

SHEET ISSUE	NO.	DATE	DESCRIPTION	BY
1	09/02/2020	ISSUE FOR BID + PERMIT	RMF	

PRINCIPAL IN CHARGE
PROJECT ARCHITECT
DRAWN BY: Author

SHEET TITLE
LEVEL 1 FLOOR
PLAN -
MECHANICAL
PIPING

PROJ. NO.
019216.00

M111

GENERAL NEW WORK NOTES

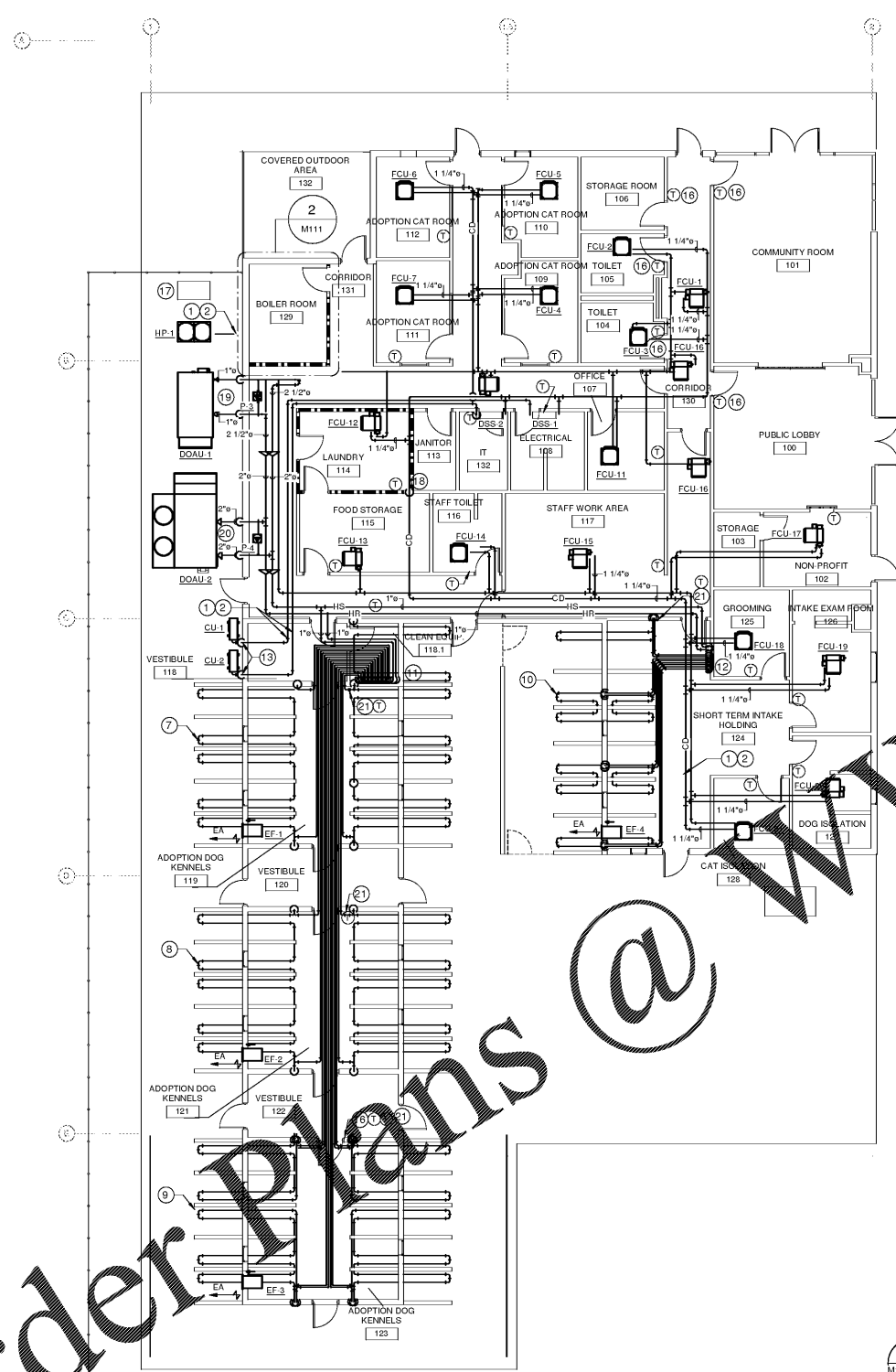
- CONTRACTOR SHALL FIELD VERIFY ALL DIMENSIONS AND SITE CONDITIONS BEFORE COMMENCING WORK.
- THIS CONTRACT REQUIRES COMPLETE, FINISHED WORKABLE PROJECT OF THE AREAS INDICATED BY THE CONTRACT DOCUMENTS, AND SHALL INCLUDE ALL MATERIALS AND LABOR NECESSARY TO COMPLETE SAME, REGARDLESS OF WHETHER OR NOT EACH AND EVERY NECESSARY WORK OR ITEM IS SPECIFICALLY INDICATED ON ANY OTHER PORTION OF THE DRAWING AND/OR NOTES.
- ALL DETAILS AND SECTIONS SHOWN ON THE DRAWINGS ARE INTENDED TO BE TYPICAL AND SHALL BE CONSTRUED TO APPLY TO ANY SIMILAR SITUATION ELSEWHERE ON THE PROJECT, EXCEPT WHERE A DIFFERENT DETAIL IS SHOWN.
- CONTRACTOR SHALL FURNISH ALL ADDITIONAL DATA AND DOCUMENTATION TO SECURE ALL REQUIRED PERMITS AND SHALL COORDINATE THIS DATA WITH THE CONSTRUCTION DOCUMENTS WHERE REQUIRED.
- AS A MINIMUM, ALL WORK SHALL CONFORM TO THE APPLICABLE BUILDING CODE ADOPTED BY THE JURISDICTION OF THE WORK. WHERE MORE STRINGENT CODES ARE ADOPTED, THEY SHALL GOVERN THE WORK.
- ALL WORK SHALL CONFORM TO APPLICABLE FEDERAL, STATE, COUNTY AND LOCAL CODES AND ORDINANCES.
- TO PROVIDE ACCESSIBILITY FOR THE PHYSICALLY HANDICAPPED, ALL WORK SHALL CONFORM TO PUBLIC LAW 101-336 (AMERICANS WITH DISABILITIES ACT OF 1993).
- ALL WORK SHALL CONFORM TO THE APPLICABLE NFPA 101 LIFE SAFETY CODE ADOPTED BY THE JURISDICTION OF THE WORK.
- AROUND ALL EXPOSED PIPES, CONDUIT OR DUCTS, INSTALL ENCLOSURES OF THE SAME MATERIAL AND FINISH AS ADJACENT WORK, UNLESS NOTED OTHERWISE.
- LOUVERS, GRILLES, VENTILATORS AND FANS SHALL BE BUILT SNIJGLY INTO OPENINGS. ALL SUCH ASSEMBLIES TO BE FLASHED, WATERSTOPPED AND SEALED.
- FIELD CHECK ALL ROUGH AND/OR FINISH DIMENSIONS FOR ACCURATE FITTING OF EQUIPMENT, SINKS, COUNTERS, FIXTURES AND ACCESSORIES BEFORE FABRICATION. PROVIDE AND INSTALL ALL GASKETS, FILLERS, SCRIBE STRIPS, PANELS, BASES OR TRIM TO COMPLETE AND FINISH INSTALLATION.
- ALL SWITCHES, OUTLETS, THERMOSTATS, CLOCKS, SPEAKERS OR OTHER WALL MOUNTED DEVICES OR CONTROLS SHALL BE INSTALLED IN LOCATIONS WHICH ARE UNOBSTRUCTED BY SUBJECTS, COUNTERS, RACKS, FIXTURES, FURNISHINGS OR EQUIPMENT. ITEMS INTENDED FOR WALL MOUNTING SHALL NOT BE INSTALLED ON, THROUGH OR INTO ANY OTHER EQUIPMENT UNLESS SPECIFICALLY NOTED FOR MOUNTING HEIGHTS WITH ADR.
- PROVIDE AND INSTALL ALL NECESSARY HARDWARE, BRACKETS, BEACING, WEDGING, INSERTS, BLOCKING, FURRING OR OTHER SUPPLEMENTARY ITEMS NEEDED FOR COMPLETE INSTALLATION OF EQUIPMENT, FIXTURES AND ACCESSORIES.
- ALL CONTRACTORS ARE TO COORDINATE THE WORK WITH OTHERS SO THAT THE WORK AND SCHEDULE ARE NOT IMPEDED. SCHEDULE WORK PROGRESS THROUGHOUT THE ENTIRE PROJECT TO PREVENT CONFLICTS AND INTERFERING. OBTAIN NECESSARY APPROVALS AS SIZES, LOCATIONS, TEMPLATES, LAYOUT, DIMENSIONS AND ALL OTHER INFORMATION NECESSARY FOR A PROPER AND WELL COORDINATED INSTALLATION PRIOR TO INSTALLATION OF ITEMS. CONFER WITH EACH CONTRACTOR EXACT LOCATION OF ALL ITEMS.
- WHERE MATERIALS REFERRED TO IN DRAWINGS, OR NECESSARY TO COMPLETE THE WORK OF THIS CONTRACT ARE NOT SPECIFIED THEREIN, PROVIDE BEST QUALITY MATERIALS. WHERE MATERIALS ARE INTENDED TO MATCH EXISTING, MAKE POSITIVE MATCH. SUBJECT TO OWNER'S APPROVAL. ALL ITEMS AND WORK ON THIS DRAWING ARE NEW UNLESS INDICATED OTHERWISE. ALL WORK WHICH HAS BEEN DAMAGED OR REPLACED WHERE ITEM CANNOT BE REPAIRED TO A NEW CONDITION SHALL BE REPLACED WITH THE SAME INTEGRITY HAS BEEN AFFECTED. ITEM SHALL BE REPLACED.
- CONTRACTOR SHALL OBTAIN PERMITS FOR ALL REQUIREMENTS FOR INSTALLATION OF OWNER PROVIDED EQUIPMENT INCLUDING ROUGHING DIAGRAMS, INSTALLATION INSTRUCTIONS, ELECTRICAL SCHEDULES, SPLIT SYSTEMS, SIZES AND DIMENSIONS AND ALL OTHER INFORMATION NECESSARY FOR A PROPER, WELL COORDINATED INSTALLATION. PRIOR TO ROUGH-IN SERVICES, CONFER WITH OWNER EXACT LOCATION OF ALL ITEMS.
- DESIGN WINDSPEED FOR THE PROJECT IS 130MPH. ALL LOUVERS MUST RESIST POSITIVE AND NEGATIVE WIND LOADS AS ATTRIBUTED TO THE WINDSPEED BY ASCE 7-05 AND FACTORY MUTUAL DATA SHEETS 1-28 & 2-30 WINDSPEED MORE STRINGENT.
- PRODUCTS CONTAINING SILICONE ARE PROHIBITED FROM USE ON THIS PROJECT UNLESS SPECIFICALLY APPROVED IN ADVANCE BY THE OWNER.
- INSTALL DRAIN PANS BENEATH ALL FAN COIL UNITS. REFER TO M-501 FOR DETAIL.
- ALL VOLUME DAMPERS ARE REQUIRED AS SHOWN.

DRAWING NOTES

- REFRIGERANT LIQUID AND GAS PIPING TO THE AIR COOLED CONDENSING UNIT. MULTIPLE PIPES ARE REQUIRED. FOR CLARITY ONLY ONE PIPE IS SHOWN. REFER TO VRF PIPING LAYOUT ON M600 AND DUCTLESS SPLIT SYSTEM SCHEDULE FOR SIZES.
- SIZE REFRIGERANT PIPING IN ACCORDANCE WITH MANUFACTURER'S WRITTEN INSTRUCTIONS BASED ON THE PROJECT SPECIFIC LAYOUT AND LENGTH OF REFRIGERANT PIPING. REFER TO SCHEMATIC ON M601 FOR BASIS OF DESIGN SIZES.
- BAS CONTROL PANEL.
- VRF CONTROL PANEL.
- PIPE SUPPORT (TYP).
- PROVIDE WATER TIGHT PIPE PENETRATIONS AT WALL.
- PROVIDE RADIANT FLOOR HEATING SYSTEM WITH (2) 5/8" CIRCUITS @ 12" O.C. AND 290 FEET OF PIPING. TOTAL HEAT LOAD IS 10,600 BTU/HR. SEPARATE AREAS SHALL BE INTERCONNECTED BY UNDERSLAB PIPING.
- PROVIDE WATTS RADIANT FLOOR HEATING SYSTEM OR APPROVED EQUIVALENT. PROVIDE (2) 5/8" CIRCUITS @ 12" O.C. AND 345 FEET OF PIPING. TOTAL HEAT LOAD IS 10,670 BTU/HR. SEPARATE AREAS SHALL BE INTERCONNECTED BY UNDERSLAB PIPING.
- PROVIDE WATTS RADIANT FLOOR HEATING SYSTEM OR APPROVED EQUIVALENT. PROVIDE (4) 5/8" CIRCUITS @ 12" O.C. AND 345 FEET OF PIPING. TOTAL HEAT LOAD IS 10,715 BTU/HR. SEPARATE AREAS SHALL BE INTERCONNECTED BY UNDERSLAB PIPING.
- PROVIDE WATTS RADIANT FLOOR HEATING SYSTEM OR APPROVED EQUIVALENT. PROVIDE (4) 5/8" CIRCUITS @ 12" O.C. AND 345 FEET OF PIPING. TOTAL HEAT LOAD IS 10,300 BTU/HR. SEPARATE AREAS SHALL BE INTERCONNECTED BY UNDERSLAB PIPING.
- RADIANT FLOOR HEATING MANIFOLDS FOR ADOPTING DOG KENNELS 119, 121 & 123.
- RADIANT FLOOR HEATING MANIFOLDS FOR SHORT TERM INTAKE HOLDING 124.
- PROVIDE WATER TIGHT PIPE PENETRATION AS WALL.
- PROVIDE NEW DUAL FUEL (METHANE GAS / NATURAL GAS) BOILER. SEE SCHEDULE FOR ADDITIONAL INFORMATION.
- INDIRECT DOMESTIC WATER HEATER PROVIDED BY PLUMBING CONTRACTOR. SEE PLUMBING PLUMBING DRAWINGS FOR ADDITIONAL INFORMATION.
- PROVIDE TAMPER RESISTANT THERMOSTAT IN PUBLIC AREAS.
- LANDFILL GAS DRYER SYSTEM PROVIDED BY PLUMBING CONTRACTOR.
- 1 1/4" CONDENSATE DOWN TO SERVICE SINK.
- PROVIDE HEAT TRACE HT-1 FOR EXPOSED HEATING HOT WATER SUPPLY AND RETURN FEEDING BOILER. SEE SCHEDULE FOR DETAILS.
- PROVIDE HEAT TRACE HT-2 FOR EXPOSED HEATING HOT WATER SUPPLY AND RETURN FEEDING BOILER. SEE SCHEDULE FOR DETAILS.
- PROVIDE TAMPER PROOF THERMOSTAT FOR RADIANT FLOOR HEATING.

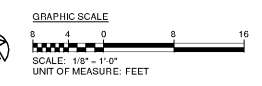
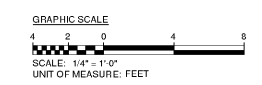
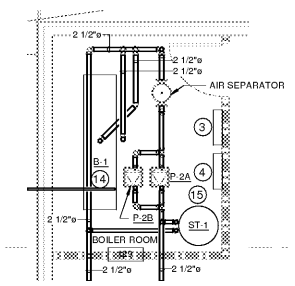
ALTERNATES

ALTERNATE 03: PROVIDE RADIANT FLOOR HEATING SYSTEM AS INDICATED ON DRAWINGS.



1 FIRST FLOOR PLAN - MECHANICAL PIPING
SCALE: 1/8" = 1'-0"

2 BOILER ROOM 129 - ENLARGED PLAN - PIPING
SCALE: 1/4" = 1'-0"



FIRE RATED WALL

