



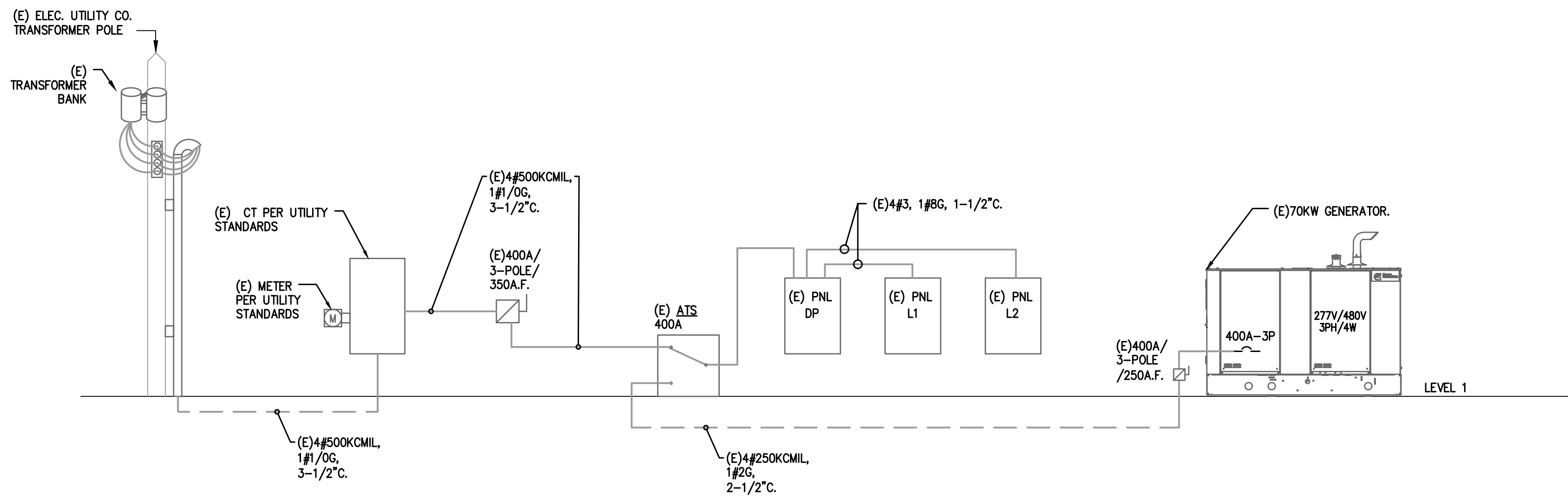
ARCHITECTURE PLANNING INTERIOR DESIGN  
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NECHES LUMBERTON OFFICE ADDITION  
 299 Country Lane at U.S. 69  
 Lumberton, Texas 77657



E/P/E PROJECT NUMBER: 26028.00



**01 ELECTRICAL ONE-LINE DIAGRAM**  
 SCALE: NOT TO SCALE

ELECTRICAL LOAD ANALYSIS					
PROJECT NAME: NECHES FCU LUMBERTON EXPANSION					
PROJECT NUMBER: 26028.00					
SERVICE VOLTAGE: 120/208, 3 PHASE, 4 WIRE, WYE					
SERVICE RATING: 400 AMPS					
GROSS AREA: 1,001 SQUARE FEET					
LOAD DESCRIPTION	CODE	CONNECTED	DEMAND	DESIGN	REMARKS
LIGHTS (1.3 VA/FT <sup>2</sup> ):	1.3	0.7	125%	1.6	NEC 220.42, 43, 44, 45
SIGN LIGHTS:	0.0	0.0	125%	0.0	NEC 220.14.F
SITE LIGHTS:	0.0	0.0	125%	0.0	NEC 220.42, 43, 44, 45
RECEPTACLES:	1.0	2.3	10kVA+50%	2.3	NEC 220.14.H, I, J, K, 220.47
EQUIPMENT:	5.2	5.2	100%	5.2	NEC 220.14.A
WATER HEATERS:	0.0	0.0	100%	0.0	NEC 220.14.A
HVAC:	6.6	6.6	100%	6.6	NEC 220.14.G, 220.50
ELECTRIC HEAT:	0.0	0.0	100%	0.0	NEC 220.51
LARGEST MOTOR:	0.0	0.0	125%	0.0	NEC 430.22
TOTAL DESIGN LOAD: 16 KVA					
@ 208V, 3 PHASE: 44 AMPS					

NOTE: ALL LOADS AND DEMAND FACTORS ARE IN ACCORDANCE WITH APPLICABLE SECTIONS OF NEC ARTICLE 220

PROJECT NAME: NECHES FCU LUMBERTON EXPANSION											
PROJECT NUMBER: 26028.00											
PANEL: DP EXISTING PANEL											
VOLTAGE: 120/208V, 3PH, 4W BUS: 400 AMP MAINS: M.L.O. ACCESSORIES:											
CODES: 0=LIGHTS 1=RECEP 2=EQUIP 3=A/C 4=HTG 5=125% LGST MTR 6=KITCHEN 7=PREVIOUSLY CALCULATED											
CODE	LOAD	CIRCUIT DESCRIPTION	BKR	CKT	PH	CKT	BKR	CIRCUIT DESCRIPTION	LOAD	CODE	
7	11581	PANEL L1	100/3	1	A	2	100/3	PANEL L2	6367	7	
7	13314	---	---	3	B	4	---	---	9867	7	
7	10783	---	---	5	C	6	---	---	8627	7	
3	5476	RTU-1	50/3	7	A	8	60/3	RTU-3	6377	3	
3	5476	---	---	9	B	10	---	---	6377	3	
3	5476	---	---	11	C	12	---	---	6377	3	
3	5476	RTU-2	60/3	13	A	14	20/1	VAV	100	3	
3	5476	---	---	15	B	16	40/2	RTU-4	3328	3	
3	5476	---	---	17	C	18	---	---	3328	3	
4	2250	EW-1	30/2	19	A	20	---	SPACE	---	4	
4	2250	---	---	21	B	22	---	SPACE	---	4	
		SPACE	---	23	C	24	---	SPACE	---		
		SPACE	---	25	A	26	---	SPACE	---		
		SPACE	---	27	B	28	---	SPACE	---		
		SPACE	---	29	C	30	---	SPACE	---		
		SPACE	---	31	A	32	---	SPACE	---		
		SPACE	---	33	B	34	---	SPACE	---		
		SPACE	---	35	C	36	---	SPACE	---		
		SPACE	---	37	A	38	---	SPACE	---		
		SPACE	---	39	B	40	---	SPACE	---		
		SPACE	---	41	C	42	---	SPACE	---		
LIGHTS	RECEP	EQUIP	MOTORS	EL. HEAT	PHASE	PHASE	CONN.KVA	LOAD FACTORS	DES. KVA	DES. AMP	
0	0	0	0	17429	A	A	37.6	LIGHTS @ 125%	19.7	164	
0	0	0	0	20657	B	B	46.1	EQUIP. @ 100%	22.9	191	
0	0	0	0	20657	C	C	40.1	LG. MOTOR @ 125%	20.7	172	
0	0	0	0	58743		TOTAL	123.8	RECEPS @ 10kVA+50%	63.2	176	
SUB-FEED PANELS:											
		PANEL NAME	S.F. KVA	LOAD FACTORS	DES. KVA	DES. AMP					
		PANEL L1	35.7	SUB FEED @ 100%	35.7	99					
		PANEL L2	24.9	SUB FEED @ 100%	24.9	69					
		GRAND TOTAL	123.8		123.8	344					

\* EXISTING CIRCUIT BREAKER - ESTIMATED LOAD  
 \*\* EXISTING SPARE CIRCUIT BREAKER  
 \*\*\* EXISTING BREAKER SPACE  
 \*\*\*\* REPLACE EXISTING BREAKER AS SHOWN

PROJECT NAME: NECHES FCU LUMBERTON EXPANSION											
PROJECT NUMBER: 26028.00											
PANEL: L1 EXISTING PANEL											
VOLTAGE: 120/208V, 3PH, 4W BUS: 100 AMP MAINS: M.L.O. ACCESSORIES:											
CODES: 0=LIGHTS 1=RECEP 2=EQUIP 3=A/C 4=HTG 5=125% LGST MTR 6=KITCHEN 7=PREVIOUSLY CALCULATED											
CODE	LOAD	CIRCUIT DESCRIPTION	BKR	CKT	PH	CKT	BKR	CIRCUIT DESCRIPTION	LOAD	CODE	
0	100	EXT EM LIGHT	20/1	1	A	2	20/1	SITE LIGHTING	1125	0	
0	300	LIGHTING	20/1	3	B	4	20/1	---	1125	0	
0	414	LIGHTING	20/1	5	C	6	20/1	SITE LIGHTING	900	0	
0	824	LIGHTING	20/1	7	A	8	20/1	---	900	0	
0	824	LIGHTING	20/1	9	B	10	20/1	SITE LIGHTING	1050	0	
0	880	LIGHTING	20/1	11	C	12	20/1	SIGN	1200	0	
0	900	LIGHTING	20/1	13	A	14	20/1	LANE LIGHTS	300	0	
0	1200	SIGN	20/1	15	B	16	20/1	SIGN	1200	0	
0	1200	SIGN	20/1	17	C	18	20/1	SIGN	1200	0	
0	1000	LED LIGHT	20/1	19	A	20	20/1	SIGN	1200	0	
0	1200	SIGN	20/1	21	B	22	20/1	SIGN	1200	0	
0	1200	SIGN	20/1	23	C	24	20/1	BRKROOM/HALLWAY GP	900	1	
0	0	TRACK LIGHT	20/1	25	A	26	20/1	REF*GFCI BREAKER*	800	6	
2	600	COIN MACHINE	20/1	27	B	28	20/1	SMALL APPLIANCE	600	6	
2	600	COIN MACHINE	20/1	29	C	30	20/1	SMALL APPLIANCE	600	6	
0	700	OFFICE HALLWAY LIGHTS	20/1	31	A	32	26/2	IWH-1	2050	4	
		SPACE	---	33	B	34	---	---	2050	4	
		SPACE	---	35	C	36	---	---	---		
		SPACE	---	37	A	38	---	SPACE	---		
		SPACE	---	39	B	40	---	SPACE	---		
		SPACE	---	41	C	42	---	SPACE	---		
LIGHTS	RECEP	EQUIP	MOTORS	EL. HEAT	PHASE	PHASE	CONN.KVA	LOAD FACTORS	DES. KVA	DES. AMP	
7049	0	720	0	2050	A	A	9.8	LIGHTS @ 125%	11.6	96	
8099	0	1140	0	2050	B	B	11.3	EQUIP. @ 100%	13.3	111	
5994	900	1140	0	0	C	C	9.0	LG. MOTOR @ 125%	10.8	90	
22142	900	3000	0	4100	TOTAL	TOTAL	30.1	RECEPS @ 10kVA+50%	35.7	99	

\* EXISTING CIRCUIT BREAKER - ESTIMATED LOAD  
 \*\* EXISTING SPARE CIRCUIT BREAKER  
 \*\*\* EXISTING BREAKER SPACE  
 \*\*\*\* REPLACE EXISTING BREAKER AS SHOWN

PROJECT NAME: NECHES FCU LUMBERTON EXPANSION											
PROJECT NUMBER: 26028.00											
PANEL: L2 EXISTING PANEL											
VOLTAGE: 120/208V, 3PH, 4W BUS: 100 AMP MAINS: M.L.O. ACCESSORIES:											
CODES: 0=LIGHTS 1=RECEP 2=EQUIP 3=A/C 4=HTG 5=125% LGST MTR 6=KITCHEN 7=PREVIOUSLY CALCULATED											
CODE	LOAD	CIRCUIT DESCRIPTION	BKR	CKT	PH	CKT	BKR	CIRCUIT DESCRIPTION	LOAD	CODE	
1	2880	RECEPTACLE	30/1	1	A	2	20/1	RECEPTACLES	180	1	
1	2880	RECEPTACLE	30/1	3	B	4	20/1	DISPOSAL	500	6	
1	180	RECEPTACLE	20/1	5	C	6	20/1	RECEPTACLES	180	1	
1	180	RECEPTACLE	20/1	7	A	8	20/1	REF	500	6	
1	2880	RECEPTACLE	30/1	9	B	10	20/1	EDF	500	2	
1	2880	RECEPTACLE	20/1	11	C	12	20/1	RECEPTACLES	180	1	
1	180	RECEPTACLE	20/1	13	A	14	20/1	RECEPTACLES	180	1	
1	180	RECEPTACLE	20/1	15	B	16	20/1	RECEPTACLES	180	1	
1	720	RECEPTACLE	20/1	17	C	18	20/1	RECEPTACLES	180	1	
1	1080	RECEPTACLE	20/1	19	A	20	20/1	RECEPTACLES	180	1	
1	900	RECEPTACLE	20/1	21	B	22	20/1	COPIER	1200	2	
1	1080	RECEPTACLE	20/1	23	C	24	20/1	RECEPTACLES	900	1	
1	720	RECEPTACLE	20/1	25	A	26	20/1	RECEPTACLES	720	1	
1	360	RECEPTACLE	20/1	27	B	28	20/1	RECEPTACLES	180	1	
1	540	RECEPTACLE	20/1	29	C	30	20/1	RECEPTACLES	1080	1	
1	180	RECEPTACLE	20/1	31	A	32	20/1	RECEPTACLES	720	1	
2	500	DRIVE THRU	20/1	33	B	34	20/1	VIDEO	500	2	
2	500	DRIVE THRU	20/1	35	C	36	20/1	AUDIO	500	2	
2	100	LCP	20/1	37	A	38	20/1	SWITCHES	500	2	
2	500	J-BOX	20/1	39	B	40	20/1	OFFICE GP	1440	1	
2	1200	OFFICE PC	20/1	41	C	42	20/1	EDF	800	2	
LIGHTS	RECEP	EQUIP	MOTORS	EL. HEAT	PHASE	PHASE	CONN.KVA	LOAD FACTORS	DES. KVA	DES. AMP	
0	9000	1100	0	0	A	A	8.3	LIGHTS @ 125%	8.4	53	
0	7920	3700	0	0	B	B	12.7	EQUIP. @ 100%	9.9	82	
0	7920	3000	0	0	C	C	10.9	LG. MOTOR @ 125%	8.6	72	
0	24120	7800	0	0	TOTAL	TOTAL	31.9	RECEPS @ 10kVA+50%	24.9	69	

\* EXISTING CIRCUIT BREAKER - ESTIMATED LOAD  
 \*\* EXISTING SPARE CIRCUIT BREAKER  
 \*\*\* EXISTING BREAKER SPACE  
 \*\*\*\* REPLACE EXISTING BREAKER AS SHOWN

ISSUED FOR CLIENT APPROVAL	DATE
ISSUED FOR BIDDING	04/30/2026
ISSUED FOR PERMIT	04/30/2026
ISSUED FOR CONSTRUCTION	

REVISIONS		
MARK	DESCRIPTION	DATE
	REVIEW SET	03-27-2026
	90% REVIEW SET	04-13-2026
	BID AND PERMIT	04-30-2026

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DRAWING TITLE  
**ELECTRICAL SCHEDULES**

SHEET NO.

**E-4.00**



04/30/2026