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AD-102	6TH FLOOR PARTIAL - RCP DEOMLITION
A-101	6TH FLOOR PARTIAL - APT. SIM LAB
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E-102	6TH FLOOR - NEW WORK - POWER
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UNIVERSITY of MARYLAND BALTIMORE

ADMINISTRATION & FINANCE

DESIGN AND CONSTRUCTION

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UMB 6TH FLOOR APARTMENT SIM. RENOVATION

SCHOOL OF NURSING - SON-0833

655 W. LOMBARD ST.

BALTIMORE, MARYLAND 21201

UMB Project No.: 26-312

A/E Project No.: 25-128

100% BID SET

APRIL 8, 2026

List of Drawings Cont.

SHEET NUMBER	SHEET NAME
FIRE PROTECTION	
FP-001	SYMBOLS, ABBREVIATIONS, AND NOTES
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TA-100	LOW VOLTAGE OVERALL 6TH FLOOR PLAN
TA-101	6TH FLOOR - APT. SIM LAB
TA-102	6TH FLOOR - APT. SIM LAB - REFLECTED CEILIING PLAN
TA-500	LOW VOLTAGE SYSTEMS INFRASTRUCTURE DETAILS

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PROFESSIONAL CERTIFICATION: I HEREBY CERTIFY THAT THESE DOCUMENTS WERE PREPARED OR APPROVED BY ME, AND THAT I AM A DULY LICENSED PROFESSIONAL ENGINEER UNDER THE LAWS OF THE STATE OF MARYLAND.
LICENSE No. _____ EXPIRATION DATE: _____

REGISTRATION/STAMP

PROJECT TITLE :	
UMB SON 6TH FLOOR APT. SIM. RENOVATION	
UMB BUILDING NO. :	SON - 0833
UMB Project NO. :	26-312
A/E PROJECT NO. :	25-128
CAD FILE NO. :	
DATE :	

SHEET TITLE :
COVER SHEET

REVISIONS		
NO	DATE	ITEM
	2/07/26	100% CD SUBMISSION
	4/08/26	BID SET

SHEET NO.
CS1

- LEGEND:
- 2-HR RATED FIRE BARRIER
 - 1-HR RATED FIRE BARRIER
 - SMOKE-TIGHT PARTITION
 - PATH OF EGRESS
- CAPACITY OF DOOR / STAIR
- 160
- FEC
= FIRE EXTINGUISHER
CABINET
- FE
= FIRE EXTINGUISHER
ON WALL BRACKET

GENERAL/TYPICAL LIFE SAFETY NOTES:
ALL RATED WALLS AND PARTITIONS SHALL BE PERMANENTLY IDENTIFIED WITH SIGNS OR STENCILING AS FOLLOWS:

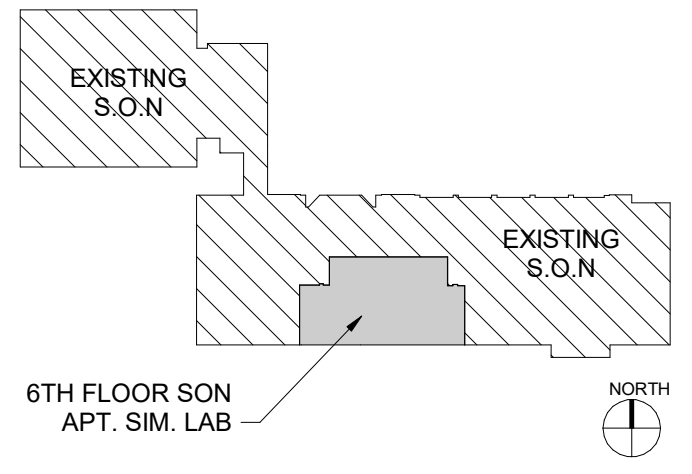
A. IDENTIFICATION MARKINGS SHALL BE LOCATED WITHIN ACCESSIBLE CONCEALED FLOOR, FLOOR-CEILING AND ATTIC SPACES.

B. IDENTIFICATION MARKINGS SHALL BE LOCATED WITHIN 15'-0" OF THE END OF EACH WALL AND AT INTERVALS NOT EXCEEDING 30'-0" MEASURED HORIZONTALLY ALONG THE WALL OR PARTITION.

C. LETTERING SHALL NOT BE LESS THAN 3" IN HEIGHT WITH A MINIMUM 3/8" STROKE IN CONTRASTING COLOR INCORPORATING THE FOLLOWING WORDING:

"FIRE AND/OR SMOKE BARRIER - PROTECT ALL OPENINGS".

KEY PLAN



BUILDING CODE STUDY DATA

FIRE MARSHAL
UMB OFFICE OF THE FIRE MARSHAL
410-706-3494
214 N. PINE STREET | BALTIMORE, MD 21201

1. PROJECT DESCRIPTION
INTERIOR RENOVATION OF THE SIXTH FLOOR OF THE SCHOOL OF NURSING LOCATED AT 655 W. LOMBARD STREET, BALTIMORE, MARYLAND.

THE SCOPE OF WORK INCLUDES DEMOLITION OF EXISTING PARTITIONS AND FINISHES WITHIN THE CURRENT APARTMENT SIMULATION SUITE, FOLLOWED BY CONSTRUCTION OF NEW PARTITIONS, CASEWORK, AND INTERIOR FINISHES TO SUPPORT UPDATED PROGRAM REQUIREMENTS. MECHANICAL, ELECTRICAL, AND PLUMBING SYSTEMS WILL BE MODIFIED AS NECESSARY TO ACCOMMODATE THE NEW LAYOUT, INCLUDING THE INSTALLATION OF NEW FIXTURES AND EQUIPMENT.

THE RENOVATED SPACE WILL FUNCTION AS APARTMENT-STYLE VOCATIONAL TRAINING CLASSROOMS DESIGNED TO SIMULATE RESIDENTIAL ENVIRONMENTS, ALLOWING STUDENTS TO PRACTICE AND BE MONITORED WHILE PROVIDING CARE TO "AT-HOME" CLIENTS. THESE UNITS ARE INTENDED STRICTLY FOR EDUCATIONAL USE AND WILL NOT BE USED FOR RESIDENTIAL OCCUPANCY OR OVERNIGHT STAYS.

BUILDING AREA MODIFICATION

6TH FLOOR SF	19294 GSF
APT. SIM. SPACE	3788 SF

2. APPLICABLE CODES

A) BUILDING CODE: IBC 2021
B) FIRE CODE: NFPA 2024
C) INTERNATIONAL MECHANICAL CODE: IMC 2021
D) INTERNATIONAL PLUMBING CODE: IPC 2021
E) NATIONAL ELECTRICAL CODE: NFPA 2023
G) MARYLAND ACCESSIBILITY CODE GUIDELINES FOR BUILDINGS AND FACILITIES (COMAR 05.02.02)

3. BUILDING USE, CONSTRUCTION CLASSIFICATIONS AND HEIGHT

USE GROUP (SECTION 302): B
SPECIAL USE AND OCCUPANCY (CHAPTER 4): N/A
INCIDENTAL USE AREAS (TABLE 509.1): N/A
PROPOSED TYPE OF CONSTRUCTION (TABLE 601): IB

4. OCCUPANCY LOADS:

USE: NFPA 7.3.1.2 OCCUPANT LOAD FACTOR
ASSEMBLY LESS CONCENTRATED USE, NON FIXED SEATING (NSF/15)

DEBRIEF 1	96 NSF	7 OCCUPANTS
DEBRIEF 2	96 NSF	7 OCCUPANTS
DEBRIEF 3	96 NSF	7 OCCUPANTS
OBS. 1	56 NSF	4 OCCUPANTS
OBS. 2	48 NSF	4 OCCUPANTS
OBS. 3	49 NSF	4 OCCUPANTS
OBS. 4	48 NSF	4 OCCUPANTS
TOTAL OCCUPANTS		= 37

STORAGE (GSF/300) - STORAGE FURNITURE FF&E FOR REFERENCE ONLY - NET SF USED.

STORAGE 1	160 SF	1 OCCUPANT
STORAGE 2	98 SF	1 OCCUPANT
AV STORAGE	48 SF	1 OCCUPANT
TOTAL OCCUPANTS		= 3 (2 IN SUITE)

COLLABORATION ROOMS (UNDER 450 SF NSF/15 - OVER 450 SF = NSF/30)

APARTMENT 1	420/15 NSF	28 OCCUPANTS
APARTMENT 2	463/30 NSF	16 OCCUPANTS
APARTMENT 3	471/30 NSF	16 OCCUPANTS
APARTMENT 4	421/15 NSF	29 OCCUPANTS
TOTAL OCCUPANTS		= 89

SUITE OCCUPANTS = 128 IN SUITE (TWO MEANS OF EGRESS REQUIRED BY NFPA 101 7.4)

5. EGRESS REQUIREMENTS

	NFPA 101-2024	NFPA 101-2024	PROVIDED
EGRESS WIDTH AT DOORS:	2X128 = 25.6"	32" CLEAR MIN.	36" & 42" (32" CLEAR PROVIDED)
EGRESS WIDTH AT CORRIDORS:	2X128 = 25.6"	44" MIN.	48"

6. FIRE PROTECTION SYSTEM REQ:

IBC (903)
AUTOMATIC SPRINKLER (IBC 903): PROVIDED
PORTABLE FIRE EXTINGUISHERS: (1) PROVIDED WITHIN SUITE

7. MAXIMUM DEAD END DISTANCE:

USE GROUP	IBC	PROVIDED
B	50' MAX	NO DEAD END CORRIDORS

8. INTERIOR FINISH REQUIREMENTS:

IBC (TABLE 803.13): C
NFPA (CHAPTER 10): C

9. MAXIMUM TRAVEL DISTANCE:

EXIT ACCESS TRAVEL DISTANCE:	250'	167'
COMMON PATH OF TRAVEL:	100'	55' FROM BEDROOM 1
DEAD END DISTANCE:	50'	NO DEAD END CORRIDORS

10. MINIMUM CORRIDOR WIDTH:

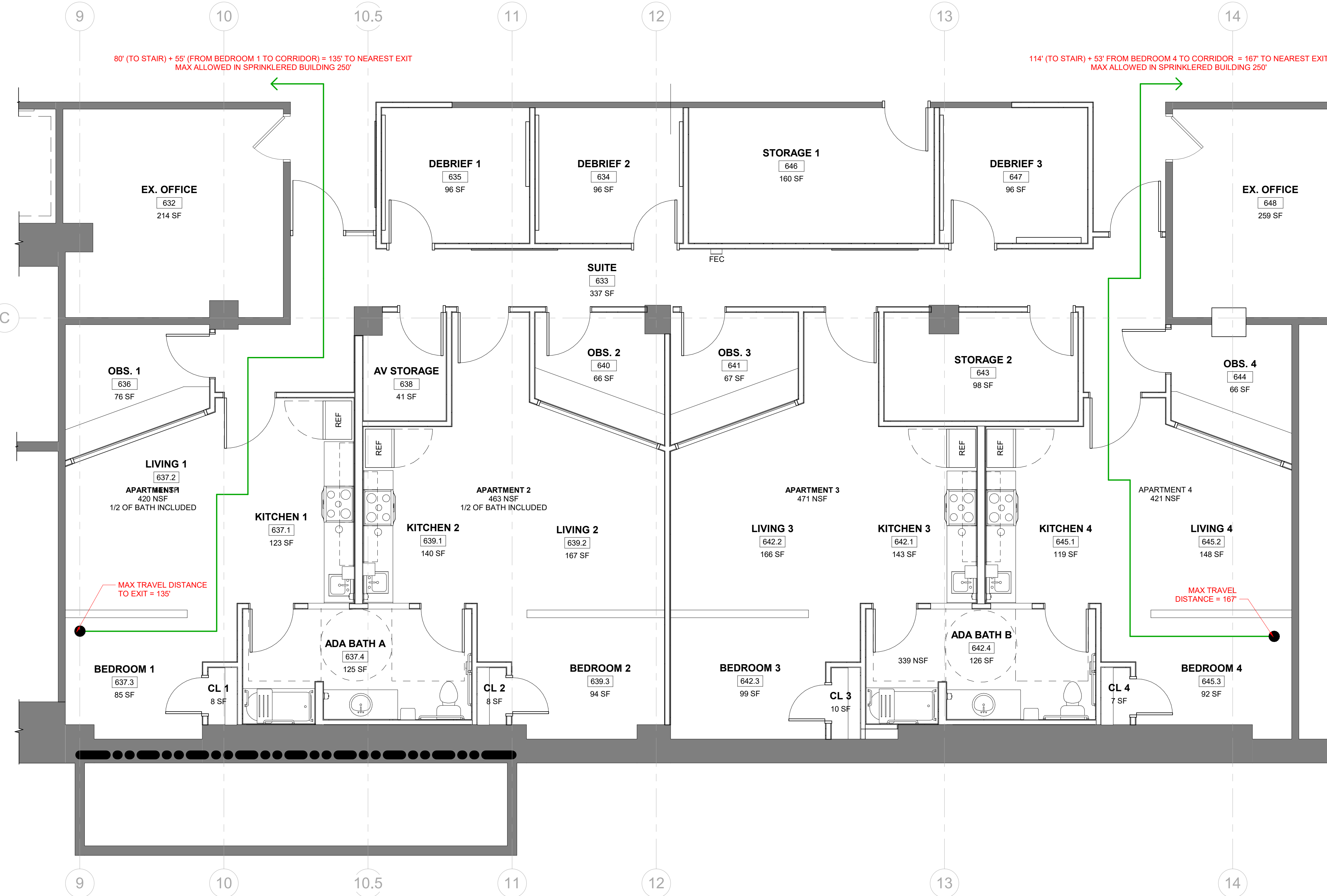
IBC (1020.3):	NFPA	PROVIDED
44"	44"	48"

11. PANIC HARDWARE:

IBC (1010.2.9)
REQUIRED - SPACES W/ AN OCCUPANT LOAD > 50 IN A OCCUPANCY

12. BUILDING FIRE RATINGS:

BUILDING TYPE	IBC 601-602
STRUCTURAL FRAME	IB
EXTERIOR BEARING WALL	2 HR
EXTERIOR NON-BEARING WALL	1 HR
FLOOR CONSTRUCTION	2 HR
ROOF CONSTRUCTION	1 HR
CORRIDORS	0 HR



1 6TH FLOOR PARTIAL - EGRESS PLAN
1/4" = 1'-0"



NO	DATE	ITEM
	2/07/26	100% CD SUBMISSION
	4/08/26	BID SET



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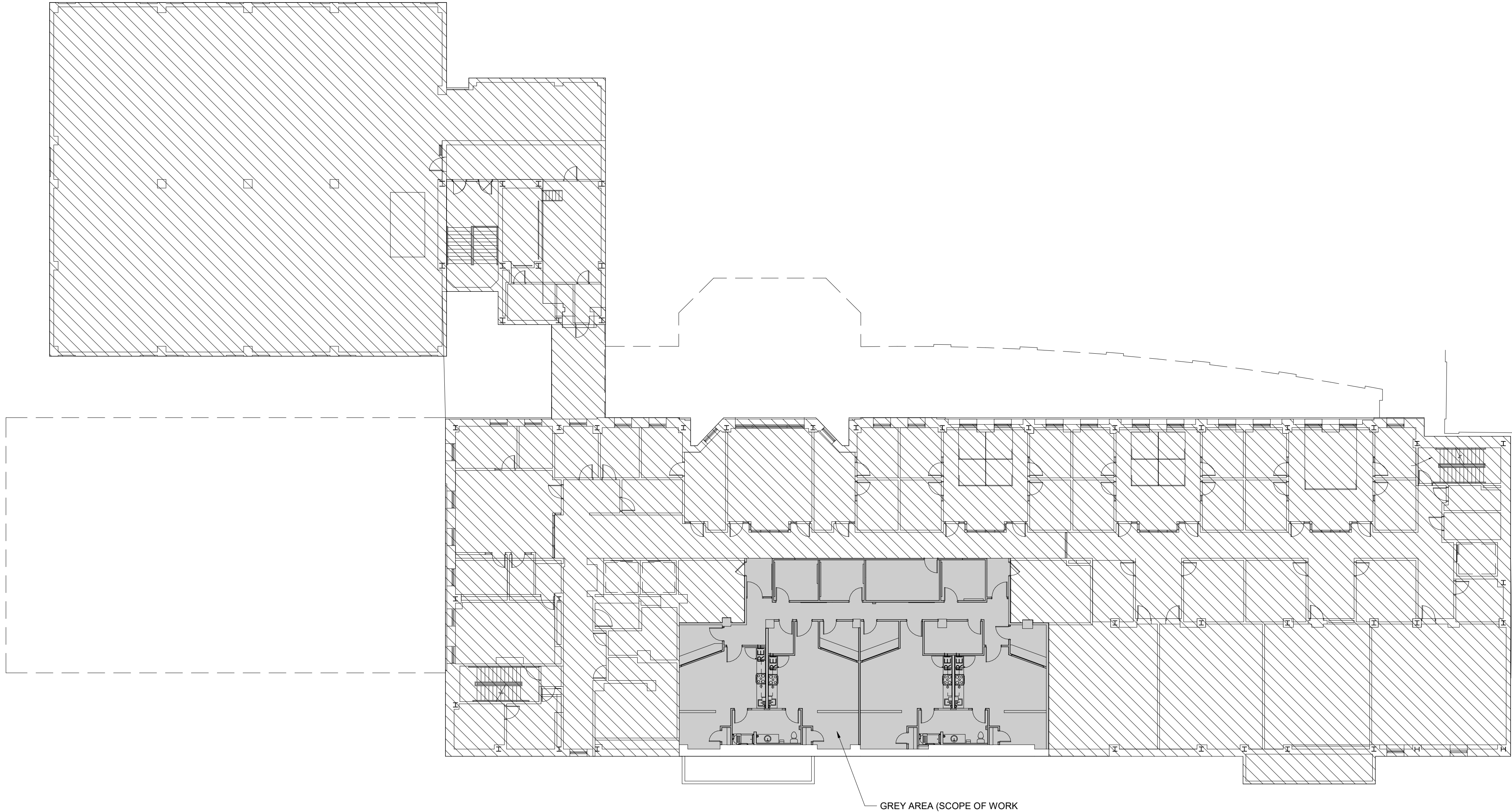
PROJECT TITLE :
**UMB SON
6TH FLOOR
APT. SIM.
RENOVATION**

UMB BUILDING NO. :	SON - 0833
UMB Project NO. :	26-312
A/E PROJECT NO. :	25-128
CAD FILE NO. :	
DATE :	

SHEET TITLE :
**OVERALL
FLOOR 6TH
FLOOR PLAN**

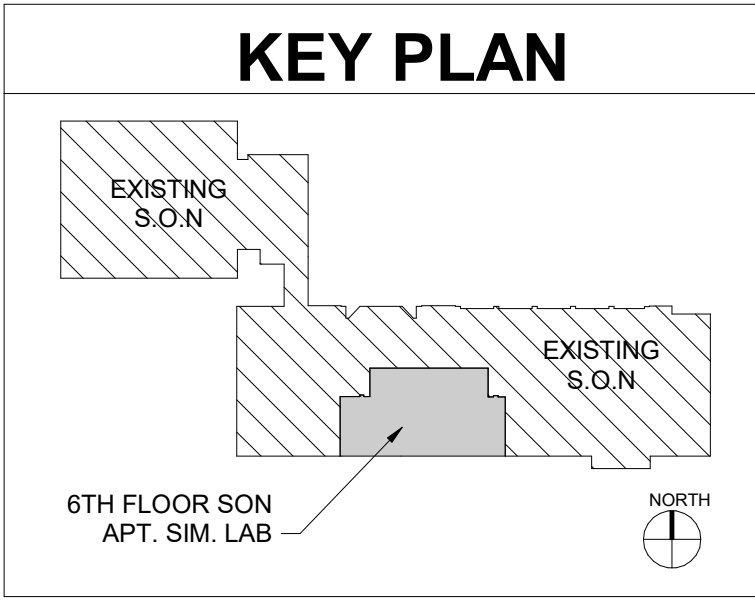
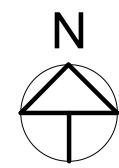
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SHEET NO.
AD-100

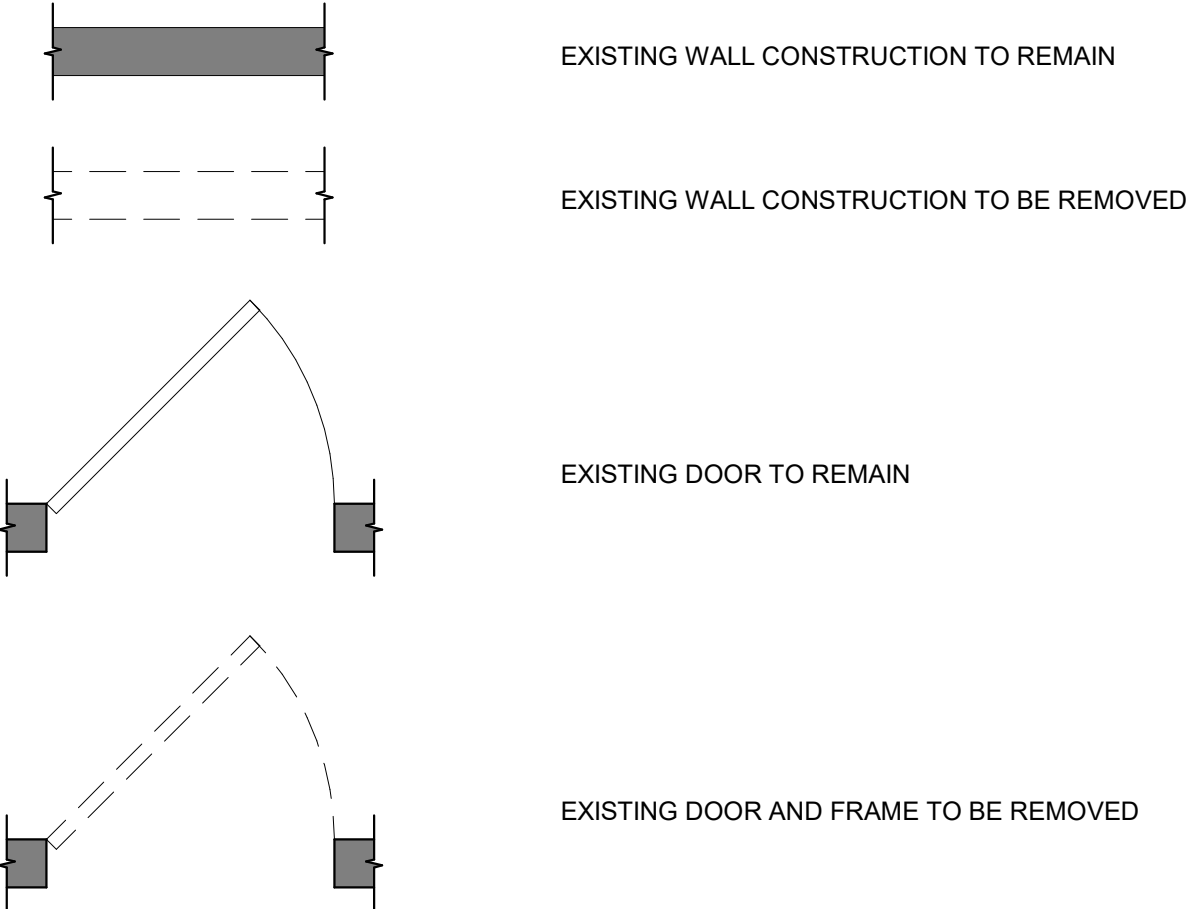


GREY AREA (SCOPE OF WORK)

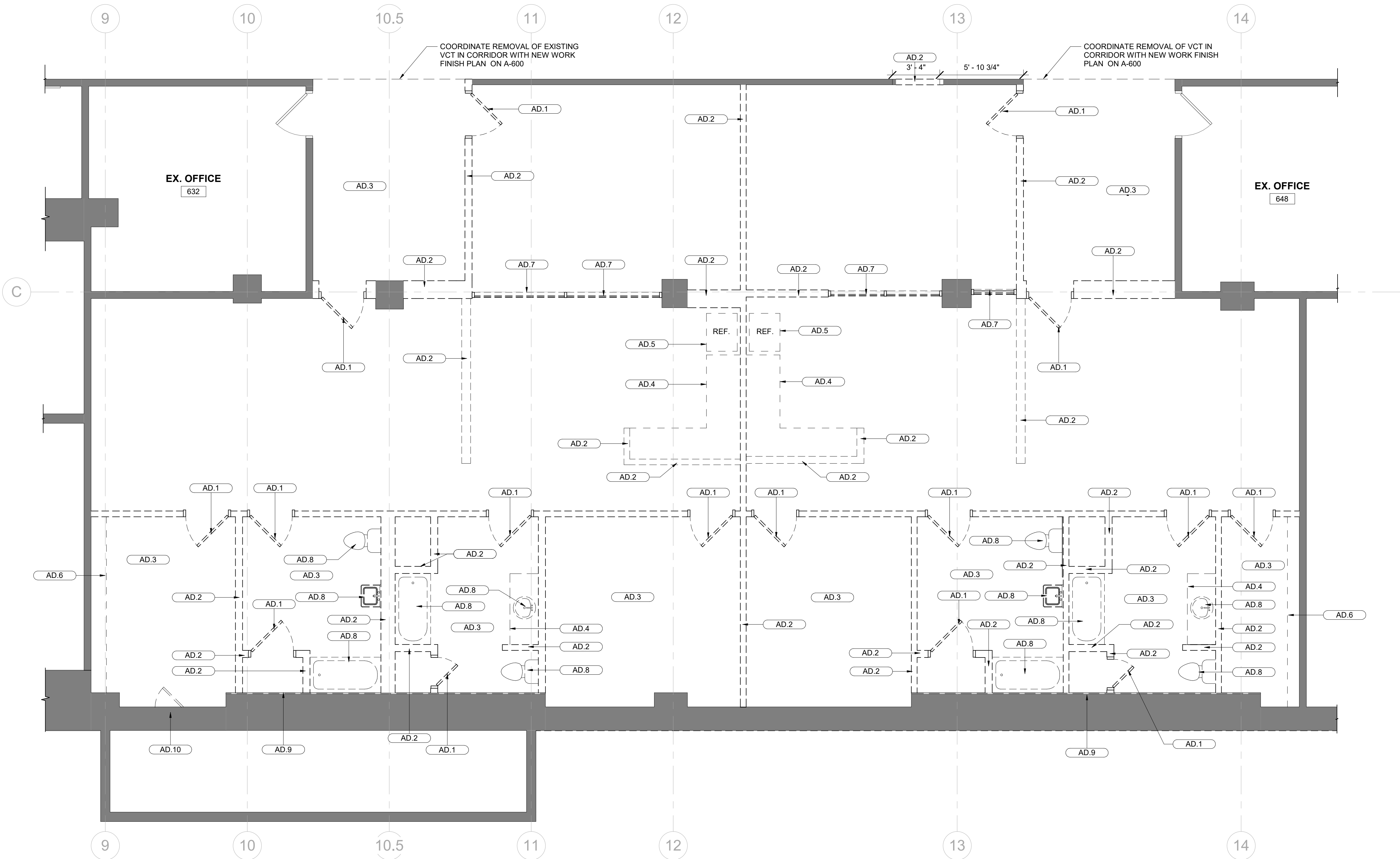
1 6TH FLOOR OVERALL PLAN
1/16" = 1'-0"



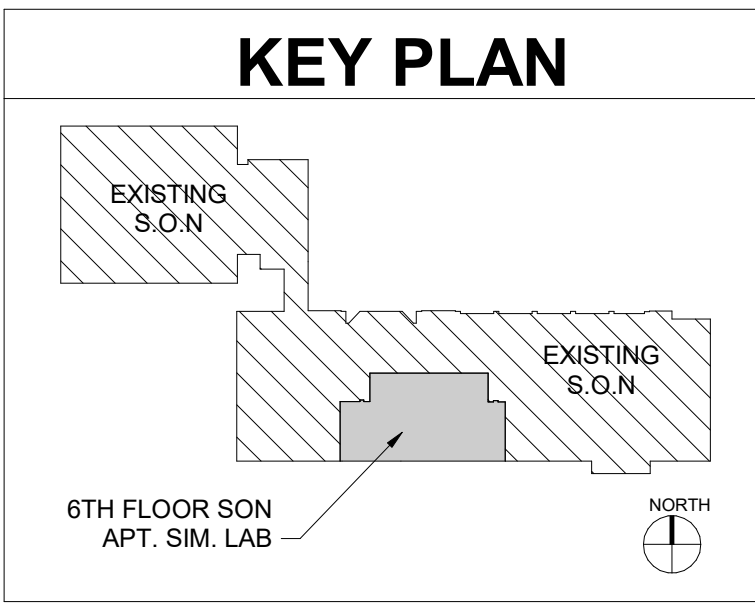
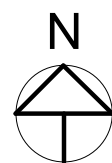
DEMOLITION LEGEND



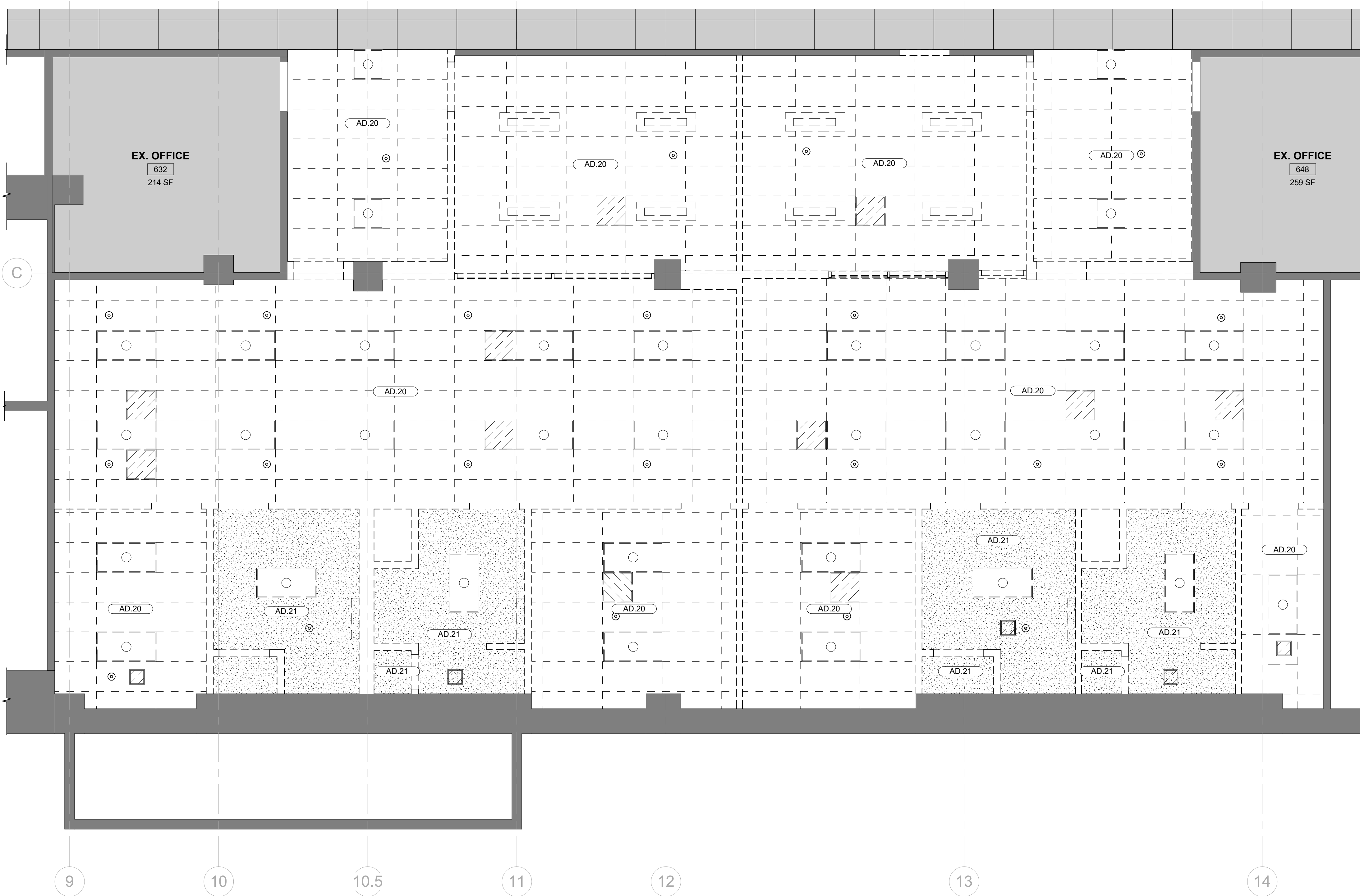
KEYNOTE LEGEND	
TAG	DESCRIPTION
AD.1	REMOVE EXISTING DOOR, FRAME AND HARDWARE.
AD.2	REMOVE EXISTING PARTITION AS SHOWN.
AD.3	REMOVE EXISTING FLOOR FINISHING , WALL BASE, AND ALL MASTICS/GLUE THROUGHOUT ENTIRE SUITE. PREPARE FLOOR SLAB FOR NEW WORK.
AD.4	REMOVE EXISTING CASEWORK IN ITS ENTIRETY.
AD.5	REMOVE EXISTING KITCHEN APPLIANCES.
AD.6	REMOVE EXISTING WALL MOUNTED SHELVING. PATCH & REPAIR EXISTING WALL FOR NEW WORK.
AD.7	REMOVE EXISTING ONE WAY GLASS STOREFRONT IN ITS ENTIRETY.
AD.8	REMOVE EXISTING RESTROOM FIXTURES. REFER TO PLUMBING DRAWINGS FOR DETAILS.
AD.9	REMOVE EXISTING DRYWALL & FINISH IN THEIR ENTIRETY.
AD.10	REMOVE SHAFT ACCESS PANEL AND HARDWARE. RETAIN ROUGH OPENING, PREPARE FOR NEW ACCESS PANEL INSTALLATION. EXISTING TRIM TO REMAIN.



1 6TH FLOOR PARTIAL - DEMOLITION PLAN
1/4" = 1'-0"



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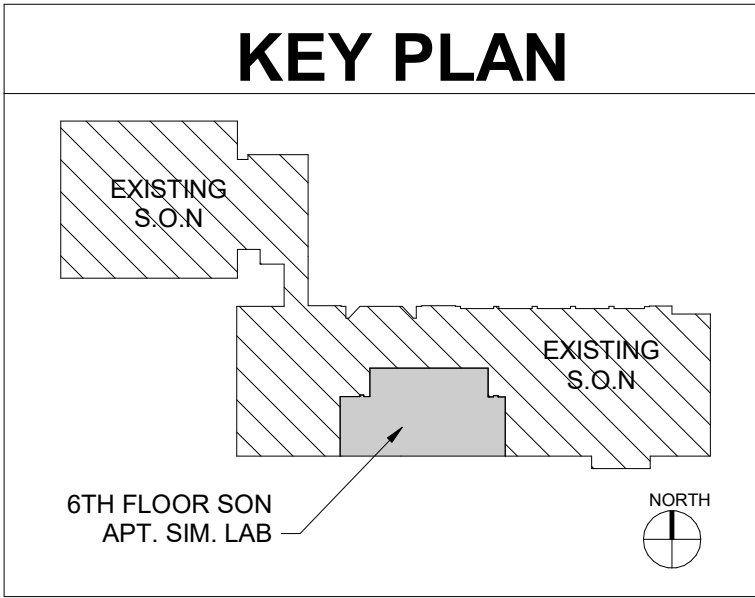


1 6TH FLOOR PARTIAL - RCP DEMOLITION PLAN
1/4" = 1'-0"

KEYNOTE LEGEND	
TAG	DESCRIPTION
AD.20	REMOVE EXISTING ACT CEILING & GRID.
AD.21	REMOVE EXISTING GWB CEILING AND ALL ASSOCIATED FRAMING.

DEMO REFELCTED CEILING PLAN LEGEND	
	ACOUSTICAL CEILING TILE (ACT)
	PTD. GYPSUM WALL BOARD (GWB)
	EXISTING TO REMAIN

DEMO FIXTURE LEGEND COORD. W/ MEP DWGS	
	REMOVE EXISTING 2X4 RECESSED DOWNLIGHT
	REMOVE EXISTING 2X2 RECESSED DOWNLIGHT
	RELOCATE EXISTING SPRINKLER HEAD
	REMOVE EXISTING CEILING MTD. PENDANT
	REMOVE EXISTING WALL MTD. VANITY LIGHT
	REMOVE EXISTING DIFFUSER



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Murphy & Dittenhafer
ARCHITECTS

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PROJECT TITLE :
**UMB SON
6TH FLOOR
APT. SIM.
RENOVATION**

UMB BUILDING NO. : SON - 0833
UMB Project NO. : 26-312
A/E PROJECT NO. : 25-128
CAD FILE NO. :
DATE :

SHEET TITLE :
**6TH FLOOR
PARTIAL - RCP
DEOMLITION**

REVISIONS		
NO	DATE	ITEM
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	4/08/26	BID SET

SHEET NO.
AD-102



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PROJECT TITLE :
UMB SON 6TH FLOOR APT. SIM. RENOVATION

UMB BUILDING NO. : SON - 0833
UMB Project NO. : 26-312
A/E PROJECT NO. : 25-128
CAD FILE NO. :
DATE :

SHEET TITLE :
REFLECTED CEILING PLANS

REVISIONS

NO	DATE	ITEM
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	4/08/26	BID SET

SHEET NO.
A-102

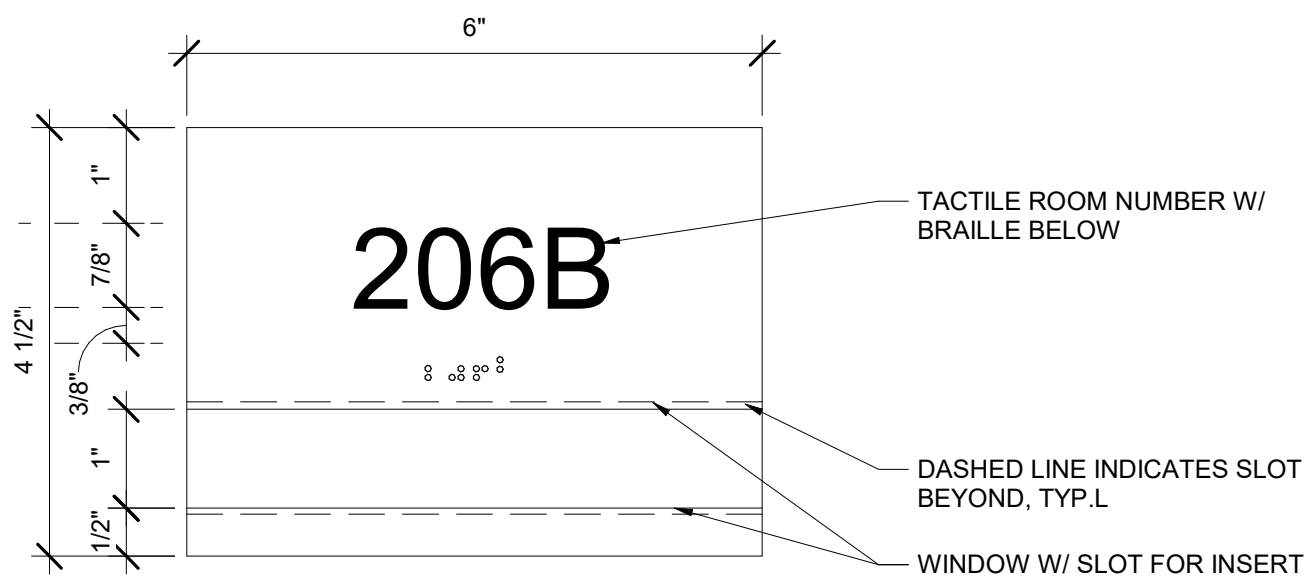
ROOM FINISH SCHEDULE																
ROOM NUMBER	ROOM NAME	FLOOR	BASE	WALLS								CEILING	SIGNAGE	REMARKS		
		TAG	TAG	NORTH		EAST		SOUTH		WEST		FINISH				
				MATERIAL	FINISH	MATERIAL	FINISH	MATERIAL	FINISH	MATERIAL	FINISH					
632	EX. OFFICE	EXIST.	EXIST.	EXIST.	EXIST.	EXIST.	EXIST.	EXIST.	EXIST.	EXIST.	EXIST.	EXIST.	EXIST.			
633	SUITE	LVT-1	RB-1	GWB	PT-1	GWB	PT-1	GWB	PT-1	GWB	PT-1	ACT-1	---			
634	DEBRIEF 2	CPT-1	RB-1	GWB	PT-1	GWB	PT-1	GWB	PT-1	GWB	PT-1	ACT-1	A.03	SIGN TEXT = DEBRIEFING ROOM 2		
635	DEBRIEF 1	CPT-1	RB-1	GWB	PT-1	GWB	PT-1	GWB	PT-1	GWB	PT-1	ACT-1	A.03	SIGN TEXT = DEBRIEFING ROOM 1		
636	OBS. 1	CPT-1	RB-1	GWB	PT-1	GWB	PT-1	GWB	PT-1	GWB	PT-1	ACT-1	A.03	SIGN TEXT = OBSERVATION ROOM 1		
637.1	KITCHEN 1	LVT-1	RB-1	GWB	PT-1	GWB	PT-1	GWB	PT-1	GWB	PT-1	ACT-1	A.03	SIGN TEXT = APT. SIM. LAB 1 @ ENTRY DOOR		
637.2	LIVING 1	CPT-1	RB-1	GWB	PT-1	GWB	PT-1	GWB	PT-1	GWB	PT-1	ACT-1	N/A			
637.3	BEDROOM 1	CPT-1	RB-1	GWB	PT-1	GWB	PT-1	GWB	PT-1	GWB	PT-1	ACT-1	N/A			
637.4	ADA BATH A	CT-1	CT-1A	GWB	PT-1	GWB	PT-1	GWB	PT-1	GWB	PT-1	PTD. PT-1 GWB	N/A	MOLD & MOISTURE RESISTANT GWB IN RESTROOMS		
638	AV STORAGE	LVT-1	RB-1	GWB	PT-1	GWB	PT-1	GWB	PT-1	GWB	PT-1	ACT-1	A.03	SIGN TEXT = AV STORAGE		
639.1	KITCHEN 2	LVT-1	RB-1	GWB	PT-1	GWB	PT-1	GWB	PT-1	GWB	PT-1	ACT-1	A.03	SIGN TEXT = APT. SIM. LAB 2 @ ENTRY DOOR		
639.2	LIVING 2	CPT-2	RB-1	GWB	PT-1	GWB	PT-1	GWB	PT-1	GWB	PT-1	ACT-1	N/A	GWB SOFFIT @ ENTRY SEE RCP PLAN		
639.3	BEDROOM 2	CPT-2	RB-1	GWB	PT-1	GWB	PT-1	GWB	PT-1	GWB	PT-1	ACT-1	N/A			
640	OBS. 2	CPT-2	RB-1	GWB	PT-1	GWB	PT-1	GWB	PT-1	GWB	PT-1	ACT-1	A.03	SIGN TEXT = OBSERVATION ROOM 2		
641	OBS. 3	CPT-3	RB-1	GWB	PT-1	GWB	PT-1	GWB	PT-1	GWB	PT-1	ACT-1	A.03	SIGN TEXT = OBSERVATION ROOM 3		
642.1	KITCHEN 3	LVT-1	RB-1	GWB	PT-1	GWB	PT-1	GWB	PT-1	GWB	PT-1	ACT-1	A.03	SIGN TEXT = APT. SIM. LAB 3 @ ENTRY DOOR		
642.2	LIVING 3	CPT-3	RB-1	GWB	PT-1	GWB	PT-1	GWB	PT-1	GWB	PT-1	ACT-1	N/A	GWB SOFFIT @ ENTRY SEE RCP PLAN		
642.3	BEDROOM 3	CPT-3	RB-1	GWB	PT-1	GWB	PT-1	GWB	PT-1	GWB	PT-1	ACT-1	N/A			
642.4	ADA BATH B	CT-1	CT-1A	GWB	PT-1	GWB	PT-1	GWB	PT-1	GWB	PT-1	PTD. PT-1 GWB	N/A	MOLD & MOISTURE RESISTANT GWB IN RESTROOMS		
643	STORAGE 2	LVT-1	RB-1	GWB	PT-1	GWB	PT-1	GWB	PT-1	GWB	PT-1	ACT-1	A.03	SIGN TEXT = STORAGE		
644	OBS. 4	CPT-4	RB-1	GWB	PT-1	GWB	PT-1	GWB	PT-1	GWB	PT-1	ACT-1	A.03	SIGN TEXT = OBSERVATION ROOM 4		
645.1	KITCHEN 4	LVT-1	RB-1	GWB	PT-1	GWB	PT-1	GWB	PT-1	GWB	PT-1	ACT-1	A.03	SIGN TEXT = APT. SIM. LAB 4 @ ENTRY DOOR		
645.2	LIVING 4	CPT-4	RB-1	GWB	PT-1	GWB	PT-1	GWB	PT-1	GWB	PT-1	ACT-1	N/A			
645.3	BEDROOM 4	CPT-4	RB-1	GWB	PT-1	GWB	PT-1	GWB	PT-1	GWB	PT-1	ACT-1	N/A			
646	STORAGE 1	LVT-1	RB-1	GWB	PT-1	GWB	PT-1	GWB	PT-1	GWB	PT-1	ACT-1	A.01	SIGN TEXT = STORAGE		
647	DEBRIEF 3	CPT-1	RB-1	GWB	PT-1	GWB	PT-1	GWB	PT-1	GWB	PT-1	ACT-1	A.03	SIGN TEXT = DEBRIEFING ROOM 3		
648	EX. OFFICE	EXIST.	EXIST.	EXIST.	EXIST.	EXIST.	EXIST.	EXIST.	EXIST.	EXIST.	EXIST.	EXIST.	EXIST.			
649.1	FOYER A	VCT-1	RB-2	N/A	N/A	EXIST GWB	PT-1	GWB	PT-1	EXIST GWB	PT-1	PTD. PT-1 GWB	N/A	NEW FOYER WALLS TO MATCH EXIST CORRIDOR REVEAL		
649.2	FOYER B	VCT-1	RB-2	N/A	N/A	EXIST GWB	PT-1	GWB	PT-1	EXIST GWB	PT-1	PTD. PT-1 GWB	N/A	NEW FOYER WALLS TO MATCH EXIST CORRIDOR REVEAL		
650	CL 1	CPT-1	RB-1	GWB	PT-1	GWB	PT-1	GWB	PT-1	GWB	PT-1	PTD. PT-1 GWB	N/A			
651	CL 2	CPT-2	RB-1	GWB	PT-1	GWB	PT-1	GWB	PT-1	GWB	PT-1	PTD. PT-1 GWB	N/A			
652	CL 3	CPT-3	RB-1	GWB	PT-1	GWB	PT-1	GWB	PT-1	GWB	PT-1	PTD. PT-1 GWB	N/A			
653	CL 4	CPT-4	RB-1	GWB	PT-1	GWB	PT-1	GWB	PT-1	GWB	PT-1	PTD. PT-1 GWB	N/A			

FINISH TYPE SCHEDULE					
TAG	FINISH	MANUFACTURER	STYLE/TYPE	SIZE	COMMENTS
CPT-1	CARPET	J + J	ADAPT - AZURE BEAM	24X24	
CPT-2	CARPET	J + J	ADAPT - CITRUS OASIS	24X24	
CPT-3	CARPET	J + J	ADAPT - BRICK PATH	24X24	
CPT-4	CARPET	J + J	ADAPT - PLUM PATH	24X24	
VCT-1	VINYL COMPOSITION TILE	MATCH EXISTING	MATCH EXISTING	12X12	UTILIZE ATTIC STOCK. COORD. WITH UMB
VCT-2	VINYL COMPOSITION TILE	MATCH EXISTING	MATCH EXISTING	12X12	UTILIZE ATTIC STOCK. COORD. WITH UMB
LVT-1	LUXURY VINYL TILE	ARMSTRONG FLOORING	AVILA OAK VIENNA SMOKE	6X36	NA193 - INSTALLATION: PLANK
RB-1	RUBBER BASE	ROPPE	193 BLACK BROWN	4"	
RB-2	RUBBER BASE	ROPPE	100 BLACK	4"	TO MATCH EXISTING BASE IN CORRIDOR
ACT	ACOUSTIC TILE	ARMSTRONG	ULTIMA 1910 CLASS A	24X24	TEGULAR EDGE LAY-IN
SSM-1	SOLID SURFACE	CORIAN	TITANIUM	VARIES	
P-LAM-1	PLASTIC LAMINATE	WILSONART	SUMNER OAK - MATTE	VARIES	
PT-1	PAINT	SHERWIN WILLIAMS	9549 TOUCH OF GREY	N/A	EGGSHELL SHEEN (ALL WALLS)
CT-1	CERAMIC TILE	GARDEN STATE TILE	CLAYS - BEIGE	12X24	FLOOR TILE, 1/3 OFFSET LENGTH OF ROOM
CT-1A	CERAMIC TILE BASE	GARDEN STATE TILE	CLAYS - DARK GRAY	2.4X24	BULLNOZE BASE - MATTE/RECTIFIED HONED

EXISTING ENTRY TO SUITE

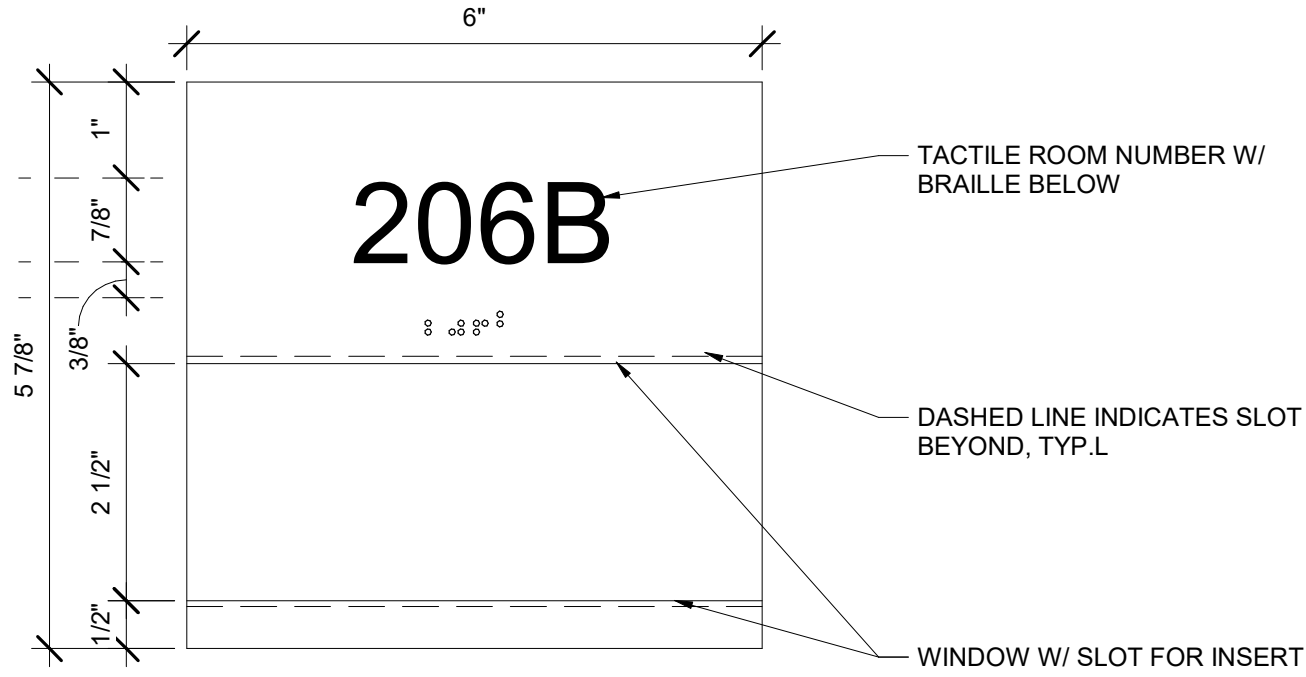


1 6TH FLOOR PARTIAL - APT. SIM. LAB FLOOR FINISH PLAN
3/16" = 1'-0"



TYPE A.01 ROOM NUMBER SIGN
(SINGLE WINDOW FOR ONE INSERT)

NAME AND NUMBER FOR EXAMPLE ONLY. SEE
FINISH SCHEDULE FOR TEXT

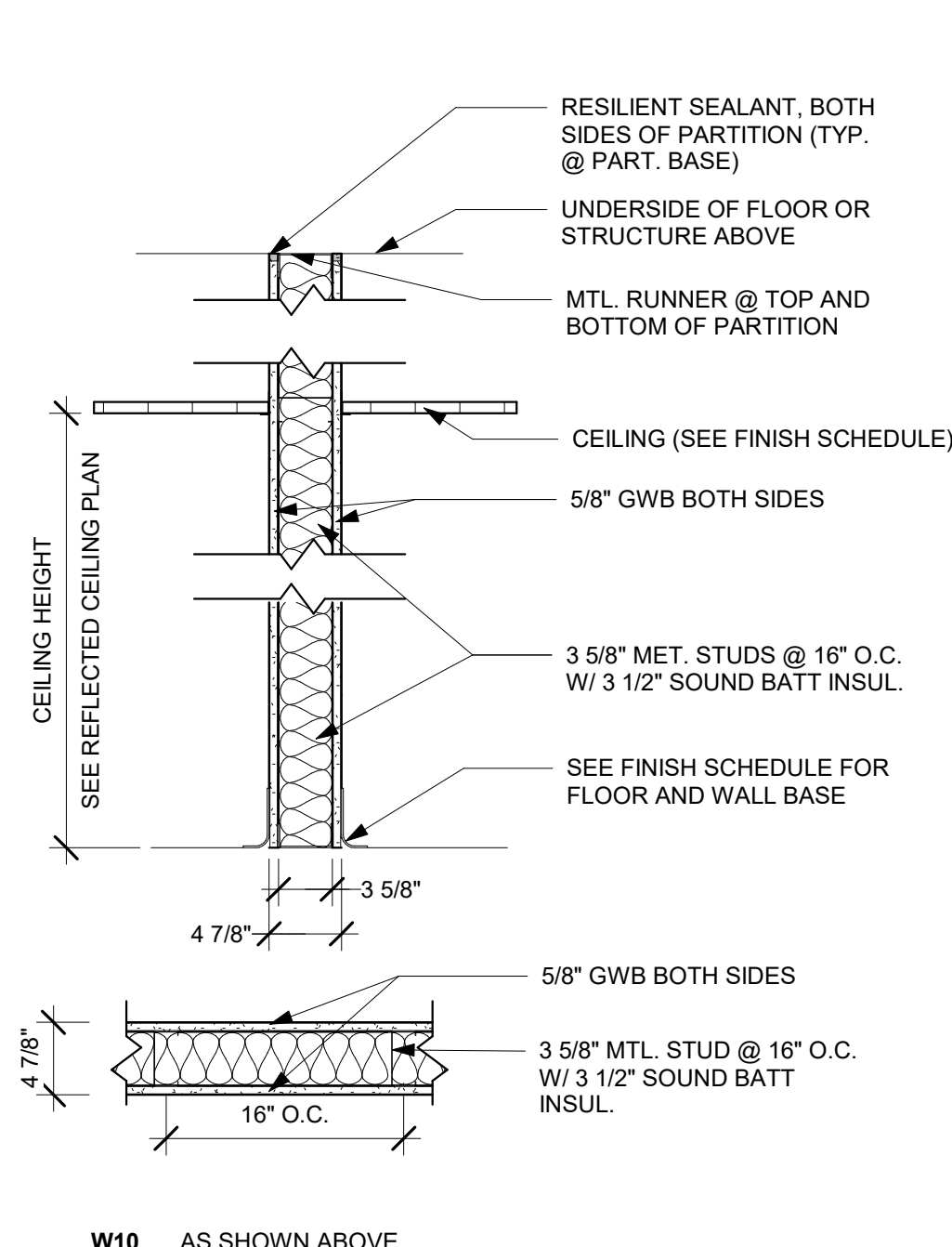
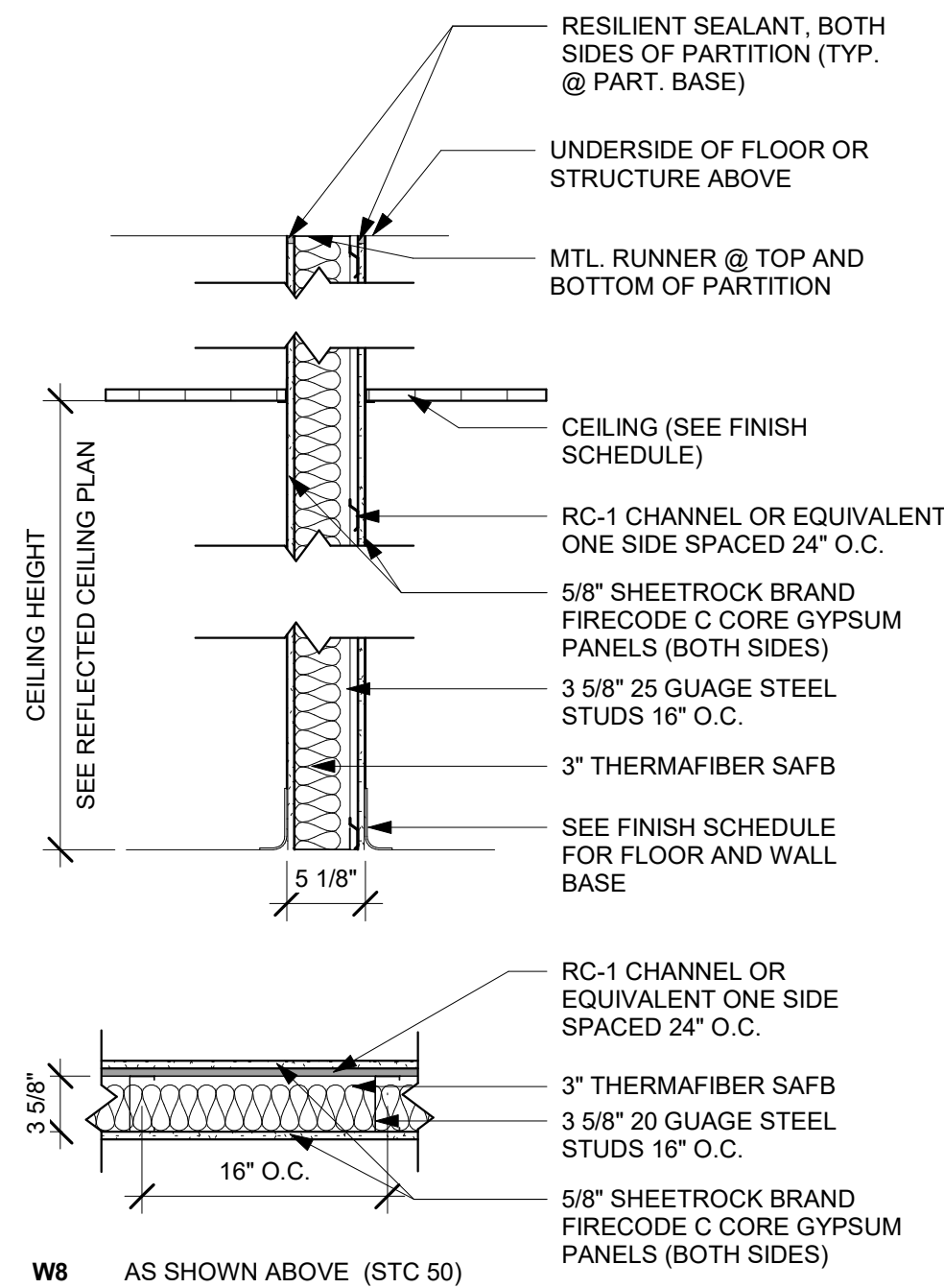
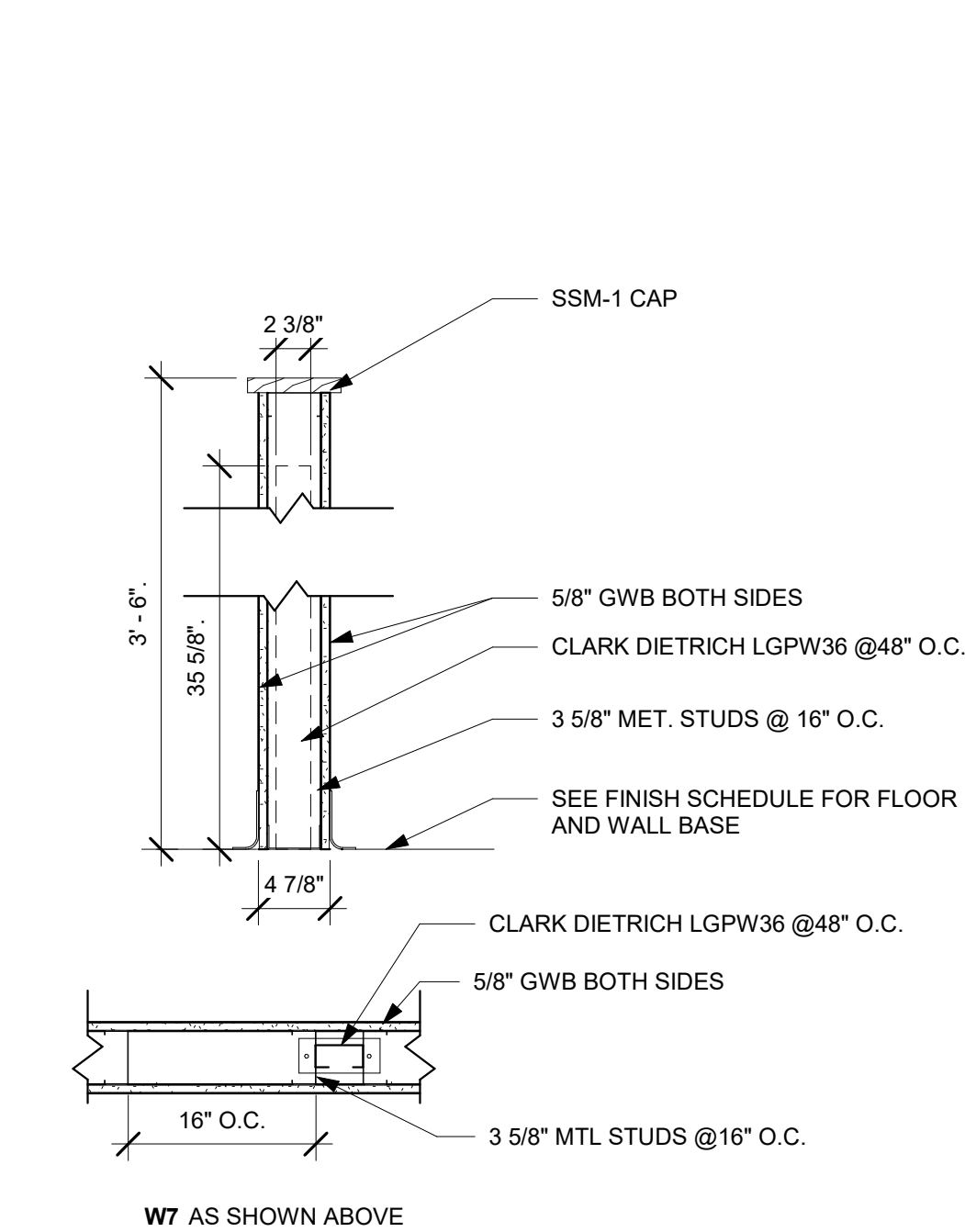
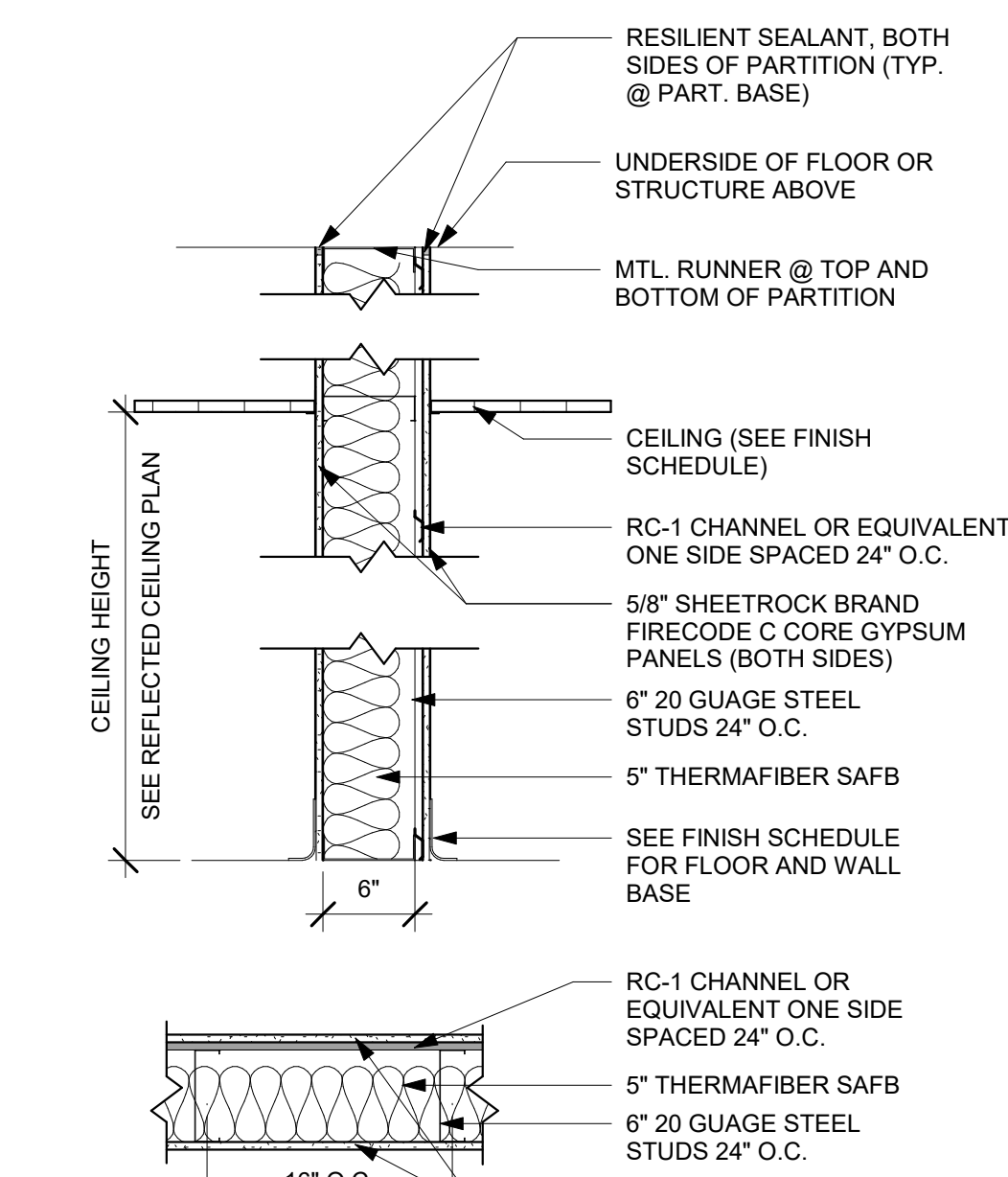
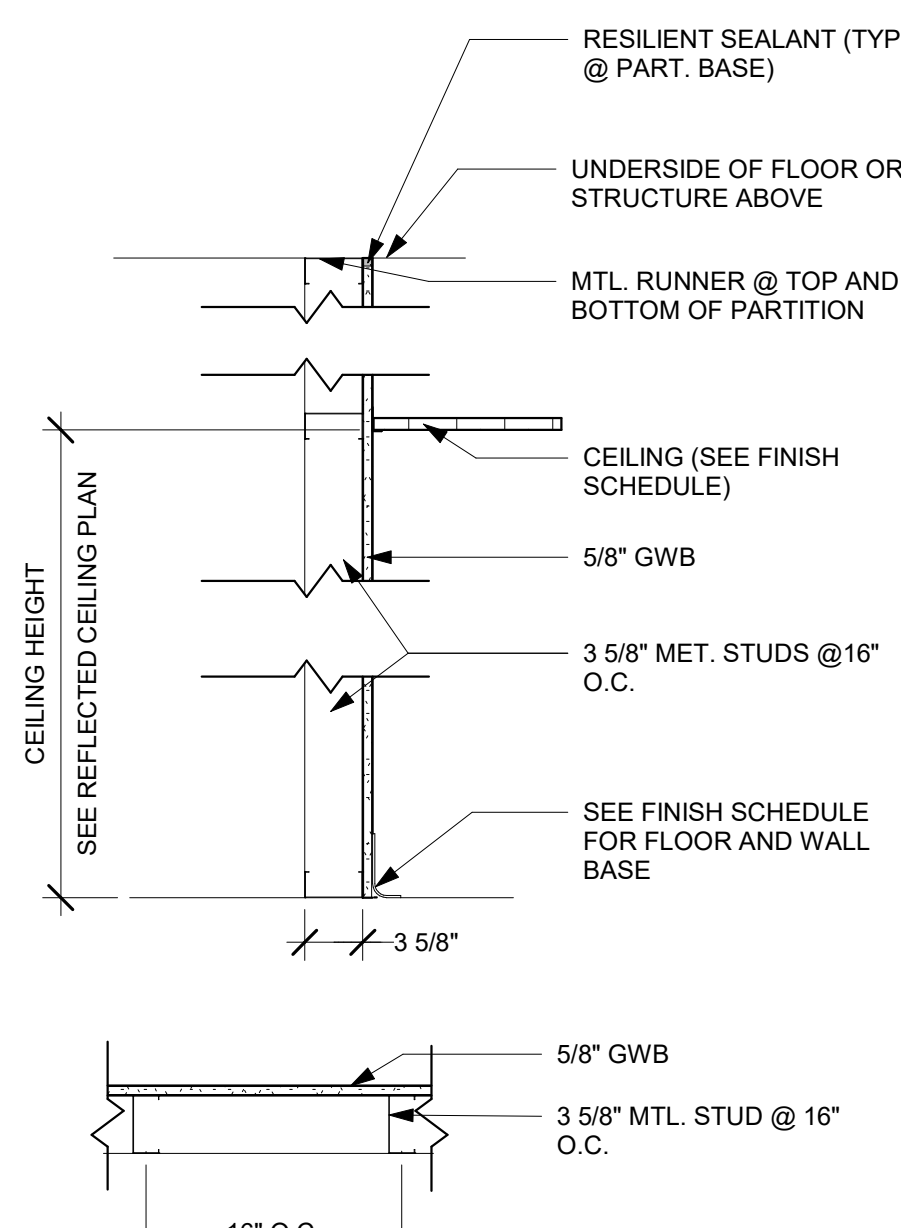
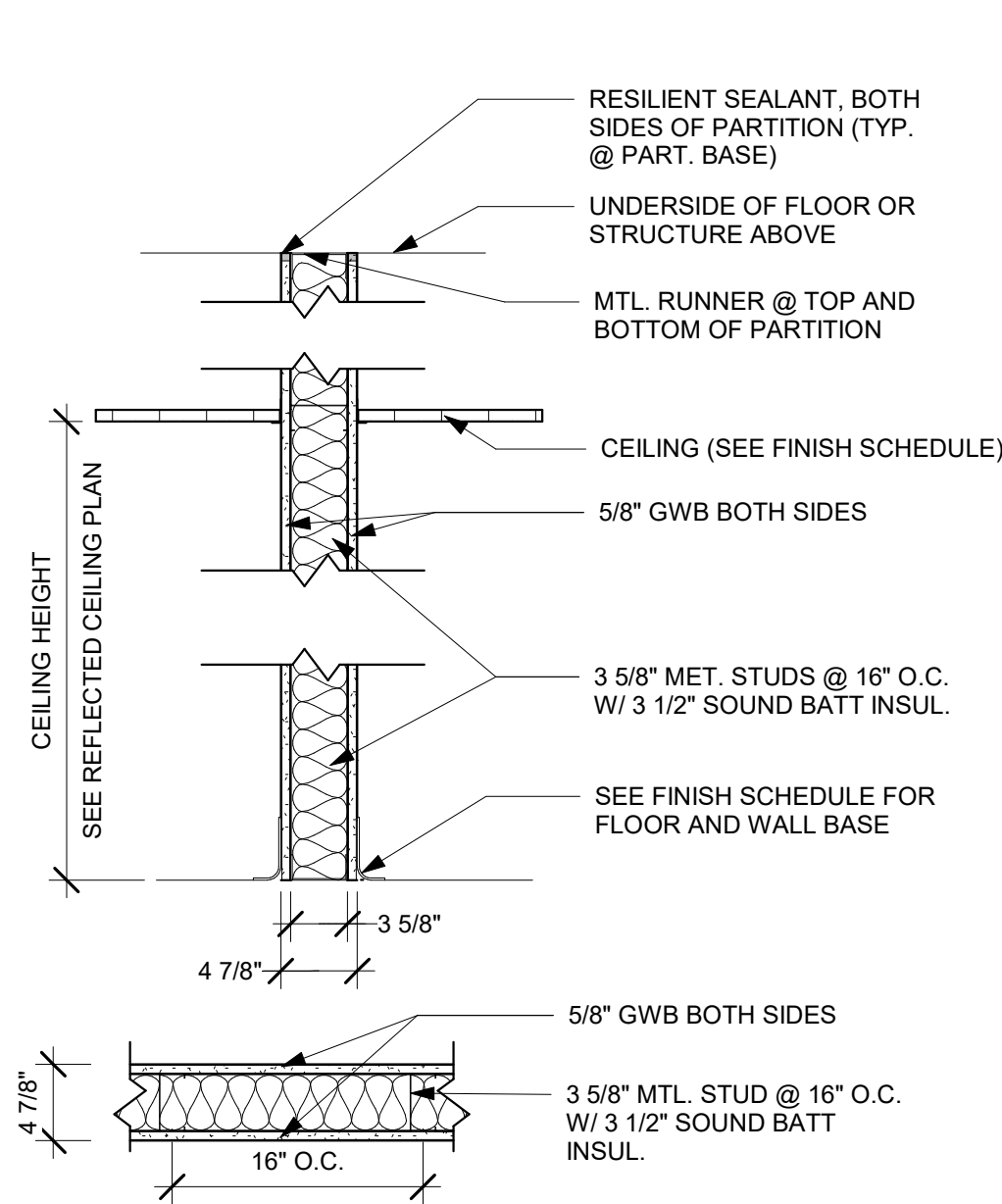


TYPE A.03 ROOM NUMBER SIGN
(TALL WINDOW FOR TALL INSERT)

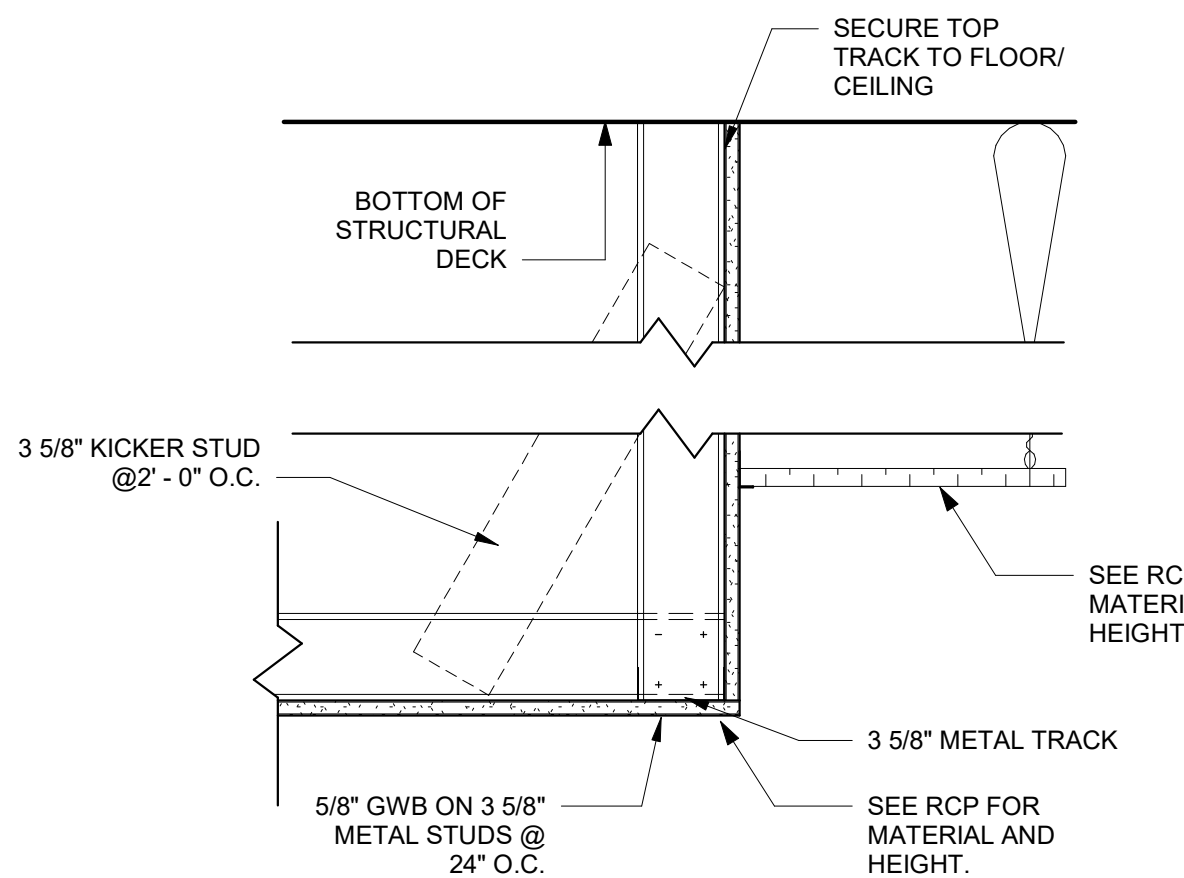
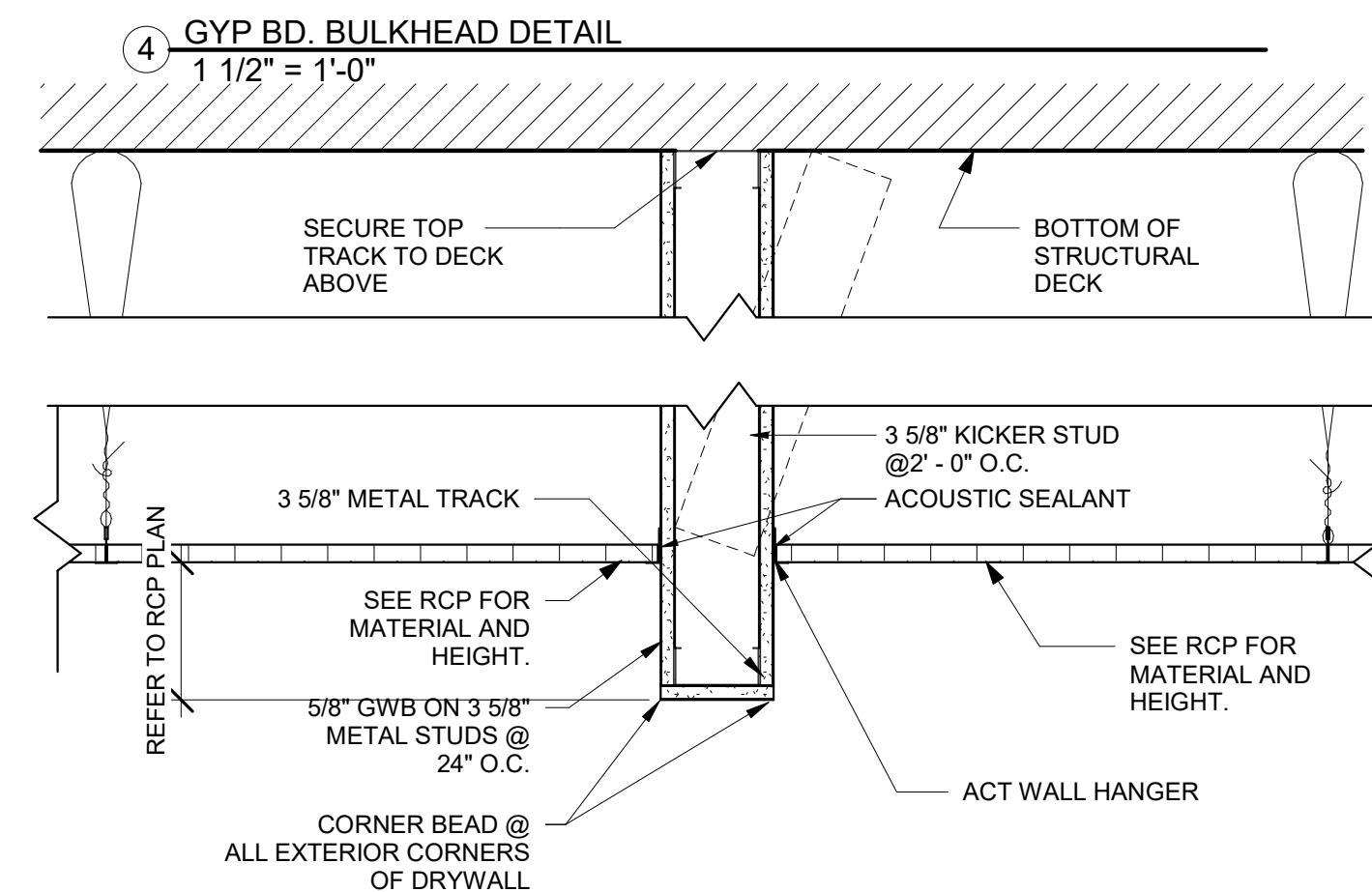
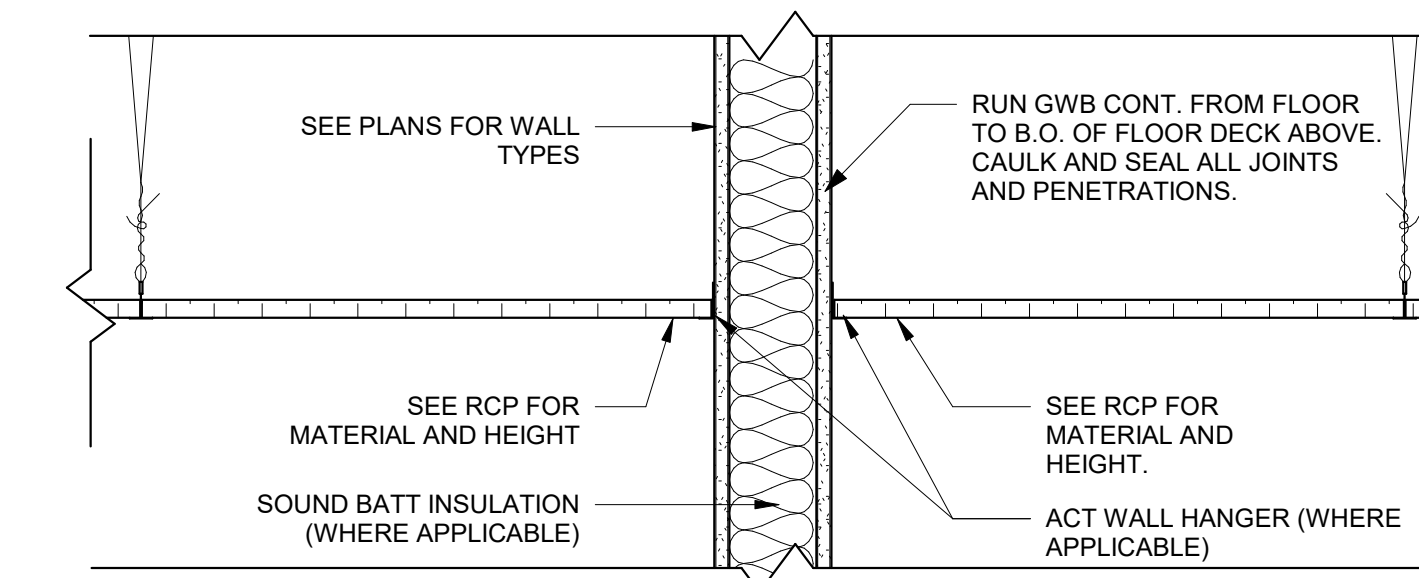
TYPICAL SIGNAGE ELEVATIONS

REVISIONS		
NO	DATE	ITEM
	2/07/26	100% CD SUBMISSION
	4/08/26	BID SET

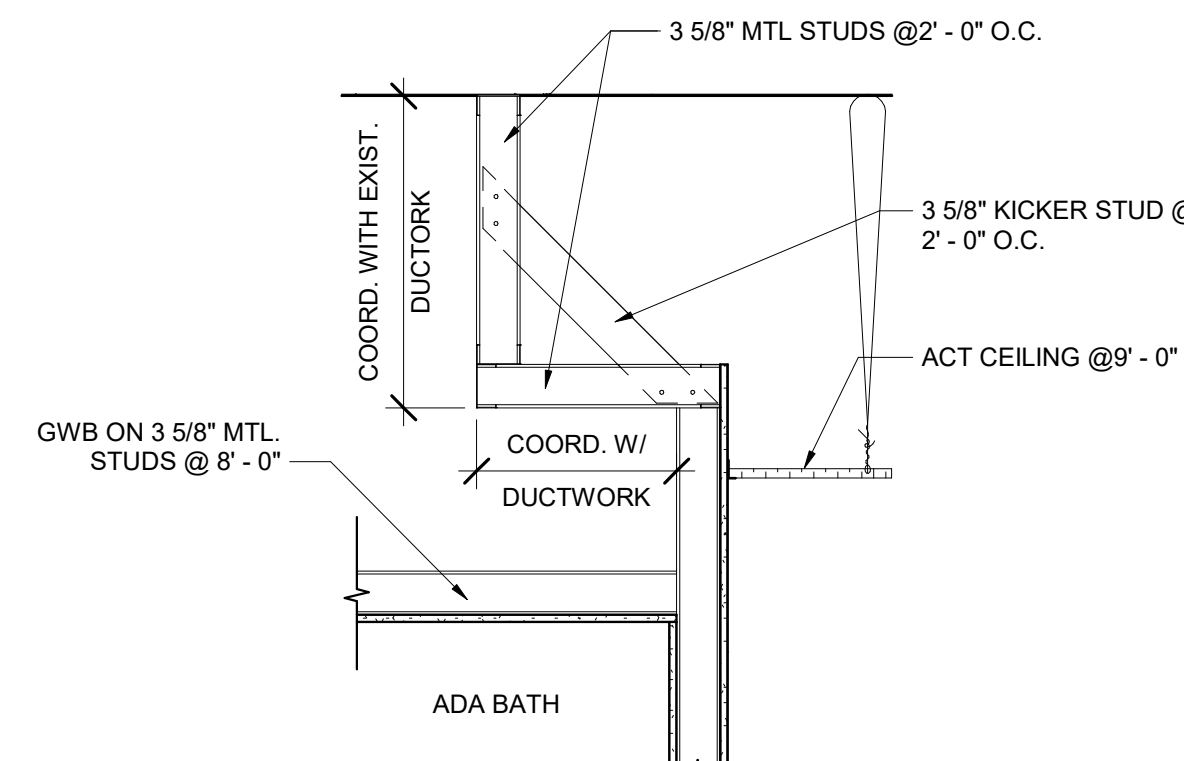
1 WALL TYPES
1" = 1'-0"



2 TYPICAL ACT DETAIL @ WALL
1 1/2" = 1'-0"



3 SECTION DETAIL @ ACT CEILING TRANSITION
1 1/2" = 1'-0"



5 SECTION @ JOGGED WALL
3/4" = 1'-0"



PROFESSIONAL CERTIFICATION, I HEREBY CERTIFY THAT THESE DOCUMENTS WERE PREPARED OR APPROVED BY ME, AND THAT I AM A DULY LICENSED PROFESSIONAL ENGINEER UNDER THE LAWS OF THE STATE OF MARYLAND.
LICENSE No. _____ EXPIRATION DATE: _____

REGISTRATION / STAMP

PROJECT TITLE :
**UMB SON
6TH FLOOR
APT. SIM.
RENOVATION**

UMB BUILDING NO. : SON - 0833
UMB Project NO. : 26-312
A/E PROJECT NO. : 25-128
CAD FILE NO. :
DATE :

SHEET TITLE :
**WALL TYPES &
CEILING
DETAILS**

REVISIONS		
NO	DATE	ITEM
	2/07/26	100% CD SUBMISSION
	4/08/26	BID SET

SHEET NO.
A-601

4 ONE WAY MIRROR STOREFRONT @ OBSERVATION 1-4
1/2" = 1'-0"

3 TYPICAL ALUMINUM STOREFRONT JAMB DETAILS
1 1/2" = 1'-0"

② HOLLOW METAL TYPICAL DOOR HEADER DETAILS
1 1/2" = 1'-0"

① HOLLOW METAL DOOR TYP. JAMBS
1 1/2" = 1'-0"

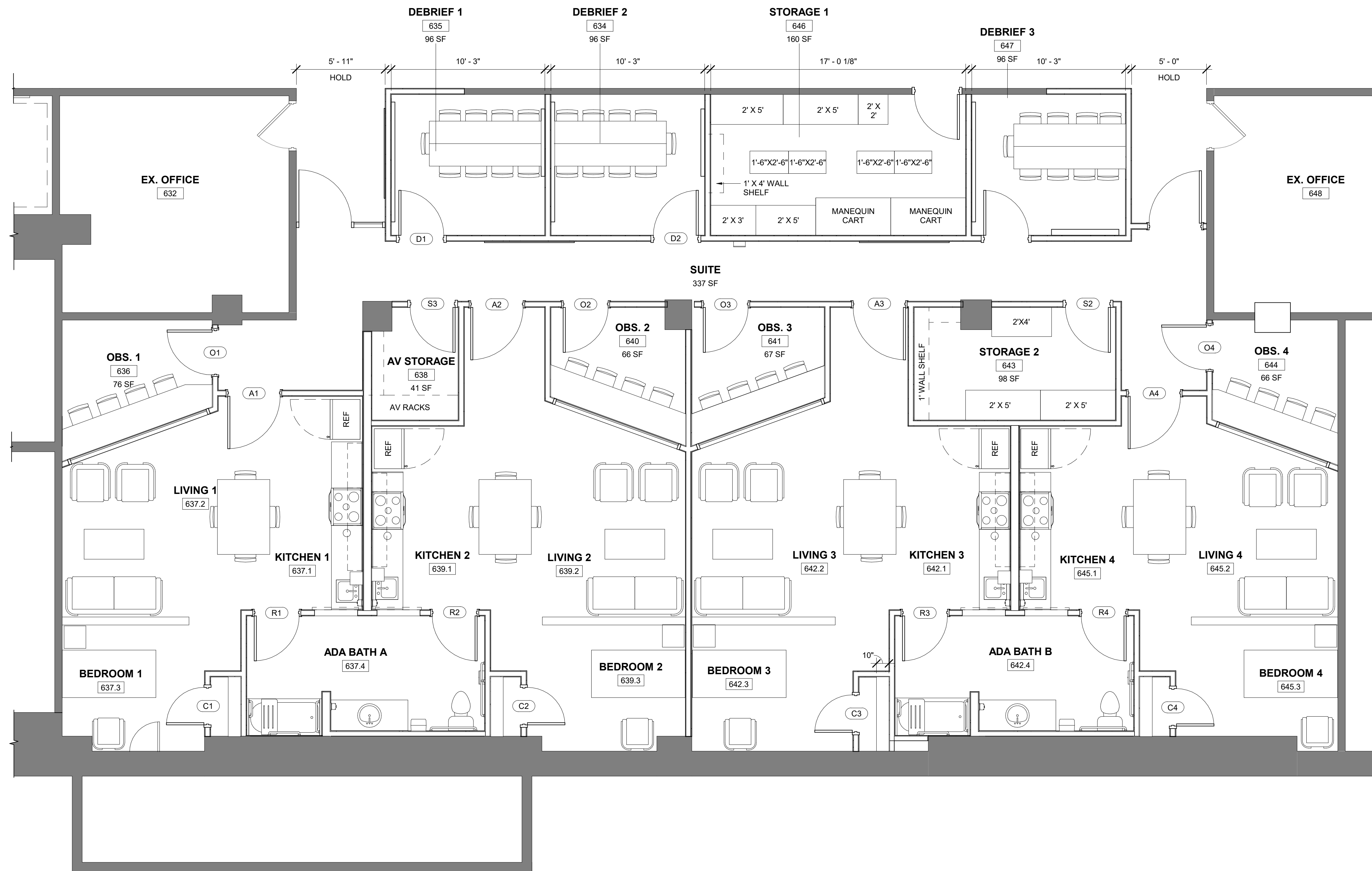
5 FOYER STOREFRONT ELEVATION
1/2" = 1'-0"

ABBREVIATIONS
HM = HOLLOW METAL
PTD. PAINTED

DOOR TAG ABBREVIATIONS
A = APARTMENT ENTRY
B = SUITE ENTRY DOOR
C = BEDROOM CLOSET
D = DEBRIEF ROOMS
O = OBSERVATION ROOM
R = RESTROOM
S = STORAGE

6 DOOR PANEL / FRAME TYPES
1/4" = 1'-0"

7 WINDOW DETAILS
3" = 1'-0"




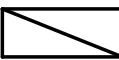





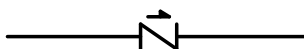
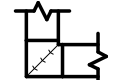
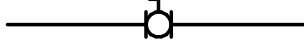
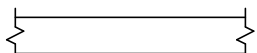
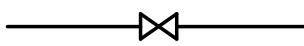
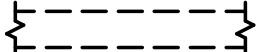
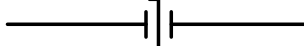
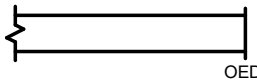

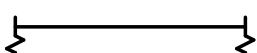


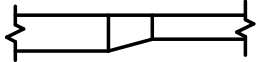

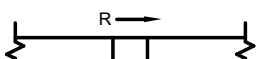
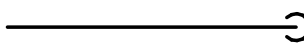
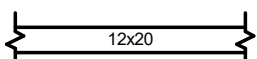
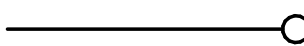
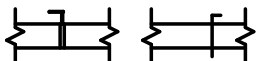
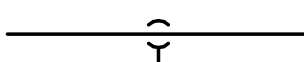

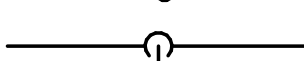
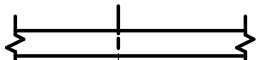






REVISIONS		
NO	DATE	ITEM
	2/07/26	100% CD SUBMISSION
	4/08/26	BID SET

MECHANICAL GENERAL NOTES

1. THE MECHANICAL AND PLUMBING CONTRACT DRAWINGS ARE DIAGRAMMATIC AND ARE INTENDED TO INDICATE SCOPE AND THE GENERAL ARRANGEMENT OF THE SYSTEMS. WHERE APPLICABLE THE FOLLOWING NOTES SHALL APPLY TO ALL MECHANICAL (HVAC, PLUMBING, PIPING AND FIRE PROTECTION) SYSTEMS.
2. THOUGH SOME DUCTWORK AND PIPING OFFSETS AND TRANSITIONS ARE INDICATED, IT IS NOT THE INTENT OF THE DRAWINGS TO SHOW ALL OFFSETS AND TRANSITIONS REQUIRED. THE CONTRACTOR SHALL FULLY COORDINATE THE MECHANICAL WORK WITHIN ITSELF AND WITH THE WORK OF ALL OTHER TRADES TO PROVIDE COMPLETE AND OPERABLE SYSTEMS WITHOUT INTERFERENCES.
3. DEMOLISH ALL SYSTEMS AND EQUIPMENT INDICATED TO BE REMOVED BY DRAWINGS OR NOTES. WHERE EXISTING SYSTEMS ARE TO REMAIN IN USE, REMOVE ALL UNUSED PORTIONS OF THE SYSTEMS TO A POINT AS CLOSE TO THE REMAINING SYSTEMS AS POSSIBLE AND CAP WITH MATERIALS AND CONSTRUCTION MATCHING THE REMAINING SYSTEMS' CUT END.
4. SUPPORT ALL EQUIPMENT (I.E. AIR TERMINAL UNITS, ETC.) FROM STRUCTURE WITH SPECIFIED VIBRATION ISOLATION.
5. PROVIDE ACCESS PANELS WHERE REQUIRED FOR ADEQUATE ACCESS TO ALL CONCEALED EQUIPMENT, VALVES, DAMPERS AND CONTROLS.
6. ALL DUCT SIZES REFER TO INTERNAL FREE AREA. REFER TO DRAWINGS AND SPECIFICATIONS FOR INTERNAL INSULATION AND SOUND LINING PRIOR TO FABRICATION.
7. ALL DUCTWORK SHALL BE CONSTRUCTED OF RIGID SHEET METAL UNLESS OTHERWISE NOTED.
8. REFER TO DOOR SCHEDULE ON ARCHITECTURAL DRAWINGS FOR UNDER CUT DIMENSIONS AND DOOR LOUVER SIZES.
9. COORDINATE DIFFUSER, REGISTER AND GRILLE LOCATIONS AND BORDER TYPES WITH ARCHITECTURAL REFLECTED CEILING PLAN.
10. INSTALL DUCTWORK AND PIPING MAINS TIGHT TO UNDERSIDE OF STRUCTURE UNLESS OTHERWISE INDICATED.
11. REFER TO MECHANICAL DETAILS FOR TYPICAL EQUIPMENT CONNECTIONS.
12. PIPING CONNECTIONS TO HEATING COILS SHALL BE MADE TO PROVIDE COUNTER FLOW BETWEEN WATER AND AIR.
13. PATCH AND SEAL ALL REMAINING OPENINGS (NEW AND EXISTING) THROUGH FLOORS, CEILINGS, AND WALLS RESULTING FROM DEMOLITION OR NEW WORK WITH MATERIALS AND FINISHES TO MATCH EXISTING CONSTRUCTION AND FIRE RATING.
14. AS AN INTEGRAL PART OF THESE DOCUMENTS, THE CONTRACTOR SHALL REFER TO THE SPECIFICATIONS FOR ADDITIONAL INFORMATION.
15. PRIOR TO THE BALANCING OF SYSTEMS BY THE AABC CERTIFIED BALANCING CONTRACTOR, ALL HIGH PRESSURE AND LOW PRESSURE SYSTEMS SHALL BE TESTED BY THE MECHANICAL CONTRACTOR FOR DUCT LEAKAGE. DUCT LEAKAGE SHALL NOT EXCEED 1% FOR A DURATION OF TEN (10) MINUTES. SEE SPECIFICATIONS FOR ADDITIONAL TESTING CRITERIA. INSULATION MATERIALS SHALL NOT BE APPLIED UNTIL SYSTEMS HAVE BEEN WITNESSED, DOCUMENTED AND SUBMITTED TO MEET THE ABOVE TESTING REQUIREMENTS. REFER SPECIFICATIONS FOR SYSTEMS INDICATED AS LOW PRESSURE OR HIGH PRESSURE. THE BALANCE CONTRACTOR SHALL WITNESS AND CERTIFY ALL DUCT PRESSURE TESTS.
16. CONTRACTOR SHALL VISIT THE SITE AND VERIFY EXISTING CONDITIONS PRIOR TO THE BEGINNING OF ANY WORK. FAILURE TO VISIT THE SITE SHALL IN NO WAY RELIEVE THE CONTRACTOR FROM ANY RESPONSIBILITY.
17. CONTRACTOR SHALL USE CARE WHEN PERFORMING SELECTIVE DEMOLITION. THE CONTRACTOR SHALL BE RESPONSIBLE FOR DAMAGE TO BUILDING FINISHES, EQUIPMENT, FURNITURE, STRUCTURE, AND MECHANICAL/ELECTRICAL SYSTEMS AND EQUIPMENT. SHOULD ANY DAMAGE OCCUR THE CONTRACTOR SHALL RESTORE DAMAGED AREAS/ITEMS TO ORIGINAL CONDITION TO MEET THE OWNER'S SATISFACTION.
18. CONTRACTOR SHALL NOTIFY AND COORDINATE WITH THE OWNER ANY UTILITY OUTAGES. OWNER SHALL BE GIVEN A MINIMUM NOTICE FOR ANY OUTAGES AS INDICATED WITHIN THE PROJECT SPECIFICATIONS.
19. HVAC SHALL BE MAINTAINED TO ALL AREAS OUTSIDE OF THE CURRENT PHASE OF THE RENOVATED AREA AT ALL TIMES. PROVIDE TEMPORARY CONNECTIONS AS REQUIRED TO COORDINATE OUTAGES WITH THE OWNER AS DESCRIBED IN THE PROJECT SPECIFICATIONS.
20. DEMOLITION AND NEW WORK THAT WILL RESULT IN DOWN TIME OF SERVICES (HVAC, PLUMBING, MEDICAL GASES, ETC.) SHALL BE PERFORMED AT PREMIUM TIME AS REQUIRED TO MINIMIZE DOWN TIME TO ADJACENT SPACES. COORDINATE ALL OUTAGES WITH OWNER.
21. SCHEDULE ALL WORK IN OCCUPIED SPACES WITH THE OWNER AS INDICATED IN THE SPECIFICATIONS.
22. RETURN TO OWNER, AT THEIR DISCRETION, ALL UNUSED MECHANICAL EQUIPMENT (I.E. VAV BOXES, AIR DEVICES, THERMOSTATS AND CONTROLS).
23. CONTRACTOR SHALL TEST/BALANCE ALL AIR AND HYDRONIC EQUIPMENT AND DEVICES INDICATED ON THE DOCUMENTS. AIR SYSTEM EQUIPMENT AND DEVICES SHALL INCLUDE, BUT NOT BE LIMITED TO: AIR VOLUME TERMINAL UNITS, AIR DEVICES, DUCT MOUNTED VOLUME DAMPERS, ETC. HYDRONIC EQUIPMENT AND DEVICES SHALL INCLUDE, BUT NOT BE LIMITED TO: COILS, BALANCING VALVES, ETC. BALANCE ALL EQUIPMENT AND DEVICES TO THE AIR/WATER FLOWS (CFM OR GPM) INDICATED ON THE DOCUMENTS (WHERE FLOWS ARE NOT CLEARLY INDICATED, CONTACT THE A/E FOR CLARIFICATION).
24. WHERE PENETRATIONS OF STRUCTURAL SLAB, WALLS, ETC. ARE ANTICIPATED, PROVIDE GROUND PENETRATING RADAR (GPR), OR OTHER APPROVED METHODS, TO DETERMINE THE LOCATION OF STRUCTURAL REINFORCEMENT. COORDINATE ALL PENETRATIONS WITH STRUCTURAL REINFORCEMENT AS REQUIRED TO AVOID DAMAGE TO THE REINFORCEMENT AS WELL AS TO MAINTAIN THE STRUCTURAL INTEGRITY OF ALL SLABS, WALLS, ETC. SUBMIT TO STRUCTURAL ENGINEER FOR REVIEW.
25. UNLESS INDICATED OTHERWISE, ALL EXPOSED PIPING IN ALL FINISHED AREAS SHALL BE COVERED WITH A 16-GAUGE STEEL PRIMED AND PAINTED METAL COVER. THE COVER SHALL BE SECURED TO AN ADJACENT STRUCTURE AND PAINTED TO MATCH ADJACENT SURFACES.
26. PROVIDE EXPANSION COMPENSATION ON ALL PIPING SYSTEMS AS REQUIRED. CONTRACTOR SHALL REFER TO SPECIFICATIONS FOR DELEGATED DESIGN REQUIREMENTS TO DETERMINE EXPANSION COMPENSATION TYPES AND ACCESSORIES REQUIRED FOR THE PROJECT SPECIFIC APPLICATION AND SPACE AVAILABLE.
27. CONTRACTOR SHALL REMOVE, REINSTALL AND/OR RELOCATE ANY EXISTING CONDUIT, PIPING SYSTEMS, DUCTWORK, TELECOMMUNICATIONS WIRING, HANGERS/SUPPORTS, ETC. AS REQUIRED TO ACCOMPLISH THE MECHANICAL WORK INDICATED.
28. FOR ALL INSULATED PIPING, PROVIDE RIGID, NON-COMPRESSIVE INSULATED PIPE SADDLES AT ALL HANGER AND SUPPORT LOCATIONS. SEE SPECIFICATION FOR ADDITIONAL INFORMATION.
29. CONTRACTOR SHALL TAKE PRE-DEMOLITION READINGS FOR ALL VAV TERMINAL UNITS AND AIR DEVICES SERVING THE RENOVATED AREA. PRE-DEMOLITION READINGS SHALL INCLUDE DUCT STATIC PRESSURE READINGS AT THE INLET OF EACH VAV TERMINAL UNIT INDICATED ON THE DOCUMENTS. DOCUMENT AND PROVIDE TO THE A/E.

MECHANICAL LEGEND

COLD WATER (CW)		SUPPLY AIR & OUTSIDE AIR DUCT UP (DASHED LINES FOR DOWN)	
HOT WATER (HW)		RETURN DUCT UP (DASHED LINES FOR DOWN)	
HEATING WATER SUPPLY		EXHAUST DUCT UP (DASHED LINES FOR DOWN)	
HEATING WATER RETURN		FLEXIBLE CONNECTION	
PIPING TO BE REMOVED		FLEXIBLE DUCT	
CHECK VALVE		DOUBLE THICKNESS TURNING VANES	
BALL VALVE		EXISTING DUCTWORK	
GATE VALVE		DUCTWORK TO BE REMOVED	
BUTTERFLY VALVE		OPEN ENDED DUCT	
GLOBE VALVE		NEW DUCTWORK	
BALANCING VALVE W/ FLOW METER FITTING (VENTURI TYPE)		DUCT TRANSITION ROUND TO RECTANGULAR	
UNION		DUCT TRANSITION	
PIPING CAP		CHANGE IN DUCT ELEVATION (R-RISE, D-DROP)	
PIPING ELBOW DOWN		DUCT SIZE (FIRST FIGURE IS SIDE SHOWN)	
PIPING ELBOW UP		BALANCING DAMPER	
PIPE CONNECTION BOTTOM		FIRE DAMPER WITH ACCESS PANEL	
PIPE CONNECTION TOP		COMBINATION FIRE/SMOKE DAMPER WITH SMOKE DETECTORS AND ACCESS PANEL	
FLOOR CLEANOUT			
FLOOR DRAIN			
THERMOSTAT			
LIMIT OF DEMOLITION			
CONNECT TO EXISTING			

MECHANICAL ABBREVIATIONS

ABOVE FINISHED FLOOR	AFF	ENTERING WATER TEMPERATURE	EWT	OPEN END DUCT	OED
AIR PRESSURE DROP	APD	FAN POWERED TERMINAL BOX	FTB	POUNDS PER SQUARE INCH	PSI
ARCHITECTURAL	ARCH	FLEXIBLE CONNECTION / FORWARD CURVED	FC	PRESSURE	PRESS
AMERICAN NATIONAL STANDARDS INSTITUTE	ANSI	FEET PER MINUTE	FPM	QUANTITY	QTY
AMERICAN SOCIETY OF SANITARY ENGINEERING	ASSE	FEET	FT	RETURN AIR	RA
AUTOMATIC TEMPERATURE CONTROLS	ATC	GALLON(S)	GAL	RELATIVE HUMIDITY	RH
BRAKE HORSEPOWER	BHP	GALLONS PER MINUTE	GPM	REVOLUTIONS PER MINUTE	RPM
BRITISH THERMAL UNIT	BTU	HEIGHT	H	REMOVE EXISTING	RX
BRITISH THERMAL UNITS PER HOUR	BTUH	HORSEPOWER	HP	SUPPLY AIR	SA
CAPACITY	CAP	HEATING WATER SUPPLY	HS	STATIC PRESSURE	SP
CUBIC FEET PER MINUTE	CFM	HEATING WATER RETURN	HR	TESTING AND BALANCING	TAB
CONNECT TO EXISTING	CX	INCH(ES)	IN	TOTAL STATIC PRESSURE	TSP
DRY BULB	DB	KILOWATT	KW	TYPICAL	TYP
DESIGNATION	DESIG	LENGTH	L	UNLESS OTHERWISE NOTED	UON
DIAMETER	DIA	LEAVING AIR TEMPERATURE	LAT	VOLTS	V
DOWN	DN	POUNDS	LBS	VARIABLE AIR VOLUME	VAV
DIFFERENTIAL PRESSURE SENSOR	DPS	LEAVING WATER TEMPERATURE	LWT	VARIABLE FREQUENCY DRIVE	VFD
DRAWING(S)	DWG	MAXIMUM	MAX	WIDTH	W
EXHAUST AIR	EA	THOUSAND BRITISH THERMAL UNITS PER HOUR	MBH	WET BULB	WB
ENTERING AIR TEMPERATURE	EAT	MINIMUM CIRCUIT AMPACITY	MCA	WATER COLUMN	WC
EXHAUST FAN	EF	MINIMUM	MIN	WATER GAUGE	WG
EXTERNAL STATIC PRESSURE	ESP	MAXIMUM OVERCURRENT PROTECTION	MOP	WATER PRESSURE DROP	WPD

ADMINISTRATION & FINANCE

DESIGN AND CONSTRUCTION

OFFICE OF FACILITIES MANAGEMENT
620 W. LEXINGTON STREET, 6TH FLOOR
BALTIMORE, MARYLAND 21201
PHONE NO. (410) 706-7740
FAX NO. (410) 706-8547



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ARCHITECTS

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Mechanical / Electrical Engineers
6300 Blair Hill Lane, Suite 400
Baltimore, Maryland 21209
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PROFESSIONAL CERTIFICATION: I HEREBY CERTIFY THAT THESE DOCUMENTS WERE PREPARED OR APPROVED BY ME, AND THAT I AM A DULY LICENSED PROFESSIONAL ENGINEER UNDER THE LAWS OF THE STATE OF MARYLAND.

LICENSE No. 44909
EXPIRATION DATE: 01/06/28

REGISTRATION/STAMP

PROJECT TITLE :

**UMB SON
6TH FLOOR
APT. SIM.
RENOVATION**

UMB BUILDING NO. :	SON - 0833
UMB Project NO. :	26-312
A/E PROJECT NO. :	25-128
CAD FILE NO. :	
DATE	04/08/2026

SHEET TITLE :

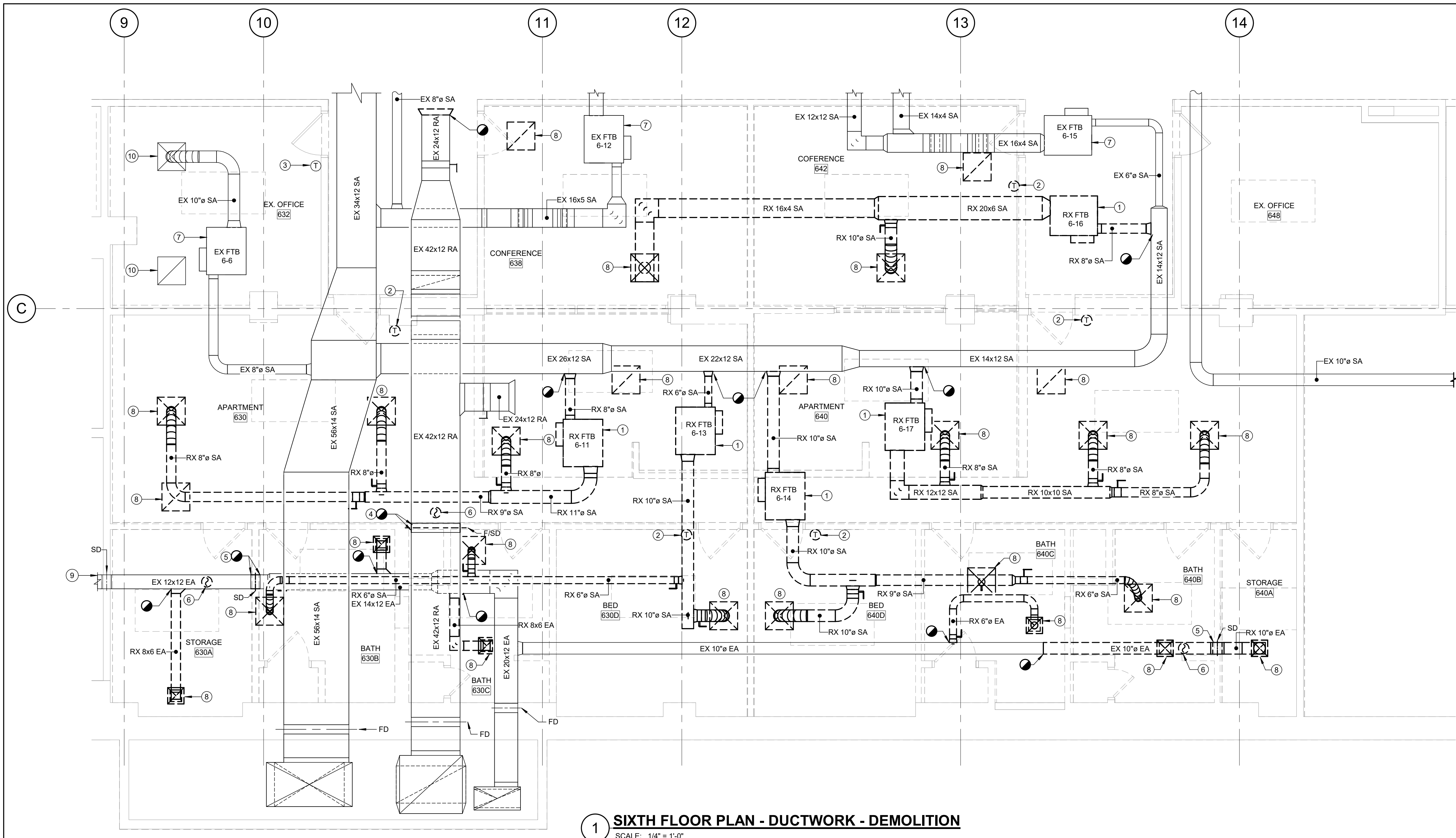
**MECHANICAL
LEGEND,
ABBREVIATIONS &
GENERAL NOTES**

REVISIONS		
NO	DATE	ITEM
	2/07/26	100% CD SUBMISSION
	4/08/26	BID SET

SHEET NO.

M001

BKM # 25042.02



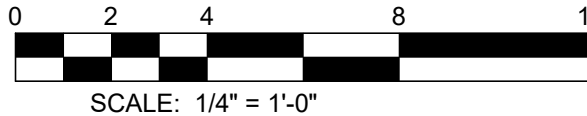
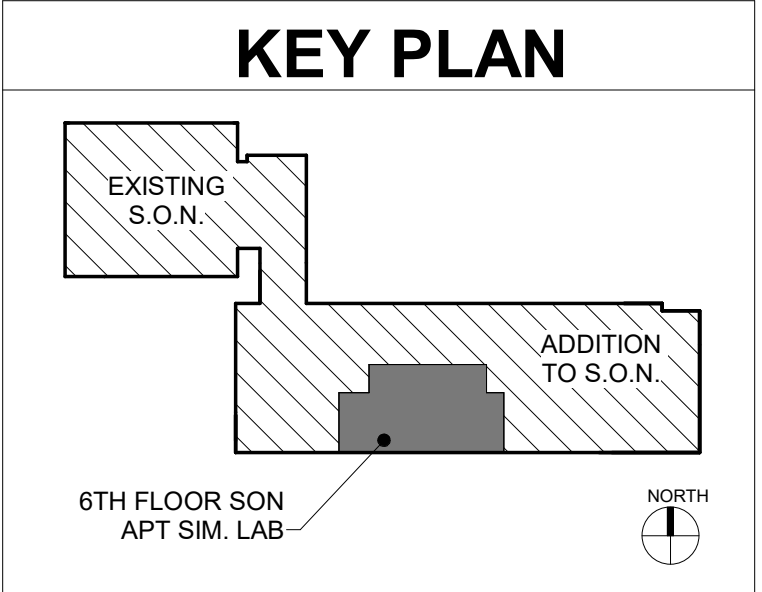
1 SIXTH FLOOR PLAN - DUCTWORK - DEMOLITION
SCALE: 1/4" = 1'-0"

GENERAL NOTES:

1. REFER TO M001 FOR MECHANICAL LEGEND, ABBREVIATIONS AND GENERAL NOTES.

DRAWING NOTES:

1. REMOVE EXISTING FAN POWERED TERMINAL UNIT WITH HOT WATER REHEAT; REMOVE ASSOCIATED INLET DUCTWORK, LOW PRESSURE DUCTWORK, DAMPERS, AIR DEVICES AND OTHER ASSOCIATED APPURTENANCES.
2. REMOVE EXISTING THERMOSTAT.
3. EXISTING THERMOSTAT TO REMAIN.
4. REMOVE EXISTING DUCT FIRE/SMOKE DAMPER WITHIN WALL TO BE DEMOLISHED.
5. REMOVE EXISTING SMOKE DAMPER WITHIN WALL TO BE DEMOLISHED.
6. COORDINATE THE REMOVAL OF EXISTING DUCT SMOKE DETECTOR WITH FIRE ALARM CONTRACTOR. REFER TO FIE ALARM DRAWINGS FOR ADDITIONAL INFORMATION.
7. EXISTING FAN POWERED TERMINAL UNIT WITH HOT WATER REHEAT TO REMAIN.
8. REMOVE EXISTING AIR DEVICE.
9. CONTRACTOR TO TAKE PRE-DEMOLITION FLOW READINGS OF THE UPSTREAM BRANCH, DOCUMENT AND PROVIDE TO THE A/E.
10. EXISTING AIR DEVICE TO REMAIN.



BID DOCUMENTS - 04/08/2026

ADMINISTRATION & FINANCE
DESIGN AND CONSTRUCTION
OFFICE OF FACILITIES MANAGEMENT
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LICENSE No. 44909
EXPIRATION DATE: 01/06/28

REGISTRATION/STAMP

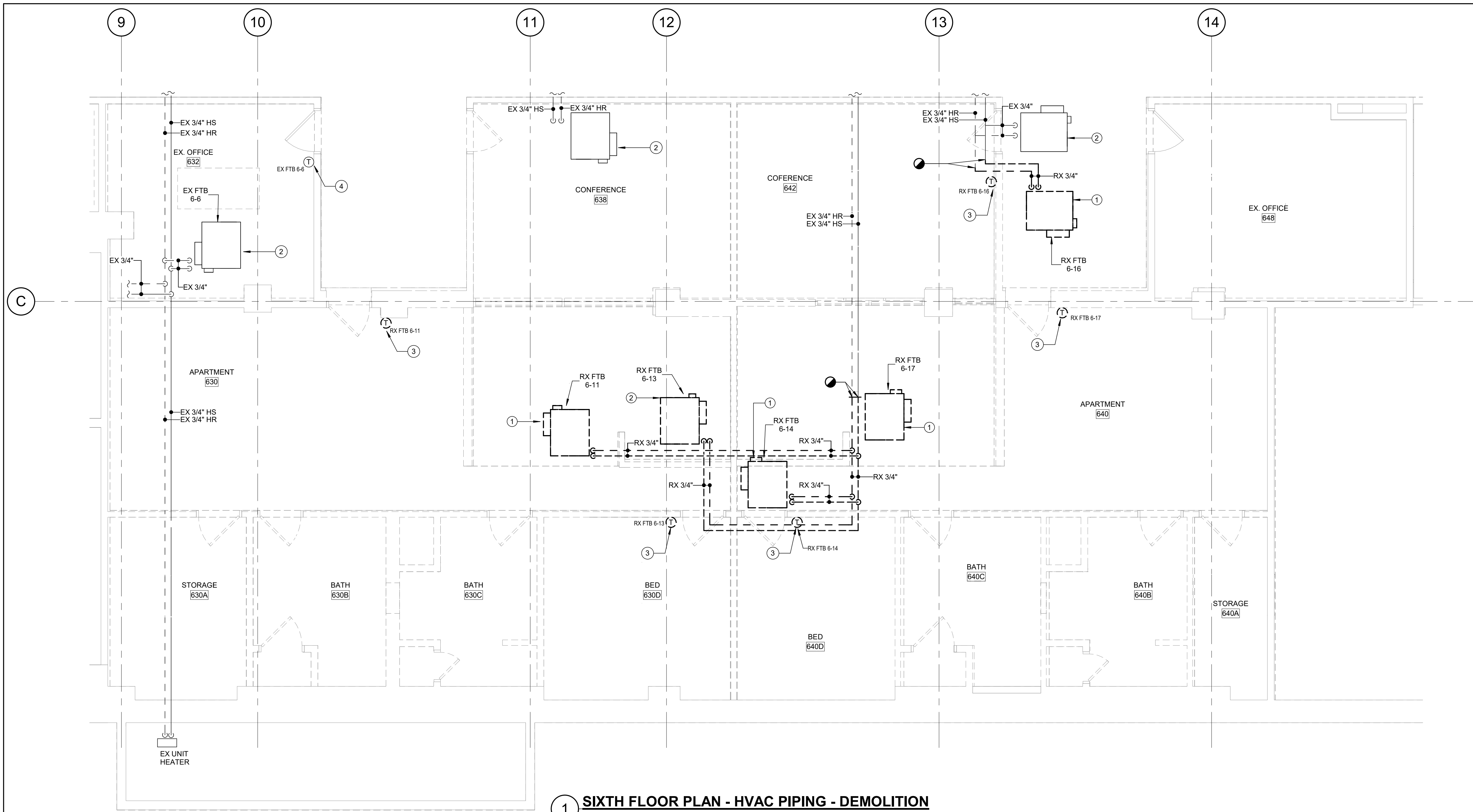
PROJECT TITLE :
**UMB SON
6TH FLOOR
APT. SIM.
RENOVATION**

UMB BUILDING NO. :	SON - 0833
UMB Project NO. :	26-312
A/E PROJECT NO. :	25-128
CAD FILE NO. :	
DATE	04/08/2026

SHEET TITLE :
**SIXTH FLR
PLAN DUCTWORK
DEMOLITION**

REVISIONS		
NO	DATE	ITEM

SHEET NO.
MD106



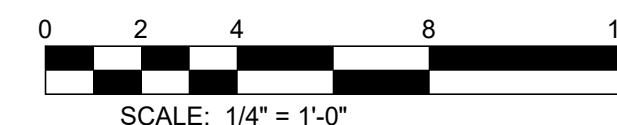
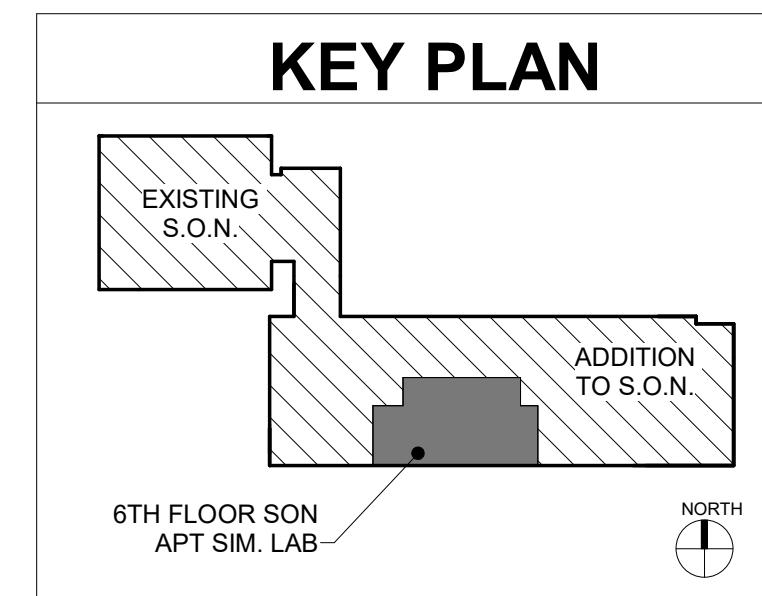
1 SIXTH FLOOR PLAN - HVAC PIPING - DEMOLITION
SCALE: 1/4" = 1'-0"

GENERAL NOTES:

1. REFER TO M001 FOR MECHANICAL LEGEND, ABBREVIATIONS AND GENERAL NOTES.

DRAWING NOTES:

1. REMOVE EXISTING FAN POWERED TERMINAL UNIT WITH HOT WATER REHEAT. REMOVE ASSOCIATED VALVES, ACCESSORIES AND PIPING AS INDICATED.
2. EXISTING FAN POWERED TERMINAL UNIT WITH HOT WATER REHEAT TO REMAIN.
3. REMOVE EXISTING THERMOSTAT.
4. EXISTING THERMOSTAT TO REMAIN.



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CAD FILE NO. :	
DATE	04/08/2026

SHEET TITLE :

**SIXTH FLR
PLAN HVAC PIPING
DEMOLITION**

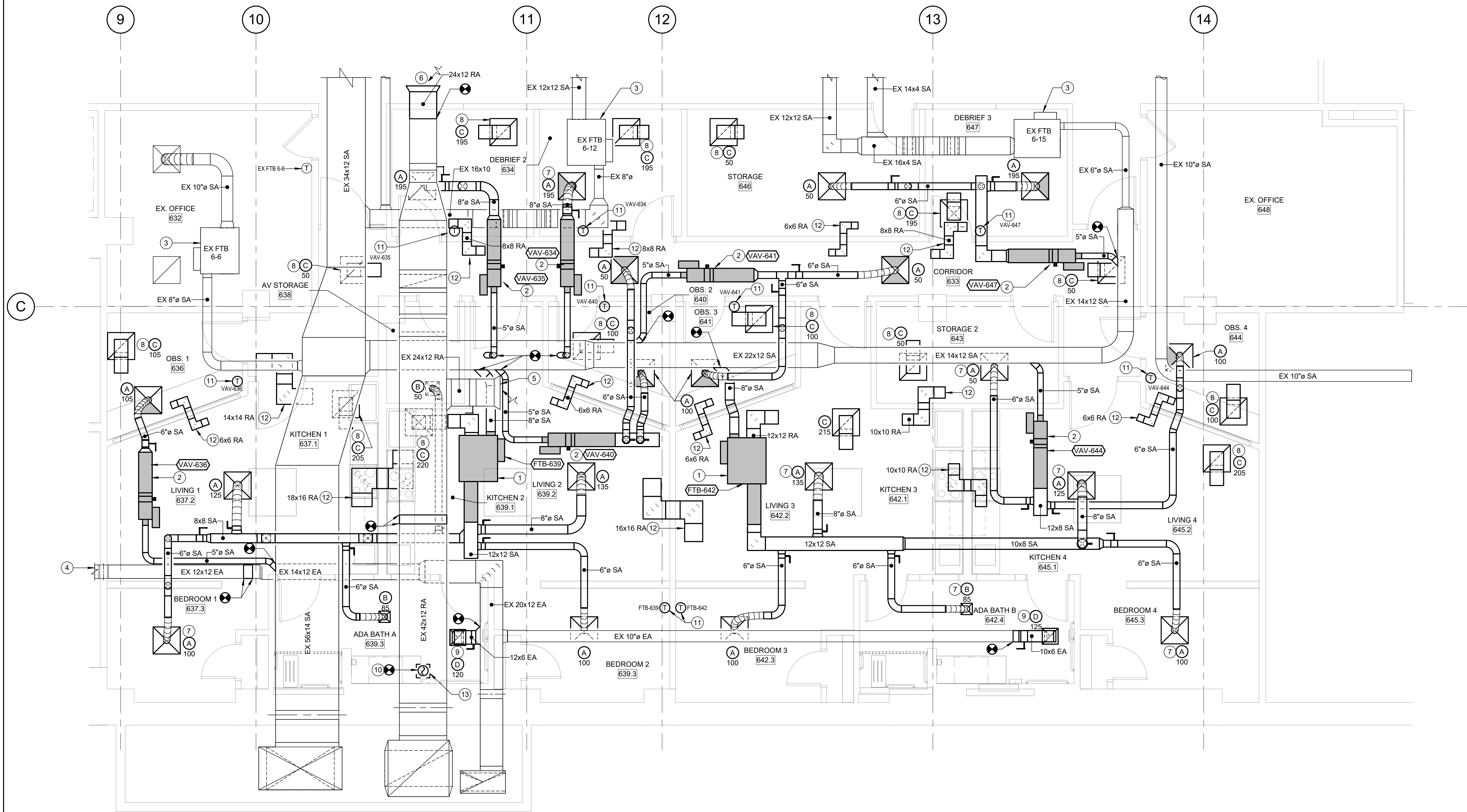
REVISIONS

NO	DATE	ITEM

SHEET NO.

MD206

BKM # 25042.02



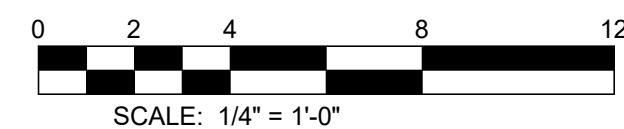
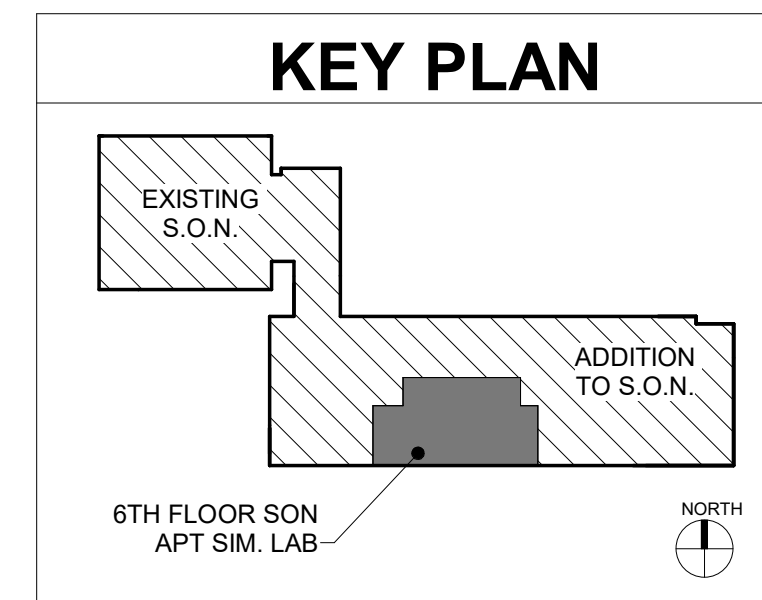
1 SIXTH FLOOR PLAN - DUCTWORK - NEW WORK
SCALE: 1/4" = 1'-0"

GENERAL NOTES:

1. REFER TO M001 FOR MECHANICAL LEGEND, ABBREVIATIONS AND GENERAL NOTES.

DRAWING NOTES:

1. PARALLEL FAN POWERED TERMINAL UNIT WITH HOT WATER REHEAT. PROVIDE WITH VIBRATION ISOLATORS, AND A FLEXIBLE CONNECTION. PROVIDE WITH LOCAL DISCONNECT FOR BLOWER. PROVIDE LINED RETURN AIR INLET AND ATTENUATOR AS INDICATED. REFER TO FAN POWERED VAV SCHEDULE FOR MORE INFORMATION.
2. SINGLE DUCT VARIABLE AIR VOLUME TERMINAL WITH HOT WATER REHEAT. PROVIDE SOUND ATTENUATORS WHERE REQUIRED TO MEET SCHEDULED MAXIMUM NC RATING.
3. EXISTING FAN POWERED TERMINAL UNIT WITH HOT WATER REHEAT TO REMAIN.
4. REBALANCE THE TWO REBALANCE THE FIRST EXHAUST AIR DEVICE UPSTREAM TO AN AIRFLOW VALUE OF 250 CFM, AND REBALANCE THE SECOND EXHAUST AIR DEVICE UPSTREAM TO AN AIRFLOW VALUE OF 260 CFM.
5. OPEN ENDED RETURN. BALANCE TO 2,035 CFM.
6. EXTEND RETURN DUCTWORK TO OPEN AREA. TRANSITION TO 30X12 DUCT BELL MOUTH AND PROVIDE NEW METAL SCREEN OVER OPENING. REBALANCE TO 2,520 CFM.
7. SUPPLY AIR DIFFUSER. TYPICAL.
8. PLENUM RETURN PERFORATED GRILLE. PROVIDE WITH SOUND BOOT DUCTWORK WITH FREE AREA OF THE INLET SIZE, LINED WITH MIN 1" ACOUSTICAL LINING. SIZE INLET PER AIR DEVICE SCHEDULE AND REFER TO DETAIL FOR MORE INFORMATION. TYPICAL.
9. EXHAUST GRILLE.
10. COORDINATE THE INSTALLATION OF DUCT SMOKE DETECTOR TO BE PROVIDED WHERE INDICATED WITH FIRE ALARM CONTRACTOR. REFER TO FIRE ALARM DRAWINGS FOR ADDITIONAL INFORMATION.
11. BAS TEMPERATURE SENSOR. ASSOCIATE WITH CONTROLS OF INDICATED TERMINAL UNIT.
12. PROVIDE AIR TRANSFER ABOVE CEILING, SIZE DUCTS INTERNAL FREE AREA AS INDICATED. TRANSFER SHALL BE PROVIDED WITH MINIMUM 1" ACOUSTICAL DUCT LINING.
13. PROVIDE 12X12 ACCESS DOOR. REFER TO SPECIFICATIONS FOR REQUIREMENTS.



BID DOCUMENTS - 04/08/2026

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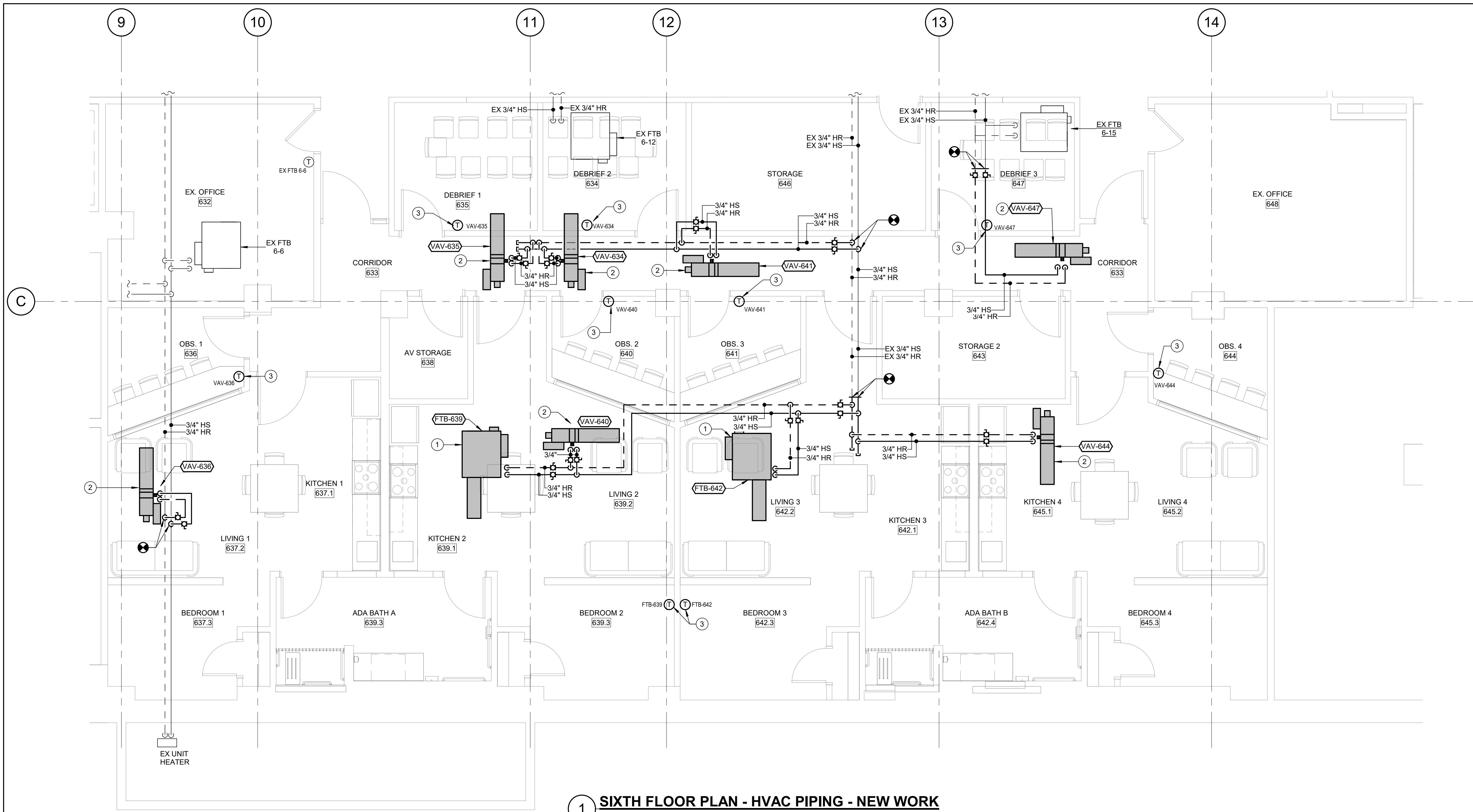
PROJECT TITLE :
**UMB SON
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UMB Project NO. :	26-312
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DATE	04/08/2026

SHEET TITLE :
**SIXTH FLR
PLAN DUCTWORK
NEW WORK**

REVISIONS		
NO	DATE	ITEM

SHEET NO.
M106



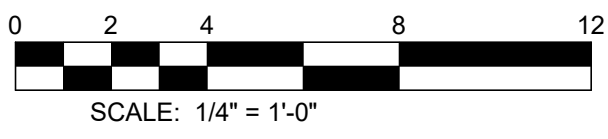
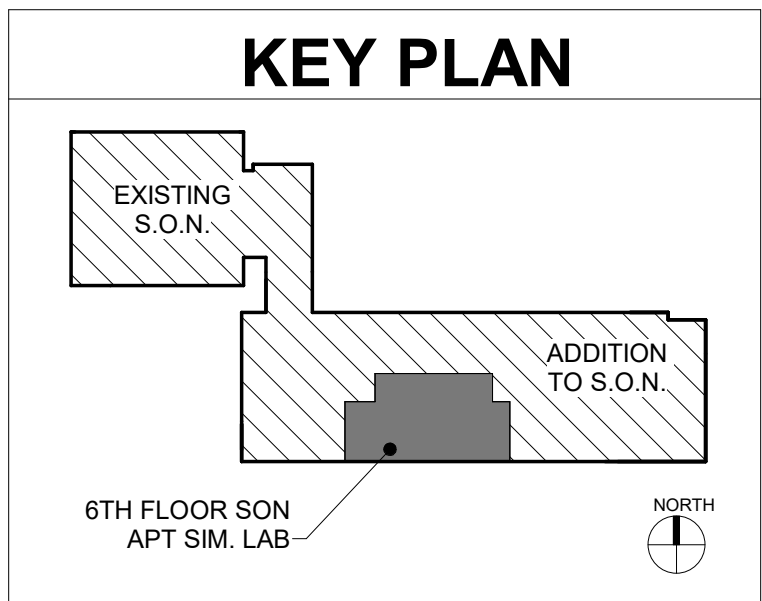
1 SIXTH FLOOR PLAN - HVAC PIPING - NEW WORK
SCALE: 1/4" = 1'-0"

GENERAL NOTES:

1. REFER TO M001 FOR MECHANICAL LEGEND, ABBREVIATIONS AND GENERAL NOTES.

DRAWING NOTES:

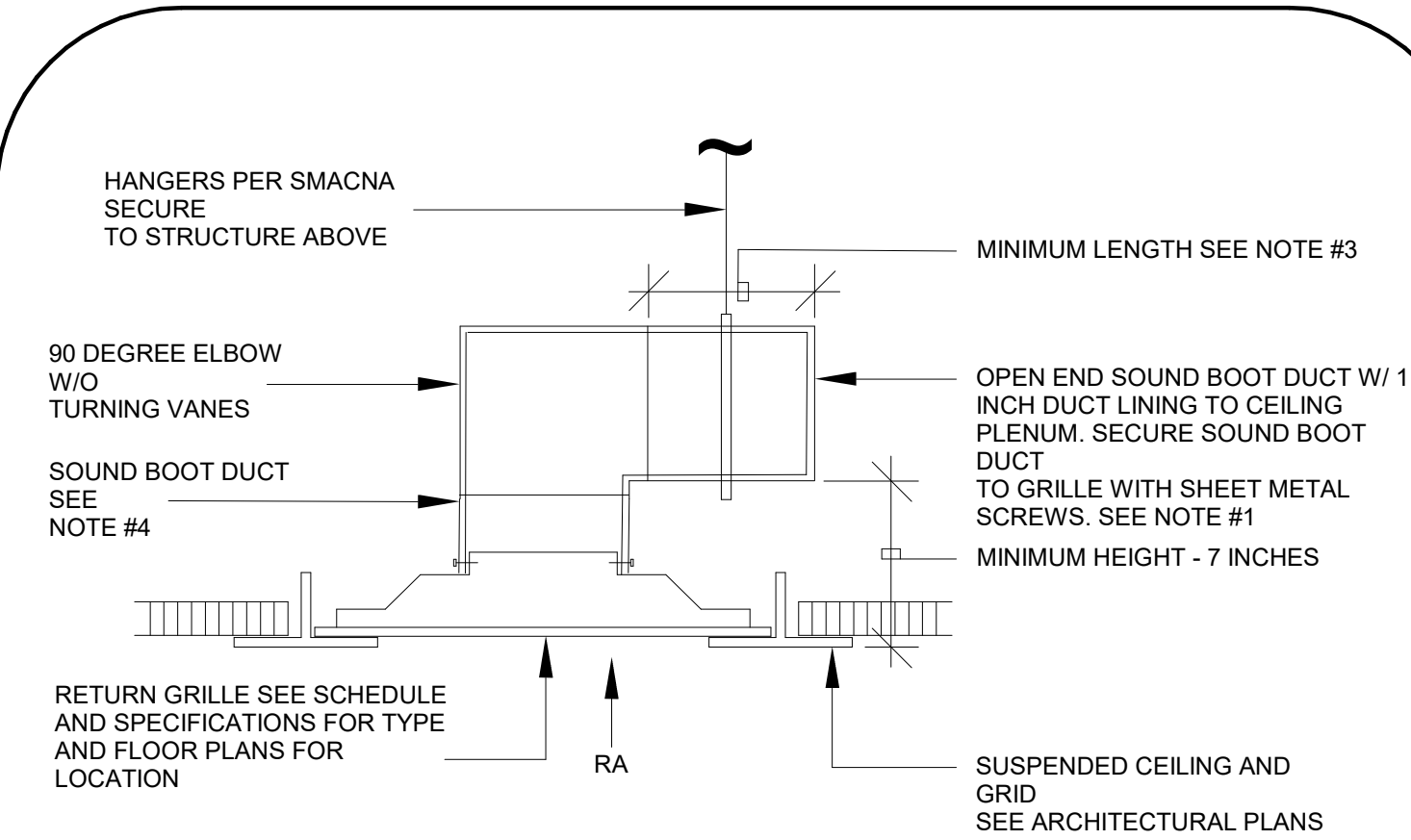
1. PARALLEL FAN POWERED TERMINAL UNIT WITH HOT WATER REHEAT. PROVIDE COIL KIT COMPLETE WITH ATC VALVE AND MAKE CONNECTION TO COIL. EXTEND PIPING TO EXISTING HEATING WATER SUPPLY AND RETURN PIPING AS SHOWN. SHUTOFF VALVES SHOWN ON PLAN FOR CLARITY. REFER TO DETAIL FOR ALL REQUIRED APPURTENANCES.
2. SINGLE DUCT VARIABLE AIR VOLUME TERMINAL UNIT WITH HOT WATER REHEAT. PROVIDE COIL KIT COMPLETE WITH ATC VALVE AND MAKE CONNECTION TO COIL. EXTEND PIPING TO EXISTING HEATING WATER SUPPLY AND RETURN PIPING AS SHOWN. SHUTOFF VALVES SHOWN ON PLAN FOR CLARITY. REFER TO DETAIL FOR ALL REQUIRED APPURTENANCES.
3. NEW BAS TEMPERATURE SENSOR. ASSOCIATE WITH CONTROLS OF INDICATED TERMINAL UNIT.



BID DOCUMENTS - 04/08/2026

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REVISIONS		
NO	DATE	ITEM



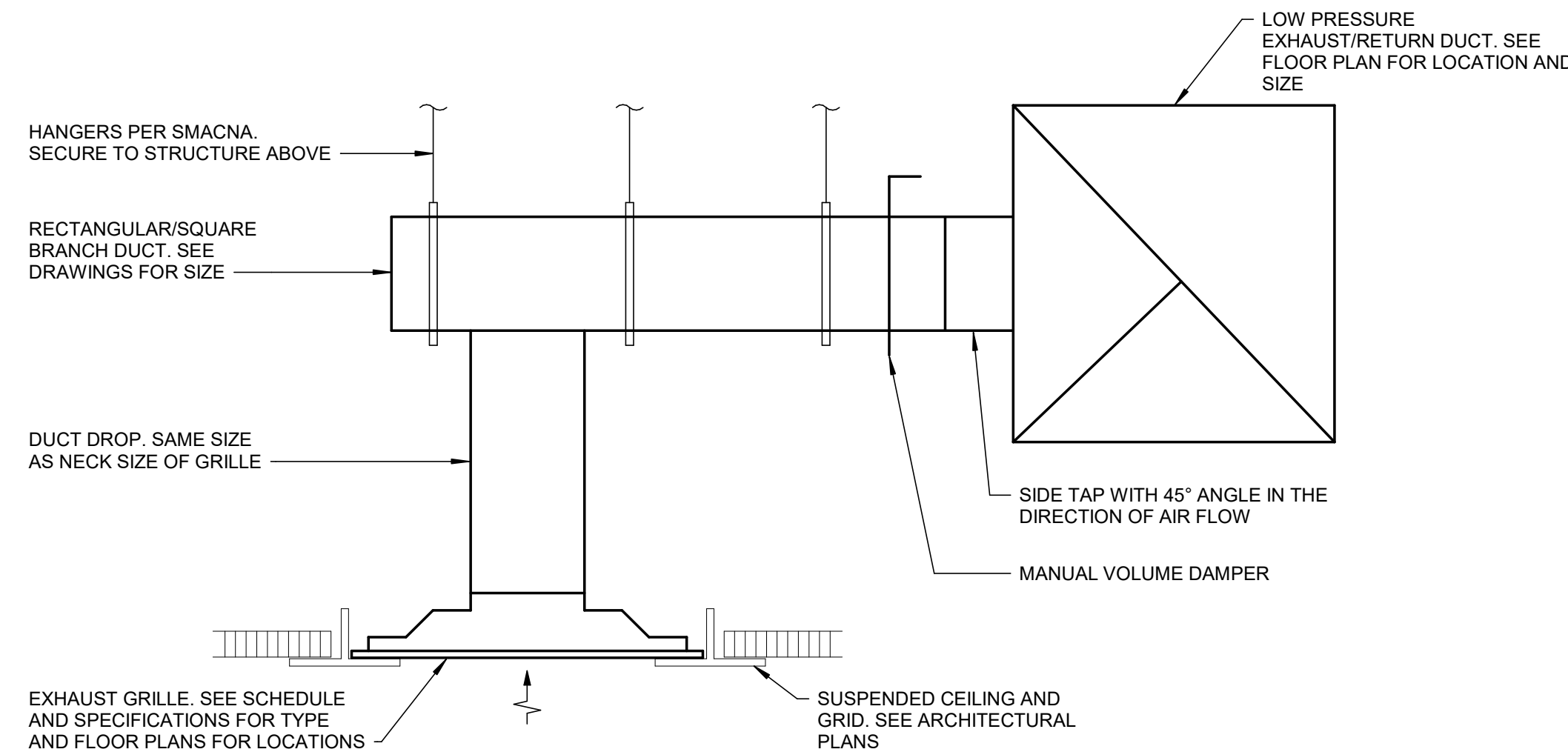
1 RETURN GRILLE - CEILING PLENUM DETAIL

SCALE: NOT TO SCALE

NOTES:

1. FOR RETURN AIR VOLUMES UP TO 450 CFM USE A GRILLE WITH A 12" X 12" NECK SIZE.
2. THE MINIMUM LENGTH OF THE HORIZONTAL SOUND BOOT DUCT SHALL BE EQUAL TO THE INTERIOR CLEAR HEIGHT OF THE LINED DUCT SOUND BOOT.
3. THE LINED SOUND BOOT SHALL HAVE A FREE AREA EQUAL TO THE NECK SIZE OF THE GRILLE.
4. WHERE RETURN GRILLES ARE USED WITH FAN POWERED BOXES PROVIDE FILTERS AT EACH GRILLE LOCATION. SEE SPECS FOR FILTER MEDIA REQUIREMENTS.

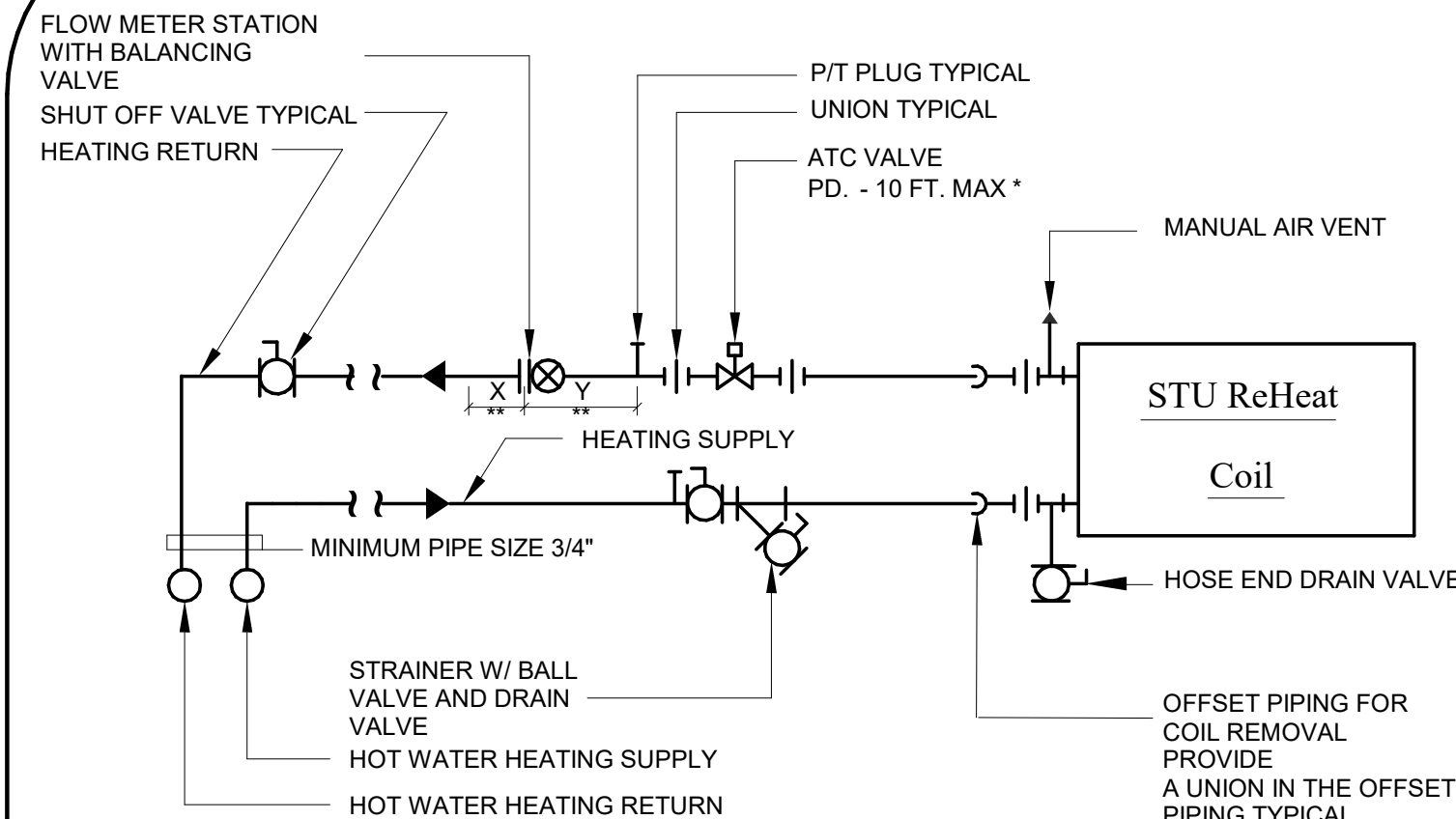
UMB - 232113 - Det 32 - Tab 5



2 EXHAUST GRILLE - HARD DUCT CONNECTION DETAIL

SCALE: NOT TO SCALE

UMB - 233600 - Det 32 - Tab 4



** NOTE: FOR X & Y PROVIDE THE MINIMUM LENGTHS OF STRAIGHT PIPE AS PER MANUFACTURER'S RECOMMENDATIONS FOR EACH FLOW METER FITTING

* CONTRACTOR SHALL COORDINATE PIPE CONNECTIONS W/ ATC CONTRACTOR

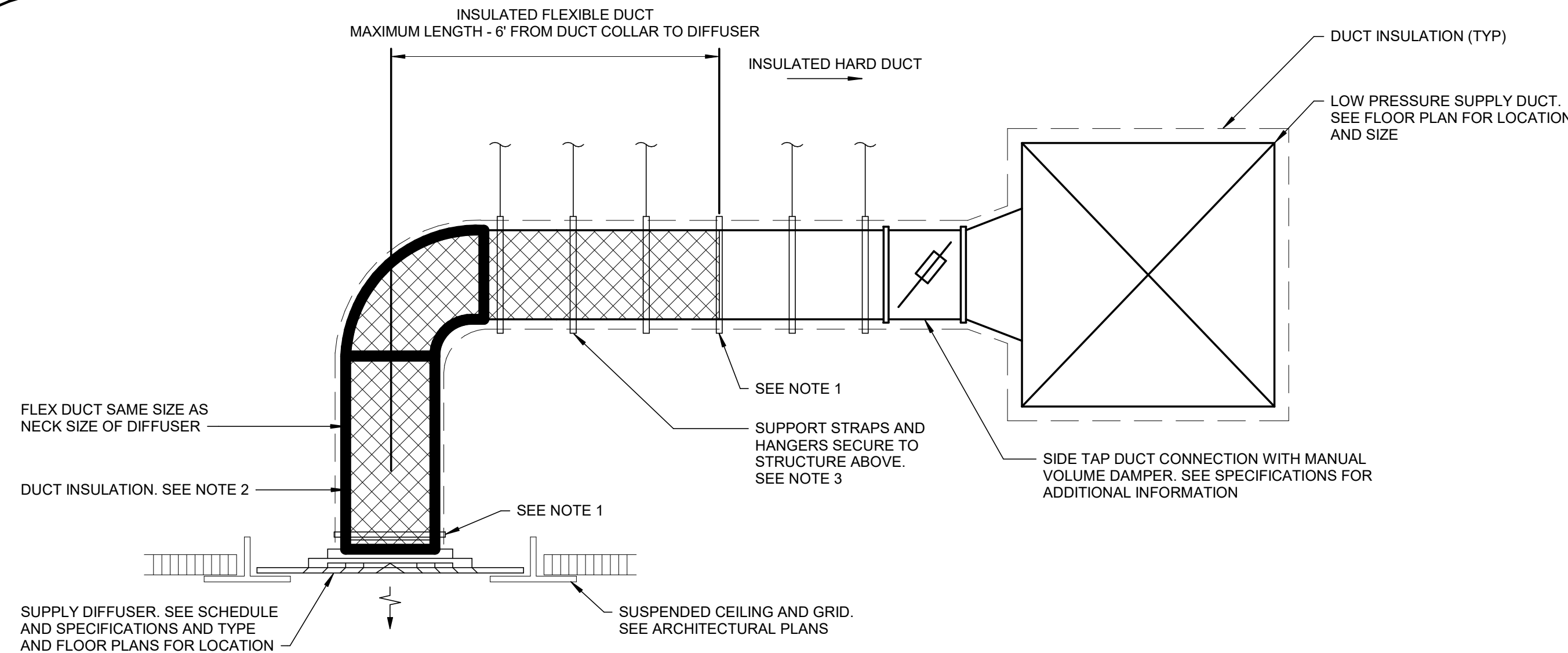
3 TYPICAL HEATING COIL - 2 WAY CONTROL DETAIL

SCALE: NOT TO SCALE

NOTES:

1. WHEN THE STRAINER ELEVATION IS LOWER THAN THE COIL THE HOSE END DRAIN VALVE AT THE COIL CSAN BE DELETED.
2. SEE VALVE AND FITTING INSTALLATION DETAILS FOR ADDITIONAL REQUIREMENTS.

UMB - 232113 - Det 11 - Tab 11



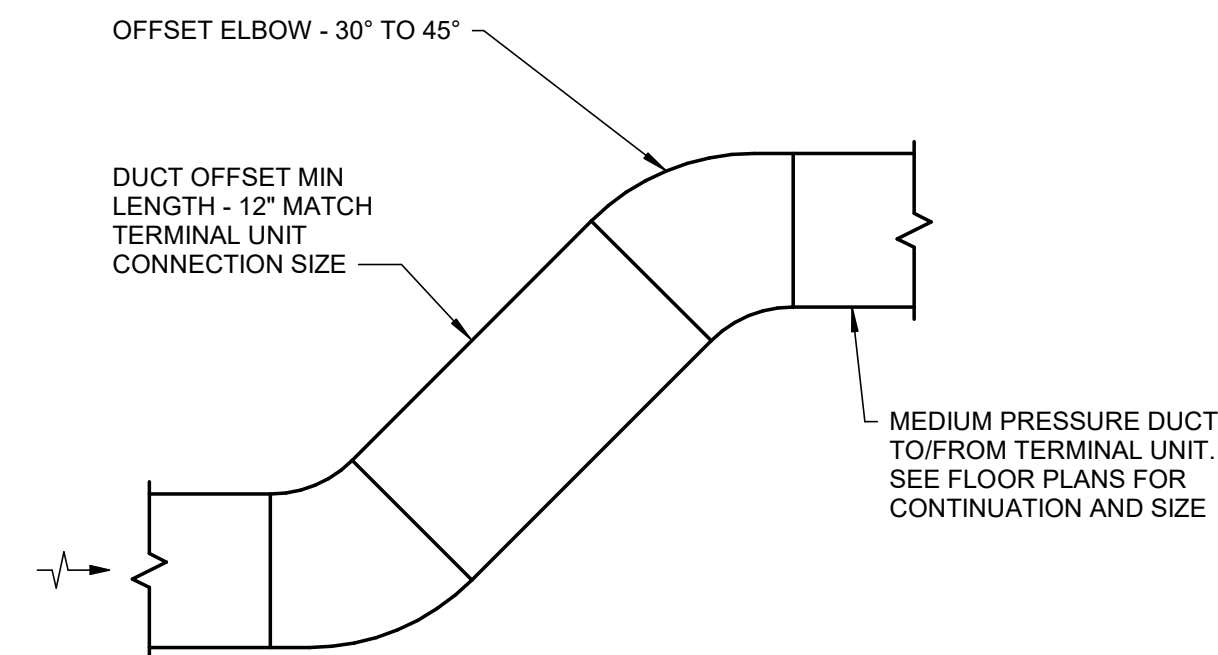
4 DIFFUSER WITH HARD DUCT & FLEXIBLE DUCT CONNECTIONS DETAIL

SCALE: NOT TO SCALE

NOTES:

1. PROVIDE TIES OR STAINLESS STEEL CLAMPS TO SECURE THE INSULATION.
2. SEAL THE END OF THE INSULATION WITH A VAPOR BARRIER MASTIC.
3. PROVIDE SUPPORTS TO KEEP THE FLEXIBLE DUCT FROM SAGGING AS FOLLOWS:
2' - 4' LENGTH: MIN 2 HANGERS.
6' LENGTH: MIN 3 HANGERS.

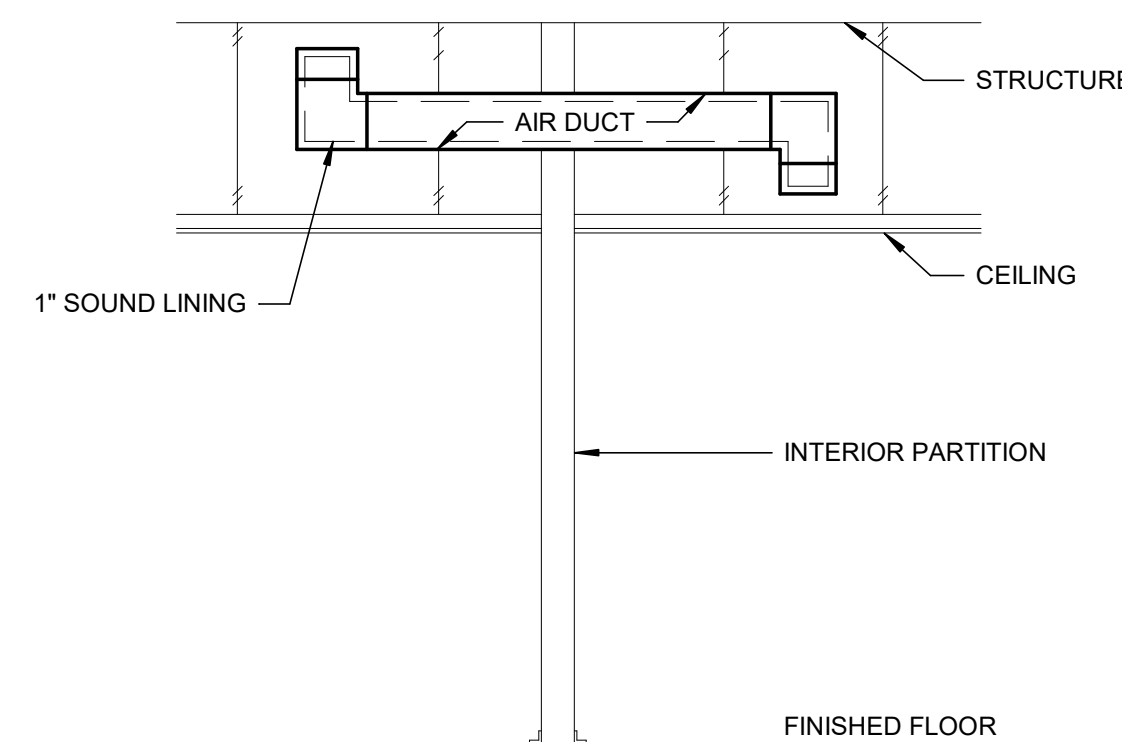
UMB - 233600 - Det 32 - Tab 1



5 TYPICAL DUCT OFFSET DETAIL

SCALE: NOT TO SCALE

UMB - 223113 - Det 33 - Tab 7



6 TRANSFER DUCT DETAIL

SCALE: NOT TO SCALE

NOTE: TRANSFER SHOWN IN THIS DETAIL IN VERTICAL POSITION. HORIZONTAL ORIENTATION AS SHOWN OF THE FLOOR PLANS IS ALSO ACCEPTABLE.

BKM - 233113 - 002B

BID DOCUMENTS - 04/08/2026

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APT. SIM.
RENOVATION**

UMB BUILDING NO. : SON - 0833

UMB Project NO. : 26-312

A/E PROJECT NO. : 25-128

CAD FILE NO. :

DATE 04/08/2026

SHEET TITLE :

**MECHANICAL
DETAILS**

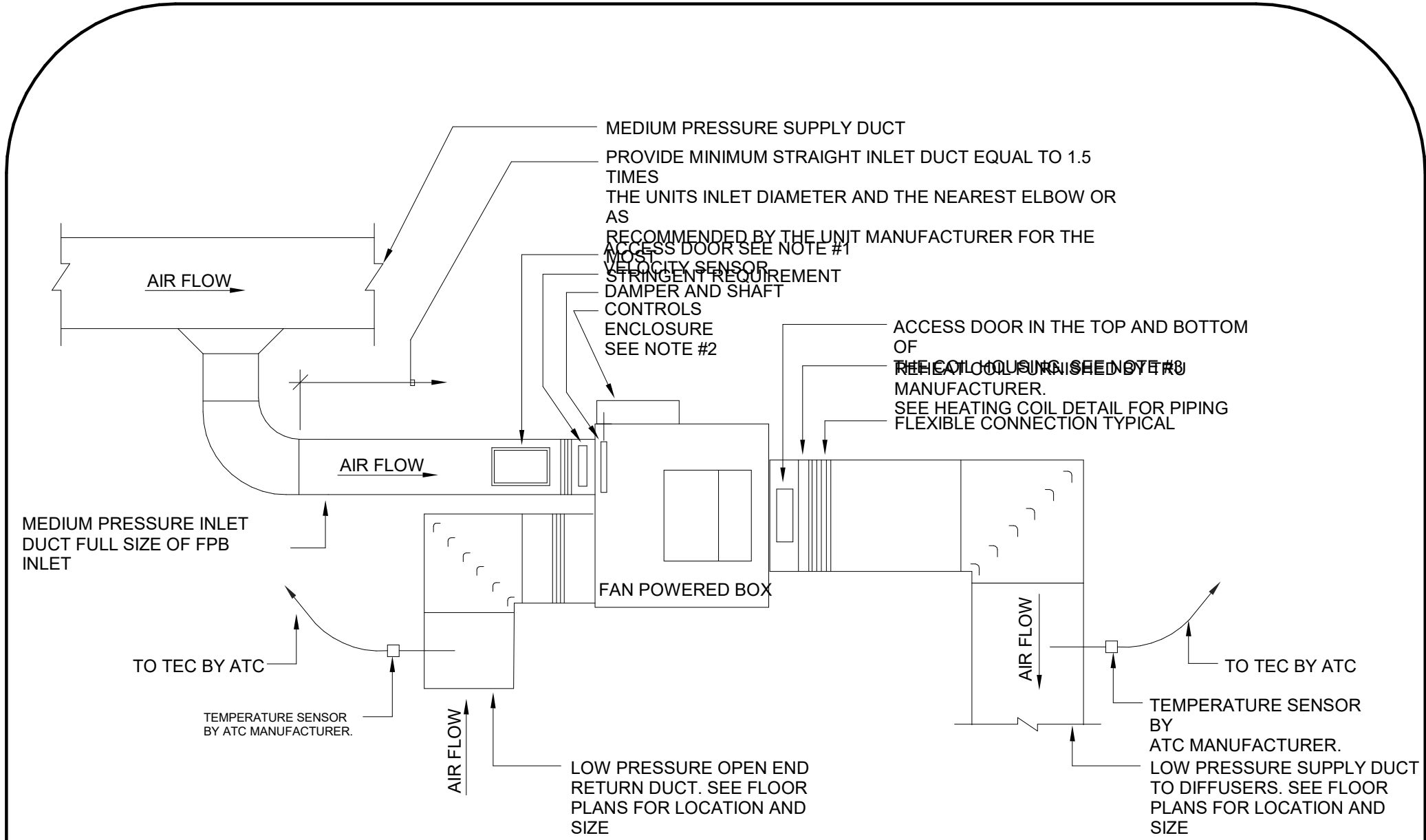
REVISIONS

NO	DATE	ITEM

SHEET NO.

M601

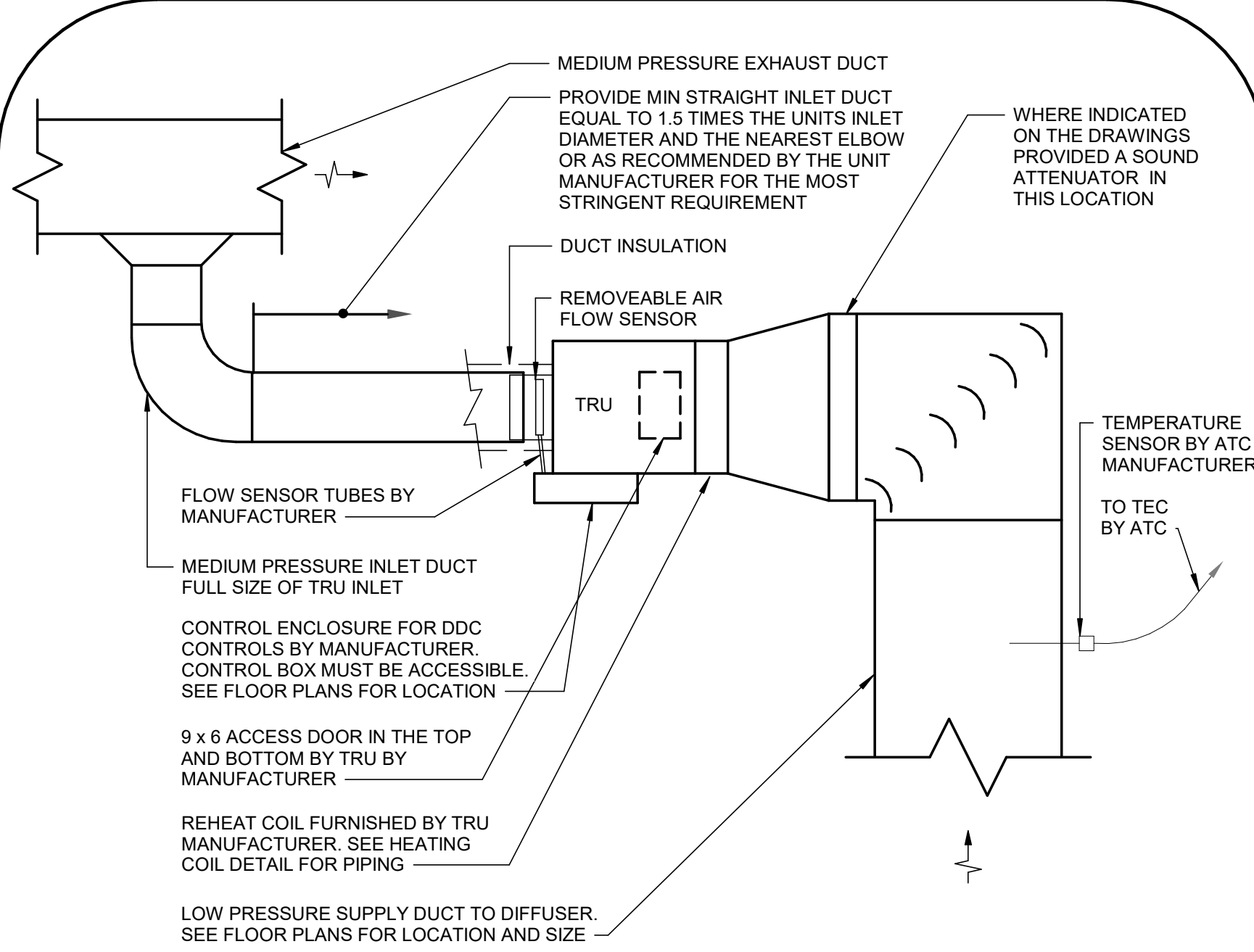
BKM # 25042.02



1 FAN POWERED BOX - DUCTWORK DETAIL
SCALE: NOT TO SCALE

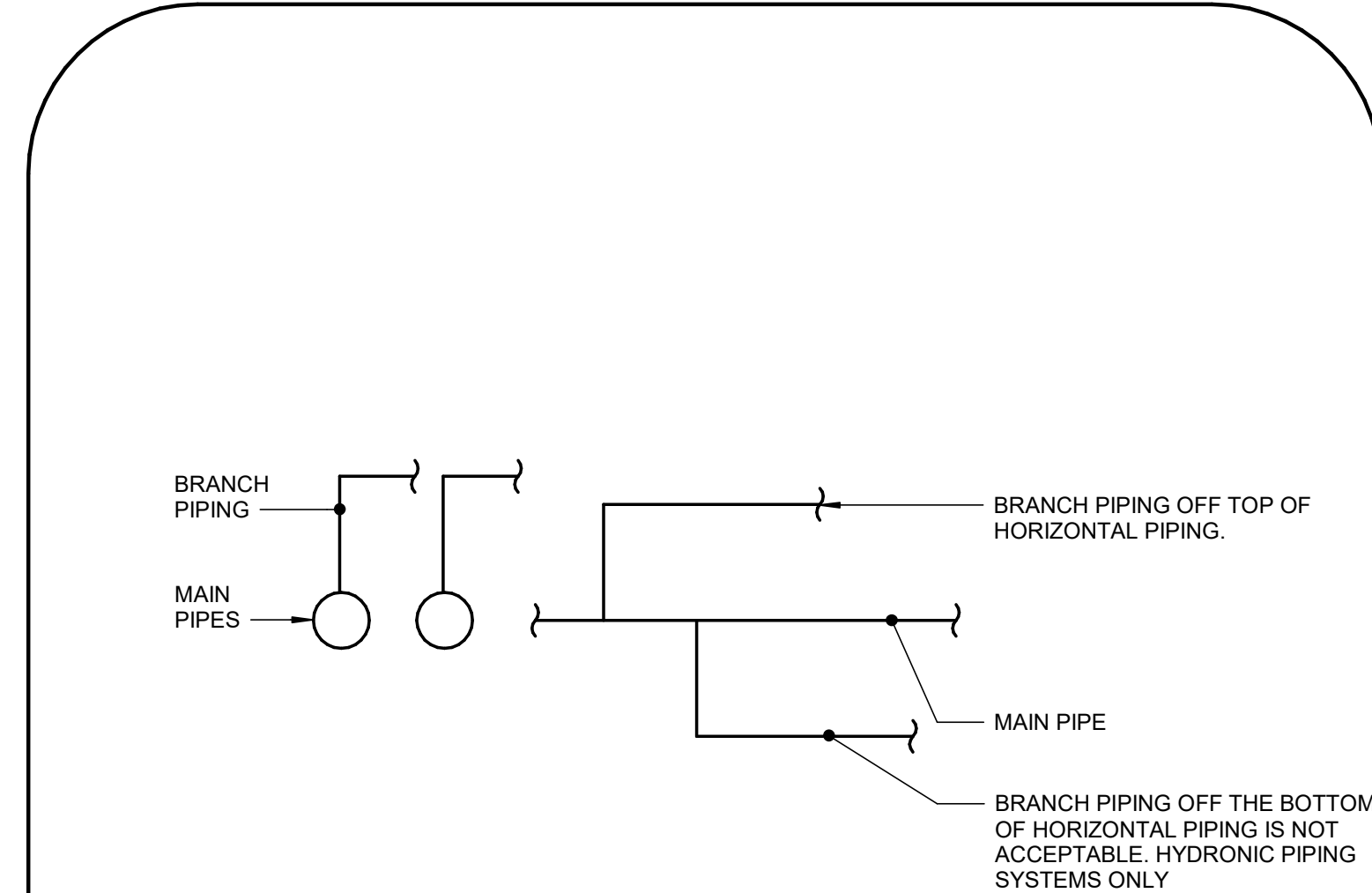
- NOTES:
1. PROVIDE SEMCO DUCT MATE INSULATED ACCESS DOOR, MODEL DI 106GA SIZE 10" X 6" WITH CLOSED CELL NEOPRENE GASKET, ZINC COATED SPRINGS AND BOLTS, RED POLYPROPYLENE MOLDED KNOBS, AND A MOUNTING TEMPLATE.
 2. CONTROL ENCLOSURE FOR DDC CONTROLS BY MANUFACTURER. CONTROL BOX MUST BE ACCESSIBLE SEE FLOOR PLANS FOR LOCATIONS.
 3. MINIMUM ACCESS DOOR SIZE IS 12 X 6. SIZE MAY VARY PER MANUFACTURER.

UMB - 232113 - Det 26 - Tab 3



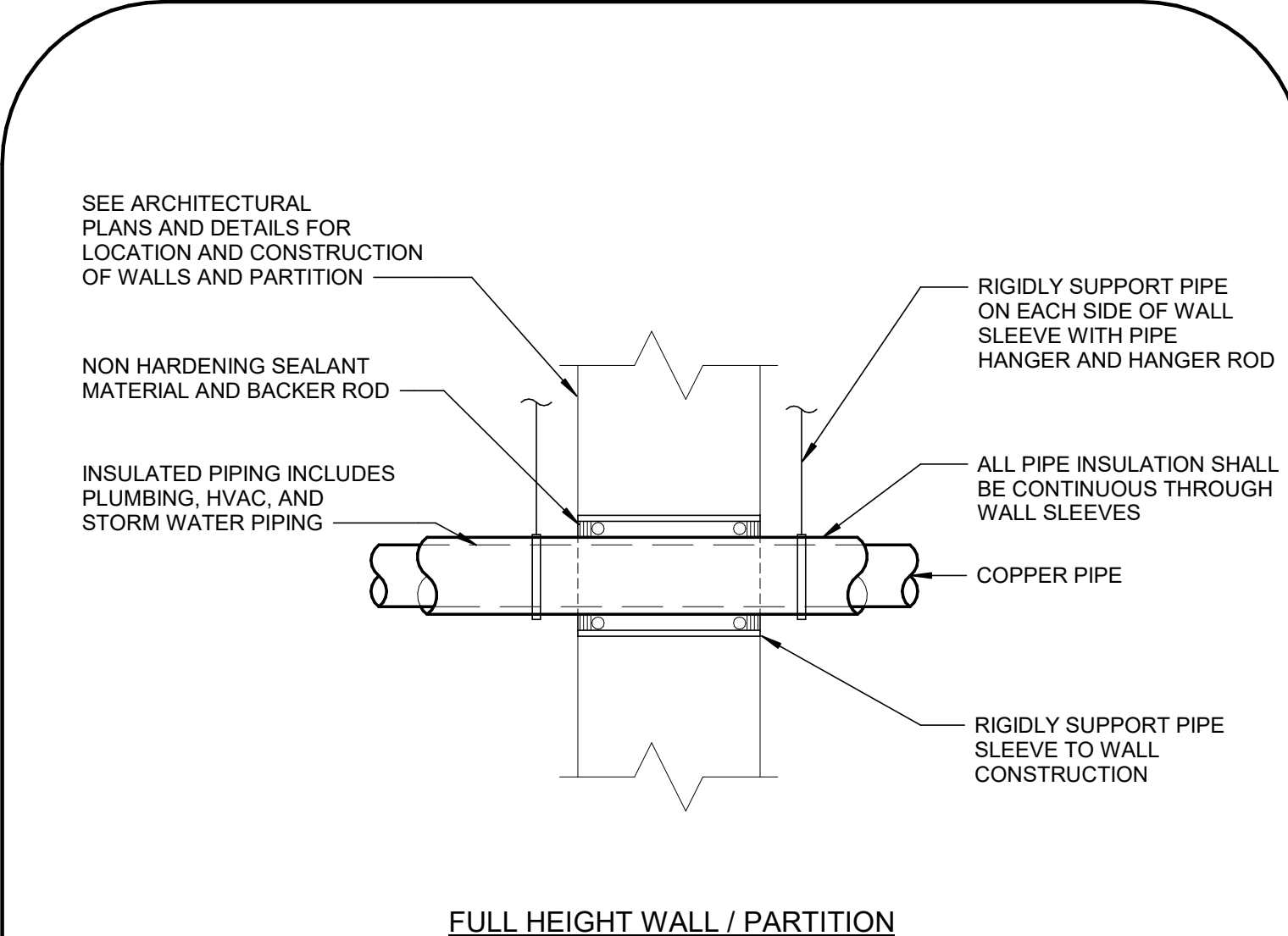
2 TERMINAL REHEAT UNIT - DUCTWORK DETAIL
SCALE: NOT TO SCALE

UMB - 233800 - Det 28 - Tab 1



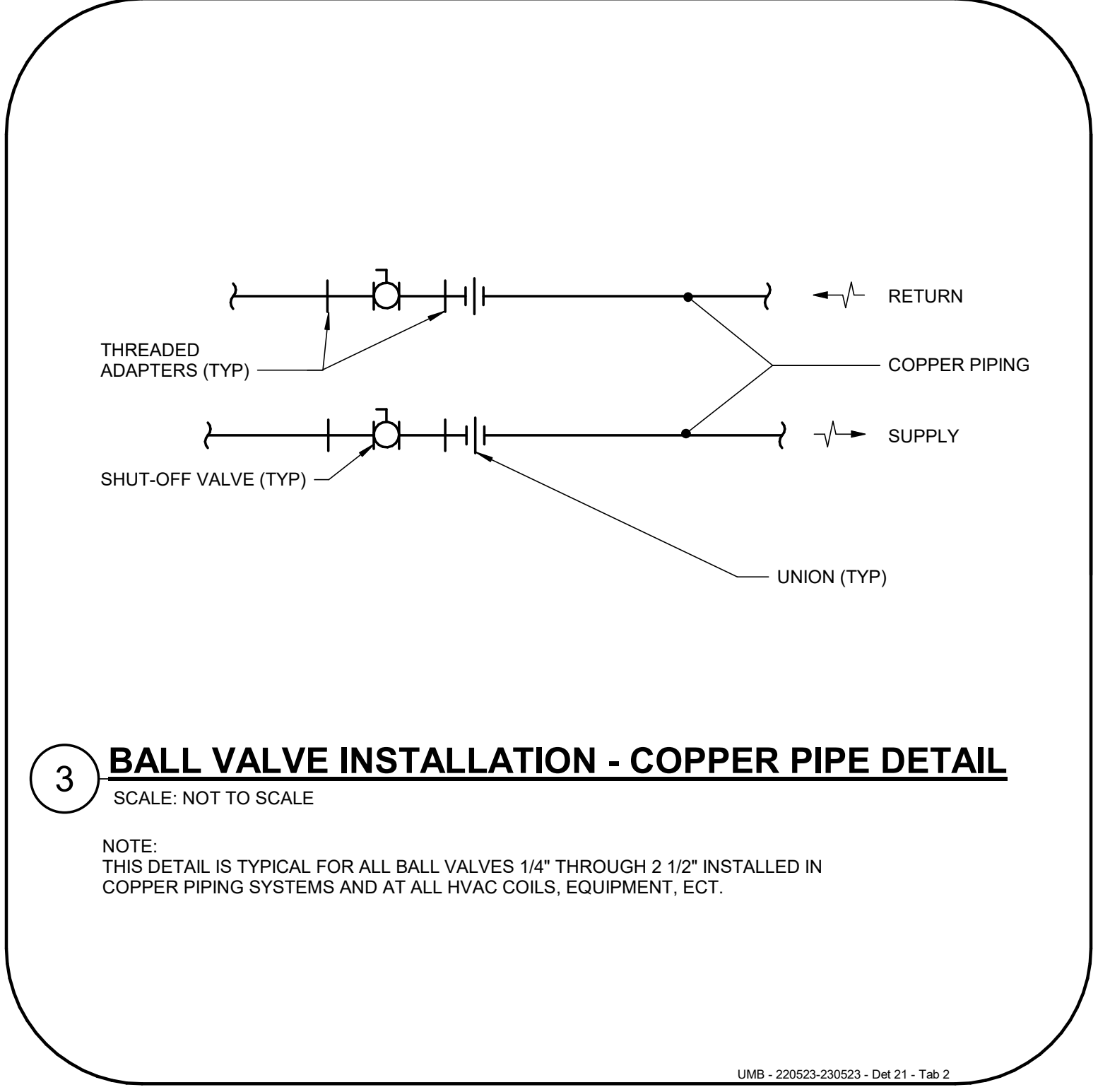
4 TYPICAL BRANCH PIPE CONNECTION DETAIL
SCALE: NOT TO SCALE

UMB - 232113 - Det 21 - Tab 9



5 UNRATED WALL PIPE SLEEVE - INSULATED PIPE DETAIL
SCALE: NOT TO SCALE

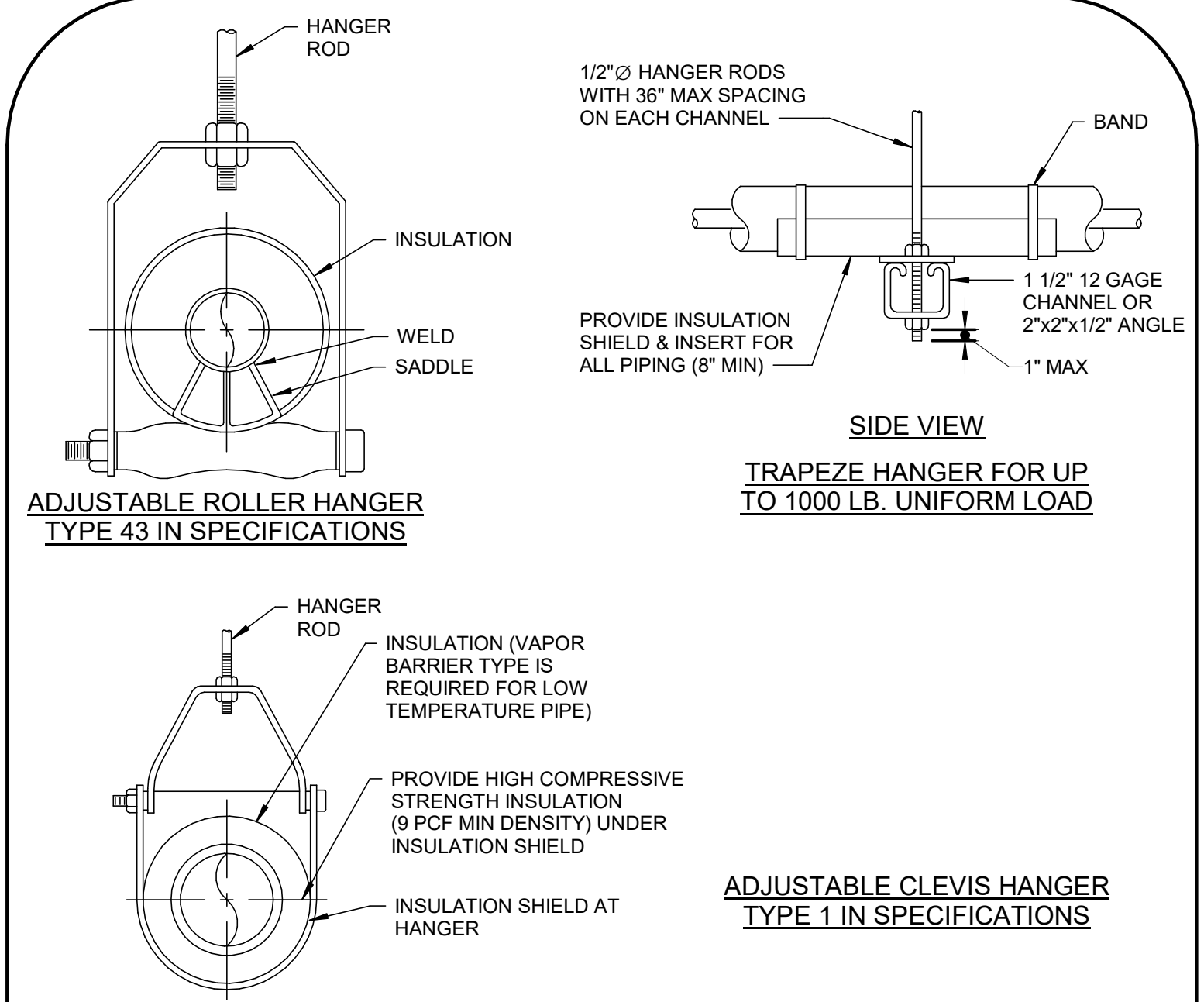
UMB - 230517 - Det 40 - Tab 10



3 BALL VALVE INSTALLATION - COPPER PIPE DETAIL
SCALE: NOT TO SCALE

NOTE:
THIS DETAIL IS TYPICAL FOR ALL BALL VALVES 1/4" THROUGH 2 1/2" INSTALLED IN COPPER PIPING SYSTEMS AND AT ALL HVAC COILS, EQUIPMENT, ECT.

UMB - 230523-230523 - Det 21 - Tab 2



6 TYPICAL PIPE HANGERS DETAIL
SCALE: NOT TO SCALE

BKM - 230529 - 006


MAXIMUM PIPE/TUBING SUPPORT SPACING, FEET													
NOM. SIZE (IN)	THRU 3/4	1	1 1/4	1 1/2	2	2 1/2	3	4	5	6			
PIPE	7 FT	7	7	9	10	11	12	14	16	17			
TUBING	5 FT	6	7	8	8	9	10	12	13	14			

NOTE:
FOR TRAPEZE HANGER TAKE SPACING OF SMALLEST SIZE ON TRAPEZE.

PARALLEL FAN POWERED AIR VOLUME TERMINAL WITH HOT WATER HEATING COIL SCHEDULE																							
DESIG	PRIMARY AIR CFM		MIN INLET SIZE IN	INDUCED AIR CFM	FAN DATA				MAX APD IN	MAX NC	MIN INLET SP IN	MIN SOUND SILENCER SIZE IN x IN x IN	HEATING COIL DATA						BASIS OF DESIGN		REMARKS		
	MAX	MIN			MAX DOWN STREAM SP IN	HP	VOLTS	PHASE					CFM	EAT DEG F	LAT DEG F	BTUH	EWT DEG F	LWT DEG F	GPM	PIPE SIZE	MANUFACTURER	MODEL	
FTB-639	545	110	8	435	0.20	1/4	120	1	0.60	35	1.50	12 x 12 x 36	545	55	95	23550	140	100	1	3/4"	TITUS	DTQP	
FTB-642	545	110	8	435	0.20	1/4	120	1	0.60	35	1.50	12 x 12 x 36	545	55	95	23550	140	100	1	3/4"	TITUS	DTQP	
NOTES: 1. AIR VOLUME TERMINALS SHALL BE PRESSURE INDEPENDENT TYPE. 2. PROVIDE MINIMUM OF THREE (3) DUCT DIAMETERS OR TWO (2) FEET (WHICHEVER IS GREATER) OF STRAIGHT SHEET METAL DUCT AT TERMINAL UNIT INLET. MEDIUM PRESSURE FLEXIBLE DUCTWORK WILL NOT BE PERMITTED. 3. WHERE OUTLET SIZE IS INDICATED OTHERWISE ON HVAC PLANS, PROVIDE DUCT TRANSITION AS REQUIRED. WHERE SOUND SILENCERS ARE REQUIRED, PROVIDE TRANSITION FROM TERMINAL OUTLET TO SOUND SILENCER AND FROM SOUND SILENCER TO DUCT SIZE INDICATED ON PLANS. 4. MAX. APD SHALL BE FOR AIR VOLUME TERMINAL PLUS HEATING COIL (NOT INCLUDING SOUND SILENCER). 5. MAXIMUM NOISE CRITERIA (NC) LEVELS FOR DISCHARGE AND RADIATED SOUND SHALL NOT BE EXCEEDED IN ANY OF THE 2ND THRU 7TH OCTAVE BANDS AT THE SCHEDULED INLET STATIC PRESSURE. STANDARD CATALOGUED ATTENUATION CREDITS SHALL NOT BE USED. SEE SPECIFICATIONS FOR ALLOWABLE SOUND ADJUSTMENT FACTORS. PROVIDE SOUND SILENCERS AS REQUIRED TO MEET NC VALUES INDICATED. 6. PROVIDE WHERE REQUIRED TO MEET NC VALUES SCHEDULED. SOUND SILENCER PRESSURE DROP SHALL NOT EXCEED 0.15 IN WC. 7. THE MINIMUM INLET STATIC PRESSURE INDICATED SHALL BE EQUAL TO THE DIFFERENCE IN STATIC PRESSURE FROM AIR TERMINAL INLET TO AIR TERMINAL DISCHARGE (NOT INCLUDING COIL, SILENCER, ETC.) 8. HYDRONIC HEATING COILS SHALL BE TWO ROWS, AS SPECIFIED.																							

AIR VOLUME TERMINAL WITH HOT WATER HEATING COIL SCHEDULE																		
DESIG	MAX CFM	MIN CFM	MIN INLET SIZE IN	MAX APD IN	MAX NC	MIN INLET SP IN	MIN SILENCER SIZE IN x IN x IN	HEATING CAPACITY					BASIS OF DESIGN			REMARKS		
								CFM	EAT DEG F	LAT DEG F	BTUH	EWT DEG F	LWT DEG F	GPM	PIPE SIZE	MANUFACTURER	MODEL	
VAV-634	195	60	5	0.60	35	1.50	12 x 8 x 36	195	55	95	8,430	140	100	0.50	3/4"	TITUS	DESV	SEE NOTES
VAV-635	195	60	5	0.60	35	1.50	12 x 8 x 36	195	55	95	8,430	140	100	0.50	3/4"	TITUS	DESV	SEE NOTES
VAV-636	105	25	5	0.60	35	1.50	12 x 8 x 36	105	55	95	4,540	140	100	0.25	3/4"	TITUS	DESV	SEE NOTES
VAV-640	150	25	5	0.60	35	1.50	12 x 8 x 36	150	55	95	6,480	140	100	0.32	3/4"	TITUS	DESV	SEE NOTES
VAV-641	150	25	5	0.60	35	1.50	12 x 8 x 36	150	55	95	6,480	140	100	0.32	3/4"	TITUS	DESV	SEE NOTES
VAV-644	150	25	5	0.60	35	1.50	12 x 8 x 36	150	55	95	6,480	140	100	0.32	3/4"	TITUS	DESV	SEE NOTES
VAV-647	245	50	5	0.60	35	1.50	12 x 8 x 36	245	55	95	10,590	140	100	0.53	3/4"	TITUS	DESV	SEE NOTES
NOTES: 1. AIR VOLUME TERMINALS SHALL BE PRESSURE INDEPENDENT TYPE. 2. PROVIDE MINIMUM OF THREE (3) DUCT DIAMETERS OR TWO (2) FEET (WHICHEVER IS GREATER) OF STRAIGHT SHEET METAL DUCT AT TERMINAL UNIT INLET. MEDIUM PRESSURE FLEXIBLE DUCTWORK WILL NOT BE PERMITTED. 3. WHERE OUTLET SIZE IS INDICATED OTHERWISE ON HVAC PLANS, PROVIDE DUCT TRANSITION AS REQUIRED. WHERE SOUND SILENCERS ARE REQUIRED, PROVIDE TRANSITION FROM TERMINAL OUTLET TO SOUND SILENCER AND FROM SOUND SILENCER TO DUCT SIZE INDICATED ON PLANS. 4. MAX. APD SHALL BE FOR AIR VOLUME TERMINAL PLUS HEATING COIL AND SOUND SILENCER. 5. MAXIMUM NOISE CRITERIA (NC) LEVELS FOR DISCHARGE AND RADIATED SOUND SHALL NOT BE EXCEEDED IN ANY OF THE 2ND THRU 7TH OCTAVE BANDS AT THE SCHEDULED INLET STATIC PRESSURE. STANDARD CATALOGUED ATTENUATION CREDITS SHALL NOT BE USED. SEE SPECIFICATIONS FOR ALLOWABLE SOUND ADJUSTMENT FACTORS. PROVIDE SOUND SILENCERS AS REQUIRED TO MEET NC VALUES INDICATED. 6. PROVIDE WHERE REQUIRED TO MEET NC VALUES SCHEDULED. SOUND SILENCER PRESSURE DROP SHALL NOT EXCEED 0.15 IN WC. 7. THE MINIMUM INLET STATIC PRESSURE INDICATED SHALL BE EQUAL TO THE DIFFERENCE IN STATIC PRESSURE FROM AIR TERMINAL INLET TO AIR TERMINAL DISCHARGE (NOT INCLUDING COIL, SILENCER, ETC.) 8. HYDRONIC HEATING COILS SHALL BE TWO ROWS, AS SPECIFIED.																		

AIR DEVICE SCHEDULE									
DESIG	DUTY	SIZE (IN)	CFM RANGE	INLET SIZE	MAX SP (IN)	MAX NC	DESCRIPTION	BASIS OF DESIGN	
								MANUFACTURER	MODEL
A	SUPPLY	24 x 24 MODULE	0 - 120	6"Ø	0.10	20	18 x 18 NECK W/ FACTORY MOUNTED SQUARE - ROUND TRANSITION	TITUS	TDC
A	SUPPLY	24 x 24 MODULE	121 - 210	8"Ø	0.10	20	18 x 18 NECK W/ FACTORY MOUNTED SQUARE - ROUND TRANSITION	TITUS	TDC
B	SUPPLY	12 x 12 MODULE	0 - 120	6"Ø	0.10	20	6 x 6 NECK W/ FACTORY MOUNTED SQUARE - ROUND TRANSITION	TITUS	TDC
C	RETURN	24 x 24 MODULE	0 - 450	12 x 12	0.10	20	PERFORATED FACE - REGISTER (FLUSH) (WITH FILTER REFER TO SPECS)	TITUS	PAR
D	EXHAUST	10 x 10	0 - 295	10 x 10	0.06	20	FIXED LOUVER. 30° DEFLECTION 3/4" SPACING - GRILLE	TITUS	25RL
NOTES: 1. RETURN GRILLES SHALL BE PROVIDED WITH AIR FILTERS WHERE REQUIRED PER SPECIFICATIONS. 2. COORDINATE SUPPLY AIR DIFFUSER THROW DIRECTIONS AS INDICATED ON THE FLOOR PLANS. (SHADED QUADRANT REPRESENTS BLANKED OFF FLOW IN THAT DIRECTION).									



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UMB SON
6TH FLOOR
APT. SIM.
RENOVATION

UMB BUILDING NO. : SON - 0833

UMB Project NO. : 26-312

A/E PROJECT NO. : 25-128

CAD FILE NO. :

DATE 04/08/2026

SHEET TITLE :

MECHANICAL
SCHEDULES

REVISIONS		
NO	DATE	ITEM

SHEET NO.

M801

PLUMBING GENERAL NOTES

1. THE PLUMBING CONTRACT DRAWINGS ARE DIAGRAMMATIC AND ARE INTENDED TO INDICATE SCOPE AND THE GENERAL ARRANGEMENT OF THE SYSTEMS.
2. MAKE ALL WATER CONNECTIONS TO FIXTURES ABOVE FLOOR.
3. LIMIT SANITARY AND WASTE PIPING DEAD END TO 12 INCHES FROM MAIN OR MAIN BRANCH.
4. PROVIDE A MINIMUM OF 24 INCHES CLEARANCE FOR RODDING OF CLEANOUTS.
5. CONTRACTOR SHALL COORDINATE ALL WORK WITH ALL OTHER DISCIPLINES PRIOR TO CONSTRUCTION.
6. ACCESS SHALL BE PROVIDED FOR ALL CONCEALED VALVES, CLEANOUTS ETC. LOCATED AT/IN CEILINGS, WALLS OR FLOORS.
7. CONTRACTOR SHALL REFER TO ARCHITECTURAL DRAWINGS FOR EXACT LOCATIONS OF PLUMBING FIXTURES, FLOOR DRAINS AND OTHER EQUIPMENT.
8. ALL FLOOR DRAINS AND SHOWER DRAINS CONNECTED TO THE SANITARY SHALL BE PROVIDED WITH A PRIMED TRAP UNLESS OTHERWISE NOTED.
9. CONTRACTOR SHALL COORDINATE THE LOCATION OF ALL FLUSH TYPE CLEANOUTS WITH WALLS, EQUIPMENT, DUCTWORK, PIPE, STRUCTURAL MEMBERS, ETC.
10. ALL SPECIFICATIONS AND DRAWINGS (I.E., ARCHITECTURAL, STRUCTURAL, MECHANICAL, PLUMBING, FIRE PROTECTION AND ELECTRICAL) ARE COMPLEMENTARY AND MUST BE USED IN COMBINATION TO OBTAIN COMPLETE CONSTRUCTION INFORMATION.
11. COORDINATE ALL PIPING TO BE INSTALLED WITH OTHER TRADES (I.E., MECHANICAL, FIRE PROTECTION AND ELECTRICAL) TO ASSURE THAT ALL PIPING SYSTEMS ARE INSTALLED ABOVE FINISHED CEILING OR IN A CONCEALED SPACE. ALL CEILING HEIGHTS INDICATED ON ARCHITECTURAL AND/OR INTERIOR DESIGN DRAWINGS AND MINIMUM CLEARANCES REQUIRED BY LOCAL CODES SHALL BE MAINTAINED THROUGHOUT THE BUILDING.
12. ALL CUTTING, DRILLING AND PATCHING OF WALLS, FLOORS OR STRUCTURAL MEMBERS FOR THE INSTALLATION OF THE PLUMBING SYSTEMS SHALL BE PROVIDED BY THE PLUMBING CONTRACTOR. STRUCTURAL COMPONENTS SHALL NOT BE CUT, DRILLED OR MODIFIED IN ANY WAY WITHOUT THE STRUCTURAL ENGINEER'S REVIEW AND APPROVAL.
13. BACKFLOW PREVENTER ASSEMBLY SHALL BE INSTALLED IN AN ACCESSIBLE LOCATION (NOT TO EXCEED 48" ABOVE THE FINISHED FLOOR), PIPE RELIEF OUTLET DISCHARGE TO NEAREST FLOOR DRAIN.
14. ALL PIPING, SYSTEMS, VALVES AND EQUIPMENT SHALL BE PROPERLY IDENTIFIED.
15. COLD WATER SUPPLY MAINS AND BRANCHES SHALL BE INSULATED IN ACCORDANCE WITH THE SPECIFICATIONS.
16. ALL ROUGH-IN AND FINAL CONNECTION FOR EQUIPMENT SPECIFIED BY OTHERS SHALL BE PROVIDED.
17. ALL EXPOSED PIPING AND FITTINGS SHALL BE CHROME PLATED.
18. ALL HORIZONTAL PIPING LINES EXTENDED AND CONNECTED TO EQUIPMENT SHALL BE INSTALLED AT THE HIGHEST POSSIBLE ELEVATION AND NOT LESS THAN 6" ABOVE FLOOR.
19. VERIFY EQUIPMENT LOCATIONS WITH OTHER CONSULTANTS OR SUPPLIERS BEFORE PROCEEDING WITH ANY ROUGH-IN.
20. ALL PIPING SHALL BE INSTALLED ABOVE CEILING OR IN A CONCEALED SPACE UNLESS NOTED OR INDICATED OTHERWISE.
21. CLEANOUTS SHALL BE PROVIDED AT THE BASE OF EACH SANITARY OR STORM WATER STACK.
22. THOUGH SOME PIPING OFFSETS ARE INDICATED, IT IS NOT THE INTENT OF THE DRAWINGS TO SHOW ALL OFFSETS THAT ARE REQUIRED. THE CONTRACTOR SHALL FULLY COORDINATE THE PLUMBING WORK WITH THE WORK OF ALL OTHER TRADES TO PROVIDE COMPLETE SYSTEM WITHOUT INTERFERENCES.
23. DEMOLISH ALL SYSTEMS AND EQUIPMENT INDICATED TO BE REMOVED BY DRAWINGS OR NOTES. WHERE EXISTING SYSTEMS ARE TO REMAIN IN USE, REMOVE ALL UNUSED PORTIONS OF THE SYSTEMS TO A POINT AS CLOSE TO THE REMAINING SYSTEMS AS POSSIBLE AND CAP WITH MATERIALS AND CONSTRUCTION MATCHING THE REMAINING SYSTEMS' CUT END.
24. REMOVE ALL EXISTING PIPING ABOVE CEILINGS OR EXPOSED NOT TO REMAIN IN USE. DISCONNECT ABANDONED PIPING IN WALLS OR BELOW SLAB FROM DISTRIBUTION SYSTEM.
25. CONTRACTOR SHALL FIELD VERIFY ALL EXISTING CONDITIONS INCLUDING EXISTING INVERTS, LOCATIONS AND SIZES OF PIPES, DUCTWORK, LIGHTING AND STRUCTURAL MEMBERS PRIOR TO CONSTRUCTION.
26. ALL PLUMBING VENTS SHALL BE A MINIMUM OF TEN FEET (10') FROM OUTSIDE AIR INTAKES.
27. CONTRACTOR SHALL REMOVE, REINSTALL AND/OR RELOCATE ANY EXISTING CONDUIT, PIPING SYSTEMS, DUCTWORK, TELECOMMUNICATIONS WIRING, HANGERS/SUPPORTS, ETC. AS REQUIRED TO ACCOMPLISH THE PLUMBING WORK INDICATED.
28. WHERE PIPING IS EXPOSED BENEATH ALL SINKS AND LAVATORIES, THE CONTRACTOR SHALL PROVIDE MANUFACTURED PREMOLDED INSULATED PIPE FOR EXPOSED HOT WATER, COLD WATER AND SANITARY DRAIN PIPING; LAVGUARD OR EQUIVALENT.
29. FOR ALL INSULATED PIPING, PROVIDE RIGID, NON-COMPRESSIVE INSULATED PIPE SADDLES AT ALL HANGER AND SUPPORT LOCATIONS. SEE SPECIFICATION FOR ADDITIONAL INFORMATION.
30. CONTRACTOR SHALL NOTIFY AND COORDINATE WITH THE OWNER ANY UTILITY OUTAGES. OWNER SHALL BE GIVEN A MINIMUM NOTICE FOR ANY OUTAGES AS INDICATED WITHIN THE PROJECT SPECIFICATIONS.
31. SCHEDULE ALL WORK IN OCCUPIED SPACES WITH THE OWNER AS INDICATED IN THE SPECIFICATIONS.

PLUMBING ABBREVIATIONS

ABOVE FINISHED FLOOR	AFF
BRAKE HORSEPOWER	BHP
CONNECTION	CONN
COLD WATER (DOMESTIC)	CW
DESIGNATION	DESIG
FEET	FT
FLOOR DRAIN	FD
HORSEPOWER	HP
HOT WATER (DOMESTIC)	HW
KILOWATT(S)	KW
POUNDS	LBS
MAXIMUM	MAX
THOUSAND BRITISH THERMAL UNITS PER HOUR	MBH
REMOVE EXISTING	RX
SANITARY	SAN
TRAP PRIMING LINE	TPL
VENT	V

PLUMBING LEGEND

COLD WATER		TEMPERATURE/PRESSURE TEST PORT	
HOT WATER		THERMOMETER	
SANITARY		FLOOR DRAIN	
VENT		PIPING CAP	
BALL VALVE		PIPE CONNECTION BOTTOM	
BALANCING VALVE W/ FLOW METER FITTING (VENTURI TYPE)		PIPE CONNECTION TOP	
BUTTERFLY VALVE		PIPING ELBOW DOWN	
CHECK VALVE		PIPING ELBOW UP	
GATE VALVE		UNION	
GLOBE VALVE		VALVE IN VERTICAL POSITION	
Y-STRAINER W/HOSE-END VALVE		CONNECT TO EXISTING	
FLOOR CLEANOUT		LIMIT OF DEMOLITION	
WALL CLEANOUT		PIPING TO BE REMOVED	
PRESSURE GAUGE			

PLUMBING DRAIN SCHEDULE

DESIG	FIXTURE	AREA	STRAINER SIZE DIA	OUTLET SIZE DIA	BASIS OF DESIGN		REMARKS
					MANUFACTURER	MODEL	
FD-1	FLOOR DRAIN	TOILET ROOM	6	2"	ZURN	Z-415	SEE NOTES
NOTES: 1. 1/2" TRAP PRIMING LINE. 2. INVERTIBLE MEMBRANE CLAMPS.							

PLUMBING FIXTURE SCHEDULE

DESIG	DESCRIPTION	CW	HW	SAN	VENT	TRAP	FLOW	REMARKS
BT-1	BATHTUB/SHOWER	1/2"	1/2"	2"	2"	"P"	1.75 GPM	3, 4
L-1	LAVATORY	1/2"	1/2"	1 1/2"	1 1/2"	"P"	1 GPM	5, 6
S-1	KITCHEN SINK	1/2"	1/2"	2"	2"	"P"	1.5 GPM	5
WC-1	WATER CLOSET	1/2"	-	4"	-	INTERNAL	1.28 / 0.92 GPF	1, 2

- NOTES:
1. ADA COMPLIANT.
2. DUAL FLUSH TANK.
3. WALL MOUNTED.
4. FLOOR MOUNTED.
5. COUNTERTOP MOUNTED.
6. PROVIDE ASSE 1070 POINT-OF-USE THERMOSTATIC MIXING VALVE.

TRAP PRIMER SCHEDULE

DESIG	DESCRIPTION	BASIS OF DESIGN	
		MANUFACTURER	MODEL
TP-1	1/2" COPPER INLET CONNECTION, STAINLESS STEEL 115VAC SOLENOID VALVE, 1" PHYSICAL AIR GAP ELECTRONIC MODULE WITH 24-HOUR TIMER AND MANUAL TEST BUTTON, 1/2" FEMALE NPT CONNECTION, SURFACE MOUNTED ASSEMBLY.	PRECISION PLUMBING PRODUCTS	SMP-500



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UMB Project NO. :	26-312
A/E PROJECT NO. :	25-128
CAD FILE NO. :	
DATE	04/08/2026

SHEET TITLE :

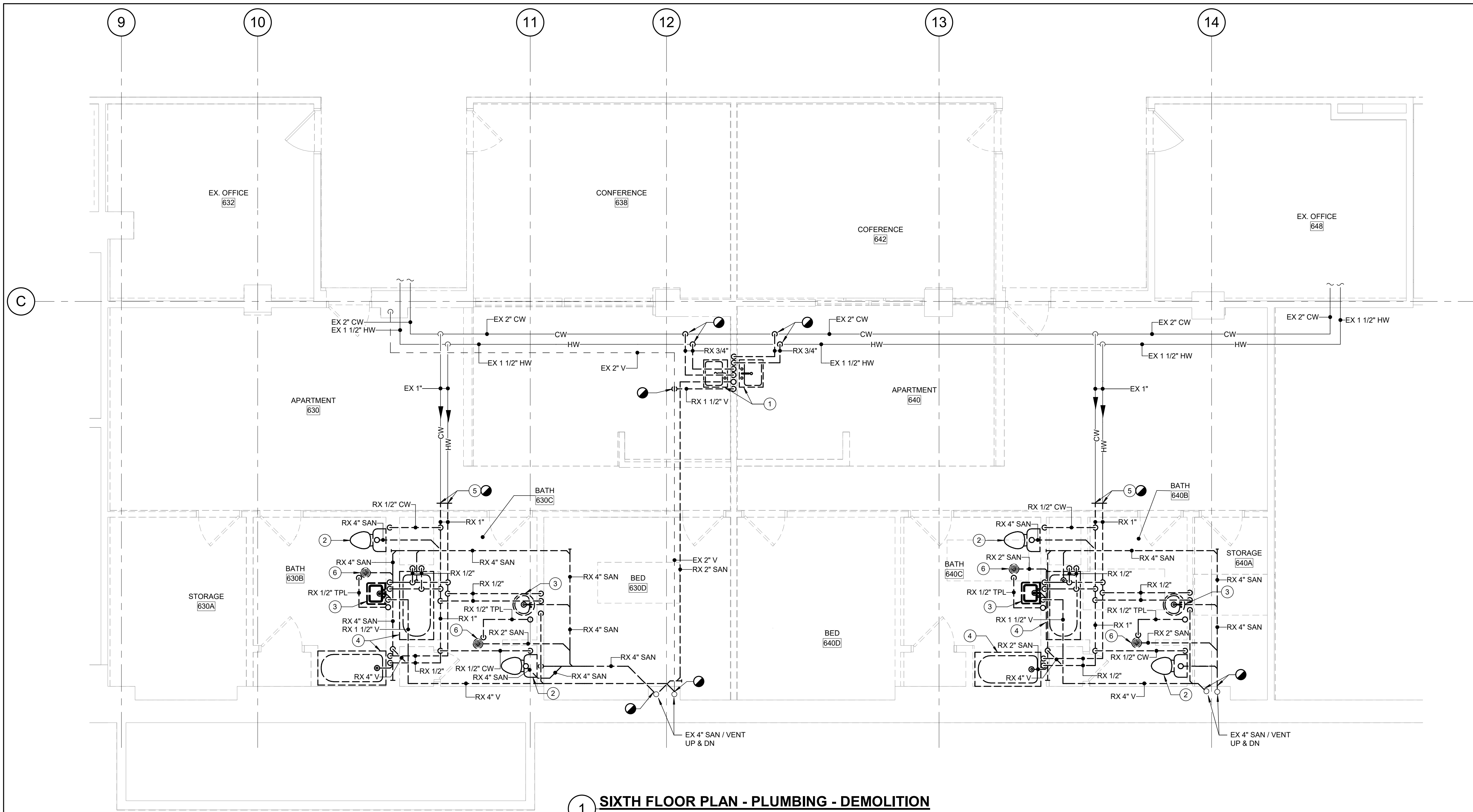
PLUMBING LEGEND,
ABBREVIATION,
GENERAL NOTES &
SCHEDULES

REVISIONS		
NO	DATE	ITEM

SHEET NO.

P001

BKM # 25042.02



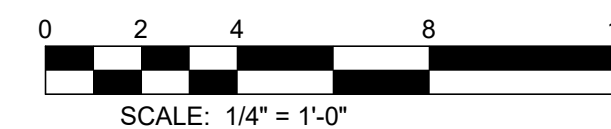
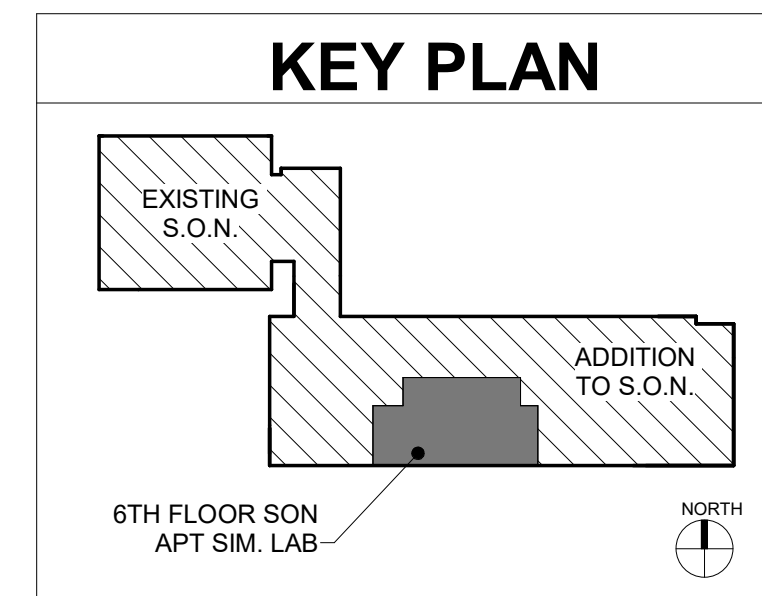
1 SIXTH FLOOR PLAN - PLUMBING - DEMOLITION
SCALE: 1/4" = 1'-0"

GENERAL NOTES:

- REFER TO P001 FOR PLUMBING LEGEND, ABBREVIATIONS AND GENERAL NOTES.
- HORIZONTAL SANITARY PIPING AND TRAP PRIMING LINES SHOWN EXIST BELOW THE FLOOR SLAB, WITHIN THE FIFTH FLOOR CEILING PLENUM. HORIZONTAL VENT AND DOMESTIC COLD AND HOT WATER EXISTING ABOVE THE SIXTH FLOOR CEILING.

DRAWING NOTES:

- REMOVE EXISTING SINK, P-TRAP, AND ALL ASSOCIATED VALVES, ACCESSORIES, AND FITTINGS.
- REMOVE EXISTING WATER CLOSET, P-TRAP, AND ALL ASSOCIATED VALVES, ACCESSORIES, AND FITTINGS.
- REMOVE EXISTING LAVATORY, P-TRAP, AND ALL ASSOCIATED VALVES, ACCESSORIES, AND FITTINGS.
- REMOVE EXISTING TUB AND SHOWER AND ALL ASSOCIATED VALVES, ACCESSORIES, AND FITTINGS.
- REMOVE EXISTING 1" DOMESTIC COLD WATER AND 1" DOMESTIC HOT WATER PLUMBING EXTENDING TO THE BATHROOM AND ALL FIXTURES. CAP PLUMBING AT POINT OF DISCONNECT.
- REMOVE EXISTING FLOOR DRAIN. PATCH AND SEAL FLOOR.



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APT. SIM.
RENOVATION**

UMB BUILDING NO. :	SON - 0833
UMB Project NO. :	26-312
A/E PROJECT NO. :	25-128
CAD FILE NO. :	
DATE	04/08/2026

SHEET TITLE :

**SIXTH FLR
PLAN PLUMBING
DEMOLITION**

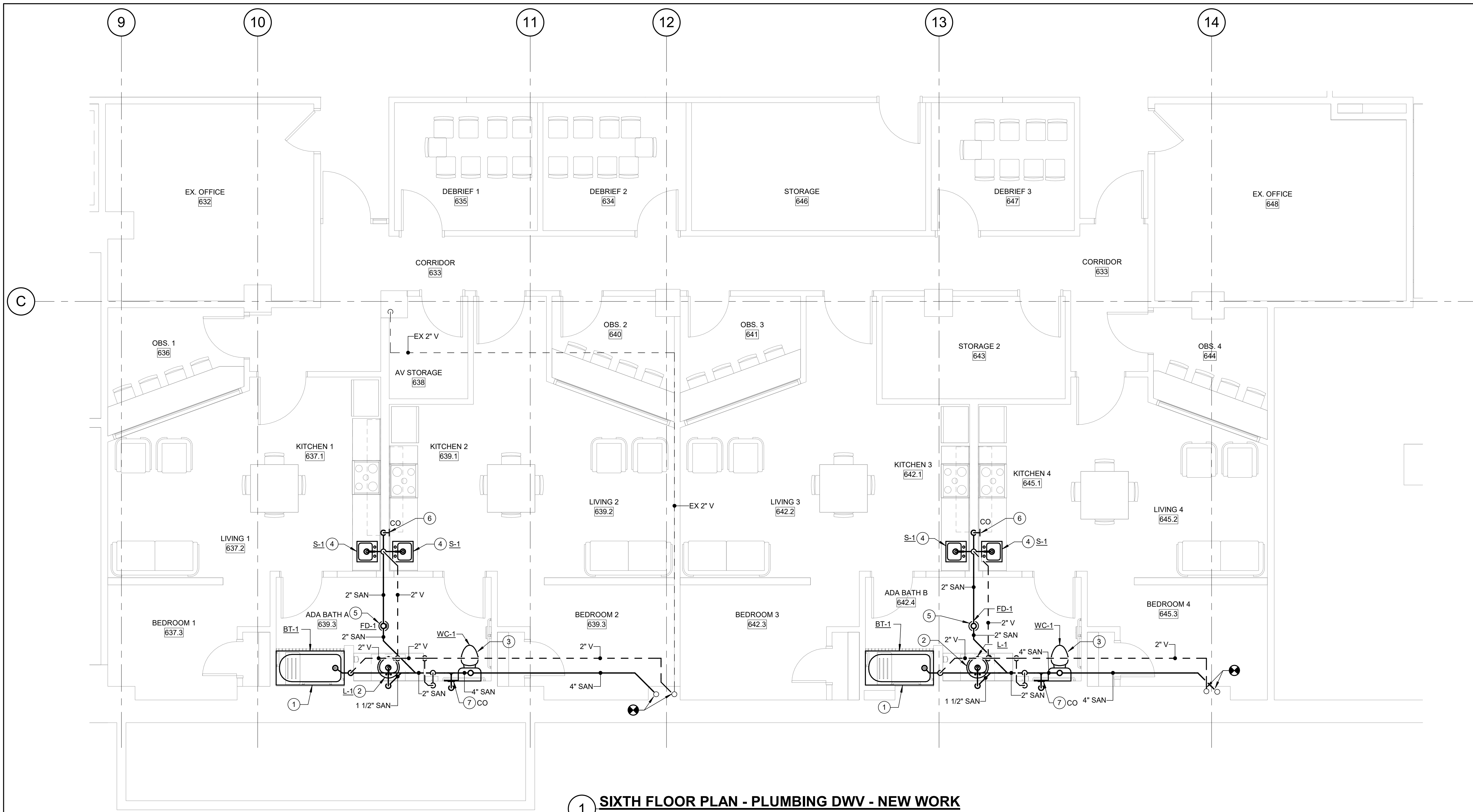
REVISIONS

NO	DATE	ITEM

SHEET NO.

PD106

BKM # 25042.02



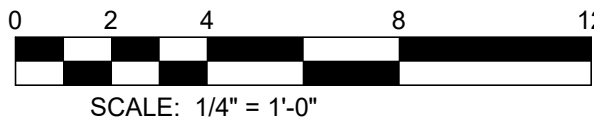
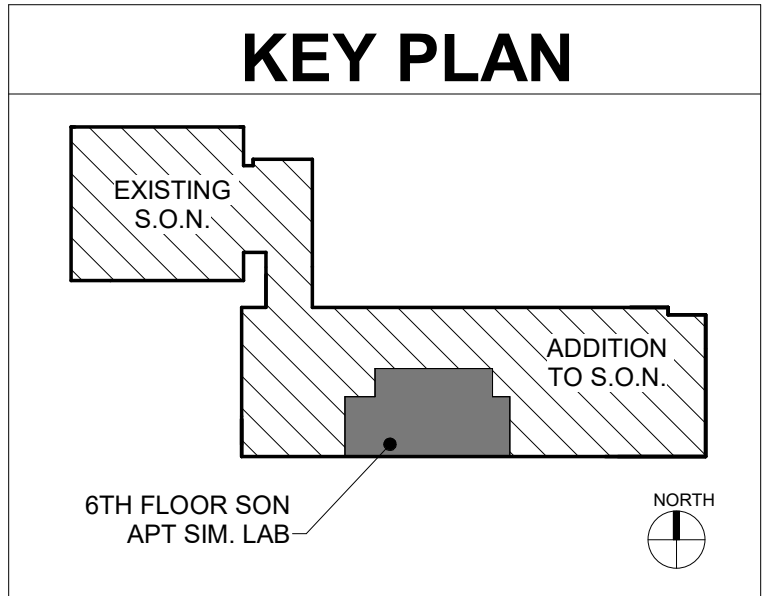
1 **SIXTH FLOOR PLAN - PLUMBING DWV - NEW WORK**
SCALE: 1/4" = 1'-0"

GENERAL NOTES:

1. REFER TO P001 FOR PLUMBING LEGEND, ABBREVIATIONS AND GENERAL NOTES.
2. SANITARY PIPING SHOWN IS TO BE INSTALLED BELOW THE FLOOR SLAB, WITHIN THE 5TH FLOOR CEILING PLENUM. HORIZONTAL VENT PIPING SHOWN ARE TO BE INSTALLED ABOVE 6TH FLOOR CEILING.

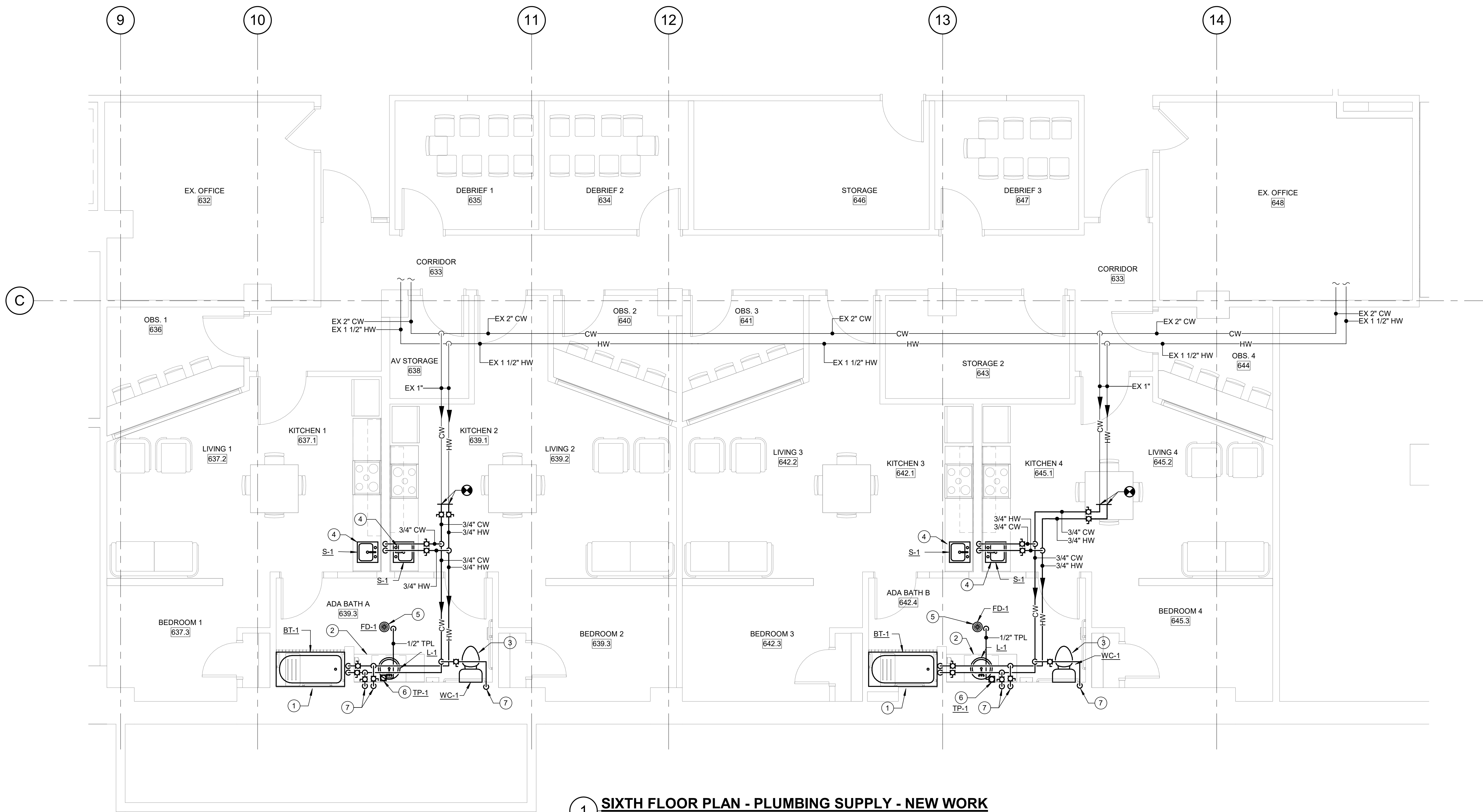
DRAWING NOTES:

1. BT-1. 5 FOOT BATHTUB WITH SHOWER. PROVIDE WITH 2" P-TRAP.
2. L-1. COUNTERTOP LAVATORY SINK. PROVIDE WITH 1 1/2" P-TRAP.
3. WC-1. TANK TYPE WATER CLOSET WITH BOTTOM DISCHARGE. EXTEND 4" SANITARY FROM DISCHARGE TO RISER AS SHOWN. PROVIDE WALL CLEANOUT AT AN ACCESSIBLE HEIGHT AS SHOWN.
4. S-1. DROP IN KITCHEN SINK. PROVIDE WITH 1 1/2" P-TRAP AND EXTEND PIPING FROM EACH BACK-TO-BACK FIXTURE INTO WALL TO A DOUBLE FIXTURE FITTING. EXTEND 2" VENT UP THROUGH WALL AND CONNECT TO 2" VENT ABOVE BATHROOM AS SHOWN.
5. FD-1. 2" FLOOR DRAIN. PROVIDE WITH P-TRAP WITH TRAP PRIMING CONNECTION (REFER TO P206 FOR TRAP PRIMING LINE).
6. PROVIDE 2" WALL CLEAN OUT WITHIN SINK BASE CABINET, EXTENDING THROUGH CABINET BACK.
7. PROVIDE CLEANOUT ABOVE FLOOR RIM OF TOILET COMPLETE WITH 12X12 ACCESS DOOR. REFER TO P401 FOR DETAIL.



BID DOCUMENTS - 04/08/2026

REVISIONS		
NO	DATE	ITEM



1 SIXTH FLOOR PLAN - PLUMBING SUPPLY - NEW WORK

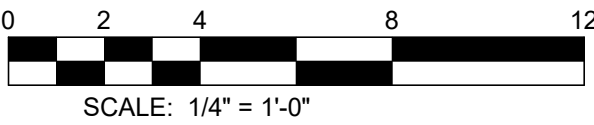
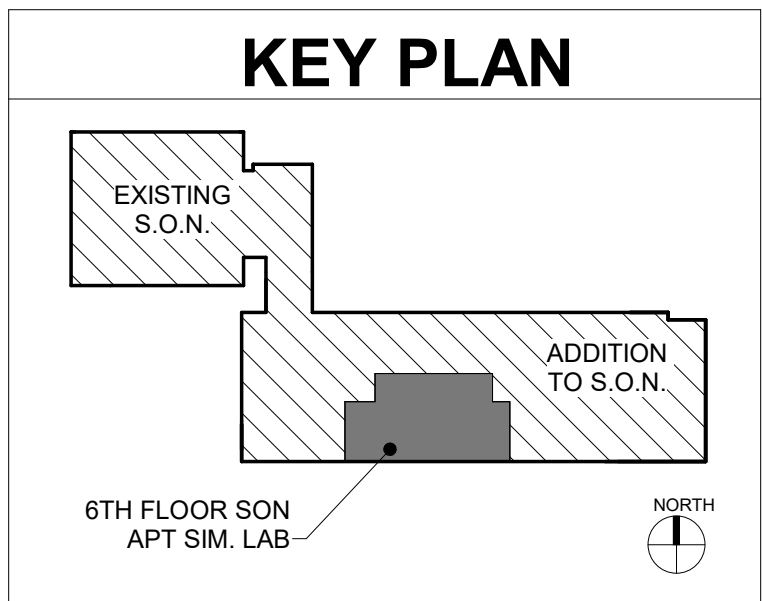
SCALE: 1/4" = 1'-0"

GENERAL NOTES:

1. REFER TO P001 FOR PLUMBING LEGEND, ABBREVIATIONS AND GENERAL NOTES.
2. TRAP PRIMING LINE SHOWN TO BE INSTALLED BELOW THE FLOOR SLAB, WITHIN THE 5TH FLOOR CEILING PLENUM.

DRAWING NOTES:

1. BT-1, 5 FOOT BATHTUB WITH SHOWER. EXTEND 1/2" CW & 1/2" HW TO MIXING VALVE AND INSTALL SPECIFIED ACCESSORIES AND TRIM.
2. L-1, COUNTERTOP LAVATORY SINK. EXTEND 1/2" CW & 1/2" HW TO FIXTURE. PROVIDE NEW STOP VALVES. PROVIDE WITH ASSE 1070 MIXING VALVE FOR HOT WATER SUPPLY LINE. PROVIDE CLEANOUT WITHIN SINK CASEWORK.
3. WC-1, TANK TYPE WATER CLOSET WITH BOTTOM DISCHARGE. EXTEND 1/2" CW PIPING TO ROUGH IN LOCATION. PROVIDE NEW STOP VALVE.
4. S-1, EXTEND 3/4" CW AND 3/4" HW TO FIXTURE. PROVIDE NEW STOP VALVES WITHIN CASEWORK.
5. FD-1, CONNECT 1/2" TRAP PRIMING LINE TO TRAP PRIMING CONNECTION ON FLOOR DRAIN TRAP.
6. TP-1, EXTEND 1/2" CW TO ELECTRIC TRAP PRIMER LOCATED BELOW SINK BASIN. EXTEND 1/2" TRAP PRIMING LINE BELOW THE FLOOR AND SLOPE TO NEARBY FLOOR DRAIN FD-1. REFER TO SPECIFICATIONS FOR REQUIREMENTS.
7. PIPING SHALL BE INSTALLED ON THE WARM SIDE OF THE WALL INSULATION. CONFIRM EXISTING WALL INSULATION EXISTS AND IS PROPERLY INSTALLED; NOTIFY THE A/E OTHERWISE.



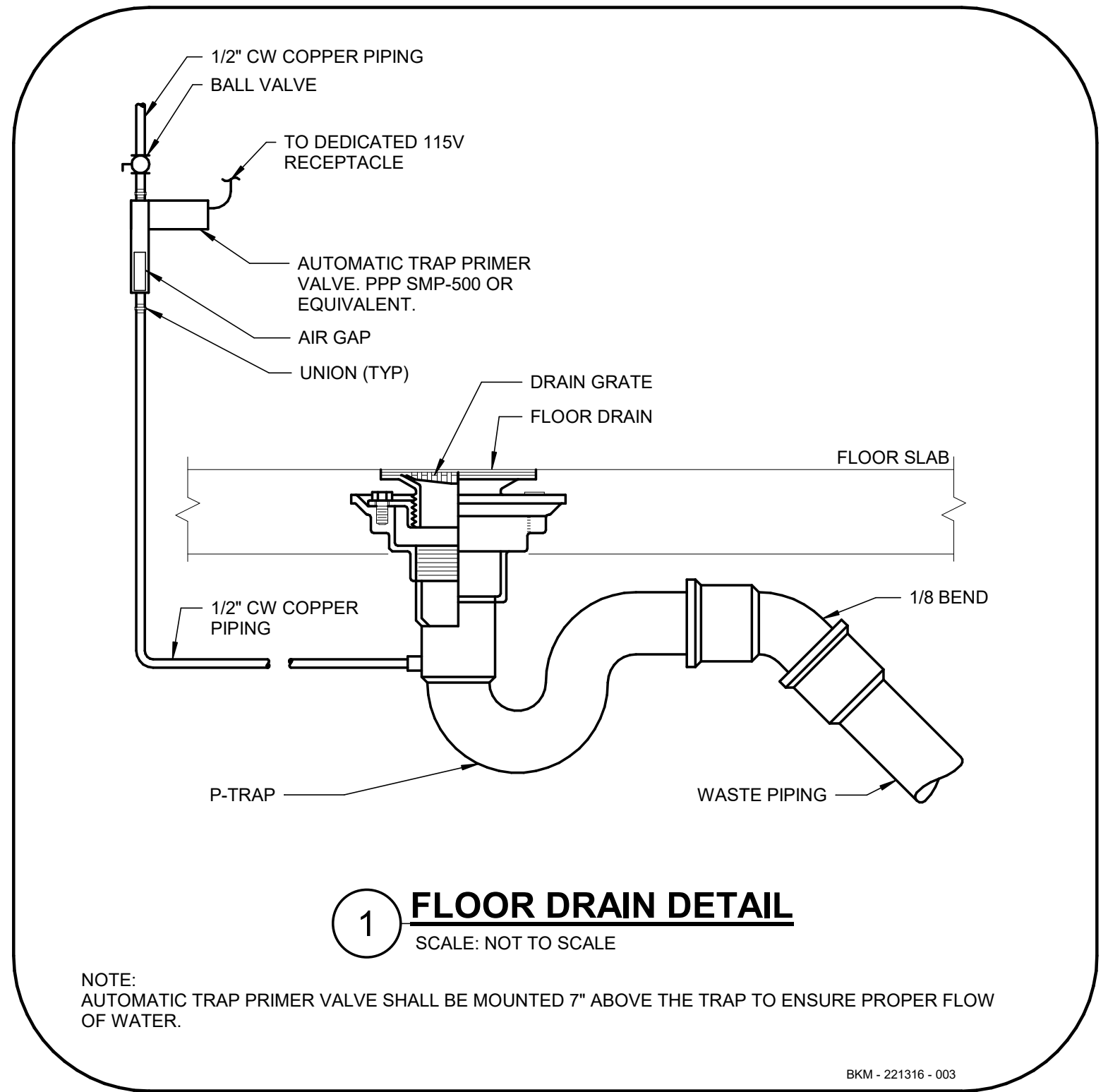
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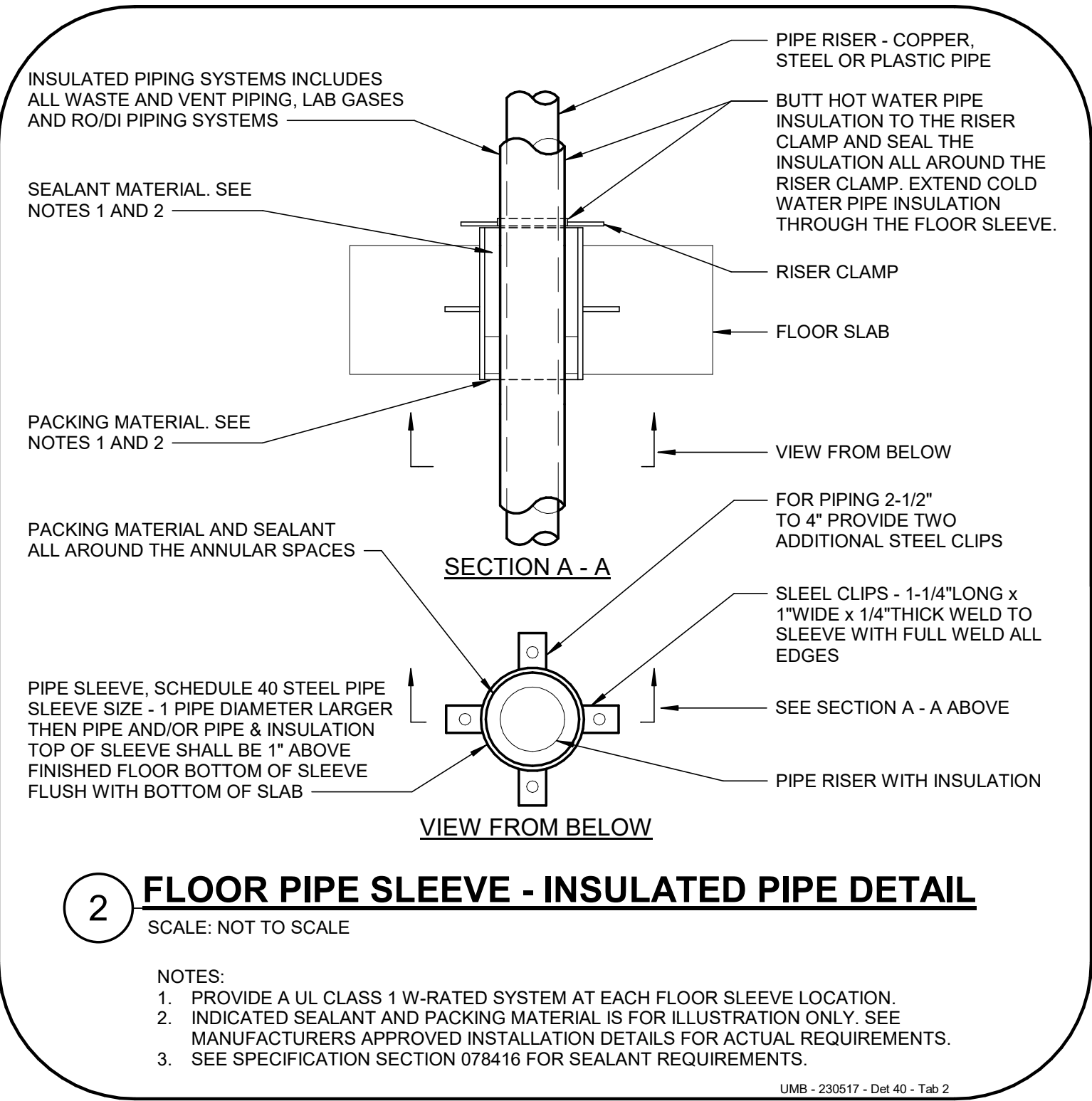
SHEET TITLE :
**SIXTH FLR
PLAN PLUMBING
NEW WORK**

REVISIONS		
NO	DATE	ITEM



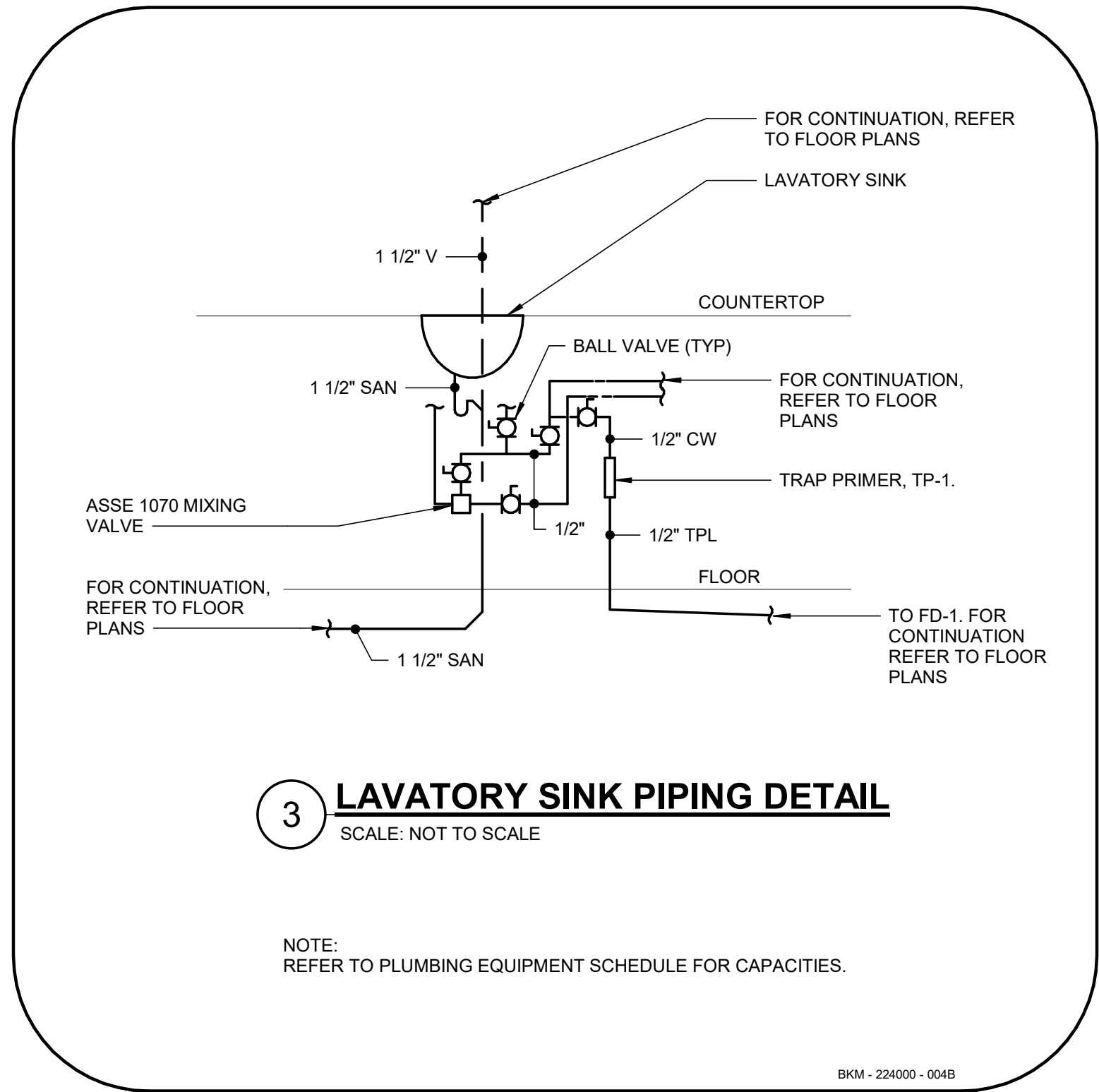
1 **FLOOR DRAIN DETAIL**
SCALE: NOT TO SCALE

BKM - 221316 - 003



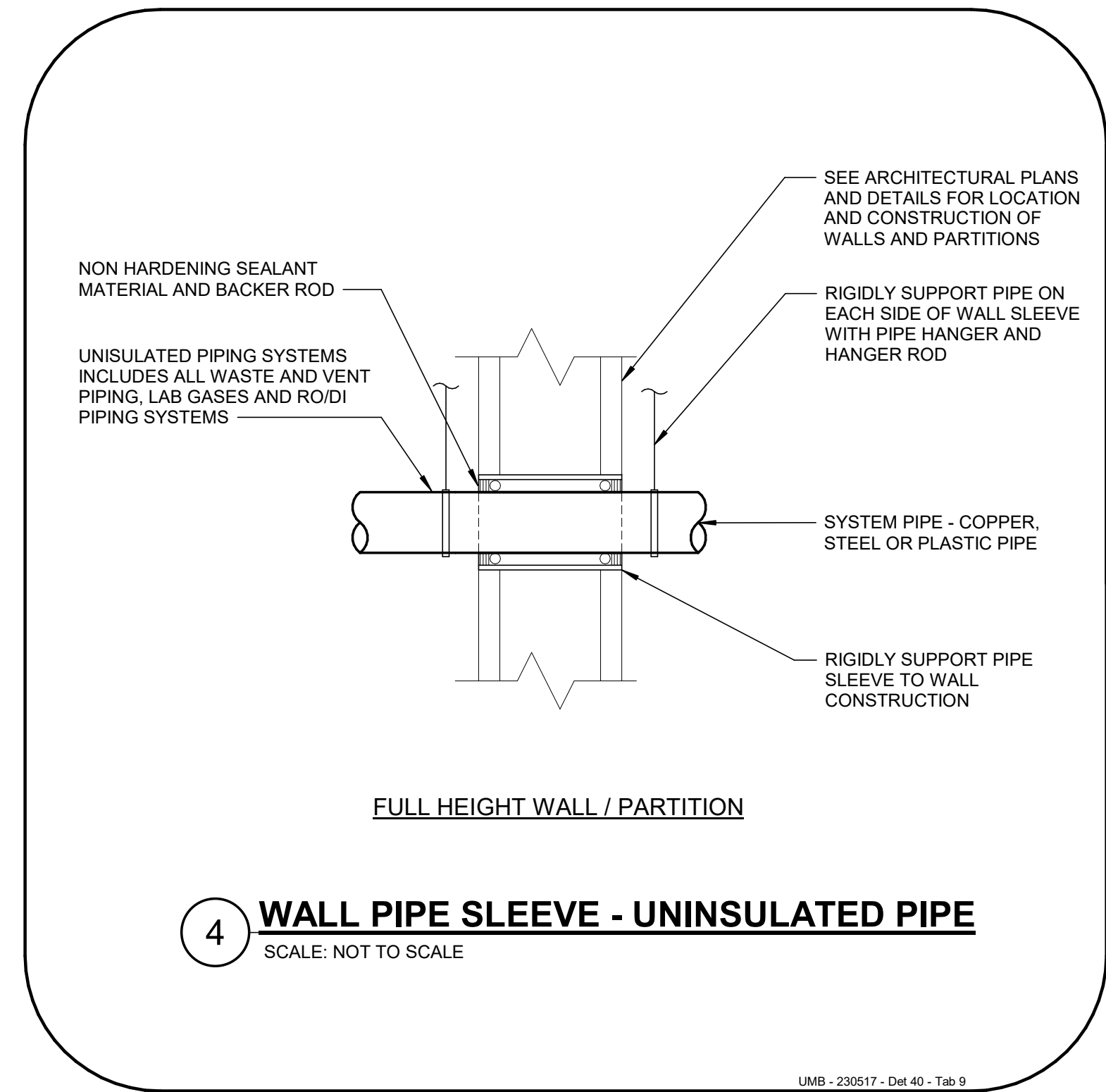
2 **FLOOR PIPE SLEEVE - INSULATED PIPE DETAIL**
SCALE: NOT TO SCALE

UMB - 230517 - Det 40 - Tab 2



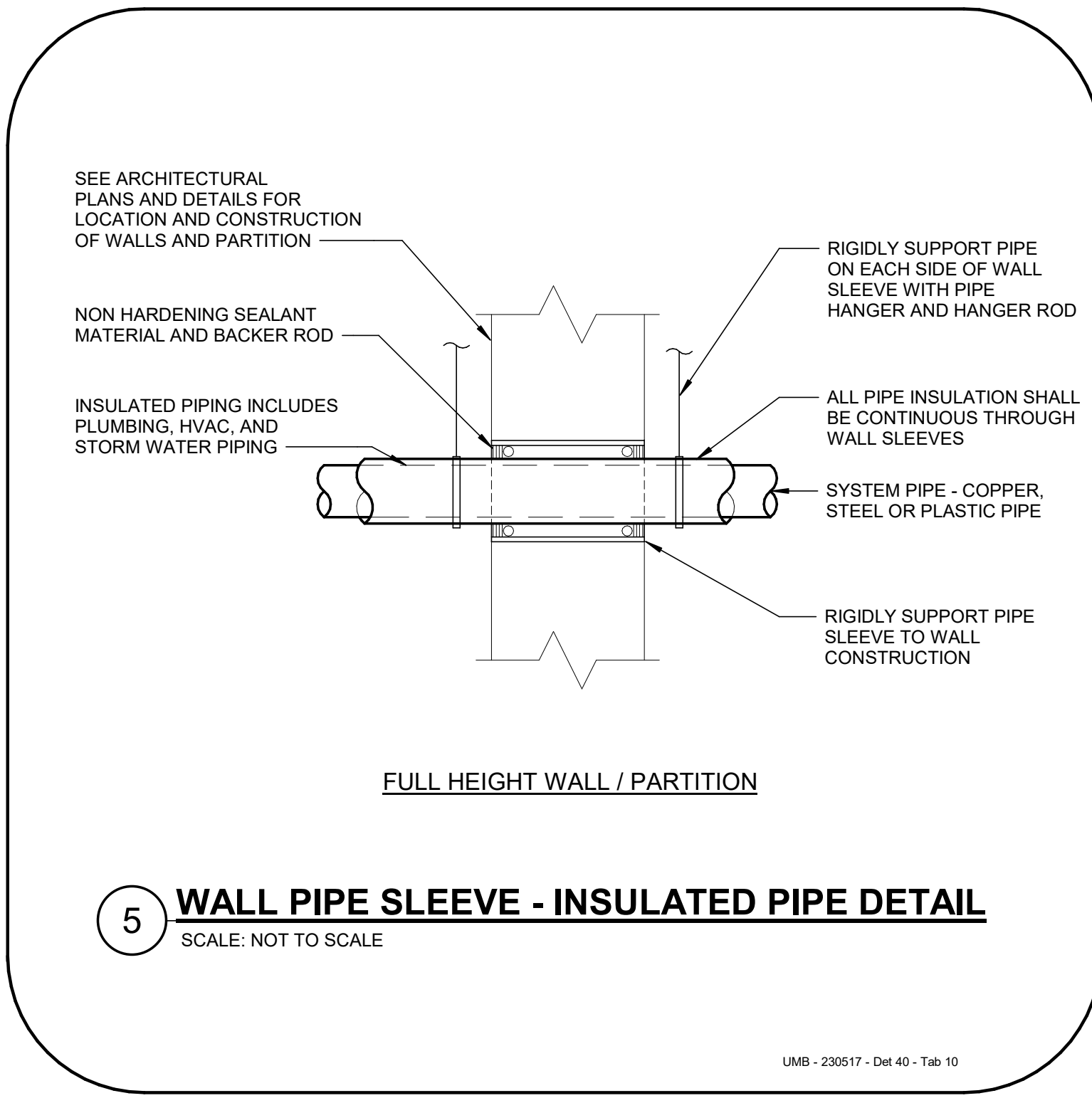
3 **LAVATORY SINK PIPING DETAIL**
SCALE: NOT TO SCALE

BKM - 224000 - 004B



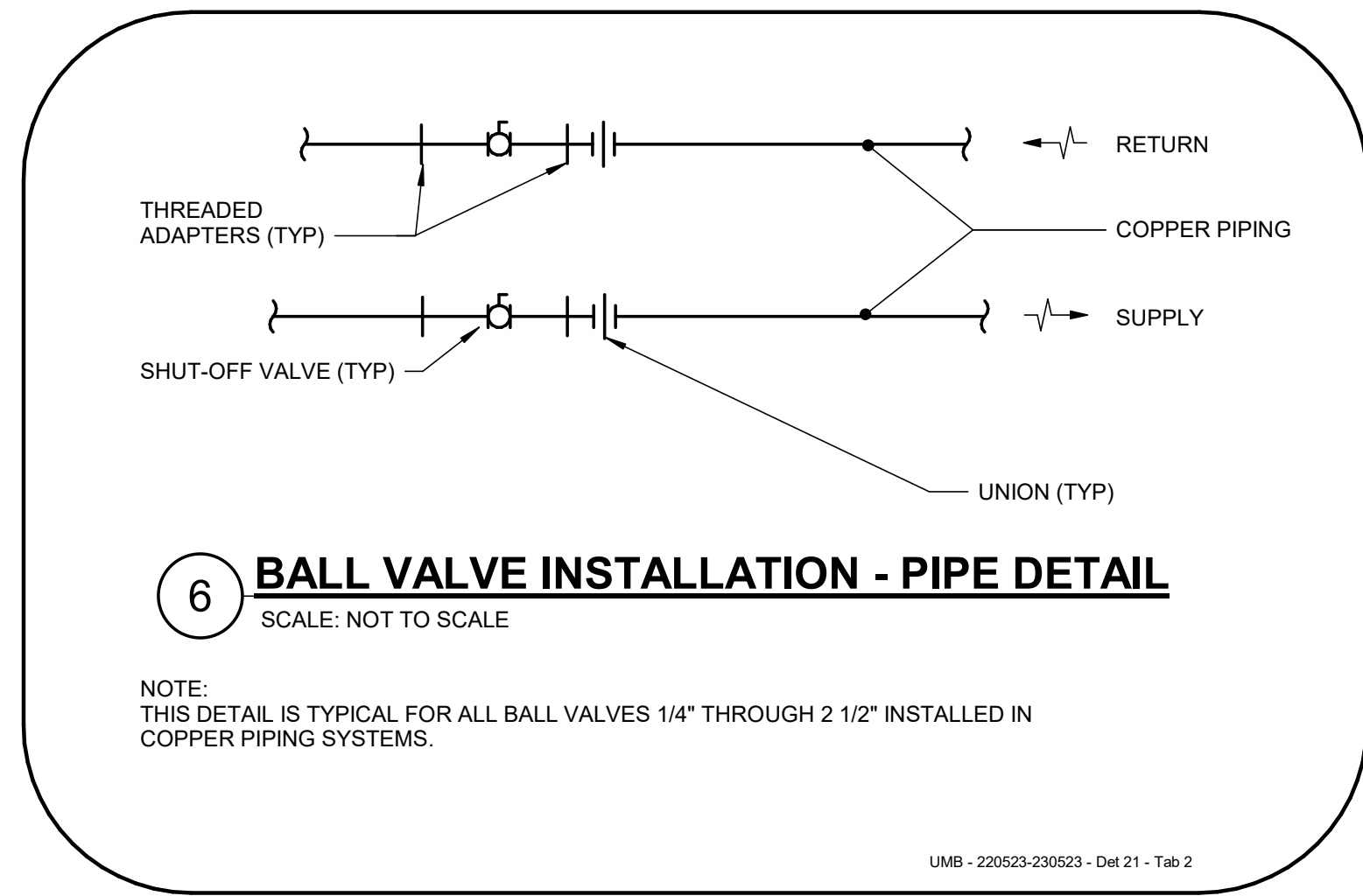
4 **WALL PIPE SLEEVE - UNINSULATED PIPE**
SCALE: NOT TO SCALE

UMB - 230517 - Det 40 - Tab 9



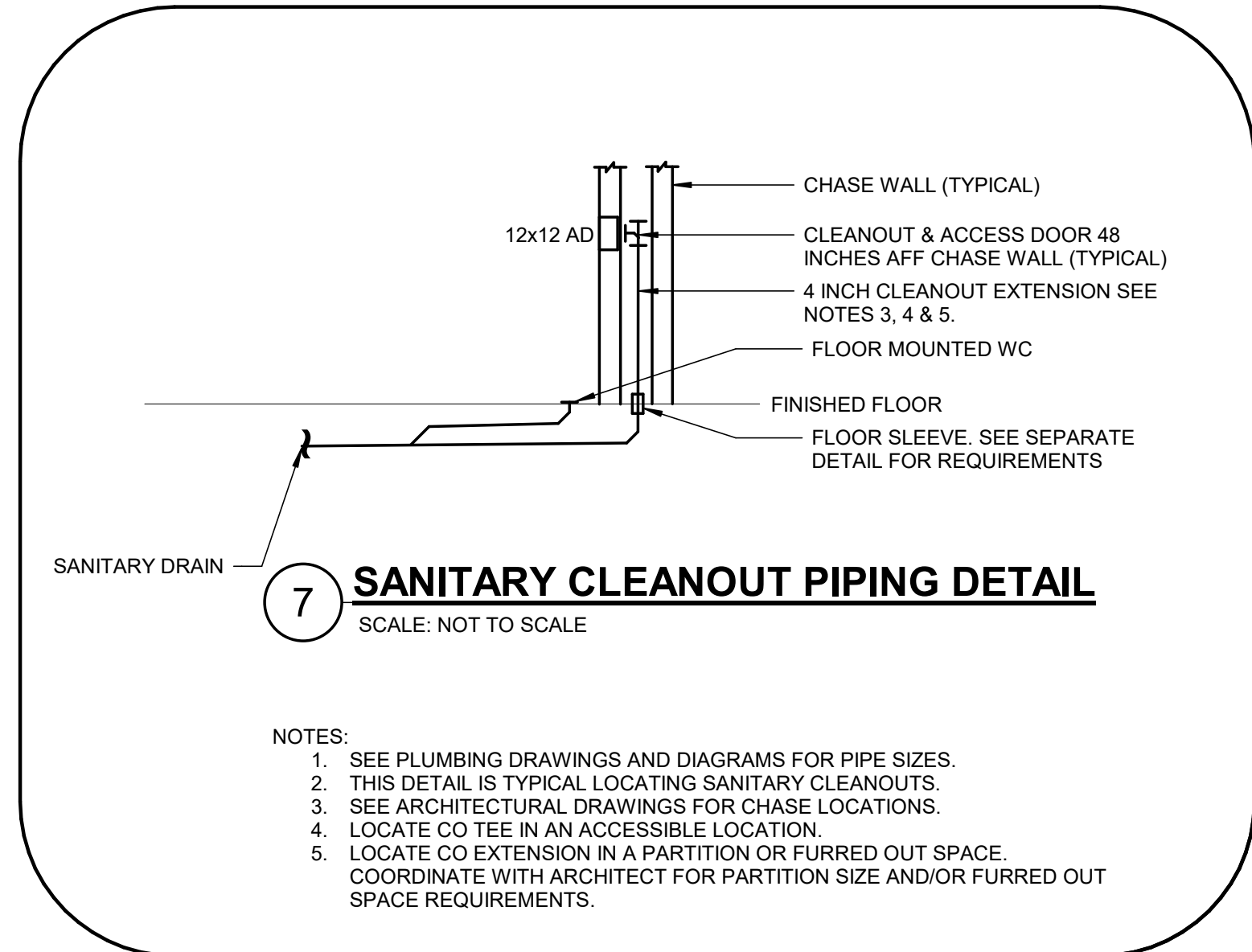
5 **WALL PIPE SLEEVE - INSULATED PIPE DETAIL**
SCALE: NOT TO SCALE

UMB - 230517 - Det 40 - Tab 10



6 **BALL VALVE INSTALLATION - PIPE DETAIL**
SCALE: NOT TO SCALE

UMB - 220023-230023 - Det 21 - Tab 2



7 **SANITARY CLEANOUT PIPING DETAIL**
SCALE: NOT TO SCALE

- NOTES:
- SEE PLUMBING DRAWINGS AND DIAGRAMS FOR PIPE SIZES.
 - THIS DETAIL IS TYPICAL LOCATING SANITARY CLEANOUTS.
 - SEE ARCHITECTURAL DRAWINGS FOR CHASE LOCATIONS.
 - LOCATE CO TEE IN AN ACCESSIBLE LOCATION.
 - LOCATE CO EXTENSION IN A PARTITION OR FURRED OUT SPACE. COORDINATE WITH ARCHITECT FOR PARTITION SIZE AND/OR FURRED OUT SPACE REQUIREMENTS.

REVISIONS		
NO	DATE	ITEM

LIGHT FIXTURE SCHEDULE			C406.3 EFFICIENT LIGHTING SYSTEM CALCULATIONS				
Type Mark	Type	Specification	Lamp	Mounting Type	Voltage	Apparent Load	Total Wattage
A	2x4 RECESSED CEILING FIXTURE	H.E. WILLIAMS: AT1-24-L40/835-DIM-277	LED	RECESSED	277	36 VA	34.2
B	2x2 RECESSED CEILING FIXTURE	H.E. WILLIAMS: AT1-22-L40/835-DIM-277	LED	RECESSED	277	31 VA	29.5
C	6" RECESSED DOWNLIGHT - 2000 Lmn	LITHONIA LIGHTING: LDN6 35/20 L06AR LS	LED	RECESSED	277	24 VA	22.5
D	36" WALL FIXTURE OVER SINK	VISUAL COMFORT & CO: 700BCELO-36-S-LED930-277	LED	SURFACE-WALL	277	32 VA	30
E	6" RECESSED DOWNLIGHT - 1000 Lmn	LITHONIA LIGHTING: LDN6 35/10 L06AR LS	LED	RECESSED	277	11 VA	10.44
F	24" SURFACE WALL STRIP FIXTURE	LITHONIA LIGHTING: CLX-L24-SEF-FDL-MVOLT	LED	SURFACE-WALL	277	19 VA	18.4
G	24" SURFACE UNDER CABINET FIXTURE	H.E. WILLIAMS: 1SF-2-L12-835-DIM-WRS/120-120V	LED	SURFACE U.C.	120	12 VA	11.4
H	12" SURFACE UNDER CABINET FIXTURE	H.E. WILLIAMS: 1SF-1-L6-835-DIM-WRS/120-120V	LED	SURFACE U.C.	120	6 VA	5.9
X1	EXIT SIGN - CEILING MOUNT	LITHONIA LIGHTING: EXRG-M6	LED	SURFACE-CEILING	277	1 VA	1

ELECTRICAL DRAWING INDEX	
Sheet Number	Sheet Name
E-001	SYMBOLS, ABBREVIATIONS AND NOTES
E-101	6TH FLOOR - NEW WORK - LIGHTING
E-102	6TH FLOOR - NEW WORK - POWER
E-201	SECTIONS & DETAILS
E-401	LIGHTING CALCULATIONS
E-402	EMERGENCY LIGHTING CALCULATIONS
E-403	LIGHTING CONTROL SCHEMATICS & SEQUENCE OF OPERATIONS
E-501	PARTIAL POWER ONE-LINE DIAGRAM
E-502	PANEL SCHEDULES
E-503	PANEL SCHEDULES
ED-100	OVERALL 6TH FLOOR PLAN
ED-101	6TH FLOOR - DEMOLITION - LIGHTING
ED-102	6TH FLOOR - DEMOLITION - POWER

LIGHTING GENERAL NOTES		GENERAL SYMBOLS			
<div>1. ARCHITECT TO CONFIRM / APPROVE FINISH.</div> <div>2. REFER TO ARCHITECT'S DETAILS AND PLANS FOR MOUNTING INFORMATION.</div> <div>3. REFER TO MANUFACTURER'S TECHNICAL INSTRUCTIONS FOR MOUNTING INFORMATION AND POWER SUPPLY INFORMATION.</div> <div>4. ELECTRICAL CONTRACTOR TO PROVIDE ALL NECESSARY MOUNTING ACCESSORIES.</div> <div>5. CONFIRM CEILING MATERIAL AND COMPATIBILITY WITH FIXTURE TO ENSURE CORRECT MOUNTING CONDITION.</div> <div>6. DRIVER AND POWER SUPPLY TO BE CONCEALED - LOCATION TO BE DETERMINED IN ACCESSIBLE CEILING WITHIN MANUFACTURER RECOMMENDED DISTANCES.</div> <div>7. LIGHTING CONTROL SYSTEMS PROVIDED TO BE COMPATIBLE WITH SPECIFIED LUMINAIRE. CONTRACTOR TO COORDINATE VENDOR / SUPPLIER SELECTION WITH ALL DOCUMENTS PRIOR TO SUBMITTAL. REFER TO SHEET E-403 FOR ADDITIONAL DETAILS.</div> <div>8. EXIT SIGN FIXTURE "X1" - EC SHALL COORDINATE FACE PLATES AND DIRECTIONAL CHEVRONS WITH LIGHTING SHEET "E-101" PRIOR TO ORDERING AND INSTALLATION.</div>	<div><div>SYMBOLS</div><div>DESCRIPTION</div><div><div><div><div></div></div></div><div>DRAWING NOTES, "*" IS DRAWING NOTE NUMBER OR LETTER</div><div><div><div><div></div></div></div><div>DETAIL OR SECTION</div><div>DETAIL OR SECTION NUMBER OR LETTER</div><div>DRAWING NUMBER WHERE DETAIL OR SECTION IS SHOWN</div></div><div><div><div><div></div></div></div><div>DETAIL</div><div>DETAIL NUMBER OR LETTER</div><div>DRAWING NUMBER WHERE DETAIL IS SHOWN</div></div><div><div><div><div></div></div></div><div>NORTH ARROW</div></div></div></div>	POWER SYMBOLS			
		SYMBOLS	DESCRIPTION	MTG HEIGHT TO CL A.F.F. U.O.N.	
		<div><div></div></div>	DUPLEX RECEPTACLE - 2P,3W, 20A, 125A, GROUNDED NEMA 5-20R.	+18"	
		<div><div></div></div>	DUPLEX RECEPTACLE - PLUG CONTROLLED - 2P,3W, 20A, 125A, GROUNDED NEMA 5-20R.	+18"	
		<div><div></div></div> GFI	GROUND FAULT INTERRUPTER DUPLEX RECEPTACLE - 2P,3W, 20A, 125A, GROUNDED NEMA 5-20R .	6" ABOVE COUNTER	
		<div><div></div></div>	JUNCTION BOX - SEE FLOOR PLANS FOR EQUIPMENT SERVED. COORDINATE LOCATION AND MOUNTING HEIGHT.		
		<div><div></div></div>	POWER TOGGLE SWITCH		
		<div><div></div></div> \$M	MOTOR RATED SWITCH		
		<div><div></div></div>	COMMUNICATIONS / DATA BACKBOX (2-GANG BOX, 1-GANG TRIM RING W/ 1-1/4" CONDUIT TO ACCESSIBLE CEILING SPACE). COORDINATE WITH LV PLANS PRIOR TO ROUGH-IN.	+18"	
		<div><div></div></div> PL	PLUG LOAD RECEPTACLE CONTROL DEVICE		
		ELECTRICAL EQUIPMENT SYMBOLS			
		SYMBOLS	DESCRIPTION	MTG HEIGHT TO CL A.F.F. U.O.N.	
		<div><div></div></div>	NON-FUSED DISCONNECT SWITCH		
		<div><div></div></div>	PANELBOARD		
		<div><div></div></div>	GROUND		
		<div><div></div></div>	TRANSFORMER		
		<div><div></div></div>	CIRCUIT BREAKER		
		LIGHTING FIXTURE SYMBOLS			
		SYMBOLS	DESCRIPTION	MTG HEIGHT TO CL A.F.F. U.O.N.	
		<div><div></div></div> <div><div></div></div> <div><div></div></div> <div><div></div></div> <div><div></div></div> <div><div></div></div> <div><div></div></div>	EXIT SIGNS (CONNECTED TO EMERGENCY POWER SOURCE)		
		<div><div></div></div>	2x4 RECESSED LIGHTING FIXTURE (CONNECTED TO NORMAL POWER SOURCE)		
		<div><div></div></div>	2x4 RECESSED LIGHTING FIXTURE (CONNECTED TO EMERGENCY POWER SOURCE)		
		<div><div></div></div>	2x2 RECESSED LIGHTING FIXTURE (CONNECTED TO NORMAL POWER SOURCE)		
		<div><div></div></div>	2' SURFACE STRIP LIGHTING FIXTURE (CONNECTED TO NORMAL POWER SOURCE)		
		<div><div></div></div>	2' SURFACE VANITY LIGHTING FIXTURE (CONNECTED TO NORMAL POWER SOURCE)		
		<div><div></div></div>	6" DOWNLIGHT (CONNECTED TO NORMAL POWER SOURCE)		
		LIGHTING DEVICE SYMBOLS			
		SYMBOLS	DESCRIPTION	MTG HEIGHT TO CL A.F.F. U.O.N.	
		<div><div></div></div> \$D	DIMMER SWITCH	+48"	
		<div><div></div></div> \$	SINGLE POLE SWITCH	+48"	
		<div><div></div></div> OS	CEILING MOUNTED OCCUPANCY SENSOR; BASIS OF DESIGN IS LEGRAND / WATTSTOPPER.		
		<div><div></div></div> VS	CEILING MOUNTED VACANCY SENSOR; BASIS OF DESIGN IS LEGRAND / WATTSTOPPER.		
		<div><div></div></div> RC	ROOM CONTROLLER; BASIS OF DESIGN IS LEGRAND / WATTSTOPPER.		
		<div><div></div></div> \$VS	WALL MOUNTED LIGHTING VACANCY SENSOR SWITCH	+48"	
		<div><div></div></div> \$3D	WALL MOUNTED LIGHTING 3-WAY DIMMER SWITCH	+48"	
		<div><div></div></div> \$OR	SINGLE POLE SWITCH - OVERRIDE	+48"	
		WIRING TYPES			
		SYMBOLS	DESCRIPTION	MTG HEIGHT TO CL A.F.F. U.O.N.	
		<div><div></div></div> <div><div></div></div> <div><div></div></div> <div><div></div></div> <div><div></div></div> <div><div></div></div> <div><div></div></div>	HOMERUN TO PANELBOARD - NUMBER OF ARROWHEADS INDICATES NUMBER OF CIRCUITS. NUMERAL AND LETTERS ADJACENT TO ARROWHEADS INDICATE ASSIGNED PANEL AND CIRCUIT NUMBERS. SUBSCRIPT "S" DENOTES SYSTEMS FURNITURE.(GENERAL) RECEPTACLES THAT ARE SWITCHED. TICK MARKS IN CIRCUITRY INDICATE QUANTITY OF 12 HOT, NEUTRAL AND GROUND CONDUCTORS. ALL CONDUCTORS ARE NO. 12 UNLESS NOTED OTHERWISE.		
		VOLTAGE DROP GENERAL NOTES			
		1.	ALL 120 VOLT CIRCUIT HOMERUNS WHICH ARE OVER 75 LINEAR FEET SHALL BE #10 CONDUCTORS MINIMUM. CONTRACTOR SHALL INCREASE WIRE SIZE AS REQUIRED MAINTAINING A MAXIMUM VOLTAGE DROP OF 3%.		

UNIVERSITY of MARYLAND
BALTIMORE

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BALTIMORE, MARYLAND 21201
PHONE NO. (410) 706-7710
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Murphy & Dittenhafer
ARCHITECTS

PROFESSIONAL CERTIFICATION
I HEREBY CERTIFY THAT THESE DOCUMENTS WERE
PREPARED OR APPROVED BY ME, AND THAT I AM A
DULY LICENSED PROFESSIONAL ENGINEER UNDER
THE LAWS OF THE STATE OF MARYLAND.
LICENSE NO. 18155
EXPIRATION DATE: 2/14/2027

REGISTRATION / STAMP

STATE OF MARYLAND

DAVID E. GARY

REGISTERED PROFESSIONAL ENGINEER

18155

PROJECT TITLE :

UMB SON
6TH FLOOR
APT. SIM.
RENOVATION

UMB BUILDING NO. : SON - 0833

UMB Project NO. : 26-312

A/E PROJECT NO. : 25-128

CAD FILE NO. :

DATE :

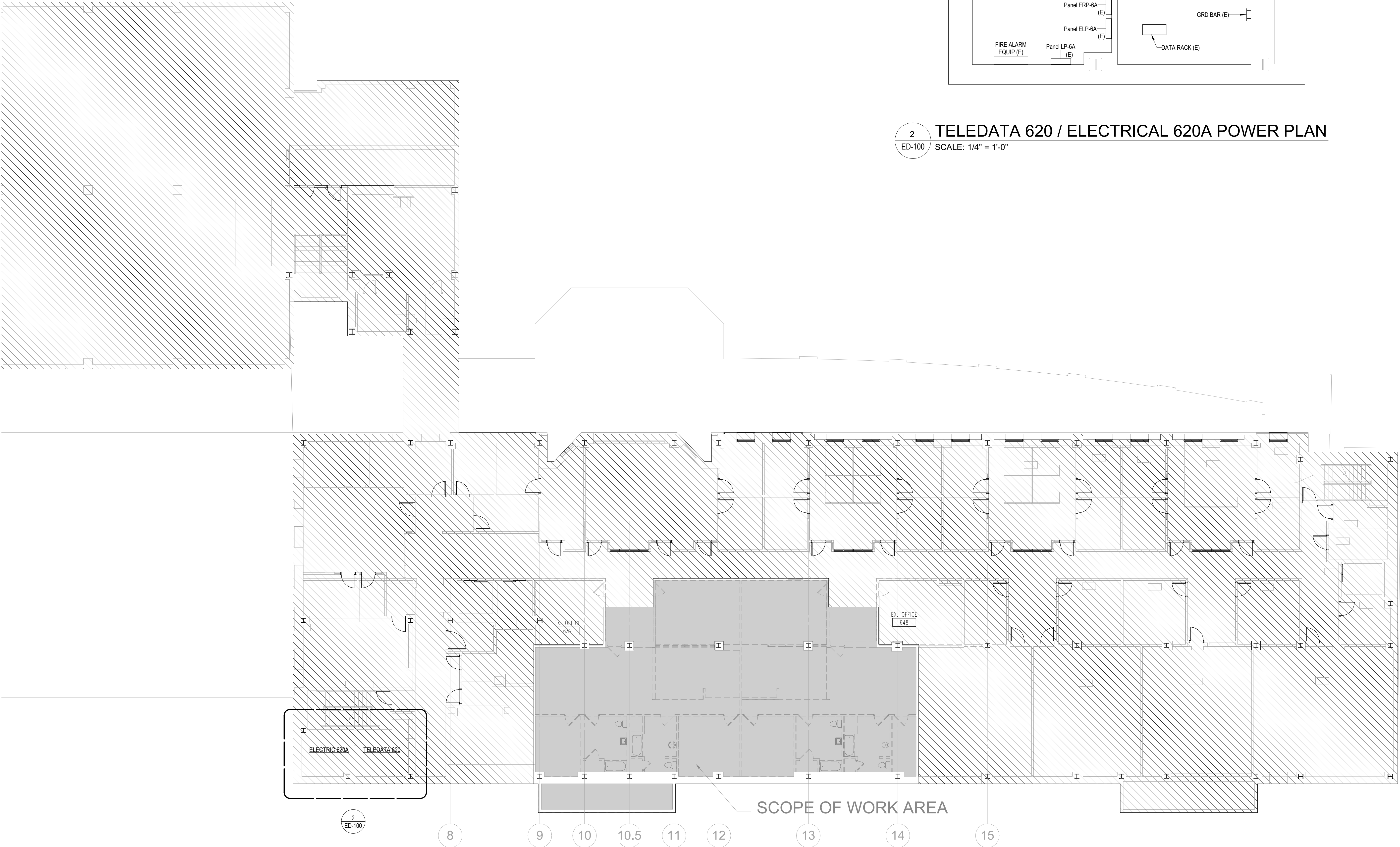
SHEET TITLE :

SYMBOLS,
ABBREVIATIONS AND
NOTES

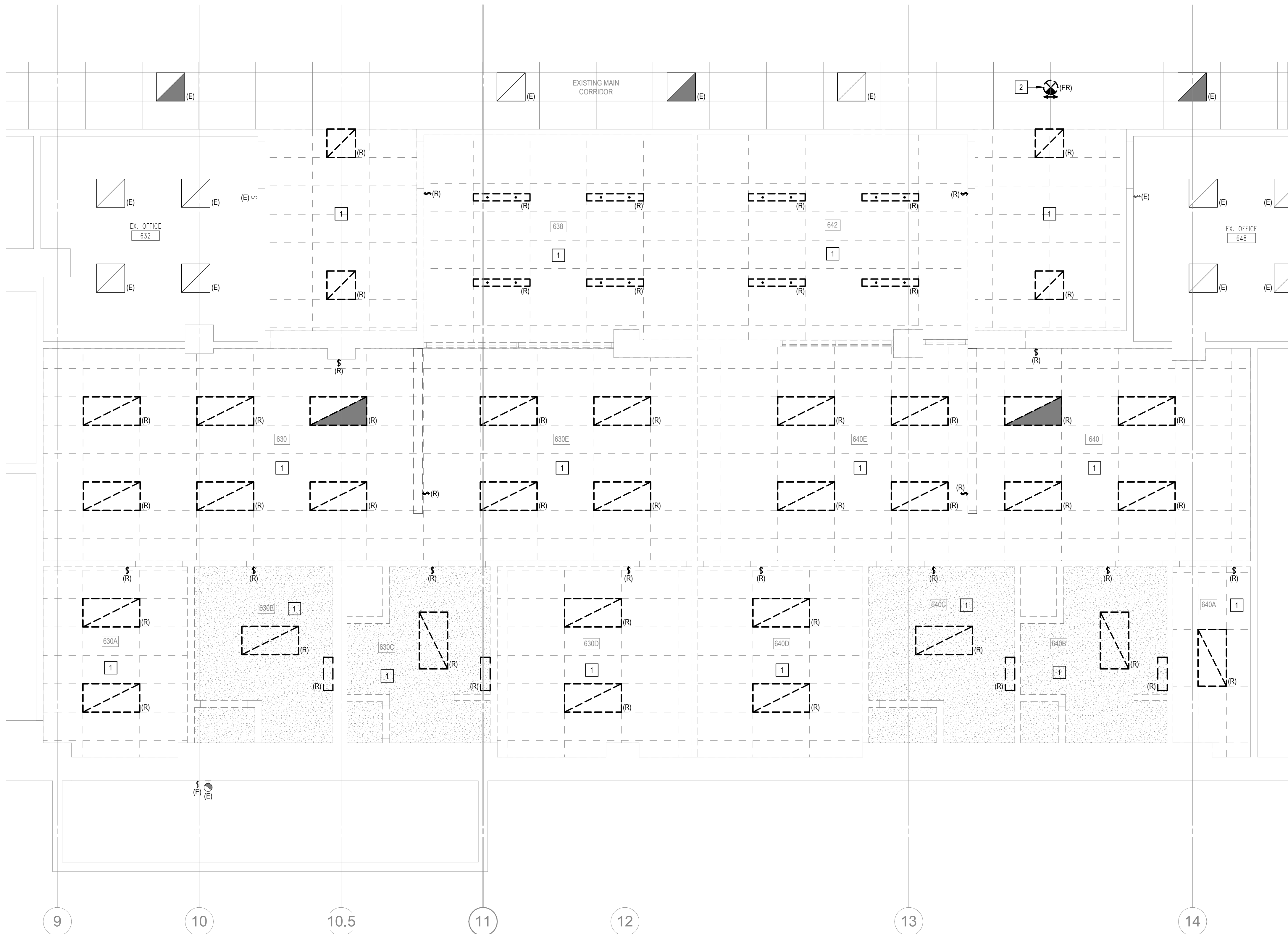
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NO	DATE	ITEM
	2/07/26	100% CD SUBMISSION
	4/08/26	BID SET

SHEET NO.

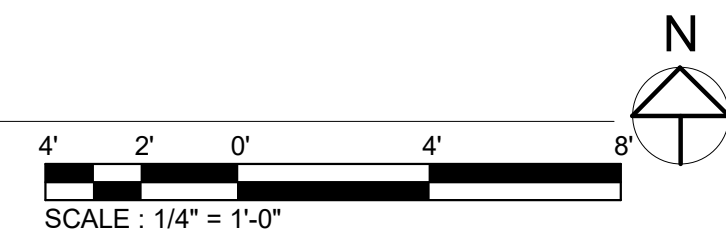
E-001



REVISIONS		
NO	DATE	ITEM
	2/07/26	100% CD SUBMISSION
	4/08/26	BID SET



1 6TH FLOOR - DEMOLITION - LIGHTING
ED-101 SCALE: 1/4" = 1'-0"

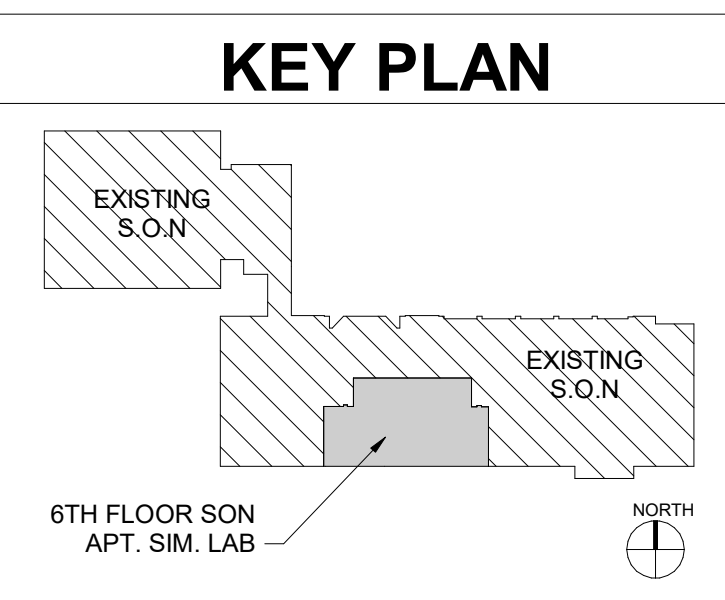


GENERAL DEMOLITION NOTES

1. ALL CONDITIONS SHOWN SHALL BE CONSIDERED EXISTING TO BE REMOVED UNLESS OTHERWISE NOTED.
2. REQUIRED DEMOLITION WORK SHALL NOT BE LIMITED TO THAT PORTION SHOWN ON PLANS ALONE, BUT SHALL INCLUDE ALL NECESSARY WORK BY THIS CONTRACTOR AFTER VISITING THE SITE PRIOR TO BIDDING. CONTRACTOR SHALL GATHER ALL THE INFORMATION AND COORDINATE WITH THE NEW OR MODIFIED WORK AS INDICATED ON THE DRAWINGS. ANY MAJOR DISCREPANCIES FOUND ON THE DRAWINGS AND SPECIFICATIONS SHALL BE BROUGHT TO THE ENGINEERS' ATTENTION, IN WRITING, BEFORE SUBMITTING THE BIDS.
3. THE SCHEDULING OF DEMOLITION WORK SHALL BE COORDINATED BY THIS CONTRACTOR WITH THE UMB REPRESENTATIVE PRIOR TO PERFORMING THE WORK. CONTRACTOR SHALL NOTIFY / OBTAIN PERMISSION 10 DAY PRIOR TO ANY OUTAGE.
4. CONTRACTOR SHALL VISIT JOB SITE TO ASCERTAIN CONDITIONS WHICH MAY AFFECT HIS BID AND WORK, AND HE SHALL BE RESPONSIBLE FOR THE INCLUSION OF ALL REQUIRED DEMOLITION IN AREAS UNDERGOING MODIFICATION WHETHER OR NOT SUCH WORK IS INDICATED ON PLANS OR NOTES.
5. CONTRACTOR SHALL CLEAN THE PROJECT SITE AT THE END OF EACH WORKING DAY. AFTER REMOVAL OF ALL DEVICES, CONTRACTOR SHALL TURN ALL DEVICES OVER TO THE UMB REPRESENTATIVE FOR HIM TO INSPECT. AFTER INSPECTION BY THE OWNERS REPRESENTATIVE CONTRACTOR SHALL REMOVE ALL UNWANTED DEVICES OR MATERIALS FROM THE SITE.
6. THE CONTINUITY OF ALL EXISTING CIRCUITS WHICH ARE TO REMAIN OPERATIONAL SHALL BE MAINTAINED THROUGHOUT THE FACILITY DURING DEMOLITION, CONSTRUCTION AND AT THE CONCLUSION OF CONSTRUCTION. THE CONTRACTOR SHALL IDENTIFY ALL CIRCUITS THAT SUPPLY POWER TO AREAS TO REMAIN, MARK THESE CIRCUITS AND MAKE SURE THEIR POWER IS NOT INTERRUPTED DURING DEMOLITION AND CONSTRUCTION. ALL EXISTING CIRCUITS TO REMAIN SHALL BE RECONNECTED TO NEW OR EXISTING PANELS. PROVIDE NEW WIRING AND CIRCUIT BREAKERS OF RATING TO MATCH EXISTING AS REQUIRED.
7. THE CONTRACTOR SHALL MAKE A CAREFUL INSPECTION OF ALL OF THE EXISTING ELECTRICAL POWER AND SYSTEMS PRIOR TO THE MODIFICATION OF THE EXISTING SPACE.

DRAWING NOTES

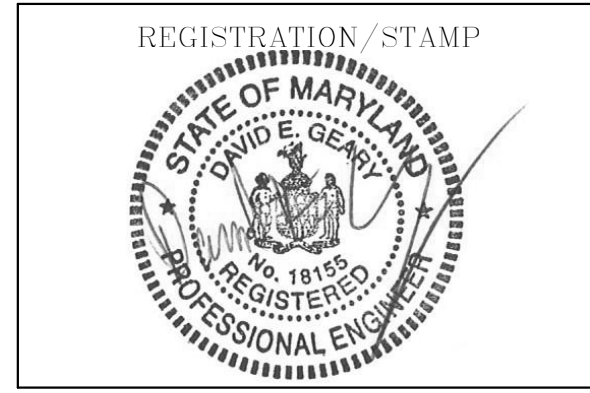
1. UNLESS OTHERWISE NOTED, ALL LIGHTING FIXTURES, LIGHT CONTROL SWITCHES, AND ASSOCIATED CIRCUITRY WITHIN THE AREA OF WORK SHOWN SHALL BE REMOVED BACK TO SOURCE. RESTORE ANY EXISTING CIRCUITRY TO REMAIN.
2. EXISTING EXIT SIGN TO BE RELOCATED TO ALIGN WITH NEW CORRIDOR SECTION. REFER TO NEW WORK PLAN E-101 FOR NEW LOCATION. RETAIN EXISTING EMERGENCY BRANCH POWER CIRCUIT (PANEL ELP-6A) SERVING CORRIDOR EXIT SIGNS.



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PROFESSIONAL CERTIFICATION
I HEREBY CERTIFY THAT THESE DOCUMENTS WERE PREPARED OR APPROVED BY ME, AND THAT I AM A DULY LICENSED PROFESSIONAL ENGINEER UNDER THE LAWS OF THE STATE OF MARYLAND.
LICENSE NO. 18155
EXPIRATION DATE: 2/14/2027



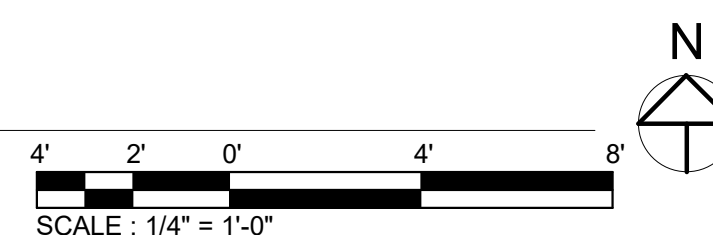
PROJECT TITLE :
**UMB SON
6TH FLOOR
APT. SIM.
RENOVATION**

UMB BUILDING NO. : SON - 0833
UMB Project NO. : 26-312
A/E PROJECT NO. : 25-128
CAD FILE NO. :
DATE :

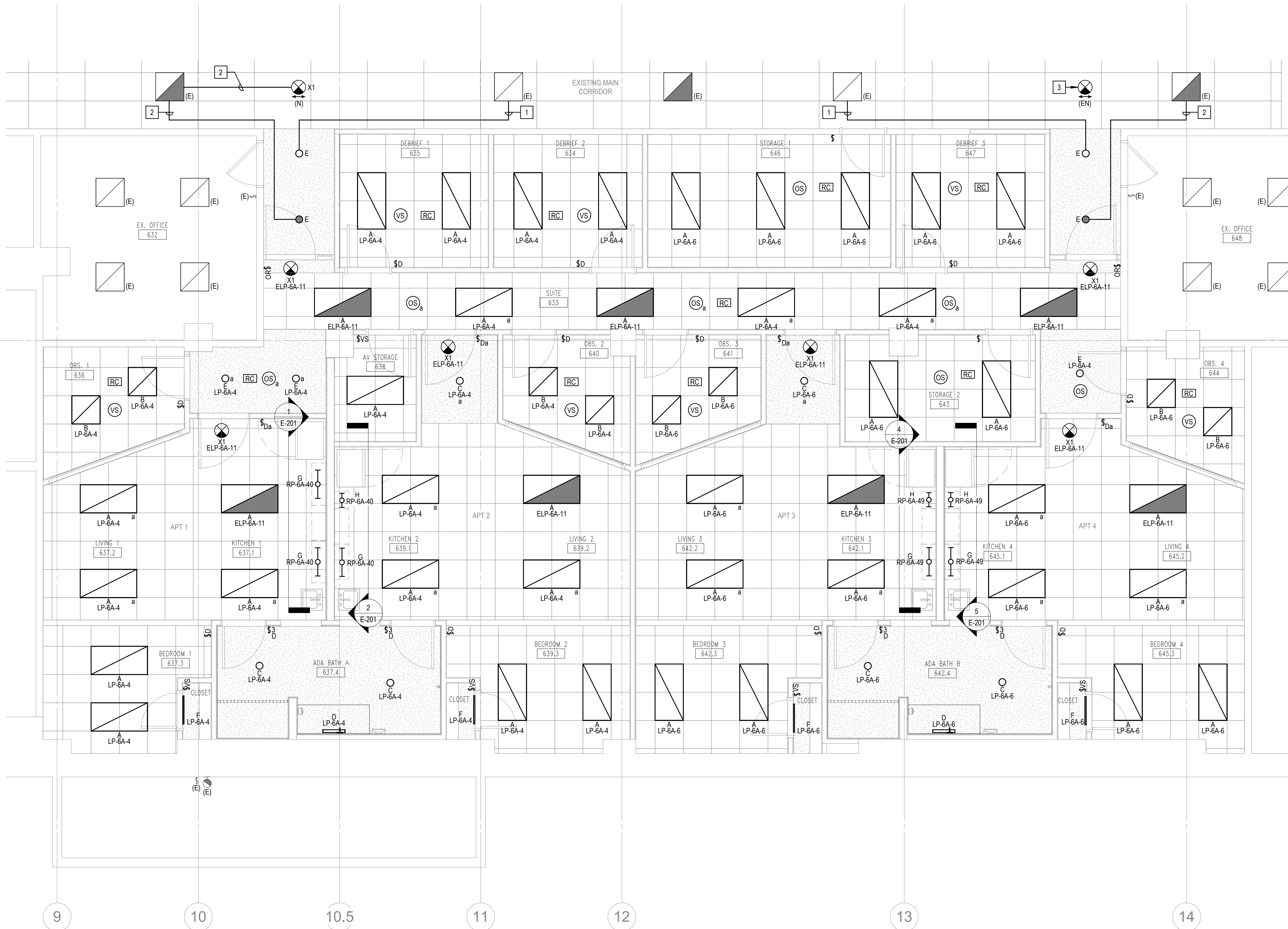
SHEET TITLE :
**6TH FLOOR -
DEMOLITION -
LIGHTING**

REVISIONS		
NO	DATE	ITEM
	2/07/26	100% CD SUBMISSION
	4/08/26	BID SET

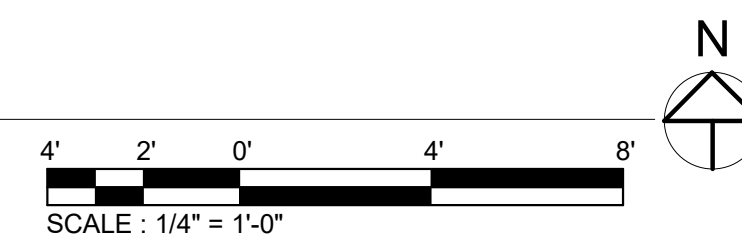
SHEET NO.
ED-101



ED-102



1 6TH FLOOR - NEW WORK - LIGHTING
E-101 SCALE: 1/4" = 1'-0"



GENERAL NOTES

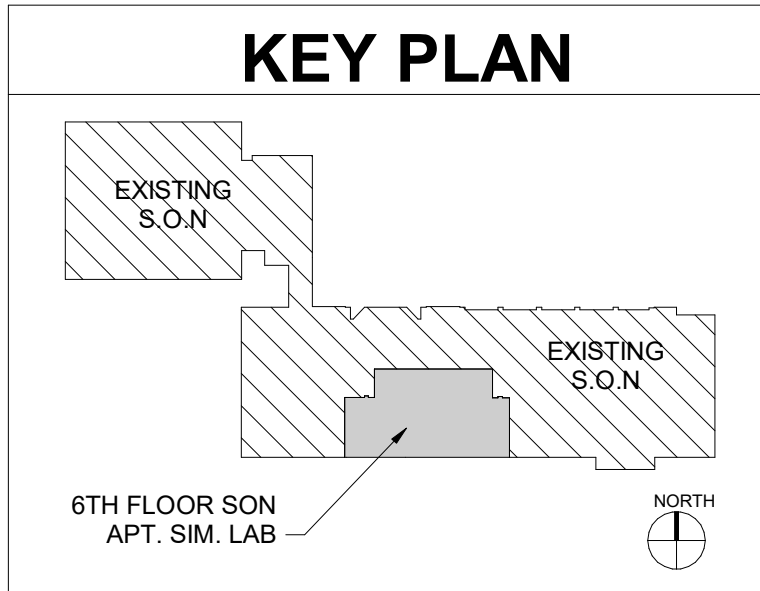
1. ALL CONDITIONS SHOWN SHALL BE CONSIDERED NEW UNLESS OTHERWISE NOTED.

DRAWING NOTES

1. CONNECT TO EXISTING BRANCH LIGHTING CIRCUIT (PANEL LP-6A-4) AND CONTROL SCHEME SERVING THE EXISTING MAIN CORRIDOR. CIRCUITRY TO BE 2# 12 + 1#12 EG PLUS CONTROL WIRING IN 3/4" C.

2. CONNECT TO EXISTING EMERGENCY BRANCH LIGHTING CIRCUIT AND CONTROL SCHEME SERVING THE EXISTING MAIN CORRIDOR (PANEL ELP-6A). CIRCUITRY TO BE 2#12 + 1#12 EG PLUS CONTROL WIRING IN 3/4" C.

3. EXISTING EXIT SIGN IN NEW LOCATION. RECONNECT TO EXISTING EMERGENCY BRANCH POWER CIRCUIT SERVING CORRIDOR EXIT SIGNS (PANEL ELP-6A). EXTEND CIRCUITRY AS REQUIRED.



PROFESSIONAL CERTIFICATION
I HEREBY CERTIFY THAT THESE DOCUMENTS WERE PREPARED OR APPROVED BY ME, AND THAT I AM A DULY LICENSED PROFESSIONAL ENGINEER UNDER THE LAWS OF THE STATE OF MARYLAND.
LICENSE NO. 18155
EXPIRATION DATE: 2/14/2027



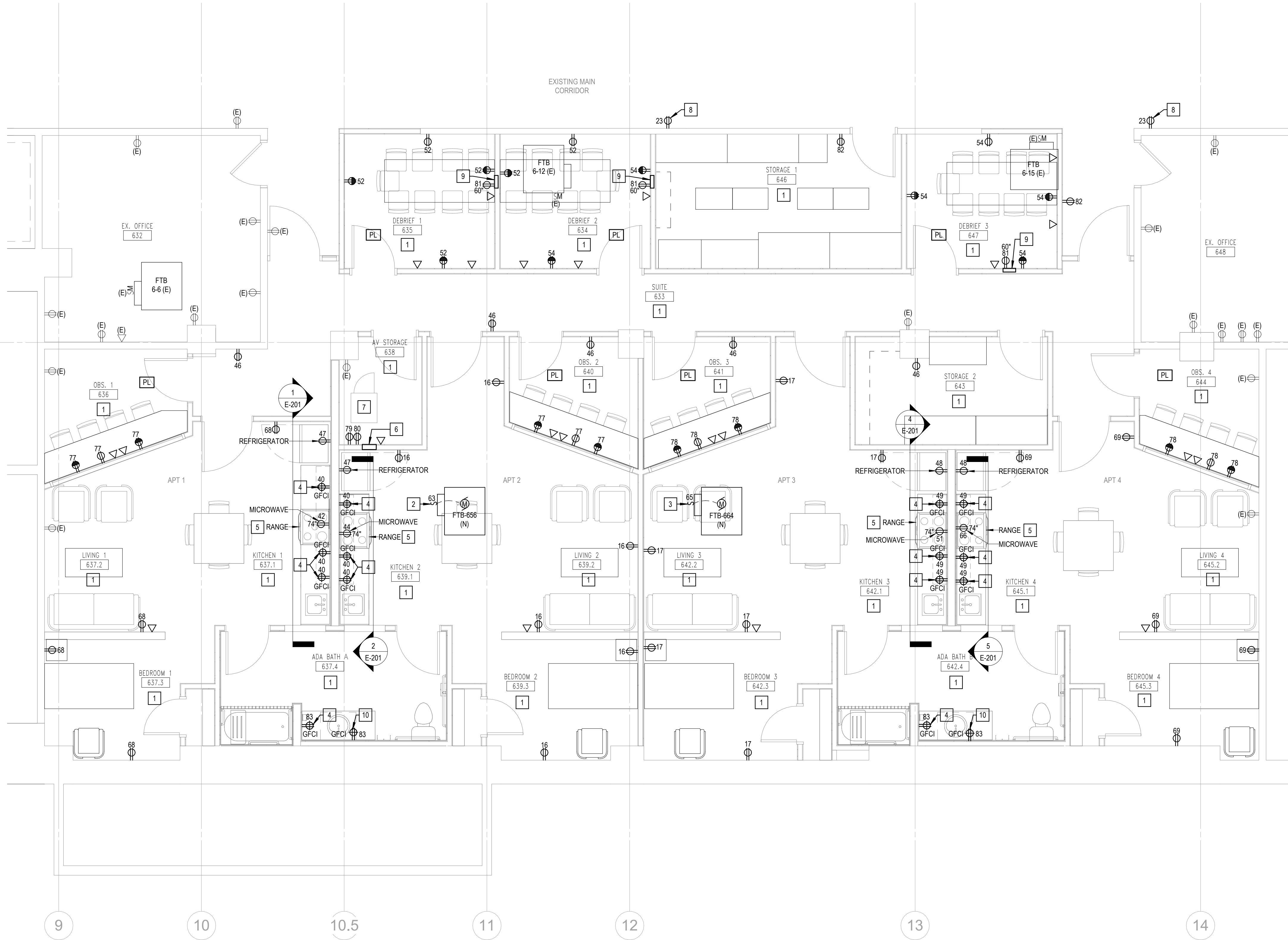
PROJECT TITLE :
**UMB SON
6TH FLOOR
APT. SIM.
RENOVATION**

UMB BUILDING NO. : SON - 0833
UMB Project NO. : 26-312
A/E PROJECT NO. : 25-128
CAD FILE NO. :
DATE :

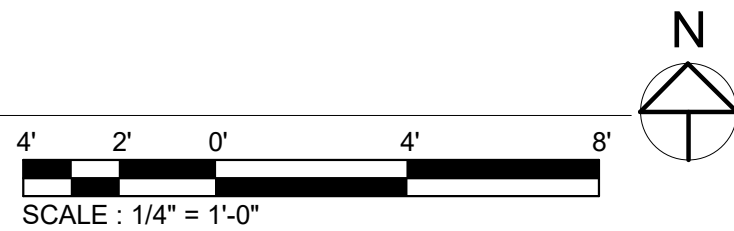
SHEET TITLE :
**6TH FLOOR - NEW
WORK - LIGHTING**

REVISIONS		
NO	DATE	ITEM
1	2/07/26	100% CD SUBMISSION
2	4/08/26	BID SET

SHEET NO.
E-101

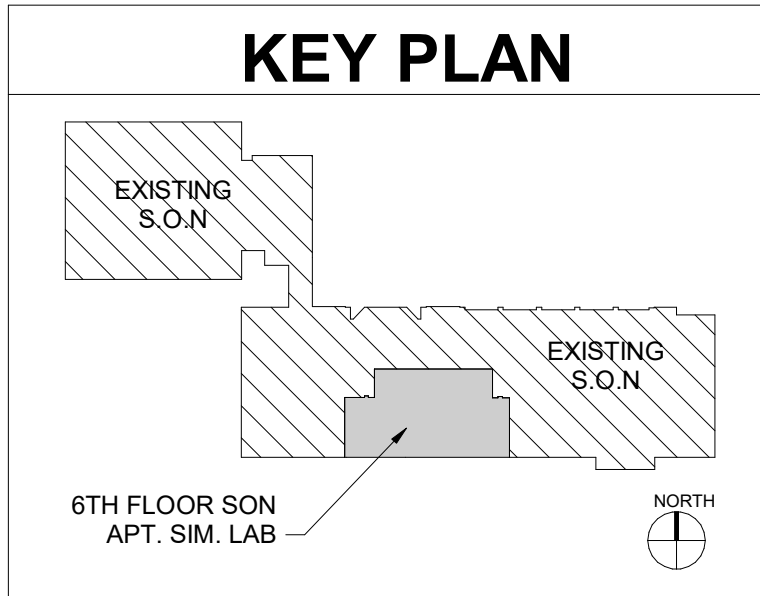


1 6TH FLOOR - NEW WORK - POWER
E-102 SCALE: 1/4" = 1'-0"

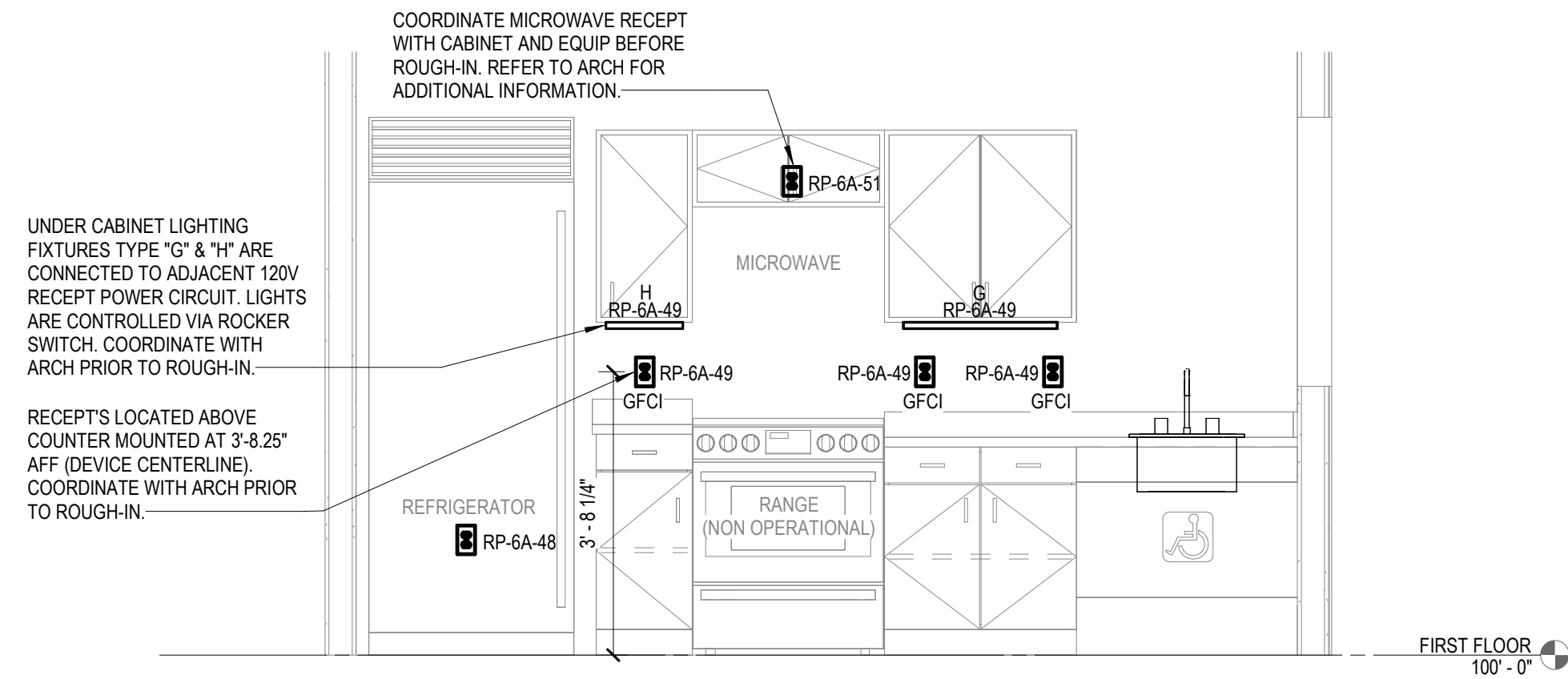


- ### GENERAL NOTES
- ALL CONDITIONS SHOWN SHALL BE CONSIDERED NEW UNLESS OTHERWISE NOTED.
 - ELECTRICAL CONTRACTOR SHALL REVIEW AND COORDINATE ALL LV / AV REQUIREMENTS & LOCATIONS WITH THE TA SERIES DRAWING PACKAGE AND LV / AV CONTRACTOR PRIOR TO PROCURING MATERIALS OR ROUGH-IN.
 - ELECTRICAL CONTRACTOR SHALL REVIEW AND COORDINATE ALL MECH / PLUMB REQUIREMENTS WITH THE MECH / PLUMB CONTRACTOR PRIOR TO ROUGH-IN.
 - ANY BRANCH POWER CIRCUIT EXCEEDING 75'-0" IN TOTAL LENGTH, SHALL HAVE A MINIMUM CONDUCTOR SIZE OF #10 AWG.

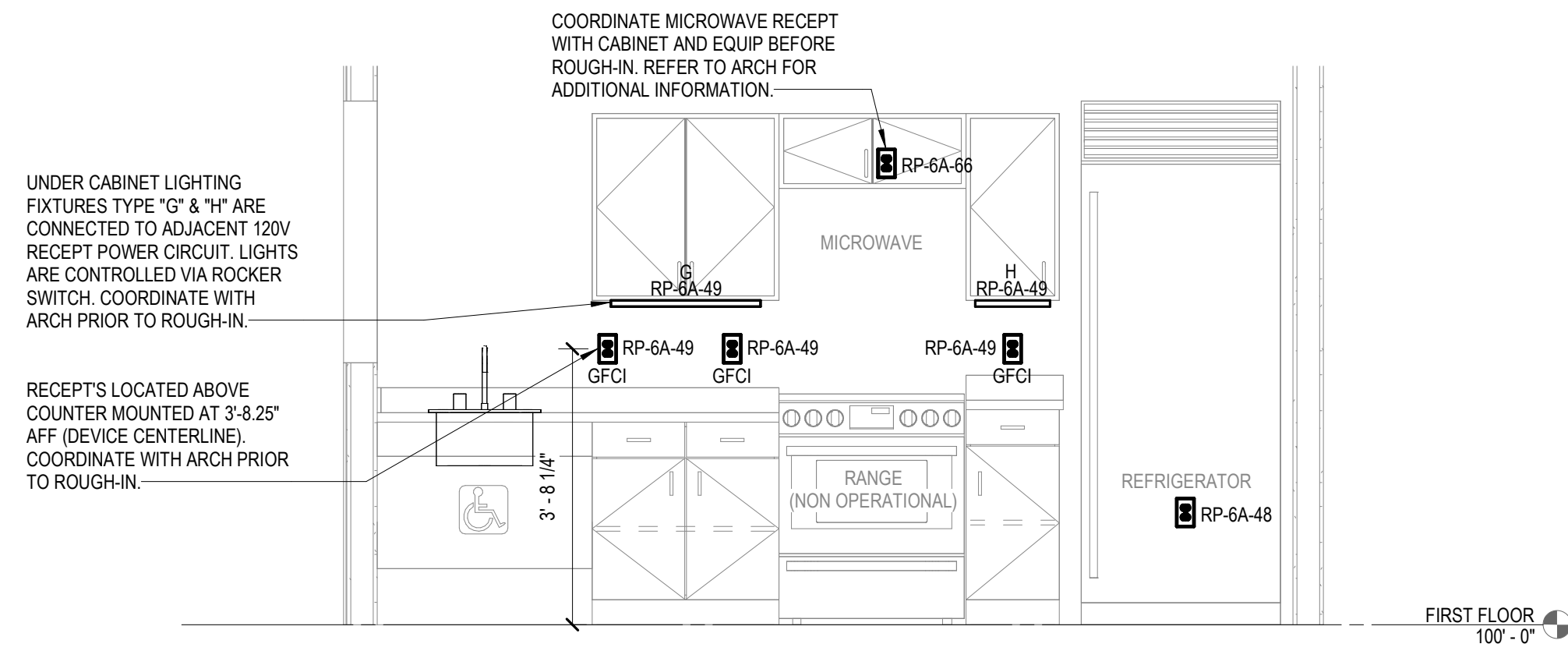
- ### DRAWING NOTES
- UNLESS OTHERWISE NOTED, ALL NORMAL BRANCH POWER CIRCUITS IN THIS ROOM ARE FED FROM EXISTING PANEL "RP-6A" AND ALL EMERGENCY BRANCH POWER CIRCUITS IN THIS ROOM ARE FED FROM EXISTING PANEL "ERP-8A" LOCATED IN ELECTRICAL ROOM 620A. NUMERAL ADJACENT TO DEVICE INDICATES THE CIRCUIT NUMBER. REFER TO PANEL SCHEDULE SHEET E-502 AND ELECTRICAL ROOM PLAN ON SHEET ED-100 FOR ADDITIONAL INFORMATION.
 - NEW FAN POWERED TERMINAL UNIT "FTB-656" (113HP, 120V, 2.9A). LOCAL DISCONNECT TO BE PROVIDED WITH MECH PACKAGE. ELEC CONTRACTOR TO PROVIDE SINGLE POINT OF CONNECTION USING EXISTING BRANCH CIRCUIT RETAINED IN CEILING SPACE FROM DEMOLITION PHASE (PANEL "RP-6A" # 63). COORDINATE ALL WORK WITH MECH DRAWINGS AND CONTRACTOR PRIOR TO PERFORMING WORK.
 - NEW FAN POWERED TERMINAL UNIT "FTB-654" (113HP, 120V, 2.9A). LOCAL DISCONNECT TO BE PROVIDED WITH MECH PACKAGE. ELEC CONTRACTOR TO PROVIDE SINGLE POINT OF CONNECTION USING EXISTING BRANCH CIRCUIT RETAINED IN CEILING SPACE FROM DEMOLITION PHASE (PANEL "RP-6A" # 63). COORDINATE ALL WORK WITH MECH DRAWINGS AND CONTRACTOR PRIOR TO PERFORMING WORK.
 - RECEPTACLE ABOVE COUNTERTOP SHALL BE MOUNTED AT 3'-8.25" AFF (DEVICE CENTERLINE) PER ADA. COORDINATE WITH ARCH PRIOR TO ROUGH-IN. REFER TO ARCH DRAWINGS FOR ADDITIONAL INFORMATION.
 - NEW KITCHEN RANGE IS FOR VISUAL PURPOSES ONLY. NO UTILITY CONNECTION IS REQUIRED.
 - 5-GANG AV WALLBOX MOUNTED AT 18" AFF BEHIND AV EQUIPMENT RACK WITH THREE 1-1/4" CONDUIT UP TO ACCESSIBLE CEILING SPACE. REFER TO LOW VOLTAGE SHEET TA-500/4 FOR ADDITIONAL INFORMATION. ELEC CONTRACTOR TO COORDINATE WITH AV / LV CONTRACTOR PRIOR TO PROCURING MATERIALS OR ROUGH-IN.
 - AV EQUIPMENT RACK PROVIDED BY OTHERS. REFER TO LV DRAWINGS FOR ADDITIONAL INFORMATION.
 - CONNECT NEW RECEPTACLE TO EXISTING CORRIDOR BRANCH POWER CIRCUIT (PANEL RP-6A #23).
 - PWB-100 FLAT PANEL DISPLAY WALL BOX (PROVIDED BY OTHERS). MOUNTED AT 60" AFF. EC TO PROVIDE ONE NEMA 5-20R DUPLEX RECEPTACLE & BRANCH CIRCUIT. EC TO ALSO PROVIDE ONE 1-1/4" CONDUIT UP TO ACCESSIBLE CEILING SPACE FOR TELCOM & CONTROL WIRING. REFER TO LV DRAWING TA-500 FOR ADDITIONAL INFORMATION. EC SHALL COORDINATE / CONFIRM ALL REQUIREMENTS & EXACT LOCATION WITH AV / TELCOM CONTRACTORS PRIOR TO ROUGH-IN.
 - TRAP PRIMER (115V / 1PH) PROVIDED UNDER DIV 22. SCOPE OF WORK: TRAP PRIMER WILL BE INSTALLED UNDER SINK BASIN AND PROVIDED WITH A GROMMET AND PLUG. ELEC CONTRACTOR IS RESPONSIBLE FOR GFCI RECEPT (NEMA 5-20R) MOUNTED AT 18" AFF. COORDINATE EXACT LOCATION AND CONFIRM REQUIREMENT WITH INSTALLING PLUMBING CONTRACTOR PRIOR TO ROUGH-IN.



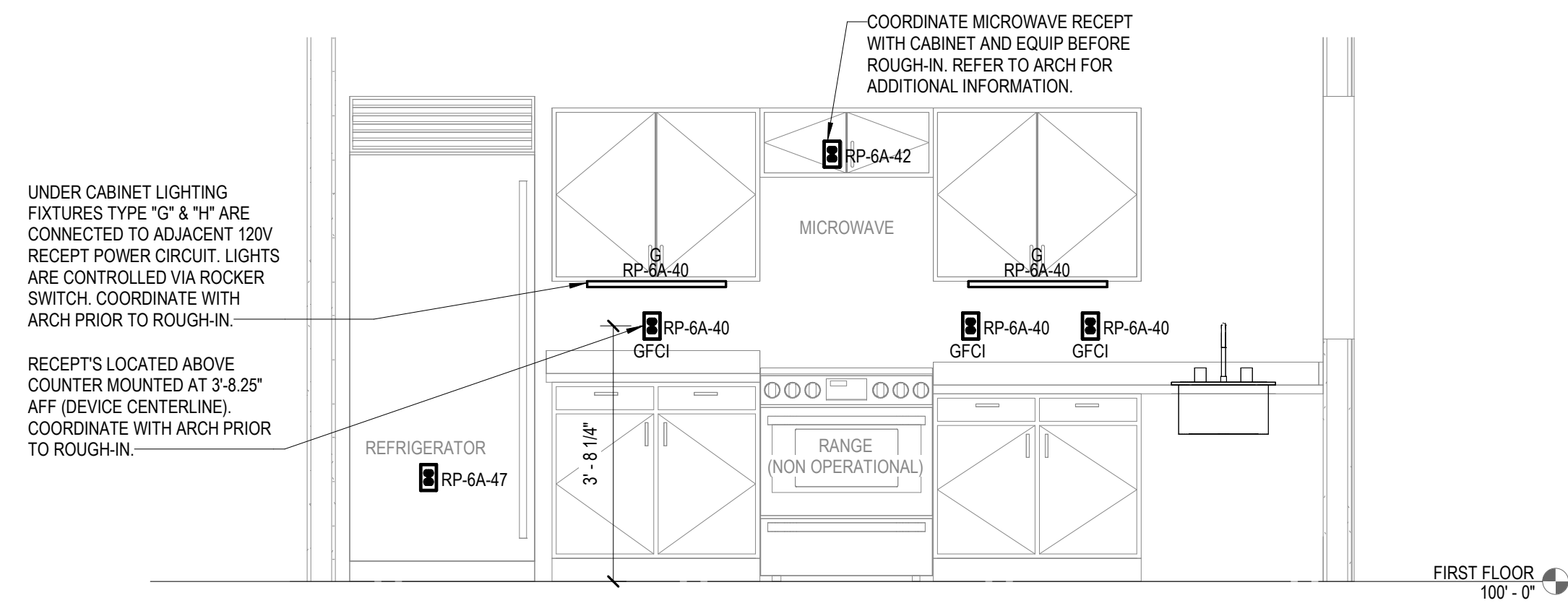
REVISIONS		
NO	DATE	ITEM
	2/07/26	100% CD SUBMISSION
	4/08/26	BID SET



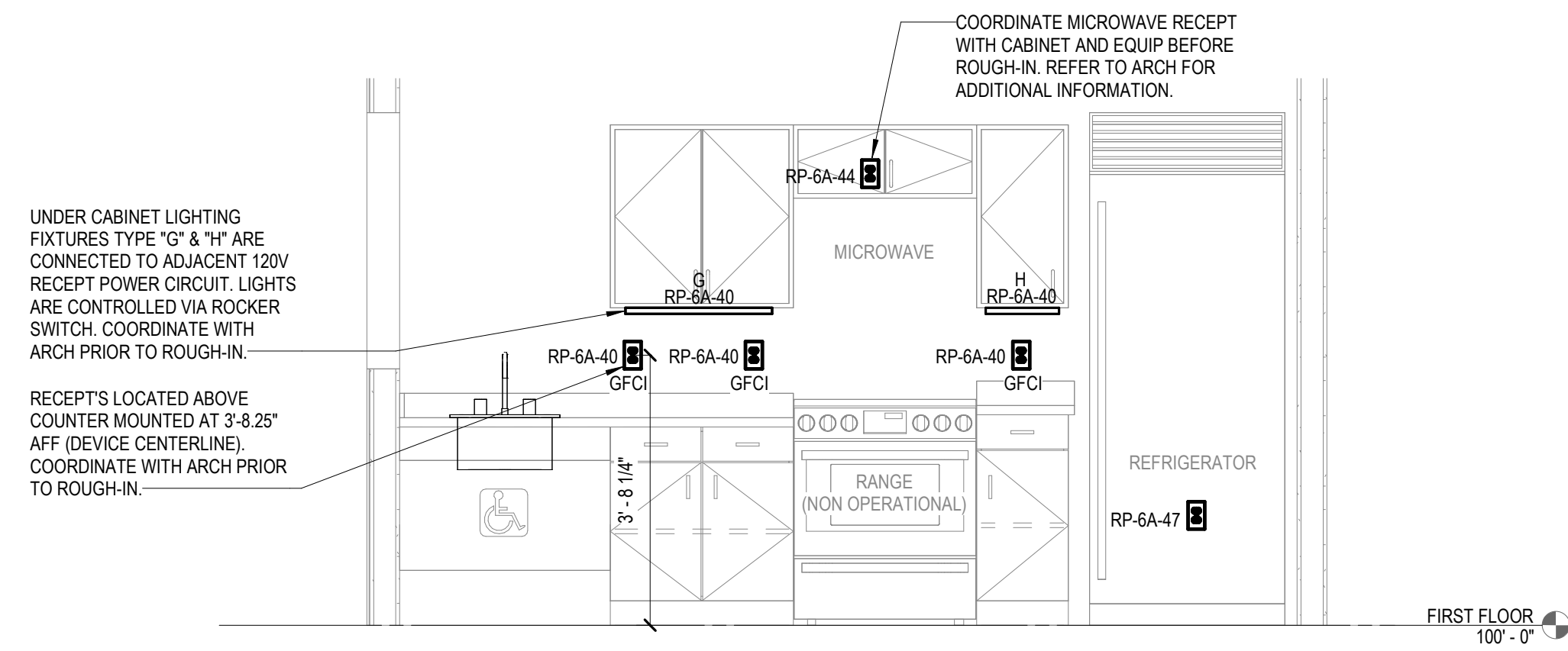
4 Section 3 - KITCHEN ELECTRICAL DETAIL
E-201 SCALE: 1/2" = 1'-0"



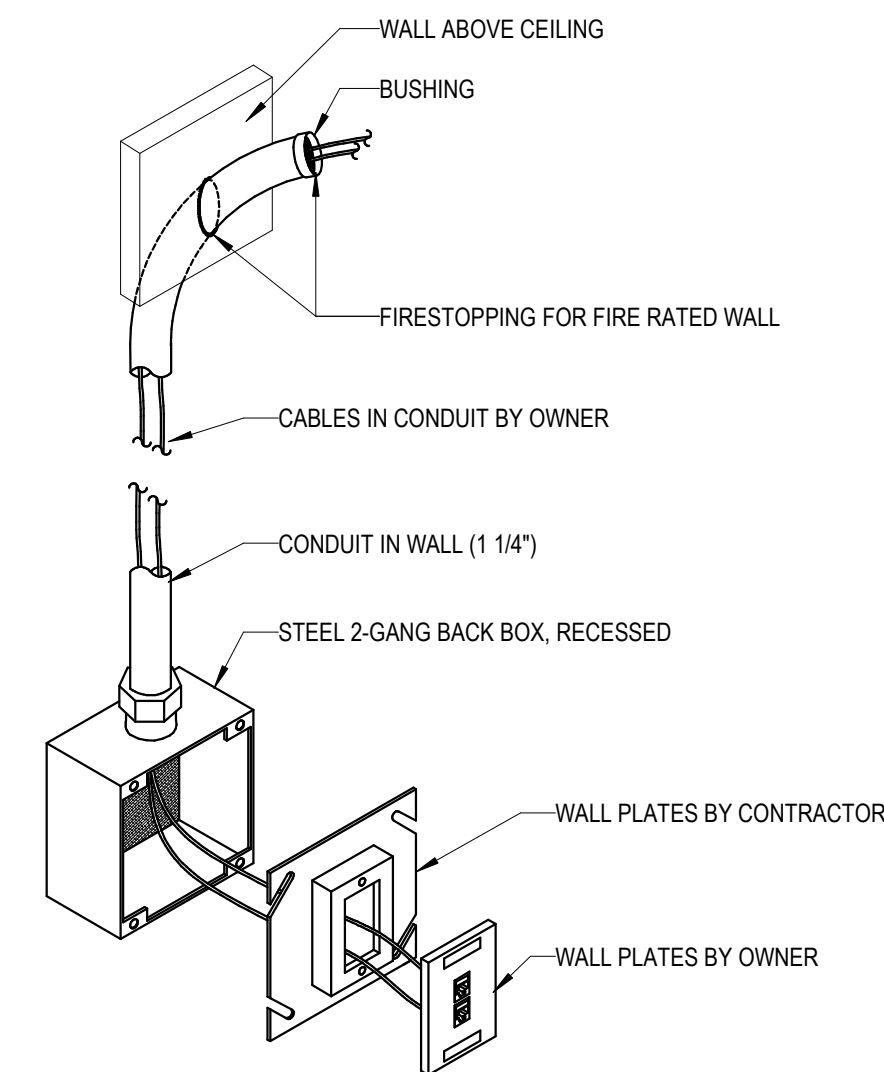
5 Section 4 - KITCHEN ELECTRICAL DETAIL
E-201 SCALE: 1/2" = 1'-0"



1 Section 1 - KITCHEN ELECTRICAL DETAIL
E-201 SCALE: 1/2" = 1'-0"



2 Section 2 - KITCHEN ELECTRICAL DETAIL
E-201 SCALE: 1/2" = 1'-0"



3 TYPICAL TEL/COM WALL BOX DETAIL
E-201 NOT TO SCALE



REVISIONS		
NO	DATE	ITEM
	2/07/26	100% CD SUBMISSION
	4/08/26	BID SET



Statistics						
Description	Symbol	Avg	Max	Min	Max/Min	Avg/Min
APT. 1	+	40.8 fc	55.7 fc	18.5 fc	3.0:1	2.2:1
APT. 2	+	41.8 fc	56.7 fc	26.0 fc	2.2:1	1.6:1
APT. 3	+	40.6 fc	55.7 fc	22.0 fc	2.5:1	1.8:1
APT. 4	+	40.0 fc	54.8 fc	21.3 fc	2.6:1	1.9:1
AV STORAGE (661)	+	27.6 fc	31.5 fc	24.2 fc	1.3:1	1.1:1
BEDROOM 1	+	35.9 fc	48.2 fc	20.2 fc	2.4:1	1.8:1
BEDROOM 2	+	32.8 fc	42.5 fc	16.6 fc	2.6:1	2.0:1
BEDROOM 3	+	32.3 fc	42.3 fc	16.3 fc	2.6:1	2.0:1
BEDROOM 4	+	32.7 fc	43.0 fc	16.9 fc	2.5:1	1.9:1
CLOSET (BEDROOM 1)	+	13.3 fc	13.8 fc	12.8 fc	1.1:1	1.0:1
CLOSET (BEDROOM 2)	+	14.0 fc	14.3 fc	13.6 fc	1.1:1	1.0:1
CLOSET (BEDROOM 3)	+	13.0 fc	13.3 fc	12.6 fc	1.1:1	1.0:1
CLOSET (BEDROOM 4)	+	13.1 fc	13.4 fc	12.8 fc	1.0:1	1.0:1
DEBRIEF 1 (635)	+	40.2 fc	52.6 fc	29.4 fc	1.8:1	1.4:1
DEBRIEF 2 (634)	+	40.2 fc	52.7 fc	29.2 fc	1.8:1	1.4:1
DEBRIEF 3 (647)	+	40.2 fc	52.6 fc	29.3 fc	1.8:1	1.4:1
MAIN CORR EXTENSION A	+	21.6 fc	24.7 fc	18.6 fc	1.3:1	1.2:1
MAIN CORR EXTENSION B	+	20.7 fc	25.2 fc	17.8 fc	1.4:1	1.2:1
OBS. 1 (647)	+	36.4 fc	47.7 fc	21.3 fc	2.2:1	1.7:1
OBS. 2 (657)	+	39.1 fc	49.8 fc	26.0 fc	1.9:1	1.5:1
OBS. 3 (663)	+	38.9 fc	49.3 fc	26.7 fc	1.8:1	1.5:1
OBS. 4 (666)	+	38.8 fc	49.5 fc	27.3 fc	1.8:1	1.4:1
SHARED BATH A	+	29.9 fc	42.5 fc	13.2 fc	3.2:1	2.3:1
SHARED BATH B	+	29.8 fc	42.3 fc	13.2 fc	3.2:1	2.3:1
STORAGE 1 (646)	+	34.1 fc	42.6 fc	26.1 fc	1.6:1	1.3:1
STORAGE 2 (662)	+	28.8 fc	33.0 fc	21.8 fc	1.5:1	1.3:1
SUITE (633)	+	27.5 fc	31.8 fc	17.6 fc	1.8:1	1.6:1

Power Statistics				
Description	# Luminaires	Total Watts	Area	Density
APT. 1	4	136.8 W	255.7 ft ²	0.5 W/ft ²
APT. 2	5	159.3 W	298.9 ft ²	0.5 W/ft ²
APT. 3	5	159.3 W	301.4 ft ²	0.5 W/ft ²
APT. 4	4	136.8 W	259.3 ft ²	0.5 W/ft ²
AV STORAGE (661)	1	34.2 W	41.3 ft ²	0.8 W/ft ²
BEDROOM 1	2	68.4 W	93.2 ft ²	0.7 W/ft ²
BEDROOM 2	2	68.4 W	101.7 ft ²	0.7 W/ft ²
BEDROOM 3	2	68.4 W	104.9 ft ²	0.7 W/ft ²
BEDROOM 4	2	68.4 W	98.0 ft ²	0.7 W/ft ²
CLOSET (BEDROOM 1)	1	10.9 W	8.0 ft ²	1.4 W/ft ²
CLOSET (BEDROOM 2)	1	10.9 W	7.9 ft ²	1.4 W/ft ²
CLOSET (BEDROOM 3)	1	10.9 W	9.9 ft ²	1.1 W/ft ²
CLOSET (BEDROOM 4)	1	10.9 W	8.0 ft ²	1.4 W/ft ²
DEBRIEF 1 (635)	2	68.4 W	98.7 ft ²	0.7 W/ft ²
DEBRIEF 2 (634)	2	68.4 W	98.7 ft ²	0.7 W/ft ²
DEBRIEF 3 (647)	2	68.4 W	98.7 ft ²	0.7 W/ft ²
MAIN CORR EXTENSION A	2	20.9 W	44.6 ft ²	0.5 W/ft ²
MAIN CORR EXTENSION B	2	20.9 W	45.0 ft ²	0.5 W/ft ²
OBS. 1 (647)	2	59.0 W	76.1 ft ²	0.8 W/ft ²
OBS. 2 (657)	2	59.0 W	66.3 ft ²	0.9 W/ft ²
OBS. 3 (663)	2	59.0 W	67.3 ft ²	0.9 W/ft ²
OBS. 4 (666)	2	59.0 W	65.9 ft ²	0.9 W/ft ²
SHARED BATH A	2	45.0 W	122.3 ft ²	0.4 W/ft ²
SHARED BATH B	3	81.0 W	120.0 ft ²	0.7 W/ft ²
STORAGE 1 (646)	3	102.6 W	161.4 ft ²	0.6 W/ft ²
STORAGE 2 (662)	2	68.4 W	98.0 ft ²	0.7 W/ft ²
SUITE (633)	9	236.5 W	335.6 ft ²	0.7 W/ft ²

1 LIGHTING CALCULATIONS
E-401 SCALE: 1/4" = 1'-0"

Schedule								
Symbol	Label	QTY	Manufacturer	Catalog Number	Description	Lamp	Lumens per Lamp	LLF Wattage
	A	42	H.E. WILLIAMS INDOOR	AT1-24-L40-835-D-DIM-UNV	RECESSED 2 X 4 LED LUMINAIRE w/WHITE REFL, FROST CONCAVE ACRYLIC LENS w/SHALLOW ACRYLIC CENTER	LED	4034	0.9 34.2
	B	8	H.E. WILLIAMS INDOOR	AT1-22-L30-835-D-DIM-UNV	RECESSED 2 X 2 LED LUMINAIRE w/WHITE REFL, FROST CONCAVE ACRYLIC LENS w/SHALLOW ACRYLIC CENTER	LED	3027	0.9 29.5
	C	6	LITHONIA LIGHTING	LDN6 35/20 L06AR LS	6IN LDN, 3500K, 2000LM, CLEAR, SPECULAR REFLECTOR, CRI80	LED	2084	0.9 22.52
	D	2	VISUAL COMFORT & CO.	700BCELI-36-S-LED930-277	LED BATH BAR - OVER SINK	LED	1995	0.9 36
	E	7	LITHONIA LIGHTING	LDN6 35/10 L06AR LS	6IN LDN, 3500K, 1000LM, CLEAR, SPECULAR REFLECTOR, CRI80	LED	987	0.9 10.44
	F	4	LITHONIA LIGHTING	CLX L24 1500LM SEF FDL GZ10 35K 80CRI	CLX LED Linear 24" 1,500 lumens, Standard Efficiency, Less louver, flat diffuse lens, General distribution, 0-10V dimming, 3500 CCT, 80 CRI	LED	1358	0.9 10.85

ADMINISTRATION & FINANCE
DESIGN AND CONSTRUCTION
OFFICE OF FACILITIES MANAGEMENT
630 W. LEXINGTON STREET, 6TH FLOOR
BALTIMORE, MARYLAND 21201
PHONE NO. (410) 706-7710
FAX NO. (410) 706-8517

PROFESSIONAL CERTIFICATION
I HEREBY CERTIFY THAT THESE DOCUMENTS WERE PREPARED OR APPROVED BY ME, AND THAT I AM A DULY LICENSED PROFESSIONAL ENGINEER UNDER THE LAWS OF THE STATE OF MARYLAND.
LICENSE NO. 18155
EXPIRATION DATE: 2/14/2027

REGISTRATION / STAMP

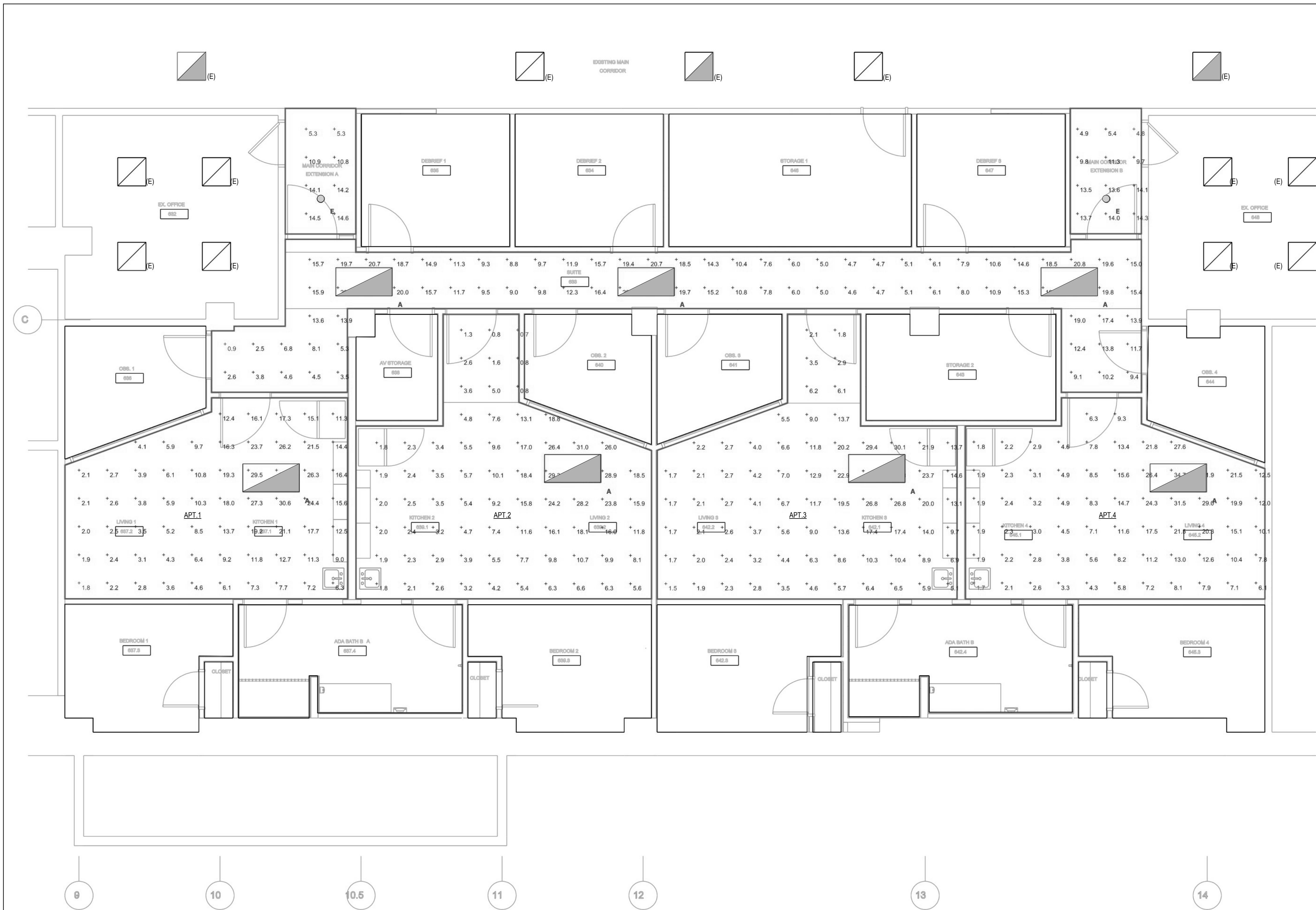
PROJECT TITLE :
**UMB SON
6TH FLOOR
APT. SIM.
RENOVATION**

UMB BUILDING NO. : SON - 0833
UMB Project NO. : 26-312
A/E PROJECT NO. : 25-128
CAD FILE NO. :
DATE :

SHEET TITLE :
**LIGHTING
CALCULATIONS**

REVISIONS		
NO	DATE	ITEM
	2/07/26	100% CD SUBMISSION
	4/08/26	BID SET

SHEET NO.
E-401



EMERGENCY LIGHTING CALCULATIONS

NOT TO SCALE

Statistics						
Description	Symbol	Avg	Max	Min	Max/Min	Avg/Min
APT. 1	+	11.3 fc	33.2 fc	1.8 fc	18.4:1	6.3:1
APT. 2	+	9.3 fc	34.6 fc	0.7 fc	49.4:1	13.3:1
APT. 3	+	9.4 fc	33.0 fc	1.5 fc	22.0:1	6.3:1
APT. 4	+	10.2 fc	34.7 fc	1.7 fc	20.4:1	6.0:1
MAIN CORR EXTENSION A	+	11.2 fc	14.6 fc	5.3 fc	2.8:1	2.1:1
MAIN CORR EXTENSION B	+	10.8 fc	14.3 fc	4.8 fc	3.0:1	2.3:1
SUITE (633)	+	12.0 fc	22.2 fc	0.9 fc	24.7:1	13.3:1

Power Statistics				
Description	# Luminaires	Total Watts	Area	Density
APT. 1	1	34.2 W	255.7 ft²	0.1 W/ft²
APT. 2	1	34.2 W	298.9 ft²	0.1 W/ft²
APT. 3	1	34.2 W	301.4 ft²	0.1 W/ft²
APT. 4	1	34.2 W	259.3 ft²	0.1 W/ft²
MAIN CORR EXTENSION A	1	10.4 W	44.6 ft²	0.2 W/ft²
MAIN CORR EXTENSION B	1	10.4 W	45.0 ft²	0.2 W/ft²
SUITE (633)	3	102.6 W	335.6 ft²	0.3 W/ft²

Schedule								
Symbol	Label	QTY	Manufacturer	Catalog Number	Description	Lamp	Lumens per Lamp	LLF Wattage
	A	7	H.E. WILLIAMS INDOOR	AT1-24-L40-835-D-DIM-UNV	RECESSED 2 X 4 LED LUMINAIRE w/WHITE REFL, FROST CONCAVE ACRYLIC LENS w/SHALLOW ACRYLIC CENTER	LED	4034	34.2
	E	2	LITHONIA LIGHTING	LDN6 35/10 LO6AR LS	6IN LDN, 3500K, 1000LM, CLEAR, SPECULAR REFLECTOR, CRI80	LED	987	10.44

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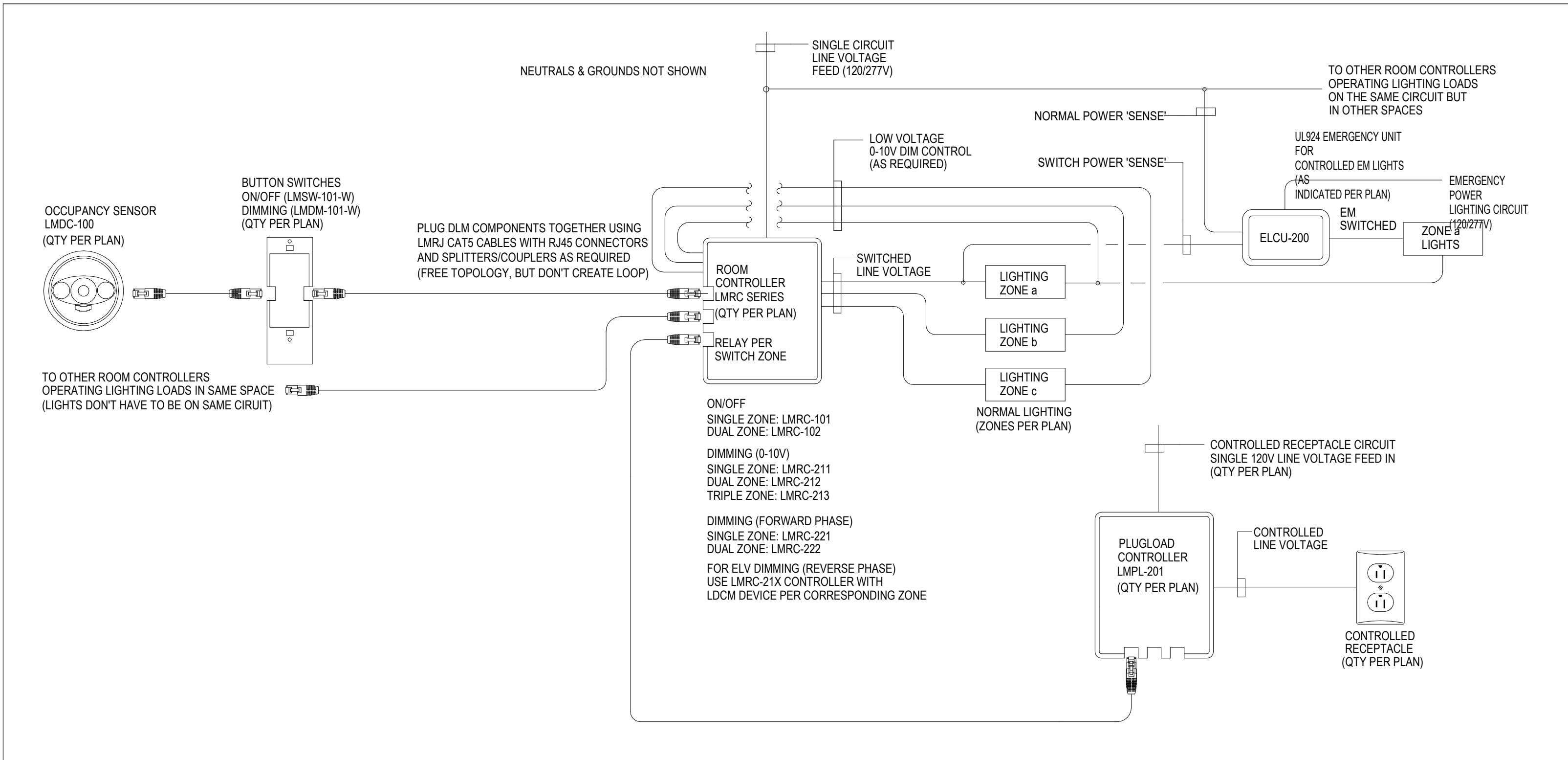
PROJECT TITLE :
**UMB SON
6TH FLOOR
APT. SIM.
RENOVATION**

UMB BUILDING NO. : SON - 0833
UMB Project NO. : 26-312
A/E PROJECT NO. : 25-128
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DATE :

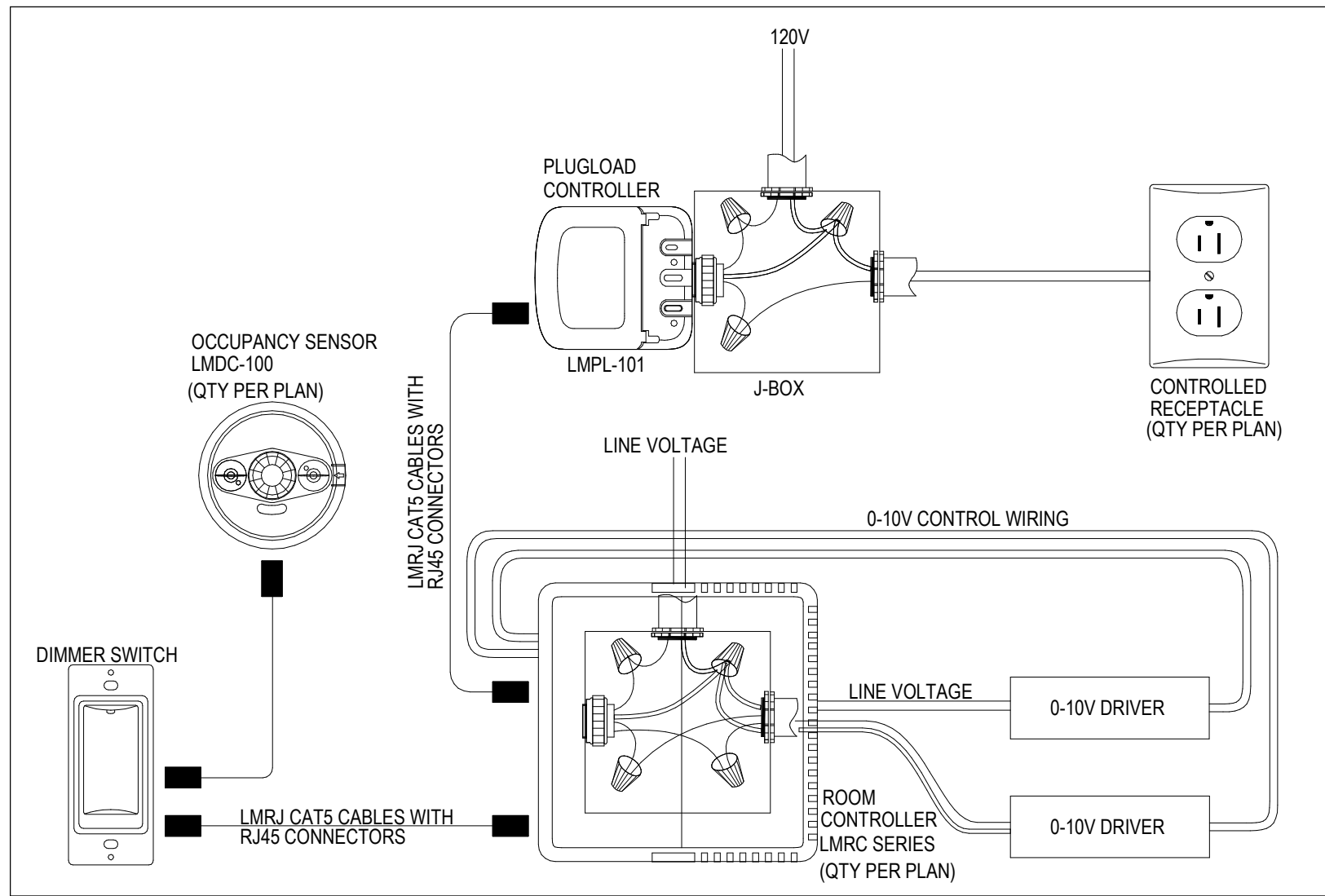
SHEET TITLE :
**EMERGENCY
LIGHTING
CALCULATIONS**

REVISIONS		
NO	DATE	ITEM
	2/07/26	100% CD SUBMISSION
	4/08/26	BID SET

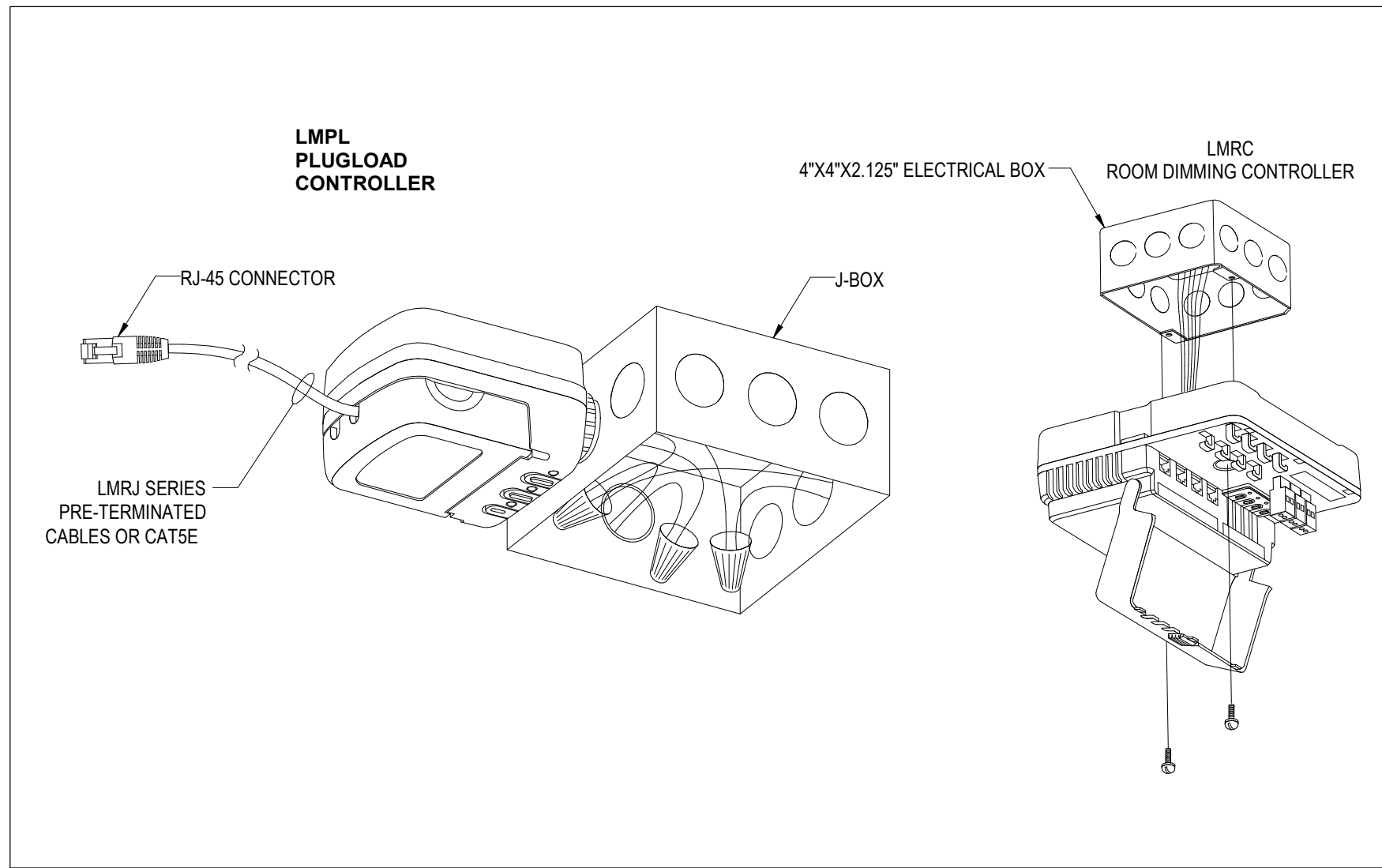
SHEET NO.
E-402



LIGHTING CONTROL WIRING DIAGRAM
WATTSTOPPER BASIS OF DESIGN



PLUG LOAD AND ROOM CONTROLLERS CONNECTION DETAIL
WATTSTOPPER BASIS OF DESIGN



PLUG LOAD AND ROOM CONTROLLERS DETAILS
WATTSTOPPER BASIS OF DESIGN

LIGHTING CONTROL SEQUENCE OF OPERATIONS

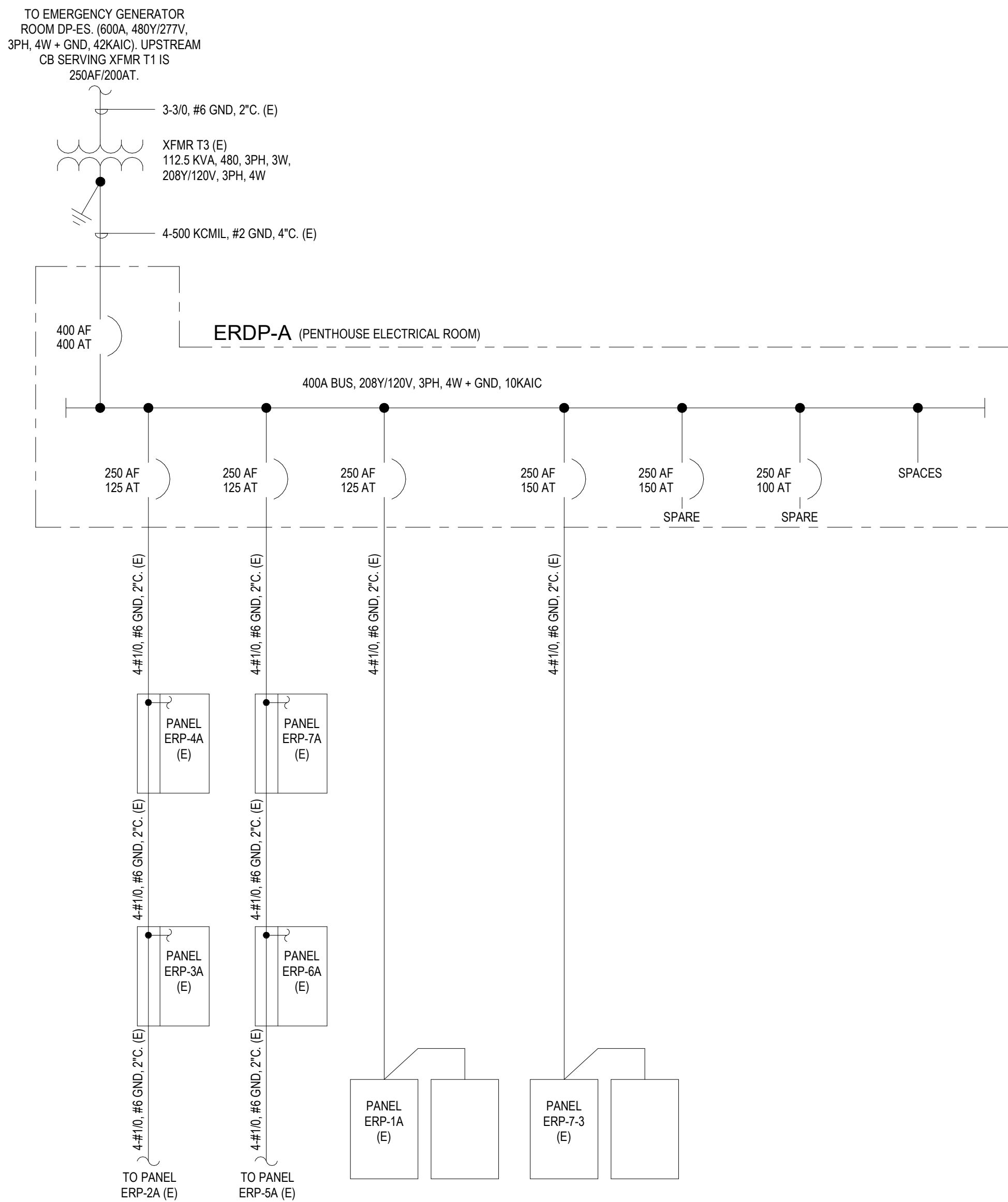
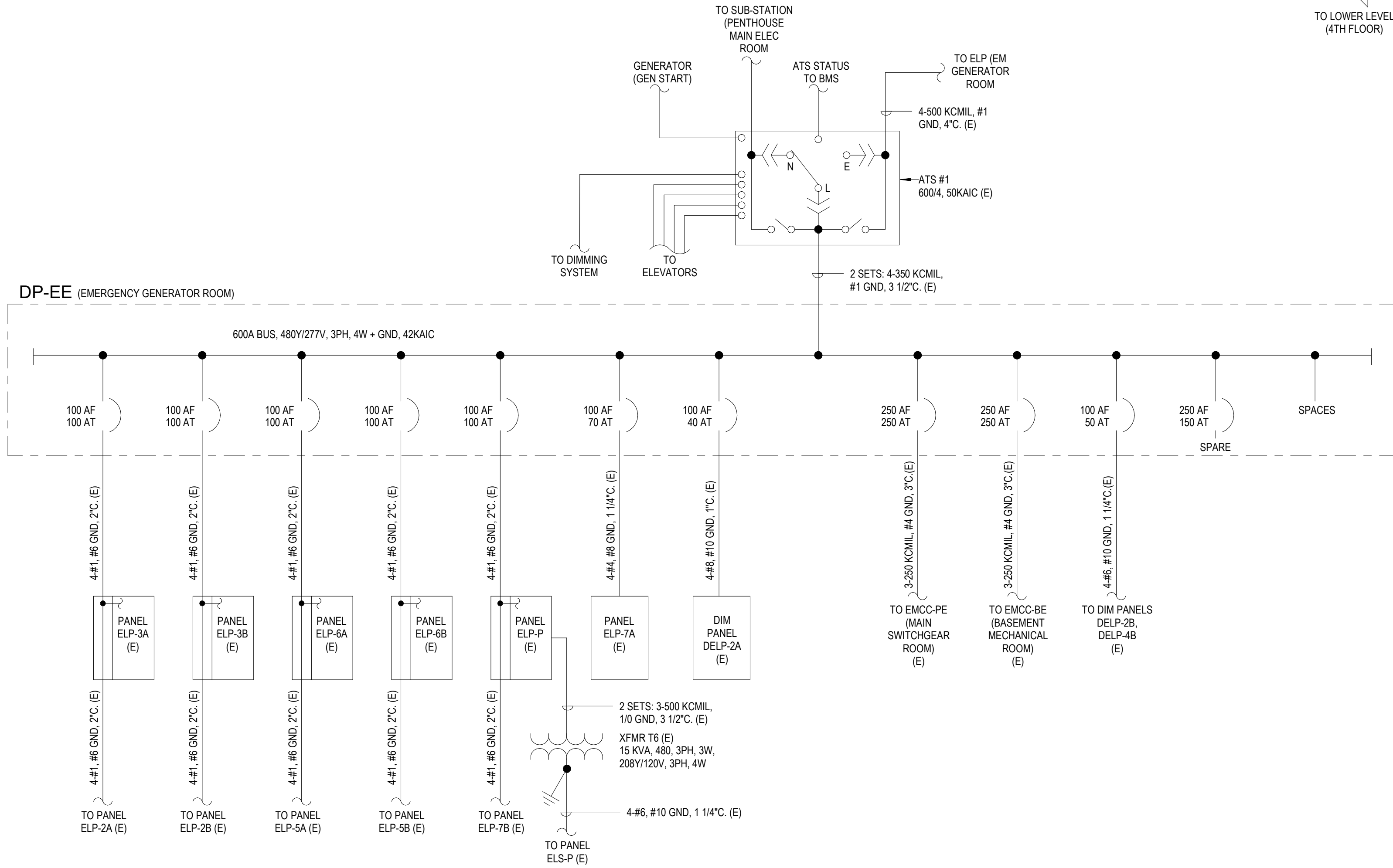
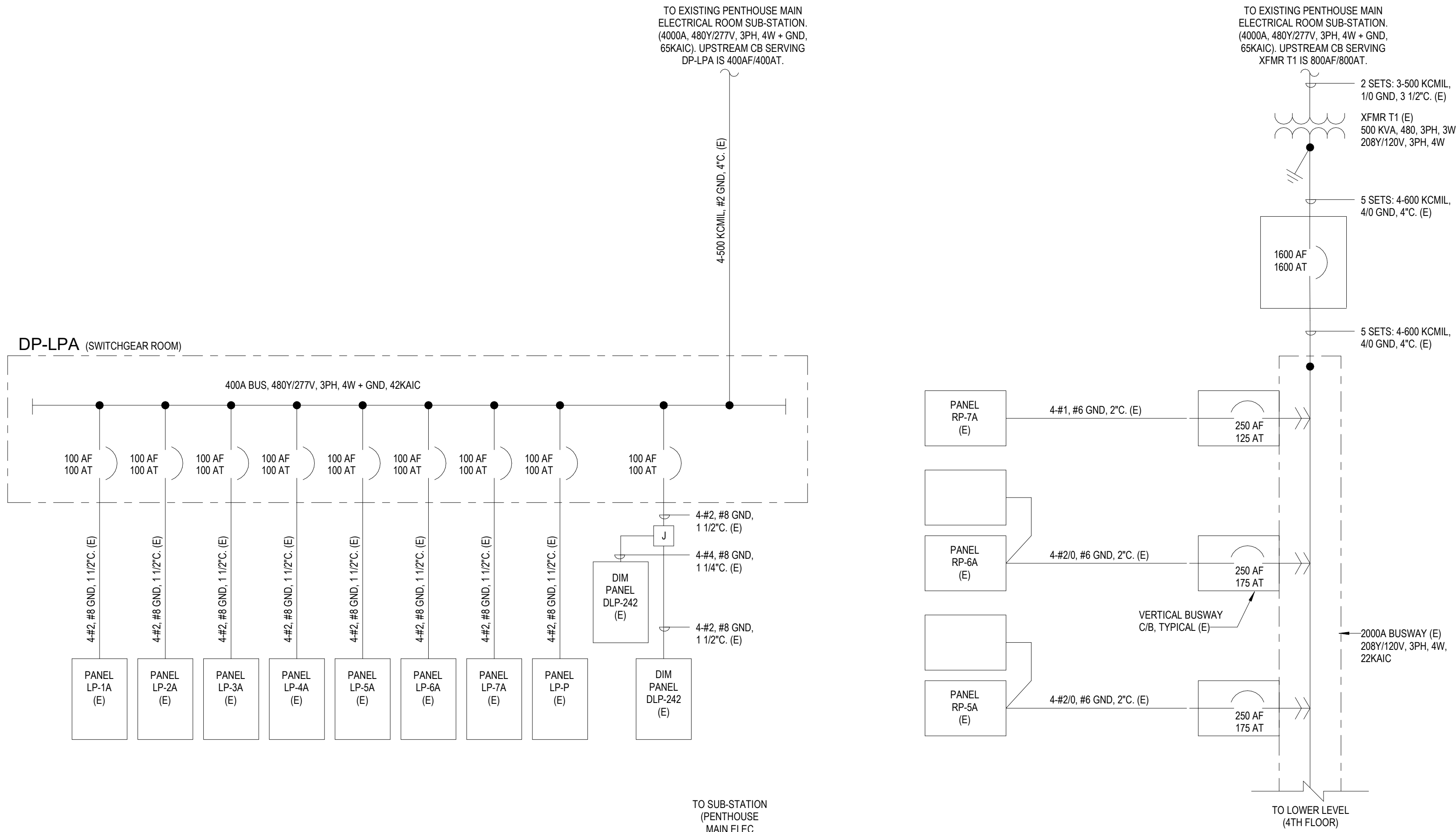
SPACE TYPE	SEQUENCE OF OPERATION - (2021 IECC)
CORRIDOR (633):	<p>CONTROLLED BY CEILING MOUNTED OCCUPANCY SENSORS AND WALL MOUNTED OVERRIDE SWITCH.</p> <p>ON: LIGHTS AUTOMATICALLY TURN FULL ON VIA OCCUPANCY SENSORS UPON OCCUPANCY DETECTION.</p> <p>PARTIAL OFF: LIGHTS DIM TO 50% AFTER 30 MINUTES (ADJUSTABLE) OF INACTIVITY.</p> <p>CEILING MOUNTED OCCUPANCY SENSORS SHALL CONTROL LIGHTS AFTER HOURS AND TURN LIGHTS FULL ON UPON OCCUPANCY DETECTION AND DIM LIGHTS TO 50% AFTER 20 MINUTES OF INACTIVITY.</p> <p>OCCUPANCY SENSORS SHALL BE OVERRIDDEN BY OVERRIDE SWITCH TO TURN THE LIGHTS OFF.</p>
DEBRIEF, OBSERVATION ROOMS,	<p>CONTROLLED BY CEILING MOUNTED VACANCY SENSORS AND WALL MOUNTED DIMMERS.</p> <p>ON: LIGHTS ARE MANUALLY TURNED ON TO 100% VIA WALL MOUNTED DIMMERS.</p> <p>MAN: DIMMER SWITCHES ALLOW LIGHTING LEVELS TO BE ADJUSTED AS REQUIRED.</p> <p>OFF: LIGHTS AUTOMATICALLY TURN OFF VIA CEILING MOUNTED VACANCY SENSORS AFTER 20 MINUTES OF INACTIVITY.</p>
AV STORAGE ROOM, BEDROOM CLOSETS	<p>CONTROLLED BY WALL MOUNTED VACANCY SENSORS.</p> <p>ON: LIGHTS ARE MANUALLY TURNED ON TO 100% VIA WALL MOUNTED VACANCY SENSORS.</p> <p>OFF: LIGHTS AUTOMATICALLY TURN OFF VIA CEILING MOUNTED OCCUPANCY SENSORS AFTER 20 MINUTES OF INACTIVITY.</p>
STORAGE ROOMS,	<p>CONTROLLED BY CEILING MOUNTED OCCUPANCY SENSORS.</p> <p>ON: LIGHTS AUTOMATICALLY TURN ON TO 100% VIA CEILING MOUNTED OCCUPANCY SENSORS.</p> <p>OFF: LIGHTS AUTOMATICALLY TURN OFF VIA CEILING MOUNTED VACANCY SENSORS AFTER 20 MINUTES OF INACTIVITY.</p> <p>OCCUPANCY SENSORS SHALL BE OVERRIDDEN BY WALL OVERRIDE SWITCH.</p>
APARTMENT (LIVING / KITCHEN), BEDROOMS, BATHROOMS	<p>CONTROLLED BY WALL MOUNTED DIMMER SWITCH.</p> <p>ON: LIGHTS ARE MANUALLY TURNED ON TO 100% VIA WALL MOUNTED DIMMER SWITCH.</p> <p>MAN: DIMMER SWITCHES ALLOW LIGHTING LEVELS TO BE ADJUSTED AS REQUIRED.</p> <p>OFF: LIGHTS ARE MANUALLY TURNED OFF TO 100% VIA WALL MOUNTED DIMMER SWITCH.</p> <p>UNDER CABINET LIGHTS ARE MANUAL ON/OFF VIA ROCKER SWITCH.</p>

**UMB SON
6TH FLOOR
APT. SIM.
RENOVATION**

**LIGHTING CONTROL
SCHEMATICS &
SEQUENCE OF
OPERATIONS**

REVISIONS

NO	DATE	ITEM
	2/07/26	100% CD SUBMISSION
	4/08/26	BID SET



GENERAL NOTES

1. ALL CONDITIONS SHOWN SHALL BE CONSIDERED EXISTING TO REMAIN UNLESS OTHERWISE NOTED.

DRAWING NOTES

1. ALL ONE-LINE DIAGRAM CONDITIONS SHOWN ARE FOR REFERENCE PURPOSES ONLY. THERE ARE NO NEW MAJOR ELECTRICAL SYSTEMS SUPPORTING THIS PROJECT. BRANCH CIRCUITS SHALL BE FED FROM EXISTING PANELBOARDS ON THE 6TH FLOOR.



UMB SON 6TH FLOOR APT. SIM. RENOVATION

PARTIAL POWER ONE-LINE DIAGRAM

REVISIONS


NO	DATE	ITEM
	2/07/26	100% CD SUBMISSION
	4/08/26	BID SET

Branch Panel: LP-6A (EXISTING)

Location: ELEC 620A		Mounting: Surface		Voltage: 480/277 Wye		Bus Rating: 100 A		Double Lugged:		Neutral Bus:							
Supply From: DP-LPA		Sections: 1		Phases: 3		MLO/MCB: MLO		Feed Thru Lug:		Ground Bus:							
Enclosure: Type 1		ISC Rating:		Wires: 4		MCB Rating: N/A		ISO Ground Bus:		Neutral Rating:							
CKT	Circuit Description	Load Classification	Feeder	Conduit	Trip	P	A	B	C	P	Trip	Conduit	Feeder	Load Classification	Circuit Description	CKT	
1	LTG RM 610, 612, 613,615-621(E)	--	(E)	(E)	20 A	1	0.00	0.00		1	20 A	(E)	(E)	--	LTG CORR. 6C1, 6C2, LOBBY 600 (E)	2	
3	LTG RM 604-611, 614 (E)	--	(E)	(E)	20 A	1		0.00	0.94	1	20 A	3/4"	2-#12,#12EG	Lighting	LTG RM 652, 653, 633, 647, 661,657, 659, 656 (N)	4	
5	LTG RM 6M1, 6W1, 601, 652, 653, 660 (E)	--	(E)	(E)	20 A	1			0.00	0.87	1	20 A	3/4"	2-#12,#12EG	Lighting	LTG RM 659, 658, 663, 662, 666, 664, 665 (N)	6
7	Spare	--	--	--	20 A	1	0.00	0.00		1	20 A	--	--	--	Spare	8	
9	Spare	--	--	--	20 A	1		0.00	0.00	1	20 A	--	--	--	Spare	10	
11	Spare	--	--	--	20 A	1			0.00	0.00	1	20 A	--	--	Spare	12	
13	Spare	--	--	--	20 A	1	0.00	0.00		1	20 A	--	--	--	Spare	14	
15	Space	--	--	--	--	1		--	--	1	--	--	--	--	Space	16	
17	Space	--	--	--	--	1				--	--	1	--	--	Space	18	
19	Space	--	--	--	--	1	--	--		1	--	--	--	--	Space	20	
21	Space	--	--	--	--	1				1	--	--	--	--	Space	22	
23	Space	--	--	--	--	1				--	--	1	--	--	Space	24	
25	Space	--	--	--	--	1	--	--		1	--	--	--	--	Space	26	
27	Space	--	--	--	--	1		--	--	1	--	--	--	--	Space	28	
29	Space	--	--	--	--	1				--	--	1	--	--	Space	30	
Total Load:							0.0 kVA	0.9 kVA	0.9 kVA								
Total Amps:							0 A	4 A	4 A								
Load Classification				Connected Load (VA)		Demand Factor		Estimated Demand		Panel Totals							
Lighting				1817 VA		125.00%		2271 VA									
										Total Conn. Load: 1.8 kVA							
										Total Est. Demand: 2.3 kVA							
										Total Conn. Current: 2 A							
										Total Est. Demand Current: 3 A							
Notes:																	

PANEL KEY

	LP-6A



UNIVERSITY of MARYLAND
BALTIMORE


ADMINISTRATION & FINANCE
DESIGN AND CONSTRUCTION
OFFICE OF FACILITIES MANAGEMENT
620 W. LEXINGTON STREET, 6TH FLOOR
BALTIMORE, MARYLAND 21201
PHONE NO. (410) 706-7710
FAX NO. (410) 706-B517



Murphy &
Dittenhafer
ARCHITECTS

PROFESSIONAL CERTIFICATION
I HEREBY CERTIFY THAT THESE DOCUMENTS WERE
PREPARED OR APPROVED BY ME, AND THAT I AM A
DULY LICENSED PROFESSIONAL ENGINEER UNDER
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LICENSE NO. 18155
EXPIRATION DATE: 2/14/2027

REGISTRATION / STAMP



PROJECT TITLE :

UMB SON
6TH FLOOR
APT. SIM.
RENOVATION

UMB BUILDING NO. : SON - 0833

UMB Project NO. : 26-312

A/E PROJECT NO. : 25-128

CAD FILE NO. :

DATE :

SHEET TITLE :

PANEL SCHEDULES




























REVISIONS		
NO	DATE	ITEM
	2/07/26	100% CD SUBMISSION
	4/08/26	BID SET

SHEET NO.


E-503

ABBREVIATIONS			
A	AMPERE	LF	LOW FREQUENCY
A.C	ABOVE COUNTER	M.H.	MOUNTING HEIGHT
A.F.F.	ABOVE FINISHED FLOOR	NAC	NOTIFICATION APPLIANCE CIRCUIT
A.F.G.	ABOVE FINISHED GRADE	N.E.C.	NATIONAL ELECTRIC CODE
BAS	BUILDING AUTOMATION SYSTEM	P / PH	PHASE
CKT	CIRCUIT	RM	REMOTE MICROPHONE CONSOLE
CD	CANDELA	SLC	SIGNALING LINE CIRCUIT
D	DEMOLISH	TYP	TYPICAL
FAC	FIRE ALARM COMMUNICATOR	U.O.N.	UNLESS OTHERWISE NOTED
FACP	FIRE ALARM CONTROL PANEL	V	VOLTAGE
FATC	FIRE ALARM TERMINAL CABINET	W/	WITH
E	EXISTING TO REMAIN	W	WIRE
ER	EISTING TO BE REPLACED	WP	WEATHERPROOF
GAP	GRAPHIC ANNUNCIATOR PANEL		
GFCI	GROUND FAULT CIRCUIT INTERRUPTER		
IDC	INITIATING DEVICE CIRCUIT		

FIRE ALARM GENERAL NOTES	
1.	ANY CONFLICT AND/OR DISCREPANCY BETWEEN THESE GENERAL NOTES AND ANY OTHER INFORMATION CONTAINED IN THE CONTRACT DOCUMENTS, THE MORE STRINGENT REQUIREMENT SHALL PREVAIL AND BE A REQUIREMENT OF THE WORK. THAT NOTWITHSTANDING, ANY SUCH CONFLICT AND/OR DISCREPANCY SHALL PROMPTLY BE BROUGHT TO THE ATTENTION OF THE OWNER, ARCHITECT AND ENGINEER.
2.	THE WORK INCLUDES, BUT IS NOT LIMITED TO DESIGNING AND EXTENDING AN EXISTING TO REMAIN, COMPLETELY SUPERVISED, INTELLIGENT, ANALOG, ADDRESSABLE FIRE ALARM AND DETECTION SYSTEM AS INDICATED IN THE CONTRACT DOCUMENTS. THE WORK SHALL INCLUDE, BUT NOT BE LIMITED TO, ALL WIRING, RACEWAYS, PULL BOXES, TERMINAL CABINETS, OUTLET AND MOUNTING BOXES, CONTROL EQUIPMENT, ALARM AND SUPERVISORY SIGNALS, INITIATING DEVICES, ALARM NOTIFICATION APPLIANCES, NOTIFICATION ALARM PANELS, INTERFACE EQUIPMENT, AND ALL OTHER ACCESSORIES AND MISCELLANEOUS ITEMS INCLUDING SOFTWARE, SYSTEM PROGRAMMING, TEST AND CONSTRUCTION PERMITS REQUIRED FOR A COMPLETE OPERATING SYSTEM NORMALLY AND CUSTOMARILY REQUIRED, WHETHER INDICATED OR INHERENTLY NECESSARY DUE TO THE NATURE OF THE WORK.
3.	THESE DRAWINGS ARE DIAGRAMMATIC IN NATURE TO SHOW DEVICE COUNTS AND GENERAL LOCATIONS ONLY. CONTRACTOR IS RESPONSIBLE FOR DESIGN DRAWINGS AND INSTALLATION OF DEVICES IN ACCORDANCE WITH LOCAL CODES, PROJECT SPECIFICATIONS, AND MANUFACTURER'S REQUIREMENTS.
4.	PROVIDE ALL NECESSARY PERMITS, INSPECTIONS AND FINAL SYSTEM ACCEPTANCE FROM THE AUTHORITY HAVING JURISDICTION (AHJ).
5.	FIRE ALARM CONTRACTOR SHALL PREPARE SHOP DRAWINGS, CALCULATIONS, AND EQUIPMENT CUT SHEETS, AND SUBMIT THEM TO AUTHORITY HAVING JURISDICTION (AHJ) FOR APPROVAL. APPROVAL MUST BE RECEIVED BEFORE START OF WORK.
6.	THE SYSTEM SHALL PROVIDE GENERAL EVACUATION SIGNALING THROUGHOUT THE BUILDING. UPON ACTIVATION OF AN ALARM SIGNAL, THE SYSTEM SHALL INITIATE A PRE-RECORDED EMERGENCY VOICE SIGNAL AND VISIBLE STROBE SIGNALING IN ALL REQUIRED AREAS PER PUBLIC MODE CRITERIA IN ACCORDANCE WITH NFPA 72.
7.	COORDINATE ALL WORK AND AVOID ALL CONFLICTS WITH LIGHTING FIXTURES, DIFFUSERS, GRILLS, DUCTS, STRUCTURAL MEMBERS, PIPES AND OTHER OBSTRUCTIONS.
8.	SUBJECT TO ANY INFORMATION CONTAINED IN THE CONTRACT DOCUMENTS, MOUNT ALL VISUAL WARNING STROBE/AUDIBLE NOTIFICATION APPLIANCES TO ACHIEVE MAXIMUM AUDIBILITY AND VISIBILITY IN ACCORDANCE WITH NFPA 72, 2022 AND CURRENT ADAAG GUIDELINES. PROVIDE CARE IN LOCATING VISUAL WARNING STROBE APPLIANCES TO ENSURE VISIBILITY AND AVOID OBSTRUCTIONS. REFER TO ARCHITECTURAL ELEVATIONS FOR SPECIFIC MOUNTING DETAILS AND ALIGNMENTS.
9.	ALL STROBES WITHIN A COMMON VIEWING AREA SHALL BE WIRED TO FLASH IN SYNCHRONIZATION. PROVIDE SYNCHRONIZATION MODULE OR OTHER EQUIPMENT WITH SYNCHRONIZATION CAPABILITIES FOR EACH STROBE CIRCUIT, WHERE REQUIRED. ALL NOTIFICATION FACEPLATE COLOR SHALL BE WHITE IN COLOR.
10.	DRAWINGS DO NOT SHOW THE LOCATION OF ALL ADDRESSABLE INPUT AND CONTROL MODULES. CONTRACTOR SHALL PROVIDE NEW POINT ADDRESSABLE INPUT MODULES FOR FIRE SUPPRESSION SYSTEM SUPERVISION DEVICES AND OTHER AREAS AS REQUIRED BY THE PROJECT SPECIFICATIONS. CONTRACTOR SHALL PROVIDE NEW POINT ADDRESSABLE CONTROL MODULES AS REQUIRED FOR SYSTEM OPERATION.
11.	ALL ADDRESSABLE CONTROL RELAYS SHALL BE LOCATED WITHIN 3 FEET OF CONTROLLED CIRCUIT OR DEVICE.
12.	ALL WIRING SHALL BE INSTALLED WITHIN CONDUIT. SUBJECT TO ANY CODE RESTRICTION AND/OR REQUIREMENT; PROVIDE ELECTRICAL METALLIC TUBING (EMT), UNLESS OTHERWISE NOTED. COORDINATE COLOR OF CONDUIT WITH ARCHITECT. LABEL CONDUIT AT 20 FT INTERVALS.
13.	IN AREAS WITHOUT CEILINGS, CONDUIT SHALL BE INSTALLED AS UNOBTUSIVELY AS POSSIBLE, AS CLOSE AS POSSIBLE TO FLOOR/CEILING SLAB AND PARALLEL AND AT RIGHT ANGLES TO STRUCTURAL STEEL OR CONCRETE.
14.	CONCEAL ALL CONDUITS ABOVE SUSPENDED CEILINGS AND BEHIND WALLS. IN UNFINISHED AREAS CONDUIT MAY BE SURFACE MOUNTED, UNLESS OTHERWISE NOTED.
15.	PENETRATION OF FIRE RATED ASSEMBLIES BY FIRE ALARM CONDUIT OR WIRING SHALL BE SEALED BY THE INSTALLING CONTRACTOR WITH A U.L.CLASSIFIED THROUGH PENETRATION SYSTEM CAPABLE OF MAINTAINING THE REQUIRED FIRE RESISTANCE RATING OF THE ASSEMBLY PENETRATED.
16.	COORDINATE LOCATION OF AUTOMATIC SPRINKLER FLOW AND VALVE SUPERVISORY SWITCHES PRIOR TO CONDUIT ROUGH-IN TO ENSURE ACCESSIBILITY AND MINIMIZE LENGTH OF FLEXIBLE CONDUIT RUNS NECESSARY TO MAKE CONNECTIONS.
17.	ELECTRICAL BOXES SHALL BE PROVIDED AS FOLLOWS: I) EXPOSED WORK - CAST METAL BELL TYPE BOXES WITH THREADED HUB, EXCEPT WHERE FACTORY BOXES ARE PROVIDED; AND II) CONCEALED WORK - BOXES MAY BE STAMPED STEEL BOXES.
18.	LOCATE FIRE ALARM DEVICES INSTALLED IN ACOUSTICAL TILE CEILINGS IN THE CENTER OF THE TILE.
19.	FIRE ALARM SYSTEM ON A NETWORK.
20.	SHOP DRAWING COMPLETE SUBMITTALS PACKAGE MUST BE COMPLETE AND EXECUTED PER NFPA 72 INCLUDING BUT NOT LIMITED TO ALL PLANS, CALCULATIONS, AND MATERIAL DATASHEETS. NO EXCEPTIONS; PIECE-MEAL SUBMISSIONS WILL BE AUTOMATICALLY REJECTED
21.	CLOSEOUT DOCUMENTS SHALL BE PROVIDED PER NFPA 72, UPON FINAL ACCEPTANCE OF PROJECT.
22.	FIRE ALARM SYSTEM INTEGRITY SHALL MEET SURVIVAIBLTY LEVEL 1 REQUIREMENTS AS PER NFPA 72.

FIRE ALARM EQUIPMENT SYMBOLS		
SYMBOL	DESCRIPTION	MOUNTING HEIGHT TO Ȣ A.F.F., U.O.N.
	FIRE ALARM AMPLIFIER PANEL (120VAC PRIMARY POWER)	
	FIRE ALARM POWER BOOSTER PANEL (120VAC PRIMARY POWER)	
	FIRE ALARM LED GRAPHIC ANNUNCIATOR	
	FIRE ALARM CONTROL PANEL (120VAC PRIMARY POWER)	
	FIRE ALARM TERMINAL CABINET	
	LCD ANNUNCIATOR	
	REMOTE MICROPHONE CONSOLE	
INTIATING DEVICE SYMBOLS		
SYMBOL	DESCRIPTION	MOUNTING HEIGHT TO Ȣ A.F.F., U.O.N.
	FIRE ALARM MANUAL PULL STATION	+42" - 48" A.F.F. (OPERATING HANDLE TO FLOOR)
	ADDRESSABLE HEAT DETECTOR	
	WALL-MOUNTED MAGNETIC DOOR HOLDER	
	SPRINKLER WATERFLOW SWITCH (FURNISHED BY THE SPRINKLER CONTRACTOR)	
	SPRINKLER VALVE TAMPER SWITCH (FURNISHED BY THE SPRINKLER CONTRACTOR)	
	ADDRESSABLE INTERFACE MODULE	
	ADDRESSABLE RELAY MODULE	
	REMOTE TEST STATION	
	ISOLATOR MODULE	
	ADDRESSABLE CONTROL MODULE	
 R	ADDRESSABLE SMOKE DETECTOR - PHOTOELECTRIC TYPE -SUBSCRIPT 'R' DENOTES ELEVATOR RECALL DEVICE)	
 R	WALL ADDRESSABLE SMOKE DETECTOR - PHOTOELECTRIC TYPE -SUBSCRIPT 'R' DENOTES ELEVATOR RECALL DEVICE	
	ADDRESSABLE DUCT-MOUNTED SMOKE DETECTOR	
NOTIFICATION DEVICE SYMBOLS		
SYMBOL	DESCRIPTION	MOUNTING HEIGHT TO Ȣ A.F.F., U.O.N.
 ## CM	CEILING MOUNTED COMBINATION FIRE ALARM AUDIO (SPEAKER) / VISUAL (STROBE) APPLIANCE - SUPERScript ## DENOTES CANDELA RATING	+80" - 96" A.F.F. (STROBE LENS TO FLOOR)
 ## WP	WALL MOUNTED COMBINATION FIRE ALARM AUDIO (SPEAKER) / VISUAL (STROBE) APPLIANCE - SUPERScript ## DENOTES CANDELA RATING - SUBSCRIPT 'WP' DENOTES WEATHER-PROOF TYPE DEVICE	
 ##	WALL MOUNTED FIRE ALARM VISUAL (STROBE) APPLIANCE - SUPERScript ## DENOTES CANDELA RATING	
 ## CM	CEILING MOUNTED FIRE ALARM VISUAL (STROBE) APPLIANCE - SUPERScript ## DENOTES CANDELA RATING	
	WALL MOUNTED FIRE ALARM AUDIO (SPEAKER) APPLIANCE	+90" A.F.F. (TOP OF DEVICE TO FLOOR)
	CEILING MOUNTED SPEAKER	
	BELL / CHIME	

FIRE ALARM DRAWING INDEX	
SHEET No.	SHEET NAME
FA-001	SYMBOLS, ABBREVIATIONS AND NOTES
FA-101	6TH FLOOR - NEW WORK - FIRE ALARM
FAD-102	6TH FLOOR - DEMOLITION - FIRE ALARM



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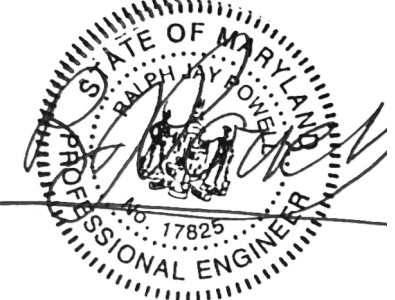
OFFICE OF FACILITIES MANAGEMENT
630 W. LEXINGTON STREET, 6TH FLOOR
BALTIMORE, MARYLAND 21201
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FAX NO. (410) 706-8517



Murphy &
Dittenhafer
ARCHITECTS

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REGISTRATION / STAMP



PROJECT TITLE :

UMB SON
6TH FLOOR
APT. SIM.
RENOVATION

UMB BUILDING NO. : SON - 0833

UMB Project NO. : 26-312

A/E PROJECT NO. : 25-128

CAD FILE NO. :

DATE :

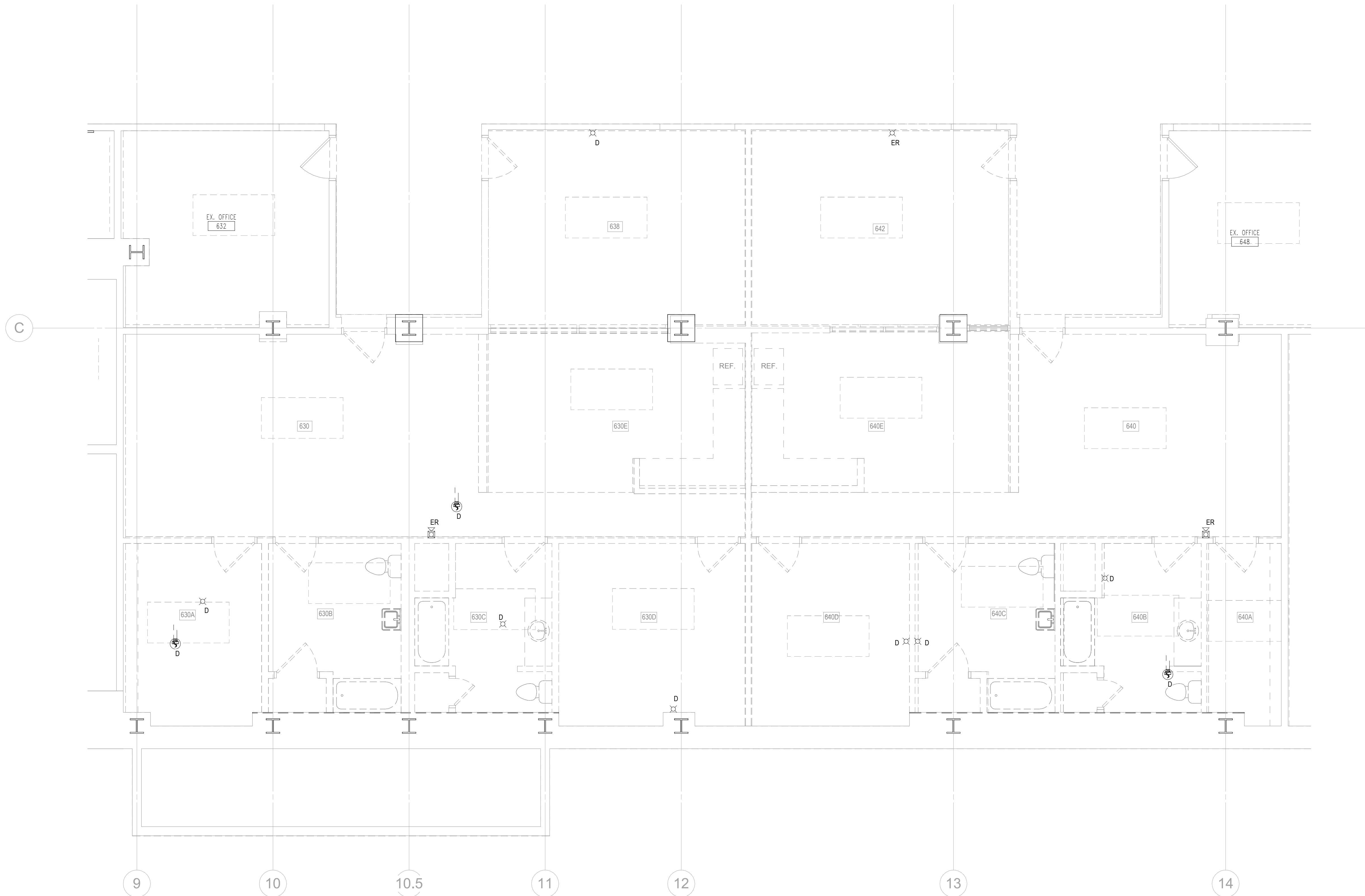
SHEET TITLE :

SYMBOLS,
ABBREVIATIONS AND
NOTES

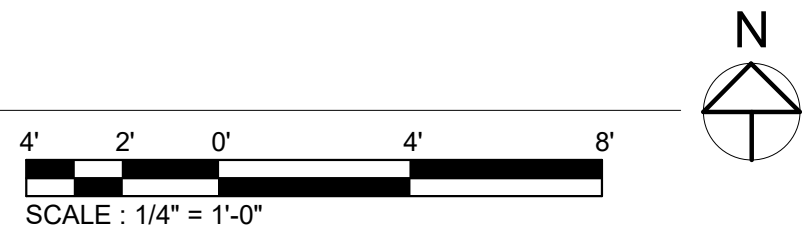
REVISIONS		
NO	DATE	ITEM
	2/07/26	100% CD SUBMISSION
	4/08/26	BID SET

SHEET NO.

FA-001



1
FAD-102
6TH FLOOR - DEMOLITION - FIRE ALARM
SCALE: 1/4" = 1'-0"



DEMO GENERAL FIRE ALARM NOTES

1. REFER TO SHEET FA-001 FOR LEGEND, NOTES, AND ABBREVIATIONS.
2. EXISTING WIRING, RACEWAY AND ASSOCIATED FITTINGS, ETC. SHALL BE MAINTAINED FOR RE-USE.
3. DEMOLISHED DEVICES SHALL BE RETURNED TO OWNER.

REGISTRATION / STAMP



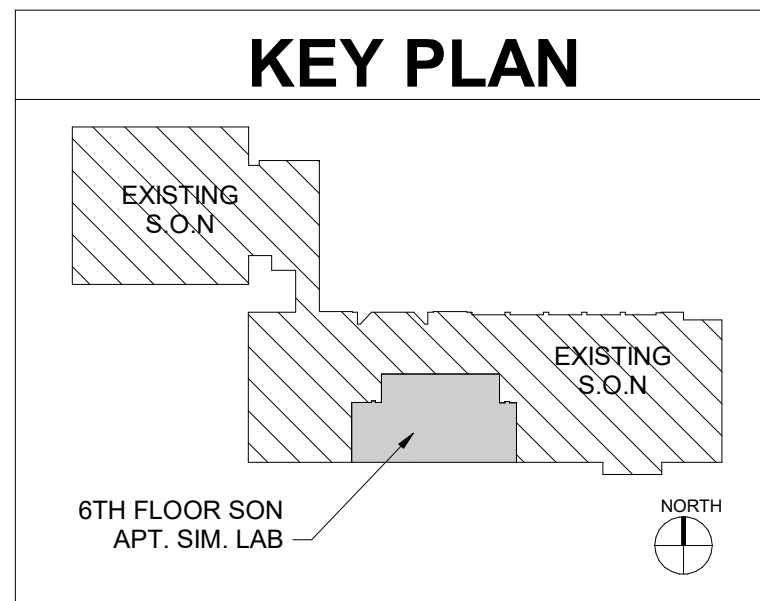
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APT. SIM.
RENOVATION**

UMB BUILDING NO. :	SON - 0833
UMB Project NO. :	26-312
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CAD FILE NO. :	
DATE :	

SHEET TITLE :
**6TH FLOOR -
DEMOLITION - FIRE
ALARM**

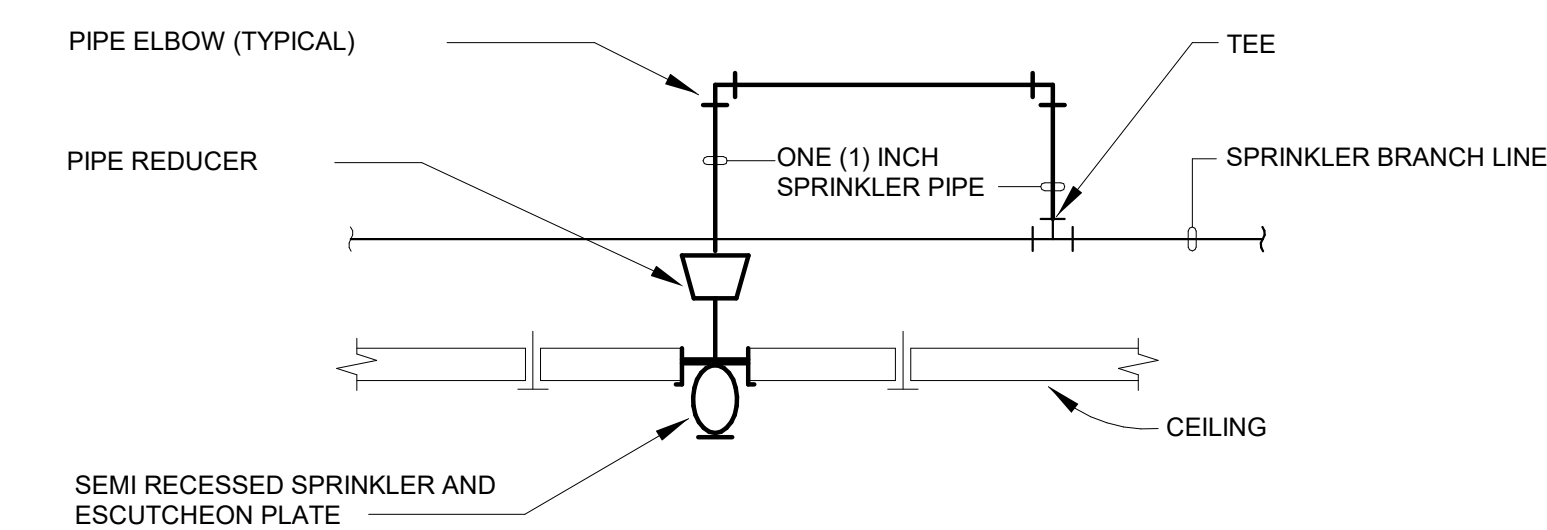
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	4/08/26	BID SET



SPRINKLER SYSTEM DESIGN CRITERIA	
1.	<u>LIGHT HAZARD OCCUPANCIES:</u> NOT APPLICABLE FOR THIS PROJECT.
2.	<u>ORDINARY HAZARD GROUP 1 OCCUPANCIES:</u>
3.	<u>ORDINARY HAZARD GROUP 2 OCCUPANCIES:</u> NOT APPLICABLE FOR THIS PROJECT.


GENERAL NOTES	
1.	ENTIRE PROJECT AREA SHALL BE PROTECTED WITH AN AUTOMATIC SPRINKLER SYSTEM. ALL WORK ON THE SPRINKLER SYSTEM SHALL BE IN ACCORDANCE WITH NFPA 13 202 EDITION, IN COMPLIANCE WITH ALL LOCAL CODES, STANDARDS, AND AMENDMENTS. THE SPRINKLER SYSTEM DESIGNS FOR THE VARIOUS HAZARDS WITHIN THE BUILDING SHALL BE DETERMINED USING NFPA 13 DESIGN CRITERIA.
2.	PROJECT SCOPE INCLUDES MODIFICATIONS TO EXISTING WET PIPE SPRINKLER SYSTEM AS IDENTIFIED ON CONTRACT DOCUMENTS. EXISTING WET SPRINKLER SYSTEMS SERVING THIS FLOOR ZONE WILL BE MODIFIED TO MEET NEW ARCHITECTURAL REQUIREMENTS.
3.	SPRINKLER CONTRACTOR SHALL PREPARE SHOP DRAWINGS AND EQUIPMENT DATA SHEETS AND SUBMIT THEM TO AHJ FOR APPROVAL. APPROVAL MUST BE RECEIVED BEFORE START OF WORK.
4.	ALL MATERIALS SHALL CONFORM TO THE REQUIREMENTS OF NFPA 13 AND THE PROJECT SPECIFICATIONS.
5.	ALL PIPING SHALL BE SIZED BASED EXISTING PIPE SCHEDULE IN BUILDING. 2 HEADS ON 1" PIPE, 4 HEADS ON 1.25" PIPE AND 5 HEADS ON 1.5" PIPE.
6.	THE CONTRACTOR IS RESPONSIBLE FOR ALL WORK, MATERIALS, AND LABOR TO SATISFY THE REQUIRED DEMOLITION OF EXISTING SPRINKLER COMPONENTS AND NEW WORK CONDITIONS TO PROVIDE A COMPLETE WORKING SYSTEM WHETHER SPECIFIED OR IMPLIED.
7.	THE CONTRACTOR SHALL EXAMINE THE EXISTING CONDITIONS TO VERIFY THE EXTENT OF THE WORK SHOWN ON THE CONTRACT DOCUMENTS AND SHALL BE RESPONSIBLE FOR THE CONDITION OF THE SPACE AS REFLECTED IN THE NEW WORK REQUIREMENTS. NO ALLOWANCE SHALL BE MADE IF THE CONTRACTOR FAILS TO MAKE SUCH EXAMINATIONS.
8.	THE CONTRACTOR SHALL REPAIR AND REPLACE ANY EXISTING FACILITY APPURTENANCES AND UTILITIES AFFECTED DURING THE COURSE OF THIS WORK.
9.	PROVIDE AUXILIARY DRAINS FOR SYSTEM PIPING FOR PORTIONS OF SYSTEM THAT CANNOT BE DRAINED THROUGH MAIN FLOOR VALVE OR SYSTEM RISER IN ACCORDANCE WITH NFPA 13.
10.	ALL EXPOSED SPRINKLER PIPING SHALL BE PAINTED RED ENAMEL. PIPES IN CONCEALED LOCATIONS SHALL BE MARKED WITH SPECIFIED PIPE LABELS EVERY 25 FEET AND AT EVERY CHANGE OF DIRECTION.



SPRINKLER INSTALLATION

FIRE PROTECTION DRAWING INDEX

SHEET No.	SHEET NAME
FP-001	SYMBOLS, ABBREVIATIONS AND NOTES
FP-101	6TH FLOOR - NEW WORK - FIRE PROTECTION
FPD-102	6TH FLOOR - DEMOLITION - FIRE PROTECTION



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MURPHY & DITTENHAFFER
ARCHITECTS

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PROJECT TITLE :

UMB SON
6TH FLOOR
APT. SIM.
RENOVATION

UMB BUILDING NO. : SON - 0833

UMB Project NO. : 26-312

A/E PROJECT NO. : 25-128

CAD FILE NO. :

DATE :

SHEET TITLE :

SYMBOLS,
ABBREVIATIONS AND
NOTES

REVISIONS		
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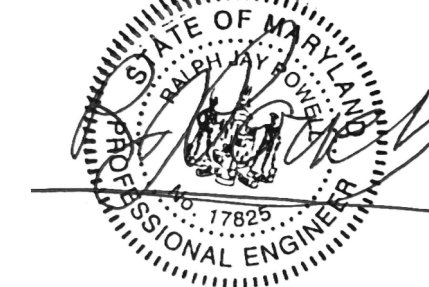
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FP-001



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SHEET TITLE :

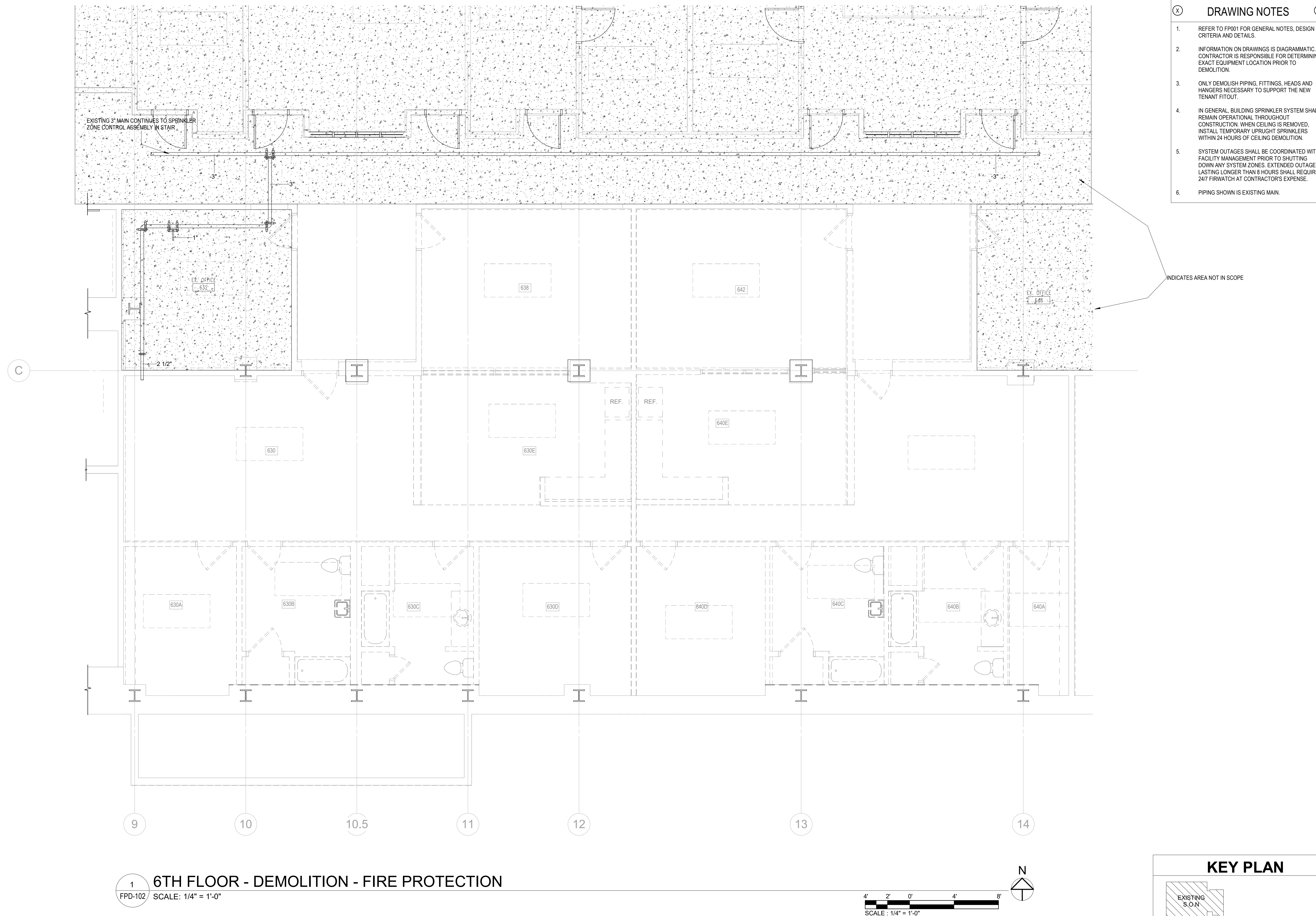
6TH FLOOR - DEMOLITION - FIRE PROTECTION

REVISIONS

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	4/08/26	BID SET

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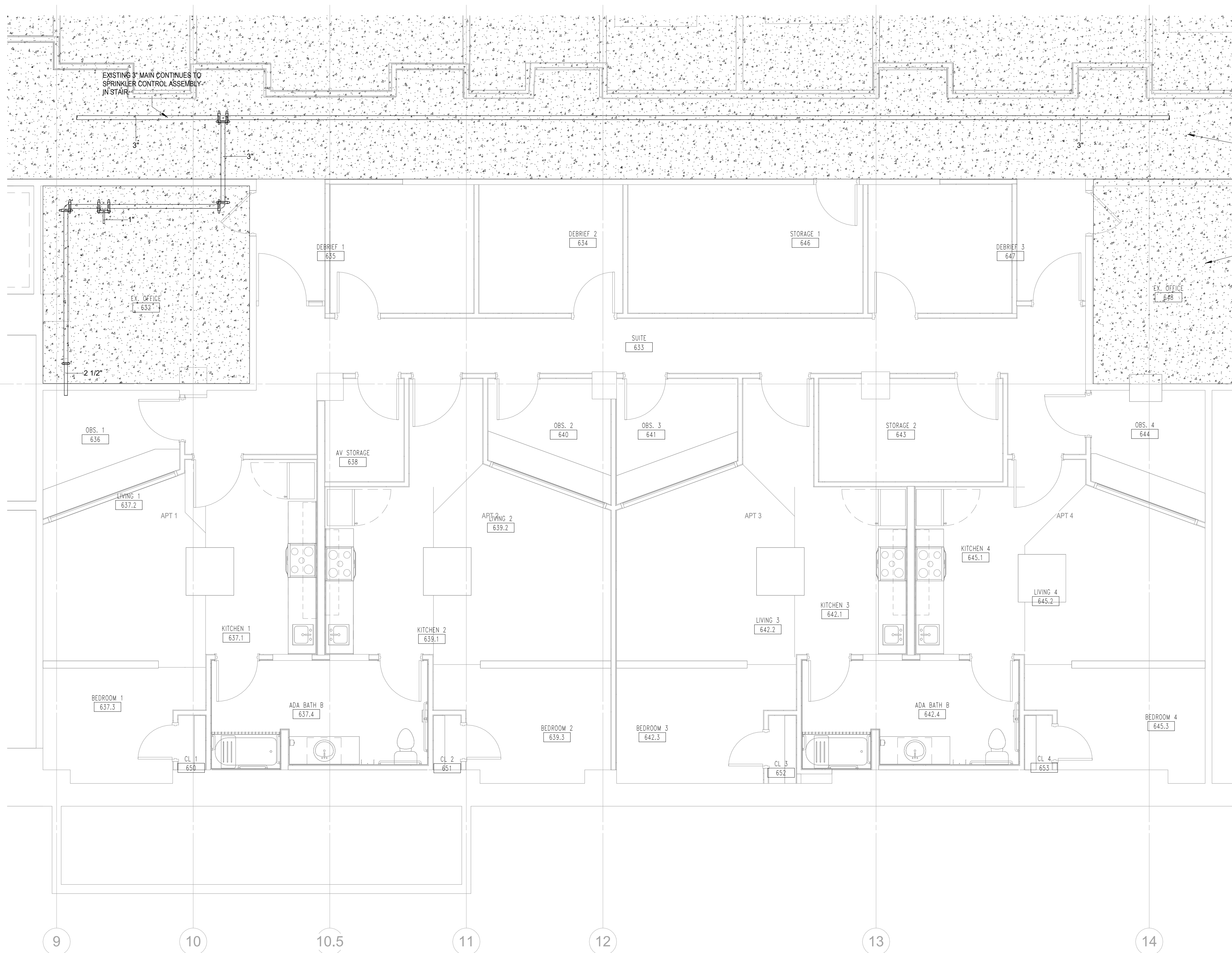
FPD-102



- DRAWING NOTES**
- REFER TO FP001 FOR GENERAL NOTES, DESIGN CRITERIA AND DETAILS.
 - INFORMATION ON DRAWINGS IS DIAGRAMMATIC. CONTRACTOR IS RESPONSIBLE FOR DETERMINING EXACT EQUIPMENT LOCATION PRIOR TO DEMOLITION.
 - ONLY DEMOLISH PIPING, FITTINGS, HEADS AND HANGERS NECESSARY TO SUPPORT THE NEW TENANT FITOUT.
 - IN GENERAL, BUILDING SPRINKLER SYSTEM SHALL REMAIN OPERATIONAL THROUGHOUT CONSTRUCTION. WHEN CEILING IS REMOVED, INSTALL TEMPORARY UPRIGHT SPRINKLERS WITHIN 24 HOURS OF CEILING DEMOLITION.
 - SYSTEM OUTAGES SHALL BE COORDINATED WITH FACILITY MANAGEMENT PRIOR TO SHUTTING DOWN ANY SYSTEM ZONES. EXTENDED OUTAGES LASTING LONGER THAN 8 HOURS SHALL REQUIRE 24/7 FIREWATCH AT CONTRACTOR'S EXPENSE.
 - PIPING SHOWN IS EXISTING MAIN.

INDICATES AREA NOT IN SCOPE

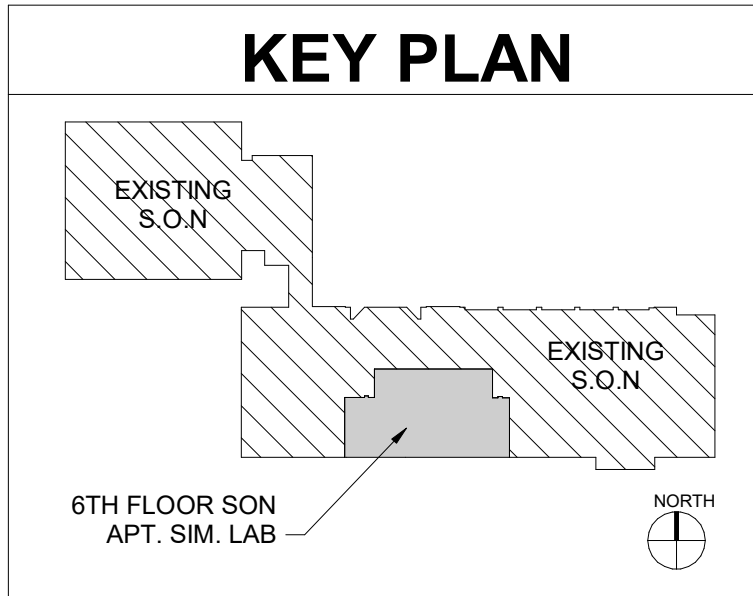
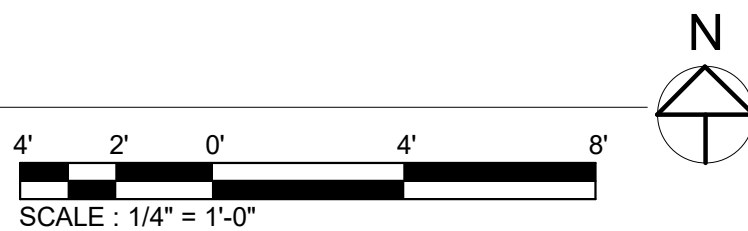
1 6TH FLOOR - DEMOLITION - FIRE PROTECTION
FPD-102 SCALE: 1/4" = 1'-0"



- DRAWING NOTES**
1. ALL MAIN SHOWN IS EXISTING.
 2. CONTRACTOR IS RESPONSIBLE FOR COORDINATING SPRINKLER HEADS, PIPING AND ALL OTHER FIRE PROTECTION EQUIPMENT CLOSELY WITH ARCHITECTURAL CONDITIONS AND ALL OTHER TRADES PRIOR TO INSTALLATION.
 3. SPRINKLER HEADS IN AREAS WITH FINISHED CEILINGS SHALL BE PENDANT SEMI RECESSED PER UMB SPECIFICATIONS. AREAS WITH NO CEILINGS SHALL HAVE UPRIGHT SPRINKLERS INSTALLED PER UMB SPECIFICATIONS.
 4. ALL SPRINKLER HEADS SHALL BE INSTALLED PER ORDINARY HAZARD GROUP 1 DESIGN CRITERIA WITH A MAXIMUM HEAD SPACING OF 130 SF PER HEAD. ANY TEMPORARY ABOVE CEILING SPRINKLERS SHALL BE REMOVED PRIOR TO PROJECT COMPLETION.

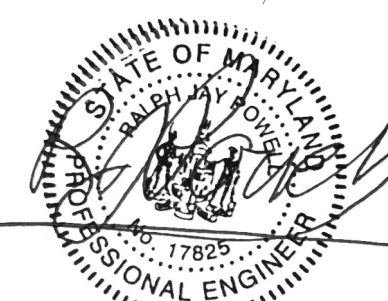
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1 6TH FLOOR - NEW WORK - FIRE PROTECTION
FP-101 SCALE: 1/4" = 1'-0"



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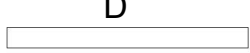




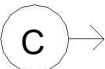
UMB BUILDING NO. : SON - 0833
UMB Project NO. : 26-312
A/E PROJECT NO. : 25-128
CAD FILE NO. :
DATE :

SHEET TITLE :
**6TH FLOOR - NEW
WORK - FIRE
PROTECTION**

REVISIONS		
NO	DATE	ITEM
	2/07/26	100% CD SUBMISSION
	4/08/26	BID SET

SHEET NO.
FP-101

LOW VOLTAGE SYSTEMS SYMBOL LEGEND


SYMBOL:	DESCRIPTION:	BACKBOX:	CONDUITS:	MOUNTING HEIGHT:	ELECTRONICS:	TELECOM CABLE REQUIREMENTS:	POWER REQUIREMENTS:
	FLAT PANEL DISPLAY	PWB-100	ONE (1) 1-1/4" EC	60" AFF	FLAT PANEL DISPLAY	N/A	120VAC DUPLEX RECEPTACLE
	WALL MOUNTED VIDEO CAMERA	2-GANG BOX	N/A	60" AFF	VIDEO CAMERA	N/A	REMOTE LOW VOLTAGE POWER
	5-GANG MULTI-MEDIA WALLBOX	5-GANG BOX	THREE (3) 1-1/4" EC	OUTLET HEIGHT	N/A	N/A	N/A
	FUTURE AUDIOVISUAL EQUIPMENT RACK	N/A	N/A	ON FLOOR	N/A	N/A	(2) DEDICATED 20-AMP, 120V CIRCUITS W/ DUPLEX RECEPTACLE
	STANDARD TELECOMMUNICATION OUTLET	2-GANG BOX WITH SINGLE GANG TRIM RING	ONE (1) 1-1/4" EC	OUTLET HEIGHT	N/A	N/A	N/A
	WIRELESS ACCESS POINT	SURFACE MOUNTED BISCUIT BOX	N/A	CEILING MOUNTED	WIRELESS ACCESS POINT	N/A	REMOTE LOW VOLTAGE POWER
	FIXED SURVEILLANCE VIDEO CAMERA	SURFACE MOUNTED BISCUIT BOX	N/A	CEILING MOUNTED	FIXED VIDEO CAMERA	N/A	REMOTE LOW VOLTAGE POWER

LOW VOLTAGE SYSTEM SHEET LIST

Sheet Number	Sheet Name
TA-001	LOW VOLTAGE SYSTEMS TITLESHEET
TA-100	LOW VOLTAGE OVERALL 6TH FLOOR PLAN
TA-101	6TH FLOOR - APT. SIM LAB
TA-102	6TH FLOOR - APT. SIM LAB - REFLECTED CEILING PLAN
TA-500	LOW VOLTAGE SYSTEMS INFRASTRUCTURE DETAILS

TA SERIES SHEET NOTES


- ALL CONDUIT, BACK BOXES, AND AC POWER REQUIREMENTS SHALL BE PROVIDED BY THE ELECTRICAL CONTRACTOR.
- ANY CONDUIT TERMINATIONS AT CONSOLE OR EQUIPMENT RACK LOCATIONS SHOULD BE ACCESSIBLE.
- EACH LOW VOLTAGE OUTLET SHALL INCLUDE A 200lb TEST PULL WIRE TO ACCESSIBLE AFC OR CABLE TRAY UNLESS OTHERWISE NOTED.
- REFERENCE ELECTRICAL DIVISION 26 00 00 SPECIFICATION FOR CONDUIT SPECIFICATIONS.
- COORDINATE CEILING MOUNTED ELEMENTS WITH ARCHITECTURAL CEILING PLANS.
- REFERENCE ARCHITECTURAL DRAWINGS FOR ALL BOX LOCATIONS AND DIMENSIONS.
- ALL TELECOM CONDUITS ARE TO RUN FROM BACK BOX TO ACCESSIBLE AFC UNLESS DETAILED OTHERWISE.
- NOTES ON INDIVIDUAL DRAWING SHEETS SUPERSEDE THE ABOVE REQUIREMENTS.



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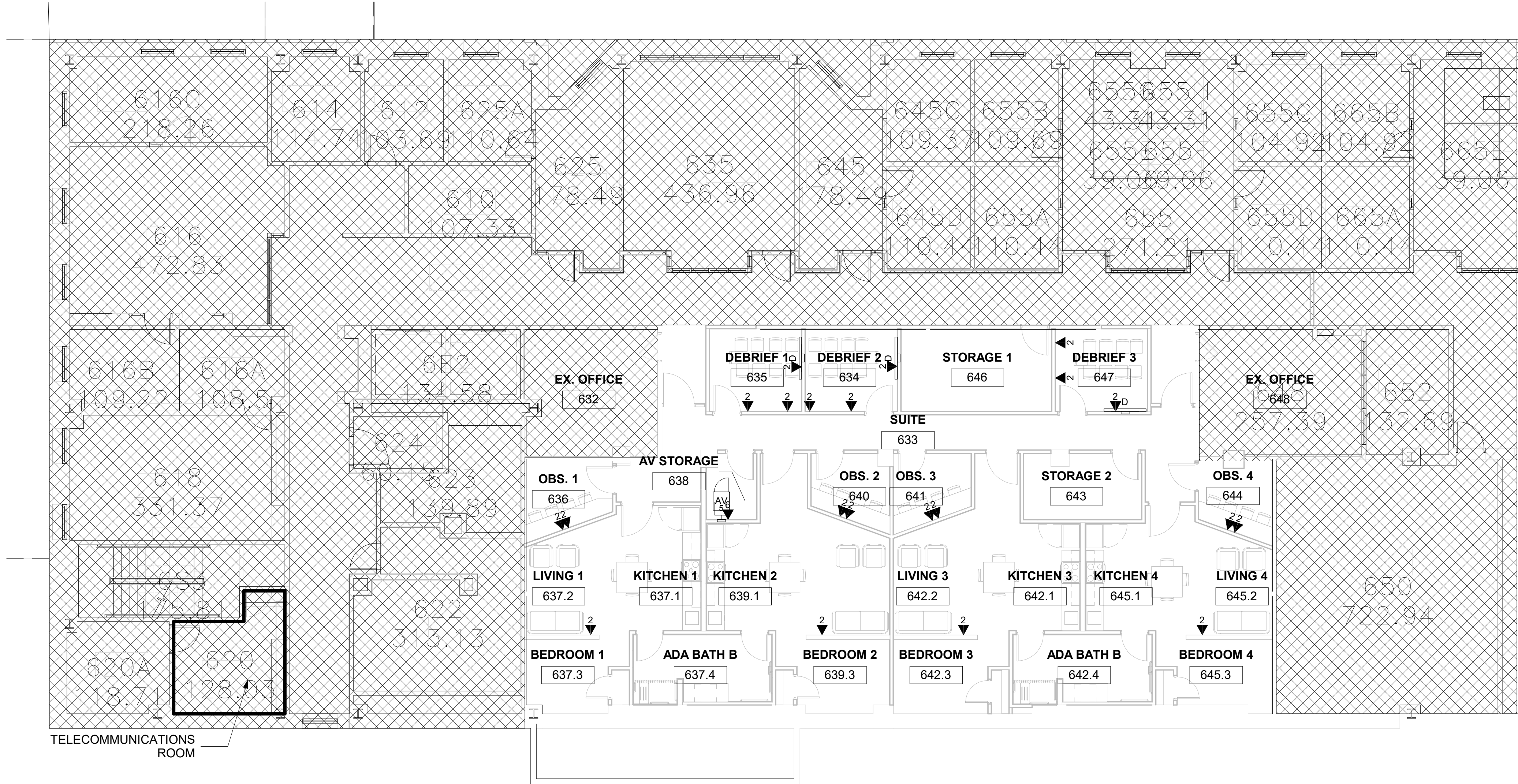
SHEET TITLE :

LOW VOLTAGE
SYSTEMS
TITLESHEET

REVISIONS		
NO	DATE	ITEM
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SHEET NO.

TA-001



① 6TH FLOOR - OVERALL
1/8" = 1'-0"



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LICENSE No. _____ EXPIRATION DATE: _____

REGISTRATION / STAMP

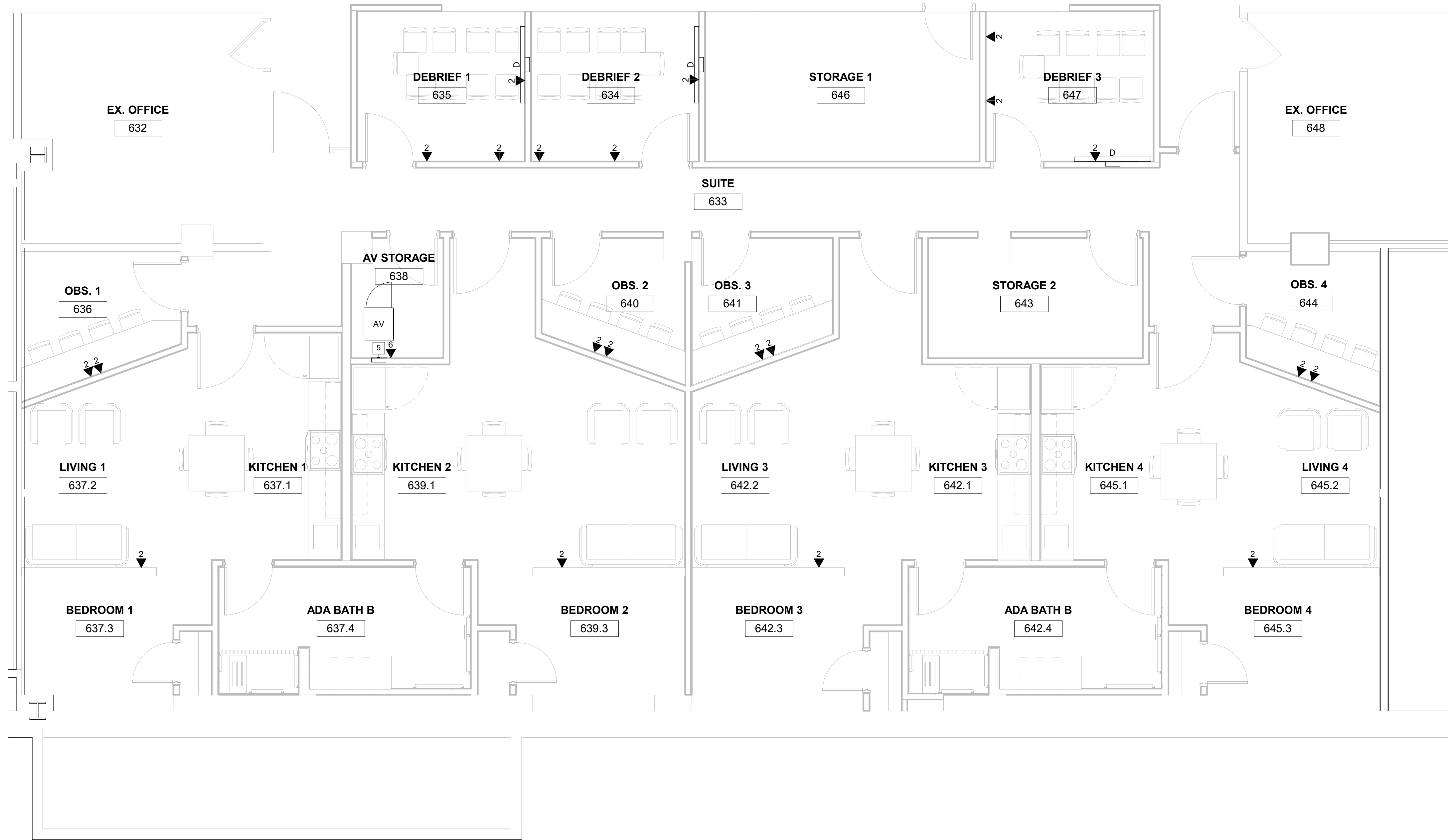
PROJECT TITLE :
**UMB SON
6TH FLOOR
APT. SIM.
RENOVATION**

UMB BUILDING NO. : SON - 0833
UMB Project NO. : 26-312
A/E PROJECT NO. : 25-128
CAD FILE NO. :
DATE :

SHEET TITLE :
**LOW VOLTAGE
OVERALL 6TH
FLOOR PLAN**

REVISIONS		
NO	DATE	ITEM
	2/07/26	100% CD SUBMISSION
	4/08/26	BID SET

SHEET NO.
TA-100



① 6TH FLOOR - APT. SIM LAB
1/4" = 1'-0"



PROFESSIONAL CERTIFICATION: I HEREBY
CERTIFY THAT THESE DOCUMENTS WERE
PREPARED OR APPROVED BY ME, AND THAT I
AM A DULY LICENSED PROFESSIONAL ENGINEER
UNDER THE LAWS OF THE STATE OF MARYLAND.
LICENSE NO. _____ EXPIRATION DATE: _____

REGISTRATION/STAMP

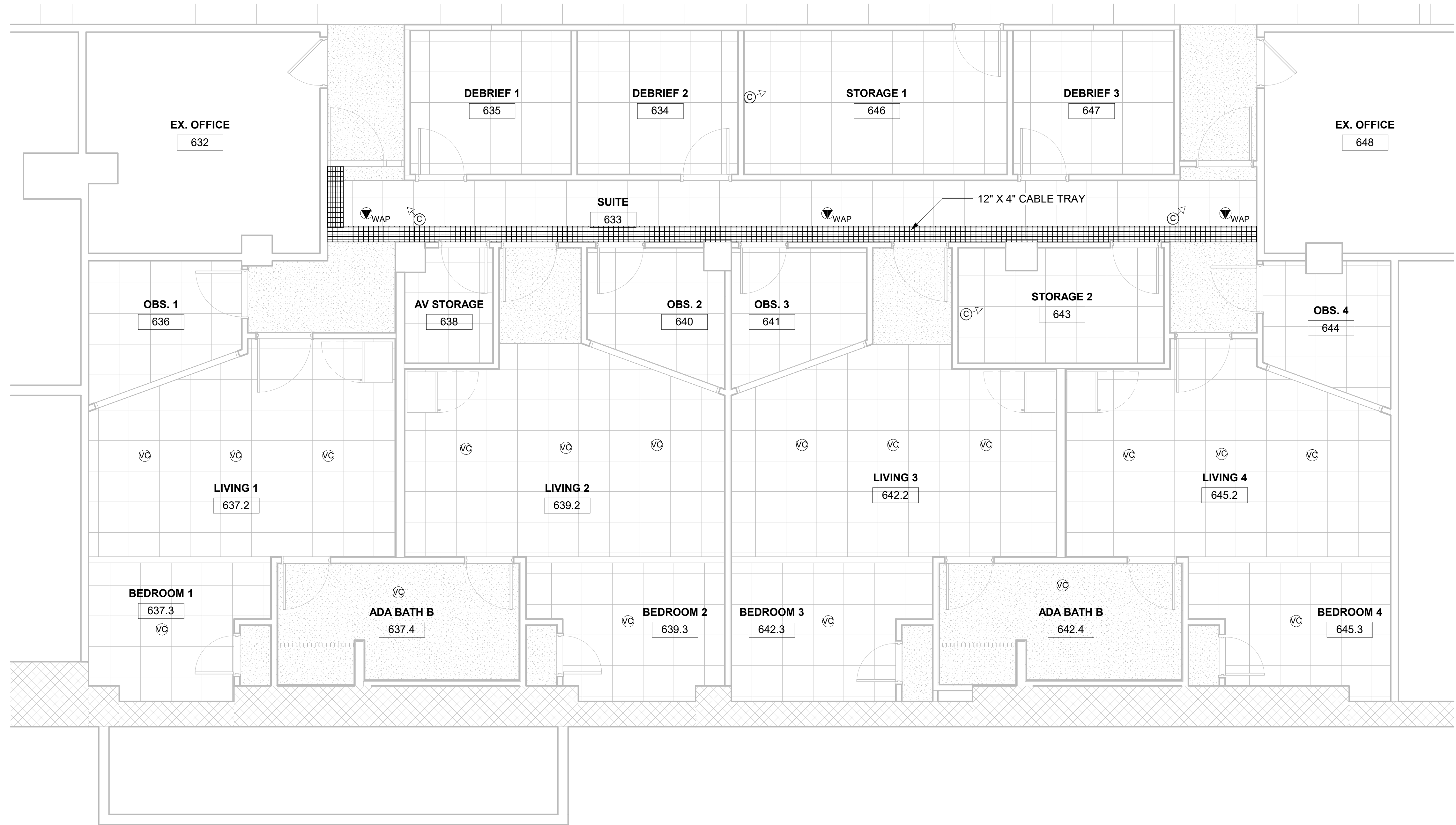
PROJECT TITLE :
**UMB SON
6TH FLOOR
APT. SIM.
RENOVATION**

UMB BUILDING NO. :	SON - 0833
UMB Project NO. :	26-312
A/E PROJECT NO. :	25-128
CAD FILE NO. :	
DATE :	

SHEET TITLE :
**6TH FLOOR -
APT. SIM LAB**

REVISIONS		
NO	DATE	ITEM
	2/07/26	100% CD SUBMISSION
	4/08/26	BID SET

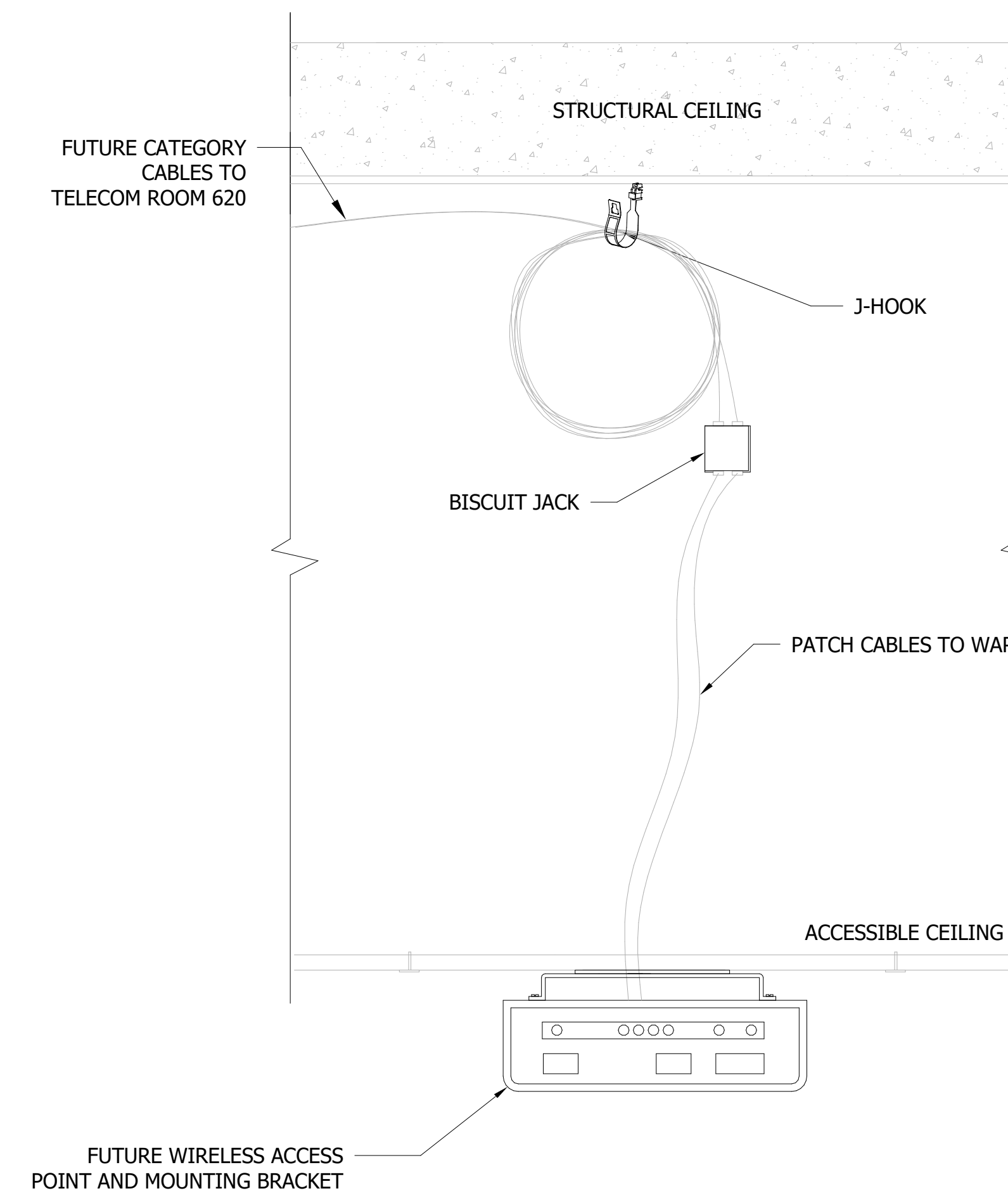
SHEET NO.
TA-101



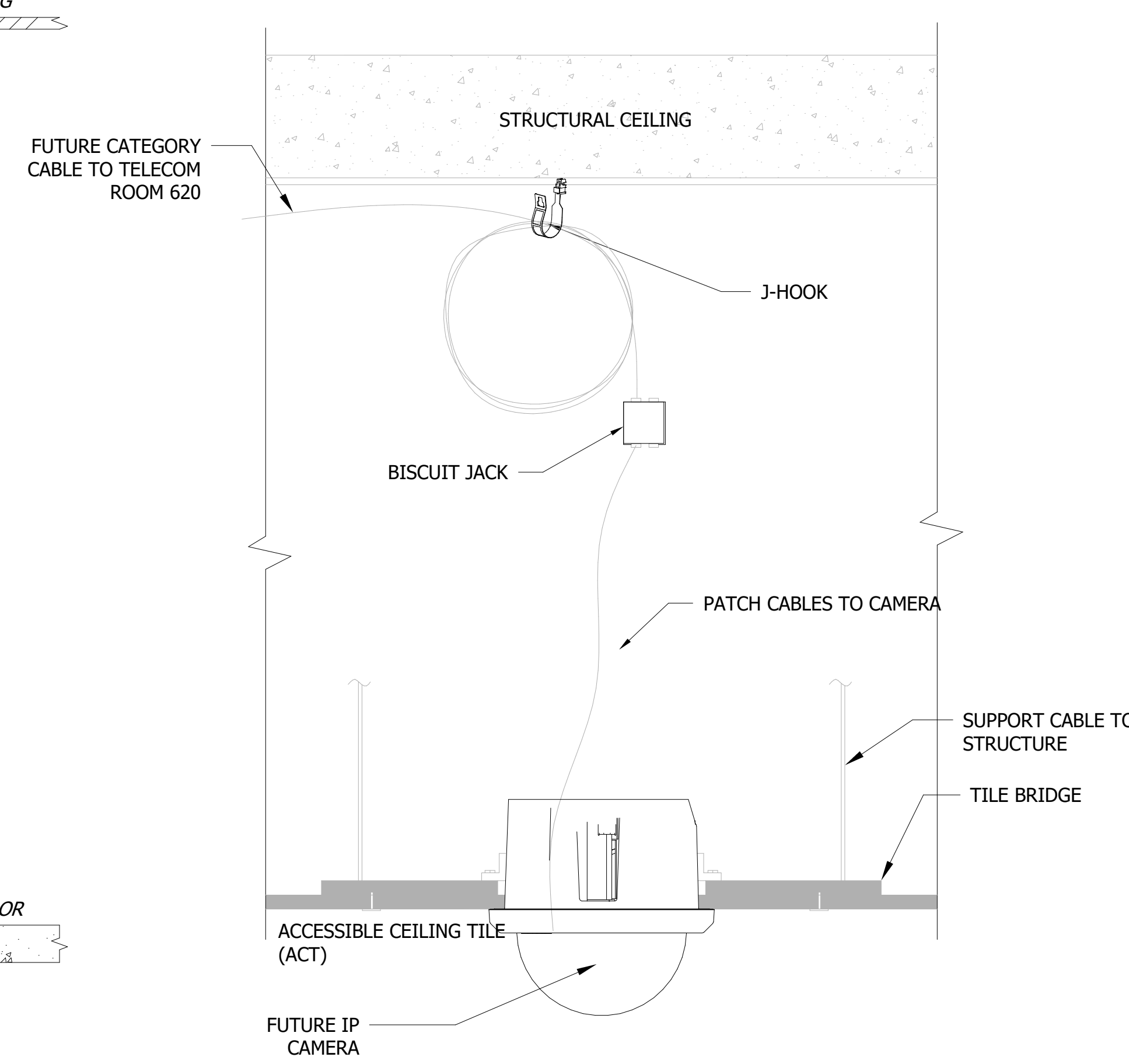
① 6TH FLOOR - APT. SIM LAB -
REFLECTED CEILING PLAN
1/4" = 1'-0"

REVISIONS		
NO	DATE	ITEM
	2/07/26	100% CD SUBMISSION
	4/08/26	BID SET

REVISIONS		
NO	DATE	ITEM
	2/07/26	100% CD SUBMISSION
	4/08/26	BID SET

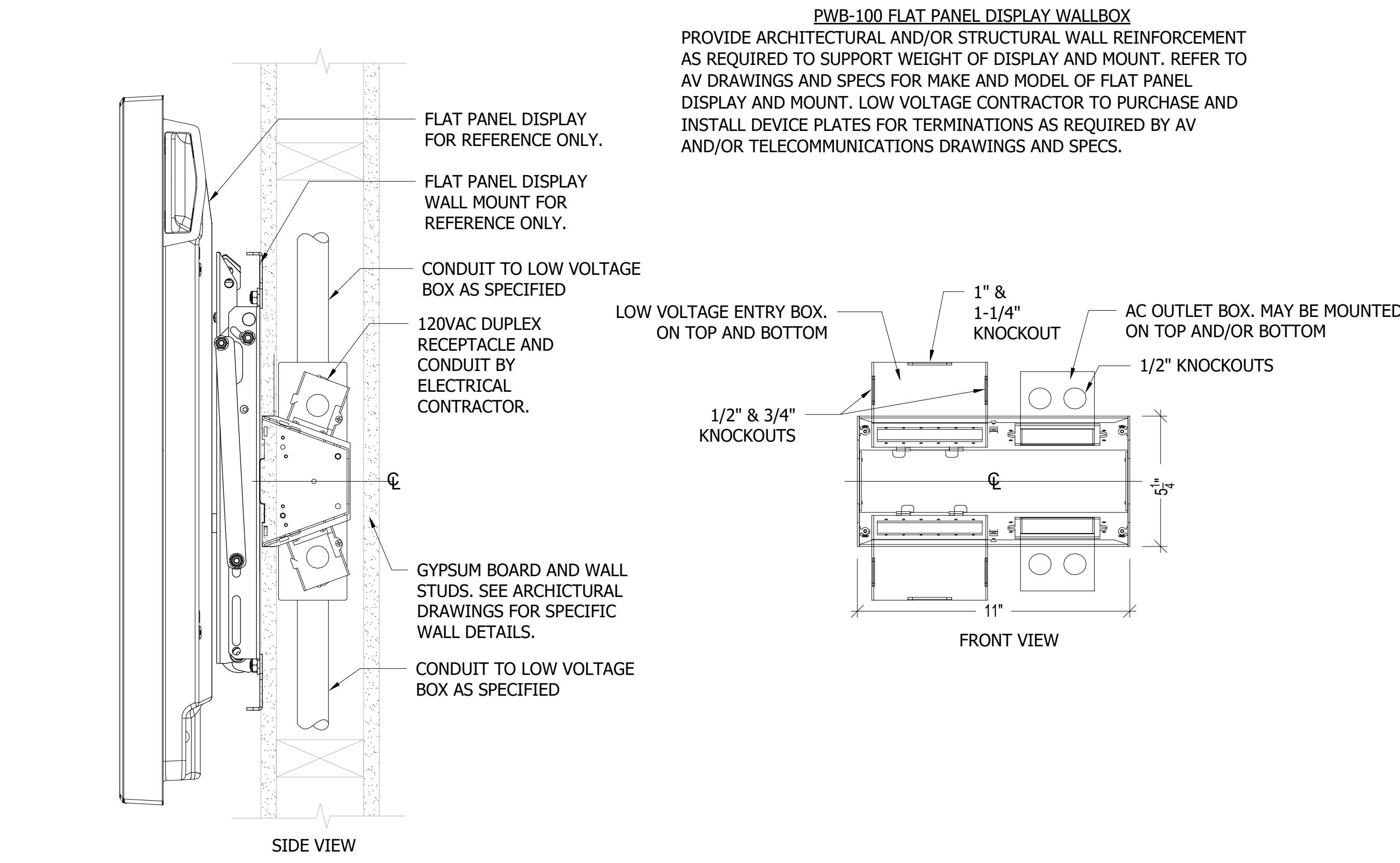


2 WAP IN ACCESSIBLE CEILING TILE
INFRASTRUCTURE DETAIL
3" = 1'-0"

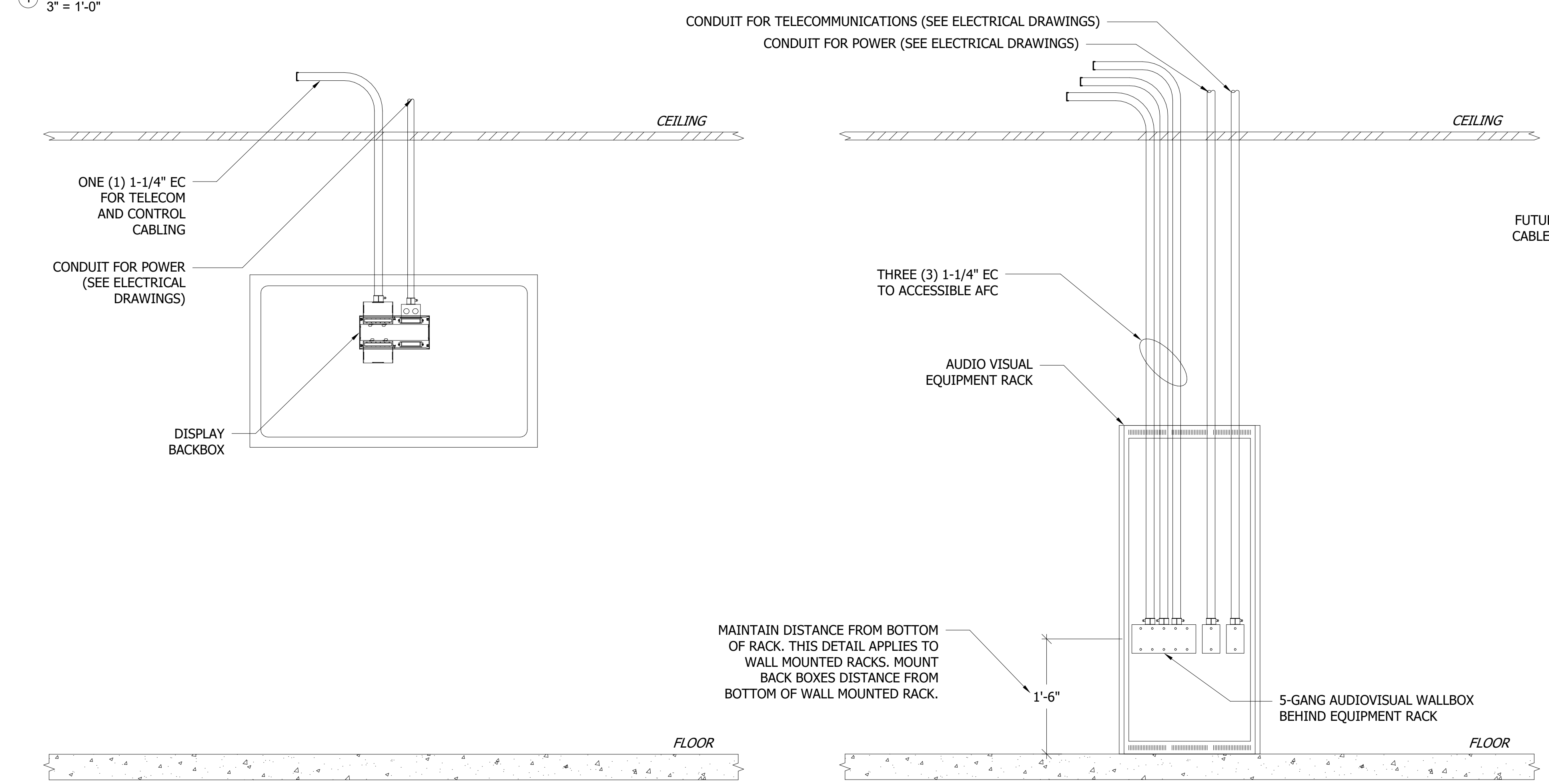


5 CAMERA IN ACCESSIBLE CEILING TILE
INFRASTRUCTURE DETAIL
3" = 1'-0"

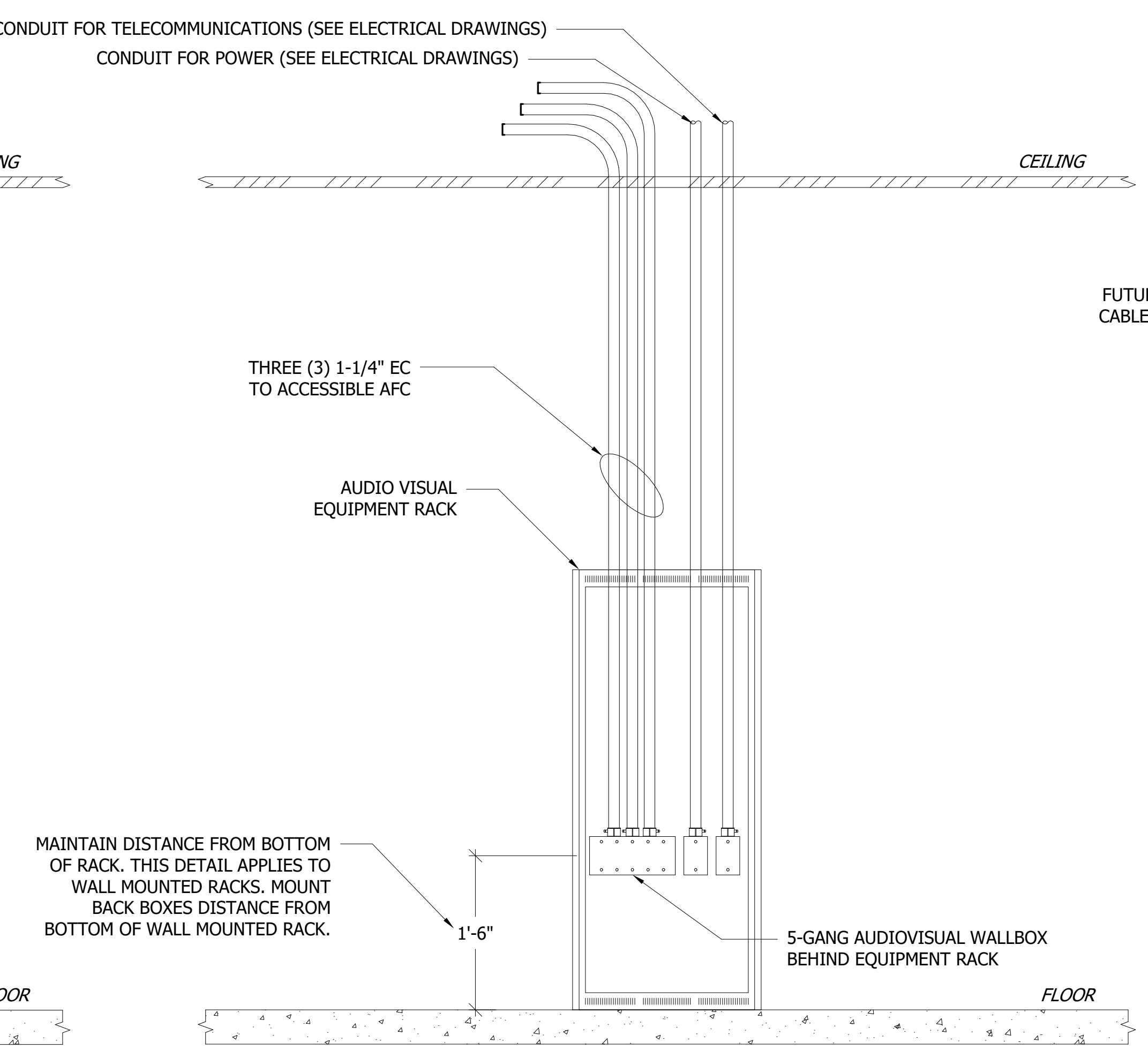
PWB-100 FLAT PANEL DISPLAY WALLBOX
PROVIDE ARCHITECTURAL AND/OR STRUCTURAL WALL REINFORCEMENT
AS REQUIRED TO SUPPORT WEIGHT OF DISPLAY AND MOUNT. REFER TO
AV DRAWINGS AND SPECS FOR MAKE AND MODEL OF FLAT PANEL
DISPLAY AND MOUNT. LOW VOLTAGE CONTRACTOR TO PURCHASE AND
INSTALL DEVICE PLATES FOR TERMINATIONS AS REQUIRED BY AV
AND/OR TELECOMMUNICATIONS DRAWINGS AND SPECS.



1 FLAT PANEL DISPLAY
INFRASTRUCTURE DETAIL
3" = 1'-0"



3 TYPICAL DISPLAY INFRASTRUCTURE
DETAIL
1" = 1'-0"



4 TYPICAL AV EQUIPMENT RACK
INFRASTRUCTURE DETAIL
1" = 1'-0"