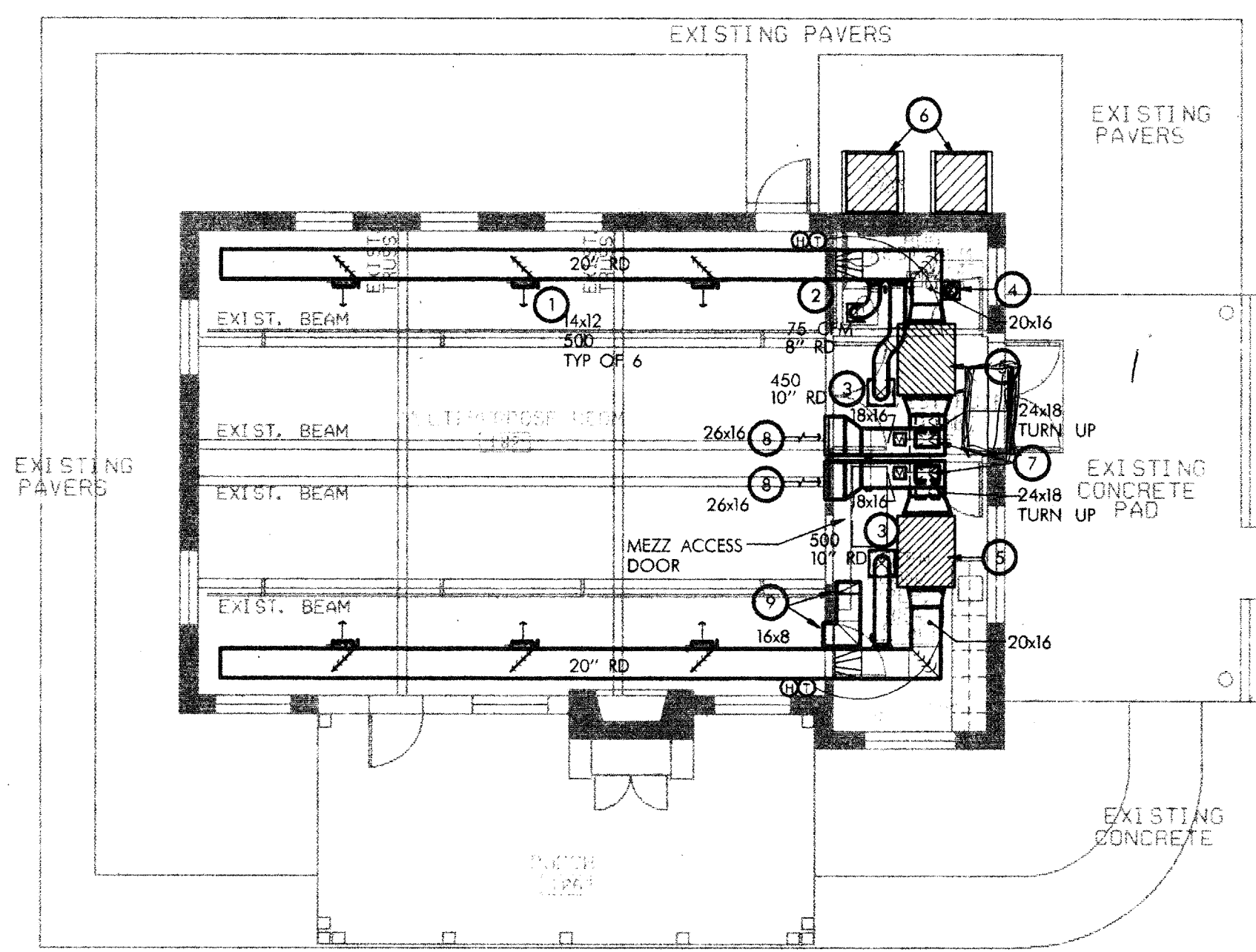


HVAC SYMBOLS:

- NEW CEILING DIFFUSER
- RETURN AIR/EXHAUST GRILLE
- MOTORIZED DAMPER
- VOLUME DAMPER
- THERMOSTAT
- HUMIDISTAT

HVAC KEYED NOTES:

- 1 SIDEWALL SUPPLY GRILLE EQUAL TO TITUS 271RL WITH OBD. 45 DEGREE HORZ. DEFLECTION. SIZE AND CFM AS INDICATED. DIRECT AIRFLOW 30 DEGREES DOWN FROM HORIZONTAL.
- 2 CEILING MOUNTED SUPPLY DIFFUSER EQUAL TO TITUS TMS-12x12. CFM AND NECK SIZE AS INDICATED.
- 3 CEILING MOUNTED SUPPLY DIFFUSER EQUAL TO TITUS TMS-24x24. CFM AND NECK SIZE AS INDICATED.
- 4 FURNISH AND INSTALL EXHAUST FAN EQUAL TO BROWN 696 WITH LIGHT - 100 CFM. 15A. 120V. EXTEND 4" RD DUCT THROUGH ROOF AND PROVIDE RAIN CAP.
- 5 FURNISH AND INSTALL AIR HANDLER UNIT IN MEZZANINE EQUAL TO TRANE (ACCEPTABLE MANUFACTURERS ARE LENNOX, TRANE, CARRIER, AND YORK) TWO60A1 WITH SUPPLEMENTARY HEATER BA7HRL123A (23.04 KW). .75 HP INDOOR FAN ELEC.: 240V 1PH, 128 MCA.
- 6 FURNISH AND INSTALL HEAT PUMP EQUAL TO TRANE (ACCEPTABLE MANUFACTURERS ARE LENNOX, TRANE, CARRIER, AND YORK) TWO60C WITH EVAP. DEFROST CONTROL KIT. ELEC.: 240V 1PH PROVIDE 4" THICK 3-1/2' X 3-1/2' CONCRETE HOUSE-KEEPING PAD.
- 7 EXTEND 16x10 O.A. (560 CFM) INTAKE DUCT FROM RETURN DUCT TO ROOF AND TERMINATE WITH GOOSENECK AND BIRD SCREEN ON ROOF. PROVIDE MOTORIZED DAMPER AS SHOWN IN BETWEEN ROOF PENETRATION AND RETURN DUCTWORK. MAINTAIN A 10 FT HORIZONTAL CLEAR FROM EXHAUST.
- 8 SIDEWALL RETURN GRILLE EQUAL TO TITUS 350RL. SIZE AS INDICATED. LOCATE AS HIGH AS POSSIBLE SO THE RETURN DUCTWORK WILL PROVIDE A MIN. 6'-0" CLEARANCE ABOVE MEZZ. FLOOR.
- 9 RETURN GRILLE EQUAL TO TITUS 350RL. SIZE AS INDICATED. LOCATE ONE ABOVE DOOR. ABOVE PREP AREA CEILING. WITH DUCT DOWN TO OTHER GRILLE IN CEILING.

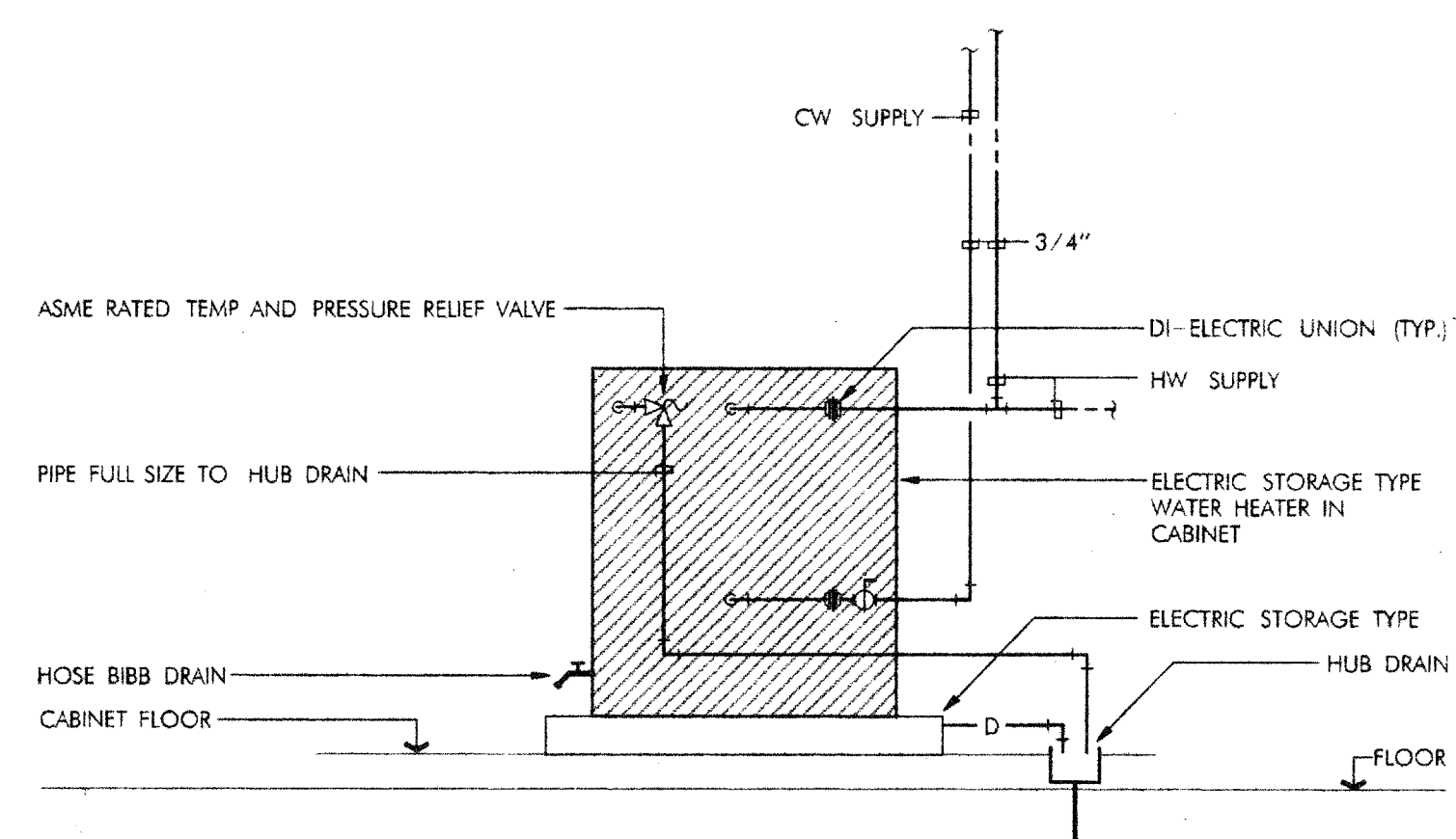


HVAC GENERAL NOTES:

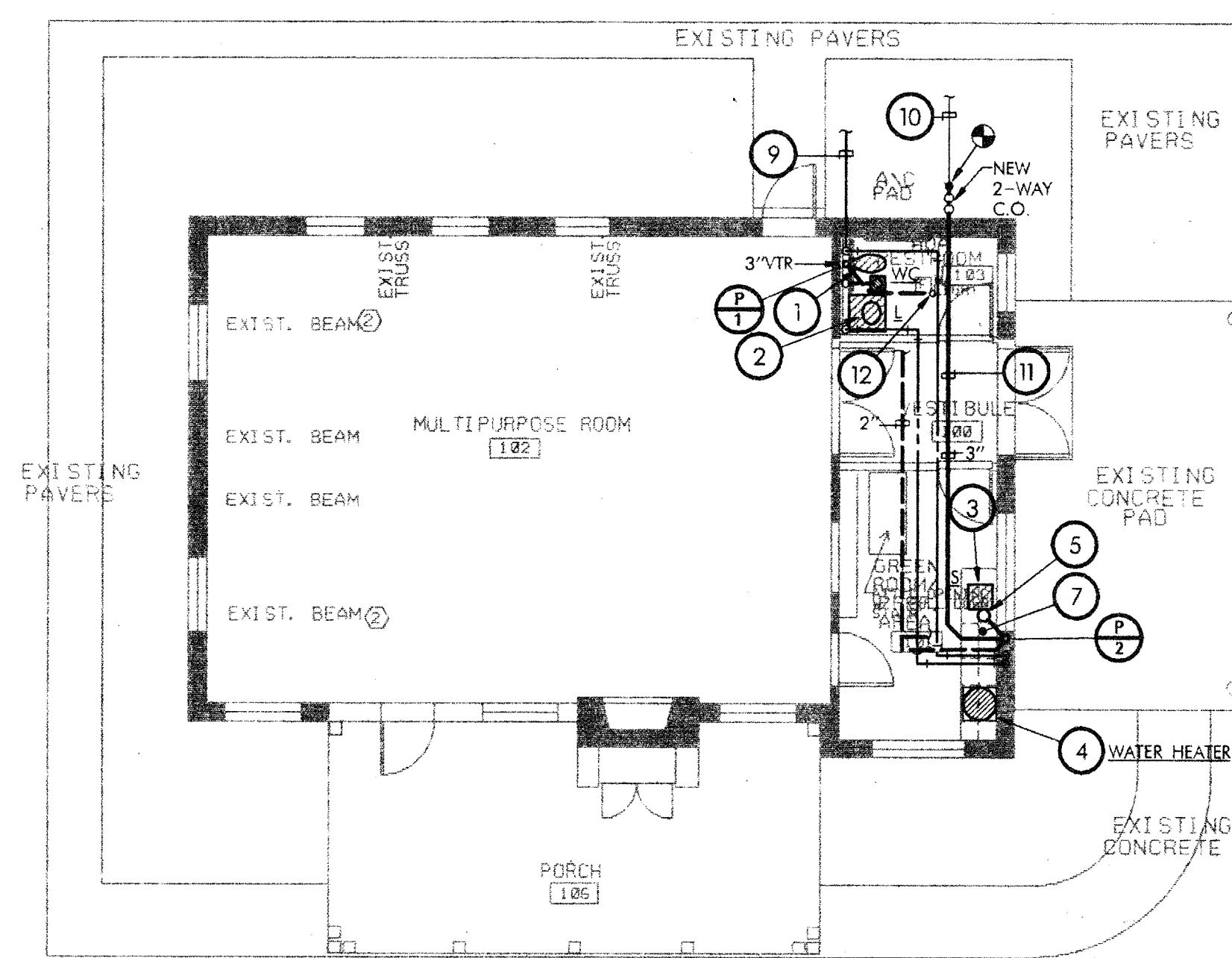
- A ALL WORK SHALL COMPLY WITH APPLICABLE NATIONAL, STATE AND LOCAL CODES, RULES, REGULATIONS AND REQUIREMENTS.
- B CONTRACTOR SHALL FIELD VERIFY PROJECT PRIOR TO BIDDING.
- C CONTRACTOR SHALL ENGAGE THE INDEPENDENT AIR BALANCING COMPANY OF RECORD FOR THIS BUILDING TO OBTAIN AIR QUANTITIES SHOWN ON DRAWING.
- D OFFSET DUCTS INTO JOIST SPACE FOR CLEARANCE WHERE SPACE ABOVE CEILING IS NOT SUFFICIENT FOR DUCTS TO CROSS OTHER DUCTS OR WORK OF OTHER TRADES.
- E PIPES AND DUCTS TO BE COORDINATED ON JOB WITH BUILDING STRUCTURE AND WORK OF OTHER CONTRACTORS.
- F COORDINATE CEILING DIFFUSERS AND GRILLES WITH LIGHTING FIXTURES. REFER TO ARCHITECTURAL REFLECTED CEILING PLAN.
- G CONTRACTOR SHALL COORDINATE LOCATION OF THERMOSTATS WITH ARCHITECT IN FIELD.
- H ALL DUCTWORK SHALL BE GALVANIZED SHEET METAL CONFORMING TO SMACNA STANDARDS. RECTANGULAR SUPPLY AND RETURN SHALL BE LINED WITH 1" LINER AND OUTSIDE AIR SHALL BE EXTERNALLY INSULATED WITH 1-1/2" FIBERGLASS WITH VAPOR BARRIER.
- I FURNISH AND INSTALL PROPER SUPPORT FOR THE AHU PER THE MANUFACTURER'S DIRECTIONS INCLUDING SPRING VIBRATION ISOLATORS.
- J EXTEND 3/4" INSULATED CONDENSATE DRAIN LINE FROM AHU'S TO HUB DRAIN BELOW SINK LOCATED IN GREEN ROOM/PREP AREA.
- K PROVIDE A HUMIDISTAT FOR EACH CONDENSER. HUMIDISTAT SET POINT SHALL BE ADJUSTABLE. DURING ELEVATED HUMIDITY CONDITIONS IN THE SPACE, THE HUMIDISTAT SHALL TAKE CONTROL OF THE CONDENSER TO MAINTAIN HUMIDITY SET POINT AND SPACE THERMOSTAT SHALL STAGE ELECTRIC HEATING TO MAINTAIN SPACE TEMPERATURE.

SPRINKLER GENERAL NOTES:

- A CONTRACTOR SHALL PROVIDE NEW FULL SPRINKLER SYSTEM. COORDINATE REQUIREMENTS WITH ARCHITECT.



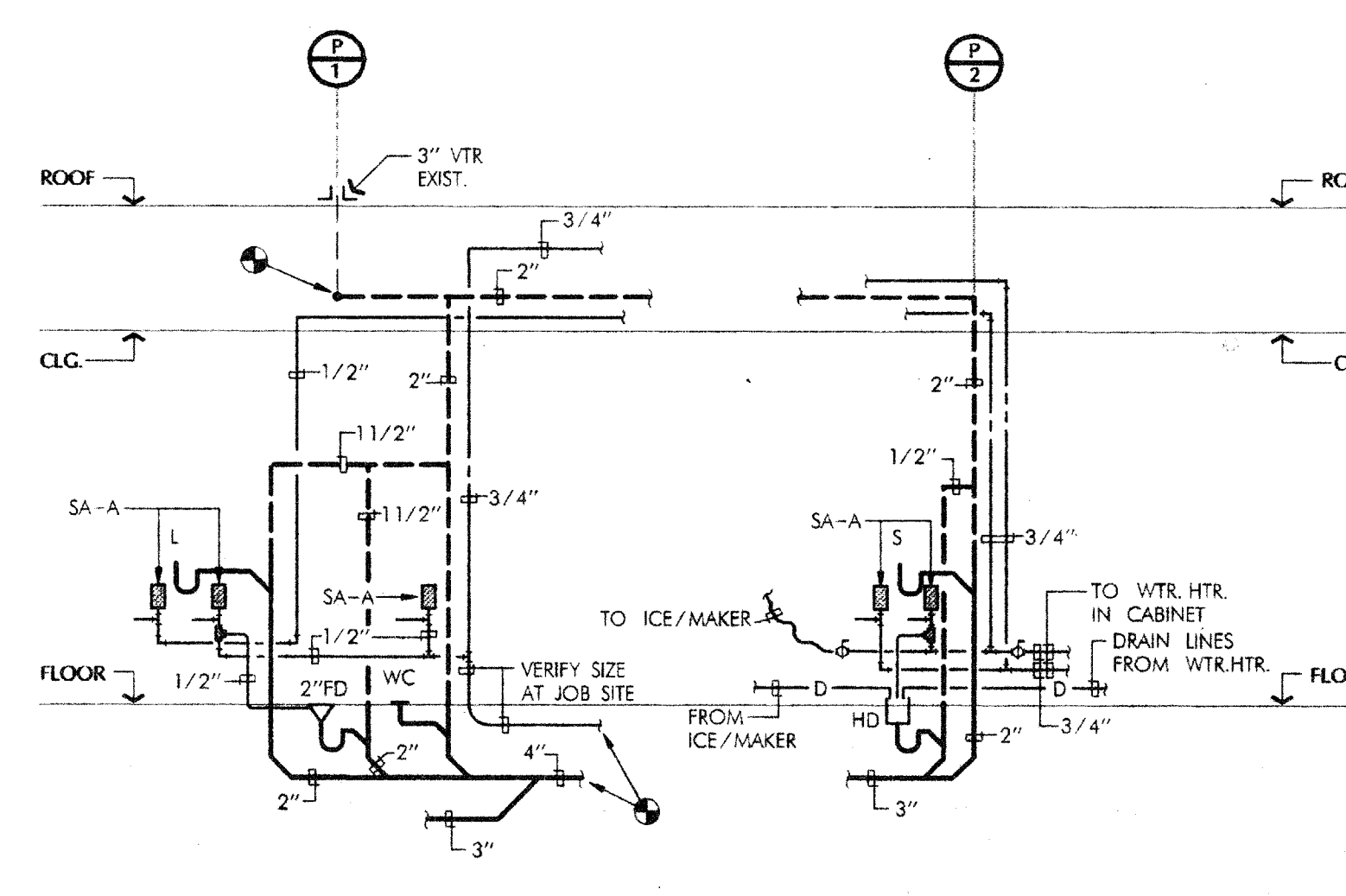
4 ELECTRIC WATER HEATER PIPING DIAGRAM FOR MOUNTING IN CABINET
NO SCALE



2 PLUMBING PLAN
SCALE: 1/8"=1'-0"

PLUMBING KEYED NOTES:

- 1 PROVIDE AND INSTALL A HANDICAP FLOOR MOUNTED WATER CLOSET EQUAL TO AMERICAN STANDARD CADET 2188.162. ELONGATED TOILET. 1.6GPF. SIPHON JET FLUSH WITH TRIP LEVER ACTUATOR. CHURCH SEAT 9500C OPEN FRONT LESS COVER. SUPPLY AND STOP WITH ESCUTCHEON.
- 2 PROVIDE AND INSTALL A UNIVERSAL DESIGN SEMI-COUNTERTOP LAVATORY EQUAL TO AMERICAN STANDARD MEZZO 9964.00 VITREOUS CHINA. FAUCET 5402.142H HERITAGE LEVER HANDLES. WITH GRID DRAIN. P-TRAP. WASTE-TO-WALL STOPS AND SUPPLIES. PROVIDE TRUEBERG PIPE INSULATION ON WASTE AND SUPPLIES.
- 3 PROVIDE AND INSTALL SINGLE COMPARTMENT STAINLESS STEEL SINK EQUAL TO ELKAY #LRAD-1522. 18 GAUGE TYPE 302 SELF RIMMING. 3-HOLE CENTER WITH FAUCET LK-4102 WITH WING HANDLES. PROVIDE LK-25 STRAINER. CRUMB CUP. TAILPIECE. P-TRAP. WASTE TO WALL. STOPS AND SUPPLIES. PROVIDE TRUEBERG INSULATION ON WASTE AND SUPPLY LINES. ADA REQUIREMENT.
- 4 PROVIDE ELECTRIC WATER HEATER STORAGE TYPE STATE NO. PV-10-10MS-K. 10 GALLON. 1650 WATTS. 120V. 70PH AT 100 DEGREE RISE. MOUNTED IN CABINET WITH DRAIN PAN BELOW WATER HEATER. PROVIDE GALVANIZED DRAIN PAN BELOW HEATER.
- 5 2" HUB DRAIN LOCATED UNDER COUNTER FOR DRAIN LINES FROM WATER HEATER DRAIN PAN. T&P RELIEF VALVE AND ICE MAKER.
- 6 NOT USED.
- 7 PROVIDE 1/2" COLD WATER WITH VALVE OR ICE/MAKER. EXTEND FROM VALVE 1/2" COPPER TUBING TO ICE/MAKER.
- 8 NEW 2-WAY CLEANOUT AT CONNECTION OF NEW AND EXISTING WASTE. LINE.
- 9 EXISTING DOMESTIC COLD WATER SERVICE. CONNECT NEW 1" COLD WATER TO EXISTING ABOVE CEILING.
- 10 EXISTING SANITARY SEWER. VERIFY EXACT SIZE AND LOCATION AT JOB SITE.
- 11 SAW CUT FLOOR FOR SANITARY SEWER.
- 12 CONNECT NEW VENT FROM FIXTURES TO EXISTING VENT THRU ROOF. VERIFY EXACT SIZE AND LOCATION AT JOB SITE.



3 PLUMBING RISER DIAGRAM
NO SCALE

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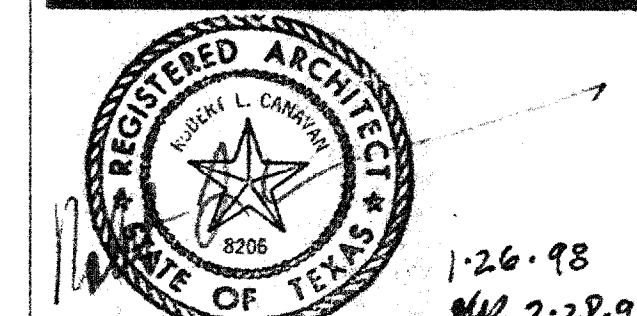
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Proj. JOB NO. 97063-00
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TITLE
HVAC & PLUMBING PLAN

SCALE: 1/8"=1' DRAWN BY:
CONSULTANTS



NOTE TO CONTRACTOR

Contractor is to field verify all dimensions. Written dimensions are to have precedence over scaled dimensions. The contractor shall verify and be responsible for all dimensions and conditions on the job and HDA must be notified of any variations from the dimensions and the conditions shown on these drawings. Shop drawings must be submitted to HDA for approval before proceeding with fabrication. The contractor remains responsible for details and accuracy, for confirming and correlating all quantities and dimensions, for selecting fabrication processes, for techniques of assembly, for performing his work in a safe manner, and for adhering to all applicable codes.

PRELIMINARY

ISSUE DATE
JANUARY 15, 1998

REVISIONS

PROJECT NUMBER

97.023.002

SHEET NUMBER

M.1