

# IDEA PUBLIC SCHOOLS

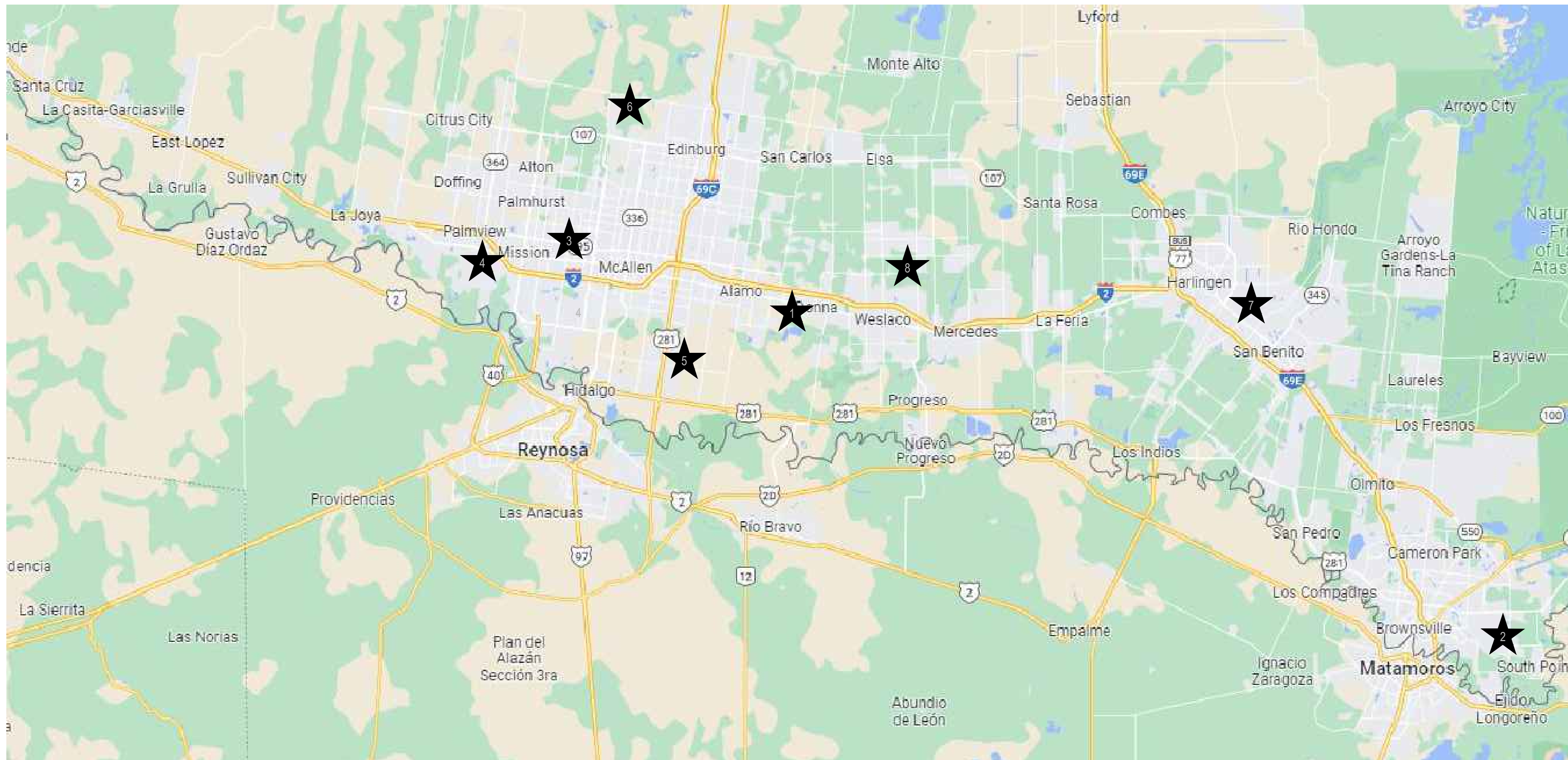
## ELECTRICAL AND LIGHTING UPGRADES AT RGV CAMPUSES CSP# 26-RGVLU-0424

NO. REVISION: BY:

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VICINITY MAP - RIO GRANDE VALLEY



### CAMPUS LIST:

1. IDEA DONNA  
401 S 1ST, DONNA, TX
2. IDEA FRONTIER  
2800 S DAKOTA AVE, BROWNSVILLE, TX
3. IDEA MCALLEN  
201 N BENTSEN RD, MCALLEN, TX
4. IDEA MISSION  
1600 S SCHUERBACH RD, MISSION, TX
5. IDEA PHARR  
600 E LAS MILPAS RD, PHARR, TX
6. IDEA QUEST  
14001 N ROUTH RD, EDINBURG, TX
7. IDEA SAN BENITO  
2151 RUSSELL LN, SAN BENITO, TX
8. IDEA WESLACO  
2931 E SUGARCANE DR, WESLACO, TX

### DATE OF ISSUE

FEBRUARY 23, 2024

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E3.09 IDEA FRONTIER LIGHTING PLAN BUILDING "H"	E7.10 IDEA QUEST LIGHTING PLAN BUILDING "H"	
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E5.05 IDEA MISSION LIGHTING PLAN BUILDING "D"		
E5.06 IDEA MISSION LIGHTING PLAN BUILDING "E"		

### SCOPE OF WORK

1. GENERAL: THE "IDEA PUBLIC SCHOOLS ELECTRICAL AND LIGHTING UPGRADES AT RGV CAMPUSES" CONSISTS OF EXISTING SINGLE-STORY BUILDINGS AT MULTIPLE CAMPUSES. THESE BUILDINGS WILL GENERALLY BE OPERATED FROM 7:00AM TO 6:00PM (MONDAY THROUGH FRIDAY) WITH OCCASIONAL AFTER HOURS AND WEEKENDS USE.
2. ELECTRICAL: PROVIDE ALL MATERIALS AND LABOR ASSOCIATED WITH COMPLETE OPERATIONAL ELECTRICAL DISTRIBUTION SYSTEM. MAJOR ITEMS OF WORK INCLUDE, BUT ARE NOT LIMITED TO:
  - (a) ELECTRICAL SERVICE: TO REMAIN AS IS WITH MODIFICATIONS.
  - (b) EXTERIOR LIGHTING SYSTEMS: PROVIDE NEW LED TYPE LIGHT FIXTURES AND POLES AS NOTED ON PLANS.
  - (c) INTERIOR LIGHTING CONTROLS (SWITCHES, VACANCY SENSORS, DAYLIGHT SENSORS, ETC.): DISCONNECT AND REMOVE EXISTING. PROVIDE NEW AS NOTED ON PLANS SPECIFICATIONS. IN SOME CASES, THEY WILL BE CEILING MOUNTED, AND OTHERS WALL MOUNTED. IT'S THE INTENT FOR THEM TO BE WIRELESS AND WIRED TO AUTOMATICALLY CONTROL THE LUMINAIRES IN THEIR RESPECTIVE AREAS.
  - (d) EXTERIOR LIGHTING CONTROLS: DISCONNECT AND REMOVE EXISTING CONTROLS. PROVIDE NEW LIGHTING CONTACTORS CONTROLLED VIA NEW LIGHTING CONTROL SYSTEM.
  - (e) POWER SYSTEMS: PROVIDE MISCELLANEOUS DUPLEX RECEPTACLES.
  - (f) COMMISSIONING: PROVIDE FOR THE LIGHTING EQUIPMENT AND LIGHTING CONTROLS AS REQUIRED PER IECC 2018.

### BOARD OF DIRECTORS

COLLIN SEWELL	CHAIR
ED RIVERA	VICE-CHAIR
ERICH HOLMSTEN	TREASURER
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IDEA PUBLIC SCHOOLS  
ELECTRICAL AND LIGHTING UPGRADES  
AT RGV CAMPUSES



DATE: FEBRUARY 23, 2024

CHECKED BY: G.Q.

DRAWN BY: R.E.

PROJECT NO.: 23v80

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**ELECTRICAL  
GENERAL NOTES:**

- ALL ELECTRICAL WORK SHALL BE UNDER THE MASTER ELECTRICIAN WHO PULLED THE PERMIT AND ITS JOURNEYMAN ELECTRICIANS.
- UNLESS NOTED OTHERWISE, MINIMUM POWER CIRCUIT IS TO BE #12 THWN WITH #12 GROUND IN 3/4" CONDUIT, WITH THE EXCEPTION THAT ANY CIRCUIT LONGER THAN 100 FEET SHALL BE MINIMUM #10 AWG WITH #10 GROUND WIRE. CIRCUIT LONGER THAN 200 FEET SHALL BE MINIMUM #8 AWG WITH #10 GROUND WIRE MINIMUM.
- ALL EXISTING ID NAMETAGS AND CIRCUIT IDENTIFICATION MUST BE REVISED TO REFLECT CURRENT CONDITIONS FOR ALL EQUIPMENT WHICH IS NEW, REPLACED, OR DEMOLISHED. REMOVE ID NAMETAGS FOR DEMOLISHED EQUIPMENT. REPLACE EXISTING NAMETAGS WITH NEW FOR REPLACED EQUIPMENT, IF REPLACEMENT EQUIPMENT HAS DIFFERENT NAME. PROVIDE NEW NAMETAGS FOR ALL NEW EQUIPMENT. ALL CIRCUIT BREAKER DIRECTORIES FOR PANELS IN WHICH NEW WORK TAKES PLACE ARE TO BE REPLACED WITH NEW DIRECTORIES WHICH LIST EXISTING CIRCUITS AND NEW. ALL UNUSED CIRCUITS ARE TO BE MARKED AS 'SPARE' IN THE DIRECTORIES. DIRECTORIES ARE TO BE COMPUTER GENERATED; NO HAND WRITTEN DIRECTORIES ARE ACCEPTABLE.
- HAND-WRITTEN CIRCUIT BREAKER DIRECTORIES WILL NOT BE ACCEPTED. DIRECTORIES MUST BE COMPUTER GENERATED AND PRINTED TO REFLECT FINAL INSTALLED CONDITIONS.
- MARK ALL J-BOXES WITH INDELIBLE INK, INDICATING POWER CIRCUITRY INFORMATION. LABEL ALL EQUIPMENT ITEMS PER SPECIFICATIONS.
- ALL EXTERIOR RACEWAYS ABOVE GROUND SHALL BE RIGID GALVANIZED.
- UNDER NO CIRCUMSTANCES SHALL MORE THAN THREE CIRCUITS SHARE THE SAME NEUTRAL, AND SUCH CIRCUITS MUST BE SEPARATE PHASE.
- SINCE ELECTRICAL CHARACTERISTIC OF EQUIPMENT (SUCH AS HORSEPOWER, KW, AMPERAGE, VOLTAGE, ETC.) SUBMITTED MAY DIFFER FROM THOSE SPECIFIED IN DRAWINGS, CONTRACTOR IS RESPONSIBLE FOR COORDINATION WITH MECHANICAL AND OTHER CONTRACTORS TO ENSURE COMPATIBILITY BETWEEN ELECTRICAL AND MECHANICAL EQUIPMENT SIZES AND TYPES OF ELECTRICAL INTERFACE EQUIPMENT REQUIRED.
- USE LONG-SWEEPS FOR ALL CHANGES IN DIRECTION ON CONDUIT RUNS.
- ALL INTERIOR RACEWAYS SHALL BE EMT.
- FIELD VERIFY PROJECT SITE EXISTING CONDITIONS AND ELEVATIONS PRIOR TO BEGINNING ANY WORK.
- PHASING AND SEQUENCE OF CONSTRUCTION SHALL BE PER DRAWINGS AND SPECIFICATIONS.
- ALL MATERIALS AND LABOR, WHETHER SPECIFICALLY INDICATED ON PLANS OR NOT, WHICH ARE NECESSARY FOR THE PROPER INSTALLATION AND FUNCTION OF THE SYSTEM SHALL BE FURNISHED BY THIS CONTRACTOR. INCLUDE ALL COSTS OF CHANGES, IF/AS REQUIRED IN BID PROPOSAL.
- ELECTRICAL WIRING SHALL NOT BE SPLICED BELOW GRADE.
- CONTRACTOR IS RESPONSIBLE FOR ALL PERMITS AND FEES ASSOCIATED WITH PROJECT, INCLUDING FEES FOR INSPECTIONS, APPLICATIONS, AND PROVISION OF NEW SERVICES.
- COORDINATE ALL WORK WITH OTHER TRADES; COORDINATE SCHEDULE OF WORK WITH ALL SUB-CONTRACTORS TO ACHIEVE SMOOTH FLOW OF CONSTRUCTION.
- SEAL AROUND ELECTRICAL RACEWAYS AT ALL WALLS AND WALL LOUVER PENETRATIONS WITH FIREPROOF CAULKING. RE: SPECS. PROVIDE FLASHING AROUND PENETRATION, BOTH INSIDE AND OUTSIDE, TO PROVIDE FINISHED LOOK.
- CONTRACTOR SHALL REVIEW COMPLETE DOCUMENTS PRIOR TO SUBMITTAL OF PROPOSAL TO GAIN COMPLETE UNDERSTANDING OF PROJECT SCOPE, WORK BY OTHERS, AND ELECTRICAL WORK ASSOCIATED WITH OTHER DISCIPLINES.
- MAINTAIN MANUFACTURER RECOMMENDED CLEARANCE AROUND ALL EQUIPMENT.
- AFFIX ID TAGS TO ALL DIVISION 26 EQUIPMENT.
- CONTRACTOR IS RESPONSIBLE FOR COORDINATION WITH INTERCOM CONTRACTOR REGARDING EQUIPMENT SIZES AND TYPES OF ELECTRICAL INTERFACE EQUIPMENT REQUIRED.
- FIELD VERIFY ALL CONDITIONS AND MEASURE DIMENSIONS WITHIN THE BUILDING PRIOR TO ORDERING EQUIPMENT AND/OR PROCEEDING WITH INSTALLATION.
- ALL EQUIPMENT SHALL BE FACTORY TESTED, AND CONTRACTOR SHALL VERIFY THEIR CONDITION PRIOR TO INSTALLATION. CONTRACTOR IS RESPONSIBLE FOR EQUIPMENT DAMAGED DURING MOVING AND INSTALLATION.
- EQUIPMENT FOUND DEFECTIVE PRIOR TO FINAL ACCEPTANCE SHALL BE REPLACED AT NO COST TO OWNER.
- SLEEVE ALL EXTERIOR WALL PENETRATIONS.

**CODES AND ORDINANCES:**

- PERFORM ALL WORK PER LATEST VERSION OF NATIONAL ELECTRICAL CODE, NFPA AND APPLICABLE LOCAL CODES AND ORDINANCES, UNLESS DRAWINGS OR SPECIFICATIONS HAVE MORE STRINGENT REQUIREMENTS.
- CONTRACTOR IS RESPONSIBLE FOR ALL PERMITS AND FEES ASSOCIATED WITH PROJECT, INCLUDING FEES FOR INSPECTIONS, APPLICATIONS, AND PROVISION OF NEW SERVICES.
- CONTRACTOR WHO WILL ACTUALLY PERFORM WORK MUST APPLY FOR ALL REQUIRED PERMITS.
- NOTIFY ENGINEER OF ANY ASPECTS OF DESIGN WHICH ARE THOUGHT TO BE IN NONCOMPLIANCE WITH APPLICABLE CODES.

**COORDINATION:**

- COORDINATE ALL WORK WITH OTHER TRADES; COORDINATE SCHEDULE OF WORK WITH ALL SUB-CONTRACTORS TO ACHIEVE SMOOTH FLOW OF CONSTRUCTION.
- TIME OR MONEY ALLOWANCES WILL NOT BE MADE TO ACCOMMODATE UTILITY CONFLICTS THAT CAN BE REASONABLY RESOLVED BY COORDINATION DURING SHOP DRAWING STAGE.
- CONTRACTOR SHALL REVIEW COMPLETE DOCUMENTS PRIOR TO SUBMITTAL OF PROPOSAL TO GAIN COMPLETE UNDERSTANDING OF PROJECT SCOPE, WORK BY OTHERS, AND ELECTRICAL WORK ASSOCIATED WITH OTHER DISCIPLINES.
- MAINTAIN MANUFACTURER RECOMMENDED CLEARANCE AROUND ALL EQUIPMENT.
- ALL WORK THAT COULD DISRUPT SCHOOL INSTRUCTION SHALL BE SCHEDULE FOR AFTER SCHOOL OR DURING HOLIDAY HOURS. COORDINATE SCHEDULING WITH SCHOOL PRINCIPAL.

**SPARE MATERIALS:**

PROVIDE ADDITIONAL DEVICES DESCRIBED BELOW THAT MATCH PRODUCTS INSTALLED & THAT ARE PACKAGED WITH A PROTECTIVE COVERING FOR STORAGE & IDENTIFIED WITH LABELS DESCRIBING THE CONTENTS. INCLUDE THE INSTALLATION COST IN THE BID PROPOSAL.

- WIRELESS VACANCY SENSOR: 5% OF THE QUANTITY INSTALLED.
- WIRELESS CORNER VACANCY SENSOR: 5% OF THE QUANTITY INSTALLED.
- POWER PACK SWITCHING MODULE: 5% OF THE QUANTITY INSTALLED.
- WIRELESS SWITCH: 5% OF THE QUANTITY INSTALLED.
- WIRELESS VACANCY SENSOR: 5% OF THE QUANTITY INSTALLED.
- VACANCY WALL SENSOR SWITCH: 5% OF THE QUANTITY INSTALLED.
- PVC, EMT & RMC RACEWAYS: 5,000 FT OF 1" OF EACH TYPE TOTAL INCLUDING TRENCHING, HANGERS, ETC.

**ABBREVIATIONS:**

ACL	ABOVE CEILING LINE	COND.	CONDUIT
AFF	ABOVE FINISHED FLOOR	GYP.	GYPSUM BOARD
B.	BOTTOM	ID	IDENTIFICATION
BLC.	BELOW CEILING LINE	NTS	NOT TO SCALE
C.	CONDUIT OR COMMON	RM.	ROOM
CLG.	CEILING OR COOLING	S.A.C.	SUSPENDED ACOUSTICAL CEILING
EMT	ELECTRICAL METALLIC TUBING	U.N.O	UNLESS NOTED OTHERWISE
EXP.	EXPOSED	RP	RELAY PANEL

**LIGHTING SYMBOL LEGEND:**

SYMBOL	DESCRIPTION	MNTG. HT. UNO (SEE NOTE 1)
	2'x4' LIGHT FIXTURE - TYPE AS NOTED	-----
	EMERGENCY 2'x4' LIGHT FIXTURE-TYPE AS NOTED CONNECT BATTERY PACK TO BE ON AT ALL TIMES (UNSWITCHED)	-----
	SURFACE/WRAPAROUND LIGHT FIXTURE	-----
	SURFACE/WRAPAROUND EMERGENCY LIGHT FIXTURE CONNECT BATTERY PACK TO BE ON AT ALL TIMES (UNSWITCHED)	-----
	SINGLE FACE EXIT SIGN CEILING OR WALL MOUNTING (DIRECTIONAL ARROWS WHERE INDICATED)	12" ABV. EGRESS OPENING
	DOUBLE FACE EXIT SIGN CEILING OR WALL MOUNTING (DIRECTIONAL ARROWS WHERE INDICATED)	12" ABV. EGRESS OPENING
	EMERGENCY LIGHTING UNIT	8'-0" AFF
	WALL MOUNT LIGHT FIXTURE - TYPE AS NOTED	-----
	DOWN/PENDANT/SURFACE LIGHT FIXTURE - TYPE AS NOTED	-----
	PENDANT/RECESSED LINEAR LIGHT FIXTURE - TYPE AS NOTED	-----
	LIGHT POLE - TYPE AS NOTED	-----

**NOTES:**

- REFERENCE LIGHT FIXTURE SCHEDULE FOR ALL MOUNTING HEIGHTS.

**GENERAL SYMBOL LEGEND:**

SYMBOL	DESCRIPTION	MNTG. HT. UNO (SEE NOTE 1)
	UNDERGROUND RACEWAY	AS REQUIRED
	CONCEALED RACEWAY	AS REQUIRED
	CONDUIT OR EMT HOMERUN TO PANELBOARD CONCEALED IN WALLS OR ABOVE CEILING. LONG CROSSMARKS DENOTE NUMBER OF "HOT" CONDUCTORS SHORT CROSSMARKS INDICATE NEUTRALS AND DOTS INDICATE NUMBER OF GROUND CONDUCTORS. ARROW INDICATES HOME RUN TO ELECTRICAL PANEL.	AS REQUIRED
	ELECTRICAL PANELBOARD - SURFACE MOUNTED	AS REQUIRED
	ELECTRICAL PANELBOARD - RECESSED/FLUSH MOUNTED	AS REQUIRED
	TIME CLOCK	AS REQUIRED
	LIGHTING CONTACTOR	AS REQUIRED
	DIGITAL OUTDOOR PHOTO CELL WALL MOUNTED	-----
	KEYED TOGGLE SWITCH CORBIN TYPE - HUBBELL MODEL #HBL1221RKLX	48" AFF

**LUTRON CONTROL SYMBOLS:**

SYMBOL	DESCRIPTION	
	WIRELESS VACANCY SENSOR - LUTRON MODEL #LRF2-OCR2B-P-WH	CLG.
	WIRELESS CORNER VACANCY SENSOR - LUTRON MODEL #LRF2-OKLB-P-WH	9'-0" AFF
	POWER PACK SWITCHING MODULE - LUTRON MODEL #RMJS-16R-DV-B	ABV. CLG.
	WIRELESS SWITCH - LUTRON MODEL #PJ2-2B-GWH-L01 (CW-1-WH)	48" AFF
	WIRELESS WALL VACANCY SENSOR - LUTRON MODEL #LRF2-OWLB-P-WH	9'-0" AFF
	VACANCY WALL SENSOR SWITCH - LUTRON MODEL #MRF2S-8SSV-WH (CW-1-WH).	48" AFF
	PREMIUM VVE WIRELESS HUB - LUTRON MODEL #HJS-2-FM	CLG.

**NOTES:**

- 48" AFF INDICATES TO TOP OF DEVICE; ALL OTHER MOUNTING HEIGHTS REFER TO CENTERLINE OF DEVICE. REFERENCE LIGHTING CONTROL SCHEMATIC DETAILS FOR ALL LUTRON CONTROLS WIRING REQUIREMENTS.

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**IDEA PUBLIC SCHOOLS  
ELECTRICAL AND LIGHTING UPGRADES  
AT RGV CAMPUSES**



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CAD FILE:  
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**E1.01**





IDEA PUBLIC SCHOOLS  
ELECTRICAL AND LIGHTING UPGRADES  
AT RGV CAMPUSES

LUMINAIRE SCHEDULE											
CALLOUT	LAMP	DESCRIPTION	DRIVER	MOUNTING	MODEL	INPUT WATTS	VOLTS	NOTE	LUMEN MAINTENANCE	HOURS	LUMENS / LAMP
N1	LED	WALLPACK	0-10V	SURFACE	BASIS OF DESIGN: RAYON: T630LED 10W UNV 40K T5 BZ G2 EM  APPROVED SUBSTITUTIONS: LITHONIA: WGE1 LED P1 40K 80CRI VF MVOLT SRM E4WH X	10	MULTIPLE	PROVIDE UL LISTED FOR WET LOCATIONS AND WITH AN EMERGENCY BATTERY PACK. PROVIDE A DARK BRONZE FINISH.	L90	100,000	1227
N2	LED	WALLPACK	0-10V	SURFACE	BASIS OF DESIGN: LS: TLWP LED 7L UNV 40 BZA  APPROVED SUBSTITUTIONS: LITHONIA: TWX2 LED ALO 40K MVOLT DDBXD	54	MULTIPLE	PROVIDE UL LISTED FOR WET LOCATIONS. PROVIDE A DARK BRONZE FINISH.	L80	100,000	6850
P1	LED	ARCHITECTURAL AREA LUMINAIRE	0-10V	POLE	BASIS OF DESIGN: LS: MRM LED 24L SIL 2 UNV DIM 40 70CRI BRZ POLE: 55QB5 A250 30 BRZ  APPROVED SUBSTITUTIONS: LITHONIA: DSX1 LED P7 40K T3M 480 RPA PIRH X WILL: VA-RTAA-30-7040-F-AB-FP-DB-DX-VDA	184	480V 2P 2W	PROVIDE FIXTURE UL LISTED FOR WET LOCATIONS & WITH A MOTION SENSOR. POLE SHALL BE 30 FOOT ROUND TAPERED ALUMINUM & RATED FOR 112MPH WINDS. PROVIDE POLE WITH A VIBRATION DAMPER & DARK BRONZE FINISH. SPECIFIED FIXTURES ARE SELECTED TO MATCH EXISTING AESTHETICS.	L80	100,000	20682
P2	LED	ARCHITECTURAL AREA LUMINAIRE	0-10V	POLE	BASIS OF DESIGN: LS: MRM LED 24L SIL FT UNV DIM 40 70CRI BRZ POLE: 55QB5 A250 30 BRZ  APPROVED SUBSTITUTIONS: LITHONIA: DSX1 LED P7 40K T4M 480 RPA PIRH DDBXD WILL: VA-RTAA-30-7040-F-AB-FP-DB-DX-VDA	184	480V 2P 2W	PROVIDE FIXTURE UL LISTED FOR WET LOCATIONS & WITH A MOTION SENSOR. POLE SHALL BE 30 FOOT ROUND TAPERED ALUMINUM & RATED FOR 112MPH WINDS. PROVIDE POLE WITH A VIBRATION DAMPER & DARK BRONZE FINISH. SPECIFIED FIXTURES ARE SELECTED TO MATCH EXISTING AESTHETICS.	L80	100,000	20378
P3	LED	ARCHITECTURAL AREA LUMINAIRE	0-10V	POLE	BASIS OF DESIGN: LS: MRM LED 24L SIL 2 UNV DIM 40 70CRI GMG POLE: 55QB5 A250 30 X  APPROVED SUBSTITUTIONS: LITHONIA: DSX1 LED P7 40K T3M 480 RPA PIRH X WILL: VA-RTAA-30-7040-F-AB-FP-X-DX-VDA	184	480V 2P 2W	PROVIDE FIXTURE UL LISTED FOR WET LOCATIONS & WITH A MOTION SENSOR. POLE SHALL BE 30 FOOT ROUND TAPERED ALUMINUM & RATED FOR 101MPH WINDS. PROVIDE POLE WITH A VIBRATION DAMPER & GUN METAL GRAY FINISH. SPECIFIED FIXTURES ARE SELECTED TO MATCH EXISTING AESTHETICS.	L80	100,000	20682
P4	LED	ARCHITECTURAL AREA LUMINAIRE	0-10V	POLE	BASIS OF DESIGN: LS: MRM LED 24L SIL FT UNV DIM 40 70CRI GMG POLE: 55QB5 A250 30 X  APPROVED SUBSTITUTIONS: LITHONIA: DSX1 LED P7 40K T4M 480 RPA PIRH X WILL: VA-RTAA-30-7040-F-AB-FP-X-DX-VDA	184	480V 2P 2W	PROVIDE FIXTURE UL LISTED FOR WET LOCATIONS & WITH A MOTION SENSOR. POLE SHALL BE 30 FOOT ROUND TAPERED ALUMINUM & RATED FOR 101MPH WINDS. PROVIDE POLE WITH A VIBRATION DAMPER & GUN METAL GRAY FINISH. SPECIFIED FIXTURES ARE SELECTED TO MATCH EXISTING AESTHETICS.	L80	100,000	20378
P5	LED	LIGHT POLE	0-10V	POLE	BASIS OF DESIGN: POLE: 55QB5 A250 30 X  APPROVED SUBSTITUTIONS: WILL: VA-RTAA-30-7040-F-AB-FP-DB-DX-VDA		480V 2P 2W	POLE SHALL BE 30 FOOT ROUND TAPERED ALUMINUM & RATED FOR 105MPH WINDS. PROVIDE POLE WITH A VIBRATION DAMPER & DARK BRONZE FINISH. PROVIDE ANCHOR BOLT ADAPTER PLATE FOR ATTACHING TO EXISTING ANCHOR BOLTS.			0

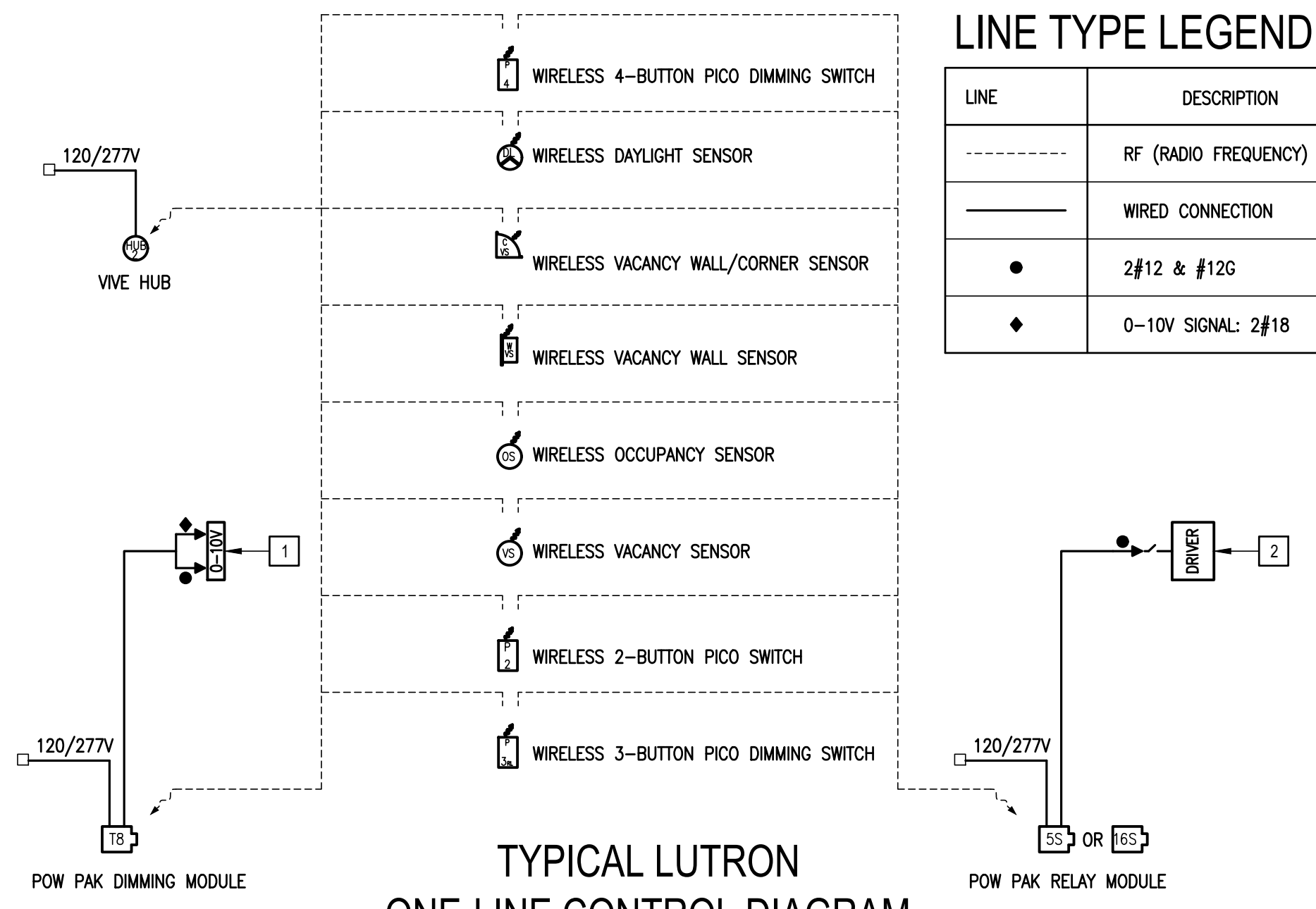
GENERAL NOTES:  
1. OTHER LIGHT FIXTURE MANUFACTURERS THAN THOSE LISTED ON THIS SCHEDULE ARE REQUIRED TO OBTAIN PRIOR APPROVAL BY SUBMITTING CUT SHEETS OF THEIR SUBSTITUTIONS AT LEAST (10) DAYS PRIOR TO BID. CUT SHEETS SHALL INDICATE/HIGHLIGHT PHOTOMETRIC CURVE, EFFICIENCY & CONSTRUCTION FOR DIRECT COMPARISON WITH SPECIFIED FIXTURES.  
2. EXTRA MATERIALS: SEE SPECIFICATIONS.

KEYED NOTES:

- 1 LED LIGHT FIXTURE DIMMING DRIVER. REFER TO LIGHTING PLANS FOR QUANTITIES
- 2 LED LIGHT FIXTURE DRIVER. REFER TO LIGHTING PLANS FOR QUANTITIES.

LINE TYPE LEGEND:

LINE	DESCRIPTION
---	RF (RADIO FREQUENCY) CONNECTION
—	WIRED CONNECTION
●	2#12 & #12G
◆	0-10V SIGNAL: 2#18



01 TYPICAL LUTRON ONE-LINE CONTROL DIAGRAM  
SCALE: NOT TO SCALE

02 LUTRON LRF2 CEILING WIRELESS VACANCY SENSOR  
SCALE: NOT TO SCALE

03 LUTRON LRF2 CORNER WIRELESS VACANCY SENSOR  
SCALE: NOT TO SCALE

04 LUTRON RMJS-16R SWITCHING MODULE  
SCALE: NOT TO SCALE

05 LUTRON PJ2-2B WIRELESS SWITCH  
SCALE: NOT TO SCALE

06 LUTRON LRF2 WALL WIRELESS VACANCY SENSOR  
SCALE: NOT TO SCALE

07 LUTRON WALL SENSOR WIRELESS SWITCH  
SCALE: NOT TO SCALE

08 LUTRON HJS WIRELESS VIVE HUB  
SCALE: NOT TO SCALE

09 TYPE "N1" LIGHT FIXTURE IMAGE  
SCALE: NOT TO SCALE

10 TYPE "N2" LIGHT FIXTURE IMAGE  
SCALE: NOT TO SCALE

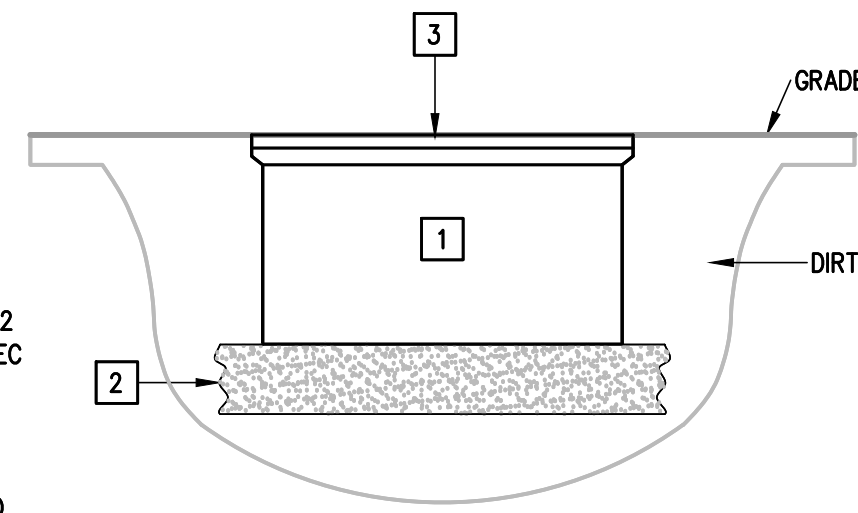
11 TYPE "P1", "P2", "P3" & "P4" LIGHT FIXTURE IMAGE  
SCALE: NOT TO SCALE





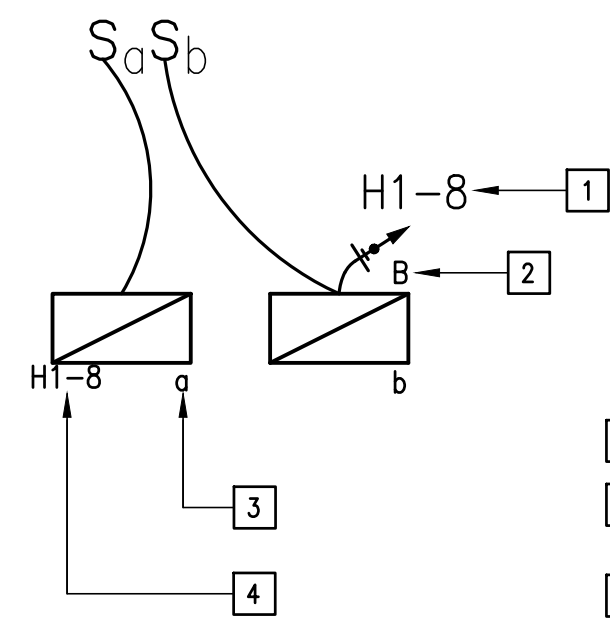
**KEYED NOTES:**

- 1 PROVIDE POLYMER CONCRETE PULL BOX TIER 22 RATED, COMPLYING WITH ANS/SCIE 77 AND NEC 314.30.
- 2 PROVIDE 8" OF GRAVEL OR CRUSHED ROCK.
- 3 PROVIDE ONE PIECE LOCKING COVER WITH LOGO TIER 22 RATED. INSTALL COVER LEVEL WITH GRADE.



**POLYMER CONCRETE PULLBOX DETAIL**

07 SCALE : NONE

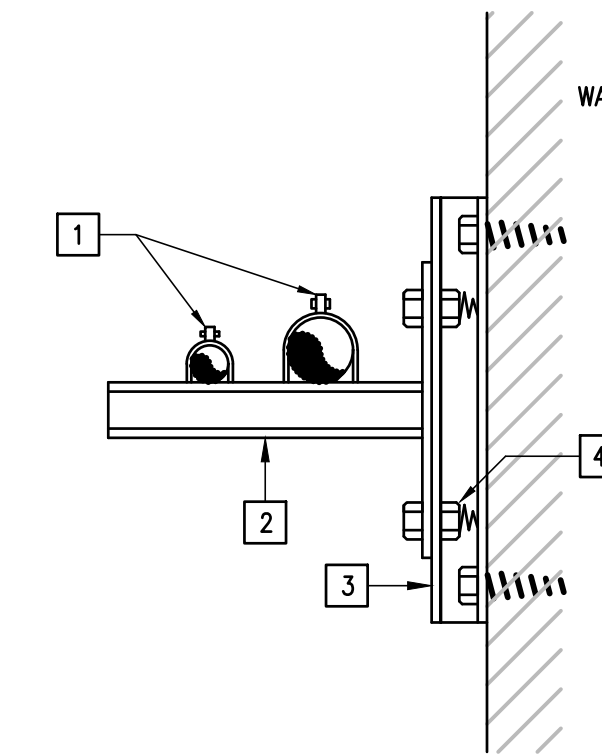


**KEYED NOTES:**

- 1 CIRCUIT HOMERUN
- 2 FIXTURE TYPE - REFER TO LIGHT FIXTURE SCHEDULE
- 3 INDICATES SWITCH CONTROLLING LIGHT FIXTURE.
- 4 INDICATES BRANCH CIRCUIT LIGHT FIXTURE IS CONNECTED TO

**04 LIGHTING LEGEND DETAIL**

SCALE : NOT TO SCALE



**KEYED NOTES:**

- 1 PROVIDE CONDUIT CLAMPS.
- 2 PROVIDE GALVANIZED UNISTRUT WALL BRACKET.
- 3 PROVIDE RAMSET OR BOLT GALVANIZED UNISTRUT TO WALL.
- 4 PROVIDE SELF HOLDING CLAMPING NUT WITH SPRING.

**RACEWAY RUNS SUPPORT DETAIL**

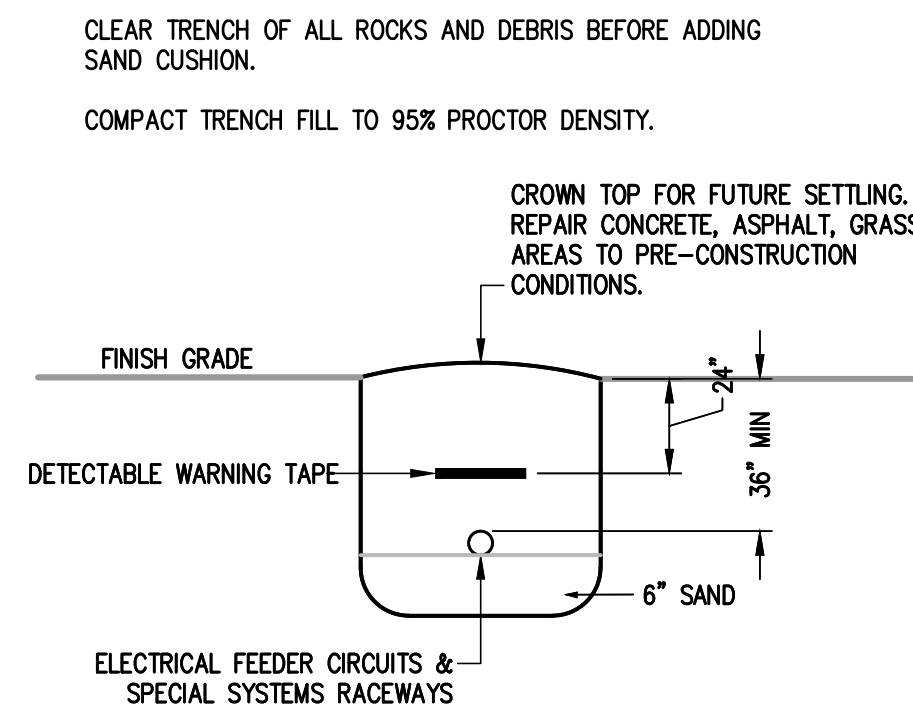
01 SCALE : NOT TO SCALE

**UPGRADES KEYED NOTES:**

- 1 PROVIDE A NEW NEMA 1 WALL MOUNT ENCLOSURE TO HOUSE NEW LIGHTING CONTACTOR AND LUTRON POWER PAK.
- 2 PROVIDE NEW 120/277V, 30A, 6-POLE, ELECTRIC LIGHTING CONTACTOR.
- 3 PROVIDE NEW LUTRON POWER PAK TO CONTROL LIGHTING CONTACTOR. TIME CONTROL SCHEDULE TO BE WIRELESS VIA THE LUTRON VIVE HUB.
- 4 PROVIDE NEW WIRING IF NECESSARY IF EXISTING BRANCH CIRCUITS DO NOT REACH NEW POINTS OF CONNECTION.
- 5 PROVIDE LUTRON WIRELESS PICO SWITCH FOR LIGHTING CONTACTOR OVERRIDE.
- 6 PROVIDE LUTRON WIRELESS HUB. PROVIDE A 120V CONNECTION. REFER TO PLANS FOR QUANTITIES AND LOCATIONS.

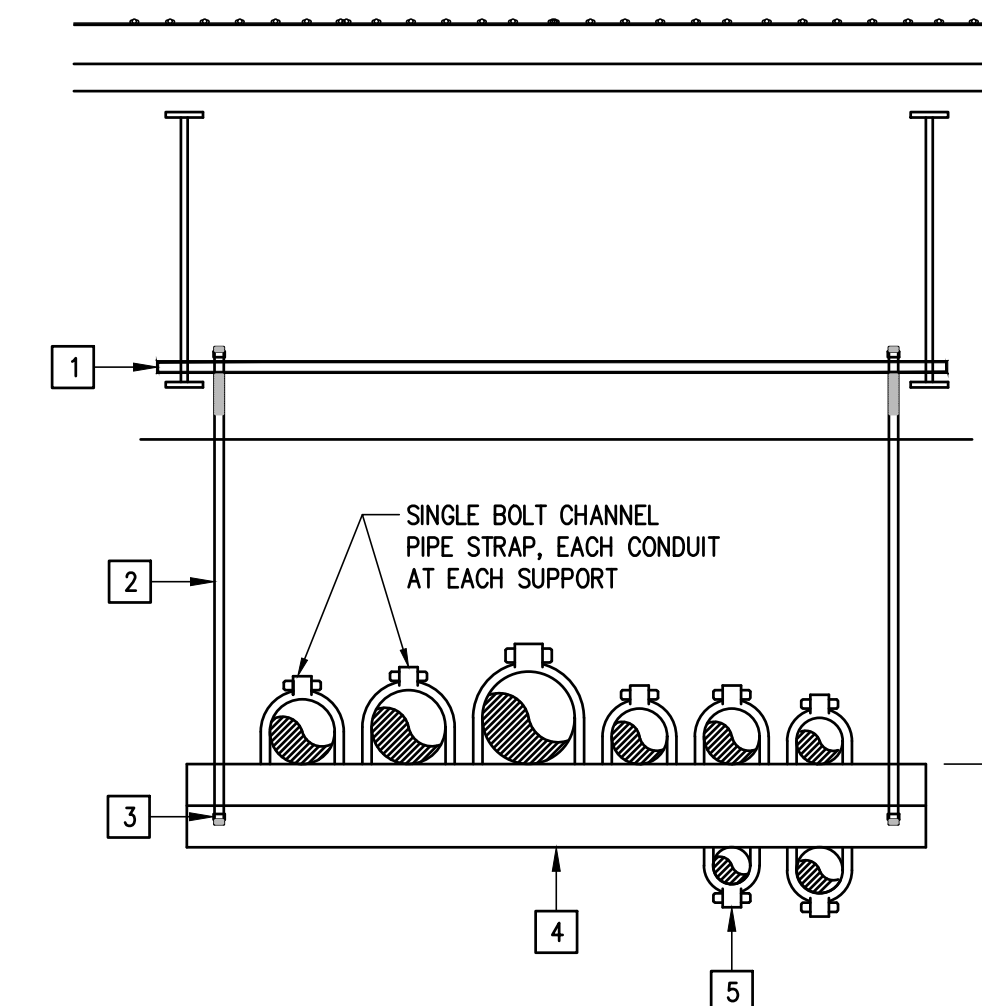
**DEMOLITION KEYED NOTES:**

- 1 DISCONNECT AND REMOVE EXISTING LIGHTING CONTROL RELAY PANEL ALONG WITH RELATED SUPPORT HARDWARE.
- 2 TEMPORARILY DISCONNECT EXISTING LIGHTING CIRCUITS.
- 3 DISCONNECT AND REMOVE EXISTING LIGHTING CONTACTOR ALONG WITH RELATED SUPPORT HARDWARE, RACEWAYS AND WIRING.
- 4 DISCONNECT AND REMOVE EXISTING ELECTROMECHANICAL TIME CLOCK ALONG WITH RELATED SUPPORT HARDWARE, RACEWAYS AND WIRING.
- 5 DISCONNECT AND REMOVE THIS PORTION OF EXISTING WIRING ALONG WITH RELATED SUPPORT HARDWARE AND RACEWAYS.



**BURIAL DETAIL FOR ELECTRICAL RACEWAYS**

05 SCALE : NONE

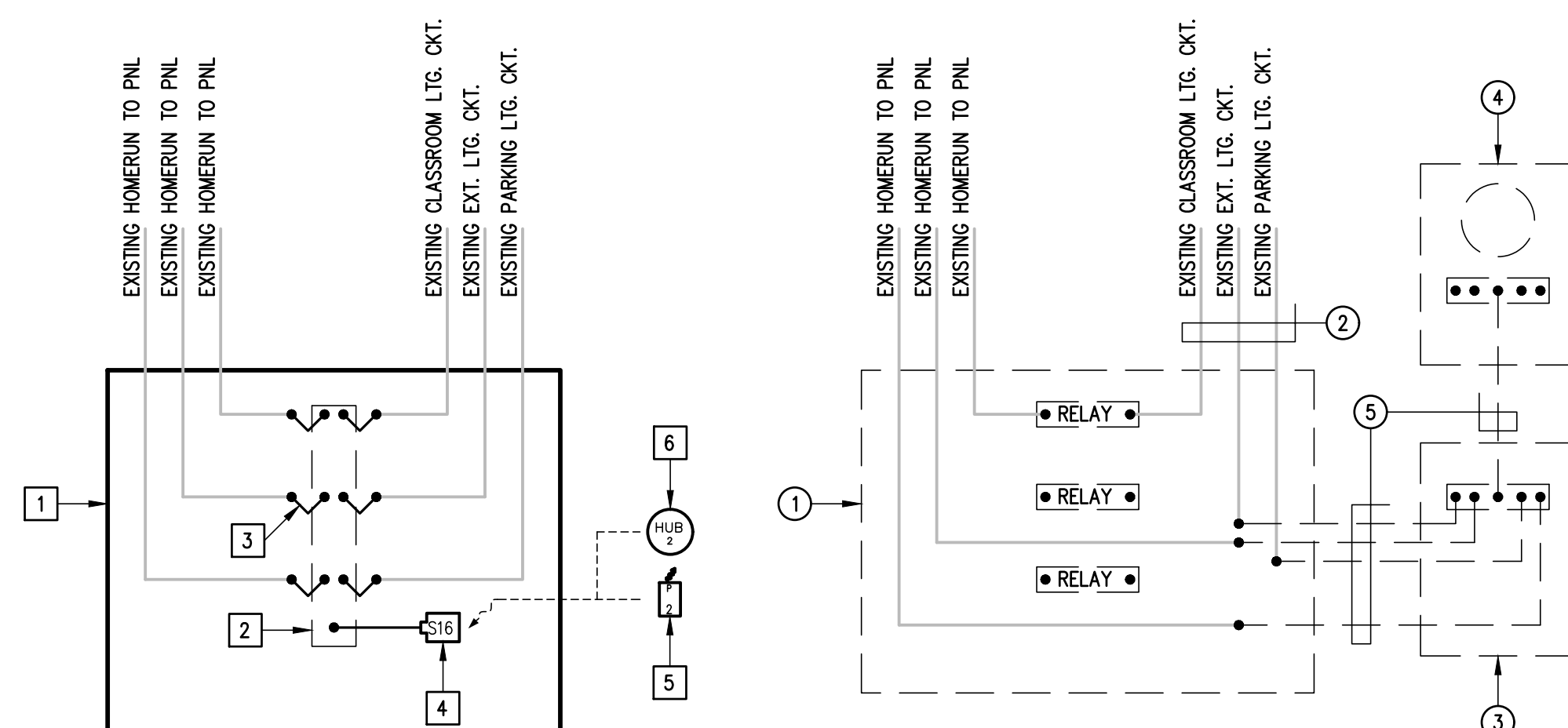


**KEYED NOTES:**

- 1 PROVIDE UNISTRUT STRUCTURAL CHANNEL SECURED TO JOIST AT BOTH ENDS.
- 2 PROVIDE 1/2" GALVANIZED ROD MINIMUM.
- 3 PROVIDE LOCKNUT.
- 4 PROVIDE GALVANIZED UNISTRUT 8'-0" O/C MAXIMUM.
- 5 PROVIDE 0'-1" MAXIMUM SIZE ON BOTTOM OF UNISTRUT.
- 6 VARIES.

**HORIZONTAL RACEWAYS SUPPORT DETAIL**

02 SCALE : NOT TO SCALE



- GENERAL UPGRADES NOTES:**
1. QUANTITY OF EXISTING CIRCUITS VARY BY BUILDING FIELD VERIFY.
  2. IF EXISTING BRANCH CIRCUITS DO NOT REACH NEW POINTS OF CONNECTION SPLICE EXISTING WIRING AND PROVIDE NEW WIRING AS NECESSARY. MATCH EXISTING BRANCH CIRCUITS WIRE SIZES.
  3. NEW TIME CONTROL TO BE VIA LUTRON VIVE HUB. COORDINATE SCHEDULES WITH CAMPUS FACILITY MANAGER (FM).

- GENERAL DEMOLITION NOTES:**
1. QUANTITY OF RELAYS VARY BY BUILDING FIELD VERIFY.
  2. THE EXISTING RELAY PANELS ARE NOT FUNCTIONAL AND SOME OR ALL OF THE EXISTING RELAYS MAY ALREADY BE BYPASSED.

**TYPICAL EXTERIOR LIGHTING CONTROLS SCHEMATIC**

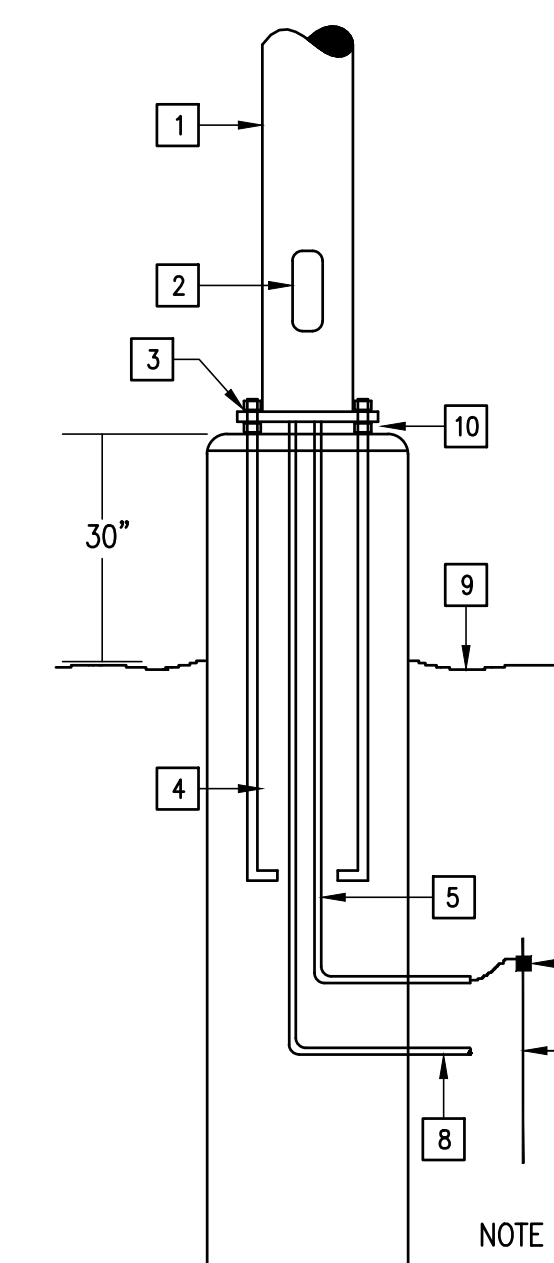
08 SCALE : NONE



NOTE: ATTACH NAMEPLATES TO ALL ELECTRICAL GEAR AS NOTED ON SECTION 260553.

**EQUIPMENT IDENTIFICATION LABEL DETAIL**

06 SCALE : NOT TO SCALE



**KEYED NOTES:**

- 1 LIGHTING POLE - SEE SCHEDULE.
- 2 HANDHOLE COVER.
- 3 DOUBLE NUTS FOR ADJUSTMENT OF POLE VERTICAL ALIGNMENT.
- 4 ANCHOR BOLTS AS REQUIRED BY POLE MANUFACTURER FURNISHING POLE. (MAX. 24" DIAM. BOLT CIRCLE).
- 5 1/2" PVC - #86.
- 6 CONNECTOR.
- 7 3/4" X 10' COPPER CLAD GROUND ROD.
- 8 CONDUIT 36" BELOW GRADE.
- 9 GRADE LINE OR PARKING LOT SURFACE.
- 10 DO NOT FILL IN WITH GROUT.

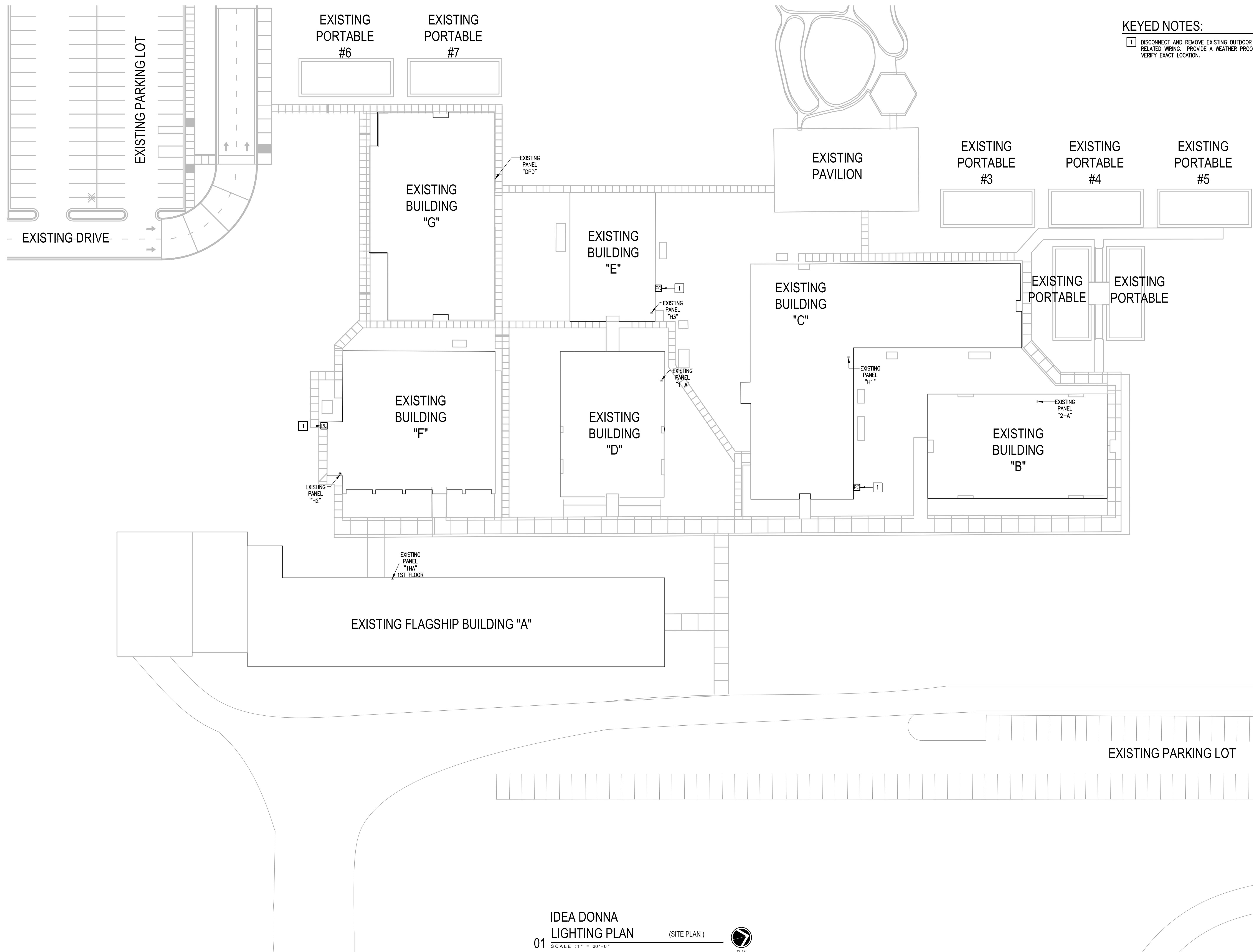
NOTE : COORDINATE WITH GENERAL CONTRACTOR.

**LIGHT POLE FOUNDATION DETAIL**

03 SCALE : NOT TO SCALE







**KEYED NOTES:**  
 1 DISCONNECT AND REMOVE EXISTING OUTDOOR PHOTO CELL ALONG WITH RELATED WIRING. PROVIDE A WEATHER PROOF BLANK COVER. FIELD VERIFY EXACT LOCATION.

NO. REVISION: BY:

COPY NO.:

TEXAS

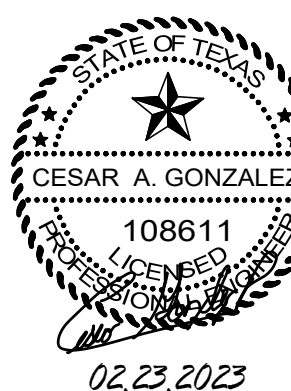
**IDEA PUBLIC SCHOOLS  
 ELECTRICAL AND LIGHTING UPGRADES  
 AT RGV CAMPUSES**

1126 SOUTH COMMERCE ST.  
 HARLINGEN, TX  
 PHONE: 361-230-3425  
 TEXAS REGISTERED  
 ENGINEERING FIRM  
 F-15998

DATE:	FEBRUARY 23, 2024
CHECKED BY:	G.O.
DRAWN BY:	R.E.
PROJECT NO.:	23v80
CAD FILE SHEET:	E2.01

IDEA DONNA





IDEA PUBLIC SCHOOLS  
ELECTRICAL AND LIGHTING UPGRADES  
AT RGV CAMPUSES



1126 SOUTH COMMERCE ST.  
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PHONE: 361-230-3425  
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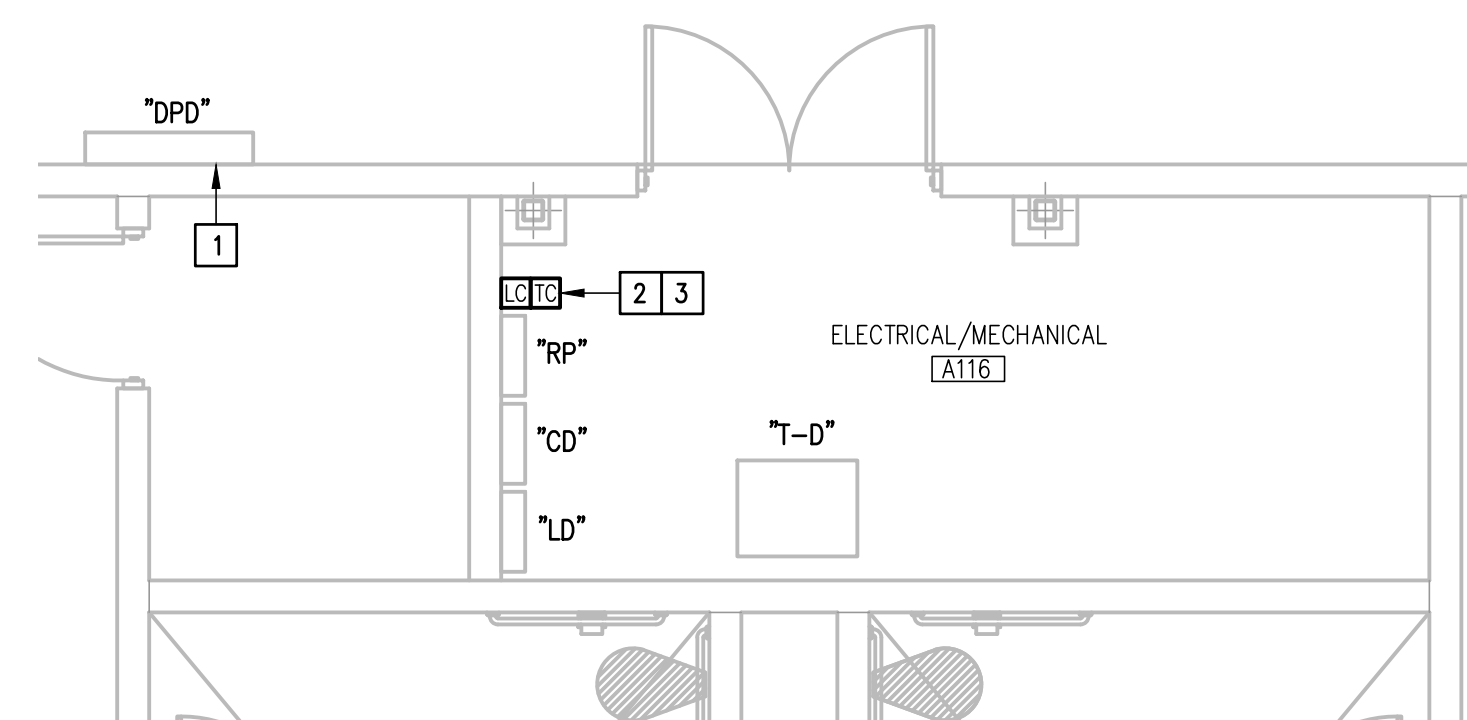
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GENERAL NOTES:

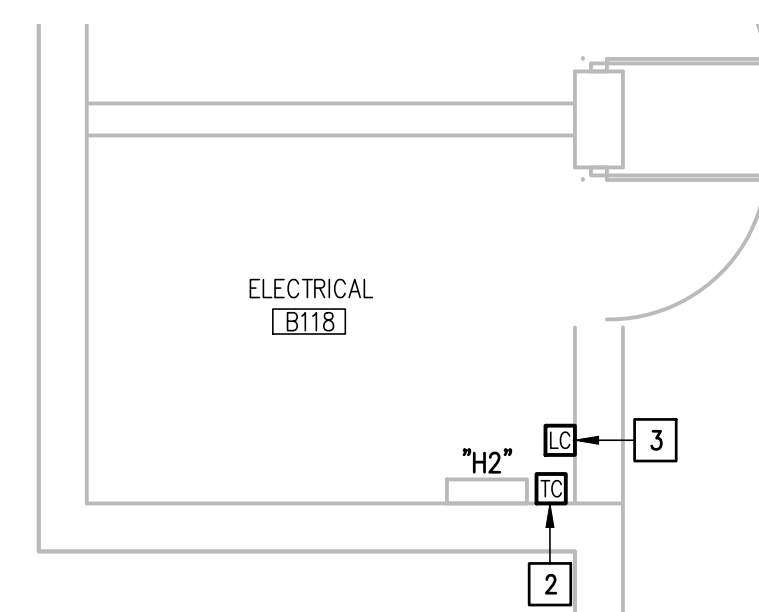
- EXTERIOR LIGHTING CONTROLS SHALL BE BY LIGHTING CONTACTOR. TIME CONTROL/SCHEDULES VIA INTERMATIC TIME CLOCK.

KEYED NOTES:

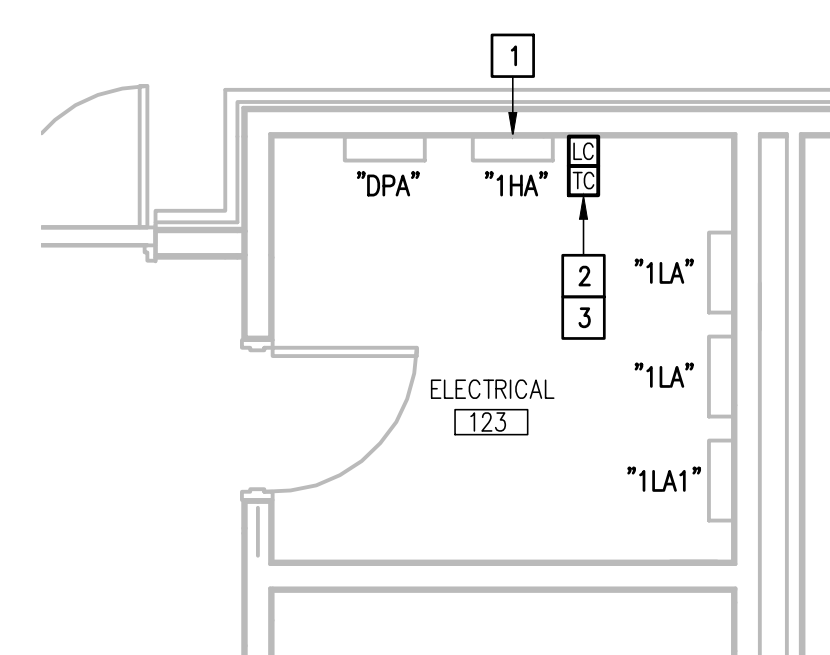
- APPROXIMATE LOCATION OF EXISTING PANELBOARD SERVING EXTERIOR LIGHTING CIRCUITS.
- DISCONNECT AND REMOVE EXISTING MECHANICAL TIME CLOCK. SEE DETAIL THIS SHEET.
- PROVIDE NEW LIGHTING CONTACTOR AND ELECTRIC TIME CLOCK. SEE DETAIL THIS SHEET.



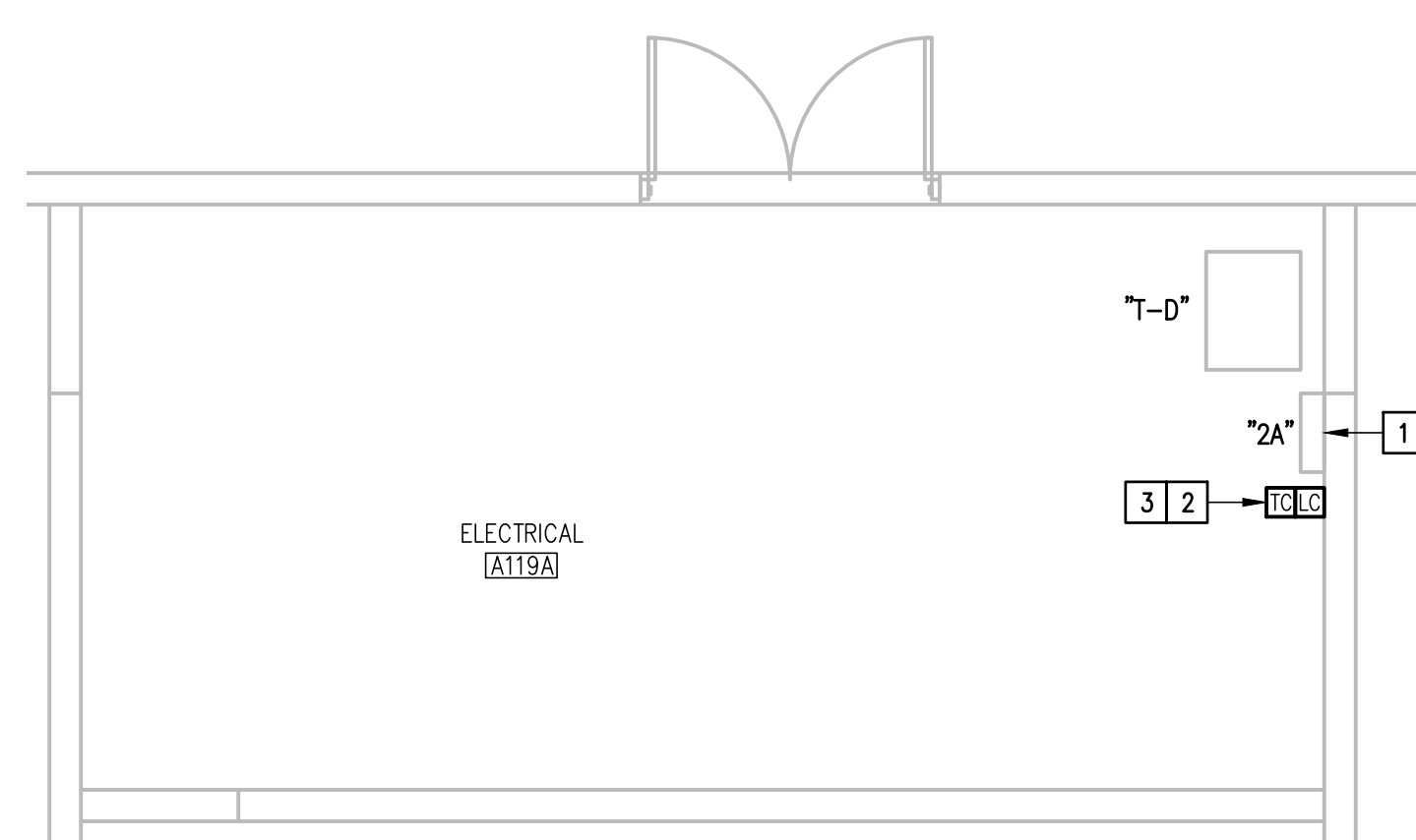
01 IDEA DONNA LIGHTING PLAN (BUILDING "G")  
SCALE : 1/4" = 1'-0"  
PLAN NORTH



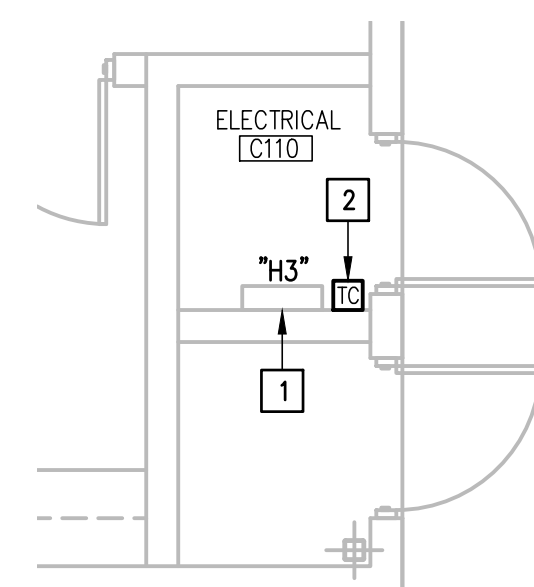
02 IDEA DONNA LIGHTING PLAN (BUILDING "F")  
SCALE : 1/4" = 1'-0"  
PLAN NORTH



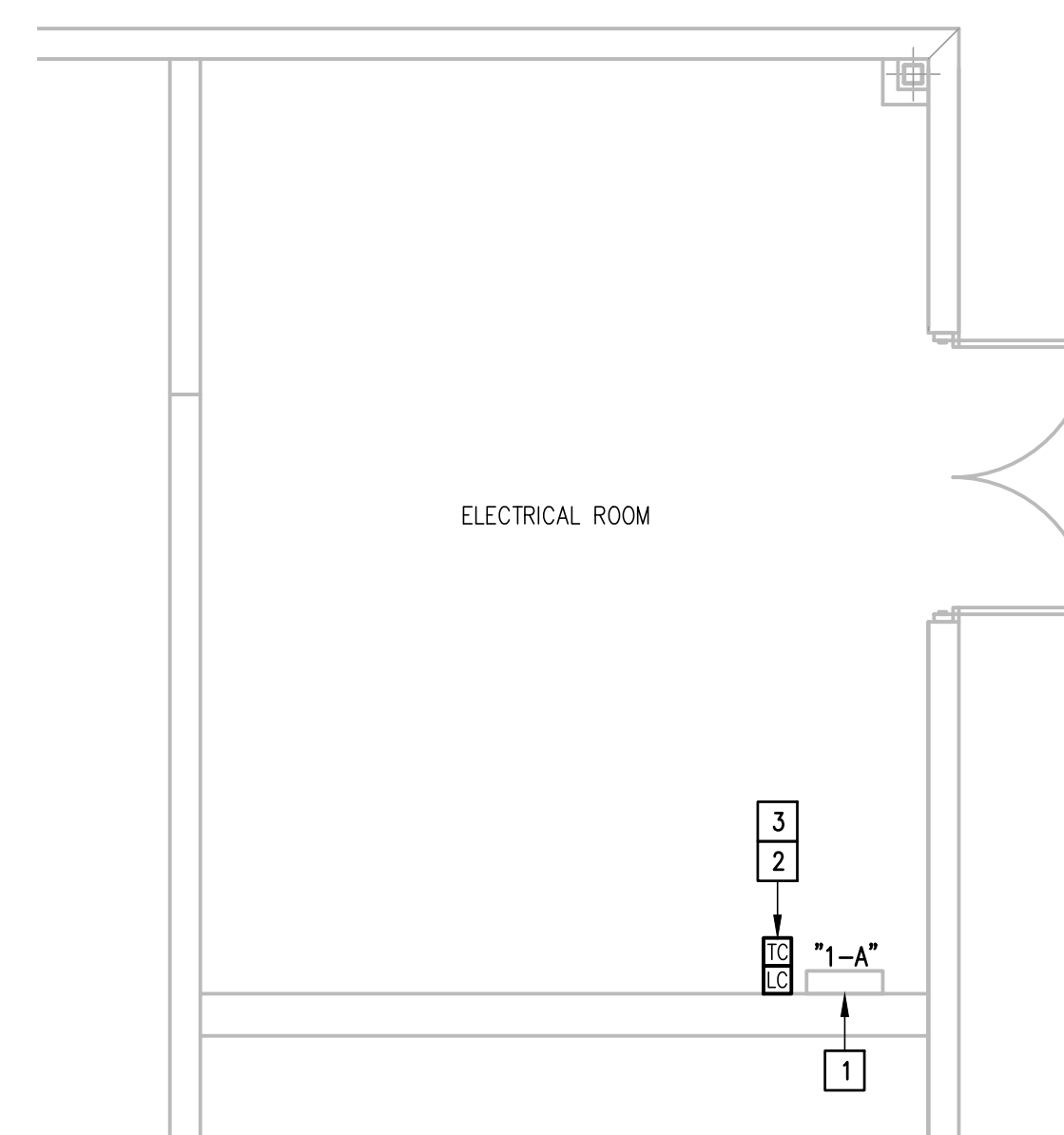
03 IDEA DONNA LIGHTING PLAN (BUILDING "A")  
SCALE : 1/4" = 1'-0"  
PLAN NORTH



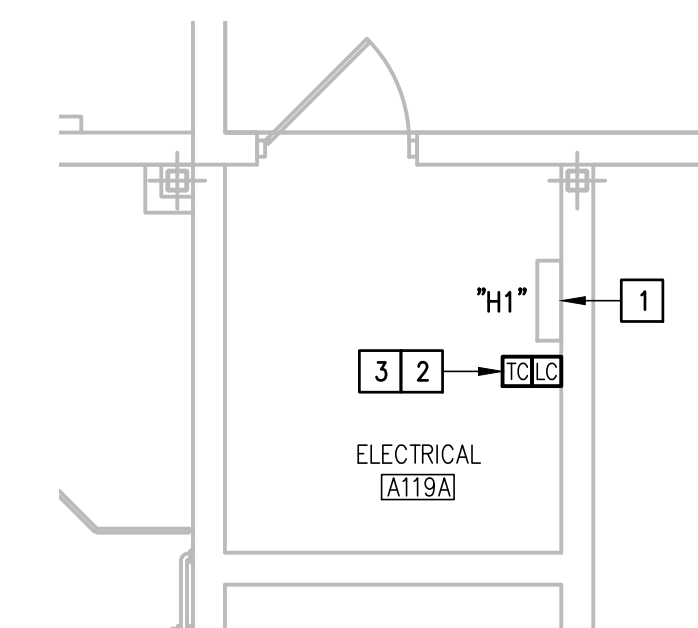
04 IDEA DONNA LIGHTING PLAN (BUILDING "B")  
SCALE : 1/4" = 1'-0"  
PLAN NORTH



05 IDEA DONNA LIGHTING PLAN (BUILDING "E")  
SCALE : 1/4" = 1'-0"  
PLAN NORTH



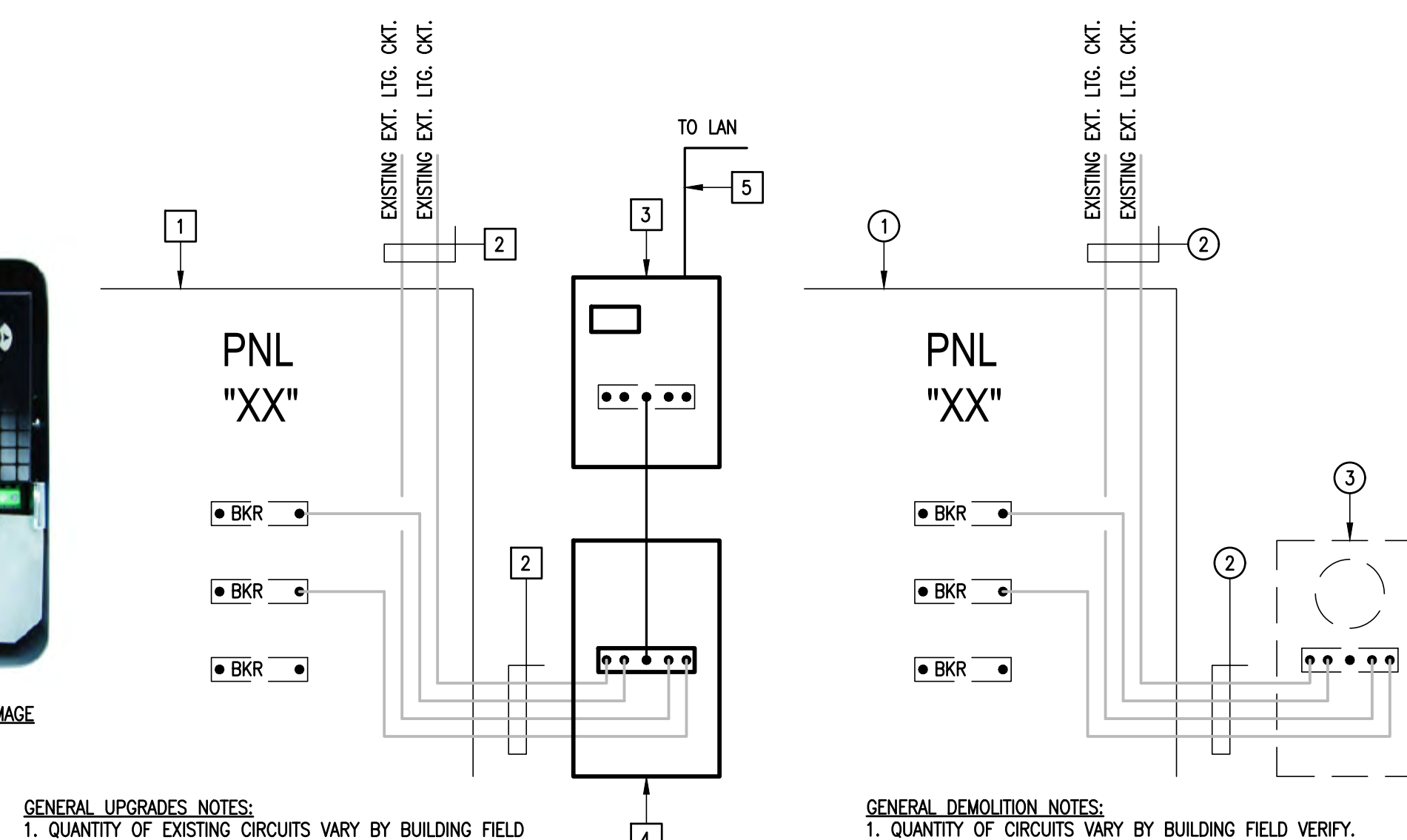
06 IDEA DONNA LIGHTING PLAN (BUILDING "D")  
SCALE : 1/4" = 1'-0"  
PLAN NORTH



07 IDEA DONNA LIGHTING PLAN (BUILDING "C")  
SCALE : 1/4" = 1'-0"  
PLAN NORTH



INTERMATIC TIME CLOCK IMAGE



- GENERAL UPGRADES NOTES:
- QUANTITY OF EXISTING CIRCUITS VARY BY BUILDING FIELD VERIFY.
  - IF EXISTING BRANCH CIRCUITS DO NOT REACH NEW POINTS OF CONNECTION SPLICE EXISTING WIRING AND PROVIDE NEW WIRING AS NECESSARY. MATCH EXISTING BRANCH CIRCUITS WIRE SIZES.
  - NEW TIME CONTROL TO BE VIA INTERMATIC ASTRONOMIC TIME CLOCK. COORDINATE SCHEDULES WITH CAMPUS FACILITY MANAGER (FM).

- GENERAL DEMOLITION NOTES:
- QUANTITY OF CIRCUITS VARY BY BUILDING FIELD VERIFY.

08 DONNA CAMPUS TYPICAL EXTERIOR LIGHTING CONTROLS SCHEMATIC  
SCALE : NONE

DEMOLITION KEYED NOTES:

- EXISTING PANELBOARD SERVING EXTERIOR LIGHTING CIRCUITS. VARIES BY BUILDING. REFER TO LIGHTING SITE PLAN.
- EXISTING EXTERIOR LIGHTING CIRCUITS. QUANTITY VARIES BY BUILDING. FIELD VERIFY.
- DISCONNECT AND REMOVE EXISTING MECHANICAL TIME CLOCK ALONG WITH RELATED SUPPORT HARDWARE, RACEWAYS AND WIRING.

UPGRADES KEYED NOTES:

- EXISTING PANELBOARD SERVING EXTERIOR LIGHTING CIRCUITS. VARIES BY BUILDING. REFER TO LIGHTING SITE PLAN.
- EXISTING EXTERIOR LIGHTING CIRCUITS. QUANTITY VARIES BY BUILDING. FIELD VERIFY.
- PROVIDE NEW ELECTRONIC TIME CLOCK INTERMATIC MODEL NO. ET90115CE, 120/277V, 30A, SPDT, 30 MIN BATTERY BACK-UP, 365 DAY, 3YR WARRANTY, USB AND ETHERNET SUPPORT.
- PROVIDE 120/277V, 30A, 6-POLE, ELECTRICAL LIGHTING CONTACTOR IN NEMA 1 SURFACE MOUNT ENCLOSURE.
- PROVIDE CAT5 FOR ETHERNET CONNECTION TERMINATE AT NEWEST MDF/IDF PATCH PANEL/SWITCH.





TEXAS

IDEA PUBLIC SCHOOLS  
ELECTRICAL AND LIGHTING UPGRADES  
AT RGV CAMPUSES

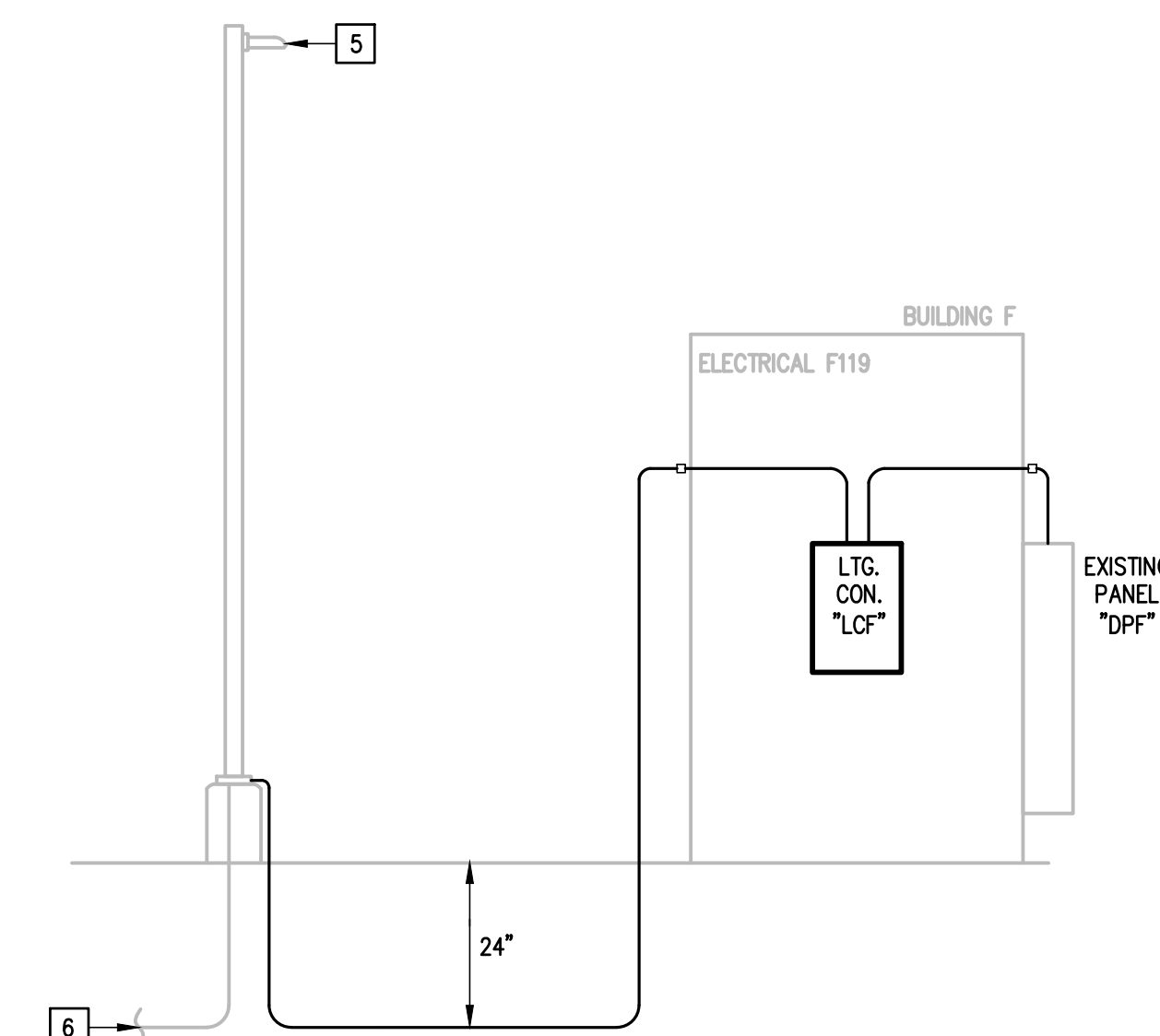


DATE: FEBRUARY 23, 2024  
CHECKED BY: G.Q.  
DRAWN BY: R.E.  
PROJECT NO.: 23v80  
CAD FILE:  
SHEET:

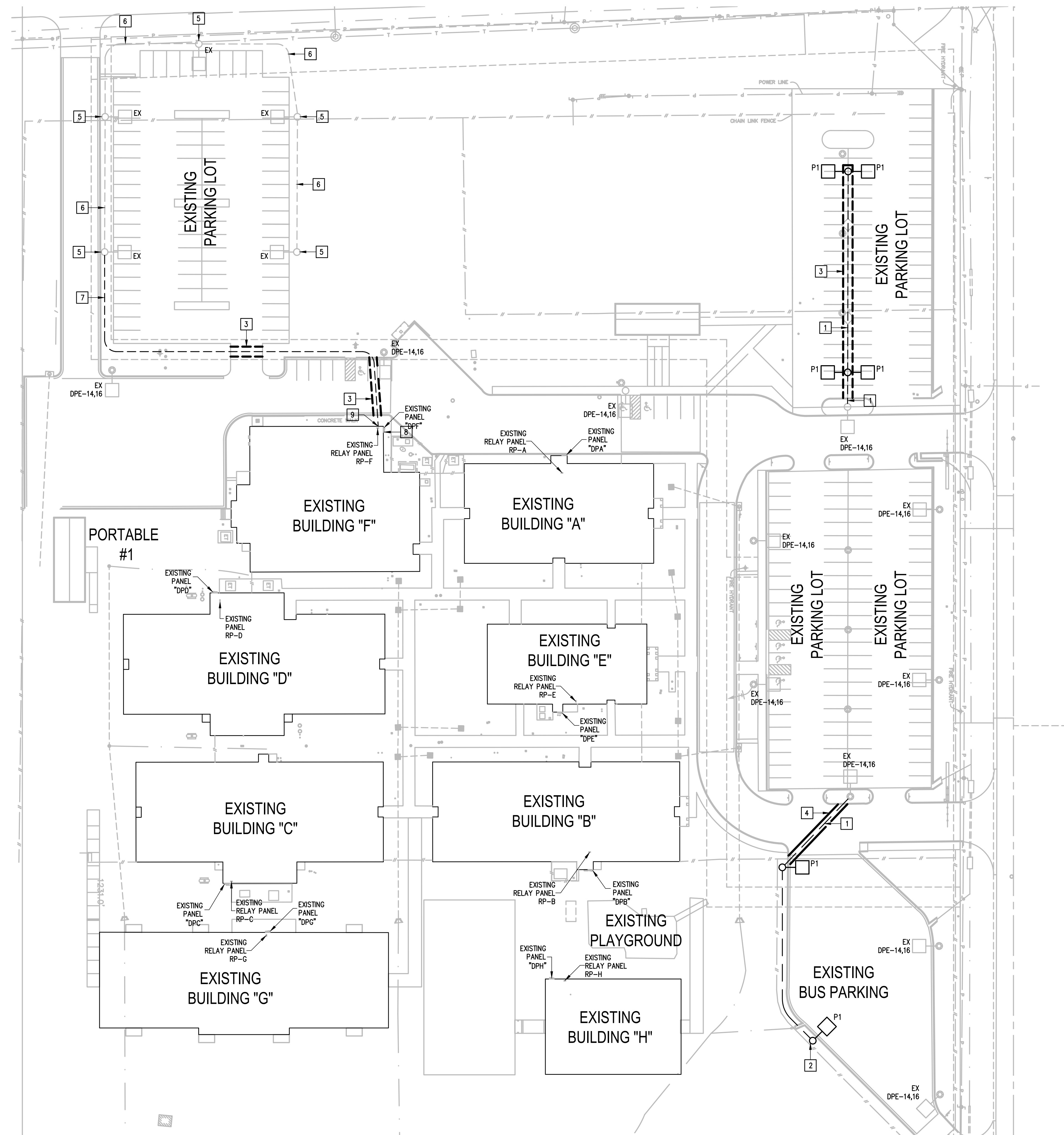
E3.01

KEYED NOTES:

- 1 CONNECT TO EXISTING LIGHTING BRANCH CIRCUIT: 1" - 2#8 & #10G
- 2 PROVIDE POLE LIGHTS AS SCHEDULED - TYPICAL. SEE DETAIL.
- 3 SAW CUT EXISTING ASPHALT PARKING LOT. PATCH TO MATCH EXISTING CONDITION.
- 4 SAW CUT EXISTING CONCRETE DRIVEWAY. PATCH TO MATCH EXISTING CONDITIONS.
- 5 DISCONNECT AND REMOVE EXISTING LIGHT FIXTURE ALONG WITH RELATED WIRING. PROVIDE A NEW FIXTURE HEAD ON EXISTING POLE. PROVIDE FIXTURE WITH A ROUND POLE ADAPTER. FIELD CONFIRM CONDITIONS.
- 6 PROVIDE NEW 3#10 & #10G IN EXISTING UNDERGROUND RACEWAY.
- 7 PROVIDE 1" - 3#10 & #10G. SWITCH VIA LIGHTING CONTACTOR "LCF".
- 8 APPROXIMATE LOCATION OF EXISTING PANEL "DPF" SQUARE D NF424AB42 400A, 277/480V, 3# 4W PANELBOARD. PROVIDE A 20A/2P BREAKER IN AVAILABLE SPACE TO CONNECT LIGHT POLES.
- 9 RISE UP RACEWAYS AND PENETRATE AT AN ACCESSIBLE LOCATION.



02 IDEA FRONTIER  
ELECTRICAL RISER DIAGRAM  
SCALE: NOT TO SCALE

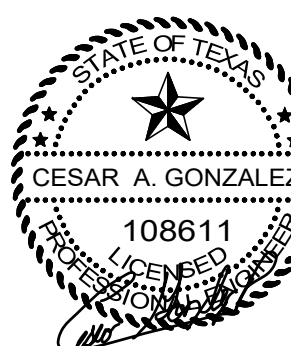


01 IDEA FRONTIER  
LIGHTING PLAN  
SCALE: 1" = 40'-0"



IDEA FRONTIER





IDEA PUBLIC SCHOOLS  
ELECTRICAL AND LIGHTING UPGRADES  
AT RGV CAMPUSES



DEMOLITION GENERAL NOTES:

1. THE EXTENT OF DEMOLITION WORK IS INDICATED ON THE DRAWINGS AND BY THE REQUIREMENTS OF THIS SECTION. A VISIT TO THE SITE IS REQUIRED TO PROPERLY BID THE DEMOLITION WORK.
2. REMOVED MATERIALS SHALL BELONG TO OWNER. DELIVER THEM TO OWNERS DESIGNATED LOCATION. IF OWNER DOES NOT WANT THE REMOVED MATERIALS THEN REMOVE THEM FROM SITE & PROPERLY DISPOSE OF THEM.
3. IF REMOVAL OF EXISTING ELECTRICAL SYSTEMS RENDERS EXISTING ELECTRICAL SYSTEMS DOWNSTREAM TO REMAIN INOPERABLE, PROVIDE J-BOXES, CONDUIT WIRING AND SPLICES ABOVE ACCESSIBLE CEILINGS IN ORDER TO CONTINUE OPERATION.
4. PRIOR TO DEMOLITION, IN CEILINGS TO BE REMOVED AND (OR) REPLACED FOR NEW WORK, PREPARE REFLECTED CEILING PLAN SKETCH SHOWING LOCATIONS OF ALL CEILING COMPONENTS AND DEVICES TO BE RE-USED INCLUDING BUT NOT LIMITED TO:
  - LIGHT FIXTURES
  - SPEAKERS
  - WIRELESS ACCESS POINTS
  - FIRE ALARM DEVICES
  - ETC.
 IF ANY OF THE ABOVE ITEMS ARE IN NON-WORKING CONDITION, SUBMIT A WRITTEN REPORT TO OWNER/ARCHITECT. TEMPORARY SUPPORT AND OR REMOVAL OF THESE SYSTEMS SHALL BE PROVIDED FOR NEW WORK.
5. PROVIDE BLANK COVER PLATE FOR UNUSED BACK BOXES.

DEMOLITION KEYED NOTES:

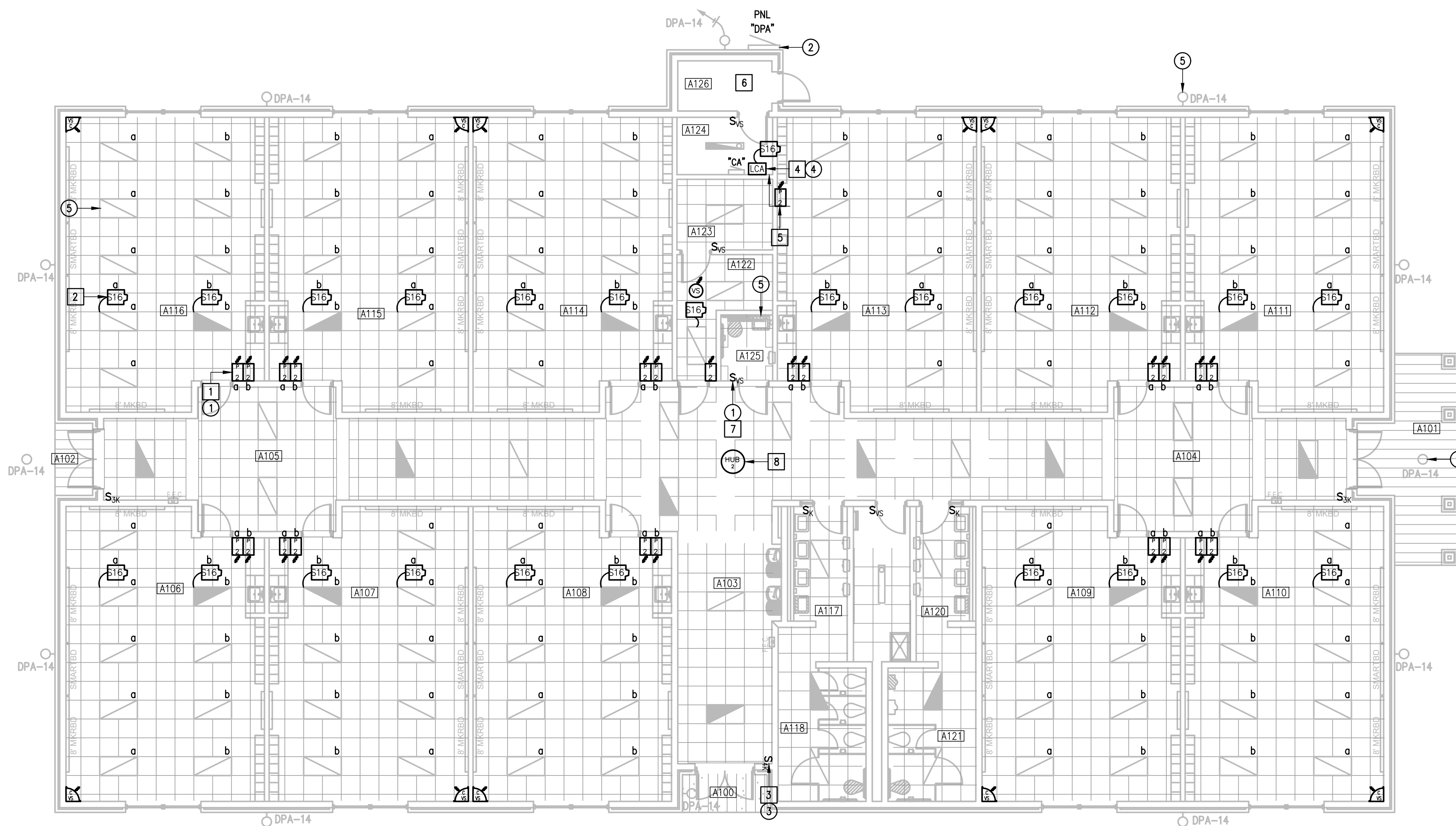
- 1 DISCONNECT AND REMOVE EXISTING TOGGLE SWITCHES (SWEEPER) ALONG WITH RELATED WIRING - TYPICAL.
- 2 APPROXIMATE LOCATION OF EXISTING LIGHTING PANELBOARD SERVING INTERIOR AND EXTERIOR LIGHTING CIRCUITS.
- 3 DISCONNECT AND REMOVE EXISTING TOGGLE SWITCH (STRAIGHT KEY) - TYPICAL.
- 4 DISCONNECT AND REMOVE EXISTING LIGHTING RELAY PANEL. SEE DETAIL.
- 5 EXISTING LIGHT FIXTURE TO REMAIN AS IS - TYPICAL.

GENERAL NOTES:

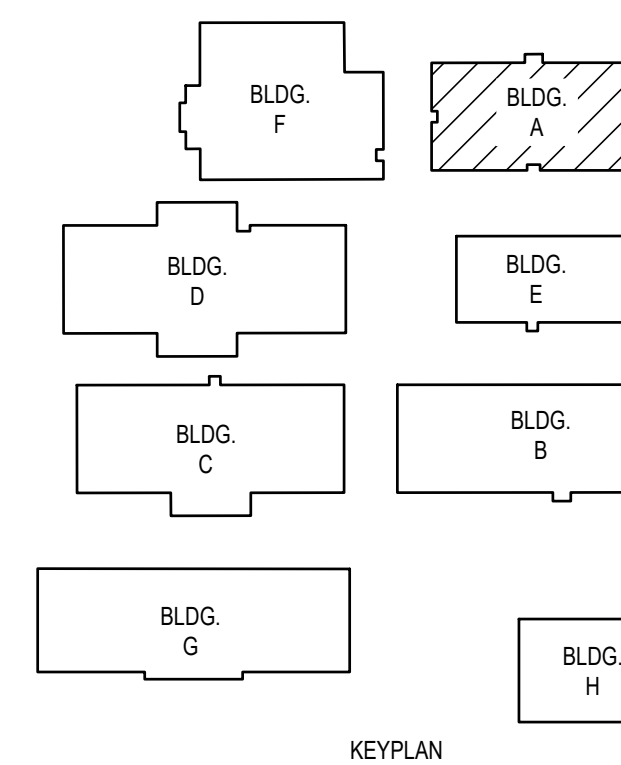
1. LIGHTING BRANCH CIRCUIT HOMERUNS SHALL BE 3/4" - 2#12 & #12G. 20A/277V HOMERUNS EXCEEDING 200FT THE WIRE SIZE SHALL BE #10 & #8 FOR 275'.
2. INTERIOR LIGHTING CONTROLS SHALL BE BY VACANCY SENSORS.
3. EXTERIOR LIGHTING CONTROLS SHALL BE BY LIGHTING CONTACTOR. TIME CONTROL/SCHEDULES BAS INTEGRATION/VA LUTRON VIVE HUB.

KEYED NOTES:

- 1 PROVIDE NEW LIGHTING SWITCHES (WIRELESS).
- 2 PROVIDE AND CONNECT POWER PACK TO THE ASSOCIATED LIGHT FIXTURES - TYPICAL.
- 3 PROVIDE AND CONNECT NEW KEYED SWITCH (CORBIN KEY) - TYPICAL.
- 4 PROVIDE LIGHTING CONTACTOR. PROVIDE LUTRON RELAY POWER PAK AND WIRELESS SWITCH FOR TIME CONTROL AND OVERRIDE FOR EACH - SEE DETAIL.
- 5 FOR EXTERIOR LIGHTING CONTACTOR OVERRIDE.
- 6 EXISTING LIGHTING CONTROLS IN THIS ROOM TO REMAIN AS IS.
- 7 PROVIDE AND CONNECT NEW WALL LIGHTING SWITCH SENSOR (WIRED) - TYPICAL.
- 8 PROVIDE FLUSH MOUNTED TO CEILING. CONNECT TO EXISTING PANELBOARD "CA"; BRANCH CIRCUIT: 1/2" - 2#12 & #12G. PROVIDE A 20A/1P BREAKER IN AVAILABLE SPACE.

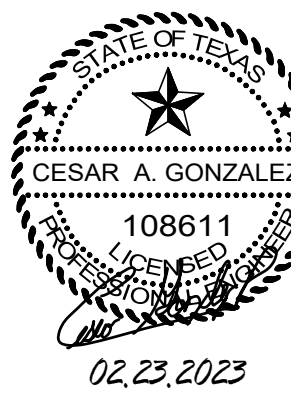


01 IDEA FRONTIER LIGHTING PLAN (BUILDING A) SCALE: 1/8" = 1'-0" PLAN NORTH



IDEA FRONTIER





### DEMOLITION GENERAL NOTES:

1. THE EXTENT OF DEMOLITION WORK IS INDICATED ON THE DRAWINGS AND BY THE REQUIREMENTS OF THIS SECTION. A VISIT TO THE SITE IS REQUIRED TO PROPERLY BID THE DEMOLITION WORK.
2. REMOVED MATERIALS SHALL BELONG TO OWNER. DELIVER THEM TO OWNERS DESIGNATED LOCATION. IF OWNER DOES NOT WANT THE REMOVED MATERIALS THEN REMOVE THEM FROM SITE & PROPERLY DISPOSE OF THEM.
3. IF REMOVAL OF EXISTING ELECTRICAL SYSTEMS RENDERS EXISTING ELECTRICAL SYSTEMS DOWNSTREAM TO REMAIN INOPERABLE, PROVIDE J-BOXES, CONDUIT WIRING AND SPLICES ABOVE ACCESSIBLE CEILINGS IN ORDER TO CONTINUE OPERATION.
4. PRIOR TO DEMOLITION, IN CEILINGS TO BE REMOVED AND (OR) REPLACED FOR NEW WORK, PREPARE REFLECTED CEILING PLAN SKETCH SHOWING LOCATIONS OF ALL CEILING COMPONENTS AND DEVICES TO BE RE-USED INCLUDING BUT NOT LIMITED TO:
  - LIGHT FIXTURES
  - SPEAKERS
  - WIRELESS ACCESS POINTS
  - FIRE ALARM DEVICES
  - ETC.
 IF ANY OF THE ABOVE ITEMS ARE IN NON-WORKING CONDITION, SUBMIT A WRITTEN REPORT TO OWNER/ARCHITECT. TEMPORARY SUPPORT AND OR REMOVAL OF THESE SYSTEMS SHALL BE PROVIDED FOR NEW WORK.
5. PROVIDE BLANK COVER PLATE FOR UNUSED BACK BOXES.

### DEMOLITION KEYED NOTES:

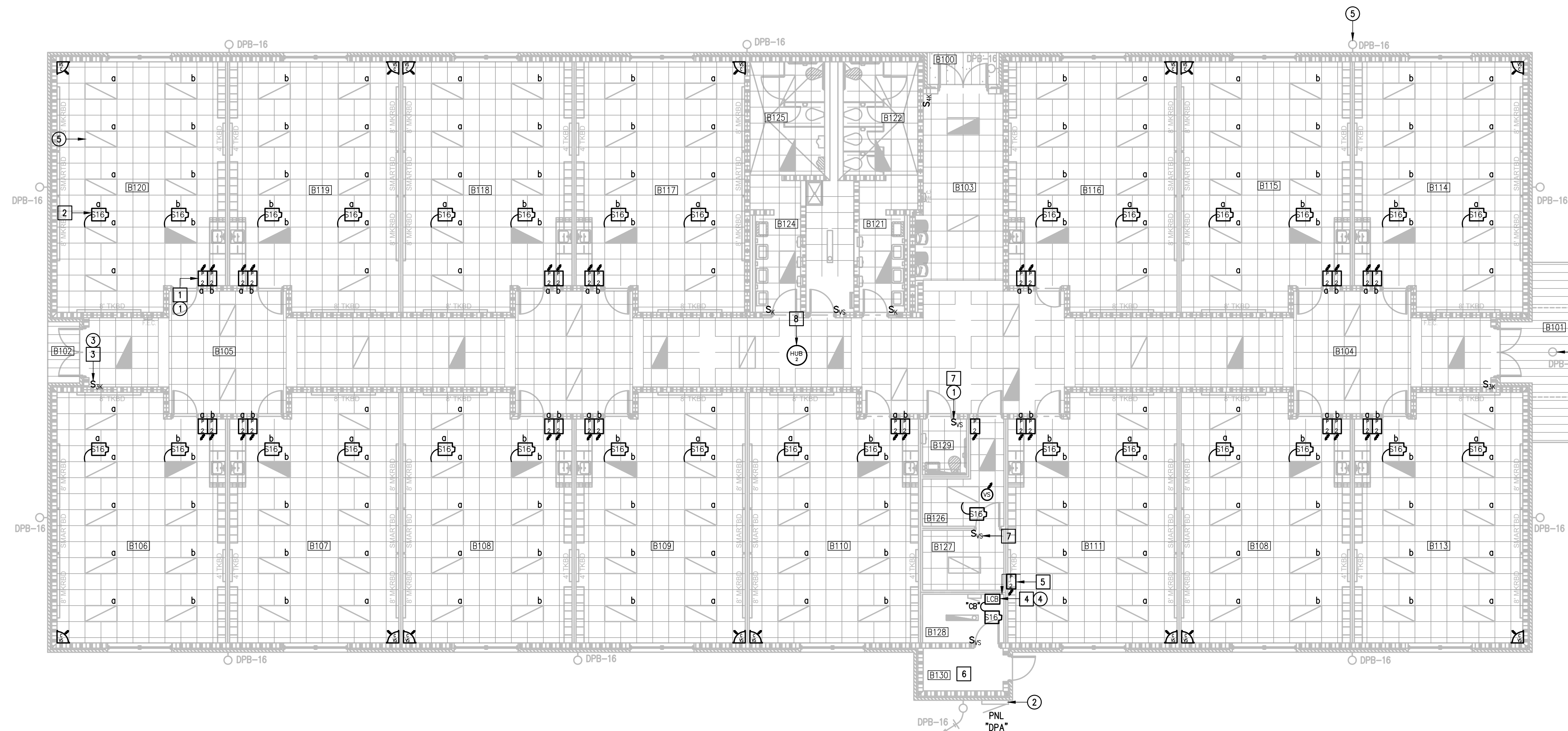
- ① DISCONNECT AND REMOVE EXISTING TOGGLE SWITCHES (SWEEPER) ALONG WITH RELATED WIRING - TYPICAL.
- ② APPROXIMATE LOCATION OF EXISTING LIGHTING PANELBOARD SERVING INTERIOR AND EXTERIOR LIGHTING CIRCUITS.
- ③ DISCONNECT AND REMOVE EXISTING TOGGLE SWITCH (STRAIGHT KEY) - TYPICAL.
- ④ DISCONNECT AND REMOVE EXISTING LIGHTING RELAY PANEL - SEE DETAIL.
- ⑤ EXISTING LIGHT FIXTURE TO REMAIN AS IS - TYPICAL.

### GENERAL NOTES:

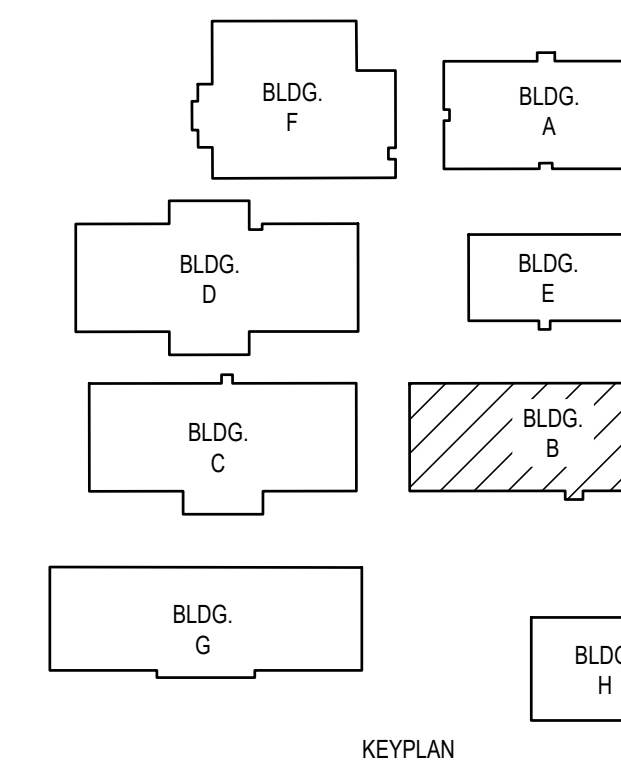
1. LIGHTING BRANCH CIRCUIT HOMERUNS SHALL BE 3/4" - 2#12 & #12G. 20A/277V HOMERUNS EXCEEDING 200FT THE WIRE SIZE SHALL BE #10 & #8 FOR 275'.
2. INTERIOR LIGHTING CONTROLS SHALL BE BY VACANCY SENSORS.
3. EXTERIOR LIGHTING CONTROLS SHALL BE BY LIGHTING CONTACTOR. TIME CONTROL/SCHEDULES BAS INTEGRATION/IA LUTRON VIVE HUB.

### KEYED NOTES:

- 1 PROVIDE NEW LIGHTING SWITCHES (WIRELESS).
- 2 PROVIDE AND CONNECT POWER PACK TO THE ASSOCIATED LIGHT FIXTURES - TYPICAL.
- 3 PROVIDE AND CONNECT NEW KEYED SWITCH (CORBIN KEY) - TYPICAL.
- 4 PROVIDE LIGHTING CONTACTOR. PROVIDE LUTRON RELAY POWER PAK AND WIRELESS SWITCH FOR TIME CONTROL AND OVERRIDE FOR EACH - SEE DETAIL.
- 5 FOR EXTERIOR LIGHTING CONTACTOR OVERRIDE.
- 6 EXISTING LIGHTING CONTROLS IN THIS ROOM TO REMAIN AS IS.
- 7 PROVIDE AND CONNECT NEW WALL LIGHTING SWITCH SENSOR (WIRED) - TYPICAL.
- 8 PROVIDE FLUSH MOUNTED TO CEILING. CONNECT TO EXISTING PANELBOARD "CB"; BRANCH CIRCUIT: 1/2" - 2#12 & #12G. PROVIDE A 20A/1P BREAKER IN AVAILABLE SPACE.



01 **IDEA FRONTIER LIGHTING PLAN** (BUILDING B)  
 SCALE: 1/8" = 1'-0"



IDEA FRONTIER

**IDEA PUBLIC SCHOOLS  
 ELECTRICAL AND LIGHTING UPGRADES  
 AT RGV CAMPUSES**

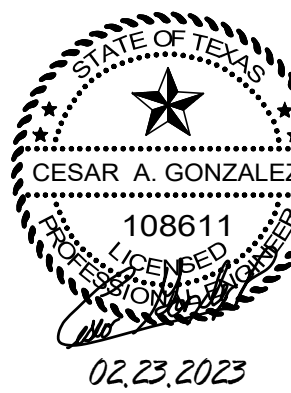


1126 SOUTH COMMERCE ST.  
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 ENGINEERING FIRM  
 F-15998

DATE: FEBRUARY 23, 2024  
 CHECKED BY: G.Q.  
 DRAWN BY: R.E.  
 PROJECT NO.: 23v80  
 CAD FILE:  
 SHEET:

E3.03





IDEA PUBLIC SCHOOLS  
ELECTRICAL AND LIGHTING UPGRADES  
AT RGV CAMPUSES

DEMOLITION GENERAL NOTES:

1. THE EXTENT OF DEMOLITION WORK IS INDICATED ON THE DRAWINGS AND BY THE REQUIREMENTS OF THIS SECTION. A VISIT TO THE SITE IS REQUIRED TO PROPERLY BID THE DEMOLITION WORK.
2. REMOVED MATERIALS SHALL BELONG TO OWNER. DELIVER THEM TO OWNERS DESIGNATED LOCATION. IF OWNER DOES NOT WANT THE REMOVED MATERIALS THEN REMOVE THEM FROM SITE & PROPERLY DISPOSE OF THEM.
3. IF REMOVAL OF EXISTING ELECTRICAL SYSTEMS RENDERS EXISTING ELECTRICAL SYSTEMS DOWNSTREAM TO REMAIN INOPERABLE, PROVIDE J-BOXES, CONDUIT WIRING AND SPLICES ABOVE ACCESSIBLE CEILINGS IN ORDER TO CONTINUE OPERATION.
4. PRIOR TO DEMOLITION, IN CEILINGS TO BE REMOVED AND (OR) REPLACED FOR NEW WORK, PREPARE REFLECTED CEILING PLAN SKETCH SHOWING LOCATIONS OF ALL CEILING COMPONENTS AND DEVICES TO BE RE-USED INCLUDING BUT NOT LIMITED TO:
  - LIGHT FIXTURES
  - SPEAKERS
  - WIRELESS ACCESS POINTS
  - FIRE ALARM DEVICES
  - ETC.
 IF ANY OF THE ABOVE ITEMS ARE IN NON-WORKING CONDITION, SUBMIT A WRITTEN REPORT TO OWNER/ARCHITECT. TEMPORARY SUPPORT AND OR REMOVAL OF THESE SYSTEMS SHALL BE PROVIDED FOR NEW WORK.
5. PROVIDE BLANK COVER PLATE FOR UNUSED BACK BOXES.

DEMOLITION KEYED NOTES:

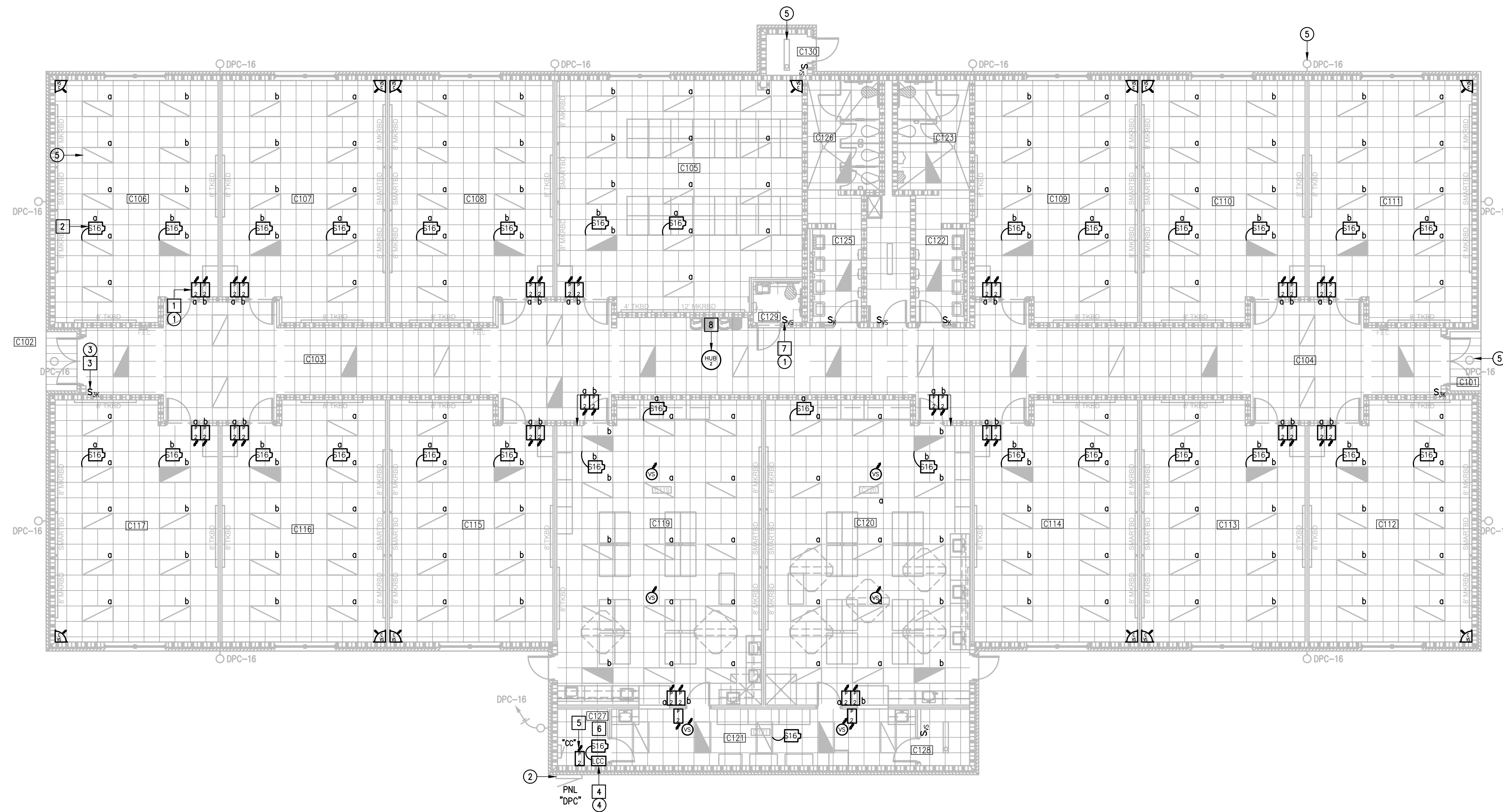
- ① DISCONNECT AND REMOVE EXISTING TOGGLE SWITCHES (SWEEPER) ALONG WITH RELATED WIRING - TYPICAL.
- ② APPROXIMATE LOCATION OF EXISTING LIGHTING PANELBOARD SERVING INTERIOR AND EXTERIOR LIGHTING CIRCUITS.
- ③ DISCONNECT AND REMOVE EXISTING TOGGLE SWITCH (STRAIGHT KEY) - TYPICAL.
- ④ DISCONNECT AND REMOVE EXISTING LIGHTING RELAY PANEL. SEE DETAIL.
- ⑤ EXISTING LIGHT FIXTURE TO REMAIN AS IS - TYPICAL.

GENERAL NOTES:

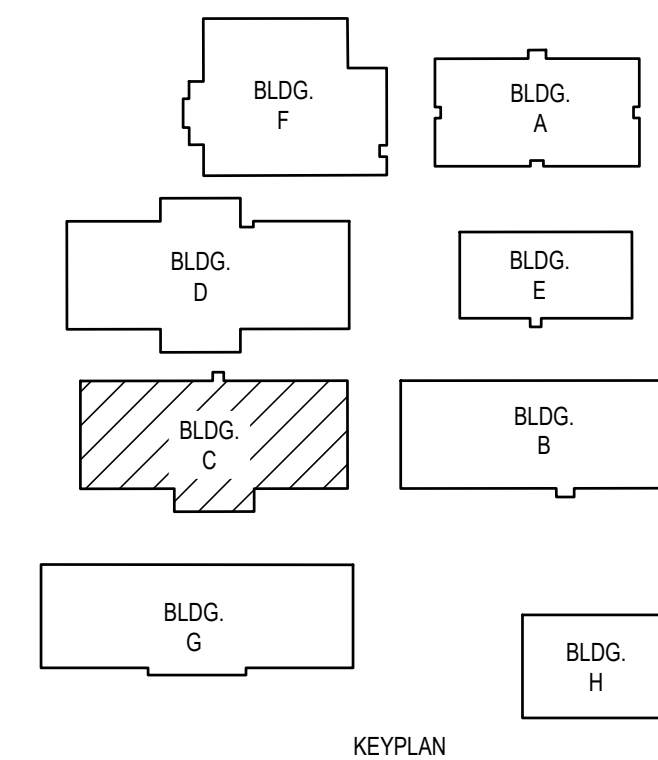
1. LIGHTING BRANCH CIRCUIT HOMERUNS SHALL BE 3/4" - 2#12 & #12G. 20A/277V HOMERUNS EXCEEDING 200FT THE WIRE SIZE SHALL BE #10 & #8 FOR 275'.
2. INTERIOR LIGHTING CONTROLS SHALL BE BY VACANCY SENSORS.
3. EXTERIOR LIGHTING CONTROLS SHALL BE BY LIGHTING CONTACTOR. TIME CONTROL/SCHEDULES BAS INTEGRATION/IA LUTRON VIVE HUB.

KEYED NOTES:

- 1 PROVIDE NEW LIGHTING SWITCHES (WIRELESS).
- 2 PROVIDE AND CONNECT POWER PACK TO THE ASSOCIATED LIGHT FIXTURES - TYPICAL.
- 3 PROVIDE AND CONNECT NEW KEYED SWITCH (CORBIN KEY) - TYPICAL.
- 4 PROVIDE LIGHTING CONTACTOR. PROVIDE LUTRON RELAY POWER PAK AND WIRELESS SWITCH FOR TIME CONTROL AND OVERRIDE FOR EACH - SEE DETAIL.
- 5 FOR EXTERIOR LIGHTING CONTACTOR OVERRIDE.
- 6 EXISTING LIGHTING CONTROLS IN THIS ROOM TO REMAIN AS IS.
- 7 PROVIDE AND CONNECT NEW WALL LIGHTING SWITCH SENSOR (WIRED) - TYPICAL.
- 8 PROVIDE FLUSH MOUNTED TO CEILING. CONNECT TO EXISTING PANELBOARD "CC"; BRANCH CIRCUIT: 1/2" - 2#12 & #12G. PROVIDE A 20A/1P BREAKER IN AVAILABLE SPACE.



01 IDEA FRONTIER LIGHTING PLAN (BUILDING C)  
SCALE: 1/8" = 1'-0"  
PLAN NORTH







IDEA PUBLIC SCHOOLS  
ELECTRICAL AND LIGHTING UPGRADES  
AT RGV CAMPUSES

DEMOLITION GENERAL NOTES:

1. THE EXTENT OF DEMOLITION WORK IS INDICATED ON THE DRAWINGS AND BY THE REQUIREMENTS OF THIS SECTION. A VISIT TO THE SITE IS REQUIRED TO PROPERLY BID THE DEMOLITION WORK.
2. REMOVED MATERIALS SHALL BELONG TO OWNER. DELIVER THEM TO OWNERS DESIGNATED LOCATION. IF OWNER DOES NOT WANT THE REMOVED MATERIALS THEN REMOVE THEM FROM SITE & PROPERLY DISPOSE OF THEM.
3. IF REMOVAL OF EXISTING ELECTRICAL SYSTEMS RENDERS EXISTING ELECTRICAL SYSTEMS DOWNSTREAM TO REMAIN INOPERABLE, PROVIDE J-BOXES, CONDUIT WIRING AND SPLICES ABOVE ACCESSIBLE CEILINGS IN ORDER TO CONTINUE OPERATION.
4. PRIOR TO DEMOLITION, IN CEILINGS TO BE REMOVED AND (OR) REPLACED FOR NEW WORK, PREPARE REFLECTED CEILING PLAN SKETCH SHOWING LOCATIONS OF ALL CEILING COMPONENTS AND DEVICES TO BE RE-USED INCLUDING BUT NOT LIMITED TO:
  - LIGHT FIXTURES
  - SPEAKERS
  - WIRELESS ACCESS POINTS
  - FIRE ALARM DEVICES
  - ETC.
 IF ANY OF THE ABOVE ITEMS ARE IN NON-WORKING CONDITION, SUBMIT A WRITTEN REPORT TO OWNER/ARCHITECT. TEMPORARY SUPPORT AND OR REMOVAL OF THESE SYSTEMS SHALL BE PROVIDED FOR NEW WORK.
5. PROVIDE BLANK COVER PLATE FOR UNUSED BACK BOXES.

DEMOLITION KEYED NOTES:

- 1 DISCONNECT AND REMOVE EXISTING TOGGLE SWITCHES (SWEEPER) ALONG WITH RELATED WIRING - TYPICAL.
- 2 APPROXIMATE LOCATION OF EXISTING LIGHTING PANELBOARD SERVING INTERIOR AND EXTERIOR LIGHTING CIRCUITS.
- 3 DISCONNECT AND REMOVE EXISTING TOGGLE SWITCH (STRAIGHT KEY) - TYPICAL.
- 4 DISCONNECT AND REMOVE EXISTING LIGHTING RELAY PANEL. SEE DETAIL.
- 5 EXISTING LIGHT FIXTURE TO REMAIN AS IS - TYPICAL.

GENERAL NOTES:

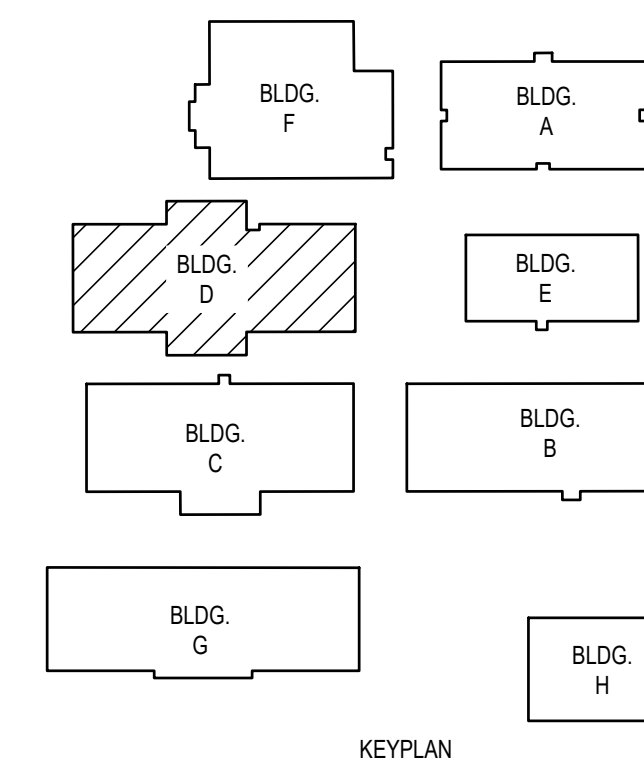
1. LIGHTING BRANCH CIRCUIT HOMERUNS SHALL BE 3/4" - 2#12 & #12G. 20A/277V HOMERUNS EXCEEDING 200FT THE WIRE SIZE SHALL BE #10 & #8 FOR 275'.
2. INTERIOR LIGHTING CONTROLS SHALL BE BY VACANCY SENSORS.
3. EXTERIOR LIGHTING CONTROLS SHALL BE BY LIGHTING CONTACTOR. TIME CONTROL/SCHEDULES BAS INTEGRATION/IA LUTRON VIVE HUB.

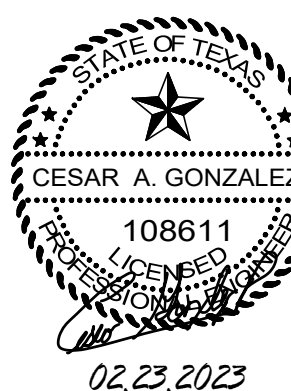
KEYED NOTES:

- 1 PROVIDE NEW LIGHTING SWITCHES (WIRELESS).
- 2 PROVIDE AND CONNECT POWER PAK TO THE ASSOCIATED LIGHT FIXTURES - TYPICAL.
- 3 PROVIDE AND CONNECT NEW KEYED SWITCH (CORBIN KEY) - TYPICAL.
- 4 PROVIDE LIGHTING CONTACTOR. PROVIDE LUTRON RELAY POWER PAK AND WIRELESS SWITCH FOR TIME CONTROL AND OVERRIDE FOR EACH - SEE DETAIL.
- 5 FOR EXTERIOR LIGHTING CONTACTOR OVERRIDE.
- 6 EXISTING LIGHTING CONTROLS IN THIS ROOM TO REMAIN AS IS.
- 7 PROVIDE AND CONNECT NEW WALL LIGHTING SWITCH SENSOR (WIRED) - TYPICAL.
- 8 PROVIDE FLUSH MOUNTED TO CEILING. CONNECT TO EXISTING PANELBOARD "CD"; BRANCH CIRCUIT: 1/2" - 2#12 & #12G. PROVIDE A 20A/1P BREAKER IN AVAILABLE SPACE.



01 IDEA FRONTIER  
LIGHTING PLAN (BUILDING D)  
SCALE: 1/8" = 1'-0"  
PLAN NORTH





DEMOLITION GENERAL NOTES:

1. THE EXTENT OF DEMOLITION WORK IS INDICATED ON THE DRAWINGS AND BY THE REQUIREMENTS OF THIS SECTION. A VISIT TO THE SITE IS REQUIRED TO PROPERLY BID THE DEMOLITION WORK.
2. REMOVED MATERIALS SHALL BELONG TO OWNER. DELIVER THEM TO OWNERS DESIGNATED LOCATION. IF OWNER DOES NOT WANT THE REMOVED MATERIALS THEN REMOVE THEM FROM SITE & PROPERLY DISPOSE OF THEM.
3. IF REMOVAL OF EXISTING ELECTRICAL SYSTEMS RENDERS EXISTING ELECTRICAL SYSTEMS DOWNSTREAM TO REMAIN INOPERABLE, PROVIDE J-BOXES, CONDUIT WIRING AND SPLICES ABOVE ACCESSIBLE CEILING IN ORDER TO CONTINUE OPERATION.
4. PRIOR TO DEMOLITION, IN CEILING TO BE REMOVED AND (OR) REPLACED FOR NEW WORK, PREPARE REFLECTED CEILING PLAN SKETCH SHOWING LOCATIONS OF ALL CEILING COMPONENTS AND DEVICES TO BE RE-USED INCLUDING BUT NOT LIMITED TO:
  - LIGHT FIXTURES
  - SPEAKERS
  - WIRELESS ACCESS POINTS
  - FIRE ALARM DEVICES
  - ETC.
 IF ANY OF THE ABOVE ITEMS ARE IN NON-WORKING CONDITION, SUBMIT A WRITTEN REPORT TO OWNER/ARCHITECT. TEMPORARY SUPPORT AND OR REMOVAL OF THESE SYSTEMS SHALL BE PROVIDED FOR NEW WORK.
5. PROVIDE BLANK COVER PLATE FOR UNUSED BACK BOXES.

DEMOLITION KEYED NOTES:

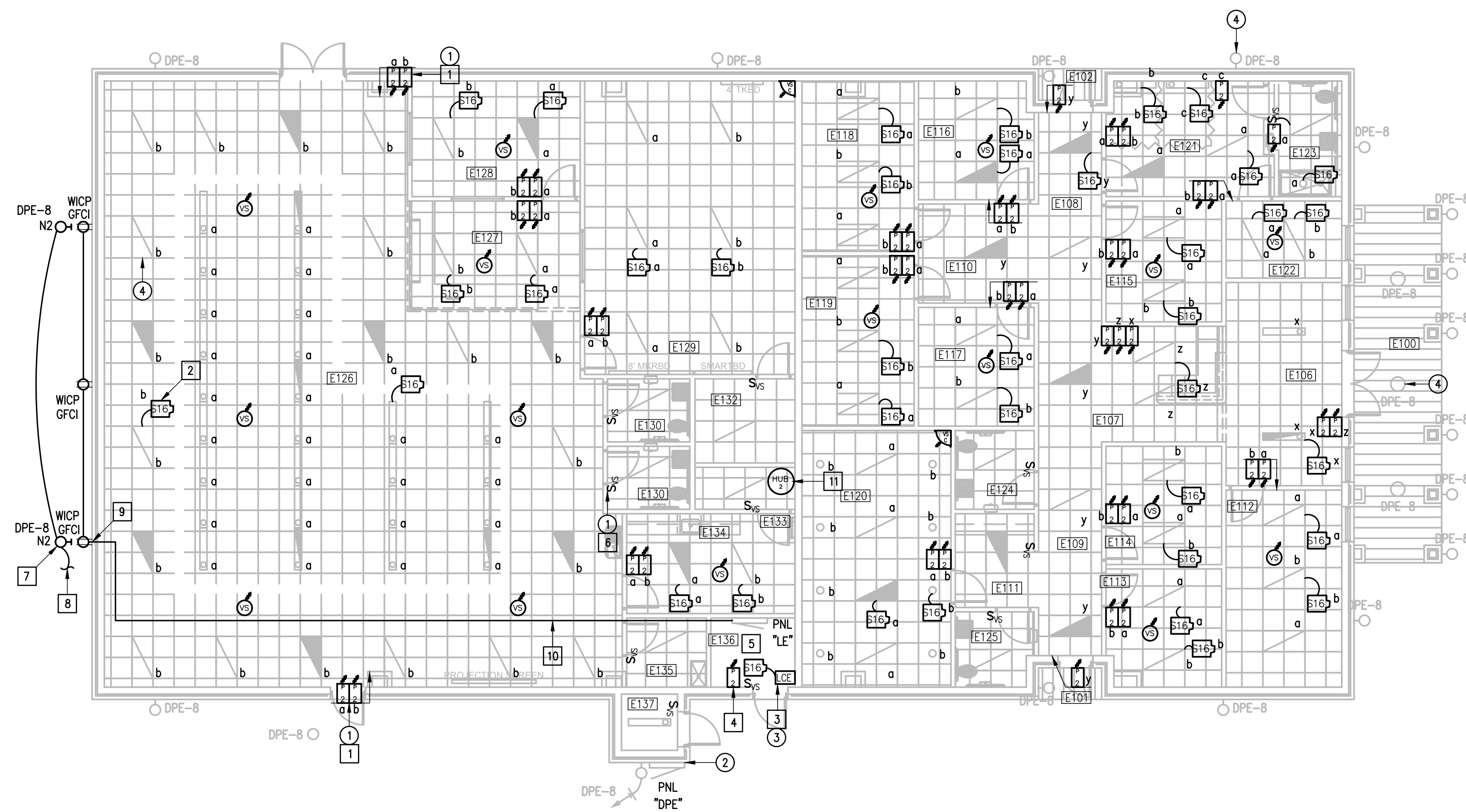
- ① DISCONNECT AND REMOVE EXISTING TOGGLE SWITCHES (SWEEPER) ALONG WITH RELATED WIRING - TYPICAL.
- ② APPROXIMATE LOCATION OF EXISTING LIGHTING PANELBOARD SERVING INTERIOR AND EXTERIOR LIGHTING CIRCUITS.
- ③ DISCONNECT AND REMOVE EXISTING LIGHTING RELAY PANEL - SEE DETAIL.
- ④ EXISTING LIGHT FIXTURE TO REMAIN AS IS - TYPICAL.

GENERAL NOTES:

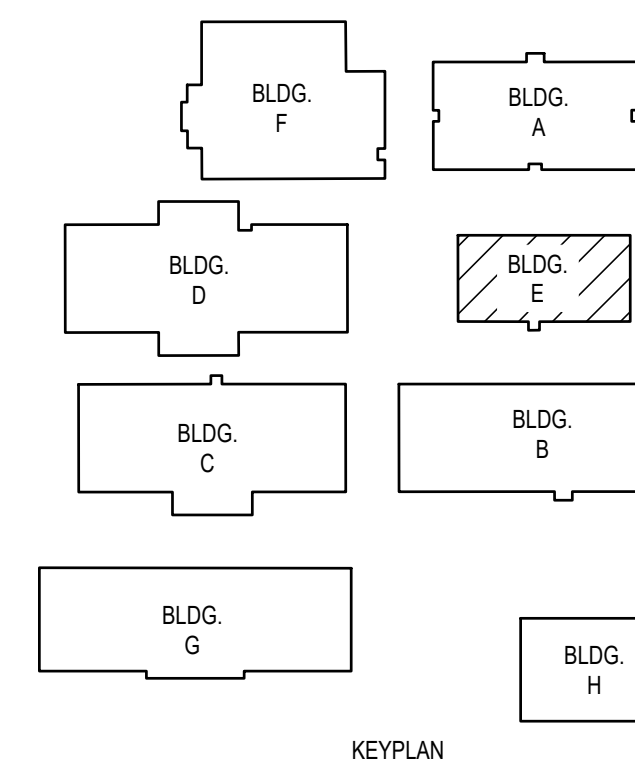
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2. INTERIOR LIGHTING CONTROLS SHALL BE BY VACANCY SENSORS.
3. EXTERIOR LIGHTING CONTROLS SHALL BE BY LIGHTING CONTACTOR. TIME CONTROL/SCHEDULES BAS INTEGRATION/IA LUTRON VIVE HUB.

KEYED NOTES:

- 1 PROVIDE NEW LIGHTING SWITCHES (WIRELESS).
- 2 PROVIDE AND CONNECT POWER PAK TO THE ASSOCIATED LIGHT FIXTURES - TYPICAL.
- 3 PROVIDE LIGHTING CONTACTORS "LC". PROVIDE LUTRON RELAY POWER PAK AND WIRELESS SWITCH FOR TIME CONTROL AND OVERRIDE FOR EACH - SEE DETAIL.
- 4 FOR EXTERIOR LIGHTING CONTACTOR OVERRIDE.
- 5 EXISTING LIGHTING CONTROLS IN THIS ROOM TO REMAIN AS IS.
- 6 PROVIDE AND CONNECT NEW WALL LIGHTING SWITCH SENSOR (WIRED) - TYPICAL.
- 7 MOUNT LIGHT FIXTURE TYPE "N1" AT 12" BELOW SOLDIER COURSE BRICK ASCENT BAND - TYPICAL.
- 8 CONNECT TO EXISTING EXTERIOR LIGHTING CIRCUIT. VERIFY EXISTING LOAD PRIOR TO ANY NEW CONNECTION.
- 9 RISE UP RACEWAYS AND PENETRATE AT AN ACCESSIBLE LOCATION ABOVE THE CEILING.
- 10 CONNECT TO EXISTING PANELBOARD; BRANCH CIRCUIT: 1/2" - 2#12 & 12G. PROVIDE A 20A/1P BREAKER IN AVAILABLE SPACE.
- 11 PROVIDE FLUSH MOUNTED TO CEILING. CONNECT TO EXISTING PANELBOARD "CE"; BRANCH CIRCUIT: 1/2" - 2#12 & #12G. PROVIDE A 20A/1P BREAKER IN AVAILABLE SPACE.



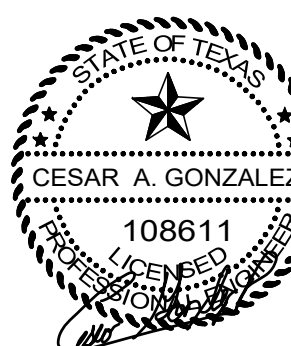
IDEA FRONTIER  
 LIGHTING PLAN (BUILDING E)  
 01 SCALE: 1/8" = 1'-0"  
 PLAN NORTH



IDEA PUBLIC SCHOOLS  
 ELECTRICAL AND LIGHTING UPGRADES  
 AT RGV CAMPUSES







IDEA PUBLIC SCHOOLS  
ELECTRICAL AND LIGHTING UPGRADES  
AT RGV CAMPUSES

DEMOLITION GENERAL NOTES:

1. THE EXTENT OF DEMOLITION WORK IS INDICATED ON THE DRAWINGS AND BY THE REQUIREMENTS OF THIS SECTION. A VISIT TO THE SITE IS REQUIRED TO PROPERLY BID THE DEMOLITION WORK.
2. REMOVED MATERIALS SHALL BELONG TO OWNER. DELIVER THEM TO OWNERS DESIGNATED LOCATION. IF OWNER DOES NOT WANT THE REMOVED MATERIALS THEN REMOVE THEM FROM SITE & PROPERLY DISPOSE OF THEM.
3. IF REMOVAL OF EXISTING ELECTRICAL SYSTEMS RENDERS EXISTING ELECTRICAL SYSTEMS DOWNSTREAM TO REMAIN INOPERABLE, PROVIDE J-BOXES, CONDUIT WIRING AND SPLICES ABOVE ACCESSIBLE CEILINGS IN ORDER TO CONTINUE OPERATION.
4. PRIOR TO DEMOLITION, IN CEILINGS TO BE REMOVED AND (OR) REPLACED FOR NEW WORK, PREPARE REFLECTED CEILING PLAN SKETCH SHOWING LOCATIONS OF ALL CEILING COMPONENTS AND DEVICES TO BE RE-USED INCLUDING BUT NOT LIMITED TO:
  - LIGHT FIXTURES
  - SPEAKERS
  - WIRELESS ACCESS POINTS
  - FIRE ALARM DEVICES
  - ETC.
 IF ANY OF THE ABOVE ITEMS ARE IN NON-WORKING CONDITION, SUBMIT A WRITTEN REPORT TO OWNER/ARCHITECT. TEMPORARY SUPPORT AND OR REMOVAL OF THESE SYSTEMS SHALL BE PROVIDED FOR NEW WORK.
5. PROVIDE BLANK COVER PLATE FOR UNUSED BACK BOXES.

DEMOLITION KEYED NOTES:

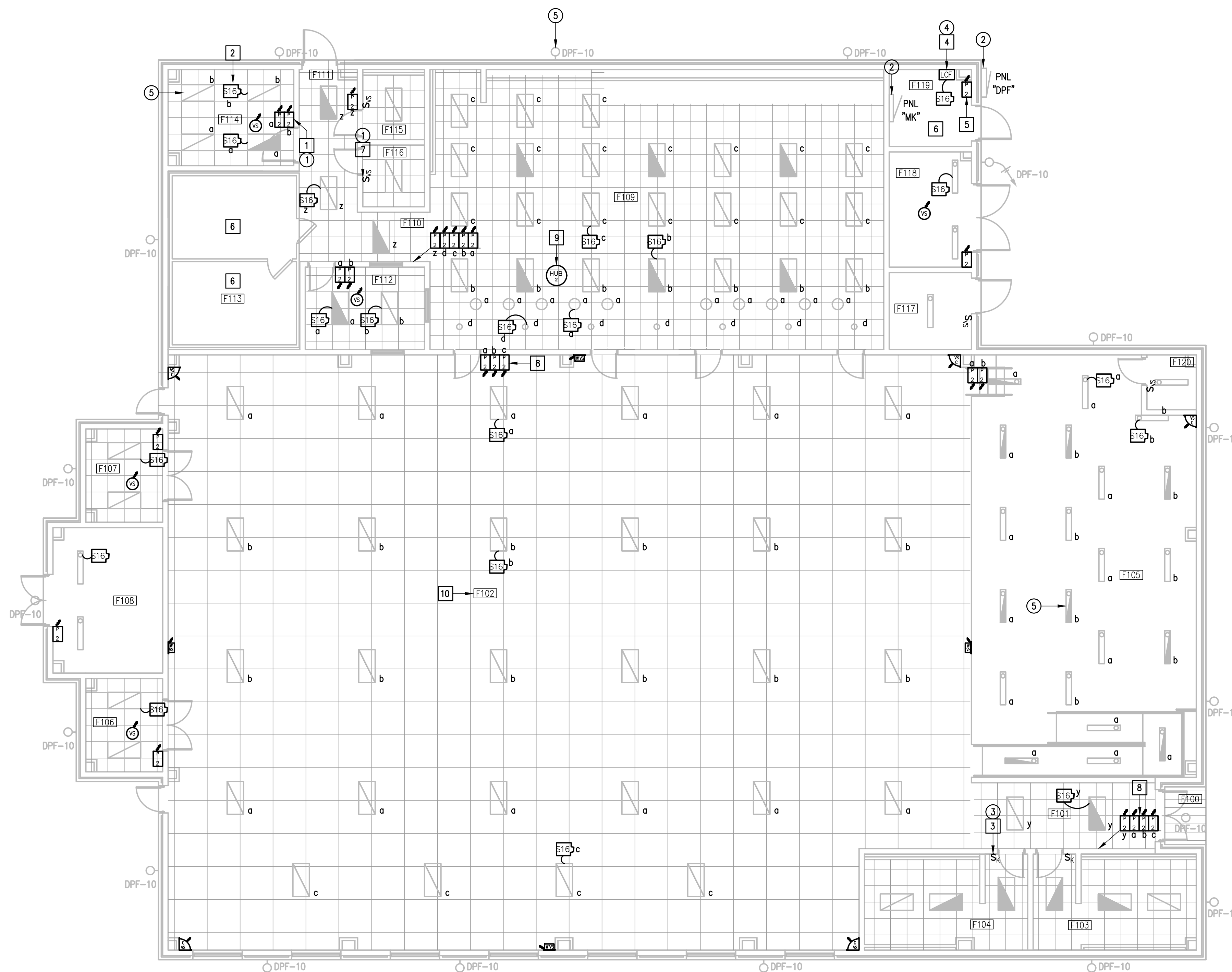
- 1 DISCONNECT AND REMOVE EXISTING TOGGLE SWITCHES (SWEEPER) ALONG WITH RELATED WIRING - TYPICAL.
- 2 APPROXIMATE LOCATION OF EXISTING LIGHTING PANELBOARD SERVING INTERIOR AND EXTERIOR LIGHTING CIRCUITS.
- 3 DISCONNECT AND REMOVE EXISTING TOGGLE SWITCH (STRAIGHT KEY) - TYPICAL.
- 4 DISCONNECT AND REMOVE EXISTING LIGHTING RELAY PANEL. SEE DETAIL.
- 5 EXISTING LIGHT FIXTURE TO REMAIN AS IS - TYPICAL.

GENERAL NOTES:

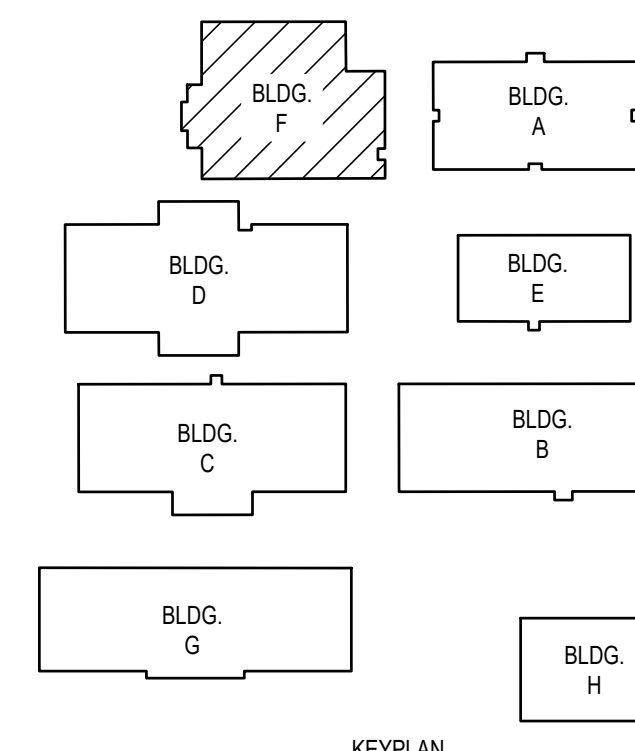
1. LIGHTING BRANCH CIRCUIT HOMERUNS SHALL BE 3/4" - 2#12 & #12G. 20A/277V HOMERUNS EXCEEDING 200FT THE WIRE SIZE SHALL BE #10 & #8 FOR 275'.
2. INTERIOR LIGHTING CONTROLS SHALL BE BY VACANCY SENSORS.
3. EXTERIOR LIGHTING CONTROLS SHALL BE BY LIGHTING CONTACTOR. TIME CONTROL/SCHEDULES BAS INTEGRATION/IA LUTRON VIVE HUB.

KEYED NOTES:

- 1 PROVIDE NEW LIGHTING SWITCHES (WIRELESS).
- 2 PROVIDE AND CONNECT POWER PAK TO THE ASSOCIATED LIGHT FIXTURES - TYPICAL.
- 3 PROVIDE AND CONNECT NEW KEYED SWITCH (CORBIN KEY).
- 4 PROVIDE LIGHTING CONTACTOR. PROVIDE LUTRON RELAY POWER PAK AND WIRELESS SWITCH FOR TIME CONTROL AND OVERRIDE FOR EACH - SEE DETAIL.
- 5 FOR EXTERIOR LIGHTING CONTACTOR OVERRIDE.
- 6 EXISTING LIGHTING CONTROLS IN THIS ROOM TO REMAIN AS IS.
- 7 PROVIDE AND CONNECT NEW WALL LIGHTING SWITCH SENSOR (WIRED) - TYPICAL.
- 8 PROVIDE A CLEAR LOOKING COVER.
- 9 PROVIDE FLUSH MOUNTED TO CEILING. CONNECT TO EXISTING PANELBOARD "DPF". BRANCH CIRCUIT: 1/2" - 2#12 & #12G. PROVIDE A 20A/1P BREAKER IN AVAILABLE SPACE.
- 10 PROVIDE WREGUARD FOR ALL VACANCY SENSOR LOCATED IN GYMNASIUM.



01 IDEA FRONTIER LIGHTING PLAN (BUILDING F)  
SCALE: 1/8" = 1'-0"  
PLAN NORTH



GENERAL NOTES:

1. LIGHTING BRANCH CIRCUIT HOMERUNS SHALL BE 3/4" - 2#12 & #12G. 20A/277V HOMERUNS EXCEEDING 200FT THE WIRE SIZE SHALL BE #10 & #8 FOR 275'.
2. INTERIOR LIGHTING CONTROLS SHALL BE BY VACANCY SENSORS.
3. EXTERIOR LIGHTING CONTROLS SHALL BE BY LIGHTING CONTACTOR. TIME CONTROL/SCHEDULES VIA LUTRON VIVE HUB.
4. NON-EMERGENCY CORRIDOR LIGHTING TIMECONTROLS SHALL BE VIA LUTRON VIVE HUB.

KEYED NOTES:

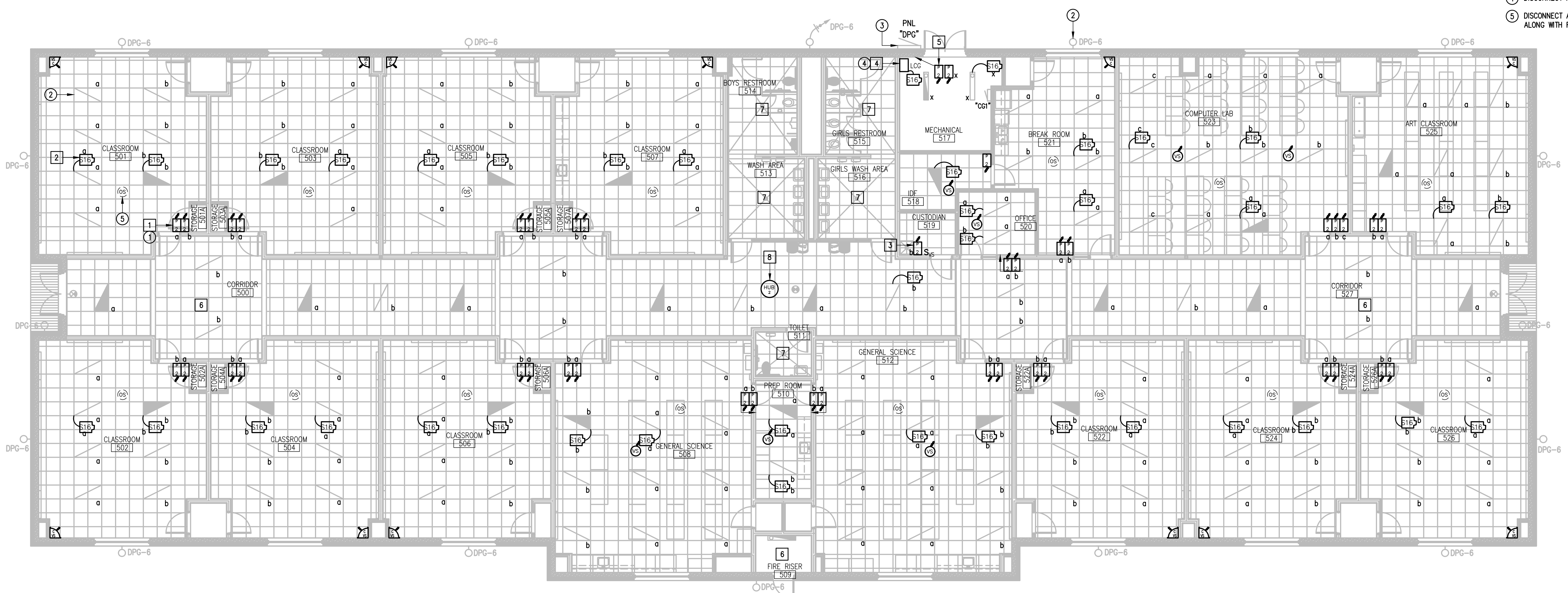
- 1 PROVIDE AND CONNECT LIGHTING SWITCHES (WIRELESS) - TYPICAL.
- 2 PROVIDE AND CONNECT POWER PACK TO THE ASSOCIATED LIGHT FIXTURES.
- 3 TIME SCHEDULE VIA THE LUTRON VIVE HUB.
- 4 PROVIDE LIGHTING CONTACTOR. PROVIDE LUTRON RELAY POWER PAK AND WIRELESS SWITCH FOR TIME CONTROL AND OVERRIDE FOR EACH.
- 5 FOR LIGHTING CONTACTOR OVERRIDE.
- 6 EXISTING LIGHTING CONTROLS TO REMAIN AS IS.
- 7 EXISTING LUTRON WIRELESS LIGHTING CONTROLS TO REMAIN AS IS - INTERFACE WITH NEW LUTRON VIVE HUB.
- 8 PROVIDE FLUSH MOUNTED TO CEILING. CONNECT TO EXISTING PANELBOARD "CG1"; BRANCH CIRCUIT: 1/2" - 2#12 & #12G. PROVIDE A 20A/1P BREAKER IN AVAILABLE SPACE.

DEMOLITION GENERAL NOTES:

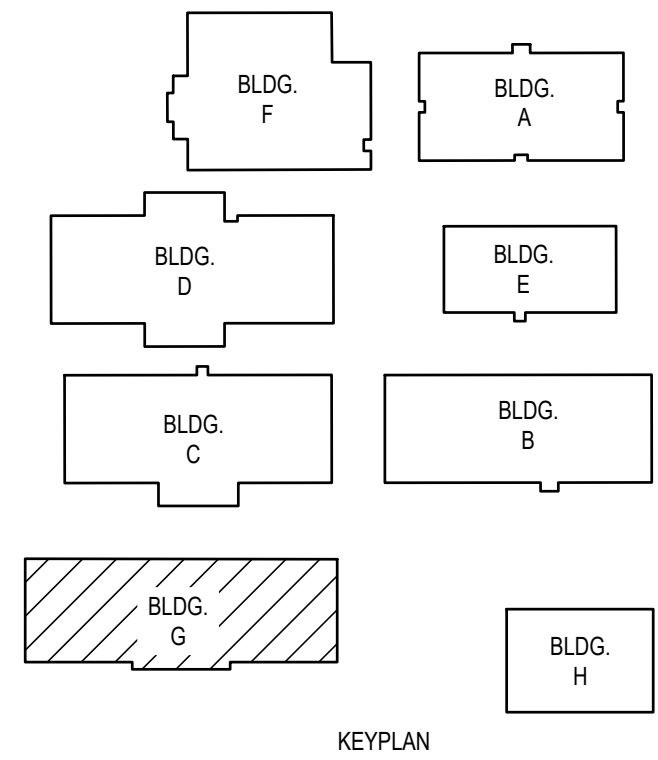
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2. REMOVED MATERIALS SHALL BELONG TO OWNER. DELIVER THEM TO OWNERS DESIGNATED LOCATION. IF OWNER DOES NOT WANT THE REMOVED MATERIALS THEN REMOVE THEM FROM SITE & PROPERLY DISPOSE OF THEM.
3. IF REMOVAL OF EXISTING ELECTRICAL SYSTEMS RENDERS EXISTING ELECTRICAL SYSTEMS DOWNSTREAM TO REMAIN INOPERABLE, PROVIDE J-BOXES, CONDUIT WIRING AND SPLICES ABOVE ACCESSIBLE CEILINGS IN ORDER TO CONTINUE OPERATION.
4. PRIOR TO DEMOLITION, IN CEILINGS TO BE REMOVED AND (OR) REPLACED FOR NEW WORK, PREPARE REFLECTED CEILING PLAN SKETCH SHOWING LOCATIONS OF ALL CEILING COMPONENTS AND DEVICES TO BE RE-USED INCLUDING BUT NOT LIMITED TO:
  - LIGHT FIXTURES
  - SPEAKERS
  - WIRELESS ACCESS POINTS
  - FIRE ALARM DEVICES
  - ETC.
 IF ANY OF THE ABOVE ITEMS ARE IN NON-WORKING CONDITION, SUBMIT A WRITTEN REPORT TO OWNER/ARCHITECT. TEMPORARY SUPPORT AND OR REMOVAL OF THESE SYSTEMS SHALL BE PROVIDED FOR NEW WORK.
5. PROVIDE BLANK COVER PLATE FOR UNUSED BACK BOXES.

DEMOLITION KEYED NOTES:

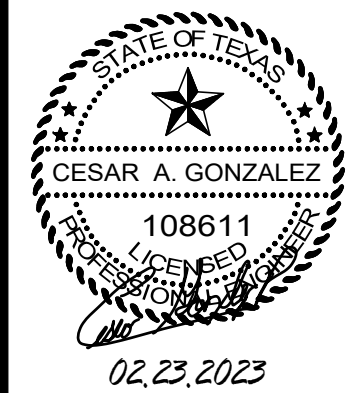
- 1 DISCONNECT AND REMOVE EXISTING SWITCHES ALONG WITH RELATED WIRING - TYPICAL.
- 2 EXISTING LIGHT FIXTURE TO REMAIN AS IS - TYPICAL.
- 3 APPROXIMATE LOCATION OF EXISTING LIGHTING PANELBOARD SERVING LIGHTING CIRCUITS.
- 4 DISCONNECT AND REMOVE EXISTING LIGHTING RELAY PANEL. SEE DETAIL.
- 5 DISCONNECT AND REMOVE EXISTING CEILING OCCUPANCY SENSOR (WRED) ALONG WITH RELATED WIRING AND POWER PACK - TYPICAL.



01 IDEA FRONTIER LIGHTING PLAN (BUILDING G)  
 SCALE: 1/8" = 1'-0"  
 PLAN NORTH



IDEA PUBLIC SCHOOLS  
 ELECTRICAL AND LIGHTING UPGRADES  
 AT RGV CAMPUSES



TEXAS



DATE: FEBRUARY 23, 2024  
 CHECKED BY: G.Q.  
 DRAWN BY: R.E.  
 PROJECT NO.: 23v80  
 CAD FILE:  
 SHEET:

E3.08

IDEA FRONTIER





DEMOLITION GENERAL NOTES:

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3. IF REMOVAL OF EXISTING ELECTRICAL SYSTEMS RENDERS EXISTING ELECTRICAL SYSTEMS DOWNSTREAM TO REMAIN INOPERABLE, PROVIDE J-BOXES, CONDUIT WIRING AND SPLICES ABOVE ACCESSIBLE CEILINGS IN ORDER TO CONTINUE OPERATION.
4. PRIOR TO DEMOLITION, IN CEILINGS TO BE REMOVED AND (OR) REPLACED FOR NEW WORK, PREPARE REFLECTED CEILING PLAN SKETCH SHOWING LOCATIONS OF ALL CEILING COMPONENTS AND DEVICES TO BE RE-USED INCLUDING BUT NOT LIMITED TO:
  - LIGHT FIXTURES
  - SPEAKERS
  - WIRELESS ACCESS POINTS
  - FIRE ALARM DEVICES
  - ETC.
 IF ANY OF THE ABOVE ITEMS ARE IN NON-WORKING CONDITION, SUBMIT A WRITTEN REPORT TO OWNER/ARCHITECT. TEMPORARY SUPPORT AND OR REMOVAL OF THESE SYSTEMS SHALL BE PROVIDED FOR NEW WORK.
5. PROVIDE BLANK COVER PLATE FOR UNUSED BACK BOXES.

GENERAL NOTES:

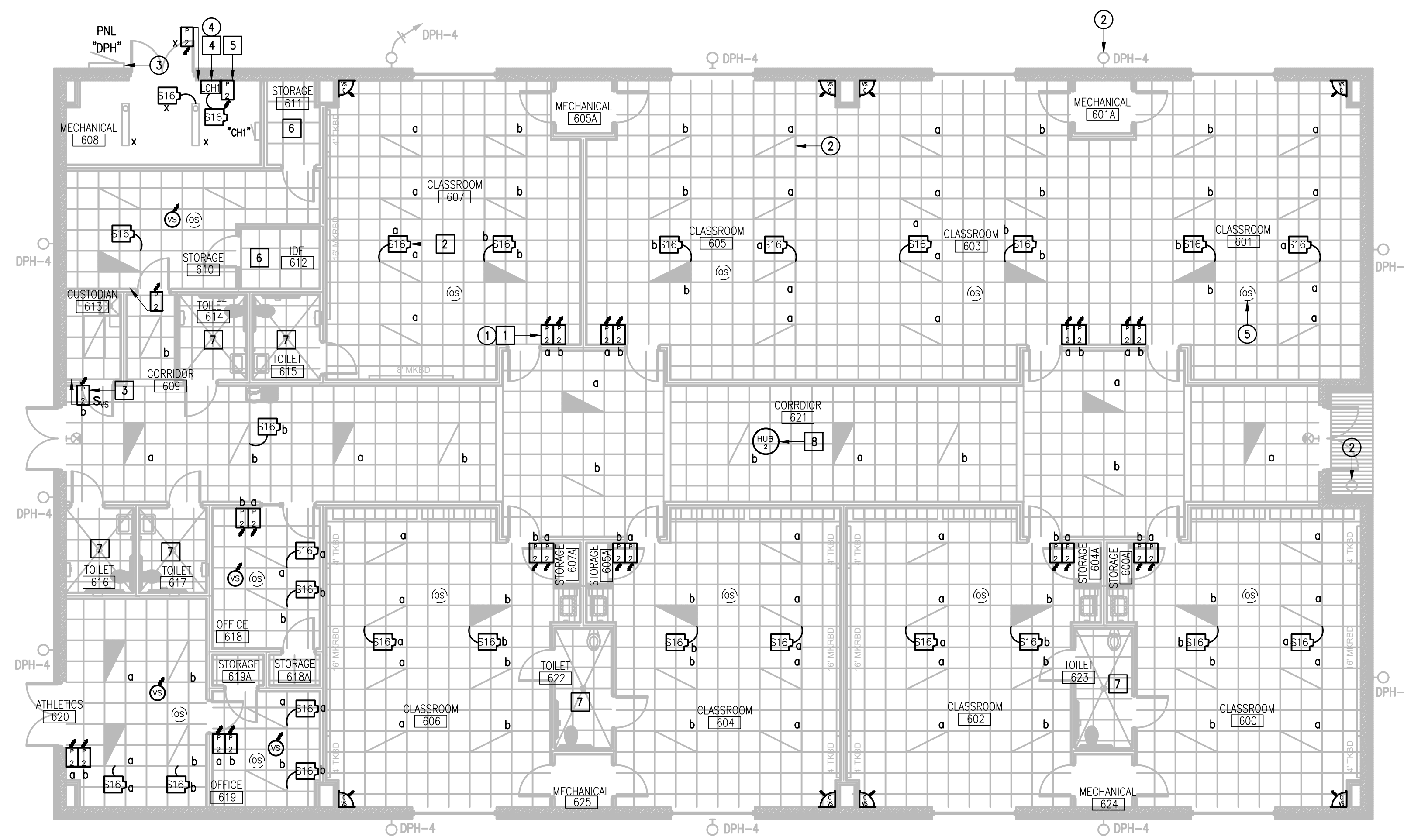
1. LIGHTING BRANCH CIRCUIT HOMERUNS SHALL BE 3/4" - 2#12 & #12G. 20A/277V HOMERUNS EXCEEDING 200FT THE WIRE SIZE SHALL BE #10 & #8 FOR 275'.
2. INTERIOR LIGHTING CONTROLS SHALL BE BY VACANCY SENSORS.
3. EXTERIOR LIGHTING CONTROLS SHALL BE BY LIGHTING CONTACTOR. TIME CONTROL/SCHEDULES VIA LUTRON VIVE HUB.
4. NON-EMERGENCY CORRIDOR LIGHTING TIMECONTROLS SHALL BE VIA LUTRON VIVE HUB.

DEMOLITION KEYED NOTES:

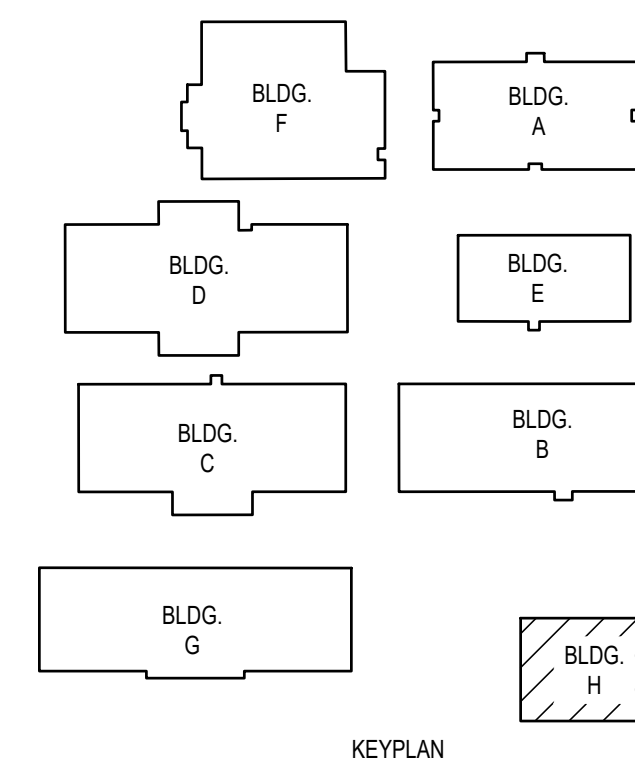
- 1 DISCONNECT AND REMOVE EXISTING SWITCHES ALONG WITH RELATED WIRING - TYPICAL.
- 2 EXISTING LIGHT FIXTURE TO REMAIN AS IS - TYPICAL.
- 3 APPROXIMATE LOCATION OF EXISTING LIGHTING PANELBOARD SERVING LIGHTING CIRCUITS.
- 4 DISCONNECT AND REMOVE EXISTING LIGHTING RELAY PANEL. SEE DETAIL.
- 5 DISCONNECT AND REMOVE EXISTING CEILING OCCUPANCY SENSOR (WRED) ALONG WITH RELATED WIRING AND POWER PACK - TYPICAL.

KEYED NOTES:

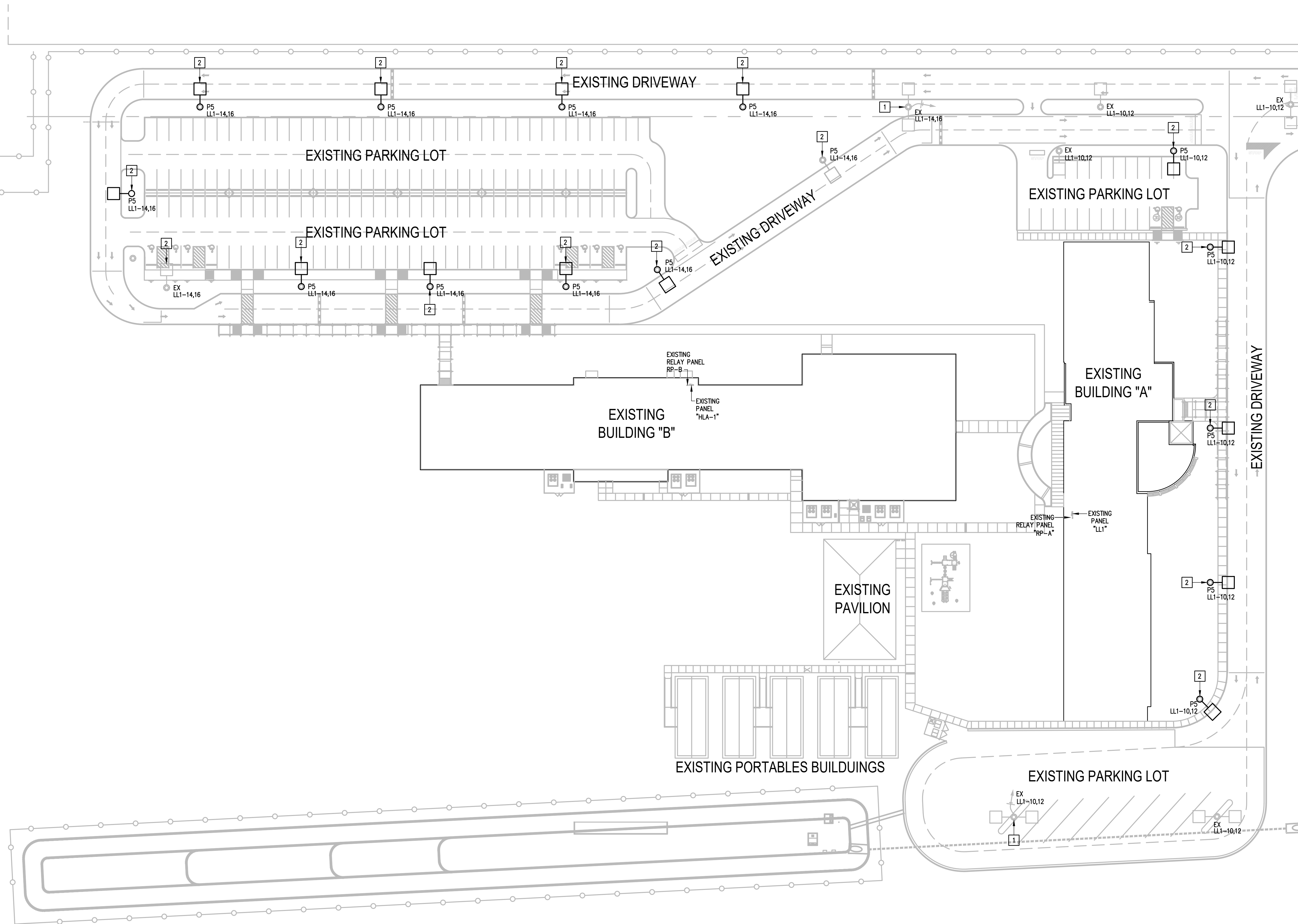
- 1 PROVIDE AND CONNECT LIGHTING SWITCHES (WIRELESS) - TYPICAL.
- 2 PROVIDE AND CONNECT POWER PACK TO THE ASSOCIATED LIGHT FIXTURES.
- 3 TIME SCHEDULE VIA THE LUTRON VIVE HUB.
- 4 PROVIDE LIGHTING CONTACTORS "LC". PROVIDE LUTRON RELAY POWER PAK AND WIRELESS SWITCH FOR TIME CONTROL AND OVERRIDE FOR EACH. FOR EXTERIOR LIGHTING CONTACTOR OVERRIDE.
- 5 EXISTING LIGHTING CONTROLS TO REMAIN AS IS.
- 7 EXISTING LUTRON WIRELESS LIGHTING CONTROLS TO REMAIN AS IS - INTERFACE WITH NEW LUTRON VIVE HUB.
- 8 PROVIDE FLUSH MOUNTED TO CEILING. CONNECT TO EXISTING PANELBOARD "CH1"; BRANCH CIRCUIT: 1/2" - 2#12 & #12G. PROVIDE A 20A/1P BREAKER IN AVAILABLE SPACE.



01 IDEA FRONTIER LIGHTING PLAN (BUILDING H) SCALE: 1/8" = 1'-0" PLAN NORTH



IDEA PUBLIC SCHOOLS ELECTRICAL AND LIGHTING UPGRADES AT RGV CAMPUSES



**DEMOLITION GENERAL NOTES:**

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2. REMOVED MATERIALS SHALL BELONG TO OWNER. DELIVER THEM TO OWNERS DESIGNATED LOCATION. IF OWNER DOES NOT WANT THE REMOVED MATERIALS THEN REMOVE THEM FROM SITE & PROPERLY DISPOSE OF THEM.
3. PROVIDE BLANK COVER PLATE FOR UNUSED BACK BOXES.
4. ITEMS DESIGNATED WITH AN "EX" ARE EXISTING TO REMAIN AS IS.

**KEYED NOTES:**

- 1 EXISTING ALUMINUM LIGHT POLE TO REMAIN AS IS - TYPICAL.
- 2 DISCONNECT EXISTING STEEL POLE FOR REPLACEMENT. TEMPORARY REMOVE EXISTING LIGHT FIXTURE, REINSTALL AND CONNECT ON NEW ALUMINUM POLE. PROVIDE ANCHOR BOLT ADAPTER PLATE FOR ATTACHING NEW POLE TO EXISTING ANCHOR BOLTS.

ALTERNATE #3  
 IDEA MCALLEN  
 LIGHTING PLAN (SITE PLAN)  
 01 SCALE: 1" = 40'-0"  
 PLAN NORTH

NO. REVISION: BY:

COPY NO:



TEXAS

IDEA PUBLIC SCHOOLS  
 ELECTRICAL AND LIGHTING UPGRADES  
 AT RGV CAMPUSES



1126 SOUTH COMMERCE ST.  
 HARLINGEN, TX  
 PHONE: 361-230-3425  
 TEXAS REGISTERED  
 ENGINEERING FIRM  
 F-15998

DATE: FEBRUARY 23, 2024  
 CHECKED BY: G.Q.  
 DRAWN BY: R.E.  
 PROJECT NO.: 23v80  
 CAD FILE:  
 SHEET:

E4.01

IDEA MCALLEN





IDEA PUBLIC SCHOOLS  
ELECTRICAL AND LIGHTING UPGRADES  
AT RGV CAMPUSES



KEYED NOTES:

- 1 PROVIDE NEW LIGHTING SWITCHES (WIRELESS).
- 2 PROVIDE AND CONNECT POWER PAK TO THE ASSOCIATED LIGHT FIXTURES - TYPICAL.
- 3 PROVIDE AND CONNECT NEW WALL LIGHTING SWITCH SENSOR (WRED) - TYPICAL.
- 4 PROVIDE LIGHTING CONTACTORS "LC". PROVIDE LUTRON RELAY POWER PAK AND WIRELESS SWITCH FOR TIME CONTROL AND OVERRIDE FOR EACH - SEE DETAIL.
- 5 FOR EXTERIOR LIGHTING CONTACTOR OVERRIDE.
- 6 EXISTING LIGHTING CONTROLS IN THIS ROOM TO REMAIN AS IS.
- 7 PROVIDE FLUSH MOUNTED TO CEILING. CONNECT TO EXISTING PANELBOARD "LAC1"; BRANCH CIRCUIT: 1/2" - 2#12 & #12G. PROVIDE A 20A/1P BREAKER IN AVAILABLE SPACE.

GENERAL NOTES:

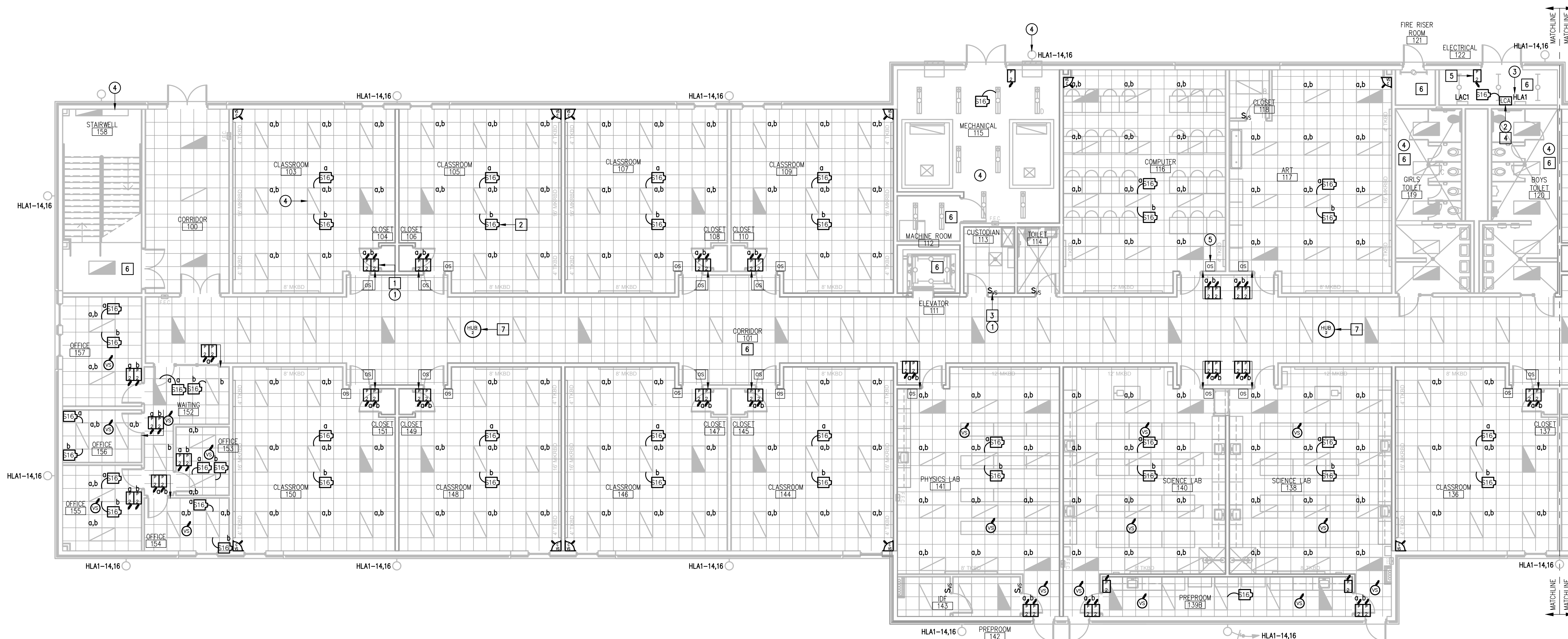
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2. INTERIOR LIGHTING CONTROLS SHALL BE BY VACANCY SENSORS.
3. EXTERIOR LIGHTING CONTROLS SHALL BE BY LIGHTING CONTACTOR. TIME CONTROL/SCHEDULES BAS INTEGRATION/VIA LUTRON VIVE HUB.

DEMOLITION KEYED NOTES:

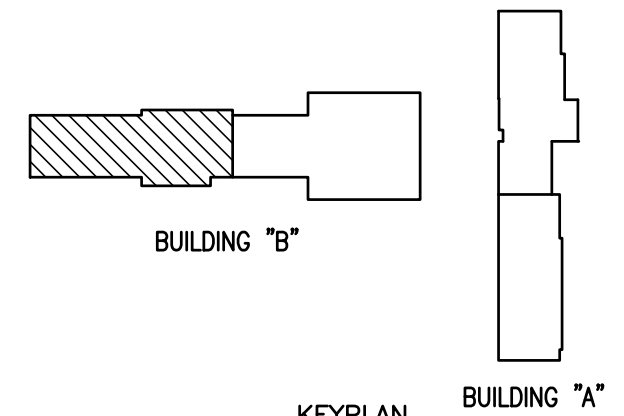
- 1 DISCONNECT AND REMOVE EXISTING TOGGLE SWITCHES (SWEEPER) ALONG WITH RELATED WIRING - TYPICAL.
- 2 DISCONNECT AND REMOVE EXISTING LIGHTING RELAY PANEL - TYPICAL.
- 3 APPROXIMATED LOCATION OF EXISTING LIGHTING PANELBOARD SERVING INTERIOR AND EXTERIOR LIGHTING CIRCUITS.
- 4 EXISTING LIGHT FIXTURE TO REMAIN AS IS - TYPICAL.
- 5 DISCONNECT AND REMOVE EXISTING CEILING OCCUPANCY SENSOR (WIRED) ALONG WITH RELATED WIRING AND POWER PAK - TYPICAL.

DEMOLITION GENERAL NOTES:

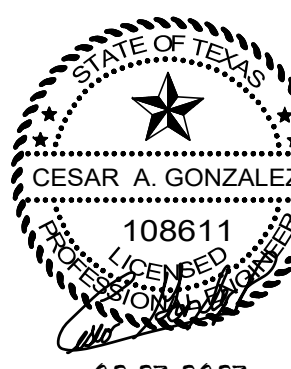
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2. REMOVED MATERIALS SHALL BELONG TO OWNER. DELIVER THEM TO OWNERS DESIGNATED LOCATION. IF OWNER DOES NOT WANT THE REMOVED MATERIALS THEN REMOVE THEM FROM SITE & PROPERLY DISPOSE OF THEM.
3. IF REMOVAL OF EXISTING ELECTRICAL SYSTEMS RENDERS EXISTING ELECTRICAL SYSTEMS DOWNSTREAM TO REMAIN INOPERABLE, PROVIDE J-BOXES, CONDUIT WIRING AND SPLICES ABOVE ACCESSIBLE CEILING IN ORDER TO CONTINUE OPERATION.
4. PRIOR TO DEMOLITION, IN CEILING SCHEDULED TO BE REMOVED AND (OR) REPLACED FOR NEW WORK, PREPARE REFLECTED CEILING PLAN SKETCH SHOWING LOCATIONS OF ALL CEILING COMPONENTS AND DEVICES TO BE RE-USED INCLUDING BUT NOT LIMITED TO:
  - LIGHT FIXTURES
  - SPEAKERS
  - WIRELESS ACCESS POINTS
  - FIRE ALARM DEVICES
  - ETC.
 IF ANY OF THE ABOVE ITEMS ARE IN NON-WORKING CONDITION, SUBMIT A WRITTEN REPORT TO OWNER/ARCHITECT. TEMPORARY SUPPORT AND OR REMOVAL OF THESE SYSTEMS SHALL BE PROVIDED FOR NEW WORK.
5. PROVIDE BLANK COVER PLATE FOR UNUSED BACK BOXES.



IDEA MCALLEN  
LIGHTING PLAN (BUILDING "B" - 1ST FLOOR)  
01 SCALE: 1/8" = 1'-0"  
PLAN NORTH



IDEA MCALLEN



# IDEA PUBLIC SCHOOLS ELECTRICAL AND LIGHTING UPGRADES AT RGV CAMPUSES



1126 SOUTH COMMERCE ST.  
HARLINGEN, TX  
PHONE: 361-230-3425  
TEXAS REGISTERED  
ENGINEERING FIRM  
F-15998

DATE: FEBRUARY 23, 2024

CHECKED BY: G.Q.

DRAWN BY: R.E.

PROJECT NO.: 23v80

CAD FILE:  
SHEET:

## E4.03

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5. PROVIDE BLANK COVER PLATE FOR UNUSED BACK BOXES.

### DEMOLITION KEYED NOTES:

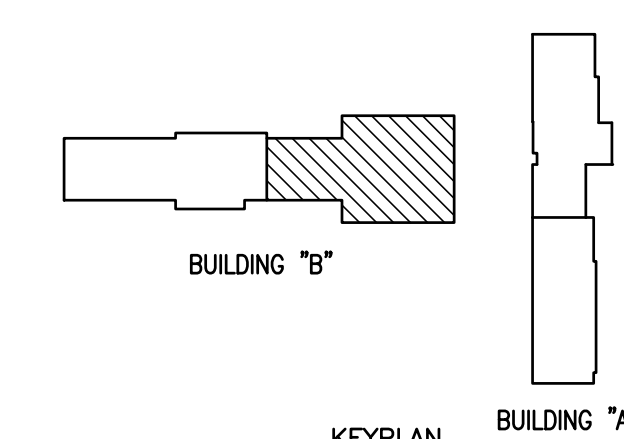
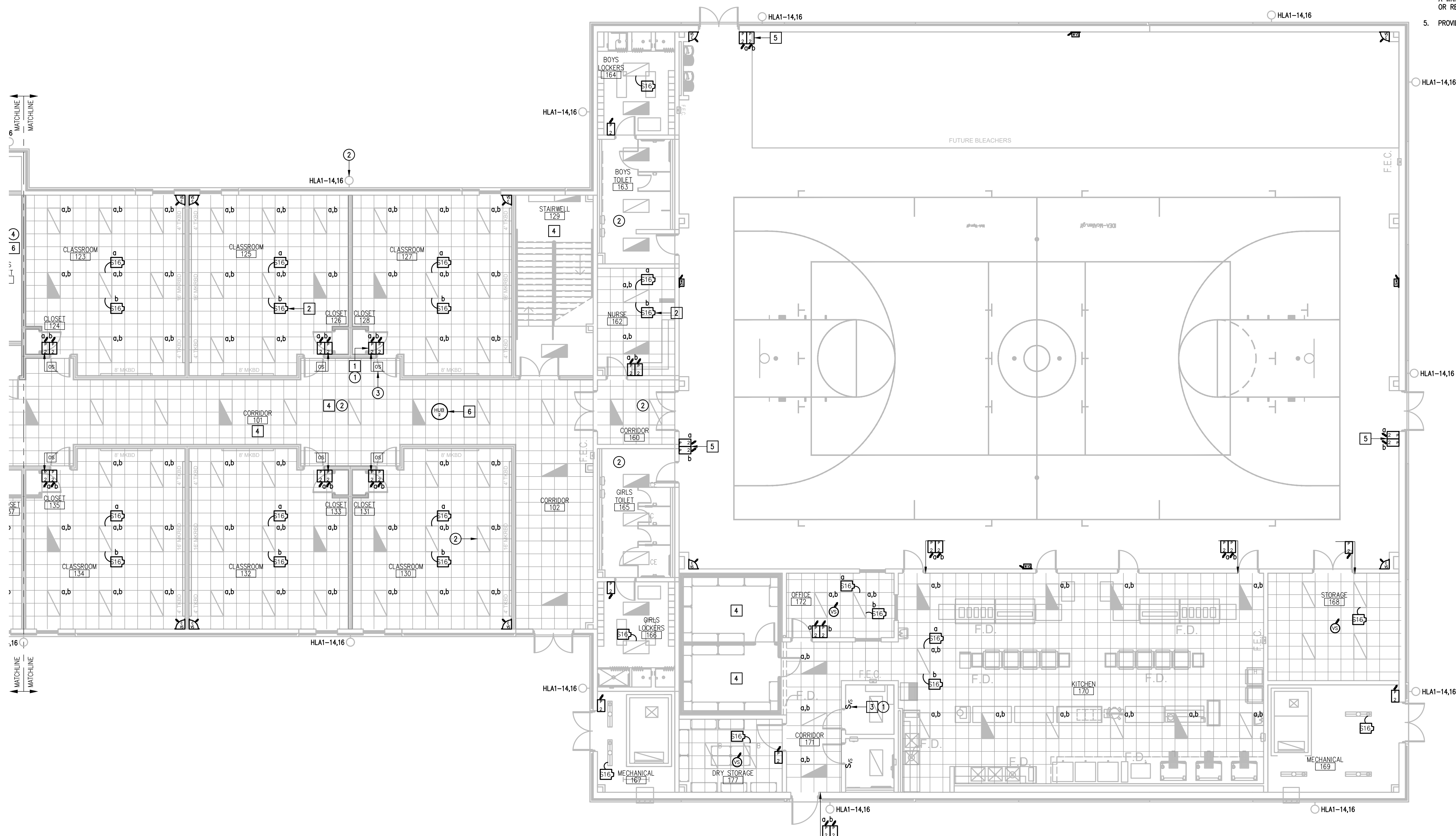
- 1 DISCONNECT AND REMOVE EXISTING TOGGLE SWITCH - TYPICAL.
- 2 EXISTING LIGHT FIXTURE TO REMAIN AS IS - TYPICAL.
- 3 DISCONNECT AND REMOVE EXISTING OCCUPANCY SENSOR (WIRED) ALONG WITH RELATED WIRING AND POWER PACK - TYPICAL.

### GENERAL NOTES:

1. LIGHTING BRANCH CIRCUIT HOMERUNS SHALL BE 3/4" - 2#12 & #12G. 20A/277V HOMERUNS EXCEEDING 200FT THE WIRE SIZE SHALL BE #10 & #8 FOR 275'.
2. INTERIOR LIGHTING CONTROLS SHALL BE BY VACANCY SENSORS.
3. EXTERIOR LIGHTING CONTROLS SHALL BE BY LIGHTING CONTACTOR. TIME CONTROL/SCHEDULES BAS INTEGRATION/VIA LUTRON VIVE HUB.

### KEYED NOTES:

- 1 PROVIDE NEW LIGHTING SWITCHES (WIRELESS).
- 2 PROVIDE AND CONNECT POWER PACK TO THE ASSOCIATED LIGHT FIXTURES - TYPICAL.
- 3 PROVIDE AND CONNECT NEW WALL LIGHTING SWITCH SENSOR (WIRED) - TYPICAL.
- 4 EXISTING LIGHTING CONTROLS IN THIS ROOM TO REMAIN AS IS.
- 5 PROVIDE CLEAR LOCKING COVER.
- 6 PROVIDE FLUSH MOUNTED TO CEILING. CONNECT TO EXISTING PANELBOARD "LAC1"; BRANCH CIRCUIT: 1/2" - 2#12 & #12G. PROVIDE A 20A/1P BREAKER IN AVAILABLE SPACE.



IDEA MCALLEN  
LIGHTING PLAN (BUILDING "B" - 1ST FLOOR)  
SCALE: 1/8" = 1'-0"  
PLAN NORTH





IDEA PUBLIC SCHOOLS  
ELECTRICAL AND LIGHTING UPGRADES  
AT RGV CAMPUSES



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CAD FILE:

SHEET:

E4.04

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  - ETC.
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5. PROVIDE BLANK COVER PLATE FOR UNUSED BACK BOXES.

DEMOLITION KEYED NOTES:

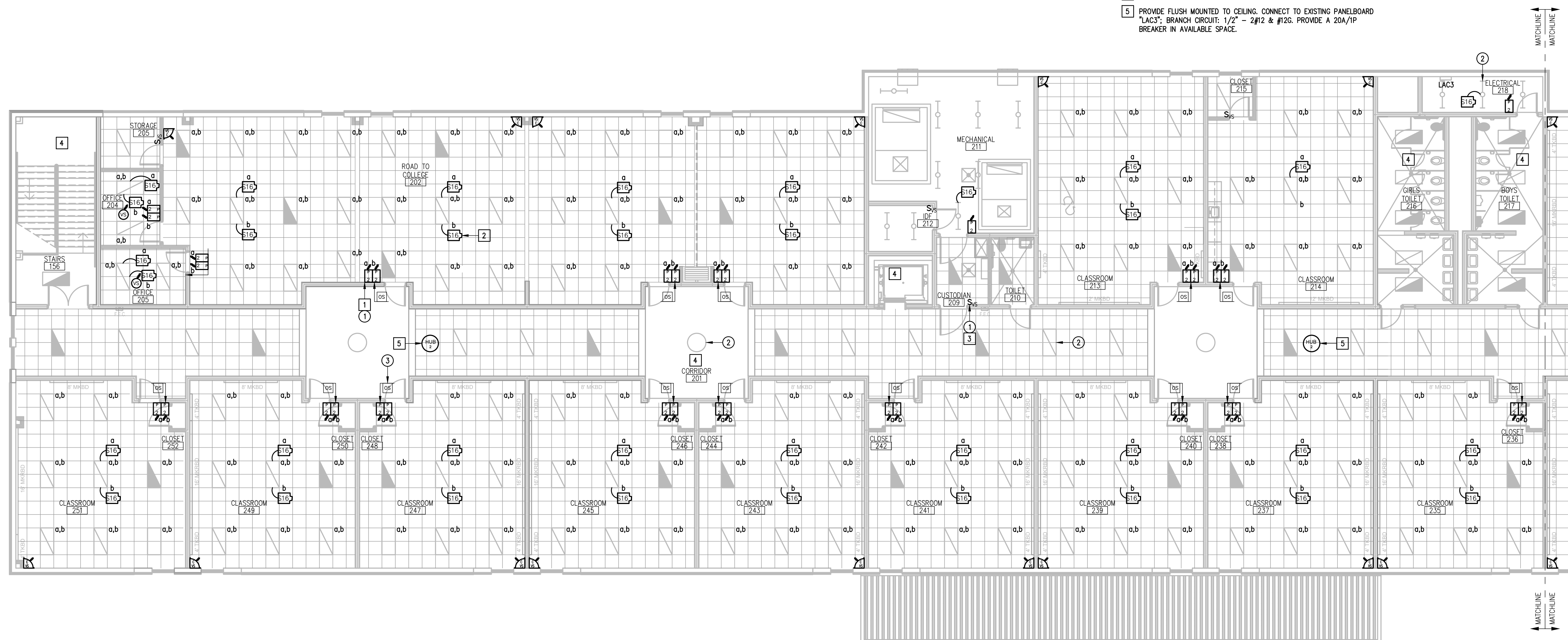
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GENERAL NOTES:

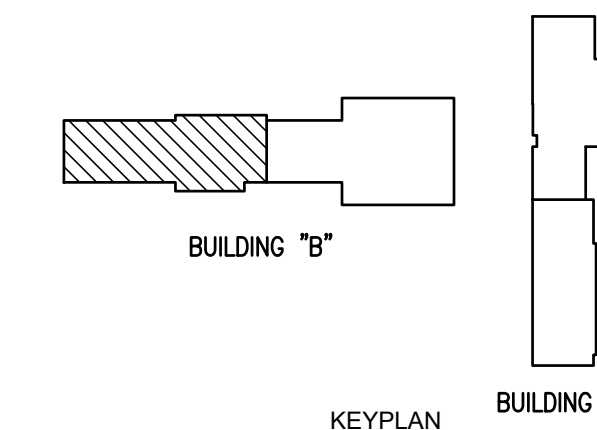
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KEYED NOTES:

1. PROVIDE NEW LIGHTING SWITCHES (WIRELESS).
2. PROVIDE AND CONNECT POWER PACK TO THE ASSOCIATED LIGHT FIXTURES - TYPICAL.
3. PROVIDE AND CONNECT NEW WALL LIGHTING SWITCH SENSOR (WRED) - TYPICAL.
4. EXISTING LIGHTING CONTROLS IN THIS ROOM TO REMAIN AS IS.
5. PROVIDE FLUSH MOUNTED TO CEILING. CONNECT TO EXISTING PANELBOARD "LAC3"; BRANCH CIRCUIT: 1/2" - 2#12 & #12G. PROVIDE A 20A/1P BREAKER IN AVAILABLE SPACE.



01 IDEA MCALLEN  
LIGHTING PLAN (BUILDING "B" - 2ND FLOOR)  
SCALE: 1/8" = 1'-0"



IDEA MCALLEN



IDEA PUBLIC SCHOOLS  
ELECTRICAL AND LIGHTING UPGRADES  
AT RGV CAMPUSES



1126 SOUTH COMMERCE ST.  
HARLINGEN, TX  
PHONE: 361-230-3485  
TEXAS REGISTERED  
ENGINEERING FIRM  
F-15998

DATE: FEBRUARY 23, 2024

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DRAWN BY: R.E.

PROJECT NO.: 23v80

CAD FILE:  
SHEET:

E4.05

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5. PROVIDE BLANK COVER PLATE FOR UNUSED BACK BOXES.

DEMOLITION KEYED NOTES:

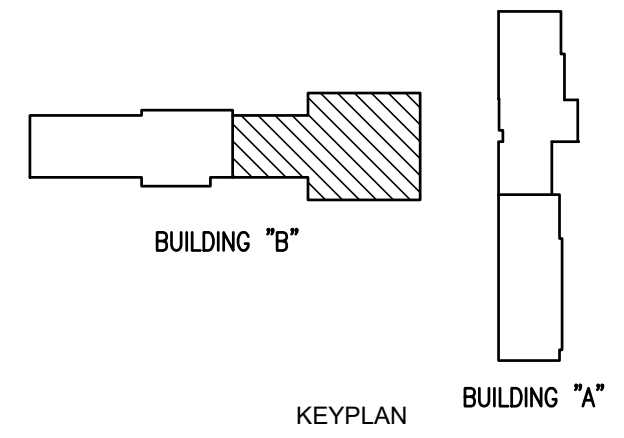
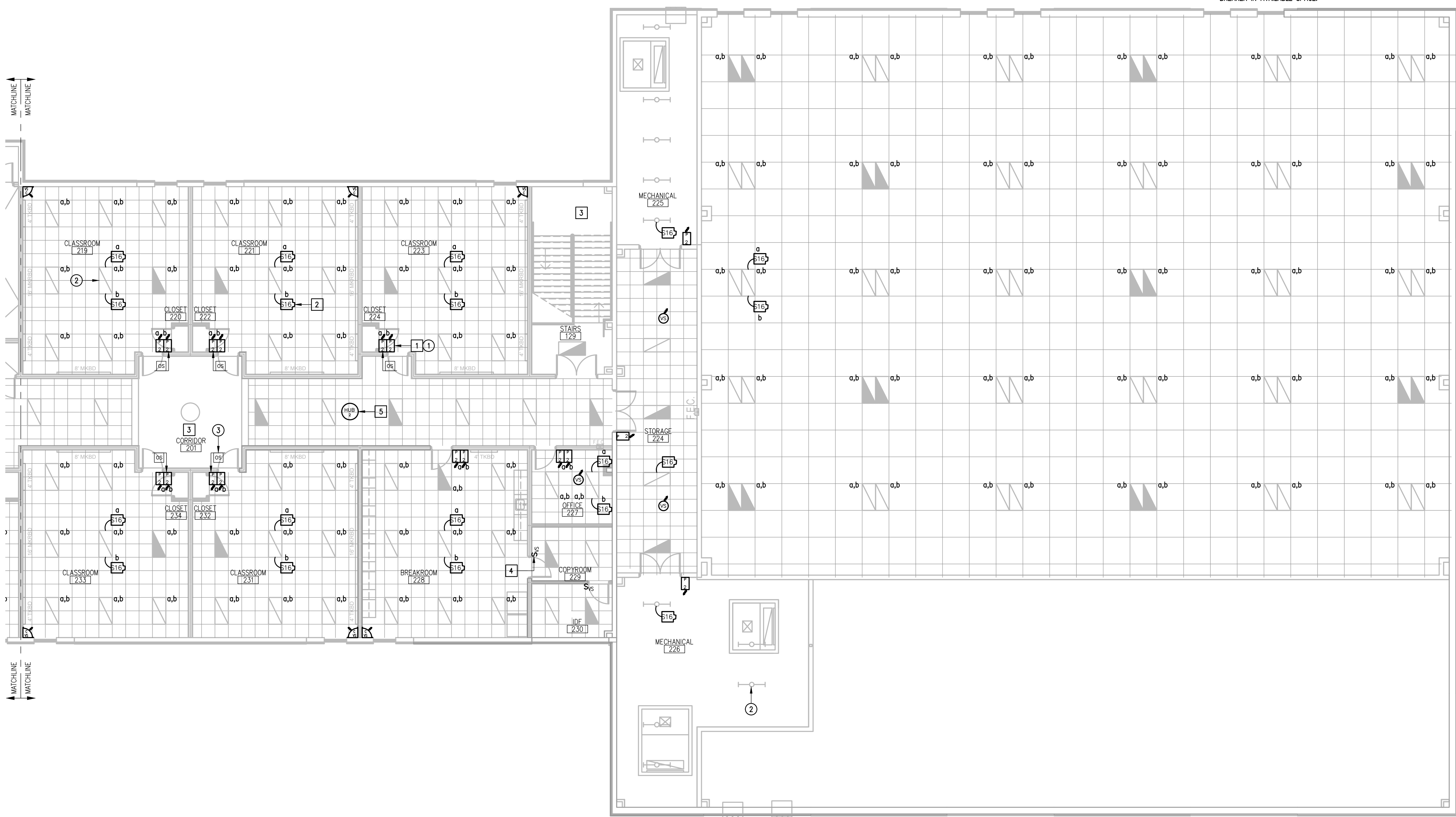
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- ③ DISCONNECT AND REMOVE EXISTING OCCUPANCY SENSOR (WIRED) ALONG WITH RELATED WIRING AND POWER PACK - TYPICAL.

GENERAL NOTES:

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4. EXTERIOR LIGHTING CONTROLS SHALL BE BY LIGHTING CONTACTOR. TIME CONTROL/SCHEDULES VIA LUTRON VIVE HUB.

KEYED NOTES:

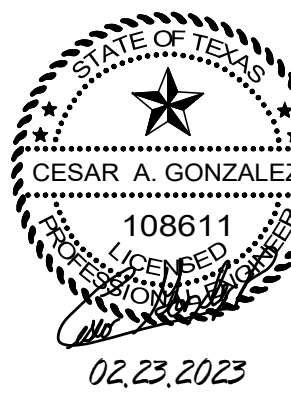
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- 2 PROVIDE AND CONNECT POWER PACK TO THE ASSOCIATED LIGHT FIXTURES - TYPICAL.
- 3 EXISTING LIGHTING CONTROLS IN THIS ROOM TO REMAIN AS IS.
- 4 PROVIDE AND CONNECT NEW WALL LIGHTING SWITCH SENSOR (WIRED) - TYPICAL.
- 5 PROVIDE FLUSH MOUNTED TO CEILING. CONNECT TO EXISTING PANELBOARD "LAC3"; BRANCH CIRCUIT: 1/2" - 2#12 & #12G. PROVIDE A 20A/1P BREAKER IN AVAILABLE SPACE.



IDEA MCALLEN  
LIGHTING PLAN (BUILDING "B" - 2ND FLOOR)  
SCALE: 1/8" = 1'-0"  
PLAN NORTH

IDEA MCALLEN





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5. PROVIDE BLANK COVER PLATE FOR UNUSED BACK BOXES.

DEMOLITION KEYED NOTES:

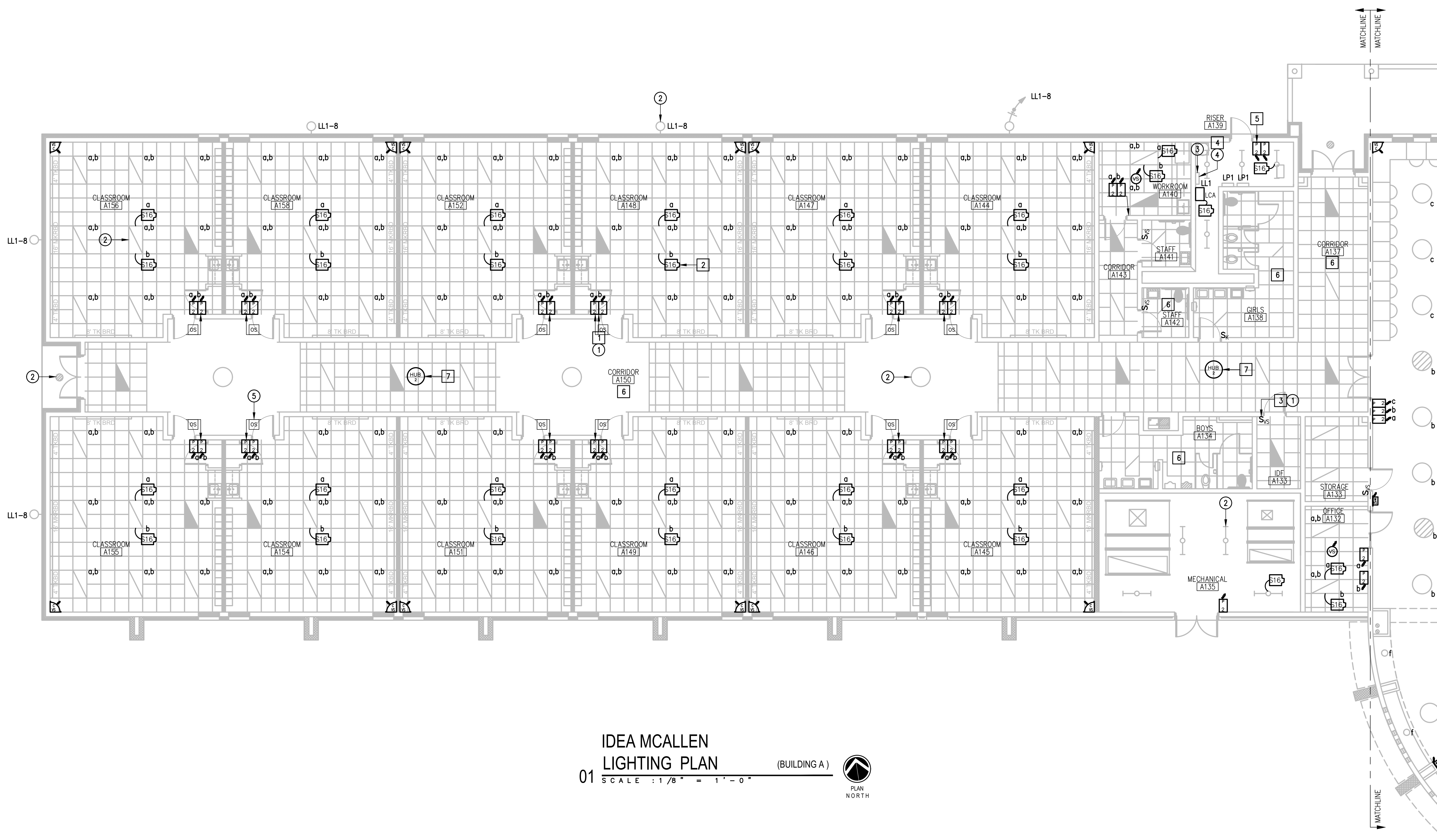
- 1 DISCONNECT AND REMOVE EXISTING TOGGLE SWITCH - TYPICAL.
- 2 EXISTING LIGHT FIXTURE TO REMAIN AS IS - TYPICAL.
- 3 APPROXIMATED LOCATION OF EXISTING LIGHTING PANELBOARD SERVING INTERIOR AND EXTERIOR LIGHTING CIRCUITS.
- 4 DISCONNECT AND REMOVE EXISTING LIGHTING RELAY PANEL. SEE DETAIL.
- 5 DISCONNECT AND REMOVE EXISTING OCCUPANCY SENSOR (WIRED) ALONG WITH RELATED WIRING AND POWER PAK - TYPICAL.

GENERAL NOTES:

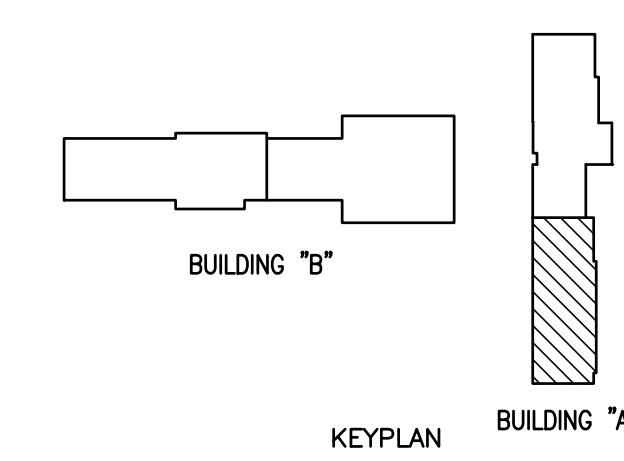
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3. EXTERIOR LIGHTING CONTROLS SHALL BE BY LIGHTING CONTACTOR. TIME CONTROL/SCHEDULES VIA LUTRON VIVE HUB.
4. NON-EMERGENCY CORRIDOR LIGHTING TIME CONTROLS SHALL BE VIA LUTRON VIVE HUB.

KEYED NOTES:

- 1 PROVIDE NEW LIGHTING SWITCHES (WIRELESS) - TYPICAL.
- 2 PROVIDE AND CONNECT POWER PAK TO THE ASSOCIATED LIGHT FIXTURES - TYPICAL.
- 3 PROVIDE AND CONNECT NEW WALL LIGHTING SWITCH SENSOR (WIRED) - TYPICAL.
- 4 PROVIDE LIGHTING CONTACTORS "LC". PROVIDE LUTRON RELAY POWER PAK AND WIRELESS SWITCH FOR TIME CONTROL AND OVERRIDE FOR EACH - SEE DETAIL.
- 5 FOR EXTERIOR LIGHTING CONTACTOR OVERRIDE.
- 6 EXISTING LIGHTING CONTROLS IN THIS ROOM TO REMAIN AS IS.
- 7 PROVIDE FLUSH MOUNTED TO CEILING. CONNECT TO EXISTING PANELBOARD "LP1"; BRANCH CIRCUIT: 1/2" - 2#12 & #12G. PROVIDE A 20A/1P BREAKER IN AVAILABLE SPACE.



IDEA MCALLEN  
 LIGHTING PLAN (BUILDING A)  
 01 SCALE : 1/8" = 1' - 0"  
 PLAN NORTH

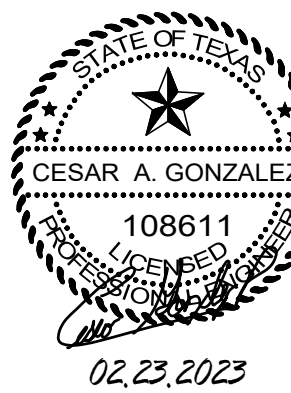


IDEA PUBLIC SCHOOLS  
 ELECTRICAL AND LIGHTING UPGRADES  
 AT RGV CAMPUSES



DATE: FEBRUARY 23, 2024  
 CHECKED BY: G.Q.  
 DRAWN BY: R.E.  
 PROJECT NO.: 23v80  
 CAD FILE:  
 SHEET:





TEXAS

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5. PROVIDE BLANK COVER PLATE FOR UNUSED BACK BOXES.

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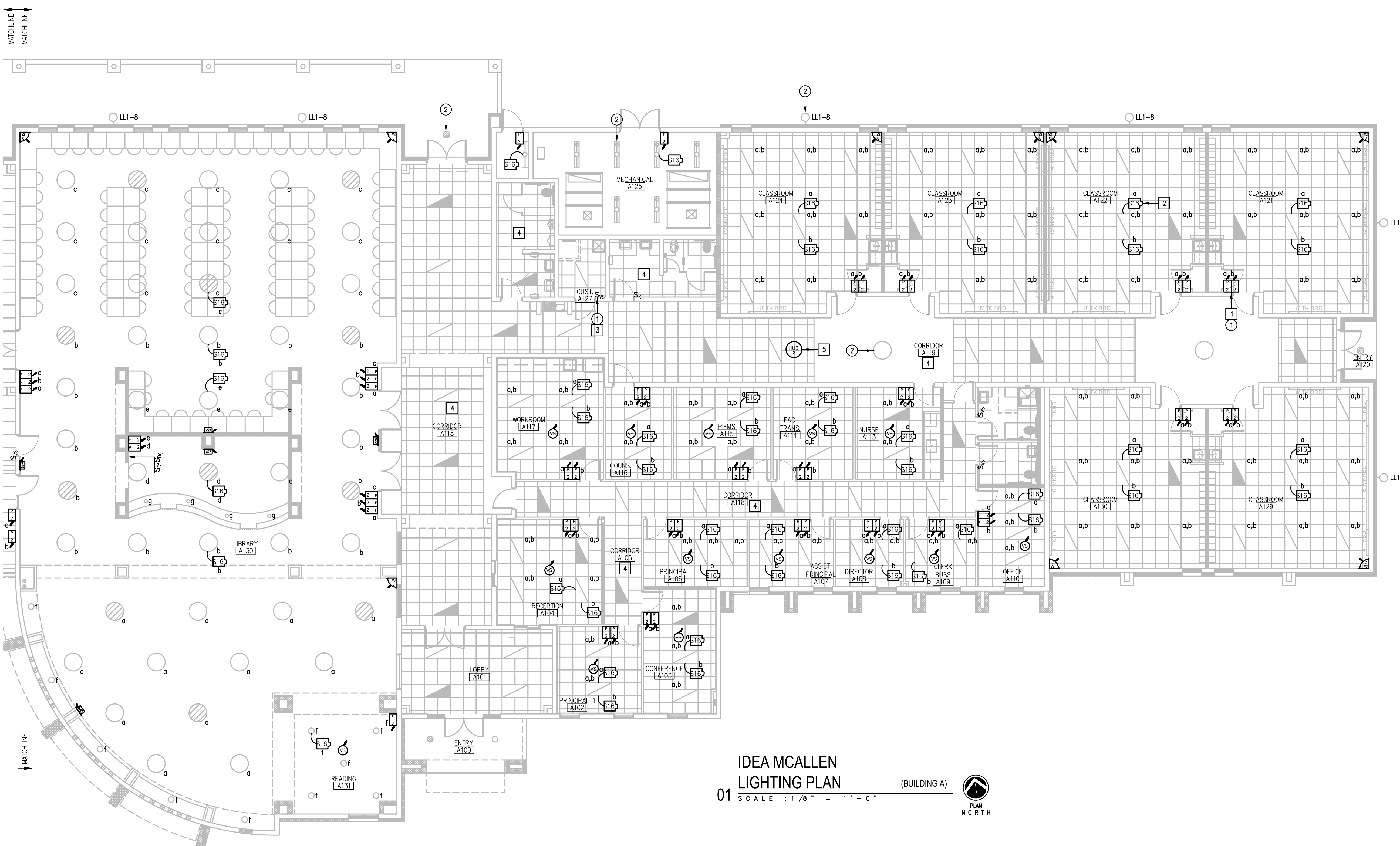
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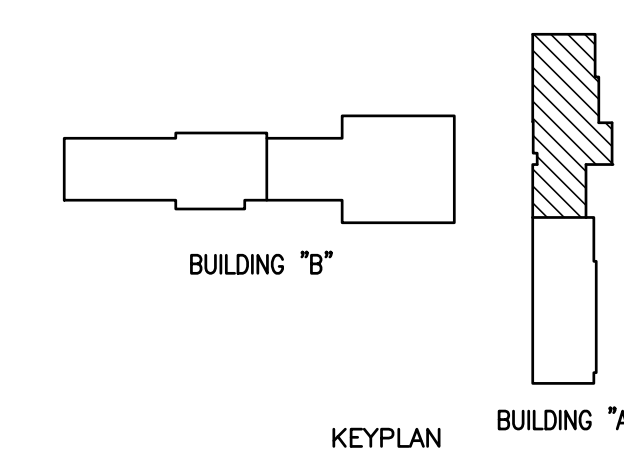
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- 2 PROVIDE AND CONNECT POWER PACK TO THE ASSOCIATED LIGHT FIXTURES - TYPICAL.
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- 4 EXISTING LIGHTING CONTROLS IN THIS ROOM TO REMAIN AS IS.
- 5 PROVIDE FLUSH MOUNTED TO CEILING. CONNECT TO EXISTING PANELBOARD "LP1"; BRANCH CIRCUIT: 1/2" - 2#12 & #12G. PROVIDE A 20A/1P BREAKER IN AVAILABLE SPACE.



IDEA MCALLEN  
 LIGHTING PLAN (BUILDING A)  
 01 SCALE: 1/8" = 1'-0"  
 PLAN NORTH



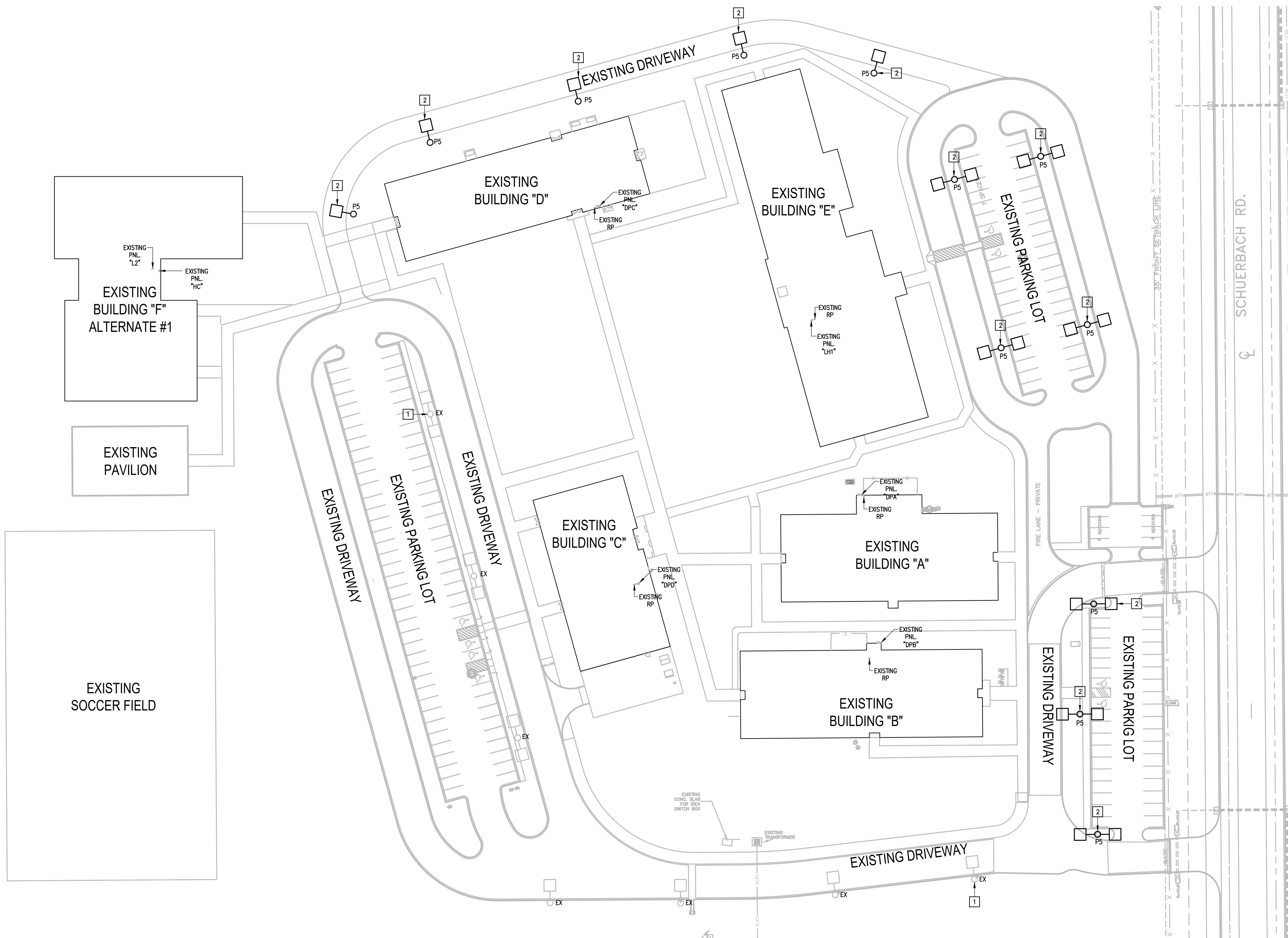
IDEA PUBLIC SCHOOLS  
 ELECTRICAL AND LIGHTING UPGRADES  
 AT RGV CAMPUSES



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 DRAWN BY: R.E.  
 PROJECT NO.: 23v80  
 CAD FILE:  
 SHEET: E4.07

IDEA MCALLEN





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4. ITEMS DESIGNATED WITH AN "EX" ARE EXISTING TO REMAIN AS IS.

**KEYED NOTES:**

- 1 EXISTING ALUMINUM LIGHT POLE TO REMAIN AS IS - TYPICAL.
- 2 DISCONNECT EXISTING STEEL POLE FOR REPLACEMENT. TEMPORARY REMOVE EXISTING LIGHT FIXTURE, REINSTALL AND CONNECT ON NEW ALUMINUM POLE. PROVIDE ANCHOR BOLT ADAPTER PLATE FOR ATTACHING NEW POLE TO EXISTING ANCHOR BOLTS.

ALTERNATE #2  
 IDEA MISSION  
 LIGHTING PLAN

01 SCALE : 1" = 40'-0" (SITE PLAN)



NO. REVISION: BY:

COPY NO.:

TEXAS

**IDEA PUBLIC SCHOOLS  
 ELECTRICAL AND LIGHTING UPGRADES  
 AT RGV CAMPUSES**

1126 SOUTH COMMERCE ST.  
 HARLINGEN, TX  
 PHONE: 361-230-3425  
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DATE:	FEBRUARY 23, 2024
CHECKED BY:	G.O.
DRAWN BY:	R.E.
PROJECT NO.:	23v80
CAD FILE:	
SHEET:	<b>E5.01</b>

IDEA MISSION





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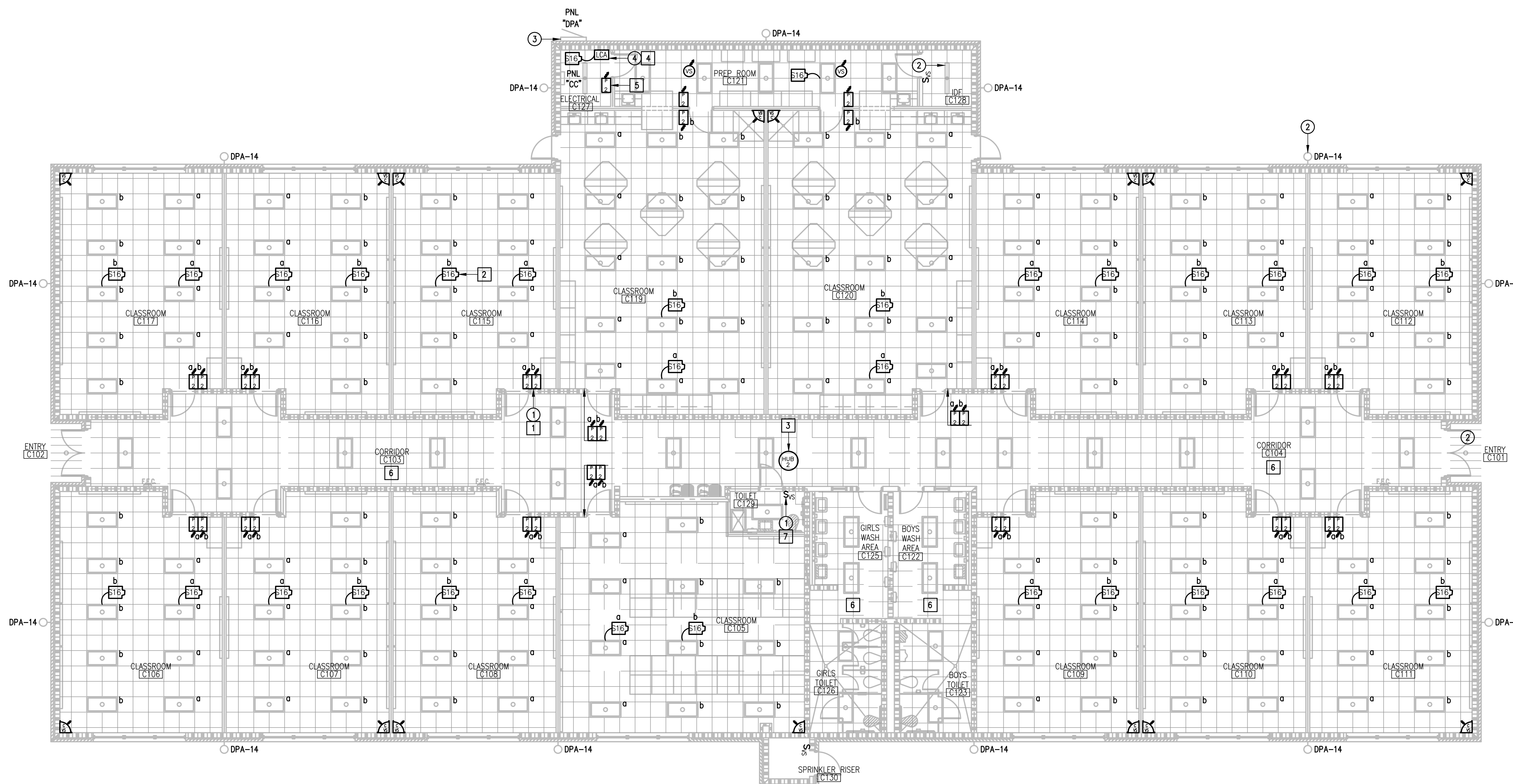
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- 2 EXISTING LIGHT FIXTURE TO REMAIN AS IS - TYPICAL.
- 3 APPROXIMATE LOCATION OF EXISTING LIGHTING PANELBOARD SERVING INTERIOR AND EXTERIOR LIGHTING CIRCUITS.
- 4 DISCONNECT AND REMOVE EXISTING LIGHTING RELAY PANEL. SEE DETAIL.

### GENERAL NOTES:

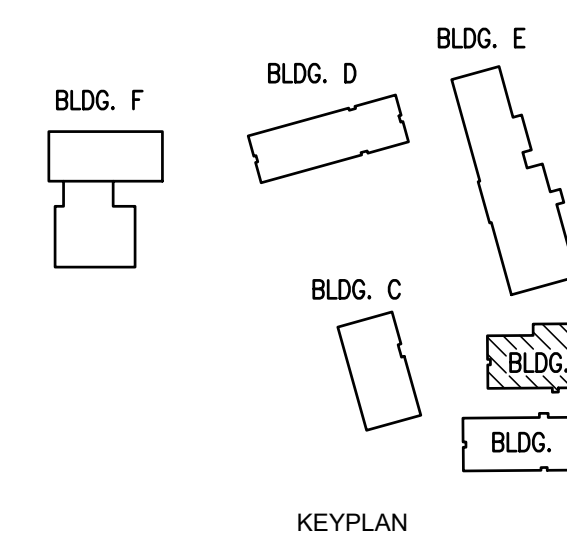
1. LIGHTING BRANCH CIRCUIT HOMERUNS SHALL BE 3/4" - 2#12 & #12G. 20A/277V HOMERUNS EXCEEDING 200FT THE WIRE SIZE SHALL BE #10 & #8 FOR 275'.
2. INTERIOR LIGHTING CONTROLS SHALL BE BY VACANCY SENSORS.
3. EXTERIOR LIGHTING CONTROLS SHALL BE BY LIGHTING CONTACTOR. TIME CONTROL/SCHEDULES BAS INTEGRATION/VIA LUTRON VIVE HUB.

### KEYED NOTES:

- 1 PROVIDE NEW LIGHTING SWITCHES (WIRELESS) - TYPICAL.
- 2 PROVIDE AND CONNECT POWER PACK TO THE ASSOCIATED LIGHT FIXTURES - TYPICAL.
- 3 PROVIDE FLUSH MOUNTED TO CEILING. CONNECT TO EXISTING PANELBOARD "CC"; BRANCH CIRCUIT: 1/2" - 2#12 & #12G. PROVIDE A 20A/1P BREAKER IN AVAILABLE SPACE.
- 4 PROVIDE LIGHTING CONTACTOR. PROVIDE LUTRON RELAY POWER PAK AND WIRELESS SWITCH FOR TIME CONTROL AND OVERRIDE FOR EACH - SEE DETAIL.
- 5 FOR EXTERIOR LIGHTING CONTACTOR OVERRIDE.
- 6 EXISTING LIGHTING CONTROLS IN THIS ROOM TO REMAIN AS IS.
- 7 PROVIDE AND CONNECT NEW WALL LIGHTING SWITCH SENSOR (WIRED) - TYPICAL.



01 IDEA MISSION LIGHTING PLAN (BUILDING A)  
 SCALE: 1/8" = 1'-0"



IDEA PUBLIC SCHOOLS  
 ELECTRICAL AND LIGHTING UPGRADES  
 AT RGV CAMPUSES

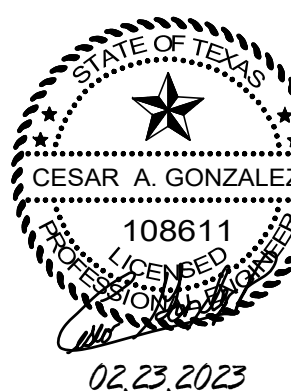


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 DRAWN BY: R.E.  
 PROJECT NO.: 23v80  
 CAD FILE:  
 SHEET:

E5.02





DEMOLITION GENERAL NOTES:

1. THE EXTENT OF DEMOLITION WORK IS INDICATED ON THE DRAWINGS AND BY THE REQUIREMENTS OF THIS SECTION. A VISIT TO THE SITE IS REQUIRED TO PROPERLY BID THE DEMOLITION WORK.
2. REMOVED MATERIALS SHALL BELONG TO OWNER. DELIVER THEM TO OWNERS DESIGNATED LOCATION. IF OWNER DOES NOT WANT THE REMOVED MATERIALS THEN REMOVE THEM FROM SITE & PROPERLY DISPOSE OF THEM.
3. IF REMOVAL OF EXISTING ELECTRICAL SYSTEMS RENDERS EXISTING ELECTRICAL SYSTEMS DOWNSTREAM TO REMAIN INOPERABLE, PROVIDE J-BOXES, CONDUIT WIRING AND SPLICES ABOVE ACCESSIBLE CEILINGS IN ORDER TO CONTINUE OPERATION.
4. PRIOR TO DEMOLITION, IN CEILINGS TO BE REMOVED AND (OR) REPLACED FOR NEW WORK, PREPARE REFLECTED CEILING PLAN SKETCH SHOWING LOCATIONS OF ALL CEILING COMPONENTS AND DEVICES TO BE RE-USED INCLUDING BUT NOT LIMITED TO:
  - LIGHT FIXTURES
  - SPEAKERS
  - WIRELESS ACCESS POINTS
  - FIRE ALARM DEVICES
  - ETC.
 IF ANY OF THE ABOVE ITEMS ARE IN NON-WORKING CONDITION, SUBMIT A WRITTEN REPORT TO OWNER/ARCHITECT. TEMPORARY SUPPORT AND OR REMOVAL OF THESE SYSTEMS SHALL BE PROVIDED FOR NEW WORK.
5. PROVIDE BLANK COVER PLATE FOR UNUSED BACK BOXES.

DEMOLITION KEYED NOTES:

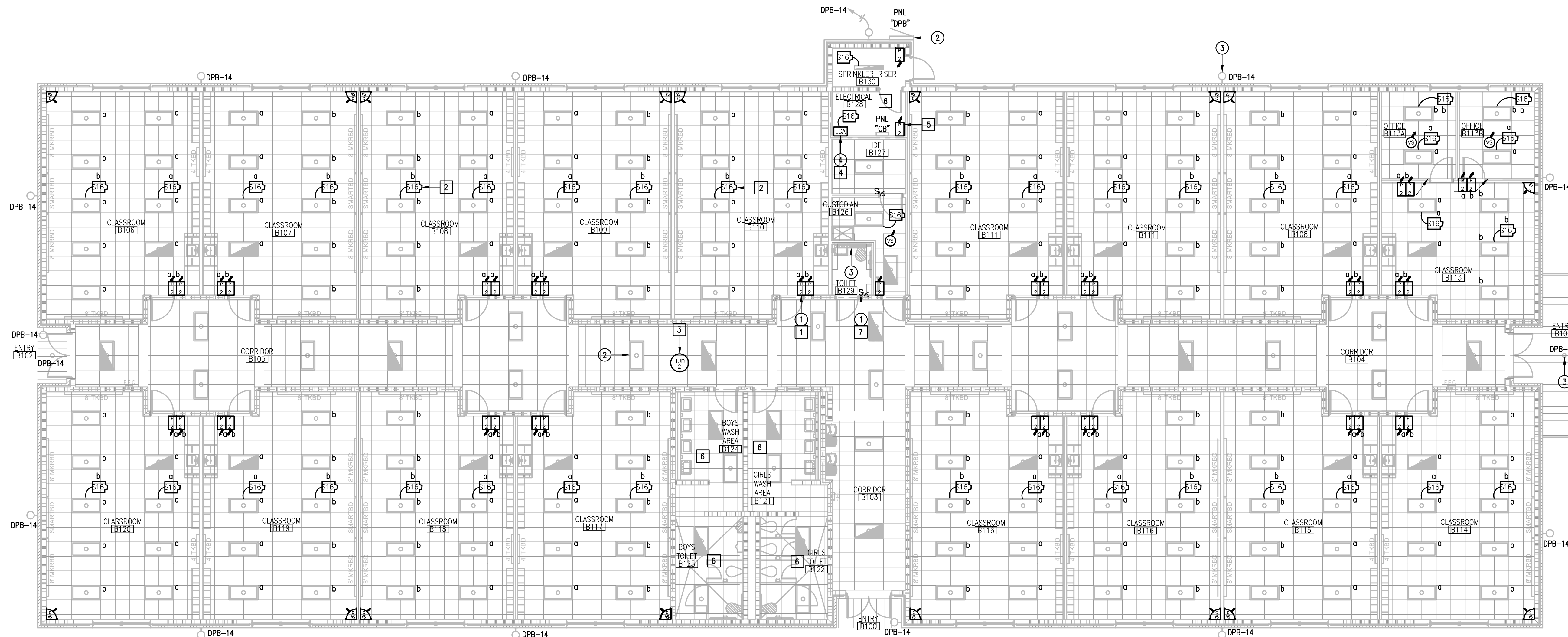
- 1 DISCONNECT AND REMOVE EXISTING TOGGLE SWITCHES (SWEEPER) ALONG WITH RELATED WIRING - TYPICAL.
- 2 APPROXIMATE LOCATION OF EXISTING LIGHTING PANELBOARD SERVING INTERIOR AND EXTERIOR LIGHTING CIRCUITS.
- 3 EXISTING LIGHT FIXTURE TO REMAIN AS IS - TYPICAL.
- 4 DISCONNECT AND REMOVE EXISTING LIGHTING RELAY PANEL. SEE DETAIL.

GENERAL NOTES:

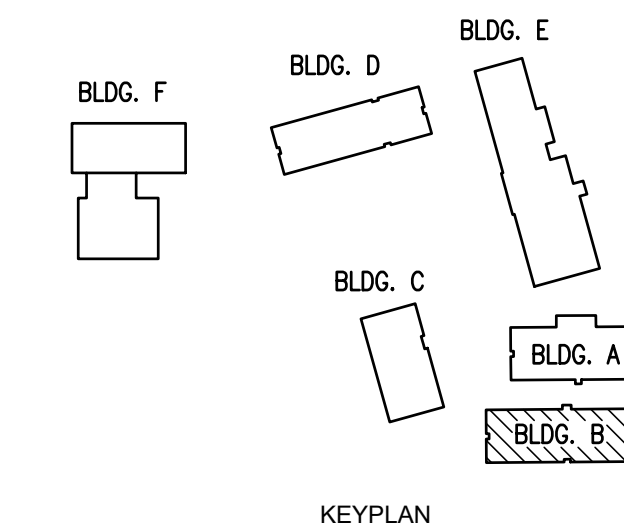
1. LIGHTING BRANCH CIRCUIT HOMERUNS SHALL BE 3/4" - 2#12 & #12G. 20A/277V HOMERUNS EXCEEDING 200FT THE WIRE SIZE SHALL BE #10 & #8 FOR 275'.
2. INTERIOR LIGHTING CONTROLS SHALL BE BY VACANCY SENSORS.
3. EXTERIOR LIGHTING CONTROLS SHALL BE BY LIGHTING CONTACTOR. TIME CONTROL/SCHEDULES BAS INTEGRATION/VIA LUTRON VIVE HUB.

KEYED NOTES:

- 1 PROVIDE NEW LIGHTING SWITCHES (WIRELESS) - TYPICAL.
- 2 PROVIDE AND CONNECT POWER PACK TO THE ASSOCIATED LIGHT FIXTURES - TYPICAL.
- 3 PROVIDE FLUSH MOUNTED TO CEILING. CONNECT TO EXISTING PANELBOARD "CB"; BRANCH CIRCUIT: 1/2" - 2#12 & #12G. PROVIDE A 20A/1P BREAKER IN AVAILABLE SPACE.
- 4 PROVIDE LIGHTING CONTACTOR. PROVIDE LUTRON RELAY POWER PAK AND WIRELESS SWITCH FOR TIME CONTROL AND OVERRIDE FOR EACH - SEE DETAIL.
- 5 FOR EXTERIOR LIGHTING CONTACTOR OVERRIDE.
- 6 EXISTING LIGHTING CONTROLS IN THIS ROOM TO REMAIN AS IS.
- 7 PROVIDE AND CONNECT NEW WALL LIGHTING SWITCH SENSOR (WIRED) - TYPICAL.



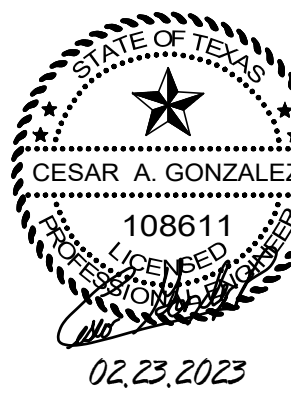
01 IDEA MISSION LIGHTING PLAN (BUILDING B)  
 SCALE: 1/8" = 1'-0"  
 PLAN NORTH



IDEA PUBLIC SCHOOLS  
 ELECTRICAL AND LIGHTING UPGRADES  
 AT RGV CAMPUSES



DATE: FEBRUARY 23, 2024  
 CHECKED BY: G.Q.  
 DRAWN BY: R.E.  
 PROJECT NO.: 23v80  
 CAD FILE:  
 SHEET:  
**E5.03**



**DEMOLITION GENERAL NOTES:**

1. THE EXTENT OF DEMOLITION WORK IS INDICATED ON THE DRAWINGS AND BY THE REQUIREMENTS OF THIS SECTION. A VISIT TO THE SITE IS REQUIRED TO PROPERLY BID THE DEMOLITION WORK.
2. REMOVED MATERIALS SHALL BELONG TO OWNER. DELIVER THEM TO OWNERS DESIGNATED LOCATION. IF OWNER DOES NOT WANT THE REMOVED MATERIALS THEN REMOVE THEM FROM SITE & PROPERLY DISPOSE OF THEM.
3. IF REMOVAL OF EXISTING ELECTRICAL SYSTEMS RENDERS EXISTING ELECTRICAL SYSTEMS DOWNSTREAM TO REMAIN INOPERABLE, PROVIDE J-BOXES, CONDUIT WIRING AND SPLICES ABOVE ACCESSIBLE CEILINGS IN ORDER TO CONTINUE OPERATION.
4. PRIOR TO DEMOLITION, IN CEILINGS TO BE REMOVED AND (OR) REPLACED FOR NEW WORK, PREPARE REFLECTED CEILING PLAN SKETCH SHOWING LOCATIONS OF ALL CEILING COMPONENTS AND DEVICES TO BE RE-USED INCLUDING BUT NOT LIMITED TO:
  - LIGHT FIXTURES
  - SPEAKERS
  - WIRELESS ACCESS POINTS
  - FIRE ALARM DEVICES
  - ETC.
 IF ANY OF THE ABOVE ITEMS ARE IN NON-WORKING CONDITION, SUBMIT A WRITTEN REPORT TO OWNER/ARCHITECT. TEMPORARY SUPPORT AND OR REMOVAL OF THESE SYSTEMS SHALL BE PROVIDED FOR NEW WORK.
5. PROVIDE BLANK COVER PLATE FOR UNUSED BACK BOXES.

**DEMOLITION KEYED NOTES:**

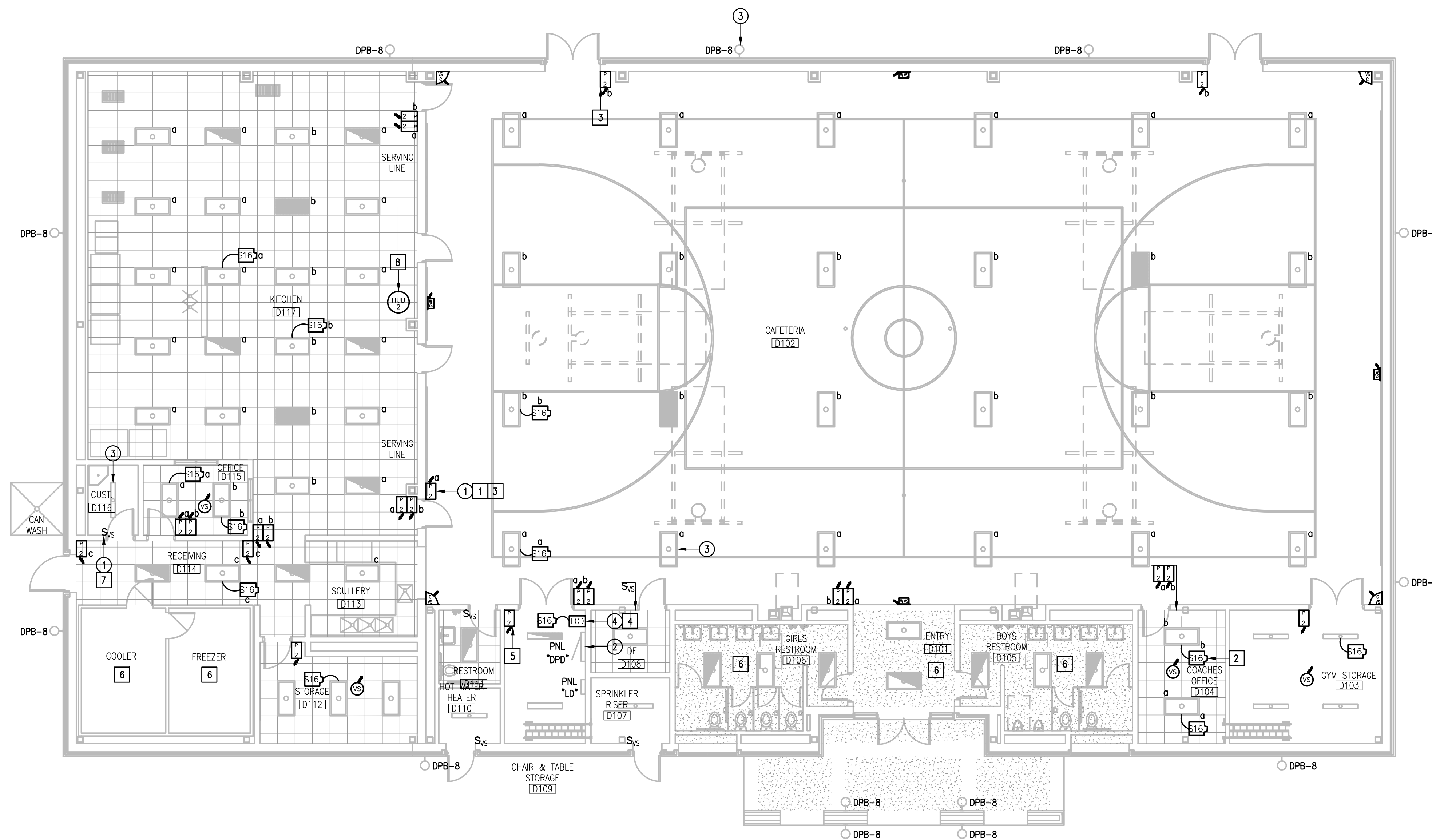
- 1 DISCONNECT AND REMOVE EXISTING TOGGLE SWITCHES (SWEEPER) ALONG WITH RELATED WIRING - TYPICAL.
- 2 APPROXIMATE LOCATION OF EXISTING LIGHTING PANELBOARD SERVING INTERIOR AND EXTERIOR LIGHTING CIRCUITS.
- 3 EXISTING LIGHT FIXTURE TO REMAIN AS IS - TYPICAL.
- 4 DISCONNECT AND REMOVE EXISTING LIGHTING RELAY PANEL. SEE DETAIL.

**GENERAL NOTES:**

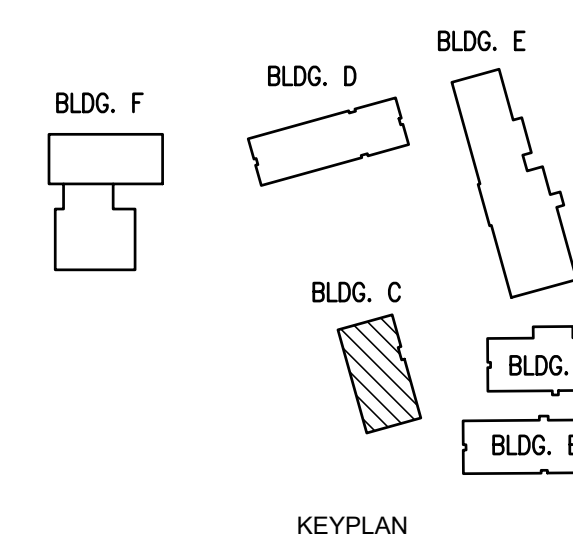
1. LIGHTING BRANCH CIRCUIT HOMERUNS SHALL BE 3/4" - 2#12 & #12G. 20A/277V HOMERUNS EXCEEDING 200FT THE WIRE SIZE SHALL BE #10 & #8 FOR 275'.
2. INTERIOR LIGHTING CONTROLS SHALL BE BY VACANCY SENSORS.
3. EXTERIOR LIGHTING CONTROLS SHALL BE BY LIGHTING CONTACTOR. TIME CONTROL/SCHEDULES BAS INTEGRATION/VIA LUTRON VIVE HUB.

**KEYED NOTES:**

- 1 PROVIDE NEW LIGHTING SWITCHES (WIRELESS) - TYPICAL.
- 2 PROVIDE AND CONNECT POWER PACK TO THE ASSOCIATED LIGHT FIXTURES - TYPICAL.
- 3 PROVIDE CLEAR LOCKING COVER.
- 4 PROVIDE LIGHTING CONTACTOR. PROVIDE LUTRON RELAY POWER PAK AND WIRELESS SWITCH FOR TIME CONTROL AND OVERRIDE FOR EACH - SEE DETAIL.
- 5 FOR EXTERIOR LIGHTING CONTACTOR OVERRIDE.
- 6 EXISTING LIGHTING CONTROLS IN THIS ROOM TO REMAIN AS IS.
- 7 PROVIDE AND CONNECT NEW WALL LIGHTING SWITCH SENSOR (WIRED) - TYPICAL.
- 8 PROVIDE FLUSH MOUNTED TO CEILING. CONNECT TO EXISTING PANELBOARD "CA", BRANCH CIRCUIT: 1/2" - 2#12 & #12G. PROVIDE A 20A/1P BREAKER IN AVAILABLE SPACE.



IDEA MISSION  
 LIGHTING PLAN (BUILDING C)  
 01 SCALE: 1/8" = 1'-0"  
 PLAN NORTH



**IDEA PUBLIC SCHOOLS  
 ELECTRICAL AND LIGHTING UPGRADES  
 AT RGV CAMPUSES**







IDEA PUBLIC SCHOOLS  
ELECTRICAL AND LIGHTING UPGRADES  
AT RGV CAMPUSES



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DRAWN BY: R.E.  
PROJECT NO.: 23v80  
CAD FILE:  
SHEET:

E5.05

KEYED NOTES:

- 1 PROVIDE NEW LIGHTING SWITCHES (WIRELESS) - TYPICAL.
- 2 PROVIDE AND CONNECT POWER PAK TO THE ASSOCIATED LIGHT FIXTURES - TYPICAL.
- 3 TIME CONTROL/SCHEDULE VIA LUTRON VIVE HUB.
- 4 PROVIDE LIGHTING CONTACTOR. PROVIDE LUTRON RELAY POWER PAK AND WIRELESS SWITCH FOR TIME CONTROL AND OVERRIDE FOR EACH - SEE DETAIL.
- 5 FOR EXTERIOR LIGHTING CONTACTOR OVERRIDE.
- 6 EXISTING LIGHTING CONTROLS IN THIS ROOM TO REMAIN AS IS.
- 7 PROVIDE AND CONNECT NEW WALL LIGHTING SWITCH SENSOR (WIRED) - TYPICAL.
- 8 PROVIDE FLUSH MOUNTED TO CEILING. CONNECT TO EXISTING PANELBOARD "CC"; BRANCH CIRCUIT: 1/2" - 2#12 & #12G. PROVIDE A 20A/1P BREAKER IN AVAILABLE SPACE.

GENERAL NOTES:

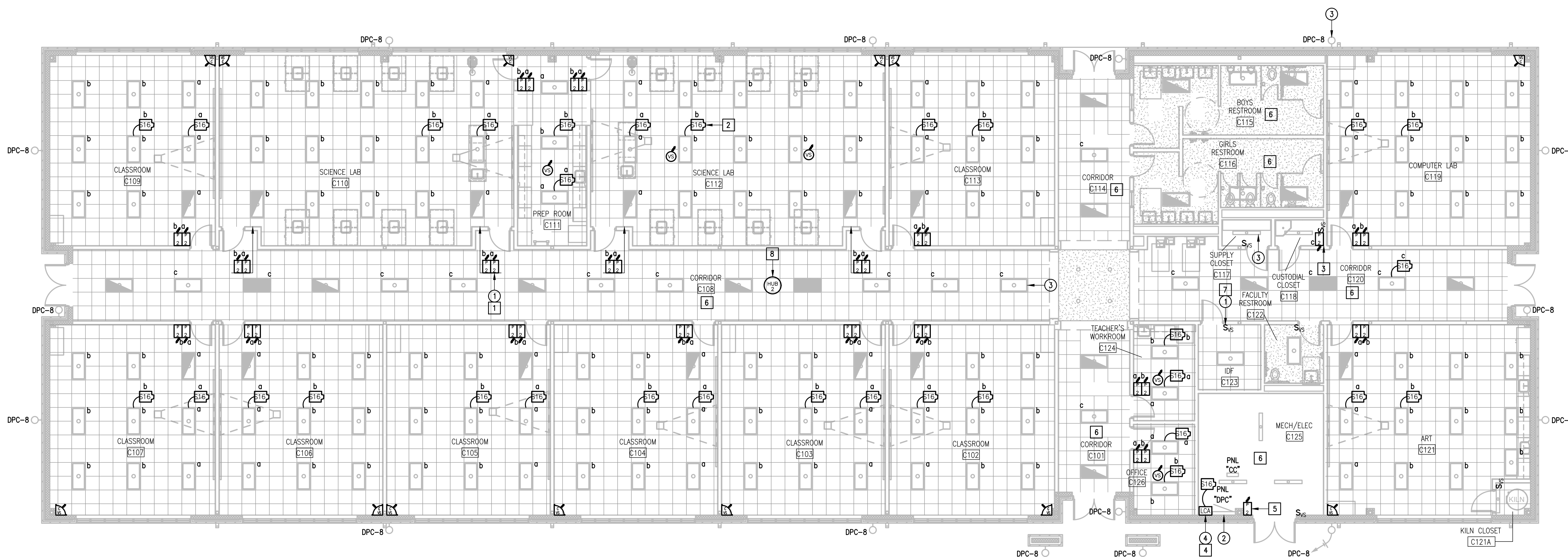
1. LIGHTING BRANCH CIRCUIT HOMERUNS SHALL BE 3/4" - 2#12 & #12G. 20A/277V HOMERUNS EXCEEDING 200FT THE WIRE SIZE SHALL BE #10 & #8 FOR 275'.
2. INTERIOR LIGHTING CONTROLS SHALL BE BY VACANCY SENSORS.
3. EXTERIOR LIGHTING CONTROLS SHALL BE BY LIGHTING CONTACTOR. TIME CONTROL/SCHEDULES BAS INTEGRATION/VIA LUTRON VIVE HUB.

DEMOLITION KEYED NOTES:

- 1 DISCONNECT AND REMOVE EXISTING TOGGLE SWITCHES (SWEEPER) ALONG WITH RELATED WIRING - TYPICAL.
- 2 APPROXIMATE LOCATION OF EXISTING LIGHTING PANELBOARD SERVING INTERIOR AND EXTERIOR LIGHTING CIRCUITS.
- 3 EXISTING LIGHT FIXTURE TO REMAIN AS IS - TYPICAL.
- 4 DISCONNECT AND REMOVE EXISTING LIGHTING RELAY PANEL. SEE DETAIL.

DEMOLITION GENERAL NOTES:

1. THE EXTENT OF DEMOLITION WORK IS INDICATED ON THE DRAWINGS AND BY THE REQUIREMENTS OF THIS SECTION. A VISIT TO THE SITE IS REQUIRED TO PROPERLY BID THE DEMOLITION WORK.
2. REMOVED MATERIALS SHALL BELONG TO OWNER. DELIVER THEM TO OWNERS DESIGNATED LOCATION. IF OWNER DOES NOT WANT THE REMOVED MATERIALS THEN REMOVE THEM FROM SITE & PROPERLY DISPOSE OF THEM.
3. IF REMOVAL OF EXISTING ELECTRICAL SYSTEMS RENDERS EXISTING ELECTRICAL SYSTEMS DOWNSTREAM TO REMAIN INOPERABLE, PROVIDE J-BOXES, CONDUIT WIRING AND SPLICES ABOVE ACCESSIBLE CEILINGS IN ORDER TO CONTINUE OPERATION.
4. PRIOR TO DEMOLITION, IN CEILINGS TO BE REMOVED AND (OR) REPLACED FOR NEW WORK, PREPARE REFLECTED CEILING PLAN SKETCH SHOWING LOCATIONS OF ALL CEILING COMPONENTS AND DEVICES TO BE RE-USED INCLUDING BUT NOT LIMITED TO:
  - LIGHT FIXTURES
  - SPEAKERS
  - WIRELESS ACCESS POINTS
  - FIRE ALARM DEVICES
  - ETC.
 IF ANY OF THE ABOVE ITEMS ARE IN NON-WORKING CONDITION, SUBMIT A WRITTEN REPORT TO OWNER/ARCHITECT. TEMPORARY SUPPORT AND OR REMOVAL OF THESE SYSTEMS SHALL BE PROVIDED FOR NEW WORK.
5. PROVIDE BLANK COVER PLATE FOR UNUSED BACK BOXES.

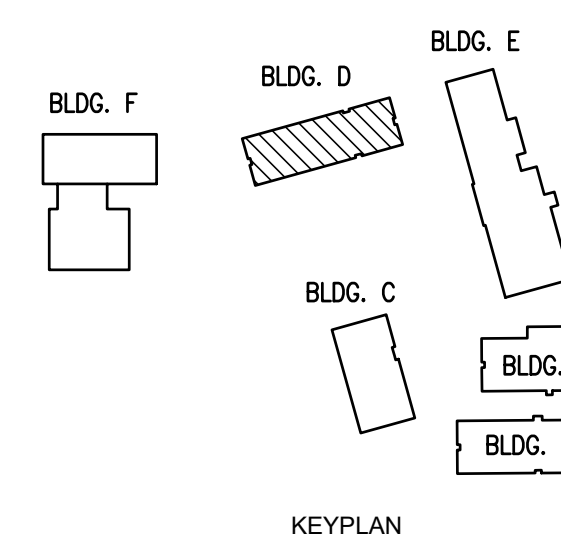


IDEA MISSION  
01 LIGHTING PLAN

(BUILDING D)



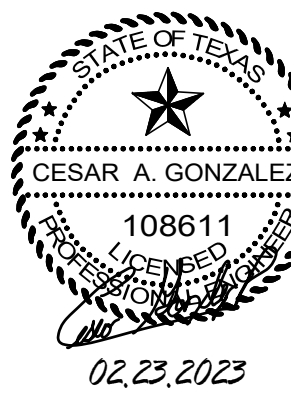
SCALE: 1/8" = 1'-0"



IDEA MISSION

KEYPLAN





### DEMOLITION GENERAL NOTES:

1. THE EXTENT OF DEMOLITION WORK IS INDICATED ON THE DRAWINGS AND BY THE REQUIREMENTS OF THIS SECTION. A VISIT TO THE SITE IS REQUIRED TO PROPERLY BID THE DEMOLITION WORK.
2. REMOVED MATERIALS SHALL BELONG TO OWNER. DELIVER THEM TO OWNERS DESIGNATED LOCATION. IF OWNER DOES NOT WANT THE REMOVED MATERIALS THEN REMOVE THEM FROM SITE & PROPERLY DISPOSE OF THEM.
3. IF REMOVAL OF EXISTING ELECTRICAL SYSTEMS RENDERS EXISTING ELECTRICAL SYSTEMS DOWNSTREAM TO REMAIN INOPERABLE, PROVIDE J-BOXES, CONDUIT WIRING AND SPLICES ABOVE ACCESSIBLE CEILINGS IN ORDER TO CONTINUE OPERATION.
4. PRIOR TO DEMOLITION, IN CEILINGS TO BE REMOVED AND (OR) REPLACED FOR NEW WORK, PREPARE REFLECTED CEILING PLAN SKETCH SHOWING LOCATIONS OF ALL CEILING COMPONENTS AND DEVICES TO BE RE-USED INCLUDING BUT NOT LIMITED TO:
  - LIGHT FIXTURES
  - SPEAKERS
  - WIRELESS ACCESS POINTS
  - FIRE ALARM DEVICES
  - ETC.
 IF ANY OF THE ABOVE ITEMS ARE IN NON-WORKING CONDITION, SUBMIT A WRITTEN REPORT TO OWNER/ARCHITECT. TEMPORARY SUPPORT AND OR REMOVAL OF THESE SYSTEMS SHALL BE PROVIDED FOR NEW WORK.
5. PROVIDE BLANK COVER PLATE FOR UNUSED BACK BOXES.

### DEMOLITION KEYED NOTES:

- 1 DISCONNECT AND REMOVE EXISTING SWITCHES ALONG WITH RELATED WIRING - TYPICAL.
- 2 EXISTING LIGHT FIXTURE TO REMAIN AS IS - TYPICAL.
- 3 APPROXIMATE LOCATION OF EXISTING LIGHTING PANELBOARD SERVING INTERIOR AND EXTERIOR LIGHTING CIRCUITS.
- 4 DISCONNECT AND REMOVE EXISTING LIGHTING RELAY PANEL. SEE DETAIL.
- 5 DISCONNECT AND REMOVE EXISTING OCCUPANCY SENSOR (WIRED) ALONG WITH RELATED WIRING AND POWER PAK - TYPICAL.

### GENERAL NOTES:

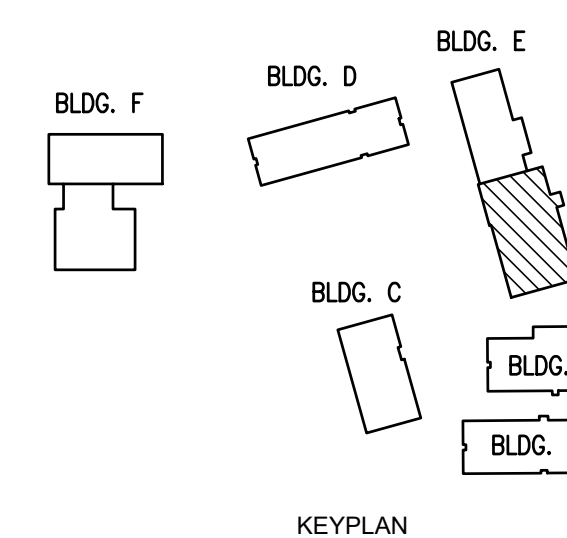
1. LIGHTING BRANCH CIRCUIT HOMERUNS SHALL BE 3/4" - 2#12 & #12G. 20A/277V HOMERUNS EXCEEDING 200FT THE WIRE SIZE SHALL BE #10 & #8 FOR 275'.
2. INTERIOR LIGHTING CONTROLS SHALL BE BY VACANCY SENSORS.
3. EXTERIOR LIGHTING CONTROLS SHALL BE BY LIGHTING CONTACTOR. TIME CONTROL/SCHEDULES VIA LUTRON VIVE HUB.
4. NON-EMERGENCY CORRIDOR LIGHTING TIMECONTROLS SHALL BE VIA LUTRON VIVE HUB.

### KEYED NOTES:

- 1 PROVIDE AND CONNECT LIGHTING SWITCHES (WIRELESS) - TYPICAL.
- 2 PROVIDE AND CONNECT POWER PAK TO THE ASSOCIATED LIGHT FIXTURES.
- 3 PROVIDE FLUSH MOUNTED TO CEILING. CONNECT TO EXISTING PANELBOARD "LC1". BRANCH CIRCUIT: 1/2" - 2#12 & #12G. PROVIDE A 20A/1P BREAKER IN AVAILABLE SPACE.
- 4 PROVIDE LIGHTING CONTACTOR. PROVIDE LUTRON RELAY POWER PAK AND WIRELESS SWITCH FOR TIME CONTROL AND OVERRIDE FOR EACH.
- 5 FOR EXTERIOR LIGHTING CONTACTOR OVERRIDE.
- 6 EXISTING LIGHTING CONTROLS TO REMAIN AS IS.
- 7 PROVIDE AND CONNECT NEW WALL LIGHTING SWITCH SENSOR (WIRED) - TYPICAL.



01 IDEA MISSION LIGHTING PLAN (BUILDING E)  
 SCALE: 1/8" = 1'-0"  
 PLAN NORTH



IDEA PUBLIC SCHOOLS  
 ELECTRICAL AND LIGHTING UPGRADES  
 AT RGV CAMPUSES

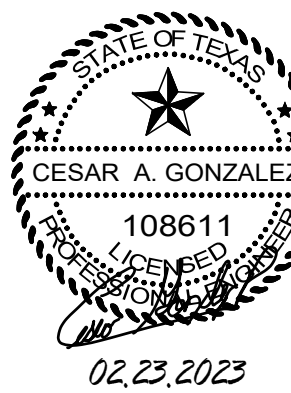


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 PROJECT NO.: 23v80  
 CAD FILE:  
 SHEET:

E5.06





DEMOLITION GENERAL NOTES:

1. THE EXTENT OF DEMOLITION WORK IS INDICATED ON THE DRAWINGS AND BY THE REQUIREMENTS OF THIS SECTION. A VISIT TO THE SITE IS REQUIRED TO PROPERLY BID THE DEMOLITION WORK.
2. REMOVED MATERIALS SHALL BELONG TO OWNER. DELIVER THEM TO OWNERS DESIGNATED LOCATION. IF OWNER DOES NOT WANT THE REMOVED MATERIALS THEN REMOVE THEM FROM SITE & PROPERLY DISPOSE OF THEM.
3. IF REMOVAL OF EXISTING ELECTRICAL SYSTEMS RENDERS EXISTING ELECTRICAL SYSTEMS DOWNSTREAM TO REMAIN INOPERABLE, PROVIDE J-BOXES, CONDUIT WIRING AND SPLICES ABOVE ACCESSIBLE CEILINGS IN ORDER TO CONTINUE OPERATION.
4. PRIOR TO DEMOLITION, IN CEILINGS TO BE REMOVED AND (OR) REPLACED FOR NEW WORK, PREPARE REFLECTED CEILING PLAN SKETCH SHOWING LOCATIONS OF ALL CEILING COMPONENTS AND DEVICES TO BE RE-USED INCLUDING BUT NOT LIMITED TO:
  - LIGHT FIXTURES
  - SPEAKERS
  - WIRELESS ACCESS POINTS
  - FIRE ALARM DEVICES
  - ETC.
 IF ANY OF THE ABOVE ITEMS ARE IN NON-WORKING CONDITION, SUBMIT A WRITTEN REPORT TO OWNER/ARCHITECT. TEMPORARY SUPPORT AND OR REMOVAL OF THESE SYSTEMS SHALL BE PROVIDED FOR NEW WORK.
5. PROVIDE BLANK COVER PLATE FOR UNUSED BACK BOXES.

DEMOLITION KEYED NOTES:

- 1 DISCONNECT AND REMOVE EXISTING SWITCHES ALONG WITH RELATED WIRING - TYPICAL.
- 2 EXISTING LIGHT FIXTURE TO REMAIN AS IS - TYPICAL.
- 3 DISCONNECT AND REMOVE EXISTING OCCUPANCY SENSOR (WIRED) ALONG WITH RELATED WIRING AND POWER PACK - TYPICAL.

GENERAL NOTES:

1. LIGHTING BRANCH CIRCUIT HOMERUNS SHALL BE 3/4" - 2#12 & #12G. 20A/277V HOMERUNS EXCEEDING 200FT THE WIRE SIZE SHALL BE #10 & #8 FOR 275'.
2. INTERIOR LIGHTING CONTROLS SHALL BE BY VACANCY SENSORS.
3. EXTERIOR LIGHTING CONTROLS SHALL BE BY LIGHTING CONTACTOR. TIME CONTROL/SCHEDULES VIA LUTRON VIVE HUB.
4. NON-EMERGENCY CORRIDOR LIGHTING TIMECONTROLS SHALL BE VIA LUTRON VIVE HUB.

KEYED NOTES:

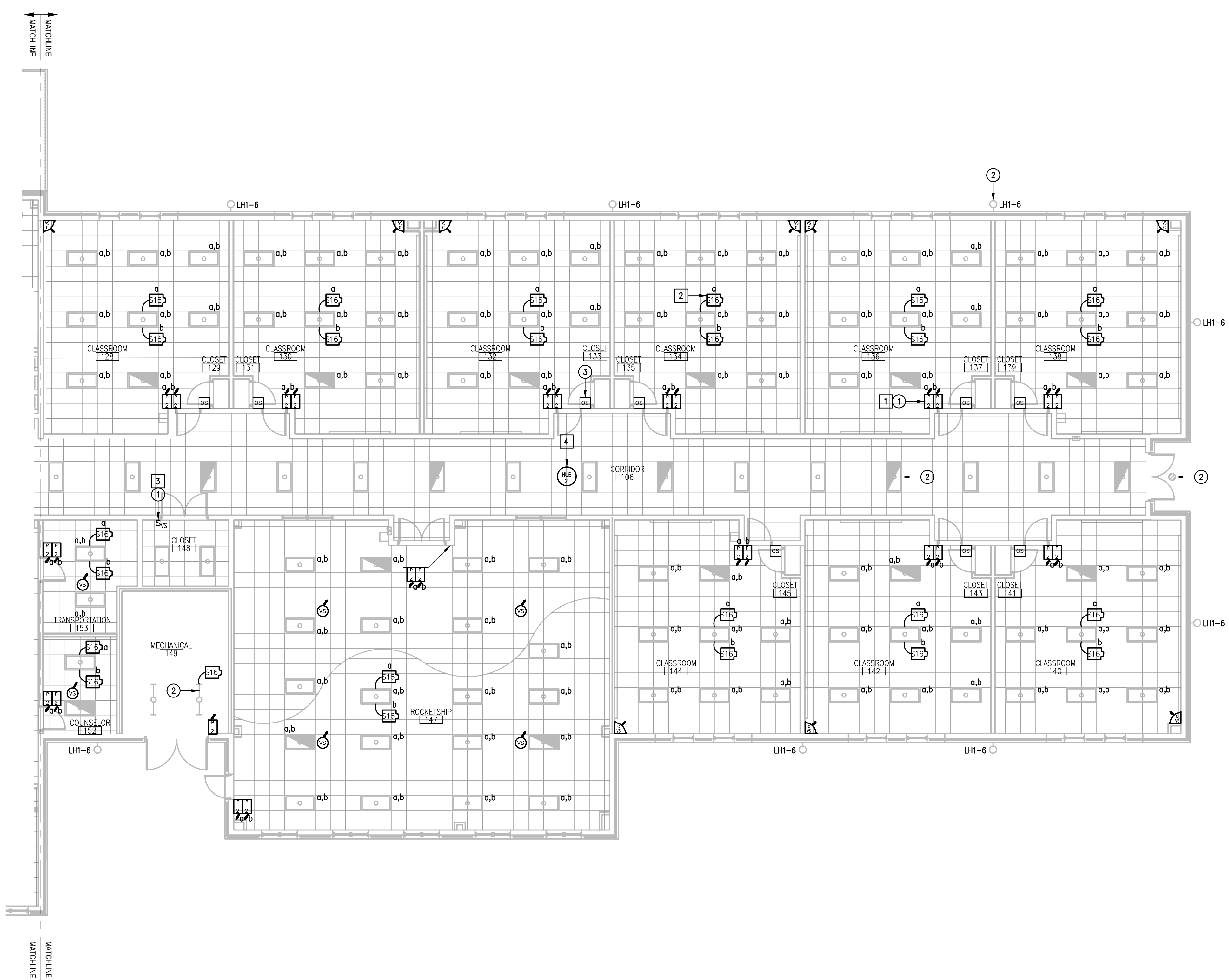
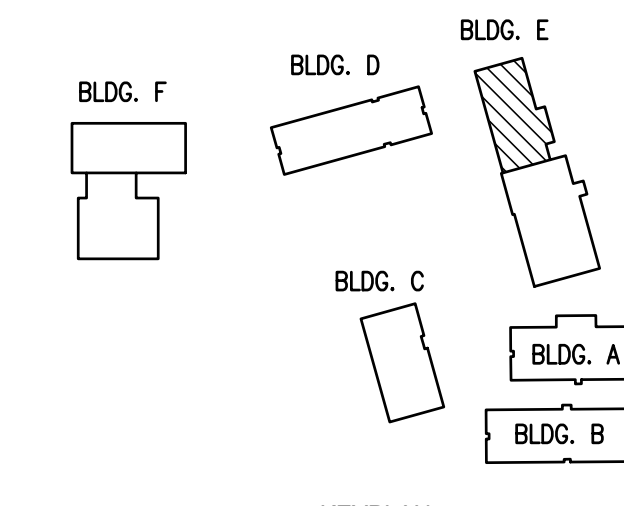
- 1 PROVIDE AND CONNECT LIGHTING SWITCHES (WIRELESS) - TYPICAL.
- 2 PROVIDE AND CONNECT POWER PACK TO THE ASSOCIATED LIGHT FIXTURES.
- 3 PROVIDE AND CONNECT NEW WALL LIGHTING SWITCH SENSOR (WIRED) - TYPICAL.
- 4 PROVIDE FLUSH MOUNTED TO CEILING. CONNECT TO EXISTING PANELBOARD "L1"; BRANCH CIRCUIT: 1/2" - 2#12 & #12G. PROVIDE A 20A/1P BREAKER IN AVAILABLE SPACE.

IDEA PUBLIC SCHOOLS ELECTRICAL AND LIGHTING UPGRADES AT RGV CAMPUSES



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 DRAWN BY: R.E.  
 PROJECT NO.: 23v80  
 CAD FILE:  
 SHEET: E5.07

IDEA MISSION



IDEA MISSION  
 01 LIGHTING PLAN (BUILDING E)  
 SCALE: 1/8" = 1'-0"





TEXAS

**DEMOLITION GENERAL NOTES:**

1. THE EXTENT OF DEMOLITION WORK IS INDICATED ON THE DRAWINGS AND BY THE REQUIREMENTS OF THIS SECTION. A VISIT TO THE SITE IS REQUIRED TO PROPERLY BID THE DEMOLITION WORK.
2. REMOVED MATERIALS SHALL BELONG TO OWNER. DELIVER THEM TO OWNERS DESIGNATED LOCATION. IF OWNER DOES NOT WANT THE REMOVED MATERIALS THEN REMOVE THEM FROM SITE & PROPERLY DISPOSE OF THEM.
3. IF REMOVAL OF EXISTING ELECTRICAL SYSTEMS RENDERS EXISTING ELECTRICAL SYSTEMS DOWNSTREAM TO REMAIN INOPERABLE, PROVIDE J-BOXES, CONDUIT WIRING AND SPLICES ABOVE ACCESSIBLE CEILINGS IN ORDER TO CONTINUE OPERATION.
4. PRIOR TO DEMOLITION, IN CEILINGS TO BE REMOVED AND (OR) REPLACED FOR NEW WORK, PREPARE REFLECTED CEILING PLAN SKETCH SHOWING LOCATIONS OF ALL CEILING COMPONENTS AND DEVICES TO BE RE-USED INCLUDING BUT NOT LIMITED TO:
  - LIGHT FIXTURES
  - SPEAKERS
  - WIRELESS ACCESS POINTS
  - FIRE ALARM DEVICES
  - ETC.
 IF ANY OF THE ABOVE ITEMS ARE IN NON-WORKING CONDITION, SUBMIT A WRITTEN REPORT TO OWNER/ARCHITECT. TEMPORARY SUPPORT AND OR REMOVAL OF THESE SYSTEMS SHALL BE PROVIDED FOR NEW WORK.
5. PROVIDE BLANK COVER PLATE FOR UNUSED BACK BOXES.

**DEMOLITION KEYED NOTES:**

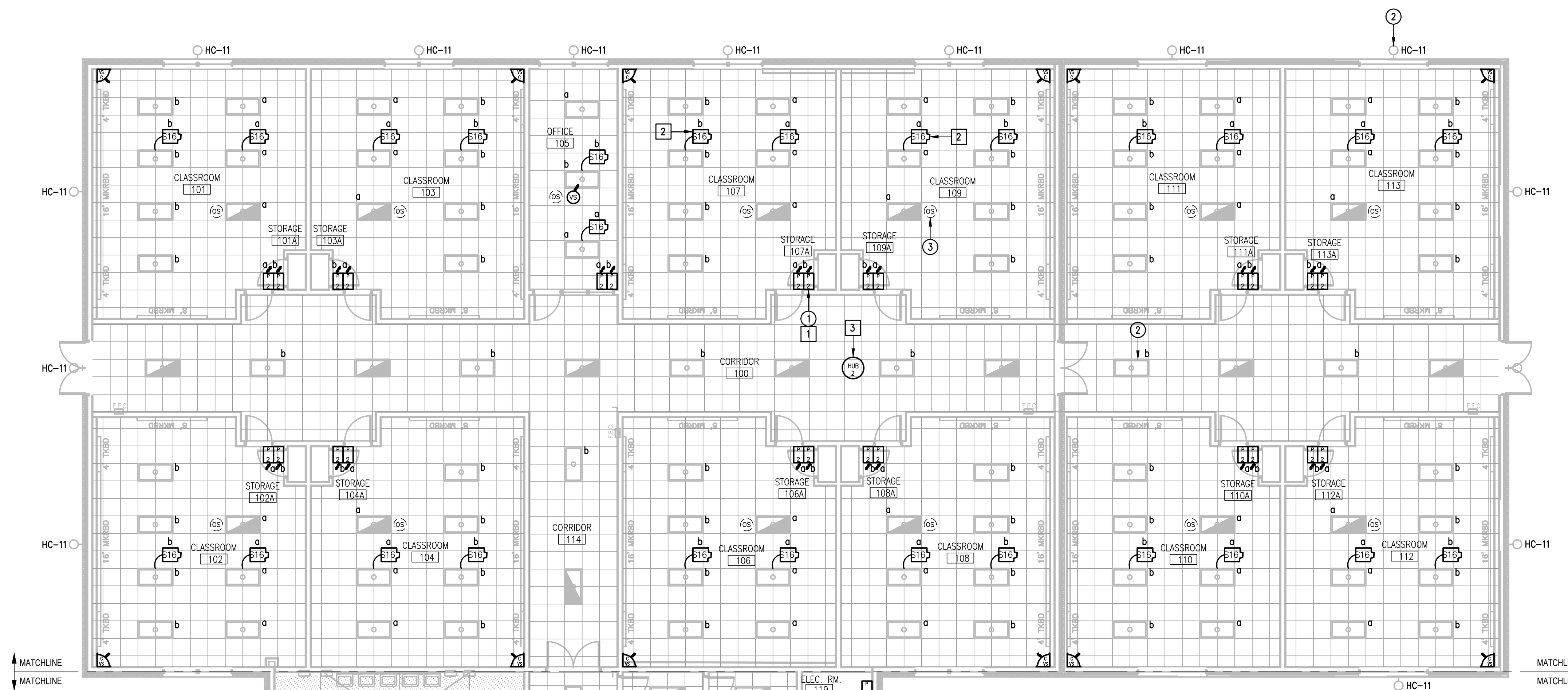
- 1 DISCONNECT AND REMOVE EXISTING SWITCHES ALONG WITH RELATED WIRING - TYPICAL.
- 2 EXISTING LIGHT FIXTURE TO REMAIN AS IS - TYPICAL.
- 3 DISCONNECT AND REMOVE EXISTING CEILING OCCUPANCY SENSOR (WIRED) ALONG WITH RELATED WIRING, POWER PACK, CONTROL PANELS, ETC - TYPICAL.

**GENERAL NOTES:**

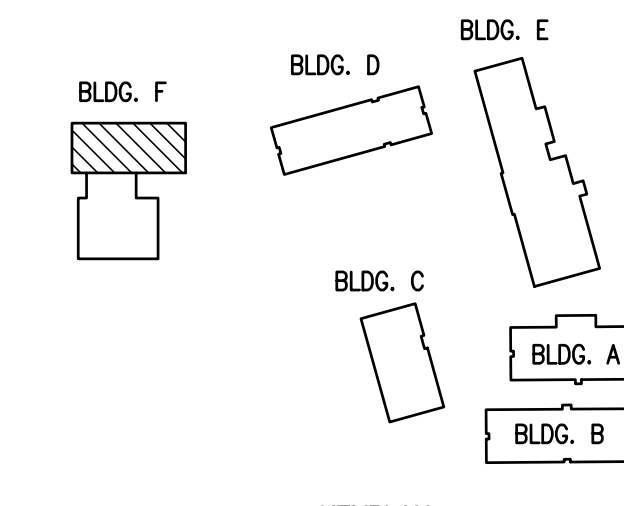
1. LIGHTING BRANCH CIRCUIT HOMERUNS SHALL BE 3/4" - 2#12 & #12G. 20A/277V HOMERUNS EXCEEDING 200FT THE WIRE SIZE SHALL BE #10 & #8 FOR 275'.
2. INTERIOR LIGHTING CONTROLS SHALL BE BY VACANCY SENSORS.
3. EXTERIOR LIGHTING CONTROLS SHALL BE BY LIGHTING CONTACTOR. TIME CONTROL/SCHEDULES VIA LUTRON VIVE HUB.
4. NON-EMERGENCY CORRIDOR LIGHTING TIMECONTROLS SHALL BE VIA LUTRON VIVE HUB.

**KEYED NOTES:**

- 1 PROVIDE AND CONNECT LIGHTING SWITCHES (WIRELESS) - TYPICAL.
- 2 PROVIDE AND CONNECT POWER PACK TO THE ASSOCIATED LIGHT FIXTURES.
- 3 PROVIDE FLUSH MOUNTED TO CEILING. CONNECT TO EXISTING PANELBOARD "L2" BRANCH CIRCUIT: 1/2" - 2#12 & #12G. PROVIDE A 20A/1P BREAKER IN AVAILABLE SPACE.



ALTERNATE #1  
 IDEA MISSION  
 LIGHTING PLAN (BUILDING F)  
 01 SCALE: 1/8" = 1'-0"  
 PLAN NORTH

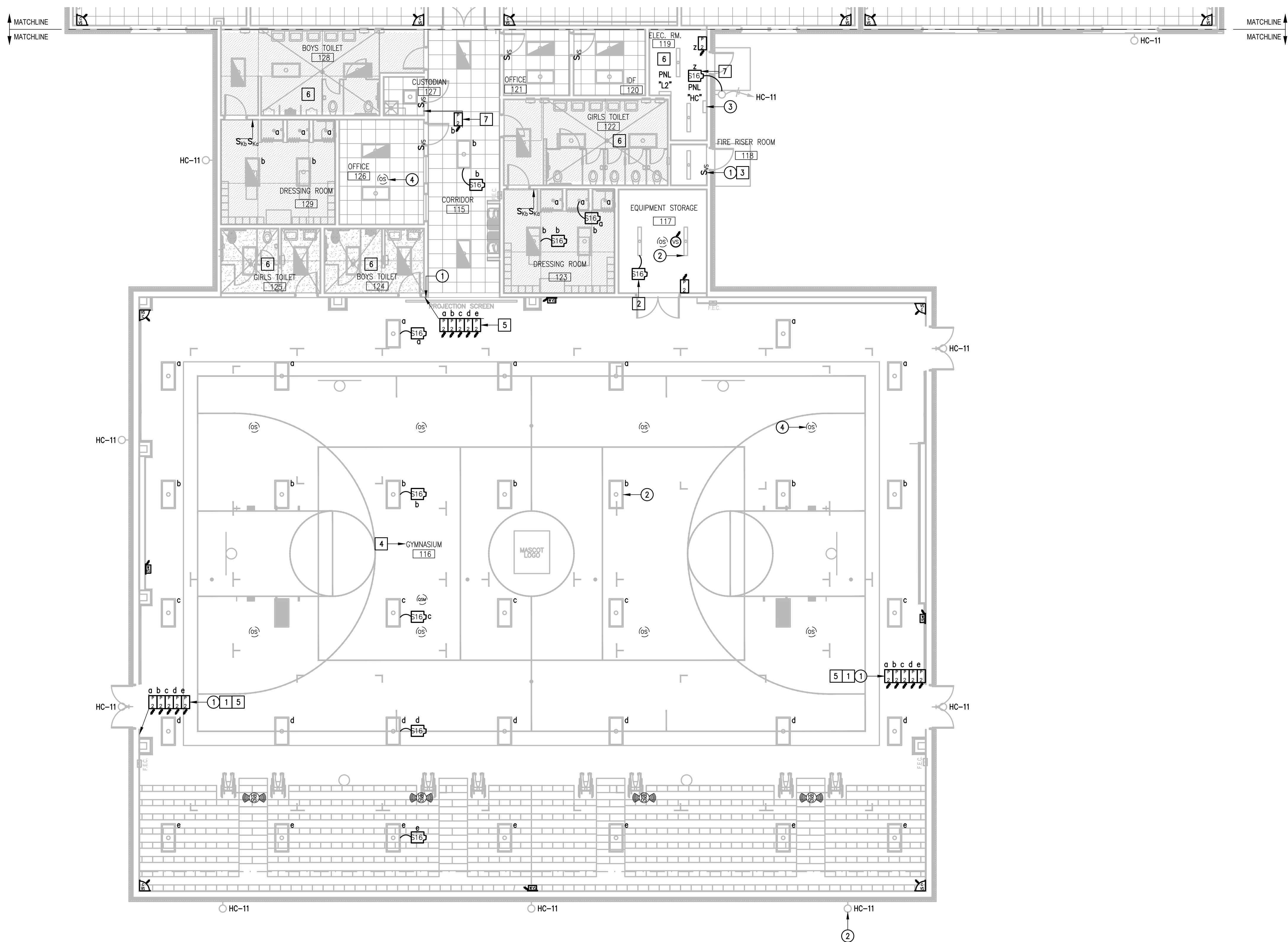


**IDEA PUBLIC SCHOOLS  
 ELECTRICAL AND LIGHTING UPGRADES  
 AT RGV CAMPUSES**



DATE: FEBRUARY 23, 2024  
 CHECKED BY: G.Q.  
 DRAWN BY: R.E.  
 PROJECT NO.: 23v80  
 CAD FILE:  
 SHEET:  
**E5.08**





ALTERNATE #1  
 IDEA MISSION  
 LIGHTING PLAN (BUILDING F)  
 01 SCALE: 1/8" = 1'-0"  
 PLAN NORTH

**DEMOLITION GENERAL NOTES:**

1. THE EXTENT OF DEMOLITION WORK IS INDICATED ON THE DRAWINGS AND BY THE REQUIREMENTS OF THIS SECTION. A VISIT TO THE SITE IS REQUIRED TO PROPERLY BID THE DEMOLITION WORK.
2. REMOVED MATERIALS SHALL BELONG TO OWNER. DELIVER THEM TO OWNERS DESIGNATED LOCATION. IF OWNER DOES NOT WANT THE REMOVED MATERIALS THEN REMOVE THEM FROM SITE & PROPERLY DISPOSE OF THEM.
3. IF REMOVAL OF EXISTING ELECTRICAL SYSTEMS RENDERS EXISTING ELECTRICAL SYSTEMS DOWNSTREAM TO REMAIN INOPERABLE, PROVIDE U-BOXES, CONDUIT WIRING AND SPLICES ABOVE ACCESSIBLE CEILINGS IN ORDER TO CONTINUE OPERATION.
4. PRIOR TO DEMOLITION, IN CEILINGS SCHEDULED TO BE REMOVED AND (OR) REPLACED FOR NEW WORK, PREPARE REFLECTED CEILING PLAN SKETCH SHOWING LOCATIONS OF ALL CEILING COMPONENTS AND DEVICES TO BE RE-USED INCLUDING BUT NOT LIMITED TO:
  - LIGHT FIXTURES
  - SPEAKERS
  - WIRELESS ACCESS POINTS
  - FIRE ALARM DEVICES
  - ETC.
 IF ANY OF THE ABOVE ITEMS ARE IN NON-WORKING CONDITION, SUBMIT A WRITTEN REPORT TO OWNER/ARCHITECT. TEMPORARY SUPPORT AND OR REMOVAL OF THESE SYSTEMS SHALL BE PROVIDED FOR NEW WORK.
5. PROVIDE BLANK COVER PLATE FOR UNUSED BACK BOXES.

**DEMOLITION KEYED NOTES:**

- ① DISCONNECT AND REMOVE EXISTING SWITCHES ALONG WITH RELATED WIRING - TYPICAL.
- ② EXISTING LIGHT FIXTURE TO REMAIN AS IS - TYPICAL.
- ③ APPROXIMATE LOCATION OF EXISTING LIGHTING PANELBOARD SERVING INTERIOR AND EXTERIOR LIGHTING CIRCUITS.
- ④ DISCONNECT AND REMOVE EXISTING CEILING OCCUPANCY SENSOR (WIRED) ALONG WITH RELATED WIRING, POWER PACK, CONTROL PANELS, ETC - TYPICAL.

**GENERAL NOTES:**

1. LIGHTING BRANCH CIRCUIT HOMERUNS SHALL BE 3/4" - 2#12 & #125. 20A/277V HOMERUNS EXCEEDING 200FT THE WIRE SIZE SHALL BE #10 & #8 FOR 275'.
2. INTERIOR LIGHTING CONTROLS SHALL BE BY VACANCY SENSORS.
4. EXTERIOR LIGHTING CONTROLS SHALL BE BY LIGHTING CONTACTOR. TIME CONTROL/SCHEDULES VIA LUTRON VIVE HUB.

**KEYED NOTES:**

- 1 PROVIDE AND CONNECT LIGHTING SWITCHES (WIRELESS) - TYPICAL.
- 2 PROVIDE AND CONNECT POWER PACK TO THE ASSOCIATED LIGHT FIXTURES.
- 3 PROVIDE AND CONNECT NEW WALL LIGHTING SWITCH SENSOR (WIRED) - TYPICAL.
- 4 PROVIDE WIREGUARD FOR ALL VACANCY SENSOR LOCATED IN GYMNASIUM.
- 5 PROVIDE CLEAR LOCKING COVER.
- 6 EXISTING LIGHTING CONTROLS IN THIS ROOM TO REMAIN AS IS.
- 7 TIME SCHEDULE VIA THE LUTRON VIVE HUB.

NO. REVISION: BY:

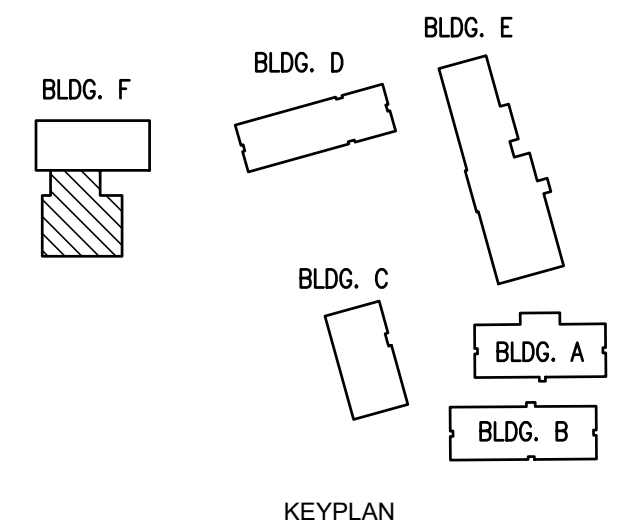
COPY NO:

TEXAS

IDEA PUBLIC SCHOOLS  
 ELECTRICAL AND LIGHTING UPGRADES  
 AT RGV CAMPUSES

1126 SOUTH COMMERCE ST.  
 HARLINGEN, TX  
 PHONE: 361-230-3425  
 TEXAS REGISTERED  
 ENGINEERING FIRM  
 F-15998

DATE: FEBRUARY 23, 2024  
 CHECKED BY: G.O.  
 DRAWN BY: R.E.  
 PROJECT NO.: 23v80  
 CAD FILE:  
 SHEET:  
**E5.09**



IDEA MISSION



IDEA PUBLIC SCHOOLS  
ELECTRICAL AND LIGHTING UPGRADES  
AT RGV CAMPUSES



1126 SOUTH COMMERCE ST.  
HARLINGEN, TX  
PHONE: 361-230-3425  
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DATE: FEBRUARY 23, 2024

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PROJECT NO.: 23v80

CAD FILE:  
SHEET:

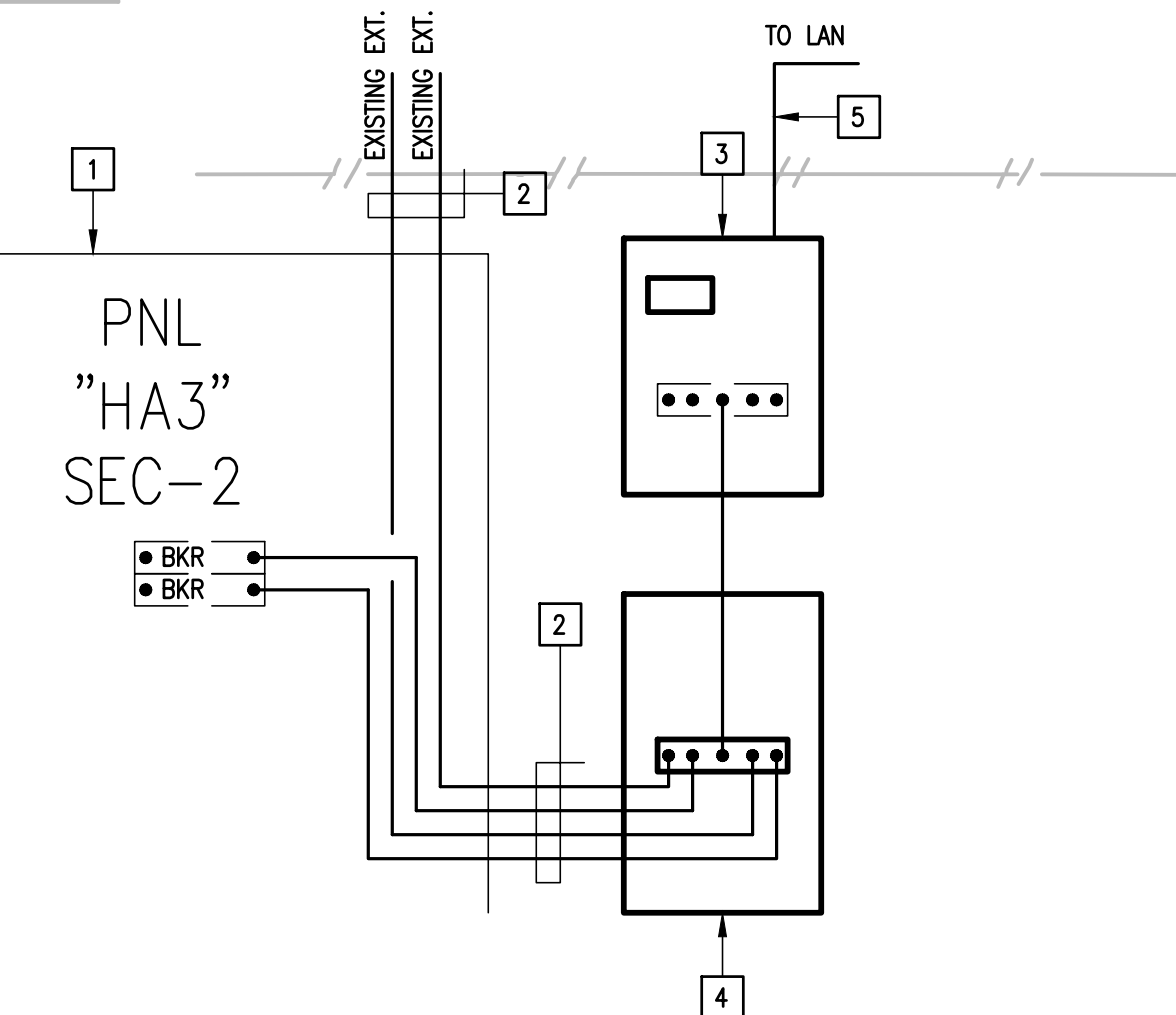
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KEYED NOTES:

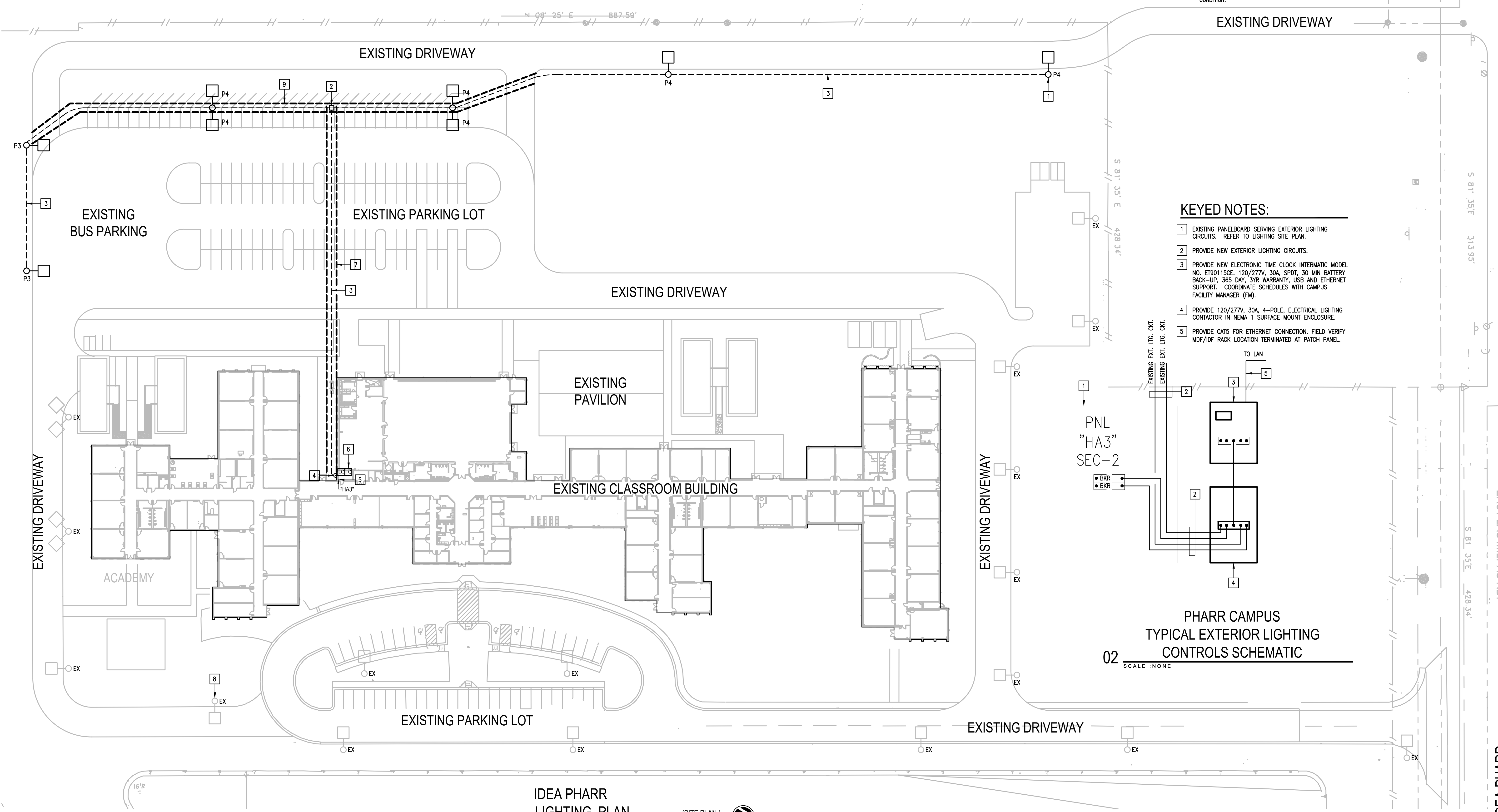
- 1 PROVIDE POLE LIGHTS AS SCHEDULED - TYPICAL. SEE DETAIL.
- 2 PROVIDE 12"x12" TIER 22 RATED POLYMER CONCRETE PULLBOX WITH "ELECTRICAL" COVER LOGO. SEE DETAIL.
- 3 PROVIDE UNDERGROUND BRANCH CIRCUIT: 1" - 3#8 & #10G (480V).
- 4 STUB-UP ALONG EXTERIOR WALL AND PENETRATE BUILDING AT ACCESSIBLE LOCATION.
- 5 EXISTING 600A, 277/480V, 3#, 4W, SIEMENS TYPE P3 PANELBOARD. PROVIDE A 20A/2P BREAKER IN AVAILABLE SPACE TO CONNECT NEW LIGHTING POLES.
- 6 PROVIDE NEW LIGHTING CONTACTOR AND ELECTRONIC TIME CLOCK. SEE DETAIL THIS SHEET.
- 7 PROVIDE BORE UNDER EXISTING DRIVES/PARKING.
- 8 EXISTING LIGHT POLE TO REMAIN AS IS.
- 9 SAW CUT EXISTING ASPHALT PARKING LOT. PATCH TO MATCH EXISTING CONDITION.

KEYED NOTES:

- 1 EXISTING PANELBOARD SERVING EXTERIOR LIGHTING CIRCUITS. REFER TO LIGHTING SITE PLAN.
- 2 PROVIDE NEW EXTERIOR LIGHTING CIRCUITS.
- 3 PROVIDE NEW ELECTRONIC TIME CLOCK INTERMATIC MODEL NO. ET90115CE, 120/277V, 30A, SPOT, 30 MIN BATTERY BACK-UP, 365 DAY, 3YR WARRANTY, USB AND ETHERNET SUPPORT. COORDINATE SCHEDULES WITH CAMPUS FACILITY MANAGER (FM).
- 4 PROVIDE 120/277V, 30A, 4-POLE, ELECTRICAL LIGHTING CONTACTOR IN NEMA 1 SURFACE MOUNT ENCLOSURE.
- 5 PROVIDE CAT5 FOR ETHERNET CONNECTION. FIELD VERIFY MDF/IDF RACK LOCATION TERMINATED AT PATCH PANEL.



PHARR CAMPUS  
TYPICAL EXTERIOR LIGHTING  
CONTROLS SCHEMATIC  
02  
SCALE: NONE



IDEA PHARR  
LIGHTING PLAN  
01  
SCALE: 1" = 40'-0"  
(SITE PLAN)  
PLAN NORTH



**KEYED NOTES:**

- 1 DISCONNECT AND REMOVE EXISTING OUTDOOR PHOTO CELL ALONG WITH RELATED WIRING. PROVIDE A WEATHER PROOF BLANK COVER. FIELD VERIFY EXACT LOCATION.

NO. REVISION: BY:

COPY NO:



TEXAS

**IDEA PUBLIC SCHOOLS  
ELECTRICAL AND LIGHTING UPGRADES  
AT RGV CAMPUSES**



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PHONE: 361-230-3425  
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DATE: FEBRUARY 23, 2024

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DRAWN BY: R.E.

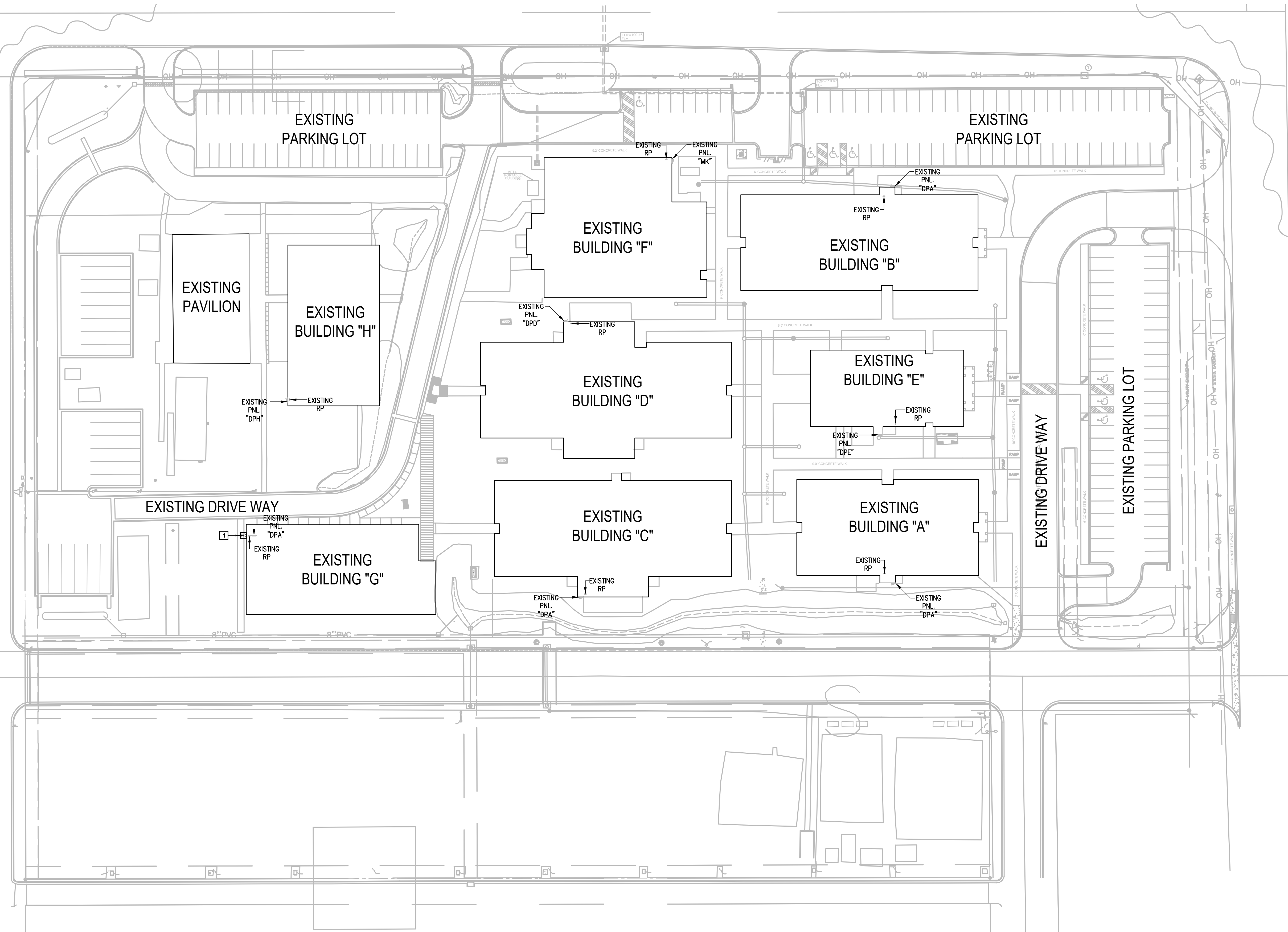
PROJECT NO.: 23v80

CAD FILE:

SHEET:

**E7.01**

IDEA QUEST



**IDEA QUEST**  
**01 LIGHTING PLAN** (SITE PLAN)  
 SCALE: 1" = 40'-0"  
 PLAN NORTH



**DEMOLITION GENERAL NOTES:**

1. THE EXTENT OF DEMOLITION WORK IS INDICATED ON THE DRAWINGS AND BY THE REQUIREMENTS OF THIS SECTION. A VISIT TO THE SITE IS REQUIRED TO PROPERLY BID THE DEMOLITION WORK.
2. REMOVED MATERIALS SHALL BELONG TO OWNER. DELIVER THEM TO OWNERS DESIGNATED LOCATION. IF OWNER DOES NOT WANT THE REMOVED MATERIALS THEN REMOVE THEM FROM SITE & PROPERLY DISPOSE OF THEM.
3. IF REMOVAL OF EXISTING ELECTRICAL SYSTEMS RENDERS EXISTING ELECTRICAL SYSTEMS DOWNSTREAM TO REMAIN INOPERABLE, PROVIDE J-BOXES, CONDUIT WIRING AND SPLICES ABOVE ACCESSIBLE CEILINGS IN ORDER TO CONTINUE OPERATION.
4. PRIOR TO DEMOLITION, IN CEILINGS TO BE REMOVED AND (OR) REPLACED FOR NEW WORK, PREPARE REFLECTED CEILING PLAN SKETCH SHOWING LOCATIONS OF ALL CEILING COMPONENTS AND DEVICES TO BE RE-USED INCLUDING BUT NOT LIMITED TO:
  - LIGHT FIXTURES
  - SPEAKERS
  - WIRELESS ACCESS POINTS
  - FIRE ALARM DEVICES
  - ETC.
 IF ANY OF THE ABOVE ITEMS ARE IN NON-WORKING CONDITION, SUBMIT A WRITTEN REPORT TO OWNER/ARCHITECT. TEMPORARY SUPPORT AND OR REMOVAL OF THESE SYSTEMS SHALL BE PROVIDED FOR NEW WORK.
5. PROVIDE BLANK COVER PLATE FOR UNUSED BACK BOXES.

**DEMOLITION KEYED NOTES:**

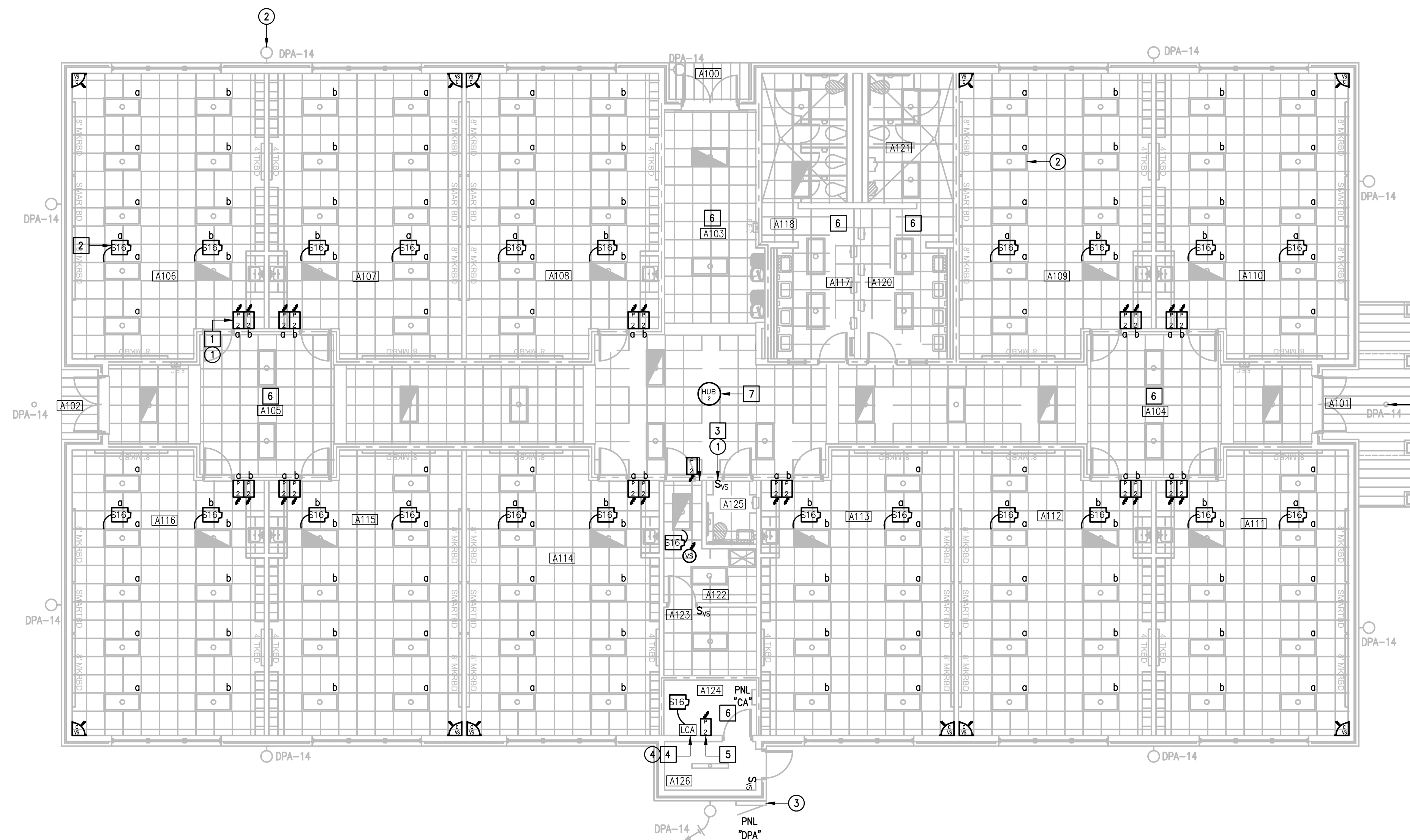
- 1 DISCONNECT AND REMOVE EXISTING TOGGLE SWITCHES (SWEEPER) ALONG WITH RELATED WIRING - TYPICAL.
- 2 EXISTING LIGHT FIXTURE TO REMAIN AS IS - TYPICAL.
- 3 APPROXIMATED LOCATION OF EXISTING LIGHTING PANELBOARD SERVING INTERIOR AND EXTERIOR LIGHTING CIRCUITS.
- 4 DISCONNECT AND REMOVE EXISTING LIGHTING RELAY PANEL - TYPICAL.

**GENERAL NOTES:**

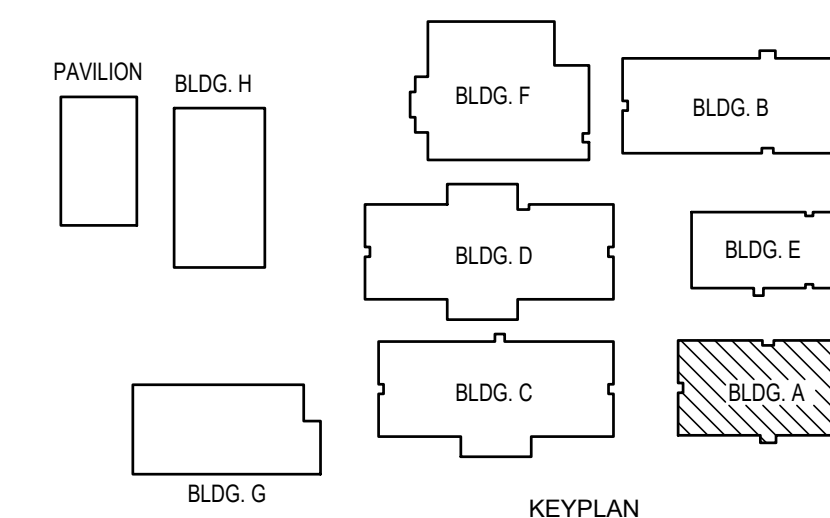
1. LIGHTING BRANCH CIRCUIT HOMERUNS SHALL BE 3/4" - 2#12 & #12G. 20A/277V HOMERUNS EXCEEDING 200FT THE WIRE SIZE SHALL BE #10 & #8 FOR 275'.
2. INTERIOR LIGHTING CONTROLS SHALL BE BY VACANCY SENSORS.
3. EXTERIOR LIGHTING CONTROLS SHALL BE BY LIGHTING CONTACTOR. TIME CONTROL/SCHEDULES BAS INTEGRATION/VA LUTRON WVE HUB.

**KEYED NOTES:**

- 1 PROVIDE NEW LIGHTING SWITCHES (WIRELESS) - TYPICAL.
- 2 PROVIDE AND CONNECT POWER PAK TO THE ASSOCIATED LIGHT FIXTURES - TYPICAL.
- 3 PROVIDE AND CONNECT NEW WALL LIGHTING SWITCH SENSOR (WIRED) - TYPICAL.
- 4 PROVIDE LIGHTING CONTACTORS "LC". PROVIDE LUTRON RELAY POWER PAK AND WIRELESS SWITCH FOR TIME CONTROL AND OVERRIDE FOR EACH - SEE DETAIL.
- 5 FOR EXTERIOR LIGHTING CONTACTOR OVERRIDE.
- 6 EXISTING LIGHTING CONTROLS IN THIS ROOM TO REMAIN AS IS.
- 7 PROVIDE FLUSH MOUNTED TO CEILING. CONNECT TO EXISTING PANELBOARD "CA"; BRANCH CIRCUIT: 1/2" - 2#12 & #12G. PROVIDE A 20A/1P BREAKER IN AVAILABLE SPACE.



01 **IDEA QUEST LIGHTING PLAN** (BUILDING A)  
 SCALE: 1/8" = 1'-0"  
 PLAN NORTH



IDEA QUEST



1126 SOUTH COMMERCE ST.  
 HARLINGEN, TX  
 PHONE: 361-230-3435  
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 DRAWN BY: R.E.  
 PROJECT NO.: 23v80  
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 SHEET:

**E7.02**





### DEMOLITION GENERAL NOTES:

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3. IF REMOVAL OF EXISTING ELECTRICAL SYSTEMS RENDERS EXISTING ELECTRICAL SYSTEMS DOWNSTREAM TO REMAIN INOPERABLE. PROVIDE J-BOXES, CONDUIT WIRING AND SPLICES ABOVE ACCESSIBLE CEILING IN ORDER TO CONTINUE OPERATION.
4. PRIOR TO DEMOLITION, IN CEILING TO BE REMOVED AND (OR) REPLACED FOR NEW WORK, PREPARE REFLECTED CEILING PLAN SKETCH SHOWING LOCATIONS OF ALL CEILING COMPONENTS AND DEVICES TO BE RE-USED INCLUDING BUT NOT LIMITED TO:
  - LIGHT FIXTURES
  - SPEAKERS
  - WIRELESS ACCESS POINTS
  - FIRE ALARM DEVICES
  - ETC.
 IF ANY OF THE ABOVE ITEMS ARE IN NON-WORKING CONDITION, SUBMIT A WRITTEN REPORT TO OWNER/ARCHITECT. TEMPORARY SUPPORT AND OR REMOVAL OF THESE SYSTEMS SHALL BE PROVIDED FOR NEW WORK.
5. PROVIDE BLANK COVER PLATE FOR UNUSED BACK BOXES.

### DEMOLITION KEYED NOTES:

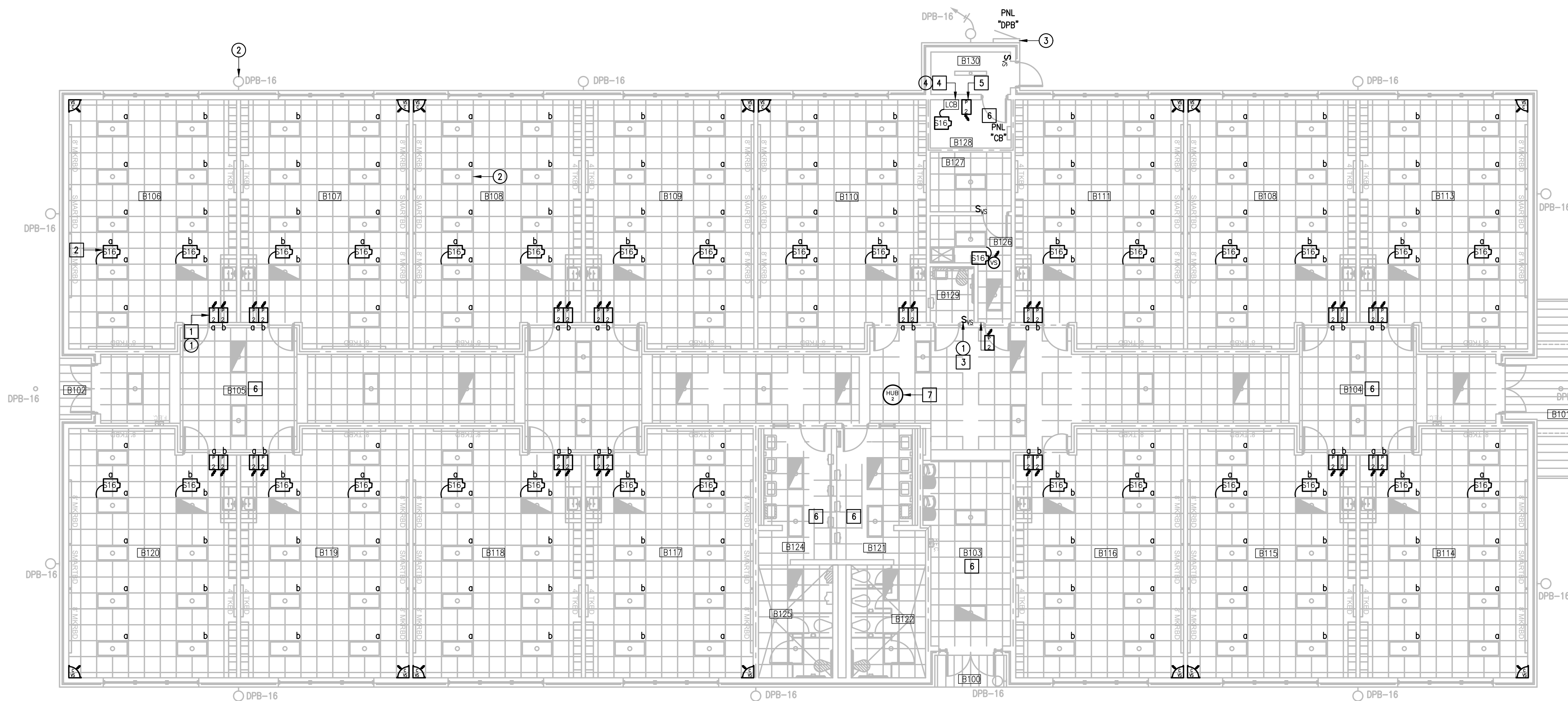
- 1 DISCONNECT AND REMOVE EXISTING TOGGLE SWITCHES (SWEEPER) ALONG WITH RELATED WIRING - TYPICAL.
- 2 EXISTING LIGHT FIXTURE TO REMAIN AS IS - TYPICAL.
- 3 APPROXIMATED LOCATION OF EXISTING LIGHTING PANELBOARD SERVING INTERIOR AND EXTERIOR LIGHTING CIRCUITS.
- 4 DISCONNECT AND REMOVE EXISTING LIGHTING RELAY PANEL - TYPICAL.

### GENERAL NOTES:

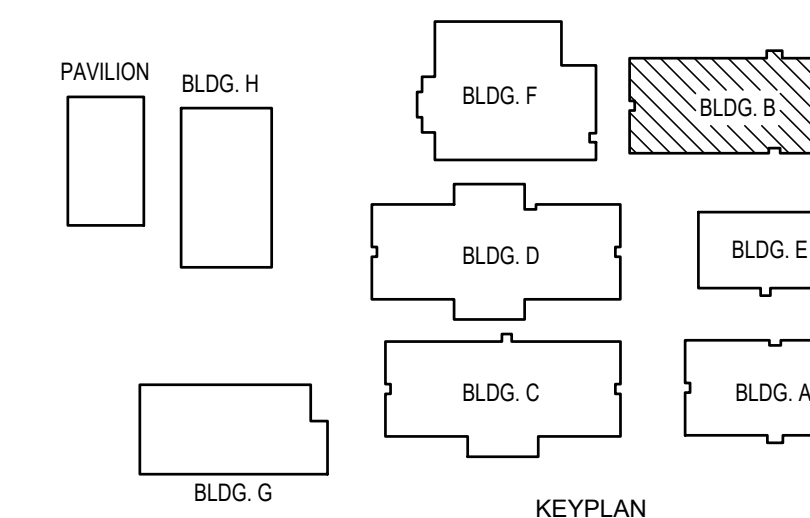
1. LIGHTING BRANCH CIRCUIT HOMERUNS SHALL BE 3/4" - 2#12 & #12G. 20A/277V HOMERUNS EXCEEDING 200FT THE WIRE SIZE SHALL BE #10 & #8 FOR 275'.
2. INTERIOR LIGHTING CONTROLS SHALL BE BY VACANCY SENSORS.
3. EXTERIOR LIGHTING CONTROLS SHALL BE BY LIGHTING CONTACTOR. TIME CONTROL/SCHEDULES BAS INTEGRATION/MA LUTRON WIVE HUB.

### KEYED NOTES:

- 1 PROVIDE NEW LIGHTING SWITCHES (WIRELESS) - TYPICAL.
- 2 PROVIDE AND CONNECT POWER PAK TO THE ASSOCIATED LIGHT FIXTURES - TYPICAL.
- 3 PROVIDE AND CONNECT NEW WALL LIGHTING SWITCH SENSOR (WIRED) - TYPICAL.
- 4 PROVIDE LIGHTING CONTACTORS "LC". PROVIDE LUTRON RELAY POWER PAK AND WIRELESS SWITCH FOR TIME CONTROL AND OVERRIDE FOR EACH - SEE DETAIL.
- 5 FOR LIGHTING CONTACTOR OVERRIDE.
- 6 EXISTING LIGHTING CONTROLS IN THIS ROOM TO REMAIN AS IS.
- 7 PROVIDE FLUSH MOUNTED TO CEILING. CONNECT TO EXISTING PANELBOARD "CB"; BRANCH CIRCUIT: 1/2" - 2#12 & #12G. PROVIDE A 20A/1P BREAKER IN AVAILABLE SPACE.



IDEA QUEST  
 01 LIGHTING PLAN (BUILDING B)  
 SCALE : 1/8" = 1'-0"



IDEA QUEST



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 PROJECT NO.: 23v80  
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E7.03



DEMOLITION GENERAL NOTES:

1. THE EXTENT OF DEMOLITION WORK IS INDICATED ON THE DRAWINGS AND BY THE REQUIREMENTS OF THIS SECTION. A VISIT TO THE SITE IS REQUIRED TO PROPERLY BID THE DEMOLITION WORK.
2. REMOVED MATERIALS SHALL BELONG TO OWNER. DELIVER THEM TO OWNERS DESIGNATED LOCATION. IF OWNER DOES NOT WANT THE REMOVED MATERIALS THEN REMOVE THEM FROM SITE & PROPERLY DISPOSE OF THEM.
3. IF REMOVAL OF EXISTING ELECTRICAL SYSTEMS RENDERS EXISTING ELECTRICAL SYSTEMS DOWNSTREAM TO REMAIN INOPERABLE, PROVIDE J-BOXES, CONDUIT WIRING AND SPLICES ABOVE ACCESSIBLE CEILING IN ORDER TO CONTINUE OPERATION.
4. PRIOR TO DEMOLITION, IN CEILING TO BE REMOVED AND (OR) REPLACED FOR NEW WORK, PREPARE REFLECTED CEILING PLAN SKETCH SHOWING LOCATIONS OF ALL CEILING COMPONENTS AND DEVICES TO BE RE-USED INCLUDING BUT NOT LIMITED TO:
  - LIGHT FIXTURES
  - SPEAKERS
  - WIRELESS ACCESS POINTS
  - FIRE ALARM DEVICES
  - ETC.
 IF ANY OF THE ABOVE ITEMS ARE IN NON-WORKING CONDITION, SUBMIT A WRITTEN REPORT TO OWNER/ARCHITECT. TEMPORARY SUPPORT AND OR REMOVAL OF THESE SYSTEMS SHALL BE PROVIDED FOR NEW WORK.
5. PROVIDE BLANK COVER PLATE FOR UNUSED BACK BOXES.

DEMOLITION KEYED NOTES:

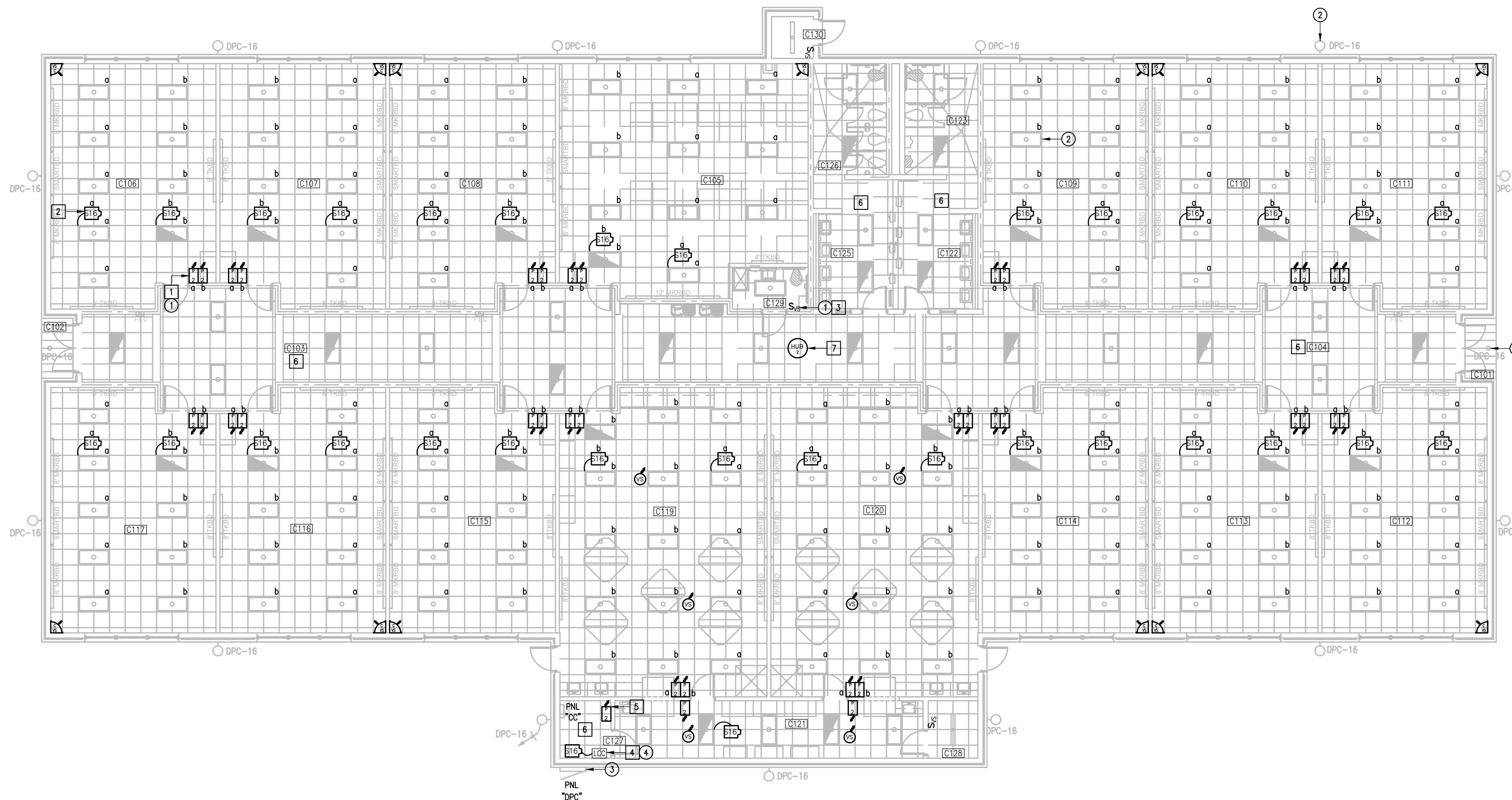
- 1 DISCONNECT AND REMOVE EXISTING TOGGLE SWITCHES (SWEEPER) ALONG WITH RELATED WIRING - TYPICAL.
- 2 EXISTING LIGHT FIXTURE TO REMAIN AS IS - TYPICAL.
- 3 APPROXIMATED LOCATION OF EXISTING LIGHTING PANELBOARD SERVING INTERIOR AND EXTERIOR LIGHTING CIRCUITS.
- 4 DISCONNECT AND REMOVE EXISTING LIGHTING RELAY PANEL - TYPICAL.

GENERAL NOTES:

1. LIGHTING BRANCH CIRCUIT HOMERUNS SHALL BE 3/4" - 2#12 & #12G. 20A/277V HOMERUNS EXCEEDING 200FT THE WIRE SIZE SHALL BE #10 & #8 FOR 275'.
2. INTERIOR LIGHTING CONTROLS SHALL BE BY VACANCY SENSORS.
3. EXTERIOR LIGHTING CONTROLS SHALL BE BY LIGHTING CONTACTOR. TIME CONTROL/SCHEDULES BAS INTEGRATION/MA LUTRON VIVE HUB.

KEYED NOTES:

- 1 PROVIDE NEW LIGHTING SWITCHES (WIRELESS) - TYPICAL.
- 2 PROVIDE AND CONNECT POWER PAK TO THE ASSOCIATED LIGHT FIXTURES - TYPICAL.
- 3 PROVIDE AND CONNECT NEW WALL LIGHTING SWITCH SENSOR (WIRED) - TYPICAL.
- 4 PROVIDE LIGHTING CONTACTORS "LC". PROVIDE LUTRON RELAY POWER PAK AND WIRELESS SWITCH FOR TIME CONTROL AND OVERRIDE FOR EACH - SEE DETAIL.
- 5 FOR LIGHTING CONTACTOR OVERRIDE.
- 6 EXISTING LIGHTING CONTROLS IN THIS ROOM TO REMAIN AS IS.
- 7 PROVIDE FLUSH MOUNTED TO CEILING. CONNECT TO EXISTING PANELBOARD "CC"; BRANCH CIRCUIT: 1/2" - 2#12 & #12G. PROVIDE A 20A/1P BREAKER IN AVAILABLE SPACE.



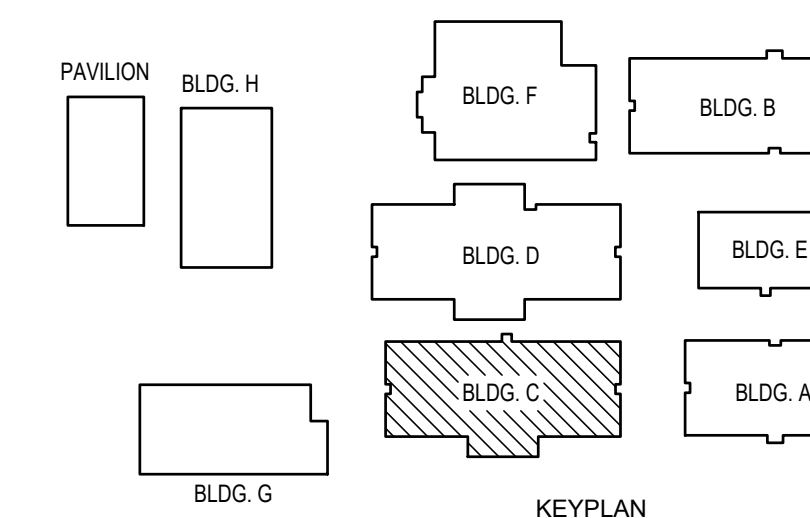
IDEA QUEST LIGHTING PLAN

01 SCALE: 1/8" = 1'-0"

(BUILDING C)



PLAN NORTH



IDEA QUEST



1126 SOUTH COMMERCE ST. HARLINGEN, TX. PHONE: 361-230-3435 TEXAS REGISTERED ENGINEERING FIRM F-15998

DATE: FEBRUARY 23, 2024

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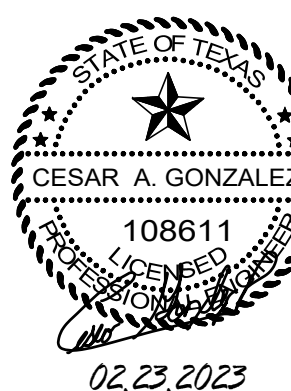
DRAWN BY: R.E.

PROJECT NO.: 23v80

CAD FILE: SHEET:

E7.04





### DEMOLITION GENERAL NOTES:

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- IF REMOVAL OF EXISTING ELECTRICAL SYSTEMS REQUIRES EXISTING ELECTRICAL SYSTEMS DOWNSTREAM TO REMAIN INOPERABLE, PROVIDE J-BOXES, CONDUIT WIRING AND SPLICES ABOVE ACCESSIBLE CEILING IN ORDER TO CONTINUE OPERATION.
- PRIOR TO DEMOLITION, IN CEILING TO BE REMOVED AND (OR) REPLACED FOR NEW WORK, PREPARE REFLECTED CEILING PLAN SKETCH SHOWING LOCATIONS OF ALL CEILING COMPONENTS AND DEVICES TO BE RE-USED INCLUDING BUT NOT LIMITED TO:
  - LIGHT FIXTURES
  - SPEAKERS
  - WIRELESS ACCESS POINTS
  - FIRE ALARM DEVICES
  - ETC.
 IF ANY OF THE ABOVE ITEMS ARE IN NON-WORKING CONDITION, SUBMIT A WRITTEN REPORT TO OWNER/ARCHITECT. TEMPORARY SUPPORT AND OR REMOVAL OF THESE SYSTEMS SHALL BE PROVIDED FOR NEW WORK.
- PROVIDE BLANK COVER PLATE FOR UNUSED BACK BOXES.

### DEMOLITION KEYED NOTES:

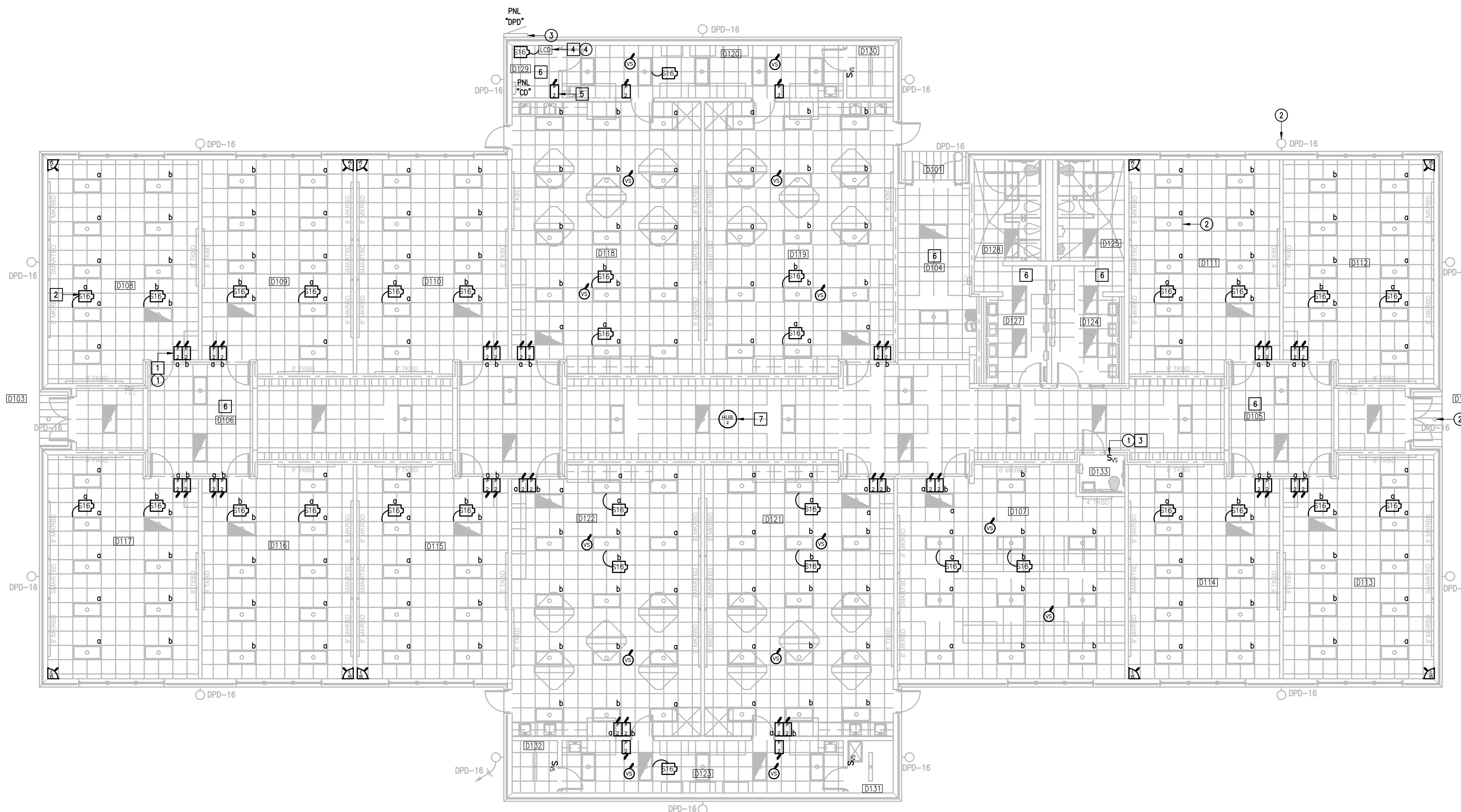
- DISCONNECT AND REMOVE EXISTING TOGGLE SWITCHES (SWEEPER) ALONG WITH RELATED WIRING - TYPICAL.
- EXISTING LIGHT FIXTURE TO REMAIN AS IS - TYPICAL.
- APPROXIMATED LOCATION OF EXISTING LIGHTING PANELBOARD SERVING INTERIOR AND EXTERIOR LIGHTING CIRCUITS.
- DISCONNECT AND REMOVE EXISTING LIGHTING RELAY PANEL - TYPICAL.

### GENERAL NOTES:

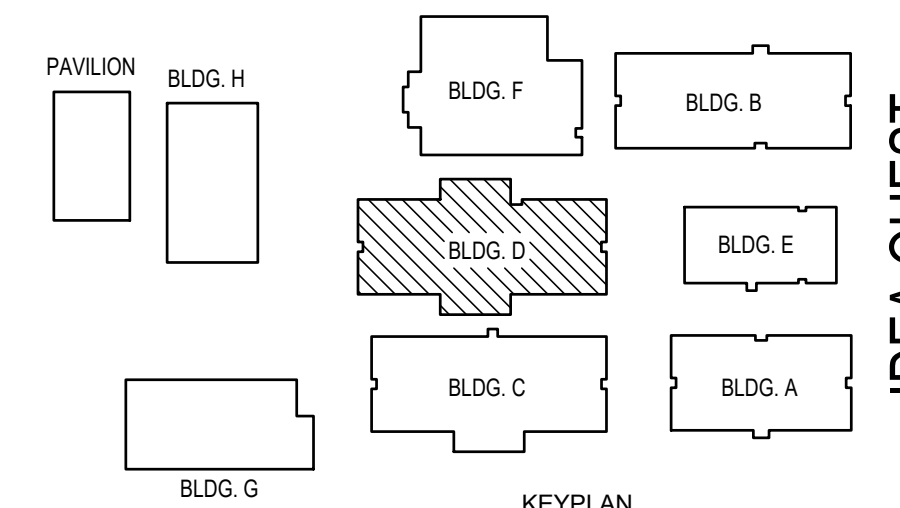
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- INTERIOR LIGHTING CONTROLS SHALL BE BY VACANCY SENSORS.
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### KEYED NOTES:

- PROVIDE NEW LIGHTING SWITCHES (WIRELESS) - TYPICAL.
- PROVIDE AND CONNECT POWER PAK TO THE ASSOCIATED LIGHT FIXTURES - TYPICAL.
- PROVIDE AND CONNECT NEW WALL LIGHTING SWITCH SENSOR (WIRED) - TYPICAL.
- PROVIDE LIGHTING CONTACTORS "LC". PROVIDE LUTRON RELAY POWER PAK AND WIRELESS SWITCH FOR TIME CONTROL AND OVERRIDE FOR EACH - SEE DETAIL.
- FOR EXTERIOR LIGHTING CONTACTOR OVERRIDE.
- EXISTING LIGHTING CONTROLS IN THIS ROOM TO REMAIN AS IS.
- PROVIDE FLUSH MOUNTED TO CEILING. CONNECT TO EXISTING PANELBOARD "CD"; BRANCH CIRCUIT: 1/2" - 2#12 & #12G. PROVIDE A 20A/1P BREAKER IN AVAILABLE SPACE.



IDEA QUEST  
 LIGHTING PLAN (BUILDING D)  
 01 SCALE: 1/8" = 1'-0"  
 PLAN NORTH



IDEA PUBLIC SCHOOLS  
 ELECTRICAL AND LIGHTING UPGRADES  
 AT RGV CAMPUSES



DATE: FEBRUARY 23, 2024  
 CHECKED BY: G.Q.  
 DRAWN BY: R.E.  
 PROJECT NO.: 23v80  
 CAD FILE:  
 SHEET: E7.05



### DEMOLITION GENERAL NOTES:

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- PROVIDE BLANK COVER PLATE FOR UNUSED BACK BOXES.

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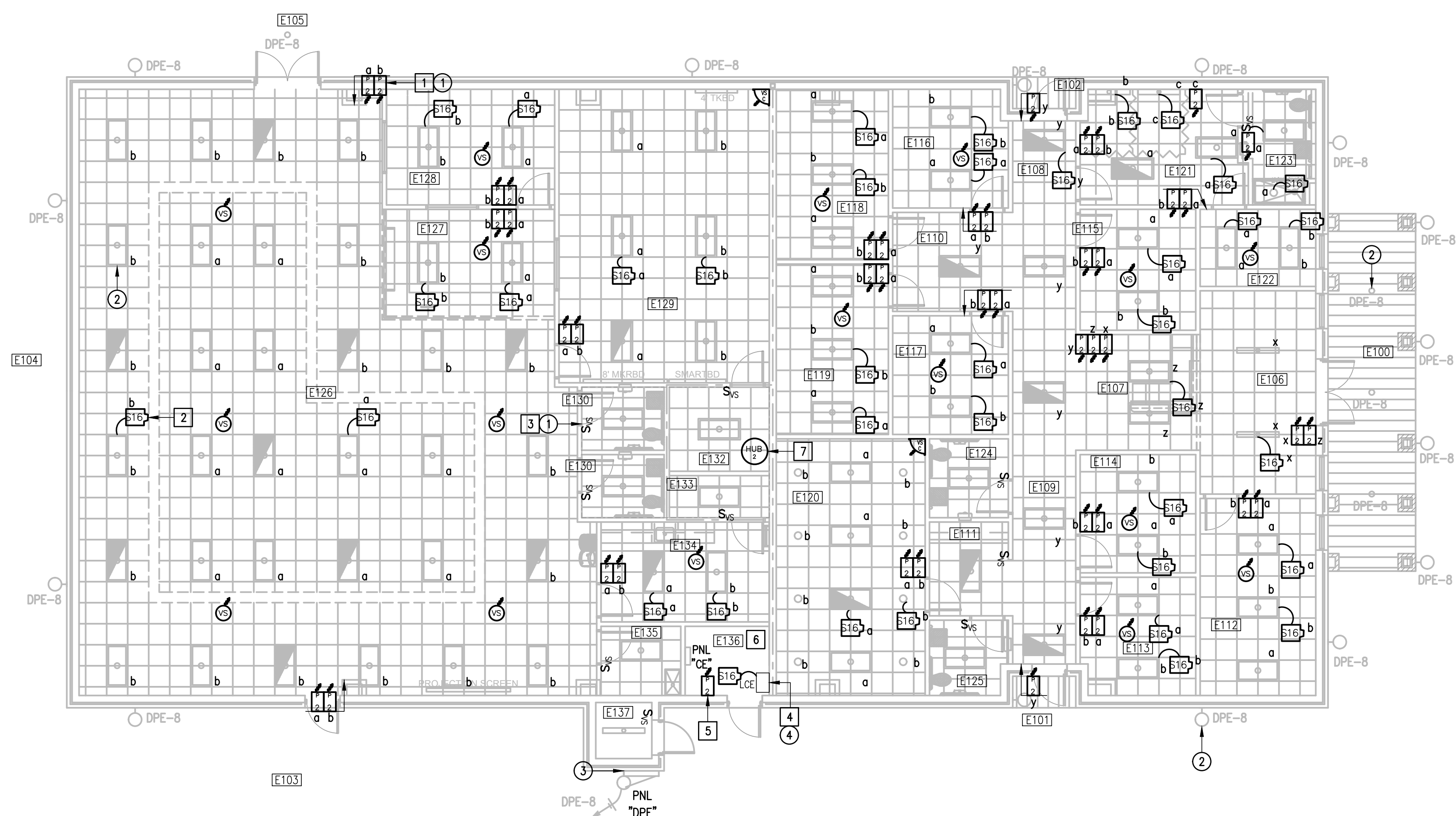
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- EXISTING LIGHT FIXTURE TO REMAIN AS IS - TYPICAL.
- APPROXIMATED LOCATION OF EXISTING LIGHTING PANELBOARD SERVING INTERIOR AND EXTERIOR LIGHTING CIRCUITS.
- DISCONNECT AND REMOVE EXISTING LIGHTING RELAY PANEL - TYPICAL.

### GENERAL NOTES:

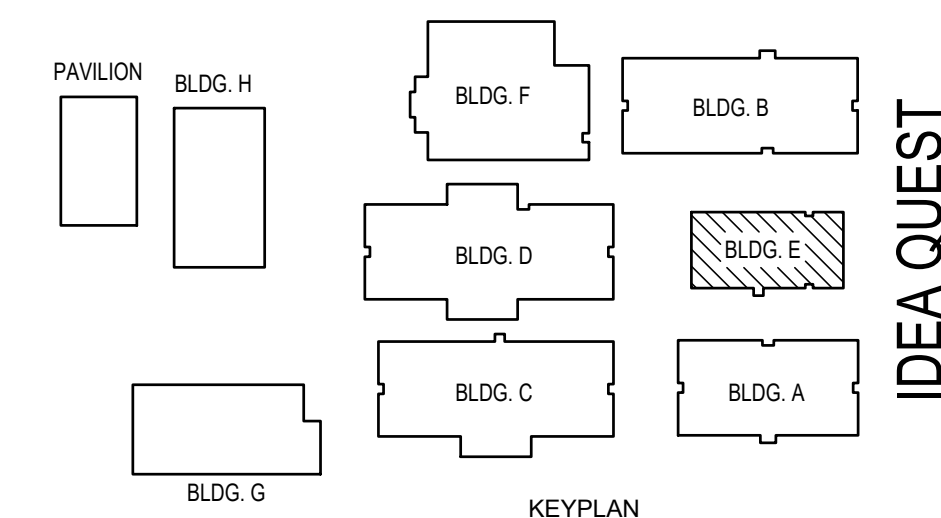
- LIGHTING BRANCH CIRCUIT HOMERUNS SHALL BE 3/4" - 2#12 & #12G. 20A/277V HOMERUNS EXCEEDING 200FT THE WIRE SIZE SHALL BE #10 & #8 FOR 275'.
- INTERIOR LIGHTING CONTROLS SHALL BE BY VACANCY SENSORS.
- EXTERIOR LIGHTING CONTROLS SHALL BE BY LIGHTING CONTACTOR. TIME CONTROL/SCHEDULES BAS INTEGRATION/MA LUTRON WVE HUB.

### KEYED NOTES:

- PROVIDE NEW LIGHTING SWITCHES (WIRELESS) - TYPICAL.
- PROVIDE AND CONNECT POWER PAK TO THE ASSOCIATED LIGHT FIXTURES - TYPICAL.
- PROVIDE AND CONNECT NEW WALL LIGHTING SWITCH SENSOR (WIRED) - TYPICAL.
- PROVIDE LIGHTING CONTACTORS "LC". PROVIDE LUTRON RELAY POWER PAK AND WIRELESS SWITCH FOR TIME CONTROL AND OVERRIDE FOR EACH - SEE DETAIL.
- FOR LIGHTING CONTACTOR OVERRIDE.
- EXISTING LIGHTING CONTROLS IN THIS ROOM TO REMAIN AS IS.
- PROVIDE FLUSH MOUNTED TO CEILING. CONNECT TO EXISTING PANELBOARD "CE"; BRANCH CIRCUIT: 1/2" - 2#12 & #12G. PROVIDE A 20A/1P BREAKER IN AVAILABLE SPACE.

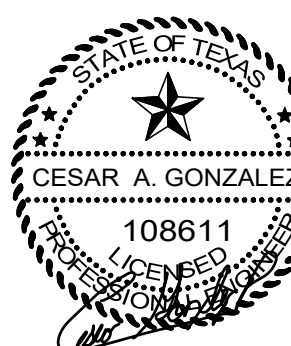


IDEA QUEST  
 01 LIGHTING PLAN (BUILDING E)  
 SCALE 1/8" = 1'-0"  
 PLAN NORTH



DATE: FEBRUARY 23, 2024  
 CHECKED BY: G.Q.  
 DRAWN BY: R.E.  
 PROJECT NO.: 23v80  
 CAD FILE:  
 SHEET:





TEXAS

### DEMOLITION GENERAL NOTES:

- THE EXTENT OF DEMOLITION WORK IS INDICATED ON THE DRAWINGS AND BY THE REQUIREMENTS OF THIS SECTION. A VISIT TO THE SITE IS REQUIRED TO PROPERLY BID THE DEMOLITION WORK.
- REMOVED MATERIALS SHALL BELONG TO OWNER. DELIVER THEM TO OWNERS DESIGNATED LOCATION. IF OWNER DOES NOT WANT THE REMOVED MATERIALS THEN REMOVE THEM FROM SITE & PROPERLY DISPOSE OF THEM.
- IF REMOVAL OF EXISTING ELECTRICAL SYSTEMS RENDERS EXISTING ELECTRICAL SYSTEMS DOWNSTREAM TO REMAIN INOPERABLE, PROVIDE J-BOXES, CONDUIT WIRING AND SPLICES ABOVE ACCESSIBLE CEILING IN ORDER TO CONTINUE OPERATION.
- PRIOR TO DEMOLITION, IN CEILING TO BE REMOVED AND (OR) REPLACED FOR NEW WORK, PREPARE REFLECTED CEILING PLAN SKETCH SHOWING LOCATIONS OF ALL CEILING COMPONENTS AND DEVICES TO BE RE-USED INCLUDING BUT NOT LIMITED TO:
  - LIGHT FIXTURES
  - SPEAKERS
  - WIRELESS ACCESS POINTS
  - FIRE ALARM DEVICES
  - ETC.
 IF ANY OF THE ABOVE ITEMS ARE IN NON-WORKING CONDITION, SUBMIT A WRITTEN REPORT TO OWNER/ARCHITECT. TEMPORARY SUPPORT AND OR REMOVAL OF THESE SYSTEMS SHALL BE PROVIDED FOR NEW WORK.
- PROVIDE BLANK COVER PLATE FOR UNUSED BACK BOXES.

### DEMOLITION KEYED NOTES:

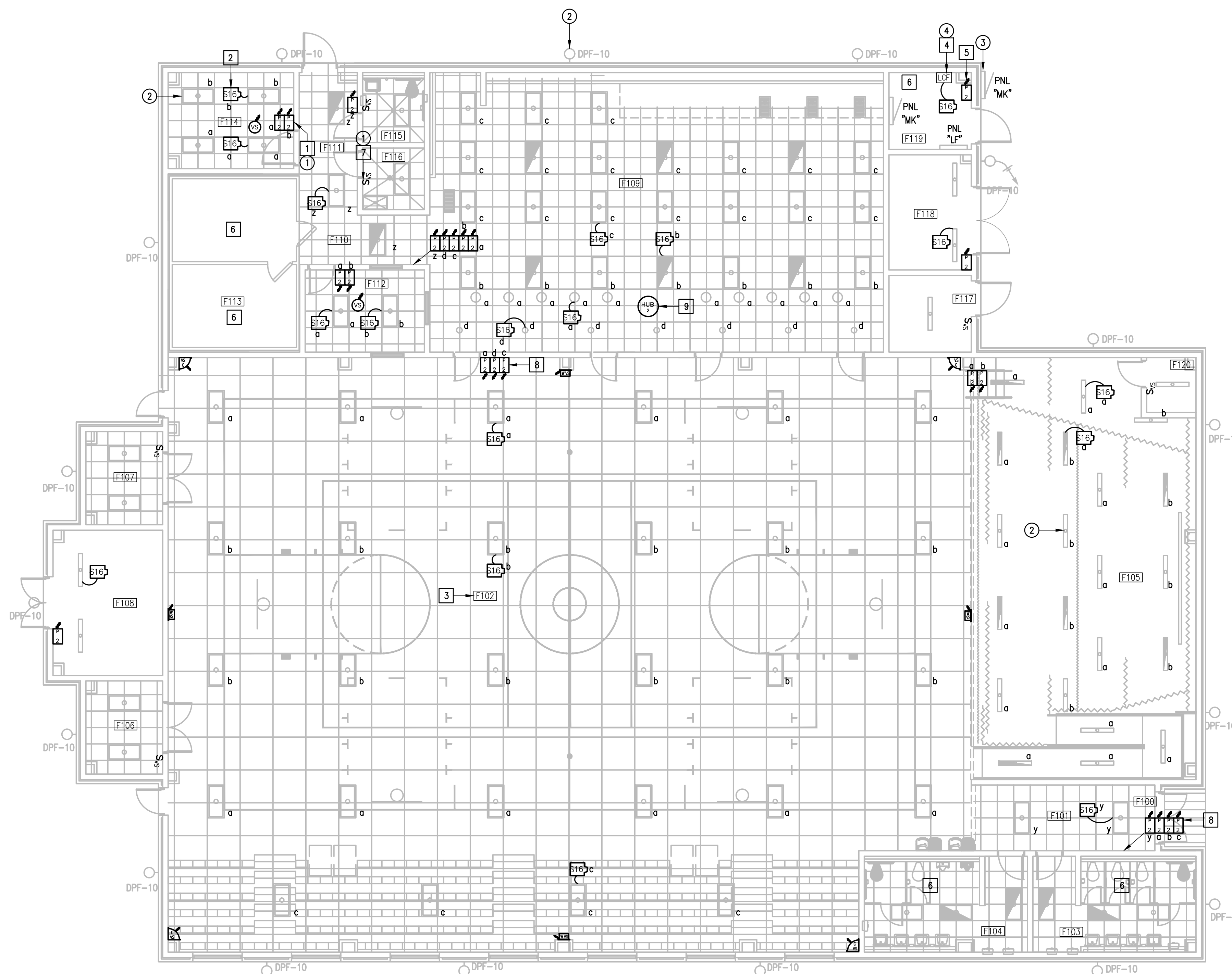
- DISCONNECT AND REMOVE EXISTING TOGGLE SWITCHES (SWEEPER) ALONG WITH RELATED WIRING - TYPICAL.
- EXISTING LIGHT FIXTURE TO REMAIN AS IS - TYPICAL.
- APPROXIMATE LOCATION OF EXISTING LIGHTING PANELBOARD SERVING INTERIOR AND EXTERIOR LIGHTING CIRCUITS.
- DISCONNECT AND REMOVE EXISTING LIGHTING RELAY PANEL. SEE DETAIL.

### GENERAL NOTES:

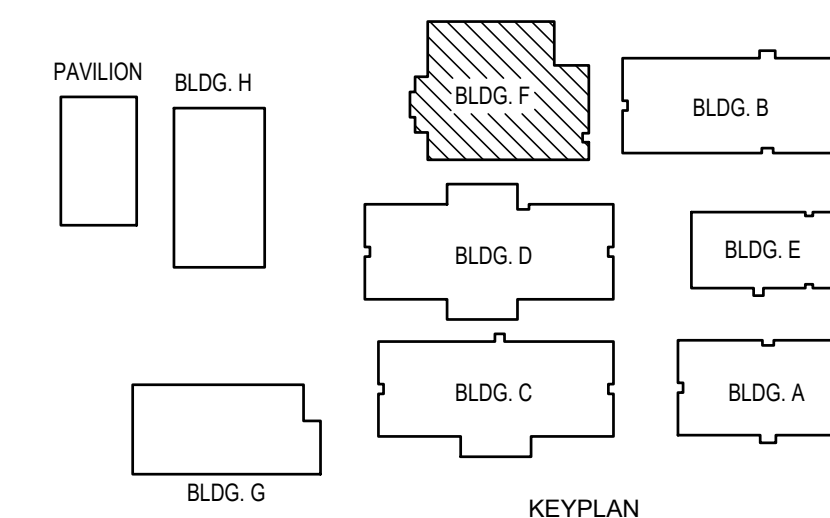
- LIGHTING BRANCH CIRCUIT HOMERUNS SHALL BE 3/4" - 2#12 & #12G. 20A/277V HOMERUNS EXCEEDING 200FT THE WIRE SIZE SHALL BE #10 & #8 FOR 275'.
- INTERIOR LIGHTING CONTROLS SHALL BE BY VACANCY SENSORS.
- EXTERIOR LIGHTING CONTROLS SHALL BE BY LIGHTING CONTACTOR. TIME CONTROL/SCHEDULES BAS INTEGRATION/MA LUTRON WVE HUB.

### KEYED NOTES:

- PROVIDE NEW LIGHTING SWITCHES (WIRELESS) - TYPICAL.
- PROVIDE AND CONNECT POWER PAK TO THE ASSOCIATED LIGHT FIXTURES - TYPICAL.
- PROVIDE WIREGUARD FOR ALL VACANCY SENSOR LOCATED IN GYMNASIUM.
- PROVIDE LIGHTING CONTACTOR. PROVIDE LUTRON RELAY POWER PAK AND WIRELESS SWITCH FOR TIME CONTROL AND OVERRIDE FOR EACH - SEE DETAIL.
- FOR EXTERIOR LIGHTING CONTACTOR OVERRIDE.
- EXISTING LIGHTING CONTROLS IN THIS ROOM TO REMAIN AS IS.
- PROVIDE AND CONNECT NEW WALL LIGHTING SWITCH SENSOR (WIRED) - TYPICAL.
- PROVIDE A CLEAR LOOKING COVER.
- PROVIDE FLUSH MOUNTED TO CEILING. CONNECT TO EXISTING PANELBOARD "LF"; BRANCH CIRCUIT: 1/2" - 2#12 & #12G. PROVIDE A 20A/1P BREAKER IN AVAILABLE SPACE.



01 IDEA QUEST LIGHTING PLAN (BUILDING F)  
 SCALE: 1/8" = 1'-0"  
 PLAN NORTH



IDEA PUBLIC SCHOOLS  
 ELECTRICAL AND LIGHTING UPGRADES  
 AT RGV CAMPUSES



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 HARLINGEN, TX  
 PHONE: 361-230-3425  
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 PROJECT NO.: 23v80  
 CAD FILE:  
 SHEET:

E7.07



**DEMOLITION GENERAL NOTES:**

- THE EXTENT OF DEMOLITION WORK IS INDICATED ON THE DRAWINGS AND BY THE REQUIREMENTS OF THIS SECTION. A VISIT TO THE SITE IS REQUIRED TO PROPERLY BID THE DEMOLITION WORK.
- REMOVED MATERIALS SHALL BELONG TO OWNER. DELIVER THEM TO OWNERS DESIGNATED LOCATION. IF OWNER DOES NOT WANT THE REMOVED MATERIALS THEN REMOVE THEM FROM SITE & PROPERLY DISPOSE OF THEM.
- IF REMOVAL OF EXISTING ELECTRICAL SYSTEMS RENDERS EXISTING ELECTRICAL SYSTEMS DOWNSTREAM TO REMAIN INOPERABLE, PROVIDE J-BOXES, CONDUIT WIRING AND SPLICES ABOVE ACCESSIBLE CEILINGS IN ORDER TO CONTINUE OPERATION.
- PRIOR TO DEMOLITION, IN CEILINGS TO BE REMOVED AND (OR) REPLACED FOR NEW WORK, PREPARE REFLECTED CEILING PLAN SKETCH SHOWING LOCATIONS OF ALL CEILING COMPONENTS AND DEVICES TO BE RE-USED INCLUDING BUT NOT LIMITED TO:
  - LIGHT FIXTURES
  - SPEAKERS
  - WIRELESS ACCESS POINTS
  - FIRE ALARM DEVICES
  - ETC.
 IF ANY OF THE ABOVE ITEMS ARE IN NON-WORKING CONDITION, SUBMIT A WRITTEN REPORT TO OWNER/ARCHITECT. TEMPORARY SUPPORT AND OR REMOVAL OF THESE SYSTEMS SHALL BE PROVIDED FOR NEW WORK.
- PROVIDE BLANK COVER PLATE FOR UNUSED BACK BOXES.

**DEMOLITION KEYED NOTES:**

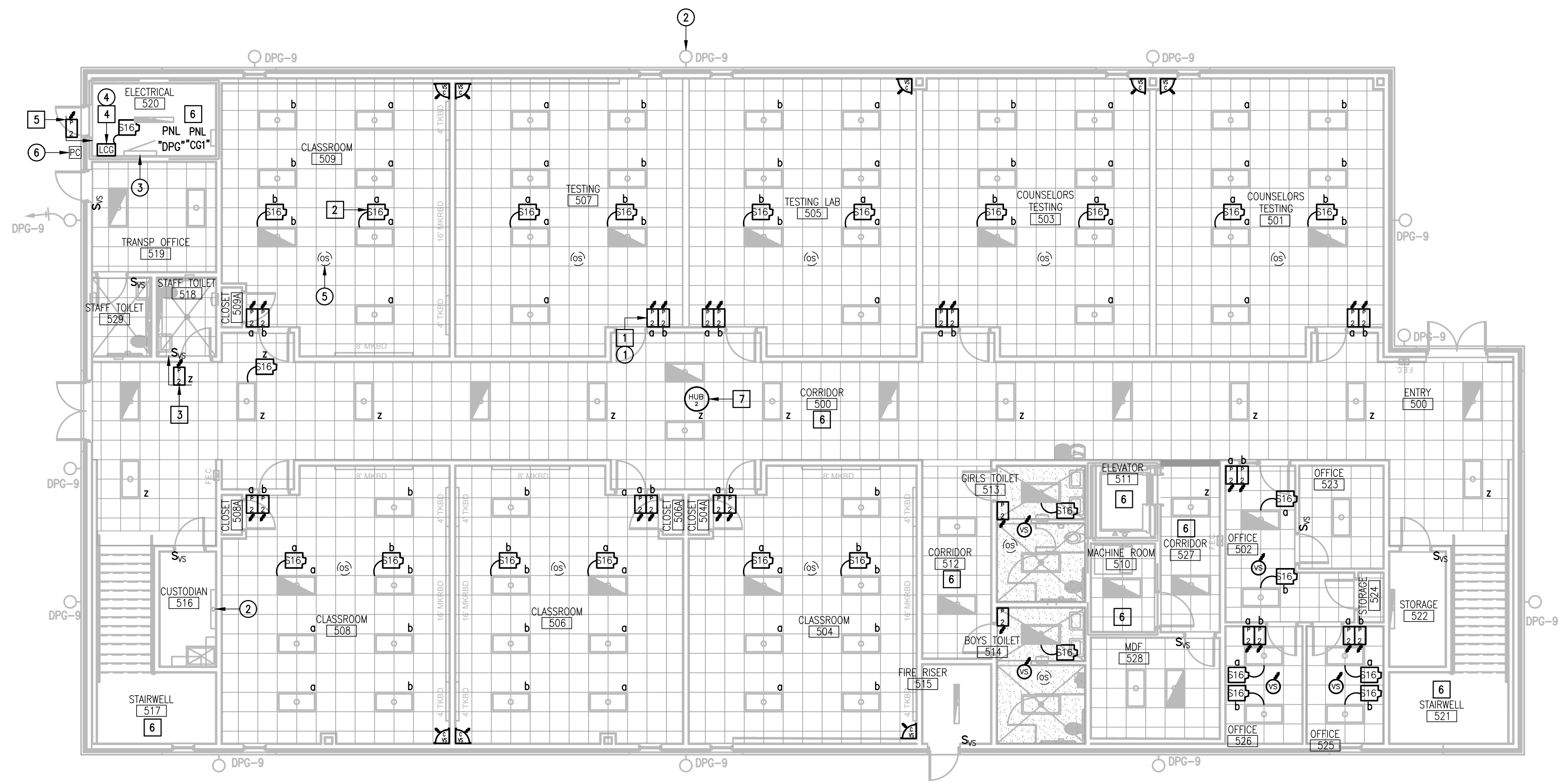
- DISCONNECT AND REMOVE EXISTING SWITCHES ALONG WITH RELATED WIRING - TYPICAL.
- EXISTING LIGHT FIXTURE TO REMAIN AS IS - TYPICAL.
- APPROXIMATE LOCATION OF EXISTING LIGHTING PANELBOARD SERVING INTERIOR AND EXTERIOR LIGHTING CIRCUITS.
- DISCONNECT AND REMOVE EXISTING LIGHTING RELAY PANEL. SEE DETAIL.
- DISCONNECT AND REMOVE EXISTING CEILING OCCUPANCY SENSOR (WIRED) ALONG WITH RELATED WIRING AND POWER PACK - TYPICAL.
- DISCONNECT AND REMOVE EXISTING PHOTOCELL ALONG WITH RELATED WIRING.

**GENERAL NOTES:**

- LIGHTING BRANCH CIRCUIT HOMERUNS SHALL BE 3/4" - 2#12 & #12G. 20A/277V HOMERUNS EXCEEDING 200FT THE WIRE SIZE SHALL BE #10 & #8 FOR 275'.
- INTERIOR LIGHTING CONTROLS SHALL BE BY VACANCY SENSORS.
- EXTERIOR LIGHTING CONTROLS SHALL BE BY LIGHTING CONTACTOR. TIME CONTROL/SCHEDULES BAS INTEGRATION/VA LUTRON VVE HUB.

**KEYED NOTES:**

- PROVIDE AND CONNECT LIGHTING SWITCHES (WIRELESS) - TYPICAL.
- PROVIDE AND CONNECT POWER PACK TO THE ASSOCIATED LIGHT FIXTURES.
- TIME SCHEDULE VIA THE LUTRON VVE HUB.
- PROVIDE LIGHTING CONTACTOR. PROVIDE LUTRON RELAY POWER PAK AND WIRELESS SWITCH FOR TIME CONTROL AND OVERRIDE FOR EACH.
- FOR EXTERIOR LIGHTING CONTACTOR OVERRIDE.
- EXISTING LIGHTING CONTROLS TO REMAIN AS IS.
- PROVIDE FLUSH MOUNTED TO CEILING. CONNECT TO EXISTING PANELBOARD \*CG1; BRANCH CIRCUIT: 1/2" - 2#12 & #12G. PROVIDE A 20A/1P BREAKER IN AVAILABLE SPACE.

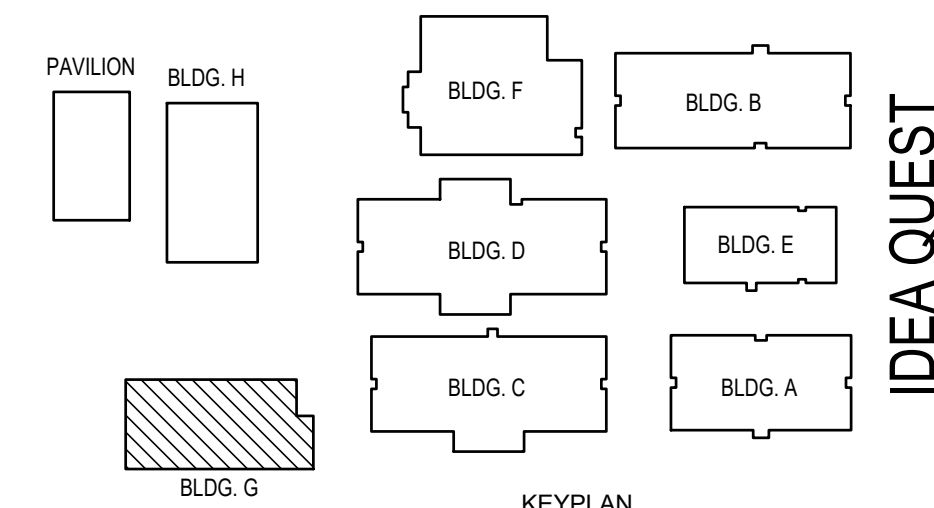


**IDEA QUEST LIGHTING PLAN (1ST FLOOR - BUILDING G)**  
 01 SCALE :1/8" = 1'-0"  
 PLAN NORTH

**IDEA PUBLIC SCHOOLS ELECTRICAL AND LIGHTING UPGRADES AT RGV CAMPUSES**



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 CHECKED BY: G.Q.  
 DRAWN BY: R.E.  
 PROJECT NO.: 23v80  
 CAD FILE: SHEET: **E7.08**



**IDEA QUEST**





**DEMOLITION GENERAL NOTES:**

1. THE EXTENT OF DEMOLITION WORK IS INDICATED ON THE DRAWINGS AND BY THE REQUIREMENTS OF THIS SECTION. A VISIT TO THE SITE IS REQUIRED TO PROPERLY BID THE DEMOLITION WORK.
2. REMOVED MATERIALS SHALL BELONG TO OWNER. DELIVER THEM TO OWNERS DESIGNATED LOCATION. IF OWNER DOES NOT WANT THE REMOVED MATERIALS THEN REMOVE THEM FROM SITE & PROPERLY DISPOSE OF THEM.
3. IF REMOVAL OF EXISTING ELECTRICAL SYSTEMS RENDERS EXISTING ELECTRICAL SYSTEMS DOWNSTREAM TO REMAIN INOPERABLE, PROVIDE J-BOXES, CONDUIT WIRING AND SPLICES ABOVE ACCESSIBLE CEILINGS IN ORDER TO CONTINUE OPERATION.
4. PRIOR TO DEMOLITION, IN CEILINGS TO BE REMOVED AND (OR) REPLACED FOR NEW WORK, PREPARE REFLECTED CEILING PLAN SKETCH SHOWING LOCATIONS OF ALL CEILING COMPONENTS AND DEVICES TO BE RE-USED INCLUDING BUT NOT LIMITED TO:
  - LIGHT FIXTURES
  - SPEAKERS
  - WIRELESS ACCESS POINTS
  - FIRE ALARM DEVICES
  - ETC.
 IF ANY OF THE ABOVE ITEMS ARE IN NON-WORKING CONDITION, SUBMIT A WRITTEN REPORT TO OWNER/ARCHITECT. TEMPORARY SUPPORT AND OR REMOVAL OF THESE SYSTEMS SHALL BE PROVIDED FOR NEW WORK.
5. PROVIDE BLANK COVER PLATE FOR UNUSED BACK BOXES.

**DEMOLITION KEYED NOTES:**

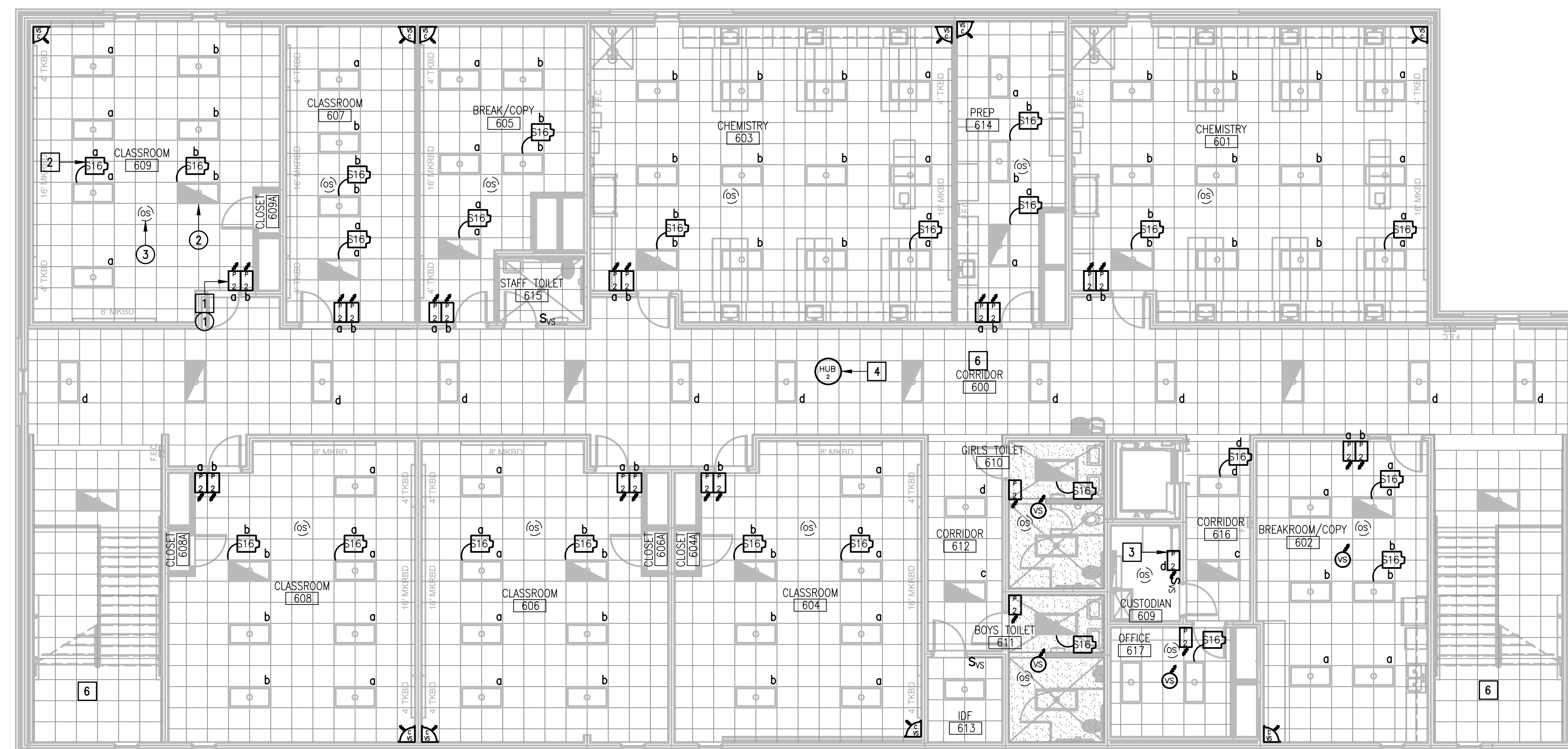
- 1 DISCONNECT AND REMOVE EXISTING SWITCHES ALONG WITH RELATED WIRING - TYPICAL.
- 2 EXISTING LIGHT FIXTURE TO REMAIN AS IS - TYPICAL.
- 3 DISCONNECT AND REMOVE EXISTING CEILING OCCUPANCY SENSOR (WIRED) ALONG WITH RELATED WIRING AND POWER PACK - TYPICAL.

**GENERAL NOTES:**

1. LIGHTING BRANCH CIRCUIT HOMERUNS SHALL BE 3/4" - 2#12 & #12G. 20A/277V HOMERUNS EXCEEDING 200FT THE WIRE SIZE SHALL BE #10 & #8 FOR 275'.
2. INTERIOR LIGHTING CONTROLS SHALL BE BY VACANCY SENSORS.
3. EXTERIOR LIGHTING CONTROLS SHALL BE BY LIGHTING CONTACTOR. TIME CONTROL/SCHEDULES BAS INTEGRATION/VIA LUTRON VIVE HUB.

**KEYED NOTES:**

- 1 PROVIDE AND CONNECT LIGHTING SWITCHES (WIRELESS) - TYPICAL.
- 2 PROVIDE AND CONNECT POWER PACK TO THE ASSOCIATED LIGHT FIXTURES.
- 3 TIME SCHEDULE VIA THE LUTRON VIVE HUB.
- 4 PROVIDE FLUSH MOUNTED TO CEILING. CONNECT TO EXISTING PANELBOARD "CG1"; BRANCH CIRCUIT: 1/2" - 2#12 & #12G. PROVIDE A 20A/1P BREAKER IN AVAILABLE SPACE.



IDEA QUEST  
 01 LIGHTING PLAN (2ND FLOOR - BUILDING G)  
 SCALE: 1/8" = 1'-0"  
 PLAN NORTH

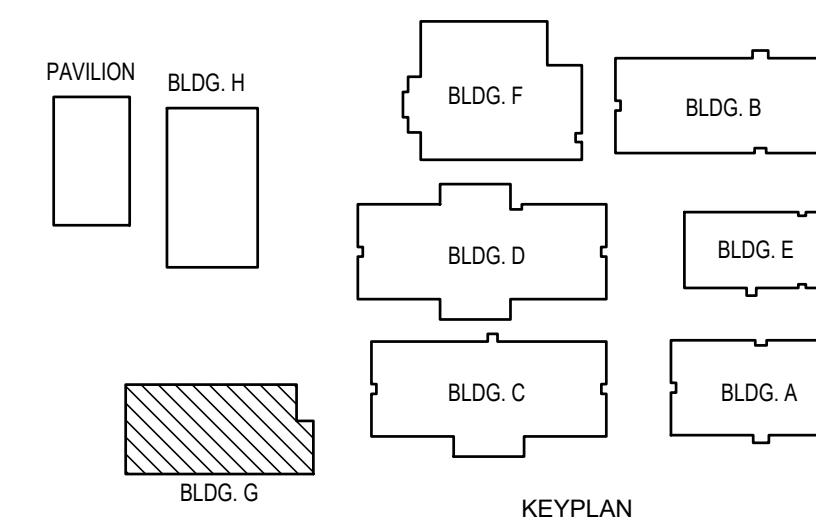
**IDEA PUBLIC SCHOOLS  
 ELECTRICAL AND LIGHTING UPGRADES  
 AT RGV CAMPUSES**



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 DRAWN BY: R.E.  
 PROJECT NO.: 23v80  
 CAD FILE:  
 SHEET:

**E7.09**



IDEA QUEST



### DEMOLITION GENERAL NOTES:

- THE EXTENT OF DEMOLITION WORK IS INDICATED ON THE DRAWINGS AND BY THE REQUIREMENTS OF THIS SECTION. A VISIT TO THE SITE IS REQUIRED TO PROPERLY BID THE DEMOLITION WORK.
- REMOVED MATERIALS SHALL BELONG TO OWNER. DELIVER THEM TO OWNERS DESIGNATED LOCATION. IF OWNER DOES NOT WANT THE REMOVED MATERIALS THEN REMOVE THEM FROM SITE & PROPERLY DISPOSE OF THEM.
- IF REMOVAL OF EXISTING ELECTRICAL SYSTEMS RENDERS EXISTING ELECTRICAL SYSTEMS DOWNSTREAM TO REMAIN INOPERABLE, PROVIDE J-BOXES, CONDUIT WIRING AND SPLICES ABOVE ACCESSIBLE CEILINGS IN ORDER TO CONTINUE OPERATION.
- PRIOR TO DEMOLITION, IN CEILINGS TO BE REMOVED AND (OR) REPLACED FOR NEW WORK, PREPARE REFLECTED CEILING PLAN SKETCH SHOWING LOCATIONS OF ALL CEILING COMPONENTS AND DEVICES TO BE RE-USED INCLUDING BUT NOT LIMITED TO:
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  - SPEAKERS
  - WIRELESS ACCESS POINTS
  - FIRE ALARM DEVICES
  - ETC.
 IF ANY OF THE ABOVE ITEMS ARE IN NON-WORKING CONDITION, SUBMIT A WRITTEN REPORT TO OWNER/ARCHITECT. TEMPORARY SUPPORT AND OR REMOVAL OF THESE SYSTEMS SHALL BE PROVIDED FOR NEW WORK.
- PROVIDE BLANK COVER PLATE FOR UNUSED BACK BOXES.

### DEMOLITION KEYED NOTES:

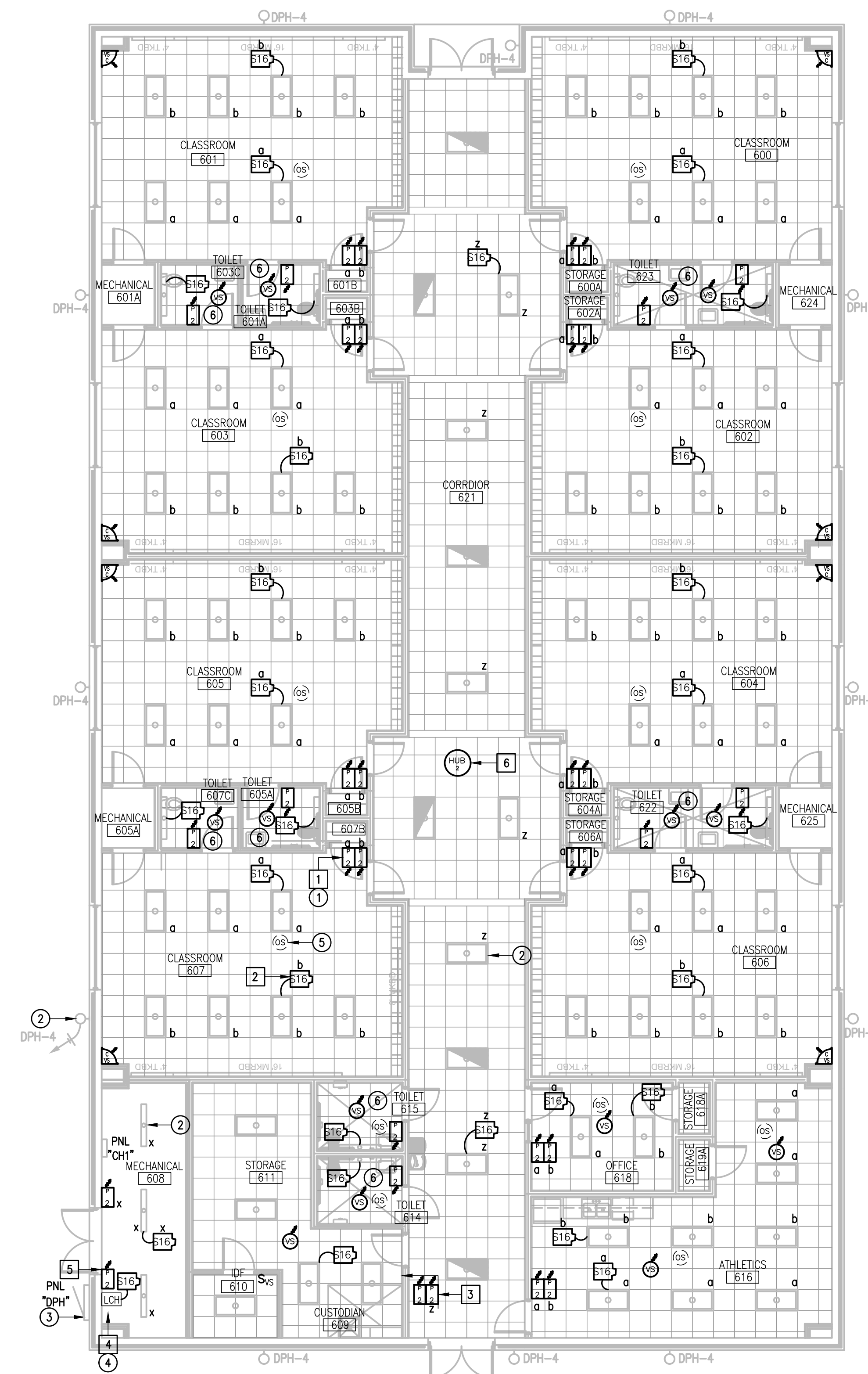
- DISCONNECT AND REMOVE EXISTING SWITCHES ALONG WITH RELATED WIRING - TYPICAL.
- EXISTING LIGHT FIXTURE TO REMAIN AS IS - TYPICAL.
- APPROXIMATE LOCATION OF EXISTING LIGHTING PANELBOARD SERVING INTERIOR AND EXTERIOR LIGHTING CIRCUITS.
- DISCONNECT AND REMOVE EXISTING LIGHTING RELAY PANEL. SEE DETAIL.
- DISCONNECT AND REMOVE EXISTING CEILING OCCUPANCY SENSOR (WIRED) ALONG WITH RELATED WIRING AND POWER PACK - TYPICAL.
- DISCONNECT AND REMOVE EXISTING CRESTON WIRELESS CONTROLS AND RELATED POWER PAK.

### GENERAL NOTES:

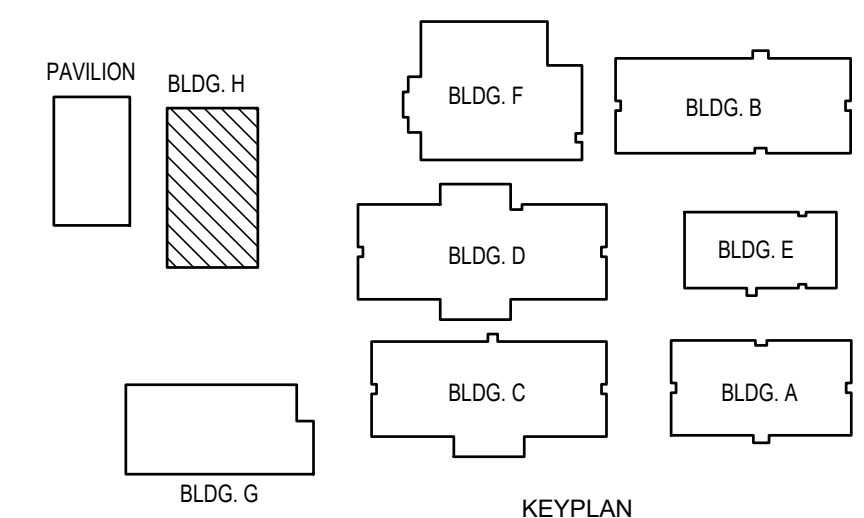
- LIGHTING BRANCH CIRCUIT HOMERUNS SHALL BE 3/4" - 2#12 & #12G. 20A/277V HOMERUNS EXCEEDING 200FT THE WIRE SIZE SHALL BE #10 & #8 FOR 275'.
- INTERIOR LIGHTING CONTROLS SHALL BE BY VACANCY SENSORS.
- EXTERIOR LIGHTING CONTROLS SHALL BE BY LIGHTING CONTACTOR. TIME CONTROL/SCHEDULES BAS INTEGRATION/VIA LUTRON VIVE HUB.

### KEYED NOTES:

- PROVIDE AND CONNECT LIGHTING SWITCHES (WIRELESS) - TYPICAL.
- PROVIDE AND CONNECT POWER PAK TO THE ASSOCIATED LIGHT FIXTURES.
- TIME SCHEDULE VIA THE LUTRON VIVE HUB.
- PROVIDE LIGHTING CONTACTOR. PROVIDE LUTRON RELAY POWER PAK AND WIRELESS SWITCH FOR TIME CONTROL AND OVERRIDE FOR EACH.
- FOR LIGHTING CONTACTOR OVERRIDE.
- PROVIDE FLUSH MOUNTED TO CEILING. CONNECT TO EXISTING PANELBOARD "CH1"; BRANCH CIRCUIT: 1/2" - 2#12 & #12G. PROVIDE A 20A/1P BREAKER IN AVAILABLE SPACE.



IDEA QUEST  
 LIGHTING PLAN (BUILDING H)  
 01 SCALE: 1/8" = 1'-0"



IDEA QUEST

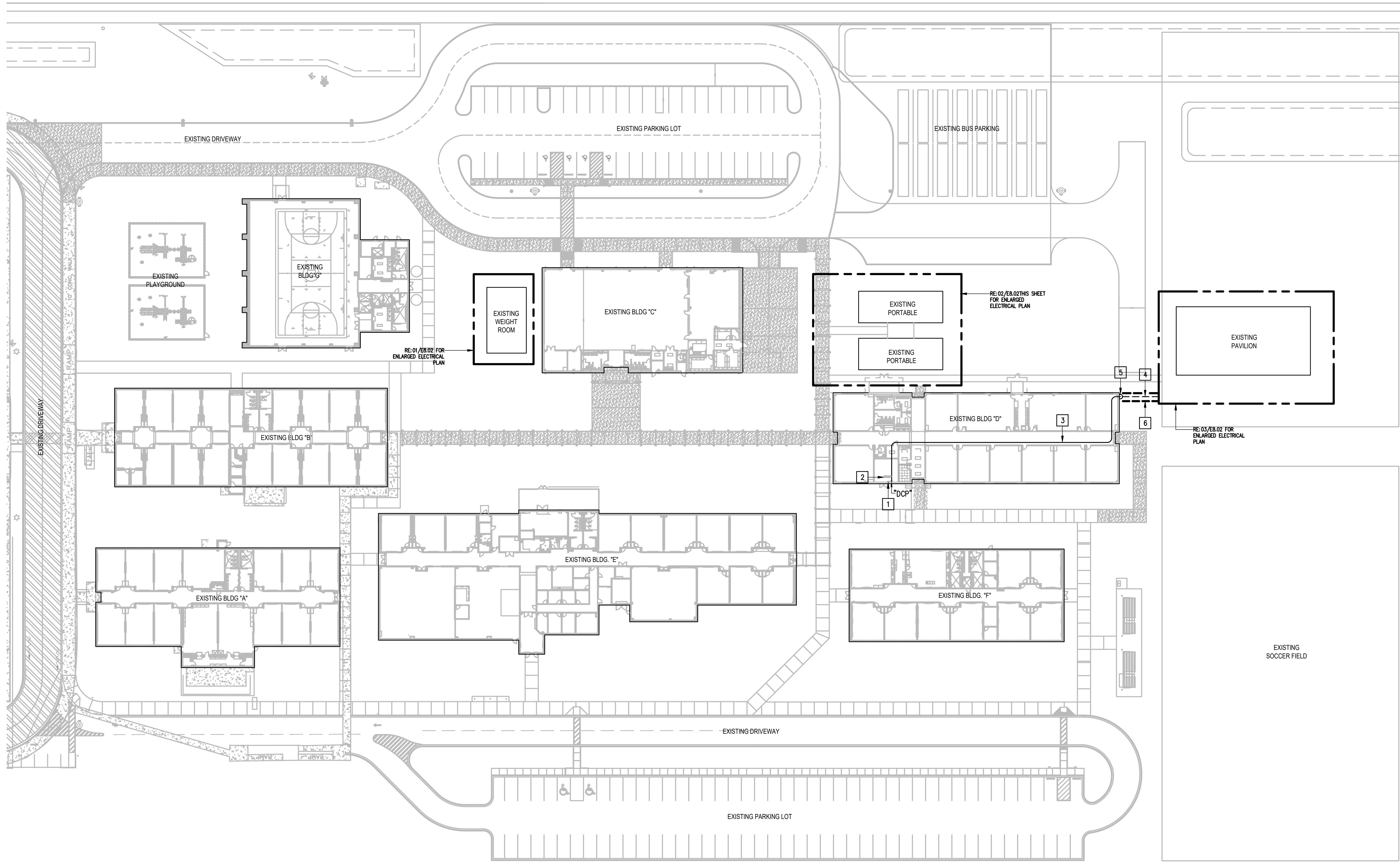


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 DRAWN BY: R.E.  
 PROJECT NO.: 23v80  
 CAD FILE:  
 SHEET:

E7.10





**ELECTRICAL KEYED NOTES:**

- 1 APPROXIMATE LOCATION OF EXISTING SIEMENS PANELBOARD "DCP" 400A, 480/277V 3Ø 4W. PROVIDE A 20A/2P BREAKER.
- 2 APPROXIMATE LOCATION OF EXISTING LIGHTING RELAY PANEL LEVITON GREEN MAX. PROGRAM RELAY SERVING PAVILION AS PER FACILITY MANAGER (FM) REQUEST.
- 3 PROVIDE SPECIAL SYSTEMS RACEWAYS ABOVE ACCESSIBLE CEILING SPACE. TEMPORARILY REMOVE EXISTING CEILING TILES FOR INSTALLATION OF NEW RACEWAYS. REINSTALL EXISTING CEILING TILES AFTER WORK ABOVE THE CEILING HAS BEEN COMPLETED.
- 4 PROVIDE 1"- 2#10 & #10G.
- 5 RISE UP RACEWAYS ALONG EXTERIOR WALL AND STUB INTO BUILDING AT AN ACCESSIBLE LOCATION ABOVE THE CEILING.
- 6 SAWCUT EXISTING CONCRETE FOUNDATION AND SIDEWALK. PATCH TO MEET EXISTING CONDITIONS.

NO. REVISION: BY:

COPY NO:



TEXAS

**IDEA PUBLIC SCHOOLS  
ELECTRICAL AND LIGHTING UPGRADES  
AT RGV CAMPUSES**

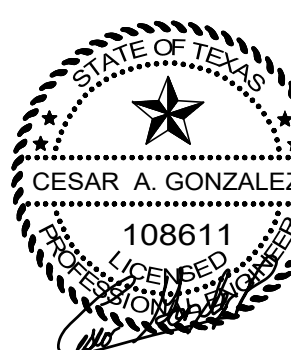
**IDEA SAN BENITO**  
**01 LIGHTING PLAN** (SITE PLAN)  
 SCALE : 1" = 40'-0"  
 PLAN NORTH

IDEA SAN BENITO



DATE: FEBRUARY 23, 2024  
 CHECKED BY: G.O.  
 DRAWN BY: R.E.  
 PROJECT NO.: 23v80  
 CAD FILE:  
 SHEET:

**E8.01**

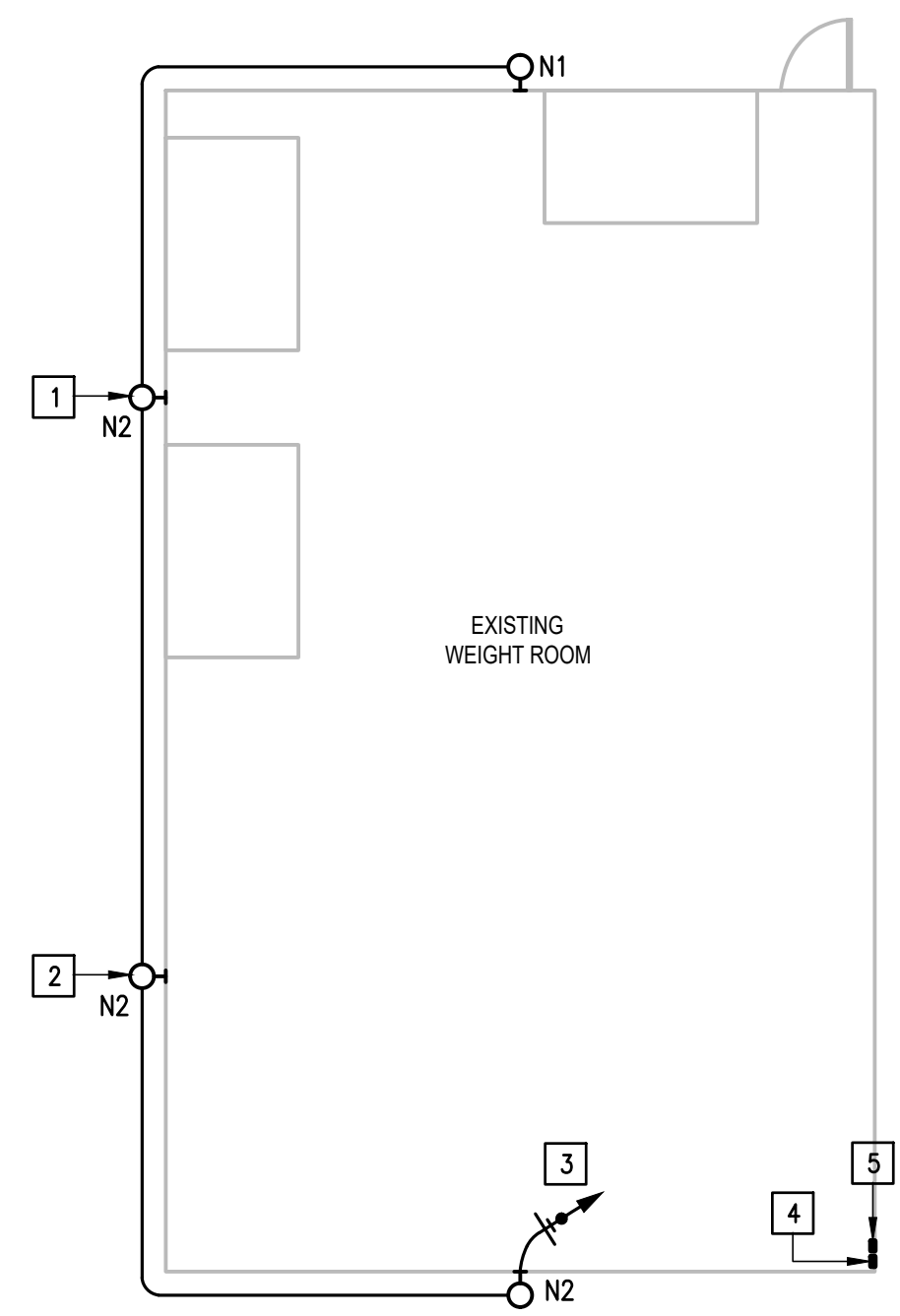


IDEA PUBLIC SCHOOLS  
ELECTRICAL AND LIGHTING UPGRADES  
AT RGV CAMPUSES

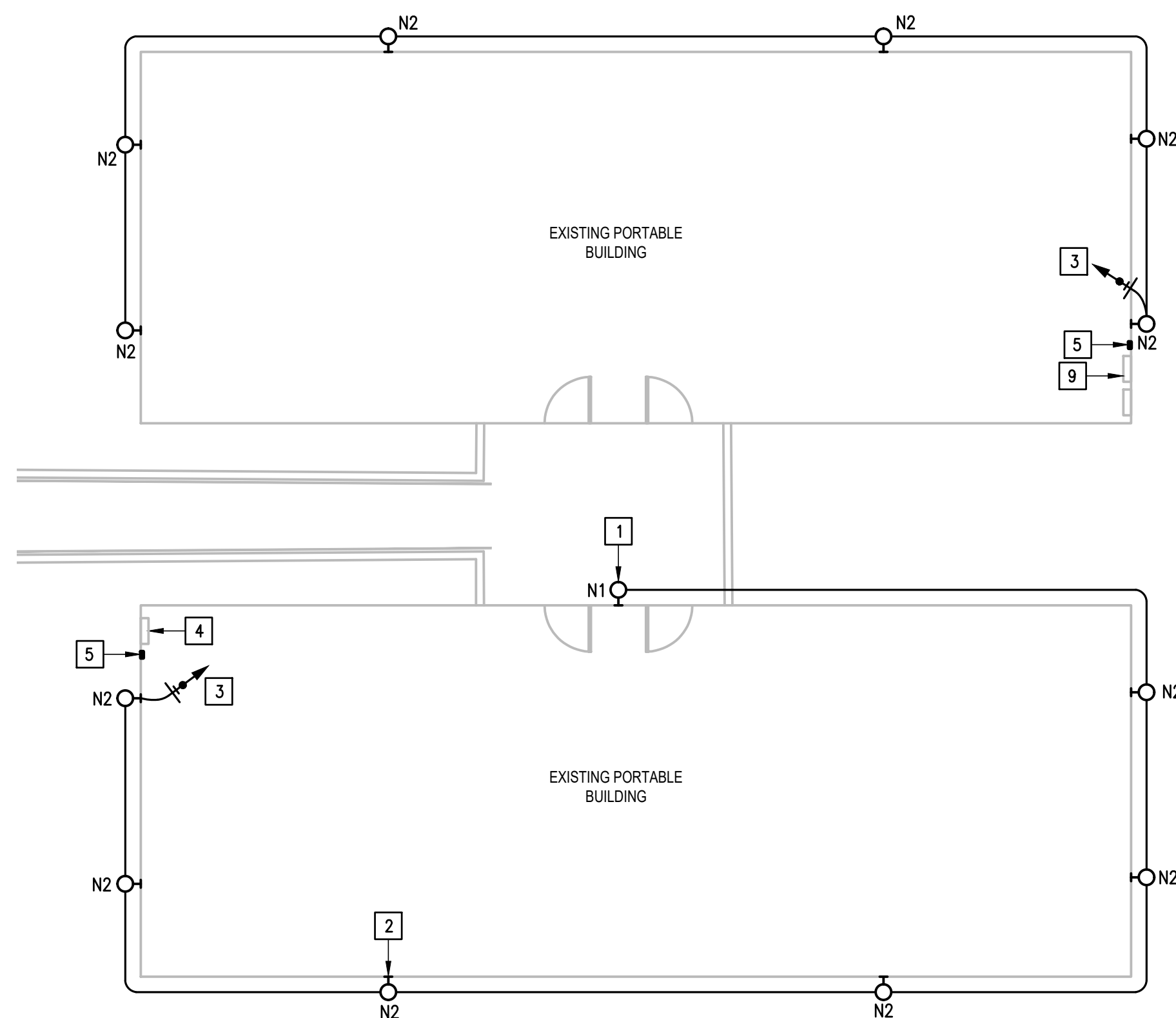


KEYED NOTES:

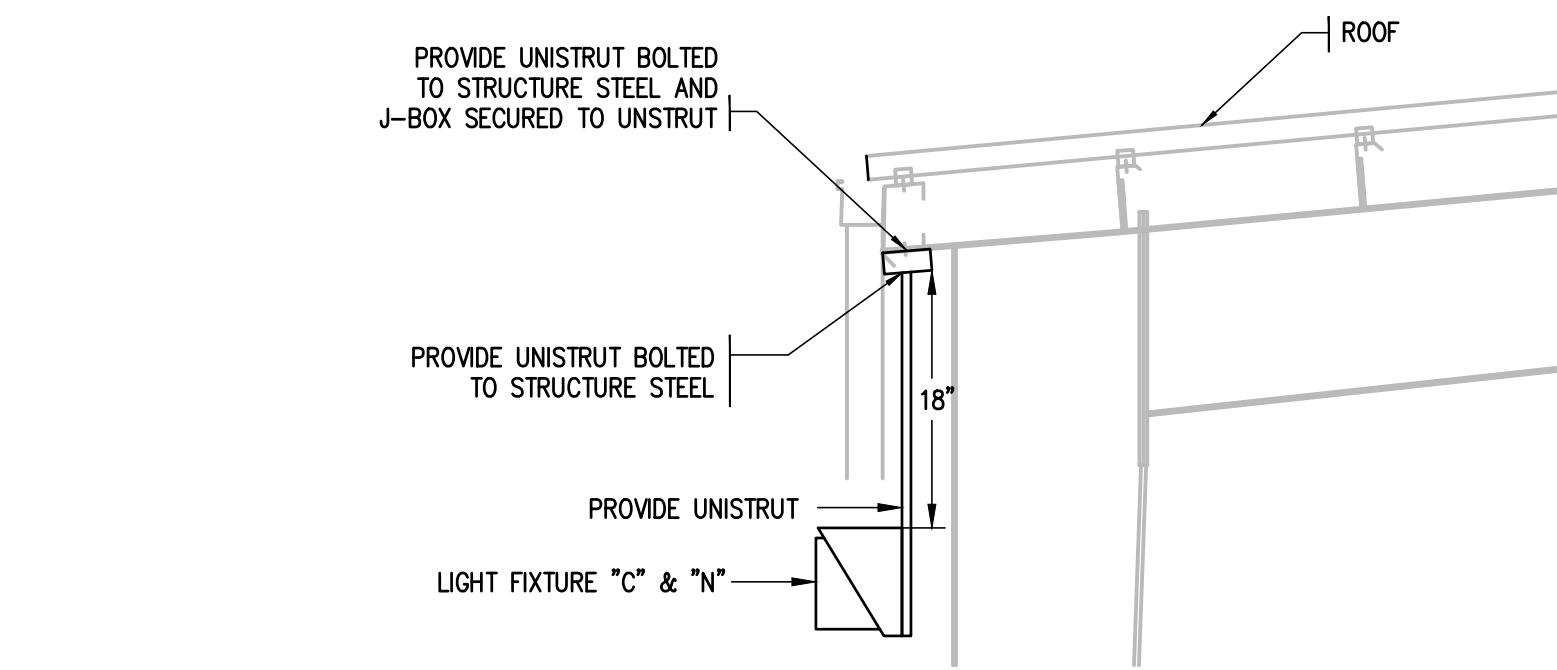
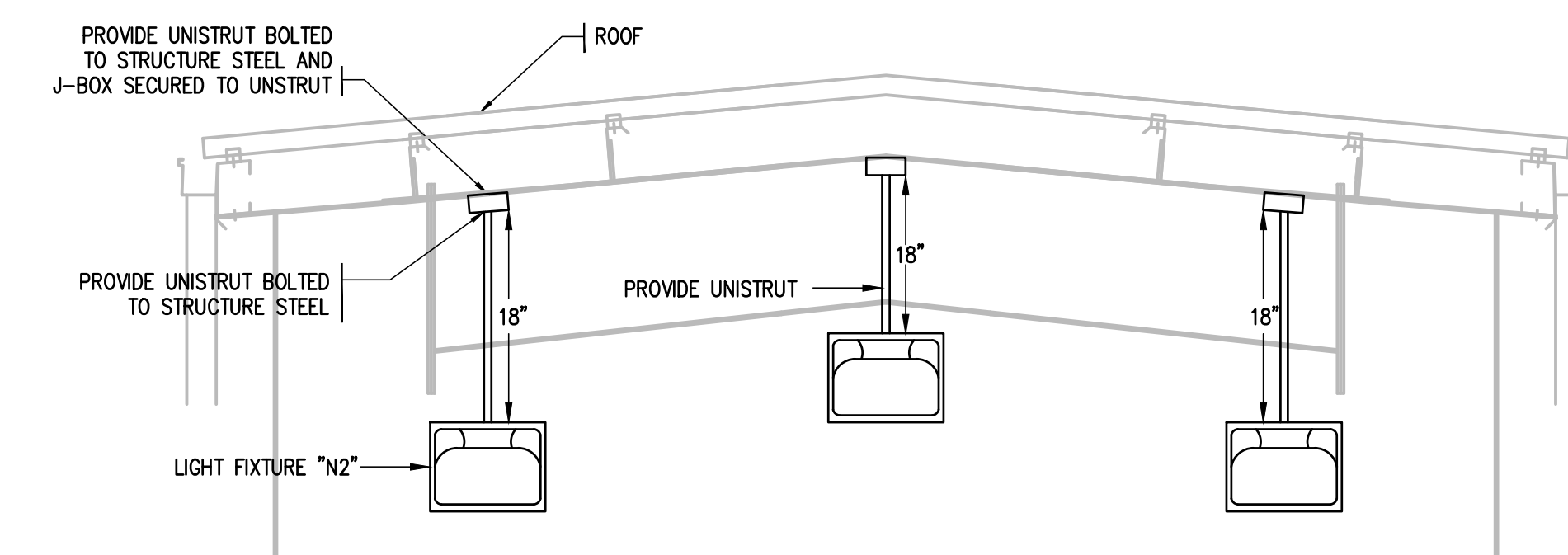
- 1 MOUNT LIGHT FIXTURE TYPE "N1" AT 8'-0" AFF TO CENTER OF FIXTURE - TYPICAL.
- 2 MOUNT LIGHT FIXTURE TYPE "N2" AT 8'-0" AFF TO CENTER OF FIXTURE - TYPICAL.
- 3 CONNECT VIA TIME CLOCK.
- 4 APPROXIMATE LOCATION OF EXISTING EATON CUTLER-HAMMER BR LOAD CENTER (CAT. NO. BR1632B200CK). PROVIDE A 20A/1P BREAKER IN AVAILABLE SPACE.
- 5 PROVIDE A 7-DAY, 4-SPST, MECHANICAL TIME CLOCK INTERMATIC MODEL NO. T7402B TO CONTROL EXTERIOR LIGHTING. PROVIDE WALL MOUNTED ADJACENT TO EXISTING PANEL.
- 6 SAWCUT EXISTING CONCRETE FOUNDATION AND SIDEWALK. PATCH TO MEET EXISTING CONDITIONS.
- 7 CONNECT VIA EXISTING LIGHTING RELAY PANEL. SEE SITE PLAN.
- 8 ALL RACEWAYS, BOXES & SUPPORTS WITHIN THE PAVILION SHALL BE RIGID METALLIC GALVANIZED STEEL (RMC).
- 9 APPROXIMATE LOCATION OF EXISTING SQUARE "D" HOMELINE LOAD CENTER (CAT. NO. HMC24UC. PROVIDE A 20A/1P BREAKER IN AVAILABLE SPACE.



01 IDEA SAN BENITO  
LIGHTING PLAN (WEIGHT ROOM)  
SCALE: 1/8" = 1'-0"  
PLAN NORTH



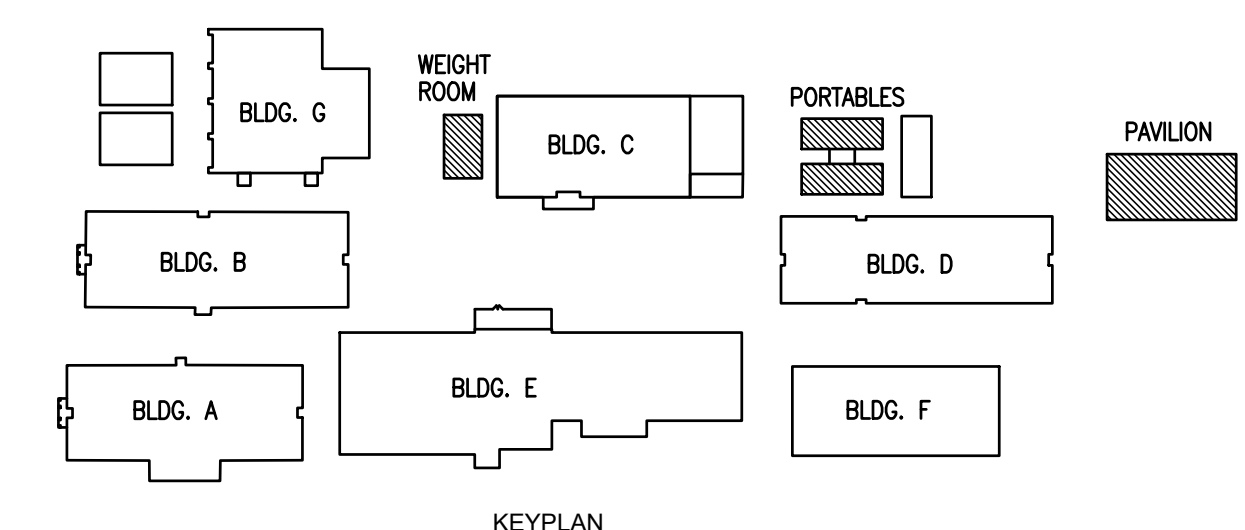
02 IDEA SAN BENITO  
LIGHTING PLAN (PORTABLES)  
SCALE: 1/8" = 1'-0"  
PLAN NORTH



04 LIGHT FIXTURE "C"  
MOUNTING DETAIL  
SCALE: NOT TO SCALE



03 IDEA SAN BENITO  
LIGHTING PLAN (PAVILION)  
SCALE: 1/8" = 1'-0"  
PLAN NORTH



KEYPLAN





TEXAS

# IDEA PUBLIC SCHOOLS ELECTRICAL AND LIGHTING UPGRADES AT RGV CAMPUSES



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PHONE: 361-230-3425  
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DATE: FEBRUARY 23, 2024  
CHECKED BY: G.Q.  
DRAWN BY: R.E.  
PROJECT NO.: 23v80  
CAD FILE:  
SHEET:

E9.01

### DEMOLITION GENERAL NOTES:

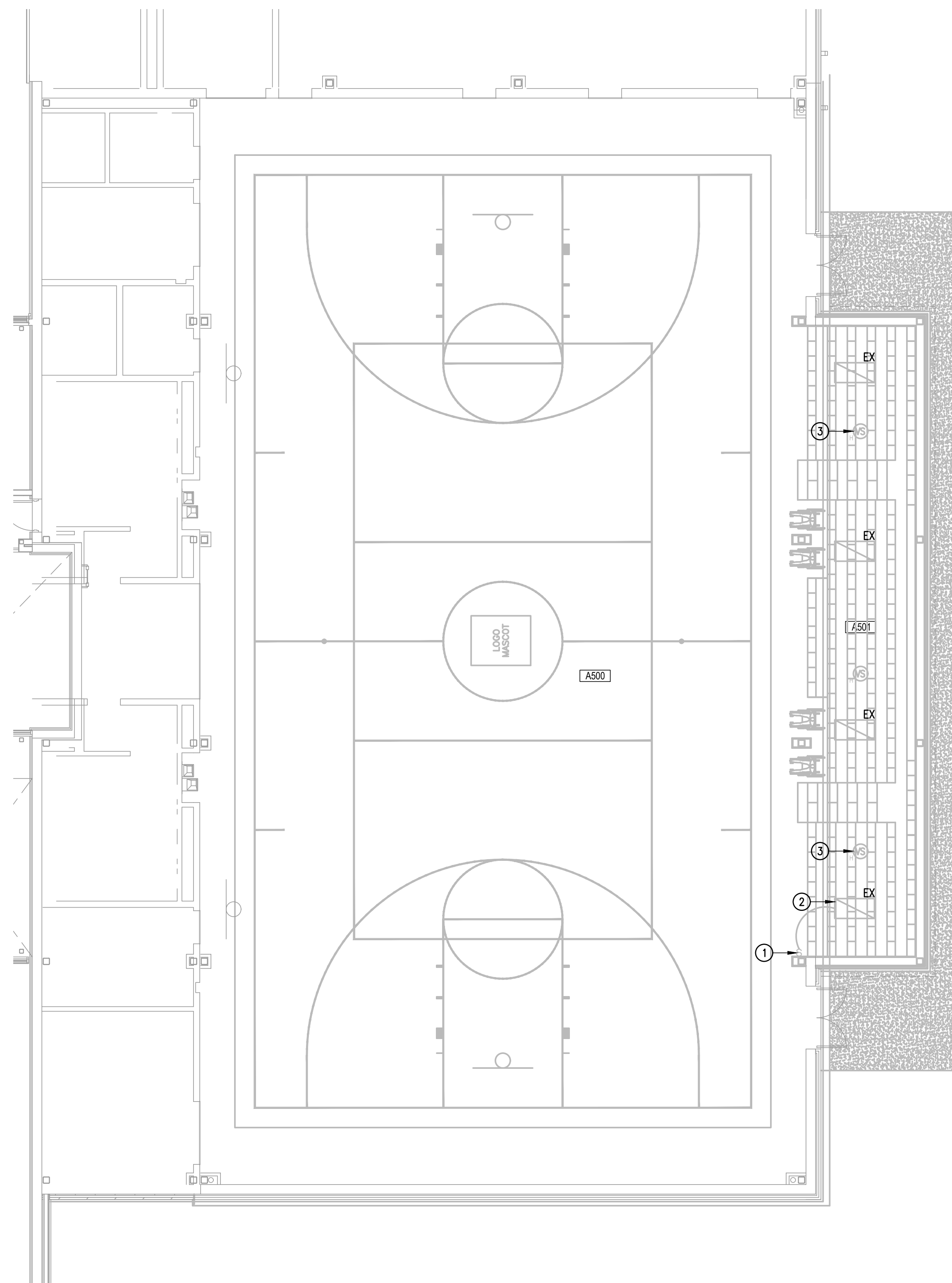
- REFER TO SPECIFICATIONS FOR PHASING REQUIREMENTS.
- THE EXTENT OF DEMOLITION WORK IS INDICATED ON THE DRAWINGS AND BY THE REQUIREMENTS OF THIS SECTION. A VISIT TO THE SITE IS REQUIRED TO PROPERLY BID THE DEMOLITION WORK.
- REMOVED MATERIALS SHALL BELONG TO OWNER. DELIVER THEM TO OWNERS DESIGNATED LOCATION. IF OWNER DOES NOT WANT THE REMOVED MATERIALS THEN REMOVE THEM FROM SITE & PROPERLY DISPOSE OF THEM.
- IF REMOVAL OF EXISTING ELECTRICAL SYSTEMS RENDERS EXISTING ELECTRICAL SYSTEMS DOWNSTREAM TO REMAIN INOPERABLE, PROVIDE J-BOXES, CONDUIT WIRING AND SPLICES ABOVE ACCESSIBLE CEILINGS IN ORDER TO CONTINUE OPERATION.
- REFER TO DEMOLITION DRAWINGS FOR WALL AND CEILINGS TO BE REMOVED.
- ITEMS DESIGNATED WITH AN "EX" ARE EXISTING TO REMAIN AS IS.
- PROVIDE BLANK COVER PLATE FOR UNUSED BACK BOXES.

### DEMOLITION KEYED NOTES:

- DISCONNECT AND REMOVE EXISTING LIGHTING SWITCH ALONG WITH RELATED WIRING.
- EXISTING LIGHT FIXTURE TO REMAIN AS IS.
- DISCONNECT AND REMOVE EXISTING VACANCY SENSOR AND ASSOCIATED POWER PACK FOR REMOVAL.

### RENOVATION KEYED NOTES:

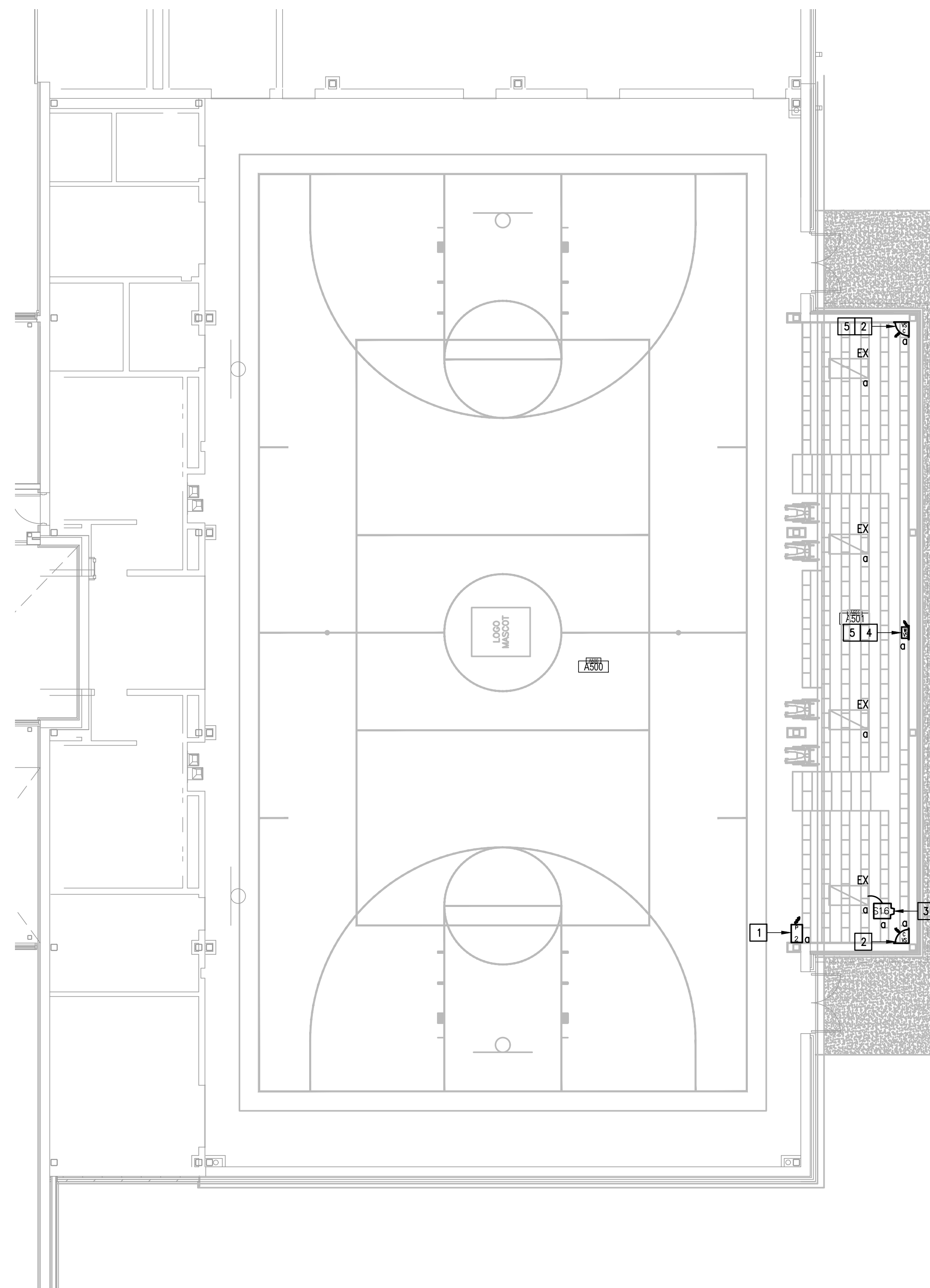
- PROVIDE LIGHT SWITCH WITH A CLEAR LOCKING COVER.
- PROVIDE A CORNER MOUNTED VACANCY SENSOR. WALL MOUNT AT 80" ABOVE BLEACHERS.
- PROVIDE AND CONNECT POWER PACK TO CONTROL EXISTING LIGHT FIXTURES.
- PROVIDE A WALL MOUNTED VACANCY SENSOR. WALL MOUNT AT 80" ABOVE BLEACHERS.
- PROVIDE WIRING GUARD FOR ALL VACANCY SENSOR LOCATED IN GYMNASIUM.



IDEA WESLACO  
DEMOLITION LIGHTING PLAN (GYMNASIUM)  
01 SCALE : 1/8" = 1'-0"



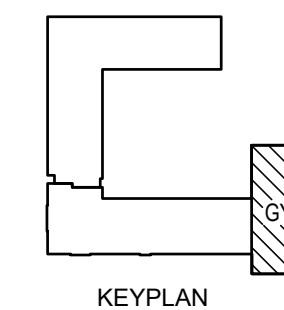
PLAN NORTH



IDEA WESLACO  
RENOVATION LIGHTING PLAN (GYMNASIUM)  
02 SCALE : 1/8" = 1'-0"



PLAN NORTH



IDEA WESLACO



# GENERAL STRUCTURAL NOTES

THESE GENERAL NOTES SHALL APPLY UNLESS OTHERWISE SPECIFICALLY NOTED ON PLANS OR DETAILS. THE CONTRACTOR SHALL VERIFY ALL DIMENSIONS AND SHALL COORDINATE ALL STRUCTURAL PLANS AND DETAILS WITH ARCHITECTURAL & MECHANICAL DRAWINGS BEFORE STARTING WORK. THE ENGINEER SHALL BE NOTIFIED OF ANY DISCREPANCIES PRIOR TO CONSTRUCTION. THE ENGINEER ASSUMES NO RESPONSIBILITY FOR CONTRACTOR MEANS AND METHODS OF CONSTRUCTION OR SITE SAFETY. DESIGN, CONSTRUCTION, WORKMANSHIP AND MATERIALS SHALL COMPLY WITH THE CONTROLLING PROVISIONS OF THE 2018 EDITION OF THE **INTERNATIONAL BUILDING CODE (IBC)**.

## DESIGN CRITERIA

- BASIS FOR DESIGN AND CODE COMPLIANCE.
  - GOVERNING BUILDING CODE..... IBC 2018 EDITION
- WIND DESIGN
  - ASCE 7-16 REQUIREMENTS.
    - ULTIMATE DESIGN WIND SPEED.....145 MPH (VASD = 112 MPH)
    - RISK CATEGORY..... II
    - WIND EXPOSURE CATEGORY..... C
    - INTERNAL PRESSURE COEFFICIENT (G<sub>Cp1</sub>)..... +/-0.0
    - K<sub>zt</sub>..... 1.0
    - K<sub>d</sub>..... 0.85

## FOUNDATION DESIGN CRITERIA

- FOUNDATION DESIGN IS IN ACCORDANCE WITH THE INTERNATIONAL BUILDING CODE, AND IS BASED ON THE VALUES RECOMMENDED IN TABLE 1806.2-PRESUMPTIVE LOAD-BEARING VALUES, AS LISTED BELOW:

VERTICAL FOUNDATION PRESSURE .....1,500 PSF  
 LATERAL BEARING PRESSURE .....100 PSF / FT BELOW GRADE

- A GEOTECHNICAL ENGINEER OF RECORD SHALL BE RETAINED TO VERIFY THE ASSUMED PROPERTIES LISTED ABOVE AND FOUNDATION NOTES HEREIN.

## LIGHT POLE DRILLED PIERS

- CONCRETE MIX FOR ALL DRILLED PIERS SHALL BE DESIGNED TO ACHIEVE MINIMUM OF 4,000 PSI 28-DAY COMPRESSIVE STRENGTH WHEN PLACED WITH A SEVEN (7) INCH (±1) INCH SLUMP.
- THE CONTRACTOR SHALL COORDINATE POLE BASE PLATE/ANCHOR BOLT DIMENSIONS WITH POLE SUPPLIER PRIOR TO PLACING PIERS. CONFLICTS SHALL BE COORDINATED WITH ENGINEER.
- INSTALL ALL PIERS AT THE LOCATIONS AND TO THE DEPTHS INDICATED ON THE DRAWINGS. BID SHALL INCLUDE ALL LABOR, EQUIPMENT, MATERIALS AND GENERAL CONDITIONS REQUIRED FOR INSTALLATION OF STRAIGHT SHAFT DRILLED PIERS, AS SHOWN ON THE DRAWINGS.
- IF DIRECTED BY THE ARCHITECT/ENGINEER, PIERS SHALL BE ADJUSTED IN THE FIELD AS REQUIRED TO MEET DESIGN REQUIREMENTS.
- PRIOR TO DEVELOPMENT OF THE PIER REINFORCEMENT SUBMITTALS, THE GENERAL CONTRACTOR, FOUNDATION CONTRACTOR, DRILLER, AND THE GEOTECHNICAL ENGINEER SHALL HAVE A PRE-CONSTRUCTION MEETING TO DISCUSS THE CONTRACTOR'S PROPOSED PIER INSTALLATION PROCEDURES. AT THE MEETING, THE CONTRACTOR NEEDS TO PERFORM A "TEST" PIER TO DETERMINE CURRENT SUBSURFACE WATER LEVELS AND THE CONSTRUCTABILITY OF THE DRILLED PIERS SPECIFIED. THE TEST PIER WILL NEED TO BE INSPECTED BY THE GEOTECHNICAL ENGINEER OF RECORD FOR APPROVAL OF THE PROPOSED INSTALLATION PROCEDURES AND/OR ISSUANCE OF ADDITIONAL RECOMMENDATIONS, AS REQUIRED.
- DRILL PIERS TO THE EXACT SIZE SHOWN. SHAFTS SHALL BE BORED PLUMB WITH A TOLERANCE OF TWO INCHES. INSTALL OFFSET STAKES ON OPPOSITE SIDES OF THE PIER AND USE TO MAINTAIN THE PIER CENTERS AND TO CHECK THE PIER PLUMBNESS. FOOTING BOTTOMS SHALL BE INSPECTED FOR A MAXIMUM OF ONE INCH (1") OF LOOSE DIRT AND TWO INCHES (2") OF GROUND WATER IMMEDIATELY PRIOR TO PLACING CONCRETE. IF MACHINE CLEANING IS NOT SATISFACTORY TO ARCHITECT/ENGINEER, HAND CLEANING WILL BE REQUIRED.
- EACH PIER SHAFT AND DRILLING OPERATIONS SHALL BE INSPECTED BY QUALIFIED GEOTECHNICAL PERSONNEL TO ENSURE PROPER BEARING AT SCHEDULED ELEVATION AND TO VERIFY STRATAS NOTED IN THE GEOTECHNICAL REPORT. INSPECTIONS SHALL ALSO VERIFY PIER SHAFT DIAMETER, DEPTH, REINFORCEMENT SIZE, QUANTITIES AND LOCATIONS. INSPECTION REPORTS SHALL BE TRANSMITTED TO ENGINEER WITHIN 3 DAYS OF INSPECTION.
- PROVIDE SUITABLE ACCESS AND LIGHTING FOR INSPECTION OF THE EXCAVATIONS FOR CLEANLINESS AND FOR CORRECTNESS OF DIMENSIONS AND ALIGNMENT.
- DUE TO SUBSURFACE STRATIGRAPHY AND WATER LEVELS ENCOUNTERED, IF THE CONTRACTOR CANNOT INSTALL THE RECOMMENDED PIER AT THE REQUIRED DEPTH, THE ENGINEER MUST BE CONTACTED IMMEDIATELY.
- DUE TO SUBSURFACE WATER ENCOUNTERED DURING DRILLING OPERATIONS, THE FOUNDATION CONTRACTOR SHOULD BE PREPARED TO UTILIZE SLURRY OR CASINGS TO CONTROL SLOUGHING OR SUBSURFACE WATER INFLUX DURING EXCAVATION SHOULD IT OCCUR. CASINGS SHOULD ONLY BE USED IN DRILLED PIERS TERMINATING IN THE CLAYEY SOILS. PRIOR TO EXCAVATION, THE FOUNDATION CONTRACTOR SHOULD VERIFY THE SUBSURFACE WATER LEVELS. THE FOUNDATION CONTRACTOR SHOULD CONSIDER PERFORMING A "TEST" PIER EXCAVATION TO DETERMINE THE CONSTRUCTABILITY OF DRILLED PIER.
- SHOULD A SLURRY BE USED TO CONTROL THE EXCAVATION PROCESS A CLEAN-OUT BUCKET SHOULD BE USED JUST PRIOR TO PIER COMPLETION IN ORDER TO REMOVE ANY CUTTINGS AND LOOSE SOILS WHICH MAY HAVE ACCUMULATED IN THE BOTTOM OF THE EXCAVATION. STEEL AND CONCRETE SHOULD BE PLACED IN THE EXCAVATION IMMEDIATELY AFTER PIER COMPLETION. A CLOSED-END TREMIE SHOULD BE USED TO PLACE THE CONCRETE COMPLETELY TO THE BOTTOM OF THE EXCAVATION IN A CONTROLLED MANNER TO EFFECTIVELY DISPLACE THE SLURRY DURING CONCRETE PLACEMENT.
- SHOULD CASINGS BE USED TO CONTROL THE EXCAVATION PROCESS, CASING SHOULD BE METAL WITH AMPLE STRENGTH TO WITHSTAND HANDLING STRESSES, CONCRETE AND EARTH PRESSURES, AND SHALL BE WATERTIGHT.
- PRECAUTIONS SHOULD BE TAKEN DURING THE PLACEMENT OF THE PIER REINFORCEMENT AND CONCRETE TO PREVENT LOOSE EXCAVATED MATERIAL FROM FALLING INTO THE EXCAVATION.
- PLACEMENT OF CONCRETE SHALL BE ACCOMPLISHED AS SOON AS POSSIBLE AFTER EXCAVATION IS COMPLETE. REINFORCING CAGE IS PLACED, INSPECTED AND APPROVED. THE CONCRETE SHOULD NOT BE ALLOWED TO RICOCHET OFF THE WALLS OF THE PIER EXCAVATION NOR OFF OF THE REINFORCING STEEL. PLACEMENT OF CONCRETE SHALL COMPLY WITH AMERICAN CONCRETE INSTITUTE (ACI) 318 CODE "BUILDING CODE REQUIREMENTS FOR REINFORCED CONCRETE", ACI 336.3R-14 ENTITLED "SUGGESTED DESIGN AND CONSTRUCTION PROCEDURES FOR PIER FOUNDATIONS", U.S. DEPARTMENT OF TRANSPORTATION-FEDERAL HIGHWAY ADMINISTRATION PUB. NO. FHWA-IF-99-025 "MANUAL ON DRILLED SHAFTS: CONSTRUCTION PROCEDURES AND DESIGN METHODS" AND ADSC: THE INTERNATIONAL ASSOCIATION OF FOUNDATION DRILLING CONTRACTORS PUB. NO. ADSC-TL-4, AUGUST 1999.
- NO PIER EXCAVATION SHALL BE LEFT OPEN OVERNIGHT WITHOUT CONCRETING.

## CONCRETE

- ALL CONCRETE WORK SHALL CONFORM TO THE AMERICAN CONCRETE INSTITUTE SPECIFICATION, A.C.I. #301 AND BUILDING CODE REQUIREMENTS, A.C.I. #318, LATEST EDITION.
- ALL DETAILING, FABRICATION AND ERECTION OF REINFORCING BARS, UNLESS OTHERWISE NOTED, MUST FOLLOW THE A.C.I. "MANUAL OF STANDARD PRACTICE FOR DETAILING REINFORCED CONCRETE", A.C.I. #315, LATEST EDITION.
- CONCRETE SHALL HAVE A MINIMUM COMPRESSION STRENGTH OF 4,000 PSI AT 28 DAYS.
- A MAXIMUM OF 25% FLYASH MAY BE USED AS A CEMENT SUBSTITUTE AND SHALL CONFORM TO ASTM C618, CLASS C. THE WATER/CEMENT RATIO SHALL NOT EXCEED 0.6 AND SLUMPS SHALL BE 5 INCHES (+1 INCH). AGGREGATE SHALL BE WELL-GRADED, 1" MAXIMUM FOR THE SLAB ON GRADE. COARSE AGGREGATE SHALL MEET ASTM C33, GRADATION #57. A QUALIFIED TESTING LABORATORY SHALL BE RETAINED TO FURNISH MIX DESIGNS FOR ALL CLASSES OF CONCRETE. A SAMPLE OF FOUR CYLINDERS SHALL BE TAKEN NOT LESS THAN ONCE A DAY, NOR LESS THAN ONCE FOR EACH 100 YD3 OF CONCRETE. ONE CYLINDER SHALL BE TESTED AT 7 DAYS AND TWO AT 28 DAYS. THE FOURTH CYLINDER MAY BE DISPOSED OF AFTER 45 DAYS IF NOT USED.
- ADMIXTURES CONTAINING WATER SOLUBLE CHLORIDE IONS GREATER THAN 0.06% BY WEIGHT OF CEMENT SHALL NOT BE USED.
- REINFORCING BARS SHALL BE NEW BILLET STEEL CONFORMING TO ASTM A-615, GRADE 60. #3 BARS MAY BE GRADE 40.
- STANDARD PROTECTIVE COVER OF REINFORCING BARS UNLESS OTHERWISE NOTED SHALL BE:
  - WHERE CAST AGAINST DIRT OR FILL ..... 3 IN.
  - EXPOSED TO EARTH OR WEATHER ..... 2 IN.
  - SLABS AND WALLS ..... 1 IN.
  - OTHER ..... 1-1/2 IN.
- ALL ACCESSORIES SHALL BE IN ACCORDANCE WITH THE A.C.I. "MANUAL OF STANDARD PRACTICE FOR DETAILING REINFORCED CONCRETE", A.C.I. #315, LATEST EDITION.
- SLAB MAT TO BE SUPPORTED BY MASONRY BRICK BATTIS (MIN OF 1/2 BRICK) SPACED AT 4 FEET ON CENTER EACH WAY (MAX). BEAM CAGES SUPPORTED BY BATTIS AT 4 FEET ON CENTER.
- VERTICAL CONSTRUCTION JOINTS IN FLOOR SHALL BE COORDINATED WITH STRUCTURAL ENGINEER PRIOR TO FORMING SLAB. CRACK CONTROL JOINTS SHALL BE PROVIDED AT LOCATIONS SHOWN ON THE PLANS. CONTROL JOINTS SHALL BE SAWCUT (IMMEDIATELY SUBSEQUENT TO FINISHING SLAB) WITH "SOFF-CUT" SYSTEM. JOINTS SHALL BE CLEANED AND FILLED WITH "SONOLASTIC SLT" WITHIN TWO (2) DAYS AFTER SAWCUTTING. NO HORIZONTAL JOINTS WILL BE PERMITTED IN SLABS OR BEAMS UNLESS APPROVED BY THE ENGINEER.
- PROVIDE 2 TOP & BOTTOM CORNER BARS AT ALL DISCONTINUOUS GRADE BEAMS AND FOUNDATION CORNERS. CORNER BARS SHALL BE 4'-0" IN LENGTH (2'-0" LEGS). SIZE OF THE CORNER BARS SHALL MATCH THE SIZE OF THE GRADE BEAM REINFORCING AS SHOWN BY STRUCTURAL DRAWINGS.
- MAINTAIN A MINIMUM OF ONE AND ONE-HALF (1-1/2) TIMES THE MAXIMUM COARSE AGGREGATE SIZE BETWEEN ALL REINFORCING BARS (EXCEPT AT LAPS).
- BARS SCHEDULED OR DETAILED "CONT" SHALL BE LAPPED 40 BAR DIAMETERS (24 INCHES MINIMUM) UNLESS OTHERWISE NOTED.
- WHERE CONCRETE IS TO HAVE UNEXPOSED SURFACES, THE FORMS MAY BE CONSTRUCTED OF #2 LUMBER OR BETTER. WHERE SURFACES ARE EXPOSED, SUCH AS FOR FINISH PAINTING OR STUCCO DASH, THE FORMS SHALL BE COMMERCIAL STANDARD DOUGLAS FIR, MOISTURE-RESISTANT CONCRETE FORM PLYWOOD; MINIMUM 5-PLY AND AT LEAST 9/16" THICK, OR FORMS LINED WITH COMMERCIAL STANDARD DOUGLAS FIR, CONCRETE FORM EXTERIOR, 3-PLY, NOT LESS THAN 1/4" THICK. WHERE CONCRETE IS EXPOSED, A SMOOTH SURFACE IS REQUIRED, FREE FROM FINIS, HONEYCOMB, FORM MARKS OR OTHER DEFECTS.
- EXPOSED SURFACES OF CONCRETE AT THE PERIMETER OF THE FOUNDATION SHALL BE FORMED WITH 2X10 #2 LUMBER OR BETTER. A SMOOTH SURFACE IS REQUIRED, FREE FROM FINIS, HONEYCOMB, FORM MARKS OR OTHER DEFECTS.
- CONSTRUCT FORMS SO THAT JOINTS ARE LEAKPROOF. MAINTAIN FORMS SUFFICIENTLY RIGID TO PREVENT DEFORMATION UNDER LOAD.
- CONCRETE MAY BE PLACED WITH CHUTES UP TO 25' MAXIMUM. SLUMP SHALL NOT EXCEED 6" AT TRUCK DISCHARGE POINT.
- CONCRETE PLACED BY PUMPING SHALL MEET THE FOLLOWING REQUIREMENTS:
  - COARSE AGGREGATE SHALL BE GRADED FROM A MAXIMUM OF 1" DOWN
  - MAXIMUM ALLOWABLE INCREASE IN CEMENT FACTOR SHALL BE 1/2 SACK PER CUBIC YARD OVER NORMAL MIX DESIGN.
  - MAXIMUM WATER CEMENT RATIO SHALL BE 7-1/2 GALLONS PER SACK OF CEMENT. IF MORE WORKABILITY IS REQUIRED, AN ADMIXTURE MAY BE USED.
  - MAXIMUM WEIGHT RATIO OF FINE AGGREGATES TO COARSE AGGREGATES SHALL NOT EXCEED 2/3.
  - REFER TO A.C.I. #301, LATEST EDITION, SECTION 800, FOR OTHER PUMPING REQUIREMENTS.
  - IN NO CASE SHALL CONCRETE BE PUMPED THROUGH AN ALUMINUM TUBE.
  - SLUMP SHALL NOT EXCEED 6" AT TRUCK DISCHARGE POINT.
- FLOOR FINISH (TOLERANCES)
  - STEEL TROWEL FINISH 1/8" IN 10'
  - FLOAT FINISH 1/4" IN 10'
  - SCRATCH FINISH 1/2" IN 10'
- CONCRETE TO BE CURED IN ACCORDANCE WITH ACI RECOMMENDATIONS. PROPOSED METHOD OF CURING TO BE COORDINATED WITH ENGINEER PRIOR TO CONCRETE PLACEMENT.
- SHOP DRAWINGS SHALL BE PREPARED FOR ALL REINFORCING STEEL AND SUBMITTED FOR REVIEW BY ENGINEER. SUBMITTALS SHALL INCLUDE ELECTRONIC (PDF) COPIES OF EACH DRAWING. ENGINEERING DRAWINGS SHALL NOT BE REPRODUCED AND USED AS SHOP DRAWINGS.
- THE CONTRACTOR SHALL REVIEW AND ANNOTATE SHOP DRAWINGS BEFORE SUBMITTING THEM TO THE ARCHITECT/ENGINEER FOR REVIEW. THE CONTRACTOR SHALL ALLOW ARCHITECT/ENGINEER 10 WORKING DAYS FOR REVIEW OF SHOP DRAWINGS.
- ENGINEER TO BE NOTIFIED 48 HOURS PRIOR TO PLACEMENT OF FOUNDATION AND OF STRUCTURAL CONCRETE TO SCHEDULE REQUIRED OBSERVATIONS.

## SPECIAL INSPECTIONS

SPECIAL INSPECTIONS INDEPENDENT OF THE CONTRACTOR, THE ARCHITECT, OR THE ENGINEER, SHALL BE PROVIDED BY A SPECIAL INSPECTOR EMPLOYED BY THE OWNER ACCORDING TO CHAPTER 17 OF THE IBC 2018. THE SPECIAL INSPECTOR SHALL OBSERVE THE WORK FOR CONFORMANCE WITH THE CONTRACT DOCUMENTS. THE SPECIAL INSPECTOR SHALL SEND WRITTEN REPORTS TO THE OWNER, THE ARCHITECT, THE ENGINEER AND THE CONTRACTOR. THE REPORTS SHALL INDICATE IF WORK INSPECTED WAS DONE IN CONFORMANCE WITH THE CONTRACT DOCUMENTS. ALL DISCREPANCIES SHALL BE BROUGHT TO THE IMMEDIATE ATTENTION OF THE CONTRACTOR FOR CORRECTION. IF THE DISCREPANCIES ARE NOT CORRECTED, THE SPECIAL INSPECTOR SHALL BRING THE DISCREPANCIES TO THE ATTENTION OF THE REGISTERED DESIGN PROFESSIONAL IN RESPONSIBLE CHARGE PRIOR TO THE COMPLETION OF THAT PHASE OF THE WORK. THE SPECIAL INSPECTOR SHALL SUBMIT A FINAL SIGNED REPORT STATING THAT THE SPECIAL INSPECTION WORK WAS, TO THE BEST OF THEIR KNOWLEDGE, IN OR NOT IN CONFORMANCE WITH THE DRAWINGS, SPECIFICATIONS AND APPLICABLE WORKMANSHIP PROVISIONS OF THE IBC 2018.

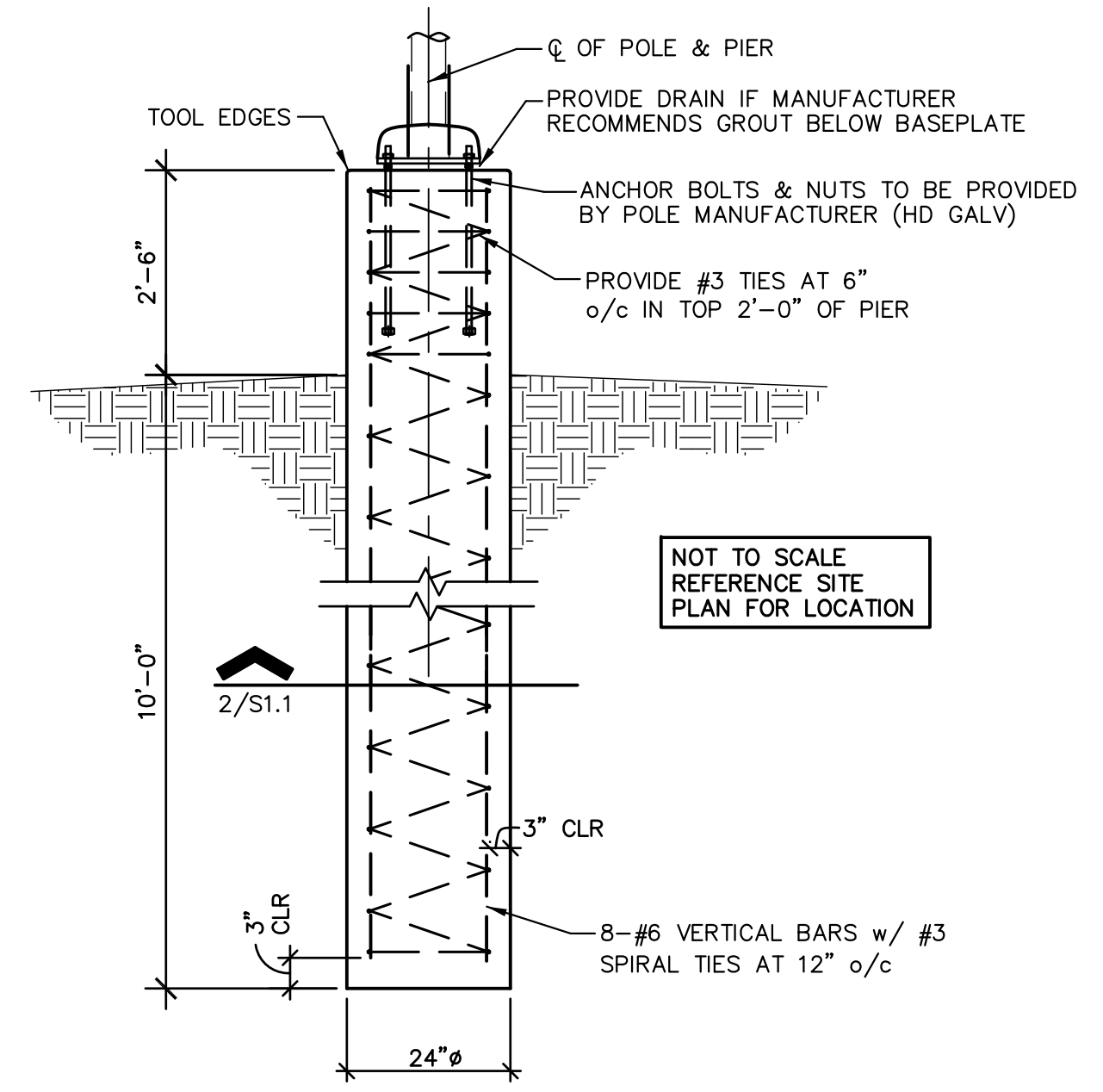
CONTINUOUS OR PERIODIC SPECIAL INSPECTION IS REQUIRED FOR THE FOLLOWING WORK:

### REQUIRED VERIFICATION AND INSPECTION OF PIER FOUNDATIONS

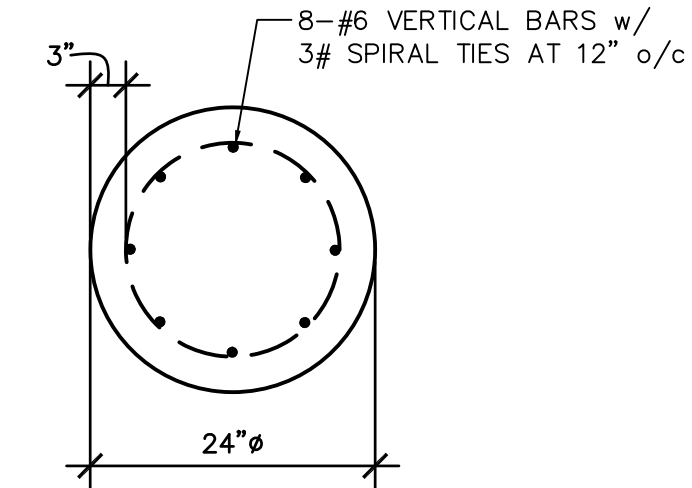
VERIFICATION AND INSPECTION TASK	CONTINUOUS DURING TASK LISTED	PERIODICALLY DURING TASK LISTED
OBSERVE DRILLING OPERATIONS AND MAINTAIN COMPLETE AND ACCURATE RECORDS OF EACH PIER	X	
VERIFY PLACEMENT LOCATIONS AND PLUMBNESS, CONFIRM PIER DIAMETERS, BELL DIAMETERS (IF APPLICABLE), LENGTHS, EMBEDMENT INTO BEDROCK (IF APPLICABLE) AND ADEQUATE END BEARING STRATA CAPACITY	X	
FOR CONCRETE PIERS, PERFORM ADDITIONAL INSPECTIONS AS REQUIRED FOR CONCRETE CONSTRUCTION		

### REQUIRED VERIFICATION AND INSPECTION OF CONCRETE CONSTRUCTION

VERIFICATION AND INSPECTION	CONTINUOUS	PERIODIC
INSPECTION OF REINFORCING STEEL, INCLUDING PRESTRESSING TENDONS, AND PLACEMENT		X
INSPECT BOLTS TO BE INSTALLED IN CONCRETE PRIOR TO AND DURING PLACEMENT OF CONCRETE	X	
VERIFY USE OF REQUIRED DESIGN MIX		X
PERFORM SLUMP AND AIR CONTENT TEST, AND DETERMINE THE TEMPERATURE OF THE CONCRETE AT THE TIME OF SAMPLING FRESH CONCRETE FOR MAKING SPECIMENS FOR STRENGTH TESTS PER ACI 318	X	
INSPECTION OF CONCRETE AND SHOTCRETE PLACEMENT FOR PROPER APPLICATION TECHNIQUES	X	
INSPECTION FOR MAINTENANCE OF SPECIFIED CURING TEMPERATURE AND TECHNIQUES		X
INSPECTION OF PRESTRESSED CONCRETE APPLICATION OF PRESTRESSING FORCES	X	
VERIFICATION OF IN-SITU CONCRETE STRENGTH, PRIOR TO STRESSING OF TENDONS IN POST-TENSIONED CONCRETE AND PRIOR TO REMOVAL OF SHORES AND FORMS FROM BEAMS AND STRUCTURAL SLABS		X
ERECTION OF PRECAST CONCRETE MEMBERS		X
INSPECT FORMWORK FOR SHAPE, LOCATION AND DIMENSIONS OF THE CONCRETE MEMBER BEING FORMED		X



1 TYPICAL LIGHT POLE FOUNDATION DETAIL



2

NO: REVISION: BY:

COPY NO:



TEXAS

IDEA PUBLIC SCHOOLS  
 ELECTRICAL AND LIGHTING UPGRADES  
 AT RGV CAMPUSES

BROWNSVILLE

IDEA FRONTIER



1126 SOUTH COMMERCE ST.  
 HARLINGEN, TX  
 PHONE: 361-230-3435  
 TEXAS REGISTERED  
 ENGINEERING FIRM  
 E-15998

DATE: FEBRUARY 23, 2024  
 CHECKED BY: BD  
 DRAWN BY: DC  
 PROJECT NO.: 1178-41

CAD FILE:  
 SHEET:

S1.1



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- ALL DETAILING, FABRICATION AND ERECTION OF REINFORCING BARS, UNLESS OTHERWISE NOTED, MUST FOLLOW THE A.C.I. "MANUAL OF STANDARD PRACTICE FOR DETAILING REINFORCED CONCRETE", A.C.I. #315, LATEST EDITION.
- CONCRETE SHALL HAVE A MINIMUM COMPRESSION STRENGTH OF 4,000 PSI AT 28 DAYS.
- A MAXIMUM OF 25% FLYASH MAY BE USED AS A CEMENT SUBSTITUTE AND SHALL CONFORM TO ASTM C618, CLASS C. THE WATER/CEMENT RATIO SHALL NOT EXCEED 0.6 AND SLUMPS SHALL BE 5 INCHES (+1 INCH). AGGREGATE SHALL BE WELL-GRADED, 1" MAXIMUM FOR THE SLAB ON GRADE. COARSE AGGREGATE SHALL MEET ASTM C33, GRADATION #57. A QUALIFIED TESTING LABORATORY SHALL BE RETAINED TO FURNISH MIX DESIGNS FOR ALL CLASSES OF CONCRETE. A SAMPLE OF FOUR CYLINDERS SHALL BE TAKEN NOT LESS THAN ONCE A DAY, NOR LESS THAN ONCE FOR EACH 100 YD3 OF CONCRETE. ONE CYLINDER SHALL BE TESTED AT 7 DAYS AND TWO AT 28 DAYS. THE FOURTH CYLINDER MAY BE DISPOSED OF AFTER 45 DAYS IF NOT USED.
- ADMIXTURES CONTAINING WATER SOLUBLE CHLORIDE IONS GREATER THAN 0.06% BY WEIGHT OF CEMENT SHALL NOT BE USED.
- REINFORCING BARS SHALL BE NEW BILLET STEEL CONFORMING TO ASTM A-615, GRADE 60. #3 BARS MAY BE GRADE 40.
- STANDARD PROTECTIVE COVER OF REINFORCING BARS UNLESS OTHERWISE NOTED SHALL BE:
  - WHERE CAST AGAINST DIRT OR FILL ..... 3 IN.
  - EXPOSED TO EARTH OR WEATHER ..... 2 IN.
  - SLABS AND WALLS ..... 1 IN.
  - OTHER ..... 1-1/2 IN.
- ALL ACCESSORIES SHALL BE IN ACCORDANCE WITH THE A.C.I. "MANUAL OF STANDARD PRACTICE FOR DETAILING REINFORCED CONCRETE", A.C.I. #315, LATEST EDITION.
- SLAB MAT TO BE SUPPORTED BY MASONRY BRICK BATTS (MIN OF 1/2 BRICK) SPACED AT 4 FEET ON CENTER EACH WAY (MAX). BEAM CAGES SUPPORTED BY BATTS AT 4 FEET ON CENTER.
- VERTICAL CONSTRUCTION JOINTS IN FLOOR SHALL BE COORDINATED WITH STRUCTURAL ENGINEER PRIOR TO FORMING SLAB. CRACK CONTROL JOINTS SHALL BE PROVIDED AT LOCATIONS SHOWN ON THE PLANS. CONTROL JOINTS SHALL BE SAWCUT (IMMEDIATELY SUBSEQUENT TO FINISHING SLAB) WITH "SOFT-CUT" SYSTEM. JOINTS SHALL BE CLEANED AND FILLED WITH "SONOLASTIC SL1" WITHIN TWO (2) DAYS AFTER SAWCUTTING. NO HORIZONTAL JOINTS WILL BE PERMITTED IN SLABS OR BEAMS UNLESS APPROVED BY THE ENGINEER.
- VERTICAL TOP & BOTTOM CORNER BARS AT ALL DISCONTINUOUS GRADE BEAMS AND FOUNDATION CORNERS. CORNER BARS SHALL BE 4'-0" IN LENGTH (2'-0" LEGS). SIZE OF THE CORNER BARS SHALL MATCH THE SIZE OF THE GRADE BEAM REINFORCING AS SHOWN BY STRUCTURAL DRAWINGS.
- MAINTAIN A MINIMUM OF ONE AND ONE-HALF (1-1/2) TIMES THE MAXIMUM COARSE AGGREGATE SIZE BETWEEN ALL REINFORCING BARS (EXCEPT AT LAPs).
- BARS SCHEDULED OR DETAILED "CONT" SHALL BE LAPPED 40 BAR DIAMETERS (24 INCHES MINIMUM) UNLESS OTHERWISE NOTED.
- WHERE CONCRETE IS TO HAVE UNEXPOSED SURFACES, THE FORMS MAY BE CONSTRUCTED OF #2 LUMBER OR BETTER. WHERE SURFACES ARE EXPOSED, SUCH AS FOR FINISH PAINTING OR STUCCO DASH, THE FORMS SHALL BE COMMERCIAL STANDARD DOUGLAS FIR, MOISTURE-RESISTANT CONCRETE FORM PLYWOOD; MINIMUM 5-PLY AND AT LEAST 9/16" THICK, OR FORMS LINED WITH COMMERCIAL STANDARD DOUGLAS FIR, CONCRETE FORM EXTERIOR, 3-PLY, NOT LESS THAN 1/4" THICK. WHERE CONCRETE IS EXPOSED, A SMOOTH SURFACE IS REQUIRED, FREE FROM FINs, HONEYCOMB, FORM MARKS OR OTHER DEFECTS.
- EXPOSED SURFACES OF CONCRETE AT THE PERIMETER OF THE FOUNDATION SHALL BE FORMED WITH 2X10 #2 LUMBER OR BETTER. SMOOTH SURFACE IS REQUIRED, FREE FROM FINs, HONEYCOMB, FORM MARKS OR OTHER DEFECTS.
- CONSTRUCT FORMS SO THAT JOINTS ARE LEAKPROOF. MAINTAIN FORMS SUFFICIENTLY RIGID TO PREVENT DEFORMATION UNDER LOAD.
- CONCRETE MAY BE PLACED WITH CHUTES UP TO 25' MAXIMUM. SLUMP SHALL NOT EXCEED 6" AT TRUCK DISCHARGE POINT.
- CONCRETE PLACED BY PUMPING SHALL MEET THE FOLLOWING REQUIREMENTS:
  - COARSE AGGREGATE SHALL BE GRADED FROM A MAXIMUM OF 1" DOWN
  - MAXIMUM ALLOWABLE INCREASE IN CEMENT FACTOR SHALL BE 1/2 SACK PER CUBIC YARD OVER NORMAL MIX DESIGN.
  - MAXIMUM WATER CEMENT RATIO SHALL BE 7-1/2 GALLONS PER SACK OF CEMENT. IF MORE WORKABILITY IS REQUIRED, AN ADMIXTURE MAY BE USED.
  - MAXIMUM WEIGHT RATIO OF FINE AGGREGATES TO COARSE AGGREGATES SHALL NOT EXCEED 2/3.
  - REFER TO A.C.I. #301, LATEST EDITION, SECTION 800, FOR OTHER PUMPING REQUIREMENTS.
  - IN NO CASE SHALL CONCRETE BE PUMPED THROUGH AN ALUMINUM TUBE.
  - SLUMP SHALL NOT EXCEED 6" AT TRUCK DISCHARGE POINT.
- FLOOR FINISH (TOLERANCES)
  - STEEL TROWEL FINISH 1/8" IN 10'
  - FLOAT FINISH 1/4" IN 10'
  - SCRATCH FINISH 1/2" IN 10'
- CONCRETE TO BE CURED IN ACCORDANCE WITH ACI RECOMMENDATIONS. PROPOSED METHOD OF CURING TO BE COORDINATED WITH ENGINEER PRIOR TO CONCRETE PLACEMENT.
- SHOP DRAWINGS SHALL BE PREPARED FOR ALL REINFORCING STEEL AND SUBMITTED FOR REVIEW BY ENGINEER. SUBMITTALS SHALL INCLUDE ELECTRONIC (PDF) COPIES OF EACH DRAWING. ENGINEERING DRAWINGS SHALL NOT BE REPRODUCED AND USED AS SHOP DRAWINGS.
- THE CONTRACTOR SHALL REVIEW AND ANNOTATE SHOP DRAWINGS BEFORE SUBMITTING THEM TO THE ARCHITECT/ENGINEER FOR REVIEW. THE CONTRACTOR SHALL ALLOW ARCHITECT/ENGINEER 10 WORKING DAYS FOR REVIEW OF SHOP DRAWINGS.
- ENGINEER TO BE NOTIFIED 48 HOURS PRIOR TO PLACEMENT OF FOUNDATION AND OF STRUCTURAL CONCRETE TO SCHEDULE REQUIRED OBSERVATIONS.

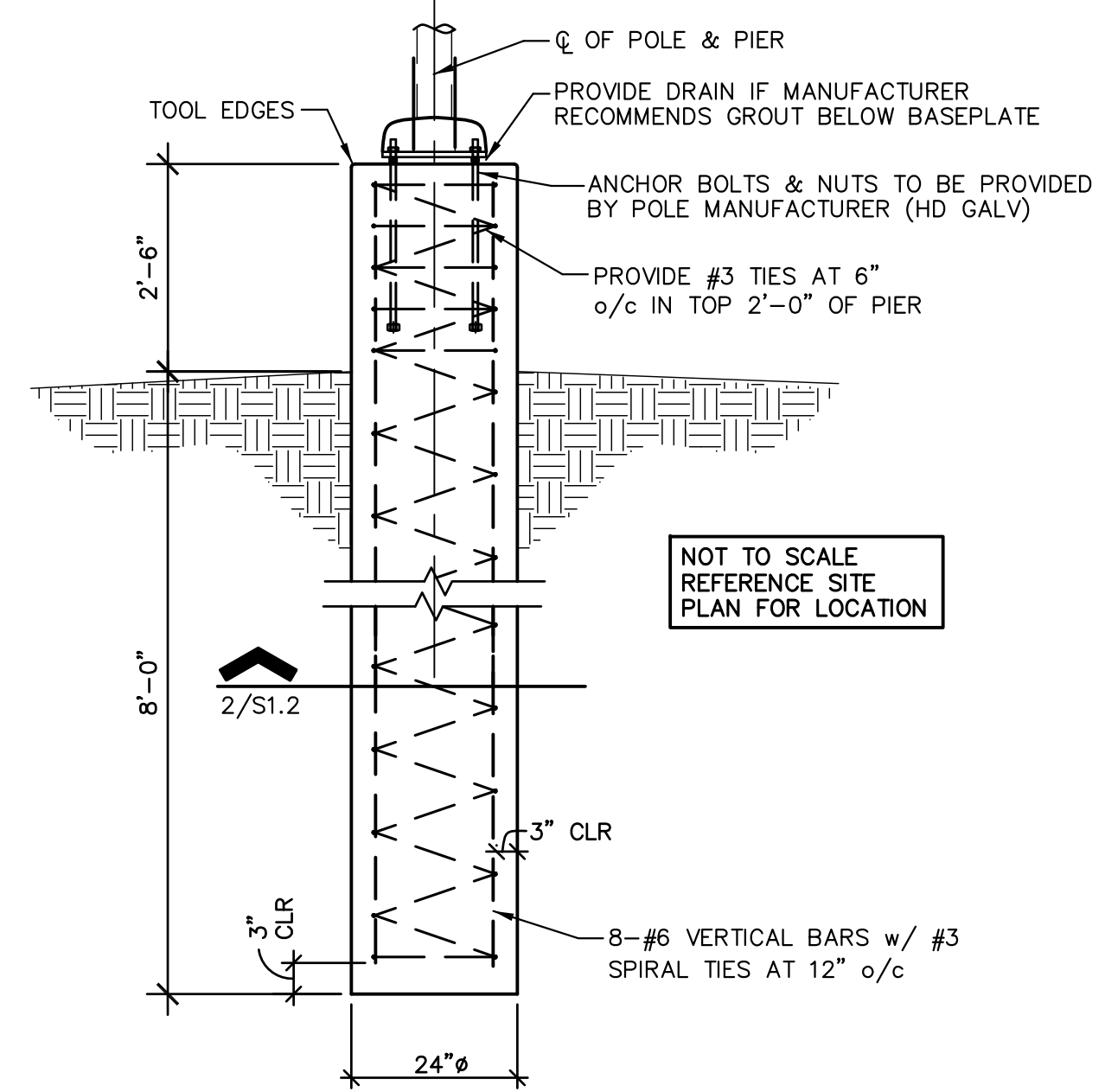
## SPECIAL INSPECTIONS

SPECIAL INSPECTIONS INDEPENDENT OF THE CONTRACTOR, THE ARCHITECT, OR THE ENGINEER, SHALL BE PROVIDED BY A SPECIAL INSPECTOR EMPLOYED BY THE OWNER ACCORDING TO CHAPTER 17 OF THE IBC 2018. THE SPECIAL INSPECTOR SHALL OBSERVE THE WORK FOR CONFORMANCE WITH THE CONTRACT DOCUMENTS. THE SPECIAL INSPECTOR SHALL SEND WRITTEN REPORTS TO THE OWNER, THE ARCHITECT, THE ENGINEER AND THE CONTRACTOR. THE REPORTS SHALL INDICATE IF WORK INSPECTED WAS DONE IN CONFORMANCE WITH THE CONTRACT DOCUMENTS. ALL DISCREPANCIES SHALL BE BROUGHT TO THE IMMEDIATE ATTENTION OF THE CONTRACTOR FOR CORRECTION. IF THE DISCREPANCIES ARE NOT CORRECTED, THE SPECIAL INSPECTOR SHALL BRING THE DISCREPANCIES TO THE ATTENTION OF THE REGISTERED DESIGN PROFESSIONAL IN RESPONSIBLE CHARGE PRIOR TO THE COMPLETION OF THAT PHASE OF THE WORK. THE SPECIAL INSPECTOR SHALL SUBMIT A FINAL SIGNED REPORT STATING THAT THE SPECIAL INSPECTION WORK WAS, TO THE BEST OF THEIR KNOWLEDGE, IN OR NOT IN CONFORMANCE WITH THE DRAWINGS, SPECIFICATIONS AND APPLICABLE WORKMANSHIP PROVISIONS OF THE IBC 2018.

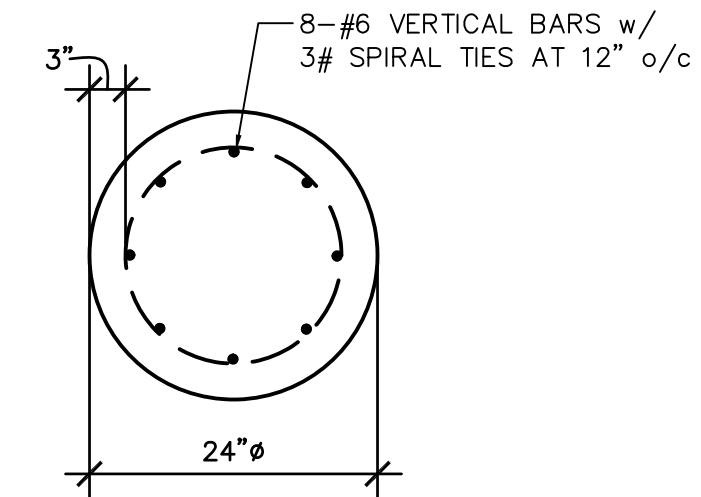
CONTINUOUS OR PERIODIC SPECIAL INSPECTION IS REQUIRED FOR THE FOLLOWING WORK:

REQUIRED VERIFICATION AND INSPECTION OF PIER FOUNDATIONS		
VERIFICATION AND INSPECTION TASK	CONTINUOUS DURING TASK LISTED	PERIODICALLY DURING TASK LISTED
OBSERVE DRILLING OPERATIONS AND MAINTAIN COMPLETE AND ACCURATE RECORDS OF EACH PIER	X	
VERIFY PLACEMENT LOCATIONS AND PLUMBNESS, CONFIRM PIER DIAMETERS, BELL DIAMETERS (IF APPLICABLE), LENGTHS, EMBEDMENT INTO BEDROCK (IF APPLICABLE) AND ADEQUATE END BEARING STRATA CAPACITY	X	
FOR CONCRETE PIERS, PERFORM ADDITIONAL INSPECTIONS AS REQUIRED FOR CONCRETE CONSTRUCTION		

REQUIRED VERIFICATION AND INSPECTION OF CONCRETE CONSTRUCTION		
VERIFICATION AND INSPECTION	CONTINUOUS	PERIODIC
INSPECTION OF REINFORCING STEEL, INCLUDING PRESTRESSING TENDONS, AND PLACEMENT		X
INSPECT BOLTS TO BE INSTALLED IN CONCRETE PRIOR TO AND DURING PLACEMENT OF CONCRETE	X	
VERIFY USE OF REQUIRED DESIGN MIX		X
PERFORM SLUMP AND AIR CONTENT TEST, AND DETERMINE THE TEMPERATURE OF THE CONCRETE AT THE TIME OF SAMPLING FRESH CONCRETE FOR MAKING SPECIMENS FOR STRENGTH TESTS PER ACI 318	X	
INSPECTION OF CONCRETE AND SHOTCRETE PLACEMENT FOR PROPER APPLICATION TECHNIQUES	X	
INSPECTION FOR MAINTENANCE OF SPECIFIED CURING TEMPERATURE AND TECHNIQUES		X
INSPECTION OF PRESTRESSED CONCRETE APPLICATION OF PRESTRESSING FORCES	X	
VERIFICATION OF IN-SITU CONCRETE STRENGTH, PRIOR TO STRESSING OF TENDONS IN POST-TENSIONED CONCRETE AND PRIOR TO REMOVAL OF SHORES AND FORMS FROM BEAMS AND STRUCTURAL SLABS		X
ERECTION OF PRECAST CONCRETE MEMBERS		X
INSPECT FORMWORK FOR SHAPE, LOCATION AND DIMENSIONS OF THE CONCRETE MEMBER BEING FORMED		X



1 TYPICAL LIGHT POLE FOUNDATION DETAIL



2

NO: REVISION: BY:

COPY NO:



TEXAS

IDEA PUBLIC SCHOOLS  
ELECTRICAL AND LIGHTING UPGRADES  
AT RGV CAMPUSES

BROWNSVILLE

IDEA PHARR



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ENGINEERING FIRM  
F-15988

DATE: FEBRUARY 23, 2024

CHECKED BY: BD

DRAWN BY: DC

PROJECT NO.: 1178-41

CAD FILE: S1.2

SHEET: S1.2



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