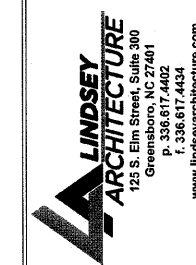


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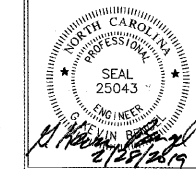
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DRAWING NAME:
ELECTRICAL DETAILS



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DATE:
2/27/19
SCALE:
AS NOTED
SHEET NO:
19021
SHEET

E-4

| PANELBOARD SCHEDULE | | | | | | | | | | |
|-------------------------|------------|-------------------------|---------|-------------------|---------------|---------------------------|------------|------|--|--|
| PANEL: A | | VOLTS: 208/120 | | | MOUNT: RECESS | | | | | |
| MAIN: MCB | | AMPS: 200 | | | AC: NOTE 1 | | | | | |
| | | PHMWIRE: 3/4 | | | LOC.: KITCHEN | | | | | |
| CIR. | AMPS/POLES | DESCRIPTION OF LOAD | LOAD VA | LOAD BY PHASE, VA | LOAD KVA | DESCRIPTION OF LOAD | AMPS/POLES | CIR. | | |
| 1 | 50/3 | ROOF-TOP UNIT (RTU-1) | 3,879 | 6,032 | 2,153 | COOLER COND. (DR) | 35/2 | 2 | | |
| 3 | | | 3,879 | 6,032 | 2,153 | | | 4 | | |
| 5 | | | 3,879 | 7,217 | 3,338 | FRZ. EVAP. FAN/COND. (DR) | 40/2 | 6 | | |
| 7 | 50/3 | ROOF-TOP UNIT (RTU-2) | 3,879 | 7,217 | 3,338 | | | 8 | | |
| 9 | | | 3,879 | 5,096 | 1,217 | KITCHEN RECEPTACLES | 20/1 | 10 | | |
| 11 | | | 3,879 | 5,096 | 1,217 | COOLER EVAP. FAN (DR) | 20/2 | 12 | | |
| 13 | 20/1 | RECEPTACLES | 1,520 | 2,448 | 828 | SAND /SALAD PREP (K) | 20/1 | 14 | | |
| 15 | 20/1 | SAND/SALAD PREP (K) | 828 | 2,088 | 1,260 | KITCHEN RECEPTACLES | 20/1 | 16 | | |
| 17 | 20/1 | EXTER. RECEPTACLES | 360 | | 180 | KITCHEN RECEPTACLES | 20/1 | 18 | | |
| 19 | 20/1 | ROOF RECEPTACLES | 900 | 2,556 | 1,656 | STEAM TABLE (K) | 20/1 | 20 | | |
| 21 | 20/1 | MNGR. DESK RECEPTACLES | 900 | 2,718 | 1,818 | FRYERS/SPREP UNIT | 20/1 | 22 | | |
| 23 | 20/1 | MNGR. DESK RECEPTACLES | 1,080 | | 1,280 | FLY LAMPS | 20/1 | 24 | | |
| 25 | 20/1 | GAS WTR. HEATERS (LO) | 170 | 350 | 180 | FLY LAMPS | 20/1 | 26 | | |
| 27 | 20/1 | RECEPTACLES | 1,440 | 1,620 | 180 | FLY LAMPS | 20/1 | 28 | | |
| 29 | 20/1 | CLR./FRZ. LITS/DR. HTR. | 756 | | 756 | | | 30 | | |
| 31 | 20/1 | POS | 360 | | | | | 32 | | |
| 33 | | | | 0 | | | | 34 | | |
| 35 | | | | 0 | | | | 36 | | |
| 37 | | | | 0 | | | | 38 | | |
| 39 | | | | 0 | | | | 40 | | |
| 41 | | | | 0 | | SURGE PROTECTOR | 40/2 | 42 | | |
| CONNECTED VA PER PHASE | | | 18,963 | 17,564 | 14,860 | | | | | |
| TOTAL AMPERES PER PHASE | | | 158 | 146 | 124 | | | | | |

(LO) - DENOTES BREAKER LOCK-OUT
(K) - DENOTES KITCHEN EQUIPMENT DERATED IN LOAD CALCULATION SUMMARY PER NEC TABLE 220.56
(DR) - DUAL REFRIGERATION EQUIPMENT WITH TIMECLOCK FOR ALTERNATING OPERATING CYCLES

| PANELBOARD SCHEDULE | | | | | | | | | | |
|-------------------------|------------|---------------------|---------|-------------------|---------------|-----------------------|---------------------|------|----|--|
| PANEL: B | | VOLTS: 208/120 | | | MOUNT: RECESS | | | | | |
| MAIN: MCB | | AMPS: 200 | | | AC: NOTE 1 | | | | | |
| | | PHMWIRE: 3/4 | | | LOC.: KITCHEN | | | | | |
| CIR. | AMPS/POLES | DESCRIPTION OF LOAD | LOAD VA | LOAD BY PHASE, VA | LOAD KVA | DESCRIPTION OF LOAD | AMPS/POLES | CIR. | | |
| 1 | 20/3 | MJA-1 | 721 | 1,813 | 1,092 | BUN WARMER (K) | 20/1 | 2 | | |
| 3 | | | 721 | 2,401 | 1,680 | TEA GREWER | 20/1 | 4 | | |
| 5 | | | 721 | 810 | 540 | SODA DISPENSER | 20/1 | 6 | | |
| 7 | 20/3 | EHP-1 | 564 | 1,104 | 540 | KITCHEN RECEPTACLES | 20/1 | 8 | | |
| 9 | | | 564 | 2,364 | 1,800 | ICE MACHINE EVAP. FAN | 20/1 | 10 | | |
| 11 | | | 564 | | 564 | | | 12 | | |
| 13 | 20/1 | MONITOR | 500 | 2,181 | 1,681 | MILKSHAKE MACH. RIGHT | 20/3 | 14 | | |
| 15 | 20/1 | RECEPTACLES | 540 | 2,221 | 1,681 | | | 16 | | |
| 17 | 20/1 | KITCHEN RECEPTACLES | 360 | | 2,041 | 1,681 | | 18 | | |
| 19 | 20/1 | HOOD LITS/CONTROLS | 1,300 | 3,221 | 1,921 | MILKSHAKE MACH. LEFT | 20/3 | 20 | | |
| 21 | 20/1 | SODA DISPENSER | 810 | 2,731 | 1,921 | | | 22 | | |
| 23 | 20/1 | SHAKE MONITOR | 500 | | 2,421 | 1,921 | | 24 | | |
| 25 | 20/1 | POS | 360 | 1,188 | 828 | SAND /SALAD PREP | 20/1 | 26 | | |
| 27 | 20/1 | POS | 720 | | 1,548 | 828 | REFRIGERATOR | 20/1 | 28 | |
| 29 | 20/1 | POS | 720 | | 1,440 | 720 | POS | 20/1 | 30 | |
| 31 | 20/1 | POS | 720 | 2,220 | 1,500 | HEAT TAPE | 20/1 | 32 | | |
| 33 | 20/1 | POS | 720 | | 900 | 180 | KITCHEN RECEPTACLES | 20/1 | 34 | |
| 35 | 20/1 | POS | 720 | | 720 | | | 36 | | |
| 37 | | | | 0 | | | | 38 | | |
| 39 | 40/2 | SURGE PROTECTOR | | 0 | 0 | | | 40 | | |
| 41 | | | | 0 | 0 | | | 42 | | |
| CONNECTED VA PER PHASE | | | 11,727 | 12,165 | 8,717 | | | | | |
| TOTAL AMPERES PER PHASE | | | 98 | 101 | 73 | | | | | |

(LO) - DENOTES BREAKER LOCK-OUT
(K) - DENOTES KITCHEN EQUIPMENT DERATED IN LOAD CALCULATION SUMMARY PER NEC TABLE 220.56

| PANELBOARD SCHEDULE | | | | | | | | | | |
|-------------------------|------------|----------------------|---------|-------------------|---------------|------------------------|------------|------|--|--|
| PANEL: C | | VOLTS: 208/120 | | | MOUNT: RECESS | | | | | |
| MAIN: MCB | | AMPS: 200 | | | AC: NOTE 1 | | | | | |
| | | PHMWIRE: 3/4 | | | LOC.: KITCHEN | | | | | |
| CIR. | AMPS/POLES | DESCRIPTION OF LOAD | LOAD VA | LOAD BY PHASE, VA | LOAD KVA | DESCRIPTION OF LOAD | AMPS/POLES | CIR. | | |
| 1 | 20/1 | LIGHTING - KITCHEN | 450 | 803 | 153 | LIGHTING - RESTROOM | 20/1 | 2 | | |
| 3 | 20/1 | LIGHTING - STORAGE | 355 | 855 | 150 | LGT. CONT. CONTROLS | 20/1 | 4 | | |
| 5 | 20/1 | BUILDING SIGN (LO) | 1,000 | | 2,280 | KITCHEN RECEPTACLES | 20/1 | 6 | | |
| 7 | 20/1 | LIGHTING - EXTERIOR | 276 | 1,337 | 1,081 | BUILDING NEON (LO) | 20/1 | 8 | | |
| 9 | 20/1 | LIGHTING - EXTERIOR | 308 | 1,307 | 1,081 | BUILDING NEON (LO) | 20/1 | 10 | | |
| 11 | 20/1 | MENU BOARD (LO) | 1,200 | | 2,281 | BUILDING NEON (LO) | 20/1 | 12 | | |
| 13 | 20/1 | PRE-ORDER BOARD (LO) | 800 | 1,861 | 1,081 | BUILDING NEON (LO) | 20/1 | 14 | | |
| 15 | 20/1 | ROAD SIGN (LO) | 1,200 | 2,000 | 800 | COOLERS | 20/1 | 16 | | |
| 17 | 20/1 | BUILDING SIGN (LO) | 1,000 | | 1,800 | COOLERS | 20/1 | 18 | | |
| 19 | 20/1 | BUILDING SIGN (LO) | 1,000 | 1,180 | 2,200 | FLY LAMPS | 20/1 | 20 | | |
| 21 | 20/1 | ROAD SIGN (LO) | 1,200 | 2,200 | 1,000 | BUILDING SIGN (LO) | 20/1 | 22 | | |
| 23 | 20/1 | ROAD SIGN (LO) | 1,200 | | 1,314 | EXTERIOR LIGHTING | 20/1 | 24 | | |
| 25 | 30/2 | ICE MACH. COND. RTU | 2,070 | 3,263 | 163 | GREASE HEATER | 20/1 | 26 | | |
| 27 | | | 2,070 | 2,570 | 500 | WALK UP MENU BRD. (LO) | 20/1 | 28 | | |
| 29 | | | | | 1,200 | MENU BOARD - INTERIOR | 20/1 | 30 | | |
| 31 | 20/1 | FREEZER HEAT TRACE | 500 | 1,873 | 1,373 | SEWAGE PUMP | 20/2 | 32 | | |
| 33 | | | | | 1,373 | | | 34 | | |
| 35 | | | | | 500 | PUMP CONTROLLER (L) | 20/1 | 36 | | |
| 37 | | | | | | | | 38 | | |
| 39 | 40/2 | SURGE PROTECTOR | | 0 | 0 | | | 40 | | |
| 41 | | | | 0 | 0 | | | 42 | | |
| CONNECTED VA PER PHASE | | | 10,114 | 10,366 | 9,336 | | | | | |
| TOTAL AMPERES PER PHASE | | | 84 | 86 | 78 | | | | | |

(LO) - DENOTES BREAKER LOCK-OUT
(L) - DENOTES LOCK-ON BREAKER

| PANEL A - LOAD CALCULATION SUMMARY | | | | |
|------------------------------------|----------|----------|--------|--|
| ITEM | TOTAL VA | (X) D.F. | VA | |
| LIGHTING | 0 | 125 (%) | 0 | |
| EXTERIOR LIGHTING | 0 | 125 (%) | 0 | |
| RECEPTS. (FIRST 10 KVA) | 9,108 | 100 (%) | 9,108 | |
| RECEPTS. (REMAINING KVA @50%) | 0 | 50 (%) | 0 | |
| HVAC | 23,274 | 100 (%) | 23,274 | |
| SHOW WINDOWS | 0 | 125 (%) | 0 | |
| WATER HEATER | 0 | 125 (%) | 0 | |
| SIGNAGE | 0 | 125 (%) | 0 | |
| MOTORS | 0 | 125 (%) | 0 | |
| EQUIPMENT | 15,774 | 100 (%) | 15,774 | |
| KITCHEN EQUIPMENT | 3,312 | 90 (%) | 2,981 | |
| TOTAL | 51,489 | | 51,137 | |
| TOTAL AMPS = VA/(208 x √3) = 142 | | | | |

NOTES:
* RECEPTACLES ARE CALCULATED PER NEC TABLE 220.44
* HVAC NAME PLATE RATING INCLUDES 125% DIVERSITY FACTOR
* KITCHEN EQUIPMENT IS CALCULATED PER NEC TABLE 220.56
* SHOW WINDOWS ARE CALCULATED AT 200 VA PER LINEAR FT.

| PANEL B - LOAD CALCULATION SUMMARY | | | | |
|------------------------------------|----------|----------|--------|--|
| ITEM | TOTAL VA | (X) D.F. | VA | |
| LIGHTING | 0 | 125 (%) | 0 | |
| EXTERIOR LIGHTING | 0 | 125 (%) | 0 | |
| RECEPTS. (FIRST 10 KVA) | 7,800 | 100 (%) | 7,800 | |
| RECEPTS. (REMAINING KVA @50%) | 0 | 50 (%) | 0 | |
| HVAC | 3,855 | 100 (%) | 3,855 | |
| SHOW WINDOWS | 0 | 125 (%) | 0 | |
| WATER HEATER | 0 | 125 (%) | 0 | |
| SIGNAGE | 0 | 125 (%) | 0 | |
| MOTORS | 0 | 125 (%) | 0 | |
| EQUIPMENT | 19,862 | 100 (%) | 19,862 | |
| KITCHEN EQUIPMENT | 1,092 | 100 (%) | 1,092 | |
| TOTAL | 32,609 | | 32,609 | |
| TOTAL AMPS = VA/(208 x √3) = 91 | | | | |

NOTES:
* RECEPTACLES ARE CALCULATED PER NEC TABLE 220.44
* HVAC NAME PLATE RATING INCLUDES 125% DIVERSITY FACTOR
* KITCHEN EQUIPMENT IS CALCULATED PER NEC TABLE 220.56
* SHOW WINDOWS ARE CALCULATED AT 200 VA PER LINEAR FT.

| PANEL C - LOAD CALCULATION SUMMARY | | | | |
|------------------------------------|----------|----------|--------|--|
| ITEM | TOTAL VA | (X) D.F. | VA | |
| LIGHTING | 1,072 | 125 (%) | 1,340 | |
| EXTERIOR LIGHTING | 4,828 | 125 (%) | 6,033 | |
| RECEPTS. (FIRST 10 KVA) | 1,260 | 100 (%) | 1,260 | |
| RECEPTS. (REMAINING KVA @50%) | 0 | 50 (%) | 0 | |
| HVAC | 0 | 100 (%) | 0 | |
| SHOW WINDOWS | 0 | 125 (%) | 0 | |
| WATER HEATER | 0 | 125 (%) | 0 | |
| SIGNAGE | 7,600 | 125 (%) | 9,500 | |
| MOTORS | 2,748 | 125 (%) | 3,433 | |
| EQUIPMENT | 12,313 | 100 (%) | 12,313 | |
| KITCHEN EQUIPMENT | 0 | 70 (%) | 0 | |
| TOTAL | 29,817 | | 33,878 | |
| TOTAL AMPS = VA/(208 x √3) = 94 | | | | |

NOTES:
* RECEPTACLES ARE CALCULATED PER NEC TABLE 220.44
* HVAC NAME PLATE RATING INCLUDES 125% DIVERSITY FACTOR
* KITCHEN EQUIPMENT IS CALCULATED PER NEC TABLE 220.56
* SHOW WINDOWS ARE CALCULATED AT 200 VA PER LINEAR FT.

| ELECTRICAL EQUIPMENT SCHEDULE | | | | |
|-------------------------------|----------|---------------------------------------|---------|------|
| ITEM | QUANTITY | DESCRIPTION | VOLTAGE | AMPS |
| 5 | 1 | WALK IN FREEZER | 208V/3ø | 25 |
| 7 | 1 | (2) DRAWER SANDWICH/SALAD PREP UNIT | 115V/1ø | 7.2 |
| 10 | 3 | 35 LB GAS FRYERS | 115V/1ø | 4.3 |
| 12 | 1 | WALK IN COOLER | 208V/3ø | 20 |
| 13 | 2 | CARBONATED BEVERAGE MACHINE W/ICE BIN | 120V/1ø | 4.5 |
| 15 | 1 | ICE MAKER W/BIN | 208V/1ø | 15 |
| 17 | 2 | (2) DOOR SANDWICH/SALAD PREP UNIT | 115V/1ø | 7.2 |
| 18 | 2 | MILK SHAKE MACHINE | 208V/3ø | 7.14 |
| 21 | 2 | TEA DISPENSER | 120V/1ø | |
| 23 | 1 | BUN WARMER | 120V/1ø | 9.1 |
| 24 | 1 | STEAM TABLE | 120V/1ø | 13.8 |
| 25 | 1 | (2) DOOR SANDWICH/SALAD PREP UNIT | 115V/1ø | 7.2 |
| 28 | 1 | (4) DRAWER UNDER COUNTER REFRIGERATOR | 115V/1ø | 7.2 |

| FEEDER TABLE | | | | |
|-----------------|------|--------|---------|--|
| O.C. PROTECTION | WIRE | TYPE | CONDUIT | |
| 20 | #12 | COPPER | 1/2" | |
| 30 | #10 | COPPER | 1/2" | |
| 35 | #8 | COPPER | 3/4" | |
| 40 | #6 | COPPER | 3/4" | |
| 45 | #6 | COPPER | 3/4" | |
| 50 | #6 | COPPER | 3/4" | |
| 55 | #6 | COPPER | 1" | |
| 60 | #6 | COPPER | 1" | |
| 65 | #4 | COPPER | 1-1/4" | |
| 70 | #4 | COPPER | 1-1/4" | |
| 100 | #3 | | | |