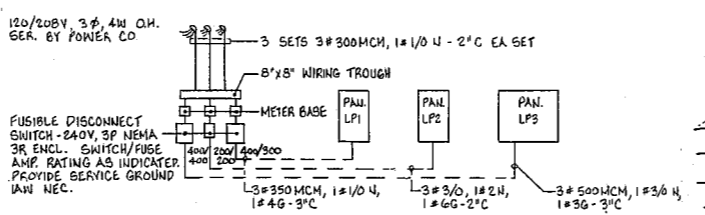


**HVAC NOTES:**  
 EQUIPMENT-ROOFTOP HEAT PUMPS, HP-1 & HP-1A CARRIER MODEL 50Q0006 2000 CFM, ARI RATING 60,000 BTUH COOLING/HI-TEMP HEATING, 1 HP FAN MOTOR, 24.6 KW HEATER, 208V.-3HP. PROVIDE WITH ROOF CURB, THERMOSTAT ASSEMBLY, EMERGENCY HEAT CONTROL AND MANUAL OUTDOOR DAMPER WITH FILTER.  
 HP-2 & HP-3- CARRIER MODEL 50Y0042, 1500 CFM, ARI RATING 40,000 BTUH COOLING/41,000 BTUH HIGH TEMP HEATING, 1/2 HP FAN MOTOR, 15 KW HEATER, 208V.-3HP. PROVIDE WITH ROOF CURB, DOWN TURN PLENUM, THERMOSTAT ASSEMBLY, EMERGENCY HEAT CONTROL AND MANUAL OUTDOOR AIR DAMPER WITH FILTER.  
 EF-1, 2&3 - GREENHECK MODEL SP-17, 1/50, 100 CFM AT 3/8" S.P., 115V-1PH PROVIDE WITH PITCHED ROOF DISCHARGE CAP AND CONNECTING DUCTWORK.  
 SIDEMALL FAN- GREENHECK MODEL SDE-12-32-B, 340 CFM AT 1/4" S.P., 115V-1PH PROVIDE WITH MOTOR SIDE GUARD AND BACKDRAFT DAMPER.  
 SUPPLY DIFFUSERS- METAL AIR PERFORATED FACE, ROUND NECK 24" SQUARE OR 12" SQUARE FACE AS SHOWN.  
 RETURN GRILLES- METAL AIRE RH F FILTER GRILLE, 24" x 24" or 48" x 24" AS SHOWN. PROVIDE WITH 1" THICK FILTERS.  
 FLEXIBLE DUCTWORK: CLEAFLEX TYPE KQA OR EQUAL DUCT INSULATION: 2" THICK 3/4LB. DENSITY GLASS FIBER BLANKET FACED WITH 1/2" OPEN MESH GLASS FIBER REINFORCED ALUMINUM FOIL AND FLAMEPROOF KRAFT PAPER LAMINATE, FACTORY APPLIED. PROVIDE ON ALL SUPPLY & RETURN DUCTWORK (EXCEPT FLEX).  
 DUCTWORK: SUPPLY & RETURN SHALL BE SHEET ALUMINUM OR GALVANIZED STEEL. SHALL BE CONSTRUCTED & INSTALLED AS RECOMMENDED BY SMACNA DUCT MANUAL. ALL DUCTS & CONNECTIONS SHALL HAVE MECHANICALLY TIGHT JOINTS AND MADE AIRTIGHT WITH PRESSURE SENSITIVE TAPE.  
 ALL WORK SHALL CONFORM TO THE REQUIREMENTS OF THE NORTH CAROLINA STATE BUILDING CODE. THIS CONTRACTOR SHALL INVESTIGATE THE STRUCTURAL & FINISH CONDITIONS AFFECTING HIS WORK, AND SHALL ARRANGE HIS WORK ACCORDINGLY, PROVIDING ACCESSORIES, HANGERS, ANCHORS AS MAY BE REQUIRED TO MEET SUCH CONDITIONS WITHOUT ADDITIONAL COST TO THE OWNER.

**FLOOR PLAN**  
 SCALE: 1/4" = 1'-0"



**ELECTRICAL RISER DIAGRAM**  
 NO SCALE

- ELECTRICAL SYMBOL SCHEDULE**
- ⊠ A FLUORESCENT LIGHTING FIXTURE, LETTER INDICATES TYPE.
  - INCANDESCENT LIGHTING FIXTURE.
  - ⊗ HID LIGHTING FIXTURE, WALL MOUNTED.
  - ⊕ EXIT LIGHT
  - ⊠ EMERGENCY LIGHT
  - S SINGLE POLE TOGGLE SWITCH } 20A, 120V RECESS MOUNTED
  - S<sub>3</sub> THREE WAY TOGGLE SWITCH } 48 INCHES ABOVE FLOOR
  - SM MANUAL MOTOR STARTER
  - TS TIME SWITCH, 2 POLE
  - ⊠ PANELBOARD
  - ⊠ DISCONNECT SWITCH
  - ⊙ JUNCTION BOX
  - ⊕ DUPLEX RECEPTACLE, 20A, 120V, 16" ABOVE FLOOR TO CENTER OF DEVICE UNLESS OTHERWISE NOTED.
  - ⊕ 208 VOLT RECEPTACLE, 36" ABOVE FLOOR TO CENTER OF DEVICE UNLESS OTHERWISE NOTED.
  - WIRE AND CONDUIT CONCEALED IN WALL OR ABOVE CEILING.
  - - - WIRE AND CONDUIT INSTALLED BELOW CONCRETE FLOOR SLAB.
  - WIRE AND CONDUIT INSTALLED EXPOSED.
  - - - BRANCH CIRCUIT HOMERUN TO PANELBOARD.

**LIGHTING FIXTURE SCHEDULE**

TYPE	MANUFACTURER, OR EQUIV.	LAMPS	VOLTS	MOUNTING
A	LITHONIA #2422DFMA12	2-F40CW	120	RECESSED
B	LITHONIA #UN240120HC	2-F40CW	120	CHAIN SUSPENDED 8 FT. ABOVE FLOOR
C	LITHONIA #LG7BRWF	150W A19	120	RECESSED
D	HI-TEX #TWL355120MB	35W HPS	120	WALL MOUNTED
E	LITHONIA #S19REL	INCLUDED	120	WALL MOUNTED 8" AFF TO BOTTOM
F	LITHONIA #ELC-2	INCLUDED	120	WALL MOUNTED 8" AFF TO BOTTOM
G	LITHONIA #S10	2-60W A19	120	AFF TO BOTTOM SURFACE

- NOTES:**
- ALL ELECTRICAL WORK SHALL COMPLY WITH THE NEC.
  - ALL ELECTRICAL EQUIPMENT SHALL BEAR UL LABEL.
  - UNDERGROUND CONDUIT AND CONDUIT INSTALLED BELOW FLOOR SLAB SHALL BE GALVANIZED RIGID STEEL, PVC OR ASPHALTUM COATED. CONDUIT INSTALLED IN BUILDING SHALL BE GALVANIZED RIGID STEEL, PVC OR EX. FLEXIBLE METAL CONDUIT AND LIQUIDTIGHT FLEXIBLE METAL CONDUIT SHALL BE USED FOR CONNECTION TO RECESSED AND SUSPENDED LIGHTING FIXTURES AND MOTORS RESPECTIVELY.
  - PROVIDE 20A, 120V AC GENERAL USE SNAP SWITCH ON FACE OF CANOPY FOR SIGN LIGHT. COORDINATE LOCATION WITH SIGN PROVIDER. INSTALL BRANCH CIRCUIT TO PANELBOARD VIA TIME SWITCH.
  - ALL LIGHTING FIXTURES ARE TYPE A UNLESS OTHERWISE NOTED.
  - CONDUCTORS SHALL BE COPPER WITH THIN OR THIN INSULATION.
  - COORDINATE LOCATION OF JUNCTION BOX, STARTER, OR SWITCH WITH EQUIPMENT.

**PANEL LP1**  
 120/208V, 3 PHASE, 4 WIRE, 400A, MID(BOTTOM), SURFACE MOUNTED

CKT. NO.	USE	WIRING	C/B	CKT. NO.	USE	WIRING	C/B
1	LTS. 101, 104, 107	1	20/1	2	REC. 101, 104	1	20/1
2	IFR. 101	1	20/1	3	REC. 101, 104	1	20/1
3	CANOPY LTS.	1	20/1	4	EP-3 108	1	15/1
4	SIGN LT.	1	20/1	5	ICE MACHINE	1	20/1
5	SIGN LT.	1	20/1	6	1/3 HP COOL./REFRIG.	1	15/1
6	HP-1	5	110/3	7	1/2 HP COOL./REFRIG.	1	20/1
7	HP-1	5	110/3	8	EXH. FAN	1	15/1
8	HP-1	5	110/3	9	ROLL UP DOOR	1	20/1
9	HP-1	5	110/3	10	COOLER	2	15/3
10	HP-1	5	110/3	11	SPARE	2	20/3
11	TIME SWITCH	1	20/1	12	FREEZER	2	20/3
12	SPARE	20/1	28	13	SPARE	20/1	28
13	SPARE	20/1	30	14	SPARE	20/1	30
14	SPARE	20/1	30	15	SPARE	20/1	30
15	SPARE	20/1	30	16	SPARE	20/1	30
16	SPARE	20/1	30	17	SPARE	20/1	30
17	SPARE	20/1	30	18	SPARE	20/1	30
18	SPARE	20/1	30	19-24	1 POLE SPACES		

**PANEL LP2**  
 120/208V, 3 PHASE, 4 WIRE, 400A, MID(BOTTOM), SURFACE MOUNTED

CKT. NO.	USE	WIRING	C/B	CKT. NO.	USE	WIRING	C/B
1	LTS. 102, 105, 107	1	20/1	2	REC. 102, 107, EXT.	1	20/1
2	CANOPY LTS.	1	20/1	3	REC. 102, 105	1	20/1
3	SIGN LT.	1	20/1	4	TIME SWITCH	1	20/1
4	SIGN LT.	1	20/1	5	EP-3 108	1	15/1
5	HP-2 HEAT	4	60/3	6	HP-2 HEAT	4	60/3
6	HP-2 HEAT	4	60/3	7	HP-2 HEAT	4	60/3
7	HP-2 HEAT	4	60/3	8	HP-2 HEAT	4	60/3
8	HP-2 HEAT	4	60/3	9	HP-2 HEAT	4	60/3
9	HP-2 HEAT	4	60/3	10	HP-2 COMPRESSOR	3	40/3
10	HP-2 HEAT	4	60/3	11	HP-2 COMPRESSOR	3	40/3
11	HP-2 HEAT	4	60/3	12	HP-2 COMPRESSOR	3	40/3
12	HP-2 HEAT	4	60/3	13	HP-2 COMPRESSOR	3	40/3
13	HP-2 HEAT	4	60/3	14	HP-2 COMPRESSOR	3	40/3
14	HP-2 HEAT	4	60/3	15	HP-2 COMPRESSOR	3	40/3
15	HP-2 HEAT	4	60/3	16	HP-2 COMPRESSOR	3	40/3
16	HP-2 HEAT	4	60/3	17	HP-2 COMPRESSOR	3	40/3
17	HP-2 HEAT	4	60/3	18	HP-2 COMPRESSOR	3	40/3
18	HP-2 HEAT	4	60/3	19-24	1 POLE SPACES		

**PANEL LP3**  
 120/208V, 3 PHASE, 4 WIRE, 400A, MID(BOTTOM), SURFACE MOUNTED

CKT. NO.	USE	WIRING	C/B	CKT. NO.	USE	WIRING	C/B
1	LTS. 103, 106, 108	1	20/1	2	REC. 106, 108, EXT.	1	20/1
2	CANOPY LTS.	1	20/1	3	TIME SWITCH	1	20/1
3	SIGN LT.	1	20/1	4	EP-3 108	1	15/1
4	SIGN LT.	1	20/1	5	HP-3 HEAT	4	60/3
5	HP-3 HEAT	4	60/3	6	HP-3 HEAT	4	60/3
6	HP-3 HEAT	4	60/3	7	HP-3 HEAT	4	60/3
7	HP-3 HEAT	4	60/3	8	HP-3 HEAT	4	60/3
8	HP-3 HEAT	4	60/3	9	HP-3 HEAT	4	60/3
9	HP-3 HEAT	4	60/3	10	HP-3 COMPRESSOR	3	40/3
10	HP-3 HEAT	4	60/3	11	HP-3 COMPRESSOR	3	40/3
11	HP-3 HEAT	4	60/3	12	HP-3 COMPRESSOR	3	40/3
12	HP-3 HEAT	4	60/3	13	HP-3 COMPRESSOR	3	40/3
13	HP-3 HEAT	4	60/3	14	HP-3 COMPRESSOR	3	40/3
14	HP-3 HEAT	4	60/3	15	HP-3 COMPRESSOR	3	40/3
15	HP-3 HEAT	4	60/3	16	HP-3 COMPRESSOR	3	40/3
16	HP-3 HEAT	4	60/3	17	HP-3 COMPRESSOR	3	40/3
17	HP-3 HEAT	4	60/3	18	HP-3 COMPRESSOR	3	40/3
18	HP-3 HEAT	4	60/3	19-24	1 POLE SPACES		

**BRANCH CIRCUIT WIRING SCHEDULE**

1	1#12, 1#12, 3/4"
2	3#12, 1#12, 3/4"
3	3#10, 1#10, 3/4"
4	3#6, 1#10, 3/4"
5	3#2, 1#6, 1/2"



7-19-84

**BUCK JONES PLAZA**  
 CARY, NORTH CAROLINA

SCALE: AS SHOWN APPROVED BY: \_\_\_\_\_ DRAWN BY: \_\_\_\_\_  
 DATE: JULY 8, 1984

**ELECTRICAL, HVAC & DETAILS**

OWNER: HSI ASSOCIATES, INC. DRAWING NUMBER: B of 9 SHS