

CRT	LOAD	WIRE SIZE	KVA	PHASES			WIRE SIZE	LOAD	
				A	B	C			
1	LIGHTING OFFICE	#12 0.9	20/1	20/1	20/1	0.54	#12	RECEPTACLE OFFICE	2
3	LIGHTING EXTERIOR	#12 1.0	20/1	20/1	20/1	0.54	#12	RECEPTACLE OFFICE	4
5	LIGHTING CONTRACTOR	#3 4.0	100/2	20/1	20/1	1.0	#12	RECEPTACLE VENDING	6
7	LIGHTING CONTRACTOR	#3 4.0	-	20/1	20/1	1.0	#12	RECEPTACLE VENDING	8
9	PANEL 'B'	#3	10.3 100/3	20/2	20/2	1.2	#12	PVC NORTH	10
11	PANEL 'B'	#3	10.3	-	-	1.2	#12	-	12
13	PANEL 'B'	#3	10.3	20/1	20/1	0.72	#12	TIME CLOCK	14
15	208V RECEPT. VENDING	#12	12 20/2	20/1	20/1	0.72	#12	CAMERA	16
17	-	#12	1.2	-	20/1	0.9	#12	DECK LIGHTS	18
19	-	-	-	-	-	-	-	-	19
21	-	-	-	-	-	-	-	-	22
23	-	-	-	-	-	-	-	-	24
25	-	-	-	-	-	-	-	-	26
27	-	-	-	-	-	-	-	-	28
29	-	-	-	-	-	-	-	-	30
31	-	-	-	-	-	-	-	-	32
33	-	-	-	-	-	-	-	-	34
35	-	-	-	-	-	-	-	-	36
37	-	-	-	-	-	-	-	-	38
39	-	-	-	-	-	-	-	-	40
41	-	-	-	-	-	-	-	-	42

CONN. LTG. 15.96 x 1.25 = 19.95 KVA    CONN. HMC. - x 1.0 = - KVA    CONN. MISC./EQUIP. 28.47 x 1.0 = 28.47 KVA  
 XPHR LOAD - x 1.0 = - KVA    CONN. RECEPT. 6.68 x NEC = 6.68 KVA    TOTAL LOAD = 55.1 KVA    153.1 AMPS

CRT	LOAD	WIRE SIZE	KVA	PHASES			WIRE SIZE	LOAD	
				A	B	C			
1	LIGHTS REST ROOM BLD.	#12 1.16	100/2	20/1	20/1	30/3	#10	POOL PUMP #1	2
3	LIGHTS EXTERIOR	#12 0.8	20/1	20/1	20/1	2.18	#10	-	6
5	RECEPTACLE	#12 0.36	20/1	20/1	20/1	2.18	#10	-	6
7	RECEPTACLE	#12 0.36	20/1	20/1	20/1	0.72	#12	POOL PUMP #2	8
9	RECEPTACLE	#12 0.36	20/1	20/1	20/1	0.72	#12	-	10
11	TIME CLOCK	#12 0.8	20/1	20/1	20/1	20/2	#12	CHEM PUMP #1	12
13	CHEM PUMP #2	#12	1.92 20/1	20/1	20/1	0.96	#12	-	14
15	RECEPTACLE	#12	0.36	20/1	20/1	30/2	#10	WATER HEATER	16
17	RECEPTACLE	#12	0.36	20/1	20/1	2.25	#10	-	18
19	HO-1	#12	1.4 20/1	20/1	20/1	1.4	#12	HO-1	20
21	EHU-1	#12	1.1 20/2	20/1	20/1	1.4	#12	EF-1	22
23	-	#12	1.1	-	20/1	0.3	#12	HEAT TRACE	24
25	RECEPTACLE	#12	0.36	20/1	20/1	10/37	#12	REMOTE COOLER	26
27	-	-	-	-	-	-	-	-	28
29	-	-	-	-	-	-	-	-	30
31	-	-	-	-	-	-	-	-	32
33	-	-	-	-	-	-	-	-	34
35	-	-	-	-	-	-	-	-	36
37	-	-	-	-	-	-	-	-	38
39	-	-	-	-	-	-	-	-	40
41	-	-	-	-	-	-	-	-	42

CONN. LTG. 2.76 x 1.25 = 3.45 KVA    CONN. HMC. - x 1.0 = - KVA    CONN. MISC./EQUIP. 23.37 x 1.0 = 23.37 KVA  
 XPHR LOAD - x 1.0 = - KVA    CONN. RECEPT. 2.16 x NEC = 2.16 KVA    TOTAL LOAD = 31.68 KVA    88.0 AMPS

CRT	LOAD	WIRE SIZE	KVA	PHASES			WIRE SIZE	LOAD	
				A	B	C			
1	LIGHTING COURT	#12 2.0	20/2	20/2	20/2	2.0	#12	LIGHTING COURT	2
3	-	#12 2.0	-	-	-	2.0	#12	-	4
5	LIGHTING COURT	#12 2.0	20/2	20/2	20/2	2.0	#12	LIGHTING COURT	6
7	-	#12 2.0	-	-	-	2.0	#12	-	8
9	-	-	-	-	-	-	-	-	10
11	-	-	-	-	-	-	-	-	12
13	-	-	-	-	-	-	-	-	14
15	-	-	-	-	-	-	-	-	16
17	-	-	-	-	-	-	-	-	18

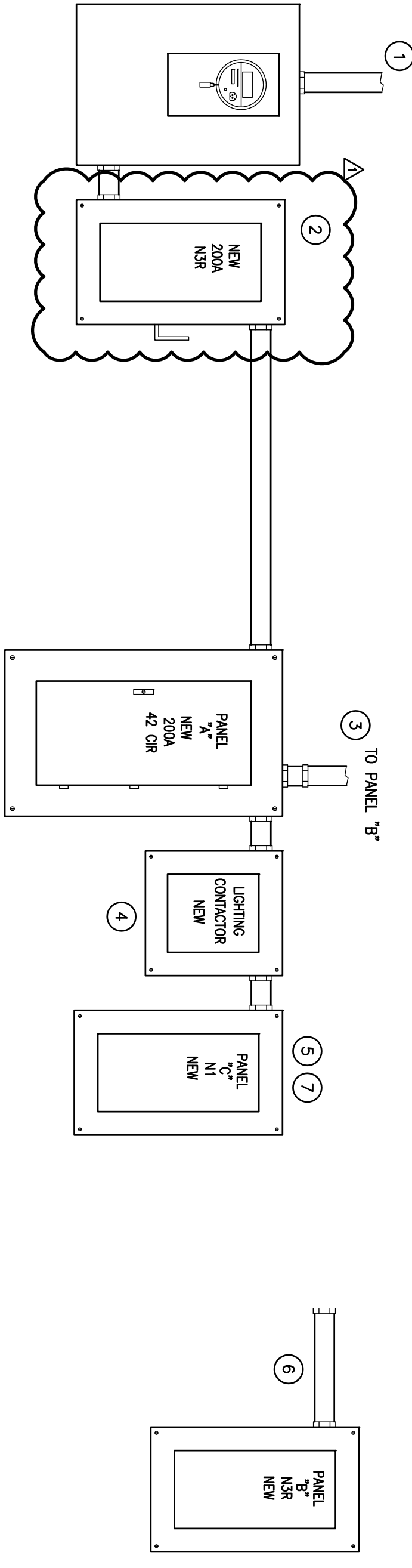
CONN. LTG. 8 x 1.25 = 10 KVA    CONN. HMC. - x 1.0 = - KVA    CONN. MISC./EQUIP. - x 1.0 = - KVA  
 XPHR LOAD - x 1.0 = - KVA    CONN. RECEPT. - x NEC = - KVA    TOTAL LOAD = 10 KVA    27.8 AMPS

**PANEL 'A'**  
 LOCATION: OFFICE  
 120/208 VOLTS - 3 PHASE 4 WIRE WITH: SOLID NEUTRAL & GROUND  
 200 AMP BUS CM9 10 KALIC  
 100 AMP '99' MCB  
 100 AMP BUS CM9 10 KALIC  
 100 AMP '99' MCB  
 100 AMP '99' MCB  
 100 AMP '99' MCB

**PANEL 'B'**  
 LOCATION: OFFICE  
 120/208 VOLTS - 3 PHASE 4 WIRE WITH: SOLID NEUTRAL & GROUND  
 200 AMP BUS CM9 10 KALIC  
 100 AMP '99' MCB  
 100 AMP BUS CM9 10 KALIC  
 100 AMP '99' MCB  
 100 AMP '99' MCB  
 100 AMP '99' MCB

**PANEL 'C'**  
 LOCATION: OFFICE  
 120/208 VOLTS - 1 PHASE 3 WIRE WITH: SOLID NEUTRAL & GROUND  
 100 AMP BUS CM9 10 KALIC  
 100 AMP '99' MCB  
 100 AMP BUS CM9 10 KALIC  
 100 AMP '99' MCB  
 100 AMP '99' MCB  
 100 AMP '99' MCB

CONTRACTOR SHALL VERIFY ELECTRICAL REQUIREMENTS OF EXISTING TENNIS COURT LIGHTING PRIOR TO BID.  
 CONTRACTOR SHALL MAKE ALL NECESSARY CHANGES TO LIGHT FIXTURES TO ACCOMMODATE NEW VOLTAGE.



**ELECTRICAL KEYED NOTES:**

- 1 NEW RISER AND WIRE 2"GRG W/ 4-3/0
- 2 NEW SERVICE DISCONNECT 200A NBR FUSED @ 200A 2" C. W/ 4-3/0 #4G.
- 3 NEW PANEL "C" 200A NI MLO 2" C. W/ 4-3/0 #4G.
- 4 NEW 100A LIGHTING CONTRACTOR. W/HOA SWITCH 1 1/4" C. W/ 3-#3 #6G.
- 5 NEW PANEL "C" 1 1/4" C. W/ 3-#3 #6G.
- 6 NEW PANEL "B" 1 1/2" W/ 4-#3 #6G.
- 7 CONTRACTOR SHALL VERIFY ELECTRICAL REQUIREMENTS OF EXISTING TENNIS COURT LIGHTING PRIOR TO BID. CONTRACTOR SHALL MAKE ALL NECESSARY CHANGES TO LIGHT FIXTURES TO ACCOMMODATE NEW VOLTAGE.

**ELECTRICAL LOAD ANALYSIS**

PROJECT:	BRUSHY CREEK POOL
LOCATION:	BRUSHY CREEK, TX
DESCRIPTION:	RENOVATION OF POOL FACILITY
VOLTAGE:	120/208V, 3φ-4W
LOAD DESCRIPTION	LOAD KVA
LIGHTING CONNECTED LOAD=	15.96 KVA AT 1.25% = 19.95
RECEPTACLES - FIRST 10 KW + 50% OF REMAINDER =	6.68
25% LARGEST MOTOR =	1.64
POOL PUMPS =	11.82
MISCELLANEOUS AT 100% =	16.65
TOTAL ESTIMATED CONNECTED LOAD =	56.74
56.01 KVA / 208 / 3 = AMPS	157.68 AMPS
NEW FACILITY SERVICE SIZE = 200.0 AMPS AT 208V, 3φ, - 4W	NEW SERVICE CAPACITY = 42.32 AMPS

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DATE OF APPROVAL \_\_\_\_\_

CLIENT HAS REVIEWED AND APPROVES DRAWINGS WITH ATTACHED NOTES AND NOTATIONS.

CLIENT AGREES TO MOVE FORWARD TO THE NEXT PHASE AS OUTLINED IN THE PROPOSAL.

PHASE COMPLETE

No.	Description	Date
1	ELECTRICAL COMMENTS	01-04-16

**BRUSHY CREEK MUD**  
 CREEKSIDE POOL RENOVATION  
 4300 BRUSHY CREEK ROAD  
 ROUND ROCK, TEXAS

**ELECTRICAL SCHEDULES**

Project number: 15021  
 Date: 11-24-2015  
 Drawn by: Author  
 Checked by: Checker

Scale: **E2.1**