CITY OF TAMPA, FLORIDA

PLANS FOR

Contract 26-C-00013 Hubert Avenue Park Improvements

Plans_Electrical

These Plans for the referenced projects come from uncontrolled sources and do not conform to WCAG 2.1 at level AA. Individuals with disabilities seeking assistance with the individual project plans or specifications should e-mail Contractadministration@tampagov.net.

City of Tampa

Contract Administration Department

Tampa Municipal Office Building

306 E Jackson Street #280A4N Fourth Floor

Tampa, Florida 33602

JUNE 2026

CONDUIT AND WIRING

	BRANCH CIRCUIT RUN CONCEALED
	BRANCH CIRCUIT RUN UNDERGROUND
	BRANCH CIRCUIT DOWN
	BRANCH CIRCUIT UP
2A-1,3,5	HOME RUN TO PANEL 2A SPACES 1, 3, & 5, REFER TO PANEL SCHEDULES

LINE TYPES

	NEW WORK SCOPE OF WORK
	EXISTING SCOPE OF WORK
	DEMOLITION SCOPE OF WORK
	FUTURE SCOPE OF WORK

GENERAL SYMBOLS

X X X X	KEY NOTE INDICATOR
1	DRAWING REVISION INDICATOR

ELECTRICAL LIGHTING SYMBOLS LEGEND

(REFER TO LIGHTING FIXTURE SCHEDULE FOR MORE INFORMATION)

	EXTERIOR POLE MOUNTED FIXTURE - TYPE AS SPECIFIED

ELECTRICAL POWER SYMBOLS LEGEND

(MOUNTING HEIGHT TO CENTER LINE OF BOX UNLESS NOTED OTHERWISE)

	DUPLEX RECEPTACLE (18" AFF)
	PANELBOARD

ELECTRICAL ABBREVIATIONS

A	AMP	L	LEVEL
AA	AUTOMATIC ALTERNATOR	LC	LOUVER CONTROLLER
AC	ALTERNATING CURRENT	LFMC	LIQUID-TIGHT FLEXIBLE METAL CONDUIT
ACU	AIR CONDITIONER UNIT		
AF	AMPERAGE FRAME	LM	LOUVER MOTOR
AFF	ABOVE FINISHED FLOOR	LP( )-( )	LIGHTING CIRCUIT ( )
ANN	ANNUNCIATOR	LP( )	LIGHTING PANELBOARD
AS	AMMETER SWITCH	LS	LIMIT SWITCH
AT	AMPERE TRIP	LV	LOUVER
AX	AUXILIARY DELAY		
		M	MANUAL MOTOR STARTER
BKR	BREAKER	mA	MILLIAMPERES
		MC	METAL CLAD CABLE
CB	CIRCUIT BREAKER	MCC	MOTOR CONTROL CENTER
COL	COLUMN	MCP	MOTOR CIRCUIT PROTECTOR
CL	CENTERLINE	MEZZ	MEZZANINE
CKT	CIRCUIT	MF-( )	MAIN FEEDER-( ) ID
CF(P OR L)	CLOSE ON FALLING (PRESSURE OR LEVEL)	MGD	MILLION GALLONS PER DAY
		MS	MOTOR STARTER
CR(P OR L)	CLOSE ON RISING (PRESSURE OR LEVEL)	MTD	MOUNTED
		MTR	MOTORIZED TIMING RELAY
CH	CONVECTION HEATER	MUAU	MAKE UP AIR UNIT
COMPT	COMPARTMENT	MX	MOTOR AUXILIARY RELAYS
COND	CONDUCTOR		
CDT	CONDUIT	(N)	NEW
C-( )	CONTRACT-( ) ID	NAC	NOTIFICATION APPLIANCE CIRCUIT
CPT	CONTROL POWER TRANSFORMER	NP	NAMEPLATE
CR-( )	CONTROL RELAY-( ) ID	NF	NON FUSED
I/I	CURRENT TO CURRENT TRANSDUCER	NFSS	NON FUSED SAFETY SWITCH
		N.C.	NORMALLY CLOSED
I/P	CURRENT TO PNEUMATIC TRANSDUCER	N.O.	NORMALLY OPEN
		No.	NUMBER
CT	CURRENT TRANSFORMER		
		( )OL	OVERLOAD ( ) NUMBER OF
D	EXISTING TO BE DEMOLISHED		
DC	DIRECT CURRENT	P	PRESSURE
DF	DUST FILTER	( )P	POLES ( ) NO OF POLES
DIA	DIAMETER	Ø or PH	PHASE
DISTR	DISTRIBUTION	P/I	PNEUMATIC TO CURRENT TRANSDUCER
DP	DIFFERENTIAL PRESSURE		
DS	DISCONNECT SWITCH	PLC	PROGRAMMABLE LOGIC CONTROLLER
DPDT	DOUBLE POLE, DOUBLE THROW		
		PRE	POWER ROOF EXHAUSTER
E	EXISTING TO REMAIN	PS	PRESSURE SWITCH
EBB	ELECTRIC BASED BOARD	PT	POTENTIAL TRANSFORMER
EC	ELECTRICAL CONTRACTOR	PTAC	PACKAGE TERMINAL AIR CONDITIONER
ECH	ELECTRIC CEILING HEATER		
EDH	ELECTRIC DUCT HEATER	PTR	PNEUMATIC TIMING RELAY
EF	ELECTRIC FAN	PVC	POLYVINYL CHLORIDE RIGID CONDUIT
EMT	ELECTRIC METALLIC TUBING		
ER	EXISTING TO BE REMOVED AND RELOCATED	PVC-RSC	PVC COATED RIGID STEEL CONDUIT
		PWV	POWER WALL VENTILATOR
ETM	ELAPSED TIME METER		
EUH	ELECTRIC UNIT HEATER	QTY	QUANTITY
EWC	ELECTRIC WATER COOLER		
		R	RELOCATED
F	FLOW	RAC	RIGID ALUMINUM
FDR	FULL LOAD AMPS	RECPT	RECEPTACLE
FLA	FLEXIBLE METALLIC CONDUIT	REQ	REQUIRED
FMC	FAST-OFF-SLOW	RMS	ROOT MEAN SQUARE
FOS	FAST-SLOW	RGS	RIGID STEEL CONDUIT
F-S	FEET	RTU	REMOTE TERMINAL UNIT
FT	FORWARD REVERSE		
F-R	FRAME	SAF	SUPPLY AIR FAN
FR	FUSED SAFETY SWITCH	STP	SHIELDED TWISTED PAIR
FUSS	FULL VOLTAGE NON-REVERSING	SL	STOP LOCKOUT
FVNR		SMC	SMART MOTOR CONTROLLER
		SPDT	SINGLE POLE, DOUBLE THROW
G	GREEN	SS	SELECTOR SWITCH
GFCI	GROUND FAULT CIRCUIT INTERRUPTER	S/S	START/STOP
		S/SL	START/STOP LOCKOUT
GPM	GALLONS PER MINUTE	SV	SOLENOID VALVE
GND	GROUND	SYM	SYMMETRICAL
GRV	GRAVITY RELIEF VENT		
GUH	GAS UNIT HEATER	T or T'STAT	THERMOSTAT
		T-( )	TELEPHONE CONDUIT-( )
HOA	HAND-OFF-AUTOMATIC	TCC	TIME-CLOSE CONTACT
HP	HORSEPOWER	TEMP	TEMPERATURE
HV	HOUSE VACUUM	TC	TEMPERATURE CONTRACTOR
HZ	HERTZ	TOC	TIME-OPEN CONTACT
		TR	TIMING RELAY
ID	IDENTIFICATION NUMBER	TRI	SHIELDED TRIPLE CABLE
IC	INTERRUPTING CAPACITY	TS	TEMPERATURE SWITCH
IF	INFRARED HEATER	TSP	TWISTED SHIELDED PAIR
IMC	INTERMEDIATE METAL CONDUIT	TYP	TYPICAL
INF	IN LINE FAN	UF	UNDERGROUND FEEDER
I/O	INPUT/OUTPUT	UH	UNIT HEATER
IT	INTERCHANGEABLE TRIP OR INSTANTANEOUS TRIP		
		VA	VOLT - AMPERE
		VAC	VOLTS ALTERNATING CURRENT
JB	JUNCTION BOX	VDC	VOLTS DIRECT CURRENT
		VFD	VARIABLE FREQUENCY DRIVE
kcmil	THOUSAND CIRCULAR MILS	VS	VOLTMETER SWITCH
KUH/EUH	ELECTRIC UNIT HEATER	VT	VOLTAGE TRANSFORMER
KVA	KILOVOLT AMPERE		
KV	KILOVOLT	W	WATT
KVAR	KILOVOLT AMPERES REACTIVE	WH	WATER HEATER
KW	KILOWATT	WP	WEATHERPROOF

GENERAL PROJECT NOTES

1. THIS IS A COMPLETE LIST OF ELECTRICAL SYMBOLS AND ABBREVIATIONS FOR REFERENCE ONLY. SYMBOLS SHOWN ON THIS DRAWING MAY NOT APPEAR ON THE FOLLOWING DRAWINGS.
2. THE CONTRACTOR SHALL COORDINATE ALL REQUIRED SHUTDOWNS ON EXISTING UTILITIES WITH OWNER REPRESENTATIVES IN ORDER TO MINIMIZE IMPACT TO OTHER AREAS.
3. PERFORM ALL WORK IN COMPLIANCE WITH ALL APPLICABLE FEDERAL, STATE, AND LOCAL CODES, REGULATIONS, AND STANDARDS ADOPTED BY THE AUTHORITY HAVING JURISDICTION. IF CONFLICTS EXIST BETWEEN THESE ENGINEERING DOCUMENTS AND CODES, THE MOST STRINGENT REQUIREMENTS SHALL GOVERN.
4. ALL CONSTRUCTION WORK SHALL ALSO MEET THE FOLLOWING CODE REQUIREMENTS:
   - FLORIDA BUILDING CODE, BUILDING, 8TH EDITION (2023)
   - FLORIDA BUILDING CODE, ENERGY CONSERVATION, 8TH EDITION (2023)
   - FLORIDA FIRE PREVENTION CODE, 8TH EDITION (2023)
   - NFPA 101-2021, THE LIFE SAFETY CODE
   - NFPA 70-2020, NATIONAL ELECTRICAL CODE
   - NFPA 72-2019, NATIONAL FIRE ALARM CODE
5. THE ELECTRICAL DRAWINGS ARE SCHEMATIC IN NATURE. BEFORE STARTING THE WORK THE CONTRACTOR SHALL REVIEW ALL OTHER DISCIPLINE DRAWINGS AND VERIFY FIELD CONDITIONS AND SHALL MAKE ANY REQUIRED MINOR ADJUSTMENTS WITHOUT EXTRA COST TO THE OWNER. ANY MAJOR DISCREPANCIES FOUND SHALL BE BROUGHT TO THE ATTENTION OF THE ARCHITECT/ENGINEER.
6. ALL WIRING SHALL BE IN CONDUIT. MINIMUM CONDUIT SIZE SHALL BE 3/4". MINIMUM CONDUCTOR SIZE SHALL BE #12 AWG. ALL NEW CIRCUITS SHALL BE PROVIDED WITH AN INDIVIDUAL NEUTRAL AND GROUNDING CONDUCTOR WITH THE PHASE CONDUCTOR.
7. ALL CONDUITS INSTALLED INTERIOR SHALL BE EMT. ALL CONDUITS INSTALLED EXTERIOR UNDERGROUND SHALL BE PVC SCHEDULED 40. ALL CONDUITS INSTALLED EXTERIOR AND EXPOSED SHALL BE RGS.
8. CONDUCTORS #10 AND SMALLER SHALL BE SOLID COPPER. CONDUCTORS #8 AND LARGER SHALL BE STRANDED COPPER. UNLESS NOTED OTHERWISE, CONDUCTORS INSULATION SHALL BE DUAL RATED AT THHN/THWN.
9. ALL DEVICES, EQUIPMENT MATERIAL AND LABOR SHALL BE PROVIDED BY THE CONTRACTOR UNLESS NOTED OTHERWISE.
10. ALL ELECTRICAL EQUIPMENT AND DEVICES SHALL BE MOUNTED AS PER EQUIPMENT AND DEVICE MANUFACTURER RECOMMENDATIONS.
11. CONTRACTOR SHALL PROVIDE SUBMITTALS TO ARCHITECT/ENGINEER FOR REVIEW AND APPROVAL OF ALL ELECTRICAL EQUIPMENT AND DEVICES DESCRIBED IN THE SUBMITTAL REGISTER. SUBMITTALS SHALL INCLUDE CUT SHEETS, DIMENSIONS, WIRING DIAGRAMS, ACCESSORIES, OPERATION MANUALS, AND ALL NECESSARY INFORMATION FOR REVIEWER TO MAKE A SOUND EVALUATION.
12. PROVIDE STARTUP OF ALL ELECTRICAL SYSTEMS AND COORDINATE WITH ARCHITECT/ENGINEER FOR OWNER STARTUP WITNESSING.
13. PROVIDED LAMINATED PLASTIC NAMEPLATES FOR EACH EQUIPMENT ENCLOSURE. EACH NAMEPLATE IDENTIFY EQUIPMENT FUNCTION, PANELBOARD CONNECTED AND CIRCUIT NUMBER. NAMEPLATE SHALL BE MELAMINE PLASTIC (0.125 INCHES THICK), WHITE LETTERS ON BLACK BACKGROUND. MINIMUM SIZE OF LETTERS SHALL BE 2.5 INCHES. IN ADDITION TO EQUIPMENT TAGGING, CONTRACTOR SHALL PROVIDE ARC-FLASH WARNING AND AVAILABLE FAULT CURRENT AT THE TIME OF INSTALLATION AND CALCULATION LABELS FOR PANELBOARDS, OTHER THAN DWELLING UNIT LOAD CENTERS, IN ACCORDANCE WITH NEC 110.
14. PROVIDE COMPUTER PRINTED ON WHITE WRAPAROUND PAPER WITH CLEAR PLASTIC PROTECTION TAIL FOR ALL WIRE MARKERS. MARKER SHALL STATE PANELBOARD NAME AND CIRCUIT NUMBER ON ALL WIRES IN JUNCTION/PULL BOXES AND IN EQUIPMENT TERMINAL BOXES.
15. PROVIDE PUNCHED TAPE LABELS ON ALL WIRING DEVICES FOR IDENTIFICATION. SHALL BE ½" BLACK TAPE WITH WHITE RAISED LETTERS. TAPE LABELS SHALL STATE PANELBOARD NAME AND CIRCUIT NUMBER.
16. PROVIDE DIRECTORIES ON ALL PANELBOARDS. ALL LOADS SHALL BE BALANCED TO WITHIN 10%.
17. CONTRACTOR SHALL BE RESPONSIBLE FOR PROVIDING A COMPLETE SET OF RECORD DRAWINGS TO THE OWNER AT THE END OF THE CONSTRUCTION.
18. ALL MATERIALS AND EQUIPMENT TO BE INSTALLED SHALL BE NEW AND FREE OF DEFECTS. ALL ELECTRICAL EQUIPMENT SHALL COMPLY WITH NATIONAL ELECTRICAL MANUFACTURERS ASSOCIATION (NEMA) STANDARDS AND SHALL BE UL LABELED. ALL ELECTRICAL EQUIPMENT AND MATERIALS SHALL BE INSTALLED IN A WORKMANLIKE MANNER.
19. ALL CONNECTORS AND SPLICES FOR CABLE SIZE #10 AWG AND SMALLER SHALL BE INSULATED, PRESSURE-TYPE, FOR LARGER SIZE CONDUCTORS USE BOLTED CLAMPS WITH INSULATING TAPE.
20. PROVIDE INSULATION AND CONTINUITY TEST OF ALL 1000V AND LESS WIRES AND CABLES. USE TESTING PROCEDURES DESCRIBED IN INTERNATIONAL ELECTRICAL TESTING AGENCY (NETA) STANDARDS. REPLACE ANY CABLES WITH INSULATION RESISTANCE LESS THAN 100 MEGA OHMS (MOHMS). TEST ALL GROUND FAULT CIRCUIT INTERRUPTING (GFCI) RECEPTACLES. TEST ALL GROUNDING ELECTRODE SYSTEMS WITH FALL OF POTENTIAL METHOD. MAKE RESISTANCE MEASUREMENTS 48 HOURS AFTER LAST RAIN FALL. MAXIMUM RESISTANCE TO GROUND SHALL BE 5 OHMS.
21. CONTRACTOR SHALL PROVIDE RECORD DOCUMENTS, DRAWINGS AND MANUALS TO OWNER WITHIN 30 DAYS AFTER SYSTEM ACCEPTANCE PER FLORIDA BUILDING CODE - ENERGY CONSERVATION 8TH EDITION (2023) - SECTIONS C405.5.4.
22. PANELBOARDS SHALL BE SUPPLIED WITH BOLT-ON CIRCUIT BREAKERS. ALL BUSBARS, PHASE, NEUTRAL, GROUND IN PANELBOARDS SHALL BE TIN-PLATED ALUMINUM.

PROJECT NOTES

THE INTENT OF DESIGN FOUND WITHIN THIS PROJECT CONSISTS OF ELECTRICAL ENGINEERING SERVICES FOR A NEW PARK FOR THE CITY OF TAMPA. INCLUDING ELECTRICAL DISTRIBUTION, SITE LIGHTING, POWER FOR IRRIGATION AND FUTURE IMPROVEMENTS.

Sheet List Table

Sheet Number	Sheet Title
E000	ELECTRICAL LEGEND, NOTES AND ABBREVIATIONS
ES100	ELECTRICAL SITE PLAN
E600	ELECTRICAL RISER DIAGRAM, DETAILS, SCHEDULES

Prepared By:

PlaceMaker Design Studio, LLC
Urban Design • Landscape Architecture • Land Planning

PlaceMaker Design Studio, LLC
415 Plaza Drive
Dunedin, Florida 34698
Phone: (727) 726-6124
Web-Site www.placemakerdesignstudio.com

High Point Engineering, Inc. (HPE)
5005 W. Laurel Street, Suite 201
Tampa, Florida 33609
Phone: (813) 644-8333

MES GROUP
550 North Reo Street
Suite 203, Tampa, FL 33609
813.289.4700
COA # 8304
Project # 2024540

Prepared For:

City of Tampa
306 East Jackson Street
Tampa, Florida 33602

Hubert Avenue Park & Right-Of-Way Improvements

4106, 4108, & 4110 N. Hubert Ave + 4115 N. Manhattan
Tampa, Florida

Seal

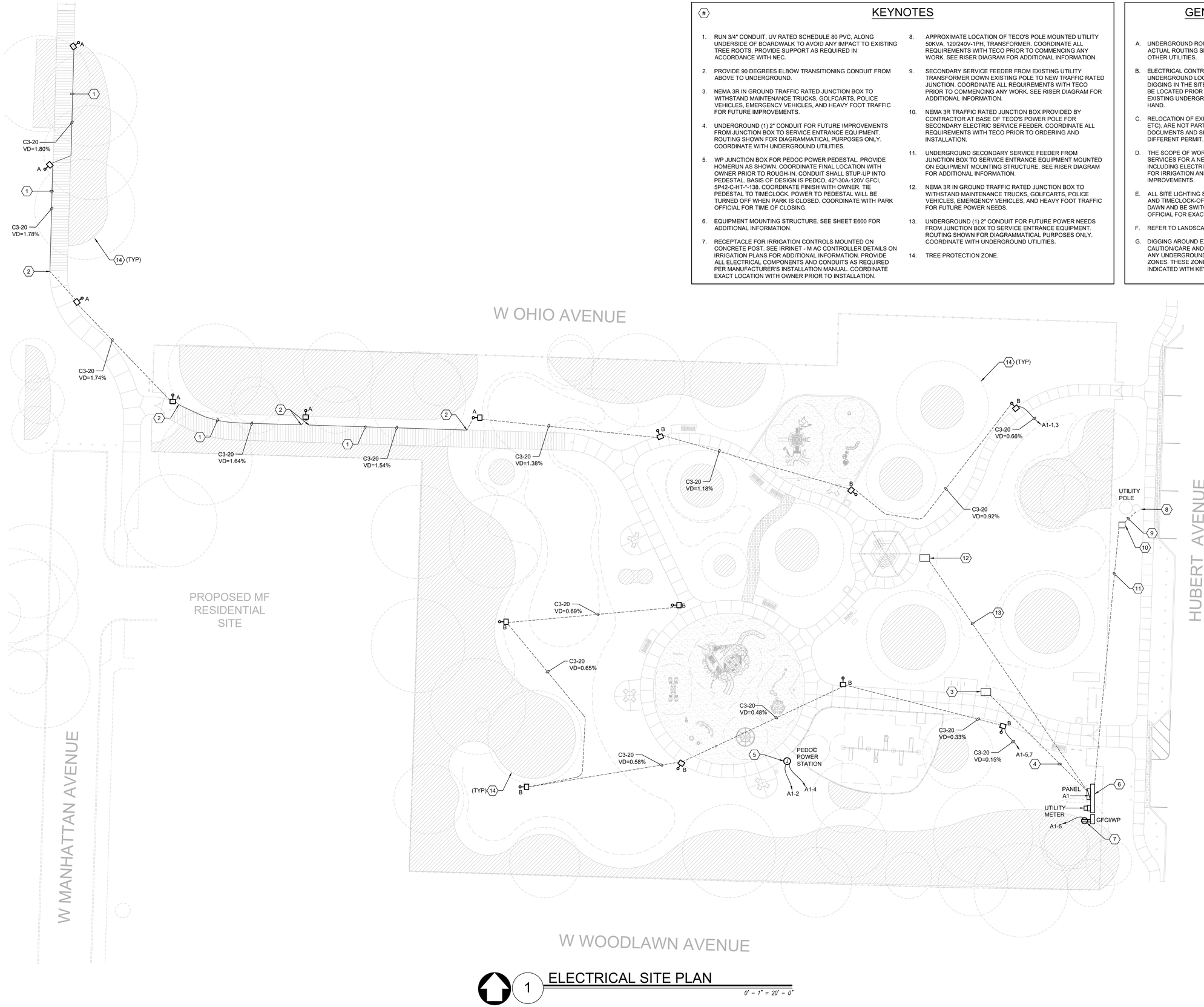
BID SET

REV	DATE	DESCRIPTION
5		
4		
3		
2		
1		

Date: MAY 15, 2026
Job No.: 24540
Drawn By: SL
Checked By: SC

Sheet Title
ELECTRICAL LEGENDS, NOTES & ABBREVIATIONS

Sheet No.
E000



KEYNOTES

1. RUN 3/4" CONDUIT, UV RATED SCHEDULE 80 PVC, ALONG UNDERSIDE OF BOARDWALK TO AVOID ANY IMPACT TO EXISTING TREE ROOTS. PROVIDE SUPPORT AS REQUIRED IN ACCORDANCE WITH NEC.
2. PROVIDE 90 DEGREES ELBOW TRANSITIONING CONDUIT FROM ABOVE TO UNDERGROUND.
3. NEMA 3R IN GROUND TRAFFIC RATED JUNCTION BOX TO WITHSTAND MAINTENANCE TRUCKS, GOLFCARTS, POLICE VEHICLES, EMERGENCY VEHICLES, AND HEAVY FOOT TRAFFIC FOR FUTURE IMPROVEMENTS.
4. UNDERGROUND (1) 2" CONDUIT FOR FUTURE IMPROVEMENTS FROM JUNCTION BOX TO SERVICE ENTRANCE EQUIPMENT. ROUTING SHOWN FOR DIAGRAMMATICAL PURPOSES ONLY. COORDINATE WITH UNDERGROUND UTILITIES.
5. WP JUNCTION BOX FOR PEDOC POWER PEDESTAL. PROVIDE HOMERUN AS SHOWN. COORDINATE FINAL LOCATION WITH OWNER PRIOR TO ROUGH-IN. CONDUIT SHALL STUP-UP INTO PEDESTAL. BASIS OF DESIGN IS PEDCO, 42"-30A-120V GFCI, 5P42-C-HT-"-138. COORDINATE FINISH WITH OWNER. TIE PEDESTAL TO TIMECLOCK. POWER TO PEDESTAL WILL BE TURNED OFF WHEN PARK IS CLOSED. COORDINATE WITH PARK OFFICIAL FOR TIME OF CLOSING.
6. EQUIPMENT MOUNTING STRUCTURE. SEE SHEET E600 FOR ADDITIONAL INFORMATION.
7. RECEPTACLE FOR IRRIGATION CONTROLS MOUNTED ON CONCRETE POST. SEE IRRINET - M AC CONTROLLER DETAILS ON IRRIGATION PLANS FOR ADDITIONAL INFORMATION. PROVIDE ALL ELECTRICAL COMPONENTS AND CONDUITS AS REQUIRED PER MANUFACTURER'S INSTALLATION MANUAL. COORDINATE EXACT LOCATION WITH OWNER PRIOR TO INSTALLATION.
8. APPROXIMATE LOCATION OF TECO'S POLE MOUNTED UTILITY 50KVA, 120/240V-1PH, TRANSFORMER. COORDINATE ALL REQUIREMENTS WITH TECO PRIOR TO COMMENCING ANY WORK. SEE RISER DIAGRAM FOR ADDITIONAL INFORMATION.
9. SECONDARY SERVICE FEEDER FROM EXISTING UTILITY TRANSFORMER DOWN EXISTING POLE TO NEW TRAFFIC RATED JUNCTION. COORDINATE ALL REQUIREMENTS WITH TECO PRIOR TO COMMENCING ANY WORK. SEE RISER DIAGRAM FOR ADDITIONAL INFORMATION.
10. NEMA 3R TRAFFIC RATED JUNCTION BOX PROVIDED BY CONTRACTOR AT BASE OF TECO'S POWER POLE FOR SECONDARY ELECTRIC SERVICE FEEDER. COORDINATE ALL REQUIREMENTS WITH TECO PRIOR TO ORDERING AND INSTALLATION.
11. UNDERGROUND SECONDARY SERVICE FEEDER FROM JUNCTION BOX TO SERVICE ENTRANCE EQUIPMENT MOUNTED ON EQUIPMENT MOUNTING STRUCTURE. SEE RISER DIAGRAM FOR ADDITIONAL INFORMATION.
12. NEMA 3R IN GROUND TRAFFIC RATED JUNCTION BOX TO WITHSTAND MAINTENANCE TRUCKS, GOLFCARTS, POLICE VEHICLES, EMERGENCY VEHICLES, AND HEAVY FOOT TRAFFIC FOR FUTURE POWER NEEDS.
13. UNDERGROUND (1) 2" CONDUIT FOR FUTURE POWER NEEDS FROM JUNCTION BOX TO SERVICE ENTRANCE EQUIPMENT. ROUTING SHOWN FOR DIAGRAMMATICAL PURPOSES ONLY. COORDINATE WITH UNDERGROUND UTILITIES.
14. TREE PROTECTION ZONE.

GENERAL NOTES

A. UNDERGROUND ROUTING SHOWN FOR REFERENCE ONLY. ACTUAL ROUTING SHALL BE BASED ON FIELD CONDITIONS AND OTHER UTILITIES.

B. ELECTRICAL CONTRACTOR SHALL CONTACT LOCAL UTILITY UNDERGROUND LOCATING SERVICE COMPANY PRIOR TO DIGGING IN THE SITE. EXISTING UNDERGROUND UTILITIES SHALL BE LOCATED PRIOR TO COMMENCEMENT. ALL DIGGING AROUND EXISTING UNDERGROUND UTILITIES SHALL BE PERFORMED BY HAND.

C. RELOCATION OF EXISTING UTILITIES(TRANSFORMERS, POLE, ETC), ARE NOT PART OF THE SCOPE OF WORK IN THESE DESIGN DOCUMENTS AND SHALL BE PROVIDED BY OTHERS UNDER A DIFFERENT PERMIT.

D. THE SCOPE OF WORK CONSIST OF ELECTRICAL ENGINEERING SERVICES FOR A NEW PARK FOR THE CITY OF TAMPA, INCLUDING ELECTRICAL DISTRIBUTION, SITE LIGHTING, POWER FOR IRRIGATION AND FUTURE PROVISIONS FOR A FUTURE IMPROVEMENTS.

E. ALL SITE LIGHTING SHALL BE CONTROLLED VIA PHOTOCELL-ON AND TIMECLOCK-OFF. LIGHTS SHALL BE SWITCHED OFF AT DAWN AND BE SWITCHED ON AT DUSK. COORDINATE WITH PARK OFFICIAL FOR EXACT TIMING .

F. REFER TO LANDSCAPE PLANS FOR PHOTOMETRIC SITE PLAN.

G. DIGGING AROUND EXISTING TREES SHALL BE TAKEN WITH CAUTION/CARE AND PERFORMED BY HAND. AVOID RUNNING ANY UNDERGROUND CONDUIT AND TRENCHING WITHIN THESE ZONES. THESE ZONES ARE "TREE PROTECTION ZONE" INDICATED WITH KEYNOTE #14 AND DASHED CIRCLES.

1 ELECTRICAL SITE PLAN

0" – 1" = 20" – 0"

Prepared By:

PlaceMaker Design Studio, LLC
Urban Design • Landscape Architecture • Land Planning

PlaceMaker Design Studio, LLC
415 Plaza Drive
Dunedin, Florida 34698
Phone: (727) 726-6124
Web-Site www.placemakerdesignstudio.com

High Point Engineering, Inc. (HPE)
5005 W. Laurel Street, Suite 201
Tampa, Florida 33609
Phone: (813) 644-8333

MES GROUP
550 North Reo Street
Suite 303, Tampa, FL 33609
813.289.4700
COA # 8304
Project # 202454

Prepared For:

City of Tampa
306 East Jackson Street
Tampa, Florida 33602

Hubert Avenue Park & Right-Of-Way Improvements

4106, 4108, & 4110 N. Hubert Ave + 4115 N. Manhattan
Tampa, Florida

Seal

BID SET

REV	DATE	DESCRIPTION
5		
4		
3		
2		
1		

Date:	**MAY 15, 2026**
Job No.:	**24540**
Drawn By:	**SL**
Checked By:	**SC**

Sheet Title
ELECTRICAL
SITE PLAN

Sheet No.
ES100

TECO
TAMPA ELECTRIC
AN EMERA COMPANY

To:

From: James E. Lockhart

Subject: - Fault Data

Date: February 28, 2025

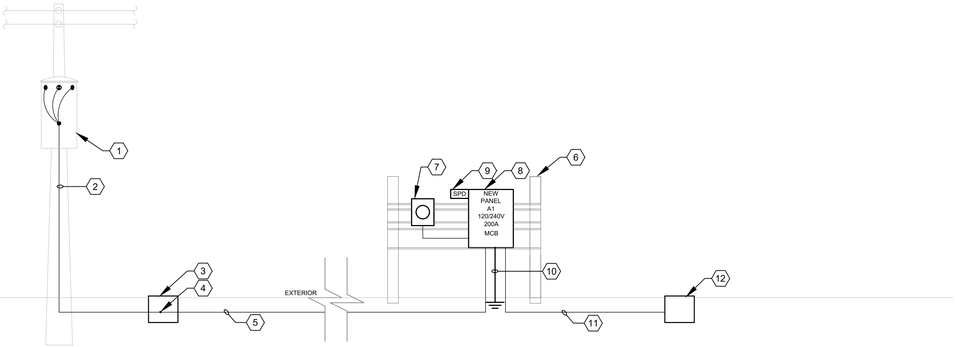
Below please find the information requested regarding the fault analysis for the referenced address. Typical fault currents on the Tampa Electric primary voltage system range from 2,000 A to 6,000 A, while X/R is typically 2.0 to 4.0, depending on location. The information below is based on the system configuration as of the above date and is subject to change without notice.

Premise Address:	4108 N Hubert Ave
Grid Number:	23343 - 42452
Meter Number:	Unknown
Work Request Number:	N/A
Circuit Number:	13637
Substation Name:	TAMPA BAY BLVD
Substation Transformer:	NORTH

Transformer Information

Size:	50 kVA overhead transformer
Primary Voltage:	13.2Y/7.62 kV nominal, grounded wye
Secondary Voltage:	120/240 Volts
Design Impedance:	2.00 %
Upstream Protective Device:	10 Amp Chance MS Fuse
Approx. Transformer X/R:	2.4
Infinite Bus Fault at Secondary:	10,417 Amperes

For equipment sizing purposes (bracing) please use 15,625 available secondary amperes. This is to accommodate a possible change of the transformer to one size smaller or one size larger without exceeding the bracing you have selected.



1 RISER DIAGRAM - 120/240V-1PH-3W

SCALE: NOT TO SCALE

TRANSFORMER SCHEDULE

Name	Size KVA	Rating	Primary Voltage	Secondary Voltage	Fault kAIC at Secondary	G.E.C.
UTILITY	50	Standard	Utility	240/1 Phase	15.63	None

240V FEEDER SCHEDULE

Feeder Termination	Feeder Source	Design Load KVA	Breaker Size Amps	Poles	Neutral (Y/N)	Feeder Material	Number of Runs	Wires per Run	Neutral Conductors per Run	Wire Size	Ground Size	Ground Type	Conduit Size	Conduit Type	Voltage Drop	Fault Current kAIC
PANEL A1	UTILITY	2.205	200	2	Y	Cu	1	2	3/0 AWG	3/0 AWG	None	None	2"	PVC	0.118%	8.07

NOTES:
1. FEEDER AMPACITIES BASED ON NEC TABLE 310.16 FOR 75°C.
2. EQUIPMENT GROUND (E.G.) SIZED PER NEC TABLE 250.122.
3. TRANSFORMER PRIMARY AND SECONDARY OVERCURRENT PROTECTION SIZED IN ACCORDANCE WITH NEC ARTICLES 240 AND 450.
4. ALL CONDUITS SIZED PER NEC TABLE C.1 FOR THHN, THWN, THWN-2.
5. ALL K RATED TRANSFORMERS SECONDARY FEEDERS SIZED WITH 80% DERATING FACTOR AND 200% RATED NEUTRAL.

BRANCH CIRCUIT COPPER WIRE AND CONDUIT SCHEDULE

Designation	Parallel Runs	3 Phase, 4 Wire			3 or 1 Phase, 3 Wire			1 Phase, 2 Wire		
		Conductors (AWG/kcmil)	Equipment Ground (AWG/kcmil)	Conduit	Conductors (AWG/kcmil)	Equipment Ground (AWG/kcmil)	Conduit	Conductors (AWG/kcmil)	Equipment Ground (AWG/kcmil)	Conduit
C_-20	1	4 # 12	1 # 12	3/4"	3 # 12	1 # 12	3/4"	2 # 12	1 # 12	3/4"
C_-30	1	4 # 10	1 # 10	3/4"	3 # 10	1 # 10	3/4"	2 # 10	1 # 10	3/4"
C_-40	1	4 # 8	1 # 10	1"	3 # 8	1 # 10	3/4"	2 # 8	1 # 10	3/4"
C_-60	1	4 # 6	1 # 10	1"	3 # 6	1 # 10	1"	2 # 6	1 # 10	1"
C_-70	1	4 # 4	1 # 8	1-1/2"	3 # 4	1 # 8	1"	2 # 4	1 # 8	1"
C_-90	1	4 # 3	1 # 8	1-1/2"	3 # 3	1 # 8	1-1/2"	2 # 3	1 # 8	1"
C_-100	1	4 # 3	1 # 8	1-1/2"	3 # 3	1 # 8	1-1/2"	2 # 3	1 # 8	1"
C_-110	1	4 # 2	1 # 6	1-1/2"	3 # 2	1 # 6	1-1/2"	2 # 2	1 # 6	1-1/2"
C_-125	1	4 # 1	1 # 6	2"	3 # 1	1 # 6	1-1/2"	2 # 1	1 # 6	1-1/2"
C_-150	1	4 # 1/0	1 # 6	2"	3 # 1/0	1 # 6	1-1/2"	2 # 1/0	1 # 6	1-1/2"
C_-175	1	4 # 2/0	1 # 6	2"	3 # 2/0	1 # 6	1-1/2"	2 # 2/0	1 # 6	1-1/2"
C_-200	1	4 # 3/0	1 # 6	2"	3 # 3/0	1 # 6	2"	2 # 3/0	1 # 6	2"

Notes
1. All conductors indicated in schedule shall be copper.

NEW PANEL: A1 — PANELBOARD SCHEDULE

#	Description	Circuit Breakers Trip (A)	Poles	Options	Wire and Conduit	Load (VA) A	Load (VA) B		Phase	Load (VA) A	Load (VA) B		Wire and Conduit	Circuit Breakers Options	Poles	Trip (A)	Description	#
1	SITE LIGHTING	20	2	PC/TC	*	270			A	2,880			C2-30	GFCI/HT	1	30	PEDESTAL	2
3	-						270		B		2,880		C2-30	GFCI/HT	1	30	PEDESTAL	4
5	SITE LIGHTING	20	2	PC/TC	*	180			A	-					2	100	FUTURE IMPROVEMENTS	6
7	-						180		B		-						-	8
9	IRRIGATION	20	1	GFCI	C2-20	180			A	-					1	20	SPARE	10
11	TIME CLOCK	20	1		C2-20		180		B		-				3	30	SPD	12
13	SPARE	20	1			-			A	-							-	14
15	SPARE	20	1				-		B		-						-	16
17	SPARE	20	1			-			A	-					1	20	SPARE	18
19	SPARE	20	1				-		B		-				1	20	SPARE	20

Load Description	Connected Load (VA)	Demand Factor	Demand Load (VA)
Lighting:	900	1.25	1,125
Receptacles - First 10 kVA:	6,120	1.00	6,120
Receptacles - Over 10 kVA:	-	0.50	-
Motors:	-	1.00	-
Largest Motor:	-	0.25	-
Air Conditioning:	-	-	-
Heat Pumps & Non-Coincidental:	-	1.00	-
Electric Space Heating:	-	1.00	-
Kitchen:	-	1.00	-
Elevators:	-	1.00	-
Continuous Loads:	-	1.25	-
Non-continuous Loads:	-	1.00	-
Totals (VA):	7,020		7,245
Total (A):			30

Connected Load (VA)
Phase A: 3,510
Phase B: 3,510
Total (VA): 7,020

See Wire and Conduit Schedule for wire and conduit sizes.

Panel Options
Voltage: 240/120V, 1Ø , 3W
Mains: 200A MCB
Rating: 10 kAIC
Minimum Bus Rating: 200
Mounting: Surface
Enclosure Type: NEMA 3R
Isolated Ground: No
Sub-feed Lugs: No
Feed-thru Lugs: No

Circuit Breaker Options

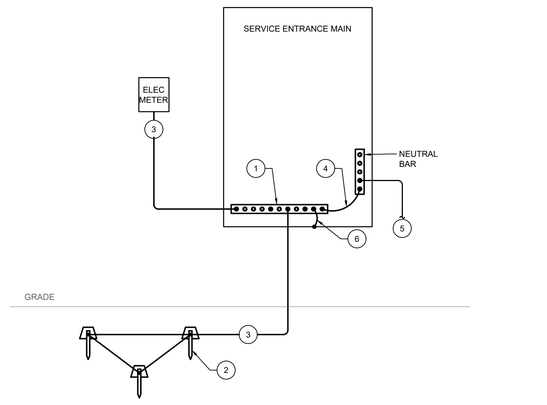
AFCI	Arc Fault Circuit Interrupter
GFCI	GFCI-Personnel (4-6 mA)
GFP	Ground Fault Protection
HT	Handle Ties
ST	Shunt Trip
L-ON	CB Lock in Closed Position
L-OFF	CB Lock in Open Position
TC/TC	Timeclock On/Timeclock Off
PC/TC	Photocell On/Timeclock Off
PC/PC	Photocell On/Photocell Off

Notes:
1. * SEE SITE PLAN FOR CONDUIT AND WIRE SIZE.
2.
3.
4.

LIGHTING FIXTURE SCHEDULE

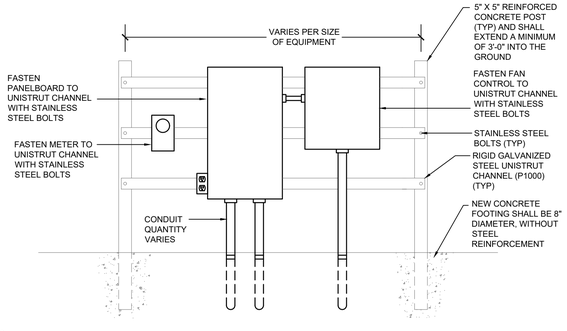
TYPE	MANUFACTURER	CATALOG NUMBER	DESCRIPTION	LAMPS Qty	LAMPS Type	VOLTS	MOUNTING	REMARKS	BALLAST/ TRANSFORMER	INPUT WATTS
A	LANDSCAPE FORMS	AG-500L5-056F-30K-UV1-12-TW1- FOG	POST TOP AREA LIGHT, TYPE III DISTRIBUTION, 60,000 HOUR L70 RATED LIFE, 19 STEP POWDER COAT PAINT, 6 YEAR WARRANTY		70CRI/3000K	UNV	POST TOP 12' AFG	NOTE POLE RATED FOR 150 MPH WIND ZONE	0-10V	50
B	LANDSCAPE FORMS	AG-500L5-056F-30K-UV1-16-TW1-FOG	POST TOP AREA LIGHT, TYPE V DISTRIBUTION, 60,000 HOUR L70 RATED LIFE, 19 STEP POWDER COAT PAINT, 6 YEAR WARRANTY		70CRI/3000K	UNV	POST TOP 16' AFG	NOTE POLE RATED FOR 150 MPH WIND ZONE	0-10V	60

LIGHTING SCHEDULE NOTES:
1. ALL LAMPS SHALL BE 80+ CRI AND 3500K UNLESS NOTED OTHERWISE.
2. OTHER FIXTURES MAY BE SUBMITTED FOR APPROVAL UP TO 10 WORKING DAYS PRIOR TO BID DATE, TO ALLOW FOR PROPER EVALUATION. SUBMISSIONS WITHIN 10 WORKING DAYS PRIOR TO BID DATE WILL NOT BE EVALUATED. EQUIPMENT IS APPROVED THROUGH ADDENDUM ONLY.



2 GROUNDING DETAILS

SCALE: NOT TO SCALE



NOTE:
1. CONTRACTOR SHALL FOLLOW ALL MANUFACTURER MOUNTING INSTRUCTIONS.

3 EQUIPMENT MOUNTING DETAIL

SCALE: NOT TO SCALE

GENERAL NOTES

A. REFER TO SCHEDULES FOR ADDITIONAL INFORMATION

B. PROVIDE WARNING LABELS AND FIELD MARKINGS IN ACCORDANCE WITH NEC (2020).

C. VOLTAGE DROP COMPLIED WITH F.B.C (FLORIDA BUILDING CODE) (2023) ENERGY CONSERVATION.

D. CONDUCTORS AND CONDUITS SIZES SHALL BE ADJUSTED IF NECESSARY FOR A MAX 3% VOLTAGE DROP.

(#) KEYNOTES

1. EXISTING 50KVA, 240/120V, 1-PH PRIMARY TRANSFORMER BY TECO.
2. 200 AMP SECONDARY SERVICE DOWN TECO'S POWER TO JUNCTION BOX
3. NEMA 3R JUNCTION BOX PROVIDED BY CONTRACTOR SIZED PER NEC AND TECO'S REQUIREMENTS.
4. CONTRACTOR SHALL COORDINATE FINALE CONNECTION WITH TECO.
5. PROVIDE A COMPACTED FILL FOR THE SECONDARY ELECTRICAL SERVICE FEEDERS.
6. EQUIPMENT MOUNTING SUPPORT STRUCTURE. SEE EQUIPMENT MOUNTING DETAILS.
7. UTILITY METER AND METER SOCKET ENCLOSURE. CONTRACTOR SHALL COORDINATE AND SUBMIT METER SOCKET ENCLOSURE TO TECO FOR REVIEW AND APPROVAL PRIOR TO PROCUREMENT. METER SHALL BE PROVIDED BY TECO.
8. SERVICE ENTRANCE RATED PANELBOARD.
9. SPD - PQ PROTECTION - PQM200-240/120 IN WEATHERPROOF ENCLOSURE.
10. PROVIDE 1#2 AWG Cu GROUNDING ELECTRODE CONDUCTOR.
11. (1) 2" UV RATED SCHEDULE 80 PVC CONDUIT FOR FUTURE IMPROVEMENTS TO NEMA 3R TRAFFIC RATED JUNCTION BOX.
12. NEMA 3R TRAFFIC RATED JUNCTION BOX FOR PREFAB FUTURE IMPROVEMENTS.

(#) GROUNDING DETAIL KEYNOTES

1. GROUND BUS BAR LOCATED WITHIN SERVICE ENTRANCE MAIN. 0.25" X 2" X 10" WITH 16 HOLES MINIMUM FOR INTERNAL INSTALLATION.
2. GROUNDING TRIAD, 3-3/4" X 10'-0" COPPERCLAD GROUND RODS DRIVEN INTO GROUND AT LEAST 1 ROD'S LENGTH APART. PROVIDE WITH INSPECTION TEST WELL.
3. COPPER GROUNDING ELECTRODE CONDUCTOR SIZED PER NEC TABLE 250.66, MINIMUM SIZE #2.
4. SERVICE ENTRANCE MAIN BONDING JUMPER SIZED PER NEC TABLE 250.66. NEUTRAL SHALL ONLY BE BONDED AT SERVICE ENTRANCE, ALL OTHER NEUTRALS SHALL BE CONSIDERED FLOATING.
5. SERVICE ENTRANCE NEUTRAL CONDUCTOR.
6. ALL EQUIPMENT ENCLOSURES AND METAL RACEWAYS SHALL BE GROUNDED WITH AN EQUIPMENT GROUNDING CONDUCTOR SIZED PER NEC TABLE 250.122.

Prepared By:

PlaceMaker Design Studio, LLC
Urban Design • Landscape Architecture • Land Planning

PlaceMaker Design Studio, LLC
415 Plaza Drive
Dunedin, Florida 34698
Phone: (727) 726-6124
Web-Site www.placemakerdesignstudio.com

High Point Engineering, Inc. (HPE)
5005 W. Laurel Street, Suite 201
Tampa, Florida 33609
Phone: (813) 644-8333

MES GROUP
550 North Reo Street
Suite 303, Tampa, FL 33609
813.289.4700
COA # 8304
Project # 2024540

Prepared For:

City of Tampa
306 East Jackson Street
Tampa, Florida 33602

Hubert Avenue Park & Right-Of-Way Improvements

4106, 4108, & 4110 N. Hubert Ave + 4115 N. Manhattan
Tampa, Florida

Seal

BID SET

REV	DATE	DESCRIPTION
5		
4		
3		
2		
1		

Date: MAY 15, 2026
Job No.: 24540
Drawn By: SL
Checked By: SC

Sheet Title
ELECTRICAL
RISER DIAGRAM,
DETAILS,
SCHEDULES

Sheet No.
E600