

**PANELBOARD SCHEDULE NOTES:**

EVERY CIRCUIT AND CIRCUIT MODIFICATION SHALL BE LEGIBLY IDENTIFIED AS TO ITS CLEAR, EVIDENT, AND SPECIFIC PURPOSE OR USE. THE IDENTIFICATION SHALL INCLUDE SUFFICIENT DETAIL TO ALLOW EACH CIRCUIT TO BE DISTINGUISHED FROM ALL OTHERS. SPARE POSITIONS THAT CONTAIN UNUSED OVERCURRENT DEVICES OR SWITCHES SHALL BE DESCRIBED ACCORDINGLY. THE IDENTIFICATION SHALL BE INCLUDED IN A CIRCUIT DIRECTORY THAT IS LOCATED ON THE FACE OR INSIDE OF THE PANEL DOOR, IN THE CASE OF A PANELBOARD, AND LOCATED AT EACH SWITCH ON A SWITCHBOARD. NO CIRCUIT SHALL BE DESCRIBED IN A MANNER THAT DEPENDS ON TRANSIENT CONDITIONS OF OCCUPANCY.

ELECTRICAL CONTRACTOR SHALL PROVIDE UPDATED, TYPED PANELBOARD SCHEDULES FOR ALL PANELBOARDS INVOLVED IN THIS REMODEL. INSPECTOR WILL VERIFY AT FINAL INSPECTION.

ELECTRICAL CONTRACTOR SHALL ENSURE THAT ALL BREAKERS LABELED AS "SPARE" WITH THIS SYMBOL (Δ) UNDER THIS SCOPE OF WORK ARE UN-USED. IF IT IS FOUND THAT ANY OF THESE BREAKERS SERVE LOADS NOT REPRESENTED IN THIS DOCUMENTS, NOTIFY THE ENGINEER IN WRITING SUCH THAT PANELS CAN BE UPDATED.

**GENERAL NOTES:**

- ELECTRICAL CONTRACTOR SHALL INSTALL COMPLETE ELECTRICAL SYSTEMS FOLLOWING THE LATEST ADOPTED VERSION OF THE N.E.C.
- ELECTRICAL CONTRACTOR SHALL USE CONNECTORS TO ENTER AND EXIT JUNCTION BOXES.
- ELECTRICAL CONTRACTOR SHALL USE UL LISTED JUNCTION BOX COVERS AND ENSURE THEY ARE ON ALL JUNCTION BOXES. LABEL ALL CIRCUITS WITHIN JUNCTION BOX ON OUTSIDE OF JUNCTION BOX COVER.
- ELECTRICAL CONTRACTOR SHALL USE STRAPS TO SUPPORT CONDUIT AND WIRE PER N.E.C.
- ELECTRICAL CONTRACTOR SHALL ENSURE ALL SPIJCES HAVE MECHANICAL CONNECTION. WIRES SHALL BE TWISTED IN A CLOCK-WISE DIRECTION, TRIMMED AND WIRE NUT INSTALLED SO THAT NO BARE COPPER IS EXPOSED. ELECTRICAL CONTRACTOR SHALL ENSURE CONDUIT IS FREE FROM ANY BURRS OR SHARP OBJECTS THAT COULD DAMAGE THE CONDUCTORS INSULATION.
- ELECTRICAL CONTRACTOR SHALL NOT EXCEED 360 DEGREES WORTH OF BENDS IN ANY CONDUIT RUN PER N.E.C.
- ELECTRICAL CONTRACTOR SHALL NOT OVER FILL CONDUITS OR BOXES PER N.E.C.
- ELECTRICAL CONTRACTOR SHALL LABEL ALL RECEPTACLES WITH "P-TOUCH" CLEAR LABELS. PROVIDE PANEL NAME AND CIRCUIT NUMBER. (ie. H1-21, P2A-15, etc.)
- ELECTRICAL CONTRACTOR SHALL BE RESPONSIBLE FOR ADJUSTING ALL EXISTING ELECTRICAL CONDITIONS TO MEET CURRENT N.E.C. CODE REQUIREMENTS. (ie. ACCESS PANELS, RELOCATION OF EXISTING EQUIPMENT/ JUNCTION BOXES TO COMPLY WITH "READILY ACCESSIBLE" REQUIREMENTS, etc.)
- ELECTRICAL CONTRACTOR SHALL NOTIFY ENGINEER IN WRITING OF ANY CODE VIOLATIONS WITH INSTALLATION PRIOR TO FINAL INSPECTION.

**KEYED NOTES**

- EXISTING UTILITY TRANSFORMER TO REMAIN.
- EXISTING UTILITY SECONDARIES TO REMAIN.
- EXISTING SERVICE GROUND AND BONDING TO REMAIN.
- EXISTING CONDUIT AND CONDUCTORS TO REMAIN.
- SEE SERIES RATED DETAIL, THIS SHEET.
- NEW (4) #3/0 Cu, (1) #6 Cu EG, 2" CONDUIT AS REQUIRED.
- PROVIDE NEW FUSES AS REQUIRED.

PROVIDE THIS LABEL READILY VISIBLE AT DISCONNECTING MEANS AND PANELBOARD AS NOTED PER NEC 110.22 & 240.86(b).



PANELBOARD "P102"  
65K / 10K  
FUSE / BREAKER  
SERIES RATED SYSTEM  
"10572" - A AVAILABLE.  
IDENTIFIED REPLACEMENT  
COMPONENTS REQUIRED.

**NEW PANELBOARD SCHEDULE**

"P102"

#	CIRCUIT DESCRIPTION	CB	A#	B#	C#	CB	CIRCUIT DESCRIPTION	#
1	RECEPTS- OFFICE 102.06 & 102.07	20	1	1080		20	LIGHTING- WAITING, HALL & REST RMS	2
3	RECEPTS- 102.05 & 102.03	20	1	1080		20	LIGHTING-OFFICES, BREAK RM & CONFERENCE	4
5	RECEPTS- 102.07, 102.11 & 102.12 (NEW)	20	1	1080		20	SPARE	6
7	RECEPTS- 102.07, 102.11 & 102.12 (EXIST.)	20	1	1080		20	SPARE	8
9	RECEPTS- BREAKROOM REFRIGERATOR	20	1	1500		20	SPARE	10
11	RECEPTS- COUNTER TOP A	20	1		360	20	SPARE	12
13	RECEPTS- COUNTER TOP B	20	1	360			BUSSED SPACE	14
15	RECEPTS- VITALS 102.09 & REST RMS.	20	1	1080			BUSSED SPACE	16
17	RECEPTS- CIRC. PUMP & CONFERENCE	20	1	1080		1080	BUSSED SPACE	18
19	RECEPTS- WAITING 102.01 & 102.02	20	1	1080			BUSSED SPACE	20
21	RECEPTS- 102.02 & 102.03	20	1	1080			BUSSED SPACE	22
23	RECEPTS- 102.02, 102.03 & 102.05	20	1	1080			BUSSED SPACE	24
25	SPARE	20	1				BUSSED SPACE	26
27	SPARE	20	1				BUSSED SPACE	28
29	SPARE	20	1				BUSSED SPACE	30
31	SPARE	20	1				BUSSED SPACE	32
33	WATER HEATER (4.5kW)	30	2	2813		2813	BUSSED SPACE	34
35		2					BUSSED SPACE	36
37		50	2	3840		3840		38
39	AC-1			3072		3072		40
41		3						42
TOTAL VA PER PHASE			12007	15895	13325		NOTES: 1. 2.	
TOTAL AMPS PER PHASE			100.1	132.5	111.0			

NEW CIRCUIT BREAKER     LOCK-ON TYPE CIRCUIT BREAKER     AFO TYPE CIRCUIT BREAKER     EXISTING C.B. RELABELED AS "SPARE"  
 CONT. LOAD ( @ 125% )     LOCK-OFF TYPE CIRCUIT BREAKER     GFO TYPE CIRCUIT BREAKER     EXISTING C.B. UNCHANGED     WITH LOAD     WITH LOAD CHANGING  
 CIRCUIT VIA LTG. CNTL.     CIRCUIT BREAKER     CIRCUIT BREAKER     WITH LOAD CHANGING

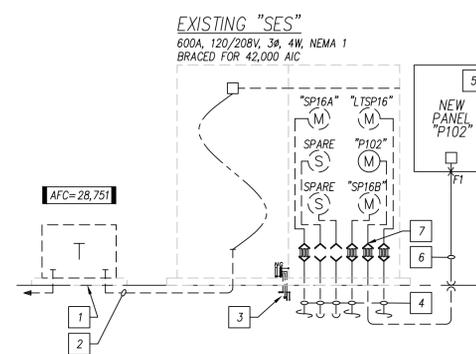
**"SES" LOAD SUMMARY**

EXISTING LOAD ON SES PER NEC 220.87	=	78291 VA
TOTAL LIGHTING LOAD CHANGE (REFER TO LOAD SUMMARY ON LIGHTING PLAN)	=	6540 VA
TOTAL POWER LOAD CHANGE (REFER TO LOAD SUMMARY ON POWER PLAN)	=	-26 VA
REVISED TOTAL LOAD	=	84805 VA
TOTAL LOAD ON "SES" @ 208V/3#	=	235.5 AMPS

**Fault Calculation**

Fault #	Point A	Point B	Isc Primary	Length	Wire Size	Cu or Al	M or NM	"C" Value	Sets	Vp	Vs	Phase	kVA	%Z	Isc Secondary
F1	SES	P102	28751	100	#3/0	Cu	NM	13923	1	208	208	3			10572

CONDUCTOR LENGTHS SHOWN IN CALCULATIONS ARE FOR ENGINEERING PURPOSES ONLY. THESE LENGTHS SHALL NOT BE USED FOR BIDDING PURPOSES. THE ELECTRICAL CONTRACTOR SHALL VERIFY EXACT ROUTING OF FEEDERS AND LENGTH REQUIRED FOR FIELD CONDITIONS. NOTIFY ENGINEER IN WRITING OF ANY DISCREPANCIES.



**ELECTRICAL ONE-LINE DIAGRAM**

N.T.S.

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SAN TAN VALLEY, AZ 85140

**2nd CHANCE TREATMENT CENTER**

**ELECTRICAL ONE-LINE DIAGRAM**

PROJECT:

SHEET TITLE:

PROJECT NO: 2125.01  
DATE: 10-22-2021  
REVISED:

DRAWN BY: WB

SHEET

**E4.0**

OF



Expires: 09/30/2023

**WELCH & SANDON DESIGN INTERIORS LLC**

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