

ELECTRICAL DEVICE LEGEND	
SYMBOL	DESCRIPTION
⊕	20A, 125V, 2P, 3W, NEMA 5-20R, DUPLEX RECEPT, MTD, 18" A.F.F. U.N.O.
⊕WP	SAME AS ABOVE EXCEPT WEATHERPROOF
⊕GF	SAME AS ABOVE EXCEPT GROUND FAULT INTERRUPTER
⊕D	SAME AS ABOVE EXCEPT DEDICATED CIRCUIT
⊕CIR	SAME AS ABOVE EXCEPT MOUNTED 4" ABOVE COUNTER HEIGHT
⊕	SAME AS ABOVE EXCEPT QUADRUPLX
⊕	SAME AS ABOVE EXCEPT RECESSED
⊕	3POLE DUPLEX RECEPT
⊕	SPECIAL PURPOSES RECEPT
⊕	CEILING MOUNTED DUAL TECHNOLOGY OCCUPANCY SENSOR
S	SINGLE POLE LIGHT SWITCH, 48" A.F.F. 120/277V
S	SAME AS ABOVE EXCEPT 3-WAY SWITCH
S	SAME AS ABOVE EXCEPT 4-WAY SWITCH
S	SAME AS ABOVE EXCEPT WEATHERPROOF
Sos	SAME AS ABOVE EXCEPT DUAL TECHNOLOGY OCCUPANCY SENSOR
S	SINGLE POLE FAN SWITCH, 48" A.F.F. 120/277V
S	SAFETY DISCONNECT SWITCH
⊕	ELECTRICAL PANEL
⊕	PROGRAMMABLE TIMECLOCK, NUMBER OF POLES AS REQUIRED
⊕	HAND DRYER, PROVIDE DUAL GANG JUNCTION BOX
⊕	JUNCTION BOX, SIZE AS REQUIRED TO FIT THE APPLICATION
⊕	FAN SWITCH OPERATED

ELECTRICAL LIGHTING DEVICE SCHEDULE					
MARK	DEVICE DESCRIPTION	ELECTRICAL DATA		BASIS OF DESIGN*	
		VA	VOLT	MANUFACTURER	MODEL OR SERIES
L-7	6" CAN LIGHT	12	UNIV	COMMERCIAL ELEC	CAT71
L-10	EXTERIOR WALL PACK LIGHT FIXTURE	40	UNIV	WILLIAMS	WPTZ-L38-UNV
L-11	UNIVERSAL MOUNTED EXIT SIGN	5	UNIV	WILLIAMS	EXIT-R-EM-WHT
L-12	UNIVERSAL MOUNTED DUAL EMERGENCY HEAD LIGHT	5	UNIV	WILLIAMS	EF43D

NOTES:
 * OR SIMILAR MANUFACTURER/MODEL OR SERIES

SEPARATE PERMITS REQUIRED

ALL FIRE PROTECTION SYSTEMS, FUEL, GAS, SIGNAGE AND OTHER BUILDING COMPONENTS REQUIRED BY LOCAL BUILDING AND FIRE AUTHORITIES TO BE INSTALLED OR MODIFIED VIA SEPARATE PERMIT, AND WHICH ARE AFFECTED BY THE WORK PROPOSED HEREIN, SHALL BE DULY INSTALLED OR MODIFIED ONLY THROUGH SEPARATE PERMIT AUTHORIZATION FROM THE AUTHORITY(S) HAVING JURISDICTION.

VOLTAGE DROP SCHEDULE		VOLTAGE DROP SCHEDULE - ALUMINUM		VOLTAGE DROP SCHEDULE - COPPER					
277 VOLT BRANCH CIRCUITS UP TO 16 AMPS		120 VOLT BRANCH CIRCUITS UP TO 10 AMPS		120 VOLT BRANCH CIRCUITS UP TO 14 AMPS		120 VOLT BRANCH CIRCUITS UP TO 10 AMPS		120 VOLT BRANCH CIRCUITS UP TO 14 AMPS	
RUN DISTANCE IN FEET	WIRE SIZE AWG	TOTAL WIRE LENGTH (FEET)	WIRE SIZE (AWG)	TOTAL WIRE LENGTH (FEET)	WIRE SIZE (AWG)	TOTAL WIRE LENGTH (FEET)	WIRE SIZE (AWG)	TOTAL WIRE LENGTH (FEET)	WIRE SIZE (AWG)
1' - 225'	#10	151' - 230'	#6	106' - 165'	#6	151' - 150'	#10	11' - 15'	#10
226' - 345'	#8	231' - 360'	#4	166' - 255'	#4	151' - 240'	#8	16' - 18'	#8
346' - 546'	#6	361' - 445'	#3	256' - 320'	#3	241' - 380'	#6	186' - 290'	#6
				321' - 390'	#2	241' - 445'	#4	291' - 445'	#4
				391' - 490'	#1	446' - 565'	#3	446' - 565'	#3
				491' - 620'	#1/0	566' - 710'	#2	566' - 710'	#2
				621' - 740'	#2/0	711' - 895'	#1	711' - 895'	#1

NOTES:
 * EMERGENCY EXIT LIGHTS ARE CONNECTED TO THE CORRESPONDING LOCAL LIGHT CIRCUIT

CONTRACTOR MUST VERIFY ALL CLEARANCES AND DIMENSIONS IN FIELD

GENERAL NOTES:
 A. ALL CIRCUITS SHALL HAVE INDIVIDUAL NEUTRAL CONDUCTORS CONTINUOUS FROM PANEL. SHARED NEUTRALS ARE NOT PERMITTED

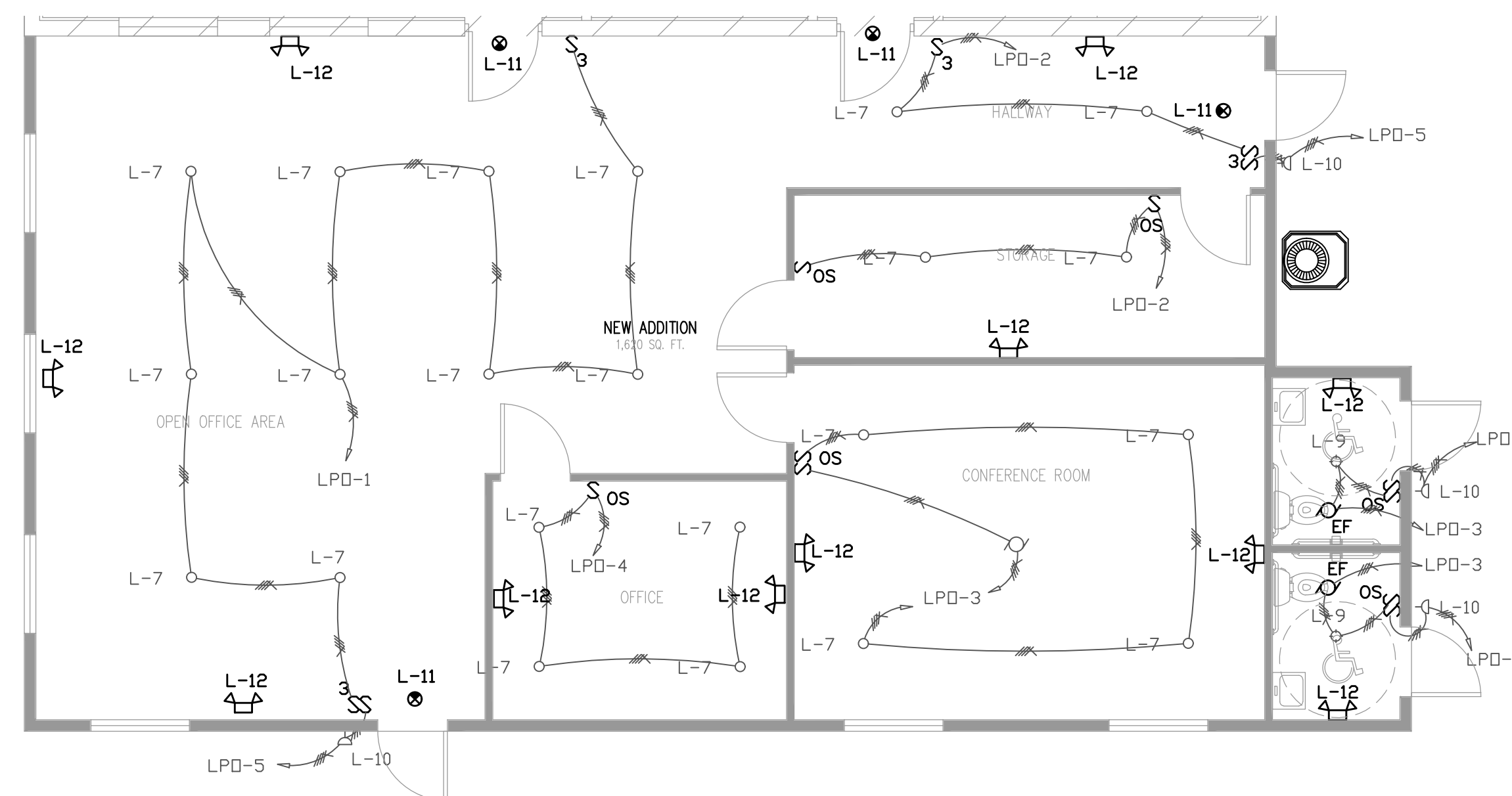
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4161 TAMAMI TRAIL UNIT 101
 FORT CHARLOTTE, FL 33980
 P. 813-978-8195
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FLORIDA ENGINEERING

PROJECT NAME & ADDRESS:
ROTONDA WEST ASSOCIATION
 646 ROTONDA CIRCLE, ROTONDA WEST, FL 33947
 MISC OWNER



LIGHTING PLAN
 3/16" = 1'-0"

No.	Description	Date

DRAWN BY: JPP

PROJECT NO: 22 200 24

SCALE: As indicated

SHEET TITLE:
ELECTRICAL PLAN

SHEET NUMBER:
E-100

PANEL		LPO		PHASE LOADS (VA)		POLE		TRIP		DESCRIPTION		CKT NO	
VOLTAGE (L-N):	120	ENCLOSURE TYPE:	NEMA 1R										
VOLTAGE (L-L):	208	MOUNTING:	SURFACE										
PHASES, WIRES:	3 ϕ 4 W	AIC RATING (A):	22000										
MINIMUM BUS CAPACITY (A):	200 A	NOTES:											
MAIN O.C. DEVICE (A):	200 A												
1	LIGHT OPEN OFFICE AREA	20	1	140	73			1	20	HALLWAY/STORAGE		2	
3	LIGHT CONFERENCE ROOM	20	1		586	58		1	20	OFFICE		4	
5	LIGHT EXT.	20	1				170	1200	1	20	SIGN		6
7	FACP	20	1	500	0				1	20	SPARE		8
9	SPARE	20	1				1800		1	20	RECEPT, OPEN OFFICE AREA		10
11	RECEPT, STORAGE	20	1				900	1620	1	20	RECEPT, CONFERENCE ROOM		12
13	RECEPT, OFFICE	20	1	1080	0				1	20	SPARE		14
15	SPARE	20	1			0	0		1	20	SPARE		16
17	SPARE	20	1				0	0	2	20	SPARE		18,20
19,21	SPARE	20	2	0	0				2	20	SPARE		18,20
19,21	SPARE	20	2			0	0		2	20	SPARE		22,24
23,25	SPARE	20	2			0	0		2	20	SPARE		22,24
23,25	SPARE	20	2	0	0				2	20	SPARE		26,28
27,29	SPARE	20	2			0	0		2	20	SPARE		26,28
27,29	SPARE	20	2			0	0		2	20	SPARE		30,32
31,33	SPARE	20	2	0	0				2	20	SPARE		30,32
31,33	SPARE	20	2			0	5520		3	45	AHU 1		34,36,38
35,37,39	CU 1	40	3				4600	5520	3	45	AHU 1		34,36,38
35,37,39	CU 1	40	3	4600	0				3	45	AHU 1		34,36,38
35,37,39	CU 1	40	3			0	0		3	20	SPARE		40,42,44
									3	20	SPARE		40,42,44
									3	20	SPARE		40,42,44
				CONNECTED LOAD PHASE TOTALS (VA)									
				6393		7964		14010					
				CONNECTED LOAD (KVA)		DEMAND FACTOR		DEMAND LOAD (KVA)		DEMAND LOAD		28.8 KVA	
				1.8		1.25		2.2		SPARE CAPACITY		86.4 KVA	
				Motors		0.3		1.00		0.3		SPARE CAPACITY	
				Motors (Largest)		0.1		1.25		0.2		PHASE BALANCE	
				Receptacles (0 - 10 KVA)		5.4		1.00		5.4		A TO B	
				Cooling		9.2		1.00		9.2		B TO C	
				Cooling and Heating		11.0		1.00		11.0		C TO A	
				Equipment		0.5		1.00		0.5		46%	
				TOTAL:		28.4		28.8					
				LOAD (AMPS):		78.7		80.1					

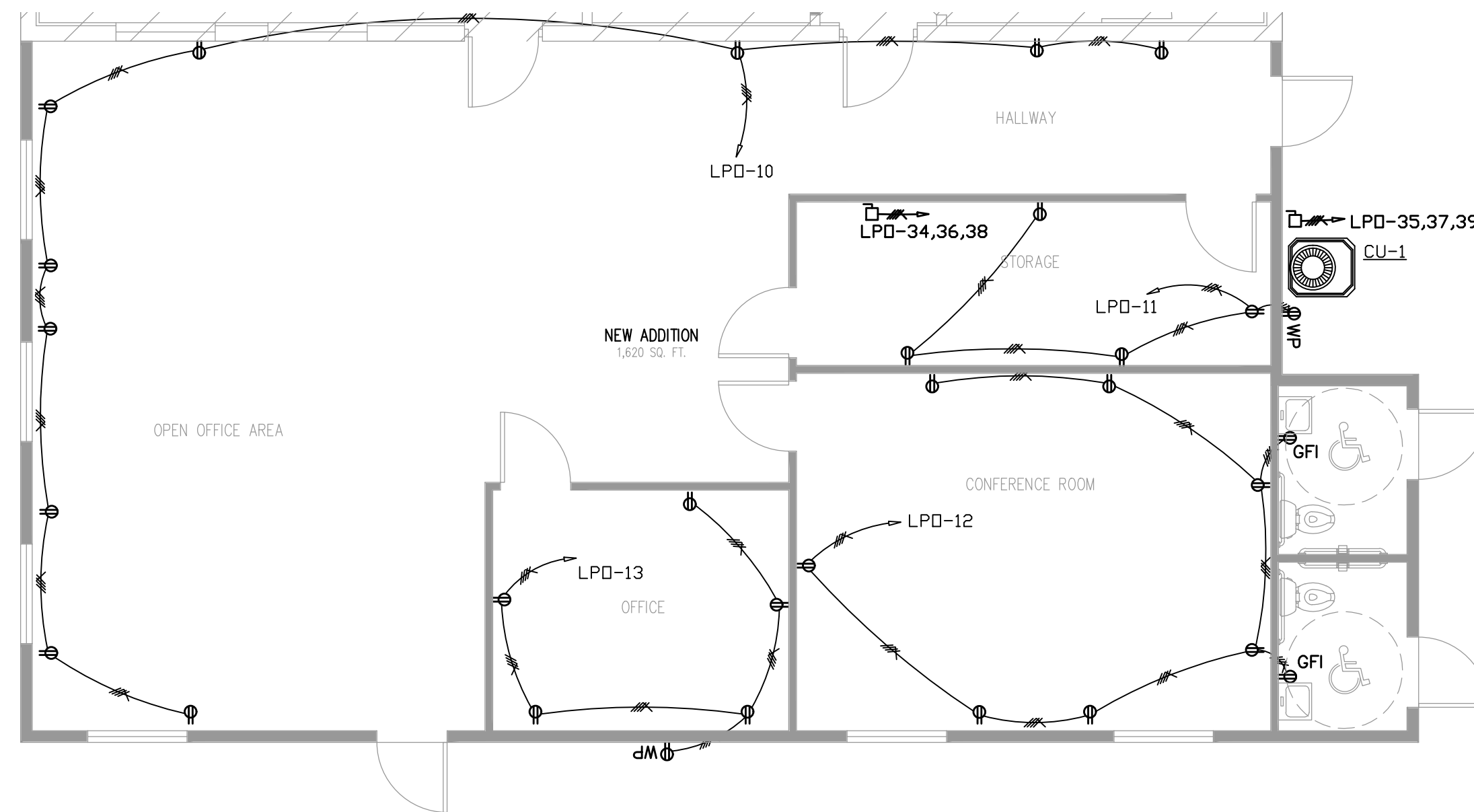
NOTES:
 * TC = INDICATES CIRCUIT TO BE TIMECLOCK CONTROLLED

SYMBOL	DESCRIPTION
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	JUNCTION BOX, SIZE AS REQUIRED TO FIT THE APPLICATION
	FAN SWITCH OPERATED

NOTES:
 * LOW VOLTAGE AND DATA PLANS NOT INCLUDED, PROVIDED BY OTHERS.
 * ELECTRICAL CONTRACTOR TO PROVIDE CLEARANCES FOR ELECTRICAL EQUIPMENT PER NEC110.26
 * CIRCUIT NUMBERS FROM ELECTRICAL PANEL LPO U.N.O
 * Electrical outlets at ALL counters to be mounted horizontal with the lower portion of the box at 38" above F.F

S E P A R A T E P E R M I T S R E Q U I R E D
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 FLORIDA ENGINEERING
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POWER PLAN
 3/16" = 1'-0"

PROJECT NAME & ADDRESS:
ROTONDA WEST ASSOCIATION
 646 ROTONDA CIRCLE, ROTONDA WEST, FL 33947
 MISC OWNER

No.	Description	Date

DRAWN BY: JPP

PROJECT NO: 22 200 24

SCALE: As indicated

SHEET TITLE:

ELECTRICAL PLAN

SHEET NUMBER:

E-101

WIRING METHODS:

- BELOW GRADE:** SINGLE- OR MULTI-CONDUCTOR COPPER WIRE WITH GROUND, MEETING N.E.C. AND NEMA REQUIREMENTS, IN APPROVED NONMETALLIC CONDUIT. CONDUIT MAY BE RUN IN OR BELOW CONCRETE, AND CONCEALED IN WALLS TO FIRST BOXES. ALL PVC COMPONENTS (PIPING, FITTINGS, CEMENT, ETC.) SHALL BE FROM THE SAME MANUFACTURER.
- EXTERIOR ABOVE GRADE:** SINGLE- OR MULTI-CONDUCTOR COPPER WIRE WITH GROUND, MEETING N.E.C. AND NEMA REQUIREMENTS, IN APPROVED METALLIC OR NONMETALLIC CONDUIT. ALL COMPONENTS (PIPING, FITTINGS, ETC.) SHALL BE FROM THE SAME MANUFACTURER.

NOTE: MAXIMUM LENGTH OF FLEXIBLE CONDUIT SHALL BE SIX FEET (6').

- EXTERIOR EQUIPMENT:** SINGLE- OR MULTI-CONDUCTOR COPPER WIRE WITH GROUND, MEETING N.E.C. AND NEMA REQUIREMENTS, IN APPROVED LIQUIDTIGHT FLEXIBLE METALLIC OR NONMETALLIC CONDUIT (MINIMUM 3/4"). ALL COMPONENTS (PIPING, FITTINGS, ETC.) SHALL BE FROM THE SAME MANUFACTURER.

NOTE: MAXIMUM LENGTH OF FLEXIBLE CONDUIT BETWEEN MEANS OF DISCONNECT (OR JUNCTION BOX) AND EQUIPMENT SHALL BE THREE FEET (3').

- INTERIOR:** SINGLE- OR MULTI-CONDUCTOR COPPER WIRE WITH GROUND, MEETING N.E.C. AND NEMA REQUIREMENTS, IN APPROVED METALLIC (EMT) CONDUIT. ALL COMPONENTS (PIPING, FITTINGS, ETC.) SHALL BE FROM THE SAME MANUFACTURER. CONDUITS SHALL BE CONCEALED IN OR BEHIND CEILINGS, WALLS, OR FLOORS, EXCEPT WHERE EXPOSED RACEWAYS ARE SPECIFICALLY PERMITTED.

NOTE: EMT SHALL NOT BE INSTALLED IN LOCATIONS (1) SUBJECT TO SEVERE DAMAGE, (2) IN CONTACT WITH EARTH, (3) IN CONCRETE SLABS ON GRADE, (4) OTHER LOCATIONS AS LISTED IN N.E.C. 2014, ARTICLE 358.12.

EXCEPTION: NON-METALLIC SHEATHED CABLE (NM, NMC, NMS) MAY BE USED WITHIN DWELLING UNITS, IN COMPLIANCE WITH N.E.C. 2014, ARTICLE 334.

- ELECTRICAL SYSTEM EXPANSION:** ANY PANELBOARD MOUNTED SO THAT ITS FRONT FACE IS FLUSH WITH THE FINISHED WALL SHALL HAVE ONE (1) 3/4" EMT CONDUIT INSTALLED FROM PANELBOARD TO ACCESSIBLE CEILING SPACE FOR EVERY FOUR (4) OR MAJOR FRACTION THEREOF. POLES INDICATED AS "SPACE" OR "SPARE" IN THE PANELBOARD SCHEDULE PER THESE DOCUMENTS.

EXCEPTION NO. 1: PANELBOARDS INSTALLED ON A WALL SURFACE, WHERE AT LEAST THREE (3) SIDES, NOT INCLUDING THE FRONT, REMAIN ACCESSIBLE AFTER CERTIFICATE OF OCCUPANCY SHALL NOT BE REQUIRED TO MEET #16320.5.

EXCEPTION NO. 2: DWELLING UNITS SHALL NOT BE REQUIRED TO MEET #16320.5.

- ELECTRICAL BOXES:** ALL OUTLET, DEVICE, AND JUNCTION BOXES SHALL BE STANDARD 4" SQUARE GALVANIZED STEEL OR APPROVED PLASTIC, 1-1/2" DEEP, WITH DEVICE RINGS OF THE SAME MATERIAL, UNLESS OTHERWISE NOTED. GALVANIZED BOXES SHALL BE MANUFACTURED BY APPLETON, NATIONAL, STEEL CITY, RACO OR APPROVED EQUAL. PLASTIC BOXES SHALL BE ALIED, NELCO, CARLON, OR EQUAL. ALL ELECTRICAL BOXES MUST BE ACCESSIBLE AFTER CERTIFICATE OF OCCUPANCY.

- THRU-FEEDS:** MAINTAIN THRU-FEEDS ON ALL ELECTRICAL DEVICES AT C.O.

GENERAL ELECTRICAL NOTES

CONTRACTOR SHALL VERIFY ALL REQUIREMENTS FOR TELEPHONE AND POWER SERVICES WITH RESPECTIVE UTILITY COMPANIES PRIOR TO SUBMITTING THE BID. IF THEIR REQUIREMENTS ARE AT A VARIANCE WITH THOSE SHOWN ON THE PLANS, THE CONTRACTOR SHALL INFORM THE ARCHITECT IMMEDIATELY. ALL COSTS INCURRED WITH THE UTILITY COMPANIES FOR SERVICES SHALL BE INCLUDED IN THE BID PRICE. IF SUCH COSTS ARE NOT AVAILABLE AT BID TIME, THE CONTRACTOR SHALL INCLUDE WITH BID, A LETTER FROM A RESPONSIBLE PARTY WITH THE UTILITY COMPANY STATING SUCH, AND COSTS WILL THEN BE EXCLUDED FROM THE BID PRICE.

THIS CONTRACTOR SHALL VERIFY EXACT REQUIREMENTS FOR MECHANICAL EQUIPMENT FROM MANUFACTURERS RECOMMENDATIONS PRIOR TO ROUGHING IN CONDUIT SIZE, WIRE SIZE AND CIRCUIT PROTECTION SIZE ACCORDINGLY. IF REQUIREMENTS ARE LARGER THAN CALLED FOR ON THE ELECTRICAL PLANS, NOTIFY THE ARCHITECT IMMEDIATELY.

CONTRACTOR SHALL VISIT THE SITE OF THE WORK PRIOR TO SUBMITTING BID TO EXAMINE CAREFULLY LOCAL CONDITIONS AND DIFFICULTIES TO BE ENCOUNTERED. ANY DISCREPANCY BETWEEN PLANS AND EXISTING CONDITIONS SHALL IMMEDIATELY BE BROUGHT TO THE ATTENTION OF THE ARCHITECT.

COMPLIANCE STATEMENT

ELECTRICAL SHALL COMPLY WITH ALL PROVISIONS OF THE 2017 NEC, NFPA 70 AND OTHER APPLICABLE CODES AND ORDINANCES.

CLARIFICATION NOTES

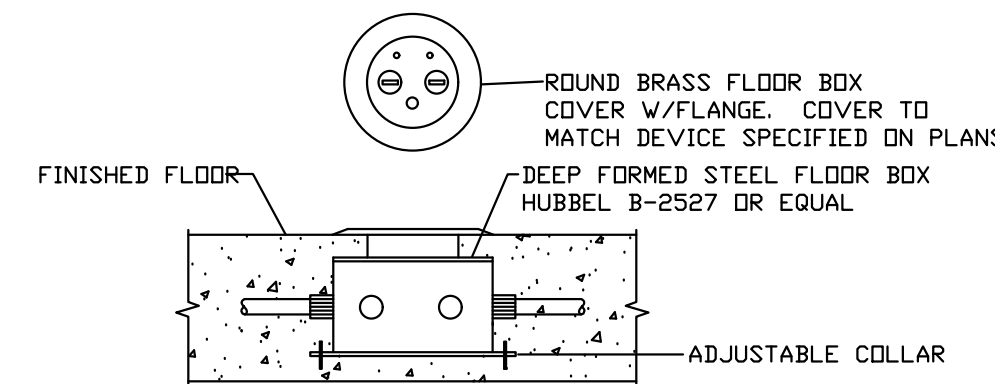
ALL GENERAL PURPOSE RECEPTACLES WITHIN 6 FEET OF A SINK SHALL BE GFCI PROTECTED. ALL 125V SINGLE PHASE EQUIPMENT RECEPTACLES TO BE GFCI PROTECTED ON GFCI BREAKER CIRCUIT.

VOLTAGE DROP

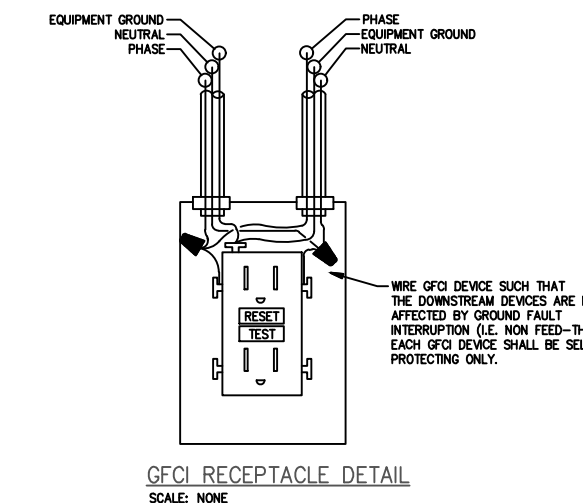
THE PLANS REFLECT SYSTEM VOLTAGES DROP AS PER FBC ENERGY CONSERVATION 2020 SIXTH C405.6.3. FEEDER CONDUCTORS ARE SIZED FOR A MAXIMUM VOLTAGE DROP OF 2 PERCENT AT DESIGN LOAD. BRANCH CIRCUIT CONDUCTORS ARE SIZED FOR A MAXIMUM VOLTAGE DROP OF 3 PERCENT AT DESIGN LOAD.

ELECTRICAL NOTES

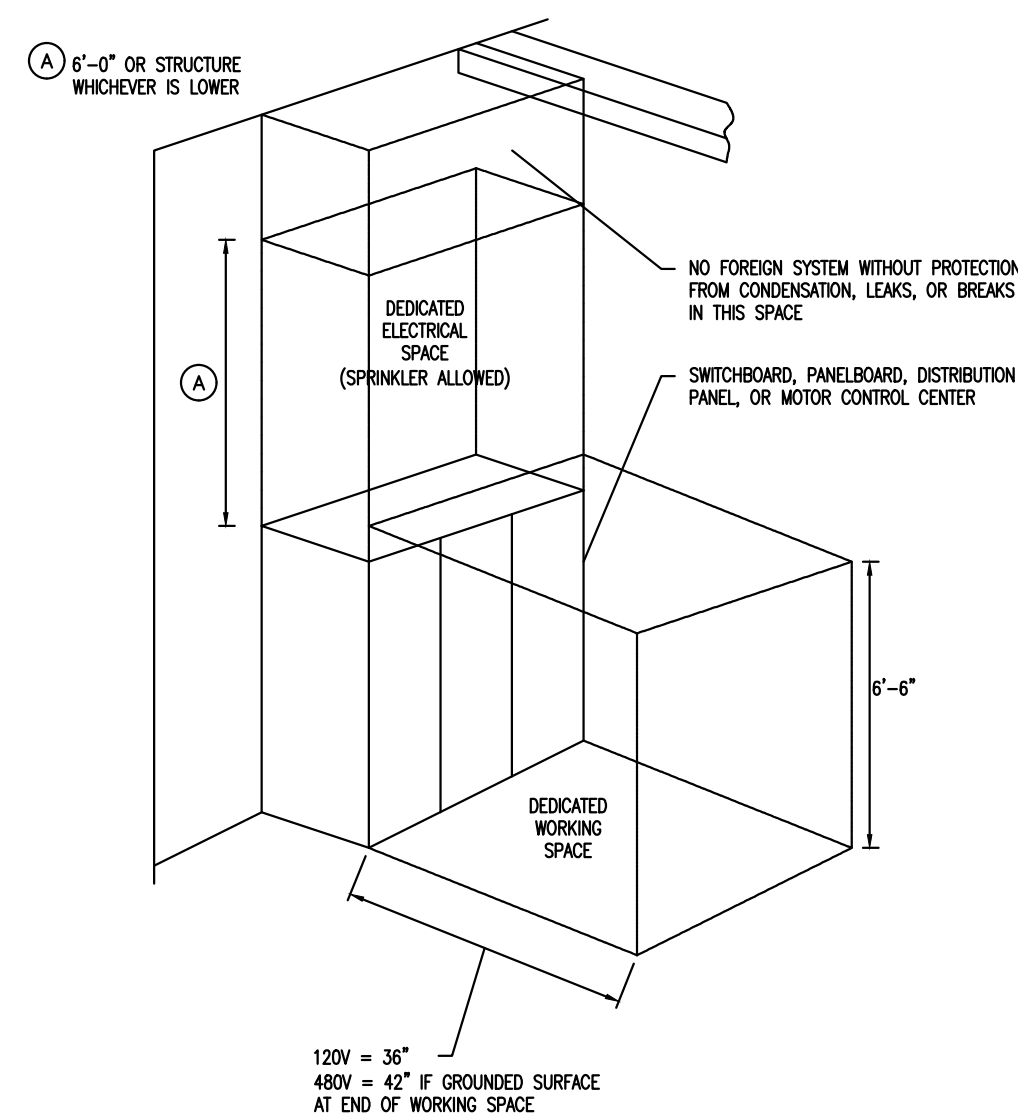
ALL ELECTRICAL WIRING EXPOSED TO VIEW IN EMT
 ALL ELECTRICAL IN CONDUITS, ARMORED CABLE OR BLUE CARLON CONDUIT
 ALL 110V EQUIPMENT RECEPTACLES MUST BE GFCI PROTECTED PER NEC 210.8(B)(2).
 ALL CONDUITS RUN PARALLEL OR PERPENDICULAR TO STRUCTURAL FRAMING.
 ALL 10-VOLT WIRING BY OTHERS UNDER SEPARATE PERMIT.
 INCREASE WIRE SIZES FOR RUNS OVER 100' PER NEC 2017.



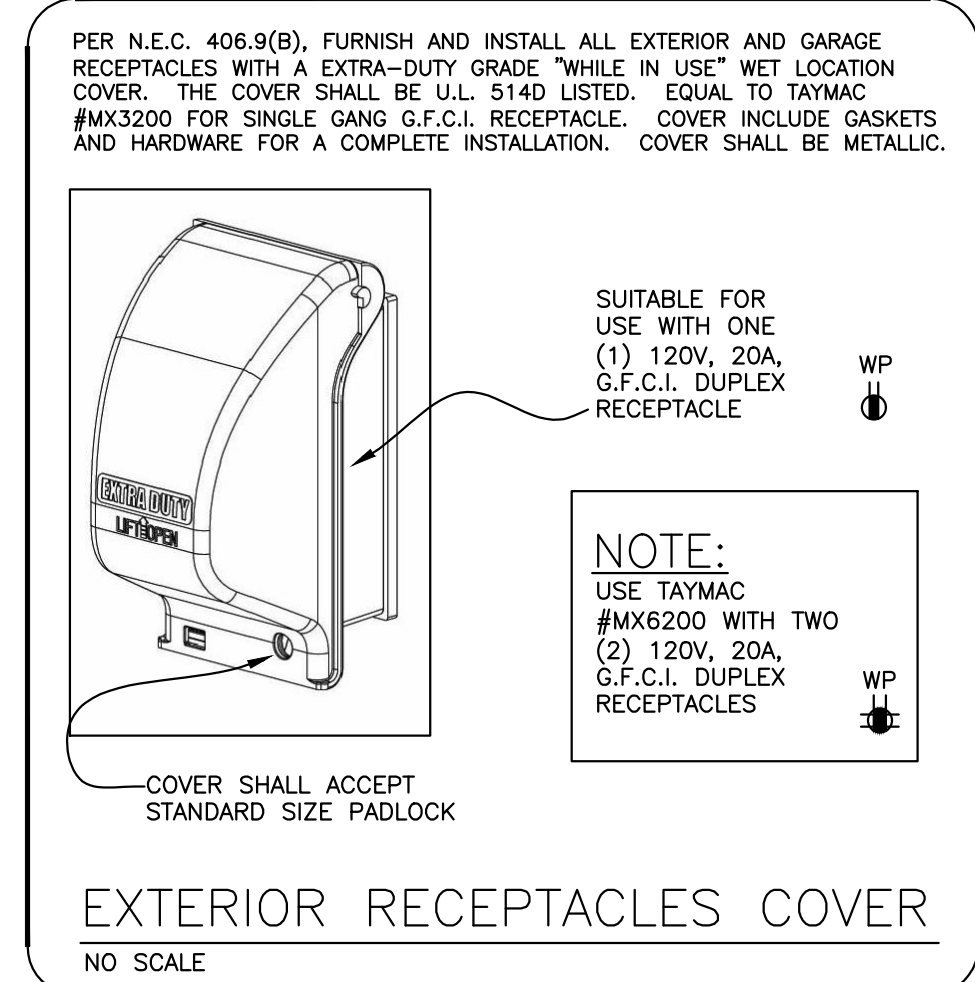
IN-FLOOR JUNCTION/OUTLET BOX DETAIL
 NOT TO SCALE



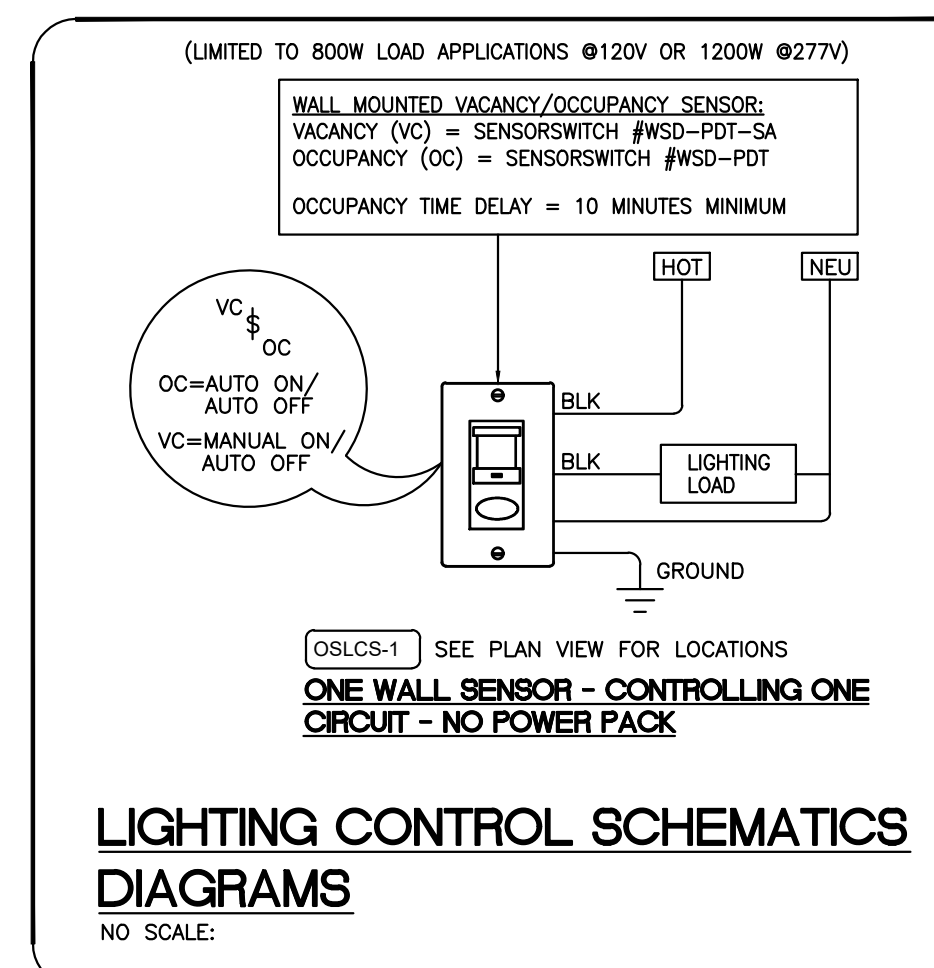
GFCI RECEPTACLE DETAIL
 SCALE NONE



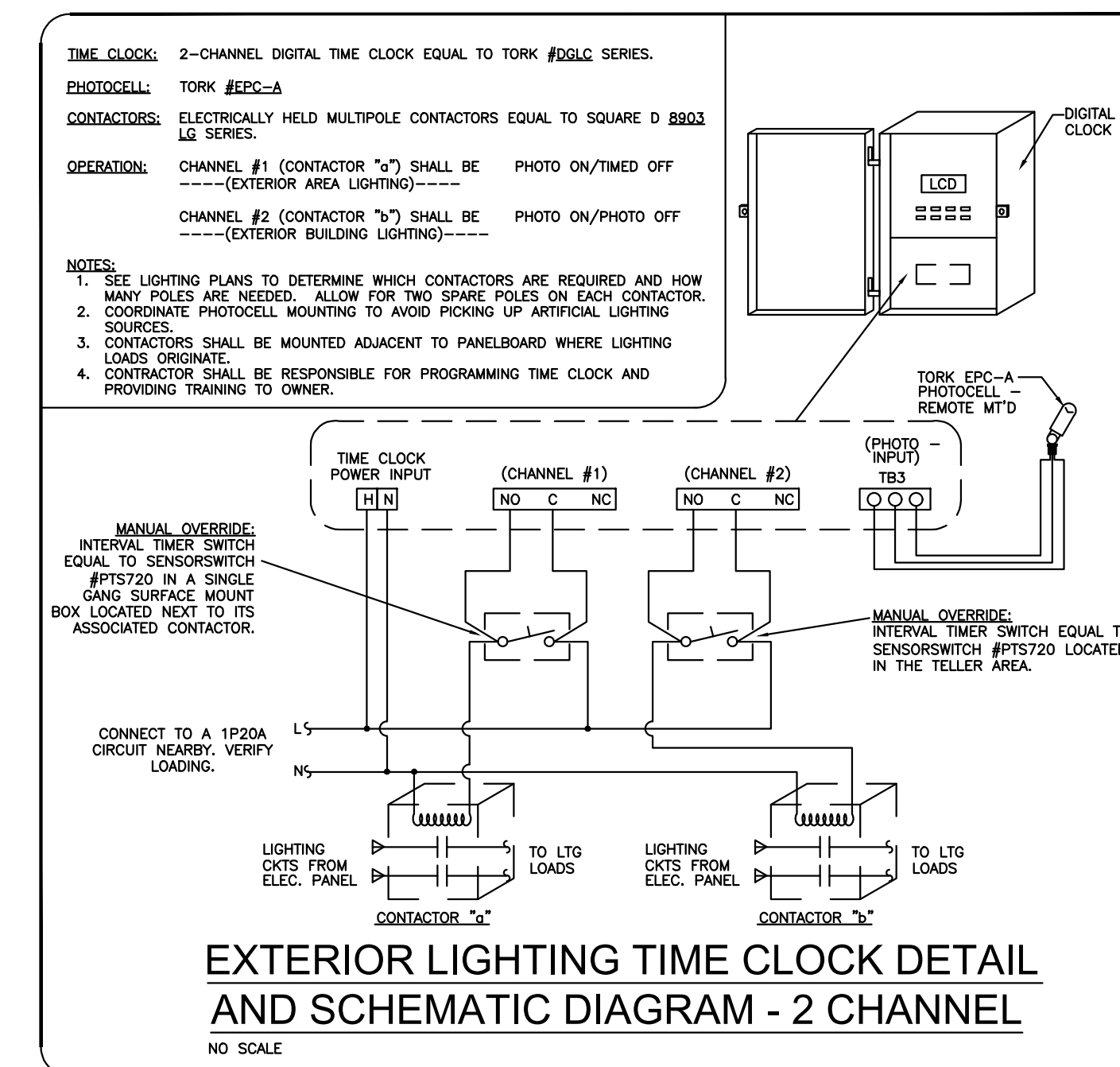
WORKING SPACE DETAIL



EXTERIOR RECEPTACLES COVER
 NO SCALE



LIGHTING CONTROL SCHEMATICS DIAGRAMS
 NO SCALE:

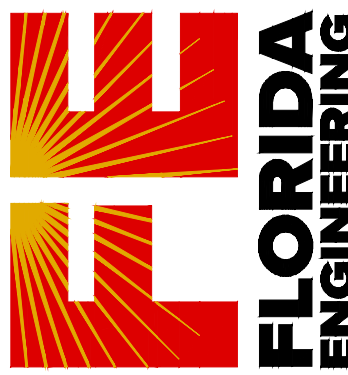


EXTERIOR LIGHTING TIME CLOCK DETAIL AND SCHEMATIC DIAGRAM - 2 CHANNEL
 NO SCALE

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ROTONDA WEST ASSOCIATION
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PROJECT NO: 22 200 24

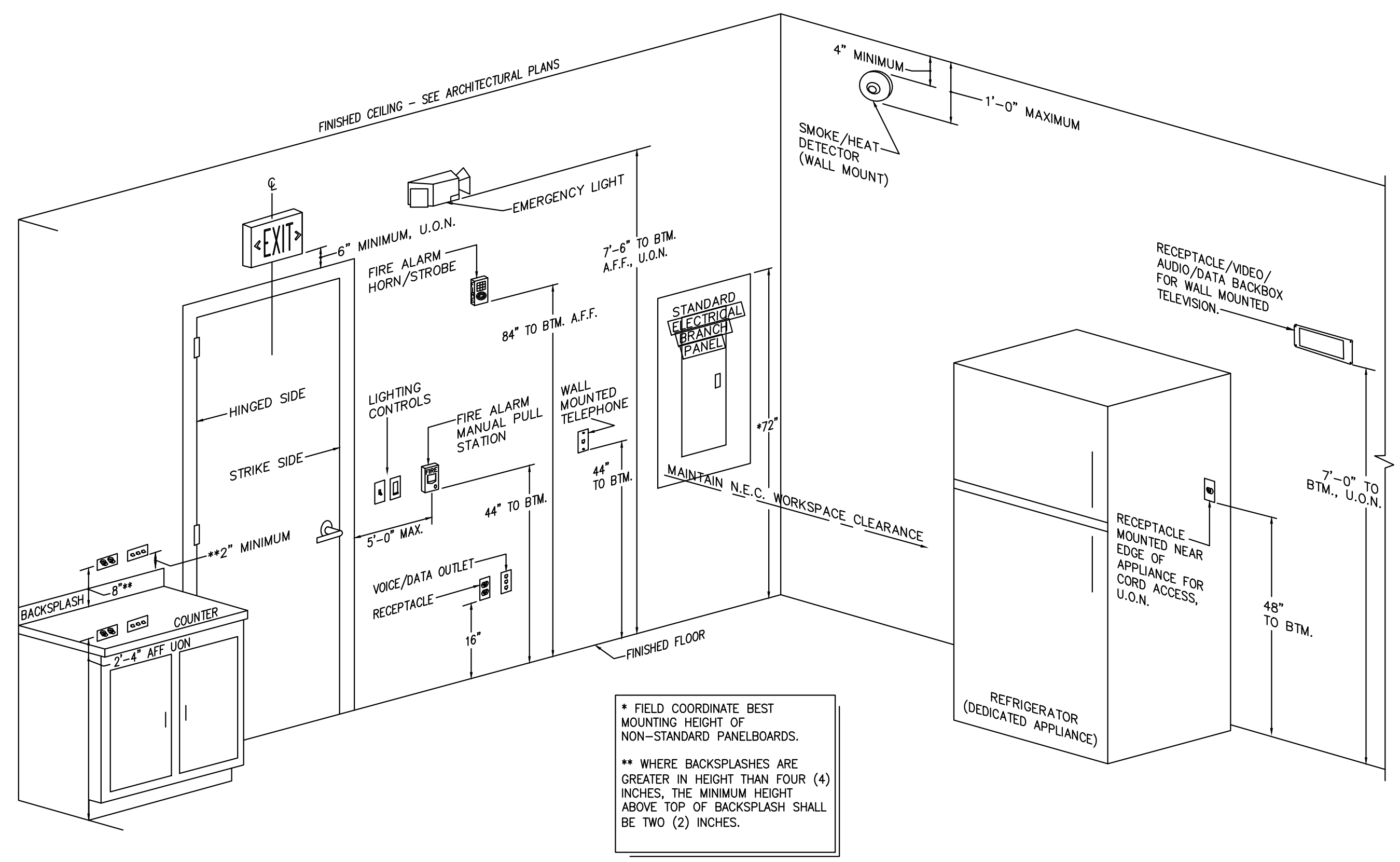
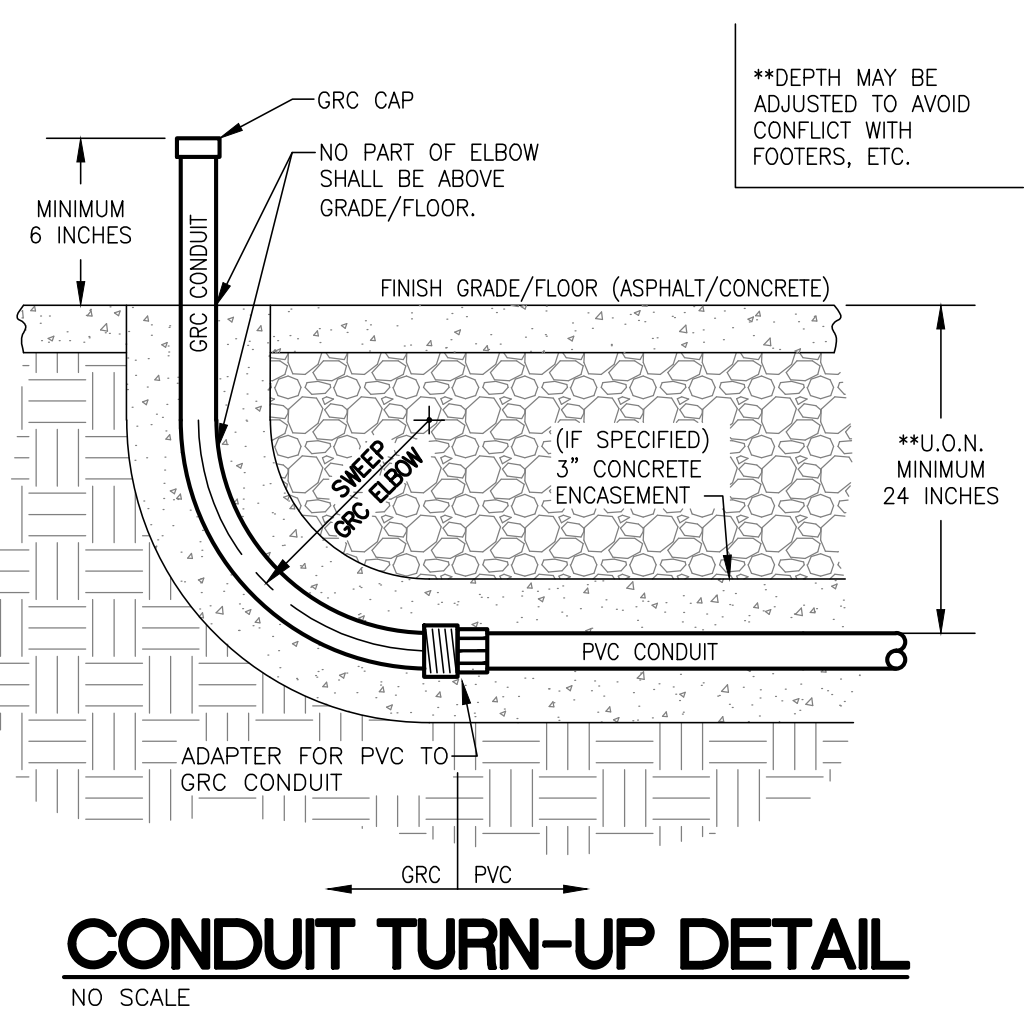
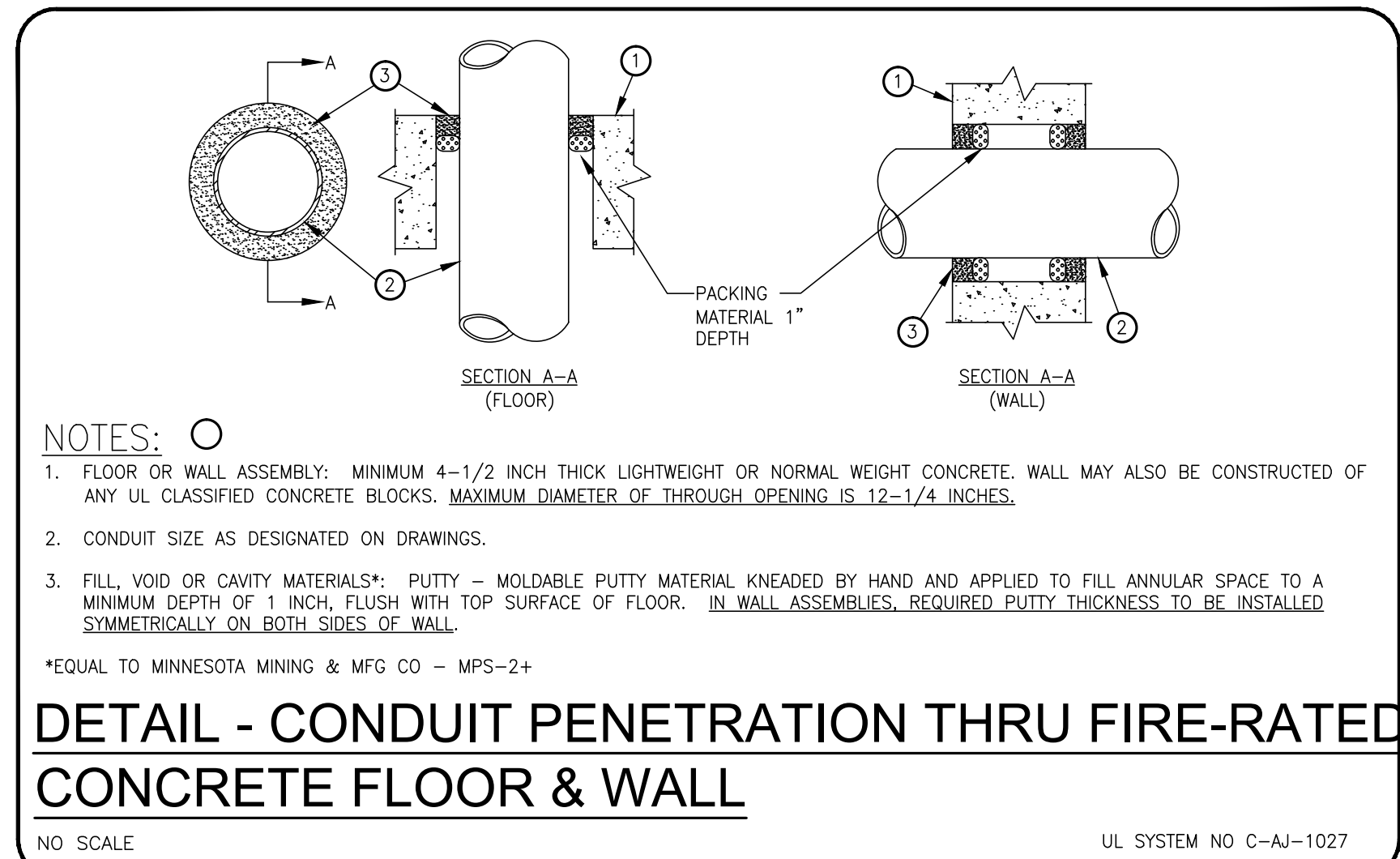
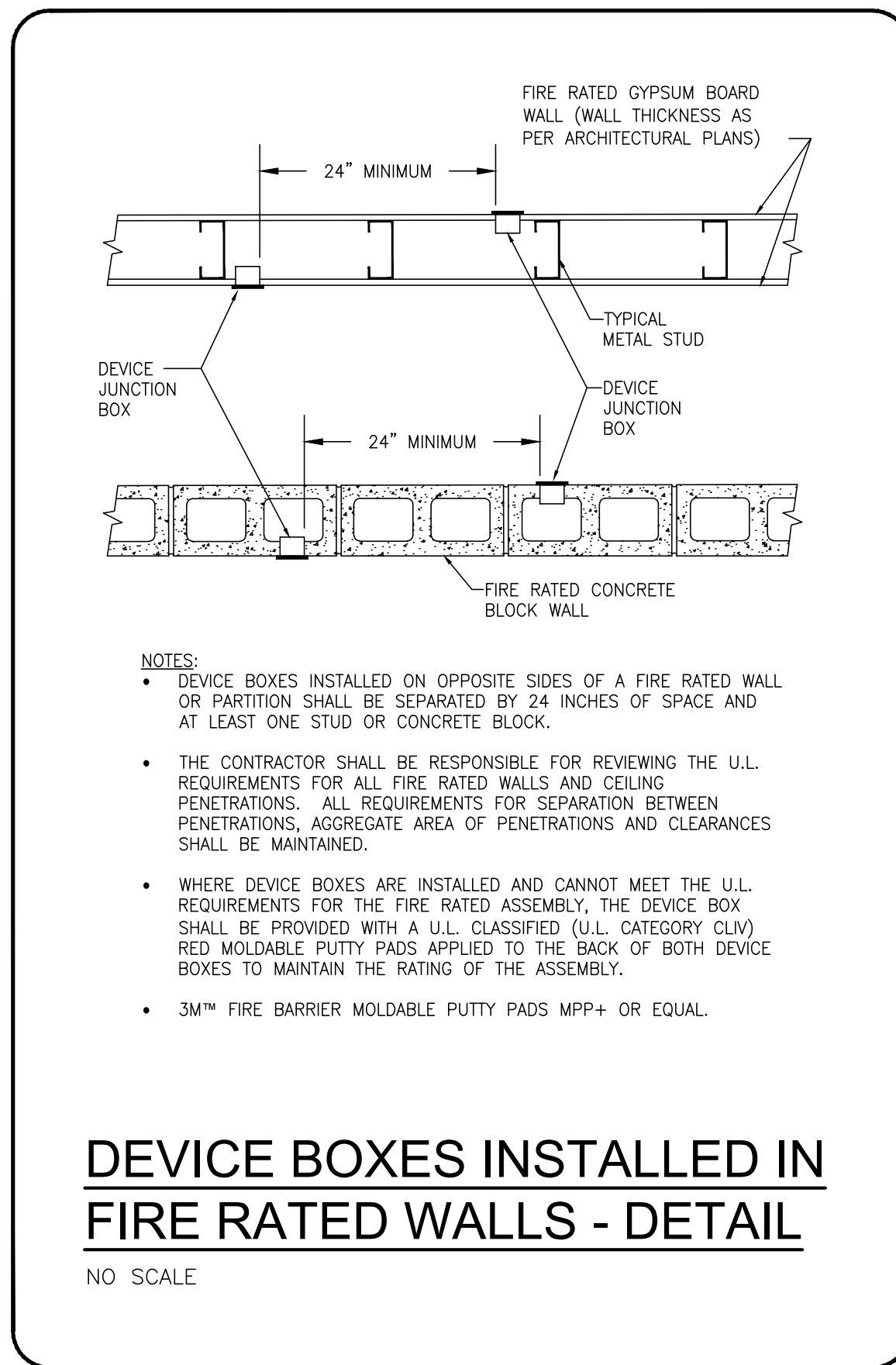
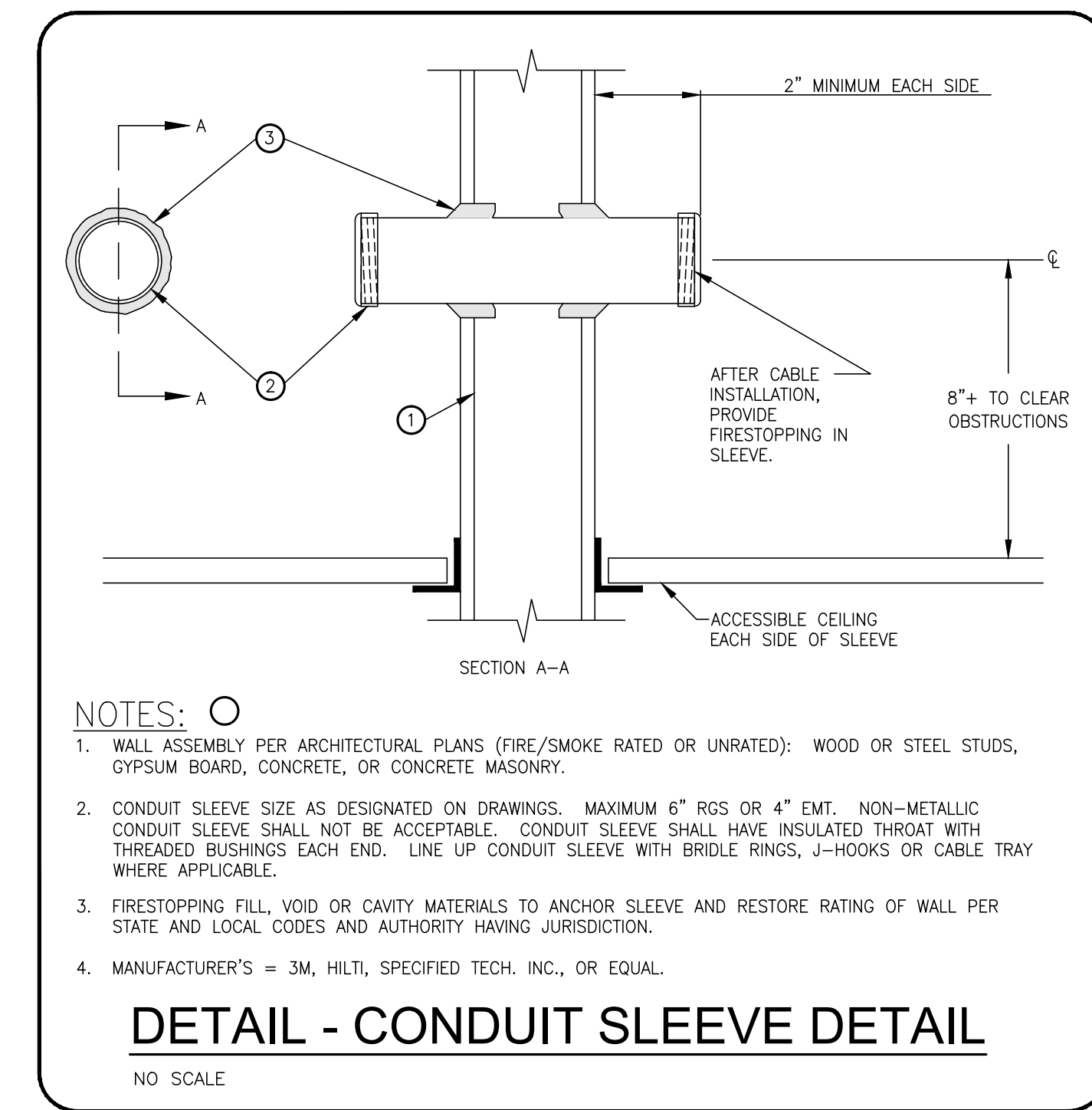
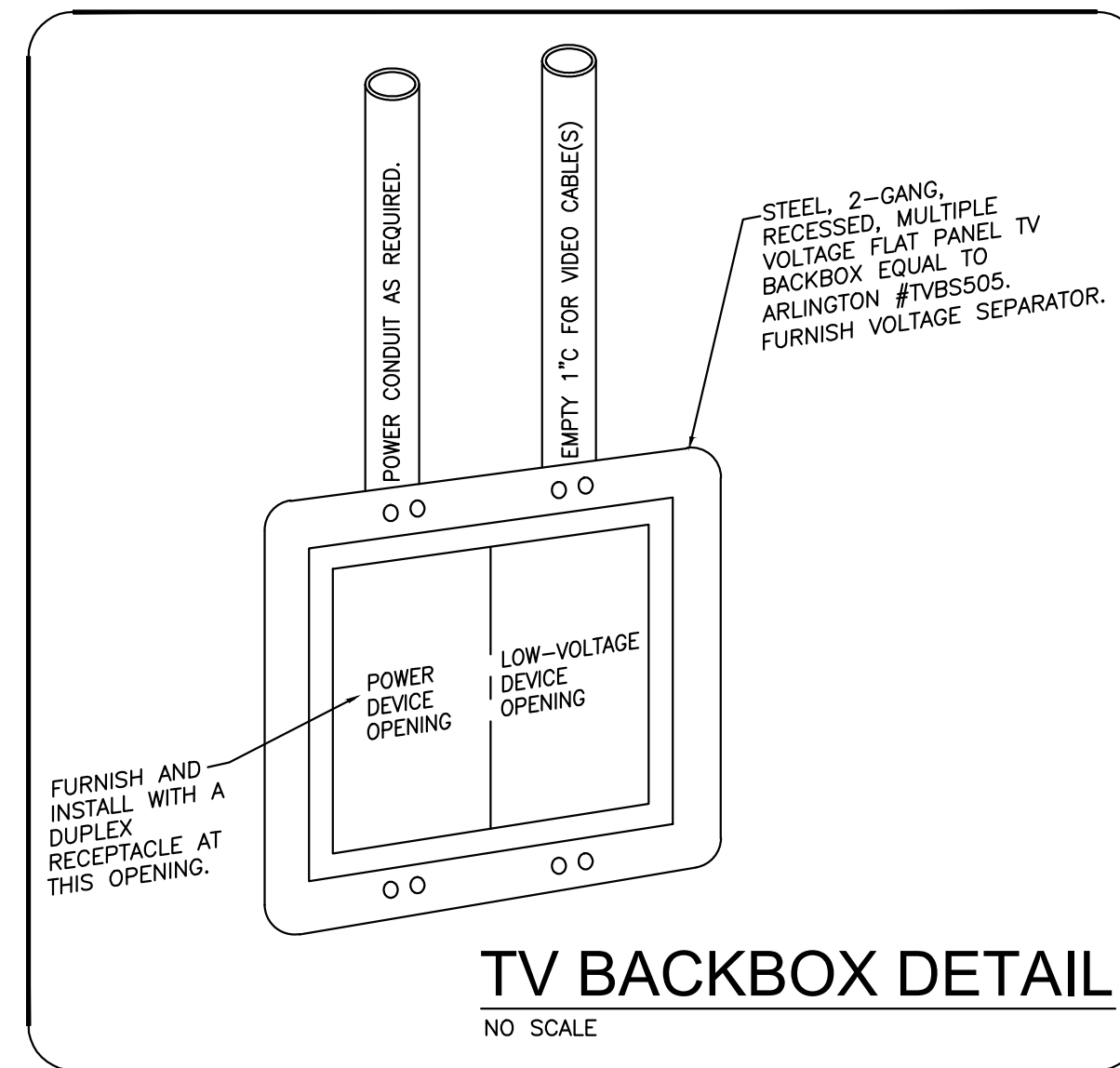
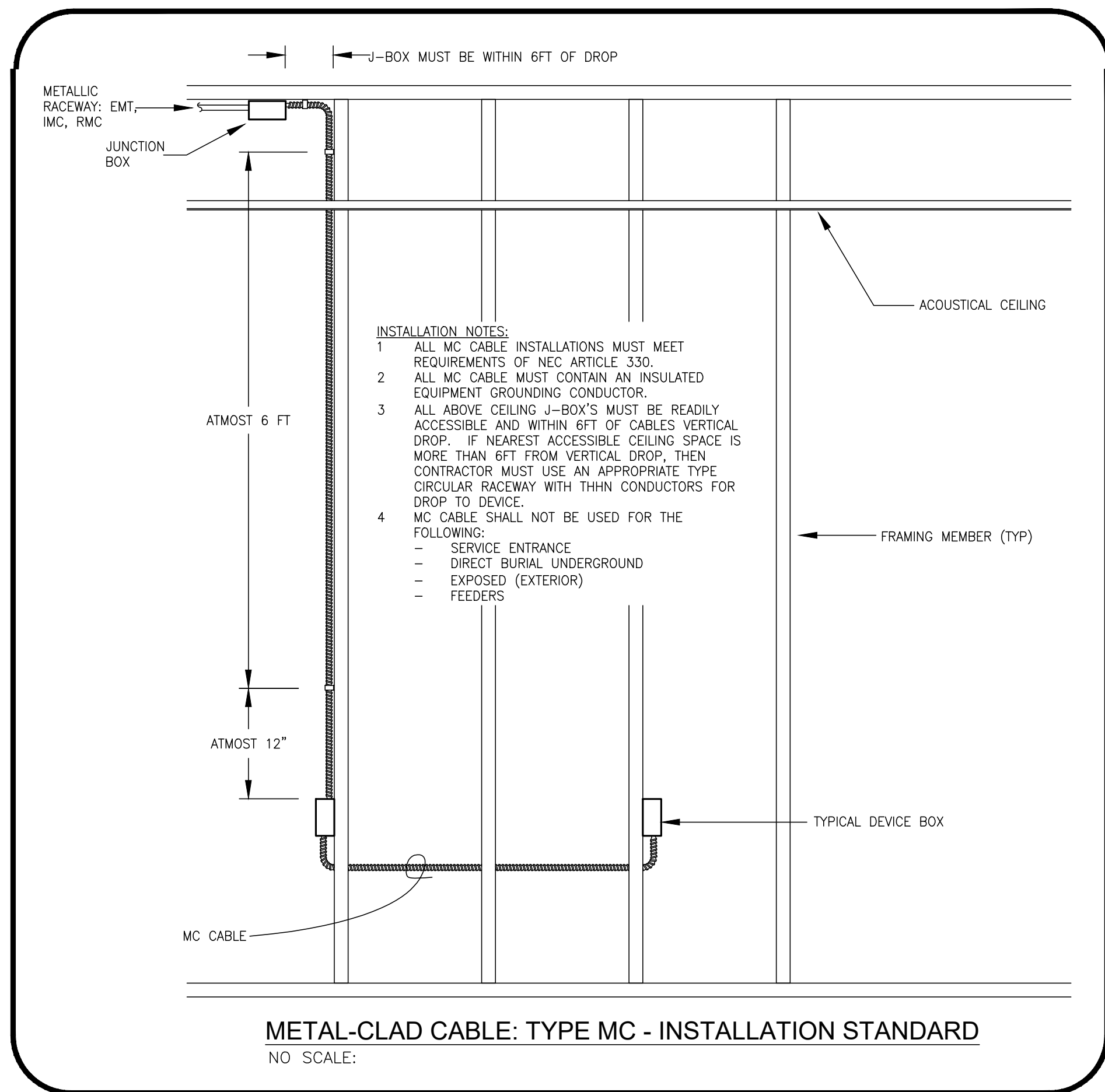
SCALE: As indicated

SHEET TITLE:

ELECTRICAL DETAILS

SHEET NUMBER:

E-200



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FLORIDA ENGINEERING

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646 ROTONDA CIRCLE, ROTONDA WEST, FL 33947
MISC OWNER

No.	Description	Date

DRAWN BY: JPP

PROJECT NO: 22 200 24

SCALE: As indicated

SHEET TITLE: ELECTRICAL DETAILS

SHEET NUMBER: E-201

COMPLIANCE STATEMENT

DESIGN CRITERIA , APPLICATION CODES, REGULATIONS & STANDARDS FOR THE LIFE SAFETY PLAN SHALL COMPLY WITH ALL PROVISIONS OF THE NFPA & 101 CODE, OTHER APPLICABLE CODES AND ORDINANCES.

APPLICABLE CODES :

2020 FLORIDA BUILDING CODE : 7th EDITION
 2020 FLORIDA BUILDING CODE : 7th EDITION, BUILDING
 2020 FLORIDA BUILDING CODE : 7th EDITION, EXISTING BUILDING
 2020 FLORIDA BUILDING CODE : 7th EDITION, MECHANICAL
 2020 FLORIDA BUILDING CODE : 7th EDITION, PLUMBING
 2020 FLORIDA BUILDING CODE : 7th EDITION, ACCESSIBILITY CODE
 2020 FLORIDA BUILDING CODE : 7th EDITION, ENERGY CONSERVATION
 2017 NATIONAL ELECTRIC CODE, NFPA 70
 2018 NFPA 1 CODE/IFPC 7TH EDITION
 2018 NFPA 101-LIFE SAFETY CODE

LIFE SAFETY CODE COMPLIANCE

LIFE SAFETY CODE: 2020

MEANS OF EGRESS SHALL COMPLY WITH
 CHAPTER 7 AND CHAPTER 39

LIFE SAFETY-MEANS OF EGRESS CHAPTER 39.2
 GROUP B
 CONSTRUCTION TYPE: V-B
 OCCUPANT LOAD FACTOR TABLE 7.3.1.2

OCCUPANCY TABLE - NFPA 101 TABLE 7.3.1.2			
ROOM	AREA	OCCUPANT FACTOR	OCCUPANCY
CONFERENCE ROOM	336	150	3
STORAGE	158	300	1
OFFICE	143	150	1
OPEN OFFICE	847	150	6
TOTAL OCCUPANT LOAD			11

COMMON PATH LIMIT - ACTUAL: 15'-0" MAX (COMPLIES) MAXIMUM 75 ft.
 DEAD END LIMIT - ACTUAL: 0'-0" (COMPLIES) MAXIMUM 20 ft.
 TRAVEL DISTANCE - ACTUAL: 62'- 0" MAX (COMPLIES) MAXIMUM 200 ft.

SECTION 906 FBC

PORTABLE FIRE EXTINGUISHER CALC: MAX 1500 S.F.
 PER UNIT (1621 S.F. / 1,500 = 3.25 = 1)
 # OF FIRE EXTINGUISHERS REQUIRED: 1

OF FIRE EXTINGUISHERS PROVIDED: 1
 MAX DISTANCE BETWEEN: 50'

* SEPARATE PERMIT REQUIRED FOR FIRE SPRINKLER SYSTEM MODIFICATIONS.
 - PERMIT BY OTHERS
 * SEPARATE PERMIT REQUIRED FOR FIRE ALARM SYSTEM MODIFICATIONS.
 - PERMIT BY OTHERS

LIFE SAFETY NOTES

- * MINIMUM 36" DOOR LEAF AS REQUIRED FOR EXIT
- * EXITS SHALL BE MARKED BY AN APPROVED SIGN AND READILY VISIBLE FROM ANY DIRECTION OF EXIT ACCESS
- * EMERGENCY LIGHTING SHALL BE PROVIDED
- * ONE PORTABLE FIRE EXTINGUISHER TO BE PROVIDED FOR EVERY 1500 SF OF FLOOR AREA OR PORTION THEREOF

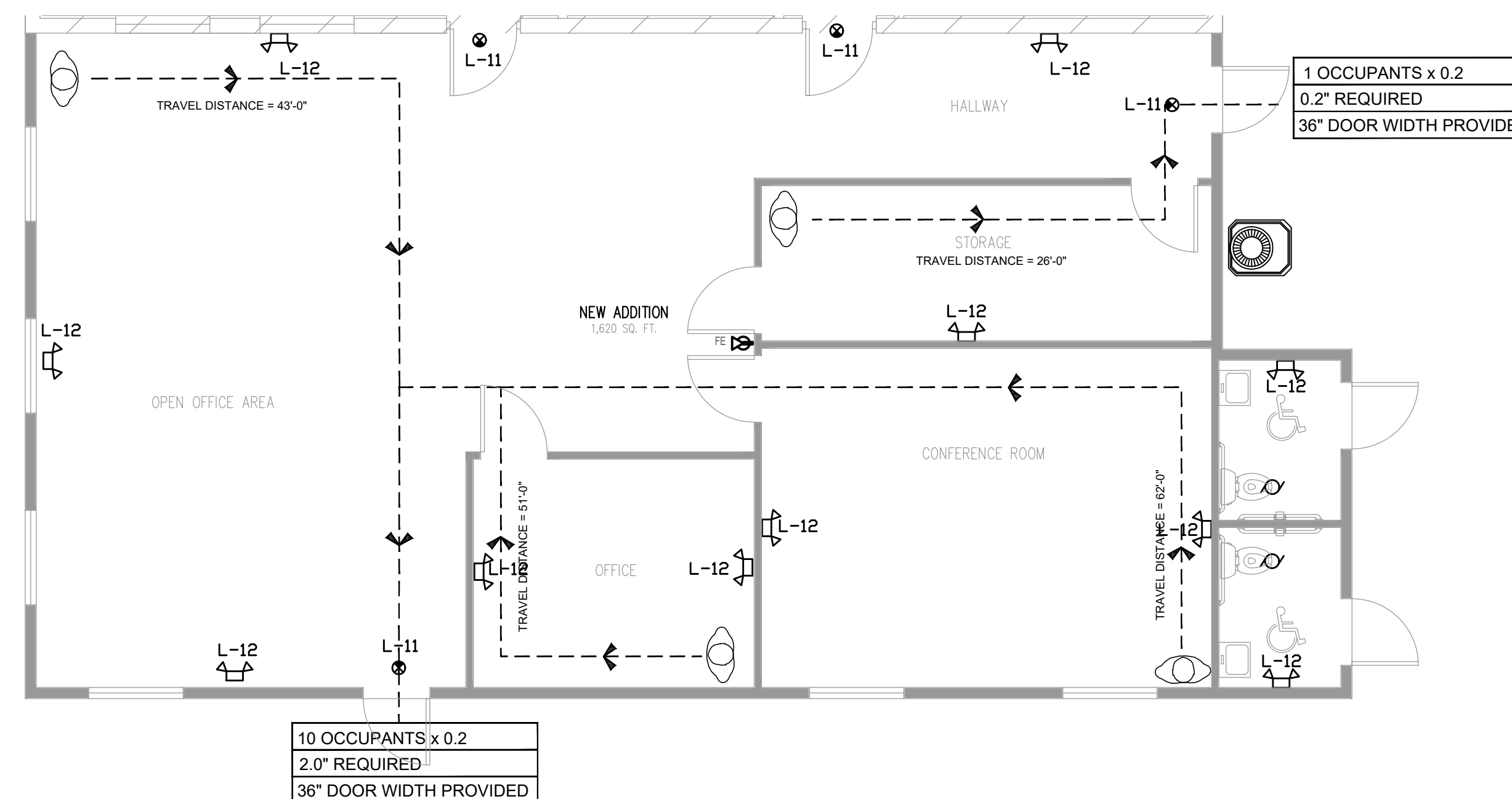
H.C. COMPLIANCE NOTES

CHANGES IN LEVEL AT DOOR THRESHOLDS BETWEEN 1/4" AND 1/2" EDGE SHALL BE BEVELED WITH A SLOPE NO GREATER THAN 1:2 WITH MAXIMUM 1/2" THRESHOLD. DOOR CLEARANCES FOR FRONT APPROACH & PULL SIDE, PROVIDE 18" BEYOND LATCH SIDE OF DOOR, 60" PERPENDICULAR TO DOOR WAY. DOOR HANDLES, PULLS, LATHES, LOCKS AND OTHER OPERATING DEVICES SHALL HAVE A SHAPE THAT IS EASY TO GRASP WITH ONE HAND AND DOES NOT REQUIRE TIGHT GRASPING, TIGHT PINCHING, OR TWISTING OF THE WRIST TO OPERATE. CONTRACTOR TO PROVIDE ALL HANDICAPPED TOILET FIXTURES AND ACCESSORIES PER CODE, CONTRACTOR TO MAINTAIN 60" DIAMETER CLEARANCE MINIMUM TO ALL FINISH SURFACES WHERE INDICATED ON THE DRAWINGS.



ELECTRICAL LIGHTING DEVICE SCHEDULE					
MARK	DEVICE	ELECTRICAL DATA		BASIS OF DESIGN*	
	DESCRIPTION	VA	VOLT	MANUFACTURER	MODEL OR SERIES
L-7	6" CAN LIGHT	12	UNIV	COMMERCIAL ELEC	CAT71
L-10	EXTERIOR WALL PACK LIGHT FIXTURE	40	UNIV	WILLIAMS	WPTZ-L38-UNV
L-11	UNIVERSAL MOUNTED EXIT SIGN	5	UNIV	WILLIAMS	EXIT-R-EM-WHT
L-12	UNIVERSAL MOUNTED DUAL EMERGENCY HEAD LIGHT	5	UNIV	WILLIAMS	EF43D

NOTES:
 * OR SIMILAR MANUFACTURER/MODEL OR SERIES

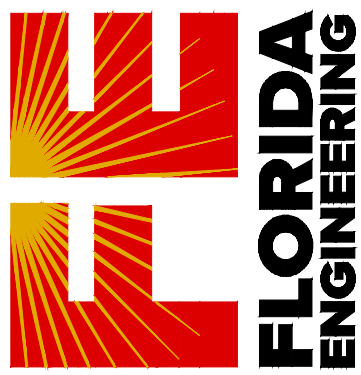


LIFE SAFETY PLAN

3/16" = 1'-0"

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 F. 813-979-8195



ROTONDA WEST ASSOCIATION
 646 ROTONDA CIRCLE, ROTONDA WEST, FL 33947
 MISC OWNER

No.	Description	Date

DRAWN BY: JPP
 PROJECT NO: 22 200 24
 SCALE: As indicated

SHEET TITLE:
LIFE SAFETY PLAN

SHEET NUMBER:
LS-100

MIN. REQUIRED PER TABLE ANSI/ASHRAE STANDARD 62.1 & 62.2									
SPACE NAME	OCCUPANCY CLASSIFICATION	SF	KNOWN OCCUPANT	RP	RA	EX	REQ. OA (CFM)	REQ. EX (CFM)	PROVIDED BY
CONFERENCE ROOM	OFFICE SPACE	336	3	5	0.06	-	36.0	-	AHU-1
OFFICE	OFFICE SPACE	143	1	5	0.06	-	14.0	-	AHU-1
OPEN OFFICE AREA	OFFICE SPACE	847	9	5	0.06	-	96.0	-	AHU-1
HALL	OFFICE SPACE	137	1	5	0.06	-	14.0	-	AHU-1
STORAGE	STORAGE	158	1	5	0.06	-	15.0	-	AHU-1
TOILET ROOM-PUBLIC	TOILET ROOM-PUBLIC	-	-	-	-	50/70*	-	140	EF-1
TOTAL							175.0	140	

* RATES ARE PER WATER CLOSET OR URINAL. THE HIGHER RATE SHALL BE PROVIDED WHERE THE EXHAUST SYSTEM IS DESIGNED TO OPERATE INTERMITTENTLY. THE LOWER RATE SHALL BE PERMITTED ONLY WHERE THE EXHAUST SYSTEM IS DESIGNED TO OPERATE CONTINUOUSLY WHILE OCCUPIED

- NOTES:
- COORDINATE LOUVERS LOCATION WITH ARCHITECTURAL ELEVATIONS.
 - CONTRACTOR TO LOCATE ALL PROGRAMMABLE THERMOSTAT PER 308.1 GENERAL, FBC-A 7TH EDITION; THERMOSTAT REACH RANGES SHALL COMPLY WITH TABLE 308 (48")
 - COORDINATE HVAC DUCTS WITH INTERIOR DESIGN PLAN
 - DUCT SMOKE DETECTOR CONNECTED TO FIRE ALARM SYSTEM
 - ALL DUCT INSIDE DIMENSIONS AS NOTED
 - SEE M-201 FOR EXHAUST FAN, AHU, CU DETAILS

AIR BALANCE SCHEDULE								
UNIT	O.A PROVIDED				TOTAL O.A	EXHAUST	GENERAL	AREA SERVED
	HVAC SUPPLY	HVAC RETURN	HVAC OA MIN REQ.	HVAC OA BALANCE				
AHU-1	2000	1825	175		175			OFFICE/ASSE
EF						140		
TOTAL	2000	1825	175	0	175	140		
TOTAL						35		BUILDING PRESSURE

NOTES LEGEND	
①	8" O.A DUCT. SEE DETAILS ON SHEET M-201
②	3/4" DEDICATED CONDENSATION DRAIN. CONNECT TO DOWNSPOUT (INDIRECT CONNECTION)
③	NOT USED
④	NOT USED
⑤	NOT USED

MECHANICAL AIR HANDLER UNIT (ELECTRIC HEAT) SCHEDULE											
TAG	TON	FLOW RATE		ELECTRICAL DATA		ELECTRIC HEATING		BASIS OF DESIGN*		WEIGHT	NOTES
		SUPPLY CFM	MCA AMPS	MOCF AMPS	VOLTAGE	COIL KW	MANUFACTURER	MODEL			
AHU-1	5	2,000	54.0	60	240/1/60	10	CARRIER	FX4DNF061	201		

MECHANICAL CONDENSING UNIT (AIR COOLED) SCHEDULE														
TAG	CAPACITY TONS	TOTAL MBH	FAN DATA		COMPRESSOR DATA		ELECTRICAL DATA		BASIS OF DESIGN*		WEIGHT LBS	SEER	NOTES	
			FAN QTY	QUANTITY	FLA	LRA	AMPS	AMPS	VOLTAGE	MANUFACTURER				MODEL
CU-1	5	60	1	1	2.9	15.3	32.4	50	208/1/60	CARRIER	24ABC660	280	16	

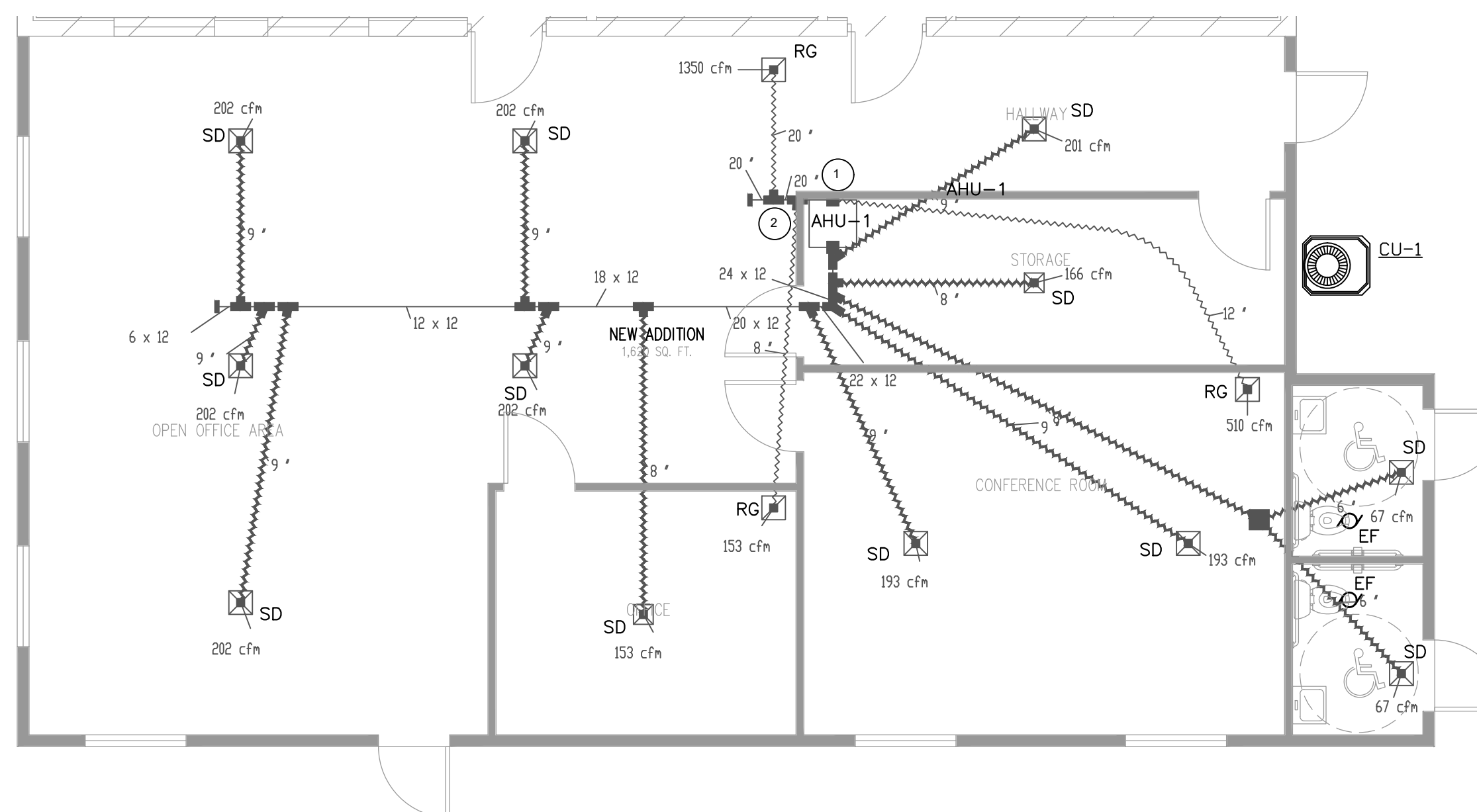
MECHANICAL AIR TERMINAL DEVICES SCHEDULE						
TAG	SIZE	DESCRIPTION	CONSTRUCTION		BASIS OF DESIGN*	
			FINISH	MANUFACTURER	MODEL OR SERIES	NOTES
SD	12 x 12	SQUARE PLAUQUE	ALUMINUM	PRICE	ASPD	OR SIMILAR
RG	1 PER PLAN	SINGLE DEFLECTION	ALUMINUM	PRICE	630	OR SIMILAR

NOTES:
* OR SIMILAR MANUFACTURER WITH THE SAME PERFORMANCE/SPECS

SEPARATE PERMITS REQUIRED

ALL FIRE PROTECTION SYSTEMS, FUEL, GAS, SIGNAGE AND OTHER BUILDING COMPONENTS REQUIRED BY LOCAL BUILDING AND FIRE AUTHORITIES TO BE INSTALLED OR MODIFIED VIA SEPARATE PERMIT, AND WHICH ARE AFFECTED BY THE WORK PROPOSED HEREIN, SHALL BE DULY INSTALLED OR MODIFIED ONLY THROUGH SEPARATE PERMIT AUTHORIZATION FROM THE AUTHORITY(S) HAVING JURISDICTION.

- SYMBOL LEGEND:
- S - DUCT SMOKE DETECTOR
 - SD - SUPPLY DIFFUSER
 - RG - RETURN GRILLE
 - TG - TRANSFER GRILLE
 - EF - EXHAUST FAN (EF-X) 70 CFM OCCUPANCY LIGHT SWITCH OPERATED, UNLESS NOTED OTHERWISE.

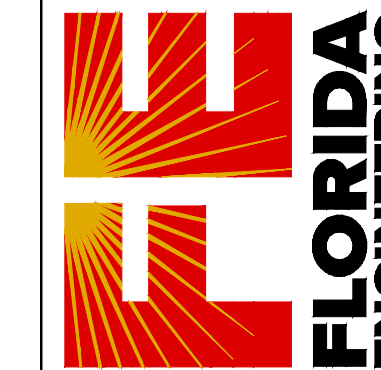


MECHANICAL PLAN
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646 ROTONDA CIRCLE, ROTONDA WEST, FL 33947
MISC OWNER

PROJECT NAME & ADDRESS:

No.	Description	Date

DRAWN BY: JPP

PROJECT NO: 22 200 24

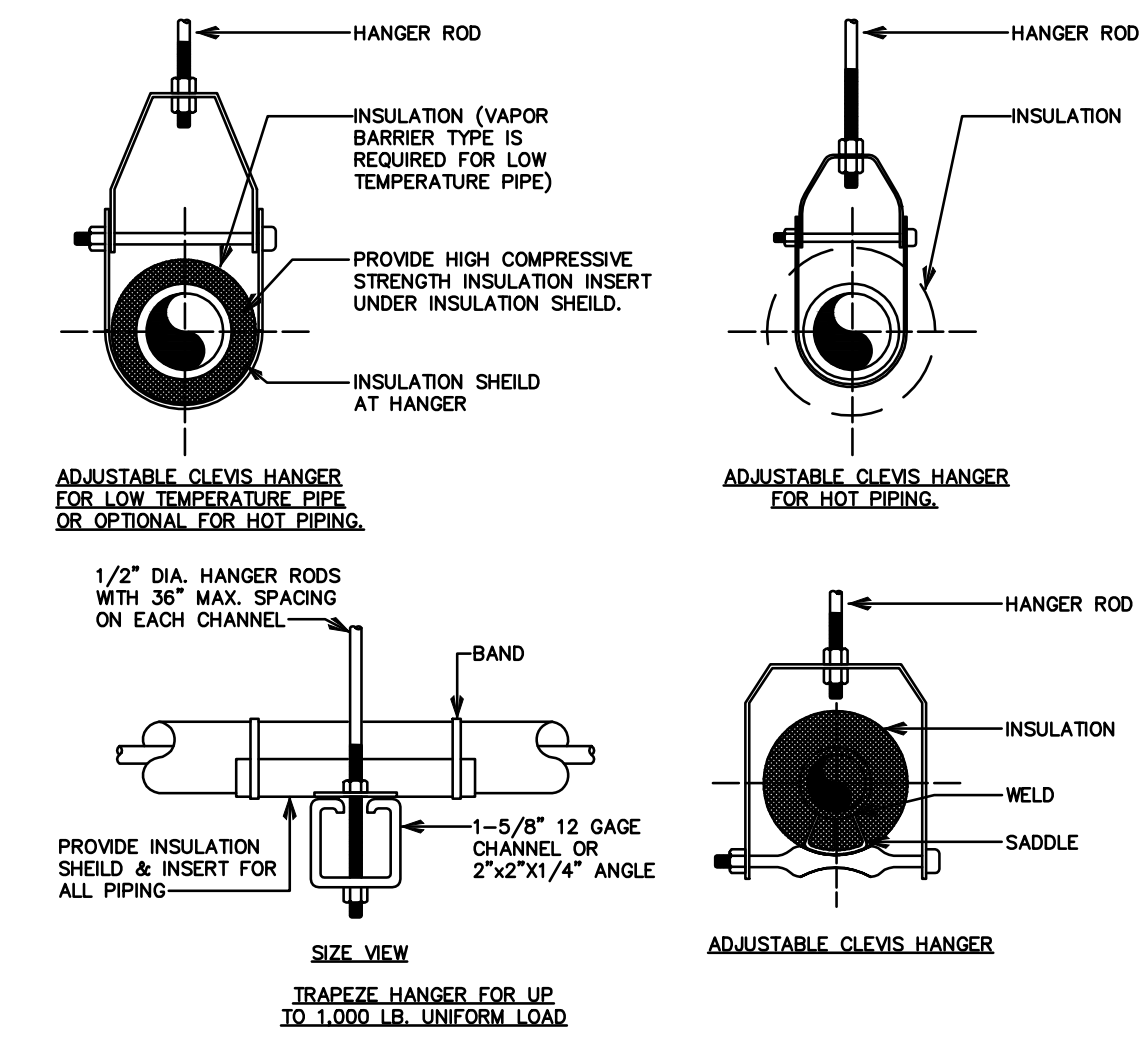
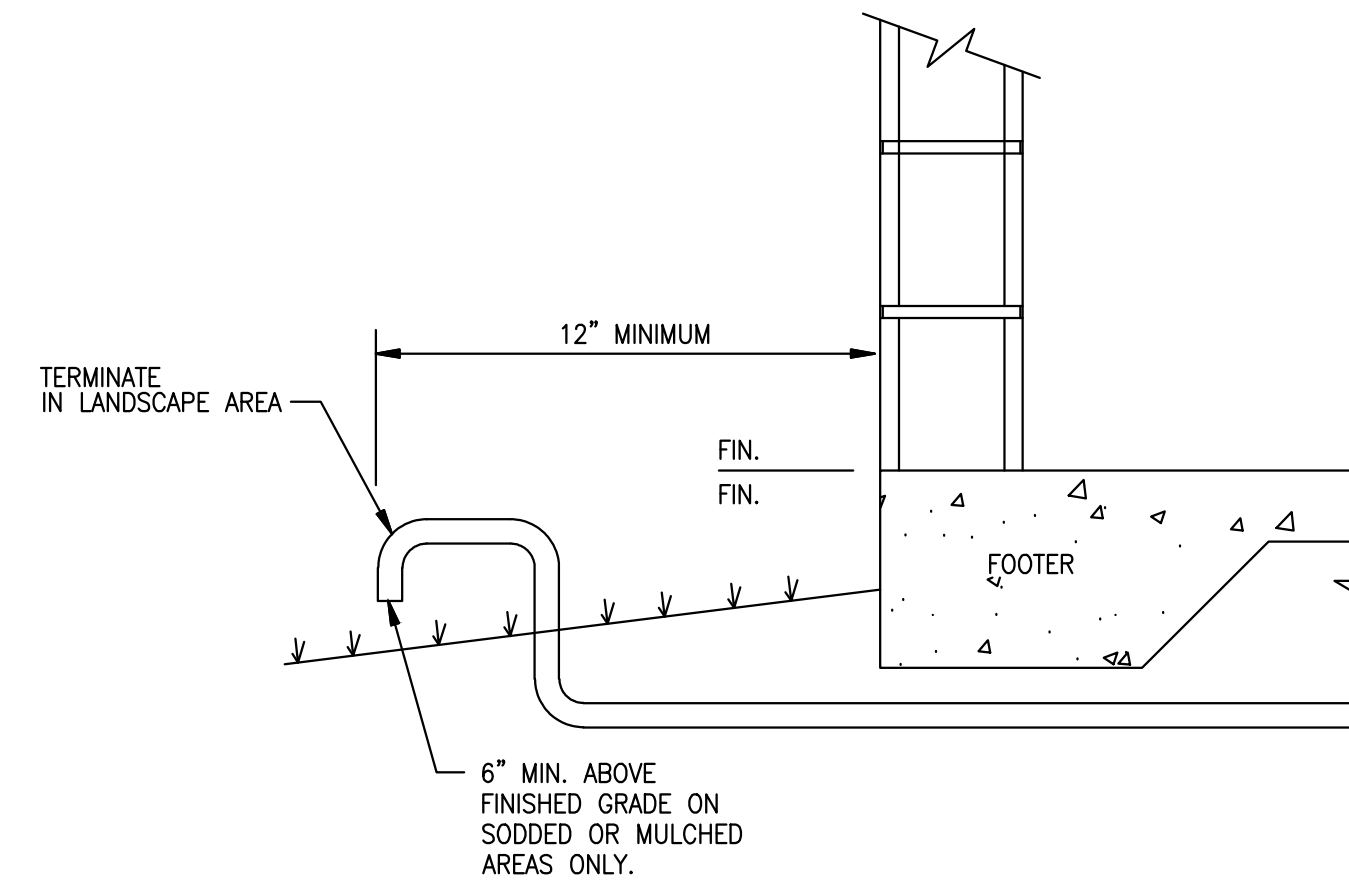
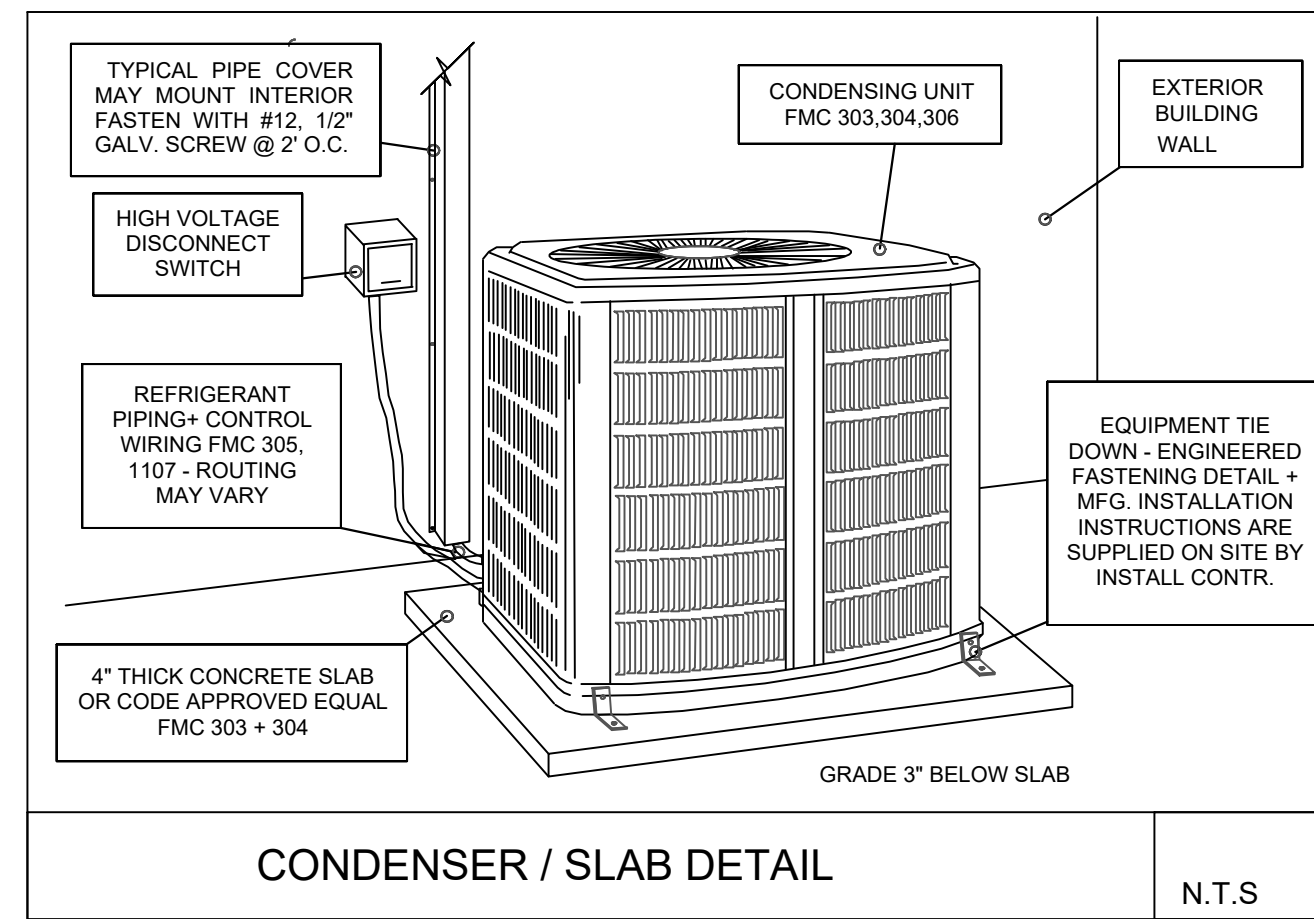
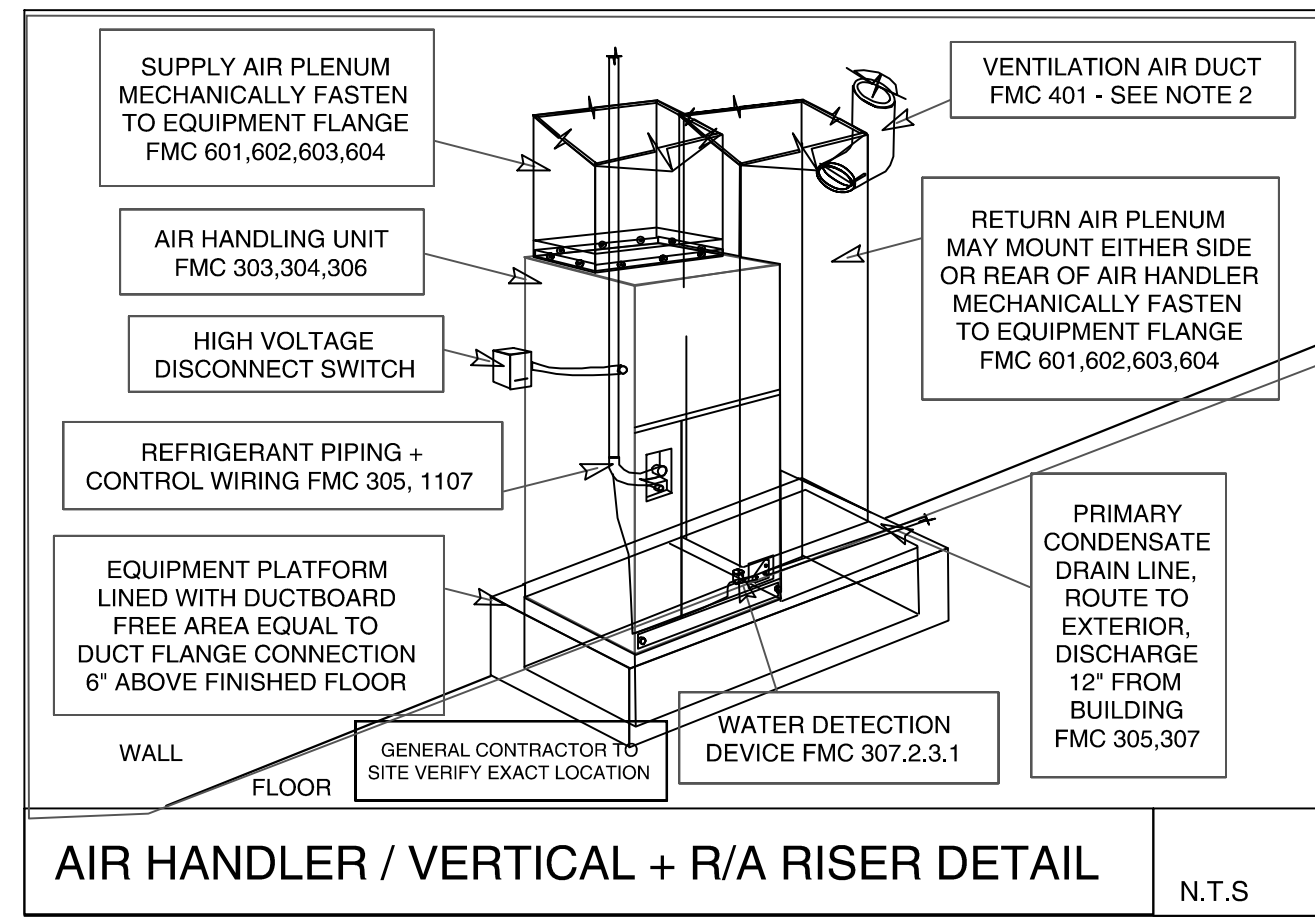
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SHEET TITLE:

MECHANICAL PLAN

SHEET NUMBER:

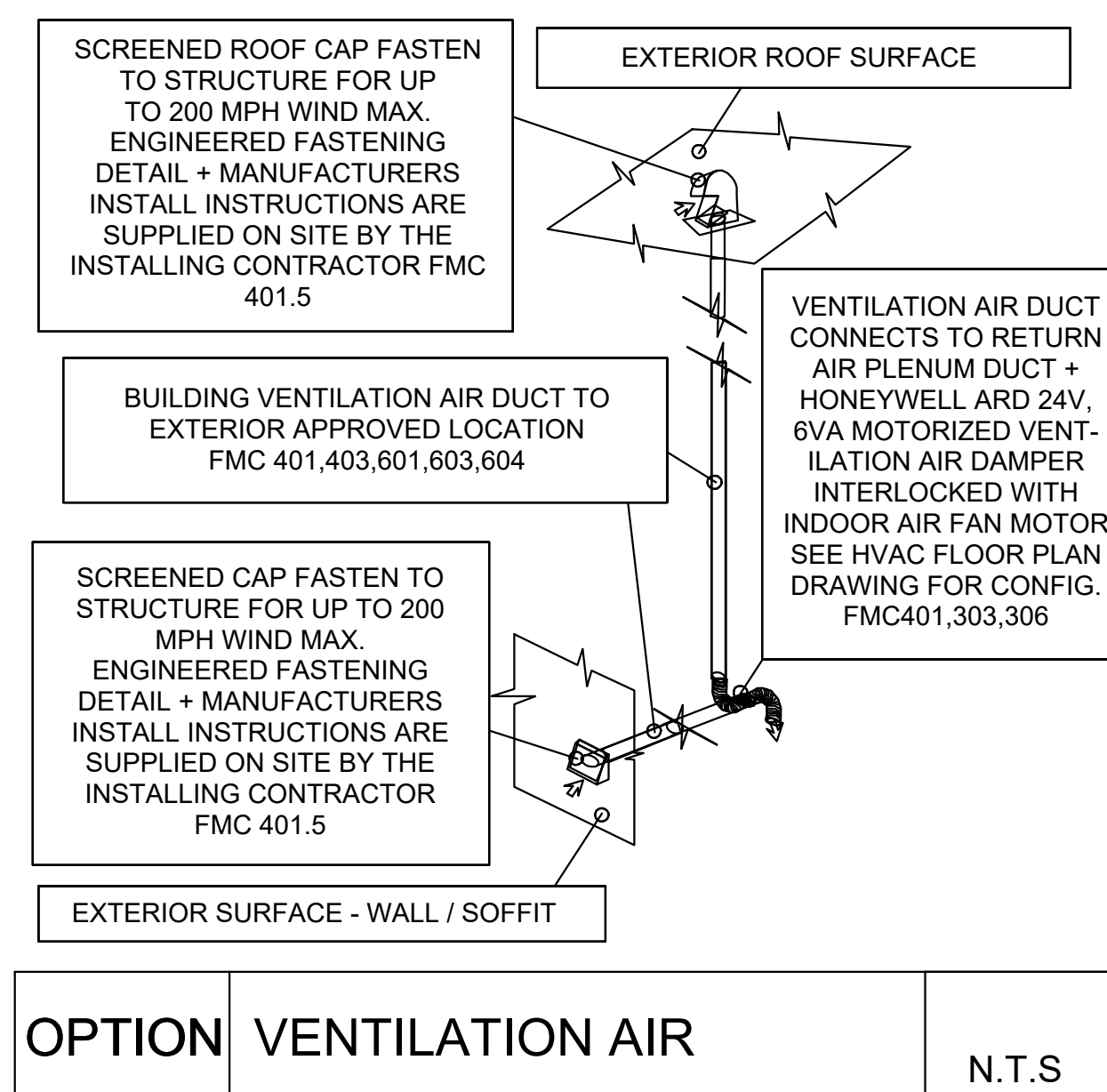
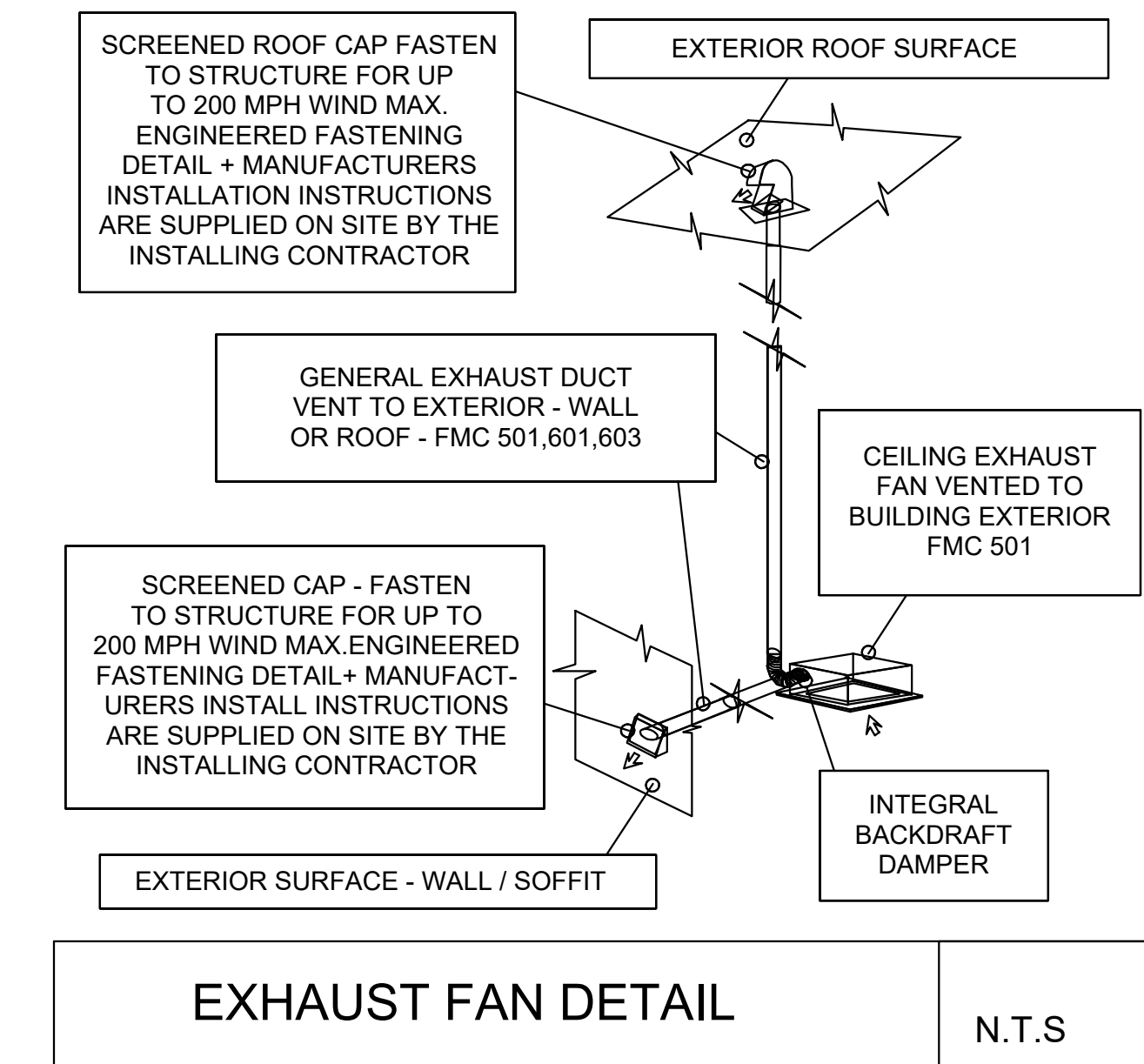
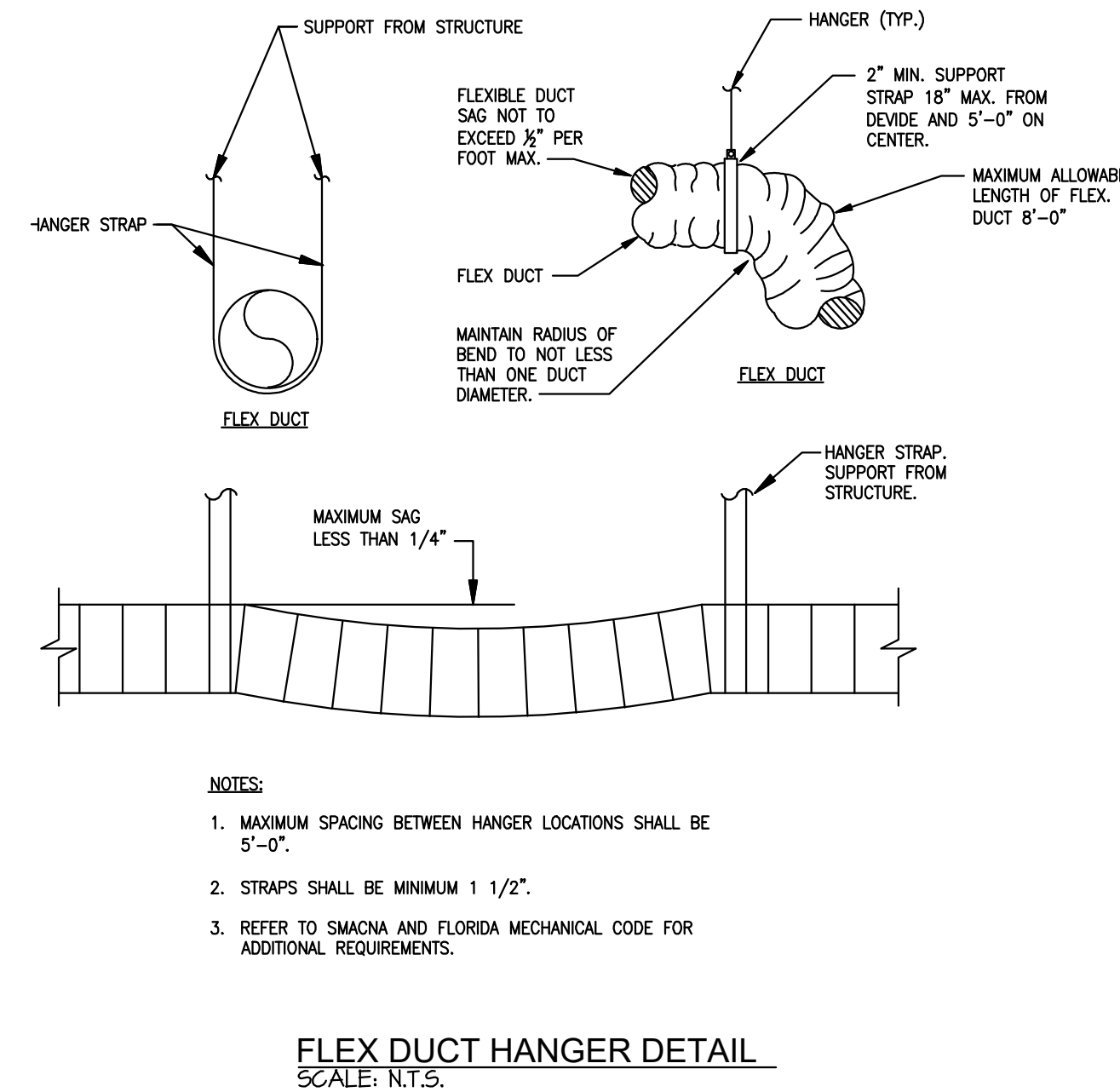
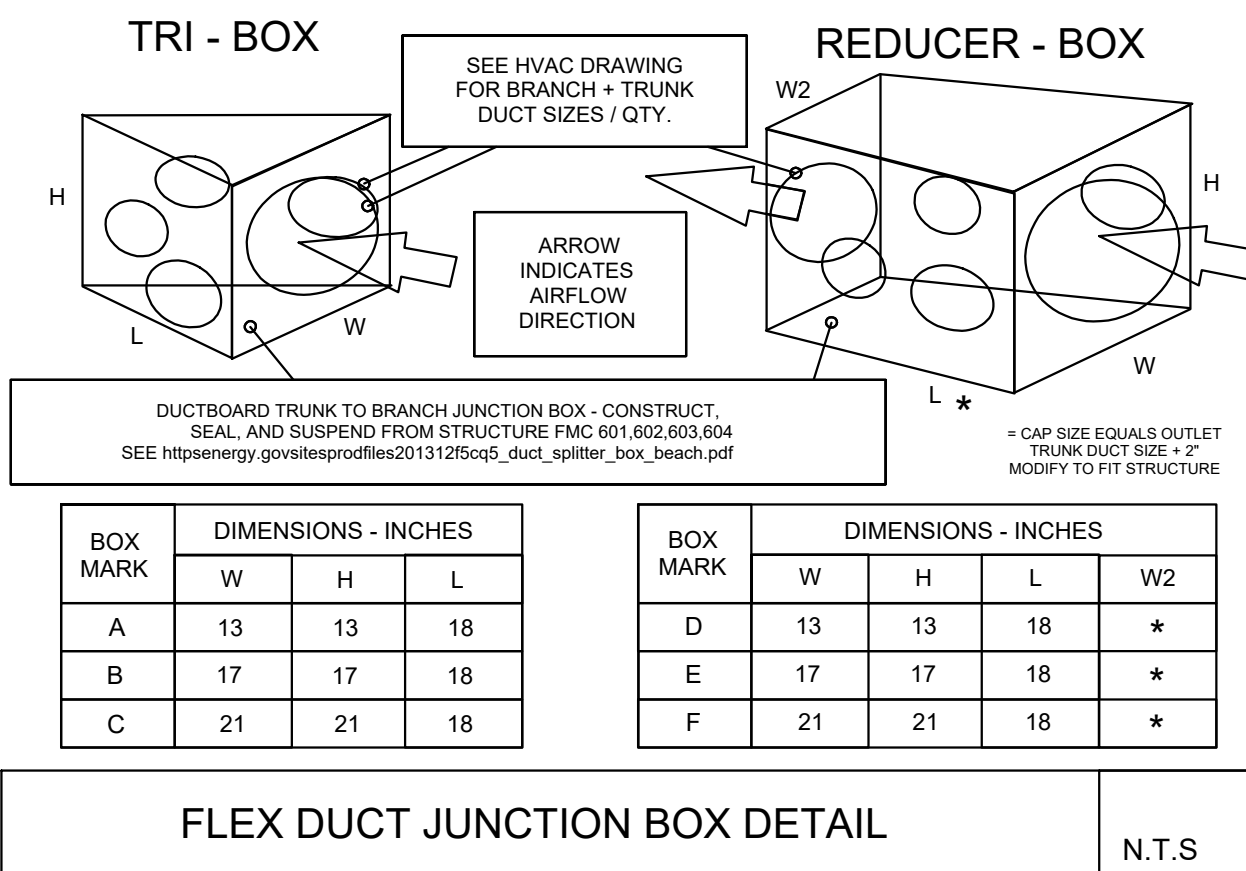
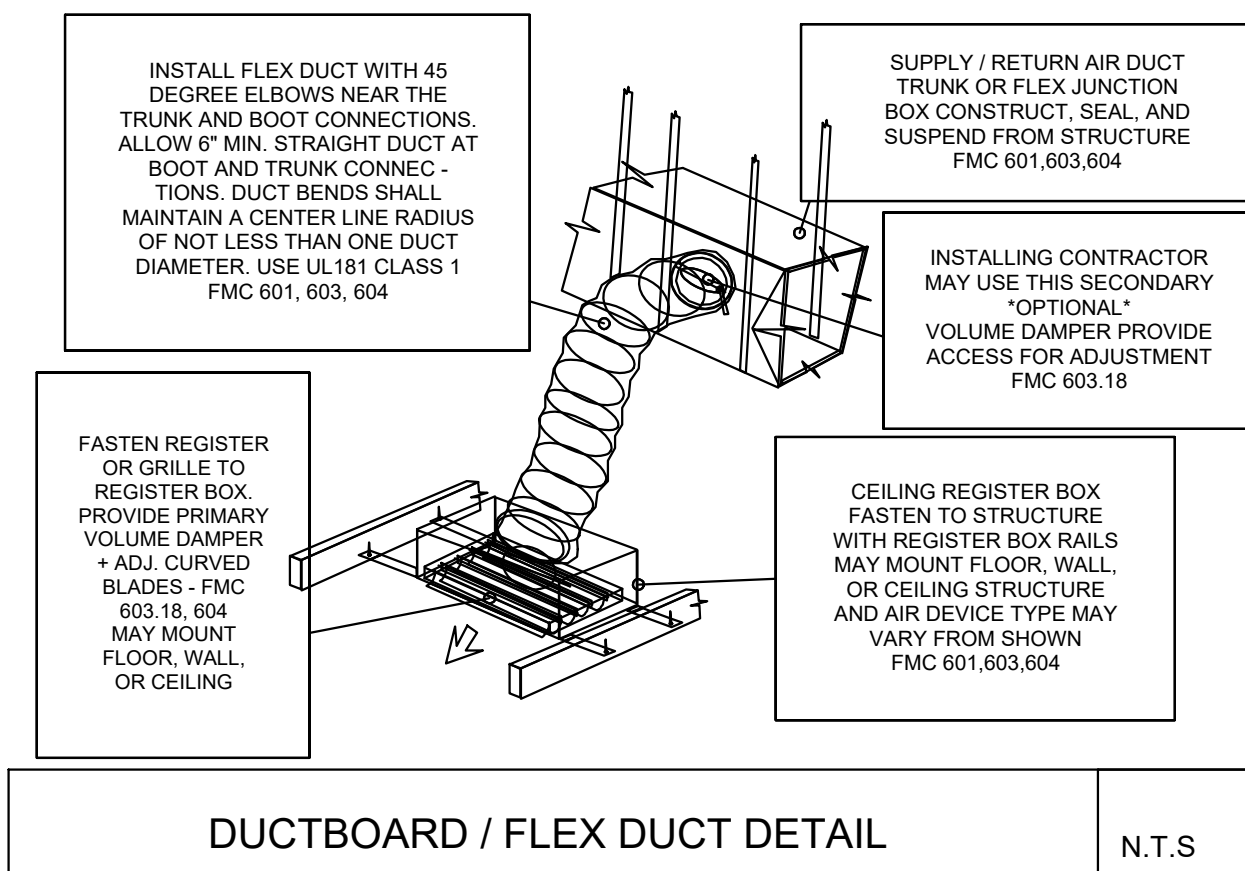
M-100



MAXIMUM PIPE/ TUBING SUPPORT SPACING, FEET

NOM. SIZE	THRU 3/4"	1	1-1/4	1-1/2	2	2-1/2	3	4	5	6	8	10	12
PIPE	7 ft	7	7	9	10	11	12	14	16	17	18	22	23
TUBING	7 ft	6	7	8	8	9	10	12	13	14	16	-	-

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



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FLORIDA ENGINEERING

PROJECT NAME & ADDRESS:

ROTONDA WEST ASSOCIATION
646 ROTONDA CIRCLE, ROTONDA WEST, FL 33947

MISC OWNER

PROJECT NAME & ADDRESS:

No.	Description	Date

DRAWN BY: JPP

PROJECT NO: 22 200 24

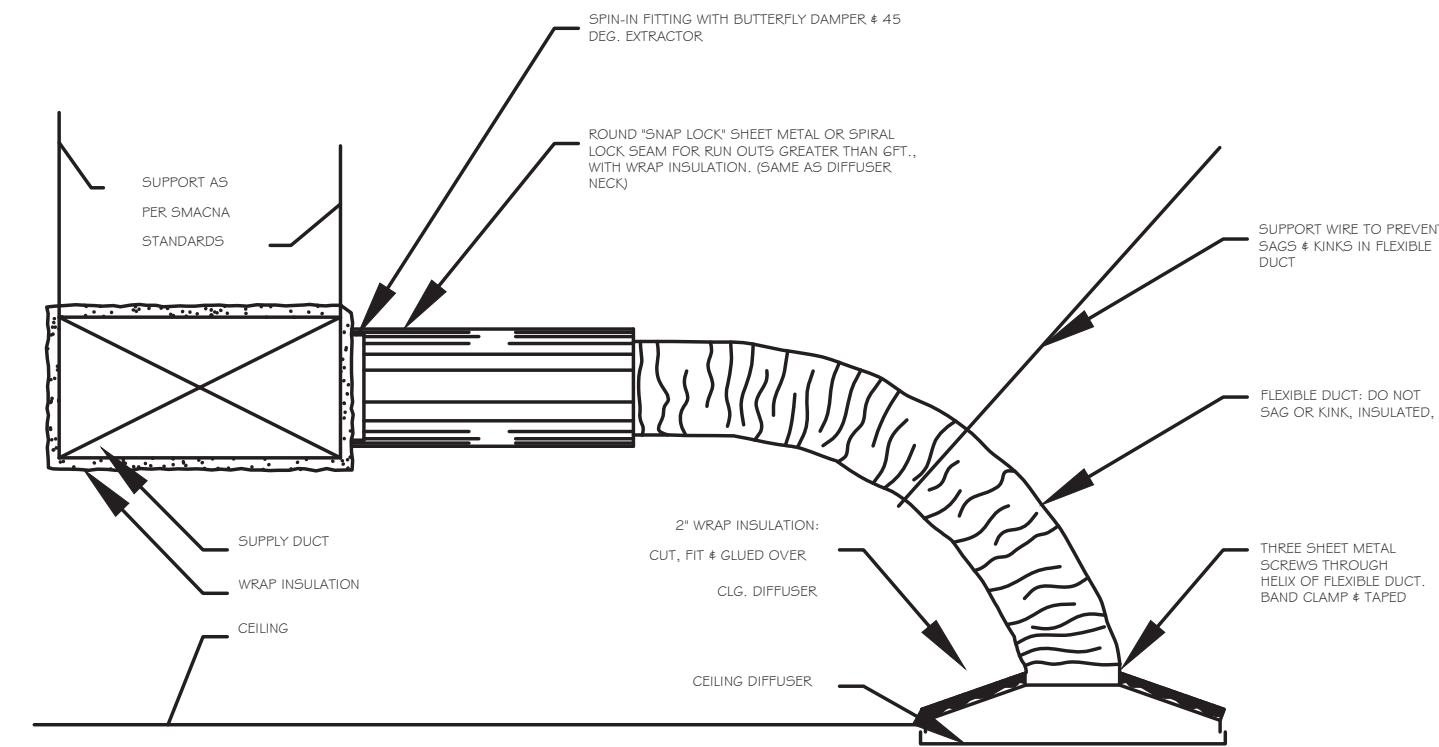
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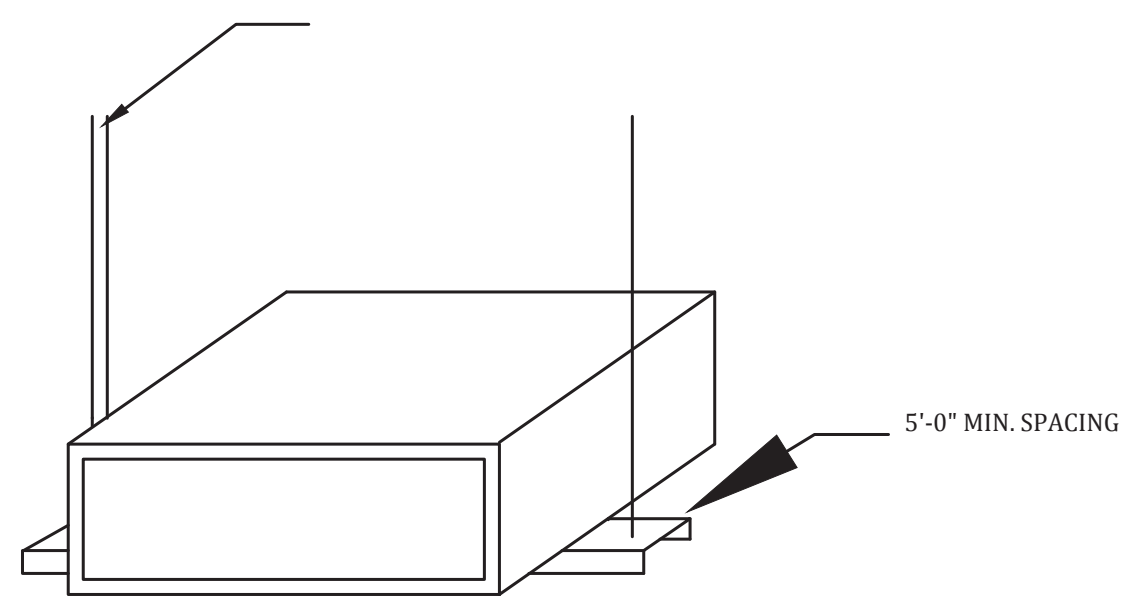
MECHANICAL DETAILS

SHEET NUMBER:

M-200



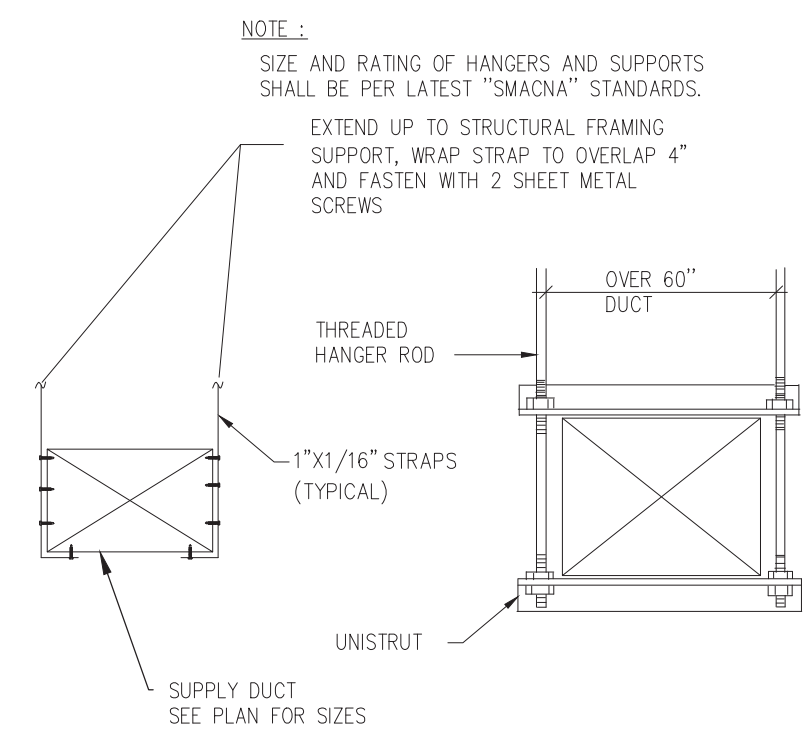
HANGER STRAP 1.5 INCH WIDE (min.) OR 12 GA. WIRE



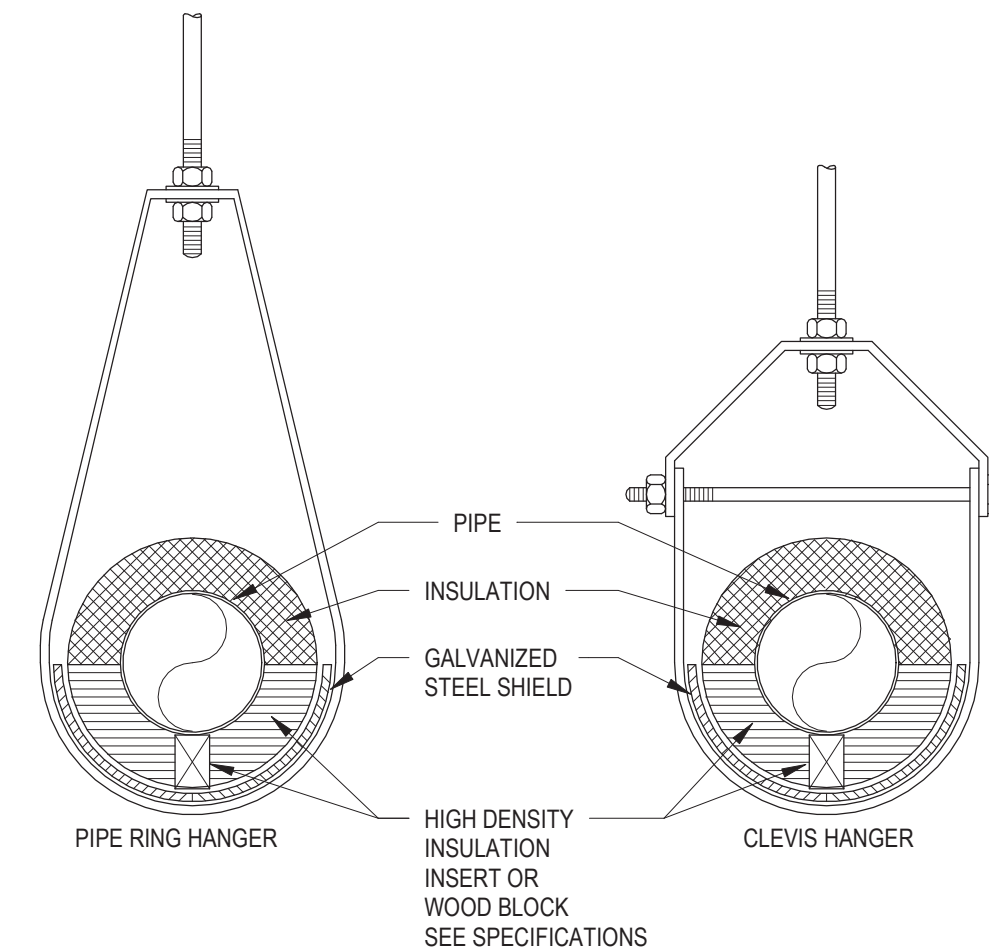
TYPICAL RIGID DUCT SUPPORT

HVAC DET

SCALE: N.T.S.

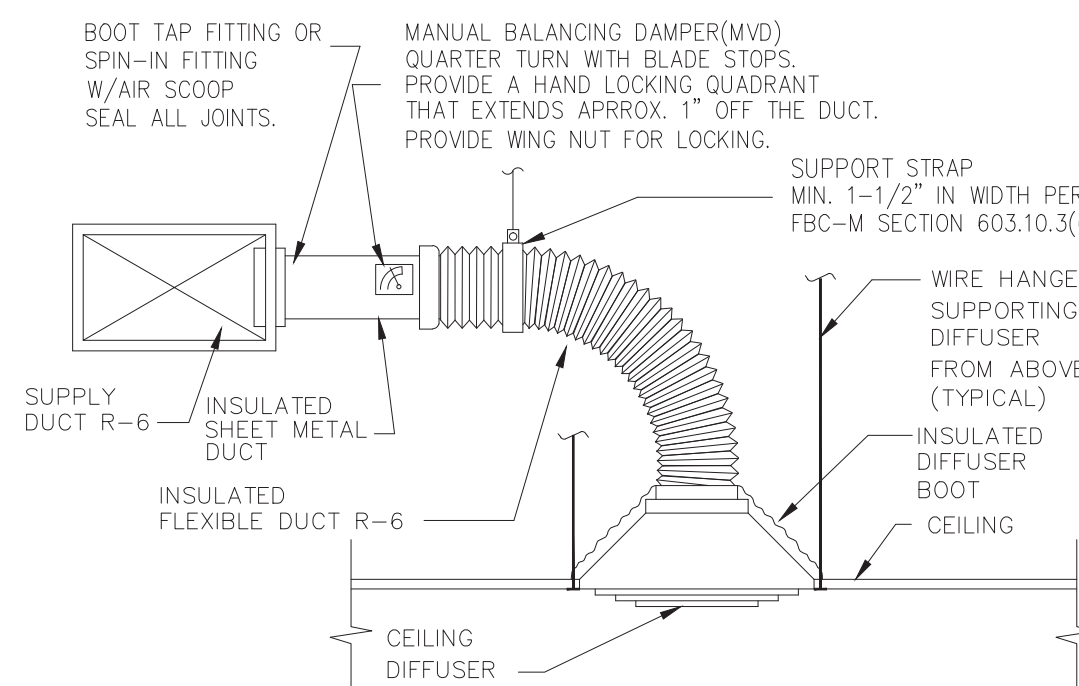
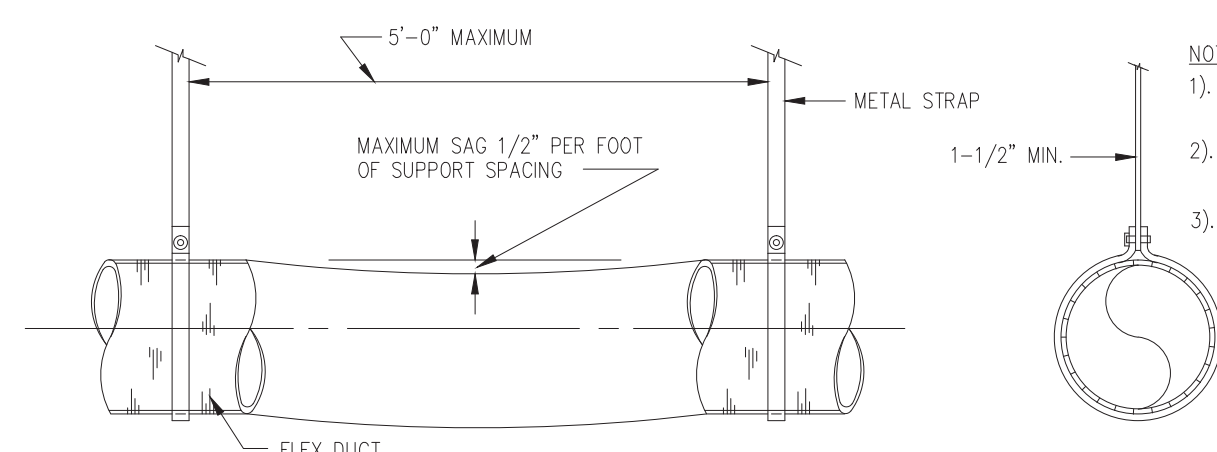


RIGID DUCT HANGER AND SUPPORT DETAIL
N.T.S.



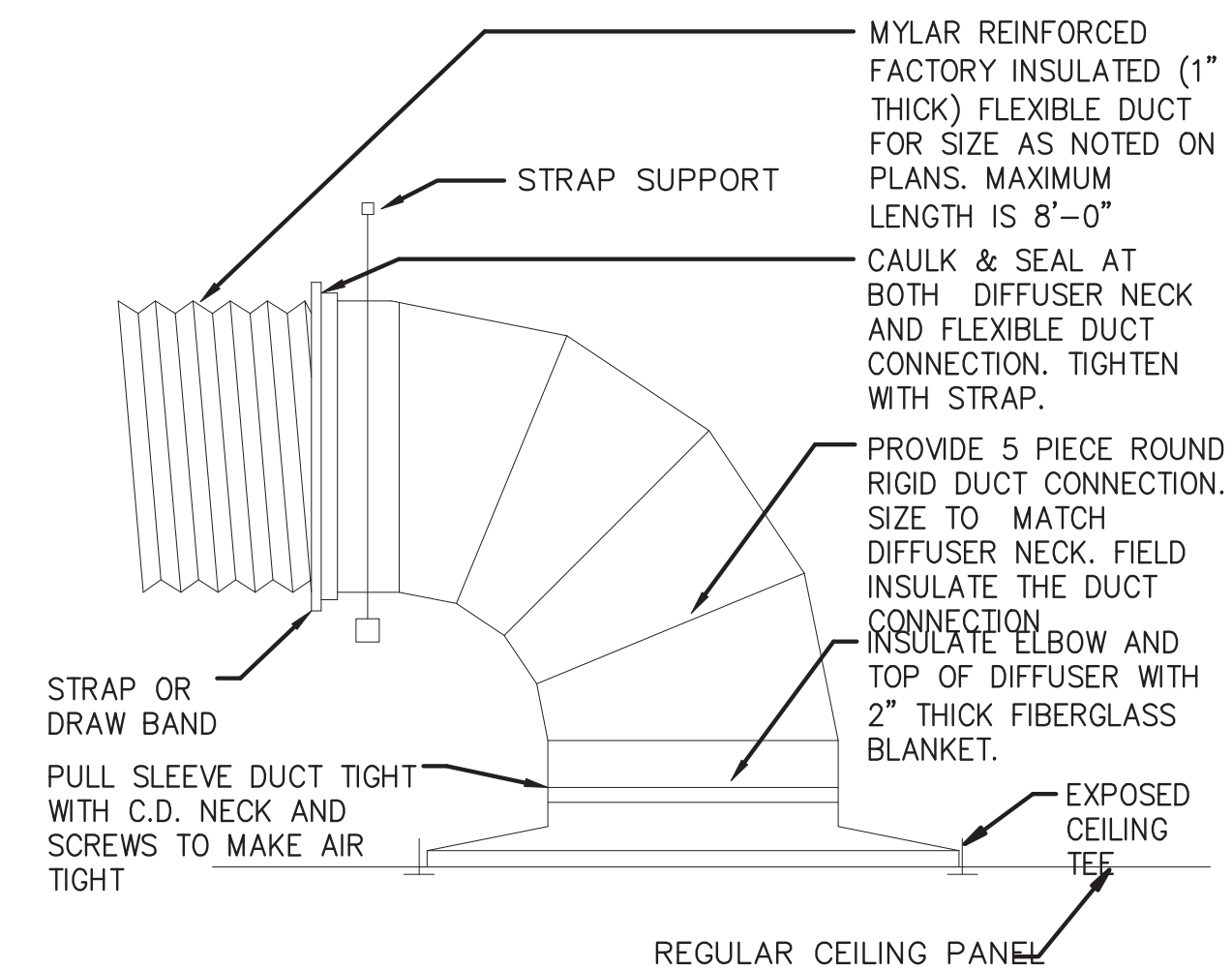
INSULATED PIPE AT HANGER DETAIL

NOT TO SCALE



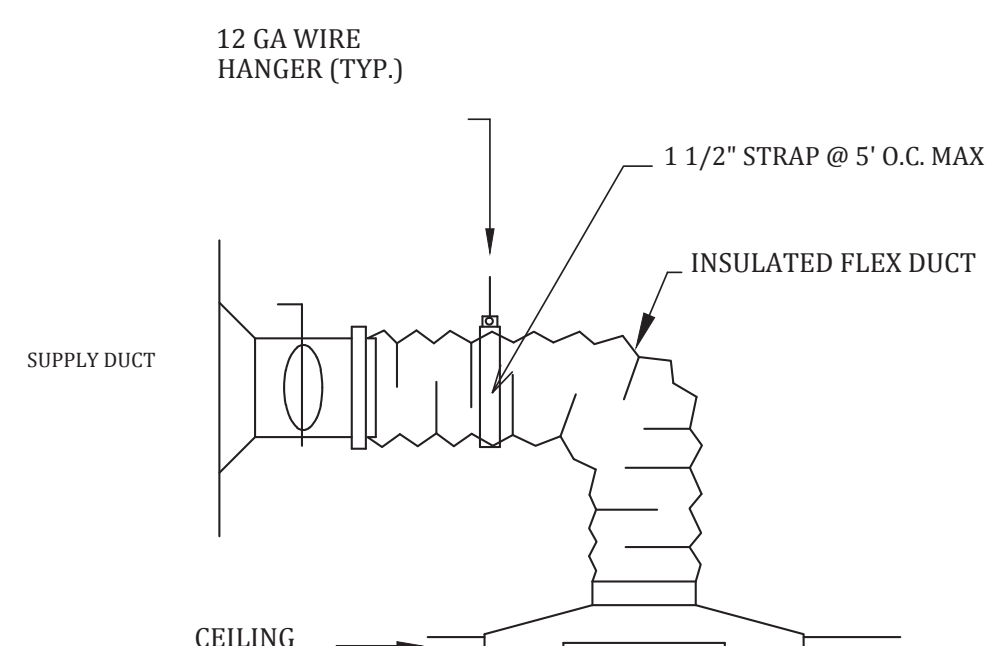
TYPICAL DIFFUSER DETAIL

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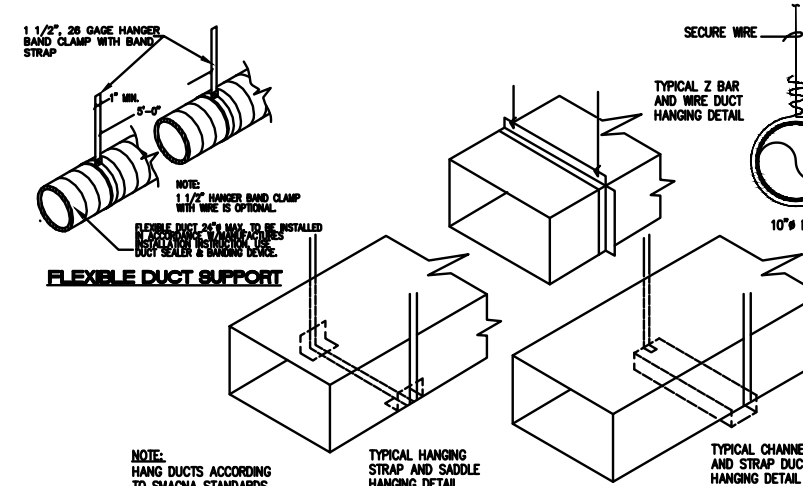


DIFFUSER CONNECTION DETAIL

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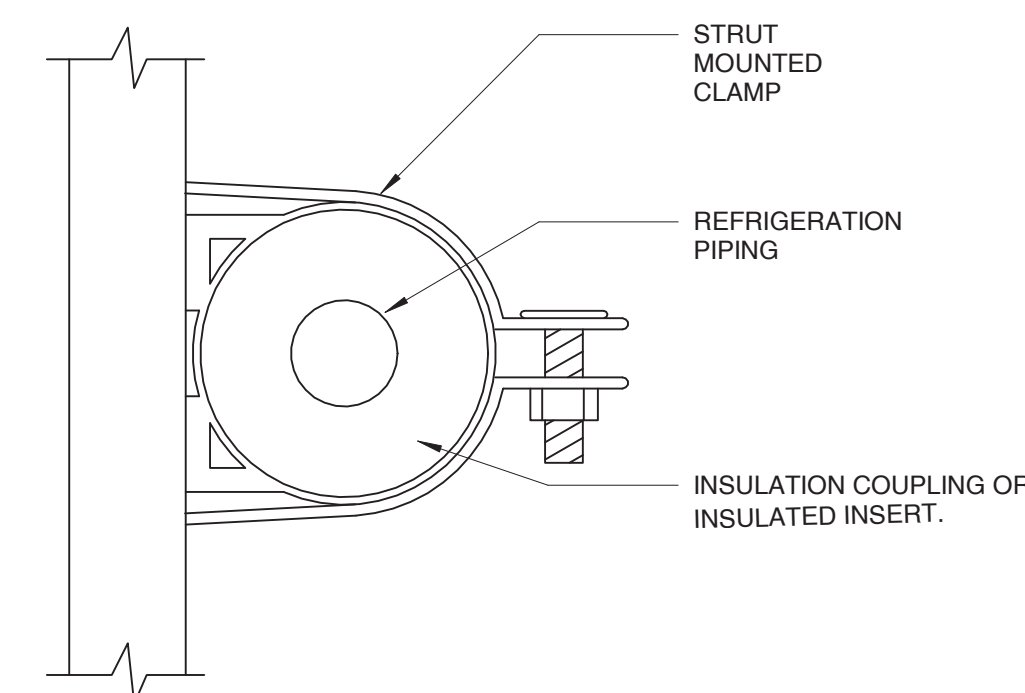


TYPICAL FLEX DUCT SUPPORT



RECTANGULAR DUCT HANGERS MINIMUM SIZE										RECTANGULAR DUCT REINFORCEMENT									
DUCT SIZE	DUCT WALL THICKNESS	DUCT WEIGHT	DUCT SPACING	DUCT WEIGHT	DUCT SPACING	DUCT WEIGHT	DUCT SPACING	DUCT WEIGHT	DUCT SPACING	DUCT WEIGHT	DUCT SPACING	DUCT WEIGHT	DUCT SPACING	DUCT WEIGHT	DUCT SPACING	DUCT WEIGHT	DUCT SPACING	DUCT WEIGHT	DUCT SPACING
P/2 = 30"	1" x 22 ga.	14.00	1' x 22 ga.	14.00	1' x 22 ga.	14.00	1' x 22 ga.	14.00	1' x 22 ga.	14.00	1' x 22 ga.	14.00	1' x 22 ga.	14.00	1' x 22 ga.	14.00	1' x 22 ga.	14.00	1' x 22 ga.
P/2 = 72"	1" x 18 ga.	3.00	1" x 20 ga.	1.00	1" x 22 ga.	1.00	1" x 22 ga.	1.00	1" x 22 ga.	1.00	1" x 22 ga.	1.00	1" x 22 ga.	1.00	1" x 22 ga.	1.00	1" x 22 ga.	1.00	1" x 22 ga.
P/2 = 96"	1" x 18 ga.	3.00	1" x 18 ga.	3.00	1" x 20 ga.	3.00	1" x 22 ga.	3.00	1" x 22 ga.	3.00	1" x 22 ga.	3.00	1" x 22 ga.	3.00	1" x 22 ga.	3.00	1" x 22 ga.	3.00	1" x 22 ga.
P/2 = 120"	1 1/2" x 18 ga.	1.00	1 1/2" x 18 ga.	3.00	1" x 18 ga.	3.00	1" x 18 ga.	3.00	1" x 20 ga.	3.00	1" x 22 ga.	3.00	1" x 22 ga.	3.00	1" x 22 ga.	3.00	1" x 22 ga.	3.00	1" x 22 ga.
P/2 = 144"	NOT SHOWN	1.00	1 1/2" x 18 ga.	1.00	1 1/2" x 18 ga.	3.00	1" x 18 ga.	3.00	1" x 18 ga.	3.00	1 1/2" x 18 ga.	3.00	1 1/2" x 18 ga.	3.00	1 1/2" x 18 ga.	3.00	1 1/2" x 18 ga.	3.00	1 1/2" x 18 ga.
P/2 = 168"	NOT SHOWN	1.00	1 1/2" x 18 ga.	1.00	1 1/2" x 18 ga.	3.00	1" x 18 ga.	3.00	1" x 18 ga.	3.00	1 1/2" x 18 ga.	3.00	1 1/2" x 18 ga.	3.00	1 1/2" x 18 ga.	3.00	1 1/2" x 18 ga.	3.00	1 1/2" x 18 ga.

6 METHOD OF HANGING DUCTS DETAIL
SCALE: N.T.S.



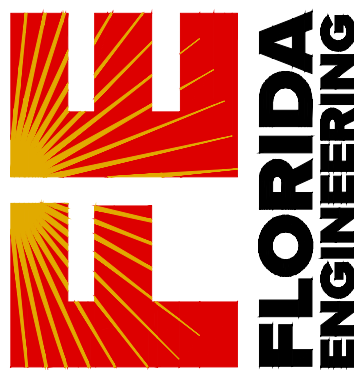
RISER SUPPORT DETAIL

NOT TO SCALE

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PROJECT NO: 22 200 24

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SHEET TITLE:

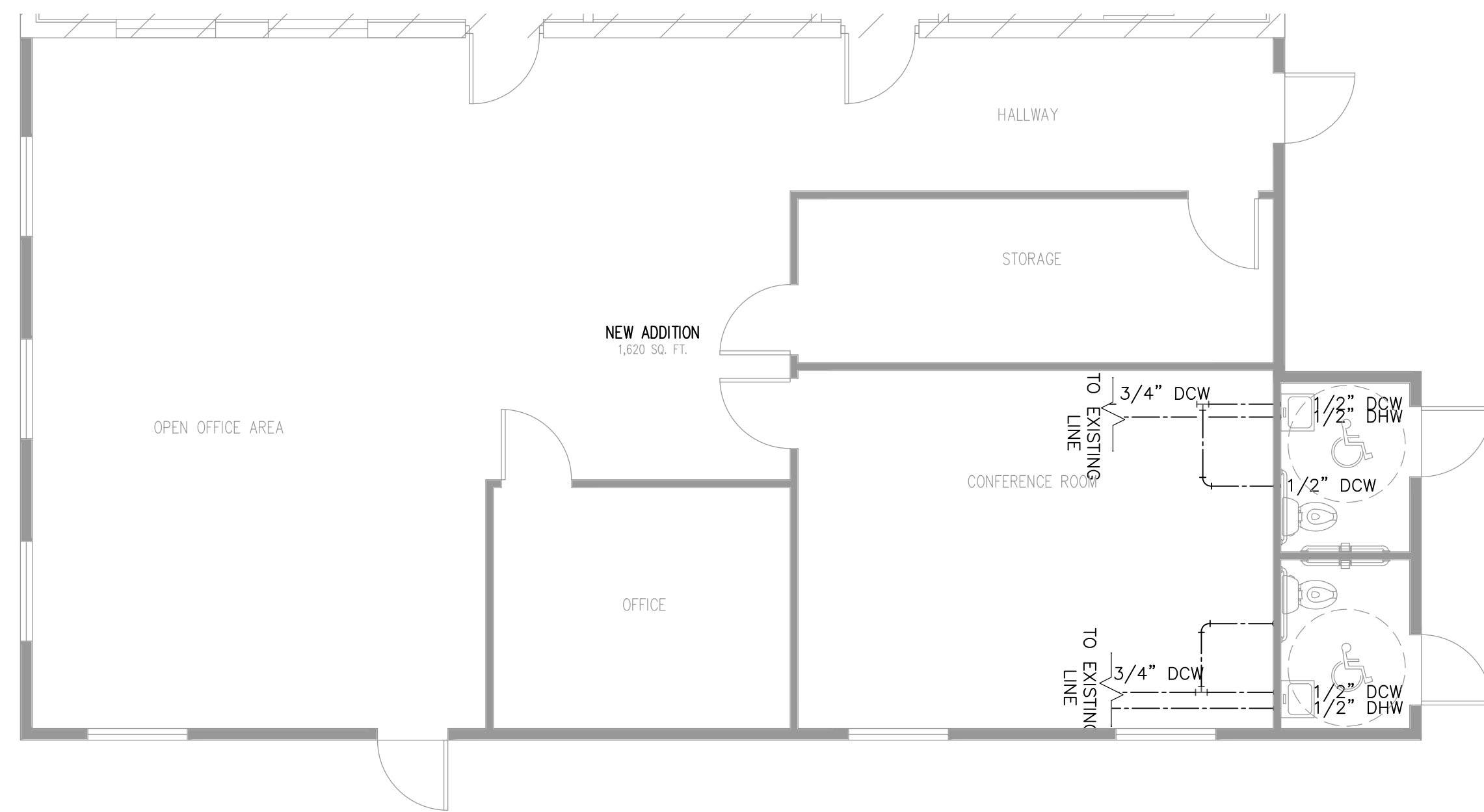
MECHANICAL DETAILS

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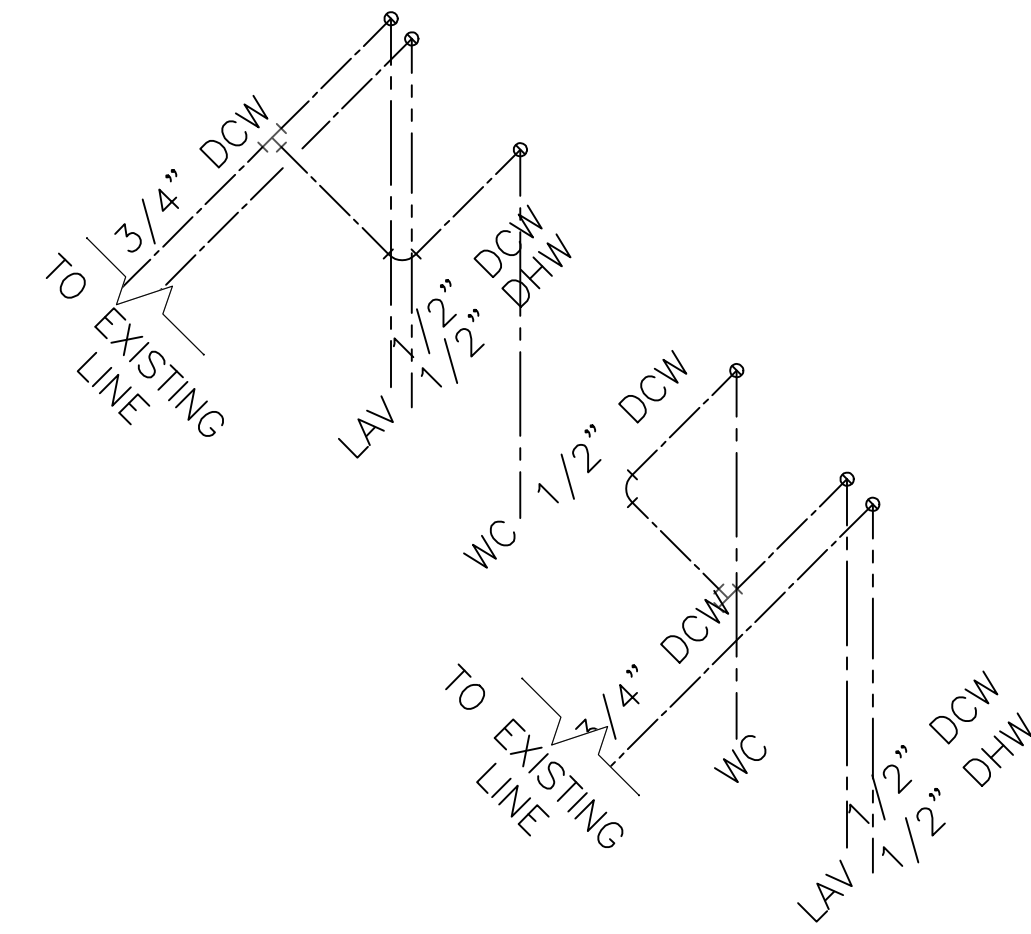
M-201

FIXTURE LEGEND & WATER SUPPLY DEMAND								
LEGEND	NAME	OCCUPANCY	QTY	PIPE SIZE (INCH)	LOAD VALUE (WSFU)			TOTAL
					COLD	HOT	TOTAL	
WC	WATER CLOSET	PUBLIC	2	1	10.0		10.0	10.0
LAV	LAVATORY	PUBLIC	2	1/2	1.5	1.5	2.0	4.0
TOTAL	TOTAL							14.0

- * MAXIMUM DEVELOPMENT LENGTH (FEET) - 40
- * TOTAL WSFU DEMAND REQUIRES 1/2" METER/SERVICE PIPE AND 1/2" DISTRIBUTION PIPE (PER TABLE E201.1, PRESSURE RANGE 40 TO 49 PSI).
- * COLD WATER SUPPLY (DCW) - 1/2"(U.N.D)
- * HOT WATER SUPPLY (DHW) - 1/2"(U.N.D)
- * MIXING VALVE (ASSE1070) REQUIRED FOR LAVATORIES PER FPC 416.5
- * RECOMMENDED MIXING VALVES FOR HANDSINKS TO PREVENT SCALDING
- * TEMPER ALL WASTE DISCHARGING INTO DRAINAGE SYSTEM THAT IS GREATER THAN 140F
- * PROVIDE ACCESS PANEL FOR PLUMBING VALVES



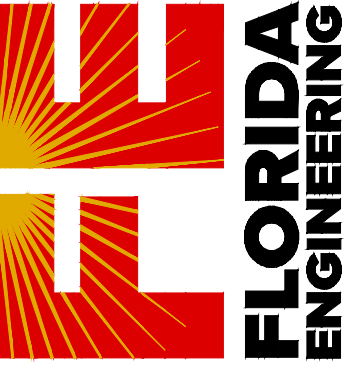
DOMESTIC WATER PLAN
3/16" = 1'-0"



DOMESTIC WATER ISOMETRIC VIEW
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TEL: 813-978-8195
FAX: 813-978-8195



PROJECT NAME & ADDRESS:
ROTONDA WEST ASSOCIATION
646 ROTONDA CIRCLE, ROTONDA WEST, FL 33947
MISC OWNER

No.	Description	Date

DRAWN BY: JPP
PROJECT NO: 22 200 24
SCALE: As indicated

SHEET TITLE:
PLUMBING PLAN

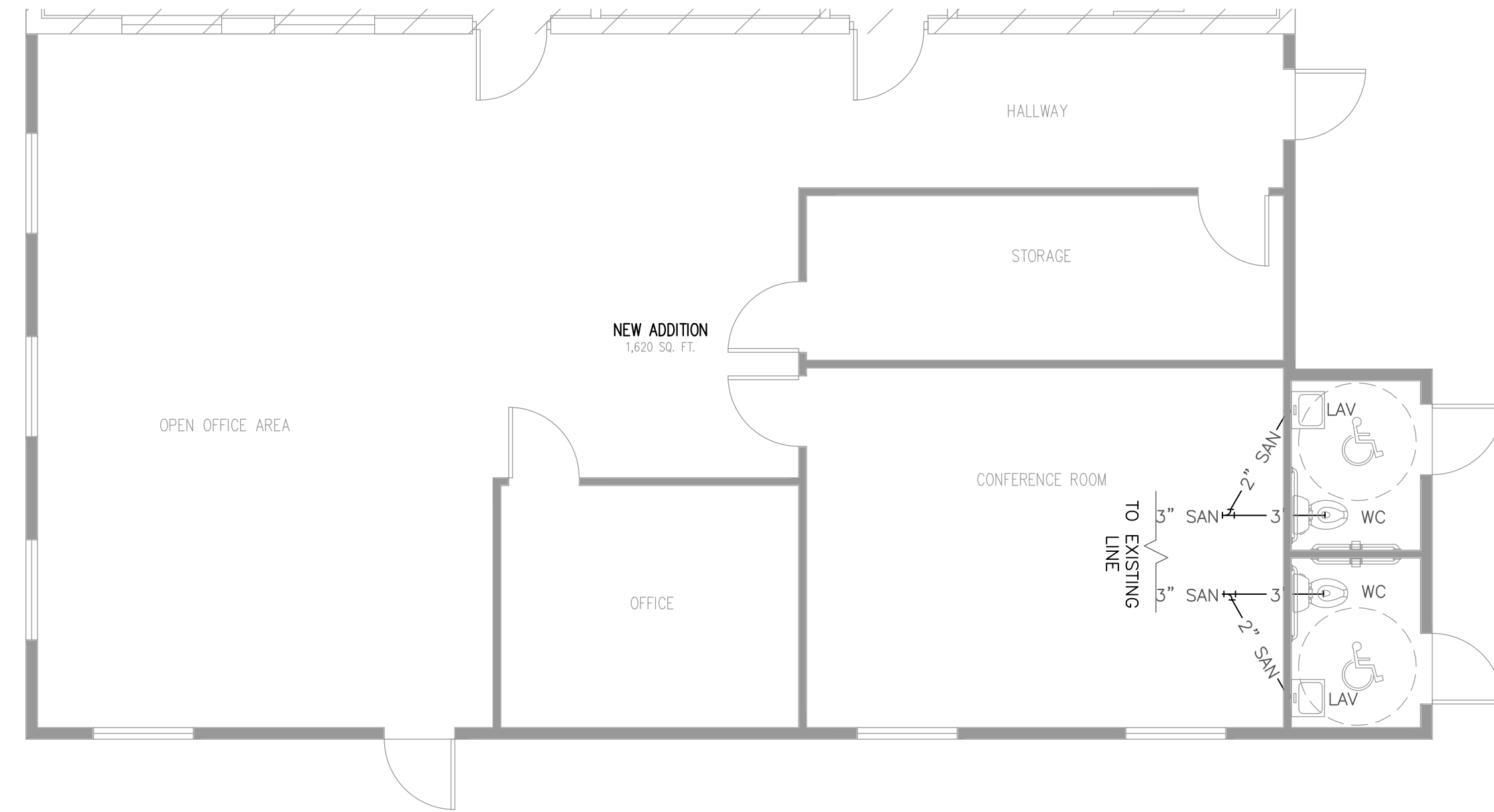
SHEET NUMBER:
P-100

FIXTURE LEGEND & CONNECTION SIZE (INCH)							
LEGEND	NAME	OCCUPANCY	QTY	SAN	MIN. TRAP SIZE	DFU	TOTAL(DFU)
WC	WATER CLOSET	PUBLIC	2	3		4	8
LAV	LAVATORY	PUBLIC	2	2	1 1/4	1	2
VTR	VENT THROUGH ROOF						
AAV	AIR ADMITTANCE VALVE						
	TOTAL						10

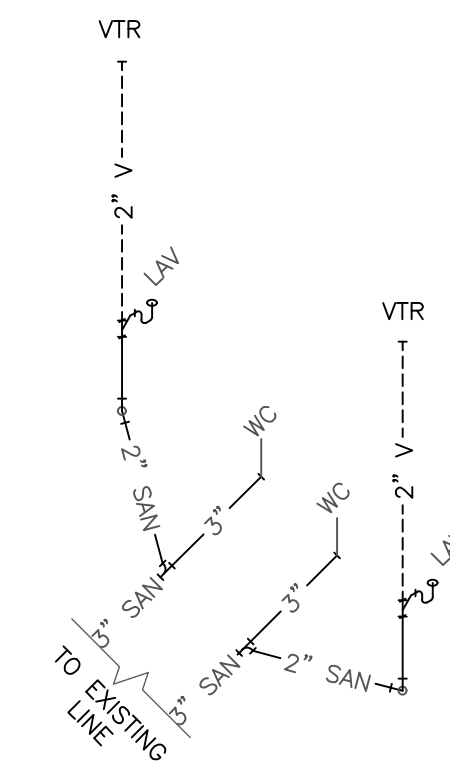
- * REQUIRED DRAINAGE PIPE DIAMETER 3" AND 1/8" SLOPE PER TABLE 710.1
- * MAIN SANITARY SEWER (SAN) 3"(U.N.D)
- * SEE TRAP PRIMER DETAIL ON SHEET P-200

SIZE OF TRAP	DISTANCE TO VENT
1 1/2"	6'
2"	8'
3"	12'
4"	16'

FBCP-909.1 Maximum Distance of Fixture Trap From Vent



SANITARY SEWER PLAN
3/16" = 1'-0"



SANITARY SEWER ISOMETRIC VIEW
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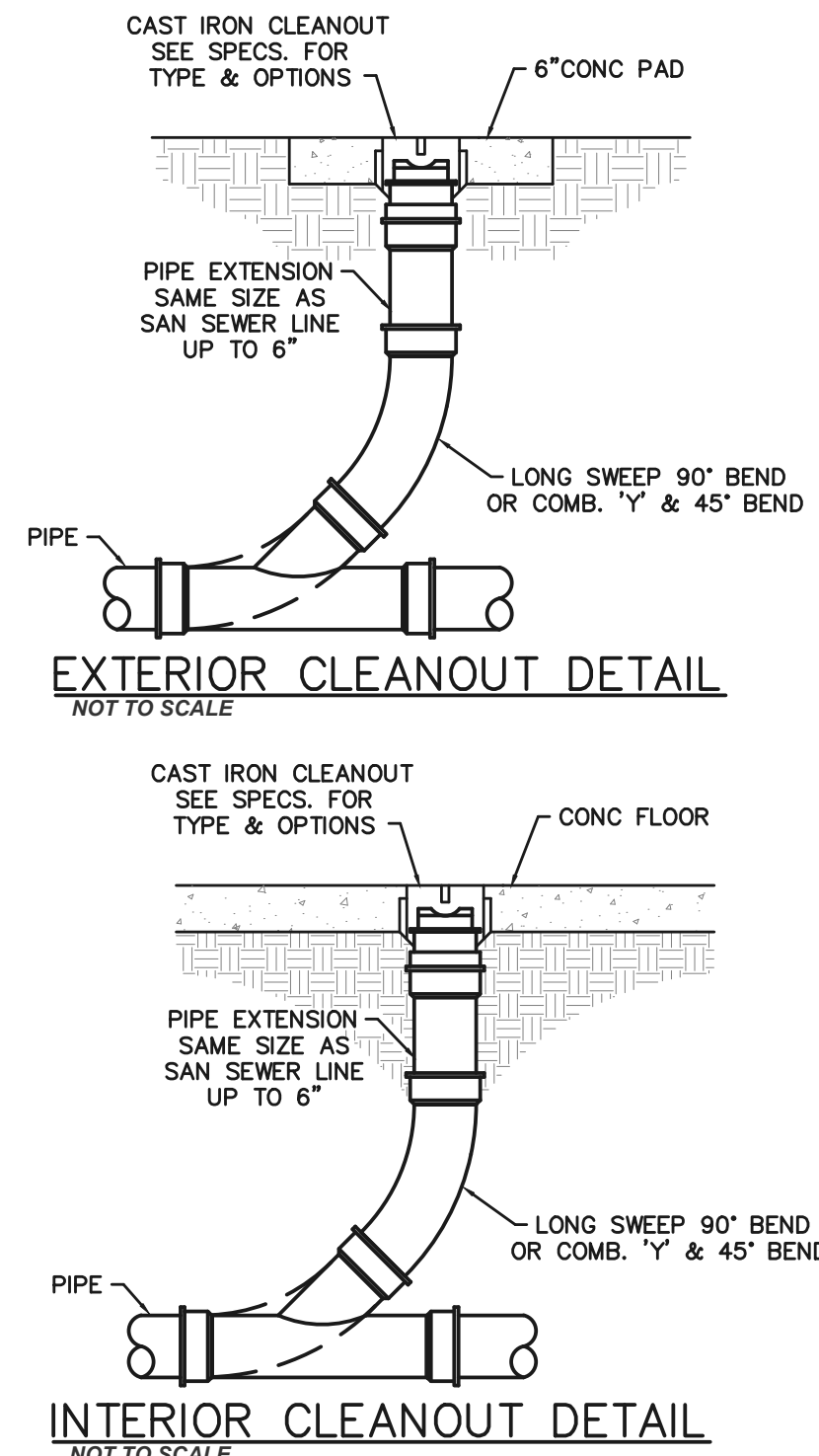
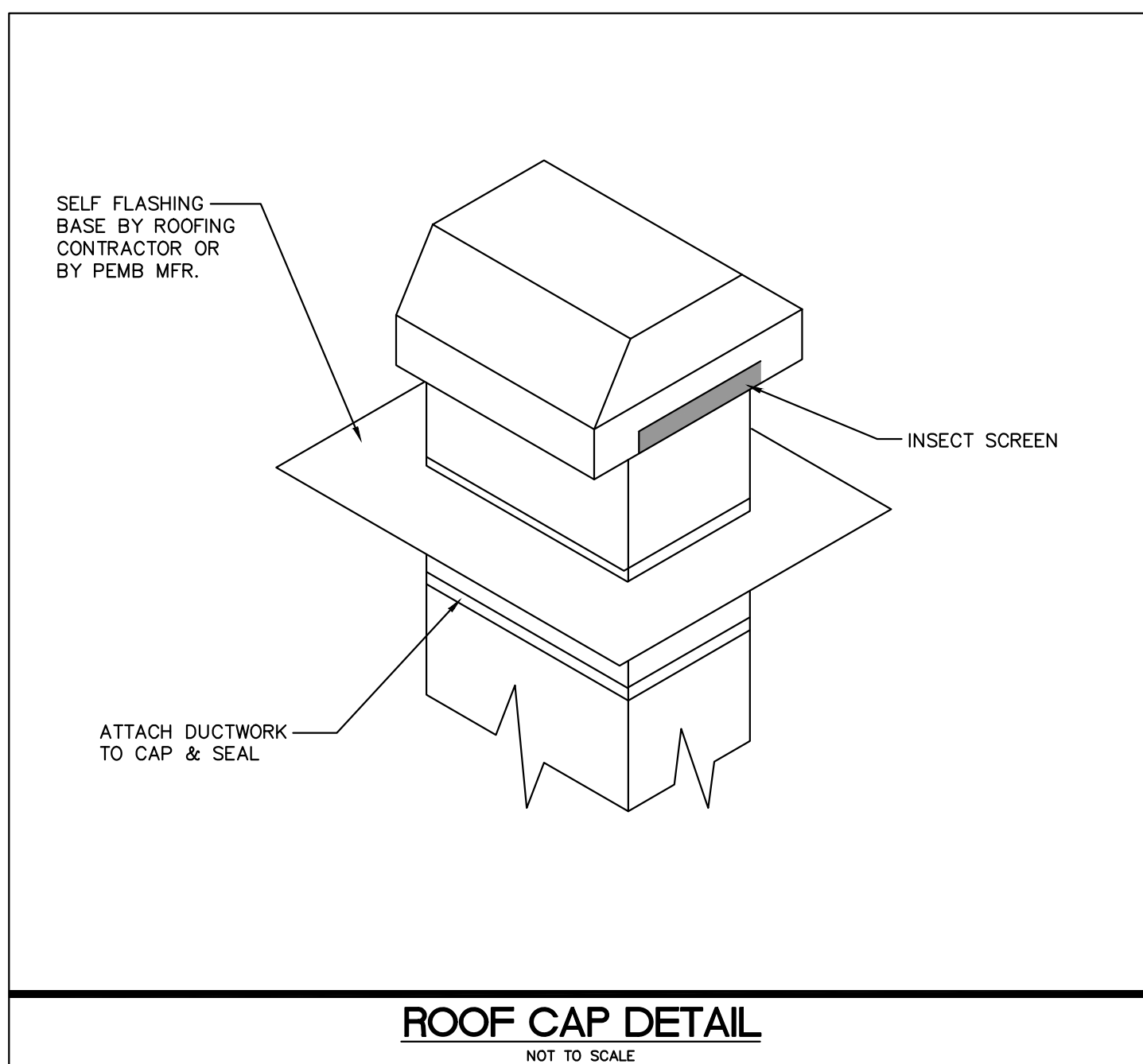
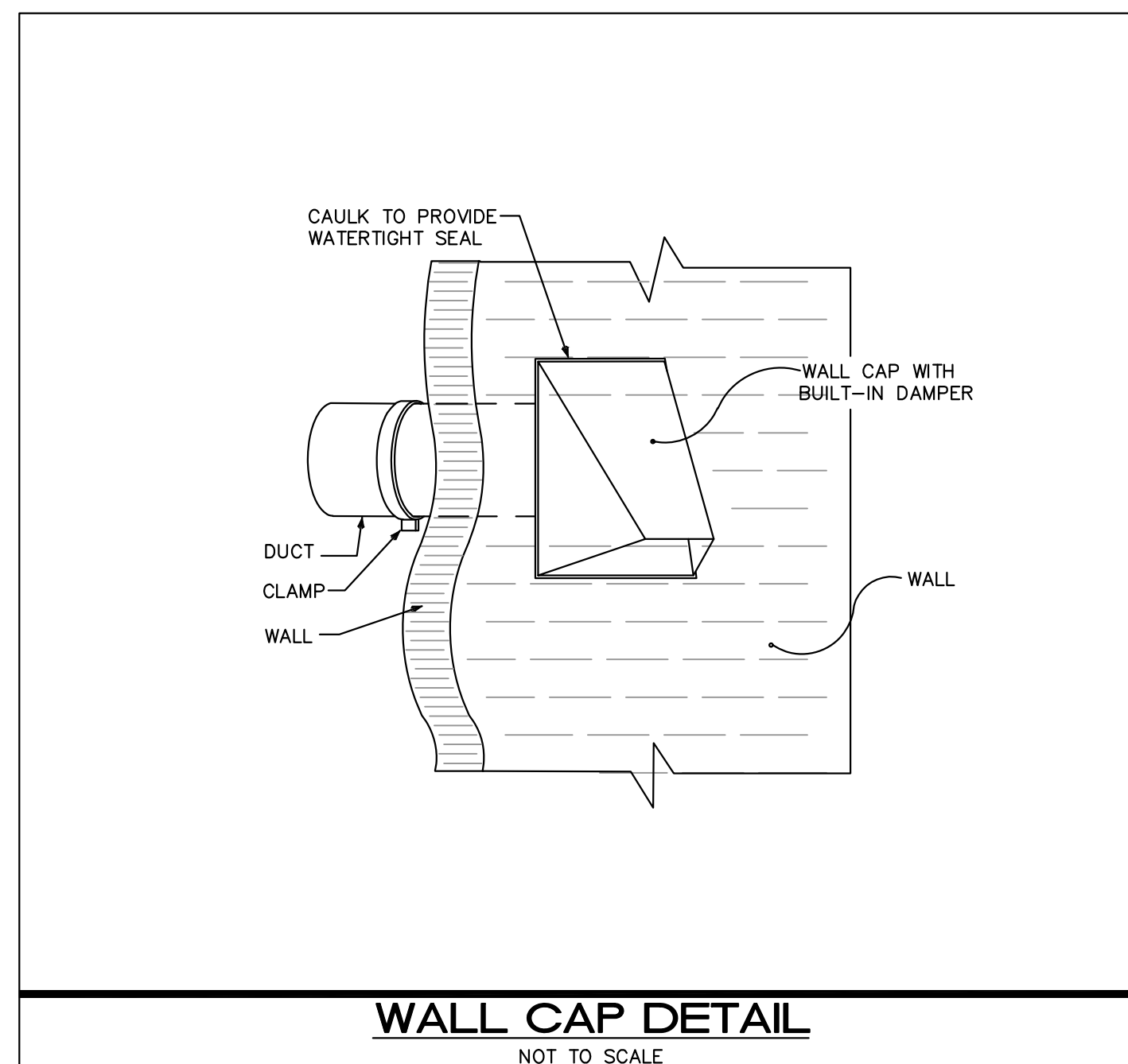
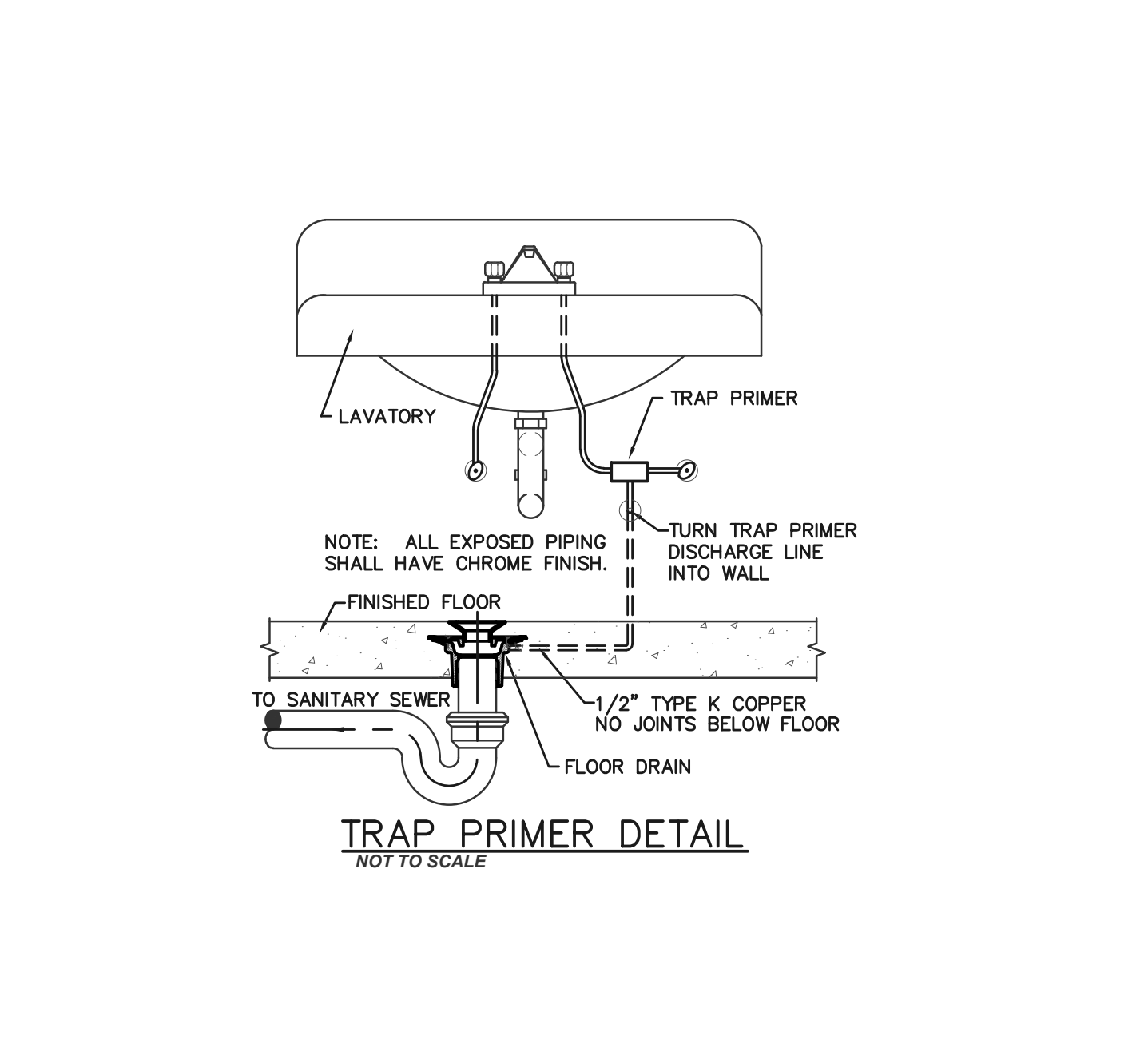
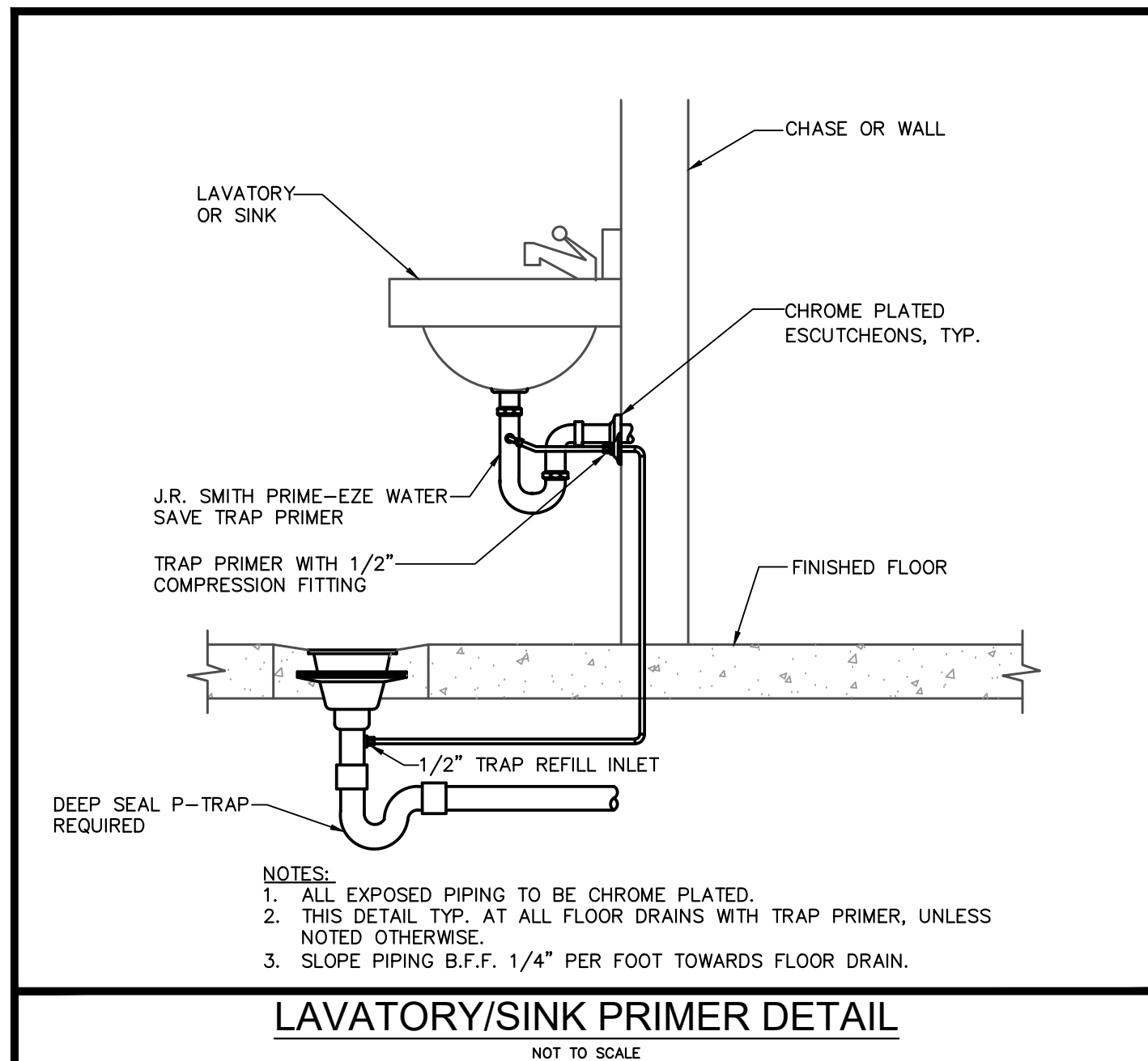
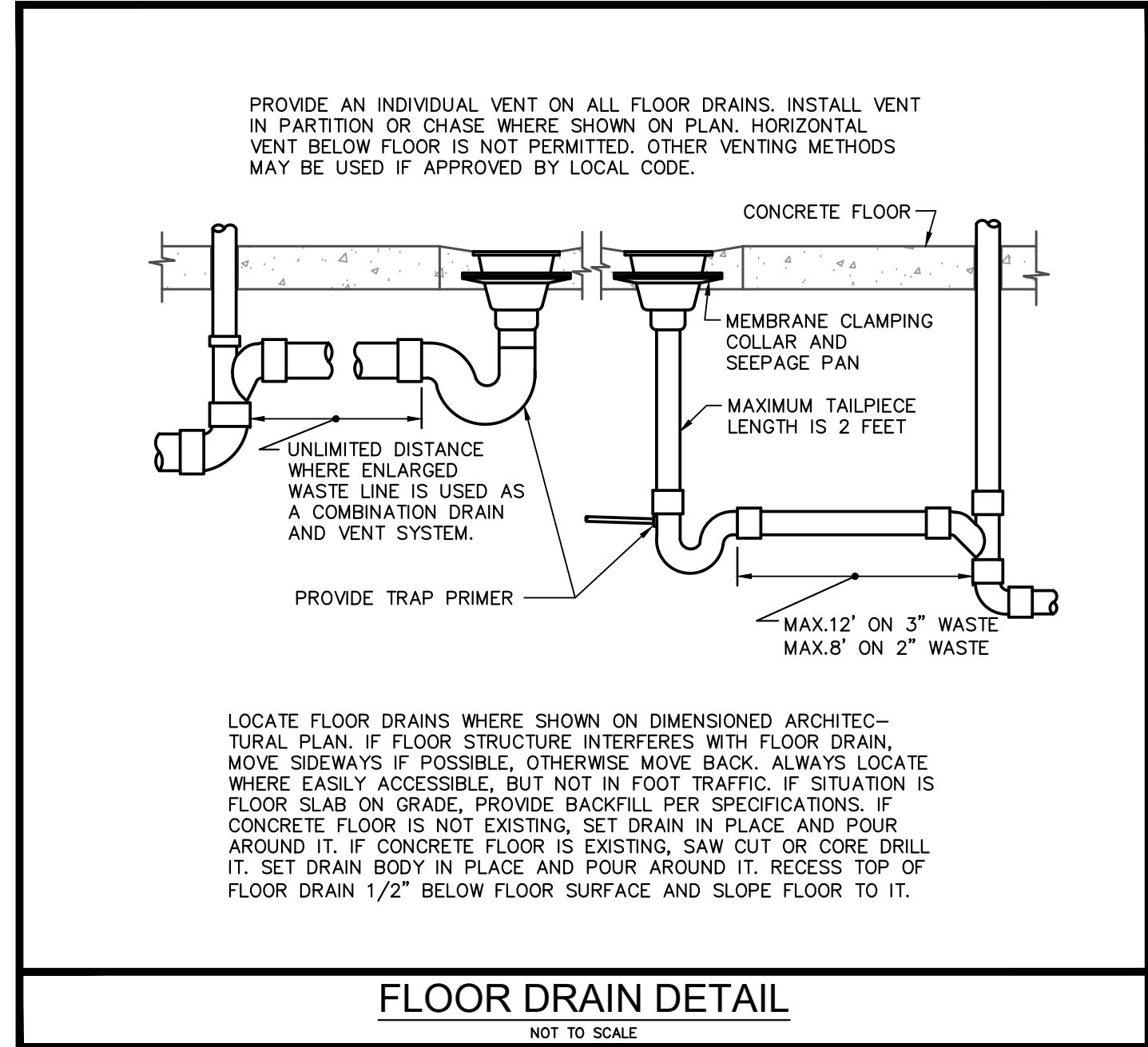
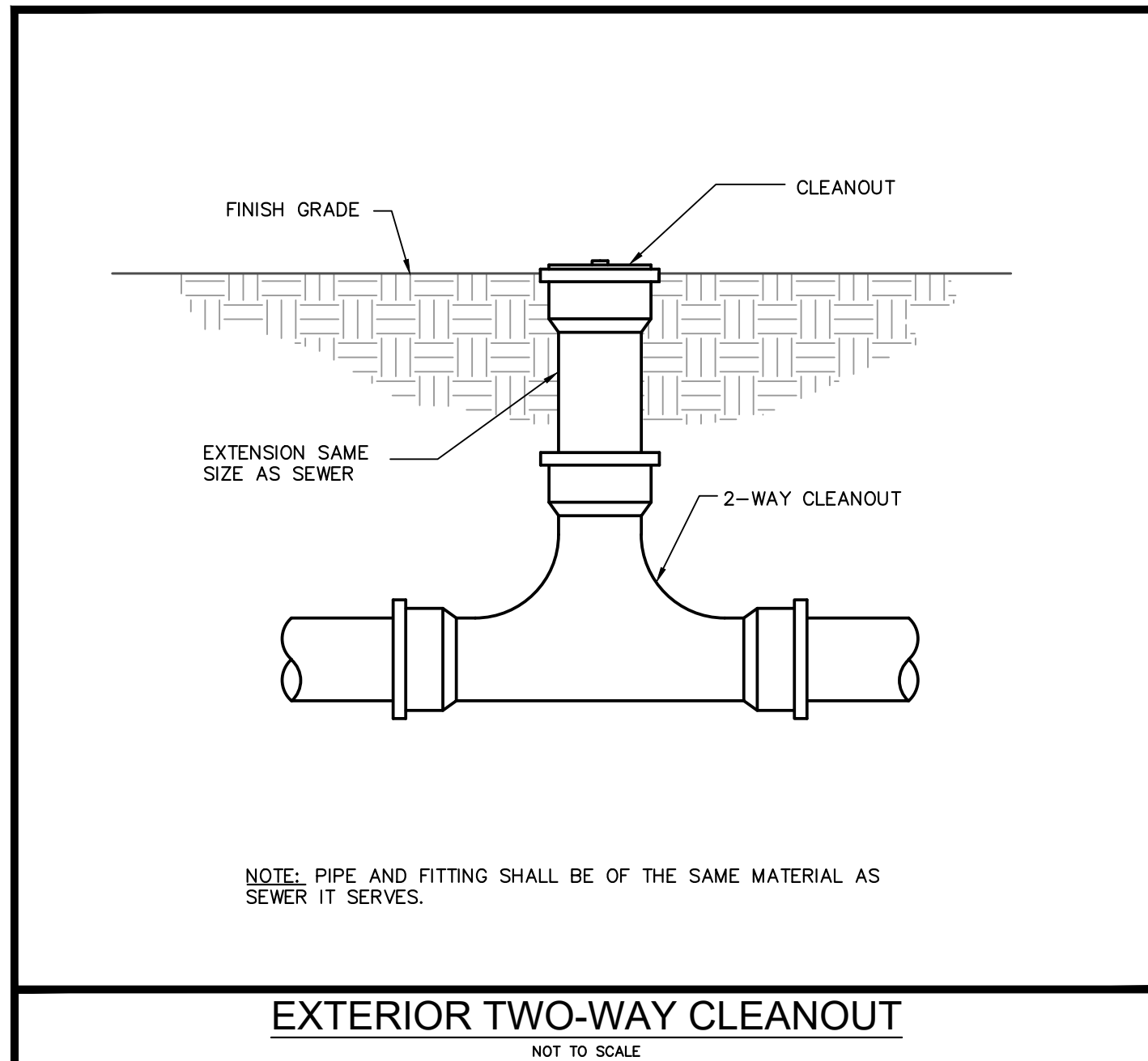
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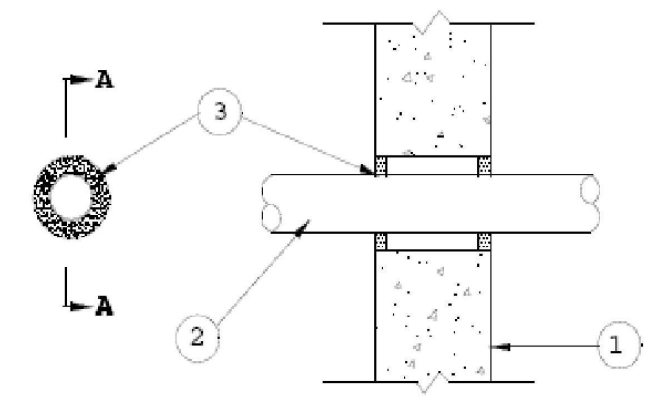
PLUMBING PLAN

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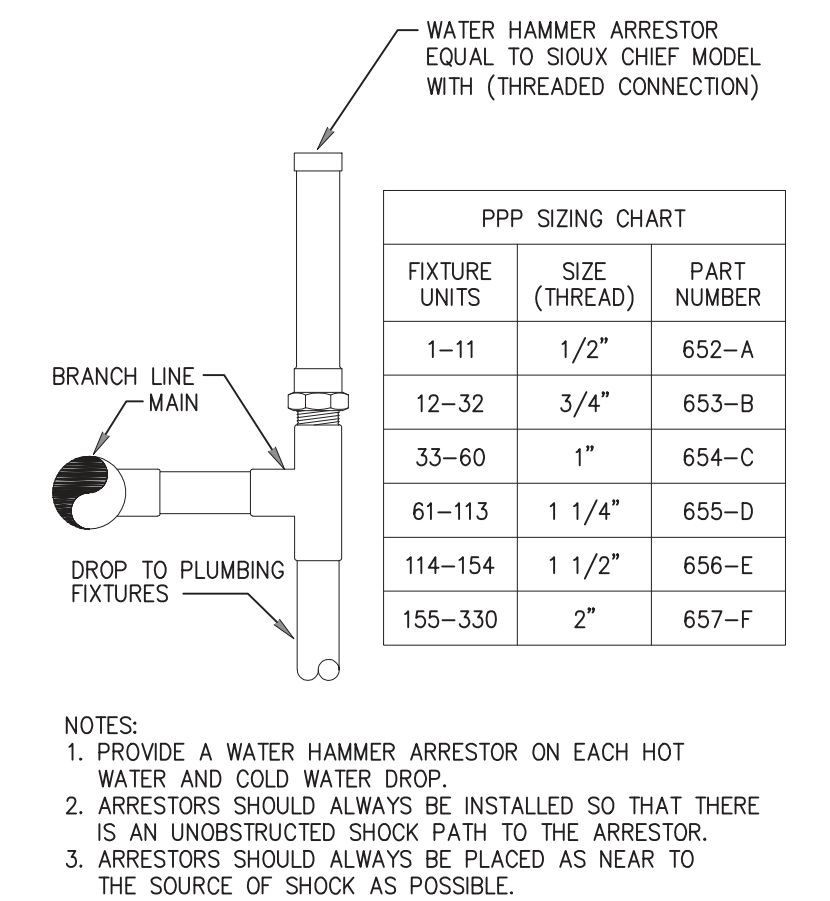
P-101



System No. W-J-1156
November 25, 2003
F Rating - 2 Hr
T Rating - 0 Hr



1. Wall Assembly - Min 6 in. (152 mm) thick reinforced lightweight or normal weight (100-150 pcf or 1600-2400 kg/m³) concrete wall. Wall may also be constructed of any UL Classified Concrete Blocks*. Diam of opening to be min 1 1/2 in. (38 mm) to max 4 in. (102 mm) greater than outside diam of through-penetrant. See Concrete Blocks (CAZT) category in the Fire Resistance Directory for names of manufacturers.
 2. Through Penetrants - One metallic pipe, conduit or tubing centered within opening. Annular space between penetrant and periphery of opening to be min 1/4 in. (6 mm) to max 2 in. (51 mm). Penetrant to be rigidly supported on both sides of wall. The following types and sizes of penetrants may be used:
 - A. Steel Pipe - Nom 6 in. (152 mm) diam (or smaller) Schedule 10 (or heavier) steel pipe.
 - B. Iron Pipe - Nom 6 in. (152 mm) diam (or smaller) cast or ductile iron pipe.
 - C. Conduit - Nom 4 in. (102 mm) diam (or smaller) steel electrical metallic tubing (EMT) or nom 6 in. (152 mm) rigid steel conduit.
 - D. Copper Tubing - Nom 3 in. (76 mm) diam (or smaller) Type L (or heavier) copper tubing.
 - E. Copper Pipe - Nom 3 in. (76 mm) diam (or smaller) Regular (or heavier) copper pipe.
 3. Fill/Void or Cavity Material* - Sealant - Min 5/8 in. (16 mm) thickness of sealant applied within annulus, flush with both surfaces of wall.
- 3M COMPANY - FB-1000 NS
*Bearing the UL Classification Marking

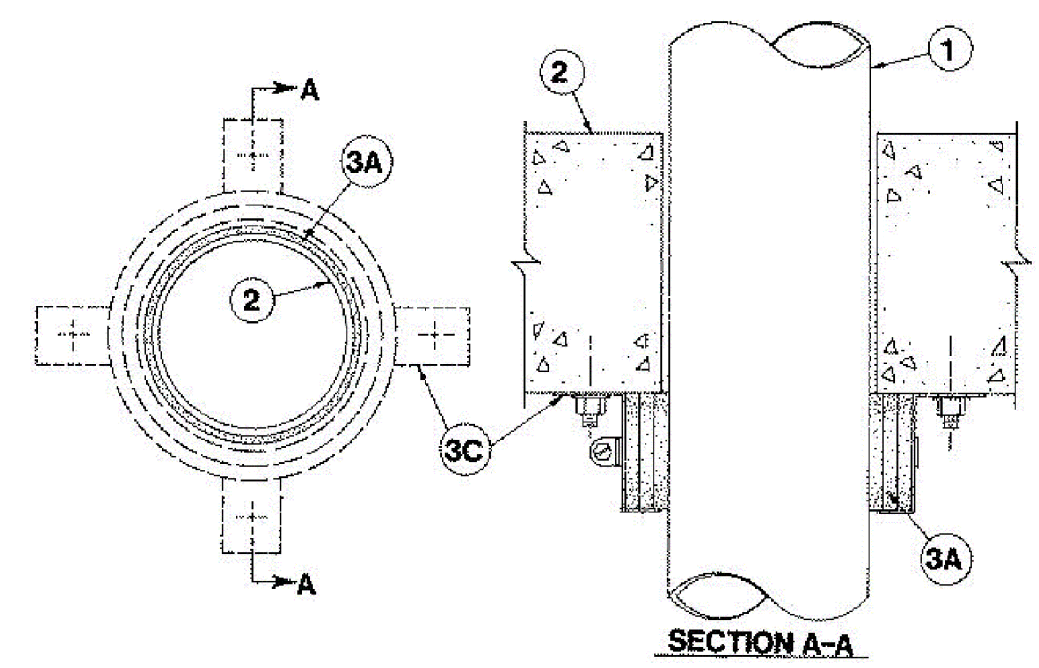


FIXTURE UNITS	SIZE (THREAD)	PART NUMBER
1-11	1/2"	652-A
12-32	3/4"	653-B
33-60	1"	654-C
61-113	1 1/4"	655-D
114-154	1 1/2"	656-E
155-330	2"	657-F

- NOTES:
1. PROVIDE A WATER HAMMER ARRESTOR ON EACH HOT WATER AND COLD WATER DROP.
 2. ARRESTORS SHOULD ALWAYS BE INSTALLED SO THAT THERE IS AN UNOBSTRUCTED SHOCK PATH TO THE ARRESTOR.
 3. ARRESTORS SHOULD ALWAYS BE PLACED AS NEAR TO THE SOURCE OF SHOCK AS POSSIBLE.

System No. C-AJ-2001
May 18, 2005

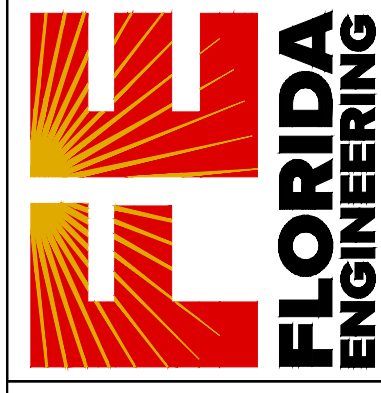
F Rating - 2 Hr
T Ratings - 0, 1-1/2 and 2 Hr (See Item 3)
L Rating at Ambient - 7 CFM/sq ft (See Item 3B)
L Rating at 400 F - 1 CFM/sq ft (See Item 3B)



NOTE:
DETAIL IS BASED ON THROUGH PENETRATION FIRESTOP SYSTEM NO. WL5001 AS DESCRIBED IN U.L. FIRE RESISTANCE DIRECTORY. MATERIALS OTHER THAN THOSE INDICATED IN THE DIRECTORY SHALL NOT BE USED.

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646 ROTONDA CIRCLE, ROTONDA WEST, FL 33947
MISC OWNER

PROJECT NAME & ADDRESS:

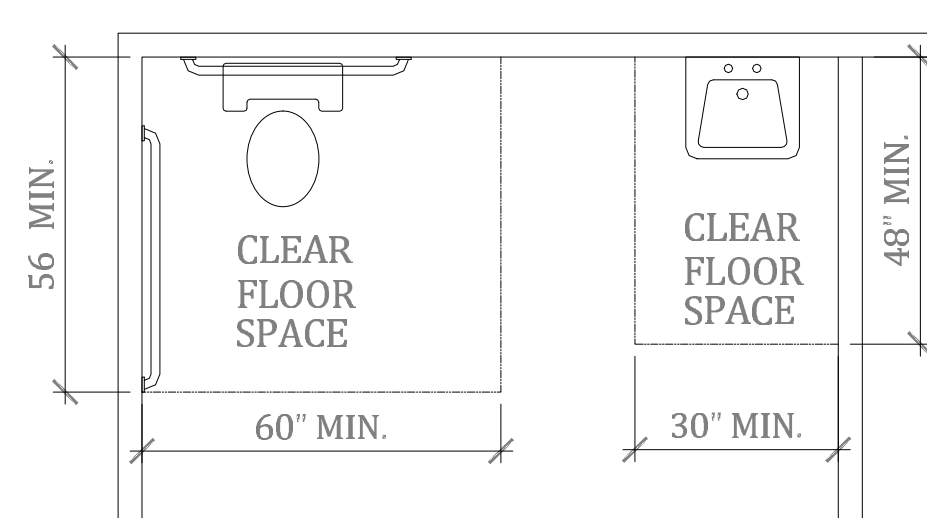
No.	Description	Date

DRAWN BY: JPP
PROJECT NO: 22 200 24
SCALE: As indicated
SHEET TITLE:

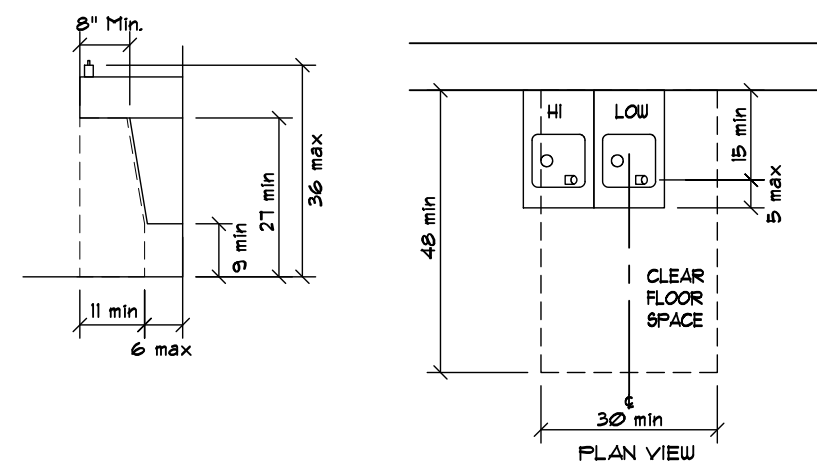
PLUMBING DETAILS

SHEET NUMBER:
P-200

TABLE 604.4 MAXIMUM FLOW RATES AND CONSUMPTION FOR PLUMBING FIXTURES AND FIXTURE FITTINGS	
PLUMBING FIXTURE OR FIXTURE FITTING	MAXIMUM FLOW RATE OR QUANTITY
LAVATORY, PUBLIC, (METERING)	0.25 GALLON PER METERING CYCLE
LAVATORY, PUBLIC, (OTHER THAN METERING)	0.5 GPM AT 60 PSI
URINAL	1.0 GALLON PER FLUSHING CYCLE
SINK FAUCET	2.2 GPM AT 60 PSI
WATER CLOSET	1.6 GALLONS PER FLUSHING CYCLE



WATER CLOSET CLEAR FLOOR SPACE
N.T.S



HI-LO DRINKING FOUNTAIN DETAIL
N.T.S

WATER

1. ALL WATER PIPING TO BE SCHED 40 CPVC.
2. PROVIDE ISOLATION VALVES TO ALL PLUMBING FIXTURES INSTALLED.
3. PROVIDE BACK FLOW PREVENTION DEVICE TO ALL EQUIPMENT WATER CONNECTIONS.
4. COLD WATER ONLY.
5. NO UNDER SLAB JOINTS IN WATER PIPING.
6. PROVIDE ISOLATION VALVES TO CW AND HW FOR MOP SINK.
7. PROVIDE WATER HAMMER ARRESTOR TO ICE CUBE MACHINE.

SANITARY

ALL DWV SANITARY LINES TO BE SCHED 40 PVC.

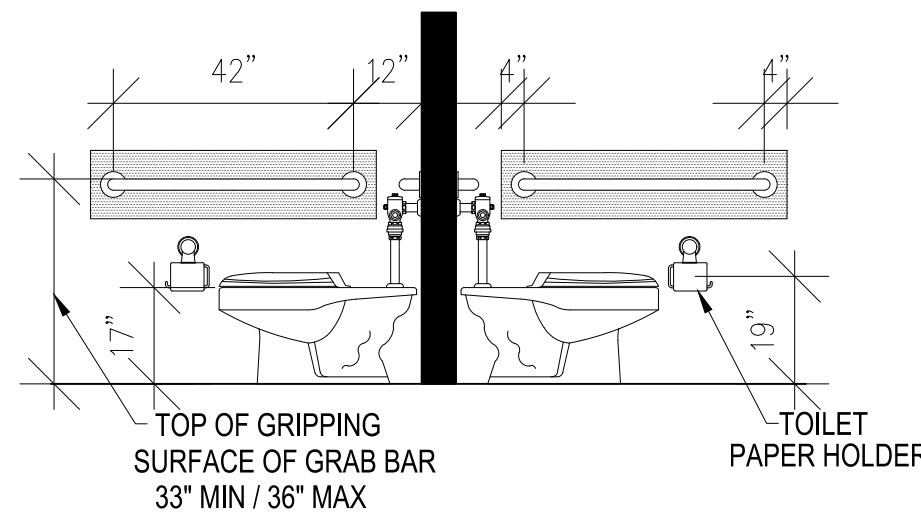
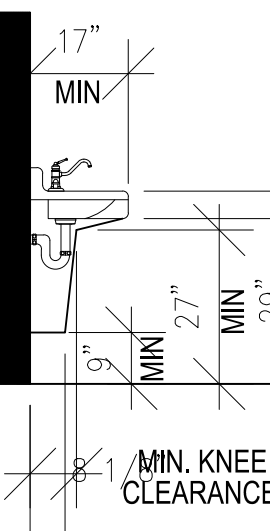
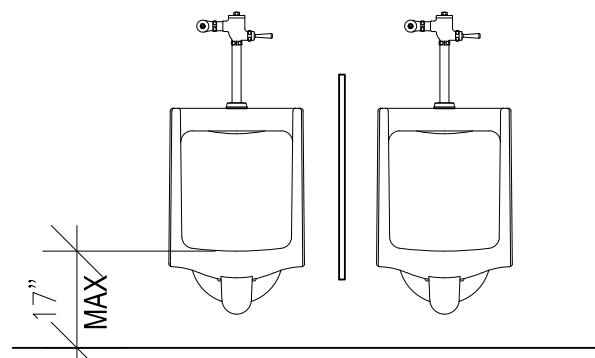
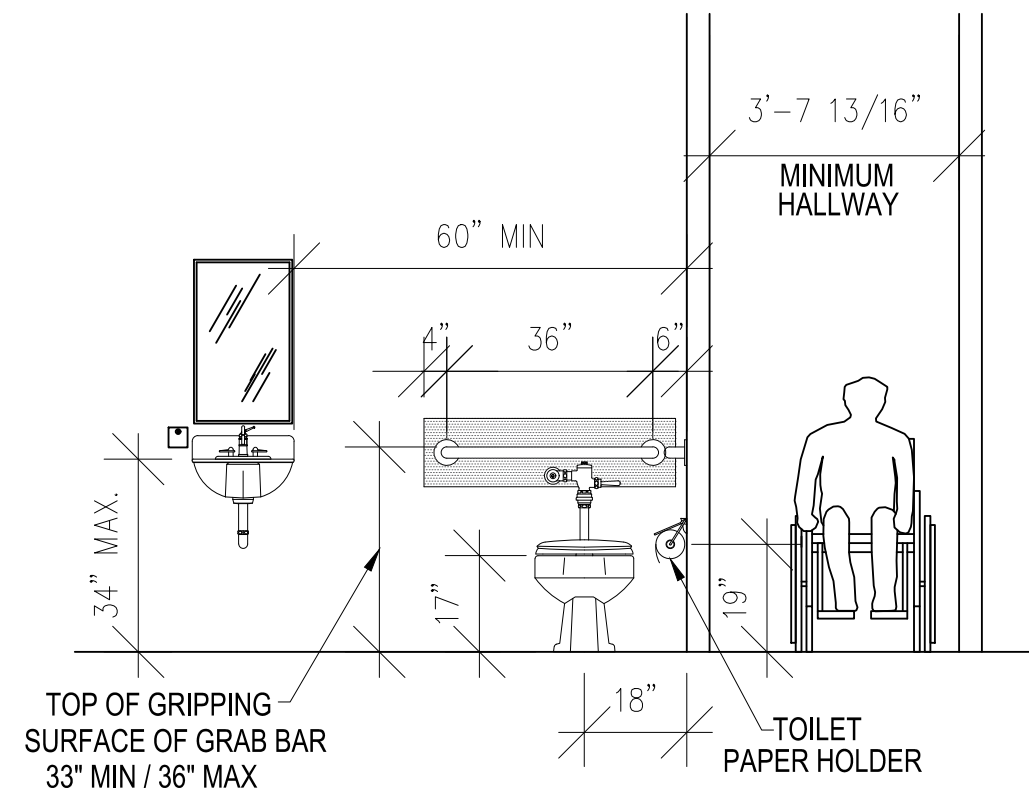
ALL WORK SHALL COMPLY WITH FBC PLUMBING.

NOTES:

TEMPERED WATER SHALL BE DELIVERED FROM LAVATORIES THROUGH AN APPROVED WATER-TEMPERATURE LIMITING DEVICE THAT CONFORMS TO ASSE 1070 OR CSA B125.3.

FBCP: 1002.1 - FIXTURE TRAPS

EACH PLUMBING FIXTURE SHALL BE SEPARATELY TRAPPED BY A LIQUID-SEAL TRAP, EXCEPT AS OTHERWISE PERMITTED BY THIS CODE. THE VERTICAL DISTANCE FROM THE FIXTURE OUTLET TO THE TRAP WEIR SHALL NOT EXCEED 24 INCHES (610 MM), AND THE HORIZONTAL DISTANCE SHALL NOT EXCEED 30 INCHES (610 MM) MEASURED FROM THE CENTERLINE OF THE FIXTURE OUTLET TO THE CENTERLINE OF THE INLET OF THE TRAP. THE HEIGHT OF A CLOTHES WASHER STANDPIPE ABOVE A TRAP SHALL CONFORM TO SECTION 802.3.3. A FIXTURE SHALL NOT BE DOUBLE TRAPPED.



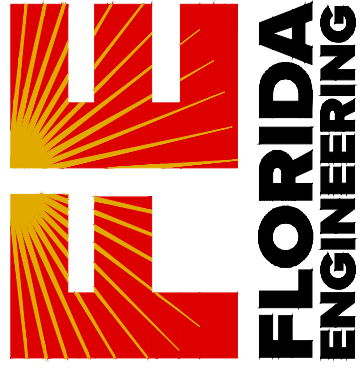
3 ADA HADICAP FIXTURE MOUNTING DETAIL
P-001 SCALE: NTS

NOTE:
PROVIDE 2 x 12 CONCEALED WOOD BLOCKING BETWEEN STUDS EXTENDING TO LIMITS OF SHADED AREAS FOR ATTACHMENT OF HANDICAP GRAB BARS. ENDS OF BLOCKING MUST OCCUR AT A STUD. ALL WOOD BLOCKING IS TO BE FIRE TREATED.

ALL FIRE PROTECTION SYSTEMS, FUEL, GAS, SIGNAGE AND OTHER BUILDING COMPONENTS REQUIRED BY LOCAL BUILDING AND FIRE AUTHORITIES TO BE INSTALLED OR MODIFIED VIA SEPARATE PERMIT, AND WHICH ARE AFFECTED BY THE WORK PROPOSED HEREIN, SHALL BE DULY INSTALLED OR MODIFIED ONLY THROUGH SEPARATE PERMIT AUTHORIZATION FROM THE AUTHORITY(S) HAVING JURISDICTION.

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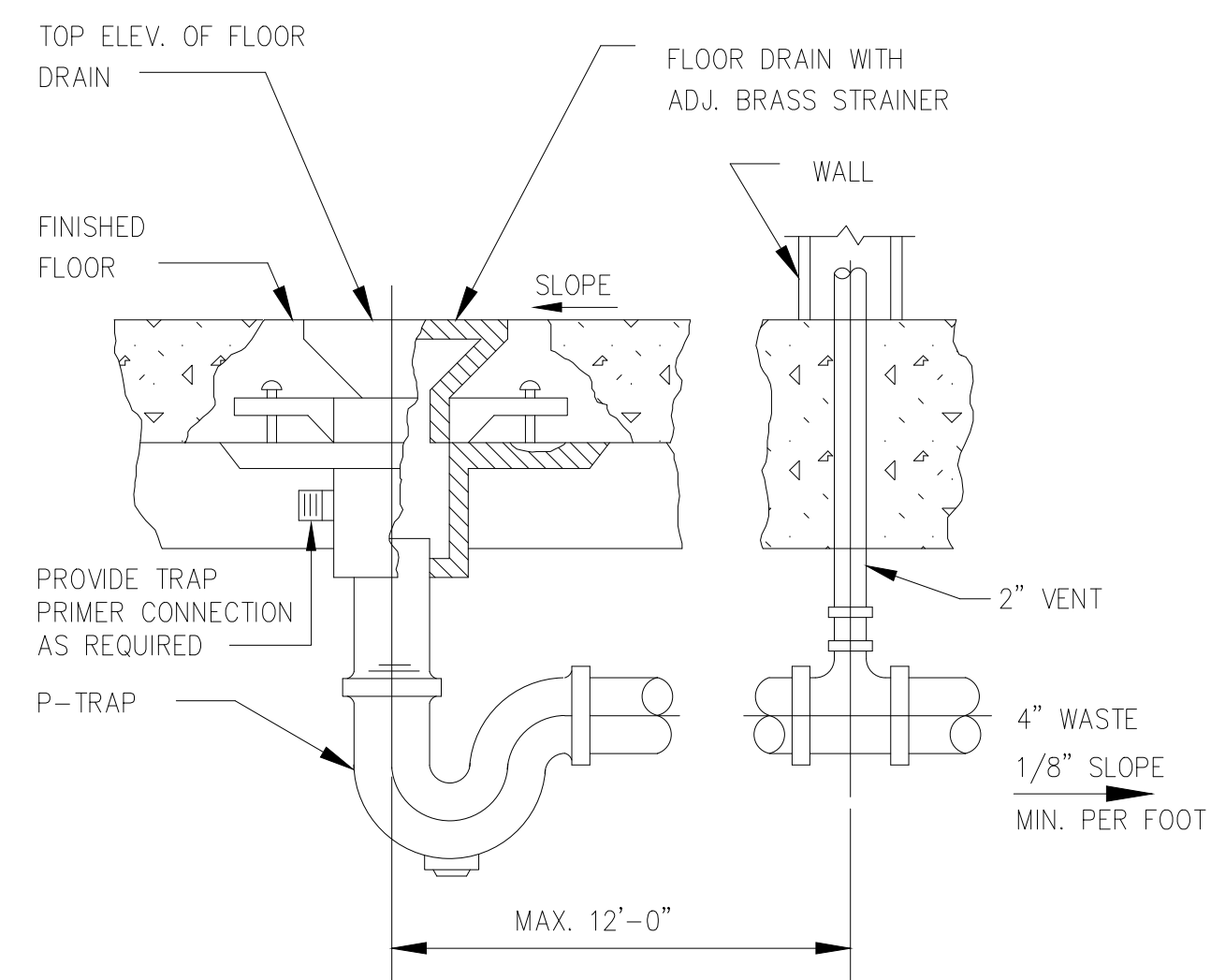
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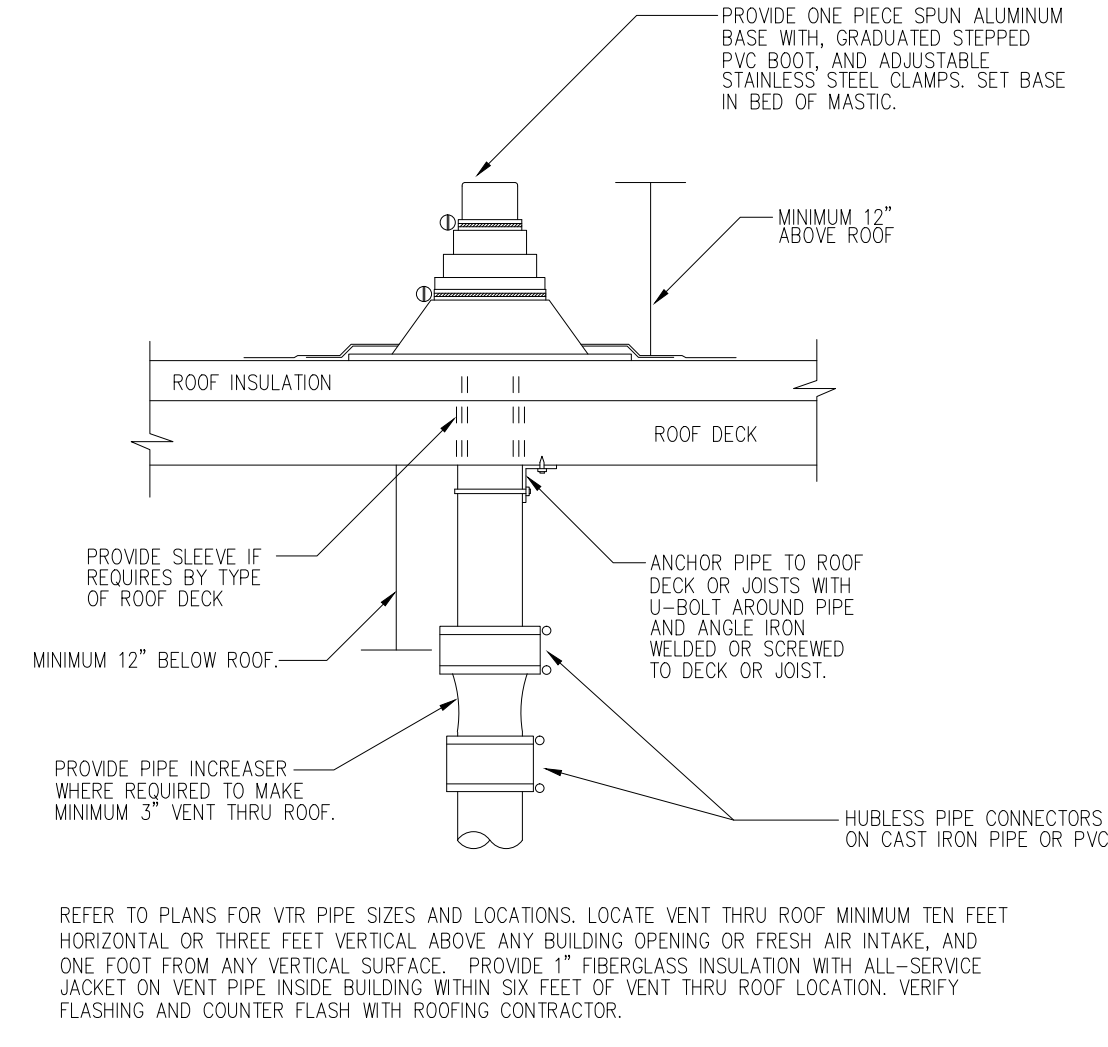
**PLUMBING
DETAILS**

SHEET NUMBER:

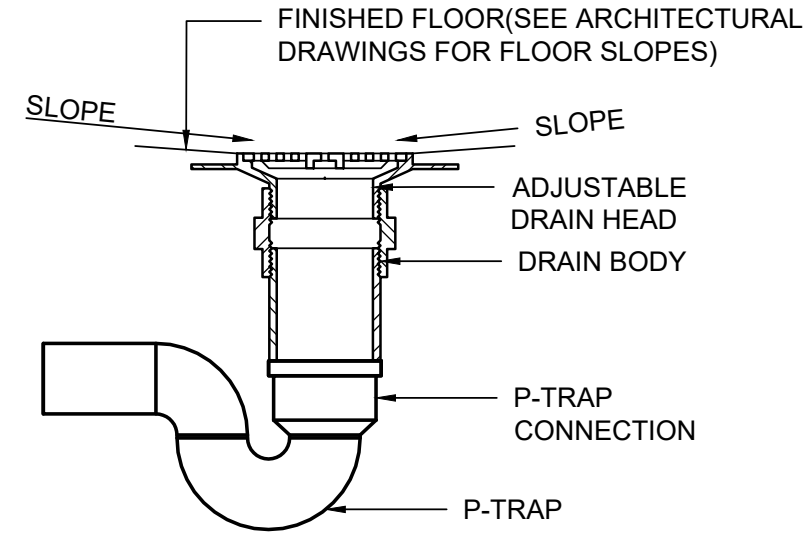
P-201



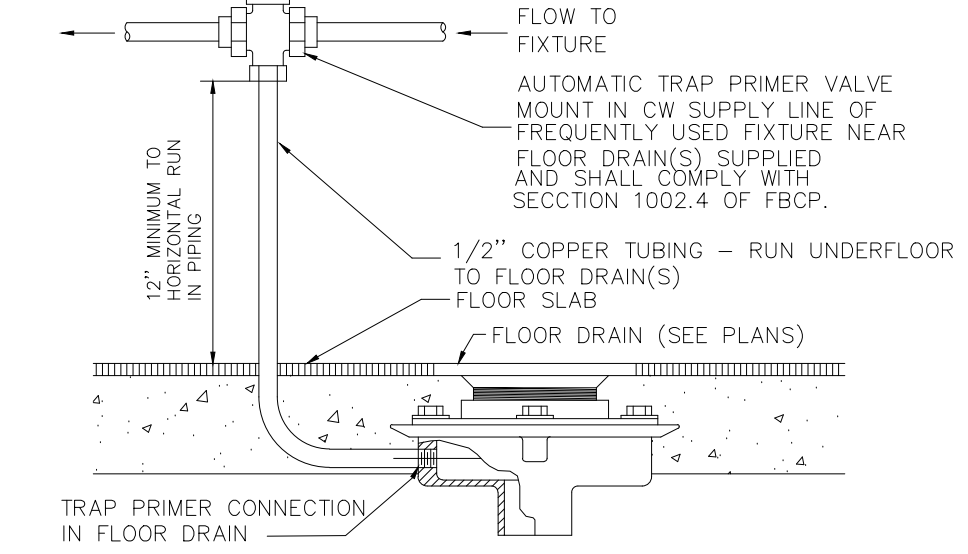
FLOOR DRAIN (FD) DETAIL
SCALE: NTS



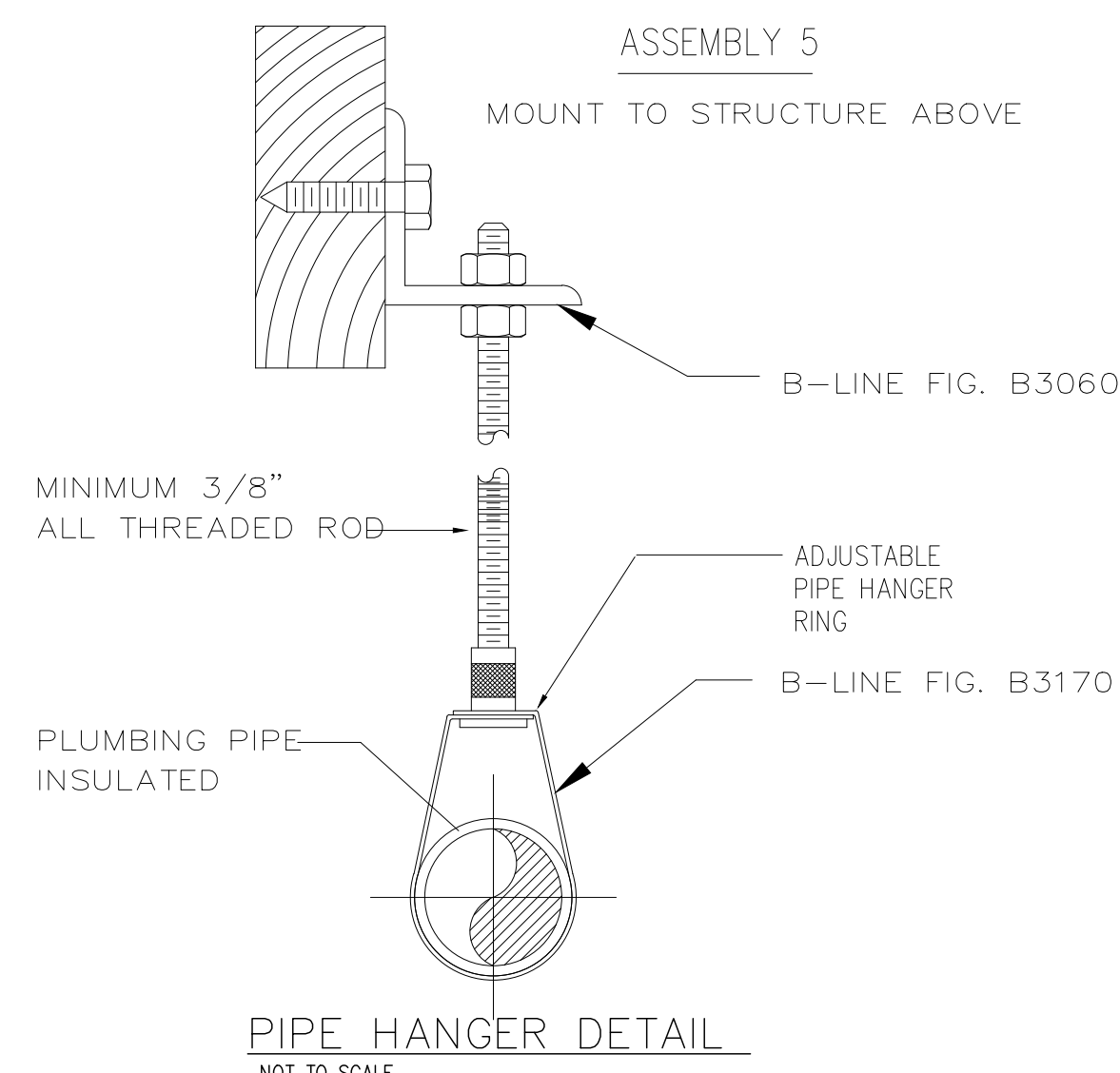
VENT THRU ROOF (VTR) DETAIL
NOT TO SCALE



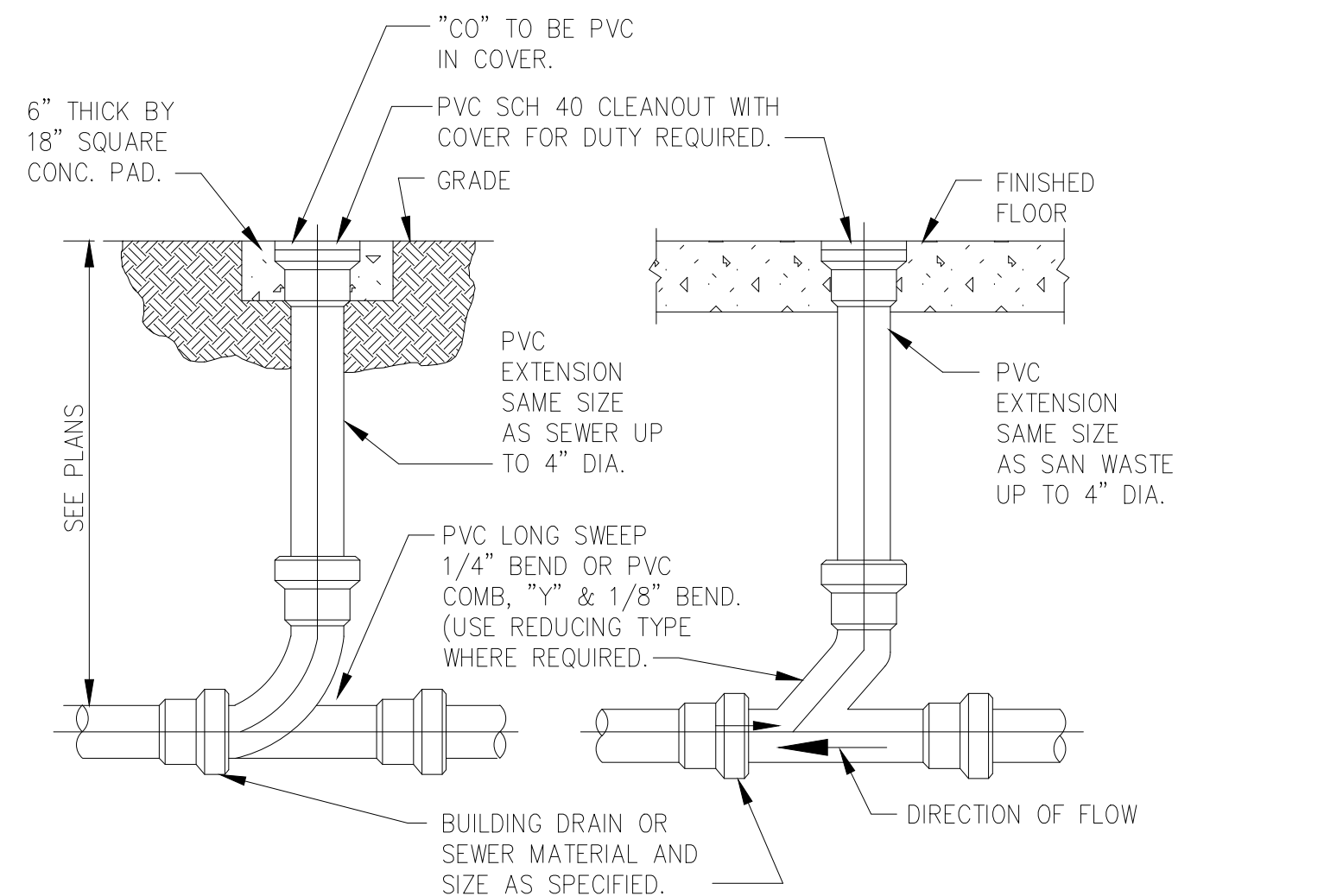
FLOOR DRAIN DETAIL



TRAP PRIMER (TPV) CONNECTION DETAIL
NOT TO SCALE

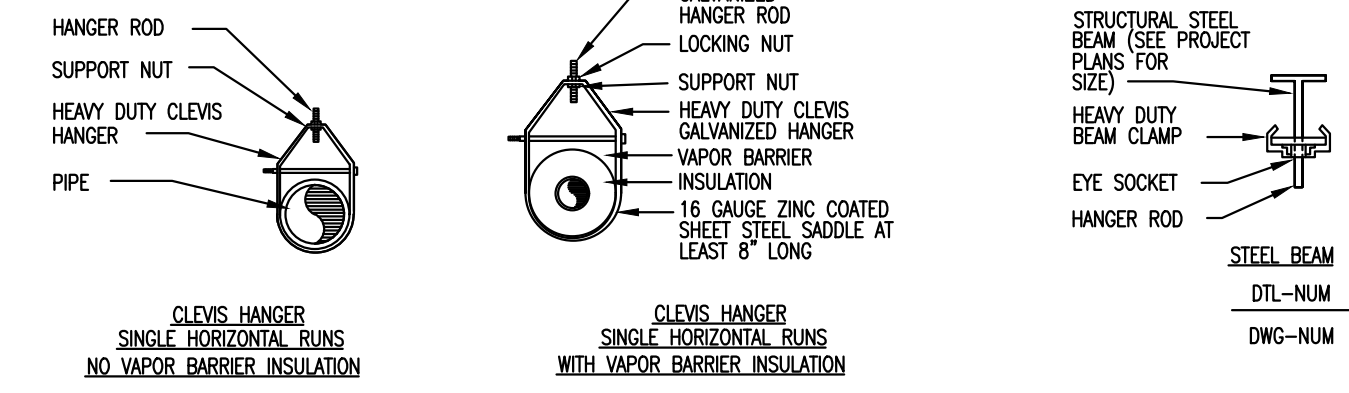


PIPE HANGER DETAIL
NOT TO SCALE

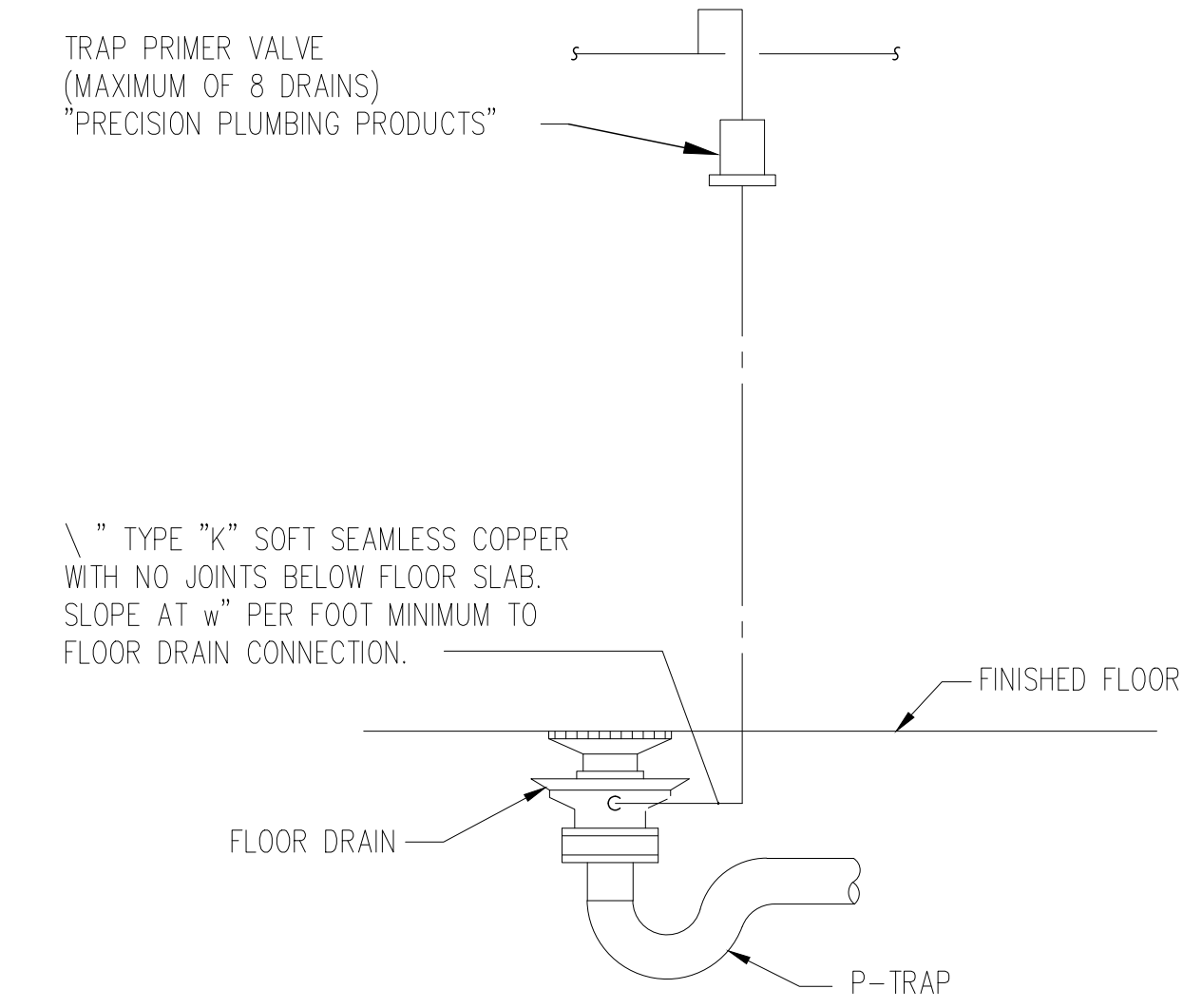


EXTERIOR CLEANOUT (ECO) INTERIOR FLOOR CLEANOUT (FCO)
CLEANOUT (CO) DETAILS
SCALE: NTS

HANGER ROD SCHEDULE			
PIPE SIZE	ROD SIZE	PIPE SIZE	ROD SIZE
UP TO 2"	3/8" DIA.	4" THRU 6"	5/8" DIA.
2" TO 3"	1/2"	6" THRU 12/7/8" DIA.	



PIPE SUPPORT DIAGRAM
NOT TO SCALE



TRAP PRIMER
SCALE: NTS

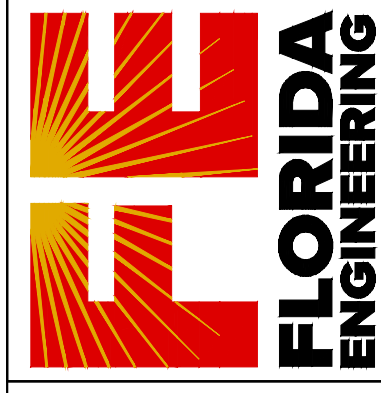
Plumbing General Notes

- Coordinate All Pipe Routing With All Other Trades Prior To Installation. Route All Piping To Avoid Ductwork, Electrical Raceways, and Building Structures. If Penetrations Through Structural Members Are Required For Plumbing Installations, Notify Architect and Structural Engineer Prior To Installation To Ensure That Integrity is Maintained.
- This Contractor Shall Base His Proposal Upon The Equipment As Scheduled Or Specified. The Completion Of The Project Delay In Deliveries Will Not Be Considered A Justifiable Reason For Submission Of Substitute Materials.
- The Contractor is Expected To Order All Materials In Sufficient Time To Avoid Delaying The Completion Of The Project. Delay In Deliveries Will Not Be Considered A Justifiable Reason For Submission Of Substitute Materials.
- Route All Piping Concealed Above Ceiling, Within Walls, or in Chases Except as Specifically Noted, or in Mechanical Rooms. Piping Shall Not Be Run Thru Electrical Rooms or Closets.
- Sleeve and Fire Stop All Penetrations Of Rated Walls, Ceilings, Floors, Etc. in Accordance With Applicable UL Standards and Local Codes To Maintain Rating. See Specifications. See Architectural Drawings For Rated Walls and Floors.
- Pipe Routing Shown is Schematic and is Intended To Indicate General Routing. Plumbing Contractor Shall Provide Any Additional Offsets and Fittings Required For Proper Installation and To Maintain Clearances As Encountered In Field.
- All Plumbing Installation and Materials Shall Be In Strict Accordance With All Local, State, and Federal Codes and Applicable Standards, Regulations, and Authorities Having Jurisdiction Over The Project.
- Provide Access Panels To All Valves Within Chases or Above Non-Accessible Ceilings. Refer To Architectural Drawings For Ceiling Types.
- Install Water Hammer Shock Arrestors At Each Fixture or Battery Of Fixtures Where Required. Arrestors Shall Be Factory Fabricated. Install Arrestors and Size Per Plumbing and Drainage Institute Standard P.D.I. WH-201. Accepted Manufacturers, Sioux Chief, Josam, Joy R. Smith, Watts (NO.15 Series), Wade. Air Chambers Are Not Acceptable.
- Site Connections Shall Be Provided On Civil Site Utilities Drawings. All Services Shown On This Set Of Plans Terminate 5'-0" From Building, Unless Shown Otherwise on Drawings. This Contractor Shall Make All Final Plumbing Service Connections To Site Work Utilities.
- Drainage Piping Shall Slope No Less Than 1/8" Fall Per Foot. See Specifications.
- Furnish and Install Hose Bibbs and Wall Hydrants 24" Above Finished Grade/Floor. And Proved Vacuum Breakers as Shown on Drawings With 150" Minimum Perimeter Intervals.
- See Architectural Drawings For Exact Plumbing Fixture Locations, Mounting Heights, Dimensions, and Handicapped Requirements.
- Position Roof Drains at Low Points. For Exact Location See Architectural Drawings.
- Plumber Shall Be Licensed By State And Local Authorities To Install Natural Gas Piping.
- Verify Invert Elevations and Exact Locations Of Sewers To Which New Sewer Lines Are To Be Connected Before Installation.
- All Vents Through Roof Shall Be A Min. 10'-0" From Any Air Intakes.
- Plumbing Contractor Shall Install Dielectric Unions At All Connections Of Dissimilar Metals.
- Rough-In All Wastes And Supplies To Special Equipment In Strict Accordance With Manufacturers Recommendations And Make Final Connections. All Supplies Shall Be Valved. Install Vacuum Breakers Where Required By Code.
- Submit Shop Drawings (Including Pipe Routing and Equipment Location) To Architect/Engineer For Review Prior To The Installation or Purchasing Of Any Piping And/Or Equipment.
- Provide 'Minimum Air Gap' as Defined in ANSI A112.1.2 For All Water Distribution System Outlets. Where It Is Not Possible To Provide Minimum Air Gap, The Outlet Shall Be Equipped With An Accessible Back flow Prevent Complying With The Requirements Of The Standard Plumbing Code; Table 608.1.
- All Water Piping Installed in Exterior Walls Shall Be Placed On The Interior Side Of The Wall, The Wall Insulation Shall Be Placed On The Exterior Side Of The Piping.
- Pressure Reducing Valves Shall Be Installed On Branch Lines Serving Fixtures And/Or Equipment When The Pressure In The Line Exceeds 60 P.S.I. It is Recommended That A Velocity Between 5 and 8 Feet Per Second Be Maintained.
- Do Not Penetrate Wall Footings With Piping. Coordinate With General Contractor To Drop Footing For Sleeved Stem Wall Penetrations As Required To Clear Plumbing Services Where Absolutely Necessary.
- Fixture P-Trap Distance From Fixture Outlet To Trap Weir Shall Not Exceed 24 Inches.
- Plumbing Contractor Shall Install Horizontal Combination Waste And Vent Systems In Strict Accordance With Florida Building Code Plumbing Edition.
- Any Piping In Unconditioned Spaces Shall Be Fully Insulated And Protected From Freezing Temperatures.
- Absolutely No PVC or CPVC Piping Will Be Allowed In Return Air Plenums.
- Indirect Waste Per FBCP 802.1.1 And 801.2.

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SCALE: As indicated

SHEET TITLE:

PLUMBING DETAILS

SHEET NUMBER:

P-202