

ALVEY TREE CONSULTING LLC

ALEXIS ALVEY ISA BOARD CERTIFIED MASTER ARBORIST®
#NY-5539B

# Arborist Report 411 Michigan Avenue Miami Beach

10/18/2021



On October 13th, 2021 I visited the property located at 411 Michigan Avenue at the request of Urban Robot Associates. I evaluated the trees on the site in anticipation of new construction. For each tree, I confirmed species, location, and size (Height, Spread, DBH); evaluated condition (Poor, Fair, Good); provided relevant comments about health and condition; and took photographs. Street trees are included.

For tree disposition and Tree Protection Zones, please see the landscape plans. For trees and palms that are to remain, protective barriers shall be placed at the dripline or 10ft radius from the trunk, whichever is greater. Barriers shall be installed prior to the start of construction, and shall remain in place until development is completed and until the department authorizes their removal. Barriers shall be a minimum of 4ft high, and shall be constructed of continuous chain link fence with metal posts at 8ft spacing, or of 2x4 posts with three equally spaced 2x4 rails. Posts may be shifted to avoid roots. No materials shall be placed or disposed of within the TPZ. Natural grade shall be maintained within the TPZ.

My findings are summarized in the following pages. This report shall in no shape or form be construed as a tree risk assessment which is beyond the scope of work written in the contractual agreement. Please feel free to contact me should any questions arise. Thank-you for the opportunity to assist in this manner.



Alexis Alvey
ISA Board Certified Master Arborist® #NY-5539B

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#### **Property Location -**

411 Michigan Avenue Miami Beach, FL 33139

#### Client -

Urban Robot Associates
Justine Velez, RLA, Principal
420 Lincoln Road, Suite 600, Miami Beach, FL 33139
786.246.4857 / justine@urbanrobot.net

Common Name -Royal Palm

**Height (ft)** - 40

**DBH (in) - 16.5** 

Condition - Native? - Yes

Scientific Name -Roystonea regia Canopy Spread (ft) - 18





Tree #1 is a Royal Palm street tree located along Fifth Street. It is growing in a sidewalk cut-out. The tree is in fair condition with a sharply pencilling trunk and chlorotic foliage.

Tree #2

Common Name -Royal Palm

Height (ft) - 35

**DBH (in)** - 14

**Condition - Native? -**Fair Yes

Scientific Name -Roystonea regia Canopy Spread (ft) - 16





Tree #2 is a Royal Palm street tree located along Fifth Street. It is growing in a sidewalk cut-out. The tree is in fair condition with a sharply pencilling trunk and chlorotic foliage.

Common Name -Royal Palm **DBH (in) -** 17 **Height (ft) -** 35

Condition - Native? - Yes

Scientific Name -Roystonea regia Canopy Spread (ft) - 16





Tree #3 is a Royal Palm street tree located along Fifth Street. It is growing in a sidewalk cut-out. The tree is in fair condition with a sharply pencilling trunk and chlorotic foliage.

Tree #4

Common Name -Royal Palm **DBH (in) -** 16 **Height (ft) -** 33

**Condition - Native? -**Good Yes

Scientific Name - Roystonea regia

Canopy Spread (ft) - 18





Tree #4 is a Royal Palm street tree located along Fifth Street. It is growing in a sidewalk cut-out. The tree is in good condition with a healthy green canopy.

Tree #5

Common Name -Green Buttonwood

Scientific Name -Conocarpus erectus DBH (in) - 48 Height (ft) - 28 Canopy Spread (ft) - 40

**Condition -**Poor

Native? -





Tree #5 is a large Green Buttonwood street tree located along Fifth Street. It is growing in a planting swale that is approximately 13ft wide at its widest. the tree is multi-trunked and in poor condition. One main leader was hatracked previously, and now a dead trunk is present (circled in red, below left). Many of the trunks have included bark and there is decay in the tree crotch (circled in red, below right). The canopy hangs low over the street and sidewalk. One main leader spreads over the sidwalk with only approximately 6ft of overhead clearance. This is hazardous for taller pedestrians. A number of other limbs in the canopy have been hatracked. There are large surface roots throughout the entire planting swale area.

It is recommended that this tree be removed.







**Common Name -**Brazilian Pepper

**Scientific Name -**Schinus terebinthifolius **DBH (in) -** 16

Height (ft) - 35

Canopy Spread (ft) - 25

**Condition -** Good

Native? -





Tree #6 is a Brazilian Pepper located on the south side of the property. The tree is in good condition. It has a dense canopy and has grown quite tall for a Pepper. This species is highly invasive in South Florida and this tree will therefore need to be removed.

Tree #7

Common Name -Mahogany

**Scientific Name -** *Swietenia mahagoni* 

**DBH (in) -** 9.5

**Height (ft) - 35** 

Canopy Spread (ft) - 12

**Condition -** Fair

Native? -





Tree #7 is a Mahogany located on the south side of the property. It is in fair condition with a narrow columnar habit. It is growing through the canopy of Brazilian Pepper #6 and is competing with it. There is an injury to the trunk that is closing over well (circled in red).

Common Name - Mahogany

**Scientific Name -** *Swietenia mahagoni* 

**DBH (in) -** 10.5

Height (ft) - 18

Canopy Spread (ft) - 8

**Condition -**Poor

Native? -





Tree #8 is a Mahogany located on the south side of the property. It is in poor condition with a small canopy. The tree has been hatracked.

Tree #9

Common Name - Mahogany

Scientific Name -Swietenia mahagoni **DBH (in) -** 14.5

**Height (ft) -** 40

Canopy Spread (ft) - 15

Condition Poor

Native? -Yes





Tree #9 is a Mahogany located on the south side of the property. It is in poor condition. There is little that remains of the canopy. Many limbs have been removed and the tree has poor form. There is an injury on the trunk where one limb split off.

Common Name -Sabal Palm **DBH (in) -** 13 **Height (ft) -** 30

Condition - Native? Good Yes

Scientific Name -Sabal palmetto Canopy Spread (ft) - 12





Tree #10 is a Sabal Palm located on the south side of the property. It is in good condition.

Tree #11

Common Name -Foxtail Palm **DBH (in) -** 8.5 **Height (ft) -** 20

**Condition - Native? -** Poor No

Scientific Name - Wodyetia bifurcata

Canopy Spread (ft) - 15





Tree #11 is a Foxtail Palm located on the south side of the property. It is in poor condition with a pencilling trunk and chlorotic foliage.

Common Name - Mahogany

Height (ft) - 16

**DBH (in) -** 10.5

**Condition - Native? -**Poor Yes

**Scientific Name -** *Swietenia mahagoni* 







Tree #12 is a Mahogany located in the southwest corner of the property. The tree is in poor condition and has been hatracked. Little canopy remains.

#### Notes - TPZ Calculations & Tree and Palm Relocation

#### Tree Protection Zone (TPZ) -

- For trees and palms that are to remain, protective barriers shall be placed at the dripline or 10ft radius from the trunk, whichever is greater.
- For trees and palms that are relocated, protective barriers shall be placed at the dripline or 1 2ft outside the rootball, whichever is greater.

#### **Tree and Palm Relocation Notes -**

- 1. All phases of transplanting trees and palms to be performed or supervised by Certified Arborist.
- 2. Trees to be relocated shall be root pruned six to eight weeks prior to transplanting. Landscape Contractor shall maintain transplanted material during construction period by watering, moving, spraying, fertilizing, and pruning.
- 3. Landscape Contractor is responsible for verifying locations of all underground and overhead utilities and easements prior to commencing work. All utility companies and/or the General Contractor shall be notified to verify locations prior to digging. Utility trenching is to be coordinated with the Landscape Contractor prior to beginning of project. The Owner and Certified Arborist shall not be responsible for damage to utility or irrigation lines.
- 4. The Landscape Contractor shall comply with all local and state codes and shall be responsible for obtaining all applicable permits.
- 5. The Landscape Contractor shall regularly inspect the relocated material to ensure compliance with standard horticultural practices.
- 6. The Landscape Contractor is responsible for guaranteeing the transplanted trees and palms for a period of one year. At the time of the final inspection all transplanted trees and palms that are not in viable condition shall be replaced by the Landscape Contractor.
- 7. The Landscape Contractor shall take all precautions to minimize shock of root pruning and transplanting in accordance with standard arboriculture practices.
- 8. The diameter of the root ball to be transplanted shall follow the guidelines set forth in the latest edition of the Florida Grades and Standards for Nursery Plants.
- 9. Roots shall be cleanly cut with a sharp spade, hand saw, chainsaw, or other approved root-pruning equipment.
- 10. Trees shall not be pruned at transplanting to compensate for root loss. Any pruning required shall be as per the ANSI A300 Standards.
- 11. For all palms except Sabal palmetto, only dead fronds shall be removed. Sabal palmetto shall have all fronds cut without damaging the bud. Fronds shall be securely tied around the bud prior to relocation and shall be untied after placement in the new planting hole. The bud shall be protected from damage or injury during relocation.
- 12. After root pruning trees, backfill roots to original existing grade with existing soil free of any deleterious material to root growth.
- 13. Provide a layer of 3" mulch over backfill area to prevent weed growth, conserve moisture and prevent evaporation. Keep mulch 6" away from the trunk.
- 14. Provide tree protection as per Landscape Architect's Tree Protection Detail to ensure that the tree or root system is not damaged during the root-pruning period.
- 15. After root pruning and prior to relocation, tree(s) shall be watered a minimum of twice weekly.
- 16. Transplanting shall occur within 24 hours after being dug for relocation. The root ball shall be kept moist.
- 17. Digging and preparation of the new hole for the transplant shall be done prior to removing the tree from the existing location.
- 18. The depth of the new hole shall be equal to the depth of the root ball and the width shall be equal to two to three times the width of the root ball.
- 19. Trees and palms shall be lifted from the ground with heavy equipment designed specifically for tree relocation so that the trunk and crown is not impacted and damaged by the equipment.
- 20. The slings used to lift the trees and large palms shall be non-binding nylon slings that are wrapped under the root ball to support the weight of tree or palm. Slings shall not be solely wrapped around the trunk of the tree. Padding the sling may be necessary so that the trunk is not damaged.

## Notes - Tree and Palm Relocation (Contd.)

- 21. Trees and palms shall be planted so that the top of the rootball is flush with the existing grade. Ensure that deep planting does not occur. The tree and palm shall be centrally positioned in the planting hole and set straight, plumb or normal to the growth pattern prior to transplanting.
- 22. Transplanted trees and palms shall be backfield with a uniform mix of 25% fully decomposed compost and 75% existing site soil cleaned free of weeds and rocks.
- 23. Trees and palms shall be watered to eliminate air pockets in the backfill mix prior to mulching.
- 24. A 4" soil berm shall be created around the edge of the planting hole to hold water, or as per the Landscape Architect's Planting Details.
- 25. Install tree and palm bracing as per the Landscape Architect's Planting Details, to ensure stability of trees and palms.
  26. After transplanting trees and palms, the Landscape Contractor shall be responsible for watering to maintain soil moisture during the guarantee period. The following schedule is suggested: First month Daily; Second month 3 times per week; Third and Fourth month 2 times per week; Last Eight months 1 time per week. For trees over 4" in caliper at the time of planting, the suggested schedule is: First 6 weeks Daily; from 1.5 months to 6 months 3 times per week, last 6 months 1 time per week.

#### Notes - Tree and Palm Protection

- 1. Fences shall be erected to protect trees and palms to be preserved. Fences define a specific protection zone for each tree or group of trees. Fences shall be installed prior to the beginning of construction and are to remain until all site work has been completed. Fences may not be relocated or removed without the written permission of the Arborist. Refer to the Landscape Architect's Tree Protection Detail.
- 2. Construction trailers, traffic, and storage areas must remain outside fenced areas at all times.
- 3. All underground utilities and drain or irrigation lines shall be routed outside the tree protection zone. If lines must traverse the protection area, disturbance shall be minimized by using techniques such as tunneling or boring.
- 4. No materials, equipment, spoil, or waste or washout water may be deposited, stored, or parked within the tree protection zone.
- 5. Additional tree pruning required for clearance during construction must be approved by the Certified Arborist and shall be performed by trained arborists, not by construction personnel.
- 6. If injury should occur to any tree during construction, it should be evaluated as soon as possible by the Landscape Contractor and the Certified Arborist should be notified immediately.
- 7. Any grading, construction, demolition, or other work that is expected to encounter tree roots must be monitored by the Landscape Contractor.
- 8. All trees shall be irrigated at least two times a week. Each irrigation session shall wet the soil within the tree protection zone to a depth of 30 inches.
- 9. Before grading, pad preparation, or excavation for foundations, footings, walls, or trenching near trees the trees shall be root pruned at the edge of the tree protection zone by cutting all roots cleanly to a depth of 36 inches. Roots shall be cut manually by digging a trench and cutting exposed roots with a saw, vibrating knife, rock saw, narrow trencher with sharp blades, or other approved root-pruning equipment.
- 10. Any roots damaged during grading or construction shall be exposed to sound tissue and cut cleanly with a saw.
- 11. Spoil from trenches, basements, or other excavations shall not be placed within the tree protection zone, either temporarily or permanently.
- 12. No burn piles or debris pits shall be placed within the tree protection zone. No ashes, debris, or garbage may be dumped or buried within the tree protection zone.
- 13. Maintain fire-safe areas around the fences. Also, no heat sources, flames, ignition sources, or smoking is allowed near mulch or trees.
- 14. Protective barriers shall be placed around each tree, cluster of trees, or the edge of the preservation area at the specified distance. Protective barriers shall be a minimum of four feet above ground level and shall be constructed of wood, plastic, or metal, and shall remain in place until development is completed. Protective barriers shall be in place prior to the start of any construction.
- 15. Understory plants within protective barriers shall be protected.
- 16. No excess oil, fill, equipment, building materials or building debris shall be placed within the areas surrounded by protective barriers, nor shall there be disposal of any waste material such as paints, oils, solvents, asphalt, concrete, mortar or any other material harmful to trees or understory plants within the areas surrounded by protective barriers.
- 17. Trees shall not be braced in such a fashion as to scar, penetrate, perforate or otherwise inflict damage to the tree.
- 18. Natural grade shall be maintained within protective barriers. In the event that the natural grade of the site is changed as a result of site development such that the safety of the tree may be endangered, tree wells or retaining walls are required.
- 19. Fences and walls shall be constructed to avoid disturbance to any protected tree. Post holes and trenches located close to trees shall be dug by hand and adjusted as necessary, using techniques such as discontinuous footings, to avoid damage to major roots.

Note: Trees inherently pose a certain degree of hazard and risk from breakage, failure or other causes and conditions. Recommendations that are made are intended to minimize or reduce such hazardous conditions. However, there can be no guarantee or warranty that efforts to discover or correct unsafe conditions will prevent future breakage or failure, nor can there be any guarantee that all hazardous conditions have been detected. The client should not infer that a tree is safe either because services have been recommended or done to reduce risk, or because no services have been recommended or done on a specific tree. The client assumes any and all risks associated with pursuing consultant's advice and fully understands that he or she is engaged in securing professional consultation regarding the above-mentioned property.

## Tree Location Diagram

# Approximate Location of Additional Site or Street Tree

