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PROJECT DATA:

PROJECT NAME: NEW GENERATION GYM

PROJECT ADDRESS: 608 SW MARVIN BURNETT RD, LAKE CITY, FLORIDA, 32025

PROJECT ZONING: PRYT SCHL/ (007200)

DESIGN CODE: FLORIDA BUILDING CODE 2017 6th EDITION, FLORIDA FIRE PREVENTION CODE 2017 6th EDITION, AND ASCE-T-10

SQUARE FOOTAGE: 5000 (+/-)

STORIES: 1 STORY

OCCUPANCY LOAD: 205 (SEE BREAKDOWNS PG. A104)

OCCUPANCY TYPE: A-3 ASSEMBLY (GYM)

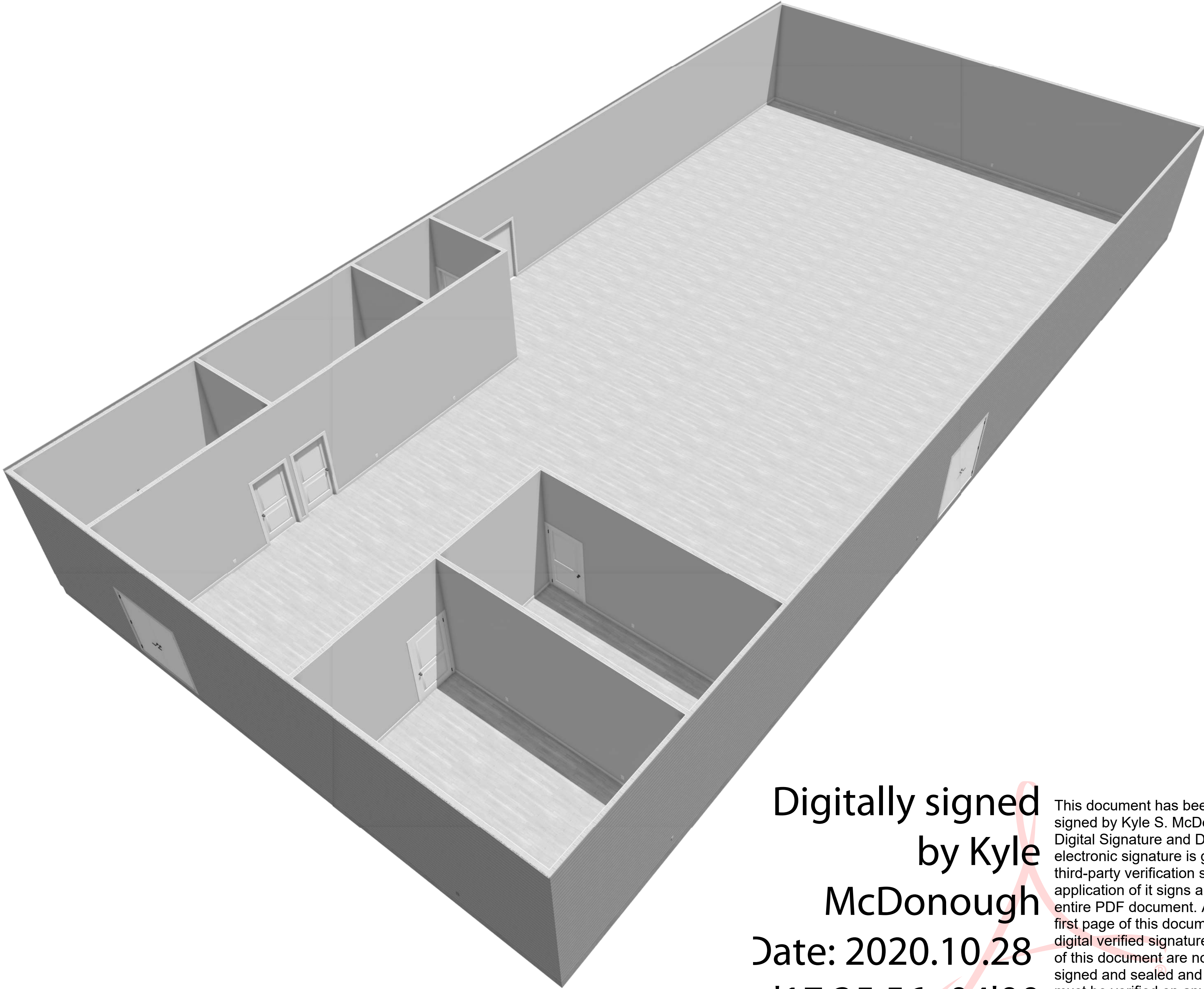
CONSTRUCTION TYPE: VB UNSPRINKLED/ UNPROTECTED

ENCLOSURE: ENCLOSED BUILDING

FIRE CODE: NFPA 101 FIRE PREVENTION CODE 2017 5th EDITION

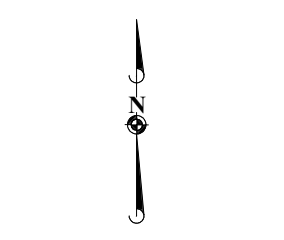
# New Generation Gym

## Lake City, Florida

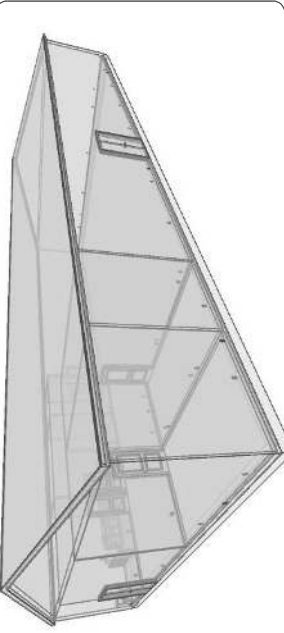
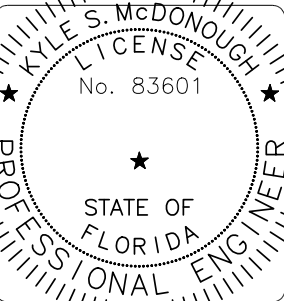


Digitally signed  
by Kyle  
McDonough  
Date: 2020.10.28  
'17:35:56 -04'00

This document has been electronically signed by Kyle S. McDonough using a Digital Signature and Date. This electronic signature is generated via a third-party verification service, and the application of it signs and certifies the entire PDF document. As such, only the first page of this documents requires a digital verified signature. Printed copies of this document are not considered signed and sealed and the signature must be verified on any electronic copies.



Intro Page



Construction of a New Generation Building  
New Generation  
Gymnasium  
608 SW Marvin Burnett Rd, Lake City, FL 32025

01/03/20  
KLEB  
2020.10.28

SHEET  
A101



SCOPE OF WORK:

TO SHOW INTERIOR BUILDOUT OF A 5000sf COMMERCIAL BUILDING. EXTERIOR: CONSTRUCTION, FINISH & DETAILS ARE ALL PERFORMED BY OTHERS.

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GENERAL NOTES:

1. ALL CONSTRUCTION MUST COMPLY WITH ALL GOVERNING CODES.

2. ALL CONTRACTORS AND SUB-CONTRACTORS WILL THOROUGHLY FAMILIARIZE THEMSELVES WITH THESE CONSTRUCTION DOCUMENTS AND WILL VERIFY EXISTING SITE AND BUILDING CONDITIONS PRIOR TO SUBMITTING A BID.

3. SUB-CONTRACTORS BEFORE STARTING THEIR WORK WILL CHECK AND VERIFY THEIR PARTICULAR RELATED REQUIREMENTS FOR COMPLIANCE ALONG WITH MEASUREMENTS, SURFACE LEVELS, SURFACE CONDITIONS NEAR & ABOUT THEIR WORK. IT WILL BE CONCLUDED THAT EACH BIDDER UNDERSTANDS AND KNOWS WHAT WILL BE REQUIRED.

4. THIS ARCHITECT AND HIS PROFESSIONAL CONSULTANTS WILL NOT HAVE CONTROL OF & WILL NOT BE RESPONSIBLE FOR CONSTRUCTION MEANS, METHODS, SEQUENCES, OR SAFETY PRECAUTIONS IN CONNECTION WITH THE WORK ON THE PROJECT OR FOR THE ACTS OR OMISSIONS OF THE CONTRACTOR, SUB-CONTRACTOR, OR ANY OTHER PERSONS PERFORMING ANY OF THE WORK ON THIS SITE.

5. ALL CONTRACTORS WILL PROVIDE ADEQUATE BRACING AND/OR SHORING TO INSURE STRUCTURAL STABILITY OF THE BUILDING AND ALL RELATED BUILDING COMPONENTS, I.E.: STRUCTURAL WALLS, INTERIOR WALL ASSEMBLIES ETC., DURING THE CONSTRUCTION PHASE OF THIS PROJECT.

6. ALL WORK WILL BE COORDINATED WITH OTHER TRADES IN ORDER TO AVOID INTERFERENCE & PRESERVE MAXIMUM HEADROOM & AVOID OMISSIONS. EACH CONTRACTOR WILL INCLUDE ALL MISCELLANEOUS ITEMS REQUIRED BY CODE AND NEEDS TO COMPLETE THIS WORK.

7. ALL MATERIAL USED WILL BE NEW & BEAR UL LABELS WHERE REQUIRED & MEET NEMA STANDARDS.

8. LAYOUT ALL PARTITIONS BEFORE BEGINNING CONSTRUCTION TO PREVENT ERRORS BY DISCREPANCY. ALL DRYWALL PARTITIONS WILL BE INSTALLED AS NOTED ON THE DRAWINGS. DO NOT SCALE THE DRAWINGS.

9. VERIFY ALL DIMENSIONS IN THE FIELD PRIOR TO ORDERING, CUTTING, AND/OR INSTALLING MATERIAL, PRODUCT OR EQUIPMENT. IN THE EVENT OF ANY DISCREPANCIES, CONTACT THE ARCHITECT BEFORE PROCEEDING WITH THAT WORK.

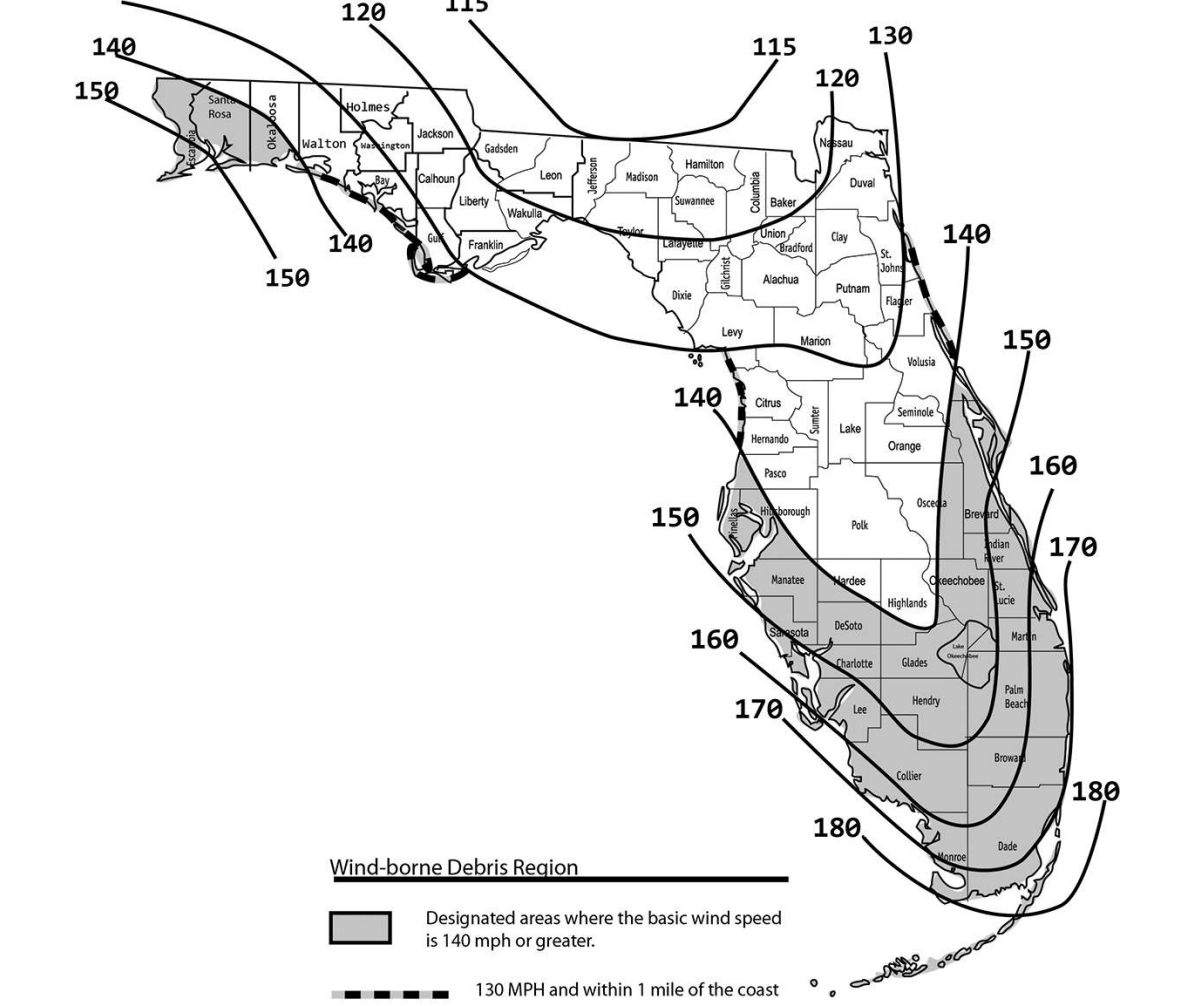
10. ALL SUB-CONTRACTORS WILL PROVIDE A CERTIFICATE OF INSURANCE TO THE OWNER PRIOR TO STARTING ANY WORK ON THIS PROJECT. CERTIFICATE OF INSURANCE CAN NOT BE TERMINATED OR CANCELED WITHOUT 10 DAYS PRIOR WRITTEN NOTICE TO THE OWNER.

11. NO SUBSTITUTIONS OF ANY KIND FOR MATERIALS SPECIFIED ON THESE CONSTRUCTION DOCUMENTS IS ALLOWED. NO "EQUIVALENT" SUBSTITUTIONS WILL BE MADE, UNLESS APPROVED IN WRITING BY THE ARCHITECT & APPROVED BY THE OWNER DUE TO THE LACK OF AVAILABILITY OF ORIGINAL, U.O.N. IN THESE DOCUMENTS

12. EACH CONTRACTOR IS RESPONSIBLE FOR THE FIRST CLASS WORKMANSHIP & WILL ASSUME ALL RESPONSIBILITY FOR THE CARE AND PROTECTIONS OF HIS OWN WORK & MATERIAL FRO DAMAGE. HE WILL MAKE GOOD ANY DAMAGE TO HIS OWN OR OTHER WORK CAUSED BY HIMSELF OR WORKMAN EMPLOYED BY HIM.

13.EACH CONTRACTOR WILL ABIDE BY LOCAL AREA STANDARDS & RELATED OSHA STANDARDS FOR THE SAFETY OF THEIR EMPLOYEES ON SITE. THIS ARCHITECT AND HIS PROFESSIONAL CONSULTANTS WILL BE HELD HARMLESS BY THE OWNER, GC, AND RELATED AWARDED TRADES, ON THIS PROJECT FOR ACCIDENTS OR INJURIES CAUSED OR ACCRUED ON THIS PROPERTY DURING CONSTRUCTION PHASES OF THIS PROJECT.

14. SHOULD FIRE ALARM & SPRINKLER DRAWINGS BECOME A REQUIREMENT, IT WILL BE THE RESPONSIBILITY OF THE SUB-CONTRACTOR AND TO BE SUBMITTED AS SEPERATE PERMIT ISSUE.



PLUMBING NOTES:

A - CONTRACTOR IS RESPONSIBLE FOR PERFORMING FIELD ASSESSMENT TO VERIFY & ENSURE INFORMATION WITHIN THESE DRAWINGS ARE AN ACCURATE REPRESENTATION.

B - THE WORK SHALL CONFORM TO ALL FEDERAL, STATE & LOCAL CODES/ORDINANCES. THE COMPLETED SYSTEM SHALL BE FULLY OPERATIONAL.

C - ALL WORK SHALL BE COORDINATED WITH OTHER TRADES TO AVOID INTERFERENCES. ALL MATERIAL, WORKMANSHIP AND EQUIPMENT SHALL BE GUARANTEED FOR ONE YEAR AFTER SYSTEM HAS BEEN ACCEPTED.

D - DO NOT SCALE DRAWINGS

E - PLUMBING CONTRACTOR SHALL MAINTAIN A CURRENT SET OF PLUMBING DRAWINGS AT THE PROJECT SITE TO BE USED FOR CONSTRUCTION PROGRESS, REVIEW & FUTURE "AS-BUILTS". ALL MARKS AND REVISIONS SHALL BE MADE WITH RED PENCIL/PEN AND SHALL BE LEGIBLE & ACCURATE. SUBMIT DRAWINGS TO AOR AT THE COMPLETION OF WORK FOR REVISION.

F - SANITARY WASTE AND VENT PIPING ABOVE GRADE SHALL BE SCH. 40 SOLVENT WELDED FITTINGS. COLD WATER PIPING SHALL BE SCH. 40 W/ MATCHING SOLVENT WELDED FITTINGS. HOT WATER PIPING SHALL BE SCH. 40 CPVC W/ MATCHING SOLVENT WELDED FITTINGS.

G - PLUMBING FIXTURES SHALL BE AS SCHEDULED ON DRAWING. PROVIDE CONTROL STOP VALVES IN EA. SUPPLY TO EA. FIXTURE. THE FINISH OF FITTINGS, ACCESSORIES & SUPPLY EXPOSED TO VIEW SHALL BE CHROME PLATED.

H - PENETRATIONS: PROVIDE CHROME PLATED BRASS ADJUSTABLE ESCUTCHEON PLATES AT EXPOSED PIPE PENETRATIONS THROUGH WALLS, PARTITIONS, CEILINGS & FLOORS.

I - TESTING WATER SYSTEM: TEST THE ADDED PORTION OF THE PLUMBING SYSTEM @ 150% OF DESIGN PRESSURE, BUT NOT LESS THAN 100 PSIG. ALLOW PRESSURE TO REMAIN FOR 24 HOURS. INSPECT EVERY JOINT FOR LEAKS WHILE UNDER TEST PRESSURE. REPAIR ALL LEAKS DETECTED WITH NEW MATERIAL & RETEST.

ELECTRICAL NOTES:

A - THE CONTRACTOR SHALL SUPPLY AND INSTALL ALL NEW ELECTRICAL WORK AS INDICATED. CONSTRUCTION SHALL BE IN ACCORDANCE WITH DRAWINGS AND APPLICABLE SPECIFICATIONS. IF A PROBLEM IS ENCOUNTERED IN COMPLYING WITH THIS REQUIREMENT, CONTRACTOR SHALL NOTIFY THE AOR/EOR AS SOON AS POSSIBLE; FIELD ALLOCATED DECISIONS IN ARE NOT TO BE PERFORMED WITHOUT AOR/EOR APPROVAL TO ADDRESS THESE ISSUES.

B - CONTRACTOR SHALL VISIT SITE PRIOR TO BID AND FAMILIARIZE HIMSELF/HERSELF WITH ALL CONDITIONS AFFECTING ELECTRICAL & COMMUNICATIONS INSTALLATION. IT IS CONTRACTORS RESPONSIBILITY TO MAKE PROVISIONS TO THE COST THEREOF.

C - ALL WORK SHALL BE PERFORMED IN ACCORDANCE WITH CODE/ ORDINANCE AUTHORITATIVE JURISDICTION & THE LATEST EDITION OF THE NATIONAL ELECTRIC CODE. THE SPECIFICATION, CODES & STANDARDS LISTED ARE UTILIZED IN THIS PROJECT: NFPA-70, NFPA-101, UL, NEMA, ANSI, FED. SPEC., IPCEA, IEEE, OSHA.

D - DO NOT SCALE ELECTRICAL DRAWINGS. REFER TO ARCHITECTURAL PLANS AND ELEVATIONS FOR EXACT LOCATION OF ALL EQUIPMENT. CONFIRM WITH OWNERS REPRESENTATIVE/ CONSULTANT.

E - IT IS NOT THE INTENT OF THESE PLANS TO SHOW EVERY MINOR DETAIL OF CONSTRUCTION. THE CONTRACTOR IS EXPECTED TO FURNISH AND INSTALL ALL ITEMS FOR A COMPLETE ELECTRICAL SYSTEM AND PROVIDE ALL REQUIREMENTS NECESSARY FOR EQUIPMENT TO BE PLACED IN PROPER WORKING ORDER.

MECHANICAL NOTES:

A - IT IS CONTRACTORS RESPONSIBILITY TO ASSESS REFERENCED INFORMATION WITHIN THESE PLANS TO ENSURE ACCURACY PRIOR TO BID, OR COMMENCEMENT OF WORK

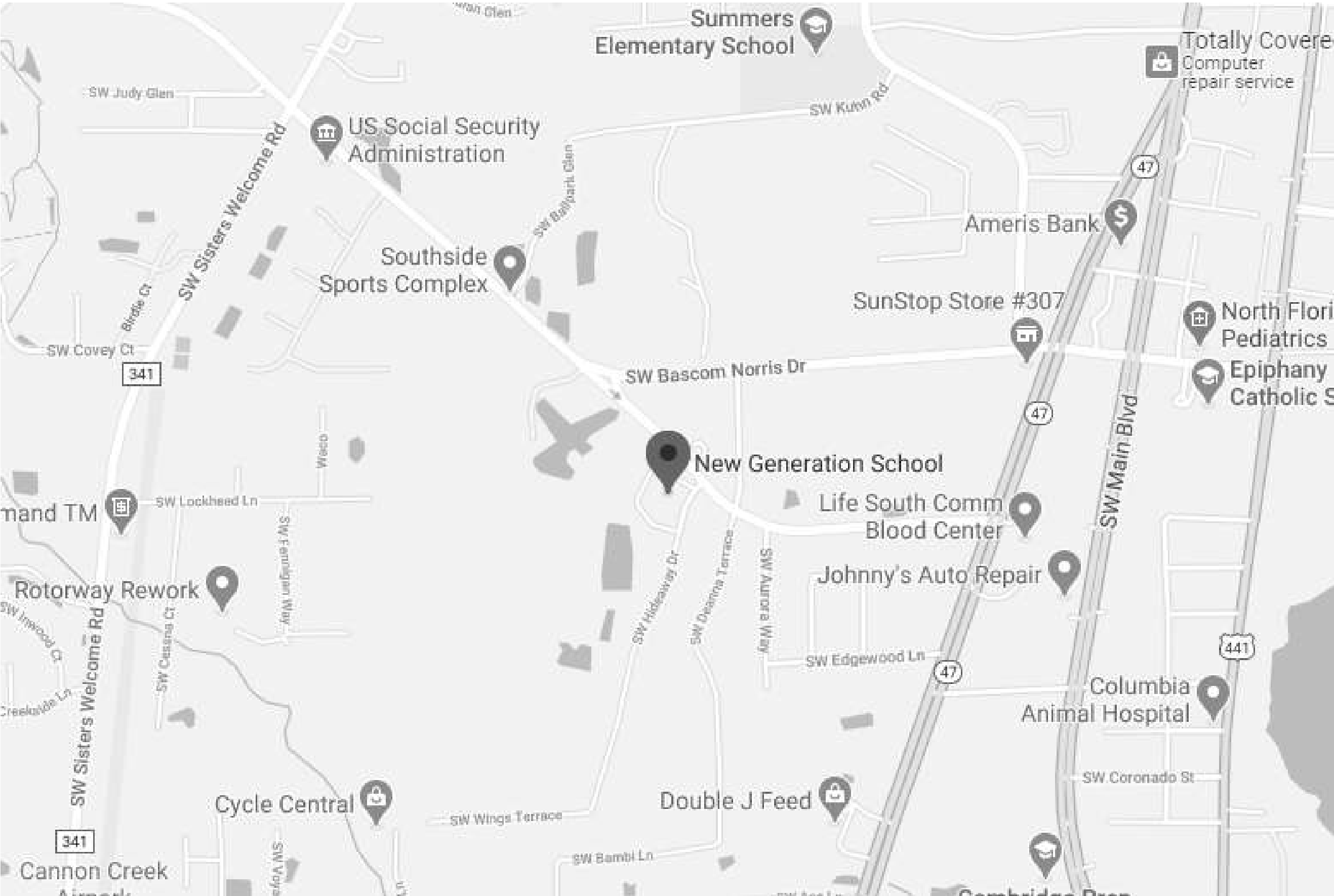
B - ALL WORK SHALL BE DONE IN CONFORMITY WITH THE LATEST EDITION OF ALL APPLICABLE CODES AND AUTHORITY HAVING JURISDICTION

C - ALL INFORMATION ILLUSTRATED WITHIN THESE PLANS ARE ACCORDING TO CONSTRUCTION DOCUMENTATION PROVIDED, OR INFORMATION GATHERED BY AOR/EOR TO THE BEST OF THEIR ABILITY. AOR/EOR MAKES NO REPRESENTATION FOR THE ACCURACY OF GIVEN INFORMATION AS ILLUSTRATED WITHIN DRAWINGS. INFORMATION, MATERIALS, EQUIPMENT, DIMENSIONS, CONDITIONS, ETC SHALL BE FIELD VERIFIED

D - ALL WORK SHALL BE DONE IN STRICT COORDINATION AND AS APPROVED BY OWNER. ALL INTERRUPTIONS IN THE FUNCTIONING OF MECHANICAL SYSTEMS SHALL BE DONE DURING OFF-PEAK, OR UNOCCUPIED TIME (STRICTLY APPROVED BY OWNER).

E - CONTRACTOR IS RESPONSIBLE FOR COORDINATING INFORMATION REQUEST AND WORK PERFORMED. ANY REQUEST FOR INFORMATION PERTAINING TO CONFLICT OF WORK BEING PERFORMED THAT IS ILLUSTRATED ON THESE PLANS IS TO BE REFERENCED TO AOR/EOR THE MOMENT IT IS NOTICED.

F - ALL A/R GRILLES SHALL BE PROVIDED WITH PROTECTIVE CONSTRUCTION FILTERS AND A/C UNITS SHALL HAVE THEIR FILTERS REPLACED NEW ONES AT THE END OF THE CONSTRUCTION PERIOD.



Location Map

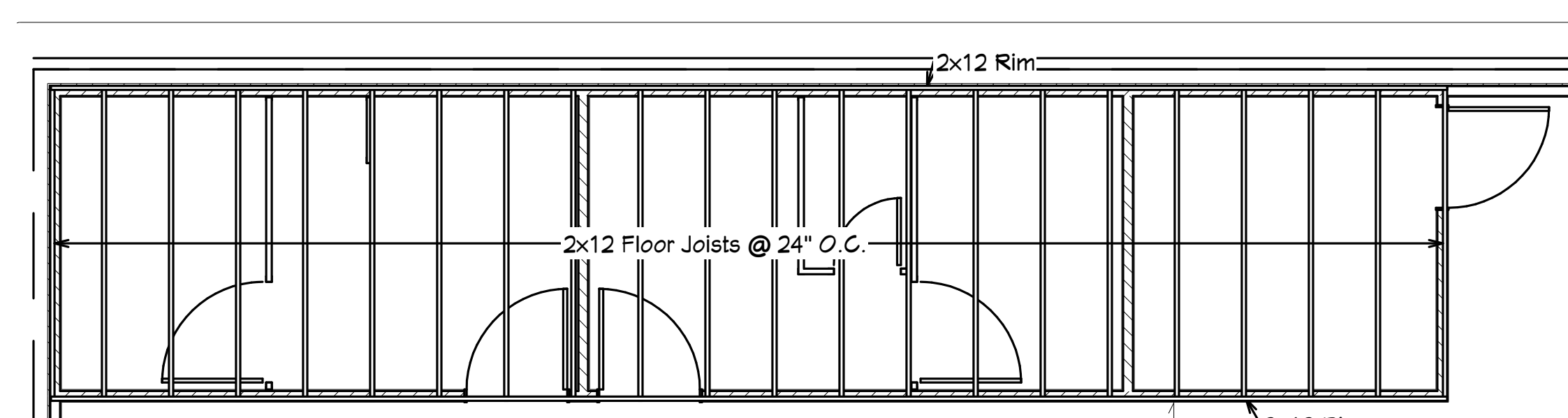
Scale - No Scale



Parcel Map

Scale - No Scale





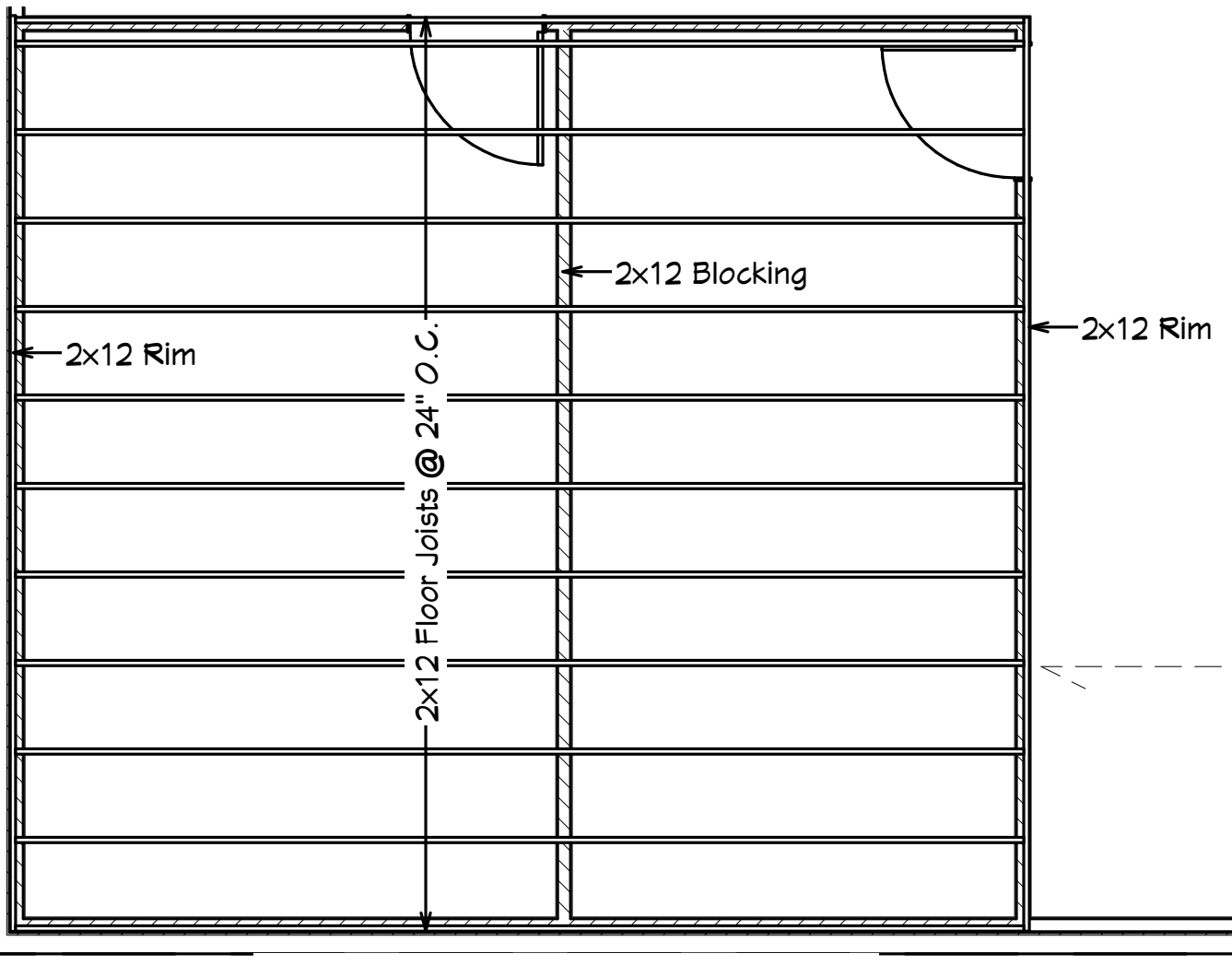
Storage Floor Framing

Scale - 1/4" = 1'

Design Loads @ 360 Deflection Factor:

Live: 40

Dead: 10



Storage Floor Framing

Scale - 1/4" = 1'

Design Loads @ 360 Deflection Factor:

Live: 40

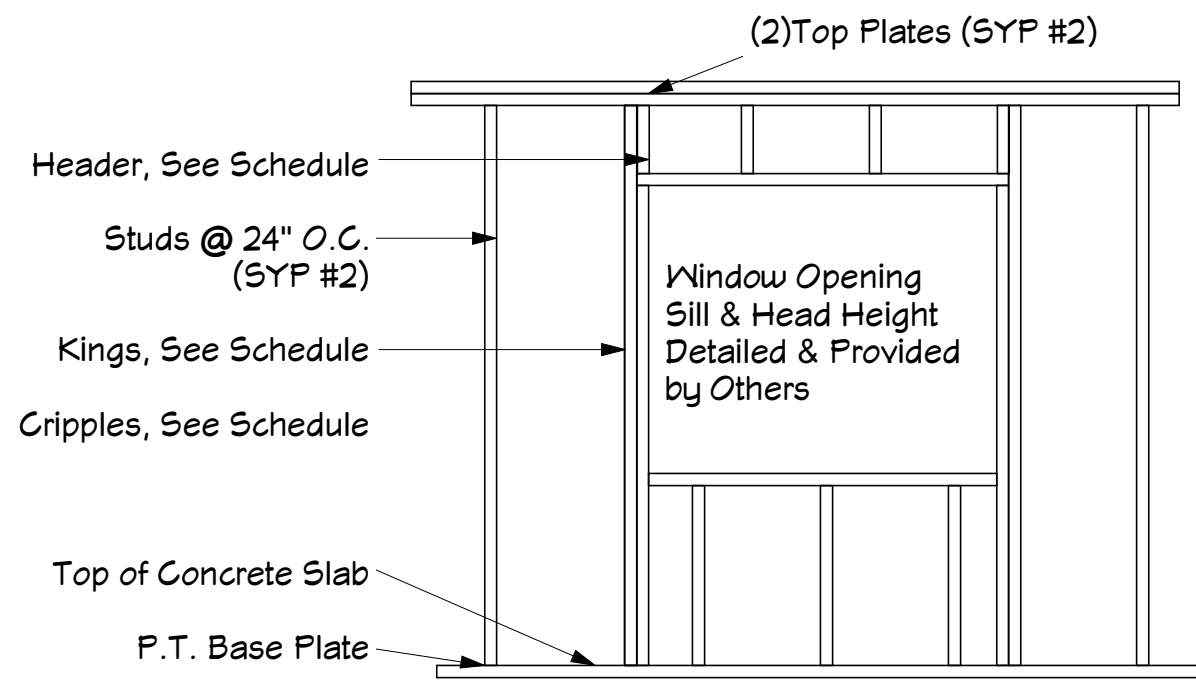
Dead: 10

Header

ALL OPENING DETAILS ARE FOR FIRRED INTERIOR FRAMING, EXTERIOR OPENINGS DETAILED & PROVIDED BY OTHERS. NO HEADERS REQUIRED

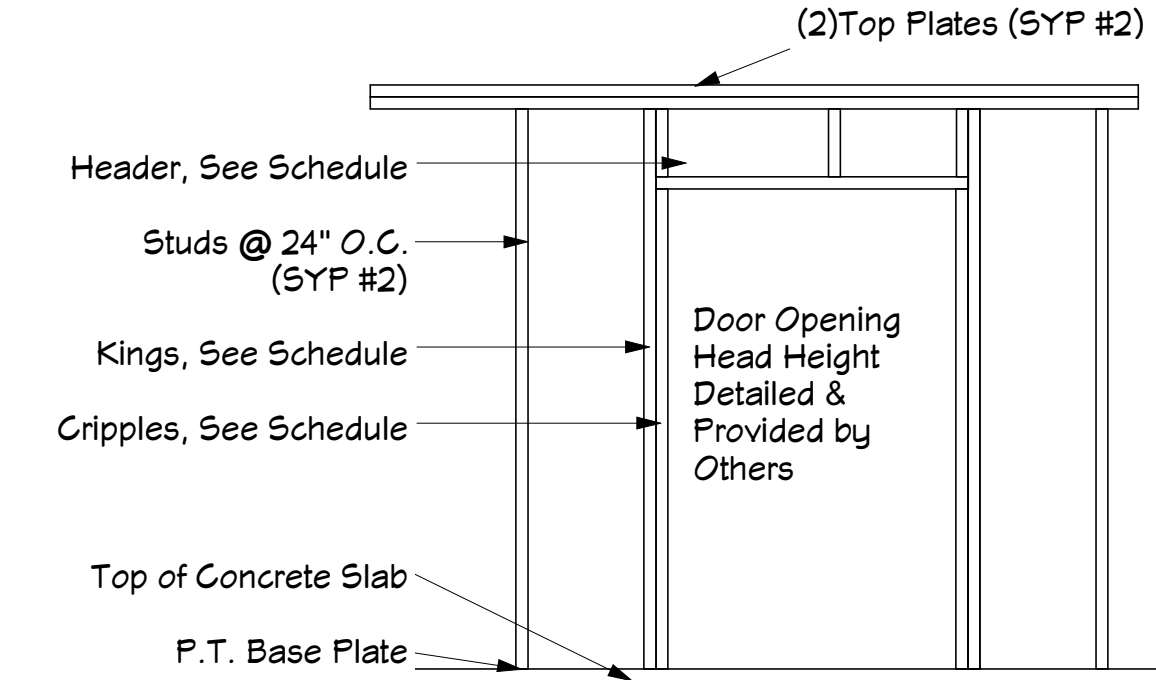
King/Cripple Stud Schedule:

ALL OPENING DETAILS ARE FOR FIRRED INTERIOR FRAMING, EXTERIOR OPENINGS DETAILED & PROVIDED BY OTHERS. USE 1 KING & 1 CRIPPLE AS SHOWN



Typical Window Framing

Scale - No Scale



Typical Door Framing

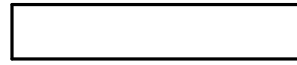
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Wall Legend

Bearing



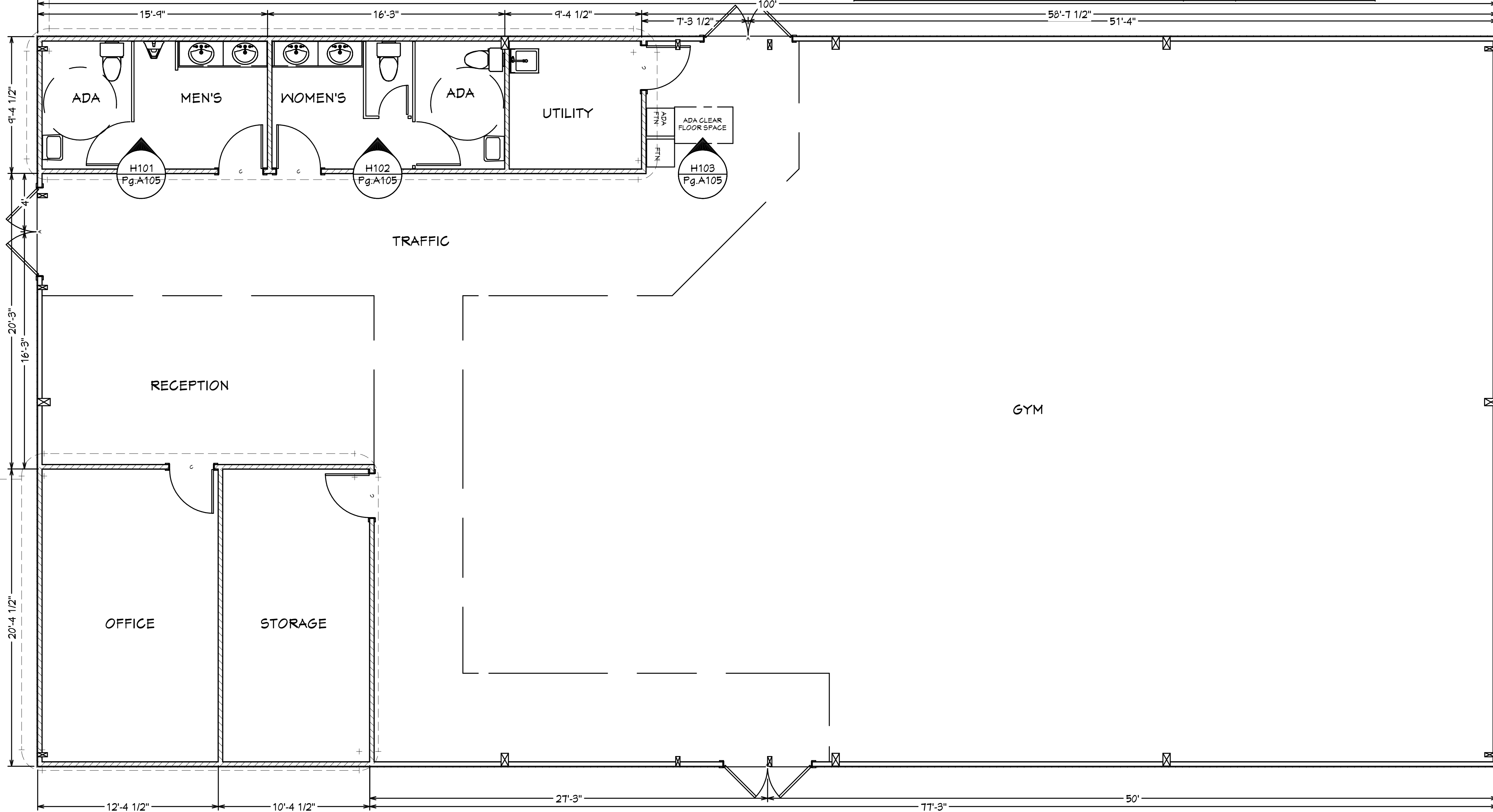
Non-Bearing



\*Note: See Header & King/Cripple Detail(s) Pg. A103 for tag reference and further instruction\*

Door Schedule

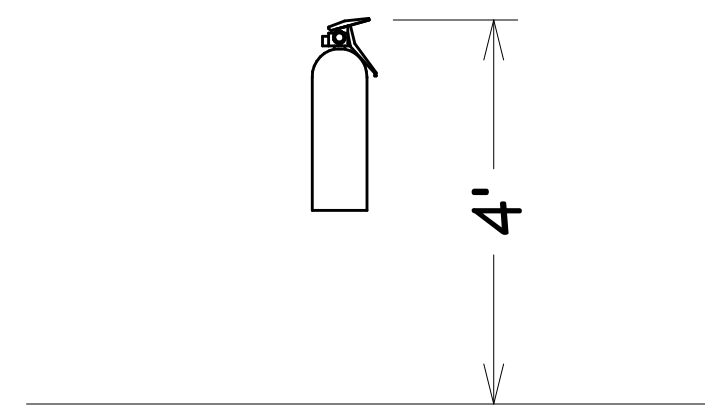
Description:	Sym.:	Hardware:
6068 Hinged Exterior Glass Door	A	Bolt Lock
3068 Hinged Exterior Glass Door	B	Panic
3068 Hinged Interior Door	C	Lever



Floor Plan

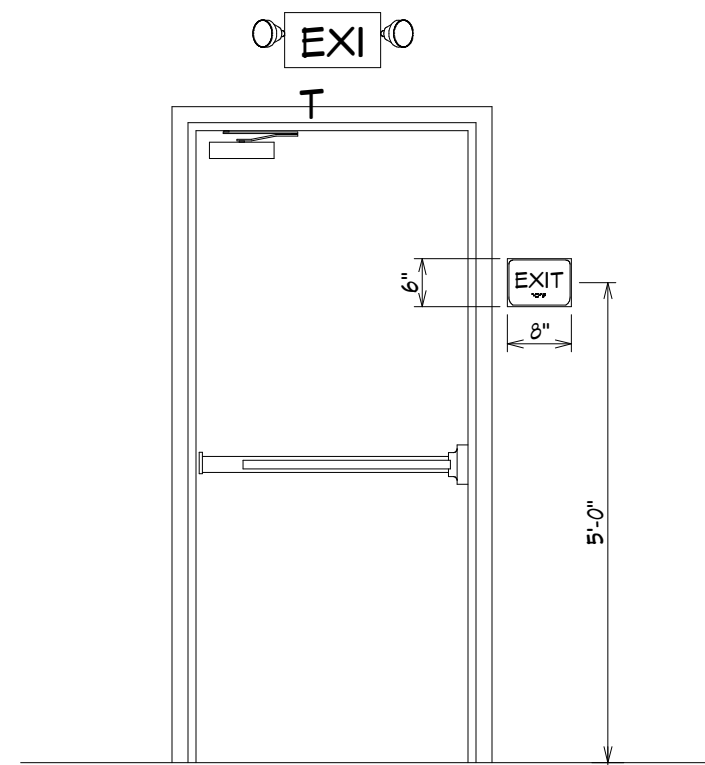
Scale - 1/4" = 1'

"AMEREX" MODEL B500 / B500T HAND HELD  
TYPE A, B, C, #5 OR EQUAL AS INDICATED  
ON PLAN. (MOUNT NO MORE THAN 5'-0"  
A.F.F. FROM TOP OF EXTINGUISHER TO FLOOR)  
PROVIDE TYPE 'K' @ KITCHEN AREAS



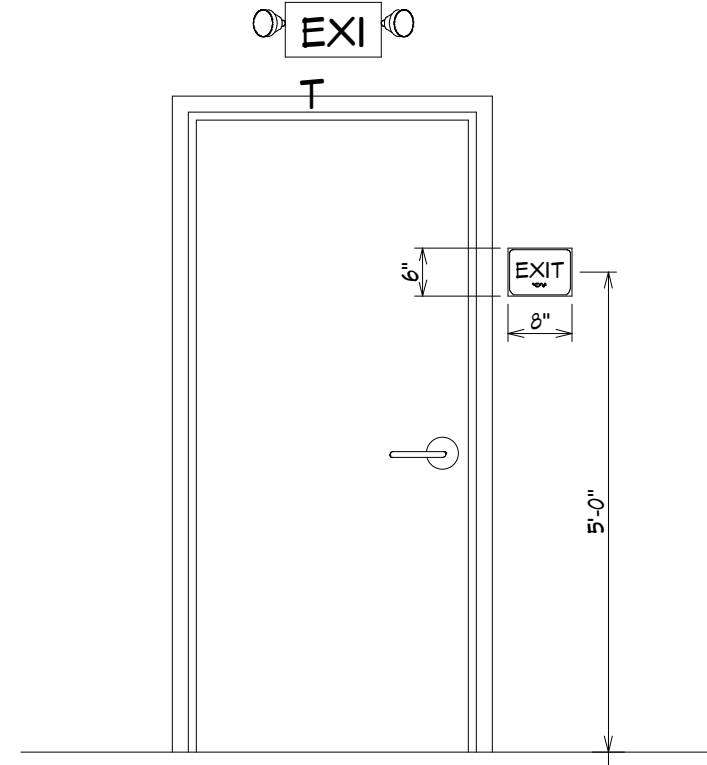
Fire Extinguisher Mounting Height

Scale - 1/2" = 1'



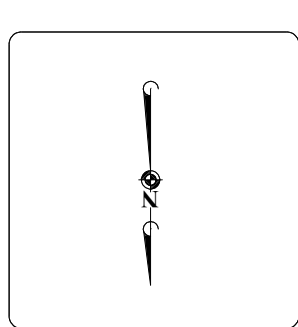
Emergency w/ Panic Hardware Detail

Scale - 1/2" = 1'

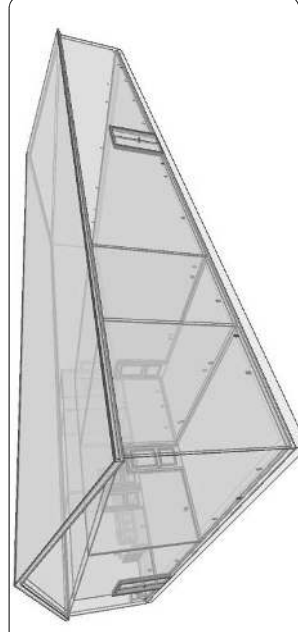
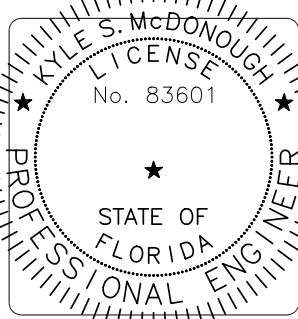


Exit Door Signage Detail

Scale - 1/2" = 1'



Layout Plan/  
Sections & Details

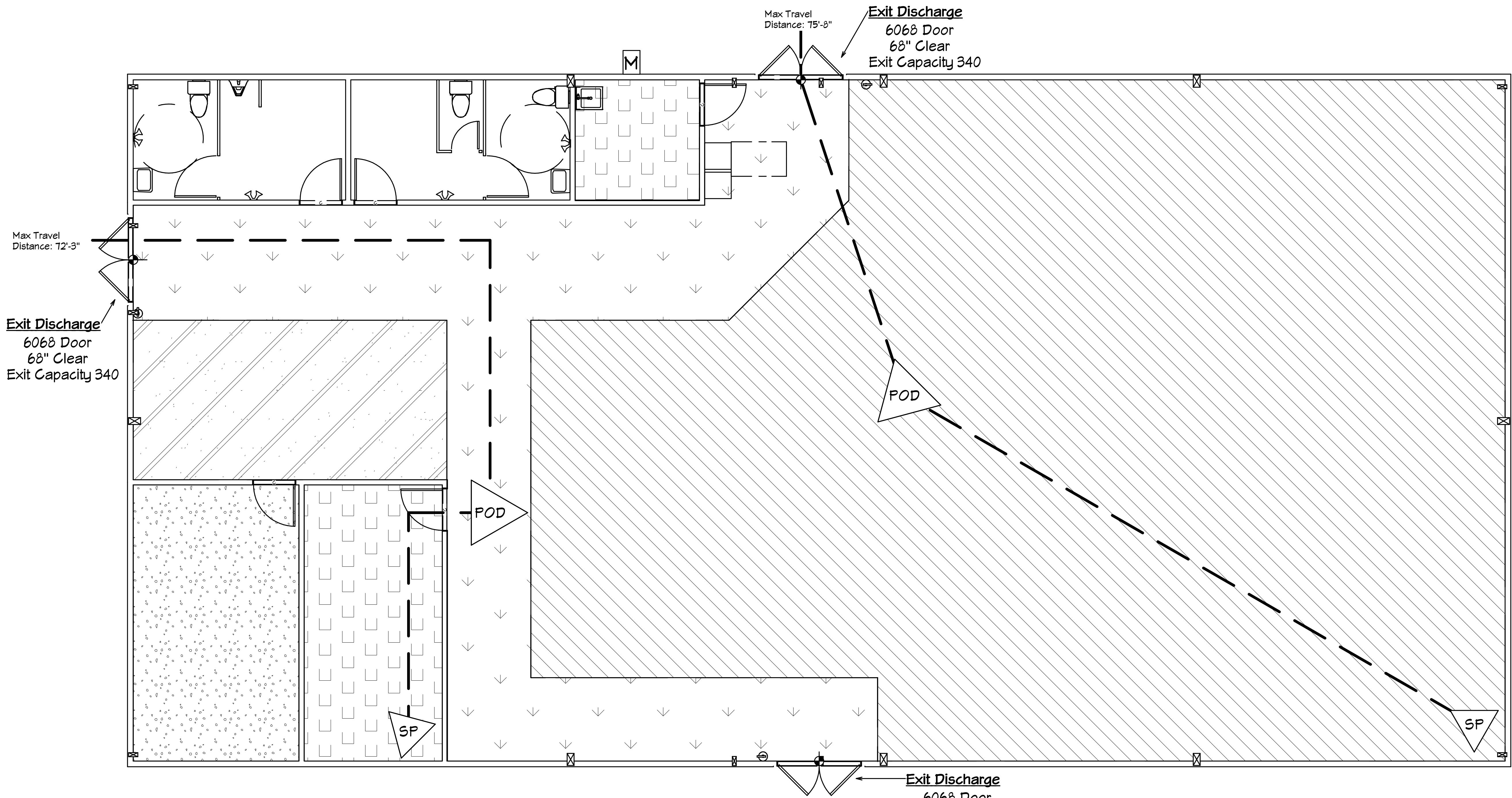


Construction of a New Commercial Building  
**New Generation  
Gymnasium**  
608 SW Marvin Burnett Rd, Lake City, FL 32025

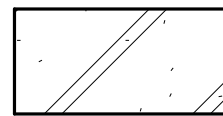
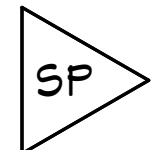

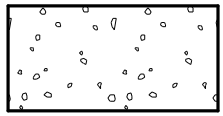
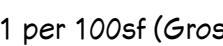




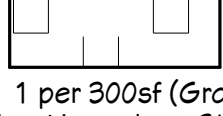
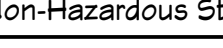

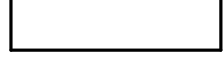
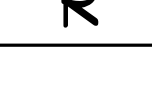
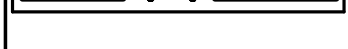

04/03/20  
KWB  
2020.04.1

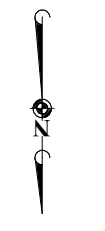
SHEET  
**A103**



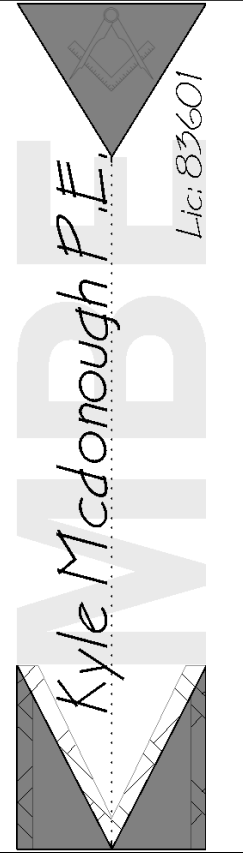


Life Safety Plan  
Scale - 1/4" = 1'

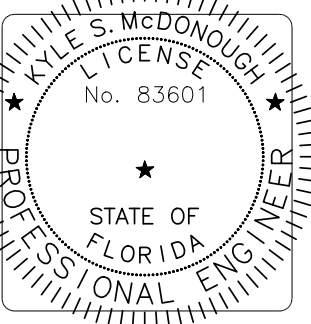
Reception Area				SF	MAX OCC.	SEAT COUNT	Life Safety Plan Legend		Assembly Use Analysis (Gym)				
				260	3	-		Starting Point	Code Requirements	Project Information		Code References Used	
1 per 100sf (Gross)										±5000 S.F. Unsprinkled Unprotected	2017 FBC 6th Edition	2017 Fire Prevention Code 5th Edition, NFPA 101	
Office Space				240	3	-		Point of Decision	Occupancy Use:	Group A3 (Gym)	303.3 - Assembly		NFPA 101.6.1.11
												Required Separation:	N/R
									Construction Type:	Type V- B	603		
General Area				2965	198	-		Exit Sign w/ Emergency Flood Lighting & Battery Back-Up	Occupant Load:	205 (Max)	1004.1.2		NFPA 101 7.3.1.2
												Egress Width:	204"
									Max Travel Distance:	75'-8"	1016.2 (250' Allowed)		NFPA 101.37.2.6.1 (250' Allowed)
Utility/Storage Areas				278	1	-		Emergency Flood Light w/ Battery Back-Up	Gymnasium Egress				
												Egress Width Doors 205 Occupants * 0.2 = 41" of Egress Required (Min.) = 204" of Egress Provided	
									204" / 0.2 = 1020 Occ. Capacity (Actual 205)				
Egress Paths				-	-	-		Fire Extinguisher					
													
								Emergency 24 Hr. Light w/ Battery Back-Up**					
								UL-U419 2Hr. Wall					
								Electric Meter Can Location					



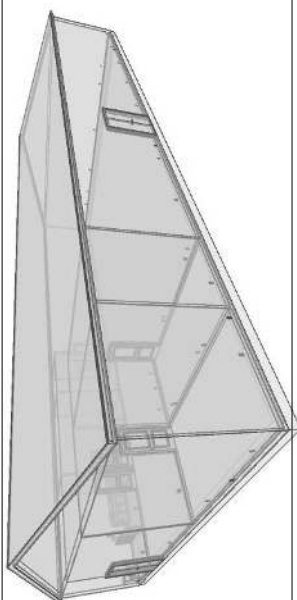
Life Safety Plan



Kyle McDonough P.E.  
Lic. 83601



KYLE S. MCDONOUGH  
No. 83601  
STATE OF FLORIDA  
PROFESSIONAL ENGINEER



Construction of a New Commercial Building  
**New Generation Gymnasium**  
608 SW Marvin Burnett Rd, Lake City, FL 32025

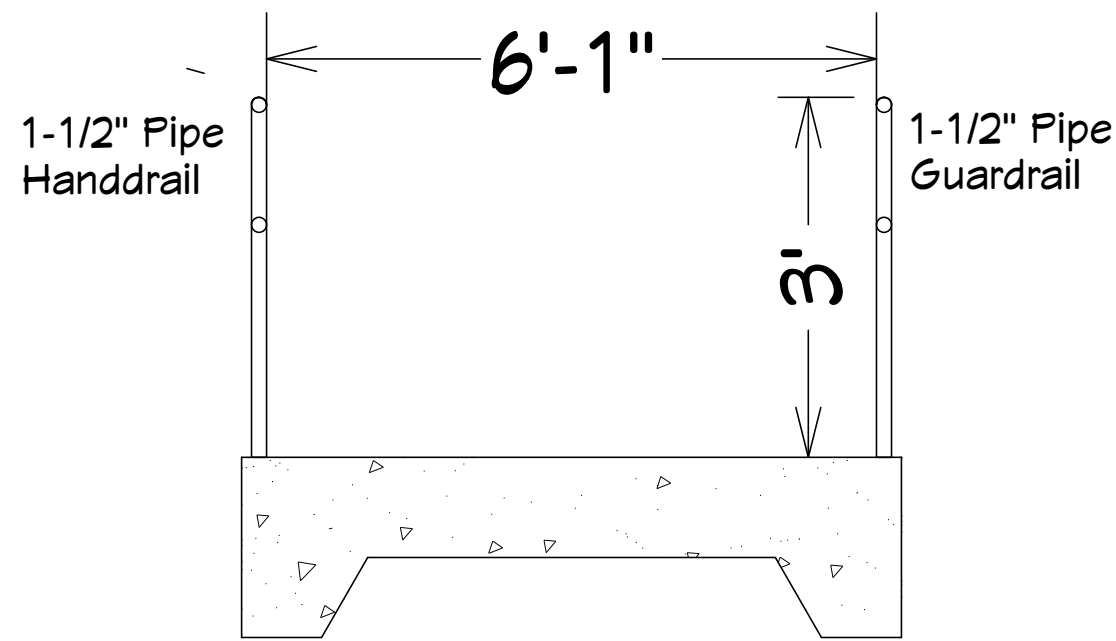
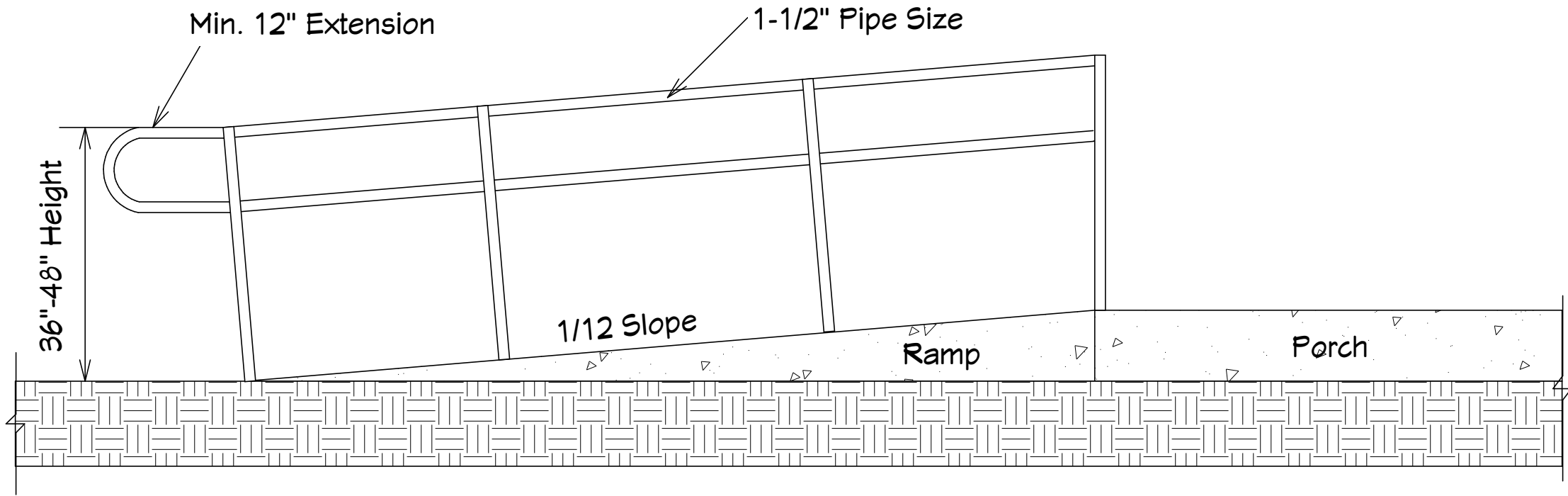
01/03/20  
KWB  
2020.041

SHEET  
**A104**

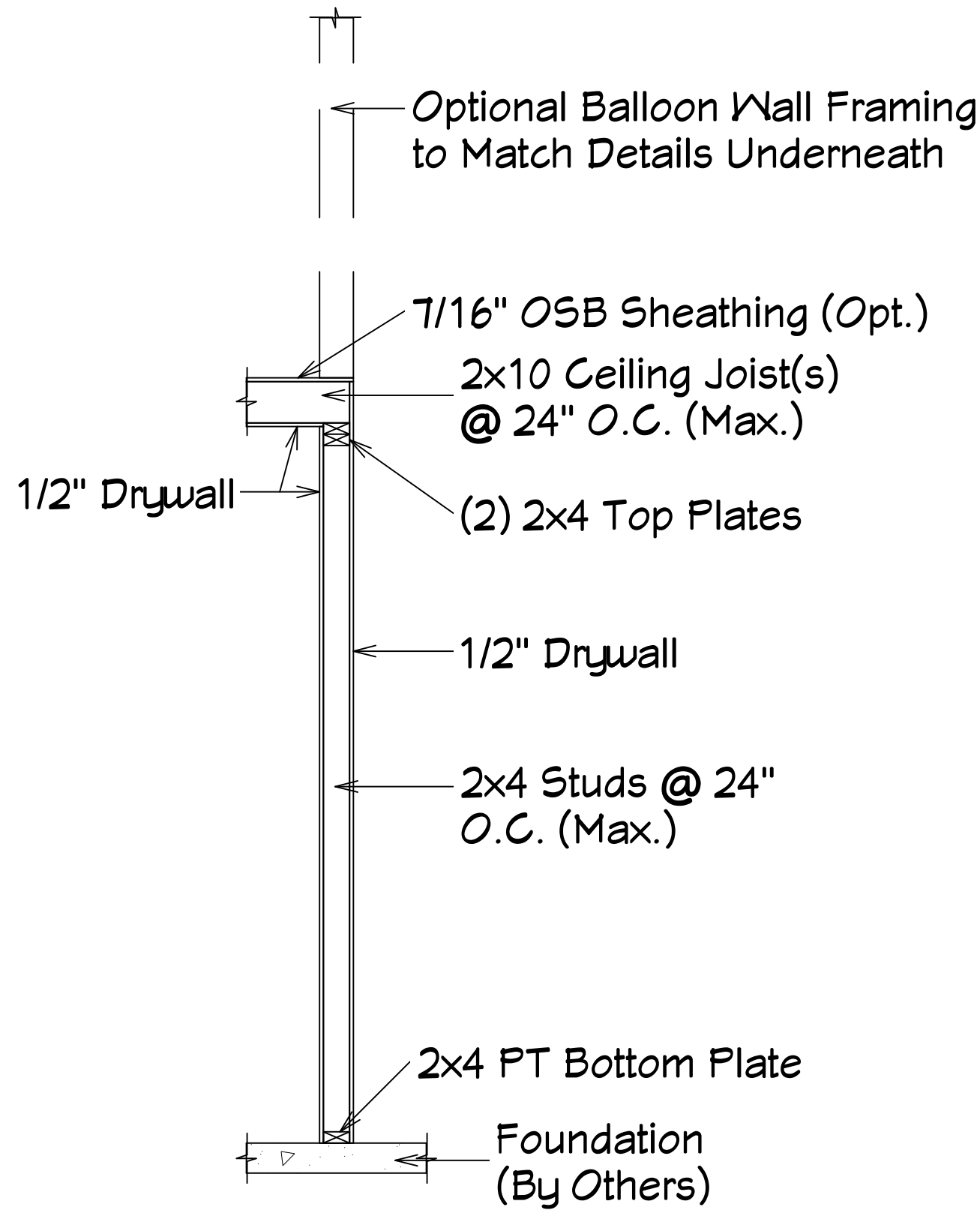
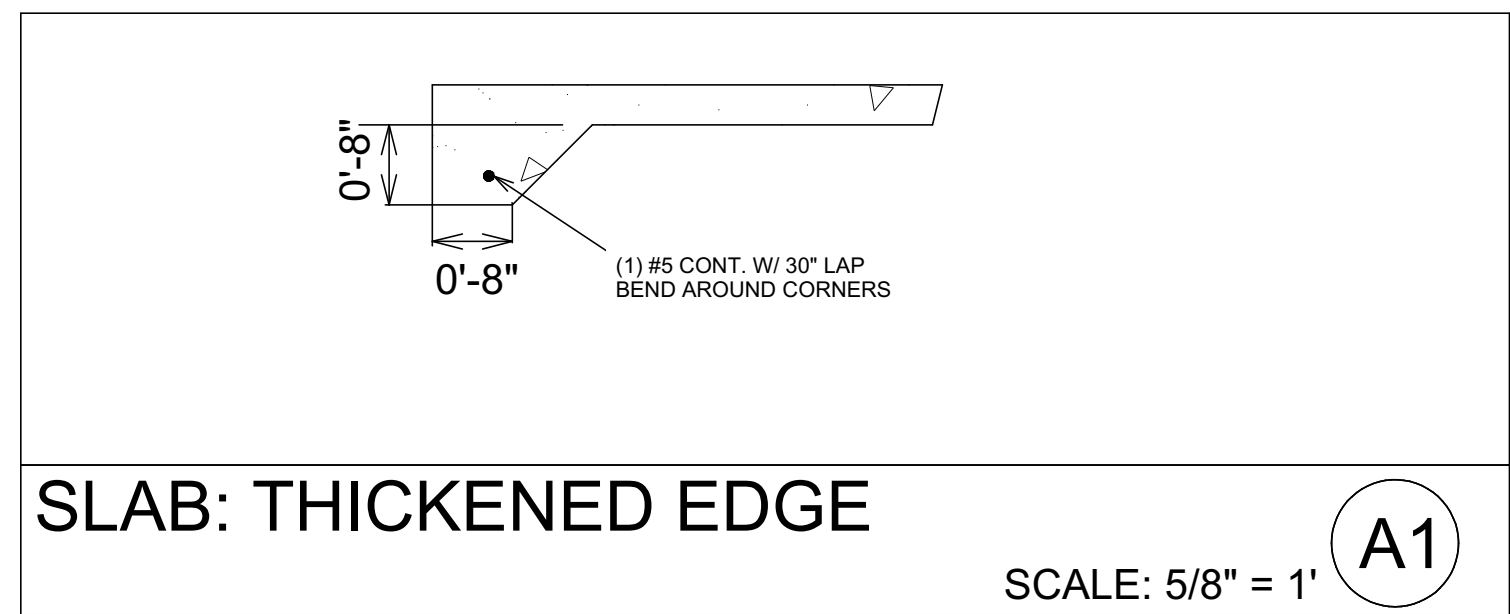






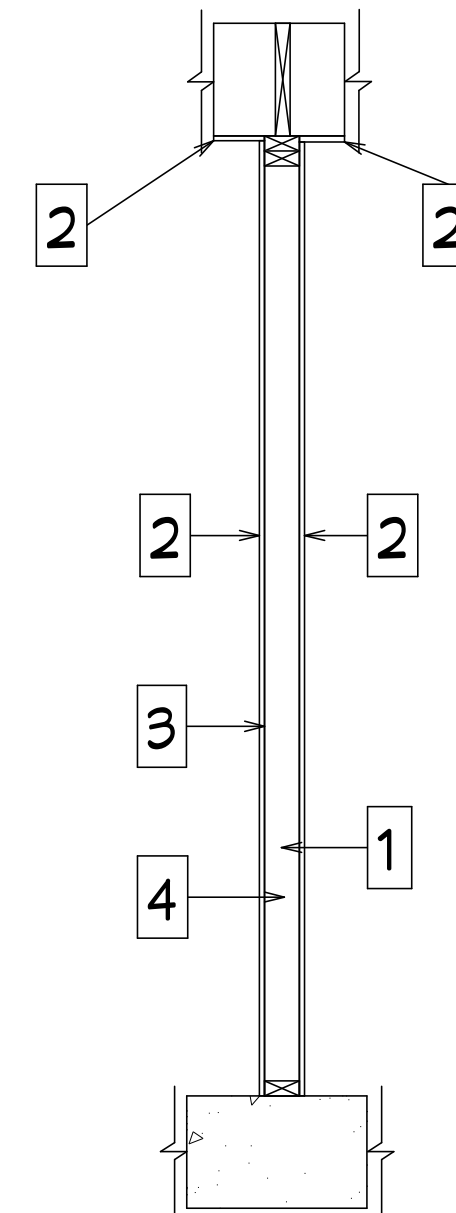


**H103** Ramp Section Detail  
Scale - 5/8" = 1'

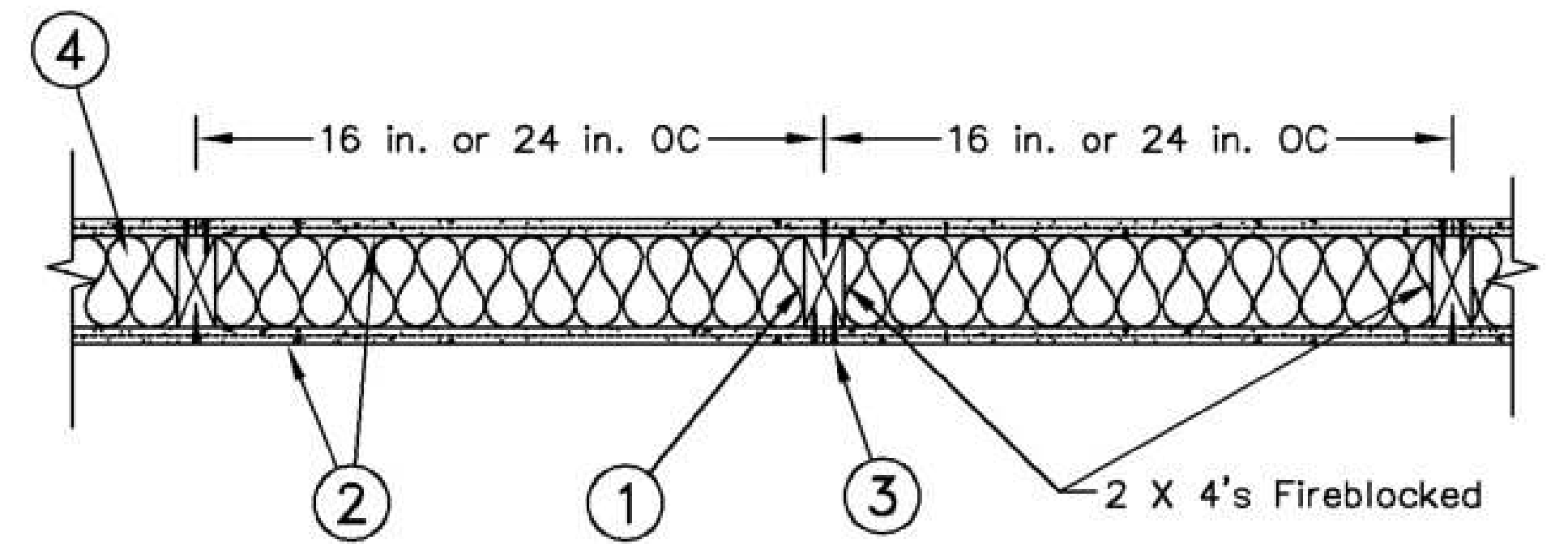


**S101** Wall Section Detail  
Scale - 5/8" = 1'

**\*\*Note: Wall is Balloon Framed,  
Field Frame & Measure\*\***



**F101** Partition Fire Wall Detail  
Scale - 5/8" = 1'



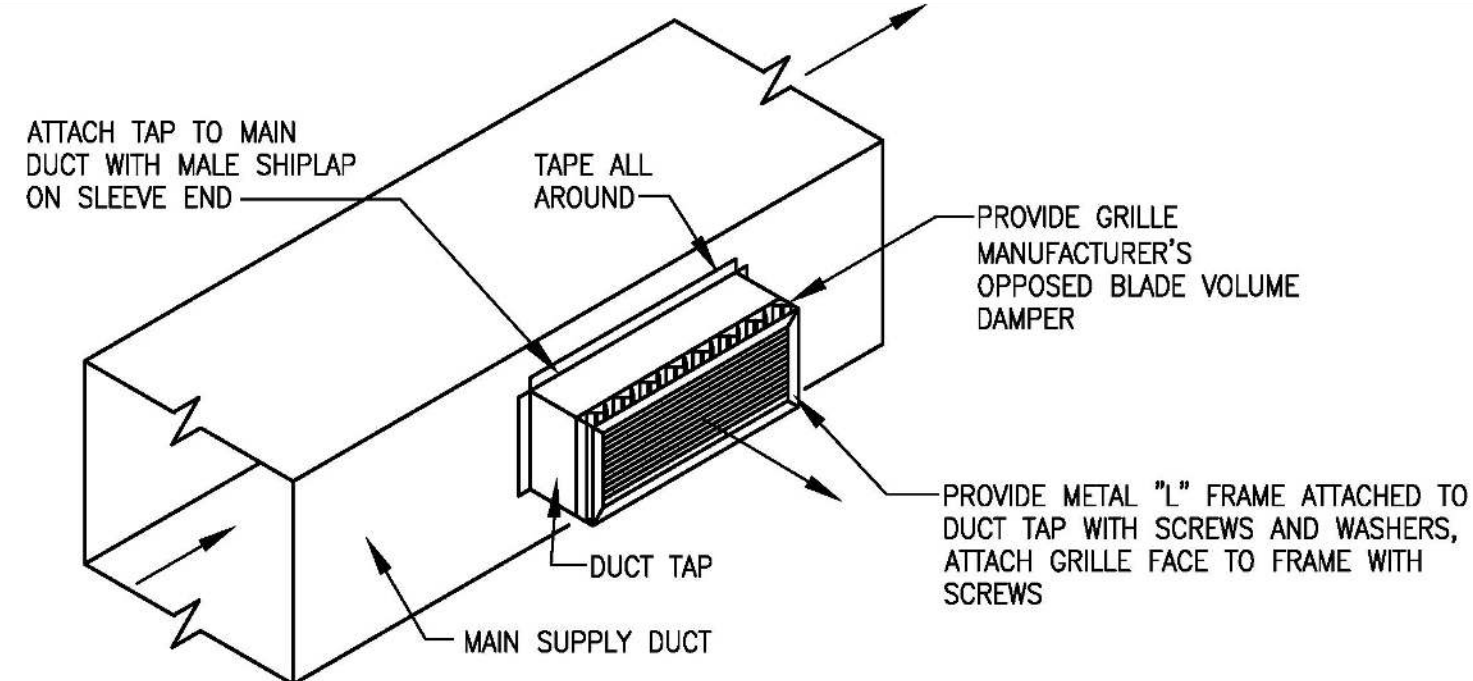
**Configuration A**

**Fire Wall & Ceiling Notes:**

Design No.: U419 - June 19, 2018 - Bearing 2hr Wall Rating

1. Wood Studs — Nom 2 by 4 in., spaced 16 in. OC, effectively firestopped
2. Gypsum Board\* — Nominal 5/8 in. thick, 4 ft wide panels, applied vertically to studs and bearing plates with 1-5/8 in. long Type S screws spaced 12 in. OC at perimeter of panels and 8 in. OC in the field. Vertical joints need not be staggered on opposite sides of wall. Horizontal joints of vertically applied panels need not be backed by studs. Finish rating 23 min
3. Joints and Screwheads — Panel joints covered with paper tape and two layers of joint compound. Screwheads covered with two layers of joint compound.
4. Batts and Blankets\* — Glass fiber insulation, nom 3-1/2 in. thick, min. density of 0.80 pcf, with a flame spread of 25 or less and a smoke developed of 50 or less, friction-fitted to completely fill the stud cavities.

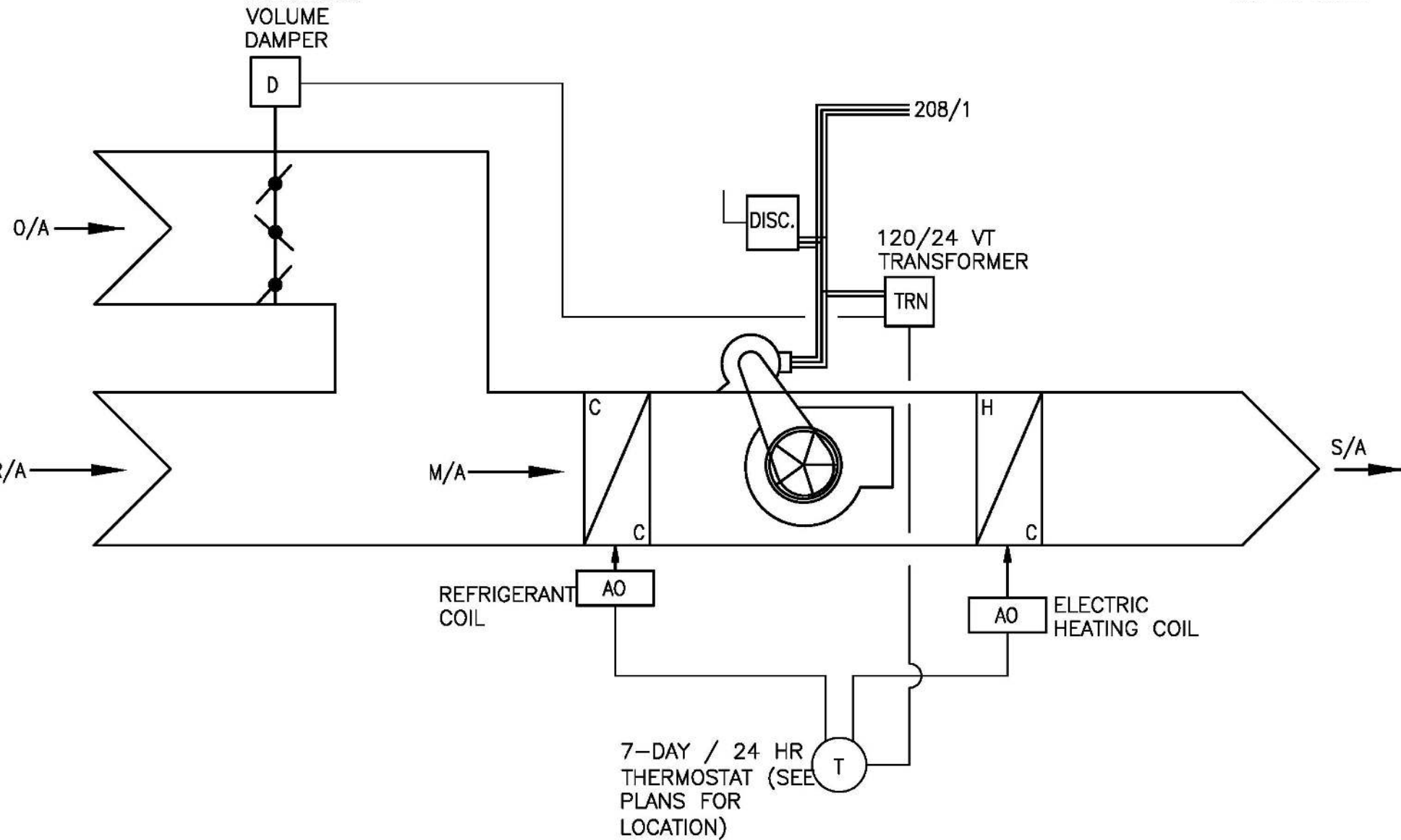




NOTE: REFER TO SMACNA FIBROUS GLASS DUCT CONSTRUCTION STANDARDS FIGURE 2-33 FOR ADDITIONAL INFORMATION

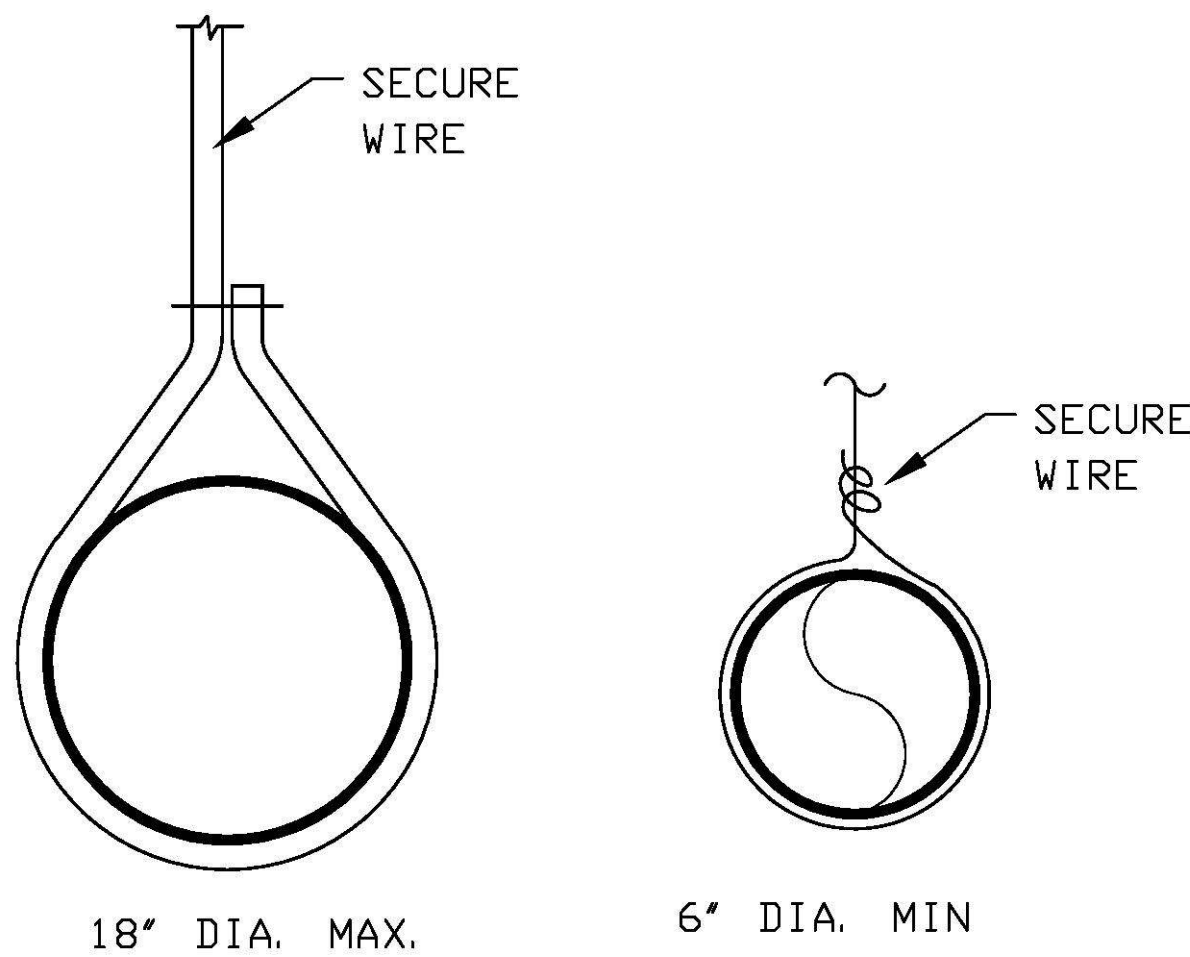
## SIDEWALL DIFFUSER DETAIL – FIBROUS GLASS DUCT

NO SCALE



## PACKAGE UNIT CONTROL SCHEMATIC

NOT TO SCALE



## CONSTRUCTION NOTES

- EXISTING EA DUCT TERMINATING AT WALL LOUVER
- 7 DAY 24 HOUR THERMOSTAT PROGRAMMABLE THERMOSTAT.
- 8" OA DUCT WITH BACKDRAFT DAMPER UP TO 12x12 OA DUCT. ROUTE DUCT THROUGH EXTERIOR WALL, AS SHOWN, TURN DUCT DOWN AND COVER WITH BIRD SCREEN
- EXISTING 12x12 EA DUCT TERMINATING AT 12x12 WALL LOUVER RUSKIN ELF62750X WITH INSECT SCREEN
- NEW 6" EA DROP DOWN WALL WITH MANUAL BALANCING DAMPER AND ALONG FLOOR. TERMINATE AT MANUFACTURER'S EXHAUST AIR CONNECTION POINT.
- RELOCATE EXISTING SUPPLY DIFFUSER. EXTEND RUN OUT, AS REQUIRED TO ACCOMMODATE NEW LOCATION.
- NEW SUPPLY AIR DIFFUSER WITH 6" RUN OUT.

## AHU SEQUENCE OF OPERATION

- SUPPLY FAN IS ENERGIZED BY A TWO POSITION SWITCH. WHEN THE SWITCH IS CLOSED IT SHALL ENERGIZE THE SYSTEM PROVIDING POWER TO ALL COMPONENTS AND LOW VOLTAGE CONTROL TO ALL CONTROL DEVICES, AND OPEN THE MINIMUM OUTSIDE AIR DAMPER.
- SYSTEM SHALL BE CONTROLLED WITH A WALL MOUNTED THERMOSTAT DEVICE CONTROLLING SPACE TEMPERATURE. THE THERMOSTAT SHALL INCLUDE OFF-AUTO-COOLING-HEATING MODES AND TIME-DAY-WEEK SCHEDULING CAPABILITIES. THERMOSTAT SHALL BE SET TO "AUTO" MODE.
- WHEN THE SPACE TEMPERATURE RISES ABOVE THE SETPOINT THE COMPRESSOR/S SHALL CYCLE TO MAINTAIN ROOM TEMPERATURE SETPOINT.
- THE SUPPLY FAN SHALL RUN CONTINUOUSLY DURING OCCUPIED HOURS.
- WHEN THE SPACE TEMPERATURE FALLS BELOW THE SETPOINT THE ELECTRIC HEAT SHALL ENERGIZE TO MAINTAIN ROOM TEMPERATURE SETPOINT.
- THE SYSTEM SHALL IMPOSE A 30 SECOND TIME DELAY TO RESTART THE SUPPLY FAN, COMPRESSORS, AND CONDENSER FANS AFTER SYSTEM SHUT DOWN.
- PROVIDE 7 DAY/24 HOUR PROGRAMMABLE THERMOSTAT TO INSURE UNIT IS DE-ENERGIZED DURING UNOCCUPIED HOURS.

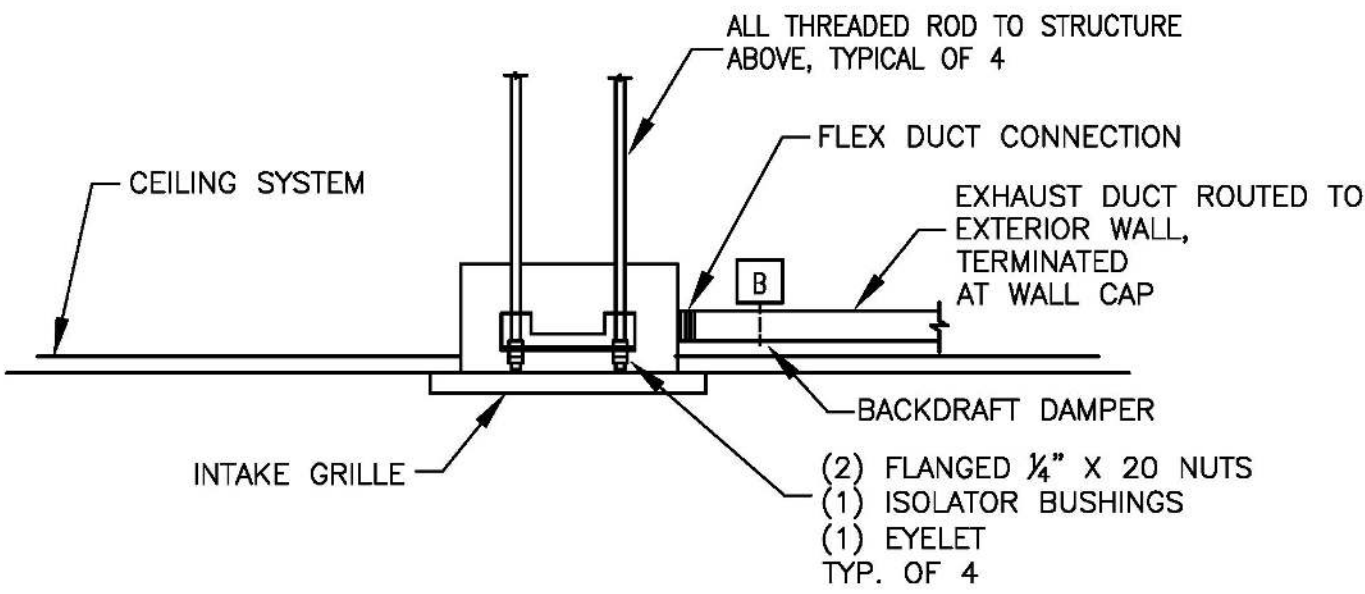
## GENERAL NOTES AND SPECIFICATIONS

- ALL WORK SHALL BE IN ACCORDANCE WITH THE 2017 FLORIDA BUILDING CODE – MECHANICAL SUPPLY DUCTS AND ALL RETURN DUCTS LOCATED IN AREAS OTHER THAN THE POOL SHALL BE RIGID, FIBERGLASS DUCT-BOARD, 1.5" THICK. FLEXIBLE DUCTS SHALL BE R-6.5 UL LISTED CLASS 1 AND NOT EXCEED 5' IN LENGTH. RUN-OUTS WHERE DISTANCES TO DIFFUSER EXCEED 5' SHALL BE SINGLE WALL ROUND DUCT WITH EXTERNAL INSULATION. DUCT WORK LOCATED IN THE POOL AREA SHALL BE MADE IN ITS ENTIRETY OF ALUMINUM. ROOF-TOP AIR SYSTEM FOR THE SPACE SHALL BE BY UNIT LISTED OR ENGINEER APPROVED EQUAL. PROVIDE 1" THICK MEDIUM EFFICIENCY PLEATED FILTERS. PROVIDE NEW PRO PROVIDE 1 YEAR WARRANTY ON LABOR AND MATERIAL BY CONTRACTOR, AND MANUFACTURER'S WARRANTY ON ANY NEW EQUIPMENT.
- ANY FIELD CHANGES AS A RESULT OF VALUE ENGINEERING SHALL BE COMMUNICATED TO THE ARCHITECT AND ENGINEER OF RECORD PRIOR TO COMMENCEMENT OF VALUE ENGINEERING WORK. ENGINEERING PLAN REVISIONS REQUIRED BY BUILDING INSPECTORS TO MATCH VALUE ENGINEERING CHANGES SHALL BE COMPENSATED TO THE ENGINEER AT A NEGOTIATED AMOUNT BY THE SUB-CONTRACTOR ENACTING THE VALUE ENGINEERING CHANGE.
- MECHANICAL CONTRACTOR SHALL PROVIDE TO ARCHITECT A COMPLETE TEST AND BALANCE REPORT, PERFORMED BY AN ABC OR NEBB CERTIFIED CONTRACTOR, UPON COMPLETION OF THE PROJECT.

## FAN SCHEDULE

PLAN MARK	BASIC OF DESIGN	TYPE	CFM	STATIC PRESS. IN. WG.	MOTOR		VOLT/ PHASE	DRIVE TYPE	STATUS	FAN INTERLOCK
					RPM	HP				
EF-1	LOREN COOK GC-168	CEIL	150	0.33	1160	52.2	115/1	B	NEW	OCC SENSOR
EF-2	LOREN COOK GC-146	CEIL	70	0.33	900	30.9w	115/1	D	NEW	OCC SENSOR
EF-3	LOREN COOK GC-146	CEIL	70	0.33	900	30.9w	115/1	D	NEW	OCC SENSOR
EF-4	LOREN COOK GC-168	CEIL	150	0.33	1160	52.2	115/1	B	NEW	OCC SENSOR

- NOTES: 1. PROVIDE SPEED CONTROLLER, INSECT SCREEN, BACK DRAFT DAMPER, WALL CAP, VIBRATION ISOLATION KIT, DISCONNECT.  
2. EXTRA BELT, INSECT SCREEN, BACK DRAFT DAMPER, VIBRATION ISOLATION KIT, DISCONNECT.



## EXHAUST FAN MOUNTING DETAIL

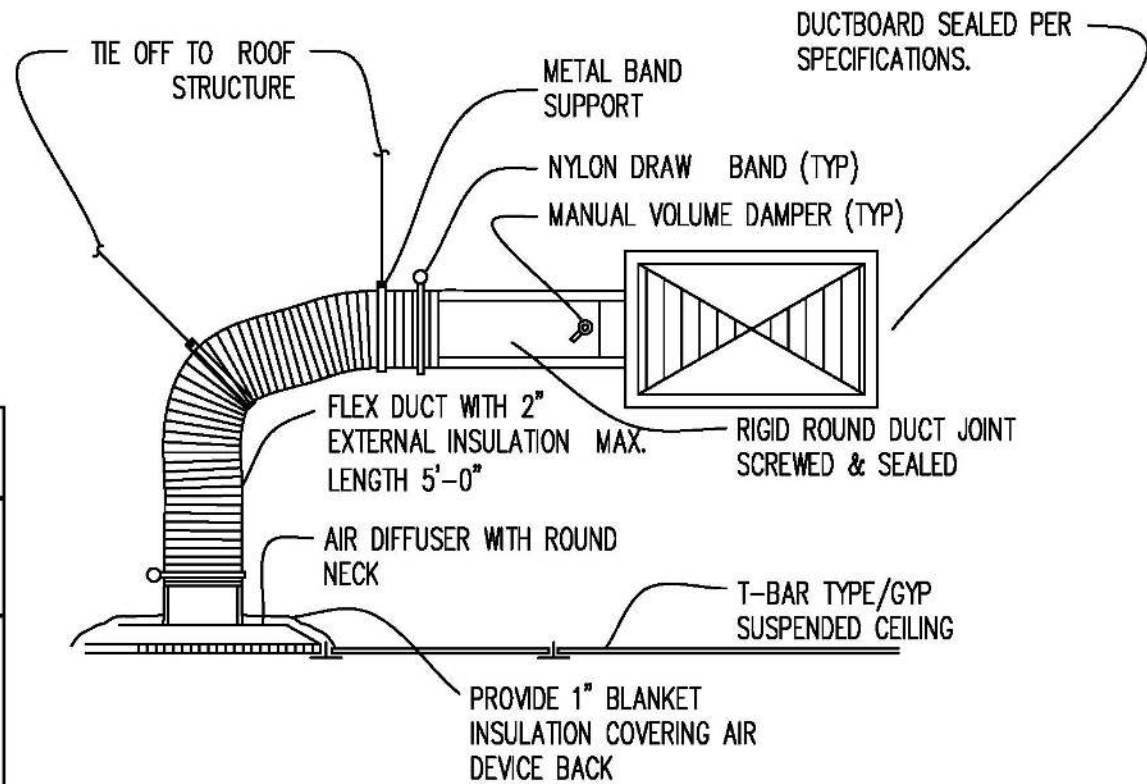
NOT TO SCALE

## DIFFUSER SCHEDULE

TYPE	SERVICE	CFM RANGE		MODULE SIZE	NECK 'N'	MODEL
		MIN	MAX			
A	SUPPLY-CEILING	0	140	24x24	6"	TITUS – TMS-I
		141	325	24x24	8"	TITUS – TMS-I
		326	475	24x24	10"	TITUS – TMS-I
		476	650	24x24	12"	TITUS – TMS-I
		651	900	24x24	14"	TITUS – TMS-I
		901	1200	24x24	15"	TITUS – TMS-I
B	RETURN/EXHAUST CEILING	0	150	24x24	6"	TITUS 50F
		151	260	24x24	8"	TITUS 50F
		261	450	24x24	10"	TITUS 50F
		451	695	24x24	12"	TITUS 50F
		696	900	24x24	14"	TITUS 50F
		901	1200	24x24	16"	TITUS 50F
C	SUPPLY – CEILING	0	120	12x12	6"	TITUS – TDC
		121	210	12x12	8"	TITUS – TDC
D	SUPPLY – SIDEWALL	0	165	8X6	–	TITUS – 300FL
		166	275	12X6	–	TITUS – 300FL
		276	400	12X8	–	TITUS – 300FL
		401	495	12X10	–	TITUS – 300FL
		496	595	18X10	–	TITUS – 300FL
		596	695	18X12	–	TITUS – 300FL
		696	800	18X14	–	TITUS – 300FL
		801	995	24X14	–	TITUS – 300FL
		996	1100	36X12	–	TITUS – 300FL

### NOTES:

- DIFFUSER RUNOUT SIZE SHALL BE DIFFUSER NECK SIZE, UNLESS OTHERWISE NOTED ON DRAWINGS.
- COORDINATE COLOR OF DIFFUSERS WITH INTERIOR DESIGNER.
- PROVIDE OPPOSED BLADE VOLUME DAMPER INSTALLED ON BACK-SIDE OF SUPPLY/RETURN REGISTERS INSTALLED IN GYPSUM CEILINGS. PROVIDE STARTING COLLAR WITH BALANCING DAMPER AT FLEX DUCT CONNECTION ALL OTHER SUPPLY/RETURN REGISTERS/DIFFUSERS.
- PROVIDE SURFACE MOUNT FRAME TYPE FOR DIFFUSERS INSTALLED IN GYPSUM/HARD CEILINGS AND 24"X24" MODULE LAY-IN FOR T-BAR DROP CEILINGS.



## CEILING DIFFUSER DETAIL

NOT TO SCALE

## MECHANICAL LEGEND

	SUPPLY DIFFUSER		SPIN-IN TAP W/DAMPER
	RETURN REGISTER		CONDENSATE DRAIN
	EXHAUST REGISTER		THERMOSTAT
	MOTORIZED DAMPER		FLEXIBLE DUCT
	BACKDRAFT DAMPER		DRYWELL
	SUPPLY SIDEWALL GRILLE		3/4" DOOR UNDERCUT
	SUPPLY SIDEWALL GRILLE		UCT
	SUPPLY SIDEWALL GRILLE		DUCT MOUNTED SMOKE DETECTOR
	SUPPLY SIDEWALL GRILLE		SMOKE DETECTOR AUDIO/VISUAL ALARM

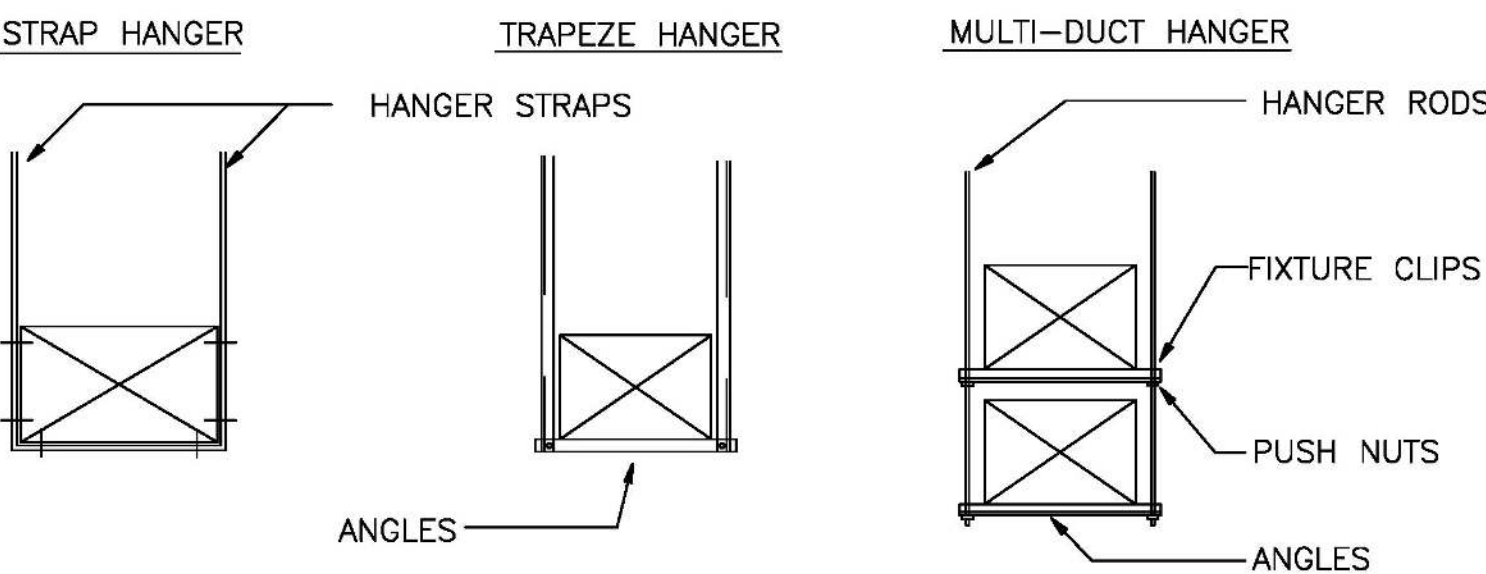
## DESIGN CONDITIONS

### EXTERIOR DESIGN CONDITIONS

SUMMER DRY/WET BULB 96°F/77°F  
WINTER DRY BULB 29°F

### INTERIOR DESIGN CONDITIONS

SUMMER 75°F, +/- 3°F  
50% R.H. +/- 10%  
WINTER 72°F



HANGER SIZES FOR RECTANGULAR DUCT				
LONGEST DIMENSION OF DUCT	ROUND HANGERS	STRAP HANGERS	TRAPEZE STRAP HANGERS	MAXIMUM SPACING
UP THRU 18"	8 GA. WIRE	1"x22 GAUGE	1"x1"x1/8"	10'-0"
19" THRU 30"	8 GA. WIRE	1"x22 GAUGE	1"x1"x1/8"	10'-0"
31" THRU 42"	3/8" ROD	1"x18 GAUGE	1-1/2"x1-1/2"x1/8"	10'-0"
43" THRU 60"	3/8" ROD	1"x18 GAUGE	1-1/2"x1-1/2"x1/8"	10'-0"
61" THRU 84"	3/8" ROD	1"x18 GAUGE	2"x2"x1/8"	8'-0"
85" THRU 96"	3/8" ROD	1"x18 GAUGE	2"x2"x3/16"	8'-0"
97" THRU 120"	3/8" ROD	1"x16 GAUGE	2"x2"x1/4"	8'-0"

## RETANGULAR DUCT HANGERS

NOT TO SCALE

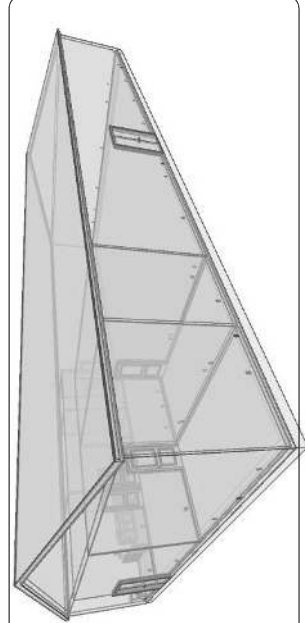
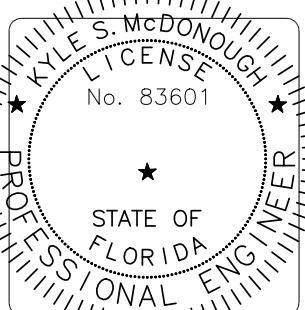
## Mechanical Notes

### System Specifications

Symbol:	Tons:	Ind Model:	Out Model:	CFM:	OA:	Ext SP:	HP:	EDB:	EWB:	Sen MBH:	Total MBH:	Heat KW:	Indoor MCA:	Indoor MOCP:	Indoor VIP:	Outdoor MCA:	Outdoor MOCP:	Outdoor VIP:	Seer:	Ind Wt.:	Out Wt.:
PCKG	5	ZPC060	ZPC060	1850	105	.5	1/3	80	67	54	60	6.5	-	-	-	40	60	208/1	14	-	344
MSMZ	1.5	18CHV2	90HSV5	1050	105	.5	1/8	80	67	14	18	6.5	10	20	-	20	30	208/1	22	80	140



## Mechanical Sections & Details

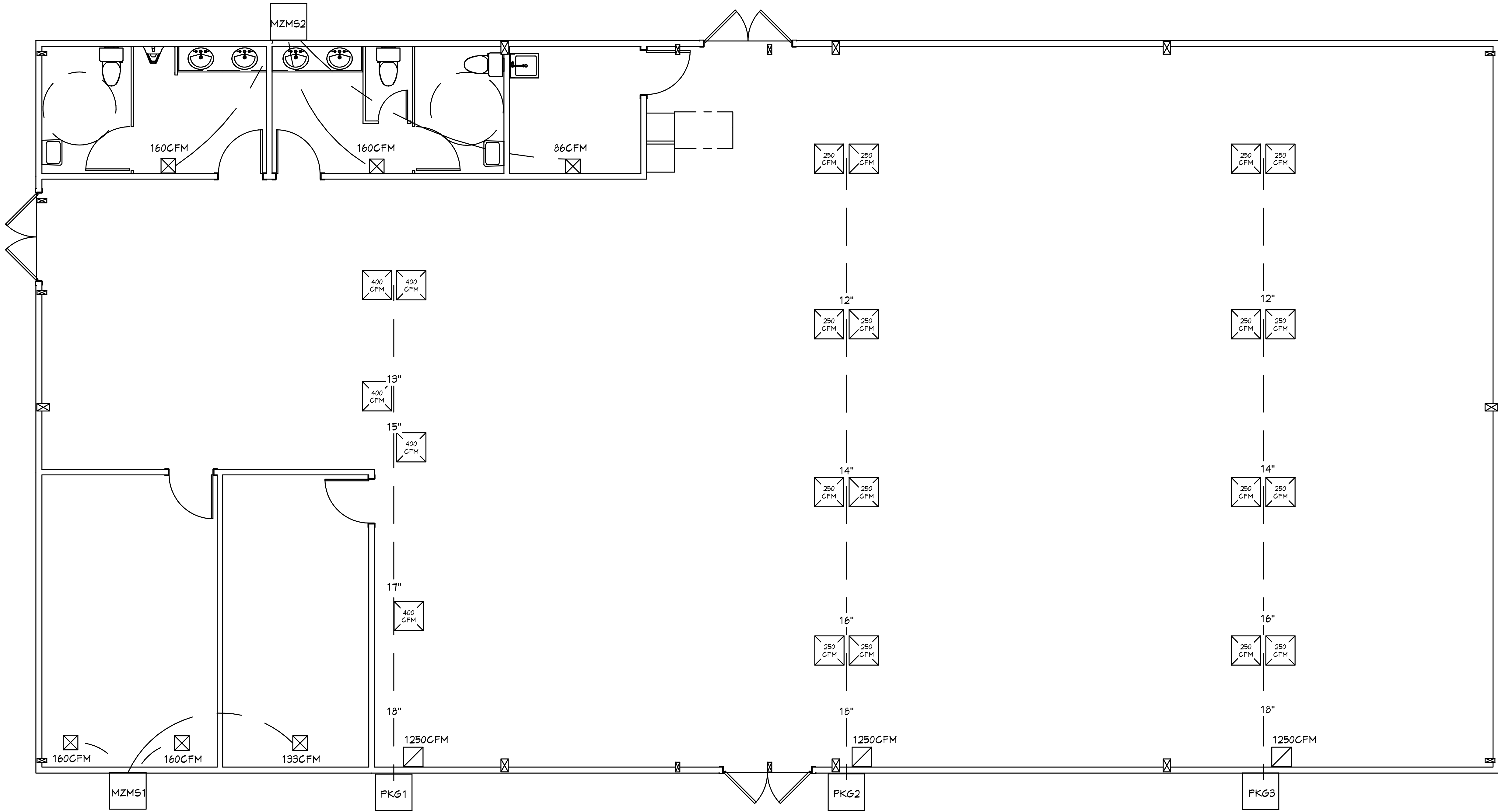


Construction of a New Generation Building  
**New Generation Gymnasium**  
603 SW Marvin Burnett Rd, Lake City, FL 32025

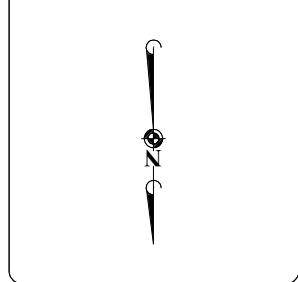
04/03/20  
KWB  
2020-041

SHEET  
**A107**

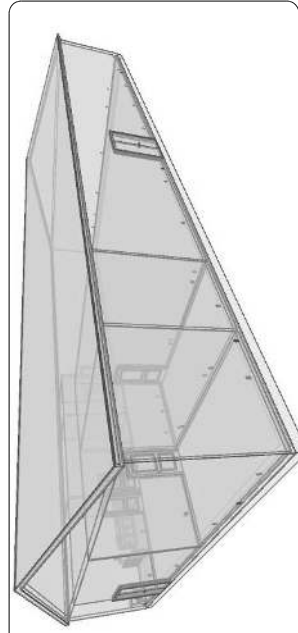
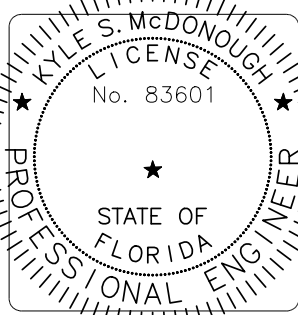
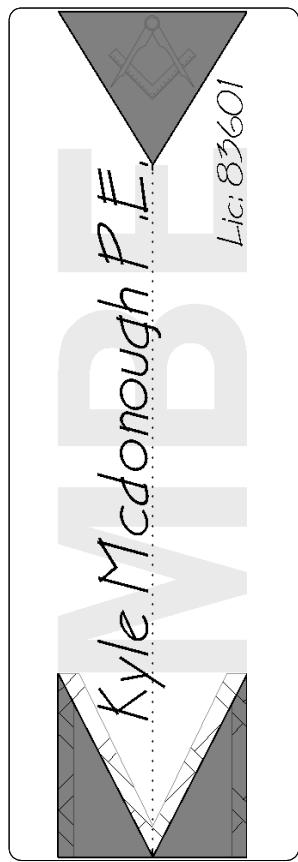




**Mechanical Floor Plan**  
Scale - 1/4" = 1'



# Mechanical Floor Plan

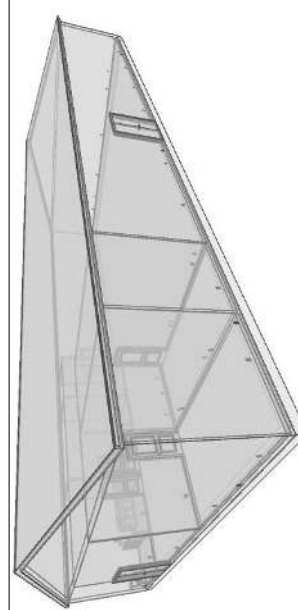


Construction of a New Commercial Building  
**New Generation  
Gymnasium**  
600 SW Marvin Burnett Rd., Lake City, FL 32025

04/03/20	IN	2020.641
04/03/20	IN	2020.641
04/03/20	IN	2020.641

SHEET  
**A108**





## ELECTRICAL SPECIFICATIONS:

- VERIFY ALL EQUIPMENT CIRCUIT BREAKER SIZES PRIOR TO ORDERING GEAR. THE INSTALLATION SHALL COMPLY WITH ALL LOCAL, STATE, COUNTY LAWS AND ORDINANCES APPLICABLE TO ELECTRICAL INSTALLATIONS, AND WITH THE REGULATIONS OF THE NFPA WHERE SUCH REGULATIONS DO NOT CONFLICT WITH THOSE LAWS. OBTAIN ALL PERMITS AS REQUIRED.
- NOTIFY THE ARCHITECT/OWNER/BUILDER OF ANY IMPACT FEES REQUIRED BY THE COUNTY OR LOCAL UTILITY CO.
- ALL MATERIALS, EQUIPMENT AND APPARATUS SHALL BE NEW, OF CURRENT MANUFACTURE AND SHALL BEAR THE SEAL OF APPROVAL OF THE UNDERWRITERS LABORATORIES. ALL WORK SHALL BE EXECUTED IN A WORKMANLIKE MANNER AND SHALL PRESENT A NEAT APPEARANCE WHEN COMPLETED.
- FURNISH AND INSTALL ALL EQUIPMENT NECESSARY FOR TEMPORARY LIGHTING AND POWER FOR ENTIRE JOB SITE. ENERGY COST PAID BY OTHERS.
- IN GENERAL, THE CONDUIT INSTALLATION SHALL FOLLOW THE LAYOUT SHOWN ON THE PLANS. THIS LAYOUT IS HOWEVER DIAGRAMMATIC ONLY, AND WHERE CHANGES ARE NECESSARY DUE TO STRUCTURAL CONDITIONS, OTHER APPARATUS OR OTHER CAUSES, SUCH CHANGES SHALL BE MADE WITHOUT ADDITIONAL COST TO THE OWNER. IT IS RECOGNIZED THAT BRANCH CIRCUIT ROUTING SHOWN ON THE DRAWINGS MAY NOT ALWAYS BE THE MOST ECONOMICAL OR THE MOST FEASIBLE METHOD. ROUTING MAY BE CHANGED BY THE CONTRACTOR AND INSTALLED PER THE LATEST NEC.
- ALL CONDUCTORS SMALLER THAN 3/0 SHALL BE COPPER THHN WITH NOT LESS THAN 98% CONDUCTIVITY. CONDUCTORS 10-14 MAY BE SOLID OR STRANDED.
- ALL RECEPTACLE CIRCUITS SHALL BE SEPERATE FROM LIGHTING CIRCUITS. ALL NON-LINEAR LOADS SHALL HAVE A SEPERATE NUTREAL WIRE FOR EACH CIRCUIT.
- IT IS THE CONTRACTORS RESPONSIBILITY TO VERIFY CATALOG NUMBERS IN THE FIXTURE SCHEDULE TO ENSURE IT MATCHES THE DESCRIPTION GIVEN AND FOR PROPER CEILING MOUNTING, REQUIRED ACCESSORIES, ETC.
- ALL CONDUIT AND BOXES PASSING THROUGH OR INSTALLED WITHIN FIRE WALLS AND SMOKE WALLS SHALL BE INSTALLED SO AS TO MAINTAIN THE INTEGRITY OF THE WALL THROUGH WHICH IT PASSES. BOXES TO BE INSTALLED WITH 1/8" OF WALL SURFACE.
- THE CONTRACTOR SHALL LEAVE THE ENTIRE ELECTRICAL SYSTEM INSTALLED BY HIM UNDER THIS CONTRACT IN PROPER WORKING ORDER AND SHALL REPLACE, WITHOUT ADDITIONAL CHARGE, ALL WORK OR MATERIAL WHICH MAY DEVELOP DEFECTS, ORDINARY WEAR AND TEAR OR DAMAGE RESULTING FROM IMPROPER HANDLING EXCEPTED, WITHIN A PERIOD OF ONE YEAR FROM THE DATE OF FINAL INSPECTION AND ACCEPTANCE FROM THE ARCHITECT OR OWNER. BALLASTS SHALL BE INCLUDED BUT LAMPS SHALL BE EXCLUDED.

LIGHTING FIXTURE SCHEDULE							
TYPE	FIXTURE DESCRIPTION	MANUFACTURER AND CATALOG NO.	VOLT	INPUT VA	LAMP NO.	LAMP TYPE	REMARKS
A	2X4 LAY IN LED	COOPER 24FP6440C	120	62	-	4000K LED	-
B	2X2 LAY IN LED	COOPER 22FP4240C	120	32	-	4000K LED	-
C	6" RECESSED CAN LED	COOPER RL560WH12935/H750ICAT	120	12	-	3500K LED	-
D	STRIP LIGHT LED	COOPER 4WSL-LD2-60-SRS-UNV-L840-CD1-U	120	56	-	4000K LED	-
EM1	EMERGENCY LIGHT INTERIOR	COOPER APEL	120	1.5	-	LED	-
EX	EXIT/EMERGENCY COMBO LIGHT	COOPER APC7R	120	1.5	-	LED	-
F	SURFACE MOUNTED LED	BARN LIGHT BLE-F-WHS16-XXX-FM-NA-WGG-FST-NA-E26	120	12	-	4000K LED	PROVIDE LED LAMP
G	WALL PACK LED	COOPER XTOR3B-W-XX	120	26	-	4000K LED	-
P	PENDANT LIGHT LED	BLE-C-WHS12-SBK-NA-FST-NA-LED16-3000K	120	16	-	3000K LED	-

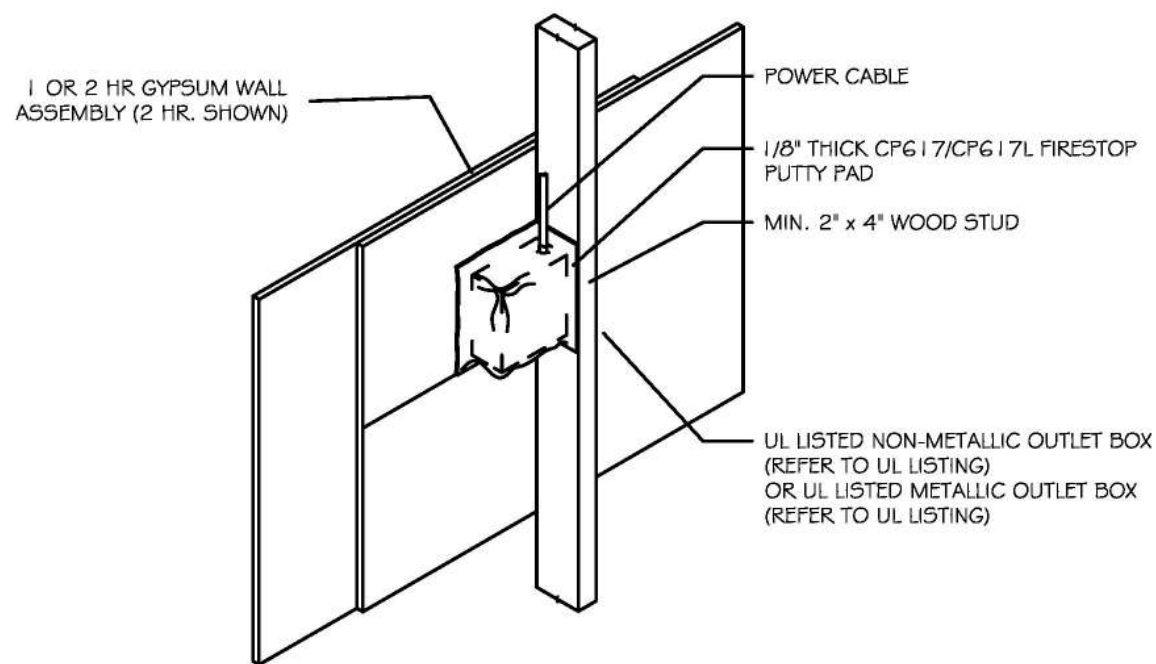
### GENERAL NOTES:

- IT IS THE CONTRACTORS RESPONSIBILITY TO VERIFY CATALOG NUMBERS IN THE FIXTURE SCHEDULE TO ENSURE IT MATCHES THE DESCRIPTION GIVEN AND FOR PROPER CEILING MOUNTING, REQUIRED ACCESSORIES, ETC.
- CONNECT EXIT LIGHTS AND EMERGENCY BALLASTS OF FIXTURES DENOTED AS EMEGENCY TO UNSWITCHED LIGHTING CIRCUIT
- SEE ARCHITECTURAL CEILING PLAN FOR EXACT LOCATION OF LIGHTING FIXTURES.
- EXAMINE EXISTING CONDITIONS PRIOR TO BID AND COMPARE WITH NEW WORK. REPORT ANY OBSERVED DESCREPANCIES.
- INTERLOCK EXHAUST FAN WITH RESPECTIVE AHU. PROVIDE REQUIRED #12 WIRE IN CONDUIT. SEE MECHANICAL DRAWINGS, FAN SCHEDULE, FOR INTERLOCK.
- ELECTRICAL CONTRACTOR SHALL COORDINATE WITH MECHANICAL CONTRACTOR TO PROVIDE ADEQUATE WORKING SPACE IN FRONT OF ALL PANELBOARDS, MOTOR STARTERS AND FUSED DISCONNECT SWITCH. WORKING SPACE SHALL BE CLEAR OF PIPES AND DUCTS. ANY CODE VIOLATION AS A RESULT OF LACK OF COORDINATION SHALL BE RECTIFIED AT NO COST TO OWNER.
- LOAD CALCULATION/ TOTAL CONNECTED LOAD SHOWN AT BOTTOM OF PANEL SCHEDULES.
- ALL WIRING SHALL BE INSTALLED IN ACCORDANCE WITH THE 2014 EDITION OF THE NATIONAL ELECTRICAL CODE.

## ELECTRICAL LEGEND

- TOGGLE SWITCH - SINGLE POLE - QUIET TYPE 20 AMP, 120/277 VOLT HUBBELL NO. HBL12211 WITH NO. P1 COVERPLATE - 46" MOUNTING HEIGHT U.N.O. PROVIDE MOTION SENSOR SWITCH WHERE REQUIRED PER FL ENERGY CODE 415
- SAME AS ABOVE EXCEPT MOTION SENSOR
- CEILING MOUNTED MOTION SENSOR - LOW VOLTAGE
- LOW VOLTAGE POWER PACK FOR CEILING MOUNTED MOTION SENSOR
- DUPLEX RECEPTACLE - 20 AMP, 120 VOLT, 3 WIRE GROUNDING, HUBBELL NO. 53521 WITH NO. P8 COVERPLATE, 18 INCH MOUNTING HEIGHT, U.N.O.
- DUPLEX RECEPTACLE WITH GROUND FULT INTERRUPTER, 20 AMP, 120 VOLT, 3 WIRE GROUNDING, HUBBELL NO. GF53521A WITH NO. HP511 COVERPLATE, 46 INCH MOUNTING HEIGHT, U.N.O. EXTERIOR LOCATIONS SHALL BE MOUNTED AT 18" A.F.F.
- DATA/TELEPHONE OUTLET - 4 INCH SQUARE JUNCTION BOX WITH 1-GANG EXTENSION RING, BLANK COVER PLATE - 18 INCH MOUNTING HEIGHT, U.N.O. PROVIDE 3/4" CONDUIT TO ACCESSIBLE CEILING SPACE.
- JUNCTION BOX.
- MOTOR, FAN, PUMP OR AIR CONDITIONING UNIT.
- LIGHTING AND/OR POWER PANELBOARD.
- WIRING IN CONDUIT, RUN CONCEALED ABOVE CEILING OR IN WALLS.
- WIRING IN CONDUIT, RUN CONCEALED BELOW FLOOR.
- HOMERUN TO PANELBOARD - NUMBER OF ARROWS DENOTES QUANTITY OF CIRCUITS. CROSSMARKS INDICATE QUANTITY OF NO. 12 CONDUCTORS. RUNS VOID OF CROSSMARKS ARE 1/2 INCH CONDUIT, 3 NO. 12, U.N.O. DO NOT COMBINE HOMERUNS EXCEPT AS SPECIFICALLY INDICATED ON THE PLAN.
- DENOTES WEATHERPROOF - MOUNT RECEPTACLES HORIZONTALLY AND PROVIDE TAYMAC 60350 COVERPLATE, FOR SWITCHES PROVIDE TAYMAC 40110 COVERPLATE.
- DISCONNECT SWITCH, "3 60/40 N3R" DENOTES 3 POLE, 60 AMPS, 40 AMPS FUSES N3R DENOTES DISCONNECT NEMA RATING.

## WALL OPENING PROTECTIVE MATERIALS (CUV) AS TESTED TO ANSI/UL 263 10R 2 HR RATING



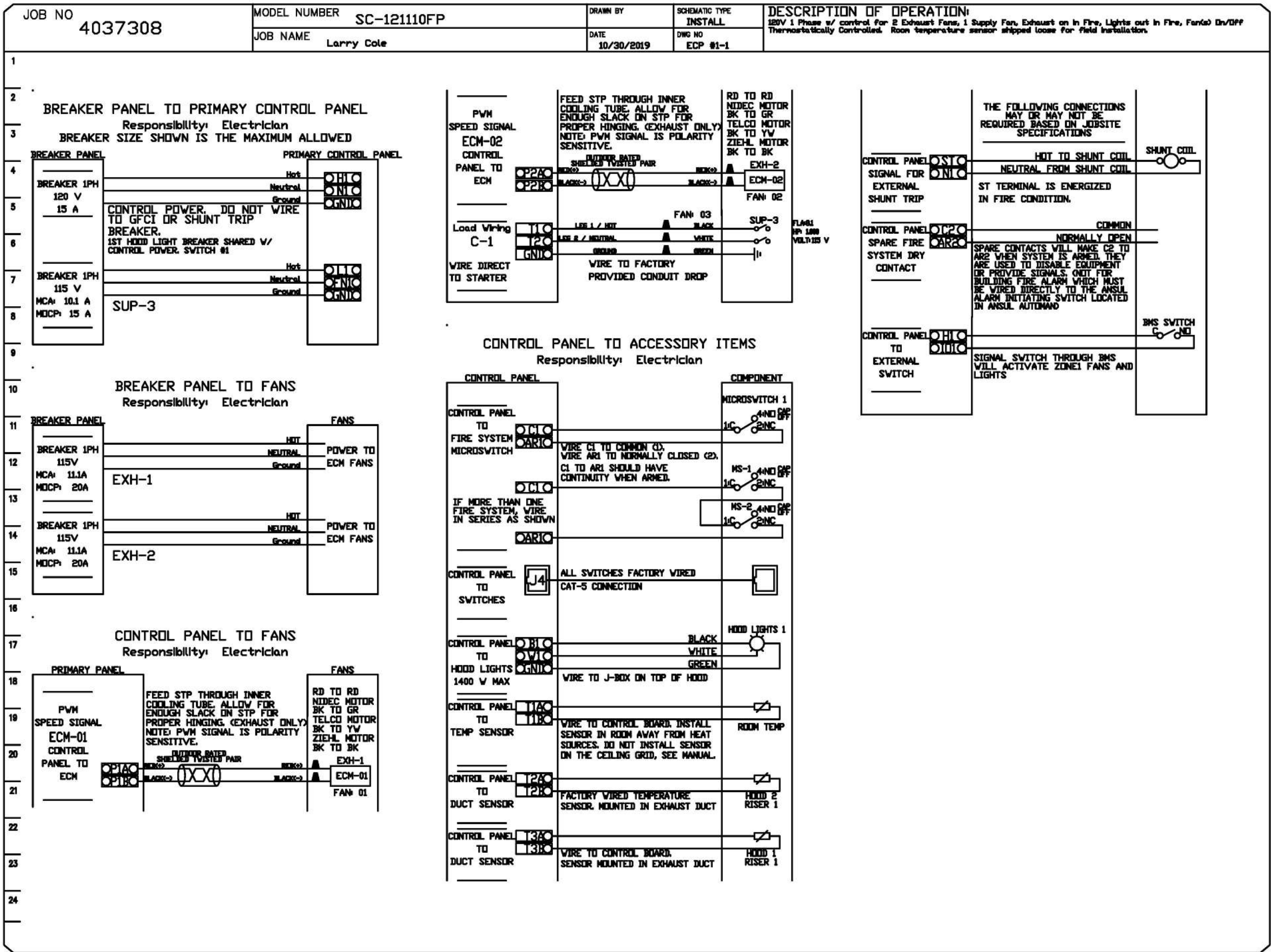
NOTE: WEHRE BOXES BACK UP TO ONE ANOTHER OR ARE VERY CLOSE TOGETHER IN THIS WALL, ADD A LAYER OF 5/8" TYPE "X" FIRECODE SCREWED TO STUD BETWEEN THEM

CP617 PUTTY PADS, FOR USE WITH MAX 4 BY 4 IN. FLUSH DEVICE UL LISTED METALLIC OUTLET BOXES INSTALLED WITH STEEL COVER PLATES IN 1 AND 2 HR. FIRE RATED GYPSUM WALLBOARD WALL ASSEMBLIES FRAMED WITH MIN 3-1/2 IN. DEEP WOOD OR STEEL STUDS AND CONSTRUCTED AS SPECIFIED IN THE INDIVIDUAL U300 OR U400 SERIES WALL AND PARTITION DESIGNS IN THE FIRE RESISTANCE DIRECTORY. MIN 1/8 IN. THICK MOLDABLE PUTTY PADS ARE TO BE INSTALLED TO COMPLETELY COVER THE EXTERIOR SURFACES OF THE OUTLET BOX (EXCEPT FOR THE SIDE OF THE OUTLET BOX AGAINST THE STUD) AND COMPLETELY SEAL AGAINST THE STUD WITHIN THE STUD CAVITY. WHEN MOLDABLE PUTTY PAD OUTLET BOX PROTECTIVE MATERIAL IS USED ON BOXES ON OPPOSITE SIDES OF WALL AS DIRECTED, THE HORIZONTAL SEPARATION BETWEEN OUTLET BOXES ON OPPOSITE SIDES OF THE WALL MAY BE LESS THAN 24 IN. PROVIDED THAT THE BOXES ARE NOT INSTALLED BACK TO BACK.

CP617 FIRESTOP PUTTY PADS, FOR USE WITH MAX 4 BY 3-3/4 BY 3 IN. DEEP UL LISTED NONMETALLIC OUTLET BOXES MANUFACTURED BY CARLON ELECTRICAL PRODUCTS, MADE FROM POLYVINYL CHLORIDE, AND BEARING A 2 HR. RATING UNDER THE " OUTLET BOXES AND FITTINGS CLASSIFICATION FOR FIRE RESISTANCE CATEGORY IN THE FIRE RESISTANCE DIRECTORY. PUTTY PADS AND BOXES FOR USE IN 1 AND 2 HR FIRE RATED GYPSUM WALLBOARD ASSEMBLIES, FRAMED WITH MIN 3-1/2 IN. DEEP WOOD STUDS AND CONSTRUCTED AS SPECIFIED IN THE INDIVIDUAL U300 SERIES WALL AND PARTITION DESIGNS IN THE FIRE RESISTANCE DIRECTORY. OUTLET BOX SECURED TO WOOD STUD BY MEANS OF TWO NAILING TABS SUPPLIED WITH THE OUTLET BOX. MIN 1/8 IN. THICK MOLDABLE PUTTY PADS ARE TO BE INSTALLED TO COMPLETELY COVER THE EXTERIOR SEAL AGAINST THE STUD WITHIN THE STUD CAVITY. OUTLET BOXES INSTALLED WITH STEEL OR PLASTIC COVER PLATES. WHEN MOLDABLE PUTTY PAD OUTLET BOX PROTECTIVE MATERIAL IS USED ON BOXES ON BOTH SIDES OF WALL AS DIRECTED, THE HORIZONTAL SEPARATION BETWEEN BOXES ON OPPOSITE SIDES OF THE WALL MAY BE LESS THAN 24 IN. PROVIDED THAT THE BOXES ARE NOT INSTALLED BACK TO BACK

CP617 FIRESTOP PUTTY PADS, FOR USE WITH MAX 2-1/4 BY 3-3/4 BY 2-1/4 IN. DEEP UL LISTED NONMETALLIC OUTLET BOXES MANUFACTURED BY PASS AND SEYMORE INC., AND BEARING A 2 HR. RATING UNDER THE " OUTLET BOXES AND FITTINGS CLASSIFICATION FOR FIRE RESISTANCE CATEGORY IN THE FIRE RESISTANCE DIRECTORY. PUTTY PADS AND BOXES FOR USE IN 1 AND 2 HR FIRE RATED GYPSUM WALLBOARD ASSEMBLIES, FRAMED WITH MIN 3-1/2 IN. DEEP WOOD STUDS AND CONSTRUCTED AS SPECIFIED IN THE INDIVIDUAL U300 SERIES WALL AND PARTITION DESIGNS IN THE FIRE RESISTANCE DIRECTORY. OUTLET BOX SECURED TO WOOD STUD BY MEANS OF TWO NAILING TABS SUPPLIED WITH THE OUTLET BOX. MIN 1/8 IN. THICK MOLDABLE PUTTY PADS ARE TO BE INSTALLED TO COMPLETELY COVER THE EXTERIOR SEAL AGAINST THE STUD WITHIN THE STUD CAVITY. OUTLET BOXES INSTALLED WITH STEEL OR PLASTIC COVER PLATES. WHEN MOLDABLE PUTTY PAD OUTLET BOX PROTECTIVE MATERIAL IS USED ON BOXES ON BOTH SIDES OF WALL AS DIRECTED, THE HORIZONTAL SEPARATION BETWEEN BOXES ON OPPOSITE SIDES OF THE WALL MAY BE LESS THAN 24 IN. PROVIDED THAT THE BOXES ARE NOT INSTALLED BACK TO BACK

CP617 FIRESTOP PUTTY PADS, FOR USE WITH MAX 4 BY 3-3/4 BY 3 IN. DEEP UL LISTED NONMETALLIC OUTLET BOXES MANUFACTURED BY ALLIED MOLDED PRODUCTS, INC., MADE FROM FIBER REINFORCED THERMOPLASTIC AND BEARING A 2 HR RATING UNDER THE " OUTLET BOXES AND FITTINGS CLASSIFICATION FOR FIRE RESISTANCE CATEGORY IN THE FIRE RESISTANCE DIRECTORY. PUTTY PADS AND BOXES FOR USE IN 1 HR FIRE RATED GYPSUM WALLBOARD ASSEMBLIES, FRAMED WITH MIN 3-1/2 IN. DEEP WOOD STUDS AND CONSTRUCTED AS SPECIFIED IN THE INDIVIDUAL U300 SERIES WALL AND PARTITION DESIGNS IN THE FIRE RESISTANCE DIRECTORY. OUTLET BOX SECURED TO WOOD STUD BY MEANS OF TWO NAILING TABS SUPPLIED WITH THE OUTLET BOX. MIN 1/8 IN. THICK MOLDABLE PUTTY PADS ARE TO BE INSTALLED TO COMPLETELY COVER THE EXTERIOR SEAL AGAINST THE STUD WITHIN THE STUD CAVITY. OUTLET BOXES INSTALLED WITH STEEL OR PLASTIC COVER PLATES. WHEN MOLDABLE PUTTY PAD OUTLET BOX PROTECTIVE MATERIAL IS USED ON BOXES ON BOTH SIDES OF WALL AS DIRECTED, THE HORIZONTAL SEPARATION BETWEEN BOXES ON OPPOSITE SIDES OF THE WALL MAY BE LESS THAN 24 IN. PROVIDED THAT THE BOXES ARE NOT INSTALLED BACK TO BACK



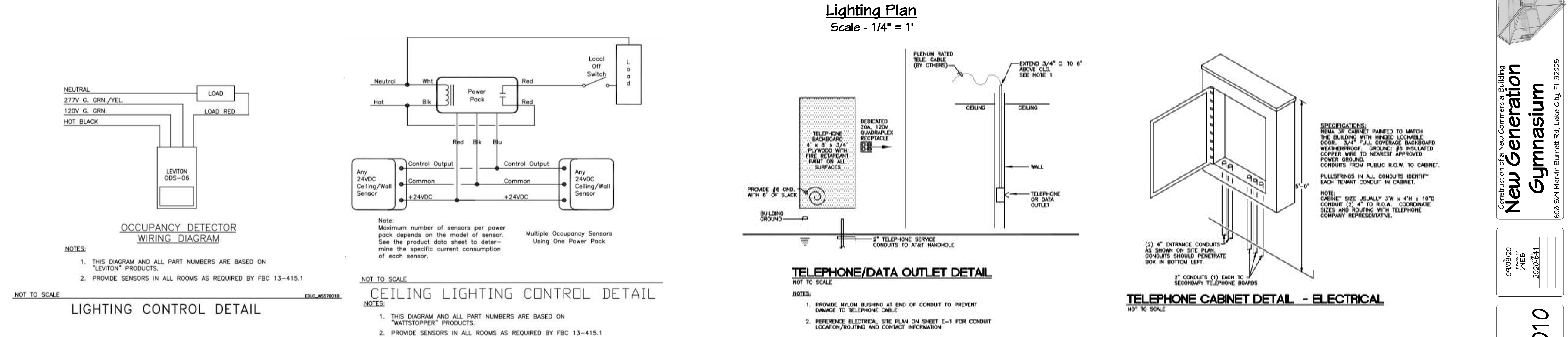
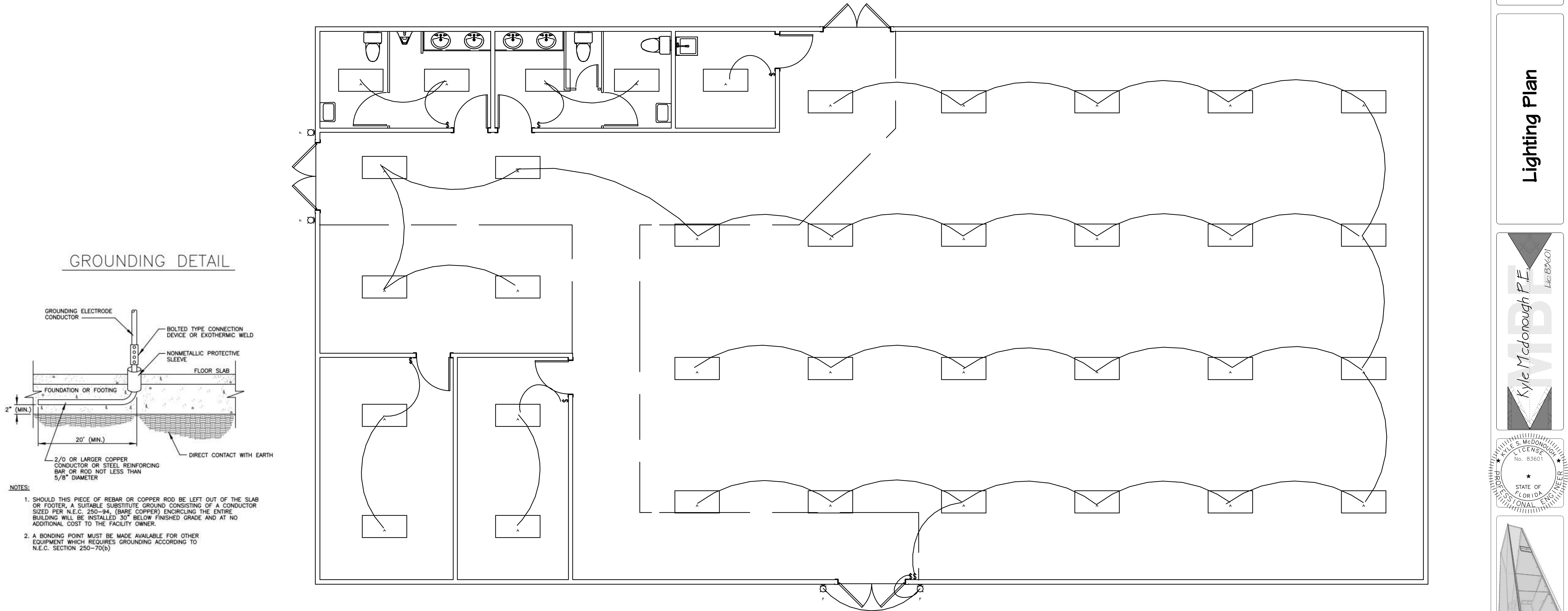
NOT TO SCALE

## LGT/RECEPTACLE CONTROL DETAIL

### NOTES:

- PROVIDE VACANCY SENSOR IN LOCATIONS INDICATED. INSTALL IN ALL OFFICE LOCATIONS PER ASHRAE 90.1
- CONTRACTOR TO ADJUST SENSITIVITY LEVEL BASED ON ROOM SIZE AND FURNITURE LAYOUT, SET TIME OUT ON SENSOR TO 12 MIN. (ALL SENSORS MUST BE FIELD ADJUSTED, DONT INSTALL WITH FACTORY SETTING) PROVIDE SENSOR MASKING KIT AS REQUIRED
- PROVIDE 20A., 24 VOLT RELAY IN AREAS INDICATED TO AUTOMATICALLY DISCONNECT 120 VOLT RECEPTACLE POWER WHEN NO OCCUPANCY IS DETECTED. RELAY SHALL BE MANUFACTURED BY SAME MANUFACTURER AS THE POWER PACK TO INSURE COMPATIBLE VOLTAGE AND POWER RATING REQUIRED TO CONTROL RECEPTACLE AS INDICATED
- PROVIDE DUPLEX RECEPTACLES IN AREAS INDICATED WITH HALF-SWITCHED OUTLETS. OUTLETS SHALL EACH HAVE A PERMANENT LABEL INDICATING TOP HALF OF RECEPTACLES ARE CONTROLLED.
- OPTIONAL LOW VOLTAGE WALL SENSOR CAN BE USED IF CEILING SENSOR IS NOT REQUIRED FOR ROOM COVERAGE. DELETE LOCAL SWITCH BETWEEN LGT RELAY PACK AND LGT. LOAD.







Electrical Load Calculation

608 SW Marvin Burnett Rd, Lake City, FL 32025

New Generation Gym

New Service Size: 300-amp 240 Volt 3 Phase 4 Wire

Total sf5000

Lighting Loads

Fluorescent Areas(A)36 x 62 VA = 2232 x 125% = 2790 VA

Surface Mount(F)6 x 12 VA = 72 x 125% = 90 VA

Receptacles

Non-Continuous45 x 360 VA = 16200 x 100% = 16200 VA

Outdoor10 x 360 VA = 3600 x 100% = 3600 VA

Special Loads

Water Heater (Tankless)1 x 10000 VA = 10000 x 100% = 10000 VA

A/C & Heating

6.5K BTU Heat (Qty: 3)3 x 6500 VA = 19500 x 100% = 19500 VA

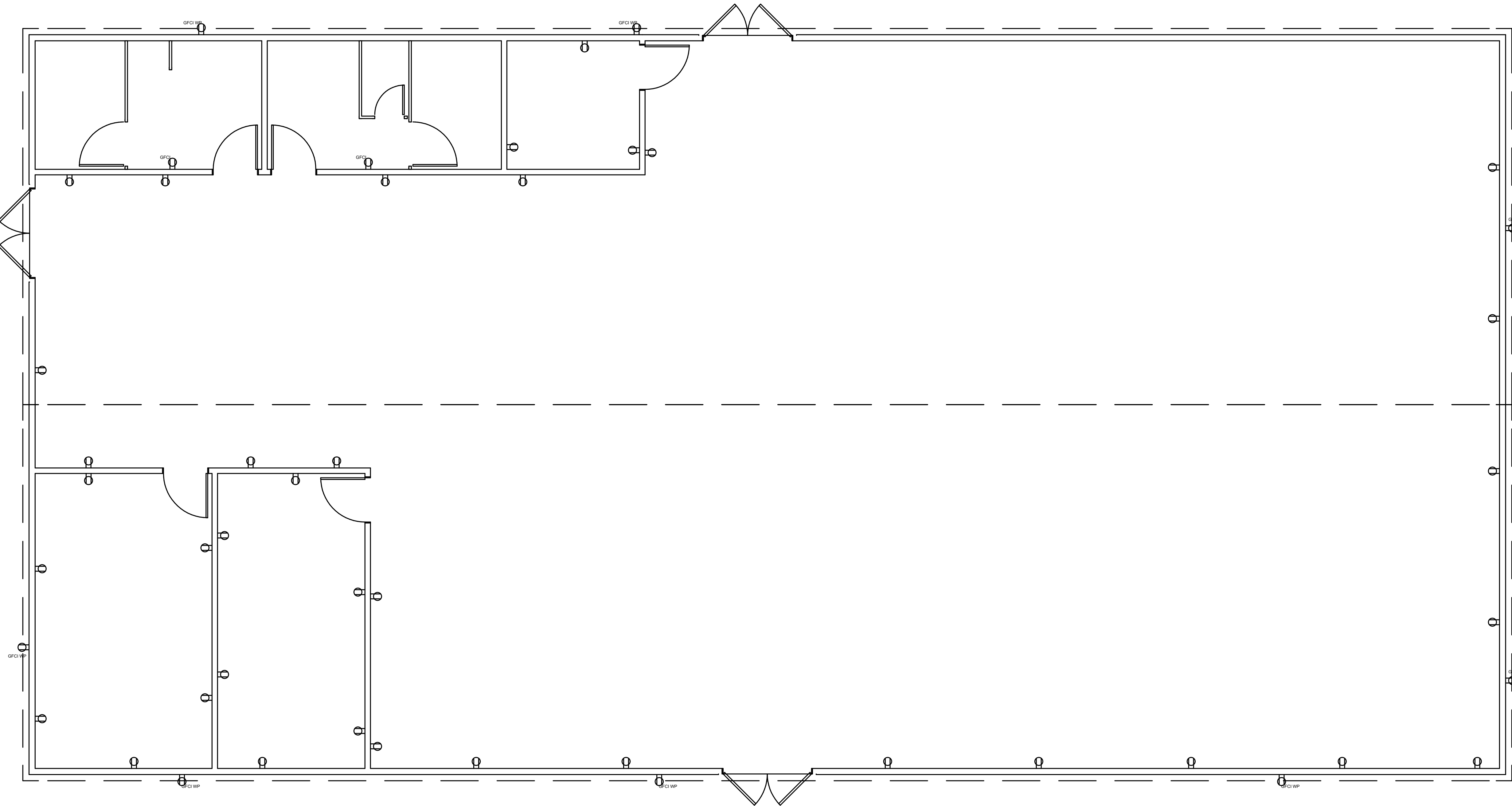
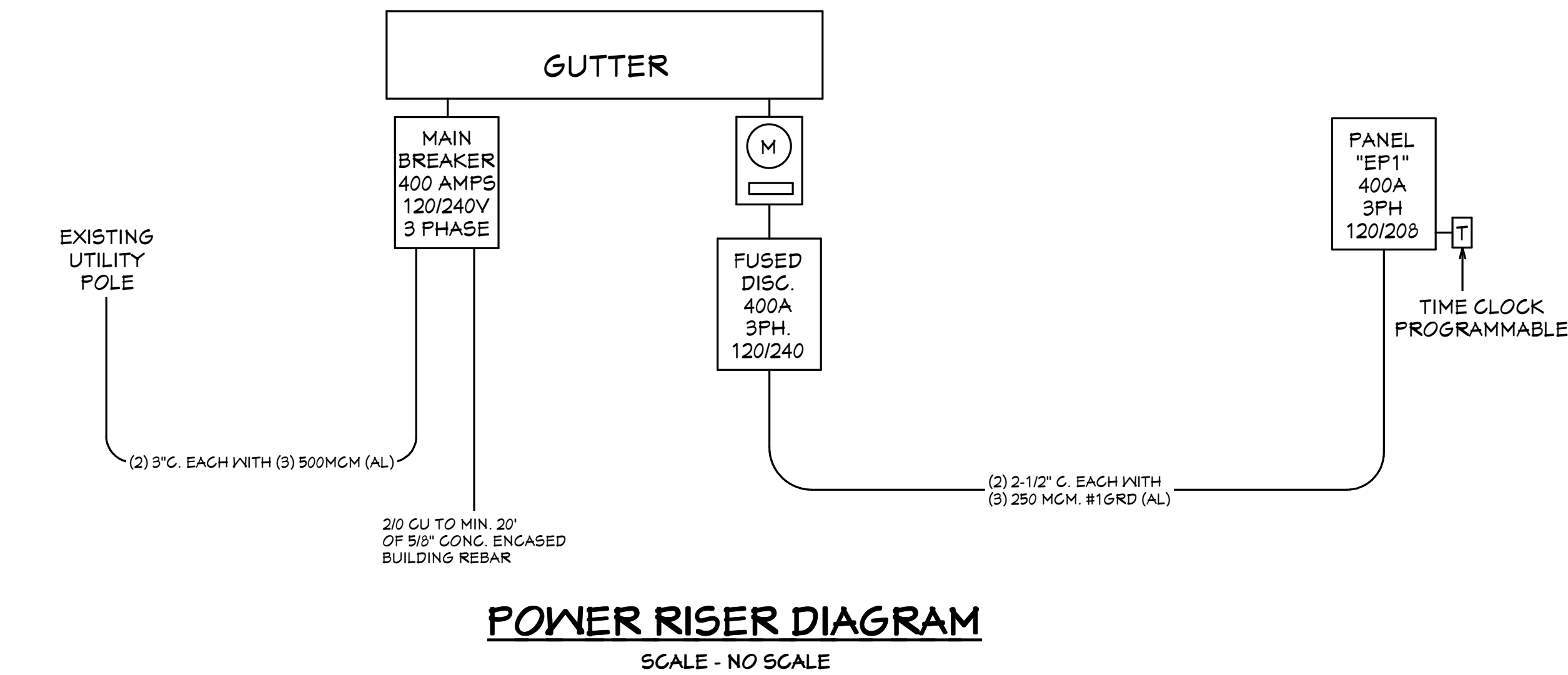
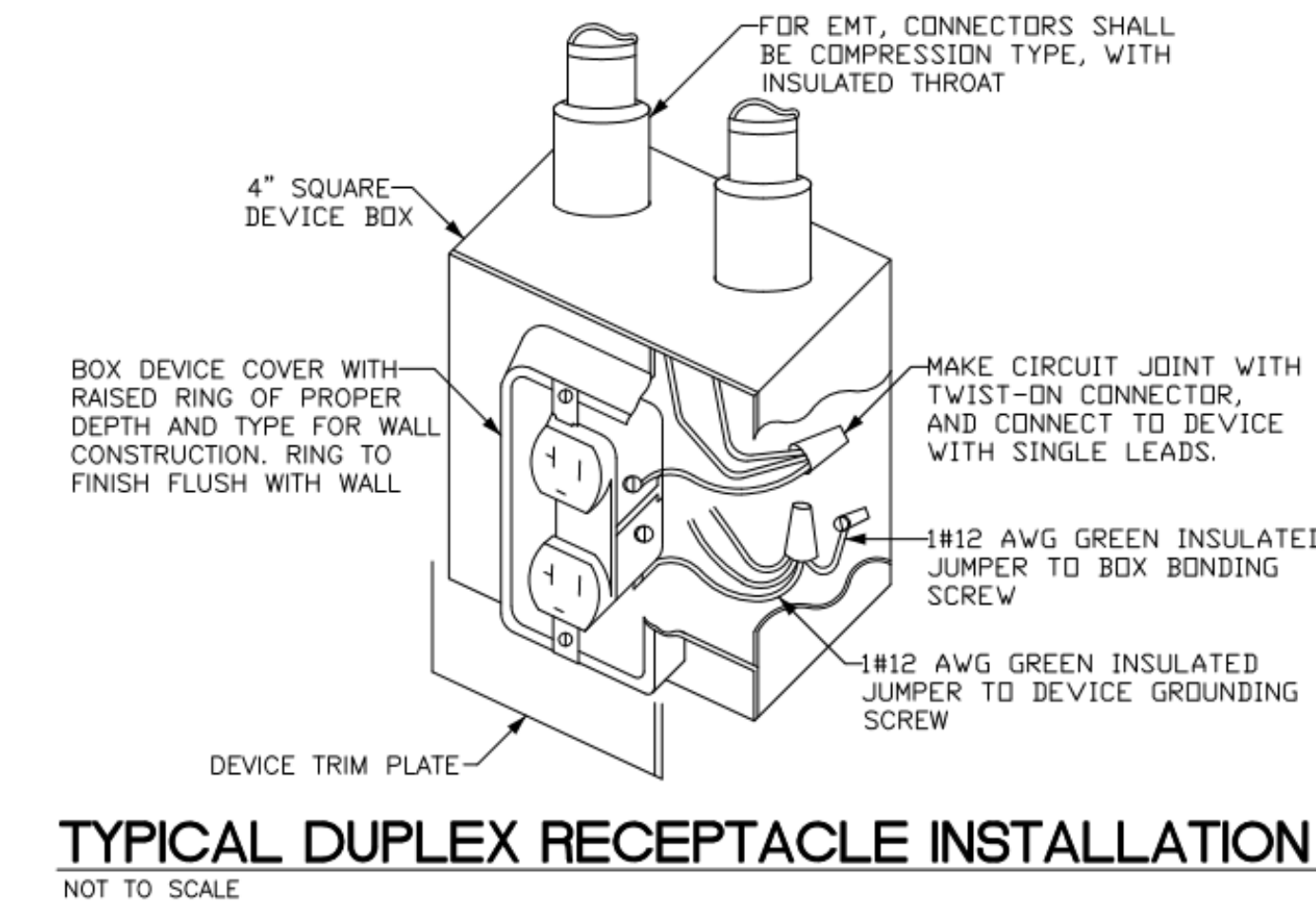
Motor Loads

Air Handler Blowers5 x 1600 VA = 8000 x 100% = 8000 VA

Largest Motor1600 x 25% = 400 VA

Total Load60580 VA

240 x 1.73 = 41560580/41 / 415 = 146 Amps



Power Plan  
Scale - 1/4 " = 1'

SCHEDULE OF BRANCH CIRCUIT PANEL "EP1"															
MAIN: 300 AMP MLO:300 MCB: NO SPEC: MOUNTING: SURFACE								VOLTAGE: 120/208V, 3C 4W GRND BUS: YES LOCATION: TENANT AIC SYMM: 22,000 FED FROM: METER CENTER							
DESCRIPTION	WIRE	GND	COND.	TRIP	CKT.	KVA	NOTES	KVA	CKT.	TRIP	COND.	GND	WIRE	DESCRIPTION	
LIGHTING	#12	#12	1/2"	20	1	1.5		1.5	2	20	1/2"	#12	#12	EXTERIOR LIGHTING	
LIGHTING	#12	#12	1/2"	20	3	1.5			4						
SIGN	#12	#12	1/2"	20	5	1.0		1.0	6	20	1/2"	#12	#12	PHONE BOARD	
RECEPTACLES	#12	#12	1/2"	20	7	1.5		.8	8	20	1/2"	#12	#12	EXIT LIGHTING	
RECEPTACLES	#12	#12	1/2"	20	9	1.5			10	20	1/2"	#12	#12		
RECEPTACLES	#12	#12	1/2"	20	11	1.5			12	20	1/2"	#12	#12		
RECEPTACLES	#12	#12	1/2"	20	13	1.5			14						
RECEPTACLES	#12	#12	1/2"	20	15	1.5		10	16	50	1"	#8	#6	TANKLESS W/H	
R/R LIGHTING	#12	#12	1/2"	20	17	1.5			18						
MSMZ1	#8	#8	3/4"	30	19	7			20						
					21				22						
MSMZ2	#8	#8	3/4"	30	23	7			24						
					25				26						
PCKG1	#6	#6	1"	60	27	15			28						
					29				30						
PCKG2	#6	#6	1"	60	31	15			32						
					33				34						
PCKG3	#6	#6	1"	60	35	15			36						
					37				38						
EXTERIOR RECEPTACLES	#12	#12	1/2"	20	39	1.5			40						
							TOTAL VA		87.0						

North Arrow

Power Plan

Kyle McDonough P.E.  
Lic: 83601

STATE OF FLORIDA  
PROFESSIONAL ENGINEER  
No. 83601

3D Model

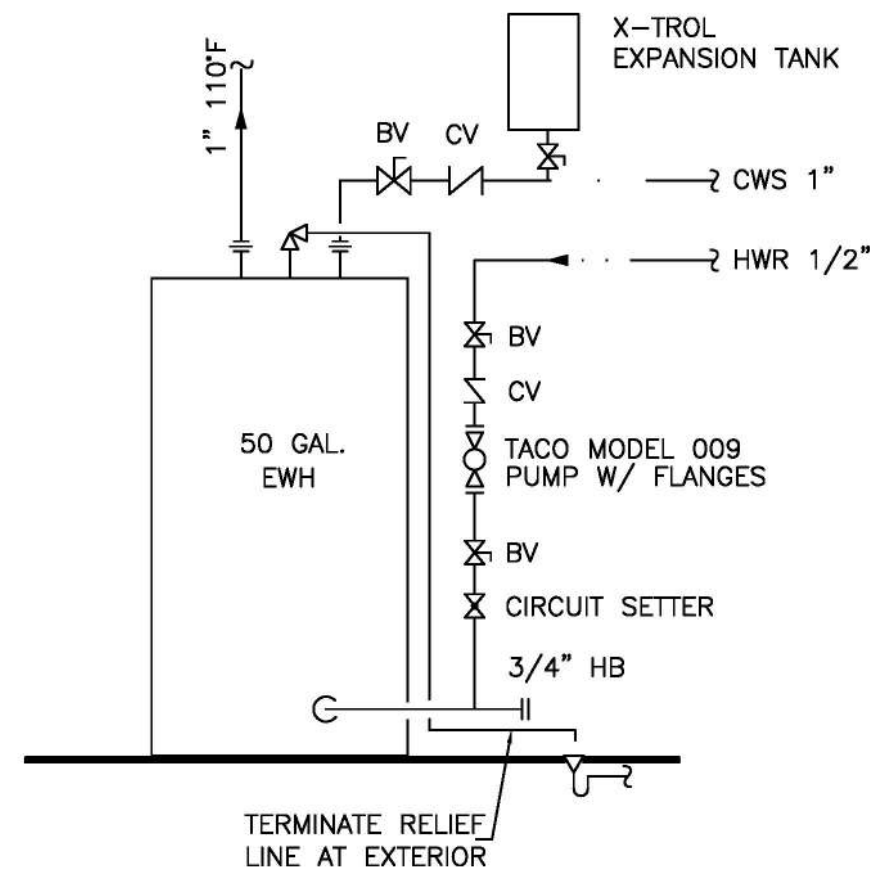
Construction of a New Commercial Building  
New Generation Gymnasium  
608 SW Marvin Burnett Rd, Lake City, FL 32025

04/03/20  
KWB  
2020.04.11

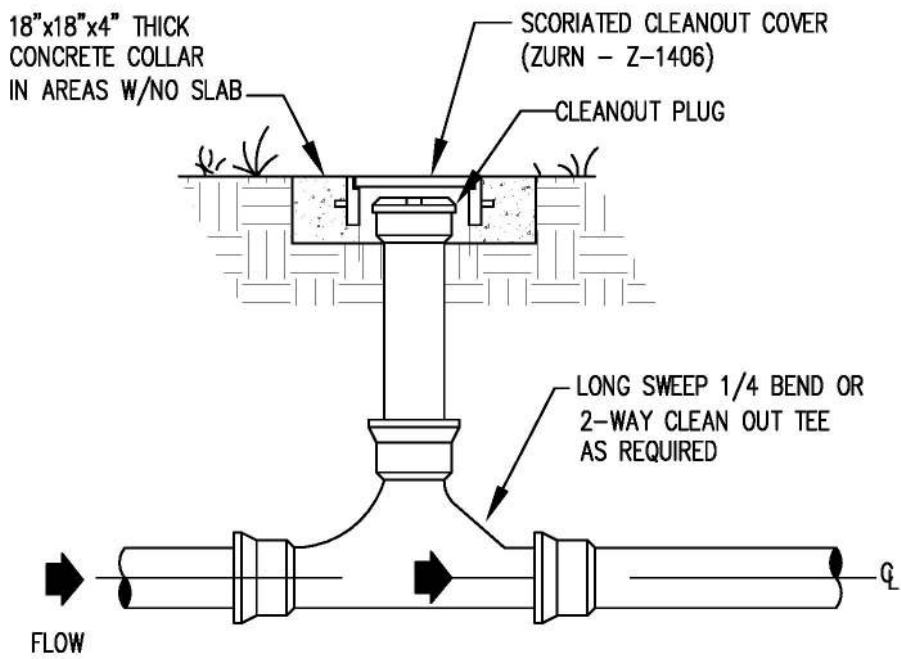
SHEET  
A1011



PLUMBING MATERIAL SPECIFICATIONS
<b>SANITARY WASTE/VENT PIPING:</b> TUBE: PVC SCHEDULE 40 DWV, ASTM D 1785, FOAM CORE NOT ACCEPTED FITTINGS: PVC PLASTIC FITTINGS, SCHEDULE 40, ASTM D 2466, FOAM CORE NOT ACCEPTED JOINTS: SOLVENT CEMENTS FOR PVC PIPE AND FITTINGS, ASTM D 2564, FOAM CORE NOT ACCEPTED PROVIDE FIRE WRAP FOR PVC PIPE IN PLENUM CEILING AREAS, 3M FIRE BARRIER PLENUM WRAP 5A OR EQUAL
<b>STORM WATER/EMERGENCY STORM WATER PIPING:</b> TUBE: CAST IRON STORM PIPE SHALL BE BELL AND SPIGOT BELOW GRADE AND NO-HUB ABOVE GRADE. THE MATERIAL FOR ALL PIPE AND FITTINGS SHALL BE CAST IRON SOIL PIPE AND FITTINGS AND SHALL CONFORM TO THE REQUIREMENTS OF CISPI STANDARD 301, ASTM A-888, OR ASTM A-74. JOINTS: FOR HUBLESS PIPE AND FITTINGS SHALL CONFORM TO THE MANUFACTURER'S INSTALLATION INSTRUCTIONS. COUPLINGS FOR HUBLESS JOINTS SHALL CONFORM TO CISPI 310. JOINTS FOR HUB AND SPIGOT PIPE SHALL BE INSTALLED WITH COMPRESSION GASKETS CONFORMING TO THE REQUIREMENTS OF ASTM STANDARD C-564.
<b>DOMESTIC WATER PIPING:</b> TUBE: CPVC, CTS PIPE, PLASTIC HOT AND COLD WATER DISTRIBUTION SYSTEMS, ASTM D2846 FITTINGS: CPVC PLASTIC FITTINGS, ASTM F438. JOINTS: SOLVENT CEMENTS FOR CPVC PIPE AND FITTINGS, ASTM F493
<b>VALVES</b> ALL VALVES FOR DOMESTIC HOT AND COLD WATER DRISTIBUTION SYSTEM SHALL BE CONFORM TO REQUIREMENTS OF ASTM D 2846. OPERATING PRESSURE SHALL NOT EXCEED 80% OF THE VALVE PRESSURE CLASS.
<b>INSULATION</b> PROVIDE 1" ELASTOMERIC INSULATION FOR ABOVE-GRADE DOMESTIC HOT WATER PIPING AND COLD WATER PIPING IF LOCATED IN VENTED ATTIC SPACE. PROVIDE 2" FIBERGLASS BLANKET WITH ASJ SEALED AND TAPED FOR STORM WATER PIPING.
<b>SUPPORTS</b> PROVIDE PIPING HANGERS AND SUPPORTS SIZED AND SPACED PER CURRENT FBC 2007 AND PROVIDE 6" SADDLES UNDER ALL INSULATED PIPING.
<b>SHOCK ARRESTORS</b> PROVIDE SHOCK ARRESTORS PER CODE SIZED TO PDI STANDARDS. AIR CHAMBERS ARE NOT ACCEPTABLE.



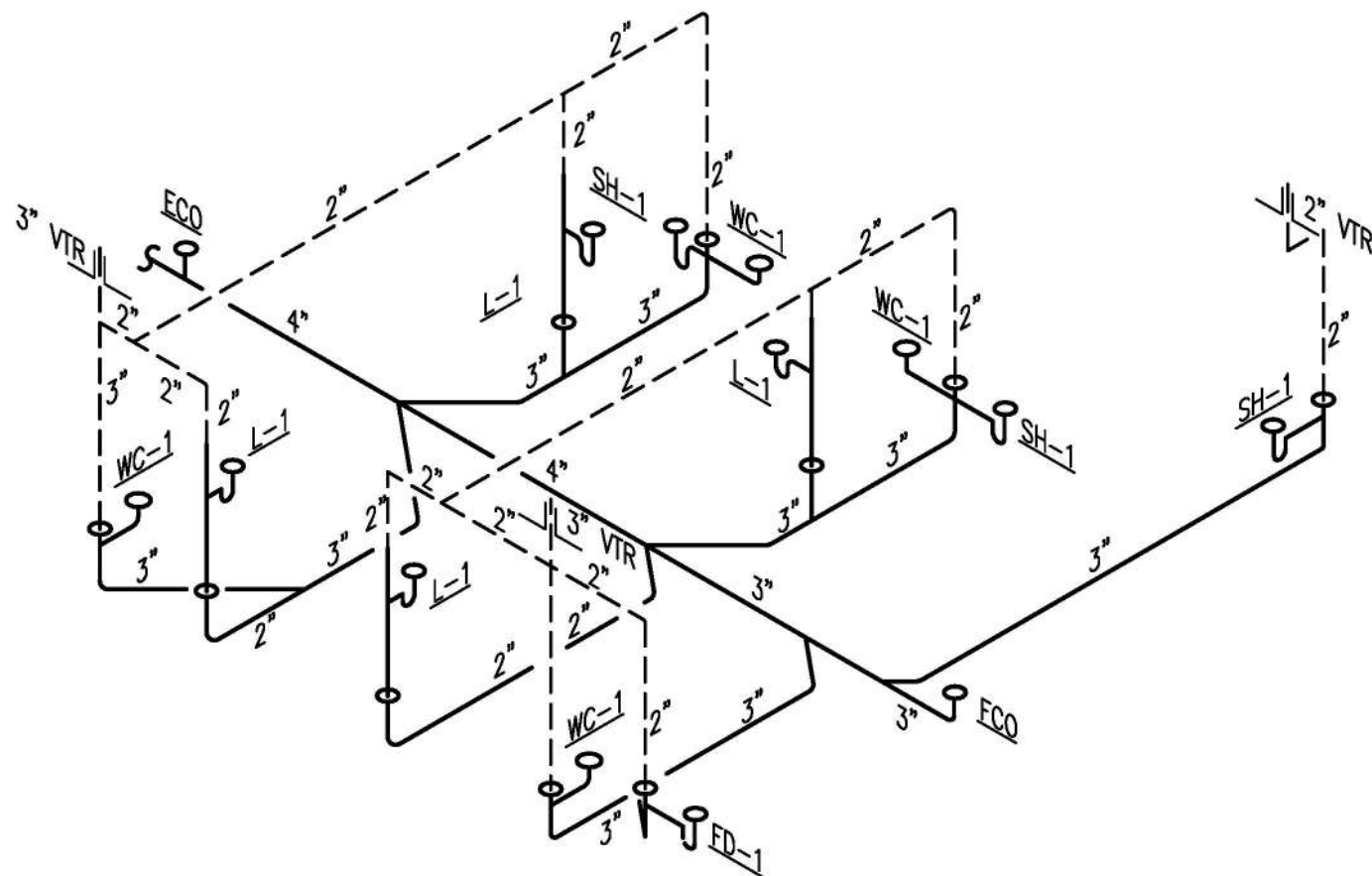
WATER HEATER (WH-1) DETAIL  
NOT TO SCALE



EXTERIOR CLEANOUT DETAIL  
NOT TO SCALE

PLUMBING FIXTURE SCHEDULE					
FIXTURE	DESCRIPTION	MANUFACTURER	WASTE	CW	HW
WC-1	<b>WATER CLOSET, ADA</b> 17-1/8" HEIGHT, ELONGATED TOILET, VITREOUS CHINA, FLOOR MOUNTED, FLOOR OUTLET, FLUSH TANK TYPE, LOW CONSUMPTION 1.6 GPF. SEAT INSTALLED MIN. 18" FROM FINISH FLOOR TO TOP OF SEAT SEAT: EXTRA HEAVY DUTY PLASTIC, OPEN FRONT SEAT LESS COVER WITH CONCEALED CHECK AND STAINLESS STEEL HINGE POST. STOP: 1/2" CHROME PLATED BRASS WHEEL HANDLE ANGLED STOP, CHROME PLATED STEEL FLANGE AND 12" FLEXIBLE CHROME PLATED COPPER WATER CLOSET RISER. ACCESSORIES: HEAVY DUTY WAX BOWL RING, WAX GASKET FOR SETTING ANY FLOOR TYPE WATER CLOSET BOWL.	KOHLER K-3979  BEMIS CHURCH OLSONITE  McGUIRE MANUFACTURING  OATEY 31190	4"	1/2"	-
L-1	<b>LAVATORY, ADA</b> WALL HUNG LAVATORY, VITREOUS CHINA, FAUCET HOLES ON 4" CENTERS. FAUCET: ADA COMPLIANT, SINGLE LEVER, CHROME TEMPERED WATER: PROVIDE WATER TEMPERATURE LIMITING DEVICE (THERMOSTATIC MIXING VALVE) THAT CONFORMS TO ASSE 1070 PER FPC 416.5 STOPS/ACCESSORIES: 1/2" CHROME PLATED BRASS WHEEL HANDLE ANGLED STOP, CHROME PLATED STEEL FLANGE AND 12" FLEXIBLE CHROME PLATED COPPER LAVATORY RISERS, GRID DRAIN WITH OFFSET TAILPIECE AND CHROME PLATED P-TRAP MOUNT AT HANDICAPPED HEIGHT, PROVIDE BLOCKING IN WALL FOR MOUNTING OF LAVATORY SUPPLY LAV-GUARD INSULATION KIT.	KOHLER K-2032  CHICAGO 420-T41AB  WATTS MMV  McGUIRE MANUFACTURING  TRUEBRO MODEL#102G  TRUEBRO #102G	1-1/4"	1/2"	1/2"
EW-1	<b>ELECTRIC WATER COOLER, ADA</b> DOUBLE UNIT, ADA, STAINLESS STEEL, REFRIGERATED	ELKAY ELKAY EZSTLBC	1-1/4"	1/2"	-
SH-1	<b>ADA COMPLIANT SHOWER UNIT:</b> 36 IN. X 36 IN. X 80.4 IN DRAIN: 2" CAST BRASS, CHROME PLATED STRAINER SHOWER SYSTEM: SYMMONS BP-300-B30-VX	AQUATIC 727148391348 SIMMONS BP-300-B30-VX	2"	1/2"	1/2"
ECO	<b>EXTERIOR CLEANOUT</b> EXTERIOR, ADJUSTABLE CLEANOUT, DUCO COATED, CI BODY, ABS TAPERED PLUG WITH GASKET, HEAVY DUTY TOP.	ZURN ZB-1400-HD	MATCH PIPE	-	-
FCO	<b>FLOOR CLEAN OUT</b> NTERIOR, FLOOR TYPE, ABS TAPERED PLUG, WITH GASKET SEAL AND ADJUSTABLE SECURED, NICKEL BRONZE TOP. "C.O." CAST IN COVER. SPANNER WRENCH REMOVABLE.	JR SMITH 4033-NB	MATCH PIPE SIZE	-	-
TP	<b>TRAP PRIMER</b> WATER SAVER TYPE, CP BRONZE, 1/2" PIPING AND ESCUTCHEON PLATES. ROUTE PRIMER PIPING IN WALL TO FLOOR DRAIN.	J.R. SMITH 2698	-	1/2"	-
HB	<b>HOSE BIBB</b> FROST-PROOF, ANTI-SIPHON WALL HYDRANT	ZURN Z1321	-	3/4"	-
FD-1	<b>FLOOR DRAIN</b> DUCO CAST IRON BODY AND FLASHING COLLAR WITH SLOTTED SEDIMENT BUCKET, 12" SQUARE NICKEL BRONZE TOP. PROVIDE 1/2" TRAP PRIMER CONNECTION.	JAY R. SMITH 2240	3"	1/2"	-

WATER HEATER SCHEDULE									
TAG	SERVICE	MAN/MODEL	TYPE	GALLONS	RECOVERY	POWER	ELEMENTS/WATTS	TANK SIZE	TANK PRESS.
WH-1	SINK/SHOWER	RHEEM PROE50 T2 RH95	ELEC	50	21 GPH 90°F RISE	208 VOLTS 1 PHASE	2/4500W	48" HT. 23" DIA.	150 PSI
NOTES: 1. ROUTE RELIEF VALVE DISCHARGE TO WATER HEATER PAN AND PAN DRAIN TO MOP SINK.									



RISER DIAGRAM - SANITARY WASTE AND VENT  
SCALE: NO SCALE

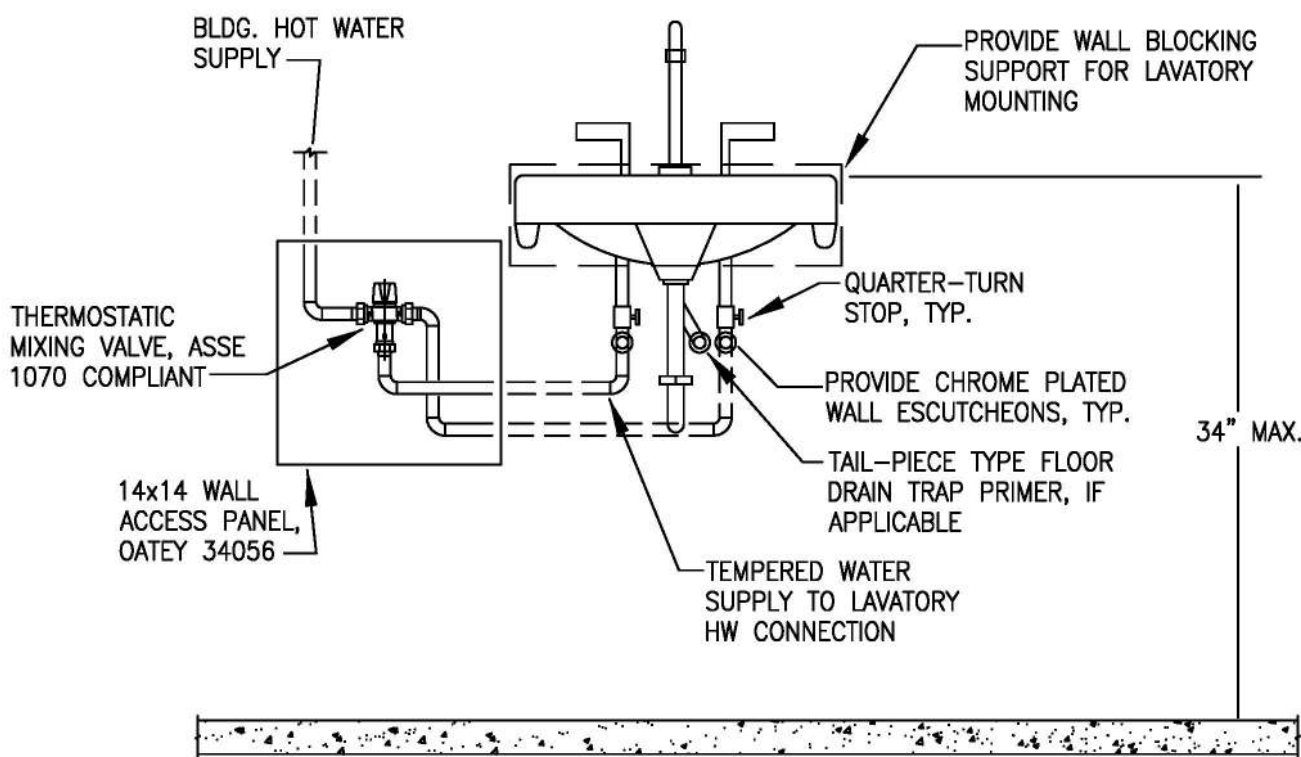
## PLUMBING GENERAL NOTES

- ALL WORK SHALL BE PERFORMED IN ACCORDANCE WITH THE 2017 FLORIDA BUILDING CODE - PLUMBING, NFPA 70, NFPA 101, AND THE AMERICAN DIABILITIES ACT (ADA).
- PLANS ARE NOT COMPLETELY TO SCALE. PIPE ROUTING SHOWN IS SCHEMATIC AND IS NOT INTENDED TO INDICATE EXACT ROUTING AND ANY ADDITIONAL OFFSETS AND FITTINGS REQUIRED FOR PROPER INSTALLATION AND TO MAINTAIN CLEARANCES. VERIFY STRUCTURAL, MECHANICAL AND ELECTRICAL INSTALLATIONS AND OTHER POTENTIAL OBSTRUCTIONS AND ROUTE PIPING TO AVOID INTERFERENCES.
- SLEEVE AND FIRE STOP PENETRATIONS OF RATED WALLS, FLOORS, CEILINGS AND ROOFS. FLASH AND COUNTERFLASH ROOF PENETRATIONS.

PROVIDE SIX SETS (GC DETERMINE EXACT QUANTITY) OF SHOP DRAWINGS OF PLUMBING FIXTURES, PIPING MATERIALS/FITTINGS, INSULATION, VALVES, AND EQUIPMENT FOR REVIEW BY ENGINEER OF RECORD. SHOP DRAWINGS SHALL BE ASSEMBLED BY THE CONTRACTOR IN A BOUND BOOKLET AND BE COMPLETE INCLUDING ALL ITEMS REQUIRED IN THE PLUMBING CONTRACT. IN-COMPLETE BOOKLETS PUT TOGETHER BY A FIXTURE MANUFACTURER WILL BE REJECTED AND RETURNED.

## SHOCK ARRESTER SCHEDULE

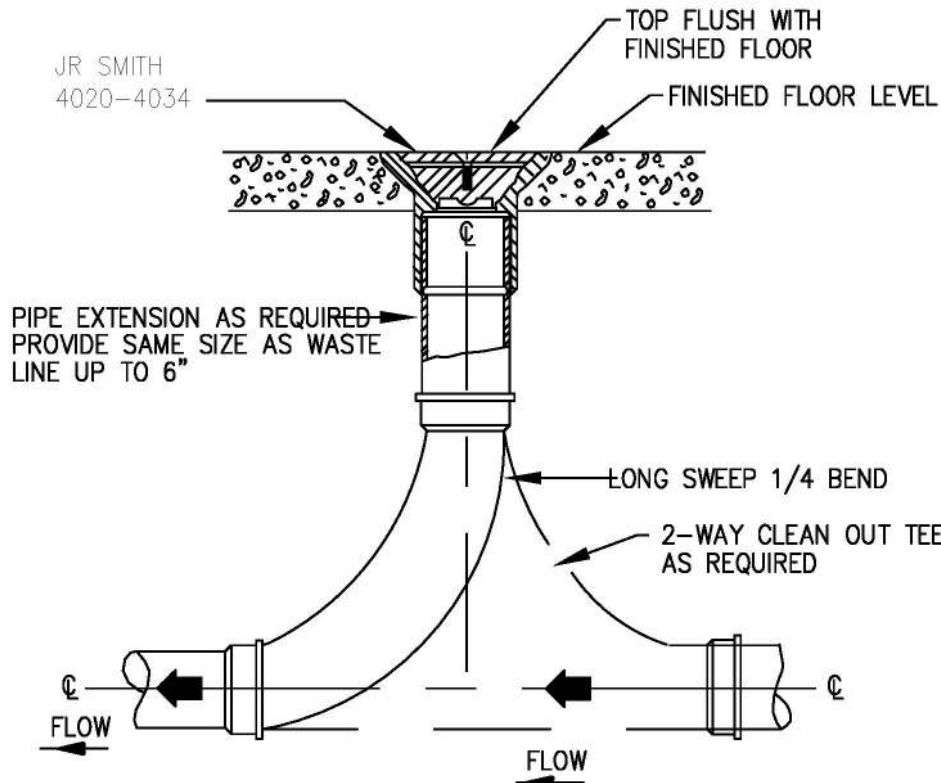
PDI UNITS	SA-A	SA-B	SA-C	SA-D	SA-E	SA-F
FIXTURE UNITS	1-11	12-32	33-60	61-113	114-154	155-330
NOTES: 1. PROVIDE SHOCK ARRSTERS AS INDICATED ON PLAN AND SIZED IN ACCORDANCE WITH THIS SCHEDULE BASED ON STANDARD PDI-WH 201.						



- NOTES:
- TMV VALVE AND ALL ASSOCIATED PIPING SHALL BE RECESSED WITHIN THE WALL CAVITY, COORDINATE WITH THE G.C. FOR EXTRA WALL FURRING AS REQUIRED FOR ADEQUATE SPACE. PROVIDE BLOCKING TO MOUNT TMV AS REQUIRED.
  - THE ONLY EXPOSED PIPING SHALL BE THE COLD, TEMPERED, TRAP PRIMER (IF APPLICABLE), AND DRAIN FOR THE LAVATORY, ALL PIPING HELD AS HIGH AS POSSIBLE
  - COUNTERTOP STYLE LAVATORY SIMILAR, PROVIDE TMV RECESSED IN WALL.
  - PROVIDE LAV-GUARD INSULATION KIT FOR ALL EXPOSED PIPING.

## HANDSINK DETAIL

SCALE: NO SCALE



## INTERIOR CLEANOUT DETAIL

NOT TO SCALE

## PLUMBING LEGEND

### ABBREVIATIONS & SYMBOLS:

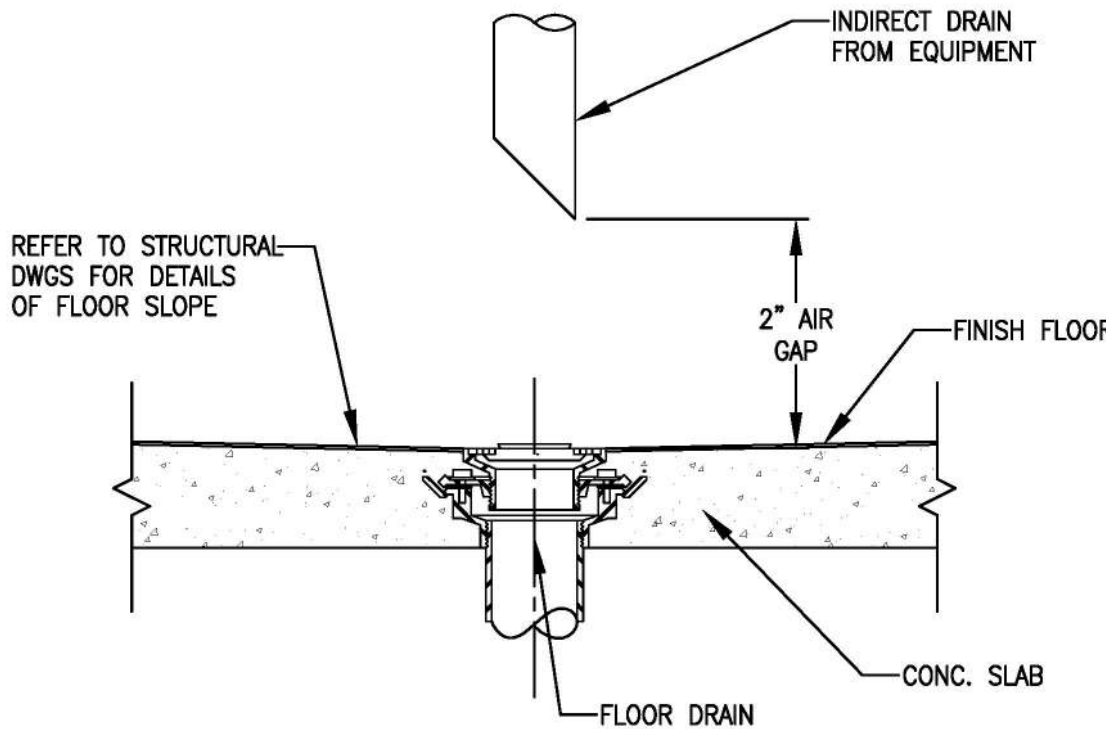
—|| WALL CLEAN OUT  
○ FLOOR CLEAN OUT  
A/C ABOVE CEILING  
AP ACCESS PANEL  
B/G BELOW GROUND  
B/F BELOW FLOOR  
BFP BACK FLOW PREVENTER  
EX. EXISTING  
HD HUB DRAIN  
VTR VENT THROUGH ROOF  
TP TRAP PRIMER  
WH WATER HEATER  
FW FILTERED WATER  
COOG CLEANOUT ON GRADE  
WCO WALL CLEANOUT  
FCO FLOOR CLEANOUT  
● POINT OF CONNECTION - NEW WORK TO EXISTING

### PLUMBING FIXTURES:

FD FLOOR DRAIN  
WH WALL HYDRANT  
HB HOSE BIBB  
L LAVATORY  
MS MOP SINK  
S SINK  
SA-A SHOCK ARRESTOR - P.P.I. SIZE  
SS SERVICE SINK  
TMV THERMOSTATIC MIXING VALVE  
UR URINAL  
WC WATER CLOSET  
WB WASHER BOX  
TMV THERMOSTATIC MIXING VALVE

### PIPING & VALVES:

● BALL VALVE  
—|— BUTTERFLY VALVE  
—X— GLOBE VALVE  
—|— STRAINER  
—|— PIPE UNION  
—Z— CHECK VALVE  
—|— ASME PRESSURE/TEMPERATURE RELIEF VALVE  
—|— TEMPERED WATER MIXING VALVE  
○ PIPE UP  
○ PIPE DOWN  
—|— SHOCK ARRESTOR  
—|— NEW SANITARY (S)  
—|— EXISTING SANITARY (S)  
—|— NEW COLD WATER (CW)  
—|— HOT WATER (110°F)  
—|— SANITARY VENT (V)

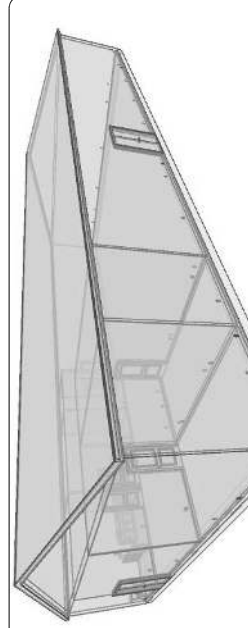
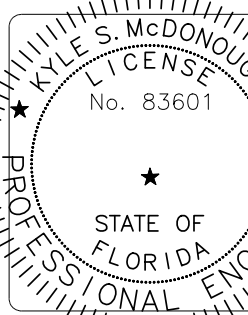
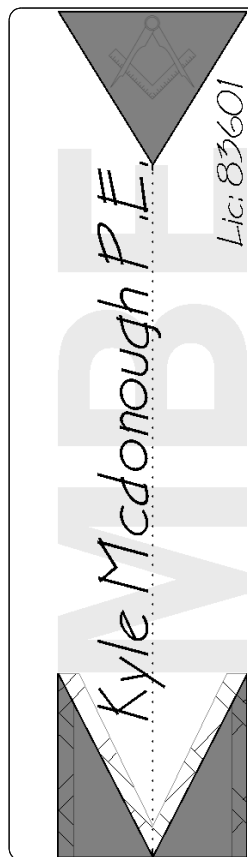


## INDIRECT WASTE DETAIL

NOT TO SCALE



## Plumbing Notes & General Details



Construction of a New Generation Building  
**New Generation Gymnasium**  
600 S.W. Marvin Burnett Rd, Lake City, FL 32025

04/03/20  
KMB  
2020.641

SHEET  
**A1012**