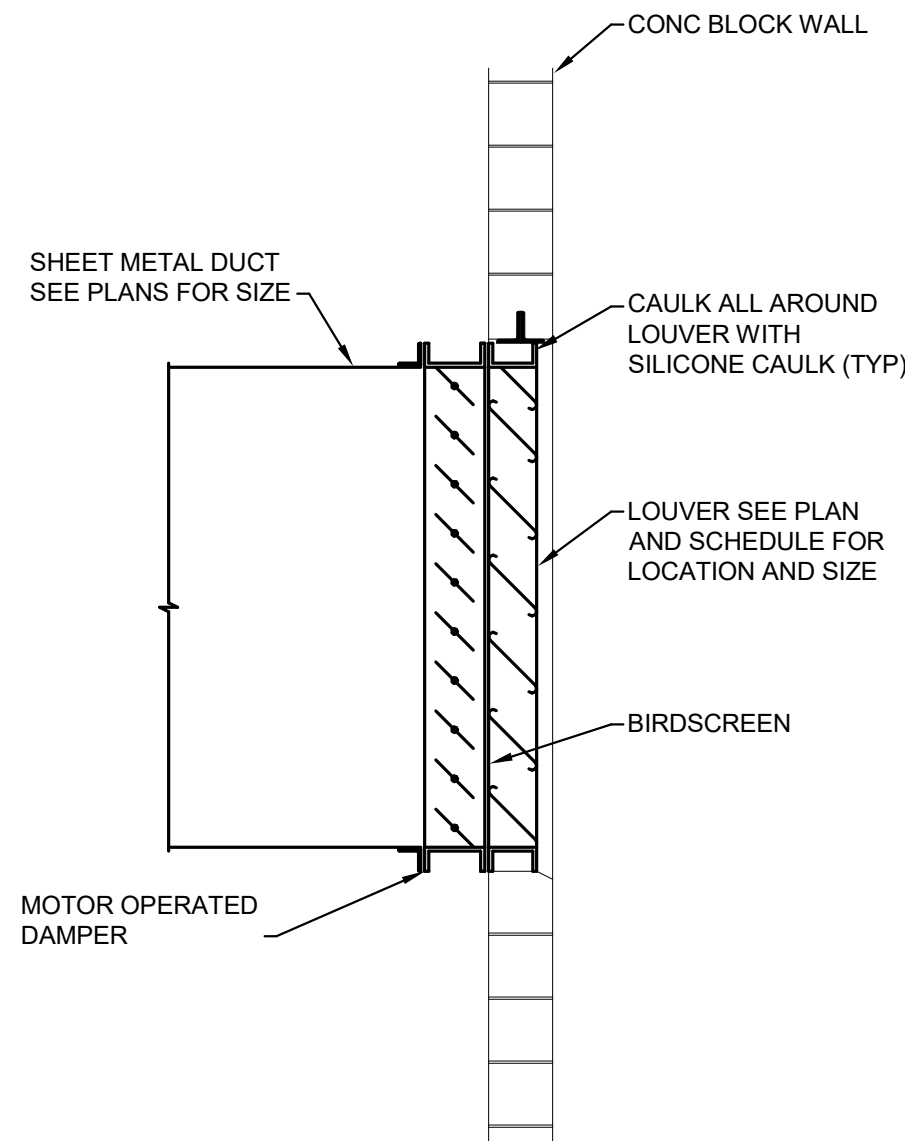
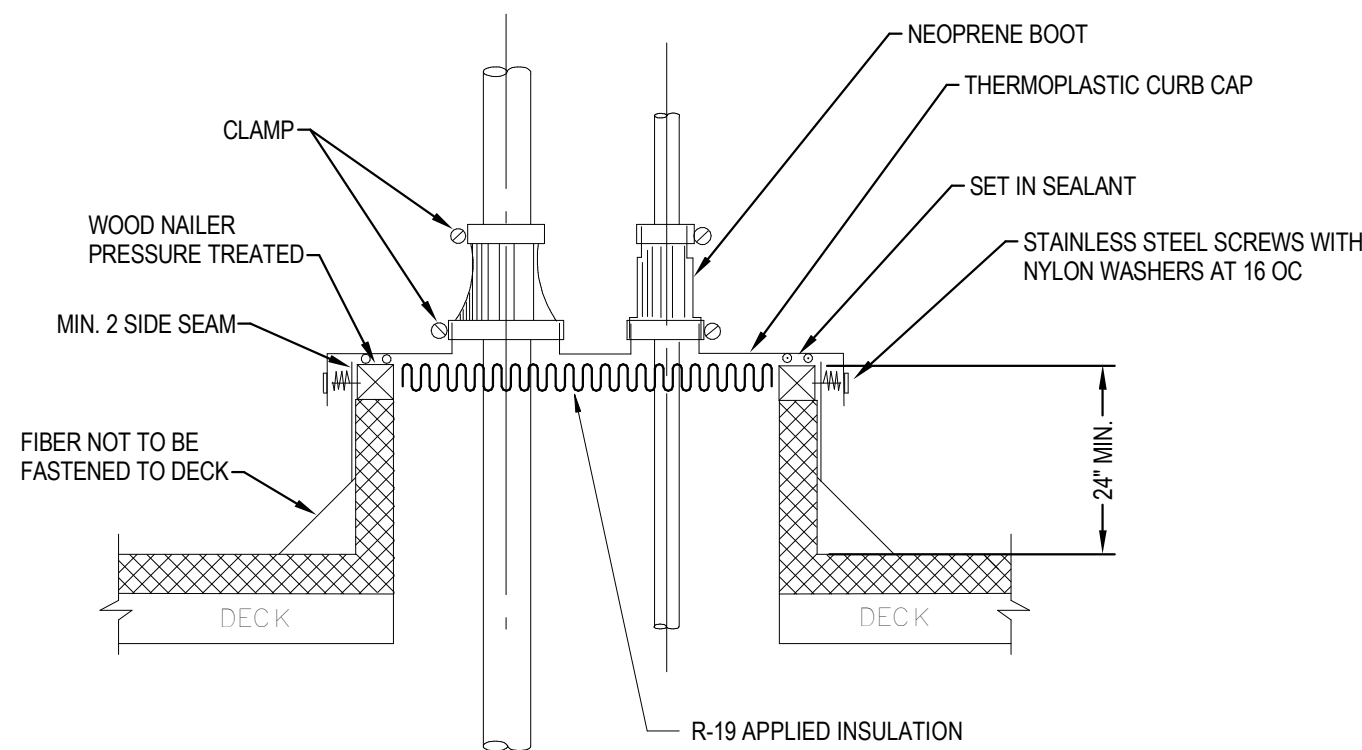
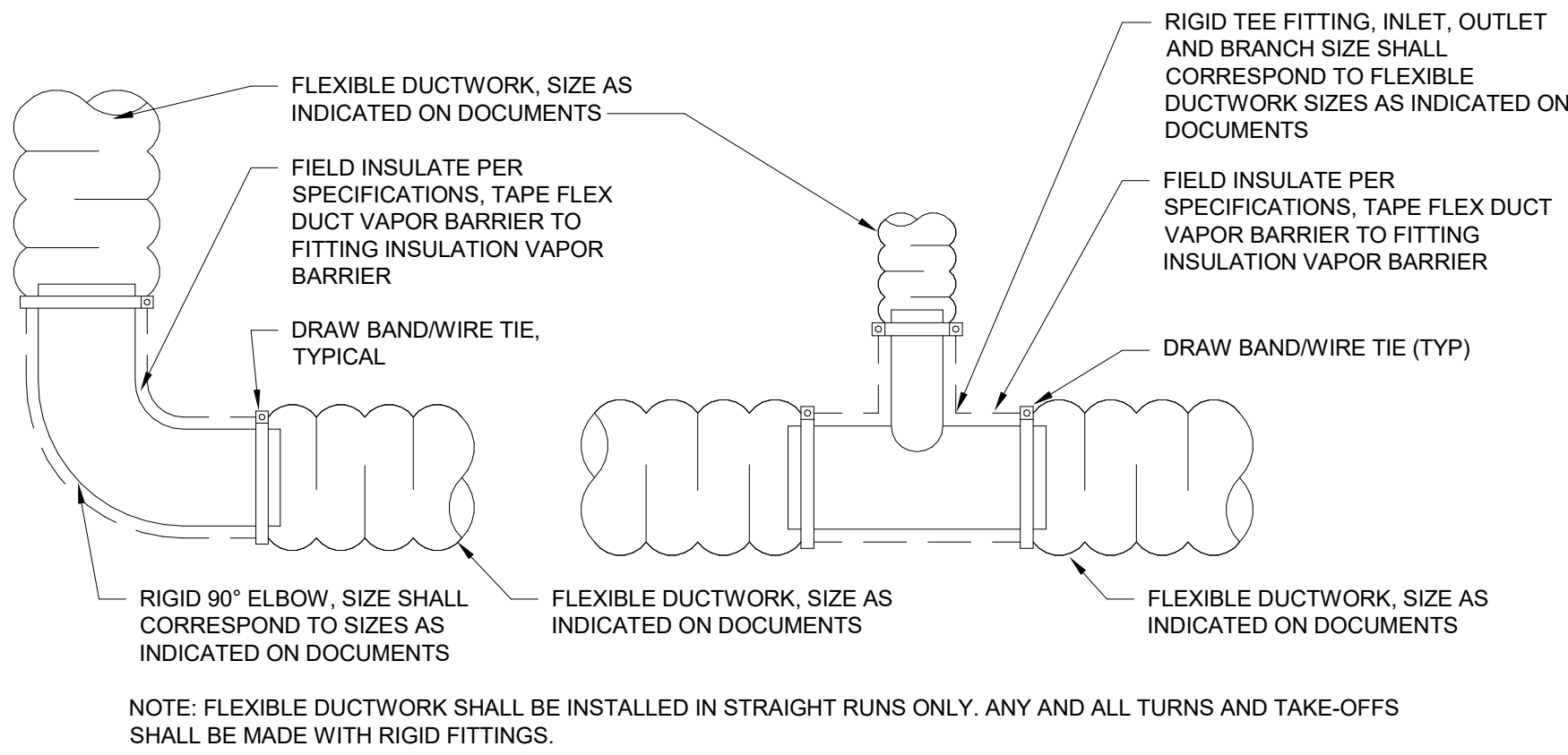
DRAWING TITLE:

DETAILS - MECHANICAL



06/08/2023
DRAWN BY: TO CHECKED BY: CT
5/8/2023
#22172.01
M501
PERMIT & BID SET

AEC ADVANCED ENGINEERING CONSULTANTS
Mechanical | Electrical | Plumbing | Fire Protection | Utilities
1405 Dublin Road Tel: (614) 466-4778
Columbus, Ohio 43215 Fax: (614) 466-4082

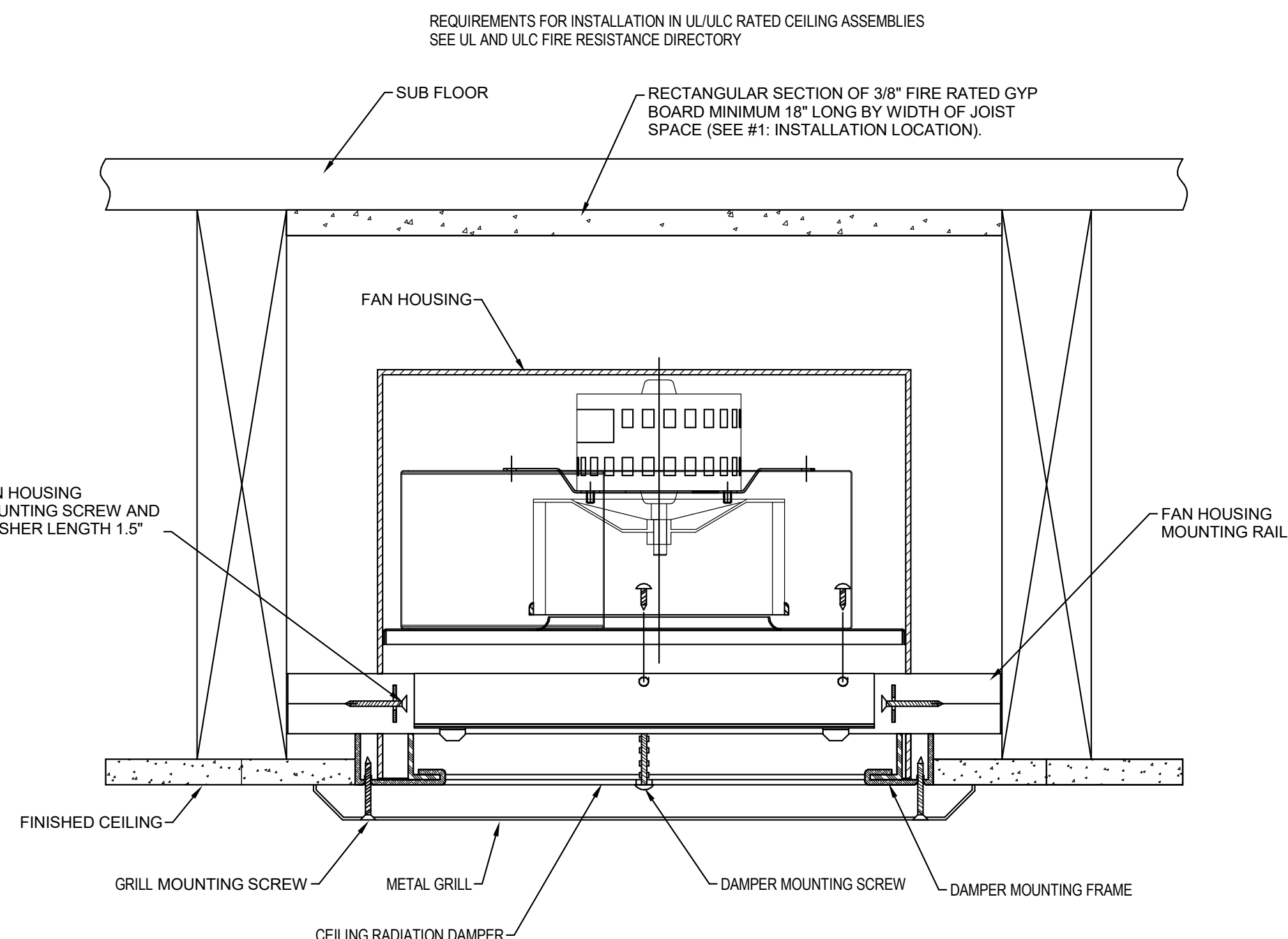
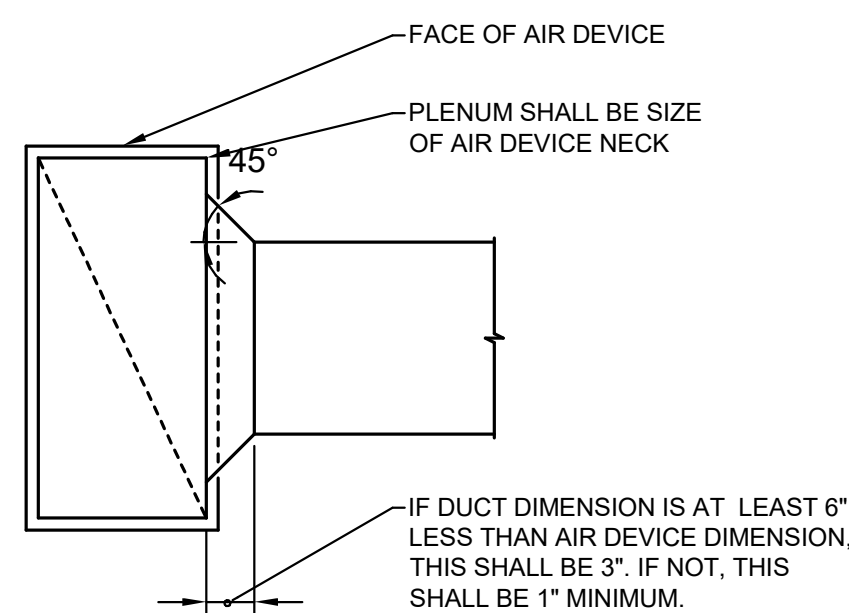
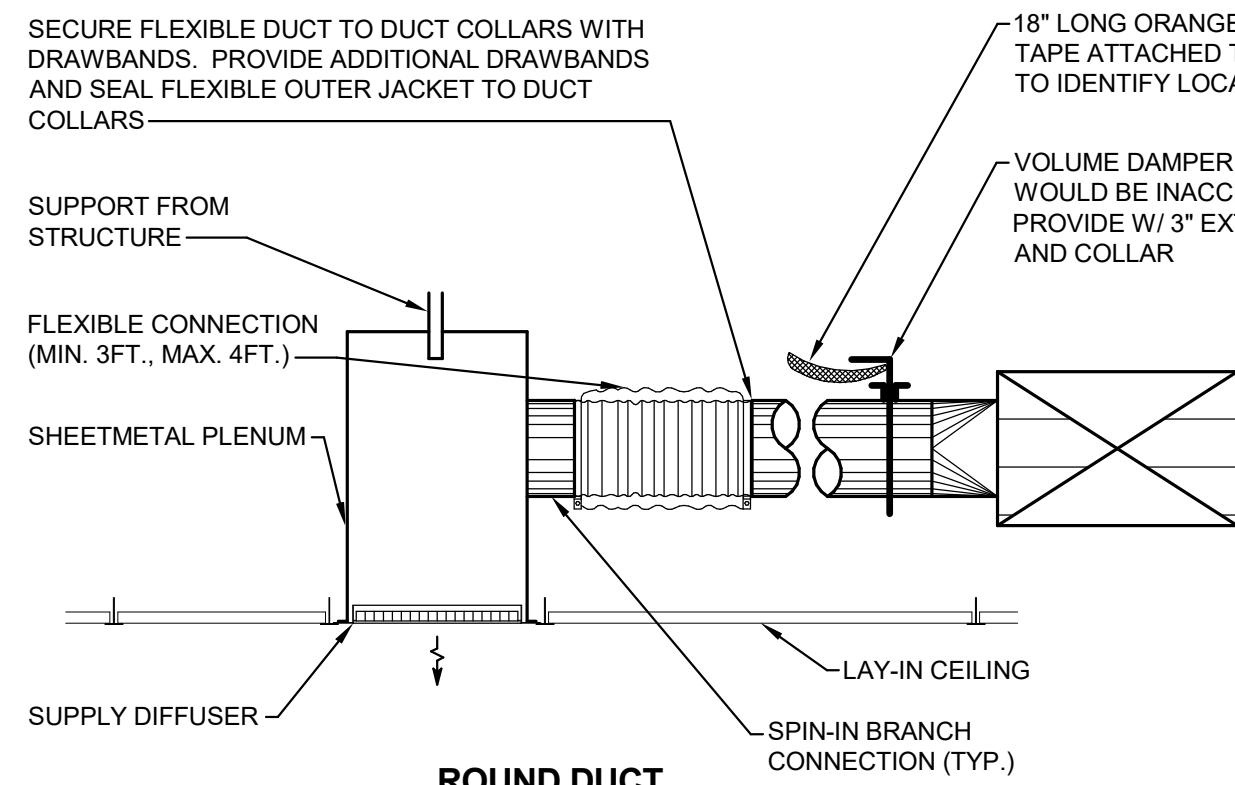
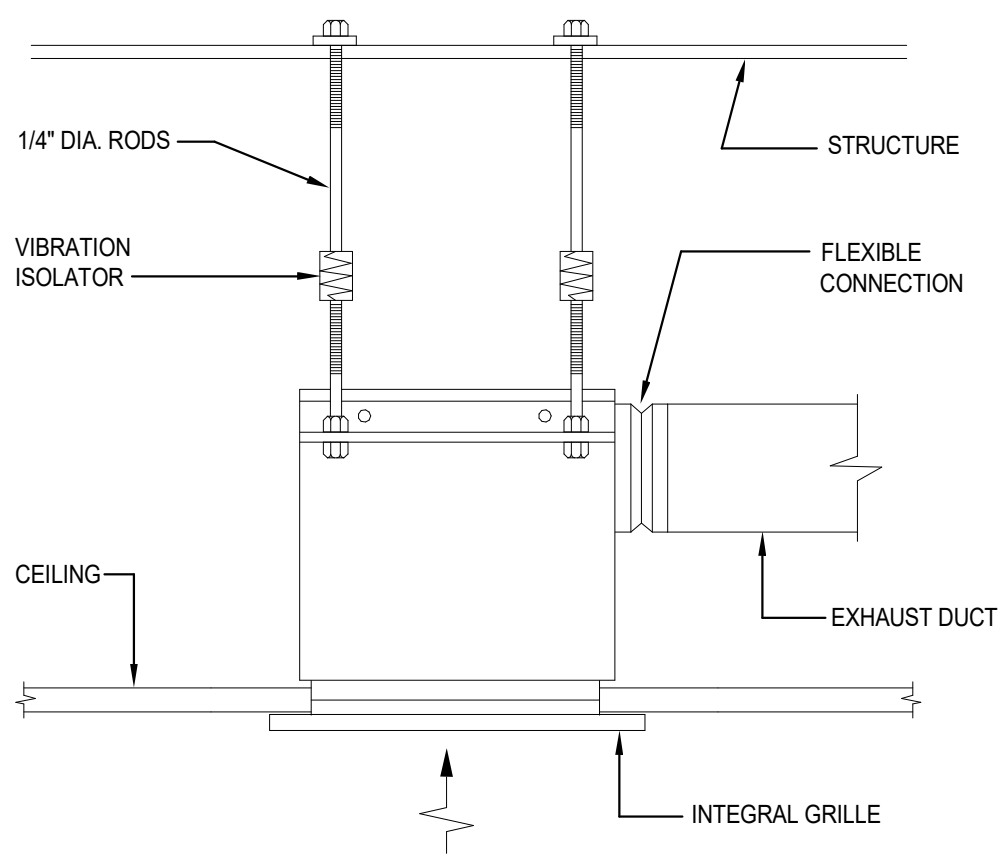


1 DETAIL DETAIL - RIGID ROUND DUCTWORK FITTING

2 DETAIL REFRIGERANT PIPING ROOF PENETRATION

3 DETAIL DETAIL - DUCTED LOUVER WITH DAMPER

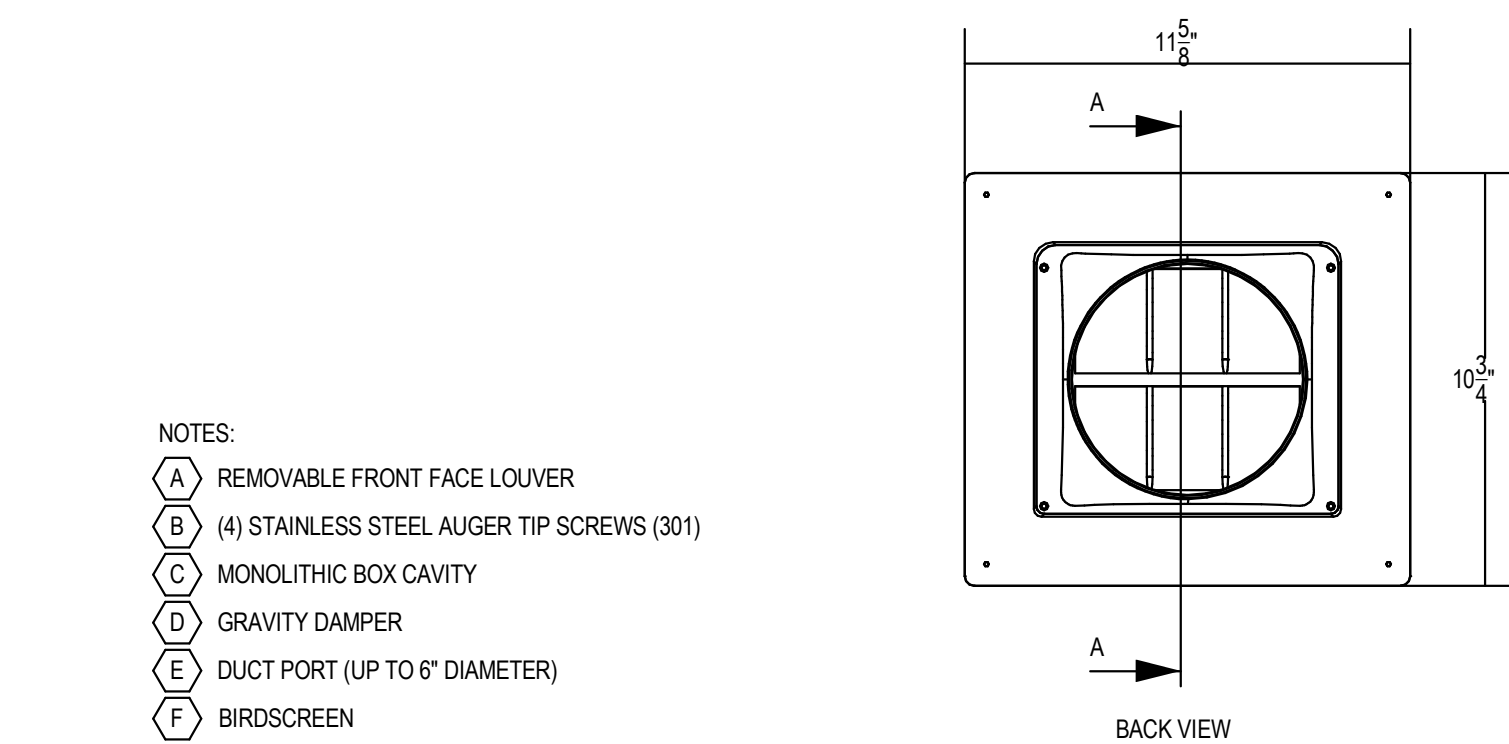
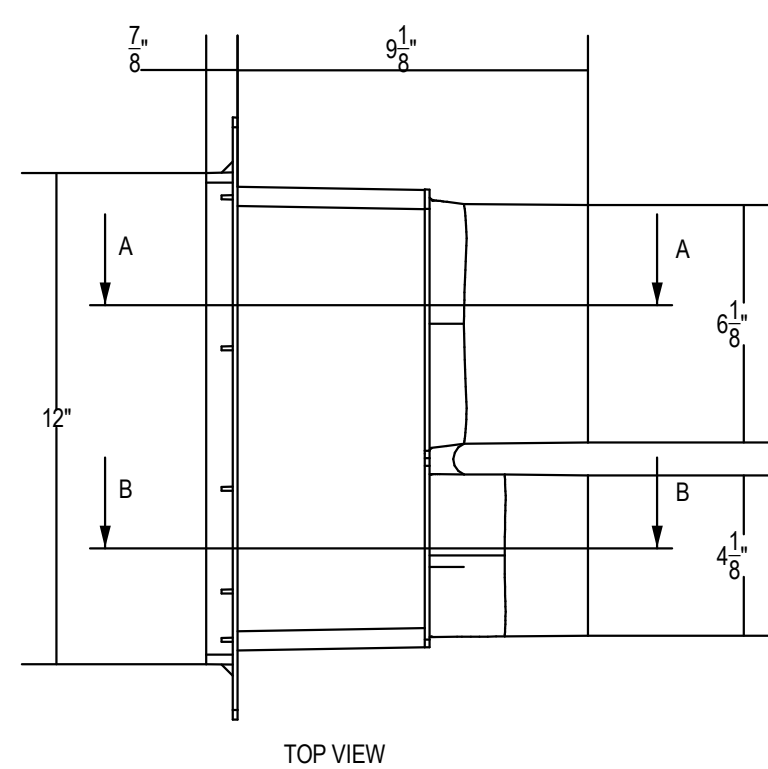
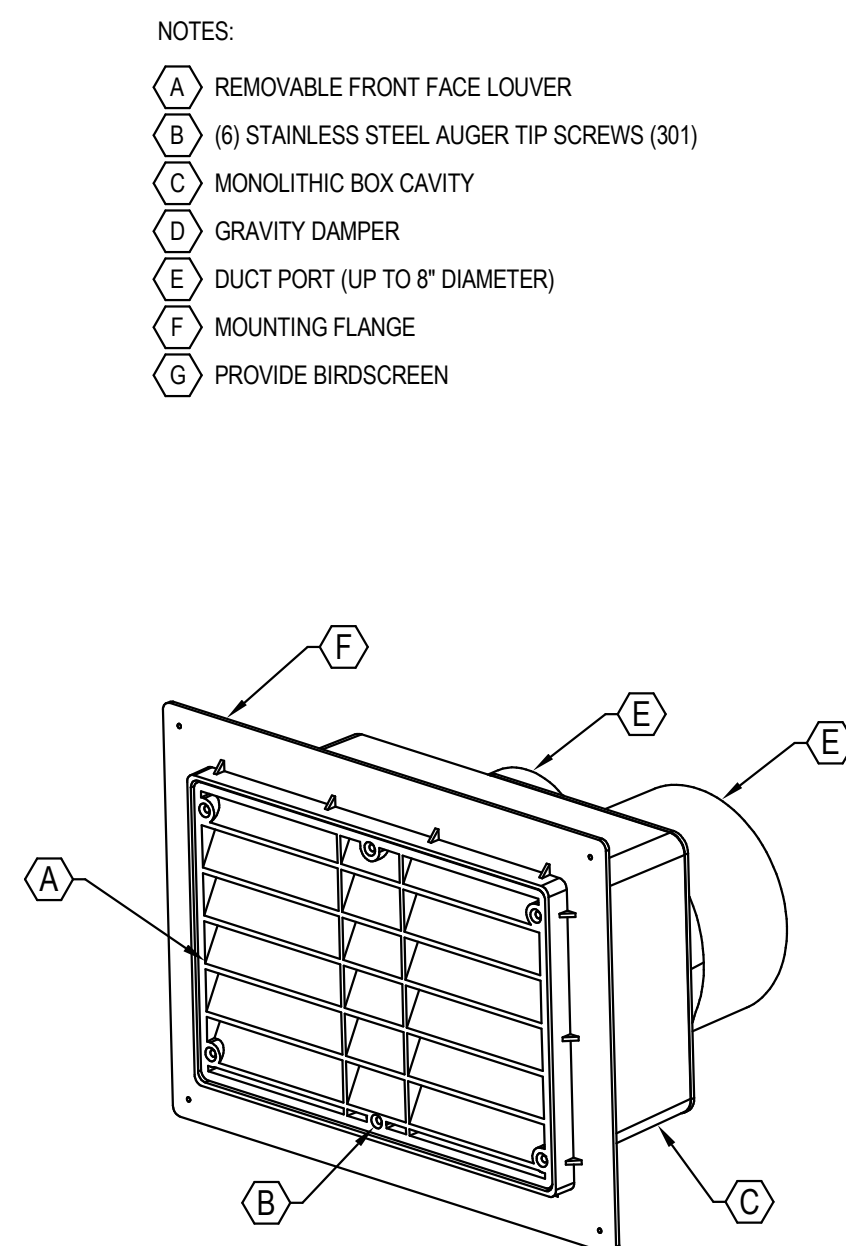
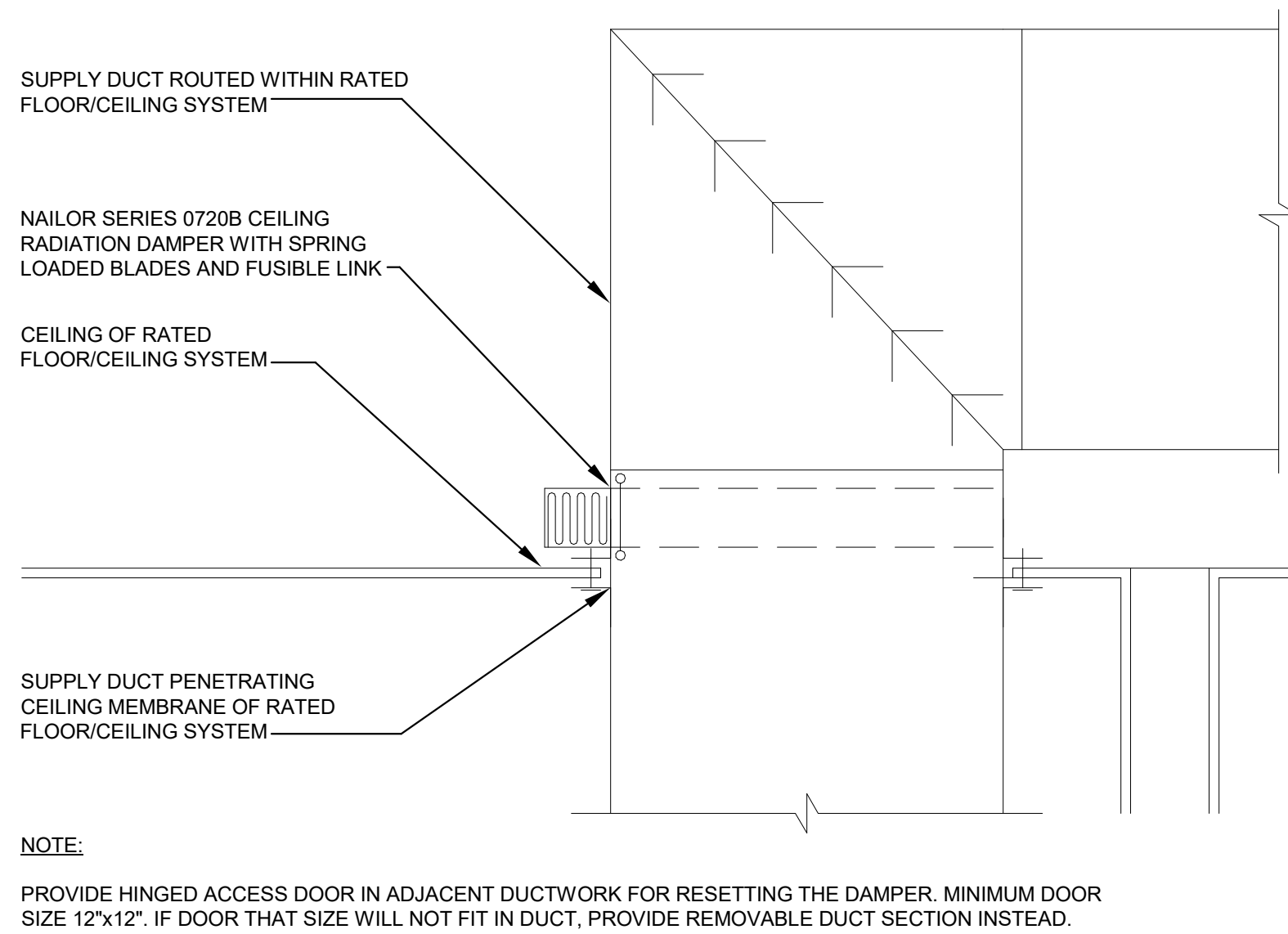
4 DETAIL DETAIL - CONDENSATE DRAIN TRAP



5 DETAIL DETAIL - CABINET EXHAUST FAN

6 DETAIL DETAIL - LINEAR SLOT DIFFUSER CONNECTION

7 DETAIL DETAIL - FAN ASSEMBLY (FAN IN DWELLING UNIT TYPES)



8 DETAIL DETAIL - RADIATION DAMPER DUCT PENETRATION THRU CEILING

9 DETAIL LOUVER DUAL EXHAUST

10 DETAIL LOUVER SINGLE EXHAUST

#	DATE	CHANGE DESCRIPTION

COBBLESTONE MANOR
100 LAMPLIGHTER DRIVE
GROVE CITY, OH 43123
FOR
CMHA

300 SPRUCE STREET
SUITE 300
COLUMBUS, OHIO 43215
PHONE: (614) 461-4664
FAX: (614) 280-8881

DRAWING TITLE:

DETAILS - MECHANICAL

06/08/2023
DRAWN BY: TO CHECKED BY: CT
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Columbus, Ohio 43215 Tel: (614) 466-4778 Fax: (614) 466-4082

ROOF TOP UNIT SCHEDULE																										
EQUIPMENT BASED ON TRANE UNLESS NOTED OTHERWISE																										
UNIT DATA							SUPPLY FAN DATA			EVAPORATOR DATA				HEATING DATA						UNIT ELECTRICAL DATA						
TAG	NOMINAL TONS	MODEL	MINIMUM O.A. CFM	TOTAL CFM	E.S.P. IN W.G.	T.S.P. IN W.G.	HP	RPM	TOTAL MBH	SENSIBLE MBH	E.A.T. °F		L.A.T. °F		REFRIG.	INPUT MBH	OUTPUT MBH	FUEL TYPE	E.A.T. (°F)	L.A.T. (°F)	NO. OF STAGES	MCA	MOCP	VOLTS	PHASE	NOTES
											D.B.	W.B.	D.B.	W.B.												
RTU-1	5.0	YHC060	280	1980	0.8	1.0	1.0	1078	56.9	46.5	76.4	62.3	56.2	52.8	R410A	60	49	GAS	61.8	85.1	1	30	45	208	3	1, 2
RTU-2	5.0	YHC060	325	1750	0.8	1.0	1.0	1041	56.9	46.1	78.9	63.9	54.5	52.6	R410A	60	49	GAS	56.1	82.4	1	30	45	208	3	1, 3
RTU-3	4.0	YHC048	275	1525	0.8	1.0	1.0	932	51.4	39.4	79.4	64.7	57.0	54.6	R410A	60	49	GAS	57.8	87.4	1	28	40	208	3	1, 3
RTU-4	5.0	YHC060	325	1600	0.8	1.0	1.0	1027	55.5	44.4	78.7	67.6	54.8	52.3	R410A	60	49	GAS	56.0	84.7	1	30	45	208	3	1, 2
NOTES: 1. PROVIDE WITH ROOF CURB, ECONOMIZER, ELECTRICAL DISCONNECT, AND SINGLE POINT ELECTRICAL CONNECTION. 2. VERTICAL DISCHARGE. 3. HORIZONTAL DISCHARGE, IF ECONOMIZER IS NOT AVAILABLE WITH HORIZONTAL DISCHARGE ON ACTUAL EQUIPMENT PROVIDED, PROVIDE VERTICAL DISCHARGE WITH HORIZONTAL DISCHARGE PLENUM CURB.																										

LOUVER SCHEDULE						
EQUIPMENT BASED ON XVENT UNLESS NOTED OTHERWISE						
UNIT DATA						
TAG	SERVICE	MODEL	FUNCTION	FACE SIZE (W x H)	FREE AREA (SF)	DAMPER
L-1	SEE PLANS	DHEB-66-BRS	EXHAUST	15.375" X 11.25"	0.440	BACKDRAFT
L-2	SEE PLANS	6SEB-BRS	INTAKE	11.75" X 10.875"	0.220	NONE
L-3	SEE PLANS	4SEB-BRS	EXHAUST	11.75" X 10.875"	0.198	BACKDRAFT
L-4	SEE PLANS	DHEB-64R-BRS	EXHAUST	15.375" X 11.25"	0.283	BACKDRAFT
L-5	SEE PLANS	GREENHECK ESD-435	INTAKE	12" X 12"	0.19	MOTORIZED
L-6	SEE PLANS	GREENHECK ESD-435	INTAKE	12" X 12"	0.19	MOTORIZED
L-7	SEE PLANS	GREENHECK ESD-435	EXHAUST	12" X 12"	0.19	BACKDRAFT
L-8	SEE PLANS	GREENHECK ESD-435	INTAKE	12" X 12"	0.19	NONE
L-9	SEE PLANS	4SEB-BRS	EXHAUST	11.75" X 10.875"	0.198	BACKDRAFT
L-10	SEE PLANS	DHEB-64R-BRS	EXHAUST	15.375" X 11.25"	0.283	BACKDRAFT
NOTES: 1. NO BIRDSCREEN ON DRYER EXHAUST.						

CONVECTION UNIT HEATER SCHEDULE									
EQUIPMENT BASED ON QMARK UNLESS NOTED OTHERWISE									
UNIT DATA						ELECTRICAL DATA			NOTES
TAG	SERVICE	MODEL	LENGTH	WIDTH	AMPS	WATTS	VOLTS	PHASE	
EBH-1	CR-100 COMMUNITY	SHA 02100	2'-4"	7	1.0	200	208	1	1
EBH-2	CR-100 COMMUNITY	SHA 02100	2'-4"	7	1.0	200	208	1	1
EBH-3	CR-100 COMMUNITY	SHA 08100	8'-0"	7	3.8	800	208	1	1
EBH-4	CR-100 COMMUNITY	SHA 02100	2'-4"	7	1.0	200	208	1	1
EBH-5	CR-100 COMMUNITY	SHA 02100	2'-4"	7	1.0	200	208	1	1
EBH-6	CR-100 COMMUNITY	SHA 02100	2'-4"	7	1.0	200	208	1	1
EBH-7	CR-100 COMMUNITY	SHA 02100	2'-4"	7	1.0	200	208	1	1
EBH-8	CR-100 COMMUNITY	SHA 06100	5'-0"	7	2.4	500	208	1	1
NOTES: 1. BOTTOM INLET, PROVIDE WITH PEDESTAL MOUNT KIT, INTEGRAL THERMOSTAT, & ELECTRICAL DISCONNECT.									

AIR DEVICE SCHEDULE									
EQUIPMENT BASED ON TITUS UNLESS NOTED OTHERWISE									
UNIT DATA									
TAG	FUNCTION	MODEL	FACE SIZE	NECK SIZE	TYPE	MATERIAL	FINISH	DAMPER	N.C. MAX.
D1	SUPPLY	FT-10	44" X 8"	12" X 6"	LINEAR	ALUMINUM	WHITE	YES	25
B1	SUPPLY	ARMATE 160	14" X 8"	12" X 6"	SURFACE	STEEL	WHITE	YES	20
B2	SUPPLY	250-AA	8" X 6"	8" X 4"	SURFACE	ALUMINUM	WHITE	YES	25
B3	SUPPLY	250-AA	10" X 6"	8" X 4"	SURFACE	ALUMINUM	WHITE	YES	25
B4	SUPPLY	250-AA	12" X 5"	10" X 4"	SURFACE	ALUMINUM	WHITE	YES	25
B5	SUPPLY	250-AA	14" X 6"	12" X 4"	SURFACE	ALUMINUM	WHITE	YES	25
B6	SUPPLY	250-AA	14" X 8"	12" X 6"	SURFACE	ALUMINUM	WHITE	YES	25
G1	RETURN / EXHAUST	350FL	14" X 8"	12" X 6"	SURFACE	ALUMINUM	WHITE	NO	20
G2	RETURN / EXHAUST	350FL	12" X 12"	10" X 10"	SURFACE	ALUMINUM	WHITE	NO	25
G3	RETURN / EXHAUST	350FL	16" X 16"	14" X 14"	SURFACE	ALUMINUM	WHITE	NO	25
G4	RETURN / EXHAUST	350FL	16" X 36"	14" X 36"	SURFACE	ALUMINUM	WHITE	NO	25
NOTES: 1. PROVIDE ALL UNITS MOUNTED IN RATED CEILINGS WITH CEILING RADIATION DAMPERS TESTED FOR UL CEILING/FLOOR AND CEILING/ROOF ASSEMBLIES. REFER TO SHEETS G-006, G-007, G-008, & G-009 FOR ACCEPTABLE MANUFACTURERS AND MODEL NUMBERS FOR EACH ASSEMBLY TYPE. 2. PROVIDE W/ INSULATED PLENUM.									

FAN SCHEDULE															
EQUIPMENT BASED ON GREENHECK UNLESS NOTED OTHERWISE															
UNIT DATA										ELECTRICAL DATA					
TAG	LOCATION	MODEL	FUNCTION	FAN TYPE	E.S.P. IN W.G.	CFM	RPM	TYPE OF DAMPER	TYPE OF DRIVE	SOUND RATING IN SONES	WATTS	VOLTS	PHASE	AMPS	NOTES
EF-1	TR-100	SP-A200	EXHAUST	CEILING	0.23	200	836	BACKDRAFT	DIRECT	1.5	43	115	1	0.5	1, 3, 6, 9, 10
EF-2	ME-100	SP-A410	EXHAUST	CEILING	0.23	300	907	BACKDRAFT	DIRECT	2.0	121	115	1	0.6	1, 3, 6, 7, 10
EF-3	E-100	DELTA ELECTRONICS SIG110	EXHAUST	CEILING	0.20	100	950	BACKDRAFT	DIRECT	0.6	9	115	1	0.4	1, 2, 3, 6, 7
EF-4	J-100	DELTA ELECTRONICS SIG110	EXHAUST	CEILING	0.20	100	950	BACKDRAFT	DIRECT	0.6	9	115	1	0.4	1, 2, 3, 6, 9
EF-5	T-100	DELTA ELECTRONICS SIG80	EXHAUST	CEILING	0.25	75	875	BACKDRAFT	DIRECT	0.5	7	115	1	0.3	1, 2, 3, 6, 8
EF-6	T-101	DELTA ELECTRONICS SIG80	EXHAUST	CEILING	0.25	75	875	BACKDRAFT	DIRECT	0.5	7	115	1	0.3	1, 2, 3, 6, 8
EF-7	TR-101	SP-A200	EXHAUST	CEILING	0.23	200	836	BACKDRAFT	DIRECT	1.5	43	115	1	0.5	1, 3, 6, 9, 10
EF-8	TR-200	DELTA ELECTRONICS SIG110	EXHAUST	CEILING	0.20	100	950	BACKDRAFT	DIRECT	0.6	9	115	1	0.4	1, 2, 3, 6, 9
EF-9	E-200	DELTA ELECTRONICS SIG110	EXHAUST	CEILING	0.20	100	950	BACKDRAFT	DIRECT	0.6	9	115	1	0.4	1, 2, 3, 6, 7
EF-10	J-200	DELTA ELECTRONICS SIG110	EXHAUST	CEILING	0.20	100	950	BACKDRAFT	DIRECT	0.6	9	115	1	0.4	1, 2, 3, 6, 9
EF-11	TR-201	DELTA ELECTRONICS SIG110	EXHAUST	CEILING	0.20	100	950	BACKDRAFT	DIRECT	0.6	9	115	1	0.4	1, 2, 3, 6, 9
EF-12	TR-300	DELTA ELECTRONICS SIG110	EXHAUST	CEILING	0.20	100	950	BACKDRAFT	DIRECT	0.6	9	115	1	0.4	1, 2, 3, 6, 9
EF-13	J-300	DELTA ELECTRONICS SIG110	EXHAUST	CEILING	0.20	100	950	BACKDRAFT	DIRECT	0.6	9	115	1	0.4	1, 2, 3, 6, 9
EF-14	E-300	DELTA ELECTRONICS SIG110	EXHAUST	CEILING	0.20	100	950	BACKDRAFT	DIRECT	0.6	9	115	1	0.4	1, 2, 3, 6, 7
EF-15	TR-301	DELTA ELECTRONICS SIG110	EXHAUST	CEILING	0.20	100	950	BACKDRAFT	DIRECT	0.6	9	115	1	0.4	1, 2, 3, 6, 9
EF-A-1	1 BED APARTMENT	DELTA ELECTRONICS SIG90M	EXHAUST	CEILING	0.23	80	--	BACKDRAFT	DIRECT	LOW FLOW: 0.3 HIGH FLOW: 0.5	14	115	1	0.3	1, 2, 3, 4, 6
EF-A-2	2 BED APARTMENT	DELTA ELECTRONICS SIG60M	EXHAUST	CEILING	0.23	80	--	BACKDRAFT	DIRECT	LOW FLOW: 0.3 HIGH FLOW: 0.5	14	115	1	0.3	1, 2, 3, 5, 6
NOTES: 1. PROVIDE WITH FACTORY MOUNTED AND WIRED DISCONNECT 2. PROVIDE EXHAUST FAN WITH CEILING RADIATION DAMPER TESTED FOR UL CEILING/FLOOR AND CEILING/ROOF ASSEMBLIES. REFER TO SHEETS G-006, G-007, G-008, & G-009 FOR ACCEPTABLE MANUFACTURERS AND MODEL NUMBERS FOR EACH ASSEMBLY TYPE. 3. PROVIDE WITH VIBRATION ISOLATION KIT. 4. WALL MOUNTED MOTION DETECTOR FOR CONTROL OF EXHAUST FAN AND 2-SPEED SOLID STATE SPEED CONTROL ARE TO BE PROVIDED WITH FAN. WHEN OCCUPIED, FAN IS TO OPERATE AT 80 CFM WHEN NOT OCCUPIED, FAN IS TO OPERATE AT 50 CFM (ADJUSTABLE) CONTINUOUSLY. SET DURATION TO BE 10 MINUTES (ADJUSTABLE) AT 75 CFM WHEN OCCUPIED. 5. WALL MOUNTED MOTION DETECTOR FOR CONTROL OF EXHAUST FAN AND 2-SPEED SOLID STATE SPEED CONTROL ARE TO BE PROVIDED WITH FAN. WHEN OCCUPIED, FAN IS TO OPERATE AT 80 CFM WHEN NOT OCCUPIED, FAN IS TO OPERATE AT 50 CFM (ADJUSTABLE) CONTINUOUSLY. SET DURATION TO BE 10 MINUTES (ADJUSTABLE) AT 75 CFM WHEN OCCUPIED. 6. PROVIDE WITH ENERGY STAR CERTIFICATION. 7. WALL MOUNTED THERMOSTAT CONTROL. 8. SWITCH WITH LIGHT SWITCH. 9. FAN RUNS CONTINUOUSLY. 10. MOUNT FAN BELOW CEILING, EXPOSED IN SPACE.															

CABINET UNIT HEATER SCHEDULE													
EQUIPMENT BASED ON QMARK UNLESS NOTED OTHERWISE													
UNIT DATA				AIR DATA				MOTOR DATA					
TAG	SERVICE	MODEL	KW	MBH	CFM	E.A.T. (°F)	L.A.T. (°F)	A.P.D. IN. W.G.	HP	RPM	VOLTS	PHASE	NOTES
CUH-1	CORRIDOR	CU935	3.0	10.2	250	60.0	97.6	0.1	0.125	1550	208	1	1
CUH-2	STAIR	CU935	3.0	10.2	250	60.0	97.6	0.1	0.1	1550	208	1	1
CUH-3	ENTRANCE	CU935	3.0	10.2	250	60.0	97.6	0.1	0.125	1550	208	1	2
CUH-4	STAIR	CU935	3.0	10.2	250	60.0	97.6	0.1	0.125	1550	208	1	1
CUH-5	CORRIDOR	CU935	3.0	10.2	250	60.0	97.6	0.1	0.125	1550	208	1	1
NOTES: 1. PROVIDE WITH INTEGRAL THERMOSTAT & ELECTRICAL DISCONNECT. PROVIDE SURFACE MOUNT UNITS WITH BASE KIT. 2. PROVIDE WITH INTEGRAL THERMOSTAT & ELECTRICAL DISCONNECT. PROVIDE SEMI-RECESSED UNITS WITH RECESS TRIM KIT.													

ELECTRIC UNIT HEATER SCHEDULE													
EQUIPMENT BASED ON QMARK UNLESS NOTED OTHERWISE													
UNIT DATA				AIR DATA				HEATER DATA			MOTOR DATA		
TAG	SERVICE	MODEL	MBH	CFM	E.A.T. (°F)	L.A.T. (°F)	AMPS	MCA	WATTS	RPM	VOLTS	PHASE	NOTES
EUH-1	TRASH	MVUH7504	10.7	270	60	86.5	15.0	18.5	6	1350	208	1	1, 2
EUH-2	MECH/WATER	MVUH5004	19.2	270	60	125.5	27.1	33.9	6	1400	208	1	1, 2
EUH-3	TRASH	MVUH7504	10.7	270	60	86.5	15.0	18.5	6	1350	208	1	1, 2
NOTES: 1. PROVIDE WITH MOUNTING BRACKET. 2. PROVIDE WITH INTEGRAL THERMOSTAT & ELECTRICAL DISCONNECT.													

AIR COOLED HEAT PUMP SCHEDULE													
EQUIPMENT BASED ON BRYANT UNLESS NOTED OTHERWISE													
UNIT DATA							CONDENSER DATA		ELECTRICAL DATA				NOTES
TAG	SERVICE	MODEL	WEIGHT LB.	NOMINAL CLG. CAP. (TONS)	SEER	HTG. CAPACITY @ 47°F (BTU/H)	MOTOR FLA	REFRIG. TYPE	VOLTS	PHASE	MCA	MOCP	
HP-1	SERVICES AHU-1	215SAW01800A	170	1.5	15.2	17.5	0.5	R-410A	208	1	13.4	20	ALL
HP-2	SERVICES AHU-2	215SAW02400A	190	2	15.2	22.8	0.6	R-410A	208	1	14.5	25	ALL
CA-HP-1	SERVICES CA-AHU-1	TRANE 4TWR6036N1	246	3	16.0	32.6	0.7	R-410A	208	1	18.0	30	ALL
CA-HP-2	SERVICES CA-AHU-2	TRANE 4TWR6036N1	246	3	16.0	32.6	0.7	R-410A	208	1	18.0	30	ALL
NOTES:													
1. PROVIDE UNIT WITH HAIL GUARD.													
2. LOW-AMBIENT PRESSURE SWITCH.													
3. CRANKCASE HEATER.													
4. EVAPORATOR FREEZE THERMOSTAT.													
5. START ASSIST.													
6. ELECTRICAL CONTRACTOR TO PROVIDE DISCONNECT.													
7. REFER TO FLOOR PLANS FOR QUANTITY OF UNITS.													

ABBREVIATIONS	
NOTE: NOT ALL ABBREVIATIONS MAY BE USED.	
(A)	EXISTING TO BE ABANDONED
(D)	EXISTING TO BE DEMOLISHED
(E)	EXISTING TO REMAIN
(F)	FUTURE
(R)	EXISTING TO BE RELOCATED
A	AMPERE
AC	ALTERNATING CURRENT OR AIR CONDITIONER
AFF	ABOVE FINISHED FLOOR
AFG	ABOVE FINISHED GRADE
AIC	AMPS INTERRUPTING CAPACITY
ANNC	ANNUNCIATOR
AWG	AMERICAN WIRE GAUGE
BPS	BOLTED PRESSURE SWITCH
C	CONDUIT
CB	CIRCUIT BREAKER
CCTV	CLOSED CIRCUIT TELEVISION
CKT	CIRCUIT
CM	CONSTRUCTION MANAGER
DC	DIRECT CURRENT
DP	DISTRIBUTION PANELBOARD
DTT	DOUBLE TWIN TUBE
EB	ELECTRONIC BALLAST
EC	ELECTRICAL CONTRACTOR
EM	EMERGENCY
EMT	ELECTRICAL METAL TUBING
EWG	ELECTRIC WATER COOLER
FA	FIRE ALARM
FLA	FULL LOAD AMPS
G	GROUND
GC	GENERAL TRADES CONTRACTOR
GF	GROUND FAULT CIRCUIT INTERRUPTER
GEN	GENERATOR
HOA	HAND-OFF-AUTOMATIC
HP	HORSEPOWER
HPC	HIGH PRESSURE CONTACT SWITCH
HZ	HERTZ
IG	ISOLATED GROUND
IMC	INTERMEDIATE METAL CONDUIT
INCD	INCANDESCENT
KVA	KILOVOLT AMPERE
KW	KILOWATT
LTG	LIGHTING OR LIGHT
LRA	LOCKED ROTOR AMPS
MCA	MINIMUM CIRCUIT AMPACITY
MCB	MAIN CIRCUIT BREAKER
MCC	MOTOR CONTROL CENTER
MDP	MAIN DISTRIBUTION PANEL
MLO	MAIN LUGS ONLY
MOCB	MAXIMUM OVERCURRENT PROTECTION
MSB	MAIN SWITCHBOARD
MH	MOUNTING HEIGHT
MTS	MANUAL TRANSFER SWITCH
NAC	NOTIFICATION APPLIANCE CIRCUIT
NC	NORMALLY CLOSED
NO	NORMALLY OPEN
NF	NON-FUSED
OCC	OCCUPANCY
PA	PUBLIC ADDRESS
PB	PULL BOX OR PUSH BUTTON
PVC	POLYVINYL CHLORIDE (PLASTIC PIPE)
PWR	POWER
RECPT	RECEPTACLE
SCA	SHORT CIRCUIT AMP
TC	TIME CLOCK
TRT	TRIPLE TUBE
TYP	TYPICAL
UNO	UNLESS NOTED OTHERWISE
UTP	UNSHIELDED, TWISTED PAIR
V	VOLT
W	WATT
WAP	WIRELESS ACCESS POINT
WH	WATTHOUR
WP	WEATHERPROOF, NEMA 3R UNO
XFMR	TRANSFORMER
Z	IMPEDANCE
□	PHASE

LIGHTING SYMBOLS	
NOTE: NOT ALL SYMBOLS MAY BE USED.	
	GENERAL PURPOSE LUMINAIRE: REFER TO LUMINAIRE SCHEDULE FOR ADDITIONAL INFORMATION
	GENERAL PURPOSE LUMINAIRE ON EMERGENCY POWER: REFER TO LUMINAIRE SCHEDULE FOR ADDITIONAL INFORMATION
	ROUND LUMINAIRE: REFER TO LUMINAIRE SCHEDULE FOR ADDITIONAL INFORMATION
	WALL MOUNTED : REFER TO LUMINAIRE SCHEDULE FOR ADDITIONAL INFORMATION
	TRACK LIGHTING
	TRACK LIGHTING HEAD
	REMOTE HEAD
	STEP LIGHT
	EMERGENCY LIGHT
	EXIT SIGN
	CEILING MOUNTED ILLUMINATED EXIT SIGN WITH DIRECTIONAL ARROWS
	EMERGENCY DUAL FACE ILLUMINATED EXIT SIGN WITH DIRECTIONAL ARROWS
	EXIT SIGN WITH INTEGRAL HEADS
	LINE VOLTAGE SWITCH: X=BLANK-SINGLE POLE 20A, TOGGLE; X=3-THREE WAY; X=4-FOUR WAY; X=P-PILOT LIGHT; X=OS-OCCUPANCY; X=OS,D-COMBO DIMMER OCCUPANCY
	PHOTOCCELL
	LOW VOLTAGE SWITCH: X=1-TWO BUTTON ON/OFF; X=2-FOUR BUTTON ON/OFF - RAISE/LOWER; X=3-MULTI BUTTON ON/OFF - RAISE/LOWER - PROVIDE BUTTONS AS REQUIRED FOR QUANTITIES OF ZONES
	CEILING MOUNTED OCCUPANCY SENSOR: X=BLANK-DUAL TECHNOLOGY; X=IR-PASSIVE INFRARED; X=US-ULTRASONIC; X=WP-EXTERIOR/EXTREME TEMP RATED
	POWER PACK
	JUNCTION BOX
	PANELBOARD
	LIGHTING CONTROL PANEL
	LOW VOLTAGE TRANSFORMER

POWER SYMBOLS	
NOTE: NOT ALL SYMBOLS MAY BE USED.	
	20A DUPLEX RECEPTACLE WITH COVER PLATE: X=TYPE, Y=NON-STANDARD MOUNTING HEIGHT, Z=SPECIAL DESIGNATION, (18" AFF TYPICAL)
	DUPLEX RECEPTACLE ON EMERGENCY CIRCUIT WITH COVER PLATE: X=TYPE, Y=NON-STANDARD MTG HEIGHT, Z=SPECIAL DESIGNATION, (18" AFF TYPICAL)
	FLOOR OR CEILING MOUNTED DUPLEX RECEPTACLE: F=FLOOR, C=CEILING
	DUPLEX RECEPTACLE: ABOVE COUNTER (48" AFF TYPICAL)
	DOUBLE-DUPLEX RECEPTACLE WITH SINGLE COVER PLATE
	SIMPLEX RECEPTACLE WITH COVER PLATE
	WEATHER RESISTANT DUPLEX RECEPTACLE, GROUND FAULT CIRCUIT INTERRUPTING WITH IN-USE COVER
	WALL MOUNTED SPECIAL RECEPTACLE: REFER TO PLANS FOR ADDITIONAL INFORMATION
	FLOOR OR CEILING MOUNTED SPECIAL RECEPTACLE: F=FLOOR, C=CEILING REFER TO PLANS FOR ADDITIONAL INFORMATION
	SURFACE MOUNTED RACEWAY
	STANDARD DISCONNECT SWITCH: X=DISCONNECT SIZE, Y=NUMBER OF POLES
	MOTOR STARTER: X=STARTER SIZE, Y=NUMBER OF POLES
	COMBINATION MOTOR STARTER/DISCONNECT SWITCH: X=STARTER SIZE, Y=FUSE SIZE, Z=NUMBER OF POLES
	MOTOR (BY OTHERS): PROVIDE POWER AS INDICATED
	UTILITY METER
	MOTOR RATED DISCONNECT SWITCH, SINGLE GANG
	JUNCTION BOX
	TRANSFORMER
	HANDHOLE/POLE BOX: SEE DETAILS FOR ADDITIONAL INFORMATION
	CONTROL PANEL
	SURGE PROTECTIVE DEVICE
	PANELBOARD
	AUTOMATIC TRANSFER SWITCH
	VARIABLE FREQUENCY DRIVE (BY DIVISION 23)
	PUSH BUTTON
	POWER POLE
	CORD REEL
	GROUND ROD
	POKE THROUGH SERVICE FITTING: X=TYPE
	FLOOR BOX - MULTI SERVICE: X= TYPE

FIRE ALARM SYMBOLS	
NOTE: NOT ALL SYMBOLS MAY BE USED.	
	MANUAL PULL STATION (48" TO HANDLE OF DEVICE)
	HEAT DETECTOR
	DUCT MOUNTED HEAT DETECTOR
	SMOKE DETECTOR: X=BLANK-SMOKE DETECTOR,X=CO-COMBINATION SMOKE CARBON MONOXIDE DETECTOR
	DUCT MOUNTED SMOKE DETECTOR
	SPEAKER (80" AFF TO BOTTOM OF DEVICE)
	SPEAKER WITH STROBE (80" AFF TO BOTTOM OF DEVICE)
	HORN (80" AFF TO BOTTOM OF DEVICE)
	HORN WITH STROBE (80" AFF TO BOTTOM OF DEVICE)
	STROBE (80" AFF TO BOTTOM OF DEVICE)
	WALL MOUNTED STROBE (80" AFF TO BOTTOM OF DEVICE)
	BELL, 120V
	WATER FLOW SWITCH: DIVISION 28 TO PROVIDE
	WATER TAMPER SWITCH: DIVISION 28 TO PROVIDE
	PIV VALVE
	ADDRESSABLE INPUT-OUTPUT MODULE
	ISOLATION MODULE
	MAGNETIC DOOR HOLDER
	FIREMAN'S PHONE
	REMOTE INDICATOR STATION FOR DUCT SMOKE DETECTOR (60" AFF TO CENTERLINE)
	WALL MOUNTED REMOTE INDICATOR STATION FOR DUCT SMOKE DETECTOR (60" AFF TO CENTERLINE)
	REMOTE INDICATOR TEST SWITCH
	FAN SHUT-DOWN RELAY
	FIRE ALARM ANNUNCIATOR PANEL
	FIRE ALARM CONTROL PANEL
	NOTIFICATION APPLIANCE CIRCUIT PANEL

#	DATE	CHANGE DESCRIPTION



COLUMBUS METROPOLITAN HOUSING AUTHORITY
CURRENTLY, COORDINATING COLUMBIANS

COBBLESTONE MANOR

1050 LAMPLIGHTER DRIVE
GROVE CITY, OH 43123
FOR
CMHA




MOODY•NOLAN

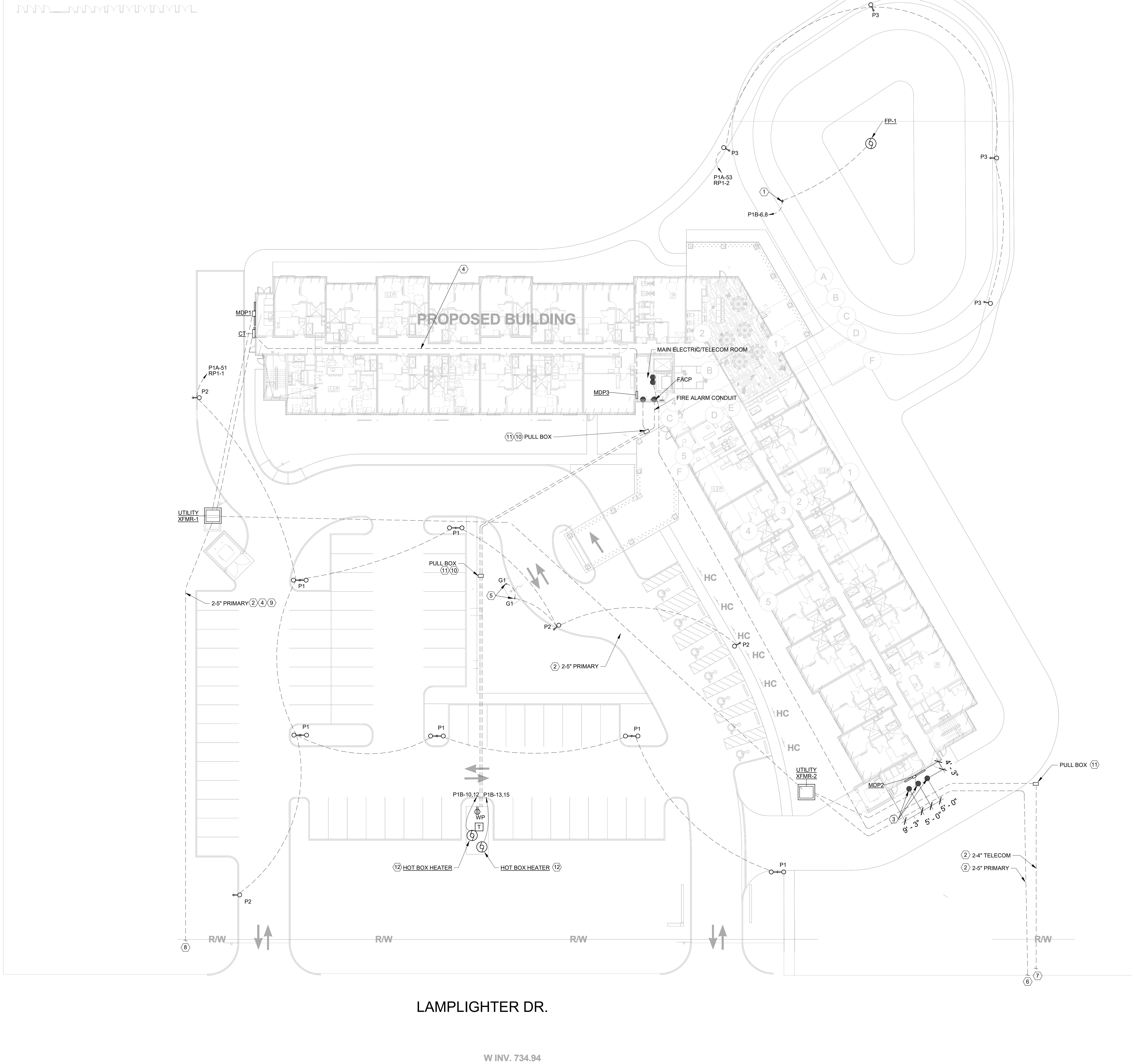
300 SPRUCE STREET
SUITE 300
COLUMBUS, OHIO 43215

PHONE: (614) 461-4664
FAX: (614) 280-8881

DRAWING TITLE:
**GENERAL INFORMATION -
ELECTRICAL**



06/08/2023	
DRAWN BY: RK	CHECKED BY: KM
#22172.01	
E001	
PERMIT & BID SET	



GENERAL NOTES

- A. UNDERGROUND CONDUIT ROUTING SHOWN IS SCHEMATIC, COORDINATE EXACT ROUTING WITH CIVIL PLANS.
- B. CONTRACTOR SHALL COORDINATE ALL SITE WORK WITH OTHER TRADES AND EXISTING UNDERGROUND UTILITIES (SEE CIVIL PLANS).
- C. ALL EXTERIOR CONDUITS RISING ABOVE GRADE, ENTERING PULL BOXES, MANHOLES, HANDHOLES, BUILDINGS, AND/OR EQUIPMENT SHALL BE RIGID GALVANIZED STEEL TYPE FROM THE LAST 6 FEET OF TRANSITION FROM BELOW GRADE.
- D. UNLESS NOTED OTHERWISE, ALL EXTERIOR CONDUITS SHALL BE MINIMUM 1.25".
- E. ALL EXTERIOR LUMINAIRES SHALL HAVE IN-LINE FUSING IN POLE, ACCESSIBLE FROM GRADE.
- F. MINIMUM SITE LIGHTING WIRE SIZE SHALL BE #8 AWG (CU).

KEYNOTES


- 1. PROVIDE PEDESTAL MOUNTED NEMA 4X DISCONNECT FOR FOUNTAIN PUMP. REFER TO FOUNTAIN PUMP DISCONNECT DETAIL 9/E501 FOR MORE INFORMATION.
- 2. ENCASED DUCT BANK, REFER TO DETAIL 1/E501.
- 3. PROTECTIVE BOLLARDS. REFER TO DETAIL 1/E501.
- 4. COORDINATE UG ROUTING WITH PLUMBING SANITARY IN SAME AREA.
- 5. IN GROUND FLAG LIGHT LOCATED WITHIN CONCRETE SLAB. COORDINATE MOUNTING AND AIMING WITH MANUFACTURER PRIOR TO ROUGH-IN.
- 6. EXTEND PRIMARY DUCT BANK TO UTILITY PAD MOUNTED SPLICE BOX LOCATED EAST OF CUL-DE-SAC AT EAST END OF LAMPLIGHTER DR.
- 7. EXTEND TELECOM DUCT BANK TO UTILITY GROUND MOUNTED PULL BOX LOCATED EAST OF CUL-DE-SAC AT EAST END OF LAMPLIGHTER DR.
- 8. EXTEND PRIMARY DUCT BANK TO R/W FOR FUTURE CONNECTION TO UTILITY INFRASTRUCTURE.
- 9. KEEP PRIMARY DUCT BANK CLEAR OF EASEMENT NEAR WEST PROPERTY LINE.
- 10. PROVIDE DEDICATED 1.25" FIRE ALARM CONDUIT TO HOT BOX. CONDUIT SHALL PASS THROUGH POWER PULL BOX. WITHIN POWER PULL BOX PROVIDE GASKETED JUNCTION BOX FOR FIRE ALARM WIRING, TO MAINTAIN SEPARATION OF LINE VOLTAGE AND FIRE ALARM (LOW VOLTAGE) WIRE TYPES. JUNCTION BOX SHALL SERVE AS A PULL POINT, DO NOT SPLICE FIRE ALARM WIRING WITHIN PULL BOX OR JUNCTION BOX. POWER WIRING TO HEATERS MAY BE SPLICED WITHIN PULL BOX USING APPROPRIATE WATER PROOF SPLICE KITS. PROVIDE DEDICATED 1.25" CONDUIT FOR POWER WIRING.
- 11. GROUND MOUNTED PULL BOX, REFER TO DETAIL 12/E501. COVER SHALL INDICATE USE - TELECOM OR POWER.
- 12. HEATER SHALL BE CIRCUITED WITH 3#8 & 1#10 GRD. UTILIZE ONE LINE CONDUCTOR AND NEUTRAL TO SERVE LOCAL SERVICE RECEPTACLE.

#	DATE	CHANGE DESCRIPTION



COLUMBUS METROPOLITAN HOUSING AUTHORITY
COOPERITY, COOPERATIVE COLLABORATION

COBBLESTONE MANOR
1050 LAMPLIGHTER DRIVE
GROVE CITY, OH 43123
FOR
CMHA



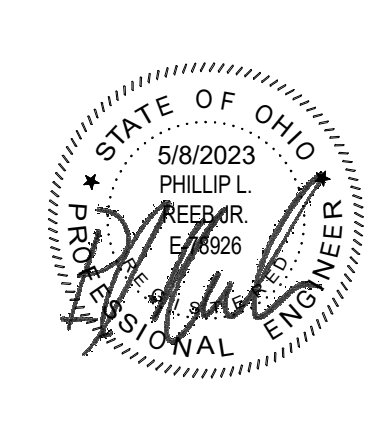
MOODY•NOLAN

300 SPRUCE STREET
SUITE 300
COLUMBUS, OHIO 43215

PHONE: (614) 461-4664
FAX: (614) 280-8881

DRAWING TITLE:

SITE PLAN - ELECTRICAL



STATE OF OHIO
PHILIP L. PHILLIPS
ELECTRICAL ENGINEER
#22172.01

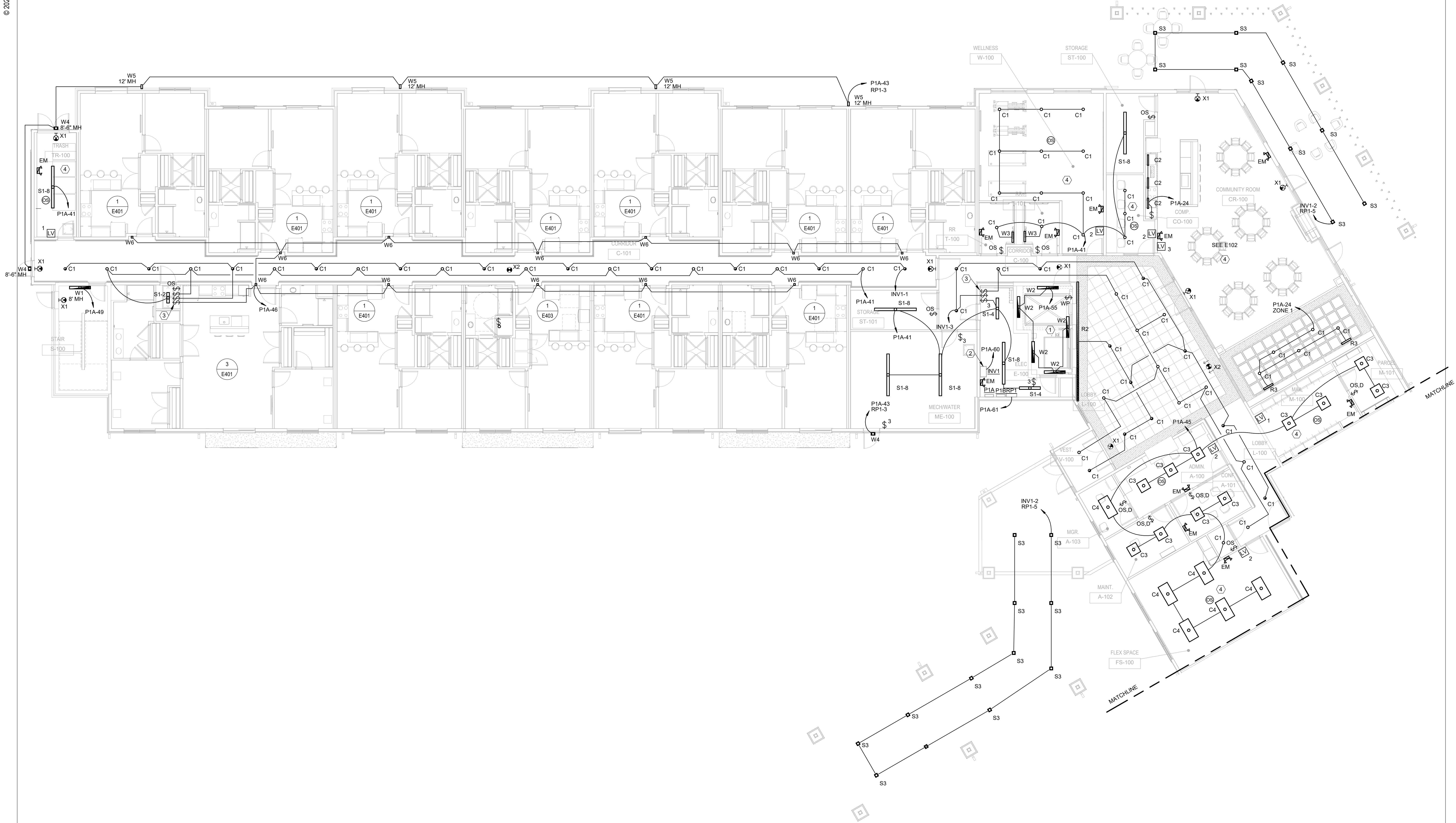
06/08/2023
DRAWN BY: RK
CHECKED BY: KM
#22172.01
E002
PERMIT & BID SET



ADVANCED ENGINEERING CONSULTANTS

Mechanical | Electrical | Plumbing | Fire Protection | Utilities
1405 Dublin Road
Columbus, Ohio 43215
Tel: (614) 466-4773
Fax: (614) 466-4082

1 FIRST FLOOR CEILING PLAN - LIGHTING - AREA A
1/8" = 1'-0"



GENERAL NOTES

- COORDINATE MOUNTING HEIGHT AND FINAL LOCATIONS OF DEVICES AND EQUIPMENT WITH ARCHITECTURAL AND HVAC DETAILS AND ELEVATIONS PRIOR TO ROUGH-IN.
- VERIFY MOUNTING HEIGHTS WITH ARCHITECTURAL ELEVATIONS PRIOR TO ROUGH-IN.
- ALL EMERGENCY EGRESS LIGHTING AND EXIT SIGNS SHALL BE CONNECTED TO LOCAL LIGHTING CIRCUIT AHEAD OF ANY SWITCHING OR CONTROLS WITH A MINIMUM OF #12 AWG CONDUCTORS. BATTERY OPERATED UNITS SHALL MONITOR LOCAL LIGHTING CIRCUIT AND AUTOMATICALLY ILLUMINATE UPON LOSS OF UTILITY POWER.
- ALL CONDUIT RUNS AND WIRING, DEVICES AND ASSOCIATED ELECTRICAL WORK WHICH PENETRATES THRU FIRE RATED WALLS OR FIRE RATED ASSEMBLIES SHALL BE COMPLETELY FIRE SEALED AT EACH PENETRATION. PROVIDE FIRE RATED PUTTY PADS ON ALL JUNCTION BOXES LOCATED IN FIRE RATED ASSEMBLIES.
- STRAIGHT LINES INDICATE LUMINAIRES CIRCUITED TO COMMON CONTROLS. ARCHED LINES INDICATE A COMMON BRANCH CIRCUIT, BUT SEPARATE CONTROLS.
- UNLESS NOTED OTHERWISE, LIGHTING CONTROLS SHALL SERVE LUMINAIRES SHOWN IN THE SAME SPACE.
- NO SHARED NEUTRALS - EACH CIRCUIT THAT REQUIRES A NEUTRAL CONDUCTOR SHALL HAVE A SEPARATE, DEDICATED NEUTRAL CONDUCTOR.
- POWER PACKS AND AUXILIARY POWER PACKS SHALL BE LOCATED WITHIN EACH ROOM ABOVE CEILING ADJACENT TO THE ENTRY DOOR.
- UNLESS NOTED OTHERWISE, SET OCCUPANCY SENSORS FOR MANUAL ON/AUTO OFF (VACANCY MODE) OPERATION.
- PROVIDE ALL MOUNTING HARDWARE PER MANUFACTURER'S WRITTEN INSTRUCTIONS TO SUPPORT LUMINAIRES. LUMINAIRES SHALL NOT BE SUPPORTED SOLELY BY CEILINGS.
- TYPE W6 LUMINAIRE SHALL BE MOUNTED AT 6'-6" AFF.

KEYNOTES

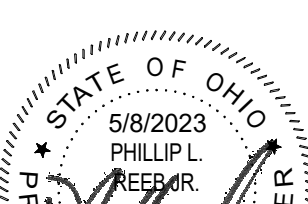
- LOCATE ELEVATOR PIT LIGHTS AFTER COORDINATION WITH ELEVATOR EQUIPMENT INSTALLER.
- PROVIDE A SURFACE MOUNTED INVERTER WITH REMOTE TEST SWITCH FOR CORRIDOR EGRESS. MYERS 1100W ILLUMINATOR LV-5-R-1-B-20-6 SERIES OR EQUAL. INVERTER SHALL BE WALL MOUNTED AND LOCATED IN THE LOCAL ELECTRICAL ROOM. INVERTER SHALL BE UL 924 LISTED INCLUDE SELF-TESTING & SELF-DIAGNOSTICS. SHADED CORRIDOR LIGHTING SHALL BE CIRCUITED THROUGH THE INVERTER TO AUTOMATICALLY ILLUMINATE UPON LOSS OF NORMAL POWER.
- PROVIDE LIGHT SWITCH FOR CORRIDOR LIGHTING. LABEL SWITCH "CORRIDOR LIGHTING, CORRIDOR EM LIGHTING, CORRIDOR SCENIC".
- PROVIDE DISTRIBUTED LIGHTING CONTROL SYSTEM IN THIS SPACE.

#	DATE	CHANGE DESCRIPTION

COBBLESTONE MANOR
1050 LAMPLIGHTER DRIVE
GROVE CITY, OH 43123
FOR
CMHA

MOODY•NOLAN
300 SPRUCE STREET
SUITE 300
COLUMBUS, OHIO 43215
PHONE: (614) 461-4664
FAX: (614) 280-8881

DRAWING TITLE:
**LEVEL 01 - CEILING PLAN -
LIGHTING - AREA A**

	06/08/2023	
	DRAWN BY: RK	CHECKED BY: KM
	#22172.01	
	E101A	
	PERMIT & BID SET	

AEC **ADVANCED**
ENGINEERING
CONSULTANTS
Mechanical | Electrical | Plumbing | Fire Protection | Utilities
1405 Dublin Road Tel: (614) 466-4773
Columbus, Ohio 43215 Fax: (614) 466-4082





1 FIRST FLOOR CEILING PLAN - LIGHTING - AREA B
1/8" = 1'-0"

AEC ADVANCED
ENGINEERING
CONSULTANTS
Mechanical | Electrical | Plumbing | Fire Protection | Utilities
1405 Dublin Road Tel: (614) 486-4778
Columbus, Ohio 43215 Fax: (614) 486-4082

GENERAL NOTES

- A. COORDINATE MOUNTING HEIGHT AND FINAL LOCATIONS OF DEVICES AND EQUIPMENT WITH ARCHITECTURAL AND HVAC DETAILS AND ELEVATIONS PRIOR TO ROUGH-IN.
- B. VERIFY MOUNTING HEIGHTS WITH ARCHITECTURAL ELEVATIONS PRIOR TO ROUGH-IN.
- C. ALL EMERGENCY EGRESS LIGHTING AND EXIT SIGNS SHALL BE CONNECTED TO LOCAL LIGHTING CIRCUIT AHEAD OF ANY SWITCHING OR CONTROLS WITH A MINIMUM OF #12 AWG CONDUCTORS. BATTERY OPERATED UNITS SHALL MONITOR LOCAL LIGHTING CIRCUIT AND AUTOMATICALLY ILLUMINATE UPON LOSS OF UTILITY POWER.
- D. ALL CONDUIT RUNS AND WIRING, DEVICES AND ASSOCIATED ELECTRICAL WORK WHICH PENETRATES THRU FIRE RATED WALLS OR FIRE RATED ASSEMBLIES SHALL BE COMPLETELY FIRE SEALED AT EACH PENETRATION. PROVIDE FIRE RATED PUTTY PADS ON ALL JUNCTION BOXES LOCATED IN FIRE RATED ASSEMBLIES.
- E. STRAIGHT LINES INDICATE LUMINAIRES CIRCUITED TO COMMON CONTROLS. ARCHED LINES INDICATE A COMMON BRANCH CIRCUIT, BUT SEPARATE CONTROLS.
- F. UNLESS NOTED OTHERWISE, LIGHTING CONTROLS SHALL SERVE LUMINAIRES SHOWN IN THE SAME SPACE.
- G. NO SHARED NEUTRALS - EACH CIRCUIT THAT REQUIRES A NEUTRAL CONDUCTOR SHALL HAVE A SEPARATE, DEDICATED NEUTRAL CONDUCTOR.
- H. POWER PACKS AND AUXILIARY POWER PACKS SHALL BE LOCATED WITHIN EACH ROOM ABOVE CEILING ADJACENT TO THE ENTRY DOOR.
- I. UNLESS NOTED OTHERWISE, SET OCCUPANCY SENSORS FOR MANUAL ON/AUTO OFF (VACANCY MODE) OPERATION.
- J. PROVIDE ALL MOUNTING HARDWARE PER MANUFACTURER'S WRITTEN INSTRUCTIONS TO SUPPORT LUMINAIRES. LUMINAIRES SHALL NOT BE SUPPORTED SOLELY BY CEILINGS.
- K. TYPE W6 LUMINAIRE SHALL BE MOUNTED AT 6'-6" AFF.

KEYNOTES

- 1. PROVIDE LIGHT SWITCH FOR CORRIDOR LIGHTING. LABEL SWITCH "CORRIDOR LIGHTING, CORRIDOR EM LIGHTING, CORRIDOR SCONCE".
- 2. PROVIDE DISTRIBUTED LIGHTING CONTROL SYSTEM IN THIS SPACE.

#	DATE	CHANGE DESCRIPTION




COBBLESTONE MANOR
1050 LANPLIGHTER DRIVE
GROVE CITY, OH 43123
FOR
CMHA



300 SPRUCE STREET
SUITE 300
COLUMBUS, OHIO 43215
PHONE: (614) 461-4664
FAX: (614) 280-8881

DRAWING TITLE:
**LEVEL 01 - CEILING PLAN -
LIGHTING - AREA B**



06/08/2023
DRAWN BY: RK CHECKED BY: KM
#22172.01
E101B
PERMIT & BID SET



AEC **ADVANCED
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CONSULTANTS**

Mechanical | Electrical | Plumbing | Fire Protection | Utilities

1405 Dublin Road
Columbus, Ohio 43215

Tel: (614) 486-4778
Fax: (614) 486-4082

- A. COORDINATE MOUNTING HEIGHT AND FINAL LOCATIONS OF DEVICES AND EQUIPMENT WITH ARCHITECTURAL AND HVAC DETAILS AND ELEVATIONS PRIOR TO ROUGH-IN.
- B. VERIFY MOUNTING HEIGHTS WITH ARCHITECTURAL ELEVATIONS PRIOR TO ROUGH-IN.
- C. ALL EMERGENCY EGRESS LIGHTING AND EXIT SIGNS SHALL BE CONNECTED TO LOCAL LIGHTING CIRCUIT AREA OF ANY SWITCHING OR CONTROLS WITH A MINIMUM 15 AMP CIRCUIT. BATTERY OPERATED UNITS SHALL MONITOR LOCAL LIGHTING CIRCUIT AND AUTOMATICALLY ILLUMINATE UPON LOSS OF UTILITY POWER.
- D. ALL CONDUIT RUNS AND WIRING, DEVICES AND ASSOCIATED ELECTRICAL WORK WHICH PENETRATES THRU FIRE RATED WALLS OR FIRE RATED CEILING SHALL BE COMPLETELY FIRE SEALED AT EACH PENETRATION. PROVIDE FIRE RATED PUTTY PADS ON ALL JUNCTION BOXES LOCATED IN FIRE RATED ASSEMBLIES.
- E. STRAIGHT LINES INDICATE LUMINAIRES CIRCUITED TO COMMON CONTROLS. ARCHED LINES INDICATE A COMMON BRANCH CIRCUIT. BUT SEPARATE CONTROLS.
- F. UNLESS NOTED OTHERWISE, LIGHTING CONTROLS SHALL SERVE LUMINAIRE SHOWN IN THE SAME SPACE.
- G. NO SHARED NEUTRALS - EACH CIRCUIT THAT REQUIRES A NEUTRAL CONDUCTOR SHALL HAVE A SEPARATE, DEDICATED NEUTRAL CONDUCTOR.
- H. POWER PAKS AND AUXILIARY POWER PAKS SHALL BE LOCATED WITHIN EACH ROOM ABOVE CEILING ADJACENT TO THE ENTRY DOOR.
- I. UNLESS NOTED OTHERWISE, SECT OCCUPANCY SENSORS FOR MANUAL ON/AUTO OFF (VACANCY MODE) OPERATION.
- J. PROVIDE ALL MOUNTING HARDWARE PER MANUFACTURER'S WRITTEN INSTRUCTIONS TO SUPPORT LUMINAIRES. LUMINAIRE SHALL NOT BE SUPPORTED SOLELY BY CEILINGS.
- K. TYPE W6 LUMINAIRE SHALL BE MOUNTED AT 6'-6" AFF.

1. PROVIDE A SURFACE MOUNTED INVERTER WITH REMOTE TEST SWITCH FOR CORRIDOR EGRESS. MYERS 750W ILLUMINATOR LV-4-R-1-B-20-4 SERIES OR EQUAL. INVERTER SHALL BE WALL MOUNTED AND LOCATED IN THE LOCAL ELECTRICAL ROOM. INVERTER SHALL BE UL 924 LISTED INCLUDE SELF-TESTING & SELF-DIAGNOSTICS. SHADED CORRIDOR LIGHTING SHALL BE CIRCUITED THROUGH THE INVERTER TO ILLUMINATE UPON LOSS OF NORMAL POWER.
2. PROVIDE LIGHT SWITCH FOR CORRIDOR LIGHTING. LABEL SWITCH "CORRIDOR LIGHTING, CORRIDOR EM LIGHTING, CORRIDOR SCONCE".
3. PROVIDE DISTRIBUTED LIGHTING CONTROL SYSTEM IN THIS SPACE.

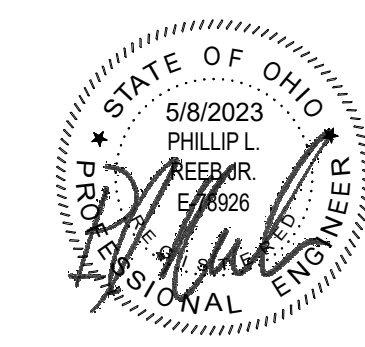
#	DATE	CHANGE DESCRIPTION



300 SPRUCE STREET
SUITE 300
COLUMBUS, OHIO 43215

PHONE: (614) 461-4664
FAX: (614) 280-8881

DRAWING TITLE:
**LEVEL 02 - CEILING PLAN -
LIGHTING- AREA A**



06/08/2023
DRAWN BY: RK
CHECKED BY: KM
#22172.01
E102A
PERMIT & BID SET


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

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ENGINEERING
CONSULTANTS**

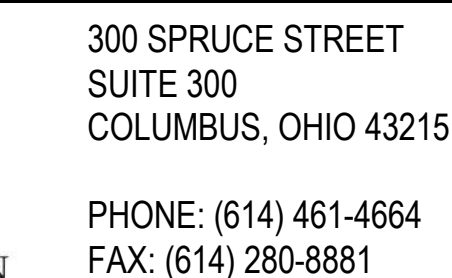
Mechanical | Electrical | Plumbing | Fire Protection | Utilities
1405 Dublin Road
Columbus, Ohio 43215
Tel: (614) 486-4777
Fax: (614) 486-4008

- A. COORDINATE MOUNTING HEIGHT AND FINAL LOCATIONS OF DEVICES AND EQUIPMENT WITH ARCHITECTURAL AND HVAC DETAILS AND ELEVATIONS PRIOR TO ROUGH-IN.
- B. VERIFY MOUNTING HEIGHTS WITH ARCHITECTURAL ELEVATIONS PRIOR TO ROUGH-IN.
- C. ALL EMERGENCY EGRESS LIGHTING AND EXIT SIGNS SHALL BE CONNECTED TO LOCAL LIGHTING CIRCUIT AREA OF ANY SWITCHING OR CONTROLS WITH A NEUTRAL CONDUCTOR AND CONDUCTORS. BATTERY OPERATED UNITS SHALL MONITOR LOCAL LIGHTING CIRCUIT AND AUTOMATICALLY ILLUMINATE UPON LOSS OF UTILITY POWER.
- D. ALL CONDUIT RUNS AND WIRING, DEVICES AND ASSOCIATED ELECTRICAL WORK WHICH PENETRATES THRU FIRE RATED WALLS OR FIRE RATED ASSEMBLIES SHALL BE COMPLETELY FIRE SEALED AT EACH PENETRATION. PROVIDE FIRE RATED PUTTY PADS ON ALL JUNCTION BOXES LOCATED IN FIRE RATED ASSEMBLIES.
- E. STRAIGHT LINE INDICATE LUMINAIRES CIRCUITED TO COMMON CONTROLS. ARCHED LINES INDICATE A COMMON BRANCH CIRCUIT, BUT SEPARATE CONTROLS.
- F. UNLESS NOTED OTHERWISE, LIGHTING CONTROLS SHALL SERVE LUMINAIRE SHOWN IN THE SAME SPACE.
- G. NO SHARED NEUTRALS - EACH CIRCUIT THAT REQUIRES A NEUTRAL CONDUCTOR SHALL HAVE A SEPARATE, DEDICATED NEUTRAL CONDUCTOR.
- H. POWER PACKS AND AUXILIARY POWER PACKS SHALL BE LOCATED WITHIN EACH ROOM ABOVE CEILING CLAYDRAFT TO THE ENTRY DOOR.
- I. UNLESS NOTED OTHERWISE, SET OCCUPANCY SENSORS FOR MANUAL ON/AUTO OFF (VACANCY MODE) OPERATION.
- J. PROVIDE ALL MOUNTING HARDWARE PER MANUFACTURERS WRITTEN INSTRUCTIONS TO SUPPORT LUMINAIRES. LUMINAIRES SHALL NOT BE SUPPORTED SOLELY BY CEILINGS.

TYPE TWO LUMINAIRE SHALL BE MOUNTED AT 6'-6" AFF.

1. PROVIDE LIGHT SWITCH FOR CORRIDOR LIGHTING. LABEL SWITCH "CORRIDOR LIGHTING. CORRIDOR EM LIGHTING. CORRIDOR SCONCE

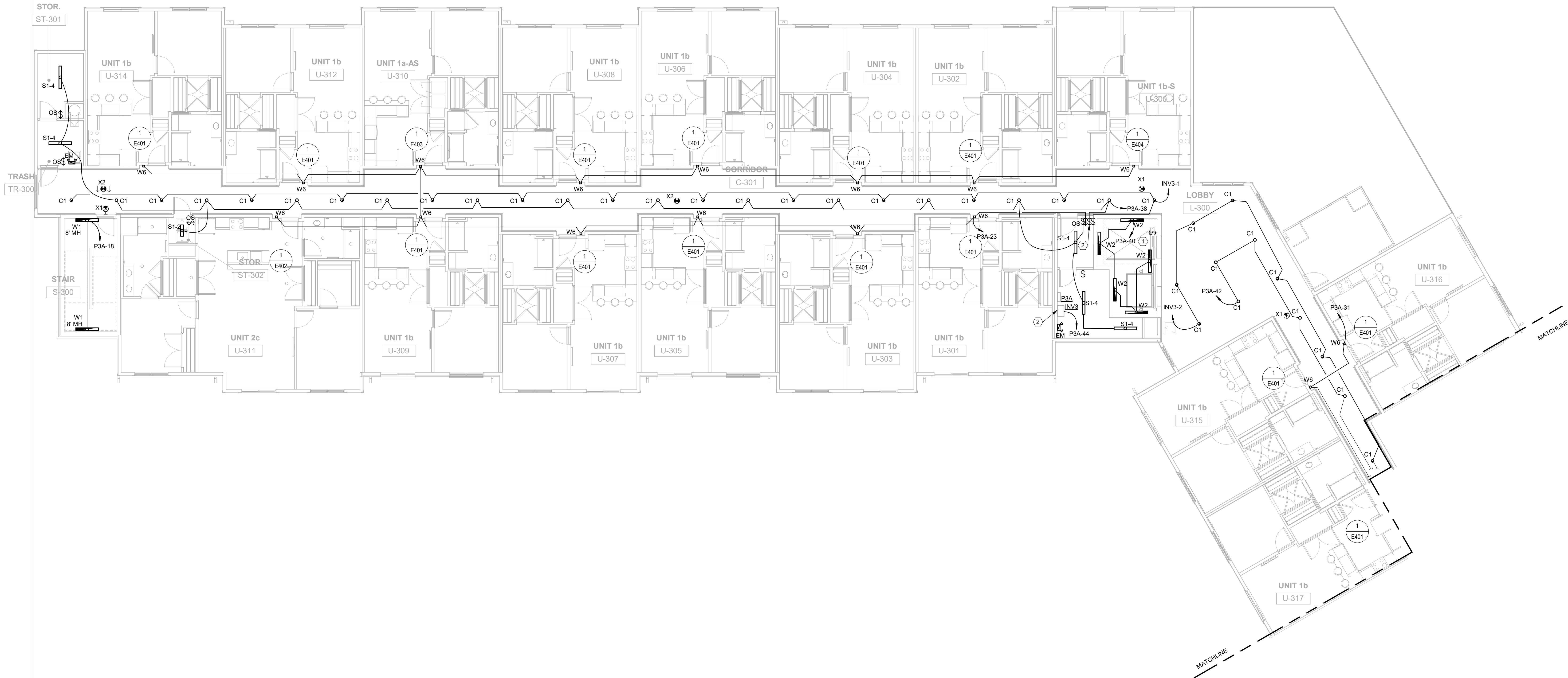
#	DATE	CHANGE DESCRIPTION



DRAWING TITLE:
**LEVEL 02 - CEILING PLAN -
LIGHTING- AREA B**



06/08/2023	
DRAWN BY: RK	CHECKED BY: KM
#22172.01	
E102B	
PERMIT & BID SET	



GENERAL NOTES

- COORDINATE MOUNTING HEIGHT AND FINAL LOCATIONS OF DEVICES AND EQUIPMENT WITH ARCHITECTURAL AND HVAC DETAILS AND ELEVATIONS PRIOR TO ROUGH-IN.
- VERIFY MOUNTING HEIGHTS WITH ARCHITECTURAL ELEVATIONS PRIOR TO ROUGH-IN.
- ALL EMERGENCY EGRESS LIGHTING AND EXIT SIGNS SHALL BE CONNECTED TO LOCAL LIGHTING CIRCUIT AHEAD OF ANY SWITCHING OR CONTROLS WITH A MINIMUM OF #12 AWG CONDUCTORS. BATTERY OPERATED UNITS SHALL MONITOR LOCAL LIGHTING CIRCUIT AND AUTOMATICALLY ILLUMINATE UPON LOSS OF UTILITY POWER.
- ALL CONDUIT RUNS AND WIRING, DEVICES AND ASSOCIATED ELECTRICAL WORK WHICH PENETRATES THRU FIRE RATED WALLS OR FIRE RATED ASSEMBLIES SHALL BE COMPLETELY FIRE SEALED AT EACH PENETRATION. PROVIDE FIRE RATED PUTTY PADS ON ALL JUNCTION BOXES LOCATED IN FIRE RATED ASSEMBLIES.
- STRAIGHT LINES INDICATE LUMINAIRES CIRCUITED TO COMMON CONTROLS. ARCHED LINES INDICATE A COMMON BRANCH CIRCUIT, BUT SEPARATE CONTROLS.
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- POWER PACKS AND AUXILIARY POWER PACKS SHALL BE LOCATED WITHIN EACH ROOM ABOVE CEILING ADJACENT TO THE ENTRY DOOR.
- UNLESS NOTED OTHERWISE, SET OCCUPANCY SENSORS FOR MANUAL ON/AUTO OFF (VACANCY MODE) OPERATION.
- PROVIDE ALL MOUNTING HARDWARE PER MANUFACTURER'S WRITTEN INSTRUCTIONS TO SUPPORT LUMINAIRES. LUMINAIRES SHALL NOT BE SUPPORTED SOLELY BY CEILINGS.
- TYPE W6 LUMINAIRE SHALL BE MOUNTED AT 6'-6" AFF.


KEYNOTES

- LOCATE ELEVATOR PIT LIGHTS AFTER COORDINATION WITH ELEVATOR EQUIPMENT INSTALLER.
- PROVIDE A SURFACE MOUNTED INVERTER WITH REMOTE TEST SWITCH FOR CORRIDOR EGRESS. MYERS 750W ILLUMINATOR LV-4-R-1-B-20-4 SERIES OR EQUAL. INVERTER SHALL BE WALL MOUNTED AND LOCATED IN THE LOCAL ELECTRICAL ROOM. INVERTER SHALL BE UL 924 LISTED INCLUDE SELF-TESTING & SELF-DIAGNOSTICS. SHADED CORRIDOR LIGHTING SHALL BE CIRCUITED THROUGH THE INVERTER TO ILLUMINATE UPON LOSS OF NORMAL POWER.
- PROVIDE LIGHT SWITCH FOR CORRIDOR LIGHTING. LABEL SWITCH "CORRIDOR LIGHTING, CORRIDOR EM LIGHTING, CORRIDOR SCONCE".

#	DATE	CHANGE DESCRIPTION



COBBLESTONE MANOR
1050 LAMPLIGHTER DRIVE
GROVE CITY, OH 43123
FOR
CMHA




300 SPRUCE STREET
SUITE 300
COLUMBUS, OHIO 43215

PHONE: (614) 461-4664
FAX: (614) 280-8881

DRAWING TITLE: LEVEL 03 - CEILING PLAN - LIGHTING - AREA A

06/08/2023	
DRAWN BY: RK	CHECKED BY: KM
#22172.01	
E103A	
PERMIT & BID SET	



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ENGINEERING
CONSULTANTS**
Mechanical | Electrical | Plumbing | Fire Protection | Utilities
1405 Dublin Road
Columbus, Ohio 43215
Tel: (614) 466-4773
Fax: (614) 466-4082



P3A-44



1 THIRD FLOOR CEILING PLAN - LIGHTING - AREA B
1/8" = 1'-0"

GENERAL NOTES

- COORDINATE MOUNTING HEIGHT AND FINAL LOCATIONS OF DEVICES AND EQUIPMENT WITH ARCHITECTURAL AND HVAC DETAILS AND ELEVATIONS PRIOR TO ROUGH-IN.
- VERIFY MOUNTING HEIGHTS WITH ARCHITECTURAL ELEVATIONS PRIOR TO ROUGH-IN.
- ALL EMERGENCY EGRESS LIGHTING AND EXIT SIGNS SHALL BE CONNECTED TO LOCAL LIGHTING CIRCUIT AHEAD OF ANY SWITCHING OR CONTROLS WITH A MINIMUM OF #12 AWG CONDUCTORS. BATTERY OPERATED UNITS SHALL MONITOR LOCAL LIGHTING CIRCUIT AND AUTOMATICALLY ILLUMINATE UPON LOSS OF UTILITY POWER.
- ALL CONDUIT RUNS AND WIRING, DEVICES AND ASSOCIATED ELECTRICAL WORK WHICH PENETRATES THRU FIRE RATED WALLS OR FIRE RATED ASSEMBLIES SHALL BE COMPLETELY FIRE SEALED AT EACH PENETRATION. PROVIDE FIRE RATED PUTTY PADS ON ALL JUNCTION BOXES LOCATED IN FIRE RATED ASSEMBLIES.
- STRAIGHT LINES INDICATE LUMINAIRES CIRCUITED TO COMMON CONTROLS. ARCHED LINES INDICATE A COMMON BRANCH CIRCUIT, BUT SEPARATE CONTROLS.
- UNLESS NOTED OTHERWISE, LIGHTING CONTROLS SHALL SERVE LUMINAIRES SHOWN IN THE SAME SPACE.
- NO SHARED NEUTRALS - EACH CIRCUIT THAT REQUIRES A NEUTRAL CONDUCTOR SHALL HAVE A SEPARATE, DEDICATED NEUTRAL CONDUCTOR.
- POWER PACKS AND AUXILIARY POWER PACKS SHALL BE LOCATED WITHIN EACH ROOM ABOVE CEILING ADJACENT TO THE ENTRY DOOR.
- UNLESS NOTED OTHERWISE, SET OCCUPANCY SENSORS FOR MANUAL ON/AUTO OFF (VACANCY MODE) OPERATION.
- PROVIDE ALL MOUNTING HARDWARE PER MANUFACTURER'S WRITTEN INSTRUCTIONS TO SUPPORT LUMINAIRES. LUMINAIRES SHALL NOT BE SUPPORTED SOLELY BY CEILINGS.
- TYPE W6 LUMINAIRE SHALL BE MOUNTED AT 6'-6" AFF.

KEYNOTES

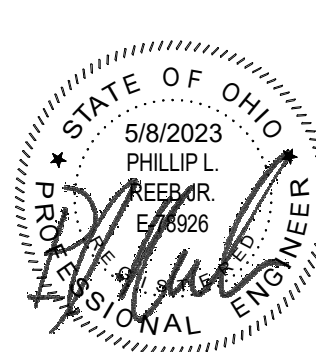
- PROVIDE LIGHT SWITCH FOR CORRIDOR LIGHTING. LABEL SWITCH "CORRIDOR LIGHTING, CORRIDOR EM LIGHTING, CORRIDOR SCONCE".

#	DATE	CHANGE DESCRIPTION

COBBLESTONE MANOR
1050 LAMPLIGHTER DRIVE
GROVE CITY, OH 43123
FOR
CMHA

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DRAWING TITLE:
**LEVEL 03 - CEILING PLAN -
LIGHTING - AREA B**

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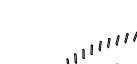
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- A. COORDINATE MOUNTING HEIGHT AND FINAL LOCATIONS OF RECEPTABLES, DEVICES AND EQUIPMENT WITH ARCHITECTURAL DETAILS AND ELEVATIONS PRIOR TO ROUGH-IN.
- B. COORDINATE ALL DEVICE LOCATIONS WITH FRAMING MEMBERS AND ELEVATIONS TO ROUGH-IN.
- C. COORDINATE PANEL THICKNESS WITH GENERAL TRADES CONTRACTOR. PROVIDE ADJUSTER RING APPROPRIATE FOR PANEL THICKNESS AND/OR CABBOT BACK PANEL.
- D. ALL 120-VOLT, 15 OR 20 AMP RECEPTACLE SHALL BE TAMPER-RESISTANT TYPE.
- E. ALL 120-VOLT, SINGLE PHASE, 15 & 20 AMP BRANCH CIRCUITS SUPPLYING OUTLET IN CORRIDORS, LAUNDRY AREAS AND SIMILAR ROOMS SHALL BE AFOI PROTECTED AT THE CIRCUIT BREAKER.
- F. ALL CONDUIT RUNS AND WIRING, DEVICES AND ASSOCIATED ELECTRICAL WORK WHICH PENETRATES THRU FIRE RATED WALLS OR FIRE RATED ROOFS SHALL BE COMPLETELY FIRE SEALED AT EACH PENETRATION. PROVIDE FIRE RATED PUTTY PADS ON ALL JUNCTION BOXES LOCATED IN FIRE RATED WALLS.
- G. ROUGH-IN FOR TELEVISION AND COMMUNICATIONS OUTLETS SHALL BE A 4" SQUARE BOX WITH SINGLE HOLE. PROVIDE AND 1 CONDUIT TO RUN OUT ABOVE ACCESSIBLE CEILING. PROTECTIVE SHIELDS.
- H. NO SHARED NEUTRALS: EACH CIRCUIT THAT REQUIRES A NEUTRAL CONDUCTOR SHALL HAVE A SEPARATE, DEDICATED NEUTRAL CONDUCTOR.

1. PROVIDE POWER CONNECTION TO DOOR HARDWARE POWER SUPPLY (120V, 1PH), INSTALL ABOVE DOOR ON SECURE SIDE. REFER TO DETAIL FOR ADDITIONAL INFORMATION.
2. PROVIDE 120V, 20 AMP CIRCUIT FOR HANDICAP PUSHBUTTON. COORDINATE WITH ARCHITECT, OWNER, ARCHITECT, OWNER'S VENDOR, AND APPROVED SHOP DRAWINGS. MAKE FINAL CONNECTIONS TO HANDICAP DOOR PUSH BUTTONS.
3. RECEPTACLE MOUNTED FLUSH IN CASEWORK, 4' BELOW COUNTER.
4. PROVIDE DUPLEX RECEPTACLE FOR DISHWASHER. RECEPTACLE SHALL BE SURFACE MOUNTED WITH BASE CABINET IMMEDIATELY ADJACENT TO DISHWASHER.
5. PROVIDE A 120V, 10, 20 AMP DUPLEX RECEPTACLE FOR AN UNDERCOUNTER MICROWAVE. CIRCUIT TO BE BREAKER AND LABEL "GFCI PROTECTED" ON BREAKER.
6. PROVIDE A DEDICATED 15 AMP, 120V CIRCUIT FOR WITH GFCI PROTECTION FOR ELEVATOR CAR LIGHTING AND ALARM CONTROLS. COORDINATE WITH ELEVATORS MANUFACTURER'S REQUIREMENTS PRIOR TO ROUGH-IN.
7. PROVIDE FINAL CONNECTIONS FROM THE ELEVATOR SAFETY SWITCH TO ELEVATOR MACHINE PER THE ELEVATOR MANUFACTURER'S REQUIREMENTS REFER TO THE SINGLE-LINE DIAGRAM FOR ADDITIONAL INFORMATION.
8. RADON MITIGATION PIPING
9. PROVIDE 120V POWER CONNECTION TO INTERCOM SYSTEM.
10. PROVIDE 120V POWER CONNECTION TO TRASH CHUTE CONTROL PANEL.
11. PROVIDE 120V POWER CONNECTION FOR COMMERCIAL OFFICE MACHINE.
12. TELECOM BACKBOARD, GROUND BAR, AND DEMARC LOCATION.
13. FIRE ALARM DEVICES SERVING FIRE WATER SERVICE ENTRANCE AND FUL CONTROL VALVE. COORDINATE INSTALLATION WITH FIRE PROTECTION CONTRACTOR AND FIRE PROTECTION DETAILS SHEET S501.
14. PROVIDE DUPLEX RECEPTACLE FOR GARBAGE DISPOSAL. RECEPTACLE SHALL BE SURFACE MOUNTED WITH BASE CABINET WHERE DISPOSAL IS INSTALLED. PROVIDE GROUND WITH PLUG AS REQUIRED. CONTROL WITH TOGGLE SWITCH ABOVE COUNTER GANGED WITH RECEPTACLE.
15. EXHAUST FAN TO BE POWERED AND SWITCHED WITH ROOM LIGHTS.
16. RECEPTACLE FOR TV MOUNT AT 6' AFF. CONFORM LOCATION AND MOUNTING HEIGHT WITH ARCHITECT PRIOR TO ROUGH-IN.
17. SYSTEM GROUND BAR, REFER TO DETAIL S501 FOR CONNECTION TO GROUNDING ELECTRODES.
18. PROVIDE 2 GANG RECESSED FLOORBOX, FLOOR BOX SHALL INCLUDE TWO 2 AMP, 120 VOLT DUPLEX RECEPTABLES. PROVIDE ROUND FLUSH SURFACE SWITCH WITH 180 DEGREE OPENING AND CABLE EGGS DROSS.
19. PROVIDE POWER FINGER WITH ARCHITECT AND OWNER DURING SHOP DRAWING SUBMITTAL PROCESS. PROVIDE ALL INTERNAL COMPONENTS, DEVICES, PARTS, AND APPURTENANCES REQUIRED FOR A COMPLETE INSTALLATION. PROVIDE 1/2" MINIMUM TO ADJACENT FLOOR BOXES SHOWN ON THE SAME CIRCUIT AND TO STUB UP IN NEAREST FULL HEIGHT STUD WALL. PROVIDE CONDUIT UNDERSLAB CONDUIT AND STUB UP LOCATIONS IN FIELD PRIOR TO CONCRETE POUR.
20. RECEPTACLE OR CIRCUIT SHALL BE GFCI TYPE WIRED TO PROTECT DOWNSTREAM RECEPTABLES.
21. PROVIDE 120V POWER CONNECTION TO COMBINATION FIRE/SMOKE DAMPER PER MANUFACTURER'S WRITTEN INSTRUCTIONS.
22. PROVIDE POWER CONNECTION TO CONTROLS, FIRE ALARM MODULE, AND FIRE ALARM CONNECTION AT DRYPIPE STANDPIPE AIR COMPRESSOR.

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1 FIRST FLOOR PLAN - POWER - AREA B
1/8" = 1'-0"



GENERAL NOTES

- A. COORDINATE MOUNTING HEIGHT AND FINAL LOCATIONS OF RECEPTACLES, DEVICES AND EQUIPMENT WITH ARCHITECTURAL DETAILS AND ELEVATIONS PRIOR TO ROUGH-IN.
- B. COORDINATE ALL DEVICE LOCATIONS WITH FRAMING MEMBERS PRIOR TO ROUGH-IN.
- C. COORDINATE WALL THICKNESS WITH GENERAL TRADES CONTRACTOR. PROVIDE ADAPTER RING APPROPRIATE FOR WALL THICKNESS AND/OR CABINET BACK PANEL.
- D. ALL 120-VOLT, 15 OR 20 AMP RECEPTACLE SHALL BE TAMPER-RESISTANT TYPE.
- E. ALL 120-VOLT, SINGLE PHASE, 15 & 20 AMP BRANCH CIRCUITS SUPPLYING OUTLET IN CORRIDORS, LAUNDRY AREAS AND SIMILAR ROOMS SHALL BE AFCI PROTECTED AT THE CIRCUIT BREAKER.
- F. ALL CONDUIT RUNS AND WIRING DEVICES AND ASSOCIATED ELECTRICAL WORK WHICH PENETRATES THRU FIRE RATED WALLS OR FIRE RATED ASSEMBLIES SHALL BE COMPLETELY FIRE SEALED AT EACH PENETRATION. PROVIDE FIRE RATED PUTTY PADS ON ALL JUNCTION BOXES LOCATED IN FIRE RATED WALLS.
- G. ROUGH-IN FOR TELEVISION AND COMMUNICATIONS OUTLETS SHALL BE A 4" SQUARE BACK BOX WITH SINGLE GANG REDUCER AND A 1" CONDUIT TO TURN OUT ABOVE ACCESSIBLE CEILING. PROVIDE PROTECTIVE BUSHINGS.
- H. NO SHARED NEUTRALS - EACH CIRCUIT THAT REQUIRES A NEUTRAL CONDUCTOR SHALL HAVE A SEPARATE, DEDICATED NEUTRAL CONDUCTOR.

KEYNOTES

- 1. PROVIDE 120V POWER CONNECTION TO TRASH CHUTE CONTROL PANEL.
- 2. RADON MITIGATION PIPING
- 3. PROVIDE 120V POWER CONNECTION TO COMBINATION SMOKE/FIRE DAMPERS.

#	DATE	CHANGE DESCRIPTION




COBBLESTONE MANOR
1050 LAMPLIGHTER DRIVE
GROVE CITY, OH 43123
FOR
CMHA




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DRAWING TITLE:
LEVEL 01 - FLOOR PLAN -
POWER - AREA B

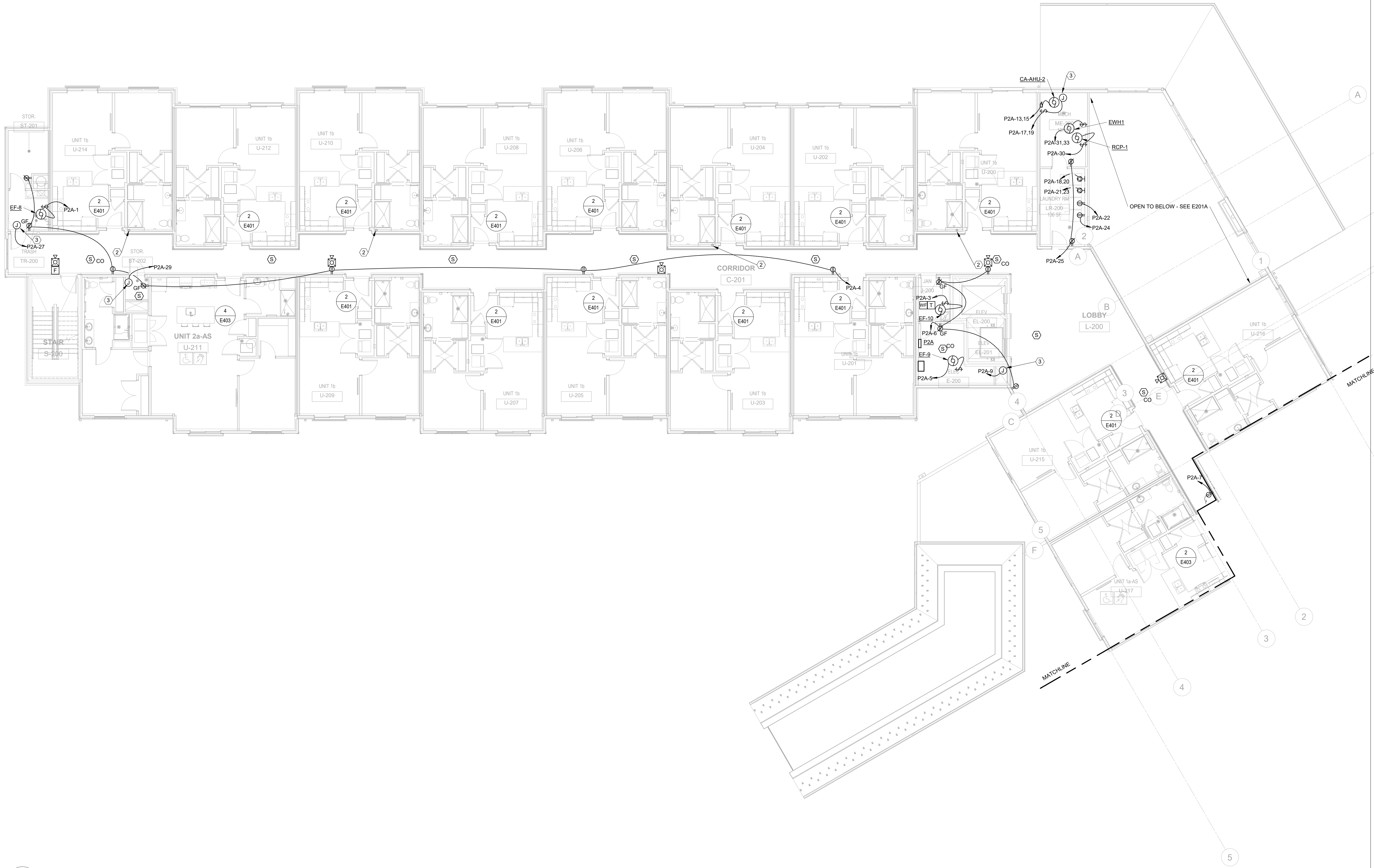


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1 SECOND FLOOR PLAN - POWER - AREA A
1/8" = 1'-0"



GENERAL NOTES

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- COORDINATE ALL DEVICE LOCATIONS WITH FRAMING MEMBERS PRIOR TO ROUGH-IN.
- COORDINATE WALL THICKNESS WITH GENERAL TRADES CONTRACTOR. PROVIDE ADAPTER RING APPROPRIATE FOR WALL THICKNESS AND/OR CABINET BACK PANEL.
- ALL 120-VOLT, 15 OR 20 AMP RECEPTACLE SHALL BE TAMPER-RESISTANT TYPE.
- ALL 120-VOLT, SINGLE PHASE, 15 & 20 AMP BRANCH CIRCUITS SUPPLYING OUTLET IN CORRIDORS, LAUNDRY AREAS AND SIMILAR ROOMS SHALL BE AFCI PROTECTED AT THE CIRCUIT BREAKER.
- ALL CONDUIT RUNS AND WIRING DEVICES AND ASSOCIATED ELECTRICAL WORK WHICH PENETRATES THRU FIRE-RATED WALLS OR FIRE RATED ASSEMBLIES SHALL BE COMPLETELY FIRE SEALED AT EACH PENETRATION. PROVIDE FIRE RATED PUTTY PADS ON ALL JUNCTION BOXES LOCATED IN FIRE RATED WALLS.
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- NO SHARED NEUTRALS - EACH CIRCUIT THAT REQUIRES A NEUTRAL CONDUCTOR SHALL HAVE A SEPARATE, DEDICATED NEUTRAL CONDUCTOR.

KEYNOTES


- PROVIDE POWER CONNECTION TO DOOR HARDWARE POWER SUPPLY (120V, 1PH). INSTALL ABOVE DOOR ON THE SECURE SIDE. REFER TO DETAIL FOR ADDITIONAL INFORMATION.
- RADON MITIGATION PIPING.
- PROVIDE CONNECTION TO SECOND ELECTRIC HEAT CIRCUIT FOR CA-AHU-2.

#	DATE	CHANGE DESCRIPTION

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DRAWING TITLE:
**LEVEL 02 - FLOOR PLAN -
POWER - AREA A**

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1 SECOND FLOOR PLAN - POWER - AREA B
1/8" = 1'-0"

GENERAL NOTES

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- F. ALL CONDUIT RUNS AND WIRING, DEVICES AND ASSOCIATED ELECTRICAL WORK WHICH PENETRATES THRU FIRE RATED WALLS OR FIRE RATED ASSEMBLIES SHALL BE COMPLETELY FIRE SEALED AT EACH PENETRATION. PROVIDE FIRE RATED PUTTY PADS ON ALL JUNCTION BOXES LOCATED IN FIRE RATED WALLS.
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- H. NO SHARED NEUTRALS - EACH CIRCUIT THAT REQUIRES A NEUTRAL CONDUCTOR SHALL HAVE A SEPARATE, DEDICATED NEUTRAL CONDUCTOR.

KEYNOTES

- 1. RADON MITIGATION PIPING.
- 2. PROVIDE 120V POWER CONNECTION TO COMBINATION FIRE/SMOKE DAMPERS.

#	DATE	CHANGE DESCRIPTION




COBBLESTONE MANOR
1050 LAMPLIGHTER DRIVE
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CMHA




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LEVEL 02 - FLOOR PLAN -
POWER - AREA B**



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1 THIRD FLOOR PLAN - POWER - AREA A
1/8" = 1'-0"

GENERAL NOTES

- COORDINATE MOUNTING HEIGHT AND FINAL LOCATIONS OF RECEPTACLES, DEVICES AND EQUIPMENT WITH ARCHITECTURAL DETAILS AND ELEVATIONS PRIOR TO ROUGH-IN.
- COORDINATE ALL DEVICE LOCATIONS WITH FRAMING MEMBERS PRIOR TO ROUGH-IN.
- COORDINATE WALL THICKNESS WITH GENERAL TRADES CONTRACTOR. PROVIDE ADAPTER RING APPROPRIATE FOR WALL THICKNESS AND/OR CABINET BACK PANEL.
- ALL 120-VOLT, 15 OR 20 AMP RECEPTACLE SHALL BE TAMPER-RESISTANT TYPE.
- ALL 120-VOLT, SINGLE PHASE, 15 & 20 AMP BRANCH CIRCUITS SUPPLYING OUTLET IN CORRIDORS, LAUNDRY AREAS AND SIMILAR ROOMS SHALL BE AFCI PROTECTED AT THE CIRCUIT BREAKER.
- ALL CONDUIT RUNS AND WIRING DEVICES AND ASSOCIATED ELECTRICAL WORK WHICH PENETRATES THRU FIRE RATED WALLS OR FIRE RATED ASSEMBLIES SHALL BE COMPLETELY FIRE SEALED AT EACH PENETRATION. PROVIDE FIRE RATED PUTTY PADS ON ALL JUNCTION BOXES LOCATED IN FIRE RATED WALLS.
- ROUGH-IN FOR TELEVISION AND COMMUNICATIONS OUTLETS SHALL BE A 4" SQUARE BACK BOX WITH SINGLE GANG REDUCER AND A 1" CONDUIT TO TURN OUT ABOVE ACCESSIBLE CEILING. PROVIDE PROTECTIVE BUSHINGS.
- NO SHARED NEUTRALS - EACH CIRCUIT THAT REQUIRES A NEUTRAL CONDUCTOR SHALL HAVE A SEPARATE, DEDICATED NEUTRAL CONDUCTOR.

KEYNOTES

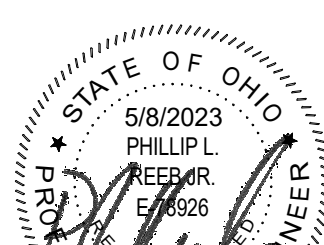
- PROVIDE POWER CONNECTION TO CONTROLS, FIRE ALARM MODULE, AND FIRE ALARM CONNECTION AT DRYPIPE STANDPIPE AIR COMPRESSOR CABINET.
- RADON MITIGATION PIPING.
- PROVIDE 120V POWER CONNECTION TO FIRE/SMOKE DAMPERS.

#	DATE	CHANGE DESCRIPTION

COBBLESTONE MANOR
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FOR
CMHA

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DRAWING TITLE:
**LEVEL 03 - FLOOR PLAN -
POWER - AREA A**

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1 THIRD FLOOR PLAN - POWER - AREA B
1/8" = 1'-0"

GENERAL NOTES

- A. COORDINATE MOUNTING HEIGHT AND FINAL LOCATIONS OF RECEPTACLES, DEVICES AND EQUIPMENT WITH ARCHITECTURAL DETAILS AND ELEVATIONS PRIOR TO ROUGH-IN.
- B. COORDINATE ALL DEVICE LOCATIONS WITH FRAMING MEMBERS PRIOR TO ROUGH-IN.
- C. COORDINATE WALL THICKNESS WITH GENERAL TRADES CONTRACTOR. PROVIDE ADAPTER RING APPROPRIATE FOR WALL THICKNESS AND/OR CABINET BACK PANEL.
- D. ALL 120-VOLT, 15 OR 20 AMP RECEPTACLE SHALL BE TAMPER-RESISTANT TYPE.
- E. ALL 120-VOLT, SINGLE PHASE, 15 & 20 AMP BRANCH CIRCUITS SUPPLYING OUTLET IN CORRIDORS, LAUNDRY AREAS AND SIMILAR ROOMS SHALL BE AFCI PROTECTED AT THE CIRCUIT BREAKER.
- F. ALL CONDUIT RUNS AND WIRING DEVICES AND ASSOCIATED ELECTRICAL WORK WHICH PENETRATES THRU FIRE RATED WALLS OR FIRE RATED ASSEMBLIES SHALL BE COMPLETELY FIRE SEALED AT EACH PENETRATION. PROVIDE FIRE RATED PUTTY PADS ON ALL JUNCTION BOXES LOCATED IN FIRE RATED WALLS.
- G. ROUGH-IN FOR TELEVISION AND COMMUNICATIONS OUTLETS SHALL BE A 4" SQUARE BACK BOX WITH SINGLE GANG REDUCER AND A 1" CONDUIT TO TURN OUT ABOVE ACCESSIBLE CEILING. PROVIDE PROTECTIVE BUSHINGS.
- H. NO SHARED NEUTRALS - EACH CIRCUIT THAT REQUIRES A NEUTRAL CONDUCTOR SHALL HAVE A SEPARATE, DEDICATED NEUTRAL CONDUCTOR.


KEYNOTES

- 1. PROVIDE POWER CONNECTION TO CONTROLS, FIRE ALARM MODULE, AND FIRE ALARM CONNECTION AT DRYPIPE STANDPIPE AIR COMPRESSOR CABINET.
- 2. RADON MITIGATION PIPING
- 3. PROVIDE 120V POWER CONNECTION TO FIRE/SMOKE DAMPERS.

#	DATE	CHANGE DESCRIPTION




COBBLESTONE MANOR
1050 LAMPLIGHTER DRIVE
GROVE CITY, OH 43123
FOR
CMHA



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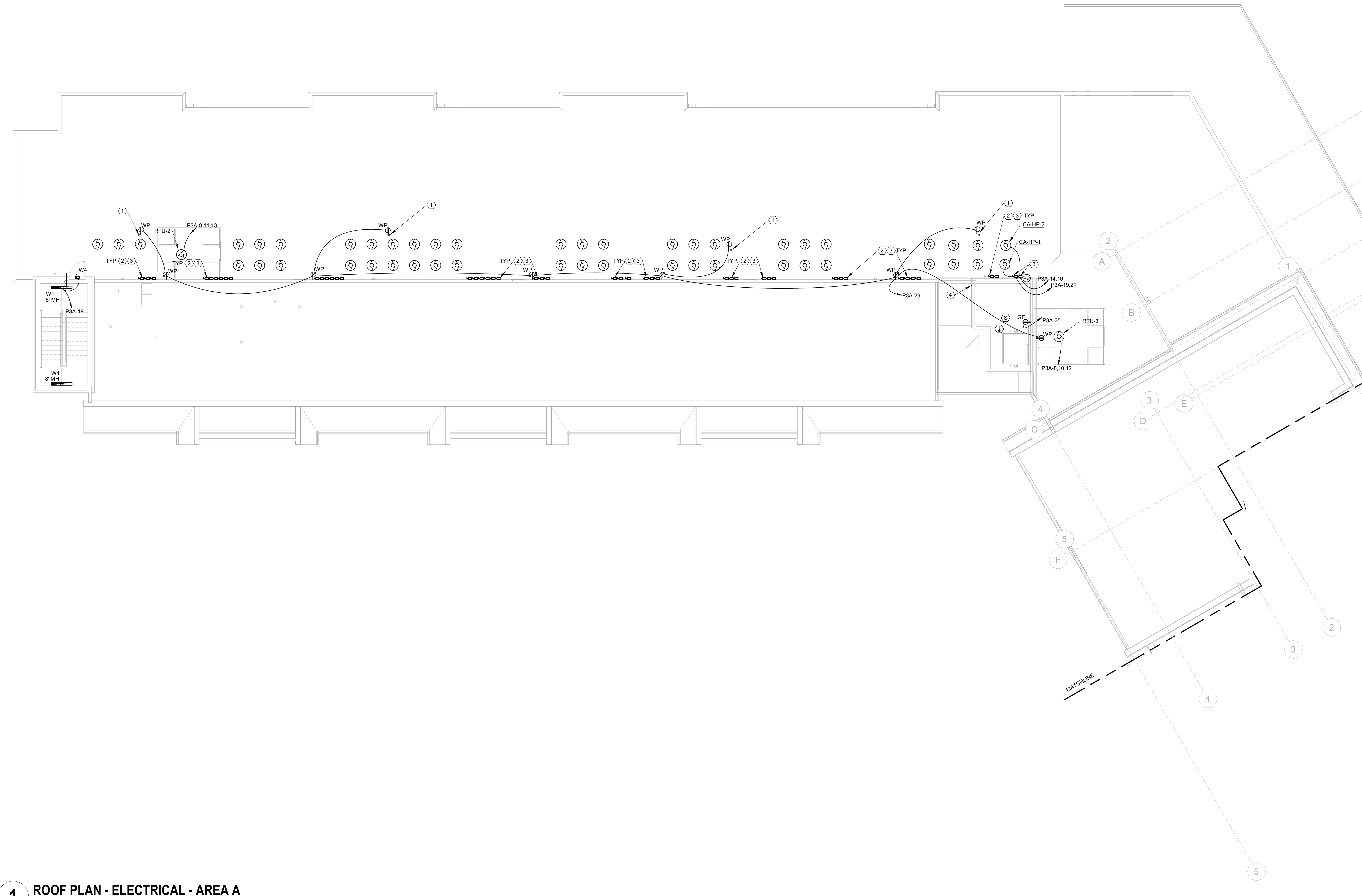
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**LEVEL 03 - FLOOR PLAN -
POWER - AREA B**



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


GENERAL NOTES

1. COORDINATE MOUNTING HEIGHT AND FINAL LOCATION OF RECEPTACLES WITH ARCHITECTURAL DETAILS AND ELEVATIONS PRIOR TO ROUGH-IN.
2. ALL CONDUIT RUNS AND WIRING DEVICES, AND ASSOCIATED ELECTRICAL WORK WHICH PENETRATES THROUGH FIRE RATED WALLS OR FIRE RATED ASSEMBLIES SHALL BE COMPLETELY FIRE SEALED AT EACH PENETRATION. PROVIDE FIRE RATED PUTTY PADS ON ALL JUNCTION BOXES LOCATED IN FIRE RATED WALLS.
3. REFER TO CONDUIT ROOF PENETRATION DETAIL, SHEET E501, FOR TYPICAL ROOF PENETRATION REQUIREMENTS.


KEYNOTES

1. RADON MITIGATION PIPING. PROVIDE FAN RECEPTACLE MOUNTED TO RADON CONDUIT. REFER TO DETAIL 10E501.
2. COORDINATE WITH MECHANICAL CONTRACTOR TO ASSIGN CONDENSING UNITS TO EACH RESPECTIVE TENANT SUITE. PROVIDE 2#10, 1#10, GRD IN, 7# CONDUIT. TYPICAL OF ALL TENANT SUITE CONDENSING UNITS. FEEDERS SHALL PENETRATE ROOF IN GROUPS USING NEOPRENE BOOTS. COORDINATE PENETRATIONS WITH OTHER TRADES TO MINIMIZE TOTAL LOCATIONS. REFER TO ROOF PENETRATION DETAIL FOR ADDITIONAL INFORMATION.
3. EXTEND FEEDER FROM DISCONNECT SWITCH TO UNIT IN LIQUID TIGHT METALLIC CONDUIT. MAKE FINAL CONNECTION.
4. ERRS PATHWAY - 2" CONDUIT TO RISE THROUGH ROOF AT ELEVATOR SHAFT. CAP WEATHERTIGHT.

#	DATE	CHANGE DESCRIPTION




COBBLESTONE MANOR
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**DRAWING TITLE:
ROOF PLAN - ELECTRICAL -
AREA A**

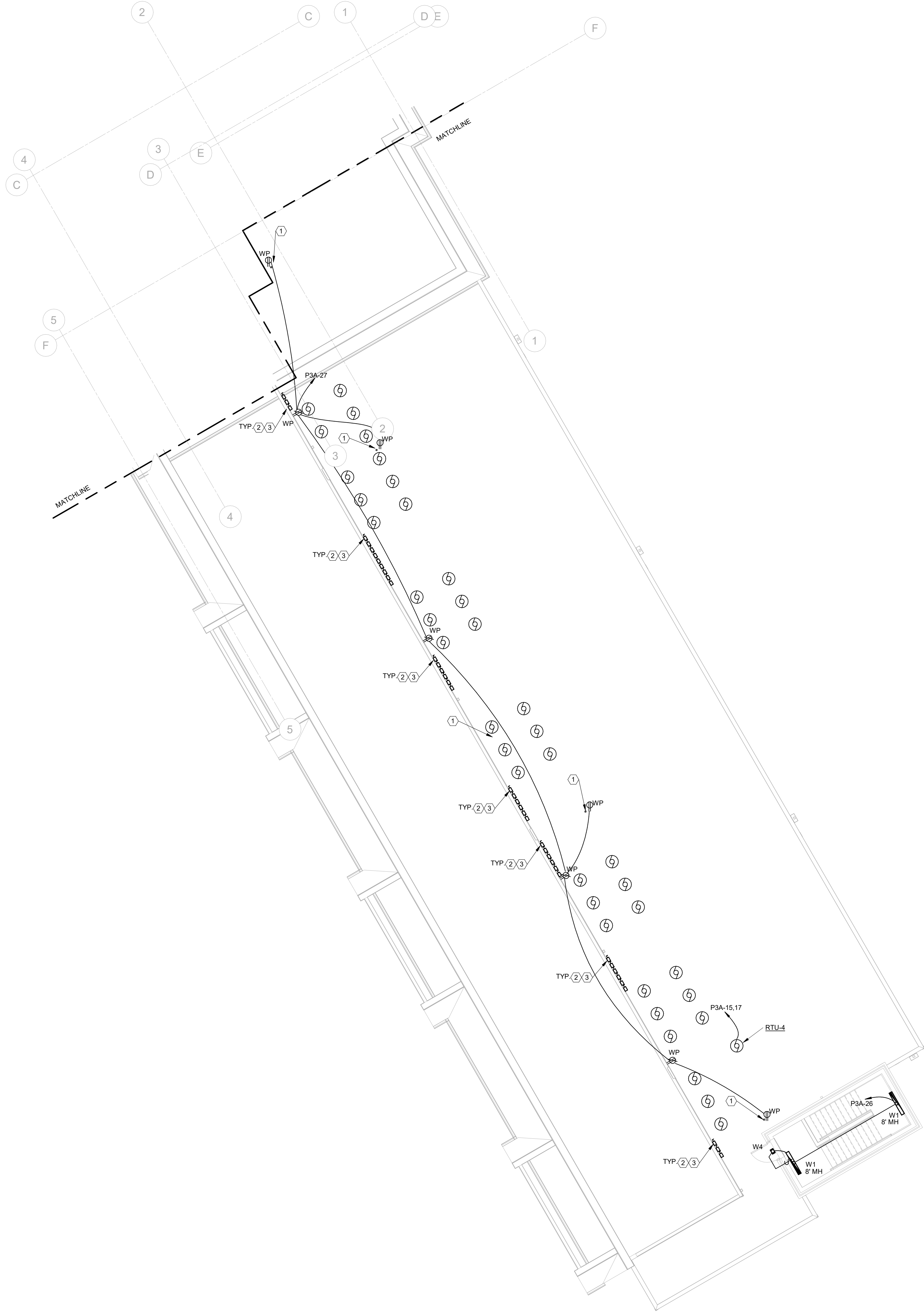


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1 ROOF PLAN - ELECTRICAL - AREA B
1/8" = 1'-0"




GENERAL NOTES

- COORDINATE MOUNTING HEIGHT AND FINAL LOCATION OF RECEPTACLES WITH ARCHITECTURAL DETAILS AND ELEVATIONS PRIOR TO ROUGH-IN.
- ALL CONDUIT RUNS AND WIRING, DEVICES, AND ASSOCIATED ELECTRICAL WORK WHICH PENETRATES THROUGH FIRE RATED WALLS OR FIRE RATED ASSEMBLIES SHALL BE COMPLETELY FIRE SEALED AT EACH PENETRATION. PROVIDE FIRE RATED PUTTY PADS ON ALL JUNCTION BOXES LOCATED IN FIRE RATED WALLS.
- REFER TO CONDUIT ROOF PENETRATION DETAIL, SHEET E501, FOR TYPICAL ROOF PENETRATION REQUIREMENTS.


KEYNOTES

- RADON MITIGATION PIPING. PROVIDE FAN RECEPTACLE MOUNTED TO RADON CONDUIT. REFER TO DETAIL 10E501.
- COORDINATE WITH MECHANICAL CONTRACTOR TO ASSIGN CONDENSING UNITS TO EACH RESPECTIVE TENANT SUITE. PROVIDE 2#10, 1#10 GRD. IN .75" CONDUIT. TYPICAL OF ALL TENANT SUITE CONDENSING UNITS.
- EXTEND FEEDER FROM DISCONNECT SWITCH TO UNIT IN LIQUID TIGHT METALLIC CONDUIT. MAKE FINAL CONNECTION.

#	DATE	CHANGE DESCRIPTION

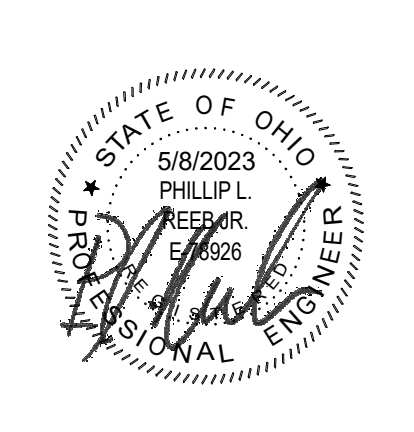


COBBLESTONE MANOR
1050 LAMPLIGHTER DRIVE
GROVE CITY, OH 43123
FOR
CMHA




300 SPRUCE STREET
SUITE 300
COLUMBUS, OHIO 43215
PHONE: (614) 461-4664
FAX: (614) 280-8881

DRAWING TITLE:
ROOF PLAN - ELECTRICAL - AREA B



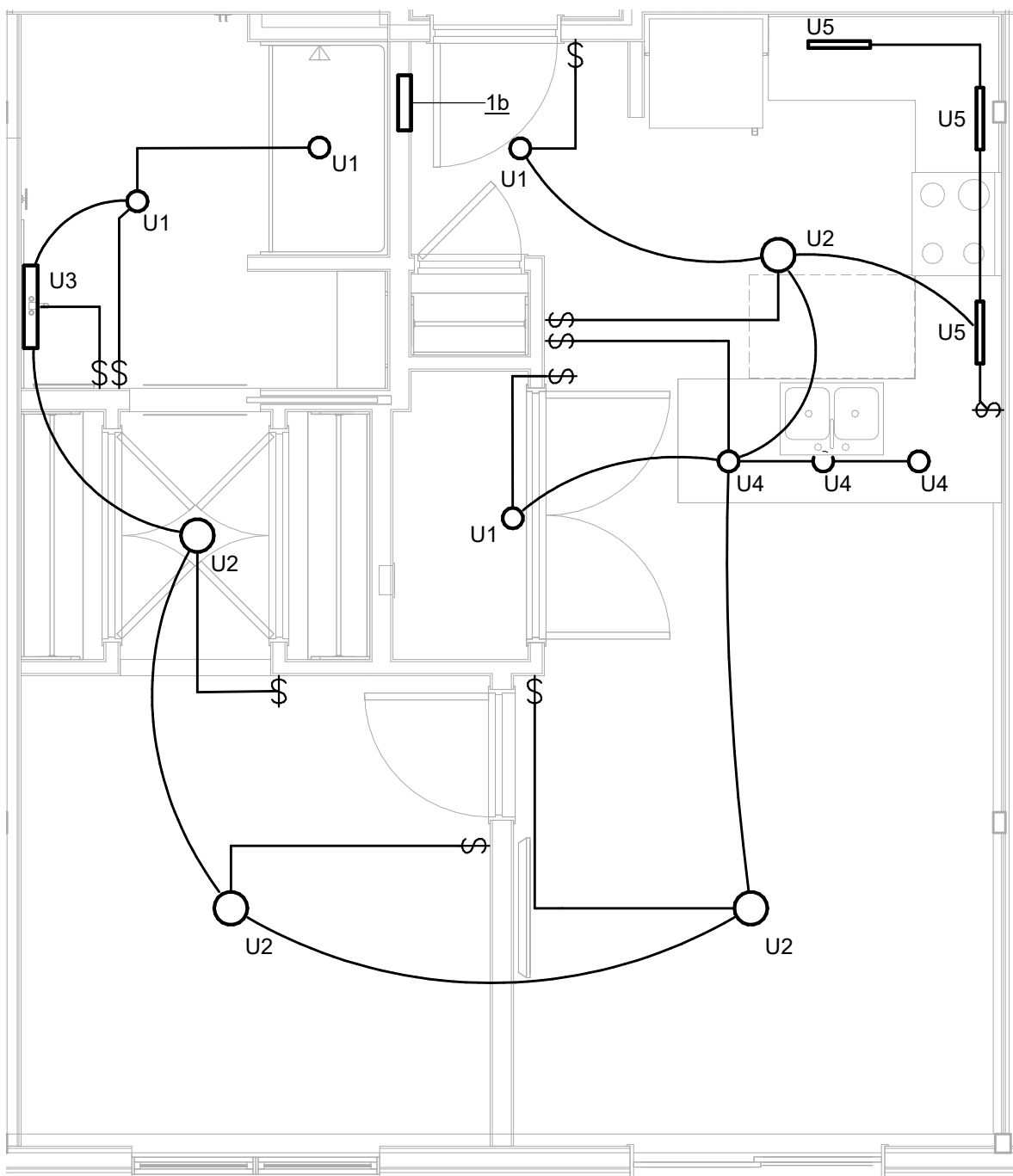
06/08/2023
DRAWN BY: RK
CHECKED BY: KM
#22172.01
E204B
PERMIT & BID SET



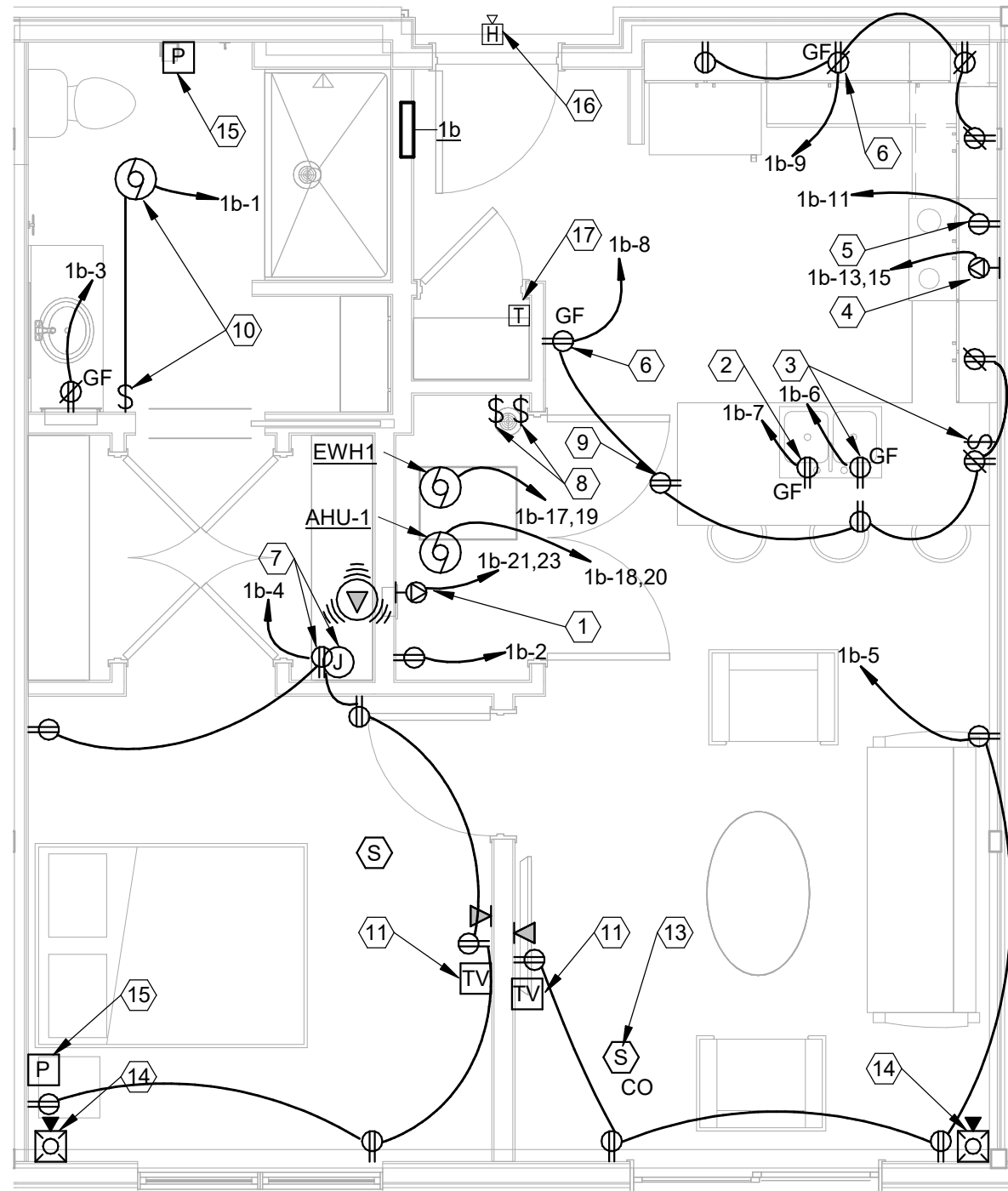
ADVANCED ENGINEERING CONSULTANTS
Mechanical | Electrical | Plumbing | Fire Protection | Utilities
1405 Dublin Road
Columbus, Ohio 43215
Tel: (614) 466-4773
Fax: (614) 466-4082

Panel: 1b									
Location: UNIT 1b U1-U3			Volts: 120/208 Single			A.I.C. Rating: 10,000			
Supply From:			Phases: 1			Mains Type: M.C.B.			
Mounting: Recessed			Wires: 3			Mains Rating: 125 A			
Enclosure: Type 1						MCB Rating: 125 A			
CKT	Circuit Description	Trip	Poles	A		Poles	Trip	Circuit Description	CKT
1	LIGHTING	20 A	1	0.2	0.8		1	20 A WASHER (GF)	2
3	RECEPT BATH	20 A	1			0.2	1.1	1 20 A RECEPT BEDROOM	4
5	RECEPT LIVING	20 A	1	0.7	0.8		1	20 A DISPOSAL	6
7	DISHWASHER	20 A	1			0.8	0.9	1 20 A RECEPT KITCHEN	8
9	RECEPT KITCHEN	20 A	1	1.4					10
11	MICROWAVE/HOOD	20 A	1			1.0			12
13	ELECTRIC RANGE	50 A	2	4.0		4.0			14
15									16
17	EW1	40 A	2	3.0	3.8				18
19						3.0	3.8	2 50 A AHU-1	20
21	ELECTRIC CLOTHES DRYER	30 A	2	2.5	1.1			2 20 A HP-1 (ROOF)	22
23						2.5	1.1		24

Load Schedule - Unit 1b				
SQUARE FOOTAGE	711 SF	X	3 VA/SF	2.1 KVA
LAUNDRY/WASHING MACHINE	1500 VA			1.5 KVA
RANGES	8000 VA			8 KVA
DRYERS	5000 VA			5 KVA
DISHWASHERS	900 VA			0.9 KVA
SMALL APPLIANCE	1500 VA			1.5 KVA
SMALL APPLIANCE	1500 VA			1.5 KVA
MICROWAVE	1000 VA			1 KVA
WATER HEATERS	6000 VA			6 KVA
GENERAL LIGHTING LOAD SUBTOTAL				27.5 KVA
DEMAND FACTOR				
1ST 10 KW (GEN LTG LOAD)	10 KVA	X	100%	10.0 KVA
REMAINDER (GEN LTG LOAD)	17.5 KVA	X	40%	7.0 KVA
HVAC (HEAT PUMP)	2.3 KVA		100	2.3 KVA
HVAC (COOLING)	0.0 KVA		100	0.0 KVA
HVAC (HEATING) ELECTRIC	7.5 KVA		65%	4.9 KVA
	37.333 KVA			
TOTAL				24.2 KVA
NOTE: PER NEC 220-82 VOLTAGE: 208 /120 PHASE: 1 116.3 AMPS				



1 ENLARGED PLAN UNIT CEILING PLAN 1b - LIGHTING
1/4" = 1'-0"



2 ENLARGED PLAN ENLARGED UNIT 1b - POWER
1/4" = 1'-0"

GENERAL NOTES

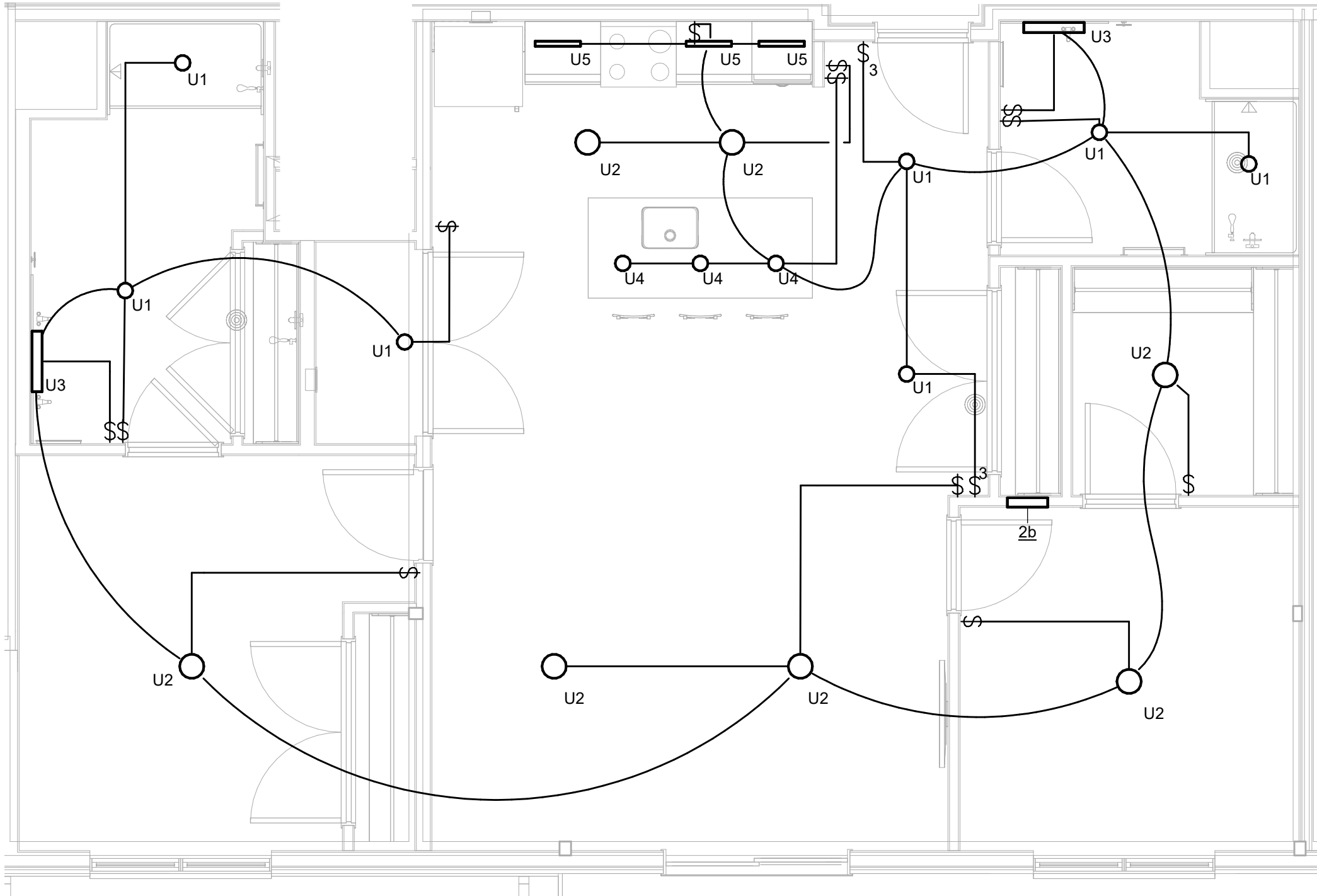
- EACH UNIT PLAN REPRESENTS MULTIPLE APARTMENT UNITS WITH SIMILAR LAYOUTS. COORDINATE EXACT UNIT LAYOUT INCLUDING ROUGH-INS WITH ARCHITECTURAL AND STRUCTURAL DRAWINGS FOR EACH UNIT.
- OUTLET BOXES FOR LIGHT FIXTURES SHALL BE STANDARD OCTAGONAL.
- COORDINATE MOUNTING HEIGHT AND FINAL LOCATIONS OF RECEPTACLES, DEVICES AND EQUIPMENT WITH ARCHITECTURAL DETAILS AND ELEVATIONS PRIOR TO ROUGH-IN.
- COORDINATE ALL FIRE ALARM DEVICE AND EQUIPMENT LOCATIONS WITH APPROVED FIRE ALARM SHOP DRAWINGS PRIOR TO ROUGH-IN.
- COORDINATE ALL DEVICE LOCATIONS WITH FRAMING MEMBERS PRIOR TO ROUGH-IN.
- COORDINATE WALL THICKNESS WITH GENERAL TRADES CONTRACTOR. PROVIDE ADAPTER RING APPROPRIATE FOR WALL THICKNESS AND/OR CABINET BACK PANEL.
- ALL 120-VOLT, 15 & 20 AMP RECEPTACLES IN DWELLING UNITS SHALL BE TAMPER-RESISTANT TYPE AND MARKED "TR".
- ALL 120-VOLT, SINGLE PHASE, 15 & 20 AMP BRANCH CIRCUITS SUPPLYING OUTLETS IN BEDROOMS, LIVING ROOMS, HALLWAYS, CLOSETS, LAUNDRY AREAS AND SIMILAR ROOMS SHALL BE AFCI PROTECTED AT THE CIRCUIT BREAKER.
- ALL RECEPTACLES LOCATED IN THE BATHROOM, KITCHEN, LAUNDRY AREA OR WITHIN 6'-0" OF THE OUTSIDE EDGE OF A SINK, SHALL BE GFCI PROTECTED PER NEC 210.8. RECEPTACLES INSTALLED IN ACCESSIBLE LOCATIONS SHALL BE GFCI TYPE. RECEPTACLES INSTALLED BEHIND EQUIPMENT OR OTHERWISE INACCESSIBLE LOCATIONS SHALL BE GFCI PROTECTED AT THE CIRCUIT BREAKER.
- ALL CONDUIT RUNS AND WIRING, DEVICES AND ASSOCIATED ELECTRICAL WORK WHICH PENETRATES THRU FIRE RATED WALLS OR FIRE RATED ASSEMBLIES SHALL BE COMPLETELY FIRE SEALED AT EACH PENETRATION. PROVIDE UL APPROVED FIRE RATED PUTTY PADS ON ALL JUNCTION BOXES LOCATED IN FIRE RATED WALLS.
- THE ELECTRICAL PANEL IN EACH APARTMENT UNIT SHALL BE MOUNTED IN SUCH THAT THE TOP CIRCUIT BREAKER IS NOT MORE THAN 48" A.F.F. AND SHALL COMPLY WITH ANSI A117.1.
- IN ALL ADA TYPE DWELLING UNITS, PROVIDE 1-1/2" BOX EXTENSION FOR ALL ABOVE COUNTER RECEPTACLES.
- ROUGH-IN FOR TELEVISION AND COMMUNICATIONS OUTLETS SHALL BE A 4" SQUARE BACK BOX WITH SINGLE GANG REDUCER AND A 1" CONDUIT TO POINT OF SERVICE ROOM. PROVIDE PROTECTIVE BUSHINGS. COORDINATE LOCATIONS OF ALL TELECOM AND TELEVISION DEVICES WITH OWNER PRIOR TO ROUGH-IN.
- ALL LOW VOLTAGE WIRING INCLUDING BUT NOT NECESSARILY LIMITED TO, CABLE TV, TELEPHONE, SECURITY AND FIRE ALARM WIRING, SHALL BE INSTALLED PRIOR TO DRYWALL COVERUP.
- AT TELEVISION SERVICE LOCATIONS, SERVICE PROVIDER (AT&T) SHALL BE PROVIDE ONE (1) CAT-5E CABLE AND ONE (1) RG6 COAXIAL CABLE TO HOMERUN TO CLOSET AS INDICATED IN CODED NOTE 18. SERVICE PROVIDER SHALL PROVIDE A MINIMUM OF 20'-0" SERVICE LOOP AT THE END OF EACH CABLE FOR TERMINATION TO EQUIPMENT FURNISHED BY SERVICE PROVIDER. COORDINATE EXACT REQUIREMENTS WITH OWNER PRIOR TO ROUGH-IN.
- SMOKE ALARMS SHALL BE INTERCONNECTED IN SUCH A MANNER THAT ACTIVATION OF ONE ALARM WILL ACTIVATE ALL ALARMS WITHIN THE INDIVIDUAL UNIT. SMOKE DETECTOR SHALL BE WIRED TO LOCAL 120 VOLT LIGHTING CIRCUIT. PROVIDE 3 WIRE INTERCONNECTION BETWEEN DEVICES.

KEYNOTES

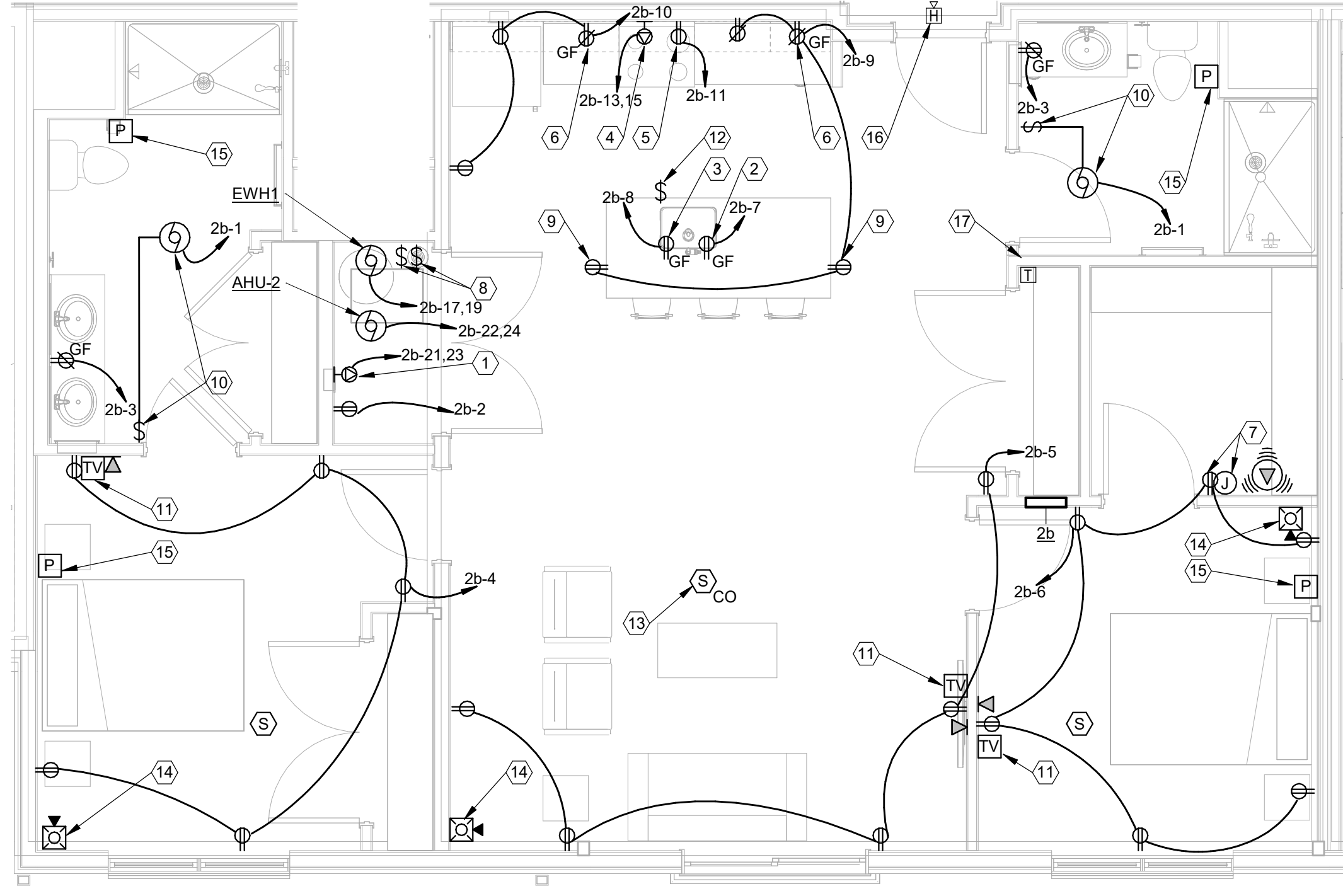
- PROVIDE NEMA 14-30R RECEPTACLE FOR DRYER, 3-#10, 1-#10 GND.
- PROVIDE DUPLEX RECEPTACLE FOR DISHWASHER. RECEPTACLE SHALL BE SURFACE MOUNTED WITHIN BASE CABINET IMMEDIATELY ADJACENT TO DISHWASHER.
- PROVIDE DUPLEX RECEPTACLE FOR GARBAGE DISPOSAL. RECEPTACLE SHALL BE SURFACE MOUNTED WITHIN BASE CABINET WHERE DISPOSAL IS INSTALLED. PROVIDE CORD WITH PLUG AS REQUIRED. CONTROL WITH TOGGLE SWITCH ABOVE COUNTER GANGED WITH RECEPTACLE.
- PROVIDE NEMA 14-50R RECEPTACLE FOR RANGE, 3-#8, #10 GND. COORDINATE MOUNTING LOCATION PRIOR TO ROUGH-IN.
- PROVIDE DUPLEX RECEPTACLE FOR MICROWAVE RANGE HOOD. LOCATE IN UPPER CASEWORK (5'-8" MIN).
- KITCHEN SMALL APPLIANCE CIRCUIT. FIRST RECEPTACLE ON CIRCUIT SHALL BE GF TYPE WIRED TO PROTECT DOWNSTREAM RECEPTACLES.
- PROVIDE RECESSED STRUCTURED CABLING MEDIA ENCLOSURE JBOX WITH HINGED COVER AT 60" AFF. BOX SHALL BE 14" X 14" X 3" DEEP. MIN. CONSTRUCTED OF ABS PLASTIC WITH BOTTOM MOUNTING PLATE FOR 120V RECEPTACLE EQUAL TO LEVITON # 48605-14E. INSTALL RECEPTACLE FACE-UP WITHIN BOX. PROVIDE (1) 3/4" CONDUIT FROM STRUCTURED CABLING JBOX TO NEAREST TELECOM ROOM ON SAME FLOOR. REFER TO DETAIL 2/E502.
- 2-POLE MOTOR RATED TOGGLE SWITCH FOR MECHANICAL EQUIPMENT. REFER TO MOTOR SCHEDULE.
- RECEPTACLE MOUNTED FLUSH IN CASEWORK 4" BELOW COUNTER.
- BATHROOM EXHAUST FAN. CONNECT TO TWO SPEED OCCUPANCY SENSING SWITCH (BY MECHANICAL CONTRACTOR). GANG SWITCH WITH LIGHTING CONTROL SWITCHES. CONNECT TO LIGHTING CIRCUIT SERVING SPACE MAKE FINAL CONNECTIONS.
- UNIT LOW VOLTAGE TELECOM DEVICE. PROVIDE CABLING BACK TO UNIT TELECOM DEMARK JBOX (REFER TO CODED NOTE 7, THIS SHEET). CABLING SHALL BE SUPPORTED WITHIN WALLS AND CEILING. REFER TO ROUGH-IN DETAIL 2/E502.
- TOGGLE SWITCH WITHIN CASEWORK, SURFACE MOUNTED NEAR HINGE SIDE OF CABINET DOOR.
- PROVIDE RELAY AT SMOKE DETECTOR TO SIGNAL AIR HANDLER FAN SHUTDOWN. REFER TO DETAIL 3/E502.
- PROVIDE FIRE ALARM DEVICE WITH LOW FREQUENCY TONE RATED AT 520 HERTZ. EXTEND WIRING TO BUILDING FIRE ALARM SYSTEM.
- REMOTE EMERGENCY PULL CORD. MOUNT AT +42" AFF TO CENTER OF
- PULL CORD DOME LIGHT. REFER TO DETAIL 3/E502 FOR MORE INFORMATION. SYSTEM SHALL BE STAND-ALONE AND WITHOUT CENTRAL MONITORING. WIRE PULL CORDS TO DOME LIGHT. REFER TO SHEET KEYNOTE #15. COORDINATE LOCATION AND MOUNTING HEIGHT OF DOME LIGHT AT EACH DOOR WITH ARCHITECT.
- EMERGENCY CALL FOR ASSISTANCE TRANSFORMER. REFER TO DETAIL 3/E502.

Panel: 2b									
Location: BEDROOM 2 138			Volts: 120/208 Single			A.I.C. Rating: 10,000			
Supply From:			Phases: 1			Mains Type: M.C.B.			
Mounting: Recessed			Wires: 3			Mains Rating: 150 A			
Enclosure: Type 1						MCB Rating: 150 A			
CKT	Circuit Description	Trip	Poles	A		Poles	Trip	Circuit Description	CKT
1	LIGHTING	20 A	1	0.3	0.8		1	20 A WASHER (GF)	2
3	RECEPT BATH	20 A	1			0.4	0.9	1 20 A RECEPT BEDROOM	4
5	RECEPT LIVING	20 A	1	0.9	1.1		1	20 A RECEPT BEDROOM	6
7	DISHWASHER	20 A	1			0.8	0.8	1 20 A DISPOSAL	8
9	RECEPT KITCHEN	20 A	1	0.7	1.3		1	20 A RECEPT KITCHEN	10
11	MICROWAVE/HOOD	20 A	1			1.0			12
13	ELECTRIC RANGE	50 A	2	4.0		4.0			14
15									16
17	EW1	40 A	2	3.0	1.2				18
19						3.0	1.2	2 25 A HP-2 (ROOF)	20
21	ELECTRIC CLOTHES DRYER	30 A	2	2.5	4.0			2 60 A AHU-2	22
23						2.5	4.0		24

Load Schedule - Unit 2b				
SQUARE FOOTAGE	1190 SF	X	3 VA/SF	3.6 KVA
LAUNDRY/WASHING MACHINE	1500 VA			1.5 KVA
RANGES	8000 VA			8 KVA
DRYERS	5000 VA			5 KVA
DISHWASHERS	900 VA			0.9 KVA
SMALL APPLIANCE	1500 VA			1.5 KVA
SMALL APPLIANCE	1500 VA			1.5 KVA
MICROWAVE	1000 VA			1 KVA
WATER HEATERS	6000 VA			6 KVA
GENERAL LIGHTING LOAD SUBTOTAL				29.0 KVA
DEMAND FACTOR				
1ST 10 KW (GEN LTG LOAD)	10 KVA	X	100%	10.0 KVA
REMAINDER (GEN LTG LOAD)	19.0 KVA	X	40%	7.6 KVA
HVAC (HEAT PUMP)	2.4 KVA		100	2.4 KVA
HVAC (COOLING)	0.0 KVA		100	0.0 KVA
HVAC (HEATING) ELECTRIC	10.0 KVA		65%	6.5 KVA
	41.37 KVA			
TOTAL				26.5 KVA
NOTE: PER NEC 220-82 VOLTAGE: 208 /120 PHASE: 1 127.3 AMPS				



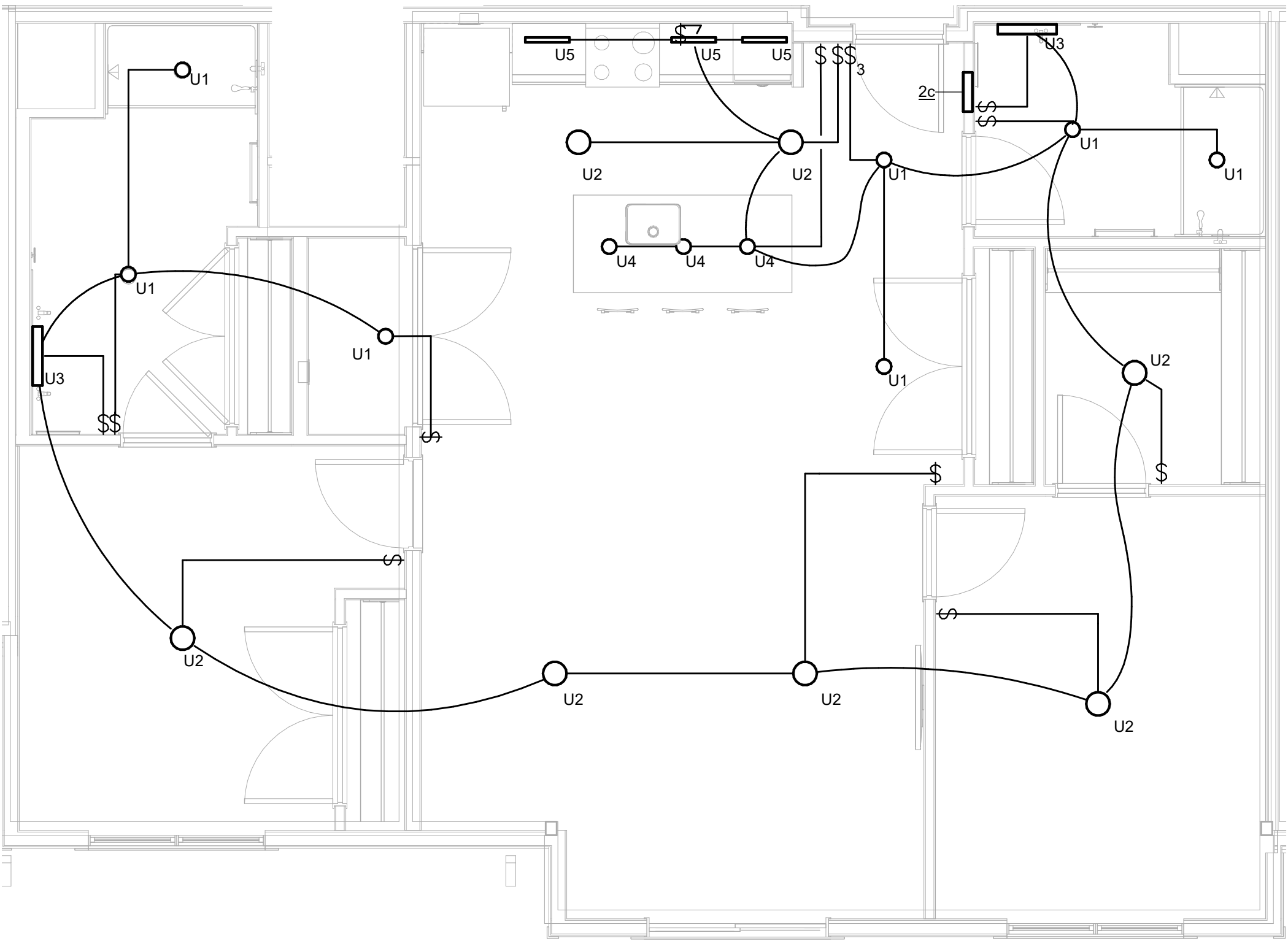
3 ENLARGED PLAN UNIT CEILING PLAN 2b
1/4" = 1'-0"



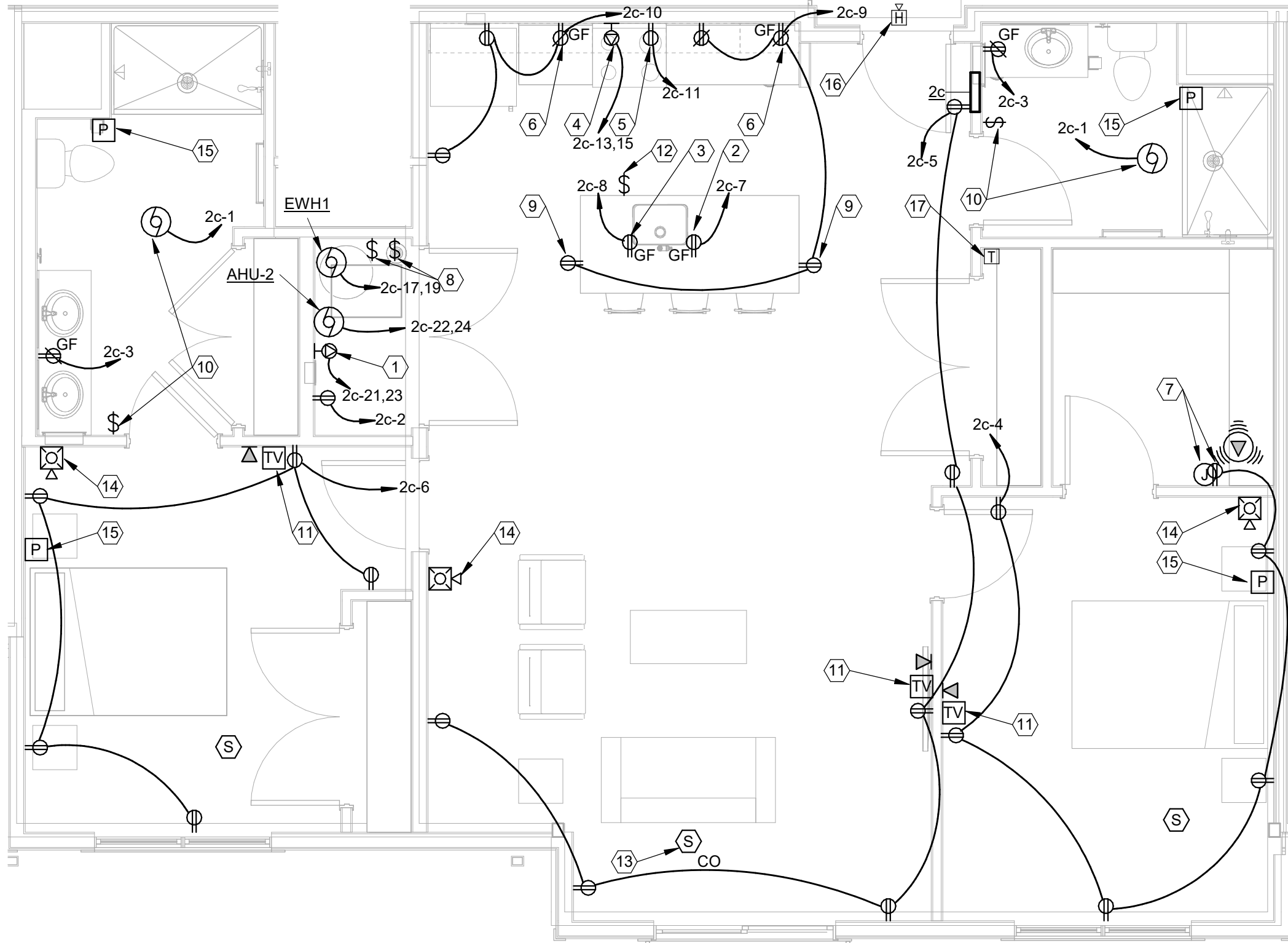
4 ENLARGED PLAN ENLARGED UNIT 2b - POWER
1/4" = 1'-0"

Panel: 2c											
Location: UNIT 2c U-311				Volts: 120/208 Single				A.I.C. Rating: 10,000			
Supply From:				Phases: 1				Mains Type: M.C.B.			
Mounting: Recessed				Wires: 3				Mains Rating: 150 A			
Enclosure: Type 1								MCB Rating: 150 A			
CKT	Circuit Description	Trip	Poles	A		B		Poles	Trip	Circuit Description	CKT
1	LIGHTING	20 A	1	0.3	0.8			1	20 A	WASHER (GF)	2
3	RECEPT BATH	20 A	1			0.4	1.1	1	20 A	RECEPT BEDROOM	4
5	RECEPT LIVING	20 A	1	1.1	0.9			1	20 A	RECEPT BEDROOM	6
7	DISHWASHER	20 A	1			0.8	0.8	1	20 A	DISPOSAL	8
9	RECEPT KITCHEN	20 A	1	0.7	1.3			1	20 A	RECEPT KITCHEN	10
11	MICROWAVE/HOOD	20 A	1			1.0					12
13	ELECTRIC RANGE	50 A	2	4.0							14
15						4.0					16
17	EW/HI	40 A	2	3.0	1.2	3.0	1.2	2	25 A	HP-2 (ROOF)	18
19											20
21	ELECTRIC CLOTHES DRYER	30 A	2	2.5	4.0	2.5	4.0	2	60 A	AHU-2	22
23											24

Load Schedule - Unit 2c					
SQUARE FOOTAGE	1263 SF	X	3 VA/SF		3.8 KVA
LAUNDRY/WASHING MACHINE	1500 VA				1.5 KVA
RANGES	8000 VA				8 KVA
DRYERS	5000 VA				5 KVA
DISHWASHERS	900 VA				0.9 KVA
SMALL APPLIANCE	1500 VA				1.5 KVA
SMALL APPLIANCE	1500 VA				1.5 KVA
MICROWAVE	1000 VA				1 KVA
WATER HEATERS	6000 VA				6 KVA
GENERAL LIGHTING LOAD SUBTOTAL					29.2 KVA
DEMAND FACTOR					
1ST 10 KW (GEN LTG LOAD)	10 KVA	X	100%		10.0 KVA
REMAINDER (GEN LTG LOAD)	19.2 KVA	X	40%		7.7 KVA
HVAC (HEAT PUMP)	2.4 KVA		100		2.4 KVA
HVAC (COOLING)	0.0 KVA		100		0.0 KVA
HVAC (HEATING) ELECTRIC	10.0 KVA		65%		6.5 KVA
	41.589 KVA				
TOTAL					26.6 KVA
NOTE: PER NEC 220-82		VOLTAGE: 208	/120	PHASE: 1	127.8 AMPS



1 UNIT CEILING PLAN - 2c - LIGHTING
1/4" = 1'-0"



2 UNIT PLAN - 2c - POWER AND SYSTEMS
1/4" = 1'-0"


GENERAL NOTES

- EACH UNIT PLAN REPRESENTS MULTIPLE APARTMENT UNITS WITH SIMILAR LAYOUTS. COORDINATE EXACT UNIT LAYOUT INCLUDING ROUGH-INS WITH ARCHITECTURAL AND STRUCTURAL DRAWINGS FOR EACH UNIT.
- OUTLET BOXES FOR LIGHT FIXTURES SHALL BE STANDARD OCTAGONAL.
- COORDINATE MOUNTING HEIGHT AND FINAL LOCATIONS OF RECEPTACLES, DEVICES AND EQUIPMENT WITH ARCHITECTURAL DETAILS AND ELEVATIONS PRIOR TO ROUGH-IN.
- COORDINATE ALL FIRE ALARM DEVICE AND EQUIPMENT LOCATIONS WITH APPROVED FIRE ALARM SHOP DRAWINGS PRIOR TO ROUGH-IN.
- COORDINATE ALL DEVICE LOCATIONS WITH FRAMING MEMBERS PRIOR TO ROUGH-IN.
- COORDINATE WALL THICKNESS WITH GENERAL TRADES CONTRACTOR. PROVIDE ADAPTER RING APPROPRIATE FOR WALL THICKNESS AND/OR CABINET BACK PANEL.
- ALL 120-VOLT, 15 & 20 AMP RECEPTACLES IN DWELLING UNITS SHALL BE TAMPER-RESISTANT TYPE AND MARKED "TR".
- ALL 120-VOLT, SINGLE PHASE, 15 & 20 AMP BRANCH CIRCUITS SUPPLYING OUTLETS IN BEDROOMS, LIVING ROOMS, HALLWAYS, CLOSETS, LAUNDRY AREAS AND SIMILAR ROOMS SHALL BE AFCI PROTECTED AT THE CIRCUIT BREAKER.
- ALL RECEPTACLES LOCATED IN THE BATHROOM, KITCHEN, LAUNDRY AREA OR WITHIN 6'-0" OF THE OUTSIDE EDGE OF A SINK, SHALL BE GFCI PROTECTED PER NEC 210.8. RECEPTACLES INSTALLED IN ACCESSIBLE LOCATIONS SHALL BE GFCI TYPE. RECEPTACLES INSTALLED BEHIND EQUIPMENT OR OTHERWISE INACCESSIBLE LOCATIONS SHALL BE GFCI PROTECTED AT THE CIRCUIT BREAKER.
- ALL CONDUIT RUNS AND WIRING, DEVICES AND ASSOCIATED ELECTRICAL WORK WHICH PENETRATES THRU FIRE RATED WALLS OR FIRE RATED ASSEMBLIES SHALL BE COMPLETELY FIRE SEALED AT EACH PENETRATION. PROVIDE UL APPROVED FIRE RATED PUTTY PADS ON ALL JUNCTION BOXES LOCATED IN FIRE RATED WALLS.
- THE ELECTRICAL PANEL IN EACH APARTMENT UNIT SHALL BE MOUNTED IN SUCH THAT THE TOP CIRCUIT BREAKER IS NOT MORE THAN 48" A.F.F. AND SHALL COMPLY WITH ANSI A117.1.
- IN ALL ADA TYPE DWELLING UNITS, PROVIDE 1-1/2" BOX EXTENSION FOR ALL ABOVE COUNTER RECEPTACLES.
- ROUGH-IN FOR TELEVISION AND COMMUNICATIONS OUTLETS SHALL BE A 4" SQUARE BACK BOX WITH SINGLE GANG REDUCER AND A 1" CONDUIT TO POINT OF SERVICE ROOM. PROVIDE PROTECTIVE BUSHINGS. COORDINATE LOCATIONS OF ALL TELECOM AND TELEVISION DEVICES WITH OWNER PRIOR TO ROUGH-IN.
- ALL LOW VOLTAGE WIRING INCLUDING BUT NOT NECESSARILY LIMITED TO, CABLE TV, TELEPHONE, SECURITY AND FIRE ALARM WIRING, SHALL BE INSTALLED PRIOR TO DRYWALL COVERUP.
- AT TELEVISION SERVICE LOCATIONS, SERVICE PROVIDER (AT&T) SHALL BE PROVIDE ONE (1) CAT-5E CABLE AND ONE (1) RG6 COAXIAL CABLE TO HOMERUN TO CLOSET AS INDICATED IN CODED NOTE 18. SERVICE PROVIDER SHALL PROVIDE A MINIMUM OF 20'-0" SERVICE LOOP AT THE END OF EACH CABLE FOR TERMINATION TO EQUIPMENT FURNISHED BY SERVICE PROVIDER. COORDINATE EXACT REQUIREMENTS WITH OWNER PRIOR TO ROUGH-IN.
- SMOKE ALARMS SHALL BE INTERCONNECTED IN SUCH A MANNER THAT ACTIVATION OF ONE ALARM WILL ACTIVATE ALL ALARMS WITHIN THE INDIVIDUAL UNIT. SMOKE DETECTOR SHALL BE WIRED TO LOCAL 120 VOLT LIGHTING CIRCUIT. PROVIDE 3 WIRE INTERCONNECTION BETWEEN DEVICES.

KEYNOTES


- PROVIDE NEMA 14-30R RECEPTACLE FOR DRYER, 3-#10, 1-#10 GND.
- PROVIDE DUPLEX RECEPTACLE FOR DISHWASHER. RECEPTACLE SHALL BE SURFACE MOUNTED WITHIN BASE CABINET IMMEDIATELY ADJACENT TO DISHWASHER.
- PROVIDE DUPLEX RECEPTACLE FOR GARBAGE DISPOSAL. RECEPTACLE SHALL BE SURFACE MOUNTED WITHIN BASE CABINET WHERE DISPOSAL IS INSTALLED. PROVIDE CORD WITH PLUG AS REQUIRED. CONTROL WITH TOGGLE SWITCH ABOVE COUNTER GANGED WITH RECEPTACLE.
- PROVIDE NEMA 14-50R RECEPTACLE FOR RANGE, 3-#8, #10 GND. COORDINATE MOUNTING LOCATION PRIOR TO ROUGH-IN.
- PROVIDE DUPLEX RECEPTACLE FOR MICROWAVE RANGE HOOD. LOCATE IN UPPER CASEWORK (6'-6" MIN).
- KITCHEN SMALL APPLIANCE CIRCUIT. FIRST RECEPTACLE ON CIRCUIT SHALL BE GF TYPE WIRED TO PROTECT DOWNSTREAM RECEPTACLES.
- PROVIDE RECESSED STRUCTURED CABLING MEDIA ENCLOSURE (J-BOX WITH HINGED COVER AT 60" AFF. BOX SHALL BE 14" X 14" X 3" DEEP, MIN. CONSTRUCTED OF ABS PLASTIC WITH BOTTOM MOUNTING PLATE FOR 120V RECEPTACLE. EQUAL TO LEVITON # 49605-14E. INSTALL RECEPTACLE FACE-UP WITHIN BOX. PROVIDE (1) 3/4" CONDUIT FROM STRUCTURED CABLING J-BOX TO NEAREST TELECOM ROOM ON SAME FLOOR. REFER TO DETAIL 2/E502.
- 2-POLE MOTOR RATED TOGGLE SWITCH FOR MECHANICAL EQUIPMENT. REFER TO MOTOR SCHEDULE.
- RECEPTACLE MOUNTED FLUSH IN CASEWORK 4" BELOW COUNTER.
- BATHROOM EXHAUST FAN. CONNECT TO TWO SPEED OCCUPANCY SENSING SWITCH (BY MECHANICAL CONTRACTOR); GANG SWITCH WITH LIGHTING CONTROL SWITCHES. CONNECT TO LIGHTING CIRCUIT SERVING SPACE MAKE FINAL CONNECTIONS.
- UNIT LOW VOLTAGE TELECOM DEVICE. PROVIDE CABLING BACK TO UNIT TELECOM DEMARK (J-BOX (REFER TO CODED NOTE 7, THIS SHEET). CABLING SHALL BE SUPPORTED WITHIN WALLS AND CEILING. REFER TO ROUGH-IN DETAIL 2/E502.
- TOGGLE SWITCH WITHIN CASEWORK, SURFACE MOUNTED NEAR HINGE SIDE OF CABINET DOOR.
- PROVIDE RELAY AT SMOKE DETECTOR TO SIGNAL AIR HANDLER FAN SHUTDOWN. REFER TO DETAIL 3/E502.
- PROVIDE FIRE ALARM DEVICE WITH LOW FREQUENCY TONE RATED AT 520 HERTZ. EXTEND WIRING TO BUILDING FIRE ALARM SYSTEM.
- REMOTE EMERGENCY PULL CORD. MOUNT AT 4'-2" AFF TO CENTER OF DEVICE.
- PULL CORD DOME LIGHT. REFER TO DETAIL 3/E502 FOR MORE INFORMATION. SYSTEM SHALL BE STAND-ALONE AND WITHOUT CENTRAL MONITORING. WIRED PULL CORDS TO DOME LIGHT. REFER TO SHEET KEYNOTE #15. COORDINATE LOCATION AND MOUNTING HEIGHT OF DOME LIGHT AT EACH DOOR WITH ARCHITECT.
- EMERGENCY CALL FOR ASSISTANCE TRANSFORMER. REFER TO DETAIL 3/E502.

#	DATE	CHANGE DESCRIPTION



COLUMBUS METROPOLITAN HOUSING AUTHORITY
COMMUNITY. COOPERATIVE. COLLABORATIVE.

COBBLESTONE MANOR
1050 LAMPLIGHTER DRIVE
GROVE CITY, OH 43123
FOR
CMHA

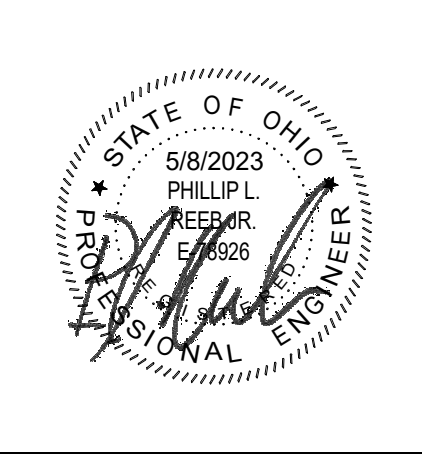


MOODY•NOLAN

300 SPRUCE STREET
SUITE 300
COLUMBUS, OHIO 43215

PHONE: (614) 461-4664
FAX: (614) 280-8881

DRAWING TITLE: ENLARGED PLANS - ELECTRICAL



STATE OF OHIO
PHILLIP L. RUPPEL
No. 92839
ELECTRICAL ENGINEER

06/08/2023
DRAWN BY: RK
CHECKED BY: KM
#22172.01
E402
PERMIT & BID SET

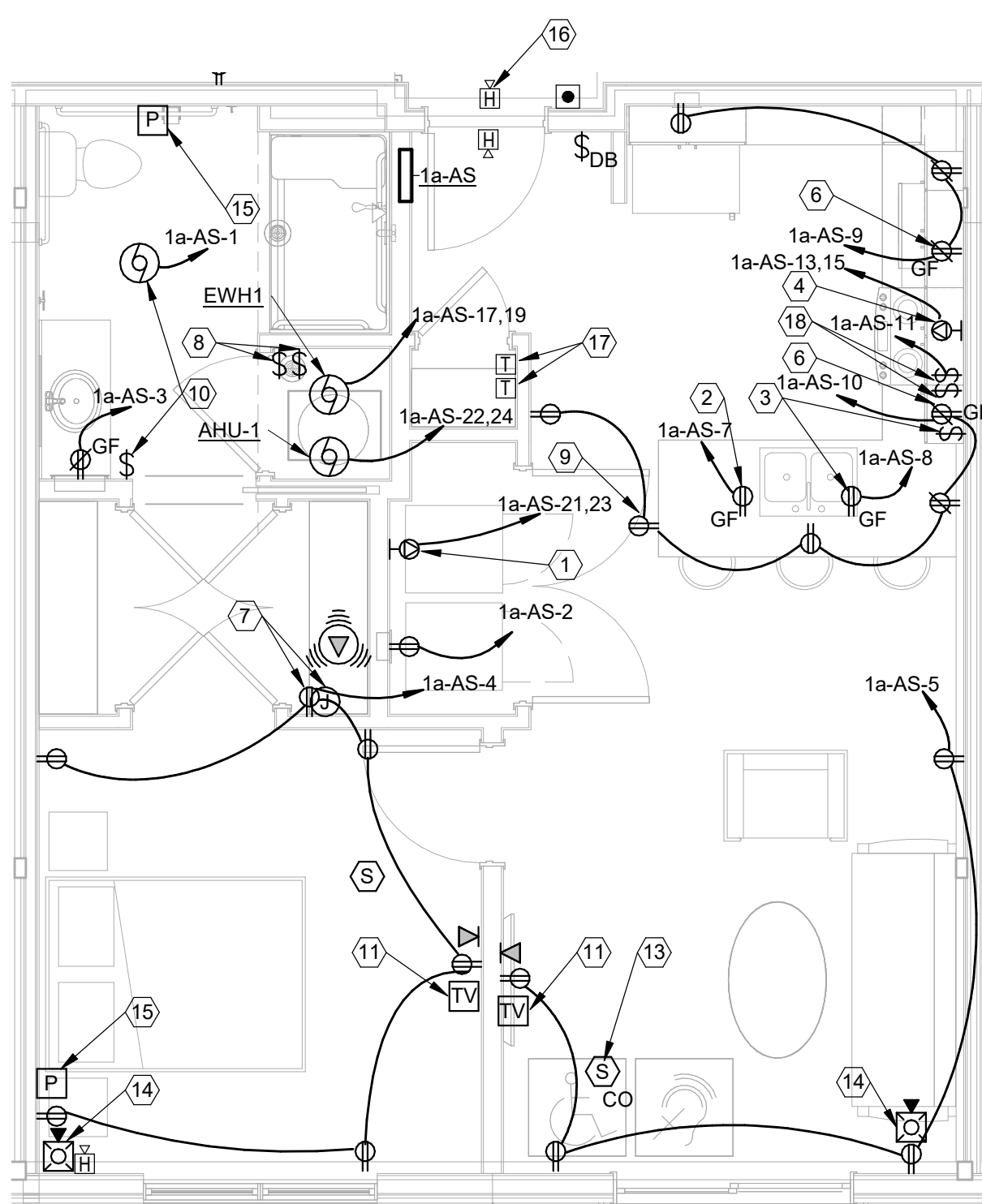
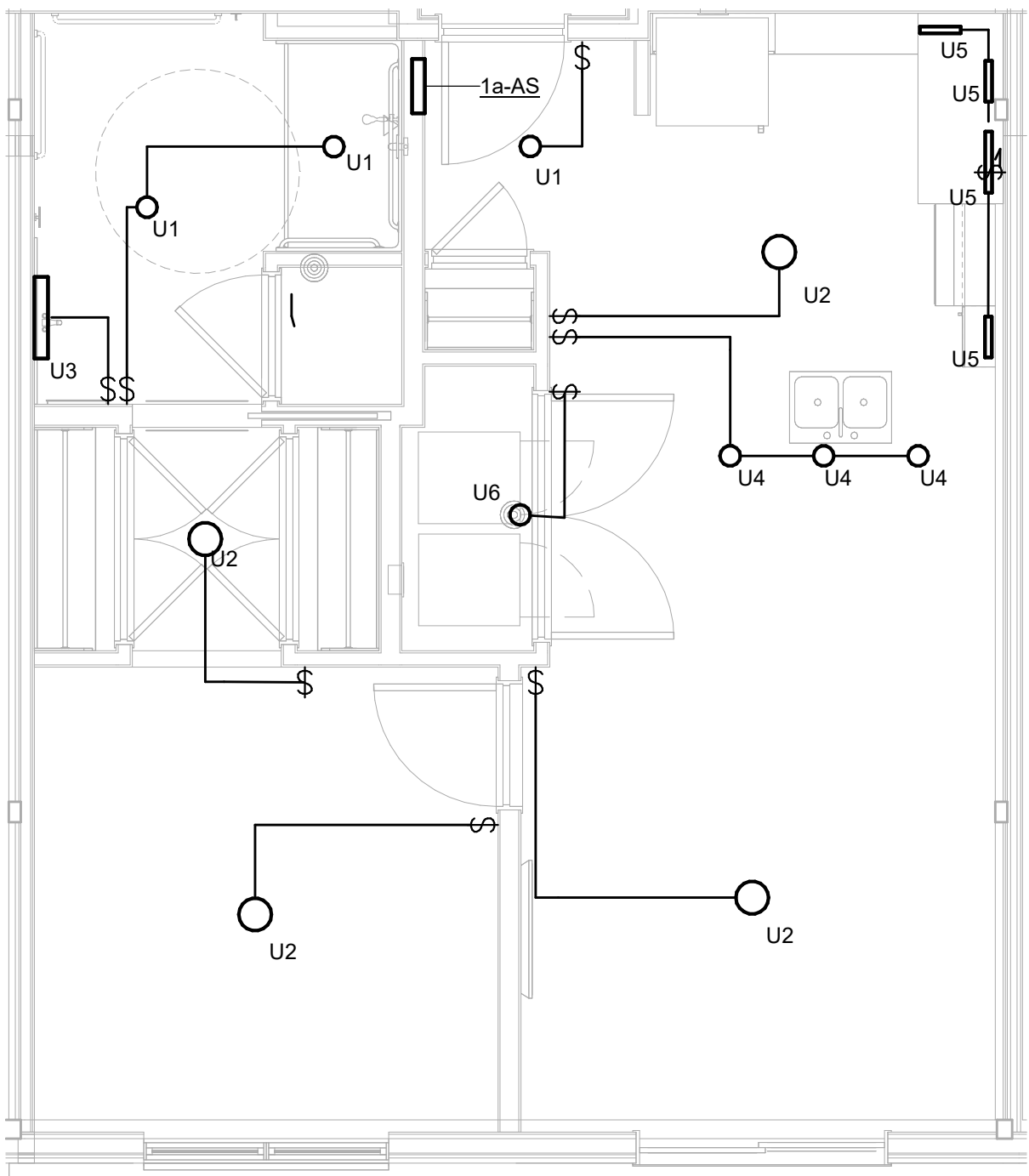


AEC

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Mechanical | Electrical | Plumbing | Fire Protection | Utilities
1405 Dublin Road
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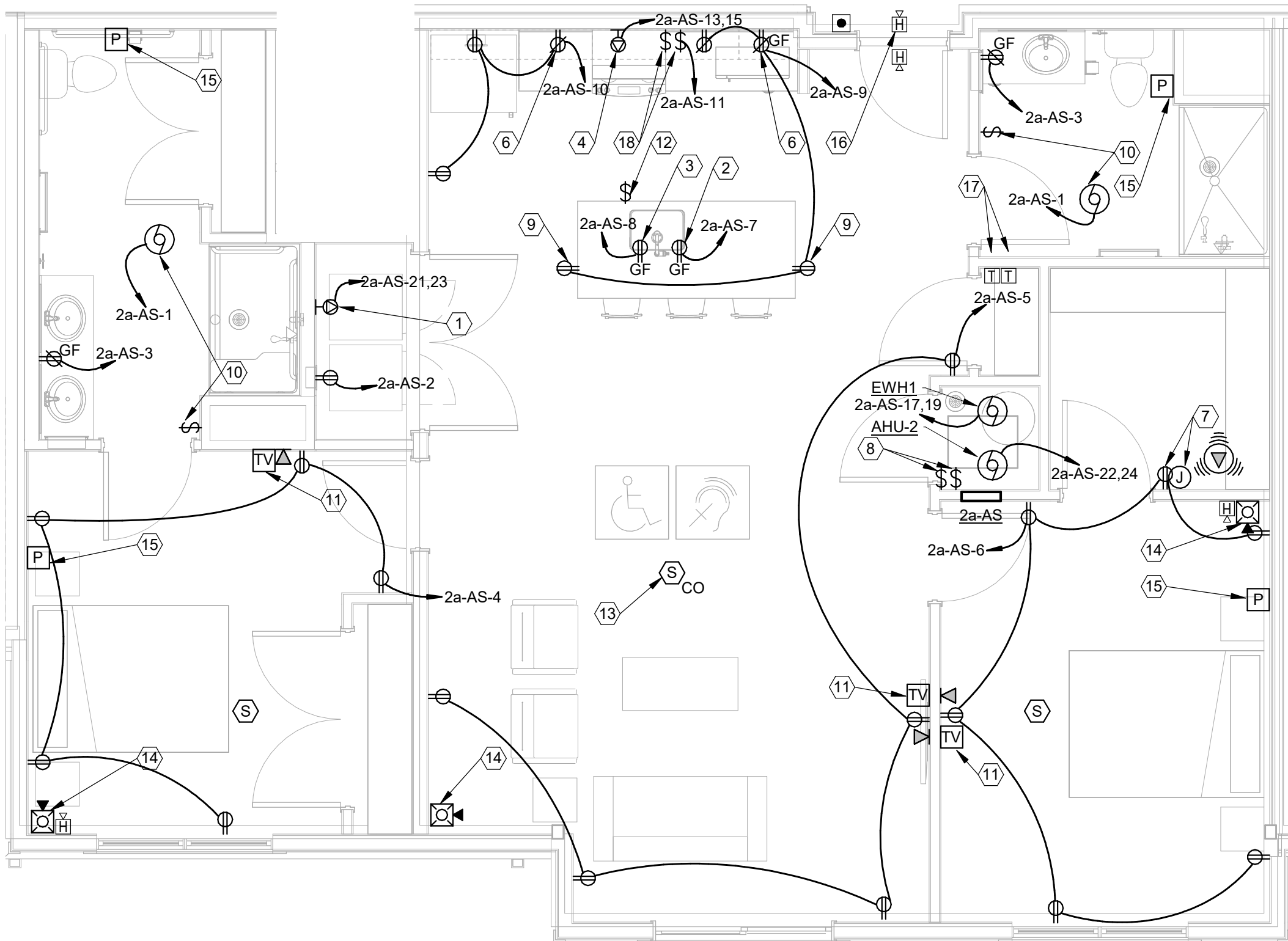
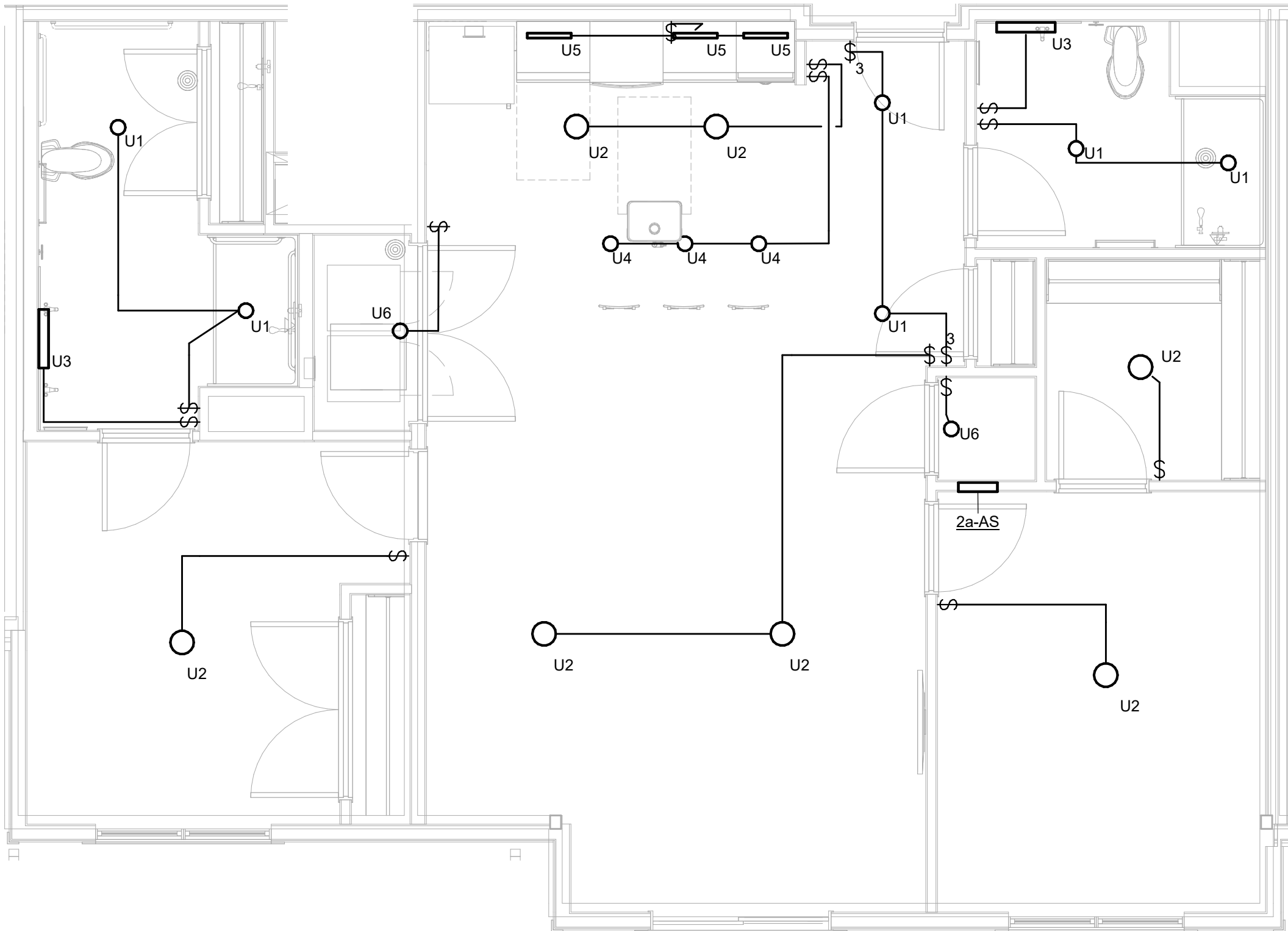
Load Schedule - Unit 1A-AS					
SQUARE FOOTAGE	708 SF	X	3 VA/SF		2.1 KVA
LAUNDRY/WASHING MACHINE	1500 VA				1.5 KVA
RANGES	8000 VA				8 KVA
DRYERS	5000 VA				5 KVA
DISHWASHERS	900 VA				0.9 KVA
SMALL APPLIANCE	1500 VA				1.5 KVA
SMALL APPLIANCE	1500 VA				1.5 KVA
WATER HEATERS	6000 VA				6 KVA
GENERAL LIGHTING LOAD SUBTOTAL					26.5 KVA
DEMAND FACTOR					
1ST 10 KW (GEN LTG LOAD)	10 KVA	X	100%		10.0 KVA
REMAINDER (GEN LTG LOAD)	16.5 KVA	X	40%		6.6 KVA
HVAC (HEAT PUMP)	2.3 KVA		100		2.3 KVA
HVAC (COOLING)	0.0 KVA		100		0.0 KVA
HVAC (HEATING) ELECTRIC	7.5 KVA		65%		4.9 KVA
	36.324 KVA				
TOTAL					23.8 KVA
NOTE: PER NEC 220-82	VOLTAGE: 208	/120	PHASE: 1		114.3 AMPS



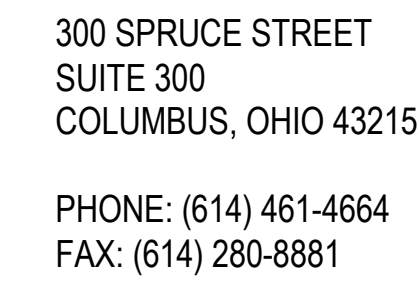
- A. EACH UNIT PLAN REPRESENTS MULTIPLE APARTMENT UNITS WITH SIMILAR LAUNDRIES. COORDINATE EXACT UNIT LAYOUT INCLUDING ROUGH-INS WITH ARCHITECTURAL AND STRUCTURAL DRAWINGS FOR EACH UNIT.
- B. OUTLET BOXES FOR LIGHT FIXTURES SHALL BE STANDARD OCTAGONAL.
- C. COORDINATE MOUNTING HEIGHT AND FINAL LOCATIONS OF RECEPTACLES, DEVICES AND EQUIPMENT WITH ARCHITECTURAL DETAILS AND ELEVATIONS PRIOR TO ROUGH-IN.
- D. COORDINATE ALL FIRE ALARM FIRE ALARM AND EQUIPMENT LOCATIONS WITH APPROVED FIRE ALARM SHOP DRAWINGS PRIOR TO ROUGH-IN.
- E. COORDINATE ALL DEVICE LOCATIONS WITH FRAMING MEMBERS PRIOR TO ROUGH-IN.
- F. COORDINATE WALL THICKNESS WITH GENERAL TRADES CONTRACTOR. PROVIDE ADAPTER RING APPROPRIATE FOR WALL THICKNESS AND ORN CARB BAK PANEL.
- G. ALL 120-VOLT, 15 & 20 AMP RECEPTACLES IN DWELLING UNITS SHALL BE TAMPER-RESISTANT TYPE OR MARKED TR.
- H. ALL 120-VOLT, SINGLE PHASE, 15 & 20 AMP BRANCH CIRCUITS SUPPLYING OUTLETS IN BEDROOMS, LIVING ROOMS, HALLWAYS, CLOSETS, LAUNDRY AREAS AND SIMILAR ROOMS SHALL BE AFCI PROTECTED AT THE CIRCUIT BREAKER.
- I. ALL RECEPTACLES LOCATED IN THE BATHROOM, KITCHEN, LAUNDRY AREA OR WITHIN 6' OF THE OUTSIDE EDGE OF A SINK, SHALL BE GFCI PROTECTED. ALL 120-VOLT, 15 & 20 AMP RECEPTACLES IN ACCESSIBLE LOCATIONS SHALL BE GFCI TYPE. RECEPTACLES INSTALLED BEHIND EQUIPMENT OR OTHERWISE INACCESSIBLE LOCATIONS SHALL BE GFCI PROTECTED AT THE CIRCUIT BREAKER.
- J. ALL CONDUIT RUNS AND WIRING, DEVICES AND ASSOCIATED ELECTRICAL WORK WHICH PENETRATES THREE FIRE RATED WALLS OR FIRE RATED ASSEMBLIES SHALL BE COMPLETELY FIRE SEALED AT EACH PENETRATION. PROVIDE UL APPROVED FIRE RATED PUTTY PADS ON ALL JUNCTION BOXES LOCATED IN FIRE RATED WALLS.
- K. THE ELECTRICAL PANEL IN EACH APARTMENT UNIT SHALL BE MOUNTED IN SUCH THAT THE TOP CIRCUIT BREAKER IS NOT MORE THAN 48" AFF. AND SHALL COMPLY WITH ANSI A137.1.
- L. IN ALL ADA TYPE DWELLING UNITS, PROVIDE 1-1/2" BOX EXTENSION FOR ALL ABOVE COUNTER RECEPTIONS.
- M. ROUGH-IN FOR TELEVISION AND COMMUNICATIONS OUTLETS SHALL BE A 4" SQUARE WITH 1/2" WIDE CONDUIT GANG REDUCER AND A 1" CONDUIT TO POINT OF SERVICE ROOM. PROVIDE PROTECTIVE BUSHINGS. COORDINATE LOCATIONS OF ALL TELECOM AND TELEVISION DEVICES WITH OWNER PRIOR TO ROUGH-IN.
- N. ALL LOW VOLTAGE WIRING INCLUDING BUT NOT NECESSARILY LIMITED TO, CABLE, TV, TELEPHONE, SECURITY AND FIRE ALARM WIRING, SHALL BE INSTALLED PRIOR TO DRYVAIL COVER).
- O. AT TELEVISION SECURITY AND FIRE ALARM WIRING (AT&T) SHALL BE PROVIDE ONE (1) CAT 6 CABLE AND ONE (1) RG6 COAXIAL CABLE TO HUMERUS TO LOC AS INDICATED IN CODED NOTE 18. SERVICE PROVIDER SHALL PROVIDE A MINIMUM OF 20' OF SERVICE LOOP AT THE END OF EACH CABLE TERMINATION TO EQUIPMENT FURNISHED BY SERVICE PROVIDER. COORDINATE EXACT REQUIREMENTS WITH OWNER PRIOR TO ROUGH-IN.
- P. SMOKE ALARMS SHALL BE INTERCONNECTED IN SUCH A MANNER THAT ACTIVATION OF ONE ALARM WILL ACTIVATE ALL ALARMS WITHIN THE SAME SMOKE DETECTOR SHALL BE WIRED TO LOCAL 120 VOLT LIGHTING CIRCUIT. PROVIDE 3 WIRE INTERCONNECTION BETWEEN DEVICES.

1. PROVIDE NEMA 14-30R RECEPTACLE FOR DRYER, 3#10, 1-#10 GND.
2. PROVIDE DUPLEX RECEPTACLE FOR DISHWASHER. RECEPTACLE SHALL BE SURFACE MOUNTED WITHIN BASE CABINET IMMEDIATELY ADJACENT TO DISHWASHER.
3. PROVIDE DUPLEX RECEPTACLE FOR GARBAGE DISPOSAL. RECEPTACLE SHALL BE SURFACE MOUNTED WITHIN BASE CABINET WHERE DISPOSAL IS INSTALLED. PROVIDE CORD WITH PLUGS AS REQUIRED. CONTROL WITH TOGGLE SWITCH ABOVE COUNTER MOUNTED WITH RECEPTACLE.
4. PROVIDE NEMA 14-30R RECEPTACLE FOR RANGE, 3#8, #10 GND. COORDINATE MOUNTING LOCATION FOR RANGE.
5. PROVIDE DUPLEX RECEPTACLE FOR MICROWAVE RANGE HOOD. LOCATE IN UPPER CASEWORK. (6-#10).
6. KITCHEN SALL APPLANCE CIRCUIT. FIRST RECEPTACLE ON CIRCUIT SHALL BE OF TYPE WIRED TO PROTECT DOWNSTREAM RECEPTABLES.
7. PROVIDE RECESSED STRUCTURED CABLING MEDEIUM ENCLOSURE. JBOX WITH HINGED COVER @ 60" AFF. BOX SHALL BE 14" X 14" X 3" DEEP. IN. COMPLETED OF ABS PLASTIC WITH BOTTOM MOUNTING PLATE FOR 120V RECEPTACLE. EQUAL TO LEVCON 4#6005-14. INSTALL RECEPTACLE FACE UP WITHIN BOX. PROVIDE 1/4" CANTHUS FROM STRUCTURED CABLING JBOX NEAREST TELECOM ROOM ON SAME FLOOR. REFER TO DETAIL 2/5502.
8. 2-POL MOTOR RATED TOGGLE SWITCH FOR MECHANICAL EQUIPMENT. REFER TO MOTOR SCHEDULE.
9. RECEPTACLE MOUNTED FLUSH IN CASEWORK, 4" BELOW COUNTER.
10. BATHROOM EXHAUST FAN. CONNECT TO TWO SPEED OCCUPANCY SENSING SWITCH (BY MECHANICAL CONTRACTOR). GANGS SWITCH WITH LIGHTING CIRCUIT. PROVIDE MECHANICAL CONTRACTOR TO LIGHTING CIRCUIT SERVING SPACE MAIN FINAL CONNECTIONS.
11. UNIT LOW VOLTAGE TELECOM DEVICE. PROVIDE CABLEING BACK TO UNIT TELECOM DEPARTMENT JBOX. REFER TO CODED NOTE 7. THIS SHEET). CABLEING SHALL BE SUPPORTED WITHIN WALLS AND CEILING. REFER TO ROUGH-IN DETAIL 2/5502.
12. TOGGLE SWITCH WITHIN CASEWORK, SURFACE MOUNTED NEAR HINGE SIDE OF CABINET DOOR.
13. PROVIDE RELAY AT SMOKE DETECTOR TO SIGNAL AIR HANDLER FAN SHUTDOWN. REFER TO DETAIL 3/502D.
14. PROVIDE FIRE ALARM DEVICE WITH LOW FREQUENCY TONE RATED AT 520 HERTZ. EXTEND WIRING TO BUILDING FIRE ALARM SYSTEM.
15. REMOTE EMERGENCY PULL CORD. MOUNT AT -42" AFF TO CENTER OF DEVICE.
16. PULL CORD DOME LIGHT. REFER TO DETAIL 3/5502 FOR MORE INFORMATION. SYSTEM SHALL BE STAND-ALONE AND WITHOUT CENTRAL MONITORING. WIRING AND CORDS TO DOME LIGHT. REFER TO SHEET KENOTE #15. COORDINATE LUMEN AND MOUNTING HEIGHT OF DOME LIGHT AT EACH DOOR WITH ARCHITECT.
17. EMERGENCY CALL FOR ASSISTANCE/ADA DOORBELL TRANSFORMER. REFER TO DETAIL 3/5502 AND 4/502.
18. SWITCHES FOR HOOD FAULTLIGHTS. MOUNT AT 4'-4" AFF. TO CENTERLINE OF BOX AND WITHIN 24" HORIZONTAL DISTANCE OF 30"X36" CLEAR FLOOR AREA.

Load Schedule - Unit 2a-AS						
SQUARE FOOTAGE	1263	SF	X	3 VA/SF		3.8 KVA
LAUNDRY/WASHING MACHINE	1500	VA				1.5 KVA
RANGES	8000	VA				8 KVA
DRYERS	5000	VA				5 KVA
DISHWASHERS	900	VA				0.9 KVA
SMALL APPLIANCE	1500	VA				1.5 KVA
SMALL APPLIANCE	1500	VA				1.5 KVA
WATER HEATERS	6000	VA				6 KVA
GENERAL LIGHTING LOAD SUBTOTAL						28.2 KVA
DEMAND FACTOR						
1ST 10 KW (GEN LTG LOAD)	10	KVA	X	100%		10.0 KVA
REMAINDER (GEN LTG LOAD)	18.2	KVA	X	40%		7.3 KVA
HVAC (HEAT PUMP)	2.4	KVA		100		2.4 KVA
HVAC (COOLING)	0.0	KVA		100		0.0 KVA
HVAC (HEATING) ELECTRIC	10.0	KVA		65%		6.5 KVA
	40.589	KVA				
TOTAL						26.2 KVA
NOTE: PER NEC 220-82	VOLTAGE:	208	/120	PHASE:	1	125.8 AMPS




**COLUMBUS METROPOLITAN
HOUSING AUTHORITY**
 COMMUNITY. COMMITMENT. COLLABORATION.



06/08/2023
DRAWN BY: RK
CHECKED BY: KM
#22172.01
E403
PERMIT & BID SET

Panel: 1b-S

Location:

Supply From:

Mounting: Recessed

Enclosure: Type 1

Volts: 120/208 Single

Phases: 1

Wires: 3

A.I.C. Rating: 10,000

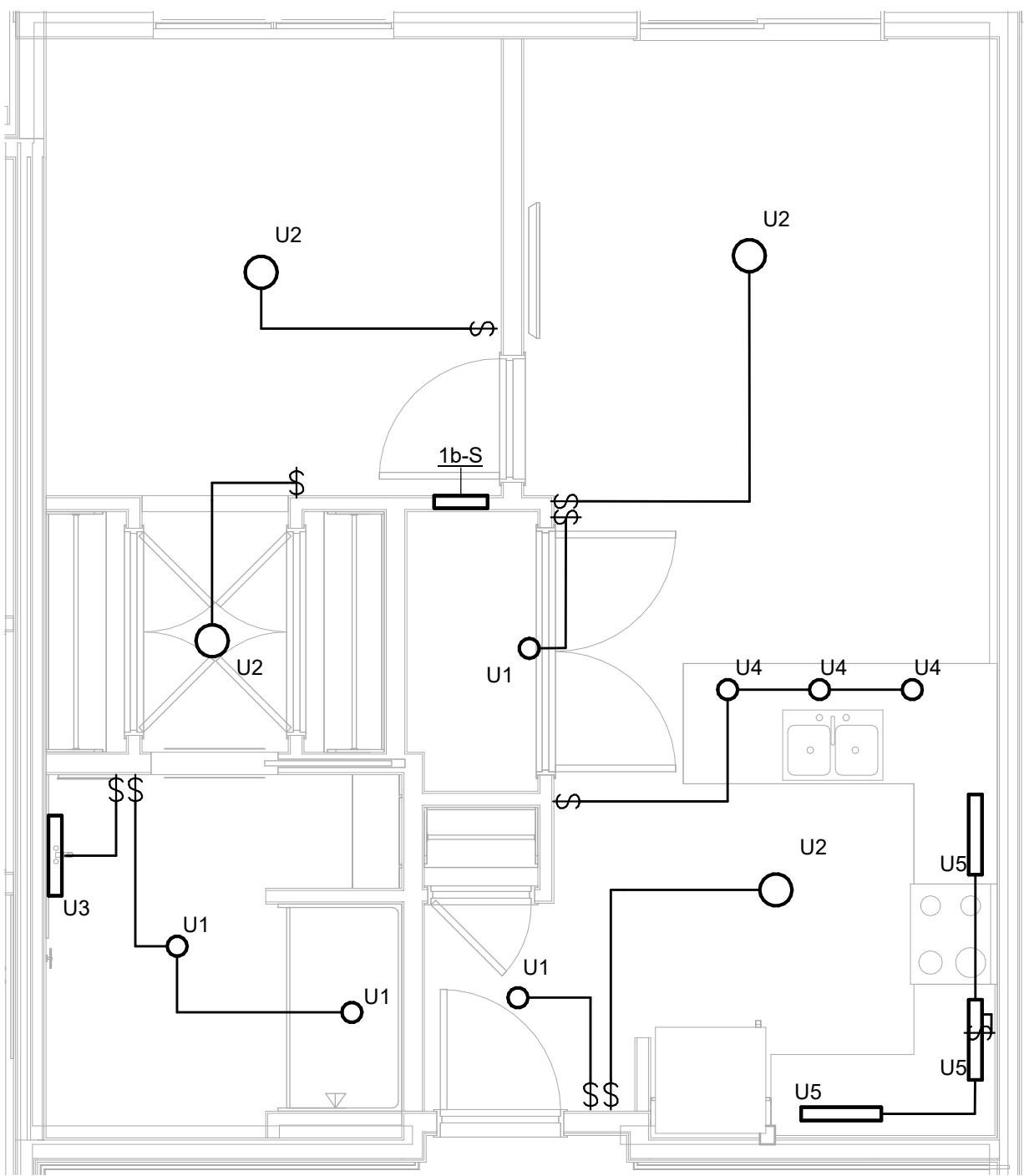
Mains Type: M.C.B.

Mains Rating: 125 A

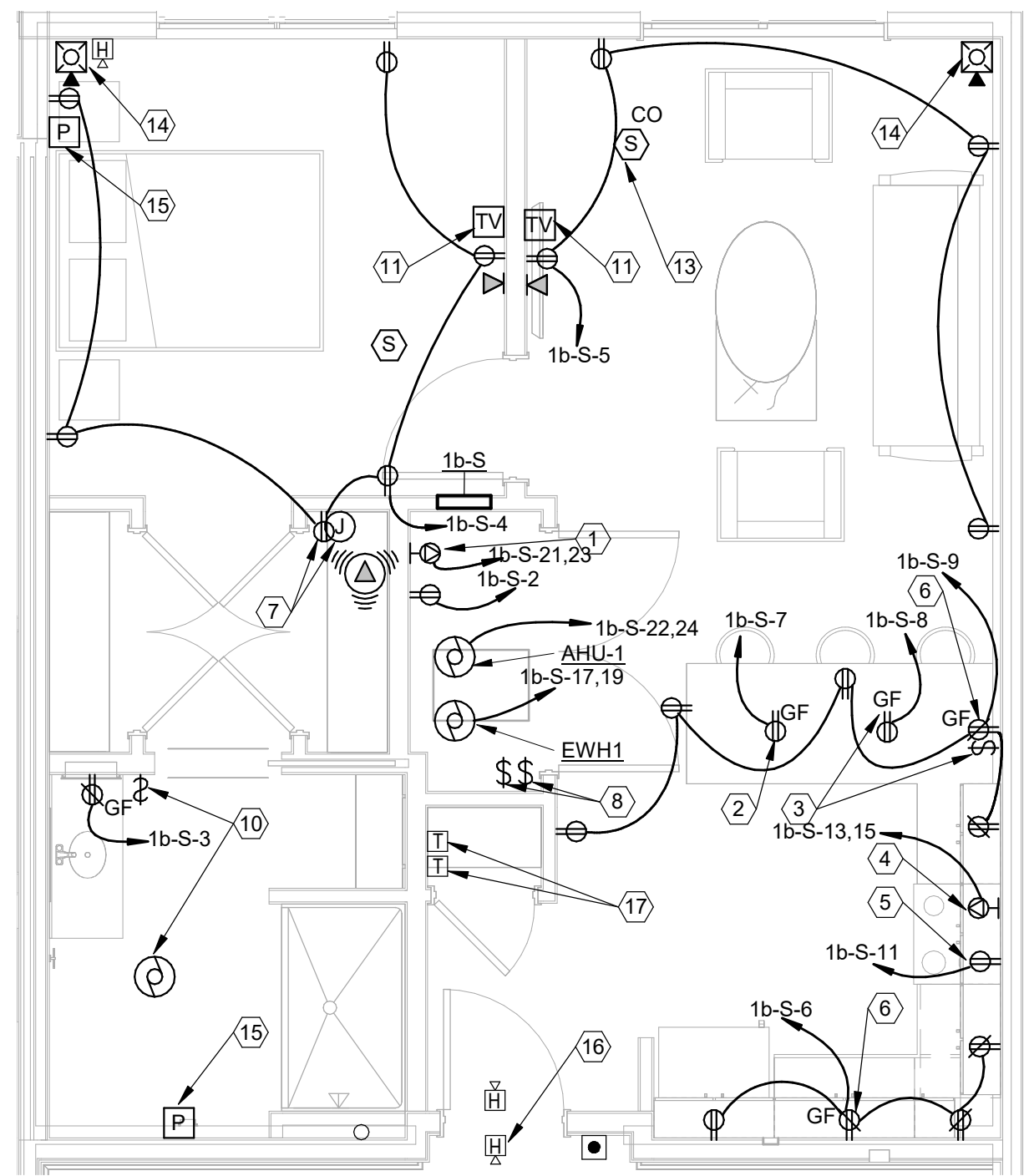
MCB Rating: 125 A

CKT	Circuit Description	Trip	Poles	A		B		Poles	Trip	Circuit Description	CKT
1	LIGHTING	20 A	1	0.2	0.8			1	20 A	WASHER (GF)	2
3	RECEPT BATH	20 A	1			0.2	1.1	1	20 A	RECEPT BEDROOM	4
5	RECEPT LIVING	20 A	1	0.7	1.4			1	20 A	RECEPT KITCHEN	6
7	DISHWASHER	20 A	1			0.8	0.8	1	20 A	DISPOSAL	8
9	RECEPT KITCHEN	20 A	1	0.9							10
11	MICROWAVE/HOOD	20 A	1			1.0					12
13	ELECTRIC RANGE	50 A	2	4.0							14
					4.0						16
15	EWH1	40 A	2	3.0	1.1						18
17						3.0	1.1	2	20 A	HP-1 (ROOF)	
19	ELECTRIC CLOTHES DRYER	30 A	2	2.5	3.8						22
21						2.5	3.8	2	50 A	AHU-1	

Load Schedule - Unit 1b-S					
SQUARE FOOTAGE	707 SF	X	3 VA/SF		2.1 KVA
LAUNDRY/WASHING MACHINE	1500 VA				1.5 KVA
RANGES	8000 VA				8 KVA
DRYERS	5000 VA				5 KVA
DISHWASHERS	900 VA				0.9 KVA
SMALL APPLIANCE	1500 VA				1.5 KVA
SMALL APPLIANCE	1500 VA				1.5 KVA
MICROWAVE	1000 VA				1 KVA
WATER HEATERS	6000 VA				6 KVA
GENERAL LIGHTING LOAD SUBTOTAL					27.5 KVA
DEMAND FACTOR					
1ST 10 KW (GEN LTG LOAD)	10 KVA	X	100%		10.0 KVA
REMAINDER (GEN LTG LOAD)	17.5 KVA	X	40%		7.0 KVA
HVAC (HEAT PUMP)	2.3 KVA		100		2.3 KVA
HVAC (COOLING)	0.0 KVA		100		0.0 KVA
HVAC (HEATING) ELECTRIC	7.5 KVA		65%		4.9 KVA
	37.321 KVA				
TOTAL					24.2 KVA
NOTE: PER NEC 220-82 VOLTAGE: 208 /120 PHASE: 1 116.3 AMPS					



1 ENLARGED PLAN UNIT CEILING PLAN - 1b-S - LIGHTING
1/4" = 1'-0"



2 ENLARGED PLAN UNIT PLAN - 1b-S - POWER AND SYSTEMS
1/4" = 1'-0"

GENERAL NOTES

- EACH UNIT PLAN REPRESENTS MULTIPLE APARTMENT UNITS WITH SIMILAR LAYOUTS. COORDINATE EXACT UNIT LAYOUT INCLUDING ROUGH-INS WITH ARCHITECTURAL AND STRUCTURAL DRAWINGS FOR EACH UNIT.
- OUTLET BOXES FOR LIGHT FIXTURES SHALL BE STANDARD OCTAGONAL.
- COORDINATE MOUNTING HEIGHT AND FINAL LOCATIONS OF RECEPTACLES, DEVICES AND EQUIPMENT WITH ARCHITECTURAL DETAILS AND ELEVATIONS PRIOR TO ROUGH-IN.
- COORDINATE ALL FIRE ALARM DEVICES AND EQUIPMENT LOCATIONS WITH APPROVED FIRE ALARM SHOP DRAWINGS PRIOR TO ROUGH-IN.
- COORDINATE ALL DEVICE LOCATIONS WITH FRAMING MEMBERS PRIOR TO ROUGH-IN.
- COORDINATE WALL THICKNESS WITH GENERAL TRADES CONTRACTOR. PROVIDE ADAPTER RING APPROPRIATE FOR WALL THICKNESS AND/OR CABINET BACK PANEL.
- ALL 120-VOLT, 15 & 20 AMP RECEPTACLES IN DWELLING UNITS SHALL BE TAMPER-RESISTANT TYPE AND MARKED "TR".
- ALL 120-VOLT, SINGLE PHASE, 15 & 20 AMP BRANCH CIRCUITS SUPPLYING OUTLETS IN BEDROOMS, LIVING ROOMS, HALLWAYS, CLOSETS, LAUNDRY AREAS AND SIMILAR ROOMS SHALL BE AFCI PROTECTED AT THE CIRCUIT BREAKER.
- ALL RECEPTACLES LOCATED IN THE BATHROOM, KITCHEN, LAUNDRY AREA OR WITHIN 6'-0" OF THE OUTSIDE EDGE OF A SINK, SHALL BE GFCI PROTECTED PER NEC 210.8. RECEPTACLES INSTALLED IN ACCESSIBLE LOCATIONS SHALL BE GFCI TYPE. RECEPTACLES INSTALLED BEHIND EQUIPMENT OR OTHERWISE INACCESSIBLE LOCATIONS SHALL BE GFCI PROTECTED AT THE CIRCUIT BREAKER.
- ALL CONDUIT RUNS AND WIRING, DEVICES AND ASSOCIATED ELECTRICAL WORK WHICH PENETRATES THRU FIRE RATED WALLS OR FIRE RATED ASSEMBLIES SHALL BE COMPLETELY FIRE SEALED AT EACH PENETRATION. PROVIDE UL APPROVED FIRE RATED PUTTY PADS ON ALL JUNCTION BOXES LOCATED IN FIRE RATED WALLS.
- THE ELECTRICAL PANEL IN EACH APARTMENT UNIT SHALL BE MOUNTED IN SUCH THAT THE TOP CIRCUIT BREAKER IS NOT MORE THAN 48" A.F.F. AND SHALL COMPLY WITH ANSI A117.1.
- IN ALL ADA TYPE DWELLING UNITS, PROVIDE 1-1/2" BOX EXTENSION FOR ALL ABOVE COUNTER RECEPTACLES.
- ROUGH-IN FOR TELEVISION AND COMMUNICATIONS OUTLETS SHALL BE A 4" SQUARE BACK BOX WITH SINGLE GANG REDUCER AND A 1" CONDUIT TO POINT OF SERVICE ROOM. PROVIDE PROTECTIVE BUSHINGS. COORDINATE LOCATIONS OF ALL TELECOM AND TELEVISION DEVICES WITH OWNER PRIOR TO ROUGH-IN.
- ALL LOW VOLTAGE WIRING INCLUDING BUT NOT NECESSARILY LIMITED TO, CABLE TV, TELEPHONE, SECURITY AND FIRE ALARM WIRING, SHALL BE INSTALLED PRIOR TO DRYWALL COVERUP.
- AT TELEVISION SERVICE LOCATIONS, SERVICE PROVIDER (AT&T) SHALL BE PROVIDE ONE (1) CAT 5E CABLE AND ONE (1) RG6 COAXIAL CABLE TO HOMERUN TO CLOSET AS INDICATED IN CODED NOTE 18. SERVICE PROVIDER SHALL PROVIDE A MINIMUM OF 20'-0" SERVICE LOOP AT THE END OF EACH CABLE FOR TERMINATION TO EQUIPMENT FURNISHED BY SERVICE PROVIDER. COORDINATE EXACT REQUIREMENTS WITH OWNER PRIOR TO ROUGH-IN.
- SMOKE ALARMS SHALL BE INTERCONNECTED IN SUCH A MANNER THAT ACTIVATION OF ONE ALARM WILL ACTIVATE ALL ALARMS WITHIN THE INDIVIDUAL UNIT. SMOKE DETECTOR SHALL BE WIRED TO LOCAL 120 VOLT LIGHTING CIRCUIT. PROVIDE 3 WIRE INTERCONNECTION BETWEEN DEVICES.

KEYNOTES

- PROVIDE NEMA 14-30R RECEPTACLE FOR DRYER, 3#10, 1#10 GND.
- PROVIDE DUPLEX RECEPTACLE FOR DISHWASHER. RECEPTACLE SHALL BE SURFACE MOUNTED WITHIN BASE CABINET IMMEDIATELY ADJACENT TO DISHWASHER.
- PROVIDE DUPLEX RECEPTACLE FOR GARBAGE DISPOSAL. RECEPTACLE SHALL BE SURFACE MOUNTED WITHIN BASE CABINET WHERE DISPOSAL IS INSTALLED. PROVIDE CORD WITH PLUG AS REQUIRED. CONTROL WITH TOGGLE SWITCH ABOVE COUNTER GANGED WITH RECEPTACLE.
- PROVIDE NEMA 14-50R RECEPTACLE FOR RANGE, 3#8, #10 GND. COORDINATE MOUNTING LOCATION PRIOR TO ROUGH-IN.
- PROVIDE DUPLEX RECEPTACLE FOR MICROWAVE RANGE HOOD. LOCATE IN UPPER CASEWORK (6'-6" MIN).
- PROVIDE DUPLEX RECEPTACLE. FIRST RECEPTACLE ON CIRCUIT SHALL BE GF TYPE WIRED TO PROTECT DOWNSTREAM RECEPTACLES.
- PROVIDE RECESSED STRUCTURED CABLING MEDIA ENCLOSURE .IBOX WITH HINGED COVER AT 60" AFF. BOX SHALL BE 14" X 14" X 3" DEEP, MIN. CONSTRUCTED OF ABS PLASTIC WITH BOTTOM MOUNTING PLATE FOR 120V RECEPTACLE. EQUAL TO LEVITON # 49605-14E. INSTALL RECEPTACLE FACE-UP WITHIN BOX. PROVIDE (1) 3/4" CONDUIT FROM STRUCTURED CABLING .IBOX TO NEAREST TELECOM ROOM ON SAME FLOOR. REFER TO DETAIL 2/E502.
- 2-POLE MOTOR RATED TOGGLE SWITCH FOR MECHANICAL EQUIPMENT. REFER TO MOTOR SCHEDULE.
- RECEPTACLE MOUNTED FLUSH IN CASEWORK 4" BELOW COUNTER.
- BATHROOM EXHAUST FAN. CONNECT TO TWO SPEED OCCUPANCY SENSING SWITCH (BY MECHANICAL CONTRACTOR). GANG SWITCH WITH LIGHTING CONTROL SWITCHES. CONNECT TO LIGHTING CIRCUIT SERVING SPACE MAKE FINAL CONNECTIONS.
- UNIT LOW VOLTAGE TELECOM DEVICE. PROVIDE CABLING BACK TO UNIT TELECOM DEMARK .IBOX (REFER TO CODED NOTE 7, THIS SHEET). CABLING SHALL BE SUPPORTED WITHIN WALLS AND CEILING. REFER TO ROUGH-IN DETAIL 2/E502.
- TOGGLE SWITCH WITHIN CASEWORK, SURFACE MOUNTED NEAR HINGE SIDE OF CABINET DOOR.
- PROVIDE RELAY AT SMOKE DETECTOR TO SIGNAL AIR HANDLER FAN SHUTDOWN. REFER TO DETAIL 3/E502.
- PROVIDE FIRE ALARM DEVICE WITH LOW FREQUENCY TONE RATED AT 520 HERTZ. EXTEND WIRING TO BUILDING FIRE ALARM SYSTEM.
- REMOTE EMERGENCY PULL CORD. MOUNT AT +42" AFF TO CENTER OF DEVICE.
- PULL CORD DOME LIGHT. REFER TO DETAIL 3/E502 FOR MORE INFORMATION. SYSTEM SHALL BE STAND-ALONE AND WITHOUT CENTRAL MONITORING. WIRE PULL CORDS TO DOME LIGHT. REFER TO SHEET KEYNOTE #15. COORDINATE LOCATION AND MOUNTING HEIGHT OF DOME LIGHT AT EACH DOOR WITH ARCHITECT.
- EMERGENCY CALL FOR ASSISTANCE/ADA DOORBELL TRANSFORMER. REFER TO DETAIL 3/E502 AND 4/E502.

Panel: 2b-S

Location: UNIT 2b-S U-128

Supply From:

Mounting: Recessed

Enclosure: Type 1

Volts: 120/208 Single

Phases: 1

Wires: 3

A.I.C. Rating: 10,000

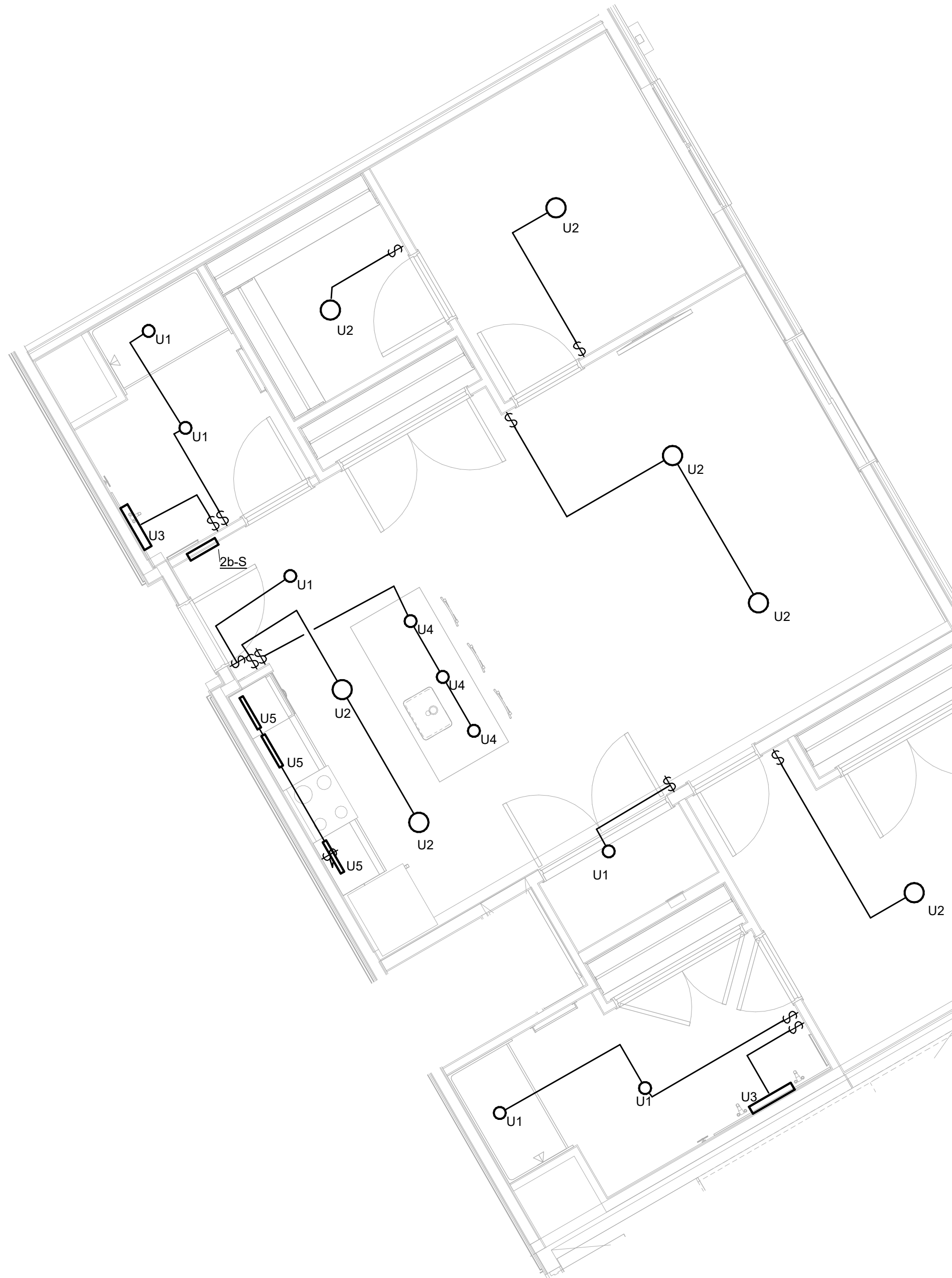
Mains Type: M.C.B.

Mains Rating: 150 A

MCB Rating: 150 A

CKT	Circuit Description	Trip	Poles	A		B		Poles	Trip	Circuit Description	CKT
1	LIGHTING	20 A	1	0.3	0.8			1	20 A	WASHER (GF)	2
3	RECEPT BATH	20 A	1			0.4	0.9	1	20 A	RECEPT BEDROOM	4
5	RECEPT LIVING	20 A	1	0.9	1.1			1	20 A	RECEPT BEDROOM	6
7	DISHWASHER	20 A	1			0.8	0.8	1	20 A	DISPOSAL	8
9	RECEPT KITCHEN	20 A	1	0.7	1.3			1	20 A	RECEPT KITCHEN	10
11	MICROWAVE/HOOD	20 A	1			1.0					12
13	ELECTRIC RANGE	50 A	2	4.0							14
15						4.0					16
17	EWHP	40 A	2	3.0	1.2			2	25 A	HP-2 (ROOF)	18
19						3.0	1.2				20
21	ELECTRIC CLOTHES DRYER	30 A	2	2.5	4.0			2	60 A	AHU-2	22
23						2.5	4.0				24

Load Schedule - Unit 2b-S					
SQUARE FOOTAGE	1195 SF	X	3 VA/SF		3.6 KVA
LAUNDRY/WASHING MACHINE	1500 VA				1.5 KVA
RANGES	8000 VA				8 KVA
DRYERS	5000 VA				5 KVA
DISHWASHERS	900 VA				0.9 KVA
SMALL APPLIANCE	1500 VA				1.5 KVA
SMALL APPLIANCE	1500 VA				1.5 KVA
MICROWAVE	1000 VA				1 KVA
WATER HEATERS	6000 VA				6 KVA
GENERAL LIGHTING LOAD SUBTOTAL					29.0 KVA
DEMAND FACTOR					
1ST 10 KW (GEN LTG LOAD)	10 KVA	X	100%		10.0 KVA
REMAINDER (GEN LTG LOAD)	19.0 KVA	X	40%		7.6 KVA
HVAC (HEAT PUMP)	2.4 KVA		100		2.4 KVA
HVAC (COOLING)	0.0 KVA		100		0.0 KVA
HVAC (HEATING) ELECTRIC	10.0 KVA		65%		6.5 KVA
	41.385 KVA				
TOTAL					26.5 KVA
NOTE: PER NEC 220-82 VOLTAGE: 208 /120 PHASE: 1 127.4 AMPS					



3 ENLARGED PLAN UNIT CEILING PLAN - 2b-S - LIGHTING
1/4" = 1'-0"



4 ENLARGED PLAN UNIT PLAN - 2b-S - POWER AND SYSTEMS
1/4" = 1'-0"



Mechanical | Electrical | Plumbing | Fire Protection | Utilities
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Columbus, Ohio 43215 Fax: (614) 466-4082

ADVANCED
ENGINEERING
CONSULTANTS



06/08/2023

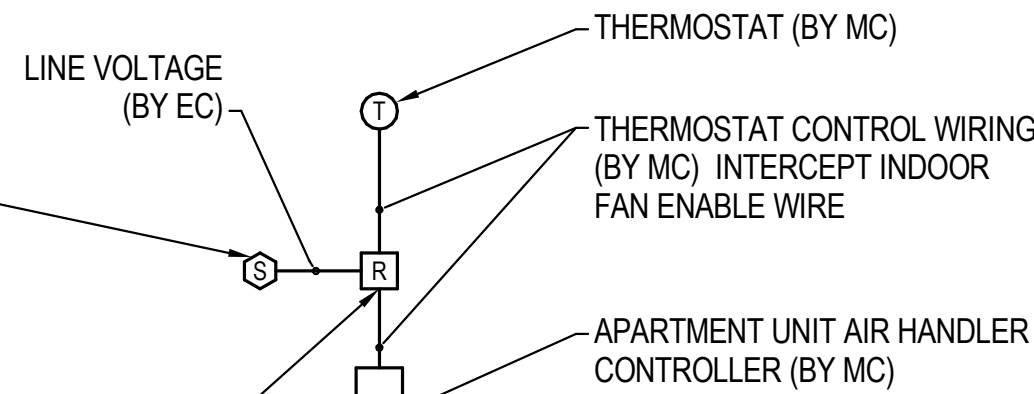
DRAWN BY: RK CHECKED BY: KM

#22172.01

E404

PERMIT & BID SET

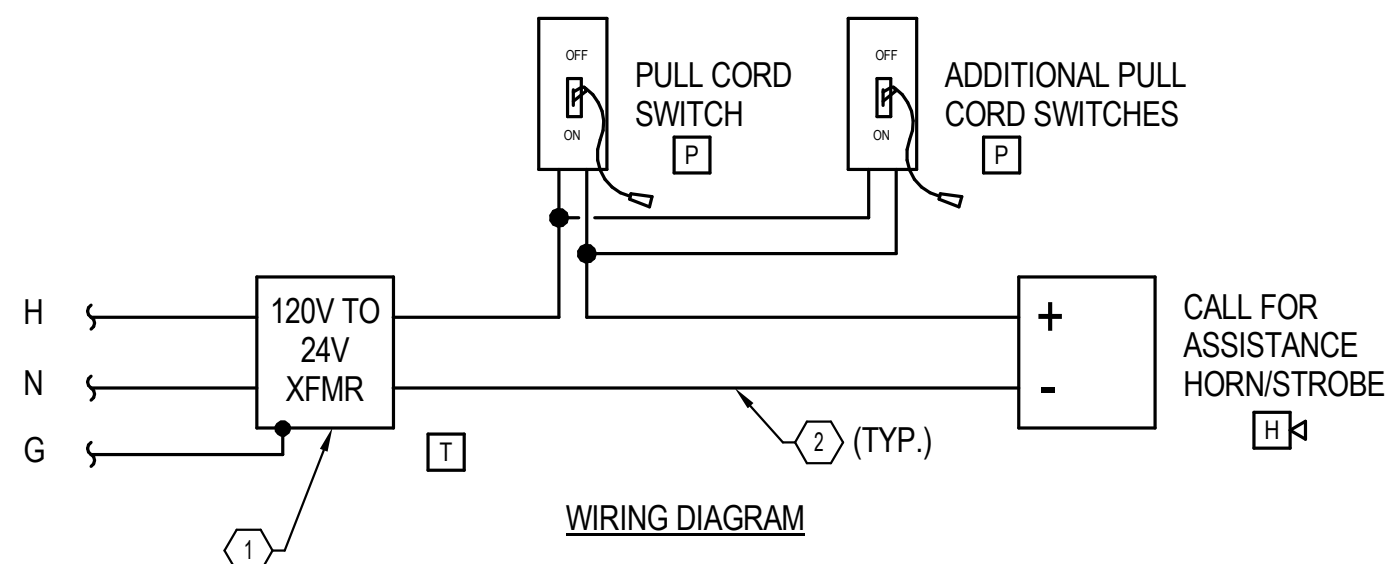
CEILING MOUNTED SMOKE ALARM, 120 VOLT WITH BATTERY BACK-UP. CIRCUIT TO LOCAL 120 VOLT POWER SUPPLY AS INDICATED ON PLANS AND MAKE FINAL CONNECTIONS. ALL ALARMS WITHIN APARTMENT UNIT SHALL BE INTERLOCKED TO PROVIDE SIMULTANEOUS ALARMING.



AUXILIARY RELAY AT SMOKE ALARM NEAREST (IN SHARED JUNCTION BOX) TO MECHANICAL CLOSET TO INTERCONNECT WITH AND SHUT DOWN APARTMENT UNIT AIR HANDLER FAN UPON ALARM. P/N BRK ELECTRONICS #RM4 OR EQUAL. (BY EC)

1 DETAIL Dwelling Unit Air Handler Shutdown

NTS

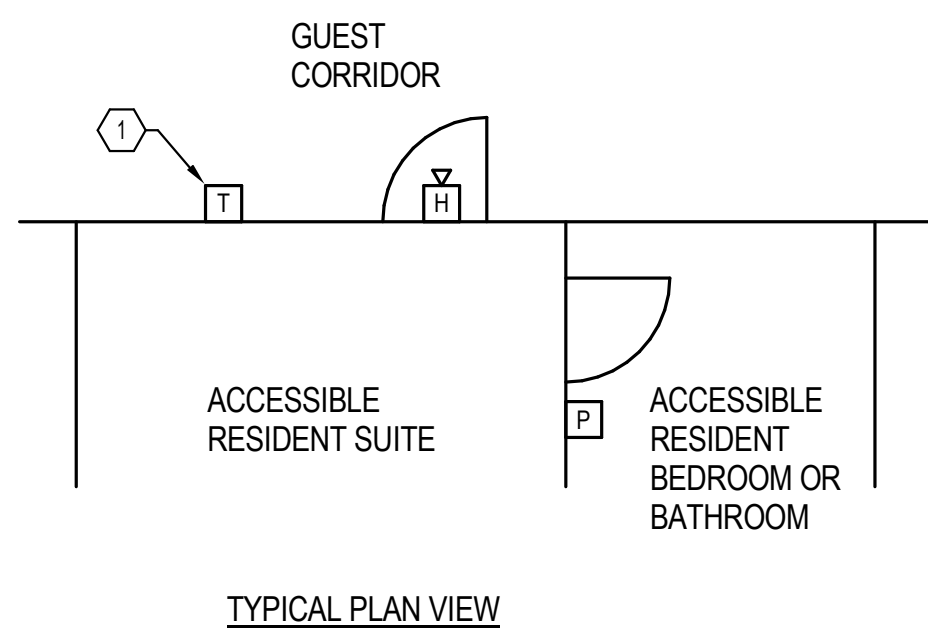


DETAIL GENERAL NOTES:

- A. PROVIDE CALL FOR ASSISTANCE KIT CONSISTING OF 24V CONTROL TRANSFORMER, PULL CORD SWITCH, AND HORN/STROBE DEVICE. PROVIDE QUANTITY OF PULL CORD SWITCHES PER PLAN. KIT SHALL BE EQUAL TO EDWARDS SIGNALING # CFA SERIES 6538-G5.

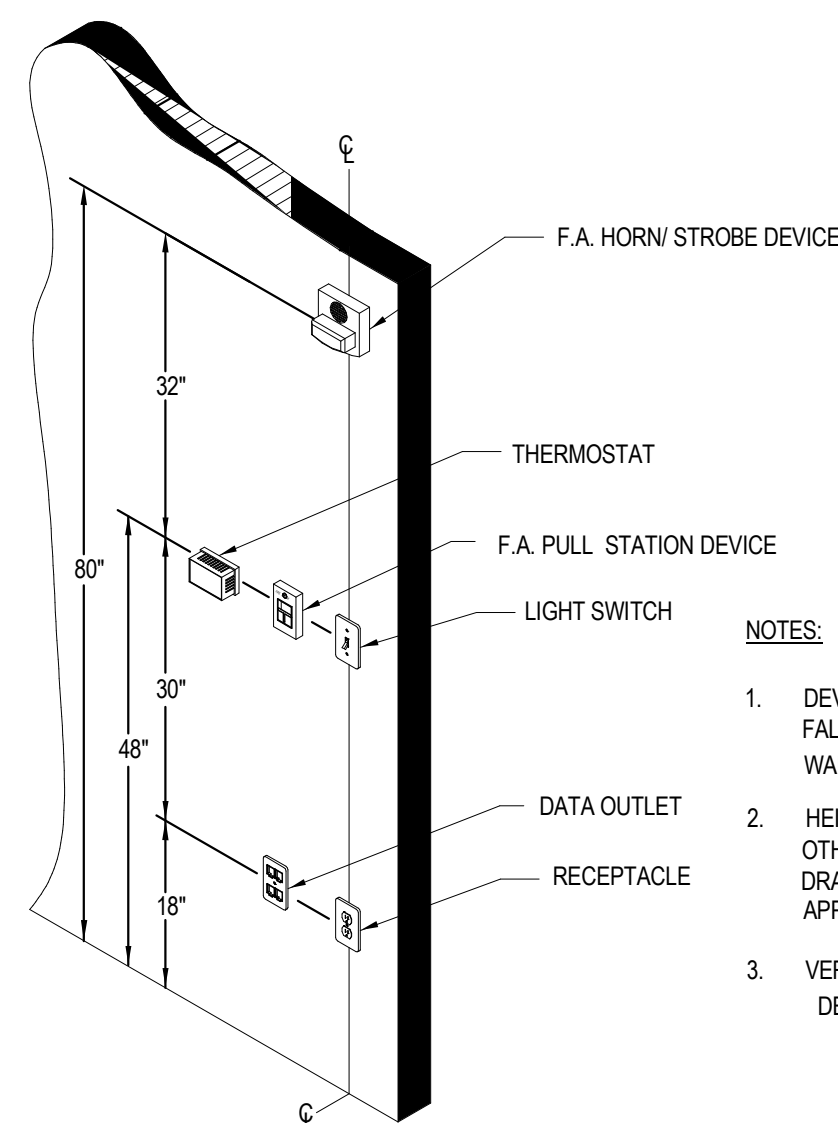
DETAIL NOTES:

1. TRANSFORMER SHALL BE MOUNTED ABOVE ACCESSIBLE CEILING OR IN RESIDENT SUITE CLOSET. PROVIDE BACKBOX AND COVERPLATE.
2. ALL 24V WIRING SHALL BE IN CONDUIT, #12 AWG.



3 DETAIL Pull Cord Dome Light

NTS

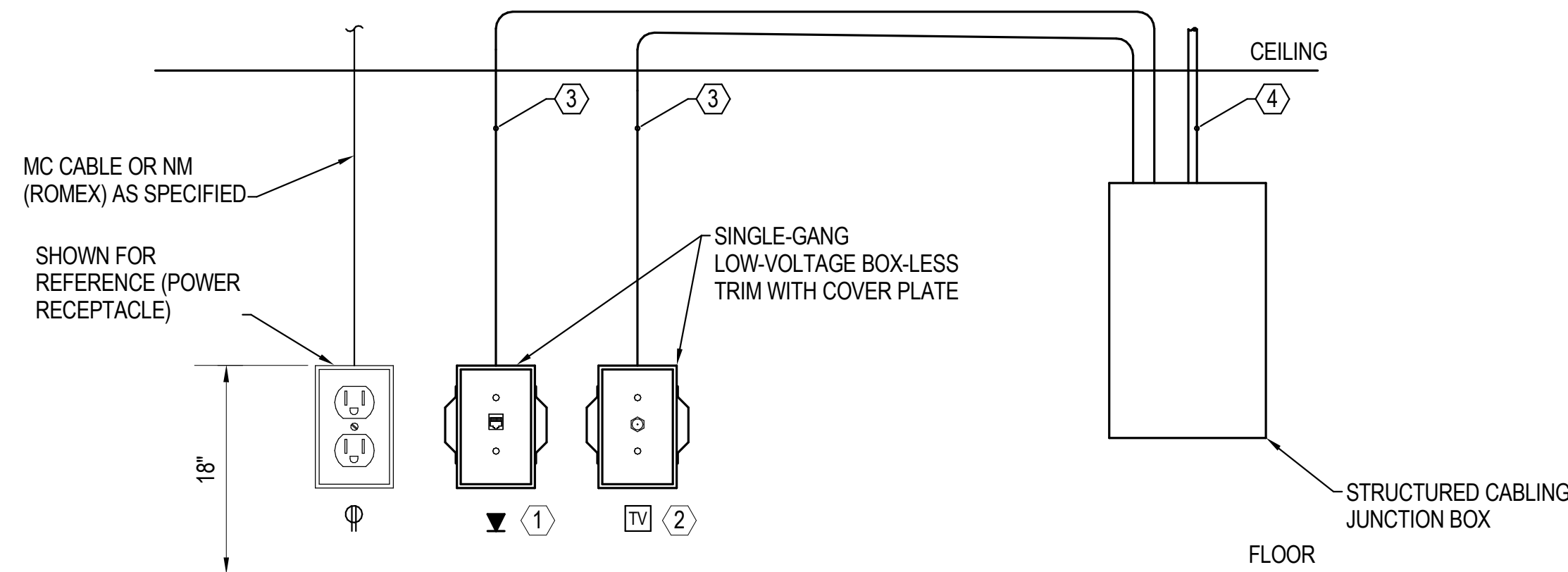


NOTES:

1. DEVICES SHOWN STACKED ALONG WALLS FALL IN THE ORDER OF LOWEST (CLOSEST TO WALL) TO HIGHEST (FURTHEST FROM WALL).
2. HEIGHTS SHOWN ARE TYPICAL UNLESS OTHERWISE NOTED ELSEWHERE ON DRAWINGS. SPECS OR IDENTIFIED IN APPLICABLE CODES.
3. VERTICAL DIMENSIONS ARE TO CENTER OF DEVICE.

5 Detail - Wall Device Orientation

NTS

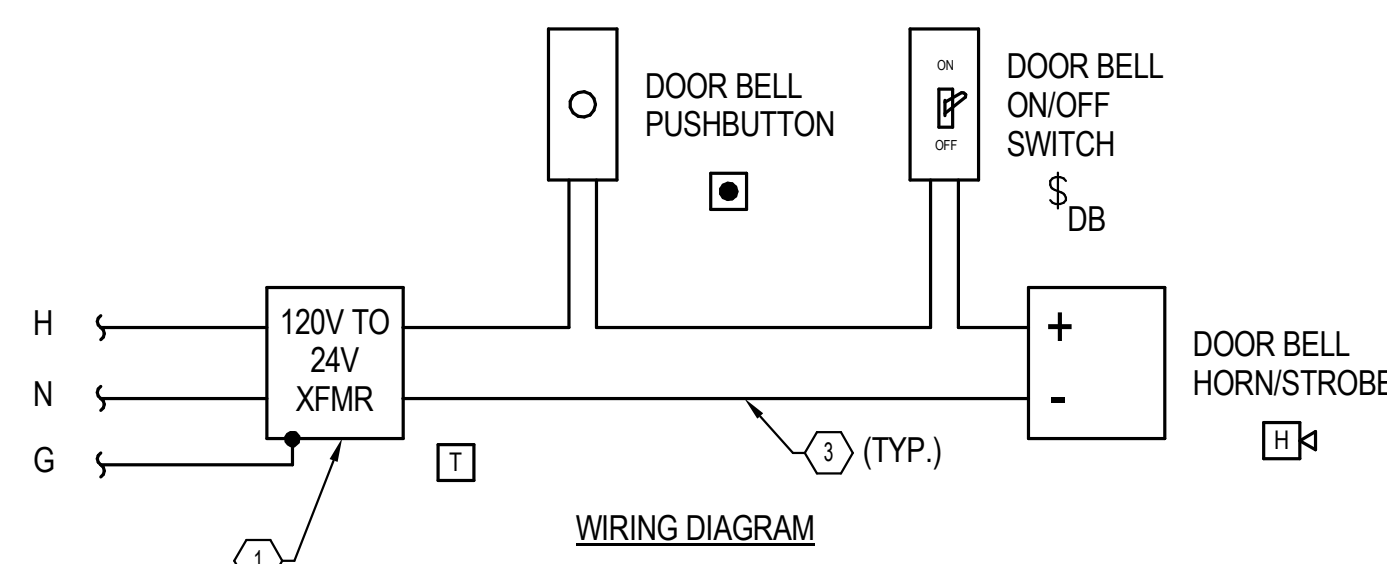


DETAIL NOTES:

1. DATA JACK (WHERE CALLED FOR ON PLANS), PROVIDE SINGLE CAT6 CABLE WITH TERMINATED CABLE JACK (8P8C) AND COVERPLATE.
2. CABLE TV JACK (WHERE CALLED FOR ON PLANS), PROVIDE SINGLE RG6 CO-AX CABLE WITH TERMINATED CABLE JACK (F-CONNECTOR) AND COVER PLATE.
3. LOW-VOLTAGE CABLING SHALL BE OPEN WIRED, CONCEALED WITHIN WALL/CEILING, BACK TO DWELLING UNIT STRUCTURED CABLING JBOX.
4. 3/4" CONDUIT TO DEMARC.

2 DETAIL Dwelling Unit Low Voltage Rough-in

NTS

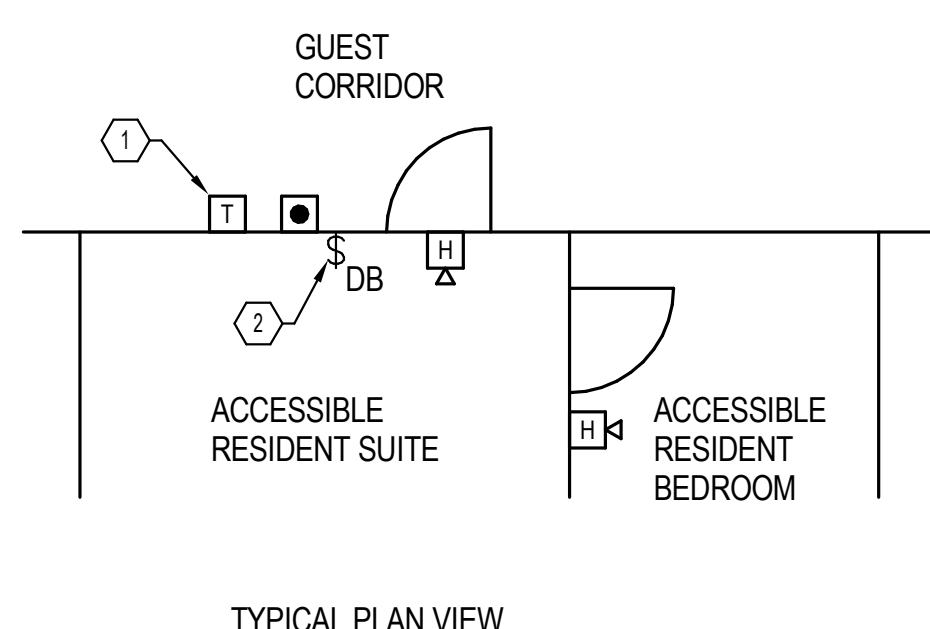


DETAIL GENERAL NOTES:

- A. PROVIDE ADA DOORBELL KIT CONSISTING OF 24V CONTROL TRANSFORMER, GUEST DOORBELL PUSHBUTTON, AND HORN/STROBE DEVICE. PROVIDE QUANTITY OF HORN/STROBE DEVICES PER PLAN. KIT SHALL BE EQUAL TO EDWARDS SIGNALING # CFA SERIES 7005-G5. DOORBELL ON/OFF SWITCH (TOGGLE) SHALL BE SUPPLIED SEPARATELY.

DETAIL NOTES:

1. TRANSFORMER SHALL BE MOUNTED ABOVE ACCESSIBLE CEILING OR IN RESIDENT SUITE CLOSET. PROVIDE BACKBOX AND COVERPLATE.
2. LOCATE DOORBELL ON/OFF SWITCH IN A COMMON GANG BACKBOX WITH LIGHTING SWITCH. PROVIDE ENGRAVED FACEPLATE LABEL IDENTIFYING SWITCH AS 'DOORBELL' WITH 'ON' AND 'OFF' POSITIONS.
3. ALL 24V WIRING SHALL BE IN CONDUIT, #12 AWG.



4 DETAIL S&H Door Bell System

NTS

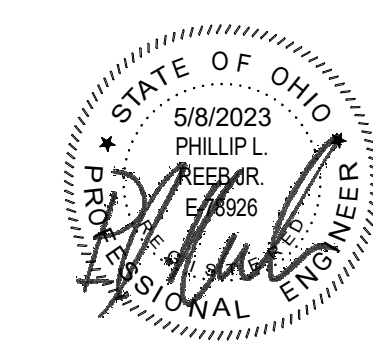
#	DATE	CHANGE DESCRIPTION

COBBLESTONE MANOR
COLUMBUS METROPOLITAN HOUSING AUTHORITY
1050 LAMPLIGHTER DRIVE
GROVE CITY, OH 43123
FOR
CMHA

MOODY•NOLAN
300 SPRUCE STREET
SUITE 300
COLUMBUS, OHIO 43215
PHONE: (614) 461-4664
FAX: (614) 280-8881

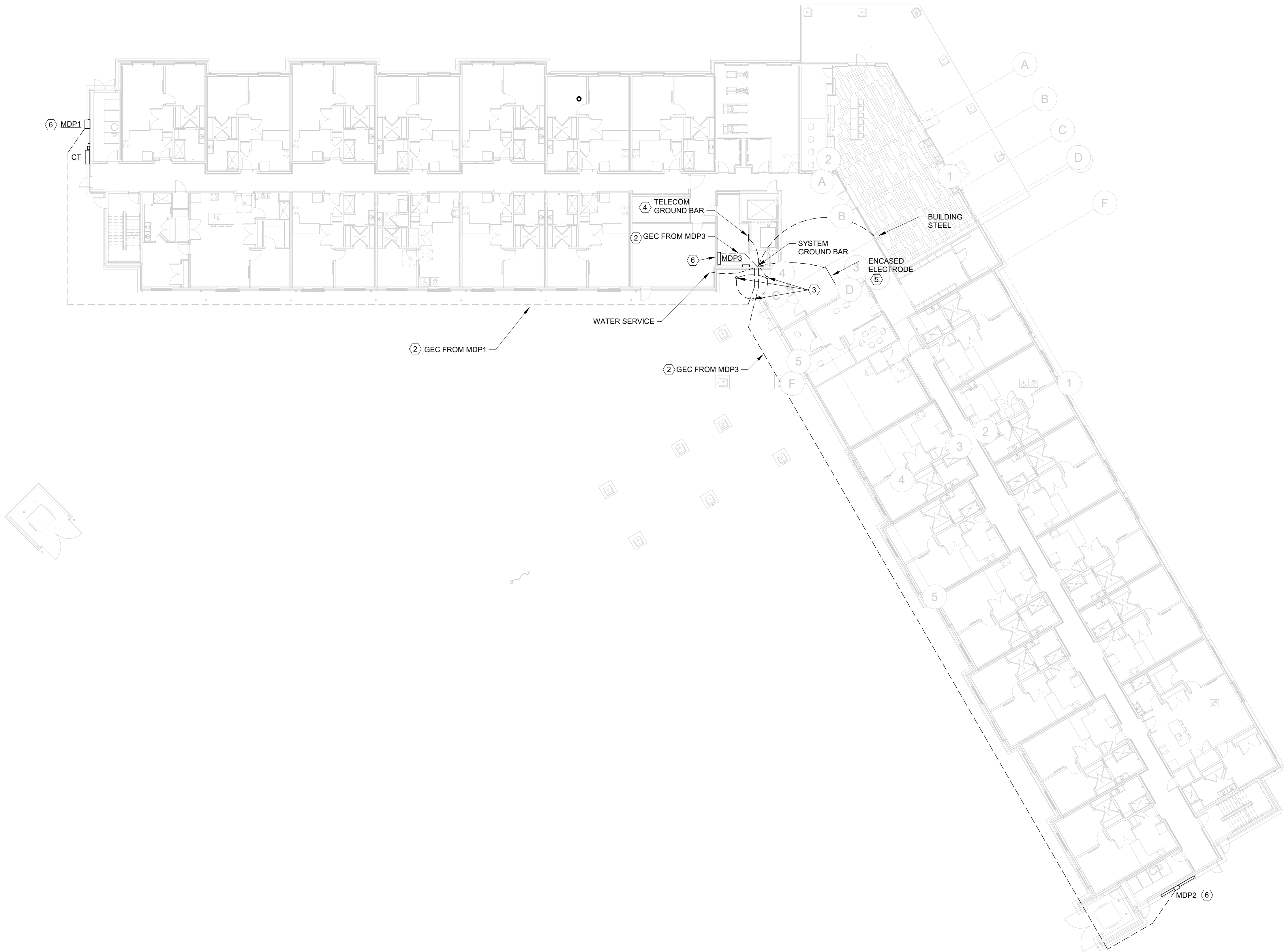
DRAWING TITLE:

DETAILS - ELECTRICAL



06/08/2023
DRAWN BY: RK
CHECKED BY: KM
#22172.01
E502
PERMIT & BID SET

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1405 Dublin Road
Columbus, Ohio 43215
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1 ELECTRICAL GROUNDING PLAN
1/16" = 1'-0"

KEYNOTES

1. SYSTEM GROUND BAR, REFER TO DETAIL 5/E501 FOR CONNECTIONS TO FACILITY GROUNDING ELECTRODES.
2. TYPICAL GROUNDING ELECTRODE CONDUCTORS, BARE COPPER WHERE INSTALLED UNDERGROUND GREEN INSULATED WHERE OVERHEAD AND PROPERLY SUPPORTED.
3. GROUNDING TRIANGLE, REFER TO DETAIL 4/E501.
4. TELECOM GROUND BAR, REFER TO DETAIL 1/T501.
5. CONTRACTOR SHALL LOCATE CONCRETE ENCASED ELECTRODE, SHOWN FOR REFERENCE.
6. BOND NEUTRAL TO GROUND WITHIN EACH SERVICE ENTRANCE EQUIPMENT.


#	DATE	CHANGE DESCRIPTION

COBBLESTONE MANOR
1050 LAMPLIGHTER DRIVE
GROVE CITY, OH 43123
FOR
CMHA

MOODY•NOLAN
300 SPRUCE STREET
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PHONE: (614) 461-4664
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DRAWING TITLE:

DETAILS - ELECTRICAL

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NOTE: STANDARD FINISH SELECTED
BY ARCHITECT

NOTE: STANDARD FINISH SELECTED
BY ARCHITECT

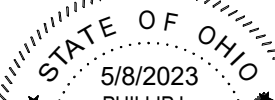
PIN: GREENGATE LK8-120NO
 **PROVIDE UL-924 BARRIER
CONTROL LEGEND:
 LS: ON/OFF SWITCH
 DM: ON/OFF/DIMMER SWITCH
 TC: TIME CLOCK
 TM: TIMER SWITCH
 MS: MASTER SWITCH
 PC: PHOTOCELL
 OS: OCCUPANCY SENSOR
 * DIM TO 10% (WITHIN 11PM - 6AM)
 + IN THE EVENT OF FIRE ALARM ACTIVATION, THIS ZONE WILL DEFAULT
 TO "100% ON" VIA WIRELESS LIGHTING RELAY

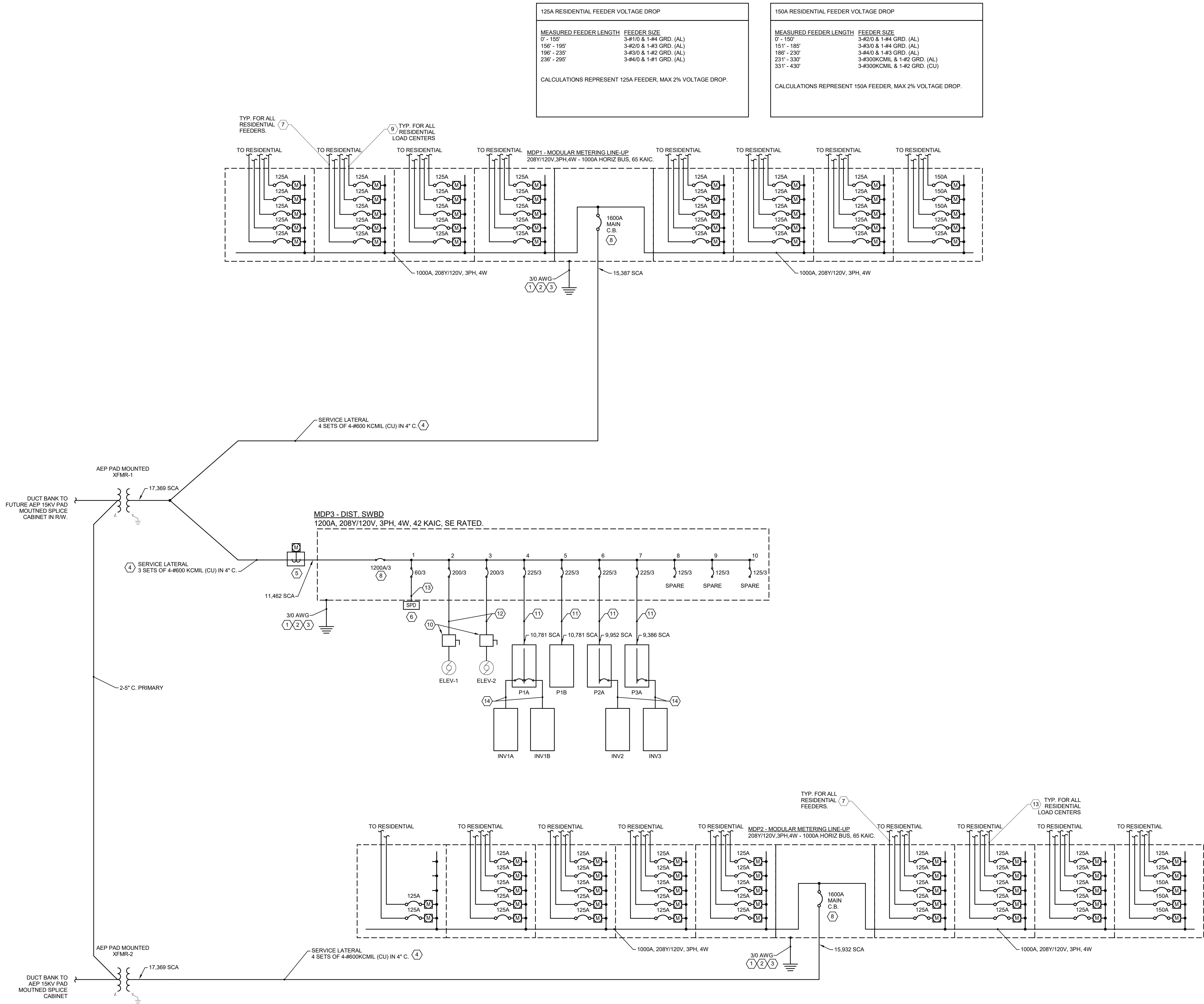
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Columbus, Ohio 43215

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Fax: (614) 486-4082

MOTOR SCHEDULE																																						
MARK	NAMEPLATE	ROOM NUMBER	LOCATION	ELECTRICAL DATA				STARTER				DISCONNECT MEANS						CONTROL			FEEDER				SEE CODED NOTE													
				HORSEPOWER (HP)	MCA (KVA)	MOCP	VOLTAGE		NEMA SIZE	MANUAL	MAGNETIC	TYPE		LOCATION	NEAR MOTOR	MOTOR CONT CENTER EQUIP CONT PANEL	ROOM NUMBER	FURNISHED BY	DISC SWITCH	MANUAL MOTOR STARTER RECEPTACLE	TYPE		LOCATION			NEAR MOTOR	MOTOR CONT CENTER EQUIP CONT PANEL	PANELBOARD	INTEGRAL WITH VFD	FURNISHED BY	INTERLOCK WITH MOTOR	MANUAL AT STARTER	INTEGRAL WITH EQUIPMENT	FURNISHED BY	NUMBER OF CONDUCTORS	WIRE SIZE	GROUND SIZE	CONDUIT SIZE
							120V-1PH	208V-1PH				208V-3PH	BUILT-IN								2-SPEED VFD	FEEDER SWITCH OR BREAKER	NEMA TYPE	DISC SIZE														
AC-1	AIR COMPRESSOR	ST-301	STOR.	1/2	-	-	●		-		●				●		ES	●		1	-	-	●					EC	●		PC		2	12	12	.75	-	
AC-2	AIR COMPRESSOR	ST-304	STOR.	1/2	-	-	●		-		●				●		ES	●		1	-	-	●					EC	●		PC		2	12	12	.75	-	
AC-3	AIR COMPRESSOR	ME-100	MECHWATER	1/2	-	-	●		-		●				●		ES	●		1	-	-	●					EC	●		PC		2	12	12	.75	-	
AHU-1	FAN COIL UNITELEC HEAT	-	RESIDENTIAL UNITS	-	(7.6)	50	●		-		●				●		ES	●		1	-	-	●					EC		●	HC		2	8	10	.75	-	
AHU-2	FAN COIL UNITELEC HEAT	-	RESIDENTIAL UNITS	-	(9.9)	60	●		-		●				●		ES	●		1	-	-	●					EC		●	HC		2	6	10	.75	-	
HP-1	AIR COOLED HEAT PUMP	-	ROOF	-	(2.3)	20	●		-		●				●		ES	●		3R	30	-	●					EC		●	HC		2	10	10	.75	-	
HP-2	AIR COOLED HEAT PUMP	-	ROOF	-	(2.4)	25	●		-		●				●		ES	●		3R	30	-	●					EC		●	HC		2	10	10	.75	-	
CA-AHU-1	AIR HANDLING UNIT	ME-101	MECH	-	(8.0)	50	●		-		●				●		ES	●		1	60	-	●					EC		●	HC		2	8	10	.75	-	
CA-AHU-2	AIR HANDLING UNIT (2 CIRCUITS)	ME-200	MECH	-	(8.0)(3.6)	50/25	●		-		●				●		ES	●		1	60/-	-	●					EC		●	HC		2,2	8,12	10,12	.75,.75	-	
CA-HP-1	AIR COOLED HEAT PUMP	-	ROOF		(3.3)	30	●		-		●				●		ES	●		3R	30	-	●					EC		●	HC		2	10	10	.75	-	
CA-HP-2	AIR COOLED HEAT PUMP	-	ROOF		(3.3)	30	●		-		●				●		ES	●		3R	30	-	●					EC		●	HC		2	10	10	.75	-	
CUH-1	CABINET UNIT HEATER	C-101	CORRIDOR	-	(3.1)	20	●		-		●				●		ES			1	30	-	●					EC		●	HC		2	12	12	.75	-	
CUH-2	CABINET UNIT HEATER	S-100	STAIR	-	(3.1)	20	●		-		●				●		ES			1	30	-	●					EC		●	HC		2	12	12	.75	-	
CUH-3	CABINET UNIT HEATER	V-100	VEST.	-	(3.1)	20	●		-		●				●		ES			1	30	-	●					EC		●	HC		2	12	12	.75	-	
CUH-4	CABINET UNIT HEATER	S-101	STAIR	-	(3.1)	20	●		-		●				●		ES			1	30	-	●					EC		●	HC		2	12	12	.75	-	
CUH-5	CABINET UNIT HEATER	C-102	CORRIDOR	-	(3.1)	20	●		-		●				●		ES			1	30	-	●					EC		●	HC		2	12	12	.75	-	
EBH-1	ELECTRIC BASE HEATER	CR-100	COMMUNITY ROOM	-	(0.2)	20	●		-		●				●		ES			-	-	-	●					HC		●	ES		2	12	12	.75	-	
EBH-2	ELECTRIC BASE HEATER	CR-100	COMMUNITY ROOM	-	(0.2)	20	●		-		●				●		ES			-	-	-	●					HC		●	ES		2	12	12	.75	-	
EBH-3	ELECTRIC BASE HEATER	CR-100	COMMUNITY ROOM	-	(0.8)	20	●		-		●				●		ES			-	-	-	●					HC		●	ES		2	12	12	.75	-	
EBH-4	ELECTRIC BASE HEATER	CR-100	COMMUNITY ROOM	-	(0.2)	20	●		-		●				●		ES			-	-	-	●					HC		●	ES		2	12	12	.75	-	
EBH-5	ELECTRIC BASE HEATER	CR-100	COMMUNITY ROOM	-	(0.2)	20	●		-		●				●		ES			-	-	-	●					HC		●	ES		2	12	12	.75	-	
EBH-6	ELECTRIC BASE HEATER	CR-100	COMMUNITY ROOM	-	(0.2)	20	●		-		●				●		ES			-	-	-	●					HC		●	ES		2	12	12	.75	-	
EBH-7	ELECTRIC BASE HEATER	CR-100	COMMUNITY ROOM	-	(0.2)	20	●		-		●				●		ES			-	-	-	●					HC		●	ES		2	12	12	.75	-	
EBH-8	ELECTRIC BASE HEATER	CR-100	COMMUNITY ROOM	-	(0.5)	20	●		-		●				●		ES			-	-	-	●					HC		●	ES		2	12	12	.75	-	
EF-1	EXHAUST FAN	TR-100	TRASH	FRAC	(0.043)	20	●				●				●		ES			1	20	-	●					ES		●	HC		2	12	12	.75	-	
EF-2	EXHAUST FAN	ME-100	MECHWATER	FRAC	(0.121)	20	●				●				●		ES			1	20	-	●					ES		●	HC		2	12	12	.75	-	
EF-3	EXHAUST FAN	E-100	ELEC	FRAC	(0.018)	20	●				●				●		ES			1	20	-	●					ES		●	HC		2	12	12	.75	-	
EF-4	EXHAUST FAN	J-100	JAN	FRAC	(0.017)	20	●				●				●		ES			1	20	-	●					ES		●	HC		2	12	12	.75	-	
EF-5	EXHAUST FAN	T-100	RR	FRAC	(0.014)	20	●				●				●		ES			1	20	-	●					ES		●	EC		2	12	12	.75	1	
EF-6	EXHAUST FAN	T-101	RR	FRAC	(0.014)	20	●				●				●		ES			1	20	-	●					ES		●	EC		2	12	12	.75	1	
EF-7	EXHAUST FAN	TR-101	TRASH	FRAC	(0.043)	20	●				●				●		ES			1	20	-	●					ES		●	HC		2	12	12	.75	-	
EF-8	EXHAUST FAN	TR-200	TRASH	FRAC	(0.014)	20	●				●				●		ES			1	20	-	●					ES		●	HC		2	12	12	.75	-	
EF-9	EXHAUST FAN	E-200	ELEC	FRAC	(0.018)	20	●				●				●		ES			1	20	-	●					ES		●	HC		2	12	12	.75	-	
EF-10	EXHAUST FAN	J-200	JAN	FRAC	(0.017)	20	●				●				●		ES			1	20	-	●					ES		●	HC		2	12	12	.75	-	
EF-11	EXHAUST FAN	TR-201	TRASH	FRAC	(0.014)	20	●				●				●		ES			1	20	-	●					ES		●	HC		2	12	12	.75	-	
EF-12	EXHAUST FAN	TR-300	TRASH	FRAC	(0.014)	20	●				●				●		ES			1	20	-	●					ES		●	HC		2	12	12	.75	-	
EF-13	EXHAUST FAN	J-300	JAN	FRAC	(0.017)	20	●				●				●		ES			1	20	-	●					ES		●	HC		2	12	12	.75	-	
EF-14	EXHAUST FAN	E-300	ELEC	FRAC	(0.018)	20	●				●				●		ES			1	20	-	●					ES		●	HC		2	12	12	.75	-	
EF-15	EXHAUST FAN	TR-301	TRASH	FRAC	(0.014)	20	●				●				●		ES			1	20	-	●					ES		●	HC		2	12	12	.75	-	
EFA-1	EXHAUST FAN	-	RESIDENTIAL UNITS	FRAC	(0.014)	20	●				●				●		ES			1	20	-	●					ES		●	HC		2	12	12	.75	-	
EUH-1	ELECTRIC UNIT HEATER	TR-100	TRASH	-	(3.2)	20	●				●				●		ES	●		1	60	-	●					HC		●	HC		2	12	12	.75	-	
EUH-2	ELECTRIC UNIT HEATER	ME-100	MECHWATER	-	(5.6)	35	●				●				●		ES	●		1	30	-	●					HC		●	HC		2	10	10	.75	-	
EUH-3	ELECTRIC UNIT HEATER	TR-101	TRASH	-	(3.2)	20	●				●				●		ES	●		1	60	-	●					HC		●	HC		2	12	12	.75	-	
EV1	SUMP PUMP	EL-100	ELEV	3/4	-	20	●				●				●		ES		●	-	-	-	●					EC		●	PC		2	12	12	.75	-	
EW1	ELECTRIC DOMESTIC WATER HEATER	-	RESIDENTIAL UNITS, ME-200	-	(6.0)	40	●				●				●		ES	●		1	60	-	●					EC		●	PC		2	8	10	.75	-	
EW2	ELECTRIC DOMESTIC WATER HEATER	E-100	ELEC	-	(2.5)	20	●				●				●		ES	●		1	30	-	●					EC		●	PC		2	12	12	.75	-	
RCP-1	RECIRCULATION PUMP	ME-200	MECH	1/1																																		

	DRAWN BY: Author	CHECKED BY: Checker
	#22172.01	
	<h1>E603</h1>	
PERMIT & BID SET		



1 SINGLE-LINE DIAGRAM - ELECTRICAL
NTS


GENERAL NOTES

1. NONE


KEYNOTES

1. BOND NEUTRAL TO GROUND AT SERVICE ENTRANCE EQUIPMENT. PROVIDE GROUNDING ELECTRODE CONDUCTOR TO UL LISTED INTERSYSTEM GROUND BAR. REFER TO DETAIL 5/E501.
2. PROVIDE BONDING JUMPERS FROM GROUND BAR TO EACH GROUNDING ELECTRODE IN ACCORDANCE WITH NEC ARTICLE 250. REFER TO DETAIL 5/E501. PROVIDE GROUNDING BAR PER DETAIL 11/E501.
3. PROVIDE 10" X 3/4" DIA. UL LISTED GROUND ROD(S) AS REQUIRED. REFER TO DETAIL 4/E501.
4. CONTRACTOR SHALL PROVIDE SECONDARY CONDUITS/CONDUCTORS AND MAKE SECONDARY TERMINATIONS.
5. CT CABINET SHALL COMPLY WITH AEP REQUIREMENTS. COORDINATE WITH LOCAL UTILITY.
6. SPD SHALL BE MOUNTED EXTERNALLY, WALL MOUNTED. KEEP CONDUCTOR LENGTH TO A MINIMUM.
7. TYPICAL RESIDENTIAL PANELBOARD FEEDERS SHALL BE SIZED USING THE VOLTAGE DROP TABLE. LENGTH OF CABLE SHALL BE MEASURED AFTER THE PROPOSED PATHWAY HAS BEEN DETERMINED.
8. PROVIDE LSI ELECTRONIC TRIP CIRCUIT BREAKER WITH ARMS DEVICE TO ADJUST BREAKER SETTINGS TO REDUCE ARC FLASH INCIDENT ENERGY.
9. RESIDENTIAL UNIT LOAD CENTERS SHALL BE SERIES RATED FOR 10KAIC. CONTRACTORS EQUIPMENT SUPPLIER SHALL PROVIDE EVIDENCE OF PROVEN SERIES RATING BETWEEN MDP1 BREAKER, AND LOAD CENTER MAIN CIRCUIT BREAKER TO ACHIEVE THE SERIES RATING.
10. PROVIDE BUSSMAN ELEVATOR POWER MODULE, OR EQUAL. REFER TO SPEC SECTION 26 28 17. FUSE SIZE SHALL BE BY MANUFACTURERS RECOMMENDATION.
11. FEEDER: 4-#250 KCML (AL) & 1-#2 GRD. IN 3" C.
12. FEEDER: 3-#4/0 (AL) & 1-#4 GRD. IN 2.5" C.
13. FEEDER: 4-#6 (CU) & 1-#10 GRD. IN 1.25" C.
14. FEEDER: 2-#12 (CU) & 1-#12 GRD. IN 0.75" C.

#	DATE	CHANGE DESCRIPTION



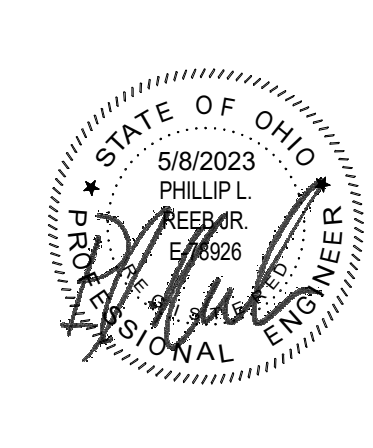
COBBLESTONE MANOR
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FOR
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DRAWING TITLE:
SINGLE-LINE DIAGRAM - ELECTRICAL



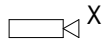

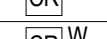
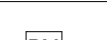

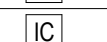
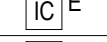


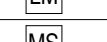

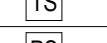

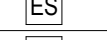

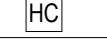





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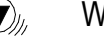




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ABBREVIATIONS	
NOTE: NOT ALL ABBREVIATIONS MAY BE USED.	
(A)	EXISTING TO BE ABANDONED
(D)	EXISTING TO BE DEMOLISHED
(E)	EXISTING TO REMAIN
(F)	FUTURE
(R)	EXISTING TO BE RELOCATED
A	AMPERE
AFF	ABOVE FINISHED FLOOR
AFG	ABOVE FINISHED GRADE
AHJ	AUTHORITY HAVING JURISDICTION
AMP	AMPLIFIER
AUTO	AUTOMATIC
AWG	AMERICAN WIRE GAUGE
BB	BACKBONE
BC	BONDING CONDUCTOR
C	CONDUIT / CONDUITS
CCTV	CLOSED CIRCUIT TELEVISION
CM	CEILING MOUNTED
CMP	COMMUNICATIONS PLENUM
CMR	COMMUNICATIONS RISER
CU	COPPER
DEMARC	DEMARICATION POINT
DIA	DIAMETER
DWG	DRAWING
EA	EACH
EC	ELECTRICAL CONTRACTOR
EM	EMERGENCY
ER	EQUIPMENT ROOM
FFA	FROM FLOOR ABOVE
FFB	FROM FLOOR BELOW
FT	FEET
GC	GENERAL TRADES CONTRACTOR
GND	GROUND
IN	INCHES
JB	JUNCTION BOX
LAN	LOCAL AREA NETWORK
LCD	LIQUID CRYSTAL DISPLAY
M	METER
MC	MECHANICAL CONTRACTOR

ABBREVIATIONS	
NOTE: NOT ALL ABBREVIATIONS MAY BE USED.	
MCC	MAIN CROSS CONNECT
MDF	MAIN DISTRIBUTION FRAME
MFGR	MANUFACTURER
MH	MANHOLE
MHZ	MEGAHERTZ
MMF	MULTIMODE FIBER
mm	MILLIMETER
NC	NORMALLY CLOSED
NO	NORMALLY OPEN
OC	ON CENTER
P/L	PROPERTY LINE
PLE	PLENUM
PVC	POLYVINYL CHLORIDE (PLASTIC PIPE)
REV	REVISION
RGS	RIGID GALVANIZED STEEL
RM	ROOM
RU	RACK UNIT(S)
S	STRAND
SMF	SINGLE MODE FIBER
SP	SERVICE PROVIDER
TBBC	TELECOMMUNICATIONS BACKBONE BONDING CONDUCTOR
TEBC	TELECOMMUNICATIONS EQUIPMENT BONDING CONDUCTOR
TGB	TELECOMMUNICATIONS GROUNDING BUSBAR
TMGB	TELECOMMUNICATIONS MAIN GROUNDING BUSBAR
TR	TELECOM ROOM
TV	TELEVISION
TYP	TYPICAL
UNO	UNLESS NOTED OTHERWISE
UTP	UNSHIELDED, TWISTED PAIR
V	VOLTS
WAN	WIDE AREA NETWORK
WAP	WIRELESS ACCESS POINT
WG	WIRE GUARD
WM	WALL MOUNTED
WP	WEATHERPROOF

SECURITY SYMBOLS	
NOTE: NOT ALL SYMBOLS MAY BE USED.	
	CAMERA: X = TYPE (A, B, C, OR D). SEE PLANS AND CAMERA SCHEDULES
	ALARM HORN
	CARD READER
	WIRELESS CARD READER
	PANEL INTERFACE MODULE (INTELLIGENT WIRELESS CONTROLLER)
	DOOR LATCH
	INTERCOM
	EMERGENCY INTERCOM
	PANIC BUTTON
	KEY PAD
	DOOR CONTACT
	LATCH MONITOR
	MONITORING STATION
	MOTION DETECTOR
	TAMPER SWITCH
	POWER SUPPLY
	REQUEST-TO-EXIT
	ELECTRIC STRIKE
	PUSH BUTTON
	CCTV EQUIPMENT RACK
	HANDICAP DOOR PUSH BUTTON

TELECOM SYMBOLS	TELECOM REQUIREMENTS	PATHWAY REQUIREMENTS
 WORKSTATION WALL OR SURFACE OUTLET MOUNTED AT 18" AFF, UNO.	SINGLE GANG, TWO-PORT FACEPLATE. ONE BLANK SPACE FOR FUTURE. PROVIDE TWO CAT6 CABLES. TERMINATED ON BOTH ENDS. TERMINATE TO PATCH PANEL IN ASSOCIATED TELECOM ROOM.	4-11/16" SQUARE, 2-1/8" DEEP BOX WITH A DUAL GANG PLASTER RING AND 1" CONDUIT INSTALLED TO ABOVE CEILING.
 WORKSTATION FLOOR OUTLET.	SINGLE GANG, TWO-PORT FACEPLATE. ONE BLANK SPACE FOR FUTURE. PROVIDE TWO CAT6 CABLES. TERMINATED ON BOTH ENDS. TERMINATE TO PATCH PANEL IN ASSOCIATED TELECOM ROOM.	4-11/16" SQUARE, 2-1/8" DEEP BOX WITH A DUAL GANG PLASTER RING AND 1" CONDUIT INSTALLED BELOW FLOOR AND UP WALL TO ABOVE CEILING. EXTEND CONDUIT TO ABOVE CEILING.
 WIRELESS ACCESS POINT	PROVIDE ONE CAT6A CABLE AT EACH DEVICE LOCATION SHOWN ON PLANS. TERMINATE TO PATCH PANEL IN ASSOCIATED TELECOM ROOM.	MANUFACTURER-SPECIFIC MOUNTING OUTLET BOX WITH 1" CONDUIT INSTALLED TO ABOVE CEILING.
 TV MONITOR WALL OUTLET AT 60" AFF, UNO.	SINGLE GANG, TWO-PORT FACEPLATE. PROVIDE ONE CAT6 CABLE AND ONE RG11 COAX CABLE. TERMINATED ON BOTH ENDS. TERMINATE CAT6 CABLE TO PATCH PANEL IN RESPECTIVE TR. TERMINATE COAX CABLE ON COAX SPLITTER AT UTILITY DEMARC.	4-11/16" SQUARE, 2-1/8" DEEP BOX WITH A DUAL GANG PLASTER RING AND (2) 3/4" CONDUITS INSTALLED TO ABOVE CEILING.
 SPEAKER, WALL, POLE, OR CEILING MOUNTED. SEE PLANS.	REFER TO PLANS FOR DESIGN NOTES	REFER TO PLANS FOR DESIGN NOTES

#	DATE	CHANGE DESCRIPTION

**COBBLESTONE MANOR**
1050 LAMPLIGHTER DRIVE
GROVE CITY, OH 43123
FOR
CMHA



300 SPRUCE STREET
SUITE 300
COLUMBUS, OHIO 43215

PHONE: (614) 461-4664
FAX: (614) 280-8881

DRAWING TITLE:
**GENERAL INFORMATION -
SYSTEMS**



06/08/2023	
DRAWN BY: RK	CHECKED BY: KM
#22172.01	
T001	
PERMIT & BID SET	



1 FIRST FLOOR PLAN - TELECOMMUNICATIONS - AREA A

1/8" = 1'-0"



AEC ADVANCED
ENGINEERING
CONSULTANTS
Mechanical | Electrical | Plumbing | Fire Protection | Utilities
1405 Dublin Road
Columbus, Ohio 43215
Tel: (614) 486-4773
Fax: (614) 486-4082

GENERAL NOTES

1. PROVIDE DATA OUTLET FOR INTERCOM DOOR STATION.
2. PROVIDE TMGB.
3. CONFIRM EXACT TELEVISION LOCATION WITH ARCHITECT PRIOR TO ROUGH IN.

KEYNOTES

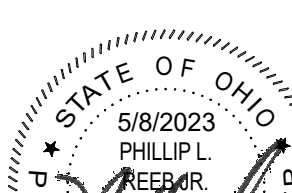
1. PROVIDE DATA OUTLET FOR INTERCOM DOOR STATION.
2. PROVIDE TMGB.
3. CONFIRM EXACT TELEVISION LOCATION WITH ARCHITECT PRIOR TO ROUGH IN.

#	DATE	CHANGE DESCRIPTION

COBBLESTONE MANOR
1050 LAMPLIGHTER DRIVE
GROVE CITY, OH 43123
FOR
CMHA

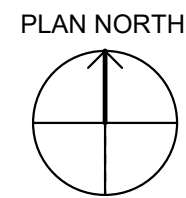
MOODY•NOLAN
300 SPRUCE STREET
SUITE 300
COLUMBUS, OHIO 43215
PHONE: (614) 461-4664
FAX: (614) 280-8881

DRAWING TITLE:
**LEVEL 01 - FLOOR PLAN -
SYSTEMS - AREA A**

	06/08/2023	
	DRAWN BY: RK	CHECKED BY: KM
	#22172.01	
	T101A	
	PERMIT & BID SET	



1 FIRST FLOOR PLAN - TELECOMMUNICATIONS - AREA B
1/8" = 1'-0"



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Fax: (614) 486-4082

GENERAL NOTES


1. -

KEYNOTES

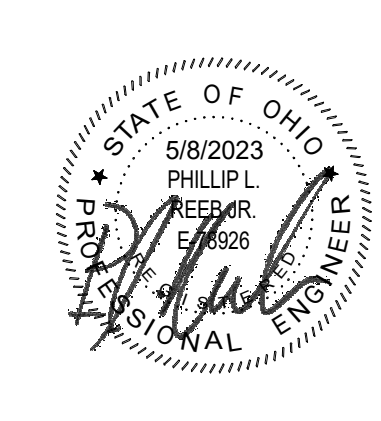
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#	DATE	CHANGE DESCRIPTION

 **COBBLESTONE MANOR**
1050 LAMPLIGHTER DRIVE
GROVE CITY, OH 43123
FOR
CMHA

 300 SPRUCE STREET
SUITE 300
COLUMBUS, OHIO 43215
PHONE: (614) 461-4664
FAX: (614) 280-8881

DRAWING TITLE:
**LEVEL 01 - FLOOR PLAN -
SYSTEMS - AREA B**

	06/08/2023	
	DRAWN BY: RK	CHECKED BY: KM
	#22172.01	
	T101B	
PERMIT & BID SET		



1 SECOND FLOOR PLAN - TELECOMMUNICATIONS - AREA A

1/8" = 1'-0"



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Fax: (614) 486-4082

GENERAL NOTES

1. -

KEYNOTES

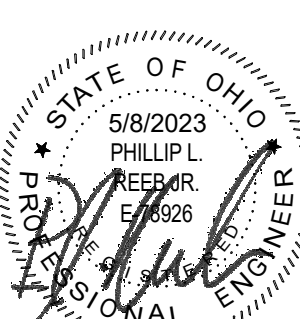
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#	DATE	CHANGE DESCRIPTION

COBBLESTONE MANOR
1050 LAMPLIGHTER DRIVE
GROVE CITY, OH 43123
FOR
CMHA

MOODY-NOLAN
300 SPRUCE STREET
SUITE 300
COLUMBUS, OHIO 43215
PHONE: (614) 461-4664
FAX: (614) 280-8881

DRAWING TITLE:
**LEVEL 02 - FLOOR PLAN -
SYSTEMS - AREA A**

	06/08/2023	
	DRAWN BY: RK	CHECKED BY: KM
	#22172.01	
	T102A	



1 SECOND FLOOR PLAN - TELECOMMUNICATIONS - AREA B
1/8" = 1'-0"

GENERAL NOTES

1.


KEYNOTES

1.

#	DATE	CHANGE DESCRIPTION




COBBLESTONE MANOR
1050 LAMPLIGHTER DRIVE
GROVE CITY, OH 43123
FOR
CMHA



300 SPRUCE STREET
SUITE 300
COLUMBUS, OHIO 43215

PHONE: (614) 461-4664
FAX: (614) 280-8881

**DRAWING TITLE:
LEVEL 02 - FLOOR PLAN -
SYSTEMS - AREA B**

	06/08/2023	
	DRAWN BY RK	CHECKED BY KM
	#22172.01	
	T102B	



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Fax: (614) 466-4062





1 THIRD FLOOR PLAN - TELECOMMUNICATIONS - AREA A

1/8" = 1'-0"



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1405 Dublin Road
Columbus, Ohio 43215
Tel: (614) 486-4778
Fax: (614) 486-4082

GENERAL NOTES

1.

KEYNOTES

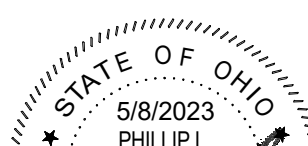
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#	DATE	CHANGE DESCRIPTION

COBBLESTONE MANOR
1050 LAMPLIGHTER DRIVE
GROVE CITY, OH 43123
FOR
CMHA

MOODY+NOLAN
300 SPRUCE STREET
SUITE 300
COLUMBUS, OHIO 43215
PHONE: (614) 461-4664
FAX: (614) 280-8881

DRAWING TITLE:
**LEVEL 03 - FLOOR PLAN -
SYSTEMS - AREA A**

	06/08/2023	
	DRAWN BY: RK	CHECKED BY: KM
	#22172.01	
	T103A	
	PERMIT & BID SET	



1 THIRD FLOOR PLAN - TELECOMMUNICATIONS - AREA B
1/8" = 1'-0"

GENERAL NOTES

1.


KEYNOTES

1.

#	DATE	CHANGE DESCRIPTION




COBBLESTONE MANOR
1050 LAMPLIGHTER DRIVE
GROVE CITY, OH 43123
FOR
CMHA



300 SPRUCE STREET
SUITE 300
COLUMBUS, OHIO 43215

PHONE: (614) 461-4664
FAX: (614) 280-8881

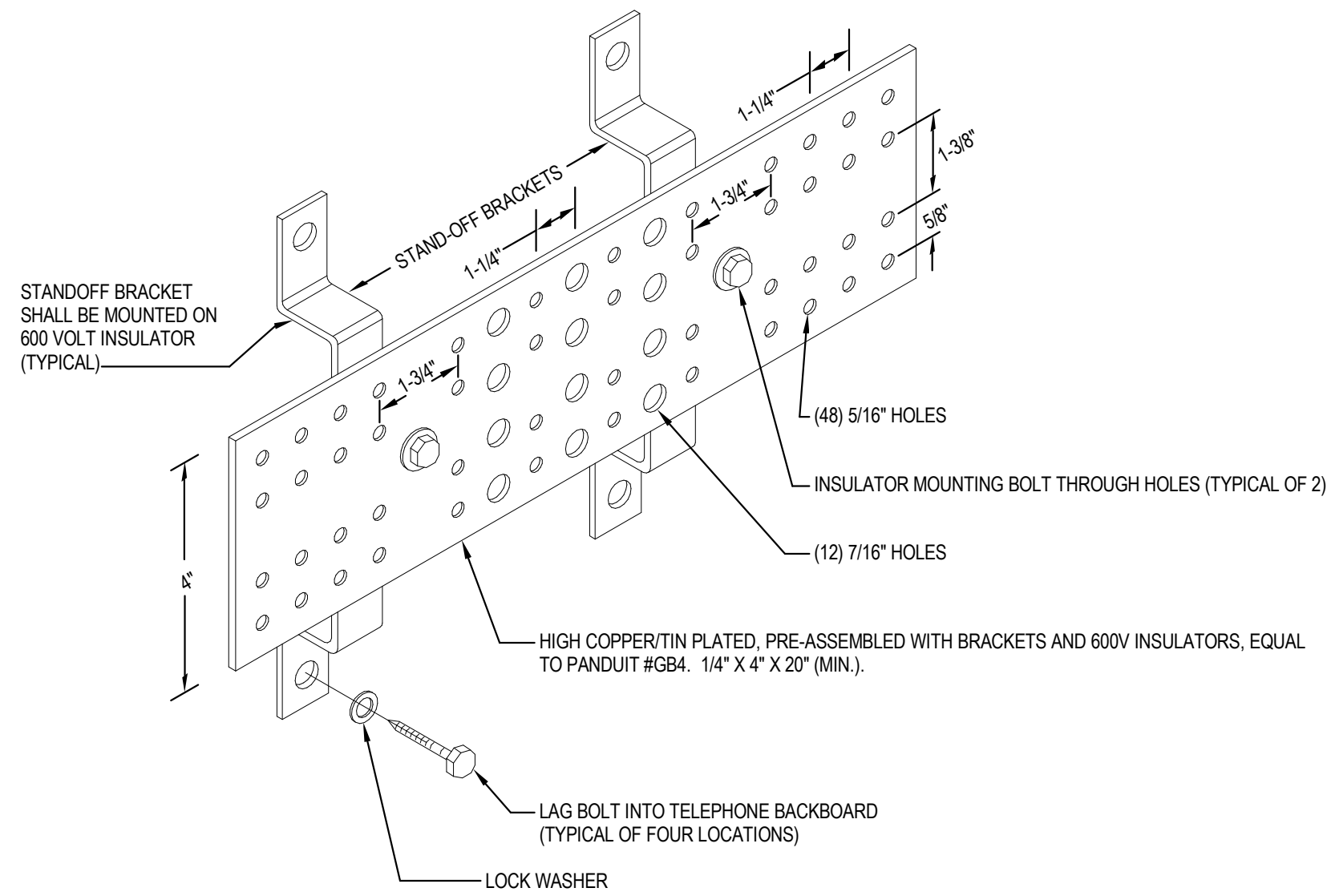
DRAWING TITLE:
**LEVEL 03 - FLOOR PLAN -
SYSTEMS - AREA B**

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	DRAWN BY RK	CHECKED BY: KM
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	T103B	

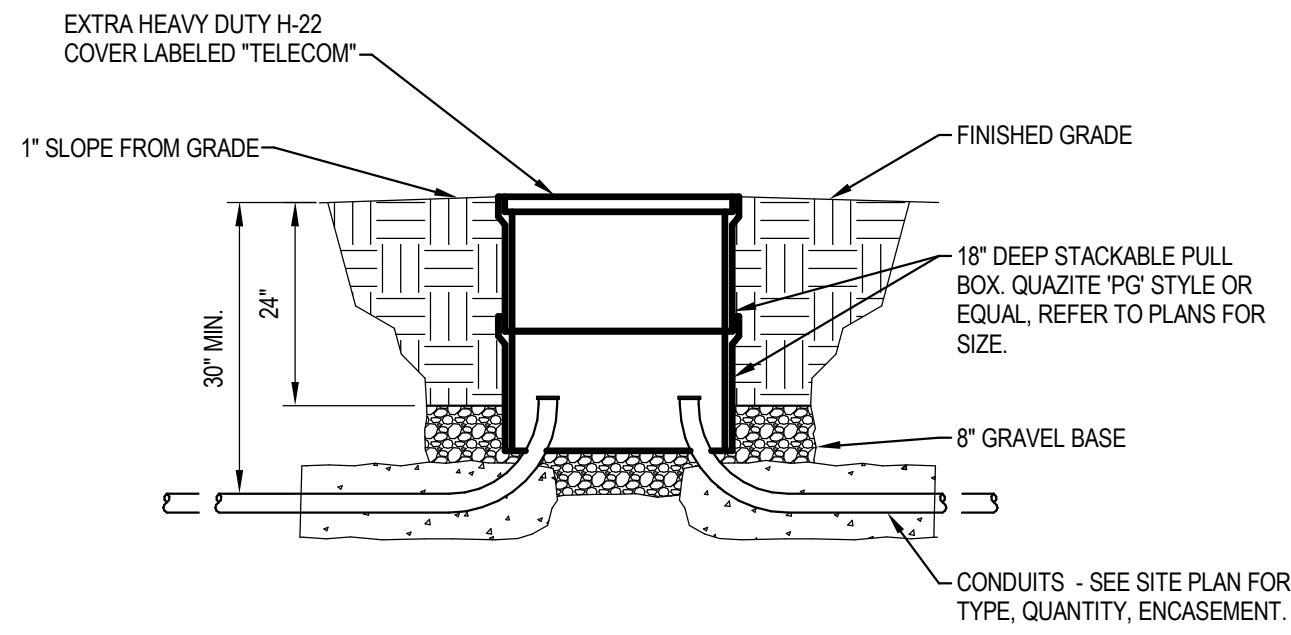


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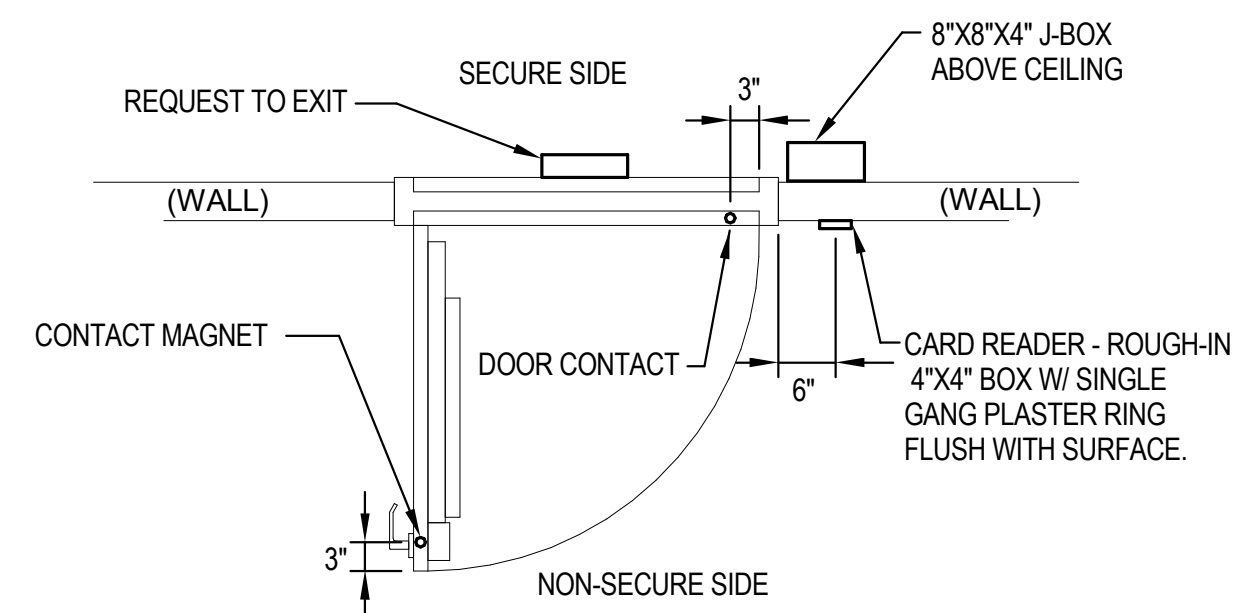
Mechanical | Electrical | Plumbing | Fire Protection | Utilities
1405 Dublin Road
Columbus, Ohio 43215
Tel: (614) 466-4773
Fax: (614) 466-4082



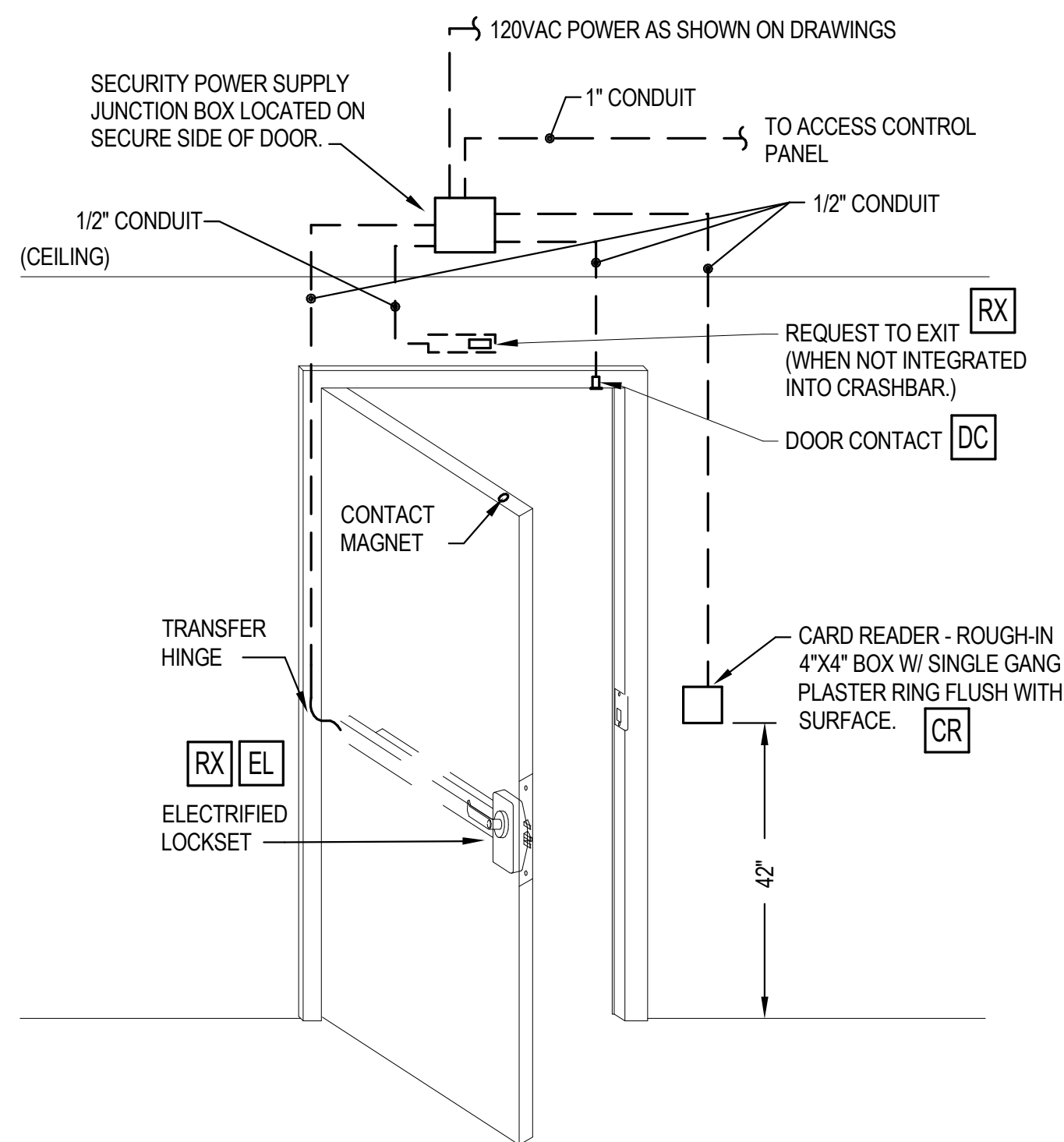
1 **DETAIL** Telecomm Main Grounding Bar
NTS



2 **DETAIL** Typical Intermediate Pullbox
NTS



3 **DETAIL** Door Hardware Rough-in
NTS



GENERAL NOTES

1. -

KEYNOTES

1. -

#	DATE	CHANGE DESCRIPTION



COBBLESTONE MANOR
1050 LAMPLIGHTER DRIVE
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FOR
CMHA

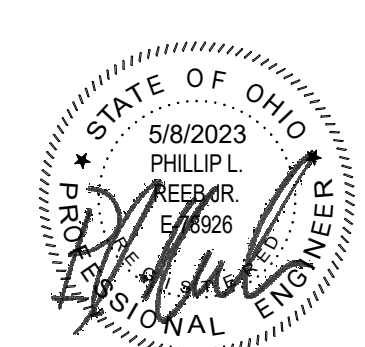


300 SPRUCE STREET
SUITE 300
COLUMBUS, OHIO 43215


PHONE: (614) 461-4664
FAX: (614) 280-8881

DRAWING TITLE:

DETAILS - SYSTEMS



06/08/2023
DRAWN BY: RK
CHECKED BY: KM
#22172.01
T501
PERMIT & BID SET



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