

Circle K Southwest Prototype 1480 - 09/17/2013

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| PANEL 'P2A' | | | | | | | | | | | | | | | | | | | | | | | |
|------------------------------------|-----------------------------------|----------------------|-----|------|-----|------------------|------------------|-------|-------|---------------|-----|------------|-----|--------------|---------------------------------|----------|--|-----------|--|--|--|----------------------|--|
| MAIN SIZE & TYPE: | | VOLTS /PHASE / WIRE: | | | | FED FROM: | | | | MANUFACTURER: | | | | LOCATION: | | | | MOUNTING: | | | | MIN. A.I.C. | |
| 225A M.L.O. | | 208Y/120V, 3Ø, 4W | | | | DIST. PANEL 'P1' | | | | SQUARE D | | | | UTILITY AREA | | | | SURFACE | | | | 65K/10K SERIES RATED | |
| CKT. NO. | AREA SERVED | COND | PH. | NEUT | GND | BKR | PHASE LOAD (KVA) | | | BKR | GND | NEUT | PH. | COND | AREA SERVED | CKT. NO. | | | | | | | |
| | | | | | | | A | B | C | | | | | | | | | | | | | | |
| 1 | LIGHTS - SALES AREA, HALLWAY *** | 1/2" | #12 | #12 | #12 | 20/1 | 0.88 | 0.36 | | 20/1 | #8 | #8 | #8 | 1" | LIGHTS - SITE (L1) | 2 | | | | | | | |
| 3 | LIGHTS - SALES AREA *** | 1/2" | #12 | #12 | #12 | 20/1 | 0.67 | 0.36 | | 20/1 | #8 | #8 | #8 | 1" | LIGHTS - SITE (L1) | 4 | | | | | | | |
| 5 | LIGHTS - SALES & CASHIER AREA *** | 1/2" | #12 | #12 | #12 | 20/1 | 0.53 | 0.00 | | 20/1 | #8 | #8 | #8 | 1" | SPARE (L1) | 6 | | | | | | | |
| 7 | LIGHTS - TRACK | 1/2" | #12 | #12 | #12 | 20/1 | 0.94 | 1.30 | | 20/1 | #8 | #8 | #8 | 1" | LIGHTS - CANOPY (L2) | 8 | | | | | | | |
| 9 | LIGHTS - TRACK | 1/2" | #12 | #12 | #12 | 20/1 | 0.84 | 1.30 | | 20/1 | #8 | #8 | #8 | 1" | LIGHTS - CANOPY (L2) | 10 | | | | | | | |
| 11 | LIGHTS - RESTROOM, EF-1, EF-2 | 1/2" | #12 | #12 | #12 | 20/1 | 0.08 | 1.30 | | 20/1 | #8 | #8 | #8 | 1" | LIGHTS - CANOPY (L2) | 12 | | | | | | | |
| 13 | LIGHTS - WALK-IN COOLER | 1/2" | #12 | #12 | #12 | 20/1 | 0.69 | 0.50 | | 20/1 | #8 | #8 | #8 | 1" | WATER/AIR FILL STATION | 14 | | | | | | | |
| 15 | LIGHTS - EXTERIOR *** (L4) | 1/2" | #12 | #12 | #12 | 20/1 | 1.22 | 1.20 | | 20/1 | #8 | #8 | #8 | 1" | CANOPY SIGNAGE (L3) | 16 | | | | | | | |
| 17 | BUILDING SIGNAGE (L4) | 1/2" | #12 | #12 | #12 | 20/1 | 1.20 | 1.20 | | 20/1 | #8 | #8 | #8 | 1" | CANOPY SIGNAGE (L3) | 18 | | | | | | | |
| 19 | BUILDING SIGNAGE (L4) | 1/2" | #12 | #12 | #12 | 20/1 | 1.20 | 1.20 | | 20/1 | #8 | #8 | #8 | 1" | CANOPY SIGNAGE (L3) | 20 | | | | | | | |
| 21 | SPARE | | | | | 20/1 | 0.00 | 1.20 | | 20/1 | #8 | #8 | #8 | 1" | MONUMENT SIGN (L5) | 22 | | | | | | | |
| 23 | ADDRESS SIGNAGE (L5) | 1/2" | #12 | #12 | #12 | 20/1 | 0.00 | 1.20 | | 20/1 | #8 | #8 | #8 | 1" | MONUMENT SIGN (L5) | 24 | | | | | | | |
| 25 | FUTURE LOAD (L5) | 1/2" | #12 | #12 | #12 | 20/1 | 0.35 | 1.20 | | 20/1 | #8 | #8 | #8 | 1" | MONUMENT SIGN (L5) | 26 | | | | | | | |
| 27 | EF-3 | 1/2" | #12 | #12 | #12 | 20/1 | 0.00 | 0.24 | | 20/1 | #8 | #8 | #8 | 1" | MONUMENT SIGN (L6) | 28 | | | | | | | |
| 29 | FUTURE LOAD | | | | | 20/1 | 0.48 | 0.00 | | 20/1 | #8 | #8 | #8 | 1" | EMERGENCY CUT-OFF SWITCH (EPO) | 30 | | | | | | | |
| 31 | LIGHTS - STORAGE, OFFICE *** | 1/2" | #12 | #12 | #12 | 20/1 | 0.00 | 1.80 | | 20/3 | #12 | | #12 | 3/4" | OPEN AIR CASE CONDENSING UNIT * | 32 | | | | | | | |
| 33 | FUTURE LOAD | | | | | 20/1 | 0.00 | 1.80 | | | | | #12 | | | 34 | | | | | | | |
| 35 | FUTURE LOAD | | | | | 20/1 | 0.00 | 0.00 | | | | | #12 | | | 36 | | | | | | | |
| 37 | FUTURE LOAD | | | | | 20/1 | 0.00 | 3.33 | | | | | #8 | | | 38 | | | | | | | |
| 39 | FUTURE LOAD | | | | | 20/1 | 0.00 | 3.33 | | 40/3 | #10 | | #8 | 3/4" | WATER HEATER ** | 40 | | | | | | | |
| 41 | LIGHTING CONTACTOR (1L) | 1/2" | #12 | #12 | #12 | 20/1 | 0.30 | 3.33 | | | | | | | | 42 | | | | | | | |
| NON-CONTINUOUS LOAD | | | | | | | 5.61 | 5.48 | 5.67 | | | | | | | | | | | | | | |
| CONTINUOUS LOAD (INDICATED BY 'C') | | | | | | | 8.27 | 7.99 | 6.71 | | | | | | | | | | | | | | |
| 25% CONTINUOUS LOAD | | | | | | | 2.07 | 2.00 | 1.68 | | | | | | | | | | | | | | |
| TOTAL LOAD (KVA) | | | | | | | 15.96 | 15.47 | 14.05 | 45.47 KVA | | 126.2 AMPS | | | | | | | | | | | |

| PANEL 'P2D' | | | | | | | | | | | | | | | | | | | | | | | |
|----------------------------------|-----------------------------------|---|-----|------|-----|-------------------------------|---------------------------|-------|-------|---------------------------|------------|------|-----|---------------------------|---|-------------|--|----------------------|--|--|--|-------------------------------------|--|
| MAIN SIZE & TYPE: 225A M.L.O. | | VOLTS /PHASE / WIRE: 208Y/120V, 3Ø, 4W | | | | FED FROM: DIST. PANEL 'P1' | | | | MANUFACTURER: SQUARE D | | | | LOCATION: UTILITY AREA | | | | MOUNTING: SURFACE | | | | MIN. A.I.C. 65K/10K SERIES RATED | |
| CKT. NO. | AREA SERVED | COND | PH. | NEUT | GND | BKR | PHASE LOAD (KVA) A B C | | | BKR | GND | NEUT | PH. | COND | AREA SERVED | CKT. NO. | | | | | | | |
| 1 | RECEPT. - BACK ROOM | 1/2" | #12 | #12 | #12 | 20/1 | 0.36 | 1.80 | | 20/1 | #12 | #12 | #12 | 1/2" | HAND DRYER ** | 2 | | | | | | | |
| 3 | WIREMOLD | 1/2" | #12 | #12 | #12 | 20/1 | 0.72 | 1.80 | | 20/1 | #12 | #12 | #12 | 1/2" | HAND DRYER ** | 4 | | | | | | | |
| 5 | RECEPT. - T.M.B. | 1/2" | #12 | #12 | #12 | 20/1 | 0.36 | 1.44 | | 20/1 | #12 | #12 | #12 | 1/2" | REACH-IN COOLER | 6 | | | | | | | |
| 7 | SPARE | | | | | 20/1 | 0.00 | 1.44 | | 20/1 | #12 | #12 | #12 | 1/2" | REACH-IN COOLER | 8 | | | | | | | |
| 9 | RECEPT. - IRRIGATION | 1/2" | #12 | #12 | #12 | 20/1 | 0.18 | 1.44 | | 20/1 | #12 | #12 | #12 | 1/2" | REACH-IN COOLER | 10 | | | | | | | |
| 11 | SPARE | | | | | 20/1 | 0.00 | 0.91 | | 15/1 | #12 | #12 | #12 | 1/2" | (2) 5 DOOR WALK-IN EVAP FAN COIL | 12 | | | | | | | |
| 13 | RECEPT. - STORAGE, EXTERIOR | 1/2" | #12 | #12 | #12 | 20/1 | 0.54 | 0.91 | | 15/1 | #12 | #12 | #12 | 1/2" | (2) 3 DOOR WALK-IN EVAP FAN COIL | 14 | | | | | | | |
| 15 | RECEPT. - HALLWAY, RR, EXTERIOR | 1/2" | #12 | #12 | #12 | 20/1 | 0.90 | 0.00 | | | | | | | SPACE | 16 | | | | | | | |
| 17 | RECEPT. - FREEZER | 1/2" | #12 | #12 | #12 | 20/1 | 0.86 | 1.60 | | 30/2 | #10 | | #10 | 3/4" | ICE MACHINE REMOTE CONDENSER | 18 | | | | | | | |
| 19 | (2) 10 DOOR WALK-IN EVAP FAN COIL | 1/2" | #12 | #12 | #12 | 15/1 | 0.91 | 1.60 | | 30/2 | #10 | | #10 | 3/4" | ICE MACHINE REMOTE CONDENSER | 20 | | | | | | | |
| 21 | LED SIGN | 1/2" | #12 | #12 | #12 | 20/1 | 0.48 | 1.60 | | 30/2 | #10 | | #10 | 3/4" | ICE MACHINE REMOTE CONDENSER | 22 | | | | | | | |
| 23 | RECEPT. - OPEN AIR CASE | 1/2" | #12 | #12 | #12 | 20/1 | 0.26 | 1.60 | | 30/2 | #10 | | #12 | | | 24 | | | | | | | |
| 25 | RECEPT. - FREEZER | 1/2" | #12 | #12 | #12 | 20/1 | 0.86 | 1.44 | | 15/3 | #12 | | #12 | 3/4" | 3 DOOR WALK-IN CONDENSING UNIT (BEER CASE CONDENSING UNIT) | 26 | | | | | | | |
| 27 | RECEPT. - FROZEN BEVERAGE | 3/4" | #10 | | #10 | 30/2 | 2.18 | 1.44 | | 15/3 | #12 | | #12 | 3/4" | | 28 | | | | | | | |
| 29 | RECEPT. - FROZEN BEVERAGE | 3/4" | #10 | | #10 | 30/2 | 2.18 | 1.44 | | | | | #12 | | | 30 | | | | | | | |
| 31 | RECEPT. - FROZEN BEVERAGE | 3/4" | #10 | | #10 | 30/2 | 2.18 | 1.44 | | 15/3 | #12 | | #12 | 3/4" | 5 DOOR WALK-IN CONDENSING UNIT | 32 | | | | | | | |
| 33 | ICE MAKER ** | 1/2" | #12 | #12 | #12 | 15/1 | 0.72 | 1.44 | | | | | #12 | | | 34 | | | | | | | |
| 35 | RECEPT. - OPEN AIR CASE | 1/2" | #12 | #12 | #12 | 20/1 | 0.26 | 2.77 | | | | | #8 | | | 36 | | | | | | | |
| 37 | RECEPT. - OPEN AIR CASE | 1/2" | #12 | #12 | #12 | 20/1 | 0.26 | 2.77 | | 35/3 | #10 | | #8 | 3/4" | 10 DOOR WALK-IN CONDENSING UNIT * | 38 | | | | | | | |
| 39 | ICE MAKER ** | 1/2" | #12 | #12 | #12 | 15/1 | 0.72 | 2.77 | | | | | #8 | | | 40 | | | | | | | |
| 41 | RECEPT. - OPEN AIR CASE | 1/2" | #12 | #12 | #12 | 20/1 | 0.26 | 2.77 | | | | | #8 | | | 42 | | | | | | | |
| NON-CONTINUOUS LOAD | | | | | | | 16.51 | 17.85 | 15.84 | | | | | | | | | | | | | | |
| LARGEST MOTOR LOAD | | | | | | | 2.77 | 2.77 | 2.77 | | | | | | | | | | | | | | |
| 25% LARGEST MOTOR LOAD | | | | | | | 0.69 | 0.69 | 0.69 | | | | | | | | | | | | | | |
| TOTAL LOAD (KVA) | | | | | | | 17.20 | 18.54 | 16.53 | 52.28 KVA | 145.1 AMPS | | | | | | | | | | | | |

| PANEL 'U' | | | | | | | | | | | | | | | | | | | |
|------------------------------------|-------------------------|----------------------|-----|------|-----|------------------|------------------|---|------|---------------|-----|---------|-----|--------------|------------------|-----------|--|----------------------|--|
| MAIN SIZE & TYPE: | | VOLTS /PHASE / WIRE: | | | | FED FROM: | | | | MANUFACTURER: | | | | LOCATION: | | MOUNTING: | | MIN. A.T.C. | |
| 225A M.L.O. | | 208Y/120V, 1Ø, 1W | | | | DIST. PANEL 'P2' | | | | SQUARE D | | | | UTILITY AREA | | SURFACE | | 65K/10K SERIES RATED | |
| CKT. NO. | AREA SERVED | COND | PH. | NEUT | GND | BKR | PHASE LOAD (KVA) | | | BKR | GND | NEUT | PH. | COND | AREA SERVED | CKT. NO. | | | |
| | | | | | | | A | B | C | | | | | | | | | | |
| 1 | RECEPTACLE POS-1 | 10/2" | #12 | #12 | #12 | 20/1 | 0.72 | | | 20/1 | #12 | #12 | #12 | 10/2" | SAFE | 2 | | | |
| 3 | RECEPTACLE POS-2 | 10/2" | #12 | #12 | #12 | 20/1 | 0.72 | | | 20/1 | #12 | #12 | #12 | 10/2" | PLUGMOLD MANAGER | 4 | | | |
| 5 | RECEPTACLE POS-3 | 10/2" | #12 | #12 | #12 | 20/1 | 0.18 | | | 20/1 | #12 | #12 | #12 | 10/2" | LOTTERY TICKET | 6 | | | |
| 7 | SERVER RACK | 10/2" | #12 | #12 | #12 | 20/1 | 0.58 | | | 20/1 | #12 | #12 | #12 | 10/2" | SECURITY DVR | 8 | | | |
| 9 | SECONDARY COMMUNICATION | 10/2" | #12 | #12 | #12 | 20/1 | 0.72 | | | 20/1 | | | | | SPARE | 10 | | | |
| 11 | DATA COMMUNICATIONS | 10/2" | #12 | #12 | #12 | 20/1 | 0.18 | | | 20/1 | | | | | SPARE | 12 | | | |
| NON-CONTINUOUS LOAD | | | | | | | 1.66 | | | | | | | | | | | | |
| CONTINUOUS LOAD (INDICATED BY 'C') | | | | | | | 1.62 | | 0.00 | | | | | | | | | | |
| 25% CONTINUOUS LOAD | | | | | | | 0.46 | | 0.00 | | | | | | | | | | |
| TOTAL LOAD (KVA) | | | | | | | 3.24 | | 2.00 | 2.24 KVA | | 2.2 AMP | | | | | | | |
| * PROVIDE GFIBREAKER | | | | | | | | | | | | | | | | | | | |