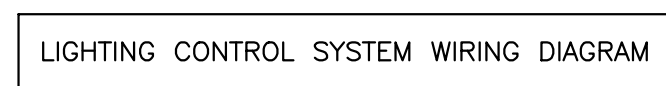


Fixture Type	LAMP	WATTAGE	VOLTAGE	DESCRIPTION	CATALOG NUMBER
A	T8W TRACK T254L G2 WHITE TRACK HEAD	15W	120	T8WH – 8 FOOT WHITE JUNO TRACK AND A T254L G2 WHITE HEAD.	T254L G2 35K 90CRI SP
B	MPFLED LED	40W	120	MPFLED FLAT PANEL 2X2 WITH FROSTED LENS AND WHITE, ALUMINUM HOUSING.	MOBERN LIGHTING #MPFL22-LE40-DMVVWH40
EX1	LED	2W	120	CEILING MOUNTED EXIT (TYPE X) SIGN FIXTURE LED ILLUMINATED, EMERGENCY BATTERY PACK BACKUP.	COMPASS #CER
BP1	LED	1W	120	WALL MOUNTED EMERGENCY LIGHT FIXTURE. ADJUSTABLE HEADS EBU TYPE.	COMPASS #CU2
BP2	LED	5W	120	EXTERIOR WALL MOUNTED EMERGENCY LIGHT FIXTURE.	EXITRONIX #L16-18-0-W-NO HEADS

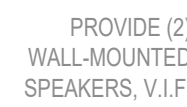
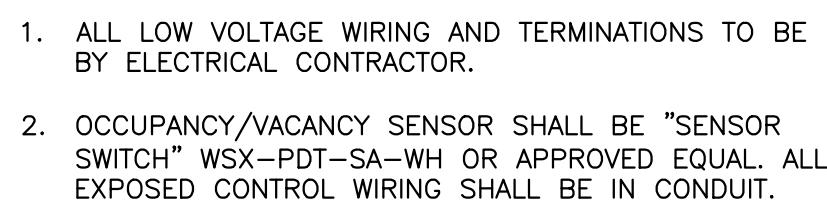
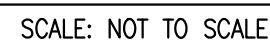
1. VERIFY ALL LUMINAIRE COLORS, TRIMS, LENGTHS, ETC. WITH THE ARCHITECT PRIOR TO PLACING FINAL PURCHASE ORDERS. SUBMISSION FOR SHOP DRAWINGS WILL BE INTERPRETED AS HAVING BEEN COORDINATED WITH THE ARCHITECTURAL DRAWINGS .
2. PROVIDE ALL LENGTHS, FEEDS, ACCESSORIES, CONNECTORS, WIRING, POWER SUPPLIES, DRIVERS ETC. FOR A COMPLETE INSTALLATION. THE E.C. SHALL VERIFY THE COMPLETE BILL OF MATERIAL WITH MANUFACTURER'S REPRESENTATIVE AND ENSURE ALL EQUIPMENT ARE INCLUDED IN BID PRICE. COORDINATE INSTALLATION WITH ARCHITECTURAL DETAILS.
3. VERIFY FINAL LUMINAIRE LOCATIONS WITH OTHER CEILING MOUNTED EQUIPMENTS SUCH AS DIFFUSER WITH ARCHITECTURAL REFLECTED CEILING PLANS.
4. VERIFY EXACT MOUNTING HEIGHT AND LOCATIONS OF ALL WALL MOUNTED LUMINAIRE WITH ARCHITECTURAL PLANS AND ELEVATIONS PRIOR TO ROUGH-IN
5. CONNECTIONS TO RECESSED LUMINAIRES SHALL BE MADE WITH MINIMUM 1/2" FLEXIBLE METAL CONDUIT (FMC) FROM LUMINAIRE TO OUTLET BOX. LENGTH OF FMC SHALL NOT CONNECTIONS TO RECESSED LUMINAIRES SHALL BE MADE WITH MINIMUM 1/2" FLEXIBLE METAL CONDUIT (FMC) FROM LUMINAIRE TO OUTLET BOX. LENGTH OF FMC SHALL NOT EXCEED 6'-0".
6. AT THE CONCLUSION OF WORK, EACH LUMINAIRE SHALL BE CLEANED AND EQUIPPED WITH THE PROPER TYPE, NUMBER OF LAMPS, INCLUDING KELVIN TEMPERATURE AND WATTAGE. AT THE CONCLUSION OF WORK, EACH LUMINAIRE SHALL BE CLEANED AND EQUIPPED WITH THE PROPER TYPE, NUMBER OF LAMPS, INCLUDING KELVIN TEMPERATURE AND WATTAGE. ALL IN GOOD OPERATING CONDITION
7. ALL LIGHTING SUPPLIES MUST BE PURCHASED FROM "CED NATIONAL ACCOUNTS". CONTACT JEREMY WEST, NATIONAL ACCOUNTS REPRESENTATIVE, (817) 923-1983. ALL LIGHTING SUPPLIES MUST BE PURCHASED FROM "CED NATIONAL ACCOUNTS". CONTACT JEREMY WEST, NATIONAL ACCOUNTS REPRESENTATIVE, (817) 923-1983. JEREMY.WEST@CED.COM.

- 1 EXHAUST FAN IN THIS ROOM SHALL BE CONTROLLED ALONG WITH THE LIGHT FIXTURES. COORDINATE EXACT LOCATION OF EXHAUST FAN WITH MECHANICAL DRAWINGS.
- 2 CONNECT ALL EMERGENCY EGRESS AND NIGHT LIGHTING FIXTURES TO NEAREST LIGHTING BRANCH CIRCUIT AND OF SWITCHES AND CONTROLS PER STATE AND LOCAL CODES. EXIT SIGNS SHALL NOT EXCEED 5 WATTS PER FACE.
- 3 PROVIDE POWER/UNION BOX(ES) FOR EXTERIOR SIGNAGE. COORDINATE EXACT LOCATION WITH SIGNAGE PROVIDER. CIRCUIT EXTERIOR SIGN(S) THROUGH LCP. VERIFY QUANTITY AND LOCATION WITH ARCHITECTURAL DRAWINGS.

1. ALL EXIST SIGNS, EMERGENCY LIGHTING BATTERY PACKS, EMERGENCY LUMINAIRES (ON GENERATOR OR EMERGENCY LIGHTING BATTERY PACKS INTEGRAL TO LUMINAIRE), AND NIGHT LIGHTS (DENOTED "NL") SHALL BE CONNECTED TO THE LOCAL LIGHTING CIRCUIT AHEAD OF ANY CONTROLS SUCH AS: SWITCHES (DEVICE), OCCUPANCY SENSORS AND/OR RELAY CONTROLS.
2. EXACT LOCATION OF ALL LUMINAIRES, AND EXACT MOUNTING HEIGHT OF ALL PENDANT MOUNTED LUMINAIRES SHALL BE COORDINATED WITH ARCHITECTURAL DRAWINGS PRIOR TO ANY ROUGH-INS.
3. MINIMUM CONDUCTOR SIZE FOR 120 VOLT BRANCH CIRCUITS SHALL BE 12-AWG. FOR 277 VOLT BRANCH CIRCUITS WITH HOMERUNS OVER 100 LINEAR FEET, A MINIMUM WIRE SIZE OF 10-AWG SHALL BE PROVIDED FROM FIRST JUNCTION/OUTLET BOX TO BRANCH CIRCUIT PANELBOARD. FOR 277 VOLT BRANCH CIRCUITS WITH HOMERUN OVER 150 LINEAR FEET, A MINIMUM WIRE SIZE OF 8-AWG SHALL BE PROVIDED FROM FIRST JUNCTION/OUTLET BOX TO BRANCH CIRCUIT PANELBOARD.
4. ALL WIRING SHALL BE IDENTIFIED BY PANELBOARD AND CIRCUIT NUMBER(S) IN ALL CABINETS, JUNCTION BOXES, WIRING TROUGHS, ENCLOSURES, SPLICE OR TERMINATION POINTS, ETC.
5. A NEW TYPED PANELBOARD DIRECTORY CARD SHALL BE PROVIDED FOR ALL PANELS INSTALLED OR MODIFIED UNDER THIS CONTRACT. NEW DIRECTORY CARDS SHALL BE LOCATED ON THE INSIDE DOOR OF ASSOCIATED PANELS.



1. PROVIDE WIRING FROM LOW VOLTAGE SWITCH TO RELAY CABINET REQUIRED FOR EACH RELAY AS REQUIRED.
2. HEADEND SHALL CONTAIN ASTRONOMICAL TIME CLOCK, PROGRAMMABLE MATRIXING AND OCCUPANCY WARNING VIA LIGHT FLASHING.
3. PROVIDE LIGHTING RELAYS IN PANELS AS SHOWN. REFER TO DRAWINGS FOR BRANCH CIRCUITS WIRED VIA RELAY PANELS.
4. PROGRAM LIGHTING SCHEDULE AND HOURS OF OPERATION WITH OWNER.
5. PROVIDE LOW-VOLTAGE MULTIBUTTON OVERRIDE SWITCH CONTROLS AS REQUIRED FOR EACH RELAY. LC&D "ON" LUMINAIRES OR LOW-VOLTAGE OVERRIDE SWITCH CONTROLS SHALL INITIATE AN OVERRIDE OF A MAXIMUM TIME OF NO MORE THAN FOUR (4) HOURS
6. PROVIDE TWO (2) HOUR TRAINING ON PROGRAMMING OF SYSTEM AND SYSTEM OPERATION.
7. SHORT-CIRCUIT CURRENT RATING SHALL BE 18K (MINIMUM).
8. SYSTEM SHOWN IS BASIS OF DESIGN BY ACUTY BRANDS. PROVIDE ACCESSORIES AS REQUIRED TO ACCOMMODATE ZONES AND LOAD TYPES SHOWN ON PLAN AND IN LUMINAIRE SCHEDULE. ALTERNATE SYSTEM(S) MAY BE SUBMITTED FOR REVIEW AND APPROVAL BY ARCHITECT AND ENGINEER PRIOR TO BID. ALTERNATE SYSTEM(S) SHALL BE PRICED AS BASIS OF DESIGN OF DESIGN SYSTEM AND LISTED AS SUCH IN SUBMITTED BID. CONFIRM FINAL SYSTEM REQUIREMENTS WITH MANUFACTURER PRIOR TO ORDERING.



1 LIGHTING PLAN
E1.0 SCALE: 1/4" = 1'-0"

EXISTING PANELBOARD

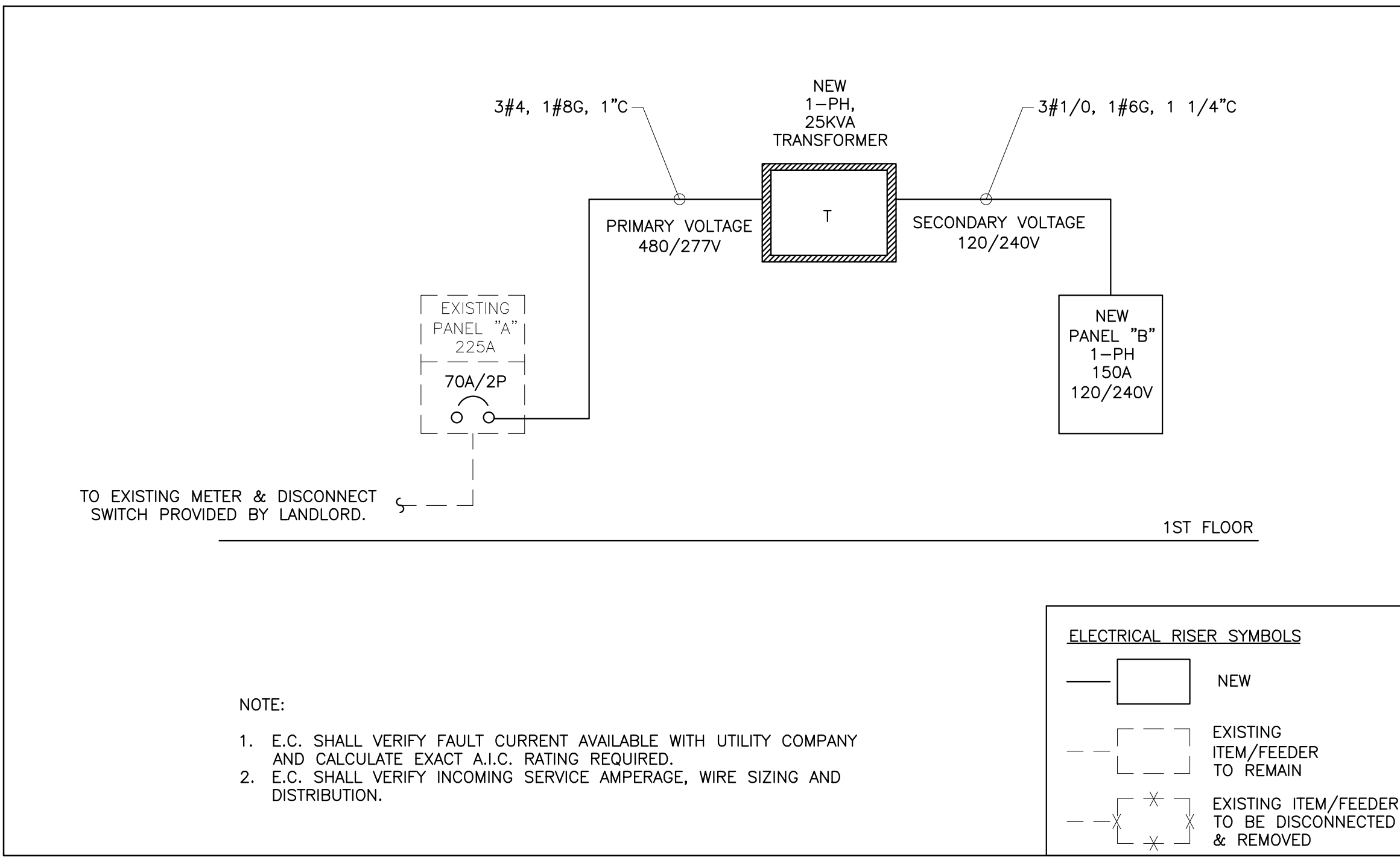
PANEL:	A					LOCATION:										MOUNTING:		SURFACE	
480Y/277	VOLTS,		3	PHASE,		4	WIRE												
MAIN CB	225A			BUS	225A	MIN.		INTERRUPTING RATING	22 KAIC										
CKT NO.	TRIP AMPS	DESCRIPTION OF LOAD	LOAD TYPE	LOAD (KVA)	PER PHASE (KVA)	LOAD (KVA)	LOAD TYPE	DESCRIPTION OF LOAD	TRIP AMPS	CKT NO.									
					A	B	C												
1	20	EXISTING AHU	H	11.67	11.67	11.67		EXISTING	20	2									
3	20		H	11.67					20	4									
5	20		H	11.67		11.67			20	6									
7	20	TO 25KVA TRANSFORMER	E	12.50	12.5			SPARE	20	8									
9	20		E	12.50				SPARE	20	10									
11	20	EDH-1	H	6.33		6.33		SPARE	20	12									
13	20		H	6.33	3.33			SPARE	20	14									
15	20		H	6.33				SPARE	20	16									
17	20	SPARE						SPARE	20	18									
19	20	SPARE			0		0	SPARE	20	20									
21	20	SPARE				0		SPARE	20	22									
23	20	SPARE					0	SPARE	20	24									
25	20	SPARE			0			SPARE	20	26									
27	20	SPARE				0		SPARE	20	28									
29	20	SPARE					0	SPARE	20	30									
31	20	SPARE			0			SPARE	20	32									
33	20	SPARE				0		SPARE	20	34									
35	20	SPARE					0	SPARE	20	36									
37	20	SPARE			0			SPARE	20	38									
39	20	SPARE				0		SPARE	20	40									
41	20	SPARE					0	SPARE	20	42									
TOTAL LOAD (KVA)				30.5	30.5	18													

PANEL:	B				Sections:	1		PROVIDE "FEED THROUGH LUGS"											
120/240	VOLTS,		1	PHASE,		3	WIRE												
MAIN CB	150A			BUS	225A	MIN.		INTERRUPTING RATING	22 KAIC										
CKT NO.	TRIP AMPS	DESCRIPTION OF LOAD	LOAD TYPE	LOAD (KVA)	PER PHASE (KVA)	LOAD (KVA)	LOAD TYPE	DESCRIPTION OF LOAD	TRIP AMPS	CKT NO.									
					A	B													
1	20	LIGHTING	L	0.72	1.72	1.00	E	DRINKING FOUNTAIN	20	2									
3	20	LIGHTING	L	0.32		0.68	0.36	E	STERIO SHELF	20	4								
5	20	EM/EXIT LIGHTING	L	0.50	1.5	1.00	E	HAND DRYER	20	6									
7	20	EXTERIOR SIGNAGE	L	0.15		1.15	1.00	E	HAND DRYER	20	8								
9	20	RECEPTACLES	R	1.08	2.58	1.50	E	WATER HEATER WH-1	15	10									
11	20	RECEPTACLES	R	0.90		5.82	4.92	H	AHU-5A(NEW)	12									
13	20	RECEPTACLES	R	0.72	5.64	4.92	H		60/12	14									
15	20	RECEPTACLE RESTROOM	R	0.36		0.36		SPARE	20	16									
17	20	SPARE			0			SPARE	20	18									
19	20	SPARE				0		SPARE	20	20									
21	20	LCP	L	0.10	0.1			SPARE	20	22									
23	20	SHOW WINDOW RECEPTACLE	R	0.36		0.36		SPARE	20	24									
25	20	WALL MOUNTED SPEAKERS	E	0.50	0.5			SPARE	20	26									
27	20	MOTORIZED DAMPER	M	0.50		0.5		SPARE	20	28									
29	20	SPARE			0			SPARE	20	30									
31	20	SPARE				0		SPARE	20	32									
33	20	SPARE				0		SPARE	20	34									
35	20	SPARE					0	SPARE	20	36									
37	20	SPARE				0		SPARE	20	38									
39	20	SPARE					0	SPARE	20	40									
41	20	SPARE				0		SPARE	20	42									
TOTAL LOAD (KVA)				12.04	8.87														

ABBREVIATIONS:
L = LIGHTING , R = RECEPTACLE , H = HVAC , E = EQUI. , M = MISCELLANEOUS

NOTE:
- * INDICATES GFCI CIRCUIT BRAEKERS.

ELECTRICAL RISER DIAGRAM

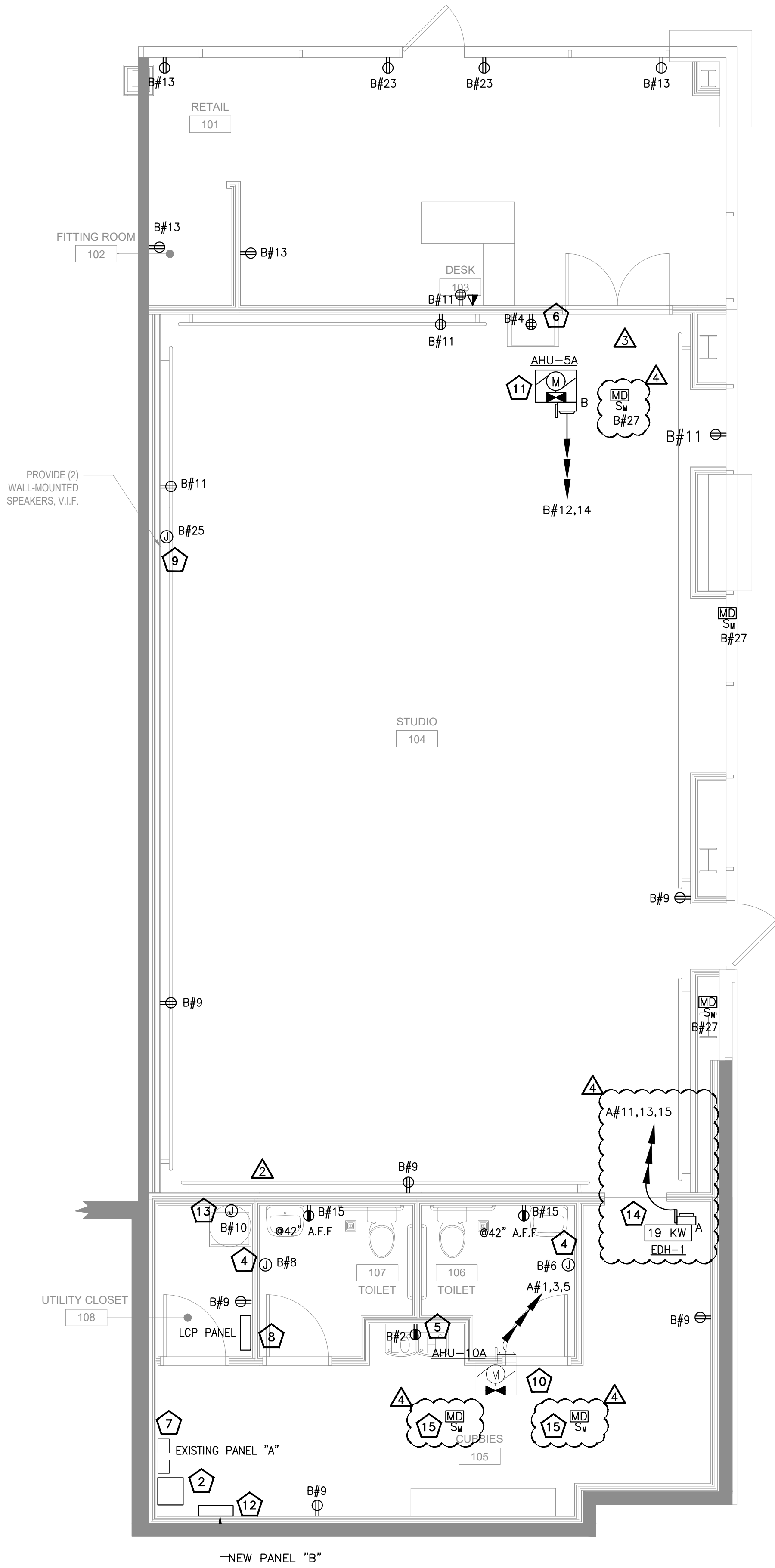


ELECTRICAL POWER PLAN KEYED WORK NOTES:

- RECEPTACLE FOR TELECOM EQUIPMENT. COORDINATE EXACT LOCATION WITH ARCHITECTURAL PLANS PRIOR TO ROUGH IN.
- NEW 25 KVA, 1-PHASE, 60 HZ CEILING MOUNTED TRANSFORMER HAVING PRIMARY VOLTAGE 277/480V & SECONDARY VOLTAGE AS 120/240V.
- RECEPTACLE FOR THE SHOW WINDOW. COORDINATE EXACT LOCATION WITH ARCHITECT PRIOR TO ROUGH-IN.
- JUNCTION BOX FOR THE HAND DRYER. E.C. TO VERIFY THE EXACT LOCATION WITH ARCHITECT PRIOR TO ROUGH-IN. HAND DRYER SHALL BE SELECTED SO THAT TO OPERATE ON 277 VOLTS.
- ELECTRICAL OUTLET FOR THE DRINKING FOUNTAIN. E.C. TO VERIFY THE EXACT LOCATION WITH ARCHITECT/OWNER PRIOR TO ROUGH-IN.
- ELECTRICAL OUTLET FOR THE STERIO SHELF. E.C. TO VERIFY THE EXACT LOCATION WITH ARCHITECT/OWNER PRIOR TO ROUGH-IN.
- EXISTING ELECTRICAL PANEL SHALL REMAIN AS IT IS.
- LOCATION OF LIGHTING CONTROL PANEL LPC. COORDINATE EXACT LOCATION WITH ARCHITECT/OWNER.
- JUNCTION BOX FOR WALL MOUNTED SPEAKERS. COORDINATE EXACT LOCATION WITH ARCHITECT/OWNER PRIOR TO ROUGH-IN.
- EXISTING AHU-10A IS TO REMAIN CONNECTED TO CKT #1,3,5 OF PANEL-A. E.C. TO FIELD VERIFY THE OPERABLE CONDITION OF THE EXISTING FEEDER AND DISCONNECT SWITCH AND PROVIDE NEW IF FOUND INOPERABLE.
- NEW AHU-5A IS TO BE CIRCUITED TO THE PANEL B CKT #12,14. PROVIDE A 60A-2P UNFUSED DISCONNECT SWITCH MOUNTED ON/AT UNIT AS REQUIRED. COORDINATE FINAL LOCATION ON FIELD. WIRING SHALL BE 2#6 , 1#10 G, 3/4"C. TO THE 60A-2P CIRUIT BREAKER AS INDICATED.
- NEW 120/240V, 1-PHASE, 60HZ ELECTRICAL PANEL-B.
- JUNCTION BOX FOR WATER HEATER WH-1 (120 VOLTS, 1.5 KW). COORDINATE WITH MANUFACTURER FOR EXACT POWER REQUIREMENTS AND WIRING DIAGRAM.
- ELECTRIC DUCT HEATER EDH-1 (19KW, 480V, 3-PHASE) CIRCUITED TO THE EXISTING PANEL "A". PROVIDE A 30A-3P DISCONNECT SWITCH MOUNTED ON/AT UNIT AS REQUIRED. COORDINATE FINAL LOCATION ON FIELD. WIRING SHALL BE 3#10, 1#10G, 3/4"C. TO THE 30A-3P CIRCUIT BREAKER AS INDICATED.
- EXISTING MOTORIZED DAMPERS. E.C. SHALL VERIFY IF POWER SUPPLY IS AVAILABLE FOR THE DAMPER OPERATION OR ELSE PROVIDE NEW POWER SUPPLY AS PER REQUIREMENTS.

GENERAL POWER PLAN NOTES:

- EXACT LOCATION OF MECHANICAL, PLUMBING, KITCHEN, FURNITURE SYSTEMS, OWNER FURNISHED EQUIPMENT ETC. THAT REQUIRE ELECTRICAL CONNECTIONS ARE SHOWN ON THE MECHANICAL, PLUMBING, AND/OR ARCHITECTURAL DRAWINGS. COORDINATE EXACT LOCATIONS WITH RESPECTIVE CONTRACTORS AND/OR VENDORS PRIOR TO ANY ROUGH-INS.
- REVIEW AND COORDINATE WITH ALL TRADES CONTRACT DOCUMENTS TO DETERMINE SPECIFIC MOUNTING LOCATIONS FOR EQUIPMENT WITH ELECTRICAL CONNECTIONS. COORDINATE EXACT MOUNTING LOCATIONS WITH THE SPECIFIC TRADE AND ARCHITECT.
- MINIMUM CONDUCTOR SIZE FOR 120V BRANCH CIRCUITS SHALL BE 12-AWG. FOR 120V BRANCH CIRCUITS WITH HOMERUN OVER 100 LINEAR FEET, A MINIMUM WIRE SIZE OF 10-AWG SHALL BE PROVIDED FROM FIRST JUNCTION/OUTLET BOX TO BRANCH CIRCUIT PANELBOARD. FOR 120V BRANCH CIRCUITS WITH HOMERUN OVER 150 LINEAR FEET, A MINIMUM OF 8-AWG SHALL BE PROVIDED FROM FIRST JUNCTION/OUTLET BOX TO BRANCH CIRCUIT PANELBOARD.
- ALL WIRINGS SHALL BE IDENTIFIED BY PANELBOARD AND CIRCUIT NUMBERS IN ALL CABINETS, JUNCTION BOXES, WIRING TROUGHS, ENCLOSURES, SPLICE OR TERMINATION POINTS, ETC.
- A NEW TYPED PANELBOARD DIRECTORY CARD SHALL BE PROVIDED FOR ALL PANELS INSTALLED OR MODIFIED UNDER THIS CONTRACT. NEW DIRECTORY CARDS SHALL BE LOCATED ON THE INSIDE DOOR OF ASSOCIATED PANELS.



1 POWER PLAN
E2.0 SCALE: 1/4" = 1'-0"