# MODEL FLORIDA-FRIENDLY LANDSCAPINGTM MANAGEMENT CONTRACT

PREPARED FOR: [ ] BY: [ ]

This contract is intended to be a model landscape-maintenance contract for use by homeowners' associations and landscape contractors who intend to employ Florida-Friendly Landscaping<sup>TM</sup> Best Management Practices.

This model contract does not convey legal advice, does not purport to include all of the provisions that may be required to create a binding agreement to the satisfaction of the parties in any given circumstance, and does not create an attorney-client relationship between the user and the University of Florida. This model contract is based upon the laws of Florida and the United States at the time it was posted. These laws may change from time to time. In addition, local government law may apply. Users of this model contract should seek advice from an attorney before using this contract.

This contract can be modified by anyone who uses it to reflect site-specific conditions and negotiated terms. Many environmental and societal factors can affect the survival of a landscape installed at any given time and place. Implementation of BMPs described in this contract do not create any site-specific assurance that the landscape will perform to the satisfaction of the parties. Before installing a Florida Friendly Landscape the parties may wish to consult with a professional.

Home Owners' association documents, including but not limited to deed restrictions or covenants, may not prohibit or be enforced so as to prohibit any property Owner from implementing Florida-Friendly landscaping on the property Owner's land or to create any requirement or limitation in conflict with any provision of Part II of Chapter 373, Florida Statute (Fla. Stat.), or a water shortage order, other order, consumptive use permit, or rule adopted or issued pursuant to part II of Chapter 373. Fla. Stat. § 373.185

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The parties to this contract are(Owner), whose business address is
, and (Contractor), whose business address is  The parties mutually agree to be bound by this contract, including the appendices (Contract).
1. Description of Florida-Friendly Landscaping <sup>™</sup> Program
Florida-Friendly Landscapes protect Florida's unique natural resources by conserving water, reducing waste and pollution, creating wildlife habitat, and preventing erosion. Any landscape can be Florida-Friendly if it is designed and cared for according to the nine Florida-Friendly Landscaping <sup>TM</sup> principles. The principles include (1) planting the right plant in the right place, (2) efficient watering, (3) appropriate fertilization, (4) mulching, (5) attraction of wildlife, (6) responsible management of yard pests, (7) recycling yard waste, (8) reduction of stormwater runoff, and (9) waterfront protection. Additional components include practices such as landscape planning and design, soil analysis, the appropriate use of solid waste compost, minimizing the use of irrigation, and proper maintenance."
In 2009, the Florida Legislature found "that the use of Florida-friendly landscaping and other water use and pollution prevention measures to conserve or protect the state's water resources serves a compelling public interest and that the participation of homeowners' associations and local governments is essential to the state's efforts in water conservation and water quality protection and restoration."
The Florida-Friendly Landscaping <sup>TM</sup> Program provides information and guidance on turfgrass and landscape management practices to minimize Nonpoint Source Pollution in order to conserve and protect Florida's water resources.
2. Description of Worksite
The worksite at which Contractor is engaged to perform work is located at
<b>3. Baseline Landscape Evaluation and Assessment</b> [remove whole section and renumber document if not requiring a Baseline Landscape Evaluation and Assessment]
Contractor shall prepare a Baseline Landscape Evaluation and Assessment, relating to the Worksite, that includes the following:

benchmarks so that improvements can be measured,

(b) An inventory of all dead and declining plant material,

(a) Photo Documentation to illustrate existing conditions and help in establishing

(c) An evaluation of all components of any existing irrigation system, and

(d) An evaluation of water bodies and aquatic systems (if applicable).

Based on the Baseline Landscape Evaluation and Assessment, Contractor shall prepare and present to Owner a detailed report that includes recommendations and cost breakdowns for materials, equipment, and labor.

### 4. Owner's Contact Information and Representative

Owner shall provide to Contractor appropriate points of contact for purposes of communications during execution of work. Appropriate points of contact include the property manager, a member of the board of directors, or a member of the grounds committee. Owner designates \_\_\_\_\_\_ [insert name] as Owner's representative to enter into this contract and to authorize any changes to this contract.

### 5. Scope of Regularly Scheduled Work

### A. Basic Description of Work

Contractor shall perform at the Worksite the work set forth and in accordance with in Appendix B (Regularly Scheduled Work). Contractor shall do the following in relation to performing any work related to the Worksite pursuant to this Contract:

- (a) Ensure that anyone performing work follows the recommendations of Florida-Friendly Best Management Practices for Protection of Water Resources by the Green Industries;
- (b) Provide all necessary labor, materials, equipment, tools, and supplies;
- (c) Supervise all workers involved in performing services at the Worksite;
- (d) Ensure that all work is performed in a workmanlike manner;
- (e) Ensure that only quality equipment and quality materials are used in connection with performing services at the Worksite; and
- (f) Ensure that the Worksite landscape meets or exceeds Owner's expectations regarding plant health and aesthetics, per the specifications set forth in this Contract.

### B. Hours for Regularly Scheduled Work

Contractor shall ensure that Regularly Scheduled Work is performed at the Worksite during normal work hours, which are between \_\_\_\_ AM and \_\_\_\_ PM Monday through Friday.

### C. Limitations on Scope of Work

The scope of Regularly Scheduled Work **does not include** [remove whole section or list item if work is included in contract] the following:

- (a) Installation or replacement of plants, except for replacement (pursuant to section 21.B of this Contract) of any plants that Contractor damages or allows to decline or die;
- (b) Repair or modification of the irrigation system, except as specified in Appendix B, relating to irrigation-system management;
- (c) Pruning of palms over 15 feet tall
- (d) Removal of suckers from clumping palms;
- (e) Pruning of large trees over \_\_\_\_ feet tall; or
- (f) Removal of a living or dead tree.

If Contractor discovers a need for any work beyond Regularly Scheduled Work, Contractor shall report the need to Owner as soon after the discovery as is possible.

#### 6. Contractor's Status

Contractor is an independent contractor and is not an agent, partner, or employee of Owner.

### 7. Laws, Licenses, and Certifications

Contractor shall comply with all federal, state, and local laws and ordinances when performing any work relating to the Worksite. As required by local and state authorities for Contractor's line of work, Contractor shall maintain all valid licenses and certifications for Contractor and for Contractor's employees. Contractor shall timely provide any license or certificate to Owner if Owner asks to see it. Contractor shall ensure that Contractor's employees have a Green Industries Best Management Practices certification, as required by Florida Statute 482.1562.

#### 8. Protection of Owner's Property

#### A. General Protection Efforts

Contractor shall use reasonable efforts to protect the Worksite from damage, including all existing plant materials, structures, facilities, utilities, and natural areas, both above and below ground. As soon as possible after Contractor discovers any damage to the Worksite, Contractor shall report the damage to Owner. If Contractor causes any damage to the Worksite, Contractor shall, at Contractor's expense, ensure that the damaged object or area is restored to the state that it was in before Contractor caused the damage.

#### **B.** Contaminate Spills

Contractor shall use best efforts to protect Owner's property from chemical, fuel, oil, or other contaminate spills.

### C. Blowing and Washing of Materials

Contractor shall not blow or otherwise place into any storm water drain or structure any soil, chemicals, litter, mulch, soil amendments, or other materials.

### 9. Protection of Contractor's Property

Contractor understands that Owner is not an insurer and that Contractor is responsible for securing, safeguarding, and protecting against damage and theft Contractor's and any of Contractor's employees' or subcontractors' material and operations.

### 10. Safety Measures and Programs

Contractor shall comply with all applicable laws, ordinances, rules, regulations, and orders of any public authority, including but not limited to OSHA, related to the safety of persons and protection of property. Contractor shall initiate, maintain, and supervise all safety precautions and programs in connection with the landscaping services.

### 11. Environmental Cleanup

Contractor shall conduct any environmental cleanup needed as a result of any chemical or fuel spill that occurs in the course of business.

### 12. Contractor's Personnel and Supervision

#### A. Employee List and Schedule

Contractor shall provide to Owner a list of Contractor's and any subcontractors' employees who are assigned to the Worksite. Contractor shall include on the list the employees' names, contact information, and schedules. Contractor shall update the employee list and work schedule no later than 3 business days after any change occurs to the list or schedule.

### B. Function and Qualifications of Supervisor

Contractor shall assign a supervisor to oversee any work performed at the Worksite and to act as Contractor's liaison with Owner. Contractor shall ensure that the supervisor (a) inspects the Worksite daily (Monday through Friday) except on legal holidays and (b) provides direction to Contractor's employees and subcontractors. Contractor shall ensure that any supervisor (a) speaks, writes, reads, and understands English and (b) is capable of writing schedules and monthly reports and of noting any deficiencies that need correcting. Contractor shall ensure that any supervisor has at least 3 years of landscape maintenance supervision experience.

#### C. Uniforms and Vehicles

Contractor shall ensure that Contractor's employees wear uniform shirts with Contractor's name or logo clearly visible, proper shoes, and equipment required by State Safety Regulations. Contractor shall ensure that uniforms are maintained in a neat and presentable condition. Contractor shall ensure that each of Contractor's vehicles has a readable sign stating Contractor's (a) telephone number and (b) name or logo. Contractor shall ensure that all of Contractor's vehicles at the Worksite are in a clean and presentable condition.

#### 13. Use of Subcontractors

Only if Owner gives Contractor prior written consent, Contractor may subcontract a portion of the work that is the subject of this contract. Contractor shall ensure that any subcontractor's name and qualifications are submitted to Owner no later than \_\_\_\_\_\_ days before the date that the subcontractor begins working at the Worksite. Contractor shall supervise any subcontractor and guarantee the subcontractor's work quality pursuant to section 5 A of this Contract

#### 14. Extra Work

### A. Notification and Proposal regarding Need for Extra Work

"Extra Work" means any work that is not set forth in Appendix B. If Contractor discovers that any Extra Work is necessary to maintain in a superior condition any landscape areas, irrigation systems, or drainage systems, then Contractor shall notify Owner of the need for the Extra Work as soon as is practically possible after Contractor's discovery. If Owner notifies Contractor that Extra Work is necessary, Contractor may submit to Owner an itemized, written cost proposal relating to the Extra Work. Owner retains the right to reject any cost proposal and to perform any Extra Work through Owner's forces or other contractors.

### B. Approval regarding Performance of Extra Work

Only if the total charge to Owner for Extra Work is less than \$\_\_\_\_\_ during a month, Contractor shall perform the Extra Work without first getting Owner's approval. If the total charge to Owner for Extra Work is more than \$\_\_\_\_\_ during a month, Contractor shall not perform the Extra Work unless Owner approves the Extra Work in advance and in writing.

### C. Time Frame for Beginning and Completing Extra Work

If Owner approves any Extra Work and unless the parties agree to a different deadline for Contractor's beginning the Extra Work, Contractor (1) shall begin the work no later than \_\_\_\_\_\_ days after the date that Contractor receives the written approval from Owner and (2) shall complete the work in a reasonable amount of time.

#### D. Coordination of Extra Work with Other Contractors

If Owner contracts for Extra Work to be done by someone other than Contractor, then Contractor shall coordinate with the new contractor to ensure that the work is performed in a timely manner.

### 15. Emergency Work

### A. Emergency Contact Information

Contractor shall supply to Owner the name and appropriate contact information, including phone numbers, of any employee responsible for emergencies. Owner shall provide Contractor with emergency numbers for Owner's personnel who are fluent in English.

### B. Notification Regarding Need for Emergency Work

If Contractor discovers that Extra Work is required at the Worksite due to an emergency (Emergency Work), then Contractor shall notify Owner of the need for the Emergency Work as soon after Contractor's discovery as is practically possible.

### C. Performance of Emergency Work

If Owner notifies Contractor of the need for Emergency Work, Contractor shall make reasonable efforts to perform the Emergency Work in a timely manner <u>or</u> shall notify Owner as soon as possible of Contractor's inability to timely perform the Emergency Work.

### 16. Owner's Compliance with Appendix B

Owner shall comply with any Owner-assigned responsibilities identified in the Contract Specifications of this document, set forth in Appendix B.

#### 17. Payment for Work

#### A. Monthly Payment for Regularly Scheduled Work

In exchange for the Regularly Scheduled Work that Contractor performs (as set forth in Appendix B) and for the required materials, Owner shall pay Contractor a flat fee totaling \$\_\_\_\_\_ each month.

### **B.** Payment for Extra Work

In exchange for any Extra Work that is approved or is appropriate pursuant to section 14 of this Contract, Owner shall pay Contractor \$\_\_\_\_\_ [insert dollar amount] per hour plus the cost of materials.

### C. Delivery of Invoice

Every [insert period, such as "month"], Contractor shall send an invoice to Owner and shall include in the invoice the following: (a) a list of the work accomplished at the Worksite during the prior month; (b) the total amount that Owner owes Contractor for that work; and (c) documentation of irrigation inspections, IPM monitoring, soil and pest management treatments, and other chemical applications that Contractor performed or arranged.

### D. Timing of Payment

No later than \_\_\_\_\_ [insert number of days] days after Owner receives an invoice from Contractor, Owner shall pay Contractor the total amount set forth in the invoice for (1) all Regularly Scheduled Work, (2) any approved or appropriate Extra Work pursuant to section 14 of this Contract, and (3) any Emergency Work approved pursuant to section 15 of this Contract.

### E. Late Payment Fee

If Owner is more than \_\_\_\_ [insert number] days late paying Contractor, Owner shall pay to Contractor interest accrued [insert daily, weekly, or monthly] at \_\_\_\_ [insert interest rate] percent per annum on the delinquent amount.

#### 18. Termination of Contract

# A. Termination for Cause by Owner

If Contractor fails to perform in accordance with this Contract, then Owner shall provide to Contractor a written notice listing deficiencies in Contractor's performance. If Contractor fails to reasonably cure any noted deficiency within \_\_\_\_\_ days after Contractor receives notice of the deficiency, then Owner may terminate this Contract for cause by giving written notice of termination to Contractor. Any for-cause termination takes effect on the day that Owner sends notice of termination to Contractor. If Owner terminates this Contract for cause, Owner retains all rights of recovery afforded by law.

#### **B.** Termination for Cause by Contractor

If Owner fails to pay Contractor in accordance with this Contract, then Contractor may terminate this Contract for cause by giving written notice of termination to Contractor. Any for-cause termination takes effect on the day that Contractor sends notice of termination to Owner. If Contractor terminates this Contract for cause, Contractor retains all rights of recovery afforded by law.

#### C. At-Will Termination

Either party may terminate this Contract at will by sending written notice of termination to the other party. Any at-will termination takes effect \_\_\_\_ [insert #, such as "30" or "60"] days after the date that the terminating party sends a notice of termination to the other party.

#### D. Performance after Termination

If this contract is terminated, whether for cause or at will, Owner shall pay Contractor in full for all services rendered through the effective date of termination. If this Contract ends due to an at-will termination, the parties shall continue performing their obligations pursuant to this Contract until the date that the termination takes effect.

### 19. Maintenance of Insurance Coverage

### A. Types of Coverage

Contractor shall maintain and shall ensure that all of Contractor's subcontractors maintain general liability insurance, broad form contractual liability insurance, automobile liability insurance, and workers' compensation insurance to meet all state and local license and insurance requirements for the contract work. Contractor shall carry workers' compensation insurance with employers' liability limits of at least \$1,000,000 and a waiver of subrogation for the work or job performed.

#### **B.** Proof of Insurance

Before beginning any work, Contractor shall deliver to Owner copies of all required insurance policies.

### 20. Indemnification against Claims

To the fullest extent permitted by law, Contractor shall indemnify and hold harmless Owner and its members, agents, and employees against all claims or losses or expenses (including attorney's fees and costs) that arise out of or result from any act or omission—whether negligent or not—by Contractor or by any of Contractor's subcontractors, which act or omission relates to any service addressed in this Contract.

### 21. Guarantee and Replacement of Materials

### A. Nature and Timing of Replacement

If any turf- or plant-material is damaged as a result of Contractor's improper maintenance, attention, or procedures, then Contractor (1) shall replace, at no additional cost to Owner, the material with material of the same size and variety as the dead or damaged material and (2) shall replace the material no later than 14 days after the date that the damage was identified. Contractor shall make any replacement pursuant to this section unless Owner gives Contractor written permission to vary the size, variety, or timing of the replacement.

#### **B.** Limits on Replacement Obligation

Owner understands and accepts that Contractor is not responsible for losses, repair or replacement of damaged work or plant material resulting from theft, extreme weather conditions, vandalism, vehicular incidents other than those resulting from Contractor's vehicles, or the acts of others over whom Contractor has no obligation to control.

### C. Notification regarding Loss or Damage

Each month, Contractor shall inform Owner of any damage to and loss of plant material that Contractor discovers, whether the damage or loss is or is not related to Contractor's maintenance activities. Contractor shall disclose to Owner the cause of any damage to or loss of plant material and shall provide recommendations and pricing for replacement of the plant material.

### 22. Contractor Warranties for Newly Installed Equipment and Plant Material

### A. Equipment and Systems

In addition to any manufacturer warranties, Contractor warrants for a period of \_\_\_\_\_\_ [Insert # of days] days (Warranty Period) the quality of any equipment and system installed by Contractor at the Worksite. Contractor will repair or replace any equipment, device or system that fails to function during the Warranty Period.

#### **B.** Plants

Contractor warrants the quality of all plants, except annual flowers, that Contractor or any of Contractor's subcontractors installs at the Worksite throughout the warranty period of each plant. The warranty period for each type of plant is as follows:

(a) Tre	es and palms: 365 days.
(b) Shi	ubs: [insert number] days.
(c) Per	ennials and Groundcovers: [insert # of days] days.
(d) Tur	fgrass [insert # of days] days.

### 23. Modification of Contract

Any modification of this contract is invalid unless it is made in writing and signed by Owner and Contractor.

#### 24. Limitation on Assignment

Contractor shall not assign to a third party any part of this Contract unless Owner gives written consent in advance.

### 25. Legal Actions

The laws of the State of Florida govern and are controlling with respect to this Contract. The parties agree that \_\_\_\_\_, County, Florida is the mandatory and exclusive forum for any legal action or proceeding relating to this Contract. If any legal action or proceeding arises out of this contract, the prevailing party is entitled to recover costs and reasonable attorneys' fees from the non-prevailing party, at both the trial and appellate levels.

# 26. Entirety of Contract

NOTARY SPACE

This Contract and the appendices constitute the entire understanding and agreement between the parties regarding landscaping services. No other representations or understandings are binding on the parties.

27. Effective Date and Duration	of Contract				
The effective date of this Contract is [insert date]. All terms of this Contract remain in effect for one year through 11:59 PM on [insert ending date].					
The signatures below bind Owner a Contract, including the appendices.	and Contractor to abide by the provisions contained in this				
OWNER/MANAGER:	CONTRACTOR:				
DATE:	DATE:				

#### **APPENDIX A: DEFINITIONS**

For the purpose of this contract, the following words and phrases have the meanings ascribed to them by this section All words used in the present tense include the future, all words in the singular number include the plural, and all words used in the plural include the singular. Any word or term not interpreted or defined by this section is used with a common dictionary meaning of common landscape maintenance practice.

- 1. "Apply" means to physically deposit of fertilizer to turf or landscape plants.
- 2. "Applicator" means any Person who applies fertilizer on turf or landscape plants.
- 3. "Best Management Practices" means turf and landscape practices or a combination of practices based on research, field-testing, and expert review, determined to be the most effective and practicable on-location means, including economic and technological considerations, for improving water quality, conserving water supplies, and protecting natural resources.
- 4. "Chemical edging" is any nonselective herbicides or growth regulators that are used to create an edge that prevents the turf or weeds from entering a certain area.
- 5. "Commercial Fertilizer Applicator" means, except as provided in 403.1562(9), Fla. Stat., any person who applies fertilizer for payment or other consideration to property not owned by the person or firm applying the fertilizer or the employer of the applicator.
- 6. Extra work, means any work that fall outside the Landscape Maintenance Specifications identified in Appendix B.
- 7. "Fertilize," means the act of applying fertilizer to turf, specialized turf, or a landscape plant.
- 8. "Fertilizer" means any substance or mixture of substances that contains one or more recognized plant nutrients and promotes plant growth, or controls soil acidity or alkalinity, or provides other soil enrichment, or provides other corrective measures to the soil. The term "fertilizer" does not include unmanipulated vegetable manures, peat, or compost.
- 9. "Filter" means a device in an irrigation distribution system that removes sediment or other foreign matter from the water.
- 10. "Florida-Friendly Landscape" means a quality landscape that conserves water, protects the environment, is adaptable to local conditions, and is drought tolerant. The principles of such landscaping include planting the right plant in the right place, efficient watering, appropriate fertilization, mulching, attraction of wildlife, responsible management of yard pests, recycling yard waste, reduction of stormwater runoff, and waterfront protection. Additional components include practices such as landscape planning and design, soil analysis, the appropriate use of solid waste compost, minimizing the use of irrigation, and proper maintenance. [Ref. s373.185 (1) Fla. Stat.]

- 11. "Florida-Friendly Landscaping<sup>TM</sup>" means the service-marked educational program of the University of Florida Institute of Food and Agricultural Sciences Extension Service, created and delivered in partnership with the Florida Department of Environmental Protection to promote and train people in the principles of designing, installing, and maintaining a Florida-Friendly Landscape as defined in Florida law, especially as it concerns protection of natural resources and water conservation.
- 12. "Formal hedges" means a row of uniformly sized shrubs planted close together, particularly when they form a fence or a boundary. Low branching, densely foliaged shrubs with small leaves are suited for that purpose.
- 13. "Ground Cover" means low growing plants, other than turfgrass, used to cover the soil and form a continuous, low mass of foliage.
- 14. "Hardscape" means areas such as patios, decks, driveways, paths, and sidewalks that are not included in the irrigation system design area.
- 15. "High volume irrigation" means an irrigation system with a minimum flow rate per emitter of more than 60 GPH or higher than 1.0 GPM. High volume irrigation emitter flow rates are usually measured in GPM.
- 16. 'Integrated pest management' (IPM) means the selection, integration, and implementation of multiple pest control techniques based on predictable economic, ecological, and sociological consequences, making maximum use of naturally occurring pest controls, such as weather, disease agents, and parasitoids, using various biological, physical, chemical, and habitat modification methods of control, and using artificial controls only as required to keep particular pests from surpassing intolerable population levels predetermined from an accurate assessment of the pest damage potential and the ecological, sociological, and economic cost of other control measure.
- 17. "Irrigated landscape area" means any outdoor area that has a permanent irrigation system.
- 18. 'Irrigation System' means a constructed watering system designed to transport and distribute water to plants.
- 19. "Irrigation Zone" means a grouping of sprinkler heads or micro-irrigation emitters operated simultaneously by the control of one valve.
- 20. "Landscape" means any combination of living plants (such as grass, ground cover, shrubs, vines, hedges, or trees) and non-living landscape material (such as rocks, pebbles, sand, mulch, walls, fences, or decorative paving materials).
- 21. "Landscaped Area" means the entire parcel less the building footprint, driveways, hardscapes, and non-porous areas. Water features are included in the calculation of the landscaped area.
- 22. "Licensed Contractor" means any person licensed or registered under chapter 489, Florida Statutes, or authorized under any county or municipal license or tax certificate to

- design, install, repair, maintain, or adjust a landscape irrigation system within the jurisdiction of (Municipality/County).
- 23. "Low Maintenance Zone" means an area a minimum of ten (10) feet wide adjacent to water courses which is planted and managed in order to minimize the need for fertilization, watering, mowing, etc.
- 24. "Microclimate" means the climate of a specific area in the landscape that has substantially differing sun exposure, temperature, or wind than surrounding areas.
- 25. "Micro-irrigation" (low volume) means the application of small quantities of water directly on or below the soil surface, usually as discrete drops, tiny streams, or miniature sprays through emitters placed along the water delivery pipes (laterals). Micro-irrigation encompasses a number of methods or concepts including drip, subsurface, micro-bubbler, and spray irrigation, previously referred to as trickle irrigation, low volume, or low flow irrigation. Also see low-flow point applicators.
- 26. "Moisture Sensing Device" means a device to estimate or measure soil moisture in the root zone for the purpose of controlling an irrigation system based on the actual needs of the plant. By law (373.62, F.S.) any person who purchases and installs an automatic landscape irrigation system must properly install, maintain, and operate technology that inhibits or interrupts operation of the system during periods of sufficient moisture.
- 27. "Mulch" means non-living, organic, or synthetic materials customarily used in landscape design to retard erosion and retain moisture.
- 28. "Person" means any natural person, business, firm, corporation, Limited Liability Company, partnership, limited partnership, association, club, organization, county, municipal corporation and/or, any group of people acting as an organized entity
- 29. "(LOCAL GOVERNMENT) Approved Best Management Practices Training Program" means a training program approved per 403.9338 F.S., or any more stringent requirements set forth in this Article that includes the most current version of the Florida Department of Environmental Protection's "Florida-Friendly Best Management Practices for Protection of Water Resources by the Green Industries, 2008," as revised, and approved by the (LOCAL GOVERNMENT) Administrator. [Guidance: 482.1562 F.S., Limited certification for urban landscape commercial fertilizer application. Beginning January 1, 2014, any person applying commercial fertilizer to an urban landscape must be certified under this section. The BMP training certificate or approved (FDEP and UF/IFAS) equivalent is mandatory to obtain the FDACS certificate. The adopting entity must define levels of required training for this program. Institutional and commercial applicators require a certificate of completion, which requires passing the written test; others, however, may require only attendance at the training, or records of in-house training, such as for laborers that may be illiterate and do not handle fertilizers or other agriche micals.]
- 30. "Native Vegetation" means any plant species with a geographic distribution indigenous to all or part of the State of Florida as identified in: Wunderlin, R. P., B. F. Hansen. 2011.

- Guide to the Vascular Plants of Florida, third edition. University Press of Florida, Gainesville.
- 31. "Plant Bed" means a grouping of trees, shrubs, ground covers, perennials, or annuals growing together in a defined area devoid of turfgrass, normally using mulch around the plants.
- 32. "Prohibited Application Period" means the time period during which a Flood Watch or Warning, or a Tropical Storm Watch or Warning, or a Hurricane Watch or Warning is in effect for any portion of (LOCAL GOVERNMENT), issued by the National Weather Service, or if heavy rains are likely.
- 33. "Ring of Responsibility" is a preventative buffer, which protects against accidental direct contamination when fertilizing, and is the responsibility of the applicator. If a person is broadcasting fertilizer with a deflector shield, the Ring of Responsibility should extend at least 3 feet from the edge of the water or top of seawall with a deflector shield engaged; 10 feet from the water without deflector shield engaged.
- 34. "Runoff" means the water that results from and occurs following a rain event or following an irrigation event, because the water is not absorbed by the soil or landscape and flows from the area.
- 35. Scalping means the removal of too much shoot tissue at one time and mowing below the recommended heights for each species is a primary cause of turf injury and should be avoided.
- 36. "Shall" means mandatory.
- 37. "Slow Release," "Controlled Release," "Timed Release," "Slowly Available," or "Water Insoluble" "Nitrogen" means nitrogen in a form that delays its availability for plant uptake and use after application or that extends its availability to the plant longer than a reference rapid or quick release product.
- 38. "Sod," or "Lawn" means a piece of turf-covered soil held together by the roots of the turf.
- 39. "Turf and/or Turfgrass" means a mat layer of monocotyledonous plants such as, but not limited to, bahiagrass, bermudagrass, centipedegrass, seashore paspalum, St. Augustine grass, and zoysiagrass.
- 40. "Used" includes the words "arranged", "designed," or "intended to be used."
- 41. "Valve" means a device used to control the flow of water in the irrigation system.

World Meteorological Organization definition of "heavy rain": rainfall greater than or equal to 50 mm (2 inches) in a 24-hour period. <a href="http://severe.worldweather.org/rain/">http://severe.worldweather.org/rain/</a>, <a href="http://severe.worldweather.org/rai

#### APPENDIX B -- REGULARLY SCHEDULED WORK

### B.1 Mowing, edging, and trimming

- A. Contractor shall maintain lawns based on the maintenance requirements of the specific turfgrass species.
- B. Contractor shall mow in a manner consistent with landscape maintenance industry standards that ensures smooth surface appearance without scalping or leaving any uncut grass.
- C. Contractor shall not cut more than one-third (1/3) of the leaf blade length per mowing event. Measure mower heights with mowers on a flat, paved surface. Mower blades must be kept sharp to provide a high-quality cut and reduce negative effects on turfgrass health. Contractor shall mow in a different direction each time the grass is cut.
- D. Contractor shall complete all edging at the time of mowing.
- E. Contractor shall maintain grass at the recommended height (Appendix D).
- F. Contractor shall report any detection of turfgrass heat stress, pests, or irrigation malfunctions.
- G. Contractor shall leave no readily visible clumps of clippings on the grass surface after mowing. Contractor shall disperse large clumps of clippings into the turf.
- H. Prior to mowing on individual properties, Contractor shall pick up and dispose of paper and other debris from the grass and around storm drains.
- I. Using string trimmers or blade edgers, as appropriate, Contractor shall edge tree rings, plant beds, buildings, sidewalks, fences, driveways, parking areas, and other hard surfaces bordered by grass. Contractor shall use string trimmers to trim turfgrass adjacent to any water bodies and around in-ground irrigation control boxes to maintain visibility and access. Contractor shall avoid damaging plants with string trimmers.
- J. Contractor shall remove grass clippings and debris on the same day that mowing and trimming is done. Contractor shall remove all grass clippings and debris from sidewalks, streets, drives, gutters, and curbs or surfaces, including those near a stormwater inlet or catch basin. The Contractor shall not allow grass clippings or debris to enter into any inlet, catch basin, or body of water. Contractor shall deposit grass clippings into the planted landscape.
- K. During extended rainy or dry periods, Contractor shall mow as conditions dictate. If weather conditions prevent mowing or edging on the scheduled day, then Contractor shall perform the mowing and edging the following day. If the wet or dry weather persists, Contractor shall coordinate with Owner to set up an alternate schedule. Contractor shall not mow wet or severely drought-stressed turf.

### **B.2** Mulching

- A. Contractor shall maintain mulch at a depth of at least two inches after settling. When additional mulch is necessary, Contractor should present a separate bid for approval.
- B. The use of mulches made from sustainable materials such as recycled hardwood mulch, Melaleuca trees, Eucalyptus, pine needles, and pine bark is recommended. Contractor shall not use Grade B cypress mulches made from whole-tree wood.
- C. Contractor shall apply mulch to bedded areas and around trees and palms. Contractor shall leave a 2-inch space between the trunks of plants and the mulch. Contractors shall mulch within at least a 12 to 18-inch radius from the trunk for any size of tree.
- D. Contractor shall apply new mulch in a level profile consistent with pre-existing grades so that the final uniform mulch depth comprised of both existing and new layers will be a minimum of 2 inches, but will not exceed 3 inches. Contractor shall not apply new mulch material against trunks or plant stems but will taper down to the soil at those locations. In all locations where the existing mulch bed is in contact with a paved surface (i.e., sidewalks, roadway edges, or curbing and driveways), Contractor shall lightly trench the mulch-hard surface bed line to better contain the existing and applied mulch.
- E. Contractor shall rake or sweep mulch off paved areas and turfgrass into beds as the mulch application progresses. Contractor shall rake smooth any mounded areas so that depth does not exceed 3 inches.
- F. If mulch is installed improperly, Contractor shall correct any problems at no additional charge to Owner.

#### **B.3 Pruning**

- A. When pruning, Contractor shall use current techniques and standards approved by UF/IFAS and the International Society of Arboriculture. Contractor shall prune selectively to improve structure and health and to enhance fruiting, flowering, or appearance.
- B. When preforming corrective pruning, Contractor shall maintain the structural integrity, natural shape, and characteristics of the species.
- C. Contractor shall disinfect pruning tools prior to and after each property and plant to prevent disease transmission.

#### **B.3.1 Shrubs**

(a) Contractor shall lightly prune shrubs based on the need of each species. Certain flowering shrubs have specific times when they should or should not be pruned. Generally, Contractor shall prune shrubs with hand pruners as needed to provide shape, fullness, and

- flowering. Contractor shall not prune spring-flowering shrubs until after the bloom period.
- (b) Contractor shall maintain shrubs to avoid contact with structures and provide clearance of 12-18 inches.
- (c) Contractor may prune formal hedges with power shears. Contractor shall ensure that the top of the hedge is maintained at a width narrower than the bottom to allow sunlight to reach lower foliage.
- (d) Contractor shall remove dead or broken branches when noted. Selective removal of small sections of branches as a form of insect pest control is also acceptable providing the natural shape of the shrub is maintained. Contractor shall not prune during or immediately after growth flushes.

#### **B.3.2 Trees**

- (a) Contractor shall insure that the central leader (trunk) of all trees is maintained (no topping/heading, hat-racking, or shearing). Contractor shall remove interfering or crossed limbs. Contractor shall remove all branches using "collar cuts." Contractor shall follow University of Florida IFAS pruning recommendations, which are set forth at the following website: <a href="http://gardeningsolutions.ifas.ufl.edu/care/pruning/pruning-and-maintaining-trees.html">http://gardeningsolutions.ifas.ufl.edu/care/pruning/pruning-and-maintaining-trees.html</a>.
- (b) Contractor shall remove sucker growth at the base of trees with pruners and shall not use herbicides for that purpose.
- (c) Contractor shall preform aesthetic pruning by removing dead and broken branches as often as necessary so that trees appear neat at all times.
- (d) Contractor shall maintain branches and limbs a minimum of two feet away from all buildings, especially roofs. Contractor shall maintain trees near sidewalks and parking lots to provide clearance for pedestrians and vehicles. Contractor shall follow FDOT recommendations set forth at the following website:

  http://www.fdot.gov/maintenance/RDW/Guide LandscapeandTreeMaintenance.pdf
- (e) Contractor shall monitor trees that are staked. Contractor shall loosen or remove support, when appropriate, to prevent girdling of the trunk.
- (f) Contractor shall inform the owner or association of trees that are diseased or dying that should be considered for removal.

#### **B.3.3 Palms**

- (a) Contractor shall prune palms as per current University of Florida/IFAS recommendations (http://edis.ifas.ufl.edu/ep443).
- (b) Contractor shall not remove green leaves and shall prune only dead or browning leaves. Contractor shall remove all palm flower and fruit clusters by handsaw without damaging live tissue to prevent seedlings.
- (c) Contractor shall make reasonable efforts to avoid removing leaves that are growing horizontally or upward (i.e., retain all leaves within a "9–3" frame). Contractor shall cut leaves close to the petiole base but shall not damage living trunk tissue.
- (d) Contractor shall assess discoloration of lower palm leaves for nutritional deficiencies.
- (e) Contractor shall not throw palm leaves or any other pruned material into any lake or other water body.

#### **B.3.4** Groundcovers

- (a) Groundcovers require minimal pruning. Contractor shall confine and maintain groundcovers within plant beds. Contractor shall not allow groundcover to grow over paved areas.
- (b) After all pruning operations, Contractor shall make all reasonable efforts to remove all cuttings and debris relative to ground-cover type and ensure an aesthetically clean appearance.

#### **B.4 Fertilization**

- A. Contractor shall follow current UF/IFAS guidelines for turfgrass fertilization. Contractor shall ensure that all of Contractor's employees who specify, handle, or apply fertilizer have a valid Florida Department of Agriculture and Consumer Services Limited Urban Commercial Fertilizer Applicator Certification (FDACS LUFAC). Contractor shall ensure that fertilization scheduling does not exceed the fertilizer label rate prescribed and complies with state and local ordinances. It is important to note that local fertilizer regulations may prohibit the use of nitrogen fertilizers during the summer months. Be aware of local ordinances to avoid fines or citations <a href="https://ffl.ifas.ufl.edu/fertilizer">https://ffl.ifas.ufl.edu/fertilizer</a>.
- B. Contractor shall notify Owner of any plant or turfgrass nutrient deficiency symptoms and what measures are recommended for correction.

- C. Contractor shall treat deficiencies of specific nutrients with applications of the lacking nutrient in accordance with University of Florida IFAS recommendations until deficiencies are corrected. The fertilizer application rate and number of applications depends on the type of plant material. Contractor shall apply the minimal amount of fertilizer needed.
- D. Contractor shall adjust fertilizer rates according to health, maturity, and desired growth patterns.
- E. During the establishment phase for shrubs, trees, and ground covers, Contractor shall fertilize landscape plants with a slow-release fertilizer as per University of Florida IFAS recommendations.

### **B.4.1 Application**

- (a) Contractor shall use deflector shields on all application equipment to minimize inadvertent applications of fertilizer to non-plant areas. Contractor shall blow, sweep, or wash back into the landscape, any fertilizer deposited on paved or impervious surfaces.
- (b) Contractor shall use and enforce the "Ring of Responsibility" (discussed in Appendix A) around or along the shoreline of canals, lakes, ponds, or waterways to reduce risk of fertilizers and other lawn chemicals coming into direct contact with surface waters.
- (c) Contractor shall apply fertilizer only when plants are actively growing.
- (d) Contractor shall clean up spilled fertilizer materials immediately as per University of Florida IFAS recommendations. Contractor may apply collected material as a fertilizer.
- (e) Contractor shall store nitrate-based fertilizers separately from solvents, fuels, and pesticides, because nitrate fertilizers are oxidants and can accelerate a fire. Owner shall work with Contractor to secure fertilizers and other chemicals stored at the Worksite.
- (f) After fertilizing (unless water restrictions are in place or a rain event is predicted), Contractor shall irrigate with at least a 1/4 inch of water following fertilization to avoid the loss of nitrogen and increase uptake efficiency. If water restrictions apply, Contractor may irrigate as permitted but no more than 1/2 inch following fertilization.

### **B.4.2 Turf fertilization**

(a) Contractor shall use only fertilizers for urban turf that are formulated and have application instructions in accordance with requirements and directions provided by Rule 5E-1.003, Florida Administrative Code, Labeling Requirements for Urban Turf Fertilizers.

- (b) Contractor shall not exceed the annual nitrogen recommendations in the Fertilizer Guidelines for Established Turfgrass Lawns in the climatic regions of Florida as provided on the label.
- (c) Contractor shall obtain a soil analysis before planting. Soil samples shall be analyzed for pH, lime requirement, and available plant nutrients (P, K, Ca, and Mg). A soil pH test will indicate whether pH adjustment is necessary. For more information on soil sampling and testing, go to (<a href="http://soilslab.ifas.ufl.edu/ESTL%20Home.asp">http://soilslab.ifas.ufl.edu/ESTL%20Home.asp</a>).
- (d) Contractor shall adjust fertilizer rates to achieve healthy, mature, desirable growth.
- (e) Contractor shall follow UF/IFAS evidence-based recommendations for turfgrass fertilization practices based on turfgrass species, soil properties, time of year, and other factors (<a href="https://edis.ifas.ufl.edu/pdffiles/LH/LH01400.pdf">https://edis.ifas.ufl.edu/pdffiles/LH/LH01400.pdf</a>, <a href="http://edis.ifas.ufl.edu/topic lawn fertilization">http://edis.ifas.ufl.edu/topic lawn fertilization</a>).

### B.4.3 Plant Beds, Trees, Shrubs, Palms, Flowers, ground covers

- (a) If landscape plants exhibit nutrient deficiency symptoms, they may not be suited to the planting site due to soil pH, drainage, salinity, limited soil volume, water quality, or mineral content of the soil. Contractor shall discuss with Owner replacing such plants with others better-adapted to the site's conditions. Contractor shall follow current University of Florida IFAS fertilization recommendations for landscape plants.
- (b) Contractor shall broadcast fertilizer uniformly over the desired areas of the landscape. Contractor shall consider root location, fertilization objectives, and plant species when applying fertilizer. In areas where tree or shrub fertilization zones overlap with lawn fertilization zones Contractor shall fertilize one or the other of the plant types, but not both.
- (c) Contractor shall start with the lowest recommended rate and slowly increase the amount up to the maximum recommendation as evidenced by the plant's response.

#### **B.4.4 Palm Fertilization**

(a) Palms have different nutritional requirements from other landscape plants. They suffer quickly and conspicuously from inadequate mineral nutrition, whether due to insufficient or incorrect fertilization. Contractor shall follow current University of Florida IFAS fertilization recommendations for palms and palm deficiencies, see <a href="http://edis.ifas.ufl.edu/topic\_palm\_nutrition">http://edis.ifas.ufl.edu/topic\_palm\_nutrition</a>. (b) Contractor shall fertilize palms with a granular slow-release fertilizer three to four times per year. An acceptable formulation is 8-0-12-4 (N, P, K, Mg plus micro-elements). Mature palms require five pounds of 8-0-12-4 fertilizer per application. For palms under ten feet tall, two pounds of 8-0-12-4 per application will be adequate.

### **B.5** Management of Pests in the Landscape

- A. Contractor shall use pesticide applications in accordance with the rules and regulations governing use of pesticides in Florida. Contractor shall follow all provisions of Florida Statute 482. Contractor shall use Integrated Pest Management (I.P.M.) principles and methods (<a href="http://edis.ifas.ufl.edu/in109">http://edis.ifas.ufl.edu/in109</a>). Contractor shall intervene with chemical pest control only when the pest is causing or is expected to cause more damage than can be reasonably and economically tolerated. Contractor shall implement a control strategy that reduces the pest numbers to an acceptable level while minimizing risks to non-targeted organisms.
- B. The Contractor shall post appropriate application signs following each treatment in line with Florida Department of Agriculture and Consumer Service regulations. Per Florida statutes, Contractor shall arrange for pesticide-sensitive persons living in the Community to be notified before treatment.
- C. Contractor shall keep records of pest problems identified, location, and control treatment applied. Contractor shall record in the records whether the control measures reduced or prevented pest damage, were economical, and minimized risks. Contractor shall provide a copy of the records to Owner. Contractor shall refer to past corrective actions when making similar decisions in the future. Contractor shall dispose of used containers in compliance with label directions to prevent water contamination.
- D. Contractor shall follow current University of Florida IFAS pest management recommendations for implementing an IPM program as per IFAS Publication ENY-298, Landscape Integrated Pest Management, at <a href="http://edis.ifas.ufl.edu/in109">http://edis.ifas.ufl.edu/in109</a>. Contractor shall also utilize available pest-specific information available through UF/IFAS Extension.

#### **B.5.1** Weed management

- (a) Contractor shall use IPM methods to reduce weeds in turf area. This includes accurate weed identification, monitoring for weed emergence, and implementing timely control measures (http://edis.ifas.ufl.edu/ep141).
- (b) Primary weed control depends on proper cultural practices, chiefly mowing turfgrass at the UF/IFAS recommended height and maintaining adequate mulch in plant beds. Weed control in landscape beds can be difficult due to the variety of plant material that may be vulnerable to herbicides. Thus, preventive weed control is important and typically the most effective weed control approach. Weed infestations will probably have to be removed by hand, as there are a limited number of herbicides available that can be safely

- applied over the top of and around most landscape plants, see (http://edis.ifas.ufl.edu/ep523).
- (c) If significant and continuing competition between weeds and desired landscape plants occur, Contractor shall notify Owner and request authorization for use of a preemergent herbicide. After Owner authorizes use of the herbicide, Contractor shall apply the herbicide per the label, and in accordance with local and state ordinances.
- (d) If it is not economical or practical to reduce weeds after they have emerged and established in lawns or ornamental plant beds, postemergent herbicides may be required. Contractor shall notify Owner and request authorization for use of a postemergent herbicide, see (http://edis.ifas.ufl.edu/wg059).

#### **B.5.2** Insects

- (a) Effective insect pest control is best achieved in landscapes by implementing preventive cultural practices to promote healthy plants, reduce conditions favorable for pests, and conserve natural biological control organisms.
- (b) Contractor shall use IPM practices to manage insects in the landscape, which include:
  - Proper insect identification
  - Active monitoring for insect activity and abundance
  - Utilizing mechanical and cultural practices first, when available
  - Preserving natural, biological control organisms
  - Spot-treating pest-infested areas when possible, rather than making calendarbased cover spray applications to the landscape
- (c) When possible, Contractor shall use selective, reduced-risk insecticides rather than broadspectrum, non-selective products. This helps conserve natural predators and parasitoids in the landscape that are attacking plant pests.
- (d) Contractor shall treat fire-ant mounds individually as they occur with bait formulas.
  - Surround each mound with <u>fresh</u> bait without disturbing the mound itself Contractor may use broadcast baiting and broadcast treatment in recreation and common areas only as needed.
- (e) Insects including southern chinch bug, fall armyworm, tropical sod webworm, hunting billbug, and mole crickets can be monitored using UF/IFAS-recommended soapy water flushes and scouting for symptoms of plant damage. See, <a href="http://edis.ifas.ufl.edu/ig001">http://edis.ifas.ufl.edu/ig001</a>, for turfgrass pest-specific recommendations.

- (f) When available, contractor shall treat sap-feeding pests like southern chinch bug, mealybugs, and scale insects using systemic or translaminar products that get into plant material to be ingested by the pest insect.
- (g) Contractor shall utilize current UF/IFAS management recommendations for specific landscape insect pests.

#### **B.5.3 Plant diseases**

- (a) Plant diseases occur when excessive moisture is present for extended periods. Correct cultural practices are the key to control of plant diseases, especially with respect to proper irrigation.
- (b) Contractor shall notify Owner of any fungal disease outbreaks that occur and shall reduce the frequency of irrigation if they do occur. If disease is significant and persistent, Contractor may apply an appropriate fungicide if Owner approves.
- (c) Tree and palm diseases that are serious include Ganoderma Butt Rot (<a href="http://edis.ifas.ufl.edu/pp100">http://edis.ifas.ufl.edu/pp100</a>) and Fusarium (<a href="http://edis.ifas.ufl.edu/pp278">http://edis.ifas.ufl.edu/pp278</a>). Contractor shall seek and follow advice from the UF/IFAS Extension Service if those problems are discovered.

### **B.6 Irrigation system management**

- A. Contractor shall adjust irrigation frequency and timing to comply with all state and local regulatory requirements. Contractor shall calibrate the irrigation system so that all areas receive adequate coverage. Contractor shall use only certified irrigation technicians for irrigation work.
- B. In accordance with section 373.62(2), Florida Statutes, if Contractor installs or performs work on an automatic landscape irrigation system, Contractor shall test for the correct operation of each inhibiting or interrupting device or switch on the system. If such devices are not installed or are not functioning properly, Contractor shall install new devices or repair the existing ones and ensure that each is operating properly before completing other work on the system.
- C. Contractor shall ensure that no more than 1/2 to 3/4 inch of water is applied during a single irrigation event. The exact amount of irrigation needed for each event depends on a plant's needs for growth, fruiting, and dormancy for that time of year, and soil characteristics, which can be determined based on UF/IFAS recommendations (http://gardeningsolutions.ifas.ufl.edu/care/irrigation/).
- D. Contractor shall provide a recommended seasonal operating schedule for each irrigation zone for both establishment and maintenance conditions, based on seasonal average precipitation rates.

- E. Contractor shall adjust the irrigation schedule seasonally, based on weather conditions.
- F. Micro-irrigation is recommended for tree and shrub beds. Contractor shall separate those ones from lawn areas to allow for irrigation efficiency.
- G. Contractor shall encourage the use of smart irrigation technology when planning for system expansion and upgrades.
- H. Contractor shall ensure that irrigation takes place early in the morning, if possible.
- I. Contractor shall provide detailed irrigation reports consisting of run times and volume being used.
- J. Contractor shall instruct Owner regarding how to turn off the irrigation system in case of emergency.

### **B.6.1 Irrigation System Maintenance & Repair**

Contractor shall perform the following preventive maintenance tasks and provide monthly invoices with a breakdown of services rendered:

- (a) Inspect irrigation systems monthly to identify and correct problems, including checking timers, valves, and rain sensing devices; cleaning filters; cleaning and adjusting sprinkler heads; replacing missing or damaged heads and micro-irrigation emitters; repairing leaking or broken pipes and tubing; adding or relocating heads in waterdeficient areas; repairing time clocks; replacing or rebuilding valves; locating and repairing cut wires; and conducting other routine irrigation maintenance;
- (b) Report by zone and irrigation controller, all irrigation deficiencies, and recommend water saving solutions;
- (c) Test and replace batteries in irrigation controllers at least annually during similar time periods;
- (d) Calibrate irrigation system seasonally and upon any changes made to the irrigation system to apply no more than 1/2 to 3/4 inch per application;
- (e) Flush micro-irrigation distribution systems quarterly;
- (f) Inspect filtration systems per manufacturer's specifications;
- (g) Reset irrigation controllers and timers seasonally to account for plant growth requirements and local climatic conditions;

- (h) Check distribution uniformity annually;
- (i) Contractor shall, in a timely manner, report to Owner the need for any repairs and work beyond the scope of Contractor's capability;
- (j) Contractor shall promptly repair damaged or defective systems after Contractor discovers the damage or defect; and
- (k) Use replacement parts that have the same characteristics (e.g., discharge-pressure relationship, jet size, and colors) as the original components.

### APPENDIX C - UF/IFAS RECOMMENDED MOWING HEIGHTS

Suggested mowing heights and mower types for Florida home lawns. Frequency of cut will vary based on species and time of year.

Turfgrass Species	Optimal Mowing Height (inches)	Preferred Mower Type	Additional resources
Bahiagrass	3.0-4.0	Rotary	http://edis.ifas.ufl.edu/lh006
Bermudagrass	0.5-1.5	Reel/Rotary	http://edis.ifas.ufl.edu/lh007
Centipedegrass	1.5-2.0	Rotary	http://edis.ifas.ufl.edu/lh009
St. Augustine grass	2.5-4.0*	Rotary	http://edis.ifas.ufl.edu/lh010
Zoysiagrass (Coarse types)	2.0–2.5	Rotary	http://edis.ifas.ufl.edu/lh011

<sup>\*</sup>Dwarf and semi-dwarf cultivars of St. Augustine grass (Captiva, Delmar, Seville) are the only cultivars of this species that should be moved at 2.5" Other cultivars should be moved at 3.5–4".

# APPENDIX D - SAMPLE MONTHLY IRRIGATION WORK REPORT

Month
Preventive Maintenance Tasks Accomplished (please check)
Set Controllers (seasonal requirement)
Inspect Irrigation Systems (valves, timers, filters, emitters, etc.)
Inspect and Test Rain Shutoff Devices (annual requirement)
Flush micro-irrigation systems (quarterly requirement)
Turn Irrigation Controllers to off position (rainy season)
Recalibrate six randomly selected property systems (annual requirement)
Repair Work Accomplished (please list)
Labor Hours and Charge
MaterialsRequired
Materials Cost
Other Comments
TOTAL COST FOR MONTH