

PANEL P-1 — 200A MLO, 120/240V 1Ø 3W, 42 SPACE — GARAGE

1. - CKT 1/2 RANGE 50A-2P - CKT 2/4 A/C COND. 3ØA-2P - CKT 5/7 DRYER 20A-2P
2. - CKT 8/8 WATER HEATER (GAS — SPARE) - CKT 9/11 EV CHARGER 50A-2P - CKT 10/12 FURNACE 15A
3. - CKT 13 KITCHEN SA-1 20A GFCI - CKT 14 KITCHEN SA-2 20A GFCI - CKT 15 DISHWASHER 20A - CKT 16 DISPOSAL 15A
4. - CKT 17 MICROWAVE 20A - CKT 18 FRIDGE 20A
5. - CKT 19 LAUNDRY 20A GFCI - CKT 20 BATH RECEPTS 20A GFCI - CKT 21 GARAGE RECEPTS 20A GFCI
6. - CKT 22 EXTERIOR RECEPTS 20A GFCI
7. - CKT 23-28 GENERAL LIGHTING L-1, L-6 15A AFCI - CKT 29-34 GENERAL RECEPTS 15A AFCI
8. - CKT 35 SMOKE/CO 15A AFCI - CKT 36 BATH FANS 15A - CKT 37-42 SPARE

LOAD CALCULATION — NEC 220.82 OPTIONAL METHOD

1. GENERAL LIGHTING & RECEPTACLES: 2,760 SF x 3 VA = 8,280 VA
2. SMALL APPLIANCE (2) + LAUNDRY (1): 3 x 1,500 = 4,500 VA
3. RANGE 12,000 VA - DRYER 5,000 VA - DISHWASHER 1,200 VA - MICROWAVE 1,500 VA - DISPOSAL 800 VA
4. - FURNACE BLOWER 900 VA - EV 9,600 VA
5. SUBTOTAL 43,780 VA ÷ FIRST 10 kVA @ 100% + REMAINDER @ 40% = 10,000 + 13,512 = 23,512 VA
6. A/C: 3 TON, 3,600 VA @ 100% (LARGER OF HEAT/COOL) = 3,600 VA
7. TOTAL 27,112 VA ÷ 240 V = 113 A @ 200A SERVICE PROVIDED (EV-READY).

BREAKER LEGEND

- AFCI — COMBINATION ARC-FAULT
- GFCI — GROUND-FAULT
- 2P — TWO-POLE

project,

CEDAR LANE RESIDENCE

client,

OKAFOR FAMILY

location,

BOULDER, COLORADO

Project No. 2020-031

PANEL SCHEDULE &

LOAD CALCULATIONS

key plan

issued,

revision,

drawn,

TBM

checked,

F.S.

scale,

1"=1'-0"

sheet,

E3.00