LEVITON

Applications Cookbook

2015 IECC

Version 3.0

FOR REFERENCE ONLY

2015 IECC SOLUTIONS COOKBOOK NOTES

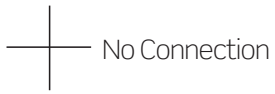
LEVITON

1. Refer to manufacturer's data sheets and installation instructions prior to installation
2. Line feed 120/230/277 VAC, 60 Hz
3. Ground not shown, ground devices per applicable national and local codes are best practices
4. For emergency power situations, illustrations assume transfer switch by others upstream of shown devices
5. Line voltage load not to exceed contact rating per device specifications
6. Power packs receiving separate feeds for switched loads and self power must have both feeds on the same phase
7. All low voltage devices consume current. Device power budget is estimated for these details—additional power sources may be required. See product literature for power specifications
8. Maximum run length for analog wiring is 1000' @ #18 AWC
9. Sensors wired in parallel will cause line voltage relay closure when occupancy is detected by any unit
10. Devices in series requiring contact closure from a single device (clock input, demand response, emergency, etc.) must follow these wiring conventions:
    - First device in sequence provides the +V to the triggering relay
    - Signal from closure attached to all devices in sequence input
    - Com from first device in sequence attached to com on all devices in sequence
11. Ultrasonic ceiling mount sensors should be located a minimum of six (6) feet from HVAC supply/return vents
12. Trough-mounted and pendant-mounted indirect lighting sources affect the operation of locally mounted sensors. Contractor is responsible for adjusting sensor locations to allow for proper operation
13. Contractor is responsible for proper sensitivity and time delay settings for non-adaptive products, following the manufacturer's recommended placement, and field verification of circuits with respect to power pack placement
14. Contractor is responsible for coordinating the operational options of sensors and power packs with the specific work requirements
    - Work relevant energy code requirements affect circuits to be controlled and their control characteristics
    - One power pack is required for each controlled circuit
    - Refer to power pack data sheet for power output and installation guide for maximum number of sensors connected to a power pack
    - If multiple circuits are to be controlled by a sensor, auxiliary relays may be used in conjunction with a power pack
15. Ceiling sensors mounted over doorways should be placed one (1) foot inside the threshold
16. Up to 100 Mark VII style ballasts may be controlled per daylighting zone by IRC
17. All relays shown in de-energized state
18. Individually cap off unused leads
19. One-line parenthesis use:
    - (X) Function
    - [#] Terminal
20. Plug load control—commercial receptacle P/Ns:
    STANDARD DUPLEX:
    Split control (1 outlet) CR015-1Px, CR020-1Px
    Full control (2 outlets) CR015-2Px, CR020-2Px
    DECORA®:
    Split control (1 outlet) 16252-1Px, 16352-1Px
    Full control (2 outlets) 16252-2Px, 16352-2Px

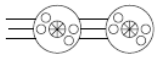
ABBREVIATIONS:

LC	LumaCAN
LV	Low voltage
HV	High voltage switch (maintained)
LVM	Low voltage switch (momentary) Equal to Leviton 1081 (toggle) OR Leviton 56081 (Decora)
LVT	Low voltage switch (maintained) Equal to Leviton 12021-2 (toggle) or Leviton 56021-2 (Decora)
LV2	IRC low voltage switch
UON	Unless otherwise noted
BLK	Black
WHT	White
BLU	Blue
YEL	Yellow
ORG	Orange
VIO	Violet
BRN	Brown

SYMBOLS:


No Connection


Connection


Devices wired in parallel

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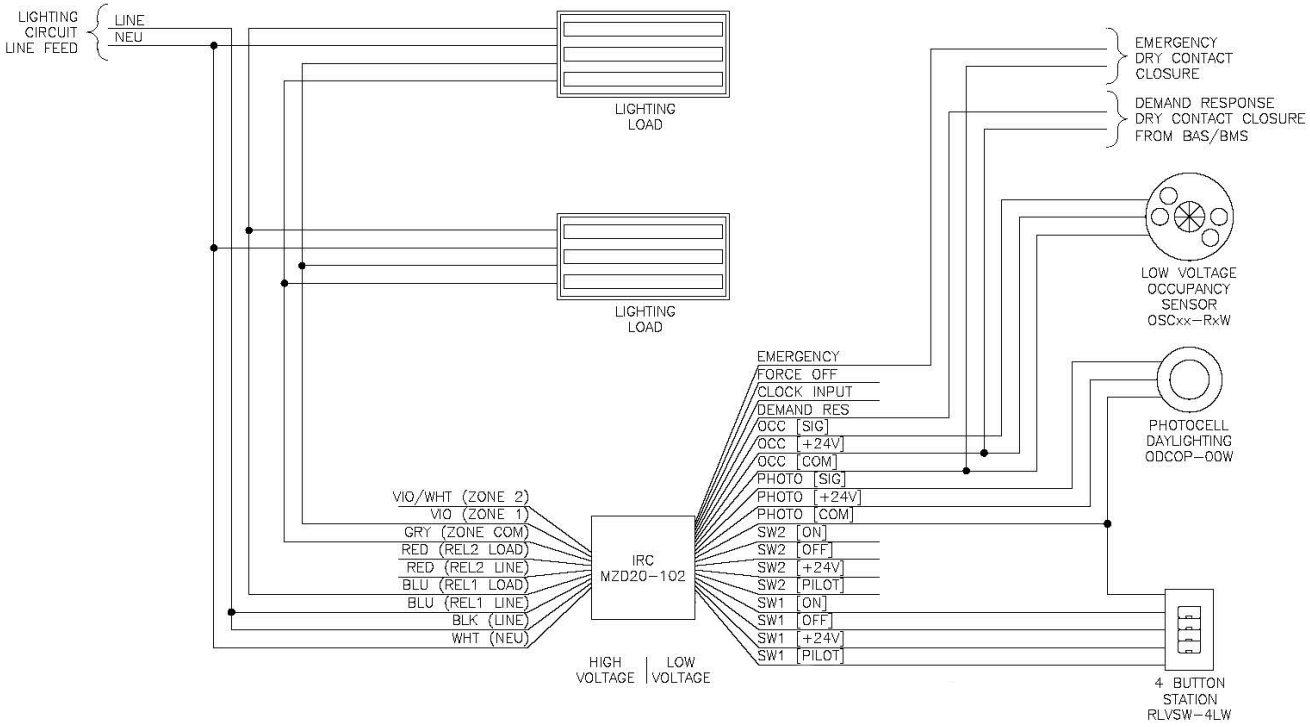
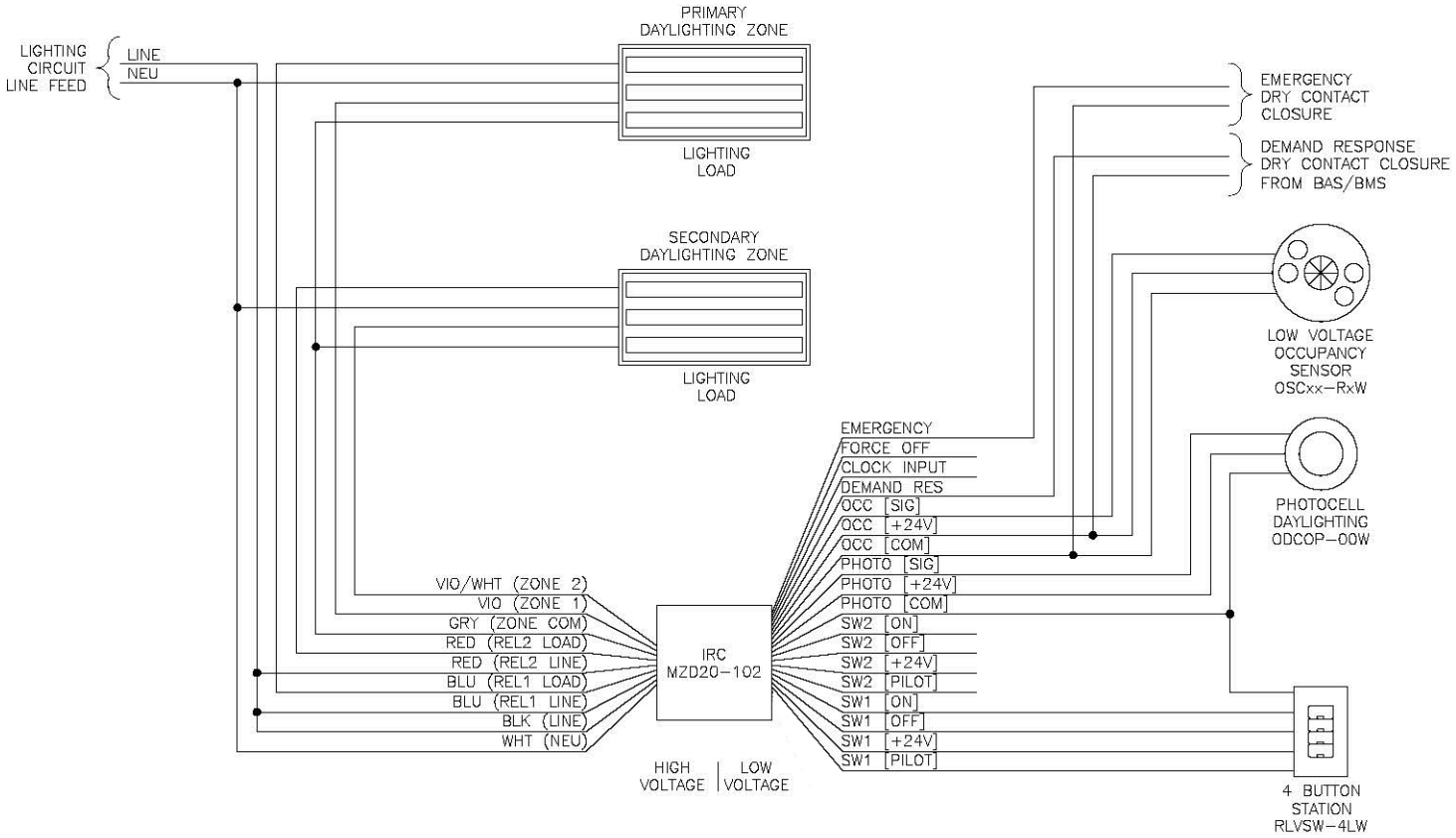
SMALL OFFICE—IRC SINGLE ZONE



SMALL OFFICE—IRC DUAL ZONE



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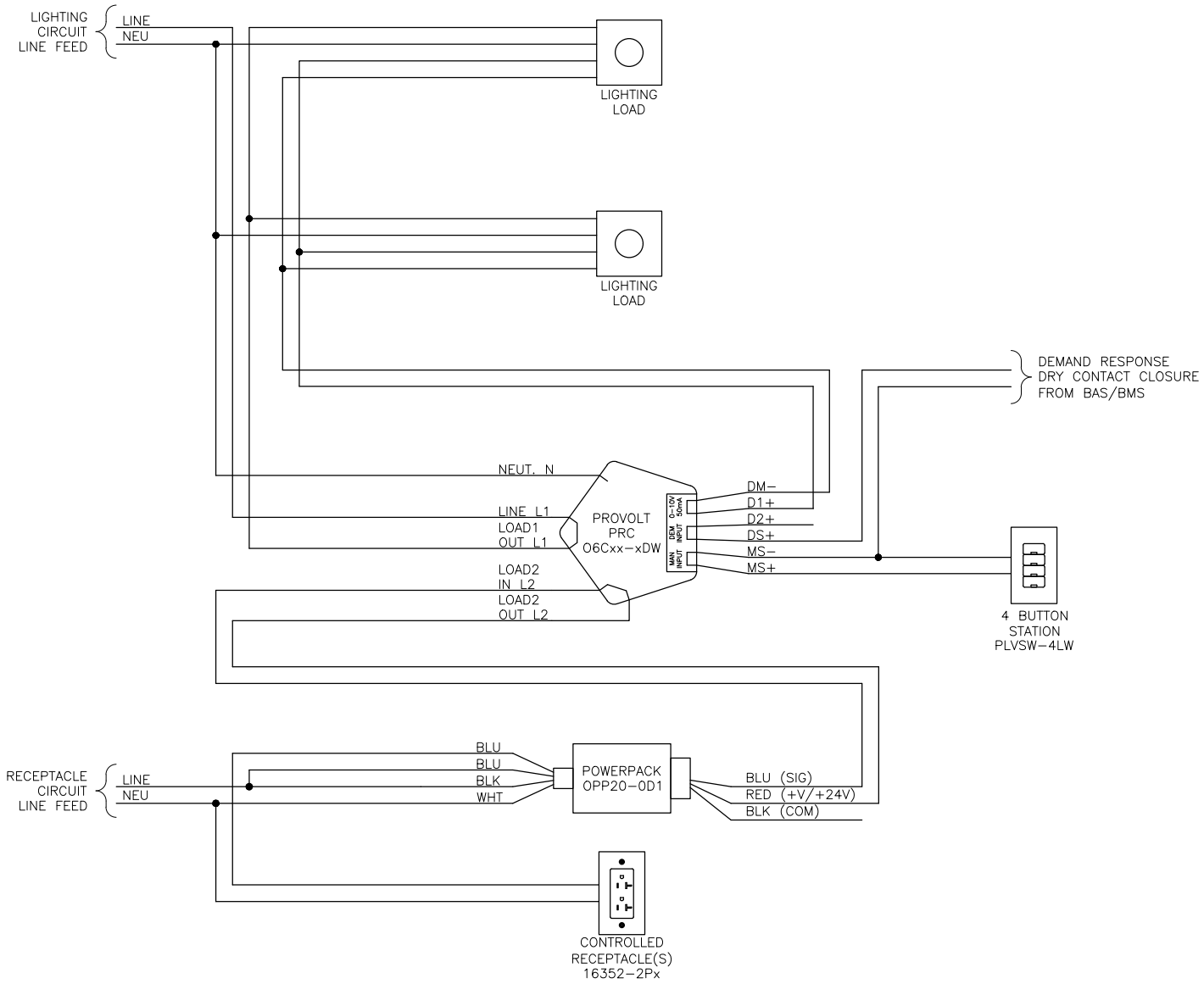

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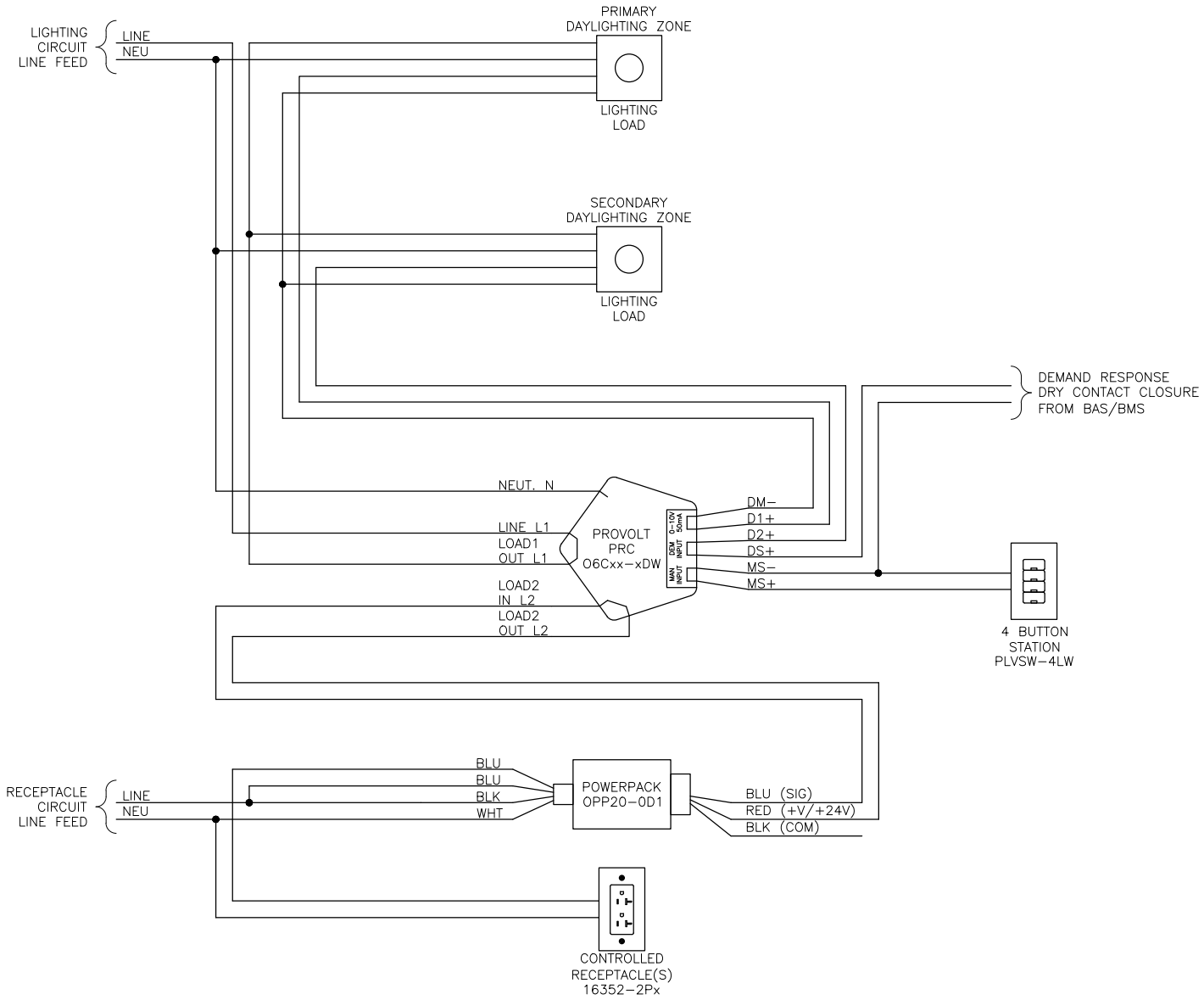
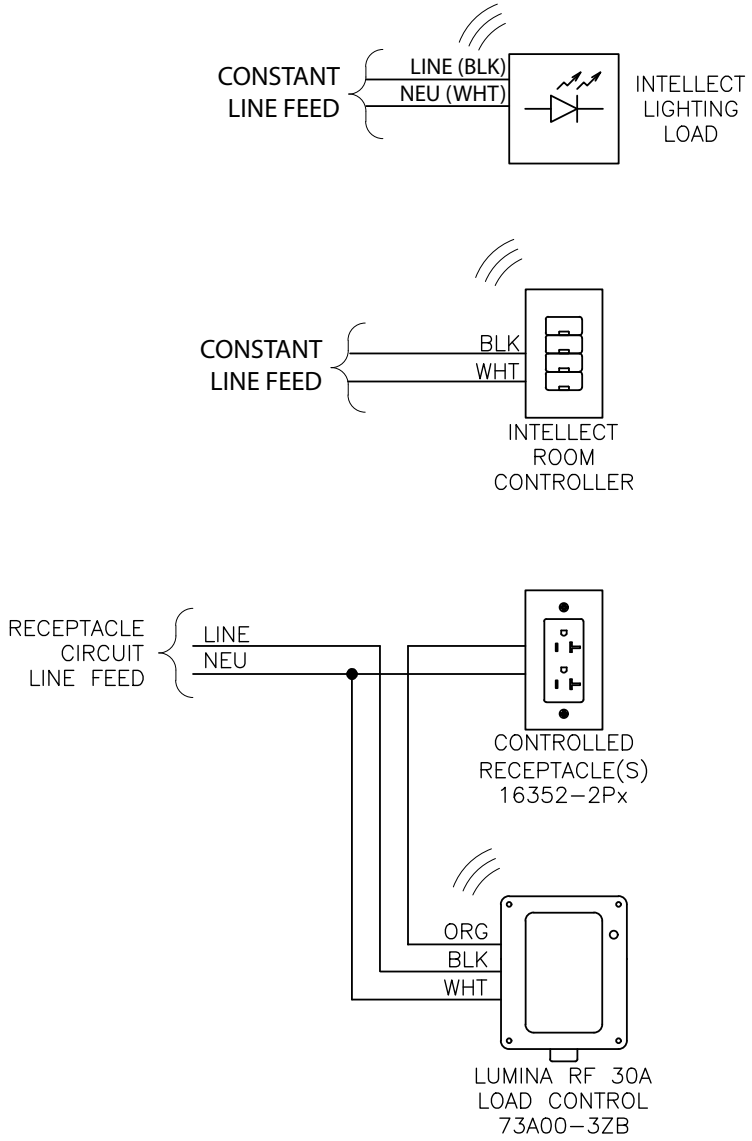
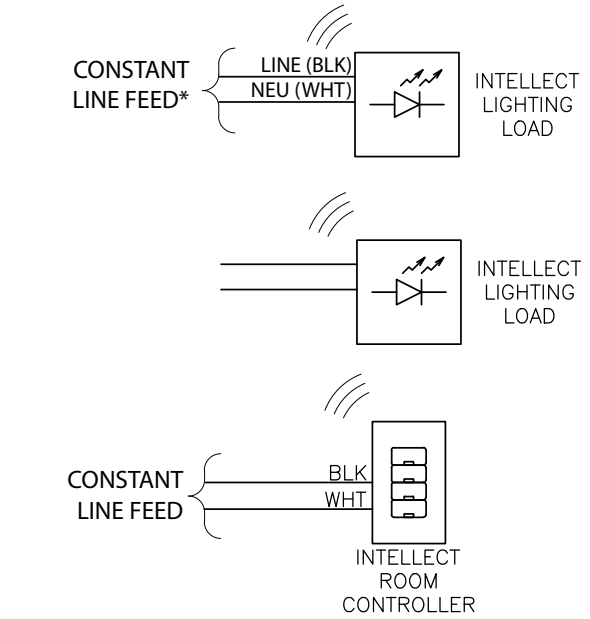
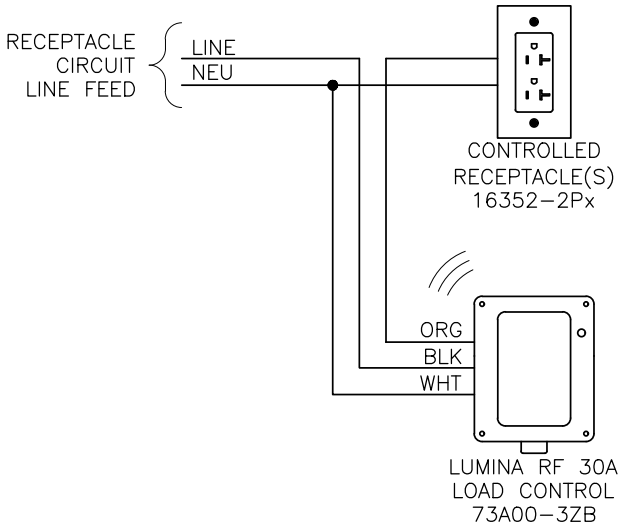


SMALL OFFICE—INTELLECT SINGLE ZONE



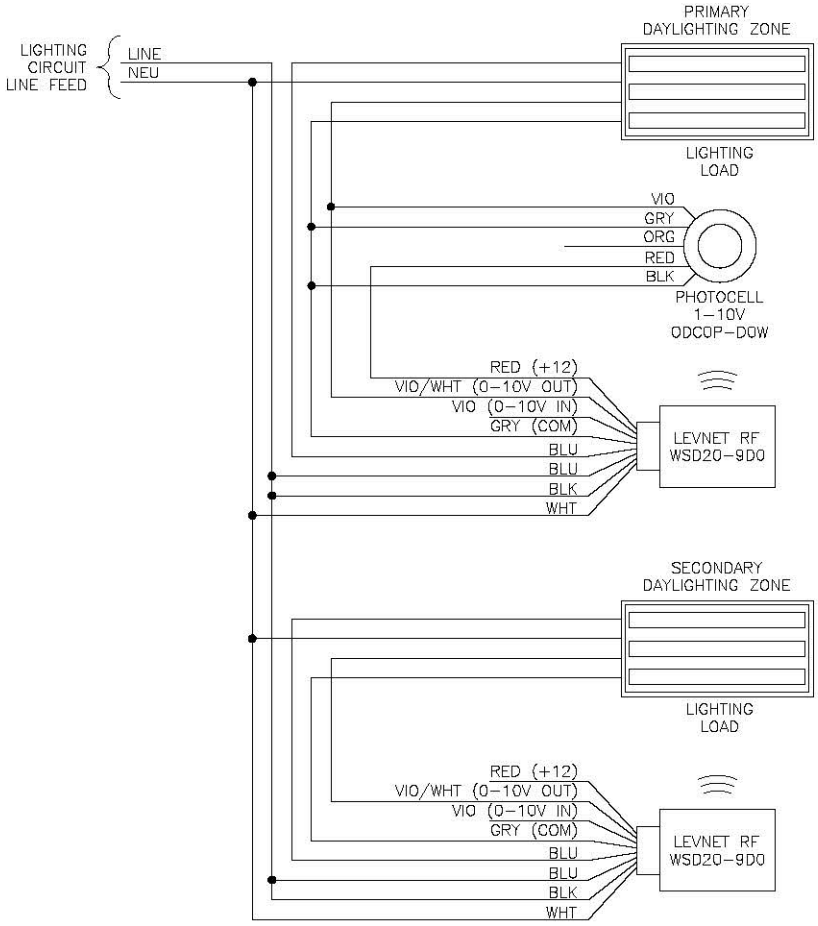
SMALL OFFICE—INTELLECT DUAL ZONE

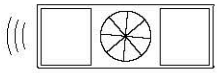




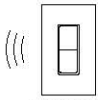
*TYPICAL AT ALL FIXTURES

SMALL OFFICE—LEVNET RF 902 MHZ





WIRELESS
OCCUPANCY
SENSOR
WSC12–M9N

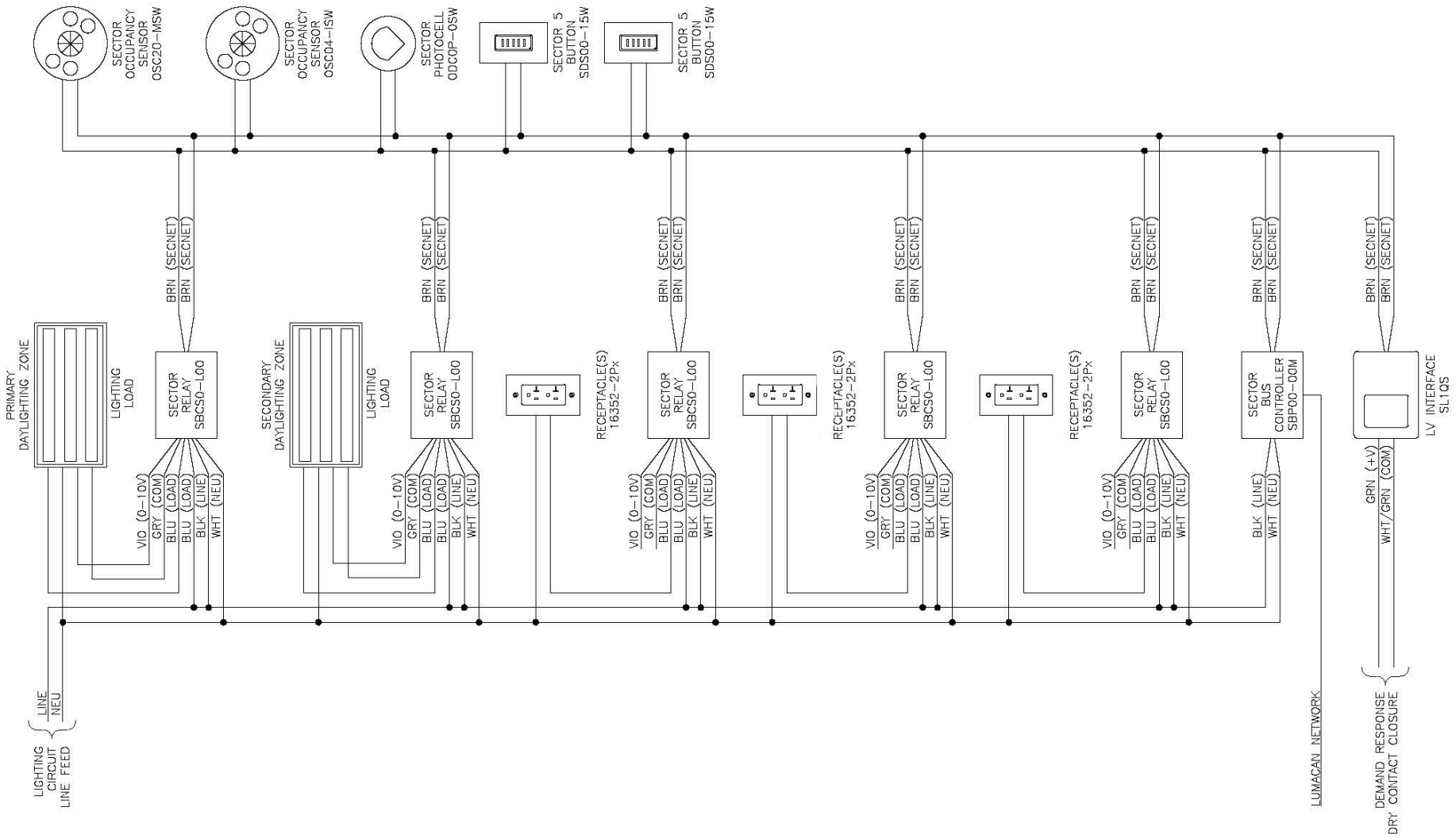


WIRELESS
SWITCH
WSSOS–D9x

NOTES:

1. FOR 0–10V CONTROL, LOWEST LIGHTING LEVEL TAKES PRECEDENCE.
2. WIRELESS CONTROL SIGNAL FROM SWITCHES, SENSORS CONTROLLERS UP TO 150FT.
3. INDIVIDUALLY CAP UNUSED LEADS.

OPEN OFFICE—SECTOR



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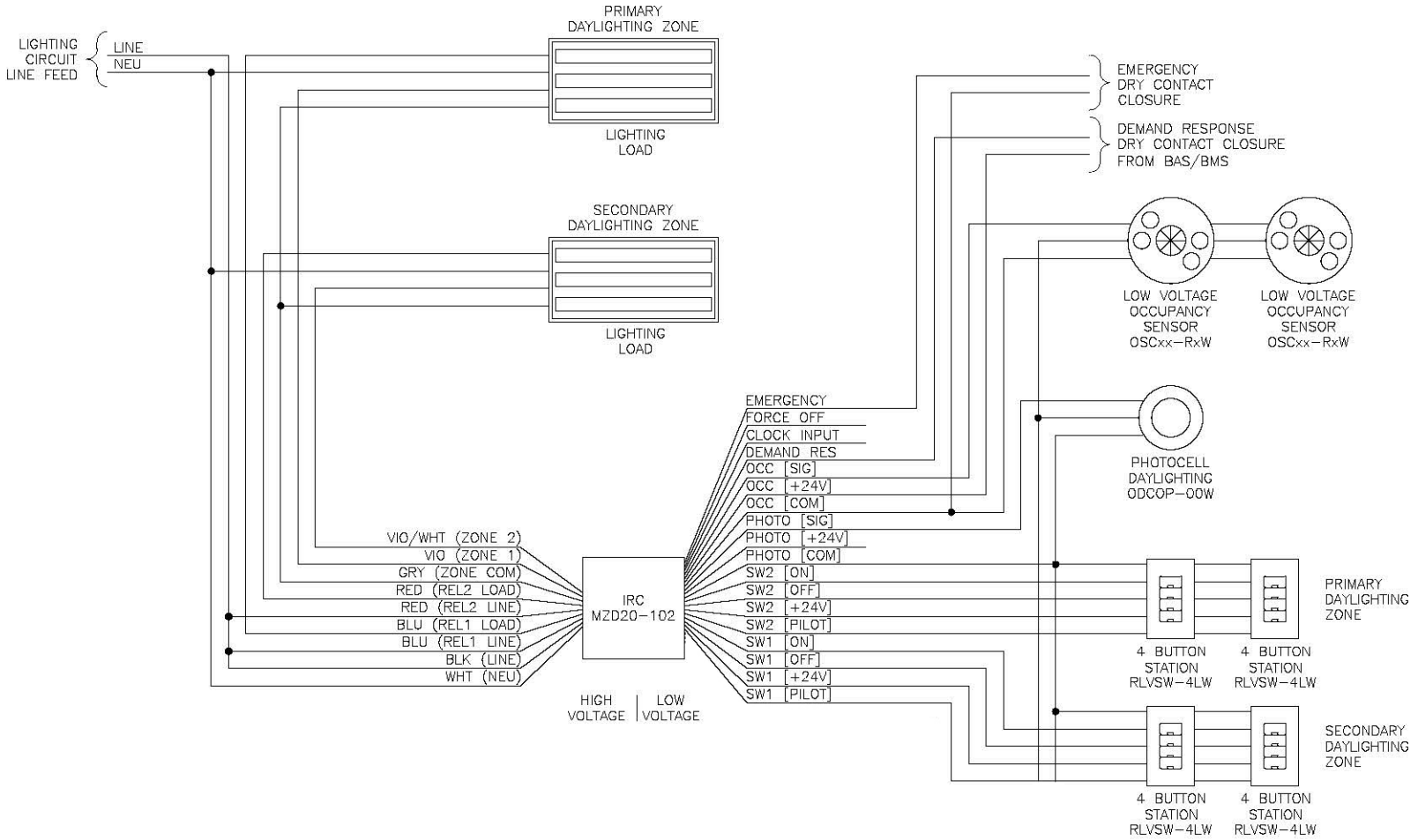
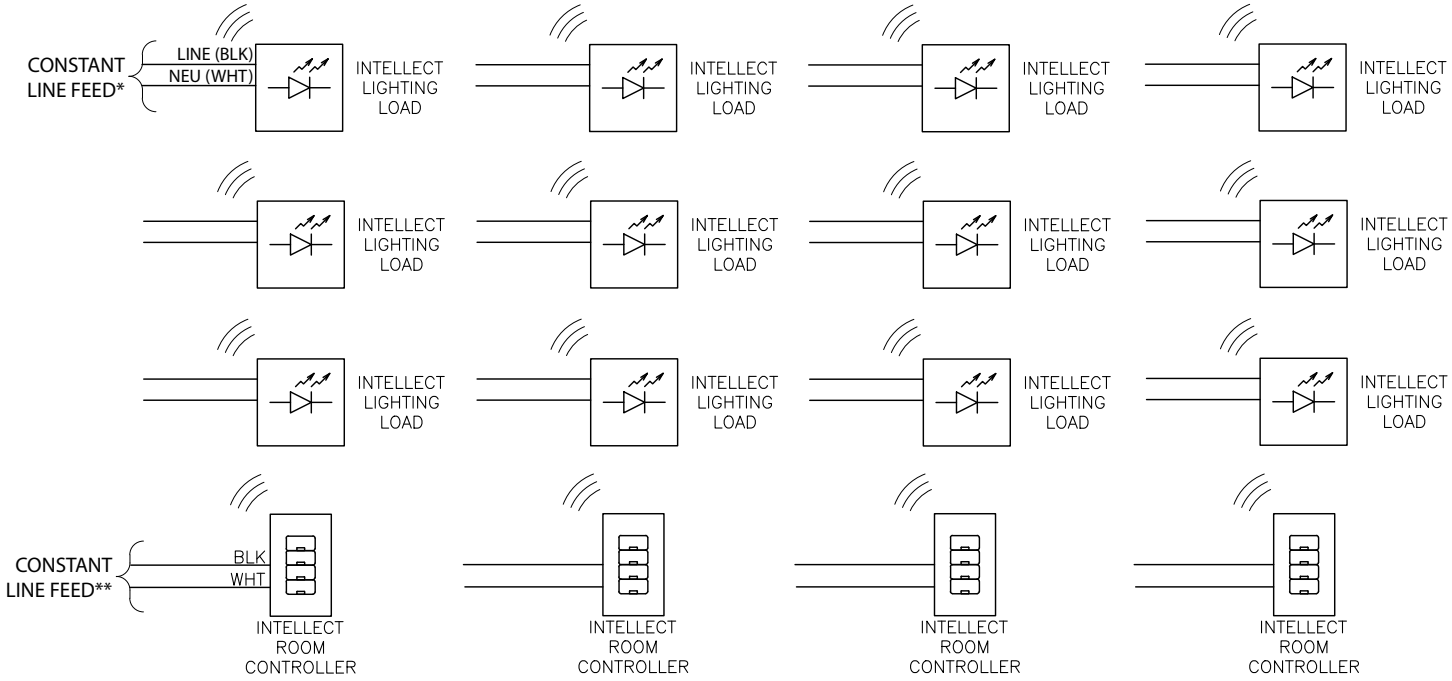
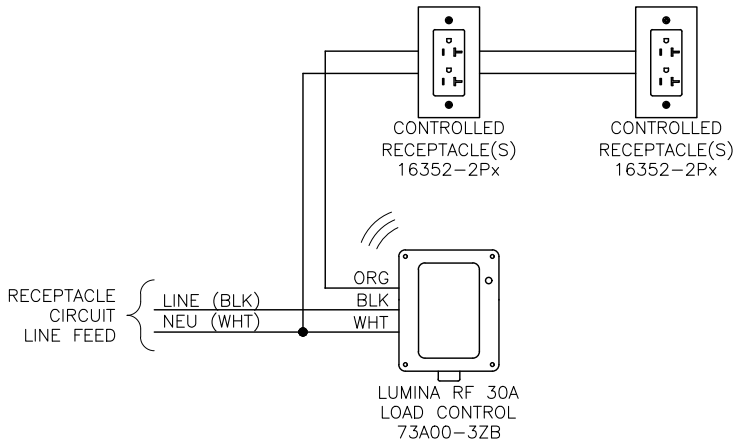


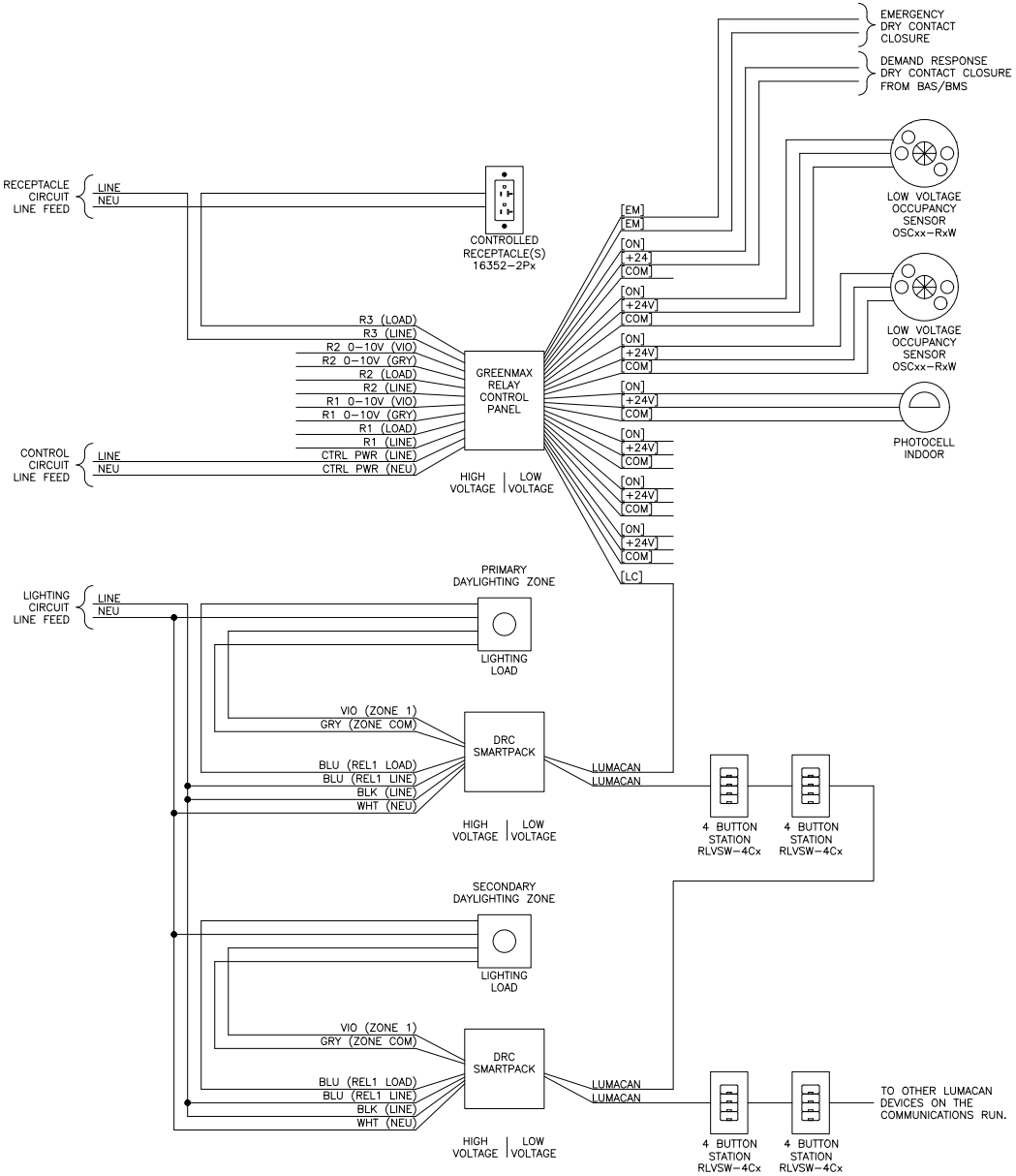
OPEN OFFICE—INTELLECT



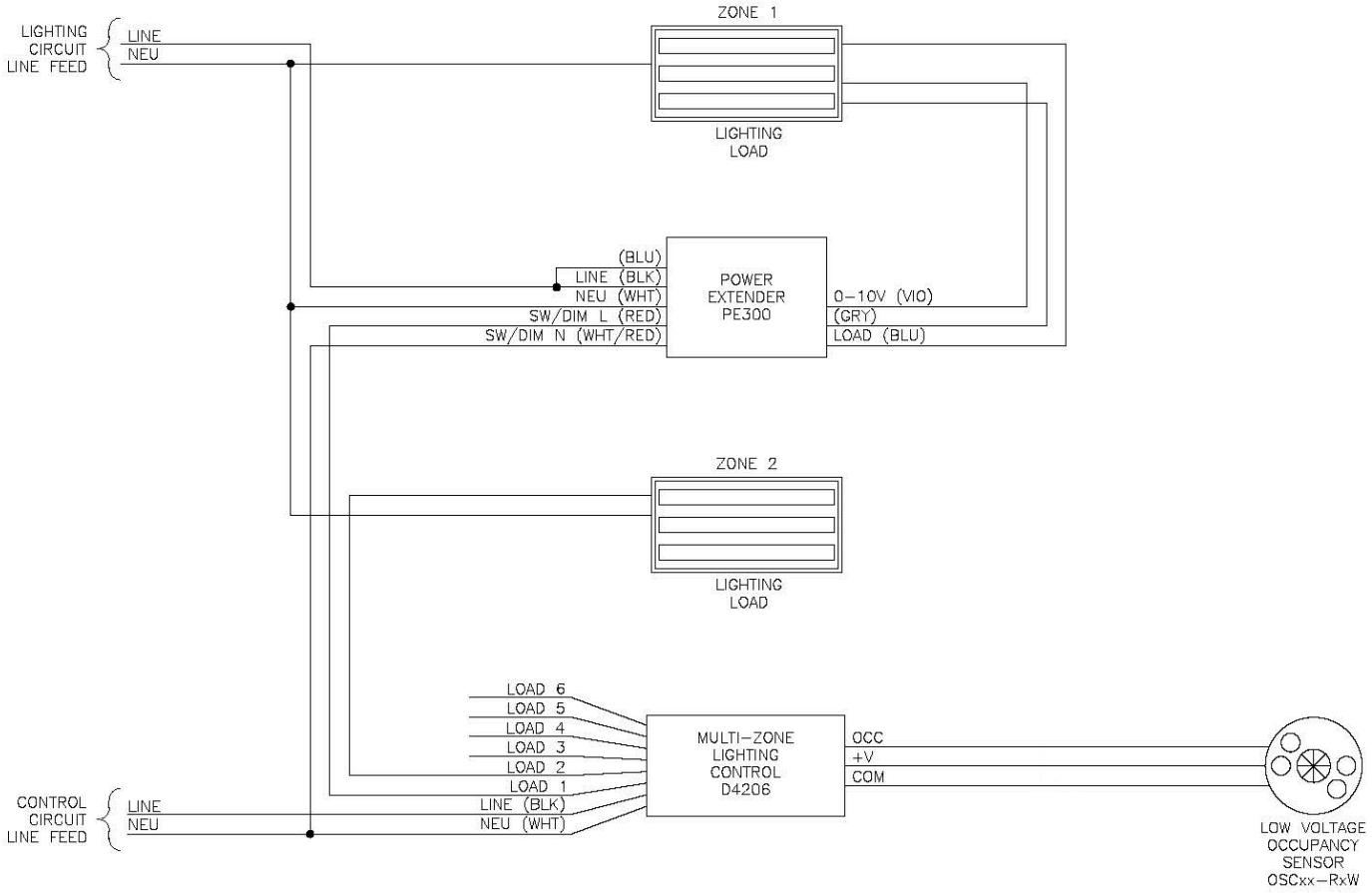


*TYPICAL AT ALL FIXTURES
**TYPICAL AT ALL CONTROLLERS

OPEN OFFICE—GREENMAX AND DRC



CONFERENCE ROOM—D4000



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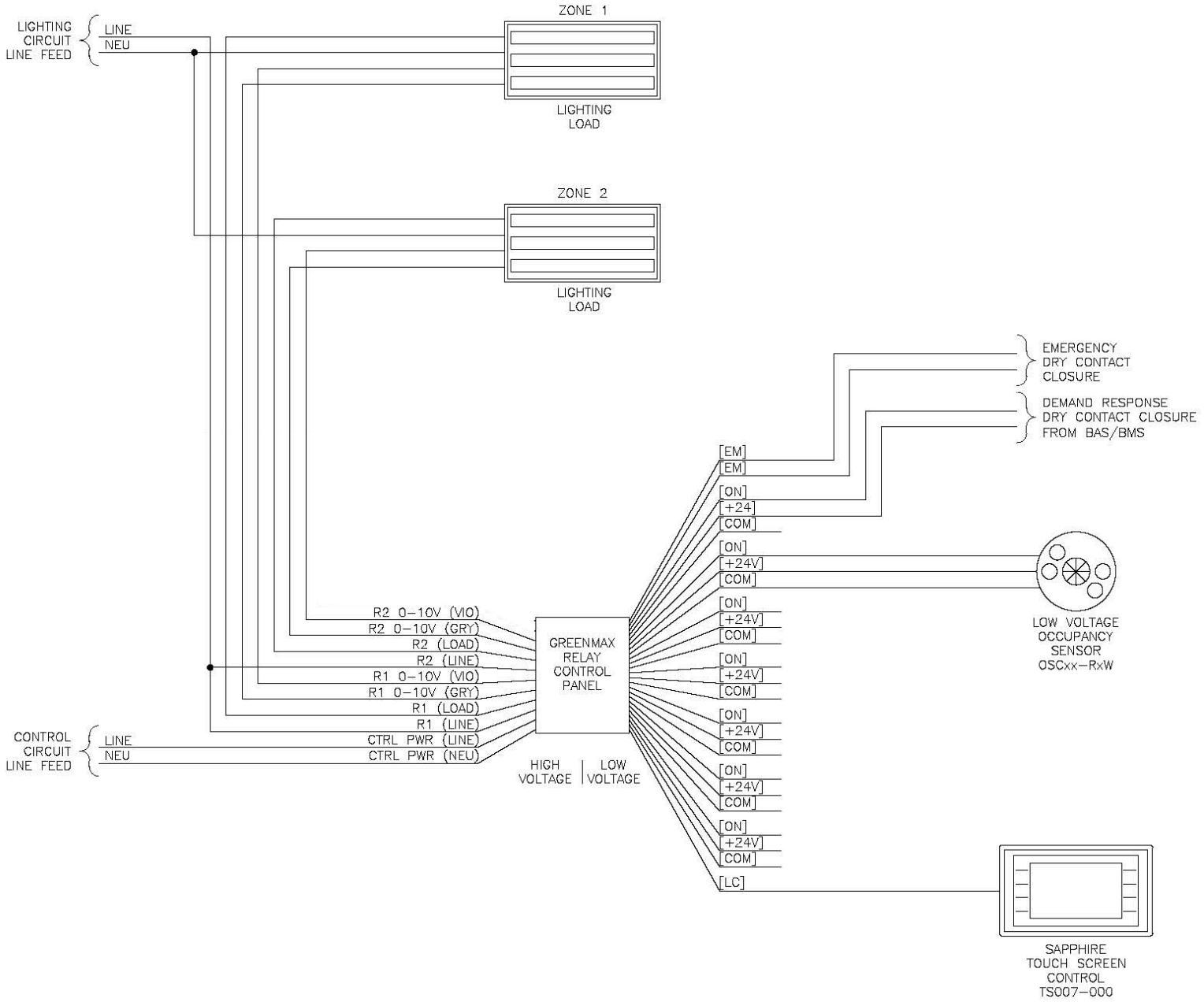

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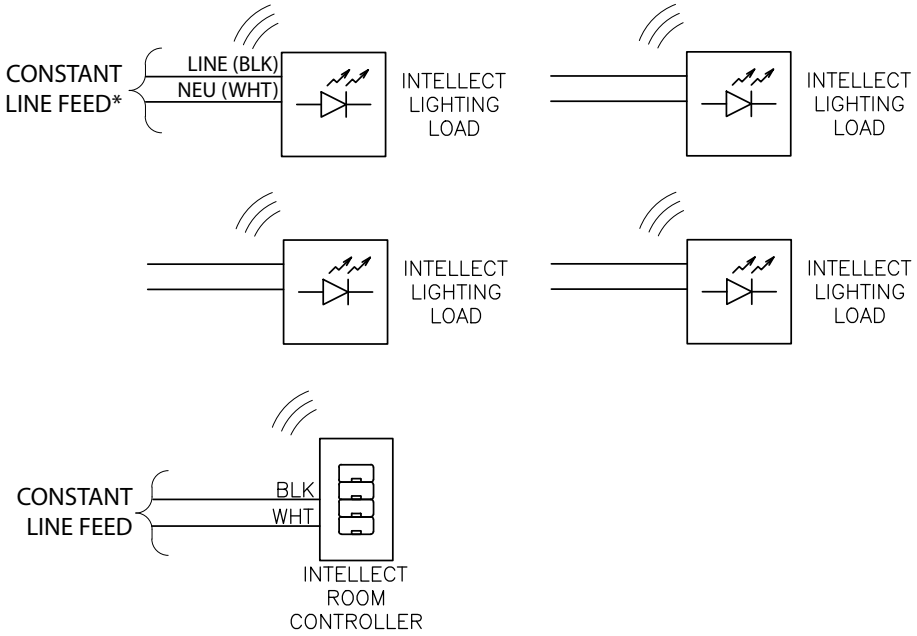
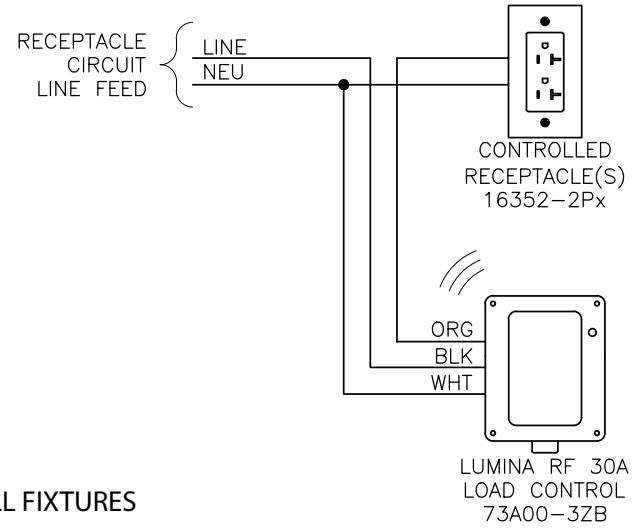
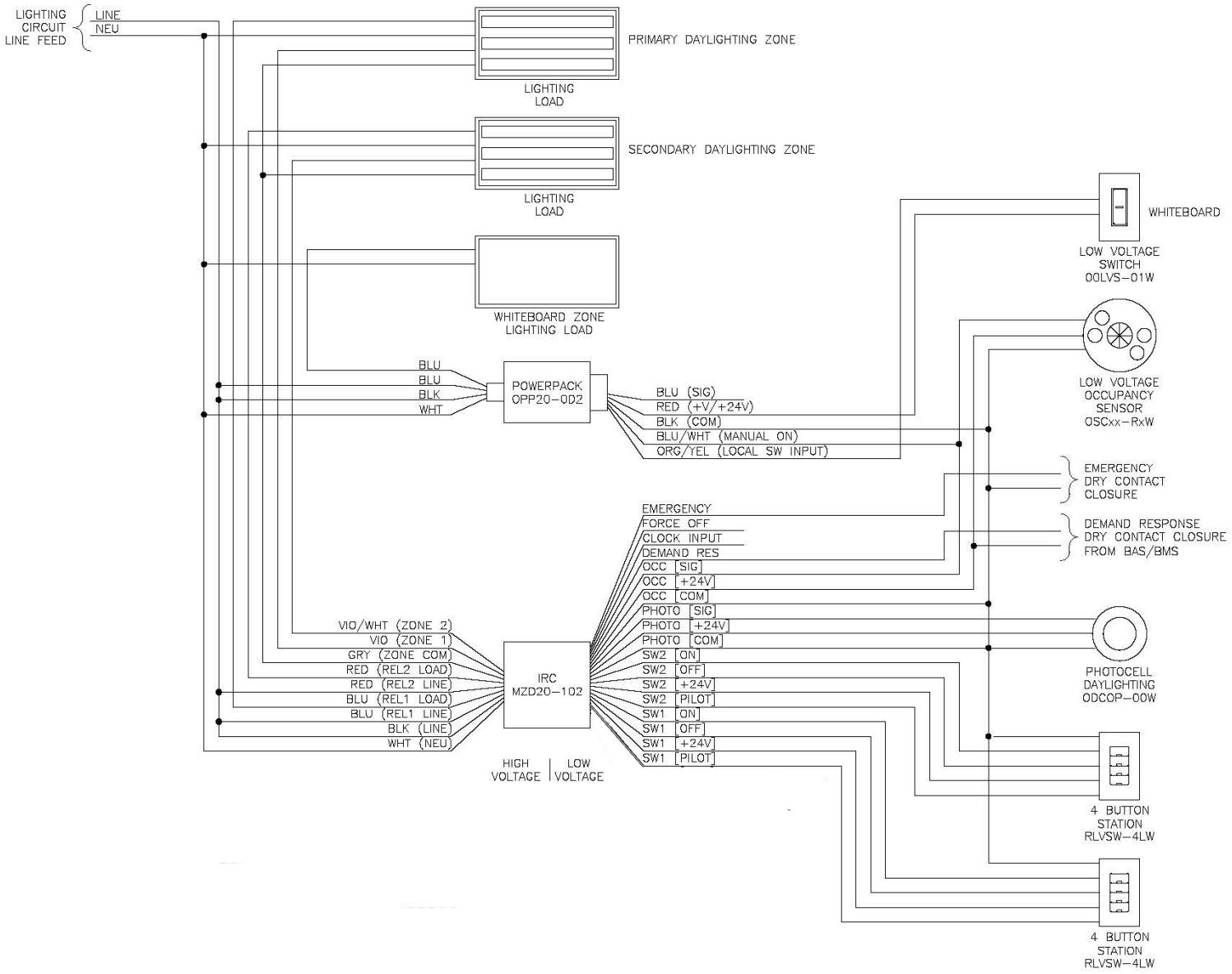




*TYPICAL AT ALL FIXTURES

CLASSROOM—IRC



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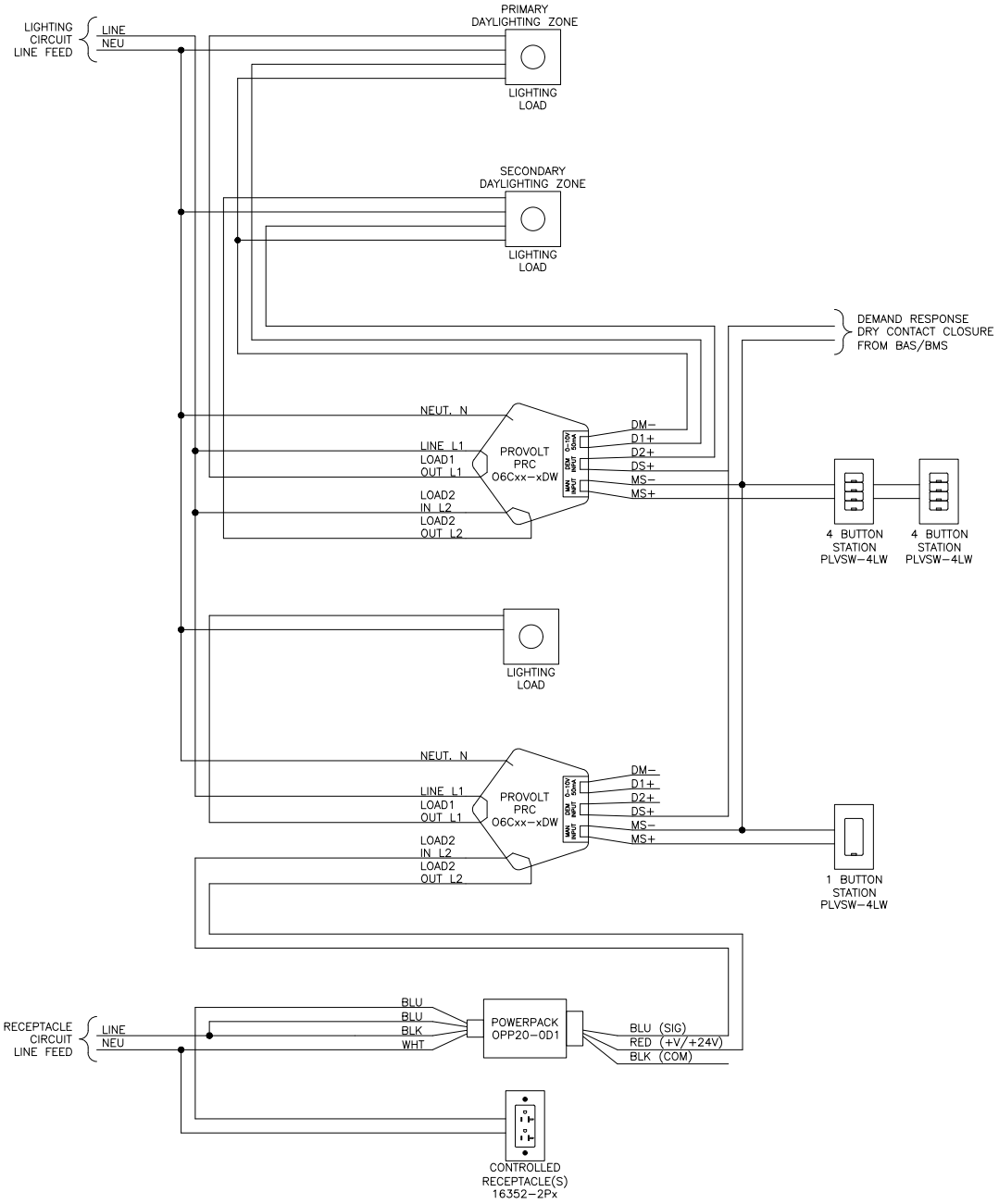

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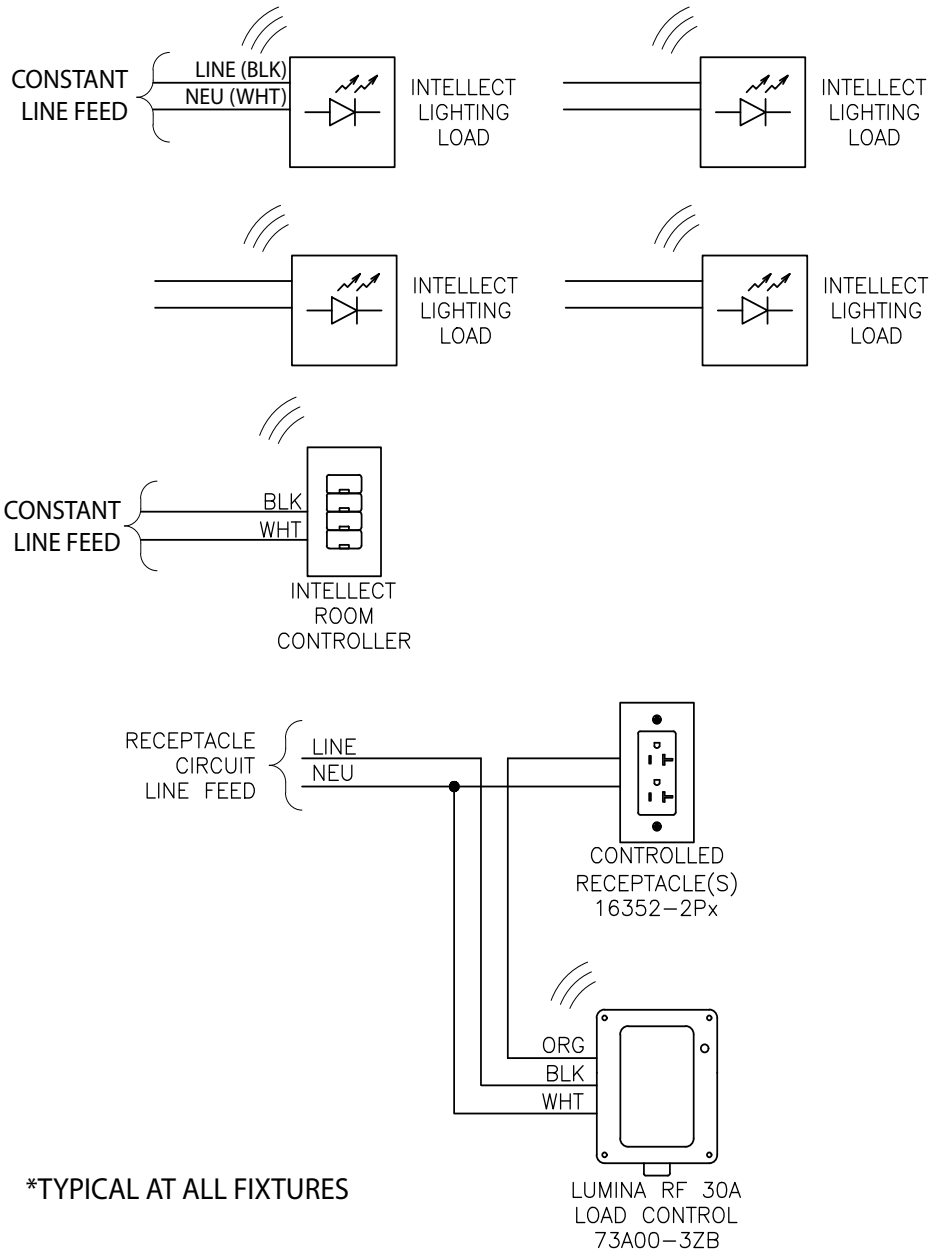

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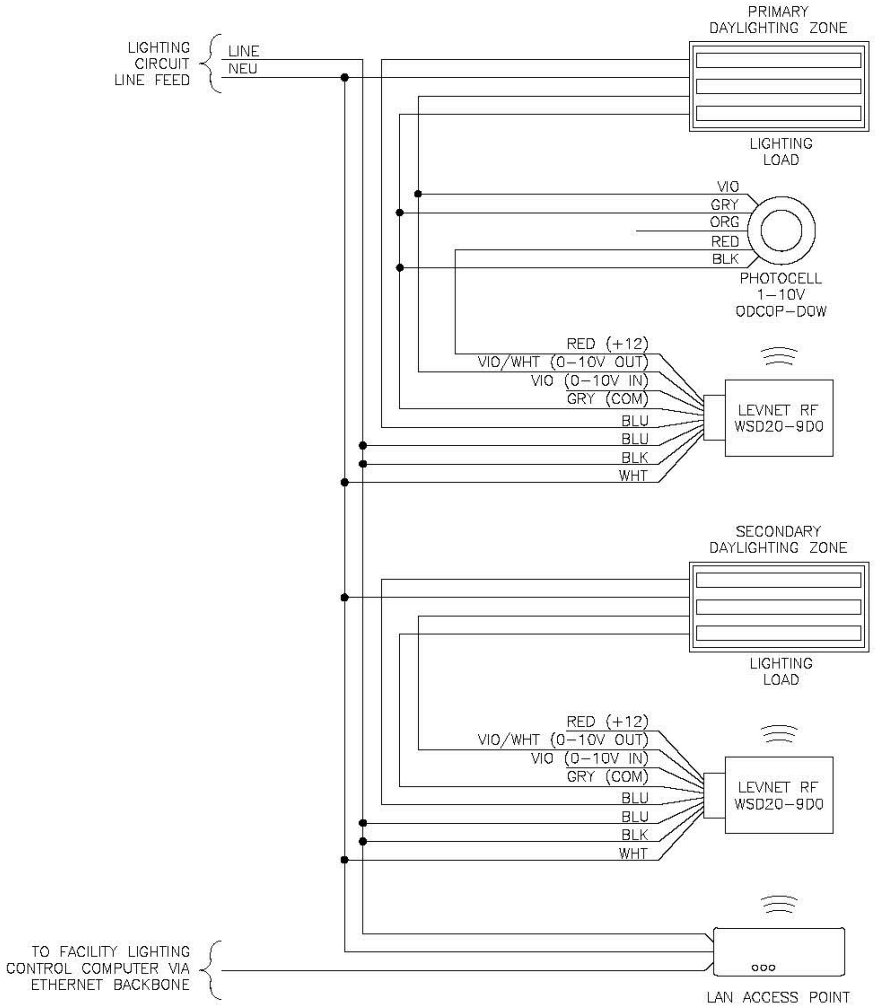
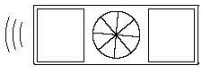
CLASSROOM—LEVNET RF 902 MHZ





WIRELESS OCCUPANCY SENSOR WSC12–M9N

WIRELESS SWITCH WSSOS–D9x

NOTES:

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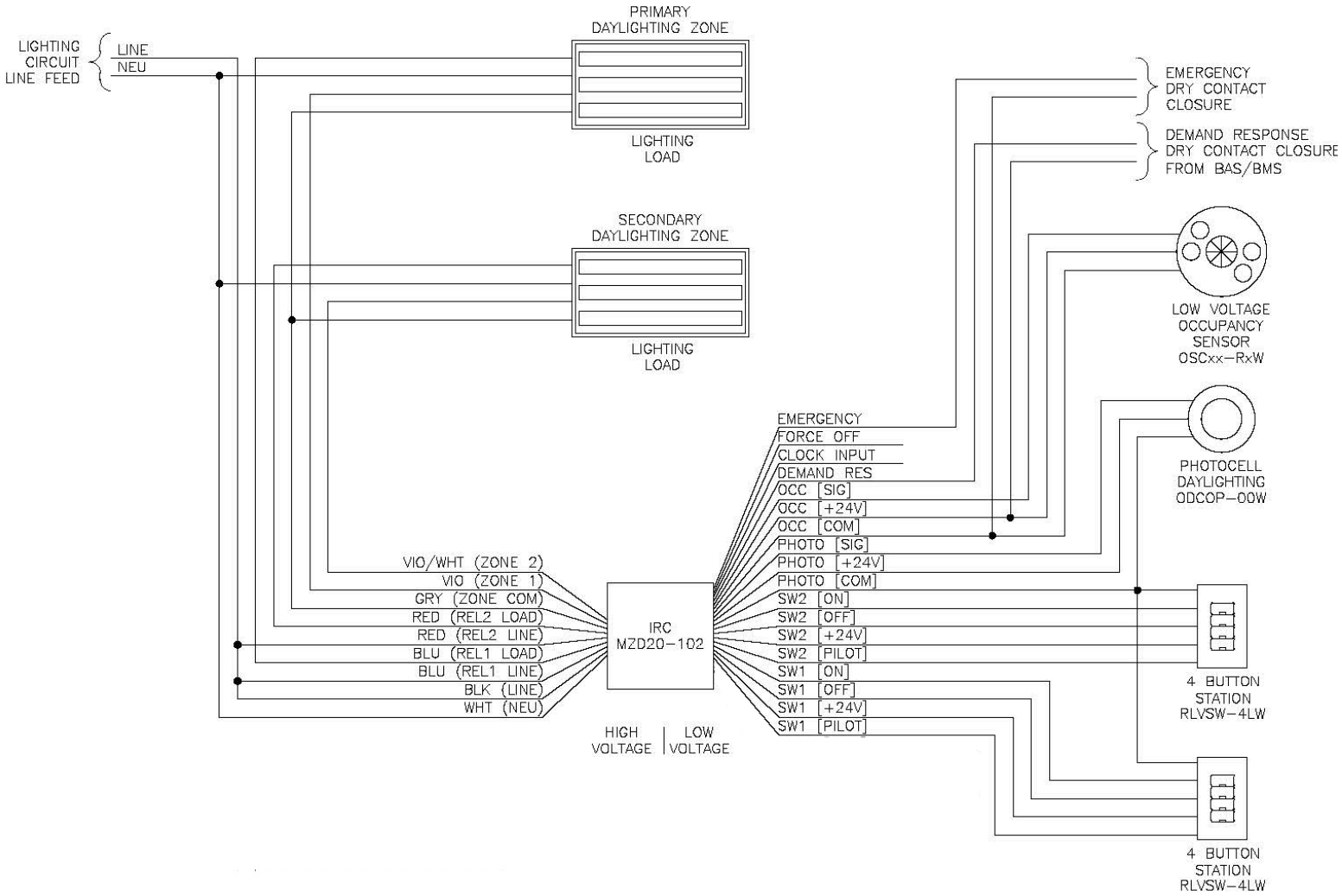
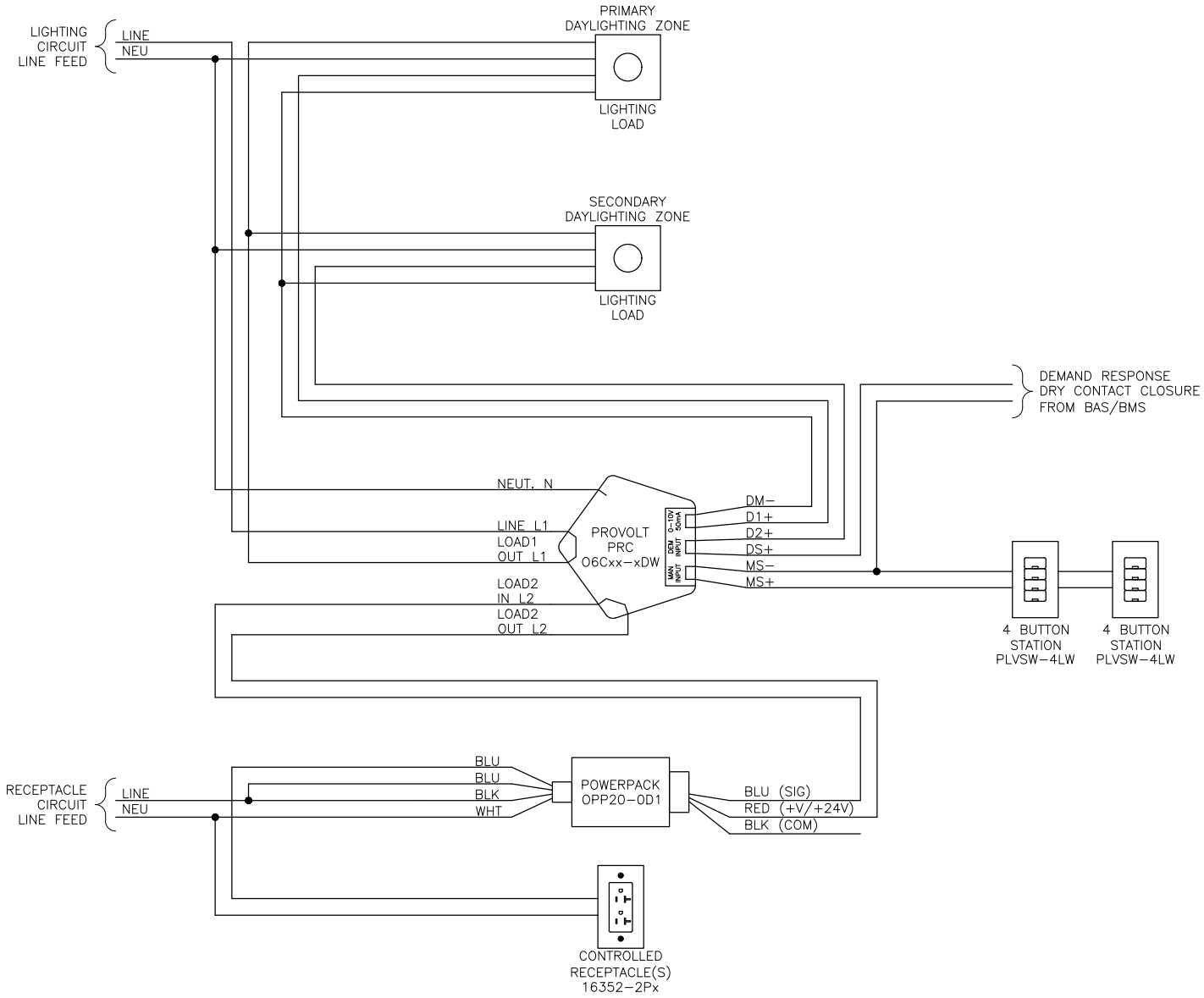
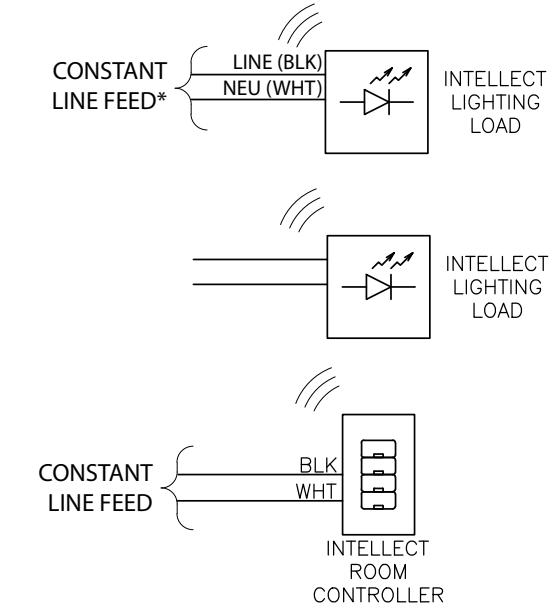
COMMON AREA—IRC

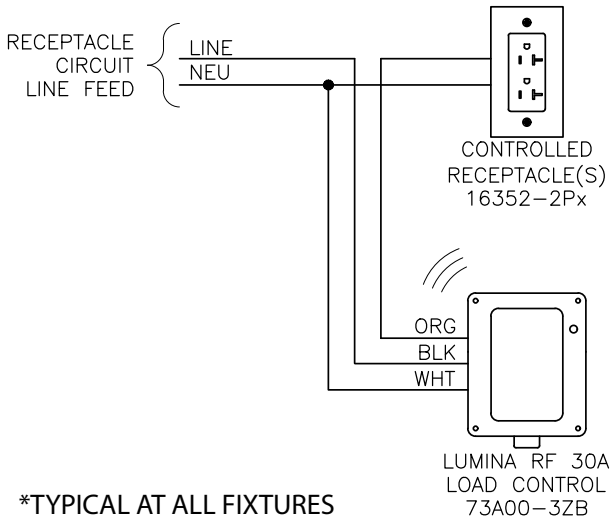


COMMON AREA—PRC



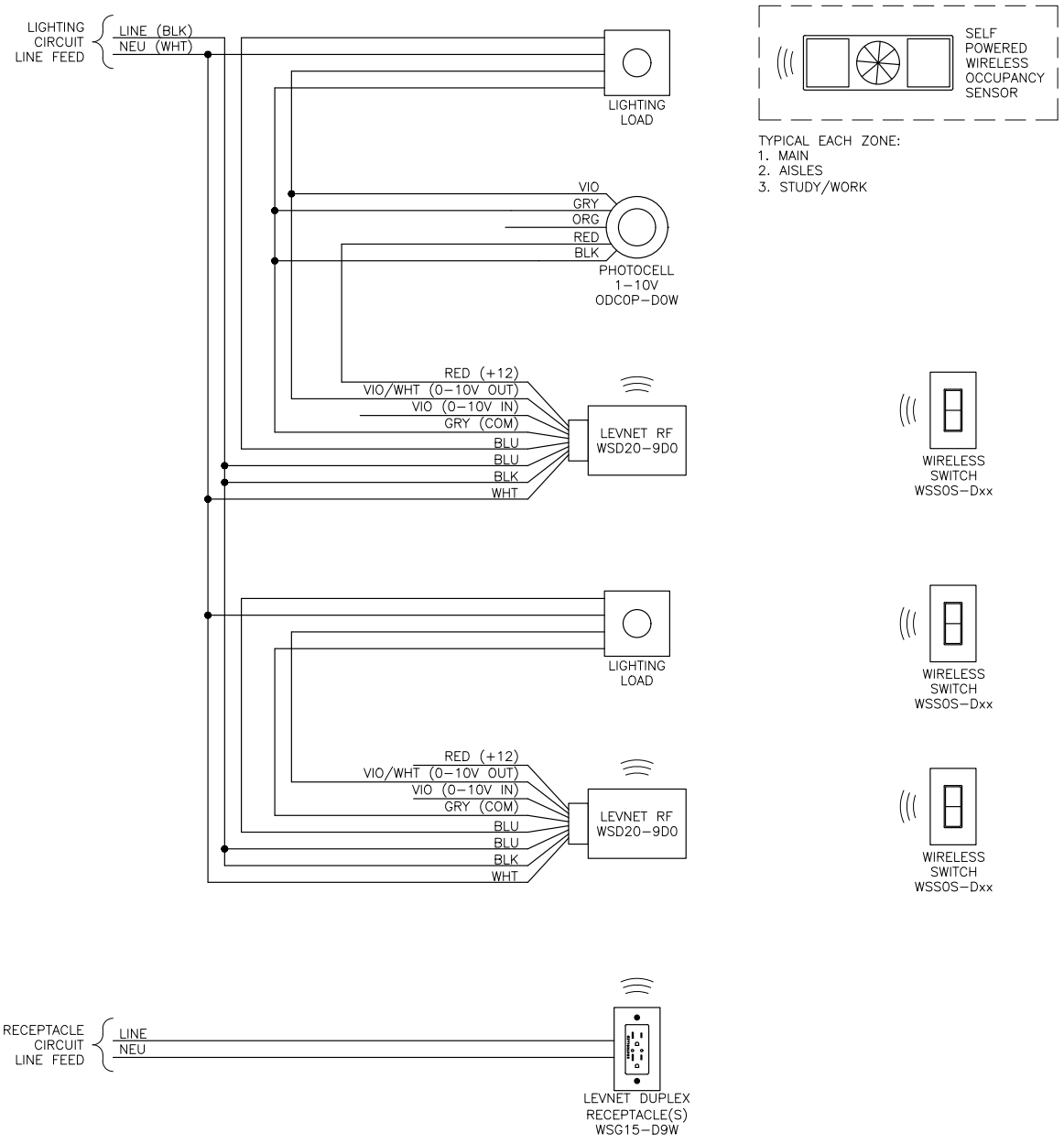
COMMON AREA—INTELLECT



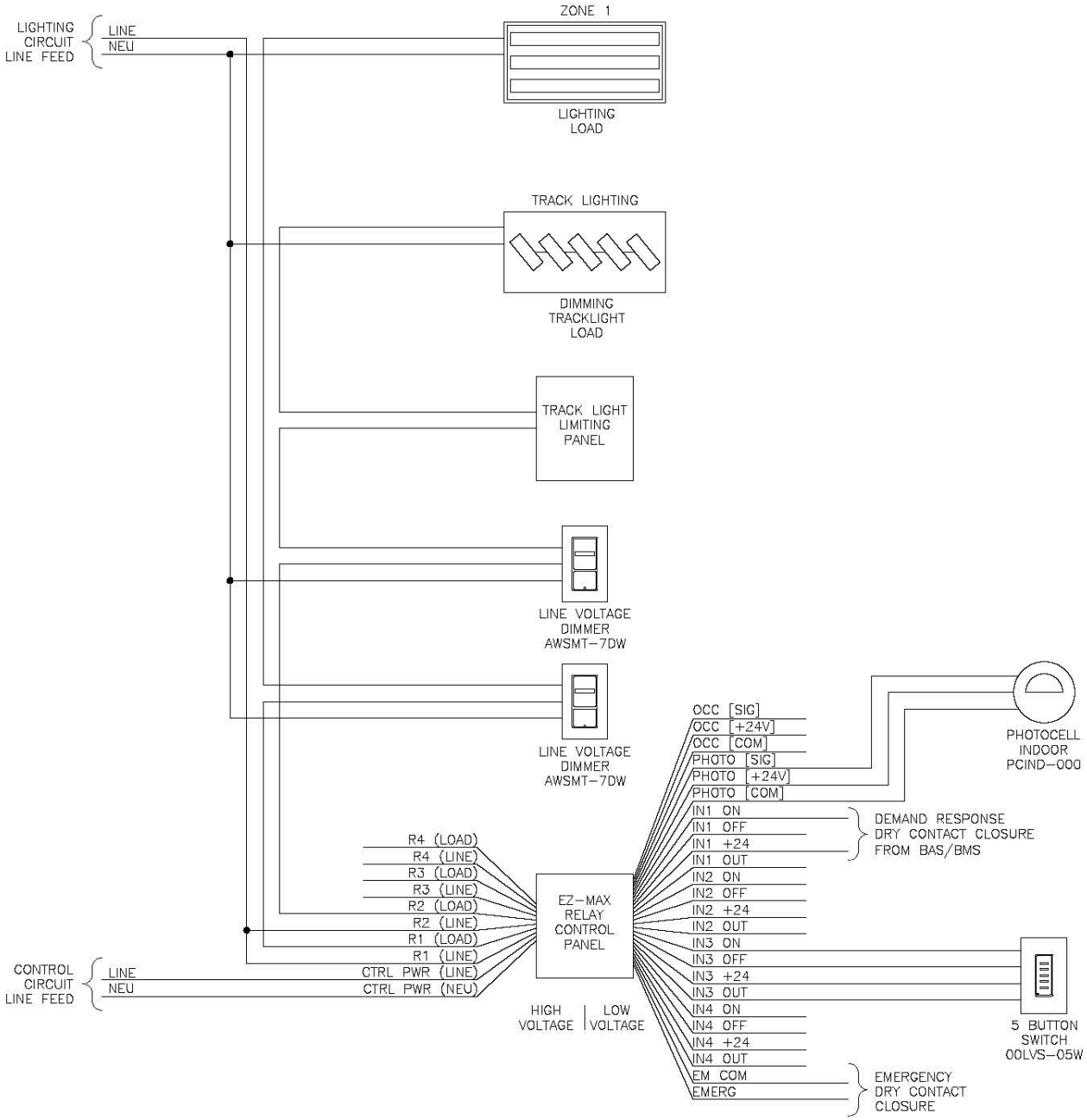


*TYPICAL AT ALL FIXTURES

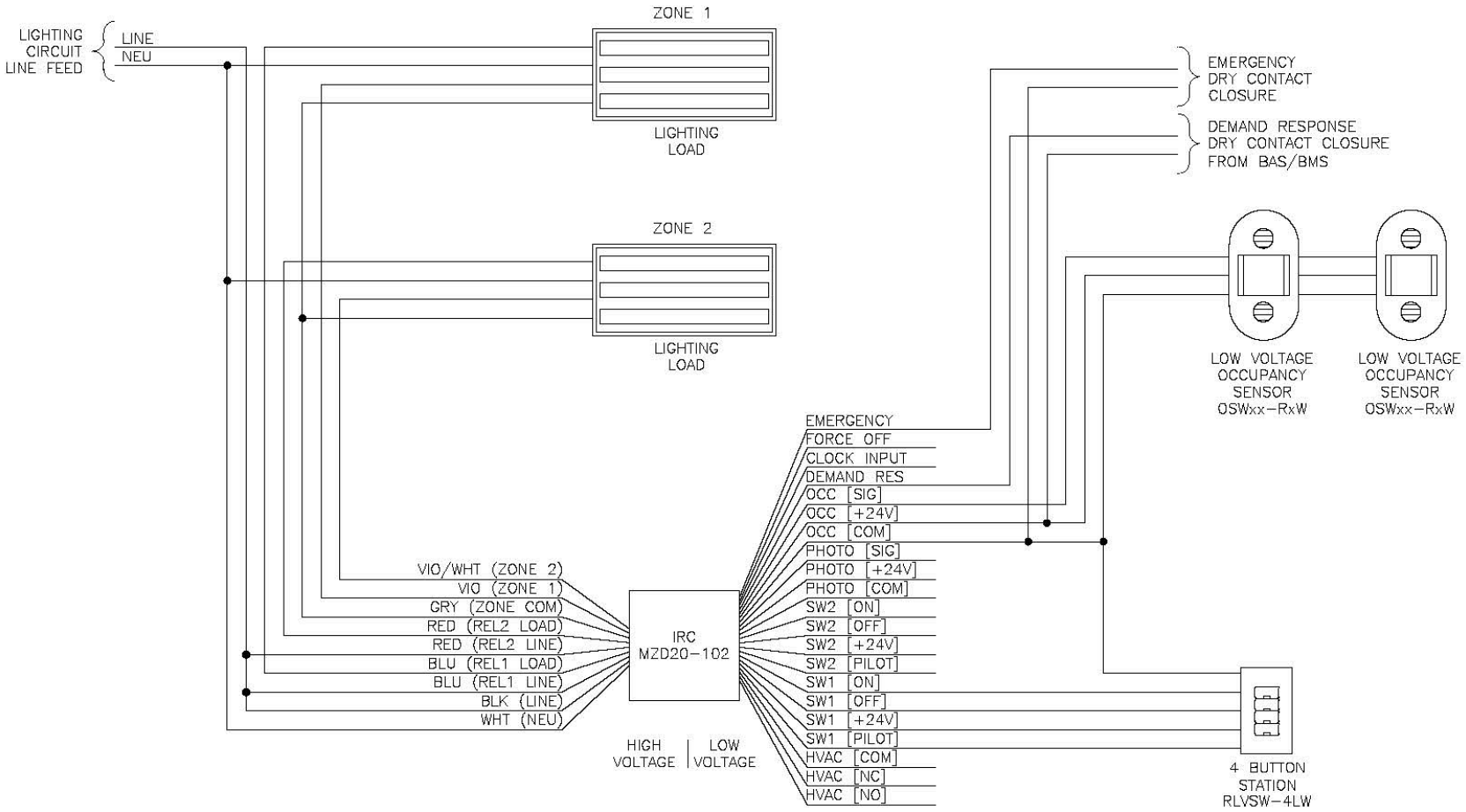
LIBRARY—LEVNET RF



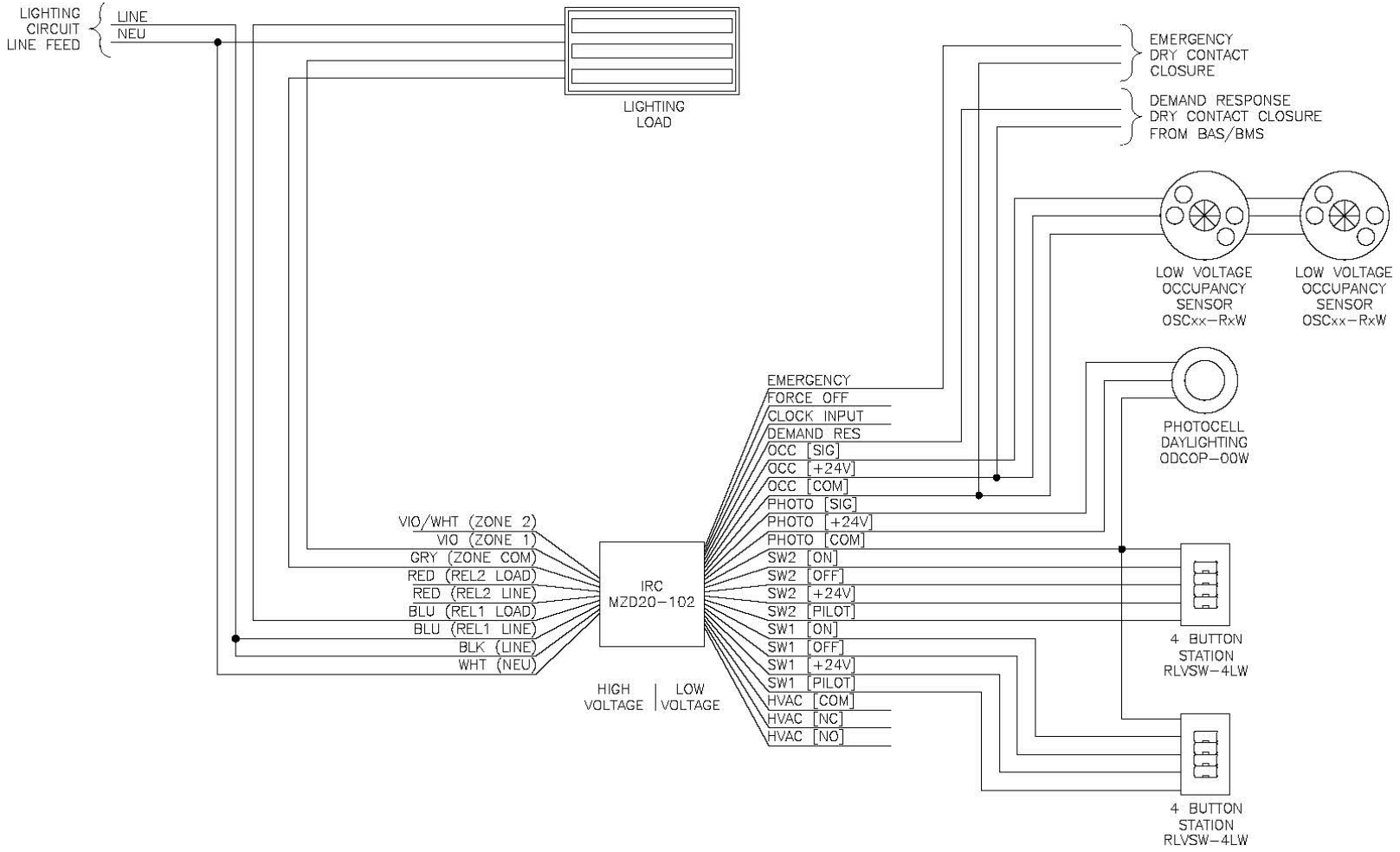
RETAIL SPACE—EZ-MAX PLUS



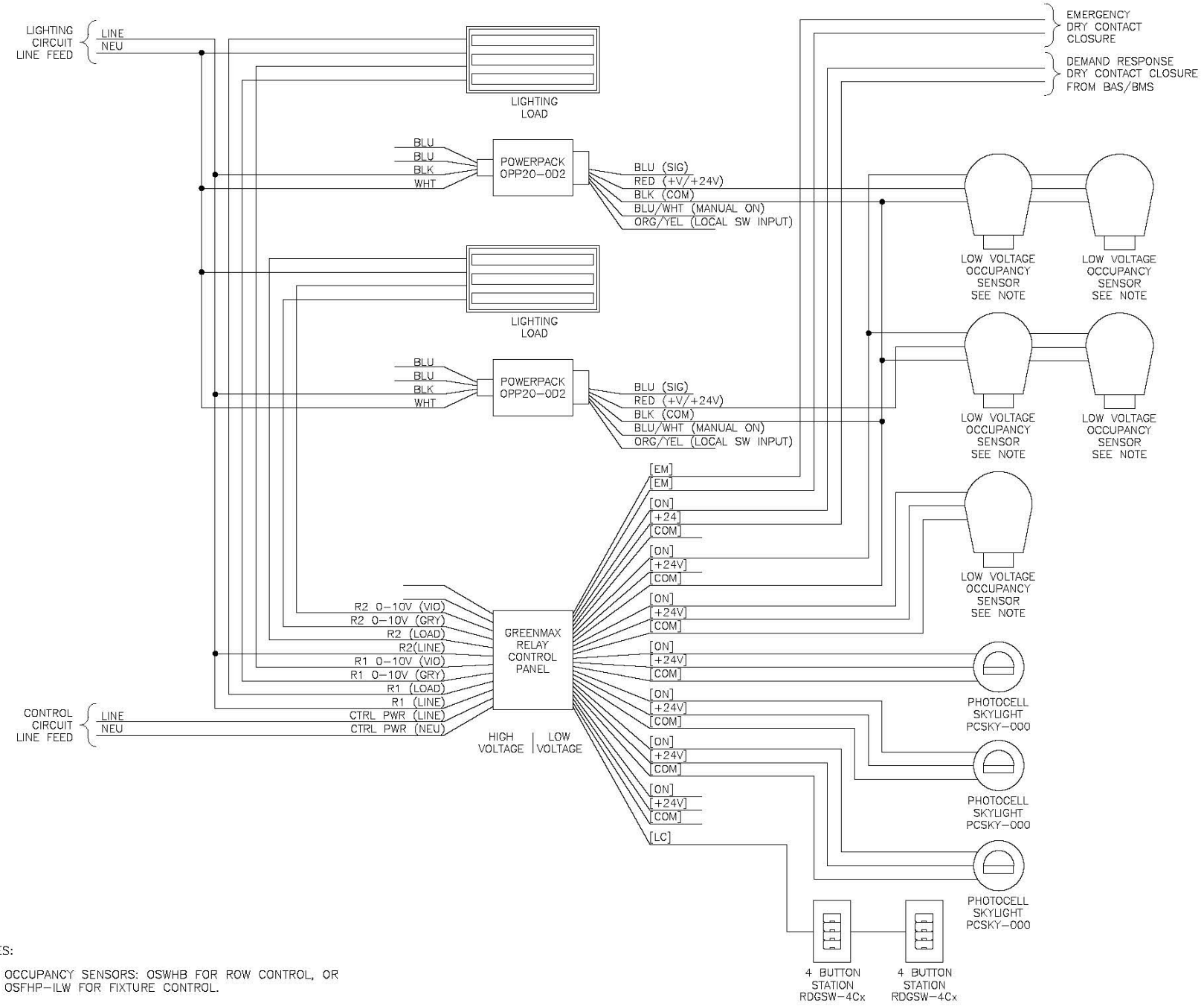
STAIRWELL—IRC



SIDELIT WALKWAY—IRC



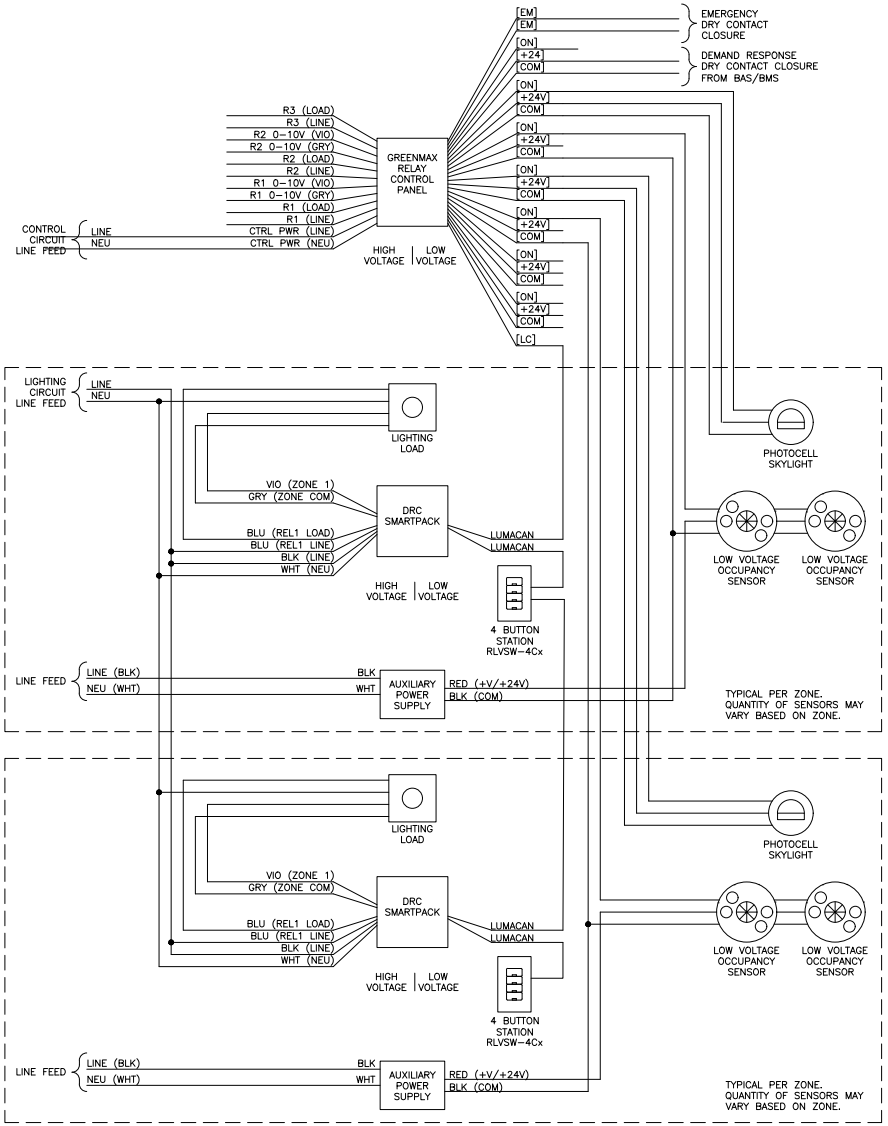
WAREHOUSE—GREENMAX



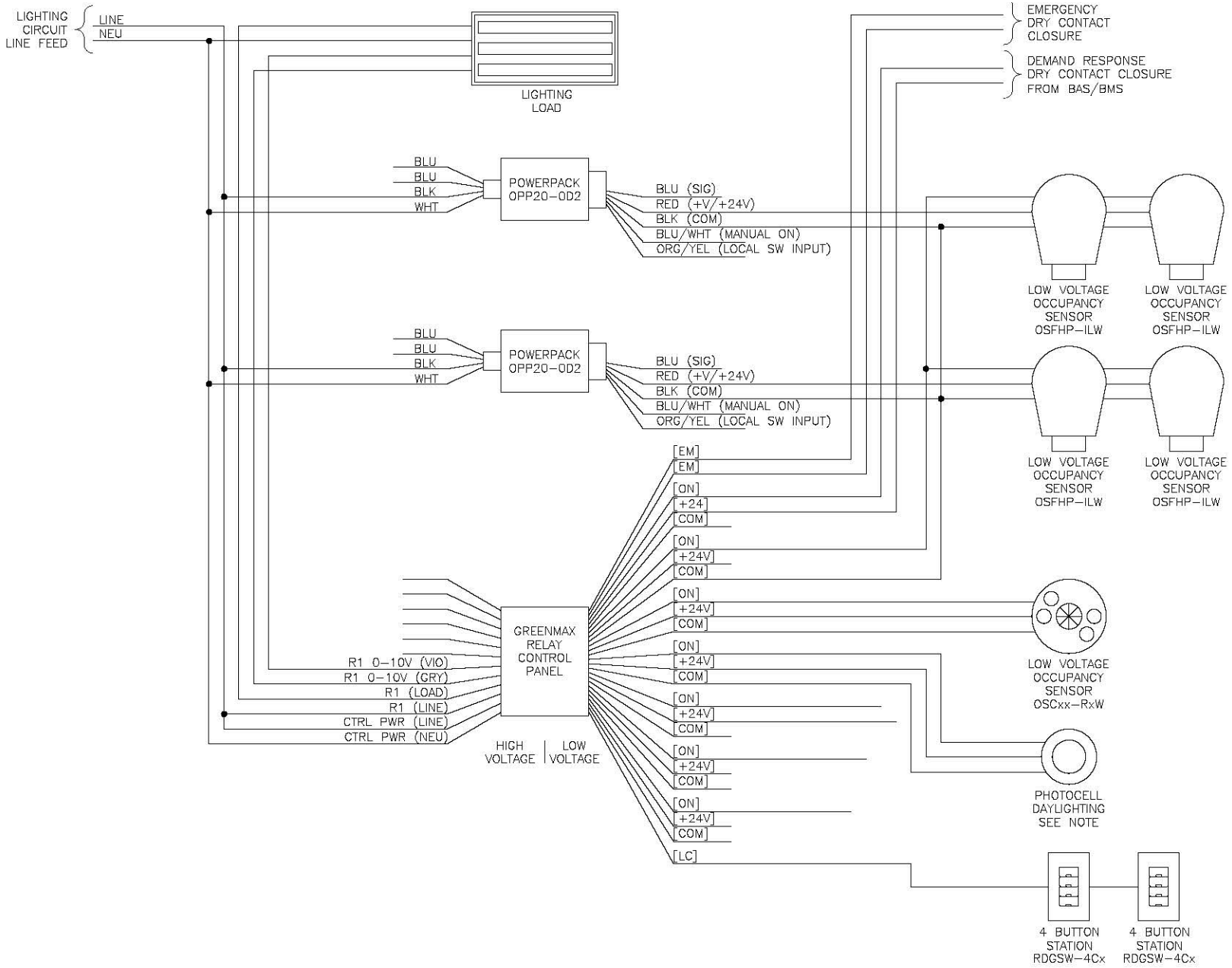
NOTES:

1. OCCUPANCY SENSORS: OSWHB FOR ROW CONTROL, OR OSFHP—ILW FOR FIXTURE CONTROL.

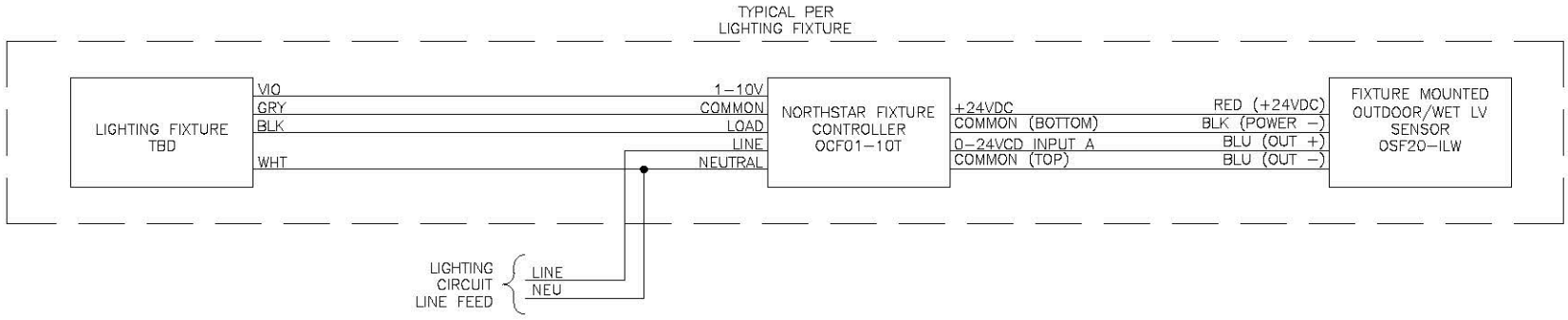
WAREHOUSE—OSF20-ILW/OSFHP-ILW/DRC

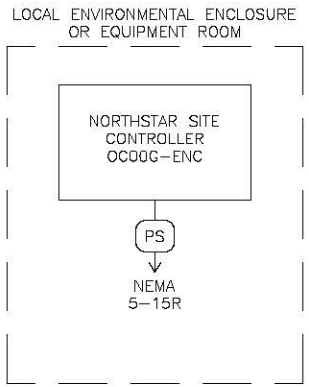


PARKING GARAGE—GREENMAX



PARKING GARAGE—NORTHSTAR

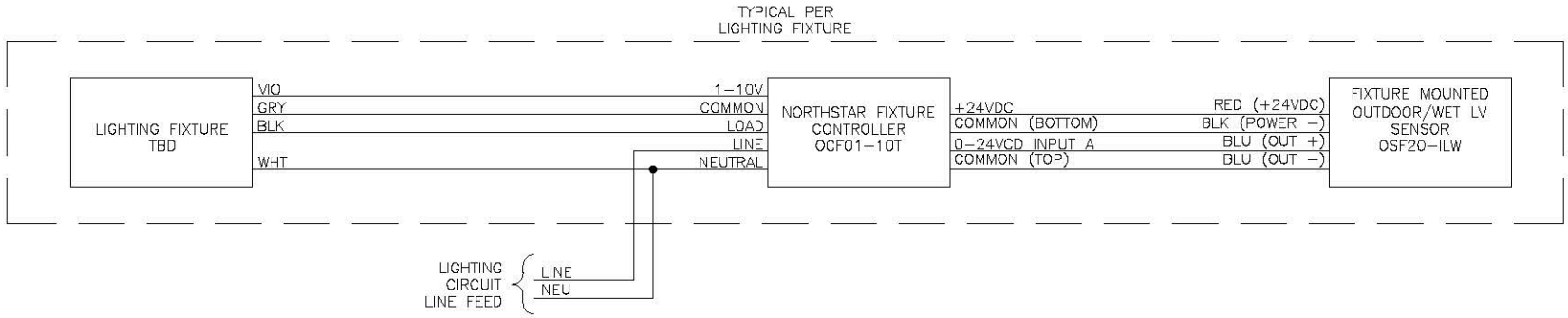


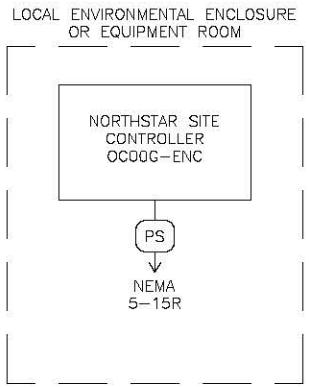


NOTES:

1. REFER TO PRODUCT LABELS AND INSTALL SHEETS FOR TERMINATION DETAILS.
2. ASTERISK (*) DENOTES CABLE WITH REMOVABLE CONNECTOR,
3. LABEL CABLE AT REMOVABLE CONNECTOR WITH CONNECTED DEVICE MODEL NUMBER AS SHOWN ON THESE DRAWINGS.
4. ALL DEVICES MOUNTED TO DISPLAY. LAYOUT TO BE DETERMINED WHEN DISPLAY AND EQUIPMENT READY FOR ASSEMBLY.

SITE LIGHTING—NORTHSTAR





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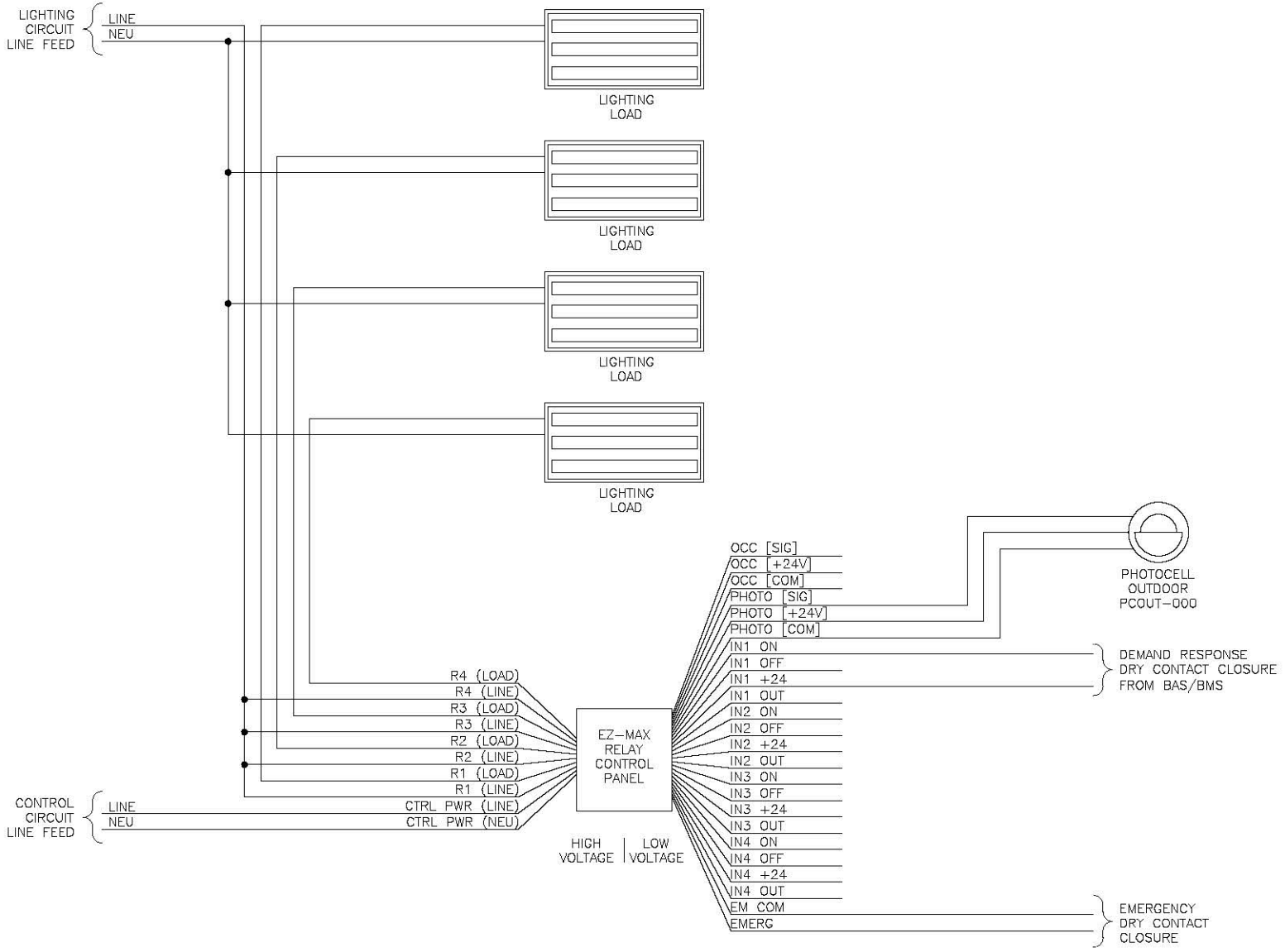
SITE LIGHTING—EZ-MAX PLUS



Leviton Manufacturing Co., Inc. Energy Management, Controls and Automation
20497 SW Teton Avenue, Tualatin, OR 97062 **tel** 800-736-6682 **fax** 503-404-5594 **tech line** (6:00AM-4:00PM PT Mon-Fri) 800-959-6004

Leviton Manufacturing Co., Inc. Global Headquarters
201 North Service Road, Melville, NY 11747-3138 **tel** 800-323-8920 **fax** 800-832-9538 **tech line** (8:30AM-7:00PM ET Mon-Fri) 800-824-3005

Visit our Website at: www.leviton.com/iecc

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