ELECTRICAL SYSTEMS SEISMIC REQUIREMENTS PER IBC-2018/ASCE 7-2016

A. PER THE 2018 INTERNATIONAL BUILDING CODE, MECHANICAL, PLUMBING AND ELECTRICAL EQUIPMENT AND COMPONENTS, INCLUDING THEIR SUPPORTS AND ATTACHMENTS, SHALL BE DESIGNED FOR SEISMIC FORCES IN ACCORDANCE WITH CHAPTER 12 OF ASCE 7-16.

B. EXTERIOR EQUIPMENT (INCLUDING ROOF CURBS, RAILS, SUPPORTS) EXPOSED TO WIND SHALL BE DESIGNED AND INSTALLED TO RESIST THE WIND PRESSURES DETERMINED IN ACCORDANCE WITH CHAPTER 26 TO 29 OF ASCE 7-16.

C. WHERE DESIGN FOR SEISMIC AND WIND LOADS IS REQUIRED, THE MORE DEMANDING FORCE MUST BE USED.

D. REFERENCE THE STRUCTURAL DRAWINGS FOR SITE SPECIFIC INFORMATION ON SEISMIC INFORMATION ON SEISMIC DESIGN CATEGORY, WIND, SPEEDS, ETC.

E. USE THE TABLE BELOW TO DETERMINE SEISMIC RESTRAINT REQUIREMENTS FOR EACH COMPONENT.

F. FOR ALL COMPONENTS REQUIRING SEISMIC RESTRAINT, THE COMPONENT SUPPORTS AND ATTACHMENTS SHALL BE DESIGNED BY A REGISTERED DESIGN PROFESSIONAL REGISTERED IN THE STATE THE JOB IS LOCATED. SUBMITTALS MUST INCLUDE STAMPED AND SIGNED DRAWINGS AND CALCULATIONS.

G. WHERE SEISMIC RESTRAINT IS REQUIRED, HOUSEKEEPING PADS NEEDED FOR THE INSTALLATION OF EQUIPMENT UNDER THIS CONTRACT MUST BE DESIGNED BY THE SEISMIC ENGINEER. DO NOT POUR ANY HOUSEKEEPING PADS PRIOR TO THE RECEIPT OF THE APPROVED SEISMIC SUBMITTAL.

H. SEISMIC RESTRAINTS FOR DUCTWORK, PIPING, CONDUIT, CABLE TRAYS AND BUS DUCT MUST BE SHOWN ON LAYOUT DRAWINGS SHOWING SPECIFIC RESTRAINT LOCATIONS ALONG WITH ACCOMPANYING DETAILS AND CALCULATIONS.

ELECTRICAL COMPONENT IMPORTANCE FACTOR (Ip) DESIGNATION

Ip = 1.0	Ip = 1.5
• ALL ASSOCIATED ELECTRICAL WORK UNLESS NOTED OTHERWISE	• EMERGENCY LIGHTS • EXIT LIGHTS • EMERGENCY POWER SYSTEMS • FILE ALARM

SEISMIC DESIGN CATEGORIES D,E,F

	COMPONENT IMPORTANCE FACTOR (Ip)			
	1.0		1.5	
COMPONENT IDENTIFICATION	SEISMIC RESTRAINT REQUIREMENT	NOTES	SEISMIC RESTRAINT REQUIREMENT	NOTES
ROOF MOUNTED	RESTRAIN ALL	1	RESTRAIN ALL	———
FLOOR MOUNTED	RESTRAIN ALL	1,2	RESTRAIN ALL	———
WALL MOUNTED	RESTRAIN ALL	1,2	RESTRAIN ALL	———
COMPONENT SUPPORTS	RESTRAIN ALL	1	RESTRAIN ALL	———
SUSPENDED EQUIPMENT	RESTRAIN ALL	1	RESTRAIN ALL	———
SINGLE CONDUIT	RESTRAIN IF ≥ 2.5"	3	RESTRAIN IF ≥ 2.5"	3
CABLE TRAY/BUS DUCT TRAPEZED CONDUIT	RESTRAIN IF ANY CONDUIT ON TRAPEZE ≥ 2.5" RESTRAIN IF TOTAL WEIGHT OF SUSPENDED COMPONENT > 10 LBS/FT	3	RESTRAIN IF ANY CONDUIT ON TRAPEZE ≥ 2.5" RESTRAIN IF TOTAL WEIGHT OF SUSPENDED COMPONENT > 10 LBS/FT	3
COMPONENT CERTIFICATION	NOT REQUIRED	———	REQUIRED	5
PENDANT, LAY-IN AND CAN LIGHTS	REQUIRED	4	REQUIRED	4

NOTES:

1. EQUIPMENT 20 LBS. OR LESS IS EXEMPT IF THE COMPONENT IS POSITIVELY ATTACHED TO THE STRUCTURE AND FLEXIBLE CONNECTIONS ARE PROVIDED BETWEEN THE COMPONENT AND ASSOCIATED DUCTWORK, PIPING AND CONDUIT.
2. RESTRAINTS ARE NOT REQUIRED IF THE COMPONENT WEIGHTS 400 LBS. OR LESS, IS MOUNTED WITH THE CENTER MASS AT 4' OR LESS ABOVE A FLOOR, IS POSITIVELY ATTACHED TO THE STRUCTURE, AND HAS FLEXIBLE CONNECTIONS BETWEEN THE COMPONENT AND ASSOCIATED DUCTWORK, PIPING AND CONDUIT.
3. RESTRAINT IS NOT REQUIRED IF THE CONDUIT IS SUPPORTED BY HANGERS AND EACH HANGER IN THE RUN 12"-INCH OR LESS LENGTH FROM THE TOP OF THE PIPE TO THE SUPPORTING STRUCTURE. WHERE PIPES ARE SUPPORTED ON A TRAPEZE SHALL BE SUPPORTED BY HANGERS HAVING A LENGTH OF 12-INCH OR LESS. WHERE ROD HANGERS ARE USED, THEY SHALL BE EQUIPPED WITH SWIVELS, EYE NUTS OR OTHER DEVICES TO PREVENT BENDING IN THE ROD.
4. THE RESTRAINT OF PENDANT, LAY-IN AND CAN LIGHTS IS ADDRESSED IN ASTM C636 AND E580.
5. COMPONENT CERTIFICATION MUST BE SUPPLIED BY THE EQUIPMENT MANUFACTURER AT TIME OF SUBMITTAL FOR REVIEW BY ENGINEER OF RECORD.

GENERAL POWER NOTES:

1. SEE THE ELECTRICAL SITE PLAN FOR ASSUMED LOCATIONS OF NEW UTILITY TRANSFORMER PAD AND UTILITY SERVICE POINT. COORDINATE EXACT LOCATION WITH THE UTILITY COMPANY, COORDINATE WITH THE UTILITY COMPANY TO PROVIDE A METER ON SERVICE, METER SHALL BE LOCATED PER UTILITY COMPANY REQUIREMENTS. ALL COSTS ASSOCIATED WITH THE UTILITY SERVICE (PAD, PRIMARY CONDUIT, METER, PERMITTING, ETC.) SHALL BE THE RESPONSIBILITY OF THE CONTRACTOR.
2. THE GROUND ROD CLUSTER FOR THE SERVICE GROUND SHALL CONSIST OF THREE 3/4" x 10'-0" COPPER CLAD STEEL GROUND RODS. THEY SHALL BE DRIVEN IN TRIANGULAR CONFIGURATION APPROXIMATELY 20' APART AND INTERCONNECTED IN DELTA WITH A #4/0 BARE COPPER CONDUCTOR. TOPS OF THE RODS SHALL BE 12" BELOW FINISHED GRADE. CONNECTION TO THE RODS SHALL BE WITH THE EXOTHERMIC WELDS.
3. STUB-UP (6) 3/4" SPARE CONDUITS FROM EACH FLUSH MOUNTED PANELBOARD TO ABOVE FINISHED CEILING.
4. PROVIDE NEMA CONFIGURATION RECEPTACLES TO MATCH PLUGS ON EQUIPMENT FURNISHED.

LIGHTING LEGEND

SYMBOLS	LIGHTING LUMINAIRE DESCRIPTION
	2'X4' RECESSED, PENDANT, OR SURFACE MOUNTED LUMINAIRE. SEE LUMINAIRE ANCILLARIES BELOW FOR ADDITIONAL REQUIREMENTS.
	2'X2' RECESSED, PENDANT, OR SURFACE MOUNTED LUMINAIRE. SEE LUMINAIRE ANCILLARIES BELOW FOR ADDITIONAL REQUIREMENTS.
	6"X4' RECESSED, PENDANT, OR SURFACE MOUNTED LUMINAIRE. SEE LUMINAIRE ANCILLARIES BELOW FOR ADDITIONAL REQUIREMENTS.
	6"X8' RECESSED, PENDANT, OR SURFACE MOUNTED LUMINAIRE. SEE LUMINAIRE ANCILLARIES BELOW FOR ADDITIONAL REQUIREMENTS.
	ROUND RECESSED, PENDANT, OR SURFACE MOUNTED LUMINAIRE. SEE LUMINAIRE ANCILLARIES BELOW FOR ADDITIONAL REQUIREMENTS.
	OUTDOOR LED WALL PACK. SEE LUMINAIRE ANCILLARIES BELOW FOR ADDITIONAL REQUIREMENTS.
LCP	LIGHTING CONTROL PANEL
	SINGLE FACED ILLUMINATED EGRESS EXIT SIGN. WHERE USED, DIRECTIONAL ARROWS AS INDICATED. WHERE WALL MOUNTED ABOVE DOOR, MOUNT BOTTOM OF FIXTURE 6" ABOVE DOOR FRAME.
	DUAL FACED ILLUMINATED EGRESS EXIT SIGN. WHERE USED, DIRECTIONAL ARROWS AS INDICATED. WHERE WALL MOUNTED ABOVE DOOR, MOUNT BOTTOM OF FIXTURE 6" ABOVE DOOR FRAME.
OS X	OCCUPANCY SENSOR (CEILING MOUNTED), "X" INDICATES SENSOR TYPE DT - DUAL TECHNOLOGY HB - PASSIVE INFRARED WITH HIGH BAY LENS PIL - PASSIVE INFRARED US - ULTRASONIC
OS X	OCCUPANCY SENSOR (WALL MOUNTED), "X" INDICATES SENSOR TYPE
#	LIGHTING CONTROL SCHEME CALLOUT (SEE J-E002 FOR SCHEDULE)

SYMBOLS	LUMINAIRE ANCILLARIES
A 3 A,B a	ONE OR TWO ALPHANUMERIC CHARACTER DENOTING LUMINAIRE TYPE; SEE LIGHTING FIXTURE SCHEDULE. LIGHTING PANEL CIRCUIT NUMBER (3 IN THIS EXAMPLE), SEE LIGHTING PANEL SCHEDULE. WHERE DENOTED WITH AN 'R' PREFIX (R3 FOR EXAMPLE); DENOTES RELAY PANEL CIRCUIT NUMBER, SEE RELAY LIGHTING PANEL SCHEDULE. WHERE INDICATED, SHADED REGION DENOTES LIFE SAFETY EGRESS. WHERE LOWERCASE ALPHANUMERIC CHARACTER IS INDICATED; DENOTES LUMINAIRE CONTROLLED BY THE CORRESPONDING LIGHT SWITCH. WHERE INDICATED, DENOTES LUMINAIRE WIRED TO THE CORRESPONDING PHASE CONDUCTORS.

SYMBOLS	TELECOMMUNICATIONS LEGEND
	COMMUNICATION OUTLET (ROUGH-IN ONLY), WHEN SHOWN, QTY AS NOTED
	COMMUNICATION OUTLET (CEILING MOUNTED, ROUGH-IN ONLY)
TV	TELEVISION CONNECTION LOCATION (ROUGH-IN ONLY)
WF	WI-FI ACCESS POINT (CEILING MOUNTED, ROUGH-IN ONLY)
WF	WI-FI ACCESS POINT (WALL MOUNTED, ROUGH-IN ONLY)
S	SPEAKER (CEILING MOUNTED, ROUGH-IN ONLY)
S	SPEAKER (WALL MOUNTED, ROUGH-IN ONLY)
CR	SECURITY CARD READER (WALL MOUNTED, ROUGH-IN ONLY)
C	CCTV CAMERA (WALL MOUNTED, ROUGH-IN ONLY)
C	CCTV CAMERA (CEILING MOUNTED, ROUGH-IN ONLY)
KP	SECURITY KEYPAD (WALL MOUNTED, ROUGH-IN ONLY)
	TELECOMMUNICATIONS CABLE TRAY IN SPACES. TYPE, SIZE AND HEIGHT AS INDICATED

SWITCHING DEVICE LEGEND

SYMBOLS	DESCRIPTION
	NOTE: WHERE SUBSCRIPT DESIGNATIONS ARE INDICATED ADJACENT TO DEVICE, SEE SWITCHING DEVICE SUBSCRIPT DESIGNATIONS BELOW FOR ADDITIONAL REQUIREMENTS. WHERE USED; LOWER CASE LETTER SUBSCRIPT DENOTES FIXTURES CONTROLLED BY SWITCH, IF NOT INDICATED BY WIRING ARRANGEMENT ON PLANS. WHERE USED AS A DISCONNECT SWITCH, COORDINATE LOCATION AND MOUNTING WITH RELATED EQUIPMENT; COMPLY WITH NEC AND EQUIPMENT MANUFACTURER'S WRITTEN INSTRUCTIONS.
	TOGGLE SWITCH, SINGLE POLE, 20A, 120-277V, UNLESS DENOTED OTHERWISE.
S	WHERE INDICATED, DENOTES SURFACE MOUNTED DEVICE.
3a,3b,c	WHERE MULTIPLE SUBSCRIPT DESIGNATIONS ARE INDICATED, SEE SWITCHING DEVICE SUBSCRIPT DESIGNATIONS BELOW FOR ADDITIONAL REQUIREMENTS.
3G	MULTI-GANG BOX WITH MULTIPLE TOGGLE SWITCHES, SINGLE POLE, 20A, 120-277V, UNLESS DENOTED OTHERWISE. IN THIS EXAMPLE, '3G' DENOTES THREE TOGGLE SWITCHING DEVICES MOUNTED IN A THREE GANG BOX.
	WHERE INDICATED, DENOTES SURFACE MOUNTED DEVICE.

DESIGNATION	SWITCHING DEVICE SUBSCRIPT DESIGNATION
3	THREE WAY
4	FOUR WAY
D	WALL DIMMER
OS	OCCUPANCY SENSOR WITH MANUAL OVERRIDE
WP	WEATHERPROOF
M	SURFACE MOUNTED MOTOR RATED WITH OVERLOAD ELEMENTS, CONTINUOUS CURRENT RATING AND QUANTITY OF POLES AS REQUIRED FOR EQUIPMENT SERVED
TM	DIGITAL TIMER

FIRE ALARM SYSTEM LEGEND

NOTIFICATION DEVICES

SYMBOLS	DESCRIPTION
	FIRE ALARM HORN/VISUAL NOTIFICATION - WALL MOUNT
	FIRE ALARM HORN/STROBE NOTIFICATION - CEILING MOUNT
	FIRE ALARM HORN/VISUAL NOTIFICATION - CEILING MOUNT
	DENOTES SURFACE MOUNTED DEVICE
B	FIRE ALARM STROBE NOTIFICATION APPLIANCE - WALL MOUNT

INITIATION DEVICES

SYMBOLS	DESCRIPTION
F	MANUAL PULL STATION (ADDRESSABLE)
SD	SMOKE DETECTION (CEILING MOUNTED)
SD	SMOKE DETECTOR (DUCT MOUNTED)
HD	HEAT DETECTOR (CEILING MOUNTED)
TS	FIRE ALARM TAMPER SWITCH
FS	FIRE ALARM FLOW SWITCH
PS	FIRE ALARM PRESSURE SWITCH

LINE LEGEND

SYMBOL	DESCRIPTION
— — — — — — — —	DEMOLISHED
————	EXISTING TO REMAIN
————	NETWORK

WIRING SIZING CHART 20 AMP BRANCH CIRCUITS

DISTANCE, 120V	WIRE SIZE
0 - 90 FEET	# 12 AWG
90 - 230 FEET	# 10 AWG
230 - 446 FEET	# 8 AWG
DISTANCE, 277V	WIRE SIZE
0 - 209 FEET	# 12 AWG
209 - 533 FEET	# 10 AWG
533 - 1033 FEET	# 8 AWG

ELECTRICAL CODES & STANDARDS

CODE	DESCRIPTION
IBC (2018)	INTERNATIONAL BUILDING CODE
IECC (2009)	INTERNATIONAL ENERGY CONVERSATION CODE
IFC (2018)	INTERNATIONAL FIRE CODE
NFPA 70 (2017)	INTERNATIONAL ELECTRICAL CODE
NFPA 72 (2016)	INTERNATIONAL FIRE ALARM AND SIGNALING CODE

POWER LEGEND

SYMBOLS	DESCRIPTION
	DUPLEX RCPT MOUNTED IN A SINGLE GANG BOX. UNLESS INDICATED OR DESIGNATED OTHERWISE, RECEPTACLES ARE FLUSH MTD, 20A,125V, 1PH, 2P, 3W, NEMA 5-20R, MH 18" AFF TO CENTER
	GFCI DUPLEX RECEPTACLE
	DUPLEX RECEPTACLE (CEILING MOUNTED)
	DUPLEX RECEPTACLE (FLOOR MOUNTED)
	TWO DUPLEX (QUAD) RCPTS MOUNTED IN A TWO GANG BOX. UNLESS INDICATED OR DESIGNATED OTHERWISE, RCPTS ARE FLUSH MTD, 20A, 125V, 1PH, 2P, 3W, NEMA 5-20R, MH 18" AFF TO CENTER
	GFCI QUADRUPLEX RECEPTACLE
	DUPLEX RECEPTACLE (CEILING MOUNTED)
	DUPLEX RECEPTACLE (CEILING MOUNTED)
	2-POLE, 250V SPECIAL PURPOSE RCPT, SEE PLANS FOR NEMA CONFIGURATION AND BRANCH CIRCUITING
PLS	POWERLINC SPLITTER
J	JUNCTION BOX (CEILING MOUNTED)
J	JUNCTION BOX (WALL MOUNTED)
	DISCONNECT SWITCH (FUSIBLE OR NON-FUSIBLE)
1	COMBINATION STARTER, NEMA SIZE AS SHOWN
	PANELBOARD
SPD 1C	SURGE PROTECTING DEVICE. TYPE AS NOTED.

DESIGNATION	JUNCTION BOX/SWITCH ANCILLARIES
AD	AUTOMATIC DOOR
AF	AUTOMATIC FAUCET
BC	GENERATOR BATTERY CHARGER
BH	GENERATOR BLOCK HEATER
CP	CONTROL POWER
DT	DRUG TESTING TOILET
DW	DISHWASHER
EF	EXHAUST FAN
FD	FIRE DAMPER
FL	AUTOMATIC FLUSH
GD	GARBAGE DISPOSAL
HD	HAND DRYER
HT	HEAT TRACE
IL	INFRARED ILLUMINATOR
IL	ILRIGATION
MD	MODULAR FURNITURE DATA
MP	MODULAR FURNITURE POWER
NACP	NOTIFICATION APPLIANCE CIRCUIT PANEL
OD	OVERHEAD DOOR
PA	PUBLIC ADDRESS
RF	RETURN FAN
SF	SUPPLY FAN
SG	SIGNAGE
TC	TIMECLOCK
WH	WATER HEATER

DESIGNATION	RECEPTACLE ANCILLARIES
C	MOUNT ABOVE COUNTER
EM	EMERGENCY
GD	GARBAGE DISPOSAL (MOTOR RATED)
M	MICROWAVE
PL	POWERLINC RECEPTACLE HUB (AS MANUFACTURED BY EVANS) WITH THREE DUPLEX RECEPTACLES (3-CIRCUIT CONFIGURATION)
REF	REFRIGERATOR
SP	SUMP PUMP
WC	WATER COOLER
WP	WEATHERPROOF

ABBREVIATIONS

ABBREV.	DESCRIPTION
AFC	ABOVE FINISHED CEILING
AFF	ABOVE FINISHED FLOOR
AFG	ABOVE FINISHED GRADE
AHU	AIR HANDLING UNIT
AIC	AMPERE INTERRUPTING CAPACITY
AL	ALUMINUM
AM	AMPERE METER
ANSI	AMERICAN NATIONAL STANDARDS INSTITUTE
ATC	AIR TERMINAL CHAMBER
ATS	AUTOMATIC TRANSFER SWITCH
AVG	AVERAGE
AWG	AMERICAN WIRE GAUGE
B.O.D.	BOTTOM OF DUCT
B.O.T.	BOTTOM OF TRAY
BAS	BUILDING AUTOMATION SYSTEM
BFC	BELOW FINISHED CEILING
BFG	BELOW FINISHED GRADE
BLDG	BUILDING
BMS	BUILDING MANAGEMENT (AUTOMATION) SYSTEM
C	CONDUIT, COIL
CCTV	CLOSED CIRCUIT TELEVISION CAMERA
cd	CANDELA
CKT	CIRCUIT
CLG	CEILING
DISC	DISCONNECT
DIST, DISTRIB	DISTRIBUTION
DIV	DIVISION
DWG(S)	DRAWING(S)
E	EMPTY
E, (E)	EXISTING
EF	EXHAUST FAN
EL. ELEV	ELEVATION
ELEC	ELECTRICAL/ELECTRIC
EM, EMER	EMERGENCY
EQPT	EQUIPMENT
ETC	ETCETERA
EWC	ELECTRIC WATER COOLER
EWH	ELECTRIC WATER HEATER
EXST	EXISTING, EXHAUST
FA	FIRE ALARM
FACP	FIRE ALARM CONTROL PANEL
FBO	FURNISHED BY OTHERS, FURNISHED BY OWNER
FLR	FLOOR
FT	FOOT, FEET
FWE	FURNISHED WITH EQUIPMENT
G, GND	GROUND
GFCI	GROUND FAULT EQUIPMENT PROTECTIVE DEVICE
H	HEIGHT
HH	HANDHOLE
HP	HORSEPOWER
HP	HEAT PUMP
HVAC	HEATING, VENTILATING AND AIR CONDITIONING
IDS	INTRUSION DETECTION SYSTEM
J, JB	JUNCTION BOX
KA	KILOAMPERES
KV	KILOVOLTS
KVA	KILOVOLT AMPERES
KVAC	KILOVOLT AMPERES CONNECTED
KVAD	KILOVOLT AMPERES DEMAND
KVAR	KILOVOLT AMPERES REACTIVE
KW	KILOWATT
L	LUMEN, LENGTH
LA	LOCAL ANNUNCIATOR
LAN	LOCAL AREA NETWORK
LB(S)	POUND(S)
LCP	LIGHTING CONTROL PANEL
LCS	LIGHTING CONTROL SYSTEM
LED('S)	LIGHT EMITTING DIODE(S)
LTG	LIGHTING
LV	LOW VOLTAGE
MAX	MAXIMUM
MCB	MAIN CIRCUIT BREAKER
MECH	MECHANICAL
MH	MOUNTING HEIGHT, MAN HOLE
MIN	MINIMUM
MTGB	MAIN TELECOM GROUNDING BUSBAR
N, NEUT	NEUTRAL
N/A	NOT APPLICABLE
NACP	NOTIFICATION APPLIANCE CIRCUIT PANEL
NEC	NATIONAL ELECTRICAL CODE
NEMA	NATIONAL ELECTRICAL MANUFACTURERS ASSOCIATION
NFDS	NON-FUSED DISCONNECT SWITCH
NFPA	NATIONAL FIRE PROTECTION ASSOCIATION
NIC	NOT IN CONTRACT
NO.	NUMBER
NOS	NUMBERS
NTS	NOT TO SCALE
O.C.	ON CENTER
PDP	POWER DISTRIBUTION PANEL
PDU	POWER DISTRIBUTION UNIT
PF	POWER FACTOR
PH	PHASE
PNL	PANEL
PT	POWER TRANSFER
R	RESISTANCE, RATE, RISE
RCPT	RECEPTACLE
RECP(S)	RECEPTACLE(S)
REQD	REQUIRED
REQMTS	REQUIREMENTS
RET	RETURN
RM	ROOM
RQD	REQUIRED
S	SPEAKER
SCHED	SCHEDULE
SEC	SECURITY PANEL
SHLD	SHIELDED, SHIELD
SQ	SQUARE
STD	STANDARD
SUP	SUPPLY
SW	SWITCH
SWBD	SWITCHBOARD
SWGR	SWITCHGEAR
T, TX	TRANSFORMER
T.O.C.	TOP OF CONDUIT
TB	TERMINAL BLOCK
TBD	TO BE DETERMINED
TEL	TELEPHONE
TYP, (TYP)	TYPICAL
UH	UNIT HEATER
UNO, UON	UNLESS NOTED OTHERWISE, UNLESS OTHERISE NOTED
UPS	UNINTERRUPTIBLE POWER SUPPLY
V	VOLT, VOLTS, VOLTMETER
VA	VOLT-AMPERE
VECP	VOICE EVACUATION CONTROL PANEL
VM	VOLT METER
W	WATT(S), WIRE, WIDTH
W/	WITH
W/O	WITHOUT
WH	WATER HEATER
WP	WEATHERPROOF
XFMR	TRANSFORMER

SOUTH CAROLINA PROFESSIONAL ENGINEER No. 29760 01/27/2020

SOUTH CAROLINA JACOBS ENGINEERING GROUP, INC. CERTIFICATE OF AUTHORIZATION No. C00316

© JACOBS 2018. ALL RIGHTS RESERVED.
THIS DOCUMENT AND THE IDEAS AND DESIGNS INCORPORATED HEREIN, AS AN INSTRUMENT OF PROFESSIONAL SERVICE, IS THE PROPERTY OF JACOBS AND IS NOT TO BE USED, IN WHOLE OR IN PART, FOR ANY PURPOSE WHICH IS NOT EXPRESSLY AUTHORIZED IN WRITING BY JACOBS. RELEASE OF THIS DOCUMENT IN NATIVE FORMAT IS FOR CONVENIENCE OF USE ONLY AND IS NOT INTENDED TO CREATE ANY CONTRACTUAL OBLIGATION.

NO.	DATE	DSGN
0	01/27/20	ISSUED FOR CONSTRUCTION
REVISION	CHK	DR
	D. RIOS	R. VALENTIN

BY: M. BURN
APVD: M. POURGHOLI
APVD:

BERKELEY COUNTY ADMINISTRATION COMPLEX RENOVATIONS
1003 N. US HIGHWAY 52, MONCKS CORNER, SC 29461
BERKELEY COUNTY GOVERNMENT - RFP# 32406-01-17/18

JACOBS®
1041 East Butler Road Greenville, South Carolina 29607-3375
Tel: 864-676-6000 Fax: 864-676-6023

ELECTRICAL
GENERAL NOTES, LEGEND AND ABBREVIATIONS

As indicated
VERIFY SCALE
BAR IS ONE INCH ON ORIGINAL DRAWING. 0 1"

DATE
PROJ 1547
DWG J-E001
SHEET of

FILEPATH: C:_Revit_Local_Models\2020\16FFRU01-E-ZSMEN001_diane.riosEZM7N.rvt
FILENAME:
PLOT DATE/TIME: 1/27/2020 4:11:34 PM

LIGHTING FIXTURE SCHEDULE

TYPE	FIXTURE SPECIFICATIONS FIXTURE DESCRIPTION	MANUFACTURER	CAT. #	LAMPING LAMP TYPE	 TOTAL LUMENS	 COLOR TEMP.	ELECTRICAL LOAD	 VOLTS	MOUNTING REMARKS	NOTES
A	2'x4' RECESSED LED TROFFER	LITHONIA	2GTL-4-48L-EZ1-LP835	LED	4879 lm	3500 K	40	277 V	RECESSED, LAY-IN	
AE	2'x4' RECESSED LED TROFFER (EMERGENCY)	LITHONIA	2GTL-4-48L-EZ1-LP835-EL14L	LED	4879 lm	3500 K	40	277 V	RECESSED, LAY-IN	
B	2'x2' RECESSED LED TROFFER	LITHONIA	2GTL-2-40L-EZ1-LP835	LED	3833 lm	3500 K	40	277 V	RECESSED, LAY-IN	
BE	2'x2' RECESSED LED TROFFER (EMERGENCY)	LITHONIA	2GTL-2-40L-EZ1-LP835-EL14L	LED	3833 lm	3500 K	40	277 V	RECESSED, LAY-IN	
C	LED STRIP LIGHT	LITHONIA	CLX-48-5000LM-SEF-FDL-MVOLT-GZ10-40K-80CRI-WH	LED	5332 lm	4000 K	40	277 V	PENDANT MOUNTED TO STRUCTURE, PROVIDE ZACVH ACCESSORY, MOUNTED 9'-0" AFF	
CE	LED STRIP LIGHT (EMERGENCY)	LITHONIA	CLX-48-5000LM-SEF-FDL-MVOLT-GZ10-40K-80CRI-WH-E10 WLCP	LED	5332 lm	4000 K	40	277 V	PENDANT MOUNTED TO STRUCTURE, PROVIDE ZACVH ACCESSORY, MOUNTED 9'-0" AFF	
E	EXTERIOR LED RECESSED CAN	GOTHAM	EVO-30/07-4AR-MWD-LSS-MVOLT-EZ10	LED	949 lm	3000 K	11	277 V	RECESSED, LAY-IN	
EE	EXTERIOR LED RECESSED CAN (EMERGENCY)	GOTHAM	EVO-30/07-4AR-MWD-LSS-MVOLT-EZ10-EL	LED	949 lm	3000 K	11	277 V	RECESSED, LAY-IN	
FE	EXTERIOR LED WALL PACK (EMERGENCY)	LITHONIA	WSQ LED-P1-30K-SR2-MVOLT-PE-E20WC-DBLXD	LED	2111 lm	3000 K	24	277 V	MATCH MOUNTING HEIGHT OF EXISTING EXTERIOR FIXTURES	
G	CURV LED INDIRECT 4' FIXTURE	ALERA LIGHTING	LCV-4-40-HL-S-FCM-48-ED-U-MW	LED	6200 lm	4000 K	60	277 V	PENDANT MOUNTED 12" BELOW CEILING	
H	CURV LED INDIRECT 8' FIXTURE	ALERA LIGHTING	LCV-8-40-HL-S-FCM-48-ED-U-MW	LED	6200 lm	4000 K	60	277 V	PENDANT MOUNTED 12" BELOW CEILING	
HE	CURV LED INDIRECT 8' FIXTURE	ALERA LIGHTING	LCV-8-40-HL-S-FCM-48-ED-U-MW-ELL10	LED	6200 lm	4000 K	60	277 V	PENDANT MOUNTED 12" BELOW CEILING	PROVIDE EMERGENCY BATTERY PACK OPTION
J	RECESSED HIGH PERFORMANCE LED	FINELITE	HPR LED-A-2X2-DCO-S-840-277-SC	LED	3506 lm	4000 K	32	277 V	RECESSED, LAY-IN	
JE	RECESSED HIGH PERFORMANCE LED	FINELITE	HPR LED-A-2X2-DCO-S-840-277-SC	LED	3506 lm	4000 K	32	277 V	RECESSED, LAY-IN	PROVIDE EMERGENCY BATTERY PACK OPTION
K	RECESSED HIGH PERFORMANCE LED	FINELITE	HPR LED-A-2X4-DCO-S-840-277-SC	LED	3893 lm	4000 K	30	277 V	RECESSED, LAY-IN	
L	CR6 6" RECESSED DOWNLIGHT	CREE	CR6-625L-40K-12-E26	LED	625 lm	4000 K	11	277 V	RECESSED, DOWNLIGHT	
M	LACYM MEDIUM HIGH PERFOMANCE FIXTURE	LUMENPULSE	LACYMA-A-PSF-MBK-M2-D-277-13-dL10-40K-CR80-N-DA1-NA-MBK-b-MBK	LED	1000 lm	4000 K	11	277 V	PENDANT MOUNTED	
X	EXIT SIGN, SINGLE FACE	COMPASS	CE SERIES, MODEL CER	LED			2	277 V	WALL/CEILING MOUNTED	REFER TO PLANS FOR SINGLE OR DOUBLE FACE APPLICATION AND DIRECTIONAL ARROWS
X2	EXIT SIGN, DOUBLE FACE	COMPASS	CE SERIES, MODEL CER	LED			2			REFER TO PLANS FOR SINGLE OR DOUBLE FACE APPLICATION AND DIRECTIONAL ARROWS

SOUTH CAROLINA PROFESSIONAL ENGINEER
No. 29760
01/27/2020

SOUTH CAROLINA
JACOBS ENGINEERING GROUP, INC.
No. C00316
CERTIFICATE OF AUTHORIZATION

© JACOBS 2019. ALL RIGHTS RESERVED.
THIS DOCUMENT AND THE IDEAS AND DESIGNS INCORPORATED IN IT, ARE AN INSTRUMENT OF PROFESSIONAL SERVICE, IS THE PROPERTY OF JACOBS AND IS NOT TO BE USED, IN WHOLE OR IN PART, FOR ANY PURPOSE WITHOUT THE WRITTEN CONSENT OF JACOBS.

NO.	DATE	DSGN	DR	CHK	APVD	BY	APVD
0	01/27/20	R. VALENTIN	D. RIOS	M. POURCHOT	M. BURN		
	ISSUED FOR CONSTRUCTION						

JACOBS®
1041 East Butler Road Greenville, South Carolina 29607-3725
Tel: 864-676-6000 Fax: 864-676-6023

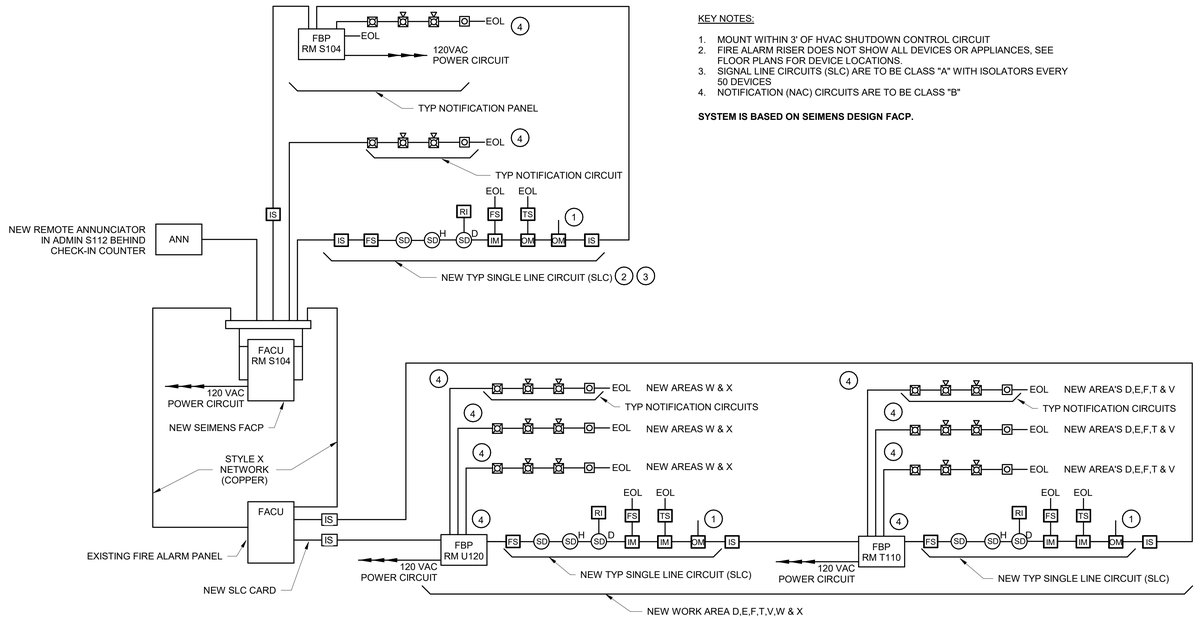
BERKELEY COUNTY ADMINISTRATION COMPLEX RENOVATIONS
1003 N. US HIGHWAY 52, MONCKS CORNER, SC 29461
BERKELEY COUNTY GOVERNMENT - RFP# 32406-01-17/18

ELECTRICAL SCHEDULES

VERIFY SCALE
BAR IS ONE INCH ON ORIGINAL DRAWING.
0 1"

DATE
PROJ 1547
DWG J-E002
SHEET of

FILEPATH: C:_Revit_Local_Models\2020\16FFRU01-E-ZSMEN001_diane.riosEZM7N.rvt
FILENAME:
PLOT DATE/TIME: 1/27/2020 4:11:35 PM



KEY NOTES:

1. MOUNT WITHIN 3' OF HVAC SHUTDOWN CONTROL CIRCUIT
2. FIRE ALARM RISER DOES NOT SHOW ALL DEVICES OR APPLIANCES, SEE FLOOR PLANS FOR DEVICE LOCATIONS.
3. SIGNAL LINE CIRCUITS (SLC) ARE TO BE CLASS "A" WITH ISOLATORS EVERY 50 DEVICES
4. NOTIFICATION (NAC) CIRCUITS ARE TO BE CLASS "B"

SYSTEM IS BASED ON SEIMENS DESIGN FACP.

B1 FIRE ALARM RISER

Not to Scale

SYSTEM OUTPUTS

SYSTEM INPUT	FACP ANNUNCIATION							NOTIFICATION											AUXILIARY FUNCTIONS			REPORTING TO RECEIVING STATION	
	A	B	C	D	E	F	G	H	I	J	K	L	M	N	O	P	Q	R	S	T	U	V
	ACTIVATE COMMON ALARM INDICATOR	ACTIVATE AUDIBLE ALARM SIGNAL	ACTIVATE COMMON SUPV SIGNAL INDICATOR	ACTIVATE AUDIBLE SUPERVISORY SIGNAL	ACTIVATE COMMON TROUBLE SIGNAL INDICATOR	ACTIVATE AUDIBLE TROUBLE SIGNAL	TEXT DISPLAY OF DEVICE LOCATION AND DESCRIPTION	CLOSE HVAC SUPPLY AND RETURN DAMPER FOR RMS109	SHUT DOWN ASSOCIATED AHU	ACTIVATE AUDIBLE FIRE ALARM MESSAGE	ACTIVATE AGENT APPLIANCES FOR 911 CALL CENTER	ACTIVATE AGENT APPLIANCES FOR SERVER ROOM	NOT USED	OPEN SECURITY GATE	NOT USED	AGENT RELEASE SOLENOID	CLOSE OUTSIDE AIR HVAC DAMPER	NOT USED	PRE-ACTION VALVE RELEASE	REPORT POINT SPECIFIC FIRE ALARM SIGNAL	REPORT POINT SPECIFIC FIRE ALARM SUPERVISORY SIGNAL	REPORT POINT SPECIFIC FIRE ALARM TROUBLE SIGNAL
FIRE ALARM PULL STATIONS	●	●					●			●				●						●		
FIRE ALARM SMOKE DETECTORS	●	●					●			●				●						●		
FIRE ALARM SMOKE/HEAT DETECTORS	●	●					●			●				●						●		
FIRE ALARM DUCT SMOKE DETECTORS			●	●			●		●					●							●	
KITCHEN HOOD SUPPRESSION SYSTEM	●	●					●			●				●						●		
WET-PIPE SPRINKLER SYSTEM WATERFLOW SWITCH	●	●					●			●				●						●		
SPRINKLER VALVE SUPERVISORY TAMPER SWITCH			●	●			●														●	
FACP AC POWER FAILURE					●	●	●															●
FACP SYSTEM SILENCE					●	●	●															●
FACP SYSTEM LOW BATTERY					●	●	●															●
SIGNALING LINE CIRCUIT FAULT					●	●	●															●
GROUND FAULT					●	●	●															●
NOTIFICATION APPLIANCE CIRCUIT FAULT					●	●	●															●
NAC BOOSTER PANEL FAILURE			●	●			●														●	
NAC BOOSTER GROUND FAULT					●	●	●															●
NAC BOOSTER CIRCUIT FAULT					●	●	●															●
PRE-ACTION SYSTEM FOR RM S101 VOTER STORAGE																						
PRE-ACTION SYSTEM ONE SMOKE DETECTOR STAGE 1 (ALERT)			●	●			●														●	
PRE-ACTION SYSTEM SECOND SMOKE DETECTOR STAGE 2 (RELEASE)	●	●					●												●	●		
AGENT SYSTEM 1 RM S109 (911 CALL CENTER)																						
AGENT SMOKE DETECTOR (FIRST) STAGE 1 (ALERT)			●	●			●														●	
AGENT SMOKE DETECTORS (SECOND) STAGE 2 (RELEASE)	●	●					●	●			●			●		●				●		
AGENT MANUAL RELEASE (RELEASE)	●	●					●	●			●			●		●				●		
AGENT MANUAL ABORT SWITCH			●	●			●														●	
AGENT MAINTENANCE BYPASS KEY SWITCH					●	●	●														●	
AGENT SYSTEM 2 RM S121 (SERVER ROOM)																						
AGENT SMOKE DETECTOR (FIRST) STAGE 1 (ALERT)			●	●			●														●	
AGENT SMOKE DETECTORS (SECOND) STAGE 2 (RELEASE)	●	●					●					●		●		●	●			●		
AGENT MANUAL RELEASE (RELEASE)	●	●					●					●		●		●	●			●		
AGENT MANUAL ABORT SWITCH			●	●			●														●	
AGENT MAINTENANCE BYPASS KEY SWITCH					●	●	●														●	

D1 FIRE ALARM MATRIX

Not to Scale

FIRE ALARM SYSTEM LEGEND

NOTIFICATION DEVICES

SYMBOLS	DESCRIPTION
	VISUAL - WALL MOUNT
	HORN/STROBE - WALL MOUNT
	HORN/STROBE - CEILING MOUNT
	DENOTES SURFACE MOUNTED DEVICE

INITIATION DEVICES

SYMBOLS	DESCRIPTION
F	MANUAL PULL STATION (ADDRESSABLE)
SD	SMOKE DETECTOR (ADDRESSABLE) SMOKE DETECTOR H - SMOKE AND HEAT DETECTOR U - UNDER FLOOR SMOKE DETECTOR
HD	HEAT DETECTOR (ADDRESSABLE) 135 DEGREE FIXED TEMP ALPHANUMERIC DESIGNATION(S) DENOTE THE FOLLOWING: R - 135 DEGREE RATE OF RISE
SD	DUCT DETECTOR
IS	ISOLATORS WALL MOUNT
RI	DUCT DETECTOR REMOTE INDICATOR (FIELD LOCATE)
OM	OUTPUT MODULE, (ADDRESSABLE) RELAY
IM	INPUT MODULE, (ADDRESSABLE)
FS	FLOW SWITCH (BY OTHERS)
TS	TAMPER SWITCH (BY OTHERS)
AS	ABORT SWITCH
LA	LOW AIR (BY OTHERS)
	DENOTES SURFACE MOUNTED DEVICE

MONITORING/REPORTING/SUPPORT DEVICES

SYMBOLS	DESCRIPTION
FACU	FIRE ALARM CONTROL PANEL
ANN	FIRE ALARM REMOTE ANNUNCIATOR
FBP	FIRE BOOSTER PANEL

ABBREVIATIONS

EL = ELEVATOR CONTROL
EOL = END OF LINE
EXP = EXPLOSION PROOF
RET = RETURN
SUP = SUPPLY
WP = WEATHERPROOF
TRANS = FIRE ALARM TRANSPONDER PANEL

SOUTH CAROLINA PROFESSIONAL ENGINEER No. 29760 01/27/2020

SOUTH CAROLINA JACOBS ENGINEERING GROUP, INC. No. C00316 CERTIFICATE OF AUTHORIZATION

© JACOBS 2019. ALL RIGHTS RESERVED.
THIS DOCUMENT AND THE IDEAS AND DESIGN INCORPORATED HEREIN, AS AN INSTRUMENT OF PROFESSIONAL SERVICE, IS THE PROPERTY OF JACOBS AND IS NOT TO BE USED, IN WHOLE OR IN PART, FOR ANY PURPOSE OTHER THAN THE SPECIFIC PROJECT FOR WHICH IT WAS PREPARED AND PUBLISHED.
REUSE OF DOCUMENTS

NO.	DATE	DR	CHK	REVISION
0	01/27/20	J. BARNES	D. RIOS	ISSUED FOR CONSTRUCTION

DSGN: J. BARNES BY: M. BURN APVD: APVD

JACOBS®
104 East Butler Road Greenville, South Carolina 29607-3725
Tel: 864.676.6000 Fax: 864.676.6003

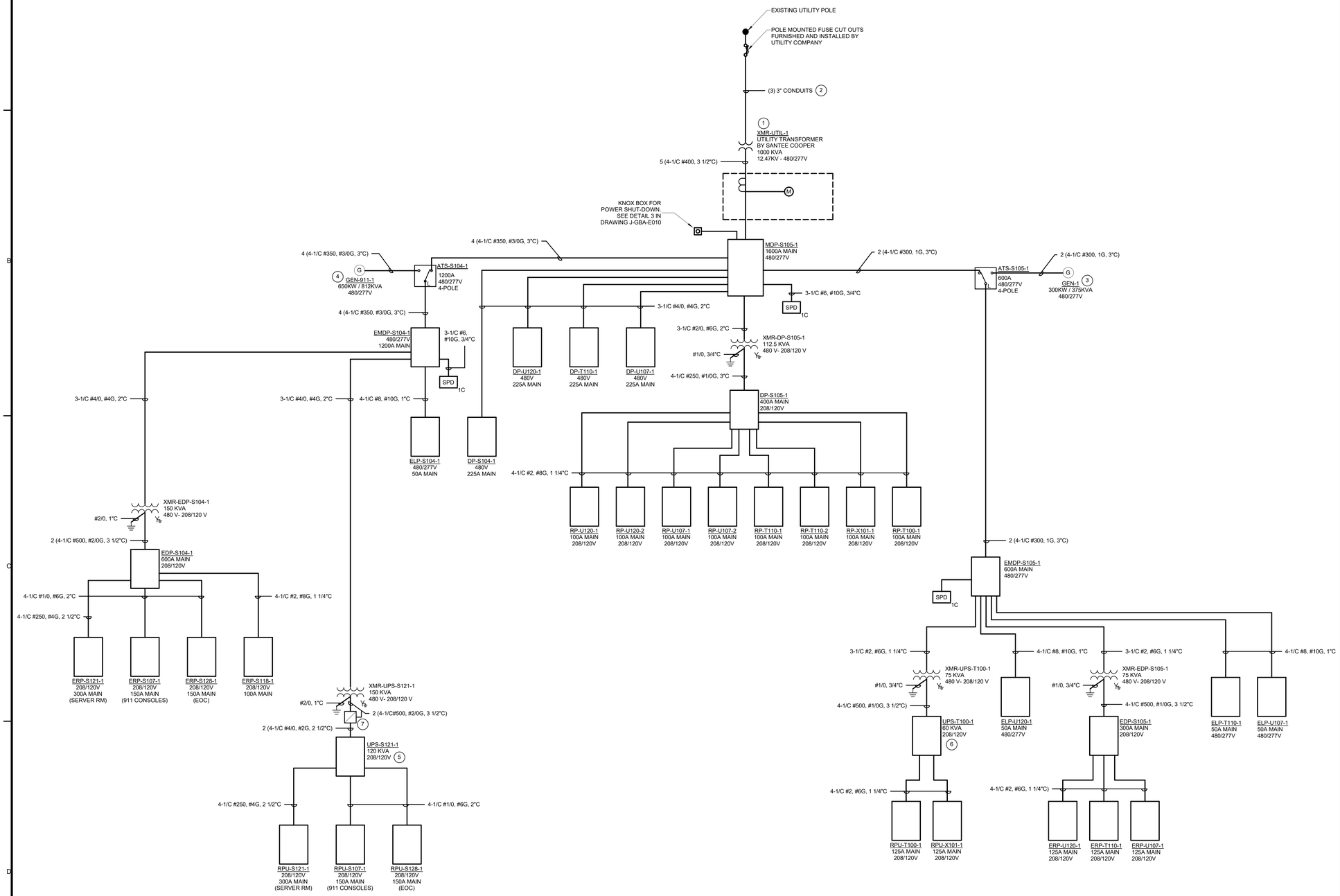
BERKELEY COUNTY ADMINISTRATION COMPLEX RENOVATIONS
1003 N. US HIGHWAY 52, MONCKS CORNER, SC 29461
BERKELEY COUNTY GOVERNMENT - RFP# 32406-01-17/18

FIRE ALARM
LEGEND AND RISERS

As indicated
VERIFY SCALE
BAR IS ONE INCH ON ORIGINAL DRAWING
0 1"

DATE
PROJ 1547
DWG J-E003
SHEET of

FILEPATH: C:_Revit_Local_Models\2020\16FFRU01-E-ZSMEN001_diane.riosEZM7N.rvt
FILENAME:
PLOT DATE/TIME: 1/27/2020 4:11:36 PM



1 SINGLE LINE DIAGRAM

Not to Scale

GENERAL NOTES:

A. REFER TO SHEET J-E001 FOR GENERAL NOTES, LEGEND AND ABBREVIATIONS.

B. REFER TO PANELBOARD SCHEDULES FOR FEEDER SIZES NOT SHOWN IN THIS DRAWING.

SHEET KEYED NOTES:

1. TRANSFORMER TO BE FURNISHED AND INSTALLED BY UTILITY COMPANY.
2. PROVIDE UNDERGROUND CONDUIT WITH PULL STRING FROM UTILITY POLE TO TRANSFORMER AS SHOWN. REFER TO DRAWING J-E501 FOR CONDUIT AND CONCRETE PAD DETAILS. PRIMARY FEEDER TO BE FURNISHED AND INSTALLED BY UTILITY COMPANY, INCLUDING CONNECTIONS TO THE TRANSFORMER PRIMARY SIDE.
3. GEN-1 STANDBY GENERATOR BASIS OF DESIGN IS CATERPILLAR MODEL C9, 300KW/375KVA, PROVIDED WITH SUB BASE FUEL TANK FOR 24-HOUR OPERATION AT 100% LOAD. SOUND ATTENUATING ENCLOSURE (75dB AT 23 FEET) WITH HEATING PACKAGE FOR FREEZE PROTECTION.
4. GEN-911-1 STANDBY GENERATOR BASIS OF DESIGN IS CATERPILLAR MODEL C18, 650KW/812KVA, PROVIDED WITH SUB BASE FUEL TANK FOR 24-HOUR OPERATION AT 100% LOAD. SOUND ATTENUATING ENCLOSURE (75dB AT 23 FEET) WITH HEATING PACKAGE FOR FREEZE PROTECTION.
5. UPS-S121-1 BASIS OF DESIGN IS EATON 93PM (CATALOG NUMBER 9GH624B005A00R0), 120/208V INPUT/OUTPUT,120KW, 16 MINUTES BACKUP TIME AT 100% LOAD, 4 OUTPUT BREAKERS, BY-PASS SWITCH.
6. UPS-T100-1 BASIS OF DESIGN IS APC MODEL MGE GALAXY 5000 SERIES,120/208V INPUT/OUTPUT, 60KVA, 5 MINUTES BACKUP TIME AT 80% LOAD, 2 OUTPUT BREAKERS, BY-PASS SWITCH.
7. PROVIDE 600A FUSIBLE DISCONNECT WITH 500A FUSES.

SOUTH CAROLINA PROFESSIONAL ENGINEER No. 29760 01/27/2020

SOUTH CAROLINA CERTIFICATE OF AUTHORIZATION JACOBS ENGINEERING GROUP, INC. No. C00316

© JACOBS 2019. ALL RIGHTS RESERVED.
THIS DOCUMENT AND THE IDEAS AND DESIGNS INCORPORATED IN IT ARE, AS AN INSTRUMENT OF PROFESSIONAL SERVICE, IS THE PROPERTY OF JACOBS AND IS NOT TO BE USED, IN WHOLE OR IN PART, FOR ANY PURPOSE OTHER THAN THE SPECIFIC PROJECT FOR WHICH IT WAS PREPARED AND PUBLISHED. NO PART OF THIS DOCUMENT MAY BE REPRODUCED, STORED IN A RETRIEVAL SYSTEM OR TRANSMITTED IN ANY FORM OR BY ANY MEANS, ELECTRONIC, MECHANICAL, PHOTOCOPYING, RECORDING, OR OTHERWISE, WITHOUT THE PRIOR WRITTEN PERMISSION OF JACOBS. ANY USE OF THIS DOCUMENT FOR ANY PURPOSE OTHER THAN THE SPECIFIC PROJECT FOR WHICH IT WAS PREPARED OR PUBLISHED IS PROHIBITED AND UNLAWFUL.

NO.	DATE	DSGN	DR	CHK	APVD	BY
0	01/27/20	R. VALENTIN	D. RIOS	M. BURN	M. BURN	M. BURN

ISSUED FOR CONSTRUCTION

REVISION

BERKELEY COUNTY ADMINISTRATION COMPLEX RENOVATIONS
1003 N. US HIGHWAY 52, MONCKS CORNER, SC 29461
BERKELEY COUNTY GOVERNMENT - RFP#
32406-01-17/18

JACOBS®
1041 East Butler Road Greenville, South Carolina 29607-5725
Tel: 864-676-6000 Fax: 864-676-6023

ELECTRICAL
ONE-LINE DIAGRAM

1" = 1'-0"
VERIFY SCALE
BAR IS ONE INCH ON ORIGINAL DRAWING.
0 1"

DATE	
PROJ	1547
DWG	J-E010
SHEET	of

FILEPATH: C:_Revit_Local_Models\2020\16FFRU01-E-ZSMEN001_diane.riosEZM7N.rvt

FILENAME:

PLOT DATE/TIME: 1/27/2020 4:11:37 PM

PANELBOARD: DP-S104-1

LOCATION: HVAC S104 | VOLTAGE: 480 Delta,3P,3W,60Hz | INTERRUPTING RATING (kA SYMMETRICAL): 14 kA
SUPPY FROM: MDP-S105-1 | MAINS TYPE / LOCATION: MCB / TOP | MINIMUM BUS RATING: 225 A
MOUNTING: SURFACE | MCB FRAME / TRIP SIZE: 225 AF/225 AT | NEUTRAL BUS RATING: 100%
ENCLOSURE: TYPE 1

CKT NO.	DESCRIPTIONS	CIRCUIT SIZE	TRIP AMPS	POLES	PHASE A (VOLT-AMPS)	PHASE B (VOLT-AMPS)	PHASE C (VOLT-AMPS)	POLES	TRIP AMPS	CIRCUIT SIZE	DESCRIPTIONS	CKT NO.
1					12333 18000							2
3	AHU-31	3#8,#10G,3/4"	50 A	3		12333 18000		3	140 A	3-1/C#1/0, #6G, 1-1/2"	CRAH-01	4
5							12333 18000					6
7					700							8
9	GATE ARM NORTH	3#12,#12G,3/4"	15 A	3		700						10
11							700					12
13												14
15												16
17												18
19												20
21												22
23												24
25												26
27												28
29												30
31												32
33												34
35												36
37												38
39												40
41												42
	TOTAL CONNECTED LOAD / PHASE				30931	30931	30931					

LOAD CLASSIFICATIONS	CONNECTED LOAD	DEMAND FACTOR	ESTIMATED DEMAND
Power	92792	100.00%	92792

TOTAL LOAD SUMMARY

LOAD (KVA)		CURRENT (AMPS)	
CONNECTED LOAD:	92.8 kVA	CONNECTED CURRENT	111.6 A
ESTIMATED DEMAND LOAD:	92.8 kVA	ESTIMATED DEMAND CURRENT	111.6 A
ESTIMATED DEMAND FACTOR:	100.00%	ESTIMATED GROWTH CURRENT	0 A
APPLIED GRTOWTH FACTOR:			

PANELBOARD NOTES:

PANELBOARD: DP-S105-1

LOCATION: ELECTRICAL S105 | VOLTAGE: 120/208 Wye,3P,4W,60Hz | INTERRUPTING RATING (kA SYMMETRICAL): 10 kA
SUPPY FROM: XMFR-DP-S105-1 | MAINS TYPE / LOCATION: MCB / TOP | MINIMUM BUS RATING: 400 A
MOUNTING: SURFACE | MCB FRAME / TRIP SIZE: 400 AF/400 AT | NEUTRAL BUS RATING: 100%
ENCLOSURE: TYPE 1

CKT NO.	DESCRIPTIONS	CIRCUIT SIZE	TRIP AMPS	POLES	PHASE A (VOLT-AMPS)	PHASE B (VOLT-AMPS)	PHASE C (VOLT-AMPS)	POLES	TRIP AMPS	CIRCUIT SIZE	DESCRIPTIONS	CKT NO.
1					0 360			1	20 A	2#12, #12G, 3/4"	RCPT FOR CONDENSATE PUMP	2
3	RP-X101-1	4#3,#8G,1-1/4"	100 A	3		0 1300		1	20 A	2#12, #12G, 3/4"	VAV-2-02	4
5							0 540	1	20 A		RECPT - ROOF SUITE S	6
7	CH-01		20 A	1	741 900			1	20 A	2#12,#12G,3/4"	RECPT - OUTDOOR & VOTER STOR. S102	8
9	RECPT - VOTER STORAGE S102	2#12, #12G, 3/4"	20 A	1		720 1171		2	25 A	2#10,#10G,3/4"	CU-04	10
11	CU-03	2#10,#10G,3/4"	25 A	2			1147 1171					12
13					1147 7793							14
15						0 4733		3	100 A	4#2,#8G,1-1/4"	RP-U107-1	16
17	RP-U107-2	4#2,#8G,1-1/4"	100 A	3			0 4813					18
19					0 9200							20
21	ACU-31		20 A	1		741 9500		3	100 A	4#2,#8G,1-1/4"	RP-T110-2	22
23	AHU-31		20 A	1			741 8800					24
25						9050						26
27						11128		3	100 A	4#2,#8G,1-1/4"	RP-T110-1	28
29							11566 8840					30
31	RP-U120-1	4#2,#8G,1-1/4"	100 A	3	6500 6833							32
33						6900 8133		3	100 A	4#2,#8G,1-1/4"	RP-U120-2	34
35	HEAT TRACE (1)	2#12,#12G,3/4"	20 A	1			100 7333					36
37	IH-1-02	2#12,#12G,3/4"	20 A	1	500 100			1	20 A	2#12,#12G,3/4"	HEAT TRACE (1)	38
39						500		1	20 A	2#12,#12G,3/4"	IH-1-03	40
41												42
	TOTAL CONNECTED LOAD / PHASE				42855	44555	44631					

LOAD CLASSIFICATIONS	CONNECTED LOAD	DEMAND FACTOR	ESTIMATED DEMAND
Power	48673	100.00%	48673
Receptacle	52020	59.61%	31010

TOTAL LOAD SUMMARY

LOAD (KVA)		CURRENT (AMPS)	
CONNECTED LOAD:	131.0 kVA	CONNECTED CURRENT	363.7 A
ESTIMATED DEMAND LOAD:	110.0 kVA	ESTIMATED DEMAND CURRENT	305.5 A
ESTIMATED DEMAND FACTOR:	83.98%	ESTIMATED GROWTH CURRENT	0 A
APPLIED GRTOWTH FACTOR:			

PANELBOARD NOTES:

PANELBOARD: DP-T110-1

LOCATION: HVAC T110 | VOLTAGE: 480 Delta,3P,3W,60Hz | INTERRUPTING RATING (kA SYMMETRICAL): 14 kA
SUPPY FROM: MDP-S105-1 | MAINS TYPE / LOCATION: MCB / TOP | MINIMUM BUS RATING: 225 A
MOUNTING: SURFACE | MCB FRAME / TRIP SIZE: 225 AF/225 AT | NEUTRAL BUS RATING: 100%
ENCLOSURE: TYPE 1

CKT NO.	DESCRIPTIONS	CIRCUIT SIZE	TRIP AMPS	POLES	PHASE A (VOLT-AMPS)	PHASE B (VOLT-AMPS)	PHASE C (VOLT-AMPS)	POLES	TRIP AMPS	CIRCUIT SIZE	DESCRIPTIONS	CKT NO.
1					3863							2
3						3863		3	25 A	3-1/C#10, #10G, 3/4"	AHU-28	4
5							3863					6
7					1967 5900							8
9	VAV-1-15	3-1/C#12, #12G, 3/4"	15 A	3		1967 5900		3	30 A	3-1/C#10, #10G, 3/4"	VAV-1-13B	10
11							1967 5900					12
13												14
15												16
17												18
19												20
21												22
23												24
25												26
27												28
29												30
31												32
33												34
35												36
37												38
39												40
41												42
	TOTAL CONNECTED LOAD / PHASE				11334	11334	11334					

LOAD CLASSIFICATIONS	CONNECTED LOAD	DEMAND FACTOR	ESTIMATED DEMAND
Power	34002	100.00%	34002

TOTAL LOAD SUMMARY

LOAD (KVA)		CURRENT (AMPS)	
CONNECTED LOAD:	34.0 kVA	CONNECTED CURRENT	40.9 A
ESTIMATED DEMAND LOAD:	34.0 kVA	ESTIMATED DEMAND CURRENT	40.9 A
ESTIMATED DEMAND FACTOR:	100.00%	ESTIMATED GROWTH CURRENT	0 A
APPLIED GRTOWTH FACTOR:			

PANELBOARD NOTES:

PANELBOARD: DP-U107-1

LOCATION: MECHANICAL U107 | VOLTAGE: 480 Delta,3P,3W,60Hz | INTERRUPTING RATING (kA SYMMETRICAL): 14 kA
SUPPY FROM: MDP-S105-1 | MAINS TYPE / LOCATION: MCB / TOP | MINIMUM BUS RATING: 225 A
MOUNTING: SURFACE | MCB FRAME / TRIP SIZE: 225 AF/225 AT | NEUTRAL BUS RATING: 100%
ENCLOSURE: TYPE 1

CKT NO.	DESCRIPTIONS	CIRCUIT SIZE	TRIP AMPS	POLES	PHASE A (VOLT-AMPS)	PHASE B (VOLT-AMPS)	PHASE C (VOLT-AMPS)	POLES	TRIP AMPS	CIRCUIT SIZE	DESCRIPTIONS	CKT NO.
1					5843 8833							2
3	AHU-30	3-1/C#8,#10G, 3/4"	35 A	3		5843 8833		3	40 A	3-1/C#8,#10G, 3/4"	VAV-3-24	4
5							5843 8833					6
7					1400 2833							8
9	VAV-3-01	3-1/C#12,#12G,3 /4"	15 A	3		1400 2833		3	15 A	3-1/C#12,#12G, 3/4"	VAV-3-27	10
11							1400 2833					12
13												14
15												16
17												18
19												20
21												22
23												24
25												26
27												28
29												30
31												32
33												34
35												36
37												38
39												40
41												42
	TOTAL CONNECTED LOAD / PHASE				18294	18294	18294					

LOAD CLASSIFICATIONS	CONNECTED LOAD	DEMAND FACTOR	ESTIMATED DEMAND
Power	54882	100.00%	54882

TOTAL LOAD SUMMARY

LOAD (KVA)		CURRENT (AMPS)	
CONNECTED LOAD:	54.9 kVA	CONNECTED CURRENT	66.0 A
ESTIMATED DEMAND LOAD:	54.9 kVA	ESTIMATED DEMAND CURRENT	66.0 A
ESTIMATED DEMAND FACTOR:	100.00%	ESTIMATED GROWTH CURRENT	0 A
APPLIED GRTOWTH FACTOR:			

PANELBOARD NOTES:

PANELBOARD: DP-U120-1

LOCATION: HVAC U120 | VOLTAGE: 480 Delta,3P,3W,60Hz | INTERRUPTING RATING (kA SYMMETRICAL): 14 kA
SUPPY FROM: MDP-S105-1 | MAINS TYPE / LOCATION: MCB / TOP | MINIMUM BUS RATING: 225 A
MOUNTING: SURFACE | MCB FRAME / TRIP SIZE: 225 AF/225 AT | NEUTRAL BUS RATING: 100%
ENCLOSURE: TYPE 1

CKT NO.	DESCRIPTIONS	CIRCUIT SIZE	TRIP AMPS	POLES	PHASE A (VOLT-AMPS)	PHASE B (VOLT-AMPS)	PHASE C (VOLT-AMPS)	POLES	TRIP AMPS	CIRCUIT SIZE	DESCRIPTIONS	CKT NO.
1					7486 700							2
3	AHU-29	3-1/C#8, #10G, 3/4"	45 A	3		7486 700		3	15 A	3-1/C#12, #12G, 3/4"	GATE ARM SOUTH	4
5							7486 700					6
7					3100 3500							8
9	VAV-2-08	3-1/C#12, #12G, 3/4"	20 A	3		3100 3500		3	20 A	3-1/C#12, #12G, 3/4"	VAV-2-15	10
11							3100 3500					12
13					4500 833							14
15	VAV-2-14	3-1/C#10, #10G, 3/4"	25 A	3		4500 833		3	15 A	3-1/C#12, #12G, 3/4"	VAV-2-13	16
17							4500 833					18
19					667							20
21	VAV-2-12	3-1/C#12, #12G, 3/4"	15 A	3		667						22
23							667					24
25												26
27												28
29												30
31												32
33												34
35												36
37												38
39												40
41												42
	TOTAL CONNECTED LOAD / PHASE				20055	20055	20055					

LOAD CLASSIFICATIONS	CONNECTED LOAD	DEMAND FACTOR	ESTIMATED DEMAND
Power	60165	100.00%	60165

TOTAL LOAD SUMMARY

LOAD (KVA)		CURRENT (AMPS)	
CONNECTED LOAD:	60.2 kVA	CONNECTED CURRENT	72.4 A
ESTIMATED DEMAND LOAD:	60.2 kVA	ESTIMATED DEMAND CURRENT	72.4 A
ESTIMATED DEMAND FACTOR:	100.00%	ESTIMATED GROWTH CURRENT	0 A
APPLIED GRTOWTH FACTOR:			

PANELBOARD NOTES:

PANELBOARD: EDP-S104-1

LOCATION: HVAC S104 | VOLTAGE: 120/208 Wye,3P,4W,60Hz | INTERRUPTING RATING (kA SYMMETRICAL): 10 kA
SUPPY FROM: XMR-EDP-S104-1 | MAINS TYPE / LOCATION: MCB / TOP | MINIMUM BUS RATING: 400 A
MOUNTING: SURFACE | MCB FRAME / TRIP SIZE: 600 AF/600 AT | NEUTRAL BUS RATING: 100%
ENCLOSURE: TYPE 1

CKT NO.	DESCRIPTIONS	CIRCUIT SIZE	TRIP AMPS	POLES	PHASE A (VOLT-AMPS)	PHASE B (VOLT-AMPS)	PHASE C (VOLT-AMPS)	POLES	TRIP AMPS	CIRCUIT SIZE	DESCRIPTIONS	CKT NO.
1					2880 2480							2
3	ERP-S121-1	4#250,#4G, 2-1/2"	300 A	3		0 1860		3	150 A	4#1/0,#6G,2"	ERP-S107-1	4
5							0 1180					6
7					10580 2160							8
9	ERP-S118-1	4#2,#8G,1-1/4"	100 A	3		8000 2160		3	150 A	4#2,#8G,1-1/4"	ERP-S128-1	10
11							4660 680					12
13	VAV-1-04	2#12,#12G,3/4"	15 A	1	1000 1000			1	15 A	2#12,#12G,3/4"	VAV-1-06	14
15	VAV-1-05	2#12,#12G,3/4"	15 A	1		1000 1200		1	15 A	2#12,#12G,3/4"	FP AIR COMPRESSOR - SPRINKLER S106	16
17	EF-1-04	2#12,#12G,3/4"	20 A	1			706 1000	1	25 A	2#10,#10G,3/4"	VAV-1-03	18
19					833 833							20
21	VAV-1-07	3-1/C#12, #12G, 3/4"	20 A	3		833 833						22
23							833 833					24
25	VAV-1-24	2#12,#12G,3/4"	15 A	1	900 900			1	15 A	2#12,#12G,3/4"	VAV-1-23	26
27	SMOKE DAMPER	2#12,#12G,3/4"	20 A	1		500 500		1	20 A	2#12,#12G,3/4"	SMOKE DAMPER	28
29	IH-01-04	2#12,#12G,3/4"	20 A	1			500 1000	1	20 A	2#12,#12G,3/4"	IH-1-01/EH-1-01	30
31						824		1	20 A	2#12,#12G,3/4"	EF-1-02	32
33							706	1	20 A	2#12,#12G,3/4"	EF-1-03	34
35												36
37												38
39												40
41	FA CONTROL PANEL - ROOM S104	2#12,#12G,3/4"	20 A	1			500 500	1	20 A	2#12,#12G,3/4"	FA BOOSTER PANEL - ROOM S104	42
	TOTAL CONNECTED LOAD / PHASE				24271	17336	12292					

LOAD CLASSIFICATIONS	CONNECTED LOAD	DEMAND FACTOR	ESTIMATED DEMAND
Power	16122	100.00%	16122
Receptacle	31840	65.70%	20920

TOTAL LOAD SUMMARY

LOAD (KVA)		CURRENT (AMPS)	
CONNECTED LOAD:	52.9 kVA	CONNECTED CURRENT	146.8 A
ESTIMATED DEMAND LOAD:	42.0 kVA	ESTIMATED DEMAND CURRENT	116.5 A
ESTIMATED DEMAND FACTOR:	79.37%	ESTIMATED GROWTH CURRENT	0 A
APPLIED GRTOWTH FACTOR:			

PANELBOARD NOTES:

PANELBOARD: EDP-S105-1

LOCATION: ELECTRICAL S105 | VOLTAGE: 120/208 Wye,3P,4W,60Hz | INTERRUPTING RATING (kA SYMMETRICAL): 10 kA
SUPPY FROM: XMFR-EDP-S105-1 | MAINS TYPE / LOCATION: MCB / TOP | MINIMUM BUS RATING: 400 A
MOUNTING: SURFACE | MCB FRAME / TRIP SIZE: 400 AF/300 AT | NEUTRAL BUS RATING: 100%
ENCLOSURE: TYPE 1

CKT NO.	DESCRIPTIONS	CIRCUIT SIZE	TRIP AMPS	POLES	PHASE A (VOLT-AMPS)	PHASE B (VOLT-AMPS)	PHASE C (VOLT-AMPS)	POLES	TRIP AMPS	CIRCUIT SIZE	DESCRIPTIONS	CKT NO.
1	RECPT - CORRIDOR S100 &S101	2#12,#12G,3/4"	20 A	1	1080 900			1	20 A	2#12,#12G,3/4"	RECPT - OUTDOOR, S103, S106	2
3	RECPT - STORAGE S102 & S103		20 A	1		540 180		1	20 A	2#12,#12G,3/4"	RECPT - HVAC S104	4
5	CU-05	2#10,#10G,3/4"	25 A	2			1118					6
7					1118 180			1	20 A	2#12,#12G,3/4"	RECPT - HVAC S104	8
9						1257						10
11	ERP-U120-1	4#2,#6G,1-1/4"	125 A	3			1100					12
13					0							14
15	CU-06	2#10,#10G,3/4"	25 A	2		1118						16
17							1118					18
19					0 2200							20
21	ERP-U107-1	4#2,#6G,1-1/4"	125 A	3		0 1100		3	125 A	4#2,#6G,1-1/4"	ERP-T110-1	22
23							0 1257					24
25												26
27						745						28
29							745	3	25 A	3#10,#10G,3/4"	CU-07	30
31					745							32
33												34
35												36
37												38
39												40
41												42
	TOTAL CONNECTED LOAD / PHASE				6007	4851	5334					

LOAD CLASSIFICATIONS	CONNECTED LOAD	DEMAND FACTOR	ESTIMATED DEMAND
Power	13306	100.00%	13306
Receptacle	3240	100.00%	3240

TOTAL LOAD SUMMARY

LOAD (KVA)		CURRENT (AMPS)	
CONNECTED LOAD:	16.2 kVA	CONNECTED CURRENT	44.8 A
ESTIMATED DEMAND LOAD:	16.2 kVA	ESTIMATED DEMAND CURRENT	44.8 A
ESTIMATED DEMAND FACTOR:	100.00%	ESTIMATED GROWTH CURRENT	0 A
APPLIED GRTOWTH FACTOR:			

PANELBOARD NOTES:

PANELBOARD: ELP-S104-1

LOCATION: HVAC S104 | VOLTAGE: 480/277 Wye,3P,4W,60Hz | INTERRUPTING RATING (kA SYMMETRICAL): 14 kA
SUPPY FROM: EMDP-S104-1 | MAINS TYPE / LOCATION: MCB / TOP | MINIMUM BUS RATING: 225 A
MOUNTING: SURFACE | MCB FRAME / TRIP SIZE: 100 AF/50 AT | NEUTRAL BUS RATING: 100%
ENCLOSURE: TYPE 1

CKT NO.	DESCRIPTIONS	CIRCUIT SIZE	TRIP AMPS	POLES	PHASE A (VOLT-AMPS)	PHASE B (VOLT-AMPS)	PHASE C (VOLT-AMPS)	POLES	TRIP AMPS	CIRCUIT SIZE	DESCRIPTIONS	CKT NO.
1	LTG - CORR. S102 & VOTER STORAGE S102	2#12,#12G,3/4"	20 A	1	884 960			1	20 A	2#12,#12G,3/4"	LTG - S103, S104, S105, S106	2
3	LTG - S123,S124,S125,S126,S127,S128,S129	2#12,#12G,3/4"	20 A	1		1698 508		1	20 A	2#12,#12G,3/4"	LTG - S116, S117, S118, S119, S120, S122	4
5	LTG - S110, S111, S112, S114, S115, S116, S117	2#12,#12G,3/4"	20 A	1			630 815	1	20 A	2#12,#12G,3/4"	LTG - S108, S109, S113, S118	6
7	LTG - OPEN OFFICE S107	2#12,#12G,3/4"	20 A	1	996							8
9	LTG - SUITE S EXTERIOR	2#12,#12G,3/4"	20 A	1		216						10
11												12
13												14
15												16
17												18
19												20
21												22
23												24
25												26
27												28
29												30
31												32
33												34
35												36
37												38
39												40
41												42
	TOTAL CONNECTED LOAD / PHASE				2839	2415	1443					

LOAD CLASSIFICATIONS	CONNECTED LOAD	DEMAND FACTOR	ESTIMATED DEMAND
LTG	6315	100.00%	6315
LTG - EGRESS	103	100.00%	103
LTG - EXTERIOR	216	100.00%	216

TOTAL LOAD SUMMARY

LOAD (KVA)		CURRENT (AMPS)	
CONNECTED LOAD:	6.6 kVA	CONNECTED CURRENT	8.0 A
ESTIMATED DEMAND LOAD:	6.6 kVA	ESTIMATED DEMAND CURRENT	8.0 A
ESTIMATED DEMAND FACTOR:	100.00%	ESTIMATED GROWTH CURRENT	0 A
APPLIED GRTOWTH FACTOR:			

PANELBOARD NOTES:

GENERAL NOTES:

A. REFER TO SHEET J-E001 FOR GENERAL NOTES, LEGEND AND ABBREVIATIONS.

(#) SHEET KEYED NOTES:

1. PROVIDE GFPE BREAKER, RATED FOR 30mA GROUND FAULT.

SOUTH CAROLINA PROFESSIONAL ENGINEER No. 29760 01/27/2020

SOUTH CAROLINA JACOBS ENGINEERING GROUP, INC. No. C00316 CERTIFICATE OF AUTHORIZATION

© JACOBS 2018. ALL RIGHTS RESERVED.
THIS DOCUMENT AND THE IDEAS AND DESIGNS INCORPORATED HEREIN, AS AN INSTRUMENT OF PROFESSIONAL SERVICE, IS THE PROPERTY OF JACOBS AND IS NOT TO BE USED IN WHOLE OR IN PART FOR ANY PURPOSE WITHOUT THE WRITTEN PERMISSION OF JACOBS.

NO.	DATE	DSGN	DR	CHK	APVD	BY	APVD
0	01/27/20	R. VALENTIN	D. RIOS	M. BOURQUE	M. BURN		
				ISSUED FOR CONSTRUCTION			
				REVISION			

BERKELEY COUNTY ADMINISTRATION COMPLEX RENOVATIONS
1003 N. US HIGHWAY 52, MONCKS CORNER, SC 29461
BERKELEY COUNTY GOVERNMENT - RFP# 32408-01-17/18

JACOBS®
1041 East Butler Road Greenville, South Carolina 29607-3725
Tel: 864-676-8000

ELECTRICAL
PANEL SCHEDULES

VERIFY SCALE
BAR IS ONE INCH ON ORIGINAL DRAWING.
0 1"

DATE	
PROJ	1547
DWG	J-E050
SHEET	of

PANELBOARD: ELP-T110-1

LOCATION: HVAC T110
SUPPY FROM: EMDP-S105-1
MOUNTING: SURFACE
ENCLOSURE: TYPE 1

VOLTAGE: 480/277 Wye,3P,4W,60Hz
MAINS TYPE / LOCATION: MCB / TOP
MCB FRAME / TRIP SIZE: 100 AF/50 AT

INTERRUPTING RATING (kA SYMMETRICAL): 14 kA
MINIMUM BUS RATING: 225 A
NEUTRAL BUS RATING: 100%

CKT NO.	DESCRIPTIONS	CIRCUIT SIZE	TRIP AMPS	POLES	PHASE A (VOLT-AMPS)		PHASE B (VOLT-AMPS)		PHASE C (VOLT-AMPS)		POLES	TRIP AMPS	CIRCUIT SIZE	DESCRIPTIONS	CKT NO.
1	LTG - T100, T101, T102, T103, T104, T105 T109	2#12,#12G,3/4"	20 A	1	1044	1602					1	20 A	2#12,#12G,3/4"	LTG - T110, T111, T112, T113, T114, T115,T134	2
3								1405			1	20 A	2#12,#12G,3/4"	LTG -T116,T118,T119,T120,T121,T125,T126,T127,T131	4
5	LTG - VOTING T137, RECPT. T128, QUEING T130	2#12,#12G,3/4"	20 A	1					925	1604	1	20 A	2#12,#12G,3/4"	LTG-T116,T117,T123,T124,T129,T132,T135,T136	6
7															8
9															10
11															12
13															14
15															16
17															18
19															20
21															22
23															24
25															26
27															28
29															30
31															32
33															34
35															36
37															38
39															40
41															42
	TOTAL CONNECTED LOAD / PHASE				2645		1405		2529						

LOAD CLASSIFICATIONS	CONNECTED LOAD	DEMAND FACTOR	ESTIMATED DEMAND
LTG	5960	100.00%	5960
LTG - EGRESS	620	100.00%	620

TOTAL LOAD SUMMARY			
LOAD (KVA)		CURRENT (AMPS)	
CONNECTED LOAD:	6.6 kVA	CONNECTED CURRENT	7.9 A
ESTIMATED DEMAND LOAD:	6.6 kVA	ESTIMATED DEMAND CURRENT	7.9 A
ESTIMATED DEMAND FACTOR:	100.00%	ESTIMATED GROWTH CURRENT	0 A
APPLIED GRTOWTH FACTOR:			

PANELBOARD NOTES:

SWITCHBOARD: EMDP-S105-1 (1)

LOCATION: ELECTRICAL S105
SOURCE: ATS-S105-1
MOUNTING: SURFACE

VOLTS: 480/277 Wye
PHASES: 3
WIRES: 4
ENCLOSURE: NEMA 1

A.I.C. RATING: 42,000
MAINS RATING: 600 A
MCB RATING: 600 A

CKT NO.	CIRCUIT DESCRIPTION	POLES	FRAME SIZE	TRIP RATING	Load
1	ELP-U120-1	3	100 A	50 A	6417
2	ELP-U107-1	3	100 A	50 A	3051
3	ELP-T110-1	3	100 A	50 A	6580
4	XMR-UPS-T100-1	3	150 A	125 A	10600
5	XMFR-EDP-S105-1	3	150 A	125 A	16150
6					
7					
8					
9					
10					
11					
12					
13					
14					
	TOTAL CONNECTED LOAD:				41790
	TOTAL AMPS:				50 A

PANELBOARD: ELP-U107-1

LOCATION: MECHANICAL U107
SUPPY FROM: EMDP-S105-1
MOUNTING: SURFACE
ENCLOSURE: TYPE 1

VOLTAGE: 480/277 Wye,3P,4W,60Hz
MAINS TYPE / LOCATION: MCB / TOP
MCB FRAME / TRIP SIZE: 100 AF/50 AT

INTERRUPTING RATING (kA SYMMETRICAL): 14 kA
MINIMUM BUS RATING: 225 A
NEUTRAL BUS RATING: 100%

CKT NO.	DESCRIPTIONS	CIRCUIT SIZE	TRIP AMPS	POLES	PHASE A (VOLT-AMPS)		PHASE B (VOLT-AMPS)		PHASE C (VOLT-AMPS)		POLES	TRIP AMPS	CIRCUIT SIZE	DESCRIPTIONS	CKT NO.
1															2
3															4
5	LTG - SUITE D, E, F	2#12,#12G,3/4"	20 A	1					1484						6
7						1567					1	20 A	2#12,#12G,3/4"	LTG - F106,F107,F108,F109,F112,F113,F114,F123	8
9															10
11															12
13															14
15															16
17															18
19															20
21															22
23															24
25															26
27															28
29															30
31															32
33															34
35															36
37															38
39															40
41															42
	TOTAL CONNECTED LOAD / PHASE				1567		0		1484						

LOAD CLASSIFICATIONS	CONNECTED LOAD	DEMAND FACTOR	ESTIMATED DEMAND
LTG	2520	100.00%	2520
LTG - EGRESS	531	100.00%	531

TOTAL LOAD SUMMARY			
LOAD (KVA)		CURRENT (AMPS)	
CONNECTED LOAD:	3.1 kVA	CONNECTED CURRENT	3.7 A
ESTIMATED DEMAND LOAD:	3.1 kVA	ESTIMATED DEMAND CURRENT	3.7 A
ESTIMATED DEMAND FACTOR:	100.00%	ESTIMATED GROWTH CURRENT	0 A
APPLIED GRTOWTH FACTOR:			

PANELBOARD NOTES:

PANELBOARD: ERP-S107-1

LOCATION: OPEN OFFICE S107
SUPPY FROM: EDP-S104-1
MOUNTING: RECESSED
ENCLOSURE: TYPE 1

VOLTAGE: 120/208 Wye,3P,4W,60Hz
MAINS TYPE / LOCATION: MCB / TOP
MCB FRAME / TRIP SIZE: 150 AF/150 AT

INTERRUPTING RATING (kA SYMMETRICAL): 10 kA
MINIMUM BUS RATING: 225 A
NEUTRAL BUS RATING: 100%

CKT NO.	DESCRIPTIONS	CIRCUIT SIZE	TRIP AMPS	POLES	PHASE A (VOLT-AMPS)		PHASE B (VOLT-AMPS)		PHASE C (VOLT-AMPS)		POLES	TRIP AMPS	CIRCUIT SIZE	DESCRIPTIONS	CKT NO.
1	RECPT - DIR. S110 & ASST. DIR. S109	2#12,#12G,3/4"	20 A	1	900	900					1	20 A	2#12,#12G,3/4"	RECPT - TRNG OFFICE S110 & QUIET RM S111	2
3	RECPT-BRK RM S118 GENRL PURPOSE/FRIDGE	2#12,#12G,3/4"	20 A	1			360	500			1	20 A	2#12,#12G,3/4"	EH-31-01	4
5	EH-31-02	2#12,#12G,3/4"	20 A	1					500	180	1	20 A	2#12,#12G,3/4"	RECPT - COPIER OPEN S114	6
7	RECPT - COPER OPEN OFFICE S107	2#12,#12G,3/4"	20 A	1	180	500					1	20 A	2#12,#12G,3/4"	ROOF - SMOKE DAMPER	8
9	ROOF - SMOKE DAMPER	2#12,#12G,3/4"	20 A	1			500	500			1	20 A	2#12,#12G,3/4"	ROOF - SMOKE DAMPER	10
11	ROOF - SMOKE DAMPER	2#12,#12G,3/4"	20 A	1					500						12
13															14
15															16
17															18
19															20
21															22
23															24
25															26
27															28
29															30
31															32
33															34
35															36
37															38
39															40
41															42
	TOTAL CONNECTED LOAD / PHASE				2480		1860		1180						

LOAD CLASSIFICATIONS	CONNECTED LOAD	DEMAND FACTOR	ESTIMATED DEMAND
Power	3000	100.00%	3000
Receptacle	2520	100.00%	2520

TOTAL LOAD SUMMARY			
LOAD (KVA)		CURRENT (AMPS)	
CONNECTED LOAD:	5.5 kVA	CONNECTED CURRENT	15.3 A
ESTIMATED DEMAND LOAD:	5.5 kVA	ESTIMATED DEMAND CURRENT	15.3 A
ESTIMATED DEMAND FACTOR:	100.00%	ESTIMATED GROWTH CURRENT	0 A
APPLIED GRTOWTH FACTOR:			

PANELBOARD NOTES:

PANELBOARD: ELP-U120-1

LOCATION: HVAC U120
SUPPY FROM: EMDP-S105-1
MOUNTING: SURFACE
ENCLOSURE: TYPE 1

VOLTAGE: 480/277 Wye,3P,4W,60Hz
MAINS TYPE / LOCATION: MCB / TOP
MCB FRAME / TRIP SIZE: 100 AF/50 AT

INTERRUPTING RATING (kA SYMMETRICAL): 14 kA
MINIMUM BUS RATING: 225 A
NEUTRAL BUS RATING: 100%

CKT NO.	DESCRIPTIONS	CIRCUIT SIZE	TRIP AMPS	POLES	PHASE A (VOLT-AMPS)		PHASE B (VOLT-AMPS)		PHASE C (VOLT-AMPS)		POLES	TRIP AMPS	CIRCUIT SIZE	DESCRIPTIONS	CKT NO.
1	LTG - X101, X105, X100	2#12,#12G,3/4"	20 A	1	1125	482					1	20 A	2#12,#12G,3/4"	LTG - U120, X102, X103, X104	2
3	LTG-V100, V101, V102, V103, V104, V105, V111	2#12,#12G,3/4"	20 A	1			1165	760			1	20 A	2#12,#12G,3/4"	LTG - V106, V107, V108, V109, V112	4
5	LTG EMERGENCY - COMMON AREAS	2#12,#12G,3/4"	20 A	1					322	893	1	20 A	2#12,#12G,3/4"	LTG - CORRIDOR U119	6
7						150					1	20 A	2#12,#12G,3/4"	LTG - EXTERIOR UNDER CANOPY "E"	8
9	LTG - OFFICE X105	2#12,#12G,3/4"	20 A	1			1520								10
11															12
13															14
15															16
17															18
19															20
21															22
23															24
25															26
27															28
29															30
31															32
33															34
35															36
37															38
39															40
41															42
	TOTAL CONNECTED LOAD / PHASE				1757		3445		1214						

LOAD CLASSIFICATIONS	CONNECTED LOAD	DEMAND FACTOR	ESTIMATED DEMAND
LTG	5680	100.00%	5680
LTG - EGRESS	737	100.00%	737

TOTAL LOAD SUMMARY			
LOAD (KVA)		CURRENT (AMPS)	
CONNECTED LOAD:	6.4 kVA	CONNECTED CURRENT	7.7 A
ESTIMATED DEMAND LOAD:	6.4 kVA	ESTIMATED DEMAND CURRENT	7.7 A
ESTIMATED DEMAND FACTOR:	100.00%	ESTIMATED GROWTH CURRENT	0 A
APPLIED GRTOWTH FACTOR:			

PANELBOARD NOTES:

PANELBOARD: ERP-S118-1

LOCATION: BREAK ROOM S118
SUPPY FROM: EDP-S104-1
MOUNTING: RECESSED
ENCLOSURE: TYPE 1

VOLTAGE: 120/208 Wye,3P,4W,60Hz
MAINS TYPE / LOCATION: MCB / TOP
MCB FRAME / TRIP SIZE: 100 AF/100 AT

INTERRUPTING RATING (kA SYMMETRICAL): 10 kA
MINIMUM BUS RATING: 225 A
NEUTRAL BUS RATING: 100%

CKT NO.	DESCRIPTIONS	CIRCUIT SIZE	TRIP AMPS	POLES	PHASE A (VOLT-AMPS)		PHASE B (VOLT-AMPS)		PHASE C (VOLT-AMPS)		POLES	TRIP AMPS	CIRCUIT SIZE	DESCRIPTIONS	CKT NO.
1	RECPT-MENS RR S117, WM RR S118 & COR S122	2#12,#12G,3/4"	20 A	1	2700	1440					1	20 A	2#12,#12G,3/4"	RECPT - BREAK RM S118	2
3	RECPT - BREAK RM S118	2#12,#12G,3/4"	20 A	1			360	1200			1	20 A	2#12,#12G,3/4"	RECPT - BREAK S113 COFFEE MAKER	4
5	RECPT - BREAK S113 MICROWAVE	2#12,#12G,3/4"	20 A	1					1200	720	1	20 A	2#12,#12G,3/4"	RECPT - CONFERENCE RM S120	6
7	RECPT - FOR RANGE BREAK ROOM S118	2#4,#8G,1"	80 A	2	5000	1440					1	20 A	2#12,#12G,3/4"	RECPT - BREAK ROOM S118	8
9							5000	1440			1	20 A	2#12,#12G,3/4"	RECPT - BREAK ROOM S118	10
11	RECPT - BREAK ROOM S118	2#12,#12G,3/4"	20 A	1					1440	1300	1	20 A	2#12, #12G, 3/4"	VAV-1-10	12
13															14
15															16
17															18
19															20
21															22
23															24
25															26
27															28
29															30
31															32
33															34
35															36
37															38
39															40
41															42
	TOTAL CONNECTED LOAD / PHASE				10580		8000		4660						

LOAD CLASSIFICATIONS	CONNECTED LOAD	DEMAND FACTOR	ESTIMATED DEMAND
Power	1300	100.00%	1300
Receptacle	21940	72.79%	15970

TOTAL LOAD SUMMARY			
LOAD (KVA)		CURRENT (AMPS)	
CONNECTED LOAD:	23.2 kVA	CONNECTED CURRENT	64.5 A
ESTIMATED DEMAND LOAD:	17.3 kVA	ESTIMATED DEMAND CURRENT	47.9 A
ESTIMATED DEMAND FACTOR:	74.31%	ESTIMATED GROWTH CURRENT	0 A
APPLIED GRTOWTH FACTOR:			

PANELBOARD NOTES:

SWITCHBOARD: EMDP-S104-1

LOCATION: HVAC S104
SOURCE: ATS-S104-1
MOUNTING: SURFACE

VOLTS: 480/277 Wye
PHASES: 3
WIRES: 4
ENCLOSURE: NEMA 1

A.I.C. RATING: 42,000
MAINS RATING: 1200 A
MCB RATING: 1200 A

CKT NO.	CIRCUIT DESCRIPTION	POLES	FRAME SIZE	TRIP RATING	Load
1	ELP-S104-1	3	100 A	50 A	6630
2	ACC-01	3	100 A	20 A	8294
3	ACU-31	3	200 A	175 A	80118
4	CRAC-1-01	3	200 A	125 A	87412
5	XMR-UPS-S121-1	3	250 A	250 A	0
6	VAV-1-01	3	100 A	30 A	16800
7	VAV-1-02	3	100 A	40 A	26000
8	VAV-1-08	3	100 A	15 A	7000
9	EWH-01	3	100 A	25 A	15000
10	XMR-EDP-S104-1	3	250 A	250 A	53890
11	EF-1-01	3	100 A	15 A	2471
12	VAV-1-14	3	100 A	30 A	19703
13	VAV-1-12	3	100 A	40 A	26354
14					
	TOTAL CONNECTED LOAD:				336044
	TOTAL AMPS:				404 A

PANELBOARD: ERP-S121-1

LOCATION: SERVER ROOM S121
SUPPY FROM: EDP-S104-1
MOUNTING: SURFACE
ENCLOSURE: TYPE 1

VOLTAGE: 120/208 Wye,3P,4W,60Hz
MAINS TYPE / LOCATION: MCB / TOP
MCB FRAME / TRIP SIZE: 400 AF/300 AT

INTERRUPTING RATING (kA SYMMETRICAL): 10 kA
MINIMUM BUS RATING: 400 A
NEUTRAL BUS RATING: 100%

CKT NO.	DESCRIPTIONS	CIRCUIT SIZE	TRIP AMPS	POLES	PHASE A (VOLT-AMPS)		PHASE B (VOLT-AMPS)		PHASE C (VOLT-AMPS)		POLES	TRIP AMPS	CIRCUIT SIZE	DESCRIPTIONS	CKT NO.
1	RECPT - SERVER ROOM S121	2#12,#12G,3/4"	20 A	1	1440	1440					1	20 A	2#12,#12G,3/4"	RECPT - SERVER ROOM S121	2
3															4
5															6
7															8
9															10
11															12
13															14
15															16
17															18
19															20
21															22
23															24
25															26
27															28
29															30
31															32
33															34
35															36
37															38
39															40
41															42
	TOTAL CONNECTED LOAD / PHASE				2880		0		0						

LOAD CLASSIFICATIONS	CONNECTED LOAD	DEMAND FACTOR	ESTIMATED DEMAND
Receptacle	2880	100.00%	2880

TOTAL LOAD SUMMARY			
LOAD (KVA)		CURRENT (AMPS)	
CONNECTED LOAD:	2.9 kVA	CONNECTED CURRENT	8.0 A
ESTIMATED DEMAND LOAD:	2.9 kVA	ESTIMATED DEMAND CURRENT	8.0 A
ESTIMATED DEMAND FACTOR:	100.00%	ESTIMATED GROWTH CURRENT	0 A
APPLIED GRTOWTH FACTOR:			

PANELBOARD NOTES:

GENERAL NOTES:

A. REFER TO SHEET J-E001 FOR GENERAL NOTES, LEGEND AND ABBREVIATIONS.

(#) SHEET KEYED NOTES:

1. SEE SINGLE LINE DIAGRAM AND POWER PLAN FOR CIRCUIT SIZES.

SOUTH CAROLINA PROFESSIONAL ENGINEER No. 29760 01/27/2020

© JACOBS 2019. ALL RIGHTS RESERVED.

SOUTH CAROLINA CERTIFICATE OF AUTHORIZATION JACOBS ENGINEERING GROUP, INC. No. C00316

NO.	DATE	DSGN	DR	CHK	APVD	BY
0	01/27/20	R. VALENTIN	D. RIOS	M. BURN		

ISSUED FOR CONSTRUCTION

THIS DOCUMENT AND THE IDEAS AND DESIGNS INCORPORATED HEREIN, AS AN INSTRUMENT OF PROFESSIONAL SERVICE, IS THE PROPERTY OF JACOBS AND SHALL NOT BE REUSED IN WHOLE OR IN PART FOR ANY PROJECT WITHOUT THE WRITTEN CONSENT OF JACOBS.

BERKELEY COUNTY ADMINISTRATION COMPLEX RENOVATIONS
1003 N. US HIGHWAY 52, MONCKS CORNER, SC, 29461
BERKELEY COUNTY GOVERNMENT - RFP# 32400-01-17718

JACOBS®
1041 East Butler Road Greenville, South Carolina 29607-3725
Tel: 864.676.6000
Fax: 864.676.6001

ELECTRICAL
PANEL SCHEDULES

VERIFY SCALE
BAR IS ONE INCH ON ORIGINAL DRAWING.
0 1"

DATE
PROJ 1547
DWG J-E051
SHEET of

PANELBOARD: ERP-S128-1

LOCATION: OPS S128
SUPPY FROM: EDP-S104-1
MOUNTING: RECESSED
ENCLOSURE: TYPE 1

VOLTAGE: 120/208 Wye,3P,4W,60Hz
MAINS TYPE / LOCATION: MCB / TOP
MCB FRAME / TRIP SIZE: 150 AF/150 AT

INTERRUPTING RATING (kA SYMMETRICAL): 10 kA
MINIMUM BUS RATING: 225 A
NEUTRAL BUS RATING: 100%

CKT NO.	DESCRIPTIONS	CIRCUIT SIZE	TRIP AMPS	POLES	PHASE A (VOLT-AMPS)		PHASE B (VOLT-AMPS)		PHASE C (VOLT-AMPS)		POLES	TRIP AMPS	CIRCUIT SIZE	DESCRIPTIONS	CKT NO.
1	RECPS. - ADMIN S123 & OPS SUPER S124	2#12,#12G,3/4"	20 A	1	1080	1080					1	20 A	2#12,#12G,3/4"	RECP-DIRECTOR S125 & BREAKOUT RM S126	2
3	RECP-ADMIN S123, CORR. S127 & PLAN. S129	2#12,#12G,3/4"	20 A	1			1080	1080			1	20 A	2#12,#12G,3/4"	RECPT - OPS S128 & PLANNING S129	4
5	EH-31-03	2#12,#12G,3/4"	20 A	1					500	180	1	20 A	2#12,#12G,3/4"	RECPT - COPIER CORRIDOR S127	6
7															8
9															10
11															12
13															14
15															16
17															18
19															20
21															22
23															24
25															26
27															28
29															30
31															32
33															34
35															36
37															38
39															40
41															42
	TOTAL CONNECTED LOAD / PHASE				2160		2160		680						

LOAD CLASSIFICATIONS	CONNECTED LOAD	DEMAND FACTOR	ESTIMATED DEMAND
Power	500	100.00%	500
Receptacle	4500	100.00%	4500

TOTAL LOAD SUMMARY			
LOAD (KVA)		CURRENT (AMPS)	
CONNECTED LOAD:	5.0 kVA	CONNECTED CURRENT	13.9 A
ESTIMATED DEMAND LOAD:	5.0 kVA	ESTIMATED DEMAND CURRENT	13.9 A
ESTIMATED DEMAND FACTOR:	100.00%	ESTIMATED GROWTH CURRENT	0 A
APPLIED GRTOWTH FACTOR:			

PANELBOARD NOTES:

SWITCHBOARD: MDP-S105-1 (1)

LOCATION: ELECTRICAL S105
SOURCE: UTILITY TRANSFORMER
MOUNTING: SURFACE

VOLTS: 480/277 Wye
PHASES: 3
WIRES: 4
ENCLOSURE: NEMA 1

A.I.C. RATING: 42,000
MAINS RATING: 1600 A
MCB RATING: 1600 A

CKT NO.	CIRCUIT DESCRIPTION	POLES	FRAME SIZE	TRIP RATING	Load
1	ATS-S104-1	3	1200 A	1200 A	337002
2	ATS-S105-1	3	600 A	600 A	41790
3	DP-U120-1	3	225 A	225 A	60165
4	DP-T110-1	3	225 A	225 A	34002
5	XMR-DP-S105-1	3	225 A	175 A	132039
6					
7					
8	DP-U107-1	3	225 A	225 A	54882
9	DP-S104-1	3	225 A	225 A	92792
10	SPD	3	100 A	60 A	0
11	CH-01	3	600 A	500 A	255412
12					
13					
14					
				TOTAL CONNECTED LOAD:	989626
				TOTAL AMPS:	1190 A

PANELBOARD: ERP-T110-1

LOCATION: HVAC T110
SUPPY FROM: EDP-S105-1
MOUNTING: SURFACE
ENCLOSURE: TYPE 1

VOLTAGE: 120/208 Wye,3P,4W,60Hz
MAINS TYPE / LOCATION: MCB / TOP
MCB FRAME / TRIP SIZE: 150 AF/125 AT

INTERRUPTING RATING (kA SYMMETRICAL): 10 kA
MINIMUM BUS RATING: 225 A
NEUTRAL BUS RATING: 100%

CKT NO.	DESCRIPTIONS	CIRCUIT SIZE	TRIP AMPS	POLES	PHASE A (VOLT-AMPS)		PHASE B (VOLT-AMPS)		PHASE C (VOLT-AMPS)		POLES	TRIP AMPS	CIRCUIT SIZE	DESCRIPTIONS	CKT NO.
1															2
3															4
5										1100					6
7	CU-02A	2#10,#10G,3/4"	25 A	2	1100	1100					2	25 A	2#10,#10G,3/4"	CU-02B	8
9							1100								10
11															12
13															14
15															16
17	RECPT - EXTERIOR SUITE T	2#12,#12G,3/4"	20 A	1					180						18
19															20
21															22
23															24
25															26
27															28
29															30
31															32
33															34
35															36
37															38
39															40
41															42
	TOTAL CONNECTED LOAD / PHASE				2200		1100		1257						

LOAD CLASSIFICATIONS	CONNECTED LOAD	DEMAND FACTOR	ESTIMATED DEMAND
Power	4400	100.00%	4400
Receptacle	180	100.00%	180

TOTAL LOAD SUMMARY			
LOAD (KVA)		CURRENT (AMPS)	
CONNECTED LOAD:	4.6 kVA	CONNECTED CURRENT	12.6 A
ESTIMATED DEMAND LOAD:	4.6 kVA	ESTIMATED DEMAND CURRENT	12.6 A
ESTIMATED DEMAND FACTOR:	100.00%	ESTIMATED GROWTH CURRENT	0 A
APPLIED GRTOWTH FACTOR:			

PANELBOARD NOTES:

PANELBOARD: RP-T100-1

LOCATION: IT CLOSET T100
SUPPY FROM: RP-T110-1
MOUNTING: SURFACE
ENCLOSURE: TYPE 1

VOLTAGE: 120/208 Wye,3P,4W,60Hz
MAINS TYPE / LOCATION: MCB / TOP
MCB FRAME / TRIP SIZE: 100 AF/100 AT

INTERRUPTING RATING (kA SYMMETRICAL): 10 kA
MINIMUM BUS RATING: 225 A
NEUTRAL BUS RATING: 100%

CKT NO.	DESCRIPTIONS	CIRCUIT SIZE	TRIP AMPS	POLES	PHASE A (VOLT-AMPS)		PHASE B (VOLT-AMPS)		PHASE C (VOLT-AMPS)		POLES	TRIP AMPS	CIRCUIT SIZE	DESCRIPTIONS	CKT NO.
1	EH-2-01 CONTROL DAMPER	2#12,#12G,3/4"	20 A	1	500	824					1	15 A	2#12,#12G,3/4"	EF-2-01	2
3															4
5															6
7															8
9															10
11															12
13															14
15															16
17															18
19															20
21															22
23															24
25															26
27															28
29															30
31															32
33															34
35															36
37															38
39															40
41															42
	TOTAL CONNECTED LOAD / PHASE				1276		0		0						

LOAD CLASSIFICATIONS	CONNECTED LOAD	DEMAND FACTOR	ESTIMATED DEMAND
Power	1276	100.00%	1276

TOTAL LOAD SUMMARY			
LOAD (KVA)		CURRENT (AMPS)	
CONNECTED LOAD:	1.3 kVA	CONNECTED CURRENT	3.5 A
ESTIMATED DEMAND LOAD:	1.3 kVA	ESTIMATED DEMAND CURRENT	3.5 A
ESTIMATED DEMAND FACTOR:	100.00%	ESTIMATED GROWTH CURRENT	0 A
APPLIED GRTOWTH FACTOR:			

PANELBOARD NOTES:

PANELBOARD: ERP-U107-1

LOCATION: MECHANICAL U107
SUPPY FROM: EDP-S105-1
MOUNTING: SURFACE
ENCLOSURE: TYPE 1

VOLTAGE: 120/208 Wye,3P,4W,60Hz
MAINS TYPE / LOCATION: MCB / TOP
MCB FRAME / TRIP SIZE: 150 AF/125 AT

INTERRUPTING RATING (kA SYMMETRICAL): 10 kA
MINIMUM BUS RATING: 125 A
NEUTRAL BUS RATING: 100%

CKT NO.	DESCRIPTIONS	CIRCUIT SIZE	TRIP AMPS	POLES	PHASE A (VOLT-AMPS)		PHASE B (VOLT-AMPS)		PHASE C (VOLT-AMPS)		POLES	TRIP AMPS	CIRCUIT SIZE	DESCRIPTIONS	CKT NO.
1															2
3															4
5															6
7															8
9															10
11															12
13															14
15															16
17															18
19															20
21															22
23															24
25															26
27															28
29															30
31															32
33															34
35															36
37															38
39															40
41															42
	TOTAL CONNECTED LOAD / PHASE				0		0		0						

LOAD CLASSIFICATIONS	CONNECTED LOAD	DEMAND FACTOR	ESTIMATED DEMAND

TOTAL LOAD SUMMARY			
LOAD (KVA)		CURRENT (AMPS)	
CONNECTED LOAD:	0.0 kVA	CONNECTED CURRENT	0.0 A
ESTIMATED DEMAND LOAD:	0.0 kVA	ESTIMATED DEMAND CURRENT	0.0 A
ESTIMATED DEMAND FACTOR:	100.00%	ESTIMATED GROWTH CURRENT	0 A
APPLIED GRTOWTH FACTOR:			

PANELBOARD NOTES:

PANELBOARD: RP-T110-1

LOCATION: HVAC T110
SUPPY FROM: DP-S105-1
MOUNTING: SURFACE
ENCLOSURE: TYPE 1

VOLTAGE: 120/208 Wye,3P,4W,60Hz
MAINS TYPE / LOCATION: MCB / TOP
MCB FRAME / TRIP SIZE: 100 AF/100 AT

INTERRUPTING RATING (kA SYMMETRICAL): 10 kA
MINIMUM BUS RATING: 225 A
NEUTRAL BUS RATING: 100%

CKT NO.	DESCRIPTIONS	CIRCUIT SIZE	TRIP AMPS	POLES	PHASE A (VOLT-AMPS)		PHASE B (VOLT-AMPS)		PHASE C (VOLT-AMPS)		POLES	TRIP AMPS	CIRCUIT SIZE	DESCRIPTIONS	CKT NO.
1	RECPT - OFFICE T111 & T112	2#12,#12G,3/4"	20 A	1	1080	1080					1	20 A	2#12,#12G,3/4"	RECPT - OFFICE T113 & T115	2
3	RECPT - OFFICE 101 & T102	2#12,#12G,3/4"	20 A	1			1400	1080			1	20 A	2#12,#12G,3/4"	RECPT - OFFICE T103 &T104	4
5	RECPT - CORRIDOR T109	2#12,#12G,3/4"	20 A	1					900	1080	1	20 A	2#12,#12G,3/4"	RECPT - OFFICE T118 & T125	6
7	RECPT - OFFICE T126 & T127	2#12,#12G,3/4"	20 A	1	1080	1080					1	20 A	2#12,#12G,3/4"	RECPT - OFFICE T119 & T121	8
9	RECPT - CORRIDOR T117	2#12,#12G,3/4"	20 A	1			1080	1040			1	20 A	2#12,#12G,3/4"	RECPT - CORRIDOR T116 & T120	10
11	RECPT - CORRIDOR T116 & OFFICE T124	2#12,#12G,3/4"	20 A	1					1080	1080	1	20 A	2#12,#12G,3/4"	RECPT - OFFICE T129 & T132	12
13	RECPT - OFFICE T135 & T136	2#12,#12G,3/4"	20 A	1	1080	1080					1	20 A	2#12,#12G,3/4"	RECPT - STORAGE T139 & CORRIDOR T140	14
15	RECPT - CONFERENCE ROOM T123	2#12,#12G,3/4"	20 A	1			1080	1080			1	20 A	2#12,#12G,3/4"	RECPT - OFFICE T133 & T138	16
17	RECPT - RECPT. T129 & QUEUING T130	2#12,#12G,3/4"	20 A	1					1260	500					18
19	JUNCTION BOX - CUBICLES T114	2#12,#12G,3/4"	20 A	2	500	500					2	20 A	2#12,#12G,3/4"	JUNCTION BOX - CUBICLES T114	20
21							500	1440			1	20 A	2#12,#12G,3/4"	RECPT - VOTING T137	22
23	RECPT - OFFICE T105	2#12,#12G,3/4"	20 A	1					540	540	1	20 A	2#12,#12G,3/4"	RECPT - CORRIDOR U113	24
25	JUNCTION BOX - CUBICLES T114	2#12,#12G,3/4"	20 A	2	500	360					1	20 A		Receptacle	26
27							500	1968			1	20 A	2#12,#12G,3/4"	RECPT - IT CLOSET T100	28
29	RECPT - HVAC T110	2#12,#12G,3/4"	20 A	1					360	1000	1	20 A	2#12,#12G,3/4"	EH-28-01 AND IH-28-02	30
31	EF-3-01	2#12,#12G,3/4"	15 A	1	824										32
33															34
35															36
37															38
39															40
41	FA BOOSTER PANEL - ROOM T110	2#12,#12G,3/4"	20 A	1					500						42
	TOTAL CONNECTED LOAD / PHASE				9050		11128		8840						

LOAD CLASSIFICATIONS	CONNECTED LOAD	DEMAND FACTOR	ESTIMATED DEMAND
Power	5963	100.00%	5963
Receptacle	22600	72.12%	16300

TOTAL LOAD SUMMARY			
LOAD (KVA)		CURRENT (AMPS)	
CONNECTED LOAD:	28.5 kVA	CONNECTED CURRENT	79.1 A
ESTIMATED DEMAND LOAD:	22.2 kVA	ESTIMATED DEMAND CURRENT	61.7 A
ESTIMATED DEMAND FACTOR:	77.92%	ESTIMATED GROWTH CURRENT	0 A
APPLIED GRTOWTH FACTOR:			

PANELBOARD NOTES:

PANELBOARD: ERP-U120-1

LOCATION: HVAC U120
SUPPY FROM: EDP-S105-1
MOUNTING: SURFACE
ENCLOSURE: TYPE 1

VOLTAGE: 120/208 Wye,3P,4W,60Hz
MAINS TYPE / LOCATION: MCB / TOP
MCB FRAME / TRIP SIZE: 150 AF/125 AT

INTERRUPTING RATING (kA SYMMETRICAL): 10 kA
MINIMUM BUS RATING: 125 A
NEUTRAL BUS RATING: 100%

CKT NO.	DESCRIPTIONS	CIRCUIT SIZE	TRIP AMPS	POLES	PHASE A (VOLT-AMPS)		PHASE B (VOLT-AMPS)		PHASE C (VOLT-AMPS)		POLES	TRIP AMPS	CIRCUIT SIZE	DESCRIPTIONS	CKT NO.
1	RCPT - CONDENSATE PUMP	2#12,#12G,3/4"	20 A	1	180	1100									2
3								1100			2	25 A	2#10,#10G,3/4"	CU-01	4
5															6
7															8
9															10
11															12
13															14
15															16
17															18
19															20
21															22
23															24
25															26
27															28
29															30
31															32
33															34
35															36
37															38
39															40
41															42
	TOTAL CONNECTED LOAD / PHASE				1257		1100		0						

LOAD CLASSIFICATIONS	CONNECTED LOAD	DEMAND FACTOR	ESTIMATED DEMAND
Power	2200	100.00%	2200
Receptacle	180	100.00%	180

TOTAL LOAD SUMMARY			
LOAD (KVA)		CURRENT (AMPS)	
CONNECTED LOAD:	2.4 kVA	CONNECTED CURRENT	6.5 A
ESTIMATED DEMAND LOAD:	2.4 kVA	ESTIMATED DEMAND CURRENT	6.5 A
ESTIMATED DEMAND FACTOR:	100.00%	ESTIMATED GROWTH CURRENT	0 A
APPLIED GRTOWTH FACTOR:			

PANELBOARD NOTES:

PANELBOARD: RP-T110-2

LOCATION: HVAC T110
SUPPY FROM: DP-S105-1
MOUNTING: SURFACE
ENCLOSURE: TYPE 1

VOLTAGE: 120/208 Wye,3P,4W,60Hz
MAINS TYPE / LOCATION: MCB / TOP
MCB FRAME / TRIP SIZE: 100 AF/100 AT

INTERRUPTING RATING (kA SYMMETRICAL): 10 kA
MINIMUM BUS RATING: 225 A
NEUTRAL BUS RATING: 100%

CKT NO.	DESCRIPTIONS	CIRCUIT SIZE	TRIP AMPS	POLES	PHASE A (VOLT-AMPS)		PHASE B (VOLT-AMPS)		PHASE C (VOLT-AMPS)		POLES	TRIP AMPS	CIRCUIT SIZE	DESCRIPTIONS	CKT NO.
1	VAV-1-11	2#12, #12G, 3/4"	15 A	1	1300	1300					1	15 A	2#12, #12G, 3/4"	VAV-1-17	2
3	VAV-1-20	2#12, #12G, 3/4"	15 A	1			900	2000			1	25 A	2#10, #10G, 3/4"	VAV-1-25	4
5	VAV-1-22	2#12, #12G, 3/4"	15 A	1					1300	1133					6
7					833	1133					3	15 A	3-1/C, #12, #12G, 3/4"	VAV-1-21	8
9	VAV-1-16	3-1/C, #12, #12G, 3/4"	15 A	3			833	1133							10
11									833	1300	1	15 A	2#12, #12G, 3/4"	VAV-3-09	12
13	VAV-3-22	2#12, #12G, 3/4"	15 A	1	1300	1300					1	20 A	2#12, #12G, 3/4"	VAV-3-16	14
15	VAV-1-18	2#10, #10G, 3/4"	25 A	1			1300	1300			1	15 A	2#12, #12G, 3/4"	VAV-1-19	16
17									700	900	1	15 A	2#12, #12G, 3/4"	VAV-3-03	18
19	VAV-1-13	3-1/C, #12, #12G, 3/4"	15 A	3	700										20
21							700	1333							22
23	VAV-1-26	2#12,#12G,3/4"	15 A	1					1300	1333	3	15 A	3-1/C, #12, #12G, 3/4"	VAV-1-27	24
25						1333									26
27															28
29															30
31															32
33															34
35															36
37															38
39															40
41															42
	TOTAL CONNECTED LOAD / PHASE				9200		9500		8800						

LOAD CLASSIFICATIONS	CONNECTED LOAD	DEMAND FACTOR	ESTIMATED DEMAND
Power	15500	100.00%	15500

TOTAL LOAD SUMMARY			
LOAD (KVA)		CURRENT (AMPS)	
CONNECTED LOAD:	27.5 kVA	CONNECTED CURRENT	76.3 A
ESTIMATED DEMAND LOAD:	27.5 kVA	ESTIMATED DEMAND CURRENT	76.3 A
ESTIMATED DEMAND FACTOR:	100.00%	ESTIMATED GROWTH CURRENT	0 A
APPLIED GRTOWTH FACTOR:			

PANELBOARD NOTES:

GENERAL NOTES:

A. REFER TO SHEET J-E001 FOR GENERAL NOTES, LEGEND AND ABBREVIATIONS.

B. REFER TO POWER PLANS FOR FEEDER SIZES NOT SHOWN IN PANEL SCHEDULE.

(#) SHEET KEYED NOTES:

1. SWITCHBOARD MDP-S105-1 TO BE SERVICE-ENTRANCE RATED. PROVIDE SHUNT-TRIP MAIN CIRCUIT BREAKER. REFER TO DETAIL 3 ON DRAWING J-GBA-E010 FOR SERVICE ENTRANCE SHUNT-TRIP DETAIL.

SOUTH CAROLINA PROFESSIONAL ENGINEER No. 29760 01/27/2020

SOUTH CAROLINA CERTIFICATE OF AUTHORIZATION JACOBS ENGINEERING GROUP, INC. No. C00316

© JACOBS 2019. ALL RIGHTS RESERVED.
THIS DOCUMENT AND THE IDEAS AND DESIGNS INCORPORATED HEREIN, AS AN INSTRUMENT OF PROFESSIONAL SERVICE, IS THE PROPERTY OF JACOBS AND IS NOT TO BE USED IN WHOLE OR IN PART FOR ANY PURPOSE OR PROJECT WITHOUT THE WRITTEN AUTHORIZATION OF JACOBS.

NO.	DATE	DSGN	DR	CHK	APVD	BY	APVD
0	01/27/20	R. VALENTIN	D. RIOS	M. BURN	M. BOURGOIS		

ISSUED FOR CONSTRUCTION

REVISION

BERKELEY COUNTY ADMINISTRATION COMPLEX RENOVATIONS
1003 N. US HIGHWAY 52, MONCKS CORNER, SC 29461
BERKELEY COUNTY GOVERNMENT - RFP# 32408-01-17/18

JACOBS®
1041 East Butler Road Greenville, South Carolina 29607-3725
Tel: 864-676-8000 Fax: 864-676-8003

ELECTRICAL
PANEL SCHEDULES

VERIFY SCALE
BAR IS ONE INCH ON ORIGINAL DRAWING.
0 1" IF

DATE	
PROJ	1547
DWG	J-E052
SHEET	of

PANELBOARD: RP-U107-1

LOCATION: MECHANICAL U107
SUPPY FROM: DP-S105-1
MOUNTING: SURFACE
ENCLOSURE: TYPE 1

VOLTAGE: 120/208 Wye,3P,4W,60Hz
MAINS TYPE / LOCATION: MCB / TOP
MCB FRAME / TRIP SIZE: 100 AF/100 AT

INTERRUPTING RATING (kA SYMMETRICAL): 10 kA
MINIMUM BUS RATING: 225 A
NEUTRAL BUS RATING: 100%

CKT NO.	DESCRIPTIONS	CIRCUIT SIZE	TRIP AMPS	POLES	PHASE A (VOLT-AMPS)		PHASE B (VOLT-AMPS)		PHASE C (VOLT-AMPS)		POLES	TRIP AMPS	CIRCUIT SIZE	DESCRIPTIONS	CKT NO.
1	RECPT - OFFICE F107 & F109	2#12,#12G,3/4"	20 A	1	1260	720					1	20 A	2#12,#12G,3/4"	RECPT - MECH RM U107 & OFFICE F109	2
3	RECPT - EXAM RM W102	2#12,#12G,3/4"	20 A	1			540	180			1	20 A	2#12,#12G,3/4"	RECPT - CONFERENCE RM W100	4
5	RECPT - UNISEX RR W103 & LAB W107	2#12,#12G,3/4"	20 A	1					1080	1260	1	20 A	2#12,#12G,3/4"	RECPT - TRIAGE W106	6
7	RECPT - OFFICE 108, OFFICE F112, CUBICLES F114	2#12,#12G,3/4"	20 A	1	1080	1440					1	20 A	2#12,#12G,3/4"	RECPT - EXAM W101,STOR.W104,OFFICE W105	8
9	RECPT - OFFICE F112 & F113	2#12,#12G,3/4"	20 A	1			1080	0			1	20 A	2#12,#12G,3/4"	JUNCTION BOX - CUBICLES F114	10
11	RECPT - OFFICE F123	2#12,#12G,3/4"	20 A	1					540	0	1	20 A	2#12,#12G,3/4"	JUNCTION BOX - CUBICLES T114	12
13					867	500									14
15	VAV-3-25	3#12,#12G,3/4"	15 A	3			867	500			3	15 A	3#12,#12G,3/4"	VAV-3-28	16
17									867	500					18
19					567	360					1	20 A	2#12,#12G,3/4"	RECPT - MECHANICAL U107	20
21	VAV-3-10	3#12,#12G,3/4"	15 A	3			567	1000			1	20 A	2#12,#12G,3/4"	IH-4-01 AND EX-4-01	22
23									567						24
25	IH-30-01 AND EH-30-01	2#12,#12G,3/4"	20 A	1	1000										26
27															28
29															30
31															32
33															34
35															36
37															38
39															40
41															42
	TOTAL CONNECTED LOAD / PHASE				7793		4733		4813						

LOAD CLASSIFICATIONS	CONNECTED LOAD	DEMAND FACTOR	ESTIMATED DEMAND
Power	2000	100.00%	2000
Receptacle	9540	100.00%	9540

TOTAL LOAD SUMMARY

LOAD (KVA)		CURRENT (AMPS)	
CONNECTED LOAD:	17.3 kVA	CONNECTED CURRENT	48.1 A
ESTIMATED DEMAND LOAD:	17.3 kVA	ESTIMATED DEMAND CURRENT	48.1 A
ESTIMATED DEMAND FACTOR:	100.00%	ESTIMATED GROWTH CURRENT	0 A
APPLIED GRTOWTH FACTOR:			

PANELBOARD NOTES:

PANELBOARD: RP-U107-2

LOCATION: MECHANICAL U107
SUPPY FROM: DP-S105-1
MOUNTING: SURFACE
ENCLOSURE: TYPE 1

VOLTAGE: 120/208 Wye,3P,4W,60Hz
MAINS TYPE / LOCATION: MCB / TOP
MCB FRAME / TRIP SIZE: 100 AF/100 AT

INTERRUPTING RATING (kA SYMMETRICAL): 10 kA
MINIMUM BUS RATING: 225 A
NEUTRAL BUS RATING: 100%

CKT NO.	DESCRIPTIONS	CIRCUIT SIZE	TRIP AMPS	POLES	PHASE A (VOLT-AMPS)		PHASE B (VOLT-AMPS)		PHASE C (VOLT-AMPS)		POLES	TRIP AMPS	CIRCUIT SIZE	DESCRIPTIONS	CKT NO.
1															2
3															4
5															6
7															8
9															10
11															12
13															14
15															16
17															18
19															20
21															22
23															24
25															26
27															28
29															30
31															32
33															34
35															36
37															38
39															40
41															42
	TOTAL CONNECTED LOAD / PHASE				0		0		0						

LOAD CLASSIFICATIONS	CONNECTED LOAD	DEMAND FACTOR	ESTIMATED DEMAND

TOTAL LOAD SUMMARY

LOAD (KVA)		CURRENT (AMPS)	
CONNECTED LOAD:	0.0 kVA	CONNECTED CURRENT	0.0 A
ESTIMATED DEMAND LOAD:	0.0 kVA	ESTIMATED DEMAND CURRENT	0.0 A
ESTIMATED DEMAND FACTOR:	100.00%	ESTIMATED GROWTH CURRENT	0 A
APPLIED GRTOWTH FACTOR:			

PANELBOARD NOTES:

PANELBOARD: RP-U120-1

LOCATION: HVAC U120
SUPPY FROM: DP-S105-1
MOUNTING: SURFACE
ENCLOSURE: TYPE 1

VOLTAGE: 120/208 Wye,3P,4W,60Hz
MAINS TYPE / LOCATION: MCB / TOP
MCB FRAME / TRIP SIZE: 100 AF/100 AT

INTERRUPTING RATING (kA SYMMETRICAL): 10 kA
MINIMUM BUS RATING: 225 A
NEUTRAL BUS RATING: 100%

CKT NO.	DESCRIPTIONS	CIRCUIT SIZE	TRIP AMPS	POLES	PHASE A (VOLT-AMPS)		PHASE B (VOLT-AMPS)		PHASE C (VOLT-AMPS)		POLES	TRIP AMPS	CIRCUIT SIZE	DESCRIPTIONS	CKT NO.
1	RECPT - OFFICE V100 & V101	2#12,#12G,3/4"	20 A	1	1080	1400					1	20 A	2#12,#12G,3/4"	RECPT - OFFICE V102 & V103	2
3	RECPT - OFFICE V104	2#12,#12G,3/4"	20 A	1			720	720			1	20 A	2#12,#12G,3/4"	RECPT - CONFERENCE ROOM V105	4
5	RECPT - BREAKROOM & STORAGE X100	2#12,#12G,3/4"	20 A	1					500	1200	1	20 A	2#12,#12G,3/4"	RECPT - MICROWAVE BREAKROOM X100	6
7	RECPT - COFFEE MAKER BREAKROOM X100	2#12,#12G,3/4"	20 A	1	1740	1720					1	20 A	2#12,#12G,3/4"	RECPT - OFFICE X103 & X104	8
9	RECPT - STOR. V106, OFFICE V107 & CORR V111	2#12,#12G,3/4"	20 A	1			1080	1260			1	20 A	2#12,#12G,3/4"	RECPT - WAITING V112	10
11	RECPT - CORRIDOR U117 & U119	2#12,#12G,3/4"	20 A	1					1080	900	1	20 A	2#12,#12G,3/4"	RECPT - VENDING U118 & OFFICE X106	12
13	RECPT - VENDING U118	2#12,#12G,3/4"	20 A	1	1260	180					1	20 A	2#12,#12G,3/4"	RECPT - BATHROOM SUITE S	14
15	RECPT-CORR U119,CUBLE. V109, STOR. V110	2#12,#12G,3/4"	20 A	1			540	500			2	20 A	2#12,#12G,3/4"	JUNCTION BOX - CUBICLES V108	16
17	RECPT - CORRIDORS U119 & U113	2#12,#12G,3/4"	20 A	1					540	500					18
19	RECPT - GARBAGE DISPOSAL BREAKROOM X100	2#12,#12G,3/4"	20 A	1	1000	1080					1	20 A	2#12,#12G,3/4"	RECPT - VENDING U118	20
21	JUNCTION BOX - CUBICLES V109	2#12,#12G,3/4"	20 A	2			500	500			2	20 A	2#12,#12G,3/4"	JUNCTION BOX - CUBICLES V109	22
23									500	500					24
25	JUNCTION BOX - OFFICE X105	2#12,#12G,3/4"	20 A	2	500	500					1	20 A	2#12,#12G,3/4"	EH-1-04	26
27							500	180			1	20 A	2#12,#12G,3/4"	RECPT - HVAC U120	28
29	RECPT - BATHROOM SUITE S		20 A	1					180	500	1	20 A	2#12,#12G,3/4"	EH-2-03 CONTROL DAMPER	30
31	EF-2-03	2#12,#12G,3/4"	20 A	1	706	500					1	20 A	2#12,#12G,3/4"	IH-29-01 CONTROL DAMPER	32
33															34
35															36
37															38
39															40
41	FA BOOSTER PANEL - ROOM U120	2#12, #12G,3/4"	20 A	1					500						42
	TOTAL CONNECTED LOAD / PHASE				11566		6500		6900						

LOAD CLASSIFICATIONS	CONNECTED LOAD	DEMAND FACTOR	ESTIMATED DEMAND
Power	7110	100.00%	7110
Receptacle	17360	78.80%	13680

TOTAL LOAD SUMMARY

LOAD (KVA)		CURRENT (AMPS)	
CONNECTED LOAD:	24.5 kVA	CONNECTED CURRENT	67.9 A
ESTIMATED DEMAND LOAD:	20.8 kVA	ESTIMATED DEMAND CURRENT	57.7 A
ESTIMATED DEMAND FACTOR:	84.96%	ESTIMATED GROWTH CURRENT	0 A
APPLIED GRTOWTH FACTOR:			

PANELBOARD NOTES:

PANELBOARD: RP-U120-2

LOCATION: HVAC U120
SUPPY FROM: DP-S105-1
MOUNTING: SURFACE
ENCLOSURE: TYPE 1

VOLTAGE: 120/208 Wye,3P,4W,60Hz
MAINS TYPE / LOCATION: MCB / TOP
MCB FRAME / TRIP SIZE: 100 AF/100 AT

INTERRUPTING RATING (kA SYMMETRICAL): 10 kA
MINIMUM BUS RATING: 225 A
NEUTRAL BUS RATING: 100%

CKT NO.	DESCRIPTIONS	CIRCUIT SIZE	TRIP AMPS	POLES	PHASE A (VOLT-AMPS)		PHASE B (VOLT-AMPS)		PHASE C (VOLT-AMPS)		POLES	TRIP AMPS	CIRCUIT SIZE	DESCRIPTIONS	CKT NO.
1						1300					1	20 A	2#12, #12G, 3/4"	VAV-2-03	2
3							1133	1300			1	20 A	2#12, #12G, 3/4"	VAV-2-05	4
5	VAV-2-04	3-1/C#12, #12, 3/4"	15 A	3					1133	900	1	15 A	2#12, #12G, 3/4"	VAV-2-06	6
7					1133	1300					1	20 A	2#12, #12G, 3/4"	VAV-2-07	8
9	VAV-2-09	2#12, #12G, 3/4"	20 A	1			1300	1300			1	15 A	2#12, #12G, 3/4"	VAV-2-19	10
11	VAV-2-18	2#12, #12G, 3/4"	15 A	1					900	1133					12
13					567	1133					3	15 A	3-1/C#12, #12, 3/4"	VAV-2-16	14
15	VAV-2-17	3-1/C#12, #12, 3/4"	15 A	3			567	1133							16
17									567	1300	1	20 A	2#12, #12G, 3/4"	VAV-2-11	18
19					700	700									20
21	VAV-2-10	3-1/C#12, #12, 3/4"	15 A	3			700	700			3	15 A	3-1/C#12, #12, 3/4"	VAV-2-01	22
23									700	700					24
25															26
27															28
29															30
31															32
33															34
35															36
37															38
39															40
41															42
	TOTAL CONNECTED LOAD / PHASE				6833		8133		7333						

LOAD CLASSIFICATIONS	CONNECTED LOAD	DEMAND FACTOR	ESTIMATED DEMAND
Power	9600	100.00%	9600

TOTAL LOAD SUMMARY

LOAD (KVA)		CURRENT (AMPS)	
CONNECTED LOAD:	22.3 kVA	CONNECTED CURRENT	61.9 A
ESTIMATED DEMAND LOAD:	22.3 kVA	ESTIMATED DEMAND CURRENT	61.9 A
ESTIMATED DEMAND FACTOR:	100.00%	ESTIMATED GROWTH CURRENT	0 A
APPLIED GRTOWTH FACTOR:			

PANELBOARD NOTES:

PANELBOARD: RP-X101-1

LOCATION: IT ROOM X101
SUPPY FROM: DP-S105-1
MOUNTING: SURFACE
ENCLOSURE: TYPE 1

VOLTAGE: 120/208 Wye,3P,4W,60Hz
MAINS TYPE / LOCATION: MCB / TOP
MCB FRAME / TRIP SIZE: 100 AF/100 AT

INTERRUPTING RATING (kA SYMMETRICAL): 10 kA
MINIMUM BUS RATING: 225 A
NEUTRAL BUS RATING: 100%

CKT NO.	DESCRIPTIONS	CIRCUIT SIZE	TRIP AMPS	POLES	PHASE A (VOLT-AMPS)		PHASE B (VOLT-AMPS)		PHASE C (VOLT-AMPS)		POLES	TRIP AMPS	CIRCUIT SIZE	DESCRIPTIONS	CKT NO.
1															2
3															4
5															6
7															8
9															10
11															12
13															14
15															16
17															18
19															20
21															22
23															24
25															26
27															28
29															30
31															32
33															34
35															36
37															38
39															40
41															42
	TOTAL CONNECTED LOAD / PHASE				0		0		0						

LOAD CLASSIFICATIONS	CONNECTED LOAD	DEMAND FACTOR	ESTIMATED DEMAND

TOTAL LOAD SUMMARY

LOAD (KVA)		CURRENT (AMPS)	
CONNECTED LOAD:	0.0 kVA	CONNECTED CURRENT	0.0 A
ESTIMATED DEMAND LOAD:	0.0 kVA	ESTIMATED DEMAND CURRENT	0.0 A
ESTIMATED DEMAND FACTOR:	100.00%	ESTIMATED GROWTH CURRENT	0 A
APPLIED GRTOWTH FACTOR:			

PANELBOARD NOTES:

PANELBOARD: RPU-S107-1

LOCATION: OPEN OFFICE S107
SUPPY FROM: UPS-S121-1
MOUNTING: RECESSED
ENCLOSURE: TYPE 1

VOLTAGE: 120/208 Wye,3P,4W,60Hz
MAINS TYPE / LOCATION: MCB / TOP
MCB FRAME / TRIP SIZE: 150 AF/150 AT

INTERRUPTING RATING (kA SYMMETRICAL): 10 kA
MINIMUM BUS RATING: 225 A
NEUTRAL BUS RATING: 100%

CKT NO.	DESCRIPTIONS	CIRCUIT SIZE	TRIP AMPS	POLES	PHASE A (VOLT-AMPS)		PHASE B (VOLT-AMPS)		PHASE C (VOLT-AMPS)		POLES	TRIP AMPS	CIRCUIT SIZE	DESCRIPTIONS	CKT NO.
1					1040	1560									2
3	RECPTACLE - OPEN OFFICE S107 (1)	3-#12,3#12N, #12G,3/4"	20 A	3			1040	1560			3	20 A	4-#12,#12G,3/4"	RECEPTACLE - OPEN OFFICE S107	4
5									1040	1560					6
7					1560	900					1	20 A	2#12,#12G,3/4"	RECPT - ROOMS S108, S109, S113	8
9	RECEPTACLE - OPEN OFFICE S107 (1)	3-#12,3#12N, #12G,3/4"	20 A	3			1560	1040			3	20 A	3-#12,3#12N, #12G,3/4"	RECEPTACLE - OPEN OFFICE S107 (1)	10
11									1560	1040					12
13					520	1040									14
15	RECEPTACLE - OPEN OFFICE S107 (1)	3-#12,3#12N, #12G,3/4"	20 A	3			520	1080			1	20 A	2#12,#12G,3/4"	RECPT - DEPT HEAD S108 & OPS SUPER S109	16
17									520	1040					18
19					1040						3	20 A	3-#12,3#12N, #12G,3/4"	RECEPTACLE - OPEN OFFICE S107 (1)	20
21							1040								22
23															24
25															26
27															28
29															30
31															32
33															34
35															36
37															38
39															40
41															42
	TOTAL CONNECTED LOAD / PHASE				7660		7840		6760						

LOAD CLASSIFICATIONS	CONNECTED LOAD	DEMAND FACTOR	ESTIMATED DEMAND
Power	20280	100.00%	20280
Receptacle	1980	100.00%	1980

TOTAL LOAD SUMMARY

LOAD (KVA)		CURRENT (AMPS)	
CONNECTED LOAD:	22.3 kVA	CONNECTED CURRENT	61.8 A
ESTIMATED DEMAND LOAD:	22.3 kVA	ESTIMATED DEMAND CURRENT	61.8 A
ESTIMATED DEMAND FACTOR:	100.00%	ESTIMATED GROWTH CURRENT	0 A
APPLIED GRTOWTH FACTOR:			

PANELBOARD NOTES:

PANELBOARD: RPU-S121-1

LOCATION: SERVER ROOM S121
SUPPY FROM: UPS-S121-1
MOUNTING: SURFACE
ENCLOSURE: TYPE 1

VOLTAGE: 120/208 Wye,3P,4W,60Hz
MAINS TYPE / LOCATION: MCB / TOP
MCB FRAME / TRIP SIZE: 400 AF/300 AT

INTERRUPTING RATING (kA SYMMETRICAL): 10 kA
MINIMUM BUS RATING: 225 A
NEUTRAL BUS RATING: 100%

CKT NO.	DESCRIPTIONS	CIRCUIT SIZE	TRIP AMPS	POLES	PHASE A (VOLT-AMPS)		PHASE B (VOLT-AMPS)		PHASE C (VOLT-AMPS)		POLES	TRIP AMPS	CIRCUIT SIZE	DESCRIPTIONS	CKT NO.
1	RECPT - DATA RACK SERVER RM S121 (1)	4#12,#12G,3/4"	20 A	2	600	600					2	20 A	4#12,#12G,3/4"	RECPT - DATA RACK SERVER RM S121 (1)	2
3							600	600							4
5	RECPT - DATA RACK SERVER RM S121 (1)	4#12,#12G,3/4"	20 A	2					600	600	2	20 A	4#12,#12G,3/4"	RECPT - DATA RACK SERVER RM S121 (1)	6
7					600	600									8
9	RECPT - DATA RACK SERVER RM S121 (1)	4#12,#12G,3/4"	20 A	2			600	600			2	20 A	4#12,#12G,3/4"	RECPT - DATA RACK SERVER RM S121 (1)	10
11									600	600					12
13	RECPT - DATA RACK SERVER RM S121 (1)	4#12,#12G,3/4"	20 A	2	600	600					2	20 A	4#12,#12G,3/4"	RECPT - DATA RACK SERVER RM S121 (1)	14
15							600	600							16
17	RECPT - DATA RACK SERVER RM S121 (1)	4#12,#12G,3/4"	20 A	2					600	600	2	20 A	4#12,#12G,3/4"	RECPT - DATA RACK SERVER RM S121 (1)	18
19					600	600									20
21	RECPT - DATA RACK SERVER RM S121 (1)	4#12,#12G,3/4"	20 A	2			600	600			2	20 A	4#12,#12G,3/4"	RECPT - DATA RACK SERVER RM S121 (1)	22
23									600	600					24
25	RECPT - DATA RACK SERVER RM S121 (1)	4#12,#12G,3/4"	20 A	2	600	600					2	20 A	4#12,#12G,3/4"	RECPT - DATA RACK SERVER RM S121 (1)	26
27							600	600							28
29															30
31															32
33															34
35															36
37															38
39															40
41															42
	TOTAL CONNECTED LOAD / PHASE				6000		6000		4800						

LOAD CLASSIFICATIONS	CONNECTED LOAD	DEMAND FACTOR	ESTIMATED DEMAND
Receptacle	16800	79.76%	13400

TOTAL LOAD SUMMARY

LOAD (KVA)		CURRENT (AMPS)	
CONNECTED LOAD:	16.8 kVA	CONNECTED CURRENT	46.6 A
ESTIMATED DEMAND LOAD:	13.4 kVA	ESTIMATED DEMAND CURRENT	37.2 A
ESTIMATED DEMAND FACTOR:	79.76%	ESTIMATED GROWTH CURRENT	0 A
APPLIED GRTOWTH FACTOR:			

PANELBOARD NOTES:

PANELBOARD: RPU-S128-1

LOCATION: OPS S128
SUPPY FROM: UPS-S121-1
MOUNTING: RECESSED
ENCLOSURE: TYPE 1

VOLTAGE: 120/208 Wye,3P,4W,60Hz
MAINS TYPE / LOCATION: MCB / TOP
MCB FRAME / TRIP SIZE: 150 AF/150 AT

INTERRUPTING RATING (kA SYMMETRICAL): 10 kA
MINIMUM BUS RATING: 225 A
NEUTRAL BUS RATING: 100%

CKT NO.	DESCRIPTIONS	CIRCUIT SIZE	TRIP AMPS	POLES	PHASE A (VOLT-AMPS)		PHASE B (VOLT-AMPS)		PHASE C (VOLT-AMPS)		POLES	TRIP AMPS	CIRCUIT SIZE	DESCRIPTIONS	CKT NO.
1					600	1200									2
3	POWERLINC RECEPTACLE (1)	3#12,3#12N, #12G,3/4"	20 A	3			600	1200			3	20 A	3#12,3#12N, #12G,3/4"	POWERLINC RECEPTACLE (1)	4
5									600	1200					6
7					1200	1200									8
9	POWERLINC RECEPTACLE (1)	3#12,3#12N, #12G,3/4"	20 A	3			1200	1200			3	20 A	3#12,3#12N, #12G,3/4"	POWERLINC RECEPTACLE (1)	10
11									1200	1200					12
13					1200	600									14
15	POWERLINC RECEPTACLE (1)	3#12,3#12N, #12G,3/4"	20 A	3			1200	600			3	20 A	3#12,3#12N, #12G,3/4"	POWERLINC RECEPTACLE (1)	16
17									1200	600					18
19					600	360					1	20 A	2#12,#12G,3/4"	RECPT - CONFERENCE RM S120	20
21	POWERLINC RECEPTACLE (1)	3#12,3#12N, #12G,3/4"	20 A	3			600	720			1	20 A	2#12,#12G,3/4"	RECPT - ROOMS S123, S124 & S125	22
23									600						24
25															26
27															28
29															30
31															32
33															34
35															36
37															38
39															40
41															42
	TOTAL CONNECTED LOAD / PHASE				6960		7320		6600						

LOAD CLASSIFICATIONS	CONNECTED LOAD	DEMAND FACTOR	ESTIMATED DEMAND
Receptacle	20880	73.95%	15440

TOTAL LOAD SUMMARY

LOAD (KVA)		CURRENT (AMPS)	
CONNECTED LOAD:	20.9 kVA	CONNECTED CURRENT	58.0 A
ESTIMATED DEMAND LOAD:	15.4 kVA	ESTIMATED DEMAND CURRENT	42.9 A
ESTIMATED DEMAND FACTOR:	73.95%	ESTIMATED GROWTH CURRENT	0 A
APPLIED GRTOWTH FACTOR:			

PANELBOARD NOTES:

GENERAL NOTES:

A. REFER TO SHEET J-E001 FOR GENERAL NOTES, LEGEND AND ABBREVIATIONS.

B. REFER TO POWER PLANS FOR FEEDER SIZES NOT SHOWN IN PANEL SCHEDULE.

(#) SHEET KEYED NOTES:

1. PROVIDE INDIVIDUAL NEUTRALS FOR EACH 120V CIRCUIT.

SOUTH CAROLINA PROFESSIONAL ENGINEER No. 29760 01/27/2020

SOUTH CAROLINA JACOBS ENGINEERING GROUP, INC. No. C00316 CERTIFICATE OF AUTHORIZATION

© JACOBS 2019. ALL RIGHTS RESERVED.
THIS DOCUMENT AND THE IDEAS AND DESIGNS INCORPORATED HEREIN, AS AN INSTRUMENT OF PROFESSIONAL SERVICE, IS THE PROPERTY OF JACOBS AND IS NOT TO BE USED IN WHOLE OR IN PART FOR ANY PURPOSE WITHOUT THE WRITTEN CONSENT OF JACOBS.

NO.	DATE	DSGN	DR	CHK	APVD	BY	APVD
0	01/27/20	R. VALENTIN	D. RIOS	M. POURGHOLAM	M. BURN		
	ISSUED FOR CONSTRUCTION						
	REVISION						

BERKELEY COUNTY ADMINISTRATION COMPLEX RENOVATIONS
1003 N. US HIGHWAY 52, MONCKS CORNER, SC 29461
BERKELEY COUNTY GOVERNMENT - RFP# 32406-01-17/18

JACOBS®
1041 East Butler Road Greenville, South Carolina 29607-5725
Tel: 864-676-6000 Fax: 864-676-6023

ELECTRICAL
PANEL SCHEDULES

VERIFY SCALE
BAR IS ONE INCH ON ORIGINAL DRAWING.
0" 1"

DATE	
PROJ	1547
DWG	J-E053
SHEET	of

FILEPATH: C:_Revit_Local_Models\2020\16FFRU01-E-ZSMEN001_diane.riosEZM7N.rvt
FILENAME:
PLOT DATE/TIME: 1/27/2020 4:11:42 PM

EXISTING PANELBOARD SCHEDULE

PANEL NAME: L1 — VOLTS: 480/277 Wye — A.I.C. RATING: EXISTING
LOCATION: OFFICE C118 — PHASES: 3 — MAINS RATING: 200 A
SOURCE: — WIRES: 4 — MAINS TYPE: MAIN LUGS ONLY
MOUNTING: Surface — ENCLOSURE: Type 1

CKT NO.	CIRCUIT DESIGNATION	TRIP	POLES	A	B	C	POLES	TRIP	CIRCUIT DESIGNATION	CKT NO.	
1	EXIST. LIGHTING	20 A	1	0 VA / 0 VA			1	20 A	EXIST. LIGHTING	2	
3	EXIST. LIGHTING	20 A	1		0 VA / 0 VA		1	20 A	EXIST. LIGHTING	4	
5	EXIST. LIGHTING	20 A	1			0 VA / 0 VA	1	20 A	EXIST. LIGHTING	6	
7	EXIST. LIGHTING	20 A	1	0 VA / 0 VA			1	20 A	EXIST. LIGHTING	8	
9	EXIST. LIGHTING	20 A	1		0 VA / 0 VA		1	20 A	EXIST. LIGHTING	10	
11	EXIST. EXTERIOR LIGHTING	20 A	1			0 VA / 0 VA	1	20 A	EXIST. LIGHTING	12	
13	EXIST. PARKING LOT LIGHTING	20 A	2	0 VA / 1670 VA			1	20 A	LIGHTING - LEGAL	14	1.
15					0 VA / 1800 VA		1	20 A	LIGHTING - LEGAL	16	1.
17	EXIST. SPARE	20 A	1			0 VA / 0 VA	1	20 A	EXIST. SPARE	18	
19	EXIST. SPARE	20 A	1	0 VA / 0 VA			1	20 A	EXIST. SPARE	20	
21	EXIST. SPARE	20 A	1		0 VA / 0 VA		1	20 A	EXIST. SPARE	22	
23	EXIST. SPARE	20 A	1			0 VA / 0 VA	1	20 A	EXIST. SPARE	24	
25				0 VA / 0 VA			1	20 A	EXIST. SPARE	26	
27	EXIST. PANEL P1	100 A	3		0 VA / 0 VA		1	20 A	EXIST. SPARE	28	
29						0 VA / 0 VA	1	20 A	EXIST. SPARE	30	
	TOTAL PHASE LOAD:			1670 VA	1799	0					
	TOTAL PHASE CURRENT:			7 A	7 A	0 A					

PANEL TOTALS
TOTAL ADDITIONAL LOAD: 3469 VA
TOTAL ADDITIONAL CURRENT: 14 A

NOTES:
1. UTILIZE EXISTING SPARE CIRCUIT BREAKER CURRENTLY INSTALLED IN PANEL. COORDINATE PANEL SPACE AVAILABILITY WITH ACTUAL FIELD CONDITIONS.
2. EXISTING PANELBOARD IS MANUFACTURED BY SIEMENS.

EXISTING PANELBOARD SCHEDULE

PANEL NAME: C1 — VOLTS: 120/208 Wye — A.I.C. RATING:
LOCATION: OFFICE C118 — PHASES: 3 — MAINS RATING: 200 A
SOURCE: — WIRES: 4 — MAINS TYPE: MAIN LUGS ONLY
MOUNTING: Surface — ENCLOSURE: Type 1

CKT NO.	CIRCUIT DESIGNATION	TRIP	POLES	A	B	C	POLES	TRIP	CIRCUIT DESIGNATION	CKT NO.	
1	EXIST. RECEPTACLE(S)	20 A	1	0 VA / 0 VA			1	20 A	EXIST. RECEPTACLE(S)	2	
3	EXIST. RECEPTACLE(S)	20 A	1		0 VA / 0 VA		1	20 A	EXIST. RECEPTACLE(S)	4	
5	EXIST. RECEPTACLE(S)	20 A	1			0 VA / 0 VA	1	20 A	EXIST. RECEPTACLE(S)	6	
7	EXIST. RECEPTACLE(S)	20 A	1	0 VA / 0 VA			1	20 A	EXIST. RECEPTACLE(S)	8	
9	EXIST. RECEPTACLE(S)	20 A	1		0 VA / 0 VA		1	20 A	EXIST. RECEPTACLE(S)	10	
11	EXIST. RECEPTACLE(S)	20 A	1			0 VA / 0 VA	1	20 A	EXIST. RECEPTACLE(S)	12	
13	EXIST. RECEPTACLE(S)	20 A	1	0 VA / 0 VA			1	20 A	EXIST. RECEPTACLE(S)	14	
15	EXIST. RECEPTACLE(S)	20 A	1		0 VA / 0 VA		1	20 A	EXIST. RECEPTACLE(S)	16	
17	EXIST. RECEPTACLE(S)	20 A	1			0 VA / 0 VA	1	20 A	EXIST. RECEPTACLE(S)	18	
19	EXIST. RECEPTACLE(S)	20 A	1	0 VA / 0 VA			1	20 A	EXIST. RECEPTACLE(S)	20	
21	EXIST. RECEPTACLE(S)	20 A	1		0 VA / 0 VA		1	20 A	EXIST. RECEPTACLE(S)	22	
23	EXIST. RECEPTACLE(S)	20 A	1			0 VA / 0 VA	1	20 A	EXIST. RECEPTACLE(S)	24	
25	EXIST. RECEPTACLE(S)	20 A	1	0 VA / 0 VA			1	20 A	EXIST. RECEPTACLE(S)	26	
27	EXIST. RECEPTACLE(S)	20 A	1		0 VA / 0 VA		1	20 A	EXIST. RECEPTACLE(S)	28	
29	EXIST. RECEPTACLE(S)	20 A	1			0 VA / 0 VA	1	20 A	EXIST. RECEPTACLE(S)	30	
31	EXIST. RECEPTACLE(S)	20 A	1	0 VA / 0 VA			1	20 A	EXIST. RECEPTACLE(S)	32	
33	EXIST. RECEPTACLE(S)	20 A	1		0 VA / 0 VA		1	20 A	EXIST. RECEPTACLE(S)	34	
35	EXIST. RECEPTACLE(S)	20 A	1			0 VA / 0 VA	1	20 A	EXIST. RECEPTACLE(S)	36	
1. 37	RECPS. - RM F127, F128, F129	20 A	1	900 VA / 1620 VA			1	20 A	RECPS. - LEGAL	38	1.
1. 39	RECPS. - RM D105, D106, F125, F126	20 A	1		1080 VA / 0 VA		1	20 A	EXIST. SPARE	40	
1. 41	RECPS. - RM D101 & D100	20 A	1			540 VA / 0 VA	1	20 A	EXIST. SPARE	42	
	TOTAL PHASE LOAD:			2520 VA	1080	540					
	TOTAL PHASE CURRENT:			22 A	10 A	5 A					

PANEL TOTALS
TOTAL ADDITIONAL LOAD: 4140 VA
TOTAL ADDITIONAL CURRENT: 11 A

NOTES:
1. UTILIZE EXISTING SPARE CIRCUIT BREAKER CURRENTLY INSTALLED IN PANEL. COORDINATE PANEL SPACE AVAILABILITY WITH ACTUAL FIELD CONDITIONS.
2. EXISTING PANELBOARD IS MANUFACTURED BY SIEMENS.

EXISTING PANELBOARD SCHEDULE

PANEL NAME: P2 — VOLTS: 120/208 Wye — A.I.C. RATING:
LOCATION: — PHASES: 3 — MAINS RATING: 200 A
SUPPLY FROM: — WIRES: 4 — MAINS TYPE: MAIN CIRCUIT BREAKER
MOUNTING: Surface — ENCLOSURE: Type 1

CKT NO.	CIRCUIT DESIGNATION	TRIP	POLES	A	B	C	POLES	TRIP	CIRCUIT DESIGNATION	CKT NO.	
1	EXIST. RECEPTACLE(S)	20 A	1	0 VA / 0 VA			1	20 A	EXIST. RECEPTACLE(S)	2	
3	EXIST. RECEPTACLE(S)	20 A	1		0 VA / 0 VA		1	20 A	EXIST. RECEPTACLE(S)	4	
5	EXIST. RECEPTACLE(S)	20 A	1			0 VA / 0 VA	1	20 A	EXIST. RECEPTACLE(S)	6	
7	EXIST. RECEPTACLE(S)	20 A	1	0 VA / 0 VA			1	20 A	EXIST. RECEPTACLE(S)	8	
9	EXIST. RECEPTACLE(S)	20 A	1		0 VA / 0 VA		1	20 A	EXIST. GATE	10	
11	EXIST. RECEPTACLE(S)	20 A	1			0 VA / 0 VA	1	20 A	EXIST. RECEPTACLE(S)	12	
13	EXIST. RECEPTACLE(S)	20 A	1	0 VA / 0 VA			1	20 A	EXIST. RECEPTACLE(S)	14	
15	EXIST. RECEPTACLE(S)	20 A	1		0 VA / 0 VA		1	20 A	EXIST. RECEPTACLE(S)	16	
17	EXIST. RECEPTACLE(S)	20 A	1			0 VA / 0 VA	1	20 A	EXIST. RECEPTACLE(S)	18	
19	EXIST. RECEPTACLE(S)	20 A	1	0 VA / 0 VA			1	20 A	EXIST. RECEPTACLE(S)	20	
21	EXIST. RECEPTACLE(S)	20 A	1		0 VA / 0 VA		1	20 A	EXIST. RECEPTACLE(S)	22	
23	EXIST. RECEPTACLE(S)	20 A	1			0 VA / 0 VA	1	20 A	EXIST. RECEPTACLE(S)	24	
25	EXIST. RECEPTACLE(S)	20 A	1	0 VA / 0 VA			1	20 A	EXIST. RECEPTACLE(S)	26	
27	EXIST. RECEPTACLE(S)	20 A	1		0 VA / 0 VA		1	20 A	EXIST. RECEPTACLE(S)	28	
29	EXIST. RECEPTACLE(S)	20 A	1			0 VA / 0 VA	1	20 A	EXIST. RECEPTACLE(S)	30	
31	EXIST. RECEPTACLE(S)	20 A	1	0 VA / 0 VA			1	20 A	EXIST. RECEPTACLE(S)	32	
33	EXIST. RECEPTACLE(S)	20 A	1		0 VA / 0 VA		1	20 A	EXIST. RECEPTACLE(S)	34	
35	EXIST. RECEPTACLE(S)	20 A	1			0 VA / 0 VA	1	20 A	EXIST. RECEPTACLE(S)	36	
37	EXIST. RECEPTACLE(S)	20 A	1	0 VA / 0 VA			1	20 A	EXIST. RECEPTACLE(S)	38	
39	EXIST. RECEPTACLE(S)	20 A	1		0 VA / 0 VA		1	20 A	EXIST. RECEPTACLE(S)	40	
41	EXIST. RECEPTACLE(S)	20 A	1			0 VA / 0 VA	1	20 A	EXIST. RECEPTACLE(S)	42	
43	EXIST. RECEPTACLE(S)	20 A	1	0 VA / 0 VA			1	20 A	EXIST. RECEPTACLE(S)	44	
45	EXIST. RECEPTACLE(S)	20 A	1		0 VA / 0 VA		1	20 A	EXIST. RECEPTACLE(S)	46	
47	EXIST. RECEPTACLE(S)	20 A	1			0 VA / 0 VA	1	20 A	EXIST. RECEPTACLE(S)	48	
49	EXIST. RECEPTACLE(S)	20 A	1	0 VA / 0 VA			1	20 A	EXIST. RECEPTACLE(S)	50	
51	EXIST. RECEPTACLE(S)	20 A	1		0 VA / 0 VA		1	20 A	EXIST. RECEPTACLE(S)	52	
53	EXIST. RECEPTACLE(S)	20 A	1			0 VA / 0 VA	1	20 A	EXIST. RECEPTACLE(S)	54	
55	EXIST. EHD	20 A	1	0 VA / 0 VA			1	20 A	EXIST. RECEPTACLE(S)	56	
57	EXIST. EHD	20 A	1		0 VA / 0 VA		1	20 A	EXIST. RECEPTACLE(S)	58	
59	EXIST. RECEPTACLE(S)	20 A	1			0 VA / 0 VA	1	20 A	EXIST. RECEPTACLE(S)	60	
61	EXIST. LIGHTING	20 A	1	0 VA / 0 VA			1	20 A	EXIST. RECEPTACLE(S)	62	
63	EXIST. LIGHTING	20 A	1		0 VA / 0 VA		1	20 A	EXIST. RECEPTACLE(S)	64	
65	EXIST. SIGN	20 A	1			0 VA / 0 VA	1	20 A	EXIST. RECEPTACLE(S)	66	
67	EXIST. DISHWASHER	20 A	1	0 VA / 0 VA			1	20 A	EXIST. RECEPTACLE(S)	68	
69	EXIST. AHU-18	40 A	2		0 VA / 0 VA		1	20 A	EXIST. AUTOMATIC DOOR	70	
71						0 VA / 0 VA	1	20 A	EXIST. NIGHT DEPOSITORY	72	
73	EXIST. AHU-19	40 A	2	0 VA / 720 VA			1	20 A	RECPS. - PROCUREMENT	74	1.
1. 75					0 VA / 1000 VA		1	20 A	PRINTER - BREAK B104	76	1.
1. 77	PRINTER - BREAK B104	20 A	1			1000 VA / 1000 VA	1	20 A	PRINTER - OPEN OFFICES B100	78	1.
1. 79	PRINTER - OPEN OFFICES B100	20 A	1	1000 VA / 720 VA			1	20 A	RECPS. - PROCUREMENT	80	1.
1. 81	RECPS. - PROCUREMENT	20 A	1		720 VA / 0 VA		1	20 A	SPARE	82	1.
1. 83	PRINTER - OPEN OFFICES B100	20 A	1			1000 VA / 0 VA	1	20 A	SPARE	84	1.
	TOTAL PHASE LOAD:			2440 VA	1720	3000					
	TOTAL PHASE CURRENT:			21 A	14 A	26 A					

PANEL TOTALS
TOTAL ADDITIONAL LOAD: 7160 VA
TOTAL ADDITIONAL CURRENT: 20 A

NOTES:
1. UTILIZE EXISTING SPARE CIRCUIT BREAKER CURRENTLY INSTALLED IN PANEL. COORDINATE PANEL SPACE AVAILABILITY WITH ACTUAL FIELD CONDITIONS.
2. EXISTING PANELBOARD IS MANUFACTURED BY SIEMENS.

EXISTING PANELBOARD SCHEDULE

PANEL NAME: L2 — VOLTS: 480/277 Wye — A.I.C. RATING:
LOCATION: — PHASES: 3 — MAINS RATING: 200 A
SOURCE: — WIRES: 4 — MAINS TYPE: MAIN LUGS ONLY
MOUNTING: Surface — ENCLOSURE: Type 1

CKT NO.	CIRCUIT DESIGNATION	TRIP	POLES	A	B	C	POLES	TRIP	CIRCUIT DESIGNATION	CKT NO.	
1	EXIST. LIGHTING	20 A	1	0 VA / 0 VA			1	20 A	EXIST. LIGHTING	2	
3	EXIST. LIGHTING	20 A	1		0 VA / 0 VA		1	20 A	EXIST. LIGHTING	4	
5	EXIST. LIGHTING	20 A	1			0 VA / 0 VA	1	20 A	EXIST. LIGHTING	6	
7	EXIST. LIGHTING	20 A	1	0 VA / 0 VA			1	20 A	EXIST. LIGHTING	8	
9	EXIST. LIGHTING	20 A	1		0 VA / 0 VA					10	
11	EXIST. LIGHTING	20 A	1			0 VA / 0 VA	3	60 A	EXIST. PANEL P2	12	
13	EXIST. LIGHTING	20 A	1	0 VA / 0 VA						14	
15	EXIST. LIGHTING	20 A	1		0 VA / 0 VA		--	--	EXIST. SPACE	16	
1. 17	LIGHTING - PROCUREMENT	20 A	1			1380 VA / 0 VA	--	--	EXIST. SPACE	18	
1. 19	EXIST. SPARE	20 A	1	0 VA / 0 VA			--	--	EXIST. SPACE	20	
21	EXIST. SPARE	20 A	1		0 VA / 0 VA		--	--	EXIST. SPACE	22	
23	EXIST. SPARE	20 A	1			0 VA / 0 VA	--	--	EXIST. SPACE	24	
25	EXIST. SPACE	--	--	0 VA / 0 VA			--	--	EXIST. SPACE	26	
27	EXIST. SPACE	--	--		0 VA / 0 VA		--	--	EXIST. SPACE	28	
29	EXIST. SPACE	--	--			0 VA / 0 VA	--	--	EXIST. SPACE	30	
	TOTAL PHASE LOAD:			0 VA	0	1377					
	TOTAL PHASE CURRENT:			0 A	0 A	5 A					

PANEL TOTALS
TOTAL ADDITIONAL LOAD: 1380 VA
TOTAL ADDITIONAL CURRENT: 2 A

NOTES:
1. UTILIZE EXISTING SPARE CIRCUIT BREAKER CURRENTLY INSTALLED IN PANEL. COORDINATE PANEL SPACE AVAILABILITY WITH ACTUAL FIELD CONDITIONS.
2. EXISTING PANELBOARD IS MANUFACTURED BY SIEMENS.

EXISTING PANELBOARD SCHEDULE

PANEL NAME: P1 — VOLTS: 120/208 Wye — A.I.C. RATING:
LOCATION: OFFICE C118 — PHASES: 3 — MAINS RATING: 200 A
SUPPLY FROM: — WIRES: 4 — MAINS TYPE: MAIN CIRCUIT BREAKER
MOUNTING: Surface — ENCLOSURE: Type 1

CKT NO.	CIRCUIT DESIGNATION	TRIP	POLES	A	B	C	POLES	TRIP	CIRCUIT DESIGNATION	CKT NO.	
1	EXIST. RECEPTACLE(S)	20 A	1	0 VA / 0 VA			1	20 A	EXIST. RECEPTACLE(S)	2	
3	EXIST. RECEPTACLE(S)	20 A	1		0 VA / 0 VA		1	20 A	EXIST. RECEPTACLE(S)	4	
5	EXIST. RECEPTACLE(S)	20 A	1			0 VA / 0 VA	1	20 A	EXIST. RECEPTACLE(S)	6	
7	EXIST. RECEPTACLE(S)	20 A	1	0 VA / 0 VA			1	20 A	EXIST. RECEPTACLE(S)	8	
9	EXIST. RECEPTACLE(S)	20 A	1		0 VA / 0 VA		1	20 A	EXIST. RECEPTACLE(S)	10	
11	EXIST. RECEPTACLE(S)	20 A	1			0 VA / 720 VA	1	20 A	RECPS. - CONF. D105 & OFFICE 106	12	1.
13	EXIST. RECEPTACLE(S)	20 A	1	0 VA / 0 VA			1	20 A	EXIST. RECEPTACLE(S)	14	
15	EXIST. RECEPTACLE(S)	20 A	1		0 VA / 0 VA		1	20 A	EXIST. RECEPTACLE(S)	16	
17	EXIST. RECEPTACLE(S)	20 A	1			0 VA / 0 VA	1	20 A	EXIST. RECEPTACLE(S)	18	
19	EXIST. RECEPTACLE(S)	20 A	1	0 VA / 0 VA			1	20 A	EXIST. RECEPTACLE(S)	20	
21	EXIST. RECEPTACLE(S)	20 A	1		0 VA / 0 VA		1	20 A	EXIST. RECEPTACLE(S)	22	
23	EXIST. RECEPTACLE(S)	20 A	1			0 VA / 0 VA	1	20 A	EXIST. RECEPTACLE(S)	24	
25	EXIST. RECEPTACLE(S)	20 A	1	0 VA / 0 VA			1	20 A	EXIST. RECEPTACLE(S)	26	
27	EXIST. RECEPTACLE(S)	20 A	1		0 VA / 0 VA		1	20 A	EXIST. RECEPTACLE(S)	28	
29	EXIST. RECEPTACLE(S)	20 A	1			0 VA / 0 VA	1	20 A	EXIST. RECEPTACLE(S)	30	
31	EXIST. RECEPTACLE(S)	20 A	1	0 VA / 0 VA			1	20 A	EXIST. RECEPTACLE(S)	32	
33	EXIST. RECEPTACLE(S)	20 A	1		0 VA / 0 VA		1	20 A	EXIST. RECEPTACLE(S)	34	
35	EXIST. RECEPTACLE(S)	20 A	1			0 VA / 0 VA	1	20 A	EXIST. RECEPTACLE(S)	36	
37	EXIST. RECEPTACLE(S)	20 A	1	0 VA / 1000 VA			1	20 A	RECPS. - COFFEE MAKER - CONF....	38	1.
39	EXIST. RECEPTACLE(S)	20 A	1		0 VA / 0 VA		1	20 A	EXIST. RECEPTACLE(S)	40	
41	EXIST. RECEPTACLE(S)	20 A	1			0 VA / 1000 VA	1	20 A	RECPS. - MICROWAVE - CONF. D105	42	1.
43	EXIST. RECEPTACLE(S)	20 A	1	0 VA / 0 VA			1	20 A	EXIST. RECEPTACLE(S)	44	
45	EXIST. RECEPTACLE(S)	20 A	1		0 VA / 0 VA		1	20 A	EXIST. RECEPTACLE(S)	46	
47	EXIST. RECEPTACLE(S)	20 A	1			0 VA / 0 VA	1	20 A	EXIST. RECEPTACLE(S)	48	
49	EXIST. RECEPTACLE(S)	20 A	1	0 VA / 0 VA			1	20 A	EXIST. RECEPTACLE(S)	50	
51	EXIST. RECEPTACLE(S)	20 A	1		0 VA / 0 VA		1	20 A	EXIST. RECEPTACLE(S)	52	
53	EXIST. RECEPTACLE(S)	20 A	1			0 VA / 0 VA	1	20 A	EXIST. RECEPTACLE(S)	54	
55	EXIST. RECEPTACLE(S)	20 A	1	0 VA / 0 VA			1	20 A	EXIST. RECEPTACLE(S)	56	
57	EXIST. GATE	20 A	1		0 VA / 0 VA		1	20 A	EXIST. GATE	58	
59	EXIST. RECEPTACLE(S)	20 A	1			0 VA / 0 VA	1	20 A	EXIST. RECEPTACLE(S)	60	
61	EXIST. RECEPTACLE(S)	20 A	1	0 VA / 0 VA			1	20 A	EXIST PARKING LOT SIGN	62	
63	EXIST. RECEPTACLE(S)	20 A	1		0 VA / 0 VA		1	20 A	EXIST. RECEPTACLE(S)	64	
65	EXIST. RECEPTACLE(S)	20 A	1			0 VA / 0 VA	1	20 A	EXIST. OVERHEAD GATE OPENER	66	
67				0 VA / 0 VA			1	20 A	EXIST. RECEPTACLE(S)	68	
69	EXIST AHU-22	25 A	2		0 VA / 720 VA		1	20 A	RECPS. - CORRIDOR F124	70	1.
71	EXIST AHU-25	25 A	2			0 VA / 900 VA	1	20 A	RECPS. - RM F125, F126, & F127	72	1.
73				0 VA / 900 VA			1	20 A	RECPS. - RM F127, F126 & CONF. F129	74	1.
75	EXIST AHU-26	40 A	2		0 VA / 1200 VA		1	20 A	RECP. - CONF. F129 COFFEE MAKER	76	1.
77						0 VA / 1200 VA	1	20 A	RECP. - CONF. F129 MICROWAVE	78	1.
79	EXIST AHU-27	40 A	2	0 VA / 6480 VA						80	
81					0 VA / 2840 VA		3	60 A	P1A	82	2.
1. 83	RECPS. - OPEN OFFICE B100	20 A	1			900 VA / 3900 VA				84	
	TOTAL PHASE LOAD:			8380 VA	4760	8620					
	TOTAL PHASE CURRENT:			74 A	40 A	78 A					

PANEL TOTALS
TOTAL ADDITIONAL LOAD: 21760 VA
TOTAL ADDITIONAL CURRENT: 60 A

NOTES:
1. UTILIZE EXISTING SPARE CIRCUIT BREAKER CURRENTLY INSTALLED IN PANEL. COORDINATE PANEL SPACE AVAILABILITY WITH ACTUAL FIELD CONDITIONS.
2. PROVIDE NEW BREAKER AS SHOWN. ENSURE BREAKER IS MANUFACTURERED AND UL LISTED FOR INSTALLATION IN EXISTING SIEMENS PANELBOARD.

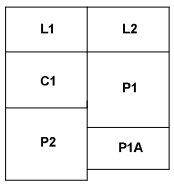
PANELBOARD SCHEDULE

PANEL NAME: P1A — VOLTS: 120/208 Wye — A.I.C. RATING: 22,000
LOCATION: OFFICE C118 — PHASES: 3 — MAINS RATING: 60 A
SOURCE: P1 — WIRES: 4 — MAINS TYPE: MAIN LUGS ONLY
MOUNTING: Recessed — ENCLOSURE: Type 1

CKT NO.	CIRCUIT DESIGNATION	TRIP	POLES	A	B	C	POLES	TRIP	CIRCUIT DESIGNATION	CKT NO.
1	RECPS. - LEGAL	20 A	1	720 VA / 1080 VA			1	20 A	RECPS. - LEGAL	2
3	RECPS. - LEGAL	20 A	1		1080 VA / 900 VA		1	20 A	RECPS. - LEGAL	4
5	RECP. - COFFEE MAKER LEGAL	20 A	1			1200 VA / 1200 VA	1	20 A	RECP. - MICROWAVE LEGAL	6
7	RECP. - COFFEE MAKER LEGAL	20 A	1	1200 VA / 1200 VA			1	20 A	RECP. - MICROWAVE LEGAL	8
9	MOTORIZED SCREEN - CONF. A125	20 A	1		500 VA / 360 VA		1	20 A	PROJECTOR / TV - TRAINING C112	10
11	MOTORIZED SCREEN - TRAIN C112	20 A	1			500 VA / 1000 VA	1	20 A	WAV BOXES - 3-AX UNITS	12
13	RECP. - GARBAGE DISPOSAL	20 A	1	1140 VA / 1140 VA			1	20 A	RECPS. - GARBAGE DISPOSAL	14
15	SPARE	20 A	1		0 VA / 0 VA		1	20 A	SPARE	16
17	SPARE	20 A	1			0 VA / 0 VA	1	20 A	SPARE	18
19	SPARE	20 A	1	0 VA / 0 VA			1	20 A	SPARE	20
	TOTAL PHASE LOAD:			8480 VA	2840	3900				
	TOTAL PHASE CURRENT:			55 A	24 A	34 A				

PANEL TOTALS
TOTAL CONNECTED LOAD: 13220 VA
TOTAL CONNECTED CURRENT: 37 A

PANEL LEGEND



GENERAL NOTES

1. EXISTING PANEL SCHEDULE CIRCUIT LAYOUTS HAVE BEEN DERIVED FROM EXISTING BUILDING CONSTRUCTION DRAWINGS. COORDINATE ALL BREAKER SPACE AVAILABILITY WITH ACTUAL FIELD CONDITIONS.

GBA GLICK BOEHM ARCHITECTURE
ARCHITECTURE PLANNING INTERIOR DESIGN
493 King Street, Suite 100 Charleston, South Carolina 29403
843.577.0007 Fax 843.577.0010 www.glickboehm.com

DWG CONSULTING ENGINEERS
1 5 8 5 - C a v a l i e r D r i v e
North Charleston, South Carolina 29406
Phone: 843.744.7175 Fax: 843.744.8678

REV. NO. | DATE | DESCRIPTION

NORTH CAROLINA — DWG P.C. — CONSULTING ENGINEERS — P0223949 — CERTIFICATE OF AUTHORIZATION

NORTH CAROLINA — REGISTERED PROFESSIONAL ENGINEER — SEAL — 21720 — 01/30/18 — SIGNATURE — RENEWAL DATE

BERKELEY COUNTY ADMINISTRATION COMPLEX RENOVATIONS

RFP# 32406-01-17/18
BERKELEY COUNTY GOVERNMENT
1003 N. US HIGHWAY 52, MONCKS CORNER, SC 29461

COPYRIGHT © 2017
GLICKBOEHM & ASSOCIATES, INC.

JOB NUMBER: 1547
PROJECT MGR.:
DRAWN BY: SPW
CHECKED BY: BSB
APPROVED BY: BSB
DATE ISSUED FOR:
PROPOSALS 01/30/18

ELECTRICAL PANEL SCHEDULES

E053

C:\Users\SWarner\Documents\18022 BERKELEY COUNTY OFFICES MSP_2015_SWarner.rvt
12/5/2018 6:47:36 PM

PANELBOARD: RPU-T100-1

LOCATION: IT CLOSET T100
SUPPY FROM: UPS-T100-1
MOUNTING: SURFACE
ENCLOSURE: TYPE 1

VOLTAGE: 120/208 Wye,3P,4W,60Hz
MAINS TYPE / LOCATION: MCB / TOP
MCB FRAME / TRIP SIZE: 150 AF/125 AT

INTERRUPTING RATING (kA SYMMETRICAL): 10 kA
MINIMUM BUS RATING: 225 A
NEUTRAL BUS RATING: 100%

CKT NO.	DESCRIPTIONS	CIRCUIT SIZE	TRIP AMPS	POLES	PHASE A (VOLT-AMPS)		PHASE B (VOLT-AMPS)		PHASE C (VOLT-AMPS)		POLES	TRIP AMPS	CIRCUIT SIZE	DESCRIPTIONS	CKT NO.
1	RECPT - RM T108, T105, T101	2#12,#12G,3/4"	20 A	1	1720	720					1	20 A	2#12,#12G,3/4"	RECPT - OFFICE T101 & FILES T104	2
3	RECPT - CUBICLES T114	2#12,#12G,3/4"	20 A	1			0								4
5	RECPT-OFFICE T118,T119,T121,T125,T126,T127	2#12,#12G,3/4"	20 A	1					1080	1080	1	20 A	2#12,#12G,3/4"	RECPT - OFFICE T133, T135, T136, T138	6
7	RECPT - VOTING T137	2#12,#12G,3/4"	20 A	1	900	540					1	20 A	2#12,#12G,3/4"	RECPT - OFFICE F107 & F109	8
9	RECPT - OFFICE T124, T129, T132	2#12,#12G,3/4"	20 A	1			540	720			1	20 A	2#12,#12G,3/4"	RECPT - EXAM RM W101 & W102 & LAB W107	10
11	RECPT - IT CLOSET T100	2#12,#12G,3/4"	20 A	1					360	360	1	20 A	2#12,#12G,3/4"	RECPT - IT CLOSET T100	12
13	JUNCTION BOX - CUBICLES T114	2#12,#12G,3/4"	20 A	1	1000	1000					1	20 A	2#12,#12G,3/4"	JUNCTION BOX - CUBICLES T114	14
15	JUNCTION BOX - CUBICLES F114	2#12,#12G,3/4"	20 A	1			0	0			1	20 A	2#12,#12G,3/4"	JUNCTION BOX - CUBICLES F114	16
17	RECPT - OFFICE F109, F112, F113, F123	2#12,#12G,3/4"	20 A	1					720						18
19															20
21															22
23															24
25															26
27															28
29															30
31															32
33															34
35															36
37															38
39															40
41															42
	TOTAL CONNECTED LOAD / PHASE				**5880**		**1260**		**3600**						

LOAD CLASSIFICATIONS	CONNECTED LOAD	DEMAND FACTOR	ESTIMATED DEMAND
Power	2000	100.00%	2000
Receptacle	8740	100.00%	8740

TOTAL LOAD SUMMARY

LOAD (KVA)		CURRENT (AMPS)	
CONNECTED LOAD:	10.7 kVA	CONNECTED CURRENT	29.8 A
ESTIMATED DEMAND LOAD:	10.7 kVA	ESTIMATED DEMAND CURRENT	29.8 A
ESTIMATED DEMAND FACTOR:	100.00%	ESTIMATED GROWTH CURRENT	0 A
APPLIED GRTOWTH FACTOR:			

PANELBOARD NOTES:

PANELBOARD: RPU-X101-1

LOCATION: IT ROOM X101
SUPPY FROM: XMR-UPS-T100-1
MOUNTING: SURFACE
ENCLOSURE: TYPE 1

VOLTAGE: 120/208 Wye,3P,4W,60Hz
MAINS TYPE / LOCATION: MCB / TOP
MCB FRAME / TRIP SIZE: 150 AF/125 AT

INTERRUPTING RATING (kA SYMMETRICAL): 10 kA
MINIMUM BUS RATING: 225 A
NEUTRAL BUS RATING: 100%

CKT NO.	DESCRIPTIONS	CIRCUIT SIZE	TRIP AMPS	POLES	PHASE A (VOLT-AMPS)		PHASE B (VOLT-AMPS)		PHASE C (VOLT-AMPS)		POLES	TRIP AMPS	CIRCUIT SIZE	DESCRIPTIONS	CKT NO.
1	RECPT - OFFICE V101, V102, V1031 V104, V105	2#12,#12G,3/4"	20 A	1	1080	360					1	20 A	2#12,#12G,3/4"	RECPT - IT ROOM X101	2
3	RECPT - OFFICE X103 & X104	2#12,#12G,3/4"	20 A	1			360	1360			1	20 A	2#12,#12G,3/4"	RECPT - CUBICLES V108	4
5	RECPT - CUBICLES V109	2#12,#12G,3/4"	20 A	1					0	360	1	20 A	2#12,#12G,3/4"	RECPT - IT ROOM X101	6
7	RECPT - IT ROOM X101	2#12,#12G,3/4"	20 A	1	360	500									8
9	JUNCTION BOX - OFFICE X105	2#12,#12G,3/4"	20 A	1			0	500			2	20 A	4#12,#12G,3/4"	JUNCTION BOX - OFFICE X105 (1)	10
11															12
13	RECPT - VENDING U118	2#12,#12G,3/4"	20 A	1	1000	1000					1	20 A	2#12,#12G,3/4"	JUNCTION BOX - VENDING U118	14
15	RECPT - OFFICE X106	2#12,#12G,3/4"	20 A	1			720	0			1	20 A	2#12,#12G,3/4"	JUNCTION BOX - CUBICLES V109	16
17									1000						18
19	JUNCTION BOX - OFFICE X105 (1)	3#12,3#12N, #12G,3/4"	20 A	3	1000										20
21							1000								22
23															24
25															26
27															28
29															30
31															32
33															34
35															36
37															38
39															40
41															42
	TOTAL CONNECTED LOAD / PHASE				**5300**		**3940**		**1360**						

LOAD CLASSIFICATIONS	CONNECTED LOAD	DEMAND FACTOR	ESTIMATED DEMAND
Power	7000	100.00%	7000
Receptacle	3600	100.00%	3600

TOTAL LOAD SUMMARY

LOAD (KVA)		CURRENT (AMPS)	
CONNECTED LOAD:	10.6 kVA	CONNECTED CURRENT	29.4 A
ESTIMATED DEMAND LOAD:	10.6 kVA	ESTIMATED DEMAND CURRENT	29.4 A
ESTIMATED DEMAND FACTOR:	100.00%	ESTIMATED GROWTH CURRENT	0 A
APPLIED GRTOWTH FACTOR:			

PANELBOARD NOTES:

GENERAL NOTES:

A. REFER TO SHEET J-E001 FOR GENERAL NOTES, LEGEND AND ABBREVIATIONS.

B. REFER TO POWER PLANS FOR FEEDER SIZES NOT SHOWN IN PANEL SCHEDULE.

(#) SHEET KEYED NOTES:

1. PROVIDE INDIVIDUAL NEUTRALS FOR EACH 120V CIRCUIT.

SOUTH CAROLINA PROFESSIONAL ENGINEER — No. 29760 — 01/27/2020

SOUTH CAROLINA — JACOBS ENGINEERING GROUP, INC. — No. C00316 — CERTIFICATE OF AUTHORIZATION

© JACOBS 2019. ALL RIGHTS RESERVED.
THIS DOCUMENT AND THE IDEAS AND DESIGNS INCORPORATED HEREIN, AS AN INSTRUMENT OF PROFESSIONAL SERVICE, IS THE PROPERTY OF JACOBS AND IS NOT TO BE USED, IN WHOLE OR IN PART, FOR ANY PURPOSE WITHOUT THE WRITTEN CONSENT OF JACOBS.

NO.	DATE	BY	CHK
0	01/27/20	ISSUED FOR CONSTRUCTION	M. BURN

DSGN: R. VALENTIN — DR: D. RIOS — CHK: M. POURGHOLAMI — APVD: APVD

JACOBS®
1041 East Butler Road Greenville, South Carolina 29607-3725
Tel: 864-676-6000 Fax: 864-676-6023

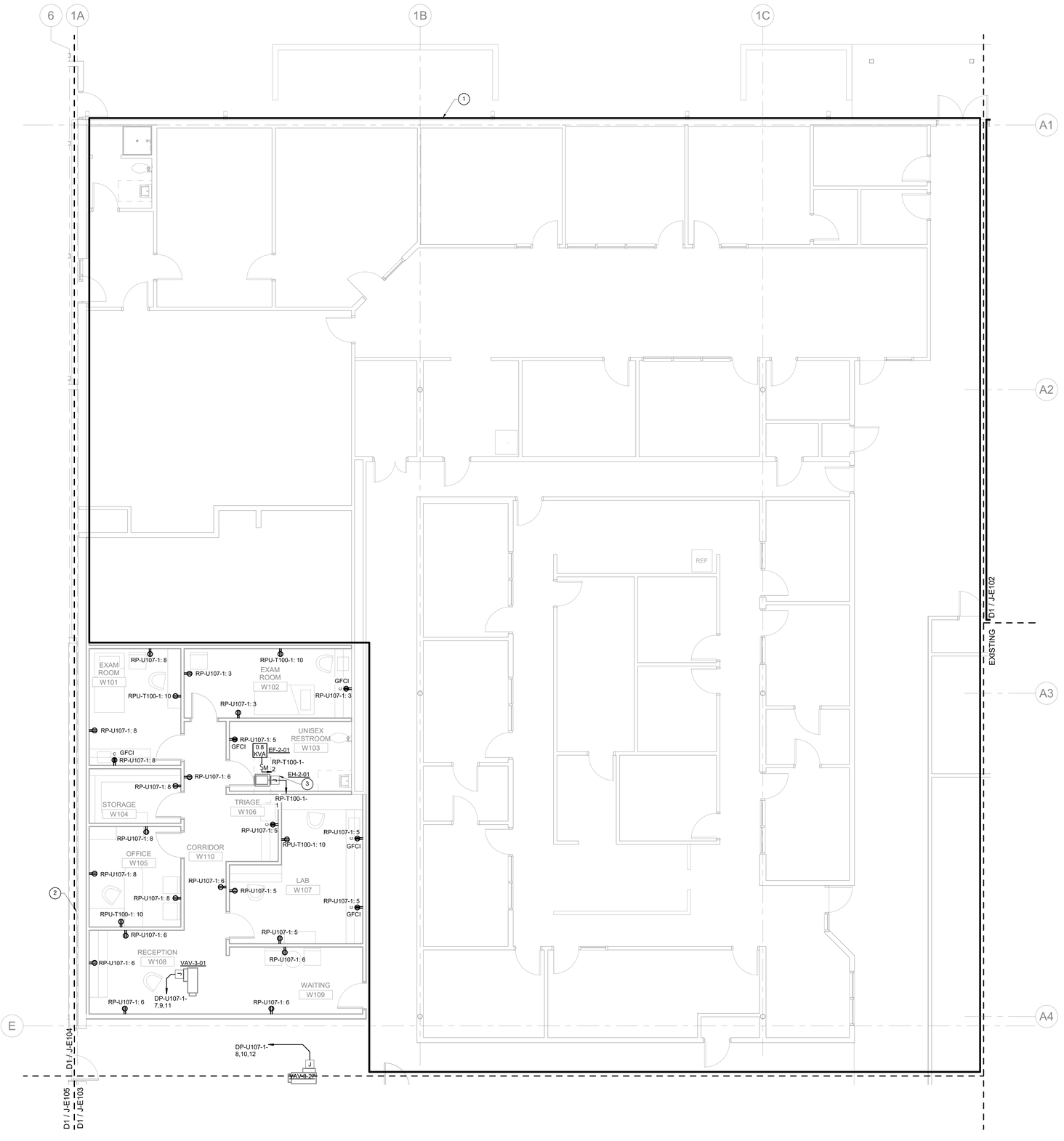
BERKELEY COUNTY ADMINISTRATION COMPLEX RENOVATIONS
1003 N. US HIGHWAY 52, MONCKS CORNER, SC 29461
BERKELEY COUNTY GOVERNMENT - RFP# 32406-01-17/18

ELECTRICAL
PANEL SCHEDULES

VERIFY SCALE
BAR IS ONE INCH ON ORIGINAL DRAWING.
0 1"

DATE
PROJ 1547
DWG J-E054
SHEET of

FILEPATH: C:_Revit_Local_Models\2020\16FFRU01-E-ZSMEN001_diane.riosEZM7N.rvt
FILENAME:
PLOT DATE/TIME: 1/27/2020 4:11:43 PM



D1 POWER PLAN SUITES A & C

3/16" = 1'-0"

GENERAL NOTES:

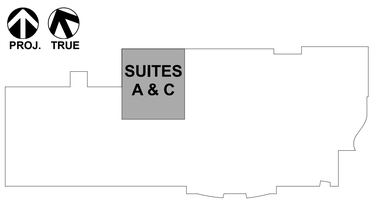
A. REFER TO SHEET J-E001 FOR GENERAL NOTES, LEGEND AND ABBREVIATIONS.

B. ALL RECEPTACLES SHOWN ON AS CIRCUITED TO A PANEL CONNECTED TO THE GENERATOR SHALL BE PROVIDED WITH RED COVER PLATES.

SHEET KEYED NOTES:

1. FOR SCOPE OF WORK IN THIS AREA REFER TO DRAWING J-GBA-E101.
2. WHEN CONDUIT PENETRATES 3-HOUR FIRE RATED WALL CONTRACTOR TO DETERMINE AND PROVIDE APPROVE PENETRATIONS EQUAL TO SYSTEMS NO. C-AJ-2003, C-AJ-1066 OR C-AJ-8041 AS MANUFACTURED BY 3M.
3. PROVISION FOR EXHAUST HOOD EH-2-01 CONTROL DAMPER, MOUNTED ON ROOF.

KEY PLAN



4 0 4 8 12

Scale: 3/16 INCH = 1 FOOT

SOUTH CAROLINA PROFESSIONAL ENGINEER No. 29760 01/27/2020

SOUTH CAROLINA CERTIFICATE OF AUTHORIZATION JACOBS ENGINEERING GROUP, INC. No. C00316

© JACOBS 2019. ALL RIGHTS RESERVED.
THIS DOCUMENT AND THE IDEAS AND DESIGNS INCORPORATED OR INDICATED HEREIN, AS AN INSTRUMENT OF PROFESSIONAL SERVICE, IS THE PROPERTY OF JACOBS AND IS NOT TO BE USED, IN WHOLE OR IN PART, FOR ANY PURPOSE OTHER THAN THE SPECIFIC PROJECT FOR WHICH IT WAS PREPARED BY JACOBS. REUSE OF DOCUMENTS WITHOUT WRITTEN VERIFICATION OR ADAPTATION BY JACOBS FOR THE SPECIFIC PURPOSE INTENDED WILL BE AT USER'S SOLE RISK AND WITHOUT LIABILITY OR LEGAL EXPOSURE TO JACOBS. ANY SUCH VERIFICATION OR ADAPTATION WILL ENTITLE JACOBS TO FURTHER COMPENSATION AT RATES TO BE AGREED BY USER AND JACOBS. USER SHALL INDEMNIFY AND HOLD HARMLESS JACOBS FROM ALL CLAIMS, DAMAGES, LOSSES AND EXPENSES ARISING OUT OF OR RESULTING FROM USE OF THIS DOCUMENT OR ADAPTATION WITHOUT VERIFICATION OR ADAPTATION BY JACOBS FOR THE SPECIFIC PURPOSE INTENDED.

NO.	DATE	DSGN	DR	CHK	APVD	BY
0	01/27/20	R. VALENTIN	D. RIOS	M. BURN	M. POURCHOT	APVD

ISSUED FOR CONSTRUCTION

REVISION

BERKELEY COUNTY ADMINISTRATION COMPLEX RENOVATIONS
1003 N. US HIGHWAY 52, MONCKS CORNER, SC 29461
BERKELEY COUNTY GOVERNMENT - RFP# 32406-01-17/18

ELECTRICAL POWER PLAN SUITES A & C

JACOBS®
104 East Butler Road Greenville, South Carolina 29607-3725
Tel. 864-676-0003 Fax. 864-676-0020

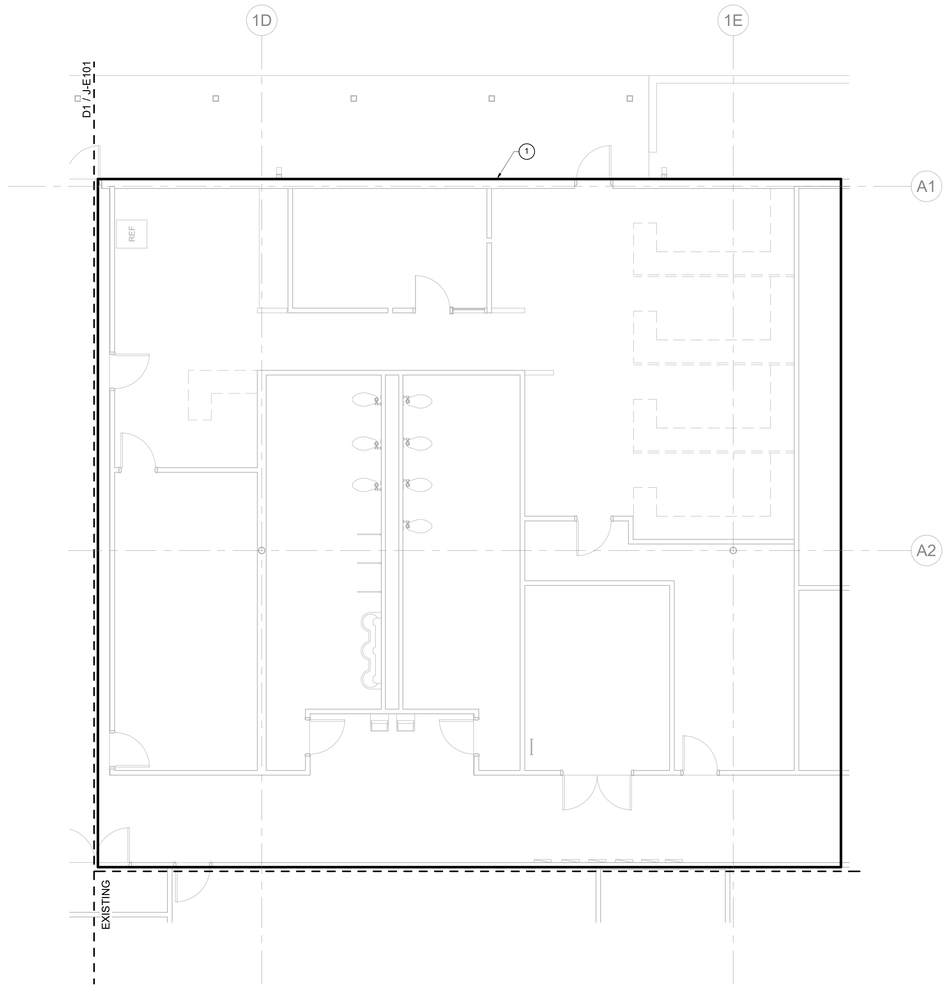
As indicated

VERIFY SCALE

BAR IS ONE INCH ON ORIGINAL DRAWING.

0" 1"

DATE	
PROJ	1547
DWG	J-E101
SHEET	of



D1 POWER PLAN SUITE B

3/16" = 1'-0"

GENERAL NOTES:

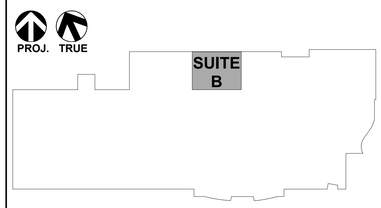
A. REFER TO SHEET J-E001 FOR GENERAL NOTES, LEGEND AND ABBREVIATIONS.

B. ALL RECEPTACLES SHOWN ON AS CIRCUITED TO A PANEL CONNECTED TO THE GENERATOR SHALL BE PROVIDED WITH RED COVER PLATES.

(#) SHEET KEYED NOTES:

1. FOR SCOPE OF WORK IN THIS AREA REFER TO GBA DRAWING E102.

KEY PLAN



4 0 4 8 12

Scale: 3/16 INCH = 1 FOOT

SOUTH CAROLINA PROFESSIONAL ENGINEER
No. 29760
01/27/2020

SOUTH CAROLINA
JACOBS ENGINEERING GROUP, INC.
No. C00316
CERTIFICATE OF AUTHORIZATION

© JACOBS 2019. ALL RIGHTS RESERVED.
THIS DOCUMENT AND THE IDEAS AND DESIGNS INCORPORATED IN IT, ARE AN INSTRUMENT OF PROFESSIONAL SERVICE, IS THE PROPERTY OF JACOBS AND IS NOT TO BE USED, IN WHOLE OR IN PART, FOR ANY PURPOSE OR PROJECT OTHER THAN THE SPECIFIC PROJECT FOR WHICH IT WAS PREPARED BY JACOBS.

NO.	DATE	DSGN	DR	CHK	APVD	BY	APVD
0	01/27/20	R. VALENTIN	D. RIOS	M. BURN	M. BURN		

ISSUED FOR CONSTRUCTION

REVISION

PURPOSE:

JACOBS®
1441 East Edisto Road Charleston, South Carolina 29405-2125
Tel: 843-815-3000 Fax: 844-815-3020

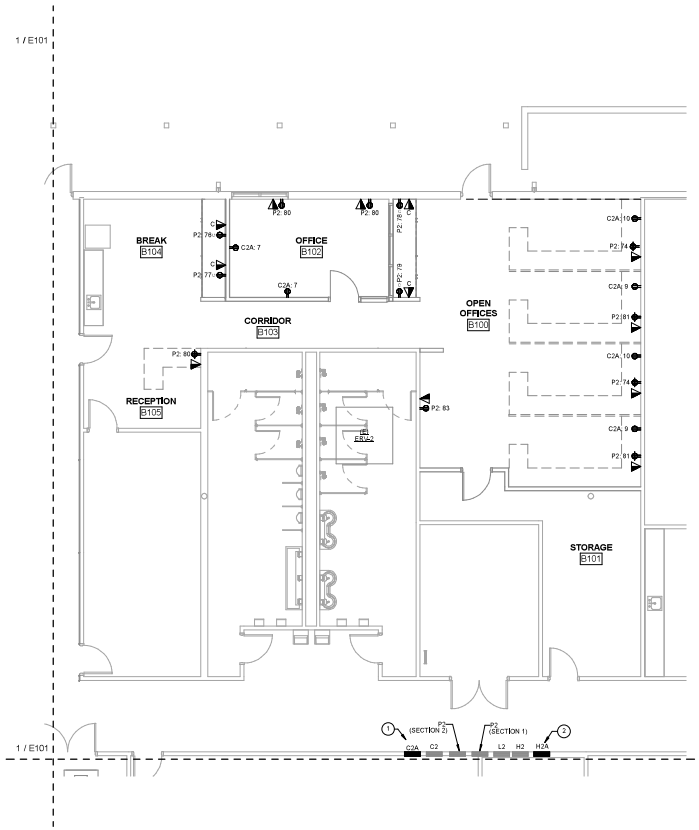
BERKELEY COUNTY ADMINISTRATION COMPLEX RENOVATIONS
1003 N. US HIGHWAY 52, MONCKS CORNER, SC 29461
BERKELEY COUNTY GOVERNMENT - RFP# 32408-01-17/18

ELECTRICAL POWER PLAN SUITE B

As indicated
VERIFY SCALE
BAR IS ONE INCH ON ORIGINAL DRAWING.
0 1"

DATE
PROJ 1547
DWG J-E102
SHEET of

FILEPATH: C:_Revit_Local_Models\2020\16FFRU01-E-ZSMEN001_diane.riosEZM7N.rvt
FILENAME:
PLOT DATE/TIME: 1/27/2020 4:11:50 PM



1 / E102 POWER & TELECOMMUNICATIONS PLAN SUITE B
SCALE: 3/16" = 1'-0"

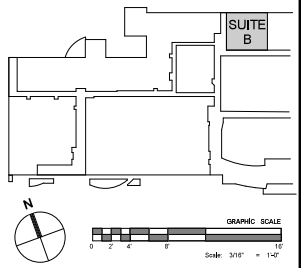
KEYNOTES

1. NEW RECESSED PANEL C2A SHALL BE FED FROM EXISTING PANEL C2, MOVE EXISTING BREAKER AND WIRING FOR LOAD IN PANEL SPACE C2: 37 TO MAKE SPACE FOR NEW 60A BREAKER TO FEED C2A. EXTEND CIRCUITRY AS NECESSARY. PANEL C2A WIRING SHALL BE #8G, 1#8G, ¾"C. EXISTING SPARE SINGLE POLE 20A BREAKERS IN SPACES C2: 39 AND C2: 41 SHALL BE RELOCATED TO NEW PANEL C2A. REFER TO PANEL SCHEDULES. COORDINATE PANEL SPACE AVAILIBILTY WITH ACTUAL FIELD CONDITIONS. UPDATE PANEL SCHEDULES ACCORDINGLY. PATCH EXISTING WALLS AS NECESSARY.
2. NEW RECESSED PANEL H2A SHALL BE FED FROM EXISTING PANEL H2. PANEL H2A WIRING SHALL BE #4G, 1#10G, 1"C. COORDINATE PANEL SPACE AVAILIBILTY WITH ACTUAL FIELD CONDITIONS. UPDATE PANEL SCHEDULES ACCORDINGLY. PATCH EXISTING WALLS AS NECESSARY.

GENERAL NOTES

1. ALL RECEPTACLES SHOWN AS BACKED UP BY THE GENERATOR SHALL BE PROVIDED WITH RED COVER PLATES.

KEY PLAN



GLICK BOEHM ARCHITECTURE
ARCHITECTURE PLANNING INTERIOR DESIGN
493 King Street, Suite 100 Charleston, South Carolina 29403
Tel: 843.577.0057 Fax: 843.722.7036 www.glickboehm.com

DWG
CONSULTING ENGINEERS
1 Hasell Street, Charleston, SC 29401
Phone: 843.853.2700 Fax: 843.853.2705
www.dwgengineers.com

REV. No.	DATE	DESCRIPTION

SOUTH CAROLINA — DWG P.C. CONSULTING ENGINEERS — CERTIFICATE OF AUTHORIZATION

SOUTH CAROLINA — REGISTERED PROFESSIONAL ENGINEER — 24301 — BRIANS. BALL

BERKELEY COUNTY ADMINISTRATION COMPLEX RENOVATIONS

RFP# 32406-01-17/18
BERKELEY COUNTY GOVERNMENT
1003 N. US HIGHWAY 52, MONCKS CORNER, SC 29461

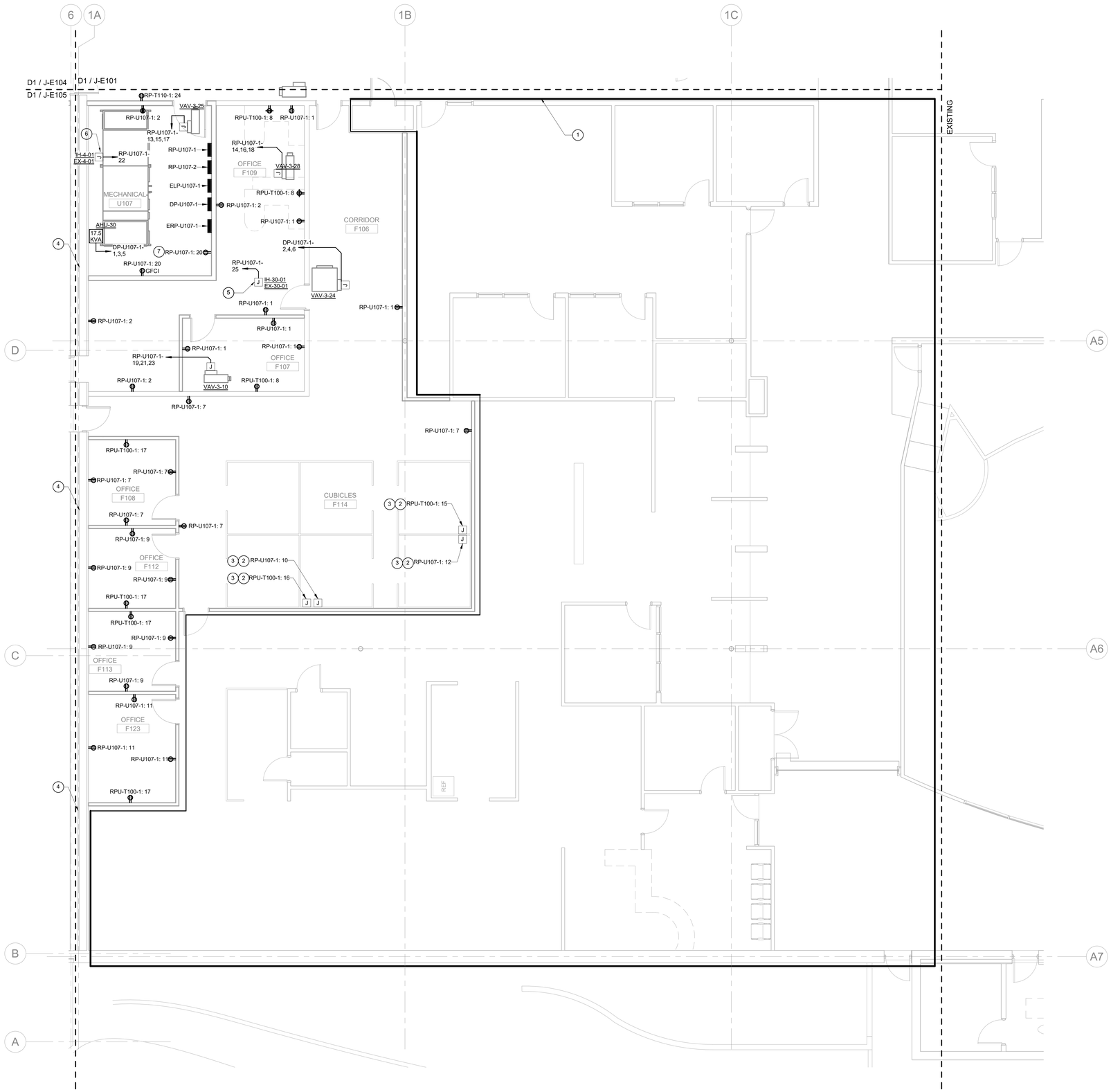
COPYRIGHT © 2017
GLICKBOEHM & ASSOCIATES, INC.

JOB NUMBER:	1547
PROJECT MGR.:	
DRAWN BY:	SPW
CHECKED BY:	BSB
APPROVED BY:	BSB
DATE ISSUED FOR:	
PROPOSALS	01/30/18

POWER & TELECOM. PLAN - SUITE B

E102

1/29/2018 6:47:39 PM
C:\Users\SWarren\Documents\18022 BERKELEY COUNTY OFFICES M3P_2015_SWarren.rvt



GENERAL NOTES:

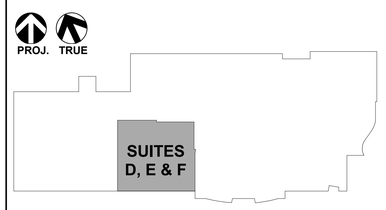
A. REFER TO SHEET J-E001 FOR GENERAL NOTES, LEGEND AND ABBREVIATIONS.

B. ALL RECEPTACLES SHOWN ON AS CIRCUITED TO A PANEL CONNECTED TO THE GENERATOR SHALL BE PROVIDED WITH RED COVER PLATES.

SHEET KEYED NOTES:

1. FOR SCOPE OF WORK IN THIS AREA REFER TO DRAWING J-GBA-E103.
2. WALL MOUNTED JUNCTION BOX WITH CIRCUITS AS SHOWN TO FEED OFFICE CUBICLES.
3. CONFIGURATION OF RECEPTACLES IN OFFICE CUBICLES TO BE COORDINATED WITH OWNER.
4. WHEN CONDUIT PENETRATES 3-HOUR FIRE RATED WALL CONTRACTOR TO DETERMINE AND PROVIDE APPROVE PENETRATIONS EQUAL TO SYSTEMS NO. C-AJ-2003, C-AJ-1066 OR C-AJ-8041 AS MANUFACTURED BY 3M.
5. PROVISIONS FOR EXHAUST HOOD EH-30-01 AND INTAKE HOOD IH-30-01 CONTROL DAMPERS, MOUNTED ON ROOF.
6. PROVISIONS FOR EXHAUST HOOD EH-4-01 AND INTAKE HOOD IH-4-01 CONTROL DAMPERS, MOUNTED ON ROOF.
7. RECEPTACLE TO SERVE BUILDING AUTOMATION SYSTEM PANELS. EXACT LOCATION TO BE COORDINATED IN THE FIELD.

KEY PLAN



4 0 4 8 12
Scale: 3/16 INCH = 1 FOOT

D1 POWER PLAN SUITES D, E & F

3/16" = 1'-0"

SOUTH CAROLINA PROFESSIONAL ENGINEER
No. 29760
01/27/2020

SOUTH CAROLINA CERTIFICATE OF AUTHORIZATION
JACOBS ENGINEERING GROUP, INC.
No. C00316

© JACOBS 2019. ALL RIGHTS RESERVED.
THIS DOCUMENT AND THE IDEAS AND DESIGNS INCORPORATED IN IT, ARE AN INSTRUMENT OF PROFESSIONAL SERVICE, IS THE PROPERTY OF JACOBS AND IS NOT TO BE USED, IN WHOLE OR IN PART, FOR ANY PURPOSE WITHOUT THE WRITTEN CONSENT OF JACOBS.

NO.	DATE	REVISION	CHK	BY	APVD
0	01/27/20	ISSUED FOR CONSTRUCTION	D. RIOS	M. BURN	M. POURCHOT

DSGN R. VALENTIN DR

BERKELEY COUNTY ADMINISTRATION COMPLEX RENOVATIONS
1003 N. US HIGHWAY 52, MONCKS CORNER, SC 29461
BERKELEY COUNTY GOVERNMENT - RFP#
32406-01-17/18

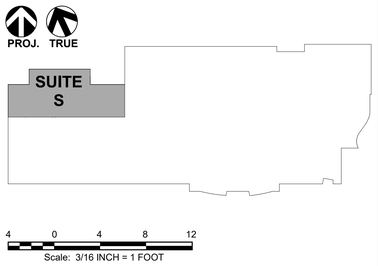
ELECTRICAL POWER PLAN SUITES D, E & F

JACOBS®
1041 East Butler Road Greenville, South Carolina 29607-2025
Tel: 864-676-8000 Fax: 864-676-8020

As indicated
VERIFY SCALE
BAR IS ONE INCH ON ORIGINAL DRAWING.
0 1"

DATE
PROJ 1547
DWG J-E103
SHEET of

KEY PLAN



SHEET KEYED NOTES:

1. CONNECT MAIN GROUNDING BAR TO EXISTING BUILDING GROUNDING LOOP, #4/0 CONDUCTOR.
2. #350 AWG BUILDING CONDUCTOR FOR TELECOMMUNICATIONS. WILL BE CONNECTED TO THE GROUNDING BAR OF THE SERVICE-ENTRANCE EQUIPMENT (MDP-S105-1) LOCATED IN MAIN ELECTRICAL ROOM S105.
3. 1" CONDUIT TO ARM GATE. REFER TO CIVIL DRAWING J-C203.
4. DEDICATED RECEPTACLE FOR ELECTRIC RANGE.
5. WHEN CONDUIT PENETRATES 3-HOUR FIRE RATED WALL CONTRACTOR TO DETERMINE AND PROVIDE APPROVE PENETRATIONS EQUAL TO SYSTEMS NO. C-AJ-2003, C-AJ-1066 OR C-AJ-8041 AS MANUFACTURED BY 3M.
6. KNOX BOX WITH FOR SHUNT-TRIP OF MDP-S105-1 MAIN BREAKER. SIMILAR TO KNOX VAULT 4500 SERIES. REFER TO DETAIL 3 IN DRAWING J-GBA-E010.
7. POWER TO CONSOLES IN 911 CALL CENTER AND EOC TO BE ROUTED BELOW RAISED FLOOR.
8. POWERLINK 3-CIRCUIT SPLITTER (AS MANUFACTURED BY EVANS) TO BE INSTALLED BELOW RAISED FLOOR. CONTRACTOR TO FURNISH AND INSTALL ALL THE REQUIRED FITTINGS AND ACCESSORIES TO PROVIDE A COMPLETE POWERLINC POWER DISTRIBUTION SYSTEM.
9. POWERLINC EXTENSION CABLE (AS MANUFACTURED BY EVANS). EXTENSION CABLE LENGHT AS REQUIRED.
10. RECEPTACLE TO BE MOUNTED 6'-0" A.F.F. FOR CONDENSATE PUMP.
11. DEDICATED RECEPTACLE FOR PORTABLE MIX STATION PUMP.
12. PROVISION FOR SMOKE DAMPERS ABOVE CEILING. REFER TO MECHANICAL DRAWING FOR EXACT LOCATION.
13. POWERLINC RECEPTACLE HUB (AS MANUFACTURED BY EVANS) WITH THREE DUPLEX RECEPTACLES (3-CIRCUIT CONFIGURATION)
14. RECEPTACLE TO SERVE BUILDING AUTOMATION SYSTEM PANELS. EXACT LOCATION TO BE COORDINATED IN THE FIELD.
15. EXHAUST FAN TO BE MOUNTED ON THE ROOF. MOTOR STARTER TO TO BE MOUNTED IN THE ROOM BEING SERVED BY THE FAN.

GENERAL NOTES:

A. REFER TO SHEET J-E001 FOR GENERAL NOTES, LEGEND AND ABBREVIATIONS.

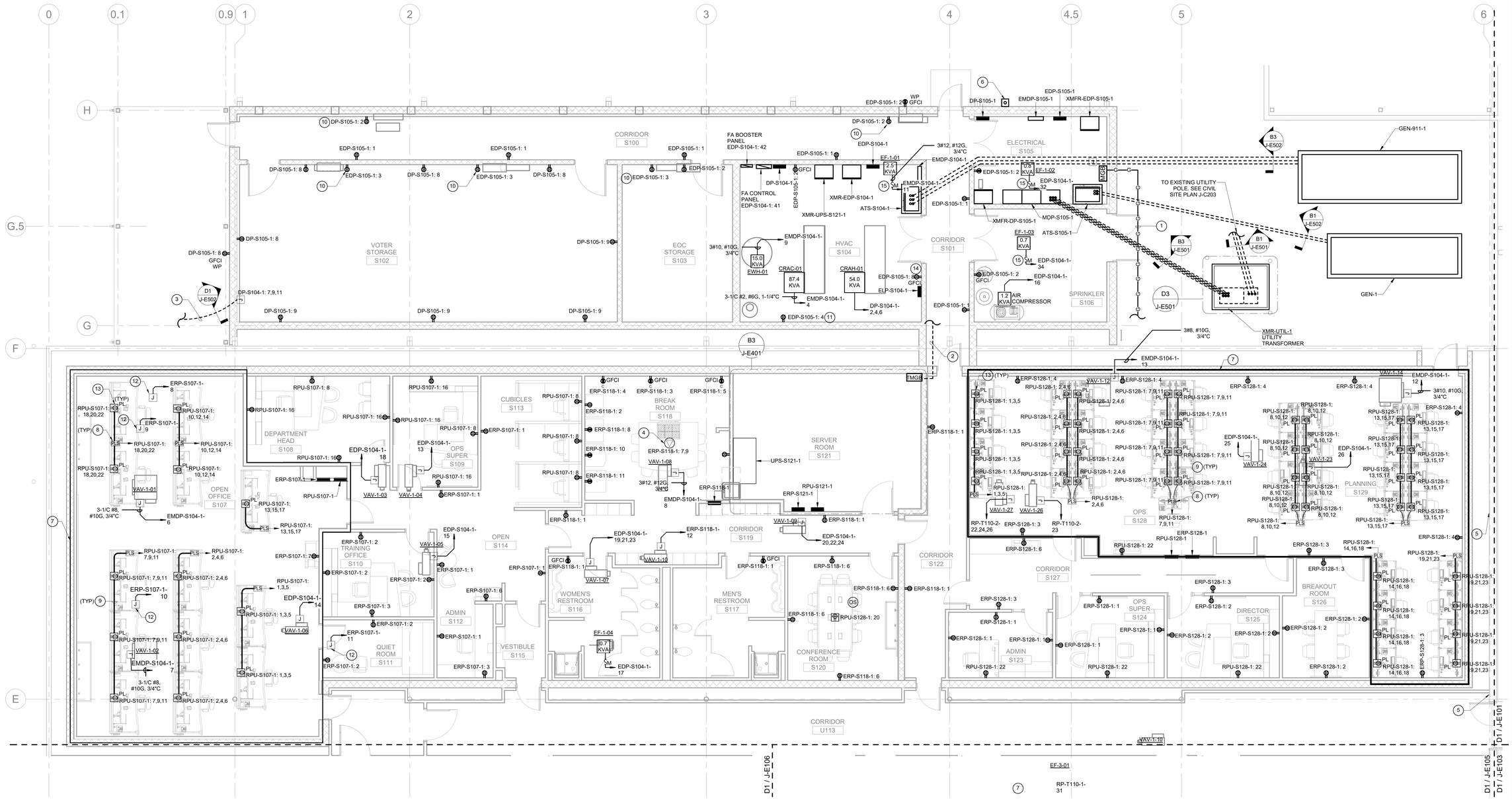
B. ALL RECEPTACLES SHOWN ON AS CIRCUITED TO A PANEL CONNECTED TO THE GENERATOR SHALL BE PROVIDED WITH RED COVER PLATES.

C. ALL FLOOR MOUNTED EQUIPMENT IN ELECTRIC S105 AND MECHANICAL ROOM S104 SHALL BE PROVIDED WITH HOUSEKEEPING PADS.

SOUTH CAROLINA PROFESSIONAL ENGINEER No. 29760 01/27/2020

SOUTH CAROLINA CERTIFICATE OF AUTHORIZATION JACOBS ENGINEERING GROUP, INC. No. C00316

© JACOBS 2019. ALL RIGHTS RESERVED.



D1 POWER PLAN SUITE S

3/16" = 1'-0"

NO.	DATE	DSGN	BY	APVD
0	01/27/20	ISSUED FOR CONSTRUCTION		
		REVISION	CHK	APVD
		D. RIOS	M. BURN	M.
		DR		
		R. VALENTIN		

THIS DOCUMENT AND THE IDEAS AND DESIGNS INCORPORATED HEREIN, AS AN INSTRUMENT OF PROFESSIONAL SERVICE, IS THE PROPERTY OF JACOBS AND IS NOT TO BE USED IN WHOLE OR IN PART FOR ANY PURPOSE OR PROJECT WITHOUT THE WRITTEN AUTHORIZATION OF JACOBS.

BERKELEY COUNTY ADMINISTRATION COMPLEX RENOVATIONS
1003 N. US HIGHWAY 52, MONCKS CORNER, SC, 29461
BERKELEY COUNTY GOVERNMENT - RFP# 32409-01-17/18

JACOBS®
1041 East Butler Road Greenville, South Carolina 29607-3725
Tel: 864-676-4000

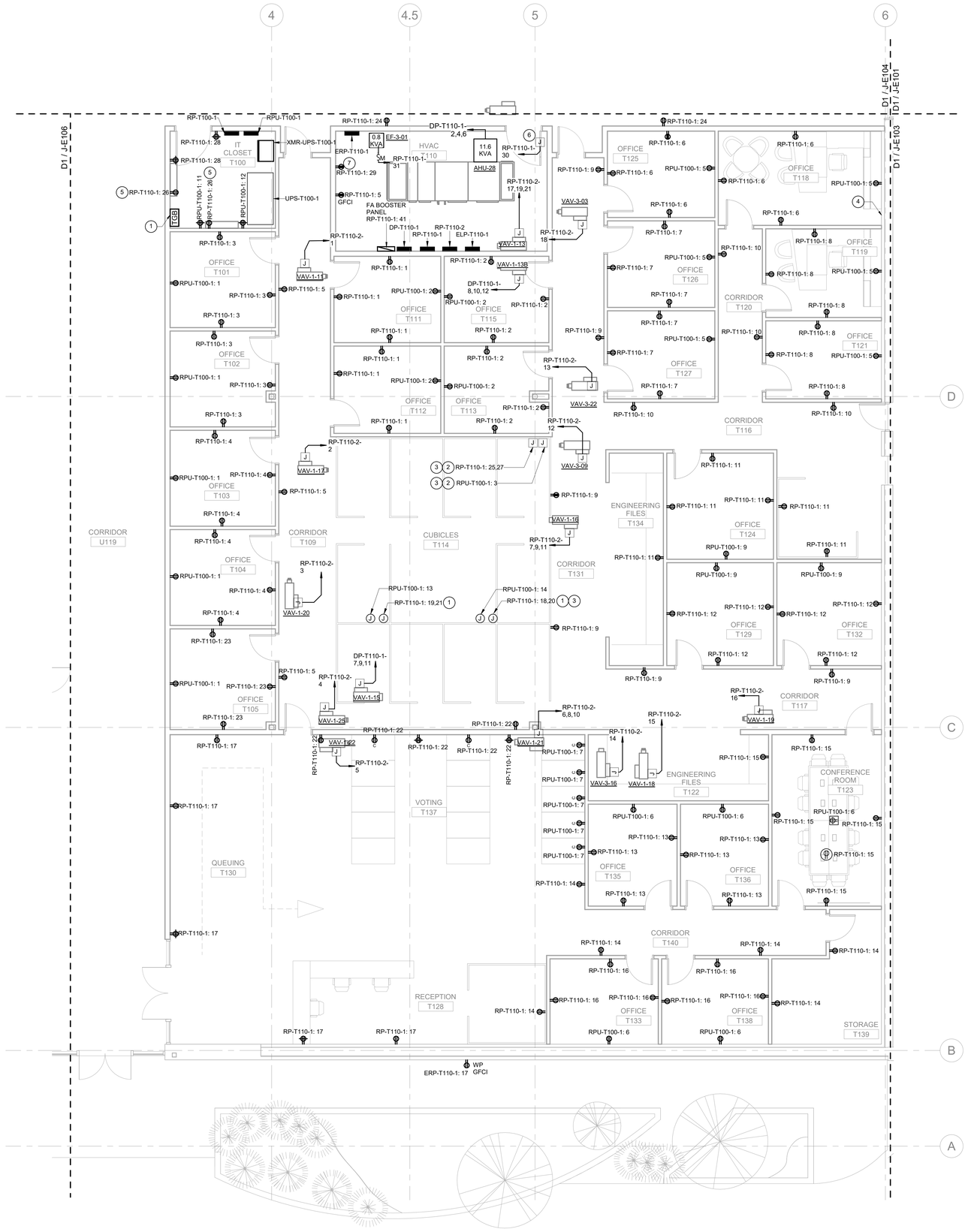
ELECTRICAL POWER PLAN SUITE S

As indicated	
VERIFY SCALE	
BAR IS ONE INCH ON ORIGINAL DRAWING.	
0	1"
DATE	
PROJ	1547
DWG	J-E104
SHEET	of

FILEPATH: C:_Revit_Local_Models\2020\16FFRU01-E-ZSMEN001_diane.riosEZM7N.rvt

FILENAME:

PLOT DATE/TIME: 1/27/2020 4:11:59 PM



GENERAL NOTES:

A. REFER TO SHEET J-E001 FOR GENERAL NOTES, LEGEND AND ABBREVIATIONS.

B. ALL RECEPTACLES SHOWN ON AS CIRCUITED TO A PANEL CONNECTED TO THE GENERATOR SHALL BE PROVIDED WITH RED COVER PLATES.

(#) SHEET KEYED NOTES:

1. JUNCTION BOX MOUNTED ABOVE CEILING WITH CIRCUITS AS SHOWN TO FEED OFFICE CUBICLES.
2. WALL MOUNTED JUNCTION BOX WITH CIRCUITS AS SHOWN TO FEED OFFICE CUBICLES.
3. CONFIGURATION OF RECEPTACLES IN OFFICE CUBICLES TO BE COORDINATED WITH OWNER.
4. WHEN CONDUIT PENETRATES 3-HOUR FIRE RATED WALL CONTRACTOR TO DETERMINE AND PROVIDE APPROVE PENETRATIONS EQUAL TO SYSTEMS NO. C-AJ-2003, C-AJ-1066 OR C-AJ-8041 AS MANUFACTURED BY 3M.
5. RECEPTACLE MOUNTED 6'-0" A.F.F. FOR CONDENSATE PUMP.
6. PROVISION FOR EXHAUST HOOD EH-28-01 AND INTAKE HOOD IH-28-01 CONTROL DAMPERS, MOUNTED ON ROOF.
7. RECEPTACLE TO SERVE BUILDING AUTOMATION SYSTEM PANELS. EXACT LOCATION TO BE COORDINATED IN THE FIELD.

KEY PLAN

D1 POWER PLAN SUITES T & V

3/16" = 1'-0"

SOUTH CAROLINA PROFESSIONAL ENGINEER No. 29760 01/27/2020

SOUTH CAROLINA JACOBS ENGINEERING GROUP, INC. No. C00316 CERTIFICATE OF AUTHORIZATION

© JACOBS 2019. ALL RIGHTS RESERVED.
THIS DOCUMENT AND THE IDEAS AND DESIGNS INCORPORATED HEREIN, AS AN INSTRUMENT OF PROFESSIONAL SERVICE, IS THE PROPERTY OF JACOBS AND IS NOT TO BE USED IN WHOLE OR IN PART FOR ANY PURPOSE OTHER THAN THE SPECIFIC PROJECT AND SHALL NOT BE LOANED, COPIED OR DISCLOSED WITHOUT WRITTEN CONSENT.

NO.	DATE	DSGN	DR	CHK	APVD	BY
0	01/27/20	R. VALENTIN	D. RIOS	M. BURN	M. BURN	M. BURN

ISSUED FOR CONSTRUCTION

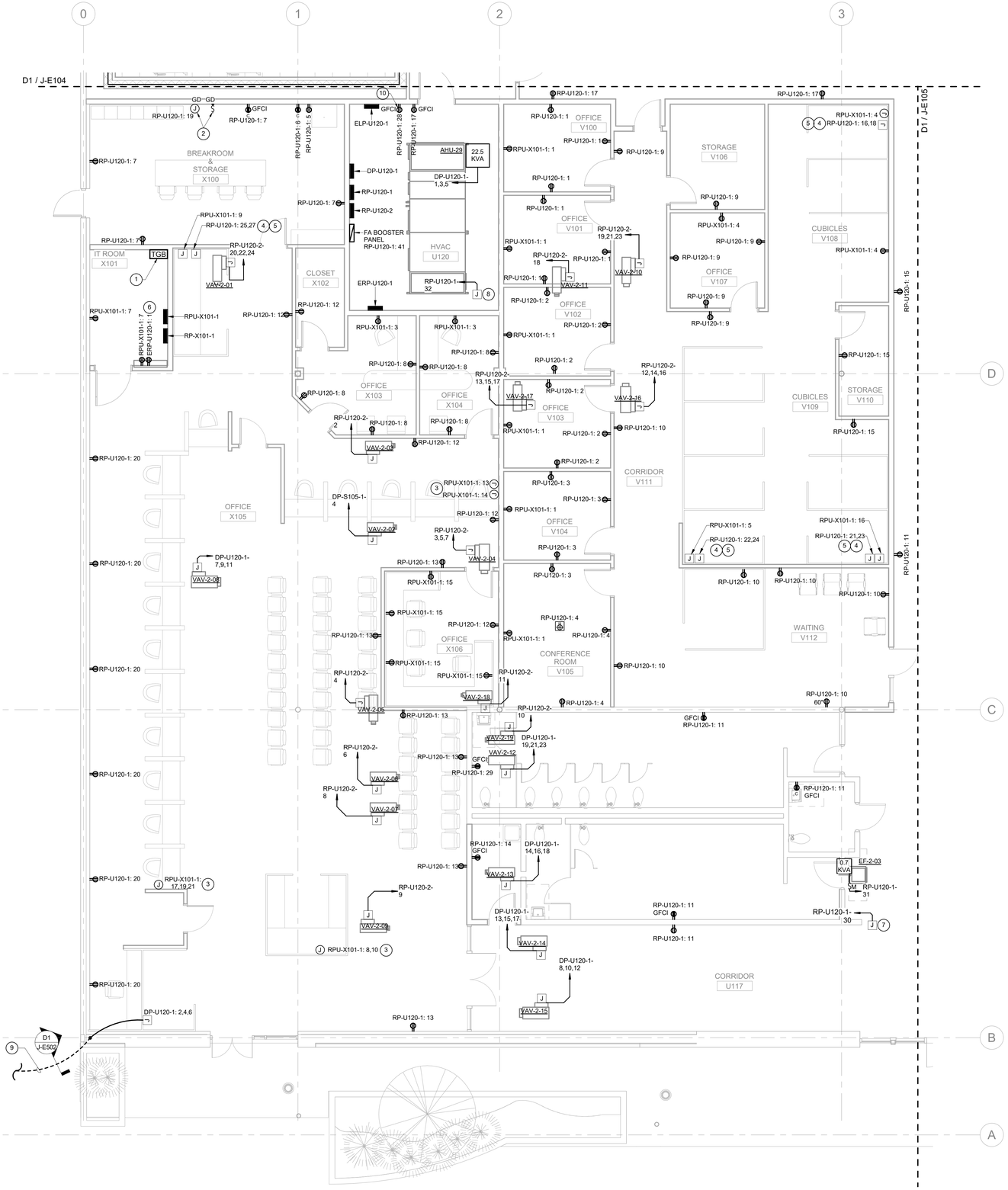
BERKELEY COUNTY ADMINISTRATION COMPLEX RENOVATIONS
1003 N. US HIGHWAY 52, MONCKS CORNER, SC 29461
BERKELEY COUNTY GOVERNMENT - RFP#
32408-01-17/18

ELECTRICAL POWER PLAN SUITES T & V

JACOBS
1041 East Butler Road Greenville, South Carolina 29607-3725
Tel: 864-676-6000 Fax: 864-676-6020

As indicated
VERIFY SCALE
BAR IS ONE INCH ON ORIGINAL DRAWING.
0 1"

DATE	
PROJ	1547
DWG	J-E105
SHEET	of



D1 POWER PLAN SUITES W & X

3/16" = 1'-0"

GENERAL NOTES:

A. REFER TO SHEET J-E001 FOR GENERAL NOTES, LEGEND AND ABBREVIATIONS.

B. ALL RECEPTACLES SHOWN ON AS CIRCUITED TO A PANEL CONNECTED TO THE GENERATOR SHALL BE PROVIDED WITH RED COVER PLATES.

SHEET KEYED NOTES:

1. PROVIDE #350 KCMIL TELECOM BONDING BACKBONE CONDUCTOR TO MAIN TELECOM GROUNDING BAR IN SERVERS ROOM S121. PROVIDE #4 AWG GROUND CONDUCTOR TO NEAREST BUILDING STEEL.
2. GARBAGE DISPOSAL AND ASSOCIATED TOGGLE SWITCH. SWITCH SHALL BE INSTALLED ABOVE COUNTER.
3. JUNCTION BOX FOR NEW PERMIT/WORKSTATION DESK. COORDINATE EXACT LOCATIONS WITH OWNER. COORDINATE POWER REQUIREMENTS WITH ACTUAL EQUIPMENT PROVIDED.
4. WALL MOUNTED JUNCTION BOX WITH CIRCUITS AS SHOWN TO FEED OFFICE CUBICLES.
5. CONFIGURATION OF RECEPTACLES IN OFFICE CUBICLES TO BE COORDINATED WITH OWNER.
6. RECEPTACLE MOUNTED 6'-0" A.F.F. FOR CONDENSATE PUMP.
7. PROVISION FOR EXHAUST HOOD EH-2-03 CONTROL DAMPER, MOUNTED ON ROOF.
8. PROVISION FOR EXHAUST HOOD EH-29-01 AND INTAKE HOOD IH-29-01 CONTROL DAMPERS, MOUNTED ON ROOF.
9. 1" CONDUIT TO ARM GATE. REFER TO CIVIL DRAWING J-C203.
10. RECEPTACLE TO SERVE BUILDING AUTOMATION SYSTEM PANELS. EXACT LOCATION TO BE COORDINATED IN THE FIELD.

KEY PLAN

Scale: 3/16 INCH = 1 FOOT

SOUTH CAROLINA PROFESSIONAL ENGINEER No. 29760 01/27/2020

SOUTH CAROLINA JACOBS ENGINEERING GROUP, INC. No. C00316 CERTIFICATE OF AUTHORIZATION

© JACOBS 2019. ALL RIGHTS RESERVED.
THIS DOCUMENT AND THE IDEAS AND DESIGNS INCORPORATED ON IT ARE, AS AN INSTRUMENT OF PROFESSIONAL SERVICE, IS THE PROPERTY OF JACOBS AND IS NOT TO BE USED, IN PART OR IN WHOLE OR IN PART, FOR ANY PURPOSE OTHER THAN THE SPECIFIC PROJECT FOR WHICH IT WAS PREPARED WITHOUT THE WRITTEN CONSENT OF JACOBS.

NO.	DATE	DSGN	DR	CHK	APVD	BY	REVISION
0	01/27/20	R. VALENTIN	D. RIOS	M. BOURGOIS	M. BURN		ISSUED FOR CONSTRUCTION

BERKELEY COUNTY ADMINISTRATION COMPLEX RENOVATIONS
1003 N. US HIGHWAY 52, MONCKS CORNER, SC 29461
BERKELEY COUNTY GOVERNMENT - RFP# 32408-01-17/18

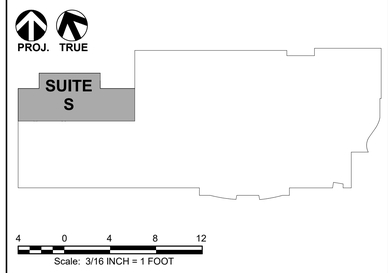
JACOBS®
1041 East Butler Road Greenville, South Carolina 29607-3725
Tel: 864-676-4000 Fax: 864-676-4020

ELECTRICAL POWER PLAN SUITES W & X

As indicated
VERIFY SCALE
BAR IS ONE INCH ON ORIGINAL DRAWING.
0 1"

DATE	
PROJ	1547
DWG	J-E106
SHEET	of

KEY PLAN

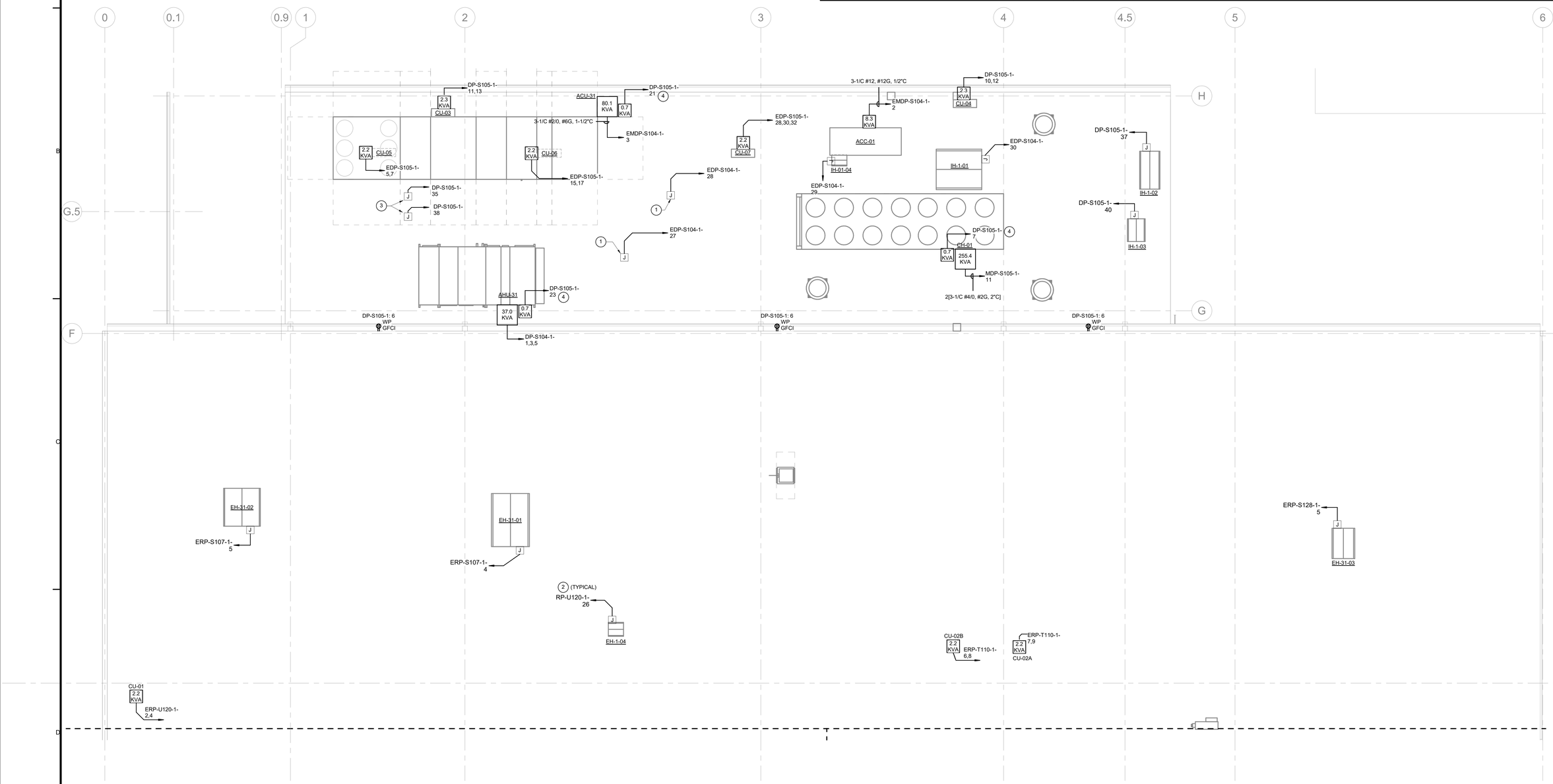


SHEET KEYED NOTES:

1. POWER PROVISION FOR SMOKE DAMPER.
2. POWER PROVISION FOR INTAKE HOODS AND EXHAUST HOODS CONTROL DAMPERS (TYPICAL).
3. POWER PROVISION FOR EXTERIOR PIPING HEAT TRACING. HEAT TRACING SYSTEM BY OTHERS. EACH SYSTEM WILL BE A SINGLE POINT OF ELECTRICAL CONNECTION.
4. 120V CIRCUIT FOR OUTLETS INCLUDED WITH CHILLER AND AIR HANDLING UNITS.

GENERAL NOTES:

A. REFER TO SHEET J-E001 FOR GENERAL NOTES, LEGEND AND ABBREVIATIONS.



A1 POWER ROOF PLAN SUITE S

3/16" = 1'-0"

SOUTH CAROLINA PROFESSIONAL ENGINEER No. 29760 01/27/2020

© JACOBS 2019. ALL RIGHTS RESERVED.

SOUTH CAROLINA CERTIFICATE OF AUTHORIZATION JACOBS ENGINEERING GROUP, INC. No. C00316

THIS DOCUMENT AND THE IDEAS AND DESIGNS INCORPORATED IN IT ARE, AS AN INSTRUMENT OF PROFESSIONAL SERVICE, IS THE PROPERTY OF JACOBS AND IS NOT TO BE USED, IN PART OR WHOLE, FOR ANY PURPOSE WITHOUT THE WRITTEN AUTHORIZATION OF JACOBS.

NO.	DATE	REVISION	BY	APVD
0	01/27/20	ISSUED FOR CONSTRUCTION	M. BURN	M. POURCHOT

DSGN R. VALENTIN DR D. RIOS CHK

JACOBS®
101 Eisa Baker Road Greenville, South Carolina 29607-2372
T+1 864.676.6000 F+1 864.676.6020

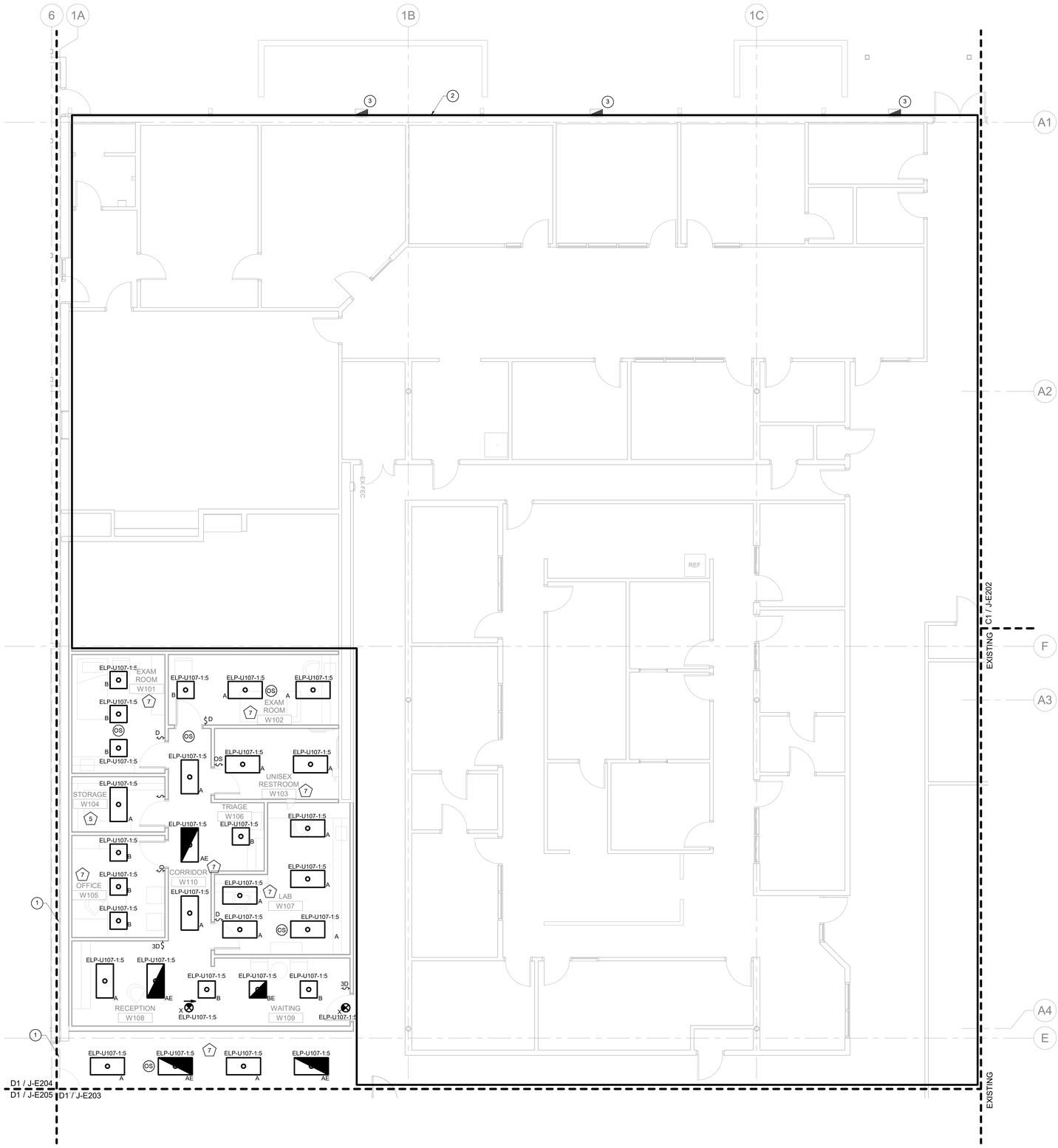
BERKELEY COUNTY ADMINISTRATION COMPLEX RENOVATIONS
1003 N. US HIGHWAY 52, MONCKS CORNER, SC, 29461
BERKELEY COUNTY GOVERNMENT - RFP# 32406-01-17/18

ELECTRICAL
ROOF POWER PLAN
SUITE S

As indicated
VERIFY SCALE
BAR IS ONE INCH ON ORIGINAL DRAWING.
0 1"

DATE
PROJ 1547
DWG J-E110
SHEET of

FILEPATH: C:_Revit_Local_Models\2020\16FFRU01-E-ZSMEN001_diane.riosEZM7N.rvt
FILENAME:
PLOT DATE/TIME: 1/27/2020 4:12:09 PM



D1 **LIGHTING PLAN SUITES A & C**

3/16" = 1'-0"

GENERAL NOTES:

A. REFER TO SHEET J-E001 FOR GENERAL NOTES, LEGEND AND ABBREVIATIONS.

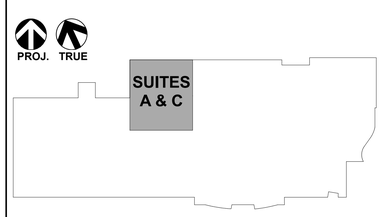
B. REFER TO SHEET J-E002 FOR LIGHTING FIXTURE SCHEDULE.

C. REFER TO SHEET J-GBA-E002 FOR LIGHTING CONTROL SCHEME SCHEDULE.

(#) SHEET KEYED NOTES:

1. WHEN CONDUIT PENETRATES 3-HOUR FIRE RATED WALL CONTRACTOR TO DETERMINE AND PROVIDE APPROVE PENETRATIONS EQUAL TO SYSTEMS NO. C-AJ-2003, C-AJ-1066 OR C-AJ-8041 AS MANUFACTURED BY 3M.
2. FOR SCOPE OF WORK IN THIS AREA REFER TO DRAWING J-GBA-E201.
3. REFER TO GBA DRAWING E107 FOR DETAILS ON THESE LIGHT FIXTURES.

KEY PLAN



4 0 4 8 12

Scale: 3/16 INCH = 1 FOOT

SOUTH CAROLINA PROFESSIONAL ENGINEER No. 29760 01/27/2020

SOUTH CAROLINA CERTIFICATE OF AUTHORIZATION JACOBS ENGINEERING GROUP, INC. No. C00316

© JACOBS 2019. ALL RIGHTS RESERVED.
THIS DOCUMENT AND THE IDEAS AND DESIGNS INCORPORATED IN IT, ARE AN INSTRUMENT OF PROFESSIONAL SERVICE, IS THE PROPERTY OF JACOBS AND IS NOT TO BE USED, IN PART OR IN WHOLE, FOR ANY PURPOSE OTHER THAN THE SPECIFIC PROJECT FOR WHICH IT WAS PREPARED AND DELIVERED. REUSE OF DOCUMENTS WITHOUT THE WRITTEN CONSENT OF JACOBS SHALL BE AT THE USER'S SOLE RISK AND WITHOUT LIABILITY OR LEGAL EXPOSURE TO JACOBS. ALL CLAIMS ARISING FROM THE UNAUTHORIZED REUSE OF THESE DOCUMENTS SHALL BE AGAINST AND BORNE BY THE USER.

NO.	DATE	REVISION	CHK
0	01/27/20	ISSUED FOR CONSTRUCTION	M. BURN

DSGN R. VALENTIN DR D. ONG CHK M. BURN APVD BY APVD

JACOBS
1041 East Butler Road Greenville, South Carolina 29607-2570
Tel. 864.676.6000 Fax. 864.676.6001

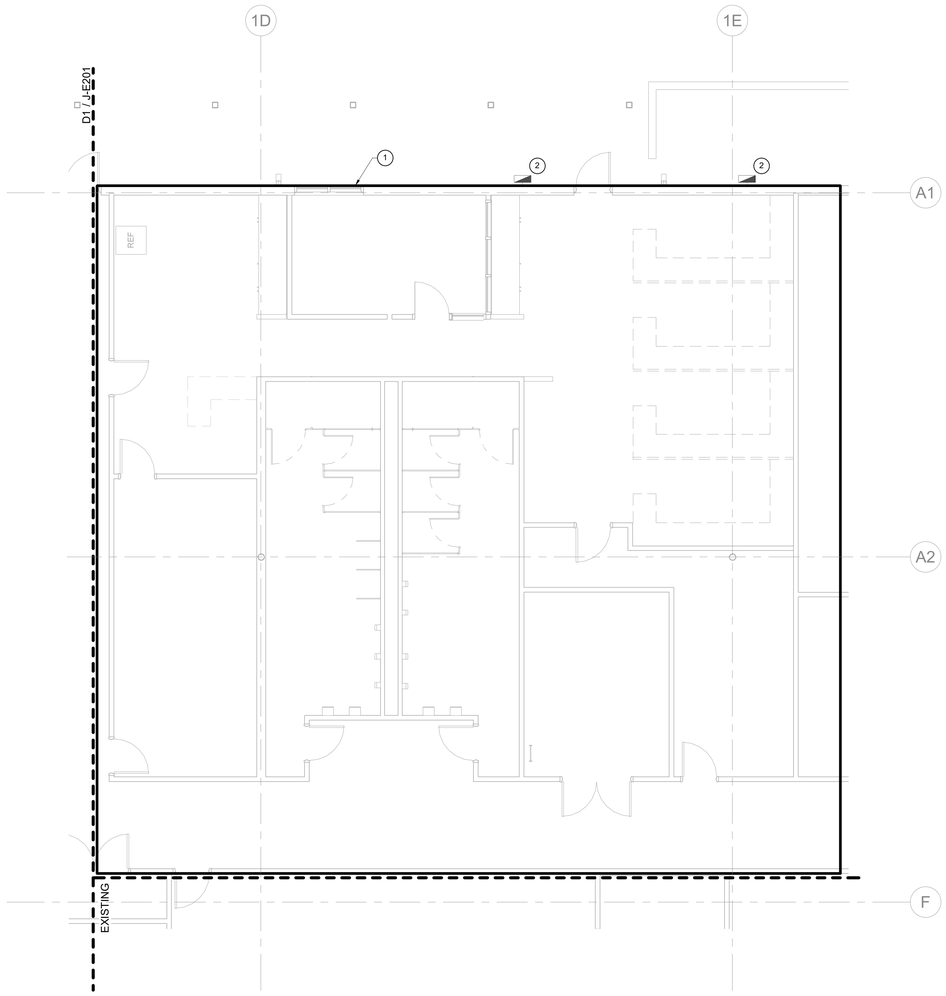
BERKELEY COUNTY ADMINISTRATION COMPLEX RENOVATIONS
1003 N. US HIGHWAY 52, MONCKS CORNER, SC, 29461
BERKELEY COUNTY GOVERNMENT - RFP# 32408-01-17/18

ELECTRICAL LIGHTING PLAN SUITES A & C

As indicated
VERIFY SCALE
BAR IS ONE INCH ON ORIGINAL DRAWING.
0" 1"

DATE
PROJ 1547
DWG J-E201
SHEET of

FILEPATH: C:_Revit_Local_Models\2020\16FFRU01-E-ZSMEN001_diane.riosEZM7N.rvt
FILENAME:
PLOT DATE/TIME: 1/27/2020 4:12:18 PM



C1 **LIGHTING PLAN SUITE B**
3/16" = 1'-0"

GENERAL NOTES:

A. REFER TO SHEET J-E001 FOR GENERAL NOTES, LEGEND AND ABBREVIATIONS.

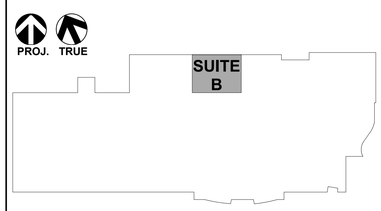
B. REFER TO SHEET J-E002 FOR LIGHTING FIXTURE SCHEDULE.

C. REFER TO SHEET J-GBA-E002 FOR LIGHTING CONTROL SCHEME SCHEDULE.

(#) SHEET KEYED NOTES:

1. FOR SCOPE OF WORK IN THIS AREA REFER TO GBA DRAWING E202.
2. REFER TO DRAWING J-GBA-E107 FOR DETAILS ON THESE LIGHT FIXTURES.

KEY PLAN



Scale: 3/16 INCH = 1 FOOT

SOUTH CAROLINA PROFESSIONAL ENGINEER
No. 29760
01/27/2020

SOUTH CAROLINA
JACOBS ENGINEERING GROUP, INC.
No. C00316
CERTIFICATE OF AUTHORIZATION

© JACOBS 2019. ALL RIGHTS RESERVED.
THIS DOCUMENT AND THE IDEAS AND DESIGNS INCORPORATED IN IT, ARE AN INSTRUMENT OF PROFESSIONAL SERVICE, IS THE PROPERTY OF JACOBS AND IS NOT TO BE USED, IN PART OR IN WHOLE, OR REPRINTED WITHOUT THE WRITTEN CONSENT OF JACOBS.

NO.	DATE	DSGN	DR	CHK	APVD	BY	APVD
0	01/27/20	R. VALENTIN	D. ONG	M. BURN	M. POURCHOT		
		ISSUED FOR CONSTRUCTION					
		REVISION					

JACOBS®
1041 East Butler Road Greenville, South Carolina 29607-2315
Tel: 864.676.6000
Fax: 864.676.6020

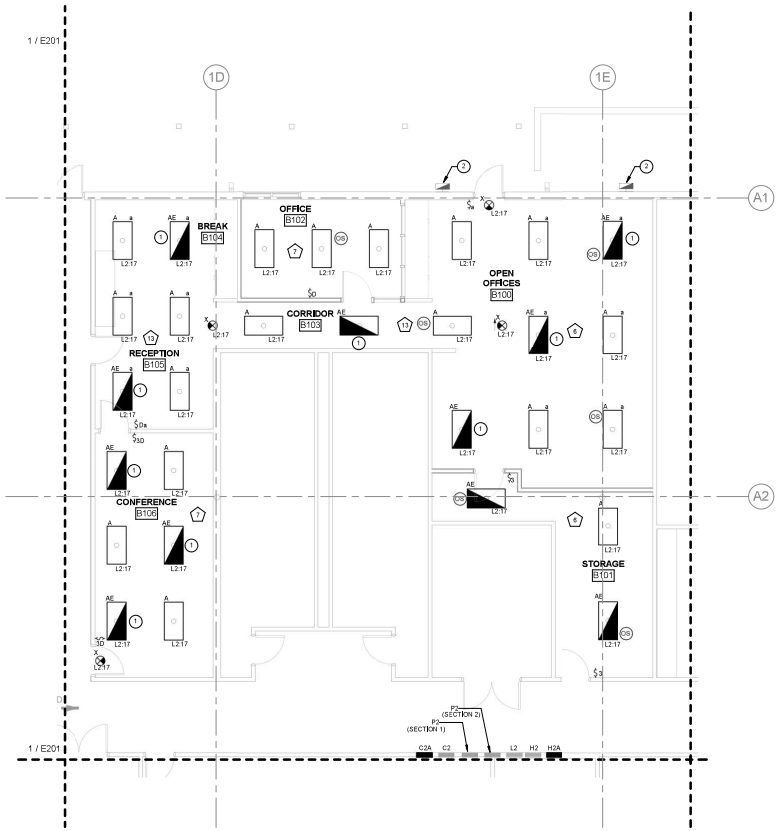
BERKELEY COUNTY ADMINISTRATION COMPLEX RENOVATIONS
1003 N. US HIGHWAY 52, MONCKS CORNER, SC, 29461
BERKELEY COUNTY GOVERNMENT - RFP# 32408-01-17718

ELECTRICAL
LIGHTING PLAN
SUITE B

As indicated
VERIFY SCALE
BAR IS ONE INCH ON ORIGINAL DRAWING.
0" 1"

DATE
PROJ 1547
DWG J-E202
SHEET of

FILEPATH: C:_Revit_Local_Models\2020\16FFRU01-E-ZSMEN001_diane.riosEZM7N.rvt
FILENAME:
PLOT DATE/TIME: 1/27/2020 4:12:22 PM



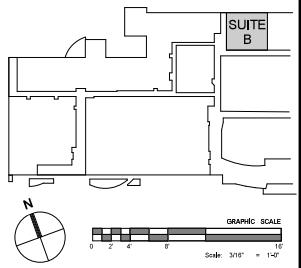
1 / E202 LIGHTING PLAN SUITE B
SCALE: 3/16" = 1'-0"

KEYNOTES

1. EMERGENCY LIGHTING FIXTURE SHALL BE PROVIDED WITH A GENERATOR TRANSFER DEVICE(GTD) AND CIRCUITED TO BOTH NORMAL AND EMERGENCY POWER, UTILIZE NORMAL POWER CIRCUIT SHOWN AND CONNECT TO EMERGENCY CIRCUIT EM-2 CURRENTLY SERVING THIS AREA. UPDATE PANEL SCHEDULES ACCORDINGLY. PROVIDE RED SWITCHCOVER PLATE (IF LOCALLY CONTROLLED AND NOT TIMECLOCK CONTROL ONLY) IN ROOM WHERE SWITCH IS SHOWN. THESE FIXTURES SHALL NOT BE PROVIDED WITH BATTERY BACK-UP.
2. REFER TO SHEET E107 FOR DETAILS ON THESE LIGHT FIXTURES.

GENERAL NOTES

KEY PLAN



GBA
GLICK BOEHM ARCHITECTURE
ARCHITECTURE PLANNING INTERIOR DESIGN
493 King Street, Suite 100 Charleston, South Carolina 29403
Tel 843.577.0207 Fax 843.722.7036 www.glickboehm.com

DWG
CONSULTING ENGINEERS
1 Exeter Commerce Center
Post Office Box 1766, Mount Pleasant, South Carolina 29465
Phone: (843) 884-7472 Fax: (843) 849-0758
www.dwgpa.com

REV. No. | DATE | DESCRIPTION

DWG P.A. CONSULTING ENGINEERS NO.C03949

BERKELEY COUNTY ADMINISTRATION COMPLEX RENOVATIONS
RFP# 32406-01-17/18
BERKELEY COUNTY GOVERNMENT
1003 N. US HIGHWAY 52, MONCKS CORNER, SC 29461

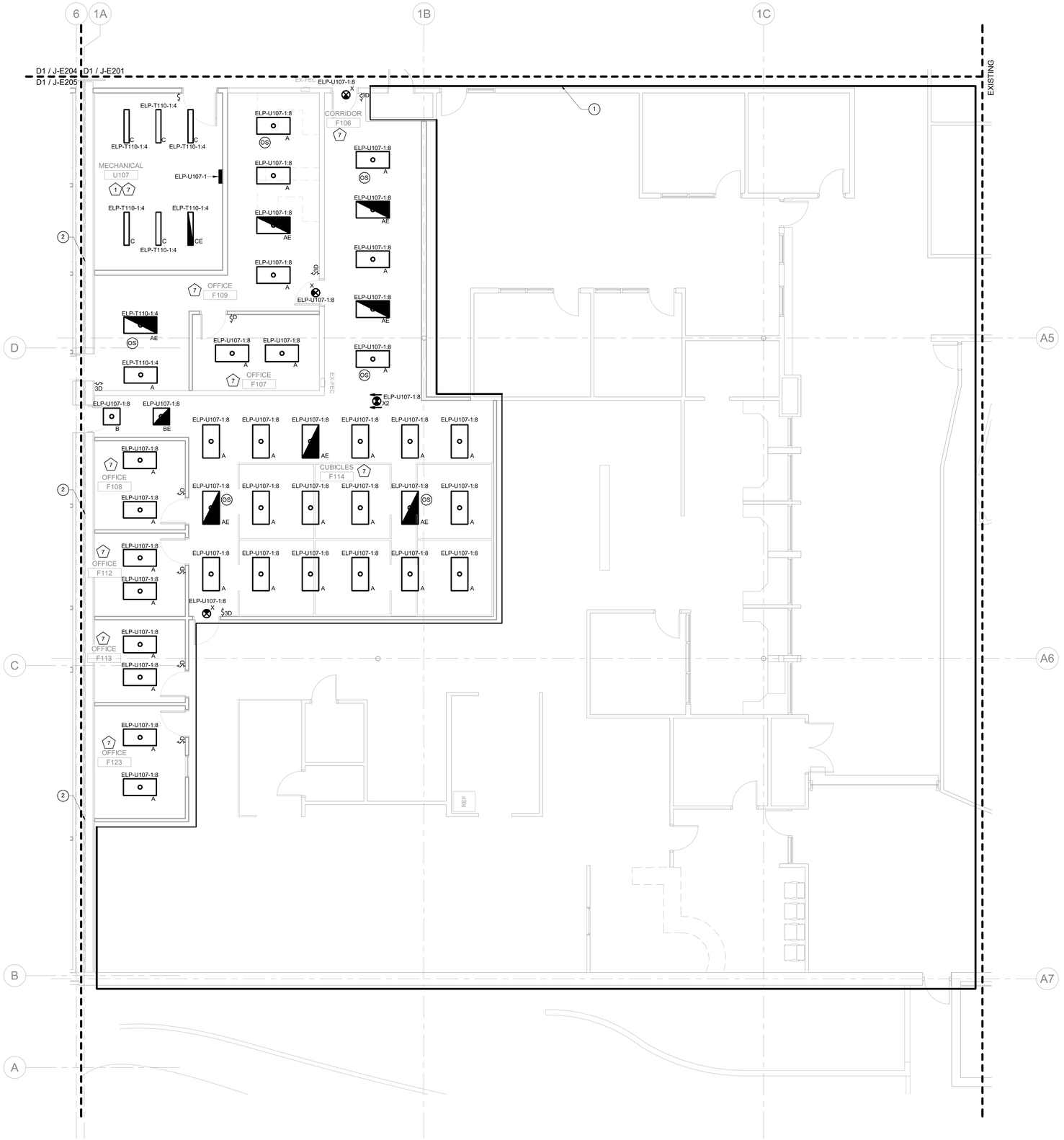
COPYRIGHT © 2017
GLICKBOEHM & ASSOCIATES, INC.

JOB NUMBER:	1547
PROJECT MGR.:	
DRAWN BY:	SPW
CHECKED BY:	BSB
APPROVED BY:	BSB
DATE ISSUED FOR:	
PROPOSALS	01/30/18

LIGHTING PLAN - SUITE B

E202

1/26/2018 6:47:56 PM
C:\Users\SWarren\Documents\18022 BERKELEY COUNTY OFFICES M1P_2015_SWarren.rvt



D1 **LIGHTING PLAN SUITES D, E & F**
-
3/16" = 1'-0"

GENERAL NOTES:

A. REFER TO SHEET J-E001 FOR GENERAL NOTES, LEGEND AND ABBREVIATIONS.

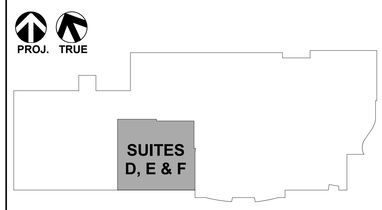
B. REFER TO SHEET J-E002 FOR LIGHTING FIXTURE SCHEDULE.

C. REFER TO SHEET J-GBA-E002 FOR LIGHTING CONTROL SCHEME SCHEDULE.

SHEET KEYED NOTES:

1. FOR SCOPE OF WORK IN THIS AREA REFER TO DRAWING J-GBA-E203.
2. WHEN CONDUIT PENETRATES 3-HOUR FIRE RATED WALL CONTRACTOR TO DETERMINE AND PROVIDE APPROVE PENETRATIONS EQUAL TO SYSTEMS NO. C-AJ-2003, C-AJ-1066 OR C-AJ-8041 AS MANUFACTURED BY 3M.

KEY PLAN



4 0 4 8 12
Scale: 3/16 INCH = 1 FOOT

SOUTH CAROLINA PROFESSIONAL ENGINEER
No. 29760
01/27/2020

SOUTH CAROLINA
JACOBS ENGINEERING GROUP, INC.
No. C00316
CERTIFICATE OF AUTHORIZATION

© JACOBS 2019. ALL RIGHTS RESERVED.
THIS DOCUMENT AND THE IDEAS AND DESIGN INCORPORATED HEREIN, AS AN INSTRUMENT OF PROFESSIONAL SERVICE, IS THE PROPERTY OF JACOBS AND IS NOT TO BE USED, IN WHOLE OR IN PART, FOR ANY PURPOSE OR PROJECT WITHOUT THE WRITTEN AUTHORIZATION OF JACOBS.

NO.	DATE	DSGN	DR	CHK	APVD
0	01/27/20	R. VALENTIN		D. ONG	M. BURN

ISSUED FOR CONSTRUCTION

REVISION BY

BERKELEY COUNTY ADMINISTRATION COMPLEX RENOVATIONS
1003 N. US HIGHWAY 52, MONCKS CORNER, SC 29461
BERKELEY COUNTY GOVERNMENT - RFP# 32408-01-17/18

JACOBS®
1041 East Butler Road Greenville, South Carolina 29607-5725
Tel 864-676-8000 Fax 864-676-8003

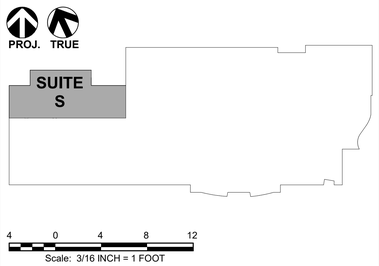
ELECTRICAL
LIGHTING PLAN
SUITES D, E & F

As indicated
VERIFY SCALE
BAR IS ONE INCH ON ORIGINAL DRAWING.
0 1"

DATE
PROJ 1547
DWG J-E203
SHEET of

FILEPATH: C:_Revit_Local_Models\2020\16FFRU01-E-ZSMEN001_diane.riosEZM7N.rvt
FILENAME:
PLOT DATE/TIME: 1/27/2020 4:12:37 PM

KEY PLAN



SHEET KEYED NOTES:

1. WHEN CONDUIT PENETRATES 3-HOUR FIRE RATED WALL CONTRACTOR TO DETERMINE AND PROVIDE APPROVE PENETRATIONS EQUAL TO SYSTEMS NO. C-AJ-2003, C-AJ-1066 OR C-AJ-8041 AS MANUFACTURED BY 3M.

GENERAL NOTES:

A. REFER TO SHEET J-E001 FOR GENERAL NOTES, LEGEND AND ABBREVIATIONS.

B. REFER TO SHEET J-E002 FOR LIGHTING FIXTURE SCHEDULE.

C. REFER TO SHEET J-GBA-E002 FOR LIGHTING CONTROL SCHEME SCHEDULE.

SOUTH CAROLINA PROFESSIONAL ENGINEER — No. 29760 — 01/27/2020

© JACOBS 2019. ALL RIGHTS RESERVED.

SOUTH CAROLINA CERTIFICATE OF AUTHORIZATION — JACOBS ENGINEERING GROUP, INC. — No. C00316

NO.	DATE	DSGN	DR
0	01/27/20	ISSUED FOR CONSTRUCTION	
	REVISION	CHK	
	BY	APVD	
	M. BURN	M. BOURGOIS	

THIS DOCUMENT AND THE IDEAS AND DESIGNS INCORPORATED HEREIN, AS AN INSTRUMENT OF PROFESSIONAL SERVICE, IS THE PROPERTY OF JACOBS AND IS NOT TO BE USED, IN PART OR WHOLE, OR REPRODUCED IN ANY FORM WITHOUT THE WRITTEN CONSENT OF JACOBS.

BERKELEY COUNTY ADMINISTRATION COMPLEX RENOVATIONS
1003 N. US HIGHWAY 52, MONCKS CORNER, SC 29461
BERKELEY COUNTY GOVERNMENT - RFP# 32406-01-17/18

JACOBS®
104 East Butler Road Greenville, South Carolina 29607-3725
Tel: 864.676.6000 Fax: 864.676.6003

ELECTRICAL LIGHTING PLAN SUITE S

As indicated	
VERIFY SCALE	
BAR IS ONE INCH ON ORIGINAL DRAWING.	
0	1"
DATE	
PROJ	1547
DWG	J-E204
SHEET	of

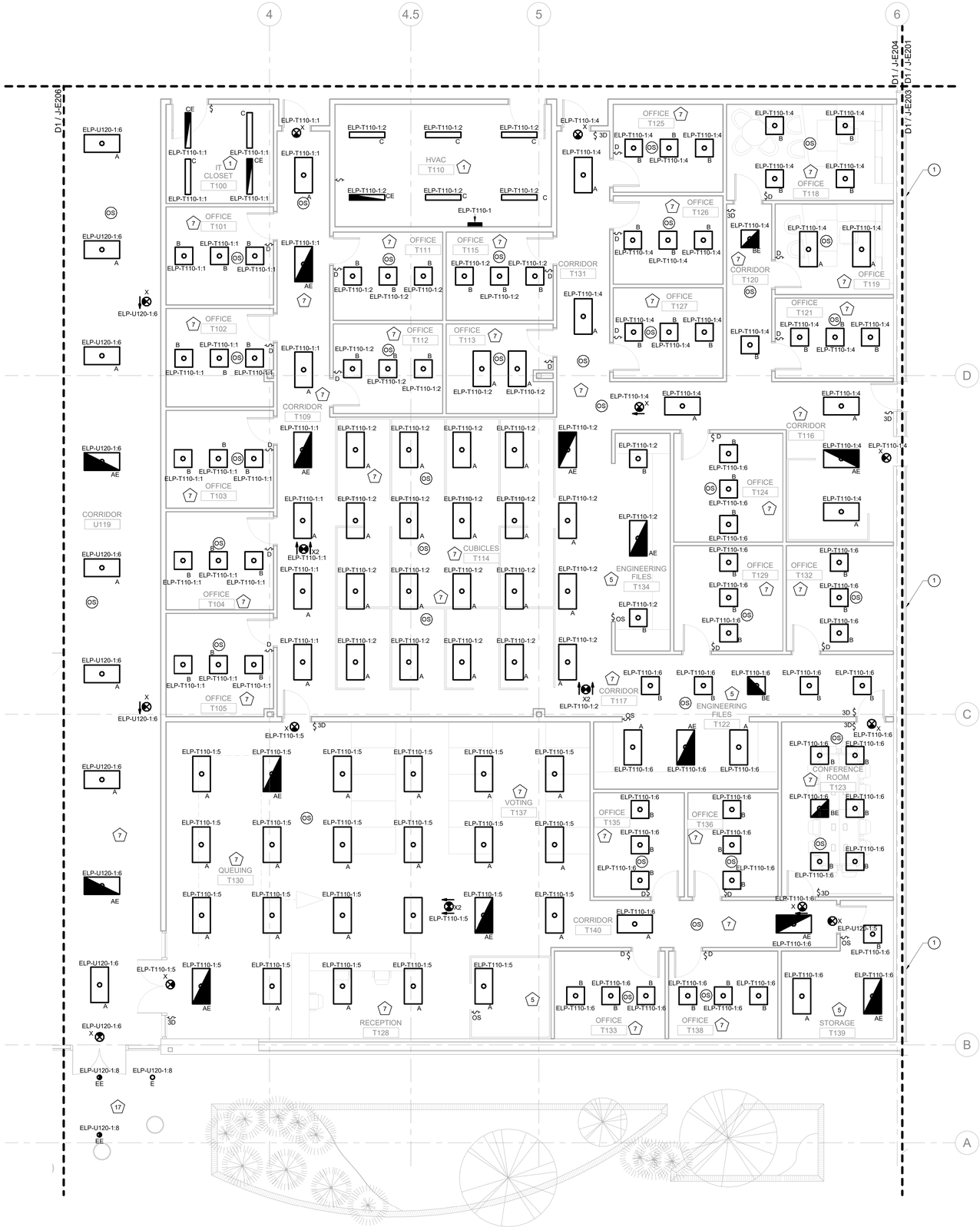
D1 LIGHTING PLAN SUITE S

3/16" = 1'-0"

FILEPATH: C:_Revit_Local_Models\2020\16FFRU01-E-ZSMEN001_diane.riosEZM7N.rvt

FILENAME:

PLOT DATE/TIME: 1/27/2020 4:13:02 PM



D1 LIGHTING PLAN SUITES T & V

3/16" = 1'-0"

GENERAL NOTES:

A. REFER TO SHEET J-E001 FOR GENERAL NOTES, LEGEND AND ABBREVIATIONS.

B. REFER TO SHEET J-E002 FOR LIGHTING FIXTURE SCHEDULE.

C. REFER TO SHEET J-GBA-E002 FOR LIGHTING CONTROL SCHEME SCHEDULE.

SHEET KEYED NOTES:

1. WHEN CONDUIT PENETRATES 3-HOUR FIRE RATED WALL CONTRACTOR TO DETERMINE AND PROVIDE APPROVE PENETRATIONS EQUAL TO SYSTEMS NO. C-AJ-2003, C-AJ-1066 OR C-AJ-8041 AS MANUFACTURED BY 3M.

KEY PLAN

4 0 4 8 12

Scale: 3/16 INCH = 1 FOOT

SOUTH CAROLINA PROFESSIONAL ENGINEER No. 29760 01/27/2020

JACOBS ENGINEERING GROUP, INC. No. C00316 CERTIFICATE OF AUTHORIZATION

© JACOBS 2019. ALL RIGHTS RESERVED.
THIS DOCUMENT AND THE IDEAS AND DESIGN INCORPORATED HEREIN, AS AN INSTRUMENT OF PROFESSIONAL SERVICE, IS THE PROPERTY OF JACOBS AND IS NOT TO BE USED IN PART OR WHOLE FOR ANY PURPOSE OTHER THAN THE SPECIFIC PROJECT FOR WHICH IT WAS PREPARED AND DELIVERED. NO USE OF THIS DOCUMENT SHALL BE MADE BY ANY PARTY AND NO REUSE SHALL BE MADE BY THE OWNER WITHOUT PRIOR WRITTEN AUTHORIZATION OF JACOBS. BY OBTAINING AND USING THIS DOCUMENT, THE USER AGREES TO THE FOREGOING AND TO INDEMNIFY AND HOLD HARMLESS JACOBS FROM ANY AND ALL CLAIMS ARISING FROM OR IN CONNECTION WITH ANY UNAUTHORIZED USE.

NO.	DATE	DSGN	DR	CHK
0	01/27/20	R. VALENTIN		D. ONG

ISSUED FOR CONSTRUCTION

REVISION	BY	APVD
	M. BURN	M.

BERKELEY COUNTY ADMINISTRATION COMPLEX RENOVATIONS
1003 N. US HIGHWAY 52, MONCKS CORNER, SC, 29461
BERKELEY COUNTY GOVERNMENT - RFP# 32406-01-17/18

JACOBS®
1041 East Butler Road Greenville, South Carolina 29607-2315
Tel: 864.676.6000 Fax: 864.676.6023

ELECTRICAL LIGHTING PLAN SUITES T & V

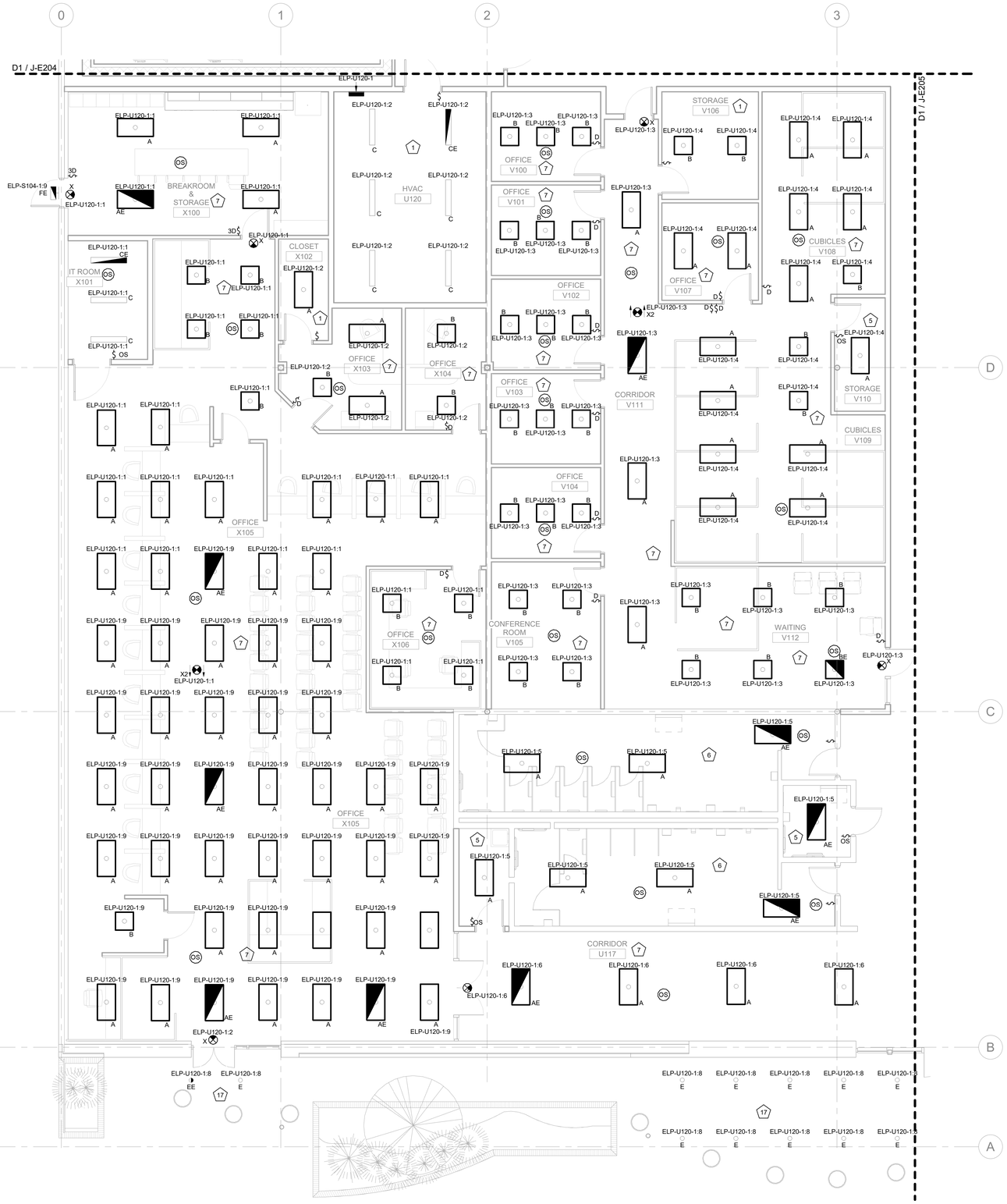
As indicated
VERIFY SCALE
BAR IS ONE INCH ON ORIGINAL DRAWING.
0" 1"

DATE	
PROJ	1547
DWG	J-E205
SHEET	of

FILEPATH: C:_Revit_Local_Models\2020\16FFRU01-E-ZSMEN001_diane.riosEZM7N.rvt

FILENAME:

PLOT DATE/TIME: 1/27/2020 4:13:24 PM



D1 LIGHTING PLAN SUITES W & X

3/16" = 1'-0"

GENERAL NOTES:

A. REFER TO SHEET J-E001 FOR GENERAL NOTES, LEGEND AND ABBREVIATIONS.

B. REFER TO SHEET J-E002 FOR LIGHTING FIXTURE SCHEDULE.

C. REFER TO SHEET J-GBA-E002 FOR LIGHTING CONTROL SCHEME SCHEDULE.

SHEET KEYED NOTES:

KEY PLAN

4 0 4 8 12

Scale: 3/16 INCH = 1 FOOT

SOUTH CAROLINA PROFESSIONAL ENGINEER No. 29760 01/27/2020

JACOBS ENGINEERING GROUP, INC. No. C00316 CERTIFICATE OF AUTHORIZATION

© JACOBS 2019. ALL RIGHTS RESERVED.
THIS DOCUMENT AND THE IDEAS AND DESIGNS INCORPORATED IN IT ARE, AS AN INSTRUMENT OF PROFESSIONAL SERVICE, THE PROPERTY OF JACOBS AND SHALL NOT BE USED IN WHOLE OR IN PART FOR ANY PURPOSE WITHOUT THE WRITTEN AUTHORIZATION OF JACOBS.

NO.	DATE	DSGN	DR	CHK	APVD	BY
0	01/27/20	R. VALENTIN	D. ONG	M. BOURGOIS	M. BURN	

ISSUED FOR CONSTRUCTION

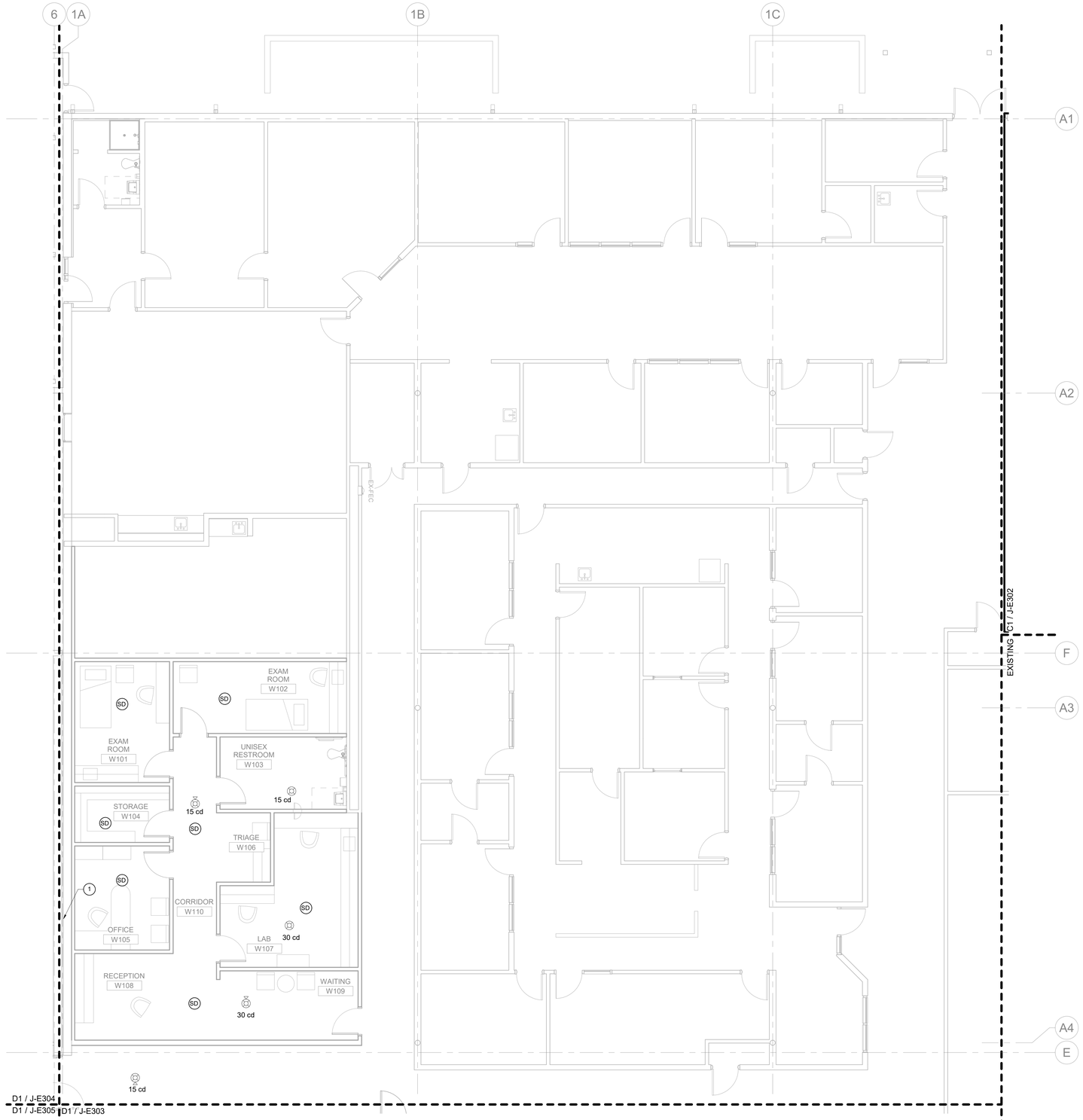
REVISION

BERKELEY COUNTY ADMINISTRATION COMPLEX RENOVATIONS
1003 N. US HIGHWAY 52, MONCKS CORNER, SC 29461
BERKELEY COUNTY GOVERNMENT - RFP# 32406-01-17/18

ELECTRICAL LIGHTING PLAN SUITES W & X

JACOBS®
1041 East Butler Road Greenville, South Carolina 29607-5725
Tel: 864-676-0000 Fax: 864-676-0023

As indicated	
VERIFY SCALE	
BAR IS ONE INCH ON ORIGINAL DRAWING.	
0 1"	
DATE	
PROJ	1547
DWG	J-E206
SHEET	of



D1 - **FIRE ALARM PLAN SUITES A & C**
3/16" = 1'-0"

GENERAL NOTES:

A. REFER TO SHEET J-E001 FOR GENERAL NOTES, LEGEND AND ABBREVIATIONS.

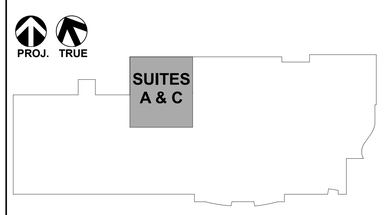
B. EXISTING FILE ALARM SYSTEM SHALL BE RE-CERTIFIED UPON COMPLETION OF WORK.

C. ALL VISUAL NOTIFICATION DEVICES TO BE 15 CANDELA UNLESS OTHERWISE NOTED.

SHEET KEYED NOTES:

1. WHEN CONDUIT PENETRATES 3-HOUR FIRE RATED WALL CONTRACTOR TO DETERMINE AND PROVIDE APPROVE PENETRATIONS EQUAL TO SYSTEMS NO. C-AJ-2003, C-AJ-1066 OR C-AJ-8041 AS MANUFACTURED BY 3M.

KEY PLAN



4 0 4 8 12
Scale: 3/16 INCH = 1 FOOT

SOUTH CAROLINA PROFESSIONAL ENGINEER No. 29760 01/27/2020

SOUTH CAROLINA CERTIFICATE OF AUTHORIZATION JACOBS ENGINEERING GROUP, INC. No. C00316

© JACOBS 2019. ALL RIGHTS RESERVED.
THIS DOCUMENT, AND THE IDEAS AND DESIGNS INCORPORATED IN IT, AS AN INSTRUMENT OF PROFESSIONAL SERVICE, IS THE PROPERTY OF JACOBS AND IS NOT TO BE USED, IN WHOLE OR IN PART, FOR ANY REUSE OF DOCUMENTS.

NO.	DATE	DSGN	DR	CHK
0	01/27/20	J. BARNES	A. BERBIN	M. BURN

ISSUED FOR CONSTRUCTION

REVISION	BY	APVD

JACOBS®
1041 East Butler Road Greenville, South Carolina 29607-2315
Tel: 864.676.6000
Fax: 864.676.6023

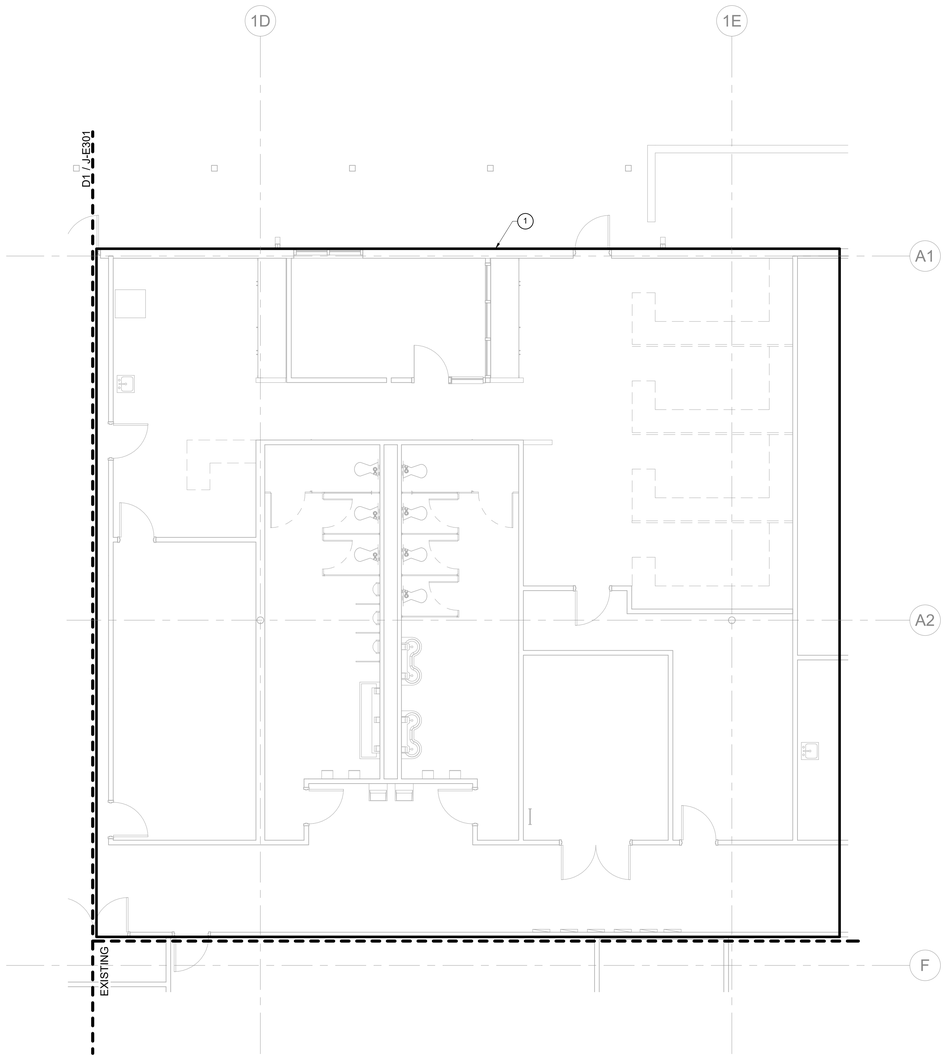
BERKELEY COUNTY ADMINISTRATION COMPLEX RENOVATIONS
1003 N. US HIGHWAY 52, MONCKS CORNER, SC, 29461
BERKELEY COUNTY GOVERNMENT - RFP# 32408-01-17/18

ELECTRICAL LIGHTING PLAN SUITES A & C

As indicated
VERIFY SCALE
BAR IS ONE INCH ON ORIGINAL DRAWING.
0" 1"

DATE	
PROJ	1547
DWG	J-E301
SHEET	of

FILEPATH: C:_Revit_Local_Models\2020\16FFRU01-E-ZSMEN001_diane.riosEZM7N.rvt
FILENAME:
PLOT DATE/TIME: 1/27/2020 4:13:51 PM



C1 FIRE ALARM PLAN SUITE B

3/16" = 1'-0"

GENERAL NOTES:

A. REFER TO SHEET J-E001 FOR GENERAL NOTES, LEGEND AND ABBREVIATIONS.

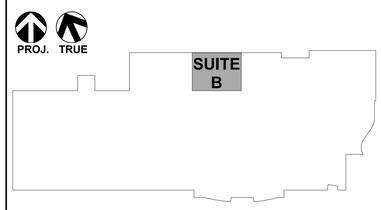
B. EXISTING FILE ALARM SYSTEM SHALL BE RE-CERTIFIED UPON COMPLETION OF WORK.

C. ALL VISUAL NOTIFICATION DEVICES TO BE 15 CANDELA UNLESS OTHERWISE NOTED.

(#) SHEET KEYED NOTES:

1. FOR SCOPE OF WORK IN THIS AREA REFER TO GBA DRAWING E302.

KEY PLAN



4 0 4 8 12

Scale: 3/16 INCH = 1 FOOT

SOUTH CAROLINA PROFESSIONAL ENGINEER No. 29760 01/27/2020

SOUTH CAROLINA CERTIFICATE OF AUTHORIZATION JACOBS ENGINEERING GROUP, INC. No. C00316

© JACOBS 2019. ALL RIGHTS RESERVED.
THIS DOCUMENT AND THE IDEAS AND DESIGNS INCORPORATED IN IT, ARE AN INSTRUMENT OF PROFESSIONAL SERVICE, IS THE PROPERTY OF JACOBS AND IS NOT TO BE USED, IN WHOLE OR IN PART, FOR ANY PURPOSE WITHOUT THE WRITTEN CONSENT OF JACOBS.
REUSE OF DOCUMENTS

NO.	DATE	DSGN	DR	CHK	APVD	BY
0	01/27/20	ISSUED FOR CONSTRUCTION				

J. BARNES | A. BERBIN | J. BARNES | M. BURN

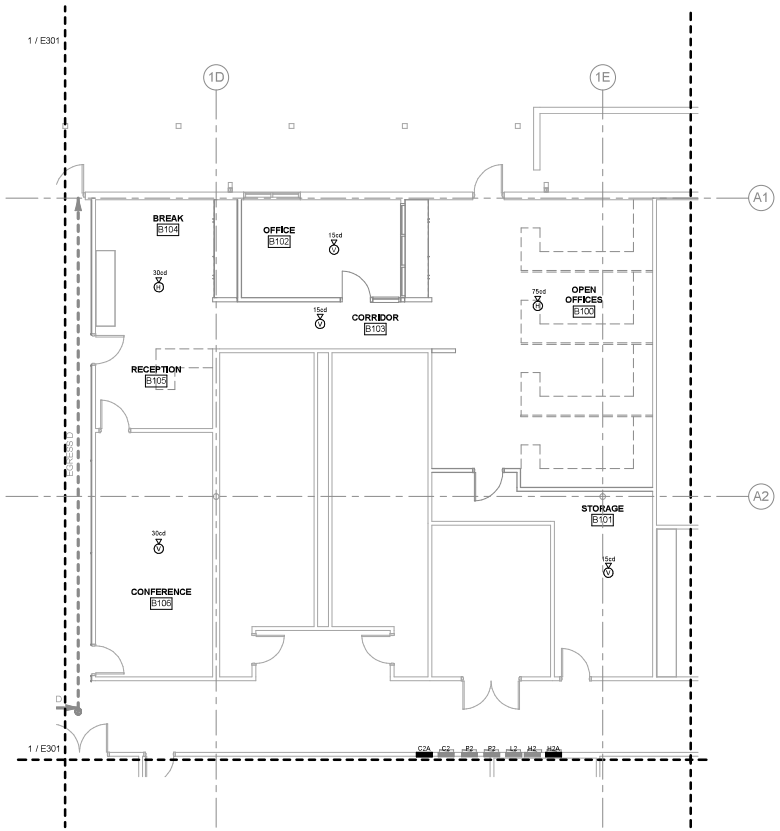
JACOBS®
1041 East Butler Road Greenville, South Carolina 29607-3725
Tel: 864-676-6000 Fax: 864-676-6023

BERKELEY COUNTY ADMINISTRATION COMPLEX RENOVATIONS
1003 N. US HIGHWAY 52, MONCKS CORNER, SC 29461
BERKELEY COUNTY GOVERNMENT - RFP#
32406-01-17/18

ELECTRICAL
FIRE ALARM
SUITE B

As indicated
VERIFY SCALE
BAR IS ONE INCH ON ORIGINAL DRAWING.
0 1"

DATE
PROJ 1547
DWG J-E302
SHEET of

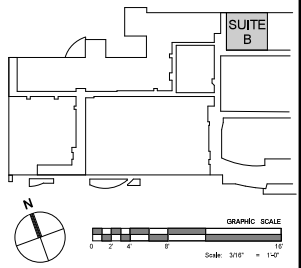


1 / E302 SYSTEMS PLAN SUITE B
SCALE: 3/16" = 1'-0"

GENERAL NOTES

1. EXISTING FIRE ALARM SYSTEM SHALL BE RECERTIFIED UPON COMPLETION OF WORK.

KEY PLAN



GLICK BOEHM ARCHITECTURE
ARCHITECTURE PLANNING INTERIOR DESIGN
493 King Street, Suite 100 Charleston, South Carolina 29403
Tel 843.577.1007 Fax 843.723.3196 www.glickboehm.com

DWG
CONSULTING ENGINEERS
1 Liberty Corporate Center, 1000 Corporate Drive, Suite 300, Mount Pleasant, SC 29464
Phone: (843) 884-7472 Fax: (843) 849-0178 www.dwgpe.com

REV. No.	DATE	DESCRIPTION

DWG P.A. CONSULTING ENGINEERS No.C03949 STATE OF SOUTH CAROLINA

REGISTERED LANDSCAPE ARCHITECT BRIANS. BAILEY 01/30/18 STATE OF SOUTH CAROLINA

BERKELEY COUNTY ADMINISTRATION COMPLEX RENOVATIONS

RFP# 32406-01-17/18
BERKELEY COUNTY GOVERNMENT
1003 N. US HIGHWAY 52, MONCKS CORNER, SC 29461

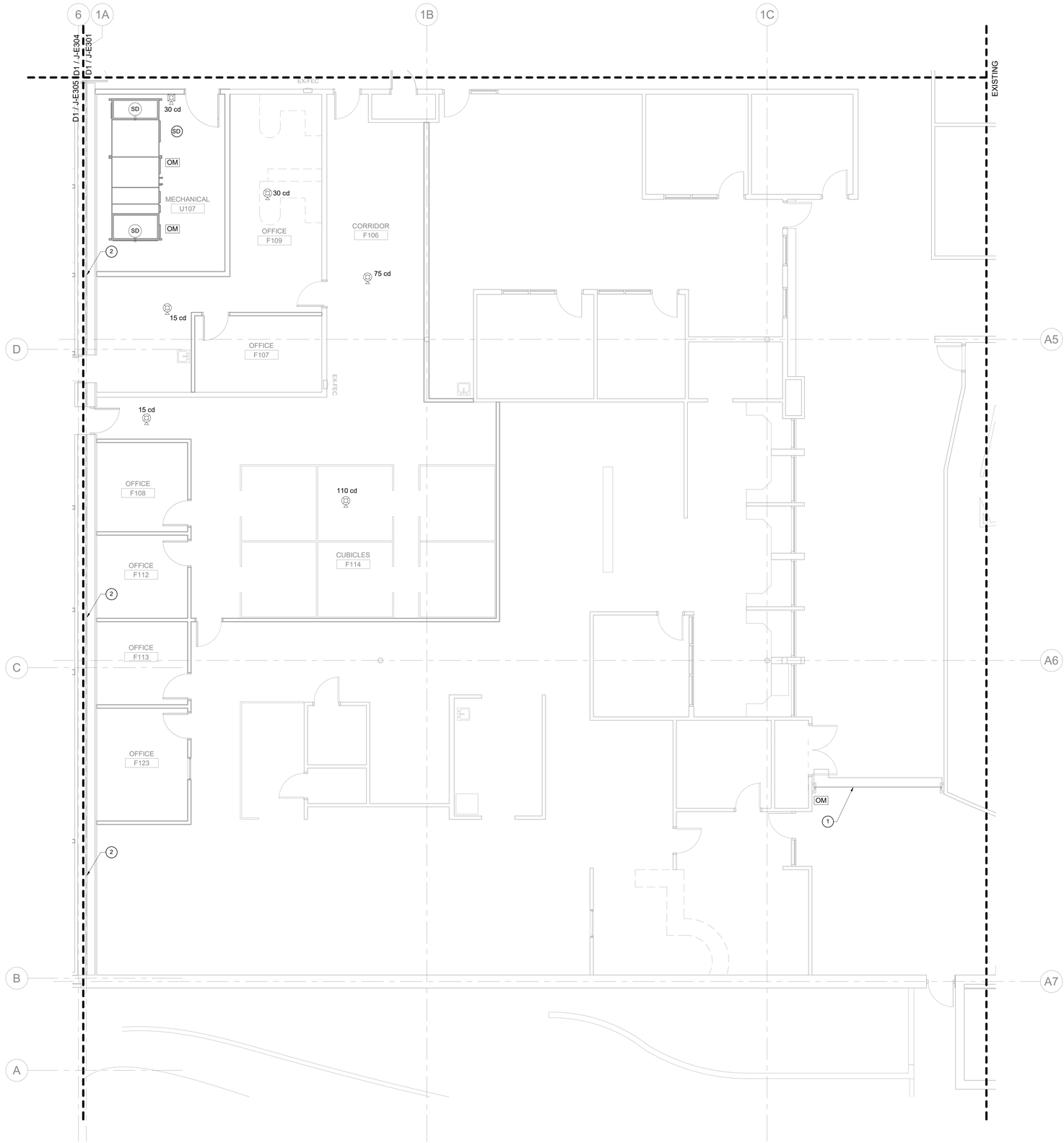
COPYRIGHT © 2017
GLICKBOEHM & ASSOCIATES, INC.

JOB NUMBER:	1547
PROJECT MGR.:	
DRAWN BY:	SPW
CHECKED BY:	BSB
APPROVED BY:	BSB
DATE ISSUED FOR:	
PROPOSALS	01/30/18

SYSTEMS PLAN
- SUITE B

E302

1/26/2018 6:48:19 PM
C:\Users\SWarren\Documents\18022 BERKELEY COUNTY OFFICES MSP_2015_SWarren.rvt



D1 FIRE ALARM PLAN D, E & F

3/16" = 1'-0"

GENERAL NOTES:

A. REFER TO SHEET J-E001 FOR GENERAL NOTES, LEGEND AND ABBREVIATIONS.

B. EXISTING FILE ALARM SYSTEM SHALL BE RE-CERTIFIED UPON COMPLETION OF WORK.

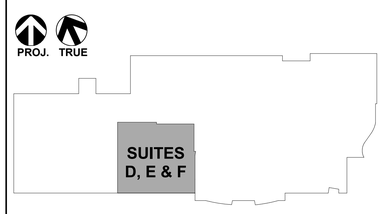
C. ALL VISUAL NOTIFICATION DEVICES TO BE 15 CANDELA UNLESS OTHERWISE NOTED.

SHEET KEYED NOTES:

1. NEW MOTORIZED SECURITY GATE TO TIE INTO FILE ALARM SYSTEM. GATE SHALL OPEN AUTOMATICALLY IN THE EVENT THAT THE FILE ALARM SYSTEM IS NOTIFIED OF AN EMERGENCY. COORDINATE WITH ACTUAL EQUIPMENT PROVIDED.

2. WHEN CONDUIT PENETRATES 3-HOUR FIRE RATED WALL CONTRACTOR TO DETERMINE AND PROVIDE APPROVED PENETRATIONS EQUAL TO SYSTEMS NO. C-AJ-2003, C-AJ-1066 OR C-AJ-8041 AS MANUFACTURED BY 3M.

KEY PLAN



4 0 4 8 12

Scale: 3/16 INCH = 1 FOOT

SOUTH CAROLINA PROFESSIONAL ENGINEER
No. 29760
01/27/2020

SOUTH CAROLINA
JACOBS ENGINEERING GROUP, INC.
No. C00316
CERTIFICATE OF AUTHORIZATION

© JACOBS 2019. ALL RIGHTS RESERVED.
THIS DOCUMENT AND THE IDEAS AND DESIGN INCORPORATED HEREIN, AS AN INSTRUMENT OF PROFESSIONAL SERVICE, IS THE PROPERTY OF JACOBS AND IS NOT TO BE USED, IN WHOLE OR IN PART, FOR ANY REUSE OF DOCUMENTS.
UNPUBLISHED WORK WITHIN THE MEANING OF THE COPYRIGHT LAWS.

NO.	DATE	DSGN	DR
0	01/27/20	ISSUED FOR CONSTRUCTION	A. BERBIN
		REVISION	CHK
		J. BARNES	APVD
		M. BURN	APVD
		BY	

BERKELEY COUNTY ADMINISTRATION COMPLEX RENOVATIONS
1003 N. US HIGHWAY 52, MONCKS CORNER, SC 29461
BERKELEY COUNTY GOVERNMENT - RFP#
32406-01-17/18

JACOBS®
1041 East Butler Road Greenville, South Carolina 29607-3725
Tel 864.676.6000 Fax 864.676.6023

ELECTRICAL
FIRE ALARM
SUITES D, E & F

As indicated
VERIFY SCALE
BAR IS ONE INCH ON ORIGINAL DRAWING.
0 1"

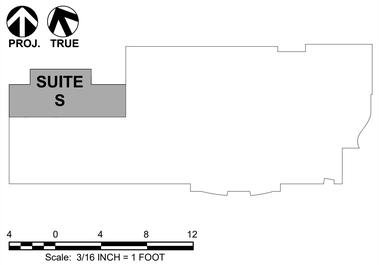
DATE	
PROJ	1547
DWG	J-E303
SHEET	of

FILEPATH: C:_Revit_Local_Models\2020\16FFRU01-E-ZSMEN001_diane.riosEZM7N.rvt

FILENAME:

PLOT DATE/TIME: 1/27/2020 4:13:54 PM

KEY PLAN



SHEET KEYED NOTES:

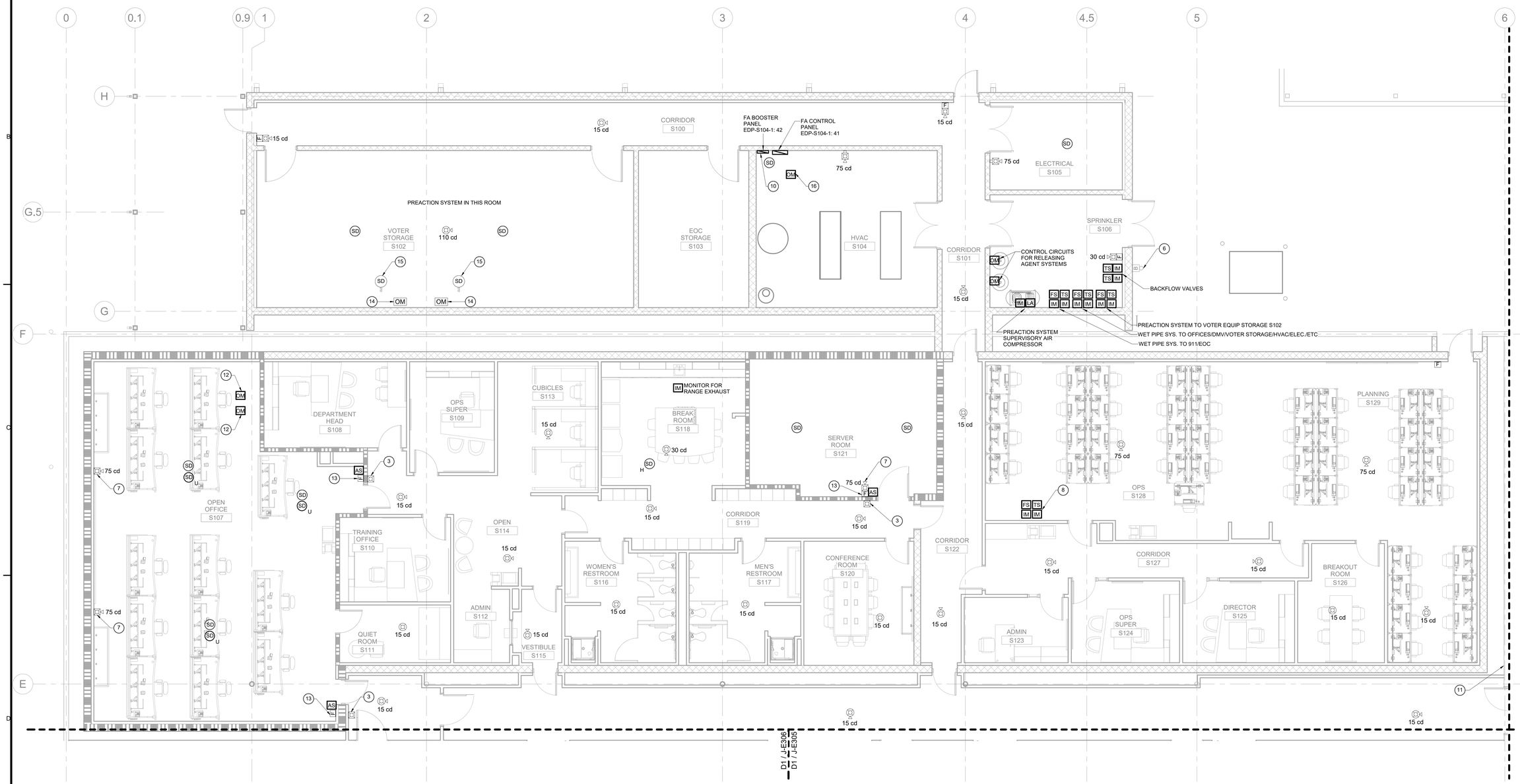
1. 911 CENTER ANNUNCIATOR PANEL SEMI-FLUSH MOUNT.
2. FIRE ALARM CONTROL PANEL TO RECEIVE 120V POWER FROM ELECTRICAL PANEL EDP-S104-1 CIRCUIT #41.
3. WALL MOUNTED VISUAL NOTIFICATION WITH LABEL "AGENT" FOR CLEAN AGENT SYSTEM.
4. NOT USED.
5. NOT USED
6. 6" ELECTRIC FIRE ALARM BELL MOUNTED AT 96" AFF.
7. WALL MOUNTED HORN/VISUAL NOTIFICATION WITH LABEL "AGENT" FOR CLEAN-AGENT SYSTEM.
8. FLOW AND TAMPER MONITORING FOR SUBFLOOR SPRINKLER SYSTEM.
9. NOT USED
10. PAD 5 NAC TO BE USED FOR SOLENOID CONTROL OF ROOMS S102, S107, AND S121 CLEAN AGENT SYSTEMS.
11. WHEN CONDUIT PENETRATES 3-HOUR FIRE RATED WALL CONTRACTOR TO DETERMINE AND PROVIDE APPROVED PENETRATIONS EQUAL TO SYSTEMS NO. C-AJ-2003, C-AJ-1066 OR C-AJ-8041 AS MANUFACTURED BY 3M.
12. HVAC SUPPLY AND RETURN DAMPER CONTROL RELAYS APPROXIMATE LOCATIONS. SEE HVAC DRAWING NUMBER J-M104.
13. AGENT MANUAL PULL STATIONS
14. MOUNT OUTPUT MODULES ABOVE CEILING GRID FOR HVAC SHUTDOWN
15. MOUNT DUCT DETECTORS INSIDE AND BELOW HVAC UNIT ON ROOF.
16. OUTSIDE AIR INTAKE CONTROL POINT FOR SERVER ROOM

GENERAL NOTES:

A. REFER TO SHEET J-E001 FOR GENERAL NOTES, LEGEND AND ABBREVIATIONS

B. ALL VISUAL NOTIFICATION DEVICES TO BE 15 CANDELA UNLESS OTHERWISE NOTED.

C. ALL FIRE ALARM DEVICES IN SUITE S SHALL BE ON A DEDICATED FIRE ALARM BOOSTER PANEL.



D1 **FIRE ALARM PLAN SUITE S**
3/16" = 1'-0"

SOUTH CAROLINA PROFESSIONAL ENGINEER No. 29760 01/27/2020

SOUTH CAROLINA CERTIFICATE OF AUTHORIZATION JACOBS ENGINEERING GROUP, INC. No. C00316

© JACOBS 2019. ALL RIGHTS RESERVED.
THIS DOCUMENT AND THE IDEAS AND DESIGNS INCORPORATED IN IT ARE, AS AN INSTRUMENT OF PROFESSIONAL SERVICE, IS THE PROPERTY OF JACOBS AND IS NOT TO BE USED, IN PART OR WHOLE, FOR ANY PURPOSE WITHOUT THE WRITTEN CONSENT OF JACOBS.

NO.	DATE	DSGN
0	01/27/20	ISSUED FOR CONSTRUCTION	DR

BY	CHK
M. BURN	A. BERBIN
APVD	APVD
J. BARNES	J. BARNES

JACOBS
1041 East Butler Road Greenville, South Carolina 29607-3725
Tel: 864-676-6000
Fax: 864-676-6003

BERKELEY COUNTY ADMINISTRATION COMPLEX RENOVATIONS
1003 N. US HIGHWAY 52, MONCKS CORNER, SC 29461
BERKELEY COUNTY GOVERNMENT - RFP# 32408-01-17/18

ELECTRICAL
FIRE ALARM
SUITE S

As indicated
VERIFY SCALE
BAR IS ONE INCH ON ORIGINAL DRAWING.
0 1"

DATE	
PROJ	1547
DWG	J-E304
SHEET	of

FILEPATH: C:_Revit_Local_Models\2020\16FFRU01-E-ZSMEN001_diane.riosEZM7N.rvt
FILENAME:
PLOT DATE/TIME: 1/27/2020 4:13:58 PM

GENERAL NOTES:

A. REFER TO SHEET J-E001 FOR GENERAL NOTES, LEGEND AND ABBREVIATIONS.

B. EXISTING FILE ALARM SYSTEM SHALL BE RE-CERTIFIED UPON COMPLETION OF WORK.

C. ALL VISUAL NOTIFICATION DEVICES TO BE 15 CANDELA UNLESS OTHERWISE NOTED.

(#) SHEET KEYED NOTES:

1. WHEN CONDUIT PENETRATES 3-HOUR FIRE RATED WALL CONTRACTOR TO DETERMINE AND PROVIDE APPROVED PENETRATIONS EQUAL TO SYSTEMS NO. C-AJ-2003, C-AJ-1066 OR C-AJ-8041 AS MANUFACTURED BY 3M.

KEY PLAN

D1 FIRE ALARM PLAN SUITES T & V

3/16" = 1'-0"

SOUTH CAROLINA PROFESSIONAL ENGINEER
No. 29760
01/27/2020

SOUTH CAROLINA CERTIFICATE OF AUTHORIZATION
JACOBS ENGINEERING GROUP, INC.
No. C00316

© JACOBS 2019. ALL RIGHTS RESERVED.
THIS DOCUMENT AND THE IDEAS AND DESIGNS INCORPORATED IN IT ARE, AS AN INSTRUMENT OF PROFESSIONAL SERVICE, THE PROPERTY OF JACOBS AND IS NOT TO BE USED, IN WHOLE OR IN PART, FOR ANY PURPOSE OTHER THAN THE SPECIFIC PROJECT FOR WHICH IT WAS PREPARED AND DELIVERED. REUSE OF DOCUMENTS.

NO.	DATE	REVISION	BY	APVD
0	01/27/20	ISSUED FOR CONSTRUCTION	M. BURN	

DSGN J. BARNES DR A. BERBIN CHK J. BARNES APVD

BERKELEY COUNTY ADMINISTRATION COMPLEX RENOVATIONS
1003 N. US HIGHWAY 52, MONCKS CORNER, SC, 29461
BERKELEY COUNTY GOVERNMENT - RFP#
32408-01-17/18

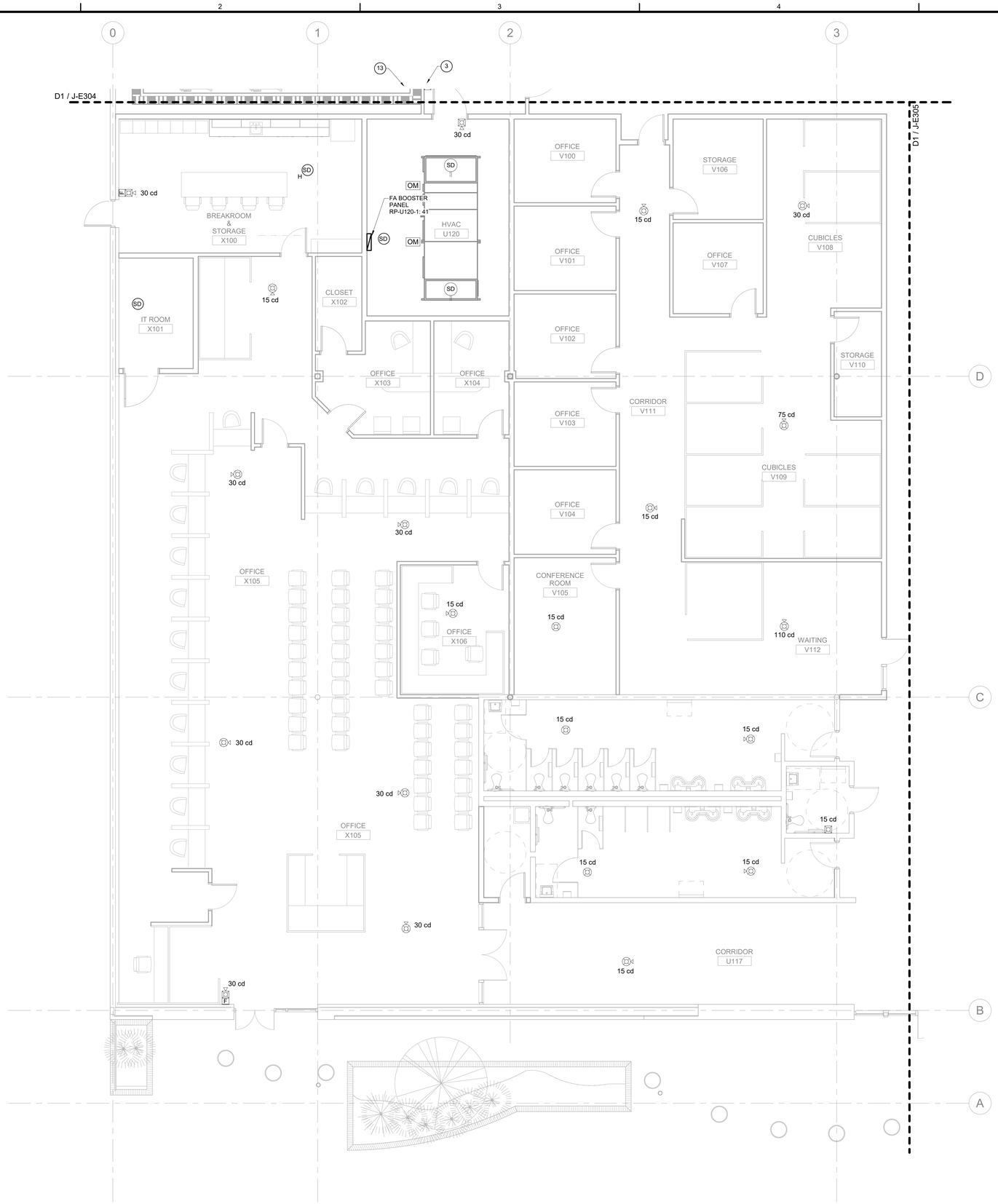
ELECTRICAL
FIRE ALARM
SUITES T & V

JACOBS
1041 East Butler Road Greenville, South Carolina 29607-2570
Tel. 864.676.6000
Fax. 864.676.6001

As indicated
VERIFY SCALE
BAR IS ONE INCH ON ORIGINAL DRAWING.
0 1"

DATE
PROJ 1547
DWG J-E305
SHEET of

FILEPATH: C:_Revit_Local_Models\2020\16FFRU01-E-ZSMEN001_diane.riosEZM7N.rvt
FILENAME:
PLOT DATE/TIME: 1/27/2020 4:14:00 PM



D1 FIRE ALARM PLAN SUITES W & X

3/16" = 1'-0"

GENERAL NOTES:

A. REFER TO SHEET J-E001 FOR GENERAL NOTES, LEGEND AND ABBREVIATIONS.

B. EXISTING FILE ALARM SYSTEM SHALL BE RE-CERTIFIED UPON COMPLETION OF WORK.

C. ALL VISUAL NOTIFICATION DEVICES TO BE 15 CANDELA UNLESS OTHERWISE NOTED.

SHEET KEYED NOTES:

KEY PLAN

4 0 4 8 12

Scale: 3/16 INCH = 1 FOOT

SOUTH CAROLINA PROFESSIONAL ENGINEER No. 29760 01/27/2020

© JACOBS 2019. ALL RIGHTS RESERVED.

SOUTH CAROLINA CERTIFICATE OF AUTHORIZATION JACOBS ENGINEERING GROUP, INC. No. C00316

THIS DOCUMENT AND THE IDEAS AND DESIGNS INCORPORATED HEREIN, AS AN INSTRUMENT OF PROFESSIONAL SERVICE, IS THE PROPERTY OF JACOBS AND IS NOT TO BE USED IN WHOLE OR IN PART FOR ANY PURPOSE WITHOUT THE WRITTEN CONSENT OF JACOBS.

NO.	DATE	DSGN	DR	CHK	APVD	BY
0	01/27/20	J. BARNES		A. BERBIN	J. BARNES	M. BURN

ISSUED FOR CONSTRUCTION

REVISION

REUSE OF DOCUMENTS

JACOBS®
104 Carl Bailey Road Greenville, South Carolina 29607-2725
Tel. 864.676.6000 Fax. 864.676.6020

BERKELEY COUNTY ADMINISTRATION COMPLEX RENOVATIONS
1003 N. US HIGHWAY 52, MONCKS CORNER, SC 29461
BERKELEY COUNTY GOVERNMENT - RFP# 32408-01-17/18

ELECTRICAL
FIRE ALARM
SUITES W & X

As indicated

VERIFY SCALE

BAR IS ONE INCH ON ORIGINAL DRAWING.

0 1"

DATE	
PROJ	1547
DWG	J-E306
SHEET	of

FILEPATH: C:_Revit_Local_Models\2020\16FFRU01-E-ZSMEN001_diane.riosEZM7N.rvt

FILENAME:

PLOT DATE/TIME: 1/27/2020 4:14:03 PM

A1 - **ELECTRICAL SITE PLAN**
1" = 40'-0"

GENERAL NOTES:

A. REFER TO SHEET J-E001 FOR GENERAL NOTES, LEGEND AND ABBREVIATIONS.

SHEET KEYED NOTES:

1. NEW SITE LIGHTING FIXTURE. EQUAL TO GULLWING MODEL G18-1-Q-400MH-277-BRP-PCR, MOUNTED IN 28' ALUMINUM, ROUND TAPERED POLE. BRONZE FINISH. PROVIDE 3'-0" CONCRETE BASE (SEE DETAIL D3 IN DRAWING J-E502).

2. CONNECT TO EXISTING SITE LIGHTING CIRCUIT. CAPACITY OF EXISTING LIGHTING CIRCUIT TO BE CONFIRMED WITH OWNER.

SOUTH CAROLINA PROFESSIONAL ENGINEER
No. 29760
01/27/2020

SOUTH CAROLINA
JACOBS ENGINEERING GROUP, INC.
No. C00316
CERTIFICATE OF AUTHORIZATION

© JACOBS 2019. ALL RIGHTS RESERVED.
THIS DOCUMENT AND THE IDEAS AND DESIGNS INCORPORATED OR INDICATED HEREIN, AS AN INSTRUMENT OF PROFESSIONAL SERVICE, IS THE PROPERTY OF JACOBS AND IS NOT TO BE USED, IN WHOLE OR IN PART, FOR ANY PURPOSE OTHER THAN THE SPECIFIC PROJECT FOR WHICH IT WAS PREPARED BY JACOBS. ANY REUSE OF PROHIBITED.

NO.	DATE	REVISION	CHK	BY	APVD
0	01/27/20	ISSUED FOR CONSTRUCTION	D. RIOS	M. BURN	M. POURCHOT

DSGN R. VALENTIN DR

JACOBS
134 East Butler Road Greenville, South Carolina 29607-3725
Tel: 864.676.6000

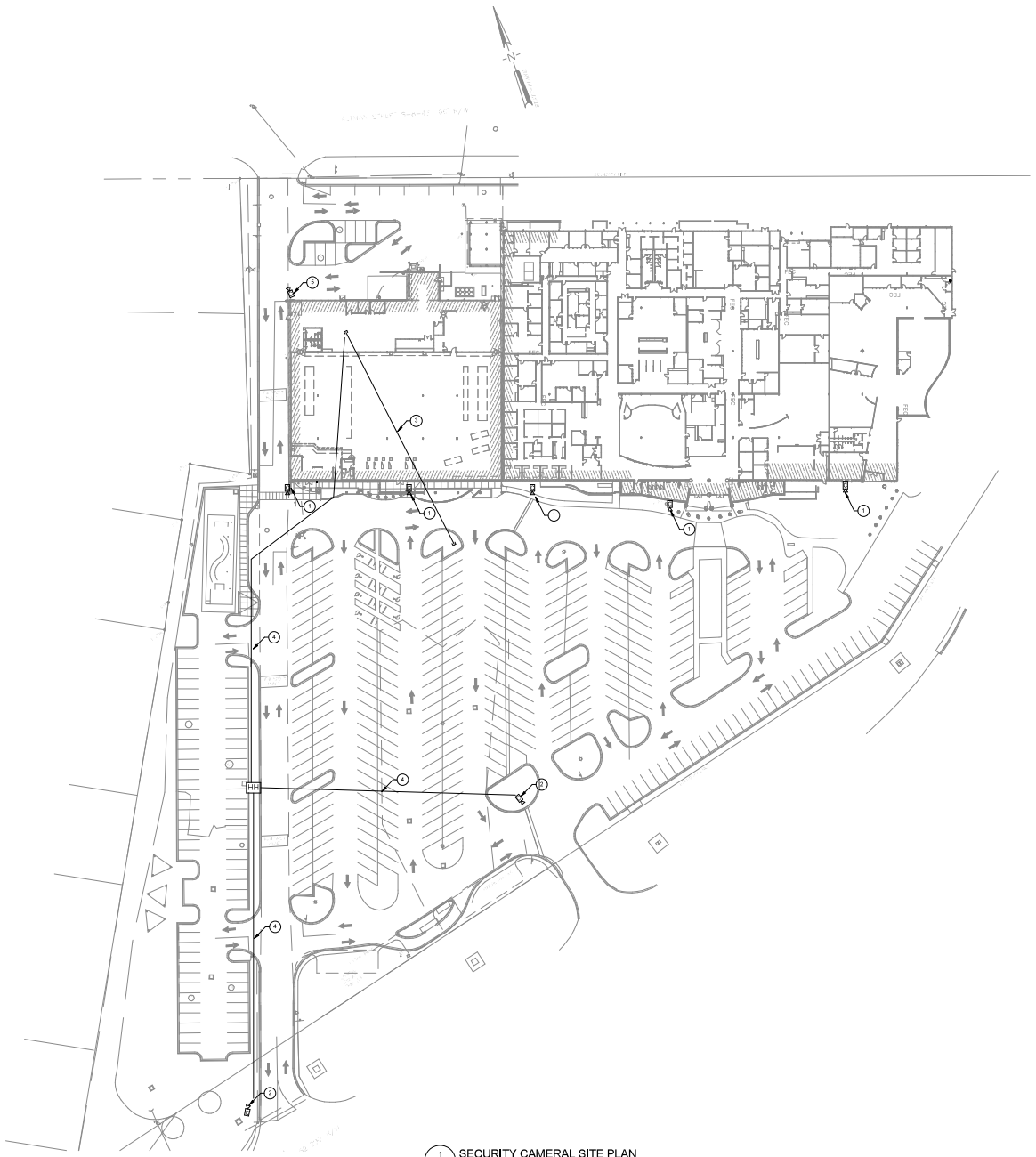
BERKELEY COUNTY ADMINISTRATION COMPLEX RENOVATIONS
1003 N. US HIGHWAY 52, MONCKS CORNER, SC 29461
BERKELEY COUNTY GOVERNMENT - RFP# 32408-01-17/18

ELECTRICAL SITE PLAN

1" = 40'-0"
VERIFY SCALE
BAR IS ONE INCH ON ORIGINAL DRAWING.
0 1"

DATE
PROJ 1547
DWG J-E309
SHEET of

FILEPATH: C:_Revit_Local_Models\2020\16FFRU01-E-ZSMEN001_diane.riosEZM7N.rvt
FILENAME:
PLOT DATE/TIME: 1/27/2020 4:14:05 PM



1 E309 SECURITY CAMERAL SITE PLAN
SCALE: 1" = 40'-0"

KEYNOTES

1. BUILDING MOUNTED EXTERIOR LONG-RANGE CAMERA LOCATION. COORDINATE EXACT LOCATION AND MOUNTING HEIGHT WITH OWNER PRIOR TO ROUGH-IN.
2. EXTERIOR LICENSE PLATE CAMERA. ROUTE 2" CONDUIT FROM SOURCE OUT TO CAMERA LOCATION UTILIZING GRASS AREAS TO THE GREATEST EXTENT POSSIBLE TO MINIMIZE CUTTING AND PATCHING OF ASHPALT. COORDINATE WITH CIVIL. COORDINATE EXACT LOCATION AND MOUNTING HEIGHT WITH OWNER.
3. 3"C ROUGH-IN FOR FUTURE CAR CHARGING STATIONS. REFER TO SHEET E108 FOR DETAILS.
4. WIRING FOR LICENSE PLATE CAMERA SHALL BE 2#1, 1#6G, 2"C ROUTED TO CAMERA LOCATION FROM CIRCUIT LF11. PROVIDE WITH GROUND ROD AT EACH LICENSE PLATE CAMERA.
5. COORDINATE EXACT LOCATION OF LICENSE PLATE CAMERA WITH OWNER.

GENERAL NOTES

1. ALL CAMERA LOCATIONS SHOWN IN INTERIOR/EXTERIOR OF BUILDING SHALL BE ROUGHED-IN WITH A MINIMUM 3/4"C. BERKELEY COUNTY ADMIN I.T. PERSONELL SHALL PERFORM WIRING AND INSTALLATION, COORDINATE UPSIZING OF CONDUIT AS NECESSARY WITH BERKELEY COUNTY ADMIN I.T. PERSONELL.

N

GRAPHIC SCALE
0 20' 40' 80' 160'
Scale: 1" = 40'

GBA
GLICK BOEHM ARCHITECTURE
ARCHITECTURE PLANNING INTERIOR DESIGN
493 King Street, Suite 100 Charleston, South Carolina 29403
Tel 843.577.0057 Fax 843.722.7656 www.glickboehm.com

DWG
CONSULTING ENGINEERS
1320 Ashley River Road, Suite 100 Charleston, SC 29407
Phone: (843) 556-7373 Fax: (843) 556-8979
www.dwgpa.com

REVISIONS	DATE	DESCRIPTION

DWG P.A. CONSULTING ENGINEERS No.C03949 — STATE OF SOUTH CAROLINA

STATE OF SOUTH CAROLINA — 24120 — REGISTERED LANDSCAPE ARCHITECT — 04/30/18 — BRIANNA BAILEY

BERKELEY COUNTY ADMINISTRATION COMPLEX RENOVATIONS
RFP# 32406-01-17/18
BERKELEY COUNTY GOVERNMENT
1003 N. US HIGHWAY 52, MONCKS CORNER, SC 29461

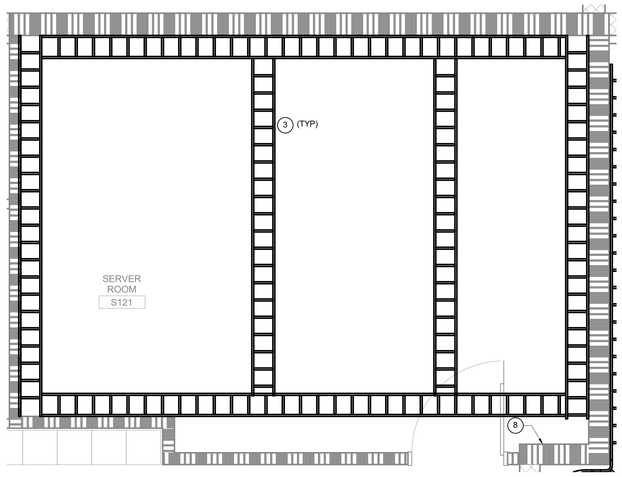
COPYRIGHT © 2017
GLICKBOEHM & ASSOCIATES, INC.

JOB NUMBER:	1547
PROJECT MGR.:	
DRAWN BY:	SPW
CHECKED BY:	BSB
APPROVED BY:	BSB
DATE ISSUED FOR:	
PROPOSALS	01/30/18

ELECTICAL SITE PLAN

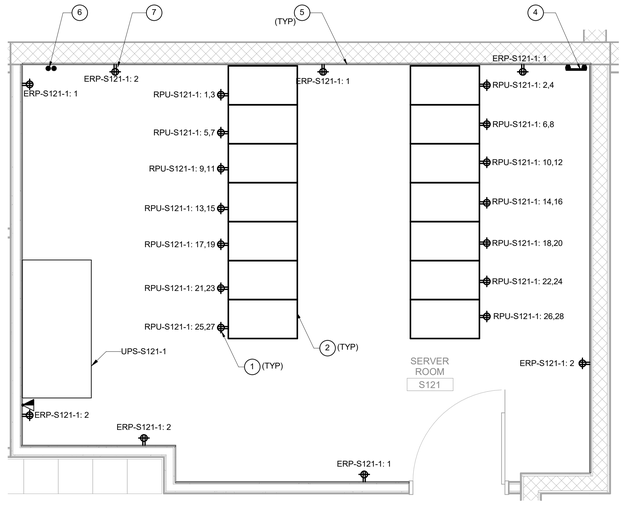
E309

1/26/2018 6:48:27 PM
C:\Users\SWimmer\Documents\18022 BERKELEY COUNTY OFFICES HVLP_2015_SWimmer.rvt



B1 SERVER RM S121 CABLE TRAY PLAN

J-E401 SCALE: 3/8" = 1'-0"



B3 SERVER RM S121 EQUIPMENT PLAN

J-E401 SCALE: 3/8" = 1'-0"

GENERAL NOTES:

A. REFER TO SHEET J-E001 FOR GENERAL NOTES, LEGEND AND ABBREVIATIONS.

B. ALL RECEPTACLES SHOWN ON AS CIRCUITED TO A PANEL CONNECTED TO THE GENERATOR SHALL BE PROVIDED WITH RED COVER PLATES.

SHEET KEYED NOTES:

1. 2-GANG BOX WITH TWO 125V, 20A DUPLEX RECEPTACLES (L5-20R). EACH DUPLEX RECEPTACLE WILL BE FED FROM A DEDICATED CIRCUIT AS INDICATED. COORDINATE EXACT LOCATION WITHIN THE RACK WITH OWNER.
2. TELECOM RACK, TO BE PROVIDED BY OWNER.
3. BASKET TYPE CABLE TRAY, 18-INCH WIDE BY 4-INCH HIGH.
4. TMGB, MOUNT AT 12-INCH AFF.
5. LINE WALL AS INDICATED WITH 3/4" BC GRADE FIRE-RATED PLYWOOD BACKBOARDS. MOUNT VERTICALLY 12-INCH AFF.
6. 2" TELECOMMUNICATIONS SERVICE ENTRANCE CONDUITS. SEE DRAWING J-E604.
7. OUTLETS TO BE MOUNTED FLUSH WITH PLYWOOD (TYP).
8. CABLE TRAY SHOULD END 6" TO 12" AWAY FROM SERVER ROOM WALL. PROVIDE (6) 4" SLEEVES AS A TRANSITION TO CABLE TRAY INSIDE SERVER ROOM. PROVIDE 2-HR FIRE STOPPING MATERIAL.

SOUTH CAROLINA PROFESSIONAL ENGINEER No. 29760 01/27/2020

SOUTH CAROLINA CERTIFICATE OF AUTHORIZATION JACOBS ENGINEERING GROUP, INC. No. C00316

© JACOBS 2019. ALL RIGHTS RESERVED.
THIS DOCUMENT AND THE IDEAS AND DESIGNS INCORPORATED IN IT, ARE AN INSTRUMENT OF PROFESSIONAL SERVICE, IS THE PROPERTY OF JACOBS AND IS NOT TO BE USED, IN WHOLE OR IN PART, FOR ANY PURPOSE OTHER THAN THE SPECIFIC PROJECT FOR WHICH IT WAS PREPARED AND DELIVERED BY JACOBS. REUSE OF DOCUMENTS WITHOUT WRITTEN VERIFICATION OR ADAPTATION BY JACOBS FOR THE SPECIFIC PURPOSE INTENDED WILL BE AT USER'S SOLE RISK AND WITHOUT LIABILITY OR LEGAL EXPOSURE TO JACOBS. ANY SUCH VERIFICATION OR ADAPTATION WILL ENTITLE JACOBS TO FURTHER COMPENSATION AT RATES TO BE AGREED BY USER AND JACOBS. USER SHALL INDEMNIFY AND HOLD HARMLESS JACOBS FROM ALL CLAIMS, DAMAGES, LOSSES AND EXPENSES ARISING OUT OF OR RESULTING FROM USE OF THIS DOCUMENT OR ADAPTATION WITHOUT VERIFICATION OR ADAPTATION BY JACOBS FOR THE SPECIFIC PURPOSE INTENDED.

NO.	DATE	DSGN	DR	CHK	APVD	BY	APVD
0	01/27/20	R. VALENTIN	D. RIOS	M. BURN	M. BOURGOIS		
	ISSUED FOR CONSTRUCTION						
	REVISION						

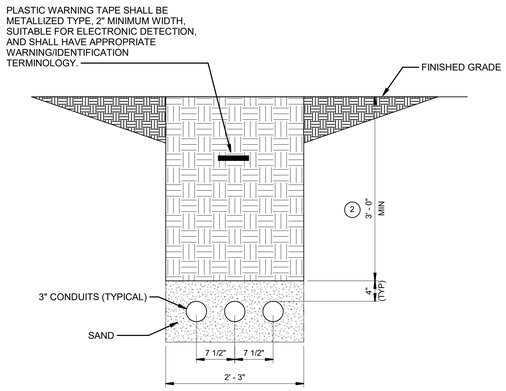
JACOBS®
1041 East Butler Road Greenville, South Carolina 29607-3725
Tel: 864-676-6000 Fax: 864-676-6023

BERKELEY COUNTY ADMINISTRATION COMPLEX RENOVATIONS
1003 N. US HIGHWAY 52, MONCKS CORNER, SC 29461
BERKELEY COUNTY GOVERNMENT - RFP# 32406-01-17/18

ELECTRICAL ENLARGED PLANS

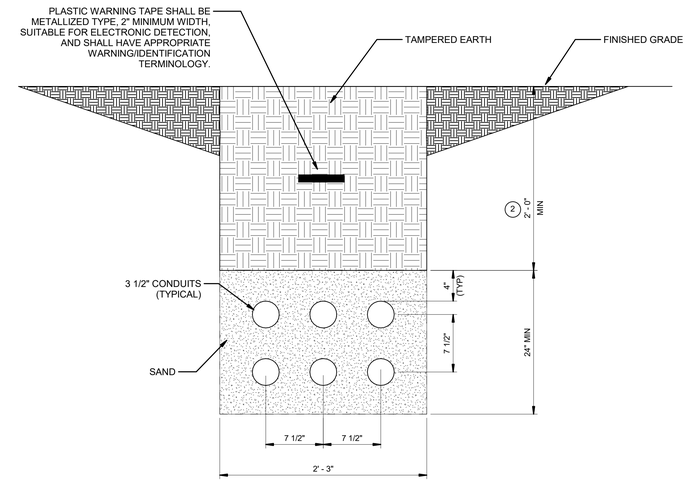
3/8" = 1'-0"
VERIFY SCALE
BAR IS ONE INCH ON ORIGINAL DRAWING.
0 1"

DATE
PROJ 1547
DWG J-E401
SHEET of



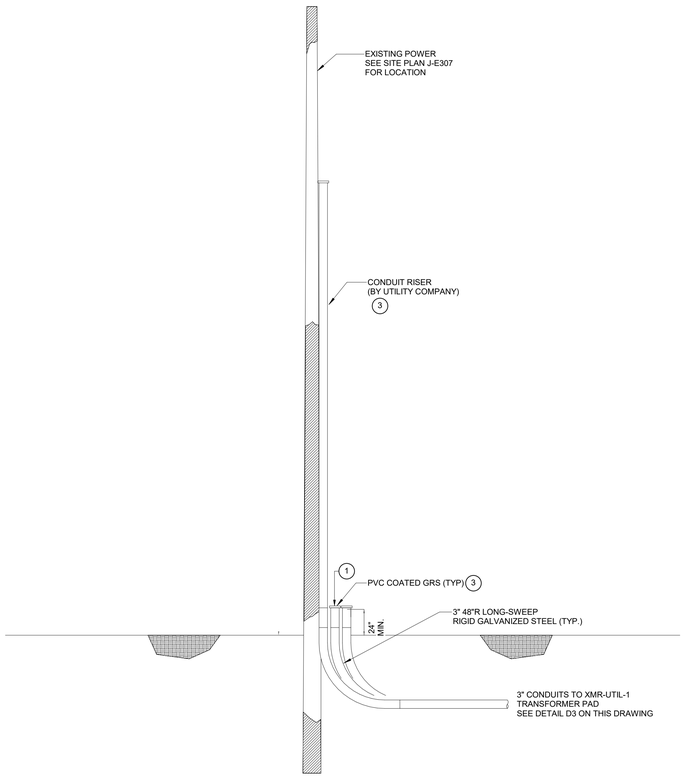
B1 1X3 DUCT BANK SECTION

Not to Scale



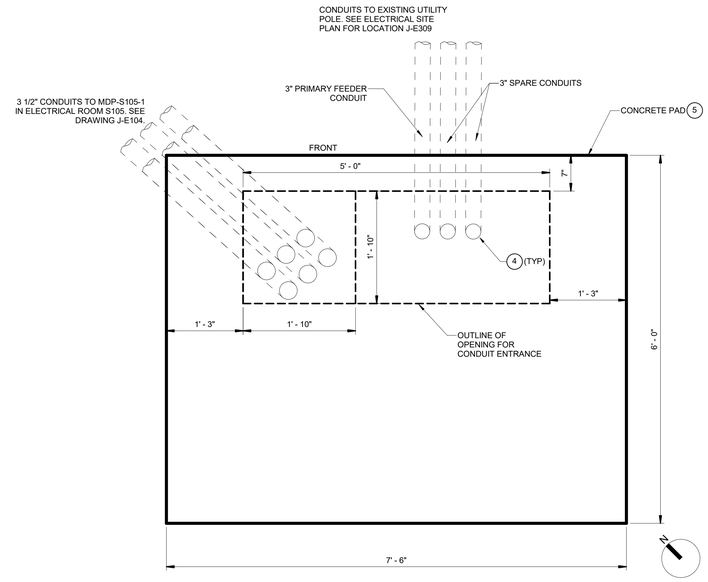
B3 2X3 DUCT BANK SECTION

Not to Scale



D1 CONDUIT RISER DETAIL

Not to Scale



D3 UTILITY TRANSFORMER CONCRETE PAD CONDUIT STUB-UP DETAIL

Not to Scale

GENERAL NOTES:

A. REFER TO SHEET J-E001 FOR GENERAL NOTES, LEGEND AND ABBREVIATIONS.

SHEET KEYED NOTES:

1. 3" SPARE CONDUITS TO BE CAPPED.
2. CHANGE CONDUIT INVERT ELEVATIONS AS REQUIRED TO AVOID INTERFERENCES WITH UNDERGROUND OBSTACLES.
3. UNDERGROUND CONDUIT AND STUB-UP BY ELECTRICAL CONTRACTOR CONDUIT RISER IN POLE BY UTILITY COMPANY.
4. CONDUITS SHOULD BE FLUSH WITH TOP SURFACE OF CONCRETE PAD. ALL ELBOWS SHALL BE RIGID GALVANIZED STEEL.
5. CONCRETE PAD TO BE MINIMUM 6" THICK, REINFORCED WITH 1/2" REBAR GRID SPACED A MAX. OF 12" X 12". ENDS OF REBAR TO BE 2" FROM OUTSIDE EDGE OF PAD AND CONDUIT ENTRANCE OPENING. PAD SHALL BE A MINIMUM OF 6" ABOVE GRADE.

SOUTH CAROLINA PROFESSIONAL ENGINEER
No. 29760
01/27/2020

SOUTH CAROLINA
JACOBS ENGINEERING GROUP, INC.
No. C00316
CERTIFICATE OF AUTHORIZATION

© JACOBS 2019. ALL RIGHTS RESERVED.
THIS DOCUMENT AND THE IDEAS AND DESIGNS INCORPORATED IN IT, ARE AN INSTRUMENT OF PROFESSIONAL SERVICE, IS THE PROPERTY OF JACOBS AND IS NOT TO BE USED, IN PART OR IN WHOLE, OR REPRODUCED IN ANY FORM WITHOUT THE WRITTEN CONSENT OF JACOBS.

NO.	DATE	REVISION	CHK	BY	APVD
0	01/27/20	ISSUED FOR CONSTRUCTION	DR	M. BURN	M.

DSGN R. VALENTIN | D. RIOS

BERKELEY COUNTY ADMINISTRATION COMPLEX RENOVATIONS
1003 N. US HIGHWAY 52, MONCKS CORNER, SC, 29461
BERKELEY COUNTY GOVERNMENT - RFP# 32408-01-17/18

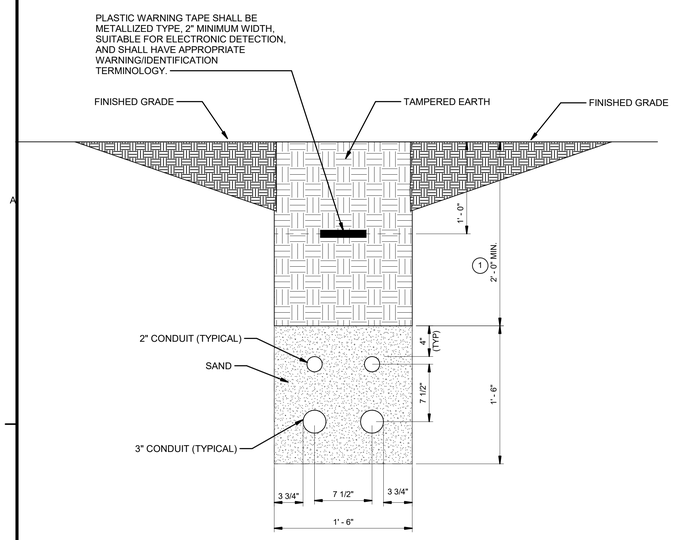
JACOBS®
1041 East Butler Road Greenville, South Carolina 29607-2725
Tel: 864.676.6000 Fax: 864.676.6003

ELECTRICAL DETAILS

As indicated
VERIFY SCALE
BAR IS ONE INCH ON ORIGINAL DRAWING.
0 1"

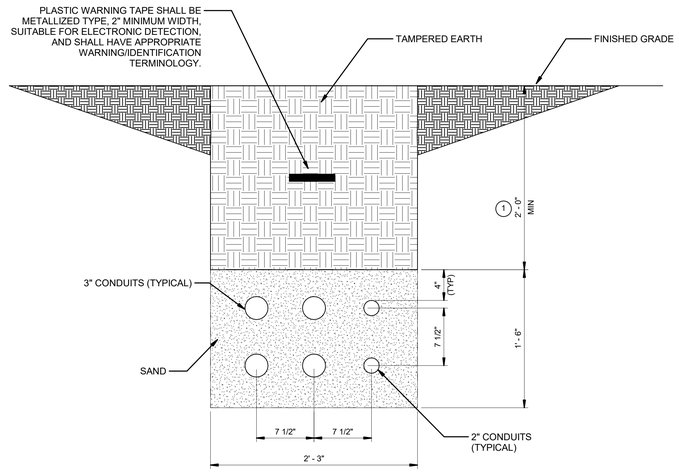
DATE	
PROJ	1547
DWG	J-E501
SHEET	of

FILEPATH: C:_Revit_Local_Models\2020\16FFRU01-E-ZSMEN001_diane.riosEZM7N.rvt
FILENAME:
PLOT DATE/TIME: 1/27/2020 4:14:07 PM



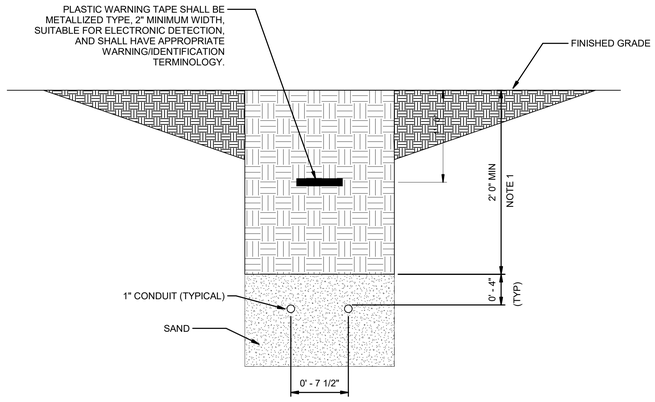
B1 2X2 CONDUIT SECTION

Not to Scale



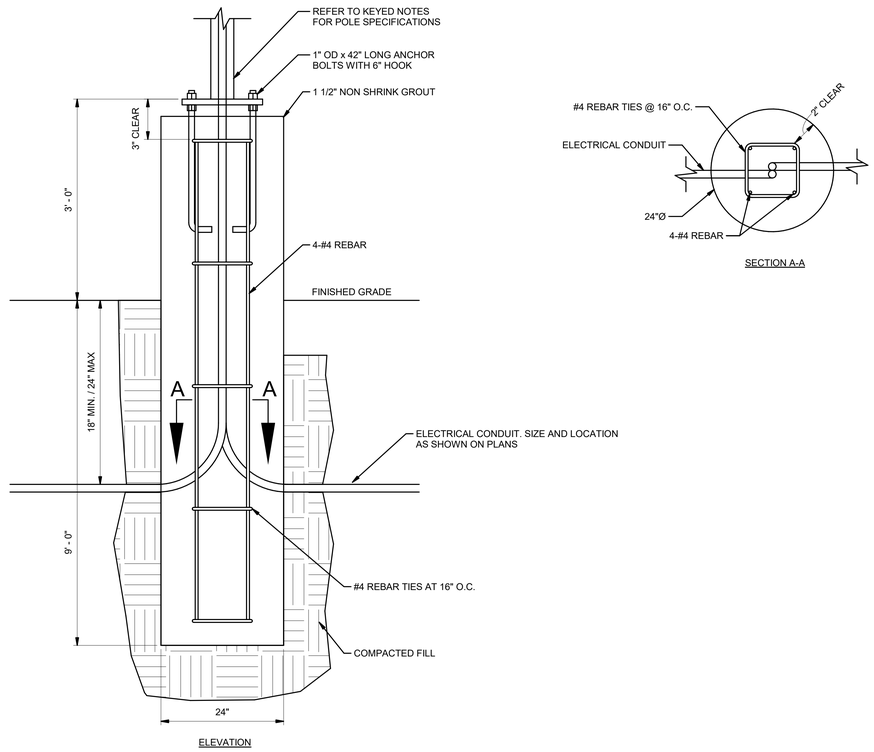
B3 2X3 CONDUIT SECTION

Not to Scale



D1 1X1 CONDUIT SECTION

Not to Scale



D3 POLE DETAIL (2)(3)(4)(5)

Not to Scale

GENERAL NOTES:

A. REFER TO SHEET J-E001 FOR GENERAL NOTES, LEGEND AND ABBREVIATIONS.

(#) SHEET KEYED NOTES:

1. CHANGE CONDUIT INVERT ELEVATIONS AS REQUIRED TO AVOID INTERFERENCES WITH UNDERGROUND OBSTACLES.
2. ALL CONCRETE Fc = 3,000 PSI MIN. (OR SIMILAR)
3. ALL REBAR Fy = 60 KSI
4. PROVIDE AND INSTALL EQUIPMENT GROUNDING CONDUCTOR ALONG WITH BRANCH CIRCUIT, SIZED PER TABLE 250.122 AND ARTICLE 250.122 OF THE NEC. PROVIDE AND INSTALL 1 NO. 6 THWN COPPER BONDING JUMPER FROM INTEGRAL GROUNDING LUG WITHIN ALUMINUM POLE HAND HOLE AND BOND TO EQUIPMENT GROUNDING CONDUCTOR.
5. NON-SHRINK GROUT SHALL COMPLY WITH ASTM C 1107, NON-SHRINK AND NONMETALLIC, DRY HYDRAULIC-CEMENT GROUT AND SHALL COMPLY WITH THE FOLLOWING: DESIGN MIX: 5,000-PSI (34.5-MPa), 28-DAY COMPRESSIVE STRENGTH; PREMIXED AND FACTORY PACKAGED; POST HARDENING, VOLUME ADJUSTING, NONSTAINING, NONCORROSIVE, NONGASEOUS, AND RECOMMENDED FOR INTERIOR AND EXTERIOR APPLICATIONS.

SOUTH CAROLINA PROFESSIONAL ENGINEER No. 29760 R. VALENTIN 01/27/2020

© JACOBS 2019. ALL RIGHTS RESERVED.

SOUTH CAROLINA ENGINEERING CERTIFICATE OF AUTHORIZATION JACOBS ENGINEERING GROUP, INC. No. C00316

THIS DOCUMENT AND THE IDEAS AND DESIGN INCORPORATED HEREIN, AS AN INSTRUMENT OF PROFESSIONAL SERVICE, IS THE PROPERTY OF JACOBS AND IS NOT TO BE USED, IN PART OR WHOLE, FOR ANY PURPOSE WITHOUT THE WRITTEN CONSENT OF JACOBS.

NO.	DATE	REVISION	CHK	BY
0	01/27/20	ISSUED FOR CONSTRUCTION	DR	APVD

DSGN R. VALENTIN | DR D. RIOS | CHK M. BOURQUE | APVD M. BURN

JACOBS
1041 East Butler Road Greenville, South Carolina 29607-3725
Tel: 864-676-8000 Fax: 864-676-8020

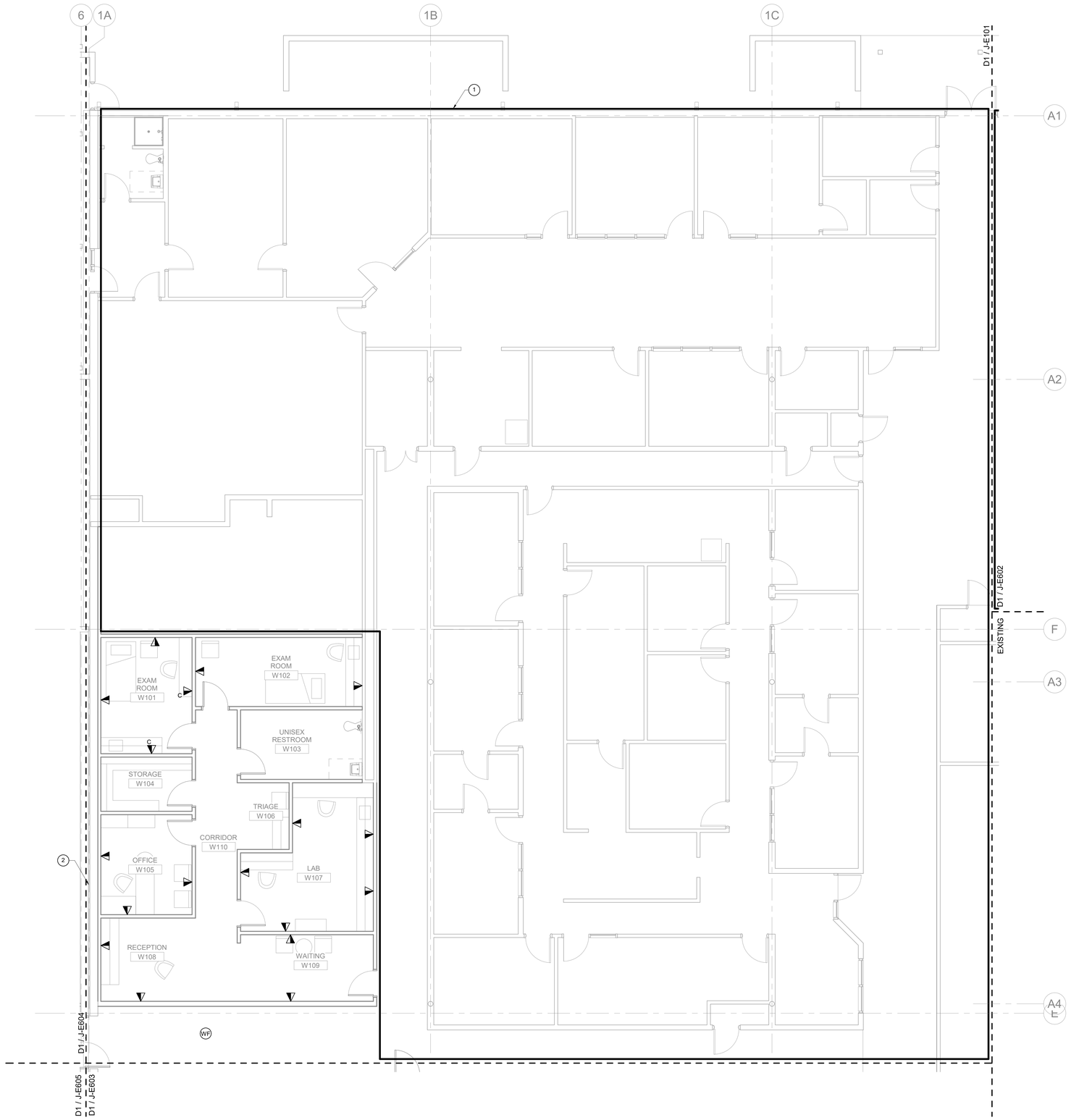
BERKELEY COUNTY ADMINISTRATION COMPLEX RENOVATIONS
1003 N. US HIGHWAY 52, MONCKS CORNER, SC 29461
BERKELEY COUNTY GOVERNMENT - RFP# 32408-01-17/18

ELECTRICAL DETAILS

As indicated
VERIFY SCALE
BAR IS ONE INCH ON ORIGINAL DRAWING. 0 1"

DATE
PROJ 1547
DWG J-E502
SHEET of

FILEPATH: C:_Revit_Local_Models\2020\16FFRU01-E-ZSMEN001_diane.riosEZM7N.rvt
FILENAME:
PLOT DATE/TIME: 1/27/2020 4:14:08 PM



D1 FIRST FLOOR TELECOMMUNICATIONS PLAN SUITES A & C

3/16" = 1'-0"

GENERAL NOTES:

A. REFER TO SHEET J-E001 FOR GENERAL NOTES, LEGEND AND ABBREVIATIONS.

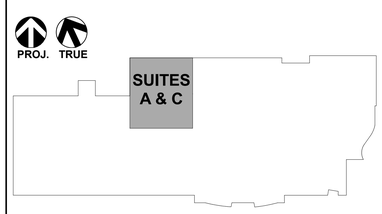
B. DATA OUTLETS SHOWN IN THIS DRAWING WILL BE FED FROM THE NEAREST EXISTING CABLE TRAY IN THE AREA.

C. 18" WIDE X 4" DEEP. BASKET-TYPE CABLE TRAY. MOUNTED NO LESS THAN 6" FROM THE WALL LONGITUDINALLY. WALL OR TRAPEZE MOUNTING BRACKET IS REQUIRED. NEVER USE SOLID BOTTOM, WHALEBONE, OR COVERED CABLE TRAYS. NEVER USE A CENTER MOUNT FOR A CABLE TRAY. ANY EXCEPTION MUST BE AUTHORIZED BY THE OWNER.

(#) SHEET KEYED NOTES:

1. FOR SCOPE OF WORK IN THIS AREA REFER TO DRAWING J-GBA-E101.
2. WHEN CONDUIT PENETRATES 3-HOUR FIRE RATED WALL CONTRACTOR TO DETERMINE AND PROVIDE APPROVED PENETRATIONS EQUAL TO SYSTEMS NO. C-AJ-2003, C-AJ-1066 OR C-AJ-8041 AS MANUFACTURED BY 3M.

KEY PLAN



Scale: 3/16 INCH = 1 FOOT

SOUTH CAROLINA PROFESSIONAL ENGINEER No. 29760 01/27/2020

SOUTH CAROLINA CERTIFICATE OF AUTHORIZATION JACOBS ENGINEERING GROUP, INC. No. C00316

© JACOBS 2019. ALL RIGHTS RESERVED.
THIS DOCUMENT AND THE IDEAS AND DESIGNS INCORPORATED OR INDICATED HEREIN, AS AN INSTRUMENT OF PROFESSIONAL SERVICE, IS THE PROPERTY OF JACOBS AND IS NOT TO BE USED, IN PART OR WHOLE, FOR ANY PURPOSE OR PROJECT OTHER THAN THE SPECIFIC PROJECT FOR WHICH IT WAS PREPARED BY JACOBS.

NO.	DATE	DSGN	DR	CHK	APVD	BY	APVD
0	01/27/20	R. VALENTIN	D. RIOS	M.	M. BURN		

ISSUED FOR CONSTRUCTION

REVISION

PROJECT

JACOBS
1041 East Butler Road Greenville, South Carolina 29607-2570
Tel: 864.676.6000 Fax: 864.676.6003

BERKELEY COUNTY ADMINISTRATION COMPLEX RENOVATIONS
1003 N. US HIGHWAY 52, MONCKS CORNER, SC, 29461
BERKELEY COUNTY GOVERNMENT - RFP# 32408-01-17/18

ELECTRICAL
TELECOMMUNICATIONS PLAN
SUITES A & C

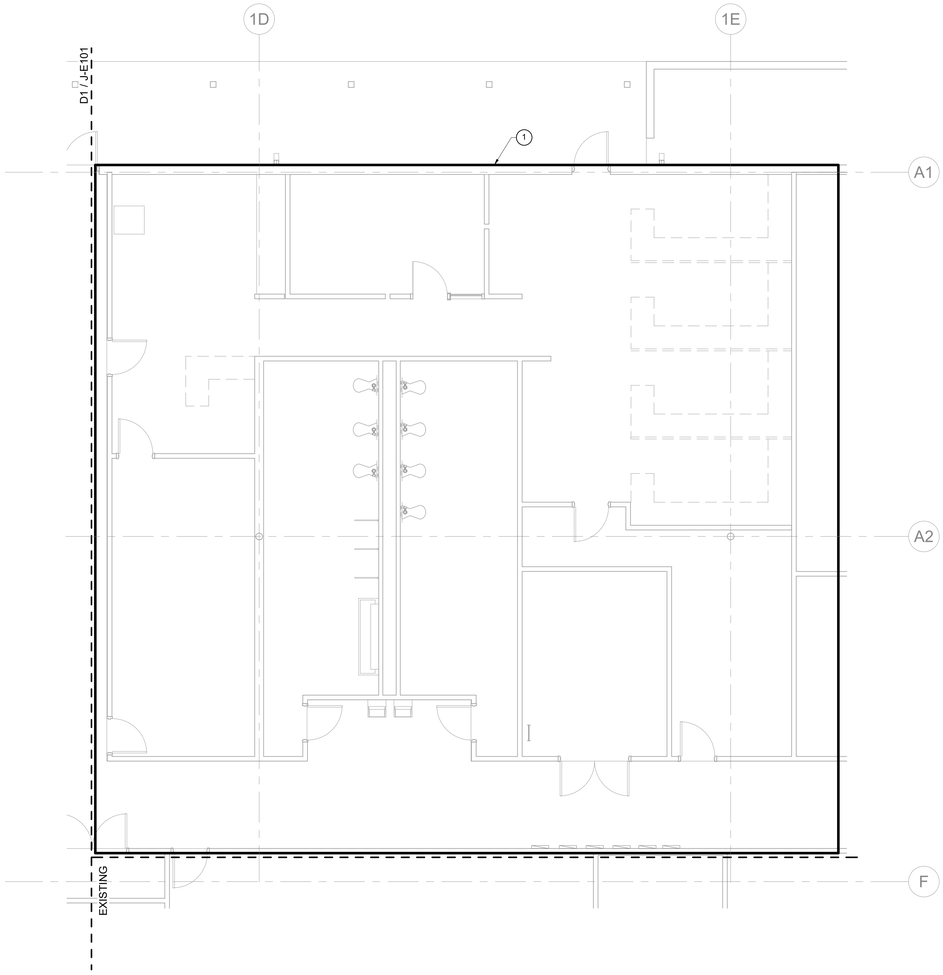
As indicated
VERIFY SCALE
BAR IS ONE INCH ON ORIGINAL DRAWING.
0" 1"

DATE	
PROJ	1547
DWG	J-E601
SHEET	of

FILEPATH: C:_Revit_Local_Models\2020\16FFRU01-E-ZSMEN001_diane.riosEZM7N.rvt

FILENAME:

PLOT DATE/TIME: 1/27/2020 4:14:10 PM



D1 FIRST FLOOR TELECOMMUNICATIONS PLAN SUITE B

3/16" = 1'-0"

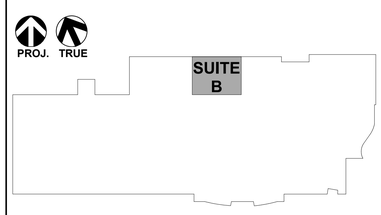
GENERAL NOTES:

A. REFER TO SHEET J-E001 FOR GENERAL NOTES, LEGEND AND ABBREVIATIONS.

SHEET KEYED NOTES:

1. FOR SCOPE OF WORK IN THIS AREA REFER TO GBA DRAWING E102.

KEY PLAN



4 0 4 8 12

Scale: 3/16 INCH = 1 FOOT

SOUTH CAROLINA PROFESSIONAL ENGINEER
No. 29760
01/27/2020

SOUTH CAROLINA
JACOBS ENGINEERING GROUP, INC.
No. C00316
CERTIFICATE OF AUTHORIZATION

© JACOBS 2019. ALL RIGHTS RESERVED.
THIS DOCUMENT AND THE IDEAS AND DESIGNS INCORPORATED IN IT, ARE AN INSTRUMENT OF PROFESSIONAL SERVICE, IS THE PROPERTY OF JACOBS AND IS NOT TO BE USED, IN PART OR IN WHOLE, OR REPRINTED WITHOUT THE WRITTEN CONSENT OF JACOBS.

NO.	DATE	DSGN	DR	CHK	APVD	BY	APVD
0	01/27/20	R. VALENTIN	D. RIOS	M. BOURQUE	M. BURN		

ISSUED FOR CONSTRUCTION

REVISION

JACOBS®
1041 East Butler Road Greenville, South Carolina 29607-5725
Tel: 864-676-6000 Fax: 864-676-6023

BERKELEY COUNTY ADMINISTRATION COMPLEX RENOVATIONS
1003 N. US HIGHWAY 52, MONCKS CORNER, SC 29461
BERKELEY COUNTY GOVERNMENT - RFP# 32406-01-17/18

ELECTRICAL
TELECOMMUNICATIONS PLAN
SUITE B

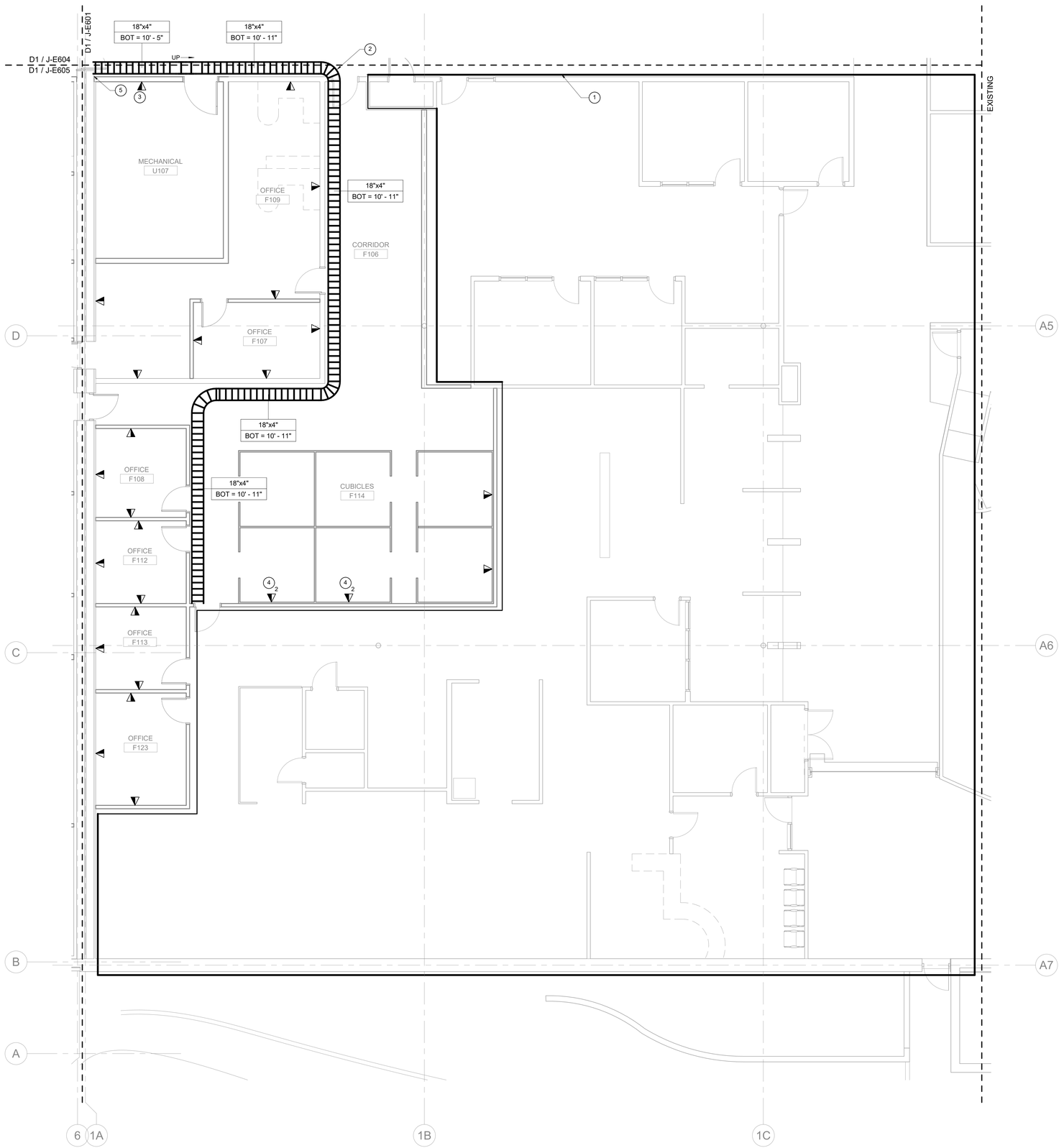
As indicated
VERIFY SCALE
BAR IS ONE INCH ON ORIGINAL DRAWING.
0 1"

DATE	
PROJ	1547
DWG	J-E602
SHEET	of

FILEPATH: C:_Revit_Local_Models\2020\16FFRU01-E-ZSMEN001_diane.riosEZM7N.rvt

FILENAME:

PLOT DATE/TIME: 1/27/2020 4:14:12 PM



D1 FIRST FLOOR TELECOMMUNICATIONS PLAN SUITES D, E & F

3/16" = 1'-0"

GENERAL NOTES:

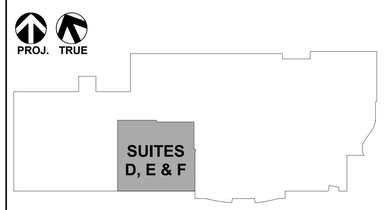
A. REFER TO SHEET J-E001 FOR GENERAL NOTES, LEGEND AND ABBREVIATIONS.

B. ALL CABLE TRAY SHALL BE 18" WIDE X 4" DEEP, BASKET-TYPE CABLE TRAY. MOUNTED NO LESS THAN 6" FROM THE WALL LONGITUDINALLY. WALL OR TRAPEZE MOUNTING BRACKET IS REQUIRED. NEVER USE SOLID BOTTOM, WHALEBONE, OR COVERED CABLE TRAYS. NEVER USE A CENTER MOUNT FOR A CABLE TRAY. ANY EXCEPTION MUST BE AUTHORIZED BY THE OWNER.

SHEET KEYED NOTES:

1. FOR SCOPE OF WORK IN THIS AREA REFER TO DRAWING J-GBA-E103.
2. EXTEND CABLE TRAY TO NEAREST EXISTING CABLE TRAY IN THE AREA.
3. EXACT LOCATION OF DATA OUTLETS IN MECHANICAL ROOMS TO BE COORDINATED IN THE FIELD.
4. PROVIDE WALL-MOUNTED DATA OUTLETS (QUANTITY AS SHOWN) TO SERVE WORKSTATIONS. EXACT LOCATION TO BE COORDINATED WITH OWNER AND FINAL FURNITURE LAYOUT.
5. CABLE TRAY SHOULD END 6" TO 12" AWAY FROM FIRE WALL. PROVIDE (4) 4" SLEEVES AS A TRANSITION THRU THE WALL. WHEN CONDUIT PENETRATES 3-HOUR FIRE RATED WALL CONTRACTOR TO DETERMINE AND PROVIDE APPROVE PENETRATIONS EQUAL TO SYSTEMS NO. C-AJ-2003, C-AJ-1066 OR C-AJ-8041 AS MANUFACTURED BY 3M.

KEY PLAN



4 0 4 8 12

Scale: 3/16 INCH = 1 FOOT

SOUTH CAROLINA PROFESSIONAL ENGINEER
No. 29760
01/27/2020

SOUTH CAROLINA CERTIFICATE OF AUTHORIZATION
JACOBS ENGINEERING GROUP, INC.
No. C00316

© JACOBS 2019. ALL RIGHTS RESERVED.
THIS DOCUMENT AND THE IDEAS AND DESIGNS INCORPORATED HEREIN, AS AN INSTRUMENT OF PROFESSIONAL SERVICE, IS THE PROPERTY OF JACOBS AND IS NOT TO BE USED, IN WHOLE OR IN PART, FOR ANY PURPOSE OR PROJECT OTHER THAN THE SPECIFIC PROJECT FOR WHICH IT WAS PREPARED BY JACOBS.

NO.	DATE	DSGN	DR	CHK	APVD	BY
0	01/27/20	R. VALENTIN	D. RIOS	M. BOURGOIS	M. BURN	

ISSUED FOR CONSTRUCTION

REVISION

JACOBS
1001 Lee Boller Road Greenville, South Carolina 29607-2315
Tel: 864.676.6000

BERKELEY COUNTY ADMINISTRATION COMPLEX RENOVATIONS
1003 N. US HIGHWAY 52, MONCKS CORNER, SC, 29461
BERKELEY COUNTY GOVERNMENT - RFP# 32408-01-17718

ELECTRICAL
TELECOMMUNICATIONS PLAN
SUITES D, E & F

As indicated
VERIFY SCALE
BAR IS ONE INCH ON ORIGINAL DRAWING.
0" 1"

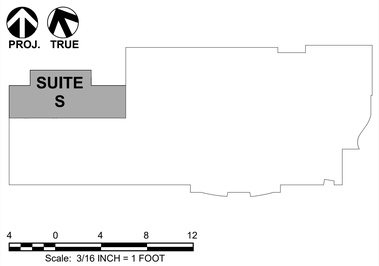
DATE	
PROJ	1547
DWG	J-E603
SHEET	of

FILEPATH: C:_Revit_Local_Models\2020\16FFRU01-E-ZSMEN001_diane.riosEZM7N.rvt

FILENAME:

PLOT DATE/TIME: 1/27/2020 4:14:14 PM

KEY PLAN



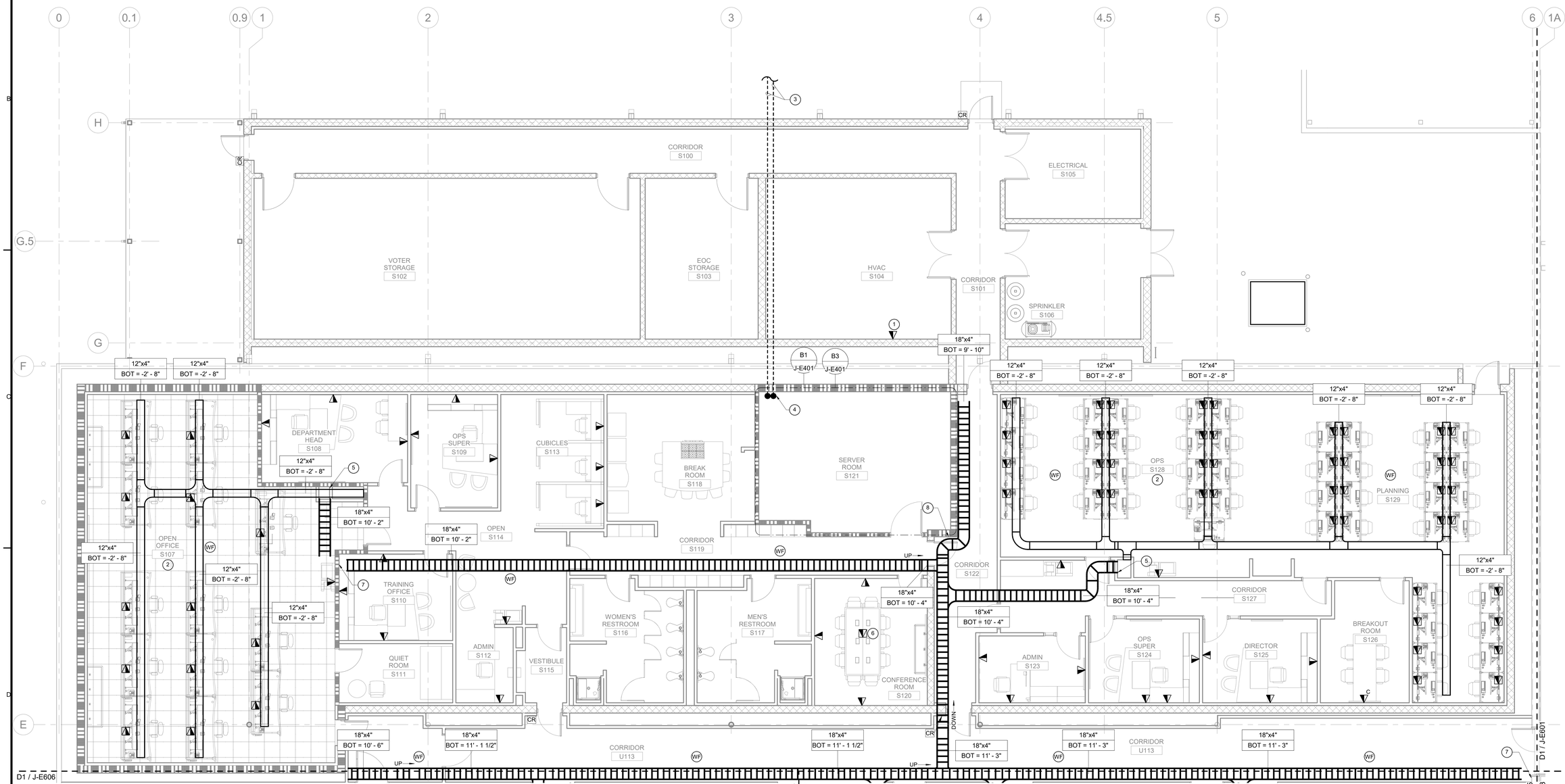
SHEET KEYED NOTES:

1. EXACT LOCATION OF DATA OUTLETS IN MECHANICAL ROOMS TO BE COORDINATED IN THE FIELD.
2. 12" WIDE X 4" DEEP, BASKET-TYPE CABLE TRAY. MOUNTED UNDERNEATH RAISED FLOORING IN THIS ROOM.
3. (2) 2" TELECOMMUNICATIONS SERVICE ENTRANCE CONDUITS TO BE ROUTED TO TELECOMMUNICATIONS PROVIDER RIGHT OF WAY EASEMENT. EXACT LOCATION TO BE COORDINATED IN THE FIELD.
4. TELECOMMUNICATION SERVICE ENTRANCE CONDUITS TO BE STUBBED UP 12" AFF INSIDE MAIN TELECOMMUNICATIONS ROOM.
5. INSTALL CABLE TRAY VERTICAL SECTION INSIDE CHASE DOWN TO CABLE TRAY MOUNTED UNDERNEATH RAISED FLOORING.
6. FLOOR BOX TO BE LOCATED BELOW CONFERENCE ROOM TABLE. COORDINATE EXACT LOCATION WITH OWNER AND FINAL FURNITURE PLAN.
7. CABLE TRAY SHOULD END 6" TO 12" AWAY FROM FIRE WALL. PROVIDE (4) 4" SLEEVES AS A TRANSITION THRU THE WALL. WHEN CONDUIT PENETRATES 3-HOUR FIRE RATED WALL CONTRACTOR TO DETERMINE AND PROVIDE APPROVE PENETRATIONS EQUAL TO SYSTEMS NO. C-AJ-2003, C-AJ-1066 OR C-AJ-8041 AS MANUFACTURED BY 3M.
8. CABLE TRAY SHOULD END 6" TO 12" AWAY FROM SERVER ROOM WALL. PROVIDE (6) 4" SLEEVES AS A TRANSITION TO CABLE TRAY INSIDE SERVER ROOM. PROVIDE 2-HR FIRE STOPPING MATERIAL.

GENERAL NOTES:

A. REFER TO SHEET J-E001 FOR GENERAL NOTES, LEGEND AND ABBREVIATIONS.

B. UNLESS NOTED OTHERWISE ALL CABLE TRAY SHALL BE 18" WIDE X 4" DEEP, BASKET-TYPE CABLE TRAY. MOUNTED NO LESS THAN 6" FROM THE WALL LONGITUDINALLY. WALL OR TRAPEZE MOUNTING BRACKET IS REQUIRED. NEVER USE SOLID BOTTOM, WHALEBONE, OR COVERED CABLE TRAYS. NEVER USE A CENTER MOUNT FOR A CABLE TRAY. ANY EXCEPTION MUST BE AUTHORIZED BY THE OWNER.



D1 FIRST FLOOR TELECOMMUNICATIONS PLAN SUITE S

3/16" = 1'-0"

SOUTH CAROLINA PROFESSIONAL ENGINEER No. 29760 01/27/2020

© JACOBS 2019. ALL RIGHTS RESERVED.

SOUTH CAROLINA CERTIFICATE OF AUTHORIZATION JACOBS ENGINEERING GROUP, INC. No. C00316

THIS DOCUMENT AND THE IDEAS AND DESIGNS INCORPORATED IN IT ARE, AS AN INSTRUMENT OF PROFESSIONAL SERVICE, IS THE PROPERTY OF JACOBS AND IS NOT TO BE USED, IN PART OR WHOLE, FOR ANY PURPOSE WITHOUT THE WRITTEN CONSENT OF JACOBS.

NO.	DATE	DSGN	DR	CHK	APVD	BY
0	01/27/20	R. VALENTIN	D. RIOS	M. BOURGOIS	M. BURN	

ISSUED FOR CONSTRUCTION

REVISION

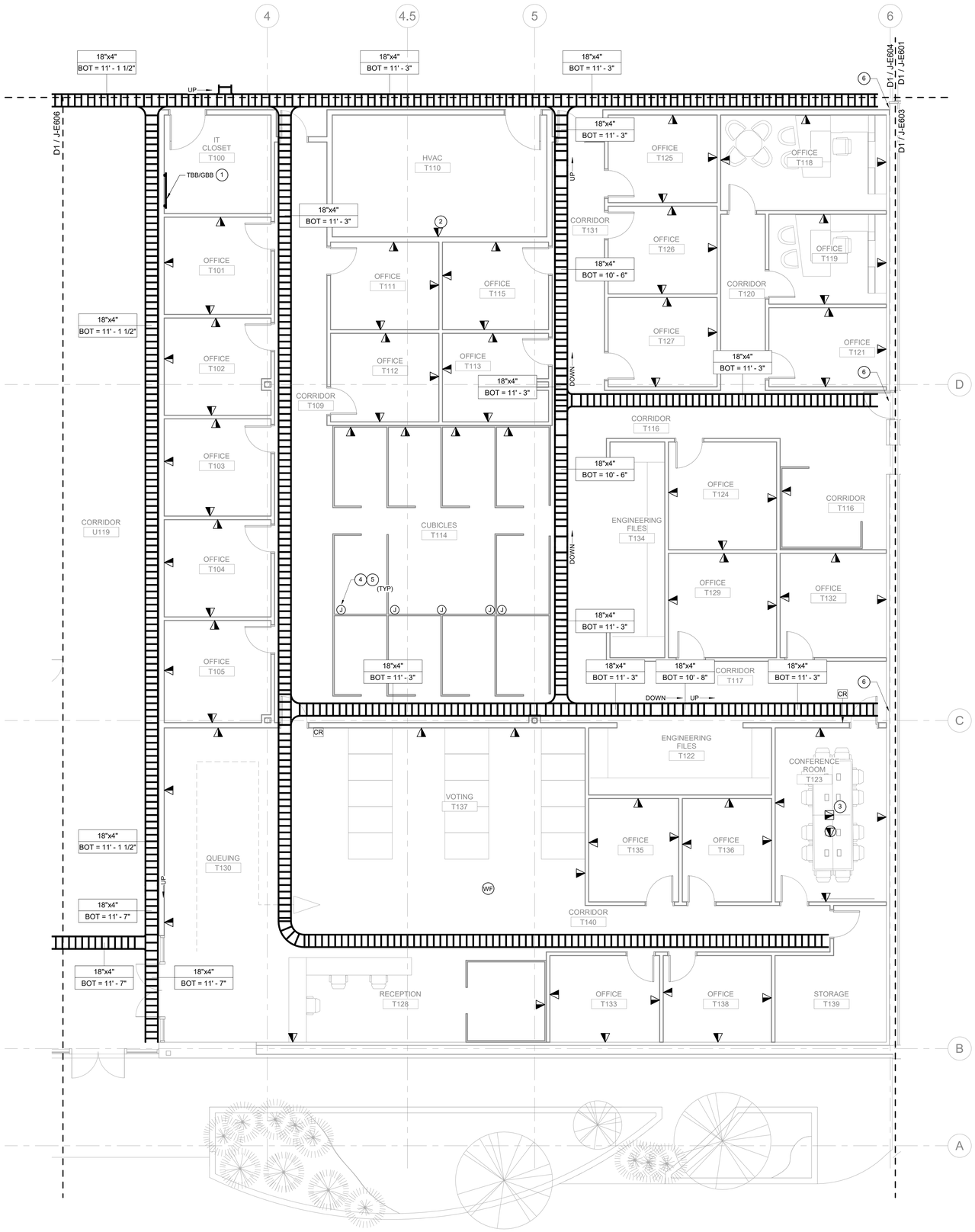
JACOBS
104 East Butler Road Greenville, South Carolina 29607-2725
Tel. 864-676-6000 Fax 864-676-6023

BERKELEY COUNTY ADMINISTRATION COMPLEX RENOVATIONS
1003 N. US HIGHWAY 52, MONCKS CORNER, SC 29461
BERKELEY COUNTY GOVERNMENT - RFP# 32406-01-17/18

ELECTRICAL
TELECOMMUNICATIONS PLAN
SUITE S

As indicated
VERIFY SCALE
BAR IS ONE INCH ON ORIGINAL DRAWING.
0" 1"

DATE	
PROJ	1547
DWG	J-E604
SHEET	of



D1 FIRST FLOOR TELECOMMUNICATIONS PLAN SUITES T & V

3/16" = 1'-0"

GENERAL NOTES:

A. REFER TO SHEET J-E001 FOR GENERAL NOTES, LEGEND AND ABBREVIATIONS.

B. UNLESS NOTED OTHERWISE, ALL CABLE TRAY SHALL BE 18" WIDE X 4" DEEP, BASKET-TYPE CABLE TRAY, MOUNTED NO LESS THAN 6" FROM THE WALL, LONGITUDINALLY. WALL OR TRAPEZE MOUNTING BRACKET IS REQUIRED. NEVER USE SOLID BOTTOM, WHALEBONE, OR COVERED CABLE TRAYS. NEVER USE A CENTER MOUNT FOR A CABLE TRAY. ANY EXCEPTION MUST BE AUTHORIZED BY THE OWNER.

SHEET KEYED NOTES:

1. REFER TO DRAWING J-E105 FOR GROUNDING REQUIREMENTS.
2. EXACT LOCATION OF DATA OUTLETS IN MECHANICAL ROOMS TO BE COORDINATED IN THE FIELD.
3. FLOOR BOX TO BE LOCATED BELOW CONFERENCE ROOM TABLE. COORDINATE EXACT LOCATION WITH OWNER AND FINAL FURNITURE PLAN.
4. JUNCTION BOX MOUNTED ABOVE CEILING FOR TELECOMM CONNECTION TO OFFICE CUBICLES. PROVIDE 1-1/4" CONDUIT TO NEAREST CABLE TRAY.
5. CONFIGURATION OF DATA OUTLETS IN OFFICE CUBICLES TO BE COORDINATED WITH OWNER AND FINAL FURNITURE SELECTION.
6. CABLE TRAY SHOULD END 6" TO 12" AWAY FROM FIRE WALL. PROVIDE (4) 4" SLEEVES AS A TRANSITION THRU THE WALL. WHEN CONDUIT PENETRATES 3-HOUR FIRE RATED WALL CONTRACTOR TO DETERMINE AND PROVIDE APPROVE PENETRATIONS EQUAL TO SYSTEMS NO. C-AJ-2003, C-AJ-1066 OR C-AJ-8041 AS MANUFACTURED BY 3M.

KEY PLAN

4 0 4 8 12

Scale: 3/16 INCH = 1 FOOT

SOUTH CAROLINA PROFESSIONAL ENGINEER No. 29760 01/27/2020

JACOBS ENGINEERING GROUP, INC. No. C00316 CERTIFICATE OF AUTHORIZATION

© JACOBS 2019. ALL RIGHTS RESERVED.
THIS DOCUMENT AND THE IDEAS AND DESIGNS INCORPORATED ON IT ARE, AS AN INSTRUMENT OF PROFESSIONAL SERVICE, IS THE PROPERTY OF JACOBS AND IS NOT TO BE USED, IN PART OR IN WHOLE, OR REPRINT FOR ANY PURPOSE OR PROJECT WITHOUT THE WRITTEN AUTHORIZATION OF JACOBS.

NO.	DATE	DSGN	DR	CHK	APVD	BY
0	01/27/20	R. VALENTIN	D. RIOS	M. BOURQUE	M. BURN	

ISSUED FOR CONSTRUCTION

REVISION

BERKELEY COUNTY ADMINISTRATION COMPLEX RENOVATIONS
1003 N. US HIGHWAY 52, MONCKS CORNER, SC 29461
BERKELEY COUNTY GOVERNMENT - RFP# 32406-01-17/18

JACOBS®
1041 East Butler Road Greenville, South Carolina 29607-3725
Tel: 864-676-6000 Fax: 864-676-6023

ELECTRICAL
TELECOMMUNICATIONS PLAN
SUITES T & V

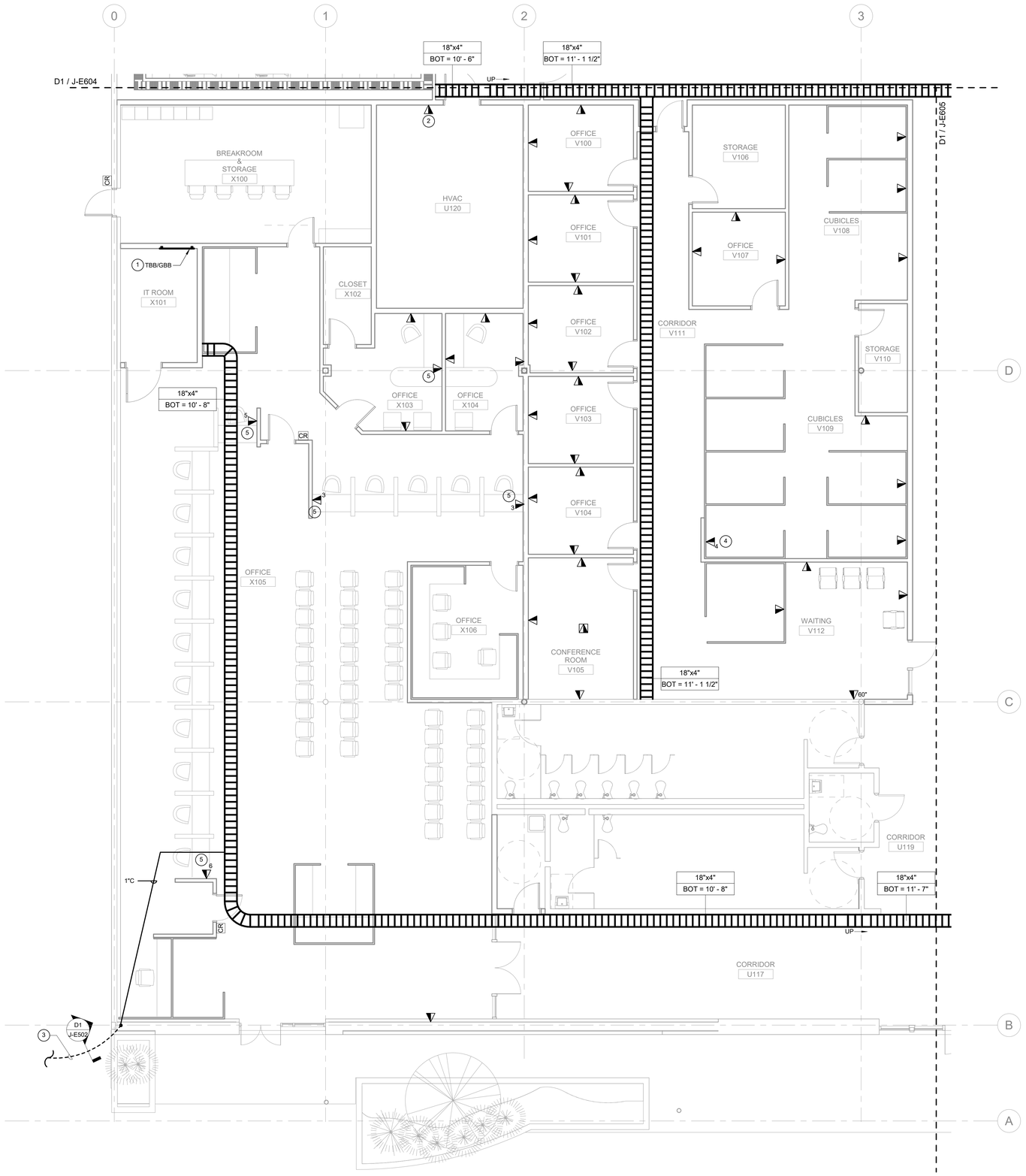
As indicated
VERIFY SCALE
BAR IS ONE INCH ON ORIGINAL DRAWING.
0 1"

DATE	
PROJ	1547
DWG	J-E605
SHEET	of

FILEPATH: C:_Revit_Local_Models\2020\16FFRU01-E-ZSMEN001_diane.riosEZM7N.rvt

FILENAME:

PLOT DATE/TIME: 1/27/2020 4:14:22 PM



D1 FIRST FLOOR TELECOMMUNICATIONS PLAN SUITES W & X

D1 - 3/16" = 1'-0"

GENERAL NOTES:

A. REFER TO SHEET J-E001 FOR GENERAL NOTES, LEGEND AND ABBREVIATIONS.

B. UNLESS NOTED OTHERWISE, ALL CABLE TRAY SHALL BE 18" WIDE X 4" DEEP, BASKET-TYPE CABLE TRAY, MOUNTED NO LESS THAN 6" FROM THE WALL LONGITUDINALLY. WALL OR TRAPEZE MOUNTING BRACKET IS REQUIRED. NEVER USE SOLID BOTTOM, WHALEBONE, OR COVERED CABLE TRAYS. NEVER USE A CENTER MOUNT FOR A CABLE TRAY. ANY EXCEPTION MUST BE AUTHORIZED BY THE OWNER.

SHEET KEYED NOTES:

1. REFER TO DRAWING J-E106 FOR GROUNDING REQUIREMENTS.
2. EXACT LOCATION OF DATA OUTLETS IN MECHANICAL ROOMS TO BE COORDINATED IN THE FIELD.
3. 1" CONDUIT TO ARM GATE CARD READER. SEE CIVIL DRAWING J-C101 FOR LOCATION.
4. DATA OUTLETS TO SERVE OFFICE CUBICLES. CONFIGURATION OF DATA OUTLETS IN OFFICE CUBICLES TO BE COORDINATED WITH OWNER AND FINAL FURNITURE SELECTION.
5. PROVIDE WALL-MOUNTED DATA OUTLETS (QUANTITY AS SHOWN) TO SERVE WORKSTATIONS. EXACT LOCATION TO BE COORDINATED WITH OWNER AND FINAL FURNITURE LAYOUT.

KEY PLAN

4 0 4 8 12
Scale: 3/16 INCH = 1 FOOT

SOUTH CAROLINA PROFESSIONAL ENGINEER
No. 29760
01/27/2020

© JACOBS 2019. ALL RIGHTS RESERVED.

SOUTH CAROLINA
JACOBS ENGINEERING GROUP, INC.
No. C00316
CERTIFICATE OF AUTHORIZATION

THIS DOCUMENT AND THE IDEAS AND DESIGNS INCORPORATED IN IT ARE, AS AN INSTRUMENT OF PROFESSIONAL SERVICE, IS THE PROPERTY OF JACOBS AND IS NOT TO BE USED, IN WHOLE OR IN PART, FOR ANY PURPOSE WITHOUT THE WRITTEN CONSENT OF JACOBS.

NO.	DATE	DSGN	CHK	BY
0	01/27/20	DR	M.	APVD
ISSUED FOR CONSTRUCTION		R. VALENTIN	BOURQUE	M. BURN

REVISION

JACOBS
1001 East Butler Road Greenville, South Carolina 29607-2372
Tel. 864-676-6000
Fax 864-676-6003

BERKELEY COUNTY ADMINISTRATION COMPLEX RENOVATIONS
1003 N. US HIGHWAY 52, MONCKS CORNER, SC 29461
BERKELEY COUNTY GOVERNMENT - RFP# 32408-01-17718

ELECTRICAL
TELECOMMUNICATIONS PLAN
SUITES W & X

As indicated	
VERIFY SCALE	
BAR IS ONE INCH ON ORIGINAL DRAWING.	
0	1"
DATE	
PROJ	1547
DWG	J-E606
SHEET	of

FILEPATH: C:_Revit_Local_Models\2020\16FFRU01-E-ZSMEN001_diane.riosEZM7N.rvt

FILENAME:

PLOT DATE/TIME: 1/27/2020 4:14:25 PM

ELECTRICAL SYSTEMS SEISMIC REQUIREMENTS

PER IBC-2015/ASCE 7-10

A. PER THE 2015 INTERNATIONAL BUILDING CODE, MECHANICAL, PLUMBING AND ELECTRICAL EQUIPMENT AND COMPONENTS, INCLUDING THEIR SUPPORTS AND ATTACHMENTS, SHALL BE DESIGNED FOR SEISMIC FORCES IN ACCORDANCE WITH CHAPTER 13 OF ASCE 7-10.

B. EXTERIOR EQUIPMENT INCLUDING ROOF CURBS, RACK SUPPORTS EXPOSED TO WIND SHALL BE DESIGNED AND INSTALLED TO WITHSTAND THE WIND PRESSURES DETERMINED IN ACCORDANCE WITH CHAPTER 26 TO 29 OF ASCE 7-10.

C. WHERE DESIGN FOR SEISMIC AND WIND LOADS IS REQUIRED, THE MORE DEMANDING FORCE MUST BE USED.

D. REFERENCE THE STRUCTURAL DRAWINGS FOR SITE SPECIFIC INFORMATION ON SEISMIC DESIGN CATEGORY, WIND SPEEDS, ETC.

E. USE THE TABLE BELOW TO DETERMINE SEISMIC RESTRAINT REQUIREMENTS FOR EACH COMPONENT.

F. FOR ALL COMPONENTS REQUIRING SEISMIC RESTRAINT, THE COMPONENT SUPPORTS AND ATTACHMENTS SHALL BE DESIGNED BY A REGISTERED DESIGN PROFESSIONAL REGISTERED IN THE STATE THE JOB IS LOCATED. SUBMITTALS MUST INCLUDE STAMPED AND SIGNED DRAWINGS AND CALCULATIONS.

G. WHERE SEISMIC RESTRAINT IS REQUIRED, HOUSEKEEPING PADS NEEDED FOR THE INSTALLATION OF EQUIPMENT UNDER THIS CONTRACT MUST BE DESIGNED BY THE SEISMIC ENGINEER. DO NOT POUR ANY HOUSEKEEPING PADS PRIOR TO THE RECEIPT OF THE APPROVED SEISMIC SUBMITTAL.

H. SEISMIC RESTRAINTS FOR DUCTWORK, PIPING, CONDUIT, CABLE TRAYS AND BUS DUCT MUST BE SHOWN ON LAYOUT DRAWINGS SHOWING SPECIFIC RESTRAINT LOCATIONS ALONG WITH ACCOMPANYING DETAILS AND CALCULATIONS.

ELECTRICAL COMPONENT IMPORTANCE FACTOR (Ip) DESIGNATION

Ip = 1.0	Ip = 1.5
• ALL ASSIGNATED ELECTRICAL WORK UNLESS NOTED OTHERWISE	• EMERGENCY LIGHTS • EXIT LIGHTS • EMERGENCY POWER SYSTEMS • FIRE ALARM

SEISMIC DESIGN CATEGORIES D,E,F

	COMPONENT IMPORTANCE FACTOR (Ip)				
	1.0		1.5		
COMPONENT IDENTIFICATION	SEISMIC RESTRAINT REQUIREMENT	NOTES	SEISMIC RESTRAINT REQUIREMENT	NOTES
ROOF MOUNTED	RESTRAIN ALL	1	RESTRAIN ALL	1
FLOOR MOUNTED	RESTRAIN ALL	1,2	RESTRAIN ALL	1
WALL MOUNTED	RESTRAIN ALL	1,2	RESTRAIN ALL	1
COMPONENT SUPPORTS	RESTRAIN ALL	1	RESTRAIN ALL	1
SUSPENDED EQUIPMENT	RESTRAIN ALL	1	RESTRAIN ALL	1
CABLE TRAY/BUS DUCT/ TRAPEZED CONDUIT	DO NOT DESIGN ON TRAPEZE 2.5", RESTRAIN IF TOTAL WEIGHT OF SUSPENDED COMPONENTS > 10 LBS/FT	3	RESTRAIN IF TOTAL WEIGHT OF SUSPENDED COMPONENTS > 10 LBS/FT	3
CONVENIENT CERTIFICATION	NOT REQUIRED		REQUIRED	
PENDANT, LAY-IN AND CAN LIGHTS	REQUIRED	4	REQUIRED	4

NOTES:

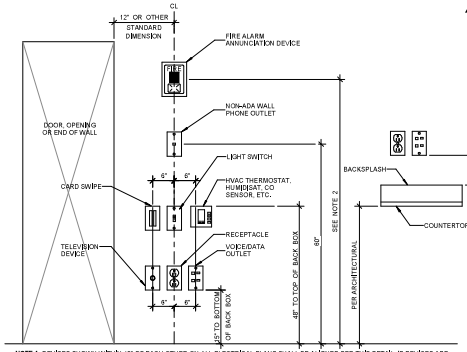
1. EQUIPMENT 20 LBS OR LESS IS EXEMPT IF THE COMPONENT IS POSITIVELY ATTACHED TO THE STRUCTURE, AND FLEXIBLE CONNECTIONS ARE PROVIDED BETWEEN THE COMPONENT AND ASSOCIATED DUCTWORK, PIPING AND CONDUIT.

   RESTRAINT IS NOT REQUIRED IF THE COMPONENT WEIGHS 400 LBS OR LESS, IS MOUNTED WITH THE CENTER OF MASS 4'-0" OR LESS ABOVE A FLOOR, IS POSITIVELY ATTACHED TO THE STRUCTURE, AND HAS FLEXIBLE CONNECTIONS BETWEEN THE COMPONENT AND ASSOCIATED DUCTWORK, PIPING AND CONDUIT.

3. RESTRAINT IS NOT REQUIRED IF THE CONDUIT IS SUPPORTED BY HANGERS AND EACH HANGER IN THE RUN IS 12" IN, OR LESS IN LENGTH FROM THE TOP OF THE PIPE TO THE SUPPORTING STRUCTURE, AND THE PIPES ARE SUPPORTED AS A TRAPEZE THE TRAPEZE SHALL BE SUSPENDED BY HANGERS HAVING A LENGTH OF 12" IN OR LESS, WHERE ROD HANGERS ARE USED, THEY SHALL BE EQUIPPED WITH SWIVELS, EYENUTS OR OTHER DEVICES TO PREVENT BENDING OF THE ROD.

4. THE RESTRAINT OF PENDANT, LAY-IN AND CAN LIGHTS IS ADDRESSED IN ASTM E580 AND E580.

5. COMPONENT CERTIFICATION MUST BE SUPPLIED BY THE EQUIPMENT MANUFACTURER AT TIME OF SUBMITTAL FOR REVIEW BY ENGINEER OF RECORD.



NOTE 1: DEVICES SHOWN WITHIN 48" OF EACH OTHER ON ALL ELECTRICAL PLANS SHALL BE ALIGNED PER THIS DETAIL. IF DEVICES ARE SHOWN IN MIDDLE OF WALL, THEN CENTER DEVICES ON WALL.

NOTE 2: MOUNT 80" ABOVE FINISHED FLOOR WHERE POSSIBLE. WHERE CEILING HEIGHTS DO NOT ALLOW THIS HEIGHT, MOUNT 6" BELOW CEILING. WHERE OBSTRUCTIONS DO NOT ALLOW THIS HEIGHT, MOUNT 60" TO 96" ABOVE FINISHED FLOOR. ALL MOUNTING HEIGHTS FOR NOTIFICATION DEVICES SHALL BE MEASURED TO THE CENTER OF THE LENS.

1 / E001 DEVICE ALIGNMENT DETAIL
SCALE: N.T.S.

GENERAL ELECTRICAL NOTES

1. BRANCH CIRCUIT WIRING FOR 208/120V CIRCUITS LESS THAN 99' FROM PANEL TO FARTHEST DEVICE SHALL BE 3-#12s, #12 GND IN 3/4"C. AND 3-#10 AND 1-#10 GND IN 3/4"C. FOR CIRCUITS GREATER THAN 99' UNLESS NOTED OTHERWISE. WHERE CONDUCTOR AND RACEWAY SIZE ARE SHOWN AT HOMERUN, SUCH SIZE SHALL BE USED FOR THE ENTIRE CIRCUIT, EXCEPTION: FINAL CONNECTION TO DEVICES IN OUTLET BOXES IS NOT REQUIRED TO BE LARGER THAN #12.
2. PRIOR TO ROUGH-IN, COORDINATE THE LOCATION AND MOUNTING HEIGHT OF ALL EQUIPMENT MOUNTED DEVICES WITH THE ARCHITECTURAL INTERIOR ELEVATIONS AND MILLWORK SHOP DRAWINGS. IN THE EVENT OF A CONFLICT, NOTIFY THE ARCHITECT. MINOR ADJUSTMENTS IN DEVICE LOCATION, SUCH AS 1-2" IN ANY DIRECTION, SHALL BE DONE AT NO ADDITIONAL COST TO THE OWNER. UNDERCABINET LIGHT FIXTURES, RECEPTACLES AND OTHER DEVICES TO BE MOUNTED INSIDE CABINETS SHALL BE REVIEWED WITH THE ARCHITECT PRIOR TO ROUGH-IN TO CONFIRM THE EXACT LOCATION OF FIXTURES AND DEVICES.
3. COORDINATE THE LOCATION OF ALL FLOOR BOXES WITH THE ARCHITECT PRIOR TO ROUGH IN. ALL FLOOR BOXES SHALL BE INSTALLED TO MAINTAIN THE FIRE RATING OF THE FLOOR. COORDINATE CORE DRILLING HOLES IN FLOOR WITH STRUCTURAL ENGINEER.
4. OUTLET BOXES FOR SWITCHES, RECEPTACLES, ETC. MOUNTED ON OPPOSITE SIDES OF PARTITIONS SHALL NOT BE MOUNTED IN THE SAME WALL CAVITY. SEPARATE WALL PENETRATIONS BY MOUNTING ON OPPOSITE SIDES OF WALL STUDS OR OTHER VERTICAL STRUCTURAL MEMBERS. IF THE WALL CONTAINING THE BOXES ARE INSTALLED IN A FIRE-RATED PARTITION, INSTALLATION SHALL COMPLY WITH INTERNATIONAL BUILDING CODE 714.3.2.
5. RACEWAYS SHALL BE INSTALLED CONCEALED IN NEW WALL CONSTRUCTION, ABOVE CEILINGS, BELOW FLOOR AND IN OTHER CAVITIES TO THE GREATEST EXTENT POSSIBLE. EXPOSED RACEWAYS MAY BE USED IN UNFINISHED SPACES, WHERE EXPLICITLY NOTED ON PLANS AND WHERE APPROVED BY THE ARCHITECT AND ENGINEER. LAY-OUT EXPOSED RACEWAYS TO MINIMIZE THE NUMBER OF VERTICAL RUNS.
6. FEEDER CONDUITS, BRANCH CIRCUITS AND CABLE TRAY ROUTING SHALL COMPLY WITH DETAILS ON DRAWINGS AND SHALL BE COORDINATED WITH THE WORK OF OTHER TRADES BEFORE AND DURING CONSTRUCTION. COORDINATE THE ROUTING OF UNDERGROUND CONDUITS/RACEWAYS WITH STRUCTURAL FOOTINGS OF BUILDING. FEEDER CONDUITS AND BRANCH CIRCUITS SHALL BE ROUTED OVERHEAD UNLESS PRIOR APPROVAL HAS BEEN GRANTED BY THE ARCHITECT AND ENGINEER.
7. WHERE LIGHT SWITCH AND ARCHITECTURAL DIMMER RECEPTACLES ARE INDICATED TO BE MOUNTED ADJACENT TO EACH OTHER, THE DEVICES SHALL BE MOUNTED IN THE SAME BOX UNDER A COMMON DEVICE PLATE. IN THE CASE WHERE THE DEVICE VOLTAGES ARE DIFFERENT, PROVIDE A PERMANENT VOLTAGE BARRIER IN THE BOX PER NEC 404.8.B.
8. A FIRESTOP SYSTEM SHALL BE USED TO SEAL ALL PENETRATIONS OF ELECTRICAL CONDUITS AND CABLES THROUGH FIRE-RATED PARTITIONS. THE FIRESTOP SYSTEM SHALL CONSIST OF A FIRE-RATED CAULK TYPE SUBSTANCE AND HIGH-TEMPERATURE FIBER INSULATION BY 3ST OR APPROVED EQUAL. ONLY METAL CONDUIT SHALL BE USED TO PENETRATE FIRE-RATED PARTITIONS. SEE ARCHITECTURAL DRAWINGS FOR ALL LOCATIONS OF FIRE-RATED WALLS.
9. THE USE OF MC CABLE IS ALLOWED ABOVE ACCESSIBLE CEILINGS AND IN STUD CONSTRUCTION ONLY. HOMERUNS TO PANEL SHALL BE WIRE IN RACEWAY ONLY. MC CABLE IS NOT ACCEPTABLE FOR HOMERUNS. MC CABLE IS ONLY ACCEPTABLE FOR 208/120V BRANCH CIRCUITS.
10. PROVIDE A LISTED EXPANSION/DEFLECTION FITTING FOR ALL CONDUIT CROSSING EXPANSION JOINTS PER NEC 300.4.H. SEE ARCHITECTURAL DRAWINGS FOR LOCATIONS OF EXPANSION JOINTS.
11. WHEREVER THE WORD "PROVIDE" IS USED ON THE ELECTRICAL DRAWINGS, IT SHALL BE INFERRED TO MEAN "FURNISH AND INSTALL" UNLESS NOTED OTHERWISE.
12. OUTLET BOXES FOR FIRE ALARM DEVICES SHALL BE DEEP BOXES (2-1/8" MINIMUM). ALL OTHER OUTLET BOXES SHALL BE STANDARD DEPTH (1-1/2" MINIMUM), UNLESS NOTED OTHERWISE.
13. THE ARRANGEMENT, GROUPING, AND ROUTING OF BRANCH CIRCUITS SHALL BE PROVIDED AT THE CONTRACTOR'S DISCRETION IN ACCORDANCE WITH GENERALLY ACCEPTED PRACTICE FOR ELECTRICAL WORK, THE NATIONAL ELECTRICAL CODE REQUIREMENTS, LOCAL ORDINANCES, AND THE FOLLOWING: 1- A COMMON NEUTRAL MAY NOT BE INSTALLED. 2- MULTIPLE SINGLE-POLE BRANCH CIRCUITS (UP TO 3 PHASE, 3 NEUTRALS AND 1 GROUND) RATED FOR 30A OR LESS MAY BE PULLED INTO A SINGLE RACEWAY. THE CONTRACTOR SHALL BE RESPONSIBLE FOR SIZING THE RACEWAYS AND DE-RATING CONDUCTORS PER NEC 310.15. 3- A GROUND CONDUCTOR SHALL BE PROVIDED IN ALL RACEWAYS UNLESS NOTED OTHERWISE.
14. REFER TO THE ARCHITECTURAL DRAWINGS FOR PROJECT PHASING.
15. ALL RECEPTACLES AND LIGHTING ON GENERATOR SHALL BE PROVIDED WITH RED COVER PLATES AND SWITCH PLATES.

GENERAL POWER NOTES

1. EXISTING UTILITY TRANSFORMER PAD SHALL BE REUSED. COORDINATE NECESSITY OF SLAB EXTENSION WITH THE POWER COMPANY. EXTEND (1) 5" CONDUIT FROM NEW TRANSFORMER PAD TO UTILITY SECTION. CONDUIT ELBOWS SHALL BE RIGID GALVANIZED STEEL. SEE SITE PLAN FOR ASSUMED LOCATIONS. COORDINATE TRANSFORMER PAD AND UTILITY SERVICE LAYOUT, CONFIRM LOCATIONS WITH THE UTILITY COMPANY. COORDINATE WITH UTILITY COMPANY REQUIREMENTS TO PROVIDE A METER CAN SERVICE. METER SHALL BE LOCATED PER UTILITY COMPANY REQUIREMENTS. ALL COSTS ASSOCIATED WITH THE UTILITY SERVICE SHALL BE INCLUDED IN THE PRIMARY CONDUIT, METER, SERVICE ENTRANCE, ETC. SHALL BE PERFORMED BY THE CONTRACTOR.
2. THE GROUNDWOOD CLUSTER OF THE SERVICE GROUND WELL CONSISTS OF THREE (3) 10'-0" COPPER CLAD STEEL GROUND RODS. THEY SHALL BE SPACED IN A TRIANGULAR CONFIGURATION APPROXIMATELY 10' APART AND INTERCONNECTED IN DELTA WITH A #2 BARE COPPER CONDUCTOR. TOPS OF RODS SHALL BE 12" BELOW FINISHED GRADE. CONNECTION TO THE RODS SHALL BE WITH EXOTHERMIC WELDS.
3. STUB-UP (1) 3/4" CONDUIT FROM EACH ENSLIN MOUNTED PANELBOARD TO ABOVE FINISHED CEILING.
4. PROVIDE NEMA CONFIGURATION RECEPTACLES TO MATCH PLUGS ON EQUIPMENT FURNISHED.

GENERAL LIGHTING NOTES

1. SEE ARCHITECTURAL REFLECTED CEILING PLAN FOR THE EXACT LOCATION OF ALL CEILING MOUNTED LIGHTING FIXTURES. REFER TO ARCHITECTURAL DRAWINGS FOR MOUNTING DETAILS OF LIGHT FIXTURE TO ACOUSTICAL CEILING SYSTEM AND STRUCTURE.
2. EXACT LOCATIONS OF LIGHTING FIXTURES IN MECHANICAL SPACES SHALL BE DETERMINED IN THE FIELD. DO NOT SUPPORT FIXTURES FROM DUCT OR PIPING. PROVIDE CHAIN OR TRAPEZE-TYPE HANGERS WHERE FIXTURES CANNOT BE MOUNTED DIRECTLY TO CEILING.
3. LIGHTING FIXTURE CATALOG NUMBERS ARE INDICATIVE OF THE STYLE OF FIXTURE REQUIRED. CONTRACTOR SHALL PROVIDE FIXTURES WITH THE PROPER TRIM, VOLTAGE AND OPTIONS NECESSARY FOR INSTALLATION.
4. DOUBLE-FACED EXIT FIXTURES SHALL BE OF THE SAME MANUFACTURER AND SERIES AS THE SINGLE-FACED EXIT FIXTURES.
5. REGARDLESS OF CATALOG NUMBER INDICATED IN SCHEDULE, PROVIDE BATTERY BACK-UP FOR ALL FIXTURES INDICATED ON THE DRAWINGS (NOT CIRCUITED TO THE EMERGENCY LIGHTING PANEL) AND CONNECTED TO THE INVERTER FOR EMERGENCY TYPE.
6. REGARDLESS OF HOW NOTED ON PLANS, ALL EMERGENCY LIGHTING FIXTURES INDICATED IN PRIVATE SPACES SHALL BE WIRED SO AS TO BE SWITCHED "UNSWITCHED" DOWNSTREAM OF THE BATTERY BACK-UP OR EMERGENCY GENERATOR. ALL EMERGENCY LIGHTING FIXTURES INDICATED IN PUBLIC SPACES OR MEANS OF EGRESS (CORRIDORS, LOBBIES, BATHROOMS, AUDITORIUMS, STAIRWELLS, ETC.) SHALL BE WIRED WITH A SWITCH AHEAD OF LOCAL SWITCH AND SHALL NOT BE SWITCHED. EMERGENCY BATTERY BACK-UP OR GENERATOR SHALL NOT BE ACTIVATED UNLESS A LOSS OF NORMAL BUILDING POWER OCCURS.
7. REGARDLESS OF CATALOG NUMBER INDICATED IN SCHEDULE, EXIT SIGNS AND EMERGENCY LIGHTING UNITS NOT CIRCUITED TO THE GENERATOR SHALL BE PROVIDED WITH BATTERY BACK-UP. SHALL BE WIRED AHEAD OF LOCAL SWITCH AND SHALL NOT BE SWITCHED.
8. SWITCHING FOR EMERGENCY LIGHT FIXTURES SHALL BE PROVIDED WITH A RED COLORED SWITCH.

GENERAL SIGNAL NOTES

1. CONDUIT FOR HVAC CONTROL CIRCUITS REQUIRED TO INTERCONNECT HVAC UNIT TO CONTROL CIRCUITS SHALL BE PROVIDED BY MECHANICAL CONTROLS CONTRACTOR. ELECTRICAL CONTRACTOR SHALL COORDINATE WITH MECHANICAL CONTRACTOR AND CONTROLS PROVIDER TO DETERMINE EXACT SIZE OF CONDUIT(S) REQUIRED FOR HVAC CONTROLS. ELECTRICAL CONTRACTOR SHALL PROVIDE ALL REQUIRED CONDUIT, COORDINATE POINTS OF CONNECTION WITH DIVISION 23. PROVIDE PULL CORD IN ALL EMPTY CONDUITS. SEE HVAC DRAWINGS FOR EXACT LOCATIONS AND QUANTITIES OF HVAC EQUIPMENT (AHU, HP, CU, EF, ETC.) AND DEVICES (THERMOSTATS, DETECTORS, VAV, FCU, THERMOSTATS, ETC.).
2. EXTEND A (1) 3" CONDUIT FROM THE TELEPHONE BACKBOARD TO THE TELEPHONE SERVICE POINT. SEE THE ELECTRICAL SITE PLAN FOR THE ASSUMED LOCATION. COORDINATE FINAL LOCATION WITH COMMUNICATIONS PROVIDER.
3. COMMUNICATION BACKBOARD (CBB) SHALL BE 8'H X 4'L X 3/4"D PLYWOOD WITH THE BOTTOM AT 6" ABOVE FINISHED FLOOR. EXTEND A #6 BARE COPPER GROUNDING CONDUCTOR FROM THE ELECTRICAL SERVICE GROUND TO THE BACKBOARD AND LEAVE WITH SUFFICIENT SLACK TO REACH ANY PLACE NEXT TO BOARD. COAT BACKBOARD WITH A MINIMUM OF TWO COATS OF FIRE RETARDANT PAINT.
4. EXTEND A 1" CONDUIT WITH PULL WIRE FROM EACH TELEPHONE OUTLET TO (THE COMMUNICATION BACKBOARD) ABOVE THE LAY-IN CEILING. TURN CONDUIT 12" INTO CEILING CAVITY A MINIMUM OF 6" ABOVE THE CEILING AND TERMINATE WITH AN INSULATED THROAT BUSHING.
5. THE MAIN TELECOMMUNICATIONS GROUNDING BUSBAR (MTGB) SHALL BE A PRE-DRILLED COPPER BUSBAR WITH STANDARD NEMA BOLT HOLE SIZING THAT IS NO SMALLER THAN 6MM THICK BY 100MM WIDE BY 1 FOOT LONG. THE MTGB SHALL BE BONDED TO THE BUILDING SERVICE GROUND AND ALL TELECOMMUNICATIONS METALLIC RACEWAYS LOCATED IN THE SAME ROOM. MTGB CONNECTIONS SHALL BE LISTED TWO HOLE COMPRESSION TYPE.
6. A #4 INSULATED COPPER CONDUCTOR RUNNING FROM THE MTGB TO ALL OTHER TELECOMMUNICATION GROUNDING BUSBARS SHALL CONSTITUTE THE TELECOMMUNICATIONS BONDING BACKBONE (TBB).
7. EACH TELECOMMUNICATION GROUNDING BUSBAR (TGB) SHALL BE A PRE-DRILLED COPPER BUSBAR WITH STANDARD NEMA BOLT HOLE SIZING THAT IS NO SMALLER THAN 6MM THICK BY 50MM WIDE BY 1 FOOT LONG. CONNECTIONS SHALL BE LISTED TWO HOLE COMPRESSION TYPE.
8. PROVIDE SLEEVES SIZED FOR 40% EXPANSION THROUGH CORRIDOR WALLS.
9. PROVIDE ALL DUCT SMOKE DETECTORS AND ACCESSORIES NECESSARY FOR INTERLOCKING WITH MECHANICAL EQUIPMENT (AHU'S, SMOKE DAMPERS, ETC.). COORDINATE WITH MECHANICAL PLANS FOR LOCATIONS AND REQUIREMENTS.
10. THESE DOCUMENTS MAY NOT INCLUDE ENTIRE ELECTRICAL INFRASTRUCTURE REQUIRED TO SUPPORT THE BUILDING AUTOMATION SYSTEM. COORDINATE WITH BAS PROVIDER ON ALL NECESSARY INFRASTRUCTURE FOR A COMPLETE AND WORKING SYSTEM.

GENERAL EXISTING CONDITION NOTES

1. AREAS OF WORK EXIST FOR THIS PROJECT WHICH WERE NOT ACCESSIBLE OR HAD LIMITED ACCESS DURING DESIGN, AS SUCH, CONTRACTOR SHALL VERIFY ALL UTILITIES IN AREA OF WORK BEFORE DEMOLITION OF ANY SERVICE. ANY ELECTRICAL COMPONENTS NOT SHOWN SHALL BE IDENTIFIED AND THE ARCHITECT AND ENGINEER SHALL BE NOTIFIED AS SOON AS POSSIBLE. NO ELECTRICAL REWORK SHALL BE COMMENCED WITHOUT COORDINATION OF BOTH ARCHITECT AND ENGINEER. WHERE INFORMATION SHOWN ON THESE DRAWINGS CONFLICTS WITH FIELD CONDITIONS, IT SHALL BE BROUGHT TO THE ATTENTION OF THE ARCHITECT AND ENGINEER.
2. IN AREAS WHERE THE EXISTING CEILINGS ARE NOT SLATED TO BE REPLACED, THE CONTRACTOR SHALL WORK THROUGH THE EXISTING CEILINGS (SEE ARCHITECTURAL REFLECTED CEILING PLAN FOR AREA OF WORK). THE CONTRACTOR SHALL BE RESPONSIBLE FOR REPLACING ANY DAMAGED CEILING TILES THAT ARE DAMAGED AS PART OF THE WORK. (ALL WORK PERFORMED ABOVE EXISTING CEILINGS SHALL BE PERFORMED AFTER HOURS AND SCHEDULED WITH THE OWNER IN ADVANCE.)
3. THE CONTRACTOR SHALL BE RESPONSIBLE FOR INSTALLING FIRESTOP SYSTEM IN ALL PENETRATIONS OF FIRE-RATED FLOORS AND WALLS CREATED BY THE REMOVAL OF EXISTING ELECTRICAL CONDUIT OR CABLES, AS WELL AS THOSE CREATED BY NEWLY INSTALLED CONDUITS AND SLEEVES.
4. WHERE INSTALLATION REQUIRES CUTTING OR DRILLING OF THE EXISTING FLOOR SLAB, THE CONTRACTOR SHALL X-RAY THE EXISTING SLAB PRIOR TO ENSURE THAT NO EXISTING UTILITIES OR STRUCTURAL ELEMENTS IN THE SLAB WILL BE COMPROMISED BY THE WORK. NOTIFY THE A/E OF ANY CONFLICTS THAT WILL REQUIRE RELOCATING THE PROPOSED SLAB WORK. THE CONTRACTOR SHALL BE RESPONSIBLE FOR THE REPAIR OF ANY DAMAGED UTILITIES OR STRUCTURAL ELEMENTS CAUSED BY THE SLAB DEMOLITION.
5. SUPPORT ALL EXISTING CONDUITS AND JUNCTION BOXES ABOVE THE CEILING IN THE CONSTRUCTION AREA PER NEC.

GENERAL DEMOLITION NOTES

1. ALL ELECTRICAL EQUIPMENT TO BE REMOVED SHALL REMAIN THE PROPERTY OF THE OWNER. THE CONTRACTOR SHALL NOT DISPOSE OF ANY MATERIALS UNTIL RELEASED BY THE OWNER'S PROJECT MANAGER. MATERIAL THAT THE OWNER'S PROJECT MANAGER CHOOSES TO RETAIN SHALL BE DELIVERED BY THE CONTRACTOR TO A LOCATION DESIGNATED BY THE PROJECT MANAGER. ALL OTHER MATERIALS SHALL BE PROPERLY DISPOSED OF BY THE CONTRACTOR.

ELECTRICAL ABBREVIATIONS

ABBR	DESCRIPTION
(E)	EXISTING
AFC	ABOVE FINISHED CEILING
AFF	ABOVE FINISHED FLOOR
AFG	ABOVE FINISHED GRADE
ATU	AIR HANDLING UNIT
BAS	BUILDING AUTOMATION SYSTEM
BFC	BELOW FINISHED CEILING
BFG	BELOW FINISHED GRADE
BOX	BOTTOM OF DEVICE
CR	CANOPIA
CLG	CEILING
ECB	ENCLOSED CIRCUIT BREAKER
EF	EXHAUST FAN
FACP	FIRE ALARM CONTROL PANEL
FDS	FUSED DISCONNECT SWITCH
FSD	FIRE/SMOKE DAMPER
GBB	GROUND BUSBAR
GFCI	GROUND-FAULT CIRCUIT-INTERRUPTING
GFI	GROUND-FAULT INTERRUPTING
GP	GENERAL PURPOSE
HL	HEAT LAMP
J BOX	JUNCTION BOX
KW	KILOWATTS
LCS	LIGHTING CONTROL SYSTEM
MTGB	MAIN TELECOMM. GROUNDING BUSBAR
NEC	NATIONAL ELECTRICAL CODE
NFDS	NON-FUSED DISCONNECT SWITCH
OC	ON CENTER
RTU	ROOF TOP UNIT
SPD	SURGE PROTECTION DEVICE
TBB	TELECOMMUNICATIONS BACKBOARD
TGB	TELECOMMUNICATIONS GROUNDING BUSBAR
TYP	TYPICAL
UNO	UNLESS NOTED OTHERWISE
UTP	UNSHIELDED TWISTED PAIR
VFD	VARIABLE FREQUENCY DRIVE
W/	WITH
WH	WATER HEATER
W/P	WEATHERPROOF
XFMR	TRANSFORMER

CONTROL PANELS	DESCRIPTION
BMS	BUILDING MANAGEMENT (AUTOMATION) SYSTEM
EMS	ENERGY MANAGEMENT SYSTEM
FACP	FIRE ALARM CONTROL PANEL
LCP	LIGHTING CONTROL PANEL
NAC	NOTIFICATION APPLIANCE CIRCUIT PANEL
SCP	SECURITY PANEL
VECP	MOVE EVACUATION CONTROL PANEL

JUNCTION BOX/SWITCH	DESCRIPTION
AD	AUTOMATIC DOOR
AF	AUTOMATIC FAUCET
BC	GENERATOR BATTERY CHARGER
BH	GENERATOR BLOCK HEATER
CP	CONTROL POWER
DH	DOOR HARDWARE
DT	DRUG TESTING TOILET
DW	DISHWASHER
EF	EXHAUST FAN
FD	FIRE DAMPER
FL	AUTOMATIC FLUSH
GD	GARBAGE DISPOSAL
HD	HAND DRYER
HT	HEAT TRACE
IL	RECESSED ILLUMINATOR
IR	IRRIGATION
MD	MOTORIZED FURNITURE DRAW
MP	MODULAR FURNITURE POWER
NACP	NOTIFICATION APPLIANCE CIRCUIT PANEL
OD	OVERHEAD DOOR
PA	PUBLIC ADDRESS
RF	RETURN FAN
SE	SOUND ENHANCEMENT
SF	SUPPLY FAN
SG	STORAGE
TC	TIME CLOCK
WH	WATER HEATER

LIGHT SWITCH	DESCRIPTION
3	THREE WAY
4	FOUR WAY
A	AUTOMATIC CONNECT TO LCS
D	DIMMER
OS	OCCUPANCY SENSOR
T	DESIGNATED TIMED

OCC. SENSOR	DESCRIPTION
DT	DUAL TECHNOLOGY
HB	PASSIVE INFRARED W/ HIGH BAY LENS
PIR	PASSIVE INFRARED
US	ULTRASONIC

RECEPTACLE	DESCRIPTION
C	MOUNT ABOVE COUNTER
EM	EMERGENCY
GD	GARBAGE DISPOSAL (MOTOR RATED)
M	MICROWAVE
R	REFRIGERATOR
SP	SUMP PUMP
TS	TAMPER/SURGE
U	RECEPTACLE WITH (2) USB PORTS
WC	WATER COOLER
WP	WEATHERPROOF

WIRE SIZING CHART 20 AMP BRANCH CIRCUITS

DISTANCE, 120V	WIRE SIZE
1'-90 FEET	#12 AWG
90 - 230 FEET	#10 AWG
230 - 349 FEET	#8 AWG

DISTANCE, 277V	WIRE SIZE
0 - 209 FEET	#12 AWG
209 - 553 FEET	#10 AWG
553 - 1033 FEET	#8 AWG

LIGHTING SYMBOL LEGEND

SYMBOL	DESCRIPTION	SYMBOL	DESCRIPTION
	LIGHT FIXTURE (TYPICAL ALL DIMENSIONS)	S	LIGHT SWITCH, SINGLE POLE
	LIGHT FIXTURE (SHADING INDICATES EMERGENCY, TYPICAL ALL LIGHTING SYMBOLS)	^{X}	LIGHT SWITCH, "X" INDICATES SWITCH TYPE
	STRIP LIGHT FIXTURE	^{X}	LIGHT SWITCH, LOWERCASE SUBSCRIPT INDICATES SWITCH LEG
	LIGHT FIXTURE (TYPICAL ALL DIMENSIONS)	OS^{X}	OCCUPANCY SENSOR (CEILING MOUNTED), "X" INDICATES SENSOR TYPE
	WALL MOUNTED LIGHT FIXTURE	DS^{X}	OCCUPANCY SENSOR (WALL MOUNTED), "X" INDICATES SENSOR TYPE
	LIGHTING CONTROL PANEL	PC	PHOTOCELL LIGHTING CONTROL (CEILING MOUNTED)
	EXIT SIGN (SINGLE SIDED ARROWS INDICATE DIRECTION)	PC	PHOTOCELL LIGHTING CONTROL (WALL MOUNTED)
	EXIT SIGN (DOUBLE SIDED ARROWS INDICATE CHEVRON DIRECTION)	^{A}	LIGHTING CONTROL SCHEME CALLOUT (SEE SCHEDULE)

POWER AND TELECOMMUNICATIONS SYMBOL LEGEND

SYMBOL	DESCRIPTION	SYMBOL	DESCRIPTION
^{X}	DUPLEX RECEPTACLE, "X" INDICATES RECEPTACLE TYPE		COMMUNICATION OUTLET (ROUGH-IN ONLY)
^{X}	GFCI DUPLEX RECEPTACLE, "X" INDICATES RECEPTACLE TYPE		COMMUNICATION OUTLET (CEILING MOUNTED, ROUGH-IN ONLY)
^{X}	DUPLEX RECEPTACLE (CEILING MOUNTED), "X" INDICATES RECEPTACLE TYPE		CABLE TRAY
^{X}	DUPLEX RECEPTACLE (FLOOR MOUNTED), "X" INDICATES RECEPTACLE TYPE	TV	TELEVISION CONNECTION LOCATION (ROUGH-IN ONLY)
^{X}	QUADRUPLEX RECEPTACLE, "X" INDICATES RECEPTACLE TYPE	WP	WAP ACCESS POINT (CEILING MOUNTED) (ROUGH-IN ONLY)
^{X}	(2) QUADRUPLEX RECEPTACLE, "X" INDICATES RECEPTACLE TYPE	WP	WAP ACCESS POINT (WALL MOUNTED) (ROUGH-IN ONLY)
^{X}	QUADRUPLEX RECEPTACLE (CEILING MOUNTED), "X" INDICATES RECEPTACLE TYPE	S	SPEAKER (CEILING MOUNTED) (ROUGH-IN ONLY)
^{X}	QUADRUPLEX RECEPTACLE (FLOOR MOUNTED), "X" INDICATES RECEPTACLE TYPE	S	SPEAKER (WALL MOUNTED) (ROUGH-IN ONLY)
	SPECIAL PURPOSE RECEPTACLE, SEE PLANS FOR NEMA CONFIGURATION AND BRANCH CIRCUITING	SM	SECURITY CARD READER (WALL MOUNTED) (ROUGH-IN ONLY)
^{X}	JUNCTION BOX (CEILING MOUNTED), "X" INDICATES JUNCTION BOX TYPE	C	CCTV CAMERA (WALL MOUNTED) (ROUGH-IN ONLY)
^{X}	JUNCTION BOX (WALL MOUNTED), "X" INDICATES JUNCTION BOX TYPE	C	CCTV CAMERA (CEILING MOUNTED) (ROUGH-IN ONLY)
	CONTROL SWITCH, "X" INDICATES SWITCH TYPE	M	SECURITY KEYPAD (WALL MOUNTED) (ROUGH-IN ONLY)
	MOTOR CONNECTION (AS NOTED)	HH	HAND HOLE
	PUSH BUTTON CONTROL	M	METER
	DISCONNECT SWITCH (FUSIBLE OR NON-FUSIBLE)		PANELBOARD
			TRANSFORMER

EQUIPMENT AND SIGNAL SYMBOL LEGEND

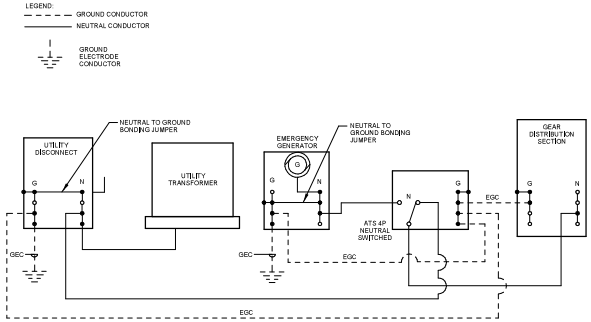
SYMBOL	DESCRIPTION	SYMBOL	DESCRIPTION
T	THERMOSTAT (WALL MOUNTED, ROUGH-IN

LIGHT FIXTURE SCHEDULE

TYPE	FIXTURE DESCRIPTION	MANUFACTURER	CAT. #	LAMPING: LAMP TYPE	LAMPING: TOTAL LUMENS	LAMPING: COLOR TEMP.	ELECTRICAL: LOAD	ELECTRICAL: VOLTS	MOUNTING REMARKS	NOTES
							0			
A	2'x4' RECESSED LED TROFFER	LITHONIA	2GTL4-L48-EZ1-LP835	LED	4800	3500 K	47	277 V	RECESSED, LAY-IN	
AE	2'x4' RECESSED LED TROFFER (EMERGENCY)	LITHONIA	2GTL4-L48-EZ1-LP835-EL14L	LED	4800	3500 K	47	277 V	RECESSED, LAY-IN	
B	2'x2' RECESSED LED TROFFER	LITHONIA	2GTL2-L30-EZ1-LP835	LED	4000	3500 K	40	277 V	RECESSED, LAY-IN	
BE	2'x2' RECESSED LED TROFFER (EMERGENCY)	LITHONIA	2GTL2-L30-EZ1-LP835-EL14L	LED	4000	3500 K	40	277 V	RECESSED, LAY-IN	
C	LED STRIP LIGHT	LITHONIA	2L2H-L65000LM-MVOLT-40K-80CRI-WH	LED	5000	4000 K	70	277 V	PENDANT MOUNTED TO STRUCTURE. PROVIDE ZAGVH ACCESSORY, MOUNTED 9'-0" AFF	
C1	LED STRIP LIGHT	LITHONIA	2L2H-L48-SMR-2000LM-LD-ENS-MVOLT-3500K-80CRI-WH	LED	3000	3500 K	38	277 V	MOUNTED INSIDE CURVED FAUX SKYLIGHT. COORDINATE WITH EXISTING FAUX SKYLIGHTING FIXTURES TO MATCH SAME MOUNTING STRATEGY.	
CE	LED STRIP LIGHT (EMERGENCY)	LITHONIA	2L2H-L48-3000LM-MVOLT-3500K-80CRI-ES-EZ-WH	LED	5000	4000 K	70	277 V	PENDANT MOUNTED TO STRUCTURE. PROVIDE ZAGVH ACCESSORY, MOUNTED 9'-0" AFF	
D	INDIRECT LED LINEAR PENDANT	PEERLESS	7CRMFL2ST-LLP-EF2-MSLB-80CRI-35K-H1200LMF-DIM-K-277-SCT-FIN-A-210-SCEP	LED	6038	3500 K	60	277 V	PENDANT MOUNTED 9'-0" AFF	
DE	INDIRECT LED LINEAR PENDANT (EMERGENCY)	PEERLESS	7CRMFL2ST-LLP-EF2-MSLB-80CRI-35K-H1200LMF-DIM-DAR-K-277-SCT-SEC-FIN-A-210-SCEP	LED	6038	3500 K	60	277 V	PENDANT MOUNTED 9'-0" AFF	
E	EXTERIOR LED RECESSED CAN	GOTHAM	EVO-30/07-SAR-MVOLT-ESEM/VOLT-EZ10	LED	750	3000 K	10	277 V	RECESSED, LAY-IN	
EE	EXTERIOR LED RECESSED CAN (EMERGENCY)	GOTHAM	EVO-30/07-SAR-MVOLT-ESEM/VOLT-EZ10E	LED	750	3000 K	10	277 V	RECESSED, LAY-IN	
FE	EXTERIOR LED WALL PACK (EMERGENCY)	LITHONIA	WDGLED-L10A700-530K-SR3-MVOLT-PE-ELCWLGM-XD	LED	2000	3000 K	24	277 V	MATCH HEIGHT OF EXISTING EXTERIOR FIXTURES	
X	EXIT SIGN	COMPASS	CE SERIES MODEL CEG	LED			4	277 V	WALL/CEILING MOUNTED	

LIGHTING CONTROL SCHEME SCHEDULE

CONTROL SCHEME	CONTROL TYPE DESCRIPTION
1	MANUAL ON/OFF BY WALL MOUNTED SWITCH.
2	MANUAL DIMMING BY WALL MOUNTED DIMMER SWITCH.
4	MANUAL ON/OFF, SCENE SWITCHING WITH WALL MOUNTED SCENE SWITCH, CONTROL MAINTAINED BY ROOM CONTROLLER.
5	MANUAL ON/OFF WITH WALL MOUNTED SINGLE LEVEL SWITCH, AUTO OFF WITH INTEGRAL VACANCY SENSOR.
6	MANUAL ON/OFF WITH WALL MOUNTED SINGLE LEVEL SWITCH, AUTO OFF WITH CEILING MOUNTED OCCUPANCY SENSOR(S).
7	MANUAL ON/OFF WITH WALL MOUNTED DIMMER SWITCH, AUTO OFF WITH CEILING MOUNTED VACANCY SENSOR(S).
8	MANUAL ON, DUAL-LEVEL SWITCHING WITH WALL MOUNTED VACANCY SENSOR.
10	MANUAL ON, DUAL-LEVEL SWITCHING WITH WALL MOUNTED VACANCY SENSOR AND CEILING MOUNTED PHOTOSENSOR WITH ON/OFF CONTROL, CONTROL MAINTAINED BY ROOM CONTROLLER.
11	MANUAL ON, DUAL-LEVEL SWITCHING WITH CEILING MOUNTED VACANCY SENSOR AND CEILING MOUNTED PHOTOSENSOR WITH ON/OFF CONTROL, CONTROL MAINTAINED BY ROOM CONTROLLER.
12	MANUAL ON, DIMMING WITH CEILING MOUNTED VACANCY SENSOR AND CEILING MOUNTED PHOTOSENSOR WITH DIMMING CONTROL. CONTROL MAINTAINED BY ROOM CONTROLLER.
13	SCHEDULE ON/OFF DURING BUSINESS HOURS WITH AFTER-HOURS CEILING MOUNTED OCCUPANCY SENSOR CONTROL. SCHEDULE CONTROL MAINTAINED BY TIMECLOCK.
14	SCHEDULE ON/OFF DURING BUSINESS HOURS WITH AFTER-HOURS CEILING MOUNTED OCCUPANCY SENSOR CONTROL AND MANUAL SWITCH OVERRIDE. SCHEDULE CONTROL MAINTAINED BY TIMECLOCK.
15	SCHEDULE ON/OFF DURING BUSINESS HOURS WITH AFTER-HOURS WALL MOUNTED OCCUPANCY SENSOR CONTROL AND MANUAL SWITCH OVERRIDE. SCHEDULE CONTROL MAINTAINED BY TIMECLOCK.
16	SCHEDULE ON/OFF DURING BUSINESS HOURS. SCHEDULE CONTROL MAINTAINED BY TIMECLOCK.
17	SCHEDULE ON/OFF WITH PHOTOSENSOR OVERRIDE. PHOTOSENSOR SHALL BE WALL MOUNTED ON EXTERIOR WALL. SCHEDULE CONTROL MAINTAINED BY TIMECLOCK.



1 GENERATOR GROUNDING DETAIL 4 POLE
E002 NOT TO SCALE

LIGHT FIXTURE PLAN KEY

SHADING INDICATES EMERGENCY FIXTURE USED BY GENERATOR OR SUPPLIED WITH EMERGENCY BATTERY PACK.

CE 4 / d / NL A.2

CE = UPPERCASE LETTER / LETTERS INDICATE FIXTURE TYPE
d = LOWERCASE LETTER INDICATES SWITCH IDENTIFICATION
NL or EM = INDICATES NON SWITCHED "NIGHT LIGHT" / "EMERGENCY"
A.9 = DESIGNATES PANEL NAME: CIRCUIT NUMBER

NOTE:
ALL "EM" FIXTURES INDICATED IN PLAN CONTAIN EMERGENCY BALLASTS OR CONNECTION TO GENERATOR. ALL EMERGENCY BALLAST FIXTURES REQUIRE AN EXTRA CONSTANT POWER CONDUCTOR TO BE CONNECTED TO THE EMERGENCY BALLAST FOR CHARGING. CONDUCTOR MUST NOT BE CONTROLLED BY ANY LIGHTING SYSTEM OR ANY POWER INTERRUPTED AT ANY TIME. "NL" FIXTURES SHALL HAVE ABSOLUTELY NO LIGHTING CONTROL & SHALL BE OPERATIONAL AT ALL TIMES.

IN BOTH CASES "EM" & "NL", WHERE UTILITY POWER SHOULD FAIL, FIXTURES SHALL REMAIN OPERATIONAL FOR A MINIMUM 90 MINUTES @ 1400 LUMENS WITH AT LEAST 2 LAMPS OPERATIONAL.

LIGHT CONTROL SCHEME

LIGHTING CONTROL SYMBOL CORRELATES WITH DESIRED CONTROL SCHEME AS INDICATED IN THE LIGHTING CONTROL SCHEME SCHEDULE

2 LIGHT FIXTURE PLAN KEY
E002 NOT TO SCALE

EQUIPMENT CONNECTION SCHEDULE

UNIT I.D.	VOLTS	# OF POLES	LOAD (VA)	BRANCH CIRCUIT WIRING	DISCONNECT / STARTER	NOTES
AIR-COOLED CHILLERS						
CH-1	480 V	3	180000	3#350KCMIL, 1#4/G 2"C/C	NFDS 800/3/3R	
AIR HANDLER ELECTRIC HEAT						
AHU-1 EH	480 V	3	75000	3#1/0, 1#1/0 G, 3/4"C	NFDS 300/3/1	
AHU-2 EH	480 V	3	100000	3-1/0, 1#6G, 1-1/4"C	NFDS 200/3/1	
AHU-3 EH	480 V	3	75000	3#1/0, 1#6G, 1-1/2"C	NFDS 200/3/1	
AHU-4 EH	480 V	3	75000	3#1/0, 1#6G, 1-1/2"C	NFDS 200/3/1	
AIR HANDLING UNITS						
AHU-2	480 V	3	39953	3#4, 1#8G, 1"C	NFDS 100/3/1	
AHU-8	480 V	3	25772	3#8, 1#8G, 3/4"C	NFDS 60/3/1	
AHU-10	480 V	3	25772	3#8, 1#10G, 3/4"C	NFDS 60/3/1	
ELECTRIC HEATERS						
EH-1	208 V	2	3000	2#12, 1#12G, 3/4"C	NFDS 30/2/3R	
EXHAUST FANS						
EF-1	277 V	1	115	2#12, 1#12G, 3/4"C	SINGLE POLE SWITCH	2
EF-2	277 V	1	115	2#12, 1#12G, 3/4"C	SINGLE POLE SWITCH	2
EF-3	277 V	1	115	2#12, 1#12G, 3/4"C	SINGLE POLE SWITCH	2
EF-4	277 V	1	115	2#12, 1#12G, 3/4"C	SINGLE POLE SWITCH	2
EF-5	277 V	1	115	2#12, 1#12G, 3/4"C	SINGLE POLE SWITCH	2
EF-6	277 V	1	115	2#12, 1#12G, 3/4"C	SINGLE POLE SWITCH	2
EF-7	277 V	1	115	2#12, 1#12G, 3/4"C	SINGLE POLE SWITCH	2
MINI-SPLIT						
CU-1	208 V	2	4492	2#12, 1#12G, 3/4"C	NFDS 30/2/3R	AH-1 POWERED FROM CU-1
CU-2	208 V	2	4492	2#12, 1#12G, 3/4"C	NFDS 30/2/3R	AH-2 POWERED FROM CU-2
CU-3	208 V	2	4492	2#12, 1#12G, 3/4"C	NFDS 30/2/3R	AH-3 POWERED FROM CU-3
CU-4	208 V	2	4492	2#12, 1#12G, 3/4"C	NFDS 30/2/3R	AH-4 POWERED FROM CU-4
RECIRCULATING PUMPS						
RCH-1	208 V	1	100	2#12, 1#12G, 3/4"C	SINGLE POLE SWITCH	
SPLIT SYSTEM						
AHU-1	480 V	3	2300	3#12, 1#12G, 3/4"C	NFDS 30/3/1	
AHU-2	480 V	3	2502	3#10, 1#12G, 3/4"C	NFDS 30/3/3R	
VAV BOX ELECTRIC HEAT						
VAV-1-01 EH	480 V	3	7000	3#12, 1#12G, 3/4"C	FDS 30/15/3/1	
VAV-1-02 EH	480 V	3	1500	3#12, 1#12G, 3/4"C	FDS 30/15/3/1	
VAV-1-03 EH	480 V	3	2500	3#12, 1#12G, 3/4"C	FDS 30/15/3/1	
VAV-1-04 EH	480 V	3	3000	3#12, 1#12G, 3/4"C	FDS 30/15/3/1	
VAV-1-05 EH	480 V	3	2500	3#12, 1#12G, 3/4"C	FDS 30/15/3/1	
VAV-1-06 EH	480 V	3	2500	3#12, 1#12G, 3/4"C	FDS 30/15/3/1	
VAV-1-07 EH	480 V	3	10000	3#2, 1#8G, 3/4"C	FDS 30/200/3/1	
VAV-1-08 EH	480 V	3	2500	3#12, 1#12G, 3/4"C	FDS 30/15/3/1	
VAV-1-09 EH	480 V	3	11500	3#12, 1#12G, 3/4"C	FDS 30/20/3/1	
VAV-1-10 EH	480 V	3	2500	3#12, 1#12G, 3/4"C	FDS 30/15/3/1	
VAV-1-11 EH	480 V	3	2500	3#12, 1#12G, 3/4"C	FDS 30/15/3/1	
VAV-1-12 EH	480 V	3	1500	3#12, 1#12G, 3/4"C	FDS 30/15/3/1	
VAV-1-13 EH	480 V	3	1500	3#12, 1#12G, 3/4"C	FDS 30/15/3/1	
VAV-1-14 EH	480 V	3	3000	3#12, 1#12G, 3/4"C	FDS 30/15/3/1	
VAV-1-15 EH	480 V	3	3000	3#12, 1#12G, 3/4"C	FDS 30/15/3/1	
VAV-1-16 EH	480 V	3	2500	3#12, 1#12G, 3/4"C	FDS 30/15/3/1	
VAV-1-17 EH	480 V	3	1500	3#12, 1#12G, 3/4"C	FDS 30/15/3/1	
VAV-1-18 EH	480 V	3	3000	3#12, 1#12G, 3/4"C	FDS 30/15/3/1	
VAV-1-19 EH	480 V	3	3000	3#12, 1#12G, 3/4"C	FDS 30/15/3/1	
VAV-1-20 EH	480 V	3	1500	3#12, 1#12G, 3/4"C	FDS 30/15/3/1	
VAV-1-21 EH	480 V	3	3000	3#12, 1#12G, 3/4"C	FDS 30/15/3/1	
VAV-1-22 EH	480 V	3	7000	3#12, 1#12G, 3/4"C	FDS 30/15/3/1	
VAV-1-23 EH	480 V	3	5000	3#12, 1#12G, 3/4"C	FDS 30/15/3/1	
VAV-1-24 EH	480 V	3	7000	3#12, 1#12G, 3/4"C	FDS 30/15/3/1	
VAV-1-25 EH	480 V	3	3500	3#12, 1#12G, 3/4"C	FDS 30/15/3/1	
VAV-1-26 EH	480 V	3	3000	3#12, 1#12G, 3/4"C	FDS 30/15/3/1	
VAV-2-01 EH	480 V	3	2500	3#12, 1#12G, 3/4"C	FDS 30/15/3/1	
VAV-2-02 EH	480 V	3	3000	3#12, 1#12G, 3/4"C	FDS 30/15/3/1	
VAV-2-03 EH	480 V	3	5000	3#12, 1#12G, 3/4"C	FDS 30/15/3/1	
VAV-2-04 EH	480 V	3	4000	3#12, 1#12G, 3/4"C	FDS 30/15/3/1	
VAV-2-05 EH	480 V	3	5000	3#12, 1#12G, 3/4"C	FDS 30/15/3/1	
VAV-2-06 EH	480 V	3	4000	3#12, 1#12G, 3/4"C	FDS 30/15/3/1	
VAV-2-07 EH	480 V	3	3000	3#12, 1#12G, 3/4"C	FDS 30/15/3/1	
VAV-2-08 EH	480 V	3	3000	3#12, 1#12G, 3/4"C	FDS 30/15/3/1	
VAV-2-09 EH	480 V	3	2500	3#12, 1#12G, 3/4"C	FDS 30/15/3/1	
VAV-2-10 EH	480 V	3	2000	3#12, 1#12G, 3/4"C	FDS 30/15/3/1	
VAV-2-11 EH	480 V	3	20000	3#12, 1#12G, 3/4"C	FDS 30/200/3/1	
VAV-2-12 EH	480 V	3	2500	3#12, 1#12G, 3/4"C	FDS 30/15/3/1	
VAV-2-13 EH	480 V	3	2500	3#12, 1#12G, 3/4"C	FDS 30/15/3/1	
VAV-2-14 EH	480 V	3	13500	3#6, 1#10G, 3/4"C	FDS 30/100/3/1	
VAV-2-15 EH	480 V	3	10500	3#12, 1#12G, 3/4"C	FDS 30/200/3/1	
VAV-3-01 EH	480 V	3	3500	3#12, 1#12G, 3/4"C	FDS 30/15/3/1	
VAV-3-02 EH	480 V	3	2000	3#12, 1#12G, 3/4"C	FDS 30/15/3/1	
VAV-3-03 EH	480 V	3	2000	3#12, 1#12G, 3/4"C	FDS 30/15/3/1	
VAV-3-09 EH	480 V	3	3000	3#12, 1#12G, 3/4"C	FDS 30/15/3/1	
VAV-3-10 EH	480 V	3	3000	3#12, 1#12G, 3/4"C	FDS 30/15/3/1	
VAV-3-16 EH	480 V	3	3500	3#12, 1#12G, 3/4"C	FDS 30/15/3/1	
VAV-3-17 EH	480 V	3	2500	3#12, 1#12G, 3/4"C	FDS 30/15/3/1	
VAV-3-24 EH	480 V	3	28500	3#6, 1#10G, 1"C	NFDS 60/3/1	
VAV-3-25 EH	480 V	3	5500	3#12, 1#12G, 3/4"C	FDS 30/15/3/1	
VAV-3-27 EH	480 V	3	9400	3#12, 1#12G, 3/4"C	FDS 30/15/3/1	
VAVS						
VAV-1-01	120 V	1	100	2#12, 1#12G, 3/4"C	TOGGLE SWITCH	
VAV-1-02	120 V	1	100	2#12, 1#12G, 3/4"C	TOGGLE SWITCH	
VAV-1-03	120 V	1	100	2#12, 1#12G, 3/4"C	TOGGLE SWITCH	
VAV-1-04	120 V	1	100	2#12, 1#12G, 3/4"C	TOGGLE SWITCH	
VAV-1-05	120 V	1	100	2#12, 1#12G, 3/4"C	TOGGLE SWITCH	
VAV-1-06	120 V	1	100	2#12, 1#12G, 3/4"C	TOGGLE SWITCH	
VAV-1-07	120 V	1	100	2#12, 1#12G, 3/4"C	TOGGLE SWITCH	
VAV-1-08	120 V	1	100	2#12, 1#12G, 3/4"C	TOGGLE SWITCH	
VAV-1-09	120 V	1	100	2#12, 1#12G, 3/4"C	TOGGLE SWITCH	
VAV-1-10	120 V	1	100	2#12, 1#12G, 3/4"C	TOGGLE SWITCH	
VAV-1-11	120 V	1	100	2#12, 1#12G, 3/4"C	TOGGLE SWITCH	
VAV-1-12	120 V	1	100	2#12, 1#12G, 3/4"C	TOGGLE SWITCH	
VAV-1-13	120 V	1	100	2#12, 1#12G, 3/4"C	TOGGLE SWITCH	
VAV-1-14	120 V	1	100	2#12, 1#12G, 3/4"C	TOGGLE SWITCH	
VAV-1-15	120 V	1	100	2#12, 1#12G, 3/4"C	TOGGLE SWITCH	
VAV-1-16	120 V	1	100	2#12, 1#12G, 3/4"C	TOGGLE SWITCH	
VAV-1-17	120 V	1	100	2#12, 1#12G, 3/4"C	TOGGLE SWITCH	
VAV-1-18	120 V	1	100	2#12, 1#12G, 3/4"C	TOGGLE SWITCH	
VAV-1-19	120 V	1	100	2#12, 1#12G, 3/4"C	TOGGLE SWITCH	
VAV-1-20	120 V	1	100	2#12, 1#12G, 3/4"C	TOGGLE SWITCH	
VAV-1-21	120 V	1	100	2#12, 1#12G, 3/4"C	TOGGLE SWITCH	
VAV-1-22	120 V	1	100	2#12, 1#12G, 3/4"C	TOGGLE SWITCH	
VAV-1-23	120 V	1	100	2#12, 1#12G, 3/4"C	TOGGLE SWITCH	
VAV-1-24	120 V	1	100	2#12, 1#12G, 3/4"C	TOGGLE SWITCH	
VAV-1-25	120 V	1	100	2#12, 1#12G, 3/4"C	TOGGLE SWITCH	
VAV-1-26	120 V	1	100	2#12, 1#12G, 3/4"C	TOGGLE SWITCH	
VAV-2-01	120 V	1	100	2#12, 1#12G, 3/4"C	TOGGLE SWITCH	
VAV-2-02	120 V	1	100	2#12, 1#12G, 3/4"C	TOGGLE SWITCH	
VAV-2-03	120 V	1	100	2#12, 1#12G, 3/4"C	TOGGLE SWITCH	
VAV-2-04	120 V	1	100	2#12, 1#12G, 3/4"C	TOGGLE SWITCH	
VAV-2-05	120 V	1	100	2#12, 1#12G, 3/4"C	TOGGLE SWITCH	
VAV-2-06	120 V	1	100	2#12, 1#12G, 3/4"C	TOGGLE SWITCH	
VAV-2-07	120 V	1	100	2#12, 1#12G, 3/4"C	TOGGLE SWITCH	
VAV-2-08	120 V	1	100	2#12, 1#12G, 3/4"C	TOGGLE SWITCH	
VAV-2-09	120 V	1	100	2#12, 1#12G, 3/4"C	TOGGLE SWITCH	
VAV-2-10	120 V	1	100	2#12, 1#12G, 3/4"C	TOGGLE SWITCH	
VAV-2-11	120 V	1	100	2#12, 1#12G, 3/4"C	TOGGLE SWITCH	
VAV-2-12	120 V	1	100	2#12, 1#12G, 3/4"C	TOGGLE SWITCH	
VAV-2-13	120 V	1	100	2#12, 1#12G, 3/4"C	TOGGLE SWITCH	
VAV-2-14	120 V	1	100	2#12, 1#12G, 3/4"C	TOGGLE SWITCH	
VAV-2-15	120 V	1	100	2#12, 1#12G, 3/4"C	TOGGLE SWITCH	
VAV-3-01	120 V	1	100	2#12, 1#12G, 3/4"C	TOGGLE SWITCH	
VAV-3-02	120 V	1	100	2#12, 1#12G, 3/4"C	TOGGLE SWITCH	
VAV-3-09	120 V	1	100	2#12, 1#12G, 3/4"C	TOGGLE SWITCH	
VAV-3-10	120 V	1	100	2#12, 1#12G, 3/4"C	TOGGLE SWITCH	
VAV-3-16	120 V	1	100	2#12, 1#12G, 3/4"C	TOGGLE SWITCH	
VAV-3-22	120 V	1	100	2#12, 1#12G, 3/4"C	TOGGLE SWITCH	
VAV-3-23	120 V	1	100	2#12, 1#12G, 3/4"C	TOGGLE SWITCH	
VAV-3-25	120 V	1	100	2#12, 1#12G, 3/4"C	TOGGLE SWITCH	
VAV-3-27	120 V	1	100	2#12, 1#12G, 3/4"C	TOGGLE SWITCH	
WATER HEATERS						
WH-5	480 V	3	27000	3#8, 1#10G, 3/4"C	NFDS 60/3/3R	

NOTE
1. EXHAUST FAN TO BE CONTROLLED WITH SAME CONTROLS AS LIGHT FIXTURES IN AREAS THAT FAN SERVES. PROVIDE RELAYS FOR INTEGRATION OF CONTROLS
2. EXHAUST FAN TO BE CONTROLLED BY TIME CLOCK LOCATED IN MECHANICAL LV21

JACOBS ENGINEERING LEGEND

GBA NEW WORK INDICATED WITHIN CROSS HATCH IS NOT TO BE INSTALLED

Seal

REVISIONS ADDED BY JACOBS ENGINEERING GROUP, INC.		
REV.	DATE	INIT.
0	1/27/2020	RAV

NOTE: THE LIABILITY OF THE ENGINEER/ARCHITECT PERFORMING THE REVISION OF THIS DRAWING SHALL BE LIMITED TO ONLY THAT PORTION OF THE DRAWING SO REVISED.

JACOBS

JACOBS ENGINEERING JOB NUMBER 16FFRU01

Signature

Date

REV. No.	DATE	DESCRIPTION
0	01/27/20	ISSUED FOR CONSTRUCTION

GBA
GLICK BOEHM ARCHITECTURE
ARCHITECTURE PLANNING INTERIOR DESIGN
493 King Street, Suite 100 Charleston, South Carolina 29403
843.577.0707 www.glickboehm.com

DWG
CONSULTING ENGINEERS
1320 Main Street, Suite 1600 Columbia, South Carolina 29201
Phone: (803) 254-1100 Fax: (803) 254-1199 www.dwgengineers.com

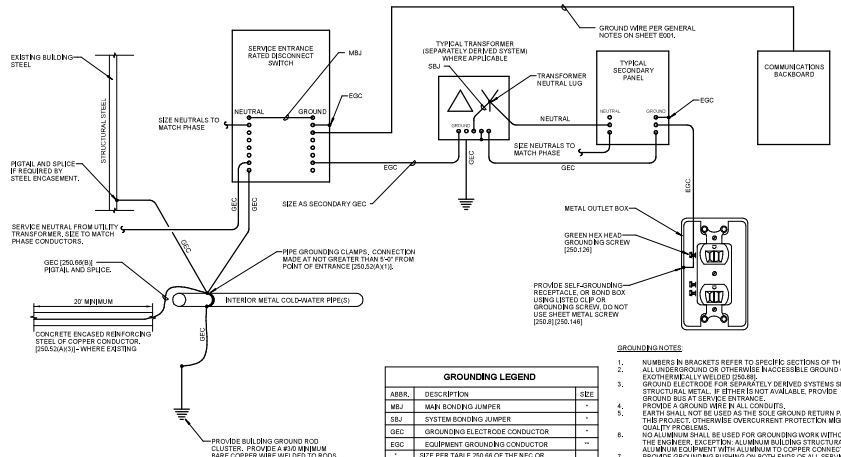
BERKELEY COUNTY ADMINISTRATION COMPLEX RENOVATIONS
RFP# 32406-01-17/18
BERKELEY COUNTY GOVERNMENT
1003 N. US HIGHWAY 52, MONCKS CORNER, SC 29461

COPYRIGHT © 2017 GLICKBOEHM & ASSOCIATES, INC.
JOB NUMBER: 1547
PROJECT MGR.:
DRAWN BY: SPW
CHECKED BY: BSB
APPROVED BY: BSB
DATE ISSUED FOR: PROPOSALS 01/30/18

ELECTRICAL SCHEDULES & DETAILS

J-GBA-E002

C:\Users\SWarner\Documents\16022 BERKELEY COUNTY OF PCES MEP_2015_SWarner.rvt
1/29/2018 6:47:30 PM

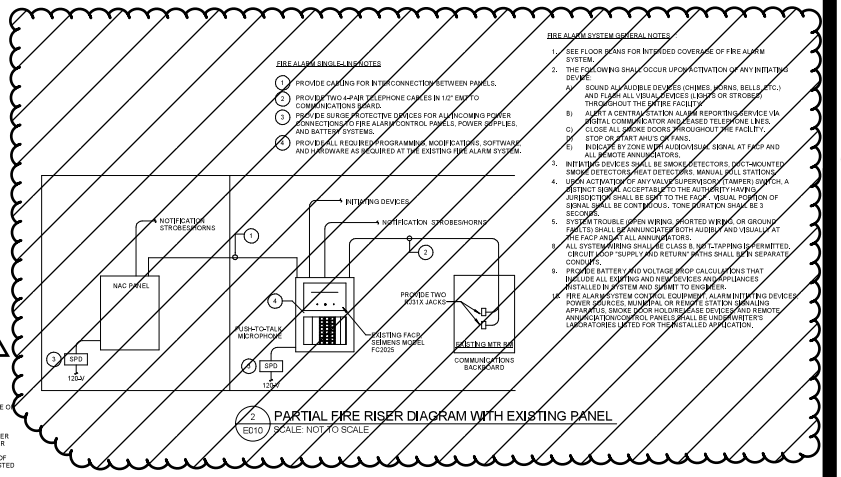


GROUNDING LEGEND		
ABBR.	DESCRIPTION	SIZE
MBJ	MAIN BONDING JUMPER	*
SBJ	SYSTEM BONDING JUMPER	*
GEC	GROUNDING ELECTRODE CONDUCTOR	*
EGC	EQUIPMENT GROUNDING CONDUCTOR	**
*	SIZE PER TABLE 250.66 OF THE NEC OR 12.5% OF CONDUCTOR SIZE [250.28].	
**	SIZE PER TABLE 250.122.	

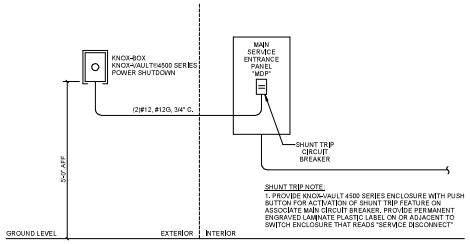
GROUNDING NOTES:

1. NUMBERS IN BRACKETS REFER TO SPECIFIC SECTIONS OF THE NATIONAL ELECTRICAL CODE.
2. ALL UNDERGROUND OR OTHERWISE INACCESSIBLE GROUND CONNECTIONS AND SPLICES SHALL BE EXOTHERMICALLY WELDED [250.8].
3. GROUND ELECTRODE FOR SEPARATELY DERIVED SYSTEMS SHALL BE THE NEAREST METAL WATER PIPE OR STRUCTURAL METAL. IF EITHER IS NOT AVAILABLE, PROVIDE GROUNDING CONDUCTOR BACK TO MAIN GROUND BUS AT SERVICE ENTRANCE.
4. PROVIDE A GROUND WIRE IN ALL CONDUITS.
5. EARTH SHALL NOT BE USED AS THE SOLE GROUND RETURN PATH FOR ANY EQUIPMENT POWERED UNDER THIS PROJECT, OTHERWISE OVERCURRENT PROTECTION MIGHT NOT WORK, OR IF MIGHT CAUSE POWER QUALITY PROBLEMS.
6. NO ALUMINUM SHALL BE USED FOR GROUNDING WORK WITHOUT THE SPECIFIC WRITTEN PERMISSION OF THE ENGINEER, EXCEPTION: ALUMINUM BUILDING STRUCTURAL MATERIALS SHALL BE BONDED WITH LISTED ALUMINUM EQUIPMENT WITH ALUMINUM TO COPPER CONNECTORS FOR ROUTING COPPER EGC'S.
7. PROVIDE GROUNDING BUSHING ON BOTH ENDS OF ALL SERVICE ENTRANCE RACEWAYS. SIZE AS A GEC [250.80]. THIS INCLUDES RIGID STEEL ELBOWS ON PVC CONDUIT.
8. ALL METAL ENCLOSURES AND RACEWAYS SHALL BE BONDED TO GROUND [250.86] FOR CIRCUITS OVER 250V PROVIDE BOND PER [250.97]. STANDARD LOCKNUTS ARE NOT ACCEPTABLE.
9. PROVIDE EGC CONNECTED TO ANY JUNCTION BOX WHERE SPLICE IS MADE [250.148].
10. PROVIDE BOND TO EXPOSED METAL ON ALL MOTORS, PUMPS, AND LIGHTING FIXTURES PER [250.112].

1 GROUNDING DETAIL
E010 NOT TO SCALE



2 PARTIAL FIRE RISER DIAGRAM WITH EXISTING PANEL
E010 SCALE: NOT TO SCALE



3 SHUNT TRIP AT SERVICE ENTRANCE DETAIL
E010 SCALE: NOT TO SCALE

AVAILABLE FAULT CURRENT
BASED ON A 1000 KVA, 5.5 %Z UTILITY TRANSFORMER THE MAXIMUM FAULT CURRENT AVAILABLE AT THE SERVICE ENTRANCE DISCONNECT IS CALCULATED TO BE 22,600 AMPS. LABEL THE SERVICE ENTRANCE DISCONNECT WITH THIS MAXIMUM FAULT CURRENT AND THE DATE OF INSTALLATION. CONTACT ENGINEER 2 WEEKS PRIOR TO SUBSTANTIAL COMPLETION TO CONFIRM THE AVAILABLE FAULT CURRENT PRIOR TO LABELING EQUIPMENT.

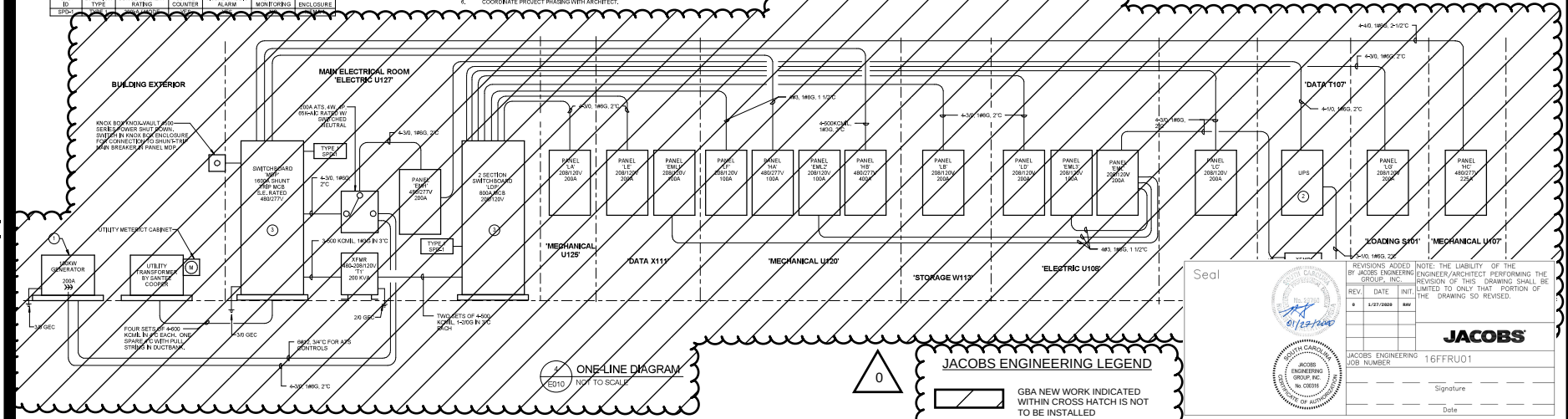
ELECTRICAL SERVICE GENERAL NOTES:

1. CONTRACTOR SHALL COORDINATE INSTALLATION OF METER ON BUILDING WITH UTILITY COMPANY. CONTRACTOR SHALL INSTALL PER REQUIREMENTS OF UTILITY COMPANY.
2. CONTRACTOR SHALL PROVIDE AND INSTALL ALL REQUIRED ELECTRICAL COMPONENTS TO MAKE UTILITY CONNECTION IN ACCORDANCE WITH UTILITY COMPANY'S REQUIREMENTS. UTILITY COMPANY SHALL INSPECT WORK PRIOR TO PROVIDING CONNECTION TO UTILITY SERVICE TRANSFORMER.
3. SERVICE DISCONNECTS SHALL BE PROPERLY LABELED IN ACCORDANCE WITH UTILITY REQUIREMENTS. UTILITY COMPANY SHALL NOT PROVIDE CONNECTION TO SERVICES WITHOUT PROPER IDENTIFICATION.
4. ADDITIONAL PANELS HAVE BEEN ADDED TO EXISTING SYSTEM THAT ARE NOT SHOWN HERE. REFER TO DRAWINGS FOR DETAILS.
5. THIS ELECTRICAL SERVICE IS THE SECOND SERVICE PROVIDED TO BUILDING. LABEL EACH BUILDING DISCONNECT SERVICE DISCONNECT #1 AND SERVICE DISCONNECT #2.
6. COORDINATE PROJECT PHASING WITH ARCHITECT.

ELECTRICAL KEY NOTES:

1. GENERATOR BASIS OF DESIGN IS CATERPILLAR MODEL C4.4 100KW PROVIDED WITH 90G BASE TANK MODEL C4.4 FSBTEDS. COORDINATE CUTTING AND PATCH OF EXISTING ASPHALT WITH CIVIL.
2. UPS BASIS OF DESIGN IS APC MODEL MGE GALAXY 5000 60KVA UPS. PROVIDE WITH INTERNAL MANUAL/AUTOMATIC BYPASS AND 5 MINUTES OF BATTERY RUN TIME AT 80% OF WILL LOAD.
3. SWITCHBOARD SHALL BE PROVIDED WITH A HOUSEKEEPING PAD AND POWER QUALITY METER.

SURGE PROTECTION DEVICE (SPD) SCHEDULE						
SPD ID	LOCATION / TYPE	SURGE CURRENT RATING	SURGE COUNTER	VISUAL & AUDIO ALARM	NETWORK MONITORING	ENCLOSURE
SPS-1	MAIN SERVICE	240KA MIN/PH	YES	YES	YES	NEMA 1



4 ONE-LINE DIAGRAM
E010 NOT TO SCALE

JACOBS ENGINEERING LEGEND

GBA NEW WORK INDICATED WITHIN CROSS HATCH IS NOT TO BE INSTALLED

Seal

REVISIONS ADDED BY JACOBS ENGINEERING GROUP, INC.		
REV.	DATE	INIT.
0	1/27/2020	RAV

NOTE: THE LIABILITY OF THE ENGINEER/ARCHITECT PERFORMING THE REVISION OF THIS DRAWING SHALL BE LIMITED TO ONLY THAT PORTION OF THE DRAWING SO REVISED.

JACOBS

JACOBS ENGINEERING JOB NUMBER 16FFRU01

Signature

Date

GBA GLICK BOEHM ARCHITECTURE
ARCHITECTURE PLANNING INTERIOR DESIGN
493 King Street, Suite 100 Charleston, South Carolina 29403
843.577.0707 www.glickboehm.com

DWG CONSULTING ENGINEERS
1520 Ingleside Avenue Suite 200 Macon, Georgia 31204
Phone: 478.743.7744 Fax: 478.743.7755 www.dwgengineers.com

REV. No.	DATE	DESCRIPTION
0	1/27/2020	ISSUED FOR CONSTRUCTION

BERKELEY COUNTY ADMINISTRATION COMPLEX RENOVATIONS

RFP# 32406-01-17/18
BERKELEY COUNTY GOVERNMENT
1003 N. US HIGHWAY 52, MONCKS CORNER, SC 29461

COPYRIGHT © 2017 GLICKBOEHM & ASSOCIATES, INC.

JOB NUMBER:	1547
PROJECT MGR.:	
DRAWN BY:	SPW
CHECKED BY:	BSB
APPROVED BY:	BSB
DATE ISSUED FOR:	
PROPOSALS	01/30/18

ELECTRICAL ONE-LINE DIAGRAM & DETAILS

J-GBA-E010

C:\Users\SPenner\Documents\18022 BERKELEY COUNTY OFFICES MSP_2015_SPenner.rvt

PANELBOARD SCHEDULE

PANEL NAME: EML2 | VOLTS: 120/208 Wye | A.I.C. RATING: 22,000
LOCATION: MECHANICAL U121 | PHASES: 3 | MAINS RATING: 100 A
SOURCE: EMC | WIRES: 4 | MAINS TYPE: MAIN CIRCUIT BREAKER
MOUNTING: Surface | ENCLOSURE: Type 1

CKT NO.	CIRCUIT DESIGNATION	TRIP	POLES	A	B	C	POLES	TRIP	CIRCUIT DESIGNATION	CKT NO.
1	RECPS. - RMS W112, W102, & W103	20 A	1	540 VA / 720 VA			1	20 A	RECPS. - RMS W114, W115, W116, &	2
3	RECPS. - RECEPT. W108 & FILE W106	20 A	1		540 VA / 360 VA		1	20 A	RECPS. - LAB W105	4
5	RECPS. - RMS S112, S110, S108	20 A	1			900 VA / 860 VA	1	20 A	RECPS. - MOD. FURN. & RECEPT., S107	6
7	S106 MODULAR FURNITURE POWER	20 A	1	1000 VA / 0 VA			1	20 A	SPARE	8
9	SPARE	20 A	1		0 VA / 0 VA		1	20 A	SPARE	10
11	SPARE	20 A	1			0 VA / 0 VA	1	20 A	SPARE	12
13	SPARE	20 A	1	0 VA / 0 VA			1	20 A	SPARE	14
15	SPARE	20 A	1		0 VA / 0 VA		1	20 A	SPARE	16
17	SPARE	20 A	1			0 VA / 0 VA	1	20 A	SPARE	18
19	SPARE	20 A	1	0 VA / 0 VA			1	20 A	SPARE	20
21	SPARE	20 A	1		0 VA / 0 VA		1	20 A	SPARE	22
23	SPARE	20 A	1			0 VA / 0 VA	1	20 A	SPARE	24
25	SPARE	20 A	1	0 VA / 0 VA			1	20 A	SPARE	26
27	SPARE	20 A	1		0 VA / 0 VA		1	20 A	SPARE	28
29	SPARE	20 A	1			0 VA / 0 VA	1	20 A	SPARE	30
31	SPARE	20 A	1	0 VA / 0 VA			1	20 A	SPARE	32
33	SPARE	20 A	1		0 VA / 0 VA		1	20 A	SPARE	34
35	SPARE	20 A	1			0 VA / 0 VA	1	20 A	SPARE	36
37	SPARE	20 A	1	0 VA / 0 VA			1	20 A	SPARE	38
39	SPARE	20 A	1		0 VA / 0 VA		1	20 A	SPARE	40
41	SPARE	20 A	1			0 VA / 0 VA	1	20 A	SPARE	42
	TOTAL PHASE LOAD:			2660 VA	900	1760				
	TOTAL PHASE CURRENT:			20 A	8 A	16 A				

PANEL TOTALS
TOTAL CONNECTED LOAD: 14420
TOTAL CONNECTED CURRENT: 144 A

PANELBOARD SCHEDULE

PANEL NAME: EML3 | VOLTS: 120/208 Wye | A.I.C. RATING: 22,000
LOCATION: ELECTRIC U108 | PHASES: 3 | MAINS RATING: 100 A
SOURCE: EML | WIRES: 4 | MAINS TYPE: MAIN CIRCUIT BREAKER
MOUNTING: Surface | ENCLOSURE: Type 1

CKT NO.	CIRCUIT DESIGNATION	TRIP	POLES	A	B	C	POLES	TRIP	CIRCUIT DESIGNATION	CKT NO.
1	RECP. - TELEPHONE BACKBOARD	20 A	1	360 VA / 360 VA			1	20 A	RECP. - TELEPHONE BACKBOARD	2
3	RECPS. - RM V108, T105, T104	20 A	1		720 VA / 1800 VA		1	20 A	RECPS. - RM T106, T103, T102	4
5	RECP. - SPEAK T109 PRINTER	20 A	1			1000 VA / 0 VA	1	20 A	SPARE	6
7	SPARE	20 A	1	0 VA / 900 VA			1	20 A	RECPS. - RM V112, V111, V110	8
9	RECPS. - RM V109, V114, V113	20 A	1		900 VA / 720 VA		1	20 A	RECPS. - RM V101, V102, V103, V104	10
11	RECPS. - OPEN OFFICE V108	20 A	1			720 VA / 720 VA	1	20 A	RECPS. - OPEN OFFICE V109	12
13	RECPS. - CORRIDOR V106 PAINTERS	20 A	1	1360 VA / 1000 VA			1	20 A	RECP. - STORAGE V107 PRINTER	14
15	RECPS. - PAYROLL V105 & BREAK...	20 A	1		720 VA / 1500 VA		1	20 A	SPARE	16
17	SERVER RACK - DATA T107	20 A	2			1500 VA / 1500 VA	2	20 A	SERVER RACK - DATA T108	18
19	SERVER RACK - DATA T107			1500 VA / 0 VA			1	20 A	SPARE	20
21					1500 VA / 0 VA		1	20 A	SPARE	22
23	SPARE	20 A	1			1500 VA / 0 VA	1	20 A	SPARE	24
25	SPARE	20 A	1	0 VA / 0 VA			1	20 A	SPARE	26
27	SPARE	20 A	1		0 VA / 0 VA		1	20 A	SPARE	28
29	SPARE	20 A	1			0 VA / 0 VA	1	20 A	SPARE	30
31	SPARE	20 A	1	0 VA / 0 VA			1	20 A	SPARE	32
33	SPARE	20 A	1		0 VA / 0 VA		1	20 A	SPARE	34
35	SPARE	20 A	1			0 VA / 0 VA	1	20 A	SPARE	36
37	SPARE	20 A	1	0 VA / 0 VA			1	20 A	SPARE	38
39	SPARE	20 A	1		0 VA / 0 VA		1	20 A	SPARE	40
41	SPARE	20 A	1			0 VA / 0 VA	1	20 A	SPARE	42
	TOTAL PHASE LOAD:			5300 VA	6960	4940				
	TOTAL PHASE CURRENT:			44 A	60 A	60 A				

PANEL TOTALS
TOTAL CONNECTED LOAD: 19200
TOTAL CONNECTED CURRENT: 53 A

EXISTING PANELBOARD SCHEDULE

PANEL NAME: H2 | VOLTS: 480/277 Wye | A.I.C. RATING:
LOCATION: | PHASES: 3 | MAINS RATING: 400 A
SOURCE: | WIRES: 4 | MAINS TYPE: MAIN LUGS ONLY
MOUNTING: Surface | ENCLOSURE: Type 1

CKT NO.	CIRCUIT DESIGNATION	TRIP	POLES	A	B	C	POLES	TRIP	CIRCUIT DESIGNATION	CKT NO.
1				0 VA / 0 VA						2
3	EXISTING	20 A	3		0 VA / 0 VA		3	35 A	EXISTING	4
5						0 VA / 0 VA				6
7				0 VA / 0 VA						8
9	EXISTING	20 A	3		0 VA / 0 VA		3	35 A	EXISTING	10
11						0 VA / 0 VA				12
13				0 VA / 0 VA						14
15	EXISTING	40 A	3		0 VA / 0 VA		3	20 A	EXISTING	16
17						0 VA / 0 VA				18
19	EXISTING	30 A	1	0 VA / 0 VA						20
21					0 VA / 0 VA		3	15 A	EXISTING	22
23	EXISTING	20 A	3			0 VA / 0 VA				24
25				0 VA / 0 VA						26
27					0 VA / 0 VA		3	15 A	EXISTING	28
29	EXISTING	20 A	3			0 VA / 0 VA				30
31				0 VA / 0 VA						32
33					6320 VA / 0 VA		3	50 A	EXISTING	34
1. 35	H2A	60 A	3			6320 VA / 0 VA				36
37				6320 VA / 0 VA						38
39	SPARE	20 A	1		0 VA / 0 VA		1	20 A	SPARE	40
41	SPARE	20 A	1			0 VA / 0 VA	1	20 A	SPARE	42
	TOTAL PHASE LOAD:			6320 VA	6322	6322				
	TOTAL PHASE CURRENT:			23 A	23 A	23 A				

PANEL TOTALS
TOTAL ADDITIONAL LOAD: 19930 VA
TOTAL ADDITIONAL CURRENT: 24 A

NOTES:
1. REMOVE 3 EXISTING SPARE SINGLE POLE, 20A BREAKERS FROM SPACES 33, 35, AND 37 TO MAKE SPACE FOR NEW BREAKER. PROVIDE NEW BREAKER AS SHOWN MANUFACTURED AND UL LISTED FOR INSTALLATION IN EXISTING SIEMENS PANELBOARD.

PANELBOARD SCHEDULE

PANEL NAME: H2A | VOLTS: 480/277 Wye | A.I.C. RATING: 22,000
LOCATION: | PHASES: 3 | MAINS RATING: 60 A
SOURCE: H2 | WIRES: 4 | MAINS TYPE: MAIN LUGS ONLY
MOUNTING: Surface | ENCLOSURE: Type 1

CKT NO.	CIRCUIT DESIGNATION	TRIP	POLES	A	B	C	POLES	TRIP	CIRCUIT DESIGNATION	CKT NO.
1				770 VA / 800 VA						2
3	HEAT PUMP HP-1	25 A	3		770 VA / 800 VA		3	15 A	AIR HANDLER AHU-1	4
5						770 VA / 800 VA				6
7				5000 VA / 0 VA			1	20 A	SPARE	8
9	AIR HANDLER AHU-1 ELECTRIC HEAT	30 A	3		5000 VA / 0 VA		1	20 A	SPARE	10
11						5000 VA / 0 VA	1	20 A	SPARE	12
13	SPARE	20 A	1	0 VA / 0 VA			1	20 A	SPARE	14
15	SPARE	20 A	1		0 VA / 0 VA		1	20 A	SPARE	16
17	SPARE	20 A	1			0 VA / 0 VA	1	20 A	SPARE	18
19	SPARE	20 A	1	0 VA / 0 VA			1	20 A	SPARE	20
	TOTAL PHASE LOAD:			6560 VA	6565	6565				
	TOTAL PHASE CURRENT:			24 A	24 A	24 A				

PANEL TOTALS
TOTAL CONNECTED LOAD: 19690 VA
TOTAL CONNECTED CURRENT: 24 A

EXISTING PANELBOARD SCHEDULE

PANEL NAME: C2 | VOLTS: 120/208 Wye | A.I.C. RATING:
LOCATION: | PHASES: 3 | MAINS RATING: 200 A
SOURCE: | WIRES: 4 | MAINS TYPE: MAIN LUGS ONLY
MOUNTING: Surface | ENCLOSURE: Type 1

CKT NO.	CIRCUIT DESIGNATION	TRIP	POLES	A	B	C	POLES	TRIP	CIRCUIT DESIGNATION	CKT NO.
1	EXIST. RECEPTACLE(S)	20 A	1	0 VA / 0 VA			1	20 A	EXIST. RECEPTACLE(S)	2
3	EXIST. RECEPTACLE(S)	20 A	1		0 VA / 0 VA		1	20 A	EXIST. RECEPTACLE(S)	4
5	EXIST. RECEPTACLE(S)	20 A	1			0 VA / 0 VA	1	20 A	EXIST. RECEPTACLE(S)	6
7	EXIST. RECEPTACLE(S)	20 A	1	0 VA / 0 VA			1	20 A	EXIST. RECEPTACLE(S)	8
9	EXIST. RECEPTACLE(S)	20 A	1		0 VA / 0 VA		1	20 A	EXIST. RECEPTACLE(S)	10
11	EXIST. RECEPTACLE(S)	20 A	1			0 VA / 0 VA	1	20 A	EXIST. RECEPTACLE(S)	12
13	EXIST. RECEPTACLE(S)	20 A	1	0 VA / 0 VA			1	20 A	EXIST. RECEPTACLE(S)	14
15	EXIST. RECEPTACLE(S)	20 A	1		0 VA / 0 VA		1	20 A	EXIST. RECEPTACLE(S)	16
17	EXIST. RECEPTACLE(S)	20 A	1			0 VA / 0 VA	1	20 A	EXIST. RECEPTACLE(S)	18
19	EXIST. RECEPTACLE(S)	20 A	1	0 VA / 0 VA			1	20 A	EXIST. RECEPTACLE(S)	20
21	EXIST. RECEPTACLE(S)	20 A	1		0 VA / 0 VA		1	20 A	EXIST. RECEPTACLE(S)	22
23	EXIST. RECEPTACLE(S)	20 A	1			0 VA / 0 VA	1	20 A	EXIST. RECEPTACLE(S)	24
25	EXIST. RECEPTACLE(S)	20 A	1	0 VA / 0 VA			1	20 A	EXIST. RECEPTACLE(S)	26
27	EXIST. RECEPTACLE(S)	20 A	1		0 VA / 0 VA		1	20 A	EXIST. RECEPTACLE(S)	28
29	EXIST. RECEPTACLE(S)	20 A	1			0 VA / 0 VA	1	20 A	EXIST. RECEPTACLE(S)	30
31	EXIST. RECEPTACLE(S)	20 A	1	0 VA / 0 VA			1	20 A	EXIST. RECEPTACLE(S)	32
33	EXIST. RECEPTACLE(S)	20 A	1		0 VA / 0 VA		1	20 A	EXIST. RECEPTACLE(S)	34
35	EXIST. RECEPTACLE(S)	20 A	1			0 VA / 0 VA	1	20 A	EXIST. RECEPTACLE(S)	36
* 37				2360 VA / 0 VA			1	20 A	EXIST. RECEPTACLE(S)	38
1. 39	C2A	100 A	3		2720 VA / 0 VA		1	20 A	EXIST. RECEPTACLE(S)	40
41						2000 VA / 0 VA	1	20 A	EXIST. RECEPTACLE(S)	42
	TOTAL PHASE LOAD:			2360 VA	2720	2000				
	TOTAL PHASE CURRENT:			20 A	23 A	17 A				

PANEL TOTALS
TOTAL ADDITIONAL LOAD: 7080 VA
TOTAL ADDITIONAL CURRENT: 20 A

NOTES:
* EXISTING SINGLE POLE, 20A BREAKER AND WIRING FEEDING THIS LOAD SHALL BE RELOCATED TO NEW PANEL C2A, EXTEND EXISTING LOAD WIRING AS NECESSARY, SEE C2A PANEL SCHEDULE.
1. PROVIDE NEW BREAKER AS SHOWN MANUFACTURED AND UL LISTED FOR INSTALLATION IN EXISTING SIEMENS PANELBOARD.

PANELBOARD SCHEDULE

PANEL NAME: C2A | VOLTS: 120/208 Wye | A.I.C. RATING: 22,000
LOCATION: | PHASES: 3 | MAINS RATING: 100 A
SOURCE: C2 | WIRES: 4 | MAINS TYPE: MAIN LUGS ONLY
MOUNTING: Recessed | ENCLOSURE: Type 1

CKT NO.	CIRCUIT DESIGNATION	TRIP	POLES	A	B	C	POLES	TRIP	CIRCUIT DESIGNATION	CKT NO.
1				1000 VA / 1000 VA						2
3	SECURITY GATE -	20 A	3		1000 VA / 1000 VA		3	20 A	SECURITY GATE -	4
5						1000 VA / 1000 VA				6
1. 7	RECPS. - PROCUREMENT	20 A	1	360 VA / 0 VA			1	20 A	EXISTING (RELOCATED FROM C2)	8 2.
1. 9	RECPS. - OPEN OFFICE B100	20 A	1		360 VA / 360 VA		1	20 A	RECPS. - OPEN OFFICE B100	10
11	SPARE	20 A	1			0 VA / 0 VA	1	20 A	SPARE	12
13	SPARE	20 A	1	0 VA / 0 VA			1	20 A	SPARE	14
15	SPARE	20 A	1		0 VA / 0 VA		1	20 A	SPARE	16
17	SPARE	20 A	1			0 VA / 0 VA	1	20 A	SPARE	18
19	SPARE	20 A	1	0 VA / 0 VA			1	20 A	SPARE	20
	TOTAL PHASE LOAD:			2360 VA	2720	2000				
	TOTAL PHASE CURRENT:			20 A	23 A	17 A				

PANEL TOTALS
TOTAL CONNECTED LOAD: 7080 VA
TOTAL CONNECTED CURRENT: 20 A

NOTES:
1. USE EXISTING SPARE SINGLE POLE, 20A BREAKER RELOCATED FROM PANEL C2.
2. EXISTING LOAD FROM C2: 37 NEW LOCATION.

JACOBS ENGINEERING LEGEND

GBA NEW WORK INDICATED WITHIN CROSS HATCH IS NOT TO BE INSTALLED

GENERAL NOTES

1. EXISTING PANEL SCHEDULE CIRCUIT LAYOUTS HAVE BEEN DERIVED FROM EXISTING BUILDING CONSTRUCTION DRAWINGS. COORDINATE ALL BREAKER SPACE AVAILABILITY WITH ACTUAL FIELD CONDITIONS.

PANEL LEGEND

EML2	C2
EML3	C2A
H2	
H2A	

Seal

REVISIONS ADDED BY JACOBS ENGINEERING GROUP, INC.

REV.	DATE	INIT.
0	1/27/2020	BMV

NOTE: THE LIABILITY OF THE ENGINEER/ARCHITECT PERFORMING THE REVISION OF THIS DRAWING SHALL BE LIMITED TO ONLY THAT PORTION OF THE DRAWING SO REVISED.

JACOBS

JACOBS ENGINEERING JOB NUMBER 16FFRU01

Signature

Date

GBA GLICK BOEHM ARCHITECTURE
ARCHITECTURE PLANNING INTERIOR DESIGN
493 King Street, Suite 100 Charleston, South Carolina 29403
Phone 843.577.0307 Fax 843.722.3594 www.glickboehm.com

DWG CONSULTING ENGINEERS
1 STATE COURT ANDERSON
1000 Woodruff Road, Suite 100 Greenville, South Carolina 29607
Phone: 864.288.7171 Fax: 864.288.8878
www.dwgse.com

REV. No.	DATE	DESCRIPTION
		PERMIT SUBMITTAL/CONSTRUCTION

BERKELEY COUNTY ADMINISTRATION COMPLEX RENOVATIONS
RFP# 32406-01-17/18
BERKELEY COUNTY GOVERNMENT
1003 N. US HIGHWAY 52, MONCKS CORNER, SC 29461

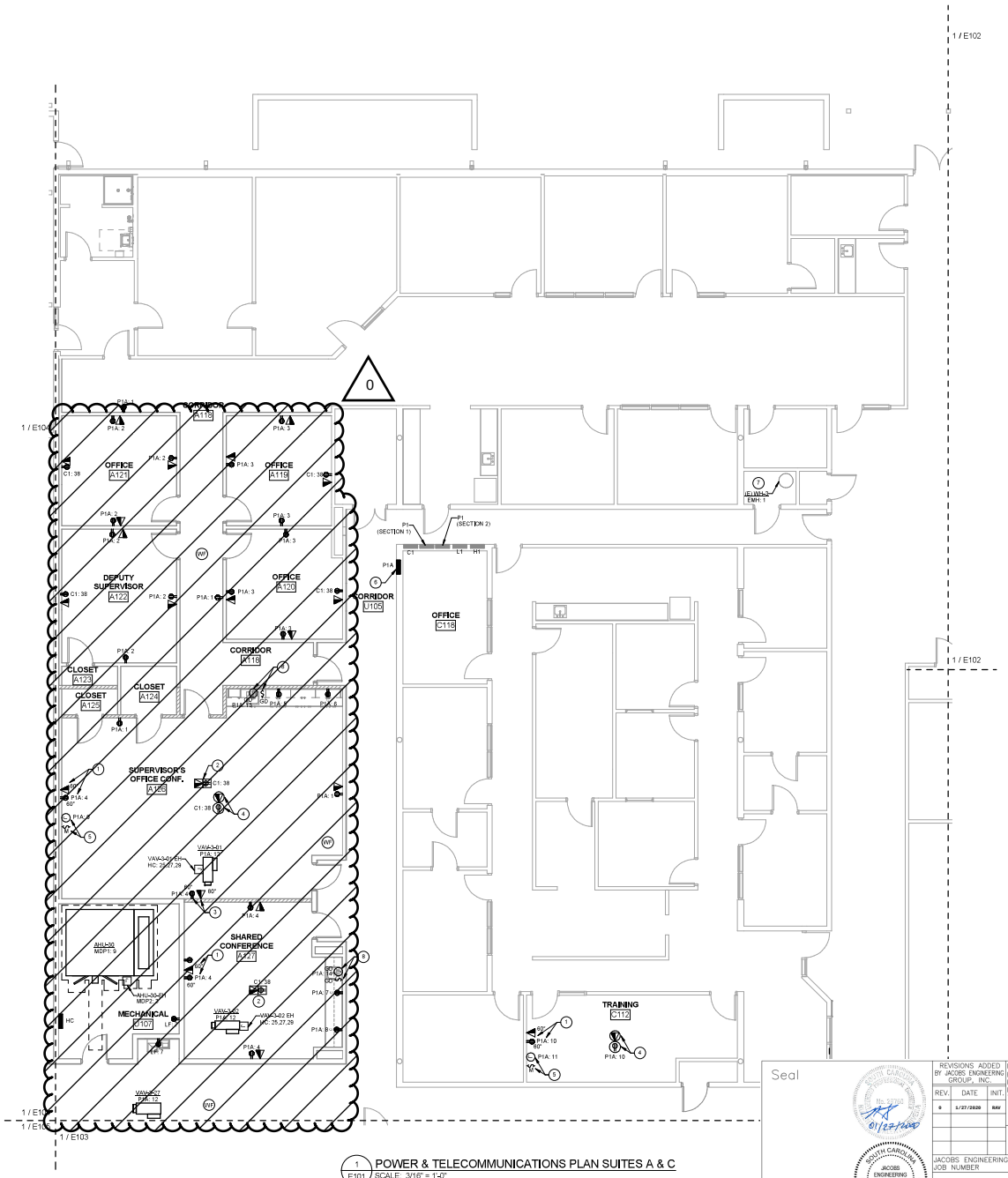
COPYRIGHT © 2017 GLICKBOEHM & ASSOCIATES, INC.

JOB NUMBER:	1547
PROJECT MGR.:	
DRAWN BY:	SPW
CHECKED BY:	BSB
APPROVED BY:	BSB
DATE ISSUED FOR:	
PROPOSALS	01/30/18

ELECTRICAL PANEL SCHEDULES

J-GBA-E052

C:\Users\SWarren\Documents\18022 BERKELEY COUNTY OF PCES M12P_2015_SWarren.rvt
1/28/2018 6:47:35 PM



1 / E101 POWER & TELECOMMUNICATIONS PLAN SUITES A & C
SCALE: 3/16" = 1'-0"

KEYNOTES

1. TV LOCATION. COORDINATE MOUNTING HEIGHT AND EXACT LOCATION WITH OWNER.
2. FLOOR BOX TO BE LOCATED UNDER CONFERENCE ROOM TABLE. COORDINATE EXACT LOCATION WITH OWNER AND FINAL FURNITURE PLAN.
3. SMARTBOARD LOCATION. COORDINATE MOUNTING HEIGHT WITH OWNER.
4. POWER AND DATA FOR CEILING MOUNTED PROJECTOR. COORDINATE EXACT LOCATION WITH OWNER.
5. JUNCTION BOX AND ASSOCIATED SWITCH FOR MOTORIZED PROJECTION SCREEN. COORDINATE EXACT LOCATIONS WITH OWNER. COORDINATE POWER REQUIREMENTS WITH ACTUAL EQUIPMENT PROVIDED.
6. NEW PANEL P1A TO BE FED FROM PANEL P1. SEE PANEL SCHEDULE. WIRING SHALL BE 3#8, 1#10G, 1"C. COORDINATE PANEL SPACE AVAILABILITY WITH ACTUAL FIELD CONDITIONS. UPDATE PANEL SCHEDULES ACCORDINGLY. PATCH EXISTING WALLS AS NECESSARY.
7. WATER HEATER SHALL BE REFED FROM PANEL EMH TO PROVIDE GENERATOR BACK UP. WIRING SHALL BE 3#6, 1#10G, 3/4"C. REFER TO PANEL SCHEDULES.
8. GARBAGE DISPOSAL AND ASSOCIATED TOGGLE SWITCH. SWITCH SHALL BE INSTALLED ABOVE COUNTER.

0

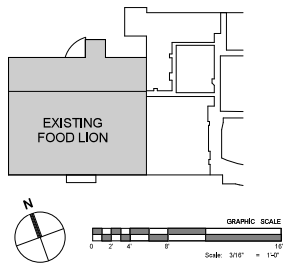
JACOBS ENGINEERING LEGEND

GBA NEW WORK INDICATED WITHIN CROSS HATCH IS NOT TO BE INSTALLED

GENERAL NOTES

1. ALL RECEPTACLES SHOWN ON AS CIRCUITED TO A PANEL CONNECTED TO THE GENERATOR SHALL BE PROVIDED WITH RED COVER PLATES.

KEY PLAN



Seal

REVISIONS ADDED BY JACOBS ENGINEERING GROUP, INC.

REV.	DATE	INIT.
0	1/27/2020	RAV

NOTE: THE LIABILITY OF THE ENGINEER/ARCHITECT PERFORMING THE REVISION OF THIS DRAWING SHALL BE LIMITED TO ONLY THAT PORTION OF THE DRAWING SO REVISED.

JACOBS

JACOBS ENGINEERING JOB NUMBER 16FFRU01

Signature

Date

GBA GLICK BOEHM ARCHITECTURE
ARCHITECTURE PLANNING INTERIOR DESIGN
493 King Street, Suite 100 Charleston, South Carolina 29403
Tel: 843.577.0007 Fax: 843.722.7636 www.glickboehm.com

DWG CONSULTING ENGINEERS
1320 Main Street, Suite 1600, Columbia, South Carolina 29201
Phone: 803.799.1771 Fax: 803.254.6678 www.dwgse.com

REV. No.	DATE	DESCRIPTION
0	1/27/20	PERMIT SUBMITTAL

BERKELEY COUNTY ADMINISTRATION COMPLEX RENOVATIONS
RFP# 32406-01-17/18
BERKELEY COUNTY GOVERNMENT
1003 N. US HIGHWAY 52, MONCKS CORNER, SC 29461

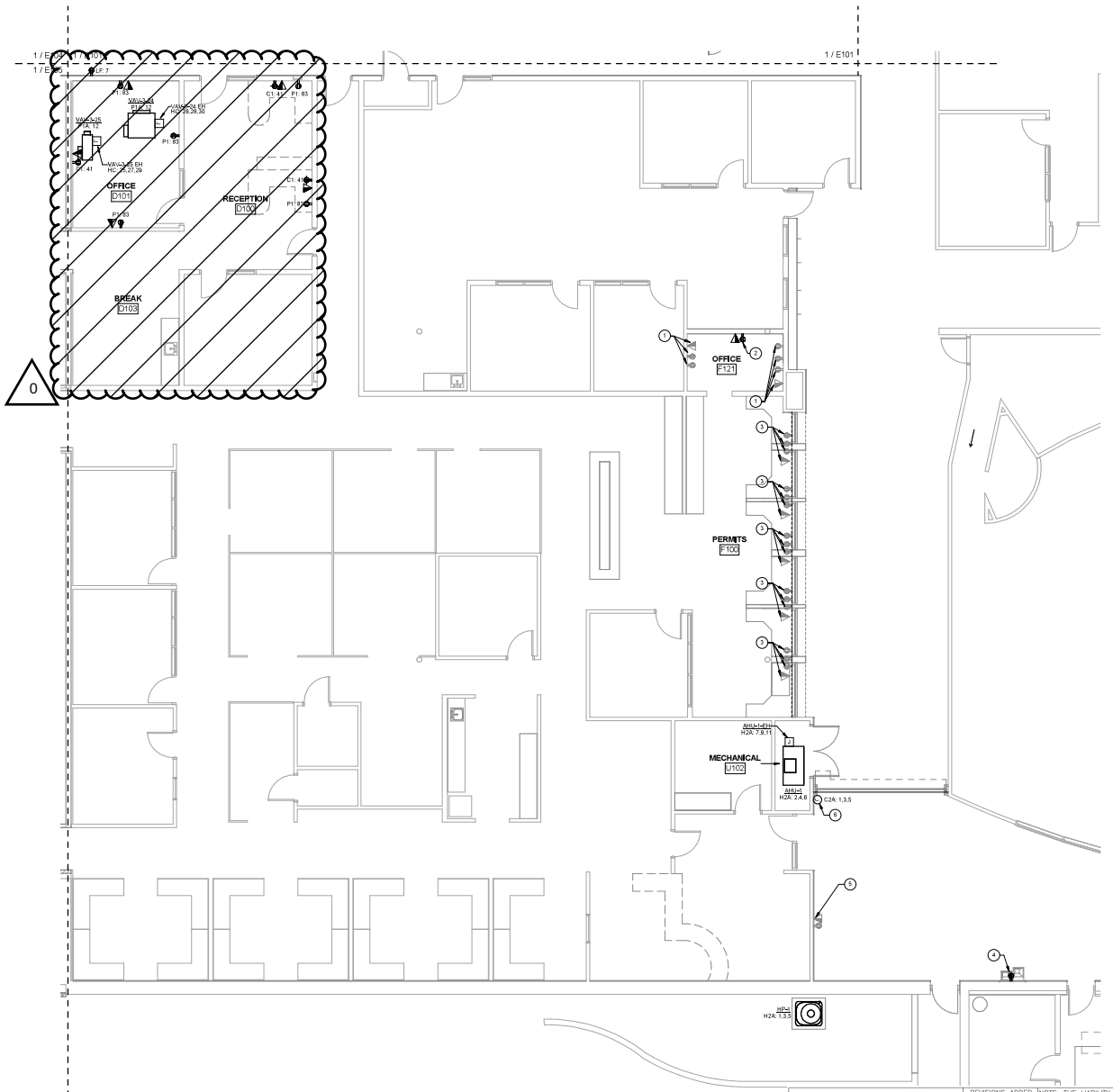
COPYRIGHT © 2017 GLICKBOEHM & ASSOCIATES, INC.

JOB NUMBER:	1547
PROJECT MGR.:	
DRAWN BY:	SPW
CHECKED BY:	BSB
APPROVED BY:	BSB
DATE ISSUED FOR:	
PROPOSALS	01/30/18

POWER & TELECOM. PLAN - SUITES A & C

J-GBA-E101

1/28/2018 6:47:37 PM
C:\Users\SWimmer\Documents\18022 BERKELEY COUNTY OFFICES M1P_2015_SWimmer.rvt



1 / E103 POWER & TELECOMMUNICATIONS PLAN SUITES D, E & F
SCALE: 3/16" = 1'-0"

KEYNOTES

1. EXISTING DEVICE TO REMAIN.
2. CONNECT NEW RECEPTACLE TO EXISTING CIRCUIT P1: 4 CURRENTLY SERVING THIS AREA.
3. EXISTING RECEPTACLES IN THIS AREA TO BE REWORKED TO ACCOMODATE NEW PERMIT DESK. RELOCATE AS NECESSARY TO MAINTAIN EXISTING ORIENTATION TO THE GREATEST EXTENT POSSIBLE.
4. PROVIDE NEW CIRCUIT FOR WATER COOLER FED FROM EXISTING SPARE 20A, SINGLE POLE BREAKER IN EXISTING PANEL P2; P1: 77. COORDINATE PANEL SPACE AVAILABILITY WITH ACTUAL FIELD CONDITIONS.
5. POWER AND DATA FOR RELOCATED TELEVISION. EXTEND EXISTING CONDUCTORS AND CONDUIT TO NEW LOCATION. COORDINATE EXACT LOCATION AND MOUNTING HEIGHT WITH ARCHITECT.
6. COORDINATE POWER REQUIREMENTS FOR ACTUAL SECURITY GATE PROVIDED. PROVIDE UP/DOWN CONTROLS AS REQUIRED BY MANUFACTURER. COORDINATE EXACT LOCATION WITH ARCHITECT.

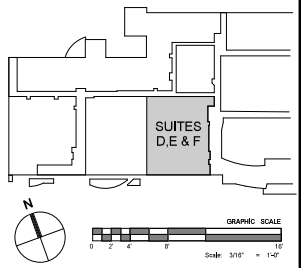
JACOBS ENGINEERING LEGEND

GBA NEW WORK INDICATED WITHIN CROSS HATCH IS NOT TO BE INSTALLED

GENERAL NOTES

1. ALL RECEPTACLES SHOWN AS BACKED UP BY THE GENERATOR SHALL BE PROVIDED WITH RED COVER PLATES.

KEY PLAN



Seal

REVISIONS ADDED BY JACOBS ENGINEERING GROUP, INC.		
REV.	DATE	INIT.
0	1/27/2020	RAV

NOTE: THE LIABILITY OF THE ENGINEER/ARCHITECT PERFORMING THE REVISION OF THIS DRAWING SHALL BE LIMITED TO ONLY THAT PORTION OF THE DRAWING SO REVISED.

JACOBS

JACOBS ENGINEERING JOB NUMBER 16FFRU01

Signature

Date

GBA GLICK BOEHM ARCHITECTURE
ARCHITECTURE PLANNING INTERIOR DESIGN
493 King Street, Suite 100 Charleston, South Carolina 29403
Tel 843.577.0007 Fax 843.722.7036 www.glickboehm.com

DWG CONSULTING ENGINEERS
1320 Main Street, Suite 1600, Columbia, South Carolina 29201
Phone: 803.799.1771 Fax: 803.256.6676 www.dwgse.com

REV. No.	DATE	DESCRIPTION

BERKELEY COUNTY ADMINISTRATION COMPLEX RENOVATIONS
RFP# 32406-01-17/18
BERKELEY COUNTY GOVERNMENT
1003 N. US HIGHWAY 52, MONCKS CORNER, SC 29461

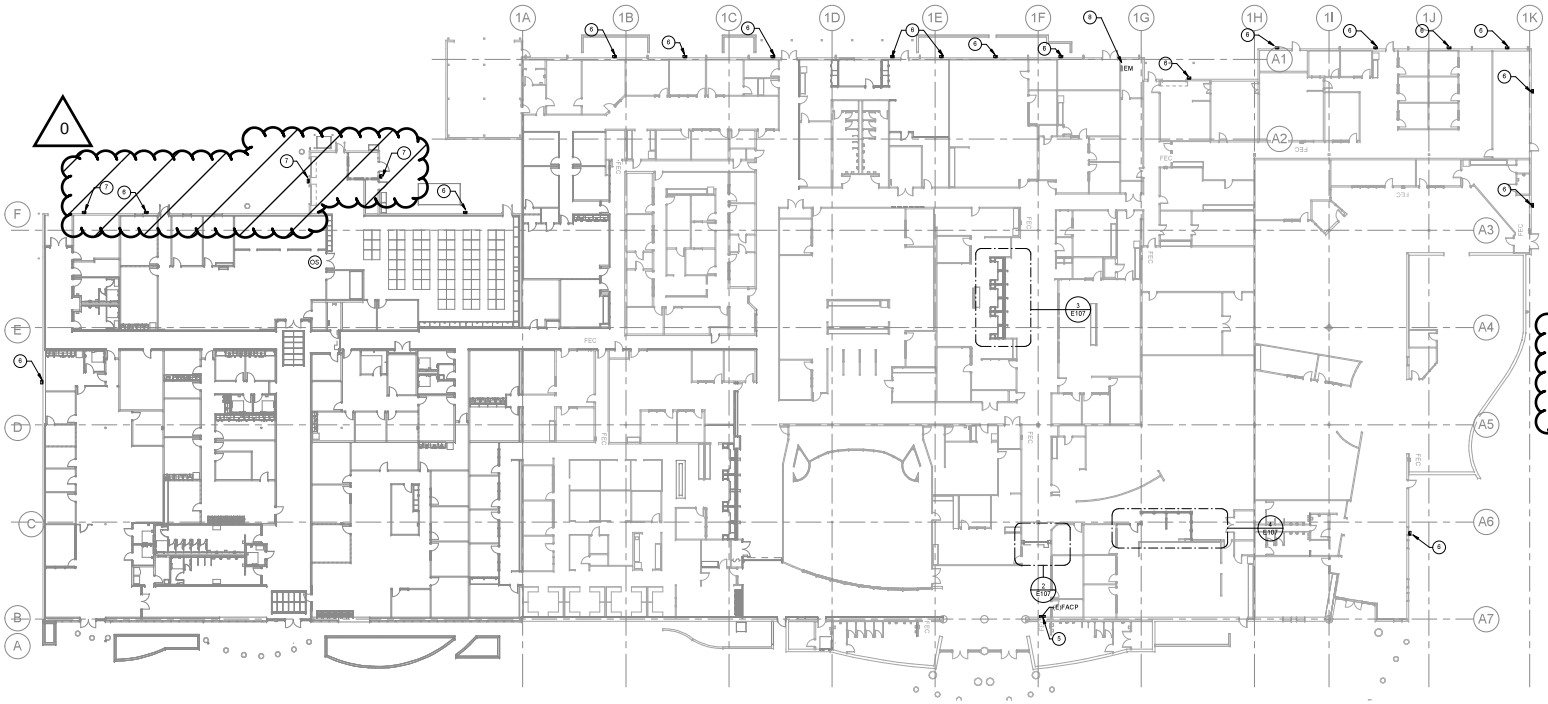
COPYRIGHT © 2017
GLICKBOEHM & ASSOCIATES, INC.

JOB NUMBER:	1547
PROJECT MGR.:	
DRAWN BY:	SPW
CHECKED BY:	BSB
APPROVED BY:	BSB
DATE ISSUED FOR:	
PROPOSALS	01/30/18

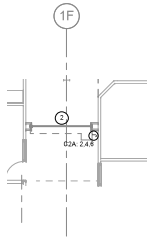
POWER & TELECOM. PLAN - SUITES D, E & F

J-GBA-E103

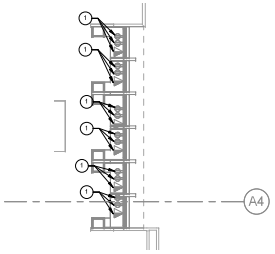
1/28/2018 6:47:40 PM
C:\Users\SWarren\Documents\18022 BERKELEY COUNTY OFFICES M1P_2015_SWarren.rvt



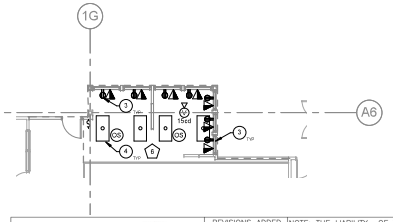
1 E107 ELECTRICAL OVERALL PLAN
SCALE: 1" = 20'-0"



2 E107 SECURITY GATE
SCALE: 1/8" = 1'-0"



3 E107 AUDITOR'S DESK
SCALE: 1/8" = 1'-0"



KEYNOTES

1. EXISTING RECEPTACLES AND LOW-VOLTAGE ROUGH-IN IN THIS AREA SHALL BE REWORKED TO ACCOMODATE NEW AUDITOR'S DESK. RELOCATE AS NECESSARY TO MAINTAIN EXISTING ORIENTATION TO THE GREATEST EXTENT POSSIBLE.
2. MOTORIZED SECURITY GATE TO TIE INTO FIRE ALARM SYSTEM. GATE SHALL OPEN AUTOMATICALLY IN THE EVENT THAT THE FIRE ALARM SYSTEM IS NOTIFIED OF AN EMERGENCY. COORDINATE POWER REQUIREMENTS FOR ACTUAL SECURITY GATE PROVIDED. PROVIDE UP/DOWN CONTROLS AS REQUIRED BY MANUFACTURER. COORDINATE EXACT LOCATION WITH ARCHITECT.
3. CIRCUIT RECEPTACLE TO NEAREST AVAILABLE 120V RECEPTACLE CIRCUIT WITH CAPACITY TO HANDLE NEW LOAD.
4. RELOCATE EXISTING FIXTURES IN THIS AREA THAT CONFLICT WITH NEW WALLS TO BE ARRANGED AS SHOWN. PROVIDE ADDITIONAL FIXTURES OF SAME TYPE AND LUMEN OUTPUT IF REQUIRED TO MEET LAYOUT SHOWN.
5. LOCATION OF EXISTING FIRE ALARM CONTROL PANEL/FACP: SIEMENS MODEL FC2025. CONTRACTOR SHALL USE EXISTING PANEL TO FEED NEW BUILDING FIRE ALARM DEVICES.
6. ALL EXTERIOR WALL MOUNTED LIGHT FIXTURES SHOWN ARE EXISTING AND SHALL BE REPLACED WITH FIXTURE TYPE 'FE' UNLESS OTHERWISE NOTED. EXISTING CONTROLS AND CIRCUITS SHALL REMAIN AND BE REUSED.
7. NEW EXTERIOR LIGHT FIXTURE.
8. EXISTING EMERGENCY PANEL 'EM' REFERENCED ON LIGHTING PLANS.

JACOBS ENGINEERING LEGEND

GBA NEW WORK INDICATED WITHIN CROSS HATCH IS NOT TO BE INSTALLED

0

GENERAL NOTES

Seal

REVISIONS ADDED BY JACOBS ENGINEERING GROUP, INC.		
REV.	DATE	INIT.
0	1/27/2020	RAV

NOTE: THE LIABILITY OF THE ENGINEER/ARCHITECT PERFORMING THE REVISION OF THIS DRAWING SHALL BE LIMITED TO ONLY THAT PORTION OF THE DRAWING SO REVISED.

JACOBS

JACOBS ENGINEERING JOB NUMBER 16FFRU01

Signature

Date

N

GRAPHIC SCALE
0 10' 20' 40' 80'
Scale: 1" = 20'

REV. No.	DATE	DESCRIPTION
0	01/27/2020	ISSUED FOR CONSTRUCTION

GBA GLICK BOEHM ARCHITECTURE
ARCHITECTURE PLANNING INTERIOR DESIGN
493 King Street, Suite 100 Charleston, South Carolina 29403
843.577.0207 FAX 843.723.7594 www.glickboehm.com

DWG CONSULTING ENGINEERS
1 Exeter Commerce Park Mount Pleasant, South Carolina 29464
Phone: 843.849.1776 Fax: 843.849.1778 www.dwgse.com

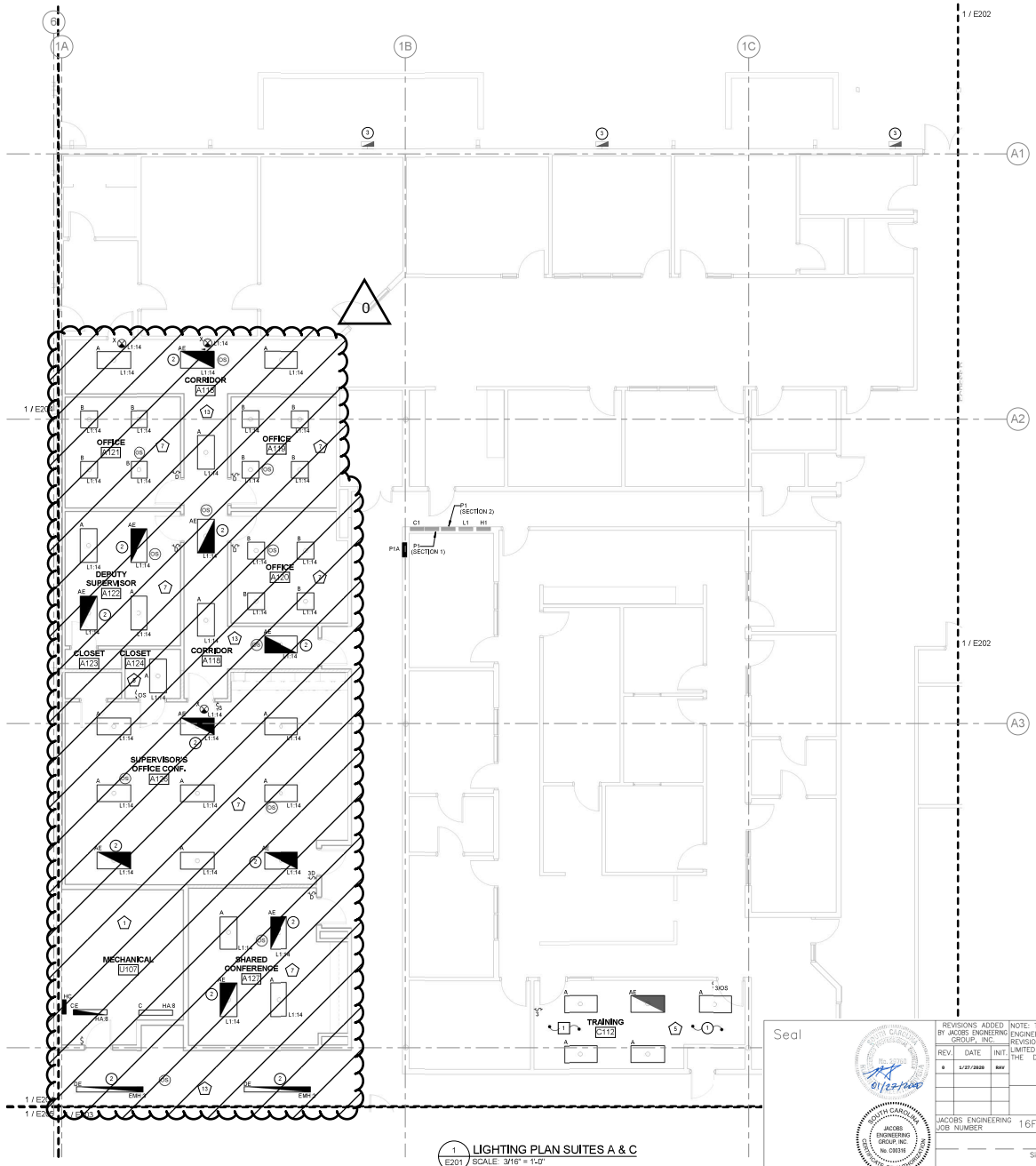
BERKELEY COUNTY ADMINISTRATION COMPLEX RENOVATIONS
RFP# 32406-01-17/18
BERKELEY COUNTY GOVERNMENT
1003 N. US HIGHWAY 52, MONCKS CORNER, SC 29461

COPYRIGHT © 2017 GLICKBOEHM & ASSOCIATES, INC.
JOB NUMBER: 1547
PROJECT MGR.:
DRAWN BY: SPW
CHECKED BY: BSB
APPROVED BY: BSB
DATE ISSUED FOR: PROPOSALS 01/30/18

ELECTRICAL OVERALL PLAN

J-GBA-E107

C:\Users\SWarren\Documents\18022 BERKELEY COUNTY OFFICES M1P_2015_SWarren.rvt
1/29/2018 6:47:48 PM



1 / E201 LIGHTING PLAN SUITES A & C
SCALE: 3/16" = 1'-0"

KEYNOTES

DEMOLITION

1. ALL EXISTING LIGHT FIXTURES AND LIGHT SWITCHES IN THIS TRAINING C112 SHALL BE DISCONNECTED AND REMOVED. PULL WIRING BACK TO NEAREST JUNCTION BOX AND RECONNECT ANY DOWNSTREAM DEVICES REQUIRING POWER DURING DEMOLITION. CIRCUIT AND CONTROL WIRING SHALL BE REUSED DURING RENOVATION.

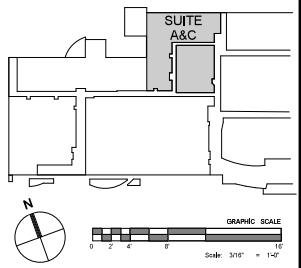
RENOVATION

1. NEW LIGHT FIXTURES SHOWN IN TRAINING C112 SHALL BE FED FROM EXISTING CIRCUIT ORIGINALLY SERVING THIS ROOM. UPDATE CONTROLS AS SHOWN.
2. EMERGENCY LIGHTING FIXTURE SHALL BE PROVIDED WITH A GENERATOR TRANSFER DEVICE(GTD) AND CIRCUITED TO BOTH NORMAL AND EMERGENCY POWER. UTILIZE NORMAL POWER CIRCUIT SHOWN AND CONNECT TO EMERGENCY CIRCUIT EM-2 CURRENTLY SERVING THIS AREA. UPDATE PANEL SCHEDULES ACCORDINGLY. REFER TO SHEET E107 FOR PANEL 'EM' LOCATION. PROVIDE RED SWITCHCOVER PLATE (IF LOCALLY CONTROLLED AND NOT TIMECLOCK CONTROL ONLY) IN ROOM WHERE SWITCH IS SHOWN. THESE FIXTURES SHALL NOT BE PROVIDED WITH BATTERY BACK-UP.
3. REFER TO SHEET E107 FOR DETAILS ON THESE LIGHT FIXTURES.

JACOBS ENGINEERING LEGEND

GBA NEW WORK INDICATED WITHIN CROSS HATCH IS NOT TO BE INSTALLED

KEY PLAN



Seal

REV.	DATE	INIT.	REVISIONS ADDED BY JACOBS ENGINEERING GROUP, INC.
0	1/27/2020	RAV	

NOTE: THE LIABILITY OF THE ENGINEER/ARCHITECT PERFORMING THE REVISION OF THIS DRAWING SHALL BE LIMITED TO ONLY THAT PORTION OF THE DRAWING SO REVISED.

JACOBS

JACOBS ENGINEERING JOB NUMBER 16FFRU01

Signature

Date

GBA GLICK BOEHM ARCHITECTURE
ARCHITECTURE PLANNING INTERIOR DESIGN
493 King Street, Suite 100 Charleston, South Carolina 29403
Tel: 843.972.0007 Fax: 843.722.7656 www.glickboehm.com

DWG CONSULTING ENGINEERS
1 Cooper Square, Suite 2 Charleston, South Carolina 29401
Phone: (843) 577-7171 Fax: (843) 577-7172 www.dwgse.com

NO.	DATE	DESCRIPTION
		ISSUED FOR CONSTRUCTION

BERKELEY COUNTY ADMINISTRATION COMPLEX RENOVATIONS
RFP# 32406-01-17/18
BERKELEY COUNTY GOVERNMENT
1003 N. US HIGHWAY 52, MONCKS CORNER, SC 29461

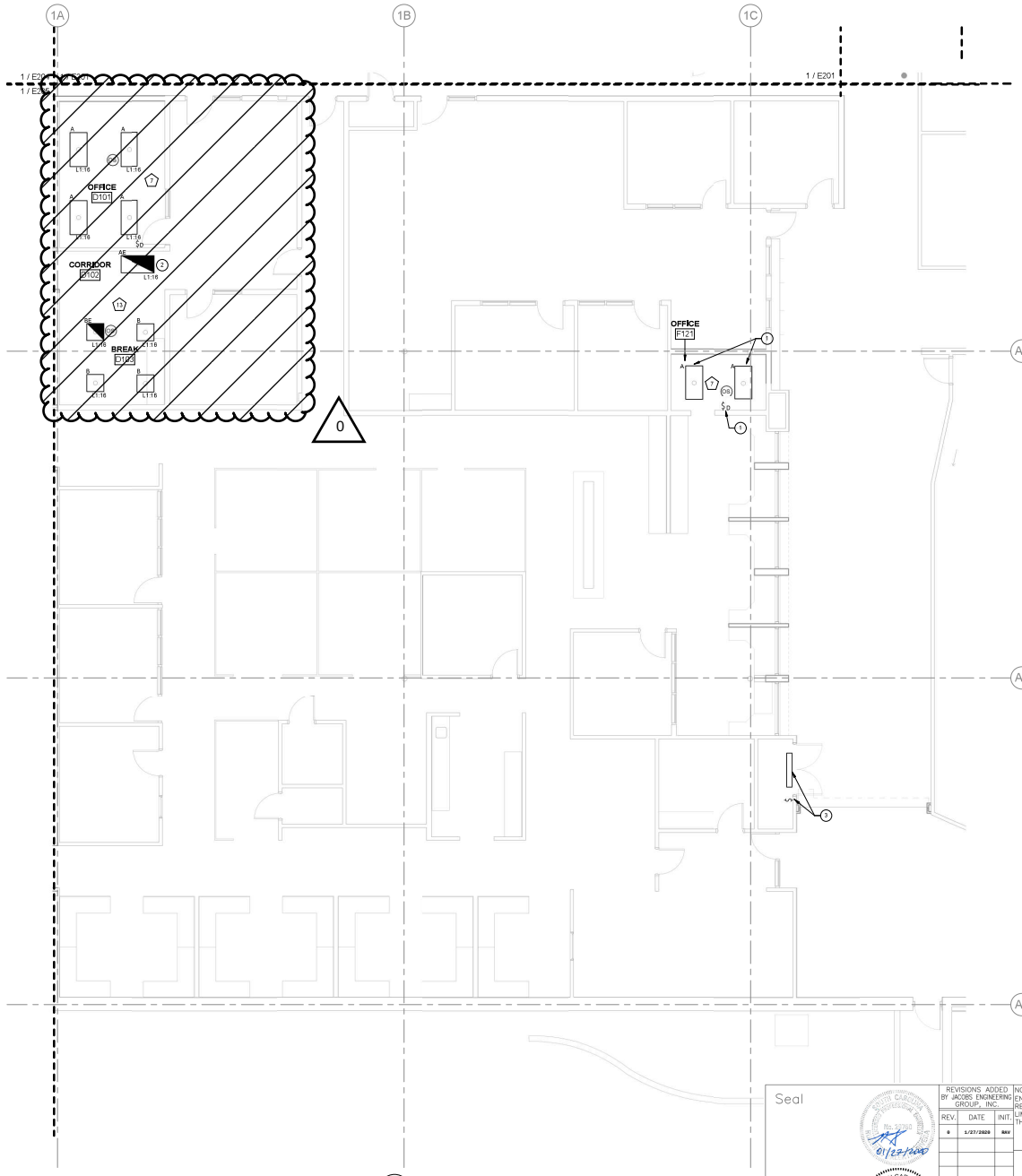
COPYRIGHT © 2017 GLICKBOEHM & ASSOCIATES, INC.

JOB NUMBER:	1547
PROJECT MGR.:	
DRAWN BY:	SPW
CHECKED BY:	BSB
APPROVED BY:	BSB
DATE ISSUED FOR:	
PROPOSALS	01/30/18

LIGHTING PLAN - SUITES A & C

J-GBA-E201

1/29/2018 6:47:53 PM
C:\Users\SWimmer\Documents\18022 BERKELEY COUNTY OFFICES MSP_2015_SWimmer.rvt



1 / E203 LIGHTING PLAN SUITES D, E & F
SCALE: 3/16" = 1'-0"

KEYNOTES

1. CONNECT LIGHT FIXTURES AND SWITCH TO EXISTING CIRCUIT L1; 2 CURRENTLY SERVING THIS AREA.
2. EMERGENCY LIGHTING FIXTURE SHALL BE PROVIDED WITH A GENERATOR TRANSFER DEVICE(GTD) AND CIRCUITED TO BOTH NORMAL AND EMERGENCY POWER, UTILIZE NORMAL POWER CIRCUIT SHOWN AND CONNECT TO EMERGENCY CIRCUIT EM-2 CURRENTLY SERVING THIS AREA. UPDATE PANEL SCHEDULES ACCORDINGLY. PROVIDE RED SWITCHCOVER PLATE (ONLY IF LOCALLY CONTROLLED) IN ROOM WHERE SWITCH IS SHOWN. THESE FIXTURES SHALL NOT BE PROVIDED WITH BATTERY BACK-UP.
3. RELOCATED LIGHT FIXTURE AND ASSOCIATED SWITCH. COORDINATE EXACT LOCATION WITH FIELD CONDITIONS AND ENSURE INSTALLATION DOES NOT INTERFERE WITH MECHANICAL. EXTEND EXISTING CONDUIT AND CONDUCTORS AS NECESSARY.

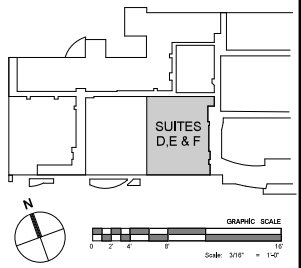
0

JACOBS ENGINEERING LEGEND

GBA NEW WORK INDICATED WITHIN CROSS HATCH IS NOT TO BE INSTALLED

GENERAL NOTES

KEY PLAN



Seal

SOUTH CAROLINA PROFESSIONAL ENGINEER No. 27700 01/27/2020

SOUTH CAROLINA JACOBS ENGINEERING GROUP, INC. No. C00316 CERTIFICATE OF AUTHORIZATION

REVISIONS ADDED BY JACOBS ENGINEERING GROUP, INC.		
REV.	DATE	INIT.
0	1/27/2020	BKV

NOTE: THE LIABILITY OF THE ENGINEER/ARCHITECT PERFORMING THE REVISION OF THIS DRAWING SHALL BE LIMITED TO ONLY THAT PORTION OF THE DRAWING SO REVISED.

JACOBS

JACOBS ENGINEERING JOB NUMBER 16FFRU01

Signature

Date

GBA GLICK BOEHM ARCHITECTURE
ARCHITECTURE PLANNING INTERIOR DESIGN
493 King Street, Suite 100 Charleston, South Carolina 29403
Tel 843.577.1007 Fax 843.722.7856 www.glickboehm.com

DWG CONSULTING ENGINEERS
1 Hasell Street, Charleston, SC 29401
Phone: (843) 577-7171 Fax: (843) 577-7181 www.dwgse.com

REV.	No.	DATE	DESCRIPTION
	0	1/27/20	ADDENDUM #1 - Permit Set Revisions

BERKELEY COUNTY ADMINISTRATION COMPLEX RENOVATIONS
RFP# 32406-01-17/18
BERKELEY COUNTY GOVERNMENT
1003 N. US HIGHWAY 52, MONCKS CORNER, SC 29461

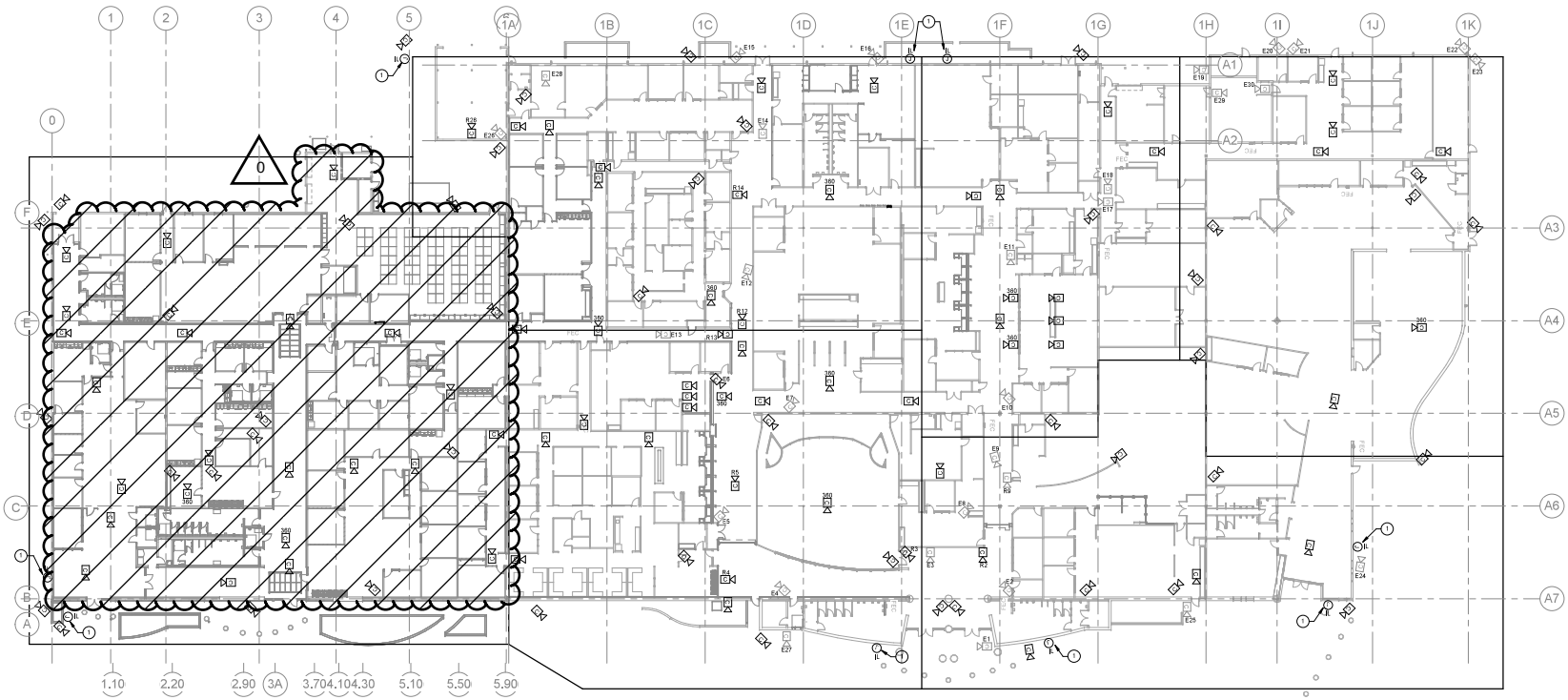
COPYRIGHT © 2017
GLICKBOEHM & ASSOCIATES, INC.

JOB NUMBER:	1547
PROJECT MGR.:	
DRAWN BY:	SPW
CHECKED BY:	BSB
APPROVED BY:	BSB
DATE ISSUED FOR:	
PROPOSALS	01/30/18

LIGHTING PLAN - SUITES D, E & F

J-GBA-E203

1/28/2018 6:48:01 PM
C:\Users\BWarner\Documents\18022 BERKELEY COUNTY OFFICES MSP_2015_BWarner.rvt



1 E307 SECURITY CAMERA OVERALL PLAN
SCALE: 1" = 20'-0"

JACOBS ENGINEERING LEGEND

GBA NEW WORK INDICATED WITHIN CROSS HATCH IS NOT TO BE INSTALLED

GENERAL NOTES

1. ALL WORK SHOWN ON THIS PLAN IS ROUGH-IN ONLY. COORDINATE INSTALLATION OF CABLING AND INFRASTRUCTURE WITH BERKELEY COUNTY ADMIN I.T. PERSONELL. CAMERAS ON THIS PLAN WITH NOTATION OF EXX ARE EXISTING CAMERAS, CAMERAS SHOWN WITH AN RXX ARE THE EXISTING CAMERAS THAT ARE BEING RELOCATED. EXISTING CAMERA NUMERICAL DESIGNATION CORRESPONDS TO NEW LOCATION SHOWN WITH RXX. ALL OTHER CAMERAS SHOWN ARE NEW.
2. DARK LINES INDICATE 6 DIFFERENT ZONE BOUNDARIES FOR CAMERA CONNECTIONS. COORDINATE ZONING AND HEAD END LOCATIONS WITH BERKELEY COUNTY ADMIN I.T. PERSONELL.
3. ALL CAMERA LOCATIONS SHOWN IN INTERIOR/EXTERIOR OF BUILDING SHALL BE ROUGHED-IN WITH A MINIMUM 3/4"C. BERKELEY COUNTY ADMIN I.T. PERSONELL SHALL PERFORM WIRING AND INSTALLATION. COORDINATE UPSIZING OF CONDUIT AS NECESSARY WITH BERKELEY COUNTY ADMIN I.T. PERSONELL.

KEYNOTES

1 JUNCTION BOXES SHOWN TAGGED WITH 'IL' ON THIS PLAN REPRESENT INFRARED ILLUMINATORS. COORDINATE EXACT LOCATION AND MOUNTING HEIGHT WITH BERKELEY COUNTY ADMIN I.T. PERSONELL. ILLUMINATORS SHALL BE CIRCUITED TO NEAREST AVAILABLE BUILDING MOUNTED LIGHTING CIRCUIT AND RUN CONTINUOUSLY.

Seal

SOUTH CAROLINA JACOBS ENGINEERING GROUP INC. No. C00316 CERTIFICATE OF AUTHORIZATION

No. 27727 01/27/2020

REVISIONS ADDED BY JACOBS ENGINEERING GROUP, INC.		
REV.	DATE	INIT.
0	1/27/2020	RAV

NOTE: THE LIABILITY OF THE ENGINEER/ARCHITECT PERFORMING THE REVISION OF THIS DRAWING SHALL BE LIMITED TO ONLY THAT PORTION OF THE DRAWING SO REVISED.

JACOBS

JACOBS ENGINEERING JOB NUMBER 16FFRU01

Signature

Date

N

GRAPHIC SCALE
0 10' 20' 40' 80'
Scale: 1" = 20'

GBA GLICK BOEHM ARCHITECTURE
ARCHITECTURE PLANNING INTERIOR DESIGN
493 King Street, Suite 100 Charleston, South Carolina 29403
Tel 843.972.0007 Fax 843.722.3304 www.glickboehm.com

DWG CONSULTING ENGINEERS
1345 Port City Boulevard, Suite 100 North Charleston, SC 29405
Phone: (843) 744-7175 Fax: (843) 744-7176

REV. No.	DATE	DESCRIPTION
		ISSUED FOR CONSTRUCTION

BERKELEY COUNTY ADMINISTRATION COMPLEX RENOVATIONS
RFP# 32406-01-17/18
BERKELEY COUNTY GOVERNMENT
1003 N. US HIGHWAY 52, MONCKS CORNER, SC 29461

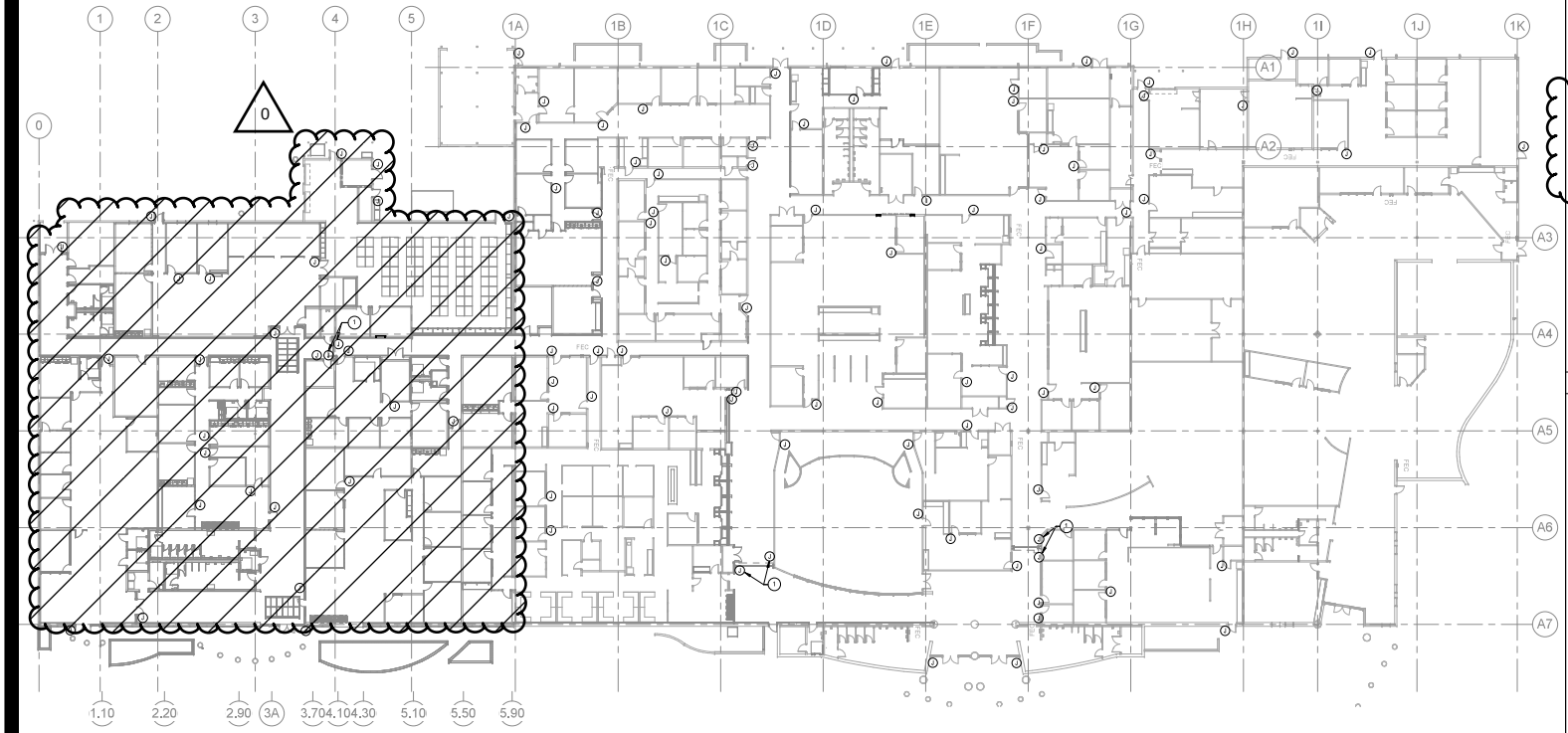
COPYRIGHT © 2017 GLICKBOEHM & ASSOCIATES, INC.

JOB NUMBER:	1547
PROJECT MGR.:	
DRAWN BY:	SPW
CHECKED BY:	BSB
APPROVED BY:	BSB
DATE ISSUED FOR:	
PROPOSALS	01/30/18

SECURITY CAMERA PLANS

J-GBA-E307

1/28/2018 6:48:25 PM
C:\Users\SWarren\Documents\18022 BERKELEY COUNTY OFFICES M12F_2015_SWarren.rvt



1 / E308 OVERALL ACCESS CONTROL PLAN
SCALE: 1" = 20'-0"

KEYNOTES

1. SECURITY GATE ACCESS CONTROL SHALL BE PROVIDED ON BOTH SIDES OF GATE.

JACOBS ENGINEERING LEGEND

GBA NEW WORK INDICATED WITHIN CROSS HATCH IS NOT TO BE INSTALLED

0

GENERAL NOTES

1. BERKELEY COUNTY ADMIN PERSONELL SHALL FURNISH AND INSTALL ALL ACCESS CONTROLS. ALL JUNCTION BOXES SHOWN ON THIS PLAN REPRESENT DOOR ACCESS CONTROL LOCATIONS ADJACENT TO DOORS SHOWN UNLESS OTHERWISE NOTED. PROVIDE WEATHERIZATED JUNCTION BOXES AND COVER PLATES FOR JUNCTION BOXES SHOWN AT EXTERIOR DOOR LOCATIONS. COORDINATE HEAD END LOCATION WITH BERKELEY COUNTY ADMIN PERSONNEL. DEVICES SHALL BE RECESSED IN WALLS IN ALL LOCATIONS.

Seal

SOUTH CAROLINA PROFESSIONAL ENGINEER — 01/27/2020

JACOBS ENGINEERING GROUP, INC. No. C00316 — CERTIFICATE OF AUTHORIZATION

REVISIONS ADDED BY JACOBS ENGINEERING GROUP, INC.		
REV.	DATE	INIT
0	1/27/2020	RAV

NOTE: THE LIABILITY OF THE ENGINEER/ARCHITECT PERFORMING THE REVISION OF THIS DRAWING SHALL BE LIMITED TO ONLY THAT PORTION OF THE DRAWING SO REVISED.

JACOBS

JACOBS ENGINEERING JOB NUMBER 16FFRU01

Signature

Date

N

GRAPHIC SCALE
0 10' 20' 40' 80'
Scale: 1" = 20'

GBA GLICK BOEHM ARCHITECTURE
ARCHITECTURE PLANNING INTERIOR DESIGN
493 King Street, Suite 100 Charleston, South Carolina 29403
Tel 843.577.2057 Fax 843.722.7636 www.glickboehm.com

DWG CONSULTING ENGINEERS
1 STATE COURT SUITE A GREENVILLE SC 29601
864.467.1000 www.dwgengineers.com

REV. No.	DATE	DESCRIPTION
0	1/27/2020	PERMIT SUBMISSION

BERKELEY COUNTY ADMINISTRATION COMPLEX RENOVATIONS
RFP# 32406-01-17/18
BERKELEY COUNTY GOVERNMENT
1003 N. US HIGHWAY 52, MONCKS CORNER, SC 29461

COPYRIGHT © 2017 GLICKBOEHM & ASSOCIATES, INC.

JOB NUMBER:	1547
PROJECT MGR.:	
DRAWN BY:	SPW
CHECKED BY:	BSB
APPROVED BY:	BSB
DATE ISSUED FOR:	
PROPOSALS	01/30/18

OVERALL ACCESS CONTROL PLAN

J-GBA-E308

1/28/2018 6:48:26 PM
C:\Users\SWarren\Documents\18022 BERKELEY COUNTY OFFICES MSP_2015_SWarren.rvt