

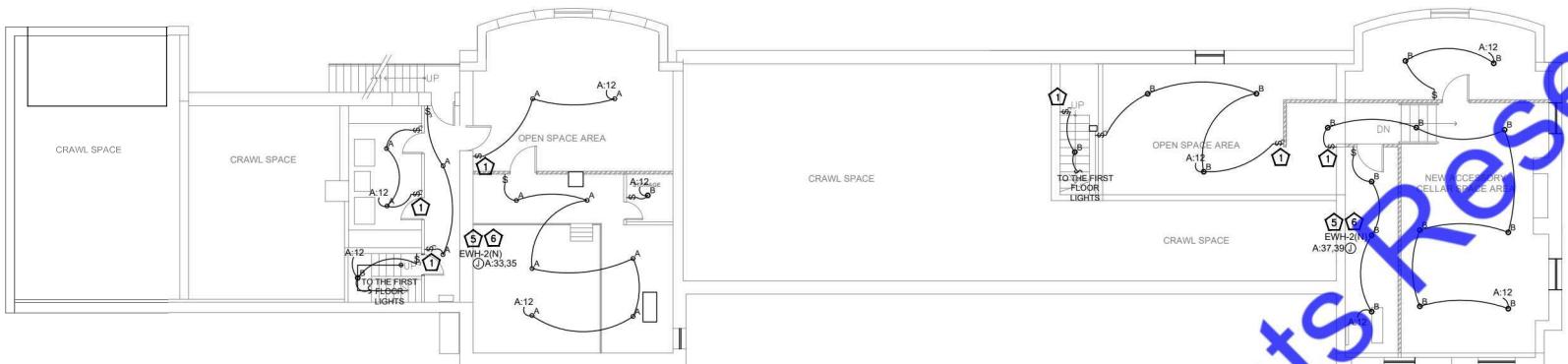
- A. E.C SHALL COORDINATE WITH ARCHITECT/OWNER FOR THE FINAL SELECTION, QUANTITY AND MOUNTING DETAILS OF LIGHTING FIXTURE. FOR MORE DETAILS REFER TO LIGHT FIXTURES SCHEDULE IN THE PLAN.
- B. SWITCHES LOCATION SHOWN IN THE DRAWINGS ARE DIAGRAMMATIC. FOR ACTUAL LOCATION AND MOUNTING HEIGHTS OF SWITCHES REFER TO ARCHITECTURAL PLANS.
- C. E.C TO COORDINATE EXACT LOCATION AND MOUNTING HEIGHTS OF FIXTURES WITH ARCHITECT/OWNER.
- D. REFER TO DWG.E-001.00 FOR ELECTRICAL GENERAL NOTES, SYMBOL LIST & ABBREVIATIONS.
- E. REFER TO DWG. E-002.00 & E-003.00 FOR ELECTRICAL SPECIFICATIONS.
- F. CIRCUITING FOR LIGHTING FIXTURES IN ROOMS/AREA WITH SWITCHES SHALL BE CONTROLLED BY DESIGNATED SWITCHES. IF SPECIFIC DESIGNATION IS NOT INDICATED, ALL LIGHTING FIXTURES IN ROOM/AREA SHALL BE CONTROLLED BY THE SWITCH INDICATED.
- G. ALL BRANCH CIRCUITS LOCATED IN THE DWELLING UNIT SHALL BE CIRCUITED TO RELEVANT UNITS PANEL, SYMBOLS INDICATED, U.O.N.
- H. NOT LESS THAN 75 PERCENT OF AMPS IN PERMANENTLY INSTALLED LIGHTING FIXTURE SHALL BE HIGH-EFFICACY OR NOT LESS THAN 75 PERCENT OF THE PERMANENTLY INSTALLED LIGHTING FIXTURE SHALL CONTAIN ONLY HIGH-EFFICACY LAMPS.

ELECTRICAL POWER PLAN KEY NOTES:

- ① E.C. SHALL COORDINATE THE EXACT LOCATION OF THE SWITCHES WITH ARCHITECT/OWNER IN FIELD.
- ② NEW EXHAUST FANS INTERLOCKED WITH LIGHT SWITCH. SEE MECHANICAL DRAWINGS FOR MORE INFORMATION AND SPECIFICATIONS.
- ③ INTERCONNECT EXHAUST FAN EF-10(N) WITH THE CO/NO2 SENSOR WITH CONTROLLER IN SPACE. E.C SHALL COORDINATE WITH THE MECHANICAL CONTRACTOR FOR ADDITIONAL INFORMATION.
- ④ EXTERIOR LIGHT FIXTURES SHALL BE CONTROLLED VIA PHOTOCELL, E.C SHALL COORDINATE EXACT LOCATION AND MOUNTING HEIGHT IN THE FIELD.
- ⑤ ELECTRICAL CONTRACTOR SHALL COORDINATE FOR EXACT LOCATION OF MECHANICAL/PLUMBING EQUIPMENTS WITH MECHANICAL/PLUMBING DRAWINGS.
- ⑥ ELECTRICAL CONTRACTOR SHALL COORDINATE DISCONNECT AND FUSE REQUIREMENT FOR MECHANICAL/PLUMBING UNIT WITH MECHANICAL/PLUMBING CONTRACTOR AND EQUIPMENT MANUFACTURER PRIOR TO ROUGH-IN AND PROVIDE AS REQUIRED. LOCATE AS REQUIRED TO MAINTAIN NEC CLEARANCES.

CELLAR FLOOR LIGHTING PLAN

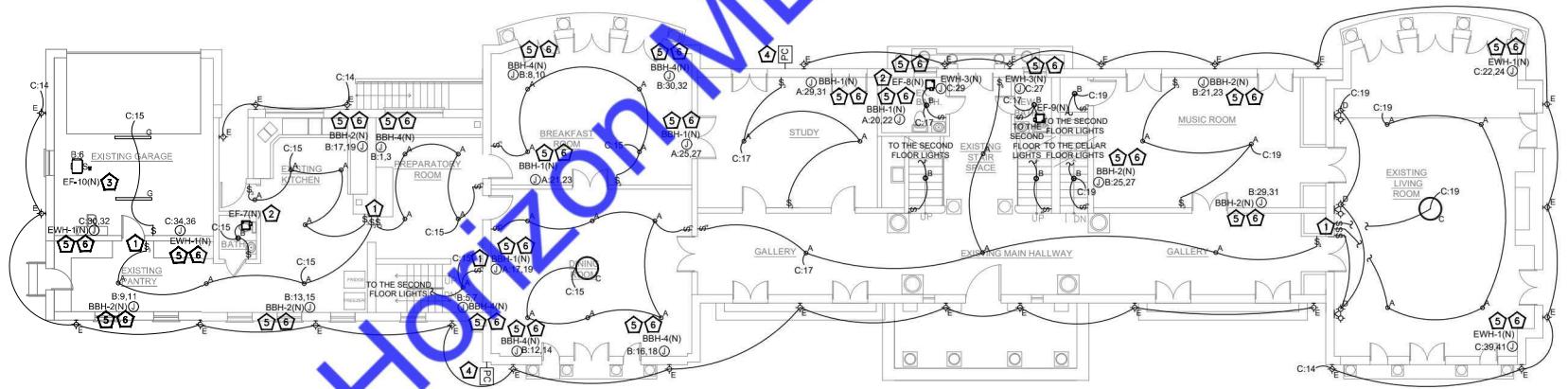
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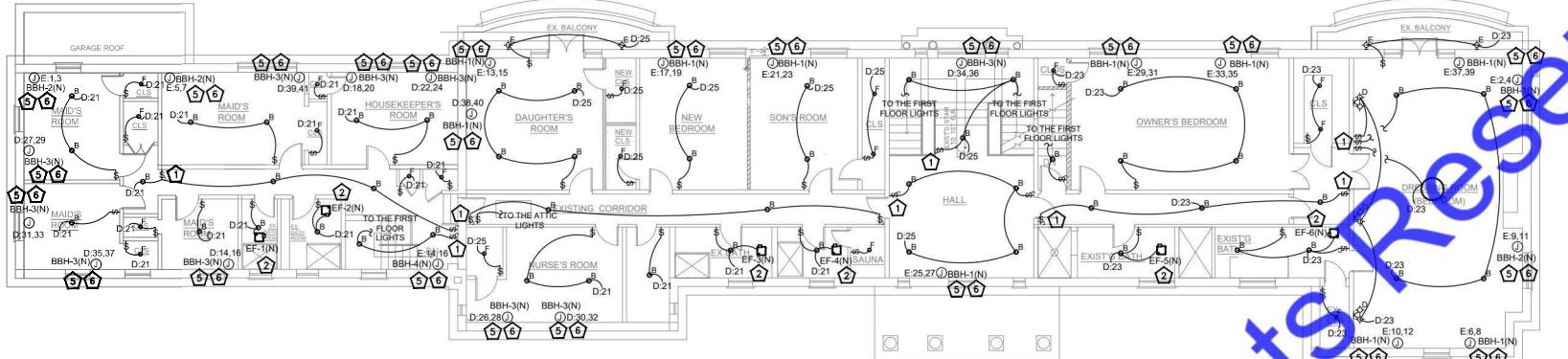


LIGHT FIXTURE SCHEDULE				
TAG	MANUFACTURER	DESCRIPTION	MODEL NUMBER	WATTAGE
A	PROLIGHTS	ECLPENDANTSVW_BLACK	ECLPENDANTSVW_4000K_60DEG	80.5 W
B	PROLIGHTS	ECLPENDANTJRFC_WHITE_BRACKET	ECLPENDANTJRFC_GREEN_60DEG	34.3 W
C	FRANKLITE	MONDRAN 12 LIGHT FITTING	FL2450-12	48.6 W
D	FRANKLITE	TAFFETA 2LT BRACKET	FL2155/2	8.2 W
F	MODULAR LIGHTING INSTRUMENTS	THIMBLE 74 LED DE 2700K MEDIUM BLACK STRUC	11620032	9.5 W
E	LEDSC4	MAX BIG SINGLE EMISSION	AT19-18X953OSZ5	19.7 W
G	LENA LIGHTING	TUBA IP56 PC 1220MM 8200LM 840 LS2(1F) 120D IK10 46W	772528	46 W

FIRST FLOOR LIGHTING PLAN

SCALE: 1/8"=1'-0"



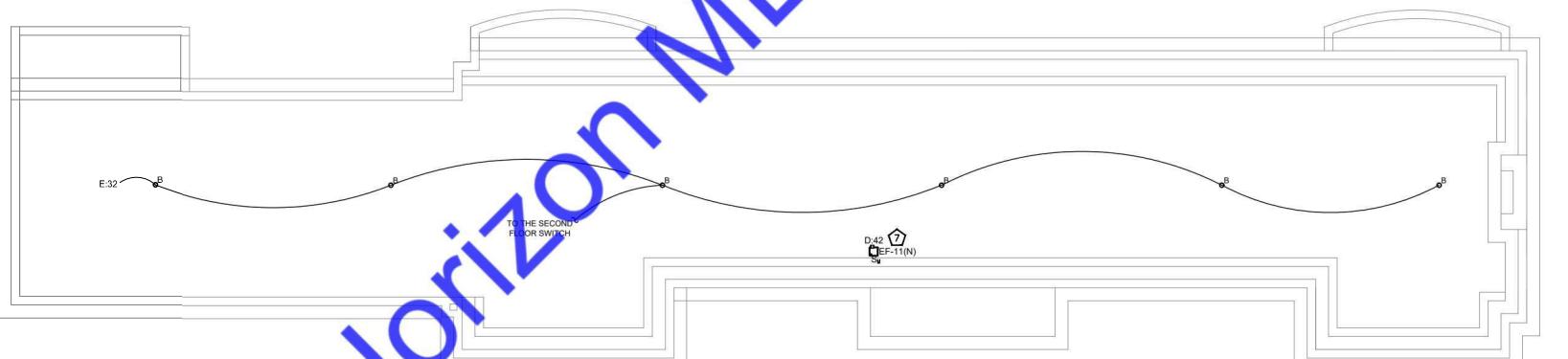


SECOND FLOOR LIGHTING PLAN

SCALE: 1/8"=1'-0"

- A. E.C. SHALL COORDINATE WITH ARCHITECT/OWNER FOR THE FINAL SELECTION, QUANTITY AND MOUNTING DETAILS OF LIGHTING FIXTURE. FOR MORE DETAILS REFER TO LIGHT FIXTURE SCHEDULE IN THE PLAN.
 - B. SWITCHES LOCATION SHOWN IN THE DRAWINGS ARE DIAGRAMMATIC. FOR ACTUAL LOCATION AND MOUNTING HEIGHTS OF SWITCHES REFER TO ARCHITECTURAL PLANS.
 - C. E.C. TO COORDINATE EXACT LOCATION AND MOUNTING HEIGHTS OF FIXTURES WITH ARCHITECT/OWNER.
 - D. REFER TO DWG. E-001.00 FOR ELECTRICAL GENERAL NOTES, SYMBOL LIST & ABBREVIATIONS.
 - E. REFER TO DWG. E-002.00 & E-003.00 FOR ELECTRICAL SPECIFICATIONS.
 - F. CIRCUITING FOR LIGHTING FIXTURES IN ROOMS/AREA WITH SWITCHES SHALL BE CONTROLLED BY DESIGNATED SWITCHES. IF SPECIFIC DESIGNATION IS NOT INDICATED, ALL LIGHTING FIXTURES IN ROOM/AREA SHALL BE CONTROLLED BY THE DESIGNATED SWITCH.
 - G. ALL BRANCH CIRCUITS LOCATED IN THE DWELLING UNIT SHALL BE CIRCUITED TO RESPECTIVE UNITS PANEL, CIRCUIT NUMBERS INDICATED, U.O.N.
 - H. NOT LESS THAN 75 PERCENT OF AMPS IN PERMANENTLY INSTALLED LIGHTING FIXTURE SHALL BE HIGH-EFFICACY OR NOT LESS THAN 75 PERCENT OF THE PERMANENTLY INSTALLED LIGHTING FIXTURE SHALL CONTAIN ONLY HIGH-EFFICACY LAMPS.
- ELECTRICAL POWER PLAN KEY NOTES:**
- ① E.C. SHALL COORDINATE THE EXACT LOCATION OF THE SWITCHES WITH ARCHITECT/OWNER IN FIELD.
 - ② NEW EXHAUST FANS INTERLOCKED WITH LIGHT SWITCH. SEE MECHANICAL DRAWINGS FOR MORE INFORMATION AND SPECIFICATIONS.
 - ③ NOT USED.
 - ④ EXTERIOR LIGHT FIXTURES SHALL BE CONTROLLED VIA PHOTOCELL. E.C. SHALL COORDINATE EXACT LOCATION AND MOUNTING HEIGHT IN THE FIELD.
 - ⑤ ELECTRICAL CONTRACTOR SHALL COORDINATE FOR EXACT LOCATION OF MECHANICAL/PLUMBING EQUIPMENT WITH MECHANICAL/PLUMBING DRAWINGS.
 - ⑥ ELECTRICAL CONTRACTOR SHALL COORDINATE FOR EXACT LOCATION OF MECHANICAL/PLUMBING EQUIPMENT WITH MECHANICAL/PLUMBING DRAWINGS.
 - ⑦ INTERCONNECT EXHAUST FAN EF-11(N) WITH THE THERMOSTAT FOR THE SAUNA. E.C. SHALL COORDINATE WITH THE MECHANICAL DRAWING FOR ADDITIONAL INFO.

LIGHT FIXTURE SCHEDULE				
TAG	MANUFACTURER	DESCRIPTION	MODEL NUMBER	WATTAGE
A	PROLIGHTS	ECLPENDANTSVW_BLACK	ECLPENDANTSVW_4000K_60DEG	60.5 W
B	PROLIGHTS	ECLPENDANTJRFC_WHITE_BRACKET	ECLPENDANTJRFC_GREEN_60DFC	34.3 W
C	FRANKLITE	MONDRIAN 12 LIGHT FITTING	FL2450-12	48.6 W
D	FRANKLITE	TAFFETA 2LT BRACKET	FL2155/2	8.2 W
F	MODULAR LIGHTING INSTRUMENTS	THIMBLE 74 LED DE 2700K MEDIUM BLACK STRUC	11620032	8.5 W
E	LEDA SC4	MAX BIG SINGLE EMISSION	AT19-18X9S3OSZ	19.7 W
G	LENA LIGHTING	TUBA IP6K PC 1220MM 6200LM 840 LS2 (1F) 1200 IK10 46W	772528	46 W



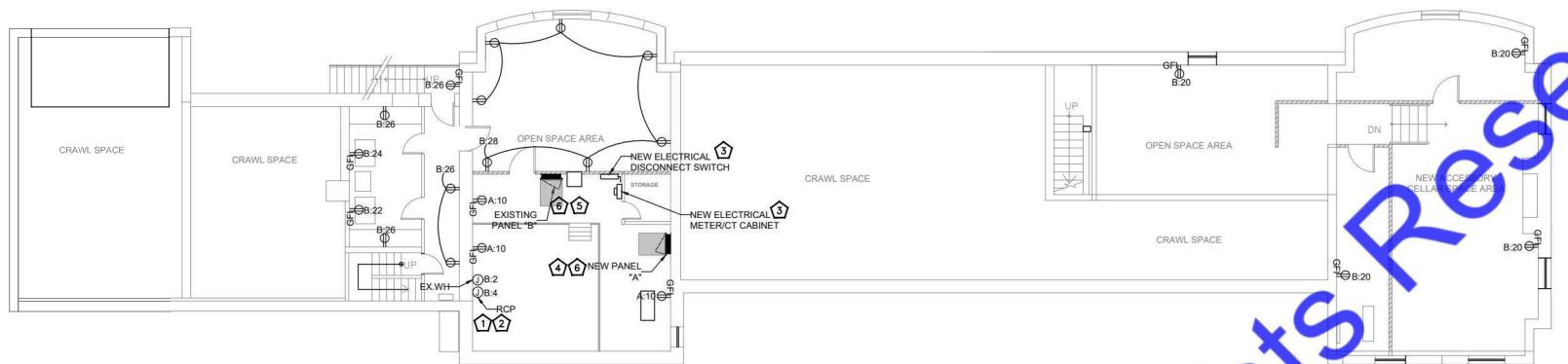
ATTIC FLOOR LIGHTING PLAN

SCALE: 1/8"=1'-0"



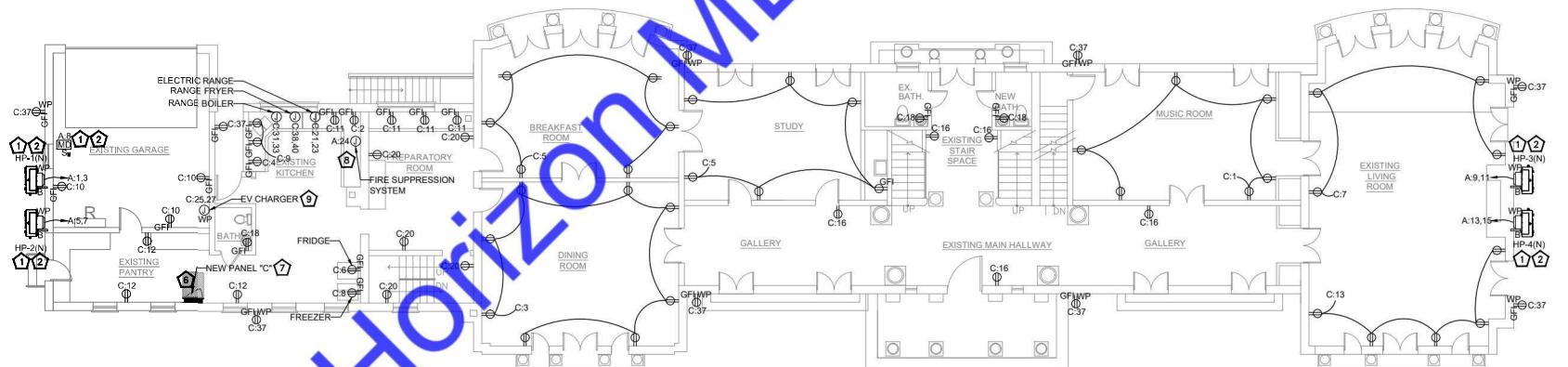
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- A. COORDINATE WITH THE ARCHITECT/OWNER FOR FINAL LOCATION OF A OUTLET & MOUNTING HEIGHTS.
- B. E.C SHALL COORDINATE WITH ARCHITECT/OWNER/EQUIPMENT MANUFACTURER FOR FINAL ELECTRICAL REQUIREMENT INCLUDING RECEPTACLE, PLUG, CORD, DIRECT CONNECTION, CABLE, BREAKER ETC. OF EQUIPMENT IN FIELD AND PROVIDE THE ELECTRICAL CONNECTION PER MANUFACTURER RECOMMENDATIONS IN FIELD. BASE BID ACCORDINGLY.
- C. E.C SHALL PROVIDE THE ELECTRICAL OUTLET/RECEPTACLE DATA CONNECTION BASED ON FINAL EQUIPMENT SELECTION.
- D. FINAL CONDUCTABLE ROUTING SHALL BE DETERMINED IN FIELD, AND PRIOR TO THE COMMENCEMENT OF WORK, COORDINATE WITH OTHER TRADE CONTRACTORS AND THE OCCUPANT.
- E. THE RECEPTACLES MARKED AS GFI ON THE FLOOR PLAN INDICATES THAT THE RECEPTACLES SHALL BE GFI PROTECTED. E.C SHALL PROVIDE GFI BREAKER IN PANEL IF GFI RECEPTACLES IS NOT READILY ACCESSIBLE OR FOR THE RECEPTACLE OTHER THAN 20A.
- F. THE EC MUST FIELD-VERIFY ALL DIMENSIONS AND EXISTING CONDITIONS PRIOR TO INSTALLATION.
- G. ALL RECEPTACLES IN HABITABLE ROOMS MUST BE ARC-FAULT CIRCUIT-INTERRUPTER (AFCI) PROTECTED.
- H. ALL REQUIRED 125V RECEPTACLES MUST BE OF THE TAMPER-RESISTANT (TR) TYPE.
- I. ALL MATERIALS AND EQUIPMENT USED MUST BE NEW, UL LISTED, AND PROPERLY LABELED.
- 1** ELECTRICAL CONTRACTOR SHALL COORDINATE FOR EXACT LOCATION OF MECHANICAL/PLUMBING EQUIPMENTS WITH MECHANICAL/PLUMBING DRAWINGS.
- 2** ELECTRICAL CONTRACTOR SHALL COORDINATE DISCONNECT AND FUSE REQUIREMENT FOR MECHANICAL/PLUMBING UNIT WITH MECHANICAL/PLUMBING CONTRACTOR AND EQUIPMENT MANUFACTURER PRIOR TO ROUGH-IN AND PROVIDE AS REQUIRED. LOCATE AS REQUIRED TO MAINTAIN NEC CLEARANCES.
- 3** NEW 600A, 120/208V, 3-PHASE, 4-WIRE ELECTRICAL METER, CT CABINET & THE DISCONNECT SWITCH FOR THE PROJECT SPACE. E.C. SHALL COORDINATE WITH OWNER/UTILITY COMPANY FOR LOCATION.
- 4** NEW 600AMP (MCB), 120/208V, 3-PHASE, 4-WIRE ELECTRICAL PANEL "A" FOR THE PROJECT SPACE. E.C. SHALL COORDINATE WITH ARCHITECT/OWNER FOR EXACT LOCATION IN FIELD.
- 5** EXISTING 150AMP(L.O), 120/208V, 3-PHASE, 4-WIRE ELECTRICAL PANEL "B"(NAME TO BE VERIFY ON FIELD) TO REMAIN. E.C. TO FIELD VERIFY THE EXACT SIZE, LOCATION & OPERABLE CONDITION OF THE PANEL. REPLACE IF INOPERABLE. BASE BID ACCORDINGLY.
- 6** E.C. SHALL VERIFY/PERFORM THE INSTALLATION OF ELECTRICAL PANELS IN COMPLIANCE WITH NEC ARTICLE 110.28(A) AND (B). E.C. SHALL FIELD VERIFY THAT THE PANELS ARE UNOBSTRUCTED AND THE AREA WHERE THE PANELS ARE PLACED SHALL NOT BE USED AS A STORAGE SPACE.
- 7** NEW 200AMP (MCB), 120/208V, 3-PHASE, 4-WIRE ELECTRICAL PANEL "C" FOR THE PROJECT SPACE. E.C. SHALL COORDINATE WITH ARCHITECT/OWNER FOR EXACT LOCATION IN FIELD.
- 8** ELECTRICAL CONTRACTOR TO COORDINATE WITH FIRE SUPPRESSION SYSTEM VENDOR FOR ITS POWER REQUIREMENT AND OTHER DETAILS BEFORE COMMENCING ANY WORK. BASE BID ACCORDINGLY.
- 9** PROVIDE OUTLET FOR ELECTRIC VEHICLE CHARGER. E.C SHALL COORDINATE WITH THE OWNER/ARCHITECT FOR THE EXACT REQUIREMENT LOCATION OF THE CHARGER IN THE FIELD. BASE BID ACCORDINGLY.



CELLAR FLOOR POWER PLAN

SCALE: 1/8"=1'-0"

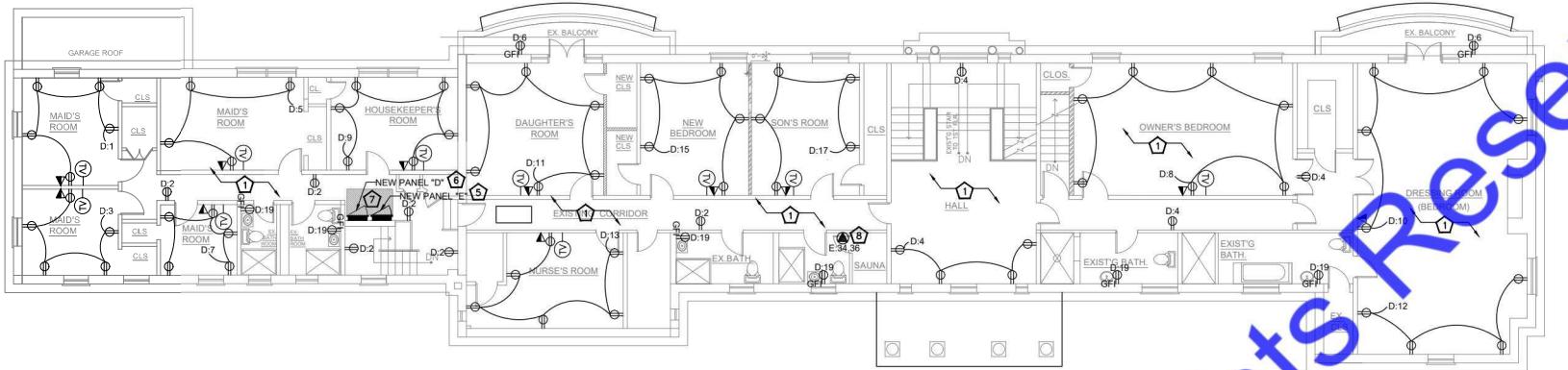


- A. COORDINATE WITH THE ARCHITECT/OWNER FOR FINAL LOCATION OF A OUTLET & MOUNTING HEIGHTS.
- B. E.C. SHALL COORDINATE WITH ARCHITECT/OWNER/EQUIPMENT MANUFACTURER FOR FINAL ELECTRICAL REQUIREMENT INCLUDING RECEPTACLE, PLUG, CORD, DIRECT CONNECTION, CABLE, BREAKER ETC. OF EQUIPMENT IN FIELD AND PROVIDE THE ELECTRICAL CONNECTION PER MANUFACTURER RECOMMENDATIONS IN FIELD. BASE BID ACCORDINGLY.
- C. E.C. SHALL PROVIDE THE ELECTRICAL OUTLET/RECEPTACLE DATA CONNECTION BASED ON FINAL EQUIPMENT SELECTION.
- D. FINAL CONDUCTIBLE ROUTING SHALL BE DETERMINED IN FIELD, AND PRIOR TO THE COMMENCEMENT OF WORK, COORDINATE WITH OTHER TRADE CONTRACTORS AND THE OCCUPANT.
- E. THE RECEPTACLES MARKED AS GFI ON THE FLOOR PLAN INDICATES THAT THE RECEPTACLES SHALL BE GFI PROTECTED. E.C. SHALL PROVIDE GFI BREAKER IN PANEL IF GFI RECEPTACLES IS NOT READILY ACCESSIBLE OR FOR THE RECEPTACLE OTHER THAN 20A.
- F. THE EC MUST FIELD-VERIFY ALL DIMENSIONS AND EXISTING CONDITIONS PRIOR TO INSTALLATION.
- G. ALL RECEPTACLES IN HABITABLE ROOMS MUST BE ARC-FAULT CIRCUIT-INTERRUPTER (AFCI) PROTECTED.
- H. ALL REQUIRED 125V RECEPTACLES MUST BE OF THE TAMPER-RESISTANT (TR) TYPE.
- I. ALL MATERIALS AND EQUIPMENT USED MUST BE NEW, UL LISTED, AND PROPERLY LABELED.

- ①** E.C. SHALL COORDINATE WITH ARCHITECT/OWNER FOR THE EXACT RECEPTACLE MOUNTING HEIGHT. BASE BID ACCORDINGLY.
- ②** ELECTRICAL CONTRACTOR SHALL COORDINATE FOR EXACT LOCATION OF MECHANICAL/PLUMBING EQUIPMENTS WITH MECHANICAL/PLUMBING DRAWINGS.
- ③** ELECTRICAL CONTRACTOR SHALL COORDINATE DISCONNECT AND FUSE REQUIREMENT FOR MECHANICAL/PLUMBING UNIT WITH MECHANICAL/PLUMBING CONTRACTOR AND EQUIPMENT MANUFACTURER. PRIOR TO ROUGH-IN AND PROVIDE AS REQUIRED, LOCATE AS REQUIRED TO MAINTAIN NEC CLEARANCES.
- ④** AHU UNITS SHALL BE FEED FROM THE OUTDOOR HP UNITS. E.C. SHALL COORDINATE WITH THE MECHANICAL DRAWINGS FOR THE EXACT REQUIREMENT OF MECHANICAL UNITS. BASE BID ACCORDINGLY.
- ⑤** NEW 225AMP (MCB), 120/208V, 3-PHASE, 4-WIRE ELECTRICAL PANEL "E" FOR THE PROJECT SPACE. E.C. SHALL COORDINATE WITH ARCHITECT/OWNER FOR EXACT LOCATION IN FIELD.
- ⑥** NEW 100AMP (MLLO), 120/208V, 3-PHASE, 4-WIRE ELECTRICAL PANEL "D" FOR THE PROJECT SPACE. E.C. SHALL COORDINATE WITH ARCHITECT/OWNER FOR EXACT LOCATION IN FIELD.
- ⑦** E.C. SHALL VERIFY/PERFORM THE INSTALLATION OF ELECTRICAL PANELS IN COMPLIANCE WITH NEC ARTICLE 110.30(A) AND (B). E.C. SHALL FIELD VERIFY THAT THE PANELS ARE UNOBSTRUCTED AND THE AREA WHERE THE PANELS ARE PLACED SHALL NOT BE USED AS A STORAGE SPACE.
- ⑧** PROVIDE NEMA 6-20A RECEPTACLE FOR THE "CLEARLIGHT SANCTUARY RETREAT FULL SPEED PERSON INFRARED SAUNA". E.C. SHALL COORDINATE WITH THE OWNER FOR THE SAFETY REQUIREMENT & SPECS BEFORE COMMENCING ANY WORK. BASE BID ACCORDINGLY.

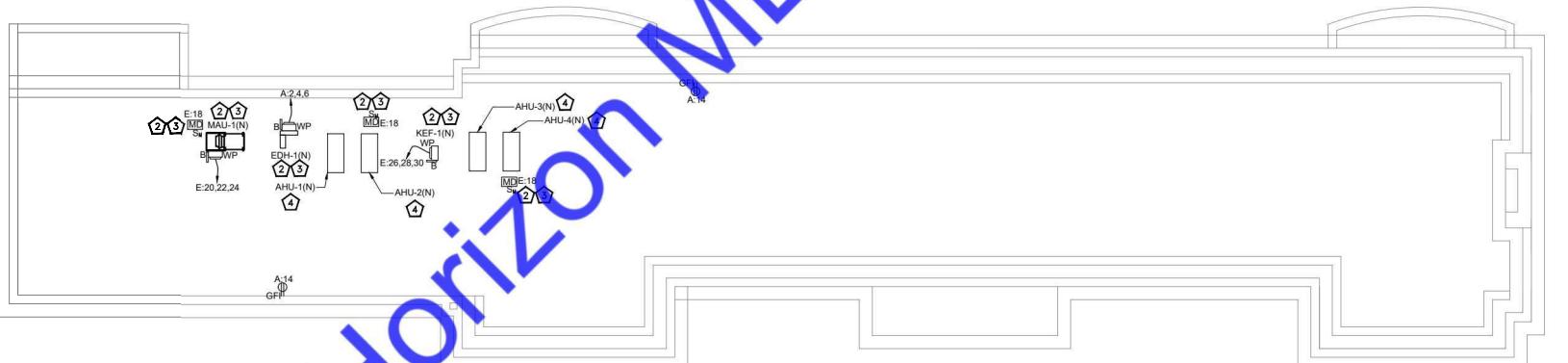
SECOND FLOOR POWER PLAN

SCALE: 1/8"=1'-0"

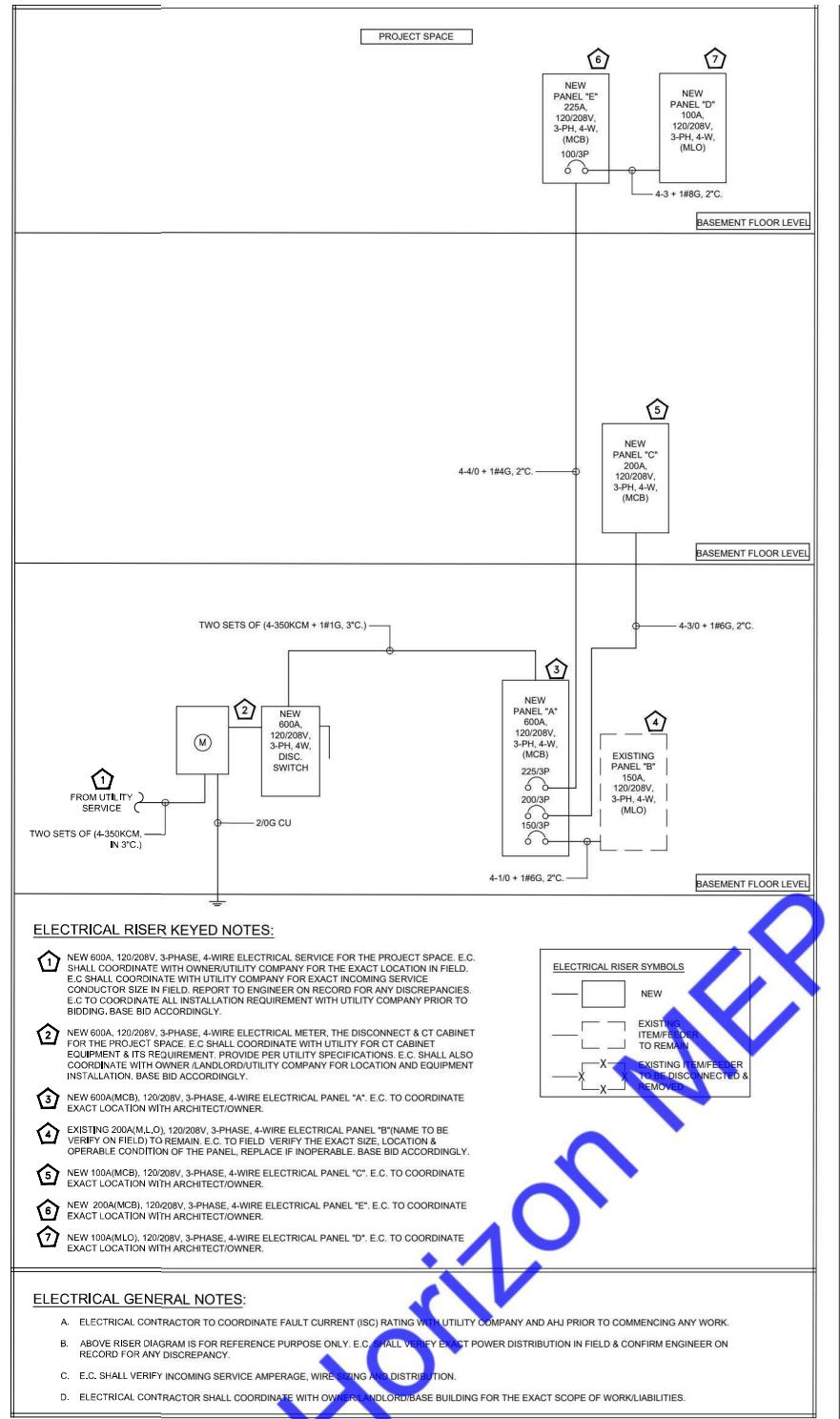


ATTIC FLOOR POWER PLAN

SCALE: 1/8"=1'-0"



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PANEL: A(N)

208Y/120 VOLTS		3 PHASE,	4 WIRE	MAIN CB 600A		MLO: NA	BUS: 600A	MIN,				
NOTE: L: LIGHTING, R: RECEPTACLES, H: HVAC LOAD, M: MOTOR LOAD, E: EQUIPMENTS, O: OTHER/MISC. (TYPICAL)												
CKT NO.	TRIP AMPS	DESCRIPTION OF LOAD	LOAD TYPE	LOAD (KVA)	MINIMUM BRANCH CIRCUIT	PER PHASE (KVA)	MINIMUM BRANCH CIRCUIT	LOAD (KVA)	LOAD TYPE	DESCRIPTION OF LOAD	TRIP AMPS	CKT NO.
1	40/2P	HP-1(N)	H	3.33	2-8 + 1#10G, 3/4"	13.33		10.00	H	EDH-1(N)	100/3P	2
3	40/2P	HP-1(N)	H	3.33		13.33		10.00	H			4
5	40/2P	HP-2(N)	H	3.33	2-8 + 1#10G, 3/4"	13.33		10.00	H	MOTORISED DAMPER	20	6
7	40/2P	HP-2(N)	H	3.33		4.33		2#12, #12G, 3/4"	R	RECEPTACLE - LEFT BASEMENT -3	20	8
9	40/2P	HP-3(N)	H	3.33	2-8 + 1#10G, 3/4"	3.87		2#12, #12G, 3/4"	R	RECEPTACLE - LIGHTING - BASEMENT	20	10
11	40/2P	HP-3(N)	H	3.33		4.33		2#12, #12G, 3/4"	L	LIGHTING - ATTIC	20	12
13	35/2P	HP-4(N)	H	3.33	2-8 + 1#10G, 3/4"	4.05		2#12, #12G, 3/4"	R	RECEPTACLE - SPARE	20	14
15	35/2P	HP-4(N)	H	3.33		3.33		2#12, #12G, 3/4"	R	SPARE	20	16
17	20/2P	BBH-1(N)	H	1.25	2#12, #12G, 3/4"	1.25		1.25	H	BBH-1(N)	20/2P	18
19	20/2P	BBH-1(N)	H	1.25		2.50		2#12, #12G, 3/4"	H			20
21	20/2P	BBH-1(N)	H	1.25	2#12, #12G, 3/4"	2.50		2#12, #12G, 3/4"	H	FIRE SUPPRESSION SYSTEM	20	22
23	20/2P	BBH-1(N)	H	1.25		2.75		2#12, #12G, 3/4"	O	PANEL B(E)	150/3P	24
25	20/2P	BBH-1(N)	H	1.25	2#12, #12G, 3/4"	11.25		10.00	O			26
27	20/2P	BBH-1(N)	H	1.25		11.25		10.00	O	PANEL C(N)	200/3P	28
29	20/2P	BBH-1(N)	H	1.25	2#12, #12G, 3/4"	15.89		14.64	O			30
31	20/2P	BBH-1(N)	H	1.25		15.89		14.64	O	PANEL D(N)	225/3P	32
33	20/2P	EWH-2(N)	H	0.86	2-12 + 1#12G, 3/4"	15.50		14.64	O			34
35	20/2P	EWH-2(N)	H	0.86		16.00		14.64	O			36
37	20/2P	EWH-2(N)	H	0.86	2-12 + 1#12G, 3/4"	10.95		10.09	O			38
39	20/2P	EWH-2(N)	H	0.86		10.95		10.09	O	PANEL E(N)	225/3P	40
41	20	SPARE				10.09		10.09	O			42
TOTAL CONNECTED LOAD (kVA)												57.49
LOAD CLASSIFICATION												12.29
CONNECTED LOAD (kVA)												60.72
DEMAND FACTOR												1.25
DEMAND LOAD (kVA)												180.50
PANEL TOTAL LOAD												KVA
TOTAL CONNECTED LOAD												180.50
TOTAL DEMAND LOAD (NEC 220.82)												185.25
TOTAL CONNECTED CURRENT												501.05
TOTAL DEMAND CURRENT												514.21
SYSTEM VOLTAGE												120/208V

PANEL: B(E)

208Y/120 VOLTS		3 PHASE,	4 WIRE	MAIN CB 150A		MLO: 150A	BUS: EXISTING	MIN,				
NOTE: L: LIGHTING, R: RECEPTACLES, H: HVAC LOAD, M: MOTOR LOAD, E: EQUIPMENTS, O: OTHER/MISC. (TYPICAL)												
CKT NO.	TRIP AMPS	DESCRIPTION OF LOAD	LOAD TYPE	LOAD (KVA)	MINIMUM BRANCH CIRCUIT	PER PHASE (KVA)	MINIMUM BRANCH CIRCUIT	LOAD (KVA)	LOAD TYPE	DESCRIPTION OF LOAD	TRIP AMPS	CKT NO.
1	20/2P	BBH-4(N)	M	0.50	2#12, #12G, 3/4"	1.00		2#12, #12G, 3/4"	O	GAS WATER HEATER	20	2
3	20/2P	BBH-4(N)	M	0.50		0.58		2#12, #12G, 3/4"	O	RCP	20	4
5	20/2P	BBH-4(N)	H	0.50	2#12, #12G, 3/4"	0.70		2#12, #12G, 3/4"	M	EF-10(N)	20	6
7	20/2P	BBH-4(N)	H	0.50		1.00		2#12, #12G, 3/4"	H	BBH-4(N)	20/2P	8
9	20/2P	BBH-2(N)	H	1.04	2#12, #12G, 3/4"	1.54		2#12, #12G, 3/4"	H	BBH-4(N)	20/2P	10
11	20/2P	BBH-2(N)	H	1.04		1.54		2#12, #12G, 3/4"	H	BBH-4(N)	20/2P	12
13	20/2P	BBH-2(N)	H	1.04	2#12, #12G, 3/4"	1.54		2#12, #12G, 3/4"	H	BBH-4(N)	20/2P	14
15	20/2P	BBH-2(N)	H	1.04		1.54		2#12, #12G, 3/4"	H	BBH-4(N)	20/2P	16
17	20/2P	BBH-2(N)	H	1.04	2#12, #12G, 3/4"	1.76		2#12, #12G, 3/4"	R	RECEPTACLE - RIGHT BASEMENT	20	18
19	20/2P	BBH-2(N)	H	1.04		2.84		2#12, #12G, 3/4"	R	WASHER-1	20	20
21	20/2P	BBH-2(N)	H	1.04	2#12, #12G, 3/4"	2.84		2#12, #12G, 3/4"	O	WASHER-2	20	24
23	20/2P	BBH-2(N)	H	1.04		1.94		2#12, #12G, 3/4"	R	RECEPTACLE - LEFT BASEMENT -1	20	26
25	20/2P	BBH-2(N)	H	1.04	2#12, #12G, 3/4"	2.30		2#12, #12G, 3/4"	R	RECEPTACLE - LEFT BASEMENT -2	20	28
27	20/2P	BBH-2(N)	H	1.04		1.54		2#12, #12G, 3/4"	H	BBH-4(N)	20/2P	30
29	20/2P	BBH-2(N)	H	1.04	2#12, #12G, 3/4"	1.54		2#12, #12G, 3/4"	H	BBH-4(N)	20/2P	32
31	20/2P	BBH-2(N)	H	1.04		0.00		2#12, #12G, 3/4"	O			34
33	20/2P	BBH-2(N)	H	1.04		0.00		2#12, #12G, 3/4"	O			36
35	20/2P	BBH-2(N)	H	1.04		0.00		2#12, #12G, 3/4"	O			38
37	20/2P	BBH-2(N)	H	1.04		0.00		2#12, #12G, 3/4"	O			40
39	20/2P	BBH-2(N)	H	1.04		0.00		2#12, #12G, 3/4"	O			42
41	20/2P	BBH-2(N)	H	1.04		0.00		2#12, #12G, 3/4"	O			
TOTAL CONNECTED LOAD (kVA)												8.78
DEMAND FACTOR												8.80
DEMAND LOAD (kVA)												8.16

PANEL: C(N)

208Y/120 VOLTS		3 PHASE,	4 WIRE	MAIN CB 200A		MLO: NA	BUS: 225A	MIN,				
NOTE: L: LIGHTING, R: RECEPTACLES, H: HVAC LOAD, M: MOTOR LOAD, E: EQUIPMENTS, O: OTHER/MISC. (TYPICAL)												
CKT NO.	TRIP AMPS	DESCRIPTION OF LOAD	LOAD TYPE	LOAD (KVA)	MINIMUM BRANCH CIRCUIT	PER PHASE (KVA)	MINIMUM BRANCH CIRCUIT	LOAD (KVA)	LOAD TYPE	DESCRIPTION OF LOAD	TRIP AMPS	CKT NO.
1	20	RECEPTACLE - MUSIC ROOM	R	1.08	2#12, #12G, 3/4"	2.28		2#12, #12G, 3/4"	O	DISHWASHER	20	2
3	20	RECEPTACLE - DINING	R	1.44	2#12, #12G, 3/4"	2.54		2#12, #12G, 3/4"	O	MICROWAVE	20	4
5	20	RECEPTACLE - BREAKFAST SPACE	R	1.08	2#12, #12G, 3/4"	2.28		2#12, #12G, 3/4"	O	FRIDGE	20	6
7	20	RECEPTACLE - EXISTING LIVING ROOM-1	R	0.72	2#12, #12G, 3/4"	2.22		2#12, #12G, 3/4"	E	FREEZER	20	8
9	20	RECEPTACLE - SMALL APPLIANCES	R	1.50	2#12, #12G, 3/4"	1.86		2#12, #12G, 3/4"	R	RECEPTACLE - GARAGE	20	10
11	20	RECEPTACLE - SMALL APPLIANCES	R	1.50	2#12, #12G, 3/4"	2.40		2#12, #12G, 3/4"	R	RECEPTACLE - PANTRY & KITCHEN	20	12
13	20	RECEPTACLE - EXISTING LIVING ROOM-2	R	0.90	2#12, #12G, 3/4"	1.98		2#12, #12G, 3/4"	R	LIGHTING - EXTERIOR	20	14
15	20	LIGHTING + EP-7IN	L	1.10	2#12, #12G, 3/4"	2.00		2#12, #12G, 3/4"	R	RECEPTACLE - MAIN HALLWAY	20	16
17	20	LIGHTING, EP-8 & 9IN	L	1.20	2#12, #12G, 3/4"	1.56		2#12, #12G, 3/4"	R	RECEPTACLE - FIRST FLOOR BATHROOM	20	18
19	20	LIGHTING	L	1.00	2#12, #12G, 3/4"	1.90		2#12, #12G, 3/4"	R	RECEPTACLE - KITCHEN & NEAR STAIR	20	20
21	60/2P	ELECTRIC RANGE	E	4.80	2-6 + 1#10G, 3/4"	6.88		2-10 + 1#10G, 3/4"	H	EWH-1(N)	30/2P	22
25		SHUNT TRIP				4.16		4.16	R	EV CHARGER	50/2P	24
27	20	EWH-3(N)	H	1.00	2#12, #12G, 3/4"	5.16		4.16	R			28
29	20	EWH-3(N)	H	1.00	2#12, #12G, 3/4"	3.08		2.08	H			30
31	40/2P	ELECTRIC BOILER	R	3.00	2-8 + 1#10G, 3/4"	5.08		2.08	H	EWH-1(N)	30/2P	32
33	40/2P	ELECTRIC BOILER	R	3.00		5.08		2.08	H			34
35	40/2P	SHUNT TRIP				2.08		2.08	H	EWH-1(N)	30/2P	36
37	20	RECEPTACLE - EXTERIOR	R	1.62	2#12, #12G, 3/4"	7.62		6.00	E	ELECTRIC FRYER	80/2P	38
39	30/2P	EWH-1(N)	H	2.08	2-10 + 1#10G, 3/4"	8.08		6.00	E	SHUNT TRIP	40	40
41	30/2P	EWH-1(N)	H	2.08		2.08		2.08	H			42
TOTAL CONNECTED LOAD (kVA)												12.54
DEMAND FACTOR												18.44
DEMAND LOAD (kVA)												16.20

PANEL SCHEDULE

SCALE: N.T.S

PANEL: D(N)										MOUNTING:	SURFACE					
208V/120 VOLTS,		3 PHASE,		4 WIRE		PANEL LOCATION:				SECOND FLOOR						
MAIN CB NA		MLO: 100A		BUS: 125A		MIN.				FED FROM: PANEL A						
NOTE: L: LIGHTING, R : RECEPTACLES, H: HVAC LOAD, M: MOTOR LOAD, E : EQUIPMENTS, O : OTHER/MISC. (TYPICAL)																
CKT NO.	TRIP AMPS	DESCRIPTION OF LOAD		LOAD TYPE	LOAD (KVA)	MINIMUM BRANCH CIRCUIT	PER PHASE (KVA)			MINIMUM BRANCH CIRCUIT	LOAD (KVA)	LOAD TYPE	DESCRIPTION OF LOAD		TRIP AMPS	CKT NO.
1	20	RECEPTACLE- MAID'S ROOM 1		R	1.08	2#12, #12G, 3/4"C	A	B	B	2#12, #12G, 3/4"C	1.08	R	RECEPTACLE - SECOND FLOOR HALLWAY -1		20	2
3	20	RECEPTACLE- MAID'S ROOM 2		R	1.08	2#12, #12G, 3/4"C			2.34	2#12, #12G, 3/4"C	1.26	R	RECEPTACLE - SECOND FLOOR HALLWAY -2		20	4
5	20	RECEPTACLE- MAID'S ROOM 3		R	1.08	2#12, #12G, 3/4"C			1.44	2#12, #12G, 3/4"C	0.36	R	RECEPTACLE - SECOND FLOOR BALCONY		20	6
7	20	RECEPTACLE- MAID'S ROOM 4		R	1.08	2#12, #12G, 3/4"C	2.16			2#12, #12G, 3/4"C	1.08	R	RECEPTACLE - OWNER'S BEDROOM		20	8
9	20	RECEPTACLE- HOUSEKEEPER'S ROOM		R	0.90	2#12, #12G, 3/4"C			1.80	2#12, #12G, 3/4"C	0.90	R	RECEPTACLE - DRESSING ROOM		20	10
11	20	RECEPTACLE- DAUGHTER'S ROOM		R	0.90	2#12, #12G, 3/4"C			1.62	2#12, #12G, 3/4"C	0.72	R	RECEPTACLE - DRESSING ROOM		20	12
13	20	RECEPTACLE- NURSE'S ROOM		R	0.90	2#12, #12G, 3/4"C	1.65			2#12, #12G, 3/4"C	0.75	H	BBH-3(N)		20/2P	14
15	20	RECEPTACLE- NEW BEDROOM		R	0.90	2#12, #12G, 3/4"C			1.65	2#12, #12G, 3/4"C	0.75	H	BBH-3(N)		20/2P	16
17	20	RECEPTACLE- SON'S ROOM		R	0.90	2#12, #12G, 3/4"C			1.65	2#12, #12G, 3/4"C	0.75	H	BBH-3(N)		20/2P	18
19	20	RECEPTACLE - SECOND FLOOR BATHROOMS		R	1.08	2#12, #12G, 3/4"C	1.83			2#12, #12G, 3/4"C	0.75	H	BBH-3(N)		20/2P	20
21	20	LIGHTING + EF-1 TO 4		L	1.30	2#12, #12G, 3/4"C			2.05	2#12, #12G, 3/4"C	0.75	H	BBH-3(N)		20/2P	22
23	20	LIGHTING + EF-5 & 6		L	1.20	2#12, #12G, 3/4"C			1.95	2#12, #12G, 3/4"C	0.75	H	BBH-3(N)		20/2P	24
25	20	LIGHTING		L	1.00	2#12, #12G, 3/4"C	1.75			2#12, #12G, 3/4"C	0.75	H	BBH-3(N)		20/2P	26
27	20/2P	BBH-3(N)		H	0.75	2#12, #12G, 3/4"C			1.50	2#12, #12G, 3/4"C	0.75	H	BBH-3(N)		20/2P	28
29	20/2P	BBH-3(N)		H	0.75	2#12, #12G, 3/4"C			1.50	2#12, #12G, 3/4"C	0.75	H	BBH-3(N)		20/2P	30
31	20/2P	BBH-3(N)		H	0.75	2#12, #12G, 3/4"C	1.50			2#12, #12G, 3/4"C	0.75	H	BBH-3(N)		20/2P	32
33	20/2P	BBH-3(N)		H	0.75	2#12, #12G, 3/4"C			1.50	2#12, #12G, 3/4"C	0.75	H	BBH-3(N)		20/2P	34
35	20/2P	BBH-3(N)		H	0.75	2#12, #12G, 3/4"C	2.00			2#12, #12G, 3/4"C	0.75	H	BBH-3(N)		20/2P	36
37	20/2P	BBH-3(N)		H	0.75	2#12, #12G, 3/4"C			2.00	2#12, #12G, 3/4"C	0.75	H	BBH-3(N)		20/2P	38
39	20/2P	BBH-3(N)		H	0.75	2#12, #12G, 3/4"C			0.95	2#12, #12G, 3/4"C	0.20	M	EF-11(N)		20	40
41	20/2P	BBH-3(N)		H	0.75	2#12, #12G, 3/4"C				2#12, #12G, 3/4"C					20	42
TOTAL CONNECTED LOAD (KVA)										9.55	9.34	8.16				

PANEL: E(N)										MOUNTING:	SURFACE					
208V/120 VOLTS,		3 PHASE,		4 WIRE		PANEL LOCATION:				SECOND FLOOR						
MAIN CB 225A		MLO: NA		BUS: 225A		MIN.				FED FROM: PANEL A						
NOTE: L: LIGHTING, R : RECEPTACLES, H: HVAC LOAD, M: MOTOR LOAD, E : EQUIPMENTS, O : OTHER/MISC. (TYPICAL)																
CKT NO.	TRIP AMPS	DESCRIPTION OF LOAD		LOAD TYPE	LOAD (KVA)	MINIMUM BRANCH CIRCUIT	PER PHASE (KVA)			MINIMUM BRANCH CIRCUIT	LOAD (KVA)	LOAD TYPE	DESCRIPTION OF LOAD		TRIP AMPS	CKT NO.
1	20/2P	BBH-2(N)		H	1.04	2#12, #12G, 3/4"C	A	B	B	2#12, #12G, 3/4"C	1.25	H	BBH-1(N)		20/2P	4
3	20/2P	BBH-2(N)		H	1.04	2#12, #12G, 3/4"C			2.29	2#12, #12G, 3/4"C	1.25	H	BBH-1(N)		20/2P	6
5	20/2P	BBH-2(N)		H	1.04	2#12, #12G, 3/4"C	2.29			2#12, #12G, 3/4"C	1.25	H	BBH-1(N)		20/2P	10
7	20/2P	BBH-2(N)		H	1.04	2#12, #12G, 3/4"C			2.29	2#12, #12G, 3/4"C	1.25	H	BBH-1(N)		20/2P	12
9	20/2P	BBH-2(N)		H	1.04	2#12, #12G, 3/4"C			2.29	2#12, #12G, 3/4"C	1.25	H	BBH-1(N)		20/2P	14
11	20/2P	BBH-2(N)		H	1.04	2#12, #12G, 3/4"C			2.29	2#12, #12G, 3/4"C	1.25	H	BBH-1(N)		20/2P	16
13	20/2P	BBH-1(N)		H	1.25	2#12, #12G, 3/4"C	1.75			2#12, #12G, 3/4"C	0.50	H	BBH-4(N)		20/2P	18
15	20/2P	BBH-1(N)		H	1.25	2#12, #12G, 3/4"C			1.75	2#12, #12G, 3/4"C	0.50	H	BBH-4(N)		20/2P	20
17	20/2P	BBH-1(N)		H	1.25	2#12, #12G, 3/4"C			2.25	2#12, #12G, 3/4"C	1.00	M	MOTORISED DAMPERS		20	22
19	20/2P	BBH-1(N)		H	1.25	2#12, #12G, 3/4"C	1.68			3-3 + 1#8G, 1"C.	0.43	H			20/3P	24
21	20/2P	BBH-1(N)		H	1.25	2#12, #12G, 3/4"C			1.68	3-3 + 1#8G, 1"C.	0.43	H	MUA-1(N)		20/3P	26
23	20/2P	BBH-1(N)		H	1.25	2#12, #12G, 3/4"C			1.68	3-3 + 1#8G, 1"C.	0.43	H			20/3P	28
25	20/2P	BBH-1(N)		H	1.25	2#12, #12G, 3/4"C	2.04			3-3 + 1#8G, 1"C.	0.79	H	REF-1(N)		20/3P	30
27	20/2P	BBH-1(N)		H	1.25	2#12, #12G, 3/4"C			2.04	2#12, #12G, 3/4"C	0.79	H	REF-1(N)		20/3P	32
29	20/2P	BBH-1(N)		H	1.25	2#12, #12G, 3/4"C	2.25			2#12, #12G, 3/4"C	1.00	L	LIGHTING- ATTIC		20/2P	34
31	20/2P	BBH-1(N)		H	1.25	2#12, #12G, 3/4"C			2.82	2#12, #12G, 3/4"C	1.57	H	SAUNA		20/2P	36
33	20/2P	BBH-1(N)		H	1.25	2#12, #12G, 3/4"C	11.34			2#12, #12G, 3/4"C	1.57	H	SAUNA		20/2P	38
35	20/2P	BBH-1(N)		H	1.25	2#12, #12G, 3/4"C			11.34	4-3 + 1#8G, 1 1/2"C.	10.09	O	PANEL D(N)		100/3P	40
37	20/2P	BBH-1(N)		H	1.25	2#12, #12G, 3/4"C			11.34	4-3 + 1#8G, 1 1/2"C.	10.09	O	PANEL D(N)		100/3P	42
39	20	SPARE		H	1.25	2#12, #12G, 3/4"C			10.09	4-3 + 1#8G, 1 1/2"C.	10.09	O	PANEL D(N)		100/3P	42
TOTAL CONNECTED LOAD (KVA)										10.04	10.04	10.54				

Location	NEC 2008	NEC 2011	NEC 2014	NEC 2017	NEC 2020
Family Rooms	AFCI	AFCI	AFCI	AFCI	AFCI
Dining Rooms	AFCI	AFCI	AFCI	AFCI	AFCI
Kitchens - 125V Receptacles	GFCI	GFCI	AF/GF	AF/GF	AF/GF
Kitchens - 250V Receptacles	TM	TM	TM	TM	GFCI1
Bedrooms	AFCI	AFCI	AFCI	AFCI	AF/GF1
Living Rooms	AFCI	AFCI	AFCI	AFCI	AFCI
Garage - 125V Receptacles	GFCI	GFCI	GFCI	GFCI	GFCI
Garage - 250V Receptacles	TM	TM	TM	TM	GFCI
Sunrooms	AFCI	AFCI	AFCI	AFCI	AFCI
Parlors	AFCI	AFCI	AFCI	AFCI	AFCI
Libraries	AFCI	AFCI	AFCI	AFCI	AFCI
Dens	AFCI	AFCI	AFCI	AFCI	AFCI
Recreation Rooms	AFCI	AFCI	AFCI	AFCI	AFCI
Closets	AFCI	AFCI	AFCI	AFCI	AFCI
Hallways	AFCI	AFCI	AFCI	AFCI	AF/GF1
Laundry Areas - 125V	GFCI3	GFCI3	AF/GF	AF/GF	AF/GF
Laundry Areas - 250V	TM	TM	TM	TM	GFCI
Basements	GFCI2	GFCI2	GFCI2	GFCI2	AF/GF
Bathrooms	GFCI	GFCI	GFCI	GFCI	GFCI
Dishwasher	TM	TM	A		