

TYPE: SQUARE D OR EQUAL SERVICE: 120/240V 1Ø, 3W MOUNTING: SURFACE INSIDE ENCLOSURE POLES: 18					PANEL NA NEMA 4X (EXISTING)					ISOLATED GND NO LOCATION: SEE PLAN					FEED THRU LUGS: NO SYSTEM TYPE: NORMAL					MAIN BUS: 100A NEUTRAL: FULL MAINS: 100A 2P A.I.C./SCA: 22K				
KVA	TRIP POLE	WIRE	GRD	CON DUIT	REMARKS	CKT. NO.	CKT. NO.	REMARKS	CON DUIT	GRD	WIRE	TRIP POLE	KVA											
4.1	35-2	E	E	E	IRRIGATION PUMP 3HP	1 A 3 B	2	PEDESTRIAN LIGHTS	2"	8	6	20-2	0.6	1 2										
0.2	20-1	E	E	E	RECEPTACLE	5 C	6	PEDESTRIAN LIGHTS	2"	8	6	20-2	0.6	1 2										
0.4	20-1	E	E	E	DRINKING FOUNTAIN	7 A	8																	
0.4	20-1	E	E	E	DRINKING FOUNTAIN	9 B	10	PEDESTRIAN LIGHTS	2"	8	6	20-2	0.3	1 2										
1.2	20-1	10	10	E	POLE RECEPTACLES	11 C	12																	
1.4	20-1	10	10	E	POLE RECEPTACLES	13 A	14	TIME CLOCK	E	E	E	20-1	0.5											
	20-1				SPACE	15 B	16	SPACE																
					SPACE	17 C	18	SPACE																
7.7					TOTAL CONNECTED LOAD = 9.7 KVA										TOTAL CONNECTED AMPS: 40.4					2.0				
1 CIRCUIT THRU EXISTING ASTRONOMICAL TIME CLOCK, 30AMP MULTI-POLE CONTACTOR AND PHOTOCELL.																								
2 TERMINATE NEW WIRES ON EXISTING BREAKER.																								
DEMAND LOAD																								
LTG (1.5) @ 125% 1.9																								
REC 1ST 10KVA (2.8) @ 100% 2.8																								
REC REMAINDER (0.0) @ 50% 0.0																								
KITCHEN (0.0) @ 65% 0.0																								
OTHER (1.3) @ 100% 1.3																								
LARGEST MOTOR (4.1) @ 25% 1.1																								
TOTAL 7.1 29.6																								

TYPE: SQUARE D OR EQUAL SERVICE: 120/240V 1Ø, 3W MOUNTING: SURFACE INSIDE ENCLOSURE POLES: 24					PANEL SL1 NEMA 4X (EXISTING)					ISOLATED GND NO LOCATION: SEE PLAN					FEED THRU LUGS: NO SYSTEM TYPE: NORMAL					MAIN BUS: 200A NEUTRAL: FULL MAINS: 200A 2P A.I.C./SCA: 22K				
KVA		TRIP POLE	WIRE	GRD	CON DUIT	REMARKS	CKT. NO.	CKT. NO.	REMARKS	CON DUIT	GRD	WIRE	TRIP POLE	KVA										
0.4		20-1	E	E	E	TOP DUPLEX'S	1	A 2	EXISTING	E	E	E	30-1	0.2										
0.4		20-1	E	E	E	MIDDLE DUPLEX'S	3	B 4	EXISTING	E	E	E	30-1	0.4										
0.4		20-1	E	E	E	BOTTON DUPLEX'S	5	C 6	BACK BOTTOM	E	E	E	100-2	12										
6.0		50-2	E	E	E	LOWER LOFT	7	A 8																
							9	B 10	BOTTOM RIGHT	E	E	E	50-2	6.0										
6.0		50-2	E	E	E	BACK TOP	11	C 12																
							13	A 14	EXISTING	E	E	E	20-1	0.6										
0.5		20-1	E	E	E	TIME CLOCK	15	B 16	EXISTING	E	E	E	20-1	0.6										
2 1 0.3		20-2	6	10	2"	PEDESTRIAN LTS	17	C 18	PEDESTRIAN LIGHTS	2"	8	6	20-2	0.5										
							19	A 20																
2 1 0.5		20-2	6	10	2"	PEDESTRIAN LTS	21	B 22	PEDESTRIAN LIGHTS	2"	8	6	20-2	0.3										
							23	C 24																
14.5		TOTAL CONNECTED LOAD = 35.1 KVA										TOTAL CONNECTED AMPS: 146.3										20.6		
1 CIRCUIT THRU EXISTING ASTRONOMICAL TIME CLOCK, 30AMP MULTI-POLE CONTACTOR AND PHOTOCELL																								
2 TERMINATE NEW WIRES ON EXISTING BREAKER.																								
DEMAND LOAD																								
LTG (1.6) @ 125% 2.0																								
REC 1ST 10KVA (10.0) @ 100% 10.0																								
REC REMAINDER (23.0) @ 50% 11.5																								
KITCHEN (0.0) @ 65% 0.0																								
OTHER (0.5) @ 100% 0.5																								
LARGEST MOTOR (0.0) @ 25% 0.0																								
TOTAL 24.0 100.0																								

TYPE: SQUARE D OR EQUAL SERVICE: 120/240V 1Ø, 3W MOUNTING: SURFACE INSIDE ENCLOSURE POLES: 18					PANEL SA NEMA 4X (EXISTING)					ISOLATED GND NO LOCATION: SEE PLAN					FEED THRU LUGS: NO SYSTEM TYPE: NORMAL					MAIN BUS: 100A NEUTRAL: FULL MAINS: 80A 2P A.I.C./SCA: 22K				
KVA	TRIP POLE	WIRE	GRD	CON DUIT	REMARKS	CKT. NO.	CKT. NO.	REMARKS	CON DUIT	GRD	WIRE	TRIP POLE	KVA											
4.1	35-2	E	E	E	IRRIGATION PUMP 3HP	1 A	2 B	PEDESTRIAN LIGHTS	2"	8	6	20-2	0.3	1	2									
0.2	20-1	E	E	E	RECEPTACLE	5	C 6	PEDESTRIAN LIGHTS	2"	8	6	20-2	0.3	1	2									
0.4	20-1	E	E	E	DRINKING FOUNTAIN	7	A 8																	
0.4	20-1	E	E	E	DRINKING FOUNTAIN	9	B 10	PEDESTRIAN LIGHTS	2"	8	6	20-2	0.5	1	2									
0.4	20-1	E	E	E	DRINKING FOUNTAIN	11	C 12																	
1.0	20-1	E	E	E	IRRIGATION CONTROLLER	13	A 14	PEDESTRIAN LIGHTS	2"	8	6	20-2	0.4	1	2									
1.6	20-1	10	10	E	POLE RECEPTACLES	15	B 16																	
1.6	20-1	10	10	E	POLE RECEPTACLES	17	C 18	TIME CLOCK	E	E	E	20-1	0.1											
9.7					TOTAL CONNECTED LOAD = 11.3 KVA										TOTAL CONNECTED AMPS: 47.1					1.6				
① CIRCUIT THRU EXISTING ASTRONOMICAL TIME CLOCK, 30AMP MULTI-POLE CONTACTOR AND PHOTOCELL																								
② TERMINATE NEW WIRES ON EXISTING BREAKER.																								
DEMAND LOAD																								
LTG (1.5) @ 125% 1.9																								
REC 1ST 10KVA (3.4) @ 100% 3.4																								
REC REMAINDER (0.0) @ 50% 0.0																								
KITCHEN (0.0) @ 65% 0.0																								
OTHER (2.3) @ 100% 2.3																								
LARGEST MOTOR (4.1) @ 25% 1.1																								
TOTAL 8.7 36.3																								

VOLTAGE DROP CALCULATION
120 VOLTS, 1 PHASE

RECEPTACLE BRANCH CIRCUIT - #10AWG
Vd 3% = 120 x 0.03 = 3.6V
Vd = 2 x 12.9 x CIRC. CURRENT x $\frac{\text{DISTANCE}}{\text{CM}}$
3.6 = 2 x 12.9 x 3.4 x $\frac{\text{DISTANCE}}{10380}$
X = 425 FEET MAXIMUM

VOLTAGE DROP CALCULATION
120 VOLTS, 1 PHASE

RECEPTACLE BRANCH CIRCUIT - #8AWG
Vd 3% = 120 x 0.03 = 3.6V
Vd = 2 x 12.9 x CIRC. CURRENT x $\frac{\text{DISTANCE}}{\text{CM}}$
3.6 = 2 x 12.9 x 3.4 x $\frac{\text{DISTANCE}}{16510}$
X = 677 FEET MAXIMUM

VOLTAGE DROP CALCULATION
120 VOLTS, 1 PHASE

POLE LIGHT BRANCH CIRCUIT #6AWG
Vd 3% = 120 x 0.03 = 3.6V
Vd = 2 x 12.9 x CIRC. CURRENT x $\frac{\text{DISTANCE}}{\text{CM}}$
3.6 = 2 x 12.9 x 3.4 x $\frac{\text{DISTANCE}}{26240}$
X = 1076 FEET MAXIMUM

VOLTAGE DROP CALCULATION
240 VOLTS, 1 PHASE

POLE LIGHT BRANCH CIRCUIT #10AWG
Vd 3% = 240 x 0.03 = 7.2V
Vd = 2 x 12.9 x CIRC. CURRENT x $\frac{\text{DISTANCE}}{\text{CM}}$
7.2 = 2 x 12.9 x 4.6 x $\frac{\text{DISTANCE}}{10380}$
X = 630 FEET MAXIMUM

VOLTAGE DROP CALCULATION
240 VOLTS, 1 PHASE

POLE LIGHT BRANCH CIRCUIT #8AWG
Vd 3% = 240 x 0.03 = 7.2V
Vd = 2 x 12.9 x CIRC. CURRENT x $\frac{\text{DISTANCE}}{\text{CM}}$
7.2 = 2 x 12.9 x 4.6 x $\frac{\text{DISTANCE}}{16510}$
X = 1002 FEET MAXIMUM

VOLTAGE DROP CALCULATION
240 VOLTS, 1 PHASE

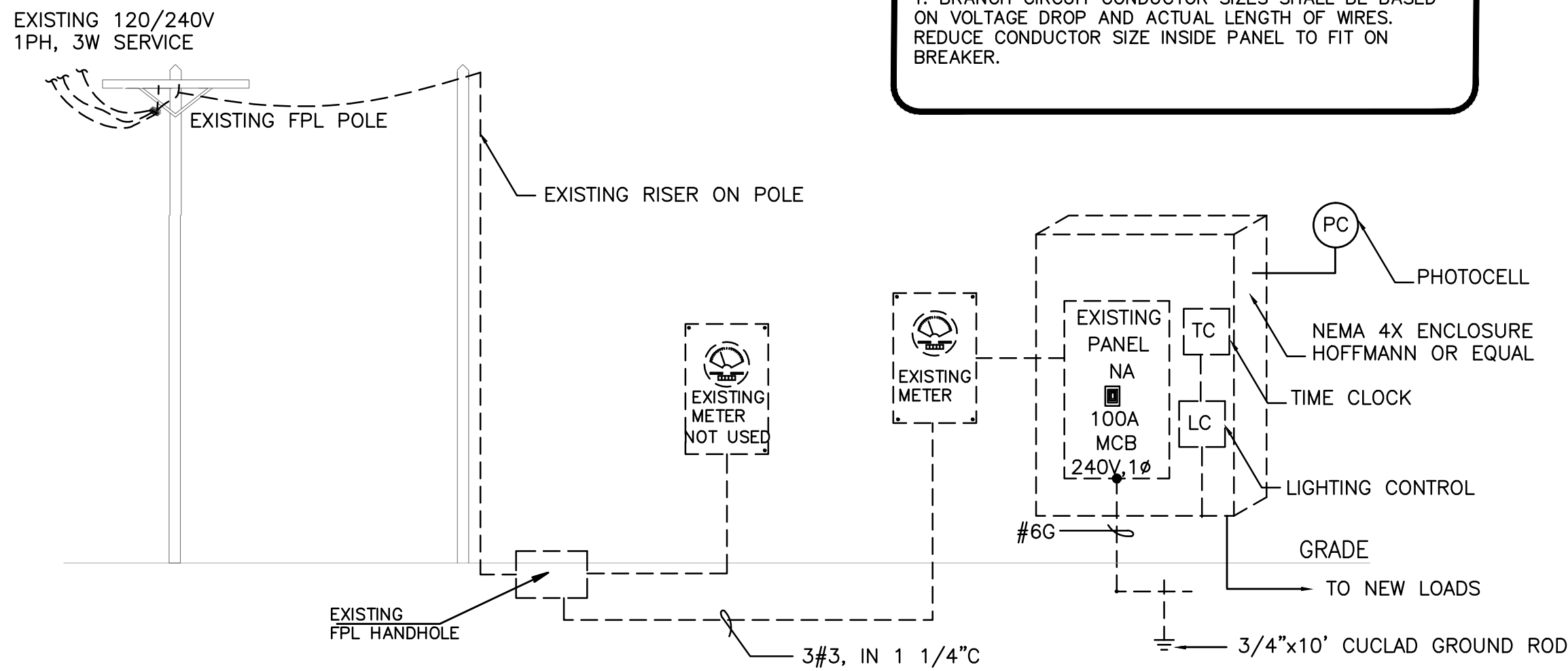
POLE LIGHT BRANCH CIRCUIT #6AWG
Vd 3% = 240 x 0.03 = 7.2V
Vd = 2 x 12.9 x CIRC. CURRENT x $\frac{\text{DISTANCE}}{\text{CM}}$
7.2 = 2 x 12.9 x 4.6 x $\frac{\text{DISTANCE}}{26240}$
X = 1592 FEET MAXIMUM

VOLTAGE DROP CALCULATION
120 VOLTS, 1 PHASE

POLE LIGHT BRANCH CIRCUIT #6AWG
Vd 3% = 120 x 0.03 = 3.6V
Vd = 2 x 12.9 x CIRC. CURRENT x $\frac{\text{DISTANCE}}{\text{CM}}$
3.6 = 2 x 12.9 x 3.4 x $\frac{\text{DISTANCE}}{41740}$
X = 1713 FEET MAXIMUM

NOTE

1. BRANCH CIRCUIT CONDUCTOR SIZES SHALL BE BASED ON VOLTAGE DROP AND ACTUAL LENGTH OF WIRES. REDUCE CONDUCTOR SIZE INSIDE PANEL TO FIT ON BREAKER.



EXISTING ELECTRICAL SERVICE RISER - NORTH

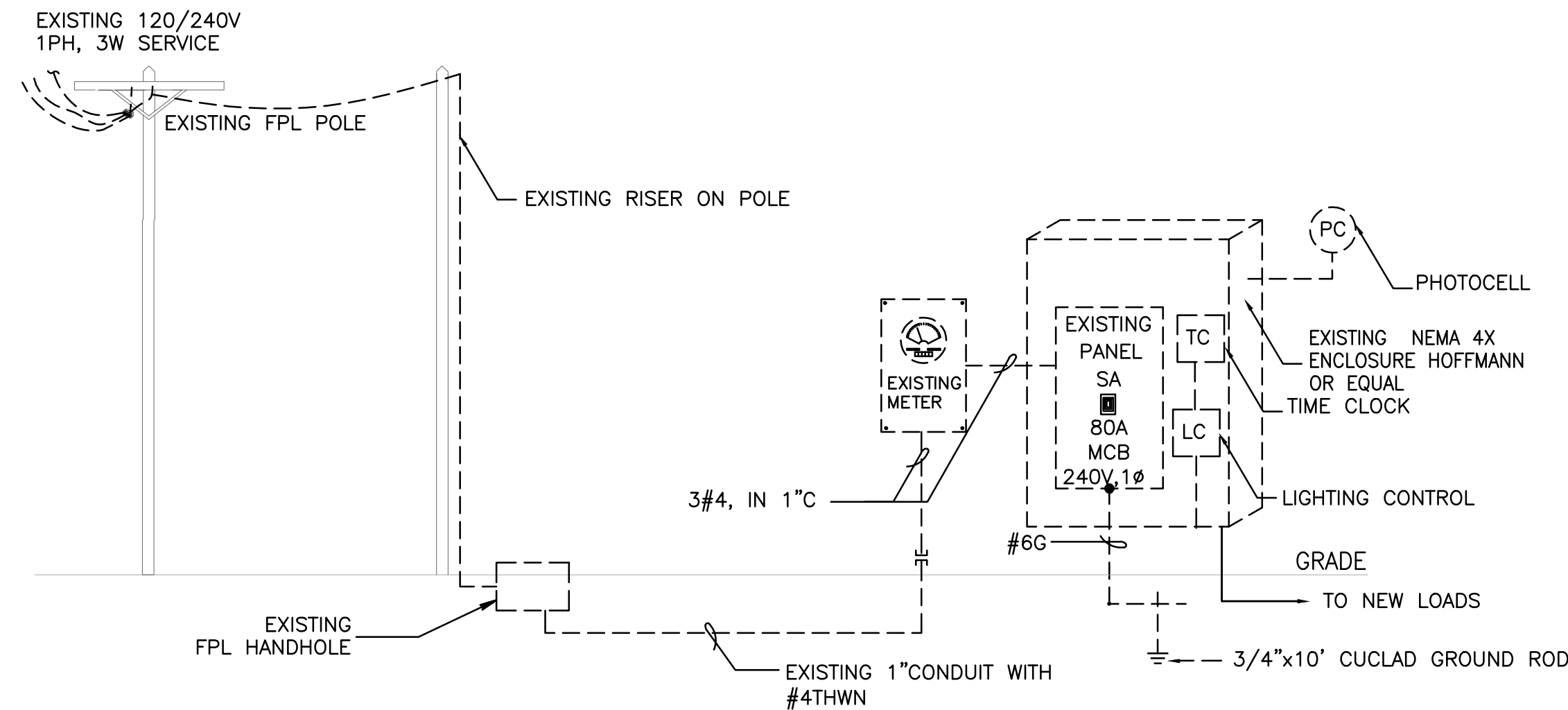
SCALE: NTS

----- EXISTING TO REMAIN
----- NEW CONSTRUCTION

EXISTING SERVICING RISER DIAGRAM #1

SCALE: NTS

----- EXISTING TO REMAIN
----- NEW CONSTRUCTION



EXISTING ELECTRICAL SERVICE RISER - SOUTH

SCALE: NTS

----- EXISTING TO REMAIN
----- NEW CONSTRUCTION

PERMIT NOTE

1. ALL PULLBOXES, CONDUITS, PANELS AND LIGHTING CONTROLS ARE EXISTING TO REMAIN AND HAVE BEEN INSTALLED AS PER APPROVED PERMITS IN PHASE 1.

PHASE 1 PERMITS:

- CITY #:17-1G7161
- FDOT #:2016-C-496-0020-93060
- DEP #:PB-1209

REFERENCE ONLY. INSTALLED PER APPROVED PHASE 1.

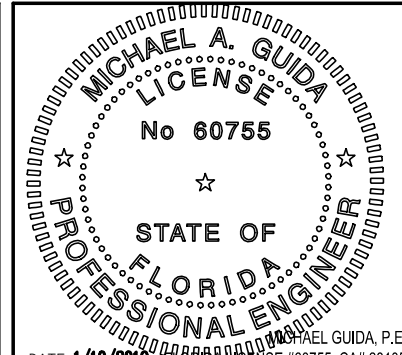


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SURVEY
AVIROM & ASSOCIATES
90 S.W. 2ND AVENUE
SUITE 102
BOCA RATON, FLORIDA 33432



DESIGNED BY: MG
DRAWN BY: SP_OL
CHECKED BY: MG
DATE: JANUARY 2019

REV	DATE	DESCRIPTION	BY

BEACH MASTER PLAN - PH 2
ISSUED FOR BID



PHASE 2 - ISSUED FOR BID
ELECTRICAL RISERS AND PANELS
SCHEDULES

PROJECT NO.
15-008 (2)

SHEET NO.
E-003

FILE ID.