

GENERAL ABBREVIATIONS

A	AMPERES	KVA	KILOVOLT AMPERES
ADA	AMERICANS WITH DISABILITIES ACT	KW	KILOWATTS
AF	AMPERE FRAME	LTG	LIGHTING
AFF	ABOVE FINISHED FLOOR	LFMC	LIQUIDTIGHT FLEXIBLE METAL CONDUIT
AFG	ABOVE FINISHED GRADE	MC	METAL CLAD CABLE
AHJ	AUTHORITY HAVING JURISDICTION	MCB	MAIN CIRCUIT BREAKER
AHU	AIR HANDLING UNIT	MCC	MOTOR CONTROL CENTER
AIC	AMPERE INTERRUPTING CAPACITY	MCP	MOTOR CIRCUIT PROTECTOR
AL	ALUMINUM	MH	MOUNTING HEIGHT
ANSI	AMERICAN NATIONAL STANDARDS INSTITUTE	MISC	MISCELLANEOUS
ARCH	ARCHITECT	MLO	MAIN LUGS ONLY
AT	AMPERE TRIP	MOCP	MAXIMUM OVERCURRENT PROTECTION
ATS	AUTOMATIC TRANSFER SWITCH	MTG	MOUNTING
ATC	AUTOMATIC TEMPERATURE CONTROL	N	NEUTRAL
AWG	AMERICAN WIRE GAUGE	NC	NORMALLY CLOSED
BFG	BELOW FINISH GRADE	NEC	NATIONAL ELECTRIC CODE
BLDG	BUILDING	NEMA	NATIONAL ELECTRICAL MANUFACTURES ASSOCIATION
C	CONDUIT	NFPA	NATIONAL FIRE PROTECTION ASSOCIATION
CAT	CATALOG	NFSS	NON-FUSED SAFETY SWITCH
CB	CIRCUIT BREAKER	NO	NORMALLY OPEN OR NUMBER
CBM	CERTIFIED BALLASTS MANUFACTURERS	NTS	NOT TO SCALE
CKT	CIRCUIT	P	POLE
CL	CENTERLINE	PB	PUSHBUTTON
CLF	CURRENT LIMITING FUSE	PH	PHASE
COL	COLUMN	PNL	PANELBOARD
CPT	CONTROL POWER TRANSFORMER	POS	PROVIDED UNDER OTHER SECTIONS
CT	CVRRNT TRANSFORMER	PVC	POLYVINYL CHLORIDE
CU	COPPER	PWR	POWER
(D)	DEMOLITION	QTY	QUANTITY
DWG	DRAWING	REQ'D	REQUIRED
(E)	EXISTING	RMC	RIGID METAL CONDUIT
(ER)	EXISTING TO REMAIN	RMS	ROOT MEAN SQUARED
EC	EMPTY CONDUIT	RNMC	RIGID NON-METALLIC CONDUIT
EF	EXHAUST FAN	RTU	ROOF TOP UNIT
EM	EMERGENCY	SP	SPARE
EMT	ELECTRICAL METALLIC TUBING	SW	SWITCH
EPO	EMERGENCY POWER OFF	SYM	SYMMETRICAL
ESB	ENERGY SAVING BALLAST	TEL	TELEPHONE
EWC	ELECTRIC WATER COOLER	TMCB	THERMAL MAGNETIC CIRCUIT BREAKER
F	FUSE	UG	UNDERGROUND OR UNDERGRADE
FA	FIRE ALARM	UL	UNDERWRITERS LABORATORIES
FB	FAN BOX	UON	UNLESS OTHERWISE NOTED
FLA	FULL LOAD AMPERES	V	VOLT
FMC	FLEXIBLE METAL CONDUIT	VAV	VOLUME AIR TERMINAL BOX
FSS	FUSED SAFETY SWITCH	VT	VOLTAGE TRANSFORMER
FT	FEET	W	WIRE
GF	GROUND FAULT INTERRUPTER	WH	WATER HEATER
GFCI	GROUND FAULT CIRCUIT INTERRUPTER	WP	WEATHERPROOF TRANSFORMER
GND,G	GROUND OR GROUNDING	XFMR	TRANSFORMER
GRMC	GALVANIZED RIGID METALLIC CONDUIT	Δ	DELTA
HOA	HAND, OFF, AUTOMATIC SWITCH	Y	WYE
HP	HORSEPOWER	∅	PHASE
HPF	HIGH POWER FACTOR	#	NUMBER
IEEE	INSTITUTE OF ELECTRICAL AND ELECTRONIC ENGINEERS		
IG	ISOLATED GROUND		
IMC	INTERMEDIATE METAL CONDUIT		
INT	INTERLOCK		
K	KELVIN		
KCMIL	THOUSAND CIRCULAR MILS		

LIGHTING EQUIPMENT LEGEND

(REFER TO LIGHTING FIXTURE SCHEDULE FOR ADDITIONAL INFORMATION)

	LIGHT FIXTURE
*4	*4" INDICATES FIXTURE TYPE
*13	*13" INDICATES CIRCUIT NUMBER
*o	*o" INDICATES SWITCH CONTROL

WIRING DEVICES LEGEND

	125 VOLT, 2 POLE, 3 WIRE, 20 AMP., DUPLEX RECEPTACLE.
	125 VOLT, 2 POLE, 3 WIRE, 20 AMP., DOUBLE DUPLEX RECEPTACLE.
	125 VOLT, 2 POLE, 3 WIRE, 20 AMP., DUPLEX RECEPTACLE. "o" DENOTES SWITCH CONTROL
	SPECIAL PURPOSE RECEPTACLE, REFER TO "SPECIAL PURPOSE RECEPTACLES SCHEDULE".
	SPECIAL PURPOSE RECEPTACLE, FLOOR MOUNTED. REFER TO "SPECIAL PURPOSE RECEPTACLES SCHEDULE".
	125 VOLT, 2 POLE, 3 WIRE, 20 AMP., DUPLEX RECEPTACLE, CEILING MOUNTED
	125 VOLT, 2 POLE, 3 WIRE, 20 AMP., DOUBLE DUPLEX RECEPTACLE, CEILING MOUNTED

Receptacle Subscripts:

"2"	INDICATES CIRCUIT NUMBER
"GF"	INDICATES RECEPTACLE EQUIPPED WITH INTEGRAL GROUND FAULT INTERRUPTER
"WP"	INDICATES WEATHERPROOF
"IG"	ISOLATED GROUND
"c"	COMPUTER
S _b	SINGLE POLE TOGGLE SWITCH "b" DENOTES SWITCH CONTROL "d" DENOTES DIMMER TYPE SWITCH "M" DENOTES MOTOR TYPE SWITCH
S ₃	THREE WAY TOGGLE SWITCH
S ₄	FOUR WAY TOGGLE SWITCH
S _M	MOTOR RATED SWITCH
\$\$\$	INDICATES TYPICAL SWITCH
\$\$\$	INDICATES DIMMER SWITCH
\$	3-WAY DIMMER SWITCH

CIRCUITRY, RACEWAYS AND FEEDERS LEGEND

	CIRCUIT HOMERUN TO PANELBOARD. PANEL DESIGNATION IS "LP2B". CIRCUIT BREAKER DESIGNATION IS CIRCUIT #1,3,5.
	GENERAL POWER BRANCH CIRCUIT HOMERUN TO PANELBOARD. WITHOUT EXCEPTION, ALL BRANCH CIRCUIT WIRING AND HOMERUNS RELATED TO GENERAL POWER AND LIGHTING CIRCUITS SHALL INCLUDE A SEPARATE GREEN EQUIPMENT GROUND CONDUCTOR.
	ALL CONDUCTORS SHALL BE SIZED IN ACCORDANCE WITH SCHEDULES, NEC AND SPECIFICATIONS.
	CIRCUITRY TURNING UP
	CIRCUITRY TURNING DOWN
	FEEDER SIZE TAG SYMBOL. REFER TO "LEGEND OF FEEDER SIZES".

FIRE ALARM SYSTEM LEGEND

	CARBON MONOXIDE DETECTOR
	SMOKE DETECTOR

EQUIPMENT LEGEND

	208/120 VOLT, 3ø, 4 WIRE PANEL RECEPTACLE.
	208/120 VOLT, 3ø, 4 WIRE PANEL RECEPTACLE.
	480/277 VOLT, 3ø, 4 WIRE PANEL RECEPTACLE.
	JUNCTION AND/OR PULL BOX
	MOTOR
	EXHAUST FAN
	DISCONNECT SWITCH (FUSED); COORDINATE FUSE SIZE WITH MECHANICAL.

EXISTING WORK SYMBOLS

	EXISTING WORK TO BE REMOVED
	EXISTING WORK TO REMAIN
	NEW OR RELOCATED WORK
	NEW WORK BURIED OR IN CONCRETE
	FUTURE WORK OR WORK SHOWN ON OTHER DOCUMENTS

COMMUNICATION DEVICES LEGEND

	TELEPHONE OUTLET
	COMBINATION TELEPHONE/DATA OUTLET

BRANCH CIRCUIT SCHEDULE

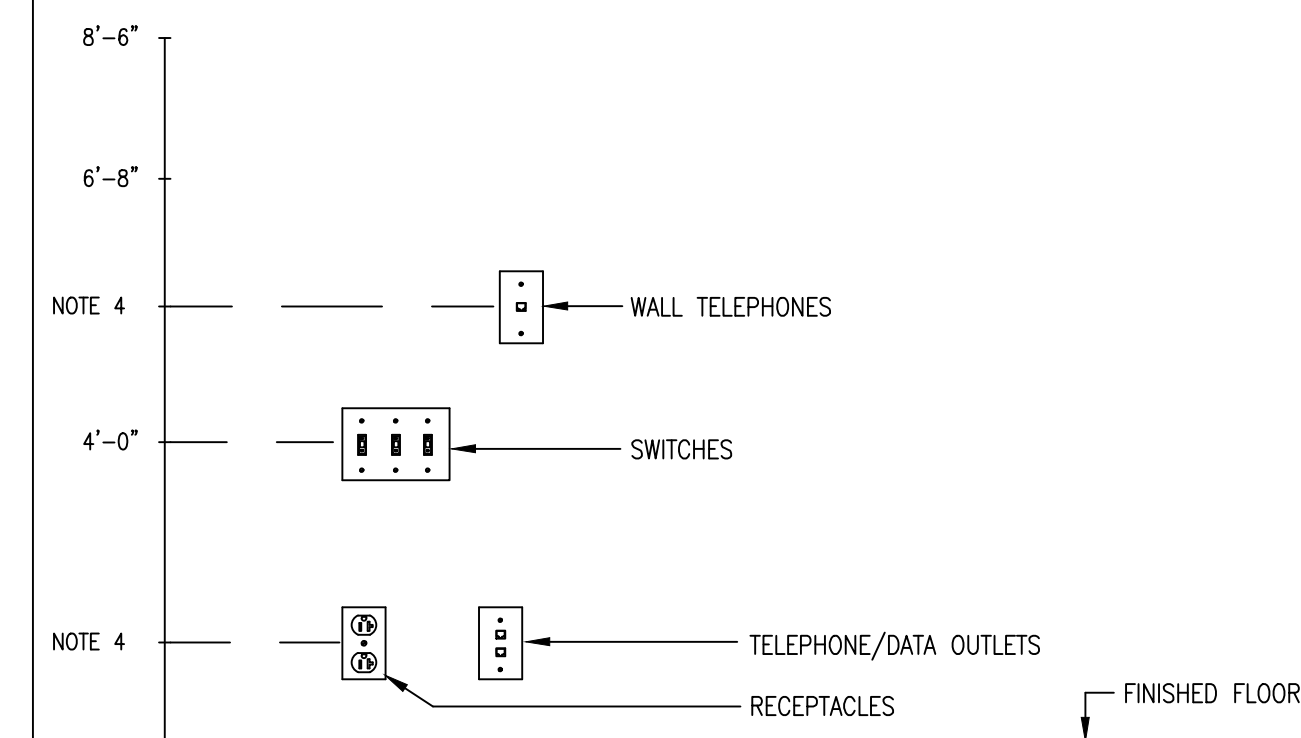
CIRCUIT TYPE	CIRCUIT BREAKER	CONDUCTORS	CONDUIT
1 POLE - 1 PHASE 2 WIRE + GROUND	20A-1P	2 #12 + 1 #12 G.	3/4"
	30A-1P	2 #10 + 1 #10 G.	3/4"
	40A-1P	2 #8 + 1 #10 G.	3/4"
	50A-1P	2 #6 + 1 #10 G.	3/4"
	60A-1P	2 #4 + 1 #10 G.	1 1/4"
2 POLE - 1 PHASE 2 WIRE + GROUND	20A-2P	2 #12 + 1 #12 G.	3/4"
	30A-2P	2 #10 + 1 #10 G.	3/4"
	40A-2P	2 #8 + 1 #10 G.	3/4"
	50A-2P	2 #6 + 1 #10 G.	3/4"
	60A-2P	2 #4 + 1 #10 G.	1 1/4"
2 POLE - 1 PHASE 3 WIRE + GROUND	20A-2P	3 #12 + 1 #12 G.	3/4"
	30A-2P	3 #10 + 1 #10 G.	3/4"
	40A-2P	3 #8 + 1 #10 G.	3/4"
	50A-2P	3 #6 + 1 #10 G.	3/4"
	60A-2P	3 #4 + 1 #10 G.	1 1/4"

Schedule Notes:

- TYPE MC CABLE SHALL INCLUDE FULL SIZE INSULATED GROUND CONDUCTOR. SIZES AS INDICATED IN SCHEDULE. REFER TO SPECIFICATIONS FOR PERMITTED APPLICATION.
- REFER TO FEEDER SCHEDULE ON ELECTRICAL POWER RISER DIAGRAM FOR ADDITIONAL INFORMATION.
- ALL CONDUCTOR SIZES ARE BASED ON CONDUIT LENGTHS OF 60 FEET FOR 120 VOLT BRANCH CIRCUITS AND 150 FEET FOR 277 VOLT BRANCH CIRCUITS. IF LENGTH EXCEEDS 60 FEET (120V, 20A CIRCUITS) OR 150 FEET (277V, 20A CIRCUITS), THEN USE WIRE SIZE DENOTED BELOW AND INCREASE CONDUIT SIZE AS REQUIRED BY NEC.
- TREAT 15A CIRCUIT SIMILAR TO 20A CIRCUIT AND 25A CIRCUIT SIMILAR TO 30A CIRCUIT.

WIRE SIZE	CIRCUIT LENGTH	
	120V CIRCUIT	277V CIRCUIT
#10	60' TO 120'	150' TO 240'
#8	120' TO 180'	ABOVE 240'
#6	180' AND ABOVE	-

TYPICAL DEVICE MOUNTING HEIGHTS DETAIL



NOTES:

- ALL MOUNTING HEIGHTS SHALL BE MEASURED FROM FINISHED FLOOR TO CENTERLINE OF DEVICE EXCEPT EXIT SIGNS.
- DEVICES SHALL BE INSTALLED ON A COMMON VERTICAL CENTERLINE WHEREVER POSSIBLE.
- ALL DEVICES SHALL BE INSTALLED AT MOUNTING HEIGHTS AS INDICATED ON THIS DETAIL UNLESS OTHERWISE NOTED.
- COORDINATED EXACT LOCATIONS WITH ARCHITECT PRIOR TO INSTALLATION.

EXISTING EQUIPMENT LEGEND

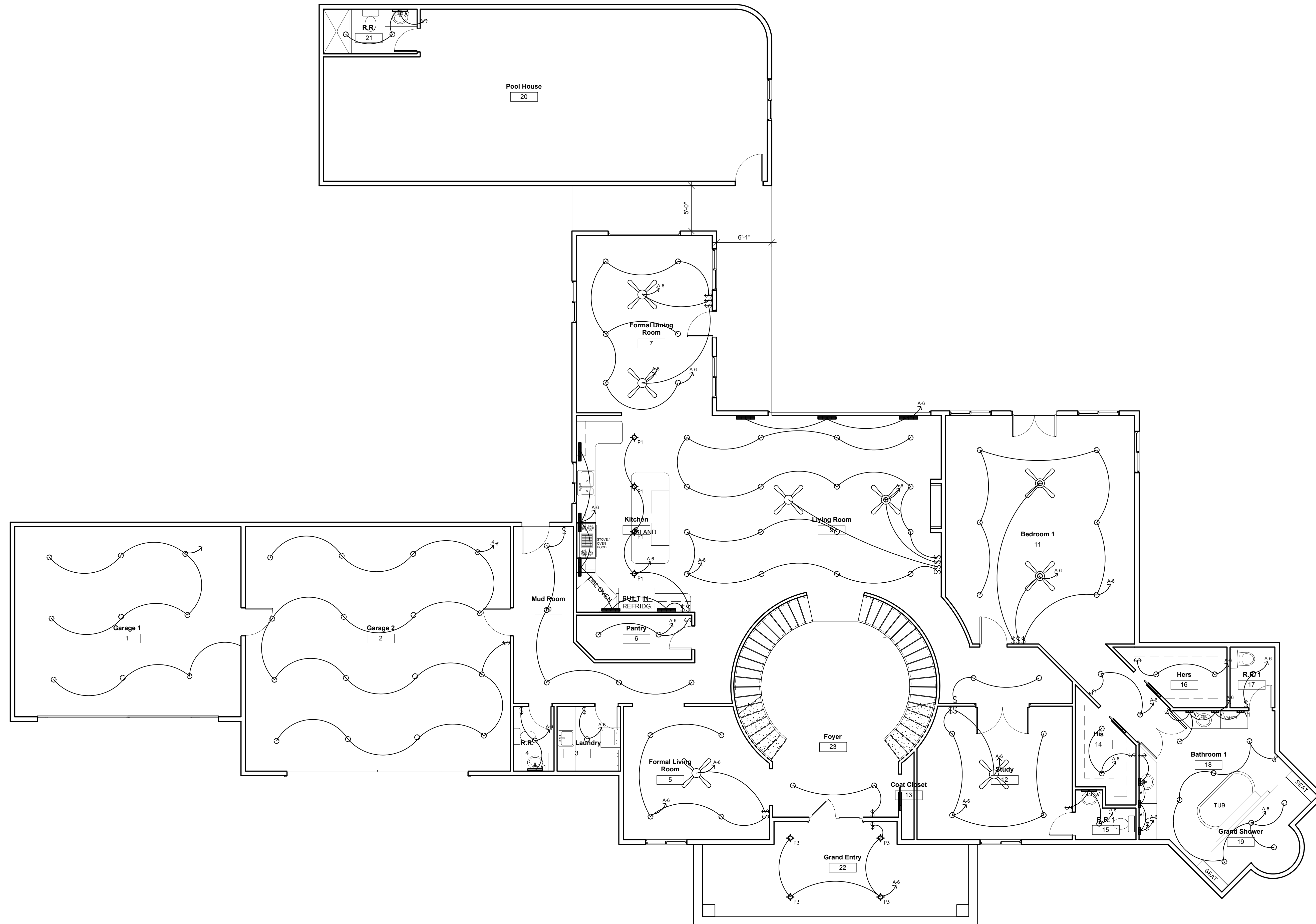
XM	EXISTING EQUIPMENT TO REMAIN.
XN	EXISTING EQUIPMENT TO BE REMOVED AND REPLACED WITH NEW.
XR	EXISTING EQUIPMENT TO BE REMOVED WITH ALL ASSOCIATED WIRING AND APPURTENANCES.
XRE	EXISTING EQUIPMENT TO BE REMOVED AND RELOCATED, AS SHOWN.

ELECTRICAL LEGEND

	EXTERIOR SECURITY LIGHT/SMALL
	EXTERIOR SECURITY LIGHT/MEDIUM
	EXTERIOR SECURITY LIGHT/LARGE
	EXTERIOR SECURITY LIGHT/UP/DN.
	EXTERIOR SECURITY LIGHT/DN
	INTERIOR SCONCE
	LED TAPE LIGHT/UNDERCOUNTER
	LED TAPE LIGHT/OVER CABINET
	LED TAPE LIGHT/CABINET LIGHTING
	1 BULB VANITY LIGHT
	3 BULB VANITY LIGHT
	5 BULB VANITY LIGHT
	RECESSED DOWNLIGHT
	RECESSED DOWNLIGHT WITH SHOWERTRIM
	DIRECT/INDIRECT LED LIGHT
	SURFACE MOUNTED LARGE SIZE.
	SURFACE MOUNTED MEDIUM SIZE.
	SURFACE MOUNTED SMALL SIZE.
	KITCHEN PENDANT
	FOYER PENDANT
	FRONT PENDANT
	MEDIUM PENDANT
	BATHROOM PENDANT
	DOWN SPOT LIGHT
	DIRECTIONAL SPOTLIGHTS
	WALL TYPE LIGHT
	LINEAR LED COVE LIGHT
	ELECTRICAL CABLE
	CEILING FAN C/W INTEGRATED LIGHT
	CEILING FAN

GENERAL NOTES

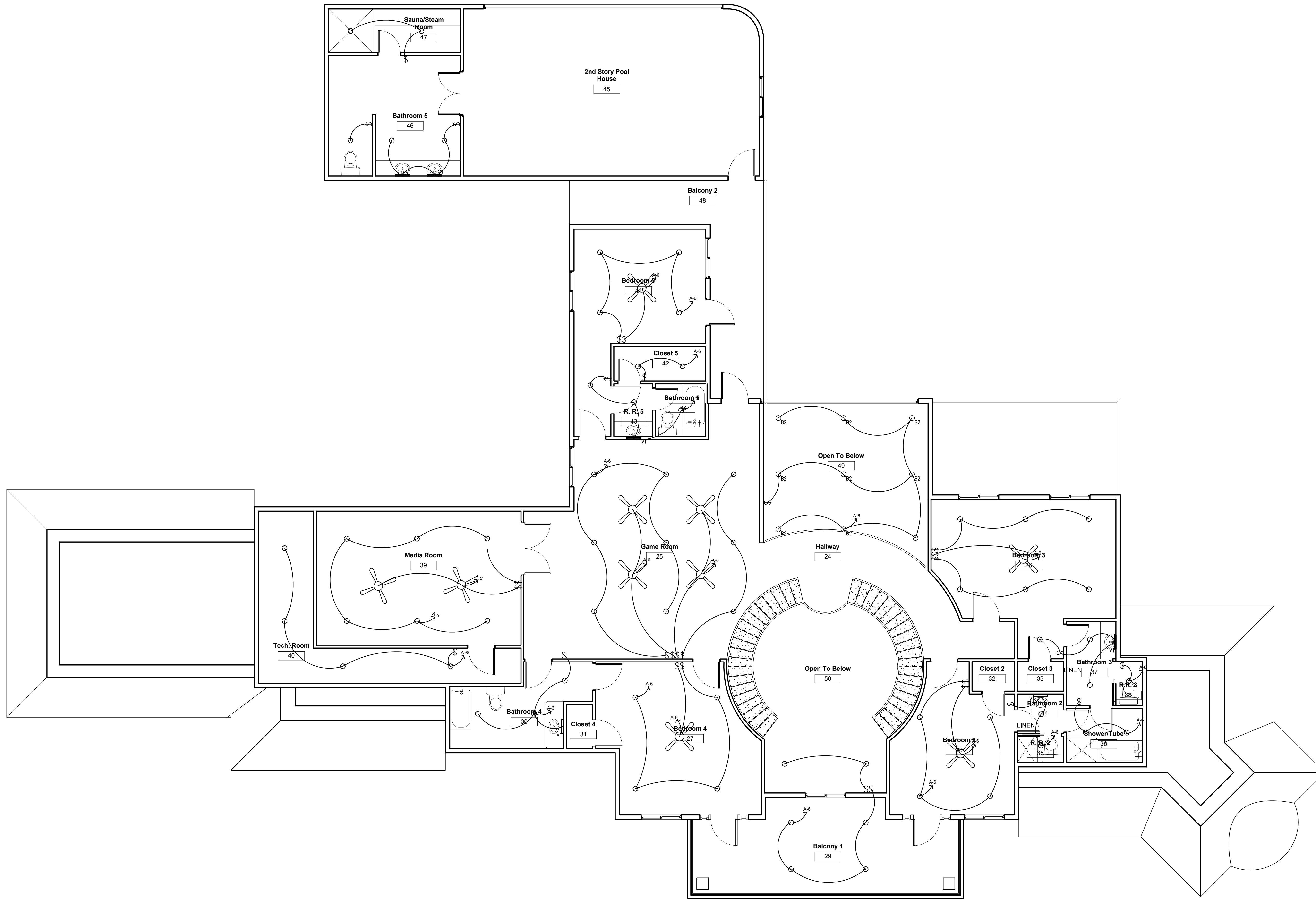
- ALL WIRING SHALL BE RUN CONCEALED UNLESS SPECIFIED OTHERWISE.
- ALL EQUIPMENT SHALL BE INSTALLED IN A NEAT AND WORKMANLIKE MANNER, RECTILINEAR TO BUILDING STRUCTURE.
- ALL COMPONENTS SHOWN ON THE RISER DIAGRAMS, BUT NOT ON THE PLANS OR VICE VERSA, SHALL BE INCLUDED AS IF SHOWN ON BOTH.
- EXACT LOCATION OF MECHANICAL EQUIPMENT THAT REQUIRE ELECTRICAL CONNECTIONS ARE SHOWN ON THE MECHANICAL DRAWINGS.
- CONTRACTOR SHALL REVIEW ALL TRADES' CONTRACT DOCUMENTS TO DETERMINE SPECIFIC MOUNTING LOCATIONS FOR ELECTRICAL EQUIPMENT. COORDINATE EXACT MOUNTING LOCATIONS WITH THE ARCHITECT.
- REFER TO ARCHITECTURAL PLANS AND ELEVATIONS FOR MOUNTING HEIGHTS AND EXACT LOCATIONS OF ALL DEVICES.
- REFER TO ARCHITECTURAL REFLECTED CEILING PLAN FOR EXACT LOCATION OF LIGHTING FIXTURES. IF DISCREPANCIES OCCUR, CONTRACTOR MUST NOTIFY ARCHITECT.
- BRANCH CIRCUIT WIRING MAY NOT BE SHOWN GRAPHICALLY ON DRAWINGS AND MAY BE INDICATED BY CIRCUIT NUMBERS BESIDE FIXTURES, DEVICES AND EQUIPMENT. PROVIDE COMPLETE WIRING SYSTEM WHETHER OR NOT INDICATED GRAPHICALLY. PHASE BALANCE ALL PANELBOARDS IN THE FIELD.
- THE DRAWINGS ARE DIAGRAMMATIC AND INDICATE GENERAL ARRANGEMENT OF SYSTEMS. THE DRAWINGS ARE NOT INTENDED TO BE ABSOLUTELY PRECISE. THE DRAWINGS ARE NOT INTENDED TO SPECIFY OR SHOW EVERY OFFSET, JUNCTION BOX, FITTING AND COMPONENT. THE PURPOSE OF THE DRAWINGS IS TO INDICATE A SYSTEMS CONCEPT, THE MAIN COMPONENTS OF THE SYSTEM AND THE APPROXIMATE GEOMETRICAL RELATIONSHIP. BASED ON THE SYSTEMS CONCEPT, THE MAIN COMPONENTS AND THE APPROXIMATE GEOMETRICAL RELATIONSHIPS, THE CONTRACTOR SHALL PROVIDE ALL OTHER COMPONENTS AND MATERIALS NECESSARY TO MAKE THE SYSTEMS FULLY COMPLETE AND OPERATIONAL.
- ALL SYMBOLS MAY NOT BE USED IN THIS DRAWING.



LIGHTING

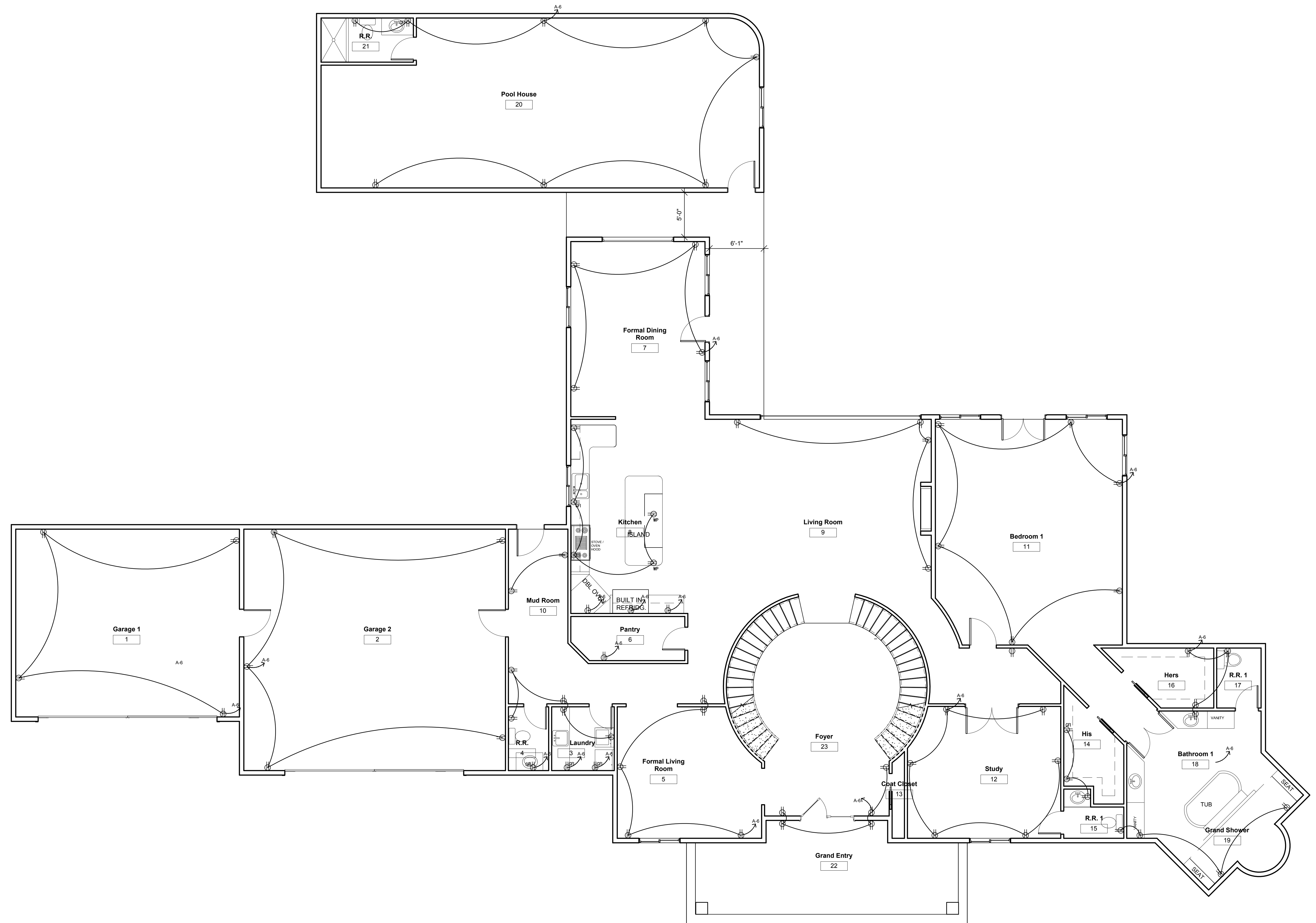
ELECTRICAL PLAN
FIRST FLOOR PLAN

E-1.1

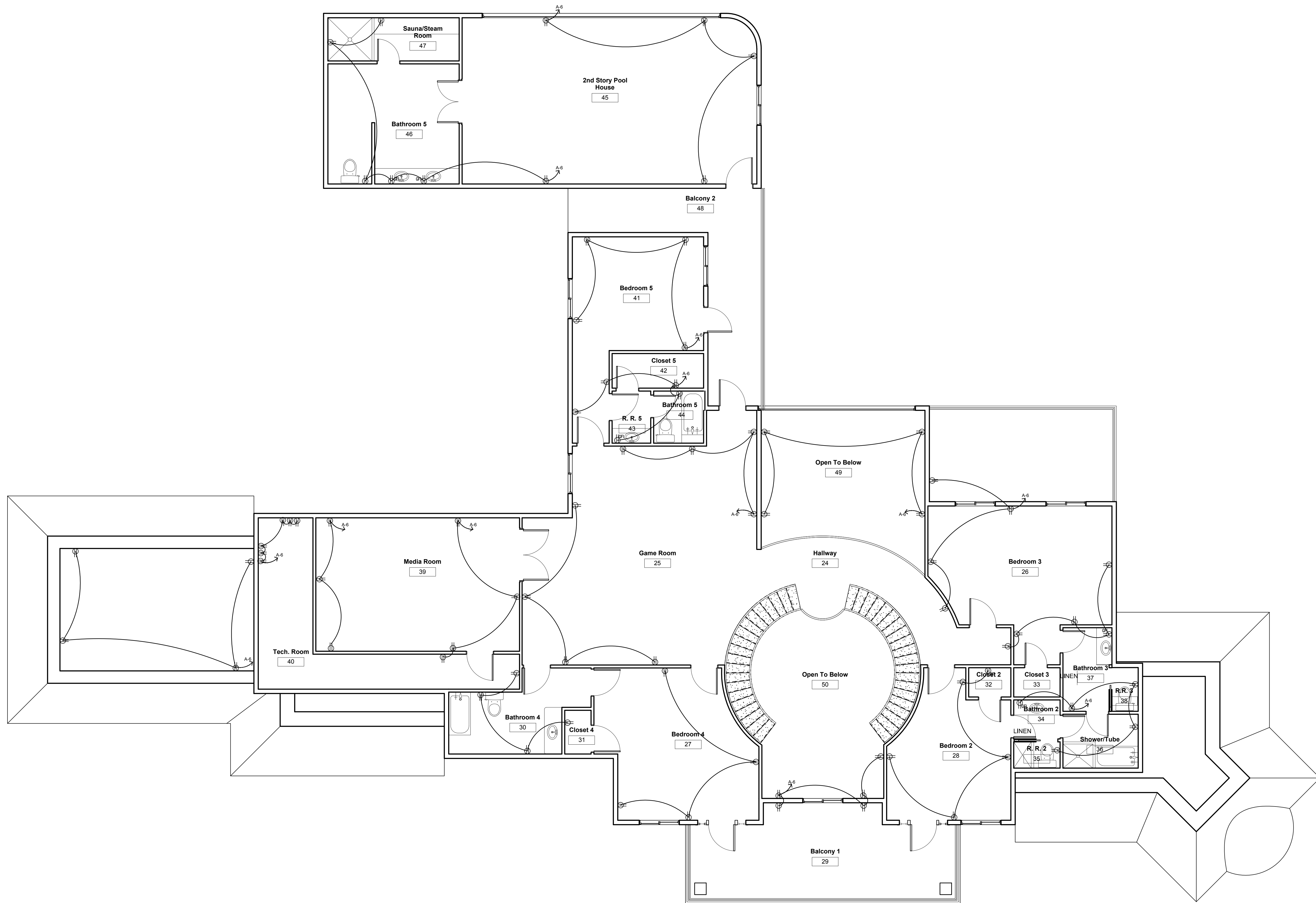


LIGHTING

ELECTRICAL PLAN
 2ND FLOOR PLAN
 E-1.2



POWER



POWER