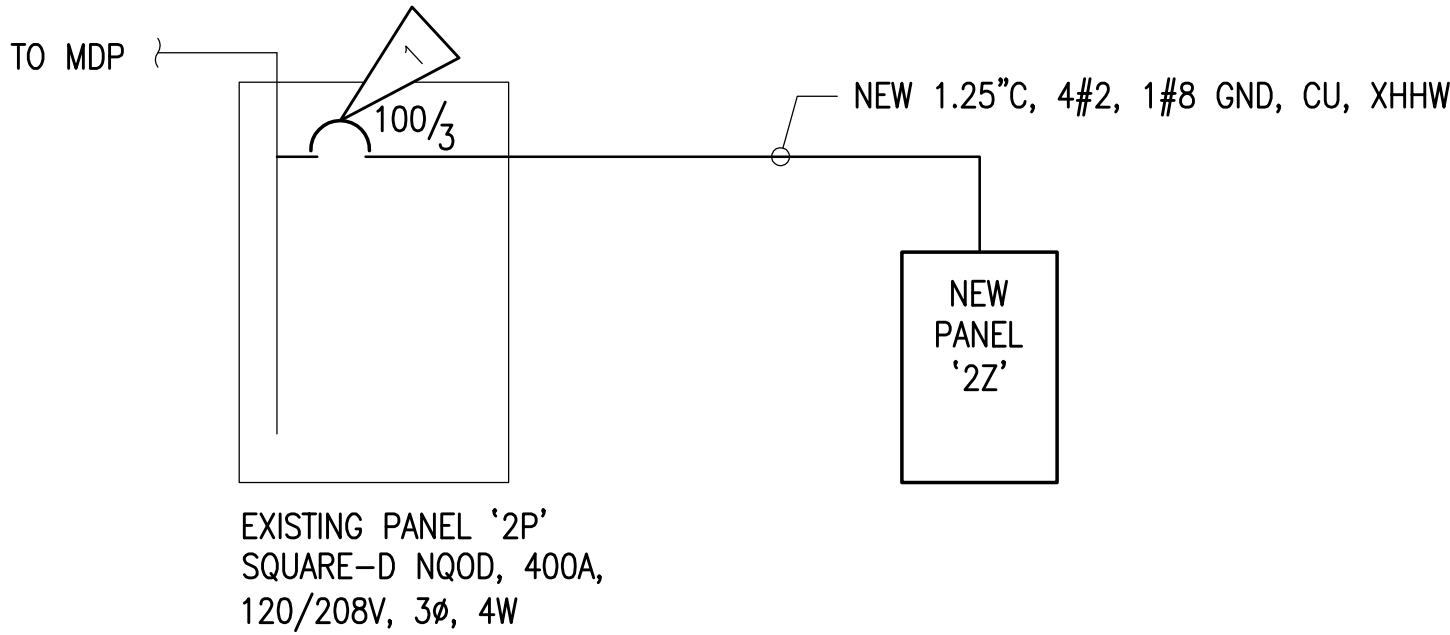


ELECTRICAL LOAD CALCULATION:			
PROJECT:		UAA PHASE II DOCTOR OF PHARMACY PROGRAM TI AT THE PSB BUILDING	
ANCHORAGE, ALASKA			
DATE :		03/14/2017	
EXISTING SERVICE IS 1,200A, 277/480V, 3-PHASE, 4-WIRE			
CALCULATED DEMAND FROM RECORD DRAWINGS (2/19/2016)		157.247 KVA	
LOAD IN AMPS		189.14 A	
REMOVED LOAD:			
LIGHTING LOADS		-4,346 VA	
RECEPTACLES EACH AT 180VA		-9,900 VA	
TOTAL REMOVED LOAD		-14,246 VA	-14,246 VA
NEW CALCULATED LIGHTING LOAD			
NEW LIGHTING PER NEC 220.12		7,125 VA	7,125 VA
ADDED RECEPTACLE LOAD			
RECEPTACLES, 180VA EA		13,500 VA	
100% OF FIRST 10KVA LOAD		10,000 VA	
50% OF REMAINING LOAD		1,750 VA	
TOTAL NEW RECEPTACLE LOAD		11,750 VA	11,750 VA
ADDED EQUIPMENT LOAD			
(2)A/V RACK		3,000 VA	
LS-1		1,176 VA	
AC-1		1,428 VA	
COPIER		1,000 VA	
DISHWASHER		1,200 VA	
MICROWAVE		1,500 VA	
UNDERCOUNTER REFRIGERATOR		500 VA	
TOTAL NEW EQUIPMENT LOAD		9,804 VA	9,804 VA
TOTAL NET LOAD			14,433 VA
TOTAL CALCULATED LOAD			171,680 VA
LOAD IN AMPS (480V,3PH)			206 A
THE EXISTING SERVICE HAS CAPACITY FOR ALL NEW AND EXISTING LOADS			

EXISTING PANEL '2P' IS 400A, 120/208V, 3-PHASE, 4-WIRE			
CALCULATED DEMAND FROM RECORD DRAWINGS (2/19/2016)		62.043 KVA	
LOAD IN AMPS		172.21 A	
REMOVED LOAD:			
RECEPTACLES EACH AT 180VA		-9,900 VA	
TOTAL REMOVED LOAD		-9,900 VA	-9,900 VA
ADDED RECEPTACLE LOAD			
RECEPTACLES, 180VA EA		13,500 VA	
100% OF FIRST 10KVA LOAD		10,000 VA	
50% OF REMAINING LOAD		1,750 VA	
TOTAL NEW RECEPTACLE LOAD		11,750 VA	11,750 VA
ADDED EQUIPMENT LOAD			
(2)A/V RACK		3,000 VA	
LS-1		1,176 VA	
AC-1		1,428 VA	
COPIER		1,000 VA	
DISHWASHER		1,200 VA	
MICROWAVE		1,500 VA	
UNDERCOUNTER REFRIGERATOR		500 VA	
TOTAL NEW EQUIPMENT LOAD		9,804 VA	9,804 VA
TOTAL NET LOAD			11,654 VA
TOTAL CALCULATED LOAD			73,697 VA
LOAD IN AMPS (208V,3PH)			205 A
THE EXISTING PANEL HAS CAPACITY FOR ALL NEW AND EXISTING LOADS			

NEW PANEL '2Z'																	
MFR/MODEL: SQUARE 'D' TYPE NQ						VOLTS: 120/208V,3PH,4W				ENCLOSURE: NEMA 1				100 A			
						VOLT-AMPS						MTG: SURFACE					
NOTE	CIRC	POLE	AMPS	SERVICE	TYPE	A		B		C		TYPE	SERVICE	AMPS	POLE	CIRC	NOTE
	1	1	20	RECP RM 113	RECP	720	540					RECP	RECP RM 101,103	20	1	2	
	3	1	20	RECP RM 113D	RECP			720	540			RECP	RECP RM 103	20	1	4	
	5	1	20	RECP RM 113C,113D	RECP					540	720	RECP	RECP RM 101 CKT#1	20	1	6	
	7	1	20	RECP RM 107,113C	RECP	720	720					RECP	RECP RM 101 CKT#2	20	1	8	
	9	1	20	RECP RM 113A	RECP			900	720			RECP	RECP RM 101 CKT#3	20	1	10	
	11	1	20	RECP RM 113,113B	RECP					540	720	RECP	RECP RM 101 CKT#4	20	1	12	
	13	1	20	COPIER RM 113	MISC	1000	360					RECP	RECP RM 101 CKT#5	20	1	14	
	15	1	20	RECP RM 107 CKT#1	RECP			720	680			RECP	RECP RM 101 CKT#6, U/C REF	20	1	16	
	17	1	20	RECP RM 107 CKT#2	RECP					720	180	RECP	RECP RM 101 CKT#7	20	1	18	
	19	1	20	RECP RM 107 CKT#3	RECP	540	1200					MISC	DISHWASHER RM 101	20	1	20	
	21	1	20	RECP RM 107 CKT#4	RECP			360	864			MOTR	LS-1 RM 101	20	1	22	
	23	1	20	AC-1 CIRC 100C3	MOTR					1428	500	MISC	LECTERN RM 103	20	1	24	
	25	1	20	A/V RACK RM 105 CKT#1	MISC	1500							SPARE	20	1	26	
	27	1	20	A/V RACK RM 105 CKT#2	MISC			1500					SPARE	20	1	28	
	29	1	20	RECP RM 103 CKT#1	RECP					720			SPARE	20	1	30	
	31	1	20	RECP RM 103 CKT#2	RECP	720							SPARE	20	1	32	
	33	1	20	RECP RM 105 CKT#3	RECP			540					SPARE	20	1	34	
	35	1	20	A/V RACK RM 113D	RECP					540			SPARE	20	1	36	
	37	1	20	SPARE									SPARE	20	1	38	
	39	1	20	SPARE									SPARE	20	1	40	
	41	1	20	SPARE									SPARE	20	1	42	
TOTAL V-A						8020		7544		6608		22,172 VA					
TOTAL AMPS						67		63		55		62 A					
A.I.C. RATING: 10,000																	
CONNECTED LOAD IN KVA (THIS PANEL): CONNECTED LOAD IN KVA (BRANCH PANELS): TOTAL CONNECTED LOAD IN KVA: DEMAND LOAD IN KVA:						LTG	RECP	MOTR	LG.MT	MISC	KIT	HEAT	SPEC	TOTAL		AMPS	
						0.00	14.18	2.29	0.36	5.70	0.00	0.00	0.00	22.2 KVA		62 A	
						0.00	14.18	2.29	0.36	5.70	0.00	0.00	0.00	0.0 KVA		0 A	
						0.00	12.09	2.29	0.36	5.70	0.00	0.00	0.00	22.2 KVA		62 A	
PANEL NOTES:												PANEL OPTIONS: MAIN LUGS ONLY					



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PARTIAL POWER ONE-LINE DIAGRAM

NO SCALE

DETAIL NOTES:

1.
- PROVIDE NEW CIRCUIT BREAKER IN EXISTING PANEL. CIRCUIT BREAKER SHALL BE LISTED FOR USE IN THE PANEL AND SHALL HAVE AN AIC RATING MATCHING THE LOWEST RATED DEVICE IN THE PANEL.

FULL SIZE PRINTED ON 22 x 34

LOAD CALC, PANEL SCHEDULE, AND ONE-LINE

AUTHOR: JAM,RWM CHECKED: JAM,RLW

OWNER PROJECT #: L5202.10

ISSUE DATE: 3-14-17

REVISION:

E0.2

