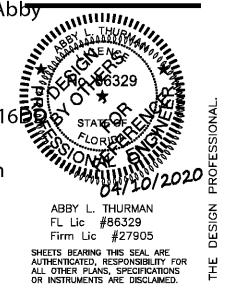


Abby L
Thurman
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O'Reilly AUTO PARTS
CORPORATE OFFICES
233 SOUTH PATTERSON
SPRINGFIELD, MISSOURI 65602
(417) 862-2674 TELEPHONE

PROJECT:
NEW O'REILLY AUTO PARTS STORE
2425 COUNTY HIGHWAY 484
OCALA, FLORIDA

GRIDPOINT EMS

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**O'REILLY PREFERRED
ONE LINE DIAGRAM**

5305 VALLEY PARK DRIVE SUITE # 2 - ROANOKE, VA 24019

GRIDPOINT CONTACT
PLEASE CONTACT GRIDPOINT INSTALLATION
MANAGEMENT @ 888-800-8086 FOR INSTALLATION
CONTACT BASED ON THE STORE LOCATION.
EMAIL: SUPPORT@GRIDPOINT.COM

PRINTS ARE FOR:

DESIGN
 REVIEW
 PERMIT
 BIDDING
 CONSTRUCTION

BY: DC

DATE: 05/23/2019

DESCRIPTION: Rev 4 - Motion Sensor 24VDC

SHEET TITLE: LIGHTING CONTROL AND MOTION SENSOR

FILE NAME: O'REILLY PREFERRED ONE LINE DIAGRAM

DATE: 4/24/2019 DRAWN BY: DAVID COLWELL

SHEET NO:

EM 1.1

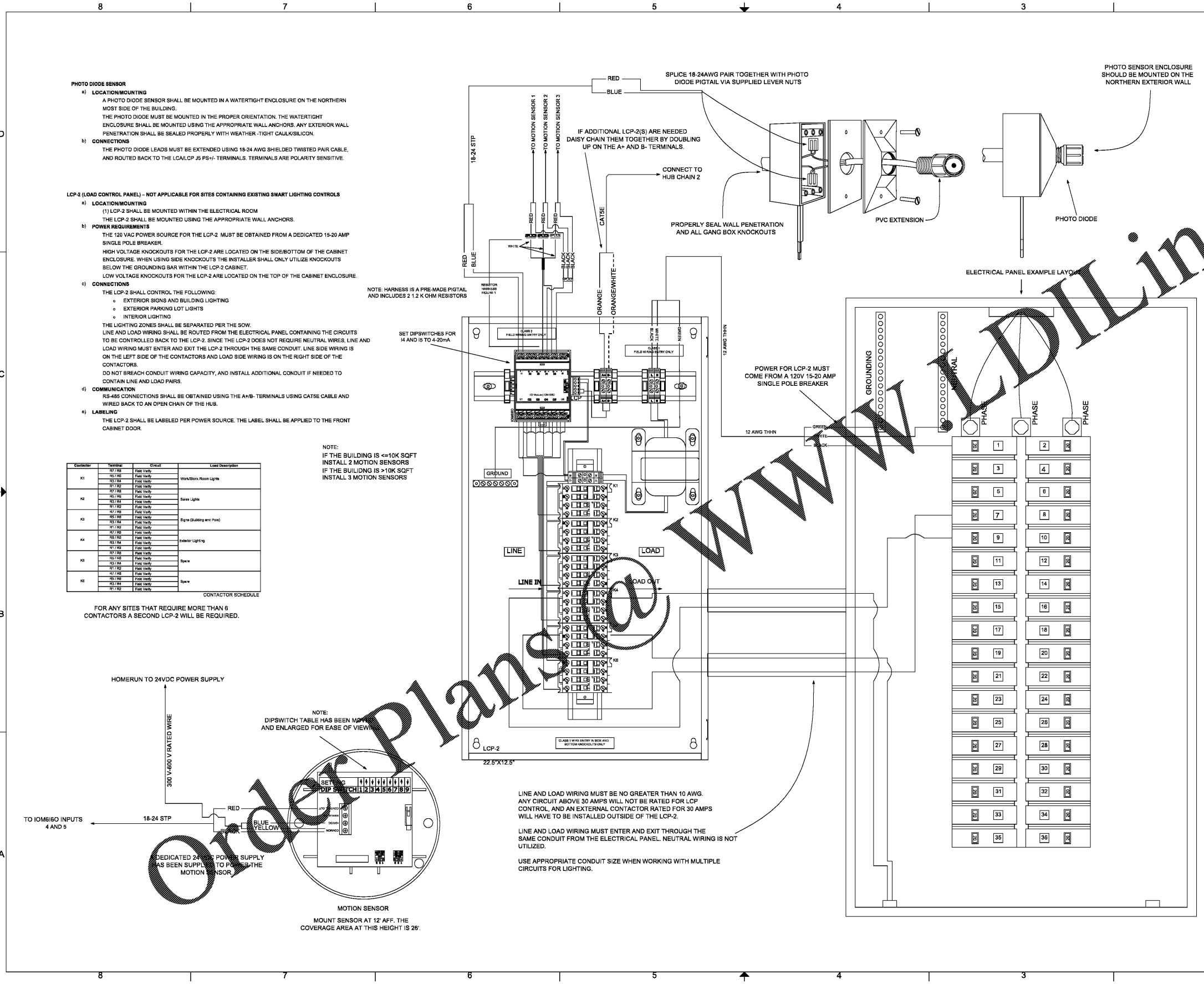


PHOTO DIODE SENSOR
A) LOCATION/MOUNTING
A PHOTO DIODE SENSOR SHALL BE MOUNTED IN A WATERTIGHT ENCLOSURE ON THE NORTHERN MOST SIDE OF THE BUILDING. THE PHOTO DIODE MUST BE MOUNTED IN THE PROPER ORIENTATION. THE WATERTIGHT ENCLOSURE SHALL BE MOUNTED USING THE APPROPRIATE WALL ANCHORS. ANY EXTERIOR WALL PENETRATION SHALL BE SEALED PROPERLY WITH WEATHER-TIGHT CAULK/SILICON.
B) CONNECTIONS
THE PHOTO DIODE LEADS MUST BE EXTENDED USING 18-24 AWG SHIELDED TWISTED PAIR CABLE, AND ROUTED BACK TO THE LCP-2. TERMINALS ARE POLARITY SENSITIVE.

LCP-2 (LOAD CONTROL PANEL) - NOT APPLICABLE FOR SITES CONTAINING EXISTING SMART LIGHTING CONTROLS
A) LOCATION/MOUNTING
(1) LCP-2 SHALL BE MOUNTED WITHIN THE ELECTRICAL ROOM. THE LCP-2 SHALL BE MOUNTED USING THE APPROPRIATE WALL ANCHORS.
B) POWER REQUIREMENTS
THE 120 VAC POWER SOURCE FOR THE LCP-2 MUST BE OBTAINED FROM A DEDICATED 15-20 AMP SINGLE POLE BREAKER. HIGH VOLTAGE KNOCKOUTS FOR THE LCP-2 ARE LOCATED ON THE SIDEBOTTOM OF THE CABINET ENCLOSURE. WHEN USING SIDE KNOCKOUTS THE INSTALLER SHALL ONLY UTILIZE KNOCKOUTS BELOW THE GROUNDING BAR WITHIN THE LCP-2 CABINET. LOW VOLTAGE KNOCKOUTS FOR THE LCP-2 ARE LOCATED ON THE TOP OF THE CABINET ENCLOSURE.
C) CONNECTIONS
THE LCP-2 SHALL CONTROL THE FOLLOWING:
o EXTERIOR SIGNS AND BUILDING LIGHTING
o EXTERIOR PARKING LOT LIGHTS
o INTERIOR LIGHTING
THE LIGHTING ZONES SHALL BE SEPARATED PER THE SOW. LINE AND LOAD WIRING SHALL BE ROUTED FROM THE ELECTRICAL PANEL CONTAINING THE CIRCUITS TO BE CONTROLLED BACK TO THE LCP-2. SINCE THE LCP-2 DOES NOT REQUIRE NEUTRAL WIRES, LINE AND LOAD WIRING MUST ENTER AND EXIT THE LCP-2 THROUGH THE SAME CONDUIT. LINE SIDE WIRING IS ON THE LEFT SIDE OF THE CONTACTORS AND LOAD SIDE WIRING IS ON THE RIGHT SIDE OF THE CONTACTORS. DO NOT BREACH CONDUIT WIRING CAPACITY, AND INSTALL ADDITIONAL CONDUIT IF NEEDED TO CONTAIN LINE AND LOAD PAIRS.
D) COMMUNICATION
RS-485 CONNECTIONS SHALL BE OBTAINED USING THE A+B- TERMINALS USING CAT5E CABLE AND WIRED BACK TO AN OPEN CHAIN OF THE HUB.
E) LABELING
THE LCP-2 SHALL BE LABELED PER POWER SOURCE. THE LABEL SHALL BE APPLIED TO THE FRONT CABINET DOOR.

Contactor	Terminal	Wiring	Load Description
K1	87 T38	Phase Supply	Work/Stock Room Lights
	86 T38	Phase Supply	
	85 T38	Phase Supply	
K2	87 T38	Phase Supply	Sales Lights
	86 T38	Phase Supply	
	85 T38	Phase Supply	
K3	87 T38	Phase Supply	Signs (Building and Pond)
	86 T38	Phase Supply	
	85 T38	Phase Supply	
K4	87 T38	Phase Supply	Exterior Lighting
	86 T38	Phase Supply	
	85 T38	Phase Supply	
K5	87 T38	Phase Supply	Stairs
	86 T38	Phase Supply	
	85 T38	Phase Supply	
K6	87 T38	Phase Supply	Stairs
	86 T38	Phase Supply	
	85 T38	Phase Supply	

FOR ANY SITES THAT REQUIRE MORE THAN 6 CONTACTORS A SECOND LCP-2 WILL BE REQUIRED.

HOMERUN TO 24VDC POWER SUPPLY

300 V-480 V RATED WIRE

TO IOM60 INPUTS 4 AND 5

18-24 STP

RED

BLUE

YELLOW

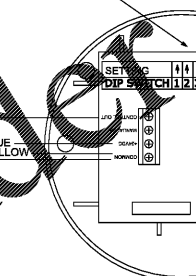
MONITOR

DEDICATED 24VDC POWER SUPPLY HAS BEEN SUPPLIED TO POWER THE MOTION SENSOR

MOTION SENSOR

MOUNT SENSOR AT 12' AFF. THE COVERAGE AREA AT THIS HEIGHT IS 25'

NOTE: DIPSWITCH TABLE HAS BEEN MOVED AND ENLARGED FOR EASE OF VIEW



NOTE: IF THE BUILDING IS <=10K SQFT INSTALL 2 MOTION SENSORS IF THE BUILDING IS >10K SQFT INSTALL 3 MOTION SENSORS

NOTE: HARNESS IS A PRE-MADE PIGTAIL AND INCLUDES 1.2 K OHM RESISTORS

LINE AND LOAD WIRING MUST BE NO GREATER THAN 10 AWG. ANY CIRCUIT ABOVE 30 AMPS WILL NOT BE RATED FOR LCP CONTROL, AND AN EXTERNAL CONTACTOR RATED FOR 30 AMPS WILL HAVE TO BE INSTALLED OUTSIDE OF THE LCP-2.

LINE AND LOAD WIRING MUST ENTER AND EXIT THROUGH THE SAME CONDUIT FROM THE ELECTRICAL PANEL. NEUTRAL WIRING IS NOT UTILIZED.

USE APPROPRIATE CONDUIT SIZE WHEN WORKING WITH MULTIPLE CIRCUITS FOR LIGHTING.

LINE

LOAD

LINE IN

LOAD OUT

GROUND

GROUNDING

PHASE

PHASE

PHASE

PHASE

PHASE

PHASE

PHASE

PHASE

PHASE

PHASE

PHASE

PHASE