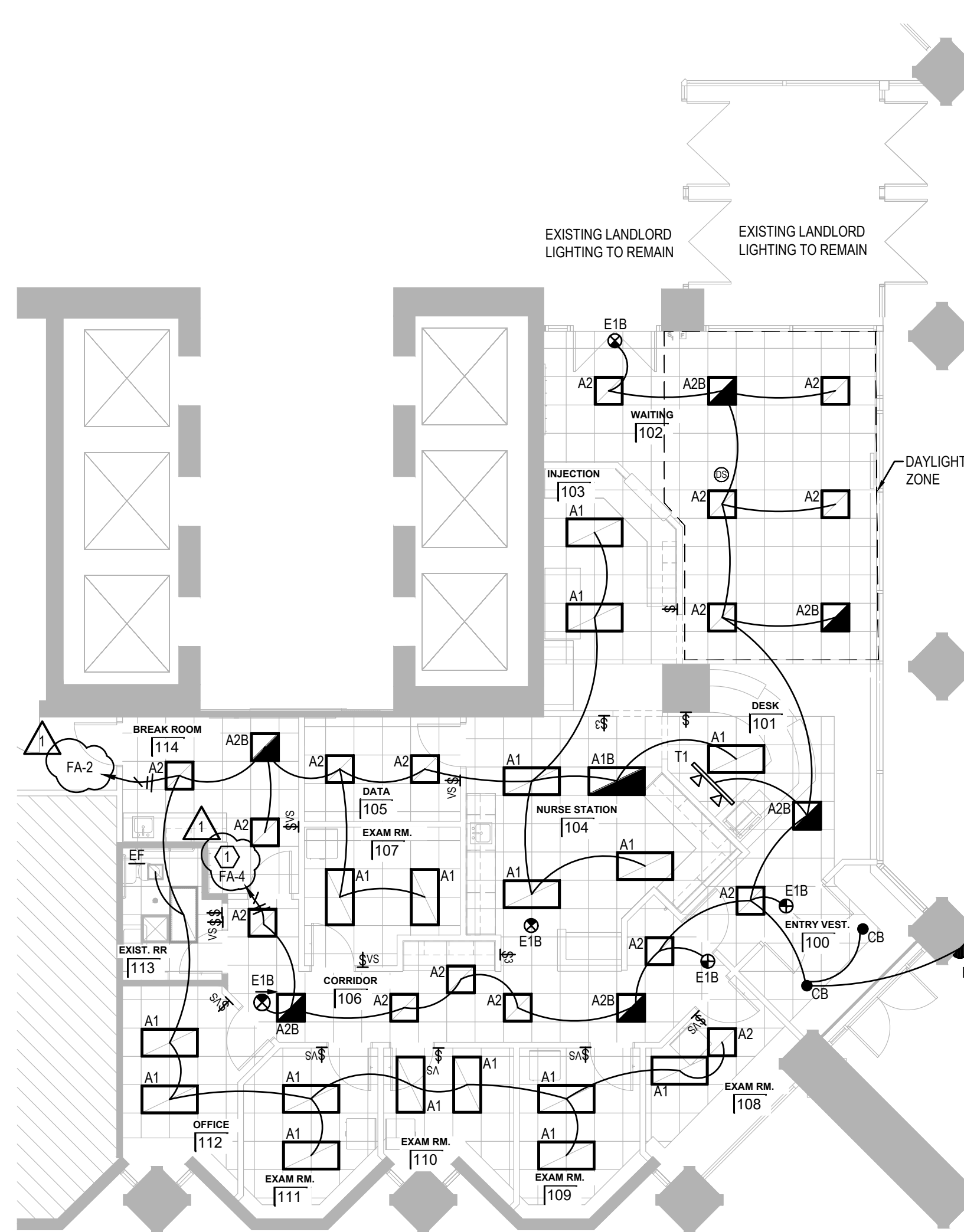


FIRST FLOOR PLAN - LIGHTING DEMOLITION
SCALE: 1/8"=1'-0"



FIRST FLOOR PLAN - LIGHTING
SCALE: 1/8"=1'-0"

ELECTRICAL KEY NOTES

1. ROUTE CIRCUIT THRU TIMECLOCK AND CONTACTOR. REFER TO LIGHTING CONTROL SEQUENCE OF OPERATION.

GENERAL LIGHTING NOTES

1. ELECTRICAL CONTRACTOR SHALL COORDINATE LOCATION OF LIGHT FIXTURES WITH MECHANICAL CONTRACTOR, PLUMBING CONTRACTOR, FIRE PROTECTION CONTRACTOR AND WITH OWNER'S EQUIPMENT LAYOUTS TO AVOID CONFLICT WITH DUCTWORK, PIPING, ETC.
2. NO MORE THAN THREE LIGHTING OR RECEPTACLE CIRCUITS (FOR A MAXIMUM OF THREE 20A BRANCH CIRCUITS) CAN BE COMBINED IN A COMMON HOMERUN WITH SEPARATE NEUTRALS FOR A TOTAL OF SIX CURRENT CARRYING CONDUCTORS IN ONE CONDUIT, UNLESS OTHERWISE INDICATED.
3. ALL EXTERIOR ELECTRICAL DEVICES AND EQUIPMENT SHALL BE WEATHERPROOF TYPE NEMA 3R.
4. EMERGENCY LIGHTING, IF SWITCHED, SHALL AUTOMATICALLY ILLUMINATE DURING A POWER OUTAGE. EXIT SIGNS AND EMERGENCY BATTERY PACKS SHALL BE CONNECTED TO AN UNSWITCHED LINE.
5. ELECTRICAL CONTRACTOR SHALL ARRANGE FOR A JOB WALK-THROUGH WITH THE BUILDING AND FIRE DEPARTMENT INSPECTORS TO DETERMINE IF ANY ADDITIONAL EXIT SIGNS ARE REQUIRED PRIOR TO COVER UP. VERIFY ARROW REQUIREMENTS.
6. PROVIDE ALL EXIT SIGNS AND EMERGENCY FIXTURES/INVERTERS AN UNSWITCHED HOT CONDUCTOR AND WIRE PER MANUFACTURER'S DIAGRAM.
7. OCCUPANCY SENSOR MANUFACTURER TO CONFIRM LOCATIONS ENSURING PROPER COVERAGE. PROVIDE ALL POWER PACKS, SENSORS, DEVICES AND WIRING. INSTALL OCCUPANCY SENSORS PER MANUFACTURER'S DIAGRAMS FOR A COMPLETE, OPERABLE SYSTEM. LOCATE POWER PACKS ABOVE CEILING IN AN ACCESSIBLE LOCATION.

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PROJECT DATE: **06.25.2021**

REVISIONS:

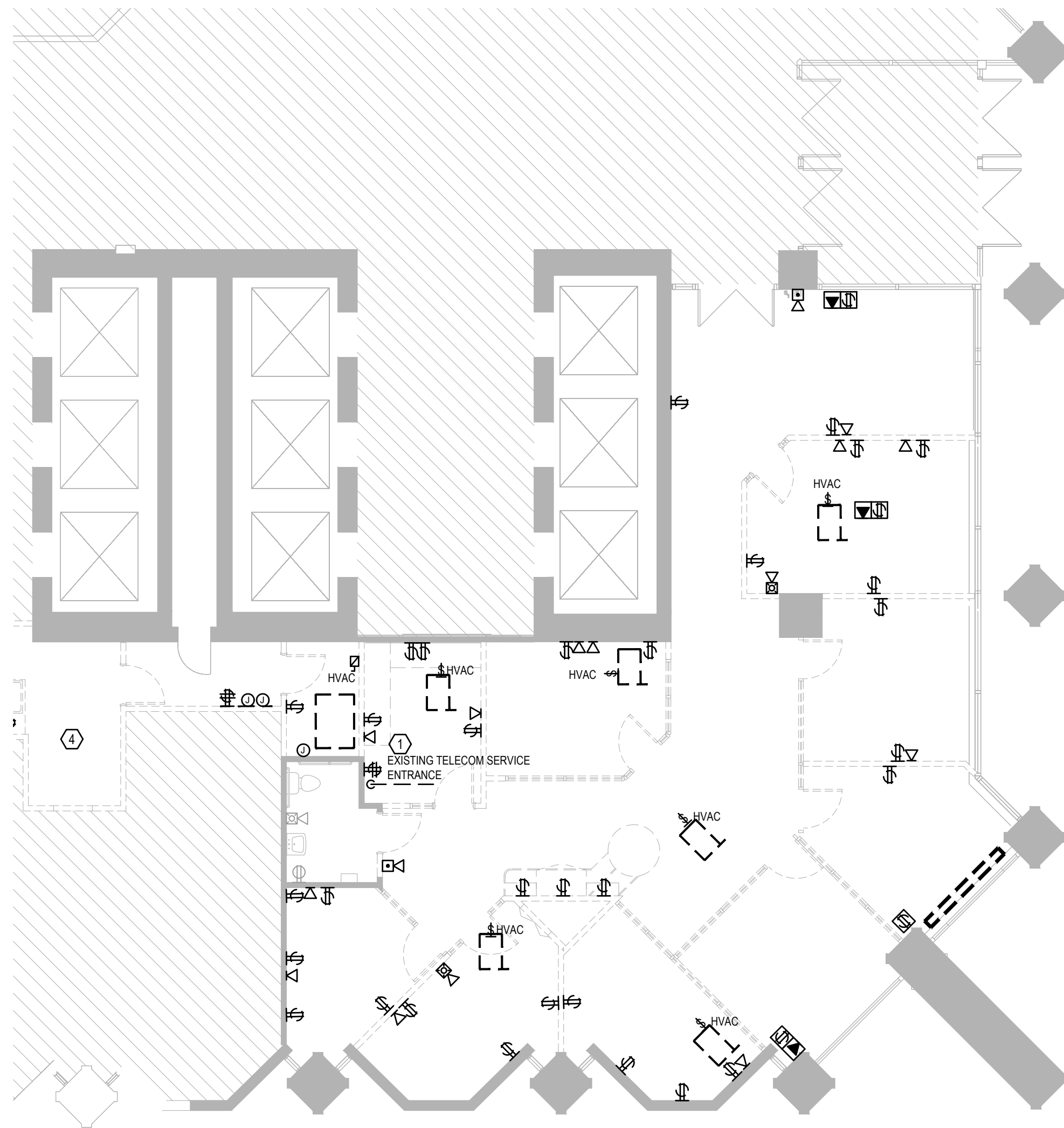
No.	Description	Date
1	ADDENDUM 1	7/8/2021

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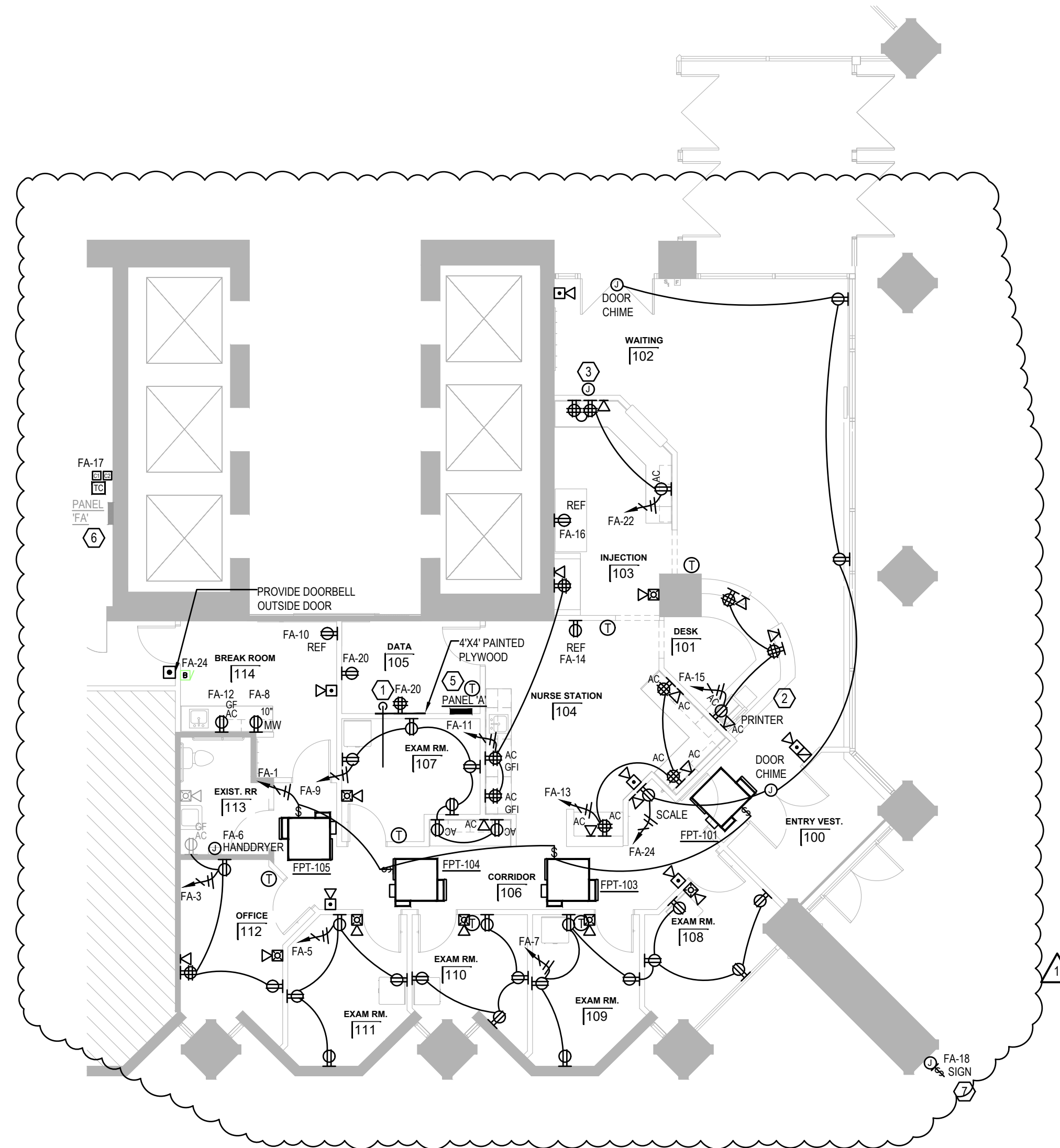
ELECTRICAL FLOOR PLAN - LIGHTING

E1.1
3 OF 8

PERMIT SET



FIRST FLOOR PLAN - POWER DEMOLITION
SCALE: 1/8"=1'-0"



FIRST FLOOR PLAN - POWER
SCALE: 1/8"=1'-0"

ELECTRICAL KEY NOTES

1. NEW PHONE/DATA SERVICE ENTRANCE LOCATION. EXTEND CONDUIT AND WIRE TO NEW LOCATION.
2. CONCEAL ALL CONDUIT WIRE WITHIN CASEWORK.
3. MONITOR AND SCANNING DEVICE - ROUTE POWER THROUGH WALL AND PLUG INTO RECEPTACLE BELOW DESK ON OTHER SIDE OF WALL.
4. DEMO ANY ADDITIONAL OUTLETS IN WALLS BEING DEMOLISHED IN THIS AREA.
5. ALTERNATE BID PANEL - REFER TO SINGLE LINE DIAGRAM.
6. FIELD VERIFY EXISTING PANEL 'FA' LOCATION. EXISTING PANEL TO BE REDEDICATED TO TENANT SPACE.
7. ROUTE CIRCUIT THRU TIMECLOCK AND CONTACTOR 'C2'. REFER TO LIGHTING CONTROL SEQUENCE OF OPERATION.

GENERAL NOTES:

- A. ALL DEVICES AND JUNCTION BOXES SHALL BE ACCESSIBLE. PROVIDE ACCESS PANEL AS REQUIRED WITH PRIOR APPROVAL OF ARCHITECT.
- B. WHERE MORE THAN ONE SWITCH OR DIMMER OCCURS AT A LOCATION, GANG THE SWITCHES TOGETHER WITH A COMMON JUNCTION BOX AND FACE PLATE.
- C. NOT MORE THAN THREE LIGHTING OR RECEPTACLE CIRCUITS OR A MAXIMUM OF THREE 20A BRANCH CIRCUIT CAN BE COMBINED IN A COMMON HOMERUN WITH SEPARATE NEUTRALS FOR A TOTAL OF SIX CURRENT CARRYING CONDUCTORS IN ONE CONDUIT, UNLESS OTHERWISE INDICATED.
- D. PROVIDE CONDUIT SLEEVES FOR CABLE ROUTING, AS NECESSARY, IN WALLS, FLOORS AND CEILINGS.
- E. PROVIDE A TYPED LEDGER/CIRCUIT DIRECTORY IN PANELBOARD INDICATING TYPE OF LOAD AND LOCATION FOR EACH BRANCH CIRCUIT BREAKER. PROVIDE ENGRAVED PHENOLIC NAMEPLATES FOR ALL PANELBOARDS & DISCONNECT SWITCHES, UNLESS OTHERWISE NOTED.
- F. ALL BRANCH CIRCUITS SHALL HAVE DEDICATED NEUTRAL CONDUCTOR.
- G. ALL RECEPTACLES LOCATED WITHIN 6'-0" OF A SINK SHALL BE GFCI RATED RECEPTACLE.
- H. ALL RECEPTACLES SHALL BE TAMPER RESISTANT.
- I. ALL NORMAL POWER DEVICES SHALL BE WHITE WITH WHITE COVERPLATE, UNLESS NOTED OTHERWISE.
- J. CONDUIT SIZE SHALL BE 3/4" MINIMUM.
- K. PROVIDE LABELING FOR ALL JUNCTION BOXES INDICATING CIRCUITING INFORMATION.
- L. WHERE OUTLETS ARE LOCATED APPROXIMATELY BACK-TO-BACK ON OPPOSITE SIDES OF A PARTY WALL, THE OUTLETS SHALL NOT BE INSTALLED IN THE SAME STUD SPACE, BUT SHALL BE SEPARATED BY A MINIMUM OF ONE STUD.
- M. ALIGN ALL THERMOSTATS NEXT TO SWITCHES AT 48" A.F.F. COORDINATE WITH MECHANICAL CONTRACTOR. IF A THERMOSTAT IS NEEDED WHERE A SWITCH DOES NOT OCCUR, COORDINATE LOCATION WITH ARCHITECT.
- N. TELEPHONE, FIRE ALARM, DATA, COMMUNICATIONS AND OTHER LOW VOLTAGE WIRING SHALL BE PLENUM RATED IF CONDUCTORS PASS THROUGH AN AIR PLENUM.
- O. PROVIDE PULL WIRE IN EACH EMPTY RACEWAY.
- P. PROVIDE RUBBER GROMMETS AT THE END OF ALL EMPTY CONDUITS FOR DATA. SEE PLANS FOR CONDUIT SIZES.
- Q. XRAY SLAB FOR ANY FLOOR PENETRATIONS PRIOR TO WORK. MINIMIZE DOWNTIME AND DISRUPTION TO OTHER SPACES.

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PROJECT DATE: **06.25.2021**

REVISIONS:

No.	Description	Date
1	ADDENDUM 1	7/8/2021

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ELECTRICAL
FLOOR PLAN -
POWER

E2.1
4 OF 8

PERMIT SET

ONE-LINE KEY NOTES

1. PROVIDE EMON METER MATCHING EXISTING BUILDING SYSTEM TO METER NEW TENANT PANEL.
2. EXISTING PANEL TO BE DEDICATED TO TENANT SPACE. EC TO RELOCATE ANY EXISTING LANDLORD CIRCUITS TO NEARBY PANEL(S) AS DIRECTED BY LANDLORD. PROVIDE NEW BREAKERS AS REQUIRED FOR NEW CIRCUITS. LABEL PANEL "FA".
3. PROVIDE NEW 100A/3P BREAKER IN EXISTING PANELBOARD FOR NEW PANEL.
4. PROVIDE NEW GFCI BREAKERS IN EXISTING PANEL.

GENERAL ELECTRICAL NOTES:

1. LUGS/TERMINALS FOR PANELBOARDS, PANELBOARD BREAKERS AND DRY-TYPE TRANSFORMERS ARE TO BE RATED AND U.L. APPROVED FOR OPERATION AT 75° CELSIUS.
2. PROVIDE "HACR" RATED BREAKERS FOR HVAC EQUIP.
3. ALL FEEDER SIZES ARE BASED UPON CONDUIT INSTALLATION WITH THREE (3) CURRENT CARRYING CONDUCTORS.
4. AMPACITIES BASED UPON N.E.C. TABLE 310-16 AND ITS ASSOCIATED CONDITIONS.
5. REFER TO FEEDER SCHEDULE THIS SHEET FOR FEEDERS.
6. AMPS INTERRUPTING CAPACITY (A.I.C.) VALUES SHOWN REPRESENT MINIMUM SERIES-RATED LEVELS TO BE COORDINATED WITH NEAREST UPSTREAM FEEDER BREAKER.
7. PROVIDE LAMACOID LABELING FOR SWITCHBOARDS ALL PANELS AND DISCONNECT SWITCHES ETC. REFER TO SPECIFICATIONS FOR FURTHER REQUIREMENTS.
8. PROVIDE ARC FLASH HAZARD WARNING FOR ALL ELECTRICAL DISTRIBUTION EQUIPMENT AND PROVIDE LABELS PER NFPA-70-110.16 AND NFPA-70E REQUIREMENTS.
9. ELECTRICAL CONTRACTOR SHALL UPDATE ALL PANEL SCHEDULES WITH-IN PANELS LISTED ON RISER DIAGRAM WITH TYPE WRITTEN DIRECTORIES.
10. ALL CONDUCTORS SHALL BE COPPER. ALUMINUM CONDUCTORS FOR ALL FEEDERS 100A AND OVER. ALL BUSBARS IN SWITCHBOARDS AND PANELBOARDS SHALL BE ALUMINUM.
11. REFER TO "HVAC / PLUMBING EQUIPMENT SCHEDULE" FOR ADDITIONAL SCOPE OF WORK.
12. FOR ELECTRICAL EQUIPMENT AIC RATING, SEE PANEL SCHEDULE SHEET.
13. ABB IS OUR BASIS OF DESIGN FOR THE FOOTPRINT OF PANELBOARDS, DISTRIBUTION PANELS AND MAIN ELECTRICAL DISTRIBUTION PANEL SHOWN.

PANEL SCHEDULE														
PANEL: FA		VOLTAGE: 120 / 208		AMP: 200		PHASE: 3		WIRE: 4						
AIC: -		NOTE: EXISTING PANEL - SQUARE D NQOD		MOUNTING: SURFACE										
TYPE OF MAIN: MCB		LIGHTING [L] RECEPTACLE [R] EQUIPMENT [EQ] KITCHEN [K] ELEC. HEAT [EH] ELEC. COOLING [EC] HEATING & COOLING [HC] CONTINUOUS [CL] SPACE/SPARE [SP]												
CKT. NO.	BRKR OPTION S	TYPE	SERVICE DESCRIPTION	LOAD			BRKR	CIR WATTS	SERVICE DESCRIPTION	TYPE	BRKR OPTION S	CKT. NO.		
				A	B	C							P	A
1		EQ	FPT-101,103,104,105	400	20	1	1290	1	20	890	LIGHTING	L		2
3		R	OFFICE 112/R.R. RECEP	900	20	1		1	20	548	CORRIDOR LIGHTING	L		4
5		R	EXAM ROOM 110,111	1440	20	1		1	20	1200	HAND DRYER	EQ	GFCI	6
7		R	EXAM ROOM 108,109	1440	20	1	2640	1	20	1200	MICROWAVE	EQ	GFCI	8
9		R	EXAM ROOM 107 AND CORR. WORK	1080	20	1		1	20	800	REFRIGERATOR	EQ	GFCI	10
11		R	NURSE STATION RECEP	1080	20	1		1	20	180	BREAK ROOM RECEP	R		12
13		R	NURSE STATION RECEP	1080	20	1	1880	1	20	800	REFRIGERATOR	EQ		14
15		R	DESK 101 RECEP	900	20	1	1700	1	20	800	REFRIGERATOR	EQ		16
17		R	TIME CLOCK/CONTACTOR	100	20	1		1	20	1200	SIGNAGE	L		18
19		SP	SPARE	30	3	360		1	20	360	PHONE BOARD	R	LO	20
21		SP	-	-	-	900		1	20	900	INJECTION 103 RECEP	R		22
23		SP	-	-	-	740		1	20	740	WAITING, SCALE, DOOR CHIME	R		24
25		SP	SPARE	20	1			1	20		SPARE	SP		26
27		SP	SPARE	20	1			1	20		SPARE	SP		28
29		SP	SPARE	20	1			1	20		SPARE	SP		30
31		SP	SPARE	20	2			2	20		SPARE	SP		32
33		SP	-	-	-			-	-	-	-	SP		34
35		SP	SPARE	20	2			2	20		SPARE	SP		36
37		SP	-	-	-			-	-	-	-	SP		38
39		SP	SPARE	20	2			2	20		SPARE	SP		40
41		SP	-	-	-			-	-	-	-	SP		42

DEMAND CALCULATION

LIGHTING [L] 2638W x 125% = 3298 W

GEN. REC. [R] (10200W -10KW)/2+10KW = 10100 W

EQUIPMENT [EQ] 5200W x 100% = 5200 W

KITCHEN [K] -

ELEC. HEAT [EH] -

ELEC. COOL [EC] -

HEAT & COOL [HC] -

CONTINUOUS [CL] -

TOTALS: 6170 5928 5940

TOTAL LOAD WATTS

CONNECTED LOAD: 18038 W

DEMAND LOAD: 18598 W

TOTAL LOAD AMPS

CONNECTED LOAD: 50.07 A

DEMAND LOAD: 51.62 A

BREAKER OPTIONS:

AS - POWERLINK AS BREAKER
LO - HANDLE LOCK-ON DEVICE
ST - SHUNT TRIP TYPE
AUX - AUXILIARY CONTACTS
EX - SHALL REUSE EXISTING CIRCUIT BREAKER
R - REMOVE EXISTING CIRCUIT

GFCI - GROUND FAULT CIRCUIT INTERRUPTER
HACR - HEATING, A/C & REFRIGERATION
SF - SUBFEED
ACF - ARC FAULT BREAKER
N - PROVIDE NEW CIRCUIT BREAKER

BASE BID

ALTERNATE BID

PANEL SCHEDULE														
PANEL: A		VOLTAGE: 120 / 208		AMP: 125		PHASE: 3		WIRE: 4						
AIC: -		NOTE: MAIN LUGS ONLY		MOUNTING: SURFACE										
TYPE OF MAIN: MCB		LIGHTING [L] RECEPTACLE [R] EQUIPMENT [EQ] KITCHEN [K] ELEC. HEAT [EH] ELEC. COOLING [EC] HEATING & COOLING [HC] CONTINUOUS [CL] SPACE/SPARE [SP]												
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31		SP	SPARE	20	1			1	20		SPARE	SP		32
33		SP	-	-	-			-	-	-	-	SP		34
35		SP	SPARE	20	1			1	20		SPARE	SP		36
37		SP	-	-	-			-	-	-	-	SP		38
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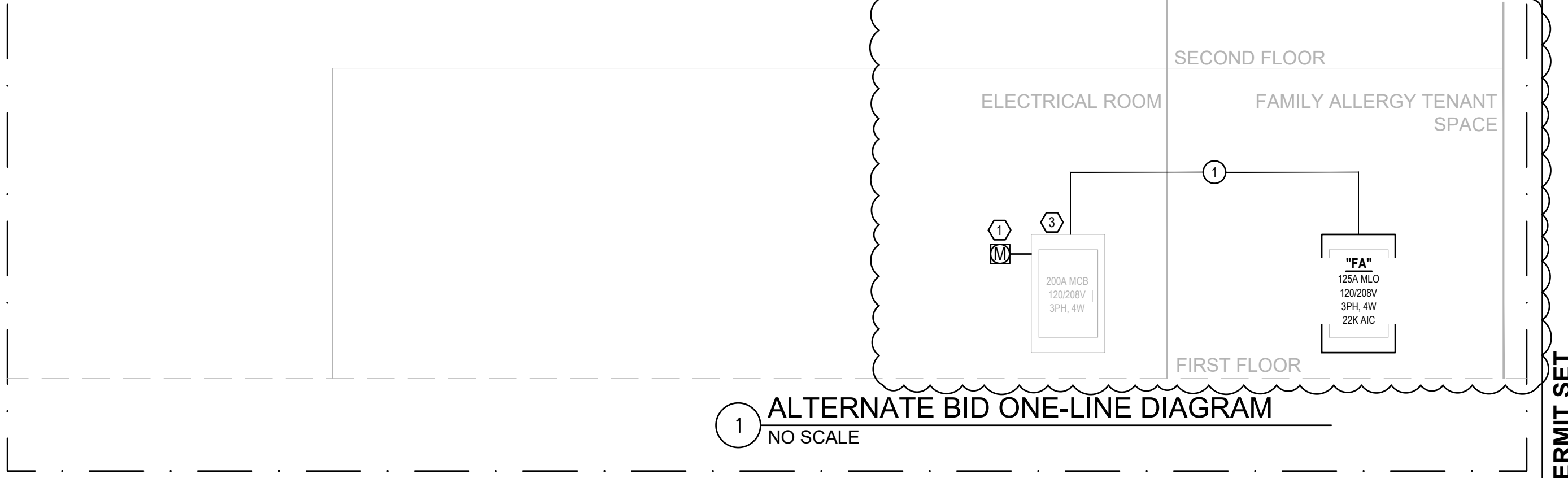
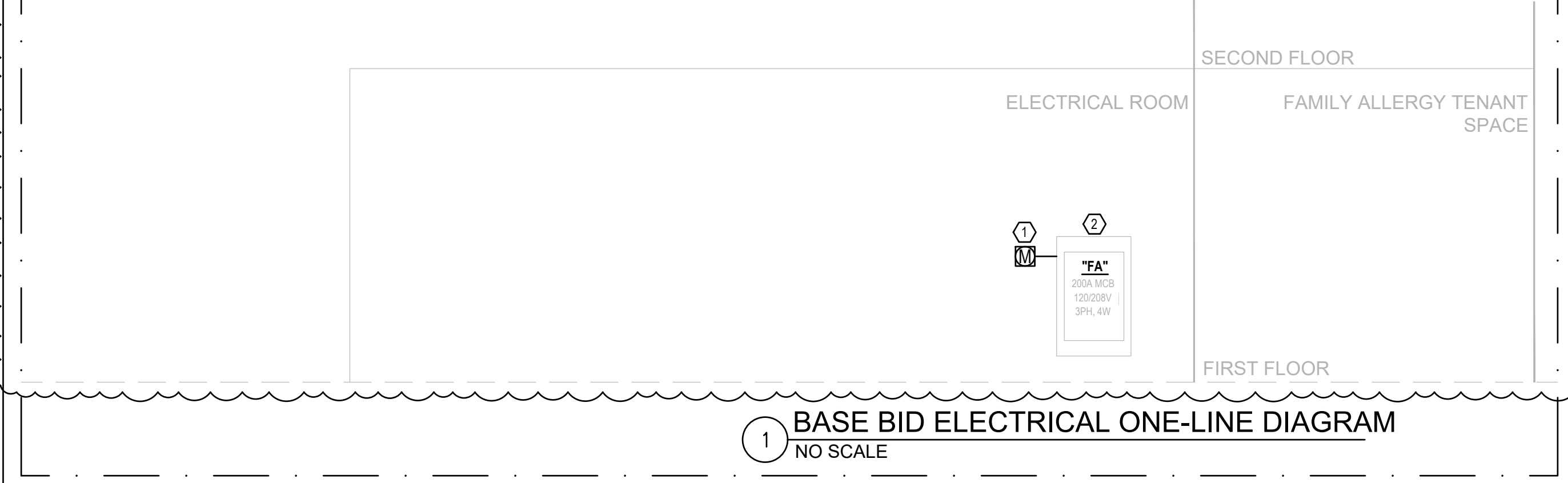
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SF - SUBFEED
ACF - ARC FAULT BREAKER
N - PROVIDE NEW CIRCUIT BREAKER
ACF/GFI

FEEDER SCHEDULE				
TAG	EQUIPMENT	FEEDER DESCRIPTION (THW/NTHN COPPER)	EQPT. GRD.	CONDUIT SIZE
1	PANEL A	(4)#1	(1)#8	1-1/2"

NOTES:
1. FEEDER SIZES ABOVE DO NOT ACCOUNT FOR VOLTAGE DROP
2. WHERE PARALLEL RUNS ARE INDICATED, INSTALL THE EQUIPMENT GROUND LISTED IN EACH RUN

- *FEEDER NOTE**
- ELECTRICAL CONTRACTOR SHALL PROVIDE THE FOLLOWING BRANCH CIRCUIT CONDUCTOR SIZES FOR ALL 120 VAC BRANCH CIRCUITS, BASED UPON LENGTH:
 1. LESS THAN 100'-0" - #12 AWG COPPER
 2. 100'-0" - 200'-0" - #10 AWG COPPER
 3. 201'-0" - 300'-0" - #8 AWG COPPER
 - MC CABLE IS ACCEPTABLE FOR RECEPTACLE AND LIGHTING BRANCH CIRCUITS ONLY AS ALLOWED BY NEC.



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ELECTRICAL

FAMILY ALLERGY

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LOUISVILLE, KENTUCKY 40202

CONSULTANT

PROJECT DATE: **06.25.2021**

REVISIONS:
No. Description Date
1 ADDENDUM 1 7/8/2021

DRAWN BY: **ME**

ELECTRICAL SINGLE LINE DIAGRAM

E3.1
5 OF 8