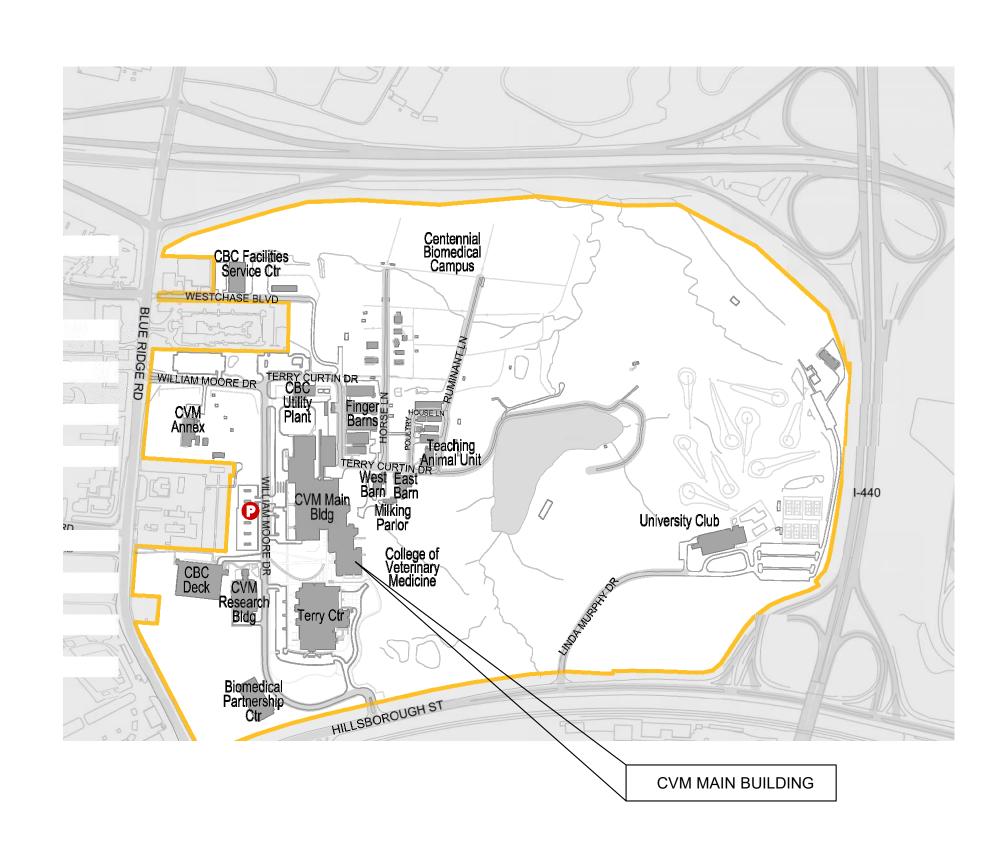
LED Conversion - Phase 1 NC STATE UNIVERSITY CVM MAIN BUILDING

1060 William Moore Drive Raleigh, North Carolina May 31, 2024

SCO ID: 22-24921-01A NCSU Project# 202220014 Building #301



INDEX OF DRAWINGS

COVER SHEET

CS1.1 PROJECT COVER SHEET

GENERAL

G1.1 APPENDIX B

ELECTRICAL

SYMBOL LEGEND, ABBREVIATIONS, AND ADDITIONAL **SPECIFICATIONS**

LIGHTING FIXTURE SCHEDULE

OVERALL FLOOR PLANS

PARTIAL FIRST FLOOR - AREA A LIGHTING PLAN

PARTIAL FIRST FLOOR - AREA B LIGHTING PLAN

PARTIAL FIRST FLOOR - AREA C LIGHTING PLAN

PARTIAL FIRST FLOOR - AREA D LIGHTING PLAN

PARTIAL FIRST FLOOR - AREA E LIGHTING PLAN

PARTIAL FIRST FLOOR - AREA F LIGHTING PLAN

PARTIAL SECOND FLOOR - AREA A LIGHTING PLAN PARTIAL SECOND FLOOR - AREA B LIGHTING PLAN

PARTIAL SECOND FLOOR - AREA C LIGHTING PLAN

E2.10 PARTIAL SECOND FLOOR - AREA D LIGHTING PLAN

E2.11 PARTIAL SECOND FLOOR - AREA E LIGHTING PLAN

E2.12 PARTIAL SECOND FLOOR - AREA F LIGHTING PLAN

E2.13 PARTIAL THIRD FLOOR - AREA B LIGHTING PLAN

E2.14 PARTIAL THIRD FLOOR - AREA C LIGHTING PLAN

E2.15 PARTIAL THIRD FLOOR - AREA D LIGHTING PLAN

E2.16 ADDITIONAL EXTERIOR LIGHTING PLAN



GREENSBORO, NO CORPORATE OFFICE ASHEVILLE, NC CHARLESTON, SC CHARLOTTE, NC CHARLOTTESVILLE, VA RALEIGH-DURHAM, NC WILMINGTON, NC

SKA Consulting Engineers, Inc. 7900 Triad Center Drive, Suite 200 Greensboro, NC 27409-9075 t: 336 855 0993 www.skaeng.com

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Quality. Integrity. Innovation.

PROJECT DESCRIPTION:

THIS PROJECT SCOPE INCLUDES REPLACING THE EXISTING LIGHTING IN CORRIDORS AND STAIRWELLS WITH NEW LED LIGHTING. MINIMAL CUTTING PATCHING, AND PAINTING WILL BE REQUIRED.



05/31/2024

2018 APPENDIX B BUILDING CODE SUMMARY FOR ALL COMMERCIAL PROJECTS

Owner or Authorized Owned By: Code Enforcement J	∣ Agent: JULIE SNEA □ C		919-513-780 ate	⊠ State	
CONTACT: DESIGNER Architectural	FIRM	NAME	LICENSE#	TELEPHONE	E-MAIL
Civil Electrical SKA Co Fire Alarm Plumbing Mechanical Sprinkler— Standpipe Structural Retaining Walls >5' Other	onsulting Engineers High	Kenzie M. Oakes	#054369	336-855-0993	kmoakes@skaeng.
2018 NC BUILDING C	□ 1st Time □ Shell/Core additional □ Phased C	struction □ Add Interior Completion e — Contact the loc procedures and req onstruction — Shell/ n for possible addition	al inspection j uirements Core — Conta	ct the local insp	ection
	BUILDING CODE: EXIST ALTERAT	「ION: ⊠ Level I Description Historic Pro	□ Level II perty	□ Chapter 1 □ Level III □ Change o	
CONSTRUCTED: (d RENOVATED: (date RISK CATEGORY (Tal	Varies ole 1604.5) C	CURRENT OCCUPA PROPOSED OCCUP urrent:		BUSINESS BUSINESS IV IV	
BASIC BUILDING DAT Construction Type: Sprinklers:	T A □ I−A □ I−B □ No □ Parti	□ II-A □ II- B al ⊠ Yes	□ III-A □ III- B ⊠ NFPA 13	□IV □NFPA 13R	□ V-A □ V-B □ NFPA 13D
Standpipes: Fire District: Flood Hazard Area: Special Instructions	□ No □ Yes ☑ No □ Yes ☑ No □ Yes ☑ No □ Yes Required: □ No				□ Dry jurisdiction fo quirements.)
		GROSS BUILDING ARE			
FLOOR 3rd Floor 2nd Floor Mezzanine 1st Floor Basement	EXISTING (SQ. 57,350 159,244 N/A 95,819 N/A	7,312 (Renovation 10,989 (Renovation N/A 14,104 (Renovation N/A	on) n) 1 on)	B-TOTAL 57,350 59,244 N/A 95,819 N/A	
TOTAL	312,413	32,405 (Renovati	on) 3	312,413	
Primary Occupancy Assembly Business Educational Factory Hazardous Institutional	□ A-1 □ A-2 □ F-1 Moderate □ H-1 Detonate □ I-1 Condition □ I-2 Condition □ I-3 Condition □ I-4	□ F-2 Low □ H-2 Deflagrate □ □ 1 □ 2 □ 1 □ 2	A-5 H-3 Combust	□ H−4 Health	□H-5 HPM
Mercantile Residential Storage Utility and Mise	□ S−1 Moderate □ Parking Garage		High-piled Enclosed	□ Repair Garag	е
Incidental Uses (Special Uses (Cha Special Provisions: Mixed Occupancy:	pter 4 — List Code : (Chapter 5 — List _ No _ Yes d Use (508.3) — Th by o		onstruction fo and area limi tire building. T	tations for each The most restrict	of the applicable ive type of
□ Separated Use Actual Allowable	(508.4 - See belghal be use divi	ow for area calculati e such that the sum ded by the allowable + Actual Area o Allowable Area	ons for each of the ratios area for eac f Occupancy E	story, the area of of the actual flood in the stands of the actual flood in the stands of the stands	of the occupancy oor area of each exceed 1.
		— + ——————————————————————————————————	(B) Z	+ = _	≤ 1.00 (D) 2,3 ALLOWABLE AREA
STORY NO	DESCRIPTION AND USE	PER STORY (ACTUAL)	AREA		PER STORY OR UNLIMITED

Total Building Perimeter
Ratio (F/P)= ____(F/P)

d. W = Minimum width of public way = ____ (W) e. Percent of frontage increase $I_f = 100 [F/P-0.25] \times W/30 = ____ (\%)$

The maximum area of open parking garages must comply with 406.5.4.

Frontage increase is based on the unsprinklered area value in Table 506.2.

³ Maximum Building Area = total number of stories in the building \times D (506.2).

² Unlimited area applicable under conditions of Section 507.

ALLOWABLE	HEIGHT

	ALLOWABLE	SHOWN ON PLANS	CODE REFERENCE ¹
BUILDING HEIGHT IN FEET (Table 504.3) ²			
BUILDING HEIGHT IN STORIES (Table 504.4) ³			

1 Provide code reference if the "Shown on Plans" quantity is not based on Table 504.3 or 504.4.
2 The maximum height of air traffic control towers must comply with Table 412.3.1.
3 The maximum height of open parking garages must comply with Table 406.5.4.

FIRE PROTECTION REQUIREMENTS

BUILDING ELEMENTS	FIRE SEPARATION	F	RATING	DETAIL	#	DESIGN # FOR	DESIGN # FOR	DESIGN # FOR
BOILDING ELLIMENTS	DISTANCE	REQ'D	PROVIDED (W/* REDUCTION)	AND SHEET	#	RATED	RATED	RATED
Structural Frame, including columns, girders, trusses	(FEET)	2 HR	2 HR			EXISTING TO REMAIN	PENETRATION	JOINTS
Bearing Walls								
Exterior	> 70'	0 110	0.110					
<u>North</u> East	>30' >30'	2 HR 2 HR	2 HR 2 HR					
West	>30'	2 HR	2 HR					
South	>30'	2 HR	2 HR					
Interior		2 HR	N/A					
Nonbearing walls and Partitions			,					
Exterior walls								
North	>30'	0 HR	EXISTING					
East	>30'	0 HR	EXISTING					
West	>30'	0 HR	EXISTING					
South Interior walls	>30'	0 HR	EXISTING					
interior walls and partitions		0 HR	0 HR					
Floor Construction Including supporting beams and joists		2 HR	2 HR			EXISTING TO REMAIN		
Floor Ceiling Assembly		2 HR	2 HR			EXISTING TO REMAIN		
Columns Supporting Floors		2 HR	2 PR	11		EXISTING TO REMAIN		
Roof Construction Including supporting beams and joists		1 1R	1 HR			EXISTING TO REMAIN		
Roof Ceiling Assembly		1 HR	1 HR			EXISTING TO REMAIN		
Columns Supporting Roof		1 HR	1 HR			EXISTING TO REMAIN		
Shaft Enclosures — Exit		2 HR	2 HR			EXISTING TO REMAIN		
Shaft Enclosures — Other		2 HR	2 HR			EXISTING TO REMAIN		
Corridor Separation		1 HR	1 HR			EXISTING TO REMAIN		
Occupancy/Wall Barrier Separation		N/A	_					
Party/Fire Wall Separation		N/A	_					
Smoke Barrier Separation		N/A	_					
Smoke Partition		N/A	_					
Tenant/Dwelling Unit/ Sleeping Unit Separation		N/A	_					
Incidental Use Separation		N/A	_					

number permitting reduction

FIRE SEPARATION . DISTANCE (FEET) FROM PROPERTY LINES	DEGREE OF OPENING? (%) PROTECTION (%) (TABLE 752 8)	ACTUAL SHOWN ON PLANS (%)
	115	

PERCENTAGE OF WALL OPENING CALCULATIONS

LIFE SAFETY SYSTEM REQUIREMENTS

Emergency Lighting:	□ No	🛛 Yes		
Exit Signs	□No	🛛 Yes		
Fire Alarm:	□ No	🛛 Yes		
Smoke Detection System:	□ No	□ Yes	☑ Partial	
Carbon Monoxide Detection:	: ⊠No	☐ Yes		

□ Location of doors with electromagnetic egress locks (1010.1.9.9)

□ Location of doors equipped with hold—open devices □ Location of emergency escape windows (1030) □ The square footage of each fire area (202)

Life Safety Plan Sheet #:

LIFE SAFETY PLAN REQUIREMENTS

 11/11
□ Fire and/or smoke rated wall locations (Chapter 7)
□ Assumed and real property line locations (if not on the site plan)
□ Exterior wall opening area with respect to distance to assumed property lines (705.8)
□ Occupancy Use for each area as it relates to occupant load calculation (Table 1004.1.2)
□ Occupancy loads for each area
⊐ Exit sign Tocations (1013)
□ Exit access travel distances (1017)
□ Common path of travel distances (Tables 10 6.7. & 1000.3.2.(1))
□ Dead end lengths (1020.4)
□ Clear exit widths for each exit door
□ Maximum calculated occupant loa(capacity each exit door can accommodate based on
egress width (1005.3)
□ Actual occupant load for pach exit for
☐ A separate schematic plan in that any where fire rated floor/ceiling and/or roof structure
is provided for purpuses of occupancy separation
□ Location of doors with paric hardware (1010.1.10)
□ Location of doors with delayed egress locks and the amount of delay (1010.1.9.7)

 \Box The square footage of each smoke compartment for Occupancy Classification I-2 (407.4) \Box Note any code exceptions or table notes that may have been utilized regarding items above.

ACCESSIBLE DWELLING UNITS

(SECTION 1107)

JNIT LASS.	TOTAL UNITS	UNITS	ACCESSIBLE UNITS PROVIDED	UNITS	TYPE A UNITS PROVIDED	TYPE B UNITS REQUIRED	TYPE B UNITS PROVIDED	TOTAL ACCESSIBLE UNITS PROVIDED

ACCESSIBLE PARKING

(SECTION 1106)

LOT OR PARKING	TOTAL NU PARKING		# OF ACCESSINE	SFACIS PROVIDED	TOTAL # ACCESSIBLE
AREA	REQUIRED	PROVIDED	9t" SP. CLS	132" SPACES	PROVIDED
TOTAL					

PLUMBING FIXTURE REQUIREMENTS

(TABLE 29021)

				(TADI	_E 29'	02.1)				
USE	W/	ATERCLO	SETS	URINALS		L, VA TON	7 41	SHOWERS	DRINKING	FOUNTAINS
	MALE	FEMALE	UNISEX		IVIAL E	FE 1A. E	UNISEX	/TUBS	REGULAR	ACCESSIBLE
SPACE EXIST'Š				1						
NEW										
REQ'D										

SPECIAL APPROVALS

Special approval: (Local Jurisdiction, Dept. of Insurance, OSC, DPI, DHHS, etc., describe below)

NC STATE CONSTRUCTION OFFICE

ENERGY SUMMARY

ENERGY REQUIREMENTS:

The following data shall be considered minimum and any special attribute required to meet the energy code shall also be provided. Each Designer shall furnish the required portions of the project information for the plan data sheet. If performance method, state the annual energy cost for the standard reference design vs. annual energy cost for the proposed design.

Existing building envelope complies with code: □ No □ Yes (if yes, the remainder of this section is not applicable)

Exempt Building:

No
Yes
(Provide code or statutory reference):

Climate Zone: 3A 4A 5A

Method of Compliance: Energy Code Performance Prescriptive ASHRAE 90.1 Performance Prescriptive (If "other", specify source here)

THERMAL ENVELOPE

NVELOPE
(Prescriptive method anly)

Roof/ceiling Assembly (each as rembly)

Description of assembly:

U-Value of total assembly:

R-Value of includio:

Skylights in each assembly:

U-Value of skylight:

total square footage of skylights in each assembly:

Exterior Walls (each assembly)

Description of assembly:

U-Value of total assembly:
R-Value of insulation:
Openings (window or doors with glazing)
U-Value of assembly:
Solar heat gain coefficient:
projection factor:
Door R-Values:

Walls below grade (each assembly)

Description of assembly: U-Value of total assembly: R-Value of insulation:

Floors over unconditioned space (each assembly)

Description of assembly: U—Value of total assembly: R—Value of insulation:

Floors slab on grade

slab heated:

Description of assembly: U-Value of total assembly: R-Value of insulation: Horizontal/vertical requirement:

2018 APPENDIX B

BUILDING CODE SUMMARY FOR ALL COMMERCIAL PROJECTS
STRUCTURAL DESIGN
(PROVIDE ON THE STRUCTURAL SHEETS IF APPLICABLE)

DESIGN LOADS:

Importance Factors:	Snow (IS) Seismic (IE)	<u>-</u>
Live Loads:	Roof _ Mezzanine _ Floor _	_psf _psf _psf
Ground Snow Load:		_psf

Wind Load:

Ultimate Wind Speed
Exposure Category

SEISMIC DESIGN CATEGORY:

Basic Structural System (check one)

Bearing Wall
Dual w/Special Moment Frame
Building Frame
Dual w/Intermediate R/C or Special Steel
Moment Frame
Inverted Pendulum

Analysis Procedure: □ Simplified □ Equivalent Lateral Force Dynamic Architectural, Mechanical, Components anchored? □ Yes □ No

LATERAL DESIGN CONTROL: Earthquake ☐ Wind ☐ SOIL BEARING CAPACITIES:

Field Test (provide copy of test report)

Presumptive Bearing capacity

Pile size, type, and capacity

2018 APPENDIX B BUILDING CODE SUMMARY FOR ALL COMMERCIAL PROJECTS MECHANICAL DESIGN

MECHANICAL SUMMARY

MECHANICAL SYSTEMS, SERVICE SYSTEMS AND EQUIPMENT

Thermal Zone	
winter dry bulb:	
summer dry bulb:	
Interior Design Conditions winter dry bulb:	16
summer dry bulb:	
relative humidity:	
,	
Building heating load:	
	116
Building cooling load:	
Mechanical Spacin Condit Unitary	ioning System

chanical Spacing Conditioning System

Unitary
description of unit:
heating efficiency:
cooling efficiency:
size category of unit:

Boiler
Size category. If oversized, state reason:

Chiller
Size category. If oversized, state reason: _____

List equipment efficiencies: ____

2018 APPENDIX B

BUILDING CODE SUMMARY FOR ALL COMMERCIAL PROJECTS
ELECTRICAL DESIGN
(PROVIDE ON THE ELECTRICAL SHEETS IF APPLICABLE)

ELECTRICAL SUMMARY

ELECTRICAL SYSTEM AND EQUIPMENT

Method of Compliance:

Energy Code:

Prescriptive

Performance

ASHRAE 90.1:
Performance

Lighting schedule (each fixture type)

lamp type required in fixture number of lamps in fixture ballast type used in the fixture number of ballasts in fixture total wattage per fixture total interior wattage specified vs allowed (whole building or space by total exterior wattage specified vs allowed total exterior wattage specified vs allowed refer to light fixture schedule refer to lig

Additional Efficiency Package Options (When using the 2018 NCECC; not required for ASHRAE 90.1)

□ C406.2 More Efficient HVAC Equipment Performance

□ C406.3 Reduced Lighting Power Density

☐ C406.4 Enhanced Digital Lighting Controls☐ C406.5 On—Site Renewable Energy

☐ C406.6 Dedicated Outdoor Air System

☐ C406.7 Reduced Energy Use in Service Water Heating

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NC STATE UNIVIERSITY	1060 WILLIAM MOORE DRIVE	APPEN
•		

APPENDIX

 Designed By:
 KMO

 Drawn By:
 MRS

 Checked By:
 RGL

 Date:
 05/31/2024

G1.1

BID SET

ELECTRICAL SYMBOL LEGEND

<u>GENERAL</u>

BRANCH CIRCUIT HOME RUN - LETTERS AND NUMERALS INDICATE PANEL
DESIGNATION AND CIRCUIT NUMBER. ARROWS INDICATE NUMBER OF
CIRCUITS UNLESS OTHERWISE NOTED. EQUIPMENT GROUNDING
CONDUCTORS SHALL BE INCLUDED IN ALL RUNS OF CONDUIT. PROVIDE
SEPARATE NEUTRALS.

BRANCH CIRCUIT CONDUIT INSTALLED CONCEALED IN WALLS, AND ABOVE
CEILINGS, UNLESS OTHERWISE NOTED OR REQUIRED BY SITE CONDITIONS.

BRANCH CIRCUIT CONDUIT INSTALLED EXPOSED IN SURFACE MOUNTED
RACEWAY OR CONDUIT.

CONDUIT AND WIRE TURNING AWAY FROM OBSERVER.

CONDUIT AND WIRE TURNING TOWARD OBSERVER.

LIGHTING

O • RECESSED, SURFACE, OR WALL MOUNTED LIGHTING FIXTURE.
LETTERS/NUMERALS INDICATE TYPE. SEE LIGHTING FIXTURE SCHEDULE FOR REQUIREMENTS.

CEILING MOUNTED EXIT SIGN - SHADED AREA INDICATES FACE(S) - ARROWS AS DIRECTED ON PLANS.

WALL MOUNTED EXIT SIGN - SHADED AREA INDICATES FACE(S) - ARROWS AS

\$ SINGLE POLE TOGGLE SWITCH 120/277V, 20A, HEAVY DUTY SPECIFICATION GRADE, FEDERAL SPECIFICATION LISTED. SUBSCRIPTS "3" INDICATES THREE WAY SWITCH, "4" FOUR WAY SWITCH, "K" KEY OPERATED SWITCH, AND "3K"

\$D DIMMING SWITCH, RECESSED MOUNTED IN JUNCTION BOX. VERIFY SWITCHING LOAD TYPE WITH LIGHTING FIXTURE SCHEDULE. FOR 0-10V DIMMING, PROVIDE LUTRON: DVSTV, OR EQUAL. PROVIDE LUTRON: DVTV OR EQUAL WHEN POWER PACK IS PROVIDED. SUBSCRIPT "3" INDICATES THREE

THREE WAY KEY OPERATED SWITCH. MOUNT IN A SINGLE GANG OR MULTI

GANG GALVANIZED BOX 46" ABOVE FINISHED FLOOR UNLESS OTHERWISE

CEILING MOUNTED DUAL TECHNOLOGY OCCUPANCY SENSOR SWITCH.
PROVIDE REQUIRED POWER PACK WITH ADDITIONAL DRY CONTACTS FOR
FUTURE BUILDING AUTOMATION SYSTEM (BAS) INTEGRATION. ELECTRICAL
CONTRACTOR SHALL PROVIDE TYPED LABEL WITH ARROW INDICATING
POWER PACK LOCATION ABOVE ACCESSIBLE CEILING. LABEL SHALL BE
ADHERED TO METALLIC CEILING GRID. PROVIDE LUTRON: LOS-CDT-2000-WH,
OR EQUAL.

TIMER. EXISTING TIMER SYSTEM TO REMAIN UNLESS OTHERWISE NOTED.

CEILING TYPE LEGEND

KEYSLOT GRID

HARD CEILING

METAL SLOT

GLASS

EXPOSED IN UNFINISHED SPACES.

EXPOSED STRUCTURE

HARD CEILING WITH UNISTRUT

GRID CEILING WITH UNISTRUT

INSTALL CONDUITS CONCEALED IN FINISHED SPACES AND

GRID

DESIGNATION | CEILING TYPE

ELECTRICAL ABBREVIATIONS Dwg.# 230114-E1002.DWG

HORSEPOWER

HEIGHT

HEATER

A OR AMP AMPERES ISOLATED GROUND ABOVE FINISHED FLOOR INTERMEDIATE METALLIC CONDUIT AFG ABOVE FINISHED GRADE INCH;INCHES AMPERE INTERRUPTING CAPACITY JUNCTION BOX ALTERNATE **KCMIL** THOUSANDS OF CIRCULAR MILLS ATS AUTOMATIC TRANSFER SWITCH KVA KILO VOLT AMPERES AWG AMERICAN WIRE GAUGE KW KILOWATT BKR BREAKER LTG LIGHTS BFG BELOW FINISHED GRADE MAIN CIRCUIT BREAKER CONDUIT MCC MOTOR CONTROL CENTER MLO CIRCUIT BREAKER MAIN LUG ONLY MTD CLG MOUNTED CEILING CABLE TRAY MTG MOUNTING COPPER NEUTRAL DIAMETER NORMALLY CLOSED NEC NATIONAL ELECTRIC CODE DN DOWN DWG(S) DRAWING(S) NEMA NATIONAL ELECTRICAL MANUFACTURERS EMPTY CONDUIT OR ASSOCIATION **ELECTRICAL CONTRACTOR** NON-FUSED EXHAUST FAN NFPA NATIONAL FIRE PROTECTION EG **EQUIPMENT GROUND** ASSOCIATION ELEC ELECTRICAL NOT IN CONTRACT EMT ELECTRIC METALLIC TUBING NORMALLY OPEN OR NUMBER **EQUIP EQUIPMENT** PHASE ER EXISTING TO BE RELOCATED PANEL **EWC** ELECTRIC WATER COOLER POLYVINYL CHLORIDE EWH REC ELECTRIC WATER HEATER RECEPTACLE EX EXISTING TO REMAIN SCHED SCHEDULE FACP FIRE ALARM CONTROL PANEL SOLID NEUTRAL **FLOOR** SPECS SPECIFICATIONS FLA FULL LOAD AMPS SWBD SWITCHBOARD FOOT;FEET SWGR SWITCHGEAR **FVNR** FULL VOLTAGE NON-REVERSING TEL TELEPHONE **FWE** FURNISHED WITH EQUIPMENT TTB TELEPHONE TERMINAL BACKBOARD GΑ GAUGE TYPICAL TRANSIENT VOLTAGE SURGE GALV GALVANIZED **TVSS** GC GENERAL CONTRACTOR SUPPRESSOR GEC GROUNDING ELECTRODE CONDUCTOR UNDERGROUND GFI UNDERWRITES LABORATORIES GROUND FAULT INTERRUPTER GND UNLESS NOTED OTHERWISE GROUND UNO GRS GALVANIZED RIGID STEEL CONDUIT VOLTS HOA HAND-OFF-AUTOMATIC HID HIGH INTENSITY DISCHARGE WEATHERPROOF

XFMR

TRANSFORMER

230114-E1008.DWG

30114-E1008.DWG

ADD ALTERNATE LIST						
No.	BASE BID DESCRIPTION	ADD ALTERNATE DESCRIPTION				
1	EXISTING LIGHTING AND CONTROLS IN SECOND FLOOR AREA B LABS AND OTHER ROOMS TO REMAIN.	NEW LIGHTING AND CONTROLS IN SECOND FLOOR AREA B LABS AND OTHER ROOMS AS SHOWN.				
2	EXISTING EXTERIOR LIGHTING TO REMAIN.	NEW EXTERIOR LIGHTING AS SHOWN.				
3	EXISTING EXIT SIGNS AND EXIT EMERGENCY COMBINATION FIXTURES TO REMAIN.	REPLACE EXISTING EXIT SIGNS AND EXIT EMERGENCY COMBINATION FIXTURES AS SHOWN.				

APPROVED DUMPSTER AREA AT LOADING DOCK

West Barn

APPROVED LAYDOWN AREA

GENERAL NOTE:

ALL HARDSCAPES MUST BE PROTECTED BY 3/4" THICK 4' x 8' PLYWOOD. THE CONTRACTOR MUST PROVIDE ADEQUATE PROTECTION OF EXISTING CONCRETE, ASPHALT, AND BRICK. ALL DAMAGE MUST BE REPAIRED BY THE CONTRACTOR TO ENSURE EQUAL MATERIAL SUBSTITUTION. NO STORING OF MATERIAL OR EQUIPMENT ON LANDSCAPED AREAS, INCLUDING MULCH BEDS AND LAWN. ALL EXCESS MATERIALS SHALL BE REMOVED FROM THE SITE INCLUDING ASPHALT, ROCKS, ET CETERA UPON COMPLETION. PLEASE NOTE, ALL VEHICULAR TRAFFIC ON HARDSCAPES IS BY PERMIT ONLY AND NOT ALLOWED ON SOFTSCAPES. ALL DAMAGES MADE TO HARDSCAPES/SOFTSCAPES MUST BE REPAIRED BY THE CONTRACTOR.



ADDITIONAL SPECIFICATIONS

SECTION 01 73 00 EXECUTION

- IN-PLACE MATERIALS: USE MATERIALS IDENTICAL TO IN-PLACE MATERIALS.
 FOR EXPOSED SURFACES, USE MATERIALS THAT VISUALLY MATCH IN-PLACE
 ADJACENT SURFACES TO THE FULLEST EXTENT POSSIBLE.
- ADJACENT SURFACES TO THE FULLEST EXTENT POSSIBLE.

 2. IF IDENTICAL MATERIALS ARE UNAVAILABLE OR CANNOT BE USED, USE MATERIALS THAT, WHEN INSTALLED, WILL MATCH THE VISUAL, TEXTURAL AND
- FUNCTIONAL PERFORMANCE OF IN-PLACE MATERIALS.

 3. EXAMINE SURFACES TO BE CUT AND PATCHED AND CONDITIONS UNDER WHICH
- 4. COMPATIBILITY: BEFORE PATCHING, VERIFY COMPATIBILITY WITH AND SUITABILITY OF SUBSTRATES, INCLUDING COMPATIBILITY WITH IN-PLACE FINISHES OR PRIMERS.

CUTTING AND PATCHING ARE TO BE PERFORMED.

- 5. PROCEED WITH INSTALLATION ONLY AFTER UNSAFE OR UNSATISFACTORY CONDITIONS HAVE BEEN CORRECTED.
- 6. TEMPORARY SUPPORT: PROVIDE TEMPORARY SUPPORT OF WORK TO BE CUT.
- 7. PROTECTION: PROTECT IN-PLACE CONSTRUCTION DURING CUTTING AND PATCHING TO PREVENT DAMAGE. PROVIDE PROTECTION FROM ADVERSE WEATHER CONDITIONS FOR PORTIONS OF PROJECT THAT MIGHT BE EXPOSED DURING CUTTING AND PATCHING OPERATIONS. PROTECT EXISTING SURFACES-TO-REMAIN FROM DAMAGE CAUSED BY WORK AND EQUIPMENT. PROTECT FLOORING FROM DAMAGE FROM LIFTS BY PLACING PLYWOOD OF ADEQUATE THICKNESS TO PREVENT SCRATCHING, MARRING AND INDENTATIONS.
- 8. ADJOINING AREAS: AVOID INTERFERENCE WITH USE OF ADJOINING AREAS OR INTERRUPTION OF FREE PASSAGE TO ADJOINING AREAS.
- 9. GENERAL: EMPLOY SKILLED WORKERS TO PERFORM CUTTING AND PATCHING. PROCEED WITH CUTTING AND PATCHING AT THE EARLIEST FEASIBLE TIME, AND COMPLETE WITHOUT DELAY.
- 10. CUT IN-PLACE CONSTRUCTION TO PROVIDE FOR INSTALLATION OF OTHER COMPONENTS OR PERFORMANCE OF OTHER CONSTRUCTION, AND SUBSEQUENTLY PATCH AS REQUIRED TO RESTORE SURFACES TO THEIR ORIGINAL CONDITION.
- 11. CUTTING: CUT IN-PLACE CONSTRUCTION BY SAWING, DRILLING, BREAKING, CHIPPING, GRINDING, AND SIMILAR OPERATIONS, INCLUDING EXCAVATION, USING METHODS LEAST LIKELY TO DAMAGE ELEMENTS RETAINED OR ADJOINING CONSTRUCTION. IF POSSIBLE, REVIEW PROPOSED PROCEDURES WITH ORIGINAL INSTALLER; COMPLY WITH ORIGINAL INSTALLER'S WRITTEN RECOMMENDATIONS.
- 12. FLAME CUTTING: DO NOT USE CUTTING TORCHES.
- 13. IN GENERAL, USE HAND OR SMALL POWER TOOLS DESIGNED FOR SAWING AND GRINDING, NOT HAMMERING AND CHOPPING. CUT HOLES AND SLOTS AS SMALL AS POSSIBLE, NEATLY TO SIZE REQUIRED, AND WITH MINIMUM DISTURBANCE OF ADJACENT SURFACES. TEMPORARILY COVER OPENINGS WHEN NOT IN USE.
- 14. FINISHED SURFACES: CUT OR DRILL FROM THE EXPOSED OR FINISHED SIDE INTO CONCEALED SURFACES.
- 15. PATCHING: PATCH CONSTRUCTION BY FILLING, REPAIRING, REFINISHING, CLOSING UP, AND SIMILAR OPERATIONS FOLLOWING PERFORMANCE OF OTHER WORK. PATCH WITH DURABLE SEAMS THAT ARE AS INVISIBLE AS POSSIBLE. PROVIDE MATERIALS AND COMPLY WITH INSTALLATION REQUIREMENTS SPECIFIED IN OTHER SECTIONS.
- 16. EXPOSED FINISHES: RESTORE EXPOSED FINISHES OF PATCHED AREAS AND EXTEND FINISH RESTORATION INTO RETAINED ADJOINING CONSTRUCTION IN A MANNER THAT WILL ELIMINATE EVIDENCE OF PATCHING AND REFINISHING.
- 17. WHERE PATCHING OCCURS IN A PAINTED SURFACE, APPLY PRIMER AND INTERMEDIATE PAINT COATS OVER THE PATCH AND APPLY FINAL PAINT COAT OVER ENTIRE UNBROKEN SURFACE CONTAINING THE PATCH. PROVIDE ADDITIONAL COATS UNTIL PATCH BLENDS WITH ADJACENT SURFACES. REPAINT ENTIRE CEILING AFTER.
- 18. CEILINGS: PATCH, REPAIR, OR REHANG IN-PLACE CEILINGS AS NECESSARY TO PROVIDE AN EVEN-PLANE SURFACE OF UNIFORM APPEARANCE.
- 19. CLEANING: CLEAN AREAS AND SPACES WHERE CUTTING AND PATCHING ARE PERFORMED. COMPLETELY REMOVE PAINT, MORTAR, OILS, PUTTY, AND SIMILAR MATERIALS.

SECTION 02 41 19 SELECTIVE DEMOLITION

- 1. CONTRACTOR IS RESPONSIBLE FOR DEMOLITION NECESSARY TO COMPLETE WORK AS INDICATED ON THE CONTRACT DOCUMENTS.
- 2. OWNER WILL OCCUPY PORTIONS OF BUILDING IMMEDIATELY ADJACENT TO SELECTIVE DEMOLITION AREA. CONDUCT SELECTIVE DEMOLITION SO OWNER'S OPERATIONS WILL NOT BE DISRUPTED.
- 3. COORDINATE WITH OWNER A DETAILED SCHEDULE OF DEMOLITION. INCLUDE THE FOLLOWING:
- a. STARTING AND ENDING DATES OF EACH ACTIVITY. ENSURE OWNER'S ON-SITE OPERATIONS ARE UNINTERRUPTED.
- b. INTERRUPTION OF UTILITY SERVICES.
- c. COORDINATION FOR SHUTOFF, CAPPING AND CONTINUATION OF UTILITY SERVICES.
- d. COORDINATION OF OWNER'S CONTINUING OCCUPANCY OF PORTIONS OF THE EXISTING BUILDING AND OF OWNER'S PARTIAL OCCUPANCY OF COMPLETED WORK.
- 4. NOTIFY ENGINEER OF DISCREPANCIES BETWEEN EXISTING CONDITIONS AND DRAWINGS BEFORE PROCEEDING WITH SELECTIVE DEMOLITION.
- 5. IF SUSPECTED HAZARDOUS MATERIALS ARE ENCOUNTERED, DO NOT DISTURB; IMMEDIATELY NOTIFY ENGINEER AND OWNER. HAZARDOUS MATERIALS WILL BE REMOVED BY OWNER UNDER A SEPARATE CONTRACT.
- REMOVED BY OWNER UNDER A SEPARATE CONTRACT.

 MAINTAIN EXISTING UTILITIES INDICATED TO REMAIN IN SERVICE AND PROTECT THEM

AGAINST DAMAGE DURING SELECTIVE DEMOLITION OPERATIONS.

- 7. REMOVE, REPLACE, PATCH AND REPAIR MATERIALS AND SURFACES CUT OR DAMAGED DURING SELECTIVE DEMOLITION BY METHODS AND WITH MATERIALS SO AS NOT TO VOID EXISTING WARRANTIES.
- 8. REGULATORY REQUIREMENTS: COMPLY WITH THE STATE CONSTRUCTION OFFICE REGULATIONS BEFORE BEGINNING SELECTIVE DEMOLITION. COMPLY WITH HAULING AND DISPOSAL REGULATIONS OF AUTHORITIES HAVING JURISDICTION.
- 9. PROVIDE AND MAINTAIN SHORING, BRACING, AND STRUCTURAL SUPPORTS AS REQUIRED TO PRESERVE STABILITY AND PREVENT MOVEMENT, SETTLEMENT, OR COLLAPSE OF CONSTRUCTION AND FINISHES TO REMAIN, AND TO PREVENT UNEXPECTED OR UNCONTROLLED MOVEMENT OR COLLAPSE OF CONSTRUCTION BEING DEMOLISHED.
- 10. CLEAN ADJACENT STRUCTURES AND IMPROVEMENTS OF DUST, DIRT, AND DEBRIS CAUSED BY SELECTIVE DEMOLITION OPERATIONS. RETURN ADJACENT AREAS TO CONDITION EXISTING BEFORE SELECTIVE DEMOLITION OPERATIONS BEGAN.

SECTION 07 92 00 JOINT SEALANTS

- 1. ACRYLIC LATEX SEALANT: ASTM C-834. SEALANT SHALL BE PAINTABLE.
- PRIMER: WHERE REQUIRED, SHALL BE USED AS RECOMMENDED, IN WRITING BY THE MANUFACTURER. THE PRIMER SHALL HAVE BEEN TESTED FOR NON-STAINING CHARACTERISTICS AND DURABILITY ON SAMPLES OF ACTUAL SURFACES TO BE SEALED.
- 3. BACK-UP MATERIALS AND PREFORMED JOINT FILLERS SHALL BE NON-STAINING, COMPATIBLE WITH SEALANT AND PRIMER, AND OF A RESILIENT NATURE, SUCH AS CLOSED CELL POLYETHYLENE ROD, CLOSED CELL URETHANE OR NEOPRENE ROD, OR ELASTOMERIC TUBING OR ROD (NEOPRENE, BUTYL, OR EPDM). MATERIALS IMPREGNATED WITH OIL BITUMEN OR SIMILAR MATERIALS SHALL NOT BE USED. SIZE AND SHAPE SHALL BE AS RECOMMENDED BY SEALANT MANUFACTURER IN WRITING. SEALANT SHALL NOT ADHERE TO BACK-UP MATERIAL.
- 4. FOLLOW SEALANT MANUFACTURER'S INSTRUCTIONS REGARDING MIXING (IF REQUIRED), SURFACE PREPARATION, PRIMING, APPLICATION LIFE, AND APPLICATION PROCEDURE.
- 5. PROVIDE CAULKING AT THE PERIMETER OF INTERIOR ACCESS DOOR AND WINDOW FRAMES: ACRYLIC LATEX SEALANT.
- 6. PROVIDE NON-SAG SEALANT COMPLYING WITH REQUIREMENTS OF FEDERAL SPECIFICATIONS TTS-1543 OR FS TT-S-280 TYPE "II", CLASS "A." PROVIDE ACOUSTICAL SEALANT WHICH SHALL BE NON-HARDENING, NON-DRYING SYNTHETIC RUBBER SEALING COMPOUND WITH MINIMUM 90% SOLIDS. USE AT ALL INTERIOR JOINTS AT INNER SECTIONS BETWEEN PLANES.
- SURFACES SHALL BE ADEQUATELY CLEANED AND PREPARED IN ACCORDANCE WITH MANUFACTURER'S WRITTEN INSTRUCTIONS PRIOR TO INSTALLATION.

SECTION 09 29 00 GYPSUM BOARD

- GYPSUM BOARD (TYPICAL): 5/8" THICK, REGULAR, TAPERED EDGE. PROVIDE TYPE "X" FIRE RETARDANT GYPSUM WALL BOARD PANELS 5/8" THICK, TESTED AND QUALIFIED FOR 1-HOUR RATING.
- 2. PROVIDE GYPSUM WALL PANELS MANUFACTURED IN ACCORDANCE WITH REQUIREMENTS OF ASTM 336.
- 3. WALL TEXTURE: MATCH EXISTING ADJACENT TEXTURE.

SECTION 09 91 24 INTERIOR PAINTING (MPI STANDARDS)

1. SUBMITTALS:

a. PRODUCT DATA, ORGANIZED BY MPI SYSTEM. INDICATE LOCATION OF EACH PROPOSED SYSTEM.

b. SAMPLE: 6 INCH BY 6 INCH DRAWDOWN FOR ENGINEER REVIEW.

- 2. PROVIDE ALL PAINTING AND FINISHING REQUIRED FOR UNFINISHED SURFACES.
- 3. PAINT SHALL BE ON THE MASTER PAINTERS INSTITUTE (MPI) APPROVED PRODUCTS LIST FOR THE USE INDICATED.
- 4. BEFORE PAINTING, REMOVE HARDWARE, ACCESSORIES, PLATES, LIGHTING FIXTURES AND SIMILAR ITEMS OR PROVIDE AMPLE PROTECTION OF SUCH ITEMS. ON COMPLETION OF EACH SPACE, REPLACE ABOVE ITEMS. PROTECT ADJACENT SURFACES AS REQUIRED OR DIRECTED.
- 5. PERFORM ALL WORK USING ONLY EXPERIENCED, COMPETENT PAINTERS. MATERIALS, PREPARATION AND WORKMANSHIP SHALL CONFORM TO THE REQUIREMENTS OF THE LATEST EDITION OF THE ARCHITECTURAL PAINTING SPECIFICATION MANUAL BY THE MASTER PAINTERS INSTITUTE (MPI.) ROLL OR BRUSH INTERIOR WORK. APPLY ALL PAINT MATERIALS UNDER ADEQUATE ILLUMINATION.
- 6. PAINT ONLY WHEN SURFACES ARE CLEAN, DRY, SMOOTH AND ADEQUATELY PROTECTED FROM DAMPNESS. EACH COAT OF PAINT SHALL BE WELL APPLIED, WORKED OUT EVENLY AND ALLOWED TO DRY AT LEAST 24 HOURS BEFORE THE SUBSEQUENT COAT IS APPLIED. FINISHED WORK SHALL BE UNIFORM, OF APPROVED COLOR, SMOOTH AND FREE FROM RUNS, SAGS, CLOGGING OR EXCESSIVE FLOODING. MAKE EDGES OF PAINT ADJOINING OTHER MATERIALS OR COLORS SHARP AND CLEAN WITHOUT OVERLAPPING. WHERE HIGH GLOSS ENAMEL IS USED, LIGHTLY SAND UNDERCOATS TO OBTAIN A SMOOTH FINISH COAT.
- 7. APPLY 2 COAT APPLICATIONS OVER PROPER PRIMER, FILLER OR PRE-TREATMENT FOR EACH TYPE OF SURFACE. CEILINGS GLOSS LEVEL SHALL MATCH EXISTING.
- 8. PROVIDE THE FOLLOWING PAINT SYSTEMS FOR THE SUBSTRATES INDICATED: MASTER PAINTERS INSTITUTE (MPI) APPROVED PRODUCTS LIST CAN BE FOUND ON-LINE AT WWW.PAINTINFO.COM. PRODUCTS ARE LISTED NUMERICALLY, ALPHABETICALLY AND BY CATEGORY ON THAT WEB SITE.
 - a. GYPSUM BOARD: LATEX SYSTEM, MPI SYSTEM INT 9.2A.

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SKA Consulting Engineers, Inc.

7900 Triad Center Drive, Suite 200
Greensboro, NC 27409-9075

t: 336 855 0993

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 BUILDING
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LIAM MOORE DRIVE

SYMBOL LEGENI

Designed By: KMO

Drawn By: MRS

Checked By: RGL

05/31/2024

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	LIGHTING FIXTURE SCHEDULE								
SYMBOL	MANUFACTURER	CATALOG NO.	VOLTS	TYPE	LAMPS DESCRIPTION	ENERGY INPUT WATTS	MOUNTING	DESCRIPTION	
A1*	GREEN CREATIVE EQUIVALENTS	8.5T8/2F/840/UEB (UNIVERSAL ENDED BYPASS 2' T8 LAMP WITH MEDIUM BI-PIN BASE) GE, TCP	120/277	LED	1,100 LUMENS 4000°K, 80+ CRI	9	EXISTING FIXTURE HOUSING	2' LED T8 (TYPE B) REPLACEMENT LAMP WITH INTEGRAL LED DRIVER AND L70 RATED LIFETIME OF 60,000 HRS. EC SHALL REMOVE EXISTING FLUOR. BALLAST AND REWIRE LAMP HOLDERS FOR SINGLE OR DOUBLE-ENDED INSTALLATION.	
A2*	GREEN CREATIVE	14T8/4F/840/UEB (UNIVERSAL ENDED BYPASS 4' T8 LAMP WITH MEDIUM BI-PIN BASE) GE, TCP	120/277	LED	2,200 LUMENS 4000°K, 80+ CRI	14	EXISTING FIXTURE HOUSING	4' LED T8 (TYPE B) REPLACEMENT LAMP WITH INTEGRAL LED DRIVER AND L70 RATED LIFETIME OF 60,000 HRS. EC SHALL REMOVE EXISTING FLUOR. BALLAST AND REWIRE LAMP HOLDERS FOR SINGLE OR DOUBLE-ENDED INSTALLATION.	
В3	CURRENT EQUIVALENTS	6L - W - D - 12 - 06 - SOF - C1 - 40K9 - DO50 - NDM - 1C - UNV LEDALITE, PEERLESS	120/277	LED	500 LUMENS / FOOT 4000°K, 90 CRI	47	SURFACE OF WALL	6" x 12' LINEAR LED WALL MOUNTED FIXTURE WITH DIFFUSE FLUSH LENS AND WHITE HOUSING. PROVIDE WITH NON-DIMMING DRIVER.	
D1	BY CURRENT	4L - LG - D - 8 - 08 - BAT - C1 - 40K9 - D075 - NDM - 1C - UNV	- 120/277	LED	750 LUMENS / FOOT 4000°K, 90 CRI	50	RECESSED IN 15/16" T-GRID		
	EQUIVALENTS BY	LEDALITE, PEERLESS 4L - DW - D - 8 - 08 - BAT - C1 - 40K9 - D075			4000 K, 90 CRI		CEILING	PROVIDE WITH NON-DIMMING DRIVER.	
D2	CURRENT EQUIVALENTS BY	- NDM - 1C - UNV LEDALITE, PEERLESS	120/277	LED	750 LUMENS / FOOT 4000°K, 90 CRI	50	RECESSED IN 4" METAL SLOTTED CEILING	4" x 8' LINEAR LED RECESSED FIXTURE WITH DRYWALL FLANGE, BATWING DISTRIBUTION, AND WHITE HOUSING. PROVIDE WITH NON-DIMMING DRIVER.	
D3	CURRENT EQUIVALENTS	4L - DW - D - 4 - 04 - SOF - C1 - 40K9 - D050 - NDM - 1C - UNV LEDALITE, PEERLESS	120/277	LED	500 LUMENS / FOOT 4000°K, 90 CRI	17	RECESSED IN 15/16" T-GRID CEILING		
E	BY CURRENT EQUIVALENTS	4L - S - D - 4 - 04 - SOF - C1 - 40K9 - D050 - NDM - 1C - UNV	120/277	LED	500 LUMENS / FOOT 4000°K, 90 CRI	17	SURFACE OF CEILING GRID	4" x 4' LINEAR LED SURFACE MOUNTED FIXTURE WITH DIFFUSED LENS AND WHITE HOUSING. PROVIDE WITH NON-DIMMING DRIVER.	
	BY	LEDALITE, PEERLESS 6L - DW - D - 4 - 04 - BAT - C1 - 40K9 - D100 - D01 - 1C - UNV			4 200		RECESSED IN		
G1	EQUIVALENTS BY	LEDALITE, PEERLESS	120/277	LED	1,000 LUMENS / FOOT 4000°K, 90 CRI	32	GYPSUM CEILING	BATWING DISTRIBUTION AND WHITE HOUSING. PROVIDE WITH 0-10V DIMMING DRIVER.	
G2	CURRENT EQUIVALENTS BY	6L - S - D - 8 - 08 - BAT - C1 - 40K9 - D075 - D01 - 1C - UNV	- 120/277	LED	750 LUMENS / FOOT 4000°K, 90 CRI	46	SURFACE MOUNTED TO BOTTOM OF EXISTING UNISTRUT	6" x 8' LINEAR DIRECT LED SURFACE MOUNTED FIXTURE WITH BATWING DISTRIBUTION AND WHITE HOUSING. PROVIDE WITH 0-10V DIMMING DRIVER.	
G3	CURRENT EQUIVALENTS	6L - S - D - 12 - 06 - BAT - C1 - 40K9 - D075 - D01 - 1C - UNV LEDALITE, PEERLESS	120/277	LED	750 LUMENS / FOOT 4000°K, 90 CRI	70	SURFACE MOUNTED TO BOTTOM OF EXISTING	6" x 12' LINEAR DIRECT LED SURFACE MOUNTED FIXTURE WITH BATWING DISTRIBUTION AND WHITE HOUSING. PROVIDE WITH 0-10V DIMMING DRIVER.	
G5	BY CURRENT EQUIVALENTS	6L - S - D - 20 - 05 - BAT - C1 - 40K9 - D075 - D01 - 1C - UNV	120/277	LED	750 LUMENS / FOOT 4000°K, 90 CRI	116	SURFACE MOUNTED TO BOTTOM OF EXISTING	6" x 20' LINEAR DIRECT LED SURFACE MOUNTED FIXTURE WITH BATWING DISTRIBUTION AND WHITE HOUSING. PROVIDE WITH 0-10V DIMMING DRIVER.	
	BY	LEDALITE, PEERLESS 6L - S - D - 28 - 06 - BAT - C1 - 40K9 - D075 - D01 - 1C - UNV			750 LUMENS / FOOT		UNISTRUT SURFACE MOUNTED TO	6" x 28' LINEAR DIRECT LED SURFACE MOUNTED	
G7	EQUIVALENTS BY	LEDALITE, PEERLESS	120/277	LED	4000°K, 90 CRI	162	BOTTOM OF EXISTING UNISTRUT	FIXTURE WITH BATWING DISTRIBUTION AND WHITE HOUSING. PROVIDE WITH 0-10V DIMMING DRIVER.	
G9	CURRENT EQUIVALENTS BY	6L - S - D - 36 - 06 - BAT - C1 - 40K9 - D075 - D01 - 1C - UNV LEDALITE, PEERLESS	- 120/277	LED	750 LUMENS / FOOT 4000°K, 90 CRI	209	SURFACE MOUNTED TO BOTTOM OF EXISTING UNISTRUT	6" x 36' LINEAR DIRECT LED SURFACE MOUNTED FIXTURE WITH BATWING DISTRIBUTION AND WHITE HOUSING. PROVIDE WITH 0-10V DIMMING DRIVER.	
L1	CURRENT EQUIVALENTS	CBT22 - A - LSCS - EDD ACUITY, SIGNIFY	120/277	LED	3,300 LUMENS 4000°K, 80+ CRI	28		2x2 LED BACKLIT FLAT PANEL WITH SWITCHABLE LUMENS AND CCT. PROVIDE WITH 0-10V DIMMING DRIVER.	
	BY CURRENT	CBT24 - A - LSCS - EDD			4 400 LLIMENS		RECESSED IN		
L2	EQUIVALENTS BY	ACUITY, SIGNIFY	120/277	77 LED	LED	4,400 LUMENS 4000°K, 80+ CRI	38	15/16" T-GRID CEILING	
L3	CURRENT EQUIVALENTS BY	CBT24 - A - LSCS - EDD - FK24 ACUITY, SIGNIFY	120/277	LED	4,400 LUMENS 4000°K, 80+ CRI	38	RECESSED IN GYPSUM CEILING	2x4 LED BACKLIT FLAT PANEL WITH SWITCHABLE LUMENS AND CCT. PROVIDE WITH 0-10V DIMMING DRIVER. PROVIDE WITH FLANGE KIT FOR GYPSUM CEILING.	
L5	CURRENT	CBT14 - A - LSCS - EDD	120/277	LED	2,800 LUMENS	24	RECESSED IN 15/16" T-GRID CEILING		
	EQUIVALENTS BY	ACUITY, SIGNIFY	120/211	LED	4000°K, 80+ CRI	24			
L8	CURRENT EQUIVALENTS BY	CBT14 - A - LSCS - EDD - PSMK14 ACUITY, SIGNIFY	120/277	LED	2,800 LUMENS 4000°K, 80+ CRI	24	SURFACE OF CEILING	1x4 LED BACKLIT FLAT PANEL WITH SWITCHABLE LUMENS AND CCT. PROVIDE WITH 0-10V DIMMING DRIVER. PROVIDE WITH SURFACE MOUNT KIT FOR GYPSUM CEILING.	

30114-F5002A DWG	

SYMBOL	MANUFACTURER	CATALOG NO.	VOLTS		LAMPS	ENERGY INPUT	MOUNTING	DESCRIPTION				
STIVIBUL	MANUFACTURER	CATALOG NO.	VOLIS	TYPE	DESCRIPTION	WATTS	MOUNTING	DESCRIPTION				
P1	CURRENT	LCL4 - 40ML - EU - CSHC	120/277	LED	5,300 LUMENS 4000°K, 80+ CRI	42	PENDANT MOUNTED TO ORIGINAL FIXTURE HEIGHT	4' LED STRIPLIGHT WITH FROSTED ACRYLIC LENS. PROVIDE MOUNTING HARDWARE REQUIRED TO MOUNT NEW FIXTURE AT SAME HEIGHT OF EXISTING FIXTURE.				
	EQUIVALENTS BY	ACUITY, SIGNIFY			4000 TX, 00 - OTX							
P2 -	CURRENT	LCL4 - 40ML - EU	120/277	LED	5,300 LUMENS	42	SURFACE OF	4' LED STRIPLIGHT WITH FROSTED ACRYLIC LENS.				
	EQUIVALENTS BY	ACUITY, SIGNIFY			4000°K, 80+ CRI		WALL					
P3	CURRENT	LCL4 - 40ML - EU	120/277	LED	5,300 LUMENS	42	SURFACE OF CEILING	4' LED STRIPLIGHT WITH FROSTED ACRYLIC LENS.				
1 3	EQUIVALENTS BY	ACUITY, SIGNIFY			4000°K, 80+ CRI							
P5	CURRENT	LCL4 - 40ML - EDU - CSHC	- 120/277	120/277 LED	5,300 LUMENS	42	PENDANT MOUNTED TO ORIGINAL	AND 0-10V DIMMING DRIVER. PROVIDE MOUNTING				
	EQUIVALENTS BY	ACUITY, SIGNIFY			4000°K, 80+ CRI		FIXTURE HEIGHT	HARDWARE REQUIRED TO MOUNT NEW FIXTURE AT SAME HEIGHT OF EXISTING FIXTURE.				
R1	CURRENT	LFR - 6RD - M - 30L40K8 - WD - DM1 / LFR - 6RD - T - SH - WTAML	120/277	LED	1,900 LUMENS 4000°K, 80+ CRI	24	RECESSED IN CEILING	6" APERTURE LED RECESSED DOWNLIGHT WITH IP65 RATING AND NON-CONDUCTIVE SHOWER TRIM. PROVIDE WITH 0-10V DIMMING DRIVER.				
	EQUIVALENTS BY	ACUITY, SIGNIFY										
S1	CURRENT	PVNT - 4 - 4 - 55 - 40K8 - NDM - UNV - D - WHT - OCM - SS(XX)(YY)	120/277	LED	7,400 LUMENS	55	PENDANT MOUNTED TO ORIGINAL	8" x 4' LED VANDAL RESISTANT STAIRWELL FIXTUR WITH INTEGRAL MICROWAVE OCCUPANCY SENSO TO DIM LIGHTS TO 30% WHEN UNOCCUPIED.				
31	EQUIVALENTS BY	ACUITY, SIGNIFY		120/277	120/2//	120/2//	120/211	120/211		4000°K, 80+ CRI	55	FIXTURE HEIGHT
S2	CURRENT	PVNT - 4 - 4 - 55 - 40K8 - NDM - UNV - D - WHT - OCM	- 120/277	LED	7,400 LUMENS	55	SURFACE OF					
	EQUIVALENTS BY	ACUITY, SIGNIFY				4000°K, 80+ CRI		WALL	OCCUPANCY SENSOR TO DIM LIGHTS TO 30% WHEN STAIRWELL IS UNOCCUPIED.			
S3	CURRENT	PVNT - 4 - 4 - 55 - 40K8 - NDM - UNV - D - WHT - OCM	120/277	120/277	120/277	LED	7,400 LUMENS	55	SURFACE OF			
55	EQUIVALENTS BY	ACUITY, SIGNIFY				4000°K, 80+ CRI	33	CEILING	OCCUPANCY SENSOR TO DIM LIGHTS TO 30% WHEN STAIRWELL IS UNOCCUPIED.			
W	ALPHALITE	CSDL - 10 - 60A - 8 - A - 40D	120/277	7 LED	ED 4,300 LUMENS 4000°K, 80+ CRI	40	RECESSED IN EXTERIOR 4" METAL SLOTTED CEILING	10" APERTURE LED OPEN RECESSED DOWNLIGHT WITH WET LOCATION LISTING, SEMI-SPECULAR REFLECTOR, AND WHITE TRIM RING.				
	EQUIVALENTS BY	ACUITY, SIGNIFY	120/271									
Х	CURRENT	CAR	120/277	LED	-	2	UNIVERSAL	LED EXIT SIGN WITH WHITE THERMOPLASTIC HOUSING, OPTIONAL SINGLE OR DOUBLE FACE, RED LETTERS, AND REMOVABLE CHEVRONS.				
^	EQUIVALENTS BY	ACUITY, SIGNIFY										
ХС	CURRENT	CCRSD	120/277	LED	LED -		LINIIV/EDCAL	COMBINATION LED EXIT SIGN AND EMERGENCY EGRESS LIGHT FIXTURE WITH WHITE HOUSING, RED LETTERS AND INTEGRAL BATTERY.				
XC ·	EQUIVALENTS BY	ACUITY, SIGNIFY	120/277	LED		2	UNIVERSAL					
	CURRENT	WGH1 - LS - 4K	120/277		2,900 LUMENS	20	SURFACE OF	11" WIDE EXTERIOR LED WALL PACK WITH GLASS LENS AND SWITCHABLE LUMENS.				
Y1	EQUIVALENTS BY	ACUITY, SIGNIFY	120/211	LED	4000°K, 80+ CRI	20	EXTERIOR WALL					
Y2	CURRENT	WGH2 - LSCS - 4K	120/277	LED	5,400 LUMENS	41	SURFACE OF EXTERIOR	14" WIDE EXTERIOR LED WALL PACK WITH GLASS				
12	EQUIVALENTS BY	ACUITY, SIGNIFY	120/211	LED	LED	4000°K, 80+ CRI	41	WALL	LENS AND SWITCHABLE LUMENS.			
_	SPECTRUM LIGHTING	C0816XT - 30L - 40K - XW - EX - TSG - NL - PM24 - MW	100/25-	7 LED	2,300 LUMENS		24" RIGID	8" APERTURE LED PENDANT MOUNTED CYLINDER WITH NO LENS, WIDE DISTRIBUTION, DAMP				
Z	EQUIVALENTS BY	ACUITY, SIGNIFY	120/277		LED	LED	4000°K, 80+ CRI	33	PENDANT MOUNT	LOCATION LISTING, ALUMINUM CONSTRUCTION, STAINLESS STEEL HARDWARE, AND WHITE		

* THE EC SHALL PROVIDE A MOCKUP OF THE TYPE A1 AND A2 FIXTURE FOR THE DESIGNER AND OWNER TO REVIEW THE INSTALLATION.

ADDITIONAL ELECTRICAL NOTES:

1. CONTRACTOR SHALL COORDINATE WITH NCSU ENVIRONMENTAL HEALTH AND SAFETY FOR THE SAFE DISPOSAL OF FLOURESCENT LAMPS AND BALLASTS. 2. EC SHALL INSTALL ALL RECESSED LIGHT FIXTURES SUCH THAT ALL RECESSED PARTS ARE SPACED NOT LESS THAN 1/2" FROM COMBUSTIBLE MATERIALS

ACCORDING TO NEC 410.116(A)(1) AND VERIFY LUMINAIRE LISTING REQUIRED FOR FIXTURES RECESSED IN FIRE RESISTANCE MATERIAL ACCORDING TO NEC

3. WHERE 0-10V DIMMING WIRING IS BEING PULLED THROUGH EXISTING LIGHTING CONDUIT, UTILIZE A NON-METALLIC SHEATHED CABLE AS REQUIRED BY NEC 725.136(I)(1) AND LISTED PER NEC 725.135(A).

4. ALL 0-10V DIMMING WIRING SHALL BE INSTALLED IN EMT PER NC STATE UNIVERSITY STANDARDS.
5. REMOVE AND STORE EXISTING CEILING TILE AS REQUIRED FOR THIS WORK. REINSTALL EXISTING CEILING TILE ONCE WORK IS COMPLETED. CONTRACTOR SHALL REPLACE ANY CEILING TILE DAMAGED DURING CONSTRUCTION WITH CEILING TILE OF MATCHING TYPE.

6. ANY EXPOSED CONDUIT SHALL BE PAINTED TO MATCH EXISTING CONDUIT IN AREA. WHERE CUTTING IS REQUIRED BY THIS WORK, CONTRACTOR SHALL PATCH AND PAINT PER SPECIFICATIONS.

8. PROVIDE LIGHTING FIXTURE SUPPORTS FOR ALL FIXTURES PER SPECIFICATIONS.

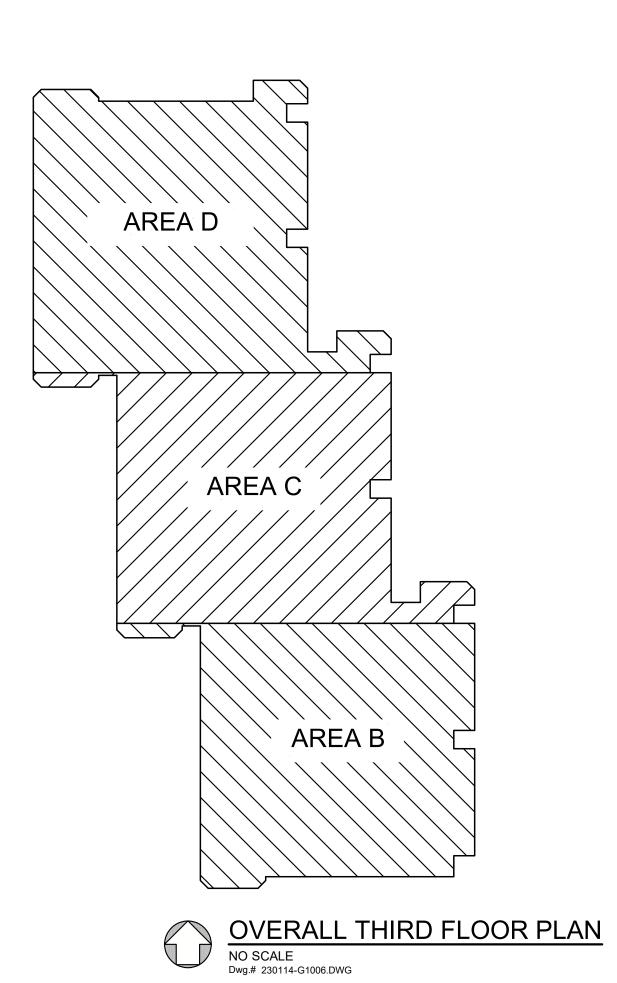
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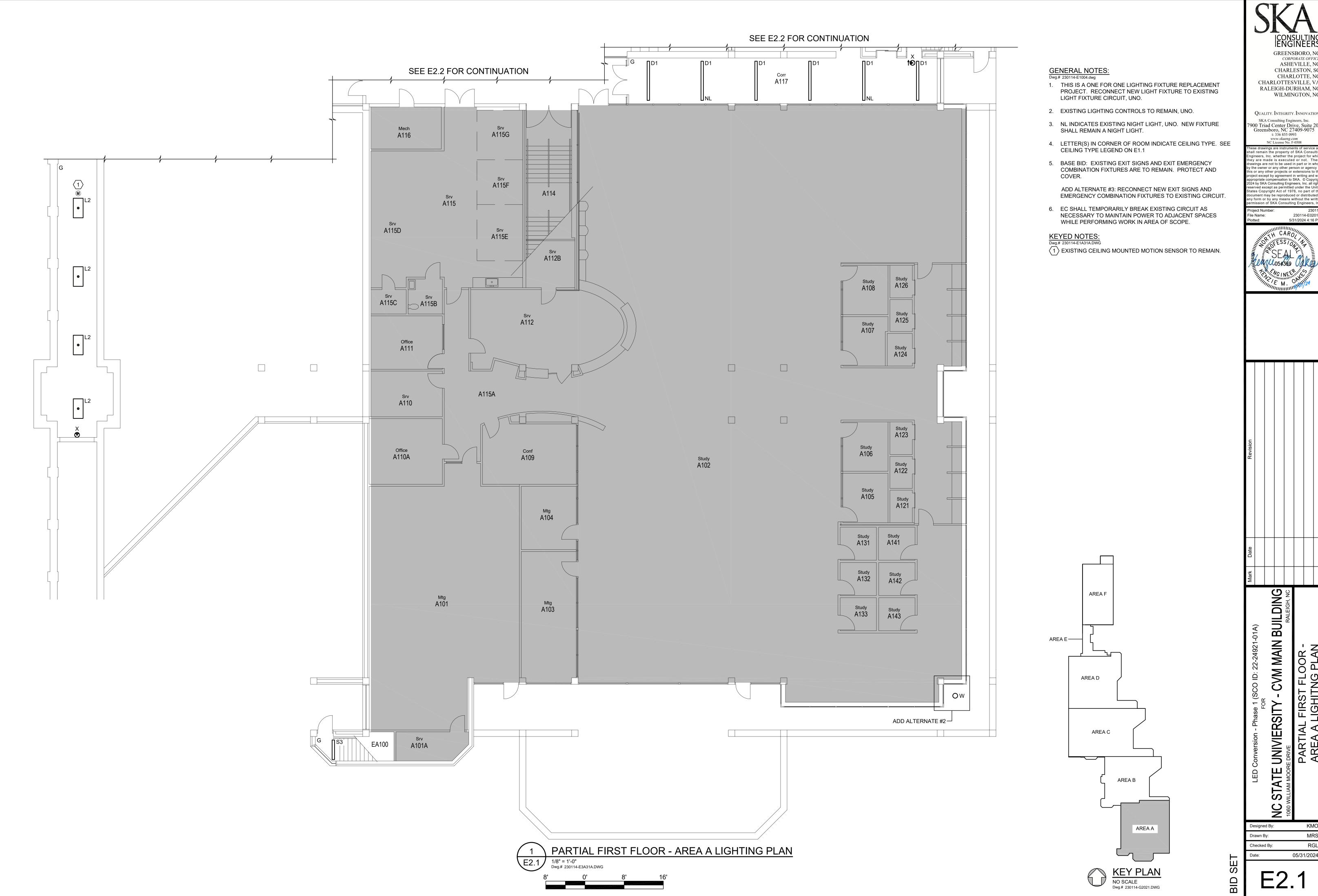
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05/31/2024

CVM MAIN BUILDING

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CHARLESTON, SO CHARLOTTE, NC

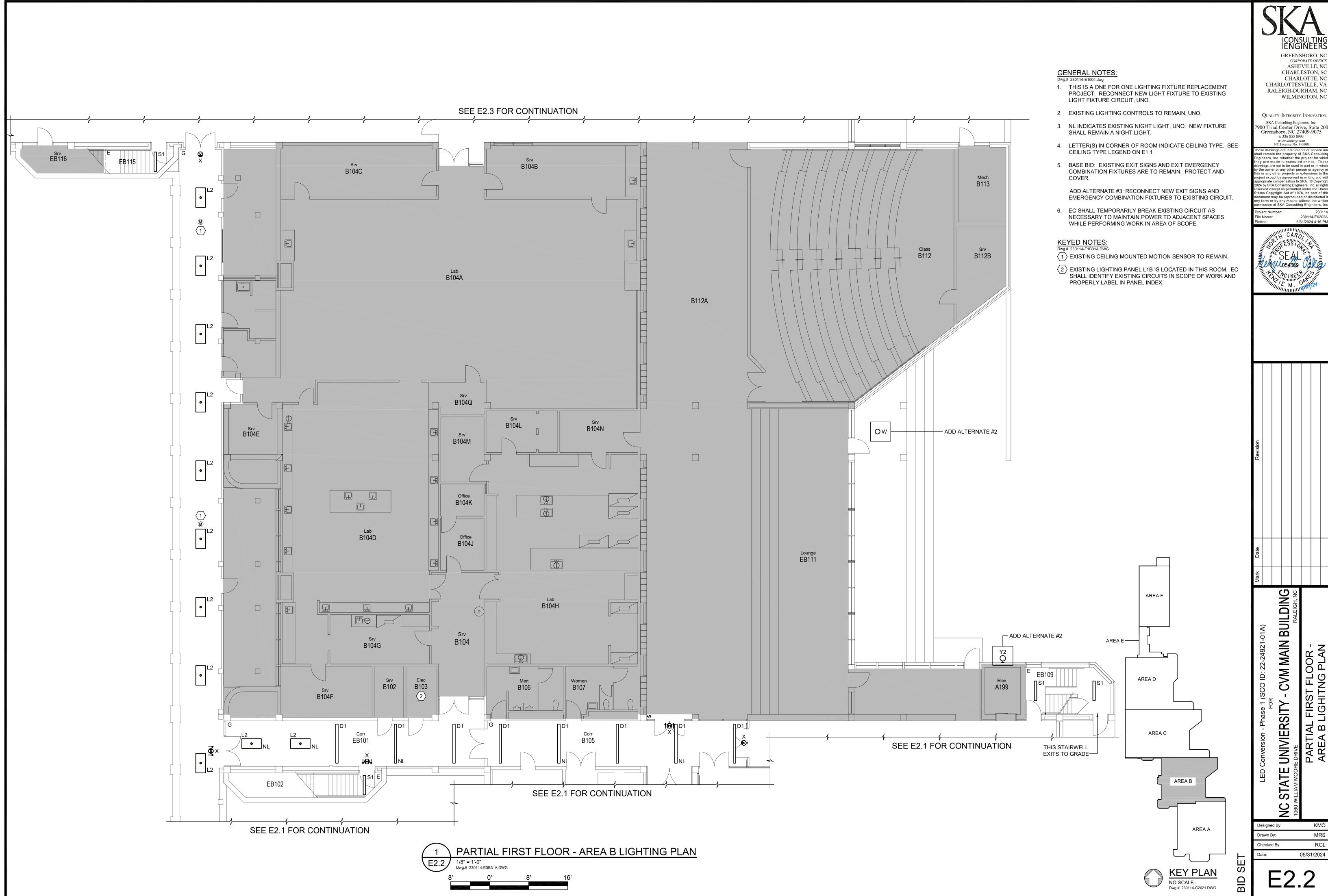
WILMINGTON, NC

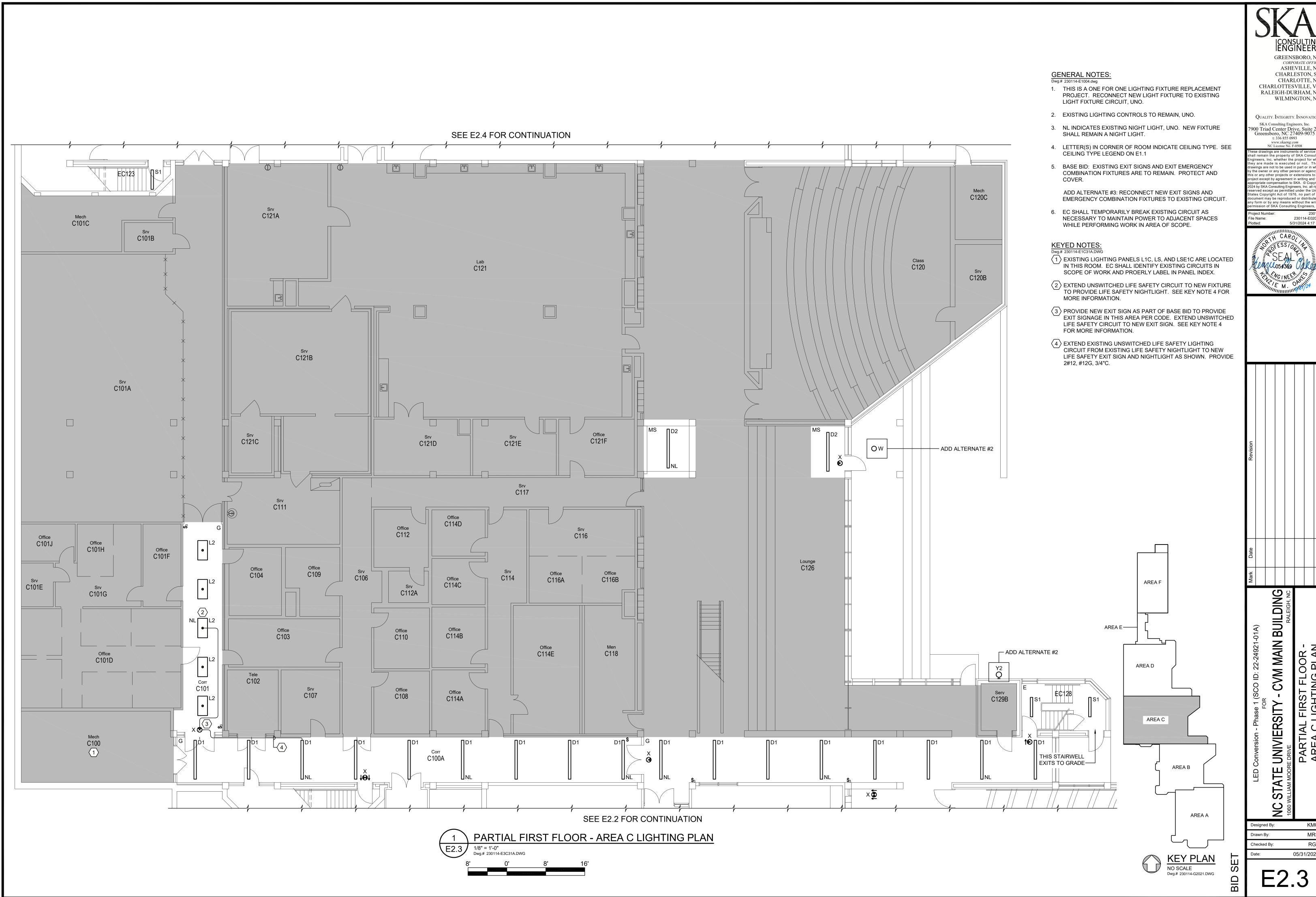
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CHARLOTTESVILLE, VA

RALEIGH-DURHAM, NO

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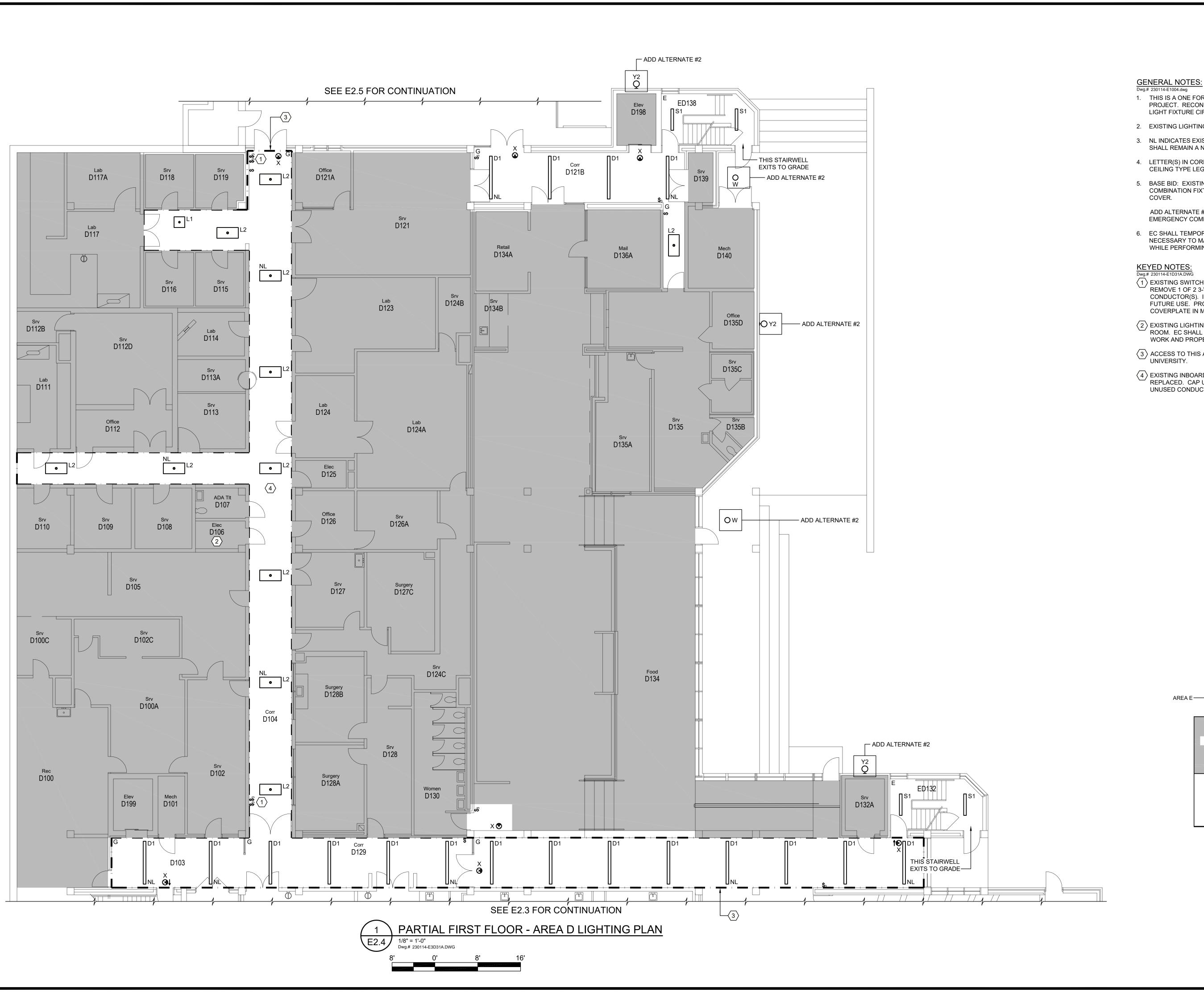
GREENSBORO, N CORPORATE OFFICE ASHEVILLE, NO CHARLESTON, SO CHARLOTTE, NO CHARLOTTESVILLE, VA RALEIGH-DURHAM, NO WILMINGTON, NC

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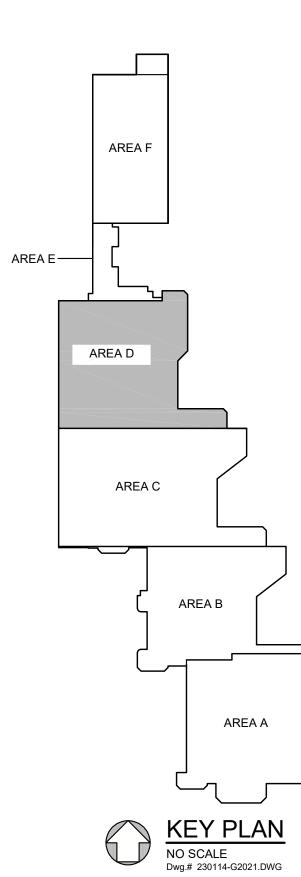


- 1. THIS IS A ONE FOR ONE LIGHTING FIXTURE REPLACEMENT PROJECT. RECONNECT NEW LIGHT FIXTURE TO EXISTING LIGHT FIXTURE CIRCUIT, UNO.
- 2. EXISTING LIGHTING CONTROLS TO REMAIN, UNO.
- 3. NL INDICATES EXISTING NIGHT LIGHT, UNO. NEW FIXTURE SHALL REMAIN A NIGHT LIGHT.
- 4. LETTER(S) IN CORNER OF ROOM INDICATE CEILING TYPE. SEE CEILING TYPE LEGEND ON E1.1
- 5. BASE BID: EXISTING EXIT SIGNS AND EXIT EMERGENCY COMBINATION FIXTURES ARE TO REMAIN. PROTECT AND COVER.

ADD ALTERNATE #3: RECONNECT NEW EXIT SIGNS AND EMERGENCY COMBINATION FIXTURES TO EXISTING CIRCUIT.

6. EC SHALL TEMPORARILY BREAK EXISTING CIRCUIT AS NECESSARY TO MAINTAIN POWER TO ADJACENT SPACES WHILE PERFORMING WORK IN AREA OF SCOPE.

- 1 EXISTING SWITCHES SERVE INBOARD/OUTBOARD FIXTURES. REMOVE 1 OF 2 3-WAY SWITCHES IN 2-GANG BOX. CAP UNUSED CONDUCTOR(S). IDENTIFY/TAG UNUSED CONDUCTOR(S) FOR FUTURE USE. PROVIDE NEW 2-GANG, 1-TOGGLE/1-BLANK COVERPLATE IN MATCHING FINISH.
- (2) EXISTING LIGHTING PANELS L1D AND EL1D ARE LOCATED IN THIS ROOM. EC SHALL IDENTIFY EXISTING CIRCUITS IN SCOPE OF WORK AND PROPERLY LABEL IN PANEL INDEX.
- (3) ACCESS TO THIS AREA MUST BE COORDINATED WITH THE UNIVERSITY.
- 4 EXISTING INBOARD/OUTBOARD FIXTURES IN CORRIDOR TO BE REPLACED. CAP UNUSED CONDUCTOR(S). INDENTIFY/TAG UNUSED CONDUCTOR(S) FOR FUTURE USE.



NC STATE UNIVIERSITY - C
1060 WILLIAM MOORE DRIVE

GREENSBORO, NO CORPORATE OFFICE ASHEVILLE, NO

CHARLESTON, SC CHARLOTTE, NC

WILMINGTON, NC

CHARLOTTESVILLE, VA

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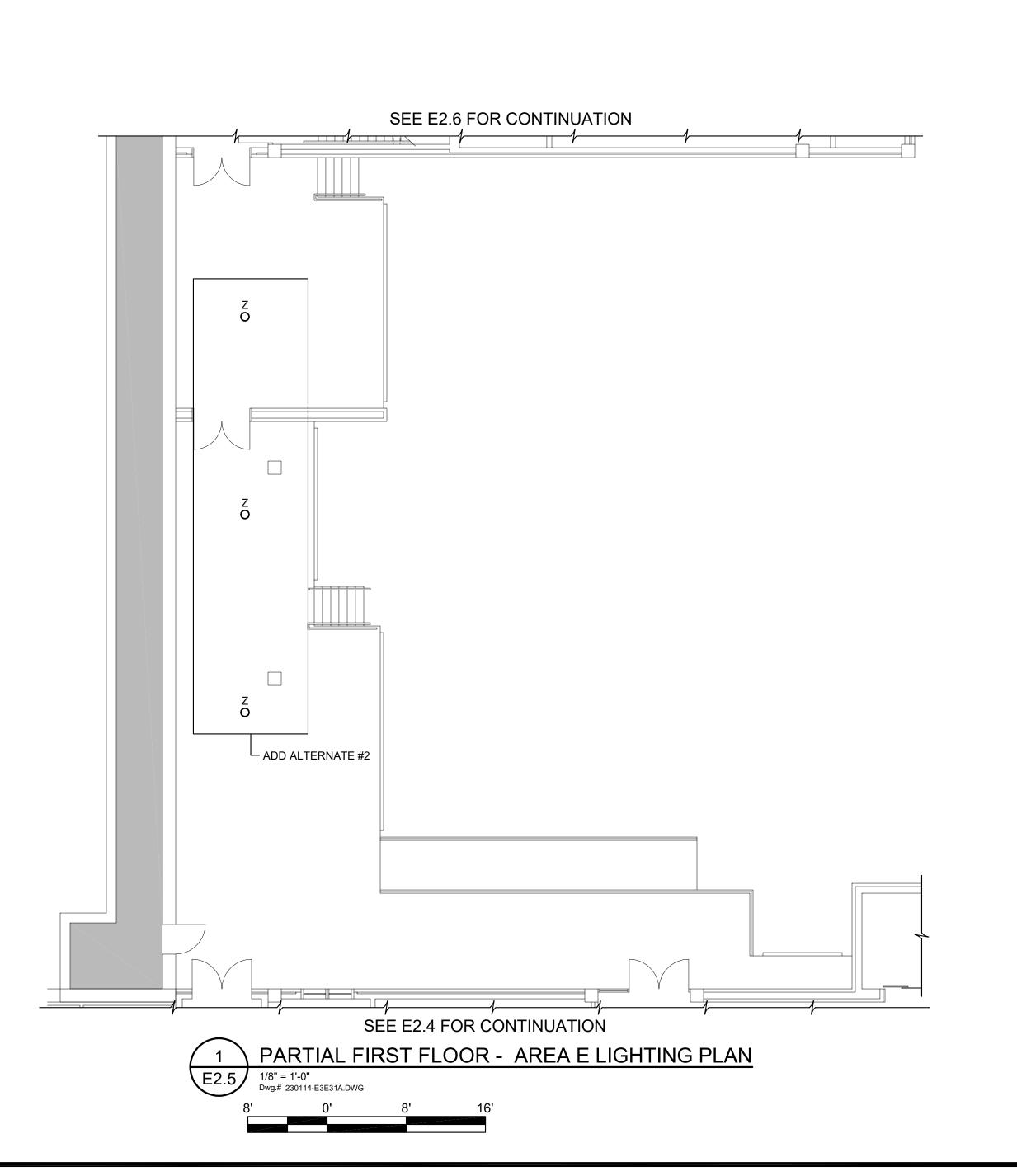
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File Name:

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esigned By: KMO
rawn By: MRS
hecked By: RGL



GENERAL NOTES: Dwg.# 230114-E1004.dwg

- 1. THIS IS A ONE FOR ONE LIGHTING FIXTURE REPLACEMENT PROJECT. RECONNECT NEW LIGHT FIXTURE TO EXISTING LIGHT FIXTURE CIRCUIT, UNO.
- 2. EXISTING LIGHTING CONTROLS TO REMAIN, UNO.
- 3. NL INDICATES EXISTING NIGHT LIGHT, UNO. NEW FIXTURE SHALL REMAIN A NIGHT LIGHT.
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ADD ALTERNATE #3: RECONNECT NEW EXIT SIGNS AND EMERGENCY COMBINATION FIXTURES TO EXISTING CIRCUIT.

 EC SHALL TEMPORARILY BREAK EXISTING CIRCUIT AS NECESSARY TO MAINTAIN POWER TO ADJACENT SPACES WHILE PERFORMING WORK IN AREA OF SCOPE.

CHARLOTTESVILLE, VA RALEIGH-DURHAM, NC WILMINGTON, NC Quality. Integrity. Innovation SKA Consulting Engineers, Inc. 7900 Triad Center Drive, Suite 20 Greensboro, NC 27409-9075 t: 336 855 0993 NC License No. F-0508

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GREENSBORO, NC CORPORATE OFFICE ASHEVILLE, NC

CHARLESTON, SC CHARLOTTE, NC

KEY PLAN

NO SCALE

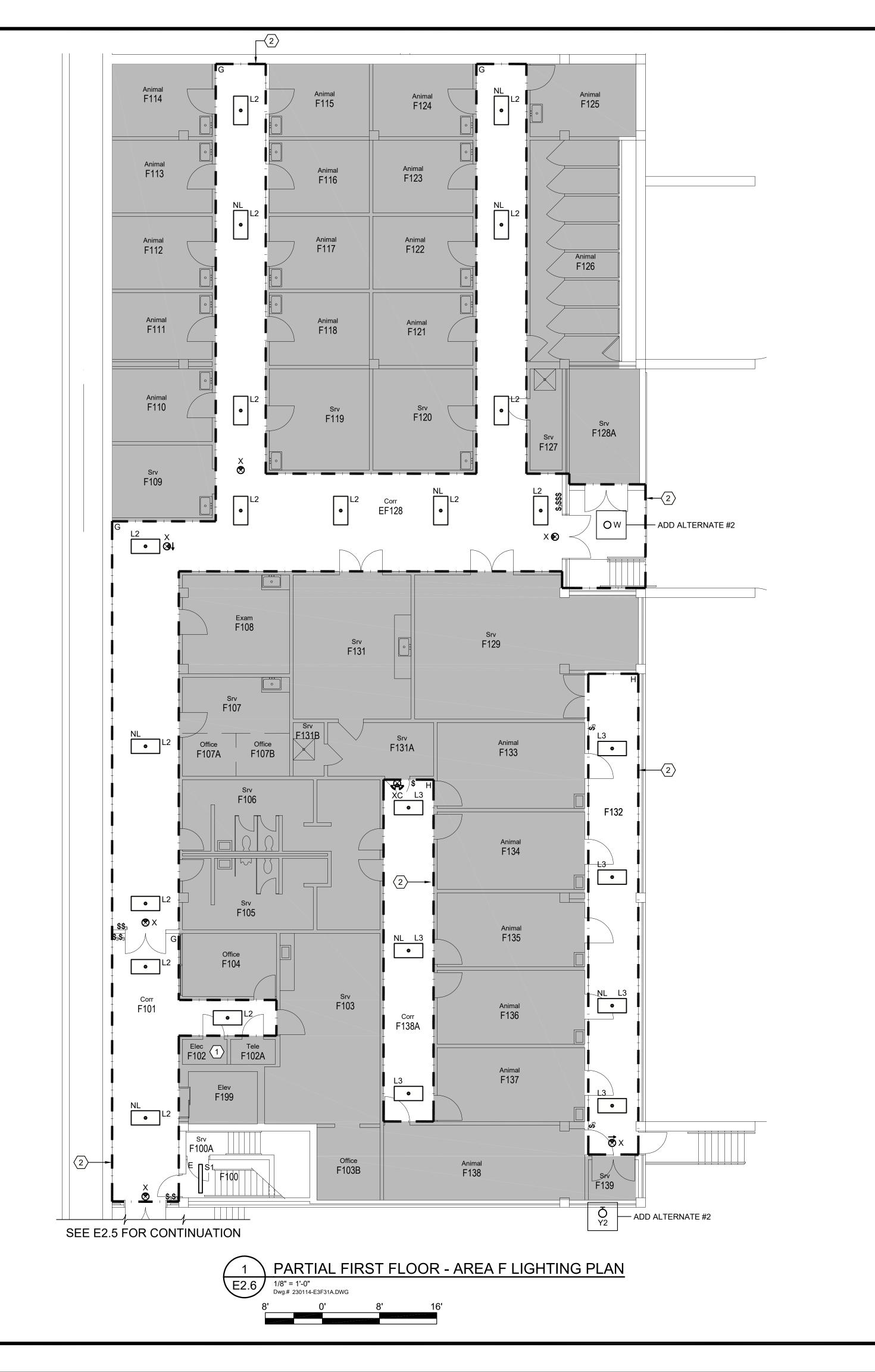
Dwg.# 230114-G2021.DWG

AREA B

AREA F

AREA D

AREA C



1. THIS IS A ONE FOR ONE LIGHTING FIXTURE REPLACEMENT PROJECT. RECONNECT NEW LIGHT FIXTURE TO EXISTING LIGHT FIXTURE CIRCUIT, UNO.

GREENSBORO, NO CORPORATE OFFICE ASHEVILLE, NO

CHARLESTON, SC CHARLOTTE, NC CHARLOTTESVILLE, VA

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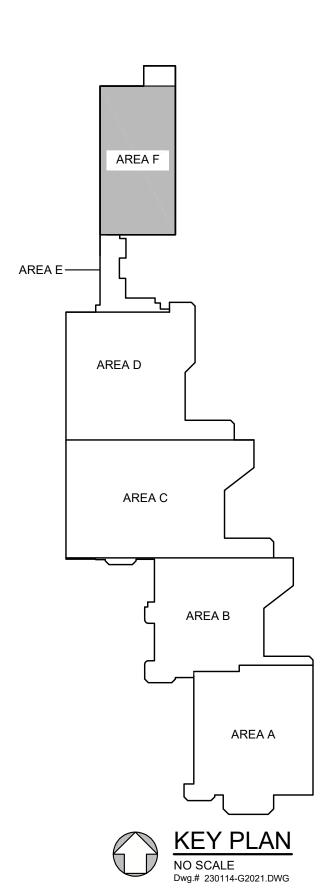
- 2. EXISTING LIGHTING CONTROLS TO REMAIN, UNO.
- NL INDICATES EXISTING NIGHT LIGHT, UNO. NEW FIXTURE SHALL REMAIN A NIGHT LIGHT.
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- 5. BASE BID: EXISTING EXIT SIGNS AND EXIT EMERGENCY COMBINATION FIXTURES ARE TO REMAIN. PROTECT AND COVER.

ADD ALTERNATE #3: RECONNECT NEW EXIT SIGNS AND EMERGENCY COMBINATION FIXTURES TO EXISTING CIRCUIT.

6. EC SHALL TEMPORARILY BREAK EXISTING CIRCUIT AS NECESSARY TO MAINTAIN POWER TO ADJACENT SPACES WHILE PERFORMING WORK IN AREA OF SCOPE.

KEYED NOTES:

- 1 EXISTING LIGHTING PANEL L1F IS LOCATED IN THIS ROOM. EC SHALL IDENTIFY EXISTING CIRCUITS IN SCOPE OF WORK AND PROPERLY LABEL IN PANEL INDEX.
- 2 ACCESS TO THIS AREA MUST BE COORDINATED WITH THE UNIVERSITY.



Designed By: KM

Drawn By: MF

Checked By: R0

Date: 05/31/20



- 1. THIS IS A ONE FOR ONE LIGHTING FIXTURE REPLACEMENT PROJECT. RECONNECT NEW LIGHT FIXTURE TO EXISTING LIGHT FIXTURE CIRCUIT, UNO.
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AREA F

AREA D

AREA C

—AREA E

AREA E NOT IN SCOPE

AREA B

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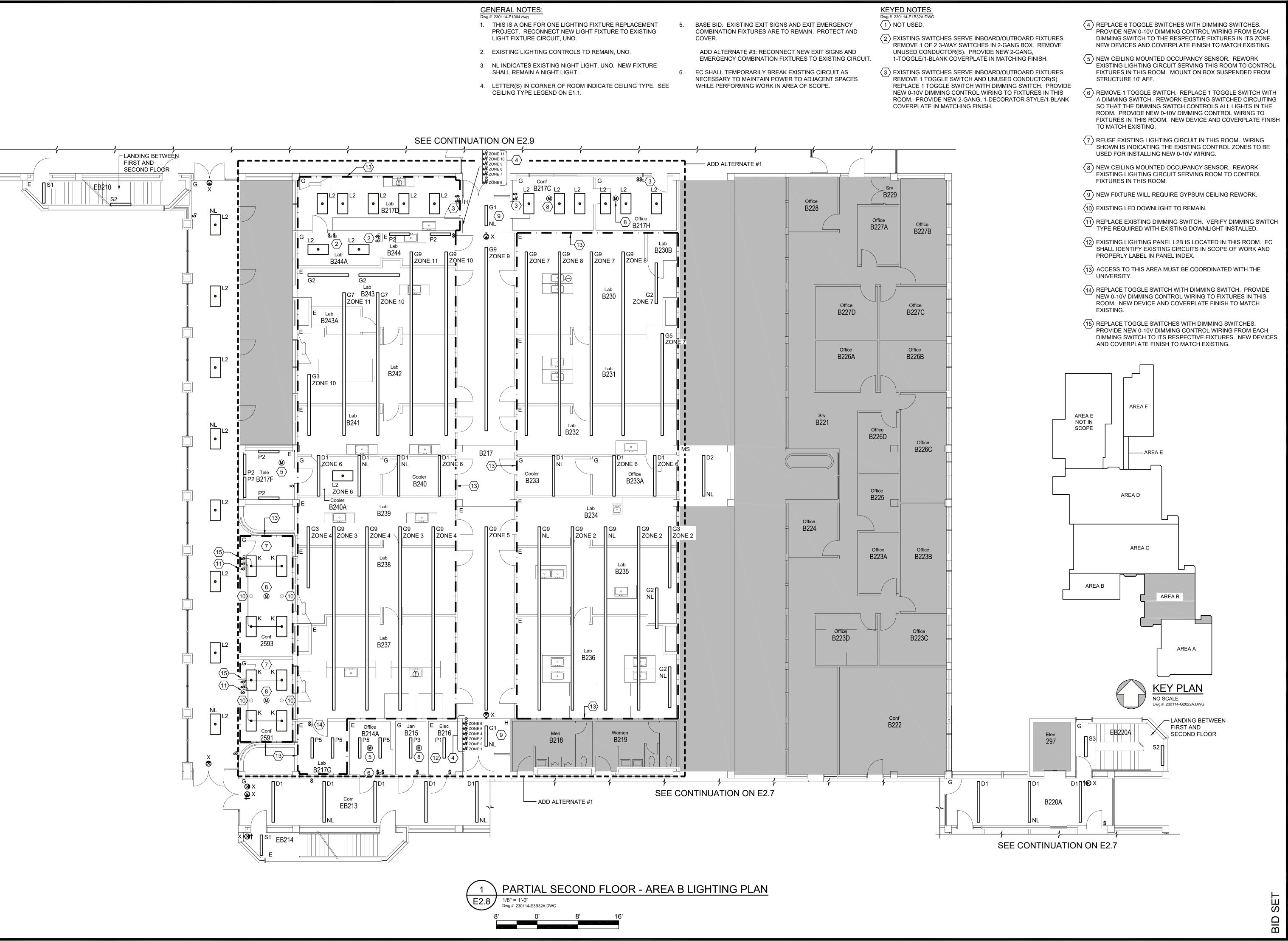
CHARLESTON, SO

CHARLOTTE, NO CHARLOTTESVILLE, VA

WILMINGTON, NC

RALEIGH-DURHAM, N

AREA A KEY PLAN
NO SCALE
Dwg.# 230114-G2022A.DWG



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2301

Project Number:

2301

230114-E0208

Plotted: 5/31/2024 5:06 Pl

STATE UNIVIERSITY - CVM
LIAM MOORE DRIVE
PARTIAL SECOND FL
AREA B. LIGHTING F

BUILDING

Designed By: KMO

Drawn By: MRS

Checked By: RGL



GREENSBORO, N CORPORATE OFFICE ASHEVILLE, N

CHARLESTON, Se CHARLOTTE, NO CHARLOTTESVILLE, VA RALEIGH-DURHAM, NO WILMINGTON, NC

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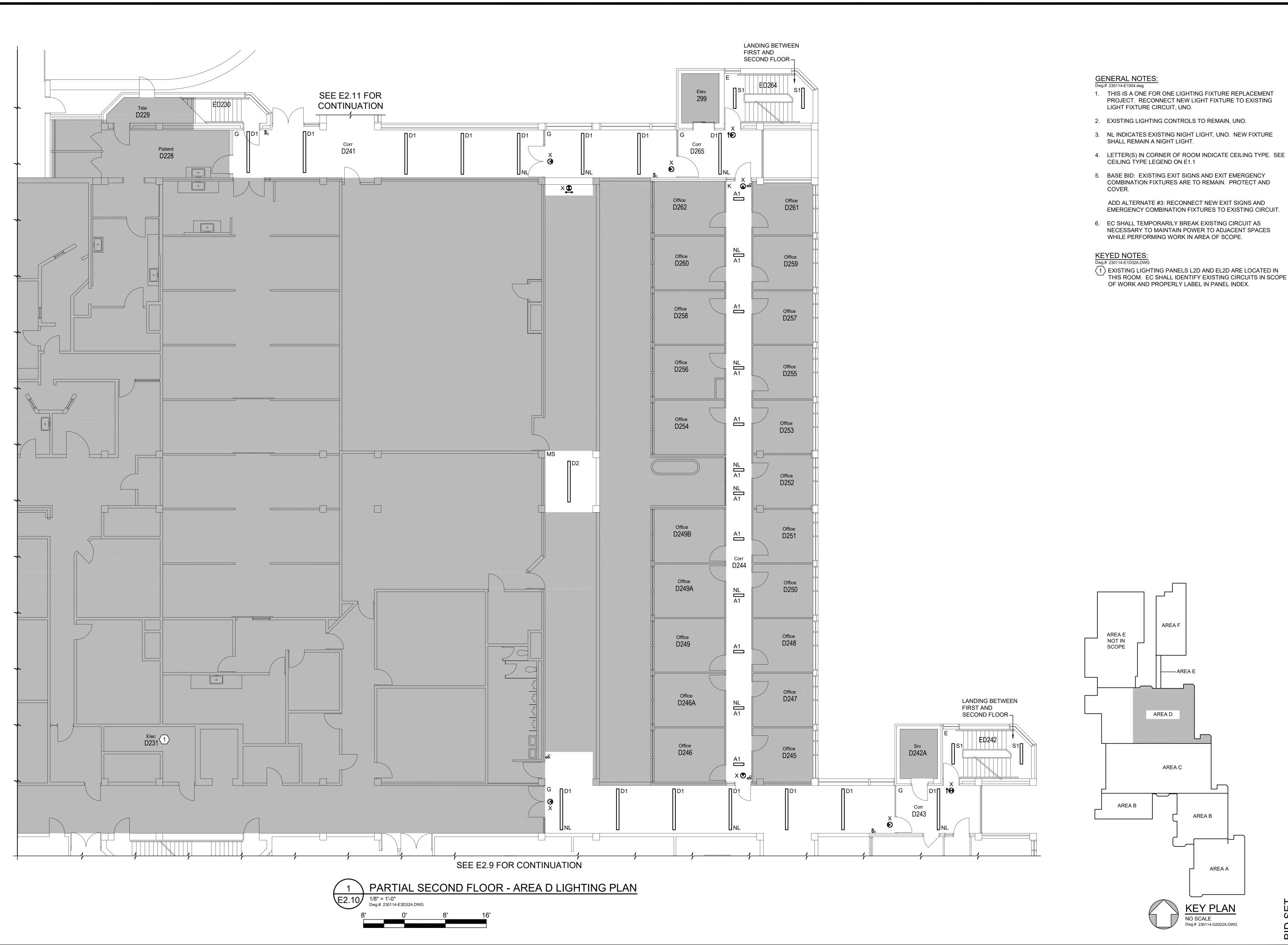
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BUILDING

05/31/2024



THIS ROOM. EC SHALL IDENTIFY EXISTING CIRCUITS IN SCOPE

MAIN BUILDING

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SEE E2.12 FOR CONTINUATION ADD ALTERNATE #2—— Y2 O SEE E2.10 FOR CONTINUATION PARTIAL SECOND FLOOR - AREA E LIGHTING PLAN

GENERAL NOTES: Dwg.# 230114-E1004.dwg

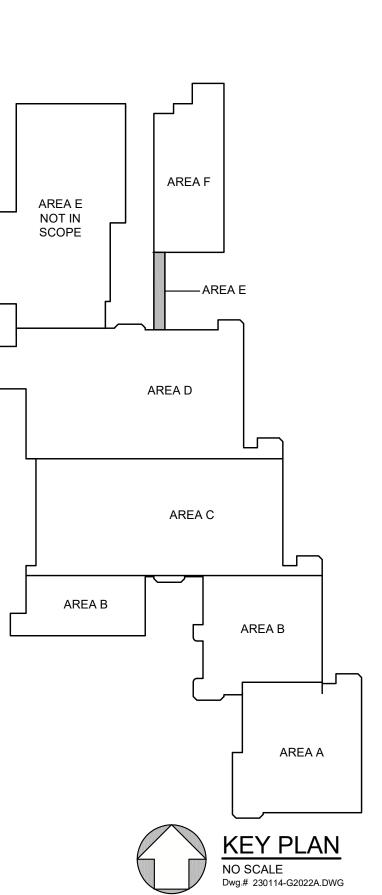
- 1. THIS IS A ONE FOR ONE LIGHTING FIXTURE REPLACEMENT PROJECT. RECONNECT NEW LIGHT FIXTURE TO EXISTING LIGHT FIXTURE CIRCUIT, UNO.
- 2. EXISTING LIGHTING CONTROLS TO REMAIN, UNO.
- 3. NL INDICATES EXISTING NIGHT LIGHT, UNO. NEW FIXTURE SHALL REMAIN A NIGHT LIGHT.
- 4. LETTER(S) IN CORNER OF ROOM INDICATE CEILING TYPE. SEE CEILING TYPE LEGEND ON E1.1
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ADD ALTERNATE #3: RECONNECT NEW EXIT SIGNS AND EMERGENCY COMBINATION FIXTURES TO EXISTING CIRCUIT.

 EC SHALL TEMPORARILY BREAK EXISTING CIRCUIT AS NECESSARY TO MAINTAIN POWER TO ADJACENT SPACES WHILE PERFORMING WORK IN AREA OF SCOPE.

KEYED NOTES: Dwg.# 230114-E1E32A.DWG

1 ACCESS TO THIS ROOM MUST BE COORDINATED WITH THE UNIVERSITY.



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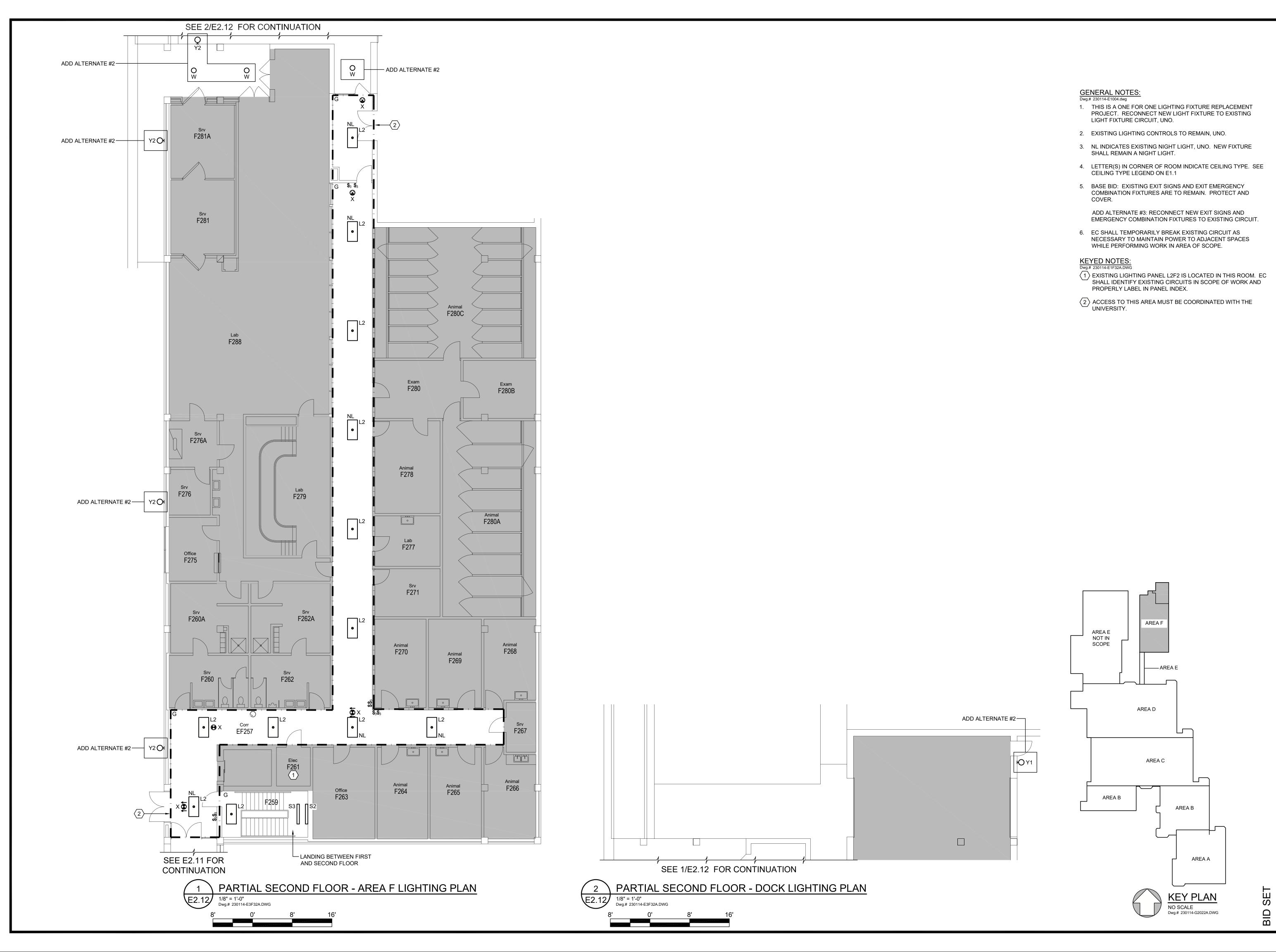
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BID SET



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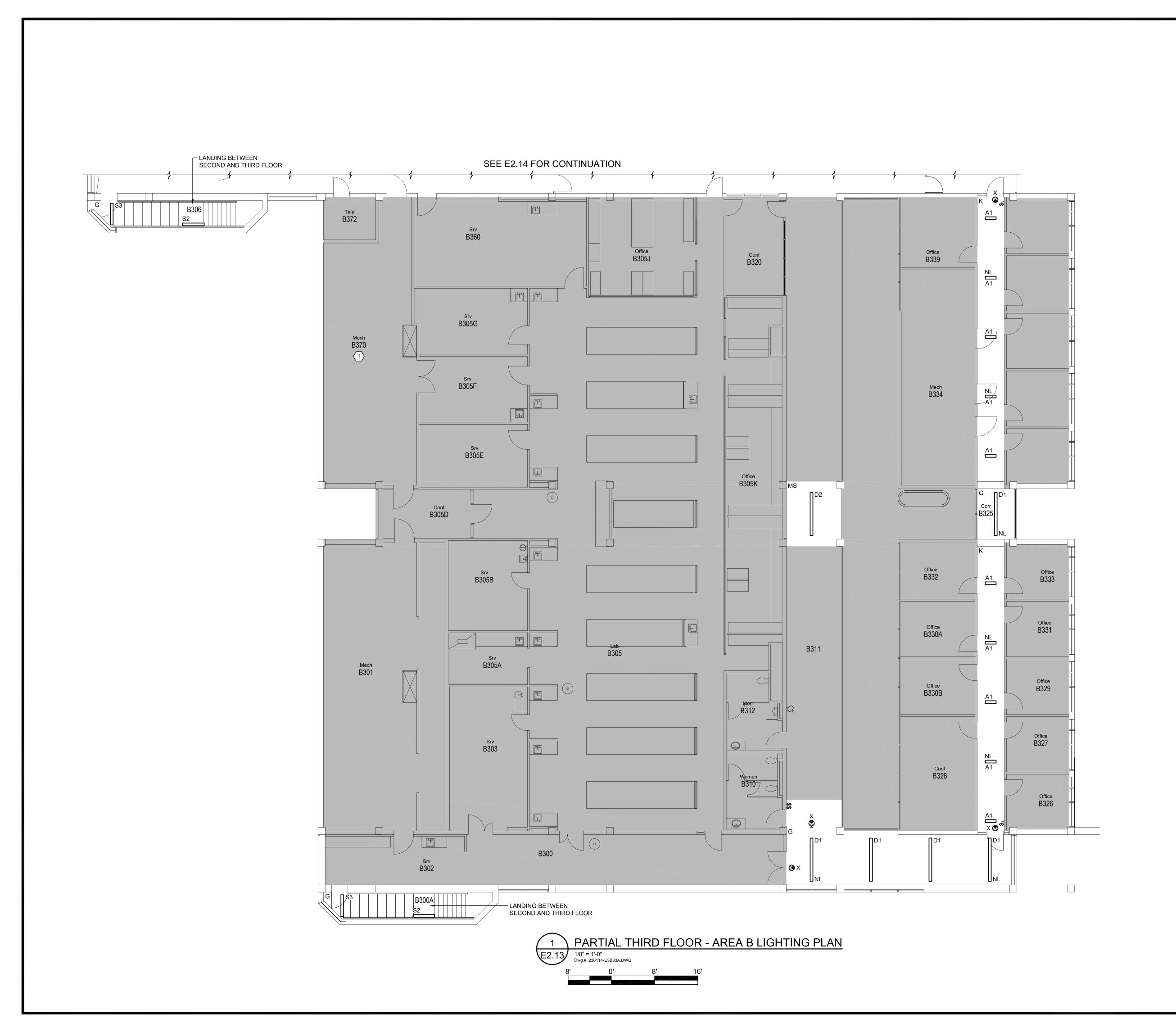
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Plotted: 5/31/2024 4:18 PM

CAROLINA H CAROLINA H

STATE UNIVIERSITY - CVM MAIN BUILDING

WILLIAM MOORE DRIVE

igned By: KMO
wn By: MRS
cked By: RGL
e: 05/31/2024



- 2. EXISTING LIGHTING CONTROLS TO REMAIN, UNO.
- 3. NL INDICATES EXISTING NIGHT LIGHT, UNO. NEW FIXTURE SHALL REMAIN A NIGHT LIGHT.
- 4. LETTER(S) IN CORNER OF ROOM INDICATE CEILING TYPE. SEE
- 5. BASE BID: EXISTING EXIT SIGNS AND EXIT EMERGENCY COMBINATION FIXTURES ARE TO REMAIN. PROTECT AND

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NECESSARY TO MAINTAIN POWER TO ADJACENT SPACES WHILE PERFORMING WORK IN AREA OF SCOPE.

SHALL IDENTIFY EXISTING CIRCUITS IN SCOPE OF WORK AND PROPERLY LABEL IN PANEL INDEX.



1. THIS IS A ONE FOR ONE LIGHTING FIXTURE REPLACEMENT PROJECT. RECONNECT NEW LIGHT FIXTURE TO EXISTING LIGHT FIXTURE CIRCUIT, UNO.

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CHARLESTON, SO CHARLOTTE, NO CHARLOTTESVILLE, VA

WILMINGTON, NC

RALEIGH-DURHAM, NO

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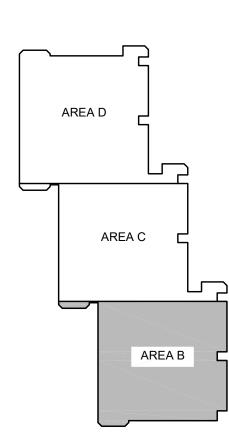
CEILING TYPE LEGEND ON E1.1

COVER.

ADD ALTERNATE #3: RECONNECT NEW EXIT SIGNS AND

6. EC SHALL TEMPORARILY BREAK EXISTING CIRCUIT AS

(1) EXISTING LIGHTING PANEL L3B IS LOCATED IN THIS ROOM. EC



KEY PLAN

NO SCALE
Dwg.# 230114-G2001.DWG



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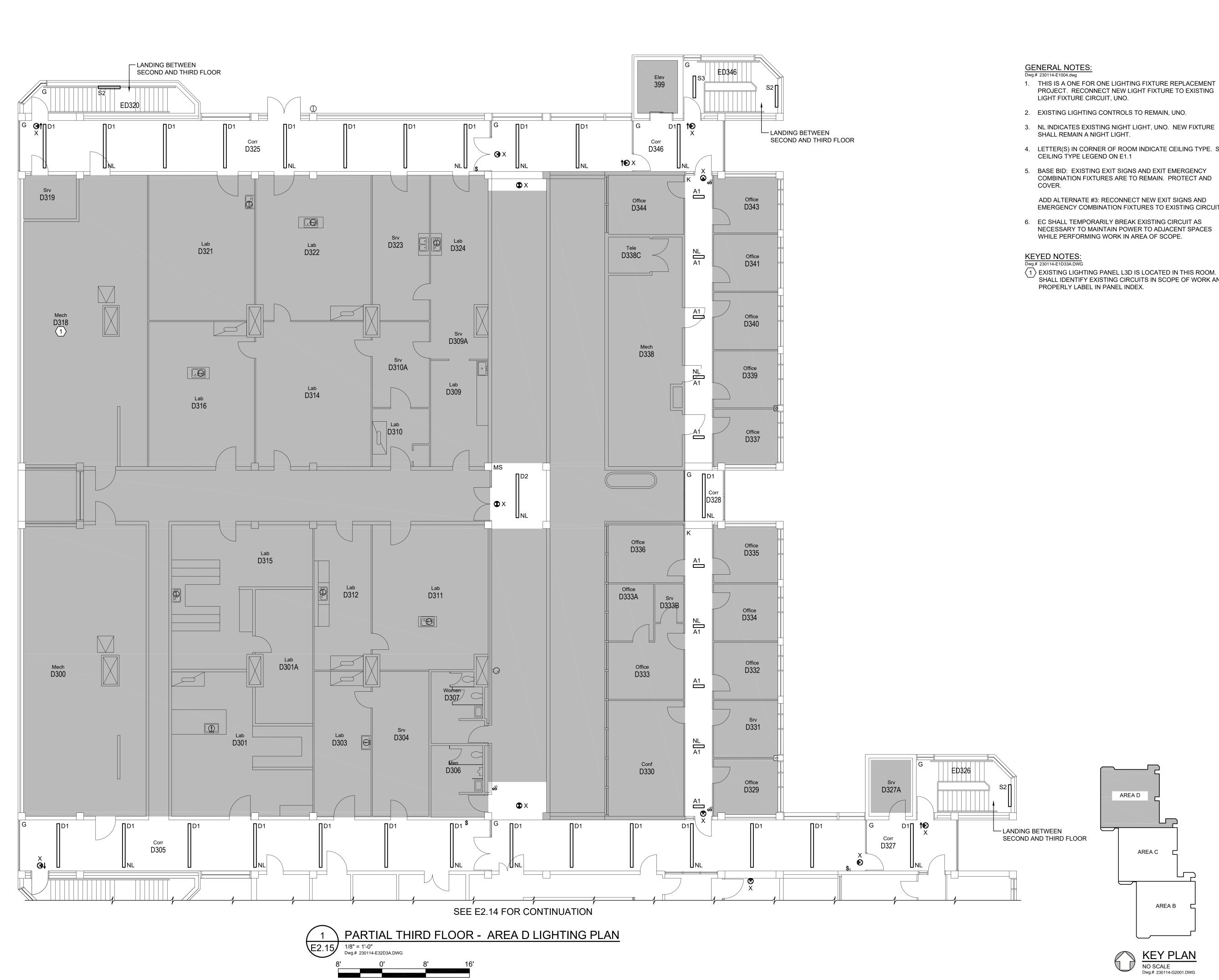
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BUILDING



- 4. LETTER(S) IN CORNER OF ROOM INDICATE CEILING TYPE. SEE
- COMBINATION FIXTURES ARE TO REMAIN. PROTECT AND

EMERGENCY COMBINATION FIXTURES TO EXISTING CIRCUIT.

 $\langle 1 \rangle$ EXISTING LIGHTING PANEL L3D IS LOCATED IN THIS ROOM. EC SHALL IDENTIFY EXISTING CIRCUITS IN SCOPE OF WORK AND

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CHARLESTON, SO CHARLOTTE, NO CHARLOTTESVILLE, VA RALEIGH-DURHAM, NO WILMINGTON, NC

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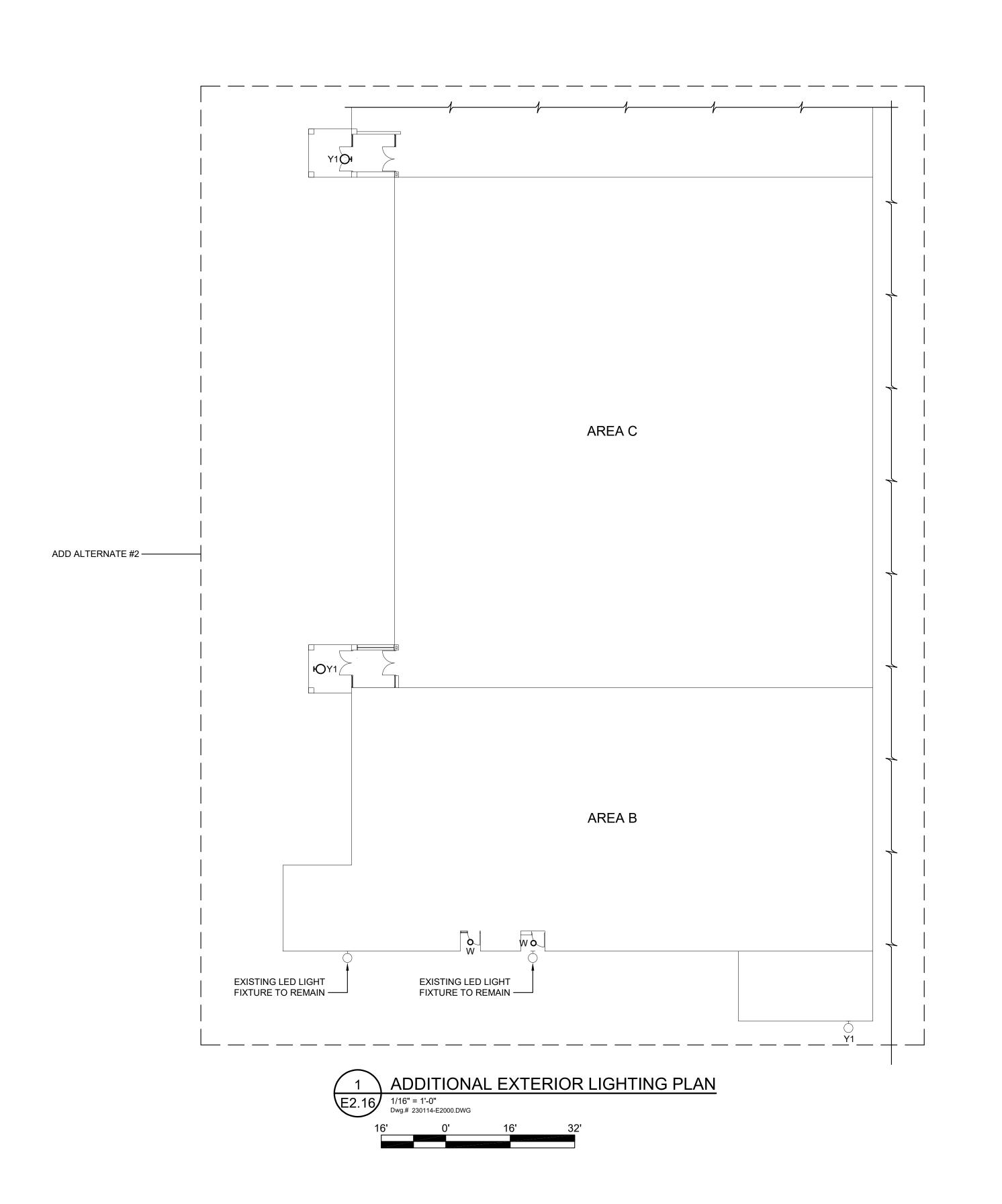
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BUILDING UNIVIERSITY



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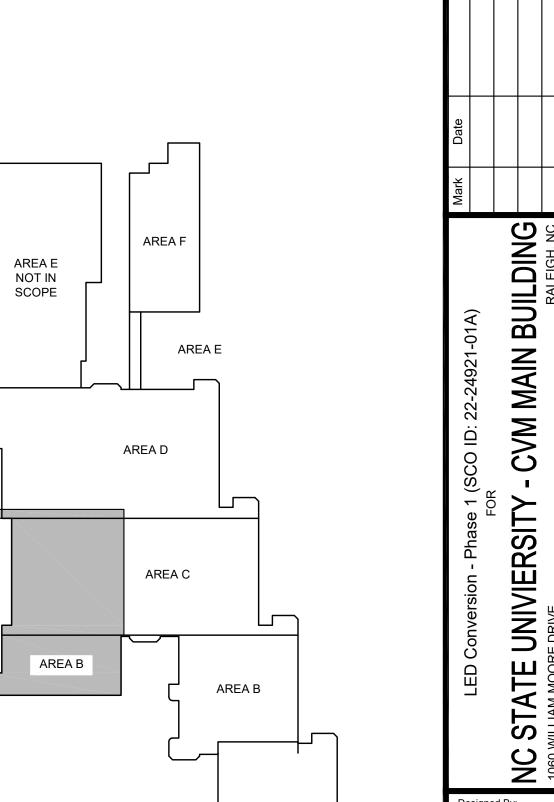
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KEY PLAN

NO SCALE

Dwg# 230114-G2022A.DWG

EXTERIOR LIGHTING PLAN

ADDITIONAL