## Fire Station 2 Lighting Retrofit (Bid Set)

	Sheetlist
Sheet Number	Sheet Name
G 01	Cover
EL 001	General Lighting
EL 200	Demolition
EL 210	Lighting
EL 220	Lighting
EL 300	Details and Schedules

lengths and other amounts may be incorrect and owner is not liable for mismatch.

familiar with the entire contract. Division of work is responsibility of contractor.

Notes applied to single items may apply to all like items on view.

with Utilities to learn about the Scope of the Utility's work.

valve will be required for each such device.

Drawing Conventions

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 purposes. All scheduled numbers,

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

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 Utility. Contractor shall inquire

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

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 work. Any trade shall be

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.

To be demolished items are shown in dashed line and/or colored. Some items necessary for removal may not be shown and removal is part of the contract.

- PROJECT DESCRIPTION:
  - SPECIAL SITE CONDITIONS:
- C. WORK HOURS

- L. ALTERNATES:

Ċ.	WORK HOURS						
	<ol> <li>Meet requirements of local ordinances, rules and laws.</li> </ol>						
	2. Hours of operation are limited to 7 a.m. to 7 p.m. Monday through Saturday and Sunday 10 a.m. through 7 p.m.						
	unless approved otherwise.						
D.	WORK AND EQUIPMENT PROVIDED BY OWNER (DON'T INCLUDE IN BID PRICE):						
	1. Owner will provide Fire Alarm panel programming.						
	2. Owner will provide dry-contact in FA panel.						
E.	SPECIAL WARRANTIES:						
	1. NA						
F.	PROVISIONS FOR FUTURE WORK						
	1. NA						
G.	PROVISIONS FOR RETROFIT INSTALLATIONS						
	1. NA						
H.	PERMIT REQUIREMENTS:						
	<ol> <li>Contractor is responsible to obtain all permits. See specifications for details.</li> </ol>						
I.	UTILITIES:						
	<ol> <li>Contractor may use owner's power and water at no cost.</li> </ol>						
J.	CONTINUITY OF SERVICE:						
	1. NA						
K.	SEQUENCING REQUIREMENTS:						
	E. F. G. H. I.						

Fire Station 2 Contract: 9322

Designed by: City of Madison Facilites Management City-County Building, Room 115 Madison Fire Department

Lighting Retrofit (Bid Set)

421 Grand Canyon Dr. Madison, WI 53719

	Center Line
	Ceiling
	Concrete Masonry Unit
	Cleanout
	Column
_	Concrete
Γ ર	Continuous Corridor
`	Carpet
<	Casework
	Ceramic Tile
_	Cold Water
)	Demolition  Dripking Fountain
	Drinking Fountain Diameter
	Door
	Downspout
	Dishwasher
;	Drawing
	East Each
	Expansion Joint
	Elevation
	Elevator
	Expanded Polystyrene Board  Equal (Distance)
	Estimated
	Expand, Expansion
	Exterior Female
	Fire Alarm
	Fabric
	Floor Drain
	Fire Extinguisher Cabinet Fire Hose Cabinet
	Floor
	Floormat
	Foundation
	Finished Opening
	Fire Protection Footing
	Gauge
/	Galvanized
	Grab Bar
	Grade Grout
,	Gypsum Board
	Hose Bib
	Hollow Core
	Height Handicapped
	Hollow Metal
	Heating, Ventilation & Air Conditioning
	Hot Water Inside Diameter
	Interior
	Jurisdiction Having Authority
	Lavatory
	Live Load
	Male Maimum
	Manufacturer
	Minimum
;	Miscellaneous  Masonry Opening
	North
	Not Applicable
	Not in Contract
	Nominal  No to Scale
	on center
	Outside Diameter
OI.	Owner Furnished / Contractor Installed
<u>Л</u>	Owner Furnished / Owner Installed Over Head Door
3	Opening
	Opposite
50	Perpendicular Polyisocyanurate Board
50	Paint, Painted
	Partition
	Reflected Ceiling Plan
R	Roof Drain Reinforcing Steel Bars
	Reference
	Revision
	Rough Opening
	South Sanitary
	Stainless Steel
)	Temperature
	Top of Finsihed Floor Top of
	Top of Beam
	Top of Concrete
	Top of Joist
	Typical Unless Noted Otherwise
	Unless Noted Otherwise  Verified in Field
	West
	With
	Without Water Closet
	Wood
	Water Heater
	Water Heater Extruded Polystyrene Board
	Water Heater
	Water Heater Extruded Polystyrene Board
	Water Heater Extruded Polystyrene Board

General Abbreviations

Acoustical Ceiling Tile Additional
Above Finished Counter Above Finished Grade

Below Finished Floor Below Finished Grade Building Below

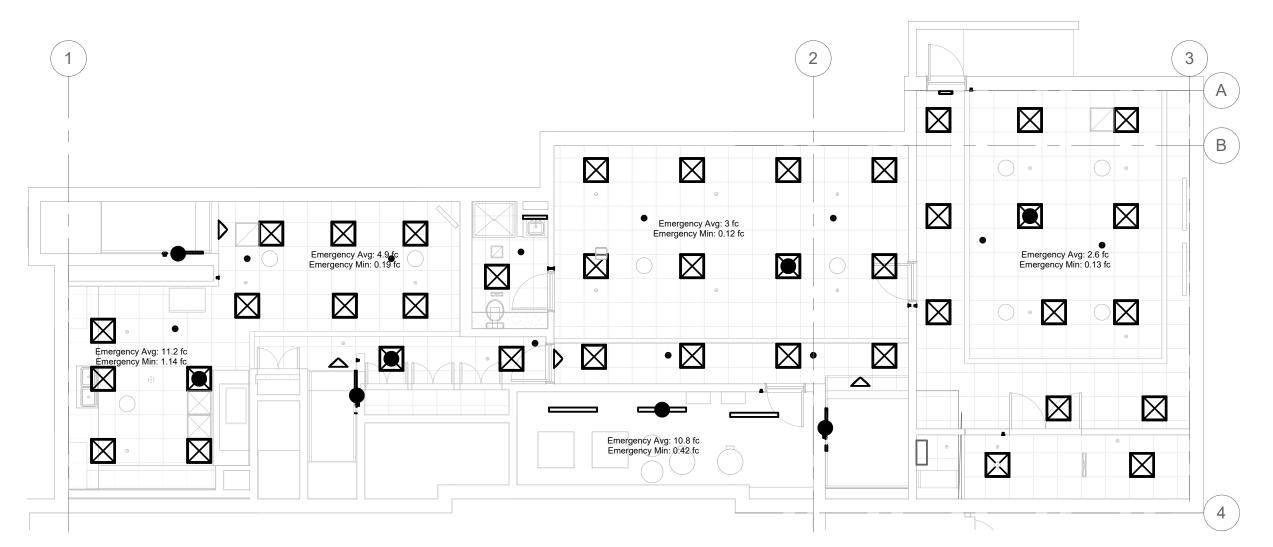
Bottom of Concrete
Bottom of Steel
Base Plate
Catch Basin
Ceramic Tile Base
Center Elevation

Contractor Furnished / Contractor Installed Contractor Furnished / Owner Installed

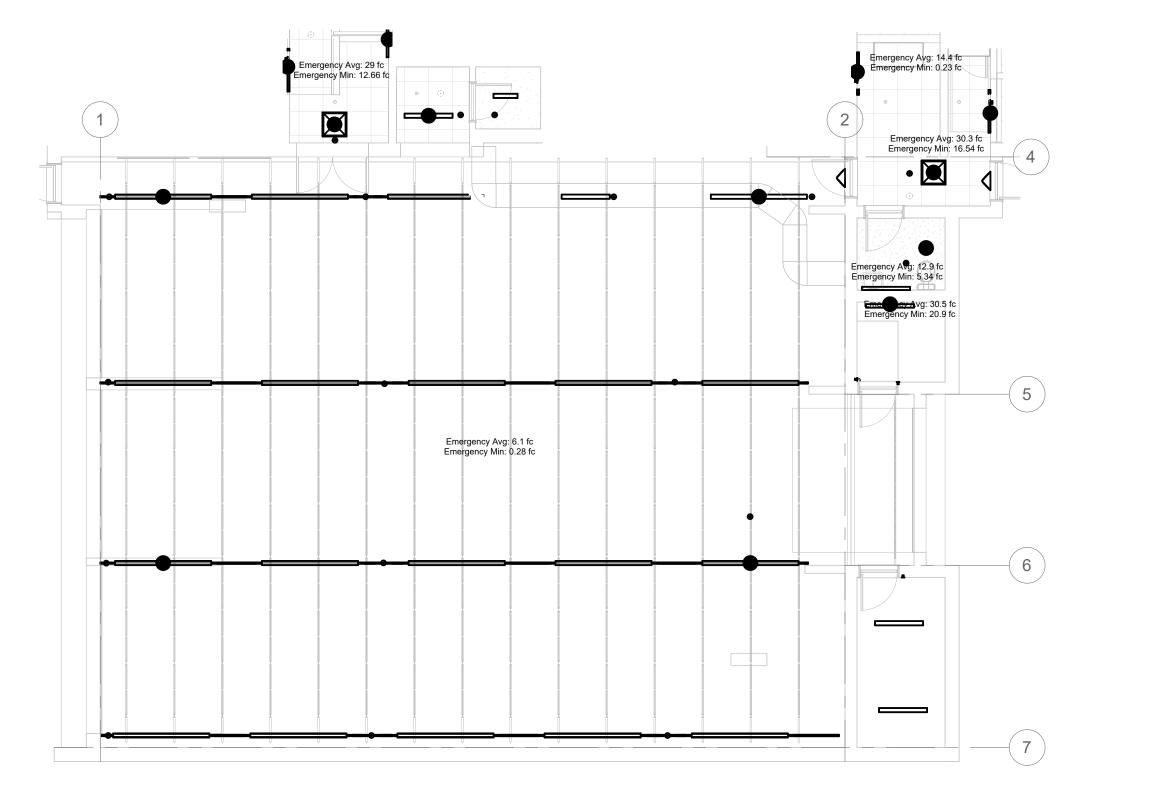
Cover

G 01

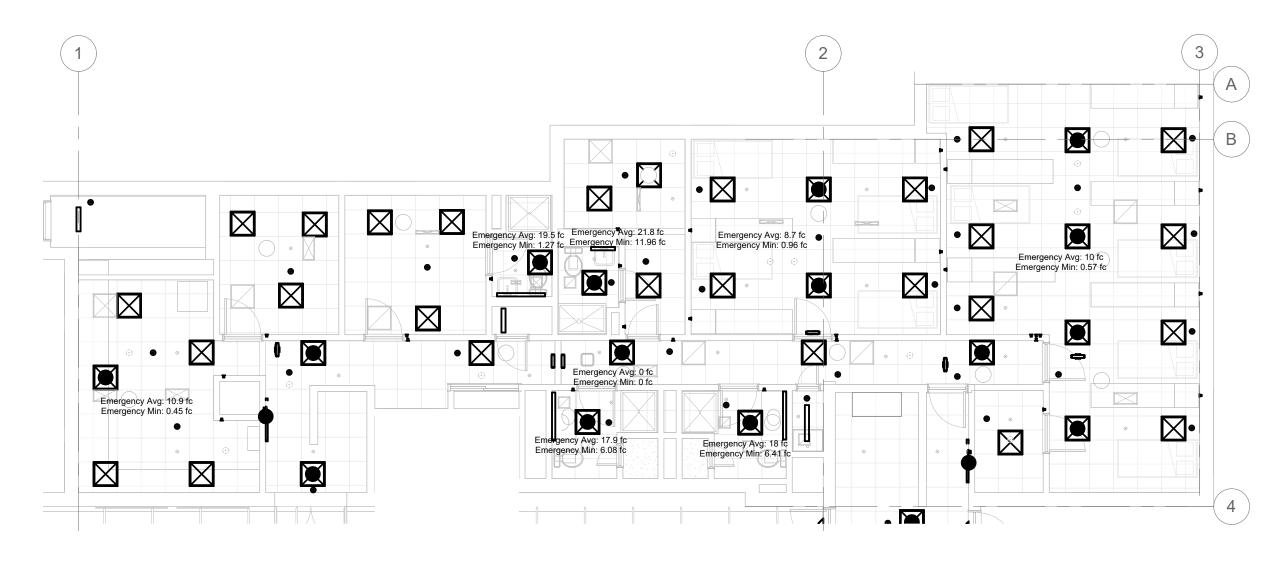
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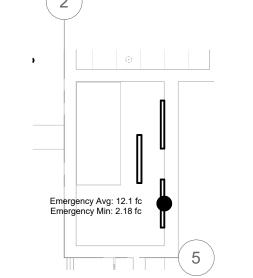
(1) EL Egress - Level 0 - Basement 1/8" = 1'-0"



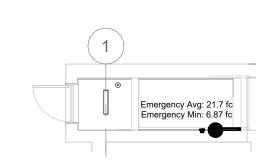
(2) EL Egress - Level 1 - Garage 1/8" = 1'-0"



(3) EL Egress - Level 2 - 2nd Floor 1/8" = 1'-0"



4 EL Egress - Level 3 - AHU 1/8" = 1'-0"



(5) EL Egress - Level 1 - Kitchen Exit 1/8" = 1'-0"

Emergency Lighting Load Oormitory Corridor Garage Dining Gym Bathroom Dormitory Dormitory P-2x2-2.0K Corridor P-2x2-2.0K P-2x2-2.0K P-2x2-2.0K P-2x2-4.0K P-2x2-4.0K S-4-4.0K S-4-5.0K Mechanical Storage Garage AHU Garage Garage S-8-8.0K S-8-8.0K S-8-8.0K SS-12-1.5K WW-4-2K Bathroom Stair West WW-4-2K Stair West WW-4-2K Stair East Down

A.	Demo	plition:
	1.	Demolish all existing lighting fixtures and controls. This includes all items not needed for new installation to function. This
		includes, but is not limited to, emergency, exit, track, architectural and spot lights, switches, sensors, inverters, batteries and
		control panels. Demolition drawings may not show all existing items.

IECC 2015 Lighting Levels

Fitness Exercise Area Lounge / Breakroon Storage

Electrical / Mechanica

Warehouse - small Items hand-carried

Emergency Vehicle Garage Restroom - otherwise

Varehouse - small Items hand-carried

Electrical / Mechanical

Office - enclosed

Office - enclosed Dormitory - Living Quarters Restroom - otherwise

Dormitory - Living Quarters

Storage

Storage Corridor Stair West

plane Avgerage Average Illumination Power Density

0.89 W/ft<sup>2</sup>

Remove all unused raceways, boxes, conduit and wiring Patch wall, ceiling and other surfaces damaged by removal of XTG elements. Use adjacent surface matching cover for electrical boxes that remain.

B. Installation:

Install new raceways, boxes, conduit and wiring as required for new lighting fixtures and controls. Locations shown are approximate only. Install as required to coordinate with tile patterns, architectural features, sprinklers, mechanical equipment and other obstacles. Center Fixtures and provide even grid wherever possible. Review deviations from plan with designer prior installation.

Install fixtures at indicated height. Provide required suspension. A noted height typically applies to all fixtures in a space, even if only a single fixture has an indicated height shown. If no height is given, ceiling surface mounting or mounting at bottom of fixture can be assumed. Installation in between trusses or beams also is an option. Consult with engineer before determining mounting height.

Surface wiring raceway in finished areas is only allowed where the structure does not allow installation inside ceiling or wall. Raceway shall be neatly routed and hidden in corners to the greatest extend possible. In finished spaces use surface wire molding instead of conduit. Wiremold shall be factory painted to match wall surface. Where matching factory paint is not available, use field-painting. Support all lighting fixtures adequately and provide all extra support.

All conduit except at fixture entrance shall be 3/4" or larger. Turns between access boxes should not be more than 270°. Grid Ceilings:

a. use flexible metal conduit from a J-box in enough length to allow lifting and 2 lateral move of fixture Move flexible head sprinklers where required for even layout pattern.

Suspended Strip Light Fixtures: use rigid type hangers every 4' or less. Mount multiple fixtures in a row on a uni-strut structure. Cord & Plug Fixtures: Mount on hook for easy replacement and install safety wire. Provide plug within reach of fixture 10. In rooms with obstruction (e.g. equipment, pipes, and ducts in mechanical and electrical rooms) mount the fixtures below obstruction and as high as practical to allow good light distribution without limiting access to obstructing equipment. Consult

C. Retrofit Installation: Maintain all fire ratings while penetrating plenums, walls or ceilings.

with designer before installation.

Install all wiring inside ceiling and wall. If wiring cannot be fished through, provide surface mounted conduit or wire molding in finished spaces.

Modify Grid Ceiling to accommodate new fixtures. Fill in openings with new tiles of existing type. Contractor shall provide tiles and grid elements. Review Special site conditions for information on type of tile. Where sprinkler, diffuser or other permanent obstruction prevents even layout, relocate after consultation with engineer.

Relocate wired devices (WiFi access points, speakers, signs) as required to allow new fixture layout. Relocate Fire Alarm devices up to 3'. Consult with designer before re-location.

Prevent dirt and dust polluting occupied areas and take special care while working in occupied areas and cover equipment and

Canopy: Provide retrofit version of fixtures and/or all retrofit accessories for installing over existing fixture locations. Ensure existing opening is fully covered. Build cover matching surrounding surface.

Locate sensors to enable good detection within controlled zone and in between partitions. In enclosed rooms minimize

Lighting zones are indicated by wire annotations and/or switchleg (SL) numbering. Wire annotations are schematic only to indicate control relationships and don't necessarily equal actually required physical wire runs. Lighting zones can be shown by proximity of sensor and light fixture without wire or switchleg annotation (for example, garage lighting where each fixture has one sensor). In a room with only one sensor (and dimmer/switch), it is assumed all fixtures are controlled by that sensor (and dimmer/switch) even if no wires or switchlegs are indicated. Unless noted otherwise assume the standard lighting control zone

Spaces with electrical panels shall have at least one light be controlled by a manual switch only (no automatic control) per

Fixture-mounted sensors shall be installed to allow 360° detection and bottom of sensor lens shall be at or below bottom of

Size analog 0-10V wiring to limit voltage drop. At 100% position the light fixture shall be 100% bright.

E. Emergency Lighting:

Light fixtures with a black dot indicate emergency lights. Control fixtures from central inverter or generator. Provide all wiring to emergency power source.

Re-wire fixture internals if fixture has integrated sensor or other lighting control. Install UL 924 relay in accessible location near controlled fixture. Verify location with engineer. a. Drywall Ceiling: if no easily accessible location is available, install relay above grid ceiling in adjacent area

Outdoor fixtures: Install relay inside above a grid ceiling or other accessible location Retrofit of XTG fixtures: Re-arrange wiring and existing control to allow emergency fixture operation like for new fixtures. Note

that schedules that show number of relays required only account for relays of NEW fixtures.

Madison, WI 53703

| Density | Allowed | Actual | Street | Compared to | Lighting | Lighting | Load | E | Code | Load | Load | Load | E | Code | Load | Load

Contributing to Total

0.02 VA/ft² 0.01 VA/ft²

Designed by: City of Madison Facilites Management
City-County Building, Room 115

Madison Fire Department

Fire Station 2 Lighting Retrofit (Bid Set)

Location: 421 Grand Canyon Dr. Madison, WI 53719

Contract: 9322 Project: 14530

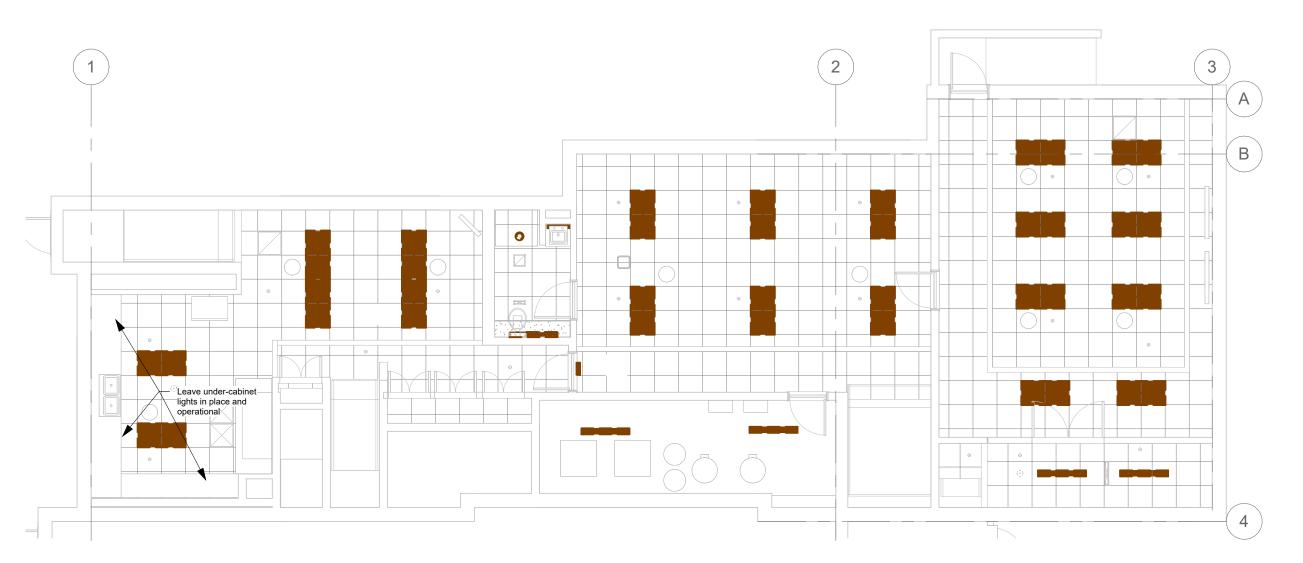
Revisions

Description

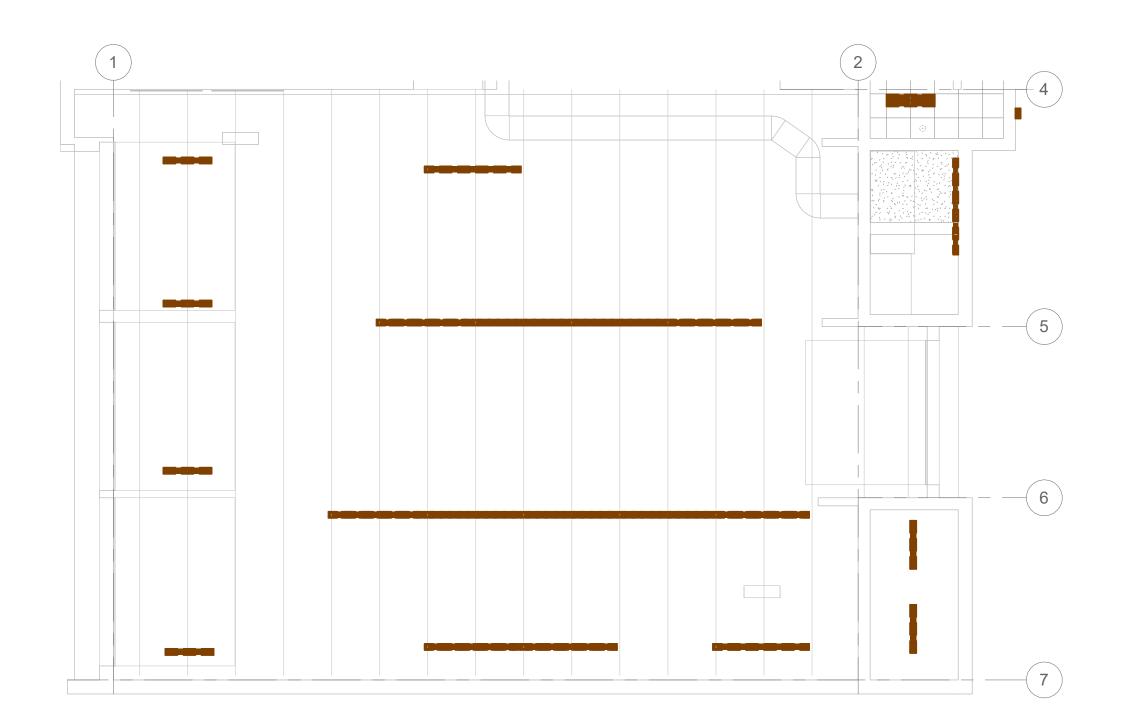
General Lighting

EL 001

Print Date: 7/25/2023 17:41:22 Print in color on 24" x 36"



## 1 ED - Level 0 - Basement 1/8" = 1'-0"



## 2 ED - Level 1 - Garage 1/8" = 1'-0"



3 ED - Level 2 - 2nd Floor 1/8" = 1'-0"

Designed by:
City of Madison
Facilites Management
City-County Building, Room 115
210 Martin Luther King Jr. Boulevard
Madison, WI 53703

Client: Madison Fire Department

> Fire Station 2 Lighting Retrofit (Bid Set)

Location: 421 Grand Canyon Dr. Madison, WI 53719

Contract: 9322 Project: 14530

Revisions

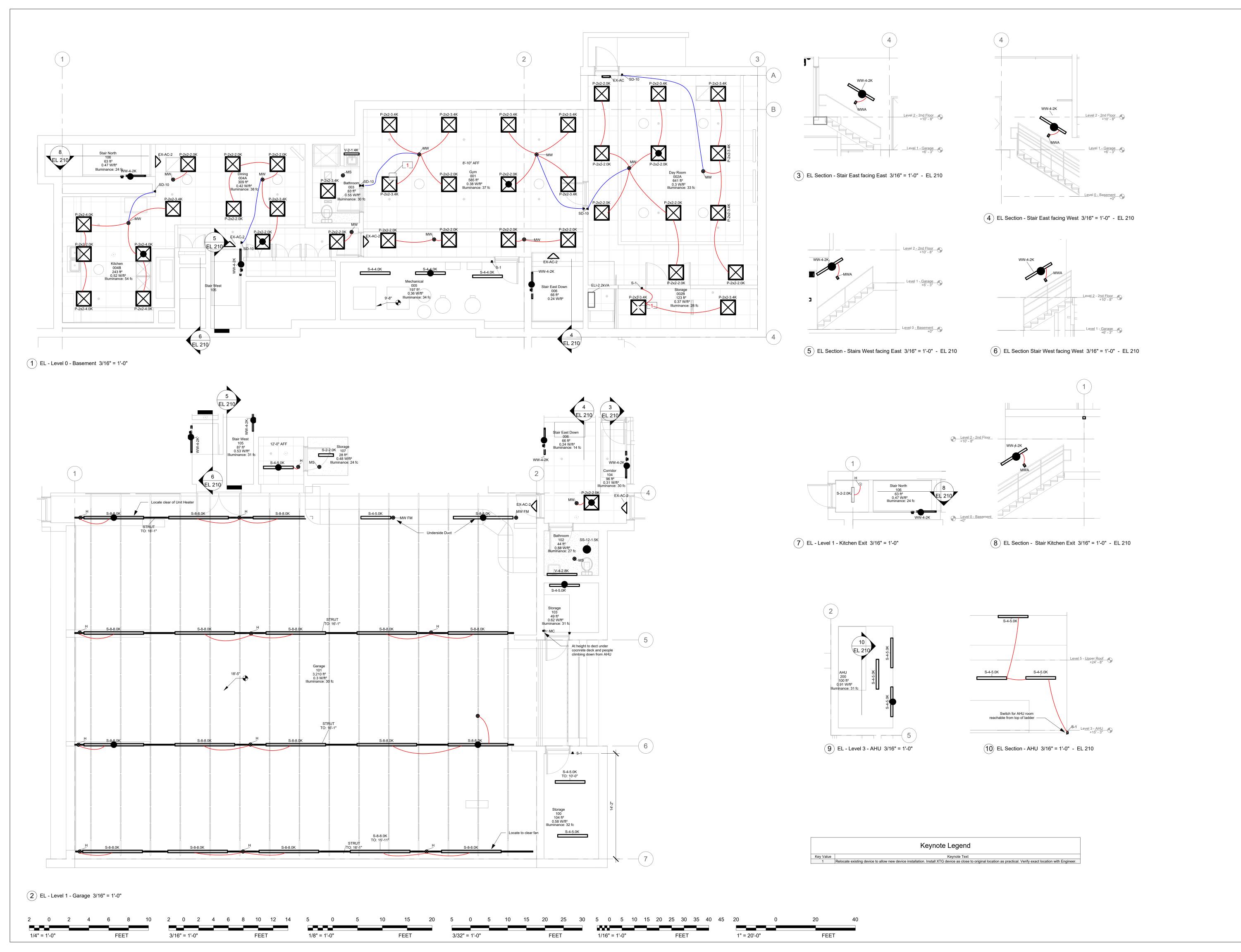
Description

Project North TRUE

Demolition

EL 200

Print Date: 7/25/2023 17:41:24 Print in color on 24" x 36"



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City of Madison
Facilites Management
City-County Building, Room 115
210 Martin Luther King Jr. Boulevard
Madison, WI 53703

Client: Madison Fire Department

> Fire Station 2 Lighting Retrofit (Bid Set)

Location: 421 Grand Canyon Dr. Madison, WI 53719

Contract: 9322 Project: 14530

Revisions

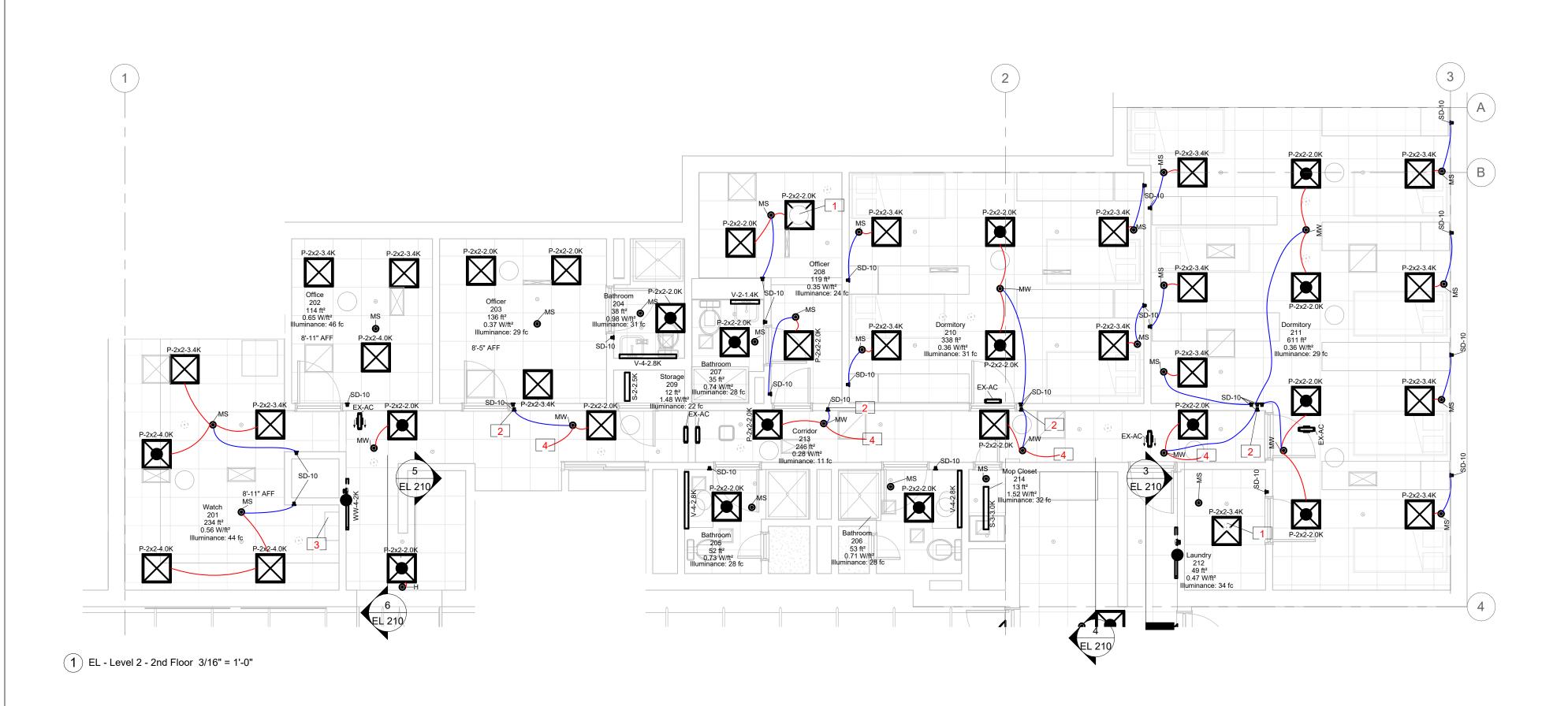
Project North TRUE

Lighting

EL 210

Print Date: 7/25/2023 17:41:25

Print in color on 24" x 36"



Keynote Legend

Keynote Text

Relocate existing device to allow new device installation. Install XTG device as close to original location as practical. Verify exact location with En
Disable switch-leg in dimmer switch. Dimming function only. Occupant shall not be able to fully turn off lights manually.

XTG Fire Alarm Panel. Wire from here to the UL 924 relays in the spaces.
Control XTG step lights in this area. Step lights shall turn on whenever motion sensor turns on.

Designed by:
City of Madison
Facilites Management
City-County Building, Room 115
210 Martin Luther King Jr. Boulevard
Madison, WI 53703

Madison Fire Department

Fire Station 2 Lighting Retrofit (Bid Set)

Location: 421 Grand Canyon Dr. Madison, WI 53719

Contract: 9322 Project: 14530

Revisions

No. Description

Project North TRUE

Lighting

EL 220

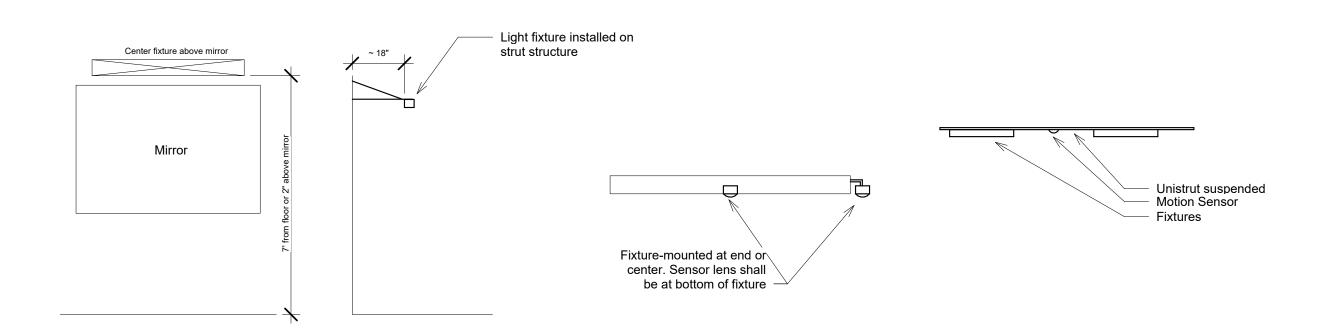
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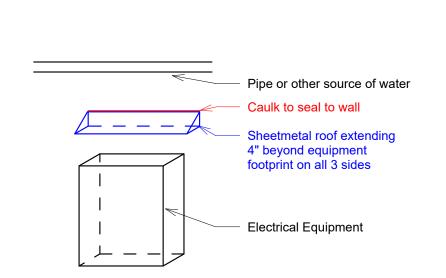
Emergency Lighting Inverters													
Ty	ype Mark	Space Number	Space Name	Description	Manufacturer	Model	URL	Output Rating @ 90 Minutes	In / Out Voltage	Weight	Remark	Specific Remark	Specifications
EĹ	LI-2.2kVA	002B	Storage	Emergency Lighting Inverter	Myers	EM-3-S-B-10-04-T-M(BBM)-I-	www.myerseps.com	2200 VA	120 V	494 lbf			26 50 00 - Lighting

					Li	ghting I	ixture	Schedu	le						
Type Mark	Type Comments	Description	Est.	Model	URL	Apparent Power	Luminous Flux	Color Temperature	Efficacy	Lumen Maintenance	Environemntal Rating	Unified Glare Rating (highest value)	Type Remark	Specific Remark	Specification
EX-AC	Light Fixture Interior	Exit Sign - no Battery	7	Lithonia LQM-S-W-3-G-MVOLT	www.acuitybrandslighting.com	1 VA			,		Damp Location	13.02)	71	'	26 50 00 - Lighting
EX-AC-2	Light Fixture Interior	Exit Sign Triangular - no Battery	6	Big Beam TRXL-AC/LED-2-G-W	www.bigbeam.com	4 VA					·				26 50 00 - Lighting
P-2x2-2.0K	Light Fixture Interior	Panel 2x2	42	Lithonia SPX-2x2-2000LM-80CRI-40K-BFR-LUGR-ZT-MVOLT-WH	www.acuitybrands.com	14 VA	2111 lm	4000 K	151 lm/W	L90 @ 50K hours	IPX5; NSF Splash Zone	16.1			26 50 00 - Lighting
P-2x2-3.4K	Light Fixture Interior	Panel 2x2	32	Lithonia SPX-2x2-3400LM-80CRI-40K-BFR-LUGR-ZT-MVOLT-WH	www.acuitybrands.com	23 VA	3438 lm	4000 K	149 lm/W	L90 @ 50K hours	IPX5; NSF Splash Zone	17.8			26 50 00 - Lighting
P-2x2-4.0K	Light Fixture Interior	Panel 2x2	8	Lithonia SPX-2x2-4000LM-80CRI-40K-BFR-LUGR-ZT-MVOLT-WH	www.acuitybrands.com	28 VA	4080 lm	4000 K	146 lm/W	L90 @ 50K hours	IPX5; NSF Splash Zone	18.4			26 50 00 - Lighting
S-2-2.0K	Light Fixture Interior	Strip 2'	2	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	Damp Location	26.2			26 50 00 - Lighting
S-2-2.5K	Light Fixture Interior	Strip 2'	1	Lithonia CLX-L24-2500LM-HEF-RDL-MVOLT-EZ1-40K-80CRI	www.acuitybrands.com	17 VA	2508 lm	4000 K	144 lm/W	L70 @ 100K hours	Damp Location	27			26 50 00 - Lighting
S-3-3.0K	Light Fixture Interior	Strip 3'	1	Lithonia CLX-L36-3000LM-HEF-RDL-MVOLT-EZ1-40K-80CRI	www.acuitybrands.com	20 VA	3004 lm	4000 K	150 lm/W	L70 @ 100K hours	Damp Location	27.3			26 50 00 - Lighting
S-4-4.0K	Light Fixture Interior	Strip 4'	3	Lithonia CLX-L48-4000LM-HEF-RDL-MVOLT-EZ1-40K-80CRI	www.acuitybrands.com	24 VA	4090 lm	4000 K	172 lm/W	L70 @ 100K hours	Damp Location	26.3			26 50 00 - Lighting
S-4-5.0K	Light Fixture Interior	Strip 4'	8	Lithonia CLX-L48-5000LM-HEF-RDL-MVOLT-EZ1-40K-80CRI	www.acuitybrands.com	30 VA	5019 lm	4000 K	166 lm/W	L70 @ 100K hours	Damp Location	27			26 50 00 - Lighting
S-8-8.0K	Light Fixture Interior	Strip 8'	19	Lithonia CLX-L96-8000LM-HEF-RDL-MVOLT-EZ1-40K-80CRI	www.acuitybrands.com	48 VA	8181 lm	4000 K	172 lm/W	L70 @ 100K hours	Damp Location	26.5			26 50 00 - Lighting
SS-12-1.5K	Light Fixture Interior	Slim Surface - Round - Wet Location	1	TGS 88-1215-RW-TM-CC4000K-90CRI	www.trulygreensolutions.com	15 VA	1500 lm	4000 K	100 lm/W	36K hours	IP 44 / Wet Location				26 50 00 - Lighting
V-2-1.4K	Light Fixture Interior	Vanity 4'	2	Birchwood NOL-LED-HLO-40-2-MW-MVOLT-D1-SM	www.birchwoodlighting.com	12 VA	1396 lm	4000 K	118 lm/W	L70 @ 60K hours	Damp Location				26 50 00 - Lighting
V-4-2.8K	Light Fixture Interior	Vanity 4'	4	Birchwood NOL-LED-HLO-40-4-MW-MVOLT-D1-SM	www.birchwoodlighting.com	24 VA	2792 lm	4000 K	118 lm/W	L70 @ 60K hours	Damp Location				26 50 00 - Lighting

			Lighting Device S	chedule		
Гуре Mark	Description	Est. Count	Model	URL	Type Remark	Specification
Н	Motion Sensor High Bay	14	Sensorswitch CMR-6-D-P-VLP	www.acuitybrands.com		26 50 00 - Lighting
MC	Motion Sensor Corner-mount w/ powerpack	1	Sensorswitch WV16-R-P-KIT-PP20	www.acuitybrands.com		26 50 00 - Lighting
MS	Motion Sensor short Range	26	Sensorswitch CMR-9-PDT-ADC-VLP	www.acuitybrands.com		26 50 00 - Lighting
MW	Motion Sensor wide Range	19	Sensorswitch CMR-10-PDT-ADC-VLP	www.acuitybrands.com		26 50 00 - Lighting
MW FM	Motion Sensor wide Range; Fixture-mount	2	Sensorswitch LSXR-10-ADC-VLP	www.acuitybrands.com		26 50 00 - Lighting
MWA	Motion Sensor Wall-mount 180° Coverage; 48" height	t 5	Sensorswitch LWS-WH	www.acuitybrands.com		26 50 00 - Lighting
S-1	Single Switch	4				26 50 00 - Lighting
SD-10	Switch w/ 0-10V Dimmer	36	Wattstopper RH4FBL3PW	www.legrand.us		26 50 00 - Lighting

Light Fixture Support								
Type Mark	Estimated Total Length	Specification						
STRUT	210'	26 05 00 - Common Work Results for Electrical						



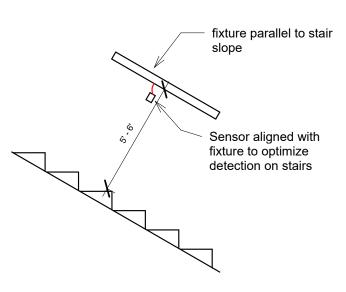


Fixture on bracket

- Any electrical equipment installed under a water pipe
- and other water sources, inc. condensate, shall be protected by a roof deflecting water

Install roof high enough to maintain all required

Protection of Inverters and other Electrical Lighting Equipment



Suspended Strip Fixture w/ Sensor

Review sensor coverage pattern. Adjust mounting to optimize motion detection of people coming from up-- and downstairs.

Wall fixture in stair case

- Some spaces don't employ automatic lighting control and use manual switches only. These include but are not limited to mechanical,
  - electrical, or crawl spaces. In these spaces, adhere a sign to the exit door indicating that lights shall be shut off upon leaving the space.

Multiple Suspended Strip Fixtures in a Row

**Turn off lights** 

when leaving

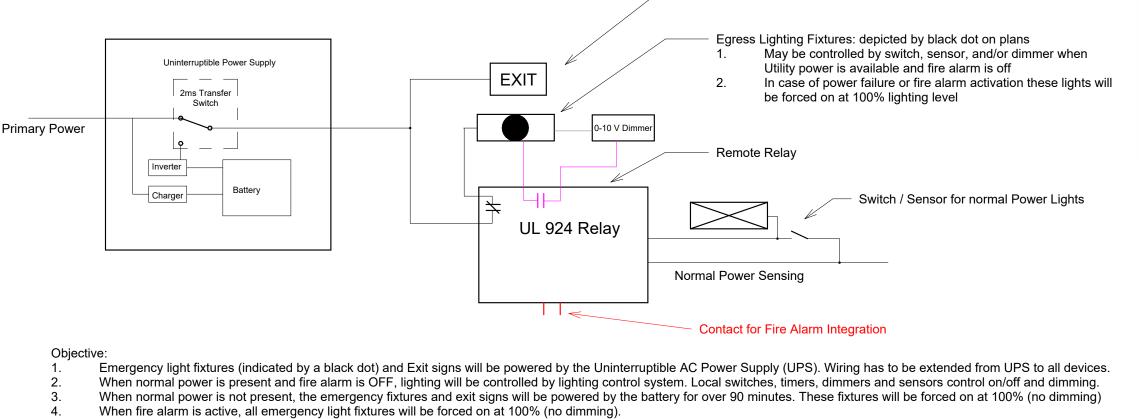
room empty.

Above sign is an example and similar signs can be used upon approval.

3 EL Typical Installation Details 1" = 1'-0"

clearances

Fixture above Mirror



Permanently lit Fixtures (e.g. EXIT signs)

Contractor shall verify availability of contacts in fire alarm panel and add relay(s) if required. Wiring shall meet NEC 700.10 requirements. This includes, but is not limited to:

Separate emergency raceway. Raceway shall be marked. Any junctions shall be labeled "Warning - 2 power sources" or as required by code Label indicates panel, circuit, and voltage

Conduit for emergency lighting shall be color-coded as specified in Division 26 When accessible installation of UL 924 relay is not possible (e.g. drywall, exterior), install the relay in near-by accessible location. Verify location with engineer. Fixtures with built-in sensor shall be re-wired for UL 924 relay to bypass sensor (e.g. exterior fixture with included photocell)

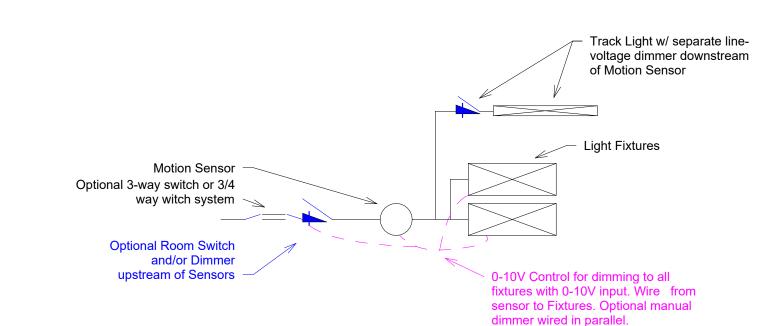
Contractor is responsible for all wiring from uninterruptible power supply and fire alarm panel to the zones.

Test by applying emergency power and normal power. Turn off local switch and set local dimmer to lowest dimming level.

a. If no local switch is available, disconnect the appropriate wire to simulate light being turned off. If no local dimmer is available and dimming by sensor is scheduled, program sensor to dim to low level.

Disconnect normal sensing power and verify emergency light turns on to 100% Re-instate normal power and activate fire alarm and verify emergency light turns on to 100%

(1) EL Egress Lighting Control w/ UPS and Fire Alarm Integration - Not to Scale



Lighting zones with lighting-devices and light-fixtures are indicated by wire lines and/or switch leg (SL) numbers.

Where devices allow, dimming shall be accomplished by 0-10V wiring of all devices. Where shown on plans, a zone may have 3-way and 4-way switches. Enable 3-way function on dimmer switch and wire appropriately to

enable control from all switch locations. Fixtures and devices in the same above zone are denoted by the same switchleg (SL) number.

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) Line-voltage dimmers (i.e. track lighting) shall be downstream of local motion 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.

Sensor Programming Instructions: The below is based on Sensorswitch Instructions at the time of design. Amend if different sensors are used or if manufacturer

changes procedure. Confirm any deviation with engineer. Sensorswitch support#: 1-800-535-2465 If sensors are equipped with VLC programming option, a smartphone app shall be used. Note that sensors needs to be

initialized and set with a PIN within 45 minutes of powering up. Program is sent to sensor via flashlight. Lights will blink to

acknowledge successful programming. Verify settings with engineer prior programming. Certain settings may be different in certain zones.

Sensors shall be programmed depending on availability of daylight . Save presets to avoid deviations.

No daylight available: Enable "Time Delay" - Set to 15 minutes

Disable Trim

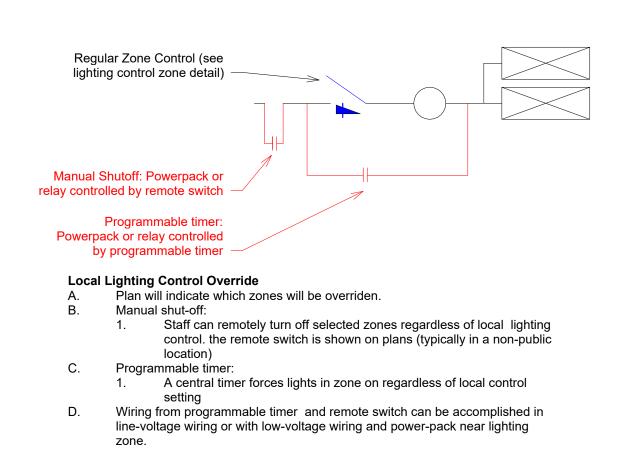
Enable "Dim to Off Delay" - set to 5 minutes Disable Photocell

Daylight available (inc. spaces with overhead doors, skylights, windows within 20' of sensor)

Enable "Photocell" and set to "On/Off and Auto Dimming" Enable "Auto Set Point"

After programming, all functions shall be tested to verify desired function. Adjust as required for intended function. Discuss problems with engineer.

(2) EL Lighting Control Zone - Not to Scale



(4) EL Local Lighting Control Overrides - Not to Scale

Details and Schedules

Revisions

No. Description

Designed by: City of Madison Facilites Management
City-County Building, Room 115 10 Martin Luther King Jr. Boulevard Madison, WI 53703

Madison Fire Department

Fire Station 2

Lighting Retrofit (Bid Set)

421 Grand Canyon Dr.

Madison, WI 53719

Contract: 9322

Project: 14530

EL 300

Print Date: 7/25/2023 17:41:28 Print in color on 24" x 36"