

# Ashman Library Lighting Upgrade

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



Design prepared for:  
 Madison Library

**Ashman Library  
 Lighting Upgrade**

Location:  
 733 N High Point Rd.  
 Madison, WI 53717

Contract: 8960  
 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:  
 NA

Fire Protection Design:  
 NA

Architectural Design:  
 NA

**Revisions**

No.	Description

**Cover**

**G 001**

Print Date:  
 2/9/2021 8:08:12 AM

Sheetlist Construction Documents	
Sheet Number	Sheet Name
G 001	Cover
CR 100	Lighting Levels and Emergency Lighting
EL 200	Demolition
EL 210	Lighting
EL 300	Details and Schedules

**General Abbreviations**

AFF	Above Finished Floor
ACT	Acoustical Ceiling Tile
ADSL	Additional
AFC	Above Finished Counter
AFG	Above Finished Grade
ALUM	Aluminum
APPD	Approved
ASC	Above Suspended Ceiling
BS	Baseboard
BF	Below Finished Floor
BFG	Below Finished Grade
BLDG	Building
BLW	Below
BO	Bottom of
BOC	Bottom of Concrete
BOS	Bottom of Steel
BPL	Base Plate
CB	Catch Basin
CBT	Ceramic Tile Base
CFGI	Contractor Furnished / Contractor Installed
CFOI	Contractor Furnished / Owner Installed
CG	Corner Glass
CP	Ceiling Plane
CJ	Control Joint
CL	Center Line
CLG	Ceiling
CMU	Concrete Masonry Unit
CO	Column
COL	Column
CONC	Concrete
CONT	Continuous
CORR	Corridor
CPT	Ceiling
CSWK	Ceiling
CT	Ceramic Tile
CT	Cold Water
DEMO	Demolition
DF	Drinking Fountain
DIA	Diameter
DR	Door
DS	Downspout
DW	Downspout
DWG	Drawing
E	East
EA	Each
EJ	Expansion Joint
EL	Elevation
ELEV	Elevator
EPS	Expanded Polystyrene Board
EQ	Equal Distances
EST	Estimated
EXP	Expand, Expansion
F	Female
FA	Fire Alarm
FAB	Fabric
FD	Floor Drain
FGC	Fire Extinguisher Cabinet
FHC	Fire Hose Cabinet
FLR	Floor
FM	Formwork
FND	Foundation
FO	Finished Opening
FP	Fire Protection
FTG	Footing
GA	Gauge
GALV	Galvanized
GB	Grab Bar
GR	Grade
GT	Grip
GYP	Gypsum Board
HB	Hard Hat
HC	Hollow Core
HGT	Height
HM	Handicapped
HM	Hollow Metal
HVAC	Heating, Ventilation & Air Conditioning
HW	Hot Water
ID	Inside Diameter
J	Joint
JAH	Jurisdiction Having Authority
LAV	Lavatory
LL	Live Load
M	Misc
MAX	Maximum
MFR	Manufacturer
MIN	Minimum
MISC	Miscellaneous
MO	Masonry Opening
N	North
NA	Not Applicable
NC	Not in Contact
NM	Nominal
NYS	Not to Scale
OC	on center
OD	Outside Diameter
O/I	Owner Furnished / Contractor Installed
O/I	Owner Furnished / Owner Installed
OH	Over Head Door
OPNG	Opening
OPP	Opposite
PERSP	Perpendicular
POLYSTG	Polystyrene Board
PT	Paint, Painted
PN	Plaster
RPC	Reflected Ceiling Plan
RD	Rough Opening
REBAR	Reinforcing Steel Bars
REF	Reference
REV	Revision
RO	Rough Opening
S	South
SAN	Sanitary
SST	Slanted Steel
TEMP	Temperature
THF	Top of Finished Floor
TO	Top of
TOB	Top of Beam
TOC	Top of Concrete
TOJ	Top of Joint
TRP	Typical
UNO	Unless Noted Otherwise
VF	Verified in Field
W	West
W	With
WO	Without
WC	Water Closet
WD	Wood
WH	Water Heater
XPS	Extruded Polystyrene Board
XTG	Existing

- A. 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 purposes. All scheduled numbers, 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 incomplete details and specifications 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 work. Any trade shall be 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 Utility. Contractor shall inquire with Utilities to learn about the Scope of the Utility's work.
- B. Sheet Discipline Organization (not intended to determine responsibility of each trade).
  - G - General
  - CR - Code Review Items
  - H - Hazardous Material
  - C - Civil Engineering
  - A - Architectural
  - F - Furniture
  - L - Landscaping
  - S - Structural
  - M - Mechanical
  - EP - Electrical Power
  - EL - Electrical Lighting
  - FP - Fire Protection
  - P - Plumbing
  - T - Technology
  - 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.

- A. PROJECT DESCRIPTION:
  - Demolition of all existing lighting fixtures and controls.
  - Installation of new lighting fixtures, controls and emergency lighting.
  - All required conduit and wiring work.
- B. SPECIAL SITE CONDITIONS:
  - Library will have staff working on site. Contractor shall coordinate work areas with staff on site to allow least work disruption of library staff. 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.
  - XTG fire alarm panel information can be obtained from CSC under [csc@cecinfo.com](mailto:csc@cecinfo.com) or 800-432-9082. This design requires connecting UL 924 relays to be triggered by fire alarm. Typically this requires using an existing dry contact in the fire alarm panel. Verify with fire alarm panel manufacturer about exact requirements.
  - 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.
- C. WORK PROVIDED BY OWNER (DONT INCLUDE IN BID PRICE):
  - NA
- D. EQUIPMENT PROVIDED BY OWNER (DONT INCLUDE IN BID PRICE):
  - NA
- E. SPECIAL WARRANTIES:
  - NA
- F. PROVISIONS FOR FUTURE WORK:
  - NA
- G. PERMIT REQUIREMENTS:
  - Contractor is responsible to obtain permit. See specification section 00 31 46 for details.
- H. UTILITIES:
  - Contractor may use owner's power and water at no cost.
- I. CONTINUITY OF SERVICE:
  - 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.
- J. SEQUENCING REQUIREMENTS:
  - NA
- K. SUBSTITUTIONS:
  - See specification 01 25 00 for details.
- L. ALTERNATES:
  - NA





Design prepared for:  
 Madison Library

Ashman Library  
 Lighting Upgrade

Location:  
 733 N High Point Rd.  
 Madison, WI 53717

Contract: 8960  
 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:  
 NA

Fire Protection Design:  
 NA

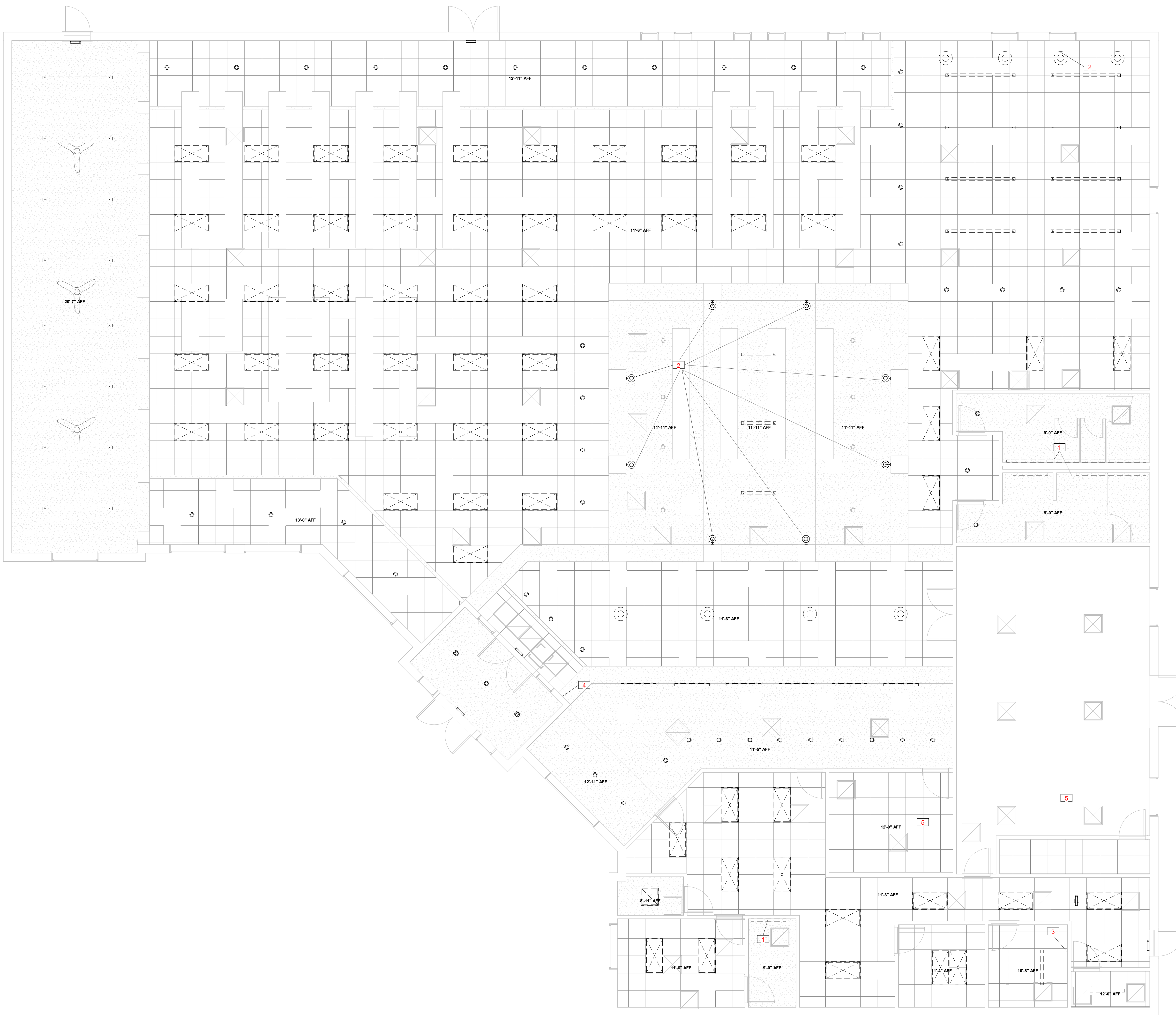
Architectural Design:  
 NA

Revisions

No.	Description



2 EL - Demolition XTG Lighting Control Panel - Not to Scale



1. Demolish all lighting fixtures and controls. Not all existing items may be shown.
2. Remove all unused raceways, boxes, conduit and wiring

Key Value	Keynote Text	Keynote Text
1	Remove light fixtures and fixture-box. Patch surface behind the fixture-box to match surrounding.	
2	Remove all wall fixtures in area. Cover box with cover matching wall-color.	
3	Remove existing lighting control panel.	
4	XTG lighting control switches. Remove and cover opening with cover matching surrounding.	
5	This Space is not included in this contract.	

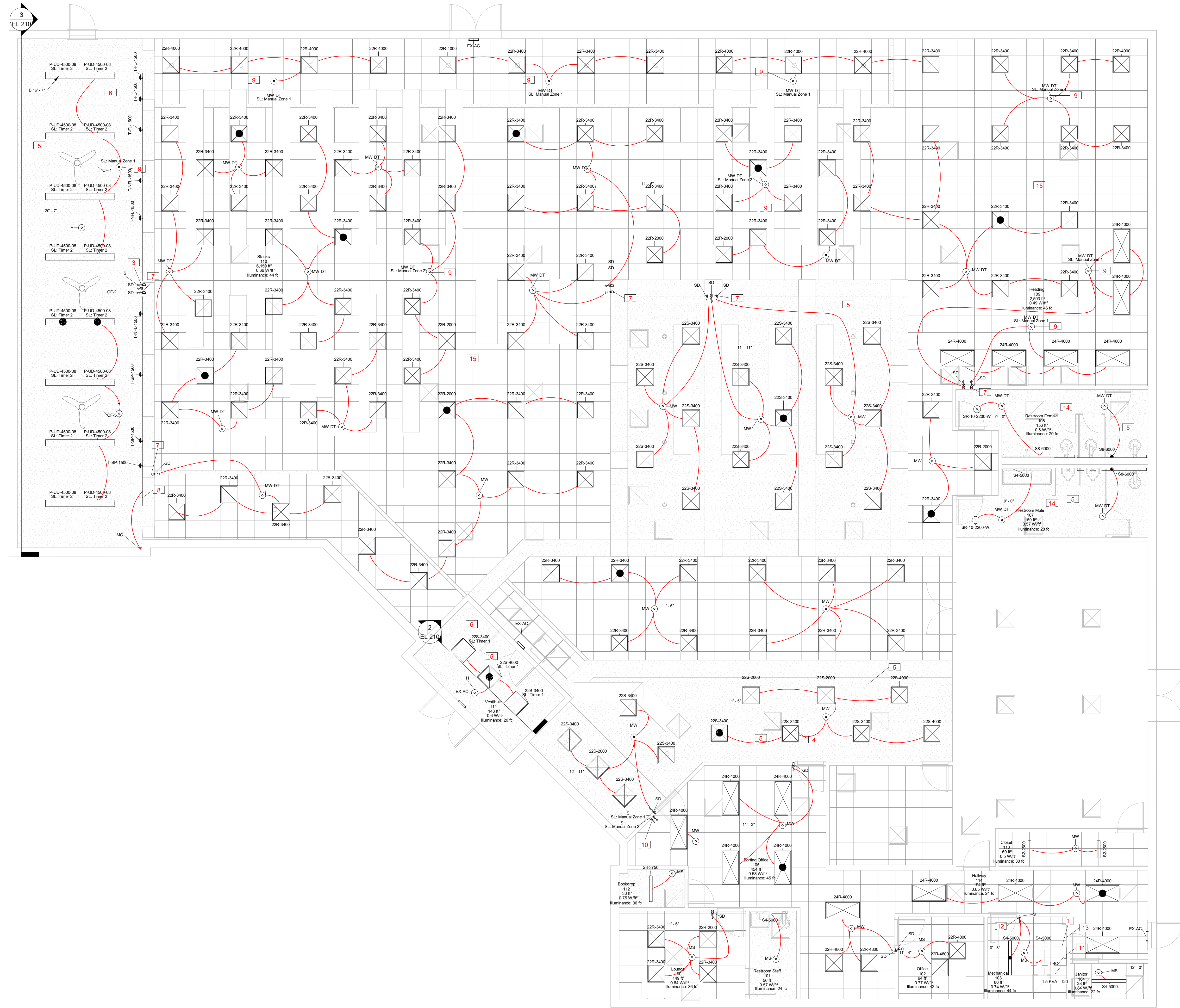
Project North



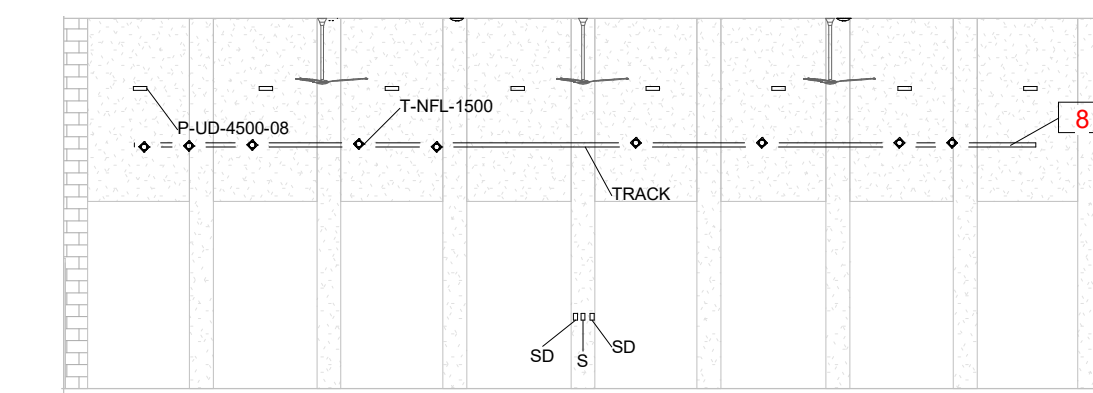
Demolition

EL 200

Print Date:  
 2/9/2021 8:08:10 AM



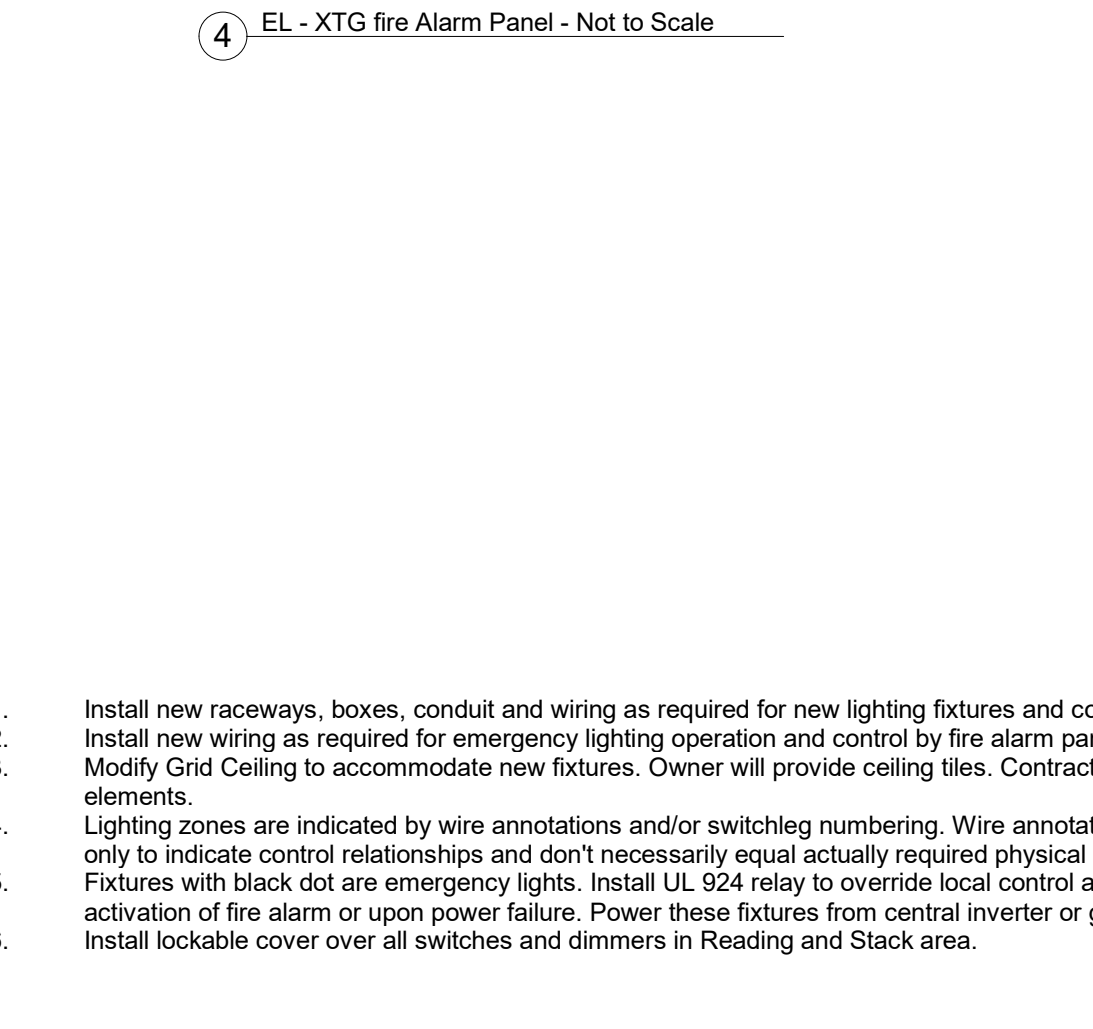
3 EL - Ceiling Level 1  
3/16" = 1'-0"



2 EL - Section Vestibule  
1/8" = 1'-0"



3 EL - Section High Ceiling Area  
3/32" = 1'-0"

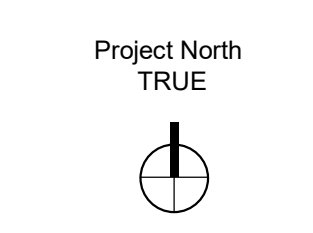


4 EL - XTG fire Alarm Panel - Not to Scale

1. Install new raceways, boxes, conduit and wiring as required for new lighting fixtures and controls.
2. Install new wiring as required for emergency lighting operation and control by fire alarm panel.
3. Modify Grid Ceiling to accommodate new fixtures. Owner will provide ceiling tiles. Contractor will provide grid elements.
4. Lighting zones are indicated by wire annotations and/or switching numbering. Wire annotations are schematic only to indicate control relationships and don't necessarily equal actually required physical wire runs.
5. Fixtures with black dot are emergency lights. Install UL 524 relay to override local control and dimming upon activation of fire alarm or upon power failure. Power these fixtures from central inverter or generator.
6. Install lockable cover over all switches and dimmers in Reading and Stack area.

Key Value	Keynote Text
1	Power all emergency lighting fixtures and exit signs from this battery power master.
2	Cover all arch-gaps with sheet metal matching surface fixture. Match-calk gaps up to 1/4".
3	Install fan speed control under lockable cover. Determine exact location with library staff.
4	Install fixtures in existing future locations where possible. Leave remaining recessed fixtures in place.
5	Low Voltage control allowed in this inaccessible area. See specification 26.09.23 - Lighting Control Devices.
6	Control Fixtures in this area from programmable timer. Wire timer in parallel to control devices. Low voltage wiring is allowed from timer to this zone. See plans for location of programmable timer.
7	Install all controls under lockable cover. See specification 26.09.23 - Lighting Control Devices.
8	Install track above HV/LC grilles. Track length as shown.
9	Provide manual shut-off control for this zone. Low voltage control is allowed. See Specification 26.09.23 - Lighting Control Devices.
10	Manual switch to turn off light in lighting zones indicated. Low voltage control is allowed. See Specification 26.09.23 - Lighting Control Devices.
11	Programmable timer See Specification 26.09.23 - Lighting Control Devices. Control zones indicated from this timer. Replace existing timer that controls outdoor lighting and control outdoor lighting from this timer. See details for wiring example with local lighting control.
12	One light fixture shall be controlled by switch only and not by motion sensor.
13	XTG Fire Alarm Panel. Wire from here to the UL 524 relays in the spaces.
14	Install UL 524 Relays outside drywall ceiling area. Install in adjacent area with 1/2" ceiling for easy access.
15	Install lockable cover in reading and stack area. See Specification 26.09.23 - Lighting Control Devices.

Revisions	No.	Description



Lighting

**EL 210**

