LIGHTING FIXTURE SCHEDULE

TYPE MARK	VENDOR	MODEL	QTY	VOLTAGE	LAMP SPECIFICATION LAMP	LAMP SPECIFICATION WATTAGE	MOUNTING	DESCRIPTION
P1	VILLA LIGHTING	SATCO S41825 13-SWLEDRDL-5-ACCT-SEL/120V	18	120/277	LED	16 W	RECESSED	RECESSED LED DOWN LIGHT
EM2	TRACE LITE	WL22-3-4KBL-RB	3	MVOLT	LED	23 W	SURFACE	EXTERIOR DUAL HEAD EMERGENCY LIGHT WITH INTEGRAL BATTERY BACKUP. MOUNT TO WALL WITH TOP OF FIXTURE 6" ABOVE DOOR
FL1	COOPER LIGHTING SOLUTIONS	NFFLD-C40-5-UNV-33	10	120V	LED	143 W	POLE	LED FLOODLIGHT LUMINAIRE
FL2	COOPER LIGHTING SOLUTIONS	NFFLD-C40-D-UNV-66	7	120V	LED	128 W	POLE	LED FLOODLIGHT LUMINAIRE
H1	VILLA LIGHTING	OHB 15HE MFL UNV L840	20	120V	LED	102 W	SUSPENDED	LED HIGH BAY LIGHT
H2	COOPER LIGHTING SOLUTIONS	VTHS-15-PCF-UNV-L840-CD-1-WL-U	6	120V	LED	108 W	SUSPENDED	WET LOCATION RATED LED HIGH BAY LIGHT
H2E	COOPER LIGHTING SOLUTIONS	VT4S-15-PCF-UNV-L840-EL10W-CD-1-WL-U	6	120V	LED	108 W	SUSPENDED	WET LOCATION RATED LED HIGH BAY LIGHT WITH EMERGENCY DRIVER
L1	VILLA LIGHTING	8SLSTP11040DD-UNV	1	UNIV	LED	94 W	SUSPENDED	8' LED STRIP LIGHT
P4	COOPER LIGHTING SOLUTIONS	PRV-C40-D-UNV-T4-BZ	1	UNIV	LED	131 W	POLE	LED SITE LUMINAIRE
V	EXITRONIX	QMR-WH	14	MVOLT	LED	3 W	SURFACE	INTERIOR DUAL HEAD EMERGENCY LIGHT WITH INTEGRAL BATTERY BACKUP. MOUNT TO SURFACE OF FINISHED CEILING OR TO WALL WITH TOP OF FIXTURE 6" BELOW CEILING. SALES FIXTURES TO BE MOUNTED WITH BOTTOM OF FIXTURES AT 12'-0" AFF, ALL OTHER AREAS OPEN TO STRUCTURE TO BE MOUNTED TO BOTTOM OF BARJOIST.
WP	COOPER LIGHTING SOLUTIONS	XTOR3B	12	120V	LED	26 W	WALL MOUNT	CROSSTOUR WALL PACK LED
X	EXITRONIX	VLED-U-W1-EM2-R	3	UNIV	LED	2.2 W	SUSPENDED	MOUNTED AT 9'-0" AFF, CENTERED ABOVE DOOR ARROWS AS INDICATED OR REQUIRED.

NOTES: 1. PURCHASE ALL LIGHTING FIXTURES THROUGH VILLA LIGHTING. CONTACT: ANNE VOELKER, PH. 314.633.0554, EMAIL: equipmentshare@villalighting.com

ELECTRICAL KEYNOTES

#	DESCRIPTION
1	EXIT SIGNS, EMERGENCY LIGHTS AND NIGHT LIGHTING (NOTED WITH NL) SHALL CONNECT TO THE UNSWITCHED LINE SIDE OF THE LIGHTING CIRCUIT SERVING AREA LIGHTING AND SHALL NOT BE SWITCHED.
2	PROVIDE TRI-LEVEL SWITCHING BY ALTERNATING SWITCH LEGS BETWEEN LIGHT FIXTURES. LOWER CASE LETTERING DENOTES THE LIGHT FIXTURE CONTROLLED BY CORRESPONDING LIGHT SWITCH.

GENERAL LIGHTING NOTES

A. THE BRANCH CIRCUIT FEEDING THE EMERGENCY/EXIT LIGHTS SHALL BE THE SAME BRANCH CIRCUIT AS THAT SERVING THE NIGHT LIGHTING IN THE AREA AND SHALL BE CONNECTED AHEAD OF ANY LOCAL SWITCHES OR CONTACTORS AND PROVIDED WITH A LOCK-ON FEATURE.

B. ALL WORK SHALL BE PERFORMED IN ACCORDANCE WITH CODES AND ORDINANCES OF THE AUTHORITY HAVING JURISDICTION.

C. ALL EQUIPMENT AND MATERIALS SHALL BE UL LISTED AND LABELED FOR TYPES OF EQUIPMENT AND MATERIALS FOR WHICH LISTING AND LABELING IS AVAILABLE.

D. FURNISH AND INSTALL ALL LABOR AND MATERIALS REQUIRED FOR A COMPLETE ELECTRICAL SYSTEM.

E. MINIMUM WIRE SIZE SHALL BE #12 A.W.G. UNLESS NOTED OTHERWISE. ALL CONDUCTORS SHALL BE COPPER WITH "THWN" INSULATION UNLESS NOTED OTHERWISE.

F. ALL WIRE SHALL BE IN CONDUIT UNLESS NOTED OTHERWISE.

G. TYPE MC CABLE WITH ALUMINUM ARMOR AND INTERNAL GROUND IS ACCEPTABLE FOR USE AS GENERAL BRANCH CIRCUIT WIRING FOR CIRCUITS 20 AMPERES OR LESS AND CONCEALED IN WALLS OR ABOVE SUSPENDED CEILING AND AS APPROVED BY THE AUTHORITY HAVING JURISDICTION.

H. PROVIDE A SEPARATE GROUND CONDUCTOR FOR ALL FEEDERS AND BRANCH CIRCUITS.

I. CONDUCTORS FOR BRANCH CIRCUITS SHALL BE SIZED TO PREVENT VOLTAGE DROP EXCEEDING 3 PERCENT AT THE FARTHEST OUTLET OF CIRCUIT. WHERE VOLTAGE DROP IS DETERMINED TO EXCEED THIS VALUE THE CONTRACTOR SHALL INCREASE THE SIZE OF CONDUCTORS AS REQUIRED.

J. CONTRACTOR TO BE RESPONSIBLE FOR ALL ELECTRICAL CONNECTIONS TO ALL EQUIPMENT UNLESS NOTED OTHERWISE.

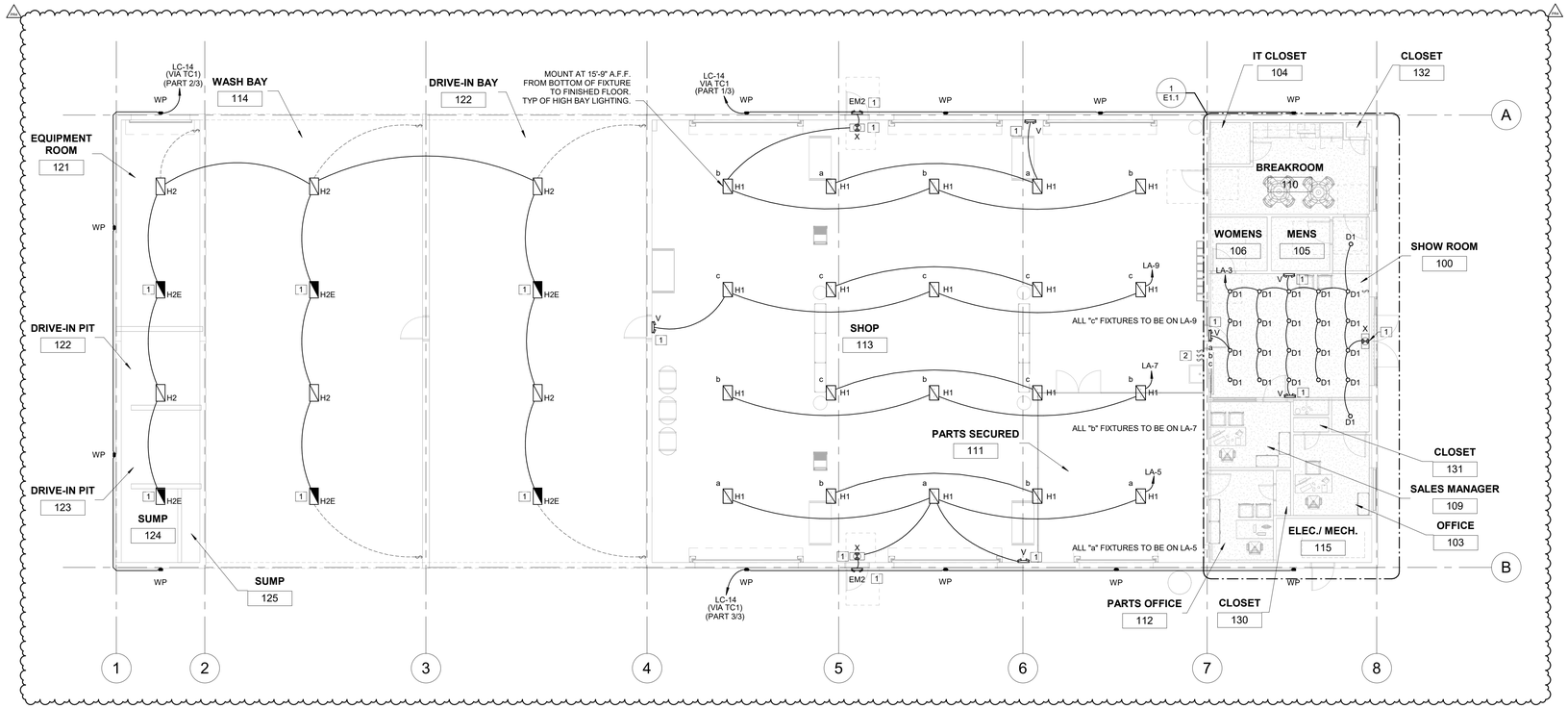
K. IN AREAS OF OPEN STRUCTURE, MOUNT STRIP FIXTURE TO BOTTOM CHORD OF BAR JOIST, UNLESS NOTED OTHERWISE.

L. PROVIDE SEPARATE BOXES FOR GANGED SWITCHES ON SEPARATE BRANCH CIRCUITS.

M. EMERGENCY LIGHT FIXTURE INSTALLATION:
1. WALL FIXTURE: 12" BELOW FINISHED CEILING OR +10'-0" IN AREAS OF EXPOSED STRUCTURE, UNLESS NOTED OTHERWISE.
2. PENDANT FIXTURE: BOTTOM CHORD OF BAR JOIST OR AT HEIGHT SPECIFIED ON DRAWINGS.
3. REMOTE HEAD FIXTURE: HEADS CENTERED ABOVE DOOR OPENING +9'-0", UNLESS NOTED OTHERWISE AND BATTERY PACK MOUNTED ON INTERIOR SIDE OF WALL 12" BELOW FINISHED CEILING OR AT BAR JOIST IN AREAS OF EXPOSED STRUCTURE.

N. EXIT SIGN MOUNTING:
1. WALL FIXTURE: CENTER 12" ABOVE DOOR OPENING.
2. CEILING FIXTURE: ON CEILING OR AT HEIGHT SPECIFIED ON DRAWINGS.
3. VERIFY MOUNTING HEIGHT WITH AHJ.

Columbia County Building Department — Plans Reviewed for Code Compliance — State of Florida



1 **LIGHTING PLAN**
1/8" = 1'-0"

pb2 architecture +engineering
2809 Ajax Avenue Suite 100
Rogers Arkansas 72758
Phone: 479.636.3545
Fax: 479.636.1209
Engineer of Record
Keith Allen Williams, P.E.
Florida License No. 64983
COA License No. 26880

STIPULATION FOR REUSE
THE DRAWINGS AS PREPARED FOR USE ON A SPECIFIC SITE AS CONTEMPLATED AT THE TIME OF CONTRACT ARE NOT SUITABLE FOR REUSE BY OWNER OR OTHERS ON EXTENSIONS OF THE PROJECT OR ON ANY OTHER PROJECT. ANY REUSE WITHOUT SPECIFIC WRITTEN VERIFICATION OR ADAPTATION BY THE ARCHITECT FOR THE SPECIFIC PURPOSE INTENDED WILL BE AT OWNER'S SOLE RISK AND WITHOUT LIABILITY OR LEGAL EXPOSURE TO THE ARCHITECT. ANY REUSE OR ADAPTATION BY OWNER FOR ANOTHER PROJECT IS NOT LEGAL UNLESS AUTHORIZED IN WRITING BY THE ARCHITECT. ANY REUSE WITHOUT SUCH AUTHORIZATION SHALL BE AT OWNER'S SOLE RISK AND OWNER SHALL INDEMNIFY THE ARCHITECT AND HOLD HIM HARMLESS FROM ALL CLAIMS, DAMAGES AND EXPENSES, INCLUDING ATTORNEY'S FEES AND COURT COSTS, ARISING OUT OF OR RESULTING THEREFROM. ANY REUSE OR MODIFICATION OF PLANS BY OTHERS SHALL RELIEVE THE ARCHITECT OF ALL RESPONSIBILITY FOR THE PROJECT AND ARISING OUT OF SUCH REUSE OR MODIFICATION.

EQUIPMENT SHARE GROUND-UP
US HWY 90
LAKE CITY, FL 32055
JOB NUMBER: 2023.0377

ISSUE BLOCK

	OTP	08.11.2023
PR1	PLAN REV. 1	10.13.2023
PR2	PLAN REV. 2	11.10.2023
PR4	PLAN REV. 4	09.24.2024

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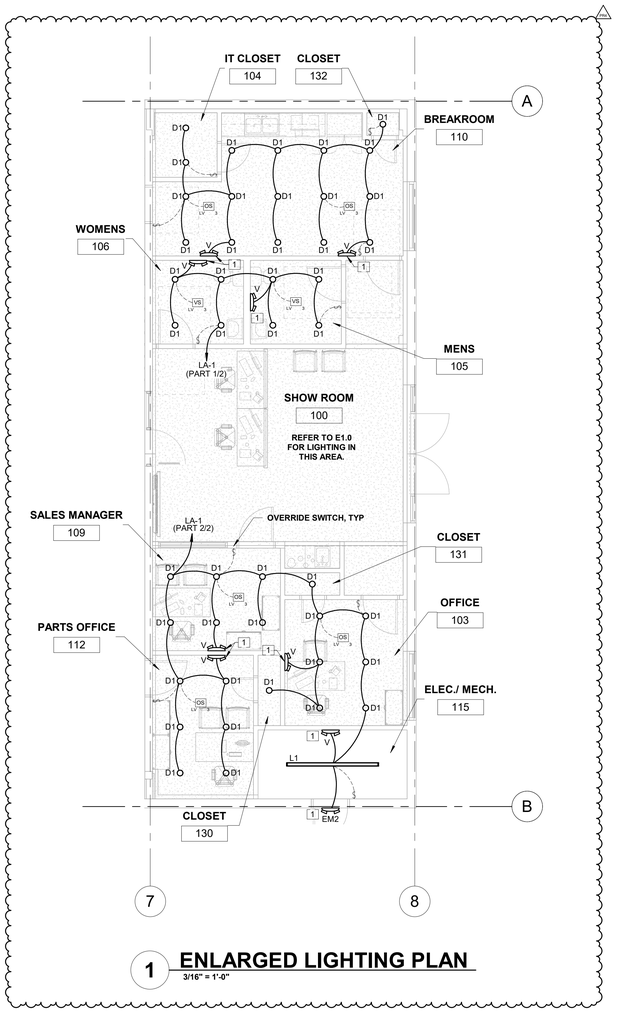
LIGHTING PLAN

SHEET: E1.0

EACH SUBCONTRACTOR IS RESPONSIBLE FOR HAVING A THOROUGH KNOWLEDGE OF ALL DRAWINGS AND SPECIFICATIONS IN THEIR RELATED FIELD. THE FAILURE TO ACQUAINT THEMSELF WITH THIS KNOWLEDGE DOES NOT RELIEVE THE RESPONSIBILITY OF PERFORMING THE WORK PROPERLY. NO ADDITIONAL COMPENSATION SHALL BE ALLOWED BECAUSE OF CONDITIONS THAT OCCUR DUE TO FAILURE TO FAMILIARIZE WORKERS WITH THIS KNOWLEDGE.

ELECTRICAL KEYNOTES

#	DESCRIPTION
1	EXIT SIGNS, EMERGENCY LIGHTS AND NIGHT LIGHTING (NOTED WITH NL) SHALL CONNECT TO THE UNSWITCHED LINE SIDE OF THE LIGHTING CIRCUIT SERVING AREA LIGHTING AND SHALL NOT BE SWITCHED.



1 ENLARGED LIGHTING PLAN

3/16" = 1'-0"

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Engineer of Record
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COA License No. 26880

STIPULATION FOR REUSE

THE DRAWINGS WERE PREPARED FOR USE ON A SPECIFIC SITE AT LAKE CITY, FL AND SHALL NOT BE CONSIDERED SUITABLE FOR USE ON A DIFFERENT SITE. THE ARCHITECT SHALL NOT BE LIABLE FOR USE OF A DIFFERENT SITE OR FOR USE ON A DIFFERENT PROJECT OF THIS DRAWING FOR REFERENCE OR REUSE BY OTHERS. THE SERVICES OF PROFESSIONAL ARCHITECTS IS REQUIRED FOR THE PROPER REUSE OF THIS DRAWING. REUSE ON ANOTHER PROJECT IS NOT AUTHORIZED UNLESS SO AGREED IN WRITING BY THE LAR.

EQUIPMENT SHARE GROUND-UP
US HWY 90
LAKE CITY, FL 32055

JOB NUMBER: 2023.0377

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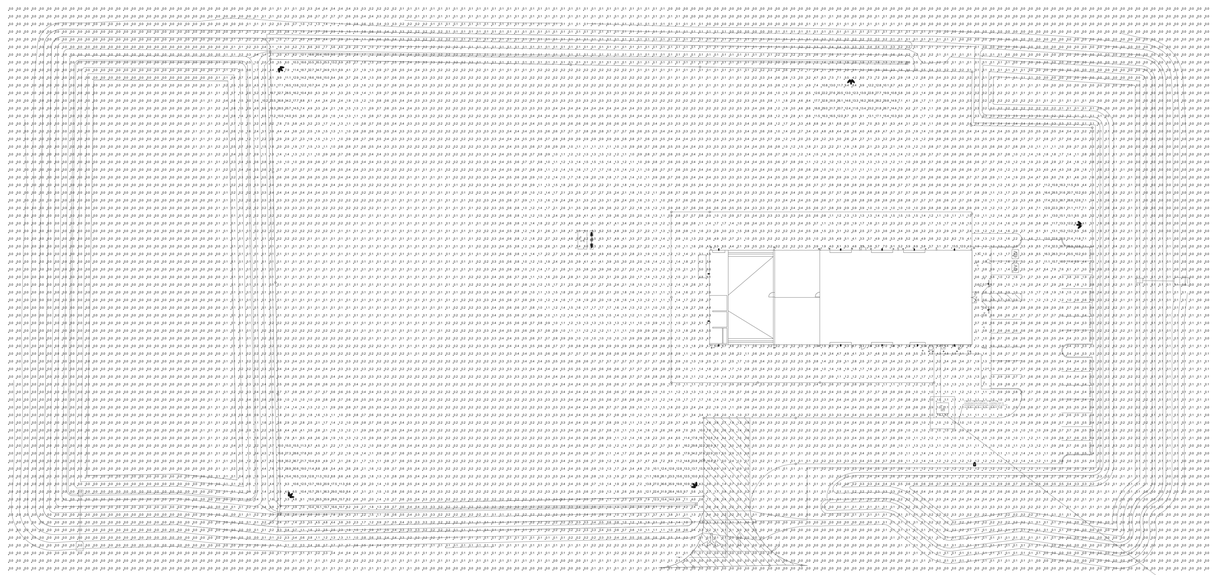
ENLARGED LIGHTING PLANS

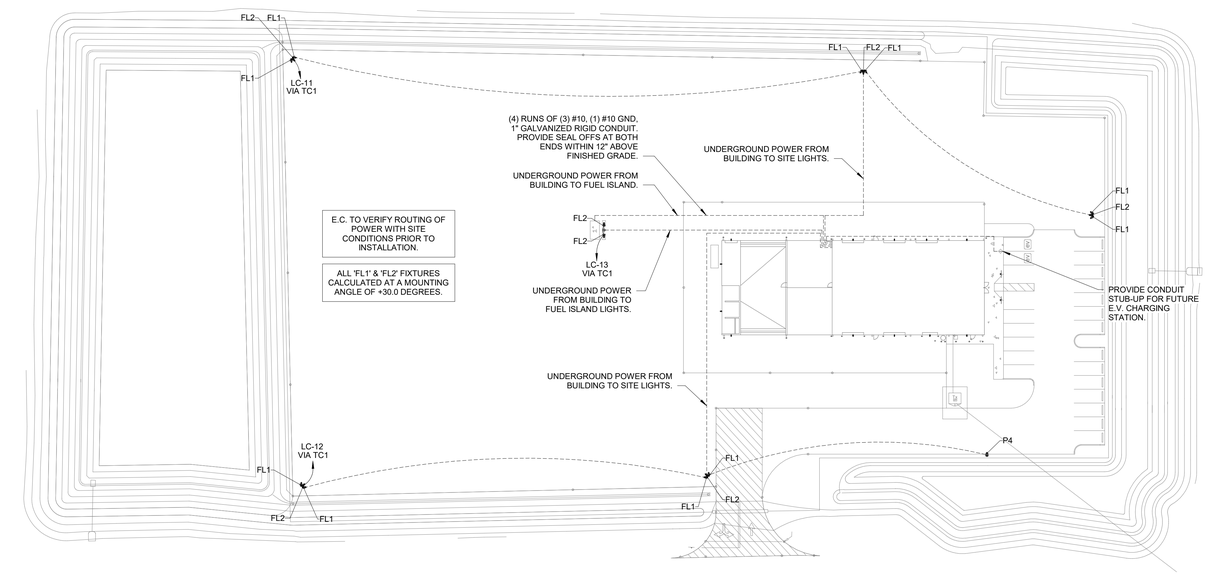
SHEET: E1.1



2 SITE LIGHTING PHOTOMETRIC PLAN
1" = 40'-0"

PHOTOMETRIC STATISTICS	
AVG.	1.0 fc
MAX	38.8 fc
MIN	0.0 fc
AVG/MIN	N/A
MAX/MIN	N/A

NOTE - SITE LIGHTING PHOTOMETRICS CALCULATED WITH POLE MOUNTED LIGHT FIXTURES MOUNTED AT 38'-0" ABOVE FINISHED GRADE.
POLE MODEL NUMBERS:
- RTP-T-S11G-35-N-BRZ
- RTP-T-S11G-35-N-BRZ & BKS-PTB-3-BRZ



1 SITE LIGHTING AND POWER PLAN
1" = 40'-0"

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STIPULATION FOR REUSE

THE DRAWINGS WERE PREPARED FOR USE ON A SPECIFIC SITE AT CONTEMPORANEOUSLY WITH ITS ISSUE DATE AND ARE NOT NECESSARILY SUITABLE FOR USE ON A DIFFERENT SITE OR AT A DIFFERENT TIME. USE OF THESE DRAWINGS FOR REFERENCE OR TEMPLATE FOR ANOTHER PROJECT REQUIRES THE SERVICES OF PROPERLY LICENSED DESIGN PROFESSIONALS. ANY REUSE ON ANOTHER PROJECT IS NOT AUTHORIZED AND MAY BE CAUSE FOR LIABILITY TO THE USER.

EQUIPMENT SHARE GROUND-UP
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ELECTRICAL SITE PLAN

SHEET:
E1.2

ELECTRICAL KEYNOTES

#	DESCRIPTION
1	PROVIDE CORD DROPS FOR CIRCUITS IN THIS AREA.
2	EC SHALL PROVIDE CIRCUIT AND DEVICES REQUIRED FOR INSTALLATION OF F.A.C.P. BY VENDOR. COORDINATE EXACT LOCATION WITH VENDOR PRIOR TO ROUGH-IN.
3	PROVIDE 1" CONDUIT FROM EACH OF THREE NEMA 3R ENCLOSED CONTACTORS OUT TO FLOW MASTER CONTROLLER. ALL CONDUIT WITHIN 25FT FROM TANKS SHALL BE GALVANIZED RIGID WITH SEAL-OFF AT BOTH ENDS. REF PANEL SCHEDULE FOR CIRCUIT INFORMATION.
4	PROVIDE (2) 3" CONDUITS FOR TELEPHONE/INTERNET SERVICE. COORDINATE LOCATION AND REQUIREMENTS WITH CIVIL PLANS AND SERVICE PROVIDER.
5	COORDINATE EXACT BUILDING SIGN POWER REQUIREMENTS AND LOCATION PRIOR TO ROUGH-IN.

GENERAL POWER NOTES

A. ALL BREAKERS ARE TO BE LABELED. PROVIDE TYPED PANEL DIRECTORIES FOR EACH PANELBOARD.

B. COMPLY WITH NFPA, STATE AND LOCAL BUILDING, AND/OR OTHER APPLICABLE CODES AND ORDINANCES.

C. COORDINATE ALL WORK WITH OTHER CONTRACTORS TO SCHEDULE INSTALLATION AT THE PROPER TIME, IN THE AVAILABLE SPACE, AND ALLOWING FOR PROPER SERVICE ACCESS TO EQUIPMENT.

D. COMPLY WITH NEC AND HAVE A MINIMUM SIZE OF #12 AWG WIRING. PROVIDE COPPER CONDUCTORS WITH U.L. LABEL AND 600 VOLT INSULATION OF THHN (DRY LOCATIONS), THWN (WET LOCATIONS), AND THWN OR XHHN FOR SERVICE ENTRANCE.

E. PERSONALLY INSPECT THE SITE OF THE PROPOSED WORK AND BECOME FULLY INFORMED OF THE CONDITIONS UNDER WHICH THE WORK IS TO BE PERFORMED. FAILURE TO DO SO IS NOT CONSIDERED SUFFICIENT JUSTIFICATION FOR EXTRA COMPENSATION.

F. UPON COMPLETION OF ELECTRICAL INSTALLATION AND PRIOR TO ENERGIZING CIRCUIT, INSPECT WIRE/CABLE FOR PHYSICAL DAMAGE. PERFORM CONTINUITY TEST, AND VERIFY PROPER PHASING CONNECTION TO ALL THREE PHASE MOTOR LOADS.

G. CONCEAL CONDUIT WHEREVER POSSIBLE. CONDUIT IS TO COMPLY WITH NEC AND HAVE A MINIMUM SIZE OF 1/2".

H. INSTALL CONDUCTORS IN CONDUIT, UNLESS NOTED OTHERWISE.

I. DRAWINGS ARE SCHEMATIC IN NATURE, SHOWING COMPONENTS OF THE SYSTEMS AND INDICATING THEIR INTEGRATION WITH OTHER PARTS OF THE BUILDING.

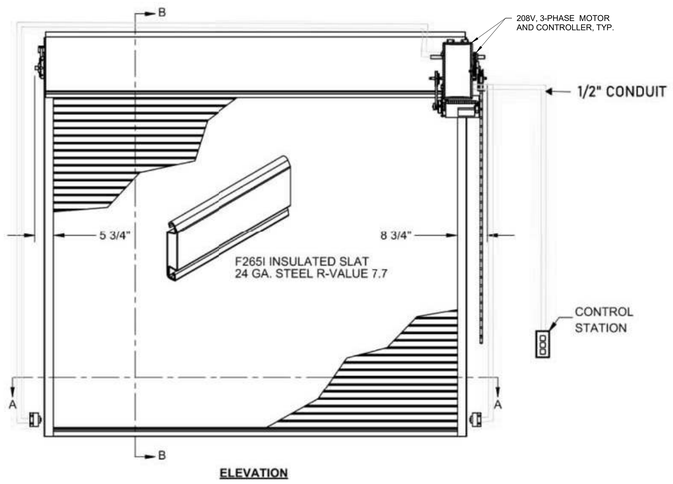
J. CLEAN ALL EQUIPMENT INSTALLED UNDER THE ELECTRICAL CONTRACT. PRIOR TO PROJECT SUBSTANTIAL COMPLETION.

K. PROVIDE GALVANIZED STEEL KNOCKOUT BOXES SUITABLE FOR THE DESIGN THEY SERVE. SPACE THEY OCCUPY, AND SIZE REQUIRED FOR OUTLET, JUNCTION, AND PULL BOXES.

L. PROVIDE LIQUID-TIGHT FLEXIBLE METAL CONDUIT AND WIRING FROM DISCONNECT SWITCH OR JUNCTION BOX TO EQUIPMENT KNOCKOUT OR ELECTRICAL CONNECTION POINT.

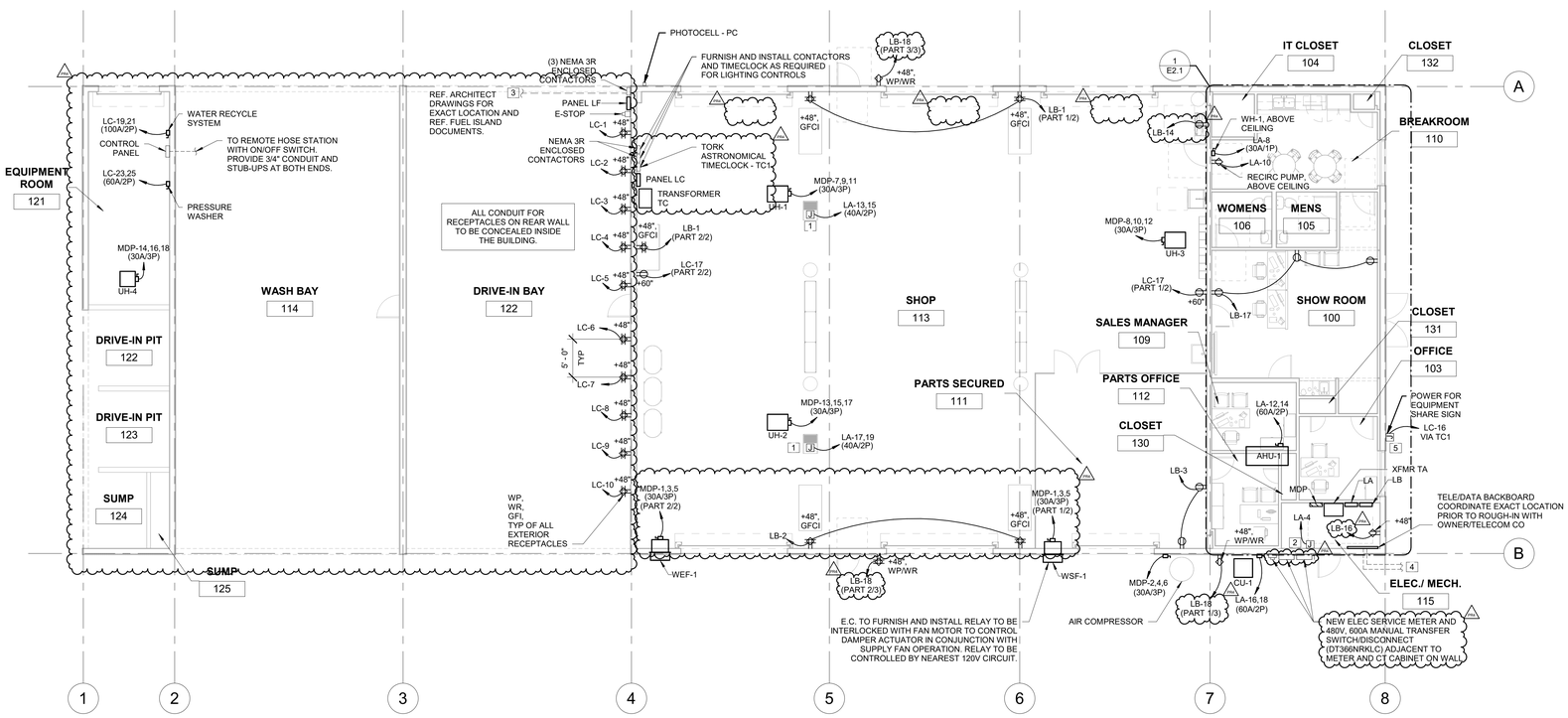
M. PROVIDE WHITE SPECIFICATION GRADE WIRING DEVICES. LIGHT SWITCHES ARE RATED 20 AMPS, GENERAL USE RECEPTACLES ARE RATED 20 AMPS.

N. E.C. TO ROUTE 3/4"C FROM EACH DATA OUTLET TO STRUCTURE OR TO ABOVE ACCESSIBLE CEILING SPACE AS APPLICABLE. INSTALL BUSHING AND CONNECTOR ON EACH END. TYPICAL OF ALL DATA OUTLETS.



2 OVERHEAD DOOR DETAIL

1 1/2" = 1'-0"



1 POWER PLAN

1/8" = 1'-0"

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COA License No. 26880

STIPULATION FOR REUSE

THE DRAWINGS AND SPECIFICATIONS PREPARED FOR USE ON A SPECIFIC SITE AT LAKE CITY, FLORIDA ARE AND SHALL REMAIN THE PROPERTY OF PB2 ARCHITECTURE + ENGINEERING. USE OF THESE DRAWINGS FOR REFERENCE OR PURPOSES OTHER THAN THOSE FOR WHICH THEY WERE PREPARED IS PROHIBITED. THE SERVICES OF PB2 ARCHITECTURE + ENGINEERING ARE REQUIRED FOR ANY REUSE ON ANOTHER PROJECT. ALTERATIONS TO THESE DRAWINGS SHALL NOT BE MADE WITHOUT THE WRITTEN CONSENT OF PB2 ARCHITECTURE + ENGINEERING AND SHALL NOT BE CONTRARY TO THE LAW.

EQUIPMENT SHARE GROUND-UP
US HWY 90
LAKE CITY, FL 32055

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KEITH A. WILLIAMS, LICENSE, No. 64983, STATE OF FLORIDA, PROFESSIONAL ENGINEER

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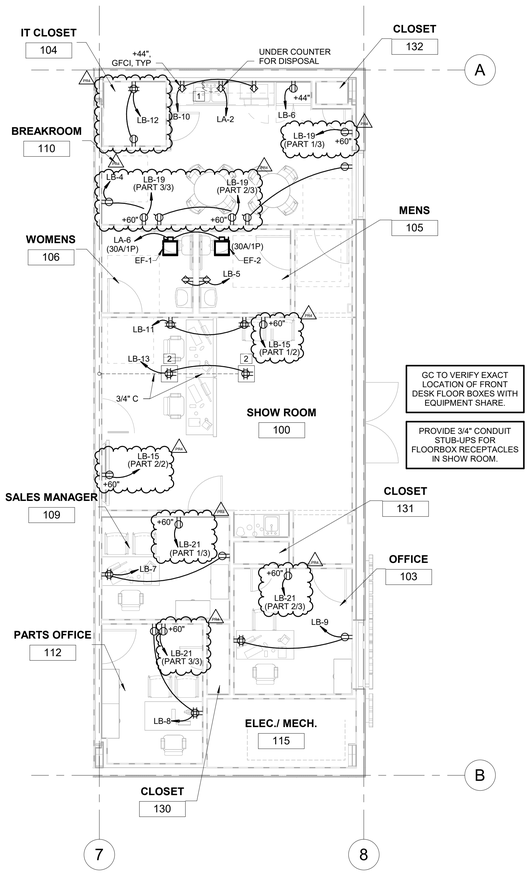
POWER PLAN

SHEET: E2.0

ELECTRICAL KEYNOTES

#	DESCRIPTION
1	DISPOSAL SWITCH.
2	PROVIDE HUBBELL PFBRG3 (OR EQUAL) 3 GANG BOX AND SATIN ALUMINUM COVER. IF REQUIRED, PROVIDE SAWCUT TRENCHING AND BACKFILL PER SITE CONDITIONS. REF ELV1 FOR DATA INFORMATION.



1 ENLARGED POWER PLAN

3/16" = 1'-0"

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EQUIPMENT SHARE GROUND-UP
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ENLARGED POWER PLAN

SHEET: E2.1

GROUND WIRE SIZING CHART

BREAKER AMPACITY	WIRE	WIRE SIZE				
15-20	PHASE	#12	#10	#8	#6	#4
	GROUND	#12	#10	#8	#6	#4
25-30	PHASE	#10	#8	#6	#4	#3
	GROUND	#10	#8	#6	#4	#3
35-50	PHASE	#8	#6	#4	#3	#2
	GROUND	#10	#8	#4	#4	#4
60	PHASE	#6	#4	#3	#2	#1
	GROUND	#10	#6	#6	#4	#4
70	PHASE	#6	#4	#3	#2	#1
	GROUND	#8	#4	#4	#3	#2
80-90	PHASE	#4	#3	#2	#1	#1/0
	GROUND	#8	#6	#4	#4	#3
100	PHASE	#3	#2	#1	#1/0	#2/0
	GROUND	#8	#6	#4	#4	#3

WIRE SIZES PER NEC 250.122 (B)

GENERAL NOTES

1. FURNISH AND INSTALL ALL MATERIALS, EQUIPMENT, AND LABOR FOR A COMPLETE INSTALLATION IN ALL RESPECTS, READY FOR INTENDED USE AND IN STRICT ACCORDANCE WITH NEC, NESC, STATE, AND LOCAL CODES, AND MANUFACTURER'S RECOMMENDATIONS. PAY ALL NECESSARY FEES AND PERMITS.
   A. NO CIRCUITRY SHALL BE ALLOWED TO BE ROUTED ACROSS THE ROOF OR THE EXTERIOR SIDE OF THE EXTERIOR WALL.
   B. ALL EQUIPMENT SHALL BE UL LISTED WHERE APPLICABLE.
   C. ARRANGE ALL WORK TO MINIMIZE DISRUPTIONS TO BUILDING OPERATIONS. COORDINATE ALL DISRUPTIONS WITH LANDLORD.
   D. CONTRACTOR SHALL VERIFY ALL WALL FINISH THICKNESSES BEFORE INSTALLING BOXES. FURNISH AND INSTALL EXTENDED BOXES OR BOX EXTENDERS WHERE REQUIRED.
   E. CONTRACTOR SHALL VERIFY THAT ALL PANELBOARDS HAVE CIRCUIT BREAKER KNOCKOUTS PROPERLY COVERED AND THAT TRIM IS IN GOOD CONDITION, ALLOWING NO ACCESS TO LIVE PARTS.
2. PROVIDE SEALS AT RACEWAY PENETRATIONS AS FOLLOWS:
   A. FIRE RATED WALLS: SEAL PER SPECIFICATIONS FOR FIRE STOPPING.
   B. NEUTRALIZATION AREA: SEAL PER MECHANICAL DETAIL.
   C. EXTERIOR: REFER TO ARCHITECTURAL DOCUMENTS FOR SEALING REQUIREMENTS AT ALL EXTERIOR MOUNTED DEVICES, FIXTURES, ENCLOSURES, AND RACEWAY PENETRATIONS.
3. PROVIDE A SEPARATE EQUIPMENT GROUNDING CONDUCTOR (SIZE PER NEC) IN PVC TYPE CONDUIT, POWER CIRCUITS, ISOLATED GROUND CIRCUITS, OR AS SHOWN ON PLANS. CONDUIT SHALL BE SIZED PER NEC BASED ON THWN 600 VOLT COPPER SINGLE CONDUCTORS, PLUS THE EQUIPMENT GROUNDING CONDUCTOR.
4. WIRING DEVICES: DEVICE MOUNTING HEIGHTS ARE FROM FINISHED FLOOR TO CENTER OF OUTLET BOX UNLESS NOTED OTHERWISE ON PLANS. COORDINATE THE STANDARD MOUNTING HEIGHTS WITH MASONRY:
   A. SWITCHES +46"
   B. RECEPTACLES +18"
   C. VOICE/DATA +18"
5. WIRING SHALL INCLUDE FINAL CONNECTION TO ALL EQUIPMENT IN CONFORMANCE WITH EQUIPMENT SUPPLIER WIRING DIAGRAMS.
6. CONTRACTOR IS RESPONSIBLE FOR PROVIDING COMPLETE PANELBOARD IDENTIFICATION SCHEDULES.
7. BRANCH CIRCUIT CONDUCTORS SHALL BE MINIMUM #12 AWG UNLESS NOTED OTHERWISE IN SCHEDULES. WHERE 20A BRANCH CIRCUITS HAVE #8 AND LARGER WIRE SPECIFIED, #10 AWG WIRE SHALL BE USED FOR THE FINAL CONNECTION (15-FT MAXIMUM).
8. WHERE BRANCH CIRCUITS ARE GROUPED, SIZE CONDUIT AND DERATE CURRENT CARRYING CONDUCTORS PER NEC. ISOLATED GROUND CIRCUITS SHALL NOT BE ROUTED IN THE SAME CONDUIT AS NORMAL POWER CIRCUITS.
9. PROVIDE HANDLE TIES ON ALL MULTIWIRE BRANCH CIRCUITS TO MEET NEC REQUIREMENTS.
10. ONLY FEEDER CIRCUITS NOTED ON THE ONE LINE DIAGRAM AND BRANCH CIRCUITS NOTED BY LEGEND SHALL BE INSTALLED UNDER SLAB. ALL OTHER FEEDER AND BRANCH CIRCUITS SHALL BE INSTALLED OVERHEAD. PROVIDE EXTERIOR COATED GRC BENDS ON ALL CONDUIT RUNS THAT HAVE 45 DEGREE BENDS OR GREATER. REF SPECIFICATIONS.
11. WHERE GROUPED CONDUITS ARE INSTALLED WITHIN THE JOIST SPACE, COORDINATE WITH SPRINKLER CONTRACTOR PRIOR TO INSTALLATION IN ORDER TO MAINTAIN REQUIRED CLEARANCES FROM SPRINKLERS
12. SEISMIC ZONE REQUIREMENTS: PROVIDE EXPANSION COUPLINGS AND BRACING FOR ELECTRICAL EQUIPMENT AS REQUIRED BY LOCAL CODES.

ELECTRICAL SYMBOLS LEGEND

SYMBOL	DESCRIPTION
	LIGHT FIXTURE
	LIGHT FIXTURE, NIGHT LIGHT
	LIGHT FIXTURE, EMERGENCY DRIVER
	EXIT FIXTURE, (WALL MOUNTED/CEILING MOUNTED)
	EMERGENCY LIGHT (WALL MOUNTED/CEILING MOUNTED)
	EMERGENCY LIGHT REMOTE HEADS (WALL MOUNTED/CEILING MOUNTED)
$	LIGHT SWITCH - SINGLE POLE WALL SWITCH (NO LETTER DESIGNATION
$2	LIGHT SWITCH - TWO POLE WALL SWITCH
$3	LIGHT SWITCH - THREE-WAY WALL SWITCH
$4	LIGHT SWITCH - FOUR-WAY WALL SWITCH
$WP	LIGHT SWITCH - WEATHER PROOF
$M	LIGHT SWITCH - MOTOR RATED SWITCH
$K	LIGHT SWITCH - KEYED LIGHT SWITCH
$D	LIGHT SWITCH - DIMMER TYPE SWITCH
$VS	LIGHT SWITCH - VACANCY SENSOR
$2VS	LIGHT SWITCH - TWO POLE VACANCY SENSOR
OS	CEILING MOUNTED OCCUPANCY SENSOR
R	RELAY
J	ELECTRICAL JUNCTION BOX
	DUPLEX RECEPTACLE, 3 WIRE GROUND TYPE, 20A
WP	DUPLEX RECEPTACLE, WEATHERPROOF, 20A
GFI	GROUND FAULT PROTECTED DUPLEX RECEPTACLE, 20A, @40" AFF, UNO
	QUADRAPLEX WALL RECEPTACLE, 20A
	SPECIAL RECEPTACLE
	FLUSH MOUNTED PANELBOARD
	SURFACE MOUNTED PANELBOARD
	VOICE/DATA BOX
X	LIGHT FIXTURE IDENTIFICATION
1	KEYNOTE CALLOUT
TV	COAXIAL CABLE FOR TELEVISION
XXXA/3XXXXA	ELECTRICAL DISCONNECT SWITCH. CONFIRM # OF POLES & SIZE WITH MANUFACTURER OF EQUIPMENT BEING SERVED PRIOR TO PULLING WIRE. "XXXA/XP/XXXA" DENOTES AMPERES/POLE/FUSE NF= NON-FUSED CB= CIRCUIT BREAKER (200/3/CB)
	ELECTRICAL CONDUIT TRENCH PATH
USB	COMBINATION RECEPTACLE WITH USB PORT
F	FIRE ALARM SYSTEM MANUAL PULL STATION AT +48" A.F.F.
F	FIRE ALARM SYSTEM SPEAKER/STROBE AT +90" A.F.F. 15 cd UNLESS NOTED OTHERWISE. 'CLG' INDICATES CEILING MOUNTED.
SD	CEILING MOUNTED SMOKE DETECTOR, PHOTOELECTRIC TYPE, 24V DC.
V	FIRE ALARM SYSTEM STROBE ALARM AT +90" A.F.F. 15 cd
TS	SPRINKLER SYSTEM TAMPER SWITCH
FS	SPRINKLER SYSTEM FLOW SWITCH
OCS OCSS COS COSS DIM DIMS	FOR ENERGY MANAGEMENT, SENSORS, SWITCHING AND DIMMING SYMBOLS, PLEASE REFER TO THE LIGHT FIXTURE SCHEDULE.

NOTE:
ALL SYMBOLS DO NOT NECESSARILY APPLY
MOUNTING HEIGHT TO CENTERLINE - U.N.O.
IN HANDICAPPED AREAS, THE RECEPTACLES AND TELEPHONE OUTLETS SHALL BE MOUNTED AT +24" A.F.F.; THE TOGGLE SWITCHES, THERMOSTATS, AND MANUAL STARTERS SHALL BE MOUNTED AT +42" A.F.F.

ABBREVIATIONS

a, b, c	LOWER CASE LETTERS INDICATE SWITCHING CONFIGURATION
AFF	ABOVE FINISHED FLOOR
AFG	ABOVE FINISHED GRADE
C	CONDUIT
CCT	CIRCUIT
EC	ELECTRICAL CONTRACTOR
EF	EXHAUST FAN
ETR	EXISTING TO REMAIN
EWC	ELECTRIC WATER COOLER
G	GROUND
GC	GENERAL CONTRACTOR
GFEP	GROUND FAULT EQUIPMENT PROTECTION
GFI	GROUND FAULT CIRCUIT INTERRUPTER
HD	HAND DRYER
IG	ISOLATED GROUND
NL	NIGHT LIGHT
NTS	NOT TO SCALE
RH	RADIANT HEATER
SC	SECURITY CAMERA
TR	TAMPER RESISTANT
TYP	TYPICAL
UH	UNIT HEATER
UNO	UNLESS NOTED OTHERWISE
WH	WATER HEATER
WP	WEATHER PROOF
WR	WEATHER RESISTANT

PANEL LF
LF-17
120V

LC5
LF-13,15 — DYED DIESEL TANK PUMP
SPARE — SPARE
120V/30A

7 LIGHTING CONTACTOR 5
1 1/2" = 1'-0"

PANEL LF
LF-17
120V

LC4
LF-9,11 — CLEAR DIESEL TANK PUMP
SPARE — SPARE
120V/30A

6 LIGHTING CONTACTOR 4
1 1/2" = 1'-0"

PANEL LF
LF-17
120V

LC3
LF-7 — GASOLINE TANK PUMP
SPARE — SPARE
120V/30A

5 LIGHTING CONTACTOR 3
1 1/2" = 1'-0"

TC1 = TORK ASTRONOMICAL TIME CLOCK MODEL: DGLC200A-NC OR EQUAL
PC = PHOTOCELL

PC
TC
PANEL LC
LC-15
120V
LC2
ON - DUSK, OFF- SEE NOTE
LC-16 — EQUIPMENT SHARE SIGN
SPARE — SPARE
SPARE — SPARE
SPARE — SPARE
120V/30A

INSTALL UPRIGHT ON NORTH WALL OF BUILDING WITH ARROW FACING WALL.

NOTE
SET THE TIMECLOCK TO TURN OFF DURING DAYLIGHT TIMES SO THAT SIGN TURNS OFF AT DAWN.

4 LIGHTING CONTACTOR 2
1 1/2" = 1'-0"

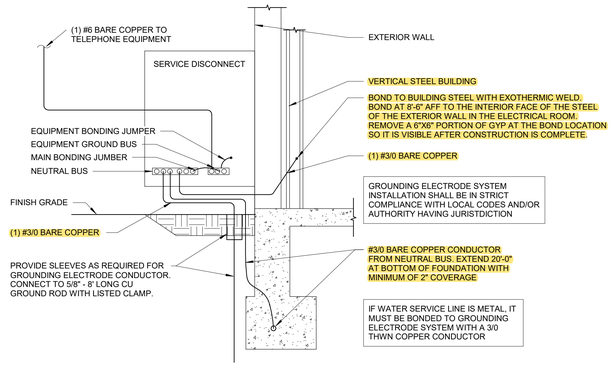
TC1 = TORK ASTRONOMICAL TIME CLOCK MODEL: DGLC200A-NC OR EQUAL
PC = PHOTOCELL

PC
TC
PANEL LC
LC-15
120V
LC1
ON - DUSK, OFF- SEE NOTE
LC-11 — SITE LIGHTING
LC-12 — SITE LIGHTING
LC-13 — FUEL ISLAND LIGHTING
LC-14 — LTS EXTERIOR
120V/30A

INSTALL UPRIGHT ON NORTH WALL OF BUILDING WITH ARROW FACING WALL.

NOTE
SET THE TIMECLOCK TO TURN OFF DURING DAYLIGHT TIMES SO THAT LIGHTS TURN OFF AT DAWN.

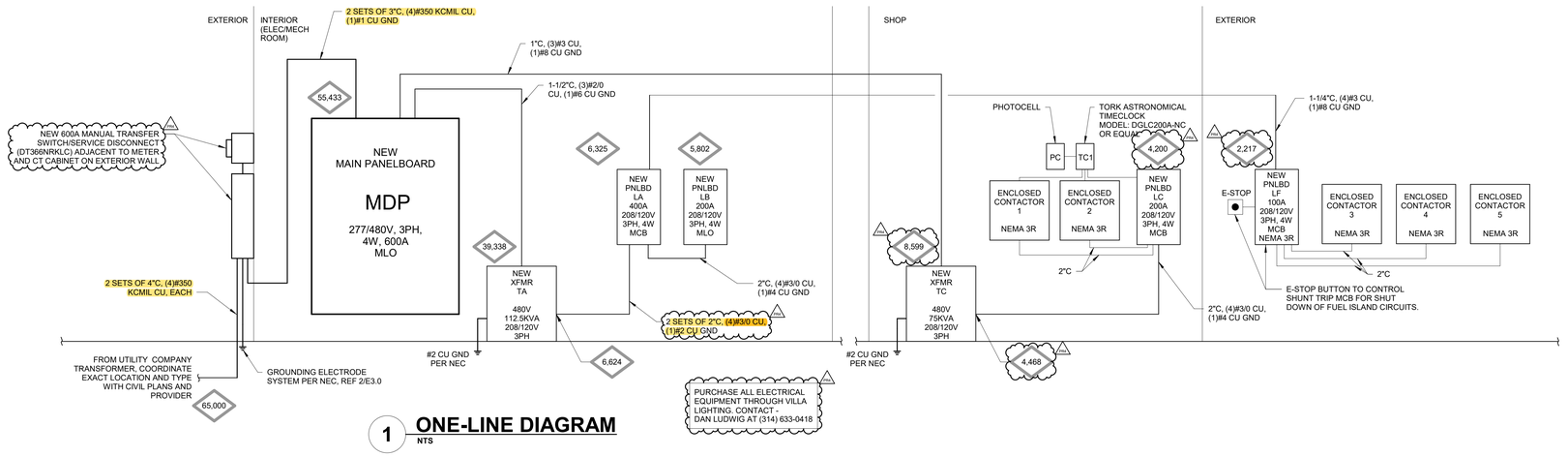
3 LIGHTING CONTACTOR 1
1 1/2" = 1'-0"



2 GROUNDING ELECTRODE SYSTEM
1/2" = 1'-0"

XX,XXX — REPRESENTS THE AVAILABLE FAULT CURRENT IN RMS SYMMETRICAL AMPERES AT THE RESPECTIVE TRANSFORMER, PANEL OR EQUIPMENT.

FAULT CURRENT CALCULATIONS ARE BASED ON AVAILABLE FAULT CURRENT OF 65,000 AMPS AT SECONDARY TERMINALS OF THE UTILITY TRANSFORMER.



1 ONE-LINE DIAGRAM
NTS

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EQUIPMENT SHARE GROUND-UP
US HWY 90
LAKE CITY, FL 32055
2023.0377
JOB NUMBER

ISSUE BLOCK

	OTP	08.11.2023
PR1	PLAN REV. 1	10.13.2023
PR2	PLAN REV. 2	11.10.2023
PR4	PLAN REV. 4	09.24.2024

CHECKED BY: TJ
DRAWN BY: DR
DOCUMENT DATE: 08.11.2023

KEITH A. WILLIAMS — STATE OF FLORIDA — No. 64983 — PROFESSIONAL ENGINEER

DN: CN=Keith A Williams, oid=Qualifier=A01410D000018F3F51F75E00019B7A, O="pb2 architecture + engineering", C=US
Reason: This item has been digitally signed and sealed by Keith A. Williams, P.E., on 12/06/2024 using a digital signature.
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ELECTRICAL ONE-LINE DIAGRAM AND SYMBOLS LEGEND

SHEET:
E3.0

PANELBOARD: LB
(NEW)

BUS AMPS: 200 A
MAIN SIZE/TYPE: M.L.O.
VOLTS/PHASE: 208/120 Wye,3PH,4W
SERVES: GENERAL POWER
LOCATION: ELECTRICAL ROOM
MOUNTING: SURFACE

EQUIPMENT GROUND BUS

	Load Name	NOTE	WIRE	BKR AMP	PL	A	B	C	PL	BKR AMP	WIRE	NOTE	Load Name	
1	SHOP BENCH RECEPTACLE	1	10	20 A	1	1,080			1	20 A	10	1	SHOP BENCH RECEPTACLE	2
3	PARTS SECURED RECEPTS	--	12	20 A	1		360	720	1	20 A	12	--	BREAKROOM RECEPTS	4
5	RESTROOM RECEPTS	--	12	20 A	1			360 1,200	1	20 A	10	1	REFRIGERATOR - BREAKROOM	6
7	SALES MANAGER RECEPTS	--	12	20 A	1	540	540		1	20 A	12	--	PARTS OFFICE RECEPTS	8
9	OFFICE 103 RECEPTS	--	12	20 A	1		540	360	1	20 A	12	--	KITCHENETTE RECEPTS	10
11	SHOW ROOM FRONT DESK	--	12	20 A	1			720 540	1	20 A	12	--	I.T. CLOSET RECEPTS	12
13	SHOW ROOM FRONT DESK	--	12	20 A	1	720	720		1	20 A	12	3	DRINKING FOUNTAIN	14
15	SHOW ROOM TV RECEPTS	--	12	20 A	1		360	180	1	20 A	12	--	ELECTRICAL ROOM RECEPT	16
17	SHOW ROOM RECEPTS	--	12	20 A	1			360 540	1	20 A	12	--	EXT RECEPTS - CARD READERS	18
19	BREAKROOM TV RECEPTS	--	12	20 A	1	540	--		1	--	--	--	SPACE	20
21	OFFICE TV RECEPTS	--	12	20 A	1		540	--	1	--	--	--	SPACE	22
23	SPARE	--	--	20 A	1			0 --	1	--	--	--	SPACE	24
25	SPARE	--	--	20 A	1	0	--		1	--	--	--	SPACE	26
27	SPARE	--	--	20 A	1		0	--	1	--	--	--	SPACE	28
29	SPARE	--	--	20 A	1			0 --	1	--	--	--	SPACE	30
31	SPARE	--	--	20 A	1	0	--		1	--	--	--	SPACE	32
33	SPARE	--	--	20 A	1		0	--	1	--	--	--	SPACE	34
35	SPARE	--	--	20 A	1			0 --	1	--	--	--	SPACE	36
37	SPACE	--	--	--	1	--	--		1	--	--	--	SPACE	38
39	SPACE	--	--	--	1		--	--	1	--	--	--	SPACE	40
41	SPACE	--	--	--	1			-- --	1	--	--	--	SPACE	42
43	SPACE	--	--	--	1	--	--		1	--	--	--	SPACE	44
45	SPACE	--	--	--	1		--	--	1	--	--	--	SPACE	46
47	SPACE	--	--	--	1			-- --	1	--	--	--	SPACE	48
49	SPACE	--	--	--	1	--	--		1	--	--	--	SPACE	50
51	SPACE	--	--	--	1		--	--	1	--	--	--	SPACE	52
53	SPACE	--	--	--	1			-- --	1	--	--	--	SPACE	54
	TOTAL CONNECTED					4.86	3.06	3.72	KVA					
	TOTAL CONNECTED					41.35	25.50	31.85	AMPS					
	TOTAL LOAD					11.64	KVA	32.31	AMPS					
	PER NEC ARTICLE 220 FEEDER LOAD					11.64	KVA	32.31	AMPS					

PANELBOARD: MDP
(NEW)

BUS AMPS: 600 A
MAIN SIZE/TYPE: M.L.O.
VOLTS/PHASE: 480/277 Wye,3PH,4W
SERVES: 480V DISTRIBUTION
LOCATION: ELECTRICAL ROOM
MOUNTING: SURFACE

SERVICE ENTRANCE RATED
65,000 AIC
EQUIPMENT GROUND BUS

	Load Name	NOTE	WIRE	BKR AMP	PL	A	B	C	PL	BKR AMP	WIRE	NOTE	Load Name	
1						1,164	3,048							
3	WSF/WEF-1	--	12	20 A	3		1,164	3,048	3	20 A	12	--	AIR COMPRESSOR	4
5								1,164 3,048						6
7						667	667							8
9	UH-1	--	12	15 A	3		667	667	3	15 A	12	--	UH-3	10
11								667 667						12
13						667	667							14
15	UH-2	--	12	15 A	3		667	667	3	15 A			UH-4	16
17								667 667						18
19	SPACE	--	--	--	1	--	--		1	--	--	--	SPACE	20
21	SPACE	--	--	--	1		--	--	1	--	--	--	SPACE	22
23	SPACE	--	--	--	1			-- --	1	--	--	--	SPACE	24
25	SPACE	--	--	--	1	--	--		1	--	--	--	SPACE	26
27	SPACE	--	--	--	1		--	--	1	--	--	--	SPACE	28
29	SPACE	--	--	--	1			-- --	1	--	--	--	SPACE	30
31	SPACE	--	--	--	1	--	--		1	--	--	--	SPACE	32
33	SPACE	--	--	--	1		--	--	1	--	--	--	SPACE	34
35	SPACE	--	--	--	1			-- --	1	--	--	--	SPACE	36
37	SPACE	--	--	--	1	--	--		1	--	--	--	SPACE	38
39	SPACE	--	--	--	1		--	--	1	--	--	--	SPACE	40
41	SPACE	--	--	--	1			-- --	1	--	--	--	SPACE	42
43						23,492	--		1	--	--	--	SPACE	44
45	XFMR TA	6	--	175 A	3		12,158	--	1	--	--	--	SPACE	46
47								18,069 --	1	--	--	--	SPACE	48
49						14,731	--		1	--	--	--	SPACE	50
51	XFMR TC	6	--	100 A	3		12,224	--	1	--	--	--	SPACE	52
53								8,442 --	1	--	--	--	SPACE	54
	TOTAL CONNECTED					45.10	31.26	33.05	KVA					
	TOTAL CONNECTED					163.82	112.85	120.30	AMPS					
	TOTAL LOAD					109.40	KVA	131.59	AMPS					
	PER NEC ARTICLE 220 FEEDER LOAD					116.23	KVA	139.80	AMPS					

PANELBOARD: LC
(NEW)

BUS AMPS: 200 A
MAIN SIZE/TYPE: M.C.B.
VOLTS/PHASE: 208/120 Wye,3PH,4W
SERVES: GENERAL POWER
LOCATION: SHOP
MOUNTING: SURFACE

EQUIPMENT GROUND BUS

	Load Name	NOTE	WIRE	BKR AMP	PL	A	B	C	PL	BKR AMP	WIRE	NOTE	Load Name	
1	CHARGING STATION	1	10	20 A	1	1,000	1,000		1	20 A	10	1	CHARGING STATION	2
3	CHARGING STATION	1	10	20 A	1		1,000	1,000	1	20 A	10	1	CHARGING STATION	4
5	CHARGING STATION	1	10	20 A	1			1,000 1,000	1	20 A	10	1	CHARGING STATION	6
7	CHARGING STATION	1	10	20 A	1	1,000	1,000		1	20 A	10	1	CHARGING STATION	8
9	CHARGING STATION	1	10	20 A	1		1,000	1,000	1	20 A	10	1	CHARGING STATION	10
11	SITE LIGHTING	1	3	20 A	1			1,242 959	1	20 A	4	1	SITE LIGHTING	12
13	LTS FUEL ISLAND	--	12	20 A	1	256	312		1	20 A	12	--	LTS EXTERIOR	14
15	TIME CLOCK CONTROL	--	12	20 A	1		180	1,600	1	20 A	8	1	PWR EXTERIOR SIGN	16
17	SHOP TV RECEPTS	--	12	20 A	1			360 0	1	20 A	--	--	SPARE	18
19	WATER RECYCLE SYSTEM	--	3	80 A	2	6,444	0		1	20 A	--	--	SPARE	20
21							6,444	--	1	--	--	--	SPACE	22
23	PRESSURE WASHER	--	6	45 A	2			3,744 --	1	--	--	--	SPACE	24
25						3,744	--		1	--	--	--	SPACE	26
27	SPACE	--	--	--	1		--	--	1	--	--	--	SPACE	28
29	SPACE	--	--	--	1			-- --	1	--	--	--	SPACE	30
31	SPACE	--	--	--	1	--	--		1	--	--	--	SPACE	32
33	SPACE	--	--	--	1		--	--	1	--	--	--	SPACE	34
35	SPACE	--	--	--	1			-- --	1	--	--	--	SPACE	36
37	SPACE	--	--	--	1	--	--		1	--	--	--	SPACE	38
39	SPACE	--	--	--	1		--	--	1	--	--	--	SPACE	40
41	SPACE	--	--	--	1			-- --	1	--	--	--	SPACE	42
	TOTAL CONNECTED					14.73	12.22	8.14	KVA					
	TOTAL CONNECTED					127.99	107.10	67.85	AMPS					
	TOTAL LOAD					35.06	KVA	97.30	AMPS					
	PER NEC ARTICLE 220 FEEDER LOAD					39.31	KVA	109.13	AMPS					

PANELBOARD: LA
(NEW)

BUS AMPS: 400 A
MAIN SIZE/TYPE: M.C.B.
VOLTS/PHASE: 208/120 Wye,3PH,4W
SERVES: GENERAL POWER
LOCATION: ELECTRICAL ROOM
MOUNTING: SURFACE

EQUIPMENT GROUND BUS

	Load Name	NOTE	WIRE	BKR AMP	PL	A	B	C	PL	BKR AMP	WIRE	NOTE	Load Name	
1	LTS OFFICES	--	12	20 A	1	715	1,200		1	20 A	12	--	DISPOSAL - BREAKROOM	2
3	LTS SHOW ROOM	--	12	20 A	1		319	500	1	20 A	12	--	F.A.C.P.	4
5	LTS SHOP - GRP "A"	1	8	20 A	1			543 106	1	30 A	12	--	RESTROOM EXHAUST FANS	6
7	LTS SHOP - GRP "B"	1	10	20 A	1	843	2,500		1	30 A	8	--	WATER HEATER WH-1	8
9	LTS SHOP - GRP "C"	1	10	20 A	1		717	125	1	20 A	12	--	RECIRC PUMP	10
11	LTS WASH BAY	3	--	20 A	1			1,296 5,200	2	60 A	4	1	AHU-1	12
13	WELDER	1	6	40 A	2	3,266	5,200							14
15							3,266	2,715	2	45 A	6	1	CU-1	16
17	WELDER	--	8	40 A	2			3,266 2,715						18
19						3,266	0		1	20 A	--	--	SPARE	20
21	SPARE	--	--	20 A	1		0	0	1	20 A	--	--	SPARE	22
23	SPACE	--	--	--	1			-- --	1	--	--	--	SPACE	24
25	SPACE	--	--	--	1	--	--		1	--	--	--	SPACE	26
27	SPACE	--	--	--	1		--	--	1	--	--	--	SPACE	28
29	SPACE	--	--	--	1			-- --	1	--	--	--	SPACE	30
31						4,860	--		1	--	--	--	SPACE	32
33	PANELBOARD LB	6	--	200 A	3		3,060	--	1	--	--	--	SPACE	34
35								3,720 --	1	--	--	--	SPACE	36
37						1,613	--		1	--	--	--	SPACE	38
39	PANELBOARD LF	6	--	100 A	3		1,457	--	1	--	--	--	SPACE	40
41								1,224 --	1	--	--	--	SPACE	42
	TOTAL CONNECTED					23.49	12.16	18.07	KVA					
	TOTAL CONNECTED					203.35	101.31	158.15	AMPS					
	TOTAL LOAD					53.72	KVA	149.11	AMPS					
	PER NEC ARTICLE 220 FEEDER LOAD					55.46	KVA	153.94	AMPS					

PANELBOARD: LF
(NEW)

BUS AMPS: 100 A
MAIN SIZE/TYPE: MCB (SHUNT TRIP)
VOLTS/PHASE: 208/120 Wye,3PH,4W
SERVES: FUEL STATION
LOCATION: BACK OF BUILDING
MOUNTING: SURFACE (NEMA 3R)

NEMA 3R
EQUIPMENT GROUND BUS

	Load Name	NOTE	WIRE	BKR AMP	PL	A	B	C	PL	BKR AMP	WIRE	NOTE	Load Name	
1	LTS/RECPT	1	10	20 A	1	360	--		1	--	--	--	SPACE	2
3	HEATER	1	10	20 A	2		271	--	1	--	--	--	SPACE	4
5								271 --	1	--	--	--	SPACE	6
7	GASOLINE	1	10	20 A	1	660	--		1	--	--	--	SPACE	8
9	CLEAR DIESEL	1	10	20 A	2		593	--	1	--	--	--	SPACE	10
11								593 --	1	--	--	--	SPACE	12
13	DYED DIESEL	1	10	20 A	2	593	--		1	--	--	--	SPACE	14
15							593	--	1	--	--	--	SPACE	16
17	CONTACTOR CONTROL	--	12	20 A	1			180 --	1	--	--	--	SPACE	18
19	SPACE	--	--	--	1	--	--		1	--	--	--	SPACE	20
21	SPACE	--	--	--	1		--	--	1	--	--	--	SPACE	22
23	SHUNT TRIP	--	12	20 A	1			180 --	1	--	--	--	SPACE	24
	TOTAL CONNECTED					1.61	1.46	1.22	KVA					
	TOTAL CONNECTED					13.74	12.44	10.20	AMPS					
	TOTAL LOAD					4.29	KVA	11.92	AMPS					
	PER NEC ARTICLE 220 FEEDER LOAD					4.29	KVA	11.92	AMPS					

PANELBOARD NOTES

1. CONDUCTORS UPSIZED PER VOLTAGE DROP CALCULATIONS.
2. INSTALL LOCKING DEVICE (LOCK-ON FOR CRITICAL LOAD).
3. INSTALL GFCI BREAKER FOR PERSONNEL PROTECTION (5ma).
4. INSTALL GFCI BREAKER FOR EQUIPMENT PROTECTION (30ma).
5. ROUTE CIRCUIT THROUGH CONTACTOR.
6. REFER TO RISER DIAGRAM FOR WIRE SIZE(S).
7. INSTALL LOCKING DEVICE (LOCK-OFF FOR MAINTENANCE).

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ISSUE BLOCK

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PANELBOARD SCHEDULES

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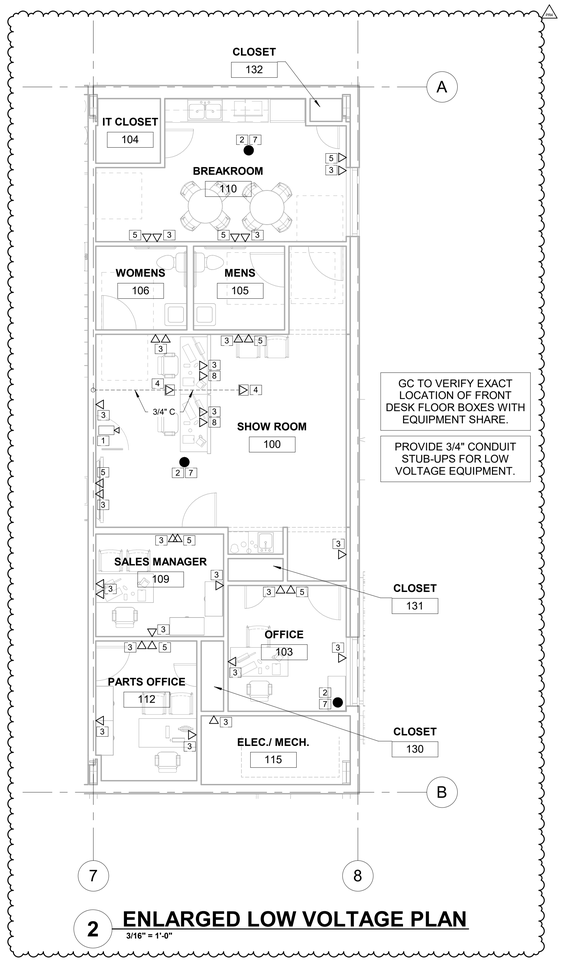
E3.1

ELECTRICAL KEYNOTES

#	DESCRIPTION
1	CAT 6 RJ45 (GREEN CABLE FOR SECURITY CAMERAS). PINOUT T-568B. INTERIOR SECURITY CAMERAS TO BE MOUNTED AT +9'-0" A.F.F. EXTERIOR SECURITY CAMERAS TO BE MOUNTED AT +14'-0" A.F.F. SECURITY CAMERAS TO BE WALL MOUNTED UNLESS NOTED OTHERWISE.
2	CAT 6 RJ45 (ORANGE CABLE FOR APs). AP DEVICES TO BE WALL MOUNTED AT +9'-0" A.F.F. UNLESS NOTED OTHERWISE. PINOUT T-568B.
3	CAT 6 RJ45 (BLUE CABLE FOR DATA PORTS). PINOUT T-568B. DATA PORTS TO BE MOUNTED AT +18" A.F.F.
4	CAT 6 RJ45 (BLUE CABLE FOR FLOOR BOX DATA PORTS). PINOUT T-568B.
5	CAT 6 RJ45 (BLUE CABLE FOR TV PORTS). TV PORTS TO BE MOUNTED AT +60" A.F.F.
6	CONDUIT THROUGH WALL FOR DOOR ACCESS.
7	DEVICE TO BE CEILING MOUNTED.
8	DATA PORTS TO BE MOUNTED INSIDE OF KIOSK. ROUTE CONDUIT CONCEALED WITHIN WALL AND ALONG BACK SIDE OF KIOSK SHELF AS REQUIRED TO SERVE DATA PORTS. COORDINATED EXACT PLACEMENT WITH OWNER PRIOR TO INSTALLATION.

LOW VOLTAGE GENERAL NOTES

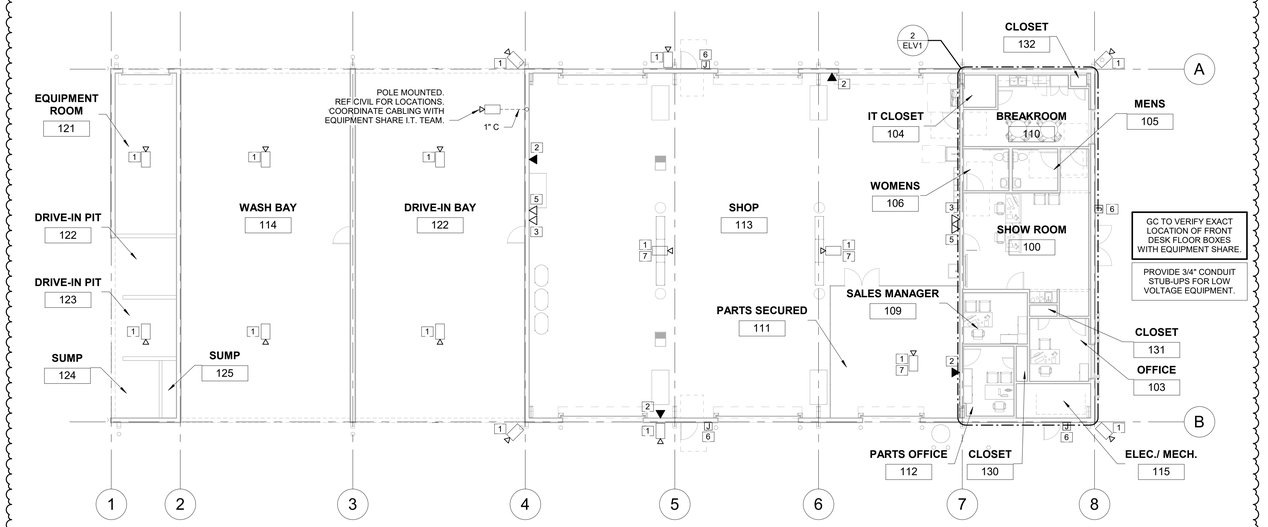
1. ALL ETHERNET CABLES AND ALL ETHERNET PATCH-CABLES WILL BE FROM THE MANUFACTURER, VERTICAL CABLE, AND WILL COMPLY WITH THEIR CAT6 UTP STANDARD.
   - A. #23 AWG, SOLID COPPER WIRE, 550MHz, CMR (RISER-RATED), NOISE REDUCING CROSS SEPARATOR).
   - B. ALL ETHERNET CABLES, KEYSTONES, AND PATCH-CABLES SHALL BE COLOR COORDINATED BASED ON DEVICE TYPE.
   - C. GREEN TO BE USED FOR CAMERAS AND CAMERA-RELATED DEVICES.
   - D. ORANGE TO BE USED FOR CRITICAL CONNECTIONS SUCH AS, UPLINKS, ACCESS POINTS, WAN CONNECTIONS, ETC.
   - E. BLUE TO BE USED FOR PCs, PHONES, PRINTERS, TVs, AND OTHER PERIPHERALS.
2. SERVICE LOOPS SHALL BE PLACED AT EACH END BEFORE CABLING REACHES THE TERMINATION POINTS.
   - A. THE SERVICE LOOP AT THE I.T. RACK SHALL BE APPROXIMATELY 6'-0" IN LENGTH.
   - B. THE SERVICE LOOP AT THE DEVICES SHALL BE APPROXIMATELY 3'-0" IN LENGTH.
3. WHERE ALLOWED BY AHJ, INSTALL 3/4", BLUE, NONMETALLIC, FLEXIBLE TUBING SHALL BE INSTALLED FROM EACH LOW VOLTAGE RECEPTACLE THROUGH THE STUD BAY UP INTO THE CEILING.
4. INSTALL EMT CONDUIT AND BUSHINGS AS NECESSARY TO PROTECT CABLING RUN THROUGH CEILINGS, WALLS, OR ANY OTHER SPACE REQUIRING PROTECTION OF CABLING.
5. RJ45 CONNECTORS WILL WORK WITH CAT6 AND CAT6A CABLES, BE INTERNALLY GROUNDED, PROVIDE STRAIN RELIEF, AND SHIELDING WHERE NECESSARY.
6. ALL ETHERNET TERMINATIONS WILL USE THE EIA/TIA 568B STANDARD.
7. ALL VISIBLE CABLES WITHIN TERMINATION CABINET WILL BE COMBED AND WELL-MANAGED USING VELCO STRAPS, SPACED 12" APART. NO ZIP TIES ARE ALLOWED, EXCEPT FOR THOSE THAT SECURE THE CABLES TO THE PATCH PANEL STRAIN-RELIEF BRACKET INSIDE RACKS.



2 ENLARGED LOW VOLTAGE PLAN
3/16" = 1'-0"

E.C. TO PROVIDE ALL CONDUIT, SLEEVING, AND LOW-VOLTAGE CABLING FOR ALL LOW VOLTAGE SYSTEMS.

PROVIDE UNDERGROUND 1" CONDUITS WITH PULL STRINGS FOR POLE MOUNTED SECURITY CAMERA CABLING.



1 LOW VOLTAGE PLAN
3/32" = 1'-0"

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ELECTRICAL LOW VOLTAGE PLAN

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ELV1