

**LP1 PANELBOARD** 208Y/120V, 3PH, 4W  
1200 A MLO  
65K AIC, FULLY RATED SURFACE, NEMA 1

LOCATION: ELECTRICAL ROOM  
SUPPLY FROM: PANEL MDP  
UPSTREAM OCPD: 1200 A  
SERVES: MECHANICAL

| CKT                          | Circuit Description          | Wire | Trip  | Poles | A          | B          | C     | Poles      | Trip  | Wire | Circuit Description | CKT |  |
|------------------------------|------------------------------|------|-------|-------|------------|------------|-------|------------|-------|------|---------------------|-----|--|
| 1                            | FUTURE BOOSTER PUMP (2)      | 6    | 60 A  | 3     | 3.70       | 2.00       |       | 3          | 30 A  | 10   | AIR COMPRESSOR (2)  | 2   |  |
| 3                            | --                           | --   | --    | --    | 3.70       | 2.00       |       | --         | --    | --   | --                  | 4   |  |
| 5                            | --                           | --   | --    | --    |            |            | 3.70  | 2.00       | --    | --   | --                  | 6   |  |
| 7                            | TRASH COMPACTOR (6)          | 6    | 60 A  | 3     | 3.60       | 12.84      |       | 3          | 110 A | 2    | RTU-2               | 8   |  |
| 9                            | --                           | --   | --    | --    | 3.60       | 12.84      |       | --         | --    | --   | --                  | 10  |  |
| 11                           | --                           | --   | --    | --    |            |            | 3.60  | 12.84      | --    | --   | --                  | 12  |  |
| 13                           | RTU-1                        | 2/0  | 175 A | 3     | 19.80      | 4.07       |       | 3          | 50 A  | 6    | HP-01               | 14  |  |
| 15                           | --                           | --   | --    | --    | 19.80      | 4.07       |       | --         | --    | --   | --                  | 16  |  |
| 17                           | --                           | --   | --    | --    |            |            | 19.80 | 4.07       | --    | --   | --                  | 18  |  |
| 19                           | ERV-1                        | 10   | 25 A  | 3     | 5.77       | 1.10       |       | 3          | 15 A  | 12   | WALK-IN COOLER COND | 20  |  |
| 21                           | --                           | --   | --    | --    | 5.77       | 1.10       |       | --         | --    | --   | --                  | 22  |  |
| 23                           | --                           | --   | --    | --    |            |            | 5.77  | 1.10       | --    | --   | --                  | 24  |  |
| 25                           | WALK-IN FREEZER COND         | 10   | 30 A  | 3     | 2.88       | 2.88       |       | 3          | 50 A  | 6    | MERCH COOLER COND   | 26  |  |
| 27                           | --                           | --   | --    | --    | 2.88       | 2.88       |       | --         | --    | --   | --                  | 28  |  |
| 29                           | --                           | --   | --    | --    |            |            | 2.88  | 2.88       | --    | --   | --                  | 30  |  |
| 31                           | DRYER (2)                    | 1    | 100 A | 3     | 9.48       | 0.60       |       | 3          | 15 A  | 12   | WASHER (2)          | 32  |  |
| 33                           | --                           | --   | --    | --    | 9.48       | 0.60       |       | --         | --    | --   | --                  | 34  |  |
| 35                           | --                           | --   | --    | --    |            |            | 9.48  | 0.60       | --    | --   | --                  | 36  |  |
| 37                           | SPACE                        | --   | --    | 1     | --         | 3.60       |       | 2          | 20 A  | 8    | PROPANE PUMP (6)    | 38  |  |
| 39                           | SPACE                        | --   | --    | 1     | --         | 3.60       |       | --         | --    | --   | --                  | 40  |  |
| 41                           | SPACE                        | --   | --    | 1     | --         | 3.60       |       | 1          | --    | --   | SPACE               | 42  |  |
| 43                           | SPACE                        | --   | --    | 1     | --         | 18.67      |       | 3          | 200 A | 3/0  | DWH-1               | 44  |  |
| 45                           | SPACE                        | --   | --    | 1     | --         | 18.67      |       | --         | --    | --   | --                  | 46  |  |
| 47                           | SPACE                        | --   | --    | 1     | --         | 18.67      |       | --         | --    | --   | --                  | 48  |  |
| 49                           | PANEL FP VIA TRANF 'T1' (10) | --   | 150 A | 3     | 15.00      | 18.67      |       | 3          | 200 A | 3/0  | DWH-1               | 50  |  |
| 51                           | --                           | --   | --    | --    | 15.00      | 18.67      |       | --         | --    | --   | --                  | 52  |  |
| 53                           | --                           | --   | --    | --    |            |            | 15.00 | 18.67      | --    | --   | --                  | 54  |  |
| <b>TOTAL CONNECTED KVA:</b>  |                              |      |       |       | 124.64 KVA | 124.64 KVA |       | 121.04 KVA |       |      |                     |     |  |
| <b>TOTAL CONNECTED AMPS:</b> |                              |      |       |       | 1043.31 A  | 1043.31 A  |       | 1008.69 A  |       |      |                     |     |  |

PER NEC ARTICLE 220

| LOAD CLASSIFICATION | CONNECTED LOAD | DEMAND FACTOR | TOTAL DEMAND | PANEL TOTALS                         |
|---------------------|----------------|---------------|--------------|--------------------------------------|
| CONTINUOUS          | 10.80 kVA      | 125.00%       | 13.50 kVA    |                                      |
| NON-CONTINUOUS      | 142.24 kVA     | 100.00%       | 142.24 kVA   | <b>TOTAL CONN. LOAD: 370.33 KVA</b>  |
| LIGHTING            | 0.00 kVA       |               |              | <b>TOTAL DEMAND LOAD: 343.53 KVA</b> |
| RECEPTACLES         | 0.00 kVA       |               |              | <b>TOTAL CONN. CURRENT: 1028 A</b>   |
| MOTORS              | 24.29 kVA      | 100.00%       | 24.29 kVA    | <b>TOTAL DEMAND CURRENT: 954 A</b>   |
| KITCHEN             | 0.00 kVA       |               |              |                                      |
| REFRIGERATION       | 20.58 kVA      | 100.00%       | 20.58 kVA    |                                      |
| HVAC COOL           | 29.50 kVA      | 0.00%         | 0.00 kVA     |                                      |
| HVAC HEAT           | 97.92 kVA      | 100.00%       | 97.92 kVA    |                                      |

**LP2 PANELBOARD** 208Y/120V, 3PH, 4W  
400 A MLO  
42K AIC, SERIES RATED SURFACE, NEMA 1

LOCATION: ELECTRICAL ROOM  
SUPPLY FROM: PANEL MDP  
UPSTREAM OCPD: 400 A  
SERVES: LIGHTING & APPLIANCES

| CKT                          | Circuit Description        | Wire | Trip | Poles | A         | B         | C    | Poles     | Trip | Wire  | Circuit Description          | CKT |  |
|------------------------------|----------------------------|------|------|-------|-----------|-----------|------|-----------|------|-------|------------------------------|-----|--|
| 1                            | LTG - PREP AREA            | 12   | 20 A | 1     | 0.77      | 1.20      |      | 1         | 20 A |       | MOTORS                       | 2   |  |
| 3                            | LTG - BACKSTOCK/MEN'S      | 12   | 20 A | 1     |           | 1.36      | 0.90 |           | 1    | 20 A  | 10 REC - CAR CANOPY (6)      | 4   |  |
| 5                            | LTG - SHOWERS/LAUNDRY      | 12   | 20 A | 1     |           |           | 1.30 | 0.90      | 1    | 20 A  | 10 REC - TRUCK CANOPY (6)    | 6   |  |
| 7                            | LTG - DRINK CENTER         | 12   | 20 A | 1     | 0.48      | 0.20      |      |           | 1    | 20 A  | 12 IRRIGATION SYSTEM         | 8   |  |
| 9                            | LTG - CASHIER/SALES        | 12   | 20 A | 1     |           | 1.57      | 0.90 |           | 1    | 20 A  | 12 REC - ROOFTOP             | 10  |  |
| 11                           | LTG - FUEL DESK / SALES    | 12   | 20 A | 1     |           |           | 1.12 | 1.50      | 2    | 20 A  | 12 EWH-3 (2)                 | 12  |  |
| 13                           | LTG - SALES TRACK          | 12   | 20 A | 1     | 0.96      | 1.50      |      |           | --   | --    | --                           | 14  |  |
| 15                           | LTG - SALES TRACK          | 12   | 20 A | 1     |           | 1.20      | 1.50 |           | 2    | 20 A  | 12 EWH-3 (2)                 | 16  |  |
| 17                           | LTG - SALES COVE           | 12   | 20 A | 1     |           |           | 0.86 | 1.50      | --   | --    | --                           | 18  |  |
| 19                           | LTG - SALES COVE           | 12   | 20 A | 1     | 0.86      | 0.36      |      |           | 1    | 20 A  | 12 REC - STORAGE             | 20  |  |
| 21                           | LTG - EXTERIOR EMERG (3,7) | 12   | 20 A | 1     |           | 0.04      | 0.90 |           | 1    | 20 A  | 12 REC - SALE SHELVING       | 22  |  |
| 23                           | LTG - INTERIOR EMERG (3)   | 12   | 20 A | 1     |           |           | 0.20 | 0.56      | 1    | 20 A  | 12 ICE CREAM MERCHANDISER    | 24  |  |
| 25                           | REC - BACKSTOCK            | 12   | 20 A | 1     | 0.90      | 0.72      |      |           | 1    | 20 A  | 12 REC - SALES FLOOR         | 26  |  |
| 27                           | RECIR. PUMP, DWH-1         | 12   | 20 A | 1     |           | 0.18      | 1.08 |           | 1    | 20 A  | 12 REC - SALES FLOOR         | 28  |  |
| 29                           | EWH-2 (2)                  | 6    | 45 A | 2     |           |           | 3.75 | 1.08      | 1    | 20 A  | 12 REC - SALES FLOOR         | 30  |  |
| 31                           | --                         | --   | --   | --    | 3.75      | 1.08      |      |           | 1    | 20 A  | 12 REC - SALES FLOOR         | 32  |  |
| 33                           | SPARE                      | --   | 20 A | 1     |           | 0.00      | 1.08 |           | 1    | 20 A  | 12 REC - SALES SHELVING      | 34  |  |
| 35                           | AC AUTO TANK DRAIN         | 12   | 20 A | 1     |           |           | 0.18 | 0.72      | 1    | 20 A  | 12 REC - SALES SHELVING      | 36  |  |
| 37                           | FLY TRAPS                  | 12   | 20 A | 1     | 1.08      | 0.18      |      |           | 1    | 20 A  | 12 TV MONITORS               | 38  |  |
| 39                           | DOOR LIGHTS & HEATERS (2)  | 12   | 20 A | 1     |           | 1.50      | 0.96 |           | 1    | 20 A  | 12 ICE MERCHANDISER (4)      | 40  |  |
| 41                           | COOLER CONTROLS (2)        | 12   | 20 A | 1     |           |           | 1.00 | 0.96      | 1    | 20 A  | 12 ICE MERCHANDISER (4)      | 42  |  |
| 43                           | MERCH COOLER EVAPS         | 12   | 20 A | 1     | 0.97      | 4.95      |      |           | 2    | 60 A  | 4 EHW-1 (2)                  | 44  |  |
| 45                           | REC - MEN'S RESTROOM (4)   | 12   | 20 A | 1     |           | 1.08      | 4.95 |           | --   | --    | --                           | 46  |  |
| 47                           | MEN'S HAND DRYER (2)       | 12   | 20 A | 1     |           |           | 1.40 | 1.20      | 1    | 20 A  | 6 DIESEL TANK HTR SYSTEM (6) | 48  |  |
| 49                           | MEN'S HAND DRYER (2)       | 12   | 20 A | 1     | 1.40      | 0.18      |      |           | 1    | 20 A  | 10 TANK REC (6)              | 50  |  |
| 51                           | REC - WOMEN'S RESTROOM (4) | 12   | 20 A | 1     |           | 1.08      | 0.00 |           | 1    | 20 A  | -- SPARE                     | 52  |  |
| 53                           | WOMEN'S HAND DRYER (2)     | 12   | 20 A | 1     |           |           | 1.40 | 0.00      | 1    | 20 A  | -- SPARE                     | 54  |  |
| 55                           | WOMEN'S HAND DRYER (2)     | 12   | 20 A | 1     | 1.40      | 0.00      |      |           | 1    | 20 A  | -- SPARE                     | 56  |  |
| 57                           | SHOWER HAND DRYER (2)      | 12   | 20 A | 1     |           | 1.40      | 0.00 |           | 1    | 20 A  | -- SPARE                     | 58  |  |
| 59                           | SHOWER HAND DRYER (2)      | 12   | 20 A | 1     |           |           | 1.40 | 0.00      | 1    | 20 A  | -- SPARE                     | 60  |  |
| 61                           | SHOWER HAND DRYER (2)      | 12   | 20 A | 1     | 1.40      | 0.00      |      |           | 1    | 20 A  | -- SPARE                     | 62  |  |
| 63                           | SHOWER HAND DRYER (2)      | 12   | 20 A | 1     |           | 1.40      | 0.00 |           | 1    | 20 A  | -- SPARE                     | 64  |  |
| 65                           | SHOWER HAND DRYER (2)      | 12   | 20 A | 1     |           |           | 1.40 | 0.00      | 1    | 20 A  | -- SPARE                     | 66  |  |
| 67                           | SHOWER HAND DRYER (2)      | 12   | 20 A | 1     | 1.40      | 0.00      |      |           | 1    | 20 A  | -- SPARE                     | 68  |  |
| 69                           | SHOWER HAND DRYER (2)      | 12   | 20 A | 1     |           | 1.40      | 0.00 |           | 1    | 20 A  | -- SPARE                     | 70  |  |
| 71                           | REC - SHOWERS              | 12   | 20 A | 1     |           |           | 1.08 | 0.00      | 1    | 20 A  | -- SPARE                     | 72  |  |
| 73                           | REC - SHOWERS              | 12   | 20 A | 1     | 0.72      | 0.00      |      |           | 1    | 20 A  | -- SPARE                     | 74  |  |
| 75                           | REC - SHOWERS              | 12   | 20 A | 1     |           | 1.08      | 0.00 |           | 1    | 20 A  | -- SPARE                     | 76  |  |
| 77                           | SPARE                      | --   | 20 A | 1     |           |           | 0.00 | 0.00      | 1    | 20 A  | -- SPARE                     | 78  |  |
| 79                           | SPARE                      | --   | 20 A | 1     | 0.00      | 4.24      |      |           | 3    | 100 A | -- PANEL HWY2 (10)           | 80  |  |
| 81                           | SPARE                      | --   | 20 A | 1     |           | 0.00      | 3.60 |           | --   | --    | --                           | 82  |  |
| 83                           | SPARE                      | --   | 20 A | 1     |           |           | 0.00 | 1.80      | --   | --    | --                           | 84  |  |
| <b>TOTAL CONNECTED KVA:</b>  |                            |      |      |       | 30.67 KVA | 29.17 KVA |      | 25.30 KVA |      |       |                              |     |  |
| <b>TOTAL CONNECTED AMPS:</b> |                            |      |      |       | 260.56 A  | 248.02 A  |      | 210.84 A  |      |       |                              |     |  |

PER NEC ARTICLE 220

| LOAD CLASSIFICATION | CONNECTED LOAD | DEMAND FACTOR | TOTAL DEMAND | PANEL TOTALS                        |
|---------------------|----------------|---------------|--------------|-------------------------------------|
| CONTINUOUS          | 0.00 kVA       |               |              |                                     |
| NON-CONTINUOUS      | 2.79 kVA       | 100.00%       | 2.79 kVA     | <b>TOTAL CONN. LOAD: 85.14 KVA</b>  |
| LIGHTING            | 20.22 kVA      | 125.00%       | 25.28 kVA    | <b>TOTAL DEMAND LOAD: 88.43 KVA</b> |
| RECEPTACLES         | 16.00 kVA      | 81.25%        | 13.00 kVA    | <b>TOTAL CONN. CURRENT: 236 A</b>   |
| MOTORS              | 16.60 kVA      | 100.00%       | 16.60 kVA    | <b>TOTAL DEMAND CURRENT: 245 A</b>  |
| KITCHEN             | 0.00 kVA       |               |              |                                     |
| REFRIGERATION       | 0.00 kVA       |               |              |                                     |
| HVAC COOL           | 0.00 kVA       | 0.00%         | 0.00 kVA     |                                     |
| HVAC HEAT           | 23.40 kVA      | 100.00%       | 23.40 kVA    |                                     |

**LP3 PANELBOARD** 208Y/120V, 3PH, 4W  
225 A MLO  
42K AIC, SERIES RATED SURFACE, NEMA 1

LOCATION: ELECTRICAL ROOM  
SUPPLY FROM: PANEL MDP  
UPSTREAM OCPD: 200 A  
SERVES: EXTERIOR LIGHTING

| CKT                          | Circuit Description         | Wire | Trip | Poles | A         | B         | C    | Poles     | Trip | Wire | Circuit Description    | CKT |  |
|------------------------------|-----------------------------|------|------|-------|-----------|-----------|------|-----------|------|------|------------------------|-----|--|
| 1                            | EXTERIOR LIGHTING DIESEL    | 12   | 20 A | 1     | 0.52      | 1.33      |      |           |      |      | PARKING LOT LIGHTS (6) | 2   |  |
| 3                            | EXTERIOR LIGHTING AUTO      | 12   | 20 A | 1     |           | 0.52      | 1.33 |           |      |      | --                     | 4   |  |
| 5                            | LOVE'S BLDG SIGN DIESEL (2) | 12   | 20 A | 1     |           |           | 0.24 | 1.00      |      |      | PARKING LOT LIGHTS (6) | 6   |  |
| 7                            | LOVE'S BLDG SIGN AUTO (2)   | 12   | 20 A | 1     | 0.24      | 1.00      |      |           |      |      | --                     | 8   |  |
| 9                            | DIRECTION SIGNS (2,6)       | 10   | 20 A | 1     |           | 0.60      | 1.02 |           |      |      | PARKING LOT LIGHTS (6) | 10  |  |
| 11                           | LIGHTING                    | 20 A | 1    |       |           |           | 0.06 | 1.02      |      |      | --                     | 12  |  |
| 13                           | SPACE                       | --   | 1    | --    | 1.53      |           |      |           |      |      | PARKING LOT LIGHTS (6) | 14  |  |
| 15                           | SPACE                       | --   | 1    | --    | 1.53      |           |      |           |      |      | --                     | 16  |  |
| 17                           | SPACE                       | --   | 1    | --    | 1.53      |           |      |           |      |      | PARKING LOT LIGHTS (6) | 18  |  |
| 19                           | SPACE                       | --   | 1    | --    | 1.53      |           |      |           |      |      | --                     | 20  |  |
| 21                           | TRUCK CANOPY FASCIA (6)     | 8    | 20 A | 1     |           | 2.75      | --   |           |      |      | SPACE                  | 22  |  |
| 23                           | TRUCK CANOPY FASCIA (6)     | 8    | 20 A | 1     |           |           | 2.75 | --        |      |      | SPACE                  | 24  |  |
| 25                           | TRUCK CANOPY FASCIA (6)     | 8    | 20 A | 1     | 3.07      | --        |      |           |      |      | SPACE                  | 26  |  |
| 27                           | TRUCK CANOPY FASCIA (6)     | 8    | 20 A | 1     |           | 2.75      | --   |           |      |      | SPACE                  | 28  |  |
| 29                           | CAR CANOPY FASCIA (6)       | 8    | 20 A | 1     |           |           | 1.25 | --        |      |      | SPACE                  | 30  |  |
| 31                           | CAR CANOPY FASCIA (6)       | 8    | 20 A | 1     | 1.50      | --        |      |           |      |      | SPACE                  | 32  |  |
| 33                           | CAR CANOPY FASCIA (6)       | 8    | 20 A | 1     |           | 1.50      | 0.78 |           |      |      | TRUCK CANOPY           | 34  |  |
| 35                           | CAR CANOPY                  | 8    | 20 A | 2     |           |           | 0.88 | 0.78      |      |      | --                     | 36  |  |
| 37                           | --                          | --   | --   | --    | 0.88      | 0.60      |      |           |      |      | TRUCK CANOPY           | 38  |  |
| 39                           | CAR CANOPY                  | 8    | 20 A | 2     |           | 0.88      | 0.60 |           |      |      | --                     | 40  |  |
| 41                           | --                          | --   | --   | --    |           |           |      | 0.88      | --   |      | SPACE                  | 42  |  |
| <b>TOTAL CONNECTED KVA:</b>  |                             |      |      |       | 12.20 kVA | 14.25 kVA |      | 10.38 kVA |      |      |                        |     |  |
| <b>TOTAL CONNECTED AMPS:</b> |                             |      |      |       | 103.99 A  | 121.09 A  |      | 86.46 A   |      |      |                        |     |  |

PER NEC ARTICLE 220

| LOAD CLASSIFICATION | CONNECTED LOAD | DEMAND FACTOR | TOTAL DEMAND | PANEL TOTALS                        |
|---------------------|----------------|---------------|--------------|-------------------------------------|
| CONTINUOUS          | 0.00 kVA       |               |              |                                     |
| NON-CONTINUOUS      | 0.00 kVA       |               |              | <b>TOTAL CONN. LOAD: 23.34 KVA</b>  |
| LIGHTING            | 23.02 kVA      | 125.00%       | 28.78 kVA    | <b>TOTAL DEMAND LOAD: 29.18 KVA</b> |
| RECEPTACLES         | 0.00 kVA       |               |              | <b>TOTAL CONN. CURRENT: 65 A</b>    |
| MOTORS              | 0.00 kVA       |               |              | <b>TOTAL DEMAND CURRENT: 81 A</b>   |
| KITCHEN             | 0.00 kVA       |               |              |                                     |
| REFRIGERATION       | 0.00 kVA       |               |              |                                     |
| HVAC COOL           | 0.00 kVA       | 100.00%       | 0.00 kVA     |                                     |
| HVAC HEAT           | 0.00 kVA       | 0.00%         | 0.00 kVA     |                                     |

**LP4 PANELBOARD** 208Y/120V, 3PH, 4W  
400 A MLO  
42K AIC, SERIES RATED SURFACE, NEMA 1

LOCATION: ELECTRICAL ROOM  
SUPPLY FROM: PANEL MDP  
UPSTREAM OCPD: 400 A  
SERVES: PREP KITCHEN

| CKT | Circuit Description      | Wire | Trip | Poles | A    | B    | C    | Poles | Trip | Wire | Circuit Description      | CKT |
|-----|--------------------------|------|------|-------|------|------|------|-------|------|------|--------------------------|-----|
| 1   | ICE MAKER                | 10   | 30 A | 2     | 2.07 | 0.94 |      |       |      |      | REFRIG PREP CASE (11)    | 2   |
| 3   | --                       | --   | --   | --    |      | 2.07 | 0.20 |       |      |      | CHILI/CHEESE DISP (11)   | 4   |
| 5   | ICE MAKER (4)            | 10   | 30 A | 2     |      |      | 2.07 | 1.32  |      |      | HOT DOG GRILL (11)       | 6   |
| 7   | --                       | --   | --   | --    | 2.07 | 0.96 |      |       |      |      | WARMING DRAWERS (11)     | 8   |
| 9   | POP/ICE DISPENSER        | 12   | 20 A | 1     |      | 1.39 | 1.32 |       |      |      | HOT DOG GRILL (11)       | 10  |
| 11  | POP/ICE DISPENSER (4)    | 12   | 20 A | 1     |      |      | 1.39 | 1.44  |      |      | (FUTURE) H/D ISLAND (11) | 12  |
| 13  | FROZEN BEVERAGE DISP (4) | 12   | 20 A | 1     | 1.44 | 1.10 |      |       |      |      | HOT FOOD MERCH (11)      | 14  |
| 15  | ICED TEA BREWER (4)      | 12   | 20 A | 1     |      | 1.50 | 1.44 |       |      |      | (FUTURE) H/D ISLAND (11) | 16  |
| 17  | HOT WATER DISPENSER (4)  | 12   | 20 A | 1     |      |      | 1.66 | 1.00  |      |      | MICROWAVE (11)           | 18  |