

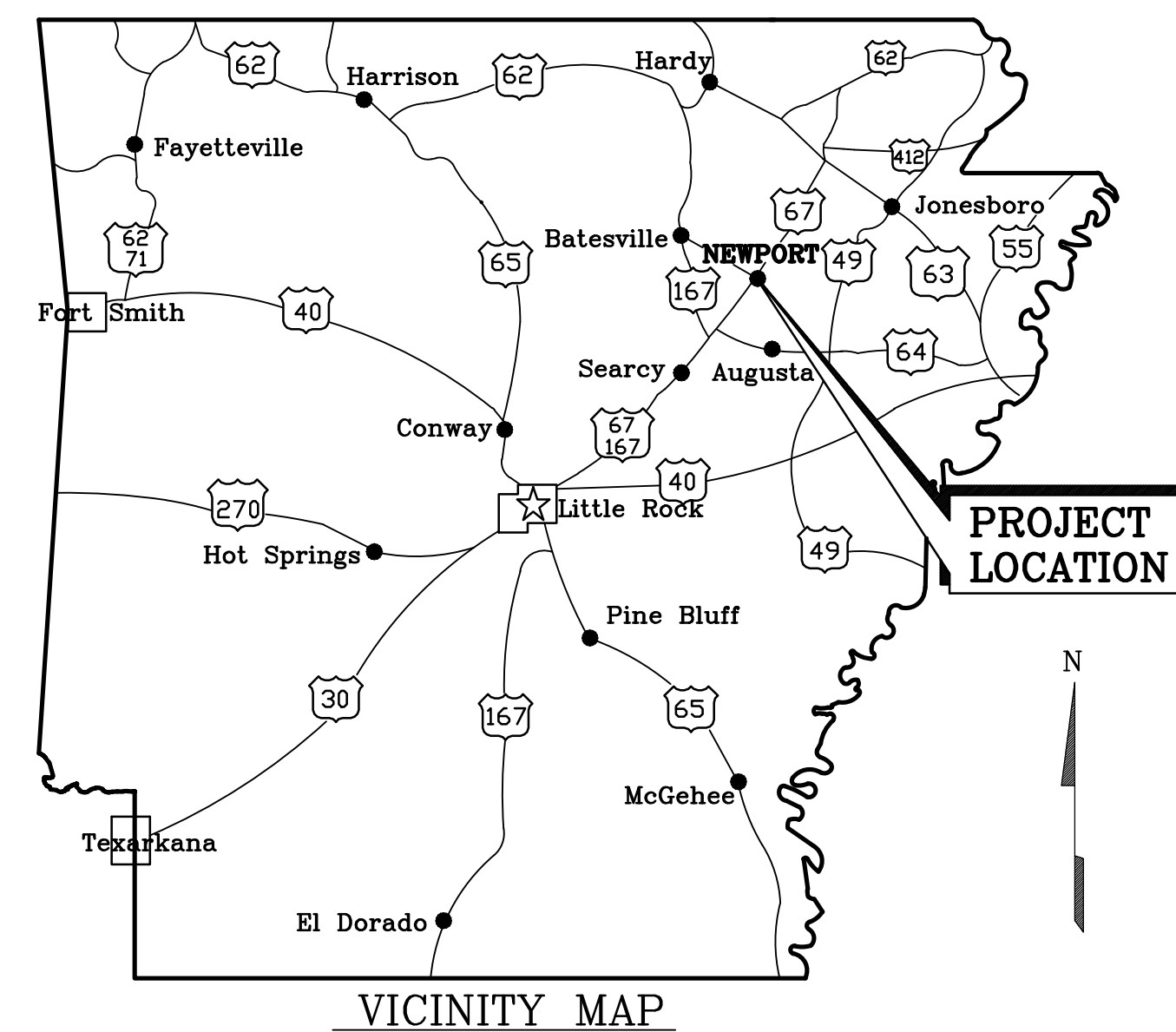
MAINTENANCE BUILDING
FOR THE
COUNTY SHERIFF'S DEPT
NEWPORT, ARKANSAS

COUNTY SHERIFF:
RUSSELL BRINSFIELD

COUNTY JUDGE:
JEFF PHILLIPS

QUORUM COURT MEMBERS:

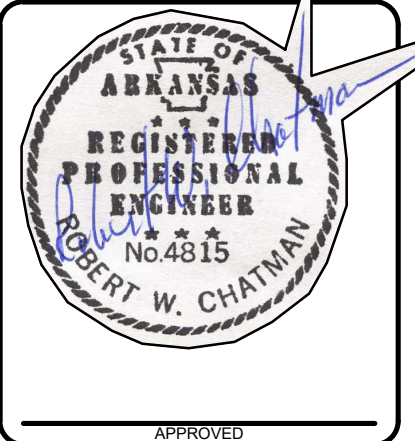
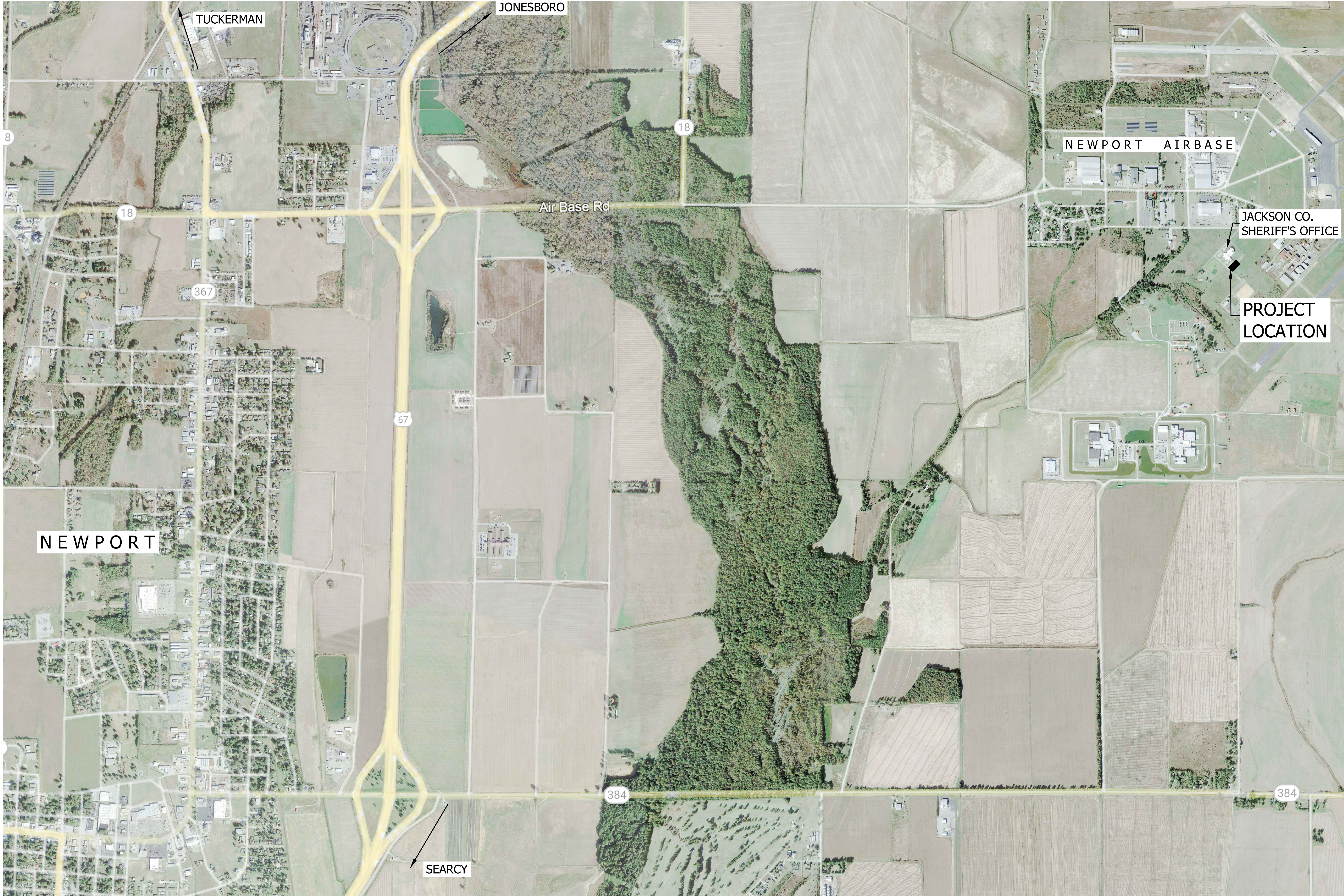
RUSTY KINDER
TOMMY YOUNG
DAVID HOWARD
MARK HARMON
CLAY YOUNG
BRYAN SMITH
JERRY W. MANN
KENNY FALWELL
ROBBY STEWART



INDEX

1. PROJECT LOCATION MAP
2. FLOOR PLAN & ELEVATIONS
3. LIGHTING & ELECTRICAL PLAN
4. MECHANICAL & PLUMBING PLAN





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PROJECT LOCATION MAP
JACKSON COUNTY SHERIFF DEPT. MAINT. BUILDING
NEWPORT (JACKSON COUNTY), ARKANSAS

PROJECT NUMBER: 23-085
DRAWN BY: G. Bowen
CHECKED BY: RWC
DATE: AUGUST 2023
REVISIONS:
1.
2.
3.

SHEET NUMBER:
1 of 4
DRAWER NUMBER:



PROJECT LOCATION MAP NO SCALE



FLOOR PLAN-ELEVATIONS

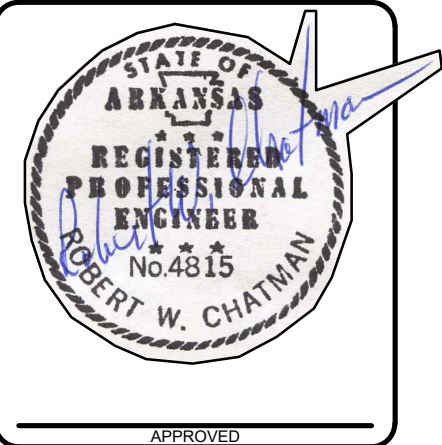
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Miller - Newell Engineers, ARKANSAS

LIGHTING & ELECTRICAL PLAN
JACKSON COUNTY SHERIFF DEPT. MAINT. BUILDING
NEWPORT (JACKSON COUNTY), ARKANSAS

PROJECT NUMBER: 23-085
DRAWN BY: G. Bowen
CHECKED BY: RWK
DATE: AUGUST 2023
REVISIONS:
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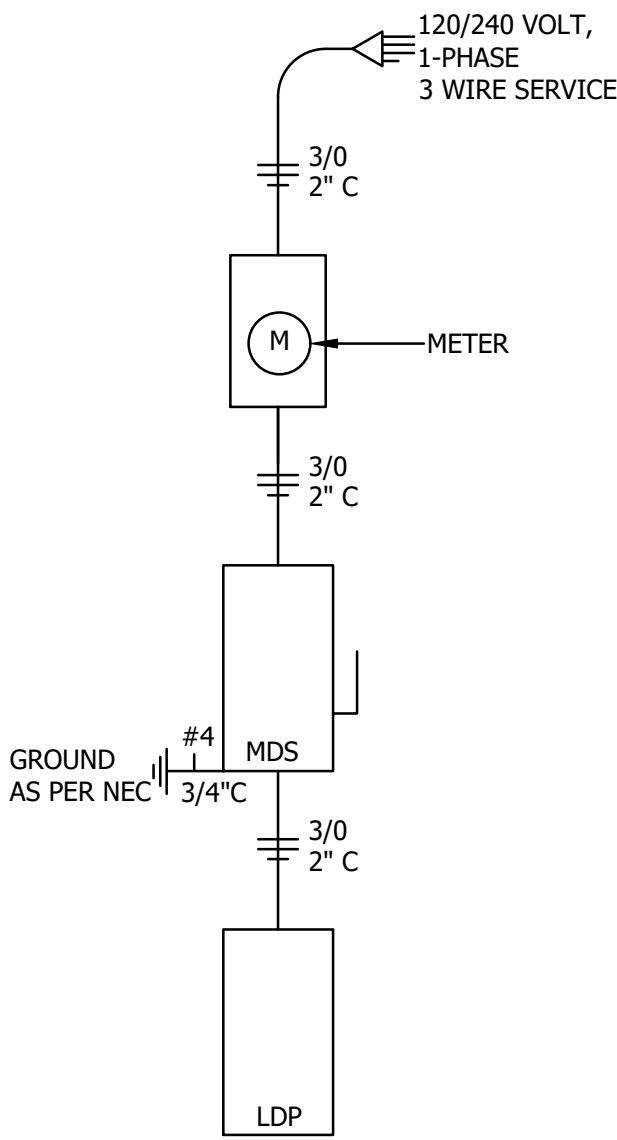
LIGHTING/ELECTRICAL SCHEDULE					
MARK	DESCRIPTION	MANUFACTURER	MODEL	SIZE	REMARKS
A	LED LIGHT	GREENTEK ENERGY SERVICE	HB07-200WSACGD1-BH57	29,000 LUMENS	120 VOLT
B	LED LIGHT	LITHONIA	SBL4 4000LM 80CRI 30K MIN10 GZT 120	4,000 LUMENS	
C	EXTERIOR LIGHT	WAC	WP-LED430-50-AGH	2,060 LUMENS	
D	LED WALL MOUNT LIGHT	LITHONIA	BLWP460LADSM120E21LP835	6,000 LUMENS	120 VOLT
MDS	MAIN DISCONNECT	CUTLER HAMMER	DH224NRK	200 AMP	FUSED, 240 VOLT, 1-PHASE, NEMA 3R
LDP	LOAD CENTER	CUTLER HAMMER	CH321225D	225 AMP	240 VOLT, 1-PHASE
EXIT	EXIT SIGH	LITHONIA	LQMSWR3 MVOH ELN 50		
PEC	PHOTO CELL	INTERMATIC	EK41-365	20 AMP	120 VOLT CO.1
CT-1	CONTROLER	CUTLER HAMMER	CN 35		

ELECTRICAL LEGEND

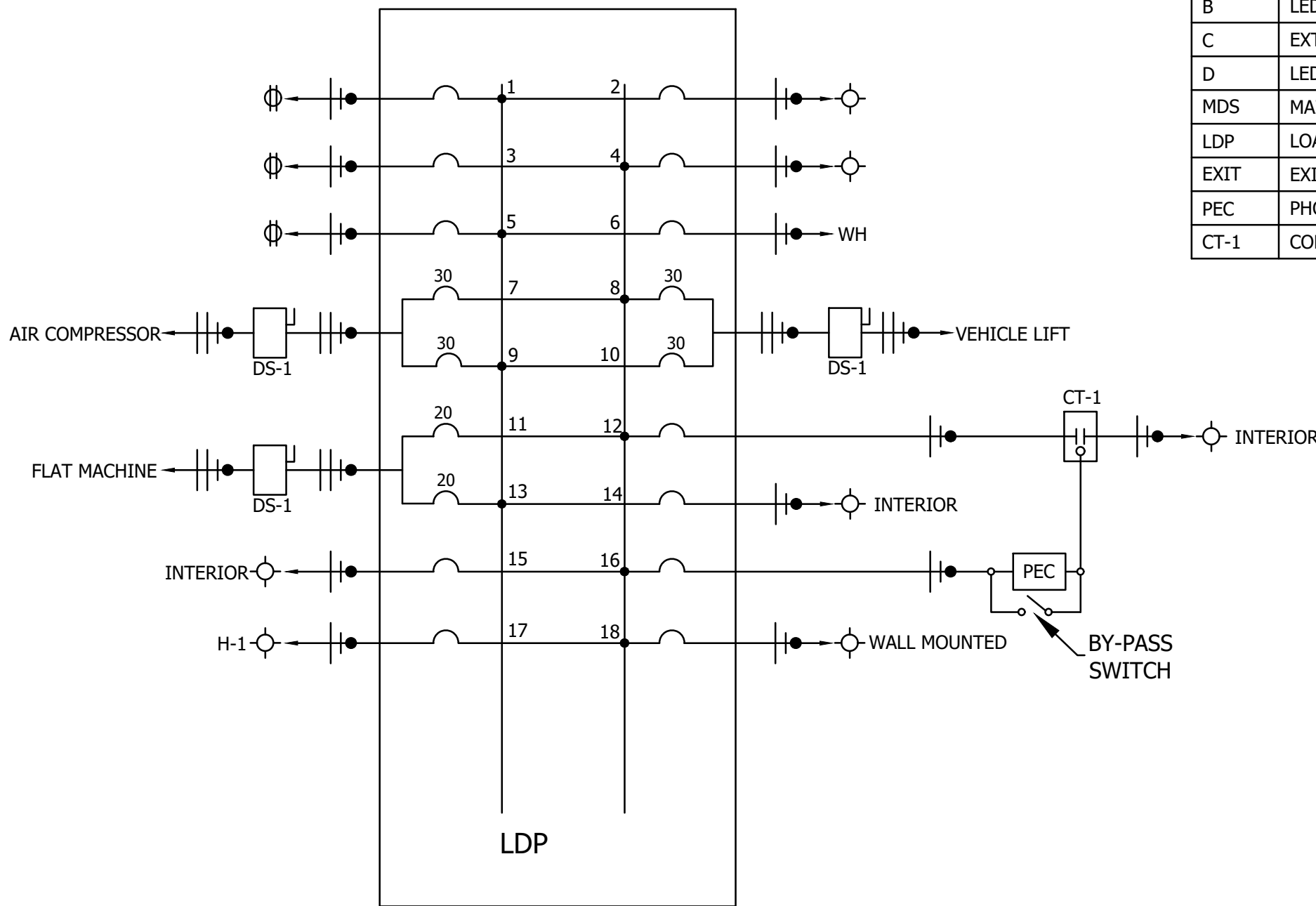
- Φ = DUPLEX WALL ELECTRICAL OUTLET
A-1 = CIRCUIT NUMBER
+ = SWITCH LEG
+ = PHASE LEG
+ = NEUTRAL LEG
● = GROUND
VC = VIDEO CAMERA
A = LIGHT FIXTURE CODE
§ = LIGHT SWITCH
‡ = 3 WAY LIGHT SWITCHES
□ = PROPOSED DISCONNECT
ΦGFCI = GROUND FAULT CIRCUIT INTERRUPTER

ELECTRICAL NOTES.

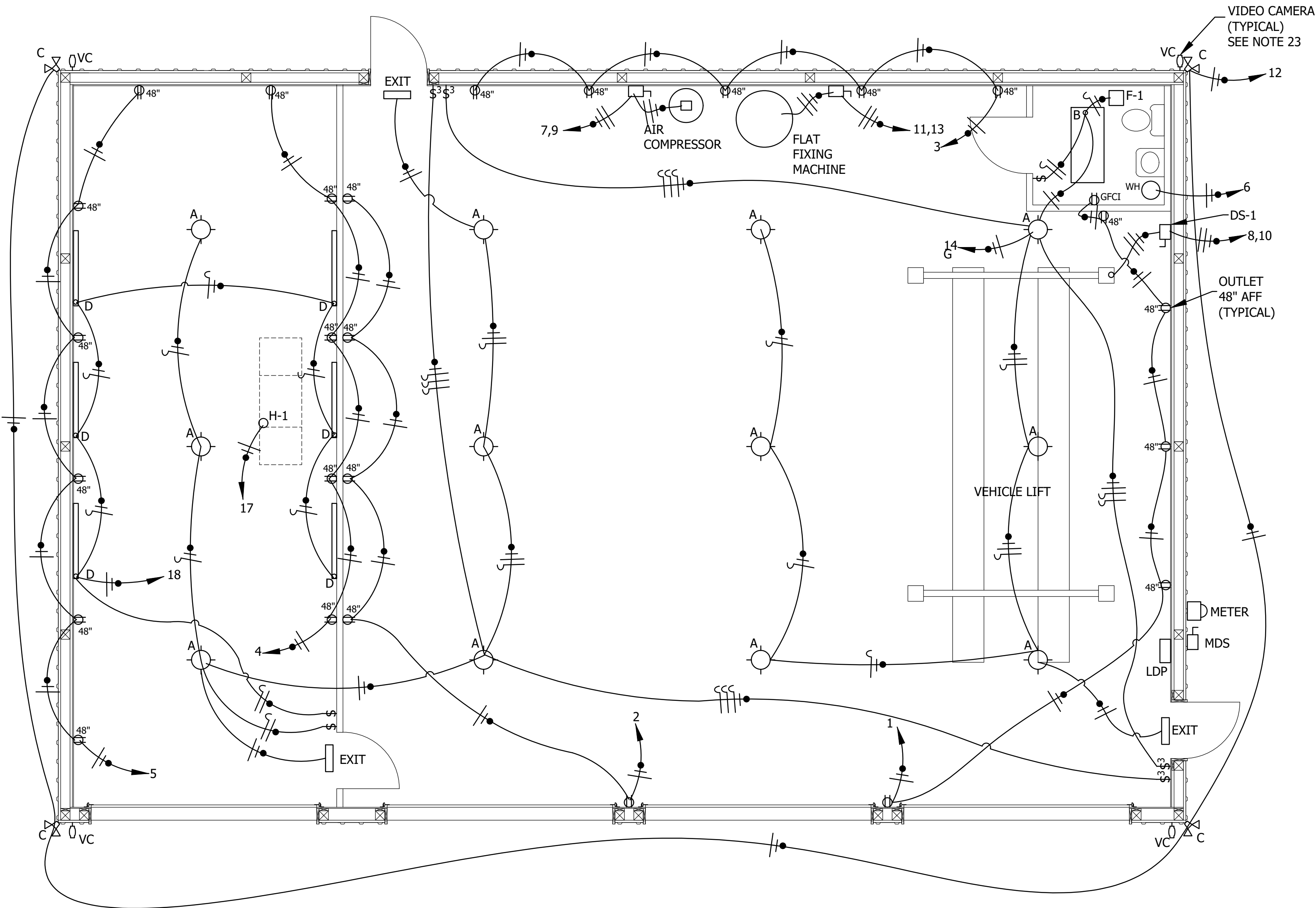
- ALL WIRE IS THHN COPPER UNLESS SHOWN OTHERWISE.
- ELECTRICAL CIRCUIT SIZE, & BREAKER SIZE SERVING CRANE, AIR COMPRESSOR, WASH BAY EQUIPMENT, MECHANICAL EQUIPMENT, & ALL OTHER EQUIPMENT SHALL BE VERIFIED WITH EQUIPMENT SUPPLIER AND OWNER.
- ALL WIRE IS TYPE THHN COPPER. ALL SIZES ARE #12 UNLESS SHOWN OTHERWISE.
- THE CENTERLINES OF ALL CONVENIENCE OUTLETS ARE TO BE 48" A.F.F. UNLESS SHOWN OTHERWISE.
- THE CENTERLINES OF ALL SWITCHES ARE LOCATED 48" A.F.F. UNLESS SHOWN OTHERWISE.
- ALL WIRING AND INSTALLATIONS SHALL MEET ALL N.E.C. REQUIREMENTS.
- ALL CIRCUIT BREAKERS ARE 20 AMP UNLESS SHOWN OTHERWISE.
- ALL CONDUIT SIZE IS 1/2" UNLESS SHOWN OTHERWISE.
- CONTRACTOR SHALL COORDINATE LOCATION OF LIGHT FIXTURES WITH OWNER AT OVERHEAD DOOR OPENING.
- FURNISH AND INSTALL ALL ELECTRICAL SYSTEMS COMPLETE IN EVERY RESPECT AND READY TO OPERATE. FURNISH ALL MISCELLANEOUS ITEMS AND ACCESSORIES REQUIRED FOR SUCH INSTALLATION, WHETHER OR NOT EACH SUCH ITEM OR ACCESSORY IS SHOWN ON THE DRAWINGS OR MENTIONED IN THE SPECIFICATIONS.
- PROVIDE RACEWAYS FOR ALL WIRING SYSTEMS, MINIMUM 3/4 INCH. RACEWAYS SHALL INCLUDE RIGID GALVANIZED STEEL, CONDUIT, RIGID ALUMINUM CONDUIT, (EMT) ELECTRICAL METALLIC TUBING, FLEXIBLE CONDUIT, SURFACE METAL RACEWAYS, WIRE WAYS AND TROUGHS. RACEWAYS SHALL BE MECHANICALLY AND ELECTRICALLY CONTINUOUS FORM SERVICE ENTRANCE TO FINAL OUTLET. RACEWAYS SHALL BE RUN PERPENDICULAR AND PARALLEL TO BUILDING CONSTRUCTION. EXCEPT IN MECHANICAL ROOMS OR AS OTHERWISE NOTED, ALL RACEWAYS SHALL BE CONCEALED. AL BREAKS AND TURNS WITH EXPOSED RACEWAYS SHALL BE MADE WITH MALLEABLE IRON CADMIUM OR HOT DIPPED GALVANIZED CONDUIT FITTINGS AND COVERS. RACEWAYS SHALL BE RIGIDLY SUPPORTED WITH MALLEABLE IRON CONDUIT CLAMPS OR TRAPEZE SUPPORTS AND CLAMPS AT INTERVALS NOT EXCEEDING 7 FEET WITH 12 INCHES OF ALL OUTLET BOXES, ELBOWS, AND CHANGES OF DIRECTION. CONCEALED RACEWAYS SHALL BE SUPPORTED FROM STRUCTURAL MEMBERS AND NOT FURRING. ALL RACEWAY SYSTEMS SHALL BE COMPLETELY INSTALLED AND SECURED AND SWABBED OUT, AND ALL WORK IN THE AREA SHALL HAVE PROGRESSED SUFFICIENTLY TO PREVENT INJURY TO CABLES, BEFORE ANY CONDUCTORS ARE INSTALLED. PROVIDE CAPS AND PLUGS ON ENDS OF RACEWAYS AND OPENINGS IN BOXES TO PREVENT FOREIGN MATERIAL FROM ENTERING DURING CONSTRUCTION PROVIDE DOUBLE LOCKNUTS WHERE 1 1/2 INCH AND LARGER CONDUITS TERMINATE, WHERE NO. 4 AND LARGER CONDUCTORS ARE INSTALLED, AND WHERE REQUIRED BY NEC. DO NOT USE RUNNING THREADS, LEAVE NO. 12 PULL WIRE (IDENTIFIED AT BOTH ENDS) IN ALL EMPTY RACEWAYS. PROVIDE PLASTIC INSULATING BUSING ON ALL CONDUIT CONNECTIONS AND FIBER INSERTS ON ALL TUBING CONNECTIONS. SURFACE METAL RACEWAYS, SURFACE WIREMOLD AND SURFACE METAL TROUGHS SHALL BE INSTALLED ONLY WHERE SHOWN ON THE DRAWINGS.
- PROVIDE RIGID GALVANIZED STEEL CONDUITS FOR SERVICE ENTRANCE, PANEL FEEDERS AND ALL MOTOR FEEDERS. THREADLESS FITTINGS, ALL THREAD AND RUNNING THREADS SHALL NOT BE USED. RIGID CONDUITS SHALL BE PROVIDED FOR ALL RACEWAY SYSTEMS RUN UNDERGROUND OR EMBEDDED IN CONCRETE OR SOLID MASONRY.
- ELECTRICAL METALLIC TUBING (EMT) MAY BE USED FOR CONDUITS CONCEALED IN FURRED CEILINGS OR WALLS, RUN EXPOSED IN THE BUILDING, OR EMBEDDED IN HOLLOW MASONRY CONSTRUCTED ABOVE GRADE. EMT FITTINGS SHALL BE FERROUS METAL GALVANIZED OR PLATED TO RESIST CORROSION AND SHALL BE OF THE COMPRESSION-RING TYPE, RAIN-TIGHT AND CONCRETE-TIGHT.
- PROVIDE FLEXIBLE CONDUIT FOR ALL CONNECTIONS TO MOTORS AND OTHER EQUIPMENT SUBJECT TO VIBRATION OR MOTION WITH A MAXIMUM LENGTH OF 18 INCHES. FLEXIBLE CONDUIT MAY BE USED FOR FINAL CONNECTION TO LIGHTING FIXTURES IN LAY-IN CEILINGS. CONDUIT SHALL BE RIGIDLY SUPPORTED WHERE CONNECTION TO FLEXIBLE CONDUIT IS MADE. CONDUIT AND FITTINGS SHALL BE SELF GROUNDING AND, IN ADDITION, COPPER BONDING JUMPERS SHALL BE USED. CONNECTORS SHALL BE FERROUS METAL, GALVANIZED OR PLATED TO RESIST CORROSION, OF THE (2) SCREW CLAMP TYPE, OR THE SQUEEZE TYPE. FLEXIBLE CONDUIT AND FITTINGS USED OUTDOORS OR IN OTHER SUBJECT TO MOISTURE SHALL BE OF THE LIQUID-TIGHT TYPE WITH CONNECTORS HAVING AN O-RING ASSEMBLY.
- ALL CONDUITS SHALL BE RIGIDLY SUPPORTED AND SECURELY FASTENED TO STRUCTURAL MEMBERS.
- PROVIDE OUTLET AND JUNCTION BOXES WHERE SHOWN ON THE DRAWINGS OR AS REQUIRED BY CODE. BOXES SHALL BE INDEPENDENTLY RIGIDLY SUPPORTED AND ACCESSIBLE. ALL OUTLET BOXES SHALL BE MINIMUM OF TWO (2) INCHES DEEP. PROVIDE A FOUR (4) INCH SQUARE BOX WITH PLASTER RING AND COVER AT EACH SWITCH AND RECEPTACLE LOCATION. WIRING DEVICE BOXES LOCATED IN BRICK, BLOCK OR CONCRETE WALLS SHALL BE APPROVED FOR THE TYPE OF INSTALLATION BEING AT MORTAR JOINTS. MULTI-GANG BOXES SHALL BE INSTALLED FOR MORE THAN (2) ADJACENT DEVICES; SECTIONAL BOXES WILL NOT BE ALLOWED. OUTLETS EXPOSED TO THE WEATHER SHALL BE TYPE FD WITH WEATHERPROOF GASKETS AND COVERS, PULL BOXES SHALL BE CONSTRUCTED OF CODE GAUGE GALVANIZED STEEL AND SHALL BE SIZED NOT LESS THAN 1 1/2 TIMES ALL DIMENSIONS AS RECOMMENDED BY THE NEC. ALL CONDUCTORS IN PULL BOXES SHALL BE IDENTIFIED WITH TAGS.
- ALL CONDUCTORS SHALL BE RATED 600 VOLTS, AND SHALL BE COPPER WITH TYPE THHN INSULATION. MINIMUM SIZE SHALL BE NO. 12 AND NO. 8, AND LARGER SHALL BE STRANDED. ALL CONDUCTORS SHALL BE COLOR CODED, WITH SIZES THROUGH NO. 10 BEING OF THE SOLID COMPOUND COATING. STRIPES, BANDS OR HASH MARKS WITH RESPECTIVE COLOR CODING MAY BE USED FOR CONDUCTORS NO. 8 AND LARGER. COLOR CODING SHALL BE PHASE A-BLACK, PHASE B-RED, PHASE C-BLUE, NEUTRAL-WHITE, AND GROUND-GREEN.
- MAINS AND FEEDERS SHALL BE RUN CONTINUOUS WITHOUT JOINTS OR SPLICES. BRANCH CIRCUIT SPLICES SHALL BE MADE WITH 3M "SCOTCHLOKS", OR EQUAL. IN PANEL BOARDS AND BOXES, CONDUCTORS SHALL BE NEATLY PLACED IN PHASE GROUPS AND SUPPORTED AWAY FROM ALL ENCLOSURE SIDES. LACING SHALL BE DONE AT INTERVALS NOT GREATER THAN SIX (6) INCHES AND SHALL BE DONE WITH LINEN CORD OR T & B SELF-LOCKING "TY-RAPS", OR EQUAL.
- PROVIDE ALL LIGHTING FIXTURES AS NOTED ON THE DRAWINGS. FIXTURES SHALL BE SUSPENDED FROM STRUCTURAL MEMBERS, BY STANDARD BAR HANGERS, OR OTHER APPROVED MEANS. STRUCTURAL STEEL NECESSARY TO SUPPORT FIXTURES SHALL BE FURNISHED AND INSTALLED UNDER THIS SECTION. PROVIDE PLASTER FRAMES AS REQUIRED. ALL FIXTURES SHALL BE GROUNDED. FIXTURES SHALL BE IN PERFECT CONDITION AND OPERATING AT THE TIME OF COMPLETION. NEW BUILDING FIXTURES SHALL NOT BE USED FOR CONSTRUCTION LIGHTING. FIXTURE LOCATIONS SHALL BE COORDINATED WITH CEILING PATTERNS OR OTHER DETAILS OR NOTES AS SHOWN ON THE DRAWINGS.
- IF A LIGHTING FIXTURE FOR A SPECIFIC LOCATION IS NOT CLEARLY NOTED, THE CONTRACTOR SHALL BRING IT TO THE ATTENTION OF THE ENGINEER PRIOR TO BIDDING, OR THE CONTRACTOR SHALL FURNISH AND INSTALL A FIXTURE SIMILAR AND COMPARABLE IN COST TO THAT SPECIFIED FOR OTHER LIKE LOCATION.
- FURNISH AND INSTALL ALL WIRING DEVICES AND PLATES WHERE SHOWN ON THE DRAWINGS AND HEREIN SPECIFIED. ALL DEVICES SHALL BE NEMA RATED SPECIFICATION GRADE, WITH ALL PARTS EXCEPT TERMINALS TOTALLY ENCLOSED, AND WITH EACH DEVICE SEPARATELY PACKAGED UPON ARRIVAL AT JOB SITE. HEIGHT OF WIRING DEVICE SHALL WORK WITH BRICK JOINTS AND CONCRETE BLOCK JOINTS, BUT IN GENERAL, LIGHTING SWITCHES SHALL BE MOUNTED 4'-0" ABOVE FLOOR, AND RECEPTACLES AND TELEPHONE OUTLETS SHALL BE MOUNTED 12" ABOVE FLOOR. ADJACENT WIRING DEVICES SHALL BE MOUNTED AS CLOSE TO EACH OTHER AS POSSIBLE. ALL WIRING DEVICES SHALL BE SIDE WIRED. COLOR OF PLATES SHALL BE SELECTED BY OWNER.
- THE ENTIRE ELECTRICAL SYSTEM AND THE BUILDING STRUCTURE SHALL BE GROUNDED, OR AS INDICATED ON THE DRAWINGS. THE ELECTRIC SERVICE, EQUIPMENT AND ENCLOSURES, CONDUITS AND RACEWAYS, SWITCHES, BREAKERS AND PANELS, MOTORS, CONTROLLERS, LIGHTING FIXTURES AND RECEPTACLES SHALL BE GROUNDED. EACH BRANCH OR POWER CIRCUIT SHALL HAVE AN INDEPENDENT GROUNDING CONDUCTOR WHETHER SHOWN OR NOT, WITH THE EXCEPTION OF LIGHTING SWITCHES.
- SECURITY CAMERAS SHALL BE INSTALLED ON THE EXTERIOR OF THE BUILDING TO PROVIDE MONITORING OF ALL AREAS OF THE FACILITY THE SECURITY CAMERA CONTRACTOR SHALL DESIGN, LAYOUT, FURNISH AND INSTALL ALL COMPONENTS AND SYSTEM COMPLETE IN EVERY RESPECT AND READY TO OPERATE. FURNISH ALL MISCELLANEOUS ITEMS AND ACCESSORIES REQUIRED FOR SUCH INSTALLATION AND SYSTEM WHETHER OR NOT EACH ITEM OR ACCESSORY IS SHOWN ON THE DRAWING OR MENTIONED IN THE SPECIFICATIONS. THE CONTRACTOR IS RESPONSIBLE FOR DESIGN AND LAYOUT OF THE SYSTEM. CONTRACTOR SHALL SUBMIT PROPOSED SECURITY CAMERA LAYOUT TO THE OWNER AND ENGINEER FOR APPROVAL PRIOR TO CONSTRUCTION. PROVIDE A VIDEO MONITORING SYSTEM WITH RECORDING CAPABILITY FOR THE SYSTEM. EACH SECURITY CAMERA LOCATION SHALL BE PROVIDED WITH A CAT 6 CABLE AND CABLE OUTLET FOR THE CAMERA. THE CAT 6 CABLE SHALL BE INSTALLED FROM THE CAMERA MONITORING CONTROL SYSTEM.



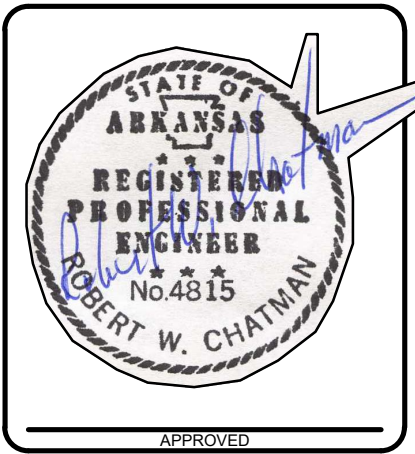
SERVICE ENTRANCE SCHEMATIC



LDP SCHEMATIC



LIGHTING & ELECTRICAL PLAN 1/4"=1'-0"



MECHANICAL & PLUMBING PLAN

JACKSON COUNTY SHERIFF DEPT. MAINT. BUILDING

NEWPORT (JACKSON COUNTY), ARKANSAS

PROJECT NUMBER: 23-085

DRAWN BY: G.Bowren

CHECKED BY: RWC

DATE: AUGUST 2023

REVISIONS:

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DRAWER NUMBER:

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MECHANICAL & PLUMBING PLAN

JACKSON COUNTY SHERIFF DEPT. MAINT. BUILDING

NEWPORT (JACKSON COUNTY), ARKANSAS

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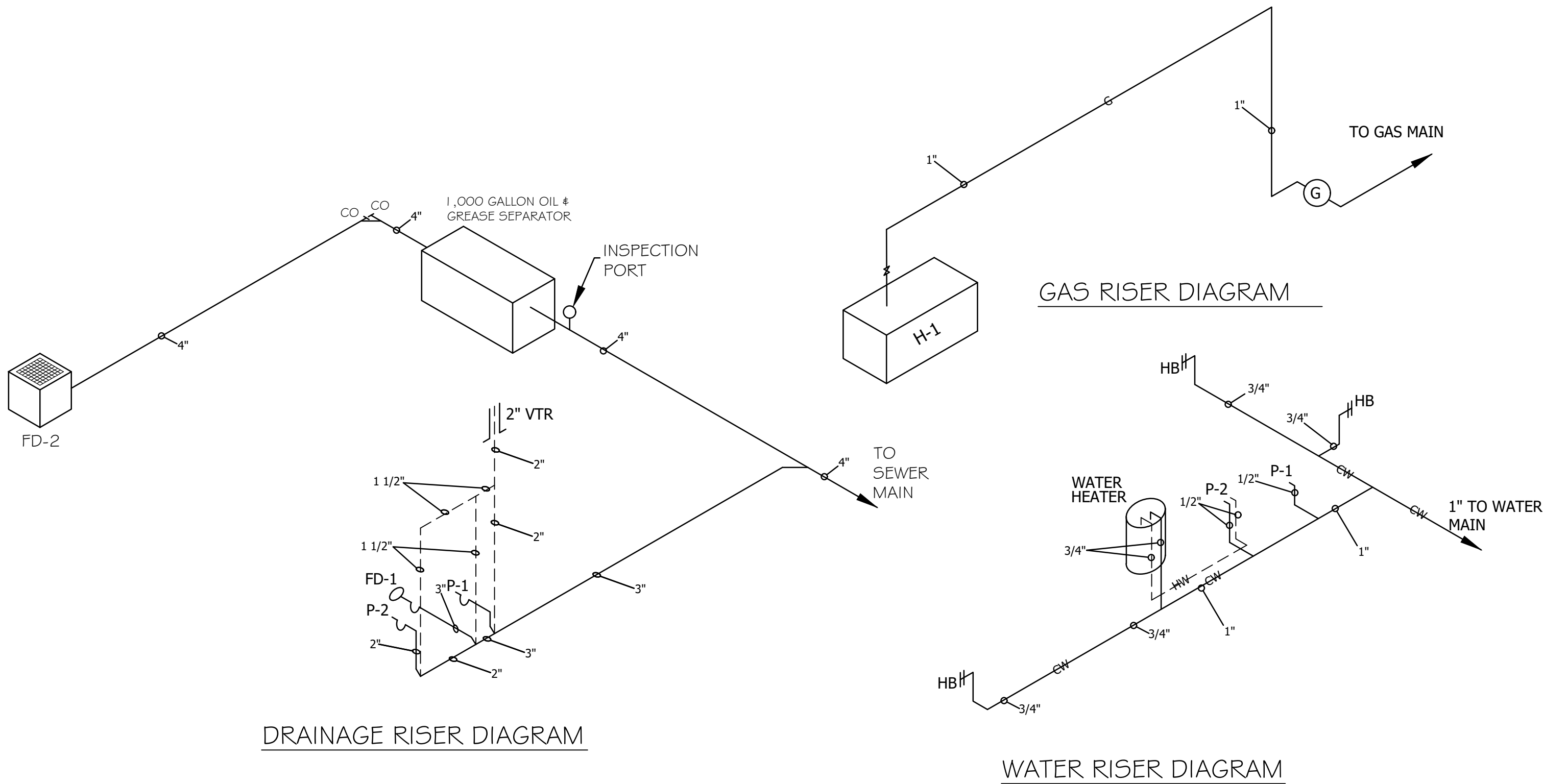
of 4

DRAWER NUMBER:

PLUMBING SCHEDULE				
MARK	DESCRIPTION	MANUFACTURER	MODEL	REMARKS
P-1	TOILET	KOHLER	K-25077-RA	PROVIDE K-25076 TOILET SEAT
P-2	LAVATORY	KOHLER	K-2005	PROVIDE KOHLER MODEL K-400T70-5AKC FAUCET
FD-1	FLOOR DRAIN	ZURN	Z-400	
FD-2	FLOOR DRAIN	ZURN	Z-610	
WH	WATER HEATER	RHEEM	PROE11RHMT	120 VOLT POINT OF USE
HB	HOSE BIBB	ZURN	Z-1315	

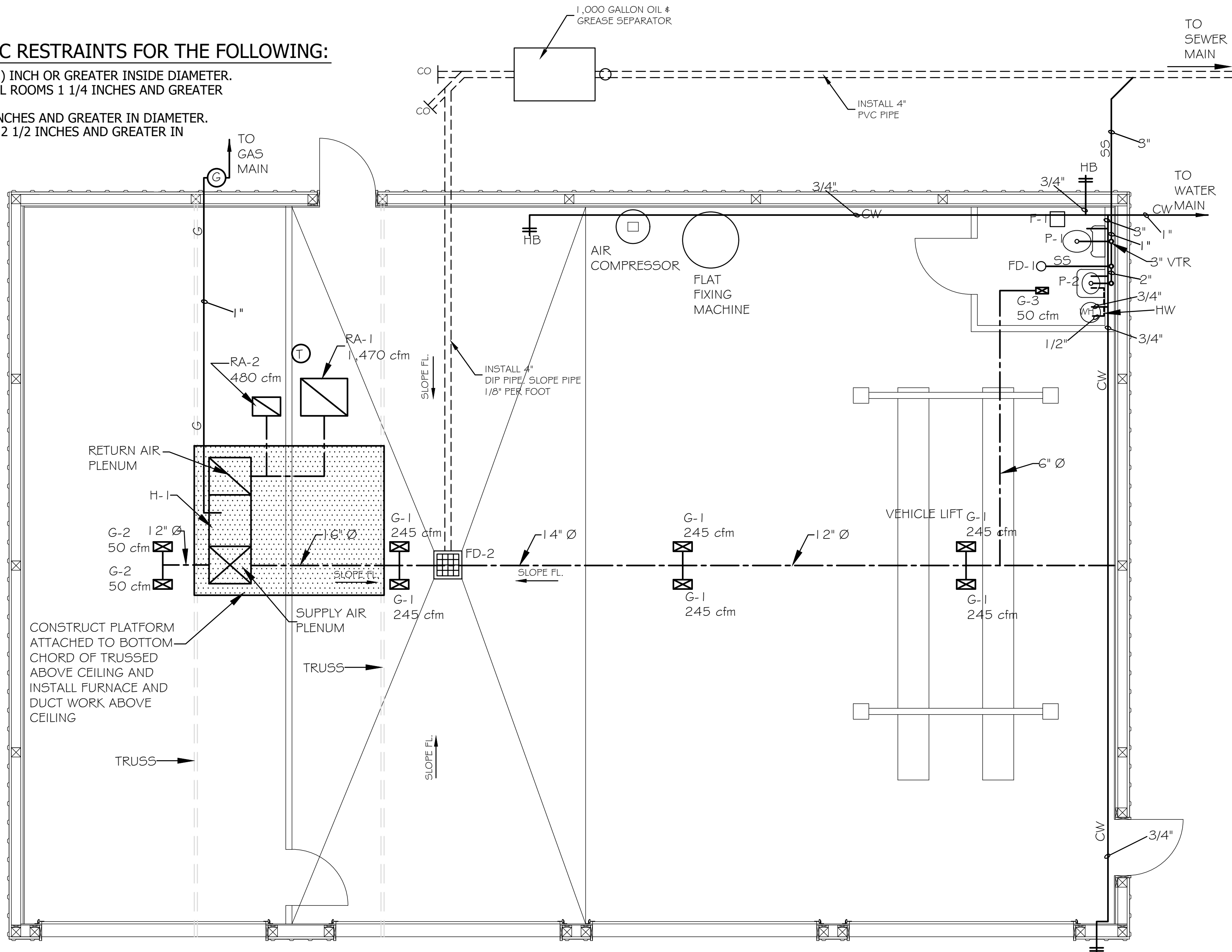
MECHANICAL SCHEDULE					
MARK	DESCRIPTION	MANUFACTURER	MODEL	SIZE	REMARKS
H-1	HORIZONTAL GAS FURNACE	LENNOX	ML180UH110E60C	110,000 BTUH INPUT 90,000 BTUH OUTPUT	120 VOLT, 80% AFUE
G-1	SUPPLY GRILL	HART & COOLEY	92VHV	12"x5"	245 CFM DUCT MOUNTED, WITH OPPOSED BLADE DAMPER
G-2	SUPPLY GRILL	HART & COOLEY	92VHV	12"x5"	240 CFM DUCT MOUNTED, WITH OPPOSED BLADE DAMPER
G-3	SUPPLY GRILL	HART & COOLEY	821	8"x4"	50 CFM WITH DAMPER
RA-1	RETURN GRILL	HART & COOLEY	RH45	30"x24"	1,470 CFM
RA-1	RETURN GRILL	HART & COOLEY	RH45	18"x12"	480 CFM
F-1	VENT FAN	BROAN	671		70 CFM. PROVIDE DUCT AND ROOF CAP
T	THERMOSTAT	WHITE ROGERS	1F80-361		

- PLUMBING NOTES:
- ALL PLUMBING SHALL COMPLY WITH THE ARKANSAS STATE PLUMBING CODE & ARKANSAS STATE FUEL GAS CODE.
 - THE CONTRACTOR, BEFORE SUBMITTING HIS PROPOSAL, SHALL INSPECT THE SITE OF THE PROPOSED CONSTRUCTION AND BECOME FULLY INFORMED AS TO THE FACILITIES, DIFFICULTIES, AND RESTRICTIONS ATTENDING THE EXECUTION OF WORK. NO ADDITIONAL COMPENSATION WILL BE GRANTED FOR WORK OR ITEMS OMITTED FROM HIS PROPOSAL DUE TO HIS FAILURE TO INFORM HIMSELF OF THE CONDITIONS AFFECTING THE PERFORMANCE OF THE WORK INCLUDED IN THE CONTRACT, OR NECESSARY TO CARRY ON AND SATISFACTORILY COMPLETE THE WORK INCLUDED HEREIN.
 - ALL WORKMANSHIP AND MATERIALS HEREIN SPECIFIED SHALL MEET IN EVERY RESPECT THE CODES, STANDARDS AND REGULATIONS HAVING JURISDICTION OF THE WORK. IN CASE OF DIFFERENCE BETWEEN THE VARIOUS STANDARDS AND OTHER REGULATIONS, THE MATTER WILL BE BROUGHT TO THE ATTENTION OF THE ENGINEER AND EITHER THE MOST STRINGENT SHALL GOVERN OR THE REGULATION OR STANDARD SELECTED BY THE ENGINEER SHALL GOVERN.
 - SHOULD THE CONTRACTOR PERFORM ANY WORK THAT DOES NOT COMPLY WITH THE REQUIREMENTS OF THE APPLICABLE CODES, STANDARDS AND REGULATIONS, HE SHALL BEAR ALL COSTS ARISING FROM THE DEFICIENCIES. FURNISH ALL LABOR, MATERIALS, EQUIPMENT AND SERVICES TO COMPLETE THE PLUMBING WORK AS SHOWN ON THE DRAWINGS.
 - FURNISH AND INSTALL ALL PLUMBING SYSTEMS COMPLETE IN EVERY RESPECT AND READY TO OPERATE. FURNISH ALL MISCELLANEOUS ITEMS AND ACCESSORIES REQUIRED FOR SUCH INSTALLATION, WHETHER OR NOT EACH ITEM ACCESSORY IS SHOWN ON THE DRAWINGS OR MENTIONED IN THE SPECIFICATIONS.
 - HOT AND COLD WATER PIPING ABOVE SLAB SHALL BE SCHEDULE 40 GALVANIZED STEEL WITH GALVANIZED M.I. FITTINGS OF TYPE "L" COPPER WITH WROUGHT COPPER FITTINGS, OR EQUAL. PIPING BELOW SLAB SHALL BE TYPE "K" COPPER TUBING. EXTERIOR PIPING SHALL BE SCHEDULE 40 GALVANIZED STEEL, TYPE "K" OR "L" COPPER, OR CLASS 150 CAST IRON.
 - TREATED WATER PIPING: SCHEDULE 40 PVC INSTALLED IN CRAWL SPACE BELOW FLOOR. JOINT CEMENT WILL BE PROVIDED BY PVC MANUFACTURER.
 - SOIL AND STORM DRAINAGE PIPING SHALL BE SCHEDULE 40 PVC, OR SCHEDULE 40 ABS DWV PLASTIC PIPE, OR SERVICE WEIGHT CAST IRON WITH SERVICE WEIGHT FITTINGS OR NO HUB. PIPE AND FITTINGS TO BE COATED WITH HOT COAL TAR PITCH INSIDE AND OUT.
 - VENT PIPING 2 1/2 INCH AND UNDER MAY BE SCHEDULE 40 GALVANIZED STEEL PIPE WITH BANDED CAST IRON FITTINGS OR GALVANIZED VICTAULIC COUPLINGS AND FITTINGS. THREE INCH AND LARGER PIPE SHALL BE SERVICE WEIGHT CAST IRON. NO HUB. COPPER DWV WITH COPPER DRAINAGE FITTINGS MAY BE USED FOR ALL SIZE VENTING PIPING. VENT PIPE MAY BE SCHEDULE 40 PVC OR ABS DWV PLASTIC PIPE.
 - GATE AND GLOBE VALVES SHALL BE BRONZE WITH A STEAM WORKING PRESSURE OF 125 PSI AS MANUFACTURED BY JENKINS, STOCKHAM, OR WELLWORTH, OR EQUAL. VALVES 2" AND SMALLER SHALL HAVE SCREWED ENDS. VALVES 2 1/2" AND LARGER SHALL BE IRON BODY BRONZE MOUNTED 125 PSI ASA FLANGE.
 - CONNECTIONS ARE NOT PERMITTED BETWEEN POTABLE WATER AND NON-POTABLE WATER OR WASTE SOURCES.
 - AIR GAPS OR APPROVED BACKFLOW PREVENTERS SHALL ALWAYS BE USED WHEN REQUIRED BY CODE OR AS NECESSARY TO PREVENT BACKFLOW.
 - ALL COLD AND HOT WATER SUPPLY AND RETURN PIPING EXCEPT EXPOSED CONNECTIONS TO PLUMBING FIXTURES, FLANGES AND UNIONS SHALL BE INSULATED WITH 3/4" WALL THICKNESS GUSTIN-BACON "SNAP-ON" Owens-Corning "PF".
 - ALL EXPOSED PIPING SHALL HAVE A FIRE RETARDANT JACKET APPLIED.
 - COLD WATER PIPING SHALL HAVE A VAPOR BARRIER JACKET APPLIED.
 - HOT WATER PIPING UNDER FLOORS, 1" FOAMGLAS COVERED WITH GLASS CLOTH AND MASTIC.
 - A WATERPROOFING FLASHING SHALL BE PROVIDED FOR EACH PIPE OR VENT PASSING THROUGH THE ROOF.
 - AFTER THE HOT AND COLD WATER SYSTEMS ARE COMPLETE, THEY SHALL BE FLUSHED OUT COMPLETELY AND FILLED WITH WATER AND A SOLUTION OF SODIUM HYPO CHLORITE ADDED TO THE SYSTEM. THE SOLUTION SHALL CONSIST OF 1 GALLON OF SODIUM HYPO CHLORITE PUREX OR OTHER TO 200 GALLONS OF WATER. CHECK RESIDUAL CHLORINE BY ORTHOTOLIDIN TEST. ALLOW SOLUTION TO REMAIN IN THE SYSTEM FOR 24 HOURS, AFTER WHICH THE ENTIRE SYSTEM SHALL BE FLUSHED. THE ENGINEER SHALL BE NOTIFIED 24 HOURS PRIOR TO TESTING SO HIS REPRESENTATIVE CAN WITNESS TEST.
 - CUT PIPE ACCURATELY TO MEASUREMENTS ESTABLISHED AT THE SITE, WORK INTO PLACE, WITHOUT SPRINGING OR FACING AND CLEAR ALL WINDOWS, DOORS AND OTHER OPENINGS. REAM ALL PIPING TO REMOVE BURRS AND INSTALL SO AS TO PERMIT FREE EXPANSION AN CONTRACTION WITHOUT CAUSING DAMAGE. MAKE ALL CHANGES IN DIRECTION WITH FITTINGS.
 - PROVIDE, WHETHER SHOWN OR NOT, SUFFICIENT AWING JOINTS, EXPANSION LOOPS AND DEVICES NECESSARY FOR A FLEXIBLE PIPING SYSTEM. PROVIDE UNION SHUT OFF VALVES SUITABLE LOCATED TO FACILITATE MAINTENANCE AND REMOVAL OF ALL EQUIPMENT OR APPARATUS. INSTALL DRAIN VALVES AT ALL LOW POINTS OF EACH SYSTEM TO ENABLE COMPLETE DRAINAGE, AND AIR VENTS AT ALL HIGH POINTS IN THE PIPING SYSTEM TO ENABLE COMPLETE AIR VENTING.
 - JOINTS IN COPPER TUBING SHALL BE MADE USING SWEAT FITTINGS AND TIN-ANTIMONY SOLDER AND NON-CORROSIVE FLUX. FOR SOLDERED JOINTS, THE OUTSIDE SURFACE AT END OF PIPE AND INSIDE SURFACE OF FITTING SHALL BE THOROUGHLY CLEANED WITH STEEL WOOL OR EMERY CLOTH AND ALL BURRS SHALL BE REMOVED. AFTER CLEANING, SURFACES TO BE JOINED SHALL BE EVENLY AND COMPLETELY COVERED WITH FLUX. SOLDER JOINTS SHALL BE WELL SUPPORTED DURING THE HEATED PROCESS AND SHALL NOT BE STRAINED DURING THE COOLING PERIOD. EXCESS SOLDER SHALL BE REMOVED WHILE IN A PLASTIC STATE, LEAVING A FILLET AROUND THE CUP OF THE FITTING AS IT COOLS.
 - ALL PIPE AND FITTINGS WITH SCREWED ENDS SHALL HAVE ITS THREADS CUT CLEAN AND TRUE AND IN CONFORMANCE WITH THE ASA SPECIFICATIONS B2-1 FOR TAPER THREADS. SCREWED PIPE AND FITTING OF BRASS SHALL BE MADE UP WITHOUT MARRING OR DAMAGING PIPE AND FITTING SURFACES. ALL SCREWS PIPE JOINTS, EXCEPT WHERE SPECIFIED OTHERWISE, SHALL BE MADE UP WITH NON-SOLUBLE, NON-TOXIC, APPROVED THREAD COMPOUND, APPLIED TO MALE THREADS ONLY.
 - HANGERS: FURNISH AND INSTALL SUITABLE HANGERS AND SUPPORTS FOR ALL HORIZONTAL LINES, HANGERS AND SUPPORTS SHALL BE GRINNEL, FEE AND MASON, OR EQUAL. HEAVY PIPES SHALL BE CARRIED BY PIPE HANGERS SUPPORTED BY RODS SECURED TO SLAB OR BY APPROVED DESIGN. NO PIPING SHALL BE HUNG FROM OTHER PIPING. IN NO CASE SHALL HANGERS BE SUPPORTED BY MEANS OF VERTICAL EXPANSION BOLTS.
 - ESCUTCHEONS SHALL BE INSTALLED ON PIPES AND CONDUITS WHEREVER THEY PASS THROUGH FLOORS, CEILINGS, WALLS OR PARTITIONS IN FINISHED AREAS.
 - ALL HORIZONTAL PIPING SHALL BE SUPPORTED BY HANGERS IN ACCORDANCE WITH ALL SEISMIC REQUIREMENTS.
 - WATER HEATERS SHALL BE PROVIDED WITH ANTISIPHON DEVISE, RELIEF VALVE IN ACCORDANCE WITH SECTION 504 OF THE ARKANSAS STATE PLUMBING CODE. RELIEF VALVE SHALL DISCHARGE INTO THE HUB DRAIN AND SHALL BE PROVIDED WITH AN AIR GAP.
 - ALL HUB DRAINS SHALL BE INSTALLED IN ACCORDANCE WITH SECTION 802.3 OF THE ARKANSAS STATE PLUMBING CODE AND SHALL EXTEND AT LEAST 1" ABOVE THE FLOOR.
 - ALL HUB DRAINS AND FLOOR DRAINS SHALL BE PROVIDED WITH A TRAP SEAL PRIMER VALVE. TRAP SEAL PRIMER VALVE SHALL CONNECT TO THE TRAP AT A POINT ABOVE THE LEVEL OF THE TRAP SEAL. TRAP SEAL PRIMER VALVE SHALL CONFORM TO ASSE 1018 OR ASSE 1044.
 - WATER HEATER INSTALLATION SHALL COMPLY WITH ARKANSAS STATE PLUMBING CODE CHAPTER 5.
 - WATER DISTRIBUTION SYSTEM SHALL COMPLY WITH ARKANSAS STATE PLUMBING CODE CHAPTER 6.
 - ALL HAND WASHING SINKS SHALL BE PROVIDED WITH TEMPERATURE MIXER FOR TEMPERED WATER IN ACCORDANCE WITH ARKANSAS STATE PLUMBING CODE SECTION 416.5.



PROVIDE SEISMIC RESTRAINTS FOR THE FOLLOWING:

- GAS PIPING OF ONE (1) INCH OR GREATER INSIDE DIAMETER.
- PIPING IN MECHANICAL ROOMS 1 1/4 INCHES AND GREATER IN INSIDE DIAMETER.
- OTHER PIPING 2 1/2 INCHES AND GREATER IN DIAMETER.
- ELECTRICAL CONDUIT 2 1/2 INCHES AND GREATER IN INSIDE DIAMETER.



LEGEND

- P-1 = PLUMBING FIXTURE
CW = COLD WATER
HW = HOT WATER
SS = SANITARY SEWER
FD = FLOOR DRAIN
C.O. = CLEAN OUT
G = GAS LINE
VTR = VENT THROUGH ROOF
HB = HOSE BIBB

MECHANICAL & PLUMBING PLAN 1/4"=1'-0"