

LEVEL 2 ALTERATION  
 TENANT BUILD-OUT FOR:  
**SF PROCESSING**  
 1315 N. FEDERAL HWY. 2ND.FLOOR  
 BOYNTON BEACH, FL. 33435

JOHN SHERMAN REED  
 ARCHITECT  
 FL LICENSE# AR9571

JSR DESIGN GROUP INC.  
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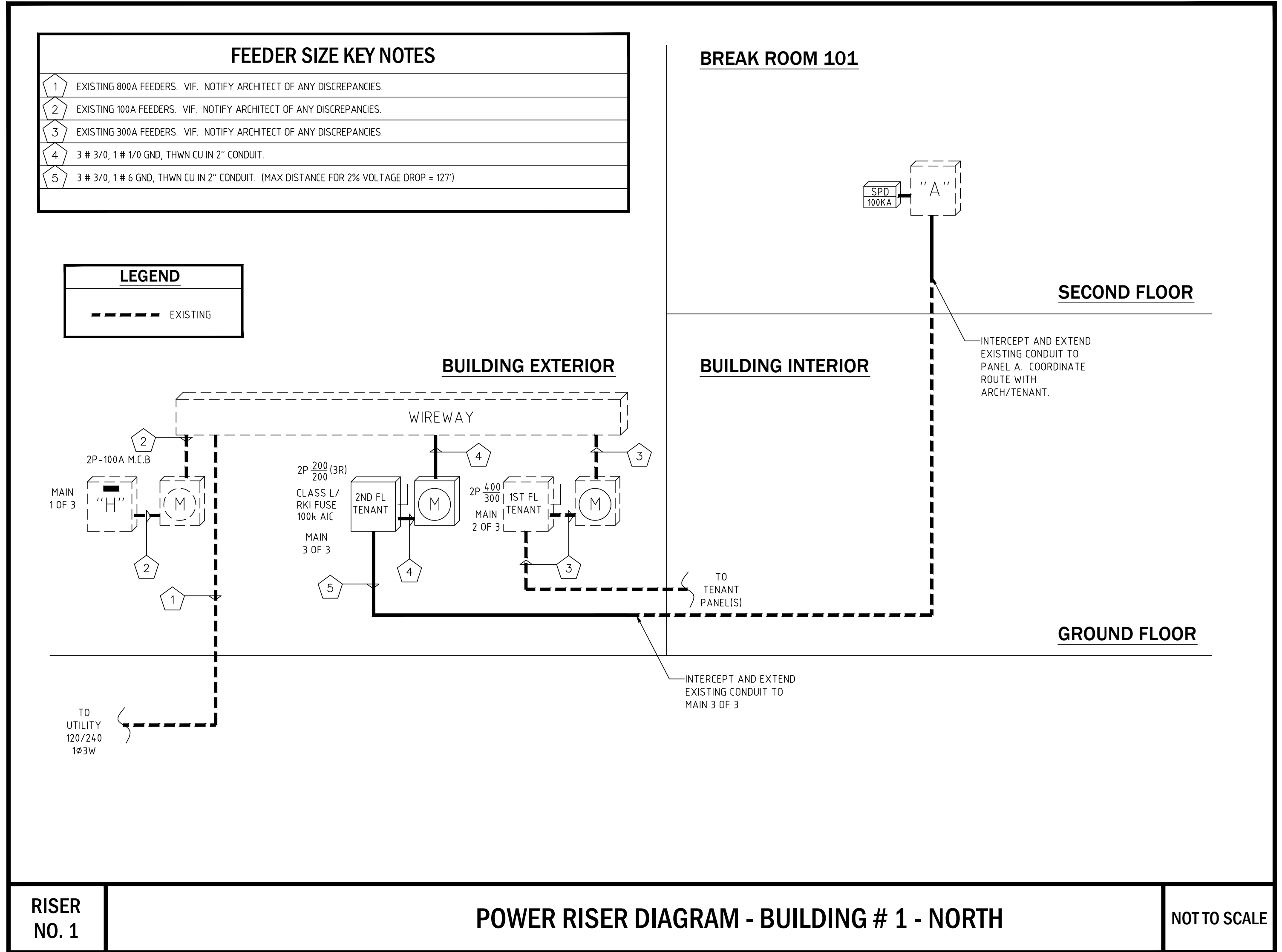
### SHORT CIRCUIT FAULT CURRENT CALCULATION

CALCULATION OF FAULT CURRENT  
 FAULT SCA SOURCE = TA PRIMARY INFINITE  
 SCA AVAILABLE = INFINITE  
 LENGTH UNITS = FEET  
 MOTOR LOAD = NONE  
 MOTOR SCA = NONE  
 MOTOR SCA TREATMENT = MOTOR SCA NOT INCLUDED  
 SYSTEM VOLTAGE = 240  
 SYSTEM PHASE = 1 PHASE  
 TRANSFORMERS

TA	NAME	PH	SIZE	PRIV	SEC.V	%Z	SCA,L-L	SCA,L-N
		1-PH	167		240	1.4	49,703	74,555

S/F	NAME	COND	CABLE SIZE	QTY	FEET	SCA,L-L	SCA,L-N
1	PVC, ABS	1/C, CU	500	2	50	35,816	34,466
4/5	EMT	1/C, CU	3/0	1	70	13,636	8,344



MFG	SQUARE 'D' OR EQUAL	TYPE	NQ	PANEL RATING										400 AMPS				
VOLTS	120/240V 1Ø3W	PANEL	"A"											BUS B (KVA)	BUS B (KVA)			
0.4		REC - LOBBY		1/2"	12	12	20	1	2	20	12	12	12	1/2"	2	SYSTEM FURNITURE	1.0	
	0.5	DRINKING FOUNTAIN	4	1/2"	12	12	20	3	4	20	12	12	12	1/2"	2	SYSTEM FURNITURE		1.0
0.8		REC - BREAK ROOM		1/2"	12	12	20	5	6	20	12	12	12	1/2"	2	SYSTEM FURNITURE	1.0	
	0.9	REF	4	1/2"	12	12	20	7	8	20	12	12	12	1/2"	2	SYSTEM FURNITURE		1.0
1.5		SMALL APP		1/2"	12	12	20	9	10	20	12	12	12	1/2"	2	SYSTEM FURNITURE	1.0	
	1.5	SMALL APP		1/2"	12	12	20	11	12	20	12	12	12	1/2"	2	SYSTEM FURNITURE		1.0
0.2		REC - IT		1/2"	12	12	20	13	14	20	12	12	12	1/2"	2	SYSTEM FURNITURE	1.0	
	0.8	IT EQUIP		1/2"	12	12	20	15	16	20	12	12	12	1/2"	2	SYSTEM FURNITURE		1.0
0.8		IT EQUIP		1/2"	12	12	20	17	18	20	12	12	12	1/2"	2	SYSTEM FURNITURE	1.0	
	0.4	TELE BACK BOARD		1/2"	12	12	20	19	20		30	10	10	3/4"	3	AHU-1		2.8
2.3		WATER HEATER		1/2"	12	12	20	21	22								2.8	2.8
	2.3							23	24		25	10	10	3/4"	3	CU-1	(1.4)	(1.4)
0.6		REC - OFFICE 1		1/2"	12	12	20	25	26									
	0.6	REC - OFFICE 1		1/2"	12	12	20	27	28		30	10	10	3/4"	3	AHU-2	2.9	2.9
0.4		REC - OFFICE 2		1/2"	12	12	20	29	30									
	0.6	REC - OFFICE 3		1/2"	12	12	20	31	32		45	10	8	3/4"	3	CU-2	(2.5)	(2.5)
0.6		REC - OFFICE 4		1/2"	12	12	20	33	34									
		SPACE						35	36									
								37	38									
								39	40									
								41	42									
								43	44									
								45	46									
								47	48									
								49	50									
								51	52									
								53	54									
TOTALS																		
KVA Φa		KVA ΦB																
18.3		17.2																

### REMARKS & KEY NOTES

- MAIN LUGS ONLY. ELECTRICAL CONTRACTOR SHALL PROVIDE AN ACCURATE PER FIELD CONDITIONS, TYPED UP PANEL SCHEDULE UPON COMPLETION OF THE PROJECT.
- VERIFY ELECTRICAL REQUIREMENTS OF ALL EQUIPMENT PRIOR TO CONSTRUCTION; ALL EQUIPMENT'S ELECTRICAL REQUIREMENTS SHALL BE CONFIRMED WITH MFG SPECS. VERIFY VOLTAGE, AMPERAGE, AND BREAKER SIZES.
- NON-CONCURRENT LOAD. PROVIDE NEW "HACR" RATED CIRCUIT BREAKER.
- PROVIDE "GFCI" RATED CIRCUIT BREAKER.
- CONTROLLED VIA ASTRONOMICAL TIME CLOCK.
- INSTALL PER MANUFACTURER SPECIFICATIONS.

### LOAD CALCULATIONS PER NEC 220

1ST 10KVA OF RECEPS.	10.0	AT 100%	10.0
REMAINDER OF RECEPS.	3.2	AT 50%	1.6
LIGHTING	0.0	AT 125%	0.0
LARGEST MOTOR	5.8	AT 125%	7.3
WATER HEATER	4.5	AT 125%	5.6
KITCHEN EQUIPMENT	0.0	AT 65%	0.0
REMAINDER OF LOADS		AT 100%	12.0
TOTAL KVA			36.4
TOTAL AMPS			151.8

MOUNT RECESSED MIN A.I.C. 22,000 AMPS

A NEW TENANT MAIN HAS BEEN ADDED. CONTRACTOR TO RE-LABEL MAINS AS INDICATED. ALL UNIT CIRCUIT BREAKER/MAINS SHALL BE LABELED AS INDICATED.

COORDINATE NEW ELECTRICAL SERVICE WITH UTILITY SERVICE REPRESENTATIVE. PRIOR TO BID, ELECTRICAL CONTRACTOR SHALL VERIFY WITH UTILITY COMPANY THAT THE FAULT CURRENT AVAILABLE DOES NOT EXCEED THE FAULT CURRENT RATING OF THE SPECIFIED SWITCHGEAR. NOTIFY ARCHITECT/ ENGINEER IF CHANGES TO PLANS ARE REQUIRED.

NOTE: THE GC SHALL COORDINATE EXACT PLACEMENT OF NEW ELECTRICAL SERVICE EQUIPMENT WITH EXISTING LANDSCAPING TO MAINTAIN REQUIRED CLEARANCES. FIELD VERIFY.

### PANEL FEEDER NOTE

THE ELECTRICAL CONTRACTOR SHALL VERIFY THE LENGTH OF ALL 120V RUNS IN FIELD AND SHALL MAINTAIN LESS THAN 3% VOLTAGE DROP. THE WIRE GAUGE MAY NEED TO INCREASE TO #10 AWG. FOR A 20A BREAKER.

### ELECTRICAL SERVICE & PANEL NOTES

- ALL ELECTRICAL SERVICE EQUIPMENT SHALL MATCH EXISTING A.I.C. RATING. ALL EQUIPMENT LOCATED ON EXTERIOR OF BUILDING SHALL BE NEMA-3R RATED.
- ALL ELECTRICAL EQUIPMENT AND WIRE SHALL BE RATED @ 75°C CONTINUOUS DUTY.
- PRIOR TO CONSTRUCTION, THE ELECTRICAL CONTRACTOR SHALL:
  - VERIFY ALL EXISTING CONDITIONS IN FIELD
  - COORDINATE THE ELECTRICAL SERVICE WITH FP&L REPRESENTATIVE
  - NOTIFY THE ENGINEER OF ANY CHANGES REQUIRED TO COMPLETE NEW CONSTRUCTION.
- ALL ELECTRICAL EQUIPMENT SHALL BE FIELD MARKED TO WARN OF POTENTIAL ELECTRICAL ARC FLASH HAZARDS. THE MARKING SHALL BE LOCATED SO AS TO BE CLEARLY VISIBLE BEFORE ANY EXAMINATION, ADJUSTMENT, SERVICING, OR MAINTENANCE OF THE EQUIPMENT.
- EACH DISCONNECT SHALL BE LEGIBLY MARKED TO INDICATE THE UNIT IT IS FEEDING. THE MARKING SHALL BE OF SUFFICIENT DURABILITY TO WITHSTAND THE ENVIRONMENT INVOLVED.

PROGRESS OR CHECK SETS, BY THEIR NATURE, MAY BE INCOMPLETE AND ARE NOT TO BE USED FOR BIDDING OR CONSTRUCTION. CONTRACTOR RECOGNIZES HIS SOLE RESPONSIBILITY TO INCLUDE ALL CONTINGENCIES FOR DESIGN AND INSTALLATION TO MEET THE PROJECT REQUIREMENTS IN ANY PRICING EXERCISE.

PRIOR TO SUBMITTING THE BID, THE CONTRACTOR SHALL FIELD VERIFY ALL EXISTING CONDITIONS AND INFORM THE ARCHITECT AND THE ENGINEER OF ANY DISCREPANCY BETWEEN THESE DOCUMENTS AND THE EXISTING CONDITIONS AND SHALL INCLUDE IN THE BID TO CORRECT THE SAME AS DIRECTED. THE ENGINEER AND THE ARCHITECT, ARE NOT RESPONSIBLE FOR ANY ADDITIONAL COSTS RESULTING FROM VERIFIABLE EXISTING CONDITIONS DISCOVERED AFTER CONTRACT HAS BEEN AWARDED. NO CHANGES SHALL BE MADE TO THESE PLANS WITHOUT PRIOR APPROVAL FROM THE ENGINEER OF RECORD. ALL CHANGES SHALL BE SUBMITTED FOR REVIEW PRIOR TO INSTALLATION. NOT FOR BID UNTIL PERMIT HAS BEEN ISSUED.

CHECK SET: 02/22/16

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E3.1

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 2. Contractor to verify all written dimensions (Not scaled) & notify architect of any discrepancies or omissions. Construction shall not proceed until said discrepancies or omissions have been resolved by architect.  
 3. Contractor to verify and approve all shop drawings and dimensions before having drawings reviewed and accepted by the architect prior to construction.

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