

**SECTION No.:** 860060000  
**Permit No.:** 2020-L-491-00005  
**COUNTY:** Broward  
**S.R. No.:** 842

**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 842 (Broward Boulevard) 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 842 (Broward Boulevard) 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 ( 1 ) 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 ( l ) 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 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) By the DEPARTMENT, for refusal by the AGENCY to allow public access to all documents, papers, letters, or other material subject to the provisions of Chapter 119, Florida Statutes, and made or received by the AGENCY in conjunction with this Agreement.

## 9. 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.
- (b) If the DEPARTMENT chooses to cancel the landscape improvements described in **Exhibit "B"**, this Agreement becomes void and the original Agreement is reinstated, if any.

## 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 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

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

Approved as to form by Office of City Attorney

\_\_\_\_\_  
Kimberly Cunningham Mosley  
Assistant City Attorney

ATTEST:

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

(SEAL)

STATE OF FLORIDA  
DEPARTMENT OF TRANSPORTATION

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

Attest: \_\_\_\_\_ (SEAL)  
Executive Secretary

Legal Review                                  Date

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

**SECTION No.:** 860060000  
**Permit No.:** 2020-L-491-00005  
**COUNTY:** Broward  
**S.R. No.:** 842

**EXHIBIT A**

**LANDSCAPE IMPROVEMENTS MAINTENANCE BOUNDARIES**

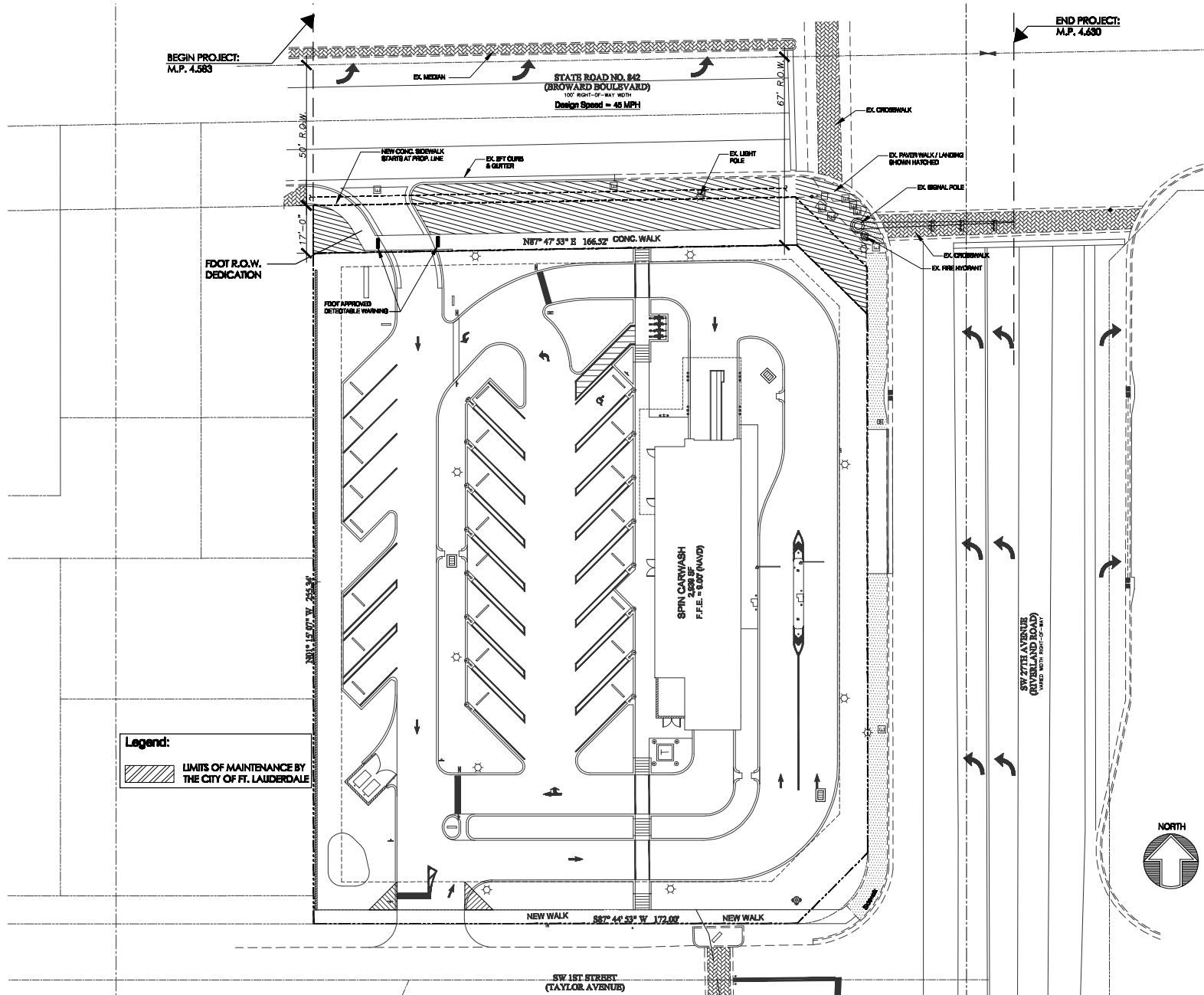
I. LIMITS OF MAINTENANCE FOR LANDSCAPE IMPROVEMENTS:

**SECTION Number: 860060000**

State Road 842 (Broward Boulevard) from M.P.4.630 to M.P. 4.583

II. LANDSCAPE IMPROVEMENTS MAINTENANCE RESPONSIBILITIES MAP:

*Please see attached map*



Landscape Improvement Maintenance Boundary Map - City of Ft. Lauderdale FDOT Landscape Permit Number 2020-L-491-0005

**SECTION No.:** 860060000  
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**COUNTY:** Broward  
**S.R. No.:** 842

**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: Dan Carter, RLA  
Dan Carter & Associates  
Landscape Architecture, Inc.

Date: March 5, 2021

Sheets – L – 1 thru L - 4

- RELOCATION NOTES:**
1. All canopy trees designated as relocated on the plans, are to be root-pruned for a minimum of 3 months prior to the relocation process.
  2. The root ball size for each tree will depend on the caliper of the individual tree to be relocated. The size of the root ball shall be adequate to support & sustain the vitality of the individual tree.
  3. All root cuts shall be "stair-step" and the backfill material shall be well drained planting soils, or pre-approved gravel. All root cuts and underdrains shall be removed from root-prune trench.
  4. Temporary irrigation shall be provided to all root-pruned trees during the root-pruning process, and after the trees have been relocated to their location for a minimum of 4 months, or as necessary to insure their survivability.
  5. The canopy of all trees shall be reduced by a minimum of 20% of time of root pruning.
  6. All trees shall be relocated with equipment (i.e., crane, fork-lift loader, tree spade, or equal capable of handling the material) without damaging any portion of the tree. The Landscape Architect will pre-approve all methods utilized for the relocation process.
  7. All relocation work shall comply with the National Arboreal Standards.

- REMOVAL NOTES:**
1. All trees to be removed shall be completely removed from the site.
  2. The root systems of the removed shall be removed in such a manner to facilitate the installation of new trees, or palms. Root system removal shall be a minimum of 3" depth, and a 6 foot diameter around the trunk.
  3. TREE REMOVAL PERMITS WILL BE REQUIRED BY THE GOVERNING MUNICIPALITY, AND IT SHALL BE THE CONTRACTORS RESPONSIBILITY TO OBTAIN ALL NECESSARY PERMITS.

ALL UNDERGROUND UTILITIES SHALL BE LOCATED PRIOR TO COMMENCING ANY WORK ON THE SITE, PER FLORIDA LAW.

**PROJECT NOTE:**  
ALL MATERIALS ON SITE NOT INDICATED TO BE REMOVED OR RELOCATED SHALL REMAIN.

SEE SHEET L2 FOR RELOCATED MATERIAL LOCATIONS

**NOTE:**  
RELOCATED TREES WILL BE MOVED BY THE APPLICANT FOLLOWING THE ANSI A 300 STANDARDS AND GUARANTEED BY THE PERMIT HOLDER FOR ONE YEAR FOR TREES OF LESS THAN SIX INCHES IN CALIPER AND FOR TWO YEARS FOR TREES GREATER THAN SIX INCHES IN CALIPER. AS PER FLOR. 49-21.15, A HONEYEAT GUARANTEE OR POTENTIAL HONEYEATER CONTROLLED CHECKS OR CHECKS CHECKS MAY BE REQUIRED TO INSURE COMPLIANCE WITH REQUIREMENTS. A TREE PROTECTION BARRICADE BEFORE DURING AND AFTER CONSTRUCTION ACTIVITIES MAY BE REQUIRED TO INSURE PROTECTION OF TREES OR TREES. THIS CAN BE IN ADDITION TO A HONEYEAT GUARANTEE. THE AMOUNT OF GUARANTEE IS BASED ON THE DETERMINED VALUE OF THE TREES SPECIFICALLY INCLUDED. THE HONEYEAT GUARANTEE SHALL BE REQUIRED AT THE TIME OF PERMITTING.

**TREE INVENTORY CONDUCTED APRIL 22, 2016**

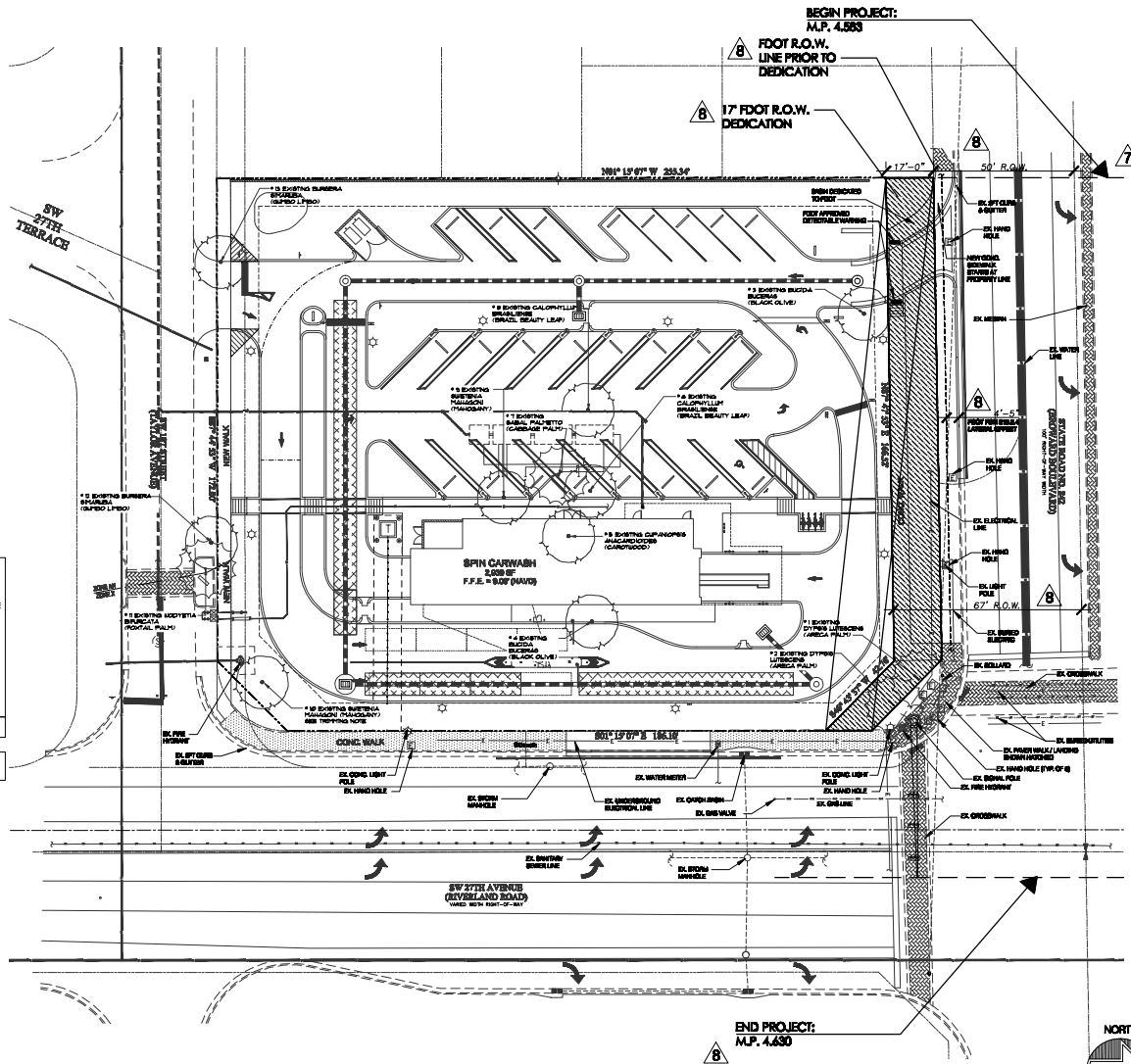
EXISTING TREE LEGEND:	SIZE	DISPOSITION	MITIGATION CALC.
#1 EXIST. DYPERS LITERICENSIS / ARBOA PALM	6" DBH	TO BE REMOVED	N/A
#2 EXIST. DYPERS LITERICENSIS / ARBOA PALM	12" DBH	TO BE REMOVED	N/A
#3 EXIST. BUCIDA NUCIFERA / BLACK OLIVE	54" DBH	TO BE REMOVED	12" CALIPER REPLACEMENT
#4 EXIST. BUCIDA NUCIFERA / BLACK OLIVE	18" DBH	TO BE REMOVED	N/A
#5 EXIST. COPANIOS ANACARDIOS / CASHWATWOOD	12" DBH	TO BE REMOVED	N/A
#6 EXIST. CALOPHYLLUM BRASILIENSE / BRAZIL BEAUTY LEAF	12" DBH	TO BE REMOVED	N/A
#7 EXIST. SABA PALMISTO / CHAMBER PALM	18" DBH	TO BE REMOVED	N/A
#8 EXIST. CALOPHYLLUM BRASILIENSE / BRAZIL BEAUTY LEAF	12" DBH	TO BE REMOVED	N/A
#9 EXIST. SWITERSIA MANGSONI / MANGOSANT	6" DBH	TO BE REMOVED	N/A
#10 EXIST. SWITERSIA MANGSONI / MANGOSANT	54" DBH	TO REMAIN	N/A
#11 EXIST. WOODIERA BRICCATIA / PORTAL PALM	6" DBH	TO REMAIN	N/A
#12 EXIST. BURBURA SWARUBA / GUMBO LIMBO	8" DBH	TO REMAIN	N/A
#13 EXIST. BURBURA SWARUBA / GUMBO LIMBO	8" DBH	TO RELOCATE	N/A

**TREE MITIGATION CALCULATION TABLE**

TREE BOTANICAL NAME	COMMON NAME	DBH	CANOPY	HEIGHT	CONDITION	DISPOSITION	MITIGATION CALC.
#1 DYPERS LITERICENSIS	ARBOA PALM	6"	6'	6'	70%	TO BE REMOVED	N/A
#2 DYPERS LITERICENSIS	ARBOA PALM	12"	12'	12'	70%	TO BE REMOVED	N/A
#3 BUCIDA NUCIFERA	BLACK OLIVE	54"	39'	49'	80%	TO BE REMOVED	\$ 7,344 REPLACEMENT VALUE
#4 BUCIDA NUCIFERA	BLACK OLIVE	18"	30'	39'	80%	TO BE REMOVED	2" CALIPER REPLACEMENT
#5 COPANIOS ANACARDIOS	CASHWATWOOD	12"	24'	19'	40%	TO BE REMOVED	N/A
#6 CALOPHYLLUM BRASILIENSE	BRAZIL BEAUTY LEAF	12"	20'	17'	40%	TO BE REMOVED	N/A
#7 SABA PALMISTO	CHAMBER PALM	18"	15'	11'	40%	TO BE REMOVED	N/A
#8 CALOPHYLLUM BRASILIENSE	BRAZIL BEAUTY LEAF	12"	18'	22'	40%	TO BE REMOVED	N/A
#9 SWITERSIA MANGSONI	MANGOSANT	6"	12'	19'	40%	TO BE REMOVED	2" CALIPER REPLACEMENT
#10 SWITERSIA MANGSONI	MANGOSANT	54"	42'	41'	80%	TO REMAIN	N/A
#11 WOODIERA BRICCATIA	PORTAL PALM	6"	4'	10'	80%	TO REMAIN	N/A
#12 BURBURA SWARUBA	GUMBO LIMBO	8"	12'	16'	80%	TO REMAIN	N/A
#13 BURBURA SWARUBA	GUMBO LIMBO	8"	12'	16'	80%	TO RELOCATE	N/A

**NOTE:** Refer to Landscape Plan for Mitigation Locations

**TRAINING NOTE:** Tree T10 to have Corrective Trimming & Pruning by Certified Arborist.



Daniel Carter  
Digitally signed by Daniel Carter  
Date: 2021.03.05  
09:52:28 -05'00'



Overall Existing Tree Removal & Relocation Plan

REVISIONS	BY
7.28.16 Permit Stamp	
11/27/16 Per revised Site Plan & City Comments	PL
07/21/17 Per revised Site Plan	PL
09/15/17 Per City review comments & PPL Review	PL
02/18/18 Per revised Site Plan	PL
03/16/18 Per meeting w/ City (K.P.) On Street Side	PL
09/27/18 Per revised Arch Site Plan	PL
05/14/20 Per FDOT review comments	PL
05/14/20 Per FDOT review comments	PL

DESIGNED BY:  
**CARTER & ASSOCIATES**  
**LANDSCAPE ARCHITECTS INC.**  
74 N.E. 8th Ave. Delray Beach, FL 33483  
561-272-9621 ec@clainc@bellsouth.net LA\_831

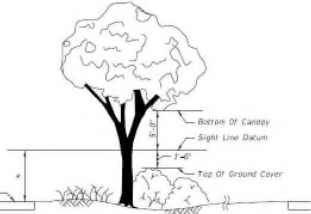
Landscape for:  
**SPIN CAR WASH**  
2700 WEST BROWARD BOULEVARD  
FORT LAUDERDALE, FLORIDA 33312

DRWN	06/PL
CHKD	06/PL
D.H.C.	
DATE	07.26.16
SCALE	1" = 20'
SHEET NO.	01/14
TOTAL SHEETS	14
OF	4



Know what's below.  
Call before you dig.

Figure 212.11.2 Window Detail



\* Since observations are made in both directions, the line of sight datum between roadways is 3.5 feet above both pavements.

FDOT Figure 212.11.2

For FDOT Design Manual (DM) Chapter 212.11.2, Figure 212.11.2 Window Detail. Do not place trees, poles or other objects higher than 10' below the sight line datum within the hatched-out areas as shown in Figure 212.11.2. The hatched-out areas is for ground cover only.

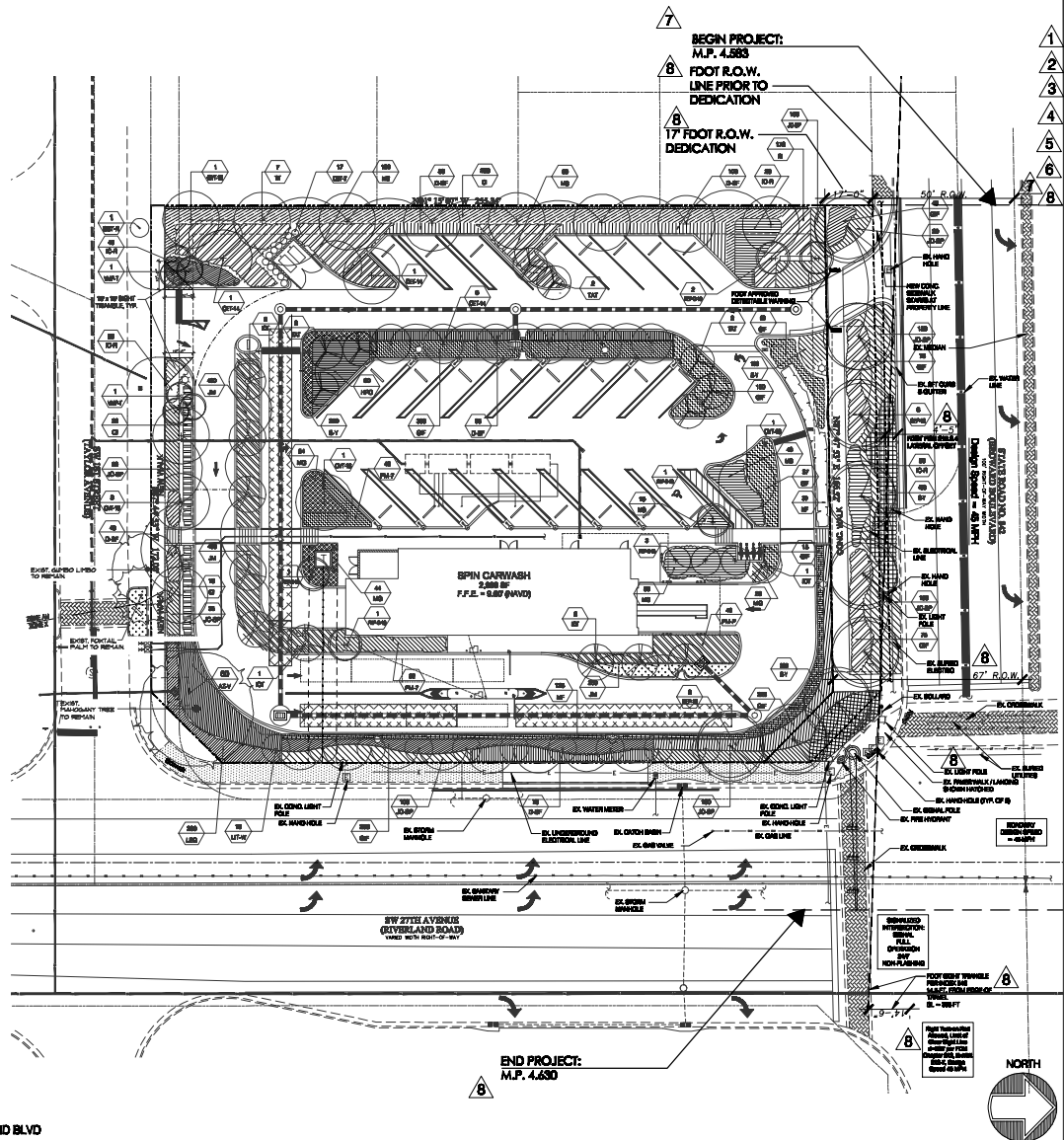
**FOOT GENERAL NOTES:**

- GOVERNING STANDARD PLANS:**  
Florida Department of Transportation, FY 2021-22 Standard Plans for Road and Bridge Construction and applicable Interim Revision (IR). Website: <https://www.flhdm.com/interim-revisions>
- GOVERNING STANDARD SPECIFICATIONS:**  
Florida Department of Transportation, January 2020 Standard Specifications for Road and Bridge Construction, website: <https://www.flhdm.com/interim-revisions/interim-revisions>  
Any plant material installation within or adjacent to the FDOT Right of Way requires approval by the Customer, County Landscape Architect or other staff need to get approval from the FDOT District Landscape Architect. "Plantation Placement Installation shall comply with current FDOT Standard Specifications 808, if applicable. Online Reference: <https://www.flhdm.com/interim-revisions/interim-revisions>
- Plantation Placement:** If project is proposing to use **Plantation** Plans within the right of way, please add the following note: "Plantation Placement Installation for all plants, trees, shrubs or roadways within the FDOT Right of Way shall comply with current FDOT Standard Specifications 808. Online Reference: <https://www.flhdm.com/interim-revisions/interim-revisions>
- Quantity of all suitable excavated materials, as determined by the Department, shall result in the Department with a final acceptance of the permitted project is limited. Excavated materials shall be loaded by the Permittee, at their cost & expense from the site to the nearest Quarantine Center or stockpile in those areas as directed by the Department, including required fillings.**

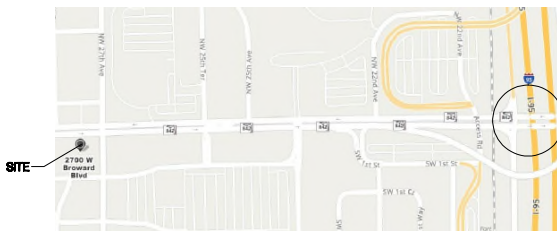
**FOOT PLANNING NOTES:**

- For the portion of landscape plant material that will be installed within the FDOT Right of Way, landscape installation shall comply with current applicable FDOT Maintenance Specifications 808. Online Reference: <https://www.flhdm.com/interim-revisions/interim-revisions>
- For the portion of landscape plant material that will be installed within the FDOT Right of Way refer to the FDOT Standard Plans Inter 808-021 Landscape Installation. Online Reference: <https://www.flhdm.com/interim-revisions/interim-revisions>
- Customer shall be responsible for any and all maintenance of the landscape installation. Plantation shall be installed in accordance with the Florida and Best Current (B.C.) Best Management Practices (BMP) for Landscape Installation. Plantation shall be installed in accordance with the Florida and Best Current (B.C.) Best Management Practices (BMP) for Landscape Installation. Plantation shall be installed in accordance with the Florida and Best Current (B.C.) Best Management Practices (BMP) for Landscape Installation.
- Shaded areas will be in accordance with Standard Plans Inter 810-010 and Standard Specifications Section 102, 075, 091, 082, 086, 087 of the Department's latest edition of Governing Design Standards and Standard Specifications. All shaded areas will be installed within one (1) week of installation of said pavement work.

LANDSCAPE TABULAR DATA		
Site Area = 261,128 S.F. (1:100) Aerial		
Vehicle Use Area = 97,914 S.F.		
VLA Landscape Area (Min. 20% of VLA) = 19,583 S.F. 80.26% of VLA		
Pavement Landscape Area = 4,512 S.F.		
Interior Landscape Area = 6,099 S.F. (77 parking spaces)		
DESCRIPTION	REQUIRED	PROVIDED
Total Trees (1 S.F. 1,000 Sq. Ft. net lot area)	51	66
VLA Trees (1 per 1,000 Sq. Ft. VLA)	26	38
VLA Shade Trees 9" Cal. DBH	7	7
VLA Shade Trees 12" Cal. DBH	7	8
VLA Flowering Trees	6	6
VLA Palm Trees	6	6
VLA Other Trees Species	3	6
VLA Shrubs (8 per 1,000 Sq. Ft. VLA)	140	2,491



Sidewalk As Located Within FDOT R.O.W. Dedication

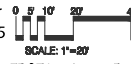


General Location Map

Landscape Plan

Daniel  
Carter

Digitally signed  
by Daniel Carter  
Date: 2021.03.05  
09:56:22 -05'00'



FDOT Landscape Permit Number 2020-L-491-0005

REVISIONS	BY
7.28.16 Permit Start	
11/27/16 Per revised Site Plan & City Comments	PL
07/21/17 Per revised Site Plan	PL
08/16/17 Per City review comments & PPL Review	PL
02/13/18 Per revised Site Plan	PL
03/16/18 Per meeting of City (L.P.) On Street/ Sidewalk	PL
08/27/18 Per revised Arch Site Plan	PL
09/12/20 Per FDOT review 07/16/20 Per FDOT review	PL

DESIGNED BY:  
**CARTER & ASSOCIATES LANDSCAPE ARCHITECTS INC.**  
74 N.E. 8th Ave. Delray Beach, FL 33483  
561-292-9721 [ec@carterandassociates.com](mailto:ec@carterandassociates.com)

Landscape for:  
**SPIN CAR WASH**  
2700 WEST BROWARD BOULEVARD  
FORT LAUDERDALE, FLORIDA 33312

DRWN	08/PL
CHKD	08/PL
D.H.C.	
DATE	07.26.16
SCALE	1" = 20'
DATE	01.14.17
BY	08/PL
<b>L-2</b>	
OF	4 SHEETS



PLANT MATERIAL SCHEDULE

Qty	Key	Botanical Name	Common Name	Size	REMARKS
7	OCT-16P	Quercus virginiana	Live Oak Tree	16-20" Ø CT @ 4.5' DBH	IMPROVATION TREES (CULPER INCREASED FROM CODE REQUIRED 2" TO 3")
8	OCT-14P	Coccoloba vesicosa Tree	Green buttonwood Tree	14-17" Ø CT @ 3.5' DBH	IMPROVATION TREES (CULPER INCREASED FROM CODE REQUIRED 2" TO 3")
7	TAT	Taxodium distichum	Taxodium Tree	14-17" Ø CT @ 3.5' DBH	IMPROVATION TREES (CULPER INCREASED FROM CODE REQUIRED 2" TO 3")
8	TAT	Tabebuia cassinii Tree	Yellow Tab Tree	14-17" Ø CT @ 3' DBH	IMPROVATION TREES (CULPER INCREASED FROM CODE REQUIRED 2" TO 3")
2	WMP-7	Vallecula Montezumeyana Palm	Montezuma Palm	14-18" O.A. Triple Trunk	
2	PEP-16P	Psychotrias elata Palm	Florida Royal Palm	16" Ø W. Heavy Outcrop Matching	
5	PEP-18	Psychotrias elegans Palm	Alexander Palm	16" O.A. Double Trunk	
2	PEP-18	Psychotrias elegans Palm	Alexander Palm, Bright	16" O.A. Matching	
10	ICP*	Isis casalis	Dahoon Holly Tree	14-20" DBH @ 3' DBH, matching	IMPROVATION TREES (CULPER INCREASED FROM CODE REQUIRED 2" TO 3")
1	BBP-R*	Bumelia Simaruba (Platanoides)	Caribbean Lime Tree	12-20" O.A.	
10	LIF-W	Lagerströmia indica	Orange Myrtle Tree, Hatcher White	12-20" Ø CT	
17	OCT-7*	Coccoloba vesicosa	Green buttonwood	4" - 4.5" O.A. Fall To Base	
8	CA-GE	Citrus aurantium	Orange Grove	2-3"	
384	CI*	Chrysobalanus icaco	Coconut	20-25" Sp. @ 7" O.C.	
1188	GF*	Ficus microcarpa	Green Island Fig	10-15" Sp. @ 12" O.C.	
85	PM-7	Podocarpus neriifolia	Yew	3-5" x 7-8" @ 20" O.C.	
40	PM-P	Podocarpus Pringlei	Dwarf	1" Sp. @ 12" O.C.	
105	MP*	Myrsine laevis	Slender St. Augustine	8" x 2" @ 48" O.C.	
144	IC-R	Isis casalis, Red	Red Holly	20-25" Sp. @ 24" O.C.	
389	D-SP*	Dianella sparganii	Blue Star Lily	16-18" Sp. @ 20" O.C.	
1,100	B-Y*	Bulbine yellow	Bulbine yellow	12-15", 1 gal. 1" O.C.	
80	HPD*	Hemelia patens	Dwarf Freesia	18" Sp. @ 24" O.C.	
476	MB*	Muhlenbergia capillaris	Marsh Grass	1" Sp. @ 18" O.C.	
80	AZ-V	Alphitonia virginiana	Variegated ginger	20" Sp. @ 20" O.C.	
176	IP*	Phoradendron virginicum	Indian Hawthorn, Pink	12" Sp. @ 18" O.C.	
1,110	JM	Justicia sparganii	Jazzonia minima	8" Sp. @ 18" O.C.	
389	LEP*	Liriodendron chinensis	Plantain lily	12" Sp. @ 18" O.C.	
786	JD-SP*	Juncus chinensis	Blue plantain	1" Sp. @ 18" O.C.	

\* Denotes native, or highly drought tolerant plant materials, per FDOT, "Landscape Manual".  
 \*\* (P)IND - very drought tolerant  
 Planting hole, see appendix A details  
 Soil Mix, see appendix B details  
 Soil tested Positive  
 All landscaping shall receive 100% coverage from an automatic irrigation system.

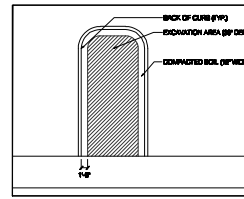
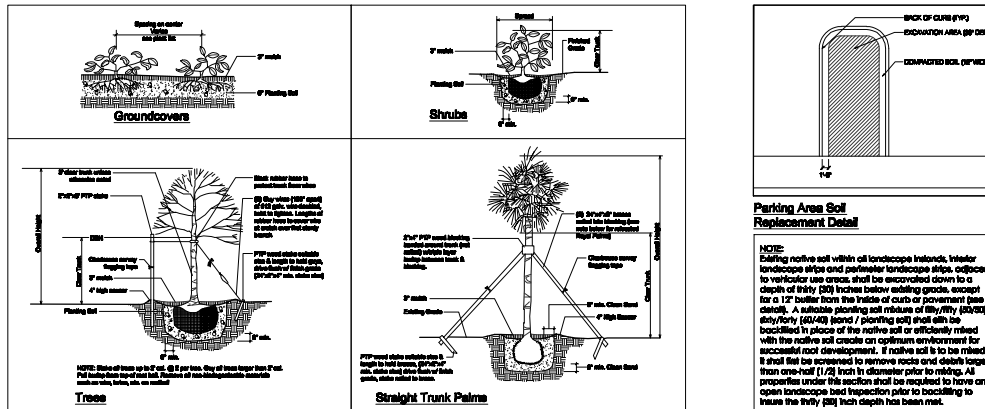
GENERAL LANDSCAPE NOTES

- All plant materials shall be F1, F1+, or better, as per the latest edition of F1, Grades & Standards. All "specimen" quality materials shall be F1, Fancy, and shall be pre-approved by the Landscape Architect.
- All plant materials shall be true to name & size, as per F1, Grades & Standards. Plant materials which do not meet, or exceed these standards will not be accepted.
- Quantities, sizes, colors of plants shall be determined by the plan and material schedule. Size of the specified plants shall take precedence over the contractor site. Spacing of the ground covers will be determined by the material schedule. Quantities shown on the material schedule are to be used as a guideline. The landscape contractor shall be responsible for the actual quantities shown on the plan. The plans will take precedence over the material schedule. Discrepancies shall be brought to the attention of the Landscape Architect prior to commencing.
- No substitutions shall be accepted without the Landscape Architect's written approval. All substitution requests shall be made in writing.
- Planting holes shall be clean, stable, and free of debris. Soil shall consist of 20% P.L. mix & 80% clean sand. Trees shall be installed with a minimum of 4" on slope & bottom of root balls. Shrubs, plants & ground covers shall be installed with a minimum of 4" on slope & bottom of root balls. Rooted cuttings shall be installed with a minimum of 4" of planting soil washed into the top 4" of the existing soil. Sidal palm and Phoenix species shall be installed with a clean well drained sand.
- Mulch, organic or equal, fertilizer shall be applied to all plantings, per manufacturer's recommendations. In addition, "AgriForm" tablets (20-10-8) shall also be applied to all plants 1" gal. and above, per manufacturer's recommendations.
- All trees & palms shall be matched with a 3/4" diameter circle, 3" minimum depth. All planting beds shall receive 3" finished grade, much upon completion of planting process. Holes shall be "backfilled" or approved equal. NO CURBS OR EDGES SHALL BE UTILIZED ON THE PROJECT.
- All materials are to be delivered to immediately after planting, or as to remove all packages. All materials are to be hand-watered for a minimum of 1 week after installation, and thereafter as required. Contractor shall advise the owner of any additional hand-watering requirements.
- All trees 1/2" or larger are to be staked, or guyed, to provide ample support such that materials remain straight & true in an up-right position through the guarantee period. Staking & guying shall be performed at the option of the landscape contractor, except where required by code. However, the landscape contractor shall be responsible for all trees & palms remaining straight & true through the guarantee period. In the event that a material shifts after it has been properly staked, or guyed, the landscape contractor shall be held responsible.
- All soil shall be "checked", unless otherwise specified. Soil shall be dense, green, well-rooted, and free of debris, weeds, clumps, or trash. A complete 4-4-4 fertilizer shall be applied at a rate of 10lbs. per 1,000sq.ft. Soil is to be worked to a depth of 3" immediately after installation. Grasses are to be rated smooth, and all debris removed, prior to installation.
- All trees, plants & ground-covers shall be guaranteed for a period of 120 days, and all palms are for a period of one year, after the date of substantial completion. Phoenix candelabra & doctyll palm palms are to be maintained, per grower/applier recommendations, by a qualified person, or firm. All maintenance programs shall be the responsibility of the owner. The landscape invoice will be deemed as rejection of the plant materials. The landscape contractor shall remove any, or all of the rejected material from the site as "self disposal".
- The removal of "base rock" is not included in the landscape contract.
- All grades are to be within 2" of finished grade, prior to the landscape contractor commencing work.

Automatic irrigation system to provide 100% irrigation coverage, with 100% overlap minimum, with a programmable controller and rain sensor. Shrub & turf zones are to be separated. THERE SHALL BE NO TREES OR SHRUBS PLACED WITHIN WATER, SEWER OR DRAINAGE EASEMENTS

TREE PROTECTION NOTES

- Protection from construction work. During any construction, land development or lot clearing, the contractor and the owner of the property subject to this section shall adhere to the requirements which follow:
- Place and maintain protective barriers around the drip line of all trees to be retained on the site to prevent their destruction or damage. The protective barriers shall be at least four (4) feet in height and conspicuously colored to be seen easily by operators of trucks and other equipment. Protective barriers shall be constructed of sturdy material (not tagging or ribbon) and shall be installed prior to start during construction and/or land development.
  - Use stakes or use materials or equipment within the drip line of any tree to be retained on the site unless the activity is being done to protect trees.
  - Use chainsaw or other equipment to cut trees that may cause adverse impacts.
  - Control of vegetation within the drip line of trees designated for preservation shall only be by hand or light rubber wheeled equipment that will not damage tree roots; soil equipment shall be a maximum of forty-eight (48) inches wide, five to six, with a maximum weight of three thousand five hundred (3,500) pounds.
  - Utility retaining walls and driveway aprons needed to protect trees to be preserved from severe grade changes.
  - Planting of trees to be preserved shall be in accordance with the standards for planting established by City of ASH.
  - Make no attachments, other than those of a protective and non-damaging nature, to any tree to be retained on the site.
  - Retainage the actual grade above the root system within the drip line of any tree to be retained on the site unless it can be demonstrated to the city that it will not damage any tree.
  - Avoid any encroachments, enclosures or severe grade changes within the drip line of preserved trees unless it can be demonstrated to the city that it will not impact any tree and.
  - Use soil compaction within the drip line of any tree to be retained on site and.
  - If any trees designated to be preserved which are damaged during construction shall promptly be replaced.



**Parking Area Soil Replacement Detail**

**NOTE:** Existing native soil within all landscape islands, interior landscape slope and perimeter landscape slope, adjacent to vehicular use areas, shall be excavated down to a depth of thirty (30) inches below existing grade, except for a 12" buffer from the inside of curb or pavement base detail. A suitable planting soil mixture of fifty (50%) topsoil, fifty (50%) sand / planting soil shall be backfilled in place of the native soil or efficiently mixed with the native soil under an optimum environment for successful plant development. If native soil is to be mixed, it shall first be necessary to remove rocks and debris larger than one-half (1/2) inch in diameter prior to mixing. All properties under this section shall be required to have an open landscape test inspection prior to backfilling to insure the thirty (30) inch depth has been met.

Landscape General Notes and Details

REVISIONS	BY
7.28.18 Permit Stamp	
11/27/18 Per revised Site Plan & City Comments	PL
07/21/17 Per revised Site Plan	PL
06/18/16 Per City review comments & PFL Review	PL
02/18/16 Per revised Site Plan	PL
03/16/16 Per meeting w/ City (KCP) On Street Bulbs	PL
03/27/16 Per revised Arch Site Plan	PL
03/16/16 Per FDOT review 07/16/20 Per FDOT review	PL

DESIGNED BY:  
**CARTER & ASSOCIATES**  
**LANDSCAPE ARCHITECTS INC.**  
 74 N.E. 38th AVE. Delray Beach, FL 33483  
 561-272-9621 ext:clainc@csbau.net LA\_881

Landscape for:  
**SPIN CAR WASH**  
 2700 WEST BROWARD BOULEVARD  
 FORT LAUDERDALE, FLORIDA 33312

DATE	BY
08/14/16	CS
07/26/16	D.H.C.
06/23/16	CS
06/23/16	CS
06/23/16	CS
06/23/16	CS
06/23/16	CS

Daniel Carter  
 Digitally signed by Daniel Carter  
 Date: 2021.03.05 09:57:08 -05'00'

FDOT Landscape Permit Number 2020-L-491-0005

L-3  
 OF 4 SHEETS

**IRIGATION LEGEND**

- Rain Bird 270 Series Side Step Heads
- Rain Bird 4 Pop-up 1800 Series w/PC Pattern or
- Rubber Heads
- ▲ Rain Bird PWS Valves
- Rain Bird Controller 888 Series / Vial Click Rain Sensor
- Water Sources: Vial & Pump capable of providing 45 GPM

**NOTES**  
Automatic Irrigation System  
Water demand zone  
Pressure required (refer to plan)

**GENERAL**  
System shall be installed in accordance with a Federal, State, and local codes, Contractor drawings and Contract Specifications.  
Irrigation design is based on "Planning Plan" dated 07/26/14.  
Contractor shall refer to this plan to coordinate sprinkler locations and pipe routing with plant locations.  
The water source for this system shall be Vial & Pump (capable of providing 45 GPM).  
The master shut-off valve shall be activated via the automatic controller, and shall be used to determine the zone time when the system is not operating. Contractor shall install the irrigation, where noted on the plans for actual field conditions, and shall install the system in accordance with Bureau of Public Safety Standards and specifications.

To insure proper operation of this system, pump size, pressure required, pipe and valve sizes, sprinkler spacing, installation details and specifications shall be followed as shown on the coverings and in the specifications.

Irrigation systems shall provide 100% coverage, with a 20% overlap minimum, utilizing "walk-behind" water sources. If a well & pump system is installed, the contractor shall install a "check valve" to prevent backflow. The contractor shall install a "check valve" to prevent backflow. The contractor shall install a "check valve" to prevent backflow.

**PIPING**  
Pipe routing is schematic only, and shall be field adjusted for on-site conditions. All pipe shall be installed in accordance with local codes, and per manufacturer recommendations.

Pipe routed under power surfaces, and through planter walls shall be sleeved in SCH 40 PVC sleeves that be of adequate size to allow for 1/2" clearance for pipe & wire. Contractor shall verify the location, depth & size of existing sleeves, as required. Pipe installed above grade for the backflow preventer shall be SCH 40 galvanized pipe. All other piping shall be PVC. The Main Line (Typ) shall be SCH 40 PVC, 1.5" diameter. All other piping shall be PVC, Class 140, and tolerance shall from 1" to 3/4" shall be SCH 21, Class 140 PVC pipe.

Pipe shall be installed on the backfill depths as maintained at 18" for Main Line (Typ) and 12" for other lines. The depth from 1" to 3/4" shall be SCH 21, Class 140, and tolerance shall from 1" to 3/4" shall be SCH 21, Class 140 PVC pipe. One to be 12" from finished grade. Backfill material shall be suitable material, free of rocks, stones, or other debris that could damage components of the irrigation system.

**SPRINKLERS**  
Sprinkler locations are schematic only, and shall be adjusted for wind, landscape materials, landscape elements, etc., to provide 100% coverage with a no overlap onto covered surfaces, or building footings.

Pop-up spray heads shall be Toro series 4", and 1 1/2" type, which are to be installed on flexible swing joint or from blow-out poly pipe with 1/2" hose above. **NOTE**

SHALL BE HD-40 POP-UP HEADS LISTED FOR THE PROJECT.  
Rubber heads shall be installed at a minimum height of 4" above the plantings, and one to be located within planting mass so as to be concealed from view. Braze type spray heads shall be Toro 570 series, and one to be installed in system installed on a 1/2" SCH 40 PVC riser.  
Rubber heads to be installed on SCH 40 PVC riser at the base of the plant material, or be located within planting mass so as to be concealed from view.  
All SCH 40 PVC risers are to be painted "Forest Green", or brown, to be less conspicuous.  
Toro 1 1/2" pop-up sprinklers shall be installed in ground-cover areas of the planting bed, and at other critical locations, as determined in the field by the Landscape Architect.

Sprinklers located adjacent to pavement, sidewalks, patios, buildings, etc., shall be installed 6" from the edge. Unless otherwise noted on the plans, pop-up sprinklers shall be installed 6" from the edge, and area sprinklers shall be installed 18" from the edge. Stub areas are not to be installed at walkway intersections, or where ever a "Trip & Fall" hazard may occur. Adjusted features of sprinklers specified shall be utilized to insure proper coverage, while minimizing undesirable overhead.  
Contractor shall use precaution in locating, and setting sprinkler heads in planting areas adjacent to parking spaces to minimize the damage to sprinklers by overwatering car bumpers.

Pop-up sprinklers with slow angle" nozzles shall be installed inside of tall shrubs for low level watering. Contractor shall install sprinklers at optimum locations for the most effective coverage.

**CONTROL SYSTEM**  
Rainbird control system shall be installed, per manufacturer recommendations, to operate the pop-up valves, and the master shut-off valve.  
Proper grounding equipment shall be installed for the controller.  
Controller location shall be approved by the Landscape Architect, and project supervisor.  
The Irrigation contractor shall supply the controller, however the physical installation thereof, and the electrical hook-up shall be by others.

**VALVES**  
BOTTLE, or approved equal, electric valves shall be installed per manufacturer recommendations, and as per details. All valves are to be installed in a 10" Arvalve valve box, see details.

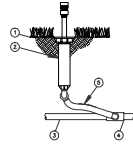
**RAIN SENSOR**  
Vial-Click rain sensor shall be installed, per manufacturer recommendations. Rain sensor location shall be approved by the Landscape Architect.

**IRIGATION NOTE:**

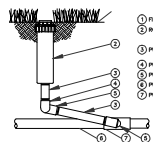
ALL LANDSCAPE AREAS TO RECEIVE 100% IRRIGATION COVERAGE WITH 20% OVERLAP MINIMUM TO BE FULLY IRRIGATED WITH A "PROGRAMMABLE" CONTROLLER, LOW VOLTAGE VALVES AND RAIN SENSOR.

**NOTE:** Main line & valve locations are shown for graphic clarity only. All main lines & valves are to be located within landscape swatch on-site.

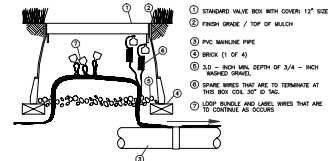
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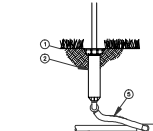
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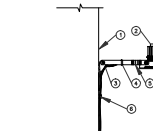
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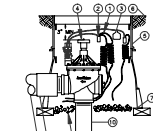
**7\"/>**



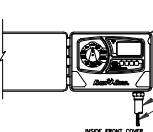
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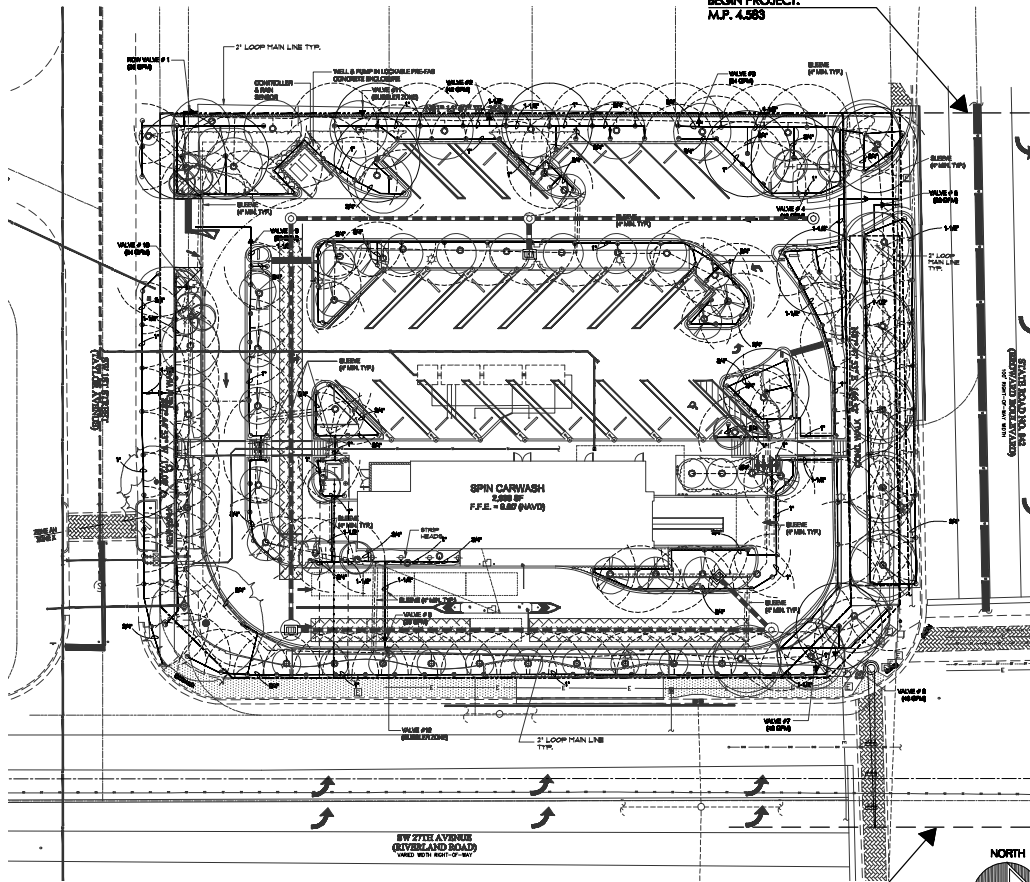
**2\"/>**



**3\"/>**



**4\"/>**



- IRIGATION NOTES:**
- The irrigation system shall use the lowest quality water available which adequately and safely meets the water needs of the system. Storm water, rooftop water, or gray water irrigation shall be used whenever possible.
  - FDOT requires 24-hour emergency access to water sources.
  - Contractor shall provide FDOT Check Closures Manager with a set of "As-Built" irrigation plans.

**Irrigation Plan**

**IRIGATION NOTE:**  
ALL NEW TREES & PALMS TO RECEIVE RUBBER HEADS

**END PROJECT:**  
M.P. 4.630

**SCALE:** 1"=20'

FDOT Landscape Permit Number 2020-L-491-0005

Digitaly signed by Daniel Carter  
Date: 2021.03.05  
09:57:48 -05'00"

REVISIONS	BY
7.26.16 Permit Start	
11/27/16 Per revised Site Plan & City Comments	PL
07/25/17 Per revised Site Plan	PL
08/15/17 Per City review comments & PPL Review	PL
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03/16/18 Per meeting w/ City (KCP) On Street/ Sidewalk	PL
08/27/18 Per revised Site Plan	PL
05/14/20 Per FDOT review 07/04/20 Per FDOT review	PL

DESIGNED BY:  
**CARTER & ASSOCIATES LANDSCAPE ARCHITECTS INC.**  
74 N.E. 8th Ave. Delray Beach, FL 33483  
561-272-9621 ecnclainc@bellsouth.net LA 881

Landscape for:  
**SPIN CAR WASH**  
2700 WEST BROWARD BOULEVARD  
FORT LAUDERDALE, FLORIDA 33312

DRWN	DB/PL
CHKD	D.H.C.
DATE	07.26.16
SCALE	1" = 20'
NO. IN CH.	81814
REV	

**L-4**  
OF 4 SHEETS

**811** Know what's below.  
Call before you dig.

<b>SECTION No.:</b>	<b>860060000</b>
<b>Permit No.:</b>	<b>2020-L-491-00005</b>
<b>COUNTY:</b>	<b>Broward</b>
<b>S.R. No.:</b>	<b>842</b>

## **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 842 (Broward Boulevard) from M.P.4.630  
to M.P. 4.583

**Permit:** 2020-L-491-00005  
**Maintaining Agency:** City of Fort Lauderdale  
**RLA of Record:** Dan Carter  
**Date:** October 23, 2020

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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**

*Mulch: The contractor shall maintain a 2” clear zone of mulch, away from the trunks of all trees, palms, shrubs plants & ground covers.*

*Pruning: The contractor shall disinfect and cleanse all trimming & pruning equipment prior to performing any work at this site.*

*Trimming Heights:*

*Simpson stopper to be maintained @ 30” above the average grade level of the planting area.  
Ixora, red to be maintained @ 20-24” above the average grade level of the planting area.*

*Green Island Ficus to be maintained, as a solid mass planting @ 12-15" above the average grade level of the planting bed.*

*Blue Pacific Juniper to be maintained, as a solid mass planting 4-6" above the average grade level of the planting bed.*

*Royal Palms shall have all brown, or dying fronds, and seed pods, removed immediately.*

*Bulbine, ground cover to be allowed to grow naturally and kept at a height of 12-15" oa. height. This material is not to be trimmed as a hedge form. All brown leaves & flowers to be removed on a regular basis*



## 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)