



Florida Department of Transportation

RICK SCOTT
GOVERNOR

3400 West Commercial Boulevard
Fort Lauderdale, FL 33309-3421

OFFICE OF THE
SECRETARY

February 23, 2011

Ms. Wendy Gonyea
Assistant City Clerk
City of Fort Lauderdale
100 N. Andrews Avenue, 7th Floor
Fort Lauderdale, Florida 33301

CITY CLERK
2012 FEB 27 PM 1:32

Dear Ms. Gonyea:

RE: District Four (4) Amendment Number One (1) Inclusive Maintenance Memorandum of Agreement (MOA) for State Road 838 (Sunrise Boulevard) from east of N.E. 20th Avenue (M.P. 0.180) to middle River Drive (M.P. 0.314) FM# 422866-1-52-01.

Enclosed is one (1) original executed Amendment Number One (1) Maintenance Memorandum of Agreement (MOA) for improvements to be installed along State Road 838 (Sunrise Boulevard) in the City of Fort Lauderdale under Financial Management #422866-1-52-01.

If you have any questions or need further information, please contact me at (954) 777-4219.

Sincerely,

Elisabeth A. Hassett, R.L.A.
District Landscape Architect

Enclosures
CC: S. Petersen, P.E.
File

SECTION NO: 860005
S.R. NO(S): 838
COUNTY: Broward
FM NO.(S): 422866-1-52-01

**DISTRICT FOUR (4) AMENDMENT # ONE (1)
TO STATE OF FLORIDA DEPARTMENT OF TRANSPORTATION AND
CITY OF FORT LAUDERDALE LANDSCAPE
INCLUSIVE MEMORANDUM OF AGREEMENT**

This is Amendment Number One to the Agreement dated December 12, 2007, made and entered into this 23rd day of February, 2012 by and between the State of Florida Department of Transportation hereinafter called the "DEPARTMENT" and the City of Fort Lauderdale, a municipal corporation of the State of Florida, hereinafter called the "AGENCY".

WHEREAS, the parties entered into the Inclusive Maintenance of Agreement dated December 12, 2007, for the purpose of maintaining the landscape improvements by the AGENCY on various State Roads including State Road 838 (Sunrise Boulevard) and

WHEREAS, the DEPARTMENT and the AGENCY have agreed to add additional landscape improvements to be installed on State Road 838 (Sunrise Boulevard) in accordance with the above referenced Agreement;

WHEREAS, this Amendment shall also clarify the limits of this Inclusive Maintenance Memorandum of Agreement

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

1. Pursuant to paragraph 13 of the Inclusive Agreement for State Road 838 (Sunrise Boulevard) dated December 12, 2007 the DEPARTMENT has decided to construct additional landscape improvements or to modify an improvement located as indicated in Exhibit A, on State Road 838 (Sunrise Boulevard) from east of N.E. 20th Avenue (M.P. 0.180) to Bayview Drive (M.P. 0.447) in accordance with the plans attached as Exhibit B. The limits of this Inclusive Maintenance Memorandum of Agreement are restated more accurately in Exhibit A.
2. The AGENCY shall agree to maintain the landscape improvements in the Inclusive Agreement described above and as provided in accordance with the Maintenance Plan, attached as Exhibit C.
3. The DEPARTMENT agrees to enter into a contract to have installed said landscape improvements for an amount as indicated in Exhibit D not to exceed **\$270,200.00.**

4. The AGENCY shall agree to maintain the Specialty Surfacing improvements in the Inclusive Agreement described above and provided in accordance with the Maintenance Plan, attached as Exhibit E.
5. AGENCY shall utilize the U.S. Department of Homeland Security's E-Verify system, in accordance with the terms governing use of the system, to confirm the employment eligibility of;
 - (1) All persons employed by the AGENCY during the term of the Contract to perform employment duties within Florida; and
 - (2) All persons, including subcontractors, assigned by the AGENCY to perform work pursuant to the contract with the DEPARTMENT.

Except as modified by this amendment, all terms and conditions of the Agreement shall remain in full force and effect.

Exhibits

- Exhibit A – Landscape Improvements Location & Maintenance Boundaries
- Exhibit B – Landscape Improvements Plans
- Exhibit C – Maintenance Plan for Landscape Improvements
- Exhibit D – Approximate Cost for Landscape Improvements
- Exhibit E – Specialty Paver Maintenance

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

WITNESSES:

Safeea Ali
Safeea Ali
Print Name
Dina D. Penedo
Dina D. Penedo
Print Name

(SEAL)

CITY OF FORT LAUDERDALE

By John P. Seiler
JOHN P. "JACK" SEILER, Mayor

By Lee R. Feldman
LEE R. FELDMAN, City Manager

ATTEST:

ATTEST:

 JONDA K. JOSEPH, City Clerk

Approved as to form:

Assistant City Attorney

STATE OF FLORIDA
DEPARTMENT OF TRANSPORTATION

By: Gary O'Reilly
Transportation Development Director

Date

Attest: Henry S. Uyso (SEAL)
Executive Secretary

Approved as to Form


Office of the General Counsel

Date _____

The seal of the State of Florida Department of Transportation is a circular emblem. It features a map of Florida in the center, with a road winding through it. The words "STATE OF FLORIDA" are written along the top arc, and "DEPARTMENT OF TRANSPORTATION" along the bottom arc.

SECTION NO: 860005
S.R. NO(S): 838
COUNTY: Broward
FM NO.(S): 422866-1-52-01

EXHIBIT A

PROJECT LOCATION AND LANDSCAPE IMPROVEMENTS MAINTENANCE BOUNDARIES

I. ROADWAY PROJECT LOCATION:

State Road 838 (Sunrise Boulevard) from east of N.E. 20th Avenue (M.P. 0.180) to Middle River Drive (M.P. 0.314)

II. INCLUSIVE LIMITS OF LANDSCAPE IMPROVEMENTS MAINTENANCE FOR State Road 838 (Sunrise Boulevard):

SR 838 (Sunrise Blvd.) Section 86110000

M.P. 5.789 (east of N.W. 24th Ave.) to M.P. 8.161 (SR 5/US 1)
Entire right of way

SR 838 (Sunrise Blvd) / SR 5 (US 1/Federal Hwy.) Section 86020000

M.P. 1.060 (SR 838/Sunrise Blvd.) to M.P. 1.911 (N.E. 18th Ave.)
Entire right of way

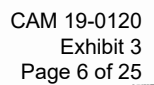
SR 838 (Sunrise Blvd.) Section 86005000

M.P. 0.000 (N.E. 18th Ave.) to M.P. 1.191 (SR A1A)
Entire right of way

III. LANDSCAPE IMPROVEMENTS MAINTENANCE MAP FOR THIS ROADWAY PROJECT:

State Road 838 (Sunrise Boulevard) from east of N.E. 20th Avenue (M.P. 0.180) to Bayview Drive (M.P.0.447)

See attached location map



SECTION NO: 860005
S.R. NO(S): 838
COUNTY: Broward
FM NO.(S): 422866-1-52-01

EXHIBIT B

LANDSCAPE IMPROVEMENT PLANS

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

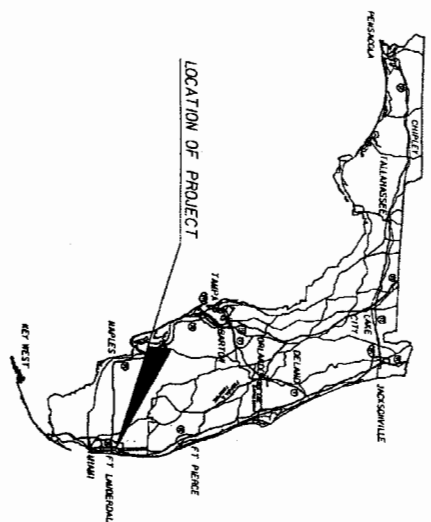
**Please see attached plans prepared by: Miller Legg
Brian Shore, RLA**

Dated: October 20, 2011

LANDSCAPE PLANS

BROWARD COUNTY (86005000)
STATE ROAD NO. 838/SUNRISE BLVD.
BRIDE # 860061 OVER MIDDLE RIVER

SHEET NO.	SHEET DESCRIPTION
LD-1	KEY SHEET
LD-2	TABULATION OF QUANTITIES / PLANT SCHEDULE
LD-3	GENERAL NOTES
LD-4 - LD-5	LANDSCAPE DETAILS
LD-6	LANDSCAPE NOTES & DETAILS
LD-7	LANDSCAPE PLAN



LANDSCAPE SHOP DRAWINGS
TO BE SUBMITTED TO:
BRIAN R. SHORE, RLA
MILLER LEO
574 NORTH ANDREWS WAY
FORT LAUDERDALE, FLORIDA 33309

PLANS PREPARED BY:

MILLER LEGG
3747 North Andrews Way • Port Lauderdale, Florida • 33309
954-636-7000 • Fax 954-636-8864 • www.millerlegg.com
Contact: Mr. C. MUD • Vendor: P-630563667
Certification of Authorization: LDD000357

NOTE: THE SCALE OF THESE PLANS MAY HAVE CHANGED DUE TO REPRODUCTION.

11-0-01

KEY SHEET REVISIONS	
DATE	DESCRIPTION

LANDSCAPE PLANS
LANDSCAPE
ARCHITECT OF RECORD: BRIAN R. SMORE, P.L.A.R.L.A. NO. 6566770

FISCAL YEAR	SHEET NO.
13	LD-1

**MAINTENANCE OF AGREEMENT
NOT FOR CONSTRUCTION**

FDOT PROJECT MANAGER: SCOTT J. PETERSON, P.E.

P&F ITEM NO.	PAY SITE	S/V	BOTANICAL NAME	COMMON NAME	INSTALLED SIZE	MAXIMUM MAINTAINED SIZE	SPACING	REMARKS	UNIT	SHEET NUMBERS		TOTAL THIS SHEET	
										LD-7	FINAL	PLAN	FINAL
500-1-1	SHRUBS & GRASS COVERS (SMALL)												
500-1-1	SMALL	CNH	Chrysobalanus icaco "No. 120000"	Horizontal Coccolum	18"x18", 3601	Natural	24" O.C.			EA	340		340
500-1-1	SMALL	FOI	Ficus microcarpa	Green 1st and Ficus	18"x18", 1601	Natural	20" O.C.			EA	490		490
500-1-1	SMALL	HAI	Hamelia patens "Coccolito" Green Island	Dark Firebush	24"x24", 3601	Natural	24" O.C.			EA	195		195
500-1-1	SMALL	IUS	Illex vomitoria "Stokes Dwarf"	Stokes Dwarf Yew	18"x18", 1601	Natural	20" O.C.			EA	400		400
500-1-1	SMALL	LAM	Leontidea camara "New Gold"	Leontide New Gold	12"x12", 1601	Natural	12" O.C.			EA	635		635
500-1-1	SMALL	MOH	Muhlenbergia capillaris	White Grass	12"x6", 1 601	Natural	24" O.C.			EA	693		693
500-1-1	SMALL	ZAF	Zodia floribunda	Corn Ice	12"x12", 3601	Natural	24" O.C.			EA	400		400
500-1-1	SMALL	ZAL	Zodia maritima	Caribbean Moon Palm	24"x24", 7601	Natural	36" O.C.			EA	55		55
500-1-2	TREES & PALMS (LARGE)												
500-1-2	LARGE	PO	Phoenix decylifera "Majesty"	Majesty Date Palm	6" CM	Natural	As Shown	16"-18" DBH, Fl. Fancy		EA	4		4
500-1-2	LARGE	BS	Bursera simaruba	Guano Limbo	16" H, 46 50P	Natural	As Shown	Over Sized Root Ball		EA	4		4
500-1-2	LARGE	CE	Conocarpus erectus "Sparticus"	Silver Billion Wood	10" H, 44 50P	Natural	As Shown	Over Sized Root Ball		EA	5		5
500-1-2	LARGE	CS	Cordia alliodora	Orange Pepper	10" H, 44 50P	Natural	As Shown	Over Sized Root Ball		EA	11		11
500-1-2	LARGE	CU	Coccoloba uvifera	Seagrape	10" H, 44 50P	Natural	As Shown	Over Sized Root Ball		EA	12		12
500-1-2	LARGE	OS	Quercus laevis	Lignum vitae	10" H, 44 50P	Natural	As Shown	Over Sized Root Ball		EA	5		5
500-1-2	LARGE	OV	Quercus virginiana	Live Oak	16"-18" DBH	Natural	As Shown	Over Sized Root Ball		EA	8		8

V:\V\o\KLS\2010\00-0017-...-T001-IV-8.ML\SUN\146.C\003\4422065\200\00000001\T\A001\0001\0001

11-02-2011

LANDSCAPE GENERAL NOTES:

1. LANDSCAPE: Pruning and installation work shall be performed by a Contractor Certified by the Florida Nurserymen, Growers and Landscape Association (FNGCLA) as a Certified Landscape Contractor. Any pruning to be supervised by a Certified Arborist, certified by The International Society of Arboriculture (ISA) and licensed in Broward County.

2. PLANTING SOIL: Provide a consistent mix of 40% mulch (weed-free organic material) / 50% Sand / 10% Peat. The planting soil mix shall be blended with the loosened native soil backfill at a 50/50 ratio. A non-soluble wetting agent per manufacturer's recommendation to be added to all trees and palms at time of planting.

3. SOD: Provide 5t. Augustine Sod per notes and plans. Refer to Roadway plans for other sod areas.

4. MULCH: A consistent 3" layer of shredded melaleuca Grade B mulch or better shall be spread over all existing and/or planting beds per Index 544 standards (except within 6" of plant trunks).

5. FERTILIZATION: Provide at a minimum, one (1) application at time of planting and two (2) applications per year. A schedule of fertilization based upon the Manufacturer's recommended rates shall be submitted by the Contractor at the pre-construction meeting.

AT TIME OF PLANTING: Fertilize with planting tablets 20-10-5 plus minors. Do not place tablets in bottom of hole; tablet shall be 1/3 from the bottom of the rootball as per manufacturer's specification.

ESTABLISHMENT PERIOD OF PLANT MATERIAL: Fertilizer for dicot trees, shrubs and ground covers shall be of 6% nitrogen, 6% phosphorus and 6% potassium with minor elements composition analysis. Fertilizer for palms shall be "palm fertilizer" of 13% nitrogen, 3% phosphorus, and 13% of potassium composition analysis with minor elements. Contractor shall apply granular fertilizer at the manufacturer's recommended rates. Contractor reserves the right to modify N-P-K ratio and shall submit product data sheets for review and acceptance prior to any installation of plant material consistent with the above criteria.

6. WATERING: At the pre-construction meeting, the Contractor to furnish to the Department a watering schedule beginning immediately after installation of plant material through the establishment/warranty period.

A. All watering applications required during Plant Establishment Period and Warranty Period and its source to be included as part of the unit price for each plant material. Contractor to adjust watering schedule during heavy rain season upon approval by Project Engineer.

7. SIGHT VISIBILITY CRITERIA: The clear zones on the main travel/through lanes for this project are based on a design speed of 45 MPH.

8. UNIT PRICES: Furnish to the Department a unit price breakdown for all materials. The Department may, at its discretion, add or delete from the materials utilizing the unit price breakdown submitted. This unit price breakdown to be provided by the Contractor at the Pre-Construction meeting.

9. CLEARING & GRUBBING: Refer Landscape Plans and Roadway plans for other Clearing and Grubbing areas.

10. Where existing trees are shown to remain within proposed plant beds, there will be no excavation for bed preparation or, no new soil added within the drip line of the canopy. All existing trees/plantings damaged or destroyed by the contractor during construction or warranty period will be replaced with like size and kind to the satisfaction of the Engineer at no expense to the Department.

11. MAINTENANCE CARE: Existing plants to remain within project limits are to be maintained during the construction period and until final project acceptance. Keep existing plants watered, fertilized, mulched, free of undesirable weeds, pruned, treated for pests and diseases as necessary to assure that the existing plants are maintained so that they are healthy and vigorous. Maintenance care to be included in 580-1-1 small plants and 580-1-2 large plants.

12. TREE PROTECTION: Install Tree Protection Barricade per Index 544 for existing trees large shrub plantings as directed by the Engineer.

13. MOWING AND LITTER CONTROL: Refer to Roadway Plans.

14. PRE-CONSTRUCTION INSPECTION: Perform an inspection with existing maintaining agency and Department representatives prior to beginning construction to document the condition of existing landscape and irrigation systems to remain.

UTILITIES GENERAL NOTES:

1. Two full business days prior to digging, the Contractor shall call Sunshine State One Call of Florida. The utility owner and request utility locations. A Contractor's representative must be present when utility companies locate their facilities.

MAINTAINING AGENCY CONTACTS

1. Inspection and acceptance of the landscape and irrigation must be obtained from the maintaining authorities prior final acceptance.

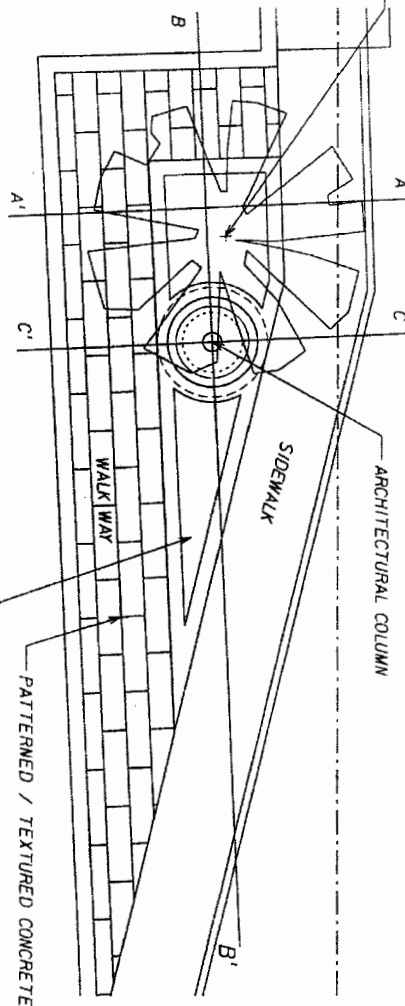
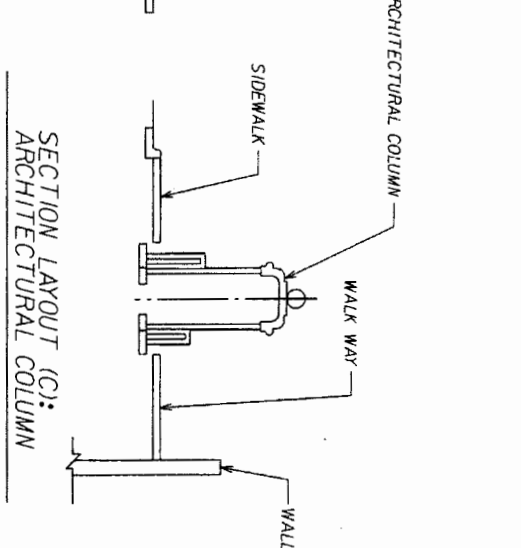
A. City of Fort Lauderdale (CoFL):

Peter Partington, CoFL
Phone: 954-028-5640

REVISIONS				STATE OF FLORIDA				DEPARTMENT OF TRANSPORTATION		GENERAL NOTES	
DATE	BY	DESCRIPTION	DATE	NO.	DESCRIPTION	ROAD NO.	COUNTY	FINANCIAL PROJECT ID	SHEET NO.	LD-3	
						5A-838	BROWARD	422066-1-52-04			



11-02-01
11-02-01
11-02-01

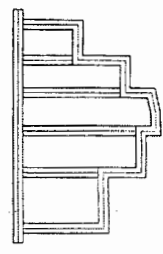


PLAN LAYOUT: SE ICON

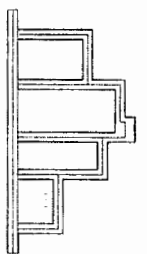
10/10/11

V1970 JACS 120(10):2014, -7 Oct 1998, 14, 838, Summary, Chao J, Wang Z, 20665303, Wnt1 and Wnt2, 16610610

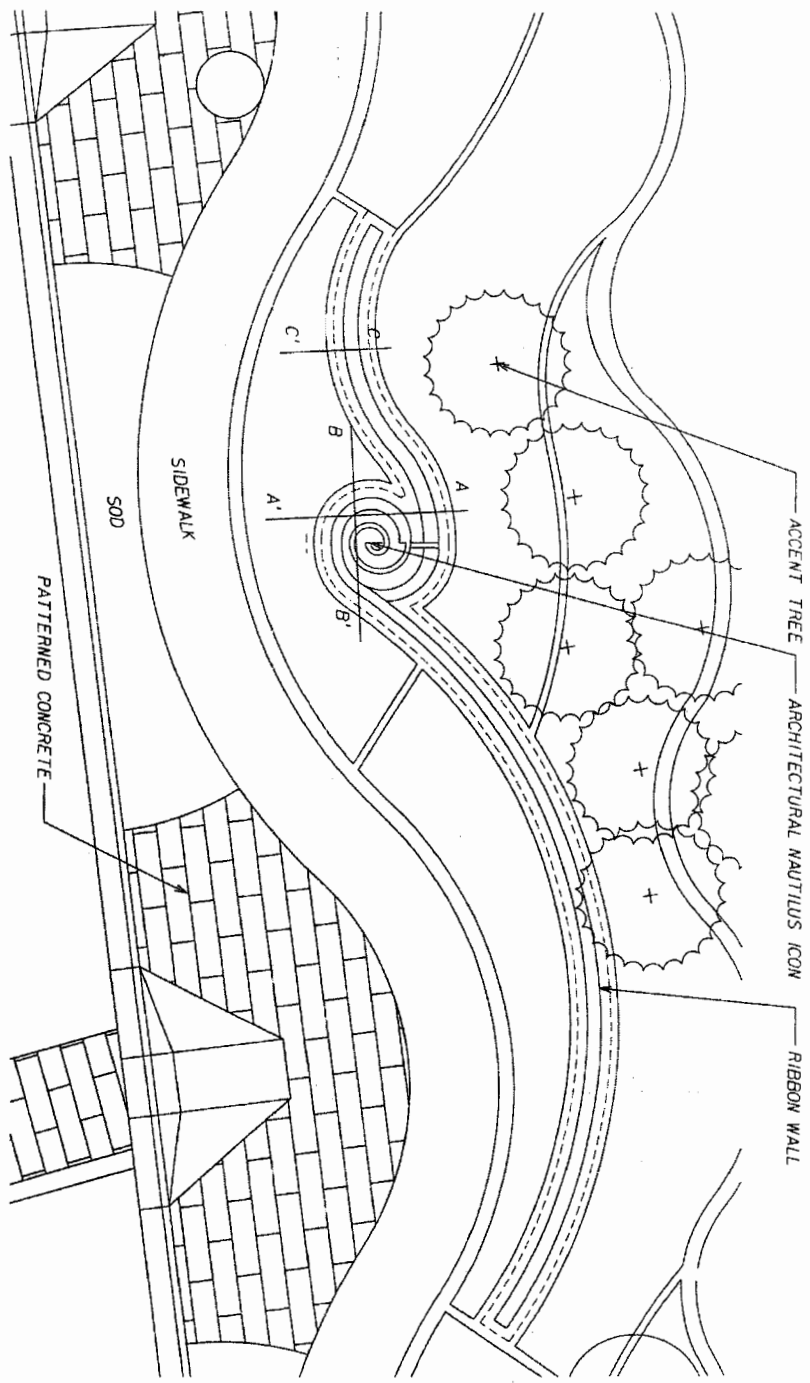
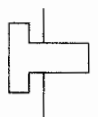
SECTION (A): ARCHITECTURAL
NAUTILUS ICON



SECTION (B): ARCHITECTURAL
NAUTILUS ICON



SECTION (C): RIBBON WALL

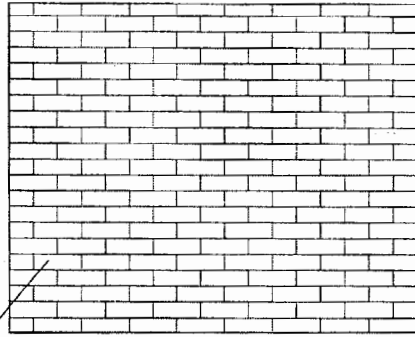


PLAN LAYOUT: ARCHITECTURAL NAUTILUS ICON

DATE	DESCRIPTION	REVISIONS	DATE
<p>MILLER LEGG 5741 North Andrews Hwy., Fort Lauderdale, Florida 33309 954-567-9000 Fax 954-567-9001 www.millerlegg.com One of Miller Legg's 117,000,000 sq. ft. of projects in 15 states and 10 countries</p>			
<p>STATE OF FLORIDA DEPARTMENT OF TRANSPORTATION ROAD NO. COUNTY FINANCIAL PROJECT ID</p>		<p>SR-838 BROWARD 422066-1-52-01</p>	
<p>LANDSCAPE DETAILS</p>		<p>SHEET NO. LD-5</p>	

*Completed
10-27-11*

HARDSCAPE DETAIL PATTERNED CONCRETE

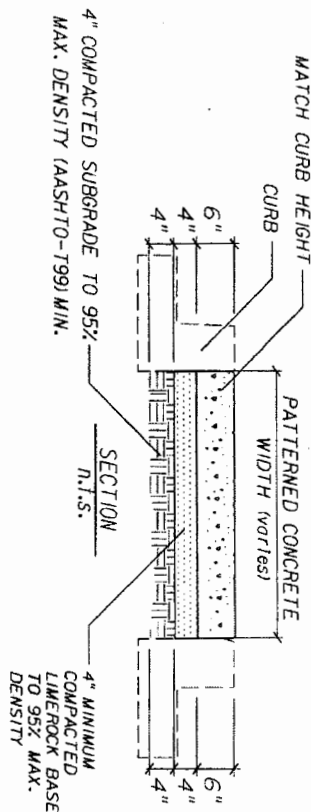


PLAN VIEW-PATTERN LAYOUT

N.T.S.

1. Colors: Brick Red
2. Pattern: Running Bond Pattern.
3. Install patterned concrete as per the plan and details.
4. Limerock base to be included with concrete installation.
5. GUARANTEE: Contractor to warranty patterned concrete and installation for one (1) year after final acceptance.
6. Contractor to have a min. 5 yrs. experience installing patterned concrete.
7. Submit on method of installation, color, product literature, manufacturer and evidence of experience.

PATTERNED CONCRETE
Running Bond Pattern

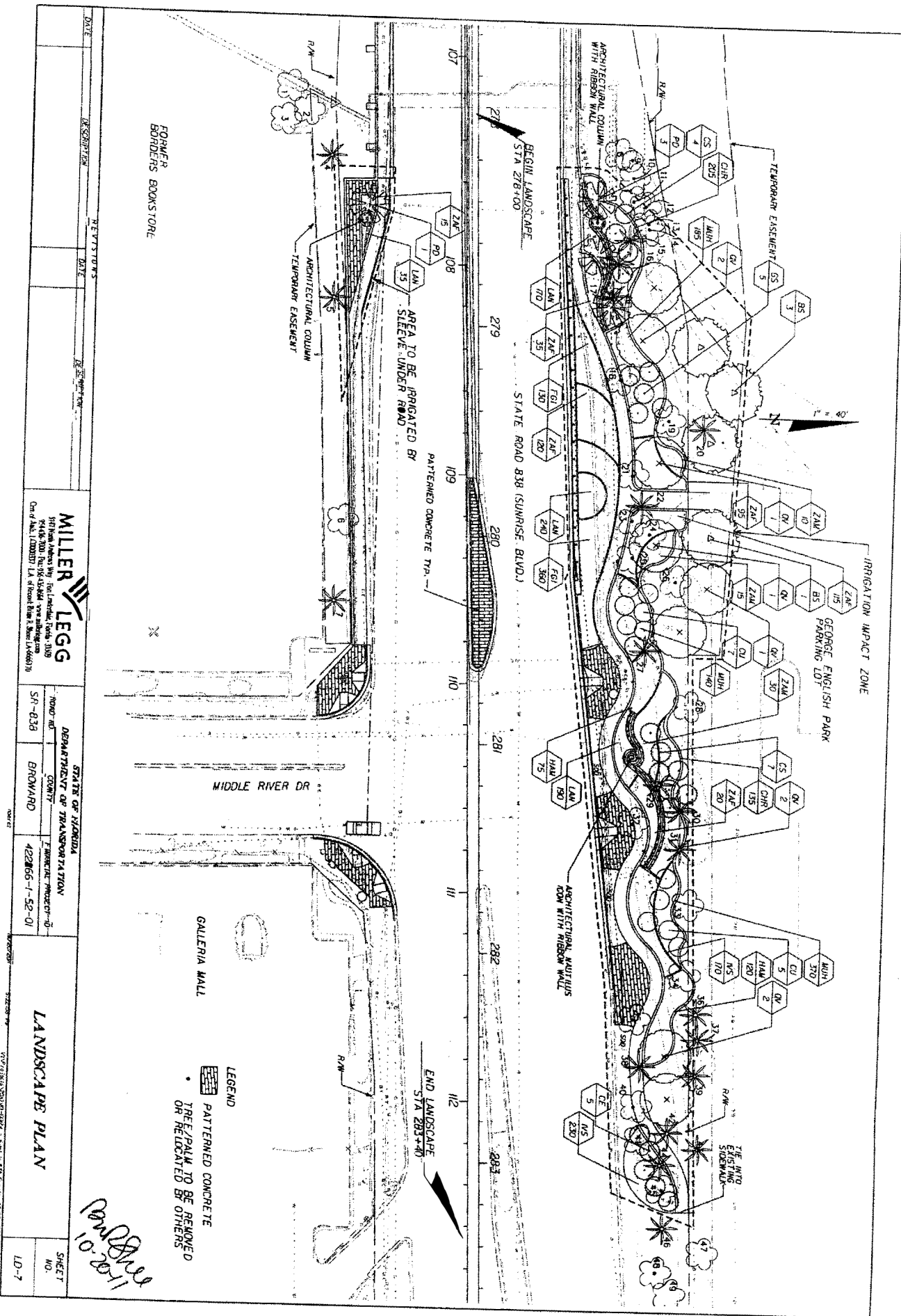


REVISIONS		STATE OF FLORIDA		DEPARTMENT OF TRANSPORTATION		SHEET	
DATE	DESCRIPTION	ROAD NO.	COUNTY	FINANCIAL PROJECT ID	PROJECT NO.	NO.	NO.
		SR-838	BROWARD	422866-1-52-01		LD-6	

MILLER LEGG
3719 North Adams Way, Fort Lauderdale, Florida 33309-3304
954-565-7000 Fax: 954-565-6664 www.millerlegg.com
One of AIAA-100000017 L.A. of Broward County is State L.A. 66670

HARDSCAPE NOTES & DETAILS

11-10-20
P. 10-20



SECTION NO: 860005
S.R. NO(S): 838
COUNTY: Broward
FM NO.(S): 422866-1-52-01

EXHIBIT C

MAINTENANCE PLAN FOR LANDSCAPE IMPROVEMENTS

This Exhibit forms an integral part of the DISTRICT FOUR (4) Amendment to the State of Florida Department of Transportation and City of Fort Lauderdale Inclusive Maintenance Memorandum of Agreement between the State of Florida, Department of Transportation and the AGENCY.

Dated: October 6, 2011

MAINTENANCE PLAN

Landscape Improvements

Project State Road No(s): 838 (Sunrise Boulevard)
Project Limits: MP 0.180 to MP 0.314
FM No(s): 424866-1-52-01
Maintaining Agency: City of Fort Lauderdale
RLA of Record: Brian R. Shore
Date: 10-6-2011

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 Design Standards*, *FDOT Plans Preparation Manual Vol. I, Chapter 2.11* 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. 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 (with particular attention to fronds and fruit) must be maintained to prevent potential roadway and pedestrian hazards. 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 planting plans. (See Part II. Specific Requirements and Recommendations per approved landscape & irrigation design for these guidelines). The understory plant materials selected for use within the restricted planting areas (Limits of Clear Sight) are to be maintained at a height in compliance with *FDOT Design Standards* Index 546; Page 6 of 6, Window Detail. Vertical tree heights must meet *FDOT Maintenance Rating Program* (MRP) standards.

Staking and Guying:

All staking materials, except for replacements, are to be removed by the completion of FDOT warranty period or at one year (whichever comes first). Any subsequent staking and guying activities by the Agency must adhere to *FDOT Design Standards* guidelines (See Index 544). 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 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 if 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 general use permit is required from FDOT for approval by the FDOT District Landscape Architect.

Hardscape (Specialty Surfacing):

All specialty surfacing shall be maintained in such a manner as to prevent any potential tripping hazards and protect damage to the pavers. 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 surfaces become damaged, they shall be replaced with the same type and specification as the approved plan.

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, 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*.

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.

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)

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:

Plant materials near decorative wall are to be maintained in their natural form to enhance the aesthetics of the wall as an entry feature.

Decorative walls / Vertical surfaces are to be maintained and when determined necessary, painted, repaired when damaged or replaced.

A recommended maintenance application of Colorcure Concrete Sealer, Lithochrome Colorwax or equivalent may be made after the original coat has weathered or worn from the surface. The appropriate tech-data A-514 Lithochrome Colorwax, A-634 Colorcure Concrete Sealer or equivalent must be read completely before using.

See manufacturer's guidelines for further maintenance responsibilities.

See the reference links below for further information:

<http://www.scofield.com/tdbpdf/ChromixTD11-98.pdf>

<http://www.scofield.com/>

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 Videos (ADA)

<http://www.access-board.gov/news/sidewalk-videos.htm>

Americans with Disabilities Act (ADA) (ADAAG)

<http://www.ada.gov/NPRM2008/adastandards/adastds08.pdf>

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://www.treespecialists.com/pdfs/pruningstandards.pdf>

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

<http://www.doacs.state.fl.us/pi/pubs.html>

Florida Department of Community Affairs (DCA), *Florida Board of Building Codes & Standards, 2007 Florida Building Code, Chapter 11 Florida Accessibility Code for Building Construction Part A*

http://www2.iccsafe.org/states/florida_codes/

Florida Department of Transportation, *FDOT Design Standards for Design, Construction, Maintenance and Utility Operations on the State Highway System, Index 544 Landscape Installation*

<http://www.dot.state.fl.us/rddesign/rd/RTDS/10/544.pdf>

Florida Department of Transportation, *FDOT Design Standards for Design, Construction, Maintenance and Utility Operations on the State Highway System, Index 546 Sight Distance at Intersections*

<http://www.dot.state.fl.us/rddesign/rd/RTDS/10/546.pdf>

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

<http://www.dot.state.fl.us/rddesign/rd/rtds/10/600.pdf>

Florida Department of Transportation, *FDOT Design Standards for Design, Construction, Maintenance and Utility Operations on the State Highway System, Index 700 Roadside Offsets*

<http://www.dot.state.fl.us/rddesign/rd/RTDS/10/700.pdf>

Florida Department of Transportation, *FDOT Plans Preparation Manual (PPM) Vol. I Chapters 2.11.5, Horizontal Clearance to Trees; Table 2.11.9 Horizontal Clearance and Clear Zone; Figure 4.1.2 Clear Zone; and Table 25.4.11.1 Clear Zone Width (feet) and Table 25.4.14.6 (for existing) trees*

<http://www.dot.state.fl.us/rddesign/PPMManual/2009/Volume1/zChap02.pdf>

Florida Department of Transportation, *FDOT Standard Specifications for Road and Bridge Construction, Section 580 Landscape Installation*
<ftp://ftp.dot.state.fl.us/LTS/CO/Specifications/SpecBook/2010Book/580.pdf>

Florida Department of Transportation, Landscape Architecture Website
<http://www.dot.state.fl.us/emo/beauty/FLA.shtm>

Florida Department of Transportation, *Maintenance Rating Program Handbook*
<http://ombnet.dot.state.fl.us/procedures/bin/850065002.pdf>

Florida Department of Transportation, *Maintenance Rating Program Standards*
<http://www.dot.state.fl.us/statemaintenanceoffice/MRPHandbook2009Final.pdf>

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

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

Florida Power and Light (FPL), *Plant the Right Tree in the Right Place*
www.FPL/trees

Guide to Roadside Mowing and Guide to Turf Management, available for purchase
<http://infonet.dot.state.fl.us/SupportServicesOffice/plist.htm>

Interlocking Concrete Pavement Institute (ICPI)
<http://www.icpi.org/>

International Society of Arboriculture (ISA)
www.isa-arbor.com

U.S. Department of Transportation, Federal Highway Administration, *Manual on Uniform Traffic Control Devices*
<http://www.mutcd.fhwa.dot.gov>

SECTION NO: 860005
S.R. NO(S): 838
COUNTY: Broward
FM NO.(S): 422866-1-52-01

EXHIBIT D

APPROXIMATE COST FOR LANDSCAPE IMPROVEMENTS

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

Dated: October 6, 2011

I. APPROXIMATE PROJECT COST: \$ 270,200.00



SR-838 Sunrise Boulevard - Middle River Bridge

Landscape Component Plan

Opinion of Probable Cost - prepared by: Miller Legg

10/6/2011



Item	Description	Quantity	Unit	Unit Cost	Cost	Subtotal
Large Trees & Palms						
Medjool Date Palm	6' GW, 16'-18'oah, Fl. Fancy, Over Sized Root Ball	4	Ea.	\$8,000.00	\$ 32,000.00	
Gumbo Limbo	16'htx6'spr., 5' CT, 2.5" DBH, FG, Over Sized Root Ball	4	Ea.	\$650.00	\$ 2,600.00	
Silver Button Wood	10'htx4'spr. 4' CT, 2" DBH, FG, Multi., Over Sized Root Ball	5	Ea.	\$650.00	\$ 3,250.00	
Orange Geiger	10'htx4'spr. 4' CT, 2" DBH, FG, Over Sized Root Ball	11	Ea.	\$650.00	\$ 7,150.00	
Lignumvitae	10'htx4'spr. 4' CT, 2" DBH, FG, Over Sized Root Ball	5	Ea.	\$650.00	\$ 3,250.00	
Seagrape	10'htx4'spr. 4' CT, 2" DBH, FG, Multi., Over Sized Root Ball	12	Ea.	\$650.00	\$ 7,800.00	
Live Oak	16'-18' oah, 5' CT, 2.5" DBH, FG, Over Sized Root Ball	8	Ea.	\$1,200.00	\$ 9,600.00	
Subtotal					\$	65,650.00
Shrubs & Groundcovers						
Horizontal Cocoplum	18"x18", 3Gal.	340	EA	\$ 8.50	\$ 2,890.00	
Green Island Ficus	18"x18", 1Gal.	490	EA	\$ 8.00	\$ 3,920.00	
Dwarf Firebush	24"x24", 3Gal.	195	EA	\$ 9.00	\$ 1,755.00	
Stokes Dwarf Yaupon	12"x12", 1Gal.	400	EA	\$ 8.00	\$ 3,200.00	
Lantana New Gold	12"x12", 1Gal.	635	EA	\$ 5.50	\$ 3,492.50	
Muhly Grass	12"x6", 1 Gal.	695	EA	\$ 6.75	\$ 4,691.25	
Coontie	12"x12", 3Gal.	400	EA	\$ 12.50	\$ 5,000.00	
Cardboard Plant/Palm	24"x24", 7Gal.	55	EA	\$ 45.00	\$ 2,475.00	
Subtotal					\$	27,423.75
Hardscape - Surface Treatments						
Bus Plaza - patterned concrete texture	4", Scored / Color concrete	60	SY	\$60.00	\$ 3,600.00	concrete included in Roadway
Cross Walk Plaza - patterned concrete texture	4", Scored / Color concrete (4 locations)	200	SY	\$60.00	\$ 12,000.00	concrete included in Roadway
Median - 6" Concrete	6" Standard Concrete	70	SY	\$45.00	\$ 3,150.00	
Median - patterned concrete texture	6", Scored / Color concrete	70	SY	\$60.00	\$ 4,200.00	
SE quadrant Sidewalk - patterned concrete texture	Barrier wall sidewalk area	45	SY	\$60.00	\$ 2,700.00	concrete included in Structures
Patterned/Textured/Colored Asphalt	Crosswalk - East	150	SY	\$110.00	\$ 16,500.00	asphalt included in Roadway
Patterned/Textured/Colored Asphalt	Crosswalk - West	150	SY	\$110.00	\$ 16,500.00	asphalt included in Roadway
Patterned/Textured/Colored Asphalt	Crosswalk - South	100	SY	\$110.00	\$ 11,000.00	asphalt included in Roadway
Subtotal					\$	69,650.00
Architecture - Vertical Elements						
Gateway Icon Feature - w/ Column	match A-1-A Beachfront Feature	2	Ea.	\$10,000.00	\$ 20,000.00	
Precast Cap	on Gateway Column	2	Ea.	\$2,000.00	\$ 4,000.00	
Gateway Icon Signage panel	on Gateway Column Icon	2	Ea.	\$1,000.00	\$ 2,000.00	
Icon Feature	match A-1-A Beachfront Feature, Nautilus Spiral only	1	Ea.	\$15,000.00	\$ 15,000.00	
Ribbon Wall	undulating half-wall/half-curb	200	LF	\$175.00	\$ 35,000.00	
Subtotal					\$	75,000.00
Irrigation						
Irrigation	Tie into existing, adjust and add laterals, heads, taps, etc.	33,133	SF	\$0.95	\$ 31,476.25	
Subtotal					\$	31,476.25
Total Landscape Component Cost: \$						270,200.00
Available Funding / Budget						
Base Project Budget				\$	125,000.00	
Easement Funds				\$	85,200.00	
Grant Funding				\$	60,000.00	\$15,000.00 allocated for upgrade cost for decorative lighting not included in the landscape component plans
Total Funding				\$		270,200.00

V:\Projects\2010\10-00174 - Fdot Iv 838 Sunrise C8u03\Documents\Cost Estimates\OPC for MOA_10-21-11.xlsx

SECTION NO: 860005
S.R. NO(S): 838
COUNTY: Broward
FM NO.(S): 422866-1-52-01

EXHIBIT E

SPECIALTY SURFACING MAINTENANCE

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

1. On a biennial basis, the area of each crosswalk in the outside traffic lane on the project shall be tested for friction resistance in accordance with ASTM E 274-06. Friction resistance shall be no less than 30 FN40R or equivalent as specified in Table 1. Failure to achieve this minimum resistance shall require all lanes of the crosswalk to be friction tested to determine the extent of the deficiency. All deficient areas shall be removed to their full extent (lane-by-lane) and replaced with the same product installed initially. If more than 50% of the lanes in the intersection require replacement, the entire intersection installation may be reconstructed with a different product on the QPL.
2. The integrity of the specialty surfacing pavement shall be maintained throughout its life. The local AGENCY shall conduct biennial condition surveys of the specialty surfacing pavement for rutting, raveling, pot holes, delamination and cracking for the life of the adjacent pavement.
 - a. Unless the pavement adjacent to the crosswalk is also deficient in rutting, rutting depth of the specialty surfacing pavement shall not exceed 0.25". Remedial work shall include the full depth removal of the specialty surfacing payment across the full width of the lane and crosswalk.
 - b. Unless the pavement in the intersection is showing uniform raveling deficiencies, raveling, pot holes or delamination of the specialty surfacing pavement shall not exceed 0.25" in depth or more than 25 square inches in area. Remedial work shall include the patching of the specialty surfacing pavement in accordance with the manufacturer's instructions.

- c. Unless pavement adjacent in the intersection is deficient in cracking criteria, cracking width of the specialty surfacing pavement shall not exceed 1/8" for more than 10' in any lane of the crosswalk. Remedial work shall include as a minimum, the full depth removal of the specialty surfacing pavement along the complete length of the crack(s) and for the width recommended by the manufacturer.
3. The results of all friction tests and condition surveys shall be sent to the FDOT District Four Operations Warranty Coordinator at the local FDOT District Four Operations Center located at Broward Operations, 5548 NW 9th Avenue, Ft. Lauderdale, FL 33309 (954) 776-4300, with a cover letter either certifying that the crosswalks comply with the above stated requirements; or what remedial action will be taken to restore the friction and/or integrity of the crosswalk area.
4. When remedial action is required in accordance with the above requirements, the local AGENCY at its own expense shall complete all necessary repairs within 90 days of the date the deficiency was identified. However, if the circumstance requires and depending on the surface conditions of the payment, this period of time may be reduced.
5. Should the local AGENCY fail to satisfactorily perform any required remedial work in accordance with this agreement, the DEPARTMENT reserves the right to replace the patterned textured pavement with conventional pavement and bill the local AGENCY for this cost. No more than two full specialty surfacing pavement depth repairs shall be made to an area without first resurfacing the pavement to its full depth.

Table 1: Pavement Friction Number Conversions for Test Speeds Other Than 40 mph

30 mph Test Speed FN Results	To Convert to 40 mph Results	50 mph Test Speed FN Results	To Convert to 40 mph Results
<29	Subtract 1	<26	Add 1
29 to 47	Subtract 2	26 to 42	Add 2
48 to 67	Subtract 3	43 to 60	Add 3