Volusia County
FLORIDA

To: Development Review Committee **DATE**: February 17, 2020

From: John G. Thomson, AICP
Land Development Manager

Subject: DRC Meeting Date: February 19, 2020
Preliminary Plat Application
Smathers Estates
2020-S-PPL-0121, RSN 977433

This is a Preliminary Plat application for a proposed four-lot residential subdivision of an overall 20.14-acre parcel. The project is located at the terminus of Murray Street, approximately 1,637 feet south of its intersection with Chicken Farm Road, in the Osteen area.

The zoning classification is Osteen Rural Estate (ORE), and the Comprehensive Plan Future Land Use Map designation is Osteen Rural Estate (ORE). The proposed parcels range from 4.904 acres to 5.002 acres, each of which meet or exceed the minimum 10,000-square-foot lot size required by the ORE zoning classification.

Potable water service will be required with the installation of an on-site well and wastewater treatment by the installation of an on-site septic tank system as this is a rural area with no central water and sewer systems available. However, Fire Safety staff have indicated in the staff review comments that the installation of a fire hydrant system providing the minimum fire flow is required pursuant to the Florida Fire Prevention Code. Summary comment 3 will require an issue hold in the AMANDA permit system to ensure the installation of the system prior to the issuance of any building permits. In addition, Fire Safety staff have indicated that a turnaround is required at the terminus of the private ingress/egress to accommodate fire apparatus.

Murray Street is a county-maintained road that was previously paved under the county's dirt road reduction program, and the prescriptive portion of this road terminates just inside the southwest corner of the subject property. The preliminary plat plans provide for the installation of a cul-de-sac at the terminus of Murray Road within the proposed subdivision. A condition of approval of the Overall Development Plan application by the Development Review Committee (DRC) was that the cul-de-sac would be constructed to county standards of Section 72-612, of the Land Development Code (LDC). The intent was that the cul-de-sac would provide a turn-around feature at the dead-end condition of Murray Street for the public and emergency/solid waste vehicles. The access to each of the lots was to be provided by a shared ingress/egress easement over the flags for three of the easterly lots (Lots 2-4), and constructed to the unpaved road standards of the LDC.

However, the applicant appealed the requirement of the DRC to construct the cul-de-sac to county standards to the county council. The county council denied the appeal at its meeting of December 4, 2018, noting that the cul-de-sac could be stabilized with the latest version of FDOT's Roadway Traffic and Design Standards to use Optional Base Group 4, as noted in the staff review

comments for the Overall Development Plan DRC staff report. This is essentially the unpaved road standard. The applicant is proposing this type of construction, as required by the LDC, to be used for a private, not a public, road. Since the road is to have access to the public, Public Works will need to recommend to the DRC whether it is acceptable design for county maintenance or should be maintained by the property owners association created for the subdivision. The association has maintenance responsibility for the private ingress/egress easement.

The property was vacant at the time of the consideration of the Overall Development Plan application. Since that time, several structures are now evident on recent aerials. The survey needs to be revised to show all existing structures and improvements and depict the setbacks to the property lines for any above or below ground improvements, such as septic tank and drain field locations.

The Overall Development Plan Development Order was issued on March 20, 2019. The Preliminary Plat application for this project was submitted on January 28, 2020, and is scheduled for the February 19, 2020, DRC meeting.

The following is a consolidated report of the attached staff review comments:

Summary:

1. Submit a revised survey to show all existing structures and improvements and depict the setbacks to the property lines for any above or below ground improvements, such as septic tank and drain field locations.

2. Revise the plans to provide a 20-foot wide access road with a turn-around for a fire truck (WB 40) at the terminus of the private ingress/egress easement.

3. Revise the plans to provide fire hydrants with a minimum 1,000 GPM flow to be installed prior to issuance of a building permit for the property. A Parcel Assigned Activity (PARR) will be included for these parcels to require Land Management Manager approval for this installation.

4. Revise the plat to include public access to Tract A and dedicate a separate access easement to the adjacent parcels on the south side of the access road.

Informational:

1. The required subdivision improvements must be constructed, inspected, and approved by the county and a Maintenance Guarantee accepted, or the completion of the improvements guaranteed by a Performance Guarantee, accepted by the county, prior to recording the Final Plat.

Recommendation:

Staff recommends that the DRC continue the Preliminary Plat application to a future meeting, pending the submission of revised plans, in accordance with the published submission deadline dates, to allow the applicant to revise the plans and preliminary plat to address the Fire Safety requirements and design standards for the cul-de-sac and ingress/egress easement, update the survey to show all structures, revised plat dedication and notes, and other staff comments, as provided in the consolidated report of the prepared staff review comments.

Staff Review Comments

Meeting Date: February 13, 2020
Smathers Estates
2020-S-PPL-0121, RSN 977433

City of Deltona - Planning

Ron Paradise, Planning Director

Smathers Estates **2020-S-PPL-0121**

No comments were received at the time of printing of the staff report.

Development Engineering

Scott Carraro, P.E., Civil Engineer II

Smathers Estates **2020-S-PPL-0121**

Staff has reviewed the requested application and provides the following comments:

1. Pursuant to Section 72-777(b)(1)h, Article III Land Development, Chapter 72 Code of Ordinances (LDC), subdividing of lands into four (4) lots or less, each being one (1) acre or larger in size where no new paved streets are proposed is exempt from the requirements of Division 8, Stormwater Management. The subject proposal is for a total of four (4) lots, each of the lots being greater than one (1) acre in size. The proposed subdivision is exempt.

Environmental Permitting

Keith Abrahamson, Environmental Permitting Manager

Smathers Estates **2020-S-PPL-0121**

Staff has reviewed the requested application and provides the following comments:

Informational:

1. This property contains gopher tortoise (GT) burrows. The gopher tortoise is a threatened species. Pursuant to Section 72-1140, of the LDC, a 100% GT burrow survey is required to be conducted by an Authorized Agent to locate all GT burrows and their 25-foot buffers on the property. If any GT burrows or their 25-foot buffers cannot be avoided, a Florida Fish and Wildlife Conservation Commission GT relocation permit will be required. Please be aware that Environmental Permitting (EP) may request the applicant redesign projects to avoid GT burrow impacts. No tree removal and/or land alteration can occur until the gopher tortoise relocation has been completed and the after action report has been provided to EP.

Fire Safety

Shane Lanoue, Fire Inspector

Smathers Estates **2020-S-PPL-0121**

Staff has reviewed the requested application and provides the following comments:

1. Pursuant to the FFPC 6th edition, the property will be required to meet Chapter 18 of the fire code, prior to building.

2. Chapter 18.1.1.1. Shall apply to public and privately owned fire apparatus roads at least 20-foot wide with a turn around for a fire truck with a WB40.

3. Chapter 18.1.1.2.Shall apply to public and privately owned fire hydrant systems. A hydrant providing 1,000 GPM shall be installed prior to combustibles being brought on to the property. Refer also to Section 72-622 (2)(b), of the LDC.

Health

Britt Williams, DOH/Volusia County Public Health Unit

Smathers Estates **2020-S-PPL-0121**

Staff has reviewed the requested application and provides the following comments:

1. Minimum required lot size for subdivisions created after 1972 using a private well and an on-site sewage treatment and disposal system is ½-acre. The proposed lot sizes are five acres. This department has no objection to the project.

Land Development

John G. Thomson, AICP, Land Development Manager

Smathers Estates **2020-S-PPL-0121**

Staff has reviewed the requested application and provides the following comments:

1. Provide Dedication for Tract “A”. Revise Note 4 to include access to the public.

2. Revise Note 6 to include access for the two properties to the south of the easement. One driveway is allowed to serve the lots within the shared access easement. The driveway width shall be 20 feet wide.

3. The driveway and cul-de-sac shall meet the unpaved road standards, pursuant to Section 72-612(a), of the LDC, per County Council action on the Appeal.

Public Works – Mosquito Control

Tim MacHardy, Activity Project Manager

Smathers Estates **2020-S-PPL-0121**

Staff has reviewed the requested application and has no comment.

Public Works – Road & Bridge

Tom Morrissey, P.E., Civil Engineer III

Smathers Estates **2020-S-PPL-0121**

Staff has reviewed the requested application and has no comment.

School Board

Eric Kozielski, Planning & GIS Specialist

Smathers Estates **2020-S-PPL-0121**

Staff has reviewed the requested application and provides the following comments:

1. The application is exempt from school concurrency review - less than 10 lots.

Survey

Jeff W. Barnes, PSM, County Contract Surveyor

Smathers Estates **2020-S-PPL-0121**

Staff has reviewed the requested application and provides the following comments:

1. All previous comments appear to have been addressed.
2. Revise the Notary Certification to the new certification as of January 01, 2020.
3. Note 3: the bearing is not matching bearing on sheet 2.
4. Revise the text in the Certification of Approval by the Land Development Manager to fit in the box.

Traffic

Anthony Taylor, Engineering Assistant
For Jon E. Cheney, P.E., County Traffic Engineer

Smathers Estates **2020-S-PPL-0121**

Staff has reviewed the requested application and provides the following comments:

1. Pursuant to the approved Smathers Estates Overall Development Plan Development Order, and to ensure accessibility for emergency vehicles to all four lots, the stabilized road provided through the ingress/egress easement shall be designed in accordance with the dirt road subdivision standards, pursuant to Section 72-612, of the LDC. This requires two 10-foot travel lanes with 6-foot clear recovery areas adjacent to each lane.

2. Please show by using AUTOTURN that a fire engine can safely maneuver the proposed cul-de-sac.

3. There is an existing gate near the “End County Maintenance” sign that would need to be identified on the plans/survey and be removed.

Utilities

Scott Mays, P.E., Utilities Engineer

Smathers Estates **2020-S-PPL-0121**

Staff has reviewed the requested application and has no comment.

Zoning

Scott Ashley, AICP, Senior Zoning Manager

Smathers Estates **2020-S-PPL-0121**

Staff has reviewed the requested application and has no comment.

SMATHERS ESTATES

SECTION 17, TOWNSHIP 19 SOUTH, RANGE 32 EAST
VOLUSIA COUNTY, FLORIDA

EASEMENT NOTE:
ALL PLATTED UTILITY EASEMENTS, EXCLUSIVE OF PRIVATE EASEMENTS GRANTED TO OR OBTAINED BY A PARTICULAR ELECTRIC, TELEPHONE, GAS, OR OTHER PUBLIC UTILITY, SHALL ALSO BE EASEMENTS FOR THE CONSTRUCTION INSTALLATION, MAINTENANCE, AND OPERATION OF CABLE TELEVISION SERVICES; HOWEVER, NO SUCH CONSTRUCTION, INSTALLATION, MAINTENANCE AND OPERATION OF CABLE TELEVISION SERVICES SHALL INTERFERE WITH THE FACILITIES AND SERVICES OF AN ELECTRIC, TELEPHONE, GAS OF OTHER PUBLIC UTILITY. IN THE EVENT A CABLE TELEVISION COMPANY DAMAGES THE FACILITIES OF A PUBLIC UTILITY, IT SHALL BE SOLELY RESPONSIBLE FOR THE DAMAGES. SUCH CONSTRUCTION, INSTALLATION, MAINTENANCE, AND OPERATION SHALL COMPLY WITH THE NATIONAL ELECTRICAL SAFETY CODE AS ADOPTED BY THE FLORIDA PUBLIC SERVICE COMMISSION.

NOTICE
THIS PLAT, AS RECORDED IN ITS GRAPHIC FORM, IS THE OFFICIAL DEPICTION OF THE SUBDIVIDED LANDS DESCRIBED HEREIN AND WILL IN NO CIRCUMSTANCES BE SUPPLANTED IN AUTHORITY BY ANY OTHER GRAPHIC OR DIGITAL FORM OF THE PLAT.
THERE MAY BE ADDITIONAL RESTRICTIONS THAT ARE NOT RECORDED ON THIS PLAT THAT MAY BE FOUND IN THE PUBLIC RECORDS OF THIS COUNTY.

DESCRIPTION:

THE NORTH 1/2 OF THE NORTHWEST 1/4 OF THE SOUTHEAST 1/4 OF SECTION 17, TOWNSHIP 19 SOUTH, RANGE 32 EAST, VOLUSIA COUNTY, FLORIDA, BEING MORE PARTICULARLY DESCRIBED AS FOLLOWS:

BEGIN AT THE NORTHWEST CORNER OF THE SOUTHEAST 1/4 OF SECTION 17, TOWNSHIP 19 SOUTH, RANGE 32 EAST, VOLUSIA COUNTY, FLORIDA; THENCE N.89°37'41"E., ALONG THE NORTH LINE OF THE NORTH 1/2 OF THE NORTHWEST 1/4 OF THE SOUTHEAST 1/4 OF SAID SECTION 17 A DISTANCE OF 1328.79 FEET TO THE NORTHEAST CORNER OF THE NORTH 1/2 OF THE NORTHWEST 1/4 OF THE SOUTHEAST 1/4 OF SAID SECTION 17; THENCE S.00°47'16"W., ALONG THE EAST LINE OF THE NORTH 1/2 OF THE NORTHWEST 1/4 OF THE SOUTHEAST 1/4 OF SAID SECTION 17 A DISTANCE OF 663.98 FEET TO THE SOUTHEAST CORNER OF THE NORTH 1.2 OF THE NORTHWEST 1/4 OF THE SOUTHEAST 1/4 OF SAID SECTION 17; THENCE S.89°57'22"W., ALONG THE SOUTH LINE OF THE NORTH 1/2 OF THE NORTHWEST 1/4 OF THE SOUTHEAST 1/4 OF SAID SECTION 17 A DISTANCE OF 1330.10 FEET TO THE SOUTHWEST CORNER OF THE NORTH 1/2 OF THE NORTHWEST 1/4 OF THE SOUTHEAST 1/4 OF SAID SECTION 17; THENCE N.00°54'48"E., ALONG THE WEST LINE OF THE THE NORTH 1/2 OF THE NORTHWEST 1/4 OF THE SOUTHEAST 1/4 OF SAID SECTION 17 A DISTANCE OF 656.40 FEET TO THE POINT OF BEGINNING.

CONTAINING 20.145 ACRES, MORE OR LESS

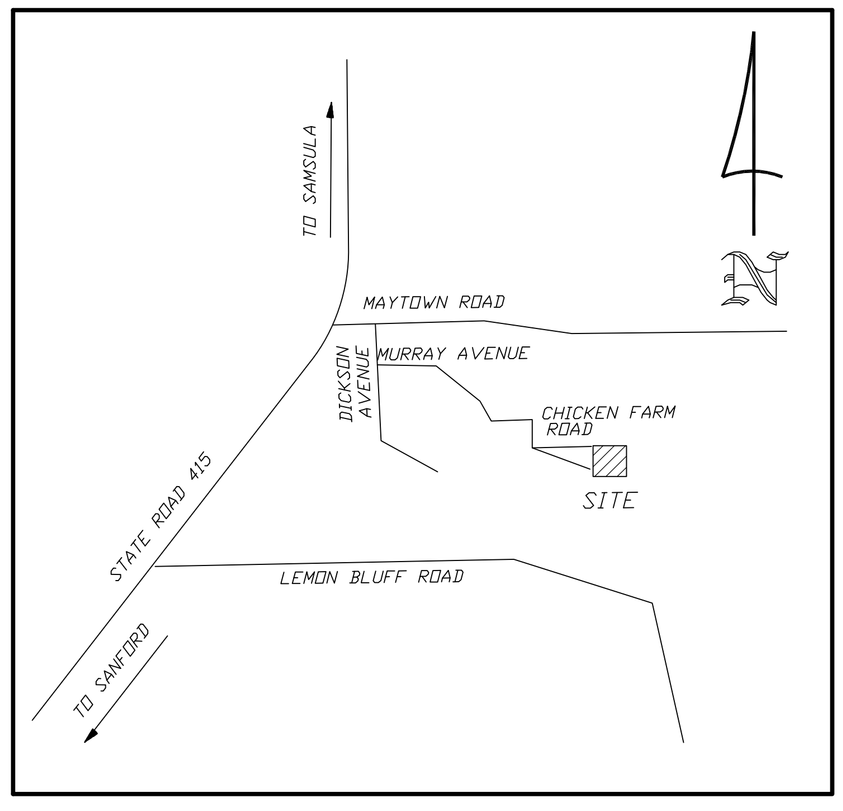
LEGEND

O.R.B.	=	OFFICIAL RECORDS BOOK
R/W	=	RIGHT OF WAY
CONC	=	CONCRETE
C.C.R.	=	CERTIFIED CORNER RECORD
REG	=	REGISTERED

NOTES

1. ■ DENOTES PERMANENT REFERENCE MONUMENT #4887 UNLESS NOTED OTHERWISE
2. ● DENOTES SET 5/8" IRON ROD & CAP #4887 TO BE SET IN ACCORDANCE WITH FLORID STATUTES.
3. BEARINGS ARE BASED ON THE N. LINE OF THE S.E. 1/4 OF SECTION 17-19-32 AS BEING N.89°33'15"W, AN ASSUMED MERIDIAN.
4. TRACT "A" IS AN INGRESS AND EGRESS TRACT AND IS TO BE OWNED AND MAINTAINED BY THE SMATHERS ESTATES PROPERTY PROPERTY OWNERS' ASSOCIATION.
5. TRACT "A" IS SUBJECT TO A UTILITY EASEMENT OVER THE ENTIRE TRACT THEREOF
6. THE INGRESS AND EGRESS EASEMENT SHOWN ALONG THE SOUTHERN BOUNDARY LINE IS A PRIVATE EASEMENT AND IS TO BE FOR EXCLUSIVE USE AND BENEFIT OF THE INDIVIDUAL LOT OWNERS.
7. THE UTILITY EASEMENTS SHOWN HEREON ARE GRANTED AND CONVEYED TO ANY PRIVATE OR PUBLIC UTILITY. AND ARE SERVABLE, NON EXCLUSIVE EASEMENTS, GRANTING THE RIGHT TO CONSTRUCT, OPERATE, MAINTAIN AND REPAIR UNDERGROUND UTILITY SYSTEMS (INCLUDING WIRES, CABLES, CONDUITS AND ABOVE GROUND APPURTENANT EQUIPMENT) UNLESS OTHERWISE INDICATED.

MCMAHON SURVEYING AND MAPPING, LLC
245 SAN MARCOS AVENUE
SANFORD, FLORIDA, 32771
CERTIFICATE OF AUTHORIZATION #LB7434
PHONE 407-328-7201



LOCATION MAP SCALE 1" = 2000'

CERTIFICATE OF APPROVAL BY LAND DEVELOPMENT MANAGER

THIS IS TO CERTIFY That on _____ the foregoing plat was approved.

_____
LAND DEVELOPMENT MANAGER OR HIS AUTHORIZED REPRESENTATIVE

CERTIFICATE OF APPROVAL BY COUNTY COUNCIL OF VOLUSIA COUNTY, FLORIDA

THIS IS TO CERTIFY, That on _____ the foregoing plat was approved by the County Council of Volusia County, Florida.

_____
Chairman of the County Council of Volusia County

ATTEST: _____
By: County Manager of Volusia County and Ex-Officio Clerk

CERTIFICATE OF CLERK

I HEREBY CERTIFY, That I have examined the foregoing plat and find that it complies in form with all the requirements of Chapter 177, Part 1, Florida Statutes, and was filed for record on _____.

at _____ File No. _____.

_____
CLERK OF THE COURT
in and for Volusia County, Florida

PLAT BOOK PAGE

DEDICATION

SMATHERS ESTATES

KNOW ALL MEN BY THESE PRESENTS, That the individual named below, being the owner in fee simple of the lands described in the foregoing caption to this plat, hereby dedicates said lands and plat for the uses and purposes herein expressed, and dedicates the utility easement to the perpetual use of the Public.

However, nothing herein shall be construed as creating an obligation upon any governing body to perform any act of construction or maintenance within such dedicated areas except when the obligation is voluntarily assumed by the governing body.

IN WITNESS WHEREOF, has caused these presents to be signed and attested to by the individual named below hereto on _____ .

_____

By: _____

Signed and sealed in the presence of:

_____

_____

STATE OF _____ , COUNTY OF _____

THIS IS TO CERTIFY, That on _____ before me, an officer duly authorized to take acknowledgments in the State and County aforesaid, personally appeared

_____

_____

of the State of Florida , the foregoing Dedication and acknowledged the execution thereof to be his free act and deed. He is personally known to me or produced

_____ as identification and did/did not take an oath.

IN WITNESS WHEREOF, I have hereonto set my hand and seal on the above date.

_____
NOTARY PUBLIC
My Commission Expires _____

CERTIFICATE OF SURVEYOR

Know all men by these presents, that the undersigned, being a Licensed and Registered Land Surveyor in the State of Florida, does hereby certify that on _____ , the survey was completed of the lands shown on the attached plat; That said plat is a true and correct representation of the lands therein described and platted; That the Boundary Survey was made under my responsible direction and supervision and meets the requirements of 5j-17.050 through 5j-07052 FAC, Standards of Practice; That the Plat was prepared under my direction and supervision, and complies with all the survey requirements of Chapter 177, Part 1, F.S., and that said land is located in Volusia County, Florida.

_____
THOMAS J. MCMAHON DATE
PROFESSIONAL SURVEYOR AND MAPPER #4887
MCMAHON SURVEYING AND MAPPING, LLC
245 SAN MARCOS AVENUE
SANFORD, FLORIDA, 32771
CERTIFICATE OF AUTHORIZATION #LB7434

REVIEW OF SURVEYOR AND MAPPER FOR VOLUSIA COUNTY, FLORIDA

Know all men by these presents, that the undersigned, being a Licensed and Registered Land Surveyor in the State of Florida, does hereby certify that a review of the foregoing plat has been performed, and based on such review has determines that the plat true and correct representation of the lands therein described and complies with the requirements of Chapter 177, Florida Statutes. This review is for the inspection of monumentation and for conformity with Florida Statute 177. The reviewing surveyor shall be held harmless if responsibility or liability to the Surveyor of record or their client.

_____
DATE
Jeff W. Barnes,
Surveyor and Mapper #5576

BOUNDARY SURVEY / SMATHERS ESTATES

DESCRIPTION:
THE NORTH 1/2 OF THE NORTHWEST 1/4 OF THE SOUTHEAST 1/4 OF SECTION 17, TOWNSHIP 19 SOUTH, RANGE 32 EAST, VOLUSIA COUNTY, FLORIDA.
BEING MORE PARTICULARLY DESCRIBED AS FOLLOWS:
BEGIN AT THE NORTHWEST CORNER OF THE SOUTHEAST 1/4 OF SECTION 17, TOWNSHIP 19 SOUTH, RANGE 32 EAST, VOLUSIA COUNTY, FLORIDA; THENCE N.89°37'41"E., ALONG THE NORTH LINE OF THE NORTH 1/2 OF THE NORTHWEST 1/4 OF THE SOUTHEAST 1/4 OF SAID SECTION 17 A DISTANCE OF 1328.79 FEET TO THE NORTHEAST CORNER OF THE NORTH 1/2 OF THE NORTHWEST 1/4 OF THE SOUTHEAST 1/4 OF SAID SECTION 17; THENCE S.00°47'16"W., ALONG THE EAST LINE OF THE NORTH 1/2 OF THE NORTHWEST 1/4 OF THE SOUTHEAST 1/4 OF SAID SECTION 17 A DISTANCE OF 663.98 FEET TO THE SOUTHEAST CORNER OF THE NORTH 1/2 OF THE NORTHWEST 1/4 OF THE SOUTHEAST 1/4 OF SAID SECTION 17; THENCE S.89°57'22"W., ALONG THE SOUTH LINE OF THE NORTH 1/2 OF THE NORTHWEST 1/4 OF THE SOUTHEAST 1/4 OF SAID SECTION 17 A DISTANCE OF 1330.10 FEET TO THE SOUTHWEST CORNER OF THE NORTH 1/2 OF THE NORTHWEST 1/4 OF THE SOUTHEAST 1/4 OF SAID SECTION 17; THENCE N.00°54'48"E., ALONG THE WEST LINE OF THE THE NORTH 1/2 OF THE NORTHWEST 1/4 OF THE SOUTHEAST 1/4 OF SAID SECTION 17 A DISTANCE OF 656.40 FEET TO THE POINT OF BEGINNING. CONTAINING 20.145 ACRES, MORE OR LESS

C.C.R. # 066364
N. 1/4 CORNER, SECTION 17-19-32
FOUND 3" DIAMETER CONC
MONUMENT (NO ID.)

S.00°54'48"W.
2660.37'

CENTER SECTION LINE, SECTION 17-19-32

PRIVATE ROAD EASEMENT PER O.R.B. 2511, PG 1651

N.W. CORNER, S.E. 1/4
SECTION 17-19-32
POINT OF BEGINNING

N.89°33'13"W.
2644.85'
N. LINE, S.E. 1/4

C.C.R. # 0024620
W. 1/4 CORNER, SECTION 17-19-32
FOUND 4" X 4" CONC
MONUMENT (NO ID.)

N.89°37'41"E.

NOT PLATTED

WOOD & WIRE FIELD FENCE

OHW RUNS ALONG LINE

N.E. CORNER, N. 1/2, N.W. 1/4, S.E. 1/4, SECTION 17-19-32

FOUND 5/8" IRON ROD LB24

1328.79'

1.7'

WPP

1328.78'
N.89°37'42"E.

C.C.R. # 092410
E. 1/4 CORNER, SECTION 17-19-32
FOUND 4" X 4" CONC
MONUMENT (NO ID.)

360.83'

338.84'

321.94'

307.19'

N. LINE, N. 1/2. N.W. 1/4, S.E. 1/4, SECTION 17-19-32

N.00°54'48"E.

W. LINE, N. 1/2, N.W. 1/4, S.E. 1/4, SECTION 17-19-32

656.40'

663.98'

428.06'

E. LINE, N. 1/2, N.W. 1/4, S.E. 1/4, SECTION 17-19-32

REMAINS OF OLD WIRE FENCE MEANDER ALONG LINE

LEANUS TRAIL (PRIVATE)

DIRT TRAIL
NO EASEMENT DATA PROVIDED

4.904 Acres, ±
PROPOSED
LOT 1

5.000 Acres, ±
PROPOSED
LOT 2

5.000 Acres, ±
PROPOSED
LOT 3

5.002 Acres, ±
PROPOSED
LOT 4

613.45'
S.00°52'54"W.

630.39'
S.00°51'01"W.

N.00°49'08"E.
647.23'

28.42'

N.01°32'10"W.
185.38'

NOT PLATTED

NOTE: NO SPECIMEN TREES IN PROJECT AREA

TRACT A

30' +- COUNTY MAINTAINED R/W
MURRAY (NO OFFICIAL ROAD DEDICATION)

DIRT TRAIL

"END COUNTY MAINTENANCE" SIGN

INGRESS / EGRESS EASEMENT
PER O.R.B. 4465, PG 4972

45.00' INGRESS, EGRESS & UTILITY EASEMENT

INGRESS, EGRESS & UTILITY EASEMENT

N.89°57'22"E.
174.20'

N.89°57'22"E.
513.11'

N.89°57'22"E.
929.13'

N.89°57'22"E.

332.53'

1053.39'

L1 L2 L3 L4 L5 L6

C-1 C-2 C-3 C-4 C-5 C-6

S.W. CORNER, N. 1/2, N.W. 1/4, S.E. 1/4, SECTION 17-19-32

S. LINE, N. 1/2, N.W. 1/4, S.E. 1/4, SECTION 17-19-32

1330.10'

S.E. CORNER, N. 1/2, N.W. 1/4, S.E. 1/4, SECTION 17-19-32

N.00°54'48"E.
1969.22'

S. 1/4 CORNER, SECTION 17-19-32
POSITION CALCULATED FROM SURVEY
BY V.K. SMITH DATED JULY 8, 1987

WETLAND AREA
44847 Square Feet
1.030 Acres, ±

50' UPLAND BUFFER

W-1 W-2 W-3 W-4 W-5

106.63'
S.69°01'39"E.

65.93'
S.84°40'35"E.

87.19'
S.69°01'39"E.

76.77'
S.84°40'35"E.

136.68'
N.35°28'25"E.

85.02'
N.35°28'25"E.

50.16'

185.77'

174.10'
N.04°36'40"W.

220.79'

FOUND 5/8" IRON ROD (NO ID)

N.00°47'16"E.

LINE TABLE

Line	Bearing	Distance
L1	N.66°55'01"W.	90.24'
L2	S.78°28'14"E.	79.12'
L3	N.89°57'22"E.	55.93'
L4	N.89°57'22"E.	1053.39'
L5	N.00°54'48"E.	100.20'
L6	N.00°54'48"E.	556.20'

GRAPHIC SCALE
0 12 25 50 100

LEGEND

WPP = WOOD POWER POLE
CONC = CONCRETE
R/W = RIGHT OF WAY
OHW = OVERHEAD WIRES
O.R.B. = OFFICIAL RECORDS BOOK
FH = FIRE HYDRANT
C.C.R. = CERTIFIED CORNER RECORD
REG = REGISTERED
● = SET 5/8" IRON ROD #4887

CURVE TABLE

NO.	RADIUS	DELTA	ARC	TANGENT	CHORD	CHORD BEARING
1	25.00'	59°19'55"	25.89'	14.24'	24.75'	S.87°08'31"W.
2	55.00'	212°28'48"	203.97'	-188.82'	105.61'	S.16°17'02"E.
3	55.00'	94°55'35"	91.12'	59.94'	81.05'	S.75°03'39"E.
4	55.00'	37°06'22"	35.62'	18.46'	35.00'	S.09°02'41"E.
5	55.00'	37°06'22"	35.62'	18.46'	35.00'	S.28°03'41"W.
6	55.00'	43°20'30"	41.61'	21.85'	40.62'	S.68°17'07"W.

SURVEYOR'S NOTES

1. BEARINGS BASED ON THE NORTH LINE OF THE S.E. 1/4 OF SECTION 17, TOWNSHIP 19 SOUTH, RANGE 32 EAST AS BEING N. 89° 33' 15" W. (PER SURVEY BY V.K. SMITH DATED JULY 8, 1987).
2. UNDERGROUND IMPROVEMENTS NOT LOCATED (EXCEPT AS SHOWN).
3. SUBJECT TO EASEMENTS AND RESTRICTIONS OF RECORD.
4. SUBJECT PROPERTY LIES IN ZONE "X", PER FLOOD INSURANCE RATE MAP PANEL # 12127C0760J, DATED FEB. 19, 2014, AND LIES OUTSIDE THE 500-YEAR FLOOD PLAIN.
5. DATE OF FIELD SURVEY: 1/17/17.

SURVEYOR'S CERTIFICATION

CERTIFIED TO:
ROGER SMATHERS

I HEREBY CERTIFY:
THAT THIS SURVEY MEETS THE STANDARDS OF PRACTICE SET FORTH BY THE FLORIDA BOARD OF LAND SURVEYORS IN CHAPTER 5J-17, FLORIDA ADMINISTRATIVE CODE.

DATE: 5/21/18
SCALE: 1" = 50'
JOB NO. 16-OSTEEN

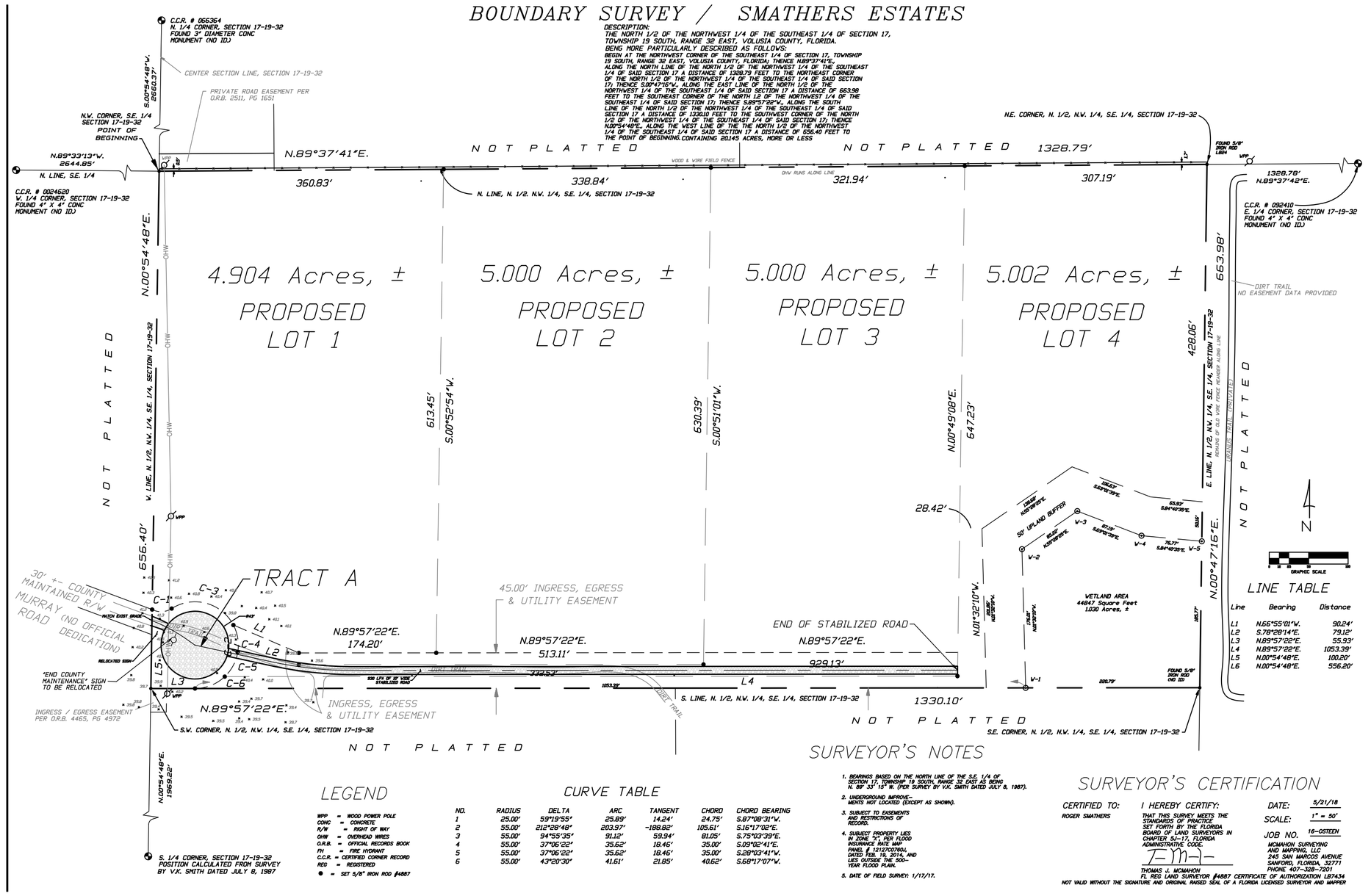
MCMAHON SURVEYING AND MAPPING, LLC
245 SAN MARCOS AVENUE
SANFORD, FLORIDA, 32771
PHONE 407-328-7201

THOMAS J. MCMAHON
FL REG LAND SURVEYOR #4887 CERTIFICATE OF AUTHORIZATION LB7434

NOT VALID WITHOUT THE SIGNATURE AND ORIGINAL RAISED SEAL OF A FLORIDA LICENSED SURVEYOR AND MAPPER

Sht Plot date

BOUNDARY SURVEY / SMATHERS ESTATES



LINE TABLE

Line	Bearing	Distance
L1	N.56°55'02"W.	90.24'
L2	S.79°28'14"E.	79.12'
L3	N.89°57'22"E.	55.93'
L4	N.89°57'22"E.	1053.29'
L5	N.00°54'48"E.	100.20'
L6	N.00°54'48"E.	556.26'

CURVE TABLE

NO.	RADIUS	DELTA	ARC	TANGENT	CHORD	CHORD BEARING
1	25.00'	93°13'55"	25.89'	14.24'	24.75'	S.87°38'31"W.
2	55.00'	212°08'48"	203.57'	-188.88'	105.61'	S.35°17'02"E.
3	55.00'	94°55'35"	91.12'	59.94'	81.05'	S.75°29'29"E.
4	55.00'	37°06'22"	35.62'	18.46'	35.00'	S.09°08'41"E.
5	55.00'	37°06'22"	35.62'	18.46'	35.00'	S.28°03'41"W.
6	55.00'	43°20'30"	41.61'	21.85'	40.62'	S.68°17'07"W.

LEGEND

WPP = WOOD POWER POLE
CONC = CONCRETE
R/W = RIGHT OF WAY
OHW = OVERHEAD WIRES
O.R.B. = OFFICIAL RECORDS BOOK
FH = FIRE HYDRANT
C.C.R. = CERTIFIED CORNER RECORD
REG = REGISTERED
● = SET 5/8" IRON ROD #4867

S. 1/4 CORNER, SECTION 17-19-32 POSITION CALCULATED FROM SURVEY BY V.K. SMITH DATED JULY 8, 1987

SURVEYOR'S NOTES

1. BEARINGS BASED ON THE NORTH LINE OF THE S.E. 1/4 OF SECTION 17, TOWNSHIP 19 SOUTH, RANGE 32 EAST AS BEING N. 89° 37' 15" E. (PER SURVEY BY V.K. SMITH DATED JULY 8, 1987).
2. UNDERGROUND IMPROVE-MENTS NOT LOCATED (EXCEPT AS SHOWN).
3. SUBJECT TO EASEMENTS AND RESTRICTIONS OF RECORD.
4. SUBJECT PROPERTY LIES IN ZONE "X" PER FLOOD INSURANCE RATE MAP (PANEL # 12127C0115J, DATED 9/28/07) UNSHADED AND LIES WITHIN THE 500-YEAR FLOOD PLAIN.
5. DATE OF FIELD SURVEY: 1/17/17.

SURVEYOR'S CERTIFICATION

CERTIFIED TO: ROGER SMATHERS

I HEREBY CERTIFY: THAT THIS SURVEY MEETS THE STANDARDS OF PRACTICE SET FORTH BY THE FLORIDA BOARD OF PROFESSIONAL SURVEYORS IN CHAPTER 61G17, FLORIDA ADMINISTRATIVE CODE.

DATE: 5/21/18
SCALE: 1" = 50'
JOB NO. 16-OSTEEN

THOMAS J. MCMAHON
FL REG. LAND SURVEYOR #4867 CERTIFICATE OF AUTHORIZATION LB7434

NOT VALID WITHOUT THE SIGNATURE AND ORIGINAL RAISED SEAL OF A FLORIDA LICENSED SURVEYOR AND MAPPER

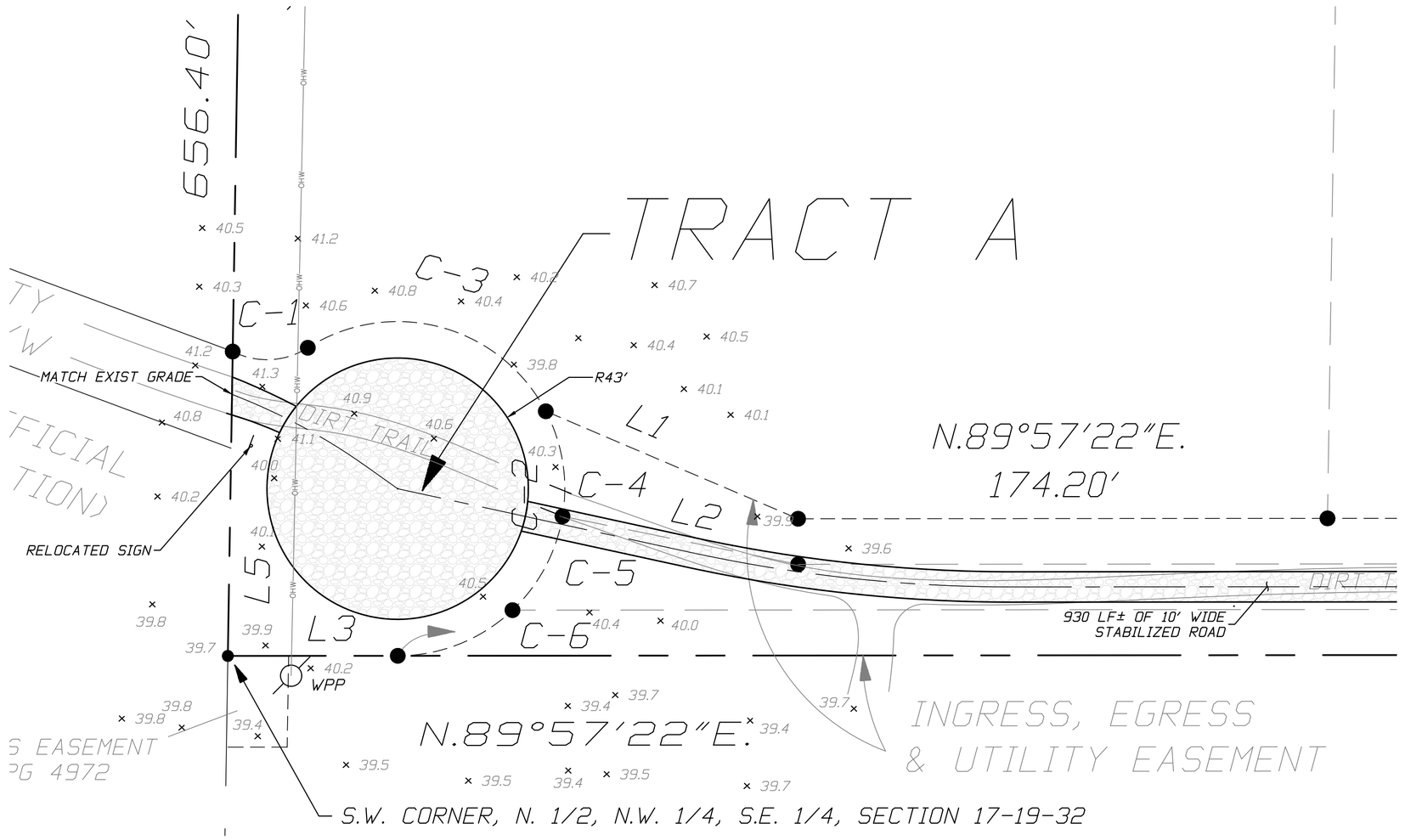
SCALE: 1"= 30'
0 30 60

SCALE: 1:100

GENERAL NOTES

1. PRIOR TO CONSTRUCTION THE CONTRACTOR SHALL BE RESPONSIBLE TO VERIFY THAT ALL PERMITS AND APPROVALS HAVE BEEN OBTAINED. NO CONSTRUCTION OR FABRICATION SHALL BEGIN UNTIL THE CONTRACTOR HAS RECEIVED AND THOROUGHLY REVIEWED ALL PLANS AND OTHER DOCUMENTS APPROVED BY ALL PERMITTING AUTHORITIES.
2. ALL WORK SHALL BE PERFORMED IN ACCORDANCE WITH THE APPROVED PLANS, SPECIFICATIONS, REQUIREMENTS AND STANDARDS OF THE LOCAL GOVERNING AUTHORITY.
3. FOR BENCHMARKS, CONTACT: McMAHON SURVEYING & MAPPING, LLC. (407) 328-7201.
4. ALL HANDICAP SPACE STRIPING AND PAVEMENT MARKINGS AND SIGNAGE TO COMPLY WITH THE FDOT ROADWAY AND TRAFFIC DESIGN STANDARDS, THE MANUAL OF UNIFORM TRAFFIC CONTROL DEVICES AND VOLUSIA COUNTY LAND DEVELOPMENT CODE. ALL STOP BARS SHALL BE THERMOPLASTIC.
5. ALL WORK SHALL CONFORM TO THE VOLUSIA COUNTY SPECIFICATIONS AND REGULATIONS.
6. THE SITE DIMENSIONS SHOWN ARE FOR CONSTRUCTION OF SITE IMPROVEMENTS ONLY. REFER TO ARCHITECTURAL PLANS FOR CONSTRUCTION OF BUILDING. ALL DIMENSIONS ARE TO EDGE OF PAVEMENT/FACE OF CURB UNLESS NOTED OTHERWISE.
7. THE CONTRACTOR SHALL IMMEDIATELY NOTIFY THE PROJECT ENGINEER PRIOR TO CONSTRUCTION IF ANY DISCREPANCIES ARE FOUND BETWEEN THESE PLANS, THE ARCHITECTURAL PLANS AND/OR FIELD CONDITIONS.
8. ALL PRIVATE AND PUBLIC PROPERTY DAMAGED BY CONSTRUCTION ACTIVITIES SHALL BE RESTORED TO A CONDITION EQUAL TO OR BETTER THAN PRE-DEVELOPMENT CONDITIONS.
9. ALL DISTURBED AREAS SHALL BE REGRADED AND SODDED, UNLESS OTHERWISE NOTED ON THE LANDSCAPE PLANS.
10. DURING CONSTRUCTION, WHEN COMBUSTIBLES ARE BROUGHT ONTO THE SITE IN SUCH QUANTITIES AS DEEMED HAZARDOUS BY THE FIRE OFFICIAL, ACCESS ROADS AND A SUITABLE TEMPORARY SUPPLY OF WATER ACCEPTABLE TO THE FIRE DEPARTMENT SHALL BE PROVIDED AND MAINTAINED.
11. ALL PAVEMENT MARKINGS SHALL BE THERMOPLASTIC EXCEPT PARKING SPACES WHICH MAY BE FDOT TRAFFIC RATED PAINT. MINIMUM LINE WIDTH SHALL BE 6".
12. WOOD IN CONTACT WITH GROUND OR BELOW GROUND LEVEL WHICH SUPPORTS PERMANENT STRUCTURES SHALL BE APPROVED PRESERVATIVE-TREATED WOOD SUITABLE FOR GROUND CONTACT USE. EXCEPTIONS:
13. NATURALLY DURABLE WOOD MAY BE USED IN CONTACT WITH THE GROUND FOR SUPPORT OF STRUCTURES OTHER THAN BUILDINGS AND WALKING SURFACES.
14. SEE BUILDING PLANS FOR STRUCTURAL SPECIFICATIONS AND DETAILS.
15. BACKGROUND/EXISTING CONDITION INFORMATION PRESENTED WAS TAKEN FROM TOPOGRAPHIC SURVEY PROVIDED BY THE CLIENT AND BEING UTILIZED IN THIS DRAWING FOR INFORMATION PURPOSES ONLY. BRAVO ENGINEERING, LLC IS NOT LIABLE FOR ANY INACCURACY OF THE INFORMATION.
16. CONTRACTOR SHALL FIELD STAKE ALL BUILDING CORNERS & CENTERLINE GEOMETRY TO ENSURE PROPOSED DIMENSIONS FIT EXISTING CONDITIONS. CONTRACTOR SHALL NOTIFY BRAVO ENGINEERING, LLC IMMEDIATELY OF ANY DISCREPANCIES BETWEEN ACTUAL FIELD CONDITIONS AND PLANS BEFORE PROCEEDING WITH CONSTRUCTION.
17. IT SHALL BE THE CONTRACTOR'S RESPONSIBILITY TO FIELD VERIFY THE LOCATION OF ALL UTILITIES, AND HE SHALL BE RESPONSIBLE FOR ANY DAMAGE DUE TO HIS OPERATIONS. CONTRACTOR IS TO COORDINATE ALL UTILITY CONNECTIONS WITH THE OWNERS AND/OR THE LOCAL AUTHORITIES PRIOR TO INSTALLATION.
18. CONTRACTOR SHALL REFER TO MANUFACTURER'S PLANS AND SPECS FOR ACTUAL LOCATION OF ALL UTILITY CONNECTION POINTS, TO INCLUDE; GAS, SANITARY SEWER LATERALS, DOMESTIC AND FIRE PROTECTION WATER SERVICE, ELECTRICAL AND TELEPHONE SERVICE. CONTRACTOR SHALL COORDINATE INSTALLATION OF UTILITIES IN SUCH A MANNER AS TO AVOID CONFLICTS AND ASSURE PROPER DEPTHS ARE ACHIEVED, AS WELL AS, COORDINATE WITH UTILITY COMPANIES FOR APPROVED LOCATIONS AND SCHEDULING OF TIE-INS/CONNECTIONS TO THEIR FACILITIES.
19. IN ACCORDANCE WITH GENERALLY ACCEPTED CONSTRUCTION PRACTICES, THE CONTRACTOR WILL BE SOLELY AND COMPLETELY RESPONSIBLE FOR CONDITIONS OF THE JOB SITE, INCLUDING SAFETY OF ALL PERSONS AND PROPERTY DURING PERFORMANCE OF THE WORK. THIS REQUIREMENT WILL APPLY CONTINUOUSLY AND WILL NOT BE LIMITED TO NORMAL WORKING HOURS. THE CONTRACTOR WILL BE RESPONSIBLE FOR PROVIDING AND MAINTAINING ALL BARRICADES, WARNING SIGNS, FLASHING LIGHTS AND TRAFFIC CONTROL DEVICES DURING CONSTRUCTION. CONTRACTOR SHALL COMPLY WITH OSHA REGULATIONS AND SAFETY REQUIREMENTS.
20. HANDICAPPED RAMPS SHALL MEET ADA AND FLORIDA STANDARDS.
21. INGRESS AND EGRESS TO SITE DURING CONSTRUCTION IS ALLOWED ONLY THROUGH APPROVED SITE DRIVEWAYS.

OVERALL VIEW

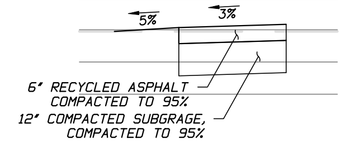


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PROJECT AREA VIEW

GRADING DRAINAGE AND PAVING

1. PRIOR TO START OF CONSTRUCTION, THE CONTRACTOR SHALL COORDINATE WITH THE VARIOUS UTILITIES TO FIELD VERIFY THE LOCATION OF ALL EXISTING UTILITIES WHETHER SHOWN HEREON OR NOT. RELOCATION OR EXTENSION OF EXISTING UTILITIES SHALL BE COORDINATED BY THE CONTRACTOR.
2. MEASURES SHALL BE TAKEN BY THE CONTRACTOR TO CONTROL EROSION ON THE SITE DURING CONSTRUCTION. SUCH METHODS SHALL BE IN ACCORDANCE WITH CURRENT STANDARDS AND SPECIFICATIONS OF THE ST JOHNS RIVER WATER MANAGEMENT DISTRICT.
3. ALL SOIL STRIPPINGS AND ANY UNSUITABLE MATERIAL SHALL BE REMOVED FROM THE SITE AND DISPOSED OF BY THE CONTRACTOR UNLESS OTHERWISE DIRECTED BY THE OWNER.
4. THE CONTRACTOR SHALL BE RESPONSIBLE FOR THE CORRECTION OF ANY EROSION OR SHOALING PROBLEMS THAT RESULT FROM THE CONSTRUCTION.
5. THE CONTRACTOR SHALL BE RESPONSIBLE FOR THE CORRECTION OF ANY WATER QUALITY PROBLEMS THAT RESULT FROM THE CONSTRUCTION.
6. THE CONTRACTOR SHALL BE RESPONSIBLE FOR THE MAINTENANCE OF ALL NEWLY PLANTED GRASS OR VEGETATION UNTIL THE WORK HAS BEEN ACCEPTED BY THE OWNER.
7. ALL MANHOLE AND INLET STRUCTURES SHALL BE PRECAST AND IN ACCORDANCE WITH FDOT & LOCAL STANDARDS.
8. ALL FILL MATERIAL SHALL BE CLEAN, COARSE SAND CONTAINING LESS THAN 5% FINES PASSING THE #200 SIEVE. FILL PLACEMENT SHALL BE IN 12" LIFTS AND COMPACTED TO 95% MAXIMUM DENSITY IN ACCORDANCE WITH AASHTO T-180. EACH LIFT SHALL BE TESTED FOR COMPACTION BY A FLORIDA REGISTERED SOILS ENGINEER RETAINED BY THE CONTRACTOR. ALL TEST RESULTS SHALL BE SUBMITTED TO THE OWNER FOR REVIEW BY HIS CONSULTANT. COMPACTION AT THE BUILDING PAD SHALL BE IN ACCORDANCE WITH ABOVE EXCEPT THAT MAXIMUM DENSITY SHALL BE 98%.
9. THE LOCATIONS OF UNDERGROUND FACILITIES SHOWN ON THIS PLAN ARE APPROXIMATE ONLY. NO ADDITIONAL COMPENSATION SHALL BE PAID TO THE CONTRACTOR FOR DAMAGE AND REPAIR TO ANY FACILITY CAUSED.
10. THE CONTRACTOR SHALL SUBMIT ASBUILT DRAWINGS (RECORD DRAWINGS) PREPARED BY A PROFESSIONAL LAND SURVEYOR AND LICENSED IN THE STATE OF FLORIDA, TO THE ENGINEER OF RECORD. ASBUILT DRAWINGS SHALL BE IN ACCORDANCE WITH THE STANDARDS AND REQUIREMENTS OF VOLUSIA COUNTY AND SJRWMD.
11. THE ASBUILT DRAWINGS SHALL SHOW ADEQUATE ELEVATIONS TO INDICATE SURFACE FLOW PATTERNS, FINISHED FLOOR ELEVATION, TOPS OF ALL STRUCTURES, INVERTS OF ALL STRUCTURES & PIPE MATERIALS, HIGH POINTS AND LOW POINTS OF FINISHED GRADES.
12. SOD ALL DISTURBED AREAS WITHIN THE DEMISED PREMISES, INCLUDING THE RETENTION POND, EXCEPT AS DIRECTED BY LANDSCAPE PLANS.
13. ALL PAVING SURFACES SHALL BE GRADED TO DRAIN POSITIVELY IN THE DIRECTION INDICATED IN THE PLAN AND TO PROVIDE A SMOOTHLY TRANSITIONED DRIVING SURFACE FOR VEHICLES WITH NO SHARP BREAKS IN GRADE AND NO UNUSUALLY STEEP OR REVERSE CROSS SLOPES.
14. PAVED AREAS ARE TO BE CONSTRUCTED IN A PRECISE MANNER AND APPROVED BY THE OWNER OR HIS REPRESENTATIVE PRIOR TO COMPLETION OF WORK.
15. THE OPEN SPACE IS TO BE GRADED IN SUCH A MANNER AS TO PROMOTE POSITIVE FLOW AND AVOID ANY PONDING ON SITE.
16. WHERE SODDING IS USED ON SLOPES OR IN DRAINAGE DITCHES, ARRANGE THE SETTING OF THE PIECES TO AVOID A CONTINUOUS PATH FOR THE LINE OF FLOW.
17. ON AREAS WHERE THE SOD MAY SLIDE DUE TO SLOPE, PEG THE SOD WITH PEGS DRIVEN THROUGH THE SOD INTO FIRM EARTH AT SUITABLE INTERVALS. REPLACE ANY SOD WHICH, AFTER PLACING, SHOWS AN APPEARANCE OF DRYNESS.
18. PROPOSED SPOT ELEVATIONS ARE AT THE EDGE OF PAVEMENT. ADD 6" TO DETERMINE BACK OF CURB ELEVATION.
19. ALL STORM PIPE SHALL BE REINFORCED CONCRETE (RCP) CLASS III (MINIMUM) UNLESS OTHERWISE NOTED ON PLANS OR APPROVED BY ENGINEER OF RECORD.



TYP UNPAVED ROAD SECTION

N.T.S.

NOTE: SOD OR SEED & MULCH ALL DISTURBED AREAS AROUND UNPAVED ROAD.

CHRISTOPHER T. BRAVO, P.E.
REGISTRATION # 58562
C.A. # 28953

SMATHERS PROPERTY
OSTEEN, FL 32764

CUL-DE-SAC STABILIZATION PLAN

BRAVO ENGINEERING, LLC
7221 ALOMA AVE, STE 300
WINTER PARK, FLORIDA 32792
Telephone: 407-252-1671

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NO.	DATE	DESCRIPTION
0	8/09/19	XXX

DRAWN BY: LEB
CHECK BY: CTB
PROJECT NO.: 2019-15
PROJECT DATE: 06/08/19

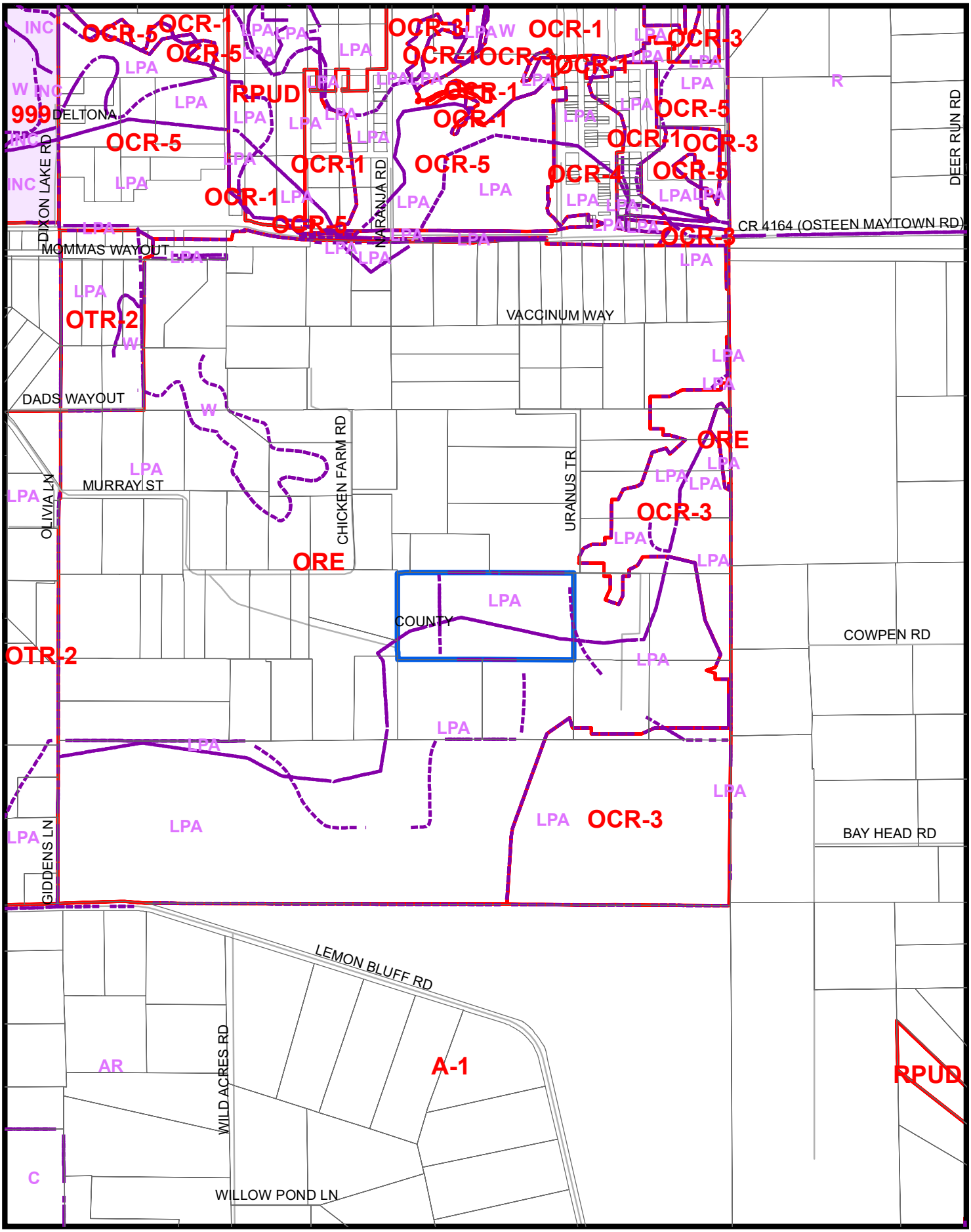
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N
W E
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1 inch = 2 miles



SMATHERS ESTATES

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N W E S

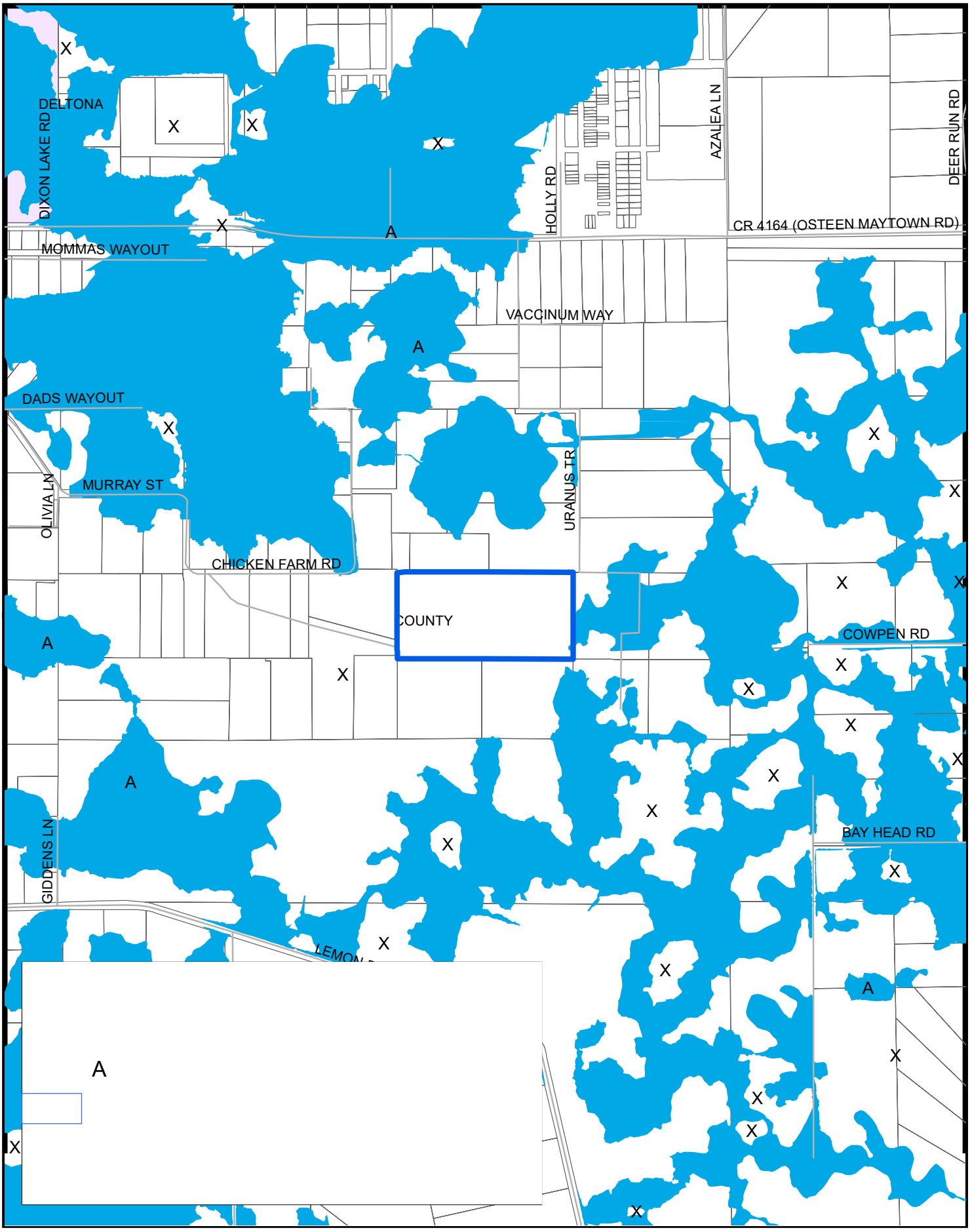
1 inch = 1,000 feet



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N
W E
S

1 inch = 250 feet



SMATHERS ESTATES

2020-S-PPL-0121

N
W E
S

1 inch = 1,000 feet