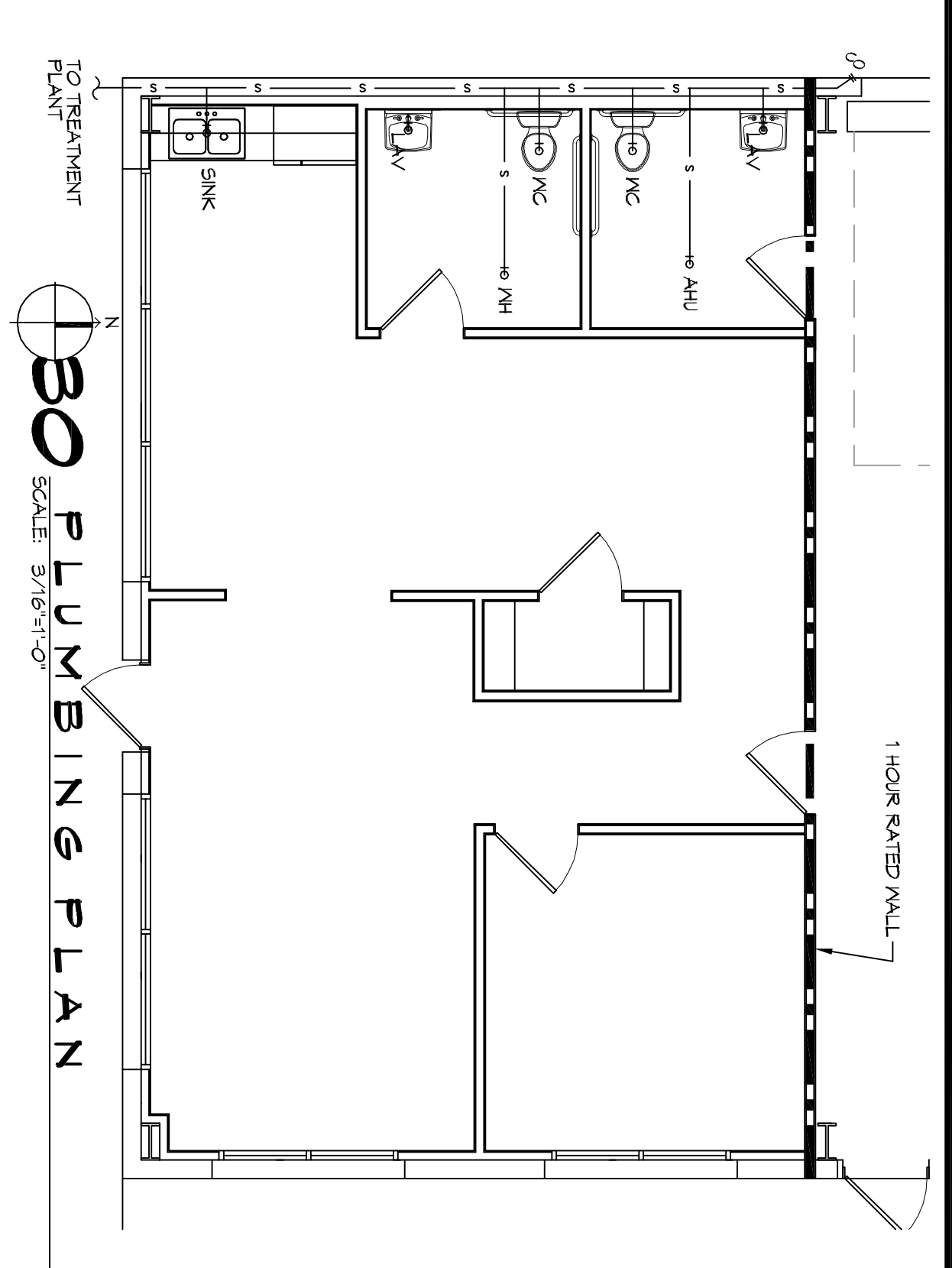
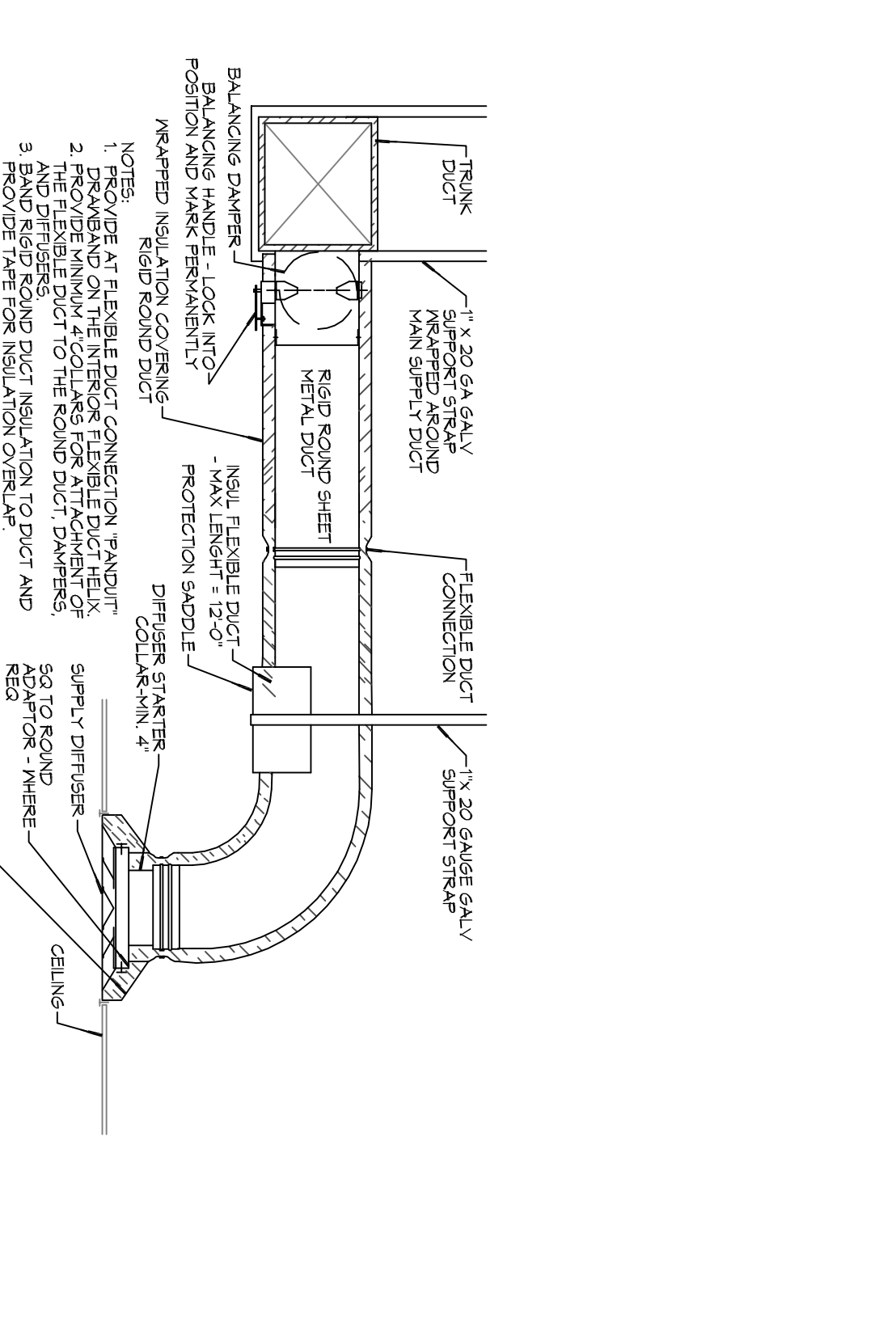


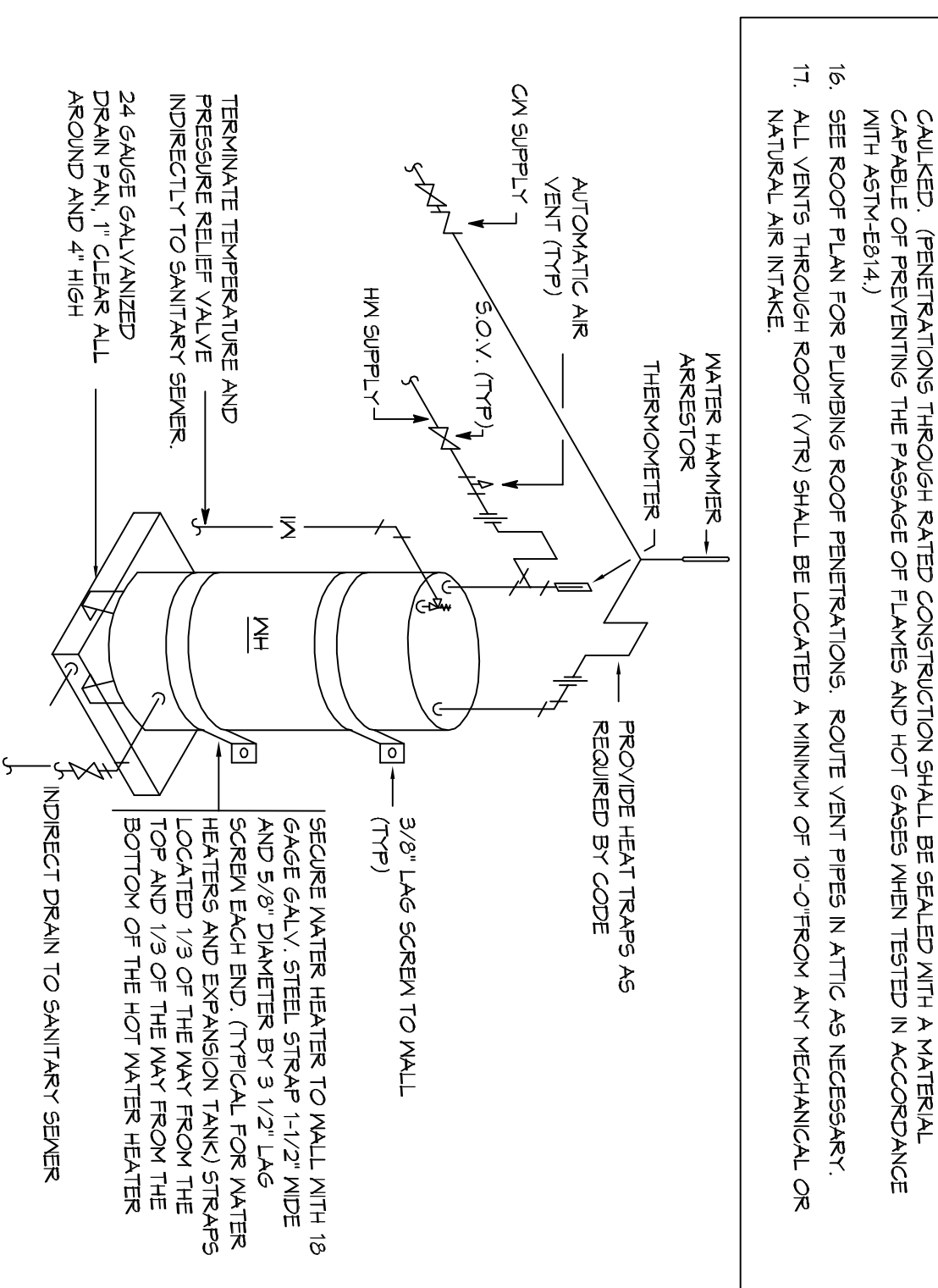
- ### GENERAL HVAC NOTES
- CONCEALED DUCTWORK TO BE GALVANIZED SHEET METAL LINED WITH FIBROGLASS DUCT LINER, MIN R-6, INSTALLED PER SMACNA STANDARDS.
  - EXPOSED DUCTWORK TO BE GALVANIZED SHEET METAL LINED WITH FIBROGLASS DUCT LINER, MIN R-6, INSTALLED PER SMACNA STANDARDS.
  - DUCT SIZES SHOWN ARE CLEAR INSIDE DIMENSIONS.
  - IN ALL SYSTEMS OVER 2000 CFM AND LESS THAN 15,000 CFM, SMOKE DETECTORS SHALL BE INSTALLED IN ACCORDANCE WITH NFPA 72E IN THE RETURN DUCT DOWNSTREAM OF THE AIR HANDLING UNIT AND ALL FILTERS TO AUTOMATICALLY STOP THE FAN.
  - PROVIDE UL LISTED 125°F FRESH AIR RETURN AIR OF EACH SYSTEM UNDER 2000 CFM TO SHUT DOWN THE FAN IN THE EVENT OF FIRE PENETRATIONS OF FIRE-RATED ASSEMBLIES AND WHERE REQUIRED BY CODE, INCLUDING OUTSIDE AIR INTAKES AND EXHAUST FANS.
  - CONDENSATE DRAINING TO BE P.V.C PIPE RUN TO PLUMBERS P-TRAP WITHIN FIVE FEET OF AIR HANDLING UNITS.
  - ALL AIR HANDLING SYSTEMS TO BE BALANCED TO ASSURE PROPER AIR FLOW PER PLANS.
  - ALL THERMOSTATS TO BE AUTOMATIC CHANGEOVER WITH HEAT SWITCH.
  - EXHAUST FAN SHALL BE CONTROLLED BY A SWITCH ON THE WALL IN THE SAME LOCATION AS LIGHT SWITCHES). PROVIDE BACK DRAFT DAMPER, PROVIDE AND INSTALL WATER PROOF GULLE VENT IN PROPER ROOF LOCATION FOR PLUMBING FIXTURE EXHAUST.
  - ALL SUPPLY AIR VENTS SHALL BE EQUIPPED WITH AIR CONTROL DAMPERS AT THE REGISTER.
  - LOCATE OUTDOOR UNITS AS SHOWN ON ARCHITECTURAL DRAWINGS AND INSTALLED ACCORDING TO MANUFACTURERS' INSTRUCTIONS.
  - REFRIGERANT LINES SHALL BE SIZED BY UNIT MANUFACTURER AND INSTALLED ACCORDING TO MANUFACTURERS' INSTRUCTIONS.
  - FRESH AIR SHALL BE SUPPLIED TO EACH AIR HANDLER THROUGH EXTERIOR WALL DUCT SUPPLIED WITH A CONTROL DAMPER.
  - ALL ELECTRICAL, MECHANICAL, AND PLUMBING PENETRATING FIRE WALLS SHALL BE FIRE CALLED. (PENETRATIONS THROUGH RATED CONSTRUCTION SHALL BE SEALED WITH A WATERAL CAPABLE OF PREVENTING THE PASSAGE OF FLAMES AND HOT GASES WHEN TESTED IN ACCORDANCE WITH ASTM-E-159).
  - ALL MECHANICAL SYMBOLS ARE DRAWN DIMENSIONALLY TO MATCH THE MANUFACTURER'S DRAWINGS.
  - ALL MECHANICAL SYMBOLS ARE DRAWN DIMENSIONALLY TO MATCH THE MANUFACTURER'S DRAWINGS.
  - REGISTER LENGTH NOT TO EXCEED 12'-0".
  - REFER TO REFLECTED CEILING PLAN FOR FAN, GRILLE AND DIFFUSER LOCATIONS AND ORIENTATIONS AS REQUIRED.
  - FAN LOCATION OR ORIENTATIONS TO BE COORDINATED WITH OWNER AS SHOWN ON REFLECTED CEILING PLAN.
  - PROVIDE AND INSTALL SHOCK DETECTORS AS APPROVED BY LOCAL AGENCIES. PLACE NEAR R.V. AND S.V.A. OPENINGS OF AHU AND PROVIDE WITH ACCESS PANEL, WIRING BY ELECTRICAL CONTRACTOR.
  - FRESH AIR INTAKES ARE REQUIRED TO HAVE VOTORIZED OR GRAVITY DAMPERS TO SHUT OFF WHEN SYSTEM IS NOT RUNNING.
  - PROVIDE AIR INTAKES AT ALL EXTERIOR MECHANICAL PENETRATIONS.
  - COORDINATE WALL MOUNTED THERMOSTAT LOCATIONS WITH ALL OWNER PARTITIONS. REFER TO ARCHITECTURAL DRAWINGS.
  - FIELD VERIFY ALL DIMENSIONS AND INTERFERENCES PRIOR TO INSTALLATION OR FABRICATION.
  - PROVIDE MIN 18 GA GALVANIZED SHEET METAL TO BLANK-OFF GABLE VENTS WHERE INTAKE/EXHAUST DUCTS COOLIE.



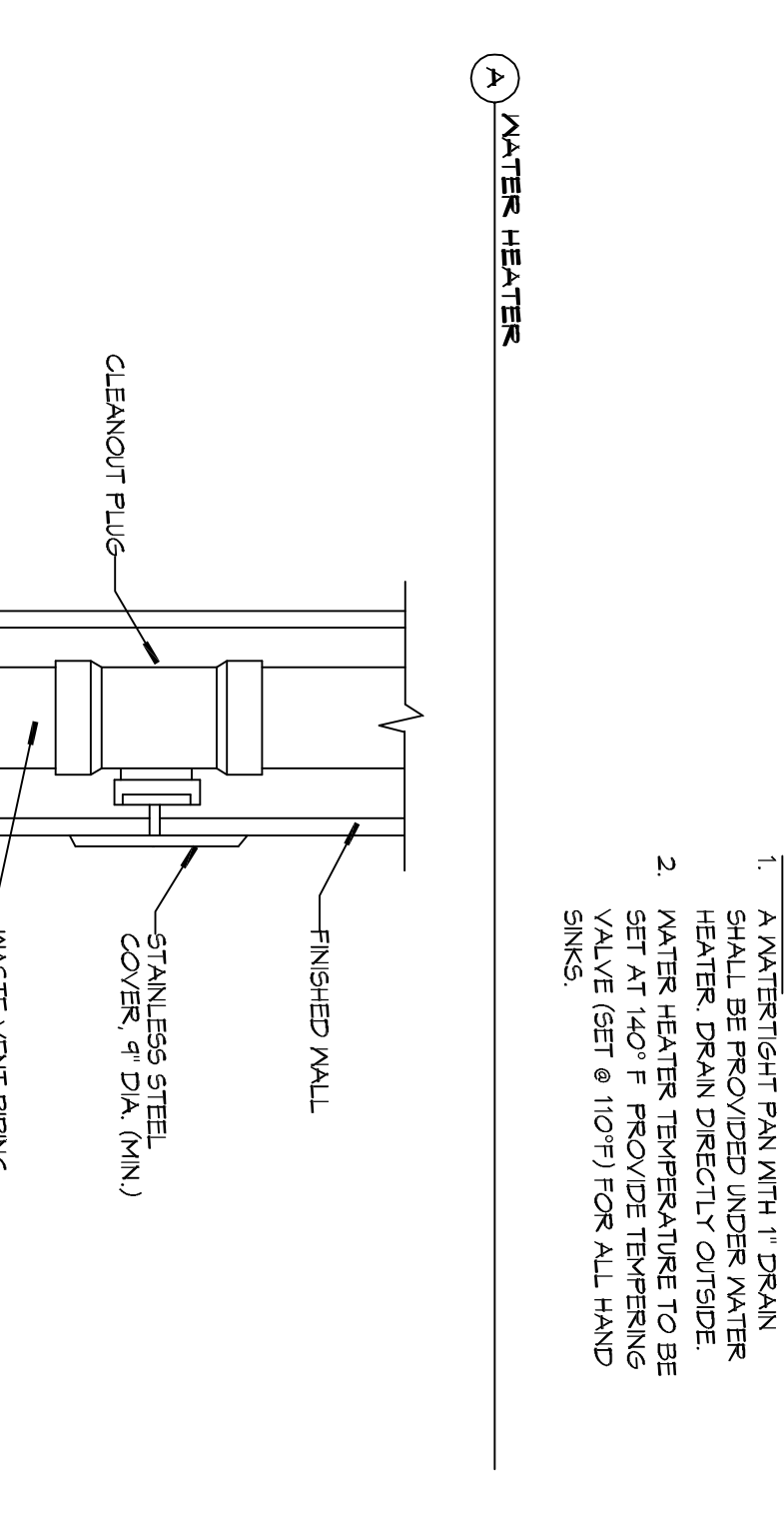
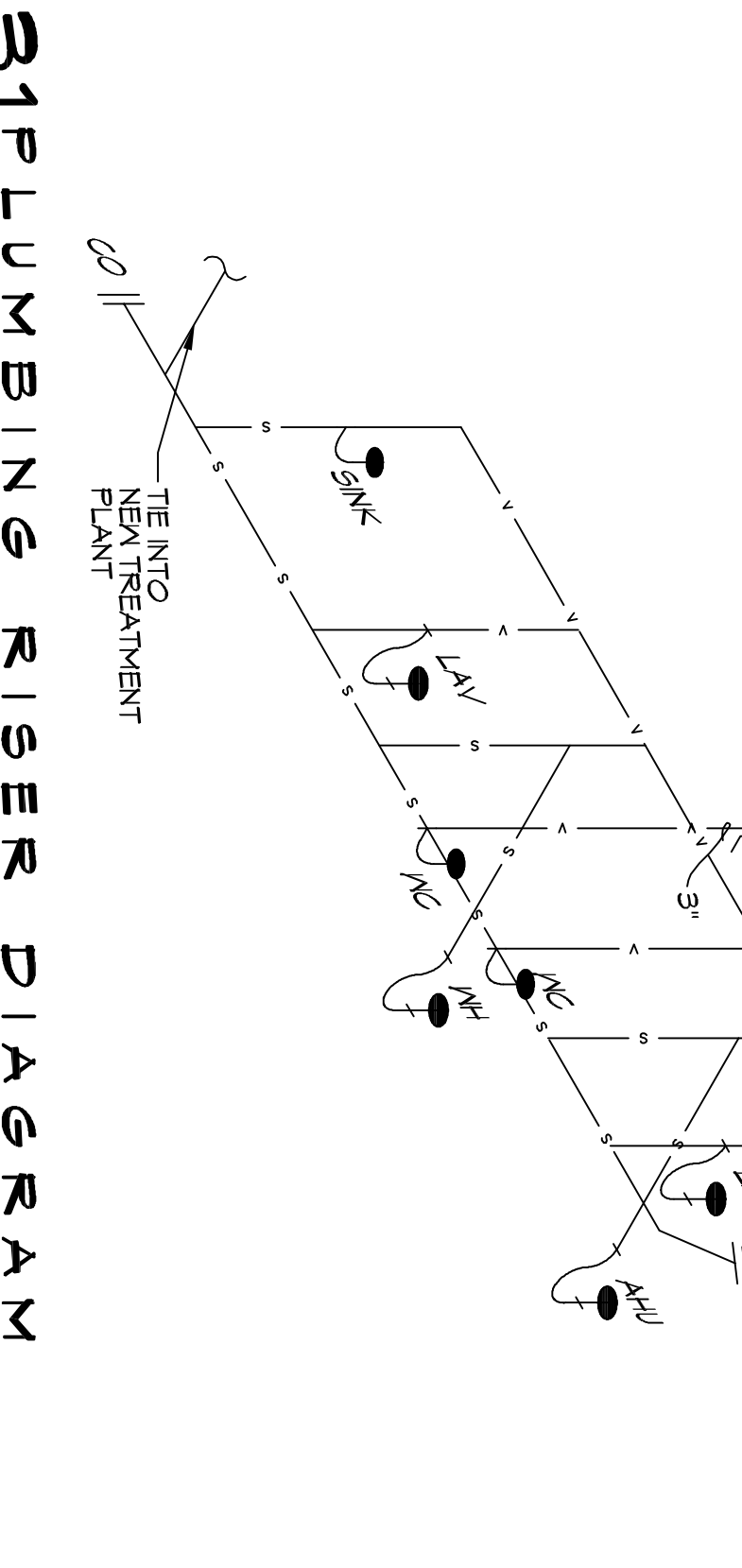
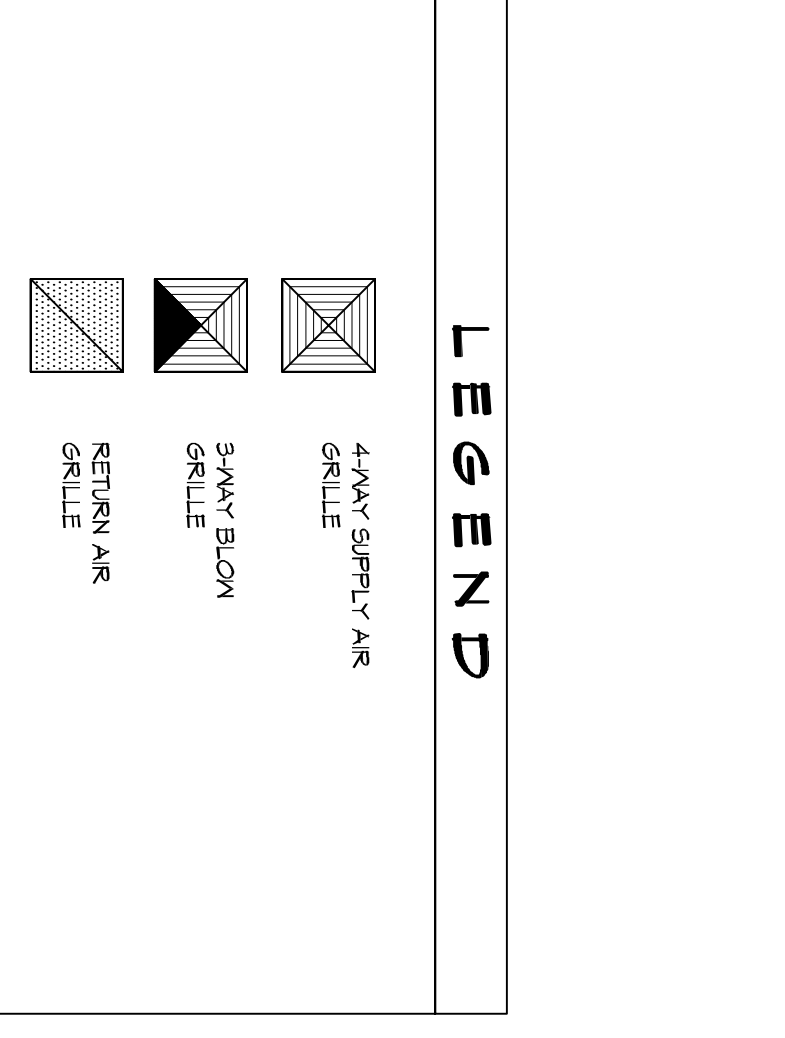
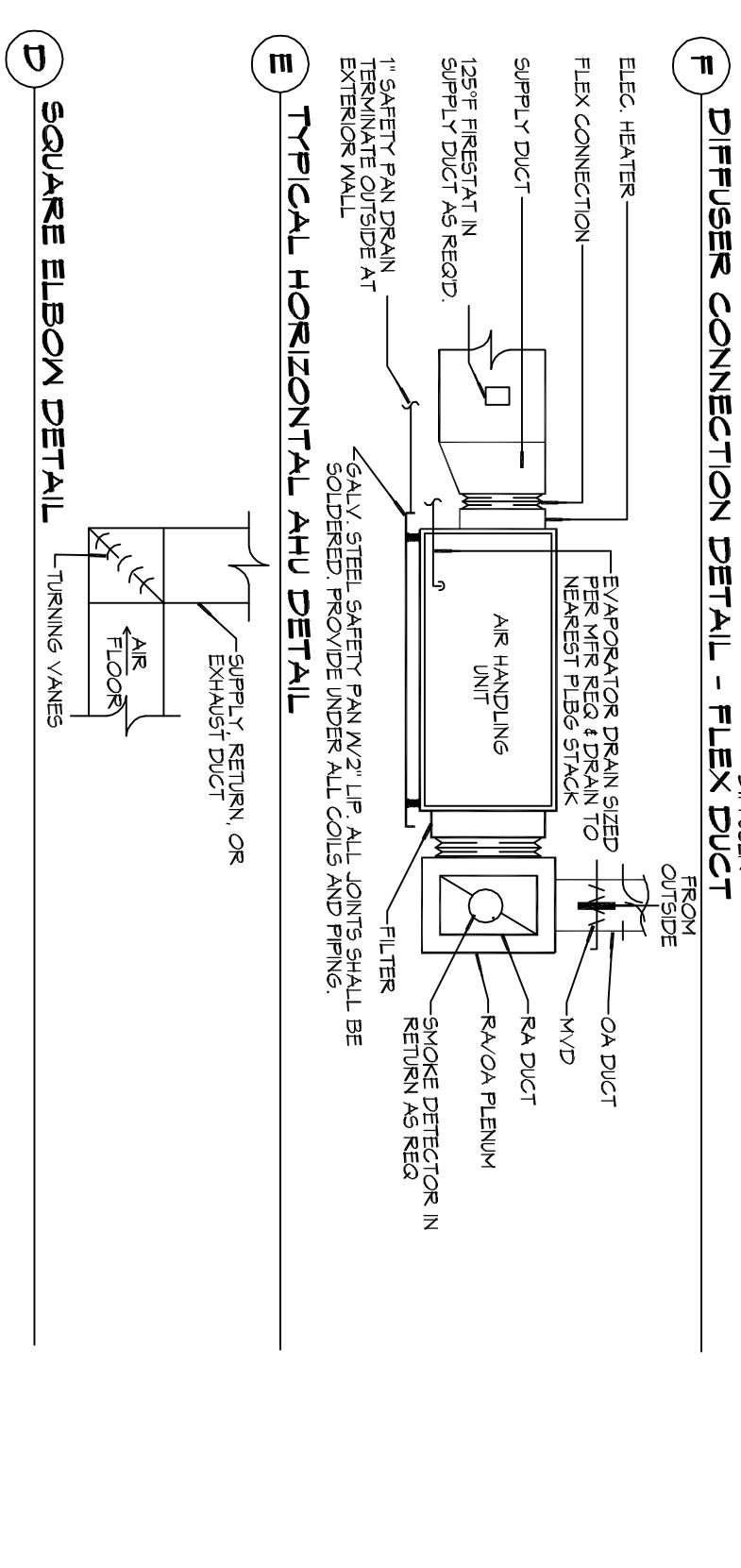
- ### GENERAL PLUMBING NOTES
- PLUMBING LINES SHOWN ARE DRAWN DIAGRAMMATIC IN NATURE AND REPRESENT CONCEPTUAL ROUTING ONLY. CONTRACTOR IS RESPONSIBLE FOR FIELD VERIFICATION OF ALL ACTUAL CONDITIONS.
  - EQUIPE ALL LABOR MATERIAL, TRANSPORTATION, SUPPLY, SERVICE, AND EQUIPMENT FOR A COMPLETE OPERATING SYSTEM. THE SYSTEM SHALL INCLUDE HOT AND COLD WATER PIPING, SEWER AND VENT PIPING, INSULATION, WATER HEATER, HANGERS, VALVES, SUPPORTS WITHOUT ANY RESTRICTIONS TO VOLUME, CUT AND PATCH AS REQUIRED TO INSTALL PIPES.
  - ALL WORK AND MATERIAL SHALL CONFORM STRICTLY TO THE LATEST LOCAL CITY, PARISH, STATE AND NATIONAL GOVERNING CODES. MEET LA STATE PLUMBING CODE 2013 REQUIREMENTS.
  - CONTRACTOR IS TO FIELD VERIFY ALL EXISTING UTILITY LOCATIONS, ELEVATIONS AND SIZES PRIOR TO COMMENCING ANY WORK. CONTRACTOR SHALL PAY NECESSARY FEES FOR THE UTILITIES CONNECTIONS.
  - CONTRACTOR IS RESPONSIBLE TO VERIFY THE EXISTING INVERTS AND SET NEW INVERTS OF SEWERAGE AND DRAINAGE PIPES.
  - SEWERAGE LINES 3-INCH AND SMALLER SHALL BE SLOPED 1/4" PER FOOT AND LINES 4-INCH AND LARGER SHALL BE 1/8" PER FOOT.
  - TEST ALL PIPING AT REQUIRED PRESSURE.
  - ALL PLUMBING SHALL BE CLOSELY COORDINATED WITH STRUCTURAL, MECHANICAL SYSTEM AND ELECTRICAL SYSTEMS TO INSURE NO TRAVELERS WILL CONFLICT WITH EACH OTHER.
  - DO NOT SCALE DRAWINGS. SEE ARCHITECTURAL DRAWINGS FOR EXACT LOCATIONS OF DOORS, WINDOWS, WALLS, FIXTURES, ETC.
  - ALL WATER MAINS AND PIPING NOT SHOWN FOR CLARITY, ALL LOCATIONS FIELD VERIFIED.
  - DOWNSIC HOT AND COLD WATER PIPING AND FITTINGS UNDER SLABS SHALL BE A315 B88 COPPER WATER TUBE TYPE K, SOFT ANNEALED. NO JOINTS SHALL BE ALLOWED UNDER THE SLAB.
  - DOWNSIC WATER PIPING AND FITTINGS ABOVE THE SLAB SHALL BE A315 B88 COPPER WATER TUBE TYPE L, HARD DRAWN WITH COPPER PRESURE TIGHT FITTINGS, AND B16.22 THE JOINTS SHALL BE SOLDERED TYPE USING A315 B92, ALLOY GRADE 90A (95-5) SOLDER.
  - SOIL, WASTE, VENT PIPING AND FITTINGS ABOVE THE SLAB SHALL BE SERVICE WEIGHT CAST IRON PIPE WITH BELL AND SPOUT ENDS AND ONE PIECE RECORDED INSERT TYPE GASKET. USE P.V.C SCHEDULE 40 OR ABS DRY PIPE AND FITTINGS ABOVE THE FLOOR SHALL BE INSULATED WITH 1/2" THICK FIBERGLASS INSULATION AND JACKET.
  - ALL WATER PIPING AND FITTINGS ABOVE THE FLOOR SHALL BE INSULATED WITH 1/2" THICK FIBERGLASS INSULATION AND JACKET.
  - ALL ELECTRICAL, MECHANICAL AND PLUMBING ELEMENTS PENETRATING FIRE PARTITIONS SHALL BE FIRE CALLED. (PENETRATIONS THROUGH RATED CONSTRUCTION SHALL BE SEALED WITH A MATERIAL CAPABLE OF PREVENTING THE PASSAGE OF FLAMES AND HOT GASES WHEN TESTED IN ACCORDANCE WITH ASTM-E-159).
  - SEE ROOF PLAN FOR PLUMBING ROOF PENETRATIONS. ROOF VENT PIPES IN ATTIC AS NECESSARY.
  - ALL VENTS THROUGH ROOF (VTR) SHALL BE LOCATED A MINIMUM OF 10'-0" FROM ANY MECHANICAL OR NATURAL AIR INTAKE.



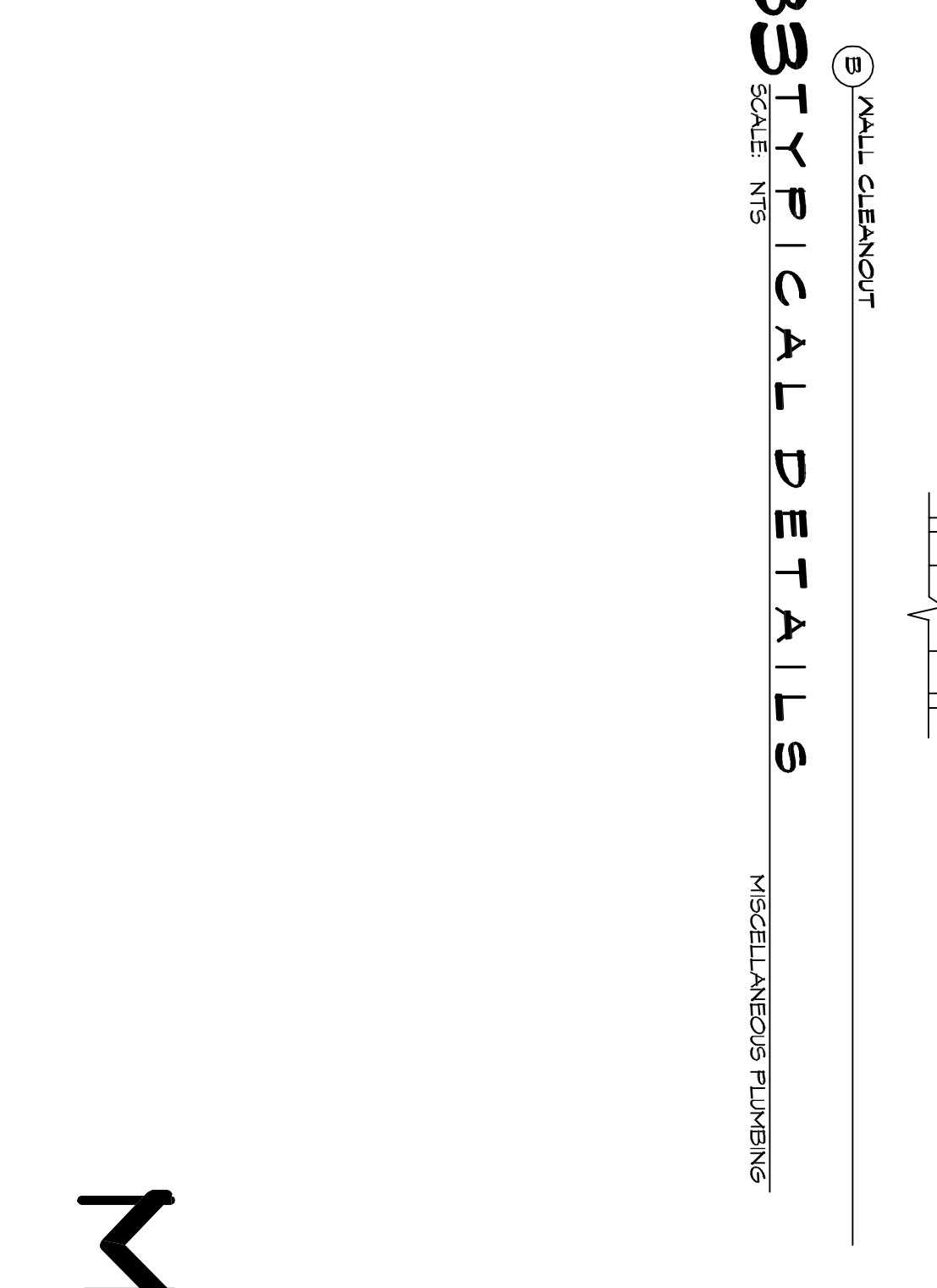
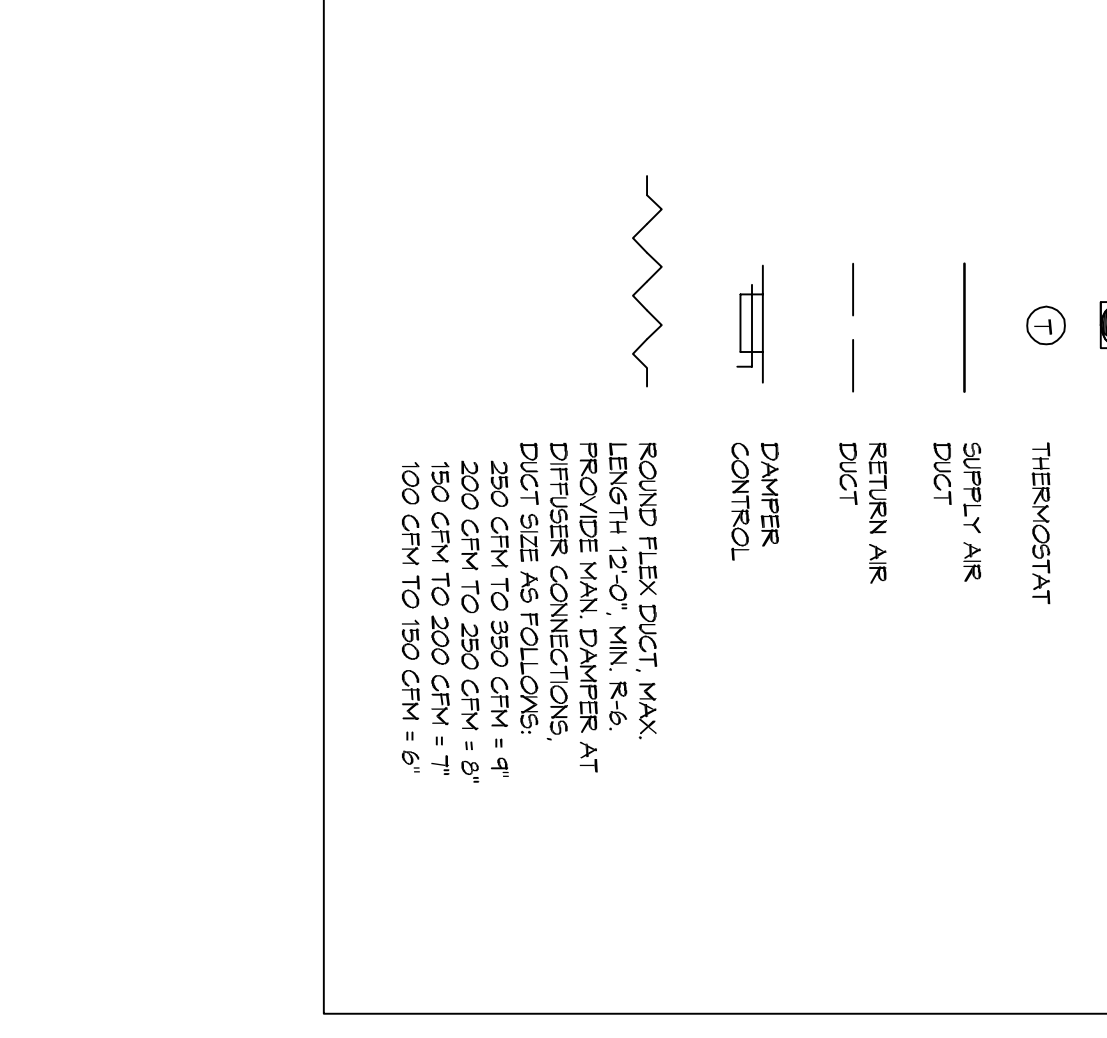
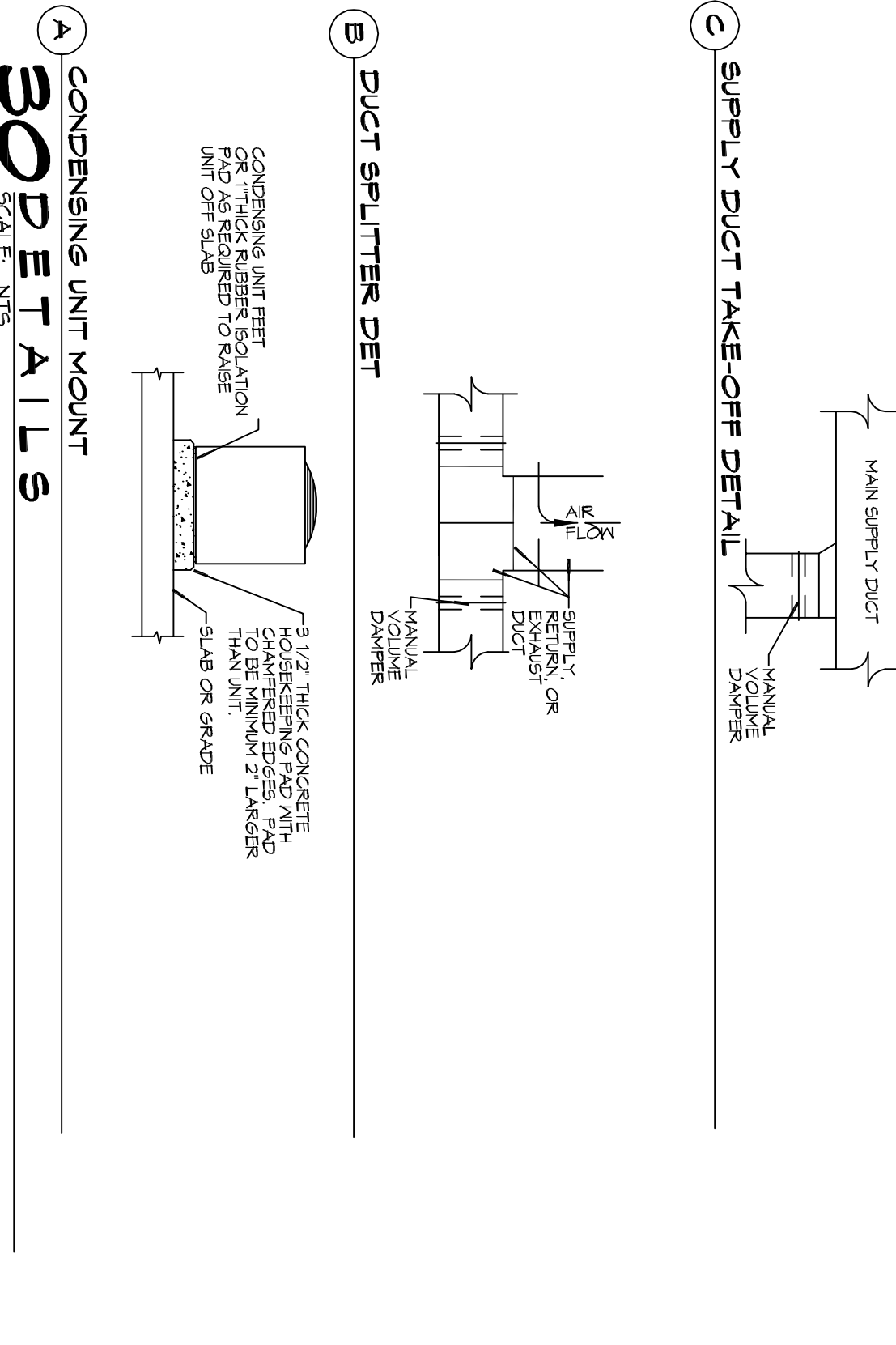
- ### LEGEND
- 4WAY SUPPLY AIR GRILLE
  - 3WAY BLOW GRILLE
  - RETURN AIR GRILLE
  - EXHAUST FAN
  - THERMOSTAT
  - SUPPLY AIR DUCT
  - RETURN AIR DUCT
  - DAMPER CONTROL
- ROUND FLEX DUCT, MAX. LENGTH 12'-0", MIN. R-6, PROVIDE VAN DAMPER AT EACH END. PROVIDE 1/2" AIR GAP BETWEEN DUCT AND SLAB OR GRADE. DUCT SIZE AS FOLLOWS:  
 250 CFM TO 950 CFM = 4"  
 200 CFM TO 250 CFM = 3"  
 150 CFM TO 200 CFM = 2"  
 100 CFM TO 150 CFM = 1"



- ### WATER HEATER TYPICAL DETAIL
- NOTES:  
 1. WATER TIGHT PAN WITH 1" DRAIN SHALL BE INSTALLED UNDER WATER HEATER PAN DUCT.  
 2. WATER HEATER TEMPERATURE TO BE SET AT 120°F. PROVIDE THERMOSTATIC VALVE (SET @ 110°F) FOR ALL HAND SINKS.



- ### CONDENSING UNIT MOUNT DETAILS
- CONDENSING UNIT FEET FROM THE EXTERIOR SHALL BE MORE THAN 2" UNDER THE SLAB OR GRADE.



- ### CONDENSING UNIT MOUNT DETAILS
- CONDENSING UNIT FEET FROM THE EXTERIOR SHALL BE MORE THAN 2" UNDER THE SLAB OR GRADE.

**DAMMON ENGINEERING INC.**  
 LOUISIANA & MISSISSIPPI  
 Chief Engineer: Brian Mstch, PE  
 554 Old Spanish Trail  
 Slidell, LA 70458  
 www.dammonengineering.com  
 info@dammonengineering.com  
 PH: 985.649.5832

#	DESCRIPTION	DATE

DATE	DESCRIPTION
07-11-2019	

OFFICE WAREHOUSE RENOVATION  
**SURGUMENTS**  
 88255 COAST BLVD. SLIDELL, LA  
 JOB No: 2019-001 DATE: 07-11-2019  
 DRAWN BY: CKD CHECKED BY: BAM