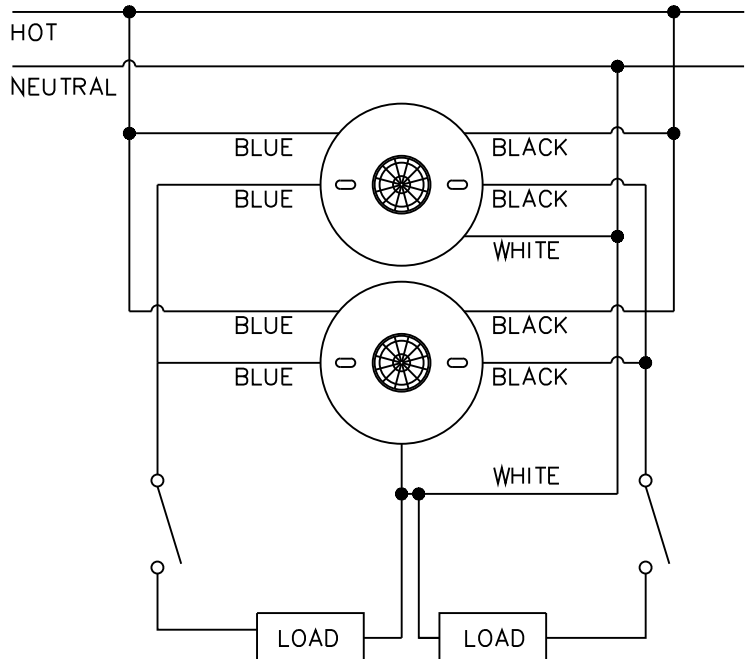


NOTE	CIRCUIT	MAIN C/B: 225A FRAME: 225A NOMINAL	NEW PANEL: 'P1' 10K AIC NOTE 1 VOLTAGE: 208/120-3ø-4W							POLES: 42 MOUNTING: SURFACE		CIRCUIT	NOTE
			EQUIPMENT	BREAKER	FEEDER	øA AMPS	øB AMPS	øC AMPS	FEEDER	BREAKER	EQUIPMENT		
	1	LTG-OFF 103 THRU 106	20A-1P	2#12 W/G	4.8	6.0		2#12 W/G	20A-1P	REC-OFF 103	2		
	3	LTG-IT 112/111/110/108	20A-1P	2#12 W/G		3.6	6.0	2#12 W/G	20A-1P	REC-OFF 103	4		
	5	LTG-KITCH 102/113/107	20A-1P	2#12 W/G				2.5	6.0	20A-1P	REC-OFF 104	6	
	7	LTG-MECH 101/114/115	20A-1P	2#12 W/G	1.3	12.0		2#12 W/G	20A-1P	REC-OFF 105/106	8		
	9	LTG-EXTERIOR	20A-1P	2#12 W/G		2.0	9.0	2#12 W/G	20A-1P	REC-CONF 108	10		
	11	REC-IT 112	20A-1P	2#12 W/G				1.5	6.0	20A-1P	REC-ENTRY 109/107	12	
	13	REC-IT 112	20A-1P	2#12 W/G	5.0	12.0		2#12 W/G	20A-1P	REC-OFF 110/111	14		
	15	REC-IT 112	20A-1P	2#12 W/G		5.0	6.0	2#12 W/G	20A-1P	REC-CORR 113/102	16		
	17	EWB-1 WATER HEATER	20A-1P	2#12 W/G				12.5	10.0	20A-1P	REC-KITCH 102 CONV	18	
	19	AHU-1	20A-1P	2#12 W/G	9.6	5.0		2#12 W/G	20A-1P	REC-KITCH 102 WATER CLR	20		
	21	EWB-1 MENS	20A-1P	2#12 W/G		6.3	10.0	2#12 W/G	20A-1P	REC-KITCH 102 FRIDGE	22		
	23	EWB-2 WOMENS	20A-1P	2#12 W/G				6.3	10.0	20A-1P	REC-WOMENS 115	24	
	25	REC-MECH 101	20A-1P	2#12 W/G	4.5	10.0		2#12 W/G	20A-1P	REC-MENS 114	26		
	27	SPARE	20A-1P			0	0		20A-1P	SPARE	28		
	29	SPARE	20A-1P					0	0	20A-1P	SPARE	30	
	31	SPARE	20A-1P		0	0				20A-1P	SPARE	32	
	33	BUSSED SPACE				0	0			BUSSED SPACE	34		
	35	BUSSED SPACE						0	0	BUSSED SPACE	36		
	37	BUSSED SPACE			0	0				BUSSED SPACE	38		
	39	CU-1	25A-2P	2#10 W/G		17.0	11.5	2#12 W/G	20A-2P	CU-2	40		
	41							17.0	11.5		42		
NOTES:		TOTAL CONNECTED AMPS/LEG			70	76	83.3						
1. COORDINATE WITH SHORT CIRCUIT/COORDINATION STUDY/ARC FAULT STUDY PRIOR TO SUBMITTAL.													
2. XXXX													



TYP. LINE VOLTAGE SENSOR DETAIL
NO SCALE

LIGHTING FIXTURE SCHEDULE								
I.D.	DESCRIPTION	MANUFACTURER			CAT. NO.	LAMPS	MTG.	WATT
		BASIS OF DESIGN	ALTERNATE	ALTERNATE				
A	2'x4' LED ZERO PLENUM	COLUMBIA	LITHONIA	COOPER	LZPT24-40HLG-LSRS-EDU	5900 L LED	RECESSED	57W
A1	2'x4' LED ZERO PLENUM	COLUMBIA	LITHONIA	COOPER	LZPT24-40HLG-LSRS-EDU-ELL14	5900 L LED	RECESSED	57W
B	2'x4' LED ZERO PLENUM	COLUMBIA	LITHONIA	COOPER	LZPT24-40VWG-LSRS-EDU	3500 L LED	RECESSED	33W
B1	2'x4' LED ZERO PLENUM	COLUMBIA	LITHONIA	COOPER	LZPT24-40VWG-LSRS-EDU-ELL14	3500 L LED	RECESSED	33W
B2	2'x2' LED ZERO PLENUM	COLUMBIA	LITHONIA	COOPER	LZPT22-40VWG-LSRS-EDU	2000 L LED	RECESSED	18W
C	4' ENCLOSED LED	COLUMBIA	LITHONIA	COOPER	LXEM4-40ML-RFA-ESDU/XEHC	4550 L LED	CHAIN	42W
C1	4' ENCLOSED LED	COLUMBIA	LITHONIA	COOPER	LXEM4-40ML-RFA-ESDU-ELL14/XEHC	4550 L LED	CHAIN	42W
C2	4' ENCLOSED LED	COLUMBIA	LITHONIA	COOPER	LXEM4-40ML-RFA-EDU/XE45MB	4550 L LED	SURFACE	39W
C3	4' ENCLOSED LED	COLUMBIA	LITHONIA	COOPER	LXEM4-40ML-RFA-EDU-ELL14/XE45MB	4550 L LED	SURFACE	39W
D	2' WALLMOUNT LED	COLUMBIA	LITHONIA	COOPER	CWM2-40LWSM-FRWA-EU	2430 L LED	SURFACE	21W
D1	2' WALLMOUNT LED	COLUMBIA	LITHONIA	COOPER	CWM2-40LWSM-FRWA-EU-ELL14	2430 L LED	SURFACE	21W
E	CANOPY LIGHT	BEACON	LITHONIA	COOPER	SRT1-35-4KB-50W-UNV-DB-WG-SCP-8F/SCP REMOTE	4550 L LED	SURFACE	35W
F	SURFACE MOUNT LED, WL	FAIL-SAFE	LITHONIA	COOPER	TRR11-LD4-25W-40-CL-WH-UNV-EDC1-CSTG	2333 L LED	SURFACE	25W
F1	SURFACE MOUNT LED, WL	FAIL-SAFE	LITHONIA	COOPER	TRR11-LD4-15W-40-CL-WH-UNV-EDC1-EL5W/CSTG	1500 L LED	SURFACE	15W
G	LED WALL BRACKET	LUMARK	LITHONIA	DUAL LITE	AXCS3ARL-PC	(1) 27W/3700L	SURFACE	31W
G1	LED NORM/EM WALL BRACKET	LUMARK	LITHONIA	DUAL LITE	AXCS3ARL-PC-CBP	(1) 27W/3700L	SURFACE	31W
H	STROBE LIGHT	LARSON ELECTR	LITHONIA	COOPER	SLEDB-110V-BLUE	(1) LED ARRAY	SURFACE	265W
H1	STROBE LIGHT	LARSON ELECTR	LITHONIA	COOPER	SLEDB-110V-RED	(1) LED ARRAY	SURFACE	265W
J	2'x4' LED ZERO PLENUM	COLUMBIA	LITHONIA	COOPER	LZPT24-40LWSM-LSRS-EDU	4500 L LED	RECESSED	43W
J1	2'x4' LED ZERO PLENUM	COLUMBIA	LITHONIA	COOPER	LZPT24-40LWSM-LSRS-EDU-ELL14	4500 L LED	RECESSED	43W
K	LED STAIRWELL	COLUMBIA	LITHONIA	COOPER	ESL4-40VW-FAW-EDU-ELL14-NXOS	3320 L LED	SURFACE	27W
☒	LED EXIT	DUAL LITE	SURELITES	LITHONIA	EVEURWEI	LED	SURFACE	2.1W
☒	EMERGENCY LIGHTING UNIT	LITHONIA	SURELITES	DUALITE	CVEC50N-12V-I-I-O	-----	SURFACE	13W
NOTE: 1. PROVIDE EMERGENCY BATTERY PACK. WIRE TO HOT LEG OF LOCAL LIGHTING CIRCUIT IN THE AREA IN WHICH IT SERVES. THE AREA MUST BE ON THE SAME CIRCUIT. 2. UNIT MUST OPERATE VIA PHOTOCONTROL AND ACT AS EMERGENCY LIGHT 3. UNIT MUST BE SUITABLE FOR EMERGENCY LIGHTING AT EGRESS DOORS. 4. WIRE TO HOT LEG OF LOCAL LIGHTING CIRCUIT IN THE AREA IN WHICH IT SERVES. THE AREA SERVED MUST BE ON THE SAME CIRCUIT, NO HEADS, 50W CAPACITY 5. WHEN APPLICABLE, MOUNT ABOVE CEILING. 6. VERIFY MOUNTING REQUIREMENT WITH MANUFACTURER AND PROVIDE CLEANEST POSSIBLE LOOK. 7. NOT USED THIS PROJECT								

SYMBOLS

NOTE 1	
	LIGHT FIXTURE, CEILING
	LIGHT FIXTURE, CEILING EMERGENCY
	SPLIT-WIRED LIGHT FIXTURE
	LIGHT FIXTURE, WALL
S	SINGLE POLE SWITCH, 48" AFF TO TOB, TYPICAL UNO
Sb	SINGLE GANG BOX W/BLANK COVER PLATE
S2	DOUBLE POLE SWITCH
S3	THREE-WAY SWITCH
S4	FOUR-WAY SWITCH
Sb	DIMMER SWITCH
Sos	OCCUPANCY SENSOR, DUAL TECH.
Sosd	OCCUPANCY SENSOR, 0-10V DIMMING.
Szos	OCCUPANCY SENSOR, DUAL TECH., 2 CIRCUIT
Szosp	OCCUPANCY SENSOR, DUAL TECH., 2 CIRCUIT, PHOTOCELL
Smbt	ELECTRONIC IN WALL TIMER, 5 PRESETS, NON-ADJUSTABLE
☒	DUPLEX RECEPTACLE, MOUNT 18" AFF TO COB, TYPICAL UNO. CL - CLOCK HANGER RECEPTACLE
☒	SPECIAL PURPOSE RECEPTACLE
☒	QUADRUPLX RECEPTACLE
☒	GROUND FAULT INTERRUPTING RECEPTACLE WP - WEATHERPROOF WHILE IN USE
☒	ISOLATED GROUND RECEPTACLE
▽	TELEPHONE OUTLET - ANALOG, 18" AFF TO COB, TYPICAL UNO W - WALL PHONE OUTLET
▽	DATA OUTLET, 4 PORT, 2 ACTIVE, 2 BLANK
▽	DATA OUTLET, 4 PORT, 4 ACTIVE
Stp	MANUAL STARTER WITH THERMAL OVERLOAD & PILOT LIGHT
Sw	MANUAL STARTER WITHOUT THERMAL OVERLOAD
☒	DISCONNECT SWITCH
☒	DOOR CONTROLLER, COORDINATE W/G.C.
☒	CABLE TV OUTLET
☒	CCTV CAMERA, POE
☒	WIFI, POE

NOTE:
1. THIS SYMBOL SCHEDULE IS TYPICAL. NOT ALL SYMBOLS MAY BE USED.
SYMBOLS MAY BE SHOWN IN MULTIPLE ORIENTATIONS.

	CEILING OCC. SENSOR, DUAL TECH., 2 CIRCUIT
	CEILING OCC. SENSOR, DUAL TECH., 2 CIRCUIT, LONG RANGE
	CONTACTOR
	AC MAGNETIC STARTER
	COMBINATION STARTER/DISCONNECT
	MOTOR
	JUNCTION BOX
	PHOTOCELL
	FIRE ALARM PULL STATION
	FIRE ALARM FLOW SENSOR
	FIRE ALARM TAMPER SWITCH
	SMOKE DAMPER
	SMOKE / FIRE DAMPER COMBINATION
	FIRE ALARM SPEAKER/STROBE
	FIRE ALARM STROBE
	SMOKE DETECTOR
	HEAT DETECTOR
	DUCT DETECTOR, COORDINATE LOCATION W/H.C.
	FIRE ALARM EXTERNAL SPEAKER(MNS), WP, 12"-0" AFF
	BOSCH D-9370i SENSOR
	POSITION SENSOR
	ADEMCO VISTA 128
	SEISMIC SENSOR, WALL MOUNT 12" BELOW DECK
	OUTSIDE SIREN
	VAULT SOUND ALARM
	MICROPHONE
	KEYPAD, WALL MOUNT 55" AFF.
	CELLULAR ANTENNA
	CELLULAR BACK-UP SYSTEM
	TIME CLOCK
	LINE VOLTAGE THERMOSTAT
	JUNCTION BOX
	HOMERUN TO PANEL, INDICATED
	EMERGENCY LIGHTING CIRCUIT
	CIRCUIT UNDERGROUND OR UNDERFLOOR
	PANELBOARD
	EMERGENCY BATTERY PACK
	REMOTE EMERGENCY HEAD
	EXIT SIGN
	CU GROUND BAR, 1/4"x1"x8" MIN.
	CU GROUND BAR, 1/4"x2"x12" MIN.

ABBREVIATIONS

WITH OR WITHOUT PERIODS

A	AMPERE	H-O-A	HAND-OFF-AUTO
AB	ABOVE	HP	HORSEPOWER
AFF	ABOVE FINISHED FLOOR	HTR	HEATER
AFG	ABOVE FINISHED GRADE	HUH	HORIZONTAL UNIT HEATER
ATS	AUTOMATIC TRANSFER SWITCH	IG	ISOLATED GROUND
BOB	BOTTOM OF BOX	JB	JUNCTION BOX
C	CONDUIT	KW	KILOWATT
CKT	CIRCUIT	LTG	LIGHTING
COB	CENTER OF BOX	MC	MECHANICAL CONTRACTOR
CPT	CONTROL POWER TRANSFORMER	MTD	MOUNTED
CT	CURRENT TRANSFORMER	MTR	MOTOR
CU	COPPER	MLO	MAIN LUG ONLY
C/B	CIRCUIT BREAKER	Ø	PHASE
DISC	DISCONNECT	P	POLE
DN	DOWN	PC	PLUMBING CONTRACTOR
DS	DISCONNECT SWITCH	PNL	PANELBOARD
DWG	DRAWING	PWR	POWER
EBB	ELECTRICAL BASEBOARD	PH	PHASE
EC	ELECTRICAL CONTRACTOR	RGS	RIGID GALVANIZED STEEL CONDUIT
ETR	EXISTING TO REMAIN	SW	SWITCH
EWG	ELECTRIC WATER COOLER	TBB	TELEPHONE BACKBOARD
FACP	FIRE ALARM CONTROL PANEL	TOB	TOP OF BOX
FAAP	FIRE ALARM ANNUNCIATOR PANEL (KEYPAD)	TV	TELEVISION
FACS	FIRE ALARM COMMAND SYSTEM/VOICE EVAC	UNO	UNLESS NOTED OTHERWISE
FU	FUSED	V	VOLT
FDR	FEEDER	W	WATT OR WIRE
FDS	FUSED DISCONNECT SWITCH	W/	WITH
FT	FEET	W/G	WITH GROUND
GC	GENERAL CONTRACTOR	W/O	WITH OUT
GFI	GROUND FAULT INTERRUPTING	WP	WEATHER-PROOF
GND	GROUND	WPIU	WEATHER-PROOF WHILE IN USE
HC	HEATING CONTRACTOR	XFMR	TRANSFORMER

GENERAL NOTES FOR ALL ELECTRICAL PLANS

1. VERIFY LOCATION OF ALL EQUIPMENT TO BE CONNECTED PRIOR TO ROUGH-IN.
2. ALL WORK MUST MEET UCC REQUIREMENTS. ALL WORK MUST MEET NEC, 2014.
3. THE ELECTRICAL CONTRACTOR (E.C.) SHALL PROVIDE ALL MATERIALS AND WORK FOR A COMPLETE AND OPERATIONAL SYSTEM. THE E.C. IS RESPONSIBLE FOR ALL "WAYS AND MEANS OF CONSTRUCTION" NOT SPECIFICALLY DETAILED, I.E. JUNCTION BOXES, ETC.
4. ALL ELECTRICAL EQUIPMENT AND/OR CONNECTIONS ARE BY E.C. UNLESS NOTED OTHERWISE. THE E.C. SHALL BECOME FAMILIAR WITH ALL OF THE CONTRACT DOCUMENTS TO VERIFY ALL ELECTRICAL REQUIREMENTS REGARDING EXISTING CONDITIONS AND INTENDED FINAL RESULT.
5. ALL ELECTRICAL PENETRATIONS THROUGH MECHANICAL ROOMS, CORRIDORS, STAIRWAYS AND FROM FLOOR TO FLOOR SHALL BE 1 HOUR RATED AND SHALL BE BY MANUFACTURER'S DETAILS. THE DETAILS SHALL MEET OR EXCEED RATINGS OF CONSTRUCTION BEING PENETRATED. PENETRATION DETAILS SHALL BE EXACTLY AS TESTED BY AN APPROVED TESTING LABORATORY OR AGENCY AND SHALL INCLUDE THEIR SYSTEM NUMBERS ON SUBMITTALS.
6. WHEN THE PHRASE "EXTEND AND CONNECT" IS USED IN ANY VARIATION, IT SHALL MEAN TO PROVIDE CONDUIT AND WIRE, AS INDICATED FOR THE ASSOCIATED CIRCUIT, TO THE POINT INDICATED EITHER IN THE NOTE OR ON THE DRAWING. PROVIDE ALL TERMINATIONS, BOXES, CONDUIT, WIRE, CONNECTORS, ETC. FOR A COMPLETE AND OPERATIONAL SYSTEM.
7. THE DRAWINGS ARE NOT INDICATIVE OF SOME MINOR MODIFICATIONS NECESSARY TO PERFORM THE SCOPE OF WORK, I.E. THE MOUNTING OF SUPPORTS, BRACKETS, AND THE LIKE. THE CONTRACTOR IS RESPONSIBLE FOR ALL MATERIALS AND LABOR TO PERFORM THE SCOPE OF WORK SUCH THAT THE END RESULT IS A COMPLETE AND OPERATIONAL SYSTEM, AS APPROVED BY DMVA.
8. THE OCCUPANCY SENSORS SHALL BE WIRED SUCH THAT CHANNEL 1 SHALL BE WIRED TO THE SINGLE LAMP BALLAST, AND CHANNEL 2 SHALL BE WIRED TO THE TWO LAMP BALLAST. CHANNEL 2 SHALL BE CONFIGURED FOR MANUAL ON ONLY. WHEN THE 2ND CHANNEL IS NOT USED, IT SHALL BE CAPPED AND MADE SPARE. RESTROOM OCCUPANCY SENSORS SHALL BE WIRED SUCH THAT CHANNEL 1 CONTROLS THE LIGHTING AND CHANNEL 2 CONTROLS THE EXHAUST FAN. THE TIME SETTING FOR EXHAUST FAN SHALL BE 5 MINUTES LONGER THAN LIGHTING. ALL OTHER TIME SETTINGS SHALL BE SET AT 10 MINUTES.
9. DATA OUTLETS SHOWN ON THESE PLANS SHALL CONSIST OF SINGLE OUTLET BOX, (2) 4 PAIR CAT6 CABLES IN 1" CONDUIT STUB UP TO ABOVE ACCESSIBLE CEILING WITH BUSHING. ROUTE CAT6 CABLE TO IT CLOSET AND EXTEND CABLES TO PATCH PANEL IN DATA RACK. PROVIDE 4 PORT COVER AND ALL TERMINATIONS.
10. THE CONTRACTOR (EC) IS RESPONSIBLE TO COORDINATE WITH OTHER TRADES OF DIM FOR ANY RENOVATIONS AND/OR MODIFICATIONS REQUIRING THEIR ATTENTION.
11. NEUTRAL SHARING IS NOT ACCEPTABLE. ALL BRANCH CIRCUITS AND FEEDERS SHALL INCLUDE A DEDICATED NEUTRAL.
12. PROVIDE A 3 WIRE FEED TO EVERY DEVICE (MINIMUM), TO INCLUDE SWITCH BOXES. THIS SHALL INCLUDE A HOT, NEUTRAL, AND GROUND.

GENERAL NOTE FOR PANELBOARD SCHEDULES

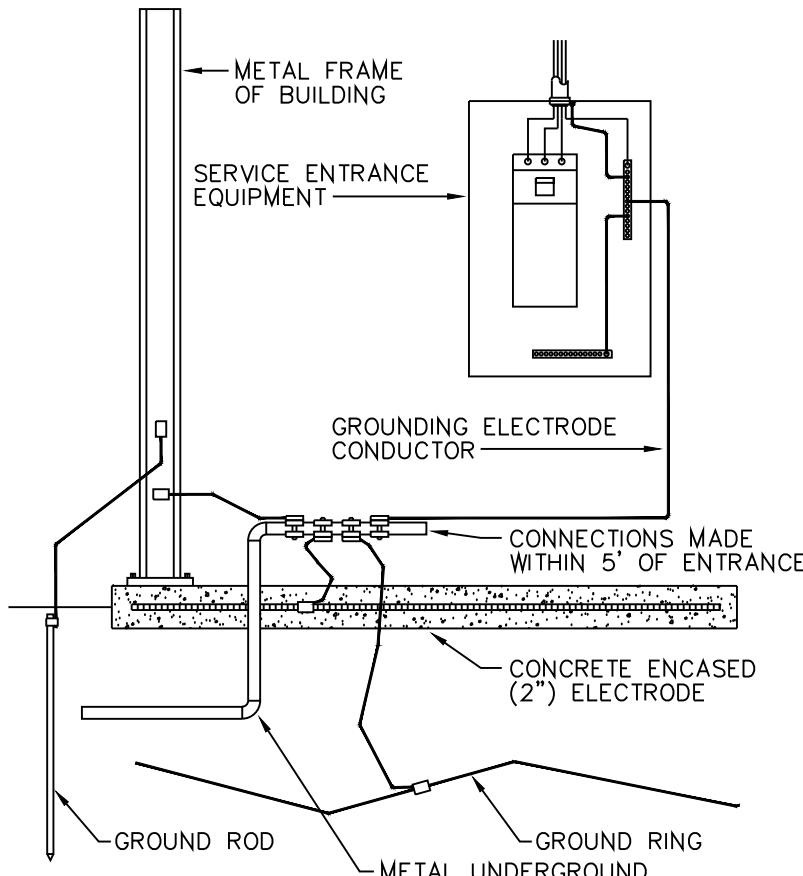
ALL WIRING FOR 120 VOLTS 20 AMP BRANCH CIRCUITS INCLUDING GROUND(NG) CONDUCTORS SHALL BE SIZED AS FOLLOWS:

HOME RUN LENGTH	WIRE SIZE
0 - 75'	#12
75 - 150'	#10
OVER 150'	#8

CIRCUIT LENGTH	WIRE SIZE
0 - 100'	#12
OVER 100'	#10

IN ACCORDANCE WITH THE ABOVE WHERE THE SIZE OF BRANCH CIRCUIT CONDUCTOR IS INCREASED BEYOND THE MINIMUM REQUIRED BY THE N.E.C. FOR THE BRANCH CIRCUIT RATING, IT IS THE ELECTRICAL CONTRACTOR'S RESPONSIBILITY TO INSURE THAT THE TERMINATION PROVISIONS OF ALL EQUIPMENT CONNECTED TO SUCH CIRCUITS ARE LISTED AS SUITABLE FOR THE CONDUCTOR SIZES INVOLVED.

THE LENGTH OF THE TRAVELERS BETWEEN THREE-WAY AND FOUR-WAY SWITCHES, ETC. SHALL BE INCLUDED WHEN FIGURING HOME RUN AND CIRCUIT LENGTH.



TYPICAL GROUNDING DETAIL
NO SCALE

GROUNDING DETAIL NOTES:

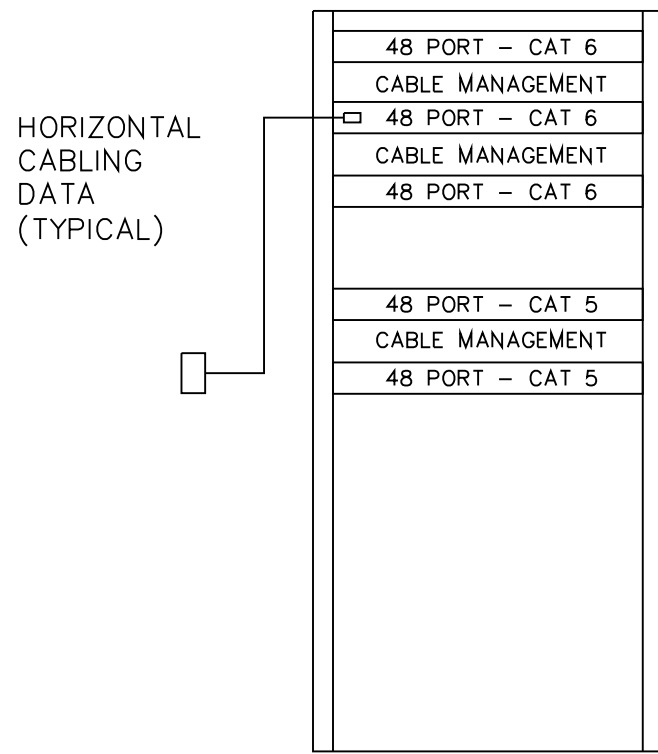
1. GROUNDING ELETRODE CONDUCTOR SHALL BE #2/0 COPPER.
2. REFER TO SPECIFICATIONS FOR THE SIZE AND TYPE OF CONDUCTORS TO BE USED FOR ALL BONDING CONDUCTORS, BONDING JUMPERS, AND GROUND RING CONDUCTORS.
3. REFER TO THE SPECIFICATIONS FOR ALL CONNECTORS AND THEIR APPLICATIONS.
4. PROVIDE ALL GROUNDING COUNTERPOISES, GROUND RODS, AND GROUND RINGS AS PER THE SPECIFICATION.
5. PROVIDE GROUNDING ELECTRODE CONDUCTORS FOR ALL GROUNDING ELECTRODES AVAILABLE AS PER NEC 2008, 250.50.
6. NOT ALL GROUNDING CONNECTIONS MAY APPLY TO THIS BUILDING.

THE CONTRACTOR SHALL PROVIDE A PATCH CORD FOR EACH PORT IN PATCH PANELS

A 1 1 01

THE 1ST CHARACTER WILL IDENTIFY THE CLOSET THE 2ND CHARACTER WILL IDENTIFY THE RACK THE 3RD CHARACTER WILL IDENTIFY THE PATCH PANEL THE 4TH AND 5TH CHARACTERS WILL IDENTIFY THE PORT NUMBER

LABELING FOR TELECOM/DATA DROPS



LOCKABLE DATA ENCLOSURE

TELECOM/DATA RACK DETAIL

NO SCALE



REFERENCE NORTH

CONTRACTOR SHALL FIELD VERIFY ALL DIMENSIONS. VARIANCE FROM CONTRACT DOCUMENTS NOT PERMITTED WITHOUT BUREAU OF ENGINEERING AND ARCHITECTURE APPROVAL.	DRAWN BY: B. BARGER	DATE: 18 APR 2023	DRAWING NO. E.2.1
	CHECKED BY: D. HEALEY	SCALE: AS SHOWN	