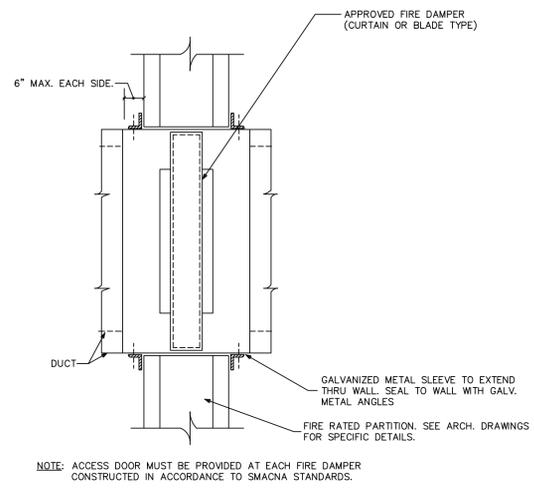


"TO THE BEST OF MY KNOWLEDGE, THE PLANS AND SPECIFICATIONS SUBMITTED HERewith COMPLY WITH EXISTING INTERPRETATIONS AND PROVISIONS OF THE APPLICABLE BUILDING CODES. THIS DRAWING IS THE PROPERTY OF TODD W. CAREY AND ASSOCIATES OF THE CAROLINAS, PA, AND IS AN INSTRUMENT OF SERVICE NOT TO BE REPRODUCED IN WHOLE OR IN PART WITHOUT THE EXPRESS WRITTEN PERMISSION OF SAME."



**TODD W. CAREY & ASSOCIATES**  
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429 CANVASBACK ROAD, MOORESVILLE, N.C. 28117  
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**FIRE DAMPER DETAIL**  
NO SCALE

**OUTSIDE AIR CALCULATIONS**

THE FOLLOWING IS BASED ON ASHRAE STANDARD 62 FOR OUTSIDE AIR REQUIREMENTS:  
OUTDOOR AIR REQUIREMENTS ARE BASED ON "OFFICE" CATEGORY = 7 PEOPLE PER 1,000 SQ. FT. & 20 CFM PER PERSON

UNIT LABEL	AREA SERVED (SQ. FT.)	ESTIMATED MAX. OCCUPANCY	OUTSIDE AIR REQUIRED (CFM)
AHU #1	1,169	1,169 / 1000 X 7 = 9	9 X 20 = 180

**OUTSIDE AIR CALCULATIONS**

THE FOLLOWING IS BASED ON ASHRAE STANDARD 62 FOR OUTSIDE AIR REQUIREMENTS:  
OUTDOOR AIR REQUIREMENTS ARE BASED ON "CONFERENCE ROOM" CATEGORY = 50 PEOPLE PER 1,000 SQ. FT. & 20 CFM PER PERSON

UNIT LABEL	AREA SERVED (SQ. FT.)	ESTIMATED MAX. OCCUPANCY	OUTSIDE AIR REQUIRED (CFM)
AHU #2	505	505 / 1000 X 50 = 26	26 X 20 = 520

**H.V.A.C. ABBREVIATION LEGEND**

A/C	AIR CONDITIONER	REV.	REVISION	A.H.U.	AIR HANDLING UNIT
DN.	DOWN	N.T.S.	NOT TO SCALE	D.G.	DOOR GRILLE
EXH.	EXHAUST	MFG.	MANUFACTURER	F.I.D.	FIRE DAMPER
EXT.	EXTERIOR	R/A	RETURN AIR	DISP.	DISPOSABLE
E.F.	EXHAUST FAN	GR.	GRILLE	V.C.D.	VOLUME CONTROL DAMPER
A.F.F.	ABOVE FINISH FLOOR	C.D.	CEILING DIFFUSER	F/A	FRESH AIR
F.F.	FINISH FLOOR	REG.	REGISTER	S.P.	SAFE PAN
TYP.	TYPICAL	C.U.	CONDENSING UNIT	CD.	CONDENSATE DRAIN

- MECHANICAL SPECIFIC NOTES**
- 3"Ø TOILET EXHAUST UP THRU CORRIDOR WALL TO ROOF. REFER TO TYPICAL EXHAUST RISER ON SHEET M-4.
  - REFRIGERANT PIPING ABOVE CEILING. CONTINUE TO AHU #1,2,3 AND A/C #1. ALL REFRIGERANT PIPING SHALL BE SIZED AS PER MANUFACTURERS RECOMMENDATIONS.
  - LAUNDRY CHUTE IS A FIRE RATED SHAFT WITH FIRE RATED ACCESS DOOR. REFER TO ARCHITECTURAL PLANS FOR DETAILS.
  - THIS ROOM IS AN A/C CLOSET AND DOES NOT FALL INTO THE MECHANICAL ROOM CATEGORY. REFER TO ARCHITECTURAL PLANS FOR DETAILS.
  - PROVIDE NEW FIRE DAMPER AT FIRE WALL PENETRAION. REFER TO FIRE DAMPER DETAIL ON THIS SHEET.

**OUTSIDE AIR CALCULATIONS**

THE FOLLOWING IS BASED ON ASHRAE STANDARD 62 FOR OUTSIDE AIR REQUIREMENTS:  
OUTDOOR AIR REQUIREMENTS ARE BASED ON "HOTEL LOBBY" CATEGORY = 30 PEOPLE PER 1,000 SQ. FT. & 15 CFM PER PERSON

UNIT LABEL	AREA SERVED (SQ. FT.)	ESTIMATED MAX. OCCUPANCY	OUTSIDE AIR REQUIRED (CFM)
AHU #3	842	842 / 1000 X 30 = 26	26 X 15 = 390

**OUTSIDE AIR CALCULATIONS**

THE FOLLOWING IS BASED ON ASHRAE STANDARD 62 FOR OUTSIDE AIR REQUIREMENTS:  
OUTDOOR AIR REQUIREMENTS ARE BASED ON "CORRIDOR" CATEGORY = .05 CFM PER SQ. FT.

UNIT LABEL	AREA SERVED (SQ. FT.)	ESTIMATED MAX. OCCUPANCY	OUTSIDE AIR REQUIRED (CFM)
AHU #3	316	316 / 1000 X - = -	316 X .05 = 16

TOTAL OUTSIDE AIR CFM FOR AHU #3 = 406

**OUTSIDE AIR CALCULATIONS**

THE FOLLOWING IS BASED ON ASHRAE STANDARD 62 FOR OUTSIDE AIR REQUIREMENTS:  
OUTDOOR AIR REQUIREMENTS ARE BASED ON "DINING" CATEGORY = 70 PEOPLE PER 1,000 SQ. FT. & 20 CFM PER PERSON

UNIT LABEL	AREA SERVED (SQ. FT.)	ESTIMATED MAX. OCCUPANCY	OUTSIDE AIR REQUIRED (CFM)
AHU #4	499	499 / 1000 X 70 = 34	34 X 20 = 680

**OUTSIDE AIR CALCULATIONS**

THE FOLLOWING IS BASED ON ASHRAE STANDARD 62 FOR OUTSIDE AIR REQUIREMENTS:  
OUTDOOR AIR REQUIREMENTS ARE BASED ON "TOILET ROOMS" CATEGORY = 50 CFM PER WC OR UR

UNIT LABEL	AREA SERVED (SQ. FT.)	ESTIMATED MAX. OCCUPANCY	OUTSIDE AIR REQUIRED (CFM)
AHU #4	-	- / 1000 X - = -	2 X 50 = 100

**OUTSIDE AIR CALCULATIONS**

THE FOLLOWING IS BASED ON ASHRAE STANDARD 62 FOR OUTSIDE AIR REQUIREMENTS:  
OUTDOOR AIR REQUIREMENTS ARE BASED ON "CORRIDOR" CATEGORY = .05 CFM PER SQ. FT.

UNIT LABEL	AREA SERVED (SQ. FT.)	ESTIMATED MAX. OCCUPANCY	OUTSIDE AIR REQUIRED (CFM)
AHU #4	492	492 / 1000 X - = -	492 X .05 = 25

TOTAL OUTSIDE AIR CFM FOR AHU #4 = 805

**OUTSIDE AIR CALCULATIONS**

THE FOLLOWING IS BASED ON ASHRAE STANDARD 62 FOR OUTSIDE AIR REQUIREMENTS:  
OUTDOOR AIR REQUIREMENTS ARE BASED ON "CORRIDOR" CATEGORY = .05 CFM PER SQ. FT.

UNIT LABEL	AREA SERVED (SQ. FT.)	ESTIMATED MAX. OCCUPANCY	OUTSIDE AIR REQUIRED (CFM)
AHU #5	975	975 / 1000 X - = -	975 X .05 = 49
AHU #6	823	823 / 1000 X - = -	823 X .05 = 41
AHU #7	823	823 / 1000 X - = -	823 X .05 = 41
AHU #8	823	823 / 1000 X - = -	823 X .05 = 41

**SUPPLY DIFFUSER SCHEDULE**

DESIGNATES LABEL FOR DIFFUSER TYPE  
DESIGNATES CFM QUANTITY FOR DIFFUSER

LABEL	MANUFACTURER & MODEL NO.	NECK SIZE	CFM RANGE	REMARKS
A	TITUS TDC-AA	6"Ø	0 - 125	12X12 LOUVERED FACE
B	TITUS TDC-AA	6"Ø	0 - 125	24X24 LOUVERED FACE
C	TITUS TDC-AA	8"Ø	130 - 200	24X24 LOUVERED FACE
D	TITUS TDC-AA	10"Ø	205 - 325	24X24 LOUVERED FACE
E	TITUS TDC-AA	12"Ø	330 - 500	24X24 LOUVERED FACE
F	TITUS 300RL	22X10	0 - 900	SIDEWALL REGISTER

**RETURN GRILLE SCHEDULE**

DESIGNATES LABEL FOR GRILLE TYPE  
DESIGNATES CFM QUANTITY FOR GRILLE

LABEL	MANUFACTURER & MODEL NO.	NECK SIZE	CFM RANGE	REMARKS
1	TITUS 355FL	10X10	0 - 400	
2	TITUS 355FL	12X12	400 - 650	
3	TITUS 355FL	24X24	700 - 2000	
4	TITUS 355FL	24X16	500 - 900	
5	TITUS 355FL	42X18	905 - 2000	

**OUTSIDE AIR CALCULATIONS**

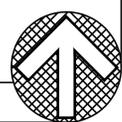
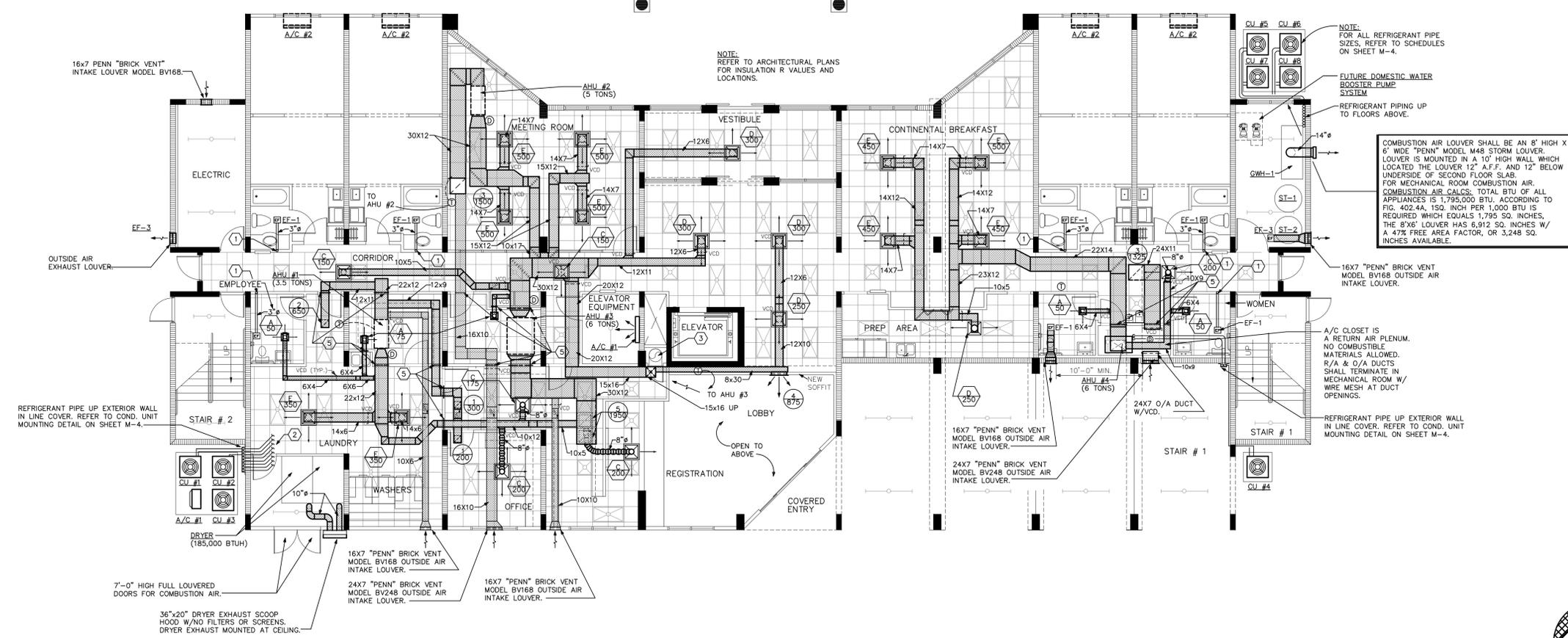
THE FOLLOWING IS BASED ON ASHRAE STANDARD 62 FOR OUTSIDE AIR REQUIREMENTS:  
OUTDOOR AIR REQUIREMENTS ARE BASED ON "HOTEL BEDROOM" CATEGORY = 30 CFM PER ROOM

UNIT LABEL	AREA SERVED (SQ. FT.)	ESTIMATED MAX. OCCUPANCY	OUTSIDE AIR REQUIRED (CFM)
A/C #2	-	- / 1000 X - = -	1 X 30 = 30
A/C #3	-	- / 1000 X - = -	1 X 30 = 30
A/C #4	-	- / 1000 X - = -	1 X 30 = 30

A/C #1 OUTSIDE AIR NOT REQUIRED. A/C #1 SERVES A ELEVATOR MACHINE ROOM.

**HVAC SYMBOLS LEGEND**

⊕	THERMOSTAT
⊖	EXHAUST FAN
⊕ ⊖	SECTION "A"- "A"
⊕	REMOTE BULB SENSOR
⊕	DUCT SMOKE DETECTOR
⊕	TRANSITION
⊕	TURNING VANE
⊕	45° BRANCH DUCT TAKE-OFF
⊕	FIRE DAMPER
⊕	VOLUME CONTROL DAMPER
⊕	RETURN REGISTER
⊕	SUPPLY DIFFUSER
⊕	RETURN AIR GRILLE
⊕	SUPPLY REGISTER
⊕	AIR FLOW DIRECTION
⊕	ROOF MTD. EXH. FAN
⊕	DUCT TURN DOWN
⊕	DUCT TURN UP
⊕	FLEXIBLE DUCT



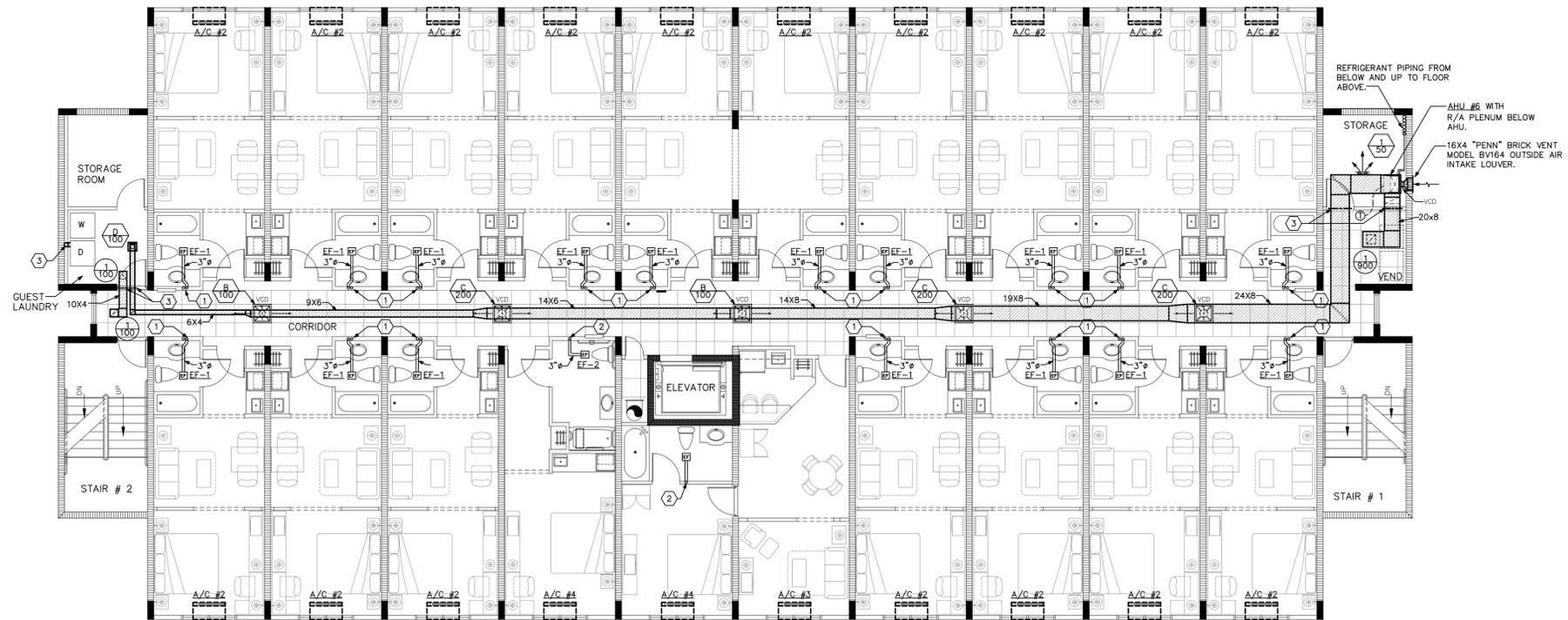
**GROUND FLOOR PLAN - MECHANICAL**

SCALE: 1/8"=1'-0"

SUPPLY DIFFUSER SCHEDULE				
DESIGNATES LABEL FOR DIFFUSER TYPE		ALL DIFFUSERS ARE TO BE PROVIDED WITH OPPOSED BLADE DAMPERS UNLESS OTHERWISE SPECIFIED ON PLANS.		
DESIGNATES CFM QUANTITY FOR DIFFUSER				
LABEL	MANUFACTURER & MODEL NO.	NECK SIZE	CFM RANGE	REMARKS
A	TITUS 300RL	6X4	0 - 75	SIDEWALL REGISTER
B	TITUS TDC-AA	6"ø	0 - 125	24X24 LOUVERED FACE
C	TITUS TDC-AA	8"ø	130 - 200	24X24 LOUVERED FACE

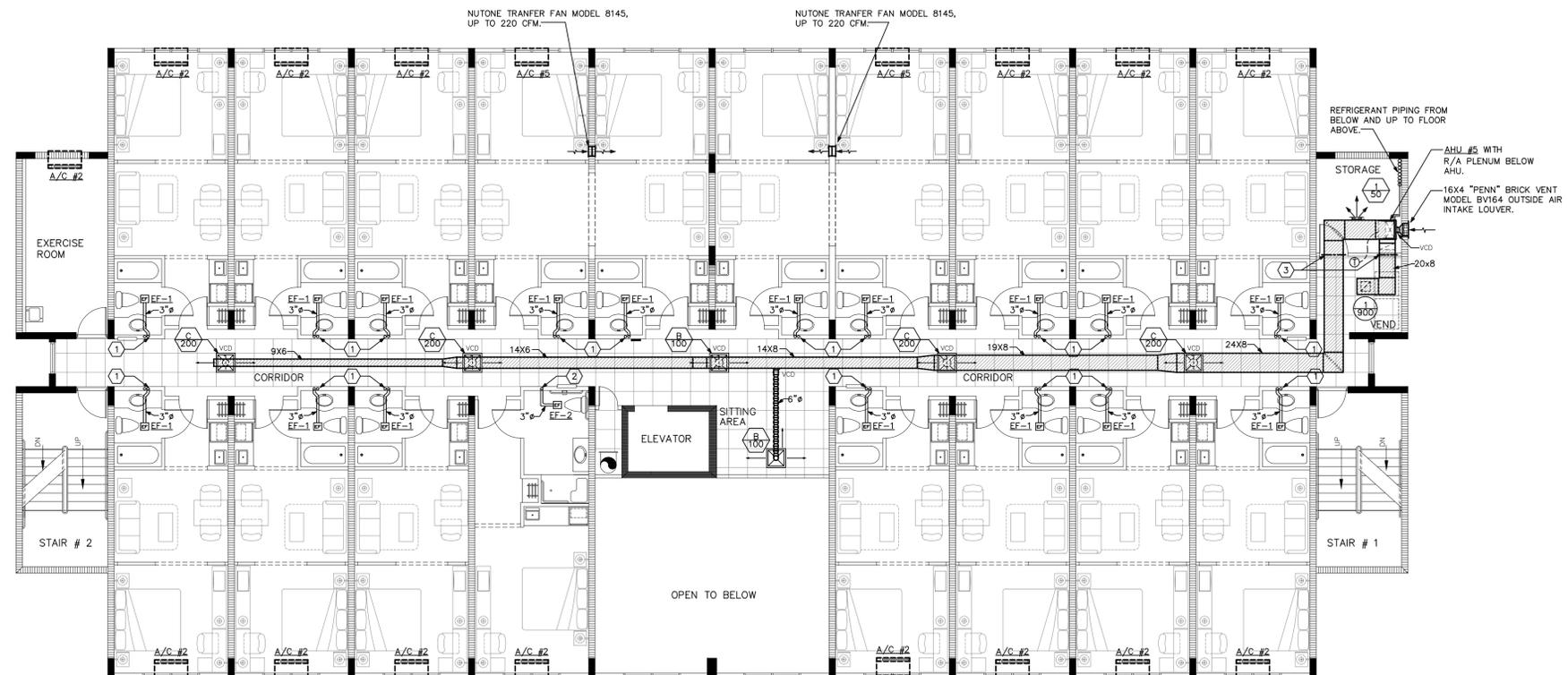
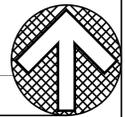
RETURN GRILLE SCHEDULE				
DESIGNATES LABEL FOR GRILLE TYPE		FILTER SHALL BE PROVIDED AT UNIT.		
DESIGNATES CFM QUANTITY FOR GRILLE				
LABEL	MANUFACTURER & MODEL NO.	NECK SIZE	CFM RANGE	REMARKS
1	TITUS 355FL	12X12	400 - 650	

- MECHANICAL SPECIFIC NOTES**
- ① 3" TOILET EXHAUST FROM BELOW AND 3"ø TOILET EXHAUST UP THRU CORRIDOR WALL TO ROOF. REFER TO TYPICAL EXHAUST RISER DIAGRAM ON SHEET M-4.
  - ② 3"ø TOILET EXHAUST UP THRU CORRIDOR WALL TO ROOF. REFER TO TYPICAL EXHAUST RISER ON SHEET M-4.
  - ③ PROVIDE NEW FIRE DAMPER AT FIRE WALL PENETRATION. REFER TO FIRE DAMPER DETAIL ON SHEET M-1.



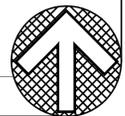
THIRD FLOOR PLAN - MECHANICAL

SCALE: 1/8"=1'-0"



SECOND FLOOR PLAN - MECHANICAL

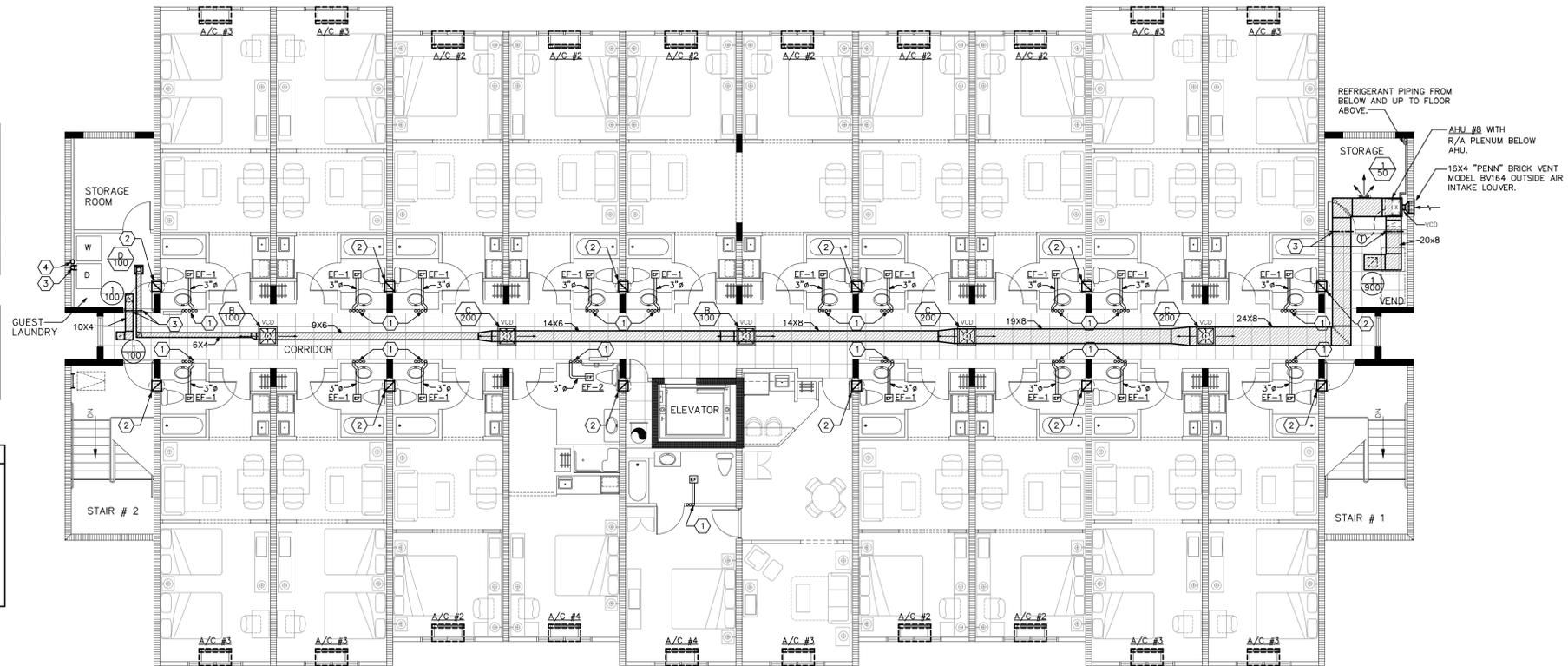
SCALE: 1/8"=1'-0"



SUPPLY DIFFUSER SCHEDULE				
DESIGNATES LABEL FOR DIFFUSER TYPE		ALL DIFFUSERS ARE TO BE PROVIDED WITH OPPOSED BLADE DAMPERS UNLESS OTHERWISE SPECIFIED ON PLANS.		
DESIGNATES CFM QUANTITY FOR DIFFUSER				
LABEL	MANUFACTURER & MODEL NO.	NECK SIZE	CFM RANGE	REMARKS
A	TITUS 300RL	6X4	0 - 75	SIDEWALL REGISTER
B	TITUS TDC-AA	6"ø	0 - 125	24X24 LOUVERED FACE
C	TITUS TDC-AA	8"ø	130 - 200	24X24 LOUVERED FACE
D	TITUS TDC-AA	6"ø	0 - 125	12X12 LOUVERED FACE

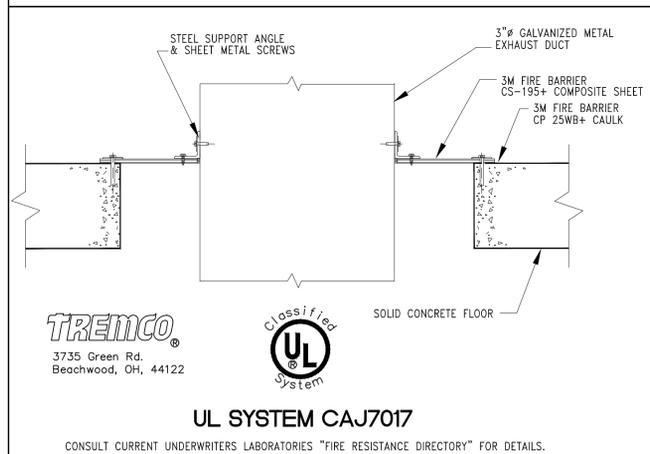
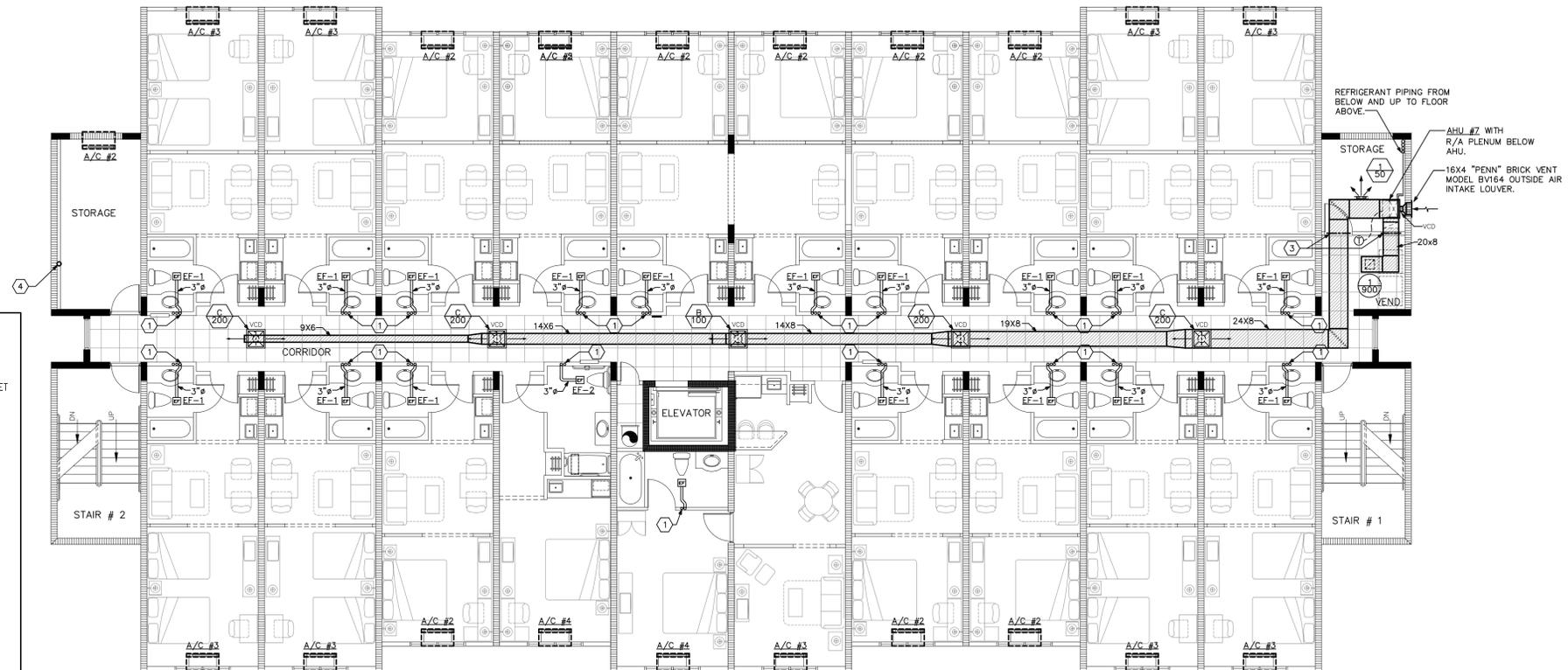
RETURN GRILLE SCHEDULE				
DESIGNATES LABEL FOR GRILLE TYPE		FILTER SHALL BE PROVIDED AT UNIT.		
DESIGNATES CFM QUANTITY FOR GRILLE				
LABEL	MANUFACTURER & MODEL NO.	NECK SIZE	CFM RANGE	REMARKS
1	TITUS 355FL	12X12	400 - 650	

- MECHANICAL SPECIFIC NOTES**
- 3" TOILET EXHAUST FROM BELOW AND 3"ø TOILET EXHAUST UP THRU CORRIDOR WALL TO ROOF. REFER TO TYPICAL EXHAUST RISER DIAGRAM ON SHEET M-4.
  - 10X10 EXHAUST PLENUM UP TO EF-4 ON ROOF. REFER TO TYPICAL EXHAUST RISER DIAGRAM ON SHEET M-4.
  - DRYER VENT UP TO ROOF.
  - DRYER VENT FROM BELOW AND UP TO ROOF.
  - PROVIDE NEW FIRE DAMPER AT FIRE WALL PENETRAION. REFER TO FIRE DAMPER DETAIL ON THIS SHEET.



FIFTH FLOOR PLAN - MECHANICAL

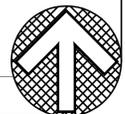
SCALE : 1/8"=1'-0"



DUCT FLOOR PENETRATION FIRE STOP DETAIL NO SCALE

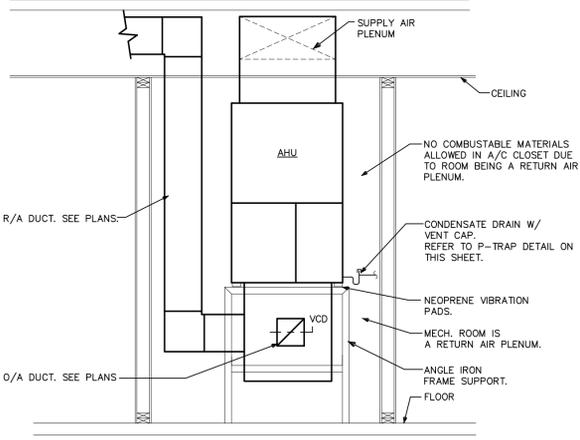
FOURTH FLOOR PLAN - MECHANICAL

SCALE : 1/8"=1'-0"

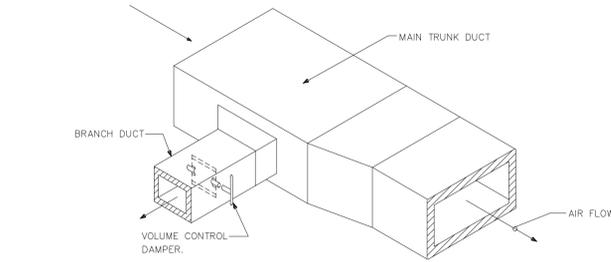


**GENERAL MECHANICAL NOTES**

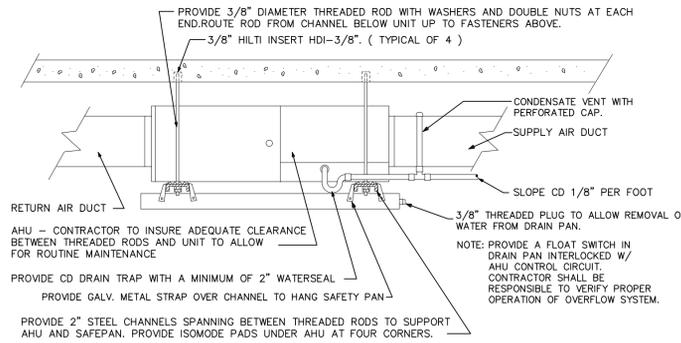
- THE CONTRACTOR SHALL FURNISH ALL LABOR, MATERIALS, AND EQUIPMENT NECESSARY FOR THE INSTALLATION OF A COMPLETE SYSTEM IN ACCORDANCE WITH THESE DRAWINGS, THE APPLICABLE BUILDING CODE AND ALL OTHER APPLICABLE STATE, COUNTY AND LOCAL ORDINANCES AND THE LATEST ADDITION OF THE FOLLOWING PUBLICATIONS: SMACNA, ASHRAE, NFPA 90A, 90B, 91 & ANSI B-9.1 MECHANICAL REFRIGERATION. ALL DUCTWORK SHALL BE FABRICATED, INSTALLED AND SUPPORTED AS PER SMACNA STANDARDS.
- THE CONTRACTOR SHALL PAY ALL COSTS OF PERMIT, INSPECTIONS AND ALL OTHER COSTS INCIDENTAL TO THE COMPLETION AND TESTING OF THIS WORK.
- THE CONTRACTOR SHALL VISIT THE SITE AND COORDINATE WORK WITH OTHER TRADES TO INSURE AN ORDERLY PROGRESS OF THIS WORK.
- THE CONTRACTOR SHALL SUPPLY THE ARCHITECT WITH "AS-BUILT" DRAWINGS UPON COMPLETION OF THIS PROJECT.
- CONTRACTOR SHALL SUBMIT, FOR APPROVAL FIVE (5) COPIES OF MANUFACTURER'S DRAWINGS FOR EACH PIECE OF EQUIPMENT AND CONTROLS INCLUDED IN CONTRACT.
- ALL MATERIAL SHALL BE NEW OF GOOD QUALITY. ALL WORK SHALL BE PERFORMED IN A WORKMANLIKE MANNER BY SKILLED WORKMAN.
- ALL AIR CONDITIONING DUCT WORK SHALL BE OF 1-1/2" STANDARD DUTY FOIL REINFORCED FIBERGLASS WITH MANUFACTURER'S LOGO PRINTED ON VAPOR BARRIER ALL FLEX TO BE R-6.
- ALL EXHAUST DUCTS AND OUTSIDE AIR DUCTS SHALL BE GALVANIZED SHEET METAL WITH SEALED SEAMS AND JOINTS.
- DUCT SIZES SHOWN ARE INSIDE DIMENSIONS.
- ALL AIR DEVICES (DIFFUSERS, REGISTERS AND GRILLES) SHALL BE ALL ALUMINUM CONSTRUCTION WITH EXPOSED SURFACE OFF WHITE BAKED ENAMEL FINISH OR AS SPECIFIED BY ARCHITECT. DEVICES SHALL BE TITUS, METALAIR, AIRGUIDE. PROVIDE OPPOSED BLADE DAMPERS AT ALL DIFFUSERS AND REGISTERS.
- THERMOSTAT SHALL BE COMBINATION COOLING/HEATING WITH SYSTEM "COOL-AUTO-HEAT-OFF" AND FAN "ON-AUTO" SELECTOR SWITCHES. PROVIDE PROGRAMMABLE TYPE, HONEYWELL OR EQUAL.
- REFRIGERANT LINES SHALL BE COPPER, TYPE "L" HARD DRAWN WITH WROUGHT COPPER SOLDER-JOINT TYPE FITTINGS, USE 95/5 SOLDER. REFRIGERANT LINES SHALL SIZED AS PER MANUFACTURER RECOMMENDATIONS.
- ARMFLEX 3/4" INSULATION SHALL BE USED FOR SUCTION LINES, FILTER/DRYER AND SIGHT GLASS SHALL BE PROVIDED AT LIQUID LINES.
- ALL BRANCH TAKE-OFFS TO BE PROVIDED W/MANUAL VOLUME DAMPERS. ALL ELBOWS AND TEES MUST BE FURNISHED W/TURNING VANES. PROVIDE 45° BRANCH TAKE-OFF AS PER BRANCH DUCT TAKE-OFF DETAIL.
- PROVIDE NEW FILTERS FOR ALL AIR CONDITIONING EQUIPMENT BEFORE STARTING THEM. REPLACE THEM PRIOR TO FINAL ACCEPTANCE BY OWNER.
- PROVIDE SMOKE DETECTORS WITH ACCESS DOORS IN ALL SUPPLY AIR DUCTS FOR FANS AND AHU'S SERVING A COMMON PLENUM OF 2000 CFM OR ABOVE. ALL SMOKE DETECTORS SHALL BE BY ONE MANUFACTURER, COORDINATE VOLTAGE ETC. WITH ELECTRICAL CONTRACTOR AND FIRE ALARM SYSTEM BEFORE ORDERING. UPON DETECTION, SMOKE DETECTORS SHUT DOWN ASSOCIATED AIR MOVING EQUIPMENT AND ALL AIR MOVING EQUIPMENT SERVING THAT COMMON PLENUM.
- PROVIDE TYPE "B" FIRE DAMPERS IN ALL DUCTS OR OPENINGS PENETRATING FIRE RATED WALLS, MECHANICAL AND ELECTRICAL EQUIPMENT ROOMS, TENANT SEPARATION PARTITIONS, FLOOR OR ROOF SLABS AND AT O/A INTAKES. PROVIDE RADIATION RADIATION DAMPERS IN RATED CEILING FOR ALL CEILING OPENINGS, CEILING FANS, DIFFUSERS OR GRILLES RATED FOR USE IN THE CEILING ASSEMBLY.
- HVAC CONTRACTOR SHALL PROVIDE AN INDEPENDENT TEST AND BALANCE REPORT FOR ALL MECHANICAL EQUIPMENT, AIR DEVICES, DAMPERS, AHU'S AND FANS. THE T & B SHALL BE IN ACCORDANCE WITH THE AIR BALANCE COUNCIL STANDARDS AND SHALL INCLUDE AIR QUANTITIES FOR ALL SUPPLY GRILLES, RETURN GRILLES, AND EXHAUST GRILLES, AND THE LEAVING AND ENTERING AIR TEMPERATURE (T) FROM SUPPLY GRILLES AND EVAPORATORS.
- THERMOSTAT LOCATION SHALL BE APPROVED BY OWNER AND ENGINEERS BEFORE INSTALLATION.
- ALL INSULATION WILL HAVE FIRE/SMOKE RATING LESS THAN 25/50.
- MECHANICAL PLANS IN GENERAL, ARE DIAGRAMMATIC IN NATURE, AND ARE TO BE READ IN CONJUNCTION WITH ARCH. PLUMBING ELECTRICAL AND STRUCTURAL PLANS AND SHALL BE CONSIDERED AS ONE SET OF DOCUMENTS. DUCT AND PIPING OFFSETS, BENDS AND TRANSITIONS WILL BE REQUIRED TO PROVIDE AND INSTALL A COMPLETE FUNCTIONAL SYSTEM AND SHALL BE PROVIDED BY THE CONTRACTOR AT NO ADDITIONAL COST TO THE OWNER.
- NO COMBUSTIBLE MATERIALS ARE ALLOWED IN RETURN AIR PLENUMS OR ABOVE CEILING USED AS RETURN AIR PLENUM. IF SPACE WITH RETURN AIR PLENUM HAS ANY DECK TO DECK PARTITIONS, AIR TRANSFER DUCTS MUST BE INSTALLED.
- REFER TO PLUMBING PLANS FOR ALL CONDENSATE PIPING.
- IF PROJECT IS REMODEL OF AN EXISTING BUILDING, THE CONTRACTOR SHALL VISIT JOB SITE PRIOR TO CONSTRUCTION AND COORDINATE ALL EXISTING FIELD CONDITIONS. ARCHITECT AND/OR ENGINEER SHALL BE NOTIFIED OF ANY DISCREPANCIES.
- CONTRACTOR SHALL INSTALL ALL OUTDOOR EQUIPMENT TO WITHSTAND A SUSTAINED 120 MPH WIND WITH A GUST FACTOR OF 30%. PROVIDE A LISTED PRE-ENGINEERED ASSEMBLY, OR THE CONTRACTOR SHALL BE RESPONSIBLE FOR THE CERTIFICATION OF ROOF MOUNTING.
- PROVIDE ALL NECESSARY CONTACTORS, RELAYS, ETC., FOR A COMPLETE OPERATING A/C UNIT.
- THROUGHOUT THE COURSE OF THE WORK, MINOR CHANGES AND ADJUSTMENTS TO THE PLANS AND SPECIFICATIONS MAY BE REQUESTED BY THE OWNER. THE CONTRACTOR SHALL MAKE SUCH ADJUSTMENTS WITHOUT ADDITIONAL COST TO THE OWNER, WHERE SUCH ADJUSTMENTS ARE NECESSARY FOR THE PROPER INSTALLATION AND OPERATION OF THE SYSTEMS, AND WITHIN THE INTENT OF THE CONTRACT DOCUMENTS.
- IT IS THE INTENT OF THE PLANS AND SPECIFICATIONS TO FORM A GUIDE FOR A COMPLETE INSTALLATION. EVERYTHING NECESSARY FOR THE COMPLETION AND SUCCESSFUL OPERATION OF THE WORK, WHETHER OR NOT HEREN DEFINITELY SPECIFIED OR INDICATED ON THE DRAWINGS SHALL BE FURNISHED AND INSTALLED AS WELL AND AS FAITHFULLY AS IF SO SPECIFIED OR INDICATED WITHOUT ADDITIONAL COST TO THE TENANT. THE MECHANICAL CONTRACTOR SHALL VERIFY ALL DIMENSIONS AND LENGTHS PRIOR TO INSTALLATION.
- NOTWITHSTANDING ANY OTHER PROVISIONS OF THE CONTRACT DOCUMENTS, THE CONTRACTOR BEARS ULTIMATE RESPONSIBILITY FOR COMPLIANCE OF THE INSTALLATION WITH THE REQUIREMENTS OF THE LANDLORD AND OF THE LOCAL AUTHORITY HAVING JURISDICTION.
- IF ANY ERRORS, DISCREPANCIES OR OMISSIONS APPEAR IN THE DRAWINGS, SPECIFICATIONS OR OTHER CONTRACT DOCUMENTS, THE CONTRACTOR SHALL NOTIFY THE ENGINEER IN WRITING OF SUCH ERROR OR OMISSION. IN THE EVENT OF THE CONTRACTOR FAILING TO GIVE SUCH NOTICE BEFORE CONSTRUCTION AND/OR FABRICATION OF THE WORK, HE WILL BE HELD RESPONSIBLE FOR THE RESULTS OF ANY SUCH ERRORS, DISCREPANCIES OR OMISSIONS AND THE COST OF RECTIFYING SAME.



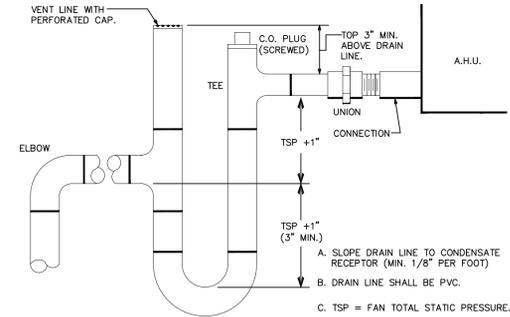
**1 AHU MOUNTING DETAIL**  
NO SCALE



**3 BRANCH DUCT DETAIL**  
NO SCALE



**2 AHU MOUNTING DETAIL**  
NO SCALE



**4 COND. P-TRAP DETAIL**  
NO SCALE

ROOM MINI-SPLIT HEAT PUMP SCHEDULE									
SYS. LABEL	MANUFACTURER	MODEL NO.	TOTAL CAPACITY	FAN SPEED	AMPERAGE RATING	MAXIMUM FUSE	VOLTAGE	EER/SEER	NOTES
A/C #1	SANYO	09KH11	9,000 BTUH	3-SPEED	8.2	15	120V/1ϕ	10.0	

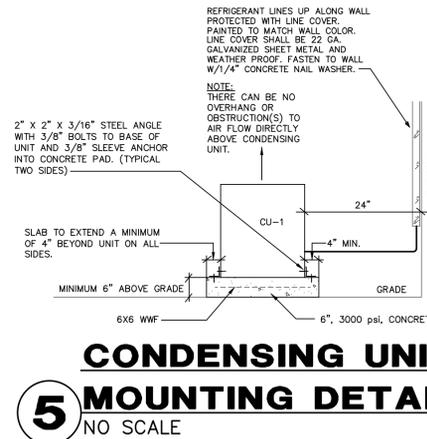
GENERAL NOTES:  
1.) POWER SUPPLY IS TO OUTDOOR UNIT, INTERCONNECTING WIRING FROM OUTDOOR UNIT TO INDOOR UNIT. REFER TO ELECTRICAL PLANS FOR CONTROL.

ROOM AIR CONDITIONING SCHEDULE										
SYS. LABEL	MANUFACTURER	MODEL NO.	HEATER KW	TOTAL CAPACITY	FAN SPEED	AMPERAGE RATING	MAXIMUM FUSE	VOLTAGE	EER/SEER	NOTES
A/C #2	GENERAL ELECTRIC	AZ22E12D3C	3.0 K.W.	12,000	TWO SPEED	-	20A	208V/1ϕ	10.7	1,2
A/C #3	GENERAL ELECTRIC	AZ22E12D3C	3.0 K.W.	12,000	TWO SPEED	-	20A	208V/1ϕ	10.7	1,2
A/C #4	GENERAL ELECTRIC	AZ22E12D3C	3.0 K.W.	12,000	TWO SPEED	-	20A	208V/1ϕ	10.7	1,2
A/C #5	CARRIER	52SE-5143	5.0 K.W.	14,000	TWO SPEED	28.3	30A	208V/1ϕ	8.8	1,2

GENERAL NOTES:  
1.) UNIT SHALL BE FLUSH MOUNTED TO EXTERIOR WALL AND SHALL BE PROVIDED WITH AN ALUMINUM ARCHITECTURAL GRILLE G.E. MODEL RA61.  
2.) UNIT SHALL BE PROVIDED WITH A WALL CASE G.E. MODEL RAB71.

FAN SCHEDULE										
LABEL	TYPE OF UNIT - AREA SERVED	MANUFACTURER & MODEL NO.	CFM	SP	MOUNTING ARRANGEMENT	MOTOR H.P.	ENCLOSURE TYPE	RPM	VOLTAGE	NOTES
EF-1	CABINET FAN - REFER TO PLANS	PENN ZEPHYR 26	90	.125"	CEILING MOUNTED	50 WATTS	OPEN DRIP PROOF	1055	115V/1ϕ	1
EF-2	CABINET FAN - REFER TO PLANS	PENN ZEPHYR 25H	120	.125"	CEILING MOUNTED	79 WATTS	OPEN DRIP PROOF	1055	115V/1ϕ	1
EF-3	CABINET FAN - REFER TO PLANS	PENN ZEPHYR 27	190	.125"	CEILING MOUNTED	68 WATTS	OPEN DRIP PROOF	1640	115V/1ϕ	1
EF-4	PROPELLER FAN - REFER TO PLANS	PENN DOMEK MODEL AMBR	250	.250"	ROOF MOUNTED	1/33 HP	OPEN DRIP PROOF	1550	115V/1ϕ	1

NOTES: 1.) REFER TO ELECTRICAL PLANS FOR CONTROL.



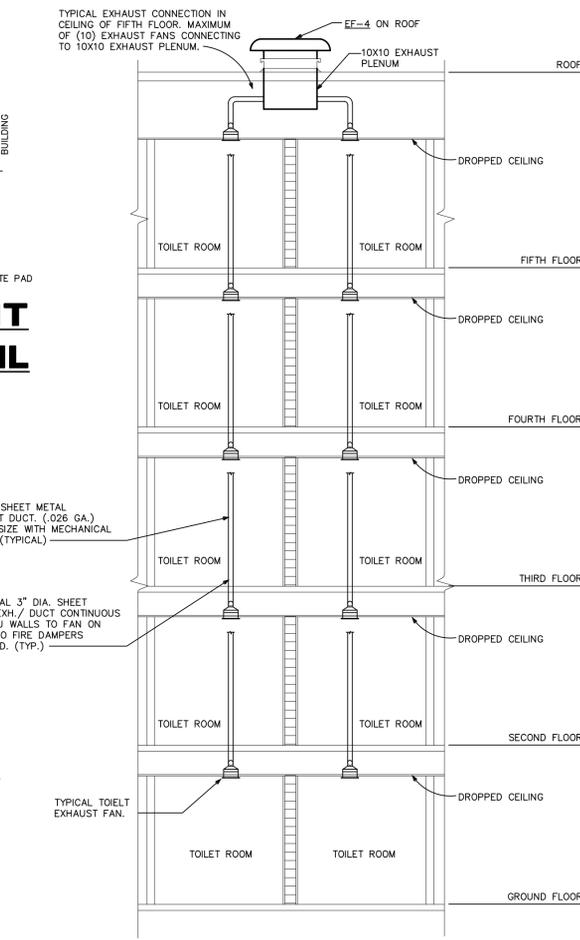
**5 CONDENSING UNIT MOUNTING DETAIL**  
NO SCALE

SPLIT SYSTEM AIR CONDITIONING SCHEDULE																			
CONDENSING UNIT					AIR HANDLING UNIT														
CU LABEL(S)	MANUFACTURER & MODEL NO.	TOTAL CAPACITY	SENSIBLE CAPACITY	COMP. RLA	FAN FLA	VOLTAGE	MOCP	EER/SEER	AHU LABEL(S)	MANUFACTURER & MODEL NO.	TOTAL CFM	O/A CFM	E.S.P.	BLOWER SPEED	FAN HP	HEATER KW	VOLTAGE	NOTES	REFRIG. LINE SIZES
																			SUCTION LIQUID
CU #1	CARRIER 38CKM-042-501	40,000	29,100	12.4	1.4	208V/3ϕ	25A	10.0	AHU-1	CARRRIER FB4AN042	1,400	SEE SCH.	.30"	HIGH	1/2 HP	5.0	208V/1ϕ	1 THRU 6	7/8" 3/8"
CU #2	CARRIER 38CKM-060-501	57,000	41,000	18.3	1.4	208V/3ϕ	35A	10.0	AHU-2	CARRRIER FB4AN060	2,000	SEE SCH.	.30"	HIGH	3/4 HP	8.0	208V/1ϕ	1 THRU 6	7/8" 3/8"
CU #3	CARRIER 38AK007-501	72,900	56,800	19.0	2.8	208V/3ϕ	35A	9.0	AHU-3	CARRRIER 40RM-007-B501	2,400	SEE SCH.	.40"	606 RPM	1 HP	10.0	208V/3ϕ	1 THRU 6	1-1/8" 1/2"
CU #4	CARRIER 38AK007-501	72,900	56,800	19.0	2.8	208V/3ϕ	35A	9.0	AHU-4	CARRRIER 40RM-007-B501	2,400	SEE SCH.	.40"	606 RPM	1 HP	10.0	208V/3ϕ	1 THRU 6	1-1/8" 1/2"
CU #5	CARRIER 38CKM-030-501	28,000	20,100	9.4	0.8	208V/3ϕ	20A	10.0	AHU-5	CARRRIER FB4AN030	1,000	SEE SCH.	.30"	HIGH	1/3 HP	3.0	208V/1ϕ	1 THRU 6	5/8" 3/8"
CU #6	CARRIER 38CKM-030-501	28,000	20,100	9.4	0.8	208V/3ϕ	20A	10.0	AHU-6	CARRRIER FB4AN030	1,000	SEE SCH.	.30"	HIGH	1/3 HP	3.0	208V/1ϕ	1 THRU 6	5/8" 3/8"
CU #7	CARRIER 38CKM-030-501	28,000	20,100	9.4	0.8	208V/3ϕ	20A	10.0	AHU-7	CARRRIER FB4AN030	1,000	SEE SCH.	.30"	HIGH	1/3 HP	3.0	208V/1ϕ	1 THRU 6	5/8" 3/8"
CU #8	CARRIER 38CKM-036-501	34,000	25,700	10.0	1.4	208V/3ϕ	20A	10.0	AHU-8	CARRRIER FB4AN036	1,000	SEE SCH.	.30"	HIGH	1/3 HP	5.0	208V/1ϕ	1 THRU 6	3/4" 3/8"

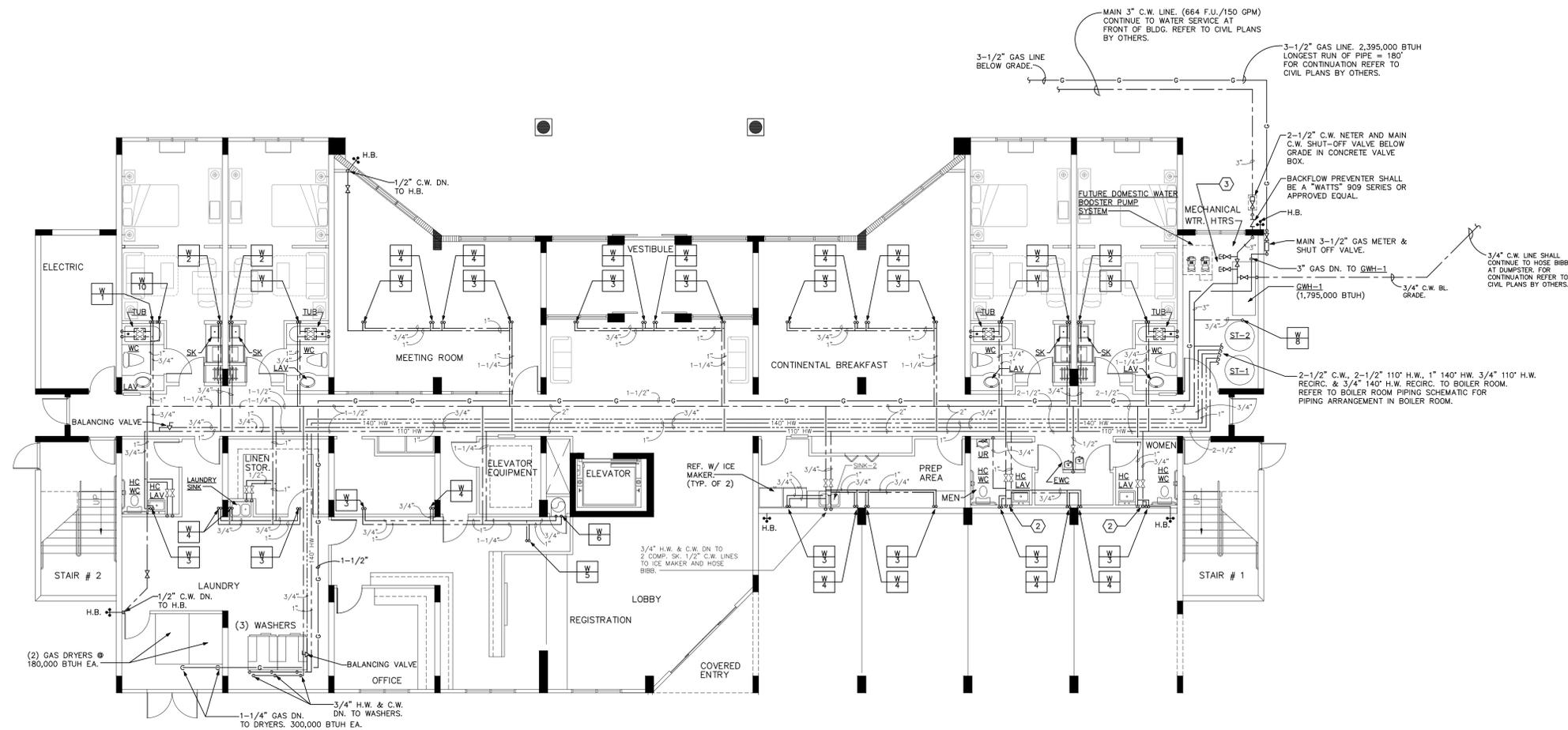
GENERAL NOTES:  
\* ALL RATINGS ARE AT ARI ENTERING CONDITIONS UNLESS OTHERWISE NOTED.  
\* PROVIDE VIBRATION ISOLATION FOR UNITS.  
\* EXTERNAL STATIC PRESSURE DOES NOT INCLUDE COIL OR FILTER PRESSURE DROP.  
\* CONTRACTOR MAY SUBSTITUTE MANUFACTURER FOR APPROVED EQUAL. IT SHALL BE THE CONTRACTORS RESPONSIBILITY TO VERIFY THAT ANY CLEARANCE REQUIREMENTS ARE MET FOR ANY SUBSTITUTIONS.

ABBREVIATION LEGEND:  
O/A - OUTSIDE AIR  
HP - HORSE POWER  
RLA - RUNNING LOAD AMPS  
FLA - FULL LOAD AMPS  
MOCP - MAX. OVERCURRENT PROTECTION (DUAL ELEMENT TYPE FUSE)  
E.S.P. - EXTERNAL STATIC PRESSURE  
EER - ENERGY EFFICIENCY RATIO  
SEER - SEASONAL ENERGY EFF. RATIO

SPECIFIC NOTES:  
1) SIZE AND RUN REFRIGERANT PIPING AS PER MANUFACTURERS PUBLISHED RECOMMENDATIONS.  
2) INSULATE REFRIGERANT SUCTION LINE WITH 3/4" ARMAFLEX OR APPROVED EQUAL.  
3) INSTALL CHEMICAL DRYER AND STRAINER IN REFRIGERANT LIQUID LINE.  
4) PROVIDE 5 YEAR WARRANTY ON COMPRESSOR AND 1 YEAR WARRANTY ON ALL PARTS AND LABOR.  
5) HEATER SHALL BE PROVIDED WITH 24 VOLT CONTROL.  
6) PROVIDE BUILT-IN DISCONNECT/CIRCUIT BREAKER IN AIR HANDLING UNIT.

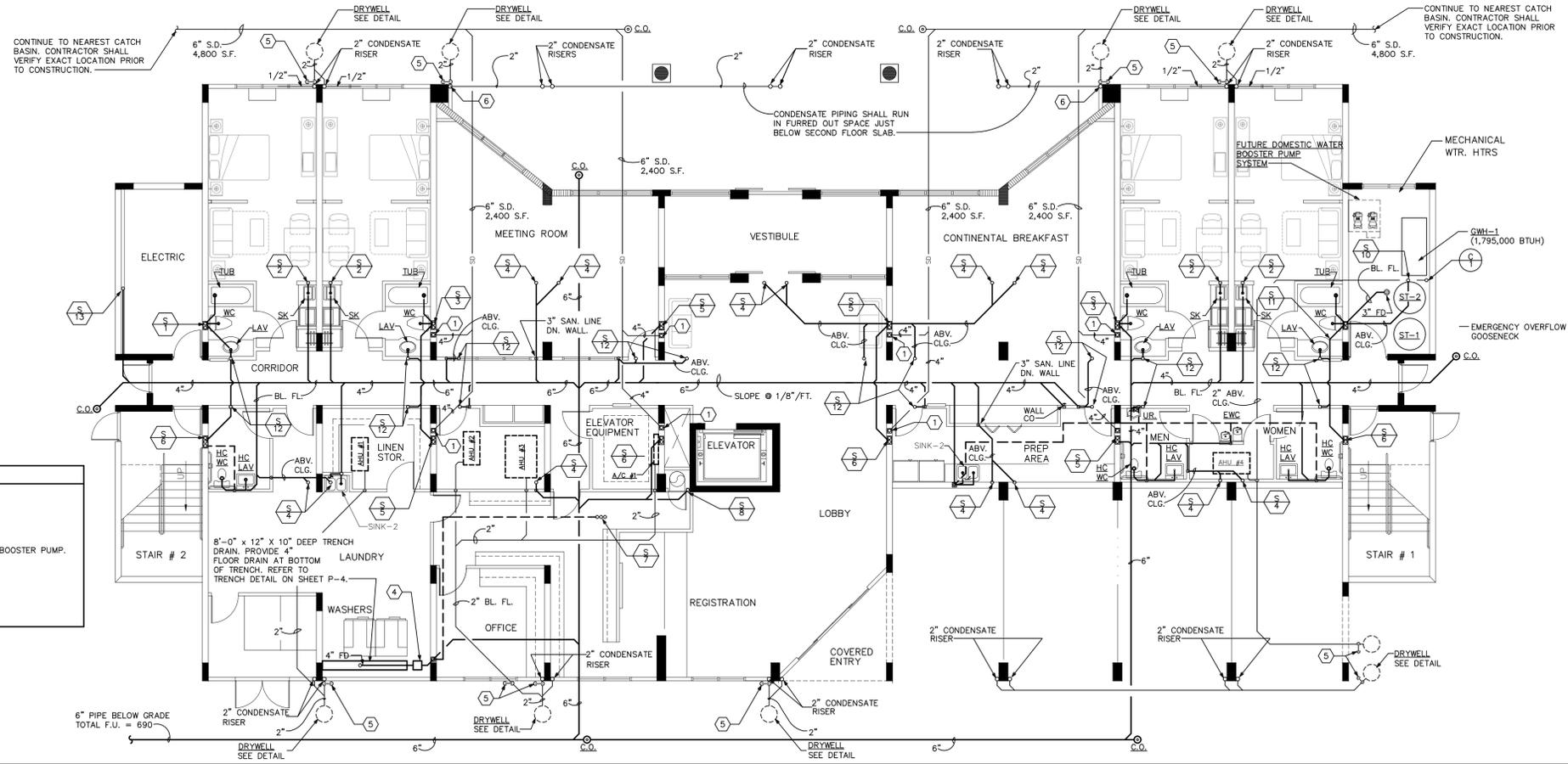
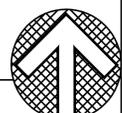


**6 TYPICAL TOILET EXHAUST RISER**  
NO SCALE



GROUND FLOOR PLAN – PLUMBING (WATER AND GAS PIPING)

SCALE : 1/8"=1'-0"



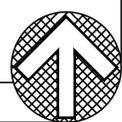
NOTE:  
FINAL LOCATION OF ALL CONDENSATE  
DRYWELLS SHALL BE COORDINATED  
WITH LANDSCAPING PRIOR TO CONSTRUCTION.

**PLUMBING SPECIFIC NOTES**

- ① 4" RAIN WATER LEADER FROM ABOVE AND DOWN TO BELOW FLOOR.
- ② 1/2" C.W. & H.W. DN. IN CHASE TO H.C.W. AND H.C.L.V.
- ③ 3" C.W. VALVED AND CAPPED FOR CONNECTION TO FUTURE DOMESTIC WATER BOOSTER PUMP.
- ④ LINT TRAP SHALL BE A Z-1185 MOUNTED IN FLOOR SLAB.
- ⑤ EMERGENCY OVERFLOW GOOSENECK
- ⑥ 2" CONDENSATE DOWN IN CHASE TO BELOW GRADE CONTINUE TO DRYWELL

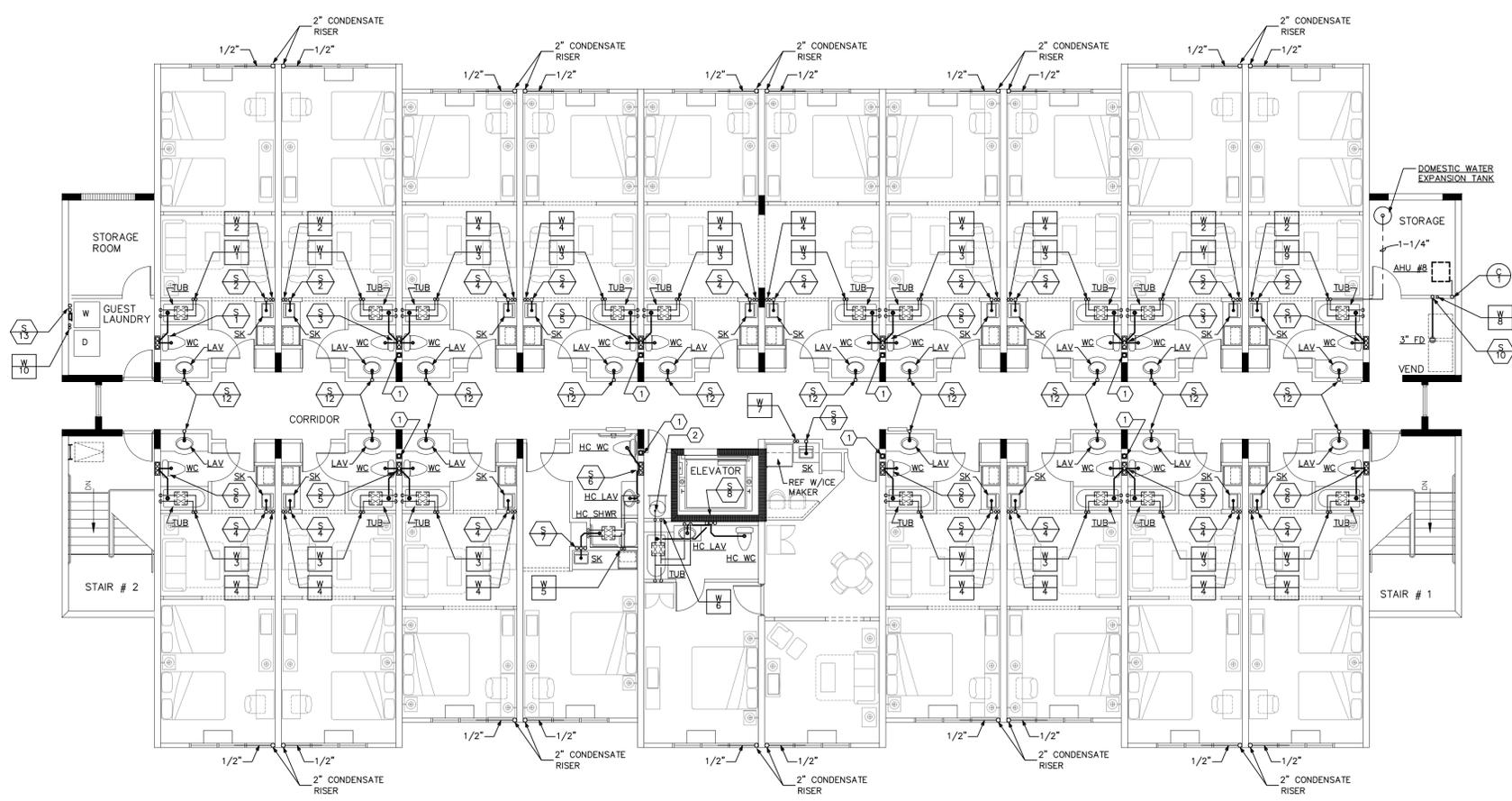
GROUND FLOOR PLAN – PLUMBING (WASTE AND CONDENSATE PIPING)

SCALE : 1/8"=1'-0"



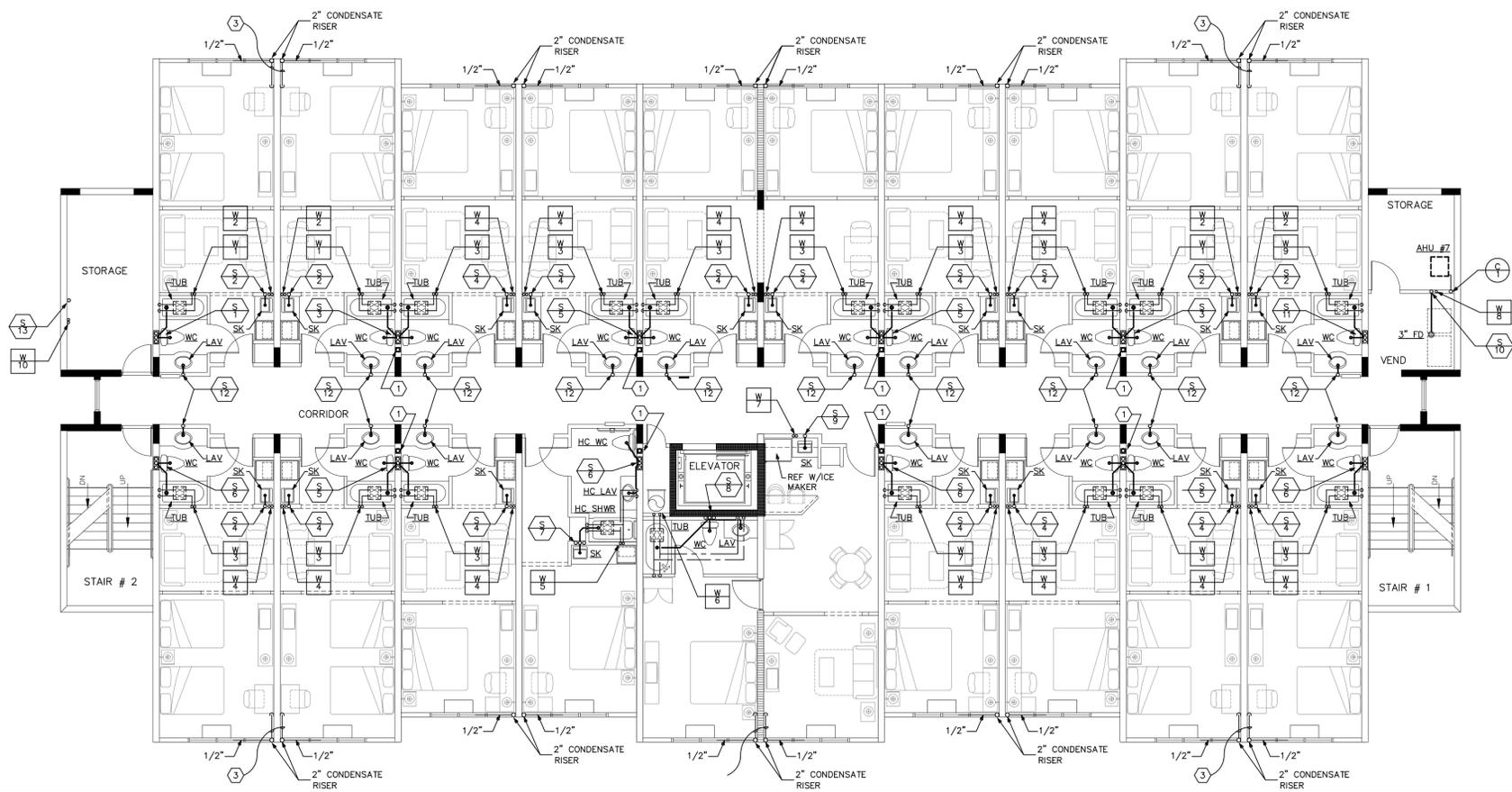
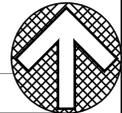


- PLUMBING SPECIFIC NOTES**
- ① 4" RAIN WATER LEADER FROM ABOVE AND DOWN TO BELOW FLOOR.
  - ② LAUNDRY CHUTE SPRINKLER HEAD. REFER TO DETAIL ON SHEET P-4.
  - ③ 2" CONDENSATE SHALL OFFSET IN FURRING BELOW FOURTH FLOOR SLAB AS INDICATED AND SHALL TURN DOWN IN EXTERIOR WALL OF THIRD FLOOR.



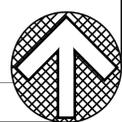
FIFTH FLOOR PLAN – PLUMBING

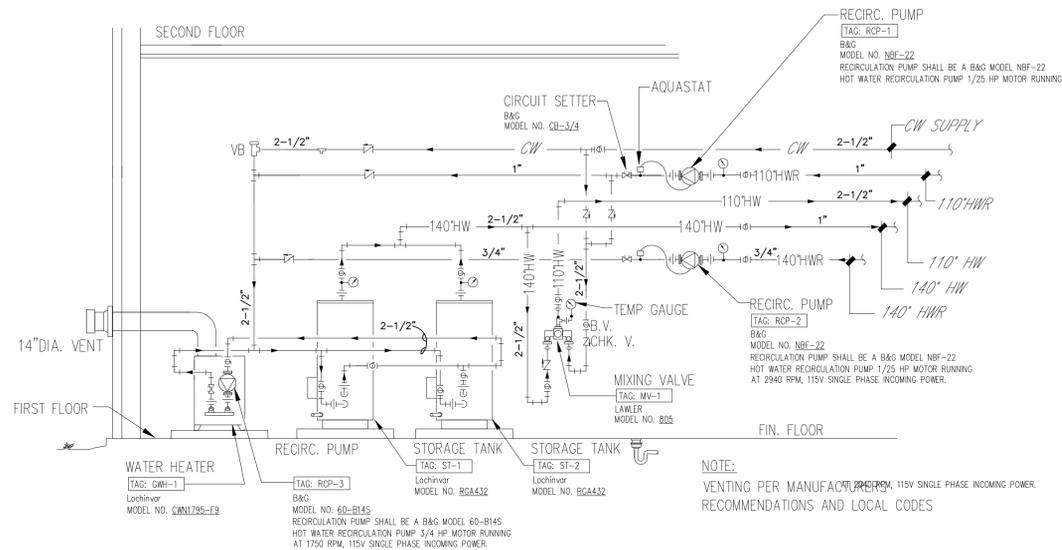
SCALE : 1/8"=1'-0"



FOURTH FLOOR PLAN – PLUMBING

SCALE : 1/8"=1'-0"





### PLUMBING ABBREVIATION LEGEND

DN. DOWN	C.C. CENTER TO CENTER	F.U. FIXTURE UNITS
EXT. EXTERIOR	N.T.S. NOT TO SCALE	H.B. HOSE BIBBS
F.D. FLOOR DRAIN	MFR. MANUFACTURER	C.O. CLEANOUT
F.F. FINISH FLOOR	S.O.V. SHUT OFF VALVE	E.W.H. ELECTRIC WATER HEATER
A.F.F. ABOVE FINISH FLOOR	W.C. WATER CLOSET	J.W.S.K. JANITOR SINK
V.T.R. VENT THRU ROOF	L.A.V. LABORATORY	P & T PRESSURE & TEMPERATURE
TYP. TYPICAL	SK. SINK	R.W.L. RAIN WATER LEADER
R.D. ROOF DRAIN	D.W. DISH WASHER	
REV. REVISION	E.D.F. ELECTRIC DRINKING FOUNTAIN	
O.C. ON CENTER	UR. URINAL	

### PLUMBING SYMBOLS LEGEND

- ⊕ FLOOR DRAIN
- ⊕ HOSE BIBB
- ⊕ CLEANOUT
- ⊕ RELIEF VALVE
- ⊕ AIR CHAMBER
- ⊕ UNION
- ⊕ SOIL OR WASTE LINE
- ⊕ SANITARY VENT LINE
- ⊕ DOMESTIC COLD WATER
- ⊕ DOMESTIC HOT WATER
- ⊕ DOMESTIC WATER RECIRCULATION
- ⊕ PRESSURE & TEMP. RELIEF LINE
- ⊕ CONDENSATE DRAIN LINE
- ⊕ RAIN WATER LEADER
- ⊕ GAS LINE
- ⊕ SAFEWASTE LINE
- ⊕ FIRE PROTECTION
- ⊕ SHUT OFF VALVE
- ⊕ SAFEPAN LINE
- ⊕ FIRE SPRINKLER HEAD
- ⊕ PIPE TURN UP
- ⊕ PIPE TURN DOWN
- ⊕ P-TRAP

# 1 BOILER ROOM PIPING SCHEMATIC

NO SCALE

## GWH-1 (GAS WATER HEATER) & ST-1/ST-2 (STORAGE TANKS) SCHEDULE

WATER HEATER SHALL BE A LOCHINVAR MODEL CWN1795-F9 COPPER-FIN GAS FIRED COMMERCIAL WATER HEATER, 1,795,000 BTU INPUT TO PRODUCE 1767 GALLONS PER HOUR OF HOT WATER AT 100' RISE. WATER HEATER SHALL INCLUDE A FLOW SWITCH, MANUAL RESET HIGH LIMIT AND A B&G MODEL 60-B14S RATED FOR 90 GPM @ 15' TDH TO CIRCULATE BETWEEN HEATER AND TANK. PROVIDE (2) TWO LOCHINVAR MODEL RGA432, 432 GALLON CAPACITY LOCK TEMP JACKETED AND INSULATED GLASSLINED STORAGE TANK. 5 YEAR LIMITED WARRANTY ON STORAGE AGAINST TANK FAILURE. WATER HEATER SHALL MEET OR EXCEED ALL APPLICABLE SECTIONS OF ASHRAE SECTIONS 90-80A AND NAECA REQUIREMENTS FOR ENERGY CONSERVATION.

### SPECIFICATION FOR FUTURE CLOSE-COUPLED END SUCTION WATER BOOSTER SYSTEM DUPLEX

Furnish and install a TIGERFLOW Series ES3000 (Duplex) U.L. Listed Engineered packaged water booster system. The system shall be rated for a system flow of 150 GPM at a system pressure of 84 PSIG including a suction pressure of 40 PSIG minimum, 60 PSIG maximum.

**PUMP(S) & MOTOR(S)**

Pump(s) shall be Aurora, series 342, Cast Iron, Bronze Fitted, Mechanical Seal End Suction vertically mounted centrifugal type each close-coupled to a 3600 RPM, 208 Voltage, 3 Phase, 60 Hz, high efficiency motor.

Pump No. 1 shall be Model 1-1/4 x 1-1/2 x 7, 75 GPM at 101' TDH, 5 HP  
 Pump No. 2 shall be Model 1-1/4 x 1-1/2 x 7, 75 GPM at 101' TDH, 5 HP

**VALVES**

Isolation Valves: Individual pump suction and discharge valves shall be provided Full Port Ball Valve(s).

Control Valves: Provide a combination pressure regulating and non-slam check valve on the discharge of each pump.

**OVER-TEMPERATURE PROTECTION**

Each pump shall be equipped with an individual combination type non-electric temperature probe and purge assembly.

**U.L. LISTED POWER AND CONTROL PANEL**

(1) U.L. Listed, Nema 3R, Tiger's Eye Solid State, Power and Control Panel  
 (\*) U.L. 508 Label  
 (\*) Micro Controller:  
 -EPROM Main Memory  
 -EEPROM Memory For All User Setpoints  
 (\*) Panel Face Mounted 4-Line Operator Interface with 20 Button Touch Pad  
 Functions Included:  
 -Pressure Sequencing with Read Out in PSI  
 -Suction and Discharge Pressure Read Out in PSI  
 -Individual Pump Run Indication  
 -H-O-A Selectors  
 -ETM's  
 -Low Suction Alarm with TDR  
 -Low System with TDR  
 -High Suction Shutdown and TDR  
 -High System Alarm with TDR  
 -Automatic Attention of Equal Sized Pumps  
 (1) Thru Door Disconnect(s) with Individual Motor Circuit Protectors  
 (2) FVNR Magnetic Starters with 3-Leg Overload Protection  
 (1) Power on Light  
 (1) Common Aux Alarm Contact  
 (2) Panel Mounted Pressure Transducers [(1) Suction, (1) Discharge]

**LAG PUMP SEQUENCING**

Each lag pump shall be sequenced by: (Pressure sequencing with minimum run timers and time delay relays). NOTE: Pressure switches in lieu of pressure transducers will not be allowed.

**TANK LOCATION AND LEAD PUMP SEQUENCING**

The Hydro-Pneumatic tank shall be Remote mounted as shown per drawings

**HYDRO-PNEUMATIC TANK**

Provide a Hydro-Pneumatic tank. Tank shall be provided complete with a bottom connection, air fill valve. Tank shall be a Clayton Mark model (CM17002)

**FACTORY PREFABRICATION**

Provide each system as a complete package system on a structural steel mounting frame, piped, tubed, mounted and wired. Unit shall be factory primed and painted with machine grade finish coat. All welding shall be performed by ASME Section 9 certified welders. System shall be (Vertical) construction.

Suction and discharge headers shall be: Type "L" Copper

Note: (1) Vertical pump construction  
 (2) System manufacturer shall isolate all ferrous from all non-ferrous materials.

**THIRD PARTY TESTING, OSHA REQUIREMENT**

The package shall be U.L. Listed as a system for its intended use, so meeting OSHA Federal Regulations 29 CFR 1910.303 and 399 as well as NFPA Pamphlet #70 (National Electric Code) Article 90-7.

**FACTORY TEST**

The package shall be electrically and hydrostatically tested before shipment, in addition, each system shall be factory tested from 0-100% of flow and pressure.

**STARTUP**

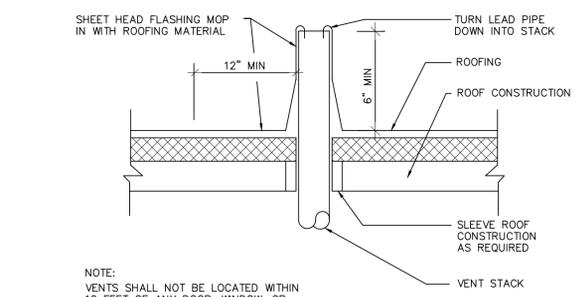
The factory authorized local representative shall provide (2) hours of startup and field training.

**WARRANTY**

Each TIGERFLOW system shall be warranted for a period of (18) months from date of shipment or (12) months from date of startup, whichever occurs first.

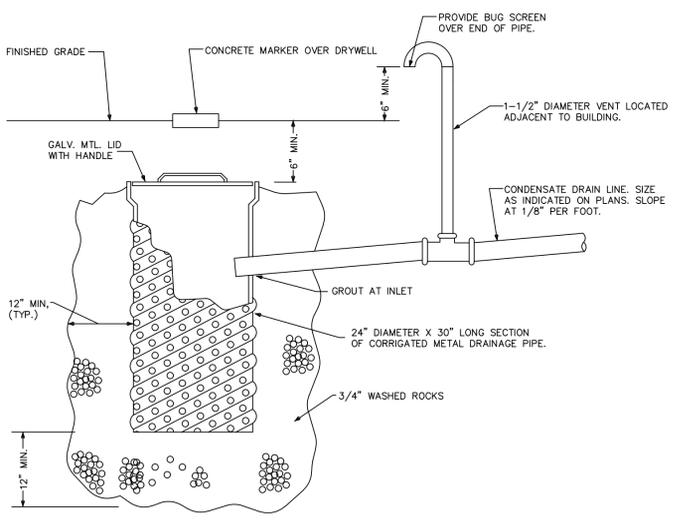
### GENERAL PLUMBING NOTES

- Drawings are diagrammatic and shall not be scaled. Refer to architectural plans and elevations for exact location of all plumbing fixtures, equipment, etc. Plumbing contractor shall furnish and install all items required for a complete and acceptable working installation.
- All work and materials shall comply with the latest edition of the National, State, and all local codes and Ordinances having jurisdiction.
- The plumbing contractor shall visit the site and thoroughly familiarize himself with all existing conditions. All execution and backfill as required for this phase of construction shall be a part of this contract.
- All material shall be new.
- All work shall be performed by a licensed plumbing contractor in a first class workmanlike manner. The completed system shall be fully operative and accepted by engineer/architect.
- All required insurance shall be provided for protection against public liability or property damage for the duration of the work.
- The plumbing contractor shall secure and pay all permit fees, inspections, and tests.
- All work shall be coordinated with other trades to avoid interference with the progress of construction.
- The plumbing contractor shall guarantee all materials and workmanship free from defects for a period of not less than (1) one year from date of acceptance. Correction of any defects shall be completed without additional charge and shall include replacement or repair of any other phase of the installation which may have been damaged thereby.
- Verify location, size and inverts of all existing utilities prior to start of construction. Advise architect/engineer of any discrepancies.
- All fixtures shall be provided with readily accessible stops.
- Water piping shall be CPVC.
- Soil, wastes and vent piping shall be PVC #40 DMV. Waste and vent piping above slab shall be PVC, if approved by local authorities having jurisdiction, otherwise cast iron. PVC shall not be installed in A/C return air plenum or penetrate fire rated walls or floors.
- Air conditioning condensate drain piping shall be PVC #40 or copper drain waste and bent pipe and fittings. Insulate all condensate piping except exterior piping. Install all condensate piping as required per local codes.
- Furnish and install approved air chambers at each plumbing fixture and PDI approved shock arresters on main lines and risers.
- Dialectic couplings, equal to EPCD, are required between all dissimilar metal piping and equipment connections.
- Isolate copper pipe from hanger supports with isolator pad (hair felt lining) Super Strut model C 715/16. Fill all voids between pipe and wall/floor sleeves with fire rated foam. Chase Technology Corporation - CTC PR-855.
- All fire rated floor and wall penetrations shall be properly protected from fire, smoke, and water by filling all voids between pipe and wall/floor sleeves with fire rated foam. Chase Technology Corporation - CTC PR-855 or 3M, CP-25 caulking or 303 putty.
- Provide access panels for all concealed valves and all water hammer arresters. Access panels in rated walls must maintain the same rating and must match the finish of the wall.
- Insulate lines as follows:
  - Cold, Hot & Hot Water Recirculating piping: 1" thick fiberglass.
  - Condensate piping: 1/2" thick armofolex preformed.



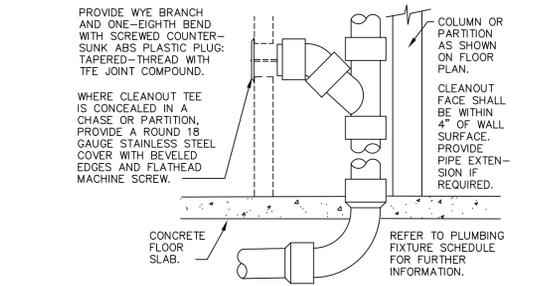
## 2 VENT THRU ROOF DETAIL

NO SCALE



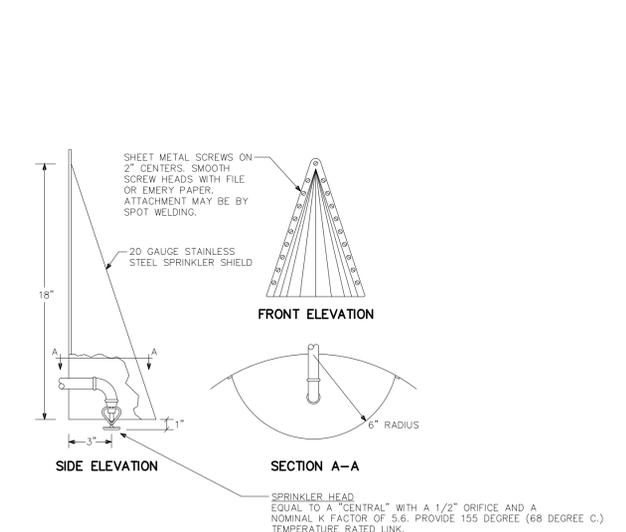
## 4 DRYWELL DETAIL

NO SCALE



## 3 WALL CLEANOUT DETAIL

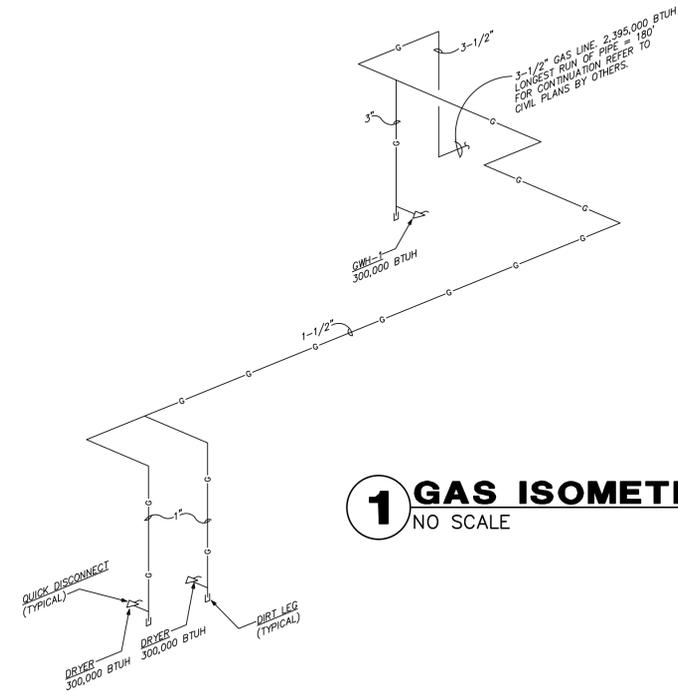
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## 5 LAUNDRY CHUTE SPRINKLER DETAIL

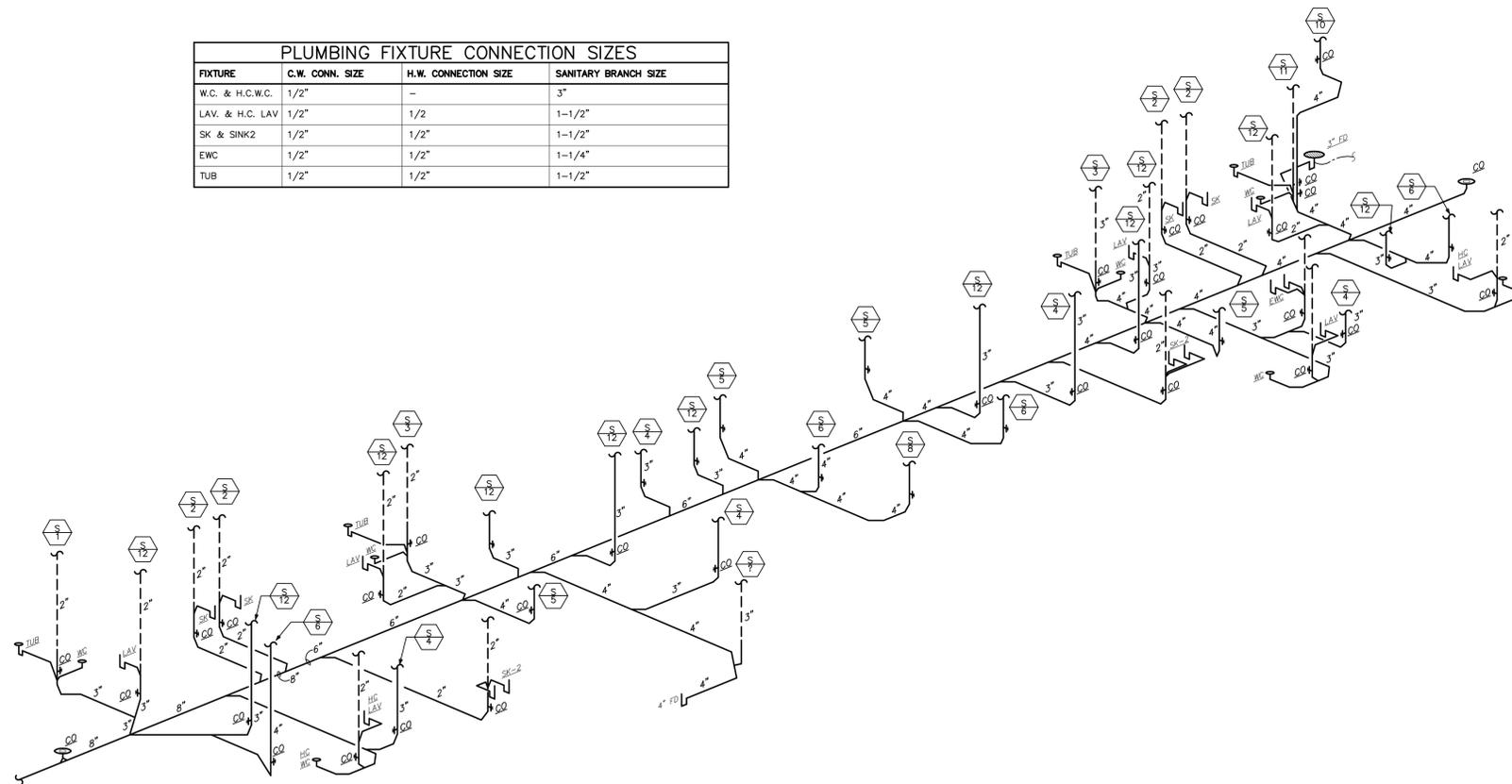
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**1 GAS ISOMETRIC**  
NO SCALE

PLUMBING FIXTURE CONNECTION SIZES			
FIXTURE	C.W. CONN. SIZE	H.W. CONNECTION SIZE	SANITARY BRANCH SIZE
W.C. & H.C.W.C.	1/2"	-	3"
LAV. & H.C. LAV	1/2"	1/2"	1-1/2"
SK & SINK2	1/2"	1/2"	1-1/2"
EWC	1/2"	1/2"	1-1/4"
TUB	1/2"	1/2"	1-1/2"



**1 OVERALL FIRST FLOOR COLLECTION ISOMETRIC**  
NO SCALE

**PLUMBING FIXTURE SCHEDULE**

**WC (WATER CLOSET)**  
SHALL BE AN AMERICAN STANDARD MODEL NEW CADET II AQUAMETER 2174.139 ELONGATED 1.6 GPF, VITREOUS CHINA, SIPHON ACTION BOWL, CLOSE-COUPLED TANK, SPEED CONNECT TANK/BOWL COUPLING SYSTEM TOILET AND AN OLSONITE # 95 OPEN FRONT SEAT LESS COVER. PROVIDE WC WITH AN AMERICAN STANDARD FLUSH-MATE.

**HCWC (HANDICAPPED WATER CLOSET)**  
SHALL BE AN AMERICAN STANDARD MODEL CADET II 2216.143 ELONGATED 18" HIGH, 1.6 GPF, VITREOUS CHINA, SIPHON ACTION BOWL, CLOSE-COUPLED TANK, SPEED CONNECT TANK/BOWL COUPLING SYSTEM TOILET AND AN OLSONITE # 95 OPEN FRONT SEAT LESS COVER. PROVIDE HC WC WITH AN AMERICAN STANDARD FLUSH-MATE.

**LAV. (SELF-RIMMING LAVATORY)**  
SHALL BE AN AMERICAN STANDARD MODEL RONDALYN 0491.019 VITREOUS CHINA SELF-RIMMING STYLE CLASSIC ROUND SHAPE. PROVIDE MEON FAUCET.

**HCLAV (HANDICAPPED WALL HUNG LAVATORY)**  
SHALL BE AN AMERICAN STANDARD MODEL REGALYN #4869.020 ENAMELED CAST IRON ACID RESISTING LAVATORY WITH SOAP DEPRESSION. PROVIDE A FAUCET WITH 4" WRIST BLADE HANDLES.

**SK (COUNTER TOP BAR SINK)**  
SHALL BE AN ELKAY MODEL BPSH-15-C STAINLESS STEEL BAR SINK WITH HI-ARC FAUCET.

**SINK-2 (DOUBLE COMPARTMENT STAINLESS STEEL SINK)**  
SHALL BE AN ELKAY LUSTERTONE MODEL DLH-2522-10-C SINGLE BOWL STAINLESS STEEL SELF-RIMMING SINK WITH LK2433 HI-ARC FAUCET TO INCLUDE AN OMNI PRESSURE COMPENSATING 2.0 GPM FLOW RESTRICTOR.

**EWC (ELECTRIC WATER COOLER)**  
SHALL BE AN OASIS MODEL OPLFBWMD, 7.8 GPH, 6.0 FLA AT 120 VOLT WITH A 1.5 HP COMPRESSOR.

**FLOOR DRAIN (F.D.)**  
SHALL BE A JOSAM 30003-A-50 SERIES COATED CAST IRON FLOOR DRAIN, TWO PIECE BODY WITH DOUBLE DRAINAGE FLANGE, WEJLOC INVERTIBLE NON-PUNCTURING FLASHING COLLAR, WEEPHOLES, BOTTOM OUTLET, INSIDE CAULK CONNECTION AND ADJUSTABLE SATIN NIKALOY ROUND SUPERFLO STRAINER.

**TUB (BY OWNER)**  
SHOWER HEAD SHALL BE A SPEAKMAN SENTINEL MARK II REGENCY MODEL #SM-1400-AF-SS ANTI-SCALD BALANCED PRESSURE SHOWER VALVE WITH AN INLINE OMNI PRESSURE COMPENSATING 2.5 GPM FLOW RESTRICTOR.

**JAN. SK (SERVICE SINK: HOT AND COLD WATER)**  
SHALL BE AN AMERICAN STANDARD MODEL LAKEWELL 7692.049 ENAMELED CAST IRON SERVICE SINK WITH 47076-07 RIM GUARD AND 7298.152 HERITAGE SERVICE SINK FAUCET TO INCLUDE AN OMNI PRESSURE COMPENSATING 2.0 FLOW RESTRICTOR WITH BUCKET HOOKS AND 7798.186 TRAP STANDARD WITH STRAINER.

**HC SHWR (HANDICAPPED SHOWER)**  
SHOWER STALL BY OWNER.  
SHOWER SHALL INCLUDE AN SPEAKMAN MODEL VS-1970-SS-3 SENTINEL MARK II REGENCY CONCEALED ANTI-SCALD BALANCED PRESSURE SHOWER VALVE AND HAND HELD SPRAY COMBINATION WITH 69" WHITE VINYL REINFORCED HOSE. ALSO INCLUDED IN THIS PACKAGE IS A COSMOPOLITAN SHOWER HEAD MODEL #S-2270-AF WITH WATER CONSERVING COMPENSATING AUTOFLOW DEVICE SET TO 2.5 CFM.

**CLOTHES WASHING MACHINES**  
BY OWNER.

**HOSE BIBB**  
SHALL BE A JOSAM 71020-95 SERIES CAST BRONZE BOX TYPE MILD CLIMATE VANDAL PROOF WALL HYDRANT WITH COVER AND CONTROL KEY.

**NOTES:**

- 1.) ALL PLUMBING FIXTURES SHALL BE AS SPECIFIED OR APPROVED EQUAL.
- 2.) PROVIDE ANGLE STOPS ON ALL WATER SERVICE LINES TO FIXTURES FOR INDIVIDUAL SHUT-OFF.
- 3.) ALL HANDICAP PLUMBING FIXTURES SHALL BE INSTALLED AS PER LATEST A.D.A. REQUIREMENTS.
- 4.) ALL FIXTURES EXCLUDING STAINLESS STEEL SINK SHALL BE A BONE COLOR. COORDINATE WITH OWNER PRIOR TO ORDERING FIXTURES.