Sheetlist Construction Documents

Sheet	Sheet Name
G 001	Cover
EL 200	Demolition
EL 210	Lighting
EL 300	Details and Schedules

Α. General Conditions:

All scheduled numbers and amounts of material and equipment are for contractor's convenience only. Contractor shall count and measure independently for bidding and ordering put 1 lengths and other amounts may be incorrect and owner is not liable for mismatch. Notes applied to single items may apply to all like items on view.

Before bidding contractor shall familiarize with existing conditions, scope of work and means and methods required. Contractor shall inquire about any missing or apparently incompl 3. before bidding.

Entire contract includes all specifications, plan sheets and other documents issued by owner. Bid documents don't intend to detail which subcontractor is responsible for what type of 4. familiar with the entire contract. Division of work is responsibility of contractor. UTILITY CONNECTIONS: where work indicated includes installation of utilities (Gas, Power, Water, Sewer, Phone etc.) provide all the required work that normally is not done by the with Utilities to learn about the Scope of the Utility's work.

Sheet Discipline Organization (not intended to determine responsibility of each trade).

G - General

Β.

- CR Code Review Items H - Hazardous Material
- C Civil Engineering
- A Architectural
- F Furniture
- L Landscaping
- S Structural M - Mechanical
- EP Electrical Power 10
- EL Electrical Lighting 11.
- 12. FP - Fire Protection P - Plumbing
- 13. 14. T - Technology
- 15. Q - Equipment C.
 - Sheet Type 0 - General
 - 1 Exterior (Elevations, 3D)
 - 2 Interior (Horizontal, Sections, Interior Elevations, 3D) 3 - Details
- 4 Schedules
- D. Drawing Conventions
 - To be demolished items are shown in dashed line. Some items necessary for removal may not be shown and removal is part of the contract. Count of devices. lengths, areas and volumes are given for convenience only. Actually required numbers may be different and contractor is responsible to determine the actual need prior bidding. Details will require items that will not be shown for every instance in the model. For example, a shut-off valve may be shown for a specific detail but the plans don't show this valve for every single instance - this valve will be required for each such device.

Lakeview Library Lighting Upgrade

ourposes. All scheduled numbers,	
olete details and specifications	
of work. Any trade shall be	
e Utility. Contractor shall inquire	

PROJECT DESCRIPTION: Α.

В.

D.

- Demolition of all existing lighting fixtures and controls.
- Installation of new lighting fixtures, controls and emergency lighting.
- All required conduit and wiring work
- SPECIAL SITE CONDITIONS:
- 1. Library will have staff working on site. Contractor shall coordinate work areas with staff on site to allow least work disruption of library staff and patrons. Work areas shall be kept clean, neat and safe at all times. Block off work
- areas and complete work in sections to minimize impact on staff and patrons.
- C. WORK HOURS
 - Meet requirements of local ordinances, rules and laws. Hours of operation are limited to 6 a.m. to 5 p.m. Monday through Friday unless approved otherwise.
 - WORK PROVIDED BY OWNER (DON'T INCLUDE IN BID PRICE): 1
 - Fire Alarm Panel requires addition of a relay module to interface with the UL 924 relays. City of Madison will be responsible for replacing the existing panel or modifying it to allow the dry contact. City of Madison also will be responsible for re-programming the panel for the appropriate function. This contractor shall cooperate with the
 - Fire Alarm panel contractor.
- EQUIPMENT PROVIDED BY OWNER (DON'T INCLUDE IN BID PRICE): Ε.
- NA
- F. SPECIAL WARRANTIES:
- NA
- G. PROVISIONS FOR FUTURE WORK
- NA PERMIT REQUIREMENTS: Η.
- Contractor is responsible to obtain permit. See specification section 00 31 46 for details.
- UTILITIES:
- Contractor may use owner's power and water at no cost. CONTINUITY OF SERVICE: J.
- Library will be operational and will require power and lighting in most areas. Outages shall be scheduled with staff on site. Complete outages shall be avoided.
- SEQUENCING REQUIREMENTS: K.
- 1. NA L.
- SUBSTITUTIONS: See specification 01 25 00 for details. 1.
- Μ. ALTERNATES:
- 1. NA



Design prepared for: Madison Library

Lakeview Library Lighting Upgrade

Location: 2845 N Sherman Ave Madison, WI 53704

Contract: 8599 Project: 12410

Lighting Design: Kay Schindel, P.E.

Civil Design: NA

Landscaping Design: NA

Electrical Design: NA

Plumbing Design: NA

HVAC Design: NA

Structural Design:

Fire Protection Design:

Architectural Design: NA

Description

Revisions

Cover



General Abbreviations AFF Above Finished Floor ACT Acoustical Ceiling Tile ADDL AFC Additional Above Finished Counter Above Finished Grade ALUM Aluminum Approved ASC BB Above Suspended Ceiling Baseboard BFF Below Finished Floor BFG BLDG BLW Below Finished Grade Building Below BO BOC Bottom of Bottom of Concrete BOS Bottom of Steel Base Plate CB CBT Catch Basin Ceramic Tile Base Contractor Furnished / Contractor Installed CF/CI CF/OI Contractor Furnished / Owner Installed Corner Guard CG Cast-In-Place CJ Control Joint Center Line CLG CMU Ceiling Concrete Masonry Unit Cleanout Columr CONC CONT Concrete Continuous CORR CPT CSWK CT Corridor Carpet Casework Ceramic Tile CW DEMO DF Cold Water Demolition Drinking Fountain Diameter Door DR Downspout DW Dishwasher Drawing East Expansion Joint Elevatior ELEV Elevator Expanded Polystyrene Board EQ Equal (Distance) Estimate EXP Expand, Expansion Exterior Female Fire Alarm FAB Fabric Floor Drain FEC FHC Fire Extinguisher Cabinet Fire Hose Cabinet Floor FLR Floormat Foundation FND Finished Opening Fire Protection FP Footing Gauge GA GALV GB Galvanized Grab Bar Grade Grout Gypsum Board HB Hose Bib Hollow Core HGT Height Handicapped HM HVAC HW Hollow Metal Heating, Ventilation & Air Conditioning Hot Water Inside Diamete INT Interior urisdiction Having Authority JHA LAV Lavatory Live Load M Male Maimur MFR Manufacturer Minimum MISC Miscellaneous Masonry Opening North Not Applicable NIC NM Not in Contract Nominal NTS No to Scale on center OD OF / Cl Outside Diameter Owner Furnished / Contractor Installe OF / OI OHD Owner Furnished / Owner Installed Over Head Door OPNG OPP Opening Dpposite PERP Perpendicular POLYISC PT PTN Polyisocyanurate Board Paint, Painted Partitio RCP RD Reflected Ceiling Plan Roof Drain REBAR REF Reinforcing Steel Bars Reference REV Revision Rough Opening South Sanitary Stainless Steel SST TEMP Temperature TFF Top of Finsihed Floor TOB Top of Beam op of Concret TOJ TYP Top of Joist Typical Unless Noted Otherwise UNO VIF Verified in Field W West W/O Without Water Closet WD Wood Water Heater Extruded Polystyrene Board XPS





		City of Madison Facilites Management City-County Building, Room 115 210 Martin Luther King Jr. Boulevard Madison, WI 53703
		Madison Library Lakeview Library Lighting Upgrade
		Location: 2845 N Sherman Ave Madison, WI 53704
		Contract: 8599 Project: 12410
		Lighting Design: Kay Schindel, P.E.
		Civil Design: NA
		Landscaping Design: NA
→ → → → → → → → → →	Demolish all lighting fixtures and controls. Not all existing items may be shown. All XTG lighting fixtures and controls that are not required for the final lighting function shall be removed. Remove all unused raceways, boxes, conduit and wiring Where removal of light fixture or control leaves an opening in wall or ceiling, the opeing shall	Electrical Design: NA
	be repaired. Boxes shall receive a cover colored to match surrounding. Holes shall be patched with like material, color and texture.	Plumbing Design: NA
		HVAC Design: NA
		Structural Design: NA
		Fire Protection Design: NA
		Architectural Design: NA
		Revisions
		No. Description
<u>*4</u> 893		
	Keynote Legend	Project North
	ValueKeynote Text1Remove all shelf-mounted light fixtures in entire area.2Remove light fixtures. Keep light grate in place.	
		Demolition
		EL 200

Print Date: 3/5/2021 8:56:03 AM



Key Value	
1	XTG Fire
2	One ligh
3	Configur
4	Locate L
5	Rotate fi
6	Locate fi
	engineer
7	Center fi
	horizonta
8	Provide
0	Pomoto
9	Manual
10	Track lig
11	Install lo
12	Remove
13	Program
14	Override
	Override
15	Power a





Design prepared for: Madison Library

> Lakeview Library Lighting Upgrade

Location: 2845 N Sherman Ave Madison, WI 53704

Contract: 8599 Project: 12410

Lighting Design: Kay Schindel, P.E.

Civil Design: NA

Landscaping Design: NA

Electrical Design:

Plumbing Design:

HVAC Design: NA

Structural Design:

Fire Protection Design:

Architectural Design:

NA

Revisions

Description

Project North

Lighting

EL 210

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Print Date:



2 EL XTG Fire Alarm Panel - Not to Scale

Keynote Legend

 Keynote Text

 re Alarm Panel. Wire from here to the UL 924 relays in the spaces.

 ht fixture shall be controlled by switch only and not by motion sensor.

 ure grid to accomodate new fixtures.

 UL 924 relay indoors in accessible location. Re-wire inside fixture to bypass sensor for emergency lighting.

 fixture 90° if needed to accomodate grid.

 fixtures in even grid pattern. Where obstacles (e.g. diffuser, fire alarm) prevent this, locate fixture at nearest location after consulting with er.

 fixtures in all partitioned rooms. Partitions are lower than ceiling. No "air conduit" will be acceptable. Wire from manual control to ceiling requires tal wiring in short partition wall up to the wall that exceeds the ceiling.

 e manual shut-off control for this zone. Low voltage control is allowed. See "Specification 26 09 23 - Lighting Control Devices" and "Local Lighting Control w/ Remote Secontrol is allowed. See "Specification 26 09 23 - Lighting Control N/ Remote Secontrol w/ Remote Secontrol is allowed. See "Specification 26 09 23 - Lighting Control N/ Remote Secontrol w/ Remote Secontrol is allowed. See "Specification 26 09 23 - Lighting Control N/ Remote Secontrol w/ Remote Secontrol is allowed. See "Specification 26 09 23 - Lighting Control N/ Remote Secontrol w/ Remote Secontrol is allowed. See "Specification 26 09 23 - Lighting Control N/ Remote Secontrol w/ Remote Secontrol is allowed. See "Specification 26 09 23 - Lighting Control Devices" and "Local Lighting Control w/ Remote Secontrol is allowed. See "Specification 26 09 23 - Lighting Control Devices" and "Local Lighting Control w/ Remote Secont Secont

ghting switched separately downstream of motion sensor in lighting zone. See detail "Local Lighting Control w/ Track Light" ockable cover over manual switches and dimmers in public area. See Specification 26 09 23 - Lighting Control Devices. e XTG timer for outdoor light. Control circuits with new programmable timer.

mmabel timer. Low voltage wiring is allowed from timer to the controlled zone.

le fixtures in this zone with programmable timer. See "Specification 26 09 23 - Lighting Control Devices" and "Local Lighting Control w/ Timer le" detail. all emergency lighting fixtures and exit signs from this battery power inverter.

all emergency lighting fixtures and exit signs from this battery power inverter.

Emergency Power Battery Inverters								
Type					Output Rating	In/Out		
Mark	Description	Est. Count	Manufacturer Model	URL	@ 90 Minutes	Voltage	Weight	Specifications
1.5 KVA - 120	Emergency Lighting Battery Inverter	1	Lithonia IISM-1500-120/120-OB1	www.acuitybrands.com	1500 VA	120 V	335.00 lbf	26 52 00 – Safety Lighting

	Lighting Device Schedule							
Туре	Type Est.							
Mark	Description	Count	Model	URL	Specification			
MS	Motion Sensor short Range	12	Sensorswitch CMR-9-ADC-VLP	www.acuitybrands.com	26 09 23 – Lighting Control Devices			
MS DT	Motion Sensor short Range; Microphonic	4	Sensorswitch CMR-9-PDT-ADC-VLP	www.acuitybrands.com	26 09 23 – Lighting Control Devices			
MW	Motion Sensor wide Range	20	Sensorswitch CMR-10-ADC-VLP	www.acuitybrands.com	26 09 23 – Lighting Control Devices			
MW DT	Motion Sensor wide Range; Dual Technology	11	Sensorswitch CMR-PDT-10-ADC-VLP	www.acuitybrands.com	26 09 23 – Lighting Control Devices			
S	Single Pole Switch	5			26 09 23 – Lighting Control Devices			
SD	Switch w/ Dimmer	14	Wattstopper RH4FBL3PW	www.legrand.us	26 09 23 – Lighting Control Devices			
T-4C	Programmable Clock 4-Circuit	1	Intermatic 2800 Series	www.Intermatic.com	26 09 23 - Lighting Control Devices			

	Lighting Fixture Schedule									
					Apparent	Luminous	Color		Lumen	
Type Mark	Description	Est. Count	Model	URL	Load	Flux	Temperature	Efficacy	Maintenance	Specification
22R-2000	Recessed 2x2	8	Lithonia EPANL-2x4-2000LMHE-40K-MIN1-ZT-MVOLT	www.acuitybrands.com	16 VA	1972 lm	4000 K	126 lm/W	L91 @ 60K hours	26 51 00 - Interior Lighting
22R-3400	Recessed 2x2	156	Lithonia EPANL-2x2-3400LMHE-40K-MIN1-ZT-MVOLT	www.acuitybrands.com	27 VA	3399 lm	4000 K	128 lm/W	L91 @ 60K hours	26 51 00 - Interior Lighting
22R-4000	Recessed 2x2	7	Lithonia EPANL-2x2-4000LMHE-40K-MIN1-ZT-MVOLT	www.acuitybrands.com	33 VA	4117 lm	4000 K	125 lm/W	L91 @ 60K hours	26 51 00 - Interior Lighting
24R-4000	Recessed 2x4	3	Lithonia EPANL-2x4-4000LMHE-40K-MIN1-ZT-MVOLT	www.acuitybrands.com	31 VA	4042 lm	4000 K	129 lm/W	L91 @ 60K hours	26 51 00 - Interior Lighting
24R-5400	Recessed 2x4	2	Lithonia EPANL-2x4-5400LMHE-40-MIN1-ZT-MVOLT-MW	www.acuitybrands.com	41 VA	5645 lm	4000 K	139 lm/W	L91 @ 60K hours	26 51 00 - Interior Lighting
EX-AC	AC-powered Exit Fixture	5	Lithonia LQM-S-W-3-R-MVOLT	www.AcuityBrandsLighting.com	1 VA					26 52 00 – Safety Lighting
S2-2000	Striplight 2'	1	Lithonia CLX-L24-2000LM-HEF-RDL-MVOLT-EZ1-40K-80CRI	www.acuitybrands.com	13 VA	1981 lm	4000 K	147 lm/W	L70 @ 100K hours	26 51 00 – Interior Lighting
S4-4000	Striplight 4'	1	Lithonia CLX-L48-4000LM-HEF-RDL-MVOLT-EZ1-40K-80CRI	www.acuitybrands.com	25 VA	3868 lm	4000 K	156 lm/W	L70 @ 100K hours	26 51 00 – Interior Lighting
S8-6000	Striplight 8'	1	Lithonia CLX-L96-6000LM-HEF-RDL-MVOLT-EZ1-40K-80CRI	www.acuitybrands.com	36 VA	5697 lm	4000 K	160 lm/W	L70 @ 100K hours	26 51 00 – Interior Lighting
S8-7600	Striplight 8'	1	Lithonia CLX-L96-8000LM-HEF-RDL-MVOLT-EZ1-40K-80CRI	www.acuitybrands.com	49 VA	7602 lm	4000 K	157 lm/W	L70 @ 100K hours	26 51 00 – Interior Lighting
SR-10-2200-W	Surface Fixture Round; White	4	Lightolier S10R-8-40K-22-W-Z10U	www.signify.com	23 VA	2000 lm	4000 K	86 lm/W	50,000 hours	26 51 00 – Interior Lighting
T-FL-1500	Track Fxiture 38°	6	Juno T272L-G2-40K-90CRI-FL-WH	juno.acuitybrands.com	15 VA	1454 lm	4000 K	100 lm/W	50,000 hours	26 51 00 – Interior Lighting
TRACK	Track compatible with scheduled track fixtures	2								
WP 1100 B	Outdoor Wall Pack Fixture - Bronze	3	RAB BRISK-S11L-PCU	www.rablighting.com	9 VA	1142 lm	5000 K	127 lm/W	L80 @ 60K hours	26 56 00 - Exterior Lighting
		200								





Multiple Suspended Strip Fixtures in a Row

(4) EL Typical Installation Details - Not to Scale









(5) EL Sensor Programming - N



6 EL Lighting Retr



Objective: Emergency light fixtures (indicated by a black dot) and Exit signs will be powered by the Uninterruptible AC Power Supply (UPS). Wiring has to be extended from UPS to all devices. When normal power is present and fire alarm is OFF, lighting will be controlled by lighting control system. Local switches, timers, dimmers and sensors control on/off and dimming. When normal power is not present, the emergency fixtures and exit signs will be powered by the battery for over 90 minutes. These fixtures will be forced on at 100% (no dimming). When fire alarm is active, all emergency light fixtures will be forced on at 100% (no dimming). Contractor shall verify availability of contacts in fire alarm panel and add relay if required. 8 EL Egress Lighting Control w/ UPS and Fire Alarm Integration - Not to Scale

Unistrut suspended

Motion Sensor

Fixtures

TIONS ming v pressing button the number number from the tables below boccupancy time delay). ad function's current setting the delay. at function's current setting the delay. at function of setting (e.g., not setting the delay). as indicated in the particular network setting. STD. OPTIONS UNIT P P ADC 0 0 0 0 1 0 1 0 1 0 1 0	DETAILED FUNCTION TABLES2= Occupancy Time Delay130 sec47.5 min**715.0 min22.5 min535.0 min612.5 min920.0 min3= Dim to Off Time Delay130 sec47.5 min715.0 min130 sec47.5 min715.0 min130 sec47.5 min715.0 min130 sec47.5 min715.0 min612.5 min920.0 min84Test Mode / 100hr Burn-In / Auto Set-Point1Normal*42Run 100 hr Burn-In5Blink back Set-Point2Run 100 hr then Auto-Setpoint3Run 100 hr then Auto-Setpoint4Run 200 hr then Auto-Setpoint3The LED will blink back the ten's digit, then pause, then blink back the one's digit, For a "0" the LED will blink very rapidly. The sequence is repeated 3 times.3Test Mode will disable Minimum On Time, set Occupancy Time Delay to 30 sec, and shorten all photocell transitions and dimming rates. Mode will expire after 10 min or if function 4 is set back to Normal.5=Ten's Digit of Set-Point110 fc4440 fc7220 fc5330 fc6100 fc11 fc44 fc77 fc10 </th <th>8 = Incremental Set-Point Adjustment 1 Decrease 1 fc 2 Increase 1 fc 10 = Minimum On Time 1 0 min 3 30 min 5 60 min 2 15 min* 4 45 min 11 = Photocell Mode P Option: 1 Full On/Off Ctrl* 2 Inhibit Only Ctrl ADC Option: 1 Normal** 2 Dim Only (No Off) 12 = Dual Technology (Microphonics™) 1 Normal* 2 Off 1 Normal* 2 Off 3 Medium 4 Low at 14 = Lamp Information 1 Enable LampMaximizer+* 3 Total Switches / 1000 ⁴ 4 Total Time On (khrs) ⁴ 5 Reset Total Switch and Total Time On Statistics 6 Reset LampMaximizer+ Value 4⁴The LED will blink back a two digit value; the first digit, then pause, then blink back the second digit. For a "0" the LED will blink rapidly. 15 = Dimming Range (High Trim) 1 Off 4 3 Volts 7 6 Volts 10 9 Volts 2 1 Volt 5 4 Volts 8 7 Volts 11 10 Volts* 3 2 Volts 6 5 Volts 9 8 Volts 11 10 Volts</th> <th><section-header></section-header></th>	8 = Incremental Set-Point Adjustment 1 Decrease 1 fc 2 Increase 1 fc 10 = Minimum On Time 1 0 min 3 30 min 5 60 min 2 15 min* 4 45 min 11 = Photocell Mode P Option: 1 Full On/Off Ctrl* 2 Inhibit Only Ctrl ADC Option: 1 Normal** 2 Dim Only (No Off) 12 = Dual Technology (Microphonics™) 1 Normal* 2 Off 1 Normal* 2 Off 3 Medium 4 Low at 14 = Lamp Information 1 Enable LampMaximizer+* 3 Total Switches / 1000 ⁴ 4 Total Time On (khrs) ⁴ 5 Reset Total Switch and Total Time On Statistics 6 Reset LampMaximizer+ Value 4 ⁴ The LED will blink back a two digit value; the first digit, then pause, then blink back the second digit. For a "0" the LED will blink rapidly. 15 = Dimming Range (High Trim) 1 Off 4 3 Volts 7 6 Volts 10 9 Volts 2 1 Volt 5 4 Volts 8 7 Volts 11 10 Volts* 3 2 Volts 6 5 Volts 9 8 Volts 11 10 Volts	<section-header></section-header>
¹ PDT SENSORS ONLY	1 x/1*** 4 x/4* 7 x/7 10 x/10 2 x/2 5 x/5 8 x/8 3 x/3 6 x/6 9 x/9	* DEFAULT SETTING ** SPECIAL DEFAULT SETTING FOR -ADC, -D UNITS *** SPECIAL DEFAULT SETTING FOR CM(R)B 6, CM(R)B 50, CM(R) 6, RM(R) 6, RM(R) 50, SB(R) 6, & SB(R) 50 SERIES UNITS	2845 N Sherman Ave Madison, WI 53704
tions are based on Sensorswitch I any deviation with engineer. ped with VLC programming up. ort#: 1-800-535-2465 engineer prior programming. ogrammed in two ways depe gramming confer with engine	nstructions at the time of design. Amend as required id diff option, a smartphone app can be used. Note that sensors Certain settings may be different from shown above in ce ending on availability of daylight: ser if specific zones require different settings.	ferent sensors are used or if manufacturer changes needs to be initialized and set with a PIN within 45 ertain zones.	Contract: 8599 Project: 12410 Lighting Design: Kay Schindel, P.E.
otion control only: Disable Ph cupancy Delay: 15 Minutes n to Off Delay: 5 Minutes (Fi nming Range shall be 0-10 v ailable (inc. spaces with ove oto Control enabled (do NO sure Normal photocell mode t Auto Set-Point (Function # iltiple times) lay and dimming range option nlight discount factor (Funct all functions shall be read ou	 Iotocell (Function #5 - Setting 8) (Function #2 - Setting 7) unction #3 - Setting 3) Volt (Function #15 - Setting 11; Function #16 - Setting 1) rhead doors, skylights, windows) T disable Photocell under function 5) is activated (Function #11 - Setting 1) 4 - Setting 4) and step away from sensor while it calibrate ons same as above. ion #7) and incremental set point (Function #8) may have fut to verify proper control. Adjust as required for intended f 	es day and artificial light (will turn lights on and off to be adjusted. function. Discuss problems with engineer.	Civil Design: NA Landscaping Design: NA
lot to Scale New installation must match equipment and layout. Existing switches may be rea	the drawn layout including circuit numbers, lighting control	l and type of mounting regardless of existing	Electrical Design: NA
Adjust and repair existing before Aount fixtures in same heigh Adjust and repair existing cei ceiling tiles (provided by own All openings caused by remo natch surroundings. Aaintain all fire ratings while	t as original fixtures unless noted otherwise. Coordinate ex ling grid. Provide ceiling grid runners as needed to install r ler) in remaining openings. aval of existing fixtures or other electrical equipment shall b penetrating plenums, walls or ceilings. Provide sleeves if	exact location and height with engineer. new fixtures in existing grid. Install new be patched with like material and painted to necessary to provide existing or specified fire	Plumbing Design: NA
ating. Remove and properly dispos nstall all wiring inside ceiling surface mounted wiring with n finished spaces, surface m conduit shall be 3/4" or large ated.	e of all abandoned material, equipment and cable. and wall. If wiring can not be fished through, provide surfa approval by owner. iounted raceway or conduit shall be painted to match surro . Turns between access boxes should not be more than 27	ace mounted raceway and/or conduit in oundings finishing in finished spaces. All 70°. All low voltage cable shall be plenum	HVAC Design: NA
revent and dust pollutin urniture as needed. rofit - Not to Scale	g occupied areas and take special care write working in or		Structural Design: NA
Motion Sensor	Light Fixt	tures	Fire Protection Design: NA

Optional Room Switch and/or Dimmer upstream of Sensors

0-10V Control for Dimming

Architectural Design:

Revisions

Project North

Details and

Schedules

EL 300

3/5/2021 8:56:05 AM

Print Date:

Description

NΔ

Motion Sensor w/ Switch

а.

a.

b.

C.

Each room lighting device or fixture shows a switch leg (SL) that dedicates a lighting zone. Motion Sensors turns on light upon occupancy and turn off light upon vacancy.

Upon detection of motion or upon energizing the sensor will turn on lights at full brightness. After a set time of no detection of motion, sensor will dim lights down to 0% over a set period of time and turn them off after.

Motion sensor is downstream of local switch and will be de-energized when switch is off: a. Light will be on upon activation of local switch regardless of actual motion detection (sensor is ON upon power-up)

Sensors will not click when local switch is off (nuisance avoidance in quiet rooms)

Where daylight is present, sensors dim or turn off lights based on natural lighting levels.

Where switches are shown, occupants have the ability to turn off lights. Where dimmers are shown, occupants have the ability to dim lights in addition to dimming control by sensor.

Notes on plans or switchleg naming will indicate exceptions. For example:

Disable Switchleg: A dimmer will only dim the lighting level to the allowable minimum. The line voltage switch in the dimmer will not be used. This prevents lights turning off entirely. Hallways are an example. One light fixture shall be controlled by switch only: Switchleg parameters indicate that some lights are controlled by switch and

sensor, and some lights by switch only. This prevents the latter lights from turning off upon loss of motion detection. Electrical or mechanical rooms are examples.

Non-dimmable fixtures (e.g. can lights) in a zone with dimmable fixtures: 0-10V control wiring only extends to the dimmable

fixtures. The non-dimmable fixtures will not dim. H. Coordinate controls with engineer before installation.

7 EL Local Lighting Control - Not to Scale



Contact for Fire Alarm Integration