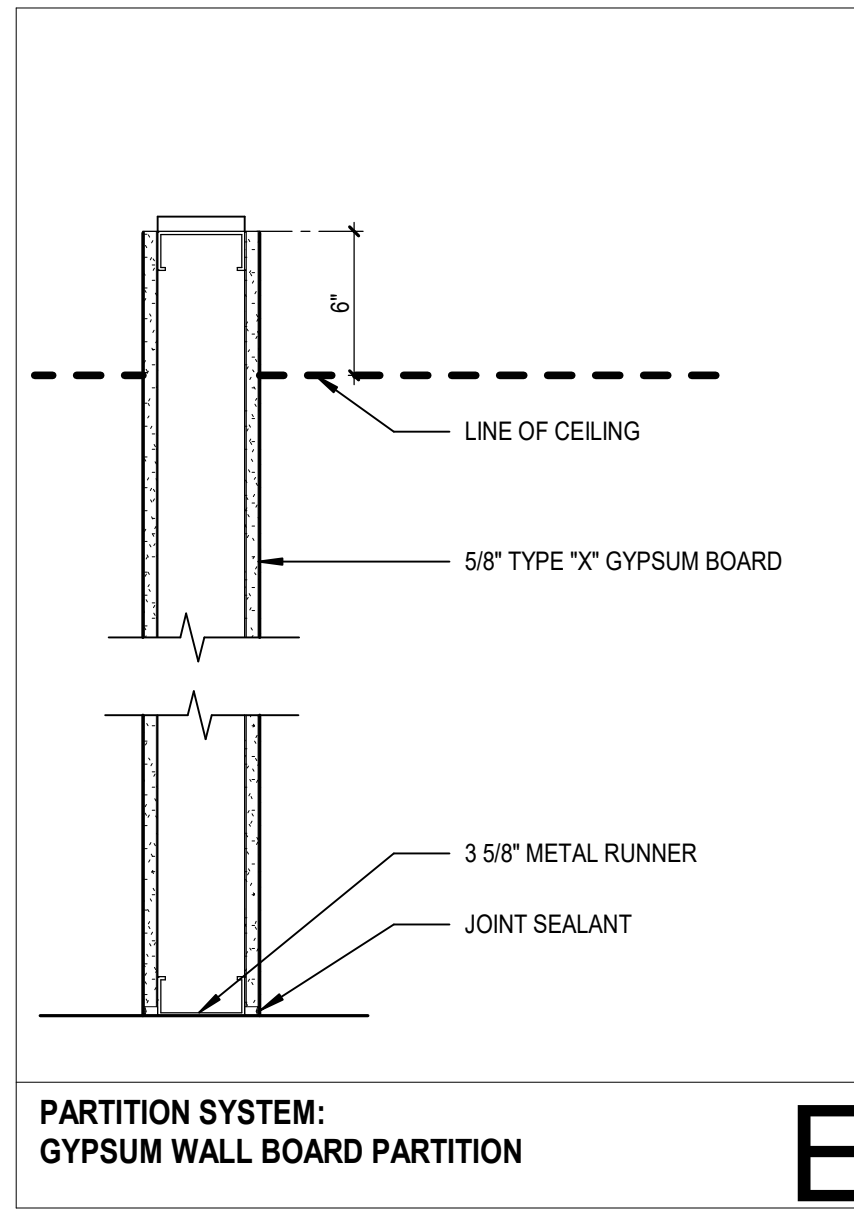
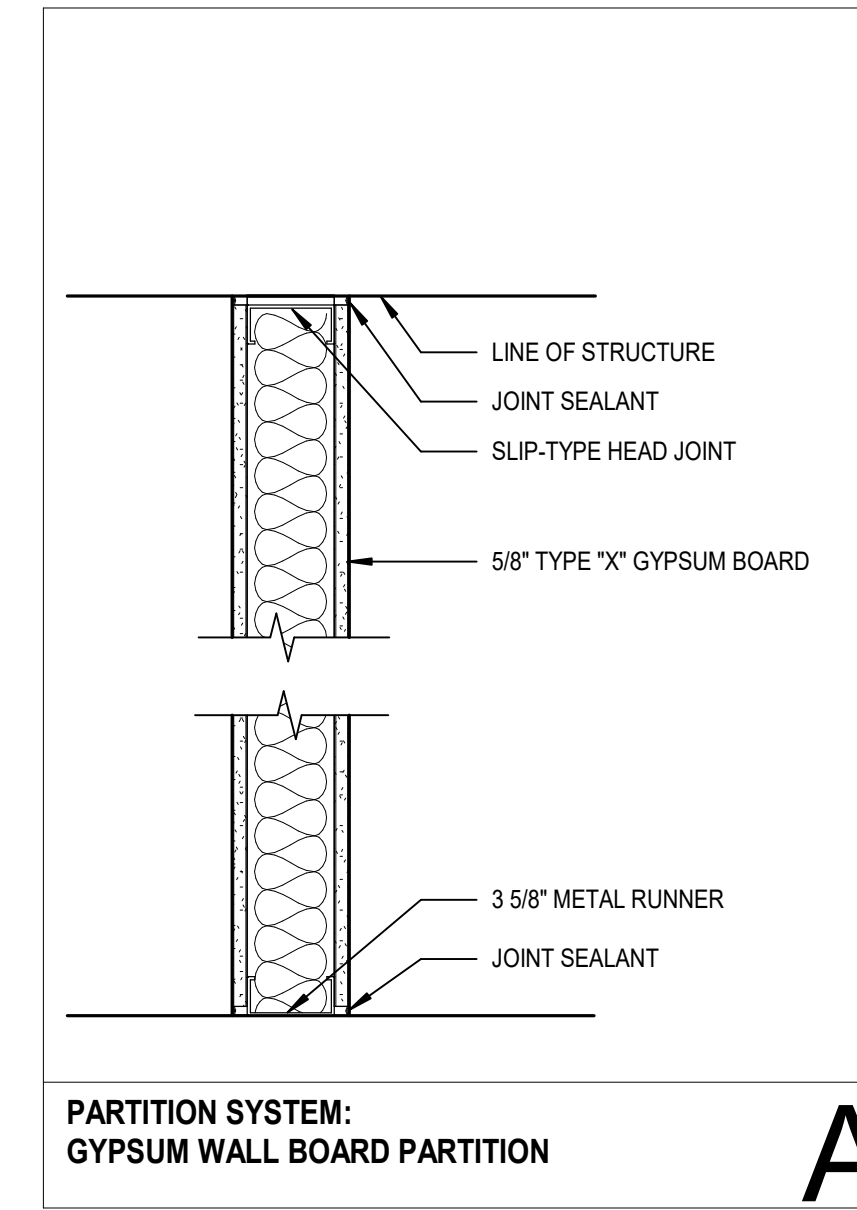


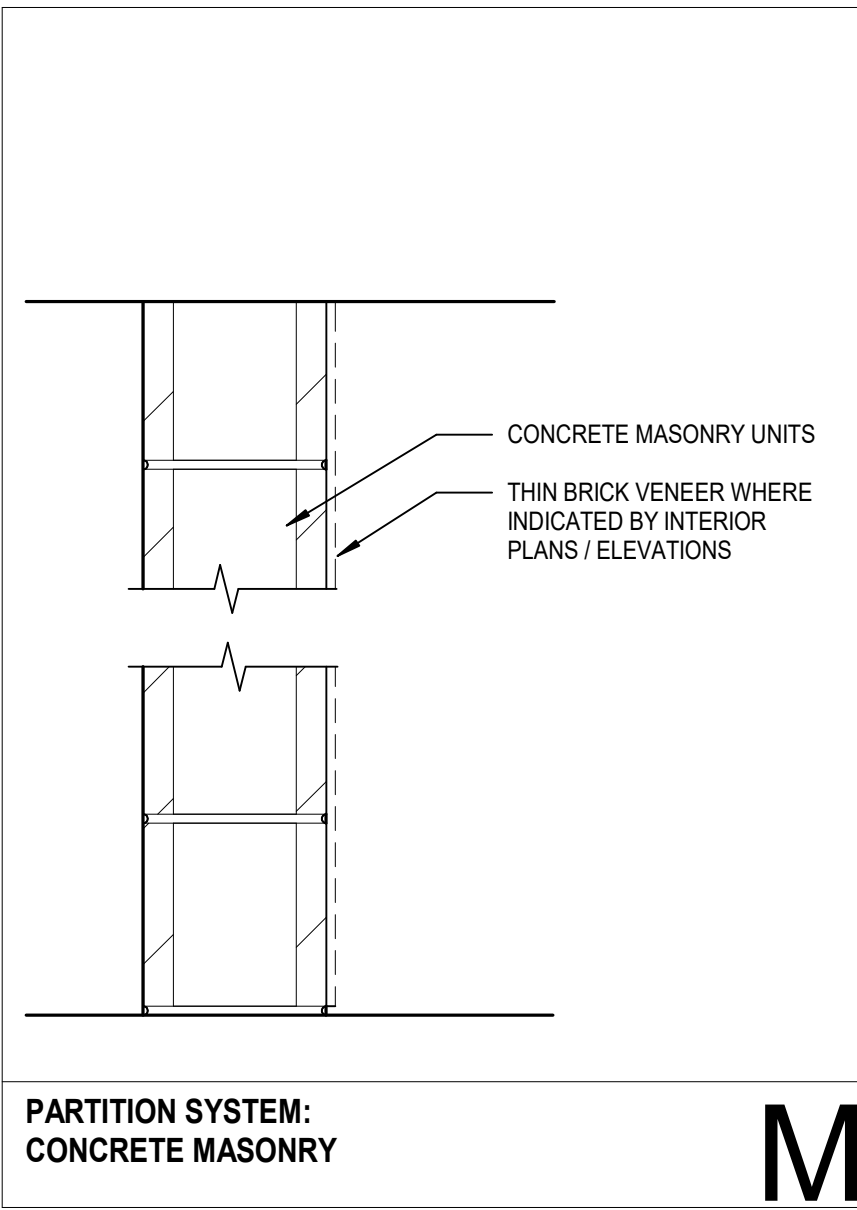
PATIRION IDENTIFICATION PLAN SYMBOL	
BASIC PARTITION THICKNESS	19 1/4"
STUD SPACING (O.C.)	MAX 16"
STUD SIZE	6 MS
GWB THICKNESS	5/8" & 1"
INSULATION THICKNESS	-
ACOUSTICAL RATING (STC)	-
ACOUSTICAL TEST NUMBER	-
ACOUSTICAL JOINTS	-
RESILIENT CHANNELS	-
FIRE RATING (HRS)	UL U415
FIRE TEST NUMBER	1
FIRE RESISTIVE JOINTS	YES
STUDS TO STRUCTURE ABOVE	YES
GWB TO STRUCTURE	YES
STUDS TO 6" ABOVE CEILING	NO
BEARING WALL	NO
REMARKS: REFER TO GENERAL NOTES FOR ADDITION REQUIREMENTS	



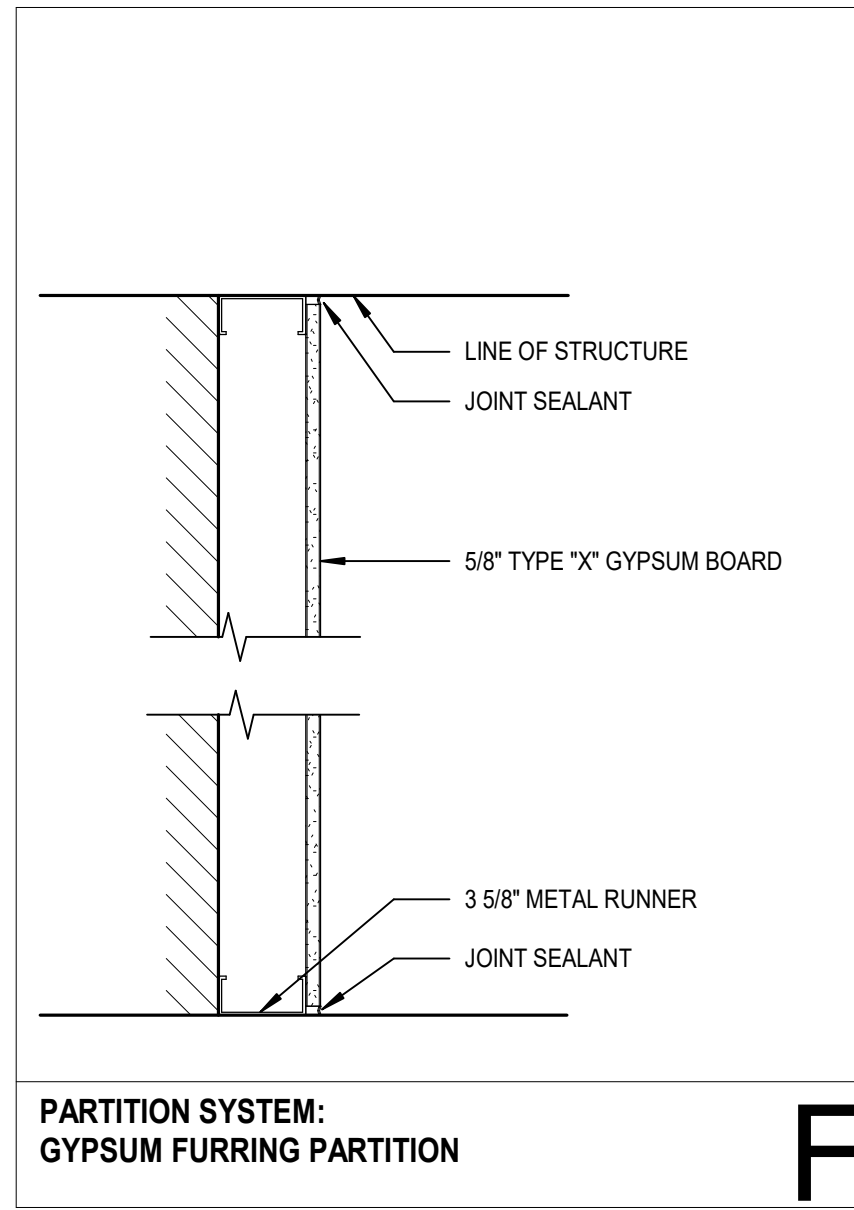
PATIRION IDENTIFICATION PLAN SYMBOL	
BASIC PARTITION THICKNESS	4 7/8"
STUD SPACING (O.C.)	16"
STUD SIZE	3 5/8" MS
GWB THICKNESS	5/8"
INSULATION THICKNESS	-
ACOUSTICAL RATING (STC)	-
ACOUSTICAL TEST NUMBER	-
ACOUSTICAL JOINTS	-
RESILIENT CHANNELS	-
FIRE RATING (HRS)	-
FIRE TEST NUMBER	-
FIRE RESISTIVE JOINTS	NO
STUDS TO STRUCTURE ABOVE	NO
GWB TO STRUCTURE	NO
STUDS TO 6" ABOVE CEILING	YES
BEARING WALL	NO
REMARKS: REFER TO GENERAL NOTES FOR ADDITION REQUIREMENTS	



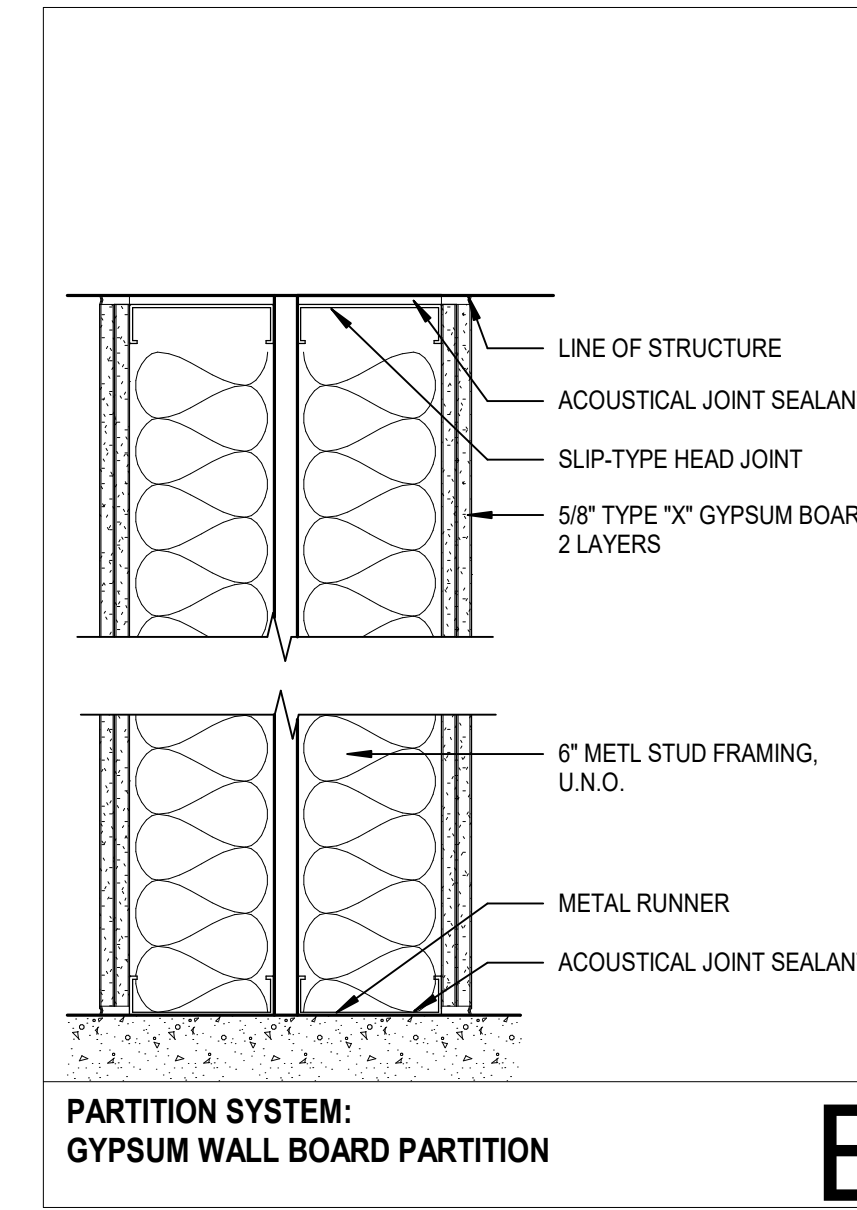
PATIRION IDENTIFICATION PLAN SYMBOL	
BASIC PARTITION THICKNESS	4 7/8"
STUD SPACING (O.C.)	16"
STUD SIZE	3 5/8" MS
GWB THICKNESS	5/8"
INSULATION THICKNESS	-
ACOUSTICAL RATING (STC)	47
ACOUSTICAL TEST NUMBER	NGC2386
ACOUSTICAL JOINTS	-
RESILIENT CHANNELS	-
FIRE RATING (HRS)	-
FIRE TEST NUMBER	NO
FIRE RESISTIVE JOINTS	YES
STUDS TO STRUCTURE ABOVE	YES
GWB TO STRUCTURE	YES
STUDS TO 6" ABOVE CEILING	NO
BEARING WALL	NO
REMARKS: REFER TO GENERAL NOTES FOR ADDITION REQUIREMENTS	



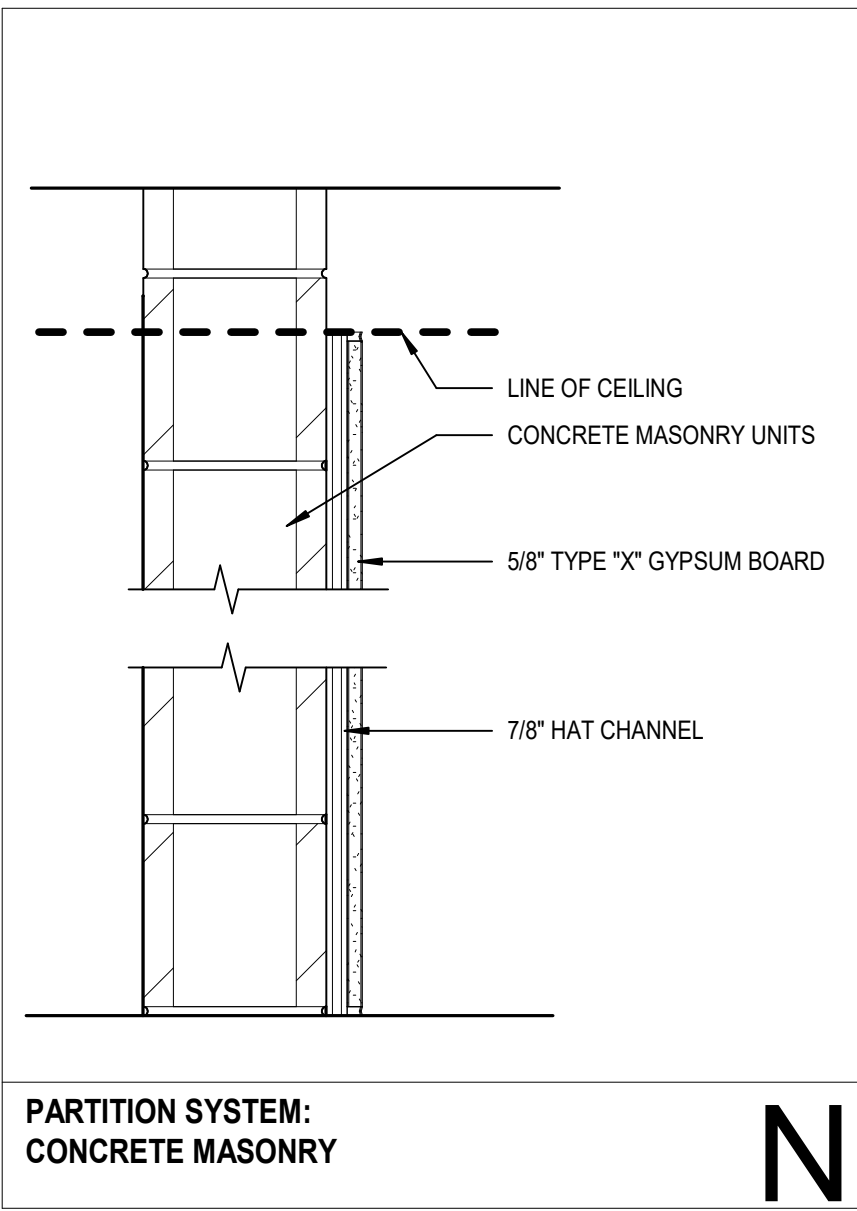
PATIRION IDENTIFICATION PLAN SYMBOL	
BASIC PARTITION THICKNESS	8"
MASONRY SIZE	8" CMU
FIRE RATING (HRS)	-
REMARKS: REFER TO GENERAL NOTES FOR ADDITION REQUIREMENTS	



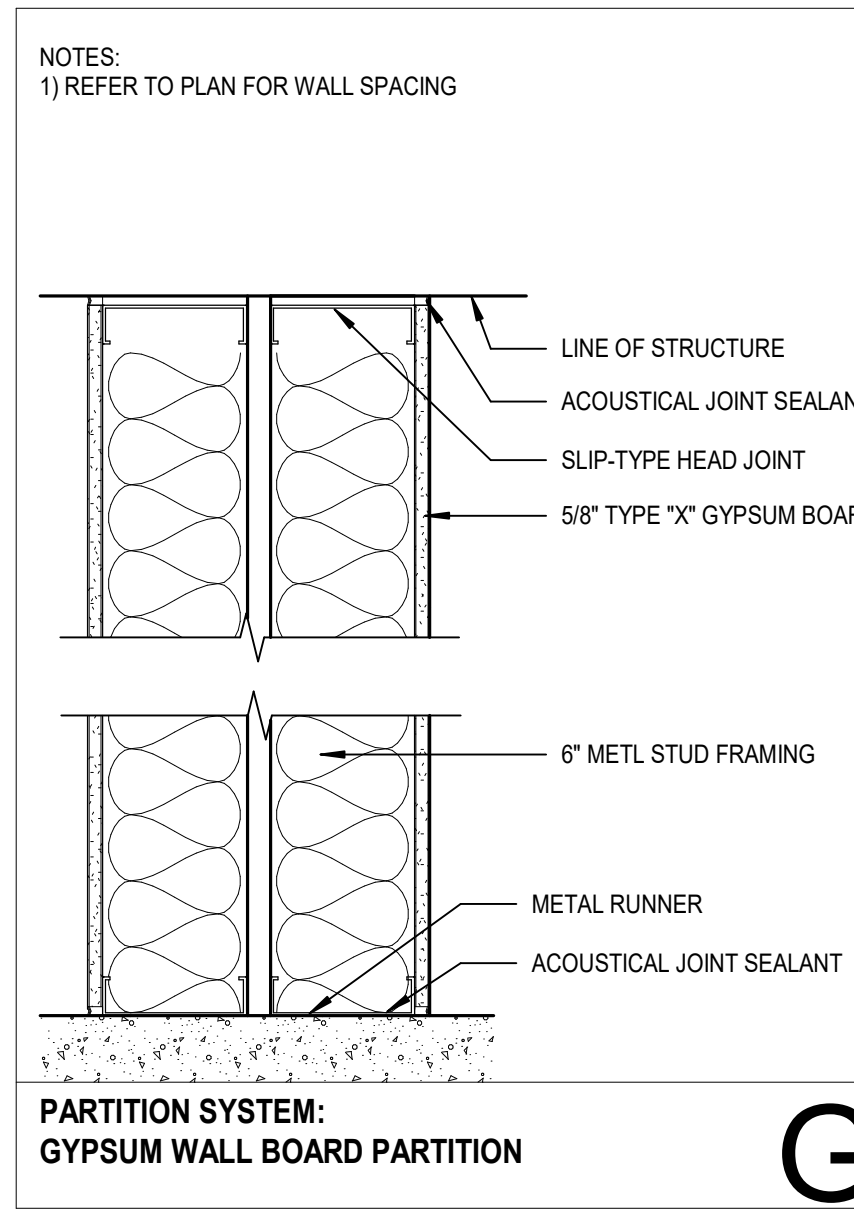
PATIRION IDENTIFICATION PLAN SYMBOL	
BASIC PARTITION THICKNESS	1 1/2"
STUD SPACING (O.C.)	16"
STUD SIZE	7/8" HC
GWB THICKNESS	5/8"
INSULATION THICKNESS	-
STUDS TO STRUCTURE ABOVE	NO
GWB TO STRUCTURE	NO
STUDS TO 6" ABOVE CEILING	YES
ACOUSTICAL RATING (STC)	N/A
ACOUSTICAL TEST NUMBER	N/A
ACOUSTICAL JOINTS	N/A
REMARKS: REFER TO GENERAL NOTES FOR ADDITION REQUIREMENTS	



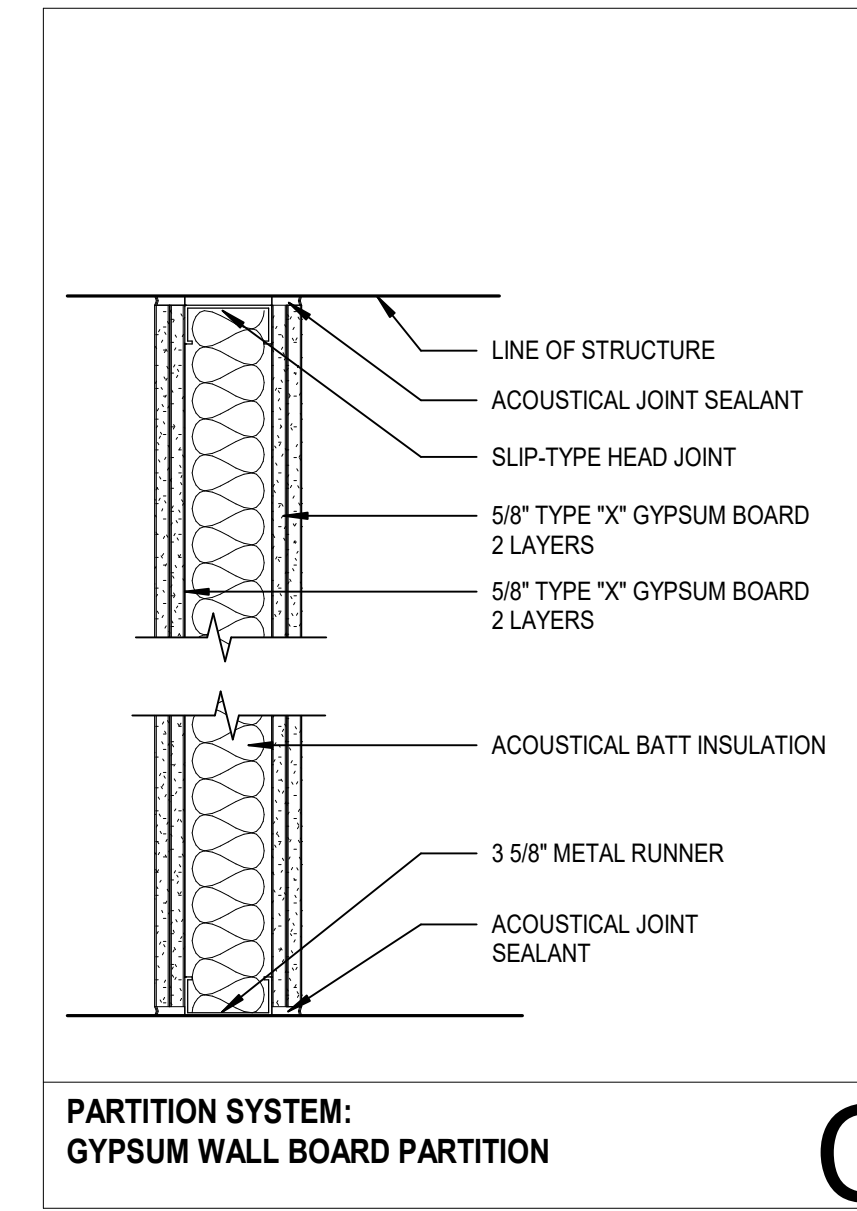
PATIRION IDENTIFICATION PLAN SYMBOL	
BASIC PARTITION THICKNESS	7 3/8"
STUD SPACING (O.C.)	16"
STUD SIZE	6" MS
GWB THICKNESS	5/8"
INSULATION THICKNESS	5 1/2"
ACOUSTICAL RATING (STC)	60
ACOUSTICAL TEST NUMBER	-
ACOUSTICAL JOINTS	YES
RESILIENT CHANNELS	-
FIRE RATING (HRS)	-
FIRE TEST NUMBER	-
FIRE RESISTIVE JOINTS	NO
STUDS TO STRUCTURE ABOVE	YES
GWB TO STRUCTURE	YES
STUDS TO 6" ABOVE CEILING	NO
BEARING WALL	NO
REMARKS: REFER TO GENERAL NOTES FOR ADDITION REQUIREMENTS	



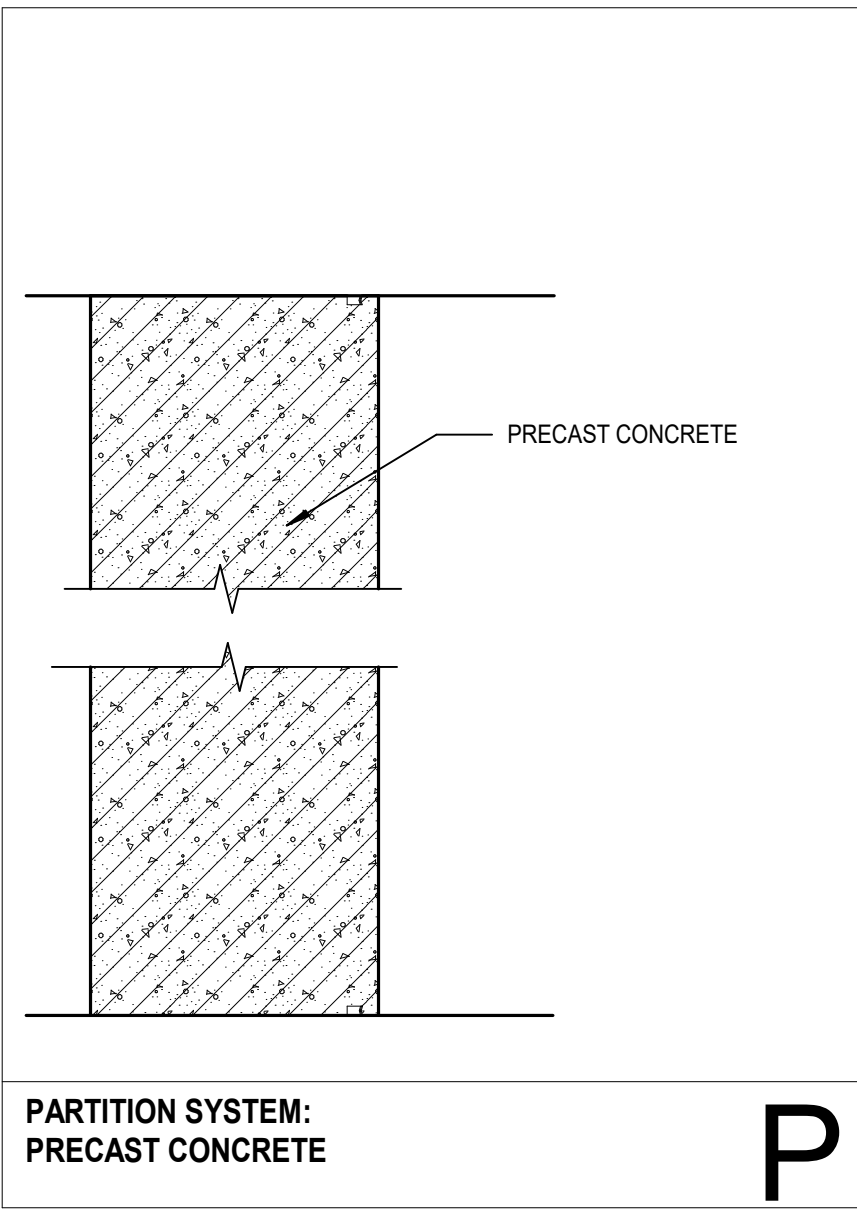
PATIRION IDENTIFICATION PLAN SYMBOL	
BASIC PARTITION THICKNESS	8"
MASONRY SIZE	8" CMU + GYP+PUR RING ONE SIDE
FIRE RATING (HRS)	-
REMARKS: REFER TO GENERAL NOTES FOR ADDITION REQUIREMENTS	



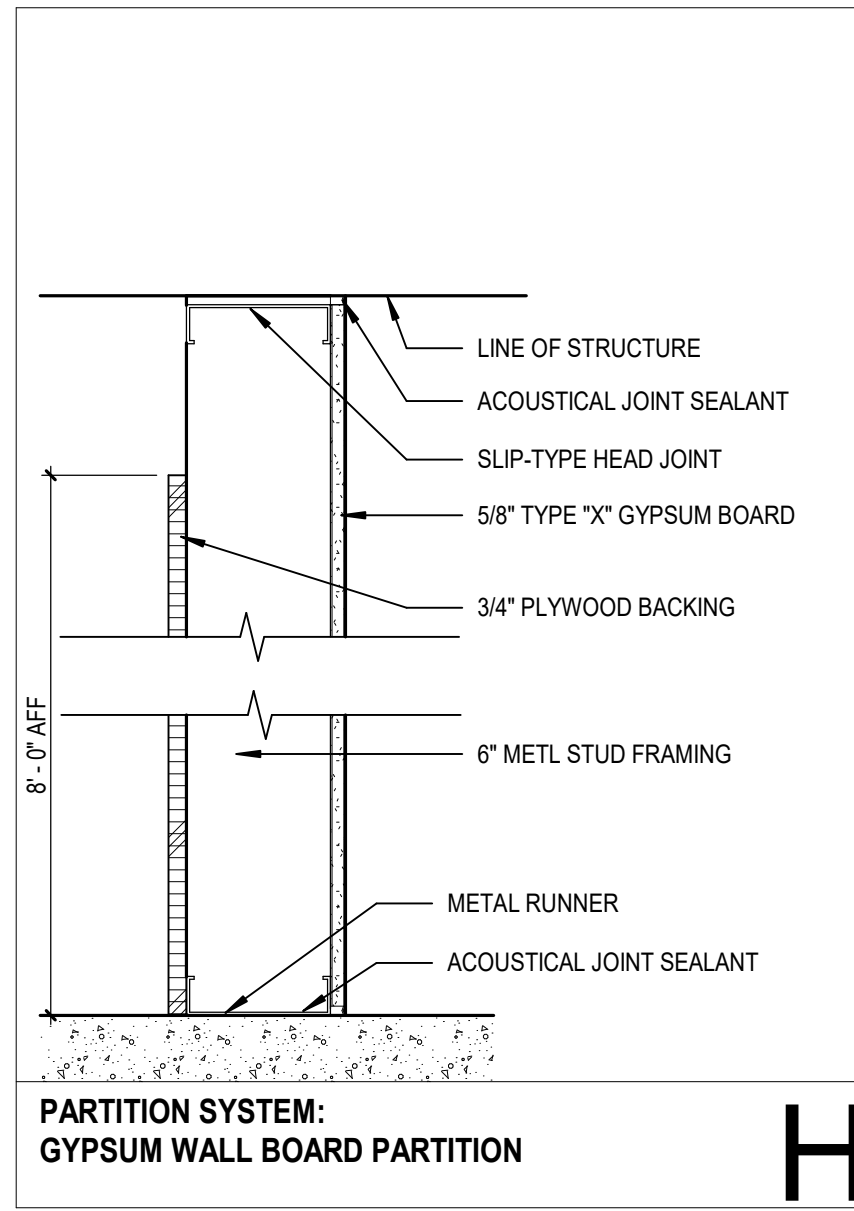
PATIRION IDENTIFICATION PLAN SYMBOL	
BASIC PARTITION THICKNESS	6 5/8"
STUD SPACING (O.C.)	16"
STUD SIZE	6" MS
GWB THICKNESS	5/8"
INSULATION THICKNESS	5 1/2"
ACOUSTICAL RATING (STC)	55
ACOUSTICAL TEST NUMBER	-
ACOUSTICAL JOINTS	YES
RESILIENT CHANNELS	-
FIRE RATING (HRS)	-
FIRE TEST NUMBER	-
FIRE RESISTIVE JOINTS	NO
STUDS TO STRUCTURE ABOVE	YES
GWB TO STRUCTURE	YES
STUDS TO 6" ABOVE CEILING	NO
BEARING WALL	NO
REMARKS: REFER TO GENERAL NOTES FOR ADDITION REQUIREMENTS	



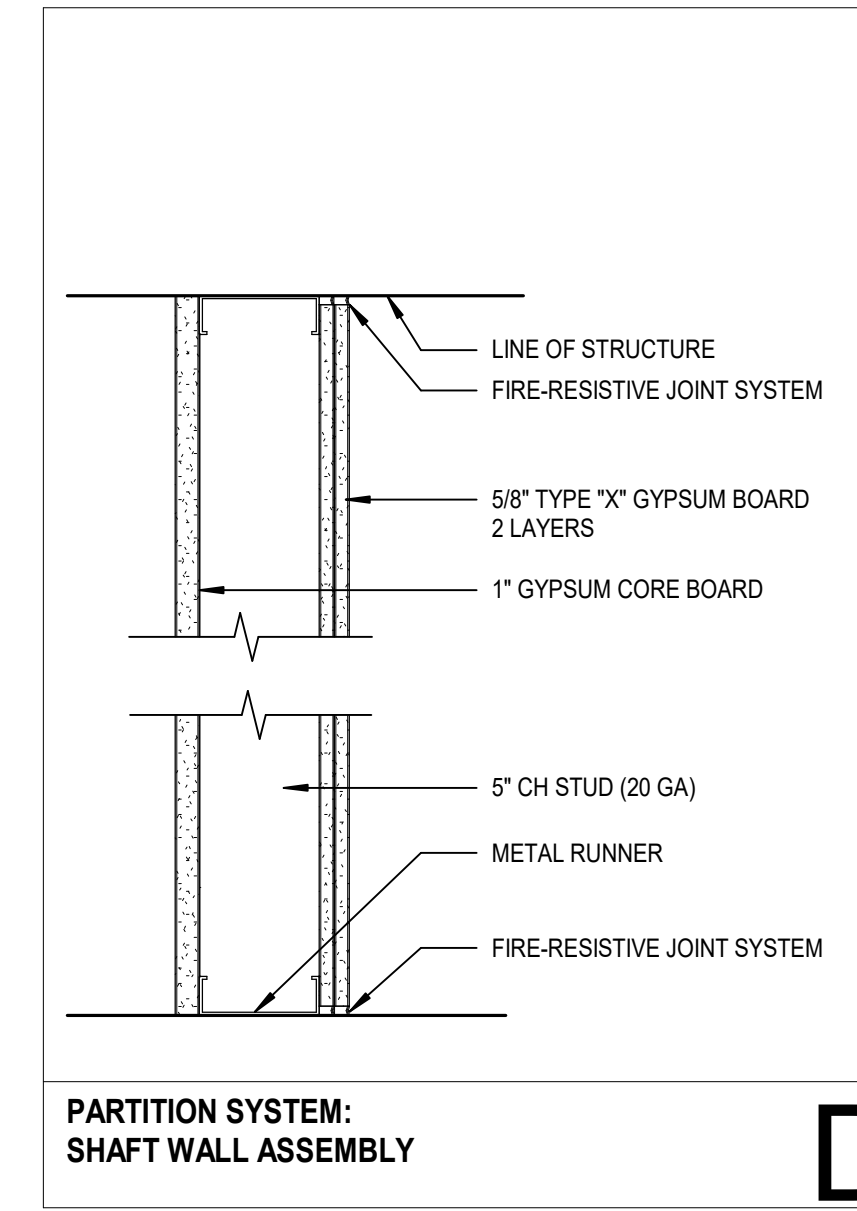
PATIRION IDENTIFICATION PLAN SYMBOL	
BASIC PARTITION THICKNESS	6 1/8"
STUD SPACING (O.C.)	16"
STUD SIZE	3 5/8" MS
GWB THICKNESS	5/8" X
INSULATION THICKNESS	2 1/2"
ACOUSTICAL RATING (STC)	-
ACOUSTICAL TEST NUMBER	-
ACOUSTICAL JOINTS	YES
RESILIENT CHANNELS	-
FIRE RATING (HRS)	-
FIRE TEST NUMBER	NO
FIRE RESISTIVE JOINTS	NO
STUDS TO STRUCTURE ABOVE	YES
GWB TO STRUCTURE	YES
STUDS TO 6" ABOVE CEILING	NO
BEARING WALL	NO
REMARKS: REFER TO GENERAL NOTES FOR ADDITION REQUIREMENTS	



PATIRION IDENTIFICATION PLAN SYMBOL	
BASIC PARTITION THICKNESS	12"
REMARKS: REFER TO GENERAL NOTES FOR ADDITION REQUIREMENTS	



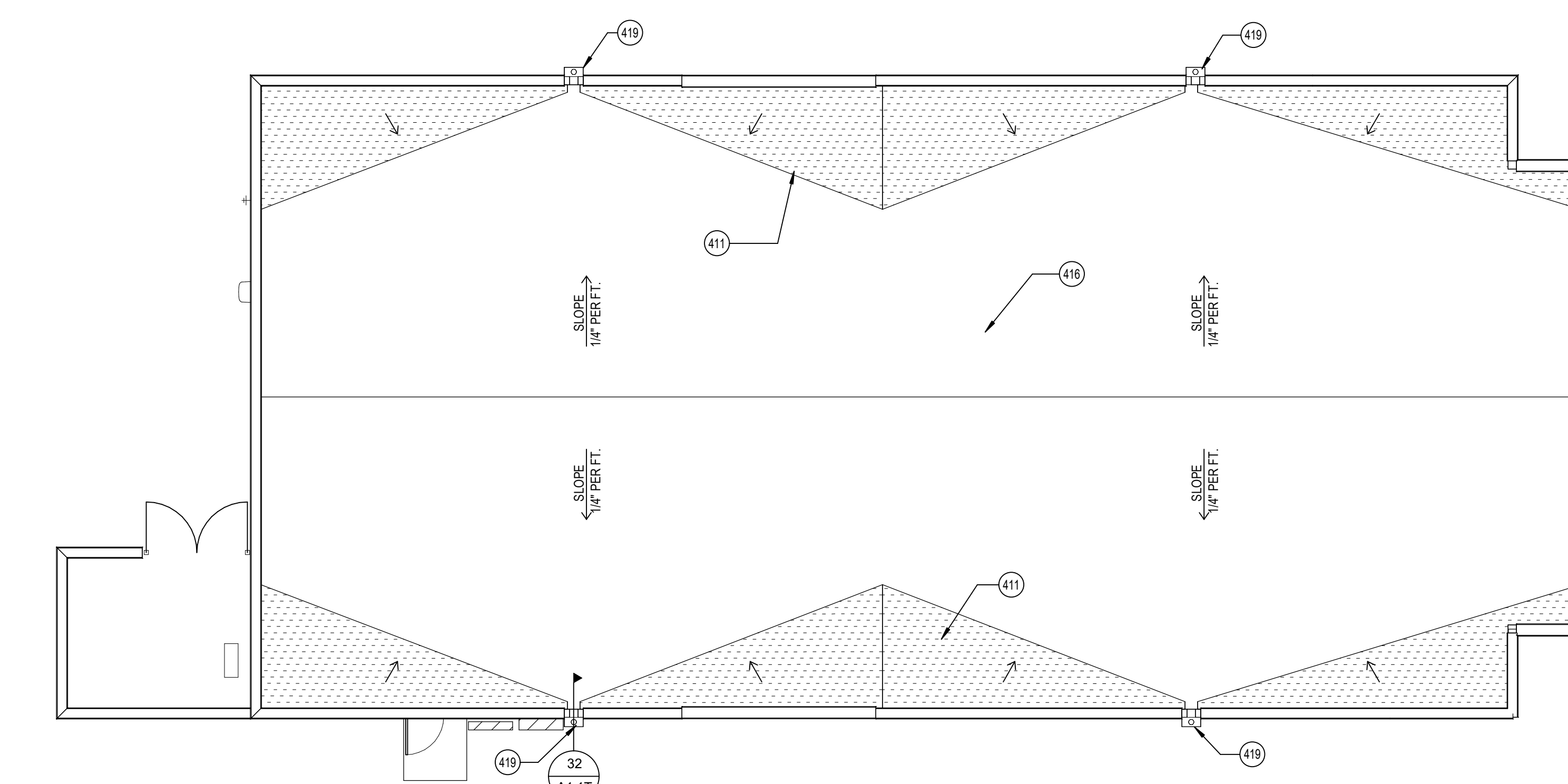
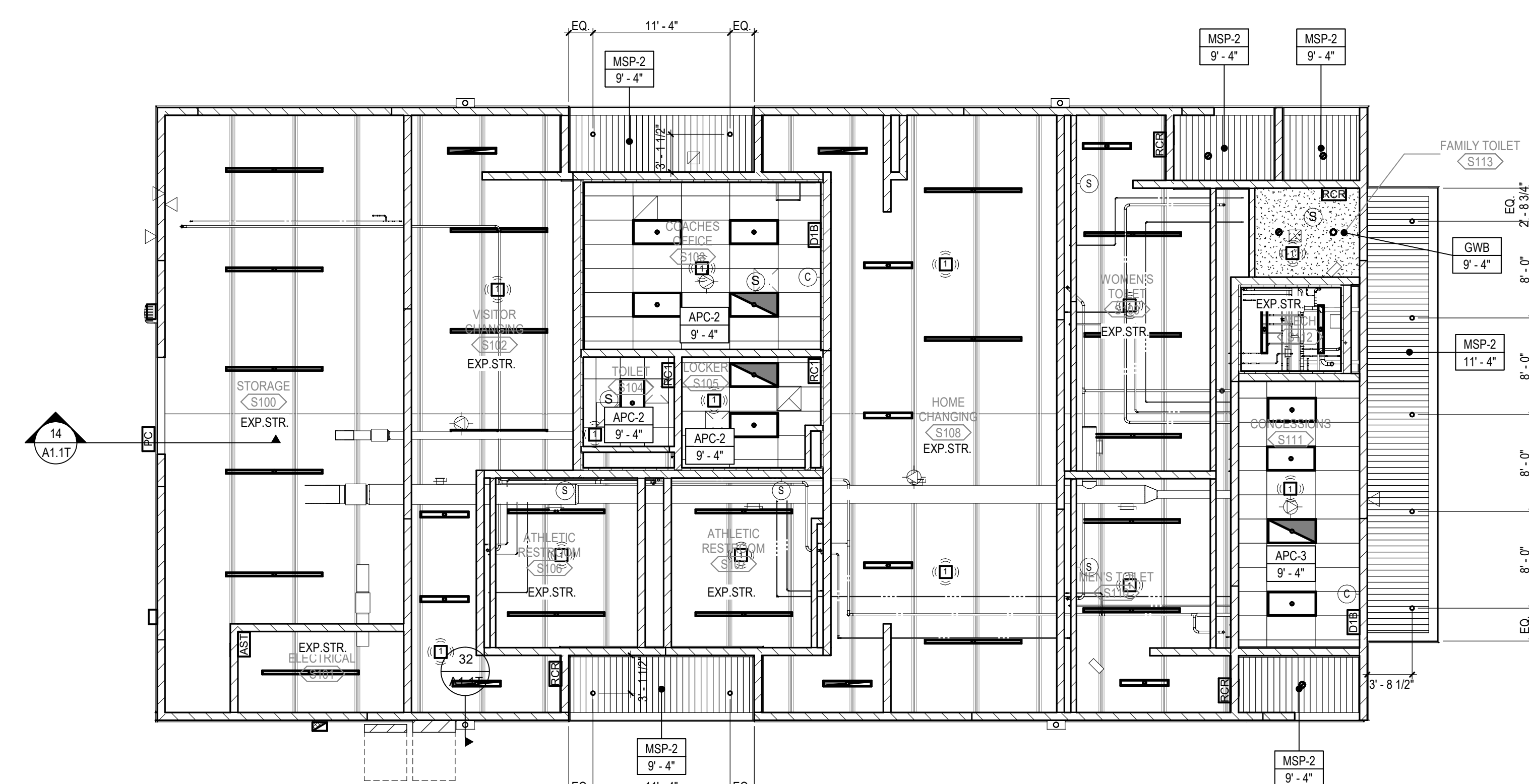
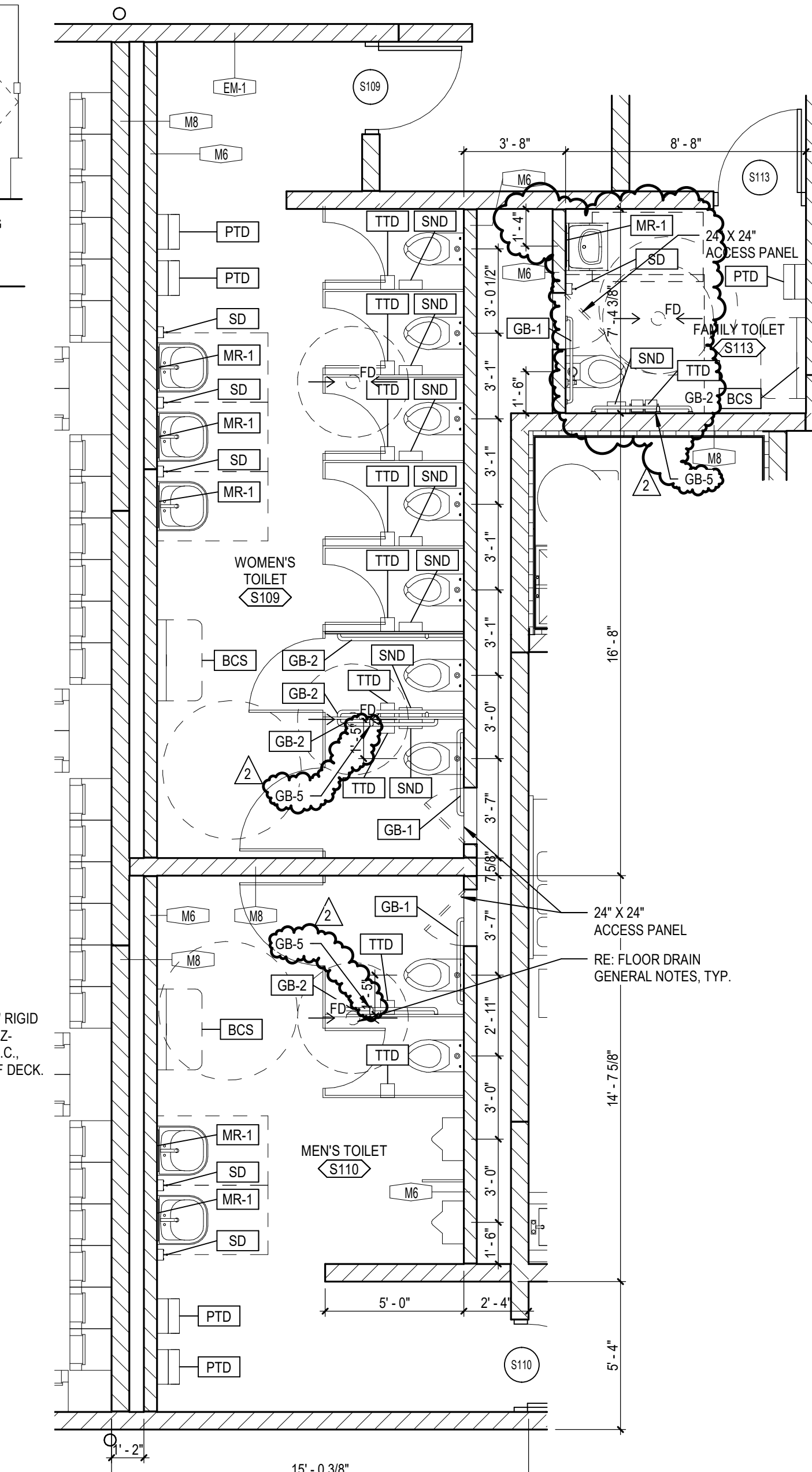
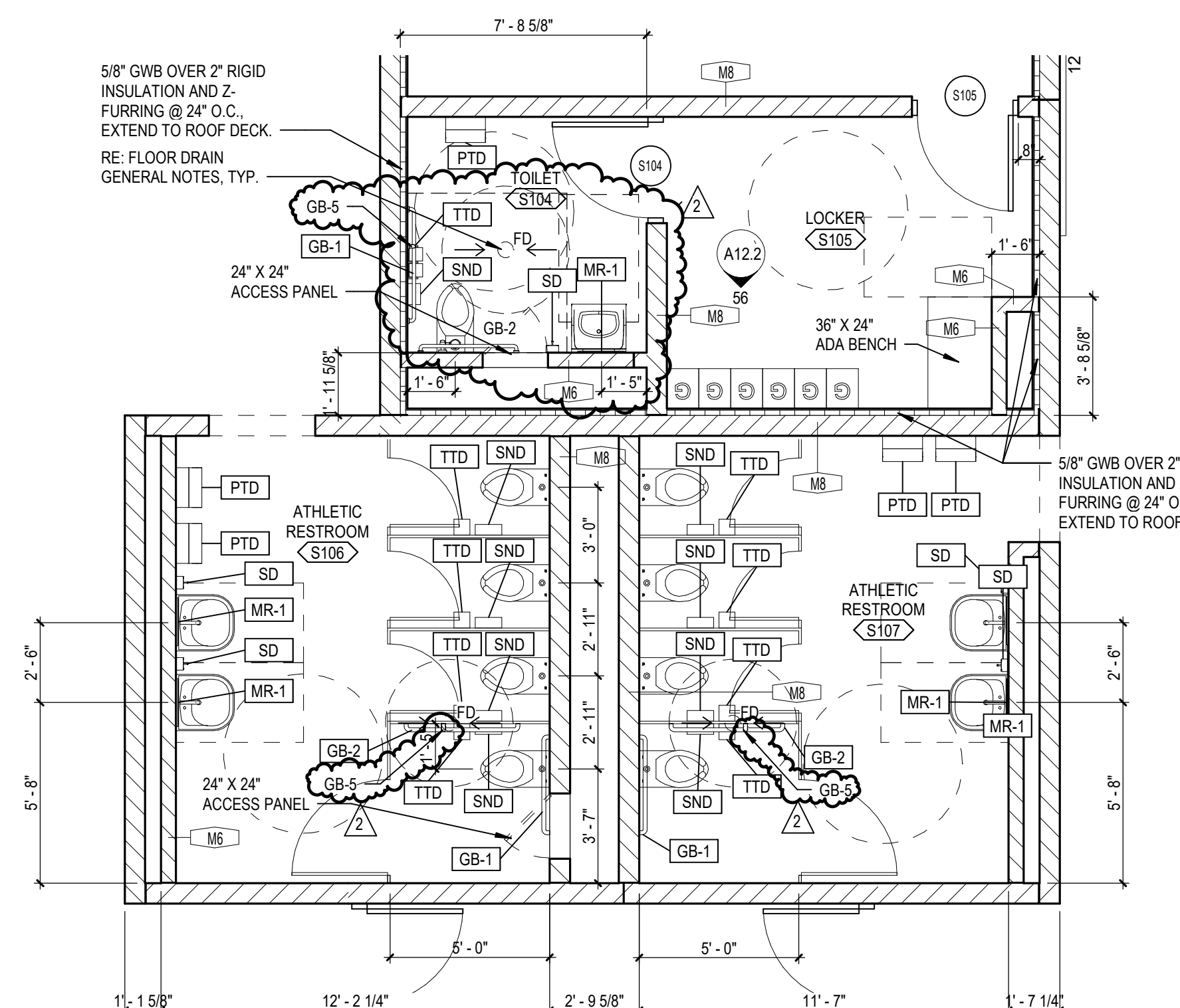
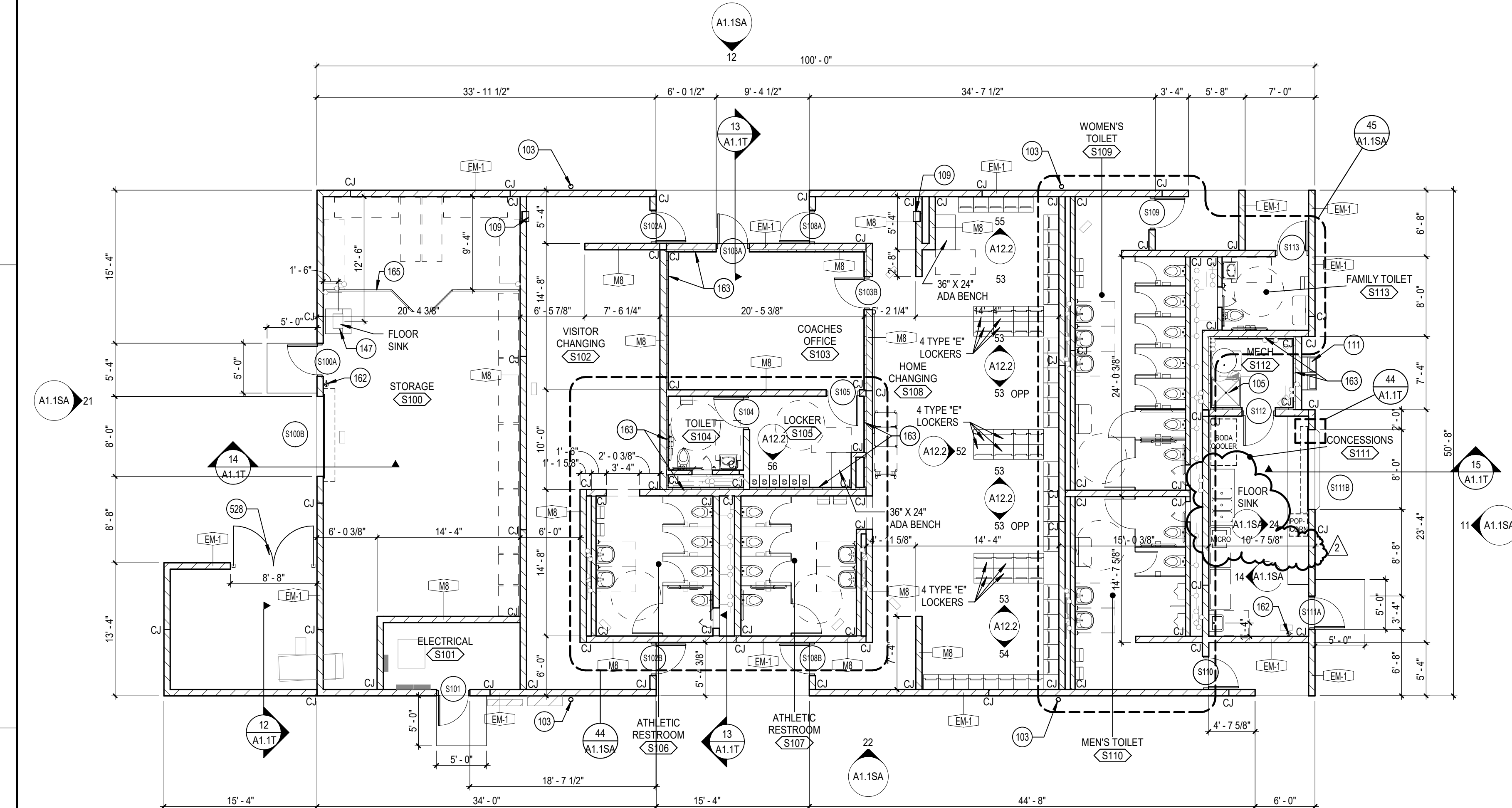
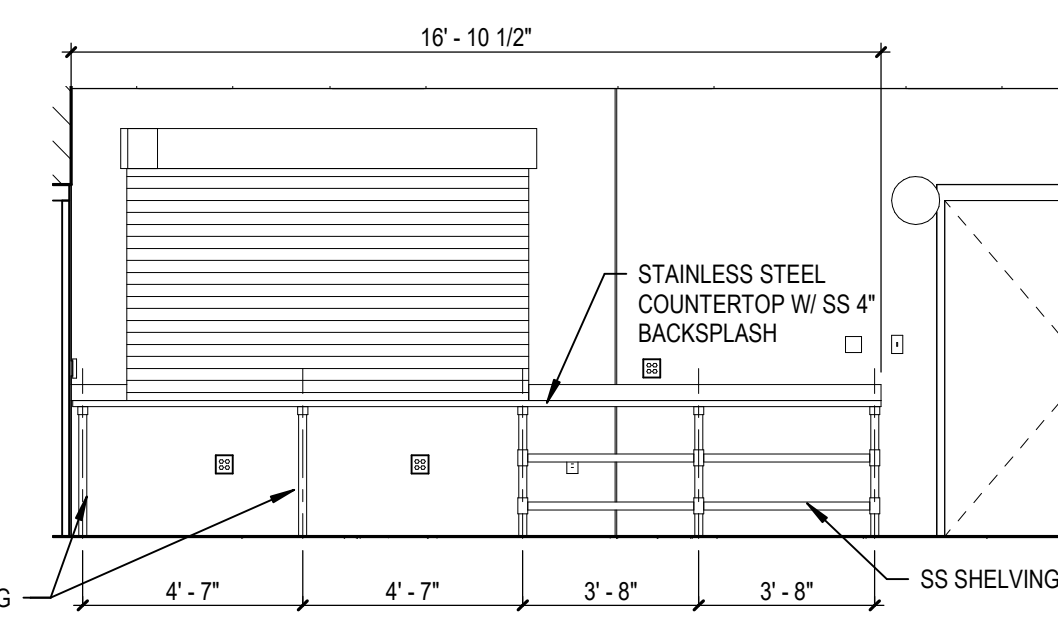
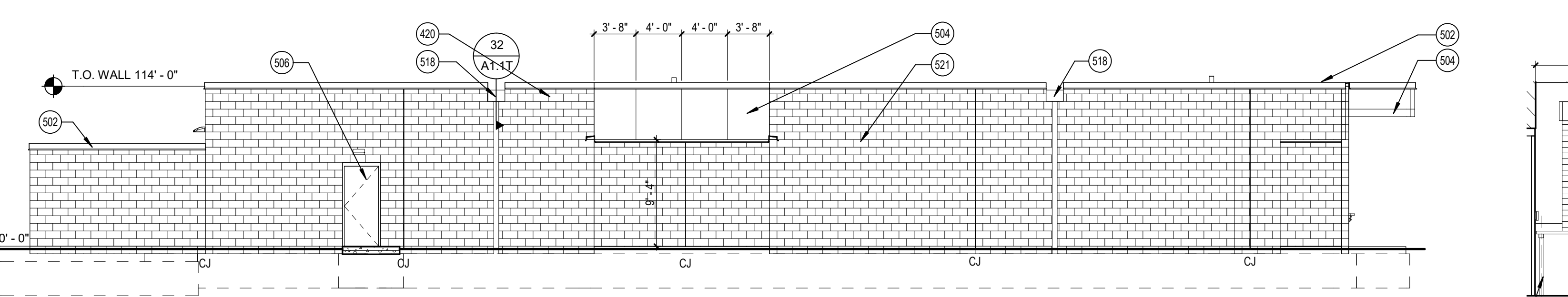
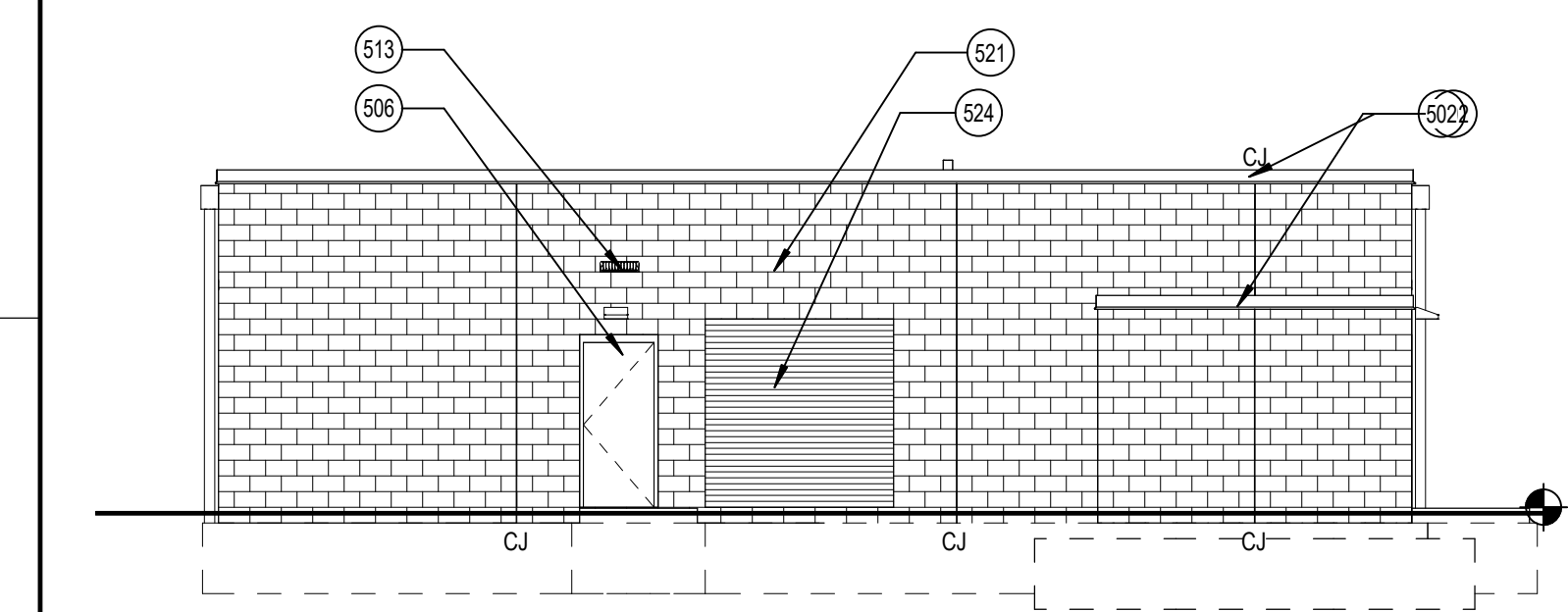
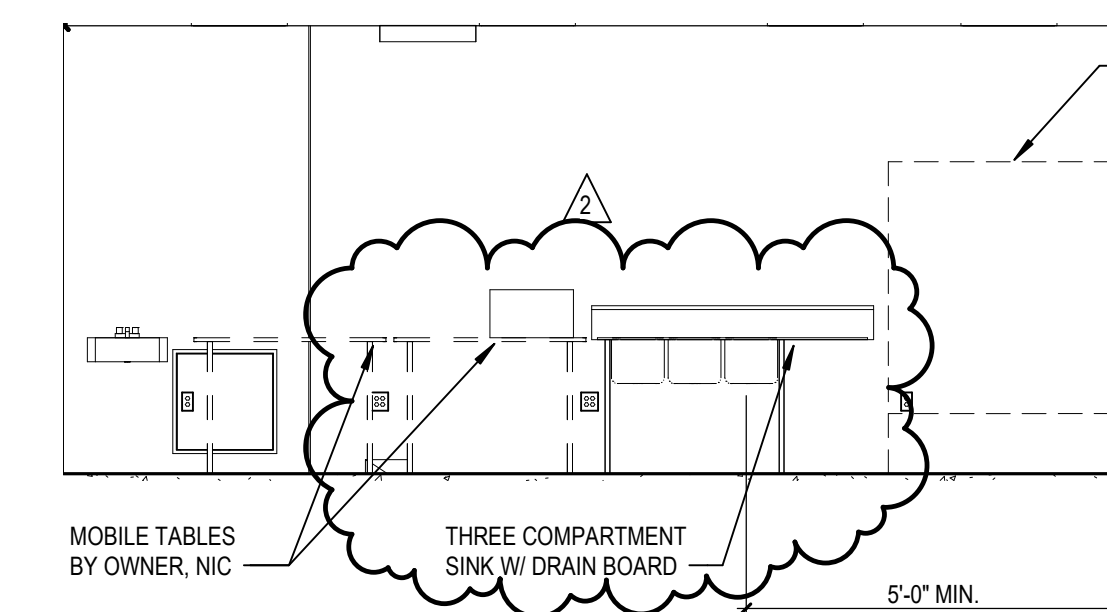
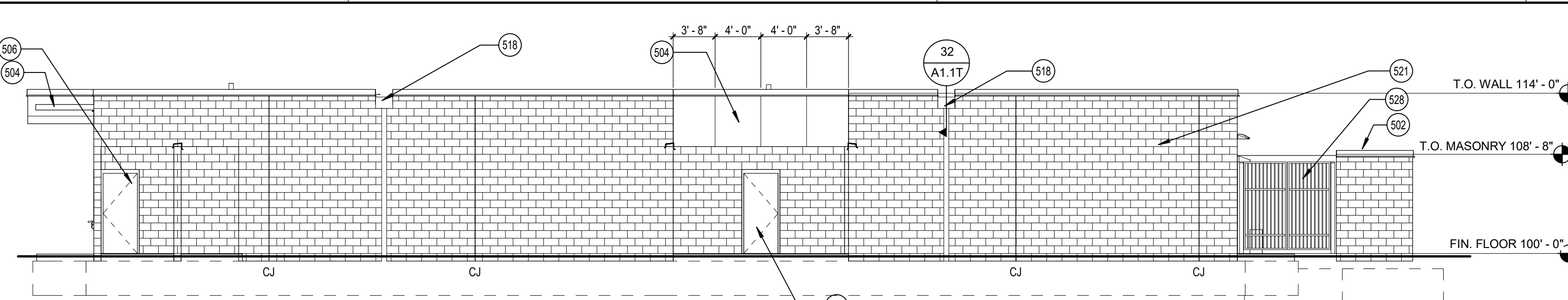
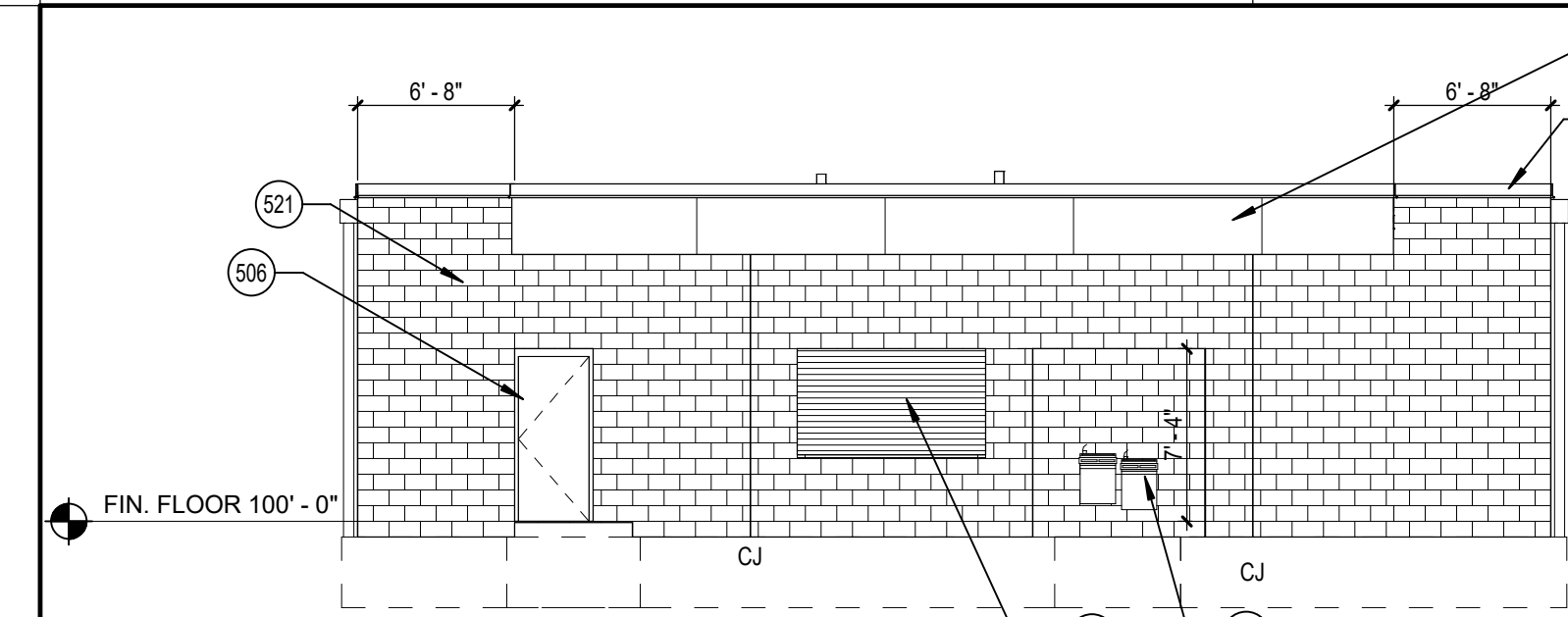
PATIRION IDENTIFICATION PLAN SYMBOL	
BASIC PARTITION THICKNESS	7 3/8"
STUD SPACING (O.C.)	16"
STUD SIZE	6" MS
GWB THICKNESS	5/8"
INSULATION THICKNESS	5 1/2"
ACOUSTICAL RATING (STC)	-
ACOUSTICAL TEST NUMBER	-
ACOUSTICAL JOINTS	-
RESILIENT CHANNELS	-
FIRE RATING (HRS)	-
FIRE TEST NUMBER	-
FIRE RESISTIVE JOINTS	NO
STUDS TO STRUCTURE ABOVE	YES
GWB TO STRUCTURE	YES
STUDS TO 6" ABOVE CEILING	NO
BEARING WALL	NO
REMARKS: REFER TO GENERAL NOTES FOR ADDITION REQUIREMENTS	



PATIRION IDENTIFICATION PLAN SYMBOL	
BASIC PARTITION THICKNESS	5 1/4"
STUD SPACING	16"
STUD SIZE	5" CH
GWB THICKNESS	5/8" X
SHAFT WALL LINER THICKNESS	1" X
INSULATION THICKNESS	-
FIRE RATING (HRS)	1
FIRE TEST NUMBER	UL-LU415
FIRE RESISTIVE JOINTS	YES
REMARKS: REFER TO GENERAL NOTES FOR ADDITION REQUIREMENTS	

\*REFER TO WALL SECTIONS  
FOR COMPLETE WALL  
ASSEMBLIES



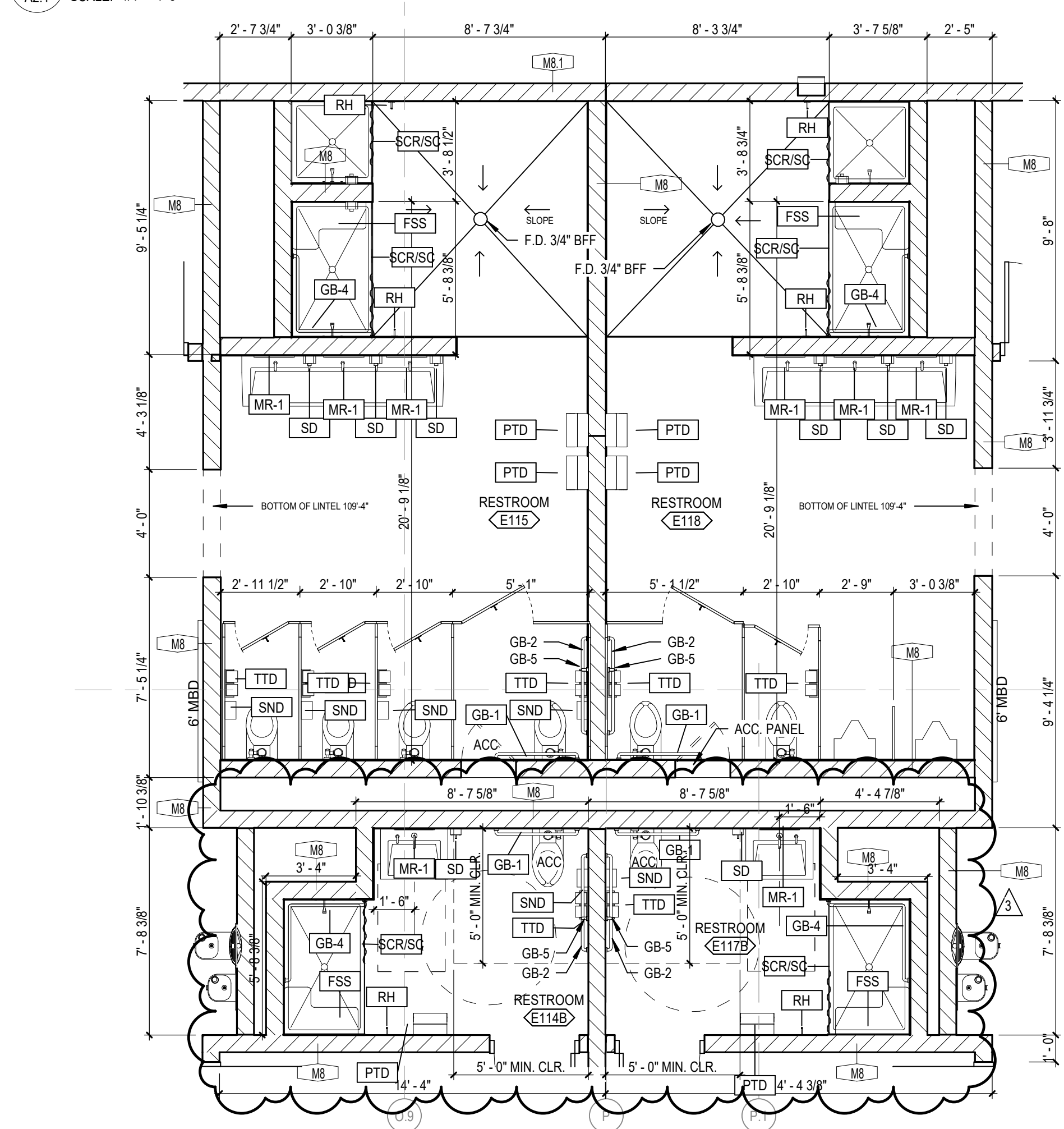


## KEYNOTE LEGEND

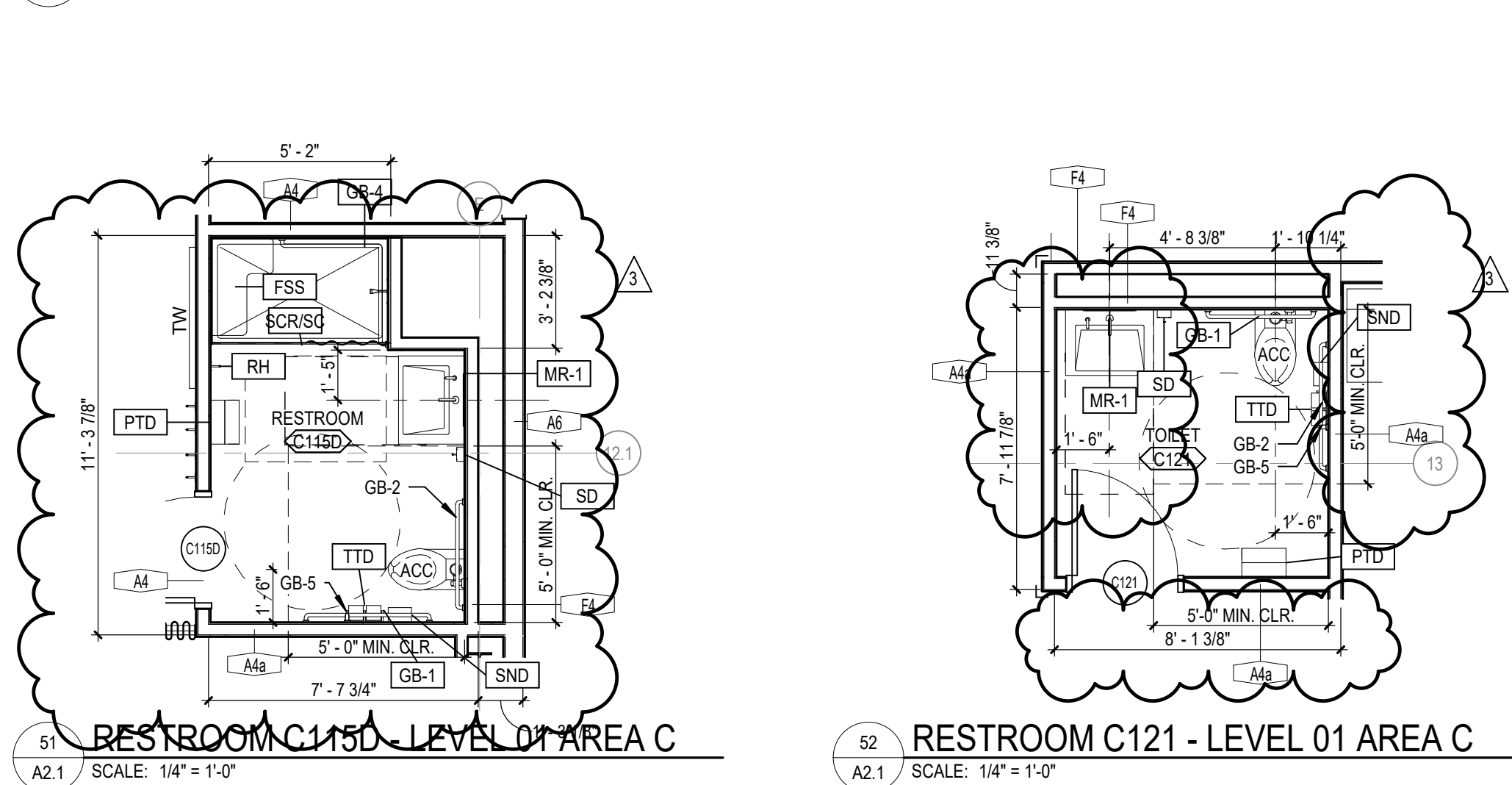
103	DOWNSPOUT
105	MOP SINK
109	SEMI-RECESSED FIRE EXTINGUISHER CABINET
111	ELECTRIC WATER COOLER
147	ICE MACHINE, (OFC)
162	FIRE EXTINGUISHER
163	6" GWD 6'x2" RIGID INSULATION AND Z-FURRING @ 24" O.C., EXTEND TO ROOF DECK
165	8" HIGH GALI CHAIN LINK FENCING AND GATE, SURFACE MOUNTED TO CONC. FLOOR, BRACE A ROOF STRUCTURE ABV.
411	ROOF CRICKET, SLOPE TOWARDS ROOF DRAIN.
416	RF-1 ROOF ASSEMBLY, SEE ROOF TYPES A2 & B2
419	LED ELECTRIC HEAD W/ DOWNSPUT, PROVIDE SPLASH BLOCK AT LOWER ROOF
420	OVERFLOW SCUPPER
423	REFINISHED METAL COPING
504	CEMENTITIOUS WALL PANEL, (CP-1)
506	HOLLOW METAL DOR, DORM-FRAME
513	BUILDING MOUNTED LIGHT FIXTURE, RE. ELEC.
521	CONDUCTIVE METAL FLASH W/ DOWNSPOUT W/ BOOT TO STORM
521	GROUND FACE MASONRY BLOCK
524	OVERHEAD COILING DOR
525	OVERHEAD COUNTER DOR
528	PREFABRICATED ENCLOSURE GATE



21 TYP. RESTROOM - LEVEL 01 AREAS A & B  
A2.1 SCALE: 1/4" = 1'-0"



41 RESTROOM E114, E115, E116, E118 - LEVEL 01 AREA E  
A2.1 SCALE: 1/4" = 1'-0"



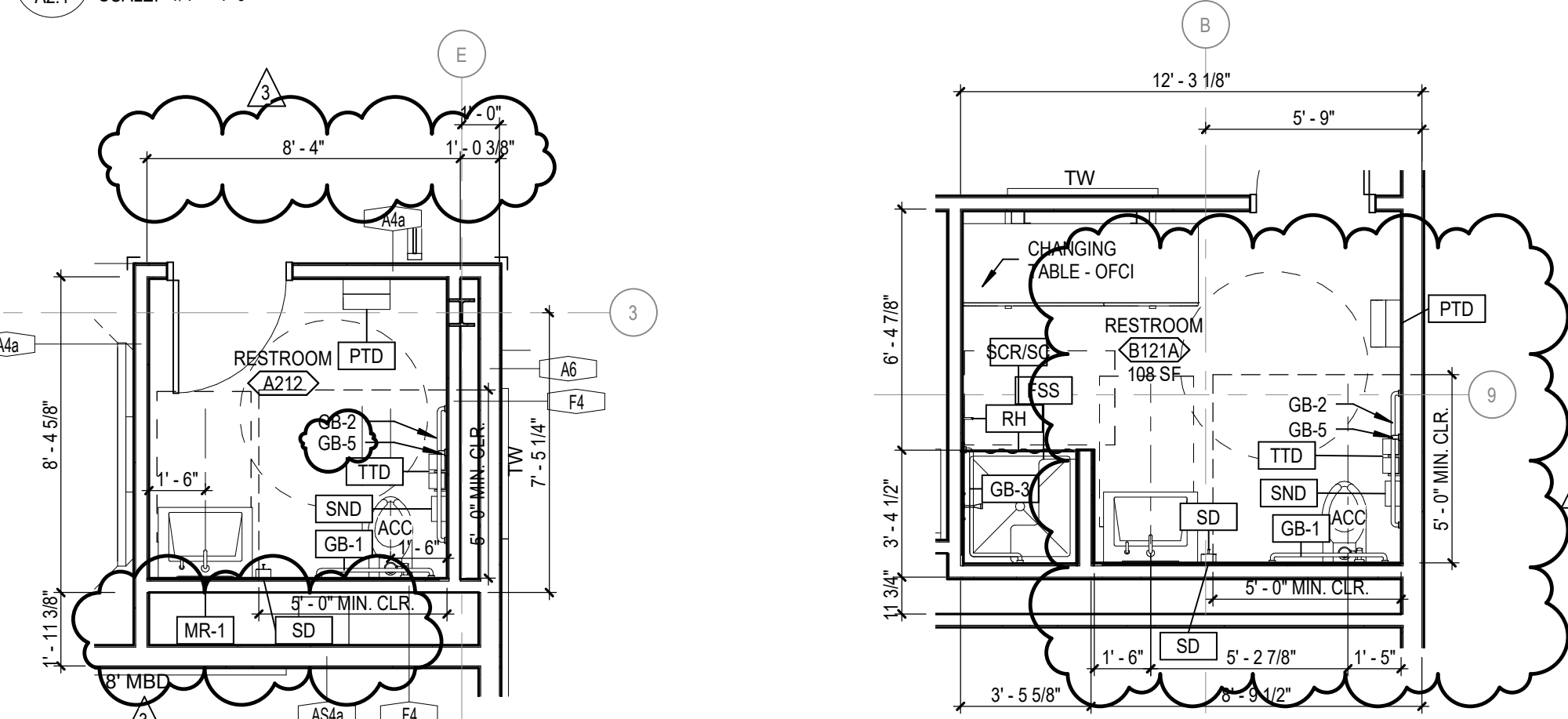
51 RESTROOM C115D - LEVEL 01 AREA C  
A2.1 SCALE: 1/4" = 1'-0"



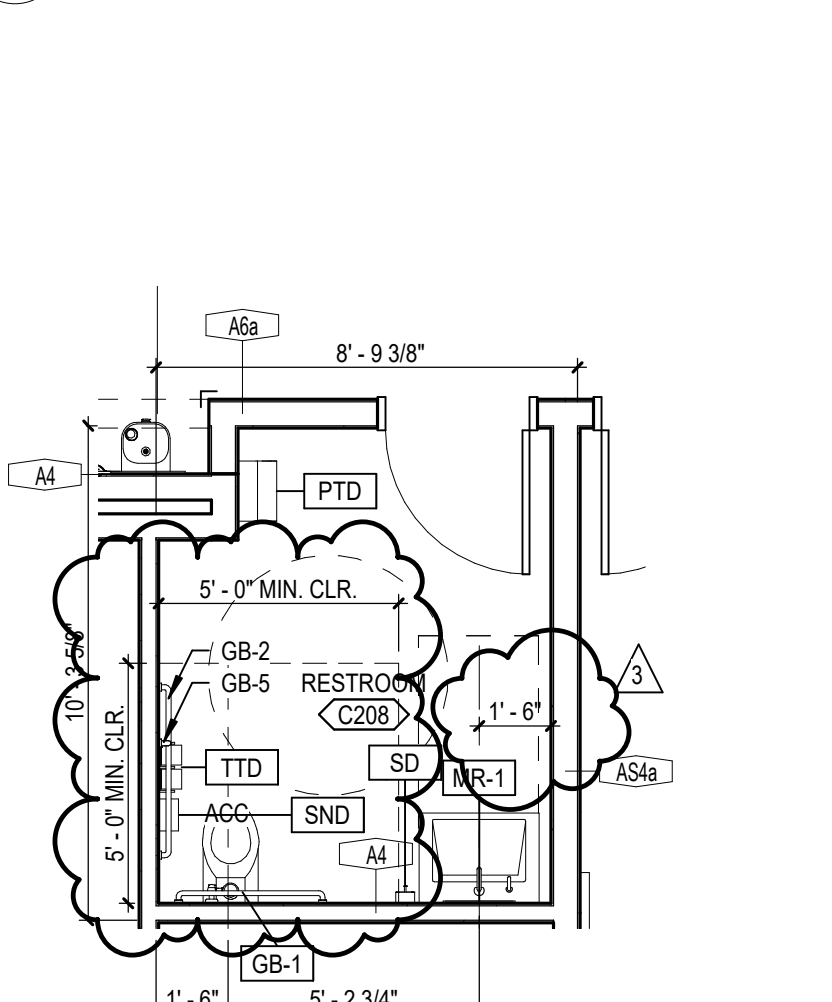
52 RESTROOM C121 - LEVEL 01 AREA C  
A2.1 SCALE: 1/4" = 1'-0"



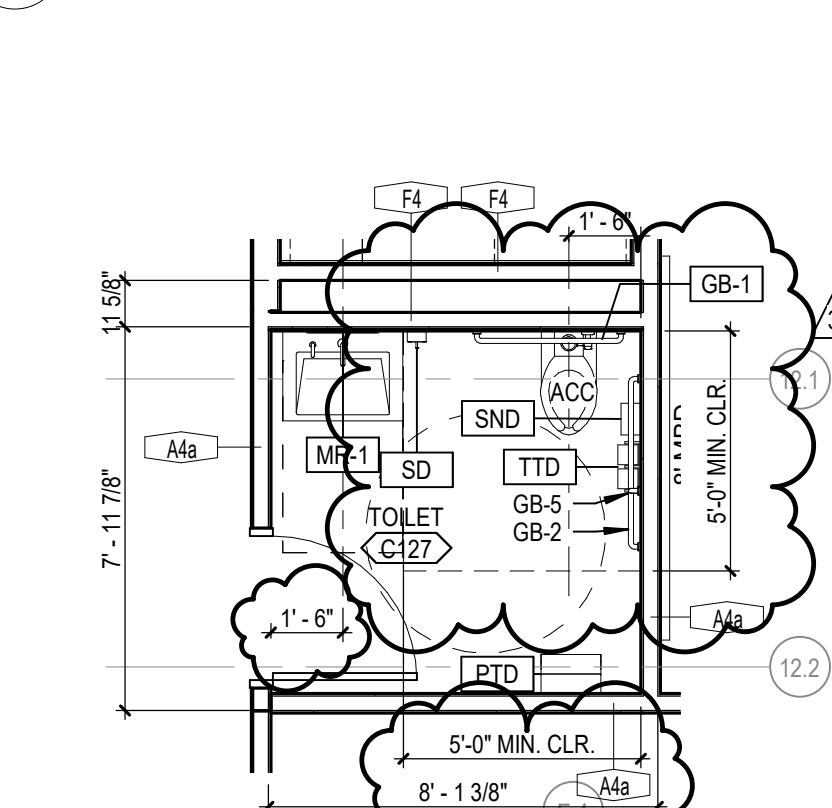
23 RESTROOM C102, C103, C104 - LEVEL 01 AREA C  
A2.1 SCALE: 1/4" = 1'-0"



33 RESTROOM A212 - LEVEL 02 AREA A  
A2.1 SCALE: 1/4" = 1'-0"



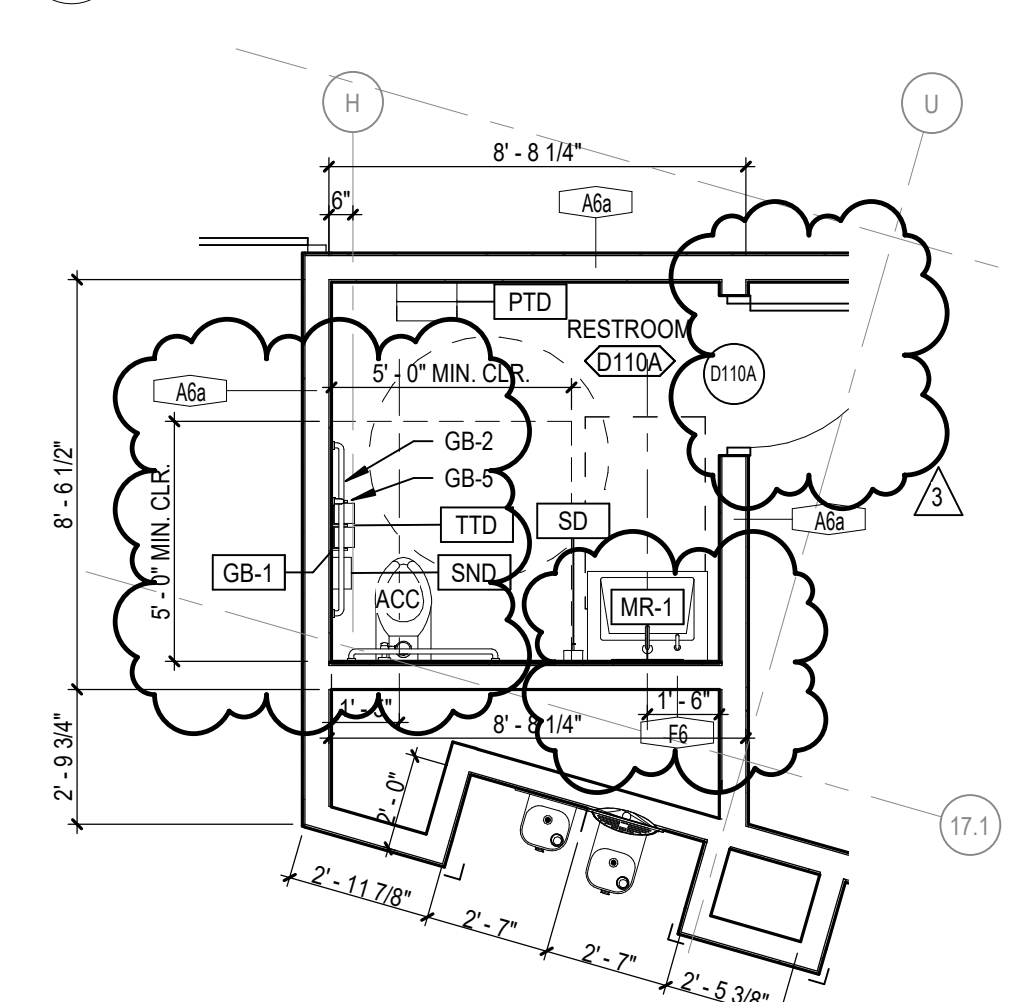
43 RESTROOM C208 - LEVEL 02 AREA C  
A2.1 SCALE: 1/4" = 1'-0"



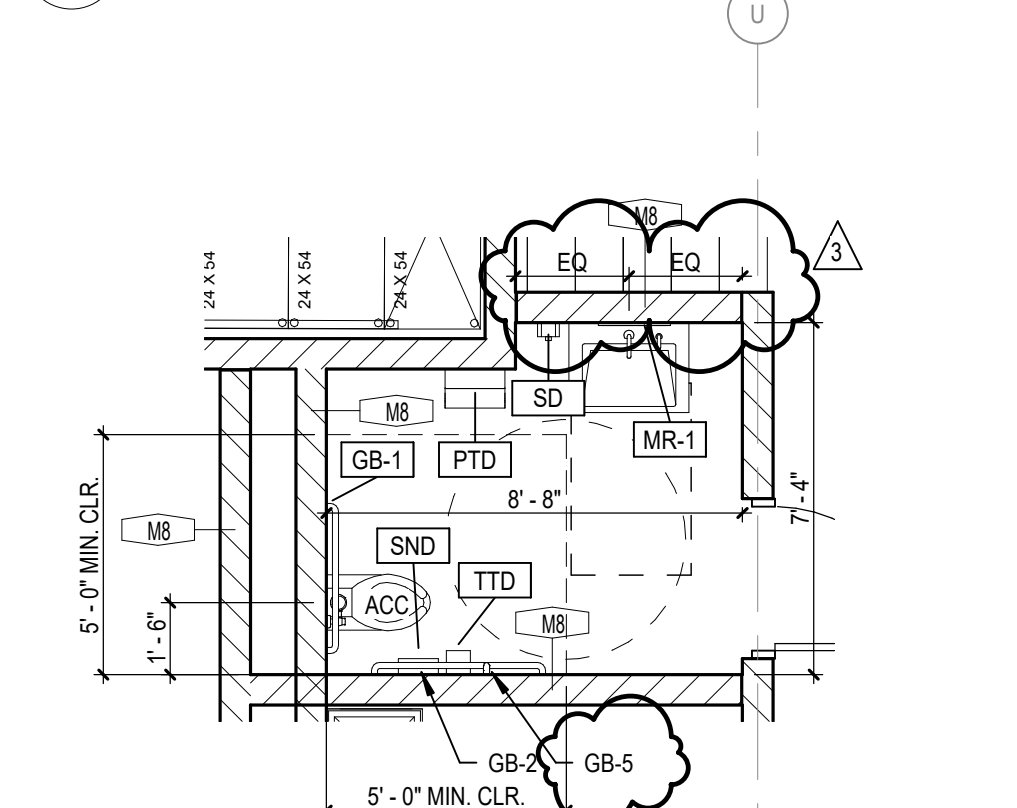
53 RESTROOM C127 - LEVEL 01 AREA C  
A2.1 SCALE: 1/4" = 1'-0"



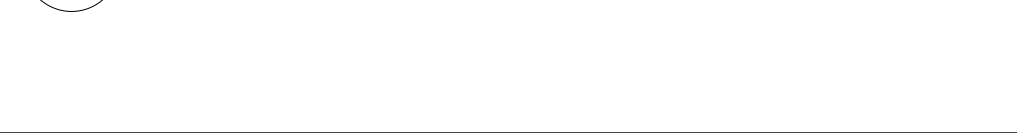
34 RESTROOM B121A - LEVEL 01 AREA B  
A2.1 SCALE: 1/4" = 1'-0"



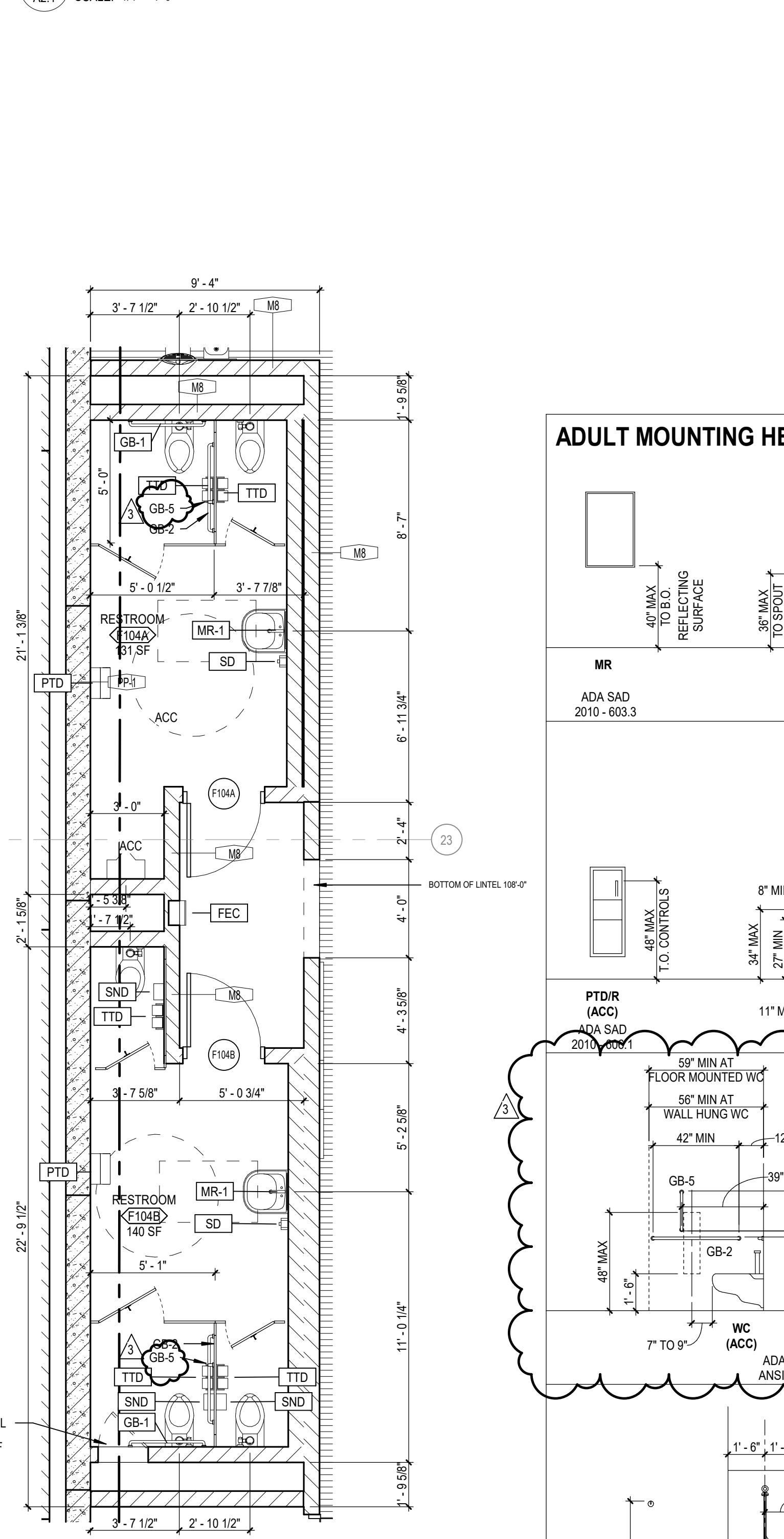
44 RESTROOM D109A - LEVEL 01 AREA D  
A2.1 SCALE: 1/4" = 1'-0"



54 RESTROOM G106C - LEVEL 01 AREA G  
A2.1 SCALE: 1/4" = 1'-0"



25 RESTROOM E123, E124 - LEVEL 01 AREA E  
A2.1 SCALE: 1/4" = 1'-0"



55 RESTROOM F104A, F104B - LEVEL 01 AREA F  
A2.1 SCALE: 1/4" = 1'-0"



## GENERAL NOTES FOR ACCESSIBILITY

- ACCESSIBLE URINAL SHALL PROVIDE CLEAR FLOOR SPACE PER ADA SAD 2010 - 605.3
- ACCESSIBLE WATER CLOSETS SHALL PROVIDE CLEAR SPACE PER ADA SAD 2010 - 604.3.1
- ACCESSIBLE LAVATORIES AND SINKS SHALL PROVIDE CLEAR SPACE PER ADA SAD 2010 - 606.2
- ACCESSIBLE TOILET ROOMS SHALL PROVIDE A TURNING SPACE OF 60 INCHES IN DIAMETER PER ADA SAD 2010 - 304.3.1
- ACCESSIBLE WATER FOUNTAINS SHALL PROVIDE CLEAR FLOOR SPACE PER ADA SAD 2010 - 602.2
- ACCESSIBLE TOILET PARTITIONS SHALL COMPLY WITH ADA SAD 2010 - 604.8.1
- EXPOSED PIPES AND SURFACES UNDER LAVATORIES AND SINKS SHALL BE INSULATED PER ADA SAD 2010 - 606.5

## TOILET ACCESSORIES ABBREVIATIONS

ABBREVIATION	DESCRIPTION
ACC	ADA ACCESSIBLE HEIGHT
BCS	BABY CHANGING STATION
EWC	ELECTRIC WATER COOLER
FSS	FOLDING SHOWER SEAT
GB-1	GRAB BAR (BACK WALL)
GB-2	GRAB BAR (SIDE WALL)
GB-3	GRAB BAR (SHOWER @ TRANSFER - TYPE)
GB-4	GRAB BAR (SHOWER @ ROLL-IN)
HD	ELECTRIC HAND DRYER
MOP	MOP / BROOM HOLDER
MR	MIRROR
RH	ROBE HOOK
SCR	SHOWER CURTAIN ROD
SC	SHOWER CURTAIN
SND	SANITARY NAPKIN DISPOSAL
SNV	NAPKIN / TAMPON VENDOR
SSS	STAINLESS STEEL SHELF
US	UTILITY SHELF

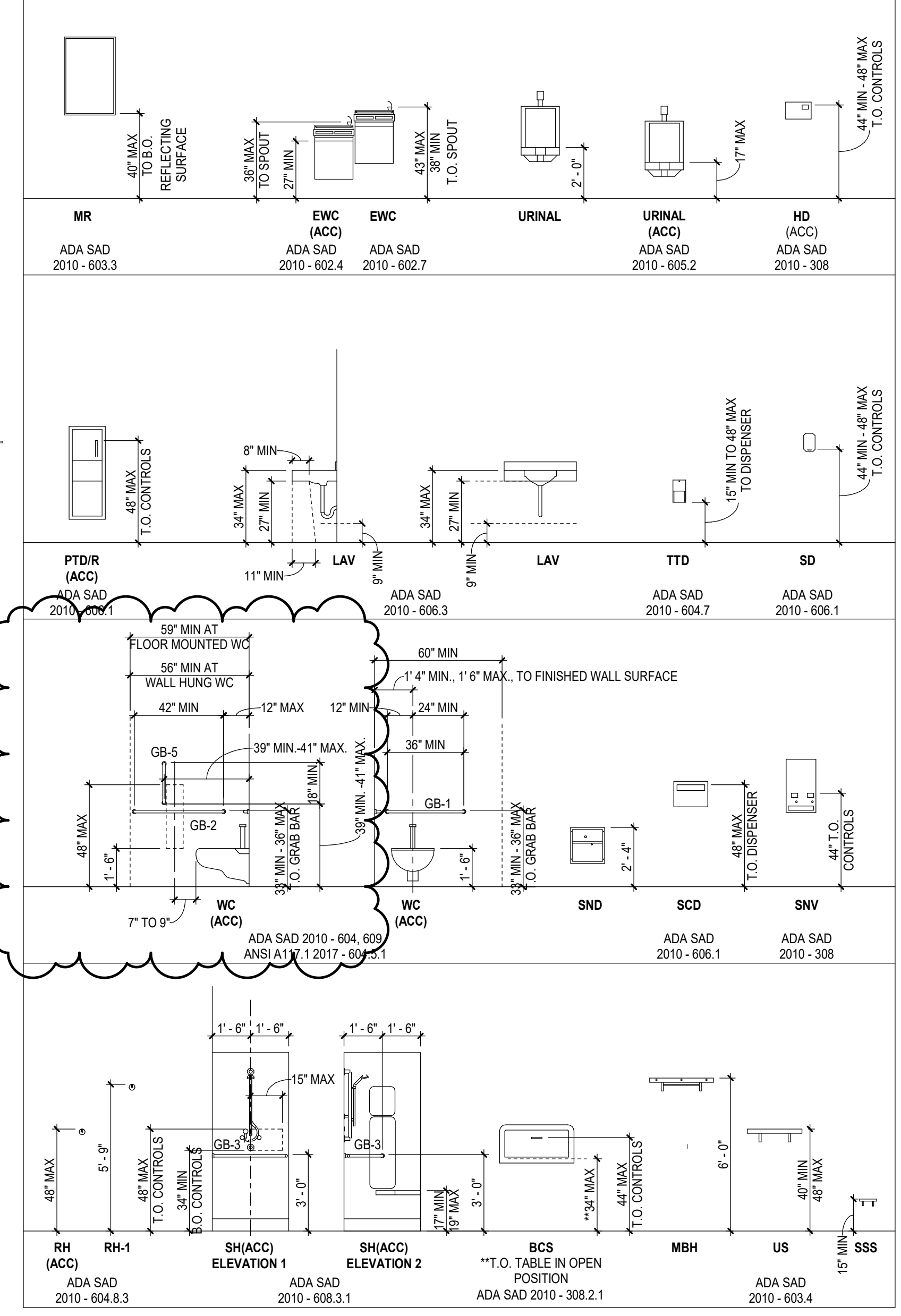
## OWNER-PROVIDED, CONTRACTOR-INSTALLED ITEMS

PTD	PAPER TOWEL DISPENSER
SD	LIQUID SOAP DISPENSER
TTD	TOILET PAPER DISPENSER

## GENERAL FLOOR PLAN DRAIN NOTES:

- SET TOPS OF FLOOR DRAIN 1/2-INCH BELOW FINISHED FLOOR SURFACES, UNLESS OTHERWISE INDICATED.
- SLOPE CONCRETE AND FINISHED FLOORING DOWN TO FLOOR DRAINS FROM A 24 - INCH RADIUS OUT FROM FLOOR DRAINS.
- DEPRESS SLABS 1-1/2 INCHES AT SHOWERS AND WHERE FLOOR SLOPES ARE INDICATED. PROVIDE INDICATE SLOPES BUILT UP WITH THICK-SET OR CONCRETE REPAIR MORTAR.

## ADULT MOUNTING HEIGHTS

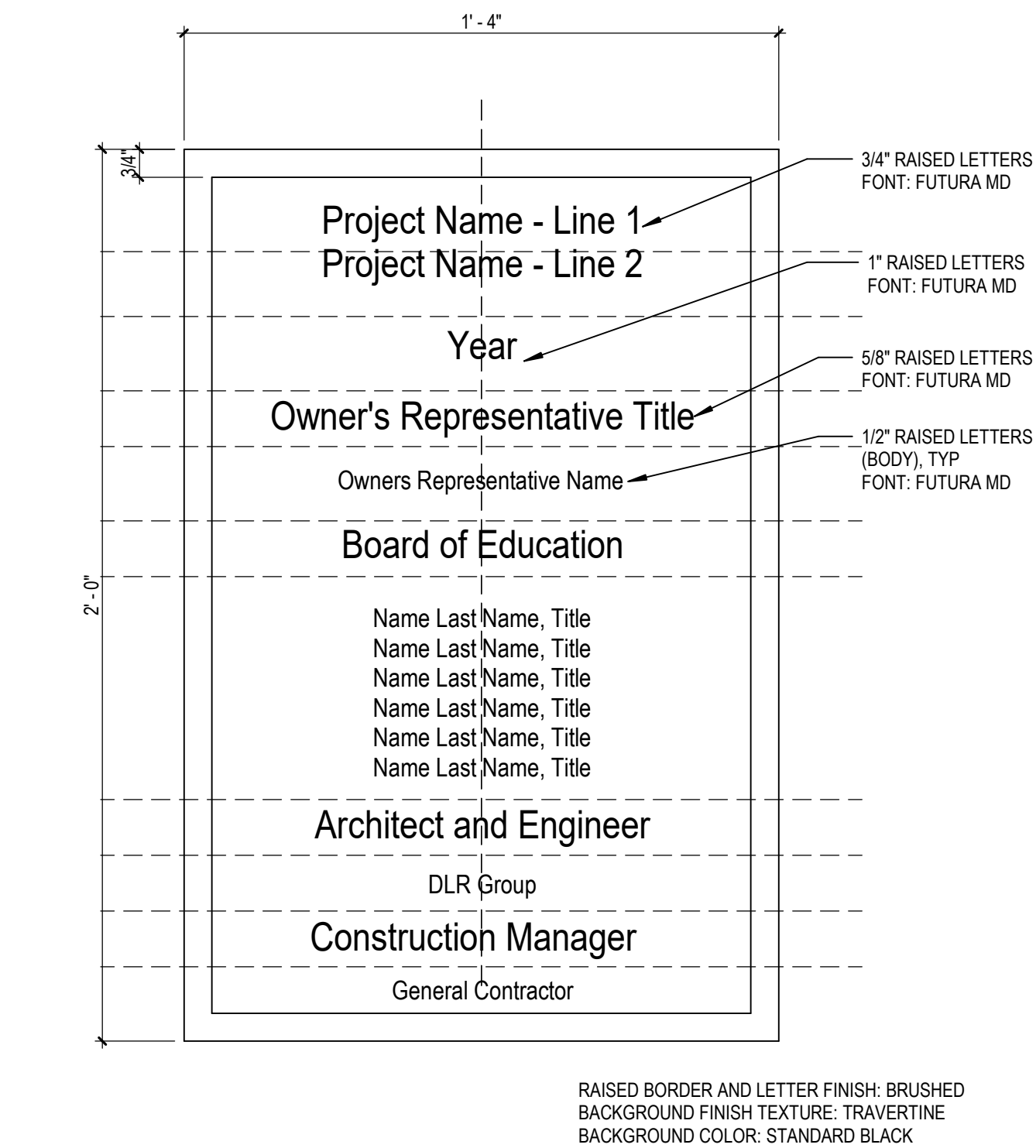




_ROOM SIGNAGE SCHEDULE				
NUMBER	ROOM NAME	SIGN TYPE	ROOM SIGN NAME	ROOM SIGN NUMBER
A10	ACADEMIC CORRIDOR			
A11	VESTIBULE	M		
A12	CORRIDOR			
A13	CORRIDOR			
A14	VESTIBULE			
A20	CORRIDOR			
A21	CORRIDOR			
A22	CORRIDOR			
A23	CORRIDOR			
A24	CORRIDOR			
A25	VESTIBULE			
A26	VESTIBULE			
A100A	LEARNING COMMONS			
A100B	SCIENCE COLAB			
A100C	SMALL GROUP	D		
A101	READING LAB	D		
A102	CUSTODIAL	E		
A103	RESOURCE	D		
A104	STUDIO	D		
A105	STUDIO	D		
A106	STUDIO	D		
A107	MECHANICAL	E		
A108	SCIENCE LAB	D		
A108A	PREP	E		
A109	SCIENCE LAB	D		
A110	SCIENCE LAB	D		
A110A	PREP	E		
A111	STUDENT RESTROOM - M	B		
A112	STUDENT RESTROOM - U	C		
A113	STUDENT RESTROOM - F	A		
A114	ELECTRICAL	E		
A115	IDF	E		
A116	CUSTODIAL	E		
A117	SHOP	D		
A117A	TECH CLASSROOM	D		
A117B	PROJECT STORAGE	E		
A118	SHOP	D		
A118A	PROJECT STORAGE	E		
A118B	TECH CLASSROOM	D		
A118C	LUMBER STORAGE	E		
A200A	LEARNING COMMONS			
A200B	LEARNING COMMONS			
A201	STORAGE	E		
A202	STUDIO	D		
A203	STUDIO	D		
A204	STUDIO	D		
A205	STUDIO	D		
A206	MECHANICAL	E		
A207	STUDIO	D		
A208	STUDIO	D		
A209	READING LAB	D		
A210	READING LAB	D		
A212	RESTROOM	C		
A213	MEDIUM GROUP	D		
A214	CUSTODIAL	E		
A215	IDF	E		
A216	ELEC	E		
A217	ART LAB	D		
A218	MATERIAL STORAGE	E		
A218A	KILN	E		
A219	ART LAB	D		
A220	ART LAB	D		
A220A	MATERIAL STORAGE	E		
B10	ACADEMIC CORRIDOR			
B10A	STAR 2	F		
B10F	LEARNING COMMONS			
B11	CORRIDOR			
B12	CORRIDOR			
B13	CORRIDOR			
B14	CORRIDOR			
B20	CORRIDOR			
B21	CORRIDOR			
B22	CORRIDOR			
B26	CORRIDOR			
B100A	LEARNING COMMONS			
B100B	COLAB			
B100C	SMALL GROUP	D		
B101	OT/PT	D		
B101A	OT/PT STORAGE	E		
B102	SLP	D		
B103	MATH LAB	D		
B104	CUSTODIAL	E		
B105	RESOURCE	D		
B106	STUDIO	D		
B107	STUDIO	D		
B108	STUDIO	D		
B109	MECHANICAL	E		
B110	SCIENCE LAB	D		
B110A	PREP	E		
B111	SCIENCE LAB	D		
B112	SCIENCE LAB	D		
B112A	PREP	E		
B113	STUDENT RESTROOM - M	B		
B114	STUDENT RESTROOM - U	C		
B115	STUDENT RESTROOM - F	A		
B116	ELEC	E		
B117	SRO	D		
B118	ISS	D		
B119	FOCUS	D		
B120	READING LAB	D		
B121	LIFE SKILLS	D		
B121A	RESTROOM	C		
B121B	LAUNDRY	E		
B121C	SENSORY	D		
B121D	SAFE ROOM	E		
B122	ELL	D		
B200	LEARNING COMMONS			
B201	FLEX	D		
B202	STORAGE	E		
B203	STUDIO	D		
B204	STUDIO	D		
B205	STUDIO	D		
B206	STUDIO	D		
B207	MECHANICAL	E		
B208	STUDIO	D		
B209	STUDIO	D		
B210	BUSINESS	D		
B211	STORAGE	E		
B212	BUSINESS	D		
B213	ELEC	E		
B214	FOODS LAB	D		
B214A	PANTRY	E		
B215	FACS CLASSROOM	D		
B216	CLOTHING / TEXTILES LAB	D		
B216A	STORAGE	E		
C10	ACADEMIC CORRIDOR			
C10A	STAIR 4	F		
C11	CORRIDOR			
C12	CORRIDOR			
C13	CORRIDOR			
C14	CORRIDOR			
C15	CORRIDOR			
C17	CORRIDOR			
C18	VESTIBULE			
C19	VESTIBULE			
C20	CORRIDOR			
C21	CORRIDOR			
C22	CORRIDOR			
C23	CORRIDOR			
C24	CORRIDOR			
C25	CORRIDOR			
C27	CORRIDOR			
C28	VESTIBULE			
C100A	LEARNING COMMONS			
C100B	COLAB			
C100C	SMALL GROUP	D		
C101	SEB	D		

_ROOM SIGNAGE SCHEDULE				
NUMBER	ROOM NAME	SIGN TYPE	ROOM SIGN NAME	ROOM SIGN NUMBER
C101A	COOL DOWN	E		
C102	STUDENT RESTROOM - F	A		
C103	STUDENT RESTROOM - U	C		
C104	STUDENT RESTROOM - M	B		
C105	CUSTODIAL	E		
C106	RESOURCE	D		
C107	STUDIO	D		
C108	STUDIO	D		
C109	STUDIO	D		
C110	MECHANICAL	E		
C111	SCIENCE LAB	D		
C111A	PREP	E		
C112	SCIENCE LAB	D		
C113	SCIENCE LAB	D		
C113A	CHEM STOR	E,H		
C114	IDF	E		
C115	WAITING	D		
C115A	TREATMENT	D		
C115B	NURSE	D		
C115C	COTS			
C115D	RESTROOM	C		
C116	ELECTRICAL	E		
C117	CONFERENCE	D		
C118	PRINCIPAL	D		
C119	WORKROOM	D		
C120	OFFICE	D		
C121	TOILET	C		
C122	OFFICE	D		
C123	BREAK	D		
C124	OFFICE	D		
C125	STAD	D		
C126	COUNSELING OFFICE	D		
C127	TOILET	C		
C128	COUNSELING OFFICE	D		
C129	COUNSELING RECEPTION	D		
C129A	COUNSELING CONFERENCE	D		
C129B	COUNSELING STORAGE	E		
C130	COUNSELING OFFICE	D		
C131	EDUCATIONAL THERAPIST	D		
C200A	LEARNING COMMONS			
C200B	LEARNING COMMONS			
C201	STUDIO	D		
C202	STUDIO	D		
C203	STUDIO	D		
C204	STUDIO	D		
C205	MECHANICAL	E		
C206	STUDIO	D		
C207	STUDIO	D		
C208	RESTROOM	C		
C209	STORAGE	E		
C210	WORLD LANGUAGE	D		
C211	WORLD LANGUAGE	D		
C212	WORLD LANGUAGE	D		
C213	CUSTODIAL	E		
C214	RESTROOM	C		
C215	MEDIUM GROUP	D		
C215A	ELEC	E		
C215B	CUSTODIAL	E		
C216	CLASSROOM	D		
C216A	COSTUME STORAGE	E		
C217	VIDEO / AUDIO STUDIO	D		
C217A	VESTIBULE	E		
C217B	CONTROL BOOTH	D		
C217C	STORAGE	E		
C217D	VESTIBULE	D		
C218	IDF	E		
C219	LAB	D		
C219A	EDITING BOOTH	D		
C219B	EDITING BOOTH	D		
C219C	EDITING BOOTH	D		
D11	ENTRY CORRIDOR			
D12	CORRIDOR			
D12S	STAIRS 5	F		
D13	CORRIDOR			
D14	PLATFORM RAMP	E		
D20	CORRIDOR			
D100	ENTRY VESTIBULE			
D100A	RECEPTION	D		
D100B	WAITING	E		
D100C	STORAGE	E		
D101	COMMONS	J		
D101A	CHAIR & TABLE STORAGE	E		
D102	GENIUS BAR	D		
D103	MEDIA CENTER	D		
D104	SMALL GROUP	D		
D105	SMALL GROUP	D		
D106	RISER ROOM	E		
D107	MEDIUM GROUP ROOM	D		
D108	STORAGE	E		
D109	OFFICE	E		
D110	WORKROOM	D		
D110A	RESTROOM	C		
D112	PLATFORM	J		
D112A	PLATFORM STORAGE	E		
E10	CORRIDOR			
E11A	CORRIDOR			
E11B	VESTIBULE			
E101	CHOR	D		
E102	OFFICE	D		
E103	INSTRUMENT STORAGE	E		
E104	ORCHESTRA	D		
E105	OFFICE	D		
E106	INSTRUMENT STORAGE	E		
E107	BAND	D		
E108	OFFICE	D		
E109	INSTRUMENT STORAGE	E		
E110	WEIGHTS	D		
E111	HEALTH	D		
E112	HEALTH	D		
E113	GIRLS LOCKER	D		
E113A	VESTIBULE			
E113B	VESTIBULE			
E114A	COACH'S OFFICE	D		
E114B	RESTROOM	C		
E115	RESTROOM	C		
E116	BOYS LOCKER	D		
E116A	VESTIBULE			
E116B	VESTIBULE			
E117A	COACH'S OFFICE	D		
E117B	RESTROOM	C		
E118	RESTROOM	C		
E119	ELEC	E		
E120	MDF	E		
E121	BLDG STORAGE	E		
E122	MUSIC CLASSROOM	D		
E123	WOMEN'S RESTROOM	B		
E124	MEN'S RESTROOM	B		
F101	COMPETITION GYM	D, J		
F101A	GYM STORAGE	E		
F102	VESTIBULE			
F103A	ATHLETIC STORAGE	E		
F103B	ATHLETIC STORAGE	E		
F104	AUXILIARY GYM	D, J, L		
F104A	RESTROOM	C		
F104B	RESTROOM	C		
F104C	GYM STORAGE	E		
F105	VESTIBULE			
F201	MECHANICAL	E		
G05	CUSTODIAL	E		
G06	STAIR E1	F		
G10A	CORRIDOR			
G10B	CORRIDOR			
G10C	CORRIDOR			
G11	VESTIBULE			
G101	DISHWASHING	E		
G102	A LA CARTE	E		
G103	SERVERY	E		

_ROOM SIGNAGE SCHEDULE				
NUMBER	ROOM NAME	SIGN TYPE	ROOM SIGN NAME	ROOM SIGN NUMBER
G104	IDF			
G106	STAFF DINING			
G107	MECHANICAL			
G108	PREP KITCHEN			
G108B	OFFICE	D		
G108C	UTILITY	C		
G108D	RESTROOM	E		
G108F	DRY STORAGE	E		
G108G	STAIR G1	F		
G108I	CORRIDOR			
G109	BLDG MANAGER	D		
G110	MAIN ELEC	E		
G111	RECEIVING	E		
G112	BUILDING STORAGE	E		
G113	BUILDING STORAGE	E		
G201	MECHANICAL	E		
G202	CHILLER YARD			
G220	TRANSFORMER YARD			
S100	STORAGE	E		
S101	ELECTRICAL	E		
S102	VISITOR CHANGING	D		
S103	COACHES OFFICE	D		
S104	TOILET	C		
S105	LOCKER	D		
S106	ATHLETIC RESTROOM	C		
S107	ATHLETIC RESTROOM	C		
S108	HOME CHANGING	D		
S109	WOMEN'S TOILET	A		
S110	MEN'S TOILET	B		
S111	CONCESSIONS	E		
S112	MECH	E		
S113	FAMILY TOILET	C		
T100	STORAGE	E		



1 SIGN - CAST PLAQUE  
A13.3 SCALE: 3" = 1'-0"

_ROOM SIGNAGE SCHEDULE				
NUMBER	ROOM NAME	SIGN TYPE	ROOM SIGN NAME	ROOM SIGN NUMBER

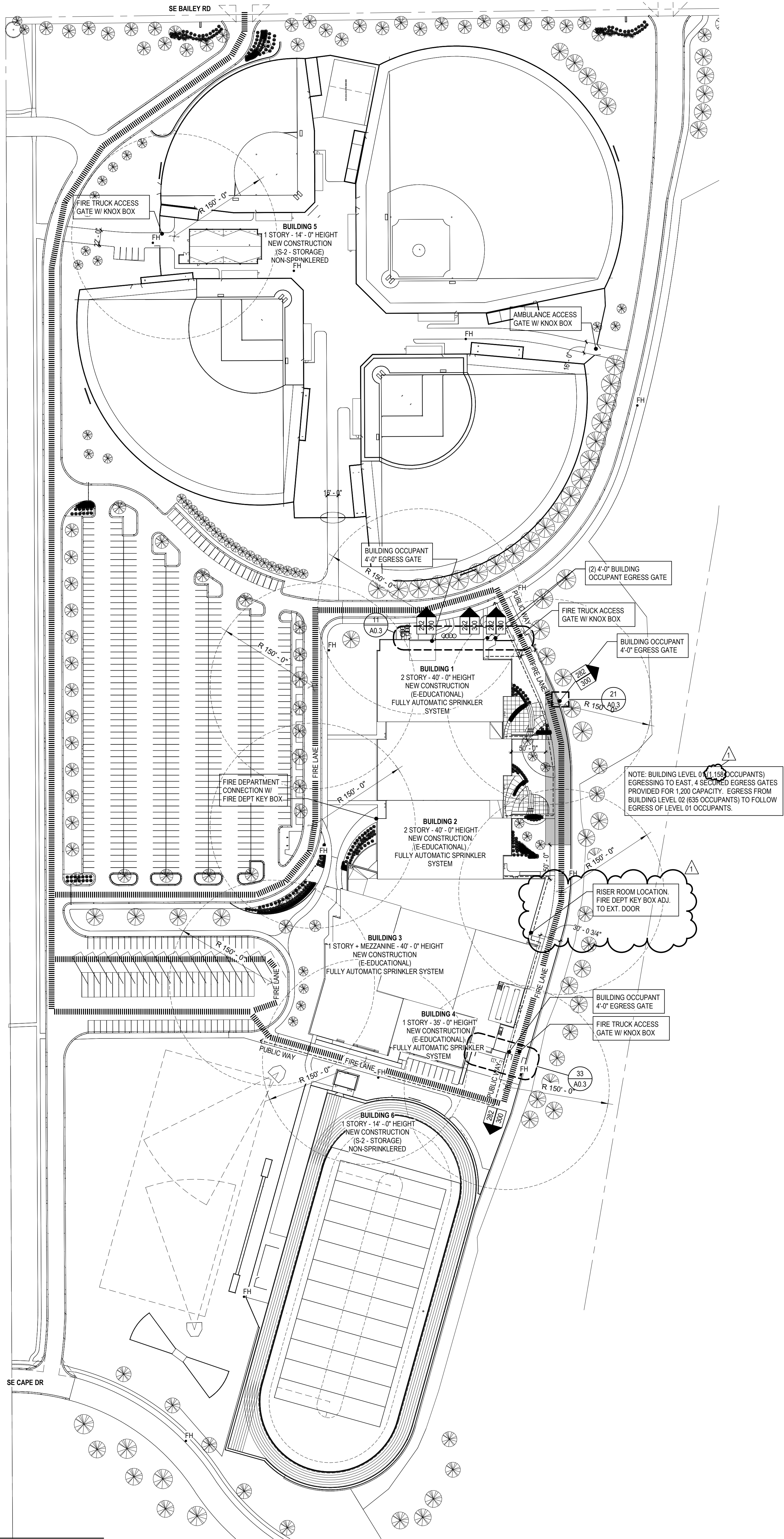
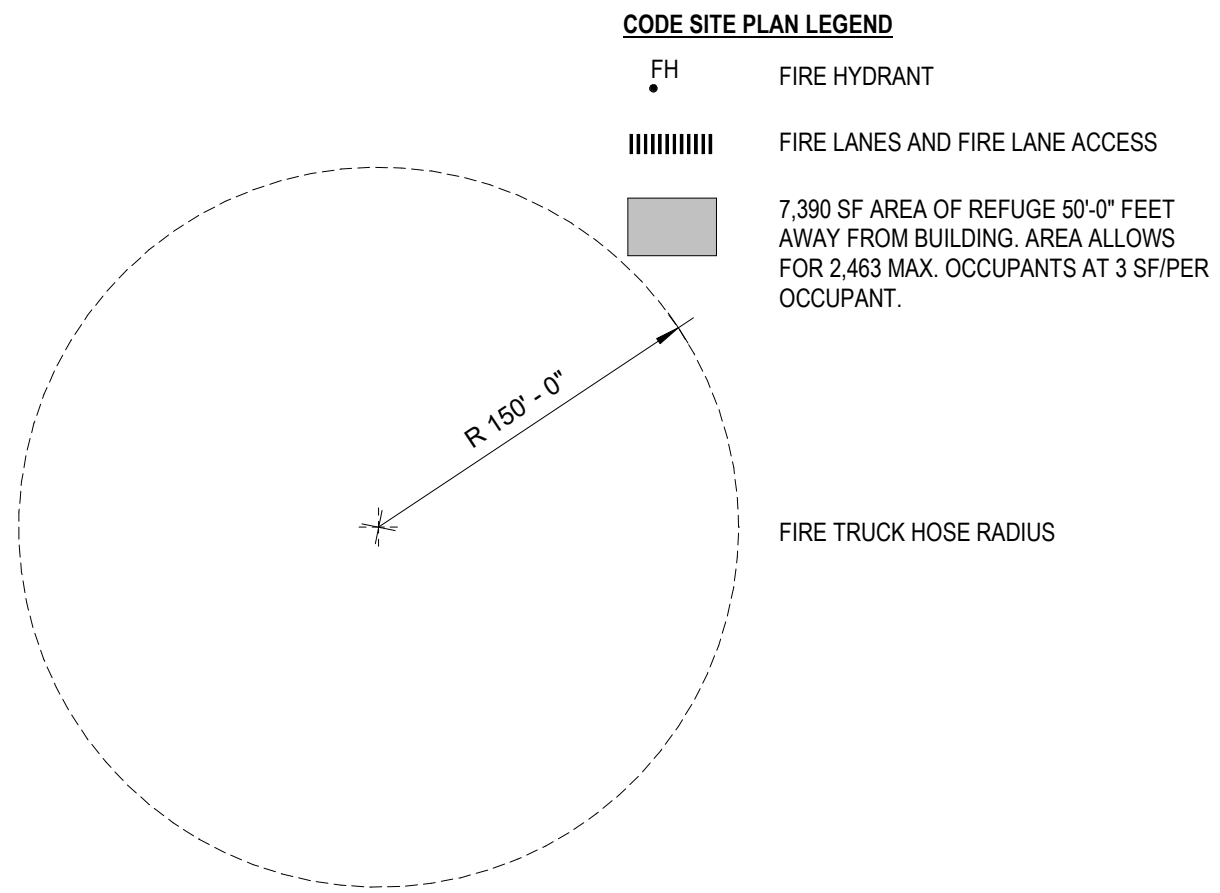
#### SIGNAGE GENERAL NOTES:

- A. ALL SIGN TYPES, TEXT AND NUMBERS TO BE VERIFIED WITH OWNER BEFORE ORDERING SIGNAGE.
- B.



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 **CODE SITE PLAN**  
SCALE: 1" = 80'-0"





## SYMBOL LEGEND

- OCCUPANCY LOAD  
 - ACCESSORY USE AREA  
(OCCUPANCY LOAD IS NOT INCLUDED IN LOADS BEYOND THIS ROOM)
- COMBINED OCCUPANT LOAD AT A GIVEN DOOR OR STAIR  
- TOTAL EXIT CAPACITY OF DOOR OR STAIR  
(THE CAPACITY OF DOORS ARE DETERMINED AS FOLLOWS:  
CLEAR OPENING WIDTH IN INCHES DIVIDED BY 0.15  
THE CAPACITY OF STAIRS ARE DETERMINED AS FOLLOWS:  
WIDTH IN INCHES DIVIDED BY 0.2 FOR SPRINKLERED PER 1005.3.1 EXCEPTION 1)
- COMBINED OCCUPANT LOAD AT A GIVEN DOOR (SUM OF THESE EQUALS TOTAL OCCUPANT LOAD)  
- TOTAL EXIT CAPACITY OF DOOR  
(THE CAPACITY OF DOORS ARE DETERMINED AS FOLLOWS:  
CLEAR OPENING WIDTH IN INCHES DIVIDED BY 0.15)
- PANIC DEVICE  
 - DOOR FIRE RATING

## WALL SEPARATION LEGEND

WALL HOURLY RATING	WALL FIRE RATING TYPE
0 = 0 HOUR	C = CORRIDOR
1/2 = 1/2 HOUR	EW = EXTERIOR WALL
1 = 1 HOUR	FB = FIRE BARRIER
2 = 2 HOUR	FP = FIRE PARTITION
3 = 3 HOUR	FSB = FIRE/SMOKE BARRIER
SP = SMOKE PARTITION	FW = FIRE WALL
SW = SMOKE WALL	HK = HORIZONTAL EXIT
	SB = SMOKE BARRIER
	VS = VERTICAL SHAFT
	VX = VERTICAL EXIT
	XP = EXIT PASSAGEWAY

## TYPICAL DOOR WIDTHS

DOOR WIDTH	CLEAR WIDTH	IBC 1005.1 FACTOR	ALLOWABLE OCCUPANCY
36"	33"	0.15	220
42"	39"	0.15	260
48"	45"	0.15	300
PAIR 36"	64"	0.15	426
PAIR 42"	76"	0.15	506
PAIR 48"	88"	0.15	586

## EXIT ACCESS STAIRWAYS:

- EXIT ACCESS STAIRWAYS AND RAMPS - TRAVEL DISTANCE ON EXIT ACCESS STAIRWAYS OR RAMPS SHALL BE INCLUDED IN THE EXIT ACCESS TRAVEL DISTANCE MEASUREMENT PER IBC 2018 1017.3.1.
- TWO-STORY OPENINGS - OPENINGS DO NOT CONNECT MORE THAN TWO STORIES PER IBC 712.1.9, EXCEPTION 1.
- EXIT ACCESS STAIRWAYS AND RAMPS SERVE ONLY TWO STORIES PER IBC 1019.3, EXCEPTION 1, AND DO NOT REQUIRE A SHAFT ENCLOSURE.

## BUILDING 1:

OCCUPANCY GROUP: E  
CONSTRUCTION TYPE: IIB  
ALLOWABLE AREA (IBC TABLE 506.2): 43,500 SF  
ALLOWABLE AREA INCREASE FOR FRONTAGE  
(IBC 506.2.3 SINGLE OCCUPANCY, MULTI STORY BUILDING  
IBC 506.3 FRONTAGE INCREASE):

IF= .6

Aa=[At + (NS \* If)] \* Sa

Aa=[43,500+(14,500\*.6)]

TOTAL ALLOWABLE AREA PER FLOOR: 52, 200

ACTUAL AREA PER FLOOR:

LEVEL 01: 20,385 SF

LEVEL 02: 20,385 SF

MAXIMUM ALLOWABLE BUILDING HEIGHT (PER TABLE 504.3): 75' - 0"

ACTUAL BUILDING HEIGHT: 42' - 3"

## BUILDING 2:

OCCUPANCY GROUP: E  
CONSTRUCTION TYPE: IIB  
ALLOWABLE AREA (IBC TABLE 506.2): 43,500 SF  
ALLOWABLE AREA INCREASE FOR FRONTAGE (IBC 506.3):

IF= .26

Aa=[At + (NS \* If)] \* Sa

Aa=[43,500 + (14,500 \* .26)]

TOTAL ALLOWABLE AREA PER FLOOR: 47, 270

ACTUAL AREA PER FLOOR:

LEVEL 01: 41,978 SF

LEVEL 02: 41,842 SF

MAXIMUM ALLOWABLE BUILDING HEIGHT (PER TABLE 504.3): 75' - 0"

ACTUAL BUILDING HEIGHT: 42' - 3"

## BUILDING 3:

OCCUPANCY GROUP: E  
CONSTRUCTION TYPE: IIB  
ALLOWABLE AREA (IBC TABLE 506.2): 58, 000 SF  
ALLOWABLE AREA INCREASE FOR FRONTAGE (IBC 506.3):

IF= .67

Aa=[At + (NS \* If)] \* Sa

Aa=[58,000 + (14,500 \* .67)]

TOTAL ALLOWABLE AREA PER FLOOR: 67, 715

ACTUAL AREA PER FLOOR:

LEVEL 01: 61,768 SF

MEZZANINE AND EQUIPMENT PLATFORMS: 5,718 SF

MAXIMUM ALLOWABLE BUILDING HEIGHT: 75'-0"

ACTUAL BUILDING HEIGHT: 32'-0"

## BUILDING 4:

OCCUPANCY GROUP: E  
CONSTRUCTION TYPE: IIB  
ALLOWABLE AREA (IBC TABLE 506.2): 58,000 SF  
ALLOWABLE AREA INCREASE FOR FRONTAGE (IBC 506.2.2, 506.3):

IF= .46

Aa=[At + (NS \* If)] \* Sa

Aa=[58,000 + (14,500 \* .46)]

TOTAL ALLOWABLE AREA PER FLOOR: 64,670

ACTUAL AREA PER FLOOR: LEVEL 01: 8,126 SF

MAXIMUM ALLOWABLE BUILDING HEIGHT: 75'-0"

ACTUAL BUILDING HEIGHT: 32'-0"

## BUILDING 5:

OCCUPANCY GROUP: S-2  
CONSTRUCTION TYPE: IIB  
ALLOWABLE AREA (IBC TABLE 506.2): 26,000 SF  
ALLOWABLE AREA INCREASE FOR FRONTAGE (IBC 506.2.2, 506.3):  
\*NONSEPARATED USE OCCUPANCY - ALLOWABLE AREA AND HEIGHT OF  
BUILDING BASED ON MOST RESTRICTIVE ALLOWANCES PER 508.3.2.

IF=.4

Aa=[At + (NS \* If)] \* Sa

Aa=[26, 000 + (26,000 \* .4)]

TOTAL ALLOWABLE AREA PER FLOOR: 36,400

ACTUAL AREA PER FLOOR: 4,829 SF

MAXIMUM ALLOWABLE BUILDING HEIGHT: 55'-0"

ACTUAL BUILDING HEIGHT: 14'-0"

## BUILDING 6:

OCCUPANCY GROUP: S-2  
CONSTRUCTION TYPE: IIB  
ALLOWABLE AREA (IBC TABLE 506.2): 26,000 SF  
ALLOWABLE AREA INCREASE FOR FRONTAGE (IBC 506.2.2, 506.3):

IF= .4

Aa=[At + (NS \* If)] \* Sa

Aa=[26, 000 + (26,000 \* .4)]

TOTAL ALLOWABLE AREA PER FLOOR: 36,400

ACTUAL AREA PER FLOOR: 740 SF

MAXIMUM ALLOWABLE BUILDING HEIGHT: 55'-0"

ACTUAL BUILDING HEIGHT: 14'-0"

## PROJECT LOCATION:

1001 SE BAILEY ROAD  
LEE'S SUMMIT, MO 64081

## OWNER NAME:

LEE'S SUMMIT R-7 SCHOOL DISTRICT

## OWNER CONTACT:

KYLE GORRELL, DIRECTOR LSR7 FACILITY SERVICES

## OWNER ADDRESS:

DEPARTMENT OF LEE'S SUMMIT SCHOOL DISTRICT  
FACILITY SERVICES  
502 SE TRANSPORT DRIVE  
LEE'S SUMMIT, MO 64081

## COUNTY: JACKSON COUNTY

## FIRE DEPARTMENT:

LEE'S SUMMIT FIRE DEPARTMENT

## WATER SUPPLY:

LEE'S SUMMIT WATER UTILITIES

## AUTHORITY HAVING JURISDICTION:

CITY OF LEE'S SUMMIT

## ARCHITECT OF RECORD:

DLR GROUP  
7290 WEST 133RD STREET, OVERLAND PARK, KS 66213

## CODES/REGULATIONS:

BUILDING: 2018 IBC  
FIRE: 2018 INTERNATIONAL FIRE CODE  
MECHANICAL: 2018 INTERNATIONAL MECHANICAL CODE  
PLUMBING: 2018 INTERNATIONAL PLUMBING CODE  
ELECTRICAL: 2017 NATIONAL ELECTRICAL CODE  
ACCESSIBLE STANDARD: ICC/ANSI A117.1-2017

## NEW CONSTRUCTION:

OCCUPANCY:

EDUCATIONAL GROUP E (SECTION 305): INSTRUCTIONAL AREAS

CONSTRUCTION TYPE (SECTION 602): TYPE IIB

ALLOWABLE HEIGHT (PER IBC TABLE 504.3): 75' - 0"

ALLOWABLE NUMBER OF STORIES (PER TABLE 504.4): 3

## SEPARATION REQUIREMENTS:

BUILDING SEPARATION

PER TABLE 706.4: 2-HOUR FIRE WALL

\*a. IN TYPE II CONSTRUCTION, WALLS SHALL BE PERMITTED TO HAVE A 2-HOUR FIRE-  
RESISTANCE RATING

## LIFE SAFETY

AUTOMATIC FIRE SUPPRESSION SYSTEM THROUGHOUT  
FIRE ALARMS THROUGHOUT  
FIRE EXTINGUISHERS THROUGHOUT  
EMERGENCY LIGHTING  
FIRE DEPARTMENT CONNECTIONS -SEE CIVIL AND PLUMBING PLANS  
FIRE ALARM ANNUNCIATOR PANEL (FAAP) - AT RECEPTION D100A  
FIRE ALARM CONTROL PANEL (FACP) - AT ELECTRICAL C116  
SMOKE CONTROL SYSTEM: NOT APPLICABLE  
MANUAL ALARMS  
COMMUNICATIONS AND ELECTRICAL ROOMS: NO UPS PROVIDED, NO RACK OF BATTERIES PROVIDED.  
PENETRATIONS THROUGH FLOORS (PIPING, CONDUIT, ETC.): ANNULAR SPACE AROUND PENETRATING ITEMS TO BE FILLED WITH APPROVED MATERIALS TO RESIST THE FREE PASSAGE OF FLAME AND THE PRODUCTS OF COMBUSTION, PER 2018 IBC 714.6.2 AND 718.2.5.  
DUCT PENETRATIONS THROUGH FLOORS: ANNULAR SPACE AROUND PENETRATING DUCT TO BE FILLED WITH AN APPROVED NON-COMBUSTIBLE MATERIAL THAT RESISTS THE FREE PASSAGE OF FLAME AND THE PRODUCTS OF COMBUSTION, PER 2018 IBC 717.6.3.2 AND 718.2.5

## PLUMBING FIXTURES

	# OCCUPANTS		WC REQ'D		WC PROVIDED		LAV REQ'D		LAV PROVIDED		DRINKING FOUNTAINS	
	M	W	M	W	M	W	M	W	M	W	REQ'D	PROV.
STUDENTS/ FACULTY: NOTES: CALCULATIONS BASED ON IPC 4.1 REQ'TS. OCCUPANT LOAD BASED ON PROJECTED 1,200 STUDENT/ 260 FACULTY COUNT	730	730	15	15	17	17	15	15	17	17	15	20
MAIN GYMNASIUM - PERFORMANCE SPECIAL EVENT NOTES: COMPETITION & AUXILIARY GYMS ARE NON-SIMULTANEOUS USE FROM STUDENT OCCUPANCY. BASED ON 1,389 OCCUPANTS SEATED ON BLEACHERS AND FLOOR W/ 63 STAGE OCCUPANTS	714	714	6	12	12	12	4	4	7	7	3	6
MAIN GYMNASIUM - ATHLETIC COMPETITION (ASSEMBLY) NOTES: COMPETITION & AUXILIARY GYMS ARE NON-SIMULTANEOUS USE FROM STUDENT OCCUPANCY. BASED ON 615 OCCUPANTS SEATED ON BLEACHERS AND 125 ATHLETES AND OFFICIALS	370	370	3	6	12	12	2	2	7	7	2	6
BASERBALL/SOFTBALL COMPLEX (ASSEMBLY) NOTES: CALCULATIONS BASED ON IPC 4.1 REQ'TS. OCCUPANT LOAD BASED ON PROJECTED 1,200 STUDENT/ 260 FACULTY COUNT. TO BE USED AS DESIGNATED STORM SHELTER FOR STUDENT/FACULTY POPULATION. CALCULATIONS BASED ON ICC-500 REQUIREMENT FOR PLUMBING FIXTURES	300	300	4	8	4	8	2	2	2	4	1	2
TORNADO SHELTER NOTES: PER ICC 500 TABLE 702.2. OCCUPANT LOAD BASED ON PROJECTED 1,200 STUDENT/ 260 FACULTY COUNT. TO BE USED AS DESIGNATED STORM SHELTER FOR STUDENT/FACULTY POPULATION. CALCULATIONS BASED ON ICC-500 REQUIREMENT FOR PLUMBING FIXTURES	730	730	3	3	3	3	1	1	1	1	-	-



- ( ) - OCCUPANCY LOAD
- ( ) - ACCESSORY USE AREA  
(OCCUPANCY LOAD IS NOT INCLUDED IN LOADS BEYOND THIS ROOM)
- ( ) - COMBINED OCCUPANT LOAD AT A GIVEN DOOR OR STAIR  
- TOTAL EXIT CAPACITY OF DOOR OR STAIR  
(THE CAPACITY OF DOORS ARE DETERMINED AS FOLLOWS:  
CLEAR OPENING WIDTH IN INCHES DIVIDED BY 0.15)  
THE CAPACITY OF STAIRS ARE DETERMINED AS FOLLOWS  
WIDTH IN INCHES DIVIDED BY 0.2 FOR SPRINKLERED PER 1005.3.1 (EXCEPTION 1))
- ( ) - COMBINED OCCUPANT LOAD AT A GIVEN DOOR. (SUM OF THESE EQUALS TOTAL OCCUPANT LOAD)  
- TOTAL EXIT CAPACITY OF DOORS ARE DETERMINED AS FOLLOWS:  
(THE CAPACITY OF DOORS ARE DETERMINED AS FOLLOWS:  
CLEAR OPENING WIDTH IN INCHES DIVIDED BY 0.15)
- (PD) - PANIC DEVICE  
XX MIN - DOOR FIRE RATING

<b>WALL HOURLY RATING</b>		<b>WALL FIRE RATING TYPE</b>
0 = 0 HOUR	■■■■■	C = CORRIDOR
1/2 = 1/2 HOUR	■■■■■	EW = EXTERIOR WALL
1 = 1 HOUR	■■■■■	FB = FIRE BARRIER
2 = 2 HOUR	■■■■■	FP = FIRE PARTITION
1 = 1 HOUR	■■■■■	FBS = FIRE SMOKE BARRIER
SP = SMOKE PARTITION	■■■■■	FW = FIRE WALL
SW = SMOKE WALL	■■■■■	HX = HORIZONTAL EXIT
		SB = SMOKE BARRIER
		VS = VERTICAL SHAFT
		VX = VERTICAL EXIT
		XP = EXIT PASSAGEWAY

DOOR WIDTH	CLEAR WIDTH	IBC 1005.1 FACTOR	ALLOWABLE OCCUPANCY
36"	33"	0.15	220
42"	39"	0.15	260
48"	45"	0.15	300
PAIR 36"	64"	0.15	426
PAIR 42"	76"	0.15	506
PAIR 48"	88"	0.15	586


EXIT ACCESS TRAVEL DISTANCE LVL 2: 238'-0" < 250'-0"  
(TABLE 1017.2 EXIT ACCESS TRAVEL DISTANCE)

MAXIMUM COMMON PATH OF TRAVEL LEVEL 2: 63'-0" < 75'-0"  
(TABLE 1006.2.1 SPACES WITH ONE EXIT OR EXIT ACCESS DOORWAY)

EXIT ACCESS TRAVEL DISTANCE: 238'-0" < 250'-0"  
(TABLE 1017.2 EXIT ACCESS TRAVEL DISTANCE)

MAXIMUM COMMON PATH OF TRAVEL: 70'-0" < 75'-0"  
(TABLE 1006.2.1 SPACES WITH ONE EXIT OR EXIT ACCESS DOORWAY)

PROTECTED OPENING  
IMAGINARY PROPERTY LINE

A diagram showing a building footprint with a protected opening and an imaginary property line. The building footprint is a rectangle with a smaller rectangle inside it. The smaller rectangle is labeled 'PROTECTED OPENING'. The larger rectangle is labeled 'IMAGINARY PROPERTY LINE'. The building footprint is shown in a perspective view, with the front face and side face visible. The protected opening is a door or window in the front face. The imaginary property line is a dashed line extending from the building footprint.

505.2.3 OPENNESS, EXCEPTION 1:  
MEZZANINES OR PORTIONS THEREOF ARE NOT  
REQUIRED TO BE OPEN TO THE ROOM IN WHICH THE  
MEZZANINES ARE LOCATED, PROVIDED THAT THE  
OCCUPANT LOAD OF THE AGGREGATE AREA OF THE  
ENCLOSED SPACE IS NOT GREATER THAN 10 \_\_\_\_\_

UPPER SEATING IS 334 - MEZZANINE LVL MOUNTED REAR  
TELESCOPING BLEACHERS. MEZZANINE MOUNTED BLEACHERS FRONT  
LOAD IN CONTINUATION TO (9) ROWS OF FORWARD TELESCOPING  
BLEACHERS AT MAIN LEVEL.

$$Aa = [At + (NS * If)] * Sa$$

$$Aa = [43,500 + (14,500 * .6)]$$

MAXIMUM ALLOWABLE BUILDING HEIGHT (PER TABLE 504.3): 75' - 0"  
ACTUAL BUILDING HEIGHT: 42' - 3"

$$Aa = [At + (NS * If)] * Sa$$

$$Aa = [43,500 + (14,500 * .26)]$$

MAXIMUM ALLOWABLE BUILDING HEIGHT (PER TABLE 504.3): 75' - 0"  
ACTUAL BUILDING HEIGHT: 42' - 3"

$$Aa = [At + (NS * If)] * Sa$$

$$Aa = [58,000 + (14,500 * .67)]$$

MAXIMUM ALLOWABLE BUILDING HEIGHT: 75'-0"  
ACTUAL BUILDING HEIGHT: 32'-0"

$$Aa = [At + (NS * If)] * Sa$$

$$Aa = [58,000 + (14,500 * .46)]$$

MAXIMUM ALLOWABLE BUILDING HEIGHT: 75'-0"  
ACTUAL BUILDING HEIGHT: 32'-0"

$$Aa = [At + (NS * If)] * Sa$$

$$Aa = [26,000 + (26,000 * .4)]$$

**BUILDING 6:**  
OCCUPANCY GROUP: S-2  
CONSTRUCTION TYPE: IIB  
ALLOWABLE AREA (IBC TABLE 506.2): 26,000 SF  
ALLOWABLE AREA INCREASE FOR FRONTAGE (IBC 506.2.2, 506.3):

$$Aa = [At + (NS * If)] * Sa$$

$$Aa = [26,000 + (26,000 * .4)]$$

**TOTAL ALLOWABLE AREA PER FLOOR: 36,400**  
**ACTUAL AREA PER FLOOR: 740 SF**  
**MAXIMUM ALLOWABLE BUILDING HEIGHT: 55'-0"**  
**ACTUAL BUILDING HEIGHT: 14'-0"**



MECHANICAL PLAN NOTES:

M13 REFRIGERATION PIPING, ELECTRICAL POWER, AND CONTROL WIRING FOR SPLIT SYSTEM SHOWN FOR REFERENCE ONLY. COORDINATE EXACT ROUTING PRIOR TO STARTING WORK. ENSURE ALL MANUFACTURERS RECOMMENDED REFRIGERATION DISTANCES ARE MAINTAINED.

M34 COORDINATE FINAL PLACEMENT OF FAN AND ASSOCIATED DUCTWORK WITH ALL REQUIRED NEC CLEARANCES OF ELECTRICAL EQUIPMENT.

M36 MOUNT TRANSFER GRILLES CENTERED ABOVE DOOR.

M37 END DUCT OPEN COVER WITH 1/2" WIRE MESH.

M15 PROVIDE HIGH AND LOW TRANSFER GRILLE FOR PIPE 6" CHASE.

M15 PROVIDE LOCKING MANUAL DAMPER IN TRANSFER DUCT.



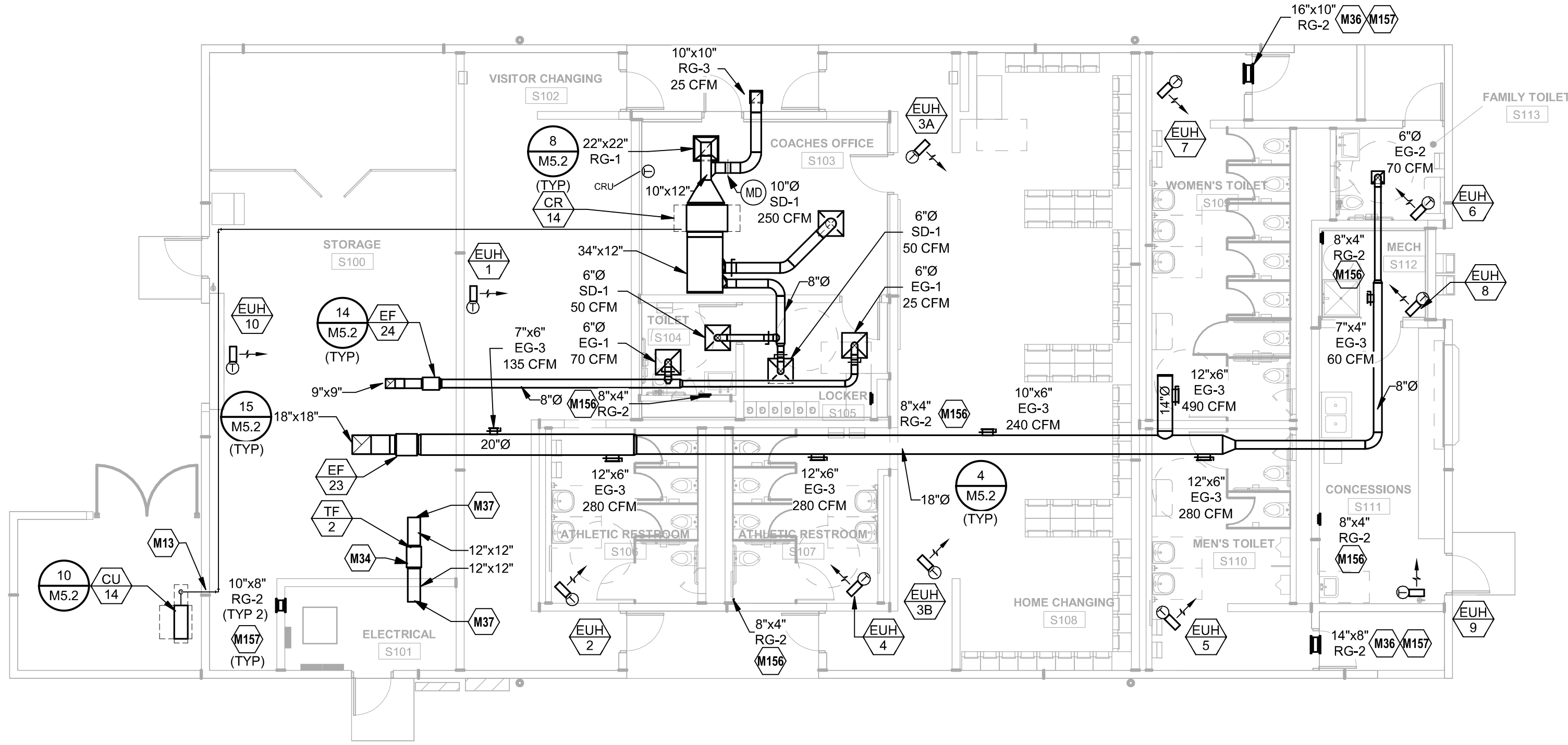
Oct 19 2020  
CARL J. HOLDEN  
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LEES SUMMIT, MO 64081  
TEL 913.201.1400  
WWW.HENDERSONENGINEERS.COM  
MO CORP ORATE NO. E-5680  
EXPIRES 12/31/2020

LEE'S SUMMIT MIDDLE SCHOOL #4  
LEE'S SUMMIT R-7 SCHOOL DISTRICT  
1001 SE BAILEY ROAD  
LEE'S SUMMIT, MO 64081

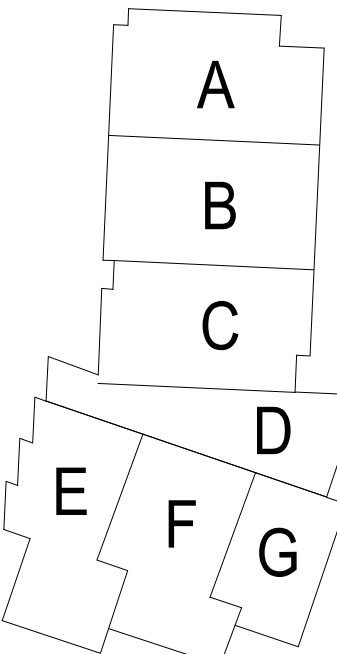
PACKAGE 3 - BUILDING & SITE  
10/08/20  
REVISIONS  
ADDENDUM 002

13-20102-00  
HVAC FIRST LEVEL PLAN - AREA S  
M1.1S



1 HVAC FIRST LEVEL PLAN - AREA S  
1/8" = 1'-0"

KEY PLAN



NORTH



## AIR HANDLING UNIT SCHEDULE (CHILLED WATER COOLING, HOT WATER HEATING)

MARK	MANUFACTURER	MODEL	UNIT TYPE	SUPPLY FAN				Supply Fan Quantlty	AIRFLOW	SF MIN OA	SF ABS MIN OA	V/PH	TH (MBH)	SH (MBH)	COOLING COIL												HEATING COIL												FILTERS		ELECTRICAL		WEIGHT (LBS)	NOTES																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																							
				FAN TYPE	CFM	ESP (IN)	TSP (IN)								BHP	EAT				LAT				FLOW (GPM)	EWT (°F)	LWT (°F)	MAX WPD (FT)	VALVE Cv	MAX APD (IN)	MAX VEL (FPM)	ROWS/ FPI	NO OF COILS	CAP (MBH)	EAT (°F DB)	LAT (°F DB)	FLOW (GPM)	EWT (°F)	LWT (°F)	MAX WPD (FT)	VALVE Cv	MAX APD (IN)	MAX VEL (FPM)			ROWS/ FPI	NO OF COILS	FINAL FILTERS		DISC TYPE	VOLTAGE																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																	
																(°F DB)	(°F WB)	(°F DB)	(°F WB)	(°F DB)	(°F WB)	(°F DB)	(°F WB)																								MERV	SP LOSS																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																			
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MODEL NUMBERS SHALL NOT BE CONSIDERED COMPLETE AND MATERIAL SHALL NOT BE ORDERED BY MANUFACTURER AND MODEL NUMBERS ONLY. REVIEW THE COMPLETE DESCRIPTION, NOTES AND SPECIFICATIONS TO DETERMINE THE EXACT MATERIAL AND ACCESSORIES TO BE ORDERED. THE MANUFACTURERS LISTED ARE THE BASIS FOR THE DESIGN.

NOTES:

- A. DISCONNECT SWITCH PROVIDED BY DIVISION 26 CONTRACTOR.  
B. PROVIDE WITH MANUFACTURE SUPPLIED PIEZOMETER RINGS AND TRANSDUCERS ON SUPPLY FAN(S).  
C. PROVIDE WITH MANUFACTURE SUPPLIED ECM MOTOR.  
D. SPECIFIED FAN ESP ACCOUNTS FOR DUCT LOSSES EXTERNAL TO UNIT. ESP EXCLUDES UNIT INLET AND OUTLET OPENING LOSSES.  
E. SPECIFIED FAN TSP INCLUDES EXTERNAL STATIC PRESSURE LOSSES, UNIT INLET AND OUTLET OPENING LOSSES, AND INTERNAL FILTER, COIL, AND CASING LOSSES. FILTER LOSS IS AT A MAXIMUM OF 400 FPM FACE VELOCITY. MAXIMUM PRESSURE DROP THROUGH EACH RETURN AIR, SUPPLY AIR, ECONOMIZER AIR, AND MIXED AIR OPENING SHALL BE 0.3 INCHES W.C.  
F. PROVIDE MOTOR HORSEPOWER TO OVERCOME INTERNAL UNIT STATIC PRESSURE DROP PLUS SPECIFIED EXTERNAL STATIC PRESSURE DROP. NOMINAL MOTOR HP SHALL BE NO LARGER THAN THE FIRST AVAILABLE NOMINAL MOTOR SIZE GREATER THAN THE REQUIRED BHP.[See Designer Note 9]  
G. DIVISION 26 CONTRACTOR SHALL PROVIDE SMOKE DETECTORS IN RETURN AIR DUCT(S).  
H. PROVIDE MOTOR HORSEPOWER TO OVERCOME INTERNAL UNIT STATIC PRESSURE DROP PLUS SPECIFIED EXTERNAL STATIC PRESSURE DROP.  
I. UNIT SHALL BE DRAW THRU CONFIGURATION.  
J. PROVIDE WITH MANUFACTURE SUPPLIED EQUIPMENT SUPPORT.  
K. SELECT EQUIPMENT FOR ELEVATION OF 1000 FEET ABOVE SEA LEVEL.  
L. ABS. MIN. O/A IS THE ABSOLUTE MINIMUM OUTSIDE AIR CFM USING VENTILATION RESET OR DEMAND CONTROL VENTILATION.  
M. DIVISION 23 TEMPERATURE CONTROLS CONTRACTOR SHALL PROVIDE CONTROL VALVE SIZED USING THE SCHEDULED CONTROL VALVE AUTHORITY FLOW COEFFICIENT (Cv).  
N. PROVIDE RETURN AIR DAMPERS AND A SPLIT OUTSIDE AIR DAMPER SECTION. SIZE ONE OUTSIDE AIR SECTION FOR THE MIN O/A CFM. SIZE THE SECOND OUTSIDE AIR SECTION FOR ECONOMIZER OPERATION.  
O. VALVE Cv IS BASED ON SPECIFIC GRAVITY OF WATER.  
P. MANUFACTURER TO PROVIDE THREE-WAY CONTROL VALVE FOR THE HOT WATER HEATING COIL.  
Q. PROVIDE UNIT WITH HOTWATER REHEAT COIL.

## CABINET UNIT HEATER SCHEDULE (HYDRONIC)

MARK	LOCATION	MANUFACTURER	MODEL	MIN OUT (MBH)	EAT (°F)	LAT (°F)	FLOW (GPM)	EWT (°F)	LWT (°F)	MAX WPD (FT)	CFM	MOTOR HP	V/PH	DISC TYPE	NOTES
UH-1	D100 ENTRY VESTIBULE	STERLING	W-1070-02	9.4	60	97.8	1.89	130	120	0.2	230	1/15	120/1	NF	A-C, E
UH-2	EAST VESTIBULE	STERLING	W-1070-02	9.4	60	97.8	1.89	130	120	0.2	230	1/15	120/1	NF	A-C, E
UH-3	G11 VESTIBULE	STERLING	W-1070-02	9.4	60	97.8	1.89	130	120	0.2	230	1/15	120/1	NF	A-C, E
UH-4	G11 RECEIVING	STERLING	W-1070-02	9.4	60	97.8	1.89	130	120	0.2	230	1/15	120/1	NF	A-C, E
UH-13	1008 RISER ROOM	STERLING	W-1070-02	9.4	60	97.8	1.89	130	120	0.2	230	1/15	120/1	NF	A-C, E

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NOTES:

- A. PROVIDE WITH WALL MOUNTED THERMOSTAT.  
B. PROVIDE NECESSARY MOUNTING BRACKET AND ACCESSORIES FOR WALL MOUNTING.  
C. PROVIDE FACTORY MOUNTED DISCONNECT SWITCH.  
D. PROVIDE WITH THREE-WAY CONTROL VALVE.  
E. PROVIDE WITH TWO-WAY CONTROL VALVE.

## LOUVER SCHEDULE

MARK	AREA SERVED	SERVICE	MANUFACTURER	MODEL	WIDTH (IN)	LENGTH (IN)	Flow	MIN FREE AREA (SF)	MAX VEL (FPM)	MAX APD (IN W.C.)	NOTES
EL 1	AHU1	EXHAUST	RUSKIN	ELF6350DMP	72"	66"	12000 CFM	21.68	590 FPM	0.10 in-wg	A-E
IL 1	AHU1	INTAKE	RUSKIN	ELF6350DMP	72"	66"	12000 CFM	21.68	590 FPM	0.05 in-wg	A-E
EL 2	AHU2	EXHAUST	RUSKIN	ELF6350DMP	72"	66"	12500 CFM	21.68	580 FPM	0.05 in-wg	A-E
EL 2	AHU2	EXHAUST	RUSKIN	ELF6350DMP	72"	66"	12500 CFM	21.68	580 FPM	0.01 in-wg	A-E
EL 3	AHU3	EXHAUST	RUSKIN	ELF6350DMP	72"	66"	13200 CFM	21.68	610 FPM	0.05 in-wg	A-E
IL 3	AHU3	INTAKE	RUSKIN	ELF6350DMP	72"	66"	13200 CFM	21.68	610 FPM	0.01 in-wg	A-E
EL 4	AHU4	EXHAUST	RUSKIN	ELF6350DMP	72"	66"	11500 CFM	21.68	530 FPM	0.10 in-wg	A-E
IL 4	AHU4	INTAKE	RUSKIN	ELF6350DMP	72"	66"	11500 CFM	21.68	530 FPM	0.05 in-wg	A-E
EL 5	AHU5	INTAKE	RUSKIN	ELF6350DMP	72"	66"	11500 CFM	21.68	530 FPM	0.05 in-wg	A-E
EL 5	AHU5	EXHAUST	RUSKIN	ELF6350DMP	72"	66"	11500 CFM	21.68	530 FPM	0.01 in-wg	A-E
EL 6	AHU6	EXHAUST	RUSKIN	ELF6350DMP	72"	66"	11500 CFM	21.68	530 FPM	0.01 in-wg	A-E
IL 6	AHU6	INTAKE	RUSKIN	ELF6350DMP	72"	64"	11500 CFM	21.68	530 FPM	0.01 in-wg	A-E
IL 7	AHU 7	INTAKE	RUSKIN	L375D	70"	60"	11000 CFM	14.64	750 FPM	0.05 in-wg	A-E
EL 7	AHU 7	EXHAUST	RUSKIN	L375D	78"	54"	11000 CFM	15.86	690 FPM	0.05 in-wg	A-E
IL 8	AHU 8	INTAKE	RUSKIN	L375D	70"	60"	12500 CFM	14.64	850 FPM	0.05 in-wg	A-E
EL 8	AHU 8	EXHAUST	RUSKIN	L375D	78"	54"	12500 CFM	15.86	790 FPM	0.05 in-wg	A-E
EL 9	AHU 9	EXHAUST	RUSKIN	L375D	42"	54"	7000 CFM	8.14	860 FPM	0.05 in-wg	A-E
EL 10	AHU 10	EXHAUST	RUSKIN	L375D	42"	54"	7000 CFM	8.14	860 FPM	0.05 in-wg	A-E
EL 11	AHU 11	EXHAUST	RUSKIN	L375D	36"	54"	5400 CFM	6.91	780 FPM	0.05 in-wg	A-E
EL 12	AHU 12	EXHAUST	RUSKIN	L375D	36"	72"	7800 CFM	9.51	830 FPM	0.05 in-wg	A-E
LV 15	G107	INTAKE	RUSKIN	L375D	24"	42"	2360 CFM	3.37	700 FPM	0.05 in-wg	A-E
LV 12	MECHANICAL ROOM	INTAKE	RUSKIN	L375D	24"	30"	925 CFM	2.24	410 FPM	0.05 in-wg	A-E
LV 4	SHELTER	VENTILATION	RUSKIN	ELF375DX	48"	78"	12000 CFM	14.36	840 FPM	0.05 in-wg	A-E
LV 2	SHELTER	VENTILATION	RUSKIN	ELF375DX	48"	78"	0 CFM	14.36	0 FPM	0.05 in-wg	A-E
LV 3	SHELTER	VENTILATION	RUSKIN	XP900	48"	78"	0 CFM	12.42	0 FPM	0.05 in-wg	A-E
LV 1	SHELTER	VENTILATION	RUSKIN	XP900	48"	78"	0 CFM	12.42	0 FPM	0.05 in-wg	A-E
LV 5	SHELTER	VENTILATION	RUSKIN	ELF375DX	48"	66"	0 CFM	14.36	0 FPM	0.05 in-wg	A-E
LV 8	SHELTER	VENTILATION	RUSKIN	ELF375DX	48"	66"	0 CFM	14.36	0 FPM	0.05 in-wg	A-E
LV 9	SHELTER	VENTILATION	RUSKIN	ELF375DX	48"	66"	0 CFM	14.36	0 FPM	0.05 in-wg	A-E
LV 12	SHELTER	VENTILATION	RUSKIN	ELF375DX	48"	66"	0 CFM	14.36	0 FPM	0.05 in-wg	A-E
LV 6	SHELTER	VENTILATION	RUSKIN	XP900	48"	66"	0 CFM	12.42	0 FPM	0.05 in-wg	A-E
LV 7	SHELTER	VENTILATION	RUSKIN	XP900	48"	66"	0 CFM	12.42	0 FPM	0.05 in-wg	A-E
LV 10	SHELTER	VENTILATION	RUSKIN	XP900	48"	66"	0 CFM	12.42	0 FPM	0.05 in-wg	A-E



VARIABLE FREQUENCY DRIVES (VFD'S)											
MARK	SERVING EQUIPMENT	NUMBER OF MOTORS ON THE DRIVE	HP OF EACH MOTOR ON THE DRIVE	MANUFACTURER	VOLTAGE / PHASE	ENCLOSURE	MOUNTING LOCATION		BYPASS	NOTES	
VFD-1	SHWP-1	1	15	ABB ULH	480V - 3 PH	INDOOR - NEMA 1	WALL		NONE	A-D	
VFD-2	SHWP-2	1	15	ABB ULH	480V - 3 PH	INDOOR - NEMA 1	WALL		NONE	A-D	
VFD-3	CHWP-1	1	30	ABB ULH	480V - 3 PH	INDOOR - NEMA 1	WALL		NONE	A-D	
VFD-4	CHWP-2	1	30	ABB ULH	480V - 3 PH	INDOOR - NEMA 1	WALL		NONE	A-D	
VFD-5	PHWP-1	1	3	ABB ULH	480V - 3 PH	INDOOR - NEMA 1	WALL		NONE	A-D	
VFD-6	PHWP-2	1	3	ABB ULH	480V - 3 PH	INDOOR - NEMA 1	WALL		NONE	A-D	
VFD-7	PHWP-3	1	3	ABB ULH	480V - 3 PH	INDOOR - NEMA 1	WALL		NONE	A-D	
VFD-8	RF-1	1	3	ABB ULH	480V - 3 PH	INDOOR - NEMA 1	WALL		NONE	A-D	
VFD-9	RF-2	1	5	ABB ULH	480V - 3 PH	INDOOR - NEMA 1	WALL		NONE	A-D	
VFD-10	RF-3	1	5	ABB ULH	480V - 3 PH	INDOOR - NEMA 1	WALL		NONE	A-D	
VFD-11	RF-4	1	3	ABB ULH	480V - 3 PH	INDOOR - NEMA 1	WALL		NONE	A-D	
VFD-12	RF-5	1	5	ABB ULH	480V - 3 PH	INDOOR - NEMA 1	WALL		NONE	A-D	
VFD-13	RF-6	1	5	ABB ULH	480V - 3 PH	INDOOR - NEMA 1	WALL		NONE	A-D	
VFD-14	RF-7	1	5	ABB ULH	480V - 3 PH	INDOOR - NEMA 1	WALL		NONE	A-D	
VFD-15	RF-8	1	5	ABB ULH	480V - 3 PH	INDOOR - NEMA 1	WALL		NONE	A-D	
VFD-16	RF-9	1	1.5	ABB ULH	480V - 3 PH	INDOOR - NEMA 1	WALL		NONE	A-D	
VFD-17	RF-10	1	1.5	ABB ULH	480V - 3 PH	INDOOR - NEMA 1	WALL		NONE	A-D	
VFD-18	RF-11	1	2	ABB ULH	480V - 3 PH	INDOOR - NEMA 1	WALL		NONE	A-D	
VFD-19	RF-12	1	2	ABB ULH	480V - 3 PH	INDOOR - NEMA 1	WALL		NONE	A-D	

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GENERAL NOTES APPLICABLE TO ALL ITEMS:

1. DRIVE AMPS SHALL BE RATED PER NATIONAL ELECTRICAL CODE TABLE 430.250

SCHEDULE NOTES:

A. PROVIDE "EARLY BREAK" AUXILIARY CONTACTS IN MOTOR DISCONNECT THAT DEACTIVATES THE VFD WHEN MOTOR DISCONNECT SWITCH IS OPEN.

B. PROVIDE D/VD FILTER.

C. PROVIDE OUTPUT REACTOR

GRILLE, REGISTER AND DIFFUSER SCHEDULE							
PLAN MARK	MANUFACTURER	MODEL	FACE TYPE	MOUNTING LOCATION	FACE SIZE	MAX NC	PRESSURE DROP
EG-1	PRICE	80	EGGCRATE	CEILING	24"x24"	25	0.05 in-wg
EG-2	PRICE	80	EGGCRATE	CEILING	12"x12"	25	0.05 in-wg
EG-3	PRICE	500	LOUVER	DUCT	REFER TO PLANS	25	0.05 in-wg
LSD1	PRICE	SDS100	LINEAR SLOT	CEILING	60" x 2-SLOT	25	0.08 in-wg
LSD2	PRICE	SDS100	LINEAR SLOT	CEILING	48" x 3-SLOT	25	0.08 in-wg
LSD3	PRICE	SDS100	LINEAR SLOT	CEILING	60" x 2-SLOT	25	0.08 in-wg
LSD4	PRICE	SDS100	LINEAR SLOT	SIDEWALL	60" x 2-SLOT	25	0.08 in-wg
RG-1	PRICE	80	EGGCRATE	CEILING	24"x24"	25	0.05 in-wg
RG-2	PRICE	500	LOUVER	SIDEWALL	REFER TO PLANS	25	0.05 in-wg
RG-3	PRICE	80	EGGCRATE	CEILING	12"x12"	25	0.05 in-wg
SD-1	PRICE	SPD	PLAQUE	CEILING	24"x24"	25	0.08 in-wg
SD-2	PRICE	SPD	PLAQUE	CEILING	12"x12"	25	0.08 in-wg
SG1	PRICE	500	LOUVER	DUCT	REFER TO PLANS	25	0.08 in-wg
SG2	PRICE	HCD	LOUVER	DUCT	REFER TO PLANS	25	0.08 in-wg
SG3	PRICE	500	LOUVER	SIDEWALL	REFER TO PLANS	25	0.08 in-wg

MODEL NUMBERS SHALL NOT BE CONSIDERED COMPLETE AND MATERIAL SHALL NOT BE ORDERED BY MANUFACTURER AND MODEL NUMBERS ONLY. REVIEW THE COMPLETE DESCRIPTION, NOTES AND SPECIFICATIONS TO DETERMINE THE EXACT MATERIAL AND ACCESSORIES TO BE ORDERED. THE MANUFACTURERS LISTED ARE THE BASIS FOR THE DESIGN.

NOTES:

- 4-WAY THROW PATTERN UNLESS OTHERWISE INDICATED BY FLOW ARROWS ON DRAWINGS. (PROVIDE ONE SPARE LOOSE BLANK-OFF DEFLECTOR PER DIFFUSER FOR USE DURING BALANCING AS REQUIRED.)
- NECK SIZE SHOWN ON DRAWINGS. PROVIDE BRANCH DUCT TO MATCH NECK SIZE UNLESS OTHERWISE SHOWN ON DRAWINGS.
- BAKED ENAMEL FINISH, WHITE TO MATCH CEILING COLOR.
- FRONT BLADES PARALLEL TO LONG DIMENSION.
- DOUBLE DEFLECTION BARS SHALL BE ADJUSTABLE.
- FRAME TYPE TO MATCH CEILING/WALL CONSTRUCTION. COORDINATE WITH ARCHITECTURAL REFLECTED CEILING/WALL PLAN.
- PROVIDE OPPOSED BLADE DAMPER ADJUSTABLE FROM FACE OF DEVICE.
- PROVIDE DIFFUSERS, LINEAR SLOTS, AND GRILLES WITH NO EXPOSED MOUNTING SCREWS.
- PAINT ALL INTERIOR SURFACES SLOTS, GRILLES AND PLENUMS FLAT BLACK.
- FOR LAY-IN DIFFUSER INSTALLED IN A HARD CEILING, CONTRACTOR SHALL PROVIDE REMOTE CABLE-OPERATED VOLUME DAMPER BY METROPOLITAN AIR TECHNOLOGIES MODEL RT2050 WITH WITH EXTERNAL WORM GEAR OPERATOR OR EQUIVALENT YOUNG REGULATOR SHALL INCLUDE GLVANIZED STEEL DUCT WITH ROLLED BEAD STIFFENERS, REINFORCED BLADE, SELF LUBRICATING BEARING AND WORM GEAR DAMPER SHALL BE INSTALLED IN BRANCH DUCT NOT INLET OF PLenum DISER.
- EGGCRATE FACE TO MATCH FULL PANEL SIZE LISTED ON SCHEDULE. CONTRACTOR TO PROVIDE DUCT TRANSITION TO GRILLE AS REQUIRED.
- SUPPLY PLENUM MAY BE FIELD FABRICATED BASED ON PROVIDED DETAILS, OR PURCHASED FROM THE SLOT DIFFUSER, MANUFACTURER.

COMPUTER ROOM UNIT SCHEDULE											
MARK	MANUFACTURER	MODEL	REFR TYPE	SUPPLY FAN CFM	ESP (IN)	HP	TC (MBH)	SC (MBH)	HEATING COIL CAP (MBH)	MIN O/A CFM	ELECTRICAL INDOOR UNIT V/PH MCA
CR 1	mitsubishi	PKA-A18	R-410A	370	0.0	0.04	18.0	12.2	11.3	0	208/1
CR 2	mitsubishi	PKA-A18	R-410A	370	0.0	0.04	18.0	12.2	11.3	0	208/1
CR 3	mitsubishi	PKA-A18	R-410A	370	0.0	0.04	18.0	12.2	11.3	0	208/1
CR 4	mitsubishi	PKA-A18	R-410A	370	0.0	0.04	18.0	12.2	11.3	0	208/1
CR 5	mitsubishi	PKA-A18	R-410A	370	0.0	0.04	18.0	12.2	11.3	0	208/1
CR 6	mitsubishi	PKA-A18	R-410A	370	0.0	0.04	18.0	12.2	11.3	0	208/1
CR 7	mitsubishi	PKA-A18	R-410A	370	0.0	0.04	18.0	12.2	11.3	0	208/1
CR 8	mitsubishi	PKA-A18	R-410A	370	0.0	0.04	18.0	12.2	11.3	0	208/1
CR 9	mitsubishi	PKA-A18	R-410A	370	0.0	0.04	18.0	12.2	11.3	0	208/1
CR 10	mitsubishi	PKA-A18	R-410A	370	0.0	0.04	18.0	12.2	11.3	0	208/1
CR 11	mitsubishi	PKA-A18	R-410A	370	0.0	0.04	18.0	12.2	11.3	0	208/1
CR 12	mitsubishi	PKA-A18	R-410A	370	0.0	0.04	18.0	12.2	11.3	0	208/1
CR 13	mitsubishi	PKA-A18	R-410A	370	0.0	0.04	18.0	12.2	11.3	0	208/1
CR 14	mitsubishi	PKA-A12	R-410A	320	0.0	0.04	12.0	9.7	9.2	0	208/1
CR 15	mitsubishi	PKA-A12	R-410A	320	0.0	0.04	12.0	9.7	9.2	0	208/1
CR 16	mitsubishi	PKA-A12	R-410A	320	0.0	0.04	12.0	9.7	9.2	0	208/1

MODEL NUMBERS SHALL NOT BE CONSIDERED COMPLETE AND MATERIAL SHALL NOT BE ORDERED BY MANUFACTURER AND MODEL NUMBERS ONLY. REVIEW THE COMPLETE DESCRIPTION, NOTES AND SPECIFICATIONS TO DETERMINE THE EXACT MATERIAL AND ACCESSORIES TO BE ORDERED. THE MANUFACTURERS LISTED ARE THE BASIS FOR THE DESIGN.

NOTES:

- EQUIPMENT SIZED FOR 100°F AMBIENT TEMPERATURE.
- PROVIDE 2" MERV 8, EFFICIENT THROWAWAY AIR FILTERS.
- PROVIDE UNIT WITH INTEGRAL STARTER AND NON-FUSED DISCONNECT SWITCH.
- PROVIDE UNIT WITH INTEGRAL CONDENSATE PUMP.

FAN-POWERED VARIABLE AIR VOLUME TERMINAL SCHEDULE (HYDRONIC HEAT)																					
MARK	SERVED FROM	ZONE SERVED	MANUFACTURER	MODEL	BOX SIZE	INLET SIZE (IN)	PRIMARY CFM	MIN PRIM CFM	PRIM AIR TEMP (F)	HEATING COIL				FAN				CP TRANS V/PH	NOTES		
										EAT	LAT	MBH	GPM	ROW	CFM	HP	VOLTS			PH	FREQ UENCY
VAV 201	AHU-2	LVL1 - AREA B	PRICE	DTOP	3	8"	600	250	60 °F	60.0	92 °F	11.6	1 GPM	2	350 CFM	0.2 5	120 V	1	60 Hz	120/1	A-P
VAV 324	AHU-3	LVL1 - AREA C	PRICE	DTOP	3	8"	1000	500	60 °F	60.0	92 °F	36.5	1 GPM	2	500 CFM	0.2 5	120 V	1	60 Hz	120/1	A-P

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NOTES:

- HEATING COIL BASED ON 130 °F ENTERING WATER TEMPERATURE AND 100 °F LEAVING WATER TEMPERATURE.
- INSTALL FLEXIBLE DUCT CONNECTOR AT INLET CONNECTION.
- PROVIDE INTEGRAL DISCONNECT SWITCH.
- PROVIDE FACTORY INSTALLED CONTROL POWER (CP) TRANSFORMER. COORDINATE PRIMARY POWER WITH ELECTRICAL DRAWINGS.
- BOX NOT TO EXCEED SCHEDULED DISCHARGE OR RADIATED SOUND NO LEVEL USING 0.5" PRESSURE DROP.
- PROVIDE FACTORY-INSTALLED, PRESSURE INDEPENDENT, DDC CONTROL PACKAGE.
- PROVIDE FACTORY FURNISHED, FIELD INSTALLED TEMPERATURE SENSOR AT VAV BOX INLET AND INTEGRAL CONTROLS FOR AUTOMATIC CHANGEOVER BETWEEN HEATING AND COOLING MODE.
- PROVIDE BOX WITH EITHER RIGHT HAND OR LEFT HAND CONFIGURATION AS SHOWN ON DRAWINGS.
- FURNISH WITH VAV BOX CONTROLLER AND HIGH SPEED ELECTRONIC ACTUATOR.
- BOX SELECTED AT 1,000 FEET ABOVE SEA LEVEL.
- INLET SIZE SHOWN IS THE MINIMUM ALLOWABLE INLET SIZE. NO SMALLER SIZES SHALL BE ACCEPTED.
- PROVIDE FILTER FRAME WITH 1" THROWAWAY FILTERS.
- MOUNT HEATING COIL ON SUPPLY AIR DISCHARGE DUCT.
- FAN CFM BASED ON 0.35" MINIMUM STATIC PRESSURE LEAVING BOX.

## MAKEUP AIR UNIT SCHEDULE (DX COOLING, (NATURAL GAS HEAT)

MARK	MANUFACTURER	MODEL	AREA SERVED	AREA	UNIT TYPE	SUPPLY FAN				DX COOLING COIL				GAS HEAT EXCHANGER				ELECTRICAL				NOTES		
						FAN TYPE	CFM	ESP (IN)	TH (MBH)	SH (MBH)	EAT		LAT		REFR TYPE	MAX VEL (FPM)	MIN OUT (MBH)	NOM INPUT (MBH)	MIN EFF (%)	LAT (°F DB)	V/PH		DISC TYPE	WEIGHT (LBS)
											(°F DB)	(°F WB)	(°F DB)	(°F WB)										
MAU 1	CAPTIVE AIR	A2-D.250-20-P200-M	ROOF	AREA G	SINGLE ZONE	FC	2362	1.3	55.6	36.0	96.4	74.7	85.0	71.4	R4-10A	500	161.0	175.0	80	62.0	208/3	NF	1374	A-U

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NOTES:

- EQUIPMENT PROVIDED BY OTHERS TO MEET REQUIREMENTS OF THIS SCHEDULE.
- PROVIDE INLET HOOD WITH CLEANABLE ALUMINUM MESH FILTERS.
- PROVIDE FACTORY MOUNTED DISCONNECT INSTALLED ON SERVICE SIDE OF UNIT.
- PROVIDE UNIT WITH SINGLE POINT ELECTRICAL CONNECTION.
- SPECIFIED FAN ESP ACCOUNTS FOR DUCT LOSSES EXTERNAL TO UNIT. FILTER LOSS IS AT A MAXIMUM OF 400 FPM FACE VELOCITY.
- PROVIDE MOTOR HORSEPOWER TO OVERCOME INTERNAL UNIT STATIC PRESSURE DROP PLUS SPECIFIED EXTERNAL STATIC PRESSURE DROP. NOMINAL MOTOR HP SHALL BE NO LARGER THAN THE FIRST AVAILABLE NOMINAL MOTOR SIZE GREATER THAN THE REQUIRED BHP.
- DIVISION 23 CONTRACTOR SHALL PROVIDE SMOKE DETECTORS IN SUPPLY AIR DUCT(S).
- PROVIDE INSULATED ROOF CURB WITH MINIMUM HEIGHT REQUIRED TO MAINTAIN BOTTOM OF EQUIPMENT A MINIMUM OF 16 INCHES ABOVE FINISHED ROOF SURFACE. PROVIDE SLOPED CURB IF NEEDED TO MATCH ROOF SLOPE. COORDINATE WITH ROOF INSULATION THICKNESS AND ROOF TAPER AT INSTALLED LOCATION. COORDINATE CURB TYPE WITH DRAWINGS.
- SCHEDULED WEIGHT IS THE MAXIMUM ALLOWABLE OPERATING WEIGHT OF THE EQUIPMENT.
- PROVIDE WITH STAINLESS STEEL HEAT EXCHANGER.
- PROVIDE HEATER TO MEET OR EXCEED SCHEDULED MINIMUM MBH OUTPUT. NOMINAL INPUT IS BASED ON LISTED MANUFACTURER'S STANDARD PRODUCT. COORDINATE EQUIPMENT GAS LOAD WITH PLUMBING CONTRACTOR IF DIFFERENT FROM THAT SCHEDULED. MEET MINIMUM EFFICIENCY SCHEDULED.
- MAKE UP AIR UNIT DESIGNED FOR ELEVATION OF 1000 FEET ABOVE SEA LEVEL.
- PROVIDE UNIT WITH VERTICAL SUPPLY AIR DUCT DISCHARGE THROUGH UNIT CURB.
- PROVIDE UNIT WITH GRAVITY BACK DRAFT DAMPERS.
- DIVISION 26 SHALL INTERLOCK MAKE UP AIR UNIT WITH HOOD CONTROL PANEL TO OPERATE AT THE SAME TIME AS THE KITCHEN EXHAUST FAN(S).
- DIVISION 26 SHALL INTERLOCK MAKE UP AIR UNIT TO SHUT DOWN FROM A SIGNAL FROM THE HOOD FIRE SUPPRESSION ANSUL SYSTEM.
- PROVIDE WITH DISCHARGE DUCT SENSOR WITH MODULATING OR STAGED COOLING AND HEATING CAPABILITY AS REQUIRED FOR OPERATION OF CONTROLS.

## DUST COLLECTOR

MARK	MANUFACTURER	MODEL	AREA SERVED	AIRFL OW (CFM)	ESP (IN)	NOM HP	ELECTRICAL			WEIGHT (LBS)	NOTES
DC 1	DONALDSON	UMA 250		2425	10.0	10 W	14 A	460/3	NF	1275	A.B
DC 2	DONALDSON	UMA 250		2425	10.0	10 W	14 A	460/3	NF	1275	A.B

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NOTES:

- FURNISH MOTOR CONTROLLER WITH VFD FOR BLOWER MOTOR FOR OUTDOOR LOCATION. REFER TO PLANS FOR LOCATION. PROVIDE REMOTE START/STOP IN SHOP FOR REMOTE OPERATION OF DUST COLLECTOR.
- PROVE DUST LEVEL INDICATOR CONSISTING OF MECHANICAL PADDLE AND COTROL PANEL WITH ALARM.

## ROOF HOOD SCHEDULE

MARK	SERVICE (INTAKE, EXHAUST)	MANUFACTURER	MODEL	CFM	MAX THROAT VEL (FPM)	MAX APD (IN)	THROAT (L" x W")	CURB (L" x W")	WEIGHT (LBS)	NOTES
RH 1	INTAKE	GREENHECK	WH	21900	800	0.1	84X54	92X62	259	A.B
RH 2	INTAKE	GREENHECK	WH	5400	800	0.1	40X26	48X36	75	A.B

MODEL NUMBERS SHALL NOT BE CONSIDERED COMPLETE AND MATERIAL SHALL NOT BE ORDERED BY MANUFACTURER AND MODEL NUMBERS ONLY. REVIEW THE COMPLETE DESCRIPTION, NOTES AND SPECIFICATIONS TO DETERMINE THE EXACT MATERIAL AND ACCESSORIES TO BE ORDERED. THE MANUFACTURERS LISTED ARE THE BASIS FOR THE DESIGN.

NOTES:

- PROVIDE WITH INTEGRAL BIRDSCREEN 1/2" ALUMINUM BIRDSCREEN.
- PROVIDE INSULATED ROOF CURB WITH MINIMUM HEIGHT REQUIRED TO MAINTAIN BOTTOM OF EQUIPMENT A MINIMUM OF 16 INCHES ABOVE FINISHED ROOF SURFACE. PROVIDE SLOPED CURB IF NEEDED TO MATCH ROOF SLOPE. COORDINATE WITH ROOF INSULATION THICKNESS AND ROOF TAPER AT INSTALLED LOCATION. COORDINATE CURB TYPE WITH DRAWINGS.

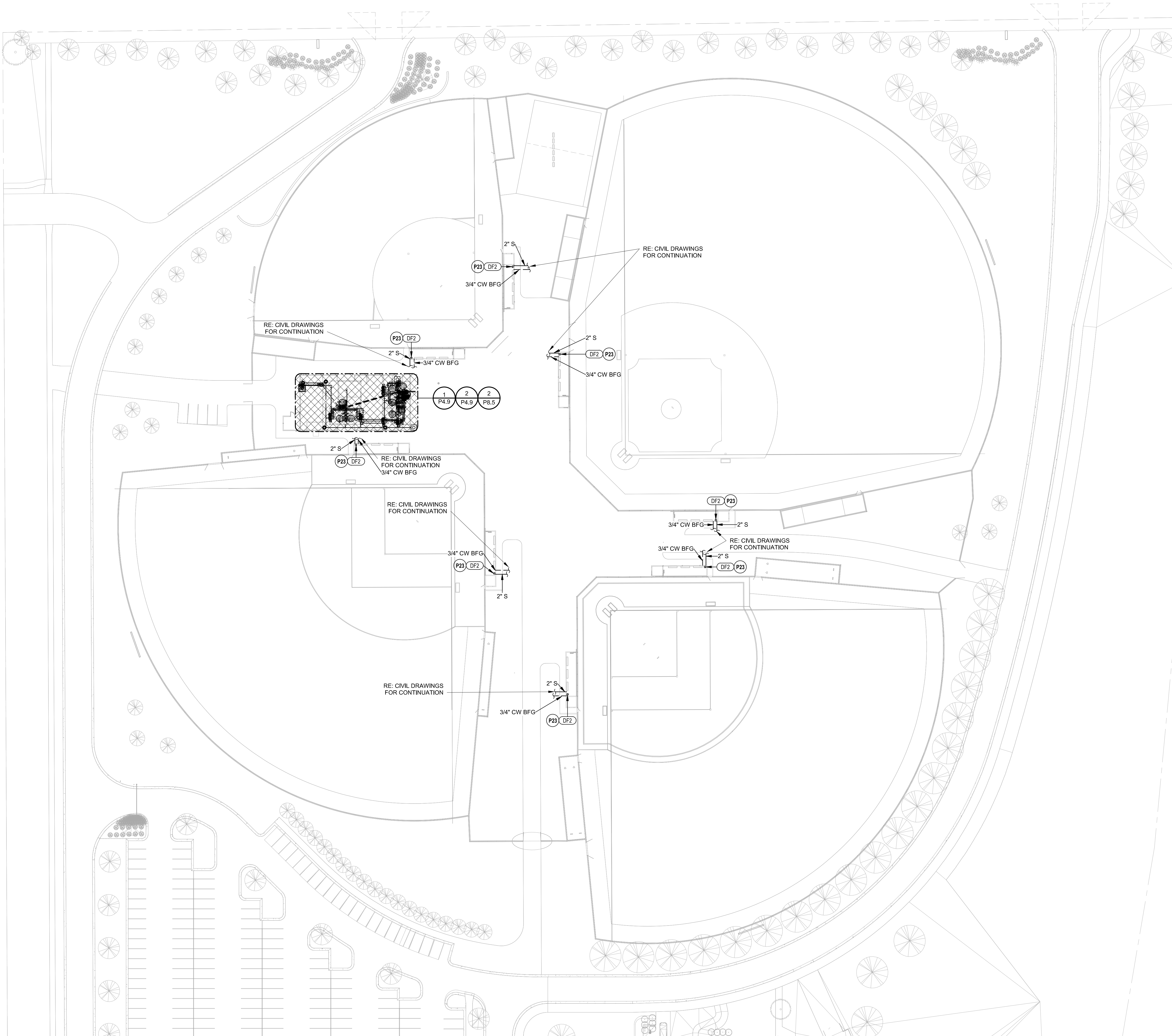
## COMPUTER ROOM CONDENSING UNIT

MARK	SERVICE	MANUFACTURER	MODEL	AMBIENT (°F)	VOLTS	PH	MCA	MOCOP	WEIGHT (LBS)	NOTES
CU 1	CR 1	mitsubishi	PUZ-A18NKA7	100 °F	208 V	1	11	28	100	A-M
CU 2	CR 2	mitsubishi	PUZ-A18NKA7	100 °F	208 V	1	11	28	100	A-M
CU 3	CR 3	mitsubishi	PUZ-A18NKA7	100 °F	208 V	1	11	28	100	A-M
CU 4	CR 4	mitsubishi	PUZ-A18NKA7	100 °F	208 V	1	11	28	100	A-M
CU 5	CR 5	mitsubishi	PUZ-A18NKA7	100 °F	208 V	1	11	28	100	A-M
CU 6	CR 6	mitsubishi	PUZ-A18NKA7	100 °F	208 V	1	11	28	100	A-M
CU 7	CR 7	mitsubishi	PUZ-A18NKA7	100 °F	208 V	1	11	28	100	A-M
CU 8	CR 8	mitsubishi	PUZ-A18NKA7	100 °F	208 V	1	11	28	100	A-M
CU 9	CR 9	mitsubishi	PUZ-A18NKA7	100 °F	208 V	1	11	28	100	A-M
CU 10	CR 10	mitsubishi	PUZ-A18NKA7	100 °F	208 V	1	11	28	100	A-M
CU 11	CR 11	mitsubishi	PUZ-A18NKA7	100 °F	208 V	1	11	28	100	A-M
CU 12	CR 12	mitsubishi	PUZ-A18NKA7	100 °F	208 V	1	11	28	100	A-M
CU 13	CR 13	mitsubishi	PUZ-A18NKA7	100 °F	208 V	1	11	28	100	A-M
CU 14	CR 14	mitsubishi	PUZ-A12NKA7	100 °F	208 V	1	11	28	93	A-M
CU 15	CR 15	mitsubishi	PUZ-A12NKA7	100 °F	208 V	1	11	28	93	A-M
CU 16	CR 16	mitsubishi	PUZ-A12NKA7	100 °F	208 V	1	11	28	93	A-M

MODEL NUMBERS SHALL NOT BE CONSIDERED COMPLETE AND MATERIAL SHALL NOT BE ORDERED



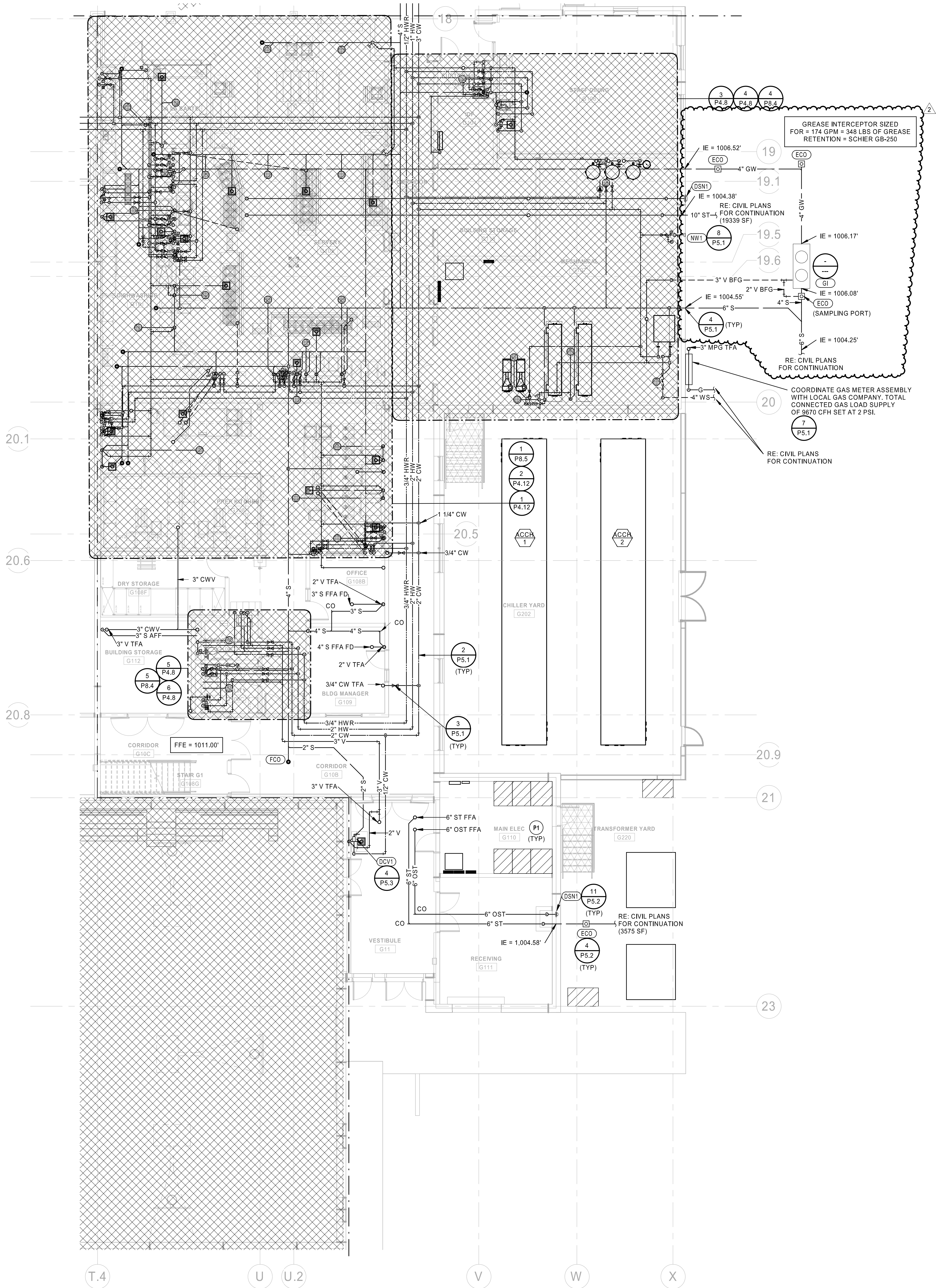
○ PLUMBING PLAN NOTES:  
P23 CONNECT TO DRINKING FOUNTAIN DRAIN AND ROUTE TO  
REMOTE FRENCH DRAIN BY CIVIL. REFER TO CIVIL FOR  
FRENCH DRAIN LOCATION AND REQUIREMENTS.



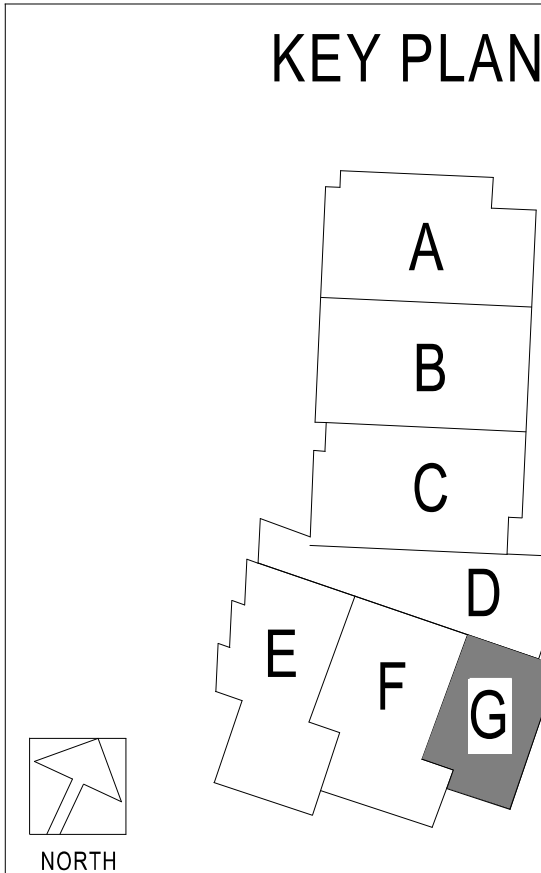
① PLUMBING SITE PLAN - NORTH  
1" = 40'-0"



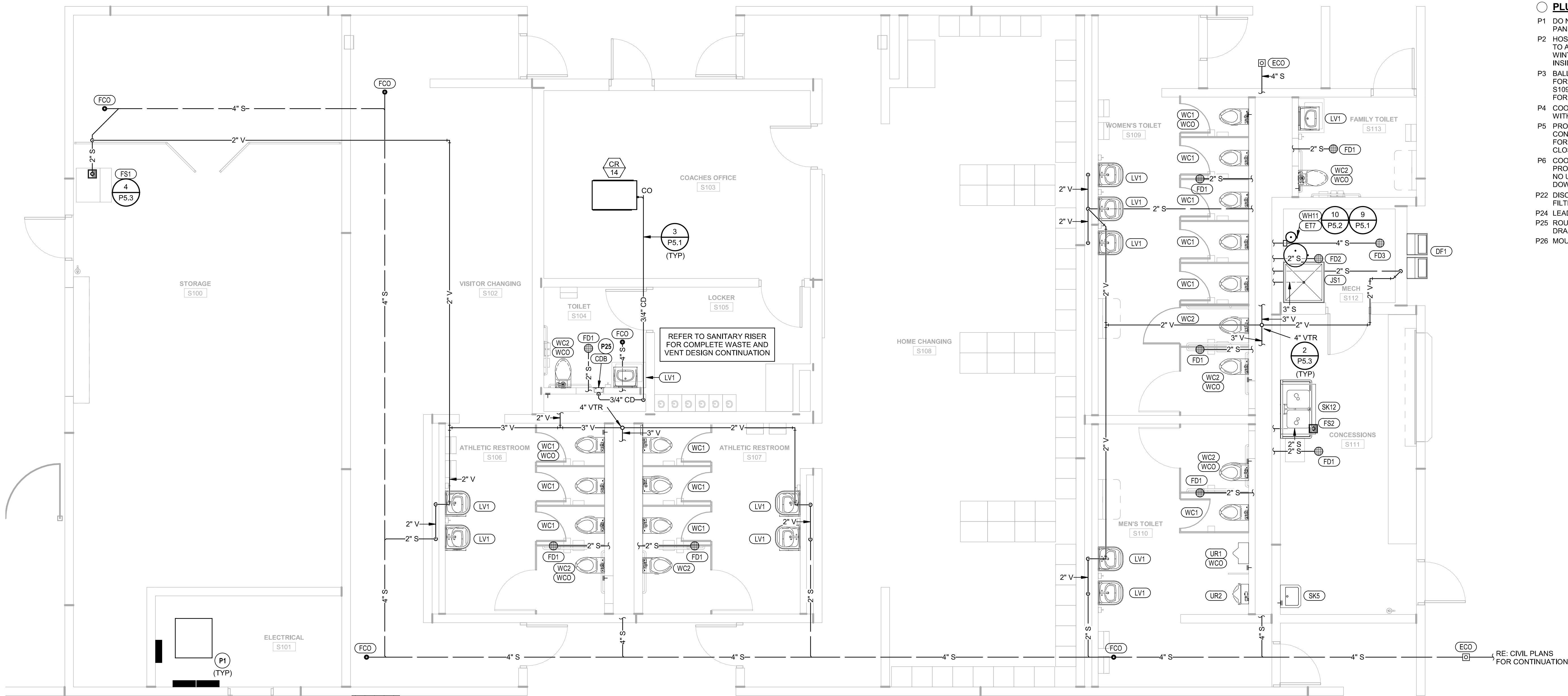
PLUMBING PLAN NOTES:  
P1: DO NOT INSTALL PLUMBING PIPING OVER ELECTRICAL PANELS OR EQUIPMENT.



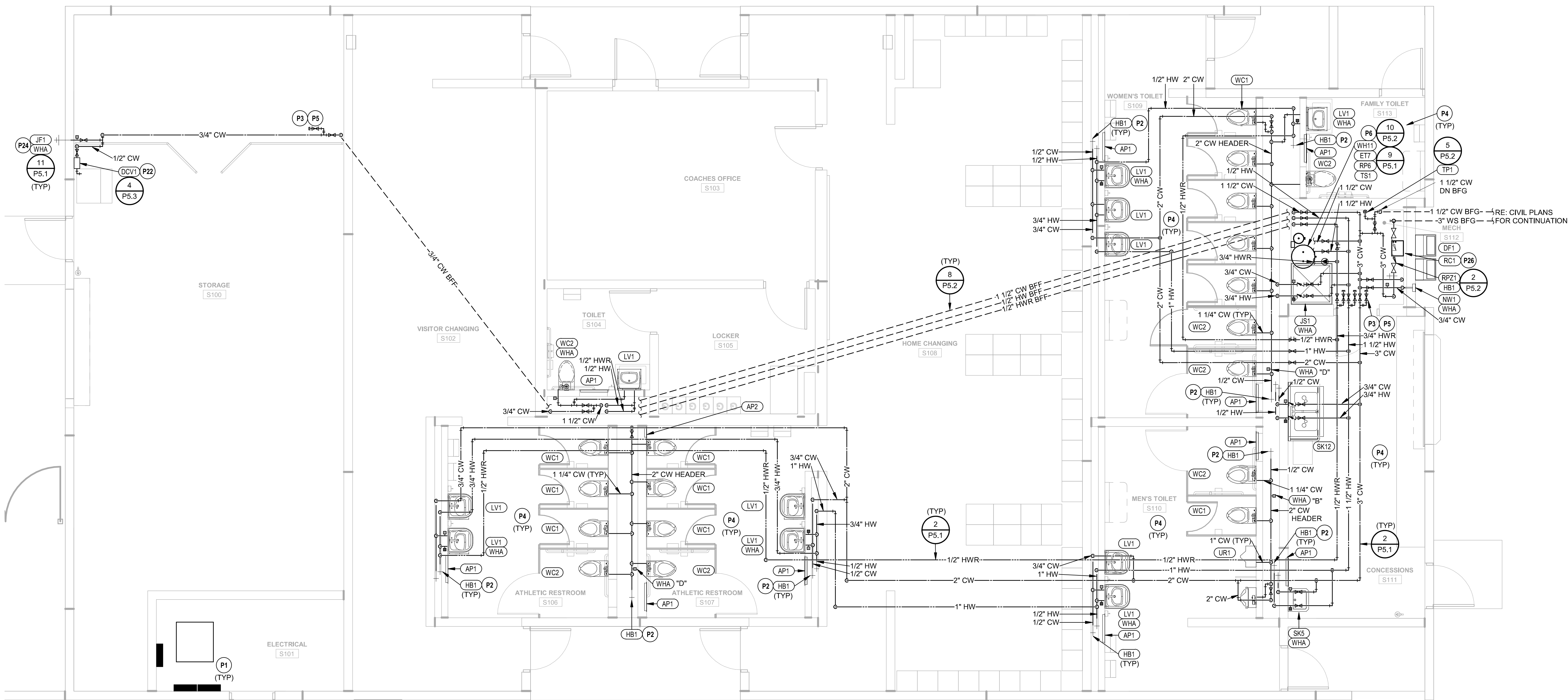
1 PLUMBING FIRST LEVEL PLAN - AREA G  
1/8" = 1'-0"







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

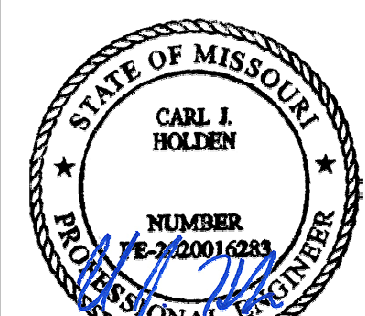


② PLUMBING WATER ENLARGED PLAN - FIRST LEVEL  
1/4" = 1'-0"

- PLUMBING PLAN NOTES:**
- P1 DO NOT INSTALL PLUMBING PIPING OVER ELECTRICAL PANELS OR EQUIPMENT.
  - P2 HOSE BIBB FOR WINTER DRAIN DOWN TO REMOVE WATER TO AVOID FREEZING. COORDINATE REQUIREMENTS FOR WINTER DRAIN DOWN WITH OWNER. SLOPE WATER PIPE INSIDE CHASE TO HOSE BIBB @ 1/16" PER FOOT.
  - P3 BALL VALVES ARE NORMALLY OPEN. CLOSE BALL VALVES FOR WINTER DRAIN DOWN OF ROOMS S100, S106, S107, S108, S110, S111 AND S113. COORDINATE REQUIREMENTS FOR WINTER DRAIN DOWN WITH OWNER.
  - P4 COORDINATE REQUIREMENTS FOR WINTER DRAIN DOWN WITH OWNER FOR FIXTURES IN THIS ROOM.
  - P5 PROVIDE 3/4" QUICK DISCONNECT FOR AIR COMPRESSOR CONNECTION TO BE USED FOR BLOWING OUT THE PIPES FOR WINTER DRAIN DOWN. BALL VALVES ARE NORMALLY CLOSED. OPEN FOR WINTER DRAIN DOWN.
  - P6 COORDINATE TIME SWITCH OPERATION TIMES WITH OWNER. PROGRAM TIME SWITCH TO SHUT OFF PUMP AT TIMES OF NO USE. COORDINATE REQUIREMENTS FOR WINTER DRAIN DOWN WITH OWNER. SHUT OFF PUMP FOR WINTER.
  - P22 DISCONNECT CUBER SUPPLY LINE AND REMOVE WATER FILTERS DURING WINTER DRAIN DOWN PROCEDURE.
  - P24 LEAD FREE JUG FILLER. MOUNT AT 3'-0" AFF.
  - P25 ROUTE CD PIPING DOWN INSIDE CHASE AND DISCHARGE TO DRAIN BOX WITH AIR GAP.
  - P26 MOUNT REMOTE CHILLER ON SHELF APPROX. 8'-0" AFF.



PLUMBING PLAN NOTES:  
P20 ROUTE CD PIPING DOWN WALL AND DISCHARGE OVER FLOOR RECEPTOR WITH AIR GAP.

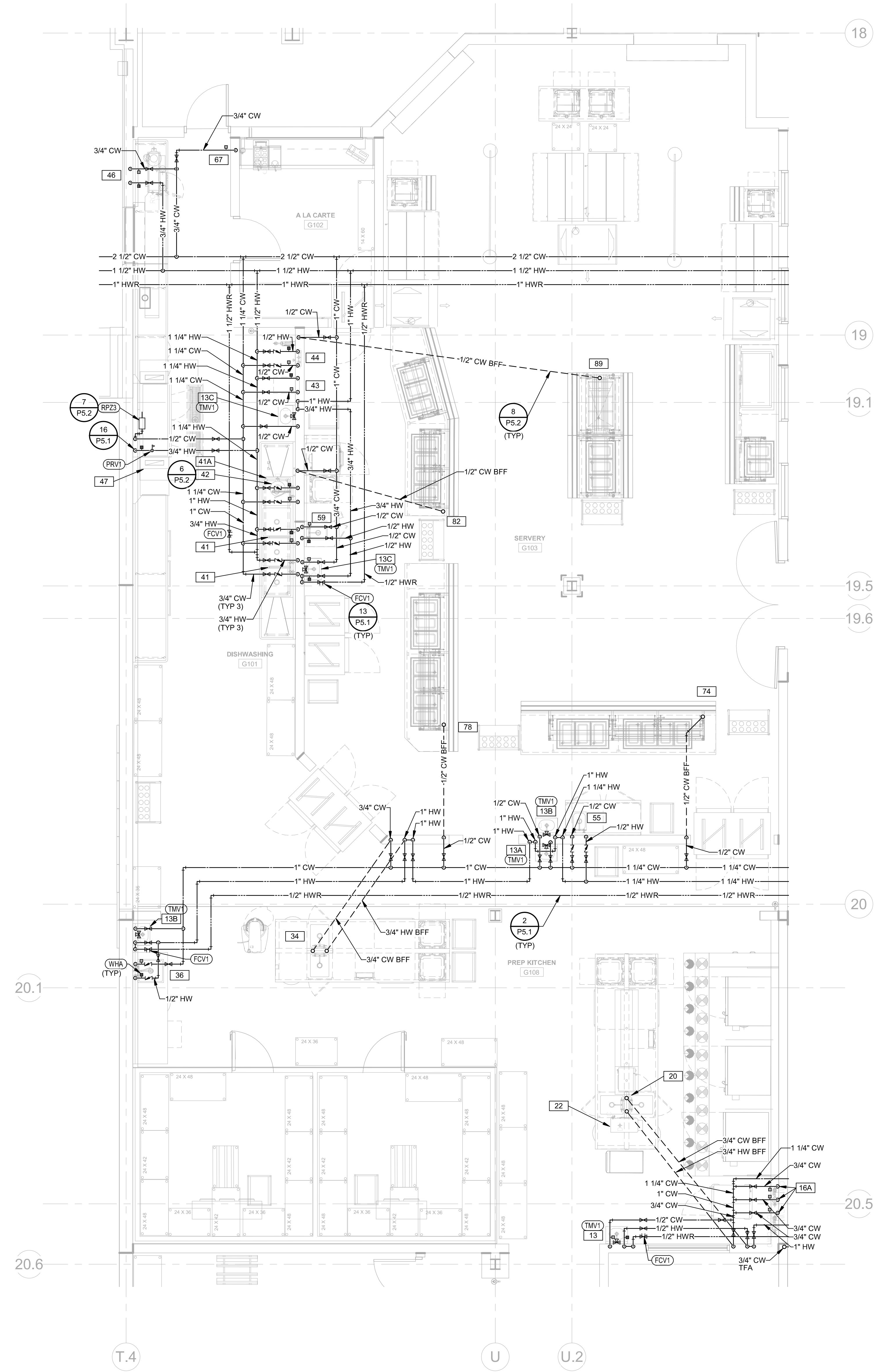


Oct 19 2020  
CARL J. HOLDEN  
LICENSE # PE-2020016283

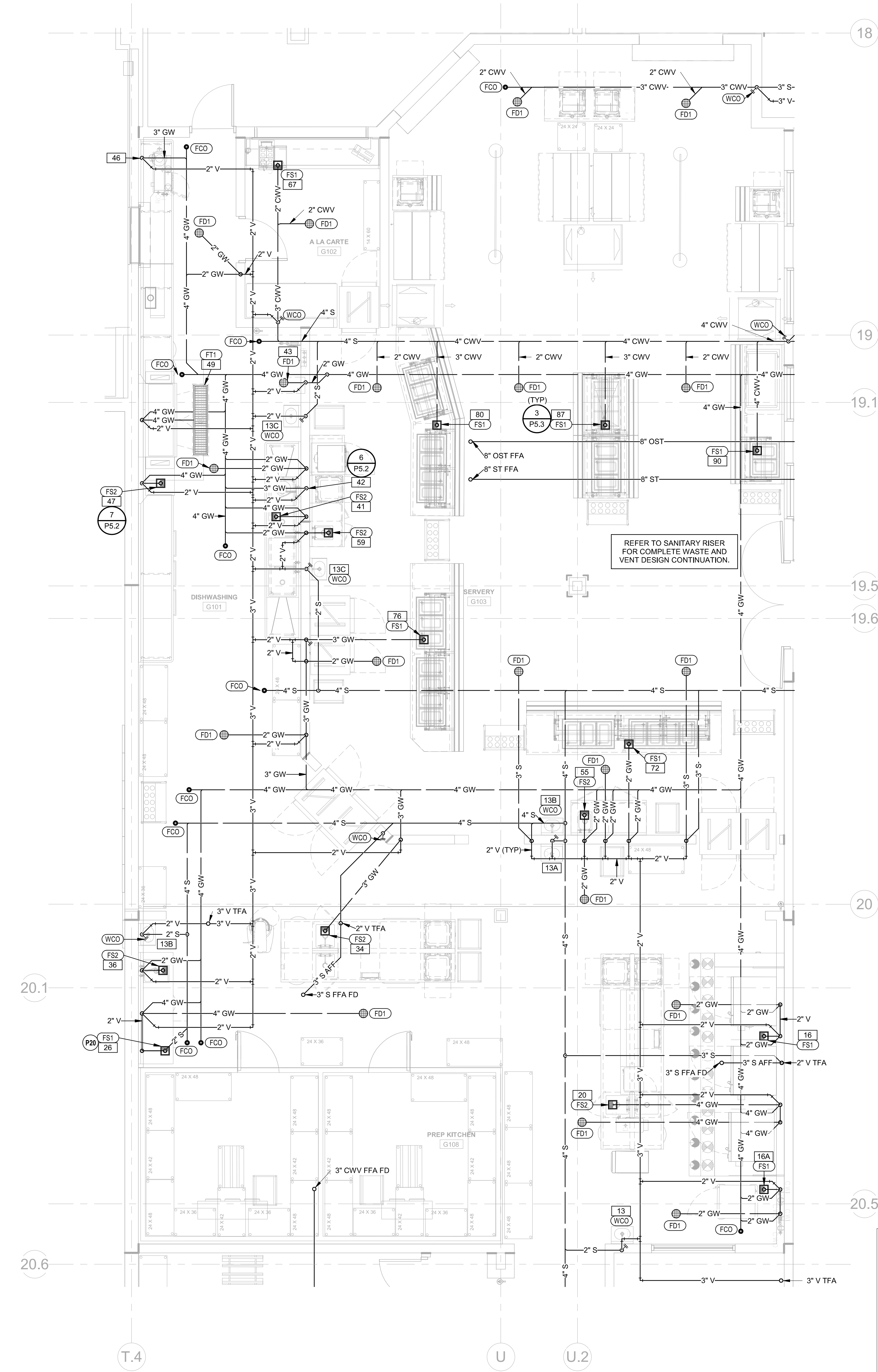
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**LEE'S SUMMIT MIDDLE SCHOOL #4**  
LEE'S SUMMIT R-7 SCHOOL DISTRICT  
1001 SE BAILEY ROAD  
LEE'S SUMMIT, MO 64081

PACKAGE 3 - BUILDING & SITE  
10/08/20  
REVISIONS  
ADDENDUM 002

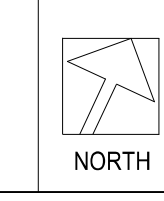
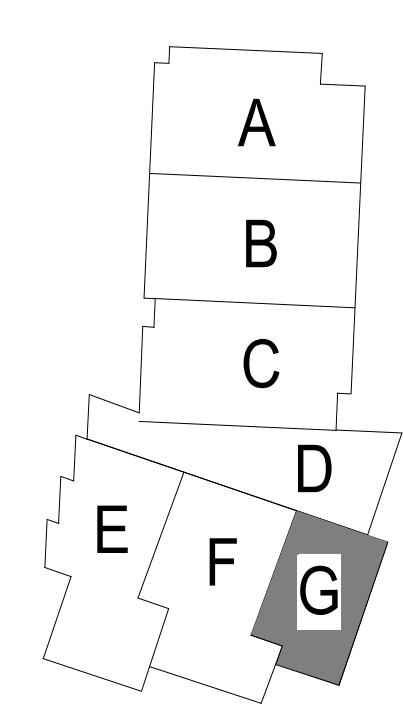


② PLUMBING WATER ENLARGED PLAN - FIRST LEVEL  
1/4" = 1'-0"

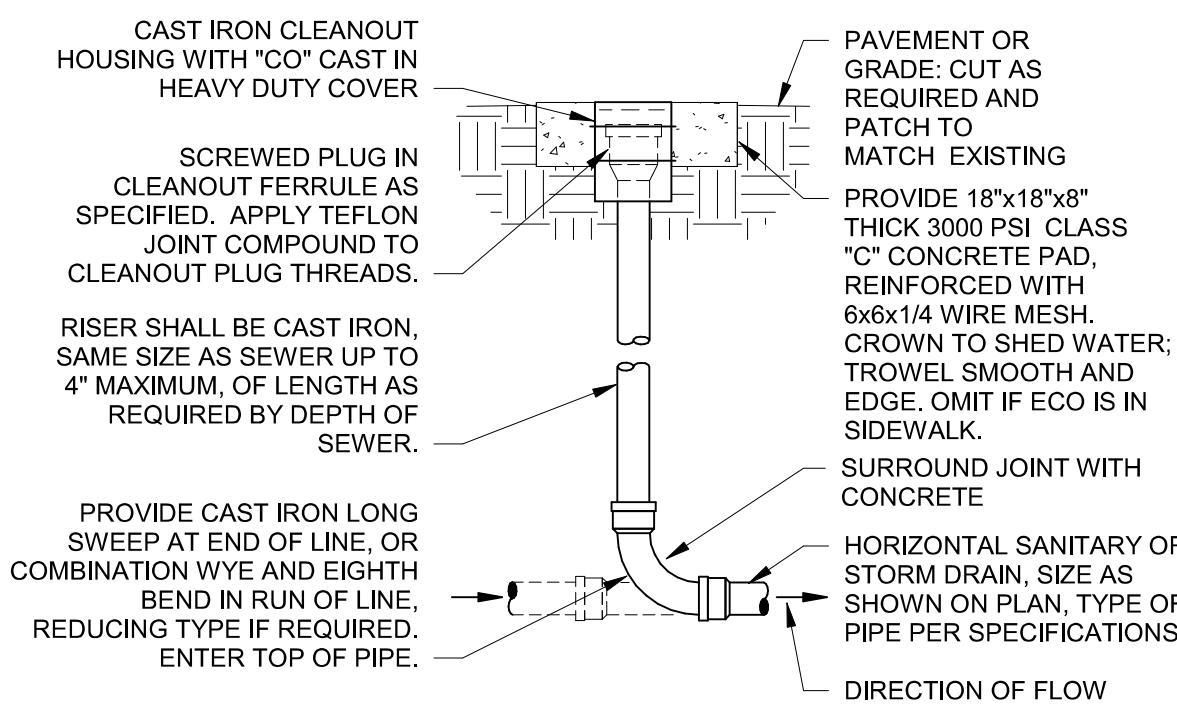


① PLUMBING SANITARY ENLARGED PLAN - FIRST LEVEL  
1/4" = 1'-0"

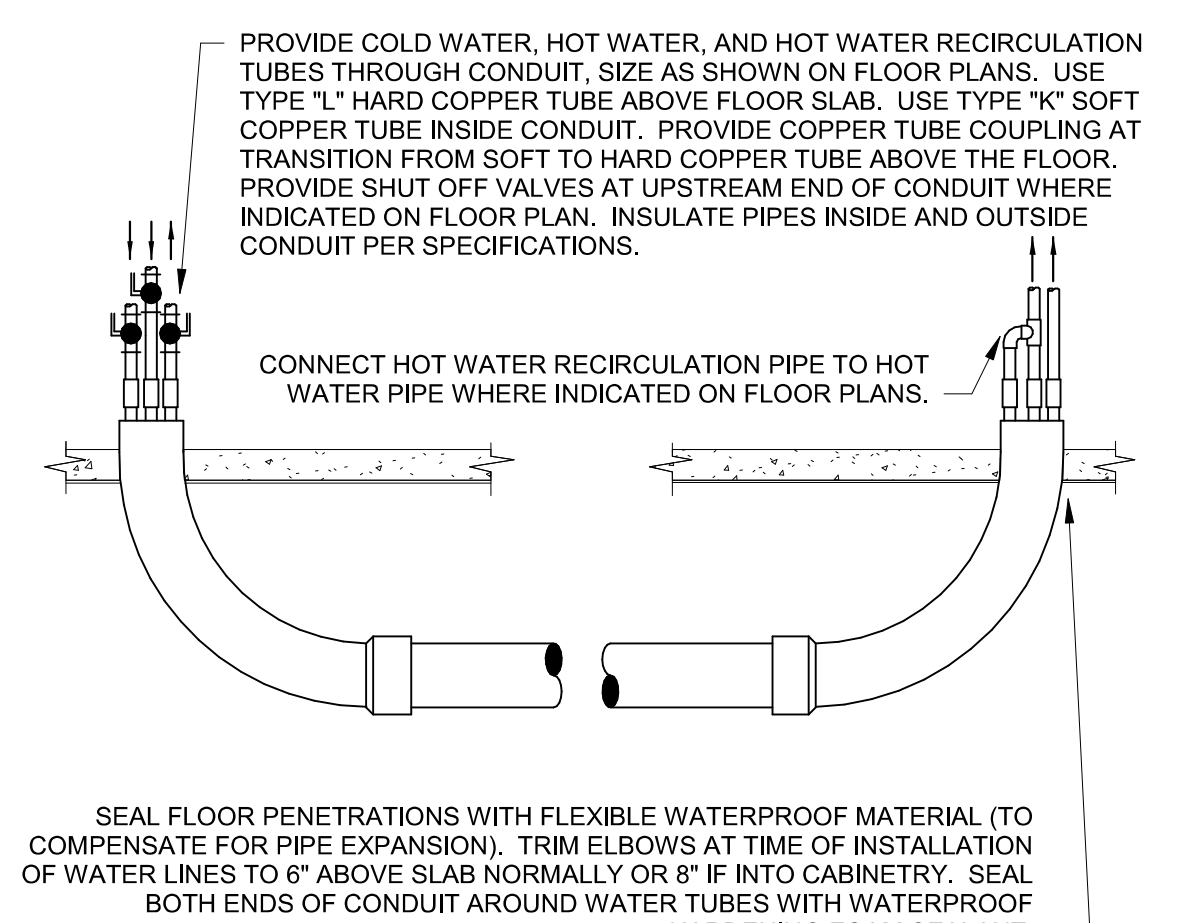
**KEY PLAN**



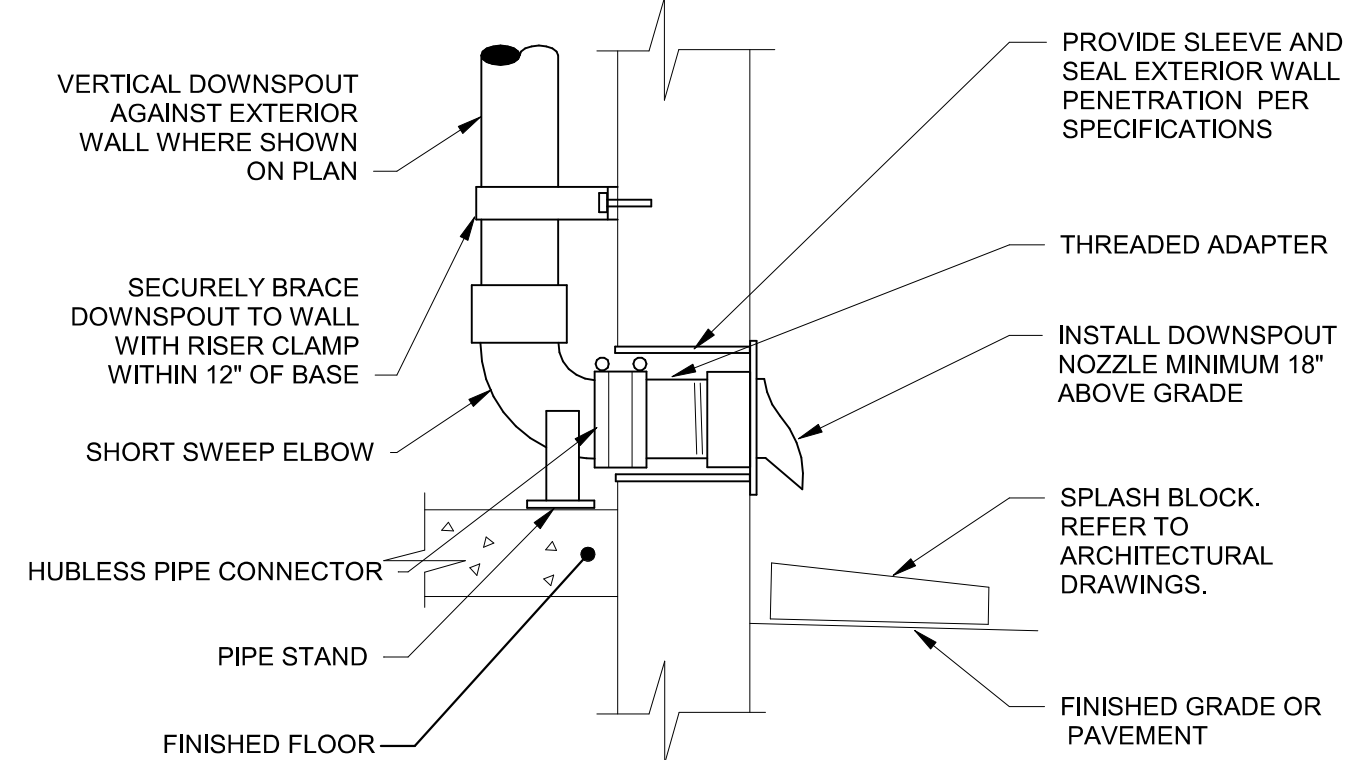




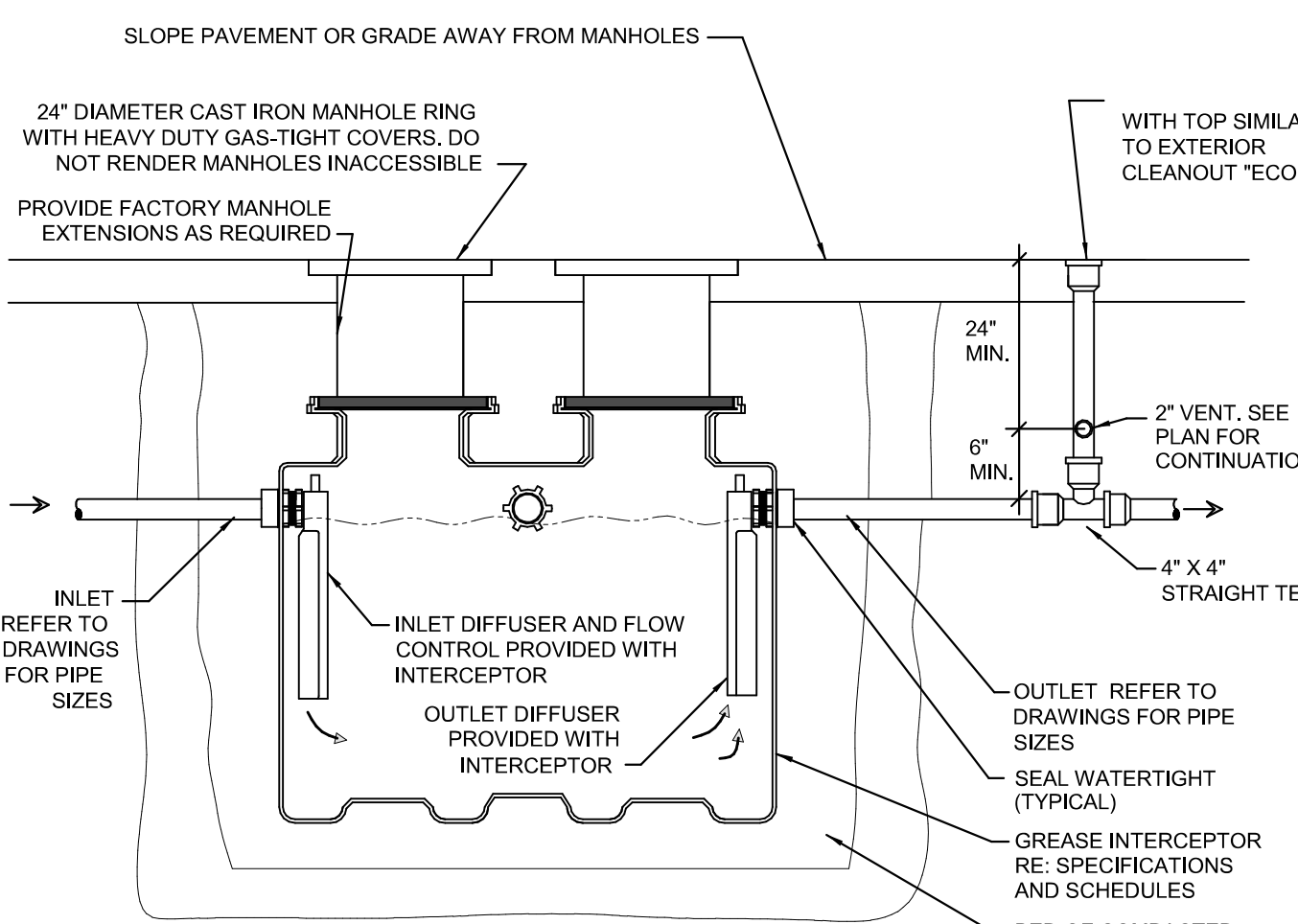
LOCATE EXTERIOR CLEANOUTS AT ENDS OF RUNS, AT TURNS OF PIPE GREATER THAN 45 DEGREES, AT MINIMUM 75 FOOT INTERVALS ON STRAIGHT RUNS, AND WHERE SHOWN ON PLANS. PROVIDE EARTH BACKFILL AND COMPACTION PER ARCHITECTURAL SPECIFICATIONS REFER TO SPECIFICATIONS AND SCHEDULES FOR MORE INFORMATION.



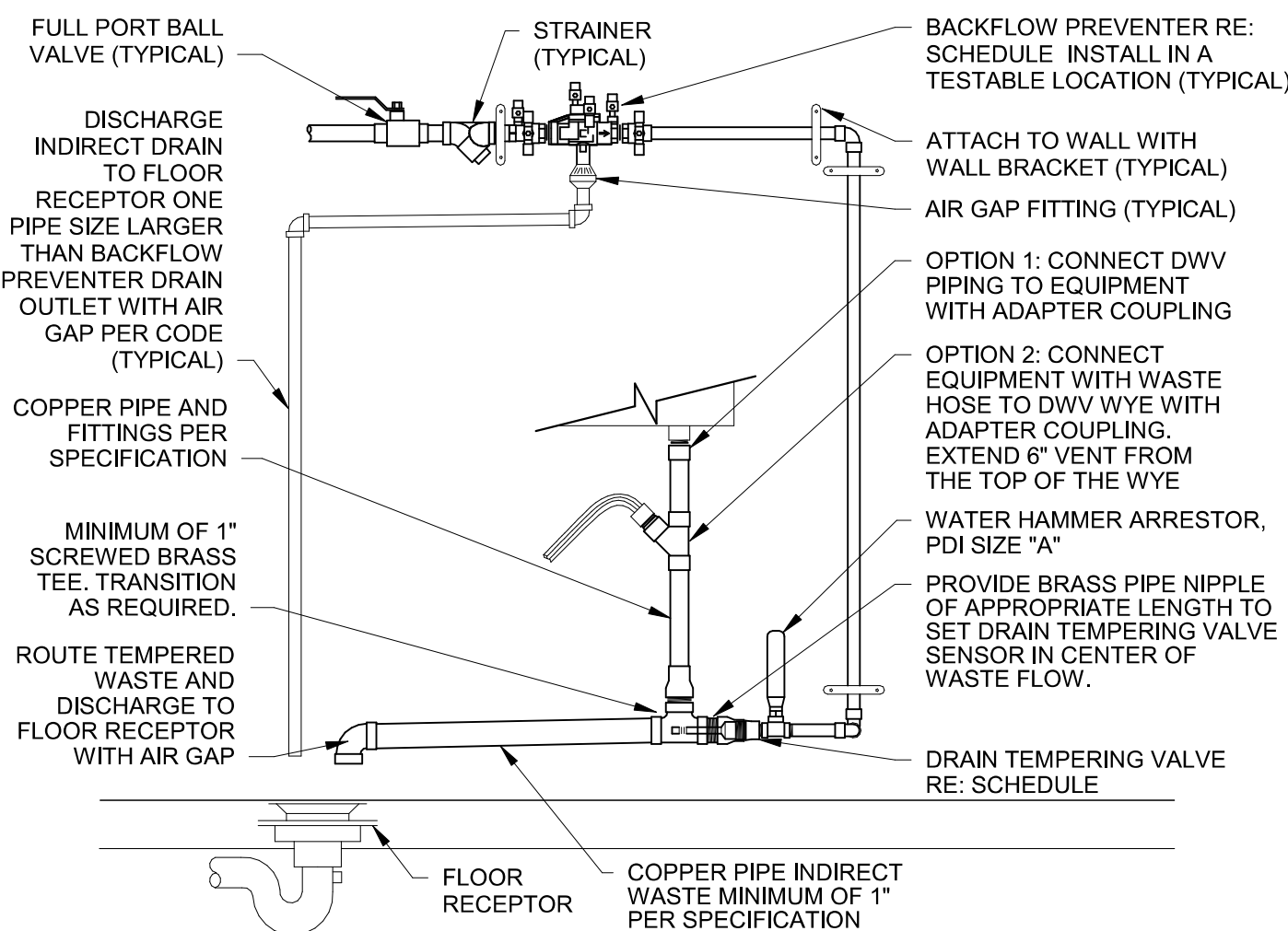
PROVIDE PVC CONDUIT WITH FITTINGS AND JOINTS PER SPECIFICATIONS. SIZE CONDUIT TO HOUSE INSULATED PIPES AS REQUIRED (INDIVIDUAL CONDUITS FOR SINGLE INSULATED PIPES MAY BE PROVIDED IN LIEU OF A SINGLE LARGER CONDUIT). SET CONDUIT ON COMPACTED OR UNDISTURBED EARTH. USE MINIMUM QUANTITY OF FITTINGS REQUIRED. PROVIDE LONG SWEEP ELBOWS AT BOTH ENDS. AVOID ELBOWS IN HORIZONTAL RUN IF AT ALL POSSIBLE. STUB ELBOWS ABOVE FLOOR AT LOCATIONS SHOWN ON FLOOR PLAN. BURY PIPE AT DEPTH AS REQUIRED TO ACHIEVE APPROXIMATELY A 90 DEGREE PENETRATION OF SLAB.



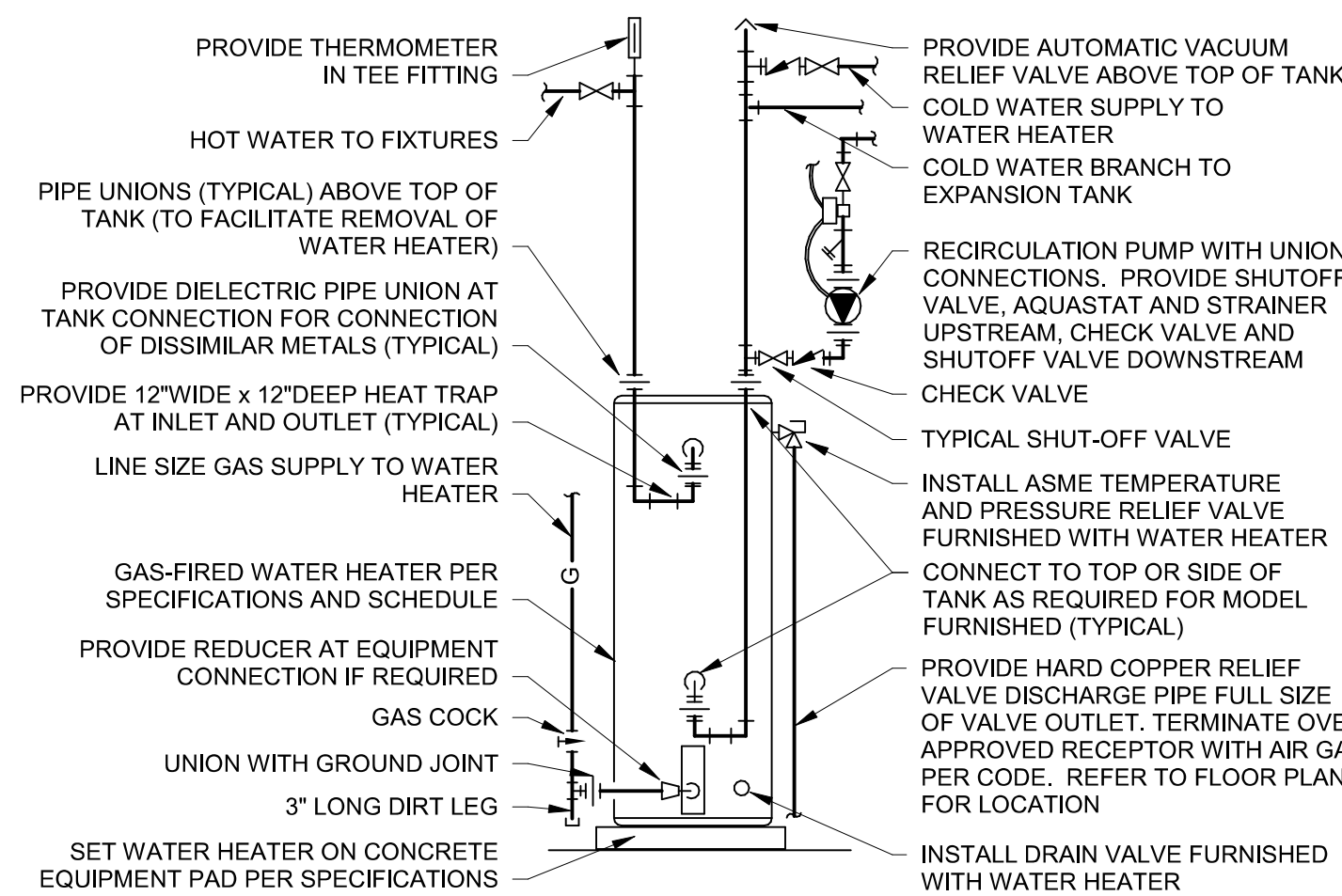
⑪ DOWNSPOUT NOZZLE  
NTS



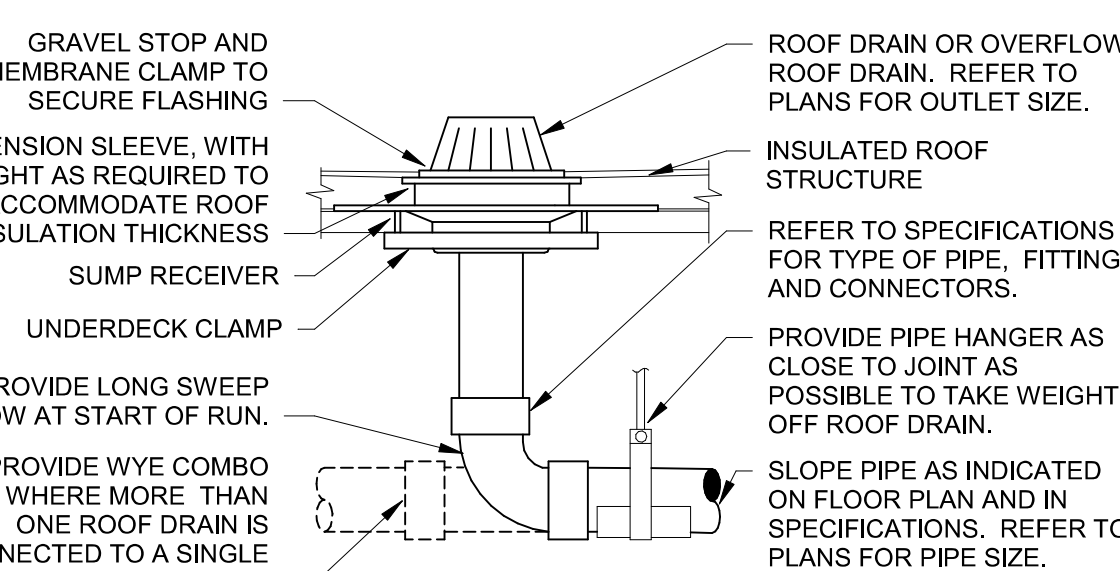
PIPING ARRANGEMENT SHOWN IN SCHEMATIC. ADJUST TO SUIT FIELD CONDITIONS.  
SUBMIT PROPOSED GREASE INTERCEPTOR INSTALLATION PLANS  
AND SPECIFICATIONS TO LOCAL AUTHORITIES FOR THEIR APPROVAL BEFORE ACQUISITION  
OF INTERCEPTOR. PROVIDE CAPACITY AS REQUIRED BY LOCAL AUTHORITIES.



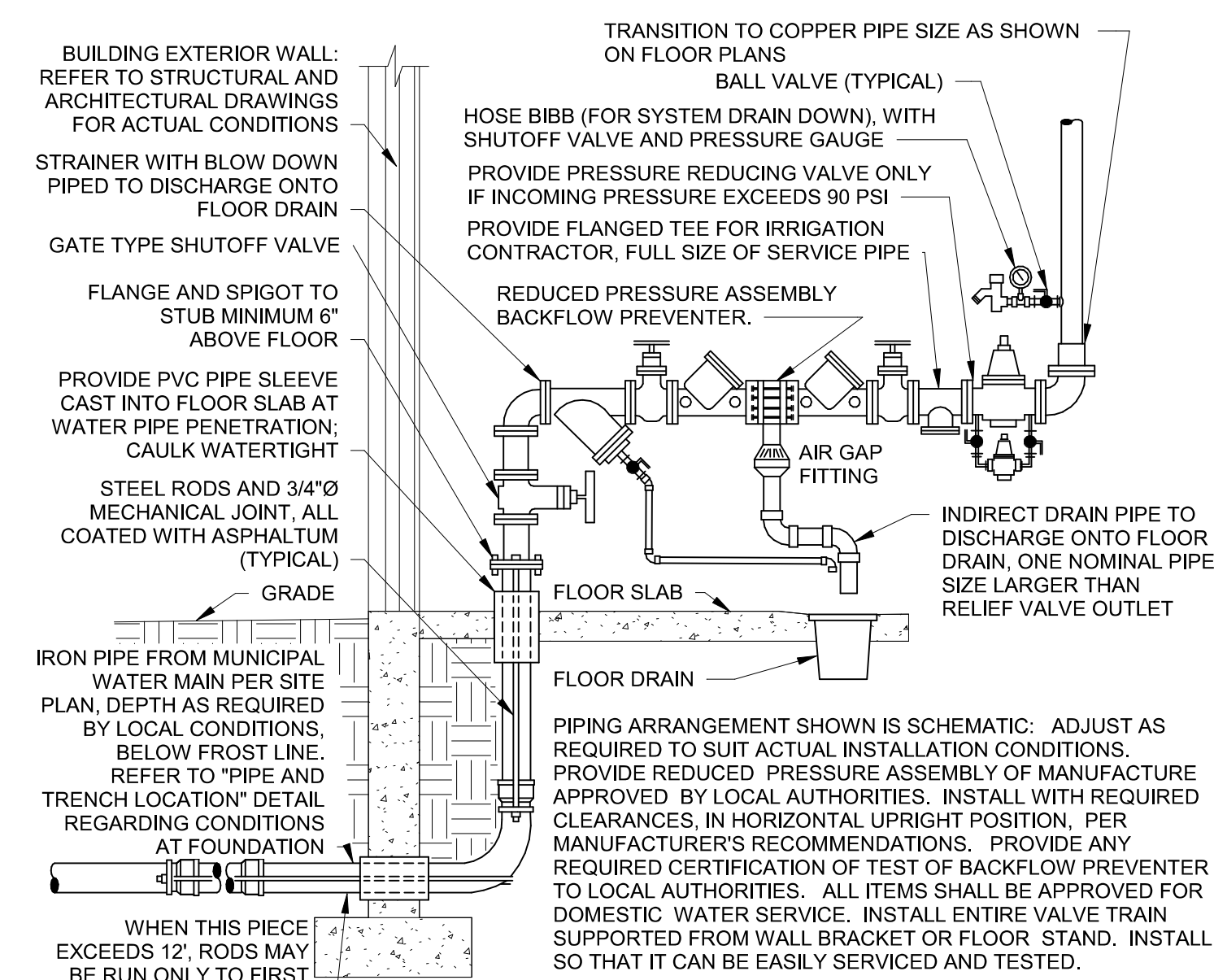
PIPING ARRANGEMENT SHOWN IN SCHEMATIC. ADJUST TO SUIT FIELD CONDITIONS. PROVIDE REDUCED PRESSURE BACKFLOW PREVENTER OF MANUFACTURER APPROVED BY LOCAL AUTHORITIES. INSTALL WITH REQUIRED CLEARANCES. INSTALL BACKFLOW PREVENTER IN HORIZONTAL UPRIGHT POSITION. PROVIDE ANY REQUIRED CERTIFICATION OF TEST OF BACKFLOW PREVENTER TO LOCAL AUTHORITIES. ALL ITEMS SHALL BE APPROVED FOR DOMESTIC WATER SERVICE. INSTALL BACKFLOW PREVENTER SO IT CAN BE EASILY SERVICED AND TESTED. SUPPORT ASSEMBLY FROM WALL WITH WALL BRACKETS.



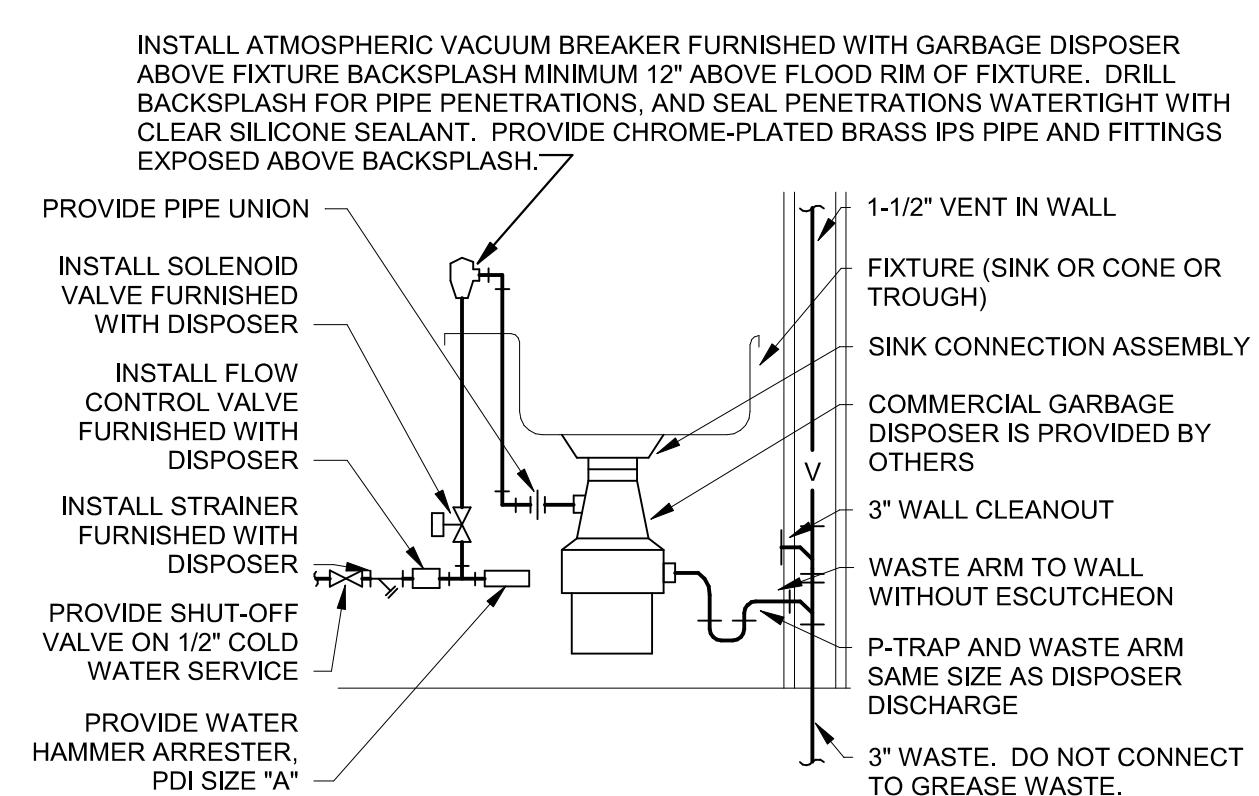
REFER TO SPECIFICATIONS, SCHEDULES, AND NOTES FOR MORE INFORMATION: PIPING ARRANGEMENT SHOWN IS SCHEMATIC; ADJUST TO SUIT FIELD CONDITIONS. VERIFY CONNECTION SIZES AND LOCATIONS WITH WATER HEATER FURNISHED. REFER TO FLOOR PLANS FOR PIPE SIZE AND CONTINUATIONS. PROVIDE SEISMIC STRAP OR BRACING AND FLEXIBLE CONNECTORS ON PIPE WHEN REQUIRED BY LOCAL AUTHORITIES. PROVIDE HEAT TRAP ON COLD WATER SUPPLY WHEN REQUIRED BY LOCAL AUTHORITIES. POWER WIRING AND DISCONNECT SWITCH ARE SPECIFIED BY ELECTRICAL. INTERLOCK OF AQUASTAT WITH RECIRCULATION PUMP IS SPECIFIED BY ELECTRICAL.



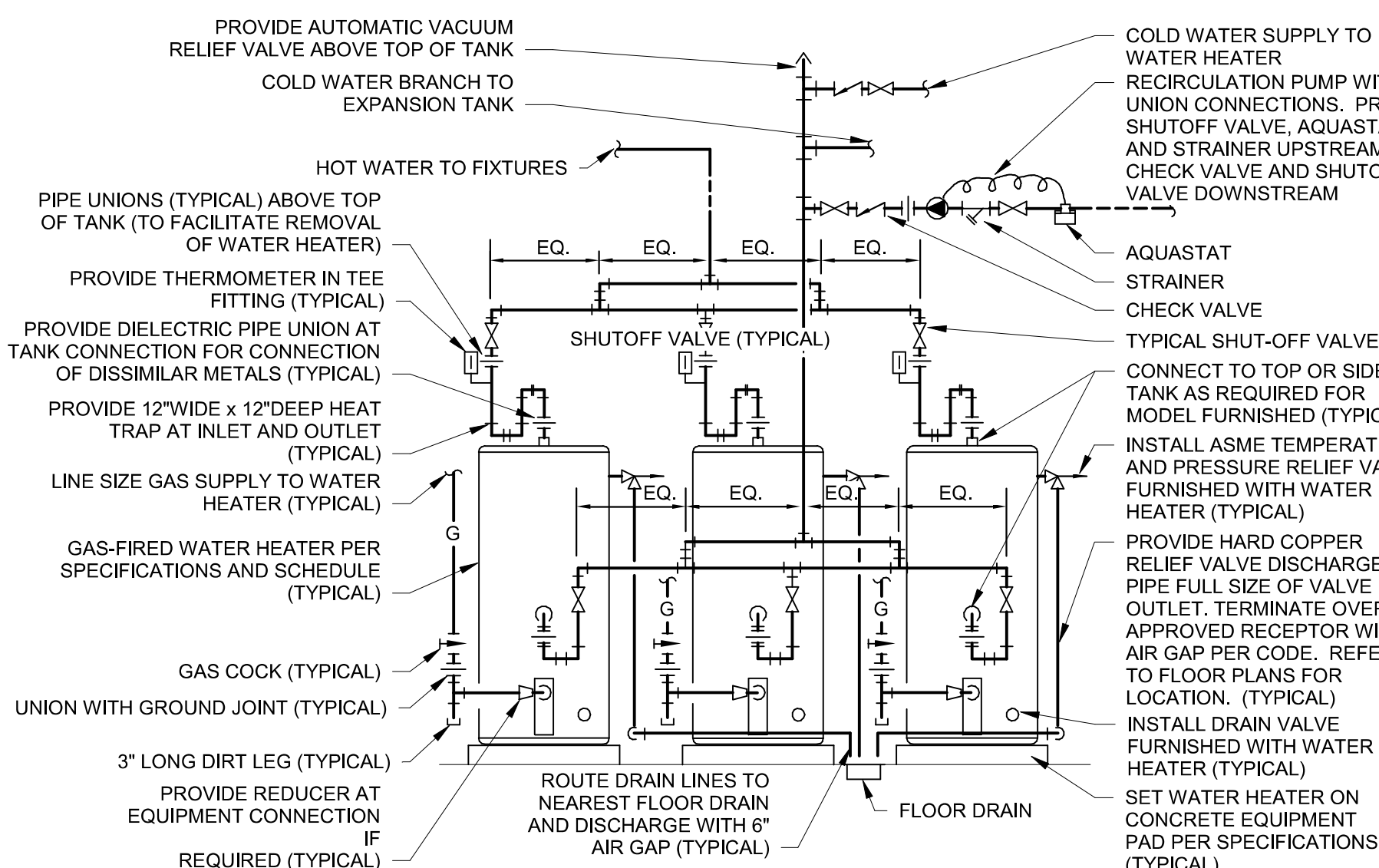
### 13 ROOF DRAIN INSTALLATION



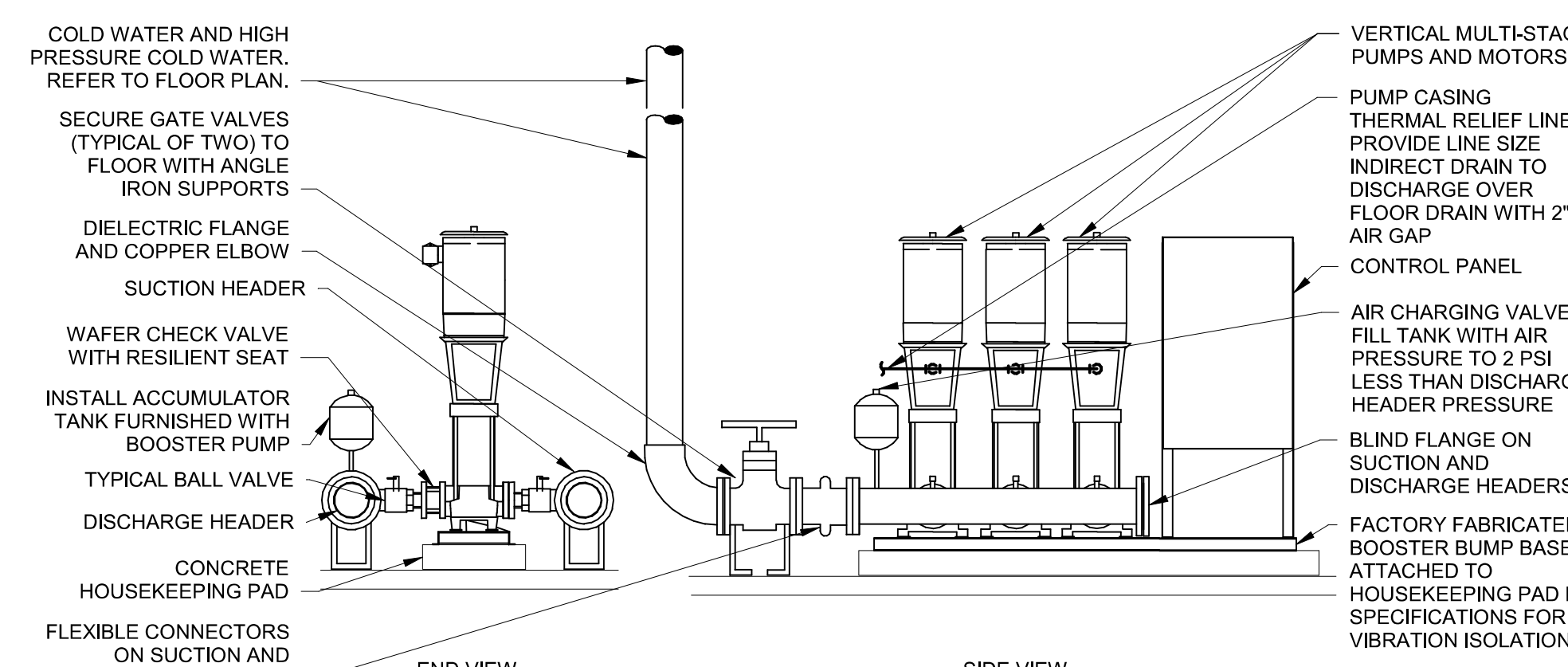
② IRON PIPE DOMESTIC WATER SERVICE ENTRY  
NTS



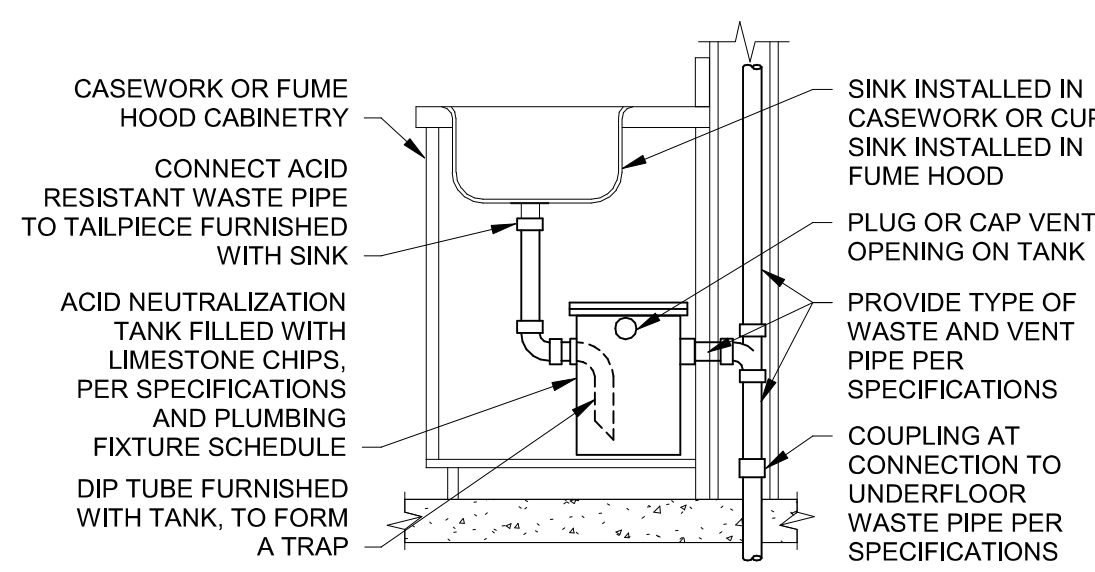
PIPING ARRANGEMENT SHOWN IS SCHEMATIC. ADJUST TO SUIT FIELD CONDITIONS AND MEET MANUFACTURER'S INSTALLATION AND CONNECTION INSTRUCTIONS. PROVIDE 1-1/2" CHROME-PLATED 17 GAUGE BRASS P-TRAP WITH CLEANOUT IF DISPOSER OUTLET IS 1-1/2"; PROVIDE HUBLESS CAST IRON PIPE IF DISPOSER OUTLET IS 2" OR 3". WIRING IS PROVIDED UNDER DIVISION 16.



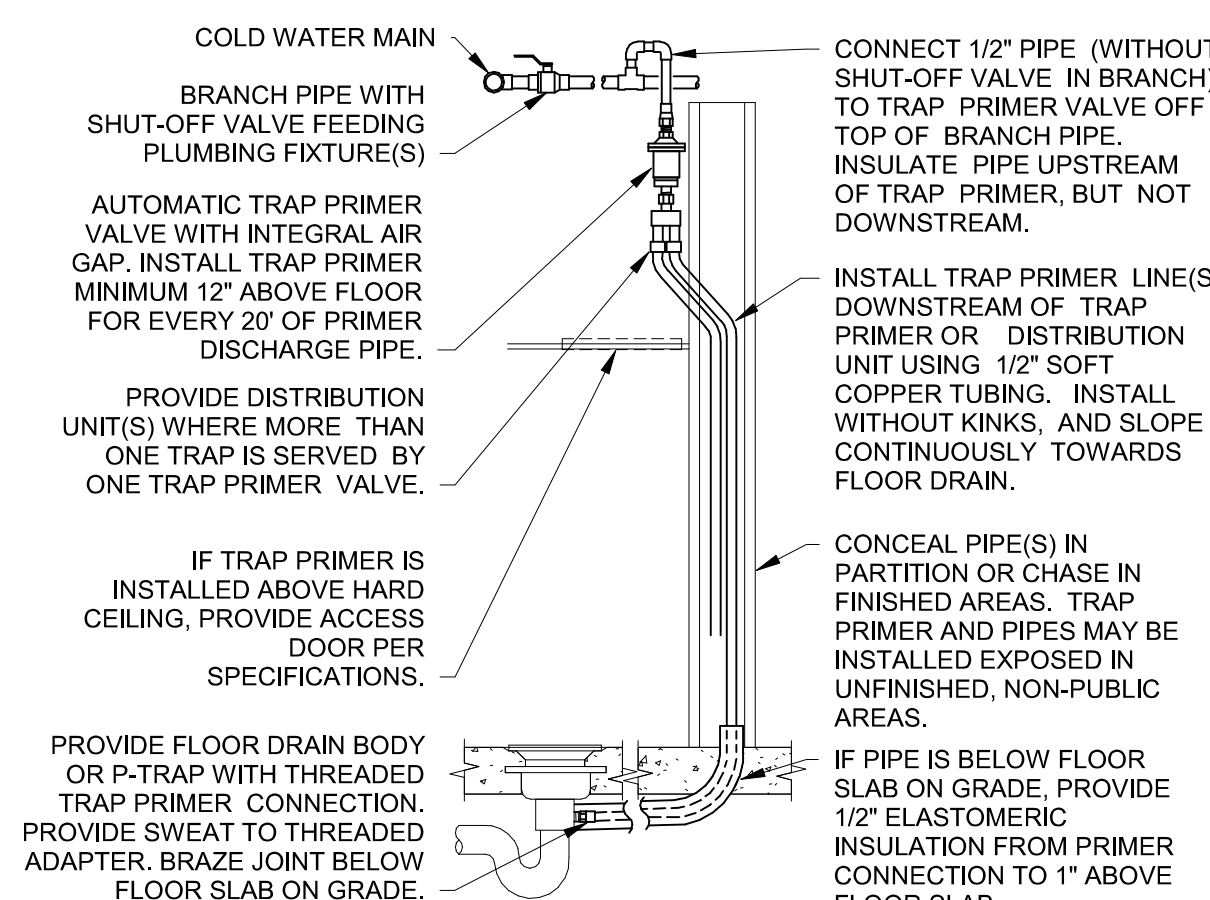
⑨ THREE GAS FIRED WATER HEATERS AND PUMPS



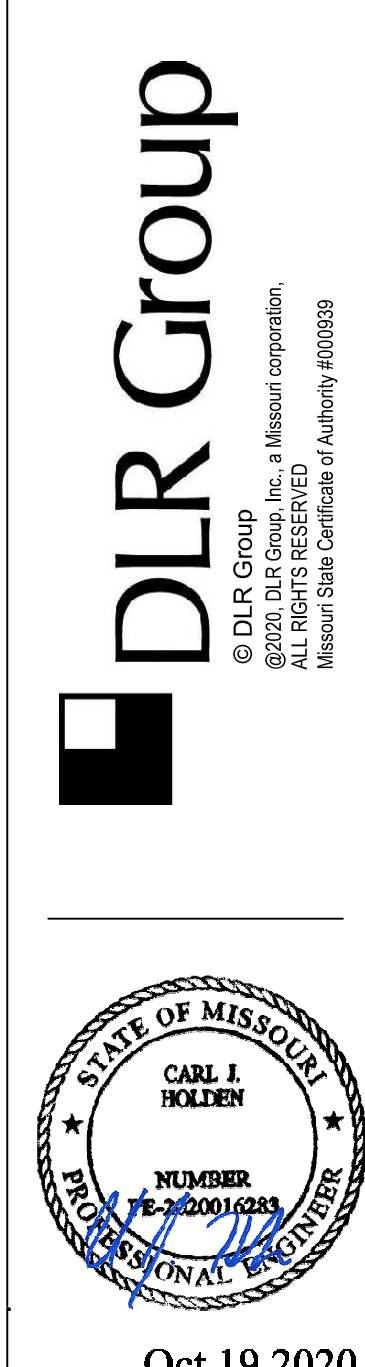
⑫ DOMESTIC WATER BOOSTER PUMP SYSTEM  
NTS



① UNDER COUNTER ACID NEUTRALIZATION TANKS



PROVIDE TRAP PRIMERS WHERE SHOWN ON FLOOR PLANS, AND WHERE REQUIRED BY LOCAL AUTHORITIES. PIPING ARRANGEMENT SHOWN IS SCHEMATIC: ADJUST TO SUIT FIELD CONDITIONS. REFER TO SPECIFICATIONS AND PLUMBING FIXTURE SCHEDULE FOR MORE INFORMATION. INSTALL TRAP PRIMER VALVE AND DISTRIBUTION UNIT PER MANUFACTURER'S RECOMMENDATIONS.





FIXTURES IN THIS SCHEDULE OR THEIR APPROVED EQUIVALENT ARE PROVIDED BY THE PLUMBING CONTRACTOR. SUBMIT SHOP DRAWINGS ON EACH OF THESE ITEMS. REFER TO SPECIFICATIONS FOR FURTHER INFORMATION AND INSTALLATION REQUIREMENTS. VERIFY ROUGH-IN REQUIREMENTS WITH MANUFACTURER'S INSTALLATION INSTRUCTIONS AND INSTALL PER MANUFACTURER'S RECOMMENDATIONS. REFER TO THE ARCHITECTURAL DRAWINGS FOR THE PLUMBING FIXTURE MOUNTING HEIGHTS.

PLUMBING PLAN MARK	DESCRIPTION
AAV1	AIR ADMITTANCE VALVE; STUDDOR "MINI-VENT" # 20301, MEETING ASSE 1051 TYPE "A", POLYSTYRENE PROTECTIVE COVER, ABS VALVE WITH ELASTOMERIC MEMBRANE AND PVC CONNECTOR, 2" INLET AND

HB1	HOSE BIBB: PRIER PRODUCTS # C-158NP.75, ROUGH CHROME PLATED BRASS 3/4" FEMALE FIP INLET. 3/4" THREADED HOSE CONNECTION.
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SK3	UNDERMOUNT SINK (ADA ACCESSIBLE): ELKAY # ELUHAD111655PD, 1 x 18-1/2" x 5-3/8" DEEP, SINGLE COMPARTMENT, SELF-RIMMING, 18
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SK10	UNDERMOUNT SINK (ADA ACCESSIBLE): ELKAY # ELUHAD31186, 30-3/8" x 18-1/2" x 5-3/8" DEEP, DOUBLE COMPARTMENT, SELF-RIMMING, 18"
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WF2	THREE STATION LAVATORY: BRADLEY # SN2003-A-AST4-STD-TMA-NSD-BS 36" ELLIPTICAL FLOOR MOUNTED MULTI-LAV OF 16 GAU
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DOMESTIC BOOSTER PUMP SCHEDULE																
MARK	SERVICE	MANUFACTURER	MODEL	TYPE (NOTE A)	DISCHARGE HEADER PRESSURE (PSI)	SUCTION HEADER PRESSURE (PSI)	NUMBER OF PUMPS	SYSTEM FLOW RATE (GPM)	INDIVIDUAL PUMP CAPACITY (%)	SUCTION HEADER SIZE (IN.)	DISCHARGE HEADER SIZE (IN.)	ELECTRICAL (NOTE B)			ACCUMULATOR TANK SIZE (GAL.)	NOTES
BP1	DOMESTIC BOOSTER	GRUNDFOS	CRE 15-3	T-VFD	75.99	36.38	3	213	33	4"	4"	480	3	5	60.0	A, B, C, D, E

- NOTES:
- A. BOOSTER PUMP CONFIGURATION TYPES: T-VFD = TRIPLEX W/ VARIABLE FREQUENCY DRIVE FOR EACH VERTICAL MULTI-STAGE PUMP (GRUNDFOS #CRE 15-3); REFER TO SPECIFICATIONS FOR MORE INFORMATION.
- B. MOTOR HORSEPOWER SHOWN IF FOR ONE PUMP.
- C. PROVIDE WITH CONTROL PANEL. REFER TO SPECIFICATIONS FOR MORE INFORMATION.
- D. MINIMUM DISCHARGE HEADER PRESSURE IS 77.99 PSI.
- E. PROVIDE PUMPS WITH SCHEDULED DESIGN FLOW RATE WITH TOTAL DYNAMIC HEAD = DISCHARGE PRESSURE - SUCTION PRESSURE + 2PSI FOR SYSTEM LOSSES

GAS PRESSURE REGULATOR SCHEDULE FOR 2 PSI SYSTEMS							
MARK	MANUFACTURER / MODEL	VALVE TYPE	VALVE BODY SIZE (INCHES)	MAX. FLOW RATE (GPH)	INLET PRESSURE PSI	OUTLET PRESSURE INCHES WATER COLUMN	NOTES
GPR1	PIETRO-FIORENTINI 31051	C	1/2"	552	1	7"	A, B, C, D, E, F, G & H
GPR2	PIETRO-FIORENTINI 31153	C	1-1/4"	3,735	1	7"	A, B, C, D, E, F, G & H

- NOTES:
- A. C = SELF CONTAINED "DIRECT ACTING" DIAPHRAGM TYPE WITH INTERNAL VENT LIMITER
- B. DROOP = 1" WATER COLUMN MAXIMUM
- C. 65# ALUMINUM BODY, SCREWED CONNECTIONS AND OVERPRESSURE PROTECTION TO 25#
- D. MAXIMUM FLOW RATE SCHEDULED, MATCH BODY SIZE AND MAXIMUM FLOW RATE TO EQUIPMENT FLOW RATE. REFER TO EQUIPMENT SHOP DRAWINGS FOR EXACT FLOWS
- E. LISTED TO MEET AND EXCEED CSA LISTING STAMP ON REGULATOR BODY
- F. GAS PRESSURE REGULATOR INLET PRESSURE = OPERATING PRESSURE + DESIGN FRICTION LOSS
- G. 2PSI MAXIMUM INLET PRESSURE & 1 PSI MINIMUM INLET PRESSURE
- H. PROVIDE EXTERNAL VENT LIMITER (WHERE APPROVED BY LOCAL AUTHORITIES) FOR INDOOR INSTALLATION AND INSTAL PER SPECIFICATIONS. INSTALL OUTDOORS PER SPECIFICATIONS.

FIXTURE BRANCH CONNECTION SCHEDULE				
FIXTURE	COLD WATER	HOT WATER	WASTE	VENT
6" FLOOR DRAIN			6"	3"
DRINKING FOUNTAIN	1/2"		2"	1 1/2"
FLOOR DRAIN			2"	2"
JANITOR'S SINK	1/2"	1/2"	3"	2"
LAVATORY/HAND SINK	1/2"	1/2"	2"	1 1/2"
SINK	1/2"	1/2"	2"	2"
URNAL	1"	1"	2"	2"
WASHFOUNTAIN	1"	1"	2"	1 1/2"
WATER CLOSET (FLUSH VALVE)	1 1/4"		4"	2"

NOTE: PIPE SIZES SHOWN ARE MINIMUM.

ELECTRIC STORAGE WATER HEATER SCHEDULE									
MARK	MANUFACTURER	MODEL#	AREA SERVED	TANK SIZE (GALLONS)	ELECTRICAL DATA			RECOVERY (GPH)	NOTES
WH1	A.O. SMITH	#BTXL 100	AREA A	75	120	1	100	115	A, B, C, D
WH2	A.O. SMITH	#BTXL 100	AREA A	75	120	1	100	115	A, B, C, D
WH3	A.O. SMITH	#BTXL 100	AREA B	75	120	1	100	115	A, B, C, D
WH4	A.O. SMITH	#BTXL 100	AREA B	75	120	1	100	115	A, B, C, D
WH5	A.O. SMITH	#BTXL 100	AREA C	75	120	1	100	115	A, B, C, D
WH6	A.O. SMITH	#BTXL 100	AREA C	75	120	1	100	115	A, B, C, D
WH7	A.O. SMITH	#BTH 150	AREA G	100	120	1	150	178	A, B, C, D
WH8	A.O. SMITH	#BTH 150	AREA G	100	120	1	150	178	A, B, C, D
WH9	A.O. SMITH	#BTH 150	AREA G	100	120	1	150	178	A, B, C, D

- NOTES:
- A. 100°F TEMPERATURE RISE WITH 140°F OPERATING TEMPERATURE.
- B. SINGLE ELEMENT
- C. THREE ELEMENTS WIRED FOR SIMULTANEOUS OPERATION
- D. FURNISH WITH IMMERSION THERMOSTAT
- E. "LOW BOY" DESIGN

GAS STORAGE WATER HEATER SCHEDULE									
MARK	MANUFACTURER	MODEL	AREA SERVED	TANK SIZE (GALLONS)	ELECTRICAL DATA			RECOVERY (GPH)	NOTES
WH1	A.O. SMITH	#BTXL 100	AREA A	75	120	1	100	115	A, B, C, D
WH2	A.O. SMITH	#BTXL 100	AREA A	75	120	1	100	115	A, B, C, D
WH3	A.O. SMITH	#BTXL 100	AREA B	75	120	1	100	115	A, B, C, D
WH4	A.O. SMITH	#BTXL 100	AREA B	75	120	1	100	115	A, B, C, D
WH5	A.O. SMITH	#BTXL 100	AREA C	75	120	1	100	115	A, B, C, D
WH6	A.O. SMITH	#BTXL 100	AREA C	75	120	1	100	115	A, B, C, D
WH7	A.O. SMITH	#BTH 150	AREA G	100	120	1	150	178	A, B, C, D
WH8	A.O. SMITH	#BTH 150	AREA G	100	120	1	150	178	A, B, C, D
WH9	A.O. SMITH	#BTH 150	AREA G	100	120	1	150	178	A, B, C, D

- NOTES:
- A. 100° TEMPERATURE RISE WITH 140°F OPERATING TEMPERATURE.
- B. AUTOMATIC FLUE DAMPER INTERLOCKED WITH WATER HEATER FIRE CONTROL.
- C. FURNISH WITH A. O. SMITH # 9003910105 FACTORY COMBUSTION AIR INTAKE AND EXHAUST KIT.
- D. FURNISH WITH CONDENSATE NEUTRALIZATION KIT TO MATCH HEATER INPUT, AO SMITH # CNS SERIES

PLUMBING EXPANSION TANK SCHEDULE							
MARK	MANUFACTURER	MODEL	TANK SIZE (GALLONS)	MIN. ACCEPTANCE (GALLONS)	AIR PRESSURE SETTING (PSI)	SERVICE	NOTES
ET1	AMTROL	ST-25V	10.3	4.6	125	WH1 WH2	A
ET2	AMTROL	ST-25V	10.3	4.6	125	WH3 WH4	A
ET3	AMTROL	ST-25V	10.3	4.6	125	WH5 WH6	A
ET5	AMTROL	ST-60V	34	15.3	125	WH7 WH8 WH9	A
ET6	AMTROL	ST-8	2	0.9	125	WH10	A
ET7	AMTROL	ST-8	3.2	1.4	125	WH11	A

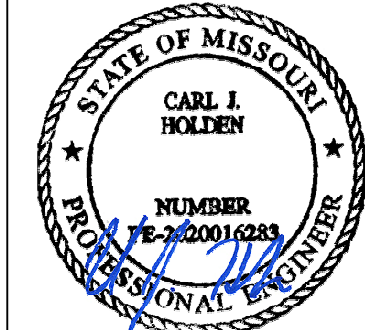
- NOTES:
- A. CHARGE TANK WITH AIR TO IDENTICAL PRESSURE AS STATIC DOMESTIC WATER PRESSURE.

RECIRCULATION PUMP SCHEDULE									
MARK	MANUFACTURER	MODEL	LOCATION	GPM	HEAD (FT.)	CONNECTION SIZE	ELECTRICAL DATA		
RP1	BELL & GOSSETT	NBF-45	LVL1 - AREA A	5.5	17	1 1/4"	120	1	1/18
RP2	BELL & GOSSETT	NBF-45	LVL1 - AREA B	5.5	17	1 1/4"	120	1	1/18
RP3	BELL & GOSSETT	NBF-45	LVL1 - AREA C	5.5	17	1 1/4"	120	1	1/18
RP4	BELL & GOSSETT	NBF-12U	LVL1 - AREA F	1	11	3/4"	120	1	1/18
RP5	BELL & GOSSETT	NBF-45	LVL1 - AREA C	5.5	17	1 1/4"	120	1	1/18
RP6	BELL & GOSSETT	NBF-12U	LVL1 - AREA S	1	11	3/4"	120	1	1/18

- NOTES:
- A. ALL LEAD FREE CAST BRONZE BOOSTER.
- B. PROVIDE WITH STRAINER UPSTREAM OF PUMP.
- C. PROVIDE ADJUSTABLE, SURFACE MOUNTED AQUASTAT - HONEYWELL L6006C.
- D. SET AQUASTAT TO SHUT OFF RECIRCULATION PUMP AT WATER HEATER SET POINT AND ON AT 10°F BELOW SET POINT.

ELEVATOR SUMP PUMP SCHEDULE (3/4 HP AND SMALLER)									
MARK	MANUFACTURER	MODEL	GPM	HEAD (FT.)	DISCHARGE SIZE (IN.)	VOLTS	ELECTRICAL PH	HP	NOTES
ESP1	WEIL	1411-538	50	21	2"	120	3	0.5	A, B, C, D, E

- NOTES:
- A. PROVIDE WEIL #8245 FLOAT SWITCH WITH POWER CORD AND PIGGYBACK PLUG.
- B. PROVIDE WITH WEIL #8341K1015 HIGH LEVEL ALARM WITH AUXILIARY CONTACT. REFER TO SPECIFICATIONS.
- C. PROVIDE 2" DISCHARGE PIPING, SHUTOFF VALVE AND ZOEGLER #30-0030 FLAPPER NON-CLOS CHECK VALVE.
- D. REFER TO DETAIL FOR MORE INSTALLATION INFORMATION.
- E. INSTALL IN 24" SQUARE x 24" DEEP SUMP PIT LOCATED IN ELEVATOR PIT. SEE ARCHITECTURAL DRAWINGS.

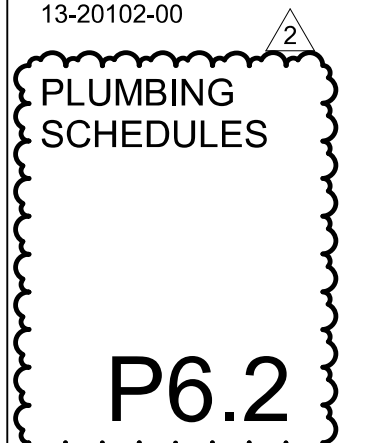


CARL J. HOLDEN  
LICENSE # PE-2020016283



LEE'S SUMMIT MIDDLE SCHOOL #4  
LEE'S SUMMIT R-7 SCHOOL DISTRICT  
1001 SE BAILEY ROAD  
LEE'S SUMMIT, MO 64081

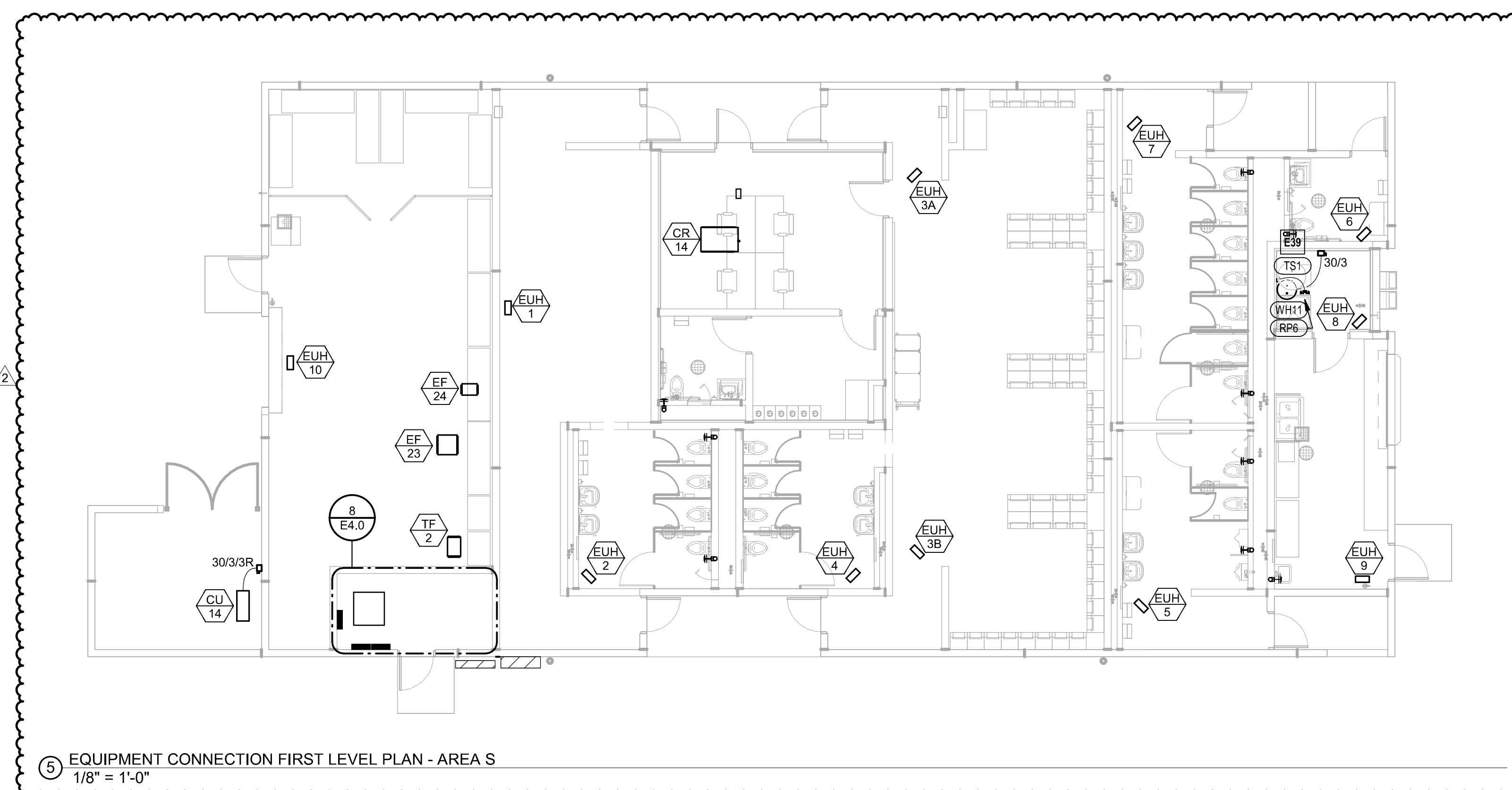
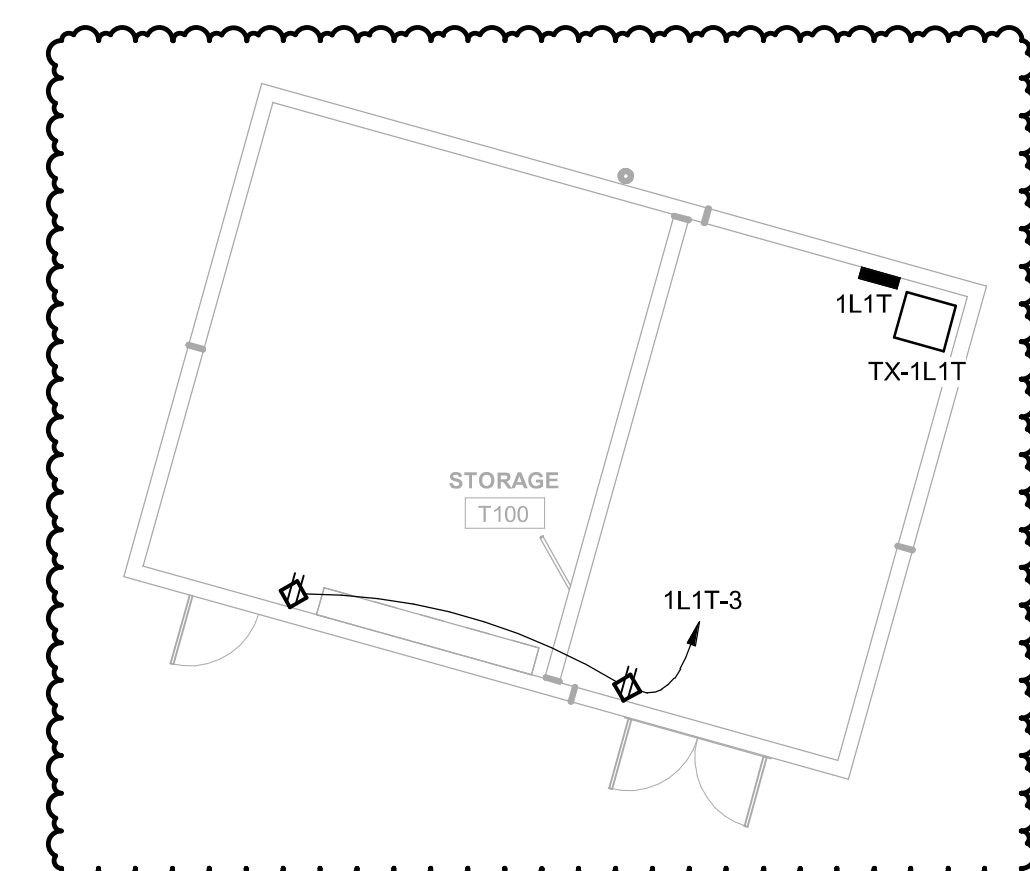
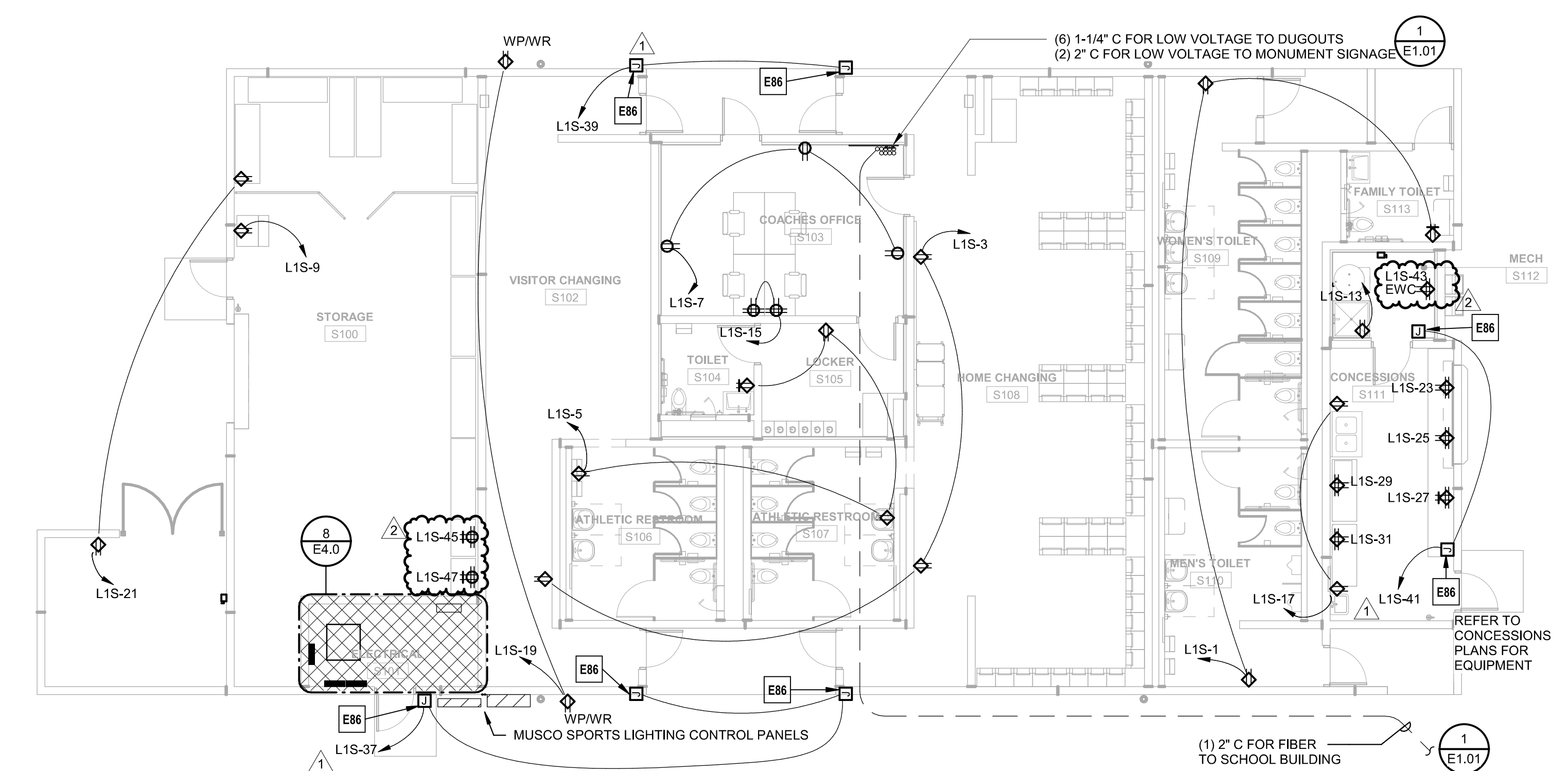
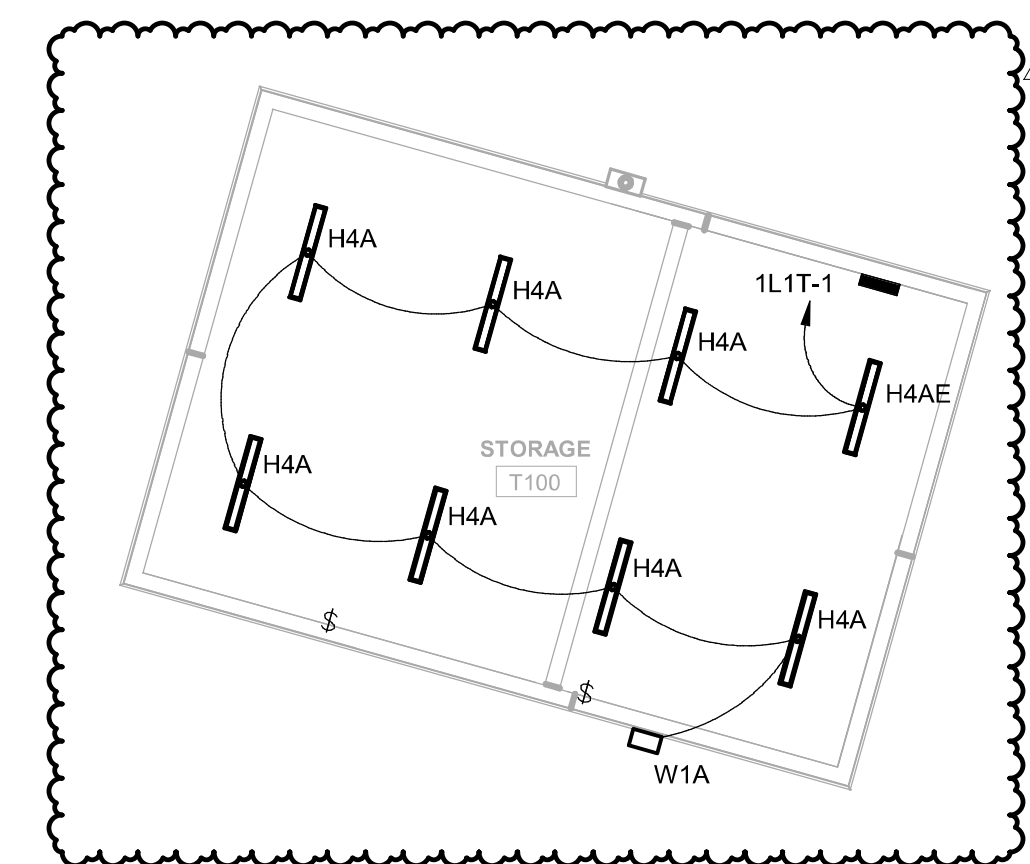
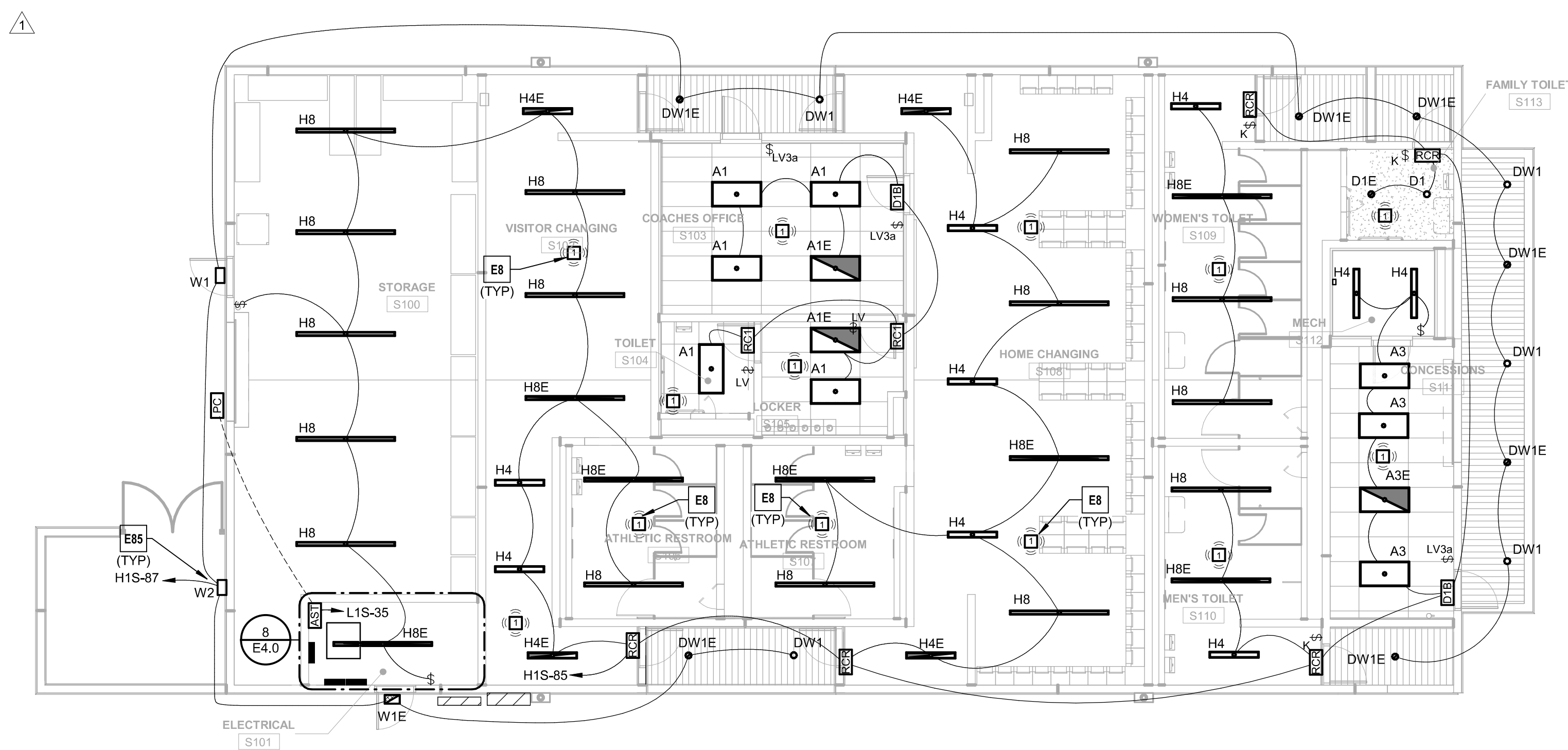
PACKAGE 3 - BUILDING & SITE  
10/08/20  
REVISIONS  
ADDENDUM 002











EQUIP CONN. - LVL1 - AREA S				
MARK	LOCATION	PANEL	CIRCUIT	NOTES
COMPUTER ROOM - INDOOR				
CR 14	LVL1 - AREA S	L1S	49.51	B,C
COMPUTER ROOM - OUTDOOR				
CU 14	LVL1 - AREA S	L1S	49.51	
Electric Storage Water Heater				
WH11	LVL1 - AREA S	H1S	127,129,131	
FAN				
EF 23	LVL1 - AREA S	L1S	53	A
EF 24	LVL1 - AREA S	L1S	55	A
TF 2	LVL1 - AREA S	L1S	57	A
Recirculation Pump				
RPP	LVL1 - AREA S	L1S	59	B
UNIT HEATER ELECTRIC				
EHU 1	LVL1 - AREA S	H1S	89,91,93	A
EHU 2	LVL1 - AREA S	H1S	95	A
EHU 3A	LVL1 - AREA S	H1S	97	A
EHU 3B	LVL1 - AREA S	H1S	99	A
EHU 4	LVL1 - AREA S	H1S	101	A
EHU 5	LVL1 - AREA S	H1S	103,105,107	A
EHU 6	LVL1 - AREA S	H1S	109	A
EHU 7	LVL1 - AREA S	H1S	111,113,115	A
EHU 8	LVL1 - AREA S	H1S	117	A
EHU 9	LVL1 - AREA S	H1S	119,121,123	A
EHU 10	LVL1 - AREA S	H1S	125	A

- GENERAL NOTES:**
1. COORDINATE ALL FINAL CONNECTIONS WITH MECHANICAL CONTRACTOR PRIOR TO ROUGHING.
  2. REFER TO MECHANICAL SCHEDULES FOR ADDITIONAL INFORMATION WITHIN DIVISION 26 SCOPE SUCH AS INTERLOCKING WITH CONTROLS OR OTHER EQUIPMENT.
  3. ELECTRICAL CONTRACTOR SHALL COORDINATE WITH DIVISION 22 AND 23 CONTRACTORS TO PROVIDE EXACT POWER REQUIREMENTS FOR ALL SUBMITTED EQUIPMENT THAT DIFFERS FROM THE BASIS OF DESIGN.
- NOTES:**
1. DISCONNECTING MEANS (FRACTIONAL HP SWITCH, FUSED DISCONNECT SWITCH) AND/OR CONTROLLER (STARTER, VFD) PROVIDED BY DIVISION 23 CONTRACTOR OR FACTORY SUPPLIED BY MANUFACTURER.
  2. PROVIDE UNIT MOUNTED FRACTIONAL HP MOTOR RATED SWITCH AS DISCONNECTING MEANS.
  3. MAKE UP UNIT OF GPM SYSTEM POWERED VIA OUTDOOR CONDENSING UNIT REFER TO MANUFACTURER'S INSTRUCTIONS FOR PROPER INSTALLATION.
  4. DISCONNECTING MEANS PROVIDED VIA CORD AND PLUG CONNECTION.
  5. LINE VOLTAGE POWER CONNECTED TO DIVISION 23 DISCONNECT UNIT VOLTAGE, UNIT MOUNTED, EQUIPMENT TRANSFORMER, RE. MECHANICAL PLANS FOR ADDITIONAL REQUIREMENTS.
  6. DISCONNECTING MEANS PROVIDED BY LOCKABLE CIRCUIT BREAKER, RE. ONE-LINE DIAGRAM (EX.) OR PANEL SCHEDULES (EX.).
  7. EQUIPMENT PROVIDED BY DIVISION 23 CONTRACTOR, INSTALLED BY DIVISION 23 CONTRACTOR. CONTRACTOR SHALL CONFIRM CONTROLLER/EQUIPMENT PAIRING WITH MECHANICAL PLANS AND SCHEDULES.
  8. MAKE UP AIR UNIT HAS TWO POWER CONNECTIONS. CIRCUIT AS SHOWN ON DRAWING. COORDINATE EXACT REQUIREMENTS WITH MANUFACTURER.
  9. DIVISION 26 CONTRACTOR TO PROVIDE ALL INTERCONNECTION BETWEEN KITCHEN EXHAUST HOOD AND ROOF MOUNTED EQUIPMENT TO PROVIDE A FULLY FUNCTIONAL SYSTEM. COORDINATE REQUIREMENTS WITH MANUFACTURER.
  10. DIVISION 26 CONTRACTOR TO PROVIDE ALL INTERCONNECTION BETWEEN ROOF MOUNTED EXHAUST HOOD AND ROOF MOUNTED EQUIPMENT TO PROVIDE A FULLY FUNCTIONAL SYSTEM. COORDINATE REQUIREMENTS WITH MANUFACTURER.
  11. DIVISION 26 CONTRACTOR TO PROVIDE NON-USED/FUSED SWITCH SIZED PER EQUIPMENT MANUFACTURER'S SPECIFICATIONS AND NEC.
  12. PROVIDE AN INTEGRAL HORSEPOWER MANUAL CONTROLLER WITH AUXILIARY CIRCUITRY TO PROVIDE A FULLY FUNCTIONAL SYSTEM. INTERFACE WITH BAS SYSTEM. COORDINATE REQUIREMENTS WITH BAS SYSTEM.

- ELECTRICAL PLAN NOTES:**
- E8 LOCKER ROOM KEYED SWITCHES AND OCCUPANCY SENSORS TO CONTROL ALL LIGHTING ASSOCIATED WITH EACH LOCKER ROOMS: BOTH VESTIBULES, LOCKER ROOM
- E9 PUMP TOWER TO PROVIDE CIRCULATION PUMP TOWER TO BE FED FROM SAME CIRCUIT AS CIRCULATION PUMP. COORDINATE INSTALLATION REQUIREMENTS WITH EQUIPMENT MANUFACTURER'S SPECIFICATIONS AND PLUMBING PLANS.
- E85 CONCESSION EXTERIOR BUILDING MOUNTED LIGHTING TO BE CONTROLLED BY COMBINATION OF TIME AND ASTRONOMICAL TIME CLOCK. REFER TO LIGHTING SEQUENCE OF OPERATIONS FOR PROGRAMMING INFORMATION.
- E86 PROVIDE POWER CONNECTION TO DOOR HARDWARE POWER SUPPLY. COORDINATE EXACT LOCATION AND ROUGH-IN REQUIREMENTS WITH ARCHITECT AND DOOR HARDWARE MANUFACTURER.

