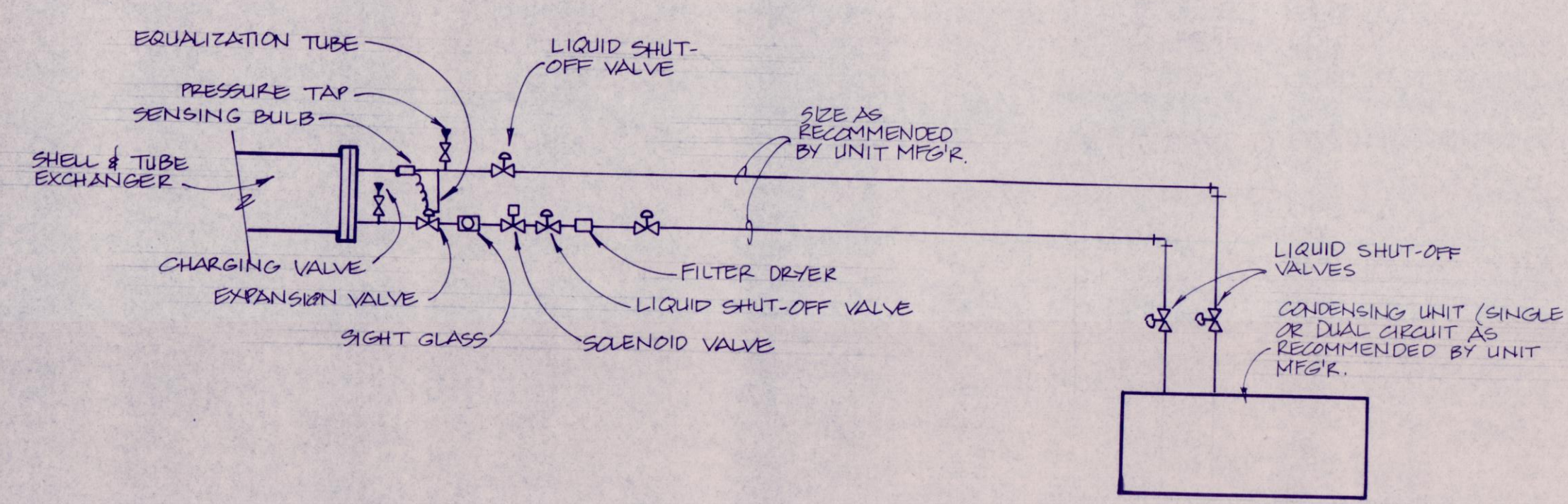
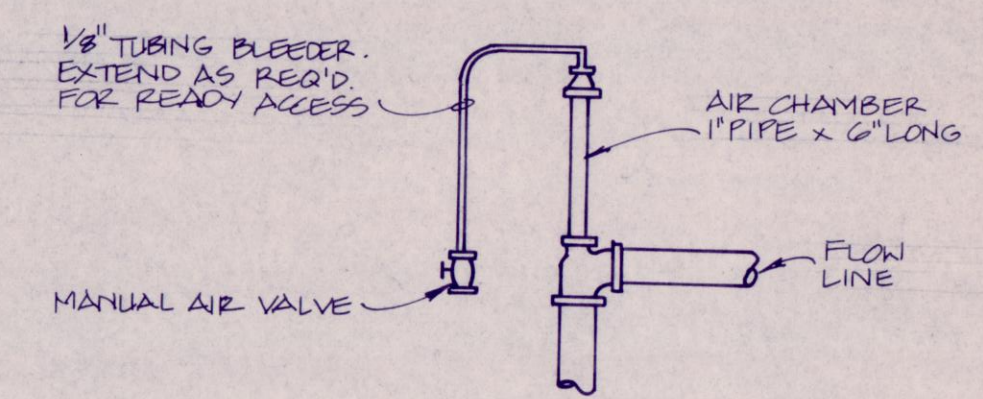


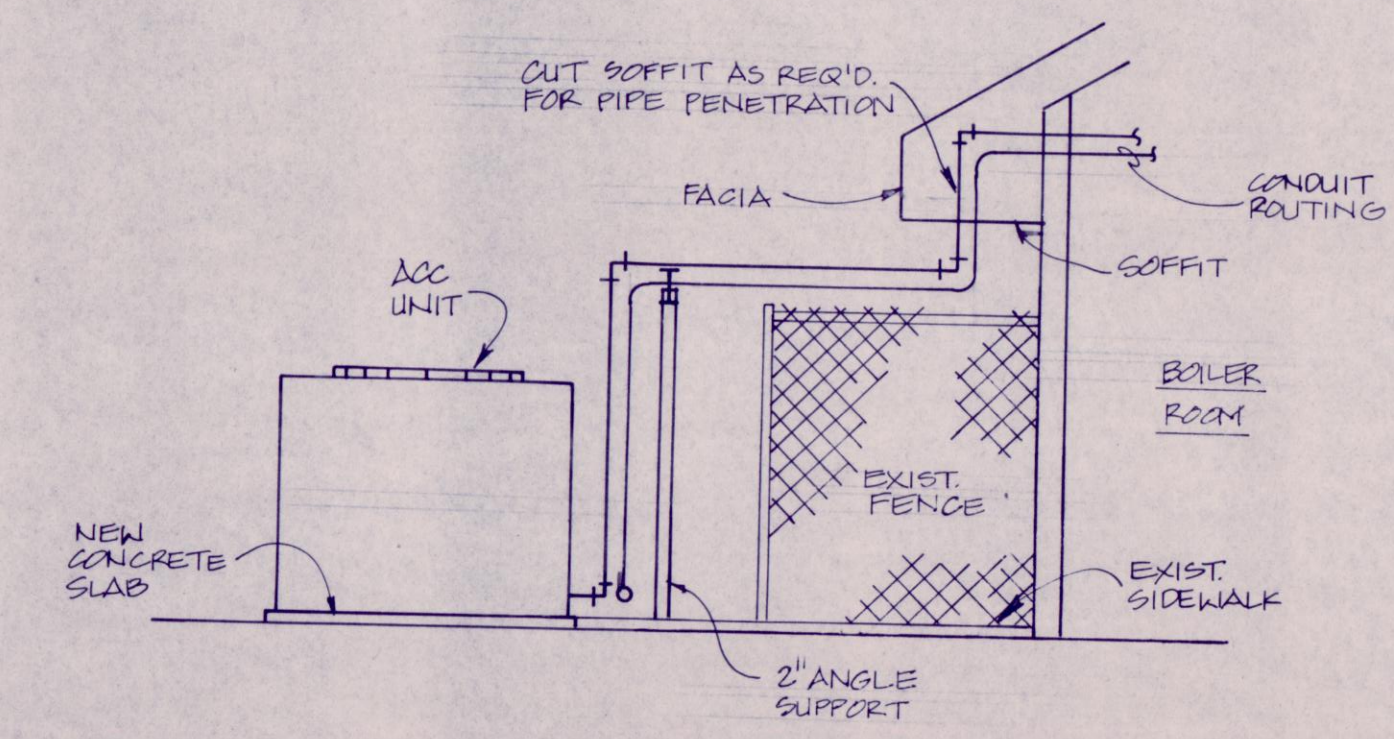
NOTES:
1. TRAP REFRIG. SUCTION LINES AT BASE OF RISERS & ADDITIONALLY AS REQ'D. FOR PROPER OIL RETURN.
2. ONE CIRCUIT SHOWN. ADDITIONAL CIRCUITS TO BE PIPED IDENTICALLY TO THIS CIRCUIT.



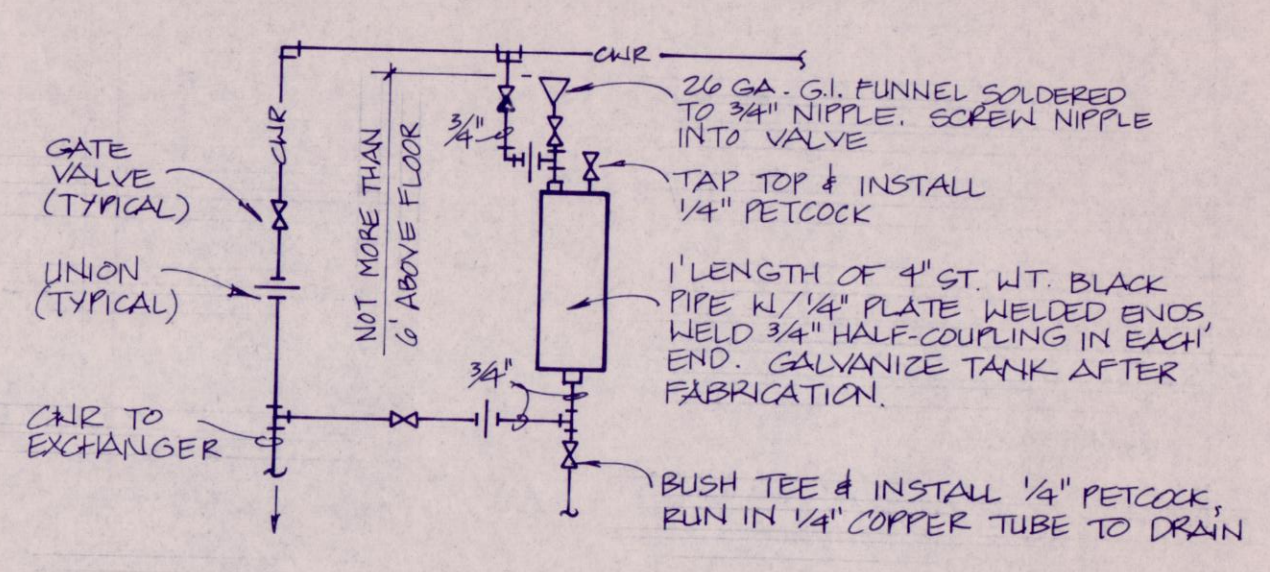
TYPICAL REFRIGERANT CIRCUIT VALVING DIAGRAM
NO SCALE



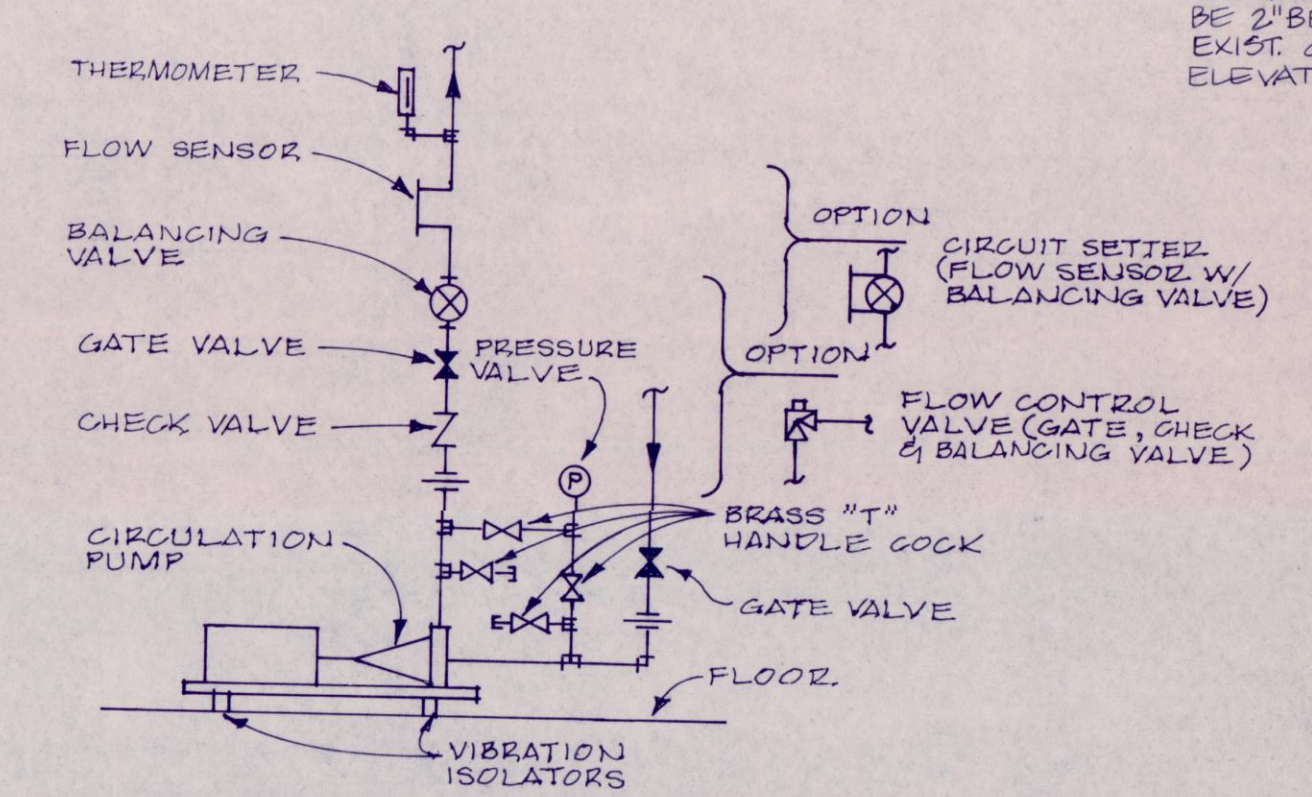
TYPICAL PIPING AIR VENT
N.T.S.



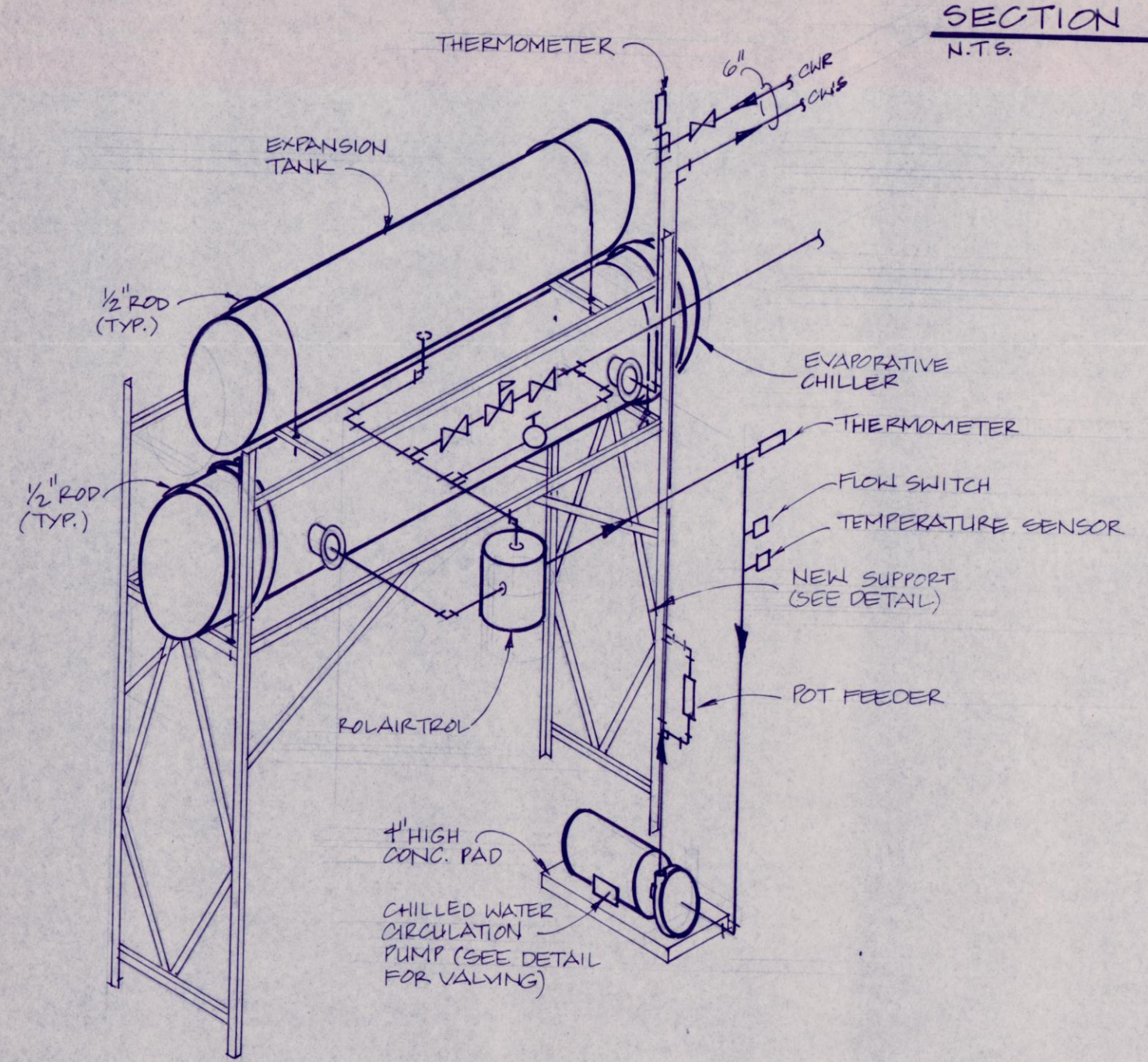
SECTION 'A-A'
N.T.S.



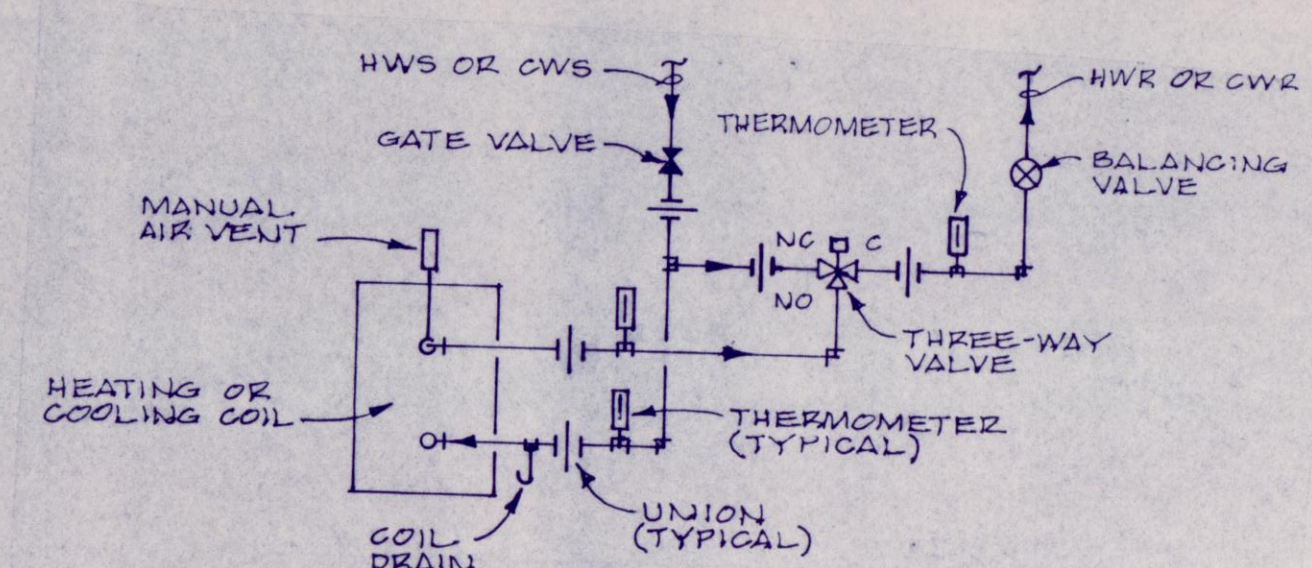
POT TYPE CHEMICAL FEEDER DETAIL
N.T.S.



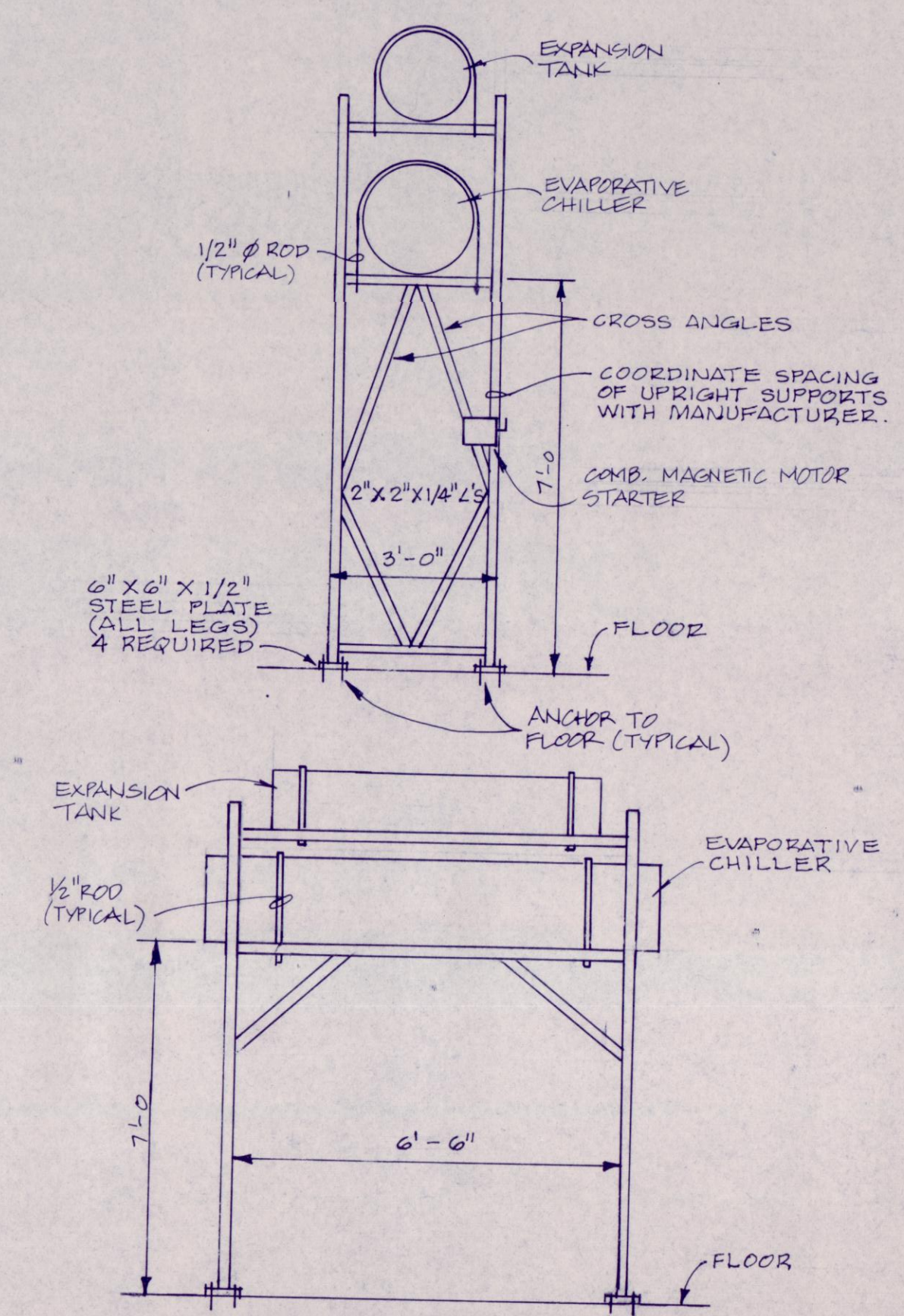
TYPICAL BASE MOUNTED CIRCULATION PUMP DETAIL
NOT TO SCALE



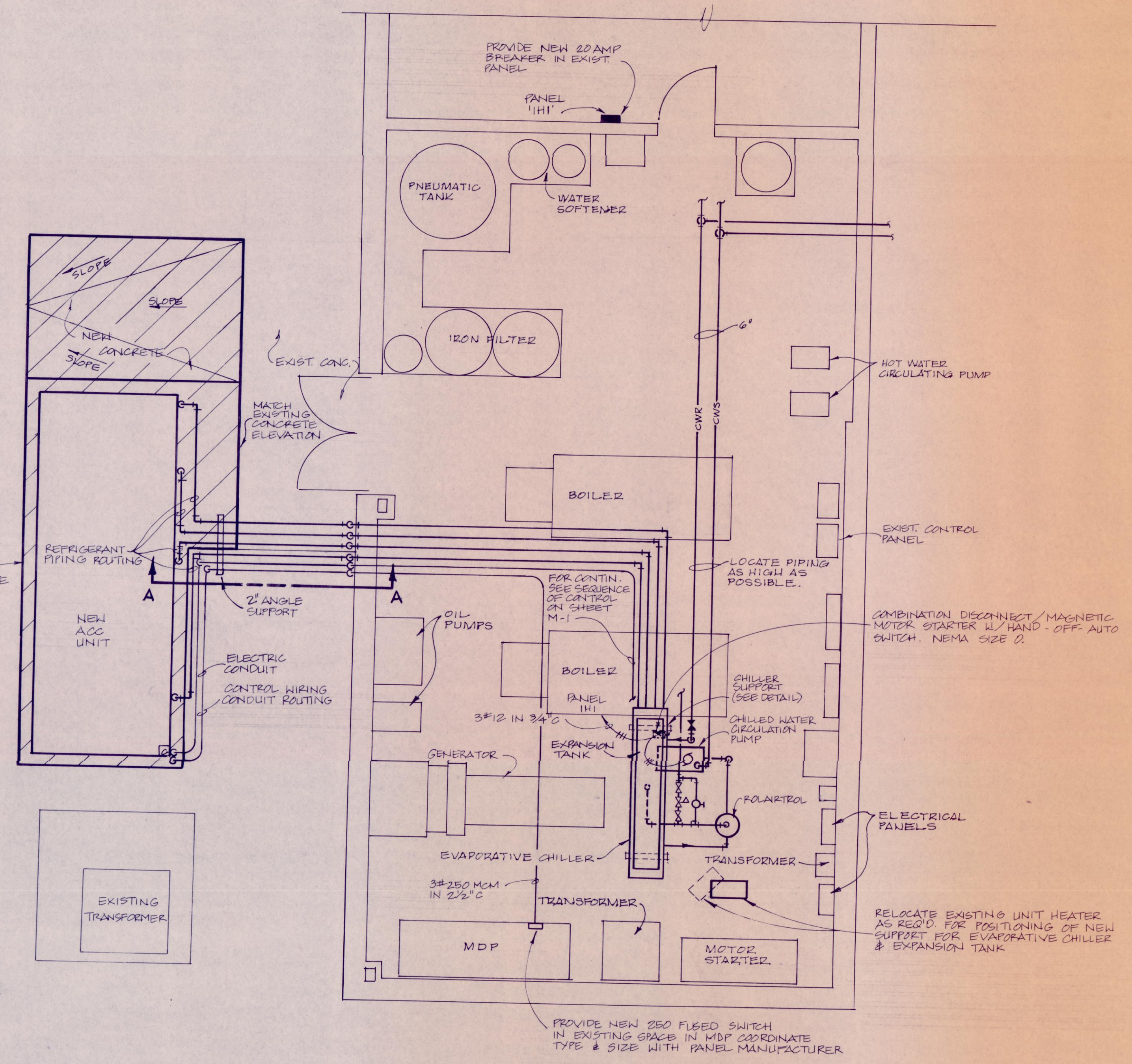
BOILER RM. EQUIPMENT SCHEMATIC
N.T.S.



CHILLED WATER COIL PIPING DETAIL
NOT TO SCALE



EVAPORATIVE CHILLER SUPPORT DETAIL
NOT TO SCALE



ENLARGED BOILER ROOM PLAN
1/4"=1'-0"

GENERAL NOTES MECHANICAL

1. THE SUBMISSION OF A PROPOSAL WILL BE CONSIDERED AS EVIDENCE THAT THE CONTRACTOR HAS FAMILIARIZED HIMSELF WITH THE PLANS AND BUILDING SITE. CLAIMS MADE SUBSEQUENT TO THE PROPOSAL FOR MATERIALS AND LABOR BECAUSE OF DIFFICULTIES ENCOUNTERED WILL NOT BE RECOGNIZED IF THEY COULD HAVE BEEN FORESEEN AND PROPER EXAMINATION BEEN MADE.
2. THE CONTRACTOR SHALL ASSUME RESPONSIBILITY FOR PROTECTION OF ALL EXISTING UTILITIES DURING CONSTRUCTION. ALL COSTS FOR LOCATING, REMOVING, REPLACING, OR RELOCATING THESE UTILITIES SHALL BE INCIDENTAL TO CONSTRUCTION. ALL UTILITIES DAMAGED DURING CONSTRUCTION SHALL BE REPAIRED WITH LIKE MATERIAL AT NO ADDITIONAL COST TO THE OWNER.
3. DRAWINGS ARE DIAGNOSTIC AND GENERALLY INDICATIVE OF THE WORK. PIPING AND SYSTEMS SHALL FOLLOW ARRANGEMENT AS MUCH AS POSSIBLE, HOWEVER ACTUAL FIELD CONDITIONS SHALL DICTATE. PROVIDE NECESSARY MODIFICATIONS TO MEET FIELD CONDITIONS AND AVOID CONFLICT WITH OTHER TRADES. IN ADDITION, THE DRAWINGS DO NOT SHOW ALL VALVES, FITTINGS, APPURTENANCES, DUCT TRANSITIONS, ACCESS PANELS, ELEVATION CHANGES, AND VARIOUS OTHER ITEMS CALLED FOR BY THE DRAWINGS AND SPECIFICATIONS. WHERE REQUIRED, THESE ITEMS SHALL BE PROVIDED WITHOUT ADDITIONAL COST FOR A COMPLETE AND OPERATING SYSTEM.
4. COORDINATE ROUTING OF PIPING, DUCTWORK, ETC. PRIOR TO STARTING INSTALLATION.
5. ALL PIPING AND HEATING WORK AND MATERIALS SHALL BE INSTALLED IN ACCORDANCE WITH ALL APPLICABLE ORDINANCES AND REGULATIONS HAVING JURISDICTION. CONTRACTOR SHALL OBTAIN ALL APPROVALS REQUIRED FROM REGULATING AGENCIES BEFORE STARTING WORK.
6. MECHANICAL TRADE SHALL PROVIDE SOFFIT AND WALL FLASHING AS REQUIRED FOR PIPE PENETRATIONS OF EXTERIOR WALLS.
7. H.C. SHALL REMOVE AND REPLACE CEILING AND LIGHTS AS REQUIRED FOR INSTALLATION OF NEW PIPING.
8. MECHANICAL CONTRACTOR SHALL PROVIDE ALL CUTTING AND/OR PATCHING OF EXISTING WALLS, CEILING AND FLOORS AS REQUIRED FOR INSTALLATION OF NEW PIPING.
9. CONNECTIONS TO EQUIPMENT SHALL CONFORM TO MANUFACTURER'S SPECIFICATIONS.
10. ALL HANGER SYSTEMS FOR PIPING SHALL BE SECURED TO BUILDING STRUCTURAL SYSTEM.
11. VERIFY VOLTAGE AND PHASE CHARACTERISTICS OF THE ELECTRICAL SERVICE AND COORDINATE WITH MECHANICAL EQUIPMENT AS REQUIRED.
12. CONTRACTOR SHALL PROVIDE CONDENSATE DRAIN FROM A/C UNITS TO FLOOR DRAIN.
13. ALL PIPING SHALL BE EASILY DRAINABLE.
14. THE EQUIPMENT CONNECTIONS AS SHOWN ARE ACCURATE TO THE BEST OF OUR KNOWLEDGE. HOWEVER, IN SOME INSTANCES THE SUPPLIER MAY SUBMIT THE EQUIPMENT FROM WHAT IS SHOWN. THEREFORE, THE CONTRACTOR SHALL VERIFY ALL CRITICAL DIMENSIONS PRIOR TO CONSTRUCTION. FAILURE OF THE CONTRACTOR TO VERIFY THESE DIMENSIONS SHALL PLACE THE RESPONSIBILITY FOR ANY SUBSEQUENT RELOCATION DIRECTLY ON THE CONTRACTOR.
15. MECHANICAL CONTRACTOR IS RESPONSIBLE FOR THE INSTALLATION OF ALL CONDUITS, SPOKES, WIRING, DISCONNECT SWITCHES, MOTOR STARTERS, NEW SWITCHES IN THE DISTRIBUTION PANELS, AND SPOKES AS REQUIRED FOR THE INSTALLATION OF THE NEW EQUIPMENT AS RELATED TO THE AIR-CONDITIONING SYSTEM.
16. ALL WORK SHALL BE DONE IN ACCORDANCE WITH THE LATEST EDITION OF THE N.E.C. AND STATE AND LOCAL CODES AS THEY APPLY.
17. ALL FLEXIBLE METALLIC AND PVC CONDUIT WHERE ALLOWED BY LOCAL CODE IS TO BE PROVIDED WITH SEPARATE GROUND WIRE.
18. ALL WORK SHALL BE IN ACCORDANCE WITH THE INDIANA CONSTRUCTION RULES, NATIONAL ELECTRICAL CODE AND OTHER STATE AND LOCAL CODES AS APPLICABLE.
19. ALL ELECTRICAL EQUIPMENT SHALL BE UL LISTED.
20. COORDINATE ALL WORK WITH OWNER AND OTHER CONTRACTORS AS REQUIRED.
21. PROVIDE AND INSTALL RACETRAYS AS REQUIRED FOR THE NEW WORK. CONDUIT SHALL BE INTERMEDIATE METALLIC (IMC), OR ELECTRICAL METALLIC TUBING (EMT) AS ALLOWED BY THE NATIONAL ELECTRICAL CODE. MINIMUM SIZE SHALL BE THREE QUARTER (3/4) INCH.
22. HEAVY WALL PVC CONDUIT MAY BE USED BELOW GRADE, IN CONCRETE SLABS OR WHERE NOT EXPOSED TO PHYSICAL DAMAGE.
23. CONDUCTORS SHALL BE THHN, THWN, OR XHHW, SIZED AS INDICATED.
24. CLASS 1 REMOTE-CONTROL AND SIGNAL CIRCUIT CONDUCTORS SHALL BE NO LESS THAN NO. 14 AWG. CLASS 2 LOW-ENERGY REMOTE-CONTROL AND SIGNAL CIRCUIT CONDUCTORS SHALL BE NOT LESS THAN NO. 16 AWG.
25. PROVIDE WIRING DEVICES AND PLATES AS REQUIRED. UNLESS OTHERWISE INDICATED, DEVICES SHALL BE STANDARD NEW CONFIGURATIONS FOR THE PARTICULAR APPLICATION.
26. PROVIDE HEAVY DUTY TYPE SAFETY SWITCHES AS INDICATED ON THE DRAWINGS AND AS REQUIRED BY CODE WITHIN SIGHT OF ALL EQUIPMENT REQUIRING A DISCONNECT. OUTDOOR ENCLOSURES SHALL BE NEMA 3B. SAFETY SWITCHES SHALL BE SQUARE D OR EQUIVALENT.
27. OVERLOAD DEVICES SHALL BE OF THE MANUALLY RESET TYPE UNLESS OTHERWISE NOTED. SIZES FOR THERMAL OVERLOADS SHALL BE DETERMINED FOR THE ACTUAL MOTOR PROVIDED WITH EACH PIECE OF EQUIPMENT IN THE FIELD.
28. PROVIDE MANUAL OR MAGNETIC MOTOR STARTERS AS CALLED FOR ON THE DRAWINGS. STARTERS SHALL BE COMPLETE WITH THERMAL OVERLOADS FOR EACH UNWOUND PHASE. CONTROL CONTACTS AND TRANSFORMERS SHALL BE PROVIDED TO MEET THE NEEDS OF EACH PARTICULAR APPLICATION AND SHALL BE COORDINATED BY THE ELECTRICAL TRADE AS REQUIRED. UNLESS NOTED OTHERWISE STARTER CONTROL CIRCUITS SHALL BE 120 VOLT. ALL STARTERS SHALL BE EQUIPPED WITH "ON-OFF-AUTO" SWITCH.
29. PROVIDE NEW DIRECTORIES IN EXISTING PANELS TO WHICH NEW EQUIPMENT IS CONNECTED.
30. PROVIDE GROUNDING FOR ALL EQUIPMENT AND SERVICES IN ACCORDANCE WITH THE NATIONAL ELECTRICAL CODE.
31. COORDINATE EXACT PLACEMENT OF ELECTRICAL ITEMS PRIOR TO INSTALLATION. ANY CONFLICTS THAT CANNOT BE RESOLVED BETWEEN TRADES MUST BE BROUGHT TO THE ATTENTION OF THE ENGINEER/ARCHITECT IN WRITING AND RESOLVED BEFORE PROCEEDING.
32. FIRESTOP AROUND ALL PENETRATIONS THROUGH FIRE RATED WALLS.
33. INSTALL ALL EQUIPMENT IN ACCORDANCE WITH ACCEPTED PRACTICE AND MANUFACTURER'S RECOMMENDATIONS.
34. THE TEMPERATURE CONTROL TRADE SHALL PROVIDE ALL WIRING AS REQUIRED FOR A COMPLETE SYSTEM OF TEMPERATURE REGULATION. THE TEMPERATURE CONTROL TRADE SHALL PROVIDE ALL NECESSARY DRAWINGS AND COORDINATION TO THE ELECTRICAL CONTRACTOR FOR DETERMINING CONNECTION POINTS, WIRE COUNTS, ETC.
35. MAINTAIN ACCESSIBILITY TO ALL EQUIPMENT FOR OPERATION, MAINTENANCE AND REPAIR.
36. REPAINT AND PATCHED AREAS TO MATCH ORIGINAL FINISH WHERE HOLES OR CHASES HAVE BEEN CUT TO RECEIVE NEW WORK. REPAINT PATCHED AREAS WITH TWO (2) COATS OF PAINT TO MATCH SURROUNDING AREAS; BLEND AS REQUIRED.

MECHANICAL LEGEND

- | | |
|-------|-----------------------------|
| EA | EXHAUST AIR |
| EC | ELECTRICAL CONTRACTOR/TRADE |
| EXIST | EXISTING |
| GC | GENERAL CONTRACTOR/TRADE |
| MC | MECHANICAL CONTRACTOR/TRADE |
| QA | OUTSIDE AIR |
| SA | SUPPLY AIR |
| D | EQUIPMENT DRAIN LINE |
| SV | SHUT OFF VALVE |
| PL | IN-LINE CIRCULATION PUMP |
| TS | THERMOSTAT |