



Planning and Zoning Board / Local Planning Agency

Brevard County Government Center
2725 Judge Fran Jamieson Way, Building C, Commission Room, Viera, Florida
Agenda

Monday, October 5, 2020

The Board of County Commissioners may approve or deny the requested classification, or may approve a classification of lesser intensity than that requested.

Call To Order

Approval of Minutes - September 14, 2020

H. Public Hearings

- H.1.** Jennifer Robbins requests a change of zoning classification from GU to RR-1. (20Z00021) (Tax Account 2402990) (District 1)
- H.2.** Christine Ruggiero and Michael A. Sollecito request a change of zoning classification from RR-1 to RRMH-1. (20Z00022) (Tax Account 2002464) (District 1)
- H.3.** 2354 Talmadge Drive, LLC (Aldon Bookhardt) requests a Small Scale Comprehensive Plan Amendment to change the Future Land Use designation from RES 4 to NC. (20PZ00079) (Tax Account 2103831) (District 1)
- H.4.** 2354 Talmadge Drive, LLC (Aldon Bookhardt) requests a change of zoning classification from RU-1-9 and BU-1 to BU-1-A on 0.98 acres; and a BDP limited to 4 units per acre on 2.29 acres on the RU-1-9 portion. (20Z00023) (Tax Account 2103831) (District 1)
- H.5.** Public Hearing, Re: Extension of Temporary Moratorium on New Applications of Biosolids to Lands within Brevard County.

Public Comment

Adjournment

In accordance with the Americans with Disabilities Act and Section 286.26, Florida Statutes, persons needing special accommodations or an interpreter to participate in the proceedings, please notify the Planning and Development Department no later than 48 hours prior to the meeting at (321) 633-2069.

Assisted listening system receivers are available for the hearing impaired and can be obtained from SCGTV staff at the meeting. We respectfully request that ALL ELECTRONIC ITEMS and CELL PHONE REMAIN OFF while the Planning and Zoning Board is in session. Thank You.

This meeting will be broadcast live on Space Coast Government Television (SCGTV) on Spectrum Cable Channel 499, Comcast (North Brevard) Cable Channel 51, and Comcast (South Brevard) Cable Channel 13 and AT&T U-verse Channel 99. SCGTV will also replay this meeting during the coming month on its 24-hour video server nights, weekends, and holidays. Check the SCGTV website for daily program updates at <http://www.brevardfl.gov>. The Agenda may be viewed at: <http://www.brevardfl.gov/Board Meetings>



Agenda Report

2725 Judge Fran Jamieson
Way
Viera, FL 32940

Public Hearing

H.1. 10/5/2020

Subject:

Jennifer Robbins requests a change of zoning classification from GU to RR-1. (20Z00021) (Tax Account 2402990) (District 1)

Fiscal Impact:

None

Dept/Office:

Planning and Development

Requested Action:

It is requested that the Planning and Zoning Board conduct a public hearing to consider a change of zoning classification from GU (General Use) to RR-1 (Rural Residential).

Summary Explanation and Background:

The applicant requests to change of zoning classification from GU (General Use) to RR-1 (Rural Residential) for the purpose of building a barn and having horses. The parcel is two combined lots located in the Canaveral Groves area. In GU zoning, agricultural pursuits (barns and horses) are permitted with 5 acres or more of land. The parcel currently is developed with a 2,823 square-foot single-family residence and an 864 square-foot detached garage. The lots were recorded in Survey Book 2, Page 61, on September 29, 1960. When these lots were recorded in the Survey Book, GU zoning required a minimum lot with and depth of 150 feet and a minimum lot size of one acre. These two lots have a lot width of 147 feet each and although they were recorded in Survey 2, Page 61, they did not meet the GU zoning 150 feet minimum lot width required to be Nonconforming Lots of Record. The lots do meet the proposed RR-1 zoning minimum 125 feet lot width and depth and the RR-1 minimum one acre lot size requirements. The proposed RR-1 zoning would legitimize the lots for lot size requirements.

The subject property retains the RES 1 (Residential 1) Future Land Use designation. The existing GU zoning and the proposed RR-1 zoning are consistent with the RES 1 Future Land Use designation.

The parcel abuts GU zoning along its northern, southern, and western boundaries and abuts AU zoning to the east. The abutting parcels to the north, east and south are undeveloped. Although there is not any RR-1 zoning in the surrounding area, the RR-1 zoning does allow agricultural pursuits limited to the keeping of horses and activities of a horticultural nature which are permitted uses in AU. These uses are also permitted in GU if the parcel is five acres in size or may be considered as a Conditional Use with a CUP (Conditional Use Permit) if the parcel is less than five acres in size.

The Board may wish to consider whether this request for RR-1 zoning is consistent and compatible with the

surrounding neighborhood which has AU and GU zoning.

The Board of County Commissioners will consider the request on **Thursday, November 5, 2020**, at **5:00 p.m.** at the Brevard County Government Center, 2725 Judge Fran Jamieson Way, Building C, Viera, Florida.

Clerk to the Board Instructions:

None

ADMINISTRATIVE POLICIES OF THE FUTURE LAND USE ELEMENT

Administrative Policies in the Future Land Use Element establish the expertise of staff with regard to zoning land use issues and set forth criteria when considering a rezoning action or request for Conditional Use Permit, as follows:

Administrative Policy 1

The Brevard County zoning official, planners and the director of the Planning and Development staff, however designated, are recognized as expert witnesses for the purposes of Comprehensive Plan amendments as well as zoning, conditional use, special exception, and variance applications.

Administrative Policy 2

Upon Board request, members of the Brevard County Planning and Development staff shall be required to present written analysis and a recommendation, which shall constitute an expert opinion, on all applications for development approval that come before the Board of County Commissioners for quasi-judicial review and action. The Board may table an item if additional time is required to obtain the analysis requested or to hire an expert witness if the Board deems such action appropriate. Staff input may include the following:

Criteria:

- A. Staff shall analyze an application for consistency or compliance with comprehensive plan policies, zoning approval criteria and other applicable written standards.
- B. Staff shall conduct site visits of property which are the subject of analysis and recommendation. As part of the site visit, the staff shall take a videotape or photographs where helpful to the analysis and conduct an inventory of surrounding existing uses. Aerial photographs shall also be used where they would aid in an understanding of the issues of the case.
- C. In cases where staff analysis is required, both the applicant and the staff shall present proposed findings of fact for consideration by the Board.
- D. For re-zoning applications where a specific use has not been proposed, the worst case adverse impacts of potential uses available under the applicable land use classification shall be evaluated by the staff.

Administrative Policy 3

Compatibility with existing or proposed land uses shall be a factor in determining where a rezoning or any application involving a specific proposed use is being considered. Compatibility shall be evaluated by considering the following factors, at a minimum:

Criteria:

- A. Whether the proposed use(s) would have hours of operation, lighting, odor, noise levels, traffic, or site activity that would significantly diminish the enjoyment of, safety or quality of life in existing neighborhoods within the area which could foreseeably be affected by the proposed use.
- B. Whether the proposed use(s) would cause a material reduction (five percent or more) in the value of existing abutting lands or approved development.
- C. Whether the proposed use(s) is/are consistent with an emerging or existing pattern of surrounding development as determined through analysis of:

1. historical land use patterns;
 2. actual development over the immediately preceding three years; and
 3. development approved within the past three years but not yet constructed.
- D. Whether the proposed use(s) would result in a material violation of relevant policies in any elements of the Comprehensive Plan.

Administrative Policy 4

Character of a neighborhood or area shall be a factor for consideration whenever a rezoning or any application involving a specific proposed use is reviewed. The character of the area must not be materially or adversely affected by the proposed rezoning or land use application. In evaluating the character of an area, the following factors shall be considered:

Criteria:

- A. The proposed use must not materially and adversely impact an established residential neighborhood by introducing types of intensity of traffic (including but not limited to volume, time of day of traffic activity, type of vehicles, et cetera), parking, trip generation, commercial activity or industrial activity that is not already present within the identified boundaries of the neighborhood.
- B. In determining whether an established residential neighborhood exists, the following factors must be present:
 1. The area must have clearly established boundaries, such as roads, open spaces, rivers, lakes, lagoons, or similar features.
 2. Sporadic or occasional neighborhood commercial uses shall not preclude the existence of an existing residential neighborhood, particularly if the commercial use is non-conforming or pre-dates the surrounding residential use.
 3. An area shall be presumed not to be primarily residential but shall be deemed transitional where multiple commercial, industrial or other non-residential uses have been applied for and approved during the previous five (5) years.

Administrative Policy 5

In addition to the factors specified in Administrative Policies 2, 3, and 4, in reviewing a rezoning, conditional use permit or other application for development approval, the impact of the proposed use or uses on transportation facilities either serving the site or impacted by the use(s) shall be considered. In evaluating whether substantial and adverse transportation impacts are likely to result if an application is approved, the staff shall consider the following criteria:

Criteria:

- A. Whether adopted levels of services will be compromised;
- B. Whether the physical quality of the existing road system that will serve the proposed use(s) is sufficient to support the use(s) without significant deterioration;

- C. Whether the surrounding existing road system is of sufficient width and construction quality to serve the proposed use(s) without the need for substantial public improvements;
- D. Whether the surrounding existing road system is of such width and construction quality that the proposed use(s) would realistically pose a potential for material danger to public safety in the surrounding area;
- E. Whether the proposed use(s) would be likely to result in such a material and adverse change in traffic capacity of a road or roads in the surrounding area such that either design capacities would be significantly exceeded or a de facto change in functional classification would result;
- F. Whether the proposed use(s) would cause such material and adverse changes in the types of traffic that would be generated on the surrounding road system, that physical deterioration of the surrounding road system would be likely;
- G. Whether projected traffic impacts of the proposed use(s) would materially and adversely impact the safety or welfare of residents in existing residential neighborhoods.

Administrative Policy 6

The use(s) proposed under the rezoning, conditional use or other application for development approval must be consistent with, (a), all written land development policies set forth in these administrative policies; and (b), the future land use element, coastal management element, conservation element, potable water element, sanitary sewer element, solid waste management element, capital improvements element, recreation and open space element, surface water element, and transportation elements of the comprehensive plan.

Administrative Policy 7

Proposed use(s) shall not cause or substantially aggravate any, (a), substantial drainage problem on surrounding properties; or (b), significant, adverse and unmitigatable impact on significant natural wetlands, water bodies or habitat for listed species.

Administrative Policy 8

These policies, the staff analysis based upon these policies, and the applicant's written analysis, if any, shall be incorporated into the record of every quasi-judicial review application for development approval presented to the Board including rezoning, conditional use permits, and vested rights determinations.

Section 62-1151(c) of the Code of Ordinances of Brevard County directs, "The planning and zoning board shall recommend to the board of county commissioners the denial or approval of each application for amendment to the official zoning maps based upon a consideration of the following factors:

- (1) The character of the land use of the property surrounding the property being considered.
- (2) The change in conditions of the land use of the property being considered and the surrounding property since the establishment of the current applicable zoning classification, special use or conditional use.

- (3) The impact of the proposed zoning classification or conditional use on available and projected traffic patterns, water and sewer systems, other public facilities and utilities and the established character of the surrounding property.
- (4) The compatibility of the proposed zoning classification or conditional use with existing land use plans for the affected area.
- (5) The appropriateness of the proposed zoning classification or conditional use based upon a consideration of the applicable provisions and conditions contained in this article and other applicable laws, ordinances and regulations relating to zoning and land use regulations and based upon a consideration of the public health, safety and welfare.

The minutes of the planning and zoning board shall specify the reasons for the recommendation of approval or denial of each application.”

CONDITIONAL USE PERMITS (CUPs)

In addition to the specific requirements for each Conditional Use Permit (CUP), Section 62-1901 provides that the following approval procedure and general standards of review are to be applied to all CUP requests, as applicable.

- (b) Approval procedure. An application for a specific conditional use within the applicable zoning classification shall be submitted and considered in the same manner and according to the same procedure as an amendment to the official zoning map as specified in Section 62-1151. The approval of a conditional use shall authorize an additional use for the affected parcel of real property in addition to those permitted in the applicable zoning classification. The initial burden is on the applicant to demonstrate that all applicable standards and criteria are met. Applications which do not satisfy this burden cannot be approved. If the applicant meets its initial burden, then the Board has the burden to show, by substantial and competent evidence, that the applicant has failed to meet such standards and the request is adverse to the public interest. As part of the approval of the conditional use permit, the Board may prescribe appropriate and reasonable conditions and safeguards to reduce the impact of the proposed use on adjacent and nearby properties or the neighborhood. A nearby property, for the purpose of this section, is defined as any property which, because of the character of the proposed use, lies within the area which may be substantially and adversely impacted by such use. In stating grounds in support of an application for a conditional use permit, it is necessary to show how the request fulfills both the general and specific standards for review. The applicant must show the effect the granting of the conditional use permit will have on adjacent and nearby properties, including, but not limited to traffic and pedestrian flow and safety, curb-cuts, off-street loading and parking, off-street pickup of passengers, odors, glare and noise, particulates, smoke, fumes, and other emissions, refuse and service areas, drainage, screening and buffering for protection of adjacent and nearby properties, and open space and economic impact on nearby properties. The applicant, at his discretion, may choose to present expert testimony where necessary to show the effect of granting the conditional use permit.

- (c) General Standards of Review.

- (1) The planning and zoning board and the board of county commissioners shall base the denial or approval of each application for a conditional use based upon

a consideration of the factors specified in Section 62-1151(c) plus a determination whether an application meets the intent of this section.

- a. The proposed conditional use will not result in a substantial and adverse impact on adjacent and nearby properties due to: (1), the number of persons anticipated to be using, residing or working under the conditional use; (2), noise, odor, particulates, smoke, fumes and other emissions, or other nuisance activities generated by the conditional use; or (3), the increase of traffic within the vicinity caused by the proposed conditional use.
 - b. The proposed use will be compatible with the character of adjacent and nearby properties with regard to use, function, operation, hours of operation, type and amount of traffic generated, building size and setback, and parking availability.
 - c. The proposed use will not cause a substantial diminution in value of abutting residential property. A substantial diminution shall be irrebuttably presumed to have occurred if abutting property suffers a 15% reduction in value as a result of the proposed conditional use. A reduction of 10% of the value of abutting property shall create a rebuttable presumption that a substantial diminution has occurred. The Board of County Commissioners carries the burden to show, as evidenced by either testimony from or an appraisal conducted by an M A I certified appraiser, that a substantial diminution in value would occur. The applicant may rebut the findings with his own expert witnesses.
- (2) The following specific standards shall be considered, when applicable, in making a determination that the general standards specified in subsection (1) of this section are satisfied:
- a. Ingress and egress to the property and proposed structures thereon, with particular reference to automotive and pedestrian safety and convenience, traffic flow and control, and access in case of fire and catastrophe, shall be: (1), adequate to serve the proposed use without burdening adjacent and nearby uses, and (2), built to applicable county standards, if any. Burdening adjacent and nearby uses means increasing existing traffic on the closest collector or arterial road by more than 20%, or 10% if the new traffic is primarily comprised of heavy vehicles, except where the affected road is at Level of Service A or B. New traffic generated by the proposed use shall not cause the adopted level of service for transportation on applicable roadways, as determined by applicable Brevard County standards, to be exceeded. Where the design of a public road to be used by the proposed use is physically inadequate to handle the numbers, types or weights of vehicles expected to be generated by the proposed use without damage to the road, the conditional use permit cannot be approved without a commitment to improve the road to a standard adequate to handle the proposed traffic, or to maintain the road through a maintenance bond or other means as required by the Board of County Commissioners.
 - b. The noise, glare, odor, particulates, smoke, fumes or other emissions from the conditional use shall not substantially interfere with the use or enjoyment of the adjacent and nearby property.
 - c. Noise levels for a conditional use are governed by Section 62-2271.

- d. The proposed conditional use shall not cause the adopted level of service for solid waste disposal applicable to the property or area covered by such level of service, to be exceeded.
- e. The proposed conditional use shall not cause the adopted level of service for potable water or wastewater applicable to the property or the area covered by such level of service, to be exceeded by the proposed use.
- f. The proposed conditional use must have existing or proposed screening or buffering, with reference to type, dimensions and character to eliminate or reduce substantial, adverse nuisance, sight, or noise impacts on adjacent and nearby properties containing less intensive uses.
- g. Proposed signs and exterior lighting shall not cause unreasonable glare or hazard to traffic safety, or interference with the use or enjoyment of adjacent and nearby properties.
- h. Hours of operation of the proposed use shall be consistent with the use and enjoyment of the properties in the surrounding residential community, if any. For commercial and industrial uses adjacent to or near residential uses, the hours of operation shall not adversely affect the use and enjoyment of the residential character of the area.
- i. The height of the proposed use shall be compatible with the character of the area, and the maximum height of any habitable structure shall be not more than 35 feet higher than the highest residence within 1,000 feet of the property line.
- j. Off-street parking and loading areas, where required, shall not be created or maintained in a manner which adversely impacts or impairs the use and enjoyment of adjacent and nearby properties. For existing structures, the applicant shall provide competent, substantial evidence to demonstrate that actual or anticipated parking shall not be greater than that which is approved as part of the site plan under applicable county standards.

FACTORS TO CONSIDER FOR A REZONING REQUEST

Section 62-1151(c) sets forth factors to consider in connection with a rezoning request, as follows:

“The planning and zoning board shall recommend to the board of county commissioners the denial or approval of each application for amendment to the official zoning maps based upon a consideration of the following factors:

- (1) The character of the land use of the property surrounding the property being considered.
- (2) The change in conditions of the land use of the property being considered and the surrounding property since the establishment of the current applicable zoning classification, special use or conditional use.
- (3) The impact of the proposed zoning classification or conditional use on available and projected traffic patterns, water and sewer systems, other public facilities and utilities and the established character of the surrounding property.

- (4) The compatibility of the proposed zoning classification or conditional use with existing land use plans for the affected area.
- (5) The appropriateness of the proposed zoning classification or conditional use based upon a consideration of the applicable provisions and conditions contained in this article and other applicable laws, ordinances and regulations relating to zoning and land use regulations and based upon a consideration of the public health, safety and welfare.”

These staff comments contain references to zoning classifications found in the Brevard County Zoning Regulations, Chapter 62, Article VI, Code of Ordinances of Brevard County. These references include brief summaries of some of the characteristics of that zoning classification. Reference to each zoning classification shall be deemed to incorporate the full text of the section or sections defining and regulating that classification into the Zoning file and Public Record for that item.

These staff comments contain references to sections of the Code of Ordinances of Brevard County. Reference to each code section shall be deemed to incorporate this section into the Zoning file and Public Record for that item.

These staff comments contain references to Policies of the Brevard County Comprehensive Plan. Reference to each Policy shall be deemed to incorporate the entire Policy into the Zoning file and Public Record for that item.

These staff comments refer to previous zoning actions which are part of the Public Records of Brevard County, Florida. These records will be referred to by reference to the file number. Reference to zoning files are intended to make the entire contents of the cited file a part of the Zoning file and Public Record for that item.

DEFINITIONS OF CONCURRENCY TERMS

Maximum Acceptable Volume (MAV): Maximum acceptable daily volume that a roadway can carry at the adopted Level of Service (LOS).

Current Volume: Building permit related trips added to the latest TPO (Transportation Planning Organization) traffic counts.

Volume with Development (VOL W/DEV): Equals Current Volume plus trip generation projected for the proposed development.

Volume/Maximum Acceptable Volume (VOL/MAV): Equals the ratio of current traffic volume to the maximum acceptable roadway volume.

Volume/Maximum Acceptable Volume with Development (VOL/MAV W/DEV): Ratio of volume with development to the Maximum Acceptable Volume.

Acceptable Level of Service (CURRENT LOS): The Level of Service at which a roadway is currently operating.

Level of Service with Development (LOS W/DEV): The Level of Service that a proposed development may generate on a roadway.



BOARD OF COUNTY COMMISSIONERS

Planning and Development Department

2725 Judge Fran Jamieson Way
Building A, Room 114
Viera, Florida 32940
(321)633-2070 Phone / (321)633-2074 Fax
<https://www.brevardfl.gov/PlanningDev>

STAFF COMMENTS

20Z00021

Jennifer L. Robbins

GU (General Use) to RR-1 (Rural Residential)

Tax Account Number: 2402990
Parcel I.D.: 24-35-08-01-2-13
Location: North side of Simpson Place, approximately 833 feet west of Ocala Street (District 1)
Acreage: 2.02 acre

Planning and Zoning Board: 10/05/2020

Board of County Commissioners: 11/05/2020

Consistency with Land Use Regulations

- Current zoning can be considered under the Future Land Use Designation, Section 62-1255.
- The proposal can be considered under the Future Land Use Designation, Section 62-1255.
- The proposal would maintain acceptable Levels of Service (LOS) (XIII 1.6.C)

	CURRENT	PROPOSED
Zoning	GU	RR-1
Potential*	One Single Family Unit	Two Single Family Unit
Can be Considered under the Future Land Use Map	YES Residential 1	YES Residential 1

* Zoning potential for concurrency analysis purposes only, subject to applicable land development regulations.

Background and Purpose of Request

The applicant desires to change of zoning classification from GU (General Use) to RR-1 (Rural Residential) for the purpose of building a barn and having horses on the property. The parcel is two combined lots located in the Canaveral Groves area. In GU zoning, Agricultural pursuits (barns and horses) are permitted with 5 acres or more of land. The parcel currently is developed with a 2,823 sq. ft. single-family residence and an 864 sq. ft. detached garage.

The GU zoning is original to the parcel adopted May 22, 1958; no previous zoning actions have been applied for. The parcel is two combined lots located in the Canaveral Groves area. The lots were recorded in Survey Book 2, Page 61 on September 29, 1960. When these lots were recorded in the Survey Book, GU zoning required a minimum lot width and depth of 150 feet and a minimum lot size of one acre. These two lots have a lot width of 147 feet each and although they were recorded in Survey 2, Page 61, they did not meet the GU zoning 150 feet minimum lot width required to be Nonconforming Lots of Record. The lots do meet the proposed RR-1 zoning minimum 125 feet lot

width and depth and the RR-1 minimum one acre lot size requirements. The proposed RR-1 zoning would legitimize the lots for lot size requirements.

Land Use

The subject property retains the RES 1 (Residential 1) Future Land Use designation. The existing GU zoning and the proposed RR-1 zoning are consistent with the RES 1 Future Land Use designation.

Environmental Constraints

Summary of Mapped Resources and Noteworthy Land Use Issues:

- National Wetlands Inventory (NWI) Wetlands
- Hydric Soils
- Aquifer Recharge Soils
- Protected and Specimen Trees
- Protected Species

No noteworthy land use issues were identified. Natural Resources Management (NRM) reserves the right to assess consistency with environmental ordinances at all applicable future stages of development.

Preliminary Concurrency

The closest concurrency management segment to the subject property is Citrus Boulevard, between Pine Street and Lee Street, which has a Maximum Acceptable Volume (MAV) of 15,600 trips per day, a Level of Service (LOS) of E, and currently operates at 28.85% of capacity daily. The maximum development potential from the proposed rezoning does increase the percentage of MAV utilization by 0.06%. The corridor is anticipated to continue to operate at 28.91% of capacity daily. The proposal is not anticipated to create a deficiency in LOS.

No school concurrency information has been provided as the development potential of this site falls below the minimum number of new residential lots that would require a formal review.

The parcel is not serviced by Brevard County sewer. The closest available sewer line is approximately 2 miles southeast of the subject property on the west side of Adams Road.

The parcel is serviced by City of Cocoa water.

Applicable Land Use Policies

FLUE Policy 1.9 –The Residential 1 land use designation permits low density residential development with a maximum density of up to one (1) unit per acre, except as otherwise may be provided for within this element. The Residential 1 land use designation may be considered for lands within the following generalized locations, unless otherwise limited by this Comprehensive Plan.

Analysis of Administrative Policy #3 - Compatibility between this site and the existing or proposed land uses in the area. The subject parcel is currently developed with a single-family

residence and lies within the Residential 1 Future Land Use designation. The surrounding area has GU and AU zoning and lies within the Residential 1 Future Land Use designation. The existing GU, AU and the proposed RR-1 zoning may be considered to be consistent with the Residential 1 Future Land Use designation.

Analysis of Administrative Policy #4 - Character of a neighborhood or area. The developed character of the surrounding area along Simpson Place is developed with single-family homes and undeveloped land on lots of one acre or more variously zoned GU and AU. The subject parcel and the surrounding area along Simpson Place have a Future Land Use (FLU) designation of RES 1, which may be considered to be consistent with the existing GU zoning and proposed RR-1 zoning. The current GU classification is a holding category, allowing single-family residences on five acre lots with a minimum width and depth of 300 feet. The minimum house size in GU is 750 square feet. Any agricultural use, pursuit or activity permitted in the agricultural zoning classifications (AU or AGR) may be considered as a conditional use for the GU zoning classification, provided that the applicant specifies the exact use in the request or application for the conditional use and meets all criteria for the use, if any, as set forth for the AU zoning classification. A conditional use permit is not required on GU parcels equal to or exceeding five acres.

The proposed RR-1 classification permits single-family residential land uses on minimum one acre lots, with a minimum lot width and depth of 125 feet. The RR-1 classification permits horses, barns and horticulture as accessory uses to a single-family residence. The minimum house size is 1,200 square feet. The keeping of horses and agricultural pursuits are accessory to a principle residence within the RR-1 (Rural Residential) zoning classification pursuant to the following limitations. Horses, not to exceed four per acre, are permitted for the personal, noncommercial use of the occupant of the property, provided there is a minimum of 10,000 square feet of land for each animal. Agricultural pursuits shall be limited to the keeping of horses and activities of a horticultural nature. No other farm animals or fowl shall be kept on the property except as provided in this chapter, and no produce shall be sold from the premises.

The AU zoning classification permits single-family residences and agricultural uses on 2.5 acre lots, with a minimum lot width and depth of 150 feet. The minimum house size in AU is 750 square feet. The AU classification permits all agricultural pursuits, including the packing, processing, and sales of commodities raised on the premises. The AU classification also permits the raising/grazing of animals, fowl, beekeeping and plant nurseries.

Surrounding Area

The parcel abuts GU zoning along its northern, southern and western boundaries and abuts AU zoning to the east. The abutting parcels to the north, east and south are undeveloped. The abutting parcel to the west is developed with a 2,231 sq. ft. single-family home and residential amenities.

Although there is not any RR-1 zoning in the surrounding area, the RR-1 zoning does allow agricultural pursuits limited to the keeping of horses and activities of a horticultural nature which are permitted uses in AU. These uses are also permitted in GU if the parcel is five acres in size or may be considered as a Conditional Use with a Conditional Use Permit (CUP) if the parcel is less than five acres in size.

There have been no zoning actions within a half-mile of the subject property within the last five years.

For Board Consideration

The Board may wish to consider whether this request for RR-1 zoning is consistent and compatible with the surrounding neighborhood which has AU and GU zoning.

NATURAL RESOURCES MANAGEMENT DEPARTMENT
Zoning Review & Summary
Item # 20Z00021

Applicant: Jennifer Robbins

Zoning Request: GU to AU

Note: Applicant wants to have horses and barn for boarding.

P&Z Hearing Date: 10/05/20; **BCC Hearing Date:** 11/05/20

Tax ID No: 2402990

- This is a preliminary review based on best available data maps reviewed by the Natural Resources Management Department (NRM) and does not include a site inspection to verify the accuracy of the mapped information.
- In that the rezoning process is not the appropriate venue for site plan review, specific site designs submitted with the rezoning request will be deemed conceptual. Board comments relative to specific site design do not provide vested rights or waivers from Federal, State or County regulations.
- **This review does not guarantee whether or not the proposed use, specific site design, or development of the property can be permitted under current Federal, State, or County Regulations.**

Summary of Mapped Resources and Noteworthy Land Use Issues:

- National Wetlands Inventory (NWI) Wetlands
- Hydric Soils
- Aquifer Recharge Soils
- Protected and Specimen Trees
- Protected Species

No noteworthy land use issues were identified. Natural Resources Management (NRM) reserves the right to assess consistency with environmental ordinances at all applicable future stages of development.

Land Use Comments:

Wetlands

The subject parcel contains mapped NWI (Freshwater forested shrub wetlands), and hydric soils (Terra Ceia muck, Valkaria sand and Basinger sand) as shown on the NWI Wetlands, and USDA Soil Conservation Service Soils Survey maps, respectively. These are indicators that wetlands may be present on the property. A wetland delineation will be required prior to any site plan design, land clearing activities, or building permit submittal. Any permitted wetland impacts must meet the requirements of Sections 62-3694(e) including avoidance of impacts, and 62-3696. The applicant is encouraged to contact NRM at 321-633-2016 prior to any site plan design.

Pursuant to the Florida Agricultural Lands and Practices Act (Chapter 163.3162(4), Florida Statutes), any activity of a Bona Fide Agricultural Use on land classified as agricultural land pursuant to Section 193.461, Florida Statute is exempt. The Brevard County Property Appraiser Office establishes Bona Fide Agricultural land classification, and is not based on the zoning alone. If Bona Fide Agriculture

classification is not established, then land clearing and accessory structures, including barns, are not permitted in wetlands. Any permitted wetland impacts must meet the requirements of Sections 62-3694(e) including avoidance of impacts, and 62-3696. The applicant is encouraged to contact NRM at 321-633-2016 prior to any site plan design or permit submittal.

If applicable, per Section 62-3694(c)(2), residential land uses within wetlands shall be limited to not more than one (1) dwelling unit per five (5) acres unless strict application of this policy would render a legally established parcel as of September 9, 1988, which is less than five (5) acres, as unbuildable. The preceding limitation of one dwelling unit per five (5) acres within wetlands may be applied as a maximum percentage limiting wetland impacts as described in Section 65-3694(c)(1)a above. Application of the one-unit-per-five-acres limitation shall limit impacts to wetlands for single family residential development on a cumulative basis, to not more than 1.8% of the total property as defined in Section 65-694(c)(6).

Aquifer Recharge Soils

Valkaria and Basinger sands may also function as aquifer recharge soils. The applicant is hereby notified of the development and impervious restrictions within Conservation Element Policy 10.2 and the Aquifer Protection Ordinance.

Heritage Specimen Trees

Aerials indicate that Heritage Specimen Trees (greater than or equal to 24 inches in diameter) may reside on subject property. Per Brevard County Landscaping, Land Clearing and Tree Protection ordinance, Section 62-4341(18), Protected and Specimen Trees shall be preserved or relocated on site to the Greatest Extent Feasible. Per Section 62-4332, Definitions, Greatest Extent Feasible shall include, but not be limited to, relocation of roads, buildings, ponds, increasing building height to reduce building footprint or reducing Vehicular Use Areas. The applicant is advised to refer to Article XIII, Division 2, entitled Land Clearing, Landscaping, and Tree Protection, for specific requirements for tree preservation and canopy coverage requirements. Land clearing is not permitted without prior authorization by NRM.

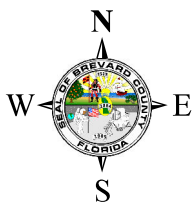
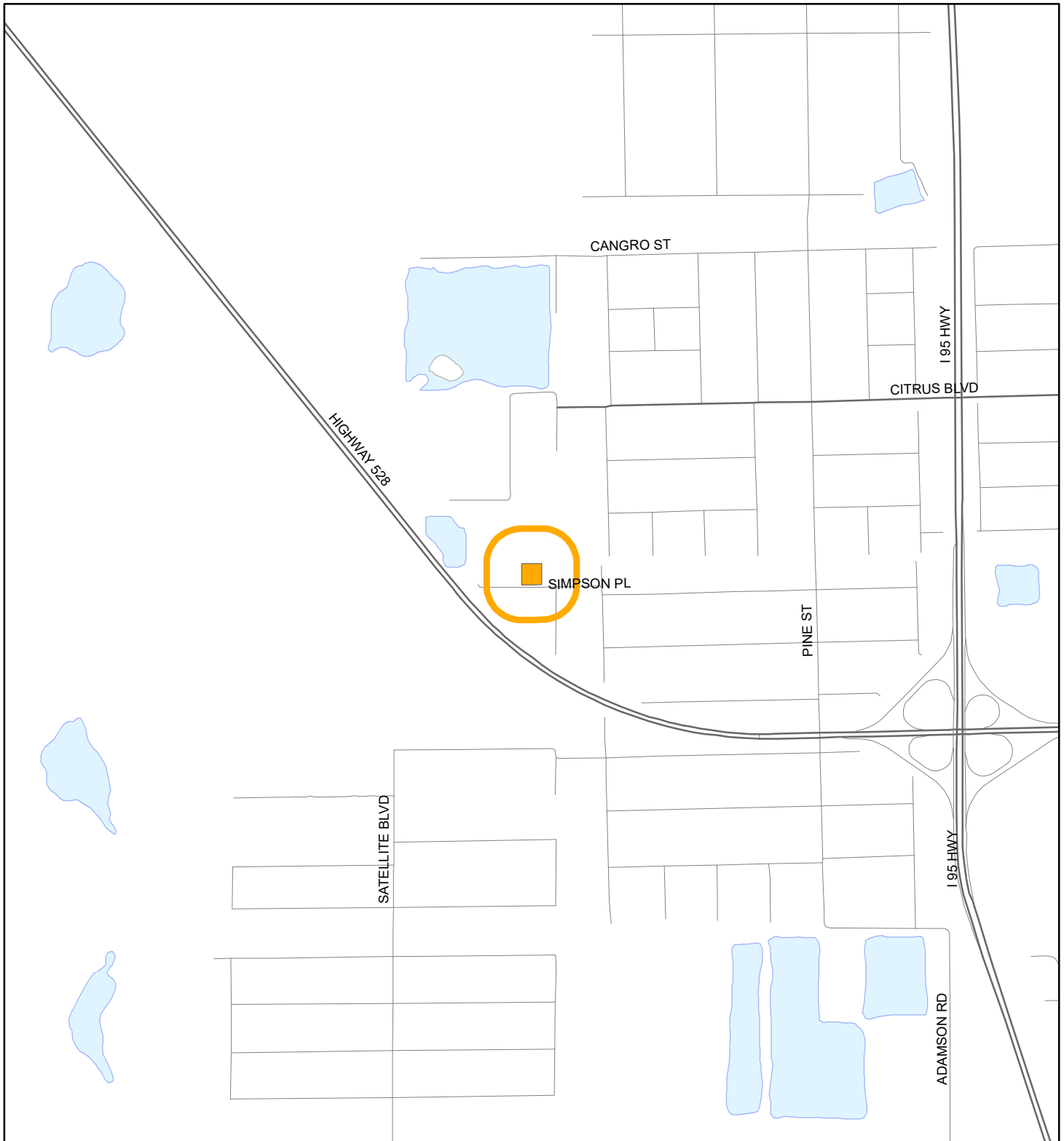
Protected Species

Information available to NRM indicates that federally and/or state protected species may be present on the property. Prior to any plan, permit submittal, or development activity, including land clearing, the applicant should obtain any necessary permits or clearance letters from the Florida Fish and Wildlife Conservation Commission and/or U.S. Fish and Wildlife Service, as applicable.

LOCATION MAP

ROBBINS, JENNIFER L.

20Z00021



1:24,000 or 1 inch = 2,000 feet

Buffer Distance: 500 feet

This map was compiled from recorded documents and does not reflect an actual survey. The Brevard County Board of County Commissioners does not assume responsibility for errors or omissions hereon.

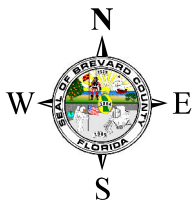
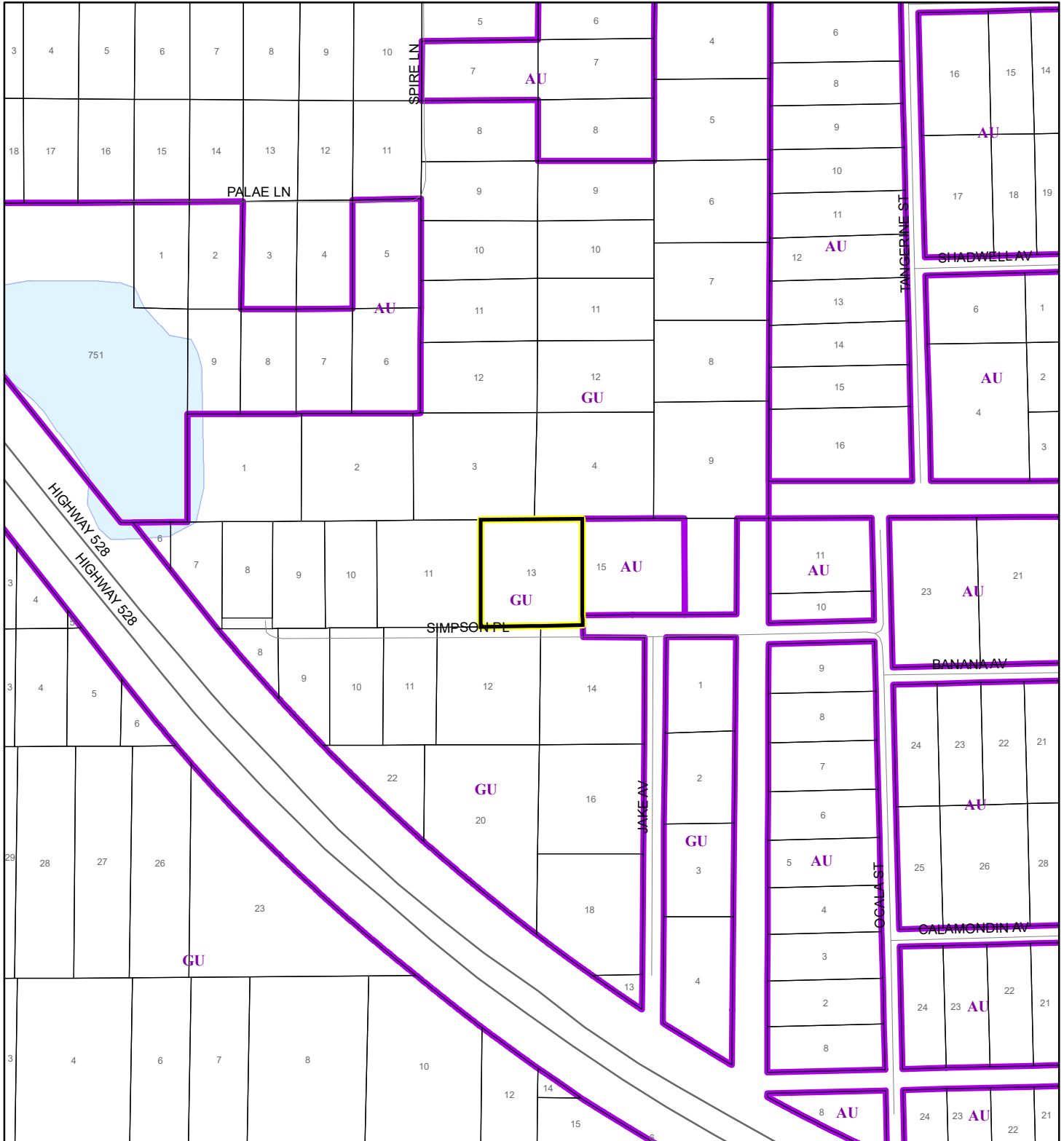
Produced by BoCC - GIS Date: 8/7/2020

Buffer
Subject Property

ZONING MAP

ROBBINS, JENNIFER L.


20Z00021



1:4,800 or 1 inch = 400 feet

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Produced by BoCC - GIS Date: 8/7/2020

 Subject Property

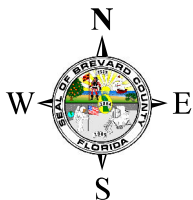
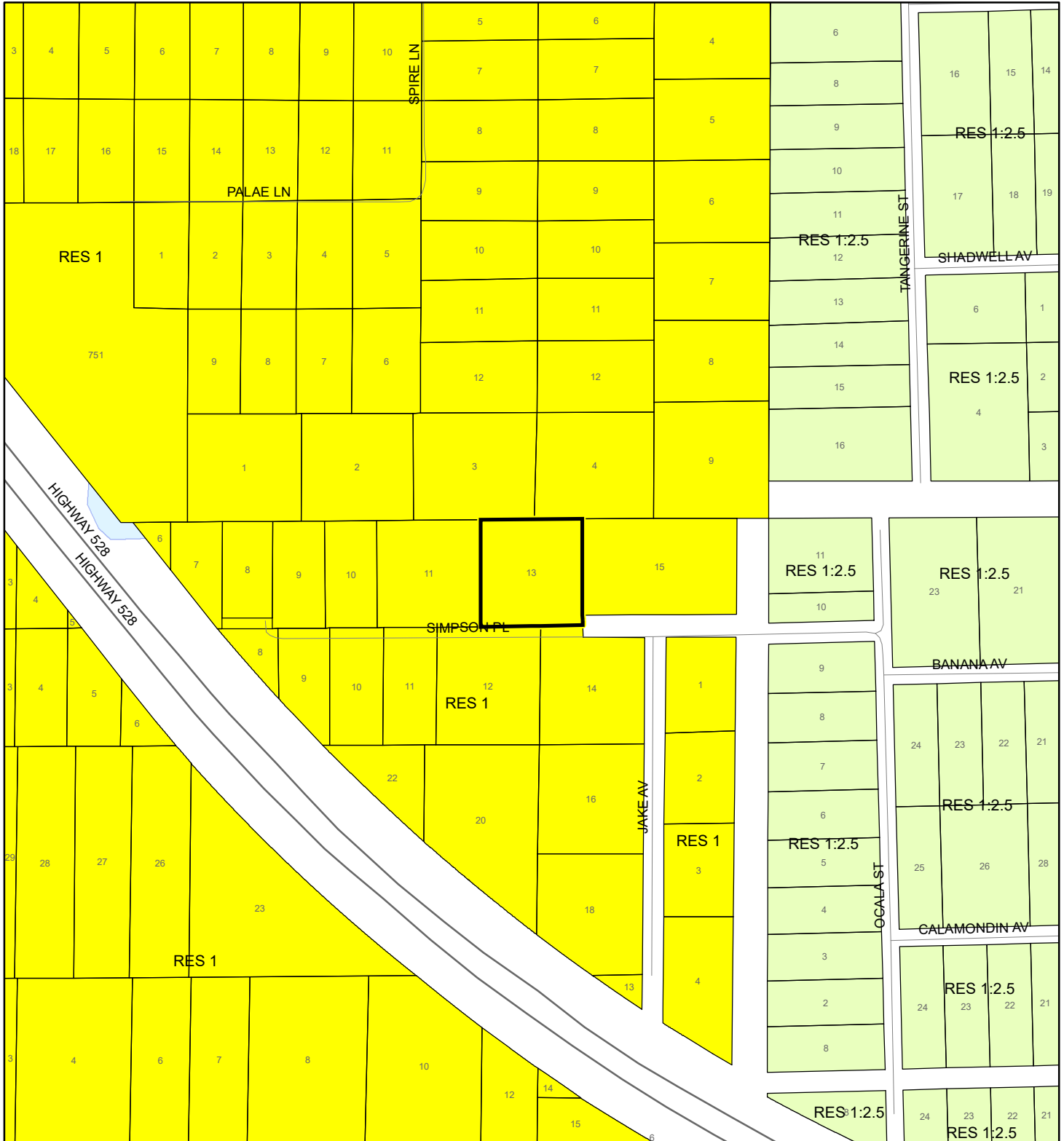
 Parcels

 Zoning

FUTURE LAND USE MAP

ROBBINS, JENNIFER L.



20Z00021



1:4,800 or 1 inch = 400 feet

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Produced by BoCC - GIS Date: 8/7/2020

 Subject Property
 Parcels

AERIAL MAP

ROBBINS, JENNIFER L.

20Z00021




1:2,400 or 1 inch = 200 feet

PHOTO YEAR: 2020

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Produced by BoCC - GIS Date: 8/7/2020

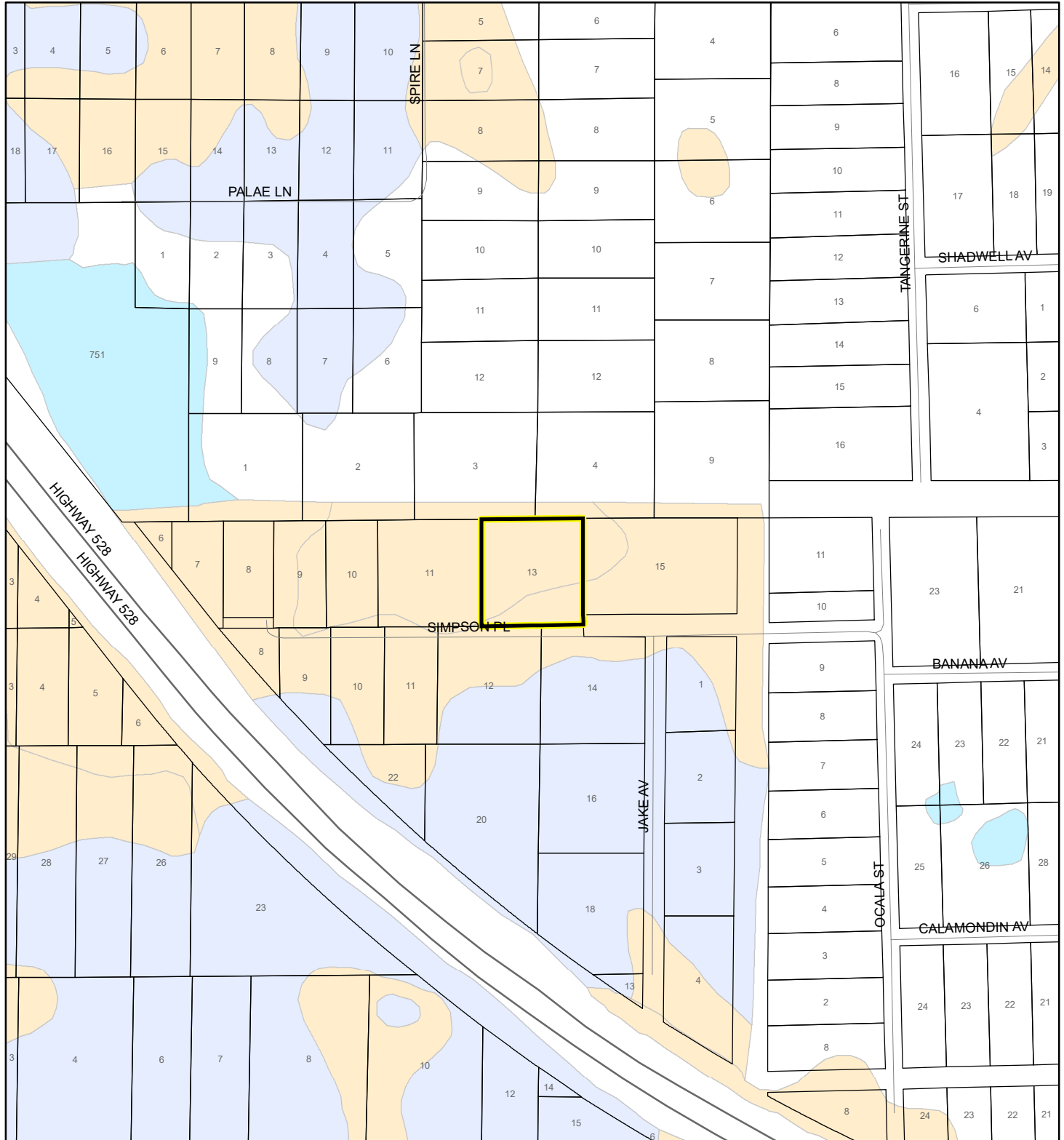
 Subject Property

 Parcels

NWI WETLANDS MAP

ROBBINS, JENNIFER L.

20Z00021



1:4,800 or 1 inch = 400 feet

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Produced by BoCC - GIS Date: 8/7/2020

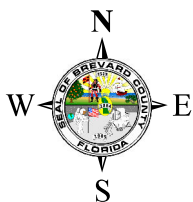
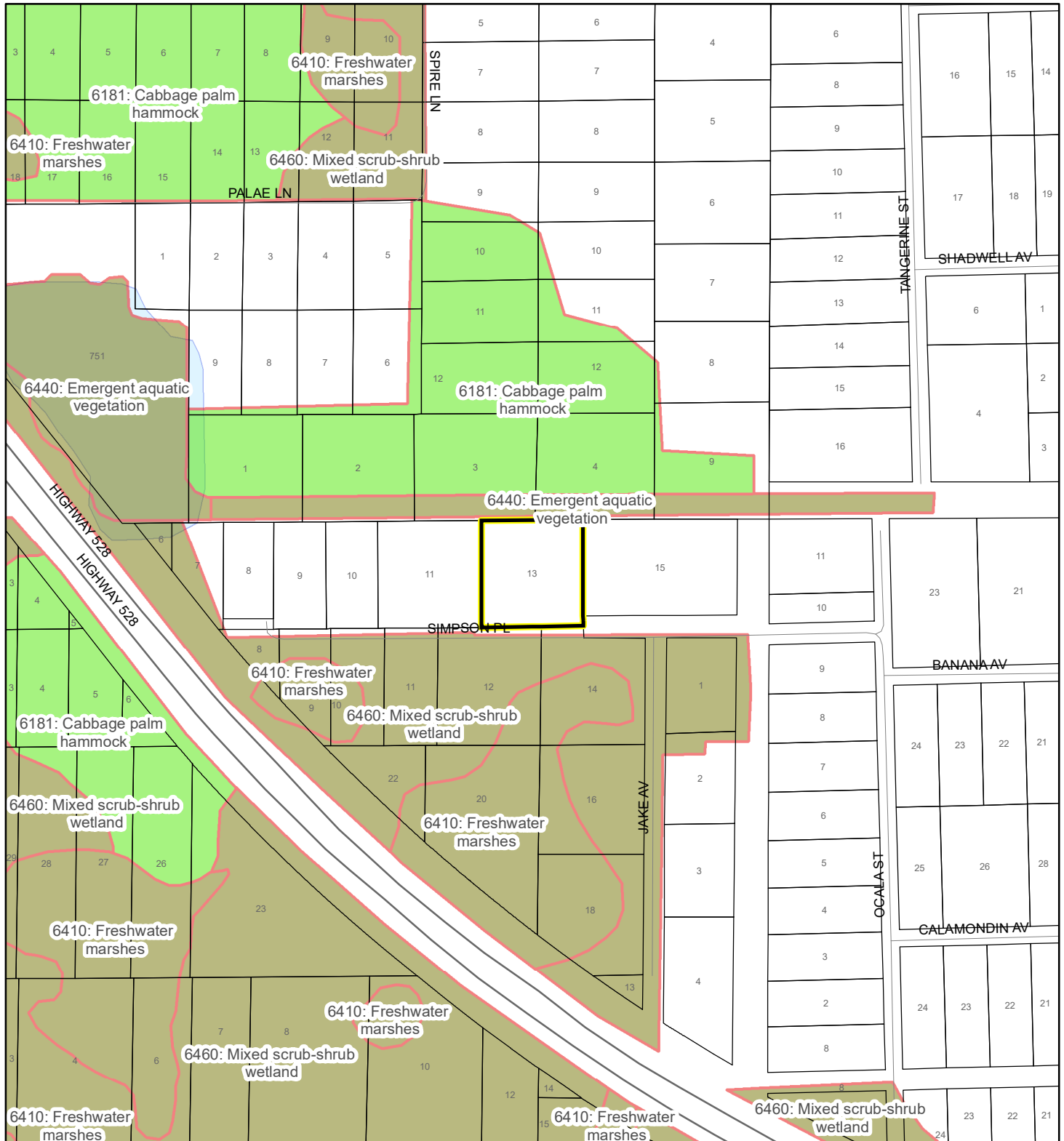
National Wetlands Inventory (NWI)

- | | |
|-----------------------------------|-----------------|
| Estuarine and Marine Deepwater | Freshwater Pond |
| Estuarine and Marine Wetland | Lake |
| Freshwater Emergent Wetland | Other |
| Freshwater Forested/Shrub Wetland | Riverine |
| Subject Property | |
| Parcels | |

SJRWMD FLUCCS WETLANDS - 6000 Series MAP

ROBBINS, JENNIFER L.

20Z00021



1:4,800 or 1 inch = 400 feet

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Produced by BoCC - GIS Date: 8/7/2020

SJRWMD FLUCCS WETLANDS

- Wetland Hardwood Forests - Series 6100
- Wetland Coniferous Forest - Series 6200
- Wetland Forested Mixed - Series 6300
- Vegetated Non-Forested Wetlands - Series 6400
- Non-Vegetated Wetland - Series 6500

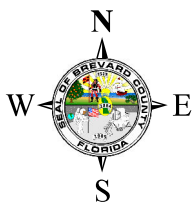
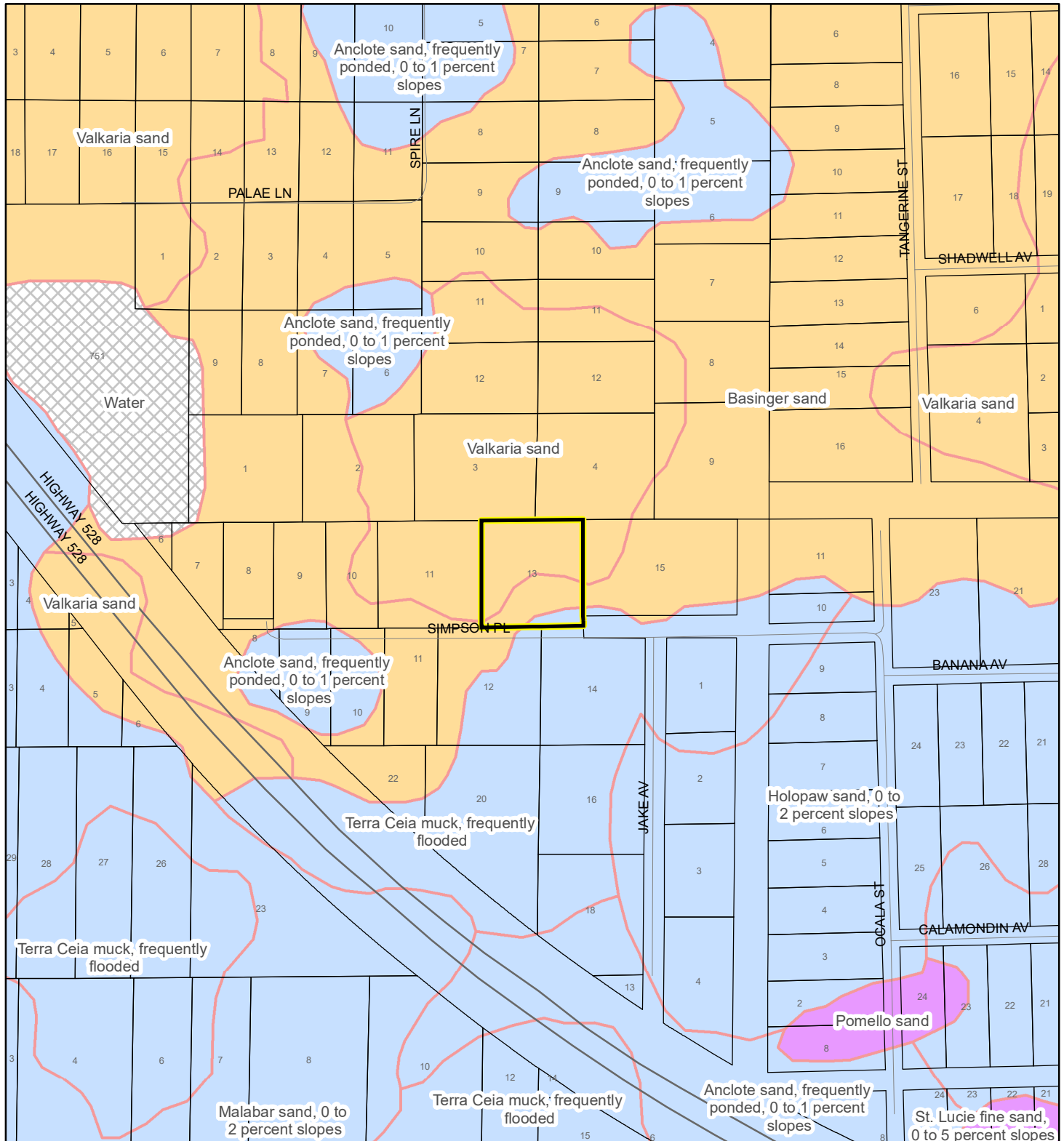
Subject Property

Parcels

USDA SCSSS SOILS MAP

ROBBINS, JENNIFER L.

20Z00021



1:4,800 or 1 inch = 400 feet

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Produced by BoCC - GIS Date: 8/7/2020

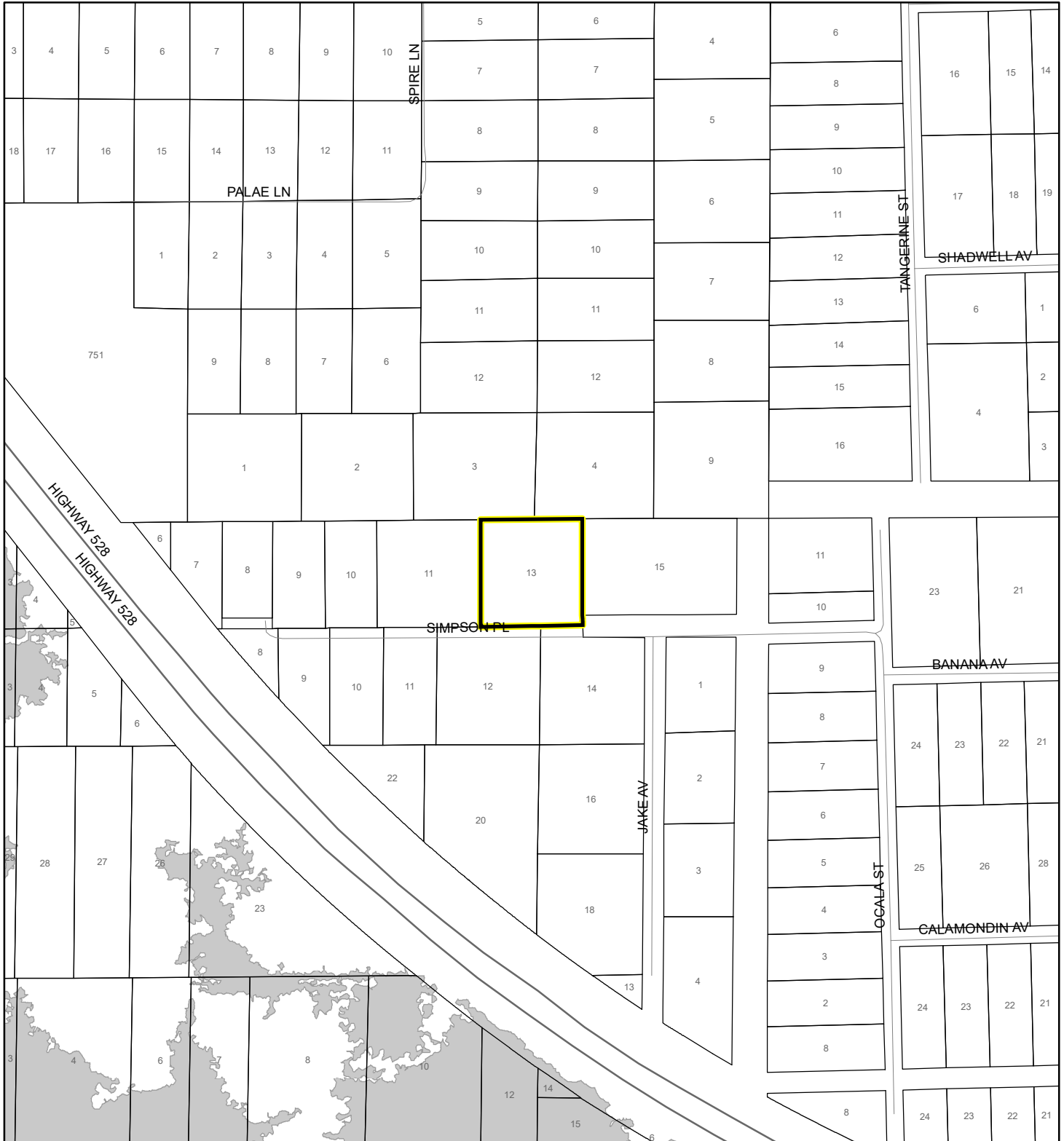
USDA SCSSS Soils

- Aquifer and Hydric
- Aquifer
- Hydric
- None
- Subject Property
- Parcels

FEMA FLOOD ZONES MAP

ROBBINS, JENNIFER L.

20Z00021



1:4,800 or 1 inch = 400 feet

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Produced by BoCC - GIS Date: 8/7/2020

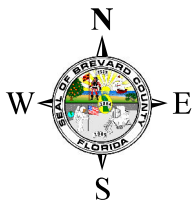
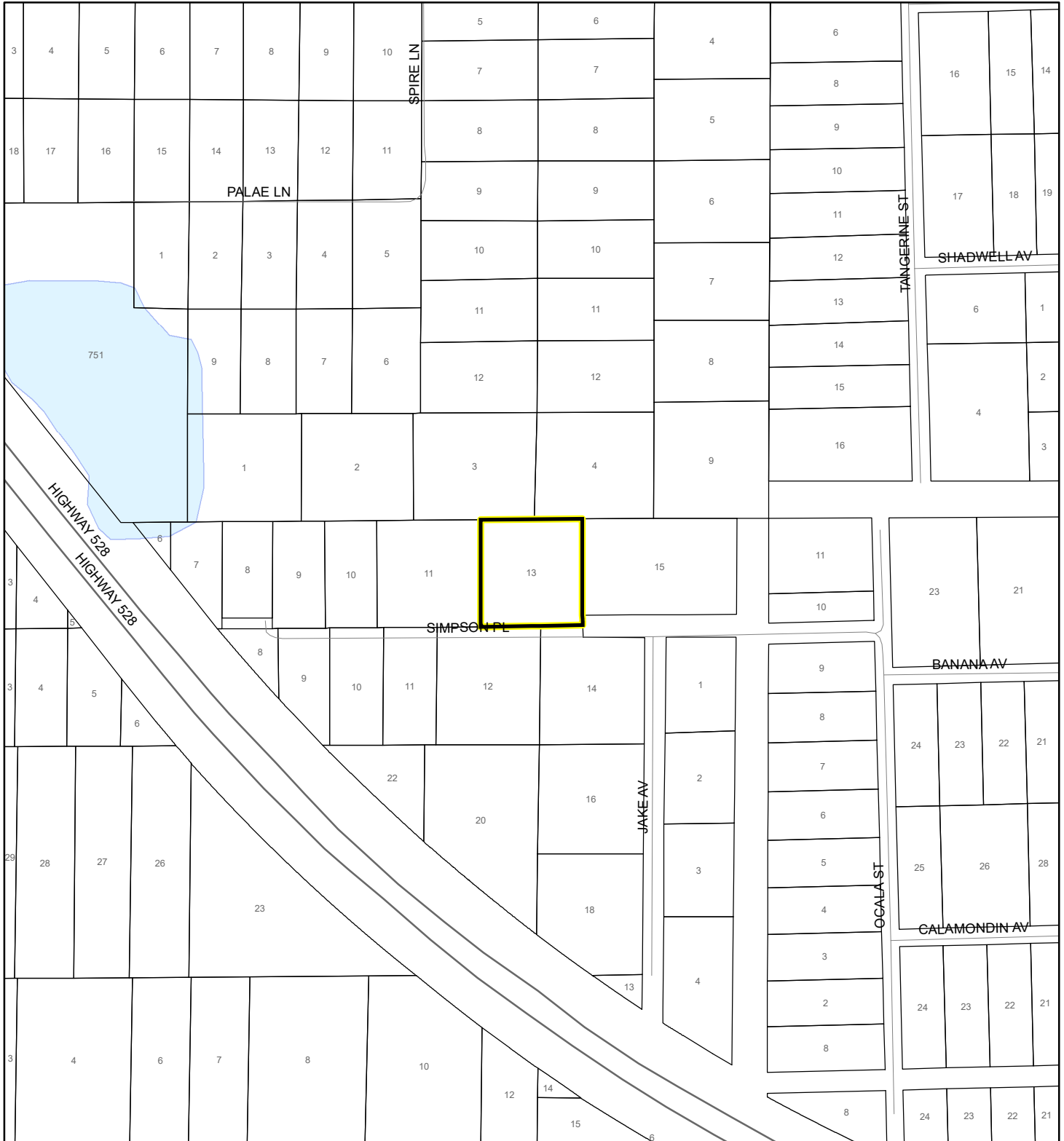
FEMA Flood Zones

- | | | |
|---|------------|----------------------|
| A | AO | X |
| AE | Open Water | X Protected By Levee |
| AH | VE | |
| 0.2 Percent Annual Chance Flood Hazard | | |
| 0.2 Percent Annual Chance Flood Hazard Contained in Channel | | |
| Subject Property | | Parcels |

COASTAL HIGH HAZARD AREA MAP

ROBBINS, JENNIFER L.

20Z00021



1:4,800 or 1 inch = 400 feet


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Produced by BoCC - GIS Date: 8/7/2020

 Subject Property

 Parcels

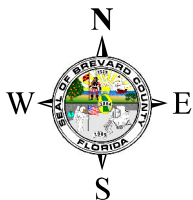
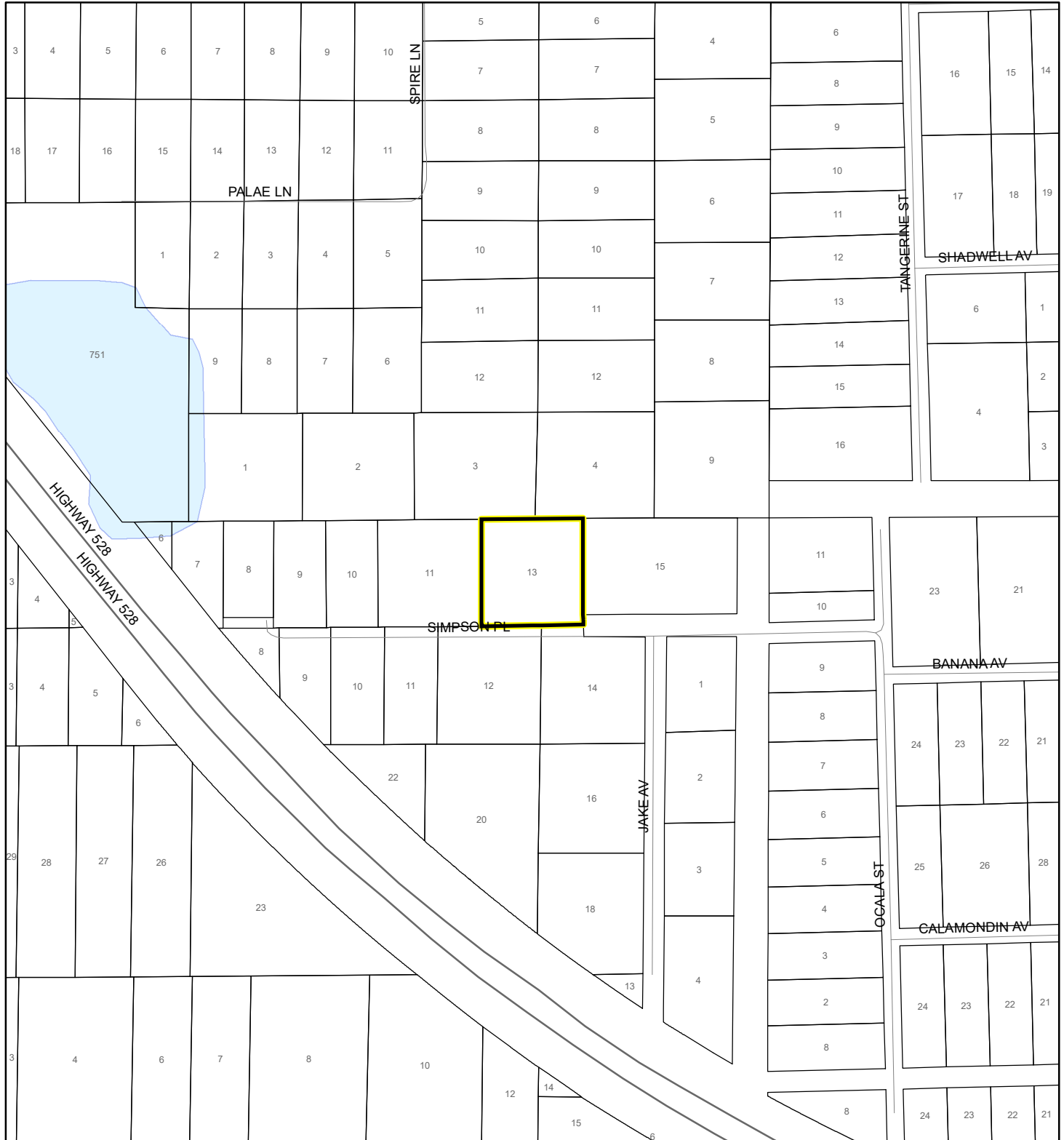
Coastal High Hazard Area

 SurgeZoneCat1

INDIAN RIVER LAGOON SEPTIC OVERLAY MAP

ROBBINS, JENNIFER L.

20Z00021



1:4,800 or 1 inch = 400 feet

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Produced by BoCC - GIS Date: 8/7/2020

Subject Property

Parcels

Septic Overlay

40 Meters

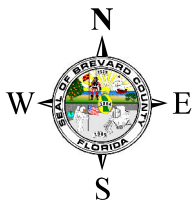
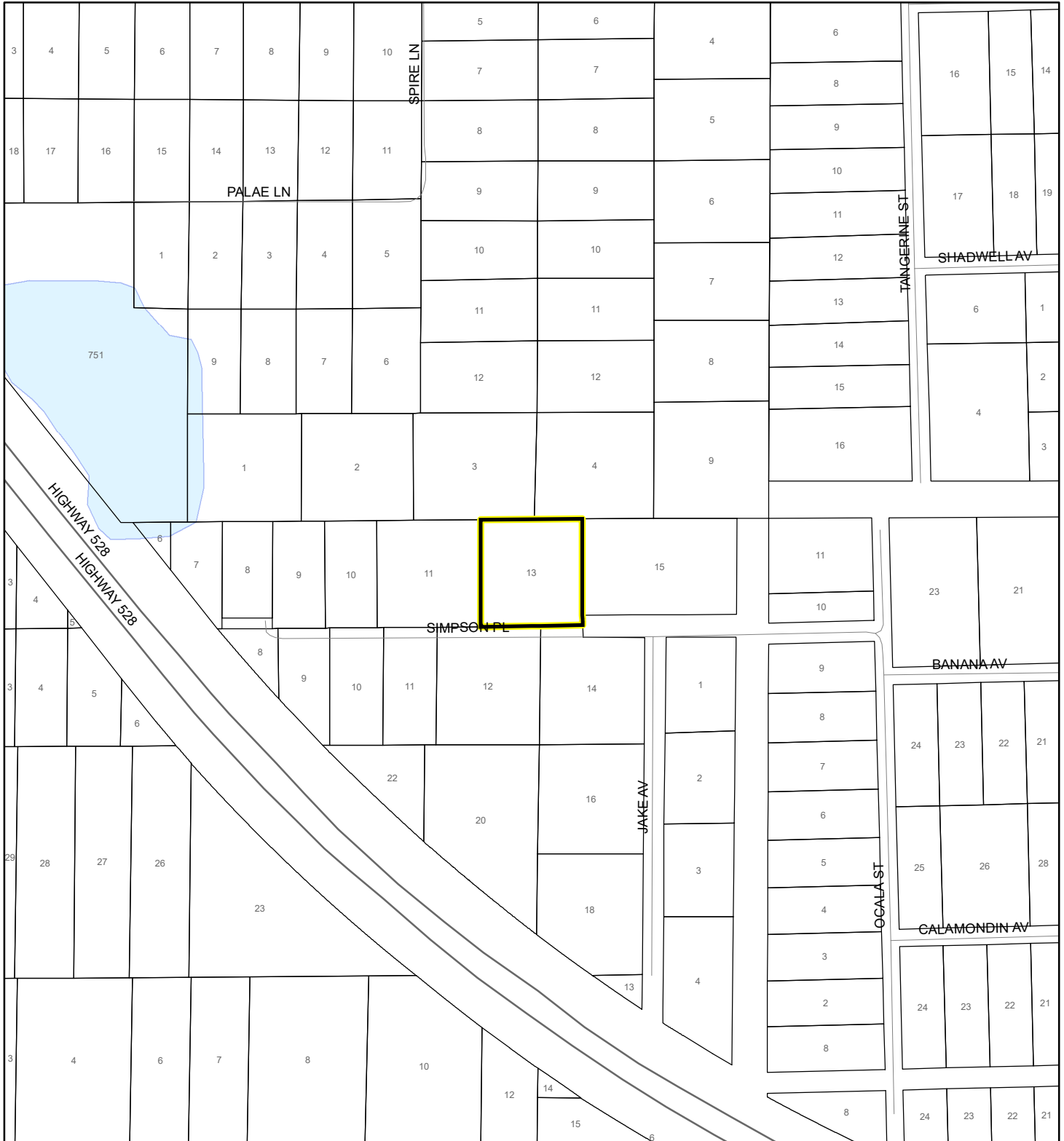
60 Meters

All Distances

EAGLE NESTS MAP

ROBBINS, JENNIFER L.

20Z00021




1:4,800 or 1 inch = 400 feet

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Produced by BoCC - GIS Date: 8/7/2020

 Subject Property

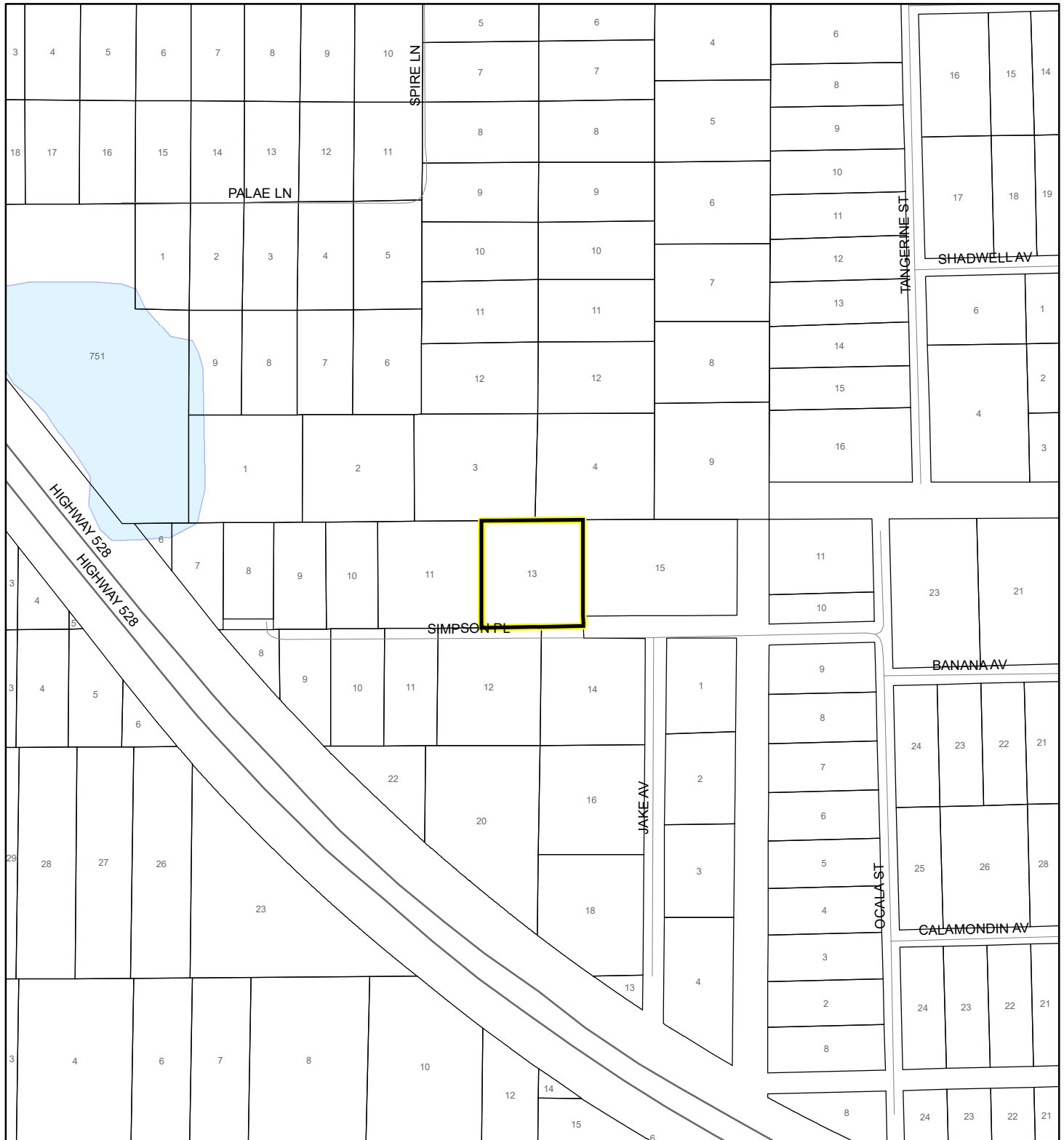
 Parcels

 Eagle Nests
FWS 2010

SCRUB JAY OCCUPANCY MAP

ROBBINS, JENNIFER L.




20Z00021



1:4,800 or 1 inch = 400 feet

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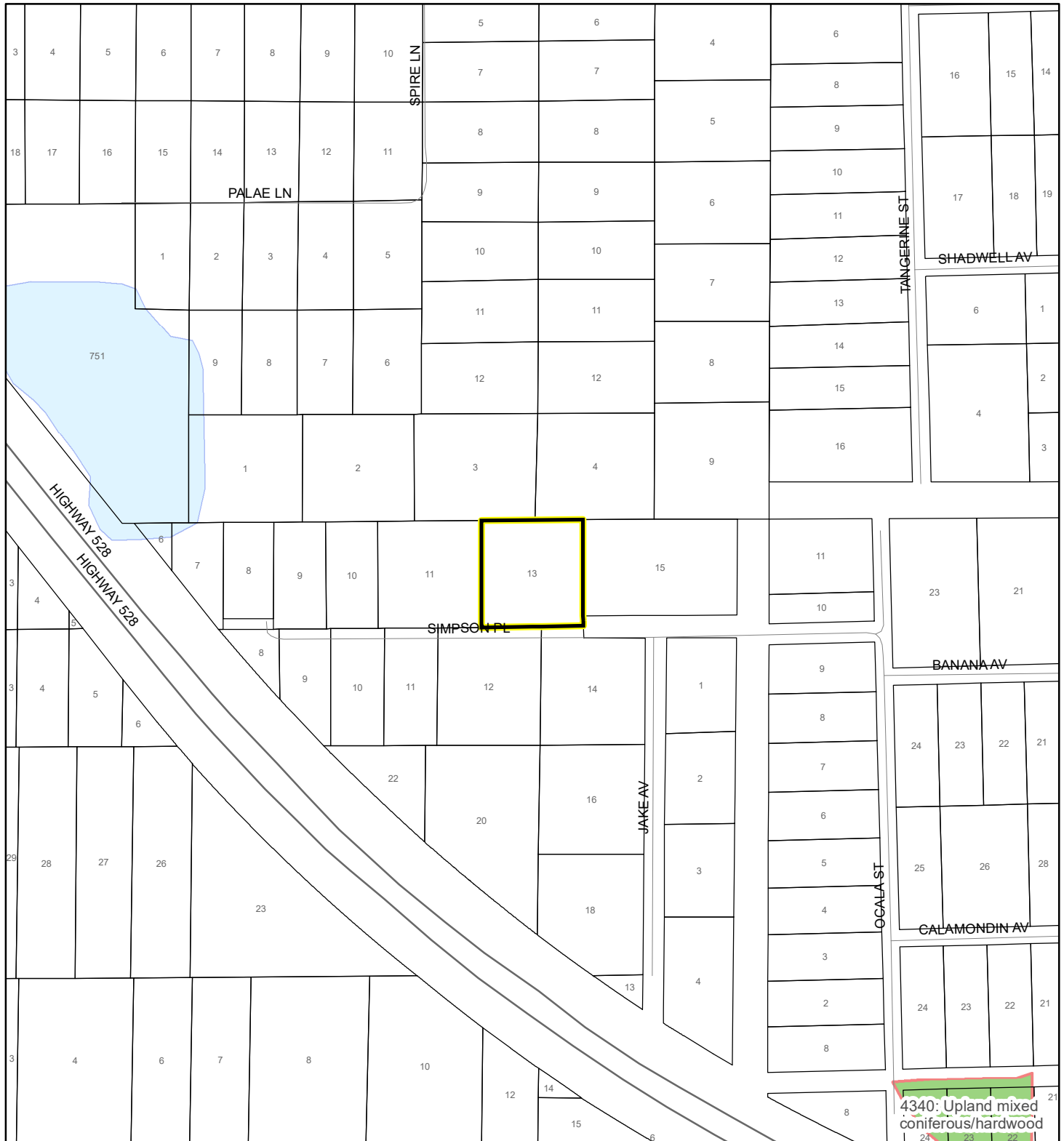
Produced by BoCC - GIS Date: 8/7/2020

-  Subject Property
-  Parcels
-  Scrub Jay Occupancy

SJRWMD FLUCCS UPLAND FORESTS - 4000 Series MAP

ROBBINS, JENNIFER L.

20Z00021



1:4,800 or 1 inch = 400 feet

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Produced by BoCC - GIS Date: 8/7/2020

SJRWMD FLUCCS Upland Forests

- Upland Coniferous Forest - 4100 Series
- Upland Hardwood Forest - 4200 Series
- Upland Mixed Forest - 4300 Series
- Tree Plantations - 4400 Series

Subject Property

Parcels



Agenda Report

2725 Judge Fran Jamieson
Way
Viera, FL 32940

Public Hearing

H.2.

10/5/2020

Subject:

Christine Ruggiero and Michael A. Sollecito request a change of zoning classification from RR-1 to RRMH-1. (20Z00022) (Tax Account 2002464) (District 1)

Fiscal Impact:

None

Dept/Office:

Planning and Development

Requested Action:

It is requested that the Planning and Zoning Board conduct a public hearing to consider a change of zoning classification from RR-1 (Rural Residential) to RRMH-1 (Rural Residential Mobile Home).

Summary Explanation and Background:

The applicant is requesting to rezone the property from RR-1 to RRMH-1 to allow for the development of a mobile home. The property is 1.23 acres of vacant land located on the south side of Harrison Road, approximately 1.14 mile west of the intersection of Green Meadows Road and Harrison Road.

The proposed RRMH-1 classification permits single-family mobile homes and detached single-family residential land uses on minimum one acre lots, with a minimum width and depth of 125 feet, and a minimum house size of 600 square feet. This classification permits horses, barns and horticulture as accessory uses. The proposed rezoning does not increase the potential number of dwelling units on the property and, therefore, will not generate additional demands on infrastructure or other services.

The developed character of the surrounding area is low density residential. The parcels across Harrison Road to the north are zoned RRMH-1. The abutting parcel to the east is zoned GU. The abutting parcel to the south is zoned GU. The abutting parcel to the west is developed and zoned RRMH-1.

The Board may consider whether the proposed rezoning to allow for a mobile home or manufactured home is compatible with the surrounding area.

The Board of County Commissioners will consider the request on Thursday, November 5, 2020, at 5:00 p.m. at the Brevard County Government Center, 2725 Judge Fran Jamieson Way, Building C, Viera, Florida.

Clerk to the Board Instructions:

ADMINISTRATIVE POLICIES OF THE FUTURE LAND USE ELEMENT

Administrative Policies in the Future Land Use Element establish the expertise of staff with regard to zoning land use issues and set forth criteria when considering a rezoning action or request for Conditional Use Permit, as follows:

Administrative Policy 1

The Brevard County zoning official, planners and the director of the Planning and Development staff, however designated, are recognized as expert witnesses for the purposes of Comprehensive Plan amendments as well as zoning, conditional use, special exception, and variance applications.

Administrative Policy 2

Upon Board request, members of the Brevard County Planning and Development staff shall be required to present written analysis and a recommendation, which shall constitute an expert opinion, on all applications for development approval that come before the Board of County Commissioners for quasi-judicial review and action. The Board may table an item if additional time is required to obtain the analysis requested or to hire an expert witness if the Board deems such action appropriate. Staff input may include the following:

Criteria:

- A. Staff shall analyze an application for consistency or compliance with comprehensive plan policies, zoning approval criteria and other applicable written standards.
- B. Staff shall conduct site visits of property which are the subject of analysis and recommendation. As part of the site visit, the staff shall take a videotape or photographs where helpful to the analysis and conduct an inventory of surrounding existing uses. Aerial photographs shall also be used where they would aid in an understanding of the issues of the case.
- C. In cases where staff analysis is required, both the applicant and the staff shall present proposed findings of fact for consideration by the Board.
- D. For re-zoning applications where a specific use has not been proposed, the worst case adverse impacts of potential uses available under the applicable land use classification shall be evaluated by the staff.

Administrative Policy 3

Compatibility with existing or proposed land uses shall be a factor in determining where a rezoning or any application involving a specific proposed use is being considered. Compatibility shall be evaluated by considering the following factors, at a minimum:

Criteria:

- A. Whether the proposed use(s) would have hours of operation, lighting, odor, noise levels, traffic, or site activity that would significantly diminish the enjoyment of, safety or quality of life in existing neighborhoods within the area which could foreseeably be affected by the proposed use.
- B. Whether the proposed use(s) would cause a material reduction (five percent or more) in the value of existing abutting lands or approved development.
- C. Whether the proposed use(s) is/are consistent with an emerging or existing pattern of surrounding development as determined through analysis of:

1. historical land use patterns;
2. actual development over the immediately preceding three years; and
3. development approved within the past three years but not yet constructed.

D. Whether the proposed use(s) would result in a material violation of relevant policies in any elements of the Comprehensive Plan.

Administrative Policy 4

Character of a neighborhood or area shall be a factor for consideration whenever a rezoning or any application involving a specific proposed use is reviewed. The character of the area must not be materially or adversely affected by the proposed rezoning or land use application. In evaluating the character of an area, the following factors shall be considered:

Criteria:

- A. The proposed use must not materially and adversely impact an established residential neighborhood by introducing types of intensity of traffic (including but not limited to volume, time of day of traffic activity, type of vehicles, et cetera), parking, trip generation, commercial activity or industrial activity that is not already present within the identified boundaries of the neighborhood.
- B. In determining whether an established residential neighborhood exists, the following factors must be present:
 1. The area must have clearly established boundaries, such as roads, open spaces, rivers, lakes, lagoons, or similar features.
 2. Sporadic or occasional neighborhood commercial uses shall not preclude the existence of an existing residential neighborhood, particularly if the commercial use is non-conforming or pre-dates the surrounding residential use.
 3. An area shall be presumed not to be primarily residential but shall be deemed transitional where multiple commercial, industrial or other non-residential uses have been applied for and approved during the previous five (5) years.

Administrative Policy 5

In addition to the factors specified in Administrative Policies 2, 3, and 4, in reviewing a rezoning, conditional use permit or other application for development approval, the impact of the proposed use or uses on transportation facilities either serving the site or impacted by the use(s) shall be considered. In evaluating whether substantial and adverse transportation impacts are likely to result if an application is approved, the staff shall consider the following criteria:

Criteria:

- A. Whether adopted levels of services will be compromised;
- B. Whether the physical quality of the existing road system that will serve the proposed use(s) is sufficient to support the use(s) without significant deterioration;

- C. Whether the surrounding existing road system is of sufficient width and construction quality to serve the proposed use(s) without the need for substantial public improvements;
- D. Whether the surrounding existing road system is of such width and construction quality that the proposed use(s) would realistically pose a potential for material danger to public safety in the surrounding area;
- E. Whether the proposed use(s) would be likely to result in such a material and adverse change in traffic capacity of a road or roads in the surrounding area such that either design capacities would be significantly exceeded or a de facto change in functional classification would result;
- F. Whether the proposed use(s) would cause such material and adverse changes in the types of traffic that would be generated on the surrounding road system, that physical deterioration of the surrounding road system would be likely;
- G. Whether projected traffic impacts of the proposed use(s) would materially and adversely impact the safety or welfare of residents in existing residential neighborhoods.

Administrative Policy 6

The use(s) proposed under the rezoning, conditional use or other application for development approval must be consistent with, (a), all written land development policies set forth in these administrative policies; and (b), the future land use element, coastal management element, conservation element, potable water element, sanitary sewer element, solid waste management element, capital improvements element, recreation and open space element, surface water element, and transportation elements of the comprehensive plan.

Administrative Policy 7

Proposed use(s) shall not cause or substantially aggravate any, (a), substantial drainage problem on surrounding properties; or (b), significant, adverse and unmitigatable impact on significant natural wetlands, water bodies or habitat for listed species.

Administrative Policy 8

These policies, the staff analysis based upon these policies, and the applicant's written analysis, if any, shall be incorporated into the record of every quasi-judicial review application for development approval presented to the Board including rezoning, conditional use permits, and vested rights determinations.

Section 62-1151(c) of the Code of Ordinances of Brevard County directs, "The planning and zoning board shall recommend to the board of county commissioners the denial or approval of each application for amendment to the official zoning maps based upon a consideration of the following factors:

- (1) The character of the land use of the property surrounding the property being considered.
- (2) The change in conditions of the land use of the property being considered and the surrounding property since the establishment of the current applicable zoning classification, special use or conditional use.

- (3) The impact of the proposed zoning classification or conditional use on available and projected traffic patterns, water and sewer systems, other public facilities and utilities and the established character of the surrounding property.
- (4) The compatibility of the proposed zoning classification or conditional use with existing land use plans for the affected area.
- (5) The appropriateness of the proposed zoning classification or conditional use based upon a consideration of the applicable provisions and conditions contained in this article and other applicable laws, ordinances and regulations relating to zoning and land use regulations and based upon a consideration of the public health, safety and welfare.

The minutes of the planning and zoning board shall specify the reasons for the recommendation of approval or denial of each application.”

CONDITIONAL USE PERMITS (CUPs)

In addition to the specific requirements for each Conditional Use Permit (CUP), Section 62-1901 provides that the following approval procedure and general standards of review are to be applied to all CUP requests, as applicable.

(b) Approval procedure. An application for a specific conditional use within the applicable zoning classification shall be submitted and considered in the same manner and according to the same procedure as an amendment to the official zoning map as specified in Section 62-1151. The approval of a conditional use shall authorize an additional use for the affected parcel of real property in addition to those permitted in the applicable zoning classification. The initial burden is on the applicant to demonstrate that all applicable standards and criteria are met. Applications which do not satisfy this burden cannot be approved. If the applicant meets its initial burden, then the Board has the burden to show, by substantial and competent evidence, that the applicant has failed to meet such standards and the request is adverse to the public interest. As part of the approval of the conditional use permit, the Board may prescribe appropriate and reasonable conditions and safeguards to reduce the impact of the proposed use on adjacent and nearby properties or the neighborhood. A nearby property, for the purpose of this section, is defined as any property which, because of the character of the proposed use, lies within the area which may be substantially and adversely impacted by such use. In stating grounds in support of an application for a conditional use permit, it is necessary to show how the request fulfills both the general and specific standards for review. The applicant must show the effect the granting of the conditional use permit will have on adjacent and nearby properties, including, but not limited to traffic and pedestrian flow and safety, curb-cuts, off-street loading and parking, off-street pickup of passengers, odors, glare and noise, particulates, smoke, fumes, and other emissions, refuse and service areas, drainage, screening and buffering for protection of adjacent and nearby properties, and open space and economic impact on nearby properties. The applicant, at his discretion, may choose to present expert testimony where necessary to show the effect of granting the conditional use permit.

(c) General Standards of Review.

- (1) The planning and zoning board and the board of county commissioners shall base the denial or approval of each application for a conditional use based upon

a consideration of the factors specified in Section 62-1151(c) plus a determination whether an application meets the intent of this section.

- a. The proposed conditional use will not result in a substantial and adverse impact on adjacent and nearby properties due to: (1), the number of persons anticipated to be using, residing or working under the conditional use; (2), noise, odor, particulates, smoke, fumes and other emissions, or other nuisance activities generated by the conditional use; or (3), the increase of traffic within the vicinity caused by the proposed conditional use.
 - b. The proposed use will be compatible with the character of adjacent and nearby properties with regard to use, function, operation, hours of operation, type and amount of traffic generated, building size and setback, and parking availability.
 - c. The proposed use will not cause a substantial diminution in value of abutting residential property. A substantial diminution shall be irrebuttably presumed to have occurred if abutting property suffers a 15% reduction in value as a result of the proposed conditional use. A reduction of 10% of the value of abutting property shall create a rebuttable presumption that a substantial diminution has occurred. The Board of County Commissioners carries the burden to show, as evidenced by either testimony from or an appraisal conducted by an M A I certified appraiser, that a substantial diminution in value would occur. The applicant may rebut the findings with his own expert witnesses.
- (2) The following specific standards shall be considered, when applicable, in making a determination that the general standards specified in subsection (1) of this section are satisfied:
- a. Ingress and egress to the property and proposed structures thereon, with particular reference to automotive and pedestrian safety and convenience, traffic flow and control, and access in case of fire and catastrophe, shall be: (1), adequate to serve the proposed use without burdening adjacent and nearby uses, and (2), built to applicable county standards, if any. Burdening adjacent and nearby uses means increasing existing traffic on the closest collector or arterial road by more than 20%, or 10% if the new traffic is primarily comprised of heavy vehicles, except where the affected road is at Level of Service A or B. New traffic generated by the proposed use shall not cause the adopted level of service for transportation on applicable roadways, as determined by applicable Brevard County standards, to be exceeded. Where the design of a public road to be used by the proposed use is physically inadequate to handle the numbers, types or weights of vehicles expected to be generated by the proposed use without damage to the road, the conditional use permit cannot be approved without a commitment to improve the road to a standard adequate to handle the proposed traffic, or to maintain the road through a maintenance bond or other means as required by the Board of County Commissioners.
 - b. The noise, glare, odor, particulates, smoke, fumes or other emissions from the conditional use shall not substantially interfere with the use or enjoyment of the adjacent and nearby property.
 - c. Noise levels for a conditional use are governed by Section 62-2271.

- d. The proposed conditional use shall not cause the adopted level of service for solid waste disposal applicable to the property or area covered by such level of service, to be exceeded.
- e. The proposed conditional use shall not cause the adopted level of service for potable water or wastewater applicable to the property or the area covered by such level of service, to be exceeded by the proposed use.
- f. The proposed conditional use must have existing or proposed screening or buffering, with reference to type, dimensions and character to eliminate or reduce substantial, adverse nuisance, sight, or noise impacts on adjacent and nearby properties containing less intensive uses.
- g. Proposed signs and exterior lighting shall not cause unreasonable glare or hazard to traffic safety, or interference with the use or enjoyment of adjacent and nearby properties.
- h. Hours of operation of the proposed use shall be consistent with the use and enjoyment of the properties in the surrounding residential community, if any. For commercial and industrial uses adjacent to or near residential uses, the hours of operation shall not adversely affect the use and enjoyment of the residential character of the area.
- i. The height of the proposed use shall be compatible with the character of the area, and the maximum height of any habitable structure shall be not more than 35 feet higher than the highest residence within 1,000 feet of the property line.
- j. Off-street parking and loading areas, where required, shall not be created or maintained in a manner which adversely impacts or impairs the use and enjoyment of adjacent and nearby properties. For existing structures, the applicant shall provide competent, substantial evidence to demonstrate that actual or anticipated parking shall not be greater than that which is approved as part of the site plan under applicable county standards.

FACTORS TO CONSIDER FOR A REZONING REQUEST

Section 62-1151(c) sets forth factors to consider in connection with a rezoning request, as follows:

“The planning and zoning board shall recommend to the board of county commissioners the denial or approval of each application for amendment to the official zoning maps based upon a consideration of the following factors:

- (1) The character of the land use of the property surrounding the property being considered.
- (2) The change in conditions of the land use of the property being considered and the surrounding property since the establishment of the current applicable zoning classification, special use or conditional use.
- (3) The impact of the proposed zoning classification or conditional use on available and projected traffic patterns, water and sewer systems, other public facilities and utilities and the established character of the surrounding property.

- (4) The compatibility of the proposed zoning classification or conditional use with existing land use plans for the affected area.
- (5) The appropriateness of the proposed zoning classification or conditional use based upon a consideration of the applicable provisions and conditions contained in this article and other applicable laws, ordinances and regulations relating to zoning and land use regulations and based upon a consideration of the public health, safety and welfare.”

These staff comments contain references to zoning classifications found in the Brevard County Zoning Regulations, Chapter 62, Article VI, Code of Ordinances of Brevard County. These references include brief summaries of some of the characteristics of that zoning classification. Reference to each zoning classification shall be deemed to incorporate the full text of the section or sections defining and regulating that classification into the Zoning file and Public Record for that item.

These staff comments contain references to sections of the Code of Ordinances of Brevard County. Reference to each code section shall be deemed to incorporate this section into the Zoning file and Public Record for that item.

These staff comments contain references to Policies of the Brevard County Comprehensive Plan. Reference to each Policy shall be deemed to incorporate the entire Policy into the Zoning file and Public Record for that item.

These staff comments refer to previous zoning actions which are part of the Public Records of Brevard County, Florida. These records will be referred to by reference to the file number. Reference to zoning files are intended to make the entire contents of the cited file a part of the Zoning file and Public Record for that item.

DEFINITIONS OF CONCURRENCY TERMS

Maximum Acceptable Volume (MAV): Maximum acceptable daily volume that a roadway can carry at the adopted Level of Service (LOS).

Current Volume: Building permit related trips added to the latest TPO (Transportation Planning Organization) traffic counts.

Volume with Development (VOL W/DEV): Equals Current Volume plus trip generation projected for the proposed development.

Volume/Maximum Acceptable Volume (VOL/MAV): Equals the ratio of current traffic volume to the maximum acceptable roadway volume.

Volume/Maximum Acceptable Volume with Development (VOL/MAV W/DEV): Ratio of volume with development to the Maximum Acceptable Volume.

Acceptable Level of Service (CURRENT LOS): The Level of Service at which a roadway is currently operating.

Level of Service with Development (LOS W/DEV): The Level of Service that a proposed development may generate on a roadway.



BOARD OF COUNTY COMMISSIONERS

Planning and Development Department

2725 Judge Fran Jamieson Way
Building A, Room 114
Viera, Florida 32940
(321)633-2070 Phone / (321)633-2074 Fax
<https://www.brevardfl.gov/PlanningDev>

STAFF COMMENTS

20Z00022

Christine Ruggiero and Michael A. Sollecito

RR-1 (Rural Residential) to RRMH-1 (Rural Residential Mobile Home)

Tax Account Number: 2002464
Parcel I.D.: 20G-34-23-AI-6-2.03
Location: South side of Harrison Road, approximately 6,000 feet west of the intersection of Green Meadows Road and Harrison Road. (District 1)
Acreage: 1.23 acres

Planning and Zoning Board: 10/05/20

Board of County Commissioners: 11/05/20

Consistency with Land Use Regulations

- Current zoning can be considered under the Future Land Use Designation, Section 62-1255.
- The proposal can be considered under the Future Land Use Designation, Section 62-1255.
- The proposal would maintain acceptable Levels of Service (LOS) (XIII 1.6.C)

	CURRENT	PROPOSED
Zoning	RR-1	RRMH-1
Potential*	1 single-family residential unit	1 single-family residential or 1 single-family mobile home unit
Can be Considered under the Future Land Use Map	YES Residential 1	YES Residential 1

* Zoning potential for concurrency analysis purposes only, subject to applicable land development regulations.

Background and Purpose of Request

The applicant is requesting to rezone the property from Rural Residential (RR-1) to Rural Residential Mobile Home (RRMH-1) to allow for the development of a mobile home as the principle structure.

This property is located on the south side of Harrison Road, approximately 6,000 feet west of the intersection of Green Meadows Road and Harrison Road. The original zoning of the property was General Use (GU). Resolution **16PZ00028**, adopted May 26, 2016, changed the property's zoning from GU to RR-1 and the Future Land Use designation from Agricultural to Residential 1 (RES 1). The property is currently vacant.

Land Use

FLUE Policy 1.9 – The Residential 1 Future Land Use (FLU) designation permits low density residential development with a maximum density of up to one (1) dwelling unit per acre, except as

otherwise may be provided for within the Future Land Use Element (FLUE). Both the existing zoning of RR-1 and the proposed zoning of RRMH-1 are consistent with the FLU and compatible with the FLUE.

Environmental Constraints

The subject parcel contains mapped National Wetlands Inventory (NWI) wetlands, SJRWMD wetlands, and hydric soils. A wetland delineation will be required prior to any site plan design, land clearing activities, or building permit submittal. Per Section 62-3694(c)(2), residential land uses within wetlands shall be limited to not more than one (1) dwelling unit per five (5) acres unless strict application of this policy would render a legally established parcel as of September 9, 1988, which is less than five (5) acres, as unbuildable. Application of the one-unit-per-five-acres limitation shall limit impacts to wetlands for single family residential development on a cumulative basis, to not more than 1.8% of the total property as defined in Section 65-694(c)(6). Any permitted wetland impacts must meet the requirements of Sections 62-3694(e) including avoidance of impacts, and 62-3696. The applicant is encouraged to contact NRM at 321-633-2016 prior to any site plan design or permit submittal.

Preliminary Transportation Concurrency

The closest concurrency management segment to the subject property is US-1, between Burkholm Road and the Volusia County Line, which has a Maximum Acceptable Volume (MAV) of 40,300 trips per day, a Level of Service (LOS) of C, and currently operates at 10.65% of capacity daily. The maximum development potential from the proposed rezoning does not change the percentage of MAV utilization. The corridor is anticipated to continue to operate at 10.65% of capacity daily (LOS C). The proposal is not anticipated to create a deficiency in LOS.

No school concurrency information has been provided as the development potential of this site falls below the minimum number of new residential lots that would require a formal review.

The subject property is not served by central potable water. The subject property is not served by central sewer.

Applicable Land Use Policies

Analysis of Administrative Policy #3 - Compatibility between this site and the existing or proposed land uses in the area. The existing and proposed zoning are both consistent with the Future Land Use Map (FLUM) designation of the property as RES 1. This segment of Harrison Road west of I-95 is rural residential in character even though all of the properties in the area, except for the subject property, are designated as Agricultural by the FLUM. Most properties are between 1 and 5 acres and developed with single-family, mobile, or manufactured residences.

Analysis of Administrative Policy #4 - Character of a neighborhood or area.

The area is characterized by rural single-family zoning and development, including properties zoned RRMH-1 that are developed with manufactured and mobile homes. The abutting property to the west is zoned RRMH-1 and developed with a mobile home. The next three properties to the west are also zoned RRMH-1 and developed with mobile homes. The properties to the east and the south are

zoned GU and are vacant. There is also a nearby property zoned Agricultural Residential (AU). Properties directly across Harrison Road to the north are zoned RRMH-1 and developed with manufactured housing.

The current RR-1 classification permits single-family residential land uses on a minimum one acre lot, with a minimum lot width and depth of 125 feet. The RR-1 classification permits horses, barns and horticulture as accessory uses to a single-family residence. The minimum house size is 1,200 square feet. Keeping of horses and agricultural uses are accessory to a principle residence within the RR-1 zoning district.

The proposed RRMH-1 classification permits single-family mobile homes and detached single-family residential land uses on minimum one acre lots, with a minimum width and depth of 125 feet. This classification permits horses, barns and horticulture as accessory uses. The minimum house size is 600 square feet.

The GU classification is a holding category, allowing single-family residences on five acre lots with a minimum width and depth of 300 feet. The minimum house size in GU is 750 square feet.

The AU zoning classification permits single-family residences and agricultural uses on 2.5 acre lots, with a minimum lot width and depth of 150 feet. The minimum house size in AU is 750 square feet. The AU classification also permits the raising/grazing of animals, fowl and beekeeping.

The proposed rezoning does not increase the potential number of dwelling units on the property and, therefore, will not generate additional demands on infrastructure or other services.

Surrounding Properties

The developed character of the surrounding area is low density rural residential. The parcels across Harrison Road to the north are zoned RRMH-1. The abutting parcel to the east is zoned General Use (GU). The abutting parcel to the south is zoned GU. The abutting parcel to the west is developed and zoned RRMH-1.

There have been no zoning actions within a half-mile of the subject property in the last three years. The most recent zoning action in the area was on the subject property. Action **16PZ00028** changed the FLUM from Agricultural to RES 1 and the zoning from GU to RR-1 on the subject property on May 26, 2016.

For Board Consideration

The Board may consider whether the proposed rezoning to allow for mobile home or manufactured home is compatible with the surrounding area.

NATURAL RESOURCES MANAGEMENT DEPARTMENT
Zoning Review & Summary
Item # 20Z00022

Applicant: Ruggiero and Sollecito

Zoning Request: RR-1 to RRMH-1

Note: Applicant wants to have a single-family mobile home.

P&Z Hearing Date: 10/05/20; **BCC Hearing Date:** 11/05/20

Tax ID No: 2002464

- This is a preliminary review based on best available data maps reviewed by the Natural Resources Management Department (NRM) and does not include a site inspection to verify the accuracy of the mapped information.
- In that the rezoning process is not the appropriate venue for site plan review, specific site designs submitted with the rezoning request will be deemed conceptual. Board comments relative to specific site design do not provide vested rights or waivers from Federal, State or County regulations.
- **This review does not guarantee whether or not the proposed use, specific site design, or development of the property can be permitted under current Federal, State, or County Regulations.**

Summary of Mapped Resources and Noteworthy Land Use Issues:

- NWI Wetlands
- SJRWMD Wetlands
- Hydric Soils
- Floodplain
- Protected and Specimen Trees
- Protected Species

The subject parcel contains mapped National Wetlands Inventory (NWI) wetlands, SJRWMD wetlands, and hydric soils. A wetland delineation will be required prior to any site plan design, land clearing activities, or building permit submittal. Per Section 62-3694(c)(2), residential land uses within wetlands shall be limited to not more than one (1) dwelling unit per five (5) acres unless strict application of this policy would render a legally established parcel as of September 9, 1988, which is less than five (5) acres, as unbuildable. Application of the one-unit-per-five-acres limitation shall limit impacts to wetlands for single family residential development on a cumulative basis, to not more than 1.8% of the total property as defined in Section 65-694(c)(6). Any permitted wetland impacts must meet the requirements of Sections 62-3694(e) including avoidance of impacts, and 62-3696. The applicant is encouraged to contact NRM at 321-633-2016 prior to any site plan design or permit submittal.

Land Use Comments:

Wetlands

The subject parcel contains mapped NWI wetlands (Freshwater forested shrub wetlands), SJRWMD (Wetland forested mixed), and hydric soils (Samsula muck and Eau Gallie sand) as shown on the NWI Wetlands, SJRWMD Florida Land Use & Cover Codes, and USDA Soil Conservation Service Soils Survey maps, respectively. All are indicators that wetlands may be present on the property. A wetland delineation will be required prior to any land clearing activities.

Per Section 62-3694(c)(2), residential land uses within wetlands shall be limited to not more than one (1) dwelling unit per five (5) acres unless strict application of this policy would render a legally established parcel as of September 9, 1988, which is less than five (5) acres, as unbuildable. Application of the one-unit-per-five-

Page 4

acres limitation shall limit impacts to wetlands for single family residential development on a cumulative basis, to not more than 1.8% of the total property as defined in Section 65-694(c)(6). Any permitted wetland impacts must meet the requirements of Sections 62-3694(e) including avoidance of impacts, and 62-3696. The applicant is encouraged to contact NRM at 321-633-2016 prior to any site plan design or permit submittal.

Floodplain

A portion of the property is mapped as being within an isolated floodplain as identified by the Federal Emergency Management Agency as shown on the FEMA Flood Zones Map. Per Section 62-3724(3), development within an isolated floodplain shall not negatively impact adjacent properties or receiving water body quality, and any development within the isolated floodplain shall provide a contiguous area that includes the primary structure and perimeter buffer, accessory structures, onsite sewage disposal system and buffer, access to the primary and accessory structure. These areas shall be elevated to or above the 100-year base flood elevation. Compensatory storage shall be required for fill brought within the floodplain in excess of that which will provide an upland buildable area greater than one third (1/3) acre in size regardless of the date the lot was created. The property is subject to the development criteria in Conservation Element Objective 4, its subsequent policies, and the Floodplain Ordinance.

Protected and Specimen Trees

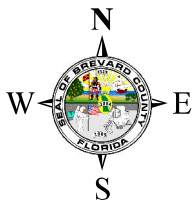
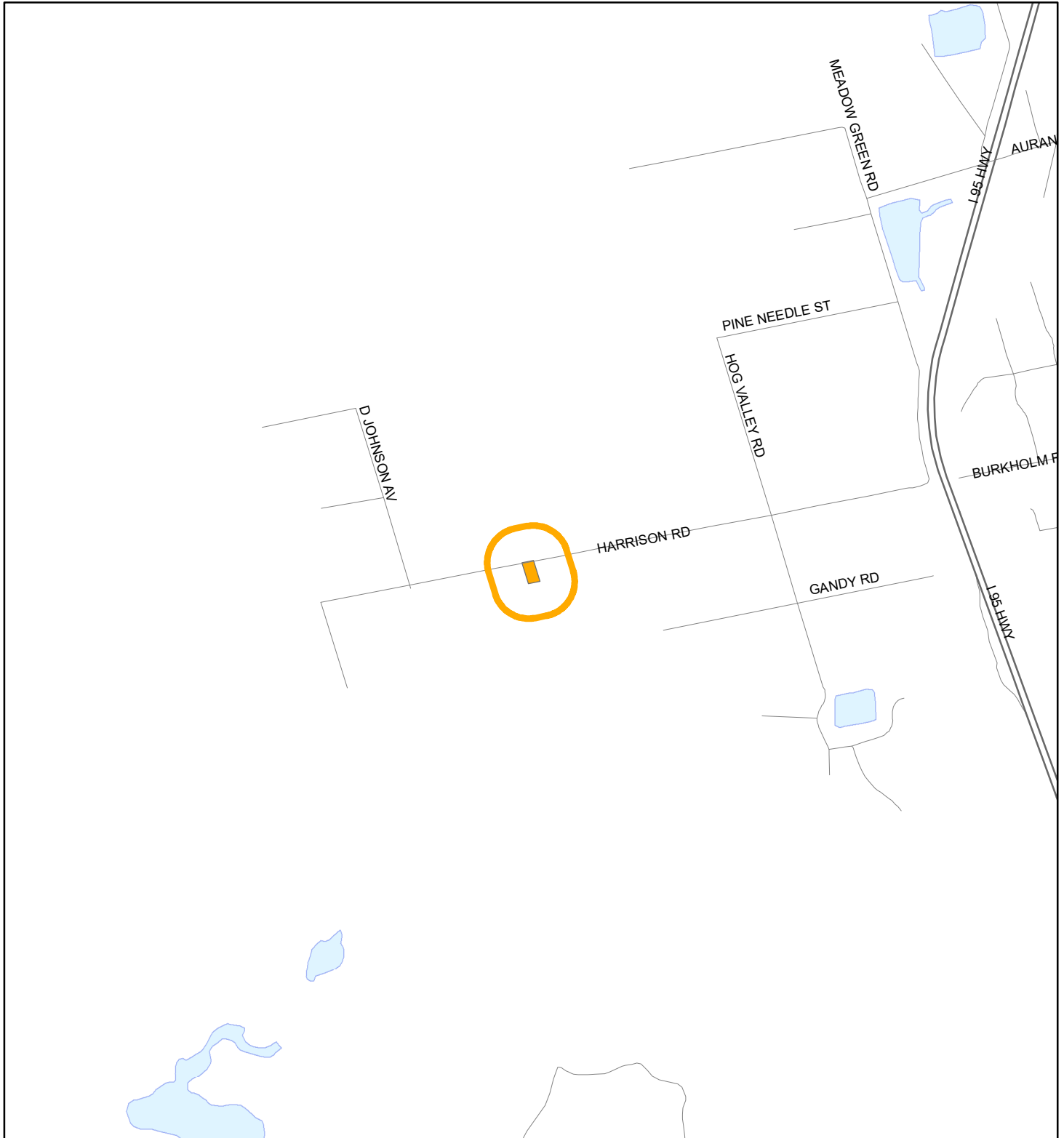
Aerials indicate that Protected (greater than or equal to 10 inches in diameter) and Specimen Trees (greater than or equal to 24 inches in diameter) may reside on subject property. Per Brevard County Landscaping, Land Clearing and Tree Protection ordinance, Section 62-4341(18), Protected and Specimen Trees shall be preserved or relocated on site to the Greatest Extent Feasible. Per Section 62-4332, Definitions, Greatest Extent Feasible shall include, but not be limited to, relocation of roads, buildings, ponds, increasing building height to reduce building footprint or reducing Vehicular Use Areas. The applicant is advised to refer to Article XIII, Division 2, entitled Land Clearing, Landscaping, and Tree Protection, for specific requirements for tree preservation and canopy coverage requirements. Land clearing is not permitted without prior authorization by NRM.

Protected Species

Information available to NRM indicates that federally and/or state protected species may be present on the property. Prior to any plan, permit submittal, or development activity, including land clearing, the applicant should obtain any necessary permits or clearance letters from the Florida Fish and Wildlife Conservation Commission and/or U.S. Fish and Wildlife Service, as applicable.

LOCATION MAP

RUGGIERO, CHRISTINE AND SOLLECITO, MICHAEL A.
20Z00022



1:24,000 or 1 inch = 2,000 feet

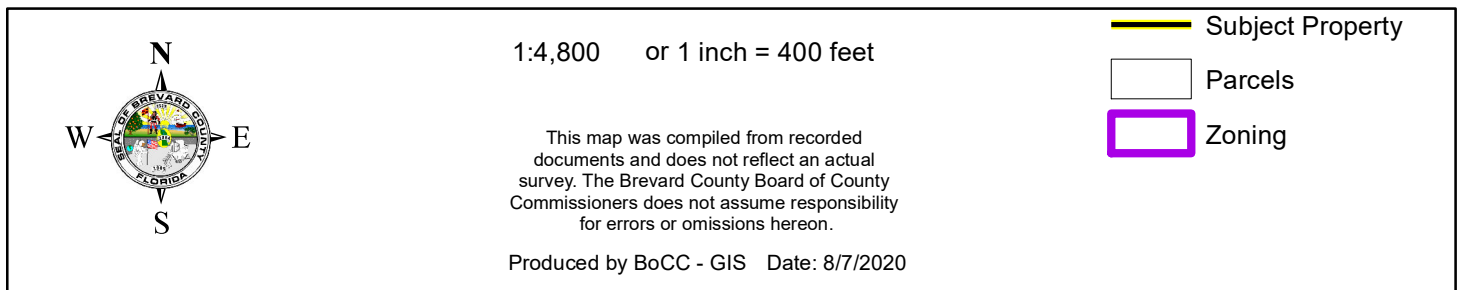
Buffer Distance: 500 feet

This map was compiled from recorded documents and does not reflect an actual survey. The Brevard County Board of County Commissioners does not assume responsibility for errors or omissions hereon.

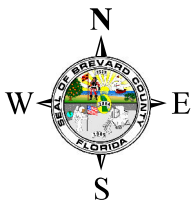
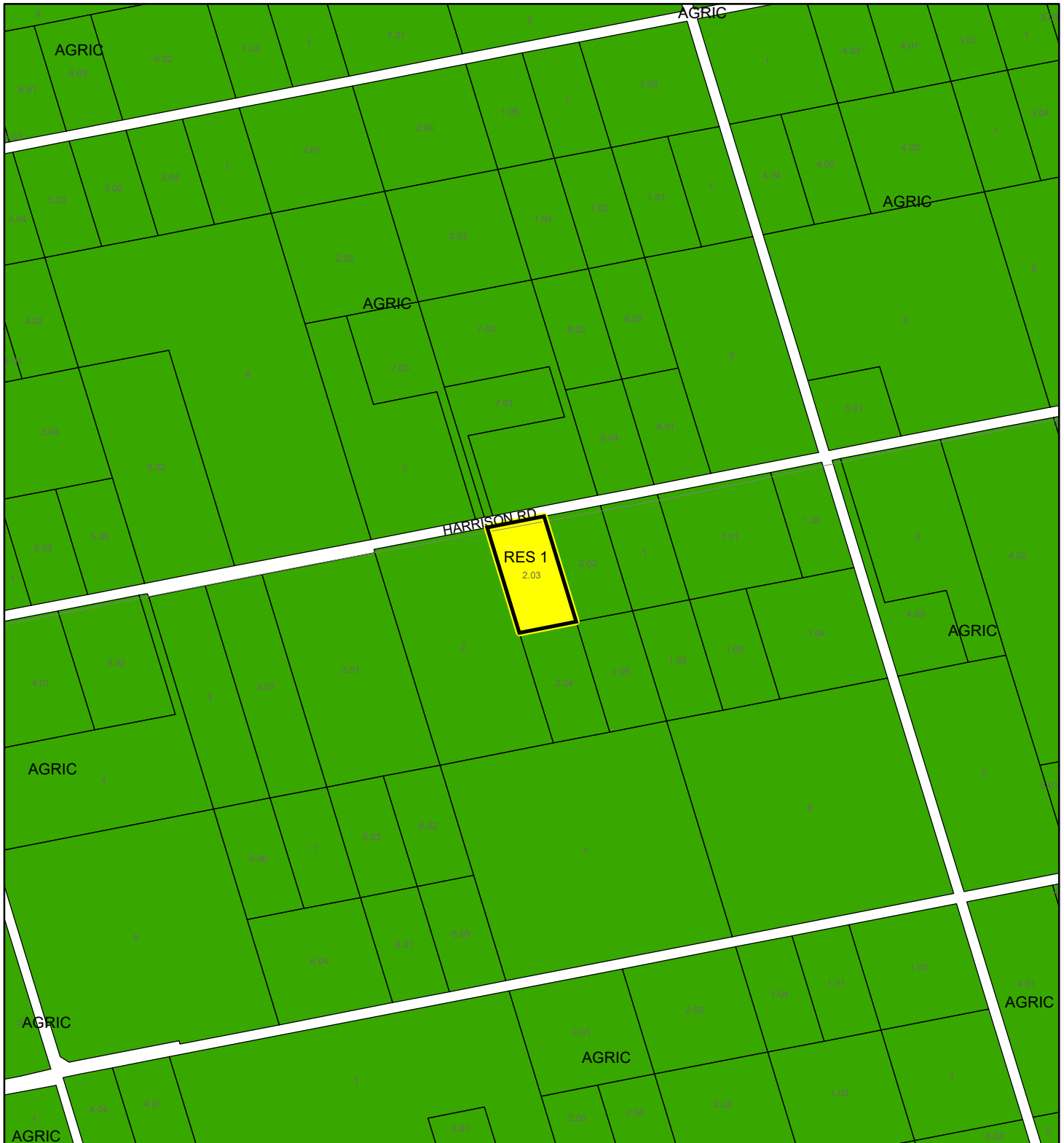
Produced by BoCC - GIS Date: 8/7/2020

Buffer
Subject Property

RUGGIERO, CHRISTINE AND SOLLECITO, MICHAEL A.
20Z00022



20Z00022



1:4,800 or 1 inch = 400 feet

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Produced by BoCC - GIS Date: 8/7/2020

Subject Property

Parcels

AERIAL MAP

RUGGIERO, CHRISTINE AND SOLLECITO, MICHAEL A.

20Z00022




1:2,400 or 1 inch = 200 feet

PHOTO YEAR: 2020

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Produced by BoCC - GIS Date: 8/7/2020

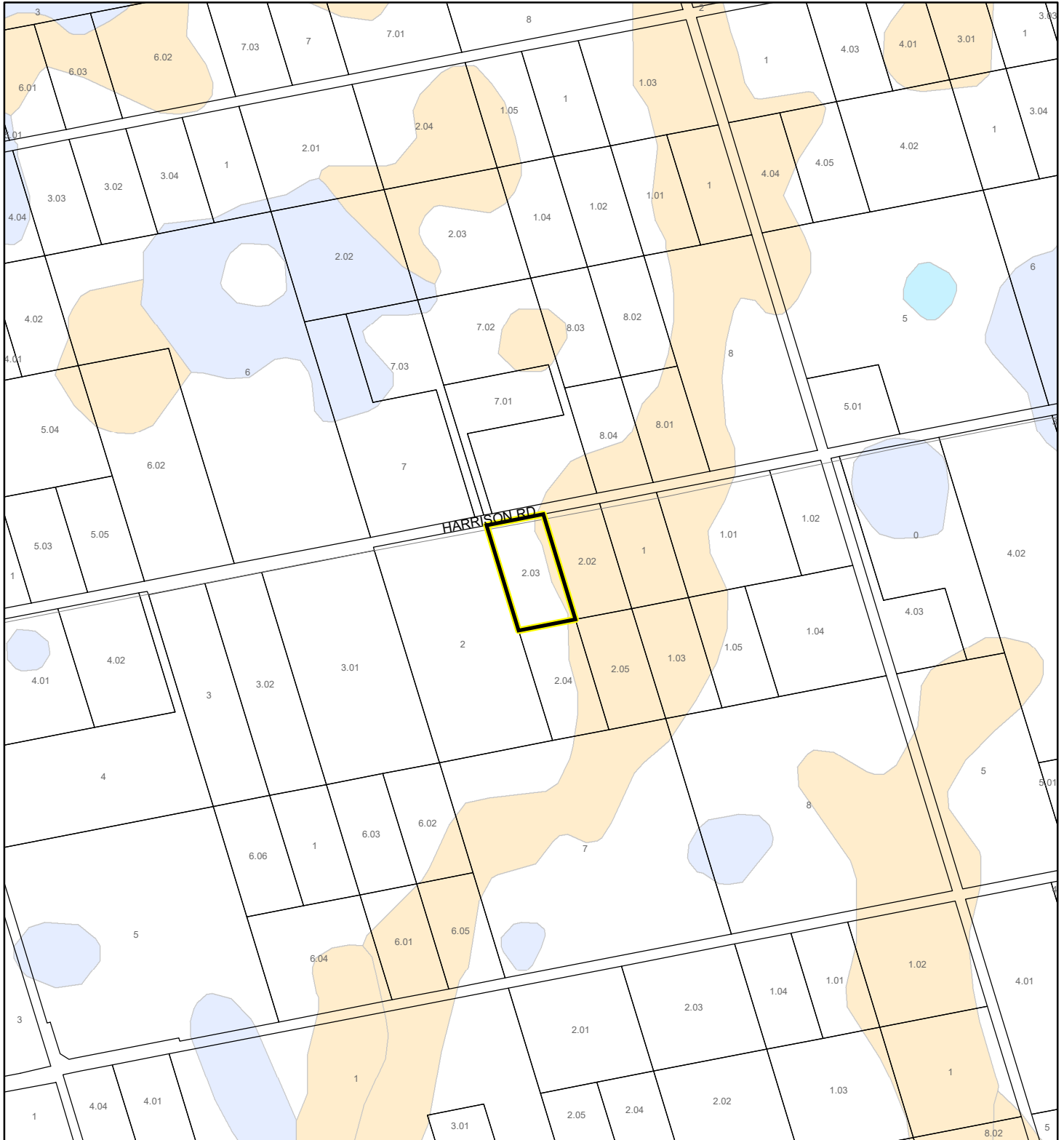
 Subject Property

 Parcels

NWI WETLANDS MAP

RUGGIERO, CHRISTINE AND SOLLECITO, MICHAEL A.

20Z00022













1:4,800 or 1 inch = 400 feet

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Produced by BoCC - GIS Date: 8/7/2020

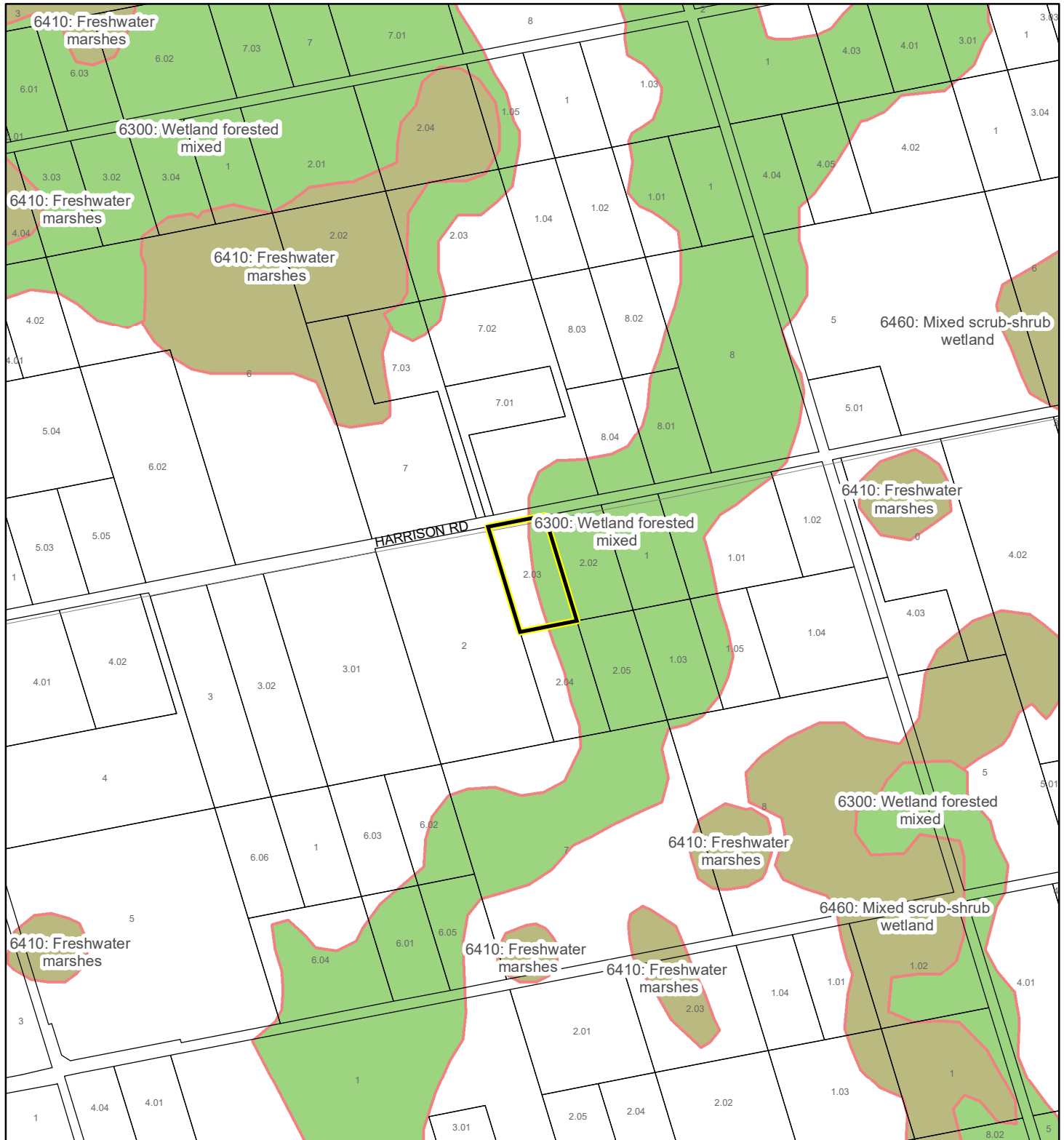
National Wetlands Inventory (NWI)

 Estuarine and Marine Deepwater	 Freshwater Pond
 Estuarine and Marine Wetland	 Lake
 Freshwater Emergent Wetland	 Other
 Freshwater Forested/Shrub Wetland	 Riverine
	 Subject Property
	 Parcels

SJRWMD FLUCCS WETLANDS - 6000 Series MAP

RUGGIERO, CHRISTINE AND SOLLECITO, MICHAEL A.

20Z00022



1:4,800 or 1 inch = 400 feet

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Produced by BoCC - GIS Date: 8/7/2020

SJRWMD FLUCCS WETLANDS

- Wetland Hardwood Forests - Series 6100
- Wetland Coniferous Forest - Series 6200
- Wetland Forested Mixed - Series 6300
- Vegetated Non-Forested Wetlands - Series 6400
- Non-Vegetated Wetland - Series 6500

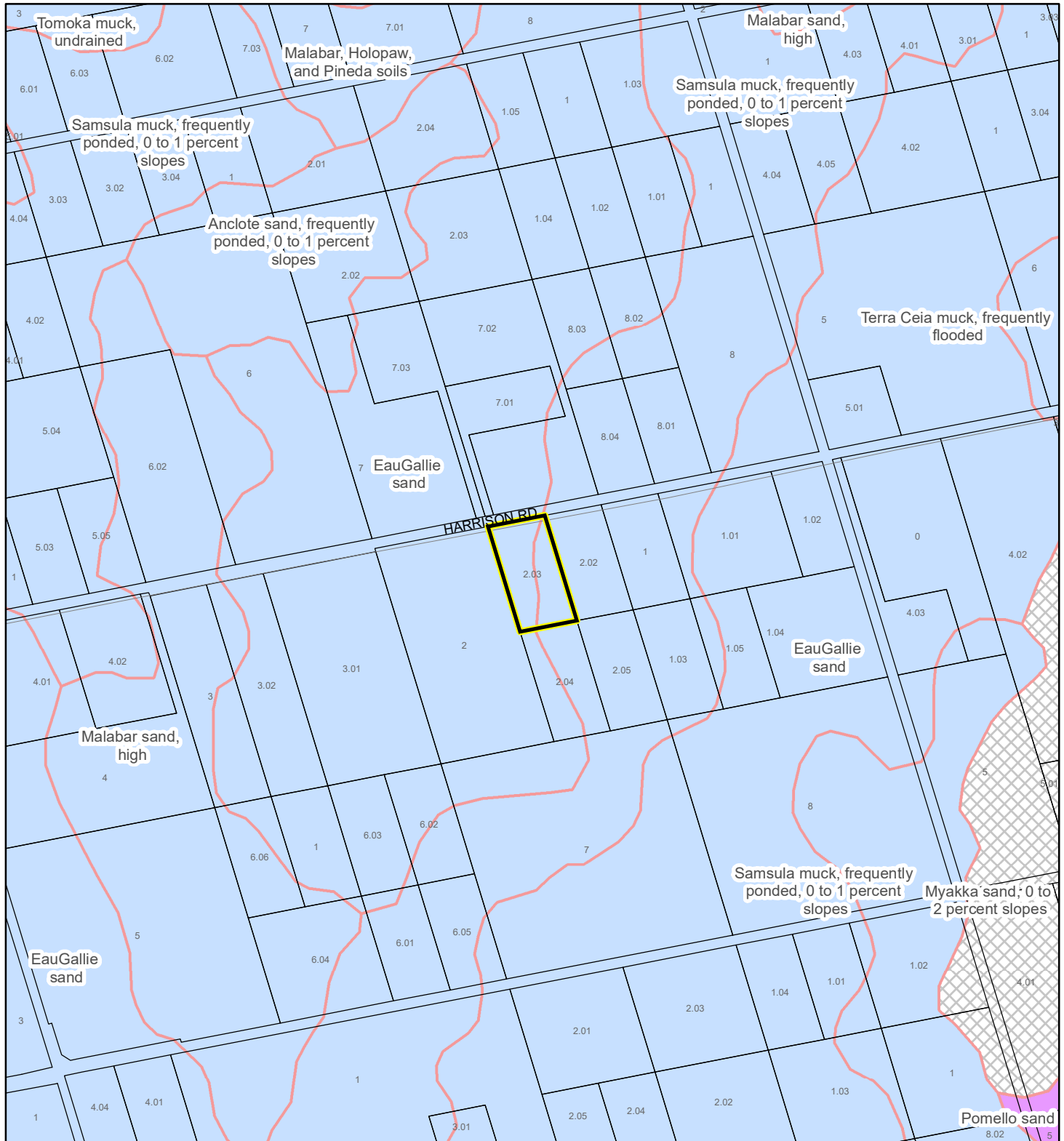
Subject Property

Parcels

USDA SCSSS SOILS MAP

RUGGIERO, CHRISTINE AND SOLLECITO, MICHAEL A.

20Z00022



1:4,800 or 1 inch = 400 feet

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Produced by BoCC - GIS Date: 8/7/2020

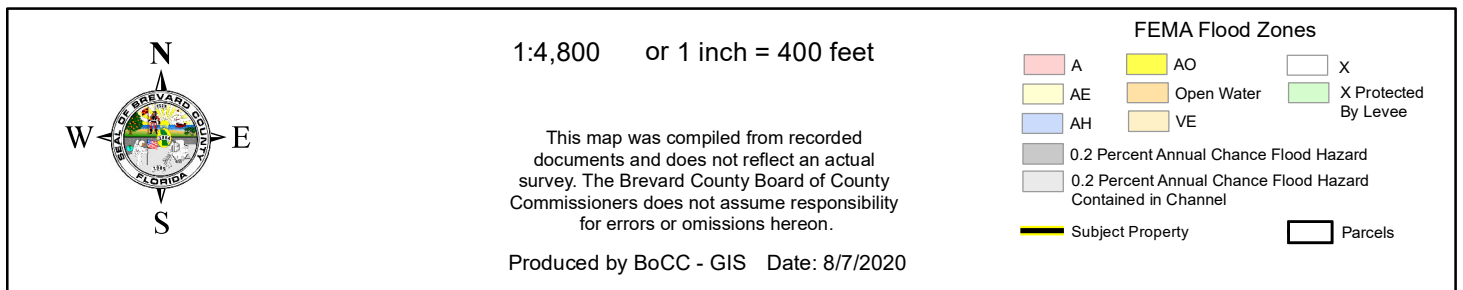
USDA SCSSS Soils

- Aquifer and Hydric
- Aquifer
- Hydric
- None

Subject Property

Parcels

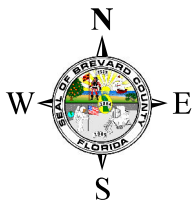
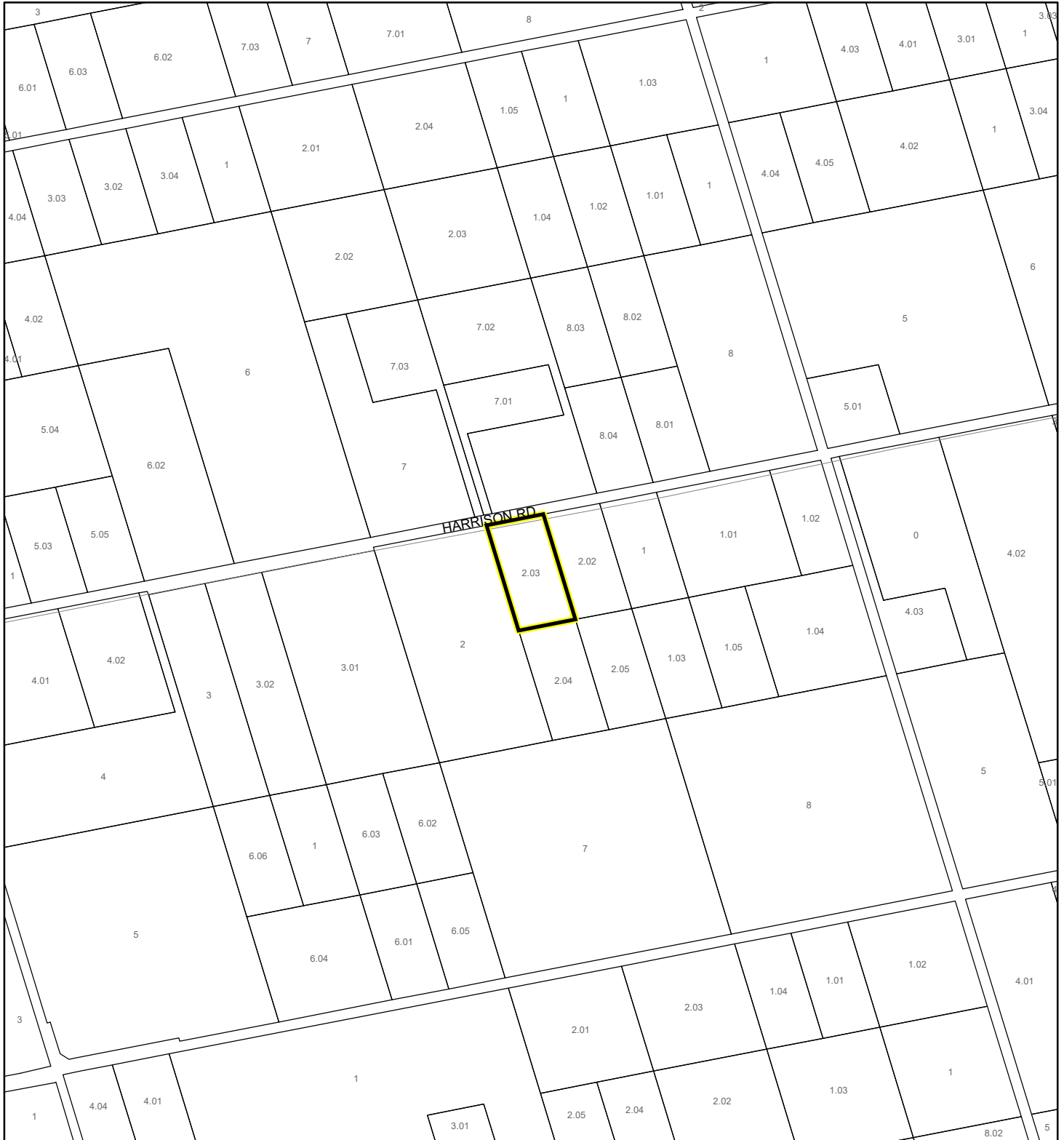
20Z00022



COASTAL HIGH HAZARD AREA MAP

RUGGIERO, CHRISTINE AND SOLLECITO, MICHAEL A.

20Z00022



1:4,800 or 1 inch = 400 feet


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Produced by BoCC - GIS Date: 8/7/2020

 Subject Property

 Parcels

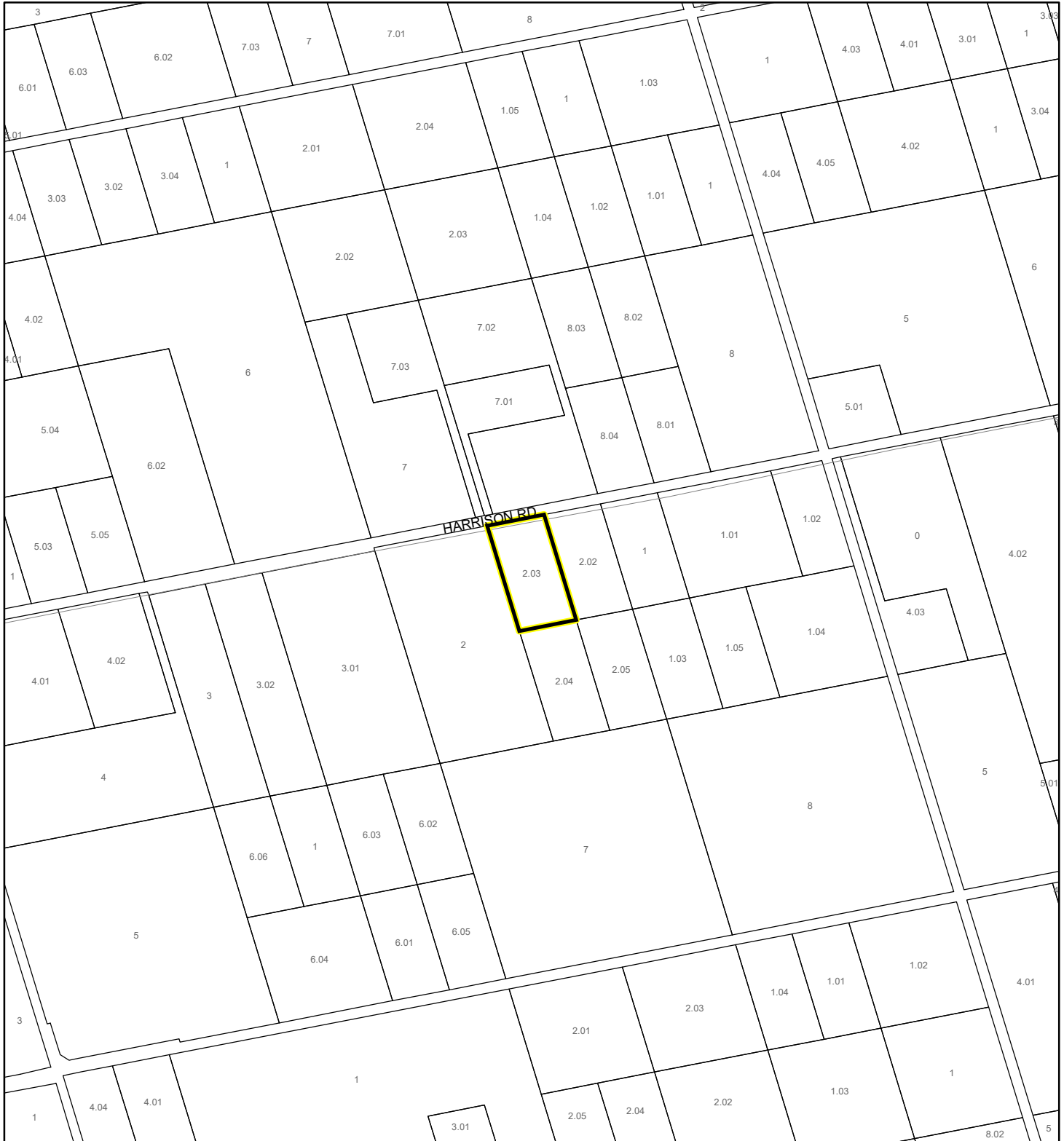
Coastal High Hazard Area

 SurgeZoneCat1

INDIAN RIVER LAGOON SEPTIC OVERLAY MAP

RUGGIERO, CHRISTINE AND SOLLECITO, MICHAEL A.

20Z00022



1:4,800 or 1 inch = 400 feet

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Produced by BoCC - GIS Date: 8/7/2020

 Subject Property

 Parcels

Septic Overlay

 40 Meters

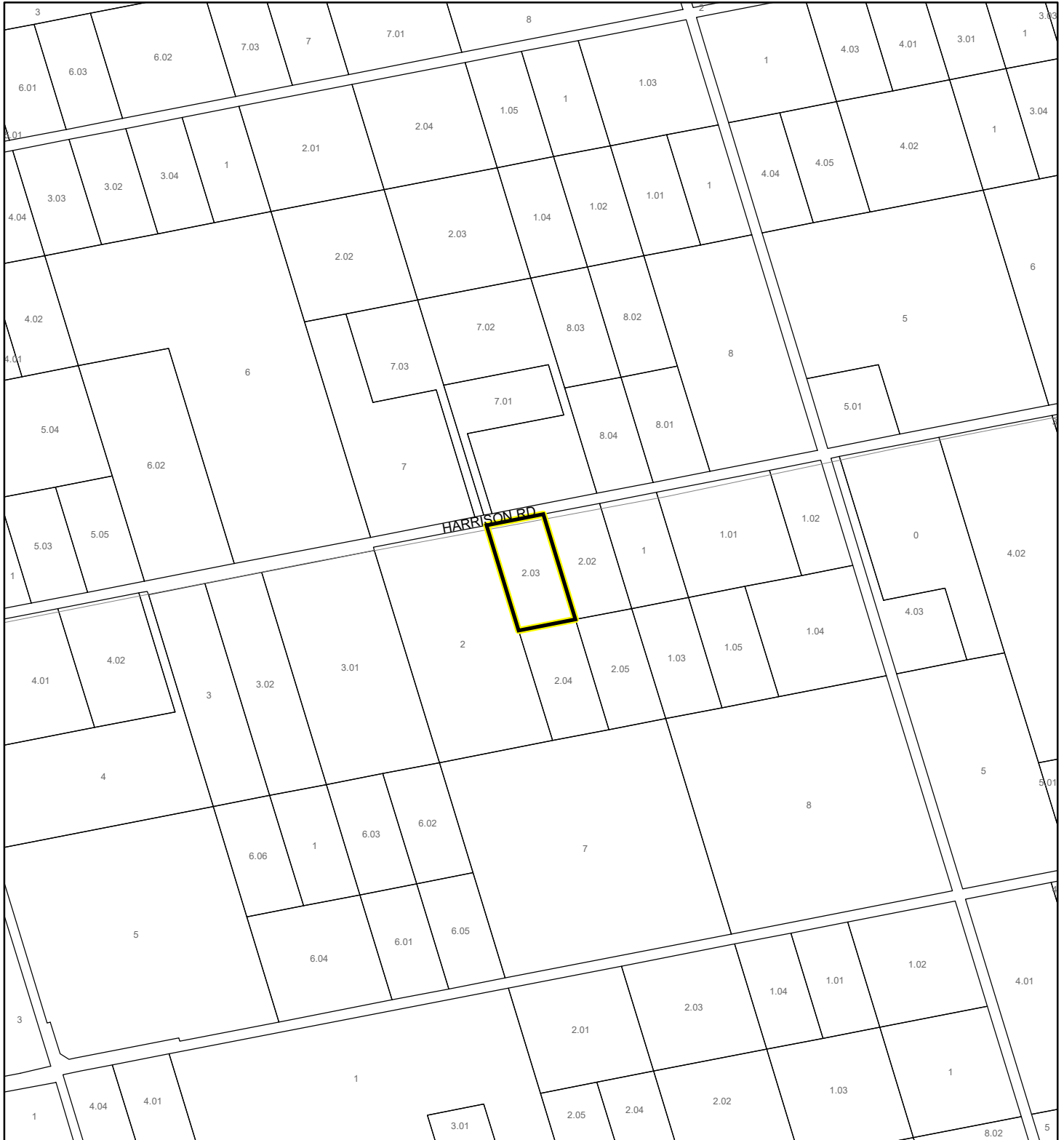
 60 Meters

 All Distances

EAGLE NESTS MAP

RUGGIERO, CHRISTINE AND SOLLECITO, MICHAEL A.

20Z00022



1:4,800 or 1 inch = 400 feet

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Produced by BoCC - GIS Date: 8/7/2020

 Subject Property

 Parcels

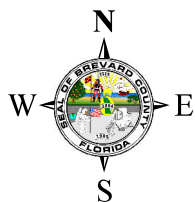
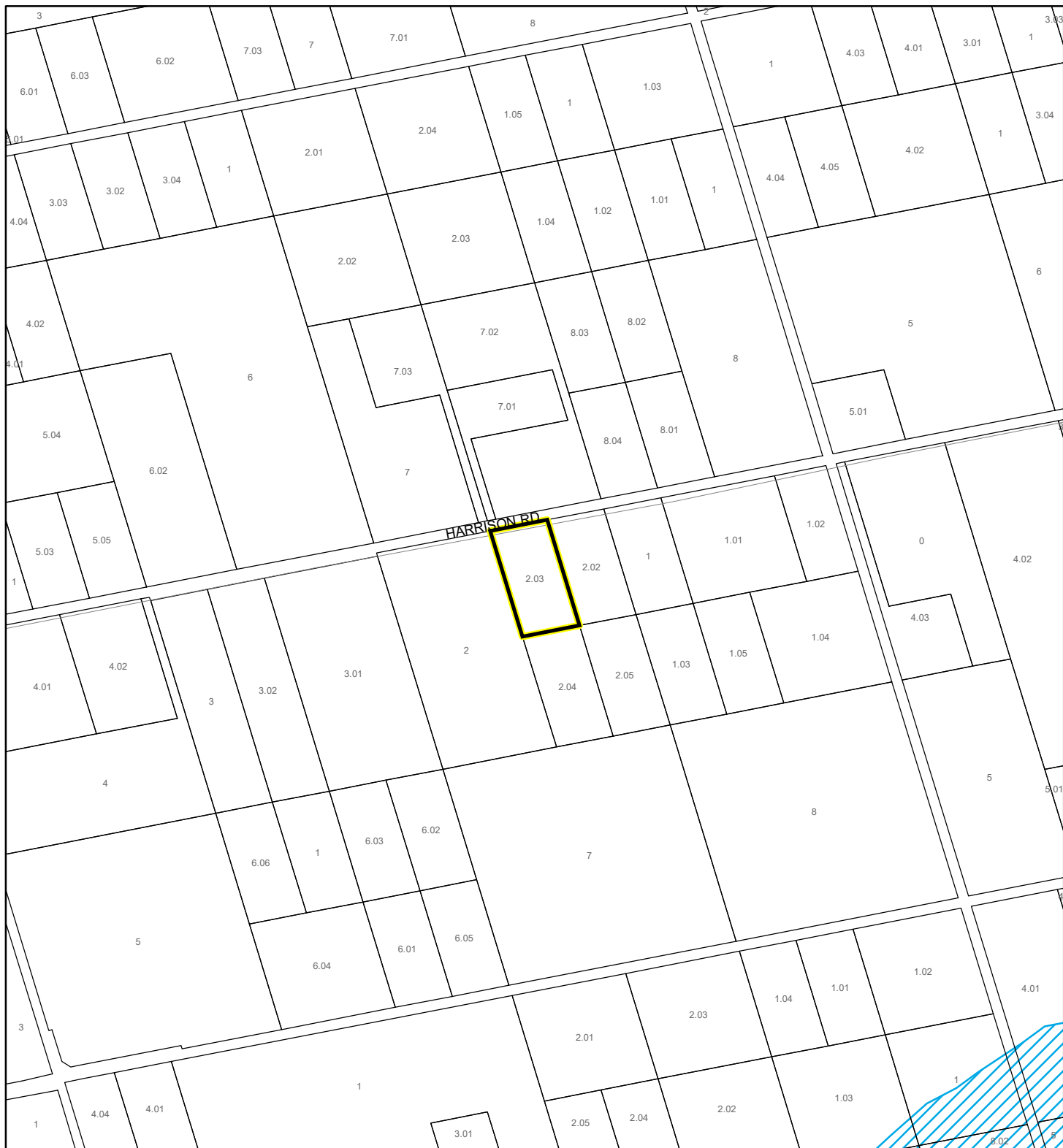


Eagle Nests
FWS 2010

SCRUB JAY OCCUPANCY MAP

RUGGIERO, CHRISTINE AND SOLLECITO, MICHAEL A.




20Z00022



1:4,800 or 1 inch = 400 feet

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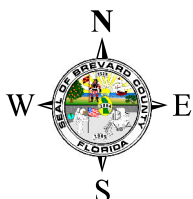
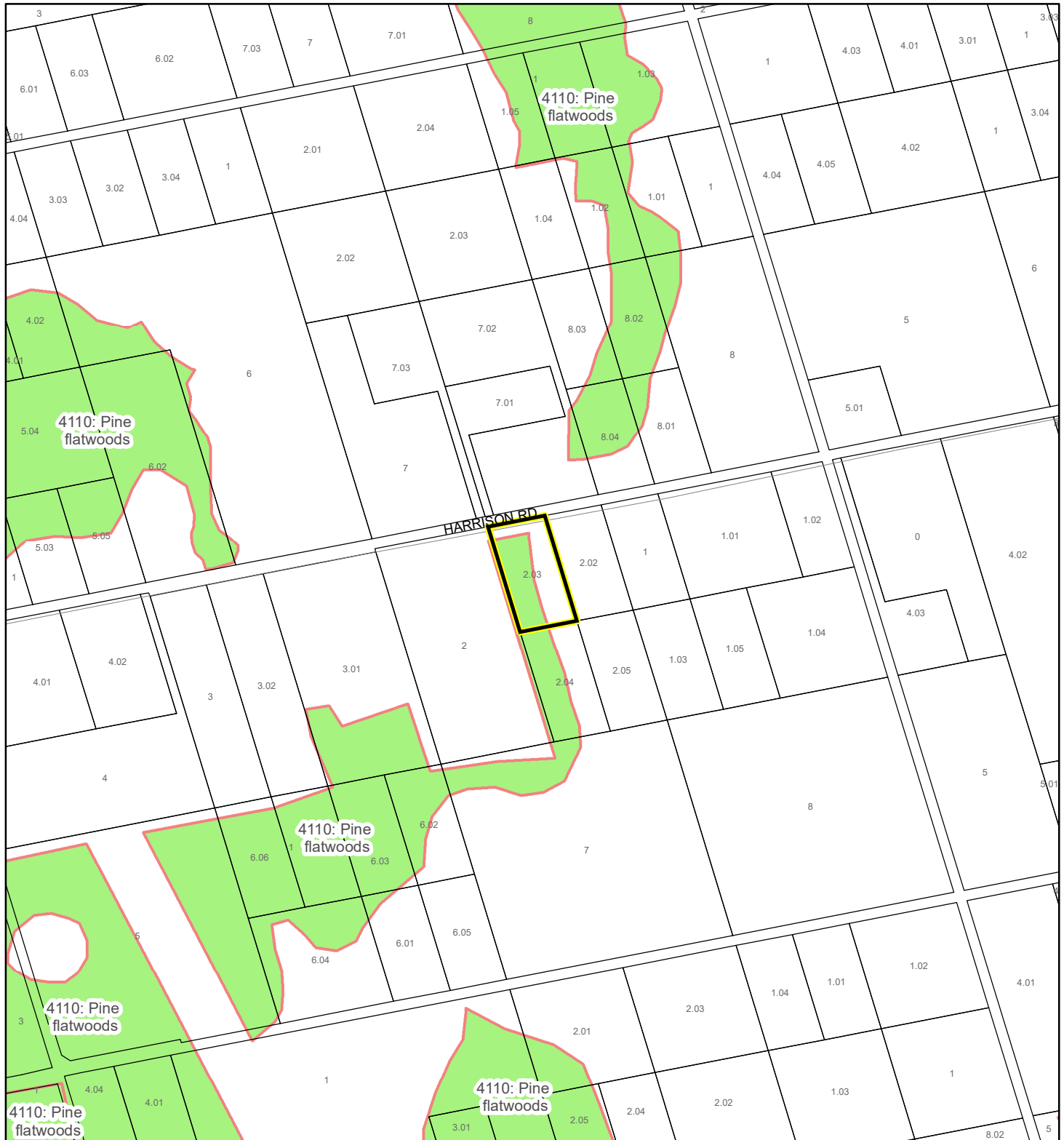
Produced by BoCC - GIS Date: 8/7/2020

-  Subject Property
-  Parcels
-  Scrub Jay Occupancy

SJRWMD FLUCCS UPLAND FORESTS - 4000 Series MAP

RUGGIERO, CHRISTINE AND SOLLECITO, MICHAEL A.

20Z00022



1:4,800 or 1 inch = 400 feet

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Produced by BoCC - GIS Date: 8/7/2020

SJRWMD FLUCCS Upland Forests

- Upland Coniferous Forest - 4100 Series
- Upland Hardwood Forest - 4200 Series
- Upland Mixed Forest - 4300 Series
- Tree Plantations - 4400 Series

Subject Property Parcels



Agenda Report

2725 Judge Fran Jamieson
Way
Viera, FL 32940

Public Hearing

H.3.

10/5/2020

Subject:

2354 Talmadge Drive, LLC (Aldon Bookhardt) requests a Small Scale Comprehensive Plan Amendment to change the Future Land Use designation from RES 4 to NC. (20PZ00079) (Tax Account 2103831) (District 1)

Fiscal Impact:

None

Dept/Office:

Planning and Development

Requested Action:

It is requested that the Local Planning Agency conduct a public hearing to consider a Small Scale Comprehensive Plan Amendment to change the Future Land Use designation from RES 4 (Residential 4) to NC (Neighborhood Commercial).

Summary Explanation and Background:

The applicant is requesting to amend the FLU (Future Land Use) designation from RES 4 to NC on a 0.98-acre portion of the overall 3.04-acre parcel of land located on the southwest corner of East Main Street and Harry T. Moore Avenue for the purpose of developing the 0.98-acre site as a neighborhood retail store.

A companion rezoning application was submitted accompanying this FLU amendment request to change the zoning classification from BU-1 (General Retail Commercial) to BU-1-A (Restricted Neighborhood Retail Commercial) on the 0.98 subject site and RU-1-9 (Single-Family Residential) with a Binding Development Plan (BDP) on the remaining portion of the overall parcel 3.04 acre parcel. The proposed rezoning and Future Land Use Amendment will establish consistency between the zoning classification and the Future Land Use Map.

To the north of the subject property is existing commercial retail and vacant land with FLU designations of RES 4; to the south is one single-family residence with a FLU designation of RES 4; to the east is multi-family housing with FLU designation of RES 4; and adjacent to the west is vacant, undeveloped land and one single-family residence with FLU designations of RES 4.

The proposed NC FLU designation will acknowledge the subject site's existing commercial zoning and is consistent with recommendation 3.2 of the adopted 2007 Mims Small Area Study that states commercial needs should generally be focused on providing goods and services to Mims residents, as opposed to larger regional markets.

Clerk to the Board Instructions:

None.

ADMINISTRATIVE POLICIES OF THE FUTURE LAND USE ELEMENT

Administrative Policies in the Future Land Use Element establish the expertise of staff with regard to zoning land use issues and set forth criteria when considering a rezoning action or request for Conditional Use Permit, as follows:

Administrative Policy 1

The Brevard County zoning official, planners and the director of the Planning and Development staff, however designated, are recognized as expert witnesses for the purposes of Comprehensive Plan amendments as well as zoning, conditional use, special exception, and variance applications.

Administrative Policy 2

Upon Board request, members of the Brevard County Planning and Development staff shall be required to present written analysis and a recommendation, which shall constitute an expert opinion, on all applications for development approval that come before the Board of County Commissioners for quasi-judicial review and action. The Board may table an item if additional time is required to obtain the analysis requested or to hire an expert witness if the Board deems such action appropriate. Staff input may include the following:

Criteria:

- A. Staff shall analyze an application for consistency or compliance with comprehensive plan policies, zoning approval criteria and other applicable written standards.
- B. Staff shall conduct site visits of property which are the subject of analysis and recommendation. As part of the site visit, the staff shall take a videotape or photographs where helpful to the analysis and conduct an inventory of surrounding existing uses. Aerial photographs shall also be used where they would aid in an understanding of the issues of the case.
- C. In cases where staff analysis is required, both the applicant and the staff shall present proposed findings of fact for consideration by the Board.
- D. For re-zoning applications where a specific use has not been proposed, the worst case adverse impacts of potential uses available under the applicable land use classification shall be evaluated by the staff.

Administrative Policy 3

Compatibility with existing or proposed land uses shall be a factor in determining where a rezoning or any application involving a specific proposed use is being considered. Compatibility shall be evaluated by considering the following factors, at a minimum:

Criteria:

- A. Whether the proposed use(s) would have hours of operation, lighting, odor, noise levels, traffic, or site activity that would significantly diminish the enjoyment of, safety or quality of life in existing neighborhoods within the area which could foreseeably be affected by the proposed use.
- B. Whether the proposed use(s) would cause a material reduction (five percent or more) in the value of existing abutting lands or approved development.
- C. Whether the proposed use(s) is/are consistent with an emerging or existing pattern of surrounding development as determined through analysis of:

1. historical land use patterns;
2. actual development over the immediately preceding three years; and
3. development approved within the past three years but not yet constructed.

D. Whether the proposed use(s) would result in a material violation of relevant policies in any elements of the Comprehensive Plan.

Administrative Policy 4

Character of a neighborhood or area shall be a factor for consideration whenever a rezoning or any application involving a specific proposed use is reviewed. The character of the area must not be materially or adversely affected by the proposed rezoning or land use application. In evaluating the character of an area, the following factors shall be considered:

Criteria:

- A. The proposed use must not materially and adversely impact an established residential neighborhood by introducing types of intensity of traffic (including but not limited to volume, time of day of traffic activity, type of vehicles, et cetera), parking, trip generation, commercial activity or industrial activity that is not already present within the identified boundaries of the neighborhood.
- B. In determining whether an established residential neighborhood exists, the following factors must be present:
 1. The area must have clearly established boundaries, such as roads, open spaces, rivers, lakes, lagoons, or similar features.
 2. Sporadic or occasional neighborhood commercial uses shall not preclude the existence of an existing residential neighborhood, particularly if the commercial use is non-conforming or pre-dates the surrounding residential use.
 3. An area shall be presumed not to be primarily residential but shall be deemed transitional where multiple commercial, industrial or other non-residential uses have been applied for and approved during the previous five (5) years.

Administrative Policy 5

In addition to the factors specified in Administrative Policies 2, 3, and 4, in reviewing a rezoning, conditional use permit or other application for development approval, the impact of the proposed use or uses on transportation facilities either serving the site or impacted by the use(s) shall be considered. In evaluating whether substantial and adverse transportation impacts are likely to result if an application is approved, the staff shall consider the following criteria:

Criteria:

- A. Whether adopted levels of services will be compromised;
- B. Whether the physical quality of the existing road system that will serve the proposed use(s) is sufficient to support the use(s) without significant deterioration;

- C. Whether the surrounding existing road system is of sufficient width and construction quality to serve the proposed use(s) without the need for substantial public improvements;
- D. Whether the surrounding existing road system is of such width and construction quality that the proposed use(s) would realistically pose a potential for material danger to public safety in the surrounding area;
- E. Whether the proposed use(s) would be likely to result in such a material and adverse change in traffic capacity of a road or roads in the surrounding area such that either design capacities would be significantly exceeded or a de facto change in functional classification would result;
- F. Whether the proposed use(s) would cause such material and adverse changes in the types of traffic that would be generated on the surrounding road system, that physical deterioration of the surrounding road system would be likely;
- G. Whether projected traffic impacts of the proposed use(s) would materially and adversely impact the safety or welfare of residents in existing residential neighborhoods.

Administrative Policy 6

The use(s) proposed under the rezoning, conditional use or other application for development approval must be consistent with, (a), all written land development policies set forth in these administrative policies; and (b), the future land use element, coastal management element, conservation element, potable water element, sanitary sewer element, solid waste management element, capital improvements element, recreation and open space element, surface water element, and transportation elements of the comprehensive plan.

Administrative Policy 7

Proposed use(s) shall not cause or substantially aggravate any, (a), substantial drainage problem on surrounding properties; or (b), significant, adverse and unmitigatable impact on significant natural wetlands, water bodies or habitat for listed species.

Administrative Policy 8

These policies, the staff analysis based upon these policies, and the applicant's written analysis, if any, shall be incorporated into the record of every quasi-judicial review application for development approval presented to the Board including rezoning, conditional use permits, and vested rights determinations.

Section 62-1151(c) of the Code of Ordinances of Brevard County directs, "The planning and zoning board shall recommend to the board of county commissioners the denial or approval of each application for amendment to the official zoning maps based upon a consideration of the following factors:

- (1) The character of the land use of the property surrounding the property being considered.
- (2) The change in conditions of the land use of the property being considered and the surrounding property since the establishment of the current applicable zoning classification, special use or conditional use.

- (3) The impact of the proposed zoning classification or conditional use on available and projected traffic patterns, water and sewer systems, other public facilities and utilities and the established character of the surrounding property.
- (4) The compatibility of the proposed zoning classification or conditional use with existing land use plans for the affected area.
- (5) The appropriateness of the proposed zoning classification or conditional use based upon a consideration of the applicable provisions and conditions contained in this article and other applicable laws, ordinances and regulations relating to zoning and land use regulations and based upon a consideration of the public health, safety and welfare.

The minutes of the planning and zoning board shall specify the reasons for the recommendation of approval or denial of each application.”

CONDITIONAL USE PERMITS (CUPs)

In addition to the specific requirements for each Conditional Use Permit (CUP), Section 62-1901 provides that the following approval procedure and general standards of review are to be applied to all CUP requests, as applicable.

(b) Approval procedure. An application for a specific conditional use within the applicable zoning classification shall be submitted and considered in the same manner and according to the same procedure as an amendment to the official zoning map as specified in Section 62-1151. The approval of a conditional use shall authorize an additional use for the affected parcel of real property in addition to those permitted in the applicable zoning classification. The initial burden is on the applicant to demonstrate that all applicable standards and criteria are met. Applications which do not satisfy this burden cannot be approved. If the applicant meets its initial burden, then the Board has the burden to show, by substantial and competent evidence, that the applicant has failed to meet such standards and the request is adverse to the public interest. As part of the approval of the conditional use permit, the Board may prescribe appropriate and reasonable conditions and safeguards to reduce the impact of the proposed use on adjacent and nearby properties or the neighborhood. A nearby property, for the purpose of this section, is defined as any property which, because of the character of the proposed use, lies within the area which may be substantially and adversely impacted by such use. In stating grounds in support of an application for a conditional use permit, it is necessary to show how the request fulfills both the general and specific standards for review. The applicant must show the effect the granting of the conditional use permit will have on adjacent and nearby properties, including, but not limited to traffic and pedestrian flow and safety, curb-cuts, off-street loading and parking, off-street pickup of passengers, odors, glare and noise, particulates, smoke, fumes, and other emissions, refuse and service areas, drainage, screening and buffering for protection of adjacent and nearby properties, and open space and economic impact on nearby properties. The applicant, at his discretion, may choose to present expert testimony where necessary to show the effect of granting the conditional use permit.

(c) General Standards of Review.

- (1) The planning and zoning board and the board of county commissioners shall base the denial or approval of each application for a conditional use based upon

a consideration of the factors specified in Section 62-1151(c) plus a determination whether an application meets the intent of this section.

- a. The proposed conditional use will not result in a substantial and adverse impact on adjacent and nearby properties due to: (1), the number of persons anticipated to be using, residing or working under the conditional use; (2), noise, odor, particulates, smoke, fumes and other emissions, or other nuisance activities generated by the conditional use; or (3), the increase of traffic within the vicinity caused by the proposed conditional use.
 - b. The proposed use will be compatible with the character of adjacent and nearby properties with regard to use, function, operation, hours of operation, type and amount of traffic generated, building size and setback, and parking availability.
 - c. The proposed use will not cause a substantial diminution in value of abutting residential property. A substantial diminution shall be irrebuttably presumed to have occurred if abutting property suffers a 15% reduction in value as a result of the proposed conditional use. A reduction of 10% of the value of abutting property shall create a rebuttable presumption that a substantial diminution has occurred. The Board of County Commissioners carries the burden to show, as evidenced by either testimony from or an appraisal conducted by an M A I certified appraiser, that a substantial diminution in value would occur. The applicant may rebut the findings with his own expert witnesses.
- (2) The following specific standards shall be considered, when applicable, in making a determination that the general standards specified in subsection (1) of this section are satisfied:
- a. Ingress and egress to the property and proposed structures thereon, with particular reference to automotive and pedestrian safety and convenience, traffic flow and control, and access in case of fire and catastrophe, shall be: (1), adequate to serve the proposed use without burdening adjacent and nearby uses, and (2), built to applicable county standards, if any. Burdening adjacent and nearby uses means increasing existing traffic on the closest collector or arterial road by more than 20%, or 10% if the new traffic is primarily comprised of heavy vehicles, except where the affected road is at Level of Service A or B. New traffic generated by the proposed use shall not cause the adopted level of service for transportation on applicable roadways, as determined by applicable Brevard County standards, to be exceeded. Where the design of a public road to be used by the proposed use is physically inadequate to handle the numbers, types or weights of vehicles expected to be generated by the proposed use without damage to the road, the conditional use permit cannot be approved without a commitment to improve the road to a standard adequate to handle the proposed traffic, or to maintain the road through a maintenance bond or other means as required by the Board of County Commissioners.
 - b. The noise, glare, odor, particulates, smoke, fumes or other emissions from the conditional use shall not substantially interfere with the use or enjoyment of the adjacent and nearby property.
 - c. Noise levels for a conditional use are governed by Section 62-2271.

- d. The proposed conditional use shall not cause the adopted level of service for solid waste disposal applicable to the property or area covered by such level of service, to be exceeded.
- e. The proposed conditional use shall not cause the adopted level of service for potable water or wastewater applicable to the property or the area covered by such level of service, to be exceeded by the proposed use.
- f. The proposed conditional use must have existing or proposed screening or buffering, with reference to type, dimensions and character to eliminate or reduce substantial, adverse nuisance, sight, or noise impacts on adjacent and nearby properties containing less intensive uses.
- g. Proposed signs and exterior lighting shall not cause unreasonable glare or hazard to traffic safety, or interference with the use or enjoyment of adjacent and nearby properties.
- h. Hours of operation of the proposed use shall be consistent with the use and enjoyment of the properties in the surrounding residential community, if any. For commercial and industrial uses adjacent to or near residential uses, the hours of operation shall not adversely affect the use and enjoyment of the residential character of the area.
- i. The height of the proposed use shall be compatible with the character of the area, and the maximum height of any habitable structure shall be not more than 35 feet higher than the highest residence within 1,000 feet of the property line.
- j. Off-street parking and loading areas, where required, shall not be created or maintained in a manner which adversely impacts or impairs the use and enjoyment of adjacent and nearby properties. For existing structures, the applicant shall provide competent, substantial evidence to demonstrate that actual or anticipated parking shall not be greater than that which is approved as part of the site plan under applicable county standards.

FACTORS TO CONSIDER FOR A REZONING REQUEST

Section 62-1151(c) sets forth factors to consider in connection with a rezoning request, as follows:

“The planning and zoning board shall recommend to the board of county commissioners the denial or approval of each application for amendment to the official zoning maps based upon a consideration of the following factors:

- (1) The character of the land use of the property surrounding the property being considered.
- (2) The change in conditions of the land use of the property being considered and the surrounding property since the establishment of the current applicable zoning classification, special use or conditional use.
- (3) The impact of the proposed zoning classification or conditional use on available and projected traffic patterns, water and sewer systems, other public facilities and utilities and the established character of the surrounding property.

- (4) The compatibility of the proposed zoning classification or conditional use with existing land use plans for the affected area.
- (5) The appropriateness of the proposed zoning classification or conditional use based upon a consideration of the applicable provisions and conditions contained in this article and other applicable laws, ordinances and regulations relating to zoning and land use regulations and based upon a consideration of the public health, safety and welfare.”

These staff comments contain references to zoning classifications found in the Brevard County Zoning Regulations, Chapter 62, Article VI, Code of Ordinances of Brevard County. These references include brief summaries of some of the characteristics of that zoning classification. Reference to each zoning classification shall be deemed to incorporate the full text of the section or sections defining and regulating that classification into the Zoning file and Public Record for that item.

These staff comments contain references to sections of the Code of Ordinances of Brevard County. Reference to each code section shall be deemed to incorporate this section into the Zoning file and Public Record for that item.

These staff comments contain references to Policies of the Brevard County Comprehensive Plan. Reference to each Policy shall be deemed to incorporate the entire Policy into the Zoning file and Public Record for that item.

These staff comments refer to previous zoning actions which are part of the Public Records of Brevard County, Florida. These records will be referred to by reference to the file number. Reference to zoning files are intended to make the entire contents of the cited file a part of the Zoning file and Public Record for that item.

DEFINITIONS OF CONCURRENCY TERMS

Maximum Acceptable Volume (MAV): Maximum acceptable daily volume that a roadway can carry at the adopted Level of Service (LOS).

Current Volume: Building permit related trips added to the latest TPO (Transportation Planning Organization) traffic counts.

Volume with Development (VOL W/DEV): Equals Current Volume plus trip generation projected for the proposed development.

Volume/Maximum Acceptable Volume (VOL/MAV): Equals the ratio of current traffic volume to the maximum acceptable roadway volume.

Volume/Maximum Acceptable Volume with Development (VOL/MAV W/DEV): Ratio of volume with development to the Maximum Acceptable Volume.

Acceptable Level of Service (CURRENT LOS): The Level of Service at which a roadway is currently operating.

Level of Service with Development (LOS W/DEV): The Level of Service that a proposed development may generate on a roadway.

**FUTURE LAND USE MAP SERIES
PLAN AMENDMENT**

STAFF COMMENTS

Small Scale Plan Amendment 20S.06 (20PZ00079)
Township 21, Range 35, Section 17

Property Information

Owner / Applicant: **Aldon Bookhardt**

Adopted Future Land Use Map Designation: Residential 4 (RES 4)

Requested Future Land Use Map Designation: Neighborhood Commercial (NC)

Acreage: 0.98 acres

Tax Account #: 2103831

Site Location: South side of east Main Street, west side of Harry T. Moore Avenue.

Current Zoning: General Retail Commercial (BU-1) and Single-Family Residential (RU-1-9)

Requested Zoning: Restricted Neighborhood Retail Commercial (BU-1-A) (20Z00023)

Background & Purpose

The applicant is requesting to amend the Future Land Use (FLU) designation from Residential 4 (RES 4) to Neighborhood Commercial (NC) on a 0.98 acre portion of the overall 3.04 acre parcel of land located on the southwest corner of East Main Street and Harry T. Moore Avenue for the purpose of developing the 0.98 acre site as a neighborhood retail store. The subject property has an existing FLU designation of RES 4 that was adopted with the Comprehensive Plan in September of 1988. The majority of the vacant subject property has retained General Retail Commercial (BU-1) zoning since 1966.

A companion rezoning application (20Z00023) was submitted accompanying this FLU amendment request to change the Zoning classification from General Retail Commercial (BU-1) to Restricted Neighborhood Retail Commercial (BU-1-A) on the 0.98 subject site and Single-Family Residential (RU-1-9) with a Binding Development Plan (BDP) on the remaining portion of the overall parcel 3.04 acre parcel. The proposed rezoning and Future Land Use Amendment will establish consistency between the zoning classification and the Future Land Use Map.

The preliminary concurrency analysis did not indicate that the proposed development would cause a deficiency in the transportation adopted level of service. Potable water service is available to the site through Brevard County Utilities. The subject parcel is not currently serviced by County or municipal sanitary sewer; however, a Brevard County sanitary sewer line is located approximately 1,280 feet west of the property at U.S. Highway 1. A School Impact Analysis was not required for this application.

Surrounding Land Use Analysis

	Existing Land Use	Zoning	Future Land Use
North	Across East Main Street - Retail Store and Vacant, Undeveloped Land	BU-1, BU-1-A, RU-1-7	RES 4
South	Across Jefferson Street - One (1) Single-Family Residence	RU-1-9	RES 4
East	Across Harry T. Moore Avenue - Multiple-Family Residential Housing	RU-2-30	RES 4
West	Vacant, Undeveloped Land and One (1) Single-Family Residence	RU-1-9	RES 4

To the north of the subject property (across East Main Street) is existing commercial retail and vacant land with FLU designations of RES 4; to the south (across Jefferson Street) is one (1) single-family residence with a FLU designation of RES 4; to the east (across Harry T. Moore Avenue) is multi-family housing with FLU designation of RES 4; and adjacent to the west is vacant, undeveloped land and one (1) single-family residence with FLU designations of RES 4.

Environmental Resources

Based on the summary provided by the Natural Resource Management Department, it has been determined that the following are present on the subject property:

- Aquifer Recharge Soils
- Protected and Specimen Trees
- Protected Species

Please refer to the attached comments provided by the Natural Resources Management Department.

Historic Resources

There are no recorded historic or archaeological sites on the project site according to the Master Site File from the Florida Division of Historic Resources.

Comprehensive Plan Policies/Comprehensive Plan Analysis

Comprehensive Plan Policies are shown in plain text; Staff Findings of Fact are shown in *italics*.

Notice: The Comprehensive Plan establishes the broadest framework for reviewing development applications and provides the initial level of review in a three layer screening process. The second level of review entails assessment of the development application's consistency with Brevard County's zoning regulations. The third layer of review assesses whether the development application conforms to site planning/land development standards of the Brevard County Land Development Code. While each of these layers individually affords its own evaluative value, all three layers must be cumulatively considered when assessing the appropriateness of a specific development proposal.

Future Land Use Element – Policies/Analysis:

Administrative Policy 3

Compatibility with existing or proposed land uses shall be a factor in determining where a rezoning or any application involving a specific proposed use is being considered. Compatibility shall be evaluated by considering the following factors, at a minimum:

Criteria:

- C. Whether the proposed use(s) is/are consistent with an emerging or existing pattern of surrounding development as determined through an analysis of:
1. historical land use patterns;

There is a historical land use pattern of commercial, residential and institutional land use surrounding the subject site. To the north is a retail store; to the east is multi-family housing; to the south is a single-family residence; and to the west is a single-family residence. At the northeast corner of East Main Street and Harry T. Moore Avenue is a church.

2. actual development over the immediately preceding three years; and

There has not been any actual development on surrounding properties within the preceding three (3) years.

3. development approved within the past three years but not yet constructed.

There have been no development approvals for surrounding properties within the past three (3) years that have not yet been constructed.

Role of the Comprehensive Plan in the Designation of Commercial Lands

Policy 2.1

The Comprehensive Plan takes into consideration broad criteria for evaluating requests for commercial land use designations within Brevard County. At a minimum, these criteria address the following:

Criteria:

- A. Overall accessibility to the site;

The subject parcel is located on the southwest corner of East Main Street and Harry T. Moore Avenue.

- B. Compatibility and inter-connectivity with adjacent adopted Future Land Use designations and land uses;

The subject parcel is adjacent to parcels with Future Land Use designations of RES 4 on all sides; however, the parcel adjacent to the north (across East Main Street) has retained commercial zoning since prior to the adoption of FLU map in 1988 and is currently a retail store. The proposed change in land use to NC will acknowledge the subject property's commercial zoning classification.

- C. Existing commercial development trend in the area;

The parcel adjacent to the north (across East Main Street) is currently developed as a commercial retail store. Additional commercial development is located 50 feet east of the intersection of East Main Street and Harry T. Moore Avenue and is currently a fraternal organization clubhouse.

- E. Availability of required infrastructure at/above adopted levels of service;

A Brevard County Utilities potable water line is adjacent to the subject property along East Main Street. The closest sanitary sewer line (Brevard County Utilities) is located approximately 1,280 feet west of the property at U.S. Highway 1.

- F. Spacing from other commercial activities;

The subject parcel is adjacent to a developed commercial property (retail store) to the north, across East Main Street. Additional commercial development (fraternal organization clubhouse) is located 50 feet east of the subject site on East Main Street. There is also existing commercial development approximately 1,280 feet west of the subject property at the

intersection of U.S. Highway 1 and East Main Street, providing an array of retail, personal and professional uses to serve several neighborhoods and sub-regional areas.

- G. Size of proposed commercial designation compared with current need for commercial lands;

The FLU designation change from RES 4 to NC is proposed on a 0.98 acre parcel of land. Consistent with Policy 2.5 of the Future Land Use Element of the Comprehensive Plan, neighborhood commercial development is intended to be low-impact in nature and serve the needs of the immediate residential area.

- H. Adherence to the objectives/policies of the Conservation Element and minimization of impacts upon natural resources and systems;

The Natural Resource Management (NRM) Department has provided a preliminary summary of adherence to the objectives/policies of the Conservation Element and the minimization of impacts upon natural resources and systems. (See attached NRM Department Summary).

Activities Permitted in Neighborhood Commercial (NC) Future Land Use Designations

Policy 2.5

Neighborhood Commercial (NC) development activities are intended to be low-impact in nature and serve the needs of the immediate residential area. Intrusion of these land uses into surrounding residential areas shall be limited. Existing BU-1-A uses, which were established as of the adoption date of this provision shall be considered consistent with this policy. Development activities which may be considered within Neighborhood Commercial (NC) Future Land Use designation, provided that listed criteria are met, include the following:

- a) Professional offices (no drive through lanes permitted);
- b) Personal Services (no drive through lanes permitted);
- c) Convenience stores (no drive through lanes permitted);
- d) Residential uses;
- e) Institutional uses;
- f) Recreational uses;
- g) Public facilities; and
- h) Transitional uses pursuant to Policy 2.12.

Locational and Development Criteria for Neighborhood Commercial Uses

Policy 2.6

Locational and development criteria for neighborhood commercial land uses are as follows:

Criteria:

- A. Neighborhood commercial clusters should be located at collector/collector or collector/arterial intersections, except as otherwise provided for in this Comprehensive Plan.

The proposed NC future land use is located at the intersection of East Main Street and Harry T. Moore Avenue.

- C. New neighborhood commercial land use sites should incorporate no more than two acres maximum at each corner of an intersection, as set forth in Criterion A of this policy. Neighborhood commercial land uses at such intersections should not exceed eight (8) acres total.

The proposed NC future land use is for a total of 0.98 acres at the southwest corner of East Main Street and Harry T. Moore Avenue.

- D. Neighborhood commercial development clusters should be spaced at least 1/2 mile apart, except in the south beaches where neighborhood commercial clusters should be spaced at least three (3) miles apart.

The closest NC future land use designation is at an undeveloped parcel located approximately 840 feet to the west of the subject property at the intersection of East Main Street and Mitchell Avenue. This request recognizes the existing commercial zoning on the property.

- E. The gross floor area of neighborhood commercial complexes should not exceed 21,800 square feet and the Floor Area Ratio (FAR) should not exceed 0.75.

The proposed gross floor area submitted by the applicant does not exceed 21,800 square feet or a FAR of 0.75. The Floor Area Ratio (FAR) is regulated through the land development regulations at the time of site plan review.

The proposed NC FLU designation will acknowledge the subject site's existing commercial zoning and is consistent with recommendation 3.2 of the adopted 2007 Mims Small Area Study that states Commercial needs should generally be focused on providing goods and services to Mims residents, as opposed to larger regional markets.

For Board Consideration

The Board may wish to legitimize the existing commercial zoning as the request is compatible with the surrounding area and consistent with the Comprehensive Plan.

NATURAL RESOURCES MANAGEMENT DEPARTMENT
Future Land Use (FLU) Review & Summary
Item # 20PZ00079

Applicant: Aldon Bookhardt

FLU request: RES-4 to NC

Note: Applicant wants to develop a retail store on corner of Main St. and Harry T. Moore Ave.

P&Z Hearing Date: 10/05/20; **BCC Hearing Date:** 11/05/20

Tax ID No: 2103831 (east portion)

- This is a preliminary review based on best available data maps reviewed by the Natural Resources Management Department (NRM) and does not include a site inspection to verify the accuracy of the mapped information.
- In that the rezoning process is not the appropriate venue for site plan review, specific site designs submitted with the rezoning request will be deemed conceptual. Board comments relative to specific site design do not provide vested rights or waivers from Federal, State or County regulations.
- **This review does not guarantee whether or not the proposed use, specific site design, or development of the property can be permitted under current Federal, State, or County Regulations.**

Summary of Mapped Resources and Noteworthy Land Use Issues:

- Aquifer Recharge Soils
- Protected and Specimen Trees
- Protected Species

No noteworthy land use issues were identified. Natural Resources Management (NRM) reserves the right to assess consistency with environmental ordinances at all applicable future stages of development.

Land Use Comments:

Aquifer Recharge Soils

The subject parcel contains mapped aquifer recharge soils (Pomello sand) as shown on the USDA Soil Conservation Service Soils Survey map. The applicant is hereby notified of the development and impervious restrictions within Conservation Element Policy 10.2 and the Aquifer Protection Ordinance.

Protected and Specimen Trees

The parcel contains a small mapped polygon of SJRWMD Florida Land Use and Cover Classification System (FLUCCS) code 4340 – Upland Mixed Coniferous/Hardwood trees. Heritage Specimen Trees (greater than or equal to 24 inches in diameter) are included in this FLUCCS code and may reside in the project area. Per Brevard County Landscaping, Land Clearing and Tree Protection ordinance, Section 62-4331(3), the purpose and intent of the ordinance is to encourage the protection of heritage Specimen Trees. In addition, per Section 62-4341(18), Specimen Trees shall be preserved or relocated on site to the Greatest Extent Feasible. Per Section 62-4332, Definitions, Greatest Extent Feasible shall include, but not be limited to, relocation of roads, buildings, ponds, increasing building height to reduce building footprint or reducing Vehicular Use Areas. The applicant is advised to refer to Article XIII, Division 2, entitled Land Clearing, Landscaping, and Tree Protection, for specific requirements

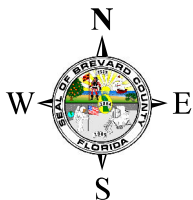
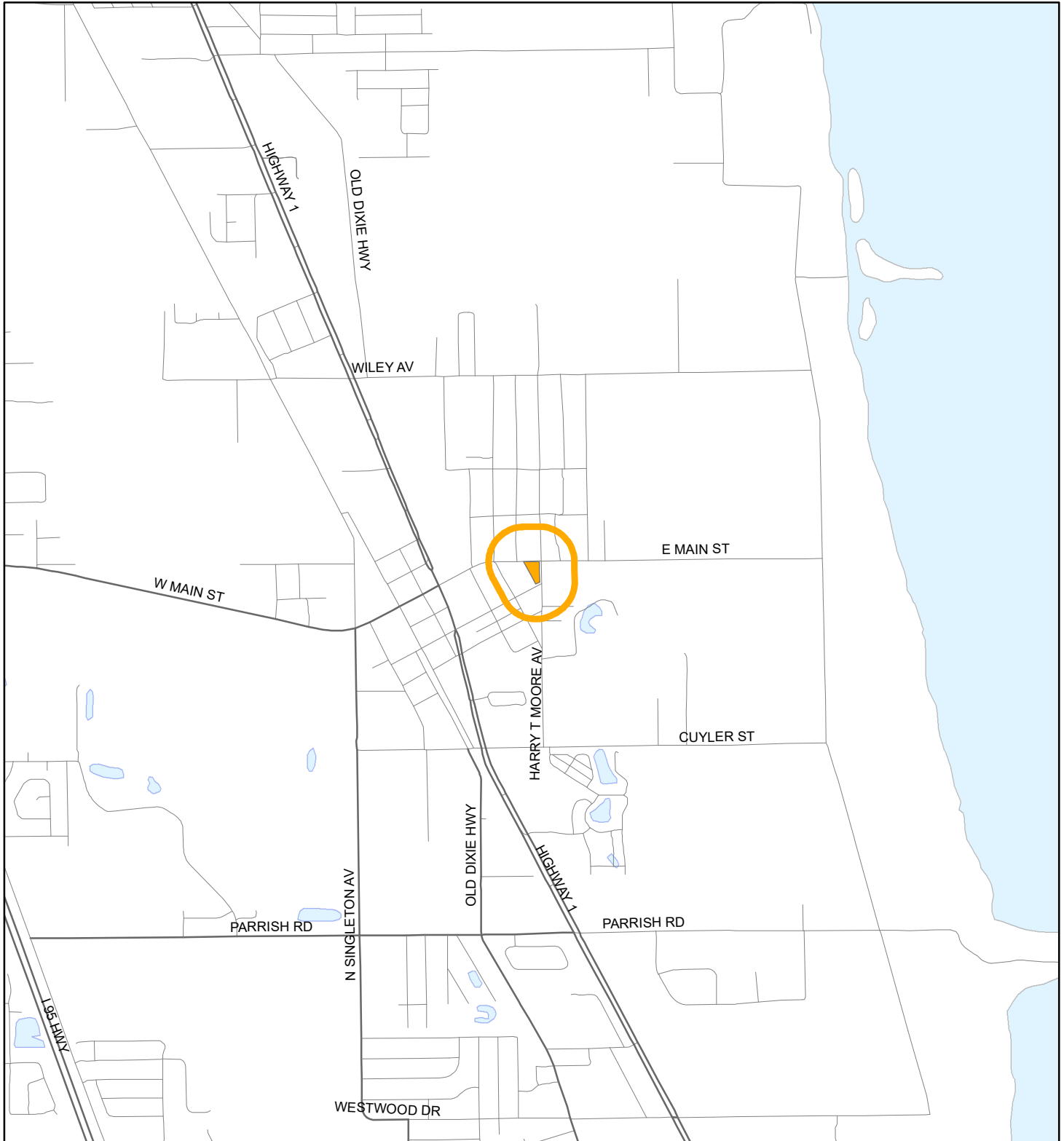
for tree preservation and canopy coverage requirements. Land clearing is not permitted without prior authorization by NRM.

Protected Species

Information available to NRM indicates that federally and/or state protected species may be present on the property. Specifically, gopher tortoises can be found in areas of aquifer recharge soils. Prior to any plan, permit submittal, or development activity, including land clearing, the applicant should obtain any necessary permits or clearance letters from the Florida Fish and Wildlife Conservation Commission and/or U.S. Fish and Wildlife Service, as applicable.

LOCATION MAP

2354 TALMADGE DRIVE, LLC
20PZ00079 SMALL SCALE AMENDMENT 20S.06



1:24,000 or 1 inch = 2,000 feet

Buffer Distance: 500 feet

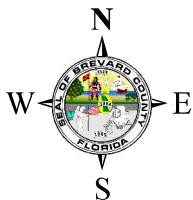
This map was compiled from recorded documents and does not reflect an actual survey. The Brevard County Board of County Commissioners does not assume responsibility for errors or omissions hereon.

Produced by BoCC - GIS Date: 8/10/2020

Buffer
Subject Property

ZONING MAP

2354 TALMADGE DRIVE, LLC
20PZ00079 SMALL SCALE AMENDMENT 20S.06



1:4,800 or 1 inch = 400 feet

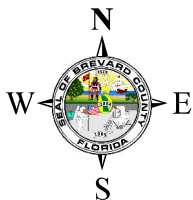
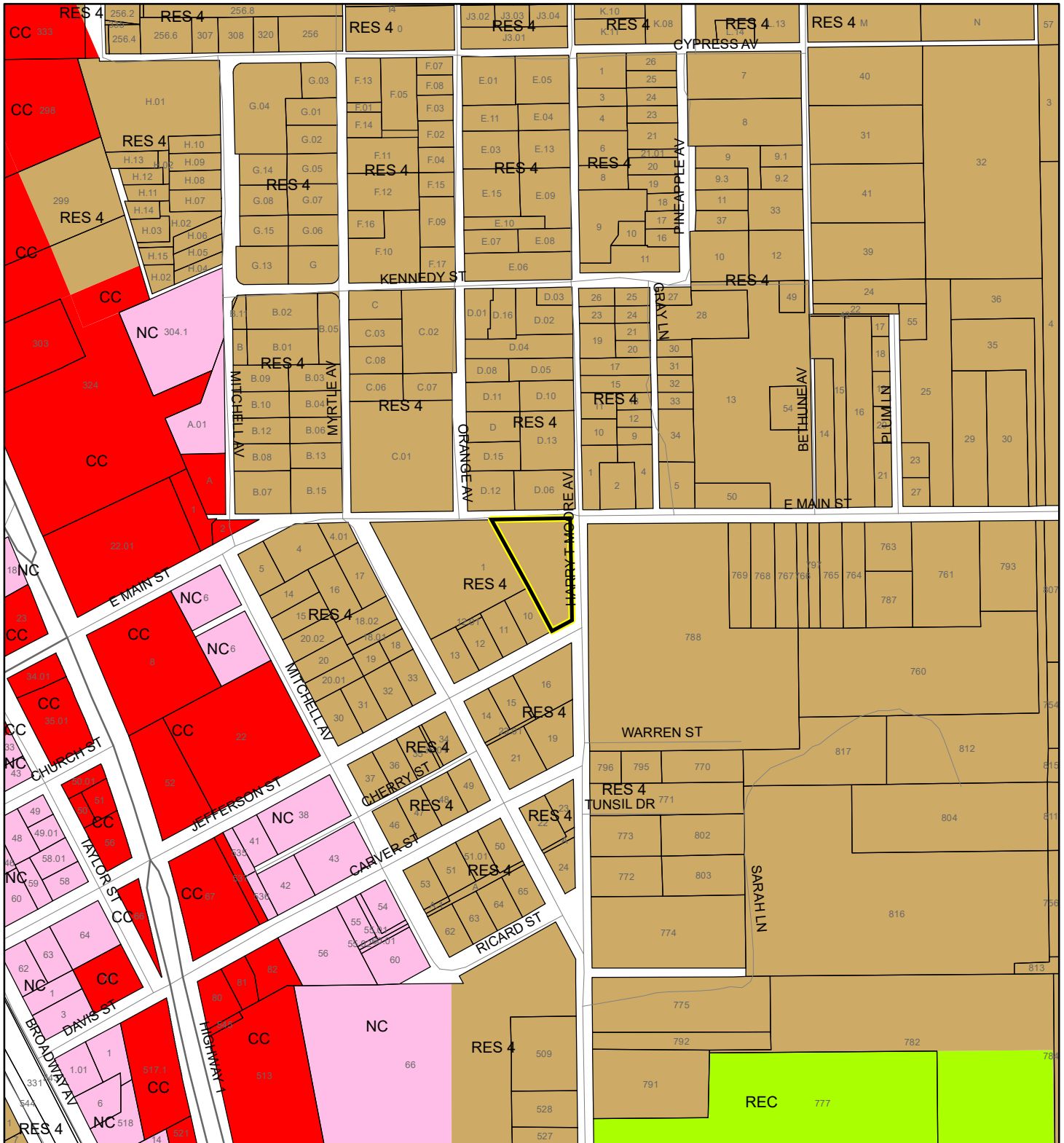
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Produced by BoCC - GIS Date: 8/10/2020



- Subject Property
- Parcels
- Zoning

FUTURE LAND USE MAP

2354 TALMADGE DRIVE, LLC
20PZ00079 SMALL SCALE AMENDMENT 20S.06



1:4,800 or 1 inch = 400 feet

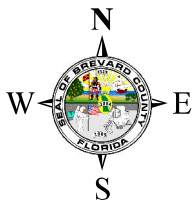
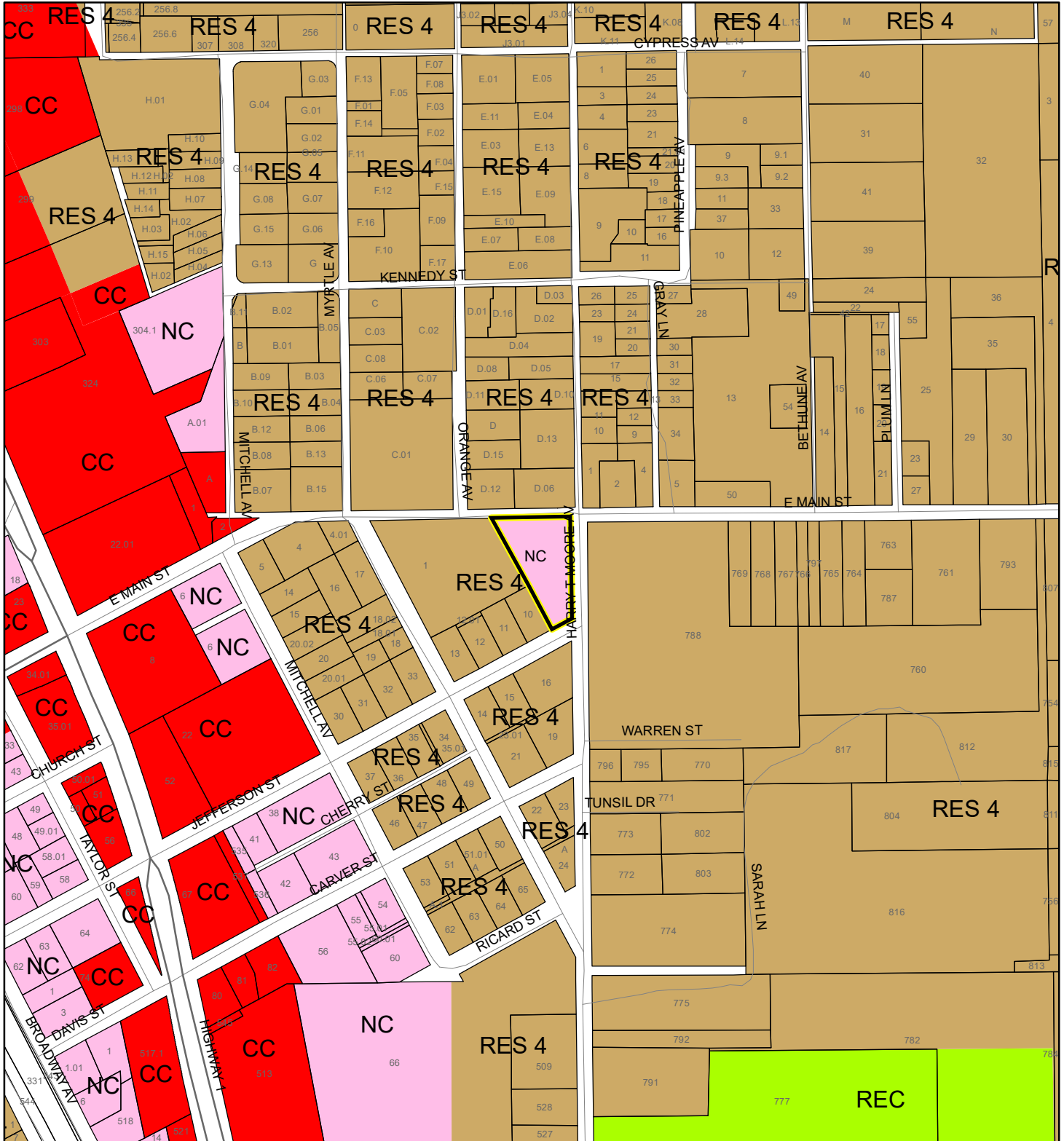
 Subject Property
 Parcels

This map was compiled from recorded documents and does not reflect an actual survey. The Brevard County Board of County Commissioners does not assume responsibility for errors or omissions hereon.

Produced by BoCC - GIS Date: 8/10/2020

PROPOSED FUTURE LAND USE MAP

2354 TALMADGE DRIVE, LLC
20PZ00079 SMALL SCALE AMENDMENT 20S.06



1:4,800 or 1 inch = 400 feet

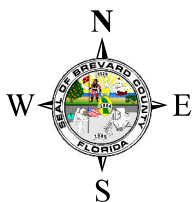
Subject Property
 Parcels

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Produced by BoCC - GIS Date: 8/10/2020

AERIAL MAP

2354 TALMADGE DRIVE, LLC
20PZ00079 SMALL SCALE AMENDMENT 20S.06





1:2,400 or 1 inch = 200 feet

PHOTO YEAR: 2020

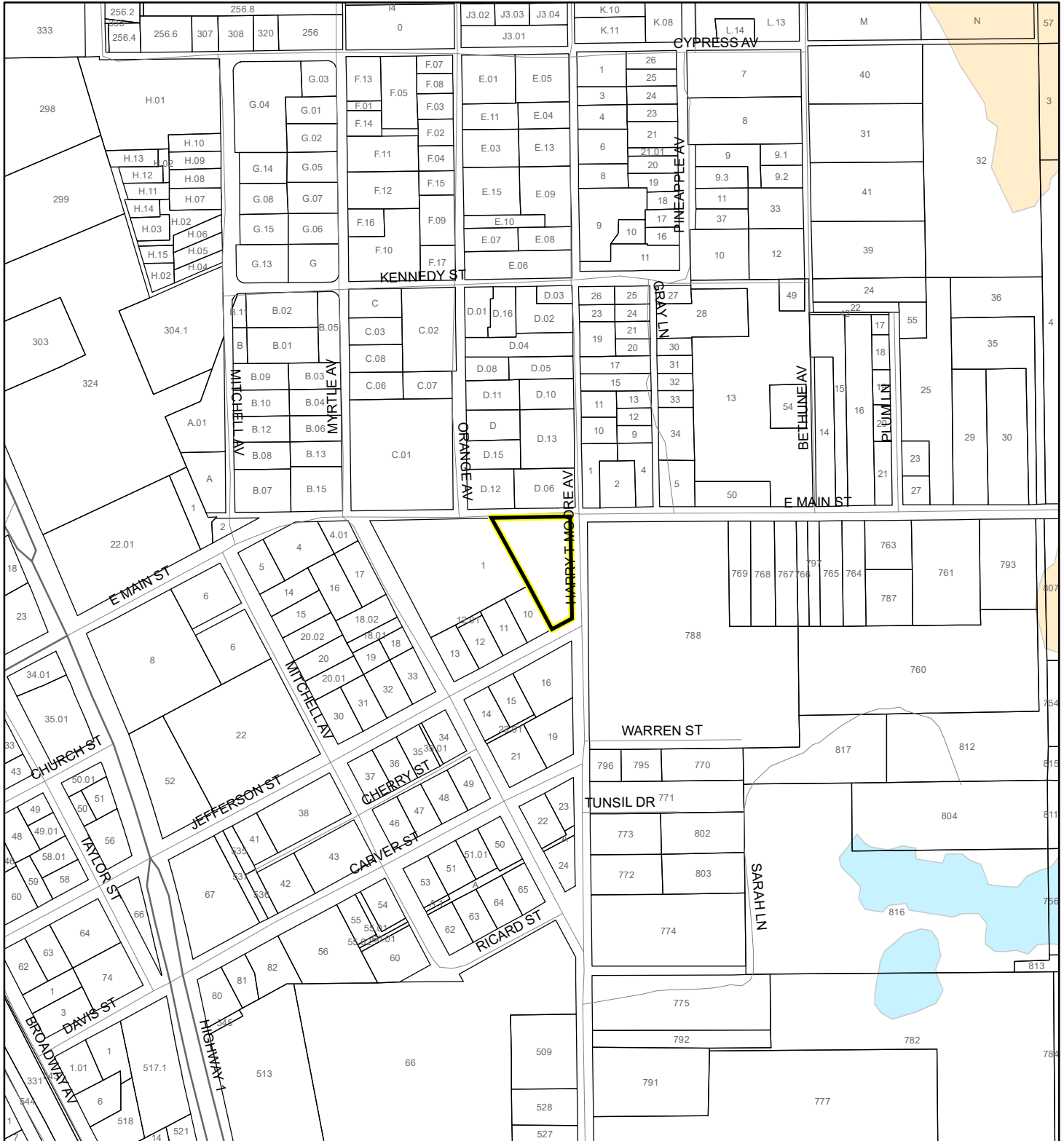
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 Subject Property
 Parcels

NWI WETLANDS MAP

2354 TALMADGE DRIVE, LLC
20PZ00079 SMALL SCALE AMENDMENT 20S.06



1:4,800 or 1 inch = 400 feet

This map was compiled from recorded documents and does not reflect an actual survey. The Brevard County Board of County Commissioners does not assume responsibility for errors or omissions hereon.

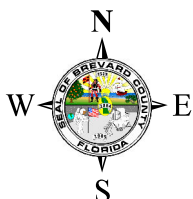
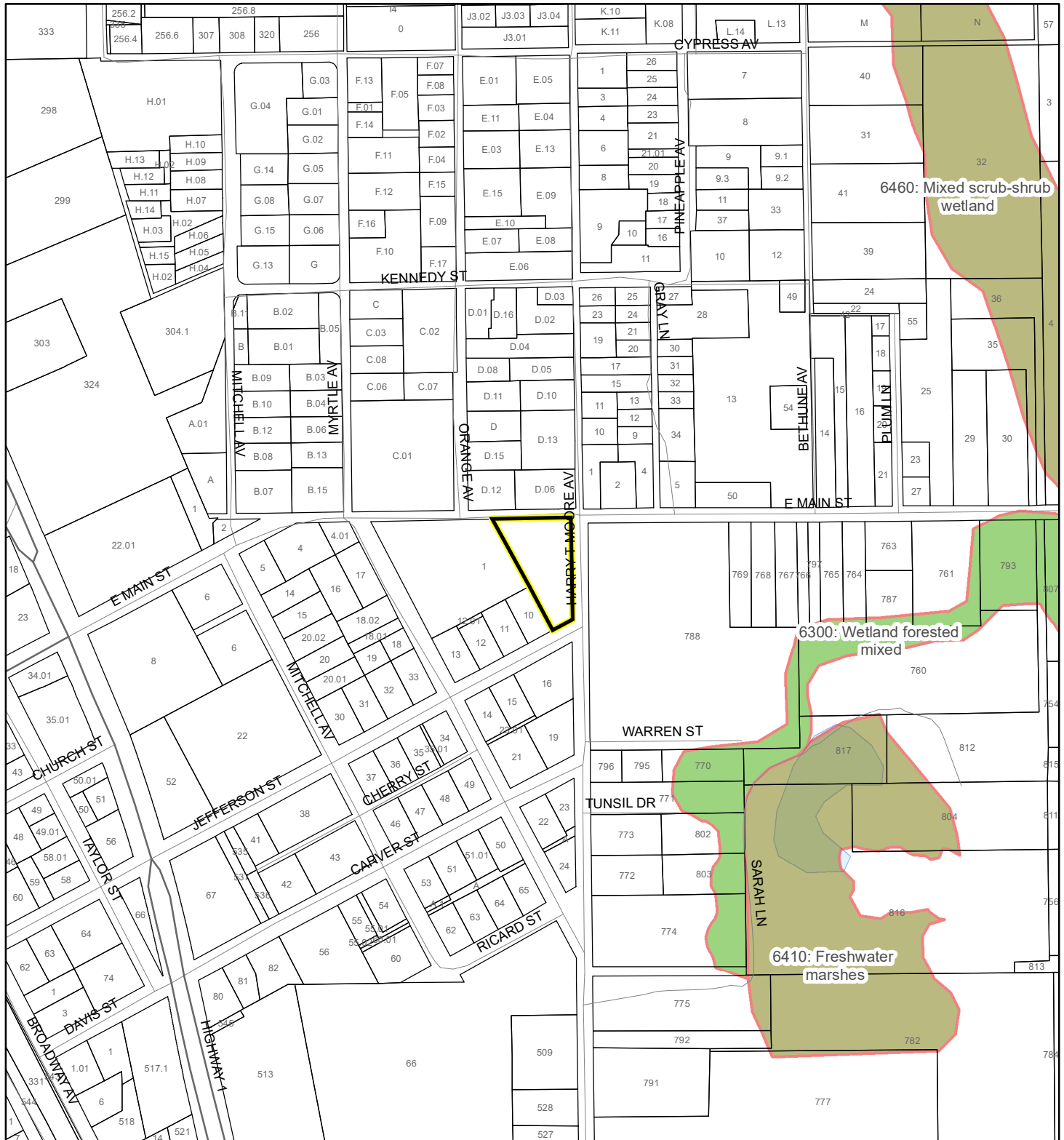
Produced by BoCC - GIS Date: 8/10/2020

National Wetlands Inventory (NWI)

- | | |
|-----------------------------------|-----------------|
| Estuarine and Marine Deepwater | Freshwater Pond |
| Estuarine and Marine Wetland | Lake |
| Freshwater Emergent Wetland | Other |
| Freshwater Forested/Shrub Wetland | Riverine |
| Subject Property | |
| Parcels | |

SJRWMD FLUCCS WETLANDS - 6000 Series MAP

2354 TALMADGE DRIVE, LLC
20PZ00079 SMALL SCALE AMENDMENT 20S.06



1:4,800 or 1 inch = 400 feet

This map was compiled from recorded documents and does not reflect an actual survey. The Brevard County Board of County Commissioners does not assume responsibility for errors or omissions hereon.

Produced by BoCC - GIS Date: 8/10/2020

SJRWMD FLUCCS WETLANDS

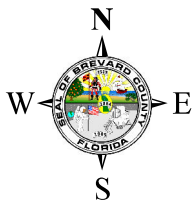
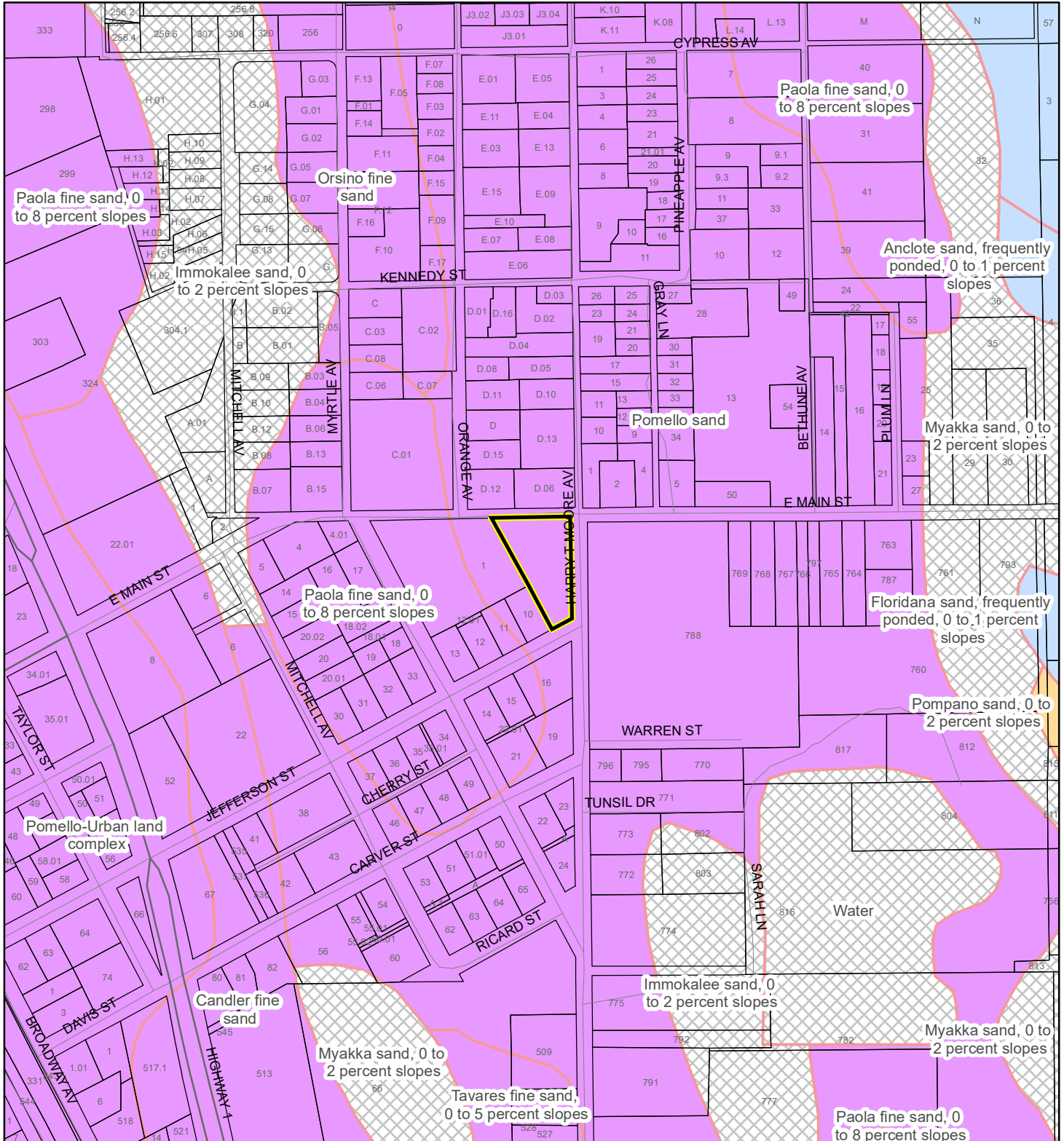
- Wetland Hardwood Forests - Series 6100
- Wetland Coniferous Forest - Series 6200
- Wetland Forested Mixed - Series 6300
- Vegetated Non-Forested Wetlands - Series 6400
- Non-Vegetated Wetland - Series 6500

Subject Property

Parcels

USDA SCSSS SOILS MAP

2354 TALMADGE DRIVE, LLC
20PZ00079 SMALL SCALE AMENDMENT 20S.06



1:4,800 or 1 inch = 400 feet

This map was compiled from recorded documents and does not reflect an actual survey. The Brevard County Board of County Commissioners does not assume responsibility for errors or omissions herein.

Produced by BoCC - GIS Date: 8/10/2020

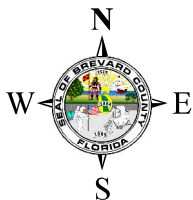
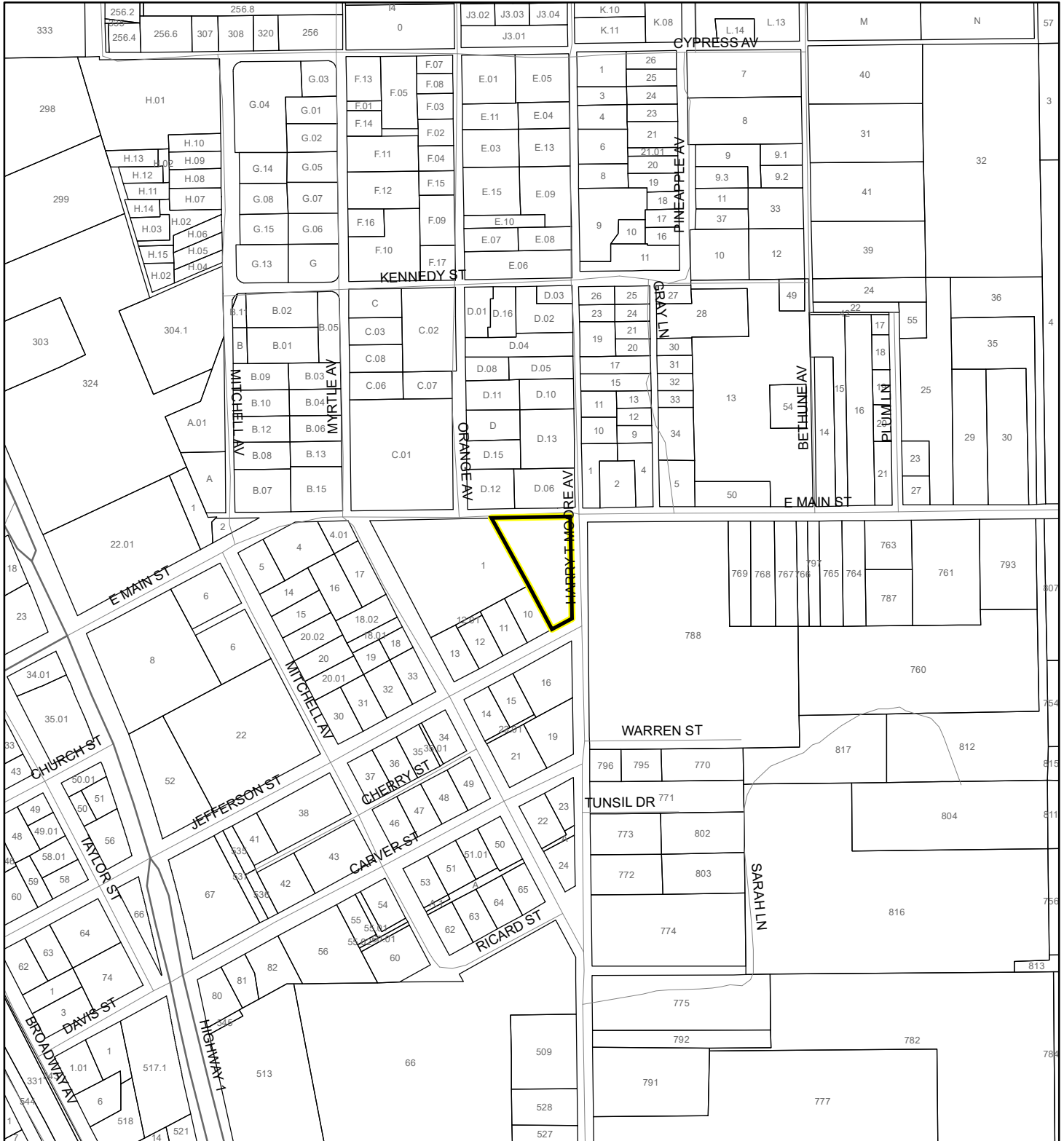
USDA SCSSS Soils

- Aquifer and Hydric
- Aquifer
- Hydric
- None

- Subject Property
- Parcels

FEMA FLOOD ZONES MAP

2354 TALMADGE DRIVE, LLC
20PZ00079 SMALL SCALE AMENDMENT 20S.06



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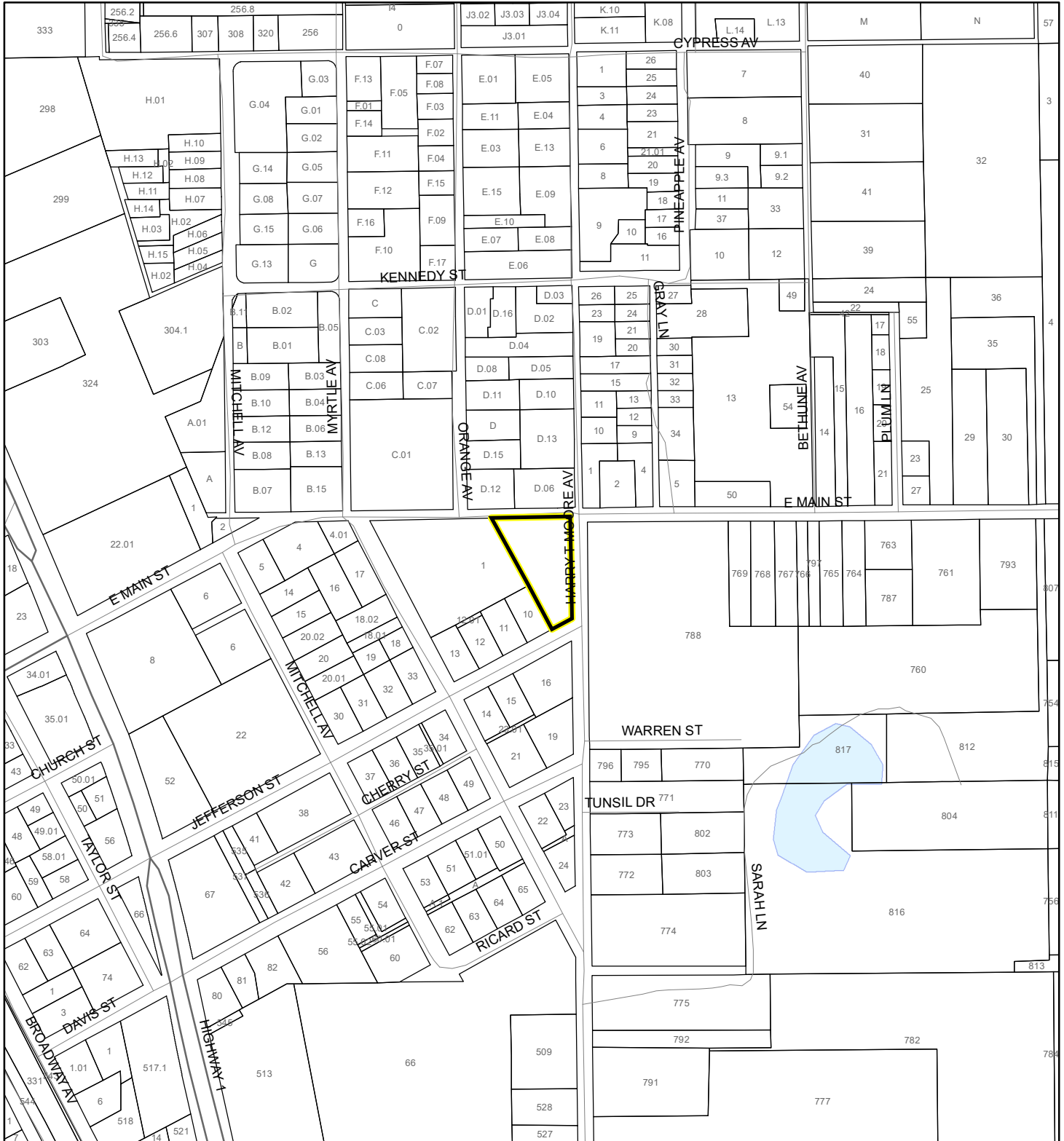
Produced by BoCC - GIS Date: 8/10/2020

FEMA Flood Zones

- | | | |
|---|------------|----------------------|
| A | AO | X |
| AE | Open Water | X Protected By Levee |
| AH | VE | |
| 0.2 Percent Annual Chance Flood Hazard | | |
| 0.2 Percent Annual Chance Flood Hazard Contained in Channel | | |
| Subject Property | | Parcels |

COASTAL HIGH HAZARD AREA MAP

2354 TALMADGE DRIVE, LLC
20PZ00079 SMALL SCALE AMENDMENT 20S.06



1:4,800 or 1 inch = 400 feet


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Produced by BoCC - GIS Date: 8/10/2020

 Subject Property

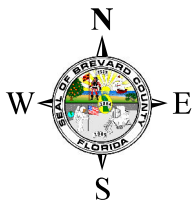
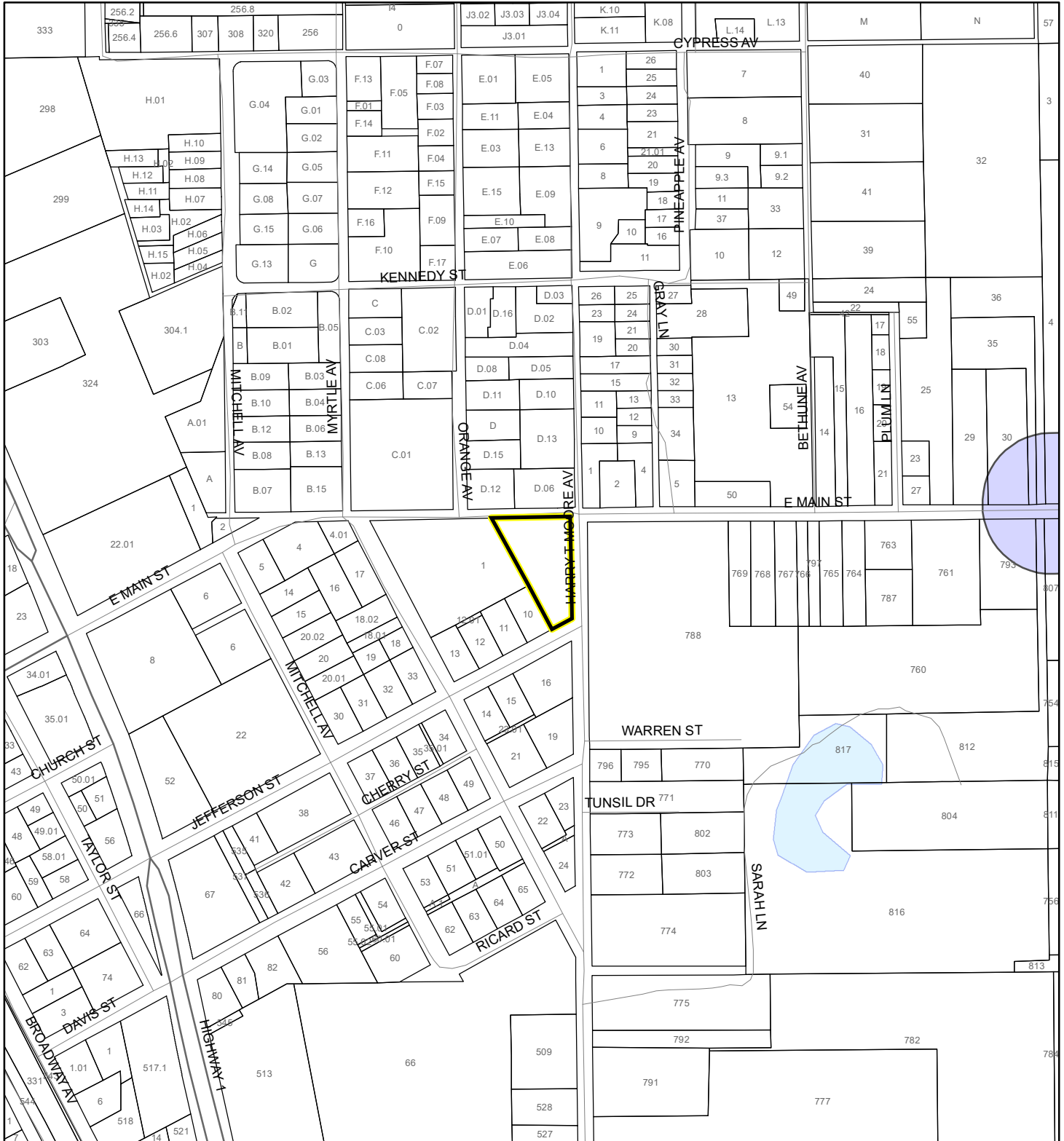
 Parcels

Coastal High Hazard Area

 SurgeZoneCat1

INDIAN RIVER LAGOON SEPTIC OVERLAY MAP

2354 TALMADGE DRIVE, LLC
20PZ00079 SMALL SCALE AMENDMENT 20S.06



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 Subject Property

 Parcels

Septic Overlay

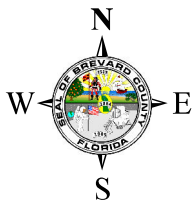
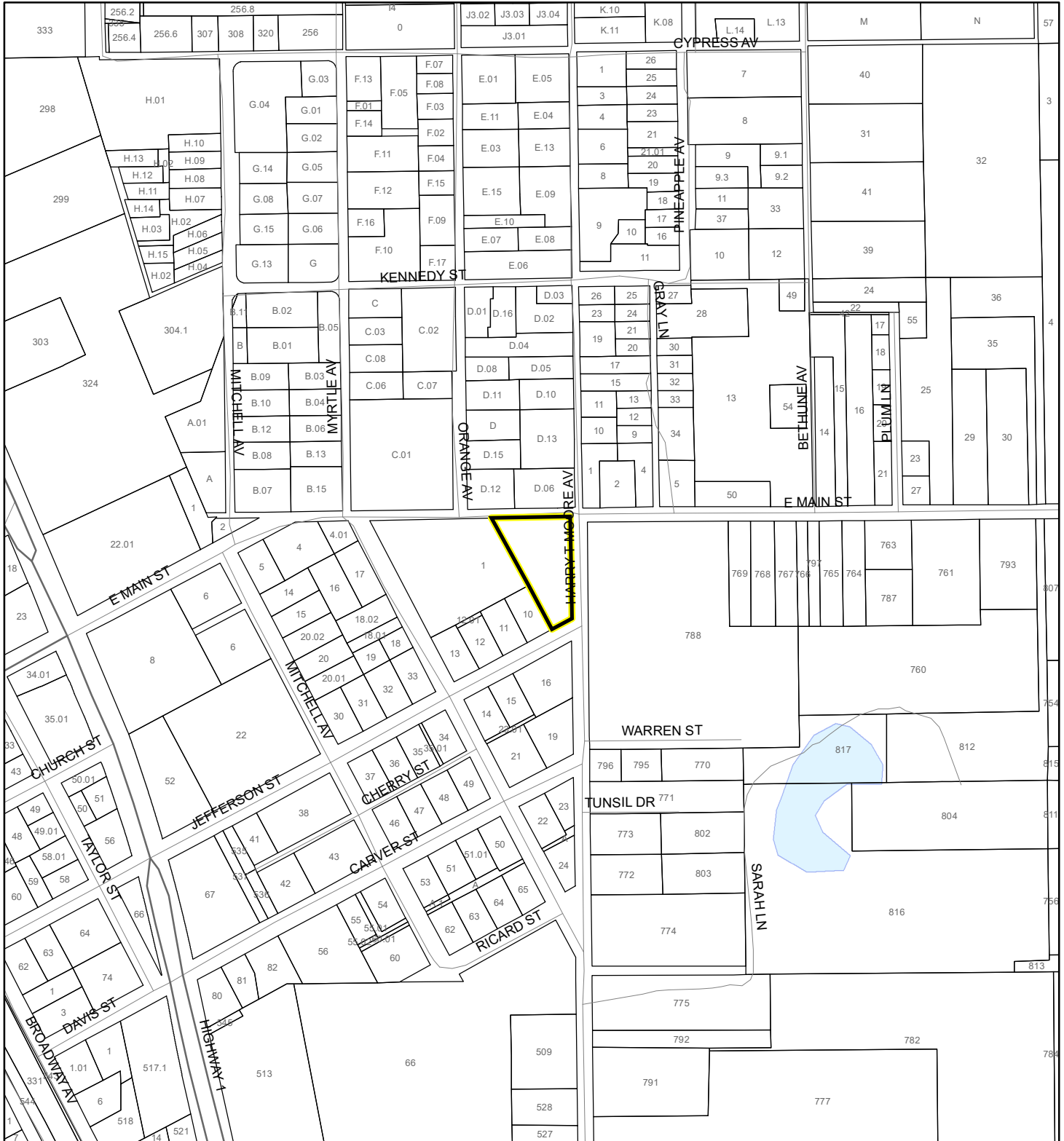
 40 Meters

 60 Meters

 All Distances

EAGLE NESTS MAP

2354 TALMADGE DRIVE, LLC
20PZ00079 SMALL SCALE AMENDMENT 20S.06




1:4,800 or 1 inch = 400 feet

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Produced by BoCC - GIS Date: 8/10/2020

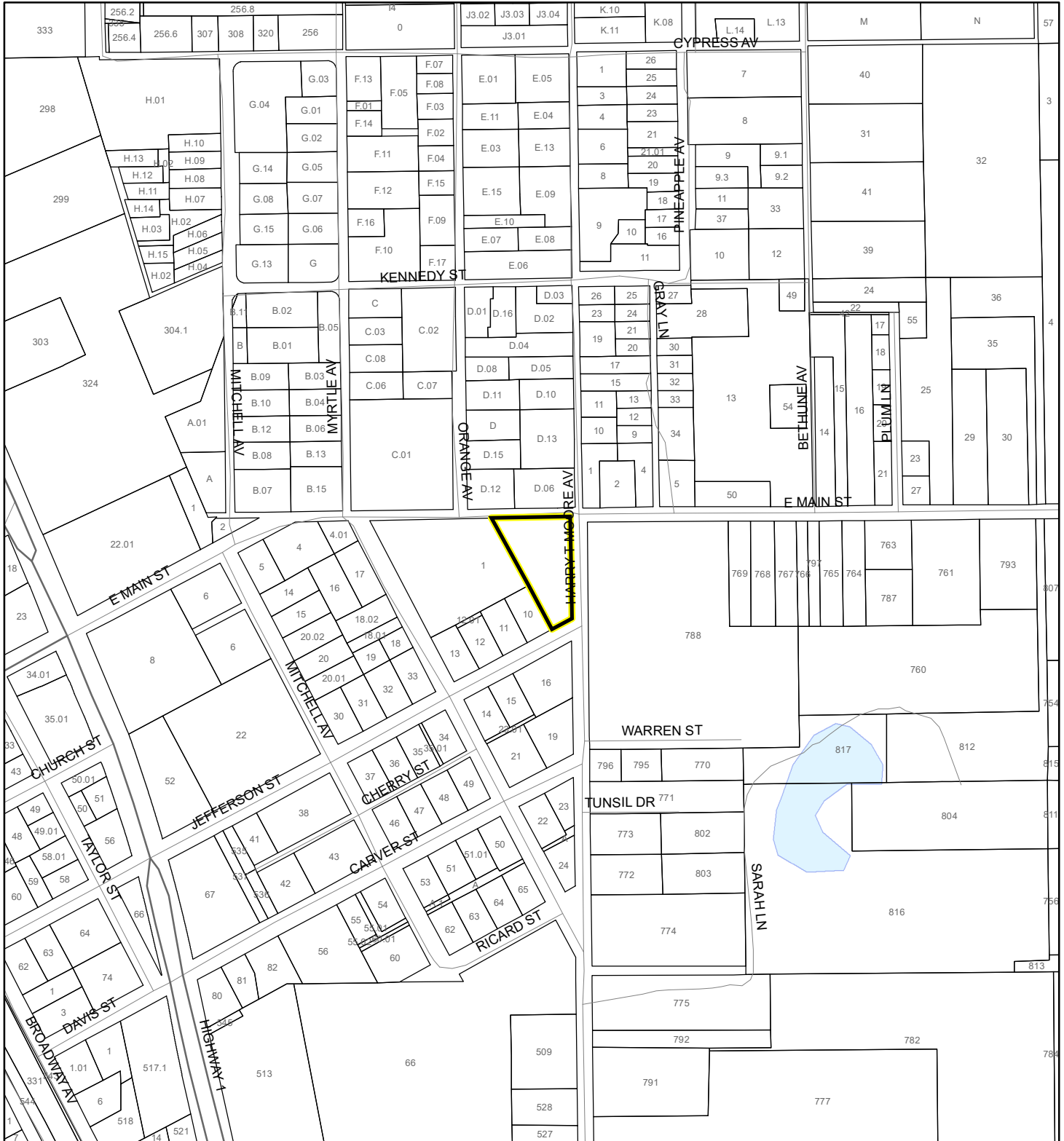
 Subject Property

 Parcels

 Eagle Nests
FWS 2010

SCRUB JAY OCCUPANCY MAP

2354 TALMADGE DRIVE, LLC
20PZ00079 SMALL SCALE AMENDMENT 20S.06



1:4,800 or 1 inch = 400 feet

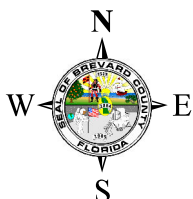
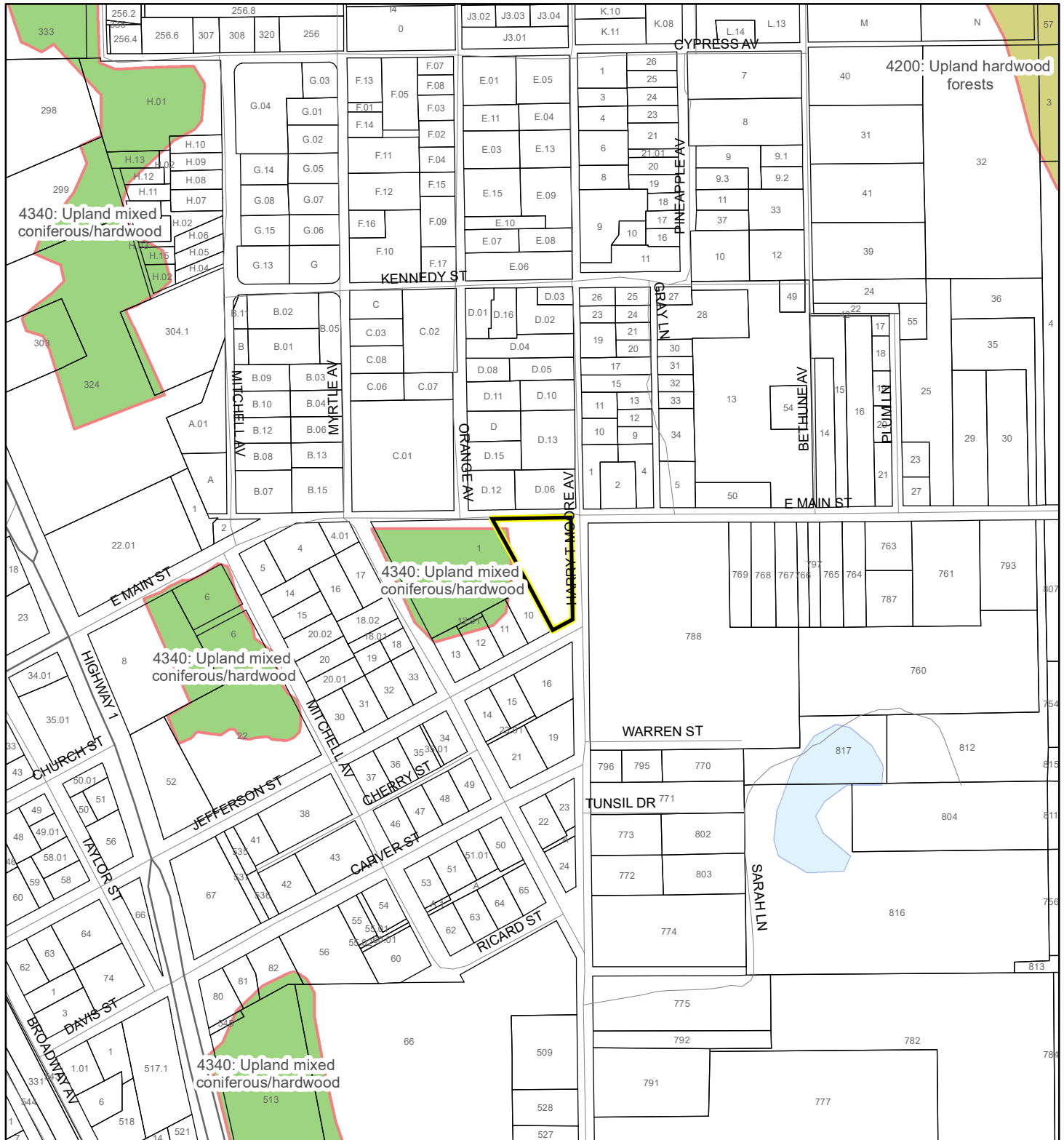
This map was compiled from recorded documents and does not reflect an actual survey. The Brevard County Board of County Commissioners does not assume responsibility for errors or omissions hereon.

Produced by BoCC - GIS Date: 8/10/2020

- Subject Property
- Parcels
- Scrub Jay Occupancy

SJRWMD FLUCCS UPLAND FORESTS - 4000 Series MAP

2354 TALMADGE DRIVE, LLC
20PZ00079 SMALL SCALE AMENDMENT 20S.06



1:4,800 or 1 inch = 400 feet

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Produced by BoCC - GIS Date: 8/10/2020

SJRWMD FLUCCS Upland Forests

- Upland Coniferous Forest - 4100 Series
- Upland Hardwood Forest - 4200 Series
- Upland Mixed Forest - 4300 Series
- Tree Plantations - 4400 Series

Subject Property

Parcels



Agenda Report

2725 Judge Fran Jamieson
Way
Viera, FL 32940

Public Hearing

H.4.

10/5/2020

Subject:

2354 Talmadge Drive, LLC (Aldon Bookhardt) requests a change of zoning classification from RU-1-9 and BU-1 to BU-1-A on 0.98 acres; and a BDP limited to 4 units per acre on 2.29 acres on the RU-1-9 portion. (20Z00023) (Tax Account 2103831) (District 1)

Fiscal Impact:

None

Dept/Office:

Planning and Development

Requested Action:

It is requested that the Planning and Zoning Board conduct a public hearing to consider a change of zoning classification from RU-1-9 (Single-Family Residential) and BU-1 (General Retail Commercial) to BU-1-A (Restricted Neighborhood Commercial) on 0.98 acres; and a BDP (Binding Development Plan) limited to 4 units per acre on 2.29 acres on the RU-1-9 portion.

Summary Explanation and Background:

The applicant is requesting a change of zoning classification from RU-1-9 and BU-1 to BU-1-A on the easterly 0.98 acre portion of the parcel for the purpose of developing a 4,275 square-foot retail store. The applicant is also seeking a Binding Development Plan on the westerly 2.29 acres of RU-1-9 limiting the density to 4 units per acre as the RU-1-9 zoning is not consistent with the RES 4 Future Land Use.

A companion Small Scale Comprehensive Plan Amendment application for a Future Land Use designation change from RES 4 to NC (Neighborhood Commercial) was submitted accompanying this zoning request to be consistent with the proposed BU-1-A zoning for the BU-1 portion of the property.

The character of the area is a mixture of single-family residential, multi-family residential, retail commercial, and institutional (low intensity) zoning classifications. The Mims Small Area Study acknowledges the subject's existing commercial zoning. Furthermore, the study states that commercial need should focus on providing good and services to the Mims residents.

The parcel is not serviced by Brevard County sewer. The closest available Brevard County sewer line is located along the east side of U.S. Highway 1, approximately 915 feet west of the westerly property line of the subject parcel as measured along Main Street.

The Board may wish to consider whether this request for RU-1-9 and BU-1-A are consistent and compatible with the surrounding area and whether Binding Development Plan mitigates potential impacts caused by the request.

The Board of County Commissioners will consider the request on **Thursday, November 5, 2020**, at **5:00 p.m.**, at the Brevard County Government Center, 2725 Judge Fran Jamieson Way, Building C, Viera, Florida.

Clerk to the Board Instructions:

None

ADMINISTRATIVE POLICIES OF THE FUTURE LAND USE ELEMENT

Administrative Policies in the Future Land Use Element establish the expertise of staff with regard to zoning land use issues and set forth criteria when considering a rezoning action or request for Conditional Use Permit, as follows:

Administrative Policy 1

The Brevard County zoning official, planners and the director of the Planning and Development staff, however designated, are recognized as expert witnesses for the purposes of Comprehensive Plan amendments as well as zoning, conditional use, special exception, and variance applications.

Administrative Policy 2

Upon Board request, members of the Brevard County Planning and Development staff shall be required to present written analysis and a recommendation, which shall constitute an expert opinion, on all applications for development approval that come before the Board of County Commissioners for quasi-judicial review and action. The Board may table an item if additional time is required to obtain the analysis requested or to hire an expert witness if the Board deems such action appropriate. Staff input may include the following:

Criteria:

- A. Staff shall analyze an application for consistency or compliance with comprehensive plan policies, zoning approval criteria and other applicable written standards.
- B. Staff shall conduct site visits of property which are the subject of analysis and recommendation. As part of the site visit, the staff shall take a videotape or photographs where helpful to the analysis and conduct an inventory of surrounding existing uses. Aerial photographs shall also be used where they would aid in an understanding of the issues of the case.
- C. In cases where staff analysis is required, both the applicant and the staff shall present proposed findings of fact for consideration by the Board.
- D. For re-zoning applications where a specific use has not been proposed, the worst case adverse impacts of potential uses available under the applicable land use classification shall be evaluated by the staff.

Administrative Policy 3

Compatibility with existing or proposed land uses shall be a factor in determining where a rezoning or any application involving a specific proposed use is being considered. Compatibility shall be evaluated by considering the following factors, at a minimum:

Criteria:

- A. Whether the proposed use(s) would have hours of operation, lighting, odor, noise levels, traffic, or site activity that would significantly diminish the enjoyment of, safety or quality of life in existing neighborhoods within the area which could foreseeably be affected by the proposed use.
- B. Whether the proposed use(s) would cause a material reduction (five percent or more) in the value of existing abutting lands or approved development.
- C. Whether the proposed use(s) is/are consistent with an emerging or existing pattern of surrounding development as determined through analysis of:

1. historical land use patterns;
2. actual development over the immediately preceding three years; and
3. development approved within the past three years but not yet constructed.

D. Whether the proposed use(s) would result in a material violation of relevant policies in any elements of the Comprehensive Plan.

Administrative Policy 4

Character of a neighborhood or area shall be a factor for consideration whenever a rezoning or any application involving a specific proposed use is reviewed. The character of the area must not be materially or adversely affected by the proposed rezoning or land use application. In evaluating the character of an area, the following factors shall be considered:

Criteria:

- A. The proposed use must not materially and adversely impact an established residential neighborhood by introducing types of intensity of traffic (including but not limited to volume, time of day of traffic activity, type of vehicles, et cetera), parking, trip generation, commercial activity or industrial activity that is not already present within the identified boundaries of the neighborhood.
- B. In determining whether an established residential neighborhood exists, the following factors must be present:
 1. The area must have clearly established boundaries, such as roads, open spaces, rivers, lakes, lagoons, or similar features.
 2. Sporadic or occasional neighborhood commercial uses shall not preclude the existence of an existing residential neighborhood, particularly if the commercial use is non-conforming or pre-dates the surrounding residential use.
 3. An area shall be presumed not to be primarily residential but shall be deemed transitional where multiple commercial, industrial or other non-residential uses have been applied for and approved during the previous five (5) years.

Administrative Policy 5

In addition to the factors specified in Administrative Policies 2, 3, and 4, in reviewing a rezoning, conditional use permit or other application for development approval, the impact of the proposed use or uses on transportation facilities either serving the site or impacted by the use(s) shall be considered. In evaluating whether substantial and adverse transportation impacts are likely to result if an application is approved, the staff shall consider the following criteria:

Criteria:

- A. Whether adopted levels of services will be compromised;
- B. Whether the physical quality of the existing road system that will serve the proposed use(s) is sufficient to support the use(s) without significant deterioration;

- C. Whether the surrounding existing road system is of sufficient width and construction quality to serve the proposed use(s) without the need for substantial public improvements;
- D. Whether the surrounding existing road system is of such width and construction quality that the proposed use(s) would realistically pose a potential for material danger to public safety in the surrounding area;
- E. Whether the proposed use(s) would be likely to result in such a material and adverse change in traffic capacity of a road or roads in the surrounding area such that either design capacities would be significantly exceeded or a de facto change in functional classification would result;
- F. Whether the proposed use(s) would cause such material and adverse changes in the types of traffic that would be generated on the surrounding road system, that physical deterioration of the surrounding road system would be likely;
- G. Whether projected traffic impacts of the proposed use(s) would materially and adversely impact the safety or welfare of residents in existing residential neighborhoods.

Administrative Policy 6

The use(s) proposed under the rezoning, conditional use or other application for development approval must be consistent with, (a), all written land development policies set forth in these administrative policies; and (b), the future land use element, coastal management element, conservation element, potable water element, sanitary sewer element, solid waste management element, capital improvements element, recreation and open space element, surface water element, and transportation elements of the comprehensive plan.

Administrative Policy 7

Proposed use(s) shall not cause or substantially aggravate any, (a), substantial drainage problem on surrounding properties; or (b), significant, adverse and unmitigatable impact on significant natural wetlands, water bodies or habitat for listed species.

Administrative Policy 8

These policies, the staff analysis based upon these policies, and the applicant's written analysis, if any, shall be incorporated into the record of every quasi-judicial review application for development approval presented to the Board including rezoning, conditional use permits, and vested rights determinations.

Section 62-1151(c) of the Code of Ordinances of Brevard County directs, "The planning and zoning board shall recommend to the board of county commissioners the denial or approval of each application for amendment to the official zoning maps based upon a consideration of the following factors:

- (1) The character of the land use of the property surrounding the property being considered.
- (2) The change in conditions of the land use of the property being considered and the surrounding property since the establishment of the current applicable zoning classification, special use or conditional use.

- (3) The impact of the proposed zoning classification or conditional use on available and projected traffic patterns, water and sewer systems, other public facilities and utilities and the established character of the surrounding property.
- (4) The compatibility of the proposed zoning classification or conditional use with existing land use plans for the affected area.
- (5) The appropriateness of the proposed zoning classification or conditional use based upon a consideration of the applicable provisions and conditions contained in this article and other applicable laws, ordinances and regulations relating to zoning and land use regulations and based upon a consideration of the public health, safety and welfare.

The minutes of the planning and zoning board shall specify the reasons for the recommendation of approval or denial of each application.”

CONDITIONAL USE PERMITS (CUPs)

In addition to the specific requirements for each Conditional Use Permit (CUP), Section 62-1901 provides that the following approval procedure and general standards of review are to be applied to all CUP requests, as applicable.

(b) Approval procedure. An application for a specific conditional use within the applicable zoning classification shall be submitted and considered in the same manner and according to the same procedure as an amendment to the official zoning map as specified in Section 62-1151. The approval of a conditional use shall authorize an additional use for the affected parcel of real property in addition to those permitted in the applicable zoning classification. The initial burden is on the applicant to demonstrate that all applicable standards and criteria are met. Applications which do not satisfy this burden cannot be approved. If the applicant meets its initial burden, then the Board has the burden to show, by substantial and competent evidence, that the applicant has failed to meet such standards and the request is adverse to the public interest. As part of the approval of the conditional use permit, the Board may prescribe appropriate and reasonable conditions and safeguards to reduce the impact of the proposed use on adjacent and nearby properties or the neighborhood. A nearby property, for the purpose of this section, is defined as any property which, because of the character of the proposed use, lies within the area which may be substantially and adversely impacted by such use. In stating grounds in support of an application for a conditional use permit, it is necessary to show how the request fulfills both the general and specific standards for review. The applicant must show the effect the granting of the conditional use permit will have on adjacent and nearby properties, including, but not limited to traffic and pedestrian flow and safety, curb-cuts, off-street loading and parking, off-street pickup of passengers, odors, glare and noise, particulates, smoke, fumes, and other emissions, refuse and service areas, drainage, screening and buffering for protection of adjacent and nearby properties, and open space and economic impact on nearby properties. The applicant, at his discretion, may choose to present expert testimony where necessary to show the effect of granting the conditional use permit.

(c) General Standards of Review.

- (1) The planning and zoning board and the board of county commissioners shall base the denial or approval of each application for a conditional use based upon

a consideration of the factors specified in Section 62-1151(c) plus a determination whether an application meets the intent of this section.

- a. The proposed conditional use will not result in a substantial and adverse impact on adjacent and nearby properties due to: (1), the number of persons anticipated to be using, residing or working under the conditional use; (2), noise, odor, particulates, smoke, fumes and other emissions, or other nuisance activities generated by the conditional use; or (3), the increase of traffic within the vicinity caused by the proposed conditional use.
 - b. The proposed use will be compatible with the character of adjacent and nearby properties with regard to use, function, operation, hours of operation, type and amount of traffic generated, building size and setback, and parking availability.
 - c. The proposed use will not cause a substantial diminution in value of abutting residential property. A substantial diminution shall be irrebuttably presumed to have occurred if abutting property suffers a 15% reduction in value as a result of the proposed conditional use. A reduction of 10% of the value of abutting property shall create a rebuttable presumption that a substantial diminution has occurred. The Board of County Commissioners carries the burden to show, as evidenced by either testimony from or an appraisal conducted by an M A I certified appraiser, that a substantial diminution in value would occur. The applicant may rebut the findings with his own expert witnesses.
- (2) The following specific standards shall be considered, when applicable, in making a determination that the general standards specified in subsection (1) of this section are satisfied:
- a. Ingress and egress to the property and proposed structures thereon, with particular reference to automotive and pedestrian safety and convenience, traffic flow and control, and access in case of fire and catastrophe, shall be: (1), adequate to serve the proposed use without burdening adjacent and nearby uses, and (2), built to applicable county standards, if any. Burdening adjacent and nearby uses means increasing existing traffic on the closest collector or arterial road by more than 20%, or 10% if the new traffic is primarily comprised of heavy vehicles, except where the affected road is at Level of Service A or B. New traffic generated by the proposed use shall not cause the adopted level of service for transportation on applicable roadways, as determined by applicable Brevard County standards, to be exceeded. Where the design of a public road to be used by the proposed use is physically inadequate to handle the numbers, types or weights of vehicles expected to be generated by the proposed use without damage to the road, the conditional use permit cannot be approved without a commitment to improve the road to a standard adequate to handle the proposed traffic, or to maintain the road through a maintenance bond or other means as required by the Board of County Commissioners.
 - b. The noise, glare, odor, particulates, smoke, fumes or other emissions from the conditional use shall not substantially interfere with the use or enjoyment of the adjacent and nearby property.
 - c. Noise levels for a conditional use are governed by Section 62-2271.

- d. The proposed conditional use shall not cause the adopted level of service for solid waste disposal applicable to the property or area covered by such level of service, to be exceeded.
- e. The proposed conditional use shall not cause the adopted level of service for potable water or wastewater applicable to the property or the area covered by such level of service, to be exceeded by the proposed use.
- f. The proposed conditional use must have existing or proposed screening or buffering, with reference to type, dimensions and character to eliminate or reduce substantial, adverse nuisance, sight, or noise impacts on adjacent and nearby properties containing less intensive uses.
- g. Proposed signs and exterior lighting shall not cause unreasonable glare or hazard to traffic safety, or interference with the use or enjoyment of adjacent and nearby properties.
- h. Hours of operation of the proposed use shall be consistent with the use and enjoyment of the properties in the surrounding residential community, if any. For commercial and industrial uses adjacent to or near residential uses, the hours of operation shall not adversely affect the use and enjoyment of the residential character of the area.
- i. The height of the proposed use shall be compatible with the character of the area, and the maximum height of any habitable structure shall be not more than 35 feet higher than the highest residence within 1,000 feet of the property line.
- j. Off-street parking and loading areas, where required, shall not be created or maintained in a manner which adversely impacts or impairs the use and enjoyment of adjacent and nearby properties. For existing structures, the applicant shall provide competent, substantial evidence to demonstrate that actual or anticipated parking shall not be greater than that which is approved as part of the site plan under applicable county standards.

FACTORS TO CONSIDER FOR A REZONING REQUEST

Section 62-1151(c) sets forth factors to consider in connection with a rezoning request, as follows:

“The planning and zoning board shall recommend to the board of county commissioners the denial or approval of each application for amendment to the official zoning maps based upon a consideration of the following factors:

- (1) The character of the land use of the property surrounding the property being considered.
- (2) The change in conditions of the land use of the property being considered and the surrounding property since the establishment of the current applicable zoning classification, special use or conditional use.
- (3) The impact of the proposed zoning classification or conditional use on available and projected traffic patterns, water and sewer systems, other public facilities and utilities and the established character of the surrounding property.

- (4) The compatibility of the proposed zoning classification or conditional use with existing land use plans for the affected area.
- (5) The appropriateness of the proposed zoning classification or conditional use based upon a consideration of the applicable provisions and conditions contained in this article and other applicable laws, ordinances and regulations relating to zoning and land use regulations and based upon a consideration of the public health, safety and welfare.”

These staff comments contain references to zoning classifications found in the Brevard County Zoning Regulations, Chapter 62, Article VI, Code of Ordinances of Brevard County. These references include brief summaries of some of the characteristics of that zoning classification. Reference to each zoning classification shall be deemed to incorporate the full text of the section or sections defining and regulating that classification into the Zoning file and Public Record for that item.

These staff comments contain references to sections of the Code of Ordinances of Brevard County. Reference to each code section shall be deemed to incorporate this section into the Zoning file and Public Record for that item.

These staff comments contain references to Policies of the Brevard County Comprehensive Plan. Reference to each Policy shall be deemed to incorporate the entire Policy into the Zoning file and Public Record for that item.

These staff comments refer to previous zoning actions which are part of the Public Records of Brevard County, Florida. These records will be referred to by reference to the file number. Reference to zoning files are intended to make the entire contents of the cited file a part of the Zoning file and Public Record for that item.

DEFINITIONS OF CONCURRENCY TERMS

Maximum Acceptable Volume (MAV): Maximum acceptable daily volume that a roadway can carry at the adopted Level of Service (LOS).

Current Volume: Building permit related trips added to the latest TPO (Transportation Planning Organization) traffic counts.

Volume with Development (VOL W/DEV): Equals Current Volume plus trip generation projected for the proposed development.

Volume/Maximum Acceptable Volume (VOL/MAV): Equals the ratio of current traffic volume to the maximum acceptable roadway volume.

Volume/Maximum Acceptable Volume with Development (VOL/MAV W/DEV): Ratio of volume with development to the Maximum Acceptable Volume.

Acceptable Level of Service (CURRENT LOS): The Level of Service at which a roadway is currently operating.

Level of Service with Development (LOS W/DEV): The Level of Service that a proposed development may generate on a roadway.



BOARD OF COUNTY COMMISSIONERS

Planning and Development Department

2725 Judge Fran Jamieson Way
Building A, Room 114
Viera, Florida 32940
(321)633-2070 Phone / (321)633-2074 Fax
<https://www.brevardfl.gov/PlanningDev>

STAFF COMMENTS

20Z00023

2354 Talmadge Drive, LLC

RU-1-9 (Single-Family Residential) and BU-1 (General Retail Commercial) to BU-1-A and BDP (Binding Development Plan) Limited to 4 units/acre on RU-1-9.

Tax Account Number: 2103831
Parcel I.D.: 21-35-17-53-*-1
Location: No address assigned, on the southwest corner of E. Main Street and Harry T. Moore Avenue, in the Mims area (District 1)
Acreage: 3.04 acre

Planning and Zoning Board: 10/05/2020

Board of County Commissioners: 11/05/2020

Consistency with Land Use Regulations

- Current zoning cannot be considered under the Future Land Use Designation, Section 62-1255.
- The proposal can be considered under the Future Land Use Designation, Section 62-1255.
- The proposal would maintain acceptable Levels of Service (LOS) (XIII 1.6.C)

	CURRENT	PROPOSED
Zoning	RU-1-9 & BU-1	RU-1-9 with BDP and BU-1-A
Potential*	9 single-family units and 7,318 sq. ft. Commercial	8 single-family units and 4,275 sq. ft. commercial
Can be Considered under the Future Land Use Map	No, RES 4	No, RU-1-9 requires RES 6** No, BU-1-A requires NC*** (Neighborhood Commercial)

* Zoning potential for concurrency analysis purposes only, subject to applicable land development regulations.

** The applicant has submitted a BDP (Binding Development Plan) limiting the RU-1-9 portion of the parcel to 4 units per acre density.

*** The applicant has submitted a companion Small Scale Comprehensive Plan Amendment application to change the Future Land Use Map (FLUM) from RES 4 (Residential 4) to NC (Neighborhood Commercial) under **20PZ00079** on the easterly 0.98 acres of the parcel.

Background and Purpose of Request

The applicant is requesting a change of zoning classification from RU-1-9 (Single-Family Residential) and BU-1 (General Retail Commercial) to BU-1-A (Restricted Neighborhood Retail Commercial) on the easterly 0.98 acre portion of the parcel for the purpose of developing a 4,275 sq. ft. retail store. The applicant is also seeking a Binding Development Plan on the westerly 2.29 acres of RU-1-9 limiting the density to 4 units per acre as the RU-1-9 zoning is not consistent with the RES 4 FLU.

The applicant has provided a site plan showing the location, size, access and parking for the proposed retail store.

December 6, 1962, zoning action **Z-876** changed the zoning from RU-1 (Single Family Residential) to RU-2 (Two Family Residential). This zoning action was on Lots 8 thru 13, Jones Ward Plat of Mims.

December 8, 1966, zoning action **Z-2018** changed the zoning from RU-1 and RU-2 to BU-1 (Neighborhood Retail Business) for shopping center. This zoning action was on Lots 1 thru 9 and 12 and 13, Jones Ward Plat of Mims.

July 3, 1975, Administrative zoning action **AZ-11** changed the zoning from RU-2 to RU-1-9.

Land Use

The subject property retains the RES 4 (Residential 4) FLU designation. The current zoning of RU-1-9 and BU-1 on the subject property is not consistent with the RES 4 FLU per 62-1255 (2). The proposed zoning of BU-1-A is consistent with the Proposed FLU designation of NC. A companion Small-Scale, Comprehensive Plan Amendment (SSCPA) application, **20S.06 (20PZ00079)** for a Future Land Use designation changing the FLU from RES 4 to NC (Neighborhood Commercial) was submitted accompanying this zoning request to be consistent with the proposed BU-1-A zoning for the BU-1 portion of the property.

Environmental Constraints

Summary of Mapped Resources and Noteworthy Land Use Issues:

- Aquifer Recharge Soils
- Protected and Specimen Trees
- Protected Species

No noteworthy land use issues were identified. Natural Resources Management (NRM) reserves the right to assess consistency with environmental ordinances at all applicable future stages of development.

Preliminary Concurrency

The closest concurrency management segment to the subject property is Highway US-1, between Dairy Road and State Road 46, which has a Maximum Acceptable Volume (MAV) of 41,790 trips per day, a Level of Service (LOS) of D, and currently operates at 40.58% of capacity daily. The maximum development potential from the proposed rezoning increases the percentage of MAV

utilization by 3.13%. With the maximum development potential from the proposed rezoning, the corridor is anticipated to operate at 43.71% of capacity daily (LOS D). The proposal is not anticipated to create a deficiency in LOS.

According to the School Impact Analysis Capacity Determination (CD-2020-08) dated August 6, 2020, the proposed development for the subject property is projected to generate 3 elementary students, 1 middle school student, and 1 high school student. CD-2020-08 concludes: "At this time, Mims Elementary School, Madison Middle School and Astronaut High School are projected to have enough capacity for the total of projected and potential students from the [proposed development on the subject property]."

The parcel is not serviced by Brevard County sewer. The closest available Brevard County sewer line is located along the east side of Highway US-1 approximately 915 feet west of the westerly property line of the subject parcel as measured along Main Street.

The parcel can be serviced by Brevard County water. The closest available Brevard County water line is located across from the parcel along the north side of E. Main Street.

Land Use Policy 1.2 addresses residential density requirements for sewer and potable water. This policy does not address commercial development requiring sewer and potable water.

Land Use Policy 1.2 D addresses where public water service is available, residential development proposals with densities greater than four units per acre shall be required to connect to a centralized sewer system. The requested BDP limits residential density to four units per acre.

Applicable Land Use Policies

The Board should evaluate the compatibility of this application within the context of the Board's Administrative Policies 1 through 8 of the Future Land Use Element, outlined in the Administrative Policies.

Analysis of Administrative Policy #3 - Compatibility between this site and the existing or proposed land uses in the area. The proposed change to the FLUM from RES 4 to NC lies on the easterly 0.98 acres of this parcel. The proposed change to the zoning from BU-1 to BU-1-A is consistent with the proposed change to the FLUM to NC.

Policy #3C Whether the proposed use(s) is/are consistent with an emerging or existing pattern of surrounding development approved within the past three year but not yet constructed.

There has not been any approved development in the surrounding area with in the last three years.

The BDP request is to limit the density on the RU-1-9 portion of the parcel to 4 units per acre to be consistent with the Residential 4 FLUM. This BDP request is on the westerly 2.29 acres of the site and the BDP proposal is for 4 units per acre single-family usage.

Analysis of Administrative Policy #4 - Character of a neighborhood or area. The subject parcel is currently undeveloped RU-1-9 and BU-1 that abuts E. Main Street to the north, Harry T. Moore Avenue to the west, Jefferson Street and RU-1-9 parcels to the south and abuts Myrtle Ave. to the west. There is a commercial developed BU-1-A and BU-1 parcel, for a retail store, located on the

Page 3

northwest corner of E. Main Street and Harry T, Moore Ave. located directly north across Harry T. Moore Ave. from the subject parcel. The northeast corner of E. Main Street and Harry T, Moore Ave. is zoned IN(L) (Institutional Low Intensity) which is developed as a church. There are also developed BU-1 parcels east of this church along the north side of E. Main Street which uses are for a Fraternal Organization Clubhouse and a restaurant. The parcel to the west across Harry T. Moore Ave. is zoned RU-2-30 (High-Density Multi Family Residential) and is a multi-family residential development. The parcels abutting to the south and south across Jefferson Street are zoned RU-1-9 and are developed with single-family homes. The parcels to the west across Myrtle Avenue are zoned RU-1-9 and RU-1-11 (single-family residential) and are developed with single-family homes.

All the surrounding area around the subject parcel has a FLU (Future Land Use) designation of RES 4 which is not consistent with the RU-1-9, RU-2-30, BU-1-A or BU-1 zoning classifications. The proposed BU-1-A zoning may be considered to be consistent with the Future Land Use designation NC (Neighborhood Commercial).

Surrounding Properties

There have been four zoning actions within a half-mile of the subject property within the last four years.

On May 05, 2016, application **16PZ00017** changed the zoning from RU-1-7 to RR-1 on a 1.4 acre parcel located on the west side of Railroad Avenue, westerly of Highway US-1, approximately 1,835 feet southwest of the subject property.

On October 13, 2016, application **16PZ00070** changed the zoning from AU (Agricultural Residential) to SR (Suburban Residential) on a 0.55 acre parcel located on the west side of Folsom Road, westerly of Highway US-1, approximately 2,600 feet northwest of the subject property.

On August 24, 2017, application **17PZ00009** changed the zoning from BU-1 (General Retail Commercial) to BU-2 (Retail, warehousing and wholesale) on the east 200 feet of the parcel with a Binding Development limited to business units, trailer/truck/boat storage, located on the west side of Highway US-1 approximately 2,115 feet northwest of the subject property.

On August 24, 2017, application **18PZ00147** changed the zoning from RU-1-7 (single-family residential) to SR (Suburban Residential) with a Binding Development Plan on a 0.81 acre parcel limiting development to located on the east side of N. Singleton Avenue approximately 2,798 feet southwest of the subject property.

The current BU-1 classification allows retail commercial land uses on minimum 7,500 square foot lots. The BU-1 classification does not permit warehousing or wholesaling.

The current RU-1-9 classification permits single family residential development on lots of 6,600 square feet (minimum). The minimum house size is 900 square feet.

The proposed BU-1-A classification permits restricted neighborhood retail and personal service uses to serve the needs of nearby low-density residential neighborhoods. Minimum lot size of 7,500 square feet is required with minimum width and depth of 75 feet.

The RU-1-11 classification permits single family residences on minimum 7,500 square foot lots, with a minimum width and depth of 75 feet. The minimum house size is 1,100 square feet.

IN(L) is an Institutional (Light) zoning classification, intended to promote low impact private, nonprofit, or religious institutional uses to service the needs of the public for facilities of an educational religious, health or cultural nature.

For Board Consideration

The Board may wish to consider whether this request for RU-1-9 and BU-1-A are consistent and compatible with the surrounding area and whether Binding Development Plan mitigates potential impact caused by the request.

NATURAL RESOURCES MANAGEMENT DEPARTMENT
Zoning Review & Summary
Item # 20Z00023

Applicant: Aldon Bookhardt

Zoning Request: RU1-9 & BU-1 to RU1-9 & BU-1-A with BDP

Note: Applicant wants to develop a retail store on corner of Main St. and Harry T. Moore Ave., and limit residential development to 4 units per acre on remainder of parcel.

P&Z Hearing Date: 10/05/20; **BCC Hearing Date:** 11/05/20

Tax ID No: 2103831

- This is a preliminary review based on best available data maps reviewed by the Natural Resources Management Department (NRM) and does not include a site inspection to verify the accuracy of the mapped information.
- In that the rezoning process is not the appropriate venue for site plan review, specific site designs submitted with the rezoning request will be deemed conceptual. Board comments relative to specific site design do not provide vested rights or waivers from Federal, State or County regulations.
- **This review does not guarantee whether or not the proposed use, specific site design, or development of the property can be permitted under current Federal, State, or County Regulations.**

Summary of Mapped Resources and Noteworthy Land Use Issues:

- Aquifer Recharge Soils
- Protected and Specimen Trees
- Protected Species

No noteworthy land use issues were identified. Natural Resources Management (NRM) reserves the right to assess consistency with environmental ordinances at all applicable future stages of development.

Land Use Comments:

Aquifer Recharge Soils

The subject parcel contains mapped aquifer recharge soils (Paola fine sand and Pomello sand) as shown on the USDA Soil Conservation Service Soils Survey map. The applicant is hereby notified of the development and impervious restrictions within Conservation Element Policy 10.2 and the Aquifer Protection Ordinance.

Protected and Specimen Trees

The parcel contains 100% mapped polygon of SJRWMD Florida Land Use and Cover Classification System (FLUCCS) code 4340 – Upland Mixed Coniferous/Hardwood trees. Heritage Specimen Trees (greater than or equal to 24 inches in diameter) are included in this FLUCCS code and likely reside in the project area. Per Brevard County Landscaping, Land Clearing and Tree Protection ordinance, Section 62-4331(3), the purpose and intent of the ordinance is to encourage the protection of heritage Specimen Trees. In addition, per Section 62-4341(18), Specimen Trees shall be preserved or

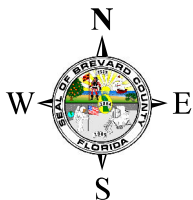
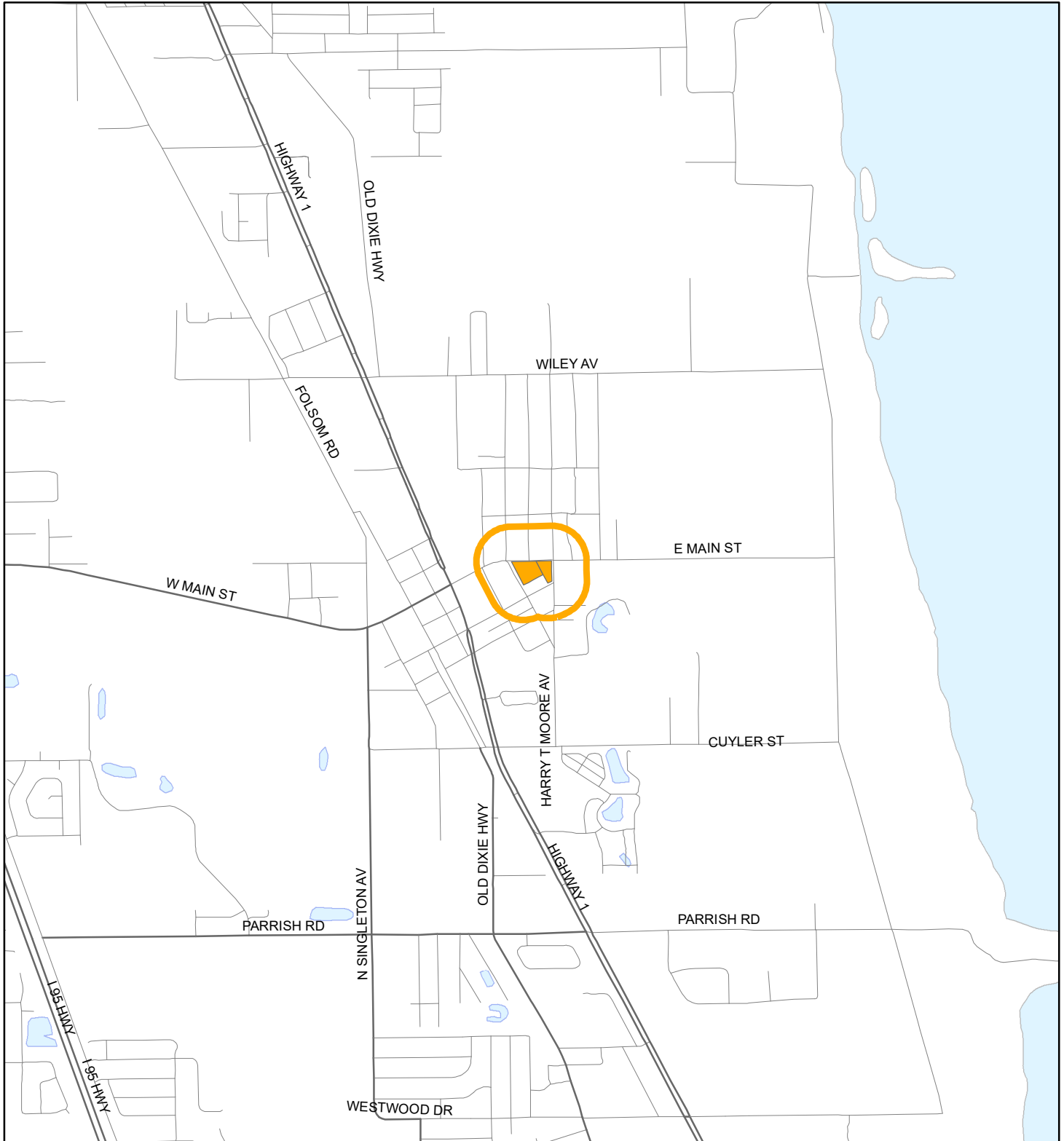
relocated on site to the Greatest Extent Feasible. Per Section 62-4332, Definitions, Greatest Extent Feasible shall include, but not be limited to, relocation of roads, buildings, ponds, increasing building height to reduce building footprint or reducing Vehicular Use Areas. The applicant is advised to refer to Article XIII, Division 2, entitled Land Clearing, Landscaping, and Tree Protection, for specific requirements for tree preservation and canopy coverage requirements. Land clearing is not permitted without prior authorization by NRM.

Protected Species

Information available to NRM indicates that federally and/or state protected species may be present on the property. Specifically, gopher tortoises can be found in areas of aquifer recharge soils. Prior to any plan, permit submittal, or development activity, including land clearing, the applicant should obtain any necessary permits or clearance letters from the Florida Fish and Wildlife Conservation Commission and/or U.S. Fish and Wildlife Service, as applicable.

LOCATION MAP

2354 TALMADGE DRIVE, LLC
20Z00023



1:24,000 or 1 inch = 2,000 feet

Buffer Distance: 500 feet

This map was compiled from recorded documents and does not reflect an actual survey. The Brevard County Board of County Commissioners does not assume responsibility for errors or omissions hereon.

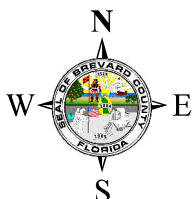
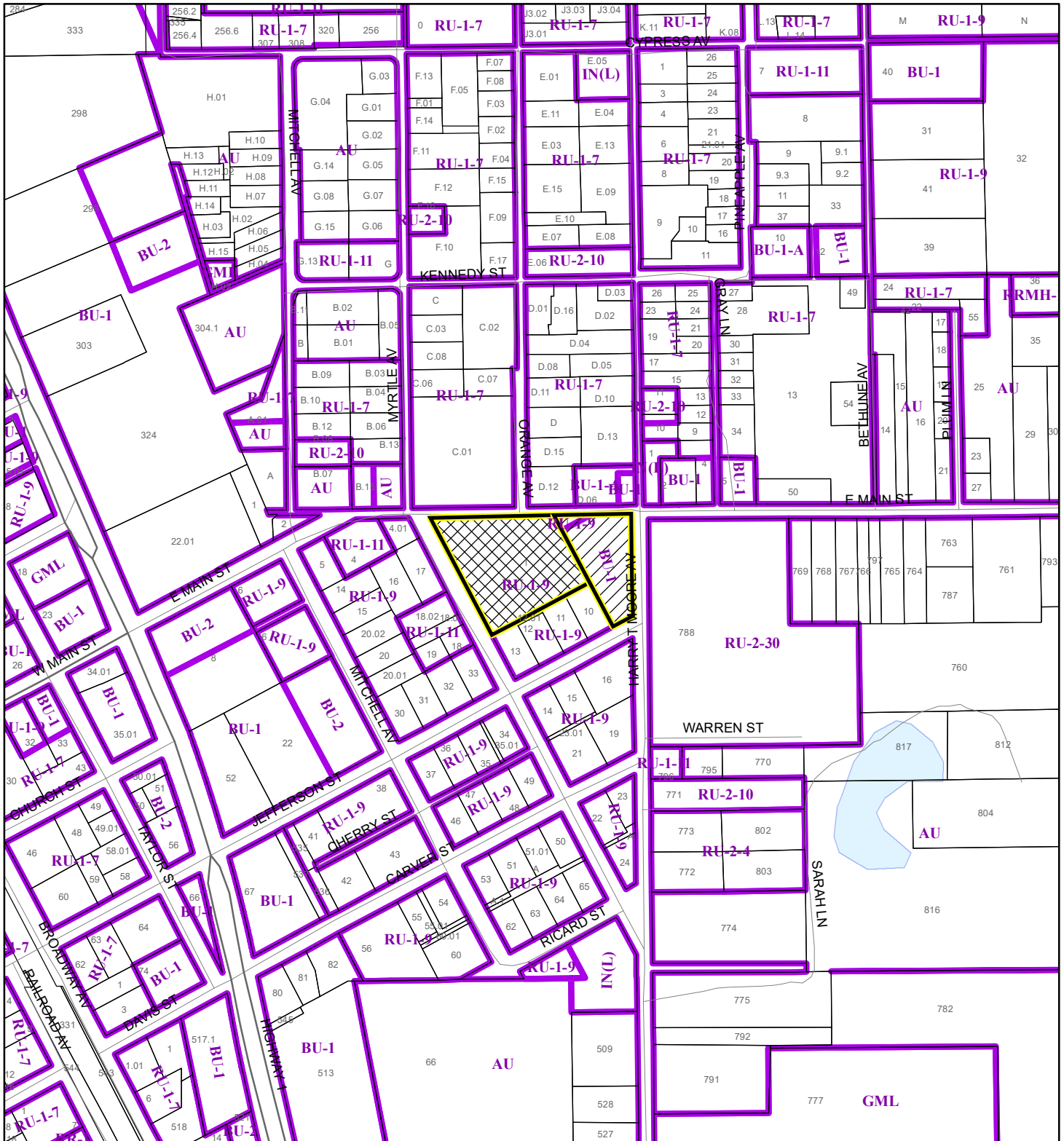
Produced by BoCC - GIS Date: 8/12/2020

Buffer
Subject Property

ZONING MAP

2354 TALMADGE DRIVE, LLC

20Z00023



1:4,800 or 1 inch = 400 feet

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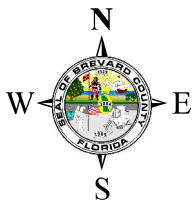
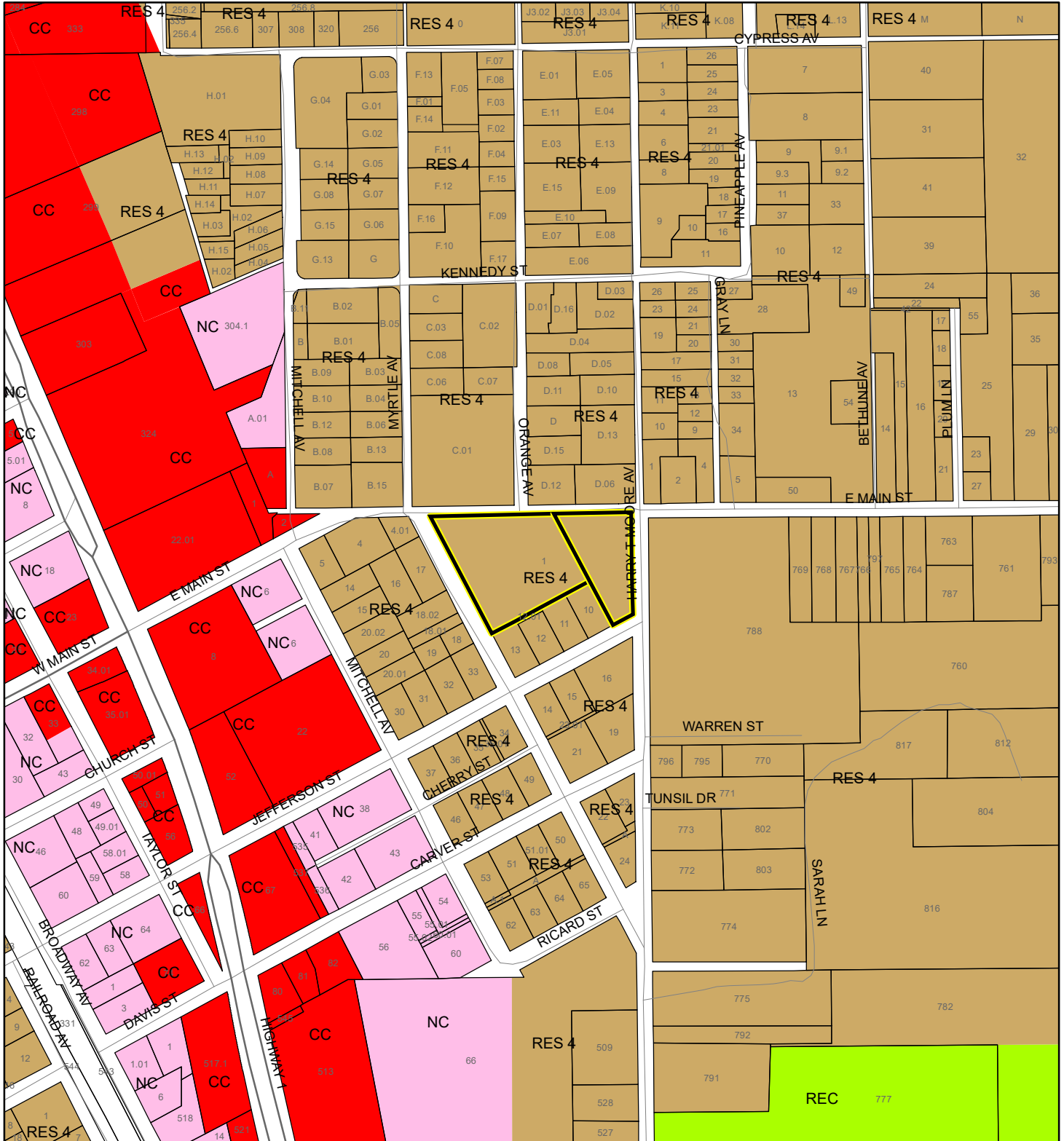
Produced by BoCC - GIS Date: 8/12/2020

- Subject Property
- Parcels
- Zoning
- RU-1-9- and BU-1 To BU-1-A
- Add BDP

FUTURE LAND USE MAP

2354 TALMADGE DRIVE, LLC

20Z00023



1:4,800 or 1 inch = 400 feet

Subject Property

Parcels

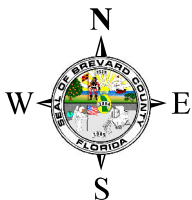
This map was compiled from recorded documents and does not reflect an actual survey. The Brevard County Board of County Commissioners does not assume responsibility for errors or omissions hereon.

Produced by BoCC - GIS Date: 8/11/2020

AERIAL MAP

2354 TALMADGE DRIVE, LLC

20Z00023




1:2,400 or 1 inch = 200 feet

PHOTO YEAR: 2020

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Produced by BoCC - GIS Date: 8/12/2020

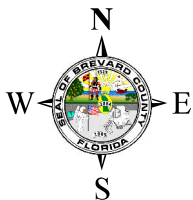
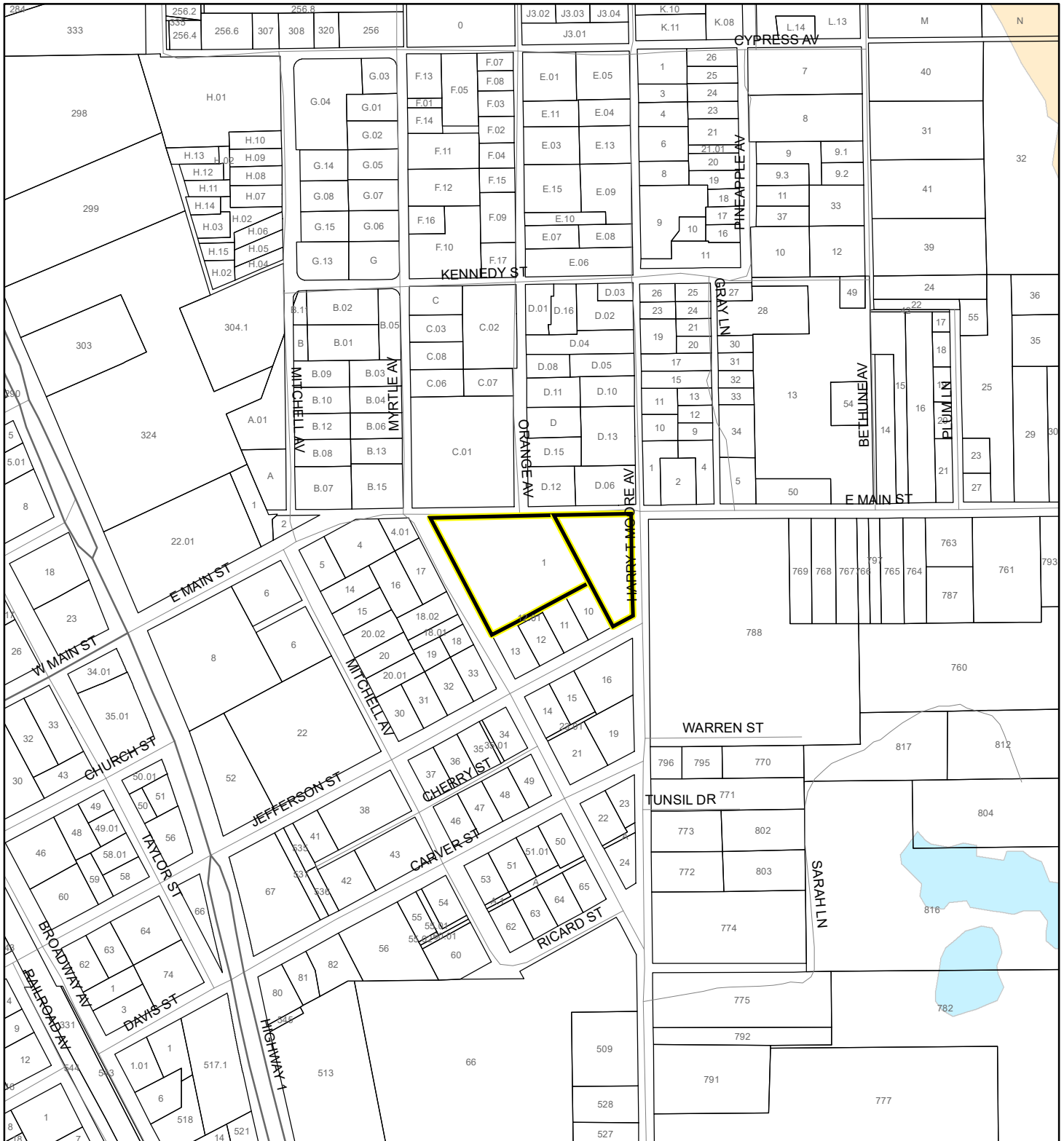
 Subject Property

 Parcels

NWI WETLANDS MAP

2354 TALMADGE DRIVE, LLC

20Z00023



1:4,800 or 1 inch = 400 feet

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Produced by BoCC - GIS Date: 8/11/2020

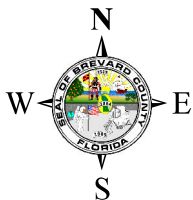
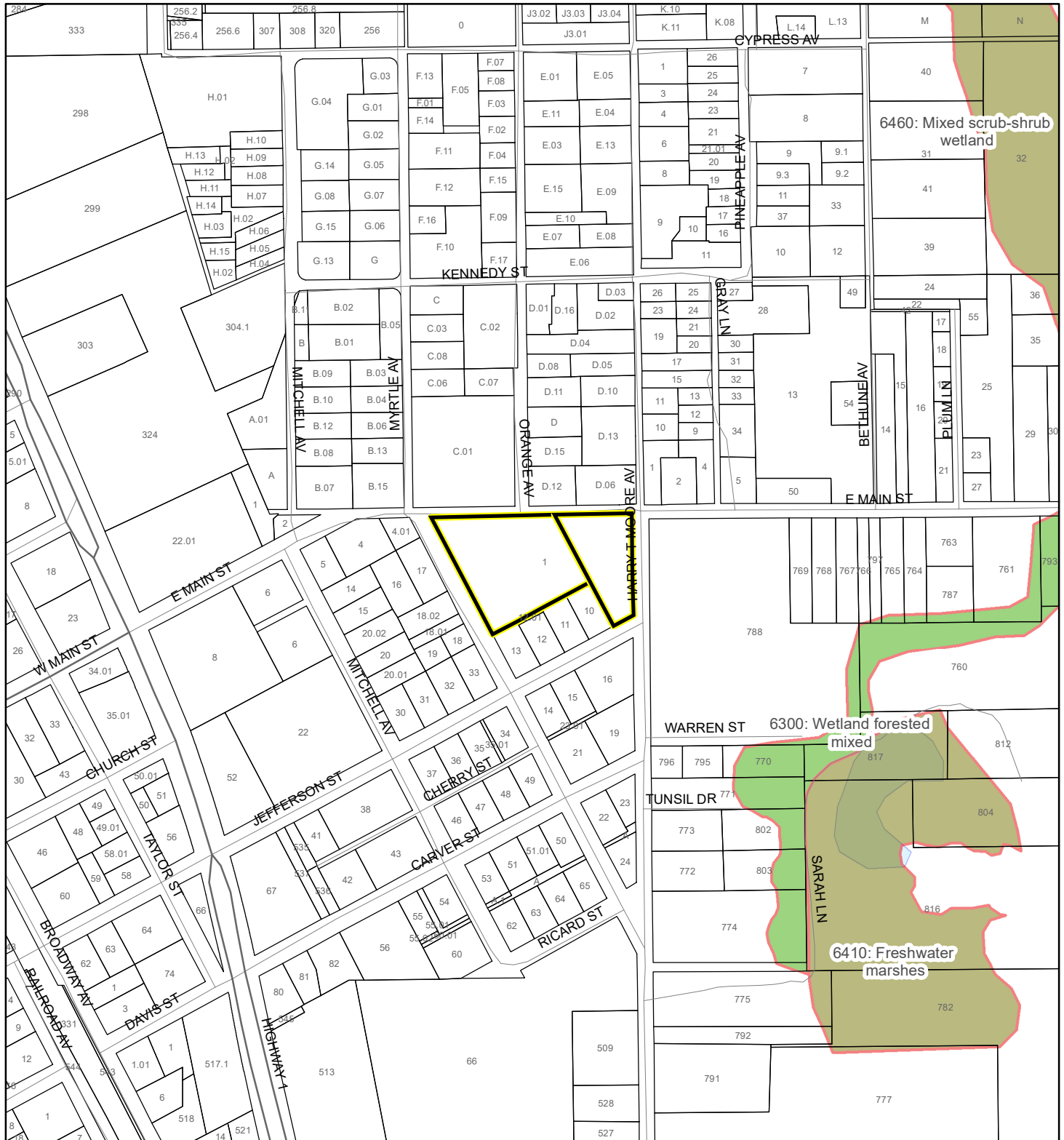
National Wetlands Inventory (NWI)

- | | |
|-----------------------------------|-----------------|
| Estuarine and Marine Deepwater | Freshwater Pond |
| Estuarine and Marine Wetland | Lake |
| Freshwater Emergent Wetland | Other |
| Freshwater Forested/Shrub Wetland | Riverine |
| Subject Property | |
| Parcels | |

SJRWMD FLUCCS WETLANDS - 6000 Series MAP

2354 TALMADGE DRIVE, LLC

20Z00023



1:4,800 or 1 inch = 400 feet

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Produced by BoCC - GIS Date: 8/11/2020

SJRWMD FLUCCS WETLANDS

- Wetland Hardwood Forests - Series 6100
- Wetland Coniferous Forest - Series 6200
- Wetland Forested Mixed - Series 6300
- Vegetated Non-Forested Wetlands - Series 6400
- Non-Vegetated Wetland - Series 6500

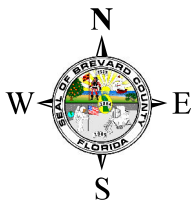
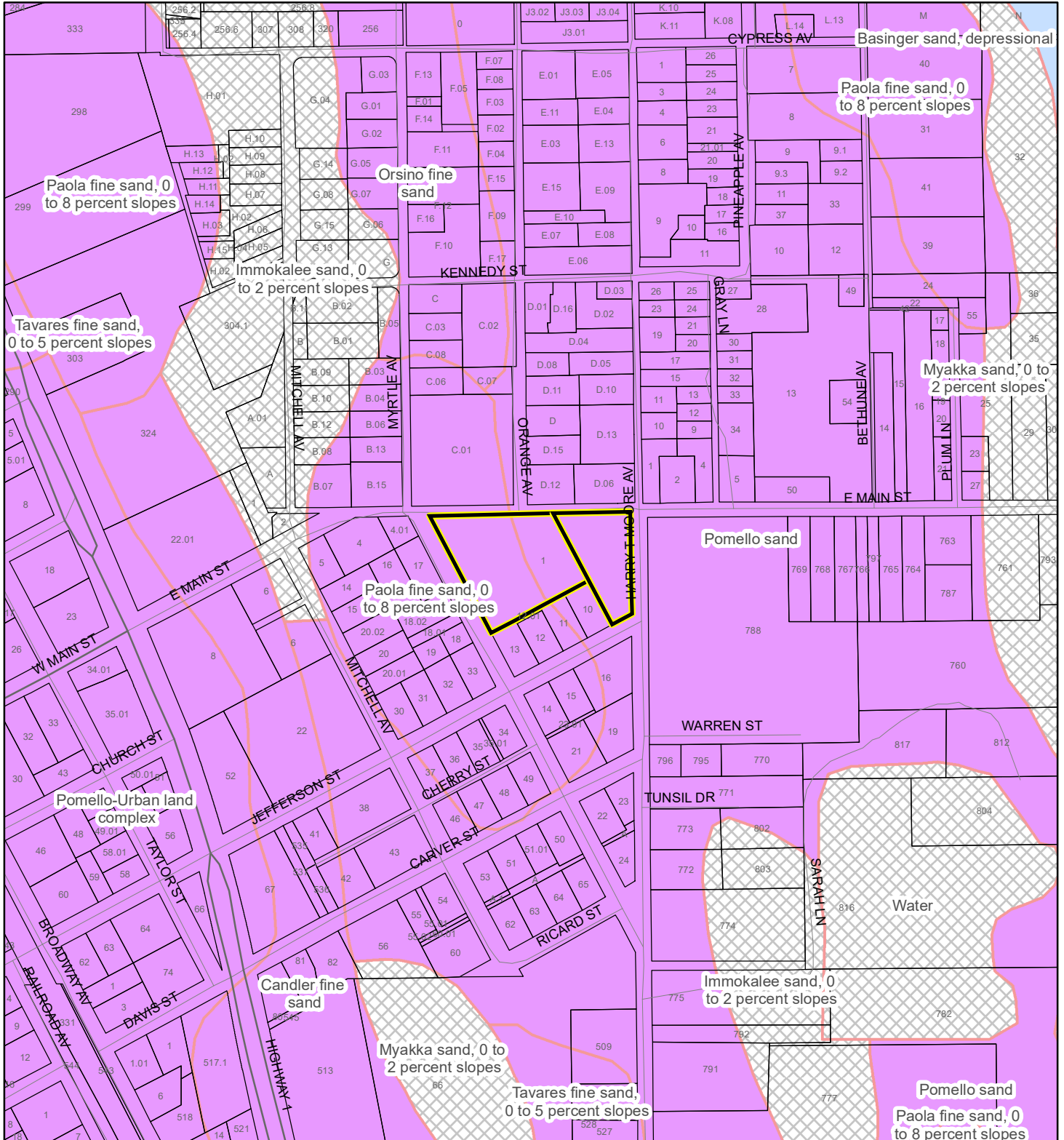
Subject Property

Parcels

USDA SCSSS SOILS MAP

2354 TALMADGE DRIVE, LLC

20Z00023



1:4,800 or 1 inch = 400 feet

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Produced by BoCC - GIS Date: 8/11/2020

USDA SCSSS Soils

- Aquifer and Hydric
- Aquifer
- Hydric
- None

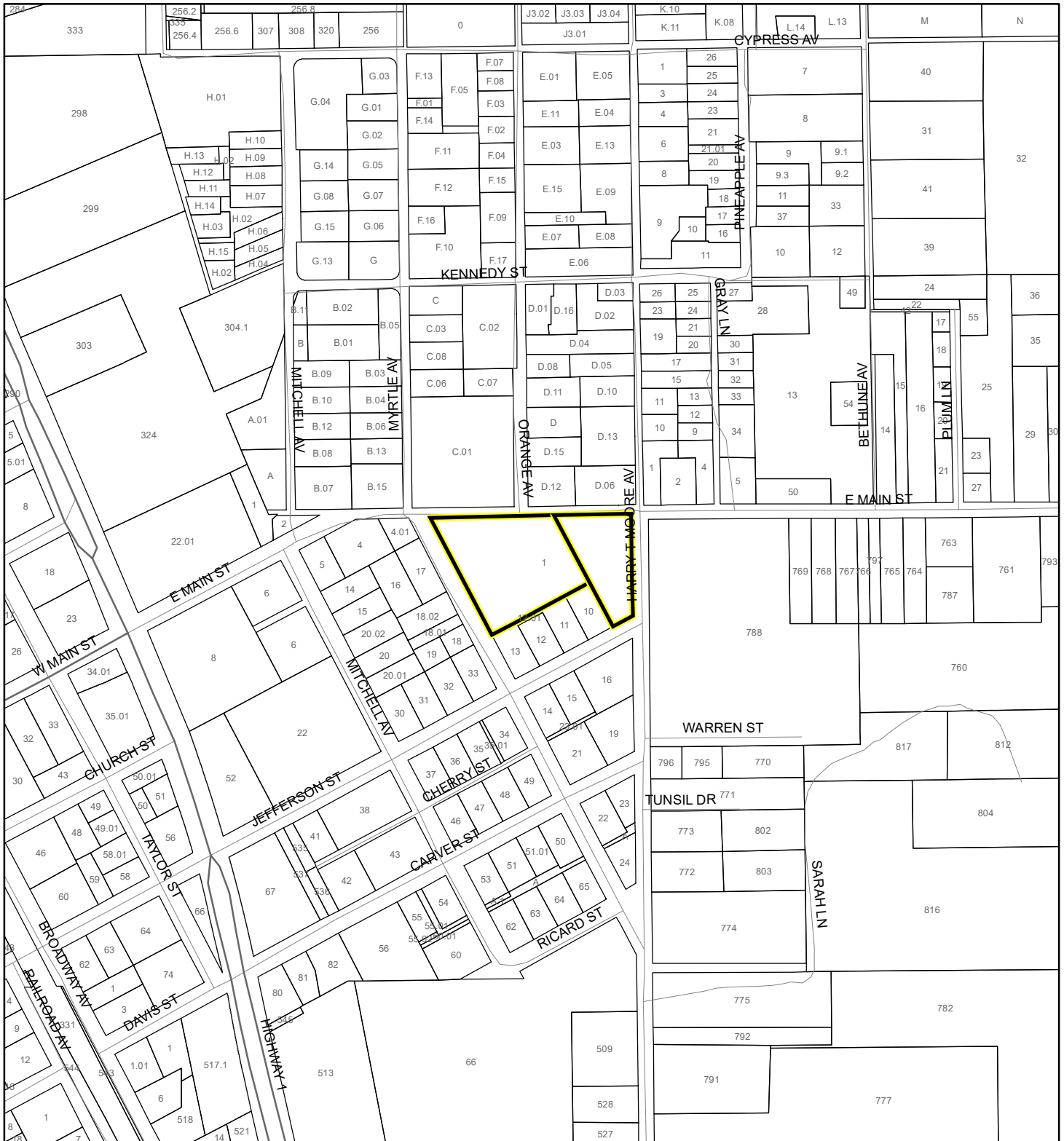
Subject Property

Parcels

FEMA FLOOD ZONES MAP

2354 TALMADGE DRIVE, LLC

20Z00023



1:4,800 or 1 inch = 400 feet

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Produced by BoCC - GIS Date: 8/11/2020

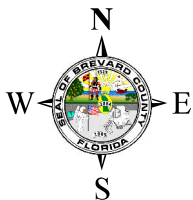
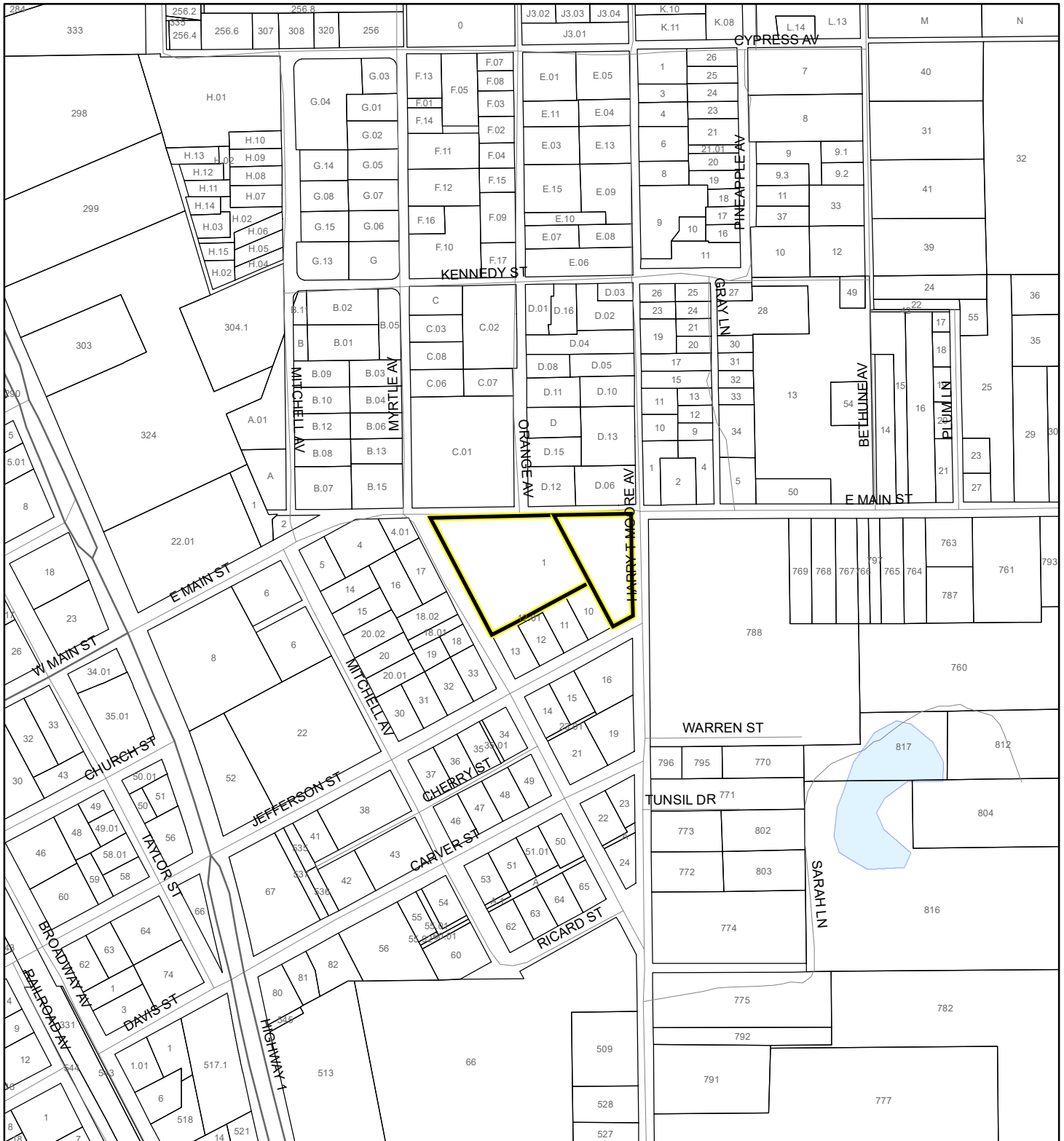
FEMA Flood Zones

- | | | |
|---|------------|----------------------|
| A | AO | X |
| AE | Open Water | X Protected By Levee |
| AH | VE | |
| 0.2 Percent Annual Chance Flood Hazard | | |
| 0.2 Percent Annual Chance Flood Hazard Contained in Channel | | |
| Subject Property | | Parcels |

COASTAL HIGH HAZARD AREA MAP

2354 TALMADGE DRIVE, LLC

20Z00023



1:4,800 or 1 inch = 400 feet

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Produced by BoCC - GIS Date: 8/11/2020

 Subject Property

 Parcels

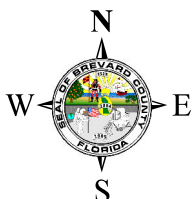
Coastal High Hazard Area

 SurgeZoneCat1

INDIAN RIVER LAGOON SEPTIC OVERLAY MAP

2354 TALMADGE DRIVE, LLC

20Z00023



1:4,800 or 1 inch = 400 feet

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Produced by BoCC - GIS Date: 8/11/2020

 Subject Property

 Parcels

Septic Overlay

 40 Meters

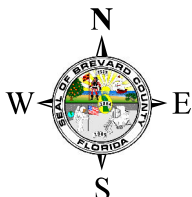
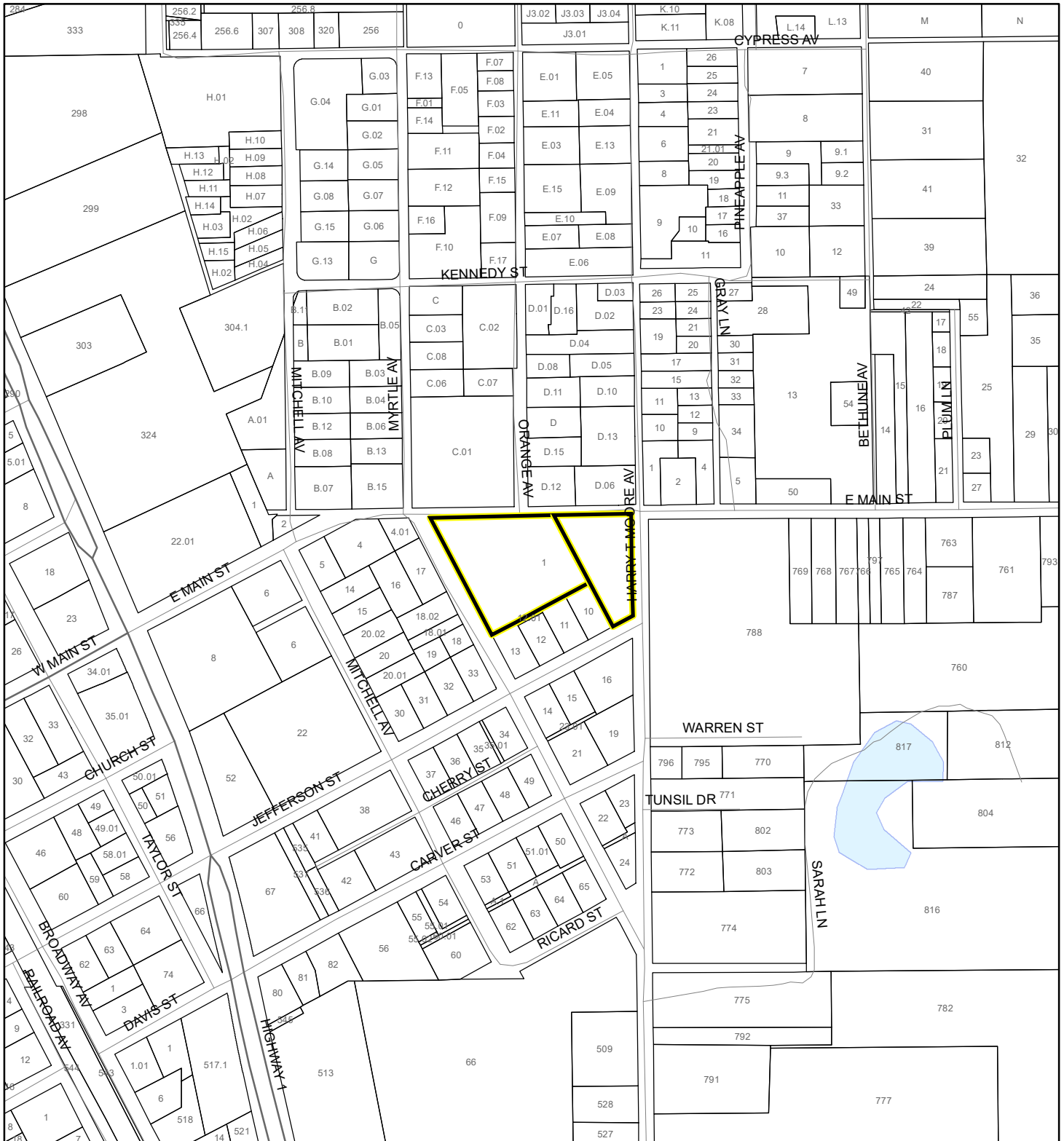
 60 Meters

 All Distances

EAGLE NESTS MAP

2354 TALMADGE DRIVE, LLC

20Z00023



1:4,800 or 1 inch = 400 feet

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Produced by BoCC - GIS Date: 8/11/2020

 Subject Property

 Parcels

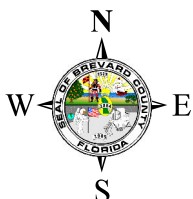
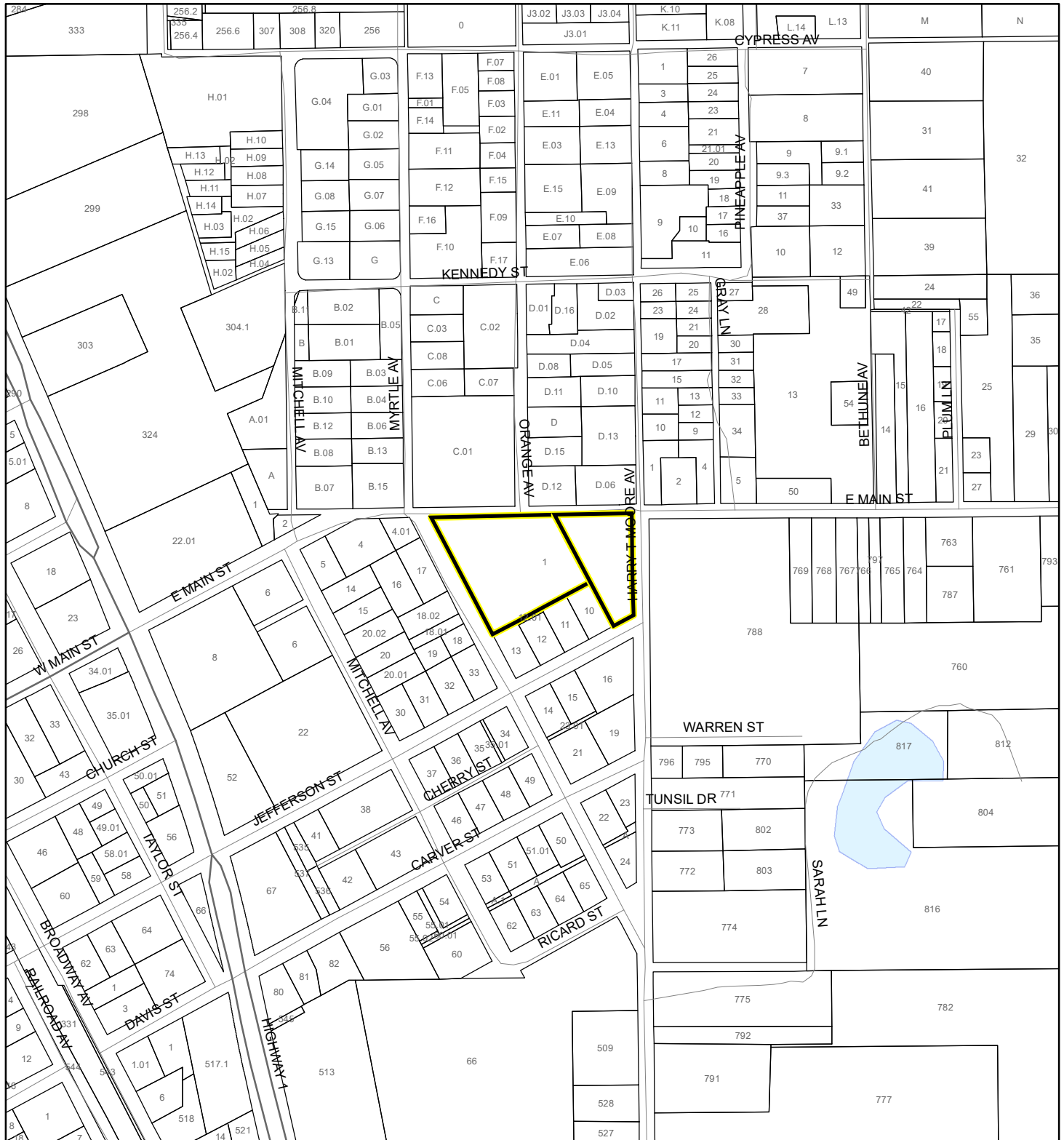


Eagle Nests
FWS 2010

SCRUB JAY OCCUPANCY MAP

2354 TALMADGE DRIVE, LLC




20Z00023



1:4,800 or 1 inch = 400 feet

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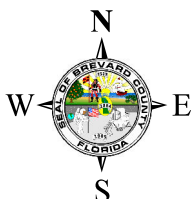
Produced by BoCC - GIS Date: 8/11/2020

-  Subject Property
-  Parcels
-  Scrub Jay Occupancy

SJRWMD FLUCCS UPLAND FORESTS - 4000 Series MAP

2354 TALMADGE DRIVE, LLC

20Z00023



1:4,800 or 1 inch = 400 feet

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Produced by BoCC - GIS Date: 8/11/2020

SJRWMD FLUCCS Upland Forests

- Upland Coniferous Forest - 4100 Series
- Upland Hardwood Forest - 4200 Series
- Upland Mixed Forest - 4300 Series
- Tree Plantations - 4400 Series

Subject Property

Parcels

School Board of Brevard County

2700 Judge Fran Jamieson Way • Viera, FL 32940-6699
Mark W. Mullins, Ed.D., Superintendent

August 6, 2020

Mr. Paul Body
Planning & Development Department
Brevard County Board of County Commissioners
2726 Judge Fran Jamieson Way
Viera, Florida 32940

**RE: Proposed Main Street & Harry T. Moore Avenue Development
School Impact Analysis – Capacity Determination CD-2020-08**

Dear Mr. Body,

We received a completed *School Facility Planning & Concurrency Application* for the referenced development. The subject property is Tax Account 2103831 (Parcel ID: 21-35-17-53-*1) containing approximately 3.04 acres in District 1, Brevard County, Florida. The proposed single-family development includes 9 homes. The School Impact Analysis of this proposed development has been undertaken and the following information is provided for your use.

The calculations used to analyze the prospective student impact are consistent with the methodology outlined in Section 13.2 of the *Interlocal Agreement for Public School Facility Planning & School Concurrency (ILA-2014)*. The following capacity analysis is performed using capacities/projected students as shown in years 2019-20 to 2024-25 of the *Brevard County Public Schools Financially Feasible Plan for School Years 2019-2020 to 2024-25* which is attached for reference.

Single-Family Homes		9	
Students Generated	Student Generation Rates	Calculated Students Generated	Rounded Number of Students
Elementary	0.28	2.52	3
Middle	0.08	0.72	1
High	0.16	1.44	1
Total	0.52		5

Planning & Project Management
Facilities Services
Phone: (321) 633-1000 x11418 • FAX: (321) 633-4646



An Equal Opportunity Employer

**FISH Capacity (including relocatables) from the
Financially Feasible Plan Data and Analysis for School Years 2019-20 to 2024-25**

School	2020-21	2021-22	2022-23	2023-24	2024-25
Mims	725	725	725	725	725
Madison	713	713	713	713	713
Astronaut	1,416	1,416	1,416	1,416	1,416

Projected Student Membership

School	2020-21	2021-22	2022-23	2023-24	2024-25
Mims	183	500	523	538	550
Madison	518	191	171	180	527
Astronaut	1,111	1,133	1,113	1,105	1,091

Students Generated by Previously Issued SCADL Reservations

School	2020-21	2021-22	2022-23	2023-24	2024-25
Mims	6	6	6	6	6
Madison	20	20	20	20	20
Astronaut	76	90	102	102	102

**Cumulative Students Generated by
Proposed Development**

School	2020-21	2021-22	2022-23	2023-24	2024-25
Mims	-	1	2	3	3
Madison	-	0	0	1	1
Astronaut	-	0	1	1	1

**Total Projected Student Membership (includes
Cumulative Impact of Proposed Development)**

School	2020-21	2021-22	2022-23	2023-24	2024-25
Mims	189	507	531	547	559
Madison	538	511	491	501	518
Astronaut	1,187	1,243	1,246	1,208	1,191

**Projected Available Capacity =
FISH Capacity - Total Projected Student Membership**

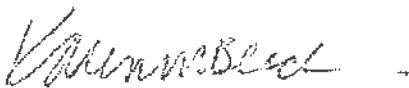
School	2020-21	2021-22	2022-23	2023-24	2024-25
Mims	236	218	191	178	166
Madison	205	229	249	212	195
Astronaut	259	203	200	238	252

At this time Mims Elementary School, Madison Middle School and Astronaut High School are projected to have enough capacity for the total of projected and potential students from the Main Street & Harry T. Moore Avenue development

This is a non-binding review; a *Concurrency Determination* must be performed by the School District prior to a Final Development Order and the issuance of a Concurrency Evaluation Finding of Nondeficiency by the Local Government

We appreciate the opportunity to review this proposed project. Please let us know if you require additional information.

Sincerely,



Karen M. Black, AICP Candidate
Manager – Facilities Planning & Intergovernmental Coordination
Planning & Project Management, Facilities Services

Enclosure: *Brevard County Public Schools Financially Feasible Plan for School Years 2019-2020 to 2024-25*

Copy: Susan Hann, Assistant Superintendent of Facility Services
File CD-2020-08

David G. Lindemann, AICP, Director of Planning & Project Management,
Facilities Services
File CD-2020-08

Brevard County Public Schools
Financially Feasible Plan To Maintain Utilization Rates Lower than the
Data and Analysis for School Years 2019-20 to 2024-25

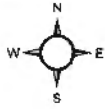
Level of Service

**Brevard
Public
Schools**

Summary	2019-20	2020-21	2021-22	2022-23	2023-24	2024-25
Highest Utilization Elementary Schools:	104%	99%	100%	99%	100%	100%
Highest Utilization Middle Schools:	90%	93%	93%	92%	90%	94%
Highest Utilization Jr / Sr High Schools:	85%	85%	86%	88%	89%	93%
Highest Utilization High Schools:	95%	98%	99%	96%	97%	100%

School	Type	Grades	Utilization Factor	School Year 2019-20			School Year 2020-21			School Year 2021-22			School Year 2022-23			School Year 2023-24			School Year 2024-25		
				FISH Capacity	10/11/19 Member-ship	Total Capacity Utilization	Future FISH Capacity	Student Projection	Total Capacity Utilization	Future FISH Capacity	Student Projection	Total Capacity Utilization	Future FISH Capacity	Student Projection	Total Capacity Utilization	Future FISH Capacity	Student Projection	Total Capacity Utilization	Future FISH Capacity	Student Projection	Total Capacity Utilization
Elementary School Concurrency Service Areas																					
New Viera	Elementary	K-6	100%	-	-	-	970	400	-	970	440	-	970	479	-	970	516	-	970	547	-
Allen	Elementary	PK-6	100%	751	733	-	751	741	-	773	760	-	795	786	-	817	815	-	839	835	-
Andersen	Elementary	K-6	100%	884	718	81%	884	667	-	884	649	-	884	663	-	884	657	-	884	644	-
Apollo	Elementary	K-6	100%	902	836	-	902	876	-	924	920	-	946	936	-	968	955	-	990	989	-
Atlantis	Elementary	PK-6	100%	739	670	-	739	691	-	739	720	-	739	722	-	739	733	-	739	735	-
Audubon	Elementary	PK-6	100%	761	533	-	761	489	-	761	477	-	761	475	-	761	465	-	761	456	-
Cambridge	Elementary	PK-6	100%	765	632	-	765	601	-	765	596	-	765	591	-	765	597	-	765	598	-
Cape View	Elementary	PK-6	100%	570	360	-	570	343	-	570	334	-	570	347	-	570	344	-	570	349	-
Carroll	Elementary	K-6	100%	751	670	-	751	710	-	751	695	-	751	707	-	751	727	-	751	771	-
Challenger 7	Elementary	PK-6	100%	573	543	-	573	544	-	573	550	-	573	566	-	595	576	-	595	586	-
Columbia	Elementary	PK-6	100%	751	432	-	751	407	-	751	430	-	751	453	-	751	466	-	751	476	-
Coquina	Elementary	K-6	100%	711	520	-	711	564	-	711	571	-	711	576	-	711	581	-	711	580	-
Cree	Elementary	PK-6	100%	1,154	825	-	1,154	843	-	1,154	829	-	1,154	831	-	1,154	813	-	1,154	815	-
Croton	Elementary	PK-6	100%	795	523	-	795	494	-	795	505	-	795	519	-	795	624	-	795	632	-
Discovery	Elementary	PK-6	100%	980	646	-	982	639	-	982	641	-	982	652	-	982	652	-	982	660	-
Endeavour	Elementary	PK-6	100%	990	652	-	990	640	-	990	617	-	990	602	-	990	585	-	990	547	-
Enterprise	Elementary	K-6	100%	729	607	-	729	598	-	729	611	-	729	609	-	729	614	-	729	615	-
Fairglen	Elementary	PK-6	100%	789	667	-	789	625	-	789	655	-	789	675	-	789	671	-	789	694	-
Gemini	Elementary	K-6	100%	711	475	-	711	502	-	711	491	-	711	488	-	711	497	-	711	510	-
Golfview	Elementary	PK-6	100%	777	508	-	777	472	-	777	470	-	777	548	-	777	542	-	777	554	-
Harbor City	Elementary	PK-6	100%	629	366	-	629	361	-	629	378	-	629	403	-	629	405	-	629	398	-
Holland	Elementary	PK-6	100%	605	502	-	605	502	-	605	501	-	605	495	-	605	484	-	605	462	-
Imperial Estates	Elementary	K-6	100%	729	629	-	729	610	-	729	604	-	729	618	-	729	625	-	729	638	-
Indiantonic	Elementary	K-6	100%	798	732	-	798	729	-	798	714	-	798	709	-	798	702	-	798	694	87%
Jupiter	Elementary	PK-6	100%	930	722	-	930	699	-	930	705	-	930	721	70%	930	725	-	930	732	-
Lockmar	Elementary	PK-6	100%	892	692	-	892	672	-	892	655	-	892	652	-	892	598	-	892	589	-
Longleaf	Elementary	PK-6	100%	790	646	82%	790	582	-	790	584	-	790	576	-	790	581	-	790	581	-
Manatee	Elementary	K-6	100%	998	995	-	998	895	-	998	847	-	998	807	51%	998	790	-	998	878	-
McAuliffe	Elementary	PK-6	100%	918	740	-	918	719	-	918	731	-	918	709	-	918	710	-	918	698	-
Meadowlane Intermediate	Elementary	3-6	100%	1,114	836	-	1,114	834	75%	1,114	910	-	1,114	966	-	1,136	1,070	-	1,180	1,165	-
Meadowlane Primary	Elementary	K-6	100%	824	680	-	824	739	-	824	754	-	824	767	-	846	812	-	868	850	-
Mila	Elementary	PK-6	100%	707	463	-	707	469	-	707	488	-	707	487	-	707	500	-	707	509	-
Mims	Elementary	PK-6	100%	725	452	-	725	483	-	725	500	-	725	523	-	725	538	-	725	550	-
Oak Park	Elementary	PK-6	100%	968	642	-	968	637	-	968	602	-	968	586	-	968	561	-	968	521	-
Ocean Breeze	Elementary	PK-6	100%	654	559	-	654	586	-	654	578	-	654	585	-	654	595	-	654	600	-
Palm Bay	Elementary	PK-6	100%	983	641	-	983	627	-	983	644	-	983	658	-	983	741	-	983	766	-
Pinewood	Elementary	PK-6	100%	569	496	-	569	501	-	569	517	-	569	533	-	569	546	-	569	552	-
Port Malabar	Elementary	PK-6	100%	852	713	-	852	680	-	852	684	-	852	696	-	852	777	-	852	802	-
Quest	Elementary	PK-6	100%	1,152	1,196	-	1,152	969	-	1,152	960	-	1,152	945	81%	1,152	1,021	-	1,152	1,037	-
Rivers	Elementary	PK-6	100%	777	699	-	777	707	-	821	735	-	931	785	-	1,019	1,014	-	1,085	1,000	-
Roosevelt	Elementary	K-6	100%	599	345	-	599	317	-	599	311	-	599	287	-	599	275	-	599	252	-
Sabal	Elementary	PK-6	100%	785	563	-	785	557	-	785	560	-	785	584	-	785	592	-	785	591	75%
Saturn	Elementary	PK-6	100%	976	845	-	976	845	-	976	856	-	976	857	-	976	905	-	976	976	-
Sea Park	Elementary	PK-6	100%	461	338	-	461	308	-	461	319	-	461	341	-	461	342	-	461	317	-
Shenwood	Elementary	PK-6	100%	609	461	-	609	438	-	609	428	-	609	421	-	609	427	-	609	435	-
South Lake	Elementary	K-6	100%	481	351	-	481	372	-	481	372	-	481	372	71%	481	372	-	481	372	-
Sunrise	Elementary	PK-6	100%	913	798	-	913	746	-	913	773	-	913	791	-	913	817	-	913	835	-
Suntree	Elementary	K-6	100%	755	675	-	755	619	-	755	586	-	755	582	-	755	596	-	755	607	-
Surfside	Elementary	K-6	100%	541	461	-	541	460	-	541	442	-	541	450	-	541	436	-	541	424	-
Tropical	Elementary	K-6	100%	910	804	-	910	803	-	910	792	-	910	757	-	910	745	-	910	708	-
Turner	Elementary	PK-6	100%	874	595	-	874	577	-	874	558	-	874	538	-	874	528	-	874	543	-
University Park	Elementary	PK-6	100%	811	479	-	811	454	-	811	553	-	811	636	-	811	644	-	811	661	-
Westside	Elementary	K-6	100%	857	773	-	857	734	-	857	686	-	857	702	-	857	709	-	857	750	-
Williams	Elementary	PK-6	100%	715	574	-	715	499	-	715	501	-	715	494	-	715	480	-	715	474	-
Elementary Totals				41,984	33,013		42,866	32,576		42,954	32,793		43,108	33,238		43,306	34,093		43,504	34,560	

Main Street & Harry T. Moore Ave. Development Location Map



MIMS

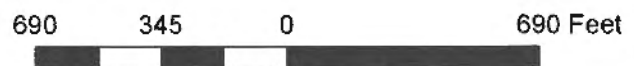
Mims
Elementary
School

Main Street &
Harry T. Moore Ave.
Development
9 Units



Schools Affected by Development:
Mims Elementary
Madison Middle School
Astronaut High School

Drawn By:
Blake Stinson
08/06/2020
Facility Services



Prepared by: 2354 Talmadge Drive, LLC
Address: 2050 White Sand Drive, Titusville, FL 32780

BINDING DEVELOPMENT PLAN

THIS AGREEMENT, entered into this 6th day of August, 2020 between the BOARD OF COUNTY COMMISSIONERS OF BREVARD COUNTY, FLORIDA, a political subdivision of the State of Florida (hereinafter referred to as "County") and 2354 Talmadge Drive, LLC, a Florida corporation (hereinafter referred to as "Developer/Owner").

RECITALS

WHEREAS, Developer/Owner owns property (hereinafter referred to as the "Property") in Brevard County, Florida, as more particularly described in Exhibit "A" attached hereto and incorporated herein by this reference; and

WHEREAS, Developer/Owner has requested the RU-1-9 zoning classification(s) and desires to develop the Property as Be limited to a density of 4 units per acre and pursuant to the Brevard County Code, Section 62-1157; and

WHEREAS, as part of its plan for development of the Property, Developer/Owner wishes to mitigate negative impact on abutting land owners and affected facilities or services; and

WHEREAS, the County is authorized to regulate development of the Property.

NOW, THEREFORE, the parties agree as follows:

1. The County shall not be required or obligated in any way to construct or maintain or participate in any way in the construction or maintenance of the improvements. It is the intent of the parties that the Developer/Owner, its grantees, successors or assigns in interest or some other association and/or assigns satisfactory to the County shall be responsible for the maintenance of any improvements.

Rev. 11/25/2019

2. Developer/Owner shall provide a 0 foot buffer on ~~the~~ no portion of the Property.
3. The Developer/Owner shall limit density to 4 units per acre and may be further restricted by any changes to the Comprehensive Plan or the Land Development Regulations.
4. The Developer/Owner shall limit ingress and egress to
Not applicable
5. Developer/Owner shall comply with all regulations and ordinances of Brevard County, Florida. This Agreement constitutes Developer's/Owner's agreement to meet additional standards or restrictions in developing the Property. This agreement provides no vested rights against changes to the Comprehensive Plan or land development regulations as they may apply to this Property.
6. Developer/Owner, upon execution of this Agreement, shall pay to the Clerk of Court the cost of recording this Agreement in the Public Records of Brevard County, Florida.
7. This Agreement shall be binding and shall inure to the benefit of the successors or assigns of the parties and shall run with the subject Property unless or until rezoned and be binding upon any person, firm or corporation who may become the successor in interest directly or indirectly to the subject Property, and be subject to the above referenced conditions as approved by the Board of County Commissioners on to be determined. In the event the subject Property is annexed into a municipality and rezoned, this Agreement shall be null and void.
8. Violation of this Agreement will also constitute a violation of the Zoning Classification and this Agreement may be enforced by Sections 1.7 and 62-5, Code of Ordinances of Brevard County, Florida, as may be amended.
9. Conditions precedent. All mandatory conditions set forth in this Agreement mitigate the potential for incompatibility and must be satisfied before Developer/Owner may implement the approved use(s), unless stated otherwise. The failure to timely comply with any mandatory condition is a violation of this Agreement, constitutes a violation of the Zoning Classification and is subject to enforcement action as described in Paragraph 8 above.

IN WITNESS THEREOF, the parties hereto have caused these presents to be signed all as of the date and year first written above.

ATTEST:

BOARD OF COUNTY COMMISSIONERS
OF BREVARD COUNTY, FLORIDA
2725 Judge Fran Jamieson Way
Viera, FL 32940

Scott Ellis, Clerk
(SEAL)

Bryan Lober, Chair
As approved by the Board on _____

(Please note: You must have two witnesses and a notary for each signature required. The notary may serve as one witness.)

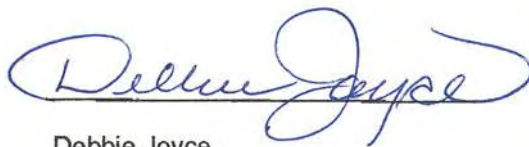
WITNESSES:

(INSERT BUSINESS NAME or INDIVIDUAL NAME(s))
as DEVELOPER/OWNER

2354 Talmadge Drive, LLC

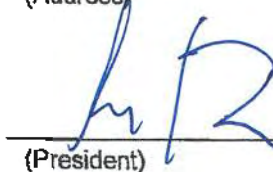
(Witness Name typed or printed)

2050 White Sand Drive, Titusville, FL 32780
(Address)



Debbie Joyce

(Witness Name typed or printed)



(President)

Aldon Bookhardt


(Name typed, printed or stamped)

STATE OF Florida §

COUNTY OF Brevard §

The foregoing instrument was acknowledged before me this 6th day of
, 20 20, by Aldon Bookhardt, President of Aldon Bookhardt Refrig, who is personally
known to me or who has produced FL Driver's License as identification.

My commission expires
SEAL
Commission No.:



Notary Public

(Name typed, printed or stamped)



Audree Horton
NOTARY PUBLIC
STATE OF FLORIDA
Comm# GG317458
Expires 3/28/2023

JOINDER IN BINDING DEVELOPMENT PLAN BY MORTGAGEE CORPORATION

KNOW ALL MEN BY THESE PRESENTS, that the undersigned, being the authorized agent and signatory

for the owner and holder of that certain Mortgage dated OCTOBER 11, 2019, given by

2354 TALMADGE DRIVE, LLC

as mortgagor, in favor of the undersigned,

JACQUELINE BOYCE MELLOR, TRUSTEE OF THE
JACQUELINE BOYCE MELLOR LIVING TRUST, DTD 9/5/18

as mortgagee, recorded in Official Records Book 8563

Page 749, of the Public Records of Brevard County, Florida, and encumbering lands described in said

Mortgage, does hereby join in the foregoing Binding Development Plan for the purpose of consenting to the

change of property use and development requirements as set forth therein.

MORTGAGEE ^{NAME} ~~CORPORATION NAME~~ AND ADDRESS

JACQUELINE BOYCE MELLOR LIVING TRUST, DTD 9/5/18

Mortgagee Corporation Name

P.O. BOX 152

EDGEWATER

FL 32132

Street

City

State

Zip Code

*Authorized Agent Signature

JACQUELINE BOYCE MELLOR, TRUSTEE
Authorized Agent Printed Name and Title

*Note: All others besides CEO or President require attachment of original corporate resolution of authorization to sign documents of this type.

AFFIX CORPORATE SEAL

WITNESSES

Signature

Print Name

Signature

Print Name

STATE OF FLORIDA

COUNTY OF VOLUSIA

The foregoing instrument was acknowledged before me this 6th day of AUGUST, 20 20,
by Jacqueline Boyce Mellor, Trustee, who is personally known to me or who has produced
_____ as identification.

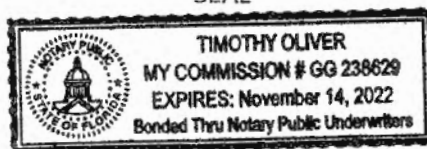
Tim Oliver

Notary Public Signature

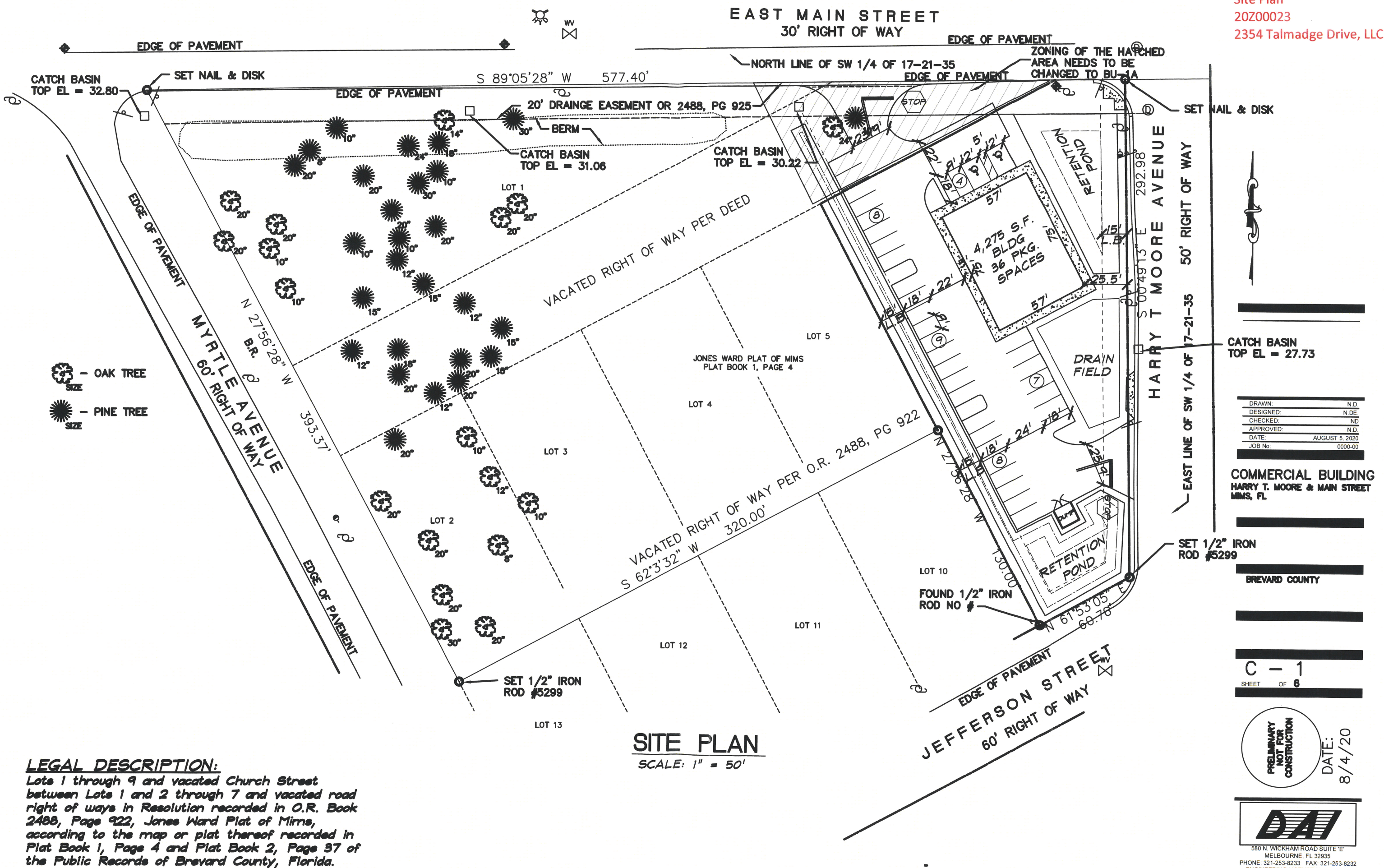
TIMOTHY OLIVER

Name Printed

SEAL



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Agenda Report

2725 Judge Fran Jamieson
Way
Viera, FL 32940

Public Hearing

H.5.

10/5/2020

Subject:

Public Hearing, Re: Extension of Temporary Moratorium on New Applications of Biosolids to Lands within Brevard County.

Fiscal Impact:

FY 20/21: Advertising Costs

Dept/Office:

Natural Resources Management

Requested Action:

It is requested that the Local Planning Agency conduct a public hearing on the extension of the 180-day moratorium on any new applications of biosolids to lands within Brevard County.

Summary Explanation and Background:

On October 8, 2019, in regular session, the Brevard County Commission approved Ordinance 19-20, a 180-day moratorium on any new permits that would expand the application of biosolids to lands in Brevard County. The Board directed staff to sample potential causes or contributing factors of lake pollution and report back to the Board in six months for re-evaluation.

On March 24, 2020, in regular session, the Board of County Commissioners voted in favor of holding a public hearing for the extension of the temporary biosolids moratorium. Ordinance 20-05, the 180-day extension of the temporary biosolids moratorium was approved by the Board of County Commissioners on April 7, 2020, in regular session.

Biosolids legislation in Senator Mayfield's Clean Waterways Act (Senate Bill 712) was approved by the Legislature on March 12, 2020, and approved by Governor DeSantis on June 30, 2020. This legislation allows for the extension of county biosolids moratoria adopted prior to November 1, 2019. The Department of Environmental Protection is proceeding with rule revision and staff are closely monitoring the progress for revisions that consider the latest research in phosphorus pollution.

The moratorium is in response to a blue-green cyanobacteria, *Dolichospermum circinale*, bloom in Lake Washington in the summer of 2019, which generated questions about the safety of a primary drinking water supply for Brevard County. Toxin levels measured during the 2019 bloom were low and did not indicate human health concerns. Based on available data at that time, likely contributors were nutrients from the land application of biosolids and/or commercial fertilizer on agricultural lands upstream and west of the lake, state water management projects upstream of the lake, or commercial/industrial and residential development and septic systems east of the lake.

County staff collaborated with the University of Florida, United States Department of Agriculture's Natural Resources Conservation Service, Brevard Soil and Water Conservation District, Florida Department of Environmental Protection, and St. Johns River Water Management District to develop a sampling plan. A multi-agency team collaborated to collect 50 soil samples from the ranch while Applied Ecology, Inc., with supervision from county and University of Florida staff, collected 11 water samples, and 3 grass tissue samples. Samples were tested for multiple forms of nitrogen and phosphorus, 7 metals, 24 polyfluoroalkyl substances (PFAS), and 58 pharmaceuticals, personal care products and other contaminants of emerging concern at Deer Park Ranch, upstream of and within Lake Washington, and in residential drainage canals entering Lake Washington.

No manmade chemicals suggestive of human health concerns were found leaving Deer Park Ranch. While a few pharmaceuticals were found in plant tissue samples on the ranch, these were not found in water leaving the site. Metals leaving the site were low concentrations, below drinking water threshold values, assuming typical hardness values for local surface waters. The only contaminants of emerging concern found leaving the site were PFAS compounds. Most of the PFAS level results were below laboratory detection limits. None of the PFOA+PFOS (perfluorooctanoic acid and perfluorooctanesulfonic acid) concentration results exceeded the lifetime drinking water health-advisory of 70 ng/L nor the state's ecological surface water screening levels for PFOA or PFOS. Canals draining developed areas east of the lake had higher PFAS concentrations than waters leaving the ranch. One roadside canal sample collected east of the lake contained PFOS levels higher than a recently proposed, still provisional, state human health surface water screening level. (See attachment: Water Sampling Report.)

The soil and water samples both indicate that phosphorus from state-permitted land application of biosolids to cattle pastures is leaving Deer Park Ranch and entering the St. Johns River during periods of heavy rain. Soil data indicate that a long history of land applying biosolids on the ranch has exceeded the capacity of most pasture soils to hold phosphorus. The resultant release of excess phosphorus contributes to alteration of the natural nitrogen to phosphorus ratios in local surface waters and an associated increased risk of harmful algal blooms in Lake Washington. (See Attachments: Water Sampling Report and Soil Sampling Results).

Clerk to the Board Instructions:

None

ORDINANCE NO. 2020- ____

AN ORDINANCE OF THE BOARD OF COUNTY COMMISSIONERS OF BREVARD COUNTY, FLORIDA AUTHORIZING AN EXTENSION OF TEMPORARY COUNTY-WIDE MORATORIUM FOR 180 DAYS FROM THE EFFECTIVE DATE; PROHIBITING THE LAND APPLICATION OF CLASS B BIOSOLIDS EXCEPT EXISTING PERMITTED ACTIVITIES; PROVIDING FOR EXHAUSTION OF ADMINISTRATIVE REMEDIES; AND PROVIDING FOR SEVERABILITY, REPEAL OF CONFLICTING PROVISIONS, RESOLUTION OF CONFLICTING PROVISIONS; AREA ENCOMPASSED AND AN EFFECTIVE DATE.

WHEREAS, as provided in Article VIII, Section 1 of the Florida Constitution and Chapter 125, Florida Statutes, counties have broad home rule powers to enact ordinances, not inconsistent with general or special law, for the purpose of protecting the public health, safety and welfare of the residents of the county; and

WHEREAS, Class B biosolids are solid, semi-solid, or liquid materials resulting from the treatment of domestic waste from sewage treatment facilities that contain nutrients such as phosphorus and nitrogen; and

WHEREAS, Elevated levels of phosphorus and nitrogen have been a point of concern for estuaries and watersheds across the state, as correlative connections have been observed between elevated levels of phosphorus and nitrogen, algal blooms, and the growth of noxious vegetation; and

WHEREAS, the land application of biosolids has been identified as a potential explanation for toxic algae blooms that occurred in Blue Cypress Lake in 2018 and Lake Washington in 2019¹; and

WHEREAS, Lake Washington provides water supply for the City of Melbourne's potable water utility that supplies drinking water to approximately 170,000 residents in

¹ St. Johns Water Management District Update to the Biosolids Technical Advisory Committee, January 23, 2018. Patterns in Surface Water Phosphorus Concentrations and Biosolids Utilization in the Upper St. Johns River: January 2019 Update.

Melbourne, West Melbourne, Palm Shores, Satellite Beach, Indian Harbour Beach, Indialantic, Melbourne Beach and portions of unincorporated Brevard County; and

WHEREAS, preliminary analysis of available ambient water quality data by St. Johns River Water Management District indicates a potential, but not conclusive, relationship between the cumulative amount of phosphorus applied to land in biosolids and increasing phosphorus concentrations in downstream waters¹; and

WHEREAS, preliminary analysis by St Johns River Water Management District of available ambient water quality data for watersheds with lower levels of biosolids application do not indicate similar trends of increasing phosphate concentrations²; and

WHEREAS, watersheds receiving biosolids and experiencing increasing phosphorus concentrations in downstream waters are not showing increased turbidity or total suspended solids, reducing the likelihood that erosion is the source of increasing phosphorus concentrations¹; and

WHEREAS, watersheds receiving biosolids and experiencing increasing phosphorus concentrations in downstream waters are not showing increased total organic carbon, reducing the likelihood that natural export processes are the source of increasing phosphorus concentrations¹; and

WHEREAS, watersheds receiving biosolids and experiencing increasing phosphorus concentrations in downstream waters are not showing significant changes in land use, reducing the likelihood that development is the source of increasing phosphorus concentrations²; and

WHEREAS, the most prevalent land use within the watersheds at issue is agriculture and there are few other known sources of phosphorus loading large enough

² St. Johns Water Management District Update to the Biosolids Technical Advisory Committee, November 28, 2018. Patterns in Surface Water Phosphorus Concentrations and Biosolids Utilization in the Upper St. Johns River.

to potentially explain the increasing phosphate level trends in the Upper Basin of the St Johns River, including Brevard² and;

WHEREAS, other possible sources of increasing phosphorus in Lake Washington include septic systems on the east side of Lake Washington; water coming from flooded water management areas south of Highway 192 in Brevard and Indian River Counties that used to be crop land; and phosphorus applied to homeowner yards; and

WHEREAS, biosolids from Brevard County-operated wastewater treatment plants are safely disposed of in the lined County landfill while biosolids from multiple cities in Brevard are land applied; and

WHEREAS, biosolids being land applied in Brevard County and neighboring counties are primarily from South Florida where landfill costs are higher than the cost to truck biosolids to the Upper Basin of the St Johns River, with only 11% of biosolids applied within the Upper Basin produced by utilities within the Upper Basin²; and

WHEREAS, biosolids application in the Upper Basin tripled in 2013, continuing thereafter, in response to rule revisions to protect the Everglades became fully effective²; and

WHEREAS, the land application of biosolids has been restricted in neighboring counties and ecosystems to the south, such as the St. Lucie River watershed and the Lake Okeechobee watershed and a temporary moratorium in Indian River County, leaving the St. Johns River watershed in and adjacent to Brevard County as the next closest alternative up the east coast for the disposal and land application of Class B biosolids generated in South Florida; and

WHEREAS, phosphate concentrations are likely to continue to trend upward under existing state rules with increasing tonnage coming from outside the County but being applied in the Upper Basin of the St Johns River, adjacent to our drinking water supply²; and

WHEREAS, increasing phosphate levels increase the risk of algal blooms, especially taxa that produce toxins such as microcystins and saxitoxins²; and

WHEREAS, Lake Washington and large portions of the Upper Basin of the St. Johns River are classified by the Florida Department of Environmental Protection as Class I surface waters with a designated use for potable water supplies²; and

WHEREAS, portions of the Upper Basin of the St Johns River have been designated as impaired and local jurisdictions including Brevard County and its taxpayers are required to reduce total phosphorus loading from the sum of sources by as much as 52%³; and

WHEREAS, approximately \$250 million has been invested in state and federal Upper Basin restoration work to restore historic flows and levels²; and

WHEREAS, the land application activities of Class B biosolids is currently being conducted on property in Brevard County, within the watershed of the St. Johns River; and

WHEREAS, adding to the present nutrient levels in the St. Johns River Basin may further inflict damage to the local economy as well as the health, safety, and welfare of humans and wildlife in Brevard County and the State of Florida; and

WHEREAS, in 2018 the Department of Environmental Protection created a Biosolids Technical Advisory Committee to evaluate the current management practices and explore opportunities to better protect Florida's water resources and the Committee agreed to a list of recommendations in January 2019; and

³ Florida Department of Environmental Protection TMDL Report: Nutrient and DO TMDLs for the St. Johns River above Lake Poinsett (WBID 2893L), Lake Hell n' Blazes (WBID 2893Q), and St Johns River above Sawgrass Lake (WBID 2893X), April 2006

WHEREAS, in 2019 the Florida Legislature considered several bills to address concerns regarding biosolids and implement recommendations of the Technical Advisory Committee; and

WHEREAS, the Department of Environmental Protection is using the recommendations of the Technical Advisory Committee to draft rule revisions that are anticipated to be considered for Legislative ratification during the 2021 session; and

WHEREAS, the Board of County Commissioners ("Board") finds that the proper regulation of the land application of Class B biosolids is necessary and appropriate to protect potable water supplies as well as guide the future use, development, and protection of the land and natural resources in Brevard County; and

WHEREAS, the Board has determined that the temporary moratorium on new or expanding biosolids application, to allow time for the state to complete additional data analyses and their on-going rule revision process, is needed to protect water quality in Lake Washington, the St. Johns River watershed and surrounding water bodies, from adverse impacts potentially caused by the land application of Class B biosolids; and

WHEREAS, County staff has met with owners of agricultural properties currently permitted through the Florida Department of Environmental Protection to land apply Class B biosolids and their use of bio-solids in Brevard in 2019 is significantly less than their use in 2018; and

WHEREAS, the owners of agricultural properties currently permitted to land apply Class B biosolids in Brevard County have implemented nutrient management plans and installed systems to collect drainage water and reuse it for irrigation, capturing and reusing excess nutrients draining from the farmland; and

WHEREAS, the owners of agricultural properties currently permitted to land apply Class B biosolids in Brevard County have indicated a good faith willingness to voluntarily comply with most of the state's proposed provisions of Chapter 62-640 of the

Florida Administrative Code for all placement of biosolids in Brevard County until the new provisions are implemented by the State of Florida; and

WHEREAS, applying biosolids to pastureland amends the soils and recycles organic nutrients that are removed from the land each year by cattle and the harvest of sod; and

WHEREAS, research has shown that organic sources of fertilizer such as biosolids are much less water soluble than commercial chemical fertilizer⁴; and

WHEREAS, the use of biosolids as fertilizer reduces the need for landfill space; and

WHEREAS, the Board enacted Ordinance 2019-20 imposing a 180-day temporary moratorium on any new Class B biosolids applications on October 8, 2019; and

WHEREAS, soil and water sampling indicate that the pasture land where Class B biosolids have been applied has exceeded its capacity to hold phosphorus and phosphorus is leaving those pasture lands and entering the St. Johns River during heavy rains⁵; and

WHEREAS, Florida Senate Bill 712 allows for the extension of county moratoriums on the land application of Class B biosolids existing prior to November 1, 2019; and

WHEREAS, The Board enacted Ordinance 2020-05 imposing a 180-day extension of the temporary biosolids moratorium on April 7, 2020; and

⁴ Silveira, M.L., G.A. O'Connor, Y. Lu, J. E. Erickson, C. Brandani and M. M. Kohmann, 2019. Runoff and Leachate Phosphorus and Nitrogen Losses from Grass-Vegetated Soil Boxes Amended with Biosolids and Fertilizer. *Journal of Environmental Quality*. doi; 10.2134/jeq2019.03.0106

⁵ Brevard County Sampling Report for the Land Application of Biosolids on Deer Park Ranch and Other Potential Impacts to Lake Washington Water Quality. Final Report 03-11-2020, Prepared by Applied Ecology, Inc.

WHEREAS, the Board specifically finds that this extension to the temporary moratorium on the land application of Class B biosolids is necessary and appropriate to protect the public health safety and welfare of the citizens of Brevard County.

NOW, THEREFORE, BE IT ORDAINED BY THE BOARD OF COUNTY COMMISSIONERS OF BREVARD COUNTY, FLORIDA THAT:

Section 1. Recitals Adopted

Each of the recitals set forth above is hereby adopted and incorporated herein.

Section 2. Enactment Authority.

Article VIII, Section 1 of the Florida Constitution and Chapter 125, Florida Statutes, vest broad home rule powers in counties to enact ordinances, not inconsistent with general or special law, for the purpose of protecting the public health, safety and welfare of the residents of the County. The Board specifically determines that the enactment of this Ordinance is necessary to protect the health, safety and welfare of the residents of Brevard County.

Section 3. Temporary Moratorium.

Beginning on the effective date of this Ordinance and continuing for a period of 180 days, a moratorium is hereby imposed upon all properties within Brevard County on the land application of Class B biosolids, excepting existing permit holders and where determined to be preempted by state law or regulation.

Section 4. Expiration of Temporary Moratorium.

The temporary moratorium imposed by Section 3 of this Ordinance expires 180 days from the effective date of this Ordinance. The moratorium may be extended or terminated early by adoption of an ordinance or resolution of the Brevard County Board of County Commissioners.

Section 5. Exhaustion of Administrative Remedies.

A property owner claiming that this Ordinance, as applied, constitutes or would constitute a temporary or permanent taking of private property or an abrogation of vested rights shall not pursue such claim in court unless all administrative remedies have been exhausted.

Section 6. Severability.

If any part of this Ordinance is held to be invalid or unconstitutional by a court of competent jurisdiction, the remainder of this Ordinance shall not be affected by such holding and shall remain in full force and effect.

Section 7. Conflict.

All ordinances or parts of ordinances in conflict herewith are hereby repealed.

Section 8. Resolution of Conflicting Provisions.

In the case of a direct conflict between any provision of this Ordinance and a portion or provision of any other appropriate federal, state or county law, rule, code or regulations, the more restrictive shall apply.

Section 9. Area Encompassed.

This Ordinance shall take effect COUNTYWIDE, within the municipal and unincorporated areas of Brevard County, Florida.

Section 10. Effective Date.

This Ordinance shall become effective upon adoption by the Board of County Commissioners and filing with the Department of State. A certified copy of the Ordinance shall be filed with the State, within ten days of enactment.

DONE, ORDERED AND ADOPTED in Regular Session, this _____ day of _____, 2020.

Attest:

BOARD OF COUNTY COMMISSIONERS
OF BREVARD COUNTY, FLORIDA

Scott Ellis, Clerk

Bryan Andrew Lober, Chair

(As approved by the Board on
_____ 2020)

MARCH 11, 2020



BREVARD COUNTY SAMPLING REPORT
FOR THE LAND APPLICATION OF
BIOSOLIDS ON DEER PARK RANCH AND
OTHER POTENTIAL IMPACTS TO LAKE
WASHINGTON WATER QUALITY

TASK ORDER # 215260-20-001-01



APPLIED ECOLOGY, INC.
122 Fourth Ave, Suite 104 Indialantic, FL 32903

EXECUTIVE SUMMARY

Lake Washington is an important source of drinking water to numerous cities and towns in the Melbourne region. Between July and August of 2019, Lake Washington experienced an algal bloom of the toxin producing cyanobacteria *Dolichospermum circinale*. Links between biosolid applications and harmful algal blooms have been investigated elsewhere in Florida. On October 8th, 2019, the Brevard County Commission voted to place a six-month moratorium on the expanded application of biosolids. In support of Brevard County's Biosolid Moratorium, Brevard County Natural Resources Management (BCNRM) contracted with Applied Ecology, Inc. to conduct a limited survey to determine levels of nutrients, metals, and emerging contaminants in water and vegetation in and around Lake Washington, including the Deer Park Ranch. Results from this present study will be used by the Commission to guide further regulatory action.

In total eleven locations were sampled for surface water between December 18-19, 2019, including five residential sampling locations east of Lake Washington, one location in Lake Washington, one location in the St. Johns River between Sawgrass Lake and Lake Washington and two locations southwest (upstream) of Lake Washington near where Class B biosolid applications have occurred and two locations in Jane Green swamp upstream of where biosolids have not been applied. In addition, three sites in the Deer Park Ranch were selected to sample plant tissue for pharmaceuticals.

For metals, none of the samples exceeded the drinking water standards. Arsenic, copper, molybdenum, nickel and zinc results ranged between < 0.5 to 2.4 parts per billion (ppb), <0.93 to 4.2 ppb, <0.5 to 3.1 ppb, <0.62 to 0.71 ppb, and <4.3 to 10.8 ppb, respectively. The highest copper values were observed near the ranch, while the highest arsenic and molybdenum values were observed in drainage canals east of Lake Washington.

For nutrients, ammonia, total kjeldhal nitrogen, nitrate-nitrite, total nitrogen, orthophosphate, and total phosphorous concentrations ranged between < 0.035 to 0.18 parts per million (ppm), 0.64 to 1.7 ppm, <0.33 to 0.15 ppm, 0.64 to 1.8 ppm, 0.0043 to 1.9 ppm and 0.028 to 2.2 ppm, respectively. The highest total nitrogen (TN) values were observed within Lake Washington; however, none of the discrete samples exceeded the numeric nutrient criteria (NNC) applicable to this segment of the St. Johns River. The highest total phosphorus (TP) values were observed in waters flowing off the ranch. Additionally, individual TP samples above the annual geometric means of the NNC (0.12 ppm) were observed at two ranch sites and one canal site east of Lake Washington. Low TN to TP ratio, which may favor nitrogen-fixing cyanobacteria over other algae, were observed at the two Deer Park Ranch sites (ratios of 0.6 and 0.9). These ratios were markedly lower than all other sites (ratio ranges of 4.5 to 16.9).

In addition to nutrients and metals, three sites east of Lake Washington, one site in Lake Washington, one location in the St. Johns River between Sawgrass Lake and Lake Washington, and two ranch sites were tested for a full suite of perfluoroalkyl substances (PFAS). PFAS make up a large group of persistent anthropogenic chemicals used in industrial processes and

commercial products over the past 60 years. Two of the PFAS compounds tested under this study (PFOS and PFOA) have been identified as having potential human health and/or environmental impacts. Although all sites had detectable levels of PFAS, only one site located east of Lake Washington had quantifiable levels of PFOS. The PFOS concentration at this site (40 parts per trillion or ppt) exceeded the provisional Perfluorooctanesulfonic acid (PFOS) FDEP Human Health Surface Water Screening Levels (4 ppt). However, no samples exceeded the EPA Lifetime Drinking Water Health Advisory nor the FDEP Ecological Surface Water Screening Levels for Perfluorooctanoic acid (PFOA) or PFOS.

Concentrations of 58 pharmaceuticals and personal care products (PPCPs) were also analyzed in two water samples and three plant tissue samples from the ranch. No PPCPs were detected in any of the water samples. In plant tissues, one of the samples had no PPCPs detected, while two samples had quantifiable concentrations of the anti-inflammatory drug Naproxen (0.322 and 0.713 ppb) and the antibiotic Ciprofloxacin (9.84 and 35.6 ppb). Additionally, one of the plant tissue samples had quantifiable levels of Triclocarban (an anti-microbial) and quantifiable levels of Norfloxacin (an antibiotic).

PROJECT BACKGROUND

Lake Washington is an important source of drinking water to numerous cities and towns in the Melbourne region including Melbourne, Melbourne Beach, West Melbourne, Indian Lake, Indian Harbour Beach, Satellite Beach, Palm Shores, Melbourne Village, and other parts of unincorporated Brevard County. Between July and August of 2019, Lake Washington experienced an algal bloom of the cyanobacteria *Dolichospermum circinale*. During this bloom event, water samples from the lake had Saxitoxin/Paralytic Shellfish Toxins between 0.06 - 0.11 ppb, below the drinking water guidelines of 3 ppb. Associations between biosolid application and harmful algal blooms (HAB) have been made in other areas along the St. Johns River (SJR).

Blue Cypress Lake, located in Indian River County, experienced a prolonged HAB during 2018. The lake, like other areas in the SJR Basin, saw an increase in Class B biosolid application after 2013 when such applications were banned from Lake Okeechobee, St. Lucie River and Caloosahatchee River basins. Blue Cypress Lake also experienced an increase in phosphorus levels in the surface water.

The land application of biosolids as a fertilizer for agricultural land provides Total Nitrogen (TN) and Total Phosphorus (TP) at a different ratio than most crops require. This can lead to the overapplication and accumulation of phosphorus and increased leaching into surrounding waterbodies. This is partially mitigated by a nutrient management plan as required in Chapter 62-640, F.A.C. An imbalance in the TN:TP ratio in surface waters can lead to the proliferation of

nitrogen-fixing, and potential HAB forming, cyanobacteria (Downing and McCauley, 1992; Dolman *et al.*, 2012).

In addition to nutrients, biosolids can be a potential source of metals (Wuana and Okieimen, 2011). For this reason, Chapter 62-640.700(5)(a), F.A.C. regulates biosolids for maximum concentrations of arsenic (75 mg/kg), copper (4,300 mg/kg), molybdenum (75 mg/kg), nickel (420 mg/kg) and zinc (7,500 mg/kg) as well as four other metals that commonly occur in Class B biosolids.

PFAS make up a large group of persistent anthropogenic chemicals used in industrial processes and commercial products over the past 60 years. As a result of concerns for these emergent compounds, recommended health advisory levels and provisional screening values for perfluorooctanesulfonic acid (PFOS) and/or perfluorooctanoic acid (PFOA) have been developed by the EPA and FDEP. PFAS have been found in biosolids worldwide (Bossi *et al.*, 2008; Chen *et al.*, 2012). Despite ceases in production of many PFAS-containing products, their concentrations in biosolids do not appear to have decreased (Vankatesan and Halden, 2013).

Like PFAS, pharmaceuticals and personal care products (PPCPs) are persistent chemicals which can bioaccumulate and cause deleterious effects on human and ecosystem health (Xia *et al.*, 2005; Richmond *et al.*, 2017). PPCPs have also been found in biosolids across the world, and special focus has been given to the potential for these compounds to bioaccumulate (Wu *et al.*, 2015). Unlike PFAS, there are currently no guidelines or health advisory levels for PPCPs.

Deer Park Ranch is a major (3,270 acres) permitted site which has been accepting land application of biosolids for 25 years, having accepted about 7,484 tons of biosolids in 2018. Part of the ranch's runoff enters into the St. Johns River, which flows north into Lake Washington. On October 8th, 2019, the Brevard County Commission voted to place a six-month moratorium on the expanded application of biosolids. In support of Brevard County's Biosolid Moratorium, Brevard County Natural Resources Management (BCNRM) contracted with Applied Ecology, Inc. to conduct a limited survey to determine levels of nutrients, metals, and emerging contaminants in water and vegetation in and around Lake Washington, including the Deer Park Ranch. In addition to the study by Applied Ecology, Inc., BCNRM collaborated with the University of Florida's Institute of Food and Agricultural Sciences (hereafter called UF), St. Johns River Water Management District, Brevard Soil & Water Conservation District, United States Department of Agriculture's Natural Resources Conservation Service, and Florida Department of Environmental Protection to conduct a study of phosphorus concentrations in soils on the Deer Park Ranch property. This soil study included the sampling and analysis of 50 soil samples within 11 pastures receiving different levels of biosolids application within the ranch, including two control samples. Results from this soil study will also be used by the Commission to guide further regulatory action.

METHODS

In early December 2019, Applied Ecology, Inc. worked closely with County staff to determine sampling locations to analyze potential nutrient and pollutant contributions to Lake Washington from biosolid applications along Deer Park Ranch as well as residential areas east of Lake Washington (Figures 1 and 2).

In total eleven locations were sampled for surface water between December 18-19, 2019, including five residential sampling locations east of Lake Washington, one location in Lake Washington, one location in the St. Johns River between Sawgrass Lake and Lake Washington and two locations southwest (upstream) of Lake Washington near where Class B biosolid applications have occurred and two locations in Jane Green swamp upstream of where biosolids have not been applied. In addition, three sites in the Deer Park Ranch were selected to sample plant tissue for pharmaceuticals. It should be noted that there was a significant (more than 1 inch) rainfall event the day prior to the sampling event.

In addition to common water quality parameters (pH, temperature, specific conductance and dissolved oxygen), additional analytes tested included metals (arsenic, copper, molybdenum, nickel, and zinc), nutrients (ammonia, total kjeldhal nitrogen, nitrate-nitrite, total nitrogen, orthophosphate and total phosphorous), 24 different perfluoroalkyl substances (PFAS), and 58 different pharmaceuticals and personal care products (PPCPs).

On or near the Deer Park Ranch (Figure 1), two of the locations (Site 1 and 2) were receiving water from natural land use areas. These sites were sampled from the same creek and were analyzed for nutrients and metals. Another two locations (Sites 3 and 4) were located in separate drainage canals near fields used for cattle pasture and sod farming, which received high biosolid loadings and flow out of the ranch during high rainfall conditions. These sites were analyzed for nutrients, metals, PFAS, and PPCPs. Also, within the Deer Park Ranch, three locations in fields (Plant Tissue 1, 2, and 3) had vegetative tissues sampled for PPCPs. Downstream of the Deer Park Ranch, on the St. Johns River (SJR), one site (Site 12) downstream of Highway 192 was sampled for nutrients, metals, and PFAS. Due to flooded roads and lack of accessibility, Site 10 was not able to be sampled and thus dropped from the analysis.

East of Lake Washington (Figure 2), all samples were taken from unnamed canals, including one site located upstream (Site 6) and another downstream (Site 5) of treatment ponds (and firefighting training facility). Site 5 was analyzed for nutrients, metals, and PFAS, while Site 6 was analyzed for nutrients and metals. Three sites (Sites 7, 8, and 9) were also located on canals draining residential areas. Sites 7 and 8 were analyzed for nutrients, metals, and PFAS, while Site 9 was analyzed for nutrients and metals. One site (Site 11) was taken in Lake Washington, south of the Melbourne Water Treatment Plant uptake near where the canal from Site 8 empties. This site was sampled for nutrients, metals, and PFAS.

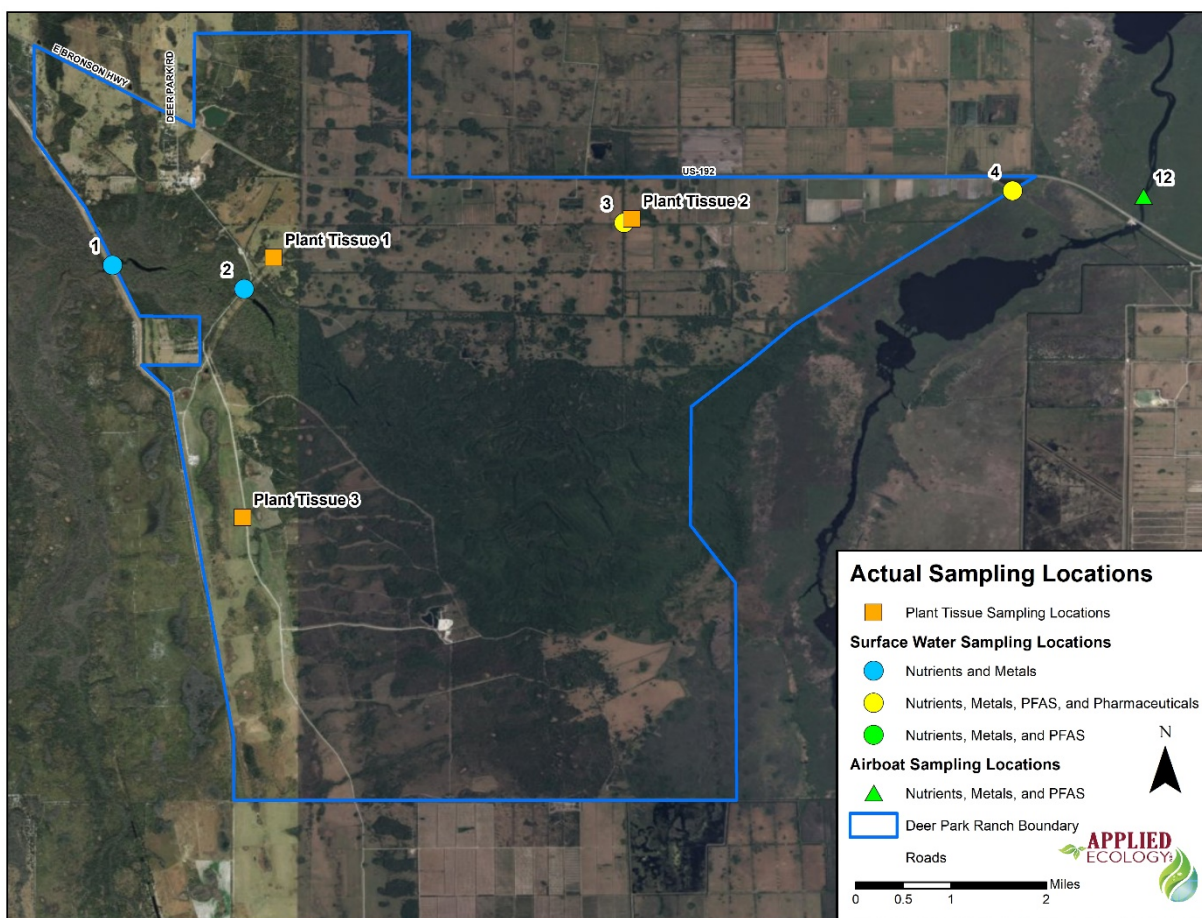


Figure 1. Site locations and parameters analyzed at five water quality and three plant tissue sites near the Deer Park Ranch where biosolids have been used for the last 25 years.



Figure 2. Sample locations and parameters analyzed at five water quality sites draining residential areas near Lake Washington and one site within Lake Washington.

All water quality sampling followed Florida Department of Environmental Protection (FDEP) Standard Operating Procedures (SOPs) FS 1000 and FS 2100. Water quality parameters measure *in situ* for Sites 1-4 were taken with a calibrated YSI, and Sites 5-12 were taken with a calibrated Ultrameter. All grab samples were collected using a peristaltic pump except for Site 2, which required a Van Dorn Sampler. For all sampling, precautions for cross-contamination were used, including for PFAS the use of new High-Density Polyethylene (HDPE) tubing to purge and collect surface water samples at each site as well as (for PFAS and PPCPs) a field blank.

Ammonia, Total Kjeldahl Nitrogen, Nitrate/Nitrite, and Total Phosphorus were collected in a 250 mL laboratory-provided container with sulfuric acid as preservative. Orthophosphate was collected in a 250 mL laboratory-provided container without preservative. Metals were collected in a 250 mL laboratory-provided container with nitric acid as preservative. Nutrient and metal samples were sent to Pace Analytical Services laboratory (Ormond Beach, FL) to process the following analytic measurements:

Nutrients

- EPA 350.1 - Ammonia
- EPA 351.2 - Total Kjeldahl Nitrogen (TKN)
- EPA 353.2 - Nitrate/Nitrite
- EPA 365.3 - Total Phosphorus (TP)
- EPA 365.1 - Orthophosphate

Metals

- EPA 200.8 – Arsenic (As), Copper (Cu), Molybdenum (Mo), Nickel (Ni) and Zinc (Zinc)

To sample for PFAS, two 125-mL aliquots were collected in a laboratory-provided container with no preservative, sealed, labeled, packed in ice, and shipped under chain-of-custody protocol to SGS Laboratories (Orlando, FL) for analysis of PFAS, including PFOA, PFOS, and 22 additional compounds using a modified EPA Method 537Mod.

To sample for PPCPs in water, two 500 mL aliquots were collected in a laboratory-provided container. For plant tissues, 40 to 50 g of vegetative tissue (Bahia grass at Site 1 and 3 and *Hemarthria* grass at Site 2) was collected in a laboratory-provided container. The samples were with no preservative, sealed, labeled, packed in ice, and shipped under chain-of-custody protocol to SGS Laboratories (Sidney, Canada) for analysis of 58 pharmaceuticals and personal care products using AXYS Method MLA-075 (modified EPA Method 1694).

See Appendix A for additional information regarding the sampling sites.

RESULTS

Surface Water Grabs

Applied Ecology, Inc. (AEI) went to 11 sites for surface water sampling. Field parameters collected *in situ* include the depth the sample/readings were taken in meters, air and water temperature (°C), the pH (SU), the dissolved oxygen percentage (DO), the specific conductance (µS/cm), total dissolved solids and oxidation-reduction potential, which are provided in Table 1. Complete corresponding field and calibration logs are included in Appendix B. The water was circumneutral with temperatures ranging between 17°C and 20.2°C. Specific conductance and total dissolved solids (TDS) ranged between 0.175-1.089 µS/cm and 371.7-765.3, respectively. The highest specific conductance and TDS were observed at Site 9 and may have been elevated at all spots due to precipitation preceding the sampling event.

Table 1. Field parameters measured during the surface water sampling for the Brevard County Biosolids Monitoring.

Site ID	Sample Date	Total Depth of Water (m)	Air Temp (°C)	Water Temp (°C)	pH (SU)	DO (%)	Specific Conductance (µS/cm)	Total Dissolved Solids (ppm)	Oxidation Reduction Potential (mV)	Sample Depth (m)
1	12/18/2019	> 2	17.6	20	7.76	22.3	0.1757	NA	NA	0.5
2	12/18/2019	> 2	16.6	20.2	7.07	37.1	0.1784	NA	NA	0.5
3	12/18/2019	0.3	14.5	19.9	7.24	56.5	0.3670	NA	NA	0.15
4	12/18/2019	NA	13.5	19.9	7.31	33.4	0.8460	NA	NA	0.5
5	12/19/2019	1.5	13.5	16.5	7.99	NA	0.9208	642.3	67	0.5
6	12/19/2019	1	19.5	19.5	7.48	NA	0.6889	471.1	102	0.5
7	12/19/2019	NA	18.8	19.4	7.77	NA	0.6605	451.4	112	0.5
8	12/19/2019	1	18.8	19	7.42	NA	0.9272	643.5	61	0.5
9	12/19/2019	0.25	18	17.1	7.47	NA	1.089	765.3	54	0.15
11	12/19/2019	>2	16.3	17	7.69	NA	0.7202	496.3	73	0.5
12	12/19/2019	>2	17.8	18.1	7.80	NA	0.5463	371.7	160	0.5

Metals

Applied Ecology, Inc. sampled 11 sites for metals (arsenic, copper, molybdenum, nickel, and zinc) and compared results to the applicable surface water criteria defined in Chapter 62-302, F.A.C. Hardness was not measured concurrently with metals, so low and high hardness values of 25 and 400 mg/L calcium carbonate (CaCO_3) as outlined in 62.302-530[1] were presented in Table 2 for illustrative purposes. For quality assurance, a field reagent blank was also collected, which exhibited concentrations below laboratory MDL values for all five metals. Complete laboratory analytical results from the one-time sampling for metals can be found in Appendix C.

No metals were detected at Site 1 (Table 2). Site 2 only had detectable levels of zinc, but it had the highest observed zinc concentrations (24.0 $\mu\text{g/L}$), more than twice as much as the next highest levels observed at Site 3 and Site 9 (10.8 $\mu\text{g/L}$). Site 3 had detectable values of all analytes except for nickel, with quantifiable levels of molybdenum (1.8 $\mu\text{g/L}$), zinc (10.8 $\mu\text{g/L}$), and the highest value of copper (4.2 $\mu\text{g/L}$). Although this copper value is above the low hardness criteria of 2.85 $\mu\text{g/L}$, it is unlikely to be an exceedance due to the historically high hardness values observed in other waterbodies in the area. All residential sites (Sites 5-9) had quantifiable values of molybdenum, which does not have applicable water quality standards. Additionally, residential sites 7-11 had quantifiable levels of arsenic (1.3 to 2.4 $\mu\text{g/L}$) well below the drinking water quality standard of 10 $\mu\text{g/L}$. In fact, all samples had metal concentration values below the drinking water quality standards in Chapter 62-550, F.A.C. assuming high water hardness values.

Table 2. Metal results (in µg/L) for the eleven sites sampled for the Brevard County Biosolids Moratorium Monitoring as well as the applicable FDEP criteria target levels (in µg/L) for each analyte as defined in Chapter 62-302, F.A.C. Samples with concentration values above the minimum detection level (MDL) but below the practical quantitation limit (PQL) are italicized, values above the PQL are bolded, and values above the applicable FDEP criteria target levels (in µg/L) are highlighted in grey.

Metals	Site 1	Site 2	Site 3	Site 4	Site 5	Site 6	Site 7	Site 8	Site 9	Site 11 ⁴	Site 12 ⁴	FDEP Class I Criteria (Low)	FDEP Class I Criteria (High)	FDEP Class III FW Criteria (Low)	FDEP Class III FW Criteria (High)
Arsenic	0.50 U ¹	0.50 U ¹	0.64 I ²	0.54 I ²	0.76 I ²	0.67 I ²	1.80	2.00	2.40	1.30	0.52 I ²	10	10	50	50
Copper	0.93 U ¹	0.93 U ¹	4.20 5	0.93 U ¹	0.93 U ¹	1.00	0.93 U ¹	1.80	0.93 U ¹	1.40	0.93 U ¹	2.85	30.5	2.85	30.5
Molybdenum	0.50 U ¹	0.50 U ¹	1.80	0.50 U ¹	2.50	2.30	3.10	1.30	1.80	1.60	0.98 I ²	NA	NA	NA	NA
Nickel	0.62 U ¹	0.62 U ¹	0.62 U ¹	0.62 U ¹	0.62 U ¹	0.62 U ¹	0.62 U ¹	0.62 U ¹	0.62 U ¹	0.71 I ²	0.62 U ¹	16.1	168.5	16.1	168.5
Zinc	4.30 U ¹	24.0	10.8	4.30 U ¹	4.30 U ¹	5.30	4.30 U ¹	9.10	10.8 0	5.20	4.30 U ¹	37.0	387.8	37.0	387.8

¹ "U" qualified values indicate the analytical concentration is below laboratory MDLs; limits vary depending on parameter and sample

² "I" qualified values indicate the analytical concentration is greater than or equal to the MDL, but less than the PQL

³ Values from Chapter 62-304.530 F.A.C. Copper, nickel, and zinc are hardness based with "Low" being set to a hardness of 25 mg/L of CaCO₃ and "High" set to 400 mg/L of CaCO₃

⁴ Class I waters

⁵ Value could be above Class I most stringent criteria if hardness is considered low onsite (less than 25 mg/L of CaCO₃)

Nutrients

Applied Ecology, Inc. sampled 11 sites for the following nutrients: ammonia, total kjeldhal nitrogen, nitrate-nitrite, total nitrogen (TN), orthophosphate, and total phosphorous (TP). Results are summarized in Table 3. Complete laboratory analytical results from the one-time sampling for nutrients can be found in Appendix C.

The highest orthophosphate (1.9 mg/L and 0.86 mg/L) and TP (2.2 mg/L and 0.95 mg/L) values were observed at Site 3 and 4 respectively. The highest ammonia (0.18 mg/L) values were observed at Site 9, while Site 11 (within Lake Washington) had the highest values of TN (1.8 mg/L), total kjeldahl nitrogen (1.7 mg/L) and nitrate-nitrite (0.15 mg/L). Based on only two data points (Sites 6 and 5), the stormwater treatment ponds may be decreasing, TN, ammonia, total kjeldhal nitrogen, nitrate-nitrite, orthophosphate and TP by as much as 26.4%, 49.3%, 16.9%, 67.0%, 53.8%, and 26.3%, respectively.

Table 3. Nutrient results (in mg/L) for the eleven sites sampled for the Brevard County Biosolids Moratorium Monitoring and applicable FDEP criteria (in mg/L) for each analyte. Samples with concentration values above the applicable criteria are highlighted in grey.

Nutrient Analyte	Site 1	Site 2	Site 3	Site 4	Site 5	Site 6	Site 7	Site 8	Site 9	Site 11	Site 12	FDEP NNC for Lake Washington	FDEP NNC for Streams
Total Nitrogen	0.980	1.000	1.300	0.820	0.640	0.870	0.860	0.970	1.200	1.800	1.300	1.91	1.54
Ammonia	0.035 U ¹	0.035 U ¹	0.060	0.035 U ¹	0.035 U ¹	0.069	0.035 U ¹	0.068	0.180	0.081	0.035 U ¹	NA	NA
Total Kjeldahl Nitrogen	0.980	1.000	1.300	0.800	0.640	0.770	0.860	0.830	1.200	1.700	1.300	NA	NA
Nitrate-Nitrite	0.033 U ¹	0.033 U ¹	0.058	0.033 U ¹	0.033 U ¹	0.100	0.033 U ¹	0.140	0.060	0.150	0.033 U ¹	NA	NA
Ortho-phosphate	0.035	0.028	1.900	0.860	0.004	0.009	0.007	0.086	0.055	0.050	0.077	NA	NA
Total Phosphorus	0.063	0.059	2.200	0.950	0.028	0.038	0.053	0.130	0.100	0.110	0.120	0.16	0.12
Nitrogen to Phosphorus Ratio (TN:TP)	15.6	16.9	0.6	0.9	22.9	22.9	16.2	7.5	12.0	16.4	10.8	NA	NA

¹ "U" qualified values indicate the analytical concentration is below laboratory minimum detection limits (MDLs); limits vary depending on parameter and sample

PFAS

Applied Ecology, Inc. (AEI) sampled seven sites for PFAS and compared the surface water PFOA and PFAS laboratory measured results to the 0.070 µg/L EPA lifetime drinking water health advisory (LDWHA) for PFOA and PFOS (Table 4). Additionally, AEI compared the results to FDEP provisional screening values for Human Health in Surface Water (HHSW) and Ecological Health in Surface Water (EHSW). For quality assurance, a field reagent blank was also collected, which exhibited concentrations below laboratory MDL values for all 24 PFAS compounds. Complete laboratory analytical results from the one-time sampling for PFAS can be found in Appendix D.

All sites had detectable levels of PFAS, with Perfluorobutanesulfonic acid (PFBS) and Perfluorobutanoic acid (PFBA) detected at all seven sites analyzed for PFAS. However, only four sites had quantifiable levels of PFAS. Sites 3 and 4, which are on Deer Park Ranch in canals that receive runoff from high biosolid loading areas, had quantifiable levels of PFBA (0.0164 and 0.0210 µg/L, respectively), Perfluoropentanoic acid (0.0230 and 0.0130 µg/L, respectively), Perfluorohexanoic acid (0.0121 and 0.0081 µg/L, respectively) and PFBS (0.0520 and 0.0360 µg/L, respectively). Even though many of the PFAS do not have current recommended health advisories or screening health advisories, there are recent toxicological studies that do indicate potential of other PFAS besides PFOA and PFOS, such as PFBS having development, thyroid, and kidney effects in adult and developing rats (Feng *et al.*, 2017). Site 8, which was in a canal that receives runoff from residential areas, had quantifiable levels of Perfluoropentanoic acid (0.0084 µg/L). Site 5, located downstream of the treatment ponds that also receives runoff from the Brevard County Fire Rescue Drill Yard and potentially other commercial and industrial land uses, had quantifiable levels of four PFAS: PFBA (0.0183 µg/L), Perfluorohexanoic acid (0.0095 µg/L), Perfluorohexanesulfonic acid (0.0377) and PFOS (0.0398 µg/L). This site was the only site to have quantifiable values of Perfluorohexanesulfonic acid and PFOS and was also the only site to exceed the provisional FDEP HHSW for PFOS (0.004 µg/L).

Site 7, which was located in a canal that receives runoff from residential areas, appears to have the lowest number of detections, only PFBS and PFBA were detected, but not in sufficient concentration to quantify. Sites 11 (Lake Washington) and 12 (St. Johns River) had 5 PFAS above detection limits, but not in sufficient concentration to quantify.

The following 14 PFAS were analyzed but not detected in any of the sample sites: Perfluorononanoic acid, Perfluorodecanoic acid, Perfluoroundecanoic acid, Perfluorododecanoic acid, Perfluorotridecanoic acid, Perfluorotetradecanoic acid, Perfluoropentanesulfonic acid, Perfluorononanesulfonic acid, Perfluorodecanesulfonic acid, Perfluorooctane sulfonamide, MeFOSAA, EtFOSAA, 4:2 Fluorotelomer sulfonate, 6:2 Fluorotelomer sulfonate and 8:2 Fluorotelomer sulfonate.

Table 4. Surface water PFAS analytical results (in µg/L) for Brevard County Biosolids Moratorium Monitoring and associated target cleanup levels (in µg/L) for each compound. Samples with concentration values above the minimum detection level (MDL) but below the practical quantitation limit (PQL) are italicized, values above the PQL are bolded. Values that exceeded the provisional FDEP Surface Water Screening Levels for Human Health (HHSW) or the US EPA Lifetime Drinking Water Health Advisory (LDWHA) are bolded and highlighted in grey.

PFAS Compound	Site 3	Site 4	Site 5	Site 7	Site 8	Site 11	Site 12	EPA LDWHA ³	FDEP HHSW ⁴	FDEP EHSW ⁵
Perfluorobutanoic acid (PFBA)	0.016	0.021	0.018	<i>0.006</i> <i>I²</i>	<i>0.011</i> <i>I²</i>	<i>0.011</i> <i>I²</i>	<i>0.010</i> <i>I²</i>	NA	NA	NA
Perfluoropentanoic acid (PFPeA)	0.023	0.013	<i>0.008</i> <i>I²</i>	<i>0.0023</i> <i>U¹</i>	0.008	<i>0.005</i> <i>I²</i>	<i>0.005</i> <i>I²</i>	NA	NA	NA
Perfluorohexanoic acid (PFHxA)	0.012	0.008	0.010	<i>0.002</i> <i>U¹</i>	<i>0.006</i> <i>I²</i>	<i>0.003</i> <i>I²</i>	<i>0.002</i> <i>I²</i>	NA	NA	NA
Perfluoroheptanoic acid (PFHpA)	<i>0.006</i> <i>I²</i>	<i>0.004</i> <i>I²</i>	<i>0.004</i> <i>I²</i>	<i>0.002</i> <i>U¹</i>	<i>0.003</i> <i>I²</i>	<i>0.002</i> <i>U¹</i>	<i>0.002</i> <i>U¹</i>	NA	NA	NA
Perfluorooctanoic acid (PFOA)	<i>0.008</i> <i>I²</i>	<i>0.006</i> <i>I²</i>	<i>0.006</i> <i>I²</i>	<i>0.002</i> <i>U¹</i>	<i>0.004</i> <i>I²</i>	<i>0.003</i> <i>I²</i>	<i>0.003</i> <i>I²</i>	0.07	0.15	1,300
Perfluorobutanesulfonic acid (PFBS)	0.052	0.036	<i>0.008</i> <i>I²</i>	<i>0.002</i> <i>I²</i>	<i>0.006</i> <i>I²</i>	<i>0.005</i> <i>I²</i>	<i>0.006</i> <i>I²</i>	NA	NA	NA
Perfluorohexanesulfonic acid (PFHxS)	<i>0.002</i> <i>U¹</i>	<i>0.002</i> <i>U¹</i>	0.038	<i>0.002</i> <i>U¹</i>	<i>0.002</i> <i>I²</i>	<i>0.002</i> <i>U¹</i>	<i>0.002</i> <i>U¹</i>	NA	NA	NA
Perfluoroheptanesulfonic acid	<i>0.002</i> <i>U¹</i>	<i>0.002</i> <i>U¹</i>	<i>0.002</i> <i>I²</i>	<i>0.002</i> <i>U¹</i>	<i>0.002</i> <i>U¹</i>	<i>0.002</i> <i>U¹</i>	<i>0.002</i> <i>U¹</i>	NA	NA	NA
Perfluorooctanesulfonic acid (PFOS)	<i>0.003</i> <i>I²</i>	<i>0.003</i> <i>U¹</i>	0.040	<i>0.003</i> <i>U¹</i>	<i>0.008</i> <i>I²</i>	<i>0.003</i> <i>U¹</i>	<i>0.003</i> <i>U¹</i>	0.07	0.004	37
PFOA + PFOS	<i>0.011</i> <i>I²</i>	<i>0.009</i> <i>I², U¹</i>	0.046	<i>0.005</i> <i>U¹</i>	<i>0.012</i> <i>I²</i>	<i>0.006</i> <i>I², U¹</i>	<i>0.006</i> <i>I², U¹</i>	0.07	NA	NA

¹ “U” qualified value indicates that analytical concentration is below laboratory MDLs; limits vary depending on parameter and sample

² “I” qualified value indicated the analytical concentration is greater than or equal to the MDL, but less than the PQL

³ US EPA Lifetime Drinking Water Health Advisories

⁴ Provisional Florida DEP Surface Water Screening Levels for Human Health

⁵ Provisional Florida DEP Surface Water Screening Levels for Ecological Health

Pharmaceuticals and Personal Care Products (PPCPs)

Surface Water

Applied Ecology, Inc. sampled two sites for 58 PPCPs (Sites 3 and 4, located on the Deer Park Ranch). For quality assurance, a field reagent blank was also collected, which exhibited concentrations below laboratory MDL values for all 58 compounds. None of the surface water samples had detectable PPCPs. Complete laboratory analytical results from the one-time sampling for PPCPs in surface water can be found in Appendix E.

Vegetation Tissue

Applied Ecology, Inc. sampled three sites with high biosolid loadings for 58 PPCPs (Plant Tissue 1-3). Complete laboratory analytical results from the one-time sampling for PPCPs in plant tissue can be found in Appendix F.

Plant Tissue 1 and 3 were Bahiagrass (*Paspalum notatum*) and actively or recently used for cattle grazing while Plant Tissue 2 was *Hemarthria sp.* collected in a field that was fallowed at time of sampling. Additionally, Plant Tissue 3 is located near the designated biosolids storage area. No pharmaceuticals were detected in Plant Tissue 2 (Table 5). Plant Tissue 1 and 3 both had quantifiable concentrations of the anti-inflammatory drug Naproxen (0.322 and 0.713 ppb, respectively) and the antibiotic Ciprofloxacin (9.84 and 35.6 ppb, respectively). Additionally, Plant Tissue 3 had 0.324 ppb of Triclocarban (an anti-microbial) and the other had 55.3 ppb of Norfloxacin (an antibiotic).

The following PPCPs were not detected in any of the tissue samples: Bisphenol A, Furosemide, Gemfibrozil, Glipizide, Glyburide, Hydrochlorothiazide, 2-hydroxy-ibuprofen, Ibuprofen, Triclosan, Warfarin, Acetaminophen, Azithromycin, Caffeine, Carbadox, Carbamazepine, Cefotaxime, Clarithromycin, Clinafloxacin, Cloxacillin, Dehydronifedipine, Diphenhydramine, Diltiazem, Digoxin, Digoxigenin, Enrofloxacin, Erythromycin-H₂O, Flumequine, Fluoxetine, Lincomycin, Lomefloxacin, Miconazole, Norgestimate, Ofloxacin, Ormetoprim, Oxacillin, Oxolinic acid, Penicillin G, Penicillin V, Roxithromycin, Sarafloxacin, Sulfachloropyridazine, Sulfadiazine, Sulfadimethoxine, Sulfamerazine, Sulfamethazine, Sulfamethizole, Sulfamethoxazole, Sulfanilamide, Sulfathiazole, Thiabendazole, Trimethoprim, Tylosin, Virginiamycin M1 and 1,7-Dimethylxanthine.

Table 5. Plant tissue analytical results (in ng/g) for Pharmaceuticals and Personal Care Products as part of the Brevard County Biosolids Moratorium Monitoring. No detectable results were found for Plant Tissue 2.

PPCP Analyte	Plant Tissue 1	Plant Tissue 2	Plant Tissue 3
Naproxen	0.322	0.313 ND ¹	0.713
Triclocarban	0.313 ND ¹	0.313 ND ¹	0.324
Ciprofloxacin	9.84	2.54 ND ¹	35.6
Norfloxacin	27.1 ND ¹	5.86 ND ¹	55.3

¹ ND - Non detect

CONCLUSION

A total of eleven water quality stations and three plant tissue sites were sampled between December 18 and 19, 2019. None of the eleven sites sampled exceeded the drinking water standards for the metals arsenic, copper, molybdenum, nickel, and zinc. The two ranch sites of the eleven sites sampled were above the numeric nutrient criteria (which is an annual geometric mean) for total phosphorus. PFAS were detected in all seven sites sampled, with one non-ranch site exceeding the provisional FDEP Human Health Surface Water Screening Levels for PFOS. PPCPs were not detected in the two water quality samples tested. However, of the three plant tissues sampled, two had high enough concentrations of four PPCPs to be quantifiable. Currently, there are no governmental guidelines for PPCPs in plant tissue.

An objective of the present study was to analyze presence, quantities, and contributions of nutrients and pollutants (metals, PPCPs, and PFAS) to the St. Johns River (Site 12) and Lake Washington (Site 11) from areas of biosolid application (Sites 3 and 4 and Plant Tissues 1-3) and residential areas (Sites 5-9). It should be emphasized that this was a small-scale study, with only one sample taken from each site over a two-day period, therefore conclusions are limited. Furthermore, loads from these two different land use types cannot be calculated as flows were not measured so. However, the present study has produced some notable results.

For metals, the highest copper value was observed at a site near biosolid application, while the other site near biosolid application did not have detectable copper. Copper is frequently found in biosolids as it readily associates with organic matter and according to Chapter 62-640.700(5)(a), F.A.C. copper in Class B biosolids can have a maximum single sample concentration of 4,300 mg/kg. However, considering the two sites both receive runoff from high biosolid loading areas, the results are inconclusive. The highest zinc value was found downstream of a bridge in a natural land use area. This higher concentration than other sites could be related to the use of galvanized steel in the bridge's construction.

For nutrients, Site 5 generally had the lowest nutrient concentrations and is downstream of a treatment pond. The highest nitrogen species concentrations were observed in Lake Washington, with generally higher values observed in the residential areas compared to natural land use areas. Nitrogen loading is typically associated with higher density residential and commercial land uses, typical of the basin draining from the east of Lake Washington. The highest TP, orthophosphate, and TN:TP values were observed at the two sites draining biosolid application areas. Generally, biosolid TN:TP is below the preferable ratio needed for plant growth (*i.e.*, crops) and when biosolids are applied on a need for nitrogen basis, it leads to excessive phosphorus build-up. The lower TN:TP has been observed in other lakes receiving runoff from biosolids application areas and has resulted in the banning of Class B biosolid applications in Lake Okeechobee, St. Lucie River and Caloosahatchee River watersheds. It is generally accepted that it is this low TN to TP ratio that leads to the proliferation of nitrogen-fixing cyanobacteria.

Although PFAS were detected in all samples, the only sample exceeding the provisional FDEP Human Health Surface Water Screening Levels was at Site 5, which is downstream of a firefighting training facility and a mix of high density residential and industrial and commercial land uses. In addition, a few months preceding the sampling date, a brush fire occurred closely near the sampling location (*i.e.*, NE of the Eau Gallie/I-95 interchange), where different firefighting products might have been used. PFOS have historically been added to aqueous film forming foam (AFFF) used to fight fires. AFFF was phased out of production in 2003 but has been used in Florida training facilities as recently as 2017. Currently, Class B firefighting foam used in Brevard County for flammable liquids such as gasoline, oils, etc., typically still contain C6 Fluorosurfactants, which have better toxicological profiles than PFOS (a C8 fluorosurfactant) but do persist in the environment.

Site 5 had quantifiable levels of PFOS, PFHxA (C6 fluorosurfactant primary breakdown product), and PFHxS. Rotander *et al.* (2015) found that both PFOS and PFHxS levels were shown to be elevated in firefighters exposed to AFFF. Sites 3 and 4, both receiving runoff from high biosolid application areas, had quantifiable concentrations of PFBA, PFPeA, PFHxA, and PFBS. These four PFAS are commonly (60-100% of the time) found in biosolids and, despite many being phased out, continue to be observed in similar concentrations in biosolids (Venkatesan and Halden 2013).

While PPCPs were detected in two tissue samples extracted from areas where high intensity of biosolids were applied, no PPCPs were detected in the water samples leaving the ranch at Sites 3 and 4. The lack of detectable PPCPs in the surface water samples could be due to the dilution effect of a very high rainfall event immediately preceding the sampling effort. Additionally, the PPCPs were only detected in areas of recent or active grazing (Plant Tissue 1 and 3) and not on land amended with biosolids, but currently fallow (Plant Tissue 2). While both ciprofloxacin and norfloxacin are antibiotics commonly used on cattle, the landowner of the Deer Park Ranch confirmed that neither antibiotic had been used recently on his cattle. Naproxen is a nonsteroidal anti-inflammatory drug found in common pain-relieving medications (Topp *et al.*, 2008), also confirmed to not have been used onsite by the landowner. Furthermore, no evidence could be found that naproxen is ever used on bovines. Topp *et al.* (2008) showed that naproxen is rapidly mineralized in soils amended with biosolids while Lin and Reinhard (2005) found naproxen rapidly photodegrades after release into the environment. Therefore, recently applied biosolids is the likely source for this particular compound. Triclocarban, originally developed for the medical field, is an antimicrobial and antifungal compound that was formerly used in personal care products such as soaps and lotions. The product began being used in the 1960s but was phased out by the FDA in 2017. Several studies have found that triclocarban from biosolid-amended fields can bioaccumulate in plants (Wu *et al.* 2010; Sabourin *et al.*, 2012; Wu *et al.*, 2014) and the concentrations observed in Site 3 were on the lower end of the range published in these studies. However, studies show the biosolid amendment inhibit the bioavailability and plant uptake of triclocarban (Fu *et al.*, 2016), which means concentrations in soils are likely much higher. In

general, the highest concentrations of PPCPs and the sample that had the most PPCPs was Plant Tissue 3. A potential confounding factor is differential bioaccumulation in vegetative tissues since Plant Tissue 1 and 3 were Bahiagrass while Plant Tissue 2 was *Hemarthria sp.*

The results from this limited study, in conjunction with a soil study by an interagency team, will be used by the Brevard County Commission to guide further regulatory action regarding biosolid applications in Brevard County.

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SAMPLE ID	PASTURE ID	DEPTH	SOIL TYPE	RELATIVE LEVEL OF BIOSOLIDS APPLICATION	MOST RECENT APPLICATION	MEHLICH PHOSPHORUS (ppm)	CALCIUM (ppm)	ALUMINIUM (ppm)	IRON (ppm)	WATER EXTRACTABLE PHOSPHORUS (ppm)	TOTAL PHOSPHORUS (ppm)	CAPACITY FACTOR or SOIL PHOSPHORUS INDEX (SPSC)	pH	SAMPLE ID
1	11	Shallow	Myakka fine sand	High	Apr-18	178	1640	3.08	2.71	22.87	255.51	-177	6.8	1
2	11	Medium	Myakka fine sand	High	Apr-18	256	636	12.26	6.77	20.67	174.79	-254	6.9	2
3	11	Shallow	Wabasso fine sand	High	Apr-18	232	1197	4.92	5.22	24.22	302.66	-231	6.5	3
4	11	Medium	Wabasso fine sand	High	Apr-18	245	789	15.75	4.01	21.17	215.52	-243	7.1	4
5	11	Deep	Wabasso fine sand	High	Apr-18	5	238	64.11	72.54	0.94	22.31	6	8.2	5
6	37A	Shallow	Myakka fine sand	High	Nov-19	79	875	3.5	2.91	17.02	137.62	-78	5.9	6
7	37A	Medium	Myakka fine sand	High	Nov-19	16	126	1.8	1.43	4.4	9.2	-16	5.6	7
8	Timberland	Shallow	Control 1	None	-	7	359	16.09	4.55	0.99	24.4	-5	6.1	8
9	Timberland	Medium	Control 1	None	-	2	233	35.61	26.65	0.19	18.9	4	6.6	9
10	Timberland	Deep	Control 1	None	-	2	246	58.84	38.45	0.33	16.32	7	7	10
11	Timberland	Shallow	Control 2	None	-	2	277	2.4	1.43	3.64	25.59	-2	5.3	11
12	Timberland	Medium	Control 2	None	-	1	131	2.52	1.42	0.99	5.95	-1	4.9	12
13	37A	Shallow	Immokalee fine sand	High	Nov-19	64	1282	1.07	0.95	5.09	106.3	-64	6.5	13
14	37A	Medium	Immokalee fine sand	High	Nov-19	19	535	0.94	0.6	1.56	22.24	-19	6.7	14
15	37A	Deep	Immokalee fine sand	High	Nov-19	6	121	0.74	0.77	1.34	8.12	-6	6.4	15
16	36	Shallow	Wabasso fine sand	Low	Nov-18	278	921	3.48	5.4	19.63	332.12	-277	6.7	16
17	36	Medium	Wabasso fine sand	Low	Nov-18	51	351	26.1	14.26	24.79	204.82	-47	7.5	17
18	36	Deep	Wabasso fine sand	Low	Nov-18	12	180	26.56	28.31	12.05	124.32	-7	7.7	18
19	42	Shallow	Riviera sand	Low	Feb-19	50	574	9.5	7.01	9.58	95.22	-49	6.7	19
20	42	Medium	Riviera sand	Low	Feb-19	17	353	37.8	10.28	1.93	27.48	-12	7.1	20
21	42	Deep	Riviera sand	Low	Feb-19	2	337	26.72	5.24	0.57	11.58	1	8.3	21
22	33	Shallow	Wabasso fine sand	Medium	Dec-17	152	645	16.72	6.82	18.22	182.51	-150	6	22
23	33 Furrow, surface	Shallow	Wabasso fine sand	Medium	Dec-17	142	636	18.31	7.68	14.68	131.34	-139	6.2	23
24	33	Medium	Wabasso fine sand	Medium	Dec-17	31	532	39.2	7.27	6.34	54.32	-26	7.1	24
25	33	Deep	Wabasso fine sand	Medium	Dec-17	30	673	44.17	10.41	5.46	49.5	-24	7.3	25

26	33	Shallow	Riviera sand	Medium	Dec-17	52	342	6	2.28	12.85	126.92	-51	4.9	26
27	33 Furrow, surface	Shallow	Riviera sand	Medium	Dec-17	57	325	5.44	1.46	10.09	116.3	-56	5.1	27
28		Medium	Riviera sand	Medium	Dec-17	142	182	18.61	2.73	12.97	118.36	-140	4.8	28
29	27	Shallow	Floridana sand	Medium	Jan-18	30	1738	8.49	2.86	6.24	100.29	-29	6.7	29
30	27	Medium	Floridana sand	Medium	Jan-18	4	590	45.4	7.89	0.41	18.47	2	6.8	30
31	27	Shallow	Riviera sand	Medium	Jan-18	50	669	26.02	8.03	7.97	64.58	-47	6.6	31
32	27	Medium	Riviera sand	Medium	Jan-18	22	886	35.22	6.43	1.64	39.75	-18	7	32
33	15	Shallow	Riviera sand	High	Sep-19	236	3899	15.33	8.35	12.35	753.32	-234	7.4	33
34	15	Medium	Riviera sand	High	Sep-19	6	301	54.72	14.3	2.01	30.27	1	7.6	34
35	15	Deep	Riviera sand	High	Sep-19	5	350	29.21	9.24	1.21	18.78	-1	8.2	35
36	15	Shallow	Pineda sand	High	Sep-19	615	6656	5.02	3.71	15.99	1730.73	-614	7.3	36
37	15	Medium	Pineda sand	High	Sep-19	15	414	22.48	8.95	4.64	87.97	-12	7.7	37
38	15	Deep	Pineda sand	High	Sep-19	4	325	36.32	5.85	0.48	20.88	0	8.2	38
39	12	Shallow	Riviera find sand	Medium	Apr-18	168	1216	8.1	9.22	14.85	216.35	-167	7	39
40	12	Medium	Riviera find sand	Medium	Apr-18	13	170	18.72	4.53	5.53	37.97	-11	8.1	40
41	12	Deep	Riviera find sand	Medium	Apr-18	13	121	26.94	15.74	7.74	30.81	-9	8.4	41
42	12	Shallow	Wabasso fine sand	Medium	Apr-18	75	1091	2.52	8.58	9.67	116.19	-74	6.5	42
43	12	Medium	Wabasso fine sand	Medium	Apr-18	40	1025	3.01	5.74	4.2	76.78	-39	6.6	43
44	12	Deep	Wabasso fine sand	Medium	Apr-18	19	293	8.1	6.36	3.47	24.35	-18	6.7	44
45	2	Shallow	Malabar - Pineda Complex	High	Nov-17	486	3434	3.42	3.17	34.01	575.73	-485	7.3	45
46	2	Medium	Malabar - Pineda Complex	High	Nov-17	37	901	1.85	2.72	5.83	51.41	-37	7	46
47	2	Deep	Malabar - Pineda Complex	High	Nov-17	81	661	3.78	4.23	9.52	28.62	-80	7.4	47
48	1	Shallow	Myakka fine sand	Low	Sep-13	338	1403	2.33	1.8	14.41	314.6	-338	5.9	48
49	1	Medium	Myakka fine sand	Low	Sep-13	66	558	1.43	1.03	4.66	9.07	-66	6.3	49
50	1	Deep	Myakka fine sand	Low	Sep-13	35	263	1.43	0.91	2.26	29.39	-35	6	50

PASTURE	SOIL TYPE	LEVEL OF BIOSOLIDS APPLICATION	MOST RECENT APPLICATION	SOIL PHOSPHORUS INDEX
1	Myakka fine sand	Low	Sep-13	-438
2	Malabar - Pineda Complex	High	Nov-17	-602
11	Myakka fine sand	High	Apr-18	-432
11	Wabasso fine sand	High	Apr-18	-468
12	Riviera find sand	Medium	Apr-18	-186
12	Wabasso fine sand	Medium	Apr-18	-131
15	Riviera sand	High	Sep-19	-234
15	Pineda sand	High	Sep-19	-626
27	Floridana sand	Medium	Jan-18	-27
27	Riviera sand	Medium	Jan-18	-64
33	Wabasso fine sand	Medium	Dec-17	-200
33	Riviera sand	Medium	Dec-17	-191
36	Wabasso fine sand	Low	Nov-18	-332
42	Riviera sand	Low	Feb-19	-59
37A	Myakka fine sand	High	Nov-19	-94
37A	Immokalee fine sand	High	Nov-19	-89
Timberland	Control 1	None	-	6
Timberland	Control 2	None	-	-2