- 1. THE COMPLETE ELECTRICAL INSTALLATION SHALL BE IN ACCORDANCE WITH THE 2023 CEC BASED ON 2022 EDITION OF THE NATIONAL ELECTRICAL CODE. THE LATEST RULES AND REGULATIONS OF THE SAFETY ORDERS ISSUED BY THE DIVISION OF INDUSTRIAL SAFETY, THE NATIONAL BOARD OF FIRE UNDERWRITERS AND ALL APPLICABLE STATE AND LOCAL CODES ISSUED BY THE AUTHORITIES HAVING JURISDICTION. 2. THE CONTRACTOR, PRIOR TO BIDDING, SHALL VISIT THE JOB SITE TO BECOME ACQUAINTED WITH THE EXISTING INSTALLATION AND SYSTEM RELATED TO HIS WORK AND SHALL INCLUDE IN THE BID PROPOSAL
- ALL LABOR AND MATERIALS REQUIRED FOR THE ELECTRICAL INSTALLATION TO BE COMPLETE AND OPERATIVE.
- 3. THE CONTRACTOR SHALL CONSULT THE ARCHITECTURAL AND OTHER DRAWINGS RELATED TO THIS PROJECT FOR ADDITIONAL WORK TO BE
- 4. ANY POWER SHUTDOWN SHALL BE COORDINATED WITH THE OWNER CONSTRUCTION COORDINATOR. A SHUTDOWN SCHEDULE SHALL BE PRESENTED TO THE OWNER FOR APPROVAL ONE WEEK PRIOR TO COMMENCEMENT OF WORK. SHUTDOWN WORK SHALL BE PERFORMED IN OVERTIME HOURS IF SO DIRECTED BY THE OWNER.
- 5. ALL FEEDER AND BRANCH CIRCUIT CONDUITS SHALL BE INSTALLED CONCEALED IN FINISHED AREA, UNLESS OTHERWISE NOTED.
- 6. THE OWNER RETAINS FIRST SALVAGE RIGHTS TO ALL EXISTING EQUIPMENT REMOVED UNDER THIS CONTRACT. THE ELECTRICAL CONTRACTOR SHALL CONSULT WITH THE OWNER FOR DISPOSITION OF THE EXISTING EQUIPMENT TO BE REMOVED BY HIM. THE CONTRACTOR SHALL INCLUDE IN HIS BID PROPOSAL ALL COSTS RELATED TO THE DISPOSITION OF EXISTING EQUIPMENT REMOVED UNDER THIS CONTRACT.
- '. DEMOLITION WORK SHALL BE PROVIDED AS REQUIRED TO ACCOMPLISH NEW WORK CALLED FOR AND AS NOTED. WORK SHALL BE PERFORMED CAREFULLY TO AVOID DAMAGE TO SURFACES, STRUCTURES, AND EQUIPMENT NOT BEING REMOVED. EXISTING EQUIPMENT AND/OR ELECTRICAL WIRING WHICH IS TO REMAIN, BUT HAS BEEN REMOVED TO FACILITATE THE INSTALLATION OF THE NEW EQUIPMENT, SHALL BE RESTORED TO ITS ORIGINAL OPERATING CONDITION.
- 8. THE CONTRACTOR SHALL REMOVE ALL ELECTRICAL ITEMS IN OR ON WALLS, CEILINGS, AND FLOORS WHICH WILL BE REMOVED FOR THE RENOVATION WORK OF THIS PROJECT. DISCONNECT COMPLETELY BEFORE START OF REMOVAL.
- 9. WHERE OUTLETS ARE REMOVED AND/OR CONDUIT IS CUT OFF, ALL EXISTING CONDUCTORS SHALL BE REMOVED BACK TO THE NEXT OUTLET, JUNCTION BOX OR PANEL BOARD.
- 10. EXISTING CONDUCTORS REMOVED FROM SERVICE SHALL NOT BE PERMITTED TO BE USED FOR NEW WORK UNDER THIS CONTRACT.
- 1. EXISTING CONDUIT RUNS REMAINING IN PLACE MAY BE UTILIZED FOR THE RENOVATION WORK, PROVIDED THAT THE CONDUIT IS OF ADEQUATE SIZE PER N.E.C. FOR THE NUMBER AND SIZE OF CONDUCTORS BEING INSTALLED.
- 12. BLANK COVERS SHALL BE INSTALLED WHEREVER DEVICE IS REMOVED AND OUTLET BOX REMAINS IN PLACE.
- 13. THE EXISTING ELECTRICAL ITEM REMAINING IN SERVICE WHICH HAS ITS EXISTING SUPPLY CIRCUIT INTERRUPTED BY DEMOLITION WORK PERFORMED UNDER THIS CONTRACT, SHALL NOT BE RECONNECTED TO A SOURCE WHICH COULD BE OVERLOADED BY THE ADDITION OF THIS
- 14. WHERE EXISTING CONDUIT AND/OR CIRCUIT HAS BEEN INTERRUPTED BY REMOVAL OF AN OUTLET(5), WALL, OR PORTION OF THE CIRCUIT, THE REMAINING CONDUIT AND/OR CIRCUIT SHALL BE REROUTED, EXTENDED AND RECONNECTED AS REQUIRED TO PROVIDE CONTINUITY OR THE CIRCUIT THAT IS TO REMAIN IN SERVICE.
- 15. UNLESS OTHERWISE INDICATED, THE MINIMUM SIZE OF CONDUCTORS SHALL BE #12 AWG THWN OR THHN COPPER ONLY
- 16. UNLESS OTHERWISE INDICATED, THE MINIMUM SIZE OF CONDUITS SHALL BE 3/4" EMT.
- 17. GREEN INSULATED GROUND CONDUCTORS SHALL BE INSTALLED IN ALL FEEDER AND BRANCH CIRCUIT CONDUITS.
- 18. PROVIDE LABELS ON ALL EQUIPMENT AND DEVICES. LABELS SHALL BE SELF -ADHESIVE PHENOLIC TYPE WITH WHITE LETTERS ON BLACK BACKGROUND. PROVIDE BRADY OR DYMO TYPE LABELS (CIRCUIT IDENTIFICATION) FOR ALL SWITCHES AND

INTERRUPTING CAPACITY RATING PH, PHASE

A, AMP AMPERE

CKT

CU

DB

DN

EA

JB

K۷

LTG

LT5

LV

AMP FUSE

AMP SWITCH

ABOVE FINISHED FLOOR

CIRCUIT BREAKER

DISTRIBUTION BOARD

CONDUIT ONLY

AUTOMOATIC TRANSFER SWITCH

amp trip

CONDUIT

CIRCUIT

Copper

DWG DRAWING

EACH

ELEC ELECTRICAL

E, EM EMERGENCY

EQ EQUIPMENT

G, GND GROUND

FLUOR FLUORESCENT

fused

FIRE ALARM

FM ANTENNA SYSTEM

HAND-OFF-AUTOMATIC

HORSE-POWER

HIGH VOLTAGE

JUNCTION BOX

KILO VOLT AMPERE

KILO VOLT

KILO WATT

LOW VOLTAGE

MCC MOTOR CONTROL CENTER

NEC NATIONAL ELECTRICAL CODE

MANUFACTURES ASS

MANUFACTURER

Lighting

MAXIMUM

MINIMUM

MTD MOUNTED

NO. # NUMBER

M5B MAIN SWITCHBOARD

NEMA NATIONAL ELECTRICAL

N/A NOT APPLICABLE NL NITE LITE CIRCUIT

NTS NOT TO SCALE

Lights

GROUND FAULT INTERRUPER

RM5 SHORT CIRCUIT CURRENT

ISOLATED GROUND

PHOTOCELL CONTROL

PULL BOX

PVC POLYVINYL CHLORIDE

SINGLE CORD

T/C TIME CLOCK LIGHT CONTROL PANEL

UNLESS OTHERWISE NOTED

VERIFY EXACT LOCATION

TERMINAL CABINET

TELEPHONE

UNDERGROUND

VOLT AMPERES

VOLTAGE DROP

WEATHERPROOF

TYPICAL

XFMR TRANSFORMER

VOLT

WITH

Panel

RECEPT RECEPTACLE

Sheet

SWBD SWITCHBOARD

SPEC SPECIFICATIONS

RM ROOM

SW SWITCH

PNL

5HT

TEL

UON

- 19. THE CONTRACTOR SHALL RETRACE ALL CIRCUITS AND PROVIDE REVISED TYPEWRITTEN DIRECTORIES FOR THE ELECTRICAL PANELS INVOLVED IN THIS PROJECT. THE PANEL DIRECTORY SHALL REFLECT THE AS BUILT CIRCUITS. ONE COPY OF SCHEDULE SHALL BE TAPED TO THE INSIDE OF THE PANEL DOOR, AND ONE COPY SHALL BE SUBMITTED TO THE ENGINEER AS AN "AS-BUILT" DRAWING.
- 20. ELECTRICAL EQUIPMENT AND FEEDERS SHALL BE SUPPORTED AND/OR ANCHORED IN ACCORDANCE WITH UBC ZONE 4 SEISMIC
- 21. THE CONTRACTOR SHALL MAINTAIN AT THE JOB SITE, AN UP TO DATE "AS-BUILT" DRAWING SET. THE "AS-BUILT" DRAWING SET SHALL REFLECT ALL APPROVED CHANGES TO THE DESIGN DRAWINGS. THE "AS-BUILT" DRAWING SET SHALL BE KEPT CLEAN AND IN GOOD CONDITION AND SHALL BE TURNED OVER TO THE OWNER AT THE COMPLETION OF THE PROJECT.
- 22. UPON COMPLETION OF HIS WORK, THE CONTRACTOR SHALL SCHEDULE AND PERFORM A COMPLETE FUNCTIONAL TEST TO DEMONSTRATE TO THE OWNER THAT THE NEW INSTALLATION IS OPERATING AS INTENDED. ANY DEFECTS OR DEFICIENCIES IN THE MATERIALS OR WORK SHALL BE CORRECTED IMMEDIATELY BY AND AT THE CONTRACTOR'S EXPENSE.
- 23. THE CONTRACTOR SHALL BE RESPONSIBLE FOR SECURING ALL REQUIRED ELECTRICAL PERMITS AND INSPECTIONS.
- 24. THE SUBMISSION OF A BID OR PROPOSAL SHALL BE CONSIDERED AS CONCLUSIVE EVIDENCE THAT THE CONTRACTOR IS THOROUGHLY FAMILIAR WITH THE INTENT OF THE CONTRACT DOCUMENT, AND NO CHANGE ORDER WILL BE 155UED FOR ANY ADDITIONAL LABOR OR MATERIAL REQUIRED TO RECTIFY ANY DISCREPANCY DISCOVERED OR REPORTED TO THE ENGINEER AFTER THE EXECUTION OF THE CONTRACT.
- 25. PROVIDE 120 VOLT A/C CIRCUITS AS REQUIRED TO SERVE AUXILIARY EQUIPMENT SUCH AS HVAC BMS CONTROL PANELS, SERVICE OUTLETS FOR AIR CONDITIONING UNITS IF REQUIRED.
- 26. CONTRACTOR SHALL PROVIDE ANY TEST REPORTS AS PART OF TURNOVER PACKAGE TO THE OWNER.
- 27. CONTRACTOR SHALL PROVIDE PENETRATION FIRESTOPPINGS TO ALL NEW AND ABANDONED PENETRATIONS USING UL LISTED "3M" FIRE PROTECTION PRODUCTS, ALL IN COMPLIANCE WITH 2013 CBC.
- 26. ELECTRICAL CONTRACTOR SHALL PROVIDE ALL BACK BOXES AND 3/4" CONDUIT SYSTEM REQUIRED BY LIFE SAFETY SYSTEM.
- 29. LIFE SAFETY CONTRACTOR SHALL PROVIDE A COMPLETE DESIGN AND INSTALLATION OF FIRE ALARM AND DETECTION SYSTEM. FIRE ALARM SHOP DRAWINGS SHALL BE REVIEWED AND APPROVED BY LOCAL FIRE MARSHALL PRIOR TO INSTALLATION. DESIGN SHALL BE BASED ON MANUFACTURER SYSTEM REQUIREMENTS AND STATE CODE AND REGULATIONS.
- 30. CONDUITS SHALL BE SUPPORTED AND BRACED THE SMACNA "GUIDELINES FOR SEISMIC RESTRAINTS OF MECHANICAL AND PLUMBING PIPING SYSTEMS", OR THE SUPERSTRUT "SEISMIC RESTRAINT SYSTEM".
- 31. HVAC AUTOMATIC CONTROLS AND 'BMS': REFER TO MECHANICAL PLANS AND ROOF AREA PROVIDE ALL CONTROL CONDUIT REQUIRED FROM 'BM5' PANEL IN MECHANICAL TO ALL SENSORS, DEVICES, CONTROLLERS, LOCAL 'DDC' AND 'PHOENIX' PANELS, COMPLETE AS SHOWN ON MECHANICAL PLANS; INCLUDING 120V-UPS POWER WIRING.
- 32. SECURITY SYSTEM CONDUIT AND WIRING: REFER TO SECURITY DRAWINGS FOR ALL CONDUIT, CABINETS, J-BOXES, 120V. EMERGENCY POWER AND WIRING. COMPLY WITH ALL REQUIREMENTS THEREON WHEN APPLIES.
- 33. ALL EXTERIOR ELECTRICAL DEVICES AND EQUIPMENT SHALL BE WEATHERPROOF TYPE, NEMA "3R".
- 34. BRANCH CIRCUIT WIRING CHART:

VOLTS	LENGTH	WIRE SIZE	MAX. WATTS	<u> </u>
120V	O-100FT.	#12	1250W	3% MAX.
120V	101-175FT.	#10	1250W	3% MAX.
277V	0-150FT.	#12	3400W	2 1/2% MAX.
277V	151-250FT.	#10	3400W	2 1/2% MAX.
NOTE:	PROVIDE #10 WIRE	MIN. NEUTRAL	AND GROUND WIRE	SIZE FOR ALL
	120 VOLT CIRCUITS	•	·	

- 35. CONSTRUCTION SEQUENCING AND PHASING: PROVIDE CONSTRUCTION IN PHASES AND IN CONJUNCTION WITH THE PHASING / SEQUENCING INDICATED ON THE ARCHITECTURAL PLANS AND AS REQUIRED BY THE
- 36. BACK TO BACK OUTLETS SHALL NOT BE PERMITTED IN THIS PROJECT. ALL OUTLETS MUST BE A MINIMUM OF ON STUD BAY APART WITH INSULATION SEPARATION FOR SOUND ISOLATION.

GENERAL N

(E) PARTIAL METER MAIN SECTION

120/200V-3#-4W - 1600A - 65,000 AIC

W/ 600A METER SECTIONS

600A

200A

(R)

PANEL

"B"

CONTRACTOR TO PROVIDE AND INSTALL WARNING

ARC FAULT WARNING LABELS FOR ALL PANELS

AND SWITCHBOARDS AS PER CEC 11.16.

Panel

- (2) FIXTURES TYPE 'A' PER LIGHTING FIXTURE SCHEDULE
- SWITCH FLUSH IN WALL TOGGLE TYPE +46"
- SWITCH FLUSH IN WALL, TOGGLE DOUBLE POLE +46"
- SWITCH FLUSH IN WALL, THREE WAY +46" TOGGLE TYPE.
- (T) T'STAT WITH #10-4 TO FAU-1 OR AC-1 TYP.
- ⇒ STANDARD DUPLES RECEPTACLE OUTLET +15".
- GROUND FAULT CIRCUIT INTERRUPTER RECEPTACLE OUTLET, +44" ALL OUTLETS AT KITCHEN COUNTERS AND BATHROOMS SHALL BE G.F.C.I.
- 240V-1≠-20 AMP. RECEPTACLE OUTLET V.L. TELEPHONE OUTLET, 4 CABLE HOME RUN TO TELEPHONE EQUIPMENT.
- DATA/COMPUTER OUTLET W/ CONDUIT HOME RUN TO DATA/TELE CLOSET.
- FUSED DISCONNECT SWITCH.

EXHAUST FAN CEILING MOUNTED: 5 AIR CHANGES MIN. PER HOUR, BROAN

- FH #5140 UE 110 CFM 1.5 SCONES. EXHAUST FAN CEILING MOUNTED WITH FLUORESCENT LIGHT: 5 AIR CHANGES
- MIN. PER HOUR, BROAN #5110 FLUE 110 CFM 1.5 SCONES. JUNCTION BOX, SIZE AS PER CODE..
- LIGHTING PANEL/POWER PANEL, FLUSH MOUNTED IN WALL.
 - SMOKE DETECTOR LISTED FOR 120V-9VDC SERIES CONNECTED: SHALL BE POWERED BY BATTERIES AND PERMANENT BLDG. POWER.
- CABLE TELEVISION OUTLET.
- $\frac{-}{//}$ 3/4" CONDUIT RUN 2#12 AWG + GND.
- $\frac{-///7}{3}$ 34" CONDUIT RUN 3#12 AWG + GND
- $\frac{1}{2}$ $\frac{3}{4}$ CONDUIT RUN 4#12 AWG + GND
- ---- P ---- POWER SERVICE CONDUIT RUN +36" BELOW GRADE.
- TELEPHONE SERVICE CONDUIT RUN +24" BELOW GRADE.
- CATV CABLE TV SERVICE CONDUIT RUN +24" BELOW GRADE.
- CONDUIT, ONLY WITH NYLON PULL CORD.
- POINT OF CONNECTION.
- VERIFY LOCATION.
- WEATHER PROOF.
- TIME CLOCK.
- FLUORESCENT LIGHTS.

UNDER-CABINET LIGHTS.

UNDERGROUND.

NOTES	SCALE	QVM
NOTES	NTS	SYM

SINGLE LINE NOTES:

- REFERENCE AS NEEDED.
- ALL DEVICES SHALL BE 65,000 MIN. 6. ALL 120/200V PANELS BOARDS ARE FULLY CONNECTED FOR
- BOARDS SHALL BE BUSSED.
- TIE-BAR BETWEEN HANDLES WILL NOT BE ACCEPTABLE. 11. PROVIDE BLACK ON WHITE LAMINATED PLASTIC NAMEPLATE ENGRAVED IN MIN 1/2" HIGH LETTERS. ATTACHED NAMEPLATES TO EQUIPMENT. SWITCHBOARD(5), DISTRIBUTION BOARD(5), PANEL BOARDS AND DISCONNECTS ETC. WITH RIVETS, BOLTS OR SHEET METAL SCREWS. CEMENT ATTACHMENTS ARE NOT
- ACCEPTABLE. 12. TIME SWITCHES, CONTACTORS, RELAYS, ETC. SHOWN TO BE FURNISHED WITH PANEL BOARDS SHALL BE LOCATED IN BARRIERED COMPARTMENTS BEHIND SEPARATE DOORS, MAINTAIN 2" OF SOLD TRIP BETWEEN DOORS. IF NECESSARY, INSTALL SWITCHES, CONTACTORS, RELAYS, ETC. IN SEPARATE WEATHERPROOF CABINETS WITH HINGED LOCKABLE DOORS. PROVIDE SCREW-ON TYPE NAMEPLATES, FULLY COMPLY WITH LATEST HANDICAP STANDARDS.

- 1. ALL ITEMS SHOWN ARE EXISTING, NOTES ARE FOR
- 2. ALL FEEDER LENGTHS SHOWN ARE FOR VOLTAGE DROP &
- SHORT CIRCUIT CALCULATIONS ONLY. ALL NEW FEEDER CONDUCTORS SHALL BE COPPER#2 AWG
- AND LARGER SHALL BE "XHHW"; CONDUCTORS SMALLER THAN #2 AWG SHALL BE "THHN/THWN". MAXIMUM AVAILABLE FAULT CURRENT AT MAIN SERVICE
- ENTRANCE IS 65 KA. 5. IN MAIN SWITCHBOARD BUS BRACING AND A.I.C. RATING OF
- 65,000 AIC PANELS SHALL BE LEGIBLY MARKED IN THE FIELD IN ADDITION TO THE MANUFACTURERS MARKINGS FOR FULLY COMBINATION RATING. THE MARKING SHALL BE READILY VISIBLE, DURABLE AND STATE "CAUTION-FULLY
- RATED SYSTEM" CIRCUIT BREAKERS IN ALL MAIN SWITCHBOARDS AND 120/200V PANELS SHALL BE FROM THE SAME MANUFACTURER AND ENTIRE SYSTEM SHALL BE LISTED AS FULLY RATED SYSTEM FOR 65,000 AIC.
- 8. ALL REMAINING SPACES IN MAIN SWITCHBOARDS AND PANEL
- ALL 120/200V PANELS SHALL BE RATED 65,000 AIC U.O.N. 10. WHERE TWO OR THREE POLE BREAKERS OCCUR IN LIGHTING PANELS THE MULTI-POLE BREAKER SHALL HAVE A COMMON TRIP "QUICKLAC" TYPE UNITS. SINGLE POLE BREAKERS WITH

	N	Location: Iain Service			(E	E) PANEL BOARD'A'		120/ 200Amp. Bus	/208V - 3PH - 4 s. M.L.O.	W 65 KAIC						
Cir		kr				Type of Load		2007 Hip. Bac	Watts	03 11 110	Type of Load				F	 3kr
No		POLE	Power	Lights	Mis.	& Location	Load	L-1	L-2	L-3	Load & Location		Mis. Lights	Power	POLE	AMPS
1	20	1	10,,61	29	1715.	Lights Open Office Area (South Area)	1,015	1,815		23	800 Front Desk Outlets (East Side)		Zigito	4	1	20
3	20	1		29		Lights Open Office Area (North Area	922	1,013	1,722		800 Front Desk Outlets (West Side			4	1	20
5	20	1		30		Lights Small Office and Classrooms	1,050		1,122	2,250	1,200 WIOA Office Outlets			6	1	20
7	20	1	6			Classroom #2 Outlets (North/East Walls)	1,200	2,400		_,	1,200 Classroom#1 Outlets			6	1	20
9	20	1	6			Classroom #2 Outlets (South/West Walls)	1,200		2,400		1,200 Classroom #3 Outlets (South/West Walls)			6	1	20
11	20	1	6			Classroom #3 Outlets (North/East Walls)	1,200			2,400	1,200 Office #2 Outlets			6	1	20
13	20	1	6			Office #3 Outlets (North/East Walls)	1,200	2,400		,	1,200 Office #3 Outlets (North/East Walls)			6	1	20
15	20	1	6			Office #4 Outlets (South/East Walls)	1,200		2,400		1,200 Open Office Outlets			6	1	20
17	20	1	6			Non-Haz. Lab Outlets (South/East Walls)	1,200		,	2,400	1,200 Lab Counter Outlets (North End)			2	1	20
19	20	1	6			Non-Haz. Lab Outlets (North/West Walls)	1,200	2,400		,	1,200 Lab Counter Outlets (South End)			2	1	20
21	20	1	3			Restroom Outlets	600		1,600		1,000 Breakroom Bar Outlets (North End)			1	1	20
23	20	1	2			Printer Outlets (Recept. Wall West Side)	1,000			2,000	1,000 Breakroom Bar Outlets (South End)			1	1	20
25	20	1	2			Printer Outlets (Recept. Wall North Side)	1,000	1,000			Space					
27	20	1	2			Printer Outlets (Recept. Wall East Side)	1,000		1,000		Space					
29	20	1	2			Storage Room 104 Outlets	800			800	Space					
31	20	1				Spare		0			Space					
33	20	1				Spare			0		Space					
35	20	1				Spare				0	Space					
37	20	1				Spare		0			Space					
39	20	1				Spare			0		Space					
41	20	1				Spare				0	Space					
Wat	tages Per Ph	ase						10,015	9,122	9,850	Watts 28.987					
Tota											Total Watts					
				W	⁷ atts	Total		Ph	ase loads in amps	S						
								83	76	82						
	L.o	C.L. @ 1.25	5%:	2,	987	3,734	_w					G	= GROUN	D FAULT		
	Othe	er Load @10	00%:	26	,000	26,000	W					A	= ARCH F	AULT		
	Tota	ıl Demand L	oad:			29,734	_w					W/G	= WEATHI	ER PROOF	/GOUND I	FAULT
							12	0/208V - 3PH - 4	4W =	83	Watts					
	200,504			ON DEVIC												

- * PROVIDE AND INSTALL LOCK ON DEVICE.
- ** CEC 408.4(A) EVERY CIRCUIT AND CIRCUIT MODIFICATION SHALL BE LEGIBLY IDENTIFIED AS TO ITS CLEAR, EVIDENT, AND SPECIFIC PURPOSE OR USE. EACH CIRCUIT SHALL BE DISTINGUISHED FROM ALL OTHERS.

		Location:			(F) PANEL BOARD ' B '		120	/208V - 3PH - 4V	V							
	M	ain Service				, , , , , , , , , , , , , , , , , , ,		200Amp. Bu	s. M.L.O.	65 KAIC							
Cir.	Bl	kr				Type of Load			Watts		Type of Load				Е	Bkr	
No.	AMPS	POLE	Power	Lights	Mis.	& Location	Load	L-1	L-2	L-3	Load & Location		Mis. Light	Power	POLE	AMPS	
1	20	1	1		8'	Show Window Outlets A	1,600	3,200			1,600 Show Window Outlets G			1	1	20	
3	20	1	1		8'	Show Window Outlets B	1,600		3,200		1,600 Show Window Outlets H			1	1	20	
5	20	1	1		8'	Show Window Outlets C	1,600			3,200	1,600 Show Window Outlets I			1	1	20	
7	20	1	1		8'	Show Window Outlets D	1,600	3,200			1,600 Show Window Outlets J			1	1	20	
9	20	1	1		8'	Show Window Outlets E	1,600		3,200		1,600 Show Window Outlets K			1	1	20	
11	20	1	1		8'	Show Window Outlets F	1,600			3,200	1,600 Show Window Outlets L			1	1	20	
13	50	2			1	Electric Water Heater	4,500	6,100			1,600 Show Window Outlets M			1	1	20	
15	30	2			1	208V-1Ph-9kW	4,500		7,953		3,453 CU-1		1		2	35	
17	25	2			1	CU-3	3,453			6,906	3,453 208V-1Ph-33.2A		1		2	33	
19	35	2			1	208V-1Ph-33.2A	3,453	6,906			3,453 CU-2		1		2	25	
21	2.5	2			1	CU-4	3,453		6,906		3,453 208V-1Ph-33.2A		1		2	35	
23	35	2			1	208V-1Ph-33.2A	3,453			4,253	800 Roof Top Power Outlets			4	1	20	
25	20	1				O.S.A. Exhaust Fan	189	189			Space				1	20	
27	20	1				Space			0		Space				1	20	
29	20	1				Space				0	Space				1	20	
31	20	1				Space		0			Space				1	20	
33	20	1				Space			0		Space				1	20	
35	20	1				Space				0	Space				1	20	
37	20	1				Space		0			Space				1	20	
39	20	1				Space			0		Space				1	20	
41	20	1				Space				0	Space				1	20	
/attagotal	ges Per Pha	ise						19,595	21,258		Watts 58,411 Total Watts						
				W	atts	Total		Pł	nase loads in amps								
								163	177	146							
	L.C	C.L. @ 1.25	5%:	6,1	100	7,625	W					G	= GROU	ND FAULT			
	Other	r Load @1	00%:	52,	311	52,311	W					A	= ARCH	FAULT			
	Tota	l Demand L	Load:			59,936	w					W/G	= WEAT	HER PROOF	GOUND F	FAULT	
							120)/208V - 3PH -	4W =	166 V							

** CEC 408.4(A) - EVERY CIRCUIT AND CIRCUIT MODIFICATION SHALL BE LEGIBLY IDENTIFIED AS TO ITS CLEAR, EVIDENT, AND

SPECIFIC PURPOSE OR USE. EACH CIRCUIT SHALL BE DISTINGUISHED FROM ALL OTHERS.

NO. E 23198 EXP. 06/30/2024

28

36

40

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ISSUE: DATE DESCRIPTION 04/03/23 1ST PLAN CHECK CORR.

manufacturer.

Drawn / Reviewed: DM/RG/AC

Issue Date 01/24/23

Sheet Name

ELECTRICAL GENERAL NOTES, DETAILS & S.L.D.

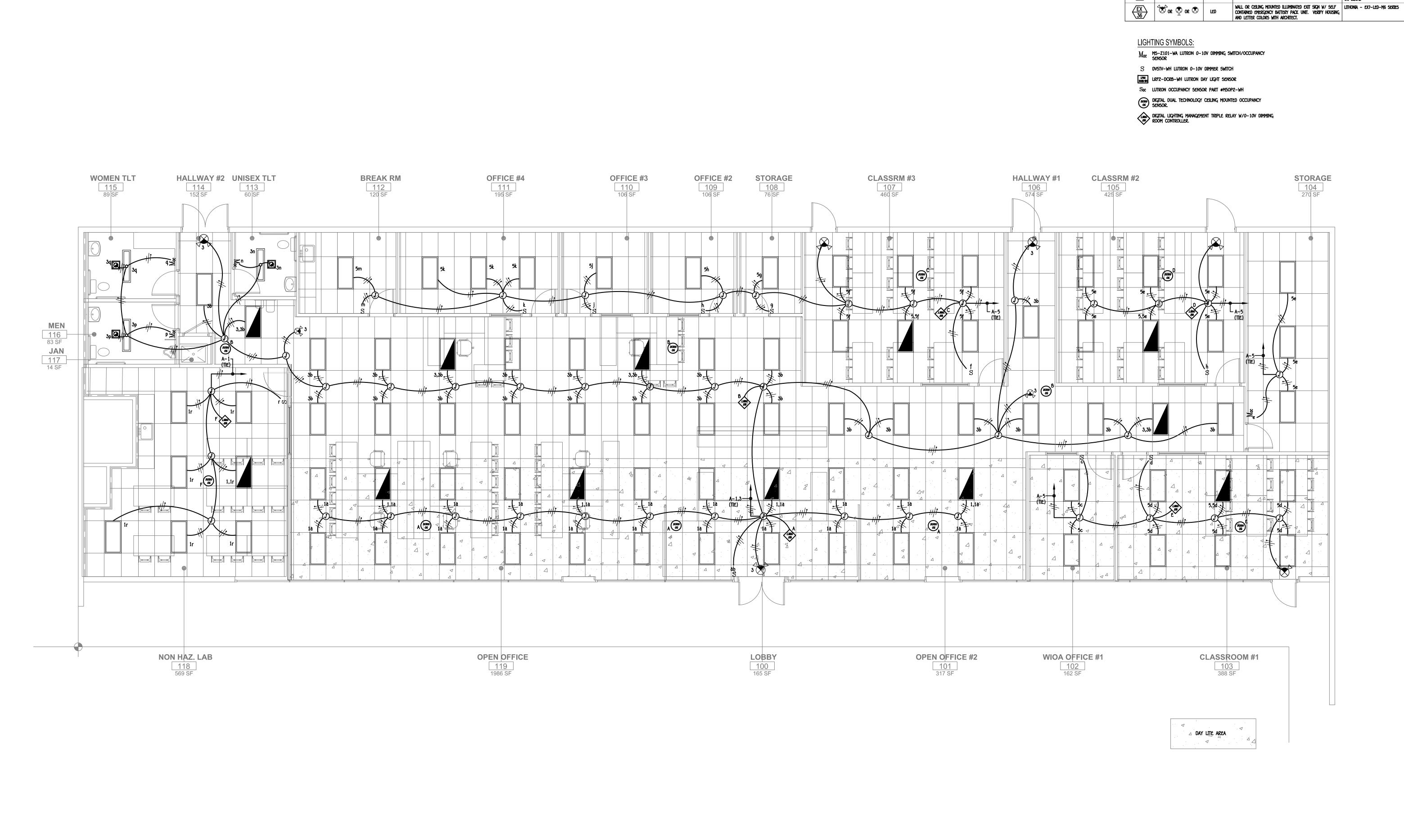
Sheet Number

ABBREVIATIONS NTS EXISTING SINGLE LINE DIAGRAM

NTS

PANEL SCHEDULES

SCALE



MANUF. & CAT# 2'X4' RECESSED LED LIGHT FIXTURE WITH ENERGY SAVING LITHONIA: LED 2GTL4-4400LM-LP835 OR EQUAL LITHONIA: LED 2GTL4-4400LM-LP035-EL14L

LIGHTING FIXTURE SCHEDULE

SYMBOL

0

 $\underbrace{\frac{A}{34.5}}^{(16)}$

AE (4) 34.5

B (1) 34.5

DESCRIPTION

2'X4' RECESSED MOUNTED LED LIGHT FIXTURE WITH ENERGY SAVING ELECTRONIC BALLAST W/ 90MIN., 1400 LUMENS BATTERY BACKUP.

E2.0

For pti

NO. E 23198 EXP. 06/30/2024

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> ELECTRICAL LIGHTING PLAN

Sheet Number

PROPOSED LIGHTING PLAN

SCALE

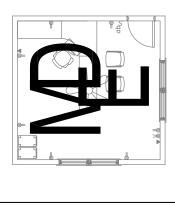
3/32" = 1'-0"

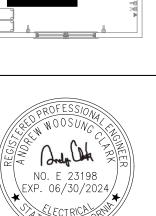
DARRYL MURRAY INC.

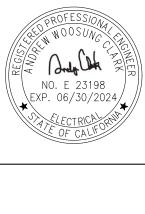
MURRAY ENGINEERING & DESIGN

MECHANICAL & ELECTRICAL & PLUMBING
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– N. AZUSA AVE. NA, CA 91791 For pti

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ISSUE: DATE DESCRIPTION

04/03/23 1ST PLAN CHECK CORR.

Drawn / Reviewed: DM/RG/AC

Issue Date 01/24/23

Sheet Name ELECTRICAL

POWER PLAN

Sheet Number

E3.0

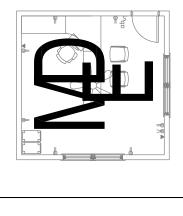
DARRYL MURRAY INC.

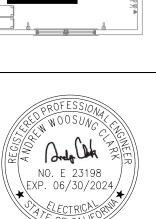
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NO. E 23198
EXP. 06/30/2024

FECTRICA PRIME

Options For Youth

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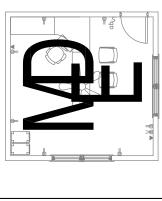
Issue Date 01/24/23
Sheet Name

ELECTRICAL ROOF PLAN

Sheet Number

E4.0

PROPOSED ELECTRICAL ROOF PLAN | SCALE | 3/32" = 1'-0"





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Sheet Name

ELECTRICAL TITLE 24 **COMPLIANCE FORMS**

Sheet Number