

Appendix B for Building

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2018 NC Administrative Code and Policies

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CONSTRUCTION DOCUMENTS

SCALE

NO.	DESCRIPTION	DATE
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DRAWN BY _____ AF

APPROVED BY _____ POA

CHECKED BY _____ GDA

DATE 08/11/2025

TITLE

BUILDING CODE SUMMARY

PROJECT NO.	50189359
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G-001

SHEET NO.

ABBREVIATIONS - ELECTRICAL

THIS IS A MASTER ABBREVIATIONS LIST. SOME ABBREVIATIONS MAY NOT APPLY TO THIS PROJECT.

A, AMP	AMPERE
AC	ABOVE CEILING
AFF	ABOVE FINISH FLOOR
AHJ	AUTHORITY HAVING JURISDICTION
AWG	AMERICAN WIRE GAUGE
BRKR, BKR	BREAKER
C/B, CB	CIRCUIT BREAKER
CKT	CIRCUIT
DWG	DRAWING
E, EX	EXISTING
EC	EMPTY CONDUIT
EM, EMERG	EMERGENCY
FA	FIRE ALARM
HL	HORN LIGHT
JB, JBOX	JUNCTION BOX
KCMIL	THOUSAND CIRCULAR MILLS
LV	LOW VOLTAGE
NEC	NATIONAL ELECTRIC CODE
NEMA	NATIONAL ELECTRICAL MANUFACTURERS ASSOCIATION
NFPA	NATIONAL FIRE PROTECTION ASSOCIATION
NTS	NOT TO SCALE
PH, Ø	PHASE
PNL	PANEL
PWR	POWER
TYP	TYPICAL
UNO	UNLESS NOTED OTHERWISE
VOIP	VOICE OVER INTERNET PROTOCOL
W	WIRE
W	WATT









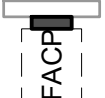
STANDARDS DETAILING SYMBOLS	
SYMBOL	DESCRIPTION
	CALLOUT
	VIEW TITLE
	NORTH INDICATOR
	ROOM TAG
	REVISION TAG
	REVISION CLOUD
	KEYNOTE TAG (PER SHEET NUMBERS)
<h3>LINETYPES</h3>	
	BACKGROUND
	EXISTING
	DEMOLITION
	NEW
	FUTURE
	HIDDEN/UNDER OBSTRUCTION

CIRCUIT SYMBOLS	
WIRES	DESCRIPTION
 LC-1-1	HOME RUN. NUMERALS INDICATE PANELBOARD AND CIRCUIT NUMBERS.
	HOME RUN. MULTIPLE ARROWS INDICATES NUMBER OF CIRCUITS INCLUDED IN CONDUIT (1, 2 OR 3).
	UNCONTROLLED CIRCUIT
	INDICATES CIRCUIT CONTINUATION
	STUB INTO ACCESSIBLE CORRIDOR CEILING SPACE UNO

POWER SYMBOLS	
SYMBOL	DESCRIPTION
	WALL MOUNTED PANEL (SHADING INDICATES ESSENTIAL BRANCH)

STANDARD WALL MOUNTING HEIGHT			
DEVICE OR EQUIPMENT TYPE	MOUNTING HEIGHT (AFF/AFG)	MEASURED TO	NOTES
EMERGENCY LIGHTS	96"	TOP	1, 2
FA NOTIFICATION DEVICES	84"	BOTTOM	1
FA PULL STATIONS	48"	TOP	1
PANELBOARDS	78"	TOP	1, 3

FIRE ALARM SYMBOLS

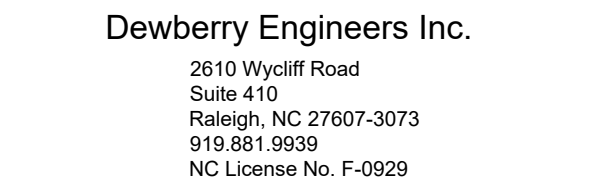
SYMBOL		DESCRIPTION	
CEILING MOUNTED	WALL MOUNTED		
BT 	BR 	SMOKE DETECTOR PHOTOELECTRIC, UNO.	<u>SUBSCRIPTS</u> "BR" = BEAM RECEIVER "BT" = BEAM TRANSMITTER "ER" = ELEVATOR "F" = FIXED TEMPERATURE "IP" = COMBINATION I/P "RF" = COMBINATION I/F "IO" = IONIZATION "SB" = SOUNDER BASE "SC" = SECURITY COVER "WG" = WIRE GUARD "WP" = WEATHER PROOF
		HEAT DETECTOR RATE OF RISE, UNO.	
		VISIBLE	<u>SUBSCRIPTS</u> "#cd" = CANDELA "#dB" = DECIBEL RATING "#W" = SPEAKER WATTAGE "WG" = WEATHER GUARD "WP" = WEATHER PROOF
		COMBINATION AUDIBLE/VISIBLE	
		<u>DESIGNATIONS</u> "ASDP" = ASPIRATING SMOKE DETECTOR PANEL "BATT" = BATTERY CABINET "DACT" = DIGITAL ALARM COMMUNICATIONS TRANSMITTER "FAA" = ANNUNCIATOR PANEL "FACU" = CONTROL UNIT "FATC" = TERMINAL CABINET "NAC" = NOTIFICATION APPLIANCE CIRCUIT PANEL "SECP" = SMOKE EVACUATION CONTROL PANEL	
		FIRE ALARM PANEL SURFACE MOUNTED	

GENERAL NOTES - ELECTRICAL

1. ELECTRICAL PLANS ARE GENERALLY DIAGRAMMATIC IN NATURE AND DO NOT CONVEY ALL DETAILS REQUIRED FOR A COMPLETE INSTALLATION. HOWEVER, THESE PLANS SHALL BE FOLLOWED AS CLOSELY AS POSSIBLE FOR GENERAL ARRANGEMENT AND LOCATION OF EQUIPMENT. REFER TO ARCHITECTURAL PLANS FOR EXACT LOCATIONS, DIMENSIONS AND MOUNTING METHODS. CONTRACTOR SHALL VERIFY ALL DIMENSIONS PRIOR TO COMMENCING WORK. CONTRACTOR SHALL VERIFY STRUCTURAL AND FINISH CONDITIONS PRIOR TO COMMENCING WORK. CONTRACTOR SHALL ARRANGE WORK TO MEET THESE CONDITIONS AND PROVIDE SUCH EQUIPMENT AND ACCESSORIES AS MAY BE REQUIRED. IN THE EVENT OF A CONFLICT, DEVIATION OR DISCREPANCY FOUND WITHIN THE PLANS OR SPECIFICATIONS, CONTRACTOR SHALL PROVIDE WRITTEN NOTIFICATION TO ENGINEER OF RECORD FOR CLARIFICATION PRIOR TO COMMENCING WORK.
2. ALL WORK SHALL BE PERFORMED IN ACCORDANCE WITH THE PROJECT SPECIFICATIONS, MANUFACTURERS' RECOMMENDED INSTALLATION PROCEDURES, THE AMERICANS WITH DISABILITIES ACT, ANSI A117.1, THE NATIONAL ELECTRICAL CODE, THE NATIONAL FIRE ALARM AND SIGNALING CODE AND ALL OTHER APPLICABLE LOCAL AND STATE CODES AS ADOPTED AND MODIFIED BY THE AUTHORITIES HAVING JURISDICTION.
3. AN ELECTRICAL FOREMAN SHALL BE ON-SITE, SUPERVISING ALL WORK PERFORMED.
4. CONTRACTOR SHALL COORDINATE WITH OWNER FOR ACCESS TO AREA OF WORK AND FOLLOW ALL OWNER ENVIRONMENTAL, HEALTH, SAFETY AND SECURITY PROTOCOLS.
5. ALL WORK SHALL BE PHASED IN ACCORDANCE WITH CONTRACT PLANS, SPECIFICATIONS AND OWNER'S REQUIREMENTS.
6. ALL MATERIALS AND EQUIPMENT FURNISHED FOR THIS PROJECT SHALL BE NEW AND SHALL BE LISTED AND LABELED BY A THIRD PARTY NATIONALLY RECOGNIZED TESTING LABORATORY AS REQUIRED AND PERMITTED BY AUTHORITIES HAVING JURISDICTION. WHERE MULTIPLE PIECES OF EQUIPMENT AND/OR COMPONENTS ARE INSTALLED IN A COMMON ENCLOSURE, THE ENTIRE ASSEMBLY SHALL BE LISTED AND LABELED AS AN ASSEMBLY. MODIFICATIONS OR ADDITIONS TO EXISTING EQUIPMENT SHALL MATCH EXISTING TO MAINTAIN ANY ASSEMBLY LISTING.
7. CONTRACTOR SHALL COORDINATE LOCATIONS OF ALL FIRE AND/OR SMOKE RATED WALLS, BARRIERS, CEILINGS, FLOORS, PARTITIONS, AND ROOFS PRIOR TO AND DURING CONSTRUCTION.
8. CONTRACTOR SHALL PROVIDE NATIONALLY RECOGNIZED TESTING LABORATORY LISTED THROUGH-PENETRATION DRAFT, FIRE AND SMOKE STOP SYSTEMS FOR ALL NEW FIRE AND/OR SMOKE-RATED WALL, BARRIER, CEILING, FLOOR AND ROOF PENETRATIONS WITHIN THE AREA OF WORK IN ACCORDANCE WITH THE REQUIREMENTS OF THE NATIONAL ELECTRICAL CODE, NATIONALLY RECOGNIZED TESTING LABORATORY LISTED REQUIREMENTS AND APPLICABLE BUILDING CODES. PROVIDE PENETRATION ASSEMBLIES SUITABLE FOR PARTICULAR CONSTRUCTION.
9. CONTRACTOR SHALL MAINTAIN INTEGRITY OF VAPOR BARRIER AND INSULATION FOR ALL ELECTRICAL WORK AND DEVICES ON EXTERIOR AND PERIMETER WALLS.
10. CONTRACTOR SHALL COORDINATE ELECTRICAL WORK WITH ALL OTHER TRADES PRIOR TO COMMENCING WORK TO ENSURE ELECTRICAL WORK DOES NOT INTERFERE WITH OTHER TRADES. LINES AND SYSTEMS THAT REQUIRE SLOPE SHALL TAKE PRECEDENCE OVER ELECTRICAL WORK.
11. CONTRACTOR SHALL REFER TO MECHANICAL AND PLUMBING DRAWINGS FOR LOCATIONS OF MECHANICAL AND PLUMBING EQUIPMENT. CONTRACTOR SHALL REFER TO DRAWINGS OF OTHER TRADES FOR LOCATIONS OF THEIR EQUIPMENT. CONTRACTOR SHALL COORDINATE AND VERIFY ELECTRICAL REQUIREMENTS WITH OTHER TRADES PRIOR TO COMMENCING WORK.
12. PRIOR TO EQUIPMENT INSTALLATION, CONTRACTOR SHALL CONDUCT FIELD MEASUREMENTS TO ENSURE ALL ELECTRICAL EQUIPMENT AND ACCESSORIES WILL FIT INTO LOCATION(S) AS INDICATED ON PLANS. IN THE EVENT OF A CONFLICT, DEVIATION OR DISCREPANCY, CONTRACTOR SHALL PROVIDE A PROPOSED SKETCH OF REVISED ARRANGEMENT TO ENGINEER OF RECORD FOR ACCEPTANCE PRIOR TO COMMENCING WORK.
13. PROPERLY SUPPORT ALL WORK AND EQUIPMENT INSTALLED UNDER THIS CONTRACT PLUMB AND PARALLEL WITH BUILDING LINES. STUDY ALL GENERAL, STRUCTURAL, PLUMBING, HVAC, AND ELECTRICAL DRAWINGS, SHOP DRAWINGS, AND CATALOG DATA TO DETERMINE HOW EQUIPMENT, ACCESSORIES, PIPING, FIXTURES, AND RELATED ITEMS ARE TO BE SUPPORTED, MOUNTED, OR SUSPENDED. PROVIDE ALL BOLTS, INSERTS, PIPE STANDS, BRACKETS, STRUCTURAL SUPPORTS, AND ACCESSORIES FOR PROPER SUPPORT OF EQUIPMENT FURNISHED UNDER THIS CONTRACT.
14. CONTRACTOR SHALL PROVIDE ADDITIONAL SUPPORT FOR DEVICE BACK BOXES, EQUIPMENT, LUMINAIRES AND RACEWAY WHERE BUILDING CONSTRUCTION IS NOT SUITABLE FOR DIRECT MOUNTING.
15. CONTRACTOR SHALL VERIFY CEILING SYSTEMS AND PROVIDE MOUNTING ACCESSORIES, TRIMS AND ALL REQUIRED MOUNTING HARDWARE TO SUIT THE PARTICULAR INSTALLATION.
16. CONTRACTOR SHALL NOT BACKFILL EXCAVATIONS, INSTALL COVERPLATES AND ENCLOSURES OR GENERALLY SEAL OR OBSCURE ELECTRICAL INSTALLATIONS PRIOR TO INSPECTION AND ACCEPTANCE BY AUTHORITIES HAVING JURISDICTION.
17. CONTRACTOR SHALL REMOVE ALL DIRT AND DEBRIS FROM ALL ELECTRICAL ENCLOSURES AND DEVICE, INSTALLATION AND PULL BOXES PRIOR TO INSTALLATION OF DEVICES, COVERPLATES AND LIDS.
18. CONTRACTOR SHALL LABEL ALL COVERPLATES, EQUIPMENT, JUNCTION BOXES, AND PULL BOXES WITH CIRCUIT AND PANEL DESIGNATIONS. REFER TO DETAILS AND SPECIFICATIONS FOR SPECIFIC LABEL AND IDENTIFICATION REQUIREMENTS.
19. CONTRACTOR SHALL PROVIDE NEW, TWO COLUMN, TYPED, COMPLETED AND REMOVABLE DIRECTORYS INDICATING CIRCUIT DESCRIPTIONS AND ROOM NUMBERS (AS INDICATED BY FINAL ROOM SIGNAGE), FOR ALL AFFECTED CIRCUITS WITHIN ELECTRICAL DISTRIBUTION EQUIPMENT. ALL SPACES SHALL BE INDICATED AS SUCH. ALL SPARES SHALL BE INDICATED AS SUCH AND PLACED IN THE "OFF" POSITION.
20. MINIMUM RACEWAY SIZE OF 3/4", UNLESS NOTED OTHERWISE. WHERE WIRING IS EXPOSED, IN NON-ACCESSIBLE AREAS OR REQUIRING PROTECTION FROM DAMAGE - SUCH AS PASSING THROUGH A FLOOR OR WALL, METALLIC CONDUIT SHALL BE USED. OTHERWISE, PLENUM RATED CABLE MAY BE SUITABLE IN PLENUMS INSTALLED PER NFPA21 12.3 AND 24.3.13-14.
21. ALL RACEWAYS SHALL BE INSTALLED CONCEALED ABOVE CEILINGS, WITHIN WALLS OR BELOW FLOORS EXCEPT WITHIN UNFINISHED SPACES AND ON CEILINGS OF AREAS WITH EXPOSED STRUCTURE.
22. ALL EMPTY RACEWAYS SHALL BE PROVIDED WITH PULL STRINGS INSTALLED PER SPECIFICATIONS.

GENERAL NOTES - ELECTRICAL

23. ALL EXPOSED RACEWAY ENDS SHALL BE PROVIDED WITH PLASTIC BUSHINGS.
24. ALL ELECTRICAL CONDUCTORS, EQUIPMENT AND TERMINALS SHALL BE 75°C RATED UNLESS NOTED OTHERWISE.
25. MINIMUM CONDUCTOR SIZE OF #12AWG, COPPER, THHN/THWN, FOR BRANCH CIRCUITS, UNLESS NOTED OTHERWISE.
26. DEVICE BACK BOXES LOCATED ON OPPOSITE SIDES OF FIRE OR SMOKE RATED PARTITIONS SHALL NOT BE MOUNTED WITHIN THE SAME WALL CAVITY. WALL PENETRATIONS SHALL BE SEPARATED BY MOUNTING BOXES ON OPPOSITE SIDES OF WALL STUDS OR OTHER VERTICAL STRUCTURAL MEMBER INSIDE THE WALL.
27. SMOKE DETECTORS SHALL BE LOCATED MINIMUM 3'-0" FROM HVAC SUPPLY AND RETURN OPENINGS.
28. WHERE MULTIPLE VISUAL NOTIFICATION DEVICES CAN BE SEEN FROM A SINGLE LOCATION DURING NORMAL FACILITY OPERATION, ALL STROBES SHALL BE SYNCHRONIZED TO ALLOW FOR SIMULTANEOUS OPERATION.



SEAL

KEY PLAN

SCALE

REVISIONS

NO.	DESCRIPTION	DATE
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DRAWN BY _____ AF

APPROVED BY _____ POA

CHECKED BY _____ GDA

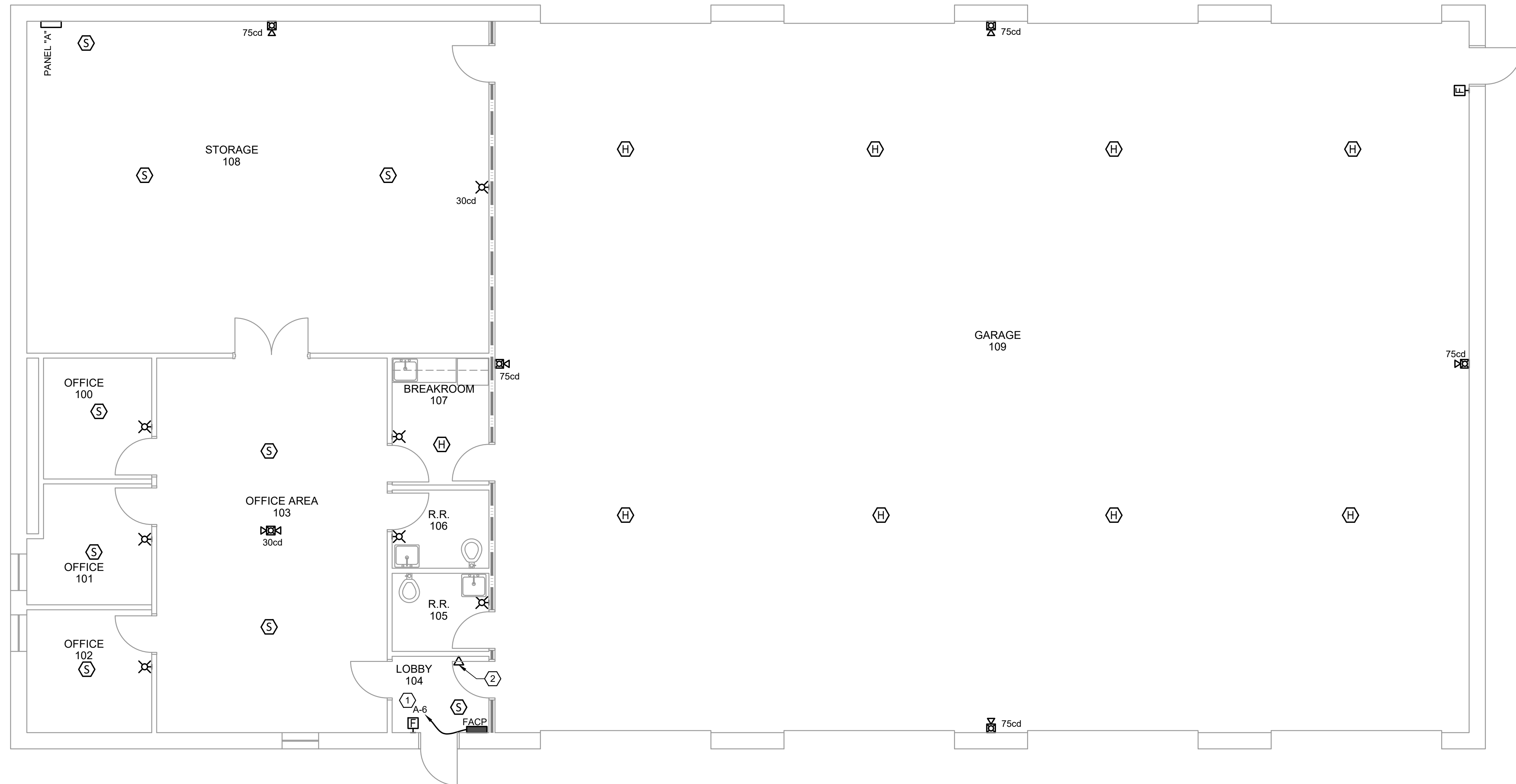
DATE 08/11/2025

ELECTRICAL SYMBOLS, NOTES & ABBREVIATIONS

PROJECT NO. 50189359

E-001

SHEET NO.



1 FIRST FLOOR NEW WORK PLAN

SCALE: 3/16" = 1'-0"



GENERAL NOTES:

1. REFER TO E-001 FOR ELECTRICAL SYMBOLS, ABBREVIATIONS AND GENERAL NOTES.
2. REFER TO E-001 TABLE "STANDARD MOUNTING HEIGHTS" FOR ALL DEVICE AND EQUIPMENT MOUNTING HEIGHTS, UNLESS NOTED OTHERWISE.
3. PROVIDE THIRD PARTY NATIONALLY RECOGNIZED TESTING LABORATORY LISTED THROUGH PENETRATION FIRE STOP SYSTEMS FOR ALL FIRE AND/OR SMOKE RATED WALLS.
4. OWNER SHALL INSTALL FIRE ALARM SYSTEM FROM FIRE-LITE ALARMS BY HONEYWELL MODEL ES-506 INTELLIGENT ADDRESSABLE FACP WITH COMMUNICATOR.

KEYNOTES:

1. PROVIDE 2#12 , #12G TO FACP FROM EXISTING PANEL. PROVIDE 1P-20A PAD LOCKABLE RED BREAKER IN PANEL TO MATCH EXISTING. REVISE PANEL DIRECTORY LABEL "FACP".
2. PROVIDE DATA TO ACCESSIBLE CEILING AND DOUBLE GANG BOX FOR OWNER DATA CONNECTION TO FACP DACT.

WALL RATING LEGEND:

FIRE-RATED BARRIER 3 HOUR



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CAMPBELL UNIVERSITY STATION HOUSE FIRE ALARM PROJECT

112 PEARSON RD
LILLINGTON, NC 27546

CONSTRUCTION DOCUMENTS

SEAL

KEY PLAN

SCALE

REVISIONS

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NO.	DESCRIPTION	DATE
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APPROVED BY _____ POA _____

CHECKED BY _____ GDA _____

DATE 08/11/2025

TITLE _____

ELECTRICAL NEWS

ELECTRICAL NEW

WORK PLAN

PROJECT NO	5018935
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LEAD

SHEET NO. _____

