



CONDITIONAL USE PERMIT STAFF REPORT

OFFICE OF PLANNING & ZONING

Tab Number: 2

Public Hearings: Planning & Zoning Board (PZB): December 3, 2025
Board of County Commissioners (BCC): January 6, 2026

Case No. and Project Name: PZ2023-318, Butler Property

Commissioner District: District 1 – Anthony Sabatini

Applicant(s): Gary Butler

Owner(s): Dock Pro, LLC

Requested Action: Conditional use permit (CUP) approval on approximately 2.46 +/- acres to allow a fishing resort / small-scale recreational camp within the Rural Residential District (R-1).

Staff Determination: Staff finds the conditional use permit application consistent with the Land Development Regulations (LDR) and Comprehensive Plan.

Case Manager: Shari Holt, Planner II

PZB Recommendation:

Subject Property Information

Size: 2.46 +/- acres

Location: South of Lakeshore Drive and east of Hammock Ridge Road, in the unincorporated Clermont area

Alternate Key No.: 3949930

Future Land Use: Green Swamp Rural (Attachment “A”)

Existing Zoning District: Rural Residential (R-1) (Attachment “B”)

JPA/ISBA: Clermont Joint Planning Area (JPA)

Overlay/Rural Protection Area: Green Swamp Area of Critical State Concern (GSACSC) (Attachment “C”)

Flood Zone(s): “AE” and “X”

Located within BMAP: Upper Ocklawaha River Basin

Adjacent Property Land Use Table

Direction	Future Land Use	Zoning	Existing Use	Comments
North	Urban Low Density	Medium Residential (R-3)	Residential / Right-of-Way	Single Family Residences north of Lakeshore Drive
South	N/A	N/A	Lake	Lake Susan

Direction	Future Land Use	Zoning	Existing Use	Comments
East	Green Swamp Interlachen	Planned Unit Development per Ordinance # 2017-59	Vacant	Vacant Residential
West	Yacht Club at Lake Susan Lodge	Planned Unit Development per Ordinance # 2005-86	Vacant	Vacant Residential and Commercial

- Summary of Analysis -

The Applicant seeks approval of a conditional use permit (CUP) for a fishing resort / small-scale recreational camp on approximately 2.46+/- acres, identified by Alternate Key Number 3949930, located south of Lakeshore Drive and east of Hammock Ridge Road, in the unincorporated Clermont area. The subject parcel is zoned as Rural Residential (R-1) district; is designated with a Green Swamp Rural Future Land Use Category (FLUC) by the 2030 Comprehensive Plan; and located within the Green Swamp Area of Critical State Concern (GSACSC). The subject parcel is currently vacant.

The Concept Plan (Attachment “D”) depicts 2,500 total square feet of rental cabin space, 200-square foot bath house, 400-square foot store, 600-square foot security building, dock, boat slips, and minor passive recreational areas with associated pervious parking.

The subject property is located within the Green Swamp Area of Critical State Concern (GSACSC). On April 9, 2025, the application was provided to the Florida Department of Commerce (Florida Commerce) for a determination of consistency with Green Swamp Area of Critical State Concern regulations. Florida Commerce had no comments at that time. Florida Commerce withholds the ability to appeal any process, pursuant to Section 380.05, Florida Statutes.

The subject property is located within the City of Clermont Joint Planning Area (JPA) and on July 31, 2025, the application was provided to the City of Clermont to review for a determination of consistency with their regulations. The City of Clermont provided the following comments as shown on Attachment “E”, *“The City will not oppose if the Conditional Use Permit is approved by Lake County. Please note that development must be in compliance with the Clermont JPA Regulations at the time of site plan review.”*

GIS maps indicate that the subject parcel is located within flood zones “AE” and “X” and there is an indication that wetlands exist on the site. On July 31, 2025, the requested action was sent to the Public Works Department for review and determination of consistency with applicable regulations, including flood and storm water requirements.

The Public Works Department provided the following conditions for development:

1. Stormwater Management: *“The stormwater management system shall be designed in accordance with all applicable Clermont JPA, Lake County and St. Johns River Water Management District (SJRWMD) requirements, as amended. The developer shall be responsible for any flood studies required for developing the site and comply with FEMA, Comprehensive Plan and Land Development Regulations, as amended. Any development within the floodplain as identified on the FEMA maps will require compensating storage. The cabins must be a minimum of 18-inches above the established base flood elevation and be an elevated construction with least amount of impact on the flood zone”* (Attachment “F”).

2. Floodplain Management: *“At this point, I would offer conditional approval from Floodplain Management with the caveat that, per 14.20.01(5), ALL development/construction will take place outside the SFHA. This approval would be for the proposed use ONLY and would not confer any approval or waive our ability to comment on any structure or site development as shown on the conceptual plan”* (Attachment “G”).

The Applicant provided a Project Narrative as shown on Attachment “H”.

– Staff Analysis –

LDR Section 14.05.03 (Standards for Review)

A. Consistency with the Comprehensive Plan and Local Code (Land Development Regulations).

The Applicant seeks conditional use approval for a fishing resort / small-scale recreational camp in the Rural Residential (R-1) zoning district. The proposed use is consistent with Comprehensive Plan Policy I-4.2.3 entitled *Green Swamp Rural Future Land Use Category*, which allows outdoor small-scale recreational camps with a conditional use permit.

The request is consistent with Comprehensive Plan Chapter XI entitled *Definitions and Acronyms*, which define outdoor sporting and recreational clubs as establishments primarily engaged in operating sporting and recreational camps, such as boys' and girls' camps, and fishing and hunting camps.

Additionally, the proposed use is consistent with Comprehensive Plan Policy I-4.2.3 entitled *Green Swamp Rural Future Land Use Category*, which requires a minimum of 60% of the net buildable area of the entire site shall be preserved as common open space, and a maximum impervious surface ratio for recreational uses of 0.30, as shown on the Concept Plan (Attachment "D").

The subject parcel is located within the Green Swamp Area of Critical State Concern (GSACSC). Pursuant to LDR Section 8.01.01 entitled *Development Permits*, a Master Land Use Plan shall be required. The Applicant provided a Master Land Use Plan for the CUP request as shown on Attachment "I". The Master Land Use Plan is consistent with LDR Section 8.01.01.

The request is consistent with LDR Section 3.01.03 entitled *Schedule of Permitted and Conditional Uses*, which specifies the allowance of hunting and fishing resorts within the Rural Residential (R-1) district with approval of a Conditional Use Permit (CUP).

The request is consistent with LDR Section 3.01.02(F)(3) entitled *Classifications of Uses*, which defines hunting and fishing resorts as an establishment, operated in association with a hunting or fishing reserve or resource, that offers accommodations and accessory sale and rental of hunting and fishing equipment.

Pursuant to LDR Section 8.01.03 entitled *Development Review Criteria*, development shall be in compliance with the Principles for Guiding Development within the GSACSC. The Applicant has provided a statement on the proposed development for the Conditional Use Permit request as shown on Attachment "J". The proposed CUP request is consistent with LDR Section 8.01.03 as the proposed development is not anticipated to have an adverse effect on existing wetlands or other environmentally sensitive areas.

The proposed CUP request is consistent with Chapter II and LDR Section 8.01.06, *Small-Scale Sporting and Recreational Camps*, which defines small-scale sporting and recreational camp activities (applicable in the Green Swamp Area of Critical State Concern only), as recreational and physical activities that generally do not require a developed site, that generally rely on the natural environment and takes place outdoors.

Pursuant to LDR Section 8.01.06 entitled *Small-Scale Sporting and Recreational Camps*, small-scale sporting and recreational camps shall be comprised of an area not to exceed 20-developed acres (excluding areas maintained in their natural state), and to the extent feasible, the development shall be clustered in one area. The proposed CUP request is consistent with LDR Section 8.01.06, as the subject parcel is comprised of 2.46 +/- acres and the proposed development is clustered towards Lakeshore Drive and away from environmentally sensitive lands.

Additionally, LDR Section 8.01.06 requires the Applicant to submit an impact statement demonstrating how the proposed development is consistent with each of the Principles of Guiding Development. The Applicant has provided an impact statement as shown on Attachment "J". The impact statement is consistent with LDR Section 8.01.06 entitled *Small-Scale Sporting and Recreational Camps*.

Pursuant to Comprehensive Plan Policy I-4.1.4 entitled Principles for *Guiding Development within the Green Swamp Area*

of *Critical State Concern*, the following shall apply to the GSACSC, to effectively and equitably conserve and protect its environmental and economic resources; provide a land and water management system to protect resources; and facilitate orderly and well-planned growth. Any review and approval mechanism shall not become effective, amended or modified, and no action taken under such mechanism shall be effective, until first reviewed and approved by the Department of Economic Opportunity (nka the Florida Department of Commerce), pursuant to Chapter 380, F.S. There is a forty-five (45) day review period during which a Development Order – unless exempted – is reviewed by the Department of Commerce for compliance with the Lake County Comprehensive Plan, Lake County Land Development Regulations, and State Statutes and Regulations relating to the Green Swamp. Upon approval of the Development Order, Lake County shall render it to the Department of Commerce.

New development will be required to meet all criteria specified by the Comprehensive Plan and Land Development Regulations, as amended.

B. Effect on Adjacent Properties.

1. The proposed conditional use will not have an undue adverse effect upon nearby property.

Pursuant to LDR Section 9.01.06, Table 1 – entitled *Landscape Buffers between Zoning Districts*, landscape buffering shall be required to minimize any undue adverse effect to the adjacent parcels.

To further mitigate any adverse impacts to surrounding properties, the proposed ordinance includes conditions that require the submission of a noise assessment in accordance with LDR Section 9.09.00 at the time of development application review.

Per the Applicant's Project Narrative, "*The site is physically separated from adjacent residential properties by Lakeshore Drive, wetlands, water bodies, and an undeveloped site to the west. The adjacent properties will not be impacted from a visual or use standpoint from this proposal. The site and concept plan include appropriate buffering from residential to the north across Lakeshore Drive, the undeveloped parcels to the east and west, as well as from any residential that exists around Lake Susan. The projects minimal ISR, small building footprints, large open space and proposed use mitigate any impacts on adjacent properties.*"

2. The proposed conditional use is compatible with the existing or planned character of the neighborhood in which it would be located.

The surrounding property to the west is zoned Planned Unit Development (PUD) and consists of a vacant parcel with allowed uses including residential, commercial, and boat storage. The parcel to the east is zoned Planned Unit Development and consists of vacant single-family residential parcels. The adjacent property to the north, across Lakeshore Drive, is zoned Medium Residential (R-3), and consists of single-family residential dwelling units.

A fishing resort / small-scale sporting and recreational camp is defined as recreational and physical activities that generally do not require a developed site, that generally rely on the natural environment and take place outdoors. Pursuant to LDR Table 3.01.03 entitled *Schedule of Permitted and Conditional Uses*, hunting and fishing resorts are allowed in the Rural Residential (R-1) zoning district with a CUP.

3. All reasonable steps have been taken to minimize any adverse effect of the proposed conditional use on the immediate vicinity through design, landscaping, and screening.

The Applicant has provided an Environmental Assessment (Attachment "K") dated December 11, 2024, performed by Ecological Consulting Solutions, Inc., which states, "*In summary, no listed species were observed on site. There is a wetland on the south side of the property. The boundaries of the wetland were delineated previously by a different consultant. USFWS will need to be notified 30 days prior to construction for Eastern Indigo Snake compliance.*"

Should the CUP request be approved, all sensitive resources will be addressed through the development application review and approval process. New development will be required to meet all criteria specified by the Comprehensive Plan and LDR, as amended, for natural resource protection and mitigation. The required Environmental Assessment

(EA) must identify the presence of natural resources and specify protection and necessary mitigation of any endangered or threatened wildlife, flora and/or fauna, to include those that are species of special concern.

4. The proposed conditional use will be constructed, arranged, and operated so as not to interfere with the development of neighboring property, in accordance with applicable district regulations.

Should the CUP request be approved, a subsequent development application for site plan review must be submitted prior to commencement of construction or related fishing resort activities; the site plan shall be substantially similar to the Concept Plan (Attachment "D").

C. Adequacy of Public Facilities.

The proposed conditional use will be served by adequate public facilities including but not limited to police, roads, sewage facilities, water supply, drainage, solid waste, parks and recreation, schools, and fire and emergency medical facilities. Levels of service established by the Comprehensive Plan Shall be considered.

Future development will require an analysis via submittal of a development application to demonstrate that the proposed development does not adversely impact the County's adopted levels of service to public facilities and services.

Water and Sewer

Sunshine Water Services has provided documentation (Attachment "L") indicating water service is available to the subject property. A septic tank system is proposed unless municipal sewer is made available to the site, and the Applicant will be required to apply for septic permits through the Florida Department of Environmental Protection (FDEP) or Florida Department of Health, as applicable.

The Applicant provided the following statement, "*Sewer is not available; therefore, sewer will be provided by an onsite septic tank and drainfield per FDEP regulations.*"

Parks

The proposed rezoning is not anticipated to adversely impact park capacity or levels of service.

Solid Waste

The proposed request is not anticipated to adversely impact solid waste capacities or levels of service.

Transportation

The standard Level of Service (LOS) for the impacted roadway of Lakeshore Drive is "D" with capacity of 1,050 trips in the peak direction. Currently the impacted segment from Harder Road to Lake Louisa Road is operating at eighty-seven percent (87%) in the PM peak direction. This project will be generating approximately twelve (12) PM peak hour trips, in which seven (7) trips will impact the peak hour direction.

A Request for Exemption from doing a full Tier 1 Traffic Impact Analysis is required prior to site plan approval.

D. Adequacy of Fire Protection.

The Applicant shall obtain from the Lake County Office of Fire Rescue written confirmation, or has otherwise demonstrated by substantial credible evidence, that water supply, evacuation facilities, and emergency access are satisfactory to provide adequate fire protection.

Lake County Fire Station #109 is located less than one mile from the subject property at 11630 Lakeshore Drive, Clermont. Fire protection water supply and emergency access will be addressed during the site plan review process, should the conditional use permit be approved by the Board.

Attachment "A" – Future Land Use Map

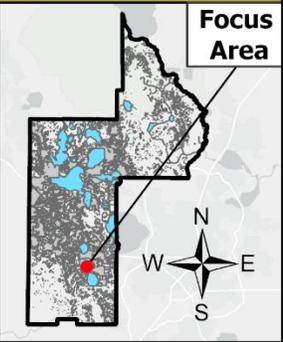
CURRENT FUTURE LAND USE



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FLU	
	Urban Low
	Green Swamp Rural
	Green Swamp Interlachen
	Green Swamp Yacht Club at Lake Susan Lodge

<p>NAME: BUTLER PROPERTY CASE NUMBER: CUP-PZ2023-318 LOCATION (S-T-R): 1-23-25 REQUEST: <u>CONDITIONAL USE PERMIT</u></p>	<p>DISTRICT: 1</p>
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9/17/2025

Attachment "B" – Zoning District Map

CURRENT ZONING



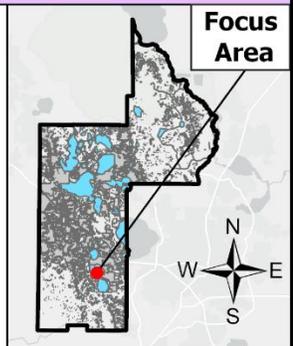
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9/17/2025

Zoning

- R-1
- R-3
- PUD

NAME: BUTLER PROPERTY
CASE NUMBER: CUP-PZ2023-318
LOCATION (S-T-R): 1-23-25
REQUEST: CONDITIONAL USE PERMIT

DISTRICT: 1



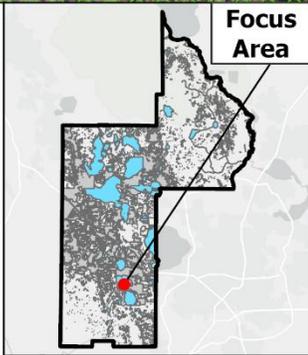
Attachment "C" – Overlay District

CUP-PZ2023-318
Butler Property



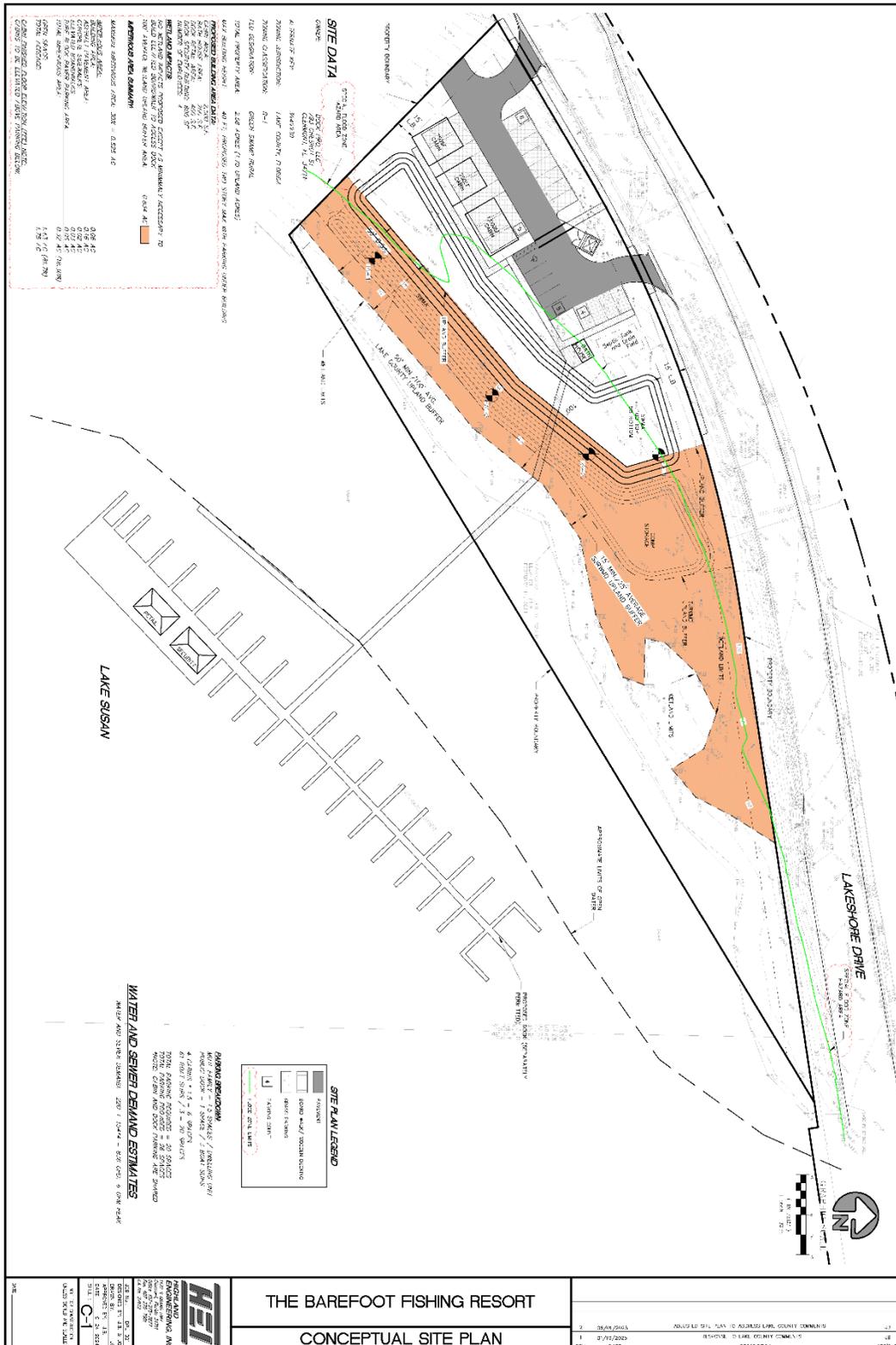
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Conditional Use Permit

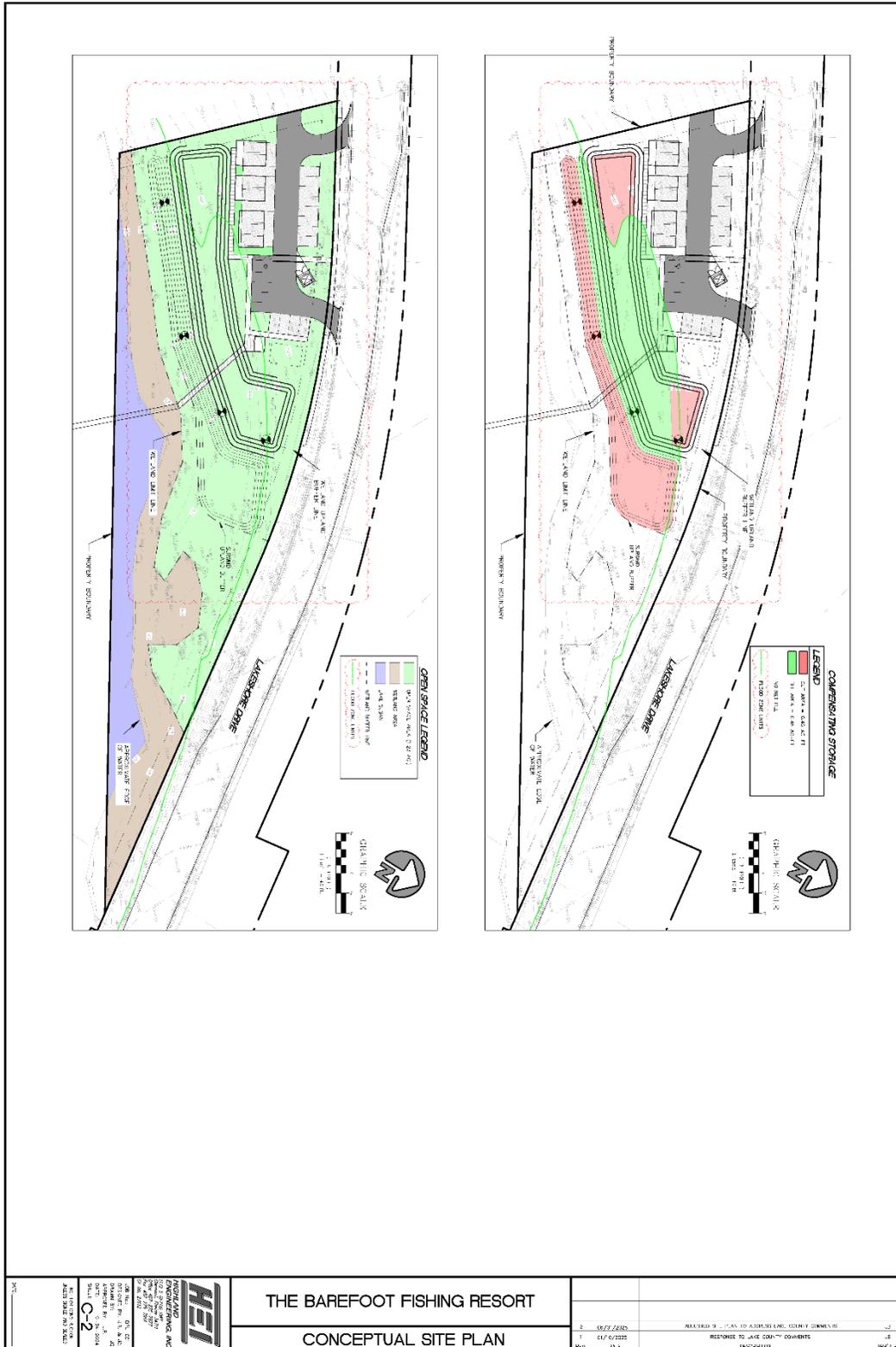


9/17/2025

Attachment "D" – Concept Plan (1 of 3)



Attachment "D" – Concept Plan (2 of 3)



<p>HET HET ENGINEERING & ARCHITECTURE, INC. 1000 W. 10th Street, Suite 100 Butler, PA 15005 Tel: 724-838-8800 Fax: 724-838-8801 www.hetinc.com</p>	<p>THE BAREFOOT FISHING RESORT</p> <p>CONCEPTUAL SITE PLAN</p>		<p>2 10/27/2020</p>	<p>APPROVED BY: [Signature]</p>
	<p>DATE: 10/27/2020 DRAWN BY: [Name] CHECKED BY: [Name] PROJECT NO.: [Number] SHEET NO.: [Number]</p>	<p>1 01/6/2022</p>	<p>RESPONSE TO JAKE COUNTY COMMENTS (ENCLOSURE)</p>	<p>DATE: 01/06/2022</p>

Attachment "D" – Concept Plan (3 of 3)

SITE DATA

OWNER: DOCK PRO, LLC
793 CHESNUT ST
CLERMONT, FL. 34711

ALTERNATE KEY: 3949930

ZONING JURISDICTION: LAKE COUNTY, FLORIDA

ZONING CLASSIFICATION: R-1

FLU DESIGNATION: GREEN SWAMP RURAL

TOTAL PROPERTY AREA: 2.58 ACRES (1.75 UPLAND ACRES)

MAX BUILDING HEIGHT: 40 FT; PROPOSED TWO STORY MAX WITH PARKING UNDER BUILDING



PROPOSED BUILDING AREA DATA:

CABIN AREA: 2,500 S.F.
BATH HOUSE AREA: 200 S.F.
DOCK RETAIL AREA: 400 S.F.
DOCK SECURITY BUILDING: 600 SF
NUMBER OF EMPLOYEES: 4

WETLAND IMPACTS:

NO WETLAND IMPACTS PROPOSED EXCEPT AS MINIMALLY NECESSARY TO BUILD ELEVATED BOARDWALK TO ACCESS DOCK

100' AVERAGE WETLAND UPLAND BUFFER AREA: 0.834 AC 

IMPERVIOUS AREA SUMMARY:

MAXIMUM IMPERVIOUS AREA: 30% = 0.525 AC

IMPERVIOUS AREA:

BUILDING AREA:	0.06 AC
ASPHALT PAVEMENT AREA:	0.16 AC
CONCRETE SIDEWALKS:	0.02 AC
ELEVATED BOARDWALKS:	0.03 AC
TURF BLOCK PAVER PARKING AREA:	0.05 AC
TOTAL IMPERVIOUS AREA:	0.32 AC (18.30%)

<u>OPEN SPACE:</u>	<u>1.43 AC (81.7%)</u>
TOTAL ACREAGE:	1.75 AC

CABIN FINISHED FLOOR ELEVATION (FFE) NOTE:
CABINS TO BE ELEVATED ABOVE PARKING BELOW.

Attachment “E” – City of Clermont Comments

Holt, Sharyn

From: Justine Day <Jday@clermontfl.org>
Sent: Wednesday, September 24, 2025 3:47 PM
To: Holt, Sharyn
Cc: Kruse, John
Subject: RE: 5th Submittal: Butler Property / PZ2023-318 / AR 5463

CAUTION: This email originated from outside of your organization. Do not click links or open attachments unless you recognize the sender and know the content is safe.

Hello Ms. Holt,

Staff's comments are listed below regarding the Butler Property CUP.

The City will not oppose if the Conditional Use Permit is approved by Lake County. Please note that development must be in compliance with the Clermont JPA Regulations at the time of site plan review.

Thank you,



Justine Day
Planner I
685 W. Montrose St., Clermont, FL 34711
Tel 352-241-7374
JDay@clermontfl.org
www.Clermontfl.gov

Our mission: To preserve and enhance the quality of life for the Clermont community by providing exceptional services.

From: Holt, Sharyn <shari.holt@lakecountyfl.gov>
Sent: Tuesday, September 23, 2025 3:19 PM
To: Justine Day <Jday@clermontfl.org>
Subject: RE: 5th Submittal: Butler Property / PZ2023-318 / AR 5463

Attachment “F” – Public Works Comments

Conditions (DRAFT):

Clermont Joint Planning Area:

1. The project shall comply with all regulations in the Chapter XV of the Land Development Regulations, as amended.

Transportation:

1. All access management shall be in accordance with the Comprehensive Plan and Land Development Regulations, as amended.
2. A cross access with the western parcel shall be required and be constructed with the site improvements to the property line.
3. The development shall provide left and right turn lanes on Lakeshore Drive at the entrance. These will be for the interim until intersection improvements to the west are made by the county.
4. The county reserves the right to modify the access to this property to a right-in right-out vehicle turning movement.
5. Additional right-of-way shall be required for Lakeshore Drive to accommodate future widening and offsite improvements from this development.
6. Sidewalks will be required per Land Development Regulations Commercial Design Standards, as amended.

Stormwater Management:

7. The stormwater management system shall be designed in accordance with all applicable Clermont JPA, Lake County and St. Johns River Water Management District (SJRWMD) requirements, as amended.
8. The developer shall be responsible for any flood studies required for developing the site and comply with FEMA, Comprehensive Plan and Land Development Regulations, as amended. Any development within the floodplain as identified on the FEMA maps will require compensating storage.
9. The cabins must be a minimum of 18-inches above the established base flood elevation and be an elevated construction with least amount of impact on the flood zone.

Mass Grading for Site Development:

1. All Grading for the site development shall be in accordance with the Clermont JPA, Comprehensive Plan, and LDR, as amended.

Utility:

1. The development will be serviced by central water system provided by the Sunshine Waters, in accordance with the Comprehensive Plan and Land Development Regulations (LDR), as amended.

Thanks,
Seth



SETH LYNCH

Development Engineer/Project Manager

public works DEPARTMENT

Engineering Division, Development Section

A P.O. BOX 7800, 350 N. Sinclair Ave, Tavares, FL, 32778

F 352-253-9052

E seth.lynch@lakecountyfl.gov | W www.lakecountyfl.gov

NOTE: Florida has a very broad public records law.

Your email communications may be subject to public disclosure.

Attachment “G” – Flood and Stormwater Comments

Holt, Sharyn

From: Bursa, Karl
Sent: Thursday, July 31, 2025 8:52 AM
To: Holt, Sharyn; Lynch, Seth; Dongalo, Ryan
Subject: RE: 5th Submittal: Butler Property / PZ2023-318 / AR 5463

Follow Up Flag: Follow up
Flag Status: Flagged

Shari:

Thanks for the opportunity to comment on this application.

While staff has no objection to the use itself, there are elements of the conceptual plan that are not in compliance with 14.20.01(5). I also have serious doubts about the applicant’s ability to achieve adequate compensating storage based on the existing water table in that location, but I’ll let Seth and Ryan speak to that.

At this point, I would offer conditional approval from Floodplain Management with the caveat that, per 14.20.01(5), ALL development/construction will take place outside the SFHA. This approval would be for the proposed use ONLY and would not confer any approval or waive our ability to comment on any structure or site development as shown on the conceptual plan.

Let me know if you need anything else.

Thanks!



KARL W. BURSA, AICP, CFM
Public Works Operations Manager

PUBLIC WORKS
A P.O. Box 7800, 323 N. Sinclair Ave. Tavares, FL 32778
P 352-253-9080 | F 352-253-9086
E karl.bursa@lakecountyfl.gov | W www.lakecountyfl.gov

*NOTE: Florida has a very broad public records law.
Your email communications may be subject to public disclosure.*

Attachment “H” – Project Narrative (1 of 4)

PROJECT NARRATIVE FOR CONDITIONAL USE PERMIT

Application Request No. 5463

Alternate Key No. 3949930

Project No. PZ2023-318

Butler Property

The following details are provided to evidence how the proposed conditional use will achieve or meet the standards in accordance with LDR Section 14.05.03.

A. Consistency with the Comprehensive Plan and Local Code. The proposed conditional use is in compliance with all requirements, and is consistent with the general purpose, goals, objectives, and standards of the Comprehensive Plan, the Lake County Code, and is in compliance with all additional standards imposed on it by the particular provisions of these regulations authorizing such use.

The proposed fishing resort/reserve is a low intensity recreational use that complies with the current Green Swamp Rural Future Land Use Designation requirements for a minimum open space of 60% (and developed in compliance with Comprehensive Plan Policy I-1.4.6) and a maximum ISR of 30%. The development will be in compliance with applicable LDRs and standards of governmental permitting agencies.

The proposed use includes the following:

- 2,500 total SF of rental cabin space, each ranging from 750-1,000 SF. A 200 SF bath house for cabin renters to use is shown on the concept plan as well.
- Dark sky lighting will be implemented to ensure there is no negative impact on adjacent properties.
- Standard hours of operation for the store and resort fishing operations to cover 6-AM - 8PM Monday – Sunday, with exceptions for nighttime fishing events which may last until midnight and may occur up to six times per month.
- A small 400 SF store to sell food and beverage items (including beer/wine and tobacco), and fishing equipment. An additional 600 SF building will be used for security.
- Guests will have the following options available to them:
 - Ability to rent boat-slips, fishing equipment and boats
 - Picnic, fire pits, and minor passive recreational areas

The property’s Green Swamp Rural Future Land Use designation specifically permits agricultural, residential, passive parks, religious organizations and equestrian related uses. Thus, residential homes, equestrian facilities or a church could be developed on site without the need for a conditional use. However, the Comprehensive Plan requires a conditional use approval for “outdoor small-scale recreational camps”, which the Comprehensive Plan defines as “Establishments primarily engaged in operating sporting and recreational camps, such as boys’ and girls’ camps, and fishing and hunting camps.” Under Section 14.05.01 of the County’s Land Development Regulations, conditional uses are “generally compatible with the use characteristics of a zoning district, but which require individual review of their location, design, intensity,

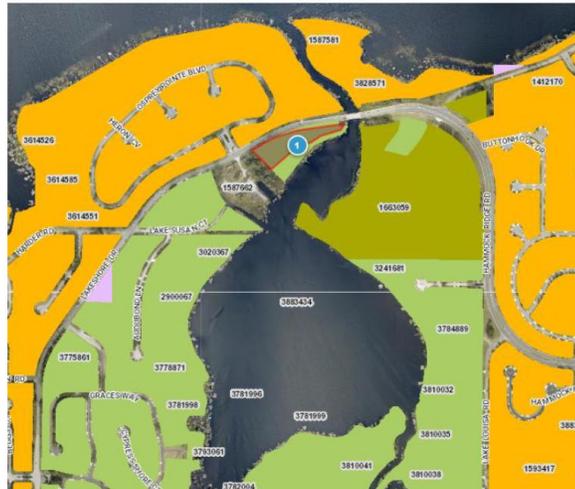
Attachment “H” – Project Narrative (2 of 4)

configuration, and public facility impact in order to determine the appropriateness of the use in the district and their compatibility with adjacent uses.” Thus, the conditional use is contemplated as being an allowable use near residential uses, as proposed, subject to the development limitations imposed herein.

B. Effect on Adjacent Properties.

1. The proposed conditional use will not have an undue adverse effect upon nearby property.

RESPONSE: The site is located off Lakeshore Drive and is surrounded by properties with a Future Land Use designation of either Green Swamp Rural or Urban Low Density:

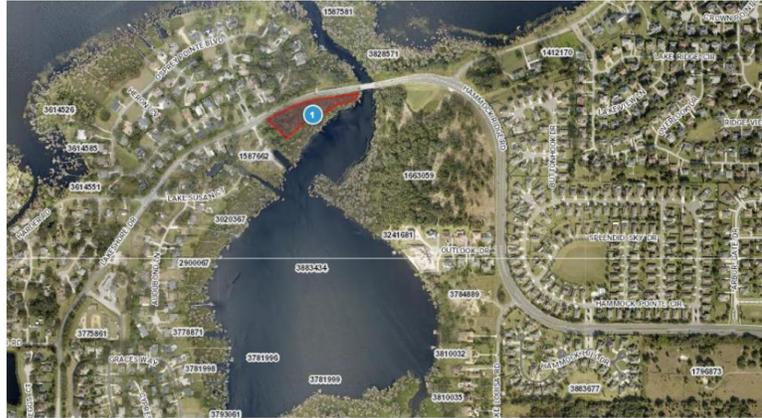


The site is physically separated from adjacent residential properties by Lakeshore Drive, wetlands, water bodies, and an undeveloped site to the west. The adjacent properties will not be impacted from a visual or use standpoint from this proposal. The site and concept plan include appropriate buffering from residential to the north across Lakeshore Drive, the undeveloped parcels to the east and west, as well as from any residential that exists around Lake Susan. The project’s minimal ISR, small building footprints, large open space and proposed use mitigate any impacts on adjacent properties.

2. The proposed conditional use is compatible with the existing or planned character of the neighborhood in which it would be located.

RESPONSE: The immediate area is built out with residential subdivisions:

Attachment “H” – Project Narrative (3 of 4)



This low intensity recreational use is compatible and consistent with the surrounding development. The Green Swamp Rural Future Land Use designation specifically permits agricultural, residential, passive parks, religious organizations and equestrian related uses. Thus, residential homes, equestrian facilities or a church could be developed on site without the need for a conditional use. However, the Comprehensive Plan requires a conditional use approval for “outdoor small-scale recreational camps”, which the Comprehensive Plan defines as “Establishments primarily engaged in operating sporting and recreational camps, such as boys' and girls' camps, and fishing and hunting camps.” Under Section 14.05.01 of the County’s Land Development Regulations, conditional uses are “generally compatible with the use characteristics of a zoning district, but which require individual review of their location, design, intensity, configuration, and public facility impact in order to determine the appropriateness of the use in the district and their compatibility with adjacent uses.” Thus, the conditional use is contemplated as being an allowable use near residential uses, as proposed, subject to the development limitations imposed herein.

3. All reasonable steps have been taken to minimize any adverse effect of the proposed conditional use on the immediate vicinity through design, landscaping, and screening.

RESPONSE: The project is setback from Lakeshore Drive and Lake Susan, with appropriate buffering from residential to the north across Lakeshore Drive, the undeveloped parcels to the east and west, as well as from any residential that exists around Lake Susan. The project’s minimal ISR, small building footprints, large open space and proposed use mitigate any impacts on adjacent properties.

4. The proposed conditional use will be constructed, arranged, and operated so as not to interfere with the development of neighboring property, in accordance with applicable district regulations.

RESPONSE: The project’s site design takes into consideration the surrounding property uses and will not interfere with the development or existing uses on neighboring properties.

Attachment “H” – Project Narrative (4 of 4)

C. Adequacy of Public Facilities. The proposed conditional use will be served by adequate public facilities including but not limited to police, roads, sewage facilities, water supply, drainage, solid waste, parks and recreation, schools, and fire and emergency medical facilities. Levels of service established by the Comprehensive Plan Shall be considered.

RESPONSE: the project will be served by adequate public facilities including but not limited to police, roads, sewage facilities, water supply (from Sunshine Water Services, as confirmed in the attached letter dated August 16, 2024), drainage, solid waste, parks and recreation, and fire and emergency medical facilities. No impacts to schools are generated from the use.

D. Adequacy of Fire Protection. The applicant Shall obtain from the Lake County Emergency Services Division written confirmation, or has otherwise demonstrated by substantial credible evidence, that water supply, evacuation facilities, and emergency access are satisfactory to provide adequate fire protection.

RESPONSE: The site plan provides sufficient access for emergency vehicles and meets the requirements of the Florida Fire Prevention Code 8th Edition. In addition, a letter from the water service provider was received acknowledging that the provider has the ability to serve this project.

Attachment "I" – Master Land Use Plan (1 of 89)

STORMWATER MANAGEMENT REPORT / DRAINAGE CALCULATIONS

for

Barefoot Fishing Resort

January 2025

Prepared For:

Dock Pro, LLC
793 Chestnut St
Clermont, FL 34711

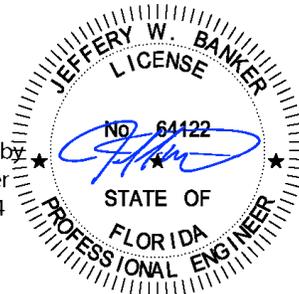
Prepared By:



Highland Engineering, Inc.
1172 S Grand Hwy
Clermont, Florida 34711
(407) 275-7877
C.A. No. 27612

Jeffery W.
Banker

Digitally signed by
Jeffery W. Banker
Date: 2025.01.24
16:08:18 -05'00'



This item has been digitally signed and sealed by Jeffery W. Banker, P.E. on the date adjacent to the seal.
Printed copies of this document are not considered signed and sealed and the signature must be verified on any electronic copies.

Attachment “I” – Master Land Use Plan (2 of 89)

STORMWATER MANAGEMENT REPORT / DRAINAGE CALCULATIONS

for

Dock Pro, LLC
793 Chestnut St
Clermont, FL 34711

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Attachment “I” – Master Land Use Plan (3 of 89)

STORMWATER MANAGEMENT REPORT / DRAINAGE CALCULATIONS

for

Dock Pro, LLC
793 Chestnut St
Clermont, FL 34711

LIST OF EXHIBITS

<u>Exhibit No.</u>	<u>Description</u>
1.1	Location Map
1.2	Aerial Location Map
1.3	USGS Topo Map
1.4	Soils Map
1.5	FEMA Flood Map
1.6	Pre-Development Drainage Basin Map
1.7	Post-Development Drainage Basin Map
1.8	Compensating Storage Plan
2.0	Drainage Calculations
3.0	Environmental Assessment, Excelsior Environmental Consultants
4.0	Report of Geotechnical Engineering Services, Andreyev Engineering Services, Inc.
5.0	Construction Plans and Survey (separately attached)

Attachment “I” – Master Land Use Plan (4 of 89)

STORMWATER MANAGEMENT REPORT / DRAINAGE CALCULATIONS

for

Dock Pro, LLC
793 Chestnut St
Clermont, FL 34711

1 **INTRODUCTION**

This report has been prepared on behalf of Dock Pro, LLC 793 Chestnut St, Clermont, Florida 34711 and addresses the project related stormwater management system design considerations and calculations to demonstrate compliance with applicable FDEP, Lake County and Saint Johns River Water Management District (SJRWMD) regulations.

2 **PROPERTY LOCATION**

The subject property is located within Section 01 / Township 23S / Range 25E, and within the jurisdictional limits of the Lake County, Florida. The property’s location is more specifically described as being situated adjacent to Lake Shore Drive and Lake Susan. The property is located within the Green Swamp Area of Critical State Concern (GSACSC). The attached **Exhibit 1.1** (Location Map) and **Exhibit 1.2** (Aerial Map) depict the subject property location.

3 **PROPERTY OWNERSHIP**

The subject property is owned by Dock Pro, LLC.

4 **PROJECT AREA**

For permitting purposes, the subject property contains 1.34 acres “project area”, which is composed of the upland area outside of the 25’ average SJRWMD buffer. The wetland buffer is not considered in the project area. The upland area contains the proposed parking lot, buildings, and storm water management system improvements. The attached **Exhibit 1.8** (Proposed Conditions Drainage Map) depicts these referenced areas.

5 **RELATED PERMIT HISTORY**

Record permits or approvals have not been found regarding the subject property.

6 **EXISTING SITE CONDITIONS**

6.1 **Land Use**

Attachment “I” – Master Land Use Plan (5 of 89)

The subject property consists of 1.34 acres of heavily wooded and vegetated land on the parcel. The Land Use Description is Vacant Residential Lake Frontage.

6.2 Soils

The attached **Exhibit 1.3** (Soils Map) depicts the soil classifications and corresponding hydrologic soil group classifications within the property boundary, according to the USDA Soil Conservation Service Survey of Lake County, Florida. The native soils on the site consist of Anelote and Myakka, Candler Sand, and Lake Sand Hydrologic soil group A/D. Subsurface explorations and geotechnical analysis of the subject property have been conducted by Andreyev Engineering services and are included as **Exhibit 4.0** (Geotechnical Report). Soil and groundwater characteristics related to the project stormwater management system design considerations addressed by the Andreyev report, include encountered groundwater elevations, estimated average wet-season groundwater elevations and hydraulic conductivity rates. Groundwater elevation was recorded to be 1.9 to 3.6 ft below existing grade. Wet-season groundwater elevation is estimated to be near the recorded ground water elevations.

6.3 100-Year Floodplain

A portion of the site lies within the limits of a mapped Flood Zone and does contain flood prone areas. The attached **Exhibit 1.5** (FEMA Flood Map) depicts the 100-year flood plain boundary relative to the project. The project area is within the marked flood zone. The elevation of the 100-year flood zone is 99.0'. The attached **Exhibit 1.8** (Compensating Storage Plan) graphically depicts areas of cut and fill within the flood zone. The plan shows there is no net fill within the 100-year flood plain.

6.4 Wetlands

The property contains wetlands. Please see **Exhibit 3.0** (Environmental Assessment) by Excelsior Environmental Consultants. The jurisdictional wetland limit line is defined in the report as well as depicted on the survey.

6.5 Drainage Characteristics

The attached **Exhibit 1.6** (Existing Conditions Drainage Map) provides the site-specific topographic conditions and depicts the existing site drainage flow patterns and drainage basin boundaries. Based on field observation of existing conditions and analysis of the site-specific Topographic Survey (included as a component of the Construction Plans, **Exhibit 5.0**), the property was considered to be a single basin that contributes to off-site collection points south of the site.

Detailed calculations related to existing stormwater runoff characteristics for the applicable SJRWMD storm events are included in the attached **Exhibit 2.0** (Drainage Calculations). The following is a summary of the drainage characteristics for the identified pre-development basin area.

Attachment “I” – Master Land Use Plan (6 of 89)

The pre-development basin consists of 1.34 acres of the project area. It slopes from the north and west boundary line to the south boundary line. Runoff from this basin sheet flows over a densely brushed portion of the project area which continues to slope in a south-easterly direction.

To establish a pre-development runoff curve number (CN) for the subject property, a land cover of good-conditioned woods – grass combination for hydrologic soil group A was used for the undeveloped portions of the site, resulting in a CN=57. To estimate the time of concentration for the pre-development drainage basin, a Manning’s roughness coefficient of 0.40 was used, which describes the surface as wooded with light underbrush. The time of concentration for the pre-development drainage basin is summarized in Table 1.0 below:

Table 1.0 Summary of Existing Conditions

Drainage Basin	Drainage Area	CN	TC
E-1	1.34 acres	57	30.0 min.

TC – Time of concentration
 CN= Runoff Curve Number

7 **PROPOSED DEVELOPMENT CONDITIONS**

7.1 **Land Use / Development Improvements**

The proposed project is for a small recreational fishing resort with 5 small cabins, parking and boat docking facilities with associated paving, grading, drainage, primary stormwater management system improvements. The attached **Exhibit 1.7** (Post-Development Drainage Map) depicts the proposed site plan and summarizes the proposed impervious/pervious surface areas and the stormwater management pond area.

7.2 **Primary Stormwater Management System**

Based on the planned site development, the project area is a single drainage basin area. The primary stormwater management system improvements include a dry retention pond. The dry retention pond provides water quality treatment and peak attenuation storage for post development basin P-1. There are no off-site contributory areas associated with the subject property. Runoff from P-1 will sheet flow over pavement and into a flume that discharges into the stormwater management pond. The attached **Exhibit 1.7** (Post-Development Drainage Map) depicts (1) a site plan of the proposed improvements including the buildings and (2) the proposed stormwater management pond and associated outfall structure/pipes.

Attachment “I” – Master Land Use Plan (7 of 89)

8 REGULATORY REQUIREMENTS

The proposed stormwater management pond is designed to provide water quality treatment and water quantity attenuation for the project site, pursuant to Saint Johns River Water Management District (SJRWMD) requirements, FDEP regulations, and Lake County prior to discharge. Specifically, the proposed pond is designed to attenuate the post-development peak rates of discharge, to less than or equal to the pre-development peak rates of discharge for the 10-year / 24-hour storm event of 6.5 inches; 25-year / 24-hour storm event of 8.5 inches, and the Mean Annual / 24-hour storm event of 4.2 inches. The property is within the Green Swamp Area of Critical State Concern (GSACSC) and will adhere to special criteria specified within the jurisdiction. Development requirements within the GSACSC require 3” of retention over the basin area, which is required to be recovered in 14 days. The subject property directly discharges to a wetland adjacent to Lake Susan.

8.1 Offsite Conveyance System Considerations

Proposed development discharge from the proposed dry detention stormwater management pond will be regulated by a broad crested weir Control Structure with a weir slot elevation set at elevation 80.00 prior to discharge offsite in the south-east corner of the property consistent with pre-development conditions.

8.2 Tailwater Conditions

Drainage from the project area positively discharges at the south-east corner of the project area via overland flow and is not affected by any tailwater constraints.

8.3 Secondary Storm Sewer System

The project is designed to flow to the stormwater management pond prior to discharge offsite.

8.4 Erosion and Sediment Control

Protection of siltation or erosion onto adjacent properties resultant to proposed site construction activities will be achieved by the placement of silt fencing along the subject property perimeter at all locations where said potential exists. Also, applicable National Pollutant Discharge Elimination System (NPDES) permitting will be obtained, and associated Pollution Prevention Plans will be maintained at the site, throughout the construction phase.

8.5 Maintenance and Operation

Maintenance and operation of the primary and secondary stormwater management system improvements will be provided by the property owner Dock Pro, LLC

Attachment “I” – Master Land Use Plan (8 of 89)

9 DRAINAGE CALCULATIONS

9.1 Existing Conditions

Drainage calculations associated with the existing property conditions are included in the attached **Exhibit 2.0** (Drainage Calculations). The existing peak discharge rate is summarized alongside the post development discharge rates in section 9.2.2.

9.1.1 **Phosphorus Loading and Removal Efficiency**

See BMPtrains Phosphorus Loading Analysis **Exhibit 2.0** (Drainage Calculations)

9.2 Proposed Conditions Findings/Results

Drainage calculations associated with the proposed post-development property conditions are included in the attached **Exhibit 2.0** (Drainage Calculations). The following is a summary of the post-development drainage calculation analysis findings/results.

9.2.1 **Water Quality Treatment Volume**

Wet detention water quality treatment volume shall be provided for the first inch of runoff from the developed project or the total runoff of 2.5-inches times the percentage of imperviousness, whichever is greater. Dry retention is one-half inch over the entire basin area or 1.25 inches of runoff from the impervious area, whichever is greater. Another one-half inch over the basin area is required for on-line retention system. Considering the site is within the Green Swamp Area of Critical Concern it is required to provide 3” of retention over the basin area.

Post Basin P-1 – Dry retention (required)

3” inch over the developed project area = $3''/12'' \times 1.34 \text{ ac} = 0.34 \text{ ac-ft}$

Post Basin P-1 Dry retention Water Quality Treatment Provided:

25yr-24hr Runoff Volume =	0.45 ac-ft
25yr-24hr Discharge =	0 cfs , 0 ac-ft
<u>25yr-24hr Volume Retained =</u>	<u>0.45 ac-ft</u>
Inches Retained on-site =	$0.45 \text{ ac-ft} / 1.34 \text{ ac} * 12\text{in/ft} = 4.03\text{in.}$

Attachment “I” – Master Land Use Plan (9 of 89)

Table 2.0 – Dry Pond Stage / Storage Relationship

DRY RETENTION POND-1 STAGE-STORAGE RELATIONSHIP						
Stage (feet)	Depth (feet)	Surface Area (sq. ft.)	Surface Area (acres)	Average Area (acres)	Incremental Volume (ac-ft)	Total Volume (ac-ft)
97.00	0.00	9,442	0.22	0.00	0.00	0.00
98.00	1.00	12,715	0.29	0.25	0.25	0.25
99.00	2.00	23,188	0.53	0.41	0.41	0.67

9.2.2 Peak Discharge Rate / Design High Water

The following Table 4.0 and 5.0 is a summary of the key design and performance characteristics for the proposed stormwater management systems. Calculations supporting this tabular summary are included in the attached **Exhibit 2.0** (Drainage Calculations).

TABLE 4: SUMMARY OF PROPOSED STORMWATER MANAGEMENT POND DESIGN AND PERFORMANCE CHARACTERISTICS		
DRY POND		
Function	Dry Retention	
Fenced	Yes	
Embankment Slope	4:1	
Top of Bank Elevation (NAVD88)	99.0	
Pond Bottom Elevation (NAVD88)	97.0	
Control Water Elevation (NAVD88)	N/A	
Outfall Control Structure	Broad Crested Weir	
Weir Elevation (NAVD88)	98.0	
Weir Length	5'	
Bleed-down Diameter	N/A	
Peak Stage (ft.) (NAVD88)	Stage	Freeboard (ft.)
Mean Annual 24-hour	97.16	1.84
10-year / 24-hour	97.55	1.45
25-year / 24-hour	98.00	1.00

TABLE 6: SUMMARY OF PEAK DISCHARGE		
Peak Discharge (cfs)	Pre-Development	Post Development
Mean Annual 24-hour	0.30	0.00
10-year / 24-hour	1.05	0.00
25-year / 24-hour	1.91	0.00

Attachment “I” – Master Land Use Plan (10 of 89)

TABLE 7: SUMMARY OF DISCHARGE VOLUME		
Volume (Cubic Foot)	Pre-Development	Post Development
Mean Annual 24-hour	3,453	0
10-year / 24-hour	9,697	0
25-year / 24-hour	16,407	0

9.2.3 Retention Volume Recovery

Dry Retention Recovery

Recovery criteria for the GSACSC is such that the storage volume is recovered within 14 days following a storm event based on a 25-year storm event. The entire 25-year storm event is retained on-site. The results of the recovery analysis are included in **Exhibit 2.0** (Drainage Calculations).

9.3 Computer Modeling

Recovery of the retention volume within the stormwater pond area was determined using POND5 Version 3.2.0274 Retention Pond Recovery - Refined Method. Input parameters and computer modeling results are presented in **Exhibit 2.0** (Drainage Calculations). The geotechnical design parameters utilized in the model are found within **Exhibit 4.0** (Geotechnical Report).

Attachment “I” – Master Land Use Plan (11 of 89)

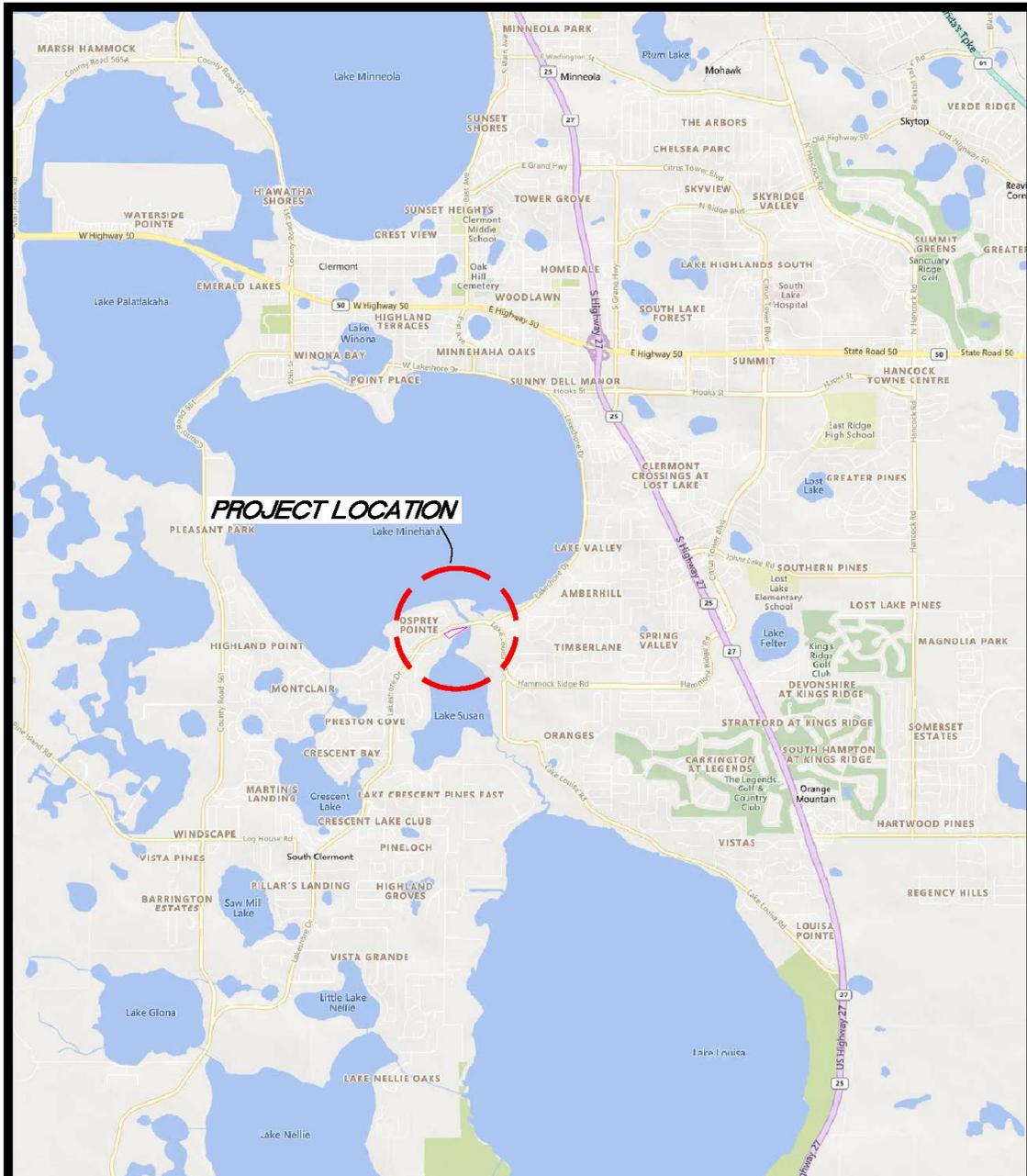
STORMWATER MANAGEMENT REPORT

BAREFOOT FISHING RESORT

LAKE COUNTY FLORIDA

EXHIBIT 1.1
LOCATION MAP

Attachment "I" – Master Land Use Plan (12 of 89)



 SCALE 1:5000	SITE LOCATION LAKESHORE DRIVE CLERMONT, FLORIDA 01-23-25-0001-000-03300	LOCATION MAP	JOB No. DPL-001 DATE: 01/24/25
	 HIGHLAND ENGINEERING, INC. 1172 GRAND HWY., CLERMONT, FL 34711 Tel (407) 275-7877 Fax (407) 275-7901 CA No. 27612		BAREFOOT FISHING RESORT LAKE COUNTY, FLORIDA

Attachment “I” – Master Land Use Plan (13 of 89)

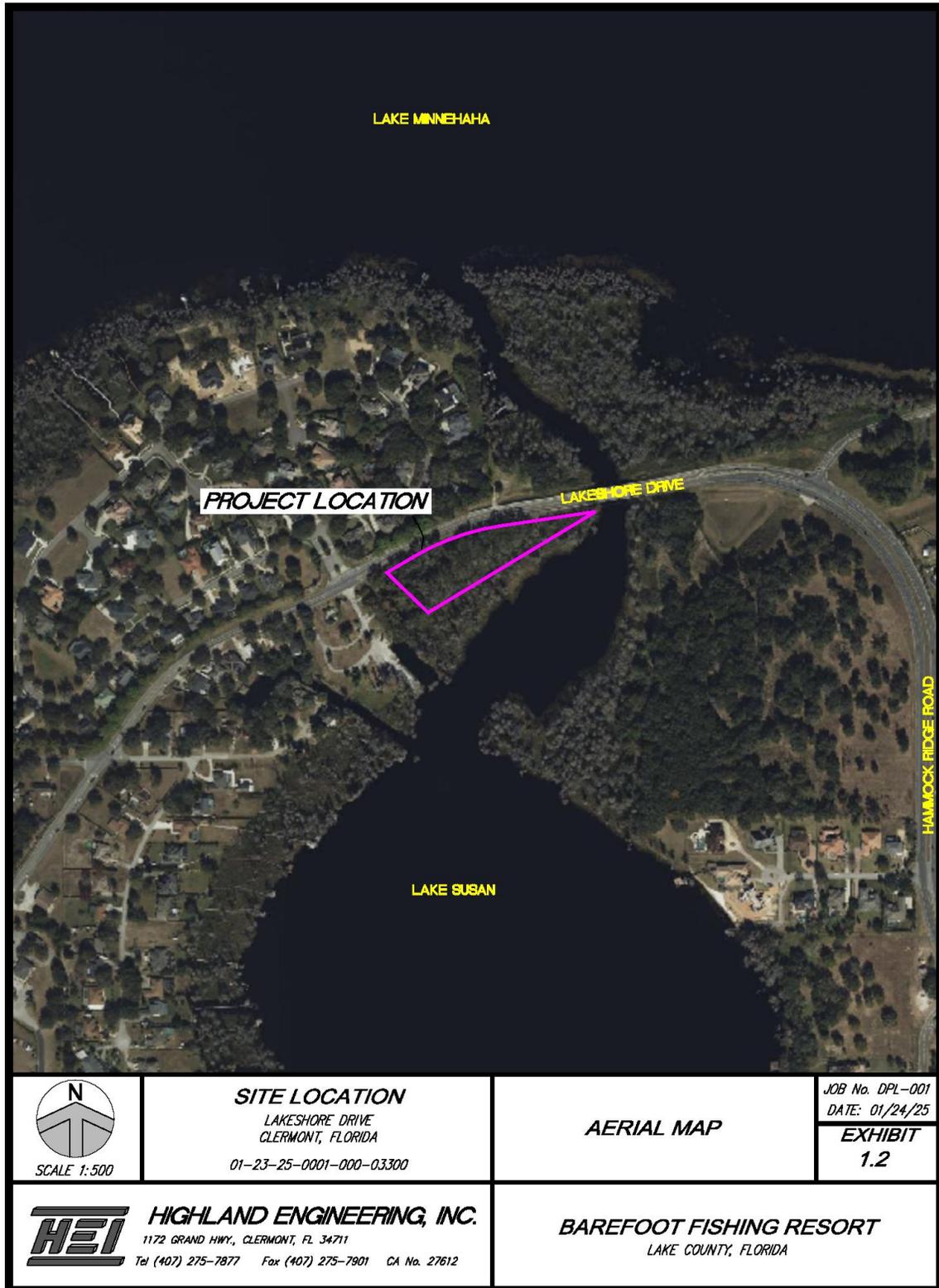
STORMWATER MANAGEMENT REPORT

BAREFOOT FISHING RESORT

LAKE COUNTY FLORIDA

EXHIBIT 1.2
AERIAL MAP

Attachment "I" – Master Land Use Plan (14 of 89)



Attachment "I" – Master Land Use Plan (15 of 89)

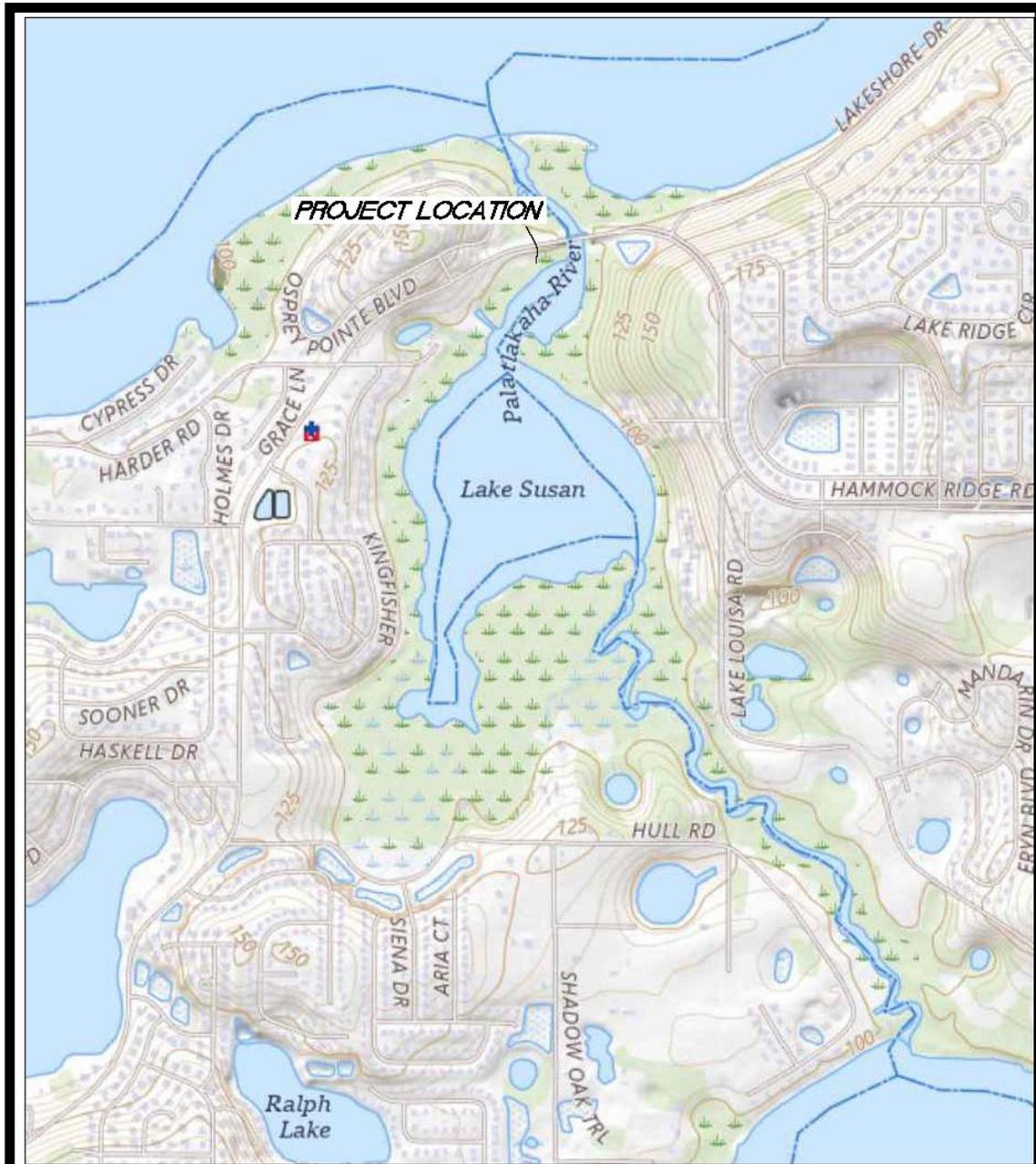
STORMWATER MANAGEMENT REPORT

BAREFOOT FISHING RESORT

LAKE COUNTY FLORIDA

EXHIBIT 1.3
USGS TOPO
MAP

Attachment "I" – Master Land Use Plan (16 of 89)



 SCALE 1:5000	<p>SITE LOCATION LAKESHORE DRIVE CLERMONT, FLORIDA 01-23-25-0001-000-03300</p>	<p>TOPOGRAPHY MAP</p>	<p>JOB No. DPL-001 DATE: 01/24/25 EXHIBIT 1.3</p>
 <p>HIGHLAND ENGINEERING, INC. 1172 GRAND HWY., CLERMONT, FL 34711 Tel (407) 275-7877 Fax (407) 275-7901 CA No. 27612</p>		<p>BAREFOOT FISHING RESORT LAKE COUNTY, FLORIDA</p>	

Attachment "I" – Master Land Use Plan (17 of 89)

STORMWATER MANAGEMENT REPORT

BAREFOOT FISHING RESORT

LAKE COUNTY FLORIDA

EXHIBIT 1.4
SOILS MAP

Attachment "I" – Master Land Use Plan (18 of 89)



LEGEND

Map Unit Symbol	Map Unit Name	Acres in AOI	Percent of AOI
4	Anclole and Myakka soils	2.9	47.9%
8	Candler sand, 0 to 5 percent slopes	1.6	27.0%
17	Arents	0.5	7.8%
22	Lake sand, 5 to 12 percent slopes	0.9	14.3%
99	Water	0.2	2.9%
Totals for Area of Interest		6.0	100.0%



SITE LOCATION
 LAKESHORE DRIVE
 CLERMONT, FLORIDA
 01-23-25-0001-000-03300

SOILS MAP

JOB No. DPL-001
 DATE: 01/24/25
EXHIBIT
1.4



HIGHLAND ENGINEERING, INC.
 1172 GRAND HWY., CLERMONT, FL 34711
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 LAKE COUNTY, FLORIDA

Attachment “I” – Master Land Use Plan (19 of 89)

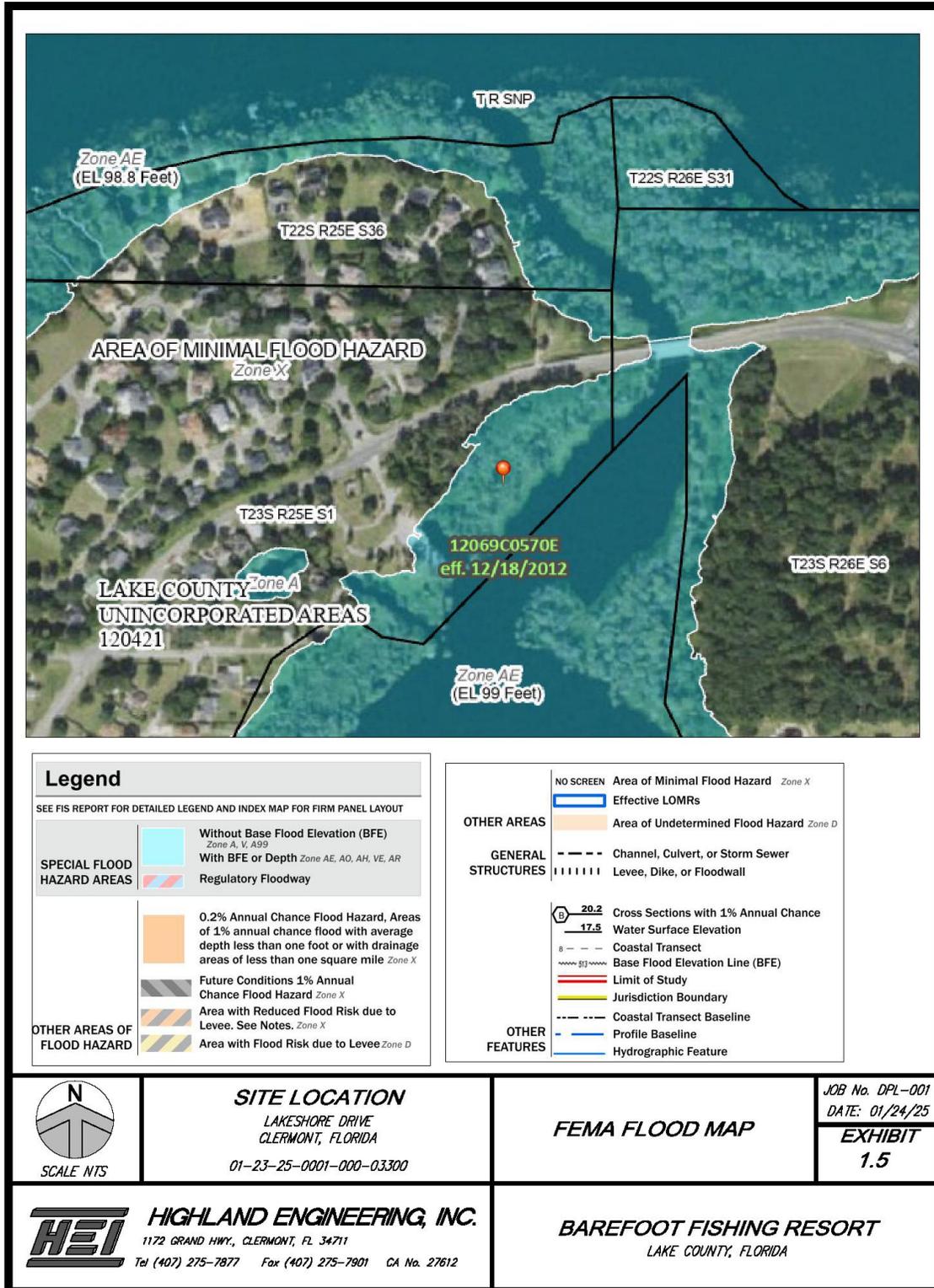
STORMWATER MANAGEMENT REPORT

BAREFOOT FISHING RESORT

LAKE COUNTY FLORIDA

EXHIBIT 1.5
FEMA FLOOD MAP

Attachment "I" – Master Land Use Plan (20 of 89)



Attachment “I” – Master Land Use Plan (21 of 89)

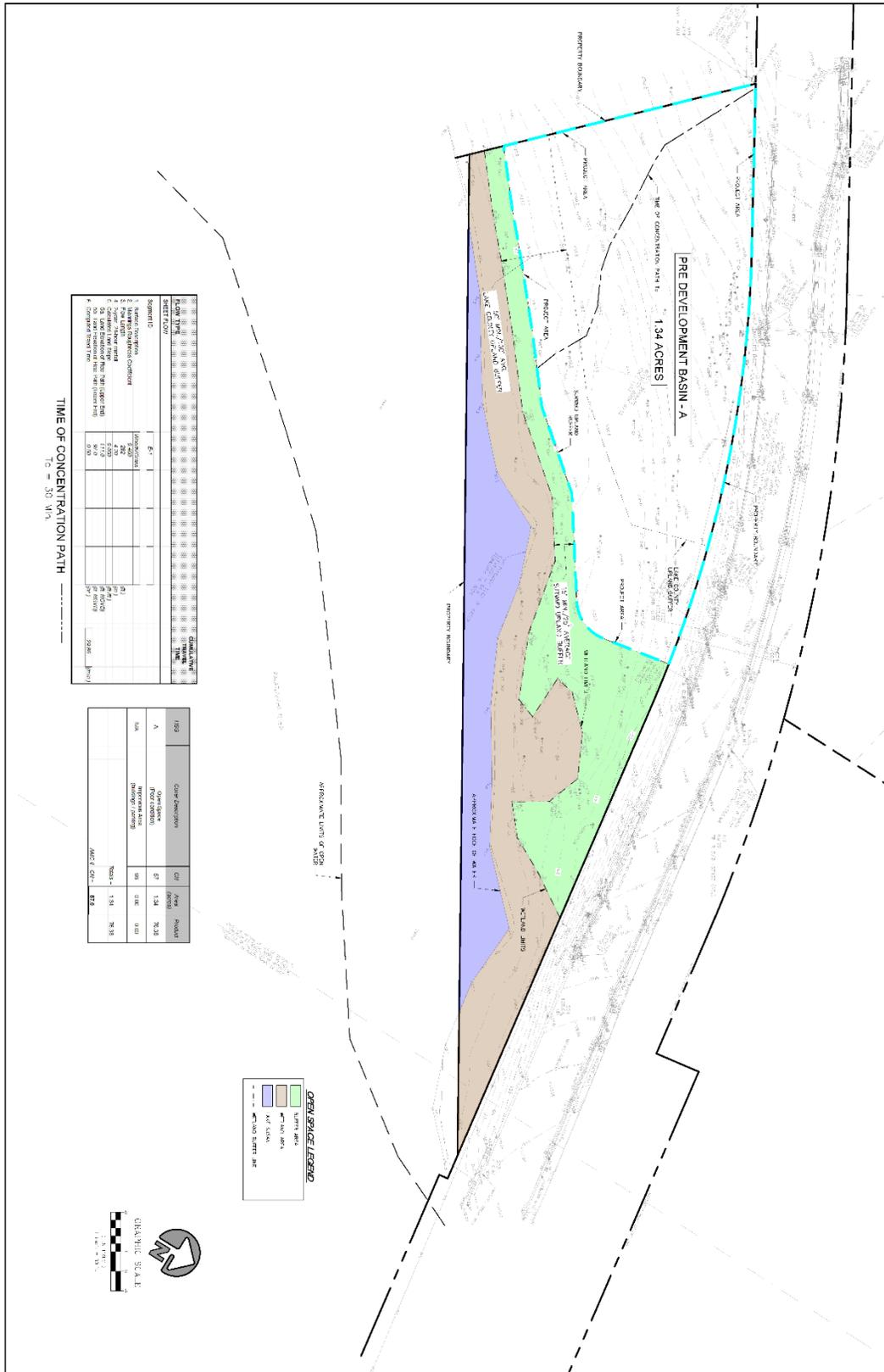
STORMWATER MANAGEMENT REPORT

BAREFOOT FISHING RESORT

LAKE COUNTY FLORIDA

EXHIBIT 1.6
PRE-DEVELOPMENT
DRAINAGE MAP

Attachment "I" – Master Land Use Plan (22 of 89)



Attachment “I” – Master Land Use Plan (23 of 89)

STORMWATER MANAGEMENT REPORT

BAREFOOT FISHING RESORT

LAKE COUNTY FLORIDA

EXHIBIT 1.7
POST-DEVELOPMENT
DRAINAGE MAP

Attachment “I” – Master Land Use Plan (25 of 89)

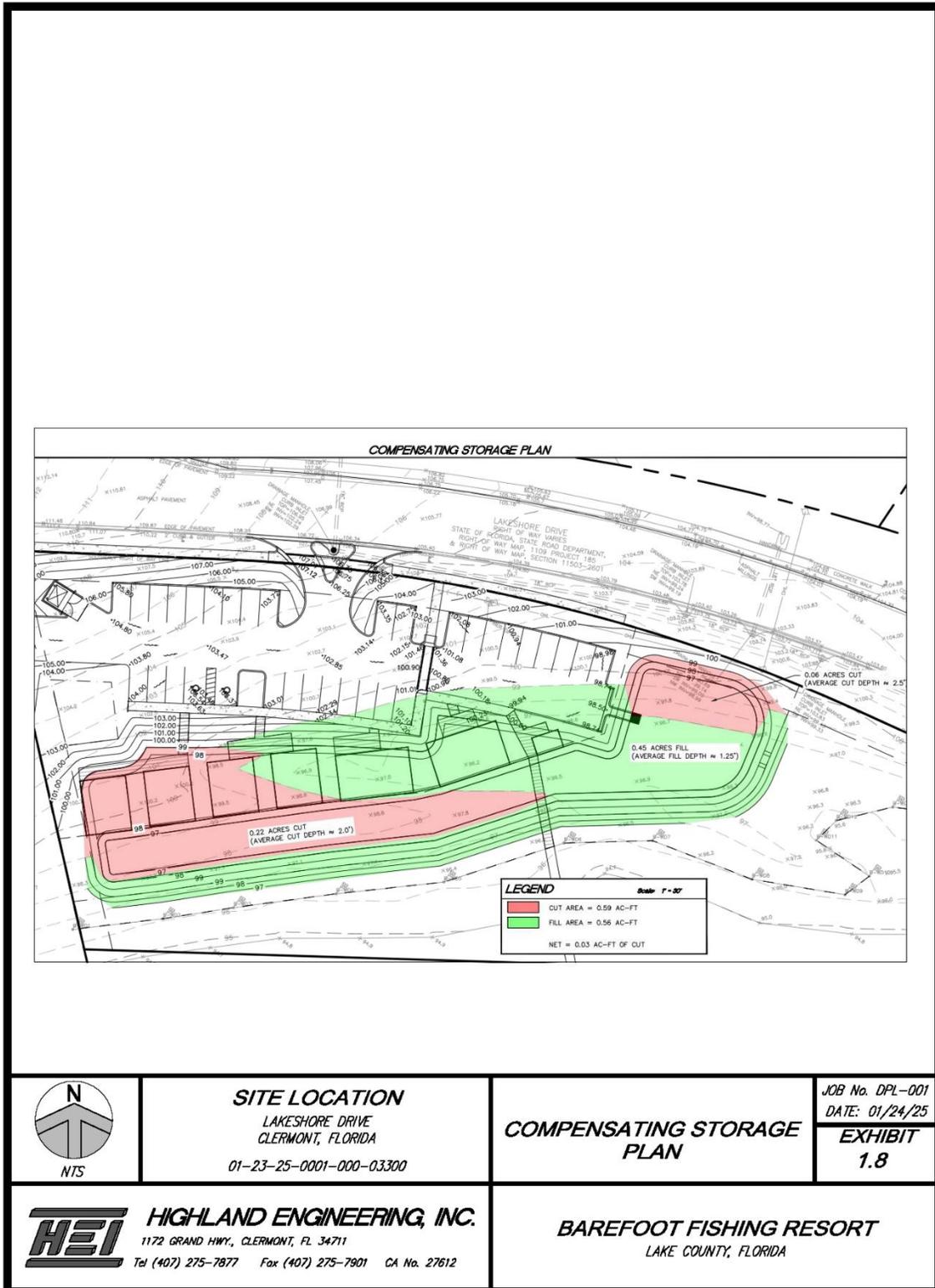
STORMWATER MANAGEMENT REPORT

BAREFOOT FISHING RESORT

LAKE COUNTY FLORIDA

EXHIBIT 1.8
COMPENSATING
STORAGE PLAN

Attachment "I" – Master Land Use Plan (26 of 89)



Attachment "I" – Master Land Use Plan (27 of 89)

STORMWATER MANAGEMENT REPORT

BAREFOOT FISHING RESORT

LAKE COUNTY FLORIDA

EXHIBIT 2.0
DRAINAGE
CALCULATIONS

Attachment "I" – Master Land Use Plan (28 of 89)

STORMWATER MANAGEMENT REPORT

BAREFOOT FISHING RESORT

LAKE COUNTY FLORIDA

PONDS CALCULATIONS

Attachment “I” – Master Land Use Plan (29 of 89)

PONDS Version 3.2.0274
Retention Pond Recovery - Refined Method
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Devo Seereeram, Ph.D., P.E.

Project Data

Project Name: Bear Foot Fishing Resort
Simulation Description: Stormwater Calculations
Project Number: DPL-001
Engineer : Julian Quintana
Supervising Engineer: Jeff Banker
Date: 09-05-2024

Aquifer Data

Base Of Aquifer Elevation, [B] (ft datum): 93.00
Water Table Elevation, [WT] (ft datum): 95.00
Horizontal Saturated Hydraulic Conductivity, [Kh] (ft/day): 8.80
Fillable Porosity, [n] (%): 8.00
Unsaturated Vertical Infiltration Rate, [Iv] (ft/day): 3.9
Maximum Area For Unsaturated Infiltration, [Av] (ft²): 23188.0

Geometry Data

Equivalent Pond Length, [L] (ft): 430.0
Equivalent Pond Width, [W] (ft): 23.0
Ground water mound is expected to intersect the pond bottom

Stage vs Area Data

Stage (ft datum)	Area (ft ²)
97.00	9442.0
98.00	12715.0
99.00	23188.0

Attachment "I" – Master Land Use Plan (30 of 89)

PONDS Version 3.2.0274
Retention Pond Recovery - Refined Method
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Discharge Structures

Discharge Structure #1 is active as weir

Structure Parameters

Description: Broad Crested Weir

Weir elevation, (ft datum):	98
Weir coefficient:	2.861
Weir length, (ft):	5
Weir exponent:	1.5

Tailwater - disabled, free discharge

Discharge Structure #2 is inactive

Discharge Structure #3 is inactive

Attachment "I" – Master Land Use Plan (31 of 89)

PONDS Version 3.2.0274
Retention Pond Recovery - Refined Method
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Scenario Input Data

Scenario 1 :: Water Quality Treatment

Hydrograph Type:	Slug Load
Modflow Routing:	Routed with infiltration
Treatment Volume (ft³)	7405
Initial ground water level (ft datum)	95.00 (default)
<u>Time After Storm Event (days)</u>	<u>Time After Storm Event (days)</u>
0.100	2.000
0.250	2.500
0.500	3.000
1.000	3.500
1.500	4.000

Scenario 2 :: Post-Development Basin Mean Annual

Hydrograph Type:	Inline SCS
Modflow Routing:	Routed with infiltration
Repetitions:	1
Basin Area (acres)	1.340
Time Of Concentration (minutes)	10.0
DCIA (%)	39.0
Curve Number	39
Design Rainfall Depth (inches)	4.2
Design Rainfall Duration (hours)	24.0
Shape Factor	UHG 323
Rainfall Distribution	SCS Type II Florida Modified
Initial ground water level (ft datum)	95.00 (default)
No times after storm specified.	

Scenario 3 :: Post-Development Basin 10-year 24-hour

Hydrograph Type:	Inline SCS
Modflow Routing:	Routed with infiltration
Repetitions:	1
Basin Area (acres)	1.340
Time Of Concentration (minutes)	10.0
DCIA (%)	39.0
Curve Number	39
Design Rainfall Depth (inches)	6.5
Design Rainfall Duration (hours)	24.0
Shape Factor	UHG 323
Rainfall Distribution	SCS Type II Florida Modified
Initial ground water level (ft datum)	95.00 (default)
No times after storm specified.	

Attachment "I" – Master Land Use Plan (32 of 89)

PONDS Version 3.2.0274
Retention Pond Recovery - Refined Method
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Scenario Input Data (cont'd.)

Scenario 4 :: Post-Development Basin 25-year 24-hour

Hydrograph Type: Multi-basin SCS Hydrograph

Modflow Options

Modflow Routing:	Routed with infiltration
Initial Groundwater Table:	default
Initial Pond Stage:	default
Boundary Condition:	default (constant head)
Repetitions:	1

Simulation Parameters

Minimum time of concentration for all contributing basins in chain (minutes):	10
Computational time step (minutes):	1
Duration of simulation (hours):	336

Contributing Basins

Number of contributing basins: 1

Basin 1

Basin Name	Post-Development Basin 25-year 24-hour
Basin Area (acres)	1.34
Time Of Concentration (minutes)	10
DCIA (%)	39
Curve Number	39
Design Rainfall Depth (inches)	8.5
Design Rainfall Duration (hours)	24
Shape Factor	UHG 323
Rainfall Distribution	SCS Type II Florida Modified

Ugradient Inflows

Number of upgradient inflow nodes: 0

Scenario 5 :: Pre-Development Basin Mean Annual

Hydrograph Type: Inline SCS
 • **Modflow Routing: Not routed**
 Repetitions: 1

Basin Area (acres)	1.340
Time Of Concentration (minutes)	30.0
DCIA (%)	0.0
Curve Number	57
Design Rainfall Depth (inches)	4.2
Design Rainfall Duration (hours)	24.0
Shape Factor	UHG 323
Rainfall Distribution	SCS Type II Florida Modified

Initial ground water level (ft datum) 95.00 (default)

No times after storm specified.

Attachment "I" – Master Land Use Plan (33 of 89)

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Scenario Input Data (cont'd.)

Scenario 6 :: Pre-Development Basin 10-year 24-hour

Hydrograph Type: Inline SCS
• **Modflow Routing:** **Not routed**
Repetitions: 1

Basin Area (acres) 1.340
Time Of Concentration (minutes) 30.0
DCIA (%) 0.0
Curve Number 57
Design Rainfall Depth (inches) 6.5
Design Rainfall Duration (hours) 24.0
Shape Factor UHG 323
Rainfall Distribution SCS Type II Florida Modified

Initial ground water level (ft datum) 95.00 (default)

No times after storm specified.

Scenario 7 :: Pre-Development Basin 25-year 24-hour

Hydrograph Type: Inline SCS
• **Modflow Routing:** **Not routed**
Repetitions: 1

Basin Area (acres) 1.340
Time Of Concentration (minutes) 30.0
DCIA (%) 0.0
Curve Number 57
Design Rainfall Depth (inches) 8.5
Design Rainfall Duration (hours) 24.0
Shape Factor UHG 323
Rainfall Distribution SCS Type II Florida Modified

Initial ground water level (ft datum) 95.00 (default)

No times after storm specified.

Attachment "I" – Master Land Use Plan (34 of 89)

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Modflow Log

MODFLOW CONTROL PARAMETERS
Perimeter boundary condition: constant head
Maximum iterations of outer loop: 150
Maximum iterations of inner loop: 60
Horizontal conductivity within pond: 1000000 (if ground water mound is expected to intersect pond bottom)
Instantaneous storage coefficient: Volumetric balance
Default head closure tolerance: .01
Default residual closure tolerance: .5
Target water budget error: 1
On failure to converge: Rerun limiting inner loop to one iteration
> Maximum number of iterations of outer loop: 500
Running Average Porosity is active
> Starting on pass: 2
> When outer iteration reaches: 50
> Number of data points: 4
Running Average Pond Stage (for discharge structures with tailwater) is active
> Starting on pass: 2
> When outer iteration reaches: 50
> Number of data points: 4
Grid size: 1000 ft (from pond centerline)
Mound Output: none

Begin Scenario 1 1/24/2025 12:4:15
End Scenario 1 1/24/2025 12:4:15

Begin Scenario 2 1/24/2025 12:4:15
End Scenario 2 1/24/2025 12:4:16

Begin Scenario 3 1/24/2025 12:4:17
End Scenario 3 1/24/2025 12:4:17

Begin Scenario 4 1/24/2025 12:4:18
End Scenario 4 1/24/2025 12:4:31

Begin Scenario 5 1/24/2025 12:4:32
End Scenario 5 1/24/2025 12:4:32

Begin Scenario 6 1/24/2025 12:4:32
End Scenario 6 1/24/2025 12:4:32

Begin Scenario 7 1/24/2025 12:4:33
End Scenario 7 1/24/2025 12:4:33

Attachment "I" – Master Land Use Plan (35 of 89)

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Sort-By-Category Report

Scenarios Considered: 1 to 7

Stage - Maximum

Rank	Scenario Number	Maximum Stage (ft datum)	Time (hours)	Description
1	4	98.002	24.133	Post-Development Basin 25-year 24-hour
2	1	97.699	0.002	Water Quality Treatment
3	3	97.551	24.089	Post-Development Basin 10-year 24-hour
4	2	97.155	12.600	Post-Development Basin Mean Annual
5	5	Not Available	Not Available	Pre-Development Basin Mean Annual
6	6	Not Available	Not Available	Pre-Development Basin 10-year 24-hour
7	7	Not Available	Not Available	Pre-Development Basin 25-year 24-hour

Discharge - Rate - Maximum Positive

Rank	Scenario Number	Maximum Positive Discharge Rate (ft ³ /s)	Time (hours)	Description
1	7	1.9145	12.200	Pre-Development Basin 25-year 24-hour
2	6	1.0508	12.267	Pre-Development Basin 10-year 24-hour
3	5	0.3014	12.600	Pre-Development Basin Mean Annual
4	4	0.0012	24.133	Post-Development Basin 25-year 24-hour
5	1	None	N.A.	Water Quality Treatment
6	2	None	N.A.	Post-Development Basin Mean Annual
7	3	None	N.A.	Post-Development Basin 10-year 24-hour

Discharge - Cumulative Volume - Maximum Positive

Rank	Scenario Number	Maximum Positive Cumulative Discharge Volume (ft ³)	Time (hours)	Description
1	7	16406.5	26.600	Pre-Development Basin 25-year 24-hour
2	6	9696.5	26.600	Pre-Development Basin 10-year 24-hour
3	5	3452.5	26.600	Pre-Development Basin Mean Annual
4	4	1.2	24.433	Post-Development Basin 25-year 24-hour
5	1	None	N.A.	Water Quality Treatment
6	2	None	N.A.	Post-Development Basin Mean Annual
7	3	None	N.A.	Post-Development Basin 10-year 24-hour

Attachment "I" – Master Land Use Plan (36 of 89)

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Summary of Results :: Scenario 1 :: Water Quality Treatment

	Time (hours)	Stage (ft datum)	Rate (ft ³ /s)	Volume (ft ³)
Stage				
Minimum	0.000	95.00		
Maximum	0.002	97.70		
Inflow				
Rate - Maximum - Positive	0.002		1234.1670	
Rate - Maximum - Negative	None		None	
Cumulative Volume - Maximum Positive	0.002			7405.0
Cumulative Volume - Maximum Negative	None			None
Cumulative Volume - End of Simulation	96.000			7405.0
Infiltration				
Rate - Maximum - Positive	0.002		0.5295	
Rate - Maximum - Negative	None		None	
Cumulative Volume - Maximum Positive	24.000			7405.0
Cumulative Volume - Maximum Negative	None			None
Cumulative Volume - End of Simulation	96.000			7405.0
Combined Discharge				
Rate - Maximum - Positive	None		None	
Rate - Maximum - Negative	None		None	
Cumulative Volume - Maximum Positive	None			None
Cumulative Volume - Maximum Negative	None			None
Cumulative Volume - End of Simulation	96.000			0.0
Discharge Structure 1 - simple weir				
Rate - Maximum - Positive	None		None	
Rate - Maximum - Negative	None		None	
Cumulative Volume - Maximum Positive	None			None
Cumulative Volume - Maximum Negative	None			None
Cumulative Volume - End of Simulation	96.000			0.0
Discharge Structure 2 - inactive				
Rate - Maximum - Positive	disabled		disabled	
Rate - Maximum - Negative	disabled		disabled	
Cumulative Volume - Maximum Positive	disabled			disabled
Cumulative Volume - Maximum Negative	disabled			disabled
Cumulative Volume - End of Simulation	disabled			disabled
Discharge Structure 3 - inactive				
Rate - Maximum - Positive	disabled		disabled	
Rate - Maximum - Negative	disabled		disabled	
Cumulative Volume - Maximum Positive	disabled			disabled
Cumulative Volume - Maximum Negative	disabled			disabled
Cumulative Volume - End of Simulation	disabled			disabled
Pollution Abatement:				
36 Hour Stage and Infiltration Volume	36.000	96.35		7405.0
72 Hour Stage and Infiltration Volume	72.000	95.94		7405.0

Attachment “I” – Master Land Use Plan (37 of 89)

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Summary of Results :: Scenario 2 :: Post-Development Basin Mean Annual

	Time (hours)	Stage (ft datum)	Rate (ft ³ /s)	Volume (ft ³)
Stage				
Minimum	0.000	95.00		
Maximum	12.600	97.15		
Inflow				
Rate - Maximum - Positive	12.022		1.2423	
Rate - Maximum - Negative	None		None	
Cumulative Volume - Maximum Positive	24.867			7748.5
Cumulative Volume - Maximum Negative	None			None
Cumulative Volume - End of Simulation	24.911			7748.5
Infiltration				
Rate - Maximum - Positive	13.533		0.4866	
Rate - Maximum - Negative	None		None	
Cumulative Volume - Maximum Positive	24.911			7338.4
Cumulative Volume - Maximum Negative	None			None
Cumulative Volume - End of Simulation	24.911			7338.4
Combined Discharge				
Rate - Maximum - Positive	None		None	
Rate - Maximum - Negative	None		None	
Cumulative Volume - Maximum Positive	None			None
Cumulative Volume - Maximum Negative	None			None
Cumulative Volume - End of Simulation	24.911			0.0
Discharge Structure 1 - simple weir				
Rate - Maximum - Positive	None		None	
Rate - Maximum - Negative	None		None	
Cumulative Volume - Maximum Positive	None			None
Cumulative Volume - Maximum Negative	None			None
Cumulative Volume - End of Simulation	24.911			0.0
Discharge Structure 2 - inactive				
Rate - Maximum - Positive	disabled		disabled	
Rate - Maximum - Negative	disabled		disabled	
Cumulative Volume - Maximum Positive	disabled			disabled
Cumulative Volume - Maximum Negative	disabled			disabled
Cumulative Volume - End of Simulation	disabled			disabled
Discharge Structure 3 - inactive				
Rate - Maximum - Positive	disabled		disabled	
Rate - Maximum - Negative	disabled		disabled	
Cumulative Volume - Maximum Positive	disabled			disabled
Cumulative Volume - Maximum Negative	disabled			disabled
Cumulative Volume - End of Simulation	disabled			disabled
Pollution Abatement:				
36 Hour Stage and Infiltration Volume	N.A.	N.A.		N.A.
72 Hour Stage and Infiltration Volume	N.A.	N.A.		N.A.

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Summary of Results :: Scenario 3 :: Post-Development Basin 10-year 24-hour

	Time (hours)	Stage (ft datum)	Rate (ft ³ /s)	Volume (ft ³)
Stage				
Minimum	0.000	95.00		
Maximum	24.089	97.55		
Inflow				
Rate - Maximum - Positive	12.022		2.0416	
Rate - Maximum - Negative	None		None	
Cumulative Volume - Maximum Positive	24.867			13693.7
Cumulative Volume - Maximum Negative	None			None
Cumulative Volume - End of Simulation	24.911			13693.7
Infiltration				
Rate - Maximum - Positive	12.689		0.5778	
Rate - Maximum - Negative	None		None	
Cumulative Volume - Maximum Positive	24.911			8075.6
Cumulative Volume - Maximum Negative	None			None
Cumulative Volume - End of Simulation	24.911			8075.6
Combined Discharge				
Rate - Maximum - Positive	None		None	
Rate - Maximum - Negative	None		None	
Cumulative Volume - Maximum Positive	None			None
Cumulative Volume - Maximum Negative	None			None
Cumulative Volume - End of Simulation	24.911			0.0
Discharge Structure 1 - simple weir				
Rate - Maximum - Positive	None		None	
Rate - Maximum - Negative	None		None	
Cumulative Volume - Maximum Positive	None			None
Cumulative Volume - Maximum Negative	None			None
Cumulative Volume - End of Simulation	24.911			0.0
Discharge Structure 2 - inactive				
Rate - Maximum - Positive	disabled		disabled	
Rate - Maximum - Negative	disabled		disabled	
Cumulative Volume - Maximum Positive	disabled			disabled
Cumulative Volume - Maximum Negative	disabled			disabled
Cumulative Volume - End of Simulation	disabled			disabled
Discharge Structure 3 - inactive				
Rate - Maximum - Positive	disabled		disabled	
Rate - Maximum - Negative	disabled		disabled	
Cumulative Volume - Maximum Positive	disabled			disabled
Cumulative Volume - Maximum Negative	disabled			disabled
Cumulative Volume - End of Simulation	disabled			disabled
Pollution Abatement:				
36 Hour Stage and Infiltration Volume	N.A.	N.A.		N.A.
72 Hour Stage and Infiltration Volume	N.A.	N.A.		N.A.

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Summary of Results :: Scenario 4 :: Post-Development Basin 25-year 24-hour

	Time (hours)	Stage (ft datum)	Rate (ft ³ /s)	Volume (ft ³)
Stage				
Minimum	0.000	95.00		
Maximum	24.133	98.00		
Inflow				
Rate - Maximum - Positive	12.033		3.0592	
Rate - Maximum - Negative	None		None	
Cumulative Volume - Maximum Positive	24.883			19787.2
Cumulative Volume - Maximum Negative	None			None
Cumulative Volume - End of Simulation	336.000			19787.2
Infiltration				
Rate - Maximum - Positive	12.050		0.5119	
Rate - Maximum - Negative	None		None	
Cumulative Volume - Maximum Positive	313.700			19786.0
Cumulative Volume - Maximum Negative	None			None
Cumulative Volume - End of Simulation	336.000			19786.0
Combined Discharge				
Rate - Maximum - Positive	24.133		0.0012	
Rate - Maximum - Negative	None		None	
Cumulative Volume - Maximum Positive	24.433			1.2
Cumulative Volume - Maximum Negative	None			None
Cumulative Volume - End of Simulation	336.000			1.2
Discharge Structure 1 - simple weir				
Rate - Maximum - Positive	24.133		0.0012	
Rate - Maximum - Negative	None		None	
Cumulative Volume - Maximum Positive	24.433			1.2
Cumulative Volume - Maximum Negative	None			None
Cumulative Volume - End of Simulation	336.000			1.2
Discharge Structure 2 - inactive				
Rate - Maximum - Positive	disabled		disabled	
Rate - Maximum - Negative	disabled		disabled	
Cumulative Volume - Maximum Positive	disabled			disabled
Cumulative Volume - Maximum Negative	disabled			disabled
Cumulative Volume - End of Simulation	disabled			disabled
Discharge Structure 3 - inactive				
Rate - Maximum - Positive	disabled		disabled	
Rate - Maximum - Negative	disabled		disabled	
Cumulative Volume - Maximum Positive	disabled			disabled
Cumulative Volume - Maximum Negative	disabled			disabled
Cumulative Volume - End of Simulation	disabled			disabled
Pollution Abatement:				
36 Hour Stage and Infiltration Volume	N.A.	N.A.		N.A.
72 Hour Stage and Infiltration Volume	N.A.	N.A.		N.A.

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Summary of Results :: Scenario 5 :: Pre-Development Basin Mean Annual

	Time (hours)	Stage (ft datum)	Rate (ft ³ /s)	Volume (ft ³)
Stage				
Minimum	Not Available	Not Available		
Maximum	Not Available	Not Available		
Inflow				
Rate - Maximum - Positive	12.600		0.3014	
Rate - Maximum - Negative	None		None	
Cumulative Volume - Maximum Positive	26.600			3452.5
Cumulative Volume - Maximum Negative	None			None
Cumulative Volume - End of Simulation	26.733			3452.5
Infiltration				
Rate - Maximum - Positive	Not Available		Not Available	
Rate - Maximum - Negative	Not Available		Not Available	
Cumulative Volume - Maximum Positive	Not Available			Not Available
Cumulative Volume - Maximum Negative	Not Available			Not Available
Cumulative Volume - End of Simulation	Not Available			Not Available
Combined Discharge				
Rate - Maximum - Positive	12.600		0.3014	
Rate - Maximum - Negative	None		None	
Cumulative Volume - Maximum Positive	26.600			3452.5
Cumulative Volume - Maximum Negative	None			None
Cumulative Volume - End of Simulation	26.733			3452.5
Discharge Structure 1 - inactive				
Rate - Maximum - Positive	disabled		disabled	
Rate - Maximum - Negative	disabled		disabled	
Cumulative Volume - Maximum Positive	disabled			disabled
Cumulative Volume - Maximum Negative	disabled			disabled
Cumulative Volume - End of Simulation	disabled			disabled
Discharge Structure 2 - inactive				
Rate - Maximum - Positive	disabled		disabled	
Rate - Maximum - Negative	disabled		disabled	
Cumulative Volume - Maximum Positive	disabled			disabled
Cumulative Volume - Maximum Negative	disabled			disabled
Cumulative Volume - End of Simulation	disabled			disabled
Discharge Structure 3 - inactive				
Rate - Maximum - Positive	disabled		disabled	
Rate - Maximum - Negative	disabled		disabled	
Cumulative Volume - Maximum Positive	disabled			disabled
Cumulative Volume - Maximum Negative	disabled			disabled
Cumulative Volume - End of Simulation	disabled			disabled
Pollution Abatement:				
36 Hour Stage and Infiltration Volume	N.A.	N.A.		N.A.
72 Hour Stage and Infiltration Volume	N.A.	N.A.		N.A.

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Summary of Results :: Scenario 6 :: Pre-Development Basin 10-year 24-hour

Stage	Time (hours)	Stage (ft datum)	Rate (ft ³ /s)	Volume (ft ³)
Minimum	Not Available	Not Available		
Maximum	Not Available	Not Available		
Inflow				
Rate - Maximum - Positive	12.267		1.0508	
Rate - Maximum - Negative	None		None	
Cumulative Volume - Maximum Positive	26.600			9696.5
Cumulative Volume - Maximum Negative	None			None
Cumulative Volume - End of Simulation	26.733			9696.5
Infiltration				
Rate - Maximum - Positive	Not Available		Not Available	
Rate - Maximum - Negative	Not Available		Not Available	
Cumulative Volume - Maximum Positive	Not Available			Not Available
Cumulative Volume - Maximum Negative	Not Available			Not Available
Cumulative Volume - End of Simulation	Not Available			Not Available
Combined Discharge				
Rate - Maximum - Positive	12.267		1.0508	
Rate - Maximum - Negative	None		None	
Cumulative Volume - Maximum Positive	26.600			9696.5
Cumulative Volume - Maximum Negative	None			None
Cumulative Volume - End of Simulation	26.733			9696.5
Discharge Structure 1 - inactive				
Rate - Maximum - Positive	disabled		disabled	
Rate - Maximum - Negative	disabled		disabled	
Cumulative Volume - Maximum Positive	disabled			disabled
Cumulative Volume - Maximum Negative	disabled			disabled
Cumulative Volume - End of Simulation	disabled			disabled
Discharge Structure 2 - inactive				
Rate - Maximum - Positive	disabled		disabled	
Rate - Maximum - Negative	disabled		disabled	
Cumulative Volume - Maximum Positive	disabled			disabled
Cumulative Volume - Maximum Negative	disabled			disabled
Cumulative Volume - End of Simulation	disabled			disabled
Discharge Structure 3 - inactive				
Rate - Maximum - Positive	disabled		disabled	
Rate - Maximum - Negative	disabled		disabled	
Cumulative Volume - Maximum Positive	disabled			disabled
Cumulative Volume - Maximum Negative	disabled			disabled
Cumulative Volume - End of Simulation	disabled			disabled
Pollution Abatement:				
36 Hour Stage and Infiltration Volume	N.A.	N.A.		N.A.
72 Hour Stage and Infiltration Volume	N.A.	N.A.		N.A.

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Summary of Results :: Scenario 7 :: Pre-Development Basin 25-year 24-hour

Stage	Time (hours)	Stage (ft datum)	Rate (ft ³ /s)	Volume (ft ³)
Minimum	Not Available	Not Available		
Maximum	Not Available	Not Available		
Inflow				
Rate - Maximum - Positive	12.200		1.9145	
Rate - Maximum - Negative	None		None	
Cumulative Volume - Maximum Positive	26.600			16406.5
Cumulative Volume - Maximum Negative	None			None
Cumulative Volume - End of Simulation	26.733			16406.5
Infiltration				
Rate - Maximum - Positive	Not Available		Not Available	
Rate - Maximum - Negative	Not Available		Not Available	
Cumulative Volume - Maximum Positive	Not Available			Not Available
Cumulative Volume - Maximum Negative	Not Available			Not Available
Cumulative Volume - End of Simulation	Not Available			Not Available
Combined Discharge				
Rate - Maximum - Positive	12.200		1.9145	
Rate - Maximum - Negative	None		None	
Cumulative Volume - Maximum Positive	26.600			16406.5
Cumulative Volume - Maximum Negative	None			None
Cumulative Volume - End of Simulation	26.733			16406.5
Discharge Structure 1 - inactive				
Rate - Maximum - Positive	disabled		disabled	
Rate - Maximum - Negative	disabled		disabled	
Cumulative Volume - Maximum Positive	disabled			disabled
Cumulative Volume - Maximum Negative	disabled			disabled
Cumulative Volume - End of Simulation	disabled			disabled
Discharge Structure 2 - inactive				
Rate - Maximum - Positive	disabled		disabled	
Rate - Maximum - Negative	disabled		disabled	
Cumulative Volume - Maximum Positive	disabled			disabled
Cumulative Volume - Maximum Negative	disabled			disabled
Cumulative Volume - End of Simulation	disabled			disabled
Discharge Structure 3 - inactive				
Rate - Maximum - Positive	disabled		disabled	
Rate - Maximum - Negative	disabled		disabled	
Cumulative Volume - Maximum Positive	disabled			disabled
Cumulative Volume - Maximum Negative	disabled			disabled
Cumulative Volume - End of Simulation	disabled			disabled
Pollution Abatement:				
36 Hour Stage and Infiltration Volume	N.A.	N.A.		N.A.
72 Hour Stage and Infiltration Volume	N.A.	N.A.		N.A.

Attachment “I” – Master Land Use Plan (43 of 89)

STORMWATER MANAGEMENT REPORT

BAREFOOT FISHING RESORT

LAKE COUNTY FLORIDA

25-YEAR VOLUME RECOVERY

Attachment "I" – Master Land Use Plan (44 of 89)

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Modflow Log

MODFLOW CONTROL PARAMETERS

Perimeter boundary condition: constant head
Maximum iterations of outer loop: 150
Maximum iterations of inner loop: 60
Horizontal conductivity within pond: 1000000 (if ground water mound is expected to intersect pond bottom)
Instantaneous storage coefficient: Volumetric balance
Default head closure tolerance: .01
Default residual closure tolerance: .5
Target water budget error: 1
On failure to converge: Rerun limiting inner loop to one iteration
> Maximum number of iterations of outer loop: 500
Running Average Porosity is active
> Starting on pass: 2
> When outer iteration reaches: 50
> Number of data points: 4
Running Average Pond Stage (for discharge structures with tailwater) is active
> Starting on pass: 2
> When outer iteration reaches: 50
> Number of data points: 4
Grid size: 1000 ft (from pond centerline)
Mound Output: none

Begin Scenario 1 1/24/2025 12:4:15
End Scenario 1 1/24/2025 12:4:15

Begin Scenario 2 1/24/2025 12:4:15
End Scenario 2 1/24/2025 12:4:16

Begin Scenario 3 1/24/2025 12:4:17
End Scenario 3 1/24/2025 12:4:17

Begin Scenario 4 1/24/2025 12:4:18
End Scenario 4 1/24/2025 12:4:31

Begin Scenario 5 1/24/2025 12:4:32
End Scenario 5 1/24/2025 12:4:32

Begin Scenario 6 1/24/2025 12:4:32
End Scenario 6 1/24/2025 12:4:32

Begin Scenario 7 1/24/2025 12:4:33
End Scenario 7 1/24/2025 12:4:33

Attachment "I" – Master Land Use Plan (45 of 89)

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Sort-By-Category Report

Scenarios Considered: 4

Stage - Maximum

Rank	Scenario Number	Maximum Stage (ft datum)	Time (hours)	Description
1	4	98.002	24.133	Post-Development Basin 25-year 24-hour

Discharge - Rate - Maximum Positive

Rank	Scenario Number	Maximum Positive Discharge Rate (ft ³ /s)	Time (hours)	Description
1	4	0.0012	24.133	Post-Development Basin 25-year 24-hour

Discharge - Cumulative Volume - Maximum Positive

Rank	Scenario Number	Maximum Positive Cumulative Discharge Volume (ft ³)	Time (hours)	Description
1	4	1.2	24.433	Post-Development Basin 25-year 24-hour

Attachment "I" – Master Land Use Plan (46 of 89)

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Detailed Results :: Scenario 4 :: Post-Development Basin 25-year 24-hour

Elapsed Time	Instantaneous Inflow Rate	Outside Recharge	Stage Elevation	Infiltration Rate	Combined Instantaneous Discharge	Cumulative Inflow	Cumulative Infiltration	Combined Cumulative	
0.000	0.0000	0.0000	95.00000	0.00000	0	0.000	0.00000	0	N.A.
0.017	0.0000	0.00000	95.00000	0.00000	0	0.000	0.00000	0	U
0.033	0.0000	0.00000	95.00000	0.00000	0	0.000	0.00000	0	U
0.050	0.0000	0.00000	95.00000	0.00000	0	0.000	0.00000	0	U
0.067	0.0000	0.00000	95.00000	0.00000	0	0.000	0.00000	0	U
0.083	0.0000	0.00000	95.00000	0.00000	0	0.000	0.00000	0	U
0.100	0.0000	0.00000	95.00000	0.00000	0	0.000	0.00000	0	U
0.117	0.0000	0.00000	95.00000	0.00000	0	0.000	0.00000	0	U
0.133	0.0000	0.00000	95.00000	0.00000	0	0.000	0.00000	0	U
0.150	0.0000	0.00000	95.00000	0.00000	0	0.000	0.00000	0	U
0.167	0.0000	0.00000	95.00000	0.00000	0	0.000	0.00000	0	U
0.183	0.0000	0.00000	95.00000	0.00000	0	0.000	0.00000	0	U
0.200	0.0000	0.00000	95.00000	0.00000	0	0.000	0.00000	0	U
0.217	0.0000	0.00000	95.00000	0.00000	0	0.000	0.00000	0	U
0.233	0.0000	0.00000	95.00000	0.00000	0	0.000	0.00000	0	U
0.250	0.0000	0.00000	95.00000	0.00000	0	0.000	0.00000	0	U
0.267	0.0000	0.00000	95.00000	0.00000	0	0.000	0.00000	0	U
0.283	0.0000	0.00000	95.00000	0.00000	0	0.000	0.00000	0	U
0.300	0.0000	0.00000	95.00000	0.00000	0	0.000	0.00000	0	U
0.317	0.0000	0.00000	95.00000	0.00000	0	0.000	0.00000	0	U
0.333	0.0000	0.00000	95.00000	0.00000	0	0.000	0.00000	0	U
0.350	0.0000	0.00000	95.00000	0.00000	0	0.000	0.00000	0	U
0.367	0.0000	0.00000	95.00000	0.00000	0	0.000	0.00000	0	U
0.383	0.0000	0.00000	95.00000	0.00000	0	0.000	0.00000	0	U
0.400	0.0000	0.00000	95.00000	0.00000	0	0.000	0.00000	0	U
0.417	0.0000	0.00000	95.00000	0.00000	0	0.000	0.00005	0	U
0.433	0.0000	0.00000	95.00000	0.00002	0	0.000	0.00045	0	U
0.450	0.0000	0.00000	95.00000	0.00005	0	0.002	0.00195	0	U
0.467	0.0001	0.00000	95.00000	0.00011	0	0.006	0.00593	0	U
0.483	0.0002	0.00000	95.00001	0.00021	0	0.015	0.01460	0	U
0.500	0.0004	0.00000	95.00002	0.00037	0	0.031	0.03097	0	U
0.517	0.0006	0.00000	95.00003	0.00058	0	0.059	0.05856	0	U
0.533	0.0008	0.00000	95.00005	0.00086	0	0.101	0.10099	0	U
0.550	0.0012	0.00000	95.00008	0.00119	0	0.162	0.16163	0	U
0.567	0.0016	0.00000	95.00013	0.00156	0	0.244	0.24351	0	U
0.583	0.0020	0.00000	95.00019	0.00198	0	0.349	0.34918	0	U
0.600	0.0024	0.00000	95.00026	0.00242	0	0.481	0.48078	0	U
0.617	0.0029	0.00000	95.00034	0.00290	0	0.640	0.64009	0	U
0.633	0.0034	0.00000	95.00045	0.00339	0	0.829	0.82855	0	U
0.650	0.0039	0.00000	95.00056	0.00391	0	1.047	1.04732	0	U
0.667	0.0044	0.00000	95.00070	0.00443	0	1.297	1.29734	0	U
0.683	0.0050	0.00000	95.00085	0.00497	0	1.579	1.57935	0	U
0.700	0.0055	0.00000	95.00102	0.00552	0	1.894	1.89366	0	U
0.717	0.0061	0.00000	95.00121	0.00607	0	2.242	2.24162	0	U
0.733	0.0066	0.00000	95.00141	0.00663	0	2.623	2.62268	0	U
0.750	0.0072	0.00000	95.00164	0.00719	0	3.037	3.03744	0	U
0.767	0.0078	0.00000	95.00188	0.00778	0	3.486	3.48607	0	U
0.783	0.0083	0.00000	95.00214	0.00833	0	3.969	3.96866	0	U
0.800	0.0089	0.00000	95.00242	0.00889	0	4.485	4.48522	0	U
0.817	0.0095	0.00000	95.00272	0.00946	0	5.036	5.03570	0	U
0.833	0.0100	0.00000	95.00303	0.01002	0	5.620	5.62001	0	U
0.850	0.0106	0.00000	95.00336	0.01058	0	6.238	6.23801	0	U
0.867	0.0111	0.00000	95.00372	0.01114	0	6.889	6.88949	0	U
0.883	0.0117	0.00000	95.00408	0.01169	0	7.574	7.57425	0	U
0.900	0.0122	0.00000	95.00447	0.01224	0	8.292	8.29201	0	U
0.917	0.0128	0.00000	95.00488	0.01278	0	9.043	9.04250	0	U
0.933	0.0133	0.00000	95.00529	0.01332	0	9.825	9.82541	0	U
0.950	0.0138	0.00000	95.00574	0.01385	0	10.640	10.64039	0	U
0.967	0.0144	0.00000	95.00620	0.01437	0	11.487	11.48708	0	U
0.983	0.0149	0.00000	95.00667	0.01489	0	12.365	12.36512	0	U
1.000	0.0154	0.00000	95.00716	0.01541	0	13.274	13.27409	0	U
1.017	0.0159	0.00000	95.00766	0.01593	0	14.214	14.21396	0	U
1.033	0.0165	0.00000	95.00819	0.01647	0	15.186	15.18557	0	U
1.050	0.0170	0.00000	95.00873	0.01705	0	16.191	16.19069	0	U
1.067	0.0177	0.00000	95.00929	0.01769	0	17.232	17.23198	0	U
1.083	0.0184	0.00000	95.00987	0.01838	0	18.313	18.31301	0	U
1.100	0.0191	0.00000	95.01048	0.01911	0	19.437	19.43723	0	U
1.117	0.0199	0.00000	95.01111	0.01987	0	20.607	20.60576	0	U
1.133	0.0206	0.00000	95.01176	0.02063	0	21.822	21.82207	0	U
1.150	0.0214	0.00000	95.01244	0.02137	0	23.083	23.08255	0	U
1.167	0.0221	0.00000	95.01315	0.02209	0	24.387	24.38689	0	U
1.183	0.0228	0.00000	95.01387	0.02278	0	25.733	25.73348	0	U
1.200	0.0235	0.00000	95.01462	0.02345	0	27.121	27.12071	0	U
1.217	0.0241	0.00000	95.01539	0.02408	0	28.547	28.54709	0	U

Attachment "I" – Master Land Use Plan (47 of 89)

PONDS Version 3.2.0274
Retention Pond Recovery - Refined Method
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Detailed Results (cont.d.) :: Scenario 4 :: Post-Development Basin 25-year 24-hour

Elapsed Time	Instantaneous Inflow Rate	Outside Recharge	Stage Elevation	Infiltration Rate	Combined Instantaneous Discharge	Cumulative Inflow	Cumulative Infiltration	Combined Cumulative	
313.287	0.0000	0.00000	97.00073	0.00458	0	19787.220	19779.08000	1.231737	S
313.283	0.0000	0.00000	97.00070	0.00458	0	19787.220	19779.38000	1.231737	S
313.300	0.0000	0.00000	97.00067	0.00458	0	19787.220	19779.63000	1.231737	S
313.317	0.0000	0.00000	97.00064	0.00458	0	19787.220	19779.91000	1.231737	S
313.333	0.0000	0.00000	97.00062	0.00458	0	19787.220	19780.18000	1.231737	S
313.350	0.0000	0.00000	97.00059	0.00458	0	19787.220	19780.48000	1.231737	S
313.367	0.0000	0.00000	97.00056	0.00458	0	19787.220	19780.73000	1.231737	S
313.383	0.0000	0.00000	97.00053	0.00458	0	19787.220	19781.01000	1.231737	S
313.400	0.0000	0.00000	97.00050	0.00458	0	19787.220	19781.28000	1.231737	S
313.417	0.0000	0.00000	97.00047	0.00458	0	19787.220	19781.55000	1.231737	S
313.433	0.0000	0.00000	97.00044	0.00458	0	19787.220	19781.83000	1.231737	S
313.450	0.0000	0.00000	97.00041	0.00458	0	19787.220	19782.10000	1.231737	S
313.467	0.0000	0.00000	97.00038	0.00458	0	19787.220	19782.38000	1.231737	S
313.483	0.0000	0.00000	97.00035	0.00457	0	19787.220	19782.65000	1.231737	S
313.500	0.0000	0.00000	97.00032	0.00457	0	19787.220	19782.93000	1.231737	S
313.517	0.0000	0.00000	97.00030	0.00457	0	19787.220	19783.20000	1.231737	S
313.533	0.0000	0.00000	97.00027	0.00457	0	19787.220	19783.48000	1.231737	S
313.550	0.0000	0.00000	97.00024	0.00457	0	19787.220	19783.75000	1.231737	S
313.567	0.0000	0.00000	97.00021	0.00457	0	19787.220	19784.03000	1.231737	S
313.583	0.0000	0.00000	97.00018	0.00457	0	19787.220	19784.30000	1.231737	S
313.600	0.0000	0.00000	97.00015	0.00457	0	19787.220	19784.57000	1.231737	S
313.617	0.0000	0.00000	97.00012	0.00457	0	19787.220	19784.85000	1.231737	S
313.633	0.0000	0.00000	97.00009	0.00457	0	19787.220	19785.12000	1.231737	S
313.650	0.0000	0.00000	97.00006	0.00457	0	19787.220	19785.40000	1.231737	S
313.667	0.0000	0.00000	97.00003	0.00457	0	19787.220	19785.67000	1.231737	S
313.683	0.0000	0.00000	97.00001	0.00264	0	19787.220	19785.95000	1.231737	S
313.700	0.0000	0.00000	96.99988	0.00035	0	19787.220	19785.99000	1.231737	S
313.717	0.0000	0.00000	96.99984	0.00000	0	19787.220	19785.99000	1.231737	S
313.733	0.0000	0.00000	96.99981	0.00000	0	19787.220	19785.99000	1.231737	S
313.750	0.0000	0.00000	96.99988	0.00000	0	19787.220	19785.99000	1.231737	S
313.767	0.0000	0.00000	96.99985	0.00000	0	19787.220	19785.99000	1.231737	S
313.783	0.0000	0.00000	96.99982	0.00000	0	19787.220	19785.99000	1.231737	S
313.800	0.0000	0.00000	96.99979	0.00000	0	19787.220	19785.99000	1.231737	S
313.817	0.0000	0.00000	96.99976	0.00000	0	19787.220	19785.99000	1.231737	S
313.833	0.0000	0.00000	96.99973	0.00000	0	19787.220	19785.99000	1.231737	S
313.850	0.0000	0.00000	96.99970	0.00000	0	19787.220	19785.99000	1.231737	S
313.867	0.0000	0.00000	96.99967	0.00000	0	19787.220	19785.99000	1.231737	S
313.883	0.0000	0.00000	96.99964	0.00000	0	19787.220	19785.99000	1.231737	S
313.900	0.0000	0.00000	96.99961	0.00000	0	19787.220	19785.99000	1.231737	S
313.917	0.0000	0.00000	96.99958	0.00000	0	19787.220	19785.99000	1.231737	S
313.933	0.0000	0.00000	96.99955	0.00000	0	19787.220	19785.99000	1.231737	S
313.950	0.0000	0.00000	96.99952	0.00000	0	19787.220	19785.99000	1.231737	S
313.967	0.0000	0.00000	96.99949	0.00000	0	19787.220	19785.99000	1.231737	S
313.983	0.0000	0.00000	96.99946	0.00000	0	19787.220	19785.99000	1.231737	S
314.000	0.0000	0.00000	96.99943	0.00000	0	19787.220	19785.99000	1.231737	S
314.017	0.0000	0.00000	96.99941	0.00000	0	19787.220	19785.99000	1.231737	S
314.033	0.0000	0.00000	96.99938	0.00000	0	19787.220	19785.99000	1.231737	S
314.050	0.0000	0.00000	96.99935	0.00000	0	19787.220	19785.99000	1.231737	S
314.067	0.0000	0.00000	96.99932	0.00000	0	19787.220	19785.99000	1.231737	S
314.083	0.0000	0.00000	96.99930	0.00000	0	19787.220	19785.99000	1.231737	S
314.100	0.0000	0.00000	96.99927	0.00000	0	19787.220	19785.99000	1.231737	S
314.117	0.0000	0.00000	96.99924	0.00000	0	19787.220	19785.99000	1.231737	S
314.133	0.0000	0.00000	96.99921	0.00000	0	19787.220	19785.99000	1.231737	S
314.150	0.0000	0.00000	96.99919	0.00000	0	19787.220	19785.99000	1.231737	S
314.167	0.0000	0.00000	96.99916	0.00000	0	19787.220	19785.99000	1.231737	S
314.183	0.0000	0.00000	96.99913	0.00000	0	19787.220	19785.99000	1.231737	S
314.200	0.0000	0.00000	96.99911	0.00000	0	19787.220	19785.99000	1.231737	S
314.217	0.0000	0.00000	96.99908	0.00000	0	19787.220	19785.99000	1.231737	S
314.233	0.0000	0.00000	96.99905	0.00000	0	19787.220	19785.99000	1.231737	S
314.250	0.0000	0.00000	96.99903	0.00000	0	19787.220	19785.99000	1.231737	S
314.267	0.0000	0.00000	96.99904	0.00000	0	19787.220	19785.99000	1.231737	S
314.283	0.0000	0.00000	96.98978	0.00000	0	19787.220	19785.99000	1.231737	S
314.300	0.0000	0.00000	96.98952	0.00000	0	19787.220	19785.99000	1.231737	S
314.317	0.0000	0.00000	96.98925	0.00000	0	19787.220	19785.99000	1.231737	S
314.333	0.0000	0.00000	96.98899	0.00000	0	19787.220	19785.99000	1.231737	S
314.350	0.0000	0.00000	96.98874	0.00000	0	19787.220	19785.99000	1.231737	S
314.367	0.0000	0.00000	96.98848	0.00000	0	19787.220	19785.99000	1.231737	S
314.383	0.0000	0.00000	96.98822	0.00000	0	19787.220	19785.99000	1.231737	S
314.400	0.0000	0.00000	96.98797	0.00000	0	19787.220	19785.99000	1.231737	S
314.417	0.0000	0.00000	96.98771	0.00000	0	19787.220	19785.99000	1.231737	S
314.433	0.0000	0.00000	96.98746	0.00000	0	19787.220	19785.99000	1.231737	S
314.450	0.0000	0.00000	96.98721	0.00000	0	19787.220	19785.99000	1.231737	S
314.467	0.0000	0.00000	96.98695	0.00000	0	19787.220	19785.99000	1.231737	S
314.483	0.0000	0.00000	96.98669	0.00000	0	19787.220	19785.99000	1.231737	S

Attachment “I” – Master Land Use Plan (48 of 89)

STORMWATER MANAGEMENT REPORT

BAREFOOT FISHING RESORT

LAKE COUNTY FLORIDA

EXHIBIT 3.0
ENVIRONMENTAL
ASSESSMENT

Attachment “I” – Master Land Use Plan (49 of 89)

WETLAND DELINEATION SURVEY Final Report

Lake County Parcel ID 01-23-25-0001-000-00100
Vicinity of Lakeshore Drive
Clermont, Florida 34711

Prepared For:

Mary Langley

By:

Excelsior Environmental Consultants, LLC
615 North Palmetto Court, Suite A
DeLand, Florida, 32720
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26 September 2023



Members:

National Registry of Environmental Professionals • Florida Association of Environmental Professionals •
International Society of Technical and Environmental Professionals • Society of Wetland Scientists • ASTM International

Attachment “I” – Master Land Use Plan (50 of 89)



1. SCOPE OF WORK

A wetland delineation survey was conducted at **Lake County Parcel ID 01-23-25-0001-000-00100**, located in the **vicinity of Lakeshore Drive, Clermont, Florida 34711** (the “**Subject Property**”) on behalf of **Mary Langley** (the “**Client**”). The survey was conducted in accordance with Florida Administrative Code 62-340 *Delineation of the Landward Extent of Wetlands and Surface Waters*, following procedures established in the *Florida Wetlands Delineation Manual*.

2. SITE VISIT AND DELINEATION CRITERIA

On 18 and 19 September 2023, **Excelsior Environmental Consultants, LLC (“Excelsior”)** visited the Subject Property and conducted a wetland delineation survey. The landward extent of a wetland is established where vegetative, soil, and hydrologic characteristics no longer meet the definition of a wetland (FAC 62-340.200(19)) or the wetland test criteria described in FAC 62-340.300(2) (i.e., the “A”, “B”, “C”, and “D” tests).

A. Vegetation

Section 62-340.400 of the Florida Administrative Code states that the top-most vegetative stratum (i.e., tree canopy) should be used to determine the dominance of upland or wetland plant species at a given sampling point unless it constitutes less than 10% of the areal extent.

The tree canopy of the wetland-upland boundary was characterized by a broad transition zone (ecotone) populated at different points by obligate wetland (**OBL**), facultative wetland (**FACW**), and upland (**UPL**) species, as defined in FAC 62-340.450, including:

- Red maple (*Acer rubrum*) [FACW]
- Loblolly bay (*Gordonia lasianthus*) [FACW]
- Dahoon holly (*Ilex cassine*) [OBL]
- Sweet bay (*Magnolia virginiana*) [OBL]
- Swamp tupelo (*Nyssa sylvatica biflora*) [OBL]
- Black cherry (*Prunus serotina*) [unrated but usual upland association]
- Sand live oak (*Quercus geminata*) [UPL]
- Swamp laurel oak (*Quercus laurifolia*) [FACW]
- Water oak (*Quercus nigra*) [FACW]
- Live oak (*Quercus virginiana*) [UPL]
- Bald cypress (*Taxodium distichum*) [OBL]

Attachment “I” – Master Land Use Plan (51 of 89)



B. Soils Characteristics

Soils were sampled at 31 different locations (Figure 1). Upland soils were characterized by fine sands with Munsell hue/value/chroma [HVC] codes ranging from 10YR 5/1 (“gray”) to 10YR 8/3 (“very pale brown”) with organic masking of 50% or less on individual grains. Hydric soil indicators were not generally observed within the first 20± inches of the soil profile.

Wetland soils were characterized by mucky peat organic soils with Munsell HVC codes ranging from 10YR 2/1 (“black”) to 10YR 3/3 (“dark brown”). Observed hydric soil indicators specified by the USDA Natural Resources Conservation Service (USDA-NRCS) included:

- Histosols (A1)
- Hydrogen sulfide odor (A4)
- Umbric surface (F13)

The transition zone (ecotone) between the upland and wetland area was characterized by sandy loams with Munsell hue/value/chroma [HVC] codes ranging from 10YR 2/1 (“black”) to 10YR 6/1 (“gray”). Observed hydric soil indicators specified by the USDA Natural Resources Conservation Service (USDA-NRCS) included:

- Organic bodies (A6)
- Mucky mineral layers (A7)
- Muck presence (A8)
- Stripped matrix (S6)

C. Hydrologic Indicators

Observed hydrologic indicators specified in FAC 62-340.500 included:

- Aquatic mosses or liverworts
- Drift lines and rafted debris
- Elevated lichen lines 6 to 10 inches above the ground surface on tree bases
- Morphological plant adaptations (e.g., buttressed tree bases and adventitious roots)
- Vegetated hummock formation
- Water marks 6 to 12 inches above the ground surface on tree bases or vegetation

Attachment “I” – Master Land Use Plan (52 of 89)



3. WETLAND DELINEATION CONCLUSIONS AND RECOMMENDATIONS

Wetlands were delineated on the Subject Property either because the “B” test wetland criteria (i.e., *areal extent of obligate and/or facultative wetland vegetation equal to or greater than 80% of all vegetation in the stratum plus hydric soils or hydrologic indicators*) were met or because the “D” test wetland criteria (i.e., *presence of both hydric soil indicators and hydrologic indicators*) were met.

Based on data collected in the field, labeled pink and blue wetland flagging, or labeled, flagged survey stakes were placed at 33 points along two lines that both meet the definition of a wetland boundary as defined in FAC 62-340 (Figure 1). The coordinates of individual field markers are provided in Table 1. A licensed land surveyor should be retained to locate the wetland field markers and add the resulting wetland lines to the property boundary survey.

The delineated wetlands on both parcels composing the Subject Property consist of bottomland swamp associated with the Palatlahaha River, which connects Lake Minnehaha to the north and Lake Susan to the south.

The Subject Property is located in an unincorporated area of Clermont and is therefore subject to county wetland buffer requirements. The Lake County land development code requires 50-foot protected upland buffers along all wetland boundaries. Typical 50-foot protected upland buffers are depicted in Figure 1 for illustrative purposes. Wetland and non-buffer upland acreages on the Subject Property are as follows:

Parcel	Non-buffer Upland Acreage	Wetland Acreage
1 (north)	0.45	1.22
2 (south)	1.06	2.30

4. WETLAND MITIGATION INFORMATION

The Subject Property is located in the Palatlahaha River drainage basin and falls within the Lake Louisa and Green Swamp Mitigation Bank Service Area (MBSA). Mitigation banks in this MBSA include:

- Mill Creek Mitigation Bank (<https://mitigationbankinginc.com/mill-creek-mitigation-bank>)

At the time of writing, the current price for forested wetland credits at this mitigation bank is \$120,000 per credit-acre. Fractional purchase is possible, in increments as small as 1/100th of a credit. Actual mitigation costs will depend on the final proposed site plan, pre- and post-impact wetland function as assessed by UMAM (Uniform Mitigation Assessment Method) or other methods, and the total area of proposed impact.

Please note that because the parcels composing the Subject Property have direct hydrologic connectivity to Waters of the United States (WOTUS), federal mitigation credits may also be required.

Attachment "I" – Master Land Use Plan (53 of 89)



This report does not constitute authorization to alter uplands or wetlands that have been delineated on the Subject Property. All wetland delineation survey findings are subject to regulatory review. Excelsior recommends contacting the Lake County Office of Planning and Zoning, the Florida Department of Environmental Protection (FDEP), and the St. Johns River Water Management District (SJRWMD) concerning any additional setbacks or environmental requirements prior to commencing any clearing, filling, grading, or construction.

Please refer any questions to Excelsior at (855) 720-2333 or contact@excelsiorflorida.com.


Jordan S. Munizzi, Ph.D., REP
Principal Field Scientist

Digitally signed
by Jordan Munizzi
Date: 2023.09.26
00:00:11 -04'00'



Jordan S. Munizzi, Ph.D., REP
Principal Field Scientist

Sara L. Cole, P.G.
Principal Geologist

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Assessment • Permitting • Remediation

Attachment “I” – Master Land Use Plan (54 of 89)



5. SUPPLEMENTAL INFORMATION

Additional information provided by Excelsior to contextualize this report includes:

- **Supplemental Figure S1:** A high-resolution, false-color Light Distance and Ranging (LiDAR) overlay of the Subject Property and surrounding area. Low lying areas and open water are depicted as darker features. The elevation of the Subject Property is approximately 100 to 105 feet above sea level (ft ASL). LiDAR is a remote sensing method that utilizes pulsed lasers reflected off the ground surface (from an aircraft or satellite) to capture contour data irrespective of structures or vegetative cover.
- **Supplemental Figure S2:** A historic 1969 United States Geological Survey (USGS) topographic map depicting submerged wooded marsh or swamp within the same general location as the delineated wetlands. The northern parcel is depicted as a cleared area associated with a citrus grove to the west.
- **Supplemental Figure S3:** A US Fish and Wildlife Service National Wetlands Inventory (USFWS-NWI) overlay showing Palustrine, Forested, Semipermanently Flooded (PFO6F) and Limnetic, Unconsolidated Bottom, Permanently Flooded (L1UBH) wetlands within the same general location as the delineated wetlands.
- **Supplemental Map S1:** A soil map from the US Department of Agriculture National Resource Conservation Service (USDA-NRCS) showing the following soil series on the Subject Property:

Map Unit	Name	Depth to Water Table (DWT)	Hydric?
4	Anclote and Myakka soils	0 cm/0 in	Yes
8	Candler sand, 0 to 5 percent slopes	>200 cm/>79 in	No
22	Lake sand, 5 to 12 percent slopes	>200 cm/>79 in	No

Attachment “I” – Master Land Use Plan (55 of 89)



6. REFERENCES

- Florida Administrative Code 62-340. *Delineation of the Landward Extent of Wetlands and Surface Waters*. Florida Department of State. Available from: <https://www.flrules.org/gateway/ChapterHome.asp?Chapter=62-340>.
- Florida Natural Areas Inventory. 2010. *Guide to the Natural Communities of Florida 2010 Edition*. Available from: www.fnai.org.
- Gilbert KM, Tobe JD, Cantrell RW, Sweeley ME, Cooper JR. 1995. *The Florida Wetlands Delineation Manual*. Florida Department of Environmental Protection. Available from: <https://floridadep.gov/sites/default/files/delineationmanual.pdf>.
- Hurt, GW. 1992. *Soil and Water Relationships of Florida's Ecological Communities*. Florida Soil Conservation Service. Available from: <https://floridadep.gov/sites/default/files/soil-and-water.pdf>.
- Kawula R, Redner J. 2018. Florida Land Cover Classification System. Florida Fish and Wildlife Conservation Commission, Fish and Wildlife Research Institute Center for Spatial Analysis. Tallahassee, Florida. Available from: <https://myfwc.com/media/20455/land-cover-classification-revision-2018.pdf>.
- Mattoon WR. 1967. *Common Forest Trees of Florida: How to Know Them* (ninth edition). Florida Forest Service.
- Staff of the Florida Department of Environmental Protection, Submerged Lands and Environmental Resources Coordination, Wetland Evaluation and Delineation. 2021. *Chapter 62-340, F.A.C. Data Form Guide*. Florida Department of Environmental Protection. Available from: https://floridadep.gov/sites/default/files/62-340FormGuide_pocket_Feb2021_0.pdf.
- Tobe JD, Burks KC, Cantrell RW, Garland MA, Sweeley ME, Hall DW, Wallace P, Anglin G, Nelson G, Cooper JR, Bickner D, Gilbert K, Aymond N, Greenwood K, Raymond N. 1998. *Florida Wetland Plants: An Identification Manual*. Florida Department of Environmental Protection. Available from: <https://archive.org/details/floridawetlandplants>.
- USACE Environmental Laboratory. 1987. *Corps of Engineers Wetlands Delineation Manual. Technical Report Y-87-1*. US Army Engineer Waterways Experiment Station. Vicksburg, Mississippi. Available from: <https://www.lrh.usace.army.mil/Portals/38/docs/USACE%2087%20Wetland%20Delineation%20Manual.pdf>.
- Whitney E, Means B. 2014. *Florida's Natural Ecosystems and Native Species Volume I: Florida's Uplands*. Sarasota, FL: Pineapple Press.
- Whitney E, Means B, Rudloe A. 2014. *Florida's Natural Ecosystems and Native Species Volume II: Florida's Wetlands*. Sarasota, FL: Pineapple Press.

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Table 1: Wetland Field Marker Coordinates

Wetland Boundary	Field ID	Coordinates (Lat, Long)*	Notes
Wetland Boundary 1 ("A")	A WD1	28.521001N, 81.757531W	Tie wetland line to property boundary at field marker
	A WD2	28.520907N, 81.757474W	
	A WD3	28.52083N, 81.757395W	
	A WD4	28.520795N, 81.757312W	
	A WD5	28.520754N, 81.757195W	
	A WD6	28.520728N, 81.757125W	
	A WD7	28.520709N, 81.75704W	
	A WD8	28.520708N, 81.756946W	
	A WD9	28.520693N, 81.756835W	
	A WD10	28.520627N, 81.756782W	
	A WD11	28.520554N, 81.756772W	
	A WD12	28.520469N, 81.756703W	
	A WD13	28.520455N, 81.756552W	Tie wetland line to property boundary at field marker
Wetland Boundary 2 ("B")	B WD1	28.519127N, 81.758336W	Tie wetland line to property boundary at field marker
	B WD2	28.519227N, 81.758223W	
	B WD3	28.519306N, 81.758116W	
	B WD4	28.519407N, 81.757986W	
	B WD5	28.519501N, 81.757856W	
	B WD6	28.519636N, 81.757714W	
	B WD7	28.519763N, 81.757571W	
	B WD8	28.519764N, 81.757418W	
	B WD9	28.519831N, 81.757252W	
	B WD10	28.519872N, 81.757236W	
	B WD11	28.519871N, 81.757333W	
	B WD12	28.519911N, 81.75735W	
	B WD13	28.519976N, 81.757285W	
	B WD14	28.520007N, 81.757181W	
	B WD15	28.520008N, 81.7571W	
	B WD16	28.519921N, 81.757041W	
	B WD17	28.519975N, 81.756987W	
	B WD18	28.520057N, 81.756942W	
	B WD19	28.520146N, 81.756812W	
	B WD20	28.520208N, 81.756406W	Tie wetland line to property boundary at field marker

*Coordinates are provided in WGS84 (decimal degrees); accuracy is ± 24 inches (0.6 meters).

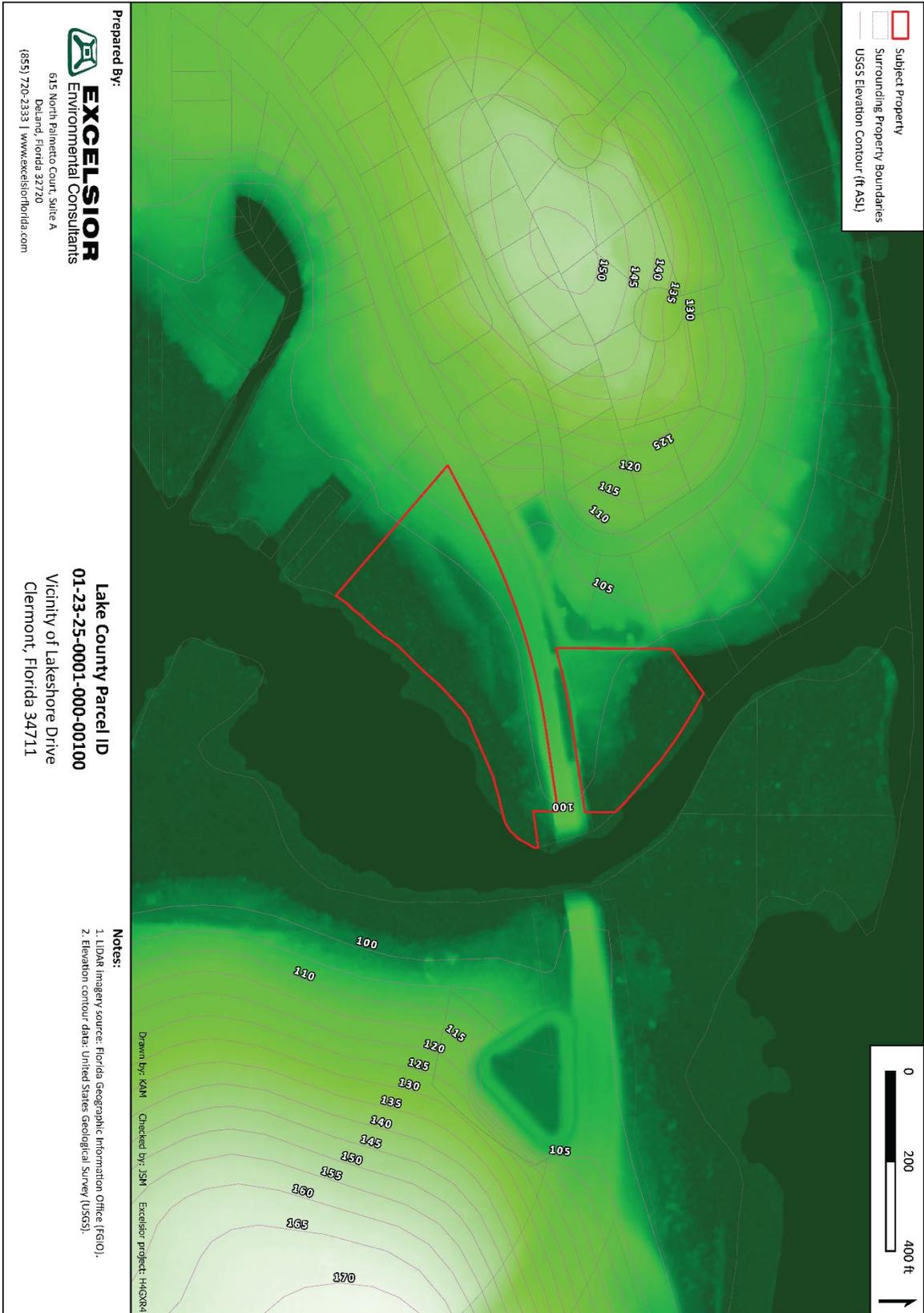
Attachment “I” – Master Land Use Plan (58 of 89)



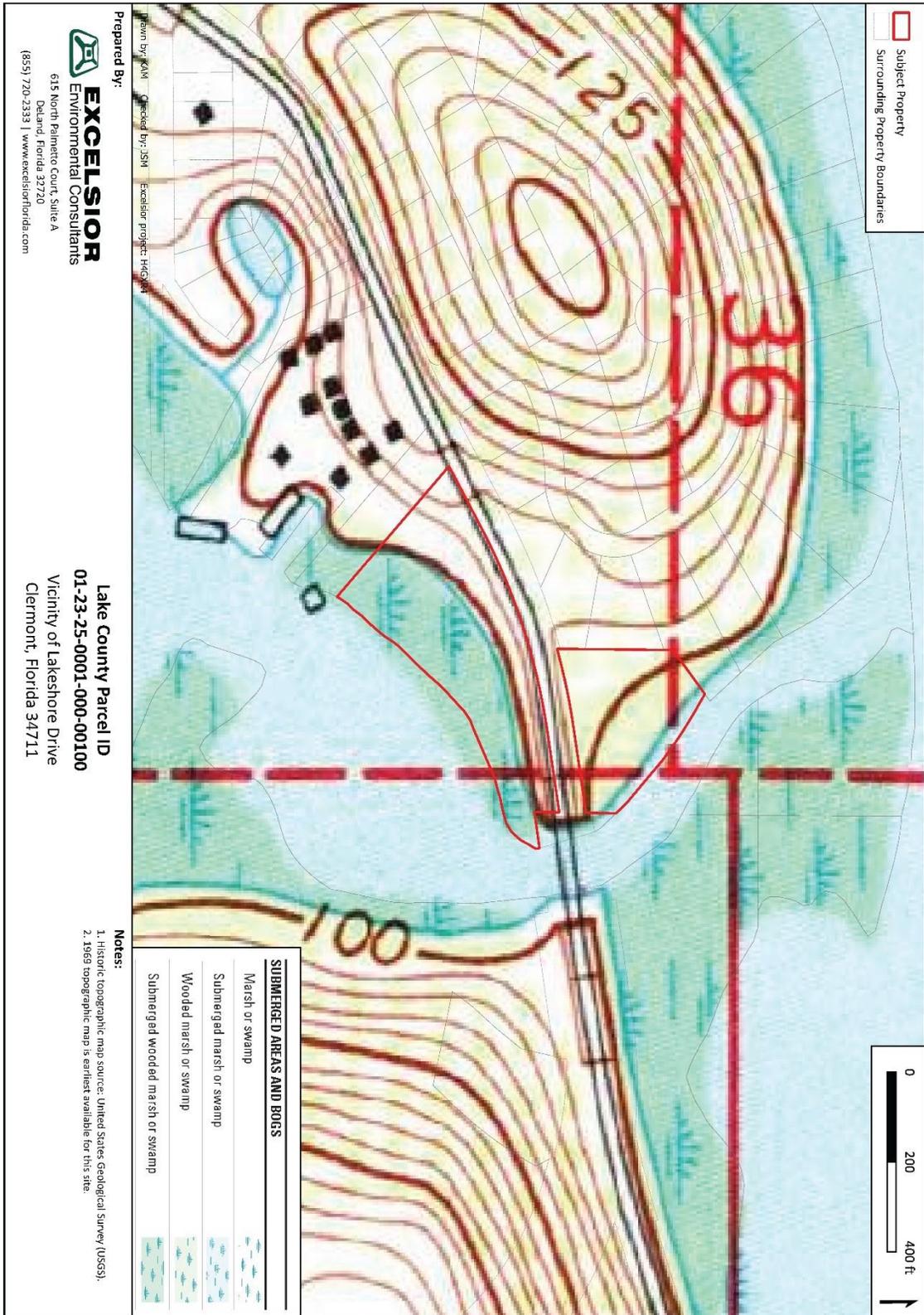
Supplemental Information

Note: the maps and information in the following section are provided for additional context only. These resources are not authoritative and do not supersede the findings of the wetland delineation survey.

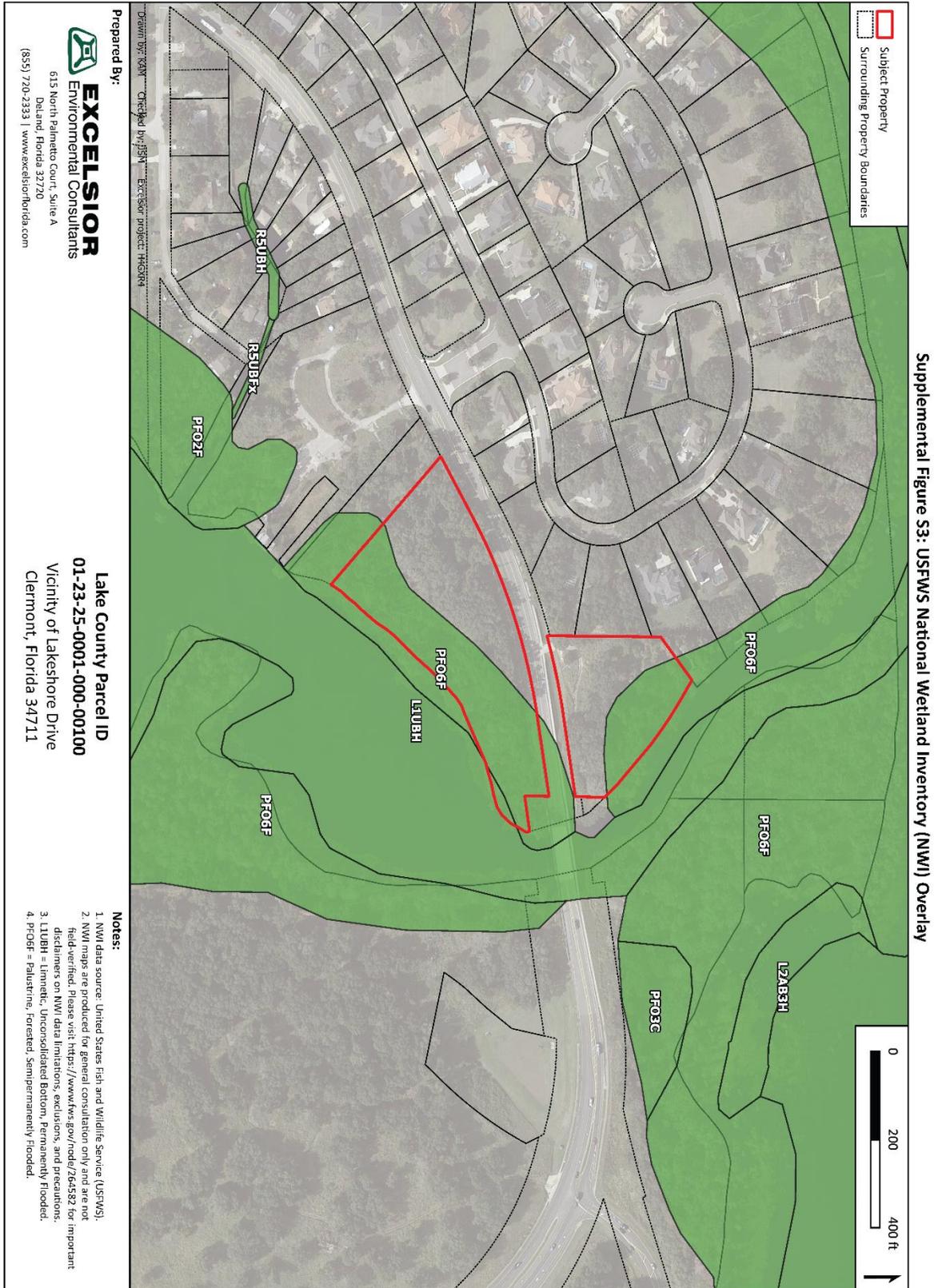
Attachment "I" – Master Land Use Plan (59 of 89)



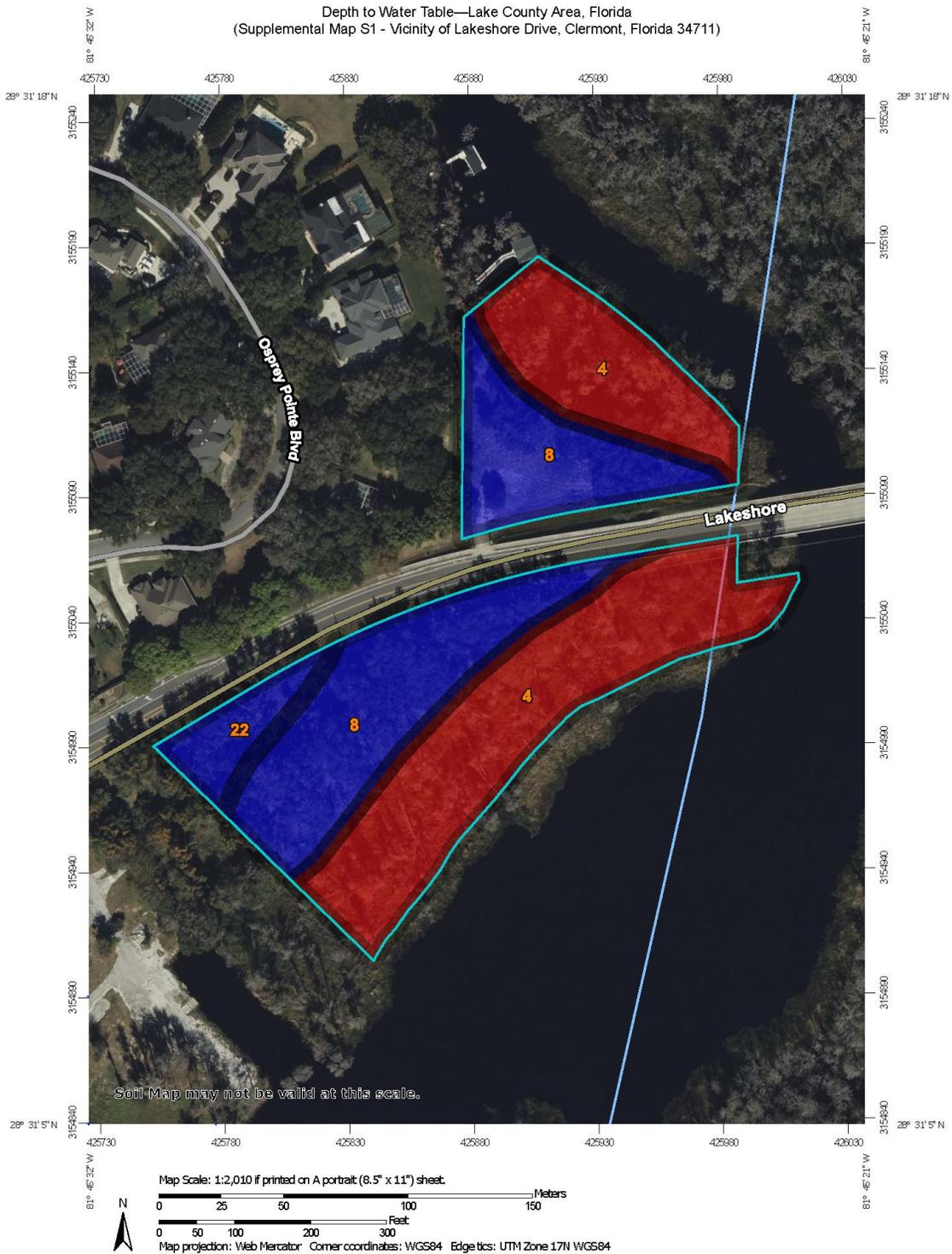
Attachment "I" – Master Land Use Plan (60 of 89)



Attachment "I" – Master Land Use Plan (61 of 89)



Attachment "I" – Master Land Use Plan (62 of 89)



USDA Natural Resources Conservation Service

Web Soil Survey National Cooperative Soil Survey

9/17/2023 Page 1 of 3

Attachment "I" – Master Land Use Plan (63 of 89)

Depth to Water Table—Lake County Area, Florida
 (Supplemental Map S1 - Vicinity of Lakeshore Drive, Clermont, Florida 34711)

MAP LEGEND

<p>Area of Interest (AOI)</p> <ul style="list-style-type: none"> Area of Interest (AOI) <p>Soil Rating Polygons</p> <ul style="list-style-type: none"> 0 - 25 25 - 50 50 - 100 100 - 150 150 - 200 > 200 <p>Soil Rating Lines</p> <ul style="list-style-type: none"> 0 - 25 25 - 50 50 - 100 100 - 150 150 - 200 > 200 <p>Soil Rating Points</p> <ul style="list-style-type: none"> 0 - 25 25 - 50 50 - 100 100 - 150 150 - 200 > 200 	<p><input type="checkbox"/> Not rated or not available</p> <p>Water Features</p> <ul style="list-style-type: none"> Streams and Canals <p>Transportation</p> <ul style="list-style-type: none"> Rails Interstate Highways US Routes Major Roads Local Roads <p>Background</p> <ul style="list-style-type: none"> Aerial Photography
----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------	--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------

MAP INFORMATION

The soil surveys that comprise your AOI were mapped at 1:20,000.

Warning: Soil Map may not be valid at this scale. Enlargement of maps beyond the scale of mapping can cause misunderstanding of the detail of mapping and accuracy of soil line placement. The maps do not show the small areas of contrasting soils that could have been shown at a more detailed scale.

Please rely on the bar scale on each map sheet for map measurements.

Source of Map: Natural Resources Conservation Service
 Web Soil Survey URL: <http://websoilsurvey.sc.egov.usda.gov>
 Coordinate System: Web Mercator (EPSG:3857)

Maps from the Web Soil Survey are based on the Web Mercator projection, which preserves direction and shape but distorts distance and area. A projection that preserves area, such as the Albers equal-area conic projection, should be used if more accurate calculations of distance or area are required.

This product is generated from the USDA-NRCS certified data as of the version date(s) listed below.

Soil Survey Area: Lake County Area, Florida
 Survey Area Data: Version 22, Sep 1, 2022

Soil map units are labeled (as space allows) for map scales 1:50,000 or larger.

Date(s) aerial images were photographed: Jan 6, 2022—Mar 21, 2022

The orthophoto or other base map on which the soil lines were compiled and digitized probably differs from the background imagery displayed on these maps. As a result, some minor shifting of map unit boundaries may be evident.

Attachment “I” – Master Land Use Plan (64 of 89)

Depth to Water Table—Lake County Area, Florida

Supplemental Map S1 - Vicinity of
Lakeshore Drive, Clermont, Florida
34711

Depth to Water Table

Map unit symbol	Map unit name	Rating (centimeters)	Acres in AOI	Percent of AOI
4	Anclote and Myakka soils	0	3.4	52.6%
8	Candler sand, 0 to 5 percent slopes	>200	2.6	41.1%
22	Lake sand, 5 to 12 percent slopes	>200	0.4	6.2%
Totals for Area of Interest			6.4	100.0%

Description

"Water table" refers to a saturated zone in the soil. It occurs during specified months. Estimates of the upper limit are based mainly on observations of the water table at selected sites and on evidence of a saturated zone, namely grayish colors (redoximorphic features) in the soil. A saturated zone that lasts for less than a month is not considered a water table.

This attribute is actually recorded as three separate values in the database. A low value and a high value indicate the range of this attribute for the soil component. A "representative" value indicates the expected value of this attribute for the component. For this soil property, only the representative value is used.

Rating Options

Units of Measure: centimeters

Aggregation Method: Dominant Component

Component Percent Cutoff: None Specified

Tie-break Rule: Lower

Interpret Nulls as Zero: No

Beginning Month: January

Ending Month: December

Attachment “I” – Master Land Use Plan (65 of 89)

STORMWATER MANAGEMENT REPORT

BAREFOOT FISHING RESORT

LAKE COUNTY FLORIDA

EXHIBIT 4.0
GEOTECHNICAL REPORT

Attachment "I" – Master Land Use Plan (66 of 89)



**Andreyev
Engineering,
Inc.**

*CLERMONT OFFICE
1170 W. Minneola Avenue
Clermont, Florida 34711
352-241-0508
Fax: 352-241-0977*

▼ Groundwater ▼ Environmental ▼ Geotechnical ▼ Construction Materials Testing

January 17, 2025
CPGT-25-019

To: Highland Engineering, Inc.
1172 S. Grand Highway
Clermont, Florida 34711

Attention: Mr. Jeff Banker, P.E.

Subject: Geotechnical Investigation
Proposed Retention Ponds – Barefoot Fishing Resort
Clermont, Lake County, Florida

Dear Mr. Banker:

The purpose of this study was to obtain geotechnical data to assist in the design and construction of the proposed wet and dry pond areas. This report presents the results of our geotechnical investigation along with an evaluation of the soil and groundwater conditions encountered. In addition, it provides geotechnical engineering recommendations for retention pond design.

SITE LOCATION AND PROJECT DESCRIPTION

The subject retention pond areas are located along the southeast side of Lakeshore Drive and north of Lake Susan in Clermont, Lake County, Florida. A Boring Location Plan is presented in **Figure 1**.

SCOPE OF FIELD EXPLORATION

The scope of our field exploration consisted of performing the following:

- Mobilized crew and drilling equipment to the site.
- Drilled four (4) auger boring to depths of 4 to 5 feet below ground surface within the proposed retention pond areas.
- Evaluated and classified the soil samples collected from the auger boring.
- Collected one (1) relatively undisturbed permeability tube samples and performed laboratory permeability tests.
- Measured stabilized groundwater table at each boring location.
- Analyzed the field and laboratory data to develop engineering geotechnical recommendations for retention pond parameters.

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Geotechnical Investigation,
Proposed Ponds – Barefoot Fishing Resort
Clermont, Lake County, Florida
Page 2

Samples were recovered from the borings, neatly packaged, and returned to AEI's laboratory for visual classification and stratification. Soil strata were classified according to the Unified Soil Classification System (USCS). The boring locations are shown on **Figure 1**, results of the auger borings, in profile form, are presented on **Figure 2**. On the profiles, horizontal lines designating the interface between differing materials represent approximate boundaries. The actual transition between layers is typically gradual.

SOIL AND GROUNDWATER CONDITIONS

The approximate locations of the borings are shown on the attached **Figure 1**. Please note that survey control was not provided for our field investigation. Therefore, the locations of the borings indicated on the attached **Figure 1** should be considered approximate.

Representative portions of each soil strata identified in the auger borings were packaged and sealed for transportation to our laboratory for further examination and visual classification.

Soil Conditions

The soil types encountered at the boring locations are presented in the form of soil profiles on the attached **Figure 2**. The stratification presented on **Figure 2** is based on visual examination of the recovered soil samples and the interpretation of the field logs by a geotechnical engineer.

In general, the borings encountered the following soil types:

Stratum No.	Soil Description	USCS GROUP
1	Grayish brown to reddish brown to brown fine sand	(SP)
2	Light brown fine sand	(SP)
3	Dark brown slightly silty fine sand	(SP-SM)
4	Reddish brown fine sand to slightly silty fine sand	(SP)(SP-SM)

Please refer to the soil profiles on the attached **Figure 2** for specific boring data. The information presented on the soil profiles represents the subsurface conditions encountered at the noted boring locations. Accordingly, the materials between and away from the boring locations may vary from those encountered at the specific boring locations. The strata boundaries presented on the soil profiles have been approximated. The actual boundaries may be gradual or otherwise not clearly defined.

Groundwater Table

The geotechnical investigation was performed on January 7, 2025. Stabilized groundwater was measured at depths ranging from 1.9 to 3.6 feet below ground surface.

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Geotechnical Investigation,
Proposed Ponds – Barefoot Fishing Resort
Clermont, Lake County, Florida
Page 3

The difference in the encountered groundwater levels is attributed to the difference in the ground surface elevations at the boring locations.

Fluctuation of the groundwater table should be anticipated throughout the year due to variations in seasonal rainfall. We anticipate that the seasonal high groundwater table (apparent condition) to be near the measured groundwater levels.

RETENTION POND AREAS

Based on the information provided to us, there is one (1) proposed dry retention pond area and one (1) proposed wet retention pond area located within the property. In order to evaluate the soil and groundwater conditions within the proposed pond areas, we performed one auger boring (HA-1), to a depth of 4.5 feet below ground, within the proposed wet retention pond area and three (3) auger borings (HA-2, HA-3 and HA-4), to depths of 4 to 5 feet below ground surface, within the proposed dry retention pond area. The results of the boring is shown in the form of soil profile in Figure 2.

In addition, we performed one (1) laboratory permeability test, on the soil tube permeability sample collected at the boring shown on the table below. The permeability tube sample was collected at a depth of 1-foot below existing grade. The measured permeability value is presented below:

Boring No.	Sample Depth (feet)	Stratum	Vertical Permeability (feet/day)
A-2	1	2	11.7

The laboratory test result is presented adjacent to the soil profile on the attached **Figure**. The permeability value should not be misconstrued to represent the design exfiltration rate. The exfiltration rate should be lower due to pond bottom siltation, pond geometry, volume, and groundwater mounding effects. Below is a summary of recommended aquifer parameters to be used in the design and stormwater recovery analysis for the proposed ponds.

Dry Retention Pond

For analysis and design purposes the following aquifer characteristics should be used. These aquifer characteristics were determined from the results of the field and laboratory investigations, adjusting for depth and soil variability:

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Geotechnical Investigation,
 Proposed Ponds – Barefoot Fishing Resort
 Clermont, Lake County, Florida
 Page 4

PARAMETERS	BORINGS A-2, A-3, A-4
Bottom of Aquifer Elevation	93.0 NGVD
Estimated Depth to Normal Seasonal High Ground Water Table	95.0 NGVD
Weighted Average Horizontal Hydraulic Conductivity (ft/day)	17.6
Weighted Average Unsaturated Vertical Hydraulic Conductivity	7.8
Storage Coefficient	0.08

* Aquifer depth is the average depth to the bottom of the borings.

** Seasonal high-water table is estimated to be about 1-foot above the encountered water levels.

The permeability values presented in the above tables are based on a weighted average of the soil profile above the bottom of aquifer using the tested saturated permeability value for Stratum 1. The weighted average of the unsaturated vertical permeability was calculated by multiplying the weighted average saturated vertical permeability of the unsaturated zone by 2/3. The saturated horizontal permeability was calculated by multiplying the saturated vertical permeability by 1.5, where appropriate.

Wet Retention Pond

Based on the information provided to us, there is one (1) proposed wet retention pond area located at the eastern side of the property. In an effort to evaluate the soil and groundwater conditions within the proposed wet pond area, we performed one (1) auger boring (HA-1) to a depth of 4.5 feet below ground surface. The boring location is shown on **Figure 1**. Please refer to the soil profile on the attached **Figure 2**. Below is our estimated normal seasonal low, normal seasonal high and average groundwater table to be used in the design of the proposed wet retention pond.

Borings	Estimated Normal Seasonal High Groundwater Elevation (feet NGVD)	Estimated Normal Seasonal Low Groundwater Table Elevation (feet NGVD)	Average Elevation of Seasonal High & Low Groundwater Table Elevation (feet NGVD)
HA-1	95.0	93.0	94.0

Attachment "I" – Master Land Use Plan (70 of 89)

Geotechnical Investigation,
Proposed Ponds – Barefoot Fishing Resort
Clermont, Lake County, Florida
Page 5

LIMITATIONS

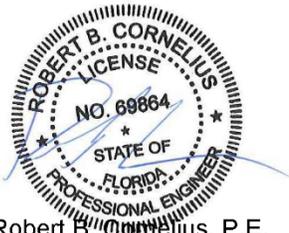
The analyses and recommendations submitted in this report are based on the anticipated location and type of construction discussed herein and the data obtained from the soil borings performed at the locations indicated and does not reflect any variations which may occur beyond these borings.

CLOSURE

AEI appreciates the opportunity to participate in this project, and we trust that the information herein is sufficient for your needs. If you have any questions or comments concerning the contents of this report, please do not hesitate to contact our office.

Sincerely,

ANDREYEV ENGINEERING, INC.

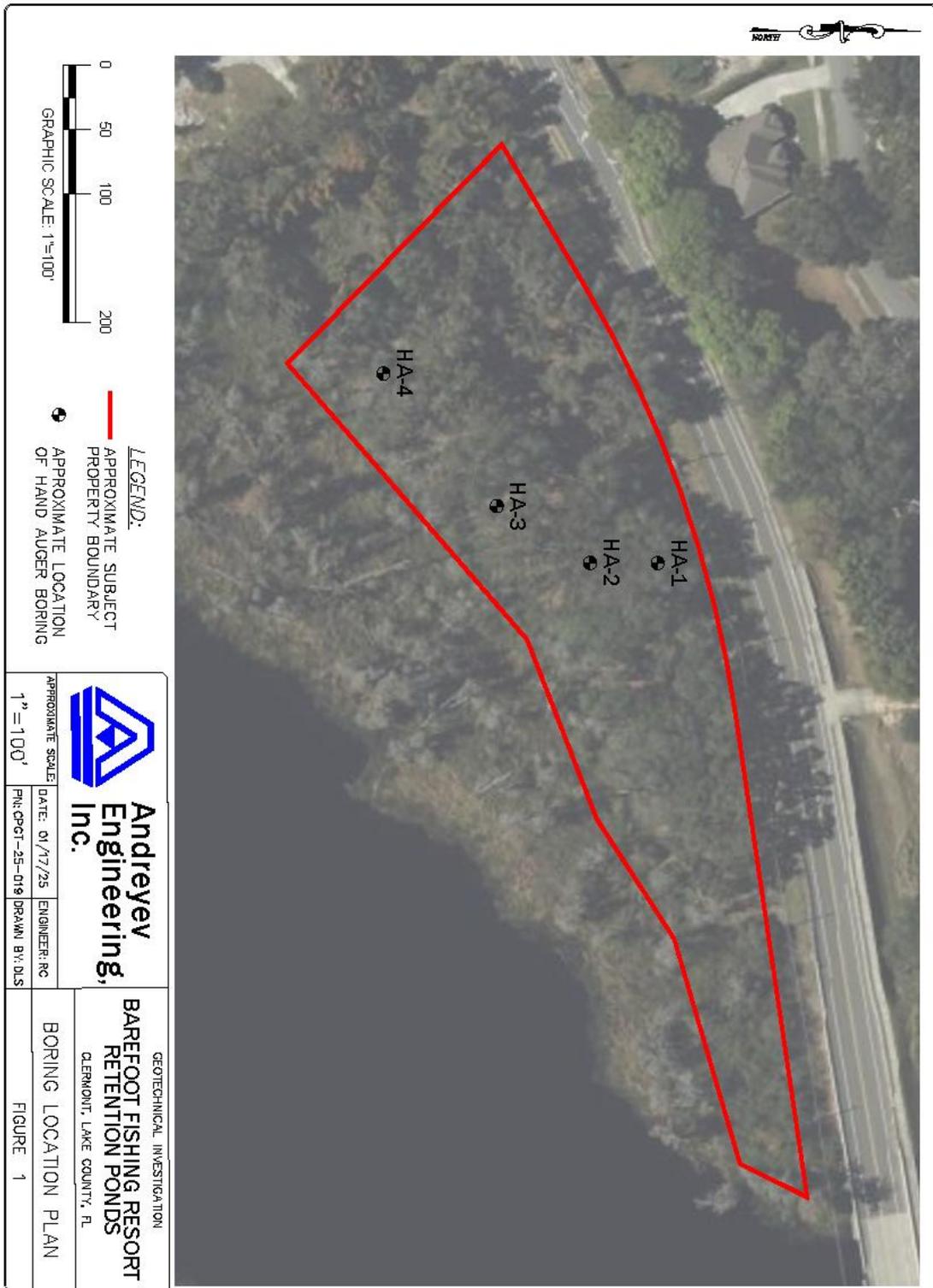


Robert B. Cornelius, P.E.
Vice President
Florida Registration No.69864

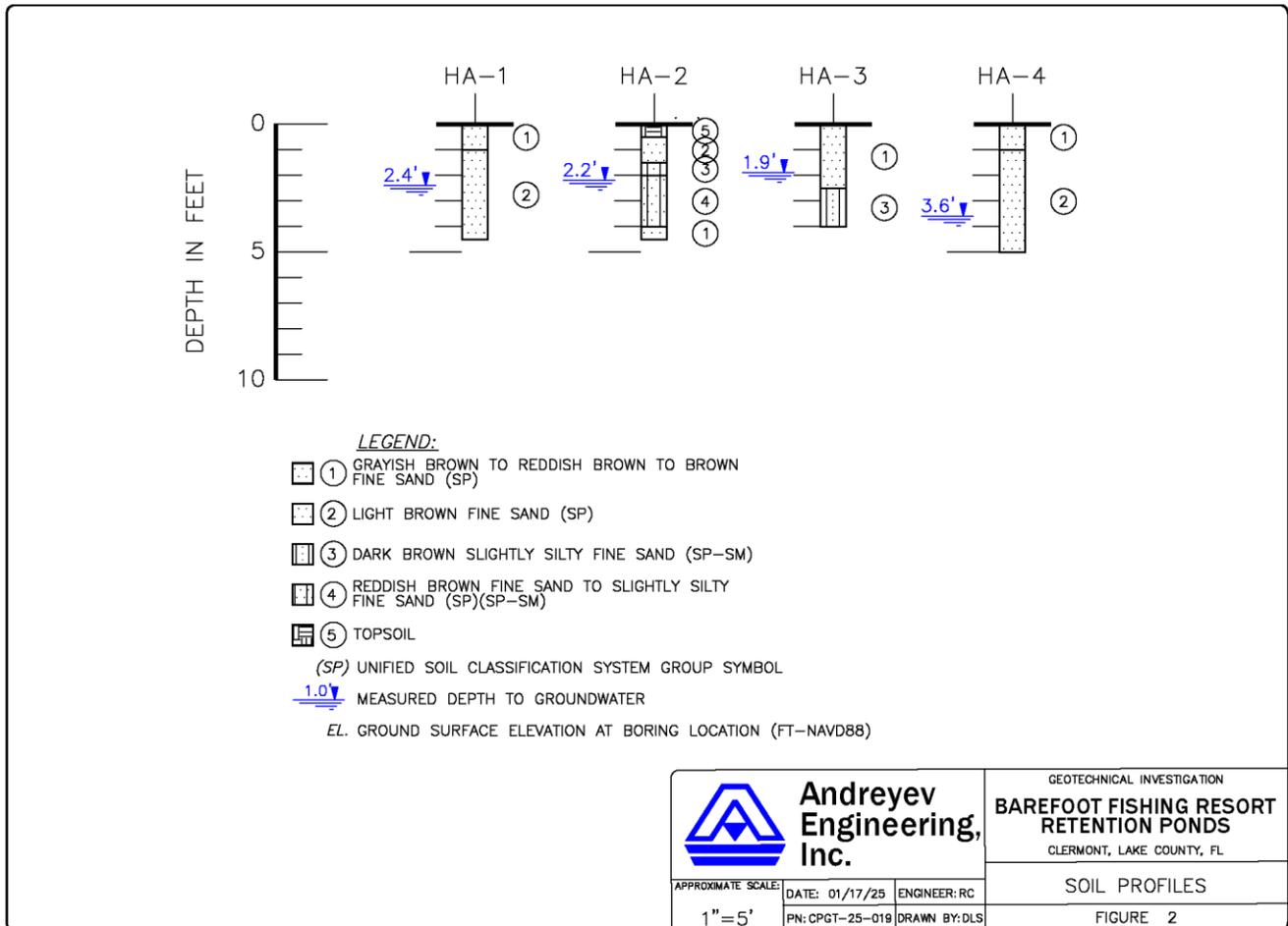
Attachment “I” – Master Land Use Plan (71 of 89)

FIGURES

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WETLAND DELINEATION SURVEY Final Report

Lake County Parcel ID 01-23-25-0001-000-00100
Vicinity of Lakeshore Drive
Clermont, Florida 34711

Prepared For:

Mary Langley

By:

Excelsior Environmental Consultants, LLC

615 North Palmetto Court, Suite A

DeLand, Florida, 32720

Phone: (855) 720-2333 • www.excelsiorflorida.com

26 September 2023



Members:

National Registry of Environmental Professionals • Florida Association of Environmental Professionals •
International Society of Technical and Environmental Professionals • Society of Wetland Scientists • ASTM International

Attachment “I” – Master Land Use Plan (75 of 89)



1. SCOPE OF WORK

A wetland delineation survey was conducted at **Lake County Parcel ID 01-23-25-0001-000-00100**, located in the **vicinity of Lakeshore Drive, Clermont, Florida 34711** (the “**Subject Property**”) on behalf of **Mary Langley** (the “**Client**”). The survey was conducted in accordance with Florida Administrative Code 62-340 *Delineation of the Landward Extent of Wetlands and Surface Waters*, following procedures established in the *Florida Wetlands Delineation Manual*.

2. SITE VISIT AND DELINEATION CRITERIA

On 18 and 19 September 2023, **Excelsior Environmental Consultants, LLC** (“**Excelsior**”) visited the Subject Property and conducted a wetland delineation survey. The landward extent of a wetland is established where vegetative, soil, and hydrologic characteristics no longer meet the definition of a wetland (FAC 62-340.200(19)) or the wetland test criteria described in FAC 62-340.300(2) (i.e., the “**A**”, “**B**”, “**C**”, and “**D**” tests).

A. Vegetation

Section 62-340.400 of the Florida Administrative Code states that the top-most vegetative stratum (i.e., tree canopy) should be used to determine the dominance of upland or wetland plant species at a given sampling point unless it constitutes less than 10% of the areal extent.

The tree canopy of the wetland-upland boundary was characterized by a broad transition zone (ecotone) populated at different points by obligate wetland (**OBL**), facultative wetland (**FACW**), and upland (**UPL**) species, as defined in FAC 62-340.450, including:

- Red maple (*Acer rubrum*) [FACW]
- Loblolly bay (*Gordonia lasianthus*) [FACW]
- Dahoon holly (*Ilex cassine*) [OBL]
- Sweet bay (*Magnolia virginiana*) [OBL]
- Swamp tupelo (*Nyssa sylvatica biflora*) [OBL]
- Black cherry (*Prunus serotina*) [unrated but usual upland association]
- Sand live oak (*Quercus geminata*) [UPL]
- Swamp laurel oak (*Quercus laurifolia*) [FACW]
- Water oak (*Quercus nigra*) [FACW]
- Live oak (*Quercus virginiana*) [UPL]
- Bald cypress (*Taxodium distichum*) [OBL]

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B. Soils Characteristics

Soils were sampled at 31 different locations (**Figure 1**). Upland soils were characterized by fine sands with Munsell hue/value/chroma [HVC] codes ranging from 10YR 5/1 (“gray”) to 10YR 8/3 (“very pale brown”) with organic masking of 50% or less on individual grains. Hydric soil indicators were not generally observed within the first 20± inches of the soil profile.

Wetland soils were characterized by mucky peat organic soils with Munsell HVC codes ranging from 10YR 2/1 (“black”) to 10YR 3/3 (“dark brown”). Observed hydric soil indicators specified by the USDA Natural Resources Conservation Service (USDA-NRCS) included:

- Histosols (A1)
- Hydrogen sulfide odor (A4)
- Umbric surface (F13)

The transition zone (ecotone) between the upland and wetland area was characterized by sandy loams with Munsell hue/value/chroma [HVC] codes ranging from 10YR 2/1 (“black”) to 10YR 6/1 (“gray”). Observed hydric soil indicators specified by the USDA Natural Resources Conservation Service (USDA-NRCS) included:

- Organic bodies (A6)
- Mucky mineral layers (A7)
- Muck presence (A8)
- Stripped matrix (S6)

C. Hydrologic Indicators

Observed hydrologic indicators specified in FAC 62-340.500 included:

- Aquatic mosses or liverworts
- Drift lines and rafted debris
- Elevated lichen lines 6 to 10 inches above the ground surface on tree bases
- Morphological plant adaptations (e.g., buttressed tree bases and adventitious roots)
- Vegetated hummock formation
- Water marks 6 to 12 inches above the ground surface on tree bases or vegetation

Attachment “I” – Master Land Use Plan (77 of 89)



3. WETLAND DELINEATION CONCLUSIONS AND RECOMMENDATIONS

Wetlands were delineated on the Subject Property either because the “B” test wetland criteria (i.e., areal extent of obligate and/or facultative wetland vegetation equal to or greater than 80% of all vegetation in the stratum plus hydric soils or hydrologic indicators) were met or because the “D” test wetland criteria (i.e., presence of both hydric soil indicators and hydrologic indicators) were met.

Based on data collected in the field, labeled pink and blue wetland flagging, or labeled, flagged survey stakes were placed at 33 points along two lines that both meet the definition of a wetland boundary as defined in FAC 62-340 (Figure 1). The coordinates of individual field markers are provided in Table 1. A licensed land surveyor should be retained to locate the wetland field markers and add the resulting wetland lines to the property boundary survey.

The delineated wetlands on both parcels composing the Subject Property consist of bottomland swamp associated with the Palatklakaha River, which connects Lake Minnehaha to the north and Lake Susan to the south.

The Subject Property is located in an unincorporated area of Clermont and is therefore subject to county wetland buffer requirements. The Lake County land development code requires 50-foot protected upland buffers along all wetland boundaries. Typical 50-foot protected upland buffers are depicted in Figure 1 for illustrative purposes. Wetland and non-buffer upland acreages on the Subject Property are as follows:

Parcel	Non-buffer Upland Acreage	Wetland Acreage
1 (north)	0.45	1.22
2 (south)	1.06	2.30

4. WETLAND MITIGATION INFORMATION

The Subject Property is located in the Palatklakaha River drainage basin and falls within the Lake Louisa and Green Swamp Mitigation Bank Service Area (MBSA). Mitigation banks in this MBSA include:

- Mill Creek Mitigation Bank (<https://mitigationbankinginc.com/mill-creek-mitigation-bank>)

At the time of writing, the current price for forested wetland credits at this mitigation bank is \$120,000 per credit-acre. Fractional purchase is possible, in increments as small as 1/100th of a credit. Actual mitigation costs will depend on the final proposed site plan, pre- and post-impact wetland function as assessed by UMAM (Uniform Mitigation Assessment Method) or other methods, and the total area of proposed impact.

Please note that because the parcels composing the Subject Property have direct hydrologic connectivity to Waters of the United States (WOTUS), federal mitigation credits may also be required.

Attachment "I" – Master Land Use Plan (78 of 89)



This report does not constitute authorization to alter uplands or wetlands that have been delineated on the Subject Property. All wetland delineation survey findings are subject to regulatory review. Excelsior recommends contacting the Lake County Office of Planning and Zoning, the Florida Department of Environmental Protection (FDEP), and the St. Johns River Water Management District (SJRWMD) concerning any additional setbacks or environmental requirements prior to commencing any clearing, filling, grading, or construction.

Please refer any questions to Excelsior at (855) 720-2333 or contact@excelsiorflorida.com.


Jordon S. Munizzi
Digitally signed by Jordon S. Munizzi
Date: 2023.09.26 00:00:11 -04'00'

Jordon S. Munizzi, Ph.D., REP
Principal Field Scientist



Sara L. Cole, P.G.
Principal Geologist

(855) 720-2333 • 615 North Palmetto Court, Suite A • DeLand, Florida 32720 • www.excelsiorflorida.com

Assessment • Permitting • Remediation

Attachment “I” – Master Land Use Plan (79 of 89)



5. SUPPLEMENTAL INFORMATION

Additional information provided by Excelsior to contextualize this report includes:

- **Supplemental Figure S1:** A high-resolution, false-color Light Distance and Ranging (LiDAR) overlay of the Subject Property and surrounding area. Low lying areas and open water are depicted as darker features. The elevation of the Subject Property is approximately 100 to 105 feet above sea level (ft ASL). LiDAR is a remote sensing method that utilizes pulsed lasers reflected off the ground surface (from an aircraft or satellite) to capture contour data irrespective of structures or vegetative cover.
- **Supplemental Figure S2:** A historic 1969 United States Geological Survey (USGS) topographic map depicting submerged wooded marsh or swamp within the same general location as the delineated wetlands. The northern parcel is depicted as a cleared area associated with a citrus grove to the west.
- **Supplemental Figure S3:** A US Fish and Wildlife Service National Wetlands Inventory (USFWS-NWI) overlay showing Palustrine, Forested, Semipermanently Flooded (PFO6F) and Limnetic, Unconsolidated Bottom, Permanently Flooded (L1UBH) wetlands within the same general location as the delineated wetlands.
- **Supplemental Map S1:** A soil map from the US Department of Agriculture National Resource Conservation Service (USDA-NRCS) showing the following soil series on the Subject Property:

Map Unit	Name	Depth to Water Table (DWT)	Hydric?
4	Anclote and Myakka soils	0 cm/0 in	Yes
8	Candler sand, 0 to 5 percent slopes	>200 cm/>79 in	No
22	Lake sand, 5 to 12 percent slopes	>200 cm/>79 in	No

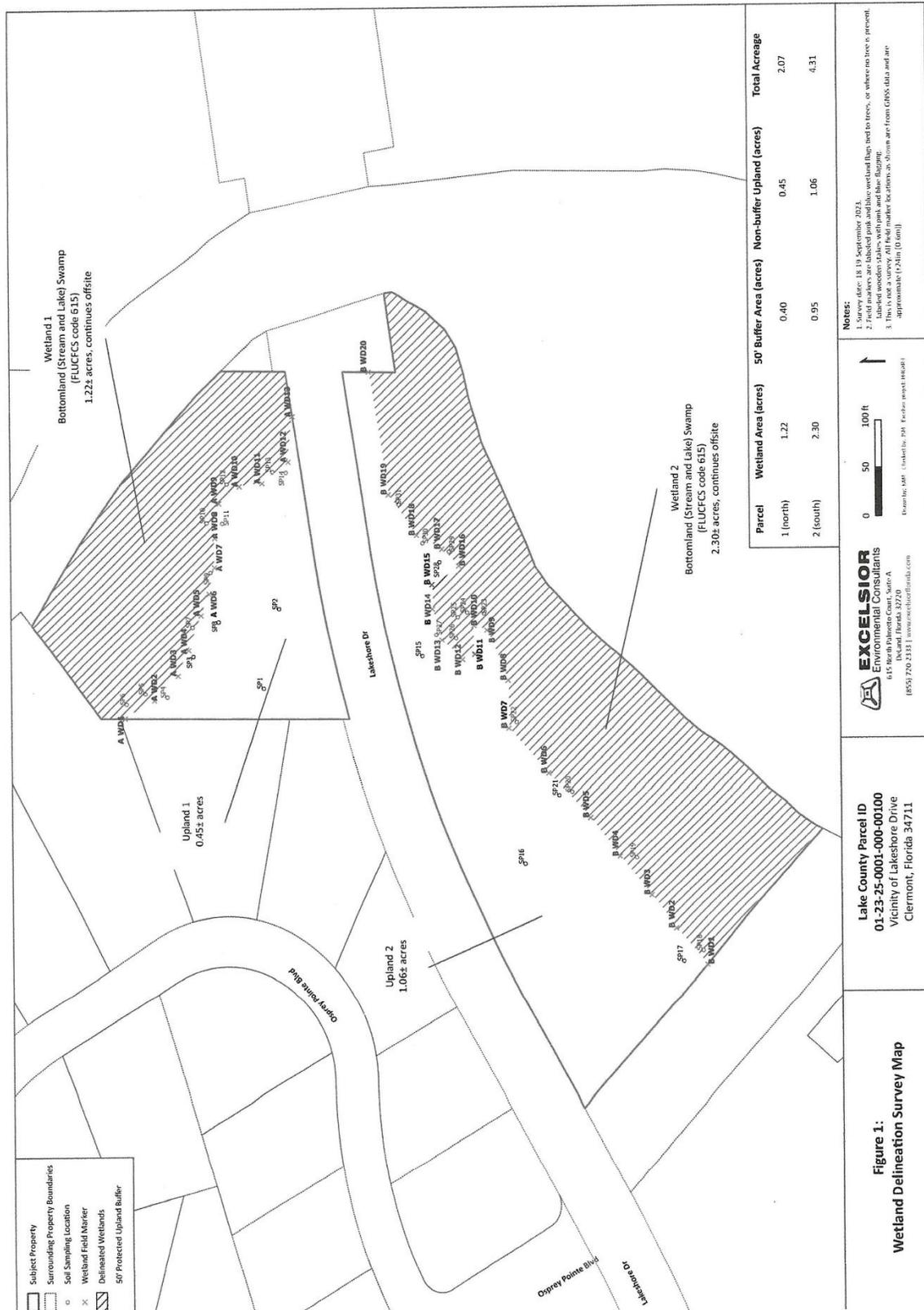
Attachment “I” – Master Land Use Plan (80 of 89)



6. REFERENCES

- Florida Administrative Code 62-340. *Delineation of the Landward Extent of Wetlands and Surface Waters*. Florida Department of State. Available from: <https://www.flrules.org/gateway/ChapterHome.asp?Chapter=62-340>.
- Florida Natural Areas Inventory. 2010. Guide to the Natural Communities of Florida 2010 Edition. Available from: www.fnai.org.
- Gilbert KM, Tobe JD, Cantrell RW, Sweeley ME, Cooper JR. 1995. *The Florida Wetlands Delineation Manual*. Florida Department of Environmental Protection. Available from: <https://floridadep.gov/sites/default/files/delineationmanual.pdf>.
- Hurt, GW. 1992. *Soil and Water Relationships of Florida's Ecological Communities*. Florida Soil Conservation Service. Available from: <https://floridadep.gov/sites/default/files/soil-and-water.pdf>.
- Kawula R, Redner J. 2018. Florida Land Cover Classification System. Florida Fish and Wildlife Conservation Commission, Fish and Wildlife Research Institute Center for Spatial Analysis. Tallahassee, Florida. Available from: <https://myfwc.com/media/20455/land-cover-classification-revision-2018.pdf>.
- Mattoon WR. 1967. *Common Forest Trees of Florida: How to Know Them* (ninth edition). Florida Forest Service.
- Staff of the Florida Department of Environmental Protection, Submerged Lands and Environmental Resources Coordination, Wetland Evaluation and Delineation. 2021. *Chapter 62-340, F.A.C. Data Form Guide*. Florida Department of Environmental Protection. Available from: https://floridadep.gov/sites/default/files/62-340FormGuide_pocket_Feb2021_0.pdf.
- Tobe JD, Burks KC, Cantrell RW, Garland MA, Sweeley ME, Hall DW, Wallace P, Anglin G, Nelson G, Cooper JR, Bickner D, Gilbert K, Aymond N, Greenwood K, Raymond N. 1998. *Florida Wetland Plants: An Identification Manual*. Florida Department of Environmental Protection. Available from: <https://archive.org/details/floridawetlandplants>.
- USACE Environmental Laboratory. 1987. *Corps of Engineers Wetlands Delineation Manual. Technical Report Y-87-1*. US Army Engineer Waterways Experiment Station. Vicksburg, Mississippi. Available from: <https://www.lrh.usace.army.mil/Portals/38/docs/USACE%2087%20Wetland%20Delineation%20Manual.pdf>.
- Whitney E, Means B. 2014. *Florida's Natural Ecosystems and Native Species Volume I: Florida's Uplands*. Sarasota, FL: Pineapple Press.
- Whitney E, Means B, Rudloe A. 2014. *Florida's Natural Ecosystems and Native Species Volume II: Florida's Wetlands*. Sarasota, FL: Pineapple Press.

Attachment "I" – Master Land Use Plan (81 of 89)



Attachment "I" – Master Land Use Plan (82 of 89)



Table 1: Wetland Field Marker Coordinates

Wetland Boundary	Field ID	Coordinates (Lat, Long)*	Notes
Wetland Boundary 1 ("A")	A WD1	28.521001N, 81.757531W	Tie wetland line to property boundary at field marker
	A WD2	28.520907N, 81.757474W	
	A WD3	28.52083N, 81.757395W	
	A WD4	28.520795N, 81.757312W	
	A WD5	28.520754N, 81.757195W	
	A WD6	28.520728N, 81.757125W	
	A WD7	28.520709N, 81.75704W	
	A WD8	28.520708N, 81.756946W	
	A WD9	28.520693N, 81.756835W	
	A WD10	28.520627N, 81.756782W	
	A WD11	28.520554N, 81.756772W	
	A WD12	28.520469N, 81.756703W	
	A WD13	28.520455N, 81.756552W	Tie wetland line to property boundary at field marker
Wetland Boundary 2 ("B")	B WD1	28.519127N, 81.758336W	Tie wetland line to property boundary at field marker
	B WD2	28.519227N, 81.758223W	
	B WD3	28.519306N, 81.758116W	
	B WD4	28.519407N, 81.757986W	
	B WD5	28.519501N, 81.757856W	
	B WD6	28.519636N, 81.757714W	
	B WD7	28.519763N, 81.757571W	
	B WD8	28.519764N, 81.757418W	
	B WD9	28.519831N, 81.757252W	
	B WD10	28.519872N, 81.757236W	
	B WD11	28.519871N, 81.757333W	
	B WD12	28.519911N, 81.75735W	
	B WD13	28.519976N, 81.757285W	
	B WD14	28.520007N, 81.757181W	
	B WD15	28.520008N, 81.7571W	
	B WD16	28.519921N, 81.757041W	
	B WD17	28.519975N, 81.756987W	
	B WD18	28.520057N, 81.756942W	
B WD19	28.520146N, 81.756812W		
B WD20	28.520208N, 81.756406W	Tie wetland line to property boundary at field marker	

*Coordinates are provided in WGS84 (decimal degrees); accuracy is ± 24 inches (0.6 meters).

Attachment "I" – Master Land Use Plan (83 of 89)

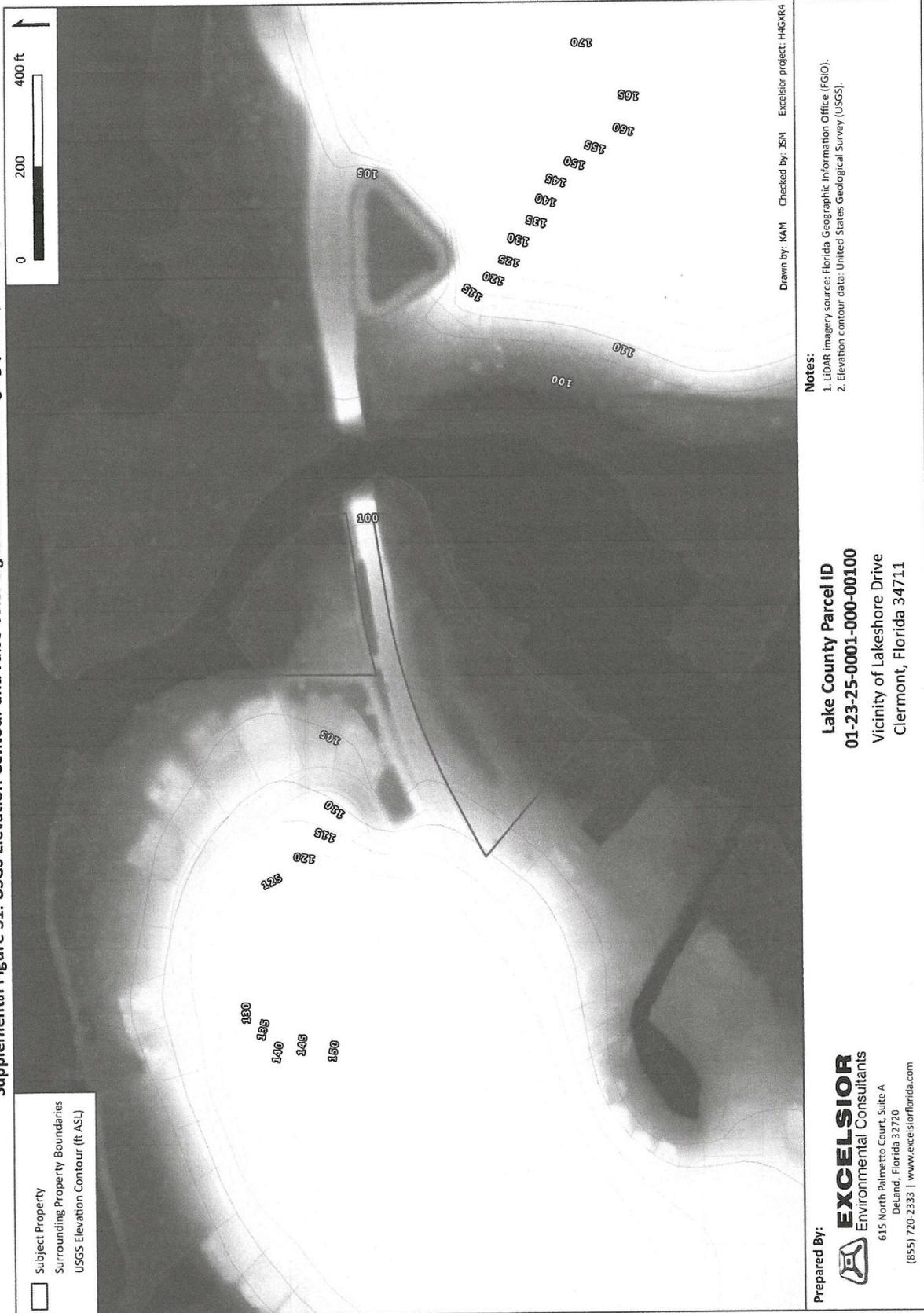


Supplemental Information

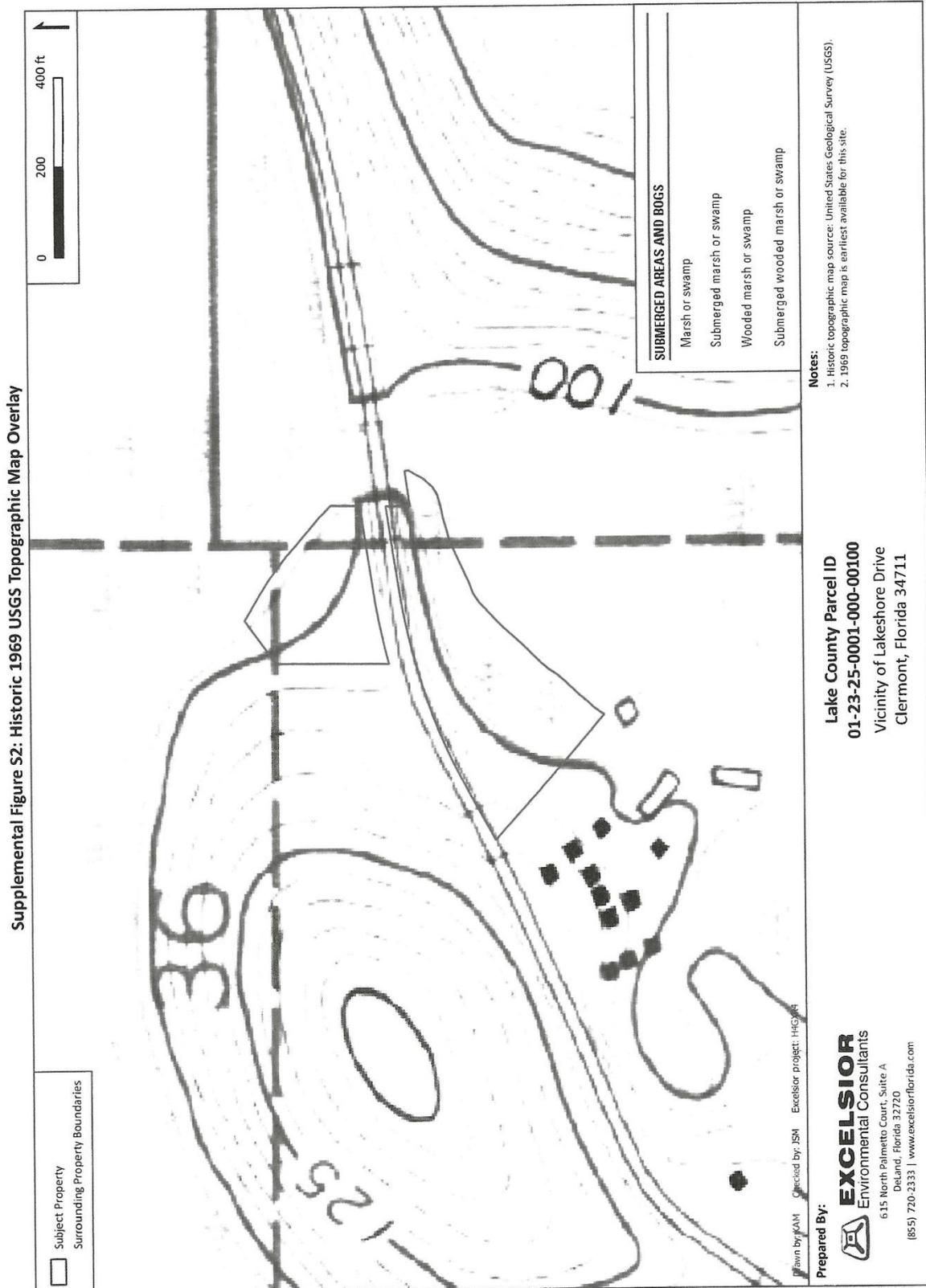
Note: the maps and information in the following section are provided for additional context only. These resources are not authoritative and do not supersede the findings of the wetland delineation survey.

Attachment "I" – Master Land Use Plan (84 of 89)

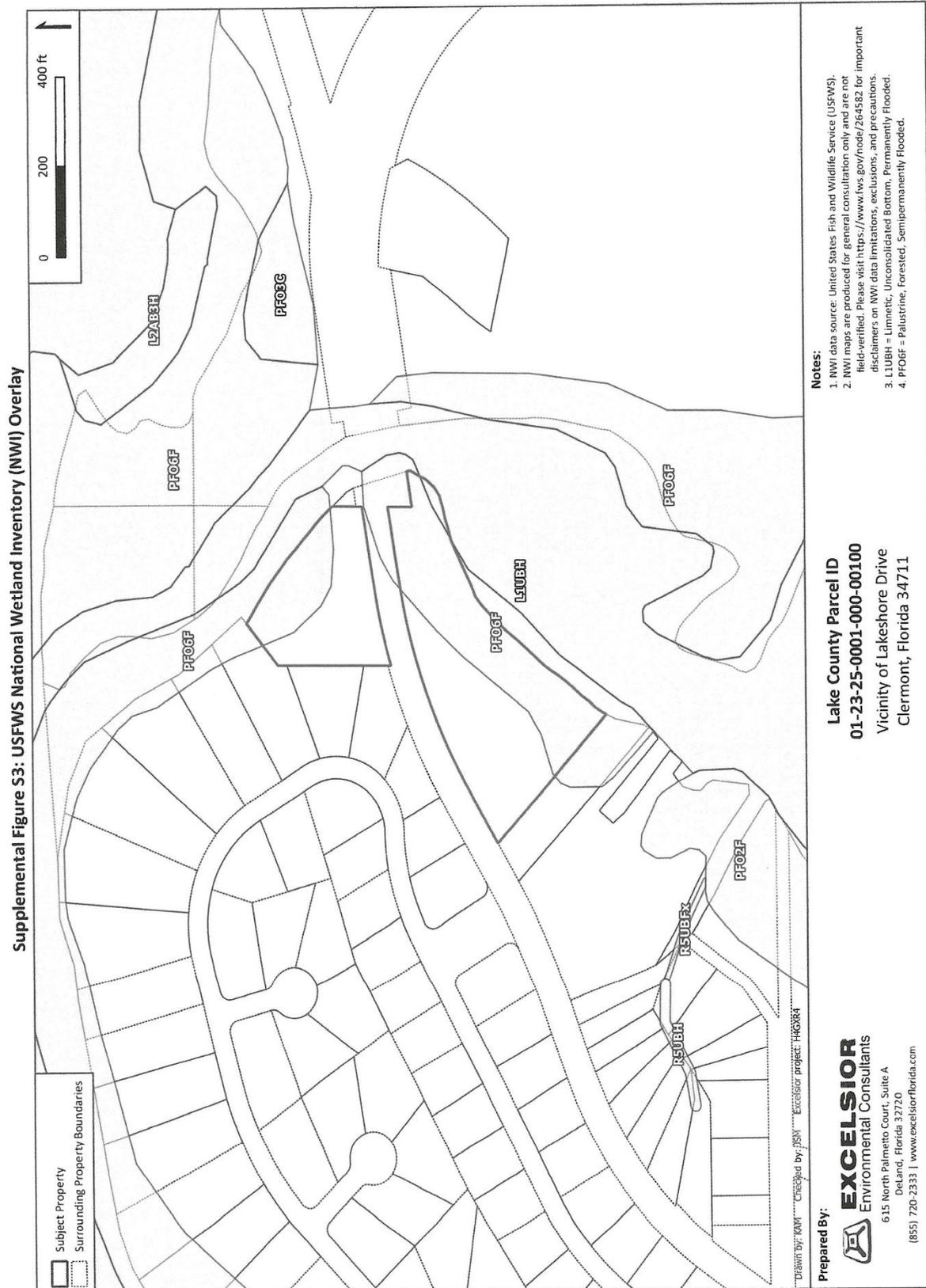
Supplemental Figure S1: USGS Elevation Contour and False-color Light Distance and Ranging (LiDAR) Overlay



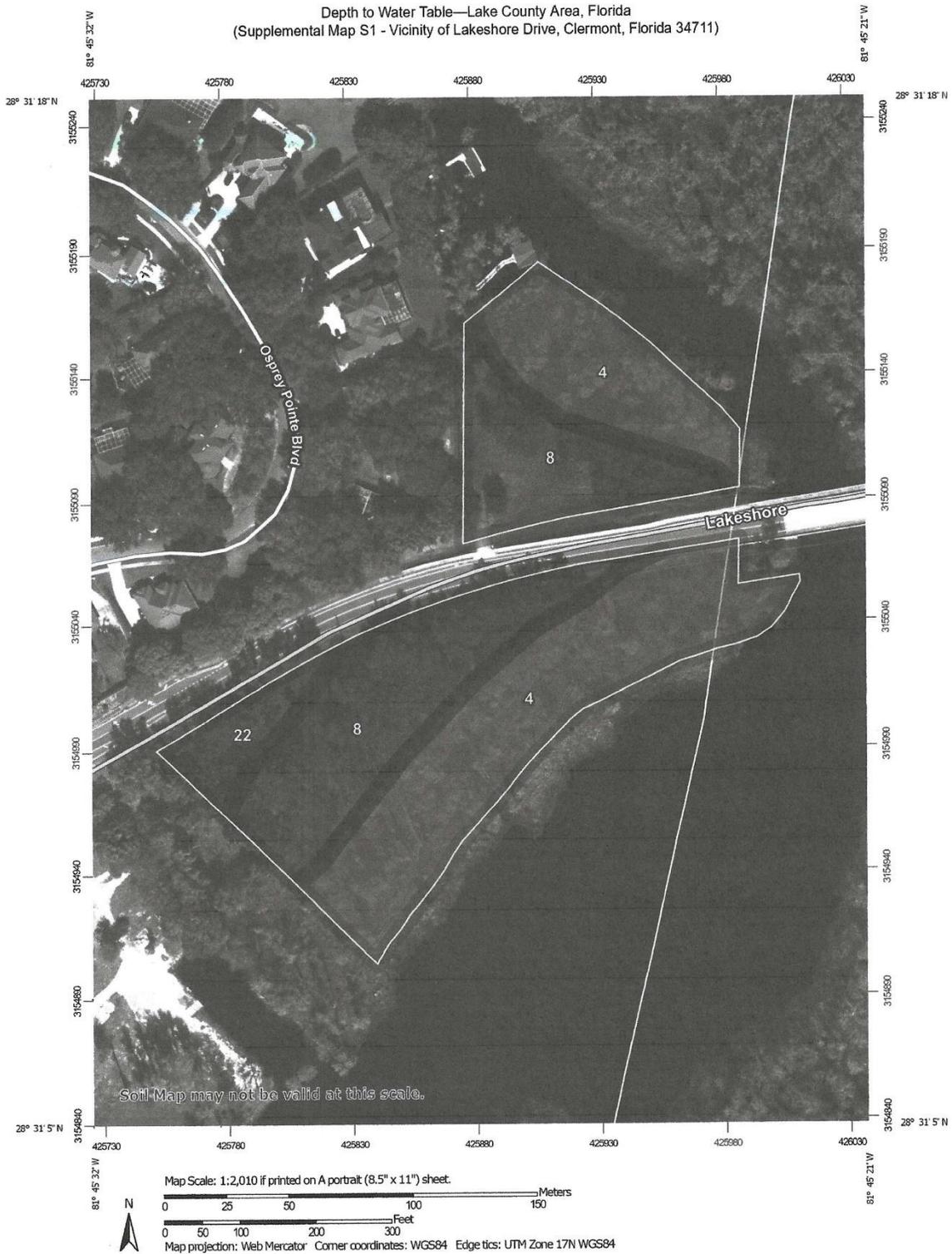
Attachment "I" – Master Land Use Plan (85 of 89)



Attachment "I" – Master Land Use Plan (86 of 89)



Attachment "I" – Master Land Use Plan (87 of 89)



Attachment "I" – Master Land Use Plan (88 of 89)

Depth to Water Table—Lake County Area, Florida
(Supplemental Map S1 - Vicinity of Lakeshore Drive, Clermont, Florida 34711)

MAP LEGEND

Area of Interest (AOI)
Area of Interest (AOI) Not rated or not available

Water Features
Streams and Canals

Transportation
 Rails
 Interstate Highways
 US Routes
 Major Roads
 Local Roads

Background
 Aerial Photography

Soils
Soil Rating Polygons
 0 - 25
 25 - 50
 50 - 100
 100 - 150
 150 - 200
 > 200
 Not rated or not available

Soil Rating Lines
 0 - 25
 25 - 50
 50 - 100
 100 - 150
 150 - 200
 > 200
 Not rated or not available

Soil Rating Points
 0 - 25
 25 - 50
 50 - 100
 100 - 150
 150 - 200
 > 200
 Not rated or not available

MAP INFORMATION

The soil surveys that comprise your AOI were mapped at 1:20,000.

Warning: Soil Map may not be valid at this scale.
 Enlargement of maps beyond the scale of mapping can cause misunderstanding of the detail of mapping and accuracy of soil line placement. The maps do not show the small areas of contrasting soils that could have been shown at a more detailed scale.

Please rely on the bar scale on each map sheet for map measurements.

Source of Map: Natural Resources Conservation Service
Web Soil Survey URL:
Coordinate System: Web Mercator (EPSG:3857)

Maps from the Web Soil Survey are based on the Web Mercator projection, which preserves direction and shape but distorts distance and area. A projection that preserves area, such as the Albers equal-area conic projection, should be used if more accurate calculations of distance or area are required.

This product is generated from the USDA-NRCS certified data as of the version date(s) listed below.

Soil Survey Area: Lake County Area, Florida
Survey Area Data: Version 22, Sep 1, 2022

Soil map units are labeled (as space allows) for map scales 1:50,000 or larger.

Date(s) aerial images were photographed: Jan 6, 2022—Mar 21, 2022

The orthophoto or other base map on which the soil lines were compiled and digitized probably differs from the background imagery displayed on these maps. As a result, some minor shifting of map unit boundaries may be evident.

Attachment "I" – Master Land Use Plan (89 of 89)

Depth to Water Table—Lake County Area, Florida

Supplemental Map S1 - Vicinity of
Lakeshore Drive, Clermont, Florida
34711

Depth to Water Table

Map unit symbol	Map unit name	Rating (centimeters)	Acres in AOI	Percent of AOI
4	Anclote and Myakka soils	0	3.4	52.6%
8	Candler sand, 0 to 5 percent slopes	>200	2.6	41.1%
22	Lake sand, 5 to 12 percent slopes	>200	0.4	6.2%
Totals for Area of Interest			6.4	100.0%

Description

"Water table" refers to a saturated zone in the soil. It occurs during specified months. Estimates of the upper limit are based mainly on observations of the water table at selected sites and on evidence of a saturated zone, namely grayish colors (redoximorphic features) in the soil. A saturated zone that lasts for less than a month is not considered a water table.

This attribute is actually recorded as three separate values in the database. A low value and a high value indicate the range of this attribute for the soil component. A "representative" value indicates the expected value of this attribute for the component. For this soil property, only the representative value is used.

Rating Options

Units of Measure: centimeters

Aggregation Method: Dominant Component

Component Percent Cutoff: None Specified

Tie-break Rule: Lower

Interpret Nulls as Zero: No

Beginning Month: January

Ending Month: December

Attachment “J” – Green Swamp Application for Consistency (1 of 7)



HIGHLAND ENGINEERING, INC.

January 10, 2025

Lake County Florida
Office of Planning and Zoning
PO Box 7800
315 W Main St., Suite 510
Tavares, FL 32778

Re: Green Swamp Area of Critical State Concern Application for Consistency Review
Butler Property (PZ2023-318) Alt Key No. 3949930

1. Pursuant to Land Development Regulations Section 8.01.01, Development Permits, any development undertaken in the Lake County portion of the Green Swamp Area of Critical State Concern (GSACSC) shall require a development permit as defined in 380.031 F.S., including, but not limited to, any change in zoning, plat approval, variances to these regulations, and conditional use permits. The applicant shall have the affirmative burden of establishing that the proposed project and supporting data meets the requirements and objectives of this Chapter. A Green Swamp Area of Critical State Concern Application for Consistency Review has been attached to this letter for use and reference.
- Any development undertaken in the Lake County portion of the Green Swamp Area of Critical State Concern shall require a development permit as defined in 380.031, F.S., including, but not limited to, any change in zoning, plat approval, variances to these regulations, and conditional use permits.

Land Development Regulations (LDR) Section 8.01.01 Development Permits.

A. The applicant shall have the affirmative burden of establishing that the proposed project and supporting data meets the requirements and objectives of this Chapter.

1. Master land use plan requirements. For all applicants for permits, except those exempted herein, a master land use plan shall be required and shall include, but not be limited to, the following:

a. A description of the scope of the proposed development, which shall include all requirements for a site plan as specified in Chapter XIV of these Land Development Regulations.

b. Maps of the site from a registered professional engineer or geologist, or soil conservation survey which shall include:

(1) A soil analysis prepared by a professional engineer or geologist registered in the State of Florida or the U.S. Natural Resources Conservation Service.

Response: Please see the drainage report. Soils map, geotechnical report and environmental study has been conducted.

(2) The topography in not more than one (1) foot contours in the wetlands and two (2) foot contours in the uplands.

Response: The Survey provided shows one-foot contours in the wetlands and uplands.

Attachment “J” – Green Swamp Application for Consistency (2 of 7)

(3) The current 100-year floodplain areas, designations, and elevations.

Response: See the attached FEMA flood map in the drainage report.

c. A statement by a registered professional engineer or geologists indicating expected changes in the quality and quantity of ground water discharge and artisan aquifer recharge of the site before, during, and after development and specifying any measure necessary to approximate existing quality and quantity in surface and ground waters.

Response: Expected changes during and after development include reduction of runoff to Lake Susan. Groundwater quantity is preserved through the post development retention pond. The pond retains over 3” of runoff before discharging to Lake Susan. The quality of groundwater discharge is preserved by the Low Impact Development LID practices such as permeable parking and reduced impervious areas (less than 30 percent).

d. A statement or assessment by a registered professional engineer that drainage facilities shall release water in a manner approximating the natural local surface flow regime, through a spreader pond of performance equivalent structure or system, either on-site or to a natural retention or natural filtration and flow area.

Response: All discharge rates and runoff volumes from applicable storm events in post-development conditions are less than pre-development. Please see the drainage summary.

2. Exemptions. A master land use plan shall not be required in the following instances:

a. The modification of an existing single-family dwelling unit.

Response: NA

b. Construction of a single-family dwelling unit or addition to a single-family dwelling unit that is not part of a common plan of development.

Response: NA

c. Detached ancillary structures to a single-family dwelling unit.

Response: NA

LDR Section 8.01.02 Development Requirements.

Development within the GSACSC shall meet the below requirements. Please thoroughly answer each of the questions below, in letter format, along with a location map, along with an application rezoning/conditional use permit. The information will assist staff in determining if the proposed activity is consistent with the provisions and principles for guiding development within the GSACSC. Answers should be detailed and apply and articulate sound and generally accepted planning practices and principles.

A. Use water conservation devices and practices as required in the Code and other Chapters of the Land Development Regulations.

Response: Conservation devices and practices including but not limited to silt fence and turbidity barriers are utilized and specified in plan. Please see sheet C1.

B. Provide assurances that all of the services needed to support that development are in place concurrent with the impacts of the development, including but not limited to roads, fire, police and schools.

Response: Services needed to support the development have been considered.

C. Cluster development away from environmentally sensitive lands. Cluster development shall be configured to preserve connections to existing environmentally sensitive lands to the greatest extent practical.

Response: NA

Attachment “J” – Green Swamp Application for Consistency (3 of 7)

D. Provide a wetland assessment for all development, based on site verification. The purpose of which is to maintain the integrity of wetland systems.

Response: Please see the attached wetland assessment report.

E. Retain all stormwater on site or located in the same area of recharge. Stormwater management systems shall be designed using Low Impact Development principles and practices.

Response: The proposed stormwater management system design strategy is to maintain the pre-development hydrologic regime. Hydrologic functions such as storage, infiltration, and discharge volume/rate are preserved through Best Management Practices train series. The stormwater system utilizes a completely dry retention system that lengthens flow paths and runoff time. Other low-impact strategies include grass parking areas as well as reductions in impermeable pavement. An average of 50' upland buffer has been provided to ensure preservation of the wetland.

F. Retain the first three inches (3") of runoff for projects located in most effective recharge areas (Type "A" Hydrologic Soil Group). Alternatively, the applicant may demonstrate that the post-development recharge will be equal to or greater than the pre-development recharge, which is stormwater that is retained such that the storage volume is recovered within 14 days following a storm event. The applicant shall submit storm water calculations, based on a 25-year storm event, completed by an engineer licensed in the State of Florida, indicating that the first three inches (3") of runoff is retained or that the alternative is met.

Response: The amount of stormwater retention has been determined through the criteria mentioned above. The post development recharge is greater than pre-development recharge.

G. A study of listed species is required for all proposed development, based on site verification. If it is determined that listed species are located on the site, a habitat management plan must be prepared and implemented using guidelines and criteria of the Florida Fish and Wildlife Conservation Commission (FFWCC) and U.S. Fish and Wildlife Service (USFWS). This plan must be reviewed by the appropriate agency (FFWCC or USFWS) prior to commencement of development.

Response: An environmental / wildlife assessment has been conducted.

H. Septic tanks shall be regulated in accordance with the specific requirements for the GSACSC set forth within these regulations, the Comprehensive Plan and state law.

Response: Acknowledged.

I. Dark skies shall be preserved through requirements as stipulated in the ordinance permitting the development on the site or as a requirement of the site plan.

Response: Acknowledged.

J. Maintain, enhance and protect corridors for wildlife movement in coordination with adjacent properties, by linking wildlife management areas and parks, buffering small wildlife populations, or other approved methods to facilitate daily or seasonal wildlife movement.

Response: Wildlife assessment has been provided.

K. Minimize site disturbance and alteration of terrain, through use of design techniques that protect native vegetation and minimize earth movement such as reduced lane widths, stem-wall construction, and swales.

Response: Conservative buffers have been provided to protect sensitive vegetation and native land. Techniques used within the project include turf pavers (pervious pavement) and shallow depth water retention area.

L. Protect common open space, wetlands and other natural features in perpetuity by conservation easement or similar recorded and legally binding instrument, as allowed by law.

Response: A conservation easement will be created during construction plan permitting.

M. Improve and protect the rural character along roadway corridors, by providing a system of rural roads intended to provide access to widely spaced home-sites and farms with substantial building setbacks from adjoining roadways, reducing road congestion, limiting the capacity of all new County roads to no more than two (2) travel lanes, and other approved methods.

Attachment “J” – Green Swamp Application for Consistency (4 of 7)

Response: Site proposes a private internal access that adjoins the adjacent western property.

N. Use of Best Management Practices for native landscaping and "right plant-right place" landscaping techniques to provide compatibility with the natural environment and minimize the use of chemicals, pesticides, and water for irrigation. No invasive exotic plant species shall be used in landscaping.

Response: Acknowledged.

O. Implement water conservation techniques, including the limitation of overhead irrigation, with the exception of low-volume irrigation such as drip or micro-irrigation systems, and areas used for vegetable gardens.

Response: Acknowledged.

P. Enhance the rural character of the project and surrounding area by using, but not limited to, the following methods: reducing urban sprawl, providing conservation areas, providing commercial and civic uses in the scale and scope of the rural area, and encouraging owners to keep large areas in a natural or open state.

Response: The site proposes less than 30 percent impervious area. Please see the plan for breakdown of impervious and pervious areas.

8.01.03 Development Review Criteria.

A. Principles for Guiding Development within the GSACSC. In order to effectively and equitably conserve and protect its environmental and economic resources, a land and water management system shall be provided to protect resources, and facilitate orderly and well planned growth. The following shall be protected, improved, or adverse impacts shall be minimized as provided in this Chapter and other Chapters of these Land Development Regulations:

1. Floridan Aquifer, wetlands and flood detention areas;
2. Normal quantity, quality and flow of groundwater and surface water;
3. Water available for aquifer recharge;
4. Functions of the Green Swamp Potentiometric High of the Floridan Aquifer;
5. Normal supply of ground and surface water.
6. Existing ground and surface water quality.
7. Water-retention capabilities of wetlands.
8. Biological-filtering capabilities of wetlands.
9. Natural flow regime of drainage basins.
10. Design capacity of flood detention areas and the water-management objectives of these areas through the maintenance of hydrologic characteristics of drainage basins.

Response: Acknowledged.

B. Review Criteria.

1. Site Alteration. Site alteration shall:

a. Maintain or improve the natural surface water flow regime;

Response: The site alteration does not deter natural surface water flow. The ultimate outfall is strategically placed within the wetland buffer so that runoff will discharge in a location consistent with pre-development conditions.

b. Maintain or improve the natural recharge capabilities of the site;

Response: The natural recharge capability of the site has been enhanced. The site retains more runoff in the post-development condition than it does in pre-development. Please see the drainage summary provided with this submittal. All runoff volume from the 25-year 24-hour storm event is retained on site, enhancing recharge capabilities.

c. Prevent the siltation of wetlands, maintain or improve the natural retention and filtering capabilities of wetlands, and adhere to the following standards:

Attachment “J” – Green Swamp Application for Consistency (5 of 7)

(1) Provide for water retention consistent with the requirements provided in the Land Development Regulations.

Response: Water retention provided in the post development condition is consistent with the Lake County Aquifer Recharge criteria. More than 3” of runoff is retained on site.

(2) Stormwater management systems shall be designed according to Low Impact Development principles and practices over conventional systems as follows:

(a) Soils. All soils exposed as a result of site alteration or development activities shall be located and stabilized in a manner to prevent erosion, compaction of soils in undeveloped portions of the site and the alteration of natural flow regimes.

Response: Acknowledged.

(b) Groundwater. Groundwater withdrawal shall not result in a reduction of the minimum flows and levels per acre as determined by the St. John’s River Water Management District or the Southwest Florida Water Management District, or their successor agencies.

Response: There will be no evidence of groundwater withdrawal due to the proposed retention pond retaining volume.

(c) Stormwater. Pre-treated stormwater runoff shall be released into wetlands in a manner approximating the natural flow regime if consistent with the stormwater management section of these regulations.

Response: Acknowledged. Pre-treated runoff natural flow regime is consistent with the Lake County Appendix C stormwater handbook as well as any applicable GSACSC criteria. The runoff volume and discharge rate is less than the pre-development 25-Year 24-Hour volume and discharge.

(d) Industrial and Sewage Waste. Any industrial waste of an existing use, sewage, or other human-induced wastes shall be effectively treated in conformance with Florida Department of Environmental Protection rules and regulations.

Response: Acknowledged.

(e) Structures. Placement of structures shall be in compliance with the Flood Disaster Protection Act of 1973 and compliance with the Lake County Floodplain Management Regulations so that the natural flow regime will be maintained.

Response: All structures are set to a minimum finished floor elevation of 18” above the 100 year flood elevation. A pier foundation will be utilized on the building structures to preserve natural flow and minimize footprint.

(f) Site disturbance. Site alteration, clearing of natural vegetation and soil compaction shall be minimized through open space preservations and clustering.

Response: Acknowledged. There is less than 30 percent impervious area on the site.

2. All development in the GSACSC shall conform to the regulatory guidelines and objectives outlined in the Principles for Guiding Development within the GSACSC, as described in 8.01.02.

Response: Acknowledged.

3. Commencement of development may not occur until all applicable county, state or federal permits are obtained.

Response: Acknowledged.

Policy I-4.1.4 Principles for Guiding Development within the Green Swamp Area of Critical State Concern

The following shall apply to the GSACSC, in order to effectively and equitably conserve and protect its environmental and economic resources; provide a land and water management system to protect resources; and facilitate orderly and well planned growth. Any review and approval mechanism shall not become effective, amended or modified, and no action taken under such mechanism shall be effective, until first reviewed and approved by the Department of Commerce, pursuant to Chapter 380, F.S.

Attachment “J” – Green Swamp Application for Consistency (6 of 7)

Protection Objectives:

- Minimize the adverse impacts of development on resources of the Floridan Aquifer, wetlands, and flood detention areas;

Response: Acknowledged.

- Protect the normal quantity, quality, and flow of groundwater and surface water, which are necessary for the protection of resources of State and regional concern.

Response: Acknowledged.

- Protect the water available for aquifer recharge;

Response: Acknowledged.

- Protect the functions of the Green Swamp Potentiometric High of the Floridan Aquifer;

Response: Acknowledged.

- Protect the normal supply of ground and surface waters; • Prevent further salt-water intrusion into the Floridan Aquifer;

Response: Acknowledged.

- Protect or improve existing ground and surface water quality;

Response: Acknowledged.

- Protect the water-retention, and biological filtering capabilities of wetlands;

Response: Acknowledged.

- Protect the natural flow regime of drainage basins; and

Response: Acknowledged.

- Protect the design capacity of flood detention areas, and the water-management objectives of these areas through the maintenance of hydrologic characteristics of drainage basins.

Response: Acknowledged.

Regulatory Guidelines:

1. Site Planning - The platting of land shall be permitted only when such platting commits development to a pattern which will not result in the alteration of the natural surface water flow regime, and which will not reduce the natural recharge rate of the platted site.

Response: Development does not require platting.

2. Site Alteration - Site Alteration shall be permitted only when such alteration will not adversely affect the natural surface water flow regime, or natural recharge capabilities of the site; and when it will not cause siltation of wetlands, or reduce the natural retention and filtering capabilities of wetlands. Any site alteration shall adhere to Low Impact Development principles and practices and shall minimize site disturbance, clearing of natural vegetation, and soil compaction.

Response: Acknowledged.

3. All site alteration activities shall provide for water retention and settling facilities, maintain an overall site runoff equivalent to the natural flow regime prior to alteration, and maintain a runoff rate which does not cause erosion. No site work shall be initiated prior to the issuance of drainage/stormwater permits by concerned agencies. Stormwater management systems shall be designed according to Low Impact Development principles and practices over conventional systems.

Response: Acknowledged. Runoff velocity is spanned across a 5-foot broad crested weir where peak velocity at the discharge point is less than 1 ft/ sec. Riprap rubble will be utilized to disperse energy.

- Soils - All soils exposed as a result of site alteration or development activities shall be located and stabilized in a manner to prevent erosion and the alteration of natural flow regimes.

Response: Acknowledged.

- Groundwater - Groundwater withdrawal shall not result in a reduction of the minimum flows and levels per acre as determined by the St. John's River Water Management District or the Southwest Florida Water Management District, or their successor agencies.

Response: Acknowledged.

Attachment “J” – Green Swamp Application for Consistency (7 of 7)

- Stormwater – Pre-treated Stormwater runoff shall be released into the wetlands in a manner approximating the natural flow regime if consistent with the stormwater management ordinance

Response: Acknowledged.

- Industrial and Sewage Waste - Any industrial waste, sewage, or other human-induced wastes shall be effectively treated by the latest technological advances, and shall not be allowed to discharge into these waters unless in conformance with Florida Department of Environmental Protection rules and regulations.

Response: Septic and drain field will be designed and permitted through the state and conform to all DEP rules and regulations.

- Solid Waste - There shall be no solid waste facilities located in the GSACSC.

Response: The site does not contain a solid waste facility.

- Structures - Structures shall be placed in a manner that will not adversely affect the natural flow regime and which will not reduce the recharge capabilities. Placement of structures shall be consistent with sound floodplain management practices such as compliance with the Flood Disaster Protection Act of 1973.

Response: Acknowledged. Placement of structures comply with Flood Protection Act of 1973.

4. Resource extraction within the GSACSC shall be limited to sand deposits only. Land Development Regulations to limit the impacts of mining activities shall be adopted by the County within 12 months of the effective date of the Comprehensive Plan.

Response: Acknowledged. No mining activity shall occur in proposed development.

All development in the GSACSC shall conform to the regulatory guidelines and objectives outlined in the Principles for Guiding Development within the GSACSC.

Attachment “K” – Environmental Assessment (1 of 17)



December 11, 2024

Mr. Gary Butler
Dock Pro LLC
793 Chestnut Street
Clermont, FL 34711

**RE: Lakeshore Drive (PID 3949930)
Lake County, FL
Environmental Assessment
ECS Project No. 1233.01.24**

Dear Gary:

On November 20, 2024, a listed species survey was conducted on the Lakeshore Drive project site. The proposed project site is located immediately south of Lakeshore Drive, and west of Lake Susan bridge on the north shore of Lake Susan in Clermont, FL. More specifically, the proposed project site is located within Sections 1 and 6, Township 23 South and Range 26 East of Lake County, Florida (Figure 1).

The subject property is comprised of mixed hardwood and conifer uplands with a wetland edge bordering the north shore of Lake Susan.

A survey of the project boundaries was conducted to assess the potential occurrence of flora and fauna listed as threatened or endangered by the United States Fish and Wildlife Service (USFWS), Florida Fish and Wildlife Conservation Commission (FWC), and the Florida Department of Agriculture (FDA). Tables 1 and 2 provide a listing of the species known to occur within Lake County and their expected occurrence of the project site. The findings and conclusions of the survey are reported in this letter.

The survey was conducted by Ecological Consulting Solutions Inc (ECS) for the purpose of evaluating the site for the presence or absence of wetland habitat and protected flora and fauna or their habitat.

Longwood Office:
410 North Street, Unit 130
Longwood, FL 32750
(407) 869-9434

Tampa Office:
419 W. Platt Street, Suite 103
Tampa, FL 33606
(813) 254-5959

Attachment “K” – Environmental Assessment (2 of 17)

The following resources were used for supporting information during the site assessment and letter preparation:

- Color aerial photographs (1" = 300), 2024, Google Earth, Lake County, Florida.
- National Wetlands Inventory Mapping, U.S. Fish and Wildlife Service.
- United States Geological Survey (USGS) 7.5-minute quadrangle map, Lake County, Florida, (ArcGIS).
- Official Lists of Endangered and Potentially Endangered Fauna and Flora in Florida (USFWS and FWC).

Pedestrian surveys of the project site were conducted in order to qualitatively document the existing vegetation and to assess the present land use patterns according to the Florida Land Use, Cover and Forms Classification System, Department of Transportation (FLUCFCS; DOT 1999). Two (02) land-use types were determined for the project site (Figure 1). A brief description of each FLUCFCS community is provided below.

434 – Hardwood Conifer Mixed

This upland area exists on the northern portion of the property, predominantly on the north-west corner. The canopy consists of slash pine (*Pinus elliotti*) and laurel oak (*Quercus laurifolia*). Groundcover consists primarily of bahiagrass (*Paspalum notatum*) and cogon grass (*Imperata cylindrica*).

615 – Stream and Lake Swamps

This wetland habitat exists on the southern portion of the property. The canopy consists of red maple (*Acer Rubrum*), loblolly bay (*Gordonia lasianthus*), water oak (*Quercus nigra*) and bald cypress (*Taxodium distichum*). There are densely vegetated edges of the surrounding lake consisting of wax myrtle (*Myrica cerifera*), muscadine vine (*Vitis rotundifolia*), ragweed (*Eupatorium capillifolium*), and Caesar weed (*Urena lobata*).

Listed Species Survey Results

A survey was conducted using pedestrian transects throughout the site to assess the occurrence, or potential for occurrence, of flora and fauna listed as threatened, endangered, or as species of special concern (SSC) by the Florida Fish and Wildlife Conservation Commission (FWC), United States Fish and Wildlife Service (USFWS), and Florida Department of Agriculture (FDA).

ECS biologists searched the USFWS database at <http://endangered.fws.gov> for the presence of critical habitats within the proposed project site. There are no critical habitats within the project boundaries.

Attachment “K” – Environmental Assessment (3 of 17)

ECS will determine the potential effect of listed species utilizing the Consultation Key direct project proponents through a series of couplets that will provide a conclusion or determination for potential effects to Florida listed species. Below is the list of determinations and their descriptions.

- **No effect** - The proposed site activity will not affect a listed species or its habitat. No follow-up surveys for these species are recommended as necessary.
- **May affect, not likely to adversely affect (MANLAA)** - The proposed action effects on listed species are expected to be discountable, insignificant, or completely beneficial. A pre-construction survey may be required to document species absence, to ensure minimization efforts are implemented (if present), or to permit the relocation of gopher tortoises through the FWC.
- **May affect** – If the potential site activity may have an effect on listed species or their habitat. Coordination with the state or federal agency may be required to mitigate the project’s effect on a listed species.
- **Jeopardy** - The appropriate conclusion when a proposed action would be expected, directly or indirectly, to reduce appreciably the likelihood of both the survival and recovery of a listed species in the wild by reducing the reproduction, numbers, or distribution of that species.

Birds

Approximately 35 species (and sub-species) of birds found in Florida are protected by the FWC and/or the USFWS. For Lake County, the USFWS federally lists four (4) bird species. Only a few are expected to occur in central Florida. No listed birds were observed at this site. (Table 1).

Florida scrub jays (*Aphelocoma c. coerulescens*) were not observed on the project site. This species is listed as threatened at the state and federal levels. The property does not contain scrub habitat. The survey guidelines outlined in the *Ecology & Development-Related Habitat Requirements of the Florida Scrub Jay (April 1991)* were reviewed prior to the site visit.

No scrub jays were observed, or vocalizations heard. The surrounding areas to the north, south, east, and west do not contain scrub habitat. ECS has determined that there will be “**No effect**” on Florida scrub jays or their habitat.

Red-cockaded woodpeckers (*Picoides borealis*) are endangered (USFWS) and endangered (FWC). No red-cockaded woodpeckers were observed, and the upland habitat type is not suitable. There were no open pine flatwoods with old-growth pines that characterize RCW nesting and foraging habitat. ECS has determined that there will be “**No effect**” on Red-cockaded woodpeckers or their habitat.

Listed wading birds such as limpkin (*Aramus guarana*), little blue heron (*Egretta caerulea*), snowy egret (*Egretta thula*), tricolored heron (*Egretta tricolor*), white ibis (*Eudocimus albus*) and wood stork (*Mycteria americana*) were not observed. The wetland to the south as well as Lake Susan provides wading bird habitat. No listed wading birds were observed within the project boundaries. ECS has determined that there will be “**MANLAA**” on wading birds or their habitat.

Attachment “K” – Environmental Assessment (4 of 17)

Bald eagles (*Haliaeetus leucocephalus*) or their nests were not observed on the site. Bald eagles are protected under the Bald and Golden Eagle Protection Act and the Migratory Bird Treaty Act. The USFWS has established a 660-foot protection zone around a bald eagle nest.

ECS searched the FWC as well as Audubon society eagle watch websites to determine if any documented bald eagle nests are within 660 feet of the site. There are no documented eagle nests close to the project site. Therefore, the project site is well outside of the 660-foot eagle nest protection zone and the development will not affect any bald eagle nests. ECS has determined that there will be “**No effect**” on bald eagles or their habitat.

No other listed raptors such as Southeastern American kestrels (*Falco sparverius paulus*) or Arctic peregrine falcons (*Falco peregrinus tundrius*) were observed on or around the sites. There is quality habitat on site for the southeastern American kestrel. ECS has determined that there will be “**No effect**” on listed raptors or their habitat.

Amphibians and Reptiles

About thirty (30) species of Florida’s amphibians and reptiles are protected. For Lake County, the USFWS federally lists three (3) reptile species. Only a few could occur on this site.

Sand Skink

The sand skink (*Neoseps reynoldsi*) is listed as threatened by both FWS and FWC. The sand skink is primarily found in rosemary scrub, sand pine and oak scrub. Sand skinks require loose sand with a large area of no groundcover or canopy cover.

On April 4, 2011, the U.S. Fish and Wildlife Service published a revised sand and bluetail mole skink survey protocol, which impacts owners of properties in interior Central Florida. The known range of the sand skink now includes Highlands, **Lake**, Marion, Orange, Osceola, Polk, and Putnam Counties with principal populations along the Lake Wales Ridge, the Winter Haven Ridge, and the Mount Dora Ridge. The habitat of the sand skink and bluetail mole skinks is affected by the conversion of citrus groves to pasture lands as well as to residential land uses.

Coverboard surveys will determine the actual area of occupation. Only the area where sand skinks are found will be considered occupied and only that area will require mitigation.

According to the revised protocol, if a property lies within the sand skink consultation area, has suitable habitat, has an elevation of 80 feet above sea level and contains sandy soils, then sand skink surveys are required. The burden is on the property owner to document the absence of sand skinks. Mitigation costs for sand skinks approach \$60,000.00 to \$70,000.00 per impacted acre.

The property is within the sand skink consultation area; however, it does not meet the elevation or soils requirements to constitute sand skink habitat. Taking that into account as well as the dense herbaceous groundcover and lack of loose swimmable soils, it is our professional opinion that sand skink coverboard surveys will not be required on this project site.

Attachment “K” – Environmental Assessment (5 of 17)

Gopher Tortoise

A 100% survey of the upland acreage was conducted throughout the property for gopher tortoises (*Gopherus polyphemus*), a species listed by the FWC as a Threatened. No (0) gopher tortoise burrows were observed during the survey. **A 100% survey will be necessary prior to construction activities if they commence 90 days or more after the date of this report.**

Currently, there are four suitable options to conduct activities that may adversely impact tortoises. The options are to:

1. Avoid developing the area occupied by the tortoises.
2. Avoid individual burrow entrances to ensure the protection of the entire burrow, usually a distance of 25 feet. A FWC permit is not required if development activity on a project site avoids impacts to tortoise burrows by 25 feet in all directions from the mouth of all burrows. Development activity must not harm gopher tortoises nor violate rules protecting them. Leaving a 50-foot diameter (25-foot radius) circle of habitat around each burrow (e.g., undisturbed “islands” or “crop circles”) and developing the rest of a project site does not qualify and requires a permit to ensure that gopher tortoises are not harmed.
3. Capture and relocate the tortoises to a separate onsite location. The herbaceous vegetation must be maintained (mowing, burning, etc.), and pesticides/herbicides should not be used in the recipient area during and following site development. The on-site recipient area should be a minimum of 750 square feet (e.g., 25ft x 30ft), with a minimum width of no less than 10 feet wide. At least half of the on-site recipient area must be located at a minimum of 25 feet away from the edge of clearing /grading, construction activities, and/or vehicular traffic.
4. Capture and relocate the tortoises to an offsite FWC-approved recipient site.

For gopher tortoise conservation permits, tortoises may be relocated to an on-site preserve at a density of up to two tortoises per acre of suitable upland habitat. For 10 or fewer burrows permits, up to five tortoises can be relocated into the onsite recipient area. Onsite recipient sites must be suitable set-aside areas that are not disturbed by construction activities, that provide a safe environment, and that exclude (through temporary fencing or other means) tortoises from development areas until such development activities have been completed.

Gopher tortoises need access to the following: 1) sufficient areas of forage (herbaceous and low-growing plants including native broadleaf grasses, legumes [bean/pea family], asters, blackberries and other fruits, prickly pear cactus, and a variety of other non-native grasses, except cogon grass); 2) sandy, well-drained, open (uncanopied), sunny sites for burrows and basking; 3) protection from dogs, cats, other predators, human harassment, roads and canals; 4) ability to roam freely, without barriers such as permanent 120 fencing that precludes access to suitable forage or burrowing habitat. Such general conditions must remain after development, outside the built footprint on the site.

Small sites typically have gopher tortoises that normally "roam" between adjoining neighboring parcels to forage or burrow, so this should be considered as well. The herbaceous vegetation must be maintained (mowing, burning, etc.), and pesticides/herbicides should not be used in the recipient area.

Attachment “K” – Environmental Assessment (6 of 17)

For onsite relocation of gopher tortoise conservation permits, a permanent FWC-approved easement is recommended to be placed over the onsite recipient area to be maintained in perpetuity. If the client elects not to put the land under easement, they will incur a significantly higher mitigation contribution fee in order to receive their permit.

If the project site does not have a dedicated onsite preserve for tortoises, then offsite relocation will be necessary. In this event, tortoises can be relocated by biologists to an FWC approved recipient site.

ECS biologists are authorized by the FWC to relocate gopher tortoises by various means including backhoe extraction. ECS also manages five (5) gopher tortoise recipient sites which are long-term protected sites.

The tasks associated with conducting an offsite relocation of tortoises would include reserving a yet to be determined number of acres at the recipient site, submitting an application to the FWC for the relocation, removing the tortoises from the donor site to the recipient site and reporting the results of the relocation to the FWC. It typically takes 30 days to obtain the permit to relocate the onsite gopher tortoise population to an approved recipient site. Once the relocation permit is received, ECS can complete the relocation using either the backhoe or bucket trapping extraction methods.

Several commensal species associated with gopher tortoise burrows, including the gopher frog (*Rana areolata aesopus*) and eastern indigo snake (*Drymarchon corais couperi*) also receive protection, but were not observed.

Eastern Indigo Snake

Concerning the eastern indigo snake, ECS conducted survey transects to identify potential aboveground and underground refugia, which eastern indigo snakes may inhabit. Underground refugia includes active or inactive gopher tortoise burrows, mammal burrows, hollows at the base of trees and other similar formations. Above ground refugia includes thick shrub formations, stumps, the base of thick palmetto, ground litter, brush piles, trash piles, and abandoned structures, and crevices of rock-lined ditch walls and other similar refugia.

Surveys for eastern indigo snakes are recommended by the USFWS during the time of October 1st through April 30th. There was little suitable refugia for the eastern indigo snake onsite. No eastern indigo snakes were observed. ECS has determined that there will be “**No effect**” on Eastern indigo snakes or their habitat.

The USFWS has established programmatic effect determination key (Key) as part of the eastern indigo snake management. The Key allows the USFWS to require mitigation for eastern indigo snake habitat if 25 or more acres of suitable habitat will be impacted for development.

- **A1** - The project is not located in open water or salt marsh.
- **B1** - Permit will be conditioned for use of the Service’s Standard Protection Measures for the Eastern Indigo Snake during site preparation and protection construction.
- **C1** – There are Gopher tortoise burrows, holes, cavities, or other refugia where a snake could be buried or trapped and injured during project activities.
- **D1** - The project will impact less than 25 acres of xeric habitat (scrub, sandhill, or scrubby flatwoods) or less than 25 active and inactive gopher tortoise burrows.

Attachment “K” – Environmental Assessment (7 of 17)

- **E1** - Any permit will be conditioned such that all gopher tortoise burrows, active or inactive, will be evacuated prior to site manipulation in the vicinity of the burrow. If an indigo snake is encountered, the snake must be allowed to vacate the area prior to additional site manipulation in the vicinity.

Any permit will also be conditioned such that holes, cavities, and snake refugia other than gopher tortoise burrows will be inspected each morning before planned site manipulation of a particular area, and, if occupied by an indigo snake, no work will commence until the snake has vacated the vicinity of the proposed work.

To determine if the site has an eastern indigo snake habitat will be up to the USFWS reviewer assigned to the project.

The USFWS requires the developer to notify the local field office via email at least **30 days prior** to any clearing/land alteration activities.

The notification has to include an eastern indigo snake protection/education plan. This notification can occur via email with the protection/education plan attached.

As long as the signatory of the e-mail certifies compliance with the protection/education plan (including use of the USFWS informational poster and brochure), no further written confirmation or “approval” from the USFWS is needed and the applicant may move forward with the project.

Mammals

Thirty-three (33) mammals are currently protected in Florida. For Lake County, the USFWS federally lists eight (8) mammal species. About four could occur in the region of this project site. None were observed on this site.

We focused our search on Southern fox squirrels (*Sciurus niger niger*) and the Florida mouse (*Peromyscus floridanus*) and their possible den or nest sites. Gopher tortoise burrows are absent which decreases the likelihood of the presence of the Florida mouse. Listed mammals or their potential den sites were not observed.

Listed Plants

There were no protected plant species found on the project sites (Table 2). Protected plants are not expected to occur on the project site since the area has been previously cleared and used as a landscape nursery. Currently, there are no technical reports available by the state or federal agencies mentioned in this letter report for the survey of the nearly 400 protected plant species. None of the agencies require relocation or mitigation for protected plant species.

The Department of Agriculture and Consumer Services (DACS) designates and regulates plants listed as “endangered”, “commercially exploited” and “threatened”. There is no statutory prohibition against a landowner from harvesting an endangered or threatened plant from his property.

Attachment “K” – Environmental Assessment (8 of 17)

However, it is unlawful for an individual to harvest an endangered or threatened species from the private land of another or any public land without first obtaining written permission of that landowner and a permit from DACS. Additionally, harvesting three or more commercially exploited plants from the private land of another or any public land will also require a DACS permit.

Summary

In summary, no listed species were observed on site. There is a wetland on the south side of the property. The boundaries of the wetland were delineated previously by a different consultant.

USFWS will need to be notified 30 days prior to construction for Eastern Indigo Snake compliance.

Ecological Consulting Solutions Inc. appreciates the opportunity to provide you with our services. Should you have any questions or require additional information, please do not hesitate to contact me.

Sincerely,

ECOLOGICAL CONSULTING SOLUTIONS INC



Chris Dunfee

Attachments

Attachment “K” – Environmental Assessment (9 of 17)

PHOTOGRAPHS OF THE SUBJECT PROPERTY



Typical Upland Habitat

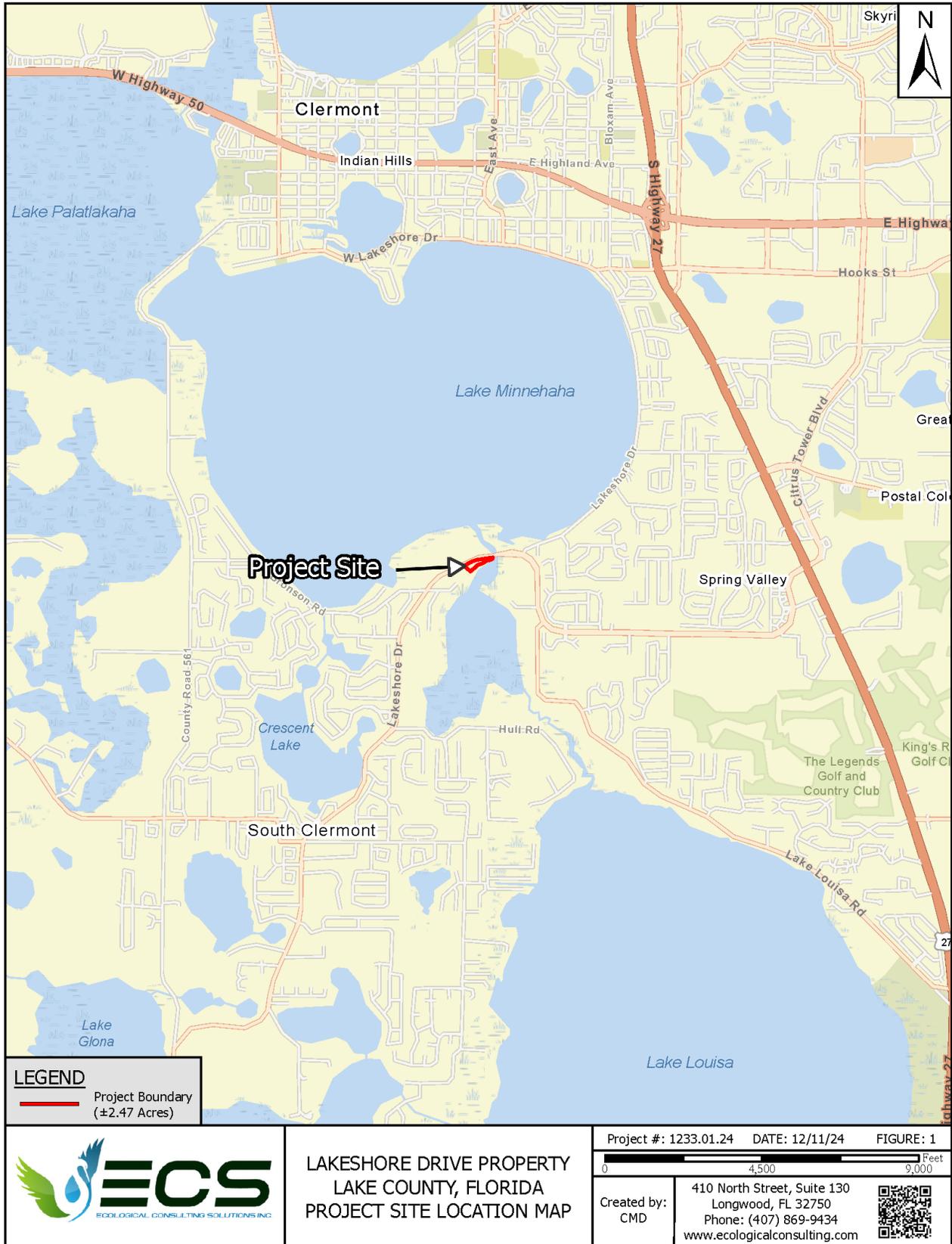


Vegetated Lake Edge

Attachment “K” – Environmental Assessment (10 of 17)

FIGURES

Attachment "K" – Environmental Assessment (11 of 17)



Attachment "K" – Environmental Assessment (12 of 17)



Attachment “K” – Environmental Assessment (13 of 17)

TABLES

Attachment “K” – Environmental Assessment (14 of 17)

Birds						
Scientific Name	Common Name	Global Rank	State Rank	Federal Status	State Status	Tracked?
<i>Antigone canadensis pratensis</i>	Florida Sandhill Crane	G5T2	S2		ST	Y
<i>Aphelocoma coerulescens</i>	Florida Scrub-Jay	G1G2	S1S2	T	FT	Y
<i>Aramus guarana</i>	Limpkin	G5	S3		N	Y
<i>Athene cunicularia floridana</i>	Florida Burrowing Owl	G4T3	S3		ST	Y
<i>Dryobates borealis</i>	Red-cockaded Woodpecker	G3	S2	E, PT	FE	Y
<i>Dryobates villosus</i>	Hairy Woodpecker	G5	S3		N	Y
<i>Egretta caerulea</i>	Little Blue Heron	G5	S4		ST	Y
<i>Egretta thula</i>	Snowy Egret	G5	S3		N	Y
<i>Egretta tricolor</i>	Tricolored Heron	G5	S4		ST	Y
<i>Eudocimus albus</i>	White Ibis	G5	S4		N	Y
<i>Grus americana</i>	Whooping Crane	G1	S1	XN	FXN	Y
<i>Haliaeetus leucocephalus</i>	Bald Eagle	G5	S3		N	Y
<i>Mycteria americana</i>	Wood Stork	G4	S2	DL	FT	Y
<i>Pandion haliaetus</i>	Osprey	G5	S3S4		N	Y
<i>Peucaea aestivalis</i>	Bachman's Sparrow	G3	S3		N	Y
<i>Plegadis falcinellus</i>	Glossy Ibis	G5	S3		N	Y
Mammals						
Scientific Name	Common Name	Global Rank	State Rank	Federal Status	State Status	Tracked?
<i>Myotis austroriparius</i>	Southeastern Myotis	G4	S3		N	Y
<i>Neofiber alleni</i>	Round-tailed Muskrat	G2	S2		N	Y
<i>Podomys floridanus</i>	Florida Mouse	G3	S3		N	Y
<i>Sciurus niger niger</i>	Southeastern Fox Squirrel	G5T5	S3S4		N	Y
<i>Trichechus manatus latirostris</i>	Florida Manatee	G2G3T2	S2S3	T	N	Y
<i>Ursus americanus floridanus</i>	Florida Black Bear	G5T4	S4		N	Y
Amphibia						
Scientific Name	Common Name	Global Rank	State Rank	Federal Status	State Status	Tracked?
<i>Lithobates capito</i>	Gopher Frog	G2G3	S3	UR	N	Y
<i>Notophthalmus perstriatus</i>	Striped Newt	G2G3	S2		ST	Y

Attachment “K” – Environmental Assessment (15 of 17)

Reptiles						
Scientific Name	Common Name	Global Rank	State Rank	Federal Status	State Status	Tracked?
<i>Alligator mississippiensis</i>	American Alligator	G5	S4	SAT	FT(S/A)	Y
<i>Clemmys guttata</i>	Spotted Turtle	G5	S2S3	UR	N	Y
<i>Crotalus adamanteus</i>	Eastern Diamondback Rattlesnake	G3	S3	UR	N	Y
<i>Drymarchon couperi</i>	Eastern Indigo Snake	G3	S2?	T	FT	Y
<i>Gopherus polyphemus</i>	Gopher Tortoise	G3	S3		ST	Y
<i>Heterodon simus</i>	Southern Hognose Snake	G2	S2S3		N	Y
<i>Lampropeltis extenuata</i>	Short-tailed Snake	G3	S3	PT	ST	Y
<i>Lampropeltis floridana</i>	Florida Kingsnake	G2	S2		N	Y
<i>Pituophis melanoleucus</i>	Pine Snake	G4	S3		ST	Y
<i>Plestiodon reynoldsi</i>	Sand Skink	G3	S3	T	FT	Y
<i>Sceloporus woodi</i>	Florida Scrub Lizard	G2G3	S2S3	UR	N	Y
Fishes						
Scientific Name	Common Name	Global Rank	State Rank	Federal Status	State Status	Tracked?
<i>Ameiurus brunneus</i>	Snail Bullhead	G4	S4?		N	Y
<i>Cyprinodon variegatus hubbsi</i>	Lake Eustis Pupfish	G5T2Q	S2		N	Y
<i>Enneacanthus chaetodon</i>	Blackbanded Sunfish	G3G4	S1S3		N	Y
<i>Pteronotropis welaka</i>	Bluenose Shiner	G3G4	S3S4		ST	Y

Attachment “K” – Environmental Assessment (16 of 17)

Plants & Lichens						
Scientific Name	Common Name	Global Rank	State Rank	Federal Status	State Status	Tracked?
<i>Astragalus obcordatus</i>	Florida milkvetch	G3G4	S2S3		N	Y
<i>Bonamia grandiflora</i>	Florida bonamia	G3	S3	T	E	Y
<i>Carex chapmanii</i>	Chapman's sedge	G3	S3		T	Y
<i>Centrosema arenicola</i>	sand butterfly pea	G2Q	S2		E	Y
<i>Chionanthus pygmaeus</i>	pygmy fringe tree	G2G3	S2S3	E	E	Y
<i>Clitoria fragrans</i>	scrub pigeon-wing	G2G3	S2S3	T	E	Y
<i>Coleataenia abscissa</i>	cutthroatgrass	G3	S3		E	Y
<i>Cucurbita okeechobeensis</i>	Okeechobee gourd	G1	S1	E	E	Y
<i>Digitaria gracillima</i>	tongleaf fingergrass	G1	S2		N	Y
<i>Digitaria leucocoma</i>	Lake Ella crabgrass	GNR	S1S2		N	Y
<i>Eriogonum floridanum</i>	scrub buckwheat	G4T2?	S2	T	E	Y
<i>Gymnopogon chapmanianus</i>	Chapman's skeletongrass	G3	S3		N	Y
<i>Hartwrightia floridana</i>	hartwrightia	G2	S2S3	UR	T	Y
<i>Hasteola robertiorum</i>	Florida hasteola	G1	S1		E	Y
<i>Hypoxis sessilis</i>	glossyseed yellow stargrass	G3	S2S3		N	Y
<i>Illicium parviflorum</i>	star anise	G2	S2		E	Y
<i>Justicia cooleyi</i>	Cooley's water-willow	G2Q	S2	E	E	Y
<i>Lechea cernua</i>	nodding pinweed	G3	S3		T	Y
<i>Matelea floridana</i>	Florida spiny-pod	G2	S2		E	Y
<i>Mnesithea tuberculosa</i>	Piedmont jointgrass	G3	S3		T	Y
<i>Monotropa hypopithys</i>	piresap	G5	S1		E	Y
<i>Najas filifolia</i>	Narrowleaf Naiad	G3	S2	UR	T	Y
<i>Nemastylis floridana</i>	celestial lily	G3	S3		E	Y
<i>Nolina brittoniana</i>	Britton's beargrass	G3	S3	E	E	Y
<i>Paronychia chartacea</i>	paper nailwort	G3	S3	T	E	Y
<i>Pectuma dispersa</i>	widespread polypody	G5	S2		E	Y
<i>Pectuma plumula</i>	plume polypody	G5	S2		E	Y
<i>Pectuma ptilodon</i> var. <i>bourgeauana</i>	comb polypody	G5?TNR	S2		E	Y
<i>Polygala lewtonii</i>	Lewton's polygala	G2	S2	E	E	Y

Attachment “K” – Environmental Assessment (17 of 17)

Plants & Lichens (Continued)						
Scientific Name	Common Name	Global Rank	State Rank	Federal Status	State Status	Tracked?
<i>Polygonella myriophylla</i>	Small's jointweed	G3	S3	E	E	Y
<i>Prunus geniculata</i>	scrub plum	G3	S3	E	E	Y
<i>Salix floridana</i>	Florida willow	G2G3	S2S3	UR	E	Y
<i>Sideroxylon alachuense</i>	silver buckthorn	G1	S1		E	Y
<i>Sideroxylon lycioides</i>	buckthorn	G5	S2		E	Y
<i>Stylisma abdita</i>	scrub stylisma	G3	S3		E	Y
<i>Vicia ocalensis</i>	Ocala vetch	G2	S2		E	Y
<i>Warea amplexifolia</i>	clasping warea	G1	S1	E	E	Y
<i>Warea carteri</i>	Carter's warea	G1	S1	E	E	Y

Attachment "L" – Utility Notification Letter

March 18, 2025

Page 25



200 Weathersfield Avenue
Altamonte Spring, Florida
United States 32714

T 866.842.8432

www.sunshinewater.com

August 16, 2024

Mr. Gary Butler
Dock Pro, LLC
793 Chestnut Street
Clermont, FL 34711

RE: The Barefoot Fishing Resort
Potable Water

Dear Mr. Butler:

Please allow this letter to serve as verification that the above referenced property is located within the Sunshine Water Services Company FPSC certificated service area for the provision of potable water service.

Sunshine Water Services Company has the ability to serve this project and is willing to do so subject to the execution of a mutually acceptable agreement between the Owner and the Utility.

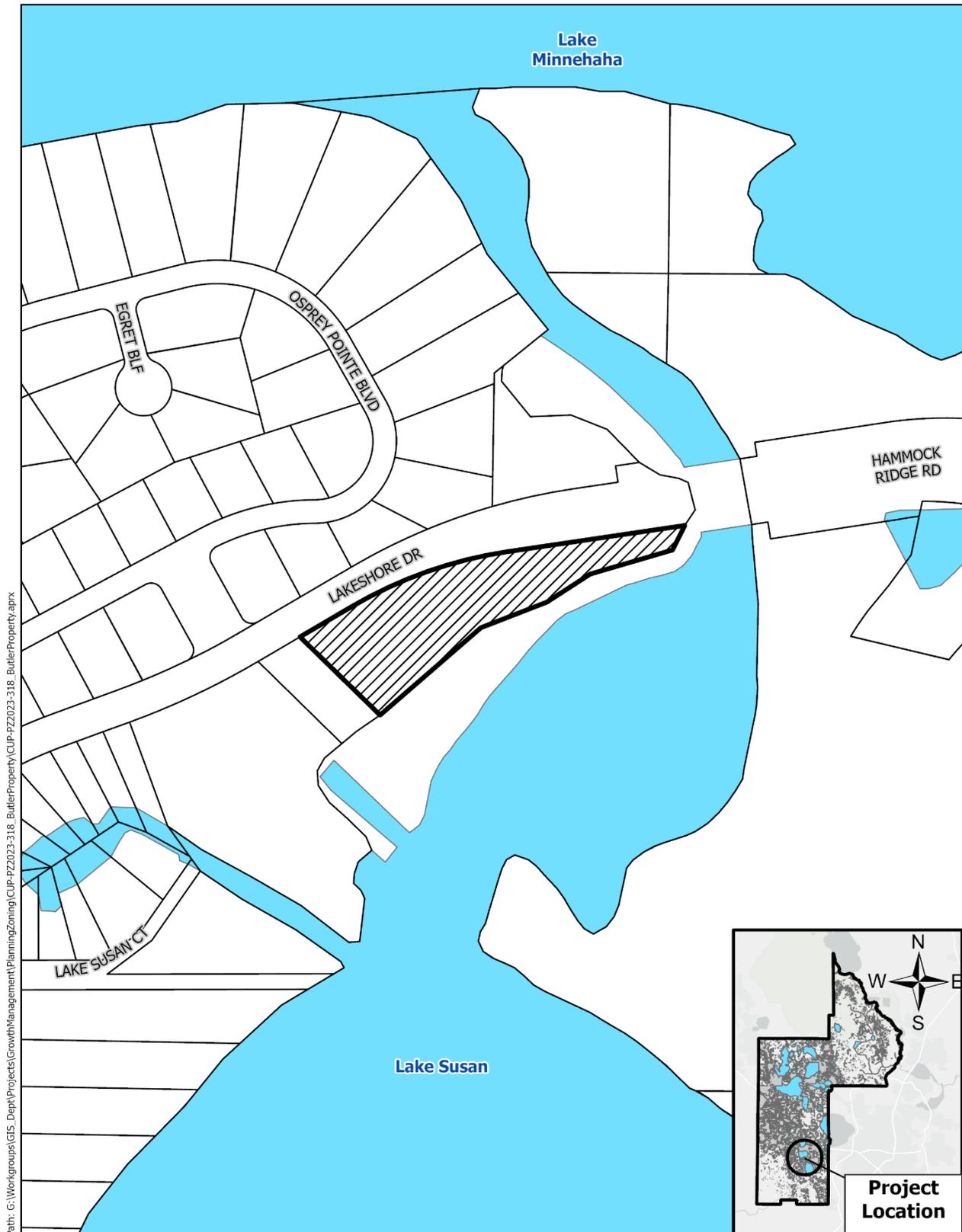
Should you have any questions, I can be reached directly by calling 321.972.0360 or via email at bryan.gongre@nexuswg.com.

Sincerely,
SUNSHINE WATER SERVICES COMPANY

A handwritten signature in cursive script that reads "Bryan K. Gongre".

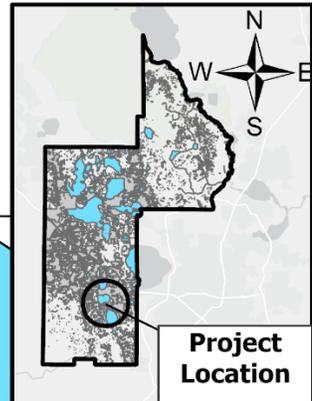
Bryan K. Gongre
Vice President, Operations

Map of Subject Property



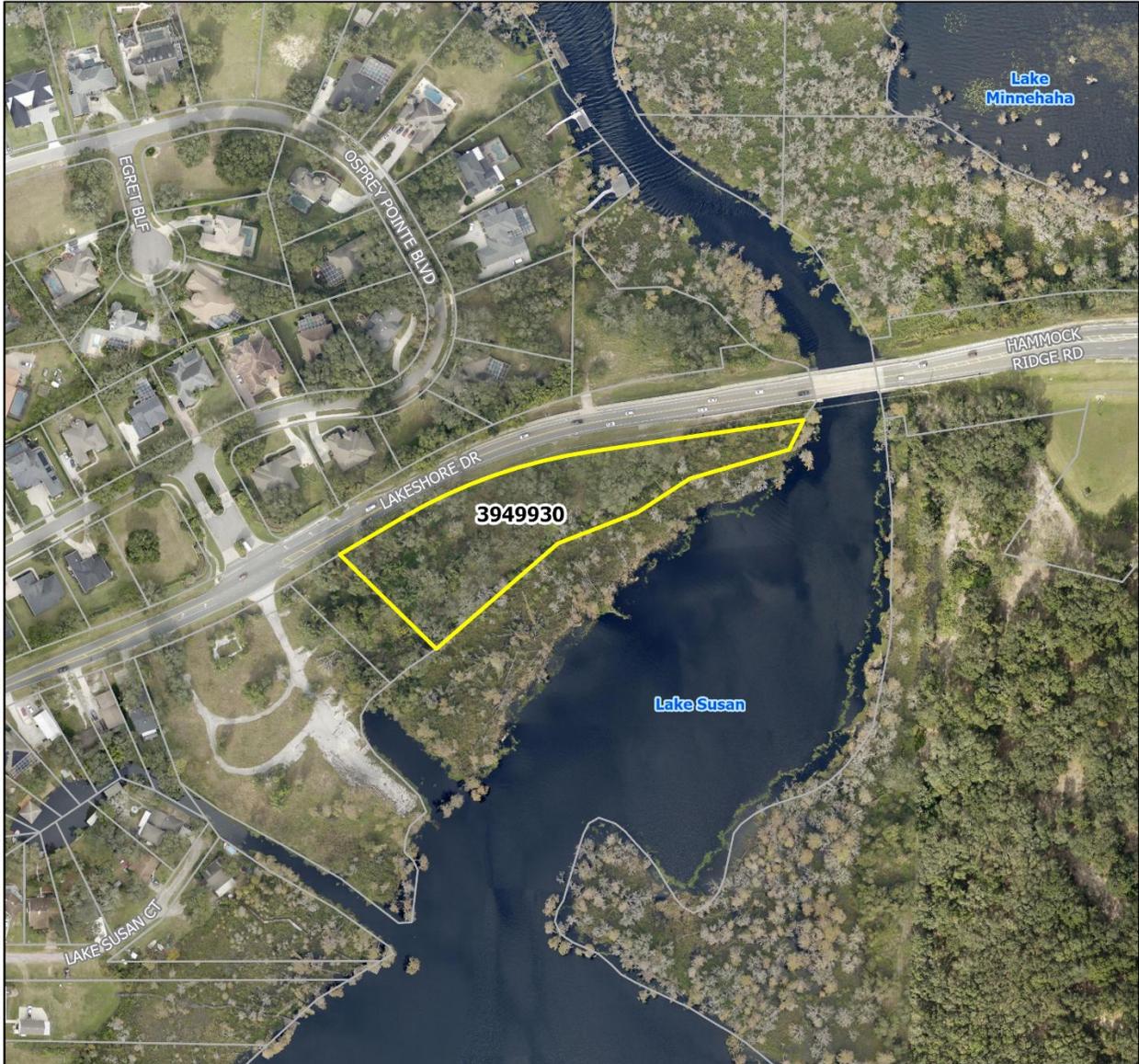
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9/17/2025



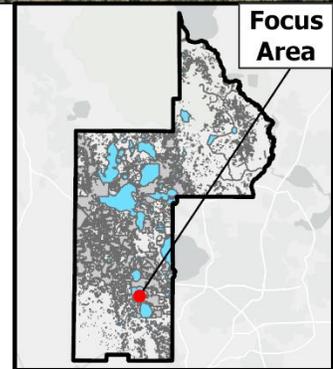
Aerial Map of Subject Property

CUP-PZ2023-318
Butler Property



Path: G:\Workgroups\GIS_Dept\Projects\GrowthManagement\PlanningZoning\CUP-PZ2023-318_ButlerProperty\CUP-PZ2023-318_ButlerProperty.aprx

Conditional Use Permit



9/17/2025

- 1 a. A fishing resort with 2,500 total SF of rental cabin space, each ranging from
2 750-1,000 SF. A 200 SF bath house for cabin renters to use as shown on the
3 Conceptual Plan is also allowed.
- 4 b. A small 200 SF store to sell food and beverage items (including beer/wine and
5 tobacco), and fishing equipment.
- 6 c. An additional 600 SF building will be used for security.
- 7 d. A dock with 61 boat slips.
- 8 e. Guests will have the option to rent boat-slips, fishing equipment and boats.
- 9 f. Picnic, fire pits, and minor passive recreational areas.
- 10 g. Standard hours of operation for the store and resort fishing operations to cover
11 6-AM - 8PM Monday – Sunday, with exceptions for nighttime fishing events
12 which may last until midnight and may occur up to six times per month.
- 13 h. All other permitted R-1 uses.
- 14 2. Accessory uses directly associated with the above uses may be approved by the County
15 Manager or designee.
- 16 3. Any other use of the site will require approval of an amendment to this Ordinance by the
17 Board of County Commissioners.

18 **B. Specific Conditions:**

- 19 1. A Site Plan approval is required prior to construction or operation of the facility.
- 20 2. Parking shall be as set forth on the Conceptual Plan; surfaces may be grass or other
21 pervious material.

22 **C. Building Setbacks.** Building setbacks shall be fifteen (15) feet from the front and side property
23 lines and fifty (50) feet from the Jurisdictional Wetland Line (JWL) as shown on the Conceptual
24 Plan.

25 **D. Landscaping, Fencing, Buffering, and Screening.** Site development shall be subject to
26 Landscaping, Fencing, Buffering, and Screening in accordance with the Comprehensive Plan
27 and LDR, as amended.

28 **E. Open Space, Impervious Surface Ratio and Building Height.**

- 29 1. A minimum of 60% open space shall be provided.
- 30 2. An impervious surface ratio of 30% shall be provided.
- 31 3. Building heights shall not exceed forty (40) feet.

32 **F. Environmental Considerations.**

- 33 1. An environmental assessment dated within six (6) months of the date the site plan is
34 submitted will be required to demonstrate the presence of vegetation, soils, threatened
35 and endangered species that may exist on the site
- 36 2. Proposed structures must maintain a minimum setback of fifty (50) feet from the
37 Jurisdictional Wetland Line (JWL).

- 1 3. Environmental resources shall be protected in accordance with the Comprehensive Plan
2 and LDR, as amended.

3 **G. Transportation Improvements.**

- 4 1. All access management shall be in accordance with the Comprehensive Plan and Land
5 Development Regulations, as amended.
6 2. A cross-access easement with the western parcel shall be required and be constructed
7 with the site improvements to the property line.
8 3. The development shall provide left and right turn lanes on Lakeshore Drive at the
9 entrance. These will be for the interim until intersection improvements to the west are
10 made by the County.
11 4. The County reserves the right to modify the access to this property to a right-in right-out
12 vehicle turning movement.
13 5. Additional right-of-way may be required for Lakeshore Drive to accommodate future
14 widening and offsite improvements from this development.
15 6. Sidewalks shall not be required on the subject property except as required to comply
16 with ADA accessibility requirements; if existing right of way, wetlands, and topography
17 permits construction of sidewalks then developer shall be responsible for the same.

18 **H. Floodplain and Stormwater Management.**

- 19 1. The stormwater management system shall be designed in accordance with all
20 applicable Clermont JPA, Lake County and St. Johns River Water Management District
21 (SJRWMD) requirements, as amended.
22 2. The developer shall be responsible for any flood studies required for developing the site
23 and comply with FEMA, Comprehensive Plan and LDR, as amended. Any development
24 within the floodplain as identified on the FEMA maps will require compensating storage.
25 3. The cabins must be a minimum of 18-inches above the established base flood elevation
26 and be an elevated construction with least amount of impact on the flood zone.
27 4. All development shall take place outside the Special Flood Hazard Area (SFHA).

28 **I. Mass Grading for Site Development:** All grading for the site development shall be in
29 accordance with the Clermont JPA, Comprehensive Plan, and LDR, as amended.

30 **J. Utilities:** The development will be serviced by a central water system provided by Sunshine
31 Water Services, in accordance with the Comprehensive Plan and Land Development
32 Regulations (LDR), as amended. The development will be serviced by Enhanced Nutrient-
33 Reducing Onsite Sewage Treatment and Disposal Systems (ENR_OSTDS) or Distributed
34 Wastewater Treatment Units or Systems (DWTU-DWTS), in accordance with the
35 Comprehensive Plan and LDR, as amended. These systems shall be permitted through the
36 Florida Department of Health (DOH) and/or Florida Department of Environmental Protection
37 (DEP), as appropriate.

38 **K. Clermont Joint Planning Area:** The project shall comply with all regulations in Chapter XV of
39 the Land Development Regulations, as amended.

- 1 **L. Signage.**
- 2 1. Wetlands shall be flagged with signage and no vehicle or development shall be allowed
- 3 within wetlands or the 50-foot-wide upland buffer surrounding the wetlands.
- 4 2. Signs shall be in accordance with the LDR, as amended.
- 5 **M. Concurrency Management Requirements.** Any development must comply with the Lake
- 6 County Concurrency Management System, as amended.
- 7 **N. Development Review and Approval.** Prior to the issuance of any permits, a development
- 8 application generally consistent with Exhibit "B" - Conceptual Plan for review and approval in
- 9 accordance with the Comprehensive Plan and LDR, as amended, shall be required.
- 10 **O. Future Amendments to Statutes, Code, Plans, or Regulations.** The specific references in
- 11 this Ordinance to the Florida Statutes, Florida Administrative Code, Lake County
- 12 Comprehensive Plan, and Lake County LDR will include any future amendments to the
- 13 Statutes, Code, Plans, or LDR.
- 14 **P. No Estoppel:** Approval of this Ordinance cannot be relied upon to assert a claim of estoppel
- 15 against the County if the property identified herein cannot be developed due to the inability to
- 16 meet other requirements under the applicable Land Development Regulations. The Owner is
- 17 solely responsible for performing any necessary due diligence to ensure the property will
- 18 appropriately support future development.

19 **Section 3. Conditions:**

- 20 **A.** After establishment of the facilities as provided in this Ordinance, the property must only be
- 21 used for the purposes named in this Ordinance. Any other proposed use must be specifically
- 22 authorized by the Board of County Commissioners.
- 23 **B.** No person, firm, or corporation may erect, construct, enlarge, alter, repair, remove, improve,
- 24 move, convert, or demolish any building or structure, add other uses, or alter the land in any
- 25 manner within the boundaries of the above described land without first obtaining the necessary
- 26 approvals in accordance with the Lake County Code, as amended, and obtaining the permits
- 27 required from the other appropriate governmental agencies.
- 28 **C.** This Ordinance will inure to the benefit of, and will constitute a covenant running with the land
- 29 and the terms, conditions, and provisions of this Ordinance, and will be binding upon the present
- 30 Owner and any successor, and will be subject to each and every condition set out in this
- 31 Ordinance.
- 32 **D.** Construction and operation of the proposed use must comply with the regulations of this and
- 33 other governmental permitting agencies.
- 34 **E.** The transfer of ownership or lease of any or all of the property described in this Ordinance must
- 35 include in the transfer or lease agreement, a provision that the purchaser or lessee is made
- 36 aware of the conditions established by this Ordinance and agrees to be bound by these
- 37 conditions. The purchaser or lessee may request a change from the existing plans and
- 38 conditions by following the procedures contained in the LDR, as amended.
- 39 **F.** The Lake County Code Enforcement Special Master will have authority to enforce the terms
- 40 and conditions set forth in this Ordinance and to recommend that the Ordinance be revoked.

1 **Section 4. Severability:** If any section, sentence, clause or phrase of this Ordinance is held to be invalid or
2 unconstitutional by any court of competent jurisdiction, the holding will in no way affect the validity
3 of the remaining portions of this Ordinance.

4 **Section 5. Filing with the Department of State:** The clerk is hereby directed forthwith to send a copy of
5 this Ordinance to the Secretary of State for the State of Florida in accordance with Section
6 125.66, Florida Statutes.

7 **Section 6. Effective Date.** This Ordinance will become effective as provided by law.

8 **ENACTED** this _____ day of _____, 2026.

9
10 **FILED** with the Secretary of State _____, 2026.

11
12 **EFFECTIVE** _____, 2026.

13

14

**BOARD OF COUNTY COMMISSIONERS
LAKE COUNTY, FLORIDA**

15

16

17

LESLIE CAMPIONE, CHAIRMAN

18

19 **ATTEST:**

20

21 _____

22 **GARY J. COONEY, CLERK OF THE**
23 **BOARD OF COUNTY COMMISSIONERS**
24 **LAKE COUNTY, FLORIDA**

25

26 **APPROVED AS TO FORM AND LEGALITY:**

27

28

29 _____

30 **MELANIE MARSH, COUNTY ATTORNEY**

31

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EXHIBIT "A", LEGAL DESCRIPTION.

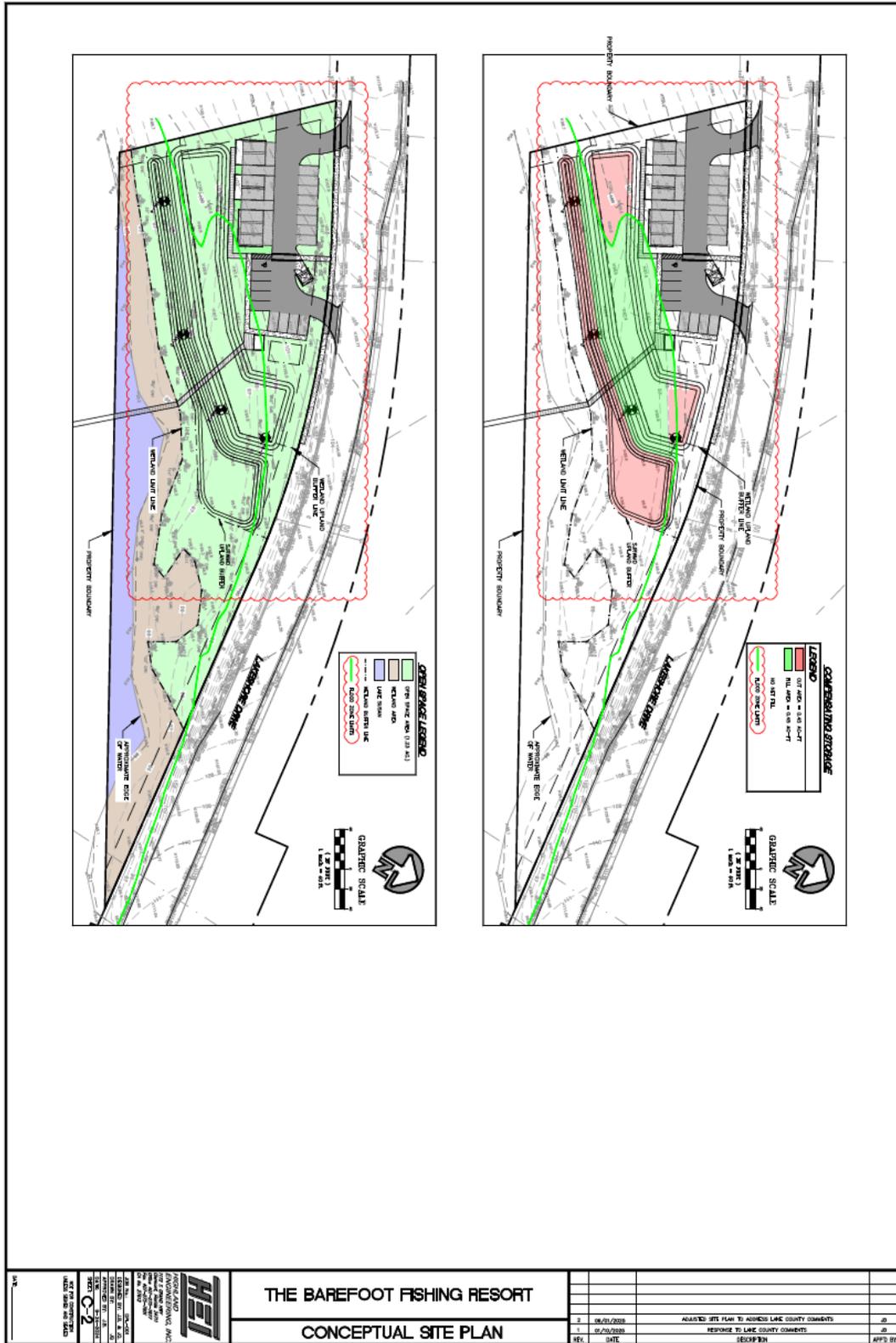
A portion of the Northeast 1/4 of Section 1, Township 23 South, Range 25 East and the Northwest 1/4 of Section 6, Township 23 South, Range 26 East, Lake County, Florida, being more particularly described as follows:

COMMENCE at the Southeast corner of OSPREY POINTE, according to the plat thereof recorded in Plat Book 36, Page 15, of the Public Records of Lake County, Florida, said point being on the Northerly right of way line of Lakeshore Drive and a point on a curve concave Southerly, having a radius of 1313.57 feet and a central angle of 14°58'49"; thence along said Northerly right of way line the following three courses and distances, from a tangent bearing of South 73°44'05" West, run Southwesterly along the arc of said curve a distance of 343.44 feet to a point on a non-tangent curve concave Southerly, having a radius of 995.37 feet and a central angle of 00°50'56"; thence from a tangent bearing of South 60°20'35" West, run Southwesterly along the arc of said curve a distance of 14.75 feet to the point of tangency; thence South 59°29'39" West, a distance of 127.65 feet; thence departing said Northerly right of way line, South 30°30'21" East, a distance of 73.00 feet to a point on the Southerly right of way line of said Lakeshore Drive and the POINT OF BEGINNING; thence along said Southerly right of way line the following three courses and distances, North 59°29'39" East, a distance of 127.65 feet to the point of curvature of a curve concave Southerly, having a radius of 922.37 feet and a central angle of 21°59'00"; thence Northeasterly along the arc of said curve a distance of 353.90 feet to the point of tangency; thence North 81°28'39" East, a distance of 380 feet plus or minus to the edge of water of the Palatlakaha River; thence meandering Southwesterly along said edge of water a distance of 785 feet plus or minus; thence departing said edge of water, North 45°45'07" West, a distance of 238 feet plus or minus to the POINT OF BEGINNING.

2

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EXHIBIT "B", CONCEPTUAL PLAN.



2