

SECTION No.: 86020000  
Permit No.: 2020-L-491-00015  
COUNTY: Broward  
S.R. No.: 5

STATE OF FLORIDA DEPARTMENT OF TRANSPORTATION  
DISTRICT FOUR  
LANDSCAPE MAINTENANCE MEMORANDUM OF AGREEMENT

**THIS AGREEMENT**, made and entered into this \_\_\_\_\_ day of \_\_\_\_\_, 20\_\_\_\_, by and between the **STATE OF FLORIDA DEPARTMENT OF TRANSPORTATION**, a component agency of the State of Florida, hereinafter called the **DEPARTMENT** and the **City of Fort Lauderdale**, a municipal corporation, existing under the Laws of Florida, hereinafter called the **AGENCY**.

**WITNESSETH:**

**WHEREAS**, the **DEPARTMENT** has jurisdiction over **State Road 5 (Federal Highway / US 1)** as part of the State Highway System as described in **Exhibit "A"**; and

**WHEREAS**, the **AGENCY** seeks to have installed by permit and maintain certain landscape improvements within the right of way of **State Road 5 (Federal Highway / US 1)** as described within **Exhibit "B"**; and

**WHEREAS**, as part of the continual updating of the State of Florida Highway System, the **DEPARTMENT**, for the purpose of safety, protection of the investment and other reasons, has constructed and does maintain the highway facility as described in **Exhibit "A"** attached hereto and incorporated by reference herein, within the corporate limits of the **AGENCY**; and

**WHEREAS**, the **AGENCY** is agreeable to maintaining those landscape improvements within the **AGENCY'S** limits including plant materials, irrigation system and/or hardscape which may contain specialty surfacing (concrete pavers, color stamped concrete and color stamped asphalt [also known as patterned pavement]) including any other nonstandard hardscape (if applicable), but excluding standard concrete sidewalk, and agree such improvements shall be maintained by periodic mowing, fertilizing, weeding, litter pick-up, pruning, necessary replanting, irrigation repair and/or repair of the median concrete replacements associated with the specialty surfacing (if applicable) as needed; and

**WHEREAS**, it is the intent of the **AGENCY** and the **DEPARTMENT** that the **AGENCY** shall maintain all right of way within the medians, outside the travelway and improvements made to the travelway that was made at the request of the **AGENCY**; and

**WHEREAS**, the parties hereto mutually recognize the need for entering into an Agreement designating and setting forth the responsibilities of each party; and

**WHEREAS**, the **AGENCY** by Resolution No. \_\_\_\_\_ dated \_\_\_\_\_, 20\_\_\_\_, attached hereto and by this reference made a part hereof, desires to enter into this Agreement and authorizes its officers to do so; and

**NOW THEREFORE**, for and in consideration of the mutual benefits to flow each to the other, the parties covenant and agree as follows:

1. The recitals set forth above are true and correct and are deemed incorporated herein.

## 2. INSTALLATION OF FACILITIES

The **AGENCY** shall install and agrees to maintain the *landscape improvements* described herein as: plant materials, irrigation and/or hardscape on the highway facilities substantially as specified in plans and specifications hereinafter referred to as the Project (s) and incorporated herein as **Exhibit "B"**. *Hardscape* shall mean, but not be limited to any site amenities such as landscape accent lighting, bike racks, fountain, tree grates, decorative free-standing wall, and/or sidewalk, median and/or roadway specialty surfacing such as concrete pavers, stamped colored concrete and/or stamped colored asphalt (also known as patterned pavement).

- (a) All plant materials shall be installed and maintained in strict accordance with sound nursery practice prescribed by the International Society of Arboriculture (ISA). All plant materials installed shall be Florida #1 or better according to the most current edition of Florida Department of Agriculture, *Florida Grades and Standards for Nursery Stock*; and all trees shall meet Florida Power & Light, *Right Tree, Right Place, South Florida*.
- (b) Trees and palms within the right of way shall be installed and pruned to prevent encroachment to roadways, lateral offsets and sidewalks. Definition of these criteria is included in the most current editions of FDOT standards for design, construction, maintenance, and utility operations on the state highway system and **Exhibit "C"**, the Maintenance Plan.
- (c) Tree and palm pruning shall be supervised by properly trained personnel trained in tree pruning techniques and shall meet the most current standards set forth by the International Society of Arboriculture (ISA) and the American National Standard Institute (ANSI), Part A-300.
- (d) Irrigation installation and maintenance activities shall conform to the standards set forth by the Florida Irrigation Society (FIS) latest edition of FIS, *Standards and Specifications for Turf and Landscape Irrigation Systems*.
- (e) The **AGENCY** shall provide the FDOT Local Operation Center accurate as-built plans of the irrigation system so if in the future there is a need for the **DEPARTMENT** to perform work in the area, the system can be accommodated as much as possible. (See paragraph ( I ) for contact information)
- (f) If it becomes necessary to provide utilities (water/electricity) to the median or side areas, it shall be the **AGENCY'S** responsibility to obtain a permit for such work through the local Operations Center (see paragraph ( I ) below) and the AGENCY shall be responsible for all associated fees for the installation and maintenance of these utilities.

- (g) All specialty surfacing shall be installed and maintained in strict accordance with the most current edition of the *Florida Accessibility Code for Building Construction* and the *Interlocking Concrete Pavement Institute (ICPI)*.
- (h) All activities, including landscape improvements installation and future maintenance operations performed on State highway right of way, must be in conformity with the most current edition of the *Manual on Uniform Traffic Control (MUTCD)* and *FDOT Design Standards, Index 600 Series, Traffic Control through Work Zones*.
- (i) The most current edition of *FDOT Design Standards, Index 546 (Sight Distance at Intersections)* must be adhered to.
- (j) Lateral Offsets as specified in the *FDOT Plans Preparation Manual, Volume 1, Chapters 2 and 4* must be adhered to.
- (k) Landscape improvements shall not obstruct roadside signs or permitted outdoor advertising signs, (see Florida Administrative Code [F.A.C.] Rule Chapter 14-10.)
- (l) The **AGENCY** shall provide the local FDOT Operation Center located at Broward Operations, 5548 NW 9<sup>th</sup> Avenue, Fort Lauderdale, FL 33309, (954)776-4300, a twenty-four (24) hour telephone number and the name of a responsible person that the **DEPARTMENT** may contact. The AGENCY shall notify the local maintenance office forty-eight (48) hours prior to the start of the landscape improvements.
- (m) If there is a need to restrict the normal flow of traffic, it shall be done on non-holiday, weekday off-peak hours (9 AM to 3 PM), and the party performing such work shall give notice to the local law enforcement agency within whose jurisdiction such road is located prior to commencing work on the landscape improvements. The **DEPARTMENT'S** Operation Center Public Information Officer (see telephone number in Paragraph ( l ) shall also be notified.
- (n) The **AGENCY** shall be responsible to clear all utilities within the landscape improvement limits before construction commences.
- (o) The **AGENCY** shall follow the minimum level of maintenance guidelines as set forth in FDOT'S Rule Chapter 14-40 *Highway Beautification and Landscape Management*, in the *FDOT Guide to Roadside Mowing and Maintenance Management System*, and **Exhibit "C"**, the *Maintenance Plan* for maintenance activities for landscape improvements.

### 3. MAINTENANCE OF FACILITIES

- A. The **AGENCY** agrees to maintain the landscape improvements, as existing and those to be installed, within the physical limits described in **Exhibit "A"** and as further described in **Exhibit "B"**. The non-standard improvements within and outside the travelway shall be maintained by the AGENCY regardless if the said improvement was made by the DEPARTMENT, the AGENCY, or others authorized pursuant to Section 7, by periodic mowing, pruning, fertilizing, weeding, curb and sidewalk edging, litter pickup, necessary replanting, irrigation system repair and/ or repair of any median

concrete replacement associated with specialty surfacing (if applicable) following the **DEPARTMENT'S** landscape safety and maintenance guidelines, **Exhibit "C"**, the Maintenance Plan. The AGENCY'S responsibility for maintenance shall include all landscaped, turfed and hardscape areas on the sidewalk or within the medians and areas outside the travelway to the right of way and/or areas within the travelway containing specialty surfacing. It shall be the responsibility of the AGENCY to restore an unacceptable ride condition of the roadway caused by the differential characteristics of non-standard travelway surfacing (if applicable) on DEPARTMENT right of way within the limits of this Agreement.

- B. Such maintenance to be provided by the **AGENCY** is specifically set out as follows: to maintain, which means to properly water and fertilize all plant materials; to keep them as free as practicable from disease and harmful insects; to properly mulch the planting beds; to keep the premises free of weeds; to mow the turf to the proper height; to properly prune all plants which at a minimum includes: (1) removing dead or diseased parts of plants, (2) pruning such parts thereof to provide clear visibility to signage, permitted outdoor advertising signs per Florida Statute 479.106 and for those using the roadway and/or sidewalk; (3) preventing any other potential roadway hazards. *Plant materials* shall be those items which would be scientifically classified as plants and including trees, palms, shrubs, groundcover and turf. To maintain also means to remove or replace dead or diseased plant materials in their entirety, or to remove or replace those that fall below original project standards. Palms shall be kept fruit free year-round. To maintain also means to keep the header curbs that contain the specialty surfacing treatment in optimum condition. To maintain also means to keep the nonstandard hardscape areas clean, free from weeds and to repair said hardscape as is necessary to prevent a safety hazard. To maintain also means to keep litter removed from the median and areas outside the travel way to the right of way line. All plants removed for whatever reason shall be replaced by plants of the same species type, size, and grade as specified in the original plans and specifications. Any changes to the original plans shall be submitted by permit application to the **DEPARTMENT** for review and approval.
- C. If it becomes necessary to provide utilities (water/electricity) to the medians or areas outside the travelway to maintain these improvements, all costs associated with the utilities associated for the landscape improvements including any impact and/or connection fees, and the on-going cost of utility usage for water and electrical, are the maintaining AGENCY'S responsibility.

The **AGENCY** shall be directly responsible for impact and connection fees.

- D. The maintenance functions to be performed by the **AGENCY** may be subject to periodic inspections by the **DEPARTMENT** at the discretion of the **DEPARTMENT**. Such inspection findings will be shared with the **AGENCY** and shall be the basis of all decisions regarding, repayment, reworking or agreement termination. The AGENCY shall not change or deviate from said plans without written approval of the DEPARTMENT.



#### 4. NOTICE OF MAINTENANCE DEFICIENCIES

A. If at any time after the **AGENCY** has undertaken the landscape improvements installation and/or maintenance responsibility for the landscape improvements it shall come to the attention of the **DEPARTMENT'S** District Secretary that the limits, or a part thereof, are not properly maintained pursuant to the terms of this Agreement, said District Secretary, may at his/her option, issue a written notice that a deficiency or deficiencies exist(s), by sending a certified letter to the **AGENCY**, to place said **AGENCY** on notice thereof. Thereafter, the **AGENCY** shall have a period of thirty (30) calendar days within which to correct the cited deficiencies. If said deficiencies are not corrected within this time period, the **DEPARTMENT** may, at its option, proceed as follows:

- (1) Maintain the landscape improvements or any part thereof, with the **DEPARTMENT** or Contractor's personnel and invoice the **AGENCY** for expenses incurred, and/or
- (2) At the discretion of the **DEPARTMENT**, terminate the Agreement in accordance with Paragraph 9 of this Agreement and remove, by the **DEPARTMENT** or Contractor's personnel, all of the landscape improvements installed under this Agreement or any preceding Agreements, except as to trees and palms, and charge the **AGENCY** the reasonable cost of such removal.

#### 5. FUTURE DEPARTMENT IMPROVEMENTS

It is understood between the parties hereto that the landscape improvements covered by this Agreement may be removed, relocated, or adjusted at any time in the future, as determined to be necessary by the **DEPARTMENT** in order that the adjacent state road be widened, altered, or otherwise changed to meet future criteria or planning needs of the **DEPARTMENT**.

The **AGENCY** shall be given sixty (60) calendar day notice to remove said landscape improvements at the **AGENCY's** expense after which time the **DEPARTMENT** may remove same. All permits (including tree permits), fees, and any mitigation associated with the removal, relocation or adjustments of these improvements are the maintaining **AGENCY'S** responsibility.

#### 6. FUTURE AGENCY IMPROVEMENTS

The **AGENCY** may construct additional landscape improvements within the limits of the landscape improvements rights of ways identified as a result of this document, subject to the following conditions:

- (a) Plans for any new landscape improvements shall be subject to approval by the **DEPARTMENT**. The **AGENCY** shall not change or deviate from said plans without written approval by the **DEPARTMENT**.
- (b) All landscape improvements shall be developed and implemented in accordance with appropriate state safety and roadway design standards.

- (c) The **AGENCY** agrees to comply with the requirements of this Agreement with regard to any additional landscape improvements it chooses to have installed and there will be no cost to the **DEPARTMENT**.

## 7. ADJACENT PROPERTY OWNER IMPROVEMENTS

The **DEPARTMENT** may allow an adjacent property owner to construct additional landscape improvements within the limits of the right of way identified in **Exhibit "A"** of this Agreement that the **AGENCY** shall be responsible for maintaining under this Agreement, subject to the following conditions:

- (a) Plans for any new landscape improvements shall be subject to approval by the **DEPARTMENT** and shall require a valid permit attached with a letter of consent to said plans by the **AGENCY**. The plans shall not be changed or deviated from without written approval by the **DEPARTMENT** and the **AGENCY**.
- (b) All landscape improvements shall be developed and implemented in accordance with appropriate state safety and roadway design standards.
- (c) The **AGENCY** agrees to comply with the requirements of this Agreement with regard to any additional landscape improvements installed by an adjacent owner.

## 8. AGREEMENT TERM

- (a) The term of this Agreement commences upon execution by all parties. The term of this Agreement shall remain in effect for twenty-five (25) years.

## 9. AGREEMENT TERMINATION

In addition to those conditions otherwise contained herein, this Agreement may be terminated under anyone (1) of the following conditions:

- (a) By the **DEPARTMENT**, if the **AGENCY** fails to perform its duties under this Agreement, following ten (10) days written notice.
- (b) At the discretion of the **DEPARTMENT** with 60 days' notice.

## 10. LIABILITY AND INSURANCE REQUIREMENTS

- A. With respect to any of the **AGENCY'S** agents, consultants, sub-consultants, contractors and/or sub-contractors, such party in any contract for the landscape improvements shall agree to indemnify, defend, save and hold harmless the **DEPARTMENT** from all claims, demands, liabilities, and suits of any nature arising out of, because of or due to any intentional and/or negligent act or occurrence, omission or commission of such agents, consultants, subconsultants, contractors and/or subcontractors. The **AGENCY** shall provide to the **DEPARTMENT** written evidence of the foregoing upon the request of the **DEPARTMENT**. It is specifically understood and agreed that this indemnification clause does not cover or indemnify the **DEPARTMENT** for its own negligence.

B. In the event that **AGENCY** contracts with a third party to provide the services set forth herein, any contract with such third party shall include the following provisions:

- (1) **AGENCY'S** contractor shall at all times during the term of this Agreement keep and maintain in full force and effect, at contractor's sole cost and expense, Comprehensive General Liability with minimum limits of \$1,000,000.00 per occurrence combined single limit for Bodily Injury Liability and Property Damage Liability and Worker's Compensation insurance with minimum limits of \$500,000.00 per Liability. Coverage must be afforded on a form no more restrictive than the latest edition of the Comprehensive General Liability and Worker's Compensation policy without restrictive endorsements, as filed by the Insurance Services Office. The **AGENCY** and **DEPARTMENT** shall be named as additional insured on such policies.
- (2) **AGENCY'S** contractor shall furnish **AGENCY** with Certificates of Insurance of Endorsements evidencing the insurance coverage specified herein prior to the beginning performance of work under this Agreement.
- (3) Coverage is not to cease and is to remain in full force and effect (subject to cancellation notice) until all performance required of **AGENCY'S** contractor is completed. All policies must be endorsed to provide the **DEPARTMENT** with at least thirty (30) day notice of cancellation and or/or restriction. If any of the insurance coverage will expire prior to the completion of work, copies of renewal policies shall be furnished at least (30) days prior to the date of expiration.

## 11. E-VERIFY REQUIREMENTS

The **AGENCY** shall:

- (a) Utilize the U.S. Department of Homeland Security's E-Verify system to verify the employment eligibility of all new employees hired by the **AGENCY** during the term of the contract; and
- (b) Expressly require any subcontractors performing work or providing services pursuant to the state contract to likewise utilize the U.S. Department of Homeland Security's E-Verify system to verify the employment eligibility of all new employees hired by the subcontractor during the contract term.

## 12. SUPERSEDED AGREEMENTS

This writing embodies the entire Agreement and understanding between the parties hereto and there are no other Agreements and understanding, oral or written, with reference to the subject matter hereof that are not merged herein and superseded hereby (except the associated landscape permit).

## 13. FISCAL TERMS

The **DEPARTMENT**, during any fiscal year, shall not expend money, incur any liability, or enter into any contract which, by its terms, involves the expenditure of money in excess of the

amounts budgeted as available for expenditure during such fiscal year. Any contract, verbal or written, made in violation of this subsection is null and void, and no money will/may be paid on such contract. The **DEPARTMENT** shall require a statement from the Comptroller of the **DEPARTMENT** that funds are available prior to entering into any such contract or other binding commitment of funds. Nothing herein contained shall prevent the making of contracts for periods exceeding one (1) year, but any contract so made shall be executory only for the value of the services to be rendered or agreed to be paid for in succeeding fiscal years; and this paragraph shall be incorporated verbatim in all contracts of the **DEPARTMENT** which are for an amount in excess of TWENTY-FIVE THOUSAND DOLLARS (\$25,000.00) and which have a term for a period of more than one year.

#### 14. DISPUTES

The **DEPARTMENT'S** District Secretary shall decide questions, difficulties, and disputes of any nature whatsoever that may arise under or by reason of this Agreement, the prosecution or fulfillment of the service hereunder and the character, quality, amount and value thereof. Should the **AGENCY** disagree with the **DEPARTMENT'S** District Secretary's decision, the **AGENCY** may pursue any and all legal and equitable remedies available under this Agreement.

#### 15. ASSIGNMENT

This Agreement may not be assigned or transferred by the **AGENCY**, in whole or in part, without the prior written consent of the **DEPARTMENT**.

#### 16. LAWS GOVERNING

This Agreement shall be governed by and construed in accordance with the laws of the State of Florida. In the event of a conflict between any portion of the contract and Florida law, the laws of Florida shall prevail. Venue with respect to judicial proceedings arising out of this Agreement shall be in Broward County, Florida.

#### 17. NOTICES

Any and all notices given or required under this Agreement shall be in writing and either personally delivered with receipt acknowledgement or sent by certified mail, return receipt requested. All notices shall be sent to the following addresses:

If to the **DEPARTMENT**:  
State of Florida Department of Transportation  
3400 West Commercial Blvd.  
Ft. Lauderdale, FL 33309-3421  
Attention: .  
FDOT District IV Landscape Architect

If to the **AGENCY**:  
City of Fort Lauderdale  
100 N. Andrews Avenue  
Fort Lauderdale, FL 33301  
Attention:  
Christopher J. Lagerbloom  
Title: City Manager

18. LIST OF EXHIBITS

Exhibit A: Landscape Improvements Maintenance Boundaries  
Exhibit B: Landscape Improvement Plans  
Exhibit C: Maintenance Plan for Landscape Improvements

**IN WITNESS WHEREOF**, the parties hereto have executed this Agreement effective the day and year first above written.

CITY OF FORT LAUDERDALE, through its  
CITY COMMISSIONERS

By: \_\_\_\_\_  
Dean J. Trantalis, Mayor

\_\_\_\_\_ day of \_\_\_\_\_, 2021

\_\_\_\_\_  
Christopher J. Lagerbloom, ICMA-CM  
City Manager

Approved as to form by Office of City Attorney

\_\_\_\_\_  
City Attorney

ATTEST:

\_\_\_\_\_  
Jeffrey A. Modarelli, City Clerk

(SEAL)

STATE OF FLORIDA  
DEPARTMENT OF TRANSPORTATION

By: \_\_\_\_\_  
Transportation Development Director

Attest: \_\_\_\_\_  
Executive Secretary

Legal Review                      Date

\_\_\_\_\_  
Office of the General Counsel

SECTION No.:	86020000
Permit No.:	2020-L-491-00015
COUNTY:	Broward
S.R. No.:	5

## EXHIBIT A

### LANDSCAPE IMPROVEMENTS MAINTENANCE BOUNDARIES

#### I. LIMITS OF MAINTENANCE FOR LANDSCAPE IMPROVEMENTS

##### **Section 86020000**

Quantum, Fort Lauderdale

**State Road 5 (Federal Highway / US 1) from N.E. 7<sup>th</sup> Street M.P. 0.638 to M.P. 0.732**

#### II. LANDSCAPE IMPROVEMENTS MAINTENANCE RESPONSIBILITIES MAP:

*Please see attached map*





<b>SECTION No.:</b>	<b>86020000</b>
<b>Permit No.:</b>	<b>2020-L-491-00015</b>
<b>COUNTY:</b>	<b>Broward</b>
<b>S.R. No.:</b>	<b>5</b>

## **EXHIBIT B**

### **LANDSCAPE IMPROVEMENT PLANS**

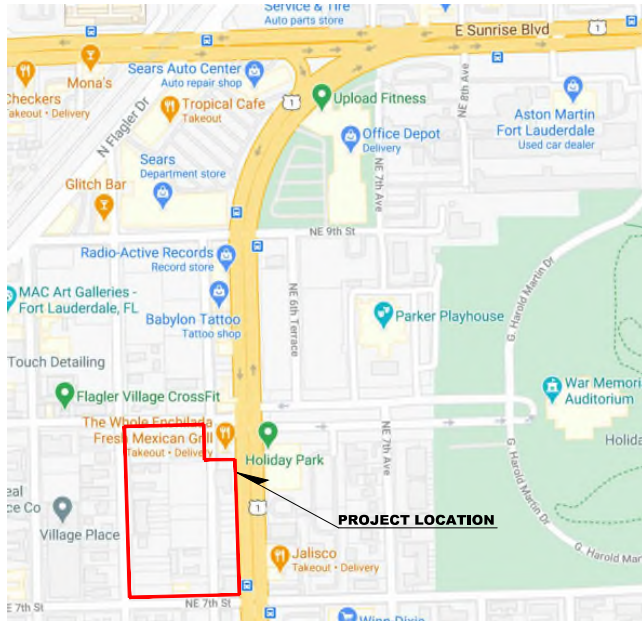
The **AGENCY** agrees to install the landscape improvements in accordance with the plans and specifications attached hereto and incorporated herein.

Please see attached plans prepared by: **Andrew M. Witkin, RLA**  
**WITKIN HULTS Design Group**

**Date: January 27, 2021**

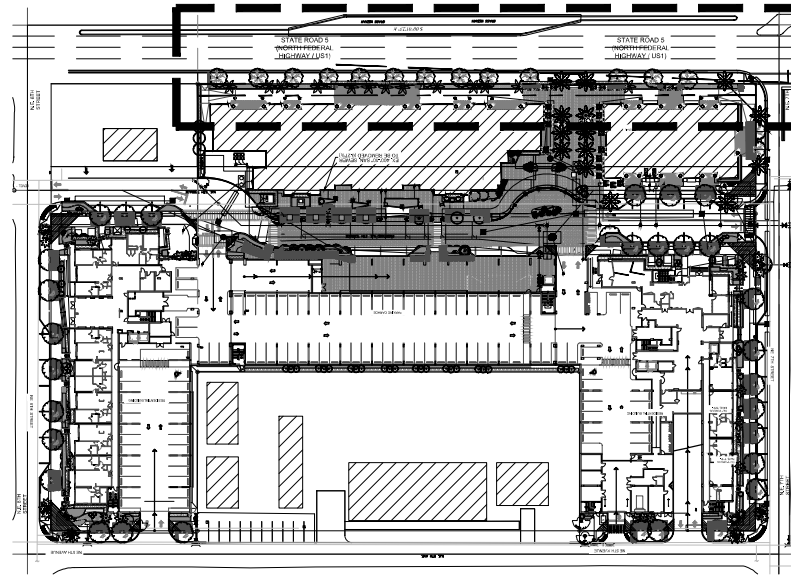
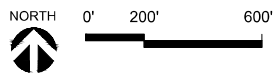
# NORTH FEDERAL HIGHWAY (SR5) AND N.E. 7TH STREET

## FORT LAUDERDALE, FLORIDA



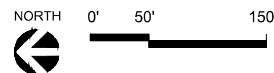
**LOCATION MAP**

Scale: 1"=200'-0"



**FDOT KEY MAP**

Scale: 1"=50'-0"



### INDEX OF CONSTRUCTION PLANS

SHEET NO.	SHEET DESCRIPTION
1	COVER SHEET
2	ROW LANDSCAPE PLAN
3	ROW LANDSCAPE PLAN
4	LANDSCAPE DETAILS
5	ROW IRRIGATION PLAN
6	IRRIGATION DETAILS
7	ROW HARDSCAPE PLAN

Permit No. 2020-L-491-00015

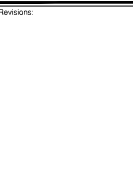
GOVERNING STANDARD PLANS:  
FLORIDA DEPARTMENT OF TRANSPORTATION, FY 2020-21 STANDARD  
PLANS FOR ROAD AND BRIDGE CONSTRUCTION AND APPLICABLE  
INTERIM REVISIONS (IRs).  
website: <https://www.fdot.gov/design/standardplans>

GOVERNING STANDARD SPECIFICATIONS:  
FLORIDA DEPARTMENT OF TRANSPORTATION, JULY 2020 STANDARD  
SPECIFICATIONS FOR ROAD AND BRIDGE CONSTRUCTION.  
website: <https://www.fdot.gov/programmanagement/implemented/specbooks>

THE DESIGN SPEED FOR THIS  
PROJECT IS 35 MPH.



**QUANTUM @ FLAGLER VILLAGE**  
FORT LAUDERDALE, FLORIDA  
FDOT LANDSCAPE PLAN



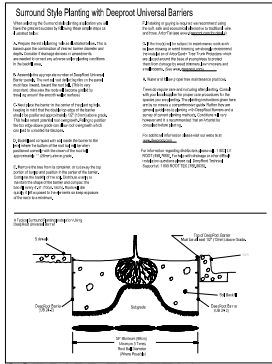
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Date: 4/27/2015  
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Drawn by: EWS  
Sheet No.:

**L-1**

CadId: 2014-081

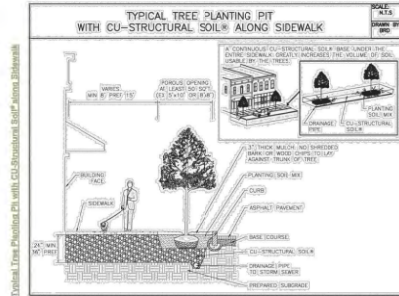






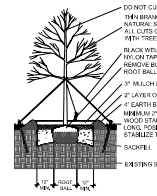
**ROOT BARRIER DETAIL**

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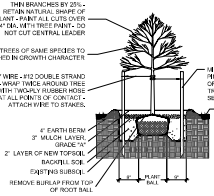


**STRUCTURAL SOIL DETAIL**

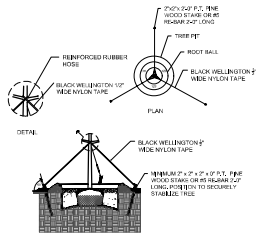
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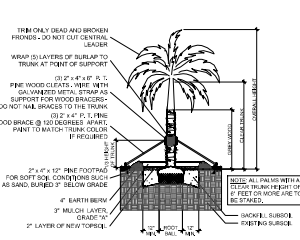
**LARGE TREE PLANTING DETAIL**



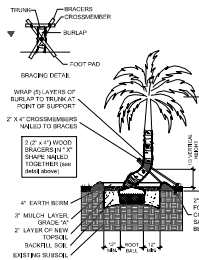
**SMALL TREE PLANTING DETAIL**



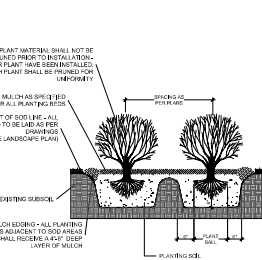
**TYPICAL TREE GUYING DETAIL**



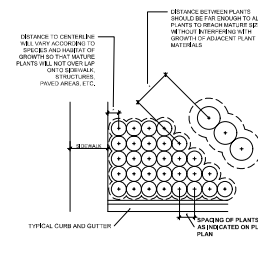
**STRAIGHT TRUNK PALM PLANTING DETAIL**



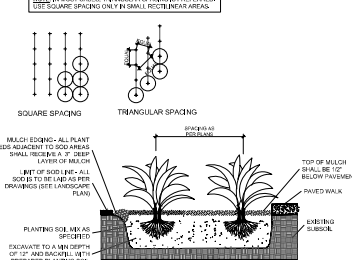
**CURVED TRUNK PALM PLANTING DETAIL**



**TYPICAL SHRUB PLANTING DETAIL**



**TYPICAL CONTAINER SPACING DETAIL**



**TYPICAL GROUND COVER PLANTING DETAIL**

**PLANTING NOTES:**

- All plant material is to be Florida Number 1 or better pursuant to the Florida Department of Agriculture's Grades and Standards for Nursery Plants.
- All plants are to be top dressed with a minimum 3" layer of Melaleuca mulch, Eucalyptus mulch or equal.
- Planting plans shall take precedence over plant list in case of discrepancies.
- No changes are to be made without the prior consent of the Landscape Architect and Owner. Additions and or deletions to the plant material must be approved by the project engineer.
- Landscape Contractor is responsible for providing their own square footage takeoffs and field verification for 100% sod coverage for all areas specified.
- All landscape areas are to be provided with automatic sprinkler system which provide 100% coverage, and 50% overlap.
- All trees in lawn areas are to receive a 24" diameter mulched saucer at the base of the trunk.
- Trees are to be planted within parking islands after soil is brought up to grade. Deeply set root balls are not acceptable.
- Planting soil for topsoil and backfill shall be 50/50 mix, nematode free. Planting soil for annual beds to be comprised of 50% Canadian peat moss, 25% salt free coarse sand and 25% Aerolite.
- Tree and shrub pits will be supplemented with "Agriform Pellets", 21 gram size with a 20-10-5 analysis, or substitute application accepted by Landscape Architect. Deliver in manufacturer's standard containers showing weight, analysis and name of manufacturer.

**SOD NOTES:**

- Sod is to be grade "A" weed free.
- All areas marked "LAWN" shall be sod sodded with St. Augustine "Florstar" solid sod. See limit on plan. All areas marked "Bahia Grass" shall be sod sodded with Paspalum.
- Provide a 2" deep blanket of planting soil as described in planting notes this sheet. Prior to planting, remove stones, sticks, etc. from the sub soil surface. Excavate existing non-conforming soil as required so that the final grade of sod is flush with adjacent pavement or top of curb as well as adjacent sod in the case of sod patching.
- Place sod on moistened soil, with edges tightly butted, in staggered rows at right angles to slopes.
- Keep edge of sod bed a minimum of 18" away from groundcover beds and 24" away from edge of shrub beds and 36" away from trees, measured from center of plant.
- Sod Shall be watered immediately after installation to uniformly wet the soil to at least 2" below the bottom of the sod strips.
- Excavate and remove excess sod so top of sod is flush with top of curb or adjacent pavement or adjacent existing sod.

**GENERAL NOTES:**

- The Landscape Contractor is to locate and verify all underground and overhead utilities prior to beginning work. Contact proper utility companies and / or General Contractor prior to digging for field verification. The Owner and the Landscape Architect shall not be responsible for any damages to utility or irrigation lines (see Roadway Plans for more utility notes).
- Landscape Contractor is to verify all current drawings and check for discrepancies and bring to the attention of the Landscape Architect prior to commencing with the work.
- All unattended and unplanted tree pits are to be properly barricaded and flagged during installation.
- All planting plans are issued as directives for site layout. Any deviations, site changes, etc. are to be brought to the attention of the Landscape Architect for clarification prior to installation.



Permit No. 2020-L-491-00015



**QUANTUM @ FLAGLER VILLAGE**  
FORT LAUDERDALE, FLORIDA  
LANDSCAPE DETAILS

Revisions:

Seal

Lic. # LA000089

Member A.S.L.A.

Drawing: Landscape Details

Date: 4 / 13 / 2015

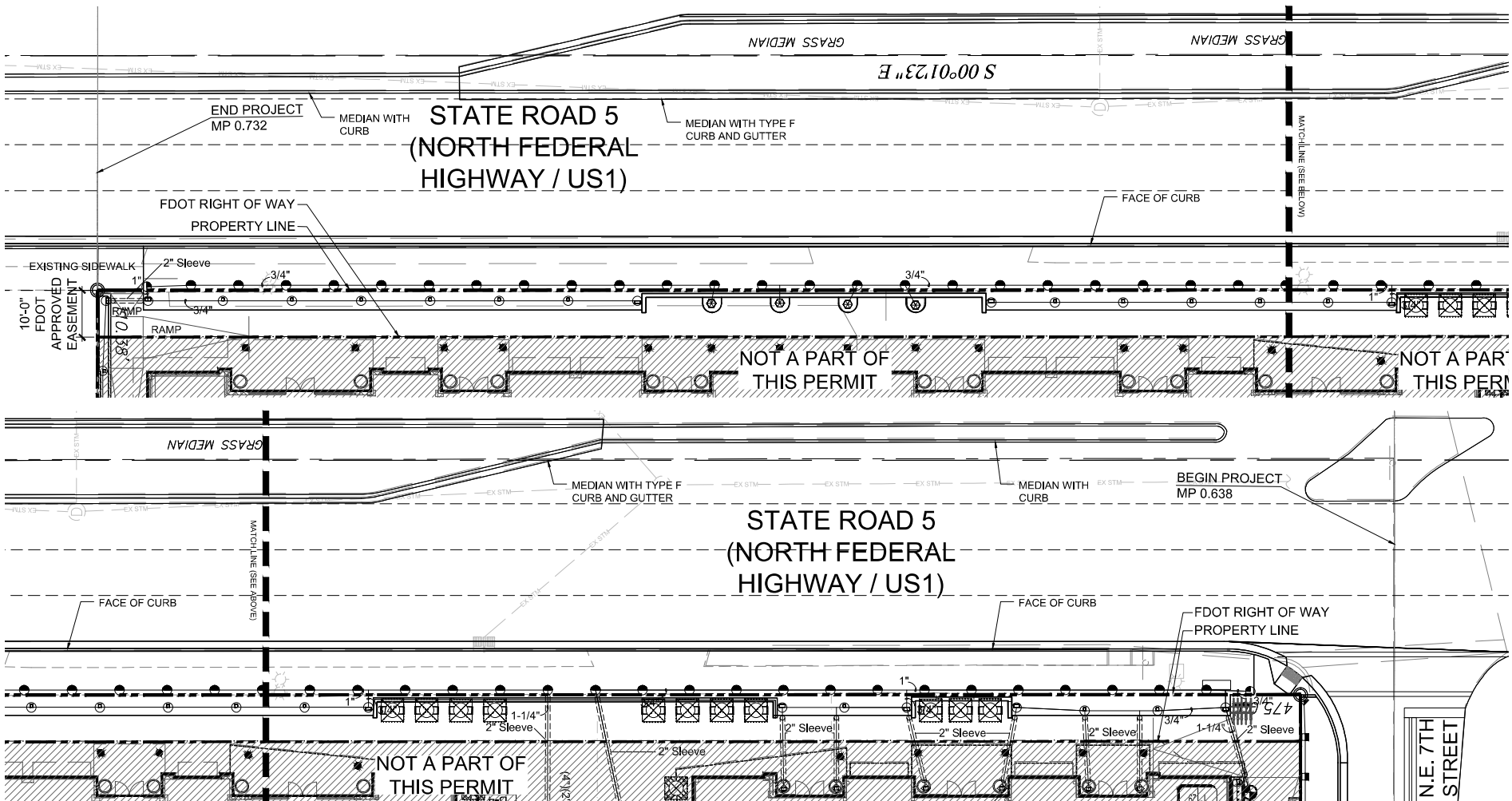
Scale: See Left

Drawn by: SCH

Sheet No.:

Cad It: 2013-000

**L-4**



# FDOT IRRIGATION PLAN

Scale: 1"=10'-0"

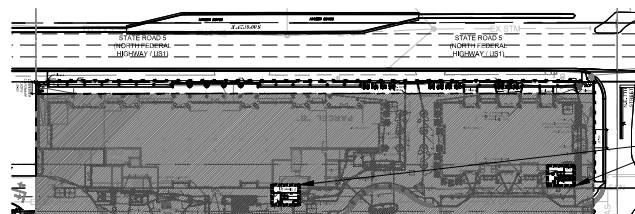


THE IRRIGATION SYSTEM SHALL USE THE LOWEST QUALITY WATER AVAILABLE WHICH ADEQUATELY AND SAFELY MEETS THE WATER NEEDS OF THE SYSTEM. STORM WATER, RECLAIM WATER, OR GREY WATER IRRIGATION SHALL BE USED WHENEVER POSSIBLE.

THE DESIGN SPEED FOR THIS PROJECT IS 35 MPH.

FDOT REQUIRED 24-HOUR EMERGENCY ACCESS TO WATER SOURCE.

CONTRACTOR SHALL PROVIDE FDOT DISTRICT OPERATIONS MANAGER WITH A SET OF "AS-BUILT" IRRIGATION PLANS.



## CONTROLLER LOCATIONS

Scale: 1"=50'-0"



Permit No. 2020-L-491-00015



QUANTUM @ FLAGLER VILLAGE  
FORT LAUDERDALE, FLORIDA  
FDOT IRRIGATION PLAN

Revisions

Seal  
Lic. # LA0000888  
Member A.S.T.E.

Drawing: IRRIGATION PLAN  
Date: 4/27/2015  
Scale: See Left  
Drawn by: EWS  
Sheet No.:

IR-1

## LAYOUT

LOW ANGLE TRAJECTORY NOZZLES SHALL BE USED WHEN ALL SPRINKLERS AND ROTORS ARE LOCATED WITHIN 100' OF POOLS OR PUBLIC GATHERING AREAS.

PIPE

PIPING UNDER HARDSCAPES SUCH AS ROADS, WALKS, AND PATIOS ARE TO BE SLEEVED USING SCH. 40 PIPE.

**\*SIZE ALL PIPE SO NOT TO EXCEED 5' PER SECOND**  
**\*INSTALL RAIN SENSOR AS PER LOCAL CODE**

**WIRES**

#14 SPARE YELLOW HOT WIRE (1 SPARES NEEDED PER 10 HOT WIRES, 3 SPARE MINIMUM)

ALL IRRIGATION CONTROLLERS TO BE PROPERLY GROUNDED IN ACCORDANCE WITH MANUFACTURE'S RECOMMENDATIONS.

FLUSHING

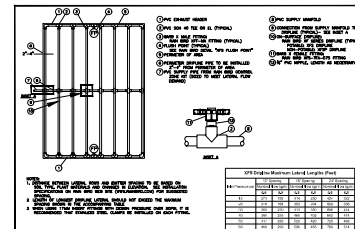
## TRENCHING

MISC.

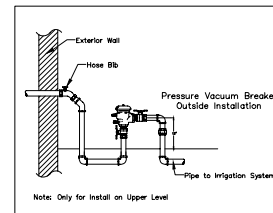
SPRAY HEADS INSTALLED IN SHRUB AREAS TO BE 12 INCH POP-UPS OR INSTALLED ON RISERS.

## DESIGN

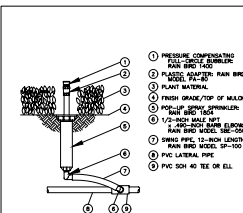
DO NOT INSTALL IRRIGATION EQUIPMENT AS SHOWN ON THE DRAWINGS WHEN FIELD CONDITIONS DIFFER. OBSTRUCTIONS OR DIFFERENCES SHALL BE BROUGHT TO THE ATTENTION OF THE OWNER OR OWNER'S REPRESENTATIVE. IN THE EVENT THIS NOTIFICATION IS NOT PERFORMED, THE IRRIGATION CONTRACTOR SHALL ASSUME FULL RESPONSIBILITY. REPLACEMENT OF THE EXISTING IRRIGATION CONTROLLER IS SUGGESTED.



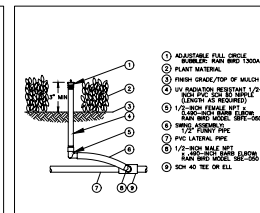
RAIN BIRD XFS CENTER FEED LAYOUT



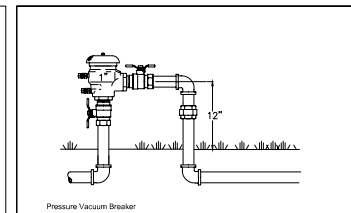
HOSE BIB / PVB CONNECTION



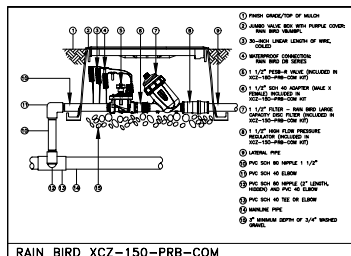
RAIN BIRD 1400 ON 1804 POP-UP
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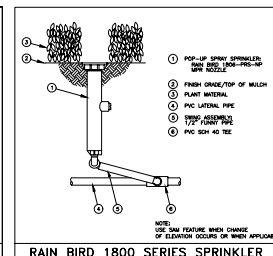
RAIN BIRD 1300A-F ON 1804 POP-UP
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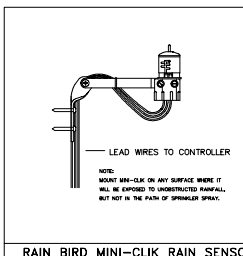
	PRESSURE VACUUM BREAKER
--	-------------------------



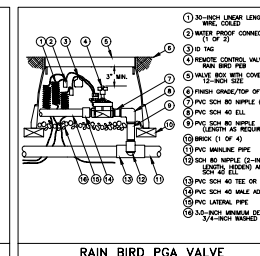
RAIN BIRD XC7-150-PRB-COM



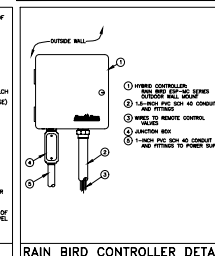
RAIN BIRD 1800 SERIES SPRINKLER



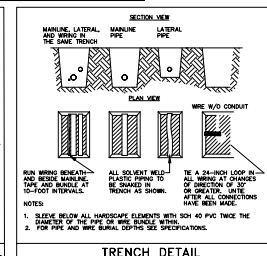
RAIN BIRD MINI-CLIK RAIN SENSOR






























	RAIN BIRD PGA VALVE
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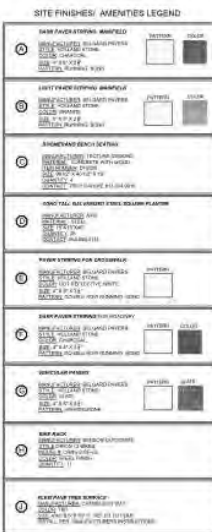
RAIN BIRD CONTROLLER DETAIL



TRENCH DETAIL

Backflow Preventers	
Symbol	Description
	Pressure Vacuum Breaker
Controllers	
Symbol	Description
	Rainbird ESP-Me
	Rainbird ESP-Me
	Rain Sensor
Irrigation Heads	
Symbol	Description
	RAINBIRD 1300A-F 1300 A-F Bubblers 360"
	RAINBIRD 1800 SERIES 8 Series 6" above finish grade trajectory 5 deg 90"
	RAINBIRD 1800 SERIES 8 Series 6" above finish grade trajectory 5 deg 180"
	RAINBIRD 1800 SERIES 10 Series trajectory 15 deg 90"
	RAINBIRD 1800 SERIES 10 Series trajectory 15 deg 180"
	RAINBIRD 1800 SERIES 12 Series trajectory 30 deg 90"
	RAINBIRD 1800 SERIES 12 Series trajectory 30 deg 180"
	RAINBIRD 1800 SERIES 15 Series trajectory 30 deg 90"
	RAINBIRD 1800 SERIES 15 Series trajectory 30 deg 180"
	RAINBIRD 1800 SERIES 15 Strip Series trajectory 30 deg EST
	RAINBIRD 1800 SERIES 15 Strip Series trajectory 30 deg SST
	RAINBIRD 3Q Nozzles 4 Feet Throw SST
	RAINBIRD 3Q Nozzles 8 Foot Hall EST
	RAINBIRD 1800 SERIES 1400 Series 1402 Model
	RAINBIRD Xer-Bubbler UXB-360
Pipe (Lateral)	
Symbol	Description
	Class 160 PVC (Lateral)
Pipe (Mainline)	
Symbol	Description
	Schedule 40 PVC Pipe
Pipe (Sleeve)	
Symbol	Description
	Schedule 40 PVC Pipe
Valves	
Symbol	Description
	Rainbird PGA Valve
	HOSE BIB with PVB
	Rainbird XCZ-100-PRB-COM
Water Meters	
Symbol	Description
	Proposed 2" Water Meter
Drp	
Symbol	Description
	Rain Bird XFS-09-18-500





Scale: 1/16"=1'-0"

NORTH  


**WITKIN HULTS  
DESIGN GROUP**  
303 south 21st avenue, hollywood, florida  
phone 304 627 9801 fax 304 627 9804  
www.witkindesigngroup.com

QUANTUM @ FLAGLER VILLAGE  
FORT LAUDERALE, FLORIDA  
ENLARGED HARDSCAPE PLAN

PERMIT SET  
12/09/2019

Inc. # LA0503650  
Mexico, D.F.A.

Drawing: GROUND FLOOR  
HARDSCAPE PLAN  
Date: 1/25/2019  
Scale: See Left  
Drawn by: EWS  
Sheet No.:  
  
**HS-2**  
Cadd No.: 2014-081



SECTION No.:	86020000
Permit No.:	2020-L-491-00015
COUNTY:	Broward
S.R. No.:	5

## EXHIBIT C

### MAINTENANCE PLAN FOR LANDSCAPE IMPROVEMENTS

This Exhibit forms an integral part of the DISTRICT FOUR (4) LANDSCAPE MAINTENANCE MEMORANDUM OF AGREEMENT between the State of Florida, Department of Transportation and the **AGENCY**.

*Please see attached*

# MAINTENANCE PLAN

## Landscape Improvements

**Project State Road No:** State Road 5 (Federal Hwy / US 1) from N.E. 7<sup>th</sup> Street (M.P. 0.638) to (M.P. 0.732)

**Permit:** 2020-L-491-000015

**Maintaining Agency:** City of Fort Lauderdale

**RLA of Record:** Andrew M. Witkin, RLA

**Date:** January 27, 2021

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### **I. GENERAL MAINTENANCE REQUIREMENTS AND RECOMMENDATIONS:**

The purpose of a plan for the landscape improvements maintenance practices is to allow the plant material on your project to thrive in a safe and vigorous manner while fulfilling their intended purpose and conserving our natural resources. Plantings and all other landscape improvements shall be maintained to avoid potential roadway hazards and to provide required clear visibility, accessibility, clearance, and setbacks as set forth by Florida Department of Transportation (FDOT) governing standards and specifications: *FDOT Standard Plans*, *FDOT Plans Design Manual* and *FDOT Standard Specifications for Road and Bridge Construction*, as amended by contract documents, and all other requirements set forth by the District 4 Operations Maintenance Engineer. The initial portion of the Maintenance Plan describes general maintenance requirements and recommendations. **The concluding section provides recommendations prepared by the Registered Landscape Architect of Record specific to the attached approved plans.**

### **WATERING REQUIREMENTS**

Watering is a critical concern for not only the maintenance of healthy plant material but also for observing water conservation practices. The amount of water to apply at any one time varies with the weather, drainage conditions and water holding capacity of the soil. For plant materials that have been established, it is imperative that any mandated water restrictions be fully conformed to on FDOT roadways.

Proper watering techniques should provide even and thorough water dispersal to wet the entire root zone, but not saturate the soil or over-spray onto travel lanes.

### **IRRIGATION SYSTEM**

The Agency shall ensure there are no roadway overspray or irrigation activities during daytime hours (most notably "rush hour" traffic periods). It is imperative the irrigation controller is properly set to run early enough that the watering process will be entirely completed before high traffic periods, while adhering to mandated water restrictions. To ensure water conservation, the Agency shall monitor the system for water leaks and the rain sensors to ensure they are functioning properly so that the system shuts down when there is sufficient rainfall.

## **INTEGRATED PLANT MANAGEMENT**

An assessment of each planting area's soil is recommended to periodically determine the nutrient levels needed to sustain healthy, vigorous plant growth.

Palms, shrubs, trees and turf areas shall be fertilized in such a manner and frequency to ensure that the plant material remains healthy and vigorously growing. Please be alert to changes in fertilization types per University of Florida, Institute of Food and Agricultural Services (I.F.A.S.) recommendations. Establishment of an integrated pest management program is encouraged to ensure healthy plants, which are free of disease and pests.

## **MULCHING**

Mulch planting beds in such a manner as to prevent weed growth, retain moisture to the plants, protect against soil erosion and nutrient loss, maintain a more uniform soil temperature, and improve the appearance of the planting beds. Avoid mulch mounded up on the trunks of trees, palms, and the base of shrubs to encourage air movement in this area which aids in lowering disease susceptibility. Cypress mulch is prohibited on state right of way.

## **PRUNING**

All pruning, and the associated safety criteria, shall be performed according to American National Standard Institute (ANSI) A300 standards and shall be supervised by an International Society of Arboriculture (ISA) Certified Arborist. Pruning shall be carried out with the health and natural growth of plant materials in mind, to specific pruning heights maintaining clear visibility for motorists, and provide vertical clearance for pedestrian, bicyclist, and truck traffic where applicable. Visibility windows must be maintained free of view obstructions, and all trees and palms must be maintained to prevent potential roadway and pedestrian hazards, all palms are to be kept fruit free. The specific pruning heights are determined by understanding the designer's intent when selecting and placing the plants. The intended mature maintained height and spread of plants are noted on the plans (See Exhibit B.) and see Part II., Specific Project Site Maintenance Requirements and Recommendations as guidance. The understory plant materials selected for use within the restricted planting areas (Limits of Clear Sight) are to be mature height in compliance with Window Detail. Vertical tree heights must meet *FDOT Maintenance Rating Program* (MRP) standards. See Reference pages.

## **STAKING AND GUYING**

All staking materials, except for replacements, are to be removed by the completion of FDOT establishment or after one year (whichever comes first). Any subsequent staking and guying activities by the Agency must adhere to *FDOT Standard Plans* guidelines (See Index 580-001). The Agency shall closely monitor staking and guying attachment materials so that they are securely fastened to avoid potential roadway hazards.

## **TURF MOWING:**

All grassed areas are to be mowed and trimmed with sufficient frequency to maintain a deep, healthy root system while providing a neat and clean appearance to the urban landscape. All turf efforts, mowing, curb/sidewalk edging and turf condition, must at a minimum, meet *FDOT Maintenance Rating Program* (MRP).

**LITTER CONTROL:**

The project site shall remain as litter free as practicable. It is recommended to recycle this litter to avoid unnecessary waste by its reuse. Litter removal efforts must meet *FDOT Maintenance Rating Program* (MRP) standards.

**WEEDING/HERBICIDE**

All planting areas shall be maintained as weed free as practicable by enlisting integrated pest management practices in areas specified on the plans and maintaining proper mulch levels. Extreme care is recommended when using a chemical herbicide to avoid overspray onto plant materials. It is the applicator's responsibility to restore any damage resulting from overspray to the plantings, per the approved plans.

**PLANT REPLACEMENT**

Plant replacement shall be the same species and specification as the approved plan. Move and replace all plant materials that may conflict with utility relocations and service. Only plants graded Florida #1 or better, per the *Florida Department of Agriculture and Consumer Services, Grades and Standards for Nursery Plants* are permitted on FDOT roadways. Should it become necessary to change the species, a permit is required from FDOT for approval by the FDOT District Landscape Architect.

**HARDSCAPE (SPECIALTY SURFACING)**

All tree grates and specialty surfacing (if applicable) shall be maintained in such a manner as to prevent any potential tripping hazards and protect damage to the surfacing and tree grates. Final surface tolerance from grade elevations shall, at a minimum, meet the most current FDOT Maintenance Rating Program Handbook for a sidewalk; ADA accessible sidewalk; and FDOT Design Standards for Design, Construction, Maintenance and Utility Operations on The State Highway System. If the specialty surfacing or tree grates become damaged, they shall be replaced with the same type and specification as the approved plan.

**HARDSCAPE (CONCRETE PAVERS)**

All tree grates and concrete pavers (if applicable) shall be maintained in such a manner as to prevent any potential tripping hazards and protect damage to the pavers and tree grates. Final surface tolerance from grade elevations shall, at a minimum, meet the most current *Interlocking Concrete Pavement Institute (ICPI), Guide Specifications for Pavers on an Aggregate Base, Section 23 14 13 Interlocking Concrete Pavers*, Part 3.05. If the specialty surfacing or tree grates become damaged, they shall be replaced with the same type and specification as the approved plan.

It shall be the responsibility of the AGENCY to maintain all signs located within a non-standard surfacing area. Such maintenance to be provided by the AGENCY shall include repair and replacement of the sign panel, post, and base.

**HARDSCAPE (NON-STANDARD) TRAVELWAY SURFACING**

It shall be the responsibility of the AGENCY to restore an unacceptable ride condition of the roadway, including asphalt pavement (if applicable), caused or contributed by the installation or failure of non-standard surfacing, and/or the header curb, on the Department of Transportation right of way within the limits of this Agreement. Pavement restoration areas or "patches" will have a minimum length of 10-ft, measured from the edge of the header curb, and a width to cover full lanes for each lane affected by the restoration.

Pavement restoration will be performed in accordance with the most current edition of the *FDOT Standard Specifications for Road and Bridge Construction*, and the *FDOT Design Standards for Design, Construction, Maintenance and Utility Operations on the State Highway System*.

**HARDSCAPE (LANDSCAPE ACCENT LIGHTING)  
(IF APPLICABLE)**

Landscape accent lighting shall be maintained in such a manner as to prolong the life of the lighting fixture and prevent potential safety hazards. If the lighting fixtures and their system become damaged, they shall be replaced with the same type and specification as the approved plan. Landscape lighting shall meet requirements for the sea turtle nesting and hatching.

**MAINTENANCE OF TRAFFIC CONTROL**

Reference the FDOT website regarding the selection of the proper traffic control requirements to be provided during routine maintenance and / or new installations of this DOT roadway.

**VEGETATION MANAGEMENT AT OUTDOOR ADVERTISING (ODA)  
(IF APPLICABLE)**

To avoid conflicts with permitted outdoor advertising, please reference the State of Florida website regarding the vegetation management of outdoor advertising. This website provides a portal to search the FDOT Outdoor Advertising Inventory Management System Database. The database contains an inventory of outdoor advertising structures, permits and other related information maintained by the Department.

Also, reference the *Florida Highway Beautification Program* website link for *Vegetation Management at ODA signs* Florida Statutes and Florida Administrative Code related to vegetation management at outdoor advertising sign, permit applications for vegetation management and determining mitigation value of roadside vegetation.

## **II. SPECIFIC PROJECT SITE MAINTENANCE REQUIREMENTS AND RECOMMENDATIONS**

*Remove suckering growth from base and clear trunk areas on Live Oak trees.*

*Groundcover and shrubs lateral growth shall be maintained to prevent foliage from growing beyond the limits of the planting areas shown on the plan. Also, maintain a 6" setback from foliage to the sidewalk.*

*Maintain the vertical height of:*

*Horizontal Cocoplum at 24".*

*Red Tip Cocoplum at 36".*

*Small Leaf Clusia at 48".*

*Pittosporum Variegata at 24".*

*Maintain full ground coverage for groundcover and shrubs at all times. To maintain the aesthetic appearance and safety of the concrete pavers they shall be cleaned on a yearly basis to prevent mold, dirt, oil, and gum build up. Concrete pavers shall be inspected on a yearly basis for the aesthetic appearance and safety conditions to address any issues occurring in specific locations.*

*Inspect the irrigation system performance on a six-month basis to ensure the system's pressure is providing adequate coverage and clean or replace any irrigation nozzles that are not properly functioning*

## REFERENCES

This reference list is provided as a courtesy. The list may not contain the most current websites. The most current references must be accessed for up to date information.

Accessible Sidewalk (ADA)

<http://www.access-board.gov/guidelines-and-standards/streets-sidewalks>

Americans with Disabilities Act (ADA) (ADAAG)

[http://www.ada.gov/2010ADASTandards\\_index.htm](http://www.ada.gov/2010ADASTandards_index.htm)

American National Standard Institute, *ANSI A300, (Part 1) for Tree Care Operations – Trees, Shrub, and Other Woody Plant Maintenance – Standard Practices (Pruning)*, available for purchase

<http://webstore.ansi.org>

Florida Department of Agriculture and Consumer Services, Division of Plant Industry, *Florida Grades and Standards for Nursery Plants 2015*

<http://www.freshfromflorida.com/Divisions-Offices/Plant-Industry/Bureaus-and-Services/Bureau-of-Plant-and-Apiary-Inspection>

Florida Department of Community Affairs (DCA), *Florida Board of Building Codes & Standards, 2017 Florida Building Code, Chapter 11 Florida Accessibility Code for Building Construction Part A*

[http://www.floridabuilding.org/fbc/workgroups/Accessibility\\_Code\\_Workgroup/Documentation/CHAPTER\\_11\\_w fla specifics.htm](http://www.floridabuilding.org/fbc/workgroups/Accessibility_Code_Workgroup/Documentation/CHAPTER_11_w fla specifics.htm)

Florida Department of Transportation, *Program Management, Maintenance Specifications Workbook Supplemental Specifications, Section 580 Landscape Installation*

<http://www.fdot.gov/programmanagement/Maintenance/2019Jan/default.shtm>

Florida Department of Transportation, *FDOT Standard Plans for Design, Construction, Maintenance and Utility Operations on the State Highway System, Index 580-001 Landscape Installation*

<http://www.fdot.gov/design/standardplans/current/IDX/580-001.pdf>

Florida Department of Transportation, *FDOT Design Manual for Design, Construction, Maintenance and Utility Operations on the State Highway System, Chapter 212.11 Clear Sight Triangles*

<http://www.fdot.gov/roadway/FDM/current/2018FDM212Intersections.pdf>

Florida Department of Transportation, *FDOT Design Manual for Design, Construction, Maintenance and Utility Operations on the State Highway System, Chapter 215.2.3 Clear Zone Criteria and 215.2.4 Lateral Offset*

*Table 215.2.1 Clear Zone Width Requirements*

*Table 215.2.2 Lateral Offset Criteria (for Trees)*

<http://www.fdot.gov/roadway/FDM/current/2018FDM215RoadsideSafety.pdf>

Florida Department of Transportation, *FDOT Standard Plans for Design, Construction, Maintenance and Utility Operations on the State Highway System, Index Series 102-600 Traffic Control through Work Zones*

<http://www.fdot.gov/design/standardplans/current/IDx/102-600.pdf>

Department of Transportation, Landscape Architecture Website  
[www.MyFloridaBeautiful.com](http://www.MyFloridaBeautiful.com)

Florida Department of Transportation, *Maintenance Rating Program Handbook*  
<http://www.dot.state.fl.us/statemaintenanceoffice/MaintRatingProgram.shtm>

Florida Department of Transportation Outdoor Advertising Database  
<http://www2.dot.state.fl.us/rightofway/>

Florida Exotic Pest Plant Council Invasive Plant Lists  
<http://www.fleppc.org/list/list.htm>

Florida Irrigation Society  
<http://www.fisstate.org>

Florida Power and Light (FPL), *Plant the Right Tree in the Right Place*  
[http://www.fpl.com/residential/trees/right\\_tree\\_right\\_place.shtml](http://www.fpl.com/residential/trees/right_tree_right_place.shtml)