

County of Monroe

Planning & Environmental Resources Department
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Board of County Commissioners:
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We strive to be caring, professional, and fair
EXISTING CONDITIONS REPORT
PURSUANT TO SECTION 118-2
MONROE COUNTY LAND DEVELOPMENT CODE

<i>Legal description of parcel, including the real estate number</i>					
Block	Lot	Subdivision	Key (island)	Plat Book/Page	Re #
-	-	-	Big Pine Key	-	00111650-000000
Monroe County Building Permit Application Number				-	
Property Owner (Last Name, First Name)			Address (Mailing address for Owner)		
State of Florida	Board of Trustees of the Internal Improvement Fund		3900 Commonwealth Blvd., Tallahassee, Fl 32399-3000		
Report Date			Date(s) of site visit(s)		
August 13, 2025			August 1 & August 8, 2025		
Name of Biologists		Affiliation		Phone:	(305) 289-2893
Jean Pessolano Julie Cheon		Monroe County		E-mail	Cheon-Julie@monroecounty-fl.gov
Signature:					

I, _____, hereby authorize Monroe County Planning & Environmental
[PROPERTY OWNER]

Resources Department staff to access the property identified above for purposes of verifying the information contained in this Existing Conditions Report:

[SIGNATURE]

[DATE]

(Note: See page 4 of submitted Environmental Resources Services Application for signed owner authorization)

I. Background

This Existing Conditions Report (ECR) evaluates the environmental characteristics of a portion of the subject property in the context of a proposed development. The overall parcel is approximately 10.5 acres in size. The proposed impact area, as submitted by the applicant, is illustrated in Figure 2. This area is estimated to be slightly over 2 acres and impact dimensions referenced in this report are estimates based on that submittal.

This report includes the following components:

- Location Aerial (Figure 1)
- Assessment Area Species List (Table 1)
- Mitigation Table (Table 2)
- Vegetation Map (Attachment A)
- Site Photos (Attachment B)

The property is bordered by developed and undeveloped properties on the north and west and developed properties to the south. The property is bordered by a paved road, Key Deer Blvd on the east.

The parcel is in the Suburban Commercial (SC) land use district and has a Tier III designation in the Tier Overlay District.

II. Habitat and Plant Species

The site is disturbed but supports a notable amount of native vegetation. The substrate in undeveloped portions of the parcel consists of areas of exposed caprock interspersed with areas of peat. A cleared path was observed on the property, as depicted in Attachment A, with mulch piles remaining onsite (Attachment B). The species composition of the cleared vegetation could not be determined.

Within the proposed development area, the dominant species are *Swietenia mahagoni* (West Indian mahogany) and *Vachellia farnesiana* (pineland acacia). Other native species observed include *Pithecellobium guadalupense* (blackbead) and *Piscidia piscipula* (Jamaican dogwood). In contrast, the groundcover is largely dominated by the invasive exotic *Zoysia matrella* (Zoysia grass). The most notable native specimen is a large West Indian mahogany located in front of the U-shaped building, as shown in Attachment A.

Potential Champion Tree

The large *Swietenia mahagoni* (West Indian mahogany) was observed in the proposed development area, with an approximate circumference of 192 inches. The current Florida Champion Tree record for this species has a circumference of 193 inches. While formal Champion Tree designation also includes height and crown spread and must be determined by the Florida Department of Agriculture and Consumer Services (FDACS), this specimen exceeds 75% of the state record circumference, qualifying it as a protected specimen tree under Monroe County Code Section 118-7 and Comprehensive Plan Policy 205.2.8. In accordance with these provisions, the tree must be avoided during development, and Champion status should be confirmed through FDACS prior to final site planning.



Figure 1 – 2025 Aerial (entire property)
Source: Monroe County Property Appraiser (mcpaf1.org)

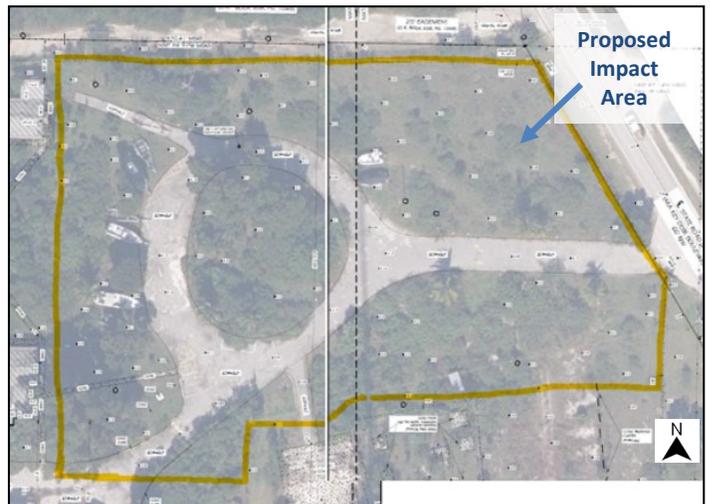


Figure 2 – Impact Area (provided by applicant)
Source: Monroe County Property Appraiser (mcpaf1.org)

To ensure the health and preservation of this tree, protective measures should be incorporated into the design and construction plans. At a minimum, this should include installation of a sturdy protective fence at or beyond the tree's dripline, clearly marked with "Tree Protection Area – No Entry" signage. Construction materials, equipment storage, grading, washdown and trenching should be prohibited within the fenced area to prevent root damage and soil compaction.

Invasive exotic species documented onsite include *Zoysia matrella*, *Schinus terebinthifolia* (Brazilian pepper)—primarily located within the vegetated circle at the driveway split — *Cocos nucifera* (coconut palm), and *Kalanchoe sp.* These four species are regulated as invasive exotic species under Monroe County Code. Per Section 118-7(e) of the Monroe County Land Development Code, their removal is required prior to issuance of a certificate of occupancy.

A comprehensive list of all plant species documented onsite is provided in Table 1.

Freshwater Features

Two freshwater features were observed at the edge of the proposed development footprint, as depicted in Attachment A. Due to the size of the parcel and lack of scaled measurements on the provided impact area sketch, their precise location relative to the development area could not be determined. The first feature is a small solution hole, approximately 11' x 13' in size, located as shown in Attachment A. The second feature is a freshwater well lined with a thick coral rock wall and containing existing piping and a pump.

Per Section 118-14(b) of the Monroe County Land Development Code (LDC):

"Existing water supply wells, including but not limited to domestic water supply wells and irrigation wells that are within a discernible groundwater freshwater lens shall be properly abandoned by pressure-grouting from bottom to top with neat cement grout in accordance with plugging requirements described in FDEP Chapter 62-532.500(4), F.A.C. Abandonment must be completed prior to issuance of any building permits or modifications for the property."

Additional groundwater protection requirements are outlined in Section 118-14(c) of the LDC, which restricts the production, storage, and disposal of certain chemicals that have cleanup target levels as listed in Chapter 62-777, F.A.C. (<https://flrules.org/gateway/ChapterHome.asp?Chapter=62-777>). These restrictions are designed to prevent contamination of the freshwater lens.

118-4(c) – "Chemicals that have a groundwater cleanup target level in Chapter 62-777, F.A.C., shall be protected from entering a groundwater freshwater lens by the following restrictions on lands overlying a discernible groundwater freshwater lens:

- (1) Production of these chemicals is prohibited.*
- (2) Storage, handling, and use of these chemicals shall be solely for the onsite maintenance or operation of the business or residence. Commercial storage, commercial handling, or commercial use of these chemicals to serve offsite facilities is prohibited.*
- (3) These chemicals shall be stored, handled, and used only in accordance with the manufacturer's instructions.*
- (4) These chemicals shall be stored solely in original consumer packages in which they are typically distributed for consumer or commercial use, or in other suitable containers properly labeled so as to indicate their contents.*

- (5) *Liquids that contain these chemicals shall be stored with secondary containment. Secondary containment shall be an impermeable coating, membrane, surface, or structure in which tanks or containers are placed. For tanks or containers larger than 110 gallons, the secondary containment shall hold at least 110% of the volume of the largest tank or container. For tanks or containers of one (1) to 110 gallons, the secondary containment shall hold at least twenty percent (20%) of the combined volume of all the tanks or containers within the secondary containment, but no less than the volume of the single largest tank or container. A double-walled tank is considered secondary containment. All materials in a secondary containment shall be stored in a manner which, in the event of a release, prevents contact of the chemicals with soil, groundwater, or surface water.*
- (6) *Buildings that contain these chemicals shall have no floor drains or outlets, except those plumbed to a sanitary sewer system.*
- (7) *Release of these chemicals in any quantity on soils, in groundwater, or in surface waters is prohibited except when used according to the manufacturer's instructions, including but not limited to, the quantity and frequency of application.*
- (8) *Untreated water that contains these chemicals in concentrations above groundwater cleanup target levels shall not be released to the soil, groundwater, or surface water.*
- (9) *All waste products and containers containing these chemicals shall be properly disposed of in accordance with federal, state, and county requirements.”*

Furthermore, a vegetated buffer between development and wetland areas is required under Section 118-10(7) of the LDC:

118-10(7) – *“Vegetated buffer required between development and wetlands. Except as allowed in [Section 118-7](#) (general environmental design criteria), a minimum vegetated setback of 50 feet shall be maintained as an open space buffer and shall be protected by a grant of conservation easement running in favor of the County for development occurring adjacent to all types of wetlands, with the following exceptions:*

- a. *If a 50-foot setback results in less than 2,000 square feet of principal structure footprint of reasonable configuration, then the setback may be reduced to allow for 2,000 square feet of principal structure footprint of reasonable configuration, provided that the setback is not reduced to less than 25 feet.*
- b. *On properties classified as scarified adjacent to wetlands, the wetland setback may be reduced to 25 feet, without regard to buildable area, if the entire setback area:*
 1. *Is planted and maintained in native vegetation meeting the standards of a class D bufferyard or a bufferyard providing similar protection ([Section 114-128 Bufferyard standards](#)) with the exception that understory trees may be substituted for canopy trees;*
 2. *Contains a site-suitable stormwater management plan approved by the County Biologist; and*
 3. *Is placed under a conservation easement...”*

In this case, based on the location and characteristics of the site, the standard 50-foot setback may be reduced to 25 feet, subject to compliance with the criteria set forth in the Code (see full language above).

Because the freshwater features could not be definitively located in relation to the proposed development footprint, it is recommended that they be surveyed by a licensed land surveyor. The solution hole has been flagged onsite to facilitate this task (see Attachment A). Due to the coral rock wall surrounding the well, flags could not be placed directly; instead, the surveyor should locate the inside edge of the coral wall for mapping purposes.

Table 1 provides a list of all plant species observed in the impact area and the designated status (Listed, invasive exotic, etc.,) of each species.

Table 1 – Species List

<u>Scientific Name</u>	<u>Common Name</u>	<u>Status</u>	<u>Map Key</u>	<u>Notes</u>
<i>Acacia pinetorum</i>	Pineland Acacia	N		
<i>Agalinis maritima</i>	Saltmarsh False Foxglove	N		
<i>Andropogon glomeratus</i>	Bushy Bluestem	N		
<i>Byrsonima lucida</i>	Locust-berry	T		
<i>Coccoloba uvifera</i>	Seagrape	N	-	
<i>Coccothrinax argentata</i>	Silver Palm	END		
<i>Cocos nucifera</i>	Coconut Palm	ex		FKIETF CAT II - Removal required
<i>Conocarpus erectus</i>	Buttonwood	N	B	
<i>Kalanchoe spp</i>	life plant, devil's backbone	IEX		FKIETF CAT II - Removal required
<i>Leucothrinax morrisii</i>	Keys Thatch Palm	END		
<i>Metopium toxiferum</i>	Poisonwood	N		
<i>Nerium oleander</i>	oleander	ex		
<i>Pinus elliotii</i>	Slash Pine var densa	RI		
<i>Piscidia piscipula</i>	Jamaican Dogwood	N		
<i>Pithecellobium guadalupense</i>	Blackbead	N		
<i>Roystonea regia</i>	Florida royal palm	N		
<i>Schinus terebinthifolia</i>	Brazilian Pepper	IEX		FKIETF CAT I - Removal required
<i>Sideroxylon foetidissimum</i>	Mastic	RI		Large, just outside footprint
<i>Solanum erianthum</i>	Potatotree	N		
<i>Sophora tomentosa var. truncata</i>	necklace pod	RI		Located just outside footprint
<i>Swietenia Mahagoni</i>	Mahogany	END		
<i>Thrinax radiata</i>	Florida Thatch Palm	END		
<i>Washingtonia robusta</i>	Mexican Fan Palm	IEX		FKIETF CAT II - Removal required
<i>Zoysia spp.</i>	Zoysia Grass	ex		

See Status Key on the following page.

Status Key

Symbol	Status	Symbol	Status
E	Endangered	N	Native
ex	Exotic	R<4	Reproductive <4" dbh
CE	Commercially Exploited	RI	Regionally Important
IEX	Invasive Exotic	T	Threatened

III. Mitigation Requirements

Monroe County designates Listed species as those that are considered Threatened, Endangered, Regionally Important, Commercially Exploited, or reproductive at less than 4" dbh as noted in Section 118-2 of the Monroe County LDC. A vegetation sketch showing the protected species overlaid on the proposed impact area is provided in Attachment A. The impact area was provided by the applicant.

A Preliminary Mitigation Table is provided in Table 2.

As noted in Section 118-8 of the Monroe County Land Development Code, mitigation is required for removal of any listed species.

Sec. 118-8. - Mitigation Standards and County Environmental Land Management and Restoration Fund.

*(a) **Mitigation standards.** Unless alternative mitigation is approved as part of a minor or major conditional use pursuant to [Section 118-6](#), the removal of any listed threatened or endangered native plants; any regionally important native plants; any native plants that reach reproductive maturity at less than four (4) inches diameter breast height (DBH) as identified in [Section 118-2\(c\)](#); and any other native plants with a DBH of four inches or greater shall require payment to the Monroe County Environmental Land Management and Restoration Fund in an amount sufficient to replace each removed plant or tree on a 2:1 basis, as determined in accordance with subsection (b). The number, species, and sizes of trees and plants to be mitigated shall be identified in the existing conditions report provided pursuant to [Section 118-2](#) and approved by the County Biologist.*

*(b) **Mitigation fees determination.** The mitigation fee shall be based on the replacement cost of the specific plants and trees. The costs for replacement plants and trees shall be based upon a price schedule maintained by the County Biologist. This schedule shall be based on price quotes by at least three private plant nurseries within the County or Miami-Dade County.*

*(c) **County environmental land management and restoration fund.** Mitigation fees shall be paid into the Monroe County Environmental Land Management and Restoration Fund. Revenues and fees deposited in this fund shall be used for restoration and management activities of public resource protection and conservation lands, as specifically detailed by resolution of the BOCC.*

The preliminary mitigation fees outlined below are based on the current site plan and assume vegetation clearing will be limited to the proposed construction footprint plus a five-foot construction buffer. The estimated fee is **\$78,099.64**. The current mitigation estimate is expected to decrease because the protected vegetation located within the dripline of the specimen mahogany will likely be preserved, reducing the total area of impact. This estimate is for planning purposes only and may be revised upon permit submittal. Please note that any modifications to the site plan or expansion of the vegetation removal area may also result in adjustments to this estimate.

Table 2 – Preliminary Mitigation Table

MITIGATION SCHEDULE PERMIT NO.									
Species to be mitigated	Quantity (Small)	2:1 Mitigation	Quantity (Medium)	2:1 Mitigation	Quantity (Large)	2:1 Mitigation	Quantity (X-Large)	2:1 Mitigation	TOTAL FEES
Blackbead	7	\$294.00	7	\$814.38	5	\$871.00	3	\$2,010.00	\$3,989.38
Florida Thatch Palm	18	\$792.00	0	\$0.00	0	\$0.00	0	\$0.00	\$792.00
Jamaica Dogwood	0	\$0.00	0	\$0.00	0	\$0.00	1	\$502.50	\$502.50
Keys Thatch Palm	36	\$1,575.36	1	\$143.76	0	\$0.00	0	\$0.00	\$1,719.12
Locustberry	3	\$120.00	4	\$691.44	6	\$1,045.20	0	\$0.00	\$1,856.64
Mahogany	442	\$14,745.12	268	\$23,584.00	125	\$27,405.00	9	\$1,912.50	\$67,646.62
Seagrape	0	\$0.00	0	\$0.00	0	\$0.00	3	\$1,138.98	\$1,138.98
Silver Palm	5	\$334.40	0	\$0.00	0	\$0.00	0	\$0.00	\$334.40
Slash Pine	0	\$0.00	1	\$120.00	0	\$0.00	0	\$0.00	\$120.00
AMOUNT DUE									\$78,099.64

IV. Animal Species

The following animal species were observed;

- *Odocoileus virginianus clavium* (key deer)
- *Patagioenas leucocephala* (white-crowned pigeon)
- *Cardinalis cardinalis* (cardinal)
- *Mimus polyglottos* (northern mockingbird)
- *Anolis sagrei* (Cuban anoles)
- *Coragyps atratus* (black vulture)
- *Cerion sp.* (peanut snail)
- *Zachrysia provisoria* (Cuban land snail)
- *Iguana Iguana* (green iguana)

The parcel is listed as being within the following US Fish and Wildlife Service's (FWS) Species Focus Areas:

- *Odocoileus virginianus clavium* (key deer)

The parcel is also listed as being within the following Species Buffer Areas:

- *Sylvilagus palustris hefneri* (Lower Keys marsh rabbit)
- *Oryzomys palustris natator* (silver rice rat)

Upon permit application submittal, Monroe County staff will use Species Assessment Guides (SAGs) prepared by U.S. Fish and Wildlife Service (FWS) to determine whether the development you are proposing through permitting will cause any incidental take of the federally protected species.

Then Monroe County will use the SAGs to determine whether a development permit application requires **NO CONDITIONS; CONDITIONS; or COORDINATION WITH FWS FOR TECHNICAL ASSISTANCE** as follows:

- **NO CONDITIONS:** County may issue permit; or
- **CONDITIONS:** County may issue the permit, pursuant to owner agreement** to conditions and all applicable codes; or
- **COORDINATION WITH FWS FOR TECHNICAL ASSISTANCE:** County shall issue the permit with a condition that:
 - the applicant seek and obtain technical assistance from the Service*;
 - and
 - the permit shall expire after 180 days; and
 - the applicant obtain all applicable state or federal permits or approvals prior to commencement of development. If the permit expires after 180 days, prior to the applicant receiving applicable state or federal permits or approvals, the applicant shall be required to reapply.

Summary

The disturbed parcel is predominantly vegetated with native species and contains two freshwater wetlands — a solution hole and a well — which should be surveyed and incorporated into any site plan submitted to Monroe County for the proposed development. Per Section 118-14(b), The well must be completed prior to issuance of any building permits or modifications for the property. A minimum 25-foot vegetated setback will be required between these wetlands and any development. As previously noted, to protect freshwater

lenses, restrictions apply to the storage and use of chemicals with cleanup target levels identified in Chapter 62-777, F.A.C.

A large specimen *Swietenia mahagoni* (West Indian mahogany) is present onsite, exceeding the 75% circumference threshold of the Florida Champion Tree and therefore protected from removal. Preliminary measurements indicate this specimen rivals the current Florida Champion specimen and this tree should be submitted to FDACS for consideration as a designated Champion Tree. Protective measures, including fencing to the dripline and signage, should be incorporated into the design to prevent damage and avoid root compaction.

Removal of the four invasive exotic species observed onsite will be required prior to issuance of a Certificate of Occupancy. Listed species mapped within the impact zone have been quantified in the Preliminary Mitigation Table, with an initial estimated mitigation cost of \$78,099.64. This estimate is likely to decrease because the protected vegetation within the dripline of the specimen mahogany will likely be preserved, reducing the total area of impact. Any modifications to the site plan or expansion of vegetation removal may alter this estimate, with final mitigation costs determined at the time of permitting.

Please do not hesitate to contact the Julie Cheon at (305) 289-2893 or cheon-julie@monroecounty-fl.gov with any questions about this report.



Julie Cheon
Special Projects Administrator

Shape Key

○ = 0 to <3' height

□ = 3 to <6'

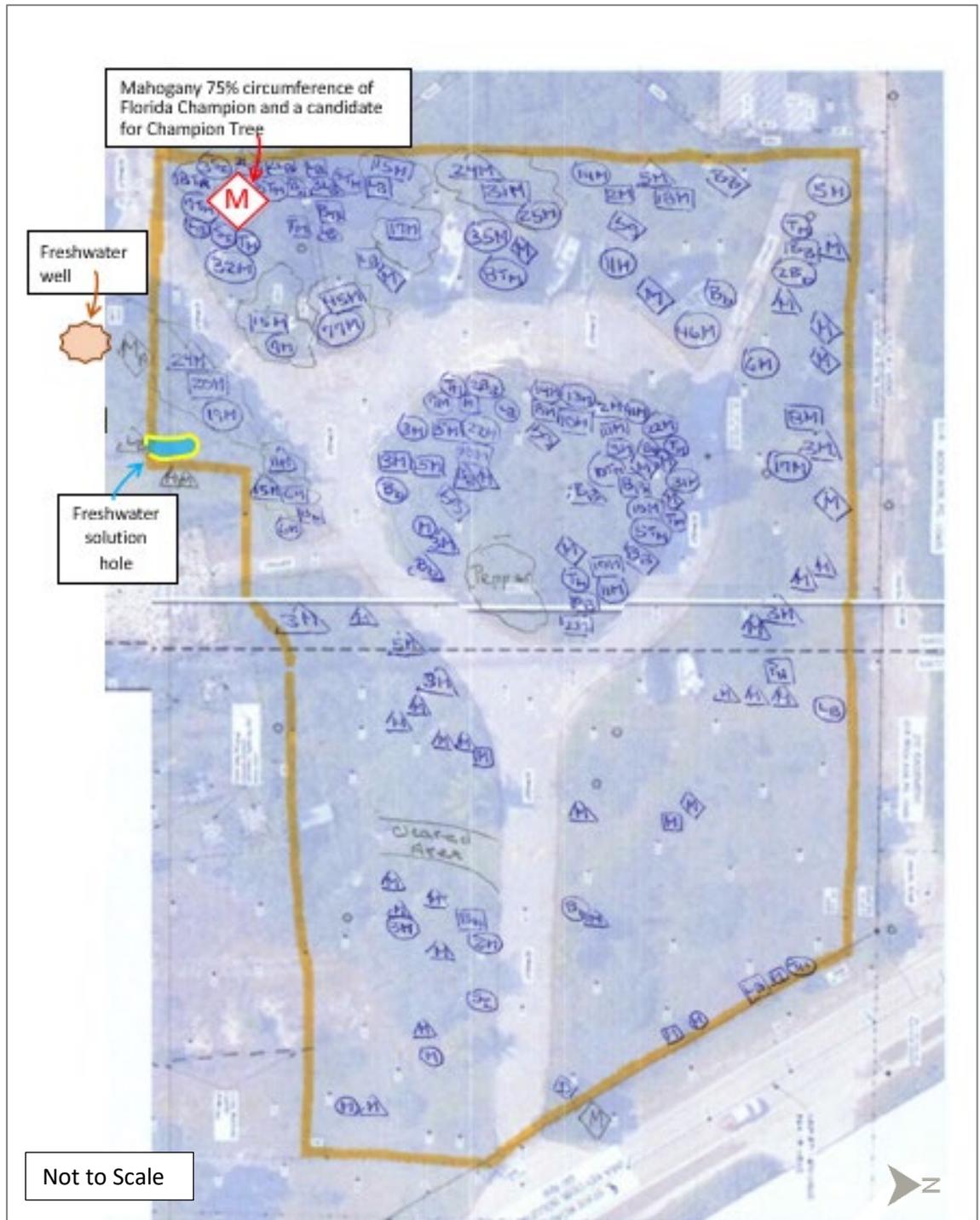
△ = 6' to 10'

◇ = >10' or 4" dbh

Specimen in blue = Specimen proposed to be impacted.

Notes:

- See Table 2 for species key.
- Locations are approximate due to the density of the vegetation and limitations of the measuring device.





Mahogany in Front of Main Building – Close-up



Mahogany in Front of Main Building - Distance



Cleared Path South of Main Drive



Solution Prior to Flagging



Solution Hole Flagged



Well



View from Main Drive Looking West



View of Vegetated Circle from Northeast



View from Vegetated Circle Looking North