

June 20, 2023

Department of Public Works

# **Engineering Division**

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Principal Engineer 1 Mark D. Moder, P.E. Andrew J. Zwieg, P.E.

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## **NOTICE OF ADDENDUM**

#### **ADDENDUM 2**

#### **GOODMAN LIBRARY LIGHTING UPGRADE**

### **CONTRACT NO. 9297**

Revise and amend the contract document(s) for the above project as stated in this addendum, otherwise, the original document shall remain in effect.

Please acknowledge this addendum on page E1 of the contract documents and/or in Section E: Bidder's Acknowledgement on Bid Express.

Electronic version of these documents can be found on the Bid Express web site at: http://www.bidexpress.com

If you are unable to download plan revisions associated with the addendum, please contact the Engineering office at 608-266-4751 receive the material by another route.

## A. Answers to questions

- 1. Question: "does emergency power conduit need to be colored?"
  - a) Answer: Yes, emergency power conduit shall be green. Refer to Section 26 05 00 2.1.J.
- 2. Question: "Some ceiling tiles that we re-use may be damaged from pre-existing fasteners etc. Are contractors responsible for buying new tiles if old ones cannot be re-used? Who modifies the ceiling grid?"
  - a) Answer: If ceiling tiles turn out to not be re-usable in sufficient number, City will responsible to buy new tiles. Contractor will be responsible for grid modifications.
- B. Change to Plan sheets
  - 1. Exterior lighting will be removed from scope of this project.
    - a) Replace sheet EL 200 with new sheet EL 200: existing exterior light fixture demolition removed from scope
    - b) Replace sheet EL 210 with new sheet EL 210: exterior lighting removed from scope

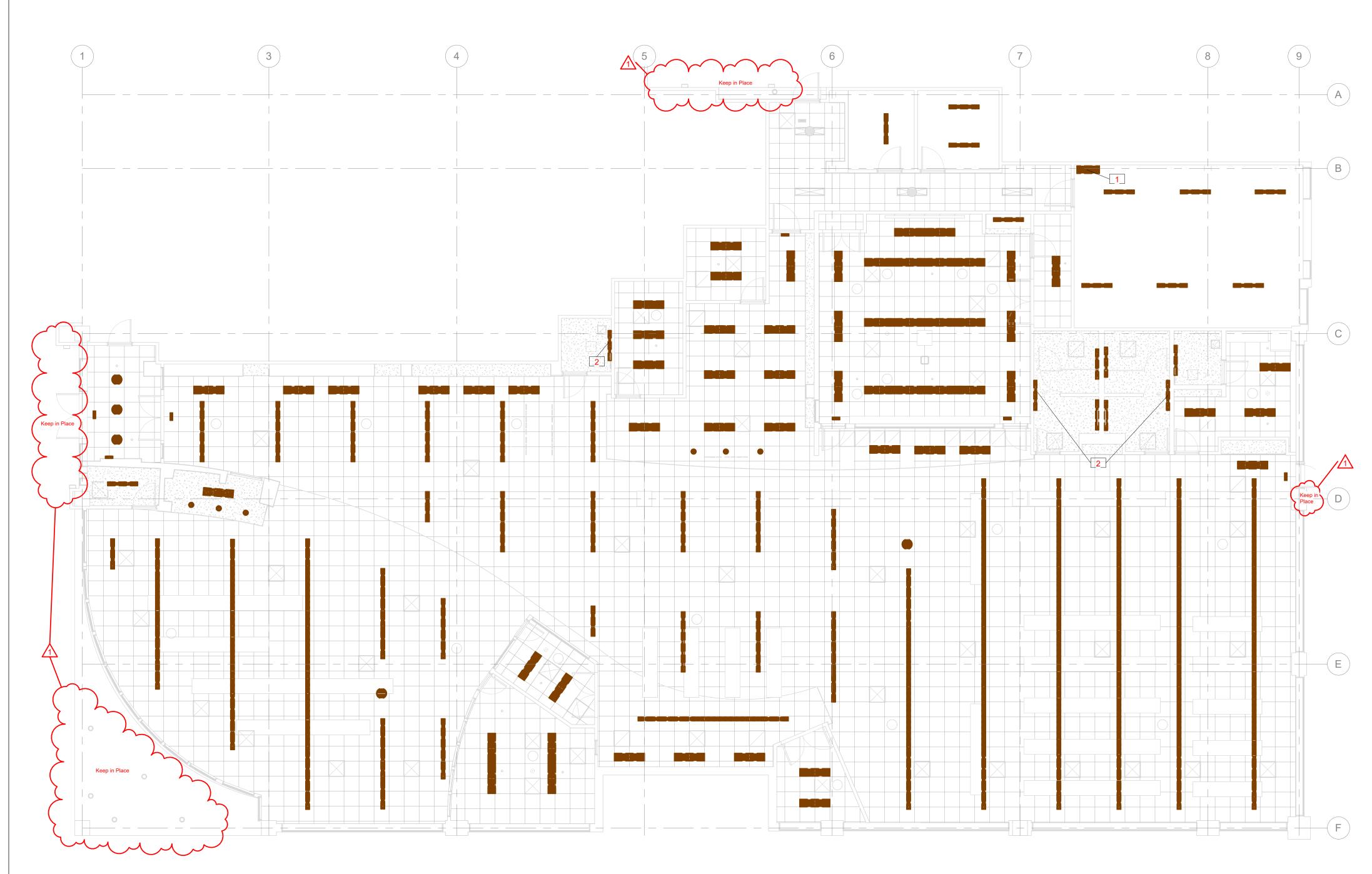
Replace sheet EL 300 with new sheet EL 300: revised lighting fixture schedule

Sincerely,

James M. Wolfe, P.E., City Engineer

Bryan Cooper

For:



FEET

1/8" = 1'-0"

3/32" = 1'-0"

FEET

1/16" = 1'-0"

1" = 20'-0"

FEET

1 EL Demo - Level 1 1/8" = 1'-0"

1/4" = 1'-0"

Keynote Legend

 Key Value
 Keynote Text

 1
 Remove existing lighting control panel and/or emergency lighting system.

 2
 Owner will patch drywall after fixture removal. Remove fixture with care to not excessively damage drywall.

3/16" = 1'-0"

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



Madison Library

Goodman Library Lighting Upgrade (Bid Set)

Location: 2222 S Park St. Madison, WI 53713

Contract: 9297 Project: 12410

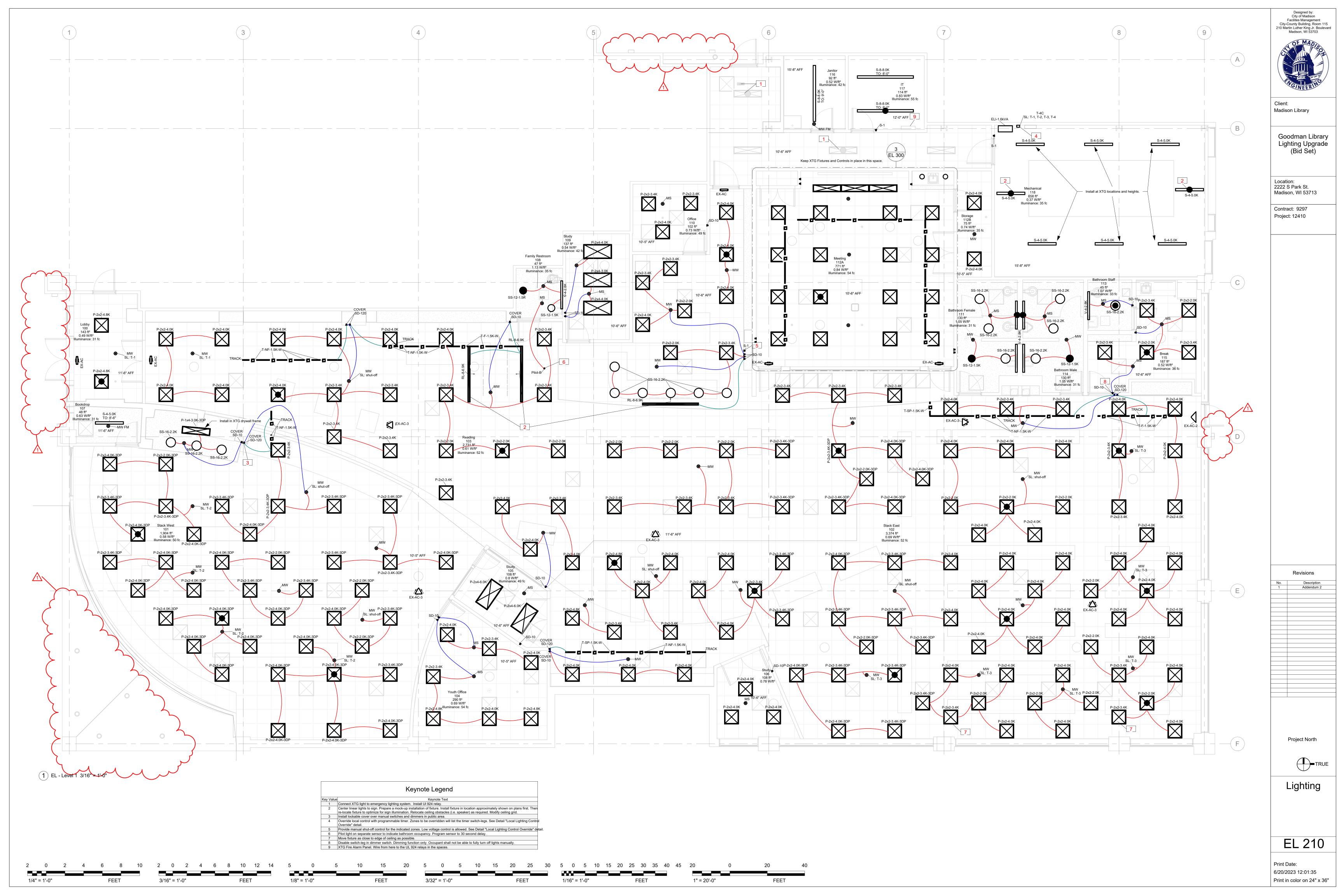
Revisions

Project North

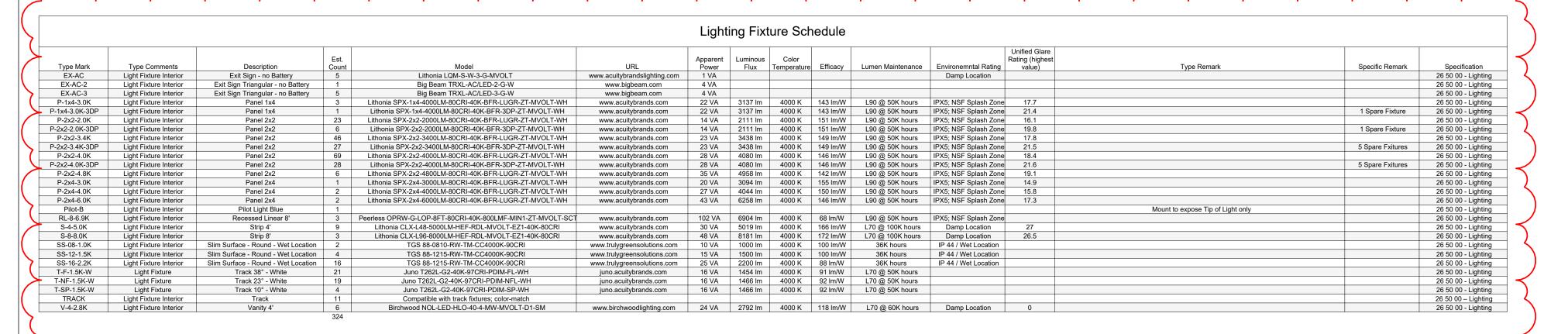
Demolition

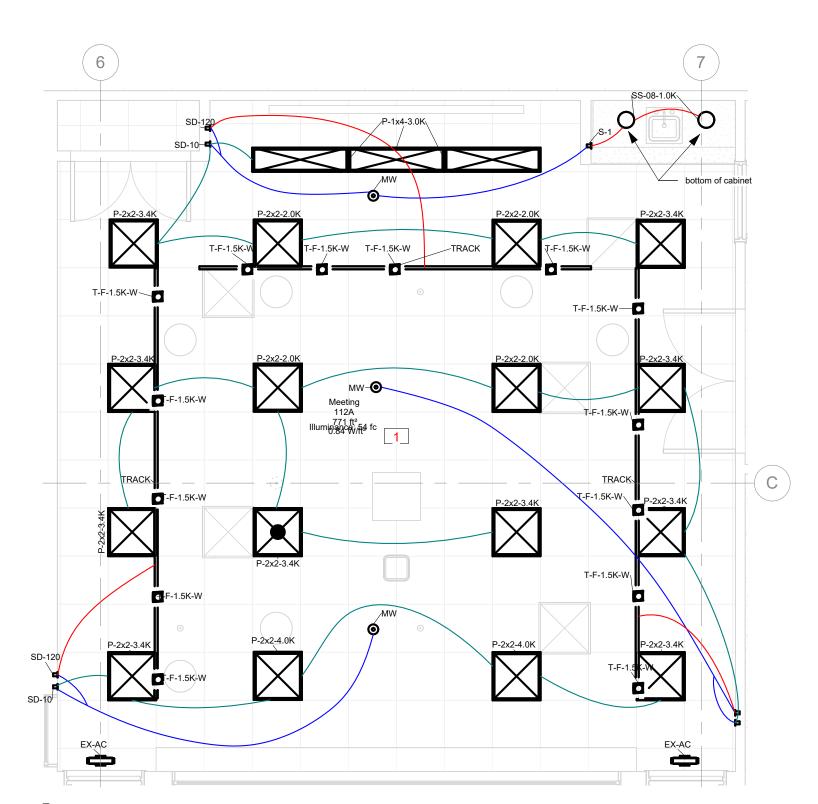
EL 200

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Acuity ISD-400E-ELV-120-WH

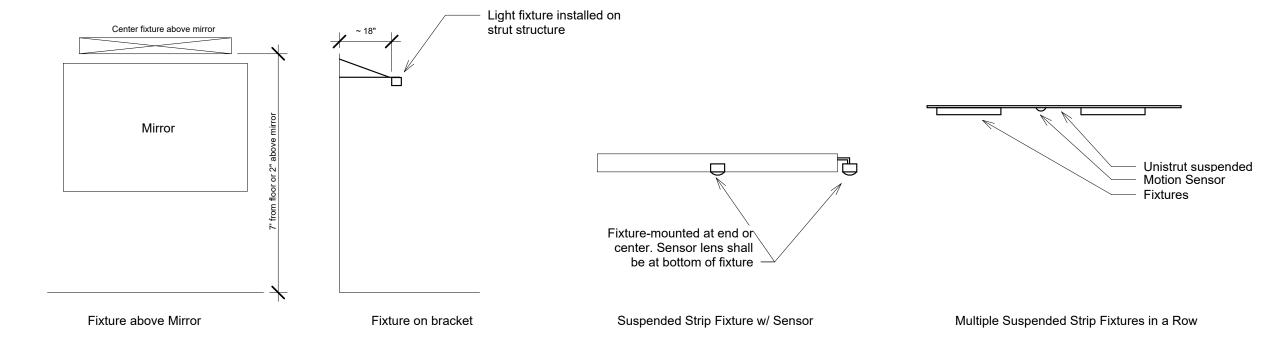
Intermatic 2800 Series

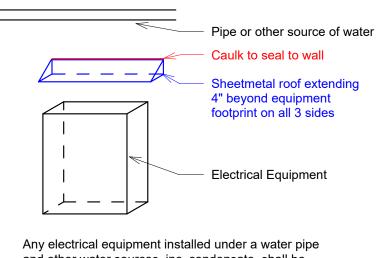
www.acuity.com

Switch w/ Line-Voltage Dimmer

(3) EL - Level 1 - Callout Meeting Room 1/4" = 1'-0"

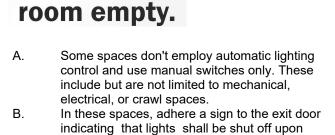
(4) EL Typical Installation Details 1" = 1'-0"





and other water sources, inc. condensate, shall be protected by a roof deflecting water Install roof high enough to maintain all required clearances

Protection of Inverters and other Electrical Lighting Equipment



Please

**Turn off lights** 

when leaving

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

Permanently lit Fixtures (e.g. EXIT signs) Egress Lighting Fixtures: depicted by black dot on plans May be controlled by switch, sensor, and/or dimmer when Uninterruptible Power Supply Utility power is available and fire alarm is off **EXIT** In case of power failure or fire alarm activation these lights will 2ms Transfer be forced on at 100% lighting level **Primary Power** Remote Relay Inverter Switch / Sensor for normal Power Lights UL 924 Relay Normal Power Sensing Contact for Fire Alarm Integration

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(s) if required. Wiring shall meet NEC 700.10 requirements. This includes, but is not limited to: Separate emergency raceway. Raceway shall be marked.

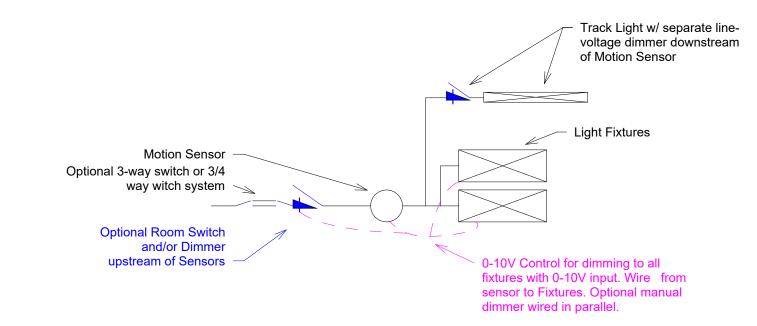
Label indicates panel, circuit, and voltage Conduit for emergency lighting shall be color-coded as specified in Division 26 When accessible installation of UL 924 relay is not possible (e.g. drywall, exterior), install the relay in near-by accessible location. Verify location with engineer. Fixtures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

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

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

Any junctions shall be labeled "Warning - 2 power sources" or as required by code

(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.

Motion sensor with local switch will be de-energized when switch is off (sensor downstream of switch): 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) If the order of switching is different at a specific location, plans will indicate so. Examples include, but are not limited to sensors controlling line-voltage dimmers or other track lighting control.

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.

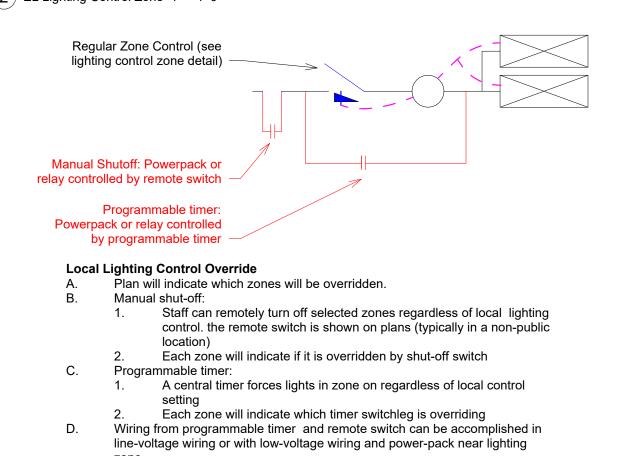
Sensors shall be programmed depending on availability of daylight. Save presets to avoid deviations. No daylight available: Enable "Time Delay" - Set to 15 minutes Disable Trim

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

2 EL Lighting Control Zone 1" = 1'-0"

problems with engineer.



Madison, WI 53703

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City-County Building, Room 115

Madison Library

Goodman Library Lighting Upgrade (Bid Set)

2222 S Park St. Madison, WI 53713

Contract: 9297 Project: 12410

Details and Schedules

Revisions

Addendum 2

EL 300

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(5) EL Local Lighting Control Overrides 1" = 1'-0"