

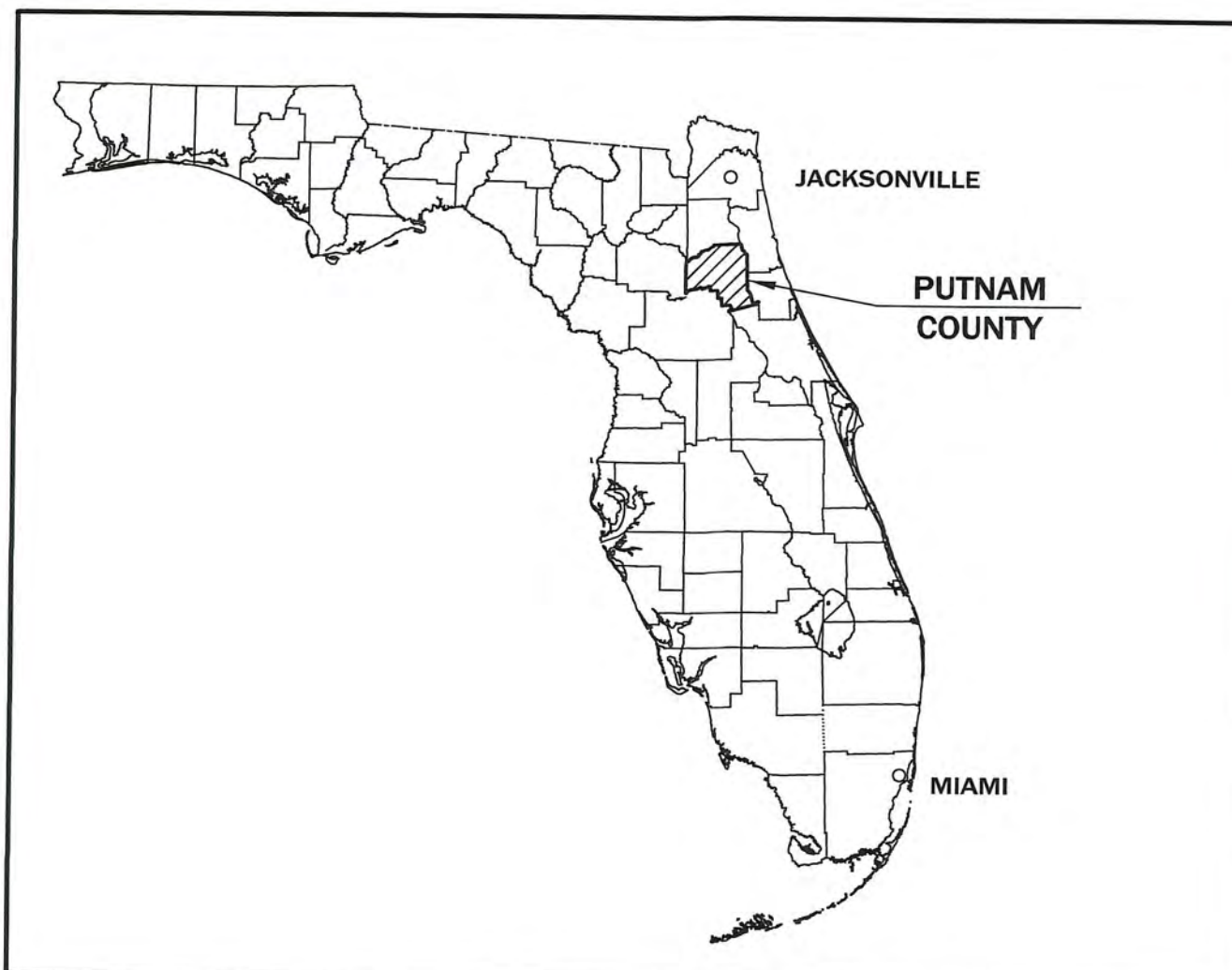
PUTNAM 230KV SWITCHYARD EXPANSION

SITE DEVELOPMENT PLAN

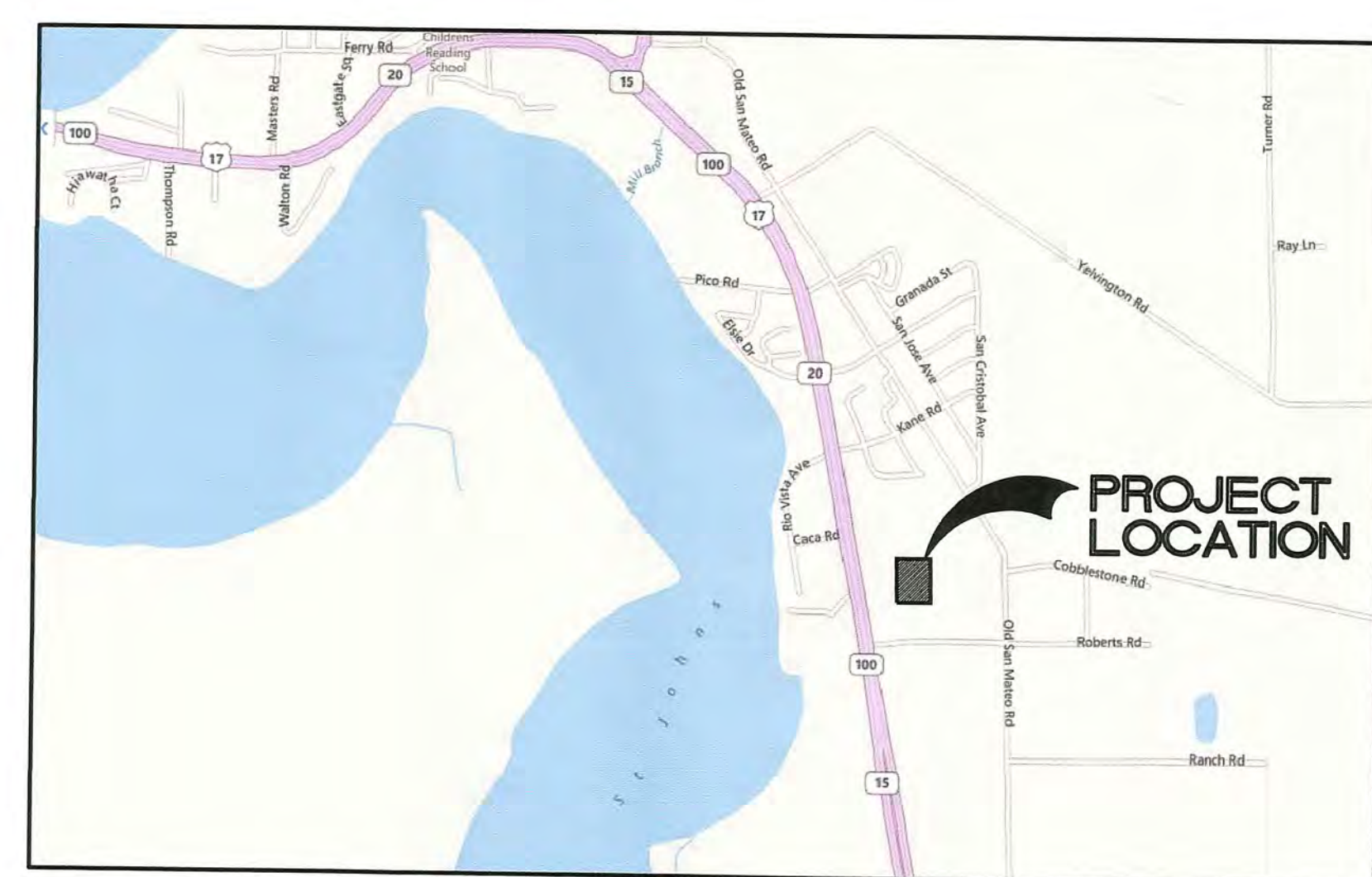


FPL

PUTNAM COUNTY, FLORIDA
SECTION 16, TOWNSHIP 10S, RANGE 27E



LOCATION MAP



VICINITY MAP

INDEX OF DRAWINGS

SKETCH NO.	DESCRIPTION
PUT00	COVER SHEET
PUT01	SITE PLAN
PUT02 (2 SHEETS)	FENCE, FILL AND GRADE PLAN
PUT03	TREE REMOVAL/STORMWATER POLLUTION PREVENTION PLAN
PUT04	BOUNDARY, TOPOGRAPHICAL, & WETLAND SURVEY

PROJECT NAME:
PUTNAM 230KV
SWITCHYARD EXPANSION

PROJECT ADDRESS:
392 S. HIGHWAY 17
EAST PALATKA, FLA. 32131

OWNER:
FLORIDA POWER & LIGHT CO.
SANTIAGO MELIANS, MANAGER
700 UNIVERSE BLVD., PDP-JB
JUNO BEACH, FLORIDA 33408-0420
(561) 694-4053 FAX (561) 694-4283

SITE DESIGNER/ENGINEER:
PARKER MYNCHENBERG & ASSOC., INC.
STEVEN R. BUSWELL, P.E., R.L.A.
1729 RIDGEWOOD AVE.
HOLLY HILL, FLORIDA 32117
(386) 677-6891 FAX (386) 677-2114

GENERAL INFORMATION

TAX PARCEL NUMBER: 39-10-27-0000-0560-0000

EXISTING ZONING: AG

SITE AREA= 3.581 AC.

GENERAL NOTES

- BOUNDARY, TOPOGRAPHIC & WETLAND SURVEY PROVIDED BY DEWBERRY BOWYER SINGLETON, WILLIAM D. DONLEY, NO. 5381, DATED 8/10/13.
- LOCATIONS OF EXISTING UTILITIES ARE SHOWN BASED ON AVAILABLE INFORMATION. IT IS THE CONTRACTOR'S RESPONSIBILITY TO DETERMINE THE EXACT LOCATION OF EXISTING UTILITIES AND TO DETERMINE IF OTHER UTILITIES WILL BE ENCOUNTERED DURING THE COURSE OF THE WORK AND TAKE WHATEVER STEPS NECESSARY TO PROVIDE FOR THEIR PROTECTION (I.E. SHEETING, DE-WATERING, ETC.). CONTRACTOR TO NOTIFY DESIGN ENGINEER OF ANY DISCREPANCIES OR CONFLICTS.
- THERMOPLASTIC STRIPING AND TRAFFIC CONTROL SIGNAGE TO MEET FDOT AND PUTNAM COUNTY SPECIFICATIONS.
- TRAFFIC CONTROL SIGNS TO BE IN ACCORDANCE WITH F.D.O.T. STANDARD SPECIFICATIONS. ALL STOP SIGNS, SPEED LIMIT AND STREET SIGNS REQUIRED TO BE PROVIDED BY DEVELOPER TO PUTNAM COUNTY SPECIFICATIONS.
- ALL TRAFFIC CONTROL SIGNS SHALL BE FABRICATED IN ACCORDANCE WITH THE MANUAL ON UNIFORM TRAFFIC CONTROL DEVICES USING 3M BRAND "SCOTCHLIGHT" SHEETING (ENGINEER GRADE) ON MINIMUM 0.080 GAUGE 5052-H38 ALUMINUM BLANKS. ALL STOP SIGNS SHALL BE HIGH INTENSITY 30" OCTAGON INSTALLED ON 12" 3 LBS/FT. "U" CHANNEL POSTS (RAIL STEEL ONLY) OR 3" X 12", ROUND ALUMINUM POSTS. "U" CHANNEL POSTS MAY BE USED FOR ALL SIGNS SMALLER THAN 36" X 48". ALL WARNING SIGNS SHALL BE 30" X 30".
- THE CONTRACTOR SHALL OBTAIN ALL REQUIRED PERMITS AND/OR LICENSES TO COMMENCE CONSTRUCTION.
- ALL CONCRETE SHALL DEVELOP A 28-DAY COMPRESSIVE STRENGTH OF 3,000 PSI UNLESS OTHERWISE NOTED.
- THE CONTRACTOR SHALL HAVE AVAILABLE AT THE JOB SITE, AT ALL TIMES, ONE COPY OF PLANS, SPECIFICATIONS, AND COPIES OF ANY REQUIRED CONSTRUCTION PERMITS.
- CONTRACTOR IS RESPONSIBLE FOR CHECKING ACTUAL SITE CONDITIONS BEFORE STARTING CONSTRUCTION.
- ANY DISCREPANCIES ON THE DRAWINGS SHALL BE BROUGHT TO THE ATTENTION OF THE ENGINEER BEFORE COMMENCING WORK.
- NO FIELD CHANGES OR DEVIATIONS FROM DESIGN TO BE MADE WITHOUT PRIOR APPROVAL FROM THE ENGINEER.
- A PORTION OF THIS PROPERTY LIES WITHIN ZONE AE (AREAS OF 100-YEAR FLOOD, NO BASE FLOOD ELEVATION DETERMINED) AND THE REMAINDER OF THIS PROPERTY LIES WITHIN ZONE X.

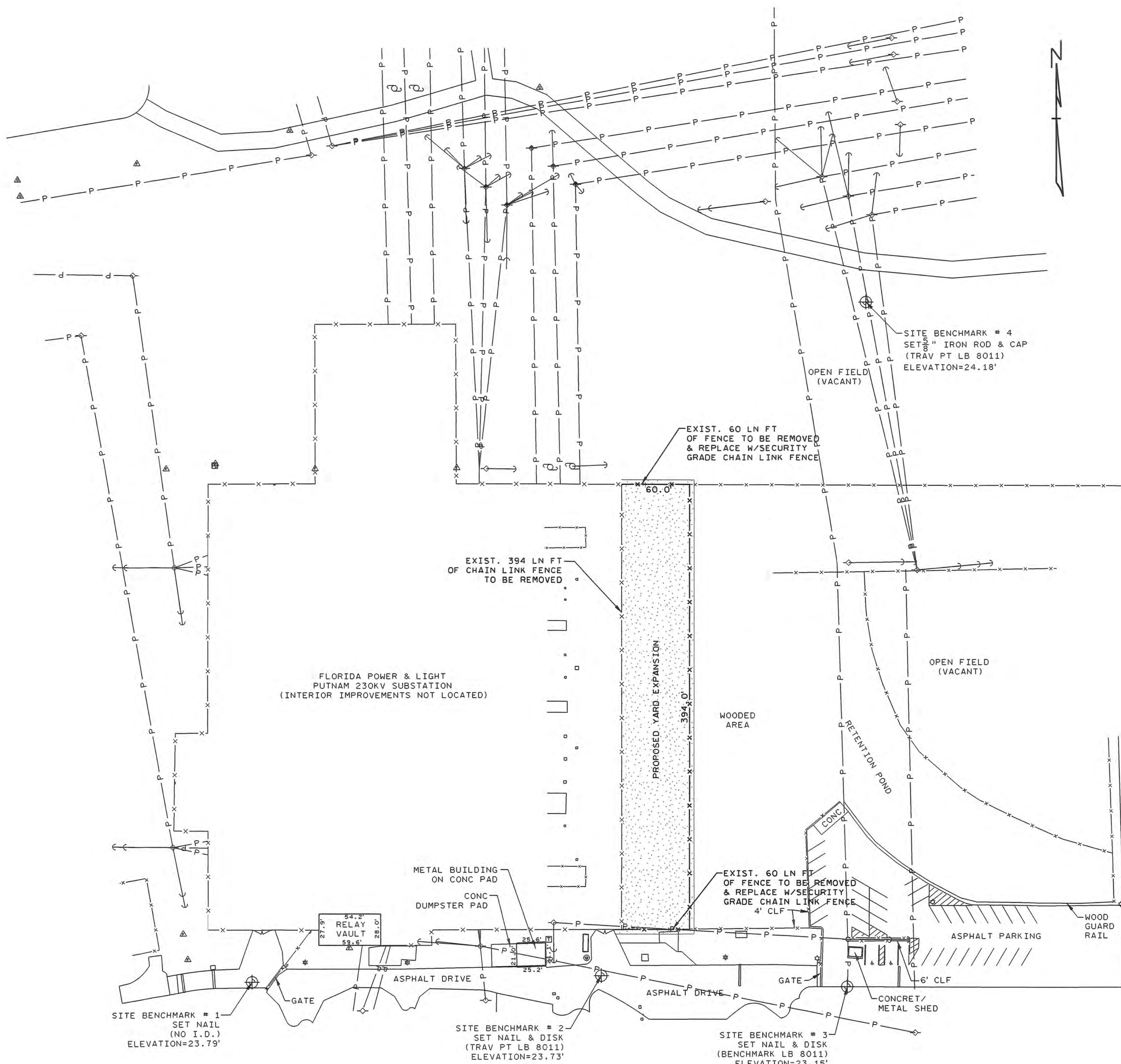
700 UNIVERSE BLVD. (PDP-JB)
JUNO BEACH, FLORIDA 33408

1	2.06.14	REMOVE THE TWO WEST SIDE EXPANSIONS	CH
REVISIONS			
PUTNAM 230KV SWITCHYARD EXPANSION FPL PROJECT NO.			
		PUT 00	SKETCH NO.
CADE			

ENGINEER'S SEAL

4-2-2014

NO. 53888

**GENERAL NOTES:**

1. APPLICANT AND AGENT: BRUCE BARBER FOR FLORIDA POWER AND LIGHT, OWNER & DEVELOPER, 700 UNIVERSE BLVD., TS4/JW. JUNO BEACH, FLORIDA 33408. PHONE (561) 904-3601.
2. THIS UNMANNED FACILITY WILL BE USED FOR TRANSFORMATION AND REGULATION OF ELECTRICITY.
3. FPL CERTIFIES THAT THIS FACILITY WILL BE USED ONLY BY EMPLOYEES, AND THE WORK ASSOCIATED WITH HIGH VOLTAGE ELECTRICAL EQUIPMENT CANNOT REASONABLY BE PERFORMED BY HANDICAPPED PERSONS. PURSUANT TO CHAPTER 553.504(1), OF FLORIDA STATUTES, THIS FACILITY IS NOT SUBJECT TO THE ACCESSIBILITY REQUIREMENTS OF THE ADA.
4. THIS FACILITY WILL CONSUME NO UNRECOVERABLE ENERGY AND IS EXEMPT FROM THE FLORIDA ENERGY REVIEW CODE.
5. THIS FACILITY WILL GENERATE NO SOLID WASTE.
6. THIS IS AN UNMANNED RESTRICTED ACCESS FACILITY. NO FPL EMPLOYEES REPORT TO THIS LOCATION AND MAINTENANCE CREWS WILL PARK INSIDE THE FENCED AREA. THEREFORE, NO PARKING SPACES WILL BE PROVIDED.
7. FPL TWO-MAN MAINTENANCE CREWS WILL AVERAGE TWO TRIPS PER MONTH TO THIS FACILITY.
8. ADDRESS (911): 392 S. HIGHWAY 17, E. PALATKA, FL 32131
9. PARCEL TAX ID NUMBER: 39-10-27-0000-0560-0000
10. THIS PROPERTY LIES IN FLOOD ZONE X PER FEMA MAP NUMBER 12107C0214C EFFECTIVE ON 02-02-2012.

SURVEY INFO PROVIDED BY:
DENBERRY/BSA
520 S. MAGNOLIA AVE., ORLANDO, FL 32801
PHONE: 407-843-5120 SURVEY DATE: 08-09-13

ER	NO	DATE	REVISION
	2	02-05-14	REMOVED EXPANSION TO THE WEST
	1	01-20-14	REVD FOR BIDDING PURPOSES ONLY

JSR			
JSR			
BY	CH	COR	APP

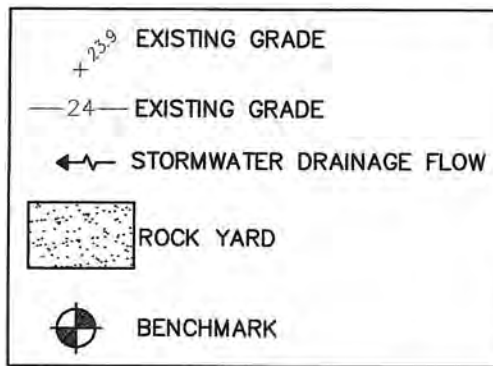
DATE 12-03-13	SCALE 0 50 75 100 150
POWER DELIVERY	DRRODRIGUEZ
	CH COR
	APPROVED B. BARBER
FPL	

PUTNAM 230KV
SWITCHYARD EXPANSION
SITE PLAN

R135099 135099S1 R2	(SU, G, PP)
SHEET 1 OF 1	REV NO
E-PUT01	2
CAD	

**FOR BIDDING
PURPOSES ONLY**

Handwritten signature and date 4-2-2014
ENGINEER'S SEAL



STRUCTURE #44A
STRUCTURE HT=68.4'
OHGW ATT HT=66.6'
CONDUCTOR ATT HT=62.0'
CONDUCTOR ATT HT=59.3'
CONDUCTOR ATT HT=55.0'
CONDUCTOR ATT HT=52.4'
CONDUCTOR ATT HT=48.0'
CONDUCTOR ATT HT=45.6'

STRUCTURE #44W
STRUCTURE HT=48.0'
OHGW ATT HT=47.1'
CONDUCTOR ATT HT=38.3'
CONDUCTOR ATT HT=35.0'
CONDUCTOR ATT HT=32.4'
CONDUCTOR ATT HT=28.0'

STRUCTURE #1331
E POLE HT=66.2'
W POLE HT=65.6'
OHGW ATT HT=65.0'
E CONDUCTOR ATT HT=51.6'
W CONDUCTOR ATT HT=51.2'
CENTER CONDUCTOR ATT HT=55.4'

STRUCTURE #8864
NLY STRUCTURE HT=77.0'
NLY OHGW ATT HT=76.3'
NLY OHGW ATT HT=75.9'
NLY CONDUCTOR ATT HT=60.0'
CENTER CONDUCTOR ATT HT=58.4'
SLY STRUCTURE HT=72.1'
SLY OHGW ATT HT=76.1'
SLY CONDUCTOR ATT HT=60.4'
SLY CONDUCTOR ATT HT=60.1'

STRUCTURE #4444
NLY STRUCTURE HT=61.5'
NLY OHGW ATT HT=61.0'
NLY CONDUCTOR ATT HT=45.4'
CENTER CONDUCTOR ATT HT=45.4'
SLY STRUCTURE HT=61.5'
SLY OHGW ATT HT=61.0'
SLY CONDUCTOR ATT HT=45.3'
SLY CONDUCTOR ATT HT=46.8'

STRUCTURE #44J5
N STRUCTURE HT=45.8'
N OHGW ATT HT=45.4'
N CONDUCTOR ATT HT=36.8'
CENTER CONDUCTOR ATT HT=35.8'
S STRUCTURE HT=44.2'
S OHGW ATT HT=44.2'
S CONDUCTOR ATT HT=36.3'

STRUCTURE # NO ID
N STRUCTURE HT=65.9'
N OHGW ATT HT=65.0'
N CONDUCTOR ATT HT=44.3'
S STRUCTURE HT=65.6'
S OHGW ATT HT=64.8'
S CONDUCTOR ATT HT=43.2'

STRUCTURE # 93M
NLY STRUCTURE HT=55.2'
NLY OHGW ATT HT=54.2'
NLY CONDUCTOR ATT HT=10.2'
NLY CONDUCTOR ATT HT=10.2'
CENTER STRUCTURE HT=54.7'
CENTER OHGW ATT HT=54.2'
CENTER CONDUCTOR ATT HT=39.8'
SLY STRUCTURE HT=54.6'
SLY OHGW ATT HT=54.1'
SLY CONDUCTOR ATT HT=39.5'
SLY CONDUCTOR ATT HT=38.8'

STRUCTURE #13312
STRUCTURE HT=101.9'
OHGW ATT HT=101.0'
CONDUCTOR ATT HT=94.1'
CONDUCTOR ATT HT=83.9'
CONDUCTOR ATT HT=73.9'

SITE BENCHMARK # 4
SET 5/8" IRON ROD & CAP
(TRAV PT LB 8011)
ELEVATION=24.18'

OPEN FIELD
(VACANT)

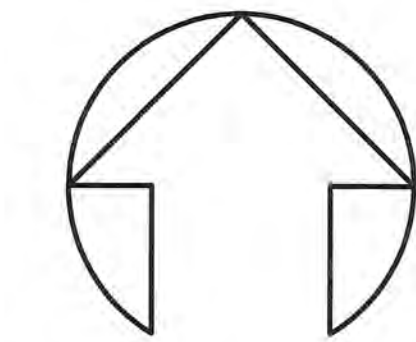
SECURITY GRADE
CHAIN LINK FENCE
(514 L.F. TOTAL)

STRUCTURE #13319
STRUCTURE HT=86.5'
OHGW ATT HT=85.8'
CONDUCTOR ATT HT=75.9'
CONDUCTOR ATT HT=62.0'
CONDUCTOR ATT HT=48.1'

STRUCTURE #93J3
STRUCTURE HT=67.3'
OHGW ATT HT=66.7'
CONDUCTOR ATT HT=55.2'
CONDUCTOR ATT HT=46.3'
CONDUCTOR ATT HT=37.1'

STRUCTURE #1331A
STRUCTURE HT=66.0'
OHGW ATT HT=65.1'
OHGW ATT HT=65.5'
CONDUCTOR ATT HT=54.0'
CONDUCTOR ATT HT=45.9'
CONDUCTOR ATT HT=45.2'
CONDUCTOR ATT HT=37.5'
CONDUCTOR ATT HT=37.1'

STRUCTURE #93J2
STRUCTURE HT=65.3'
OHGW ATT HT=64.5'
OHGW ATT HT=64.0'
CONDUCTOR ATT HT=52.8'
CONDUCTOR ATT HT=52.5'
CONDUCTOR ATT HT=44.9'
CONDUCTOR ATT HT=36.9'
CONDUCTOR ATT HT=37.0'



1 INCH = 50 FEET

TREE LEGEND (SIZE DENOTED INSIDE SYMBOL)

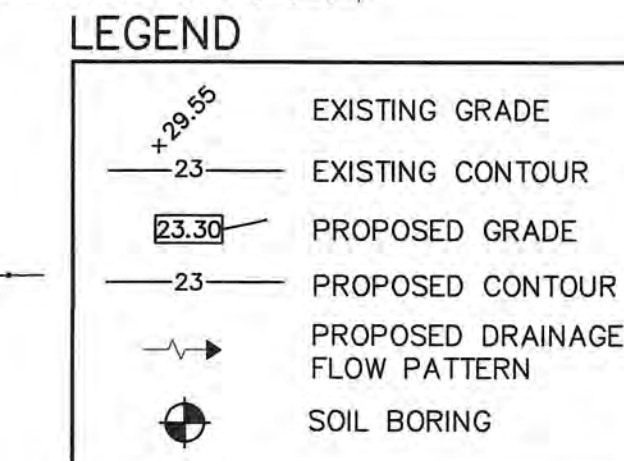
- CAMPBELL
- CEDAR
- CHERRY
- CHINABERRY
- CYPRESS
- DOGWOOD
- ELM
- GUM
- HICKORY
- HOLLY
- LAUREL OAK
- LIVE OAK
- MAGNOLIA
- MAPLE
- MIMOSA
- MISC
- OAK
- PALM
- PECAN
- PINE TREE
- SUGAR HACKBERRY
- SYCAMORE

STRUCTURE #121G10
STRUCTURE HT=58.2'
OHGW ATT HT=58.8'
CONDUCTOR ATT HT=50.9'
CONDUCTOR ATT HT=50.1'
CONDUCTOR ATT HT=44.1'
CONDUCTOR ATT HT=37.2'
CONDUCTOR ATT HT=35.4'

STRUCTURE #121G15A
STRUCTURE HT=56.9'
OHGW ATT HT=56.4'
CONDUCTOR ATT HT=48.4'
CONDUCTOR ATT HT=48.3'
CONDUCTOR ATT HT=41.8'
CONDUCTOR ATT HT=40.8'

STRUCTURE #93J1
STRUCTURE HT=70.0'
OHGW ATT HT=69.4'
CONDUCTOR ATT HT=56.5'
CONDUCTOR ATT HT=56.1'
CONDUCTOR ATT HT=48.7'
CONDUCTOR ATT HT=48.3'
CONDUCTOR ATT HT=40.9'
CONDUCTOR ATT HT=41.8'
CONDUCTOR ATT HT=40.8'

POND "A"
TOP EL. = 23.30
BOTTOM EL. = 21.70
OVERFLOW EL. = 22.80
25 YR./24 HR. DWH = EL. 22.89
100 YR./24 HR. DWH = EL. 22.97



LEGEND AND ABBREVIATIONS:

- ± MORE OR LESS
- EL. ELEVATION
- LB LICENSED BUSINESS
- NO. NUMBER
- LS LAND SURVEYOR
- LD. IDENTIFICATION
- ORB OFFICIAL RECORDS BOOK
- C CENTERLINE
- R RADIUS
- L ARC LENGTH
- Δ DELTA (CENTRAL ANGLE)
- C.D. CHORD LENGTH
- C.B. CHORD BEARING
- PCC POINT ON CURVE
- POL POINT ON LINE
- PCC POINT OF COMPOUND CURVATURE
- PRC POINT OF REVERSE CURVATURE
- PC POINT OF CURVATURE
- PT POINT OF TANGENCY
- PI POINT OF INTERSECTION
- P.O.C. POINT OF COMMENCEMENT
- P.O.B. POINT OF BEGINNING
- FEMA FEDERAL EMERGENCY MANAGEMENT AGENCY
- DIP DUCTILE IRON PIPE
- PVC POLYVINYL CHLORIDE
- CMP CORRUGATED METAL PIPE
- RCP REINFORCED CONCRETE PIPE
- NAVD NORTH AMERICAN VERTICAL DATUM
- NGVD NATIONAL GEODETIC VERTICAL DATUM
- PS PLAT BOOK
- ORB OFFICIAL RECORDS BOOK
- PG(S) PAGE(S)
- R/W RIGHT OF WAY
- ESMT EASEMENT
- SEC SECTION
- FND FOUND
- REC RECOVERED
- CCR CERTIFIED CORNER RECORD
- RLS REGISTERED LAND SURVEYOR
- CM CONCRETE MONUMENT
- IRC IRON ROD AND CAP
- IR IRON ROD
- IP IRON PIPE
- CLF CHAIN LINK FENCE
- FOUND CONCRETE MONUMENT AS NOTED
- FOUND NAIL & DISK (LB 1221)
- UNLESS OTHERWISE NOTED
- SET NAIL & DISK (LB 1221)
- FOUND IRON ROD & CAP AS NOTED
- UNLESS OTHERWISE NOTED
- FOUND IRON ROD AS NOTED
- SET 5/8" IRON ROD & CAP (LB 1221)
- CONTROL/BENCHMARK AS DESCRIBED
- CURB INLET GRATE
- CATCH BASIN
- SANITARY MANHOLE
- SANITARY CLEANOUT
- ELECTRIC MANHOLE
- ELECTRIC METER
- ELECTRIC RISER BOX
- CABLE TELEVISION RISER BOX
- TELEPHONE RISER BOX
- UTILITY RISER
- WELL
- WATER SPIGOT
- IRRIGATION CONTROL VALVE
- WATER METER
- WATER VALVE
- FIRE HYDRANT
- AIR CONDITIONER PAD
- GAS VALVE
- GAS METER
- GAS LINE MARKER
- CONCRETE UTILITY POLE
- METAL UTILITY POLE
- WOOD UTILITY POLE
- UTILITY POLE GUY ANCHOR
- LIGHT POLE
- SPOT/GROUND LIGHT
- ELECTRIC TRANSFORMER
- WETLAND FLAG
- SIGN
- BOLLARD
- FLAG POLE
- MAILBOX
- HEDGE ROW
- LINE BREAK
- FENCE LINE AS NOTED
- OVERHEAD UTILITY LINE
- APPROXIMATE TOP OF BANK
- APPROXIMATE TOE OF SLOPE
- EXISTING CONTOUR

SURVEY NOTES:

- THE SPECIFIC PURPOSE OF THIS SURVEY IS TO SHOW THE ABOVE GROUND TOPOGRAPHIC FEATURES IN RELATION TO THE PUTNAM 230KV SUBSTATION.
- ACCORDING TO FEDERAL EMERGENCY MANAGEMENT AGENCY'S FLOOD INSURANCE RATE MAP (FIRM) MAP NO. 12107C0214C, PUTNAM COUNTY, FLORIDA, EFFECTIVE DATE OF FEBRUARY 2, 2012, THE PROPERTY DESCRIBED HEREON LIES WITHIN ZONE(S) "X" AND "AE" SAID LANDS LIES PARTIALLY IN A 100 YEAR FLOOD HAZARD AREA.
- UNDERGROUND FOUNDATIONS AND UTILITIES WERE NOT LOCATED AS PART OF THIS SURVEY.
- INTERIOR IMPROVEMENTS WITHIN THE SUBSTATION FENCE AREA WERE NOT LOCATED AS PART OF THIS SURVEY.
- LANDS SHOWN HEREON WERE NOT ABSTRACTED FOR RIGHTS-OF-WAY, EASEMENTS, OWNERSHIP, ADJOINERS OR OTHER INSTRUMENTS OF RECORD BY THIS FIRM.
- NORTH-SOUTH AND EAST-WEST TIES TO FOUND MONUMENTATION AND IMPROVEMENTS ARE BASED ON CARDINAL DIRECTION.
- WETLAND AREAS, IF EXISTING, WERE NOT ADDRESSED AS A PART OF THIS SURVEY.
- THE ACCURACY OF THE SURVEY MEASUREMENTS USED FOR THIS SURVEY MEETS OR EXCEEDS THE EXPECTED USE OF THE PROPERTY DESCRIBED HEREON. (COMMERCIAL/HIGH RISK) 1 FOOT IN 10,000 FEET.
- ELEVATIONS SHOWN ARE BASED ON FLORIDA DEPARTMENT OF TRANSPORTATION BENCHMARK # TBM60 AS REFERENCED IN CAIGE DATABASE, PROJECT 7601020. SAID POINT BEING AN X CUT IN A CONCRETE HEADWALL AND HAVING AN ELEVATION OF 10.437 FEET, PURSUANT TO THE NORTH AMERICAN VERTICAL DATUM OF 1988 (NAVD1988).

CERTIFIED TO:
FLORIDA POWER & LIGHT

SURVEYOR'S CERTIFICATE:

I HEREBY CERTIFY THIS SURVEY MEETS THE APPLICABLE "MINIMUM TECHNICAL STANDARDS" AS SET FORTH BY THE FLORIDA BOARD OF PROFESSIONAL SURVEYORS AND MAPPERS IN RULE 5J17.050-.052, FLORIDA ADMINISTRATIVE CODE.

WILLIAM D. DONLEY
FLORIDA LICENSED SURVEYOR & MAPPER NO. 5381

DATE

THIS SURVEY IS NOT VALID WITHOUT THE SIGNATURE AND ORIGINAL RAISED SEAL OF A FLORIDA LICENSED SURVEYOR AND MAPPER.

PARKER MYNCHENBERG & ASSOCIATES, INC.

PROFESSIONAL ENGINEERS * LANDSCAPE ARCHITECTS
1729 RIDGEWOOD AVENUE HOLLY HILL, FLORIDA 32117
(386) 677-6891 FAX (386) 677-2114 E-MAIL: info@parkermynchenberg.com
CERTIFICATE OF AUTHORIZATION NUMBER: 00003910

NO.	DATE	REVISION	BY	CH	SRB	CH	SRB	CH	SRB
1	2.06.14	REMOVED THE TWO WEST SIDE EXPANSIONS	CH	SRB					
ER	NO								

DATE 1/16/14	SCALE 0 50 75 100 150
POWER DELIVERY	DR CH ER
	CH CH COR
	APPROVED
	STEVEN R. BUSWELL, P.E.

PUTNAM 230KV
SWITCHYARD EXPANSION
FENCE, FILL & GRADE

SHEET 1 OF 2
PUT02

REV
NO
1

4-2-2014

ENGINEER'S SEAL



PUTNAM 230KV
SWITCHYARD EXPANSION
TREE REMOVAL/STORMWATER
POLLUTION PREVENTION PLAN

PUT03

1

