

LIGHT FIXTURE SCHEDULE

CATALOG NUMBER SHALL NOT BE CONSIDERED COMPLETE AND MATERIAL SHALL NOT BE ORDERED BY MANUFACTURER AND CATALOG NUMBER ONLY. THE DESCRIPTION AND THE SPECIFICATIONS SHALL BE COORDINATED WITH THE CATALOG NUMBER TO DETERMINE THE EXACT MATERIAL AND ACCESSORIES TO BE ORDERED. THE FIRST MANUFACTURER LISTED IS THE BASIS FOR DESIGN. ALL LIGHT SOURCES FOR THIS PROJECT SHALL BE FURNISHED AND INSTALLED BY THE ELECTRICAL CONTRACTOR UNLESS OTHERWISE NOTED. ALL LIGHT FIXTURES SHALL BE PROVIDED WITH INTEGRAL DISCONNECT(S) FACTORY INSTALLED IN ACCORDANCE WITH NEC. REFER TO SPECIFICATIONS FOR SHOP DRAWING SUBMITTAL REQUIREMENTS AND ADDITIONAL INFORMATION.

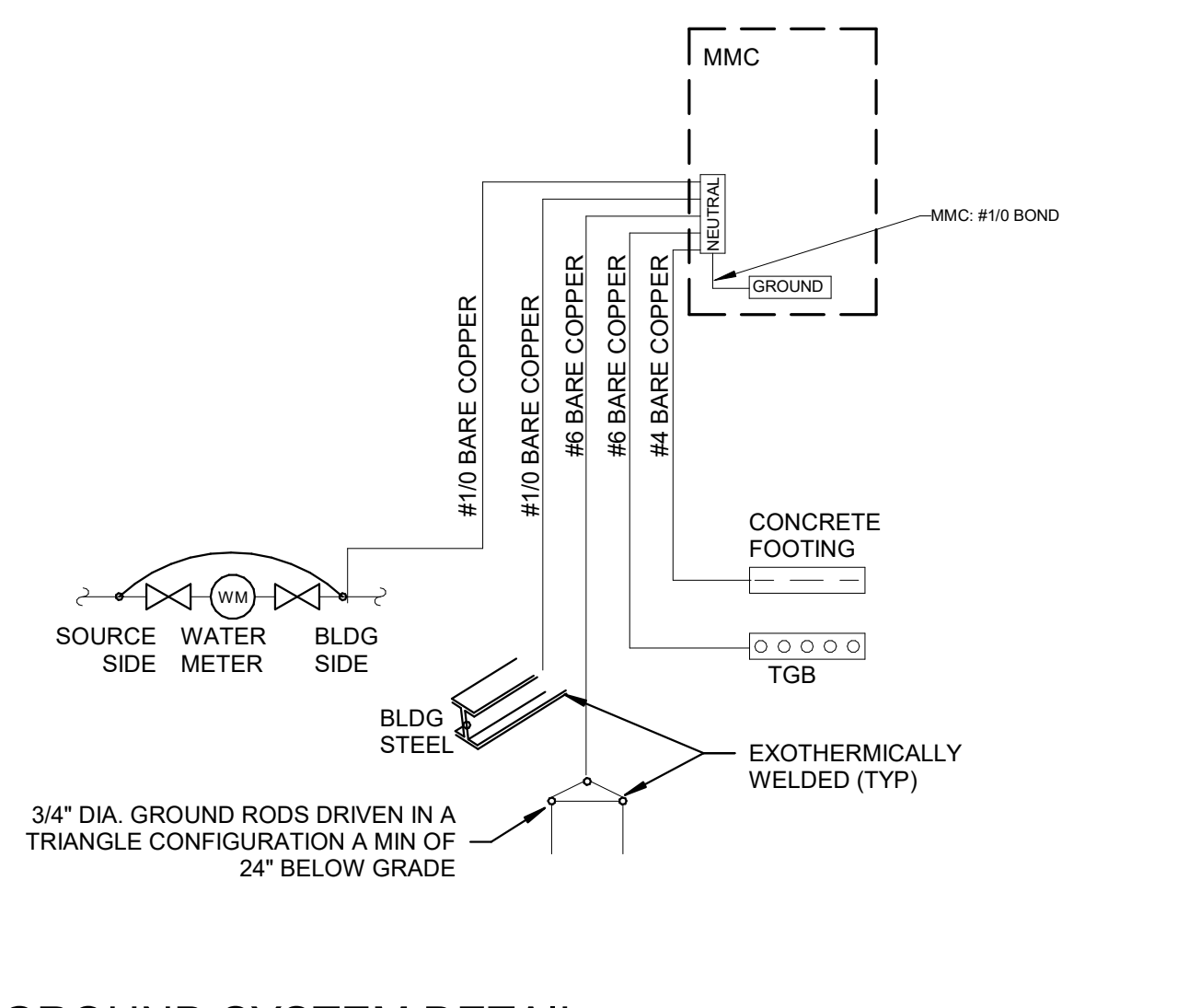
GENERAL NOTES:

- WHERE "OR ENGINEER APPROVED EQUAL" IS LISTED IN THE APPROVED EQUIVALENT COLUMN, FIXTURES MUST BE SUBMITTED AS A SUBSTITUTION FOR APPROVAL PRIOR TO BID SUBMISSION.
- LISTED LUMENS ARE DELIVERED LUMENS. PROVIDE FIXTURE WITHIN +/- 5% OF LISTED LUMENS.
- CONTRACTOR SHALL COORDINATE CEILING TYPES WITH GENERAL CONTRACTOR PRIOR TO ORDERING OF LIGHT FIXTURES. PROVIDE MOUNTING COMPONENTS AS REQUIRED BASED ON APPLICABLE CEILING TYPE.
- LUMINAIRE FINISH TO BE SELECTED DURING SHOP DRAWING REVIEW.

SCHEDULE NOTES:

- FURNISH PROJECT SPECIFIC SHOP DRAWINGS.

| TYPE | DESCRIPTION | LENS/LOUVER | MTG | LIGHTING OUTPUT/CT | DRIVER | VOLTAGE | WATTAGE | BASIS OF DESIGN | APPROVED EQUIVALENT | NOTES |
|------|---|---------------------------|-------------------|-------------------------|------------------|---------|---------|--------------------|--|-------|
| EM1 | THERMOPLASTIC EMERGENCY LIGHT, TWO 1.2W LED HEADS, SELF-DIAGNOSTICS, WHITE HOUSING | POLYCARBONATE LENS | CL/WL | LED, 220 LUMENS, 5000K | STND | 120 V | 2.4 W | LITHONIA ELM2L | ASTRALITE TP-100-LED, DUAL-LITE EV. ISOLITE RL2LED, MULE LIGHTING M5-HO | |
| L1 | 2" W X 4.5" H X 8" LONG LED LINEAR DIRECT, STEEL HOUSING | SOFT DIFFUSE ACRYLIC LENS | CL | LED, 8000 LUMENS, 4000K | LED DRIVER | 120 V | 63 W | CSS L96 AL04 MVOLT | RAB STRIP LED DOUBLE | |
| L2 | 2' X 4' LED PANEL, STEEL HOUSING, SWITCHABLE CCT | FROSTED ACRYLIC LENS | RE-A | LED, 4400 LUMENS, 4000K | LED 0-10V DRIVER | 120 V | 39 W | TCP DTF4UZD3950K | ALS LPA, COLUMBIA LIGHTING CBT-LSCS, CREE C-LITE C-TR, RAB EZPANFA | |
| L3 | 2' X 2' LED PANEL, STEEL HOUSING, SWITCHABLE CCT | FROSTED ACRYLIC LENS | RE-A | LED, 3200 LUMENS, 4000K | LED 0-10V DRIVER | 120 V | 29 W | TCP DTF2UZD2950K | ALS LPA, COLUMBIA LIGHTING CBT-LSCS, CREE C-LITE C-TR, RAB EZPANFA | |
| L4 | 2' X 2' LED PANEL, STEEL HOUSING, SWITCHABLE CCT | FROSTED ACRYLIC LENS | SUSPENDED PLUG-IN | LED, 3200 LUMENS, 4000K | LED 0-10V DRIVER | 120 V | 29 W | TCP DTF2UZD2950K | ALS LPA, COLUMBIA LIGHTING CBT-LSCS, CREE C-LITE C-TR, RAB EZPANFA | |
| R1 | 6" DIAMETER LED ROUND OPEN DOWNLIGHT, ROUND WHITE REFLECTOR, WIDE DISTRIBUTION | --- | RE-AG | LED, 1100 LUMENS, 4000K | LED DRIVER | 120 V | 13 W | NORA NOXN06311W | RAB WRFD | |
| S1 | EXTERIOR WALL LED FIXTURE, 12" W X 7" D X 9" H, ALUMINUM HOUSING, VISUAL COMFORT FORWARD THROW DISTRIBUTION | FROSTED ACRYLIC LENS | WL | LED, 3000 LUMENS, 4000K | LED DRIVER | 120 V | 23 W | LITHONIA WDGE | RAB SLM17FA | |
| X1 | LED SINGLE FACE EDGE-LIT EXIT SIGN ON CLEAR BACKING, EXTRUDED BRUSHED ALUMINUM FINISH, RED LETTERS, ARROWS AS INDICATED | --- | CL | LED | LED DRIVER | 120 V | 3 W | LITHONIA EDGR | ASTRALITE ELX-UNVRC, COMPASS CEL, EMERGH-LITE PRESTIGE, ECONOMIZER, LIGHTALARMS SIMPLICITY, LSI ELX, MULE LIGHTING CEL | |



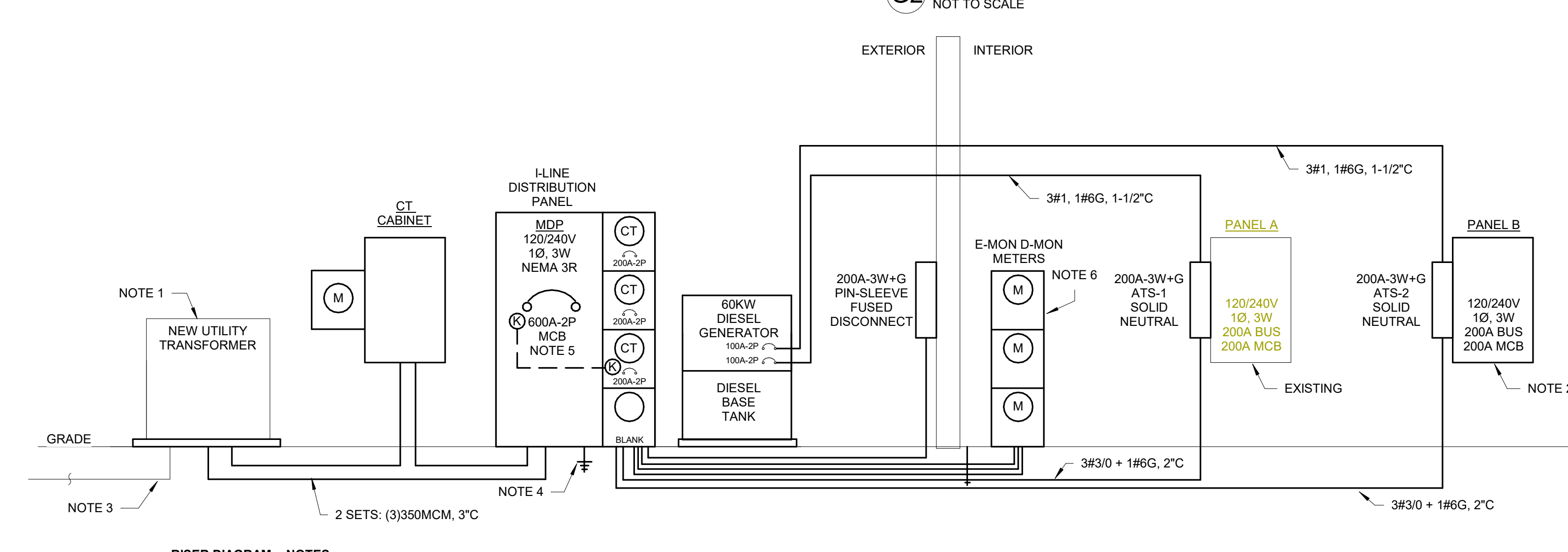
G2 GROUND SYSTEM DETAIL
NOT TO SCALE

ELECTRICAL AND MECHANICAL COORDINATION SCHEDULE

NOTES:
1. FAN TO BE SUPPLIED FROM MANUFACTURER WITH LOCAL CONVENIENCE SWITCH WITHIN EXHAUST FAN SHROUD.

KEY:
FWE = FURNISHED WITH EQUIPMENT
FVNR = FULL VOLTAGE NON-REVERSING
MANUF = MANUFACTURER
FLA = FULL LOAD AMPS
MCA = MINIMUM CIRCUIT AMPACITY
EXST = EXISTING
NF = NON-FUSED
F = FUSED
HP = HORSEPOWER
WP = WEATHERPROOF
EC = ELECTRICAL CONTRACTOR
BAS = BUILDING AUTOMATION SYSTEM
MTR SW = MOTOR SWITCH

| PLAN MARK | VOLTAGE | PHASE | FLA | MCA | DISCONNECT | FUSE | HP | WATTAGE | KVA | CONDUIT AND WIRE SIZE | CONTROL OR STARTER | CONTROLLER OR STARTER FURNISHED / INSTALLED | DISCONNECT TYPE | DISCONNECT FURNISHED / INSTALLED | REMARKS |
|-----------|---------|-------|-------|-------|------------|------|------|---------|-------|-----------------------|--------------------|---|-----------------|----------------------------------|---------|
| B-1 | 120 | 1 | 1.80 | 2.25 | 20.00 | - | - | 216 | 0.22 | 2#12, 1#12G, 3/4\" | TS | DIV 23 / DIV 23 | F, NEMA1 | DIV 26 / DIV 26 | |
| BP-1 | 120 | 1 | 4.40 | 5.50 | 20.00 | - | 1/20 | 528 | 0.53 | 2#12, 1#12G, 3/4\" | TS | DIV 23 / DIV 23 | MS, NEMA1 | DIV 26 / DIV 26 | |
| CP-1 | 120 | 1 | 4.40 | 5.50 | 20.00 | - | 1/6 | 528 | 0.53 | 2#12, 1#12G, 3/4\" | MS | DIV 26 / DIV 26 | MS, NEMA1 | DIV 26 / DIV 26 | |
| CU-1 | 240 | 1 | 18.40 | 23.00 | 40.00 | - | - | 4416 | 4.42 | 2#10, 1#10G, 3/4\" | THERMOSTAT | DIV 23 / DIV 23 | F, NEMA3R | DIV 26 / DIV 26 | |
| CU-2 | 240 | 1 | 16.80 | 21.00 | 40.00 | - | - | 4032 | 4.03 | 2#10, 1#10G, 3/4\" | THERMOSTAT | DIV 23 / DIV 23 | F, NEMA3R | DIV 26 / DIV 26 | |
| CU-3 | 240 | 1 | 23.20 | 29.00 | 40.00 | - | - | 5568 | 5.57 | 2#8, 1#10G, 3/4\" | THERMOSTAT | DIV 23 / DIV 23 | F, NEMA3R | DIV 26 / DIV 26 | |
| CU-4 | 240 | 1 | 18.40 | 23.00 | 40.00 | - | - | 4416 | 4.42 | 2#10, 1#10G, 3/4\" | THERMOSTAT | DIV 23 / DIV 23 | F, NEMA3R | DIV 26 / DIV 26 | |
| EF-1 | 120 | 1 | 0.13 | 0.16 | 20.00 | - | - | 15 | 0.02 | 2#12, 1#12G, 3/4\" | OS | DIV 26 / DIV 26 | MS, NEMA1 | DIV 26 / DIV 26 | |
| EF-2 | 120 | 1 | 0.13 | 0.16 | 20.00 | - | - | 15 | 0.02 | 2#12, 1#12G, 3/4\" | OS | DIV 26 / DIV 26 | MS, NEMA1 | DIV 26 / DIV 26 | |
| EF-3 | 120 | 1 | 0.44 | 0.55 | 20.00 | - | - | 53 | 0.05 | 2#12, 1#12G, 3/4\" | OS | DIV 26 / DIV 26 | MS, NEMA1 | DIV 26 / DIV 26 | |
| EF-4 | 120 | 1 | 0.10 | 0.13 | 20.00 | - | - | 12 | 0.01 | 2#12, 1#12G, 3/4\" | OS | DIV 26 / DIV 26 | MS, NEMA1 | DIV 26 / DIV 26 | |
| EF-5 | 120 | 1 | 0.23 | 0.29 | 20.00 | - | - | 28 | 0.03 | 2#12, 1#12G, 3/4\" | OS | DIV 26 / DIV 26 | MS, NEMA1 | DIV 26 / DIV 26 | |
| EF-6 | 120 | 1 | 0.00 | 0.00 | 20.00 | - | 1/3 | 0 | 0.00 | 2#12, 1#12G, 3/4\" | OD | DIV 23 / DIV 23 | MS, NEMA1 | DIV 26 / DIV 26 | |
| EF-7 | 120 | 1 | 0.67 | 0.83 | 20.00 | - | - | 80 | 0.08 | 2#12, 1#12G, 3/4\" | PS | MFR / MFR | MS, NEMA1 | DIV 26 / DIV 26 | |
| EW-1 | 240 | 1 | 50.00 | 62.50 | 70.00 | - | - | 12000 | 12.00 | 2#4, 1#8G, 1\" | TS | MFR / MFR | MS, NEMA1 | DIV 26 / DIV 26 | |
| F-1 | 120 | 1 | 4.40 | 5.50 | 15.00 | - | 1/2 | 528 | 0.53 | 2#12, 1#12G, 3/4\" | THERMOSTAT | DIV 23 / DIV 23 | MS, NEMA1 | DIV 26 / DIV 26 | |
| F-2 | 120 | 1 | 4.40 | 5.50 | 15.00 | - | 1/2 | 528 | 0.53 | 2#12, 1#12G, 3/4\" | THERMOSTAT | DIV 23 / DIV 23 | MS, NEMA1 | DIV 26 / DIV 26 | |
| F-3 | 120 | 1 | 4.40 | 5.50 | 15.00 | - | 3/4 | 528 | 0.53 | 2#12, 1#12G, 3/4\" | THERMOSTAT | DIV 23 / DIV 23 | MS, NEMA1 | DIV 26 / DIV 26 | |
| F-4 | 120 | 1 | 4.40 | 5.50 | 15.00 | - | 3/4 | 528 | 0.53 | 2#12, 1#12G, 3/4\" | THERMOSTAT | DIV 23 / DIV 23 | MS, NEMA1 | DIV 26 / DIV 26 | |



RISER DIAGRAM - NOTES

- NEW UTILITY TRANSFORMER BY UTILITY. EC SHALL PROVIDE NEW TRANSFORMER PAD. COORDINATE WITH MIDAMERICAN ENERGY AND OWNER FOR MORE INFORMATION. REFER TO SITE PLAN FOR LOCATION.
- PROVIDE LOAD CENTER IN EACH SPACE AS NOTED IN FLOORPLAN VIEW. REFER TO PANEL SCHEDULES FOR MORE INFORMATION.
- COORDINATE PRIMARY FEEDER REQUIREMENTS WITH UTILITY AND OWNER.
- REFER TO GROUNDING SYSTEM DETAIL ON THIS SHEET.
- PROVIDE FULLY RATED MAIN CIRCUIT BREAKER AT MDP. KIRK KEY TO INTERLOCK 200 A-2P BREAKER WITH MAIN CIRCUIT BREAKER FOR TEMPORARY GENERATOR CONNECTION.
- FURNISH AND INSTALL ONE (1) OWNER METER (BASIS OF DESIGN: EMON CLASS 1000) PER CIRCUIT BREAKER (TOTAL OF 3) TO MONITOR POWER USAGE.

BRANCH PANEL A

| BRANCH PANEL NAME | | | | VOLTAGE | PHASE | WIRE | BUS SIZE | MAIN OCP | AIC RATING |
|-------------------------|------|------|-----------|----------------|---------|-----------------------|----------|----------------------------------|-------------------------|
| A | | | | 240/120 Single | 1 | 3 | 200 AMPS | 200 A | 10,000 AMPS SYMMETRICAL |
| ROOM: MOUNTING: SURFACE | | | | | | | | | |
| ENCLOSURE: NEMA1 | | | | | | | | | |
| FED FROM: | | | | EXISTING PANEL | | FEED: | | | LOAD |
| LOAD | NOTE | POLE | CIRCUIT # | A | B | CIRCUIT # | POLE | NOTE | LOAD |
| AIR COMP | | 2 | 60A | 0.0/0.0 | 0.0/0.0 | 30A | 1 | RCPT GFI OUTLET | |
| SPARE (OFF) | | 2 | 100A | 0.0/0.0 | 0.0/0.0 | 6 | 2 | MACHINE (OFF) | |
| ROOF AHU | | 2 | 80A | 0.0/0.0 | 0.0/0.0 | 10 | 20A | 1 | W DOOR OPENER |
| EXISTING LOAD | | 2 | 60A | 0.0/0.0 | 0.0/0.0 | 14 | 20A | 2 | LITES STORAGE |
| MICROWAVE/COFFEE | | 1 | 20A | 0.0/0.0 | 0.0/0.0 | 16 | 15A | 1 | RCPT RIGHT OF PANELA |
| WATER HEATER | | 1 | 20A | 0.0/0.0 | 0.0/0.0 | 20 | 20A | 1 | RCPT ISSO GRND RACK |
| WAREHOUSE HEATER | | 1 | 20A | 0.0/0.0 | 0.0/0.0 | 22 | 20A | 1 | RCPT ROOF SERVICE |
| LITES MECH RM | | 1 | 20A | 0.0/0.0 | 0.0/0.0 | 24 | 20A | 1 | S DOOR OPENER |
| RCPT REF | | 1 | 20A | 0.0/0.0 | 0.0/0.0 | 26 | 20A | 1 | RCPT STORAGE SE |
| LITES OFFICE, RESTRM | | 1 | 20A | 0.0/0.0 | 0.0/0.0 | 28 | 20A | 1 | RCPT E SHOP |
| RCPT OFFICE | | 1 | 20A | 0.0/0.0 | 0.0/0.0 | 30 | 20A | 1 | RCPT E SHOP |
| SPARE (OFF) | | 2 | 20A | 0.0/0.0 | 0.0/0.0 | 32 | 20A | 1 | RCPT E SHOP |
| LITES SHOP | | 2 | 20A | 0.0/0.0 | 0.0/0.0 | 34 | 20A | 1 | RCPT W SHOP |
| LEFT OF PANELS/FIRE | | 1 | 20A | 0.0/0.0 | 0.0/0.0 | 38 | 20A | 1 | EX F RSTRM, FURNACE |
| TOTAL LOAD: | | | | 540.0 VA | 0.0 VA | | | | |
| TOTAL AMPS: | | | | 4.5 A | 0.0 A | | | | |
| LOAD CLASSIFICATION | | | | | | | | | PANEL TOTALS |
| CONNECTED LOAD (VA) | | | | DEMAND FACTOR | | ESTIMATED DEMAND (VA) | | TOTAL CONN. LOAD: 540.0 VA | |
| | | | | | | | | TOTAL EST. DEMAND: 540.0 VA | |
| | | | | | | | | TOTAL CONN. CURRENT: 2.3 A | |
| | | | | | | | | TOTAL EST. DEMAND CURRENT: 2.3 A | |

BRANCH PANEL B

| BRANCH PANEL NAME | | | | VOLTAGE | PHASE | WIRE | BUS SIZE | MAIN OCP | AIC RATING |
|-------------------------|------|------|-----------|-------------------------------|------------|-----------|----------|----------------|-------------------------|
| B | | | | 240/120 Single | 1 | 3 | 200 A | 200 A | 10,000 AMPS SYMMETRICAL |
| ROOM: MOUNTING: SURFACE | | | | | | | | | |
| ENCLOSURE: NEMA1 | | | | | | | | | |
| FED...: | | | | SQUARE D PANEL - NEW ADDITION | | FEED: | | | LOAD |
| LOAD | NOTE | POLE | CIRCUIT # | A | B | CIRCUIT # | POLE | NOTE | LOAD |
| RCPT NE OFFICE | | 1 | 20A | 0.7/1.3 | 1.1/1.2 | 2 | 20A | 1 | LITES N OFFICES, BRKRM |
| RCPT NE OFFICE QUAD | | 1 | 20A | 1.3 | 1.7 | 4 | 20A | 1 | LITES S OFFICES, RCPT |
| RCPT NE OFFICE | | 1 | 20A | 0.7/0.6 | 1.1/0.7 | 6 | 20A | 1 | LITES CORR |
| RCPT NE OFFICE QUAD | | 1 | 20A | 0.7/0.5 | 0.2/1.1 | 8 | 20A | 1 | LITES GARAGE |
| RCPT BRKRM | | 1 | 20A | 11 | 12 | 20A | 1 | RCPT SW OFFICE | |
| RCPT AC GFI KITCHEN | | 1 | 20A | 13 | 0.2/0.4 | 14 | 20A | 1 | RCPT NANCY OFFICE |
| RCPT AC GFI KITCHEN | | 1 | 20A | 15 | 0.2/1.4 | 16 | 20A | 1 | RCPT NANCY OFFICE QUAD |
| RCPT OVEN KITCHEN | | 2 | 40A | 17 | 0.2/1.4 | 18 | 20A | 1 | RCPT COP/WORK AREA |
| RCPT AC GFI KITCHEN | | 1 | 20A | 21 | 0.2/0.2 | 22 | 20A | 1 | RCPT AC GFI RESTROOM |
| RCPT AC GFI KITCHEN | | 1 | 20A | 23 | 0.2/0.7 | 24 | 20A | 1 | RCPT MED SUPPLY |
| RCPT AC GFI KITCHEN | | 1 | 20A | 25 | 0.2/0.7 | 26 | 20A | 1 | RCPT MED STOR |
| RCPT REF BRKRM | | 1 | 20A | 27 | 0.2/0.7 | 28 | 20A | 1 | RCPT E OFFICE |
| RCPT NW OFFICE | | 1 | 20A | 29 | 0.7/0.7 | 30 | 20A | 1 | RCPT E OFFICE QUAD |
| RCPT NW OFFICE QUAD | | 1 | 20A | 31 | 0.7/0.7 | 32 | 20A | 1 | RCPT E OFFICE |
| RCPT NW OFFICE | | 1 | 20A | 33 | 0.7/0.7 | 34 | 20A | 1 | RCPT E OFFICE QUAD |
| RCPT NW OFFICE QUAD | | 1 | 20A | 35 | 0.7/0.7 | 36 | 20A | 1 | RCPT C OFFICE |
| RCPT GFI WASHER | | 1 | 20A | 37 | 0.2/0.7 | 38 | 20A | 1 | RCPT C OFFICE QUAD |
| RCPT DRYER OUTLET | | 2 | 40A | 39 | 0.2/0.9 | 40 | 20A | 1 | RCPT CORR |
| RCPT AC GFI | | 1 | 20A | 41 | 0.2/0.5 | 42 | 20A | 1 | RCPT W GFI GARAGE |
| RCPT W OFFICE | | 1 | 20A | 43 | 0.2/0.5 | 44 | 20A | 1 | RCPT E GFI GARAGE |
| RCPT W OFFICE QUAD | | 1 | 20A | 45 | 0.5/0.2 | 46 | 20A | 1 | RCPT N GFI GARAGE |
| RCPT W OFFICE QUAD | | 1 | 20A | 47 | 0.7/0.2 | 48 | 20A | 1 | RCPT S GFI GARAGE |
| RCPT WP GFI | | 1 | 20A | 49 | 0.2/0.5 | 50 | 20A | 1 | RCPT S WP GFI |
| RCPT GARAGE E WALL | | 1 | 20A | 51 | 0.2/0.2 | 52 | 20A | 1 | RCPT N WP GFI |
| RCPT IT | | 1 | 20A | 53 | 0.7/0.2 | 54 | 20A | 1 | RCPT EXAM RR AC GFI |
| RCPT MECH RM | | 1 | 20A | 55 | 0.5/0.7 | 56 | 20A | 1 | RCPT EXAM RM |
| CU-3 | | 2 | 40A | 57 | 2.8/0.4 | 58 | 20A | 1 | RCPT EXAM RM |
| | | | | 59 | 2.8/2.0 | 60 | 40A | 2 | CU-2 |
| CP-1 | | 1 | 20A | 65 | 0.5/2.2 | 66 | 40A | 2 | CU-4 |
| F-3 | | 1 | 15A | 67 | 0.5/0.5 | 68 | 15A | 1 | F-2 |
| F-1 | | 1 | 15A | 69 | 0.5/6.0 | 70 | 20A | 2 | EW-1 |
| EF-1 | | 1 | 20A | 71 | 0.0/0.5 | 72 | 20A | 1 | BP-1 |
| EF-2 | | 1 | 20A | 73 | 0.0/0.0 | 74 | 20A | 1 | EF-5 |
| B-1 | | 1 | 20A | 75 | 0.2/0.0 | 76 | 20A | 1 | EF-6 |
| EF-6 | | 1 | 20A | 77 | 0.0/0.1 | 78 | 20A | 1 | EF-3, EF-7 |
| SPACE | | 1 | 79 | | 0.0/0.0 | 80 | | | SPACE |
| SPACE | | 1 | 81 | 0.0/0.0 | | 82 | | | SPACE |
| SPACE | | 1 | 83 | 0.0/0.0 | | 84 | | | SPACE |
| TOTAL LOAD: | | | | 32149.8 VA | 32964.6 VA | | | | |
| TOTAL AMPS: | | | | 267.9 A | 274.7 A | | | | |