



NOTE: APPROXIMATE FEEDER LENGTHS ARE SHOWN FOR VOLTAGE DROP AND SHORT CIRCUIT CALCULATIONS ONLY, AND ARE NOT INTENDED TO BE USED FOR ESTIMATING OR CONSTRUCTION.

FEEDER DESCRIPTION						
NO.	WIRE	NEUTRAL	GRND	COND.	feet LENGTH	VOLTS
N1	3#4/0	1#4/0	#3	2 1/2"	300	480
N2	3#4/0	1#4/0	#3	2 1/2"	300	
N3	3#4/0	1#4/0	#3	2 1/2"	300	
N4	3#4/0	1#4/0	#3	2 1/2"	200	
N5	3#1	1#1	#6	1 1/2"	30	
N6	3#2	1#2	#6	1 1/2"	75	
N7	2#3-350MCM	2#1-350MCM	2#1/0	2-3"	25	
N11	3#2	1#2	#8	1 1/2"	30	
N12	3-350MCM	1-350MCM	#3	3 1/2"	25	
E1	3#2	1#2	#8	1 1/2"	22	
C1	3-350MCM	1-350MCM	#3	3 1/2"	12	
C2	3#1/0	1#1/0	#8	1 1/2"	300	
C3	3#1/0	1#1/0	#8	1 1/2"	300	
C4	3#1/0	1#1/0	#8	1 1/2"	300	
C5	3#1/0	1#1/0	#8	1 1/2"	200	
C6	3#2	1#2	#8	1 1/2"	15	
C7	3#2	1#2	#8	1 1/2"	15	
N1'	3#2/0	1#2/0	#8	2"	140	208
N2'	3#2/0	1#2/0	#8	2"	140	
N3'	3#2/0	1#2/0	#8	2"	140	
N4'	3#2/0	1#2/0	#8	2"	140	
N5'	3#2	1#2	#6	1 1/2"	15	
C2'	3#1/0	1#1/0	#8	1 1/2"	15	
C3'	3#1/0	1#1/0	#8	1 1/2"	15	
C4'	3#1/0	1#1/0	#8	1 1/2"	15	
C5'	3#1/0	1#1/0	#8	1 1/2"	15	
C6'	3#1/0	1#1/0	#8	1 1/2"	15	
G1	3#2	1#2	#8	1 1/2"	20	480
G2	3-350MCM	1-350MCM	#1/0	3"	20	
G3	3-350MCM	1-350MCM	#1/0	3"	20	

CIRCUIT BREAKER COORDINATION TABLE											
C.B. NO.	TO FEED	LOAD			BKR. FRAME SIZE	CIRCUIT BREAKER SETTINGS					
		A	B	C		TRIP AMP. SET	LONG TIME TRIP BAND	SHORT TIME TRIP POINT	SHORT TIME DELAY TIME	INSTANT TRIP POINT	GRND. FAULT TRIP POINT
MAIN	NORMAL SWITCHBOARD	1171.6	1171.6	1171.6	1600	1200	MAXIMUM	X8	MINIMUM	X1	.7X INTERMEDIATE
N1	NHA	128	128	119	225	225				H1	1.0X MINIMUM
N2	NHB	128	128	119	225	225					
N3	NHC	128	128	119	225	225					
N4	NHD	128	128	119	225	225					
N5	NHS	975	975	975	225	125					
N6	NHK	75	75	75	100	100					
N7	MCCN	410	410	410	600	600					
N11	EHS	19	19	19	100	100					
N12	CRIT. DIST. SWITCHBOARD	316	316	316	400	300					
E2	EMER. GEN. CONTROL PANEL	294	294	294	600	300		X10		X1	N/A N/A
G1	EHS	18.7	18.7	18.7	100	100				H1	N/A N/A

1. ALL CIRCUIT BREAKER SETTINGS AS REQUIRED TO ACHIEVE SELECTIVE COORDINATION SHALL BE DETERMINED BY THE CONTRACTOR IN ACCORDANCE WITH THE SPECIFICATION SECTION 800, BASIC ELECTRICAL REQUIREMENTS.

CRITICAL DISTRIBUTION SWITCHBOARD

CRITICAL DISTRIBUTION SWITCHBOARD						NORMAL DISTRIBUTION SWITCHBOARD					
CKT	LOAD DESCRIPTION	LOAD AMPS	POLES	CIRCUIT BREAKER FRAME	SYM. AMP. TRIP	CKT	LOAD DESCRIPTION	LOAD AMPS	POLES	CIRCUIT BREAKER FRAME	SYM. AMP. TRIP
C2	PANEL CHA	40	3	100	100	N2	PANEL NHA	128	3	225	225
C3	" CHB					N3	" NHB				
C4	" CHC					N4	" NHC				
C5	" CHD					N5	" NHD				
C6	MCCC	36				N6	" NHS	97			125
C7	PANEL CHS	70				N7	" NHK	75		100	100
C8	SPARE					N8	" MCCN	410		600	600
C9	SPARE					N9	SPARE			400	300
						N10	"			100	100
						N11	"			100	100
						N12	PANEL EHS	25		100	100
							CRIT. SW. BOARD	266		400	300
							MAIN	1385	3	1,600	1,200
TOTAL		266									
266A x 480V3 = 221 KVA 221 KVA x 1.2 = 184 KVA DEMAND						1385 x .831 = 1140 KVA 1,140 KVA x 1.5 = 760 KVA					

TRANSFORMER SCHEDULE & GROUNDING					
TRANS. NO.	KVA	PRIMARY VOLTAGE	SECONDARY VOLTAGE	IMPEDANCE	GROUND WIRE SIZE (COPPER)
T-1	750	12.47KV	277/480 Y	5.75%	3/0
T-2	75	480V	120/208 Y	3.0%-4%	#2
T-3	75	480V	120/208 Y		
T-4	75	480V	120/208 Y		
T-5	75	480V	120/208 Y		
T-6	45	480V	120/208 Y		
T-7	45	480V	120/208 Y		
T-8	15	480V	120/208 Y		#8
T-9	30	480V	120/208 Y		
T-10	30	480V	120/208 Y		
T-11	30	480V	120/208 Y		
T-12	30	480V	120/208 Y		
T-13	30	480V	120/208 Y		

7/27/81

AS BUILT

1981

NO.

DATE

DESCRIPTION

REVISIONS

SHEET TITLE

ELECTRICAL RISER DIAGRAM

NOT TO SCALE

BLDG. NO.

PROJECT TITLE

102 200 Bed Domiciliary Building

DRAWN

CHECKED

DATE

SHS Associates Inc.

Architects, Engineers, Planners

2600 - 9th Street North

St. Petersburg, Florida 33704

DRAWING NUMBER

102 - E 18

APPROVED

PROJECT DIRECTOR

516-053F

VETERANS ADMINISTRATION

LOCATION

V.A.C. Bay Pines, Florida

