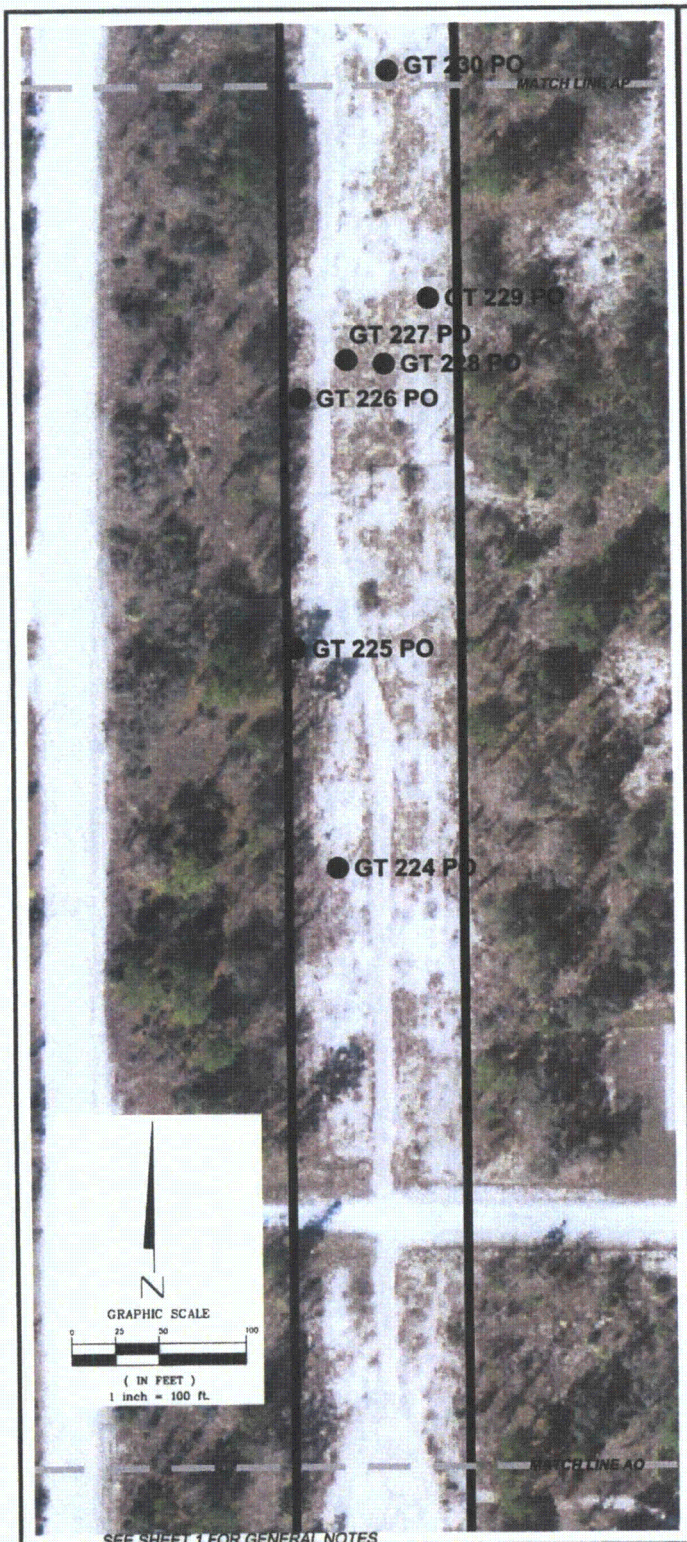


SEE SHEET 1 FOR GENERAL NOTES

PROJECT TITLE:
SPECIFIC PURPOSE SURVEY OF WETLAND JURISDICTIONAL DELINEATION AND THREATENED AND ENDANGERED SPECIES
OF
PROGRESS ENERGY FLORIDA
CITRUS - BROOKRIDGE TRANSMISSION LINE
Hernando County & Citrus County, Florida

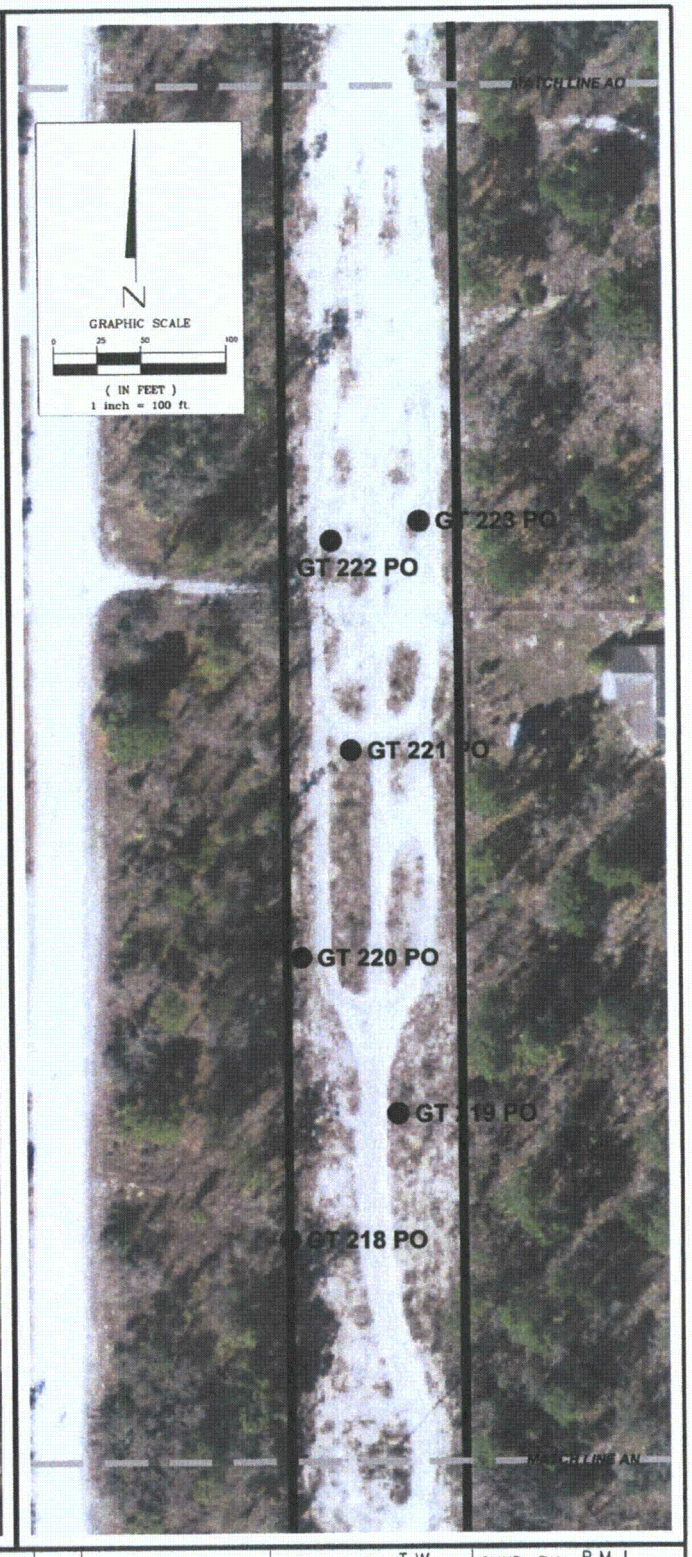
DATE	BY	DESCRIPTION

REVISION

DRAWN BY: T.W. DATE: 12/08/09
CHKD. BY: R.M.J. DATE: 12/14/09
JOB No. 63740090435
SCALE: 1"=100'
SHT. 111 OF 139
DRAWING NAME: CR - Boorkridge Substation.dwg

PREPARED BY:
MACTEC
MACTEC Engineering & Consulting, Inc.
4150 North John Young Parkway Orlando, Florida 32804-2620
Phone: 407.522.7570 Fax: 407.522.7576
CERTIFICATE OF AUTHORIZATION: LB 6969

PREPARED FOR:
Golder Associates
Gainesville, Florida
GOLDER ASSOCIATES
6026 NW 1st Place
GAINESVILLE, FLORIDA 32607



SEE SHEET 1 FOR GENERAL NOTES

PROJECT TITLE:
SPECIFIC PURPOSE SURVEY OF WETLAND JURISDICTIONAL DELINEATION AND THREATENED AND ENDANGERED SPECIES
OF
PROGRESS ENERGY FLORIDA
CITRUS - BROOKRIDGE TRANSMISSION LINE
Hernando County & Citrus County, Florida

DATE	BY	DESCRIPTION

REVISION

DRAWN BY: T.W. DATE: 12/08/09
CHKD. BY: R.M.J. DATE: 12/14/09
JOB No. 63740090435
SCALE: 1"=100'
SHT. 112 OF 139
DRAWING NAME: CR - Boorkridge Substation.dwg

PREPARED BY:
MACTEC
MACTEC Engineering & Consulting, Inc.
4150 North John Young Parkway Orlando, Florida 32804-2620
Phone: 407.522.7570 Fax: 407.522.7576
CERTIFICATE OF AUTHORIZATION: LB 6969

Golder Associates
Gainesville, Florida

PREPARED FOR:
GOLDER ASSOCIATES
6026 NW 1st Place
GAINESVILLE, FLORIDA 32607

SEE SHEET 1 FOR GENERAL NOTES

PROJECT TITLE:
SPECIFIC PURPOSE SURVEY OF WETLAND JURISDICTIONAL DELINEATION AND THREATENED AND ENDANGERED SPECIES
OF
PROGRESS ENERGY FLORIDA
CITRUS - BROOKRIDGE TRANSMISSION LINE
Hernando County & Citrus County, Florida

DATE	BY	DESCRIPTION

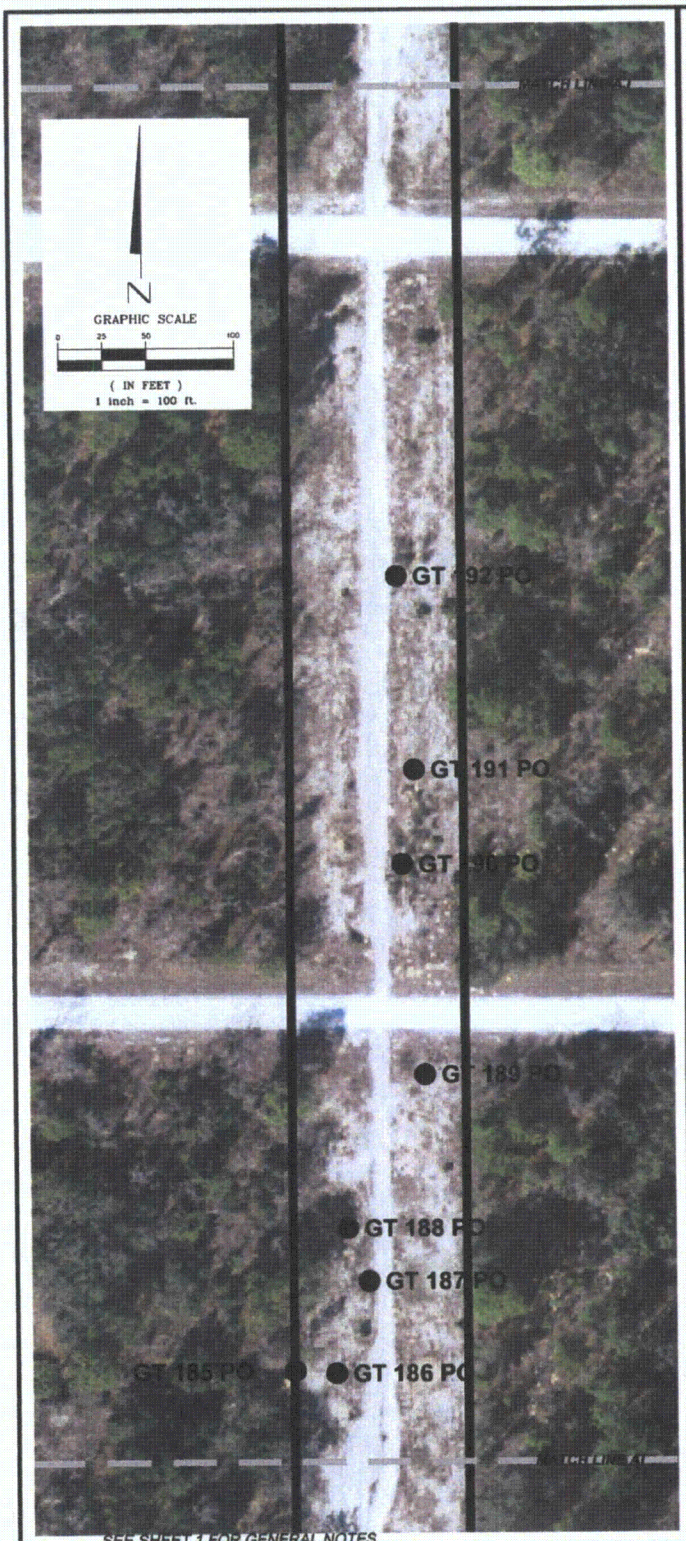
REVISION

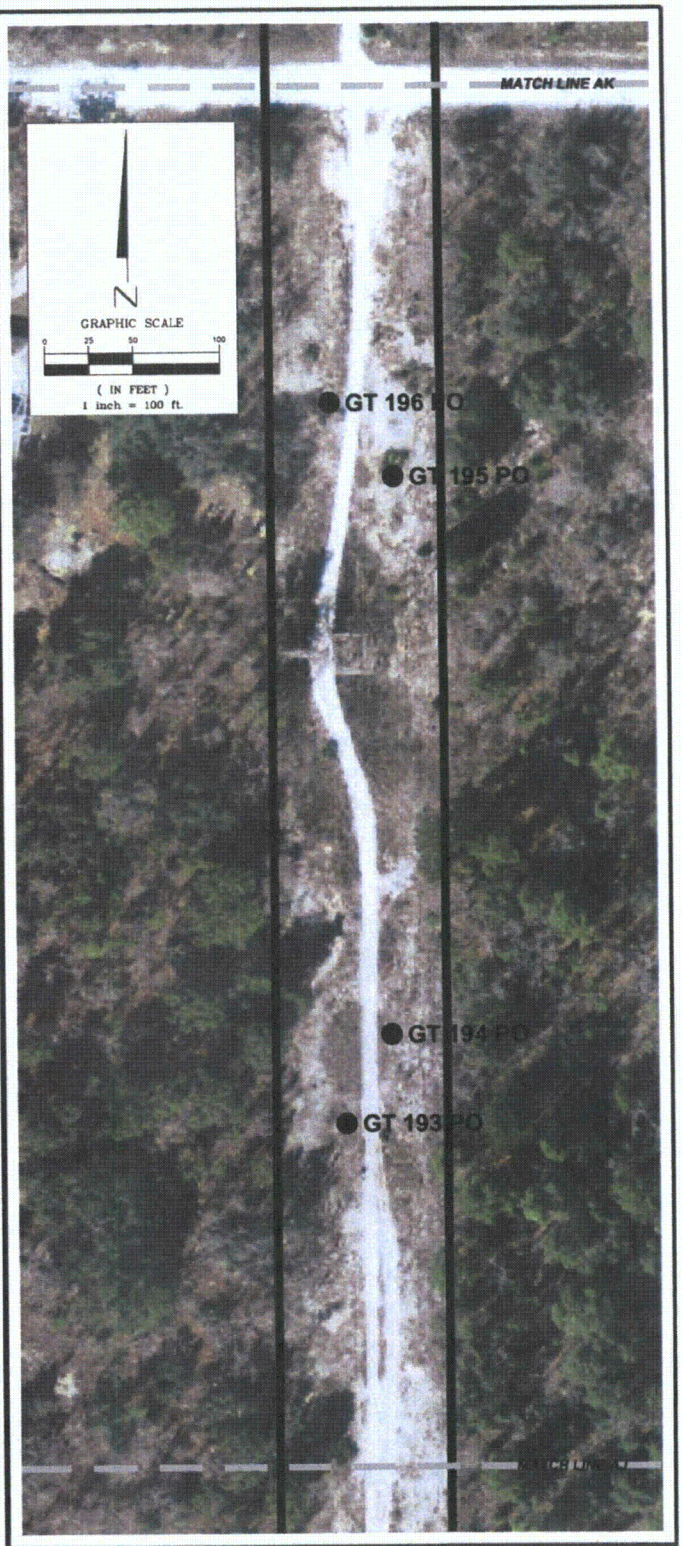
DRAWN BY: T.W. DATE: 12/08/09
CHKD. BY: R.M.J. DATE: 12/14/09
JOB No. 63740090435
SCALE: 1"=100'
SHT. 113 OF 139
DRAWING NAME: CR - Boorkridge Substation.dwg

PREPARED BY:
MACTEC
MACTEC Engineering & Consulting, Inc.
4150 North John Young Parkway Orlando, Florida 32804-2620
Phone: 407.522.7570 Fax: 407.522.7576
CERTIFICATE OF AUTHORIZATION: LB 6969

PREPARED FOR:
Golder Associates
Gainesville, Florida

GOLDER ASSOCIATES
6026 NW 1st Place
GAINESVILLE, FLORIDA 32607





SEE SHEET 1 FOR GENERAL NOTES

PROJECT TITLE:
SPECIFIC PURPOSE SURVEY OF WETLAND JURISDICTIONAL DELINEATION AND THREATENED AND ENDANGERED SPECIES
OF
PROGRESS ENERGY FLORIDA
CITRUS - BROOKRIDGE TRANSMISSION LINE
Hernando County & Citrus County, Florida

DATE	BY	DESCRIPTION

REVISION

DRAWN BY: T.W.
DATE: 12/08/09

CHKD. BY: R.M.J.
DATE: 12/14/09

JOB No. 63740090435

SCALE: 1"=100'

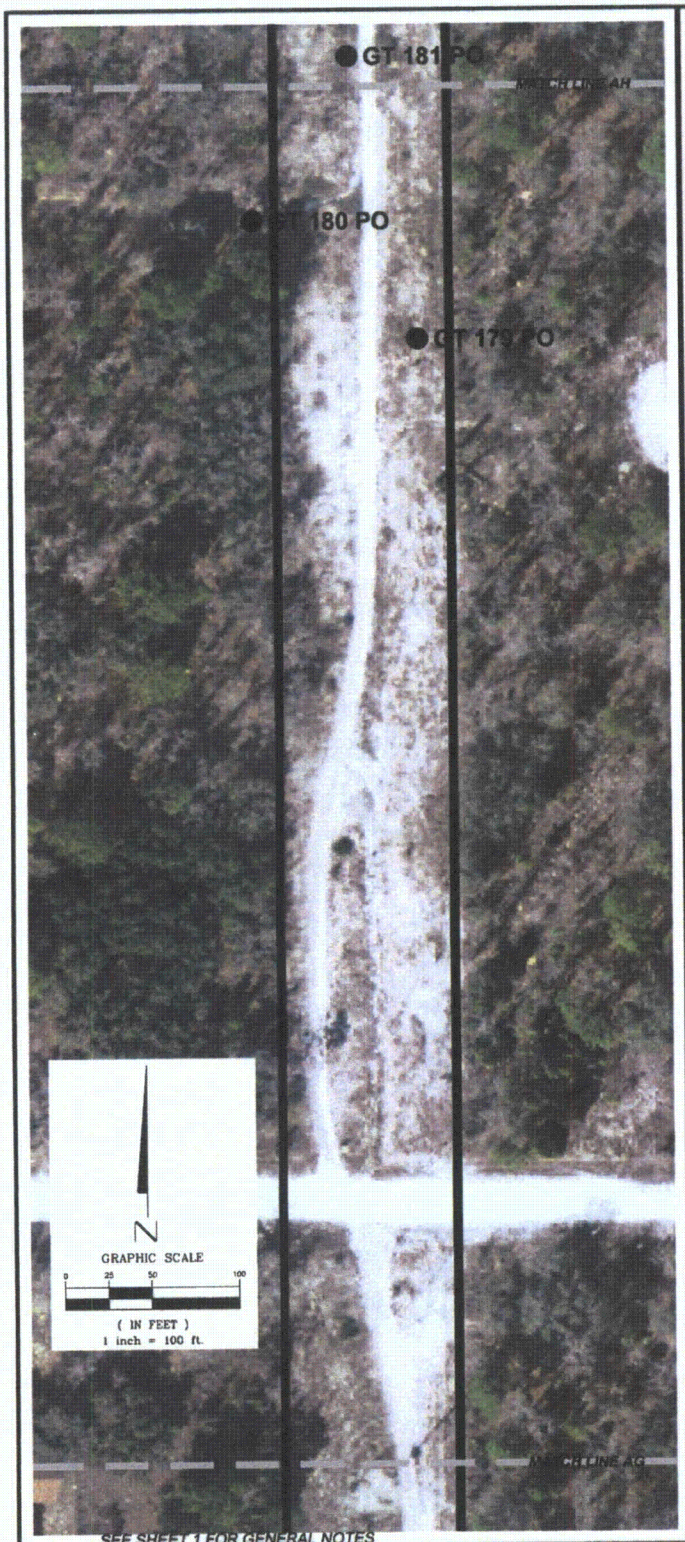
SHT. 114 OF 139

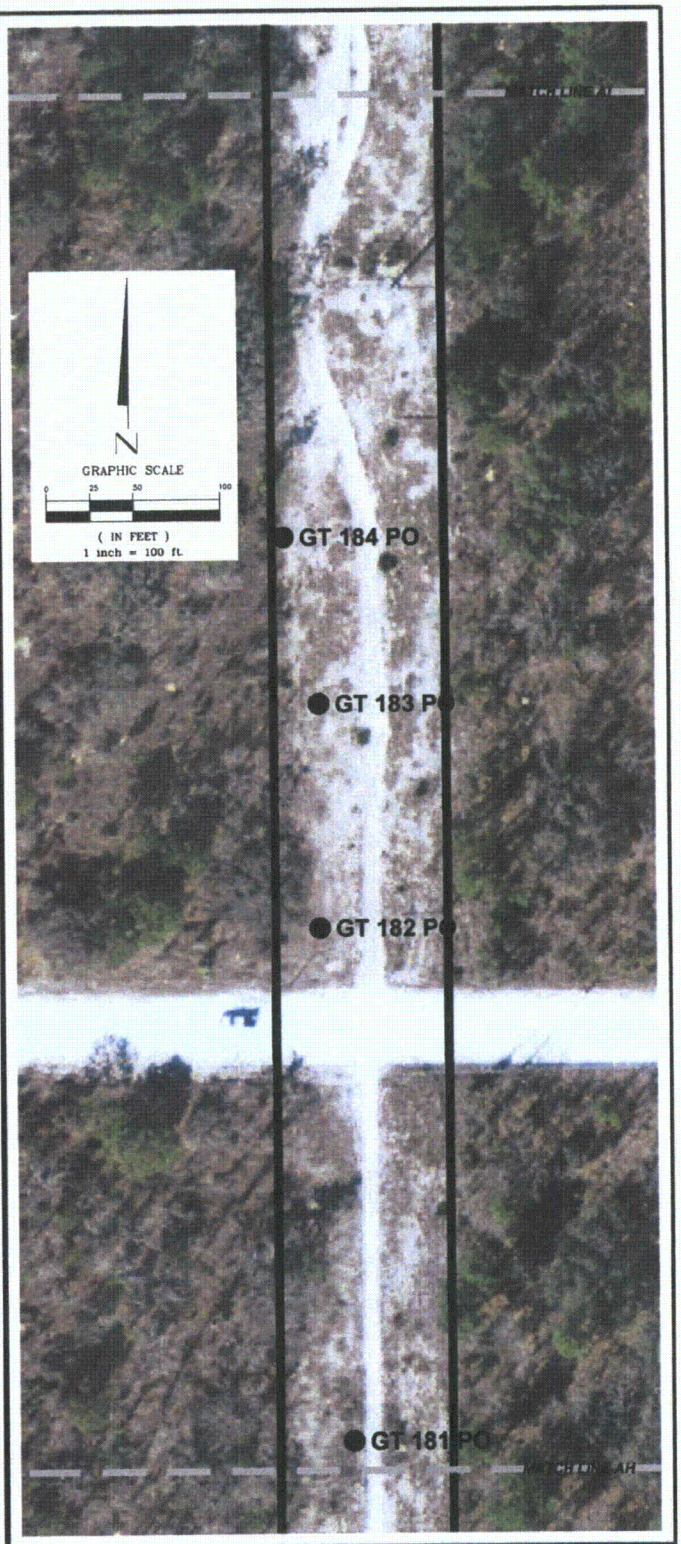
DRAWING NAME: CR - Boorkridge Substation.dwg

PREPARED BY:
MACTEC
MACTEC Engineering & Consulting, Inc.
4150 North John Young Parkway Orlando, Florida 32804-2620
Phone: 407.522.7570 Fax: 407.522.7576
CERTIFICATE OF AUTHORIZATION: LB 6969

Golder Associates
Gainesville, Florida

PREPARED FOR:
GOLDER ASSOCIATES
6026 NW 1st Place
GAINESVILLE, FLORIDA 32607





SEE SHEET 1 FOR GENERAL NOTES

PROJECT TITLE:
SPECIFIC PURPOSE SURVEY OF WETLAND JURISDICTIONAL DELINEATION AND THREATENED AND ENDANGERED SPECIES
OF
PROGRESS ENERGY FLORIDA
CITRUS - BROOKRIDGE TRANSMISSION LINE
Hernando County & Citrus County, Florida

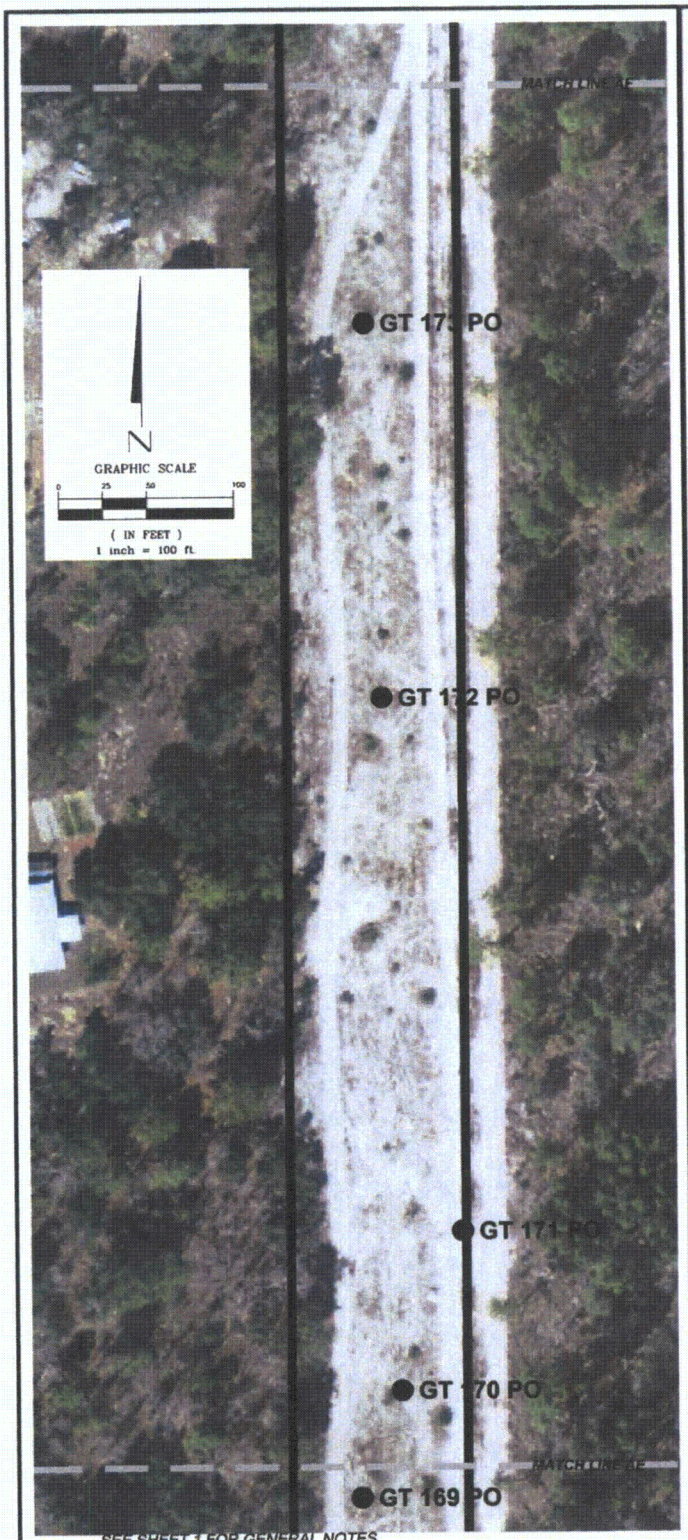
DATE	BY	DESCRIPTION

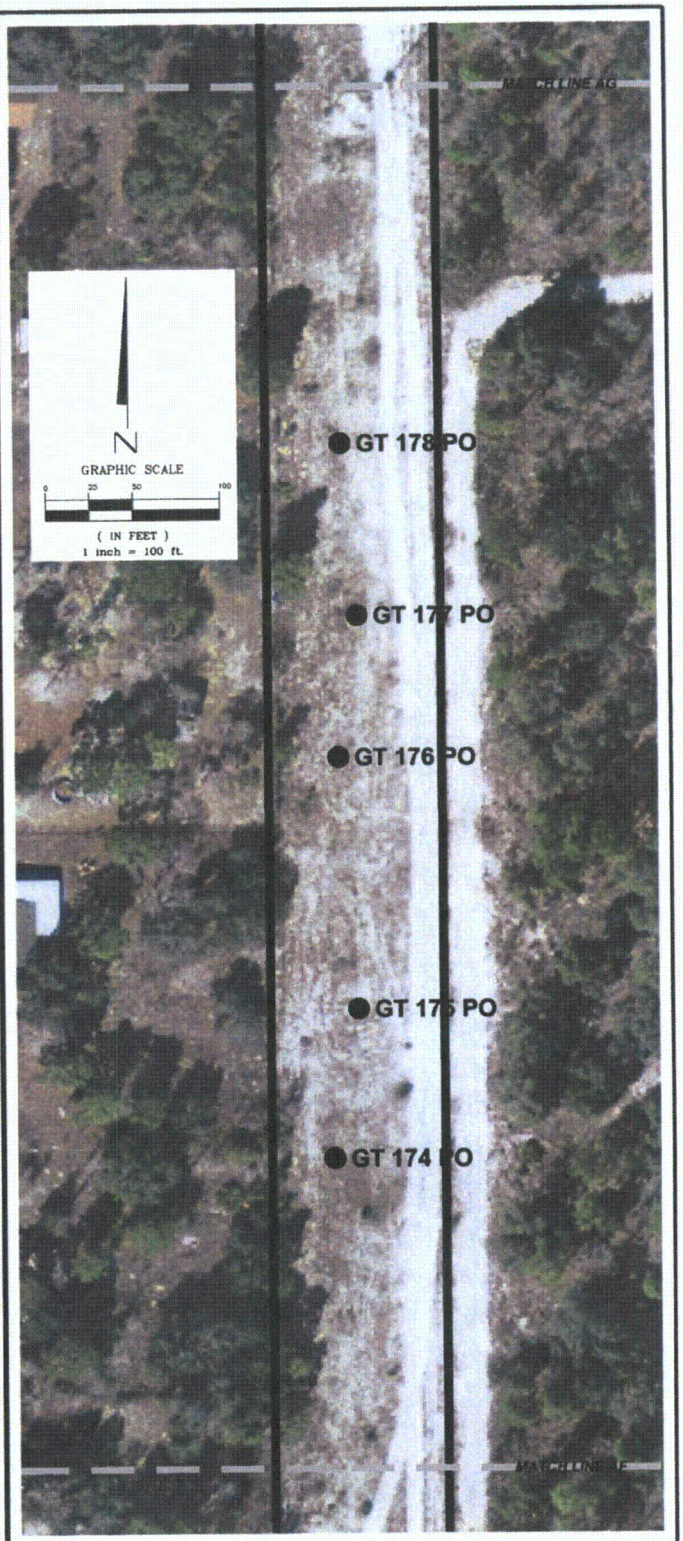
REVISION

DRAWN BY: T.W. DATE: 12/08/09
CHKD. BY: R.M.J. DATE: 12/14/09
JOB No. 63740090435
SCALE: 1"=100'
SHT. 115 OF 139
DRAWING NAME: CR - Boorkridge Substation.dwg

PREPARED BY:
MACTEC
MACTEC Engineering & Consulting, Inc.
4150 North John Young Parkway Orlando, Florida 32804-2620
Phone: 407.522.7570 Fax: 407.522.7576
CERTIFICATE OF AUTHORIZATION: LB 6969

PREPARED FOR:
Golder Associates
Gainesville, Florida
GOLDER ASSOCIATES
6026 NW 1st Place
GAINESVILLE, FLORIDA 32607





SEE SHEET 1 FOR GENERAL NOTES

PROJECT TITLE:
SPECIFIC PURPOSE SURVEY OF WETLAND JURISDICTIONAL DELINEATION AND THREATENED AND ENDANGERED SPECIES
OF
PROGRESS ENERGY FLORIDA
CITRUS - BROOKRIDGE TRANSMISSION LINE
Hernando County & Citrus County, Florida

DATE	BY	DESCRIPTION

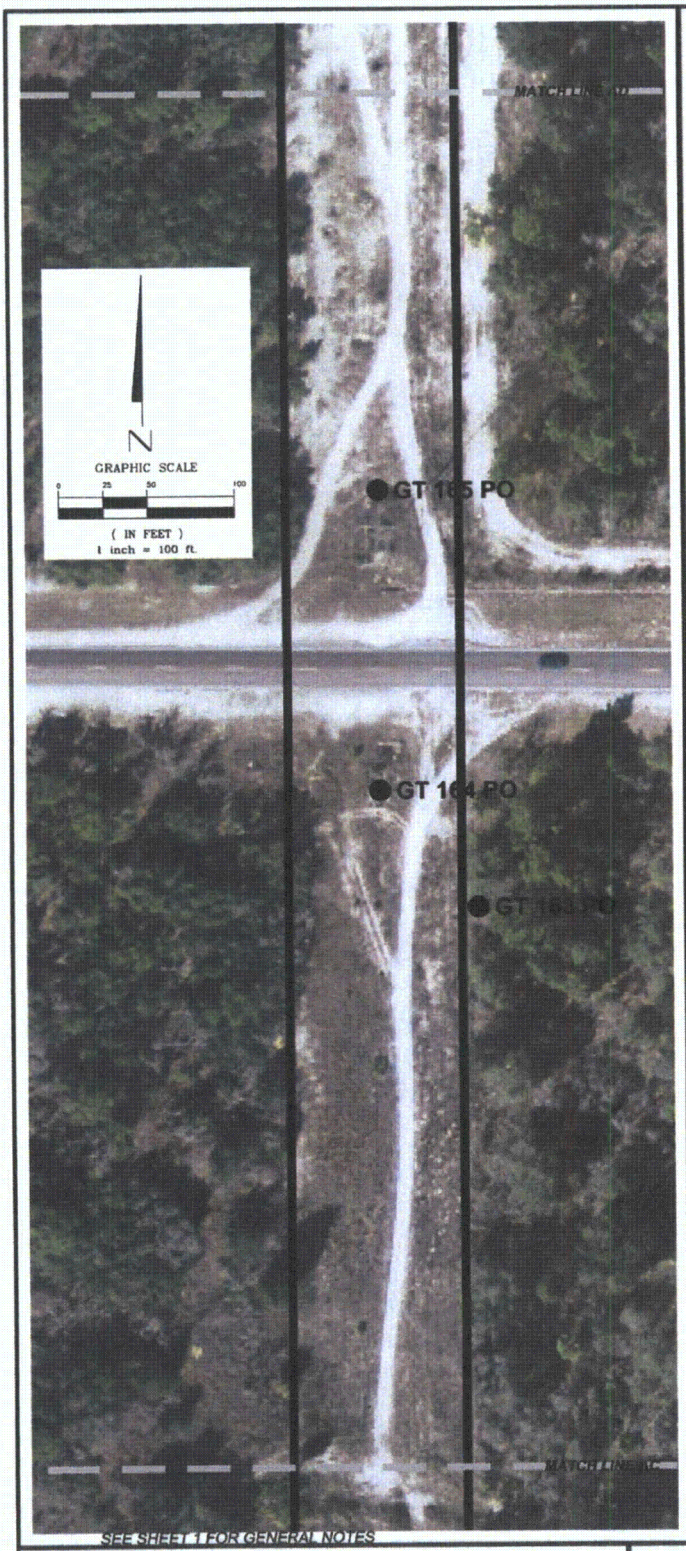
REVISION

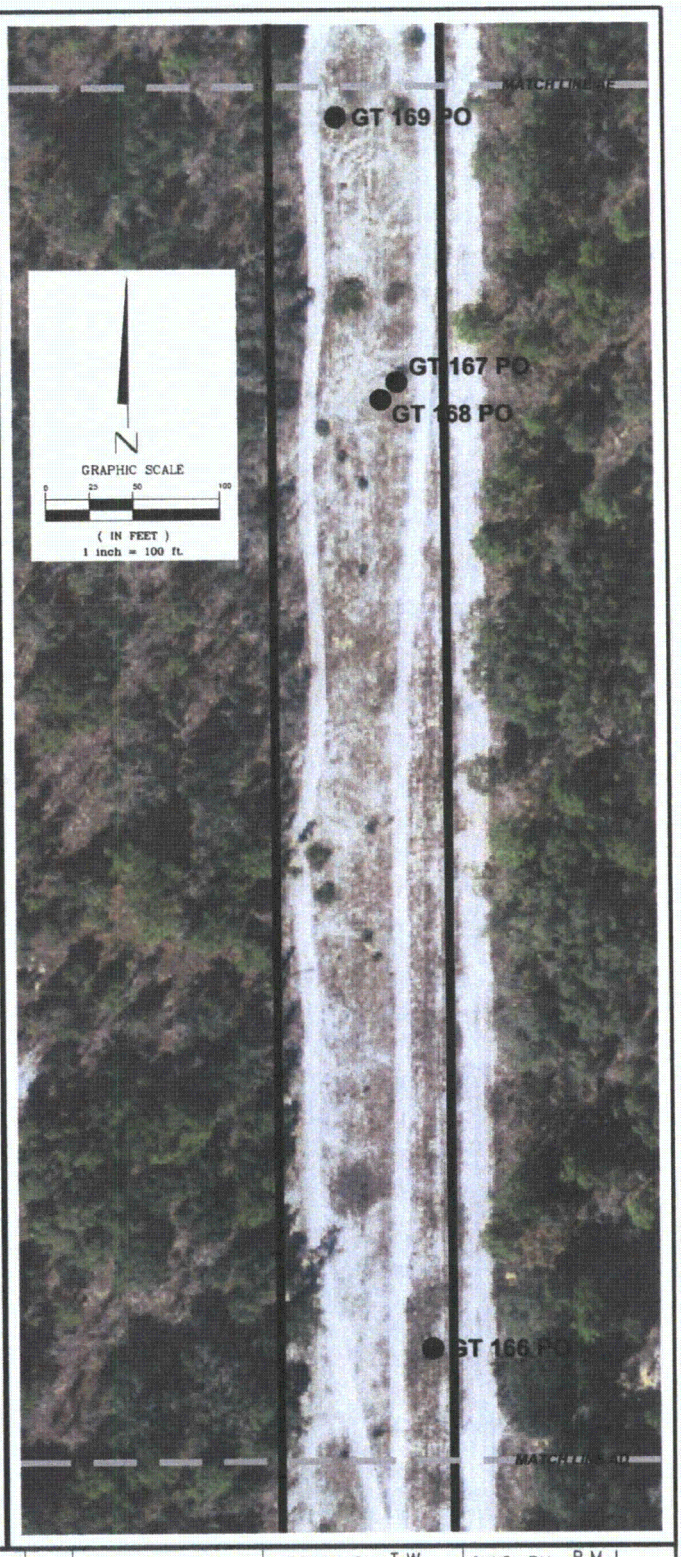
DRAWN BY: T.W. DATE: 12/08/09
CHKD. BY: R.M.J. DATE: 12/14/09
JOB No. 63740090435
SCALE: 1"=100'
SHT. 116 OF 139
DRAWING NAME: CR - Boorkridge Substation.dwg

PREPARED BY:
MACTEC
MACTEC Engineering & Consulting, Inc.
4150 North John Young Parkway Orlando, Florida 32804-2620
Phone: 407.522.7570 Fax: 407.522.7576
CERTIFICATE OF AUTHORIZATION: LB 6969

Golder Associates
Gainesville, Florida

PREPARED FOR:
GOLDER ASSOCIATES
6026 NW 1st Place
GAINESVILLE, FLORIDA 32607





SEE SHEET 1 FOR GENERAL NOTES

PROJECT TITLE:
SPECIFIC PURPOSE SURVEY OF WETLAND JURISDICTIONAL DELINEATION AND THREATENED AND ENDANGERED SPECIES
OF
PROGRESS ENERGY FLORIDA
CITRUS - BROOKRIDGE TRANSMISSION LINE
Hernando County & Citrus County, Florida

DATE	BY	DESCRIPTION

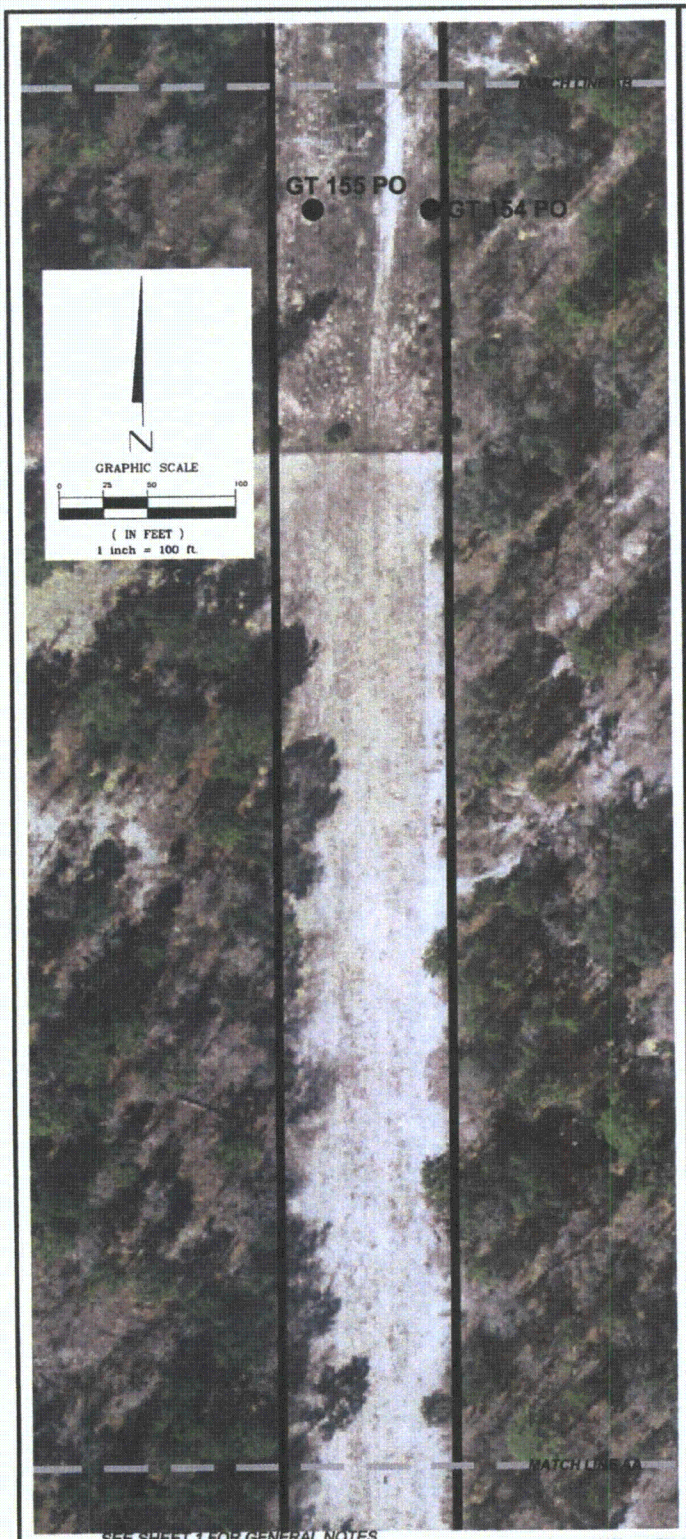
REVISION

DRAWN BY: T.W. DATE: 12/08/09
CHKD. BY: R.M.J. DATE: 12/14/09
JOB No. 63740090435
SCALE: 1"=100'
SHT. 117 OF 139
DRAWING NAME: CR - Boorkridge Substation.dwg

PREPARED BY:
MACTEC
MACTEC Engineering & Consulting, Inc.
4150 North John Young Parkway Orlando, Florida 32804-2620
Phone: 407.522.7570 Fax: 407.522.7576
CERTIFICATE OF AUTHORIZATION: LB 6969

Golder Associates
Gainesville, Florida

PREPARED FOR:
GOLDER ASSOCIATES
6026 NW 1st Place
GAINESVILLE, FLORIDA 32607



SEE SHEET 1 FOR GENERAL NOTES

PROJECT TITLE:
SPECIFIC PURPOSE SURVEY OF WETLAND JURISDICTIONAL DELINEATION AND THREATENED AND ENDANGERED SPECIES
OF
PROGRESS ENERGY FLORIDA
CITRUS - BROOKRIDGE TRANSMISSION LINE
Hernando County & Citrus County, Florida

DATE	BY	DESCRIPTION

REVISION

DRAWN BY: T.W. DATE: 12/08/09
CHKD. BY: R.M.J. DATE: 12/14/09
JOB No. 63740090435
SCALE: 1"=100'
SHT. 118 OF 139
DRAWING NAME: CR - Boorkridge Substation.dwg

PREPARED BY:
MACTEC
MACTEC Engineering & Consulting, Inc.
4150 North John Young Parkway Orlando, Florida 32804-2620
Phone: 407.522.7570 Fax: 407.522.7576
CERTIFICATE OF AUTHORIZATION: LB 6969

PREPARED FOR:
Golder Associates
Gainesville, Florida

GOLDER ASSOCIATES
6026 NW 1st Place
GAINESVILLE, FLORIDA 32607

SEE SHEET 1 FOR GENERAL NOTES

PROJECT TITLE:
SPECIFIC PURPOSE SURVEY OF WETLAND JURISDICTIONAL DELINEATION AND THREATENED AND ENDANGERED SPECIES
OF
PROGRESS ENERGY FLORIDA
CITRUS - BROOKRIDGE TRANSMISSION LINE
Hernando County & Citrus County, Florida

DATE	BY	DESCRIPTION

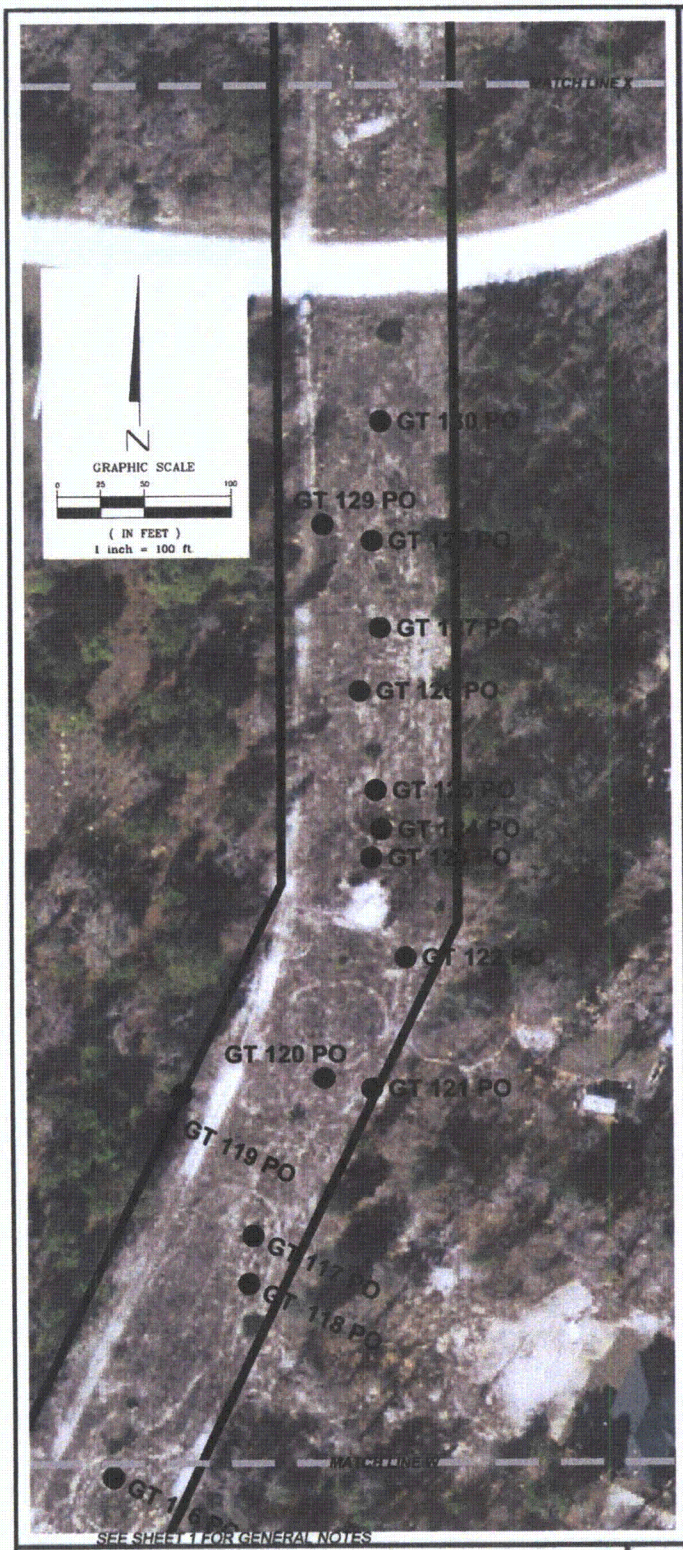
REVISION

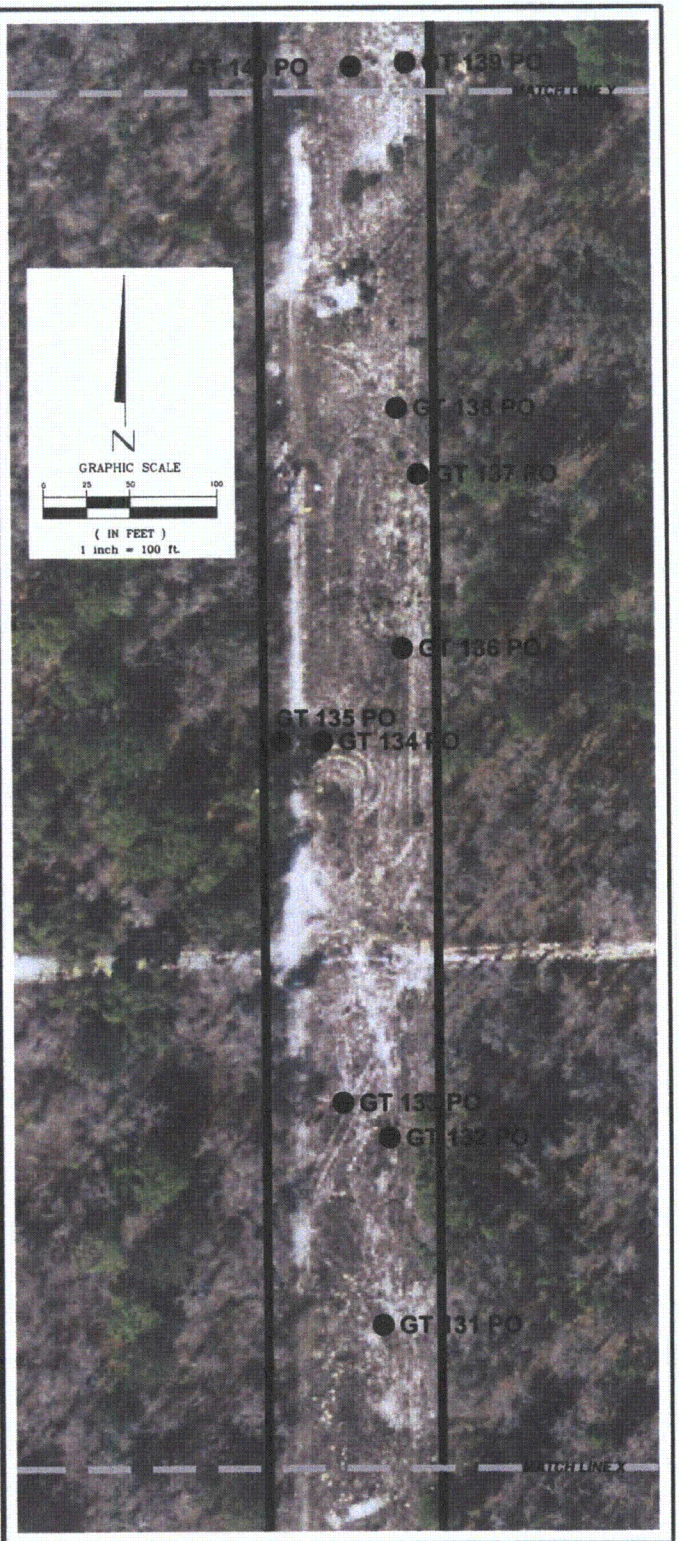
DRAWN BY: T.W. DATE: 12/08/09
CHKD. BY: R.M.J. DATE: 12/14/09
JOB No. 63740090435
SCALE: 1"=100'
SHT. 119 OF 139
DRAWING NAME: CR - Boorkridge Substation.dwg

PREPARED BY:
MACTEC
MACTEC Engineering & Consulting, Inc.
4150 North John Young Parkway Orlando, Florida 32804-2620
Phone: 407.522.7570 Fax: 407.522.7576
CERTIFICATE OF AUTHORIZATION: LB 6969

Golder Associates
Gainesville, Florida

PREPARED FOR:
GOLDER ASSOCIATES
6026 NW 1st Place
GAINESVILLE, FLORIDA 32607





SEE SHEET 1 FOR GENERAL NOTES

PROJECT TITLE:
SPECIFIC PURPOSE SURVEY OF WETLAND JURISDICTIONAL DELINEATION AND THREATENED AND ENDANGERED SPECIES
OF
PROGRESS ENERGY FLORIDA
CITRUS - BROOKRIDGE TRANSMISSION LINE
Hernando County & Citrus County, Florida

DATE	BY	DESCRIPTION

REVISION

DRAWN BY: T.W. DATE: 12/08/09
CHKD. BY: R.M.J. DATE: 12/14/09
JOB No. 63740090435
SCALE: 1"=100'
SHT. 120 OF 139
DRAWING NAME: CR - Boorkridge Substation.dwg

PREPARED BY:
MACTEC
MACTEC Engineering & Consulting, Inc.
4150 North John Young Parkway Orlando, Florida 32804-2620
Phone: 407.522.7570 Fax: 407.522.7576
CERTIFICATE OF AUTHORIZATION: LB 6969

PREPARED FOR:
Golder Associates
Gainesville, Florida

GOLDER ASSOCIATES
6026 NW 1st Place
GAINESVILLE, FLORIDA 32607

SEE SHEET 1 FOR GENERAL NOTES

PROJECT TITLE:
SPECIFIC PURPOSE SURVEY OF WETLAND JURISDICTIONAL DELINEATION AND THREATENED AND ENDANGERED SPECIES
OF
PROGRESS ENERGY FLORIDA
CITRUS - BROOKRIDGE TRANSMISSION LINE
Hernando County & Citrus County, Florida

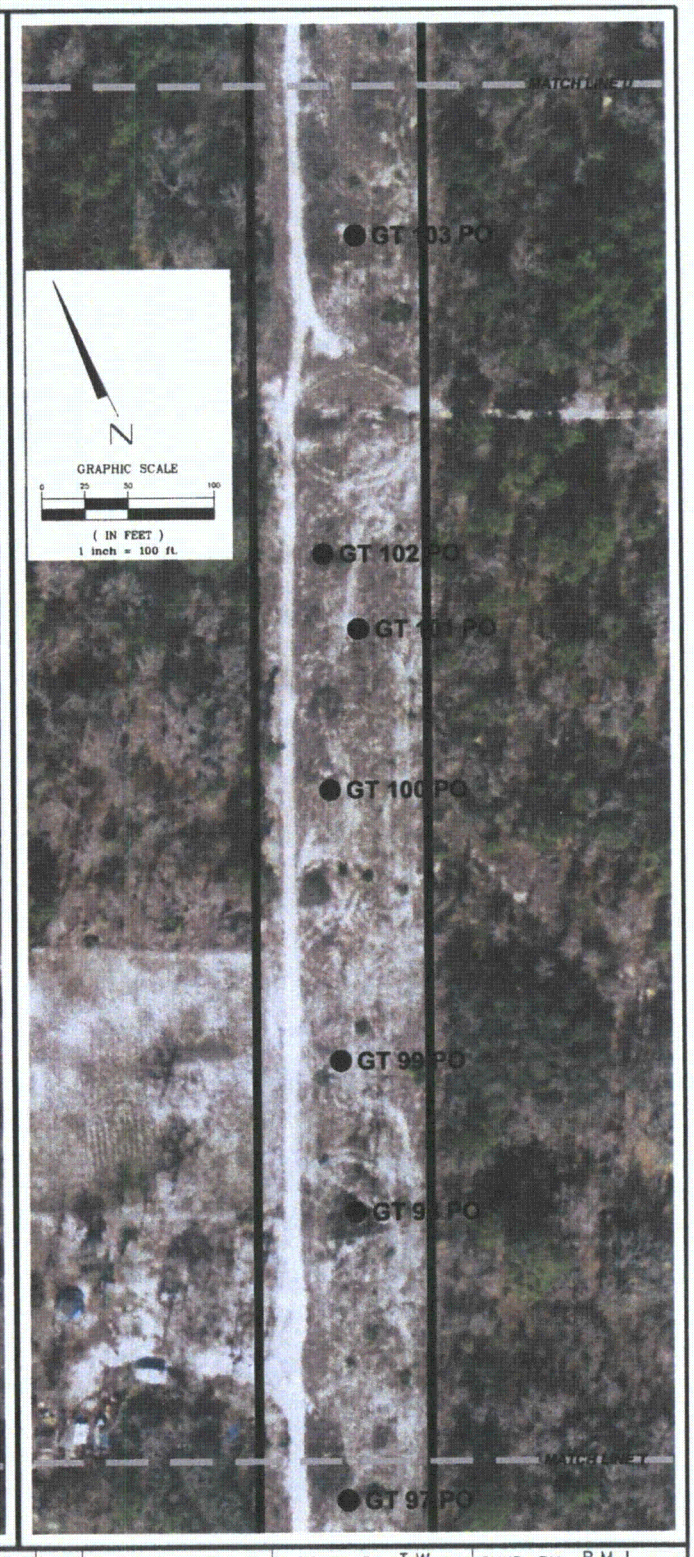
DATE	BY	DESCRIPTION

REVISION

DRAWN BY: T.W. DATE: 12/08/09
CHKD BY: R.M.J. DATE: 12/14/09
JOB No. 63740090435
SCALE: 1"=100'
SHT. 121 OF 139
DRAWING NAME: CR - Boorkridge Substation.dwg

PREPARED BY:
MACTEC
MACTEC Engineering & Consulting, Inc.
4150 North John Young Parkway Orlando, Florida 32804-2620
Phone: 407.522.7570 Fax: 407.522.7576
CERTIFICATE OF AUTHORIZATION: LB 6969

PREPARED FOR:
Golder Associates
Gainesville, Florida
GOLDER ASSOCIATES
6026 NW 1st Place
GAINESVILLE, FLORIDA 32607



SEE SHEET 1 FOR GENERAL NOTES

PROJECT TITLE:
SPECIFIC PURPOSE SURVEY OF WETLAND JURISDICTIONAL DELINEATION AND THREATENED AND ENDANGERED SPECIES
OF
PROGRESS ENERGY FLORIDA
CITRUS - BROOKRIDGE TRANSMISSION LINE
Hernando County & Citrus County, Florida

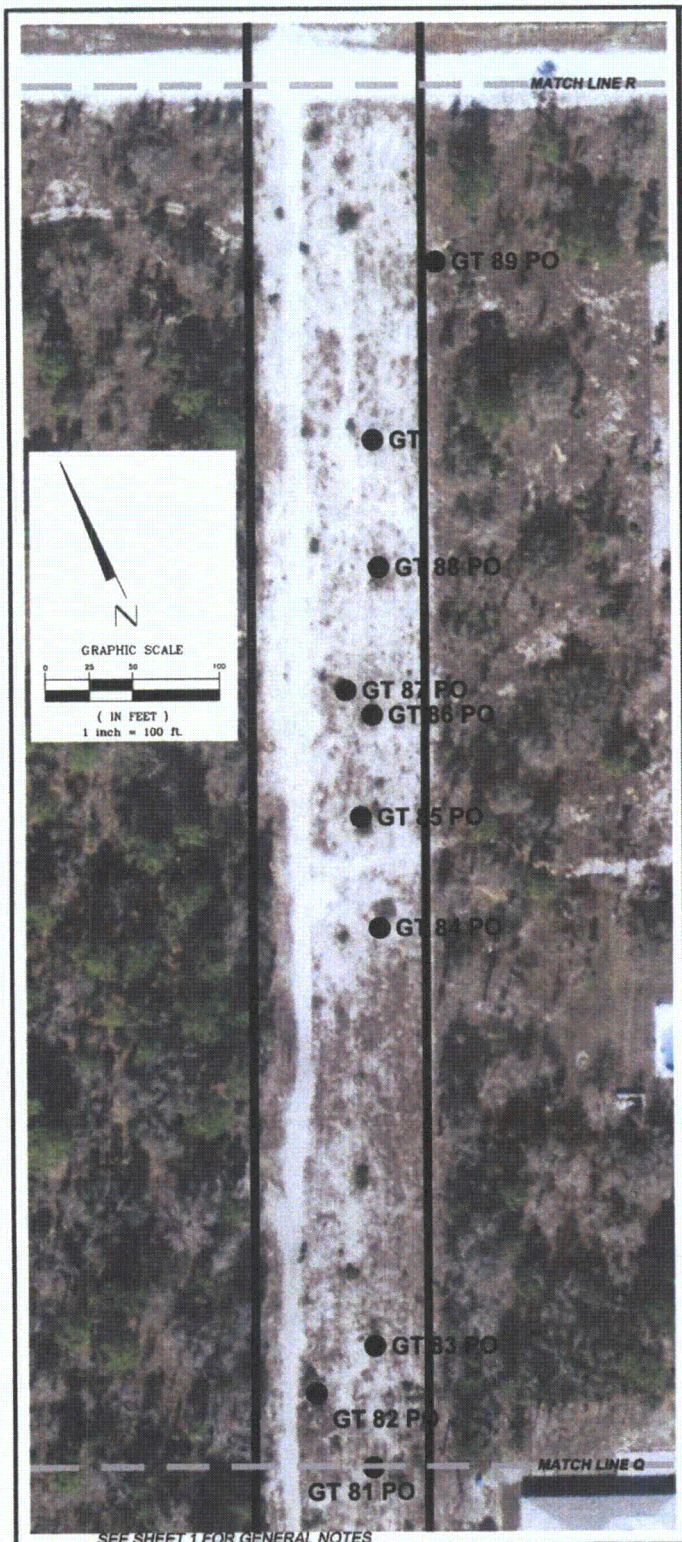
DATE	BY	DESCRIPTION

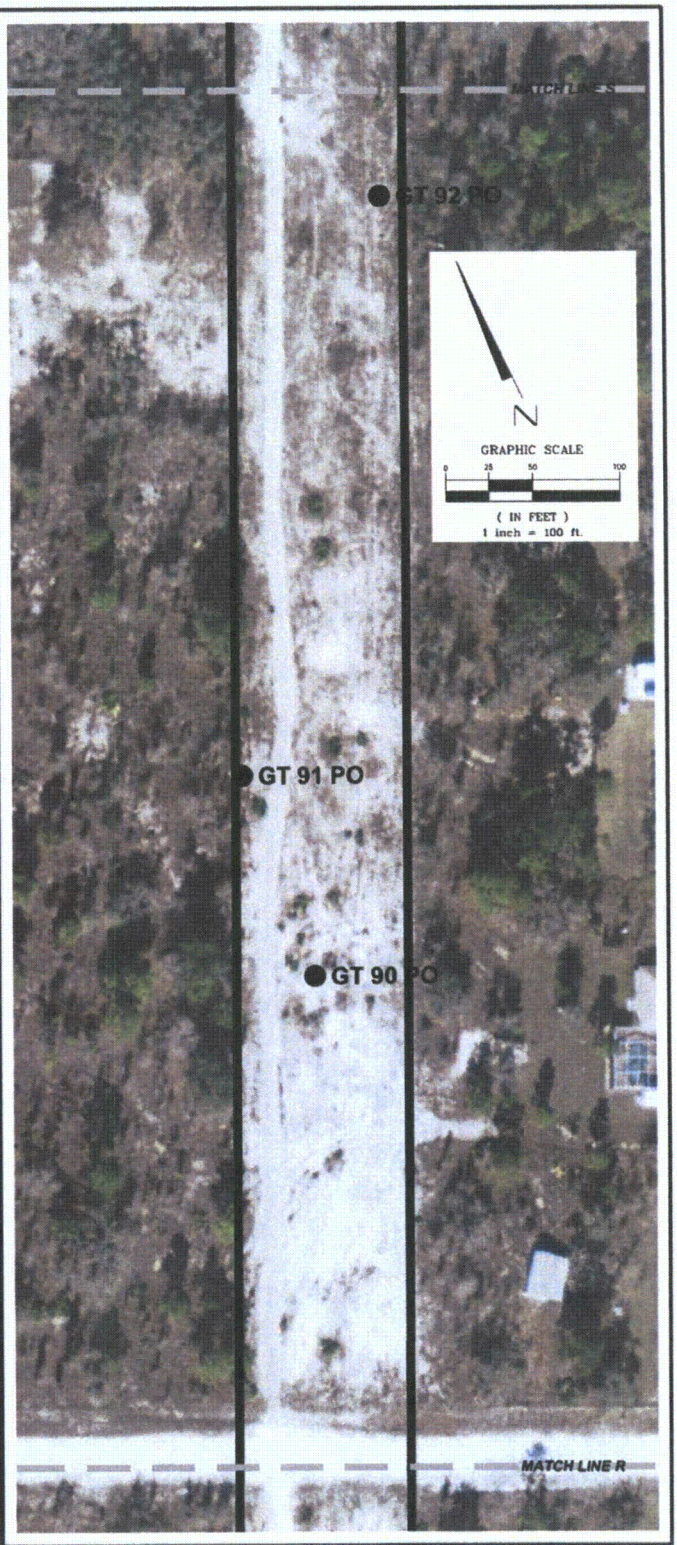
REVISION

DRAWN BY: T.W. DATE: 12/08/09
CHKD. BY: R.M.J. DATE: 12/14/09
JOB No. 63740090435
SCALE: 1"=100'
SHT. 122 OF 139
DRAWING NAME: CR - Boorkridge Substation.dwg

PREPARED BY:
MACTEC
MACTEC Engineering & Consulting, Inc.
4150 North John Young Parkway Orlando, Florida 32804-2620
Phone: 407.522.7570 Fax: 407.522.7576
CERTIFICATE OF AUTHORIZATION: LB 6969

PREPARED FOR:
Golder Associates
Gainesville, Florida
GOLDER ASSOCIATES
6026 NW 1st Place
GAINESVILLE, FLORIDA 32607





SEE SHEET 1 FOR GENERAL NOTES

PROJECT TITLE:
SPECIFIC PURPOSE SURVEY OF WETLAND JURISDICTIONAL DELINEATION AND THREATENED AND ENDANGERED SPECIES
OF
PROGRESS ENERGY FLORIDA
CITRUS - BROOKRIDGE TRANSMISSION LINE
Hernando County & Citrus County, Florida

DATE	BY	DESCRIPTION

REVISION

DRAWN BY: T.W. DATE: 12/08/09
CHKD. BY: R.M.J. DATE: 12/14/09
JOB No. 63740090435
SCALE: 1"=100'
SHT. 123 OF 139
DRAWING NAME: CR - Boorkridge Substation.dwg

PREPARED BY:
MACTEC
MACTEC Engineering & Consulting, Inc.
4150 North John Young Parkway Orlando, Florida 32804-2620
Phone: 407.522.7570 Fax: 407.522.7576
CERTIFICATE OF AUTHORIZATION: LB 6969

PREPARED FOR:
Golder Associates
Gainesville, Florida
GOLDER ASSOCIATES
6026 NW 1st Place
GAINESVILLE, FLORIDA 32607

SEE SHEET 1 FOR GENERAL NOTES

PROJECT TITLE:
SPECIFIC PURPOSE SURVEY OF WETLAND JURISDICTIONAL DELINEATION AND THREATENED AND ENDANGERED SPECIES
OF
PROGRESS ENERGY FLORIDA
CITRUS - BROOKRIDGE TRANSMISSION LINE
Hernando County & Citrus County, Florida

DATE	BY	DESCRIPTION

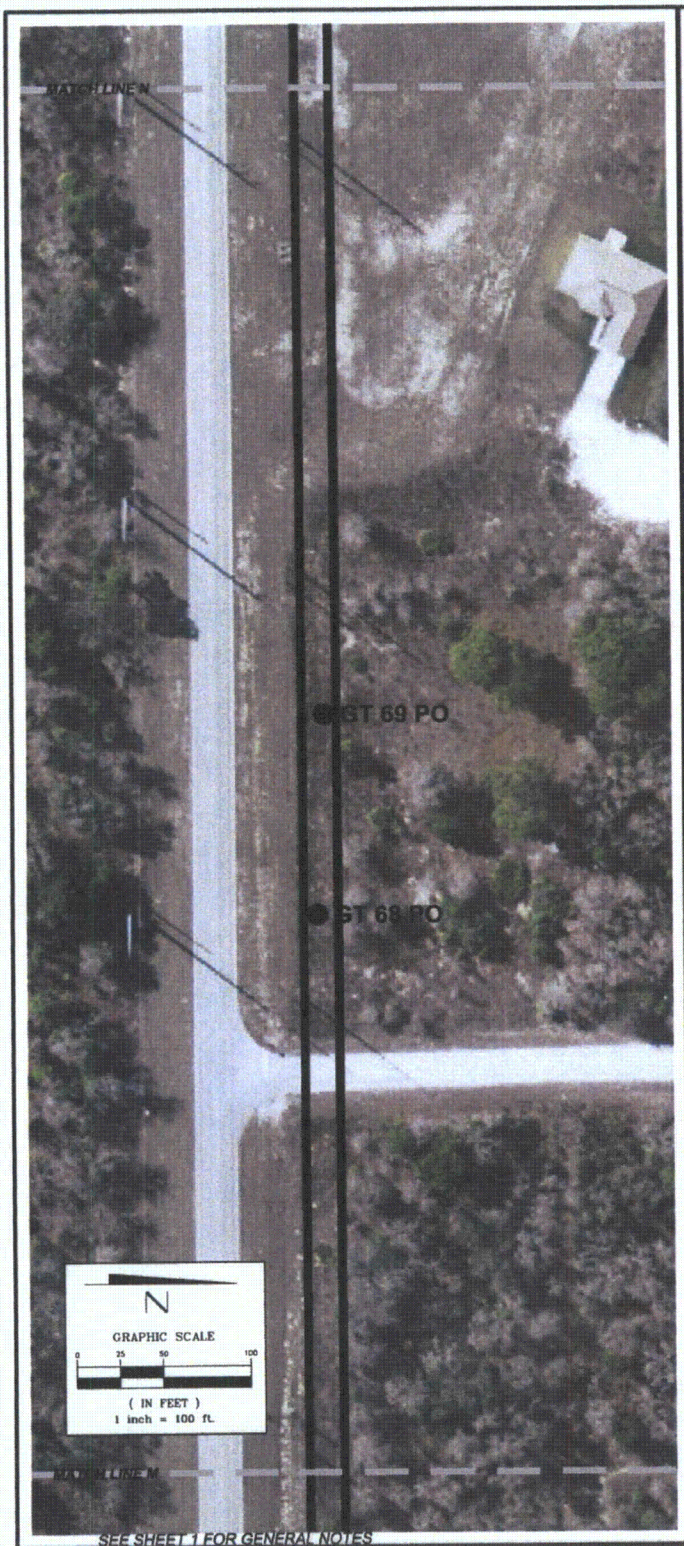
REVISION

DRAWN BY: T.W. DATE: 12/08/09
CHKD. BY: R.M.J. DATE: 12/14/09
JOB No. 63740090435
SCALE: 1"=100'
SHT. 124 OF 139
DRAWING NAME: CR - Boorkridge Substation.dwg

PREPARED BY:
MACTEC
MACTEC Engineering & Consulting, Inc.
4150 North John Young Parkway Orlando, Florida 32804-2620
Phone: 407.522.7570 Fax: 407.522.7576
CERTIFICATE OF AUTHORIZATION: LB 6969

Golder Associates
Gainesville, Florida

PREPARED FOR:
GOLDER ASSOCIATES
6026 NW 1st Place
GAINESVILLE, FLORIDA 32607



SEE SHEET 1 FOR GENERAL NOTES

PROJECT TITLE:
SPECIFIC PURPOSE SURVEY OF WETLAND JURISDICTIONAL DELINEATION AND THREATENED AND ENDANGERED SPECIES
OF
PROGRESS ENERGY FLORIDA
CITRUS – BROOKRIDGE TRANSMISSION LINE
Hernando County & Citrus County, Florida

DATE	BY	DESCRIPTION

REVISION

DRAWN BY: T.W. DATE: 12/08/09
CHKD. BY: R.M.J. DATE: 12/14/09
JOB No. 63740090435
SCALE: 1"=100'
SHT. 125 OF 139
DRAWING NAME: CR – Boorkridge Substation.dwg

PREPARED BY:
MACTEC
MACTEC Engineering & Consulting, Inc.
4150 North John Young Parkway Orlando, Florida 32804-2620
Phone: 407.522.7570 Fax: 407.522.7576
CERTIFICATE OF AUTHORIZATION: LB 6969

PREPARED FOR:
Golder Associates
Gainesville, Florida
GOLDER ASSOCIATES
6026 NW 1st Place
GAINESVILLE, FLORIDA 32607

SEE SHEET 1 FOR GENERAL NOTES

PROJECT TITLE:
SPECIFIC PURPOSE SURVEY OF WETLAND JURISDICTIONAL DELINEATION AND THREATENED AND ENDANGERED SPECIES
OF
PROGRESS ENERGY FLORIDA
CITRUS - BROOKRIDGE TRANSMISSION LINE
Hernando County & Citrus County, Florida

DATE	BY	DESCRIPTION

REVISION

DRAWN BY: T.W. DATE: 12/08/09
CHKD. BY: R.M.J. DATE: 12/14/09
JOB No. 63740090435
SCALE: 1"=100'
SHT. 126 OF 139
DRAWING NAME: CR - Boorkridge Substation.dwg

PREPARED BY:
MACTEC
MACTEC Engineering & Consulting, Inc.
4150 North John Young Parkway Orlando, Florida 32804-2620
Phone: 407.522.7570 Fax: 407.522.7576
CERTIFICATE OF AUTHORIZATION: LB 6969

Golder Associates
Gainesville, Florida

PREPARED FOR:
GOLDER ASSOCIATES
6026 NW 1st Place
GAINESVILLE, FLORIDA 32607

SEE SHEET 1 FOR GENERAL NOTES

PROJECT TITLE:
SPECIFIC PURPOSE SURVEY OF WETLAND JURISDICTIONAL DELINEATION AND THREATENED AND ENDANGERED SPECIES
OF
PROGRESS ENERGY FLORIDA
CITRUS - BROOKRIDGE TRANSMISSION LINE
Hernando County & Citrus County, Florida

DATE	BY	DESCRIPTION

REVISION

DRAWN BY: T.W. DATE: 12/08/09
CHKD. BY: R.M.J. DATE: 12/14/09
JOB No. 63740090435
SCALE: 1"=100'
SHT. 127 OF 139
DRAWING NAME: CR - Boorkridge Substation.dwg

PREPARED BY:
MACTEC
MACTEC Engineering & Consulting, Inc.
4150 North John Young Parkway Orlando, Florida 32804-2620
Phone: 407.522.7570 Fax: 407.522.7576
CERTIFICATE OF AUTHORIZATION: LB 6969

PREPARED FOR:
Golder Associates
Goinesville, Florida
GOLDER ASSOCIATES
6026 NW 1st Place
GAINESVILLE, FLORIDA 32607

SEE SHEET 1 FOR GENERAL NOTES

PROJECT TITLE:
SPECIFIC PURPOSE SURVEY OF WETLAND JURISDICTIONAL DELINEATION AND THREATENED AND ENDANGERED SPECIES
OF
PROGRESS ENERGY FLORIDA
CITRUS – BROOKRIDGE TRANSMISSION LINE
Hernando County & Citrus County, Florida

DATE	BY	DESCRIPTION

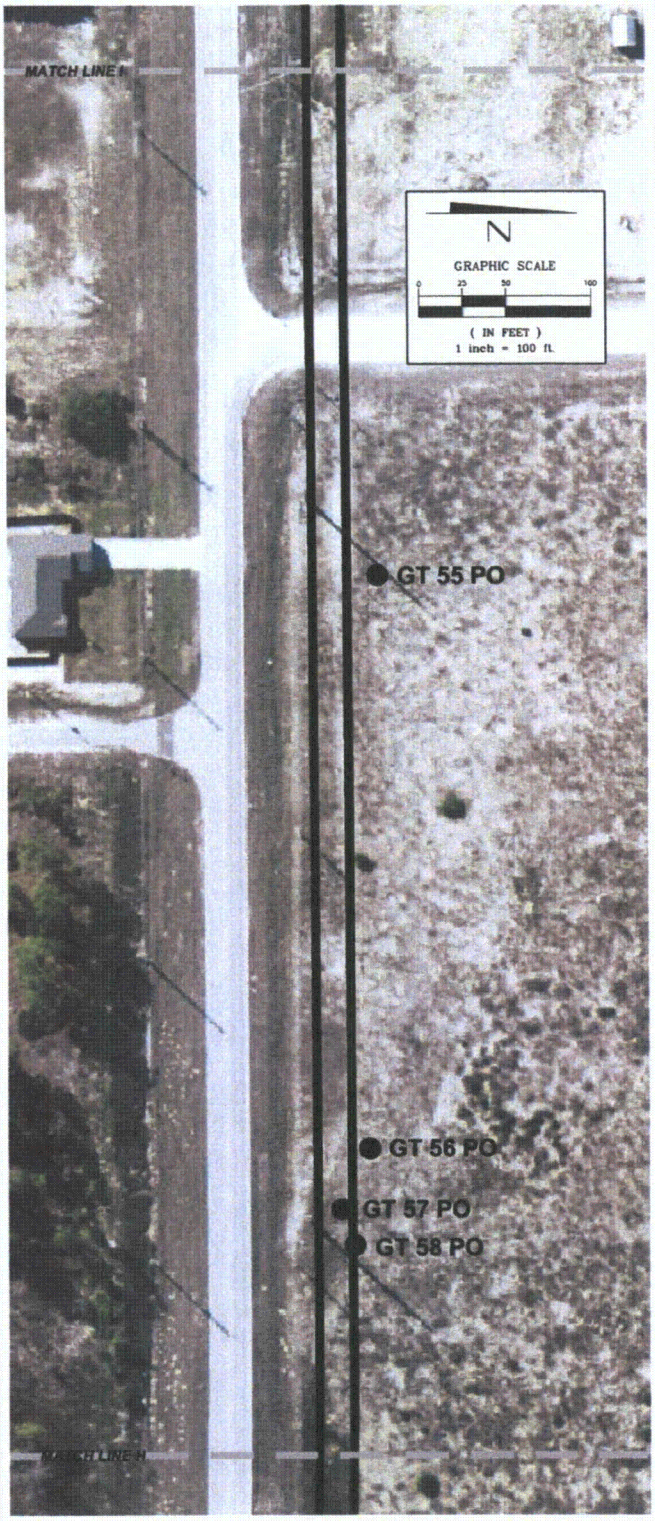
REVISION

DRAWN BY: T.W. DATE: 12/08/09
CHKD. BY: R.M.J. DATE: 12/14/09
JOB No. 63740090435
SCALE: 1"=100'
SHT. 129 OF 139
DRAWING NAME: CR – Boorkridge Substation.dwg

PREPARED BY:
MACTEC
MACTEC Engineering & Consulting, Inc.
4150 North John Young Parkway Orlando, Florida 32804-2620
Phone: 407.522.7570 Fax: 407.522.7576
CERTIFICATE OF AUTHORIZATION: LB 6969

Golder Associates
Gainesville, Florida

PREPARED FOR:
GOLDER ASSOCIATES
6026 NW 1st Place
GAINESVILLE, FLORIDA 32607



SEE SHEET 1 FOR GENERAL NOTES

PROJECT TITLE:
SPECIFIC PURPOSE SURVEY OF WETLAND JURISDICTIONAL DELINEATION AND THREATENED AND ENDANGERED SPECIES
OF
PROGRESS ENERGY FLORIDA
CITRUS - BROOKRIDGE TRANSMISSION LINE
Hernando County & Citrus County, Florida

DATE	BY	DESCRIPTION

REVISION

DRAWN BY: T.W.
DATE: 12/08/09

CHKD. BY: R.M.J.
DATE: 12/14/09

JOB No. 63740090435

SCALE: 1"=100'

SHT. 128 OF 139

DRAWING NAME: CR - Boorkridge Substation.dwg

PREPARED BY:
MACTEC
MACTEC Engineering & Consulting, Inc.
4150 North John Young Parkway Orlando, Florida 32804-2620
Phone: 407.522.7570 Fax: 407.522.7576
CERTIFICATE OF AUTHORIZATION: LB 6969

PREPARED FOR:
Golder Associates
Gainesville, Florida
GOLDER ASSOCIATES
6026 NW 1st Place
GAINESVILLE, FLORIDA 32607

SEE SHEET 1 FOR GENERAL NOTES

PROJECT TITLE:
SPECIFIC PURPOSE SURVEY OF WETLAND JURISDICTIONAL DELINEATION AND THREATENED AND ENDANGERED SPECIES
OF
PROGRESS ENERGY FLORIDA
CITRUS - BROOKRIDGE TRANSMISSION LINE
Hernando County & Citrus County, Florida

DATE	BY	DESCRIPTION

REVISION

DRAWN BY: T.W. DATE: 12/08/09
CHKD. BY: R.M.J. DATE: 12/14/09
JOB No. 63740090435
SCALE: 1"=100'
SHT. 130 OF 139
DRAWING NAME: CR - Boorkridge Substation.dwg

PREPARED BY:
MACTEC
MACTEC Engineering & Consulting, Inc.
4150 North John Young Parkway Orlando, Florida 32804-2620
Phone: 407.522.7570 Fax: 407.522.7576
CERTIFICATE OF AUTHORIZATION: LB 6969

Golder Associates
Gainesville, Florida

PREPARED FOR:
GOLDER ASSOCIATES
6026 NW 1st Place
GAINESVILLE, FLORIDA 32607

SEE SHEET 1 FOR GENERAL NOTES

PROJECT TITLE:
SPECIFIC PURPOSE SURVEY OF WETLAND JURISDICTIONAL DELINEATION AND THREATENED AND ENDANGERED SPECIES
OF
PROGRESS ENERGY FLORIDA
CITRUS – BROOKRIDGE TRANSMISSION LINE
Hernando County & Citrus County, Florida

DATE	BY	DESCRIPTION

REVISION

DRAWN BY: T.W. DATE: 12/08/09
CHKD. BY: R.M.J. DATE: 12/14/09
JOB No. 63740090435
SCALE: 1"=100'
SHT. 131 OF 139
DRAWING NAME: CR – Boorkridge Substation.dwg

PREPARED BY:
MACTEC
MACTEC Engineering & Consulting, Inc.
4150 North John Young Parkway Orlando, Florida 32804-2620
Phone: 407.522.7570 Fax: 407.522.7576
CERTIFICATE OF AUTHORIZATION: LB 6969

PREPARED FOR:
Golder Associates
Gainesville, Florida

GOLDER ASSOCIATES
6026 NW 1st Place
GAINESVILLE, FLORIDA 32607

SEE SHEET 1 FOR GENERAL NOTES

PROJECT TITLE:
SPECIFIC PURPOSE SURVEY OF WETLAND JURISDICTIONAL DELINEATION AND THREATENED AND ENDANGERED SPECIES
OF
PROGRESS ENERGY FLORIDA
CITRUS - BROOKRIDGE TRANSMISSION LINE
Hernando County & Citrus County, Florida

DATE	BY	DESCRIPTION

REVISION

DRAWN BY: T.W. DATE: 12/08/09
CHKD. BY: R.M.J. DATE: 12/14/09
JOB No. 63740090435
SCALE: 1"=100'
SHT. 132 OF 139
DRAWING NAME: CR - Boorkridge Substation.dwg

PREPARED BY:
MACTEC
MACTEC Engineering & Consulting, Inc.
4150 North John Young Parkway Orlando, Florida 32804-2620
Phone: 407.522.7570 Fax: 407.522.7576
CERTIFICATE OF AUTHORIZATION: LB 6969

Golder Associates
Gainesville, Florida

PREPARED FOR:
GOLDER ASSOCIATES
6026 NW 1st Place
GAINESVILLE, FLORIDA 32607

SEE SHEET 1 FOR GENERAL NOTES

PROJECT TITLE:
SPECIFIC PURPOSE SURVEY OF WETLAND JURISDICTIONAL DELINEATION AND THREATENED AND ENDANGERED SPECIES
OF
PROGRESS ENERGY FLORIDA
CITRUS - BROOKRIDGE TRANSMISSION LINE
Hernando County & Citrus County, Florida

DATE	BY	DESCRIPTION

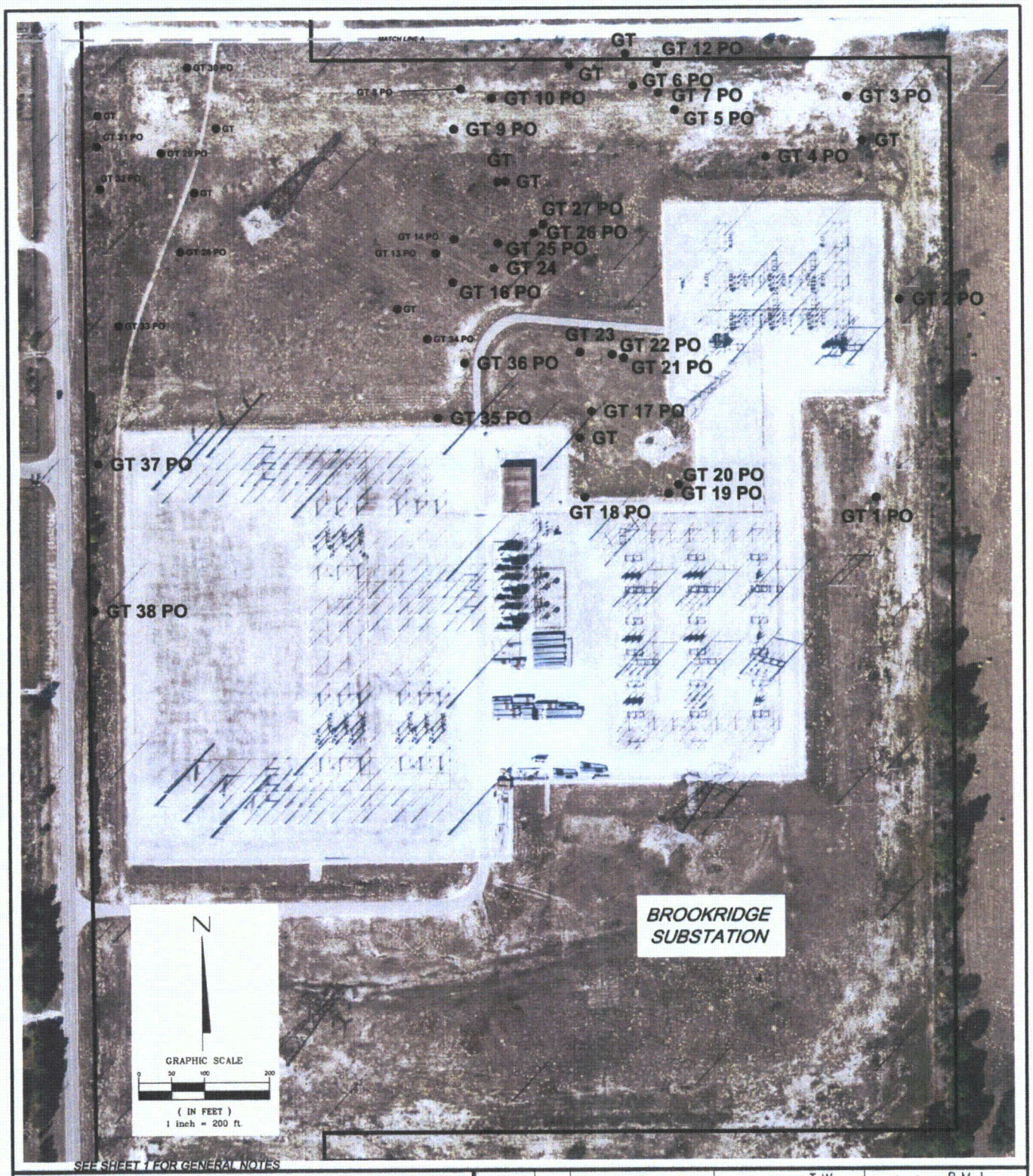
REVISION

DRAWN BY: T.W. DATE: 12/08/09
CHKD. BY: R.M.J. DATE: 12/14/09
JOB No. 63740090435
SCALE: 1"=100'
SHT. 133 OF 139
DRAWING NAME: CR - Boorkridge Substation.dwg

PREPARED BY:
MACTEC
MACTEC Engineering & Consulting, Inc.
4150 North John Young Parkway Orlando, Florida 32804-2620
Phone: 407.522.7570 Fax: 407.522.7576
CERTIFICATE OF AUTHORIZATION: LB 6969

PREPARED FOR:
Golder Associates
Gainesville, Florida

GOLDER ASSOCIATES
6026 NW 1st Place
GAINESVILLE, FLORIDA 32607



SEE SHEET 1 FOR GENERAL NOTES

PROJECT TITLE:
SPECIFIC PURPOSE SURVEY OF WETLAND JURISDICTIONAL DELINEATION AND THREATENED AND ENDANGERED SPECIES
OF
PROGRESS ENERGY FLORIDA
CITRUS - BROOKRIDGE TRANSMISSION LINE
Hernando County & Citrus County, Florida

DATE	BY	DESCRIPTION

REVISION

DRAWN BY: T.W. DATE: 12/08/09
CHKD. BY: R.M.J. DATE: 12/14/09
JOB No. 63740090435
SCALE: 1"=200'
SHT. 134 OF 139
DRAWING NAME: CR - Boorkridge Substation.dwg

PREPARED BY:
MACTEC
MACTEC Engineering & Consulting, Inc.
4150 North John Young Parkway Orlando, Florida 32804-2620
Phone: 407.522.7570 Fax: 407.522.7576
CERTIFICATE OF AUTHORIZATION: LB 6969

PREPARED FOR:
Golder Associates
Gainesville, Florida
GOLDER ASSOCIATES
6026 NW 1st Place
GAINESVILLE, FLORIDA 32607

WETLAND	SQU FT	ACREAGE
CB A	20038	0.46
CB B	12197	0.20
CB C	60113	1.38
CB D	17860	0.41
CB E	52708	1.21
CB F	12197	0.28
CB G	21780	0.50
CB H	33106	0.76
CB I	56192	1.29
CB J	41818	0.96
CB K	198198	4.55
CB L	45302	1.04
CB M	14375	0.33
CB N	43124	0.99
CB O	9148	0.21
CB P	13068	0.30
CB Q	57935	1.33
CB R	67954	1.56
CB S	30928	0.71
CB T	2178	0.05
CB U	26572	0.61
CB V	21344	0.49
CB W	27007	0.62
CB X	102366	2.35
CS R	59677	1.37
CS Q	4356	0.10
TOTAL	1048053	24.06

DESCRIPTION	NORTHING	EASTING
CB A 1 START	1680909.8	462459.3
CB A 2	1680866.4	462406.1
CB A 3	1680830.8	462385.0
CB A 4	1680705.2	462407.7
CB A 5	1680609.2	462458.6
CB A 6	1680610.5	462563.2
CB A 7	1680662.1	462647.6
CB B1	1678254.5	464254.3
CB B2	1678175.9	464278.0
CB B3	1678240.1	464392.1
CB B4	1678292.8	464415.2
CB B5	1678312.9	464332.5
CB C 1	1678091.0	465156.4
CB C 10	1677785.3	465082.9
CB C 11	1677843.5	465122.8
CB C 12	1677883.8	465182.0
CB C 13	1677906.5	465261.1
CB C 14 END	1678040.4	465205.2
CB C 2	1678010.2	465079.9
CB C 3	1677963.6	465045.1
CB C 4	1677893.7	465022.3
CB C 5	1677876.4	464956.9
CB C 6	1677808.4	464889.1
CB C 7	1677728.6	464904.8
CB C 8	1677713.4	465004.7
CB C 9	1677749.4	465038.0
CB D 1	1677695.4	465475.0
CB D 10	1677665.6	465491.8
CB D 2	1677688.2	465414.8
CB D 3	1677630.8	465393.2
CB D 4	1677562.4	465368.4
CB D 5	1677497.1	465382.6
CB D 6	1677475.6	465434.3
CB D 7	1677492.0	465467.3
CB D 8	1677555.5	465463.1
CB D 9	1677616.4	465473.3
CB E 1	1675874.7	466830.5
CB E 10	1676026.5	466855.2
CB E 11	1675944.2	466817.8
CB E 2	1675843.7	466864.6
CB E 3	1675816.1	466929.7
CB E 4	1675867.7	467005.9
CB E 5	1675934.1	467048.7
CB E 6	1675980.7	467072.5
CB E 7	1676038.8	467070.8
CB E 8	1676117.4	467012.2
CB E 9	1676103.5	466923.0
CB F1	1678222.1	464921.8
CB F2	1678248.5	464900.3
CB F3	1678233.4	464877.7
CB F4	1678175.2	464867.8
CB F5	1678133.5	464834.1
CB F6	1678079.9	464874.0
CB F7	1678102.9	464965.8
CB F8	1678184.3	464935.7
CB G 1	1677082.7	466018.6
CB G 2	1677179.4	465971.9
CB G 3	1677216.5	465925.3
CB G 4	1677215.0	465861.8
CB G 5	1677162.2	465877.5
CB G 6	1677121.5	465856.1
CB G 7	1677023.5	465862.3
CB G 8	1677026.5	465959.5
CB H 1 START	1676581.4	466585.2
CB H 2	1676696.4	466553.2
CB H 3	1676751.3	466497.5
CB H 4	1676786.6	466417.4
CB H 6	1676751.9	466307.1
CB H 7	1676709.7	466326.4
CB H 8	1676640.0	466377.1
CB H 9 END	1676568.1	466450.4
CB I 1 START	1675716.9	467498.9
CB I 10	1675487.5	467651.9
CB I 12 END	1675457.4	467746.2
CB I 2	1675699.9	467423.2
CB I 3	1675658.4	467383.6
CB I 4	1675600.9	467351.9
CB I 5	1675532.0	467351.8
CB I 6	1675464.4	467388.1
CB I 7	1675472.2	467440.7
CB I 8	1675458.7	467516.1
CB J 1 START	1675146.0	467383.4
CB J 10	1675098.4	467569.8
CB J 11	1675063.2	467526.7
CB J 12	1675023.3	467498.6
CB J 13 END	1674962.9	467547.5
CB J 2	1675178.2	467448.1
CB J 3	1675156.4	467496.6
CB J 4	1675247.1	467568.2
CB J 5	1675245.1	467607.0
CB J 6	1675233.1	467637.7
CB J 7	1675153.5	467696.9
CB J 8	1675072.0	467696.6
CB J 9	1674982.0	467727.1

DESCRIPTION	NORTHING	EASTING
CB K 1 START	1674527.5	467995.7
CB K 10	1675020.8	468010.0
CB K 11	1675053.7	468134.0
CB K 12	1675091.5	468238.0
CB K 13	1675051.5	468341.3
CB K 14	1674888.3	468297.6
CB K 15	1674805.5	468233.1
CB K 16	1674715.6	468189.3
CB K 17	1674678.2	468157.5
CB K 18	1674710.8	468096.1
CB K 19	1674646.2	468138.6
CB K 2	1674516.0	468064.5
CB K 22	1674537.3	468291.0
CB K 23	1674507.0	468349.1
CB K 24	1674521.1	468392.7
CB K 25	1674461.7	468430.1
CB K 26	1674480.8	468477.6
CB K 27	1674423.5	468511.4
CB K 28	1674394.3	468442.0
CB K 29	1674386.9	468369.4
CB K 3	1674582.3	468047.9
CB K 30	1674320.3	468379.2
CB K 31	1674262.5	468428.3
CB K 32	1674209.7	468481.0
CB K 33	1674196.9	468476.9
CB K 34	1674251.5	468411.1
CB K 35	1674316.6	468355.4
CB K 35	1674319.1	468354.5
CB K 36	1674376.2	468268.9
CB K 37	1674405.7	468208.3
CB K 38 END	1674383.5	468134.4
CB K 4	1674660.9	468006.4
CB K 5	1674718.2	467956.3
CB K 6	1674799.9	467885.4
CB K 7	1674876.5	467815.7
CB K 8	1674920.5	467884.4
CB K 9	1674973.7	467937.9
CB L 1	1673872.2	468665.6
CB L 2	1673926.2	468721.8
CB L 3	1673986.2	468750.8
CB L 4	1674037.4	468879.8
CB L 5	1674007.6	468950.9
CB L 6	1673922.7	468970.5
CB L 7	1673850.0	468943.4
CB L 8	1673840.8	468834.4
CB L 9	1673810.8	468735.9
CB M 1	1673069.7	470139.3
CB M 2	1672973.7	470110.2
CB M 3	1672969.2	470051.7
CB M 4	1673030.9	470001.0
CB M 5	1673127.2	470012.3
CB M 6	1673119.2	470083.9
CB N 1	1670966.6	471675.0
CB N 2	1671058.6	471782.7
CB N 3	1671102.9	471890.8
CB N 4	1671042.8	471959.4
CB N 5	1670895.8	471896.1
CB N 6	1670826.3	471813.9
CB O 1 START	1668844.4	473958.9
CB O 2	1668773.2	474049.2
CB O 3	1668689.6	474066.4
CB O 4	1668691.1	474019.1
CB O 5 END	1668829.5	473933.4
CB P 1	1668524.0	474612.3
CB P 2	1668436.2	474612.2
CB P 3	1668361.6	474679.2
CB P 4	1668365.6	474767.8
CB Q 2	1667966.2	475102.7
CB Q 4	1667760.8	475138.3
CB Q 5	1667688.5	475132.7
CB Q 6	1667653.0	475221.4
CB Q 7	1667699.6	475304.3
CB Q 8 END	1667743.7	475390.1
CB R 1 START	1667140.5	475476.0
CB R 10	1667519.7	475418.5
CB R 11	1667435.4	475408.1
CB R 12	1667457.6	475347.6
CB R 13	1667378.4	475306.7
CB R 14 END	1667330.6	475287.0
CB R 2	1667146.7	475511.2
CB R 3	1667185.8	475576.6
CB R 4	1667274.5	475601.1
CB R 5	1667351.9	475537.6
CB R 6	1667407.6	475460.0
CB R 7	1667476.0	475483.1
CB R 8	1667488.5	475545.8
CB R 9	1667575.8	475491.2

SEE SHEET 1 FOR GENERAL NOTES

PROJECT TITLE:
SPECIFIC PURPOSE SURVEY OF WETLAND JURISDICTIONAL DELINEATION AND THREATENED AND ENDANGERED SPECIES
OF
PROGRESS ENERGY FLORIDA
CITRUS – BROOKRIDGE TRANSMISSION LINE
Hernando County & Citrus County, Florida

DATE	BY	DESCRIPTION

REVISION

DRAWN BY: T.W. DATE: 12/08/09
CHKD. BY: R.M.J. DATE: 12/14/09
JOB No. 63740090435
SCALE: 1"=100'
SHT. 135 OF 139
DRAWING NAME: PHP Transmission Line.dwg

PREPARED BY:
MACTEC
MACTEC Engineering & Consulting, Inc.
4150 North John Young Parkway Orlando, Florida 32804-2620
Phone: 407.522.7570 Fax: 407.522.7576
CERTIFICATE OF AUTHORIZATION: LB 6969

PREPARED FOR:
Golder Associates
Gainesville, Florida
GOLDER ASSOCIATES
6026 NW 1st Place
GAINESVILLE, FLORIDA 32607

DESCRIPTION	NORTHING	EASTING
CB S 1 START	1667327.1	475816.6
CB S 2	1667234.0	475738.5
CB S 3	1667158.0	475746.3
CB S 4	1667086.1	475845.9
CB S 5	1667077.0	475928.5
CB S 6	1667223.9	475917.5
CB T 1	1666538.2	476507.7
CB T 2	1666514.1	476481.1
CB T 3	1666464.3	476493.9
CB T 4	1666500.2	476536.7
CB U 1	1666360.3	476774.7
CB U 2	1666339.3	476737.1
CB U 3	1666251.1	476770.8
CB U 5	1666105.9	476930.2
CB U 6 END	1666124.6	477009.5
CB V 1 START	1665731.9	477398.8
CB V 2	1665665.7	477371.5
CB V 3	1665584.4	477447.2
CB V 4	1665559.7	477497.6
CB V 5	1665506.2	477573.0
CB V 6	1665482.7	477565.8
CB V 7 END	1665443.3	477669.1
CB W 1 START	1665284.7	477826.7
CB W 2	1665308.0	477781.0
CB W 3	1665254.8	477708.8
CB W 3 AGAIN	1665156.6	477787.5
CB W 4	1665123.6	477816.7
CB W 5	1665124.8	477935.2
CB W 6 END	1665167.9	477953.8
CB X 1	1664440.1	478136.7
CB X 10	1664032.2	478567.0
CB X 2	1664512.1	478208.9
CB X 3	1664453.4	478317.4
CB X 4	1664363.9	478407.6
CB X 5	1664319.1	478500.7
CB X 6	1664313.0	478617.1
CB X 7	1664213.6	478711.9
CB X 8	1664139.4	478751.7
CB X 9	1664105.2	478692.4
GO	1676549.3	466499.3
GO	1676560.4	466471.8
GO	1676556.7	466477.4
GO	1676767.8	466300.9
GO	1676552.5	466481.6
GO	1677046.6	466000.3
GO	1677043.5	465999.0
GO	1677034.7	466000.0
GO	1677584.1	465461.6
GO	1677007.8	465947.5
GO	1677019.8	465958.1
GO	1676987.3	465874.1
GO	1676993.9	465868.3
GO	1676995.0	465865.5
GO	1677049.4	465868.7
GO	1677112.6	465859.5
GO	1677137.1	465841.9
GO	1676558.2	466439.9
GO	1676951.9	466202.1
GO	1676565.6	466539.6
GO	1677018.4	465995.2
GO	1676732.7	466307.0
GO	1676774.4	466295.6
GO	1676819.1	466279.9
GO	1677049.8	465995.2
GO	1676745.2	466306.0
GO	1676727.5	466314.8
GO	1676718.6	466304.0
GO	1676721.0	466300.8
GO	1676704.7	466322.9
GO	1675670.4	467421.5
GO	1675419.1	467595.0
GO	1676751.7	466300.0
GO 7	1678335.1	464631.4
GT	1603431.0	490529.3
GT	1652749.7	490009.5
GT	1598765.5	490531.6
GT	1598744.1	490529.0
GT	1547574.8	488785.2
GT	1546202.3	488133.9
GT	1604205.7	490584.4
GT	1671899.6	471044.9
GT	1603342.9	490498.3
GT	1545755.5	493595.9
GT	1645453.7	490603.7
GT	1544844.7	495845.7
GT	1638577.5	490548.9
GT	1638917.9	490600.7
GT	1593455.8	490567.4
GT	1599891.9	490515.4
GT	1600105.8	490540.6
GT	1600079.0	490525.4
GT	1606039.5	490557.9
GT	1607473.7	490586.8
GT	1638341.7	490533.0
GT	1668445.7	474608.7
GT	1606015.1	490560.2

DESCRIPTION	NORTHING	EASTING
GT	1555467.8	490570.9
GT	1597523.3	490529.3
GT	1599807.7	490573.9
GT	1599861.9	490524.3
GT	1598172.3	490567.0
GT	1605919.1	490559.5
GT	1605847.5	490522.8
GT	1634307.0	490529.6
GT	1542932.8	496331.5
GT	1652224.4	490562.5
GT	1652186.4	490588.2
GT	1652098.9	490578.6
GT	1542859.5	495614.1
GT	1542839.1	495794.9
GT	1542740.9	495760.6
GT	1635421.0	490515.5
GT	1542950.3	496416.7
GT	1652327.6	490580.0
GT	1542562.9	496067.3
GT	1543790.2	495749.9
GT	1544257.6	495846.8
GT	1631300.7	490550.8
GT	1631374.5	490539.3
GT	1632191.2	490522.7
GT	1632256.3	490520.9
GT	1542756.7	496230.4
GT	1652529.1	490322.5
GT	1652362.7	490546.4
GT	1652314.9	490509.4
GT	1652397.8	490531.8
GT	1652438.4	490481.1
GT	1652408.9	490484.2
GT	1652466.7	490387.6
GT	1641010.7	490570.8
GT	1652246.7	490580.3
GT	1652451.1	490281.4
GT	1652263.2	490600.4
GT	1652172.0	490573.9
GT	1652185.8	490590.4
GT	1652174.6	490591.9
GT	1652179.0	490628.6
GT	1652316.4	490511.9
GT	1652363.5	490547.8
GT	1632506.3	490593.9
GT	1652423.8	490318.1
GT	1636984.2	490560.3
GT	1632350.3	490550.1
GT	1634253.7	490508.8
GT	1634425.7	490513.6
GT	1645527.8	490599.1
GT	1635601.7	490543.3
GT	1636750.9	490507.7
GT	1636827.8	490518.1
GT	1633894.6	490631.9
GT	1636960.8	490557.1
GT	1633742.9	490496.1
GT	1636985.9	490651.0
GT	1637208.9	490571.7
GT	1637138.7	490510.0
GT	1637499.8	490651.9
GT	1637701.0	490552.5
GT	1637887.2	490562.7
GT	1638329.4	490520.8
GT	1636989.4	490582.2
GT	1633090.4	490609.2
GT	1638376.9	490596.2
GT	1632644.4	490487.4
GT	1632714.3	490524.3
GT	1632793.6	490543.1
GT	1632948.4	490627.2
GT	1632899.9	490550.5
GT	1632937.1	490448.7
GT	1633952.1	490507.1
GT	1633024.6	490605.1
GT	1632327.4	490487.0
GT	1633110.8	490541.6
GT	1633185.5	490617.0
GT	1633313.1	490500.6
GT	1633364.4	490567.7
GT	1633606.3	490578.7
GT	1633681.1	490560.8
GT	1633719.7	490549.1
GT	1633005.7	490470.4
GT	1623593.3	490535.1
GT	1625832.5	490545.8
GT	1641221.7	490598.6
GT	1641062.9	490528.1
GT	1622578.2	490521.9
GT	1623773.4	490520.4
GT	1623723.6	490512.7
GT	1623676.8	490522.6
GT	1641500.0	490593.5
GT	1623605.5	490574.4
GT	1641687.1	490600.4
GT	1624189.4	490508.4
GT	1624104.0	490548.8

DESCRIPTION	NORTHING	EASTING
GT	1624061.9	490548.3
GT	1624423.5	490506.1
GT	1624744.5	490494.5
GT	1625481.0	490597.8
GT	1644878.3	490641.7
GT	1623634.5	490564.1
GT	1642743.7	490538.0
GT	1652161.6	490456.4
GT	1652232.8	490373.2
GT	1652219.9	490388.0
GT	1652238.1	490357.7
GT	1652276.0	490329.2
GT	1652264.3	490323.3
GT	1652297.1	490279.5
GT	1641330.2	490585.7
GT	1652368.3	490207.8
GT	1625950.0	490577.0
GT	1642712.2	490625.4
GT	1642713.3	490568.8
GT	1642592.5	490595.5
GT	1642162.1	490602.5
GT	1642101.9	490608.2
GT	1642000.4	490557.4
GT	1641825.1	490589.1
GT	1652335.7	490260.8
GT	1639799.5	490604.3
GT	1625661.2	490592.5
GT	1639243.3	490563.8
GT	1639414.0	490607.6
GT	1639480.8	490584.1
GT	1639533.0	490578.0
GT	1639613.0	490588.6
GT	1639630.1	490593.3
GT	1639177.0	490563.5
GT	1639719.3	490581.3
GT	1639080.3	490593.6
GT	1639922.9	490603.5
GT	1640245.5	490601.7
GT	1640360.7	490502.7
GT	1640345.8	490583.2
GT	1640602.0	490610.7
GT	1640770.3	490529.2
GT	1640869.0	490603.3
GT	1639704.5	490584.9
GT	1627275.4	490551.2
GT	1626642.0	490589.2
GT	1626743.8	490590.5
GT	1626804.1	490570.2
GT	1626917.1	490572.1
GT	1627026.8	490561.8
GT	1626973.7	490520.5
GT	1639190.8	490588.6
GT	1627230.1	490564.0
GT	1652042.4	490509.7
GT	1627444.3	490574.5
GT	1628856.3	490513.9
GT	1628940.9	490534.2
GT	1629040.9	490537.8
GT	1630375.5	490553.2
GT	1630706.6	490563.3
GT	1639140.8	490601.5
GT	1627157.1	490524.8
GT	1643508.3	490597.9
GT	1652067.4	490583.4
GT	1644552.1	490627.9
GT	1644455.3	490535.8
GT	1644367.0	490539.2
GT	1644317.6	490606.7
GT	1644080.5	490604.2
GT	1643391.7	490542.3
GT	1644596.9	490546.7
GT	1643393.6	490605.2
GT	1644644.2	490576.1
GT	1643692.1	490597.8
GT	1643702.2	490577.5
GT	1643371.1	490608.1
GT	1643114.4	490510.3
GT	1643159.8	490516.3
GT	1643177.5	490593.9
GT	1643203.9	490626.9
GT	1643386.5	490544.9
GT	1644895.5	490607.3
GT	1645353.2	490595.8
GT	1645352.7	490616.2
GT	1645242.2	490536.6
GT	1645252.7	490600.0
GT	1645172.7	490612.3
GT	1645100.7	490533.8
GT	1645125.9	490508.6
GT	1644564.1	490542.9

SEE SHEET 1 FOR GENERAL NOTES

PROJECT TITLE:
SPECIFIC PURPOSE SURVEY OF WETLAND JURISDICTIONAL DELINEATION AND THREATENED AND ENDANGERED SPECIES
OF
PROGRESS ENERGY FLORIDA
CITRUS - BROOKRIDGE TRANSMISSION LINE
Hernando County & Citrus County, Florida

DATE	BY	DESCRIPTION

REVISION

DRAWN BY: T.W. DATE: 12/08/09
CHKD. BY: R.M.J. DATE: 12/14/09
JOB No. 63740090435
SCALE: 1"=100'
SHT. 136 OF 139
DRAWING NAME: PHP Transimission Line.dwg

PREPARED BY:
MACTEC
MACTEC Engineering & Consulting, Inc.
4150 North John Young Parkway Orlando, Florida 32804-2620
Phone: 407.522.7570 Fax: 407.522.7576
CERTIFICATE OF AUTHORIZATION: LB 6969

PREPARED FOR:
Golder Associates
Gainesville, Florida
GOLDER ASSOCIATES
6026 NW 1st Place
GAINESVILLE, FLORIDA 32607

DESCRIPTION	NORTHING	EASTING
GT	1644953.6	490603.2
GT	1647711.9	490623.1
GT	1652326.4	490575.4
GT	1644791.1	490574.4
GT	1652431.9	490455.9
GT	1644763.7	490576.4
GT	1644747.3	490583.4
GT	1644695.3	490587.3
GT	1644685.6	490599.9
GT	1644997.5	490605.0
GT	1651566.2	490613.5
GT	1651107.6	490620.9
GT	1651237.6	490539.8
GT	1651266.6	490593.5
GT	1651317.5	490608.3
GT	1651367.8	490594.9
GT	1651405.3	490579.4
GT	1651464.8	490578.8
GT	1643056.1	490536.3
GT	1651493.8	490614.2
GT	1651024.1	490601.6
GT	1651588.5	490618.8
GT	1651672.0	490600.3
GT	1651759.1	490575.7
GT	1651914.0	490623.1
GT	1651993.8	490646.9
GT	1652025.5	490559.3
GT	1645487.0	490531.6
GT	1651445.9	490612.7
GT	1649716.0	490592.9
GT	1652034.2	490536.7
GT	1647725.9	490555.4
GT	1647732.2	490622.6
GT	1649362.2	490561.9
GT	1649295.6	490525.8
GT	1649387.2	490414.7
GT	1649389.0	490399.5
GT	1651073.9	490589.5
GT	1649550.0	490584.9
GT	1651044.7	490609.4
GT	1650150.7	490622.5
GT	1650584.6	490654.0
GT	1650595.3	490644.9
GT	1650689.0	490563.6
GT	1650902.5	490567.5
GT	1650904.5	490604.5
GT	1650954.5	490623.3
GT	1643038.0	490604.3
GT	1649459.6	490449.6
GT	1647341.3	490603.2
GT	1646795.8	490546.8
GT	1646861.7	490553.1
GT	1647013.1	490584.3
GT	1647002.5	490557.6
GT	1647028.9	490579.5
GT	1647026.0	490596.2
GT	1647121.9	490608.5
GT	1647367.1	490559.4
GT	1681251.9	461698.0
GT	1647359.1	490614.3
GT	1646678.4	490619.7
GT	1647388.0	490579.2
GT	1647399.0	490567.0
GT	1654238.8	488587.8
GT	1654162.4	488506.3
GT	1654226.5	488405.0
GT	1654285.2	488517.3
GT	1654296.7	488483.1
GT	1654328.8	488436.5
GT	1647349.5	490571.3
GT	1646314.9	490628.6
GT	1655820.8	487047.4
GT	1681164.1	461762.7
GT	1681110.2	461797.5
GT	1645777.4	490579.0
GT	1645894.8	490623.5
GT	1645881.9	490598.8
GT	1646076.6	490586.5
GT	1646089.1	490600.4
GT	1646757.3	490561.5
GT	1646304.5	490598.4
GT	1646737.7	490586.6
GT	1646372.8	490605.4
GT	1646464.2	490634.9
GT	1646498.4	490523.7
GT	1646476.7	490519.6
GT	1646555.1	490621.8
GT	1646721.2	490569.0
GT	1646694.7	490548.7
GT	1646687.2	490629.1
GT	1654400.6	488563.8
GT	1646171.0	490596.0
GT	1655164.2	487602.2
GT	1654367.7	488251.6
GT	1654899.7	487732.8
GT	1654928.6	487759.3

DESCRIPTION	NORTHING	EASTING
GT	1655054.9	487755.3
GT	1654968.4	487735.7
GT	1655091.6	487724.4
GT	1655098.0	487683.5
GT	1655077.5	487675.6
GT	1654944.3	487798.8
GT	1655115.1	487649.9
GT	1654871.1	487798.4
GT	1655336.1	487472.3
GT	1655253.8	487522.4
GT	1655134.4	487454.9
GT	1655290.0	487292.5
GT	1655552.0	487228.3
GT	1655678.8	486937.7
GT	1652451.8	490354.9
GT	1655942.3	486896.4
GT	1652353.7	490449.8
GT	1655069.2	487636.4
GT	1654729.5	488059.5
GT	1681226.4	461699.9
GT	1654505.1	488495.2
GT	1654431.7	488365.6
GT	1654445.1	488293.9
GT	1654511.2	488273.0
GT	1654495.4	488372.5
GT	1654475.0	488231.4
GT	1654547.9	488157.2
GT	1654966.4	487795.9
GT	1654600.6	488071.6
GT	1654379.1	488460.7
GT	1654747.0	488046.9
GT	1654780.2	488060.1
GT	1654864.0	488013.9
GT	1654892.3	487956.9
GT	1654763.7	487959.6
GT	1654727.3	487888.0
GT	1654771.2	487796.8
GT	1654864.0	487873.3
GT	1654862.6	487852.5
GT	1654610.9	488131.8
GT	1653130.0	489614.2
GT	1653004.8	489771.2
GT	1652881.4	489770.1
GT	1652917.4	489706.4
GT	1652938.4	489716.4
GT	1653021.3	489711.5
GT	1653051.0	489720.0
GT	1653085.8	489737.6
GT	1653166.8	489759.8
GT	1681275.4	461737.5
GT	1653073.1	489600.8
GT	1652906.7	489893.5
GT	1653104.0	489566.9
GT	1653258.3	489556.3
GT	1653644.7	489297.6
GT	1653871.9	489003.5
GT	1653932.6	488936.7
GT	1653975.4	488648.9
GT	1653926.0	488844.7
GT	1653956.3	488850.6
GT	1653107.9	489680.4
GT	1652899.9	490098.6
GT	1652741.9	490021.6
GT	1652717.0	490008.0
GT	1652705.5	490034.7
GT	1652727.5	490031.5
GT	1652736.0	490053.7
GT	1652733.5	490081.2
GT	1652729.5	490075.5
GT	1652799.1	490037.0
GT	1652969.1	489874.2
GT	1652869.8	490086.2
GT	1652914.2	489905.0
GT	1652934.1	490102.2
GT	1653000.2	490012.6
GT	1653065.3	489886.6
GT	1653045.7	489901.0
GT	1652833.1	489914.9
GT	1652809.5	489880.5
GT	1652840.7	489838.3
GT	1652907.5	489886.6
GT	1653977.1	488798.4
GT	1652844.8	490035.1
GT	1681639.0	461006.6
GT	1654004.8	488778.0
GT	1652544.9	490199.3
GT	1652544.8	490257.4
GT	1652528.3	490324.5
GT	1652469.1	490382.0
GT	1652449.4	490359.0
GT	1652474.4	490317.5
GT	1652486.1	490313.3
GT	1652475.7	490119.2
GT	1682056.0	460680.2
GT	1652491.7	490110.1
GT	1542817.1	496780.0

DESCRIPTION	NORTHING	EASTING
GT	1681311.4	461487.3
GT	1681298.6	461479.8
GT	1542756.1	496221.8
GT	1542364.9	496343.5
GT	1681441.6	461592.5
GT	1681348.5	461463.8
GT	1681408.6	461434.8
GT	1681378.3	461388.7
GT	1652453.7	490278.3
GT	1652655.9	490123.1
GT	1655942.0	486918.8
GT	1654188.3	488852.8
GT	1654215.5	488754.4
GT	1654038.3	488724.5
GT	1653968.7	488646.9
GT	1654038.9	488629.2
GT	1654086.6	488581.9
GT	1652828.6	490002.1
GT	1652535.7	490126.1
GT	1652624.6	490106.7
GT	1654002.0	488801.1
GT	1652658.6	490173.5
GT	1652643.6	490159.7
GT	1652617.5	490276.3
GT	1652596.1	490209.5
GT	1652579.9	490178.0
GT	1652559.2	490056.4
GT	1652568.5	490035.3
GT	1652538.1	490062.6
GT	1652519.4	490068.5
GT	1652630.3	489956.9
GT	1662986.3	480029.3
GT	1662300.7	480345.0
GT	1662853.4	480153.7
GT	1662828.2	479871.2
GT	1662924.7	479892.3
GT	1662917.3	479937.9
GT	1662890.2	480081.2
GT	1662888.6	480128.2
GT	1662900.6	480118.3
GT	1662711.2	480318.5
GT	1662987.5	480047.4
GT	1662693.7	480286.0
GT	1663007.2	480019.9
GT	1663014.2	480003.7
GT	1663033.8	479950.4
GT	1662998.3	479925.5
GT	1662975.9	479900.1
GT	1662895.7	479748.1
GT	1662904.4	479762.1
GT	1663360.3	479732.0
GT	1662923.7	480108.1
GT	1662587.6	480055.0
GT	1662219.5	480630.0
GT	1655788.6	487053.5
GT	1662281.4	480613.3
GT	1662405.3	480576.1
GT	1662424.6	480641.1
GT	1662388.5	480617.0
GT	1662381.0	480596.1
GT	1662391.7	480567.3
GT	1662915.3	480165.6
GT	1662584.6	480415.5
GT	1663541.2	479133.1
GT	1662555.4	480078.2
GT	1662839.5	480011.8
GT	1662647.5	480054.3
GT	1662672.4	480269.6
GT	1662642.1	480302.1
GT	1662730.5	480187.3
GT	1662759.9	480216.6
GT	1662708.5	480245.5
GT	1662582.6	480451.6
GT	1652397.8	490182.7
GT	1680157.5	462795.4
GT	1680127.0	462853.6
GT	1680074.4	462853.7
GT	1680048.1	462895.6
GT	1679896.3	463025.0
GT	1679870.2	463054.0
GT	1679778.7	463163.1
GT	1679709.3	463202.1
GT	1663412.5	479275.4
GT	1679726.1	463308.3
GT	1680281.4	462671.4
GT	1652272.5	490460.8
GT	1652332.0	490393.6
GT	1652411.4	490383.3
GT	1652411.4	490416.3
GT	1652363.5	490544.4

SEE SHEET 1 FOR GENERAL NOTES.

PROJECT TITLE:
SPECIFIC PURPOSE SURVEY OF WETLAND JURISDICTIONAL DELINEATION AND THREATENED AND ENDANGERED SPECIES
OF:
PROGRESS ENERGY FLORIDA
CITRUS - BROOKRIDGE TRANSMISSION LINE
Hernando County & Citrus County, Florida

DATE	BY	DESCRIPTION

REVISION

DRAWN BY: T.W. DATE: 12/08/09
CHKD. BY: R.M.J. DATE: 12/14/09
JOB No. 63740090435
SCALE: N/A
SHT. 137 OF 139
DRAWING NAME: PHP Transmission Line.dwg

PREPARED BY:
MACTEC
MACTEC Engineering & Consulting, Inc.
4150 North John Young Parkway Orlando, Florida 32804-2620
Phone: 407.522.7570 Fax: 407.522.7576
CERTIFICATE OF AUTHORIZATION: LB 6969

PREPARED FOR:
Golder Associates
Gainesville, Florida.
GOLDER ASSOCIATES
6026 NW 1st Place
GAINESVILLE, FLORIDA 32607

DESCRIPTION	NORTHING	EASTING
GT	1652323.4	490453.5
GT	1652334.8	490428.7
GT	1652340.7	490436.1
GT	1679695.2	463307.7
GT	1680733.6	462199.7
GT	1662239.2	480611.1
GT	1681101.3	461831.1
GT	1681043.1	461879.1
GT	1681043.7	461902.5
GT	1681055.9	461751.4
GT	1680927.5	461890.3
GT	1680896.7	461777.6
GT	1680959.7	461966.3
GT	1680185.5	462693.5
GT	1680717.5	462079.5
GT	1680231.4	462700.4
GT	1680730.7	462198.5
GT	1680710.6	462243.0
GT	1680616.3	462202.7
GT	1680650.1	462281.8
GT	1680633.7	462293.2
GT	1680414.4	462451.3
GT	1680339.4	462534.7
GT	1665486.7	477491.9
GT	1663441.1	479242.5
GT	1680852.7	462068.0
GT	1661289.1	481376.4
GT	1658019.8	484662.3
GT	1657096.6	485482.4
GT	1661221.3	481449.4
GT	1659176.4	483596.7
GT	1661044.2	481850.2
GT	1658924.3	483829.4
GT	1659206.2	483620.9
GT	1660098.5	482524.7
GT	1660364.9	482284.6
GT	1661086.0	481673.3
GT	1658511.6	484204.7
GT	1661261.4	481755.2
GT	1661326.6	481341.9
GT	1655843.2	486877.6
GT	1661191.6	481853.6
GT	1662105.0	480617.9
GT	1656046.1	486691.8
GT	1662313.7	480635.2
GT	1661218.9	481462.1
GT	1656078.7	486626.4
GT	1656594.8	486100.7
GT	1661238.1	481407.0
GT	1657229.3	485831.8
GT	1657258.7	485774.9
GT	1656875.3	485764.5
GT	1657081.6	485493.7
GT	1661164.8	481847.4
GT	1661378.9	481673.0
GT	1662312.0	480779.4
GT	1662409.0	480696.9
GT	1661797.9	481277.6
GT	1661727.5	481320.5
GT	1655766.5	487021.3
GT	1661726.1	481171.9
GT	1661918.4	480971.7
GT	1655739.8	486936.7
GT	1661519.0	481521.9
GT	1661503.1	481549.6
GT	1661489.3	481601.5
GT	1661277.9	481745.4
GT	1661563.2	481534.9
GT	1638696.1	490603.1
GT	1626848.1	490573.5
GT 001 PO	1542271.6	496796.8
GT 002 PO	1542575.1	496834.3
GT 003 PO	1542883.8	496757.6
GT 004 PO	1542793.1	496631.8
GT 005 PO	1542864.4	496492.4
GT 006 PO	1542901.6	496428.2
GT 007 PO	1542890.1	496467.3
GT 008 PO	1542897.5	496165.6
GT 009 PO	1542836.7	496154.8
GT 010 PO	1542883.2	496213.3
GT 012 PO	1542934.8	496465.5
GT 013 PO	1542647.8	496125.7
GT 014 PO	1542669.6	496153.7
GT 016 PO	1542603.2	496151.5
GT 017 PO	1542405.3	496361.4
GT 018 PO	1542273.9	496350.5
GT 019 PO	1542279.1	496479.8
GT 020 PO	1542292.7	496493.8
GT 021 PO	1542487.5	496411.2
GT 022 PO	1542492.6	496393.8
GT 023	1542496.3	496344.5
GT 024	1542625.2	496214.6
GT 025 PO	1542663.0	496221.1
GT 026 PO	1542679.0	496275.5
GT 027 PO	1542691.4	496289.2
GT 028 PO	1542651.4	495738.5

DESCRIPTION	NORTHING	EASTING
GT 029 PO	1542801.8	495710.7
GT 030 PO	1542931.6	495751.1
GT 031 PO	1542812.4	495613.0
GT 032 PO	1542748.1	495617.2
GT 033 PO	1542538.7	495644.4
GT 034 PO	1542516.8	496112.2
GT 035 PO	1542396.2	496127.2
GT 036 PO	1542480.5	496168.9
GT 037 PO	1542327.6	495611.2
GT 038 PO	1542102.3	495604.1
GT 040 PO	1543995.7	495828.4
GT 041 PO	1544218.0	495798.2
GT 042 PO	1544166.2	495833.0
GT 043 PO	1544220.9	495878.1
GT 044 PO	1544180.2	495755.8
GT 045 PO	1544502.8	495858.5
GT 046 PO	1544629.3	495863.5
GT 047 PO	1544642.7	495720.6
GT 048 PO	1544708.7	495691.8
GT 049 PO	1545124.1	495875.6
GT 050 PO	1545180.0	495816.0
GT 051 PO	1545263.7	495754.5
GT 052 PO	1545396.9	495653.0
GT 053 PO	1545407.7	495730.5
GT 055 PO	1545743.5	492825.9
GT 056 PO	1545737.9	493158.4
GT 057 PO	1545721.7	493193.7
GT 058 PO	1545729.1	493214.0
GT 059 PO	1545758.3	493464.6
GT 060 PO	1545698.1	492432.1
GT 061 PO	1545688.1	491664.0
GT 062 PO	1545651.9	490904.9
GT 063 PO	1545648.8	490685.4
GT 064 PO	1545639.9	490198.8
GT 065 PO	1545637.8	489857.8
GT 066 PO	1545642.7	489604.0
GT 067 PO	1545641.9	489404.4
GT 068 PO	1545654.5	489016.6
GT 069 PO	1545658.7	488900.0
GT 070 PO	1545738.0	487913.5
GT 071	1546122.1	488078.7
GT 072 PO	1546118.9	488094.9
GT 073	1546229.8	488150.9
GT 074	1546237.0	488155.9
GT 075	1546271.8	488162.3
GT 076 PO	1546305.4	488197.1
GT 077 PO	1546355.9	488230.6
GT 078 PO	1546688.7	488366.2
GT 079	1546722.3	488362.3
GT 080 PO	1546972.2	488468.1
GT 081 PO	1547038.9	488529.1
GT 082 PO	1547091.2	488517.8
GT 083 PO	1547101.5	488560.0
GT 084 PO	1547318.3	488666.8
GT 085 PO	1547381.2	488684.7
GT 086 PO	1547431.7	488716.2
GT 087 PO	1547451.2	488708.6
GT 088 PO	1547507.1	488756.6
GT 089 PO	1547652.0	488863.1
GT 090 PO	1548026.6	488971.7
GT 091 PO	1548149.9	488983.3
GT 092 PO	1548417.0	489201.0
GT 093 PO	1548618.0	489247.2
GT 094 PO	1548640.6	489260.1
GT 095 PO	1548728.7	489297.1
GT 096 PO	1549100.7	489473.5
GT 097 PO	1549182.5	489524.4
GT 098 PO	1549330.7	489600.1
GT 099 PO	1549413.0	489630.1
GT 100 PO	1549557.4	489692.5
GT 101 PO	1549634.8	489747.8
GT 102 PO	1549682.5	489748.0
GT 103 PO	1549840.3	489844.8
GT 104 PO	1550208.5	490004.3
GT 105 PO	1550447.8	490141.2
GT 106 PO	1550565.1	490157.0
GT 107 PO	1550597.9	490185.6
GT 108 PO	1550661.0	490226.0
GT 109 PO	1550702.7	490218.4
GT 110 PO	1550757.9	490219.1
GT 111 PO	1550899.5	490277.7
GT 112 PO	1551017.7	490327.4
GT 113 PO	1550977.0	490390.0
GT 114 PO	1551008.9	490397.5
GT 115 PO	1551108.1	490442.6
GT 116 PO	1551180.3	490473.8
GT 117 PO	1551318.9	490555.0
GT 118 PO	1551291.4	490552.5
GT 119 PO	1551401.0	490514.3
GT 120 PO	1551410.1	490596.1
GT 121 PO	1551403.8	490623.2
GT 122 PO	1551480.0	490642.7
GT 123 PO	1551538.1	490623.5
GT 124 PO	1551554.5	490629.3
GT 125 PO	1551577.2	490626.2
GT 126 PO	1551634.9	490617.3

DESCRIPTION	NORTHING	EASTING
GT 127 PO	1551671.3	490629.2
GT 128 PO	1551721.7	490625.0
GT 129 PO	1551731.3	490596.9
GT 130 PO	1551790.8	490630.3
GT 131 PO	1552067.0	490638.4
GT 132 PO	1552175.0	490642.8
GT 133 PO	1552195.2	490616.0
GT 134 PO	1552404.9	490605.3
GT 135 PO	1552405.0	490581.1
GT 136 PO	1552458.7	490651.8
GT 137 PO	1552559.8	490661.8
GT 138 PO	1552597.9	490649.7
GT 139 PO	1552796.5	490656.5
GT 140 PO	1552794.4	490625.0
GT 141 PO	1552860.2	490634.7
GT 142 PO	1552984.3	490615.4
GT 143 PO	1553199.6	490612.2
GT 144 PO	1553295.1	490591.5
GT 145 PO	1553414.8	490574.3
GT 146 PO	1553590.3	490645.5
GT 147 PO	1553746.6	490668.6
GT 148 PO	1553812.9	490604.9
GT 149 PO	1553834.6	490599.5
GT 150 PO	1553975.0	490625.4
GT 151 PO	1554138.0	490568.6
GT 152 PO	1554156.4	490586.8
GT 153 PO	1554251.8	490637.8
GT 154 PO	1555099.4	490660.4
GT 155 PO	1555098.9	490592.4
GT 156 PO	1555245.4	490615.9
GT 157 PO	1555362.3	490574.8
GT 158 PO	1555557.6	490606.5
GT 159 PO	1555587.9	490621.0
GT 160 PO	1555631.2	490615.1
GT 161 PO	1555608.2	490666.1
GT 162 PO	1555855.5	490592.6
GT 163 PO	1556291.2	490676.6
GT 164 PO	1556359.2	490620.3
GT 165 PO	1556533.4	490620.3
GT 166 PO	1556826.8	490654.7
GT 167 PO	1557386.6	490639.1
GT 168 PO	1557376.2	490629.7
GT 169 PO	1557539.3	490605.2
GT 170 PO	1557600.8	490628.6
GT 171 PO	1557692.4	490663.7
GT 172 PO	1558001.9	490619.9
GT 173 PO	1558218.7	490611.6
GT 174 PO	1558533.6	490601.0
GT 175 PO	1558620.1	490615.5
GT 176 PO	1558766.4	490604.9
GT 177 PO	1558848.6	490616.3
GT 178 PO	1558947.7	490607.4
GT 179 PO	1559804.4	490645.3
GT 180 PO	1559872.4	490550.7
GT 181 PO	1559966.8	490606.1
GT 182 PO	1560263.2	490588.9
GT 183 PO	1560393.4	490589.3
GT 184 PO	1560489.8	490569.4
GT 185 PO	1560797.3	490562.7
GT 186 PO	1560795.7	490586.8
GT 187 PO	1560848.6	490605.9
GT 188 PO	1560879.3	490593.9
GT 189 PO	1560968.0	490639.1
GT 190 PO	1561090.2	490627.0
GT 191 PO	1561145.1	490634.1
GT 192 PO	1561257.2	490624.8
GT 193 PO	1561737.7	490602.6
GT 194 PO	1561789.3	490629.3
GT 195 PO	1562112.9	490633.1
GT 196 PO	1562155.4	490596.2
GT 197 PO	1562420.0	490655.5
GT 198 PO	1562451.6	490630.7
GT 199 PO	1562549.3	490591.8
GT 200 PO	1562670.8	490646.1
GT 201 PO	1562723.5	490596.1
GT 202 PO	1562854.6	490590.6
GT 203 PO	1562950.1	490574.4
GT 204 PO	1562960.6	490559.6
GT 205 PO	1563003.8	490626.0
GT 206 PO	1563142.3	490637.5
GT 207 PO	1563273.0	490564.5
GT 208 PO	1563219.4	490567.1
GT 209 PO	1563885.7	490649.6
GT 210 PO	1563956.2	490652.5
GT 211 PO	1564014.1	490637.0
GT 212 PO	1564357.2	490652.1
GT 213 PO	1564419.4	490643.7
GT 214 PO	1564485.3	490637.4
GT 215 PO	1564488.0	490638.9
GT 216 PO	1564507.0	490550.6

SEE SHEET 1 FOR GENERAL NOTES

PROJECT TITLE:
SPECIFIC PURPOSE SURVEY OF WETLAND JURISDICTIONAL DELINEATION AND THREATENED AND ENDANGERED SPECIES
OF
PROGRESS ENERGY FLORIDA
CITRUS – BROOKRIDGE TRANSMISSION LINE
Hernando County & Citrus County, Florida

DATE	BY	DESCRIPTION

REVISION

DRAWN BY: T.W. DATE: 12/08/09
CHKD. BY: R.M.J. DATE: 12/14/09
JOB No. 63740090435
SCALE: N/A
SHT. 138 OF 139
DRAWING NAME: PHP Transimission Line.dwg

PREPARED BY:
MACTEC
MACTEC Engineering & Consulting, Inc.
4150 North John Young Parkway Orlando, Florida 32804-2620
Phone: 407.522.7570 Fax: 407.522.7576
CERTIFICATE OF AUTHORIZATION: LB 6969

PREPARED FOR:
Golder Associates
Gainesville, Florida
GOLDER ASSOCIATES
6026 NW 1st Place
GAINESVILLE, FLORIDA 32607

DESCRIPTION	NORTHING	EASTING
GT 217 PO	1564626.6	490561.4
GT 218 PO	1564853.9	490557.5
GT 219 PO	1564927.0	490620.4
GT 220 PO	1565017.4	490565.3
GT 221 PO	1565137.7	490594.9
GT 222 PO	1565259.2	490584.5
GT 223 PO	1565270.3	490635.0
GT 224 PO	1565867.6	490583.7
GT 225 PO	1565995.2	490560.5
GT 226 PO	1566139.5	490564.5
GT 227 PO	1566161.9	490591.5
GT 228 PO	1566159.8	490612.8
GT 229 PO	1566197.7	490638.4
GT 230 PO	1566328.0	490616.5
GT 231 PO	1567333.9	490627.5
GT 232 PO	1568246.7	490636.6
GT 233 PO	1568449.7	490569.7
GT 234 PO	1568586.1	490617.3
GT 235 PO	1568601.8	490630.4
GT 236 PO	1568644.4	490631.6
GT 237 PO	1568662.3	490621.5
GT 238 PO	1569023.6	490583.1
GT 239 PO	1569295.5	490617.9
GT 240 PO	1569369.0	490578.8
GT 241 PO	1569546.7	490571.5
GT 242 PO	1569867.7	490588.5
GT 243 PO	1570288.4	490581.4
GT 244 AB	1571883.1	490601.3
GT 245 PO	1572850.3	490585.1
GT 246 PO	1572997.3	490588.4
GT 247 PO	1573390.2	490598.1
GT 248 PO	1578641.1	490613.7
GT 249 PO	1579157.9	490524.5
GT 250 PO	1579238.3	490531.5
GT 251 PO	1579348.6	490591.8
GT 252 PO	1579487.9	490585.2
GT 253 PO	1579752.9	490588.0
GT 254 PO	1581015.3	490632.9
GT 255 PO	1581455.0	490611.7
GT 256 PO	1581798.9	490576.8
GT 257 PO	1581836.4	490580.0
GT 258 PO	1582049.8	490562.9
GT 259 PO	1582106.2	490569.2
GT 260 PO	1582762.8	490542.8
GT 261 PO	1582868.9	490544.2
GT 262 PO	1583752.8	490572.2
GT 263 PO	1583807.2	490593.5
GT 264 PO	1584267.1	490583.6
GT 265 PO	1586610.8	490531.7
GT 266 PO	1586884.1	490627.9
GT 267	1587002.3	490631.3
GT 268 PO	1587028.5	490570.2
GT 269 PO	1587083.1	490644.9
GT 270 PO	1587180.7	490588.7
GT 271 PO	1587257.3	490537.5
GT 272 PO	1587534.9	490615.5
GT 273	1587781.1	490591.8
GT 274 PO	1589988.0	490620.1
GT 275 PO	1590103.6	490529.3
GT 276 PO	1590920.2	490550.0
GT 277 PO	1591533.3	490523.6
GT 278 PO	1591693.2	490632.4
GT 279 PO	1591978.0	490581.8
GT 280 PO	1592136.7	490570.2
GT 281 PO	1592141.4	490529.2
GT 282 PO	1592408.6	490550.8
GT 283 PO	1592648.7	490546.6
GT 284 PO	1592992.9	490570.6
GT 286 PO	1593618.9	490523.8
GT 287 PO	1593674.1	490523.0
GT 288 PO	1595022.4	490539.4
GT 289 PO	1595229.8	490531.3
GT 290 PO	1595685.1	490561.3
GT 291 PO	1595764.2	490519.1
GT 292 PO	1596051.9	490535.9
GT 293 PO	1596093.8	490548.8
GT 294 AB	1596163.4	490538.7
GT 295 AB	1596995.0	490509.4
GT 296 PO	1597806.9	490563.9
GT 297 PO	1597821.8	490529.5
GT 298 PO	1598448.4	490537.1
GT 299 PO	1598606.2	490527.4
GT 300 PO	1598857.4	490527.4
GT 301 PO	1598874.9	490528.2
GT 302 PO	1598856.0	490551.3
GT 303 PO	1598898.5	490542.0
GT 304 PO	1598863.8	490530.0
GT 305 PO	1598901.7	490549.1
GT 306 PO	1598978.5	490528.2
GT 307 PO	1599166.0	490511.6
GT 308 PO	1599289.5	490565.6
GT 309 PO	1600024.3	490520.7
GT 310 PO	1600056.8	490594.1
GT 311 PO	1600148.5	490525.7
GT 312 PO	1600386.9	490515.8
GT 313 PO	1600408.5	490553.1

DESCRIPTION	NORTHING	EASTING
GT 314 PO	1600381.8	490614.4
GT 315 PO	1600456.1	490534.6
GT 316 PO	1600716.0	490545.1
GT 317 PO	1600727.6	490508.8
GT 318 PO	1600856.3	490557.6
GT 319 PO	1600898.9	490623.4
GT 320 PO	1600942.9	490549.6
GT 321 PO	1601034.2	490554.2
GT 322 PO	1601102.4	490625.9
GT 323 PO	1601470.2	490572.0
GT 324 PO	1601965.9	490547.8
GT 325 PO	1602233.0	490528.1
GT 326 PO	1602261.7	490571.3
GT 327 PO	1602345.4	490491.7
GT 328 PO	1602422.9	490528.5
GT 329 PO	1602460.7	490591.5
GT 330 PO	1602915.7	490612.5
GT 331 AB	1602910.0	490554.8
GT 332 PO	1603282.1	490528.2
GT 333 PO	1603322.3	490570.8
GT 334 AB	1603323.3	490540.5
GT 336 PO	1603436.3	490540.8
GT 337 PO	1603541.3	490534.5
GT 338 PO	1603577.8	490517.0
GT 339 PO	1603595.4	490528.4
GT 340 PO	1603686.6	490621.2
GT 341 PO	1603767.0	490575.9
GT 342 PO	1603917.0	490554.0
GT 343 PO	1603924.0	490544.6
GT 344 PO	1604024.5	490557.6
GT 345 PO	1604104.8	490556.7
GT 346 PO	1604104.6	490524.8
GT 347 PO	1604146.7	490527.1
GT 348 PO	1604190.5	490555.7
GT 349 PO	1604185.4	490590.1
GT 351 PO	1604221.9	490536.1
GT 352 PO	1604227.5	490540.6
GT 353	1604263.6	490585.7
GT 354 PO	1604327.6	490597.1
GT 355 PO	1604333.2	490599.1
GT 356 PO	1604423.5	490503.1
GT 357 PO	1604461.7	490620.2
GT 358 PO	1604659.0	490600.9
GT 359 PO	1604708.8	490601.1
GT 360 PO	1604716.8	490561.0
GT 361 PO	1604834.2	490577.5
GT 362 PO	1604880.1	490518.6
GT 363 PO	1604893.9	490584.0
GT 364 PO	1604962.4	490510.3
GT 365 AB	1604980.9	490565.5
GT 366 PO	1605077.2	490524.1
GT 367 PO	1605083.0	490511.9
GT 368 PO	1605197.8	490523.9
GT 369 PO	1605273.9	490520.4
GT 370 PO	1605265.9	490503.2
GT 371 PO	1605280.8	490533.3
GT 372 PO	1605329.2	490530.1
GT 373 PO	1605359.0	490527.7
GT 374 PO	1605312.9	490558.8
GT 375 PO	1605342.3	490564.2
GT 376 PO	1605452.5	490531.0
GT 377 PO	1605463.3	490513.2
GT 378 PO	1605504.7	490527.4
GT 379 PO	1605581.1	490526.7
GT 380 PO	1605625.0	490526.3
GT 381 PO	1605708.7	490533.6
GT 382 PO	1605765.3	490523.3
GT 383 PO	1605787.5	490530.9
GT 384 PO	1605801.4	490526.6
GT 387 PO	1605918.5	490499.5
GT 390 PO	1605584.5	490571.7
GT 391 PO	1606189.1	490597.9
GT 392 PO	1606342.6	490529.4
GT 393 PO	1606416.8	490544.7
GT 394 PO	1606445.4	490512.3
GT 395 PO	1606506.5	490524.8
GT 396 PO	1606506.5	490519.7
GT 397 PO	1606554.8	490517.5
GT 398 PO	1606667.3	490510.6
GT 399 PO	1606679.1	490522.7
GT 400 PO	1606769.8	490513.8
GT 401 AB	1606753.7	490560.6
GT 402 PO	1606862.6	490531.1
GT 403 PO	1607018.7	490570.7
GT 404 PO	1607047.5	490506.2
GT 405 PO	1607088.6	490522.0
GT 406 PO	1607120.5	490583.1
GT 407 PO	1607165.3	490570.1
GT 408 PO	1607242.5	490596.5
GT 409 PO	1607317.2	490581.7
GT 410 PO	1607344.8	490577.3
GT 411 PO	1607445.4	490589.3
GT 412 PO	1607463.8	490568.3
GT 413 PO	1607461.9	490553.4
GT 414 PO	1607510.8	490555.1
GT 415 AB	1607522.5	490585.9

DESCRIPTION	NORTHING	EASTING
GT 416 PO	1607870.9	490538.6
GT 417 PO	1607903.0	490578.4
GT 418 PO	1607999.7	490573.1
GT 419 PO	1608066.8	490568.5
GT 420 PO	1608124.4	490563.5
GT 421 PO	1608115.4	490522.0
GT 422 PO	1608328.2	490563.3
GT 423 PO	1608386.8	490559.6
GT 424 PO	1608428.0	490567.2
GT 425 PO	1608500.9	490572.8
GT 426 PO	1608604.3	490567.5
GT 427 PO	1608850.7	490546.7
GT 428 PO	1608953.9	490534.2
GT 429 PO	1609145.0	490529.0
GT 430 PO	1609213.2	490535.8
GT 432 PO	1609559.6	490599.2
GT 433 PO	1609772.4	490539.6
GT 434 PO	1609783.1	490564.6
GT 435 PO	1610109.5	490537.9
GT 436 PO	1610267.0	490529.7
GT 437 PO	1610425.9	490560.4
GT 438 PO	1610463.5	490581.2
GT 439 PO	1610804.8	490474.2
GT 440 PO	1610806.8	490260.2
GT 441 PO	1610639.7	490190.8
GT 442 PO	1610517.1	490181.9
GT 443 PO	1611724.7	490598.1
GT 444 PO	1611806.5	490510.4
GT 445 PO	1611825.1	490505.3
GT 446 PO	1611941.6	490586.0
GT 447 PO	1612049.4	490502.9
GT 448 PO	1612101.7	490486.2
GT 449 PO	1612307.3	490502.2
GT 450 PO	1612879.0	490527.3
GT 451 PO	1612919.4	490496.5
GT 452 PO	1612934.1	490521.5
GT 453 PO	1613032.8	490525.6
GT 454 PO	1613086.2	490528.8
GT1	1678523.0	464453.3
GT2	1681321.9	461445.5
GT2	1678422.2	464418.0
GT3	1681358.7	461542.0
GT3	1678469.2	464392.4
GT4	1681352.5	461516.0
GT4	1682169.0	460287.5
GT4	1678335.1	464600.1
GT5	1681383.2	461517.8
GT5	1678103.1	465001.8
GT6	1678114.3	465011.8
GT7	1681314.0	461558.9
CS Q1	1682820.0	461055.0
CS Q2	1682813.0	461015.0
CS Q4	1682757.0	460942.0
CS Q5	1682741.0	460953.0
CS Q6	1682752.0	460990.0
CS Q7	1682778.0	461041.0
CS Q8	1682804.0	461063.0
CS R1	1682699.0	459959.0
CS R10	1682520.0	459588.0
CS R11	1682596.0	459602.0
CS R12	1682649.0	459620.0
CS R13	1682670.0	459652.0
CS R14	1682695.0	459733.0
CS R15	1682670.0	459813.0
CS R16	1682661.0	459859.0
CS R17	1682637.0	459898.0
CS R18	1682670.0	459923.0
CS R2	1682703.0	459986.0
CS R3	1682674.0	459990.0
CS R4	1682582.0	460013.0
CS R5	1682514.0	459976.0
CS R6	1682519.0	459904.0
CS R7	1682532.0	459859.0
CS R8	1682530.0	459814.0
CS R9	1682521.0	459707.0

SEE SHEET 1 FOR GENERAL NOTES

PROJECT TITLE:
SPECIFIC PURPOSE SURVEY OF WETLAND JURISDICTIONAL DELINEATION AND THREATENED AND ENDANGERED SPECIES
OF
PROGRESS ENERGY FLORIDA
CITRUS - BROOKRIDGE TRANSMISSION LINE
Hernando County & Citrus County, Florida

DATE	BY	DESCRIPTION

REVISION

DRAWN BY: T.W. DATE: 12/08/09
CHKD. BY: R.M.J. DATE: 12/14/09
JOB No. 63740090435
SCALE: N/A
SHT. 139 OF 139
DRAWING NAME: PHP Transmission Line.dwg

PREPARED BY:
MACTEC
MACTEC Engineering & Consulting, Inc.
4150 North John Young Parkway Orlando, Florida 32804-2620
Phone: 407.522.7570 Fax: 407.522.7576
CERTIFICATE OF AUTHORIZATION: LB 6969

PREPARED FOR:
Golder Associates
Gainesville, Florida
GOLDER ASSOCIATES
6026 NW 1st Place
GAINESVILLE, FLORIDA 32607

WETLAND DETERMINATION DATA FORM - Atlantic and Gulf Coastal Plain Region

Project/Site: Levy Baseload Transmission Program, CB Line City/County: Citrus Sampling Date: 10/18/09

Applicant/Owner: Progress Energy Florida, Inc. State: FL Sampling Point: CB A

Investigator(s): Tony Davanzo, Colleen Cunningham Section, Township, Range: 32 17S 17E

Landform (hillslope, terrace, etc.): N/A Local relief (concave, convex, none): none Slope (%): ____

Subregion (LRR or MLRA): LRR U Lat: 28.955910 Long: -82.605448 Datum: WGS84

Soil Map Unit Name: Adamsville fine sand NWI classification: Freshwater Pond

Are climatic / hydrologic conditions on the site typical for this time of year? Yes ✓ No ____ (If no, explain in Remarks)

Are Vegetation ✓, Soil ✓, or Hydrology ____ significantly disturbed? Are circumstances normal? Yes ____ No ✓

Are Vegetation ____, Soil ____, or Hydrology ____ naturally problematic? (If needed, explain any answers in Remarks)

SUMMARY OF FINDINGS - Attach site map showing sampling point locations, transects, important features, etc.

Hydrophytic Vegetation Present?	Yes ✓ No ____	**Is the Sampled Area within a Wetland?** Yes ✓ No ____
Hydric Soil Present?	Yes ✓ No ____	
Wetland Hydrology Present?	Yes ✓ No ____	

Remarks: Edge is very torn up; Disturbed pond, lots of Off-Road Vehicle tracks througha nd around, edge very dug up, lots of bare ground and open water

HYDROLOGY

Wetland Hydrology Indicators:

Primary Indicators (minimum of one is required; check all that apply)

✓ Surface Water (A1)	____ Water-Stained Leaves (B9)	____ Surface Soil Cracks (B6)
____ High Water Table (A2)	____ Aquatic Fauna (B13)	____ Sparsely Vegetated Concave Surface (B8)
✓ Saturation (A3)	____ Marl Deposits (B15) **(LRR U)**	____ Drainage Patterns (B10)
____ Water Marks (B1)	____ Hydrogen Sulfide Odor (C1)	____ Moss Trim Lines (B16)
____ Sediment Deposits (B2)	____ Oxidized Rhizospheres on Living Roots (C3)	____ Dry-Season Water Table (C2)
____ Drift Deposits (B3)	____ Presence of Reduced Iron (C4)	____ Crayfish Burrows (C8)
____ Algal Mat or Crust (B4)	____ Recent Iron Reduction in Tilled Soils (C6)	____ Saturation Visible on Aerial Imagery (C9)
____ Iron Deposits (B5)	____ Thin Muck Surface (C7)	____ Geomorphic Position (D2)
____ Inundation Visible on Aerial Imagery (B7)	____ Other (Explain in Remarks)	____ Shallow Aquitard (D3)
		____ FAC Neutral Test (D5)

Secondary Indicators (minimum of two required)

Field Observations:

Surface Water Present?	Yes ✓	No ____	Depth (inches): 12
Water Table Present?	Yes ✓	No ____	Depth (inches): 0
Saturation Present? (includes capillary fringe)	Yes ✓	No ____	Depth (inches): 0

Wetland Hydrology Present? Yes ✓ No ____

Describe Recorded Data (stream gauge, monitoring well, aerial photos, previous inspections), if available:

Remarks:

Adapted from U.S. Army Corps of Engineers
Atlantic and Gulf Coastal Plain Region- Interim Version

VEGETATION - Use scientific names of plants

Sampling Point: CB A

Tree Stratum (Plot size:_____)	Absolute % Cover	Dominant Species?	Indicator Status
1.			
2.			
3.			
4.			
5.			
6.			
7.			
	0	= Total Cover	
Sapling Stratum (Plot size:_____)			
1.			
2.			
3.			
4.			
5.			
6.			
7.			
	0	= Total Cover	
Shrub Stratum (Plot size:_____)			
1. Cephalanthus occidentalis	2	yes	OBL
2. Myrica spp.	2	yes	FAC
3.			
4.			
5.			
6.			
7.			
	4	= Total Cover	
Herb Stratum (Plot size:_____			
1. Nymphaea spp.	30	yes	OBL
2. Eleocharis spp.	10	yes	OBL
3. Andropogon spp.	10	yes	FAC
4. Panicum hemitomon	10	yes	OBL
5. Panicum repens	2	no	FACW
6. Rhyncospora spp.	2	no	FACW
7. Psilocarya spp.	2	no	OBL
8. Eupatorium capillifolium	2	no	FACU
9. Ludwigia suffruticosa	2	no	OBL
10. Pluchea spp.	2	no	FACW
11. Polypremum procumbens	2	no	FACU
12. Xyris spp.	2	no	OBL
	76	= Total Cover	
Woody Vine Stratum (Plot size:_____)			
1.			
2.			
3.			
4.			
5.			
	0	= Total Cover	

Dominance Test Worksheet:

Number of Dominant Species That Are OBL, FACW, or FAC:	6	(A)
Total Number of Dominant Species Across All Strata:	6	(B)
Percent of Dominant Species That Are OBL, FACW, or FAC:	100.00	(A/B)

Prevalance Index worksheet:

Total % Cover of:		Multiply by:
OBL species	x1=	0
FACW species	x2=	0
FAC species	x3=	0
FACU species	x4=	0
UPL species	x5=	0
Column Totals:	0 (A)	0 (B)

Prevalance Index = B/A =

Hydrophytic Vegetation Indicators:

✓ Dominance Test is 50%

Prevalence Index is ≤3.0[1]

Problematic Hydrophytic Vegetation[1] (Explain)

[1]Indicators of hydric soil and wetland hydrology must be present, unless disturbed or problematic.

Definitions of Vegetation Strata:

Tree- Woody plants, excluding woody vines, approximately 20 ft (6m) or more in height and 3 in. (7.6 cm) or larger in diameter at breast height (DBH).

Sapling- Woody plants, excluding woody vines, approximately 20 ft (6m) or more in height and less than 3 in. (7.6 cm) DBH.

Shrub- Woody plants, excluding woody vines, approximately 3 to 20 ft (1 to 6 m) in height.

Herb- All herbaceous (non-woody)plants, including herbaceous vines, regardless of size. Includes woody plants, except woody vines, less than approximately 3 ft (1 m) in height.

Woody vine- All woody vines, regardless of height.

Hydrophytic Vegetation Present? Yes ✓ No_____

Remarks: (If observed, list morphological adaptations below).
Percent cover estimates based on meandering survey of the broader community.

Adapted from U.S. Army Corps of Engineers
Atlantic and Gulf Coastal Plain Region- Interim Version

County/soil: Citrus- Adamsville

SOIL Sampling Point: CB A

Profile Description: (Describe to the depth needed to document the indicator or confirm the absence of indicators.)

Depth (inches)	Matrix Color (moist)	Matrix %	Redox Features Color (moist)	Redox %	Type[1]	Loc[2]	Texture	Remarks
0-7	10 YR 4/2		10 YR 3/1				few fine roots	dark grayish brown fine sand
7-20	10 YR 6/4		10 YR 6/6; 10 YR 7/2				few medium distinct mottles and streaks	light yellowish brown fine sand
20-39	10 YR 7/4		10 YR 6/6				common medium distinct mottles	very pale brown fine sand
39-80	10 YR 7/3							very pale brown fine sand

[1]Type: C=Concentration, D=Depletion, RM=Reduced Matrix, CS=Covered or Coated Sand Grains. [2]Location: PL=Pore Lining, M=Matrix.

Hydric Soil Indicators:

- ___Histol (A1)
- ___Histic Epidon (A2)
- ___Black Histic (A3)
- ___Hydrogen Sulfide (A4)
- ___Stratified Layers (A5)
- ___Organic Bodies (A6) **(LRR P, T, U)**
- ___5 cm Mucky Mineral (A7) **(LRR P,T,U)**
- ✓ Muck Presence (A8) **(LRR U)**
- ___1 cm Muck (A9) **(LRR P,T)**
- ___Depleted Below Dark Surface (A11)
- ___Thick Dark Surface (A12)
- ___Coast Prairie Redox (A16) **(MLRA 150A)**
- ___Sandy Mucky Mineral (S1) **(LRR O, S)**
- ___Sandy Gleyed Matrix (S4)
- ___Sandy Redox (S5)
- ___Stripped Matrix (S6)
- ___Dark Surface (S7) **(LRR P, S, T, U)**
- ___Polyvalue Below Surface (S8) **(LRR S, T, U)**
- ___Thin Dark Surface (S9) **(LRR S, T, U)**
- ___Loamy Mucky Mineral (F1) **(LRR O)**
- ___Loamy Gleyed Matrix (F2)
- ___Depleted Matrix (F3)
- ___Redox Dark Surface (F6)
- ___Depleted Dark Surface (F7)
- ___Redox Depressions (F8)
- ___Marl (F10) **(LRR U)**
- ___Depleted Orchric (F11) **(MLRA 151)**
- ___Iron-Manganese Masses (F12) **(LRR O, P,T)**
- ___Umbric Surface (F13) **(LRR P, T, U)**
- ___Delta Orchric (F17) **(MLRA 151)**
- ___Reduced Vertic (F18) **(MLRA 150A, 150B)**
- ___Piedmont Floodplain Soils (F19) **(MLRA 149A)**
- ___Anomalous Bright Loamy Soils (F20) **(MLRA 149A, 153C, 153D)**

Indicators for Problematic Hydric Soils [3]:

- ___1 cm Muck (a9) **(LRR O)**
- ___2 cm Muck (A10) **(LRR S)**
- ___Reduced Vertic (F18) **(outside MLRA 150A, B)**
- ___Piedmont Floodplain Soils (F19) **(LRR P, S, T)**
- ___Anomalous Bright Loamy Soils (F20) (MLRA 153B)
- ___Red Parent Material (TF2)
- ___Very Shallow Dark Surface (TF12) **(LRR T, U)**
- ___Other (Explain in Remarks)

[3]Indicators of hydrophytic vegetation and wetland hydrology must be present, unless disturbed or problematic.

Restrictive Layer (If observed):

Type: _____

Depth (inches): _____

Hydric Soil Present? **Yes** ✓ **No** ___

Remarks:

Adapted from U.S. Army Corps of Engineers
Atlantic and Gulf Coastal Plain Region- Interim Version

WETLAND DETERMINATION DATA FORM - Atlantic and Gulf Coastal Plain Region

Project/Site: Levy Baseload Transmission Program, CB Line City/County: Citrus Sampling Date: 10/18/09

Applicant/Owner: Progress Energy Florida, Inc. State: FL Sampling Point: CB B

Investigator(s): Tony Davanzo, Colleen Cunningham Section, Township, Range: 33 17S 17E

Landform (hillslope, terrace, etc.): N/A Local relief (concave, convex, none): none Slope (%): _____

Subregion (LRR or MLRA): LRR U Lat: 28.949088 Long: -82.599821 Datum: WGS84

Soil Map Unit Name: Adamsville fine sand NWI classification: Palustrine Emergent

Are climatic / hydrologic conditions on the site typical for this time of year? Yes ✓ No _____ (If no, explain in Remarks)

Are Vegetation ✓, Soil ✓, or Hydrology _____ significantly disturbed? Are circumstances normal? Yes ✓ No _____

Are Vegetation _____, Soil _____, or Hydrology _____ naturally problematic? (If needed, explain any answers in Remarks)

SUMMARY OF FINDINGS - Attach site map showing sampling point locations, transects, important features, etc.

Hydrophytic Vegetation Present?	Yes ✓ No _____	**Is the Sampled Area within a Wetland?** Yes ✓ No _____
Hydric Soil Present?	Yes ✓ No _____	
Wetland Hydrology Present?	Yes ✓ No _____	

Remarks: Wet prairie, poor hydrology due to drought, in area of burned woods

HYDROLOGY

Wetland Hydrology Indicators:

Primary Indicators (minimum of one is required; check all that apply)

_____ Surface Water (A1)	_____ Water-Stained Leaves (B9)	
_____ High Water Table (A2)	_____ Aquatic Fauna (B13)	
✓ Saturation (A3)	_____ Marl Deposits (B15) **(LRR U)**	
_____ Water Marks (B1)	_____ Hydrogen Sulfide Odor (C1)	
_____ Sediment Deposits (B2)	_____ Oxidized Rhizospheres on Living Roots (C3)	
_____ Drift Deposits (B3)	_____ Presence of Reduced Iron (C4)	
_____ Algal Mat or Crust (B4)	_____ Recent Iron Reduction in Tilled Soils (C6)	
_____ Iron Deposits (B5)	_____ Thin Muck Surface (C7)	
_____ Inundation Visible on Aerial Imagery (B7)	_____ Other (Explain in Remarks)	

Secondary Indicators (minimum of two required)

_____ Surface Soil Cracks (B6)
_____ Sparsely Vegetated Concave Surface (B8)
_____ Drainage Patterns (B10)
_____ Moss Trim Lines (B16)
_____ Dry-Season Water Table (C2)
_____ Crayfish Burrows (C8)
_____ Saturation Visible on Aerial Imagery (C9)
_____ Geomorphic Position (D2)
_____ Shallow Aquitard (D3)
_____ FAC Neutral Test (D5)

Field Observations:

Surface Water Present?	Yes _____	No ✓	Depth (inches): _____
Water Table Present?	Yes ✓	No _____	Depth (inches): > 10
Saturation Present? (includes capillary fringe)	Yes ✓	No _____	Depth (inches): > 10

Wetland Hydrology Present? Yes ✓ No _____

Describe Recorded Data (stream gauge, monitoring well, aerial photos, previous inspections), if available:

Remarks:

Adapted from U.S. Army Corps of Engineers
Atlantic and Gulf Coastal Plain Region- Interim Version

VEGETATION - Use scientific names of plants

Sampling Point: CB B

Tree Stratum (Plot size:_____)	Absolute % Cover	Dominant Species?	Indicator Status
1.			
2.			
3.			
4.			
5.			
6.			
7.			
	0	= Total Cover	
Sapling Stratum (Plot size:_____)			
1.			
2.			
3.			
4.			
5.			
6.			
7.			
	0	= Total Cover	
Shrub Stratum (Plot size:_____)			
1. Hypericum myrtifolium	2	yes	FACW
2. Rhus spp.	2	yes	NL
3.			
4.			
5.			
6.			
7.			
	4	= Total Cover	
Herb Stratum (Plot size:_____			
1. Dichanthelium spp.	80	yes	FAC
2. Fuirena spp.	10	no	OBL
3. Andropogon spp.	5	no	FAC
4. Axonopus spp.	2	no	FACW
5. Xyris spp.	2	no	OBL
6. Rhyncospora spp.	2	no	FACW
7. Hedyotis uniflora	2	no	NL
8. Centella asiatica	2	no	FACW
9. Eupatorium mohrii	2	no	NL
10.			
11.			
12.			
	107	= Total Cover	
Woody Vine Stratum (Plot size:_____)			
1.			
2.			
3.			
4.			
5.			
	0	= Total Cover	

Dominance Test Worksheet:

Number of Dominant Species That Are OBL, FACW, or FAC:	2	(A)
Total Number of Dominant Species Across All Strata:	2	(B)
Percent of Dominant Species That Are OBL, FACW, or FAC:	100.00	(A/B)

Prevalance Index worksheet:

Total % Cover of:		Multiply by:
OBL species	x1=	0
FACW species	x2=	0
FAC species	x3=	0
FACU species	x4=	0
UPL species	x5=	0
Column Totals:	0 (A)	0 (B)

Prevalance Index = B/A =

Hydrophytic Vegetation Indicators:

✓ Dominance Test is 50%

Prevalence Index is ≤3.0[1]

Problematic Hydrophytic Vegetation[1] (Explain)

[1]Indicators of hydric soil and wetland hydrology must be present, unless disturbed or problematic.

Definitions of Vegetation Strata:

Tree- Woody plants, excluding woody vines, approximately 20 ft (6m) or more in height and 3 in. (7.6 cm) or larger in diameter at breast height (DBH).

Sapling- Woody plants, excluding woody vines, approximately 20 ft (6m) or more in height and less than 3 in. (7.6 cm) DBH.

Shrub- Woody plants, excluding woody vines, approximately 3 to 20 ft (1 to 6 m) in height.

Herb- All herbaceous (non-woody)plants, including herbaceous vines, regardless of size. Includes woody plants, except woody vines, less than approximately 3 ft (1 m) in height.

Woody vine- All woody vines, regardless of height.

Hydrophytic Vegetation Present? Yes ✓ No_____

Remarks: (If observed, list morphological adaptations below).
Percent cover estimates based on meandering survey of the broader community.

Adapted from U.S. Army Corps of Engineers
Atlantic and Gulf Coastal Plain Region- Interim Version

County/soil: Citrus- Adamsville

SOIL Sampling Point: CB B

Profile Description: (Describe to the depth needed to document the indicator or confirm the absence of indicators.)

Depth (inches)	Matrix Color (moist)	Matrix %	Redox Features Color (moist)	Redox %	Type[1]	Loc[2]	Texture	Remarks
0-7	10 YR 4/2		10 YR 3/1				few fine roots	dark grayish brown fine sand
7-20	10 YR 6/4		10 YR 6/6; 10 YR 7/2				few medium distinct mottles and streaks	light yellowish brown fine sand
20-39	10 YR 7/4		10 YR 6/6				common medium distinct mottles	very pale brown fine sand
39-80	10 YR 7/3							very pale brown fine sand

[1]Type: C=Concentration, D=Depletion, RM=Reduced Matrix, CS=Covered or Coated Sand Grains. [2]Location: PL=Pore Lining, M=Matrix.

Hydric Soil Indicators:

___Histol (A1)
___Histic Epidon (A2)
___Black Histic (A3)
___Hydrogen Sulfide (A4)
___Stratified Layers (A5)
___Organic Bodies (A6) **(LRR P, T, U)**
___5 cm Mucky Mineral (A7) **(LRR P,T,U)**
✓ Muck Presence (A8) **(LRR U)**
___1 cm Muck (A9) **(LRR P,T)**
___Depleted Below Dark Surface (A11)
___Thick Dark Surface (A12)
___Coast Prairie Redox (A16) **(MLRA 150A)**
___Sandy Mucky Mineral (S1) **(LRR O, S)**
___Sandy Gleyed Matrix (S4)
___Sandy Redox (S5)
___Stripped Matrix (S6)
___Dark Surface (S7) **(LRR P, S, T, U)**

___Polyvalue Below Surface (S8) **(LRR S, T, U)**
___Thin Dark Surface (S9) **(LRR S, T, U)**
___Loamy Mucky Mineral (F1) **(LRR O)**
___Loamy Gleyed Matrix (F2)
___Depleted Matrix (F3)
___Redox Dark Surface (F6)
___Depleted Dark Surface (F7)
___Redox Depressions (F8)
___Marl (F10) **(LRR U)**
___Depleted Orchric (F11) **(MLRA 151)**
___Iron-Manganese Masses (F12) **(LRR O, P,T)**
___Umbric Surface (F13) **(LRR P, T, U)**
___Delta Orchric (F17) **(MLRA 151)**
___Reduced Vertic (F18) **(MLRA 150A, 150B)**
___Piedmont Floodplain Soils (F19) **(MLRA 149A)**
___Anomalous Bright Loamy Soils (F20) **(MLRA 149A, 153C, 153D)**

Indicators for Problematic Hydric Soils [3]:

___1 cm Muck (a9) **(LRR O)**
___2 cm Muck (A10) **(LRR S)**
___Reduced Vertic (F18) **(outside MLRA 150A, B)**
___Piedmont Floodplain Soils (F19) **(LRR P, S, T)**
___Anomalous Bright Loamy Soils (F20) (MLRA 153B)
___Red Parent Material (TF2)
___Very Shallow Dark Surface (TF12) **(LRR T, U)**
___Other (Explain in Remarks)

[3]Indicators of hydrophytic vegetation and wetland hydrology must be present, unless disturbed or problematic.

Restrictive Layer (If observed):
Type: _____
Depth (inches): _____

Hydric Soil Present? Yes ✓ No ___.

Remarks:

Adapted from U.S. Army Corps of Engineers
Atlantic and Gulf Coastal Plain Region- Interim Version

WETLAND DETERMINATION DATA FORM - Atlantic and Gulf Coastal Plain Region

Project/Site: Levy Baseload Transmission Program, CB Line City/County: Citrus Sampling Date: 10/18/09

Applicant/Owner: Progress Energy Florida, Inc. State: FL Sampling Point: CB C

Investigator(s): Tony Davanzo, Colleen Cunningham Section, Township, Range: 4 18S 17E

Landform (hillslope, terrace, etc.): N/A Local relief (concave, convex, none): none Slope (%): _____

Subregion (LRR or MLRA): LRR U Lat: 28.947948 Long: -82.597460 Datum: WGS84

Soil Map Unit Name: Tavares fine sand NWI classification: Palustrine Emergent

Are climatic / hydrologic conditions on the site typical for this time of year? Yes ✓ No _____ (If no, explain in Remarks)

Are Vegetation_____, Soil_____, or Hydrology_____ significantly disturbed? Are circumstances normal? Yes ✓ No_____

Are Vegetation_____, Soil_____, or Hydrology_____ naturally problematic? (If needed, explain any answers in Remarks)

SUMMARY OF FINDINGS - Attach site map showing sampling point locations, transects, important features, etc.

Hydrophytic Vegetation Present?	Yes ✓ No _____	**Is the Sampled Area within a Wetland?** Yes ✓ No _____
Hydric Soil Present?	Yes ✓ No _____	
Wetland Hydrology Present?	Yes ✓ No _____	

Remarks: low spot/drainage (?) between trasmission structures, marginal, flagged along slight topo break and Rubus line, two samll sand access roads included on either end of wetland; within cleared right-of-way

HYDROLOGY

Wetland Hydrology Indicators:

Primary Indicators (minimum of one is required; check all that apply)

____ Surface Water (A1)	____ Water-Stained Leaves (B9)	
____ High Water Table (A2)	____ Aquatic Fauna (B13)	
✓ Saturation (A3)	____ Marl Deposits (B15) **(LRR U)**	
____ Water Marks (B1)	____ Hydrogen Sulfide Odor (C1)	
____ Sediment Deposits (B2)	____ Oxidized Rhizospheres on Living Roots (C3)	
____ Drift Deposits (B3)	____ Presence of Reduced Iron (C4)	
____ Algal Mat or Crust (B4)	____ Recent Iron Reduction in Tilled Soils (C6)	
____ Iron Deposits (B5)	____ Thin Muck Surface (C7)	
____ Inundation Visible on Aerial Imagery (B7)	____ Other (Explain in Remarks)	

Secondary Indicators (minimum of two required)

____ Surface Soil Cracks (B6)
____ Sparsely Vegetated Concave Surface (B8)
____ Drainage Patterns (B10)
____ Moss Trim Lines (B16)
____ Dry-Season Water Table (C2)
____ Crayfish Burrows (C8)
____ Saturation Visible on Aerial Imagery (C9)
____ Geomorphic Position (D2)
____ Shallow Aquitard (D3)
____ FAC Neutral Test (D5)

Field Observations:

Surface Water Present?	Yes ____	No ✓	Depth (inches): _____
Water Table Present?	Yes ✓	No _____	Depth (inches): > 10
Saturation Present? (includes capillary fringe)	Yes ✓	No _____	Depth (inches): > 5

Wetland Hydrology Present? **Yes** ✓ **No** _____

Describe Recorded Data (stream gauge, monitoring well, aerial photos, previous inspections), if available:

Remarks:

Adapted from U.S. Army Corps of Engineers
Atlantic and Gulf Coastal Plain Region- Interim Version

VEGETATION - Use scientific names of plants

Sampling Point: CB C

Tree Stratum (Plot size:_____)	Absolute % Cover	Dominant Species?	Indicator Status
1.			
2.			
3.			
4.			
5.			
6.			
7.			
	0	= Total Cover	
Sapling Stratum (Plot size:_____)			
1. Salix caroliniana	2	yes	OBL
2.			
3.			
4.			
5.			
6.			
7.			
	2	= Total Cover	
Shrub Stratum (Plot size:_____)			
1. Cephalanthus occidentalis	2	yes	OBL
2.			
3.			
4.			
5.			
6.			
7.			
	2	= Total Cover	
Herb Stratum (Plot size:_____			
1. Panicum hemitomon	50	yes	OBL
2. Andropogon virginicus	20	yes	FAC
3. Fuirena spp.	20	yes	OBL
4. Panicum verucossum	2	no	FACW
5. Rhyncospora spp.	2	no	FACW
6. Andropogon glomeratus	2	no	FACW
7. Euthamia caroliniana	2	no	NL
8. Polygonum spp.	2	no	FAC
9. Ludwigia suffruticosa	2	no	OBL
10. Ludwigia maritima	2	no	FACW
11. Centella asiatica	2	no	FACW
12. Eupatorium capillifolium	2	no	FACU
	108	= Total Cover	
Woody Vine Stratum (Plot size:_____)			
1. Rubus spp.	2	yes	FACU
2.			
3.			
4.			
5.			
	2	= Total Cover	

Dominance Test Worksheet:

Number of Dominant Species That Are OBL, FACW, or FAC:	5	(A)
Total Number of Dominant Species Across All Strata:	6	(B)
Percent of Dominant Species That Are OBL, FACW, or FAC:	83.33	(A/B)

Prevalance Index worksheet:

Total % Cover of:		Multiply by:
OBL species	x1=	0
FACW species	x2=	0
FAC species	x3=	0
FACU species	x4=	0
UPL species	x5=	0
Column Totals:	0 (A)	0 (B)

Prevalance Index = B/A =

Hydrophytic Vegetation Indicators:

✓ Dominance Test is 50%

Prevalence Index is ≤3.0[1]

Problematic Hydrophytic Vegetation[1] (Explain)

[1]Indicators of hydric soil and wetland hydrology must be present, unless disturbed or problematic.

Definitions of Vegetation Strata:

Tree- Woody plants, excluding woody vines, approximately 20 ft (6m) or more in height and 3 in. (7.6 cm) or larger in diameter at breast height (DBH).

Sapling- Woody plants, excluding woody vines, approximately 20 ft (6m) or more in height and less than 3 in. (7.6 cm) DBH.

Shrub- Woody plants, excluding woody vines, approximately 3 to 20 ft (1 to 6 m) in height.

Herb- All herbaceous (non-woody)plants, including herbaceous vines, regardless of size. Includes woody plants, except woody vines, less than approximately 3 ft (1 m) in height.

Woody vine- All woody vines, regardless of height.

Hydrophytic Vegetation Present? Yes ✓ No_____

Remarks: (If observed, list morphological adaptations below).
Percent cover estimates based on meandering survey of the broader community.

Adapted from U.S. Army Corps of Engineers
Atlantic and Gulf Coastal Plain Region- Interim Version

County/soil: Citrus- Tavares

SOIL Sampling Point: CB C

Profile Description: (Describe to the depth needed to document the indicator or confirm the absence of indicators.)

Depth (inches)	Matrix Color (moist)	Matrix %	Redox Features Color (moist)	Redox %	Type[1]	Loc[2]	Texture	Remarks
0-3	10 YR 4/2							dark grayish brown fine sand
3-41	10 YR 7/4							very pale brown fine sand
41-63	10 YR 7/4							very pale brown fine sand
63-80	10 YR 8/1		10 YR 7/4				few medium distinct mottles	white fine sand

[1]Type: C=Concentration, D=Depletion, RM=Reduced Matrix, CS=Covered or Coated Sand Grains. [2]Location: PL=Pore Lining, M=Matrix.

Hydric Soil Indicators:

- ___Histol (A1)
- ___Histic Epidon (A2)
- ___Black Histic (A3)
- ___Hydrogen Sulfide (A4)
- ___Stratified Layers (A5)
- ___Organic Bodies (A6) **(LRR P, T, U)**
- ___5 cm Mucky Mineral (A7) **(LRR P,T,U)**
- ✓ Muck Presence (A8) **(LRR U)**
- ___1 cm Muck (A9) **(LRR P,T)**
- ___Depleted Below Dark Surface (A11)
- ___Thick Dark Surface (A12)
- ___Coast Prairie Redox (A16) **(MLRA 150A)**
- ___Sandy Mucky Mineral (S1) **(LRR O, S)**
- ___Sandy Gleyed Matrix (S4)
- ___Sandy Redox (S5)
- ___Stripped Matrix (S6)
- ___Dark Surface (S7) **(LRR P, S, T, U)**
- ___Polyvalue Below Surface (S8) **(LRR S, T, U)**
- ___Thin Dark Surface (S9) **(LRR S, T, U)**
- ___Loamy Mucky Mineral (F1) **(LRR O)**
- ___Loamy Gleyed Matrix (F2)
- ___Depleted Matrix (F3)
- ___Redox Dark Surface (F6)
- ___Depleted Dark Surface (F7)
- ___Redox Depressions (F8)
- ___Marl (F10) **(LRR U)**
- ___Depleted Orchric (F11) **(MLRA 151)**
- ___Iron-Manganese Masses (F12) **(LRR O, P,T)**
- ___Umbric Surface (F13) **(LRR P, T, U)**
- ___Delta Orchric (F17) **(MLRA 151)**
- ___Reduced Vertic (F18) **(MLRA 150A, 150B)**
- ___Piedmont Floodplain Soils (F19) **(MLRA 149A)**
- ___Anomalous Bright Loamy Soils (F20) **(MLRA 149A, 153C, 153D)**

Indicators for Problematic Hydric Soils [3]:

- ___1 cm Muck (a9) **(LRR O)**
- ___2 cm Muck (A10) **(LRR S)**
- ___Reduced Vertic (F18) **(outside MLRA 150A, B)**
- ___Piedmont Floodplain Soils (F19) **(LRR P, S, T)**
- ___Anomalous Bright Loamy Soils (F20) (MLRA 153B)
- ___Red Parent Material (TF2)
- ___Very Shallow Dark Surface (TF12) **(LRR T, U)**
- ___Other (Explain in Remarks)

[3]Indicators of hydrophytic vegetation and wetland hydrology must be present, unless disturbed or problematic.

Restrictive Layer (If observed):

Type: _____

Depth (inches): _____

Hydric Soil Present? Yes ✓ No ___

Remarks:

Adapted from U.S. Army Corps of Engineers
Atlantic and Gulf Coastal Plain Region- Interim Version

WETLAND DETERMINATION DATA FORM - Atlantic and Gulf Coastal Plain Region

Project/Site: Levy Baseload Transmission Program, CB Line City/County: Citrus Sampling Date: 10/18/09

Applicant/Owner: Progress Energy Florida, Inc. State: FL Sampling Point: CB D

Investigator(s): Tony Davanzo, Colleen Cunningham Section, Township, Range: 4 18S 17E

Landform (hillslope, terrace, etc.): N/A Local relief (concave, convex, none): none Slope (%): _____

Subregion (LRR or MLRA): LRR U Lat: 28.947339 Long: -82.596375 Datum: WGS84

Soil Map Unit Name: Pompano fine sand NWI classification: Palustrine Emergent

Are climatic / hydrologic conditions on the site typical for this time of year? Yes ✓ No _____ (If no, explain in Remarks)

Are Vegetation_____, Soil_____, or Hydrology_____ significantly disturbed? Are circumstances normal? Yes ✓ No_____

Are Vegetation_____, Soil_____, or Hydrology_____ naturally problematic? (If needed, explain any answers in Remarks)

SUMMARY OF FINDINGS - Attach site map showing sampling point locations, transects, important features, etc.

Hydrophytic Vegetation Present?	Yes ✓ No _____	**Is the Sampled Area within a Wetland?** Yes ✓ No _____
Hydric Soil Present?	Yes ✓ No _____	
Wetland Hydrology Present?	Yes ✓ No _____	

Remarks: Seepage slope, drainage wetland, still very marginal even though buttonbush (C. occidentalis) present

HYDROLOGY

Wetland Hydrology Indicators:

Primary Indicators (minimum of one is required; check all that apply)

_____ Surface Water (A1)	_____ Water-Stained Leaves (B9)	
_____ High Water Table (A2)	_____ Aquatic Fauna (B13)	
✓ Saturation (A3)	_____ Marl Deposits (B15) **(LRR U)**	
_____ Water Marks (B1)	_____ Hydrogen Sulfide Odor (C1)	
_____ Sediment Deposits (B2)	_____ Oxidized Rhizospheres on Living Roots (C3)	
_____ Drift Deposits (B3)	_____ Presence of Reduced Iron (C4)	
_____ Algal Mat or Crust (B4)	_____ Recent Iron Reduction in Tilled Soils (C6)	
_____ Iron Deposits (B5)	_____ Thin Muck Surface (C7)	
_____ Inundation Visible on Aerial Imagery (B7)	_____ Other (Explain in Remarks)	

Secondary Indicators (minimum of two required)

_____ Surface Soil Cracks (B6)
_____ Sparsely Vegetated Concave Surface (B8)
_____ Drainage Patterns (B10)
_____ Moss Trim Lines (B16)
_____ Dry-Season Water Table (C2)
_____ Crayfish Burrows (C8)
_____ Saturation Visible on Aerial Imagery (C9)
_____ Geomorphic Position (D2)
_____ Shallow Aquitard (D3)
_____ FAC Neutral Test (D5)

Field Observations:

Surface Water Present?	Yes _____	No ✓	Depth (inches): _____
Water Table Present?	Yes ✓	No _____	Depth (inches): > 10
Saturation Present? (includes capillary fringe)	Yes ✓	No _____	Depth (inches): > 10

Wetland Hydrology Present? Yes ✓ No _____

Describe Recorded Data (stream gauge, monitoring well, aerial photos, previous inspections), if available:

Remarks:

Adapted from U.S. Army Corps of Engineers
Atlantic and Gulf Coastal Plain Region- Interim Version

VEGETATION - Use scientific names of plants

Sampling Point: CB D

Tree Stratum (Plot size:_____)	Absolute % Cover	Dominant Species?	Indicator Status
1.			
2.			
3.			
4.			
5.			
6.			
7.			
	0	= Total Cover	
Sapling Stratum (Plot size:_____)			
1.			
2.			
3.			
4.			
5.			
6.			
7.			
	0	= Total Cover	
Shrub Stratum (Plot size:_____)			
1. Cephalanthus occidentalis	10	yes	OBL
2.			
3.			
4.			
5.			
6.			
7.			
	10	= Total Cover	
Herb Stratum (Plot size:_____			
1. Andropogon virginicus	20	yes	FAC
2. Fuirena spp.	20	yes	OBL
3. Solidago canadensis	10	no	FACU
4. Scleria spp.	5	no	FACW
5. Carex albolutescens	5	no	FAC
6. Polygonum spp.	2	no	FAC
7. Rhyncospora spp.	2	no	FACW
8. Hedyotis uniflora	2	no	NL
9. Hydrocotyle umbellata	2	no	OBL
10. Erechtites hieracifolia	2	no	FAC
11.			
12.			
	70	= Total Cover	
Woody Vine Stratum (Plot size:_____)			
1. Rubus spp.	15	yes	FACU
2.			
3.			
4.			
5.			
	15	= Total Cover	

Dominance Test Worksheet:

Number of Dominant Species That Are OBL, FACW, or FAC:	3	(A)
Total Number of Dominant Species Across All Strata:	4	(B)
Percent of Dominant Species That Are OBL, FACW, or FAC:	75.00	(A/B)

Prevalance Index worksheet:

Total % Cover of:		Multiply by:
OBL species	x1=	0
FACW species	x2=	0
FAC species	x3=	0
FACU species	x4=	0
UPL species	x5=	0
Column Totals:	0 (A)	0 (B)

Prevalance Index = B/A =

Hydrophytic Vegetation Indicators:

✓ Dominance Test is 50%

___ Prevalence Index is ≤3.0[1]

___ Problematic Hydrophytic Vegetation[1] (Explain)

[1]Indicators of hydric soil and wetland hydrology must be present, unless disturbed or problematic.

Definitions of Vegetation Strata:

Tree- Woody plants, excluding woody vines, approximately 20 ft (6m) or more in height and 3 in. (7.6 cm) or larger in diameter at breast height (DBH).

Sapling- Woody plants, excluding woody vines, approximately 20 ft (6m) or more in height and less than 3 in. (7.6 cm) DBH.

Shrub- Woody plants, excluding woody vines, approximately 3 to 20 ft (1 to 6 m) in height.

Herb- All herbaceous (non-woody)plants, including herbaceous vines, regardless of size. Includes woody plants, except woody vines, less than approximately 3 ft (1 m) in height.

Woody vine- All woody vines, regardless of height.

Hydrophytic Vegetation Present? Yes ✓ No ___

Remarks: (If observed, list morphological adaptations below).
Percent cover estimates based on meandering survey of the broader community.

Adapted from U.S. Army Corps of Engineers
Atlantic and Gulf Coastal Plain Region- Interim Version

County/soil: Citrus- Pompano

SOIL Sampling Point: CB D

Profile Description: (Describe to the depth needed to document the indicator or confirm the absence of indicators.)

Depth (inches)	Matrix Color (moist)	Matrix %	Redox Features Color (moist)	Redox %	Type[1]	Loc[2]	Texture	Remarks
0-5	10 YR 2/1							black fine sand
5-15	10 YR 6/2		10 YR 4/2				common medium distinct stains	light brownish gray fine sand
15-45	10 YR 7/1							light gray fine sand
45-80	10 YR 7/1							light gray fine sand

[1]Type: C=Concentration, D=Depletion, RM=Reduced Matrix, CS=Covered or Coated Sand Grains. [2]Location: PL=Pore Lining, M=Matrix.

Hydric Soil Indicators:

- ___Histol (A1)
- ___Histic Epidon (A2)
- ___Black Histic (A3)
- ___Hydrogen Sulfide (A4)
- ___Stratified Layers (A5)
- ___Organic Bodies (A6) **(LRR P, T, U)**
- ___5 cm Mucky Mineral (A7) **(LRR P,T,U)**
- ✓ Muck Presence (A8) **(LRR U)**
- ___1 cm Muck (A9) **(LRR P,T)**
- ___Depleted Below Dark Surface (A11)
- ___Thick Dark Surface (A12)
- ___Coast Prairie Redox (A16) **(MLRA 150A)**
- ___Sandy Mucky Mineral (S1) **(LRR O, S)**
- ___Sandy Gleyed Matrix (S4)
- ___Sandy Redox (S5)
- ___Stripped Matrix (S6)
- ___Dark Surface (S7) **(LRR P, S, T, U)**
- ___Polyvalue Below Surface (S8) **(LRR S, T, U)**
- ___Thin Dark Surface (S9) **(LRR S, T, U)**
- ___Loamy Mucky Mineral (F1) **(LRR O)**
- ___Loamy Gleyed Matrix (F2)
- ___Depleted Matrix (F3)
- ___Redox Dark Surface (F6)
- ___Depleted Dark Surface (F7)
- ___Redox Depressions (F8)
- ___Marl (F10) **(LRR U)**
- ___Depleted Orchric (F11) **(MLRA 151)**
- ___Iron-Manganese Masses (F12) **(LRR O, P, T)**
- ___Umbric Surface (F13) **(LRR P, T, U)**
- ___Delta Orchric (F17) **(MLRA 151)**
- ___Reduced Vertic (F18) **(MLRA 150A, 150B)**
- ___Piedmont Floodplain Soils (F19) **(MLRA 149A)**
- ___Anomalous Bright Loamy Soils (F20) **(MLRA 149A, 153C, 153D)**

Indicators for Problematic Hydric Soils [3]:

- ___1 cm Muck (a9) **(LRR O)**
- ___2 cm Muck (A10) **(LRR S)**
- ___Reduced Vertic (F18) **(outside MLRA 150A, B)**
- ___Piedmont Floodplain Soils (F19) **(LRR P, S, T)**
- ___Anomalous Bright Loamy Soils (F20) (MLRA 153B)
- ___Red Parent Material (TF2)
- ___Very Shallow Dark Surface (TF12) **(LRR T, U)**
- ___Other (Explain in Remarks)

[3]Indicators of hydrophytic vegetation and wetland hydrology must be present, unless disturbed or problematic.

Restrictive Layer (If observed):

Type: _____

Depth (inches): _____

Hydric Soil Present? **Yes** ✓ **No** ___.

Remarks:

Adapted from U.S. Army Corps of Engineers
Atlantic and Gulf Coastal Plain Region- Interim Version

WETLAND DETERMINATION DATA FORM - Atlantic and Gulf Coastal Plain Region

Project/Site: Levy Baseload Transmission Program, CB Line City/County: Citrus Sampling Date: 10/18/09

Applicant/Owner: Progress Energy Florida, Inc. State: FL Sampling Point: CB E

Investigator(s): Tony Davanzo, Colleen Cunningham Section, Township, Range: 4 18S 17E

Landform (hillslope, terrace, etc.): N/A Local relief (concave, convex, none): none Slope (%): _____

Subregion (LRR or MLRA): LRR U Lat: 28.942815 Long: -82.591594 Datum: WGS84

Soil Map Unit Name: Adamsville fine sand NWI classification: Palustrine Emergent

Are climatic / hydrologic conditions on the site typical for this time of year? Yes ✓ No _____ (If no, explain in Remarks)

Are Vegetation_____, Soil_____, or Hydrology_____ significantly disturbed? Are circumstances normal? Yes ✓ No _____

Are Vegetation_____, Soil_____, or Hydrology_____ naturally problematic? (If needed, explain any answers in Remarks)

SUMMARY OF FINDINGS - Attach site map showing sampling point locations, transects, important features, etc.

Hydrophytic Vegetation Present?	Yes ✓ No _____	**Is the Sampled Area within a Wetland?** Yes ✓ No _____
Hydric Soil Present?	Yes ✓ No _____	
Wetland Hydrology Present?	Yes ✓ No _____	

Remarks: Isolated fresh-water marsh within transmission lines

HYDROLOGY

Wetland Hydrology Indicators:

Primary Indicators (minimum of one is required; check all that apply)

_____ Surface Water (A1)	_____ Water-Stained Leaves (B9)	
_____ High Water Table (A2)	_____ Aquatic Fauna (B13)	
✓ Saturation (A3)	_____ Marl Deposits (B15) **(LRR U)**	
_____ Water Marks (B1)	_____ Hydrogen Sulfide Odor (C1)	
_____ Sediment Deposits (B2)	_____ Oxidized Rhizospheres on Living Roots (C3)	
_____ Drift Deposits (B3)	_____ Presence of Reduced Iron (C4)	
_____ Algal Mat or Crust (B4)	_____ Recent Iron Reduction in Tilled Soils (C6)	
_____ Iron Deposits (B5)	_____ Thin Muck Surface (C7)	
_____ Inundation Visible on Aerial Imagery (B7)	_____ Other (Explain in Remarks)	

Secondary Indicators (minimum of two required)

_____ Surface Soil Cracks (B6)
_____ Sparsely Vegetated Concave Surface (B8)
_____ Drainage Patterns (B10)
_____ Moss Trim Lines (B16)
_____ Dry-Season Water Table (C2)
_____ Crayfish Burrows (C8)
_____ Saturation Visible on Aerial Imagery (C9)
_____ Geomorphic Position (D2)
_____ Shallow Aquitard (D3)
_____ FAC Neutral Test (D5)

Field Observations:

Surface Water Present?	Yes _____	No ✓	Depth (inches): _____
Water Table Present?	Yes ✓	No _____	Depth (inches): < 10
Saturation Present? (includes capillary fringe)	Yes ✓	No _____	Depth (inches): 2

Wetland Hydrology Present? Yes ✓ No _____

Describe Recorded Data (stream gauge, monitoring well, aerial photos, previous inspections), if available:

Remarks:

Adapted from U.S. Army Corps of Engineers
Atlantic and Gulf Coastal Plain Region- Interim Version

VEGETATION - Use scientific names of plants

Sampling Point: CB E

Tree Stratum (Plot size:_____)	Absolute % Cover	Dominant Species?	Indicator Status
1.			
2.			
3.			
4.			
5.			
6.			
7.			
	0	= Total Cover	
Sapling Stratum (Plot size:_____)			
1.			
2.			
3.			
4.			
5.			
6.			
7.			
	0	= Total Cover	
Shrub Stratum (Plot size:_____)			
1. Cephalanthus occidentalis	2	yes	OBL
2. Hypericum myrtifolium	2	yes	FACW
3. Hypericum tetrapelatum	2	yes	FACW
4.			
5.			
6.			
7.			
	6	= Total Cover	
Herb Stratum (Plot size:_____			
1. Andropogon virginicus	25	yes	FAC
2. Panicum repens	25	yes	FACW
3. Panicum hemitomon	20	yes	OBL
4. Lachnanthes caroliniana	10	no	OBL
5. Eupatorium capillifolium	5	no	FACU
6. Iva microcephala	5	no	FACW
7. Cyperus spp.	2	no	FACW
8. Ludwigia spp.	2	no	OBL
9. Rhyncospora spp.	2	no	FACW
10. Erechtites hieracifolia	2	no	FAC
11. Aster spp.	2	no	FAC
12. Xyris spp.	2	no	OBL
	102	= Total Cover	
Woody Vine Stratum (Plot size:_____)			
1. Cuscuta spp.	2	yes	NL
2.			
3.			
4.			
5.			
	2	= Total Cover	

Dominance Test Worksheet:

Number of Dominant Species That Are OBL, FACW, or FAC:	6	(A)
Total Number of Dominant Species Across All Strata:	6	(B)
Percent of Dominant Species That Are OBL, FACW, or FAC:	100.00	(A/B)

Prevalance Index worksheet:

Total % Cover of:		Multiply by:
OBL species	x1=	0
FACW species	x2=	0
FAC species	x3=	0
FACU species	x4=	0
UPL species	x5=	0
Column Totals:	0 (A)	0 (B)

Prevalance Index = B/A =

Hydrophytic Vegetation Indicators:

✓ Dominance Test is 50%

___ Prevalence Index is ≤3.0[1]

___ Problematic Hydrophytic Vegetation[1] (Explain)

[1]Indicators of hydric soil and wetland hydrology must be present, unless disturbed or problematic.

Definitions of Vegetation Strata:

Tree- Woody plants, excluding woody vines, approximately 20 ft (6m) or more in height and 3 in. (7.6 cm) or larger in diameter at breast height (DBH).

Sapling- Woody plants, excluding woody vines, approximately 20 ft (6m) or more in height and less than 3 in. (7.6 cm) DBH.

Shrub- Woody plants, excluding woody vines, approximately 3 to 20 ft (1 to 6 m) in height.

Herb- All herbaceous (non-woody)plants, including herbaceous vines, regardless of size. Includes woody plants, except woody vines, less than approximately 3 ft (1 m) in height.

Woody vine- All woody vines, regardless of height.

Hydrophytic Vegetation Present? Yes ✓ No____

Remarks: (If observed, list morphological adaptations below).
Percent cover estimates based on meandering survey of the broader community.

Adapted from U.S. Army Corps of Engineers
Atlantic and Gulf Coastal Plain Region- Interim Version

County/soil: Citrus- Adamsville

SOIL Sampling Point: CB E

Profile Description: (Describe to the depth needed to document the indicator or confirm the absence of indicators.)

Depth (inches)	Matrix Color (moist)	Matrix %	Redox Features Color (moist)	Redox %	Type[1]	Loc[2]	Texture	Remarks
0-7	10 YR 4/2		10 YR 3/1				few fine roots	dark grayish brown fine sand
7-20	10 YR 6/4		10 YR 6/6; 10 YR 7/2				few medium distinct mottles and streaks	light yellowish brown fine sand
20-39	10 YR 7/4		10 YR 6/6				common medium distinct mottles	very pale brown fine sand
39-80	10 YR 7/3							very pale brown fine sand

[1]Type: C=Concentration, D=Depletion, RM=Reduced Matrix, CS=Covered or Coated Sand Grains. [2]Location: PL=Pore Lining, M=Matrix.

Hydric Soil Indicators:

- ___Histol (A1)
- ___Histic Epidon (A2)
- ___Black Histic (A3)
- ___Hydrogen Sulfide (A4)
- ___Stratified Layers (A5)
- ___Organic Bodies (A6) **(LRR P, T, U)**
- ___5 cm Mucky Mineral (A7) **(LRR P,T,U)**
- ✓ Muck Presence (A8) **(LRR U)**
- ___1 cm Muck (A9) **(LRR P,T)**
- ___Depleted Below Dark Surface (A11)
- ___Thick Dark Surface (A12)
- ___Coast Prairie Redox (A16) **(MLRA 150A)**
- ___Sandy Mucky Mineral (S1) **(LRR O, S)**
- ___Sandy Gleyed Matrix (S4)
- ___Sandy Redox (S5)
- ___Stripped Matrix (S6)
- ___Dark Surface (S7) **(LRR P, S, T, U)**
- ___Polyvalue Below Surface (S8) **(LRR S, T, U)**
- ___Thin Dark Surface (S9) **(LRR S, T, U)**
- ___Loamy Mucky Mineral (F1) **(LRR O)**
- ___Loamy Gleyed Matrix (F2)
- ___Depleted Matrix (F3)
- ___Redox Dark Surface (F6)
- ___Depleted Dark Surface (F7)
- ___Redox Depressions (F8)
- ___Marl (F10) **(LRR U)**
- ___Depleted Orchric (F11) **(MLRA 151)**
- ___Iron-Manganese Masses (F12) **(LRR O, P,T)**
- ___Umbric Surface (F13) **(LRR P, T, U)**
- ___Delta Orchric (F17) **(MLRA 151)**
- ___Reduced Vertic (F18) **(MLRA 150A, 150B)**
- ___Piedmont Floodplain Soils (F19) **(MLRA 149A)**
- ___Anomalous Bright Loamy Soils (F20) **(MLRA 149A, 153C, 153D)**

Indicators for Problematic Hydric Soils [3]:

- ___1 cm Muck (a9) **(LRR O)**
- ___2 cm Muck (A10) **(LRR S)**
- ___Reduced Vertic (F18) **(outside MLRA 150A, B)**
- ___Piedmont Floodplain Soils (F19) **(LRR P, S, T)**
- ___Anomalous Bright Loamy Soils (F20) (MLRA 153B)
- ___Red Parent Material (TF2)
- ___Very Shallow Dark Surface (TF12) **(LRR T, U)**
- ___Other (Explain in Remarks)

[3]Indicators of hydrophytic vegetation and wetland hydrology must be present, unless disturbed or problematic.

Restrictive Layer (If observed):

Type: _____

Depth (inches): _____

Hydric Soil Present? **Yes** ✓ **No** ___.

Remarks:

Adapted from U.S. Army Corps of Engineers
Atlantic and Gulf Coastal Plain Region- Interim Version

WETLAND DETERMINATION DATA FORM - Atlantic and Gulf Coastal Plain Region

Project/Site: Levy Baseload Transmission Program, CB Line City/County: Citrus Sampling Date: 10/22/09

Applicant/Owner: Progress Energy Florida, Inc. State: FL Sampling Point: CB F

Investigator(s): Tony Davanzo, Colleen Cunningham Section, Township, Range: 4 18S 17E

Landform (hillslope, terrace, etc.): N/A Local relief (concave, convex, none): none Slope (%): _____

Subregion (LRR or MLRA): LRR U Lat: 28.948978 Long: -82.598035 Datum: WGS84

Soil Map Unit Name: Adamsville fine sand NWI classification: Palustrine Emergent

Are climatic / hydrologic conditions on the site typical for this time of year? Yes ✓ No _____ (If no, explain in Remarks)

Are Vegetation_____, Soil_____, or Hydrology_____ significantly disturbed? Are circumstances normal? Yes ✓ No_____

Are Vegetation_____, Soil_____, or Hydrology_____ naturally problematic? (If needed, explain any answers in Remarks)

SUMMARY OF FINDINGS - Attach site map showing sampling point locations, transects, important features, etc.

Hydrophytic Vegetation Present?	Yes ✓ No _____	**Is the Sampled Area within a Wetland?** Yes ✓ No _____
Hydric Soil Present?	Yes ✓ No _____	
Wetland Hydrology Present?	Yes ✓ No _____	

Remarks: Marginal hydrology; some encroachment of fac. And upland species in maintained t-line right-of-way

HYDROLOGY

Wetland Hydrology Indicators:

Primary Indicators (minimum of one is required; check all that apply)

____ Surface Water (A1)	____ Water-Stained Leaves (B9)	
____ High Water Table (A2)	____ Aquatic Fauna (B13)	
✓ Saturation (A3)	____ Marl Deposits (B15) **(LRR U)**	
____ Water Marks (B1)	____ Hydrogen Sulfide Odor (C1)	
____ Sediment Deposits (B2)	____ Oxidized Rhizospheres on Living Roots (C3)	
____ Drift Deposits (B3)	____ Presence of Reduced Iron (C4)	
____ Algal Mat or Crust (B4)	____ Recent Iron Reduction in Tilled Soils (C6)	
____ Iron Deposits (B5)	____ Thin Muck Surface (C7)	
____ Inundation Visible on Aerial Imagery (B7)	____ Other (Explain in Remarks)	

Secondary Indicators (minimum of two required)

____ Surface Soil Cracks (B6)
____ Sparsely Vegetated Concave Surface (B8)
____ Drainage Patterns (B10)
____ Moss Trim Lines (B16)
____ Dry-Season Water Table (C2)
____ Crayfish Burrows (C8)
____ Saturation Visible on Aerial Imagery (C9)
____ Geomorphic Position (D2)
____ Shallow Aquitard (D3)
____ FAC Neutral Test (D5)

Field Observations:

Surface Water Present?	Yes ____	No ✓	Depth (inches): _____
Water Table Present?	Yes ✓	No _____	Depth (inches): >10
Saturation Present? (includes capillary fringe)	Yes ✓	No _____	Depth (inches): >2

Wetland Hydrology Present? Yes ✓ No _____

Describe Recorded Data (stream gauge, monitoring well, aerial photos, previous inspections), if available:

Remarks:

Adapted from U.S. Army Corps of Engineers
Atlantic and Gulf Coastal Plain Region- Interim Version

VEGETATION - Use scientific names of plants

Sampling Point: CB F

Tree Stratum (Plot size:_____)	Absolute % Cover	Dominant Species?	Indicator Status
1.			
2.			
3.			
4.			
5.			
6.			
7.			
	0	= Total Cover	
Sapling Stratum (Plot size:_____)			
1.			
2.			
3.			
4.			
5.			
6.			
7.			
	0	= Total Cover	
Shrub Stratum (Plot size:_____)			
1. Cephalanthus occidentalis	2	yes	OBL
2.			
3.			
4.			
5.			
6.			
7.			
	2	= Total Cover	
Herb Stratum (Plot size:_____			
1. Panicum hemitomon	40	yes	OBL
2. Andropogon virginicus	40	yes	FAC
3. Rhyncospora spp.	10	no	FACW
4. Eupatorium capillifolium	2	no	FACU
5. Polygonum spp.	2	no	FAC
6. Cyperus spp.	2	no	FACW
7. Panicum spp.	2	no	FACW
8. Fuirena spp.	2	no	OBL
9. Euthamia caroliniana	2	no	NL
10. Dichanthelium spp.	2	no	FAC
11. Axonopus spp.	2	no	FACW
12. Ludwigia suffruticosa	2	no	OBL
	108	= Total Cover	
Woody Vine Stratum (Plot size:_____)			
1. Rubus spp.	2	yes	FACU
2.			
3.			
4.			
5.			
	2	= Total Cover	

Dominance Test Worksheet:

Number of Dominant Species That Are OBL, FACW, or FAC:	3	(A)
Total Number of Dominant Species Across All Strata:	4	(B)
Percent of Dominant Species That Are OBL, FACW, or FAC:	75.00	(A/B)

Prevalance Index worksheet:

Total % Cover of:		Multiply by:
OBL species	x1=	0
FACW species	x2=	0
FAC species	x3=	0
FACU species	x4=	0
UPL species	x5=	0
Column Totals:	0 (A)	0 (B)

Prevalance Index = B/A =

Hydrophytic Vegetation Indicators:

✓ Dominance Test is 50%

___ Prevalence Index is ≤3.0[1]

___ Problematic Hydrophytic Vegetation[1] (Explain)

[1]Indicators of hydric soil and wetland hydrology must be present, unless disturbed or problematic.

Definitions of Vegetation Strata:

Tree- Woody plants, excluding woody vines, approximately 20 ft (6m) or more in height and 3 in. (7.6 cm) or larger in diameter at breast height (DBH).

Sapling- Woody plants, excluding woody vines, approximately 20 ft (6m) or more in height and less than 3 in. (7.6 cm) DBH.

Shrub- Woody plants, excluding woody vines, approximately 3 to 20 ft (1 to 6 m) in height.

Herb- All herbaceous (non-woody)plants, including herbaceous vines, regardless of size. Includes woody plants, except woody vines, less than approximately 3 ft (1 m) in height.

Woody vine- All woody vines, regardless of height.

Hydrophytic Vegetation Present? Yes ✓ No_____

Remarks: (If observed, list morphological adaptations below).
Percent cover estimates based on meandering survey of the broader community.

Adapted from U.S. Army Corps of Engineers
Atlantic and Gulf Coastal Plain Region- Interim Version

County/soil: Citrus- Adamsville

SOIL

Sampling Point: CB F

Profile Description: (Describe to the depth needed to document the indicator or confirm the absence of indicators.)

Depth (inches)	Matrix Color (moist)	Matrix %	Redox Features Color (moist)	Redox %	Type[1]	Loc[2]	Texture	Remarks
0-7	10 YR 4/2		10 YR 3/1				few fine roots	dark grayish brown fine sand
7-20	10 YR 6/4		10 YR 6/6; 10 YR 7/2				few medium distinct mottles and streaks	light yellowish brown fine sand
20-39	10 YR 7/4		10 YR 6/6				common medium distinct mottles	very pale brown fine sand
39-80	10 YR 7/3							very pale brown fine sand

[1]Type: C=Concentration, D=Depletion, RM=Reduced Matrix, CS=Covered or Coated Sand Grains. [2]Location: PL=Pore Lining, M=Matrix.

Hydric Soil Indicators:

- ___Histol (A1)
- ___Histic Epidon (A2)
- ___Black Histic (A3)
- ___Hydrogen Sulfide (A4)
- ___Stratified Layers (A5)
- ___Organic Bodies (A6) **(LRR P, T, U)**
- ___5 cm Mucky Mineral (A7) **(LRR P,T,U)**
- ✓ Muck Presence (A8) **(LRR U)**
- ___1 cm Muck (A9) **(LRR P,T)**
- ___Depleted Below Dark Surface (A11)
- ___Thick Dark Surface (A12)
- ___Coast Prairie Redox (A16) **(MLRA 150A)**
- ___Sandy Mucky Mineral (S1) **(LRR O, S)**
- ___Sandy Gleyed Matrix (S4)
- ___Sandy Redox (S5)
- ___Stripped Matrix (S6)
- ___Dark Surface (S7) **(LRR P, S, T, U)**
- ___Polyvalue Below Surface (S8) **(LRR S, T, U)**
- ___Thin Dark Surface (S9) **(LRR S, T, U)**
- ___Loamy Mucky Mineral (F1) **(LRR O)**
- ___Loamy Gleyed Matrix (F2)
- ___Depleted Matrix (F3)
- ___Redox Dark Surface (F6)
- ___Depleted Dark Surface (F7)
- ___Redox Depressions (F8)
- ___Marl (F10) **(LRR U)**
- ___Depleted Orchric (F11) **(MLRA 151)**
- ___Iron-Manganese Masses (F12) **(LRR O, P,T)**
- ___Umbric Surface (F13) **(LRR P, T, U)**
- ___Delta Orchric (F17) **(MLRA 151)**
- ___Reduced Vertic (F18) **(MLRA 150A, 150B)**
- ___Piedmont Floodplain Soils (F19) **(MLRA 149A)**
- ___Anomalous Bright Loamy Soils (F20) **(MLRA 149A, 153C, 153D)**

Indicators for Problematic Hydric Soils [3]:

- ___1 cm Muck (a9) **(LRR O)**
- ___2 cm Muck (A10) **(LRR S)**
- ___Reduced Vertic (F18) **(outside MLRA 150A, B)**
- ___Piedmont Floodplain Soils (F19) **(LRR P, S, T)**
- ___Anomalous Bright Loamy Soils (F20) (MLRA 153B)
- ___Red Parent Material (TF2)
- ___Very Shallow Dark Surface (TF12) **(LRR T, U)**
- ___Other (Explain in Remarks)

[3]Indicators of hydrophytic vegetation and wetland hydrology must be present, unless disturbed or problematic.

Restrictive Layer (If observed):

Type: _____

Depth (inches): _____

Hydric Soil Present? Yes ✓ No ___.

Remarks:

Adapted from U.S. Army Corps of Engineers
Atlantic and Gulf Coastal Plain Region- Interim Version

WETLAND DETERMINATION DATA FORM - Atlantic and Gulf Coastal Plain Region

Project/Site: Levy Baseload Transmission Program, CB Line City/County: Citrus Sampling Date: 10/22/09

Applicant/Owner: Progress Energy Florida, Inc. State: FL Sampling Point: CB G

Investigator(s): Tony Davanzo, Colleen Cunningham Section, Township, Range: 4 18S 17E

Landform (hillslope, terrace, etc.): N/A Local relief (concave, convex, none): none Slope (%): _____

Subregion (LRR or MLRA): LRR U Lat: 28.945922 Long: -82.594781 Datum: WGS84

Soil Map Unit Name: Tavares fine sand NWI classification: Palustrine Emergent

Are climatic / hydrologic conditions on the site typical for this time of year? Yes ✓ No _____ (If no, explain in Remarks)

Are Vegetation_____, Soil_____, or Hydrology_____ significantly disturbed? Are circumstances normal? Yes ✓ No_____

Are Vegetation_____, Soil_____, or Hydrology_____ naturally problematic? (If needed, explain any answers in Remarks)

SUMMARY OF FINDINGS - Attach site map showing sampling point locations, transects, important features, etc.

Hydrophytic Vegetation Present?	Yes ✓ No _____	**Is the Sampled Area within a Wetland?** Yes ✓ No _____
Hydric Soil Present?	Yes ✓ No _____	
Wetland Hydrology Present?	Yes ✓ No _____	

Remarks: Isolated depressional wetland; marginal hydrology, affected by drought in maintained t-line right-of-way

HYDROLOGY

Wetland Hydrology Indicators:

Primary Indicators (minimum of one is required; check all that apply)

____ Surface Water (A1)	____ Water-Stained Leaves (B9)	
____ High Water Table (A2)	____ Aquatic Fauna (B13)	
✓ Saturation (A3)	____ Marl Deposits (B15) **(LRR U)**	
____ Water Marks (B1)	____ Hydrogen Sulfide Odor (C1)	
____ Sediment Deposits (B2)	____ Oxidized Rhizospheres on Living Roots (C3)	
____ Drift Deposits (B3)	____ Presence of Reduced Iron (C4)	
____ Algal Mat or Crust (B4)	____ Recent Iron Reduction in Tilled Soils (C6)	
____ Iron Deposits (B5)	____ Thin Muck Surface (C7)	
____ Inundation Visible on Aerial Imagery (B7)	____ Other (Explain in Remarks)	

Secondary Indicators (minimum of two required)

____ Surface Soil Cracks (B6)
____ Sparsely Vegetated Concave Surface (B8)
____ Drainage Patterns (B10)
____ Moss Trim Lines (B16)
____ Dry-Season Water Table (C2)
____ Crayfish burrows (C8)
____ Saturation Visible on Aerial Imagery (C9)
____ Geomorphic Position (D2)
____ Shallow Aquitard (D3)
____ FAC Neutral Test (D5)

Field Observations:

Surface Water Present?	Yes _____	No ✓	Depth (inches): _____
Water Table Present?	Yes ✓	No _____	Depth (inches): >10
Saturation Present? (includes capillary fringe)	Yes ✓	No _____	Depth (inches): >10

Wetland Hydrology Present? Yes ✓ No _____

Describe Recorded Data (stream gauge, monitoring well, aerial photos, previous inspections), if available:

Remarks:

Adapted from U.S. Army Corps of Engineers
Atlantic and Gulf Coastal Plain Region- Interim Version

VEGETATION - Use scientific names of plants

Sampling Point: CB G

Tree Stratum (Plot size:_____)	Absolute % Cover	Dominant Species?	Indicator Status
1.			
2.			
3.			
4.			
5.			
6.			
7.			
	0	= Total Cover	
Sapling Stratum (Plot size:_____)			
1.			
2.			
3.			
4.			
5.			
6.			
7.			
	0	= Total Cover	
Shrub Stratum (Plot size:_____)			
1.			
2.			
3.			
4.			
5.			
6.			
7.			
	0	= Total Cover	
Herb Stratum (Plot size:_____			
1. Andropogon virginicus	30	yes	FAC
2. Panicum hemitomon	30	yes	OBL
3. Fuirena spp.	30	yes	OBL
4. Rhyncospora spp.	2	no	FACW
5. Lachnanthes caroliniana	2	no	OBL
6. Eragrostis elliotti	2	no	FACW
7. Hypericum tetrapelatum	2	no	FACW
8. Solidago spp.	2	no	FACU
9. Euthamia caroliniana	2	no	NL
10.			
11.			
12.			
	102	= Total Cover	
Woody Vine Stratum (Plot size:_____)			
1.			
2.			
3.			
4.			
5.			
	0	= Total Cover	

Dominance Test Worksheet:

Number of Dominant Species That Are OBL, FACW, or FAC:	3	(A)
Total Number of Dominant Species Across All Strata:	3	(B)
Percent of Dominant Species That Are OBL, FACW, or FAC:	100.00	(A/B)

Prevalance Index worksheet:

Total % Cover of:		Multiply by:
OBL species	x1=	0
FACW species	x2=	0
FAC species	x3=	0
FACU species	x4=	0
UPL species	x5=	0
Column Totals:	0 (A)	0 (B)

Prevalance Index = B/A =

Hydrophytic Vegetation Indicators:

✓ Dominance Test is 50%

___ Prevalence Index is ≤3.0[1]

___ Problematic Hydrophytic Vegetation[1] (Explain)

[1]Indicators of hydric soil and wetland hydrology must be present, unless disturbed or problematic.

Definitions of Vegetation Strata:

Tree- Woody plants, excluding woody vines, approximately 20 ft (6m) or more in height and 3 in. (7.6 cm) or larger in diameter at breast height (DBH).

Sapling- Woody plants, excluding woody vines, approximately 20 ft (6m) or more in height and less than 3 in. (7.6 cm) DBH.

Shrub- Woody plants, excluding woody vines, approximately 3 to 20 ft (1 to 6 m) in height.

Herb- All herbaceous (non-woody)plants, including herbaceous vines, regardless of size. Includes woody plants, except woody vines, less than approximately 3 ft (1 m) in height.

Woody vine- All woody vines, regardless of height.

Hydrophytic Vegetation Present? Yes ✓ No ___

Remarks: (If observed, list morphological adaptations below).
Percent cover estimates based on meandering survey of the broader community.

Adapted from U.S. Army Corps of Engineers
Atlantic and Gulf Coastal Plain Region- Interim Version

County/soil: Citrus- Tavares

SOIL Sampling Point: CB G

Profile Description: (Describe to the depth needed to document the indicator or confirm the absence of indicators.)

Depth (inches)	Matrix Color (moist)	Matrix %	Redox Features Color (moist)	Redox %	Type[1]	Loc[2]	Texture	Remarks
0-3	10 YR 4/2							dark grayish brown fine sand
3-41	10 YR 7/4							very pale brown fine sand
41-63	10 YR 7/4							very pale brown fine sand
63-80	10 YR 8/1		10 YR 7/4				few medium distinct mottles	white fine sand

[1]Type: C=Concentration, D=Depletion, RM=Reduced Matrix, CS=Covered or Coated Sand Grains. [2]Location: PL=Pore Lining, M=Matrix.

Hydric Soil Indicators:

- ___Histol (A1)
- ___Histic Epidon (A2)
- ___Black Histic (A3)
- ___Hydrogen Sulfide (A4)
- ___Stratified Layers (A5)
- ___Organic Bodies (A6) **(LRR P, T, U)**
- ___5 cm Mucky Mineral (A7) **(LRR P,T,U)**
- ✓ Muck Presence (A8) **(LRR U)**
- ___1 cm Muck (A9) **(LRR P,T)**
- ___Depleted Below Dark Surface (A11)
- ___Thick Dark Surface (A12)
- ___Coast Prairie Redox (A16) **(MLRA 150A)**
- ___Sandy Mucky Mineral (S1) **(LRR O, S)**
- ___Sandy Gleyed Matrix (S4)
- ___Sandy Redox (S5)
- ___Stripped Matrix (S6)
- ___Dark Surface (S7) **(LRR P, S, T, U)**
- ___Polyvalue Below Surface (S8) **(LRR S, T, U)**
- ___Thin Dark Surface (S9) **(LRR S, T, U)**
- ___Loamy Mucky Mineral (F1) **(LRR O)**
- ___Loamy Gleyed Matrix (F2)
- ___Depleted Matrix (F3)
- ___Redox Dark Surface (F6)
- ___Depleted Dark Surface (F7)
- ___Redox Depressions (F8)
- ___Marl (F10) **(LRR U)**
- ___Depleted Orchric (F11) **(MLRA 151)**
- ___Iron-Manganese Masses (F12) **(LRR O, P,T)**
- ___Umbric Surface (F13) **(LRR P, T, U)**
- ___Delta Orchric (F17) **(MLRA 151)**
- ___Reduced Vertic (F18) **(MLRA 150A, 150B)**
- ___Piedmont Floodplain Soils (F19) **(MLRA 149A)**
- ___Anomalous Bright Loamy Soils (F20) **(MLRA 149A, 153C, 153D)**

Indicators for Problematic Hydric Soils [3]:

- ___1 cm Muck (a9) **(LRR O)**
- ___2 cm Muck (A10) **(LRR S)**
- ___Reduced Vertic (F18) **(outside MLRA 150A, B)**
- ___Piedmont Floodplain Soils (F19) **(LRR P, S, T)**
- ___Anomalous Bright Loamy Soils (F20) (MLRA 153B)
- ___Red Parent Material (TF2)
- ___Very Shallow Dark Surface (TF12) **(LRR T, U)**
- ___Other (Explain in Remarks)

[3]Indicators of hydrophytic vegetation and wetland hydrology must be present, unless disturbed or problematic.

Restrictive Layer (If observed):

Type: _____

Depth (inches): _____

Hydric Soil Present? **Yes** ✓ **No** ___.

Remarks:

Adapted from U.S. Army Corps of Engineers
Atlantic and Gulf Coastal Plain Region- Interim Version

WETLAND DETERMINATION DATA FORM - Atlantic and Gulf Coastal Plain Region

Project/Site: Levy Baseload Transmission Program, CB Line City/County: Citrus Sampling Date: 10/22/09

Applicant/Owner: Progress Energy Florida, Inc. State: FL Sampling Point: CB H

Investigator(s): Tony Davanzo, Colleen Cunningham Section, Township, Range: 4 18S 17E

Landform (hillslope, terrace, etc.): N/A Local relief (concave, convex, none): none Slope (%): _____

Subregion (LRR or MLRA): LRR U Lat: 28.944745 Long: -82.593207 Datum: WGS84

Soil Map Unit Name: Adamsville fine sand NWI classification: Palustrine Emergent

Are climatic / hydrologic conditions on the site typical for this time of year? Yes ✓ No _____ (If no, explain in Remarks)

Are Vegetation_____, Soil_____, or Hydrology_____ significantly disturbed? Are circumstances normal? Yes ✓ No_____

Are Vegetation_____, Soil_____, or Hydrology_____ naturally problematic? (If needed, explain any answers in Remarks)

SUMMARY OF FINDINGS - Attach site map showing sampling point locations, transects, important features, etc.

Hydrophytic Vegetation Present?	Yes ✓ No _____	**Is the Sampled Area within a Wetland?** Yes ✓ No _____
Hydric Soil Present?	Yes ✓ No _____	
Wetland Hydrology Present?	Yes ✓ No _____	

Remarks: Depressional, isolated wetland, poor hydrology - impacted by drought

HYDROLOGY

Wetland Hydrology Indicators:

Primary Indicators (minimum of one is required; check all that apply)

____ Surface Water (A1)	____ Water-Stained Leaves (B9)	
____ High Water Table (A2)	____ Aquatic Fauna (B13)	
✓ Saturation (A3)	____ Marl Deposits (B15) **(LRR U)**	
____ Water Marks (B1)	____ Hydrogen Sulfide Odor (C1)	
____ Sediment Deposits (B2)	____ Oxidized Rhizospheres on Living Roots (C3)	
____ Drift Deposits (B3)	____ Presence of Reduced Iron (C4)	
____ Algal Mat or Crust (B4)	____ Recent Iron Reduction in Tilled Soils (C6)	
____ Iron Deposits (B5)	____ Thin Muck Surface (C7)	
____ Inundation Visible on Aerial Imagery (B7)	____ Other (Explain in Remarks)	

Secondary Indicators (minimum of two required)

____ Surface Soil Cracks (B6)
____ Sparsely Vegetated Concave Surface (B8)
____ Drainage Patterns (B10)
____ Moss Trim Lines (B16)
____ Dry-Season Water Table (C2)
____ Crayfish burrows (C8)
____ Saturation Visible on Aerial Imagery (C9)
____ Geomorphic Position (D2)
____ Shallow Aquitard (D3)
____ FAC Neutral Test (D5)

Field Observations:

Surface Water Present?	Yes _____	No ✓	Depth (inches): _____
Water Table Present?	Yes ✓	No _____	Depth (inches): >10
Saturation Present? (includes capillary fringe)	Yes ✓	No _____	Depth (inches): >10

Wetland Hydrology Present? Yes ✓ No _____

Describe Recorded Data (stream gauge, monitoring well, aerial photos, previous inspections), if available:

Remarks:

Adapted from U.S. Army Corps of Engineers
Atlantic and Gulf Coastal Plain Region- Interim Version

VEGETATION - Use scientific names of plants

Sampling Point: CB H

Tree Stratum (Plot size:_____)	Absolute % Cover	Dominant Species?	Indicator Status
1.			
2.			
3.			
4.			
5.			
6.			
7.			
	0	= Total Cover	
Sapling Stratum (Plot size:_____)			
1.			
2.			
3.			
4.			
5.			
6.			
7.			
	0	= Total Cover	
Shrub Stratum (Plot size:_____)			
1.			
2.			
3.			
4.			
5.			
6.			
7.			
	0	= Total Cover	
Herb Stratum (Plot size:_____			
1. Andropogon virginicus	20	yes	FAC
2. Andropogon glomeratus	20	yes	FACW
3. Panicum hemitomon	15	yes	OBL
4. Solidago canadensis	10	no	FACU
5. Fuirena spp.	10	no	OBL
6. Euthamia caroliniana	2	no	NL
7. Eupatorium capillifolium	2	no	FACU
8. Hypericum myrtifolium	2	no	FACW
9. Hedyotis uniflora	2	no	NL
10. Dichanthelium spp.	2	no	FAC
11. Rhyncospora spp.	2	no	FACW
12. Centella asiatica	2	no	FACW
	89	= Total Cover	
Woody Vine Stratum (Plot size:_____)			
1. Rubus spp.	5	yes	FACU
2.			
3.			
4.			
5.			
	5	= Total Cover	

Dominance Test Worksheet:

Number of Dominant Species That Are OBL, FACW, or FAC:	3	(A)
Total Number of Dominant Species Across All Strata:	4	(B)
Percent of Dominant Species That Are OBL, FACW, or FAC:	75.00	(A/B)

Prevalance Index worksheet:

Total % Cover of:			Multiply by:
OBL species		x1=	0
FACW species		x2=	0
FAC species		x3=	0
FACU species		x4=	0
UPL species		x5=	0
Column Totals:	0 (A)		0 (B)

Prevalance Index = B/A =

Hydrophytic Vegetation Indicators:

✓ Dominance Test is 50%

Prevalence Index is ≤3.0[1]

Problematic Hydrophytic Vegetation[1] (Explain)

[1]Indicators of hydric soil and wetland hydrology must be present, unless disturbed or problematic.

Definitions of Vegetation Strata:

Tree- Woody plants, excluding woody vines, approximately 20 ft (6m) or more in height and 3 in. (7.6 cm) or larger in diameter at breast height (DBH).

Sapling- Woody plants, excluding woody vines, approximately 20 ft (6m) or more in height and less than 3 in. (7.6 cm) DBH.

Shrub- Woody plants, excluding woody vines, approximately 3 to 20 ft (1 to 6 m) in height.

Herb- All herbaceous (non-woody)plants, including herbaceous vines, regardless of size. Includes woody plants, except woody vines, less than approximately 3 ft (1 m) in height.

Woody vine- All woody vines, regardless of height.

Hydrophytic Vegetation Present? Yes ✓ No_____

Remarks: (If observed, list morphological adaptations below).
Percent cover estimates based on meandering survey of the broader community.

Adapted from U.S. Army Corps of Engineers
Atlantic and Gulf Coastal Plain Region- Interim Version

County/soil: Citrus- Adamsville

SOIL Sampling Point: CB H

Profile Description: (Describe to the depth needed to document the indicator or confirm the absence of indicators.)

Depth (inches)	Matrix Color (moist)	Matrix %	Redox Features Color (moist)	Redox %	Type[1]	Loc[2]	Texture	Remarks
0-7	10 YR 4/2		10 YR 3/1				few fine roots	dark grayish brown fine sand
7-20	10 YR 6/4		10 YR 6/6; 10 YR 7/2				few medium distinct mottles and streaks	light yellowish brown fine sand
20-39	10 YR 7/4		10 YR 6/6				common medium distinct mottles	very pale brown fine sand
39-80	10 YR 7/3							very pale brown fine sand

[1]Type: C=Concentration, D=Depletion, RM=Reduced Matrix, CS=Covered or Coated Sand Grains. [2]Location: PL=Pore Lining, M=Matrix.

Hydric Soil Indicators:

- ___Histol (A1)
- ___Histic Epidon (A2)
- ___Black Histic (A3)
- ___Hydrogen Sulfide (A4)
- ___Stratified Layers (A5)
- ___Organic Bodies (A6) **(LRR P, T, U)**
- ___5 cm Mucky Mineral (A7) **(LRR P,T,U)**
- ✓ Muck Presence (A8) **(LRR U)**
- ___1 cm Muck (A9) **(LRR P,T)**
- ___Depleted Below Dark Surface (A11)
- ___Thick Dark Surface (A12)
- ___Coast Prairie Redox (A16) **(MLRA 150A)**
- ___Sandy Mucky Mineral (S1) **(LRR O, S)**
- ___Sandy Gleyed Matrix (S4)
- ___Sandy Redox (S5)
- ___Stripped Matrix (S6)
- ___Dark Surface (S7) **(LRR P, S, T, U)**
- ___Polyvalue Below Surface (S8) **(LRR S, T, U)**
- ___Thin Dark Surface (S9) **(LRR S, T, U)**
- ___Loamy Mucky Mineral (F1) **(LRR O)**
- ___Loamy Gleyed Matrix (F2)
- ___Depleted Matrix (F3)
- ___Redox Dark Surface (F6)
- ___Depleted Dark Surface (F7)
- ___Redox Depressions (F8)
- ___Marl (F10) **(LRR U)**
- ___Depleted Orchric (F11) **(MLRA 151)**
- ___Iron-Manganese Masses (F12) **(LRR O, P,T)**
- ___Umbric Surface (F13) **(LRR P, T, U)**
- ___Delta Orchric (F17) **(MLRA 151)**
- ___Reduced Vertic (F18) **(MLRA 150A, 150B)**
- ___Piedmont Floodplain Soils (F19) **(MLRA 149A)**
- ___Anomalous Bright Loamy Soils (F20) **(MLRA 149A, 153C, 153D)**

Indicators for Problematic Hydric Soils [3]:

- ___1 cm Muck (a9) **(LRR O)**
- ___2 cm Muck (A10) **(LRR S)**
- ___Reduced Vertic (F18) **(outside MLRA 150A, B)**
- ___Piedmont Floodplain Soils (F19) **(LRR P, S, T)**
- ___Anomalous Bright Loamy Soils (F20) (MLRA 153B)
- ___Red Parent Material (TF2)
- ___Very Shallow Dark Surface (TF12) **(LRR T, U)**
- ___Other (Explain in Remarks)

[3]Indicators of hydrophytic vegetation and wetland hydrology must be present, unless disturbed or problematic.

Restrictive Layer (If observed):

Type: _____

Depth (inches): _____

Hydric Soil Present? Yes ✓ No ___.

Remarks:

Adapted from U.S. Army Corps of Engineers
Atlantic and Gulf Coastal Plain Region- Interim Version

WETLAND DETERMINATION DATA FORM - Atlantic and Gulf Coastal Plain Region

Project/Site: Levy Baseload Transmission Program, CB Line City/County: Citrus Sampling Date: 10/22/09

Applicant/Owner: Progress Energy Florida, Inc. State: FL Sampling Point: CB I

Investigator(s): Tony Davanzo, Colleen Cunningham Section, Township, Range: 4 18S 17E

Landform (hillslope, terrace, etc.): N/A Local relief (concave, convex, none): none Slope (%): _____

Subregion (LRR or MLRA): LRR U Lat: 28.941823 Long: -82.589922 Datum: WGS84

Soil Map Unit Name: Pompano fine sand NWI classification: Palustrine Emergent

Are climatic / hydrologic conditions on the site typical for this time of year? Yes ✓ No _____ (If no, explain in Remarks)

Are Vegetation_____, Soil_____, or Hydrology_____ significantly disturbed? Are circumstances normal? Yes ✓ No_____

Are Vegetation_____, Soil_____, or Hydrology_____ naturally problematic? (If needed, explain any answers in Remarks)

SUMMARY OF FINDINGS - Attach site map showing sampling point locations, transects, important features, etc.

Hydrophytic Vegetation Present?	Yes ✓ No _____	**Is the Sampled Area within a Wetland?** Yes ✓ No _____
Hydric Soil Present?	Yes ✓ No _____	
Wetland Hydrology Present?	Yes ✓ No _____	

Remarks: Cypress wetland on edge of Right-of-Way that grades into a marsh within the right-of-way, structure pad included, small upland inclusion

HYDROLOGY

Wetland Hydrology Indicators:

Primary Indicators (minimum of one is required; check all that apply)

✓ Surface Water (A1)	____Water-Stained Leaves (B9)	
____ High Water Table (A2)	____Aquatic Fauna (B13)	
✓ Saturation (A3)	____Marl Deposits (B15) **(LRR U)**	
____ Water Marks (B1)	____Hydrogen Sulfide Odor (C1)	
____ Sediment Deposits (B2)	____Oxidized Rhizospheres on Living Roots (C3)	
____ Drift Deposits (B3)	____Presence of Reduced Iron (C4)	
____ Algal Mat or Crust (B4)	____Recent Iron Reduction in Tilled Soils (C6)	
____ Iron Deposits (B5)	____Thin Muck Surface (C7)	
____ Inundation Visible on Aerial Imagery (B7)	____Other (Explain in Remarks)	

Secondary Indicators (minimum of two required)

____Surface Soil Cracks (B6)
____Sparsely Vegetated Concave Surface (B8)
____Drainage Patterns (B10)
____Moss Trim Lines (B16)
____Dry-Season Water Table (C2)
____Crayfish Burrows (C8)
____Saturation Visible on Aerial Imagery (C9)
____Geomorphic Position (D2)
____Shallow Aquitard (D3)
____FAC Neutral Test (D5)

Field Observations:

Surface Water Present?	Yes ✓	No _____	Depth (inches): 0-12
Water Table Present?	Yes ✓	No _____	Depth (inches): 0-10
Saturation Present? (includes capillary fringe)	Yes ✓	No _____	Depth (inches): 0-5

Wetland Hydrology Present? Yes ✓ No _____

Describe Recorded Data (stream gauge, monitoring well, aerial photos, previous inspections), if available:

Remarks:

Adapted from U.S. Army Corps of Engineers
Atlantic and Gulf Coastal Plain Region- Interim Version

VEGETATION - Use scientific names of plants

Sampling Point: CB I

Tree Stratum (Plot size:_____)	Absolute % Cover	Dominant Species?	Indicator Status
1. Taxodium distichum	2	yes	OBL
2.			
3.			
4.			
5.			
6.			
7.			
	2	= Total Cover	
Sapling Stratum (Plot size:_____)			
1. Salix caroliniana	2	yes	OBL
2.			
3.			
4.			
5.			
6.			
7.			
	2	= Total Cover	
Shrub Stratum (Plot size:_____)			
1. Cephalanthus occidentalis	2	yes	OBL
2. Myrica cerifera	2	yes	FAC
3. Hypericum fasciculatum	2	yes	FACW
4.			
5.			
6.			
7.			
	6	= Total Cover	
Herb Stratum (Plot size:_____			
1. Panicum hemitomon	30	yes	OBL
2. Andropogon glomeratus	15	yes	FACW
3. Eupatorium capillifolium	15	yes	FACU
4. Leersia hexandra	5	no	OBL
5. Dichromena spp.	2	no	FACW
6. Polygonum spp.	2	no	FAC
7. Hydrocotyle spp.	2	no	OBL
8. Nymphaea spp.	2	no	OBL
9. Rhexia spp.	2	no	FACW
10. Euthamia caroliniana	2	no	NL
11. Polygonum spp.	2	no	FAC
12. Pluchea odorata	2	no	FACW
	81	= Total Cover	
Woody Vine Stratum (Plot size:_____)			
1. Rubus spp.	2	yes	FACU
2. Ampelopsis arborea	2	yes	FAC
3. Cuscuta spp.	2	yes	NL
4. Mikania spp.	2	yes	FACW
5. Rosa palustris	2	yes	OBL
	10	= Total Cover	

Dominance Test Worksheet:

Number of Dominant Species That Are OBL, FACW, or FAC:	10	(A)
Total Number of Dominant Species Across All Strata:	12	(B)
Percent of Dominant Species That Are OBL, FACW, or FAC:	83.33	(A/B)

Prevalance Index worksheet:

Total % Cover of:		Multiply by:
OBL species	x1=	0
FACW species	x2=	0
FAC species	x3=	0
FACU species	x4=	0
UPL species	x5=	0
Column Totals:	0 (A)	0 (B)

Prevalance Index = B/A =

Hydrophytic Vegetation Indicators:

✓ Dominance Test is 50%

Prevalence Index is ≤3.0[1]

Problematic Hydrophytic Vegetation[1] (Explain)

[1]Indicators of hydric soil and wetland hydrology must be present, unless disturbed or problematic.

Definitions of Vegetation Strata:

Tree- Woody plants, excluding woody vines, approximately 20 ft (6m) or more in height and 3 in. (7.6 cm) or larger in diameter at breast height (DBH).

Sapling- Woody plants, excluding woody vines, approximately 20 ft (6m) or more in height and less than 3 in. (7.6 cm) DBH.

Shrub- Woody plants, excluding woody vines, approximately 3 to 20 ft (1 to 6 m) in height.

Herb- All herbaceous (non-woody)plants, including herbaceous vines, regardless of size. Includes woody plants, except woody vines, less than approximately 3 ft (1 m) in height.

Woody vine- All woody vines, regardless of height.

Hydrophytic Vegetation Present? Yes ✓ No_____

Remarks: (If observed, list morphological adaptations below).
Percent cover estimates based on meandering survey of the broader community.

Adapted from U.S. Army Corps of Engineers
Atlantic and Gulf Coastal Plain Region- Interim Version

County/soil: Citrus- Pompano

SOIL Sampling Point: CB I

Profile Description: (Describe to the depth needed to document the indicator or confirm the absence of indicators.)

Depth (inches)	Matrix Color (moist)	Matrix %	Redox Features Color (moist)	Redox %	Type[1]	Loc[2]	Texture	Remarks
0-5	10 YR 2/1							black fine sand
5-15	10 YR 6/2		10 YR 4/2				common medium distinct stains	light brownish gray fine sand
15-45	10 YR 7/1							light gray fine sand
45-80	10 YR 7/1							light gray fine sand

[1]Type: C=Concentration, D=Depletion, RM=Reduced Matrix, CS=Covered or Coated Sand Grains. [2]Location: PL=Pore Lining, M=Matrix.

Hydric Soil Indicators:

___Histol (A1)
___Histic Epidon (A2)
___Black Histic (A3)
___Hydrogen Sulfide (A4)
___Stratified Layers (A5)
___Organic Bodies (A6) **(LRR P, T, U)**
___5 cm Mucky Mineral (A7) **(LRR P,T,U)**
✓ Muck Presence (A8) **(LRR U)**
___1 cm Muck (A9) **(LRR P,T)**
___Depleted Below Dark Surface (A11)
___Thick Dark Surface (A12)
___Coast Prairie Redox (A16) **(MLRA 150A)**
___Sandy Mucky Mineral (S1) **(LRR O, S)**
___Sandy Gleyed Matrix (S4)
___Sandy Redox (S5)
___Stripped Matrix (S6)
___Dark Surface (S7) **(LRR P, S, T, U)**

___Polyvalue Below Surface (S8) **(LRR S, T, U)**
___Thin Dark Surface (S9) **(LRR S, T, U)**
___Loamy Mucky Mineral (F1) **(LRR O)**
___Loamy Gleyed Matrix (F2)
___Depleted Matrix (F3)
___Redox Dark Surface (F6)
___Depleted Dark Surface (F7)
___Redox Depressions (F8)
___Marl (F10) **(LRR U)**
___Depleted Orchric (F11) **(MLRA 151)**
___Iron-Manganese Masses (F12) **(LRR O, P,T)**
___Umbric Surface (F13) **(LRR P, T, U)**
___Delta Orchric (F17) **(MLRA 151)**
___Reduced Vertic (F18) **(MLRA 150A, 150B)**
___Piedmont Floodplain Soils (F19) **(MLRA 149A)**
___Anomalous Bright Loamy Soils (F20) **(MLRA 149A, 153C, 153D)**

Indicators for Problematic Hydric Soils [3]:

___1 cm Muck (a9) **(LRR O)**
___2 cm Muck (A10) **(LRR S)**
___Reduced Vertic (F18) **(outside MLRA 150A, B)**
___Piedmont Floodplain Soils (F19) **(LRR P, S, T)**
___Anomalous Bright Loamy Soils (F20) (MLRA 153B)
___Red Parent Material (TF2)
___Very Shallow Dark Surface (TF12) **(LRR T, U)**
___Other (Explain in Remarks)

[3]Indicators of hydrophytic vegetation and wetland hydrology must be present, unless disturbed or problematic.

Restrictive Layer (If observed):
Type: _____
Depth (inches): _____

Hydric Soil Present? Yes ✓ No ___.

Remarks:

Adapted from U.S. Army Corps of Engineers
Atlantic and Gulf Coastal Plain Region- Interim Version

WETLAND DETERMINATION DATA FORM - Atlantic and Gulf Coastal Plain Region

Project/Site: Levy Baseload Transmission Program, CB Line City/County: Citrus Sampling Date: 10/22/09

Applicant/Owner: Progress Energy Florida, Inc. State: FL Sampling Point: CB J

Investigator(s): Tony Davanzo, Colleen Cunningham Section, Township, Range: 4 18S 17E

Landform (hillslope, terrace, etc.): N/A Local relief (concave, convex, none): none Slope (%): _____

Subregion (LRR or MLRA): LRR U Lat: 28.940524 Long: -82.589565 Datum: WGS84

Soil Map Unit Name: Immokalee fine sand NWI classification: Palustrine Emergent

Are climatic / hydrologic conditions on the site typical for this time of year? Yes ✓ No _____ (If no, explain in Remarks)

Are Vegetation_____, Soil_____, or Hydrology_____ significantly disturbed? Are circumstances normal? Yes ✓ No_____

Are Vegetation_____, Soil_____, or Hydrology_____ naturally problematic? (If needed, explain any answers in Remarks)

SUMMARY OF FINDINGS - Attach site map showing sampling point locations, transects, important features, etc.

Hydrophytic Vegetation Present?	Yes ✓ No _____	**Is the Sampled Area within a Wetland?** Yes ✓ No _____
Hydric Soil Present?	Yes ✓ No _____	
Wetland Hydrology Present?	Yes ✓ No _____	

Remarks: wetland (freshwater marsh) mostly within transmission line right-of-way, some outside maintained transmission line right-of-way

HYDROLOGY

Wetland Hydrology Indicators:

Primary Indicators (minimum of one is required; check all that apply)

____ Surface Water (A1)	____ Water-Stained Leaves (B9)	____ Surface Soil Cracks (B6)
____ High Water Table (A2)	____ Aquatic Fauna (B13)	____ Sparsely Vegetated Concave Surface (B8)
✓ Saturation (A3)	____ Marl Deposits (B15) **(LRR U)**	____ Drainage Patterns (B10)
____ Water Marks (B1)	____ Hydrogen Sulfide Odor (C1)	____ Moss Trim Lines (B16)
____ Sediment Deposits (B2)	____ Oxidized Rhizospheres on Living Roots (C3)	____ Dry-Season Water Table (C2)
____ Drift Deposits (B3)	____ Presence of Reduced Iron (C4)	____ Crayfish Burrows (C8)
____ Algal Mat or Crust (B4)	____ Recent Iron Reduction in Tilled Soils (C6)	____ Saturation Visible on Aerial Imagery (C9)
____ Iron Deposits (B5)	____ Thin Muck Surface (C7)	____ Geomorphic Position (D2)
____ Inundation Visible on Aerial Imagery (B7)	____ Other (Explain in Remarks)	____ Shallow Aquitard (D3)
		____ FAC Neutral Test (D5)

Secondary Indicators (minimum of two required)

Field Observations:

Surface Water Present?	Yes _____	No ✓	Depth (inches): _____
Water Table Present?	Yes ✓	No _____	Depth (inches): >10
Saturation Present? (includes capillary fringe)	Yes ✓	No _____	Depth (inches): >10

Wetland Hydrology Present? Yes ✓ No _____

Describe Recorded Data (stream gauge, monitoring well, aerial photos, previous inspections), if available:

Remarks:

Adapted from U.S. Army Corps of Engineers
Atlantic and Gulf Coastal Plain Region- Interim Version

VEGETATION - Use scientific names of plants

Sampling Point: CB J

Tree Stratum (Plot size:_____)	Absolute % Cover	Dominant Species?	Indicator Status
1. Quercus virginiana	2	yes	FACU
2. Quercus laurifolia	2	yes	FACW
3. Taxodium distichum	2	yes	OBL
4.			
5.			
6.			
7.			
	6	= Total Cover	
Sapling Stratum (Plot size:_____)			
1.			
2.			
3.			
4.			
5.			
6.			
7.			
	0	= Total Cover	
Shrub Stratum (Plot size:_____)			
1. Cephalanthus occidentalis	2	yes	OBL
2. Hypericum myrtifolium	2	yes	FACW
3. Rosa palustris	2	yes	OBL
4. Hypericum tetrapelatum	2	yes	FACW
5. Baccharis sp.	2	yes	FAC
6.			
7.			
	10	= Total Cover	
Herb Stratum (Plot size:_____			
1. Axonopus spp.	20	yes	FACW
2. Eupatorium capillifolium	10	yes	FACU
3. Solidago canadensis	10	yes	FACU
4. Euthamia caroliniana	10	yes	NL
5. Andropogon glomeratus	5	no	FACW
6. Andropogon virginicus	5	no	FAC
7. Xyris spp.	2	no	OBL
8. Ludwigia suffruticosa	2	no	OBL
9. Dichanthelium spp.	2	no	FAC
10. Rhexia spp.	2	no	FACW
11. Fuirena spp.	2	no	OBL
12. Rhyncospora spp.	2	no	FACW
	72	= Total Cover	
Woody Vine Stratum (Plot size:_____)			
1. Ampelopsis arborea	2	yes	FAC
2. Rubus spp.	2	yes	FACU
3.			
4.			
5.			
	4	= Total Cover	

Dominance Test Worksheet:

Number of Dominant Species That Are OBL, FACW, or FAC:	9	(A)
Total Number of Dominant Species Across All Strata:	13	(B)
Percent of Dominant Species That Are OBL, FACW, or FAC:	69.23	(A/B)

Prevalance Index worksheet:

Total % Cover of:		Multiply by:
OBL species	x1=	0
FACW species	x2=	0
FAC species	x3=	0
FACU species	x4=	0
UPL species	x5=	0
Column Totals:	0 (A)	0 (B)

Prevalance Index = B/A =

Hydrophytic Vegetation Indicators:

✓ Dominance Test is 50%

Prevalence Index is ≤3.0[1]

Problematic Hydrophytic Vegetation[1] (Explain)

[1]Indicators of hydric soil and wetland hydrology must be present, unless disturbed or problematic.

Definitions of Vegetation Strata:

Tree- Woody plants, excluding woody vines, approximately 20 ft (6m) or more in height and 3 in. (7.6 cm) or larger in diameter at breast height (DBH).

Sapling- Woody plants, excluding woody vines, approximately 20 ft (6m) or more in height and less than 3 in. (7.6 cm) DBH.

Shrub- Woody plants, excluding woody vines, approximately 3 to 20 ft (1 to 6 m) in height.

Herb- All herbaceous (non-woody)plants, including herbaceous vines, regardless of size. Includes woody plants, except woody vines, less than approximately 3 ft (1 m) in height.

Woody vine- All woody vines, regardless of height.

Hydrophytic Vegetation Present? Yes ✓ No_____

Remarks: (If observed, list morphological adaptations below).
Percent cover estimates based on meandering survey of the broader community.

Adapted from U.S. Army Corps of Engineers
Atlantic and Gulf Coastal Plain Region- Interim Version

County/soil: Citrus- Immokalee

SOIL

Sampling Point: CB J

Profile Description: (Describe to the depth needed to document the indicator or confirm the absence of indicators.)

Depth (inches)	Matrix Color (moist)	Matrix %	Redox Features Color (moist)	Redox %	Type[1]	Loc[2]	Texture	Remarks
0-6	N 2/0							black crushed fine sand
6-33	10 YR 6/2							light brownish gray fine sand
33-38	10 YR 3/2							very dark grayish brown fine sand
38-42	5 YR 3/3							dark reddish brown fine sand

[1]Type: C=Concentration, D=Depletion, RM=Reduced Matrix, CS=Covered or Coated Sand Grains. [2]Location: PL=Pore Lining, M=Matrix.

Hydric Soil Indicators:

- ___Histol (A1)
- ___Histic Epidon (A2)
- ___Black Histic (A3)
- ___Hydrogen Sulfide (A4)
- ___Stratified Layers (A5)
- ___Organic Bodies (A6) **(LRR P, T, U)**
- ___5 cm Mucky Mineral (A7) **(LRR P,T,U)**
- ✓ Muck Presence (A8) **(LRR U)**
- ___1 cm Muck (A9) **(LRR P,T)**
- ___Depleted Below Dark Surface (A11)
- ___Thick Dark Surface (A12)
- ___Coast Prairie Redox (A16) **(MLRA 150A)**
- ___Sandy Mucky Mineral (S1) **(LRR O, S)**
- ___Sandy Gleyed Matrix (S4)
- ___Sandy Redox (S5)
- ___Stripped Matrix (S6)
- ___Dark Surface (S7) **(LRR P, S, T, U)**
- ___Polyvalue Below Surface (S8) **(LRR S, T, U)**
- ___Thin Dark Surface (S9) **(LRR S, T, U)**
- ___Loamy Mucky Mineral (F1) **(LRR O)**
- ___Loamy Gleyed Matrix (F2)
- ___Depleted Matrix (F3)
- ___Redox Dark Surface (F6)
- ___Depleted Dark Surface (F7)
- ___Redox Depressions (F8)
- ___Marl (F10) **(LRR U)**
- ___Depleted Orchric (F11) **(MLRA 151)**
- ___Iron-Manganese Masses (F12) **(LRR O, P,T)**
- ___Umbric Surface (F13) **(LRR P, T, U)**
- ___Delta Orchric (F17) **(MLRA 151)**
- ___Reduced Vertic (F18) **(MLRA 150A, 150B)**
- ___Piedmont Floodplain Soils (F19) **(MLRA 149A)**
- ___Anomalous Bright Loamy Soils (F20) **(MLRA 149A, 153C, 153D)**

Indicators for Problematic Hydric Soils [3]:

- ___1 cm Muck (a9) **(LRR O)**
- ___2 cm Muck (A10) **(LRR S)**
- ___Reduced Vertic (F18) **(outside MLRA 150A, B)**
- ___Piedmont Floodplain Soils (F19) **(LRR P, S, T)**
- ___Anomalous Bright Loamy Soils (F20) (MLRA 153B)
- ___Red Parent Material (TF2)
- ___Very Shallow Dark Surface (TF12) **(LRR T, U)**
- ___Other (Explain in Remarks)

[3]Indicators of hydrophytic vegetation and wetland hydrology must be present, unless disturbed or problematic.

Restrictive Layer (If observed):

Type: _____

Depth (inches): _____

Hydric Soil Present? Yes ✓ No ___.

Remarks:

Adapted from U.S. Army Corps of Engineers
Atlantic and Gulf Coastal Plain Region- Interim Version