E - LIGHTING FIXTURE SCHEDULE										
		BAS	IS OF DESIGN	ALTERNATE 1	LAMPS					
MARK	DESCRIPTION	MANUFACTURER	CAT. NUMBER	MANUFACTURER QTY.	TYPE	MOUNTING	VOLTAGE Apparent Load	NOTES		
EBU							100 VA			
LD1							60 VA			
LR1							62 VA			
LR2							96 VA			
UC1							60 VA			

LIGHTING FIXTURE SCHEDULE NOTES:

THE BASIS OF DESIGN FOR LIGHTING FIXTURES SHALL BE AS INDICATED ON THESE DOCUMENTS. ANY SUBSTITUTIONS AND/OR ALTERNATE MANUFACTURERS SHALL BE IDENTIFIED IN THE CONTRACTORS BID FOR THE PROJECT AND SHALL BE ACCOMPANIED WITH A FULL SUBMITTAL OF ALL PROPOSED SUBSTITUTIONS. THE ARCHITECT, OWNER, AND ENGINEER MUST PROVIDE APPROVAL FOR THE SUBSTITUTIONS FOR EQUIVALENT PERFORMANCE AND AESTHETIC APPEARANCE PRIOR TO THE SUBSTITUTIONS BEING ACCEPTED. EQUIVALENT FIXTURE PERFORMANCE SHALL BE DEMONSTRATED BY LIGHTING PERFORMANCE CALCULATIONS IF REQUESTED AND SHALL INCLUDE MEETING UTILITY COMPANY INCENTIVE PROGRAMS.

(NOTES LF1 THROUGH LF10 ARE GENERAL NOTES AND APPLY TO ALL LIGHT FIXTURES). LF1. FINAL MOUNTING HEIGHT, AND LOCATION SHALL BE AS DIRECTED BY ARCHITECT.

- LF2. FLUORESCENT LIGHT FIXTURES TO BE EQUIPPED WITH ELECTRONIC BALLASTS.
- LF3. CATALOG NUMBERS INDICATED ARE FOR REFERENCE ONLY. CONTRACTOR IS RESPONSIBLE FOR FINAL FIXTURE COORDINATION AND INSTALLATION, REFER
- LF4. FLUORESCENT LAMPS SHALL BE LOW MERCURY LEVEL TYPE, MINIMUM 82 CRI, 3500°K, UNLESS SPECIFICALLY NOTED OTHERWISE.
- LF5. RECESSED FIXTURES LOCATED WITHIN INSULATED CEILING OR WALL SHALL BE "IC" RATED.
- LF6. FINAL FINISH/COLOR OF FIXTURE TO BE APPROVED IN WRITING BY ARCHITECT.
- LF7. COORDINATE LIGHTING FIXTURE INSTALLATION AND TRIM KIT WITH CEILING TYPE INDICATED ON ARCHITECTURAL DRAWINGS.
- LF8. COORDINATE TASK LIGHT FIXTURE INSTALLATION WITH CASEWORK AS DETAILED ON ARCHITECTURAL DRAWINGS.
- LF9. ALL T-8 LAMPS SHALL BE MEET THE CONSORTIUM FOR ENERGY EFFICIENCY HIGH PERFORMANCE OR REDUCED WATTAGE SPECIFICATIONS. PROVIDE WITH THE ASSOCIATED BALLAST TO MEET THE CONSORTIUM FOR ENERGY EFFICIENCY HIGH
- PERFORMANCE OR REDUCED WATTAGE SPECIFICATIONS. LF10. COORDINATE EXACT FIXTURE MOUNTING REQUIREMENTS, LAMPING AND ADDITIONAL INFORMATION WITH ARCHITECT AND LIGHTING DESIGNER PRIOR TO INSTALLATION AND

(NOTES LF11 THROUGH LF12 ARE SPECIFIC NOTES-REFER TO NOTES COLUMN FOR WHICH FIXTURE THE NOTE APPLIES).

LF11. NUMBER OF FACES, DIRECTIONAL ARROWS AND MOUNTING AS SHOWN ON THE PLAN.

LF12. U.L. WET LOCATION LISTED.

	Location: NORM	Volts: 480/277 Wye						A.I.C. Rating:					
Supply From: Mounting: Surface						nases: Nires:	_					s Type: MCB	
					'	wires:	4					Rating: 125 A	
	Enclosure: Type 1										MCB	Rating: 100 A	
	Manufacturer: SQUA	RE D											
	Series:												
СКТ	OVT. Givenit Decembring Tri Del				Δ /A)	_	B (KVA)		C (KVA)				01/7
	Circuit Description EXISTING GENERAL LTG	Trip 20 A	Poles 1	<u> </u>		(1/2)	VA) □	(/\	VA)	Poles 3	Trip	Circuit Description EXISTING MCB	CK1
3	EXISTING GENERAL LTG	20 A	1	0.0	0.0	0.0	0.0				0 A	EXISTING WICE	4
5	EXISTING LV XFMR & STAFF	20 A	1			0.0	0.0	0.0	0.0				6
7	EXISTING SPARE	20 A	1	0.0	0.0			0.0	0.0	1	20 A	EXISTING SPARE	8
9	EXISTING SPARE	20 A	1	0.0	0.0	0.0	0.0			1	20 A	EXISTING SPARE	10
11	EXISTING SPARE	20 A	1			0.0	0.0	0.0	0.0	1	20 A	EXISTING SPARE	12
13	EXISTING SPACE			0.0	0.0			0.0	0.0	1	20 A	EXISTING SPARE	14
15	EXISTING SPACE					0.0	0.0			1	20 A	EXISTING SPARE	16
17	EXISTING SPACE							0.0	0.0	1	20 A	EXISTING SPARE	18
19	EXISTING SPACE			0.0	0.0							EXISTING SPACE	20
21	EXISTING SPACE					0.0	0.0					EXISTING SPACE	22
23	EXISTING SPACE							0.0	0.0			EXISTING SPACE	24
25	EXISTING SPACE			0.0	0.0							EXISTING SPACE	26
27	EXISTING SPACE					0.0	0.0					EXISTING SPACE	28
29	EXISTING SPACE							0.0	0.0			EXISTING SPACE	30
31	EXISTING SPACE			0.0	0.0							EXISTING SPACE	32
33	EXISTING SPACE					0.0	0.0					EXISTING SPACE	34
35	EXISTING SPACE							0.0	0.0			EXISTING SPACE	36
37	EXISTING N22S1 VIA XFMR	100 A	3	0.0	0.0							EXISTING SPACE	38
39						0.0	0.0					EXISTING SPACE	40
41								0.0	0.0			EXISTING SPACE	42

		Existing Brand	h Pa	ınel:	CR	22	S1 -	2							
	Location: EMER ELEC 2050-MA Supply From: Mounting: Surface Enclosure: Type 1 Manufacturer: SQUARE D Series: E 2					Ph	Volts: nases: Wires:		08 Wye	Э	A.I.C. Rating: Mains Type: MLO Mains Rating: 175 A				
KT	СКТ	Circuit Description	Trip	Poles	, (K)		B (KVA)		C (KVA)		Poles	Trip	Circuit Description	CK	
2	1	EXISTING SPARE	20 A	1	0.0	0.0			,		1	20 A	EXISTING RCPT RM 2831	2	
4	3	EXISTING SPARE	20 A	1			0.0	0.0			1	20 A	EXISTING RCPT RM 2831	4	
6	5	EXISTING SPARE	20 A	1					0.0	0.0	1	20 A	EXISTING RCPT RM 2831	6	
8	7	EXISTING SPARE	20 A	1	0.0	0.0					1	20 A	EXISTING SPARE	8	
10	9	EXISTING RM 2827 & 29 LTG	20 A	1			0.0	0.0			1	20 A	EXISTING SPARE	10	
12	11	EXISTING RM 2821 & 25 LTG	20 A	1					0.0	0.0	1	20 A	EXISTING SPARE	12	
14	13	EXISTING RM 2817 & 19 LTG	20 A	1	0.0	0.0					1	20 A	EXISTING SPARE	14	
16	15	EXISTING RM 2815 LTG	20 A	1			0.0	0.0			1	20 A	EXISTING SPARE	16	
18	17	EXISTING SPARE	20 A	1					0.0	0.0	1	20 A	EXISTING SPARE	18	
20	19	EXISTING SPARE	20 A	1	0.0	0.0					1	20 A	EXISTING SPARE	20	
22	21	EXISTING SPARE	20 A	1			0.0	0.0			1	20 A	EXISTING SPARE	22	
24	23	EXISTING SPARE	20 A	1					0.0	0.0	1	20 A	EXISTING SPARE	24	
26	25	EXISTING SPARE	20 A	1	0.0	0.0					1	20 A	EXISTING SPARE	26	
28	27	EXISTING SPARE	20 A	1			0.0	0.0			1	20 A	EXISTING SPARE	28	
30	29	EXISTING SPARE	20 A	1					0.0	0.0	1	20 A	EXISTING SPARE	30	
32	31	EXISTING SPARE	20 A	1	0.0	0.0					1	20 A	EXISTING LOAD	32	
34	33	EXISTING SPARE	20 A	1			0.0	0.0			1	20 A	EXISTING SPARE	34	
36	35	EXISTING SPARE	20 A	1					0.0	0.0	1	20 A	EXISTING SPARE	36	
38	37	EXISTING SPARE	20 A	1	0.0	0.0					1	20 A	EXISTING LOAD	38	
10	39	EXISTING SPARE	20 A	1			0.0	0.0			1	20 A	EXISTING LOAD	40	
12	41	EXISTING SPARE	20 A	1					0.0	0.0	1	20 A	EXISTING SPARE	42	

	Location: NORM E				120/2	08 Wy	е	A.I.C. Rating:						
Supply From: Mounting: Surface Enclosure: Type 1 Manufacturer: Series:						nases: Wires:	•			Mains Type: MCB Mains Rating: 175 A				
СКТ	Circuit Description	Trip	Poles	, (K)	A /A)	_	B VA)		C VA)	Poles	Trip	Circuit Description	СКТ	
1	EXISTING RCPT RM 2821	20 A	1	0.0	0.0			`		1	20 A	EXISTING RCPT RM 2821	2	
3	EXISTING RCPT RM 2825	20 A	1			0.0	0.0			1	20 A	EXISITNG RCPT RM 2819	4	
5	EXISTING RCPT RM 2817	20 A	1					0.0	0.0	1	20 A	EXISTING RCPT RM 2817	6	
7	EXISTING RCPT RM 2815	20 A	1	0.0	0.0					1	20 A	EXISTING RCPT RM 2815	8	
9	EXISTING J-BOX ELEV LOBBY	20 A	1			0.0	0.0			1	20 A	EXISTING RCPT C SECTION	10	
11	EXISTING RCPT LUNCH RM	20 A	1					0.0	0.0	1	20 A	EXISTING RCPT C SECTION	12	
13	EXISTING RM 2831 TELEMETRY	20 A	1	0.0	0.0					1	20 A	EXISTING SPARE	14	
15	EXISTING RM 2831 TELEMETRY	20 A	1			0.0	0.0			1	20 A	EXISTING SPARE	16	
17	EXISTING RCPT LUNCH RM	20 A	1					0.0	0.0	1	20 A	EXISTING SPARE	18	
19	EXISTING RCPT RM 2809	20 A	1	0.0	0.0					1	20 A	EXISTING SPARE	20	
21	EXISTING SPACE					0.0	0.0			1	20 A	EXISTING SPARE	22	
23	EIXSITNG LOAD	20 A	1					0.0	0.0	1	20 A	EXISTING SPARE	24	
25	EXISTING SPARE	20 A	1	0.0	0.0					1	20 A	EXISTING SPARE	26	
27	EXISTING SPARE	20 A	1			0.0	0.0			1	20 A	EXISTING SPARE	28	
29	EXISTING SPARE	20 A	1					0.0	0.0	1	20 A	EXISTING SPARE	30	
31	EXISTING SPARE	20 A	1	0.0	0.0					1	20 A	EXISTING SPARE	32	
33	EXISTING SPARE	20 A	1			0.0	0.0			1	20 A	EXISTING SPARE	34	
35	EXISTING SPARE	20 A	1					0.0	0.0	1	20 A	EXISTING SPARE	36	
37	EXISTING SPARE	20 A	1	0.0	0.0					1	20 A	EXISTING SPARE	38	
39	EXISTING SPARE	20 A	1			0.0	0.0			1	20 A	EXISTING SPARE	40	
41	EXISTING SPARE	20 A	1					0.0	0.0	1	20 A	EXISTING SPARE	42	

EMERGENCY ELEC CORRIDOR 209 125A 120V ISOLATION PANEL 7.5kVA 2#8, 1#10G , 3/4"C.

POWER RISER KEYED NOTES

1) PROVIDE NEW 35A-1P CIRCUIT BREAKER TO SERVE NEW ISOLATION PANELBOARD ISP-3. NEW CIRCUIT BREAKER SHALL MATCH EXISTING PANELBOARD IN ALL RESPECTS INCLUDING SHORT CIRCUIT RATING (KAIC).

L-----

4 POWER RISER DIAGRAM E500 12" = 1'-0"

TYPICAL PANELBOARD NOTES

1 POLE CIRCUIT BREAKER INSTALLED.

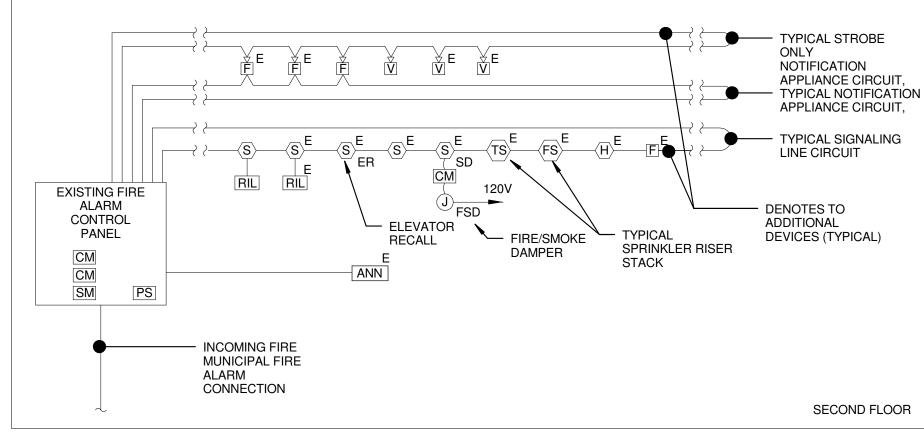
- 1. PROVIDE SUB-FEED LUGS FOR MULTI-SECTION PANELS.
- FURNISH ALL PANELBOARDS FULLY POPULATED WITH BRANCH CIRCUIT BREAKERS, THAT IS, ALL SPACES SHALL HAVE A 20AMP,
- PANEL FACE PLATES SHALL BE ATTACHED TO BACK BOX WITH FULL-LENGTH PIANO HINGE AND PROVIDED WITH LOCKING DOOR
- PANELBOARDS CONTAINING MAIN SERVICE DISCONNECT MUST BE LISTED FOR THE USE.
- 5. SERIES RATED INTERRUPTING CAPACITY IS NOT ALLOWED.
- 6. ALL CIRCUIT BREAKERS SHALL BE BOLT-ON TYPE AND HACR

FIRE ALARM SYSTEMNOTES:

SPLICES WILL BE ALLOWED.

SYSTEM UPON COMPLETION WORK.

- FA1. REFER TO ELECTRICAL DRAWINGS FOR EXACT QUANTITIES OF FIRE ALARM DEVICES. FA2. ELECTRICAL CONTRACTOR SHALL PROGRAM, TEST AND CERTIFY FIRE ALARM
- FA3. FIRE ALARM SYSTEM AND INSTALLATION SHALL COMPLY WITH APPLICABLE REGULATIONS OF NFPA #72, LIFE-SAFETY CODE #101, NATIONAL ELECTRIC CODE
- AND LOCAL FIRE DEPARTMENT. FA4. FIRE ALARM WIRING TERMINATIONS SHALL BE MADE ON TERMINAL BLOCKS, NO
- FA5. ELECTRICAL CONTRACTOR SHALL FIELD CONFORM THAT ENOUGH BATTERY CAPACITY EXISTS FOR THE FIRE ALARM SYSTEM TO OPERATE FOR 60 HOURS IN NON-ALARM CONDITION AND CAPABLE OF OPERATING IN ALARM FOR 15 MINUTES AT THE END OF THE 60 HOUR PERIOD. PROVIDE BATTERY AMP-HOUR CALCULATIONS, RISERS AND WIRING SCHEMATICS WITH SUBMISSION.
- FA6. SYSTEM MANUFACTURER SHALL PROVIDE INSTALLATION WIRING DIAGRAM OF THE FIRE ALARM SYSTEM, AND VERIFICATION CERTIFICATE OF SYSTEM OPERATING PRIOR TO FINAL ACCEPTANCE.
- FA7. ALL FIELD WIRING AND EQUIPMENT SHALL BE AS REQUIRED PER MANUFACTURERS WIRING DIAGRAMS.
- FA8. ALL FIRE ALARM WIRING SHALL BE CLASS A (OUTGOING AND RETURNING CIRCUITS SHALL NOT BE PHYSICALLY INSTALLED IN THE SAME RACEWAY), FAULT ISOLATOR MODULES SHALL BE INSTALLED IN THE FACP. ALSO, FAULT ISOLATOR MODULES WILL BE PROVIDED FOR EVERY 18 ADDRESSABLE FIRE ALARM DEVICES. NOTIFICATION DEVICE CIRCUITS SHALL BE INSTALLED IN SEPARATE RACEWAYS FROM SIGNALING LINE CIRCUITS.
- FA9. CEILING MOUNTED SMOKE DETECTORS SHALL NOT BE LOCATED CLOSER THAN 3 FT. FROM AIR SUPPLY FROM AIR SUPPLY DIFFUSERS.



PARTIAL FIRE ALARM RISER DIAGRAM SCALE: N.T.S.

BRANCH CIR	CUIT SCHEDULE		COP	PER FEED	ER SCHEDULE		
CIRCUIT BREAKER	CONDUCTORS	FEEDER SYMBOL	CONDUCTORS (3-PHASE, 3-WIRE) WITH GROUND	RACEWAY SIZE CONDUIT	CONDUCTORS (3-PHASE, 4-WIRE) WITH GROUND	RACEWAY SIZE CONDUIT	NOMINA AMPER RATINO
120 VOLT & 277 VOL	T 1PH, 2W. CIRCUITS	1	3#4 & 1#8G.	1 1/4"			
20A-1P	2#12 & 1#12G - 3/4"C.	2	3#4 & 1#6G.	1 1/4	4#4 & 1#8G.	1 1/4"	70
30A-1P	2#10 & 1#10G - 3/4"C.	3	3#3 & 1#8G.	1 1/4"	4#4 & 1#0G.	1 1/-	
40A-1P	2#8 & 1#10G - 3/4"C.	4	one a treat.		4#3 & 1#8G.	1 1/4"	80
50A-1P	2#6 & 1#10G - 3/4"C.	5	3#2 & 1#8G.	1 1/4"			
60A-1P	2#4 & 1#10G - 3/4"C.	6			4#2 & 1#8G.	1 1/2"	90
		7	3#1 & 1#8G.	1 1/2"			100
208 VOLT & 480 VOL	T 1PH, 2W. CIRCUITS	8			4#1 & 1#8G.	1 1/2"	100
20A-2P/2W	2#12 & 1#12G - 3/4"C.	9	3#1 & 1#6G.	1 1/2"			125
30A-2P/2W	2#10 & 1#10G - 3/4"C.	10			4#1 & 1#6G.	1-1/2"	125
40A-2P/2W	2#8 & 1#10G - 3/4"C.	11	3#1/0 & 1#6G.	2"			150
		12			4#1/0 & 1#6G.	2"	150
50A-2P/2W	2#6 & 1#10G - 3/4"C.	13	3#2/0 & 1#6G.	2"			175
60A-2P/2W	2#4 & 1#10G - 3/4"C.	14			4#2/0 & 1#6G.	2"	
208 VOLT & 480 VOLT 3PH, 3W. CIRCUITS		15	3#3/0 & 1#6G.	2"			200
20A-3P/3W	3#12 & 1#12G - 3/4"C.	16			4#3/0 & 1#6G.	2"	
	0.114.0.0.4.114.0.0.0.0.4.110	17	3#4/0 & 1#4G.	2 1/2"		2.1/20	225
30A-3P/3W	3#10 & 1#10G - 3/4"C.	18		0.4 (01)	4#4/0 & 1#4G.	2 1/2"	
40A-3P/3W	3#8 & 1#10G - 3/4"C.	19	3#250 KCMIL & 1#4G.	2 1/2"	4 WOED 14 ON WILL ON A WILL ON	0.4/0!	250
50A-3P/3W	3#6 & 1#10G - 3/4"C.	20	0,1050,100,011,00,4,140	3"	4#250 KCMIL & 1#4G.	2-1/2"	
60A-3P/3W	3#4 & 1#10G - 1"C.	21	3#350 KCMIL & 1#4G.	3	4#050 KONIII 0 4#40	3"	300
ANCH CIRCUIT SIZE I	NOTES:	23	3#500 KCMIL & 1#3G.	4"	4#350 KCMIL & 1#4G.	3	
	SIZES ARE FOR COPPER	24	3#300 KGWIL & 1#3G.	7	4#500 KCMIL & 1#3G.	4"	350
	CONDUCTORS NEC TABLE 310.15.(B).(16) (2011); 60-DEGREE C UP TO 100A; 75		3#600 KCMIL & 1#3G.	4"	4#300 NOME & 1#30.	•	
CONDUIT SIZES AR	RE FOR COPPER	25 26	Choos Rowle a Thod.		4#600 KCMIL & 1#3G.	4"	400
	TH THWN-2 INSULATION ABLE C1 IN ANNEX C.	27	6#250 KCMIL & 2#2G.	(2)2-1/2"			
CONDUIT AND CAB	BLE SIZES SHALL BE PER	28			8#250 KCMIL & 2#2G.	(2)2-1/2"	500
	LESS NOTED OTHERWISE ANS AND DRAWINGS.	29	6#350 KCMIL & 2#1G.	(2)3"			
	NS FOR ACCEPTABLE	30			8#350 KCMIL & 2#1G.	(2)3"	600
CONDUCTOR TYPE	:5.	31	9#300 KCMIL & 3#1/0G.	(3)3"			
		32			12#300 KCMIL & 3#1/0G.	(3)3"	800
		33	9#400 KCMIL & 3#2/0G.	(3)3"			1000
		34			12#400 KCMIL & 3#2/0G.	(3)3"	1000

FEEDER SIZE NOTES:

35 9#600 KCMIL & 3#3/0G.

37 12#600 KCMIL & 4#4/0G.

1. ALL CONDUCTOR SIZES ARE FOR COPPER CONDUCTORS NEC TABLE 310.15.(B).(16)(2011); 60-DEGREE C UP TO 100A; 75 DEGREE C OVER 100A.

12#600 KCMIL & 3#3/0G.

16#600 KCMIL & 4#4/0G.

(3)4"

(4)4"

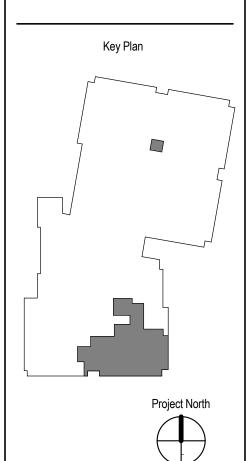
1600

2. CONDUIT SIZES ARE FOR COPPER CONDUCTORS WITH THWN-2 INSULATION IN EMT PER NEC TABLE C1 IN ANNEX C.

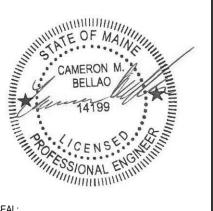
(3)4"

- 3. 600KCMIL FEEDERS SHALL BE PROVIDED WITH MAC ADAPTERS AS REQUIRED TO COORDINATE WITH BREAKER LUG SIZES.
- 4. SEE SPECIFICATIONS FOR ACCEPTABLE CONDUCTOR TYPES.









PROJECT NUMBER: SHEET TITLE AND NUMBER:

ELECTRICAL RISERS AND SCHEDULES