

## NOVA SOUTHEASTERN UNIVERSITY

Exterior Landscape Pest Control, Fertilization, Irrigation

EXTERIOR PEST CONTROL, FERTILIZATION, AND IRRIGATION SPECIFICATIONS

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#### SECTION A

# COMMERCIAL PEST CONTROL AND FERTILIZATION SERVICES INTEGRATED PEST MANAGEMENT (IPM) SPECIFICATIONS

#### 1. GENERAL

## A. Description of Service

This contract is part of a comprehensive Integrated Pest Management (IPM) program for all the sites specified herein. The goal of IPM is to deliver effective pest control while at the same time reducing the volume and toxicity of pesticides used and human and environmental exposure to pesticides. IPM is a process for achieving long term, environmentally sound pest control through the use of a wide variety of technological and management practices. Control techniques in an IPM program include a combination of pest monitoring, good sanitation practices, education, grounds maintenance, alternative physical, mechanical, and biological pest control, and the use of pesticides when warranted according to a predetermined hierarchy of pest management choices, formulations, and application techniques, which will minimize the exposure and potential risk to people and the environment.

The contractor shall furnish all supervision, labor, materials and equipment necessary to accomplish the surveillance, monitoring, and pesticide application components of the IPM program. The Contractor shall also provide detailed, site- specific recommendations for procedural modifications that may be necessary to achieve pest prevention. Satisfactory quality and customer expectations will be evident by the absence of bare spots, disease, or insect infestation in any plant, tree, shrub, or lawns. Furthermore, quality weed centrol will be measured by the absence of any weeds in turf that can be corrected by appropriate weed control measures.

#### B. Pests Included and Excluded

The Contractor shall adequately suppress all populations of any undesirable weeds in lawns and insects that feed primarily on or may otherwise cause harm to outdoor vegetation, trees, palms, plants, herbaceous annuals, grasses, lawns, and exotics. The Contractor shall adequately suppress all ant populations inside the Library Lawn for events throughout the year.

Populations of the following pests will be considered special services, separate from the specifications of this contract:

- Birds, bats, snakes, commensal rodents and all other vertebrates;
- Mosquitoes and other free flying insects;
- General pest control within structures;
- Termite & Wood Destroying Organisms;
- Flea. Bees

#### C. Initial Inspection

The Contractor shall conduct a thorough, initial inspection of the entire site within ten (10) working days after a contract has been executed. The purpose of the initial inspection is for the Contractor to identify problem areas and any equipment, landscape features, or management practices that are contributing to pest infestations. Soil samples shall be collected and sent for analysis to determine the need for any soil amendments necessary to correct pH and/or fertility. The initial inspection shall be conducted by a certified commercial supervisory applicator employed by the Contractor.

Access to the site shall be coordinated with the Contracting Officer's Representative (COR). The COR will inform the Contractor of any restrictions or areas requiring special scheduling.

Ideally, the COR should have oversight of maintenance staff to ensure that sanitation practices and maintenance procedures associated with proper pest control are accomplished, and should interact with all facility staff members to ensure that pest sightings and other pest control related items are promptly brought to the attention of the Contractor.

#### D. Pest Control Plan

Prior to the execution of this contract for pest control and fertilization service, the Contractor shall submit to the CLIENT a written Pest Control Plan and Fertilization Schedule for the site. Upon receipt of the Pest Control Plan, the COR will render a decision regarding its acceptability within ten (5) working days. If aspects of the Pest Control Plan are incomplete or disapproved, the Contractor shall have five (5) working days to submit revisions. The Contractor shall initiate services outlined in the terms and conditions of the contract following notice of approval. The Pest Control Plan shall include:

- 1. Proposed methods for fertilization and pest control, including labels and Material Safety Data Sheets for all pesticides and fertilizers to be used.
- 2. A proposed pest population level referred to as a predetermined tolerance threshold, if thresholds exist for the targeted pest;
- 3. A service schedule for the site:
- 4. A description of any operational changes that would facilitate the pest control effort;
- 5. A description of the Contractor's Quality Control Program as described in this document. It shall be the Contractor's responsibility to carry out work according to the approved Pest Control Plan for the site. The Contractor shall receive approval of the COR prior to implementing any changes to the approved Pest Control Plan, including additions or replacements to the pesticide list and to on-site service personnel.

\*The quality of the submitted PEST CONTROL PLAN will be evaluated for the ability of the products employed to produce healthy, vigorous lawns, shrubs, trees and palms, including seasonal color beds free of disease and nutritional deficiencies.

#### E. Site Fertilizer Schedule

The Contractor shall provide an annual fertilization schedule to the CLIENT. Contractor shall indicate on the Site Fertilizer Schedule the 2 week period under the month(s) when each site shall be fertilized for turf, and trees/shrubs as indicated in the Maintenance Performance Schedule (see Attachment).

Changes to the above schedules by the Contractor must be submitted in writing and approved by the Inspector at least five working days prior to any changes being implemented. A temporary change to the daily service schedule must be called into the CLIENT by 7:30 a.m. the morning of the change.

#### F. Pesticide Application

The Contractor shall not apply any pesticide product that has not been included in the Pest Control Plan or approved in writing by the COR. The COR will make a timely decision on any matter that requires a written approval. Pesticide application shall be according to need and not by schedule. As a general rule, application of pesticides shall not occur unless visual inspections and monitoring devices indicate the presence of pests in that specific area. Preventive pesticide treatments of areas determined to be at high risk for infestation by weeds, insects or disease, through inspection at the onset of the program or as part of a maintenance program, are acceptable.

#### 2. EMPLOYING BEST MANAGEMENT PRACTICES

#### A. Turf - Soil fertility and pH

The Contractor is expected to utilize best management practices at all times to maintain turf health and appearance. Prior to the application of any fertilizer or pesticide, composite soil samples will be collected and analyzed for pH and fertility.

The Contractor will be expected to perform soil sampling two times annually throughout the term of the contract. The Contractor will be responsible to apply fertilizer, micronutrients, or other amendments to the soil as recommended by the soil analysis reports including the improper balance of pH. Fertilizers for lawn, tree and shrub will be checked – in to verify a consistent product as described in the final fertilization schedule submitted with the proposal. Lawns must receive quarterly fertilizer using a comparable blend of 24-2-11 minimum of 50% slow release nitrogen, 2% magnesium, 1.5% manganese, 2.5% iron. CURRENTLY USING 19 TONS OF LAWN FERTILIZER ANNUALLY.

Level 1 Lawn Fertilization Application Frequency – limited lawn areas specific to the Horvitz Building, Flight Deck, and Alvin Sherman Library Lawn must receive monthly fertilizer applications.

#### B. Weed Control

Herbicide applications are not to be relied upon as a sole method of controlling weeds. Proper cultural practices are to be employed to encourage dense, healthy turf which will help to prevent the germination of weed seeds and survival of seedlings. The Contractor will be required to perform spot applications of herbicide on an as needed basis to limited areas.

Widespread applications of broadleaf, grass, and sedge weed herbicides may be required in areas where invasive weed species have invaded greater than 25% of the total turf area.

#### C. Insect and Disease Control

A certified supervisor employed by the Contractor will be expected to conduct visual inspections weekly to monitor for evidence of destructive turf pests and conduct additional sampling as necessary to confirm the presence of such pests. Applications of insecticide to turf areas are to be limited to locations where unacceptable levels of activity have been identified in an effort to preserve populations of beneficial insects and nematodes.

Contractor shall develop a schedule of monitoring for pest problems, using appropriate monitoring techniques, based upon growing degree days, tree species on site and the likelihood that pest problems will arise. Visual inspections should also be conducted during routine maintenance activities.

In an effort to preserve beneficial and predatory insects, pesticides shall be applied only when the presence of harmful pests or disease have been identified through monitoring and it is anticipated that more than 15% of discoloration, defoliation or damage to the total leaf area will likely occur. Pesticide applications shall be limited only to infested trees. Preventive pesticide applications may be performed only to areas where the previous or current year's monitoring has indicated the presence of harmful insect pests or if certain tree species, prone to specific insect problems are present. Preventative applications shall be made only to specific areas.

## D. Palm, Tree, and Ornamental Fertilization

Palms are to receive six fertilizer/disease applications annually, trees and shrubs must receive a quarterly feeding of a fertilizer comparable to 8-2-12 with 3% magnesium, 5% manganese, 2% iron, with a minimum of 60% slow release nitrogen.

At time of fertilizing all palms must receive a root drench of Subdue and/or Chipco fungicide for disease control. Also, palms are to receive systemic insect treatment for all insects using Safari or Imidacloprid on a rotational basis for prevention of product resistance by insects. CURRENTLY USING 34 TONS OF PALM/TREE FERTILIZER ANNUALLY.

## E. Record Keeping

- 1. Contractor shall be responsible for maintaining a pest control logbook or file for each site specified in this contract. These records shall be kept on the property of the CLIENT and maintained on each visit by the Contractor. Each logbook or file shall contain at least the following items:
  - A. A copy of the Pest Control Plan for the site, including labels and MSDS sheets for all pesticides which may be used, and the Contractor's service schedule for the facility.
  - B. Pesticide Application Record and IPM Monitoring Form will be used to document the performance of all work, including emergency work. Upon completion of each service visit to the site, the Contractor's representative performing the service shall complete, sign and date the form, and return it to the logbook or file on the same or succeeding day of the services rendered.
  - C. Contractor's representative shall provide recommendations in writing whenever appropriate as to what steps the facility must take to reduce or eliminate conditions that are favorable for pests covered by the terms of the contract.
  - D. Copies of soil, tissue, and root test analysis reports.

#### F. Contractor Personnel

Throughout the life of this contract, all Contractor personnel providing on-site pest control service must meet state requirements for training and certification as Commercial Pesticide Applicators. Non card holder individuals working under the supervision of a Certified Applicator will not be permitted to provide service under the terms of this contract.

#### G. Manner and Time to Conduct Service

The Contractor shall perform routine services that do not adversely affect occupant health or productivity during the regular hours of operation for the campus and buildings. No pesticides may be applied when the immediate area to be treated is occupied. When it is necessary to perform work outside of the regularly scheduled hours set forth in the Pest Control Plan, the Contractor shall notify the COR at least one day in advance. All Contractor personnel working in or around buildings designated under this contract shall wear distinctive uniform clothing. The Contractor shall determine and provide additional personal protection equipment required for the safe performance of work. Protective clothing, equipment, and devices shall, as a minimum, conform to Occupational Safety and Health Administration (OSHA) standards for the products being used.

#### H. Call Backs, Special Requests and Emergency Service

On occasion, the COR may request that the Contractor perform corrective, special, or emergency service (s) that are beyond routine service requests. The Contractor shall respond to these exceptional circumstances and complete the necessary work within one (1) working day after receipt of the request. In the event that such services cannot be completed within one

working day, the Contractor shall immediately notify the COR and indicate an anticipated completion date. Additional work orders or call backs for fertilization, weed control, and pest control on lawns, shrubs, trees, and palms where a second or third application must be applied to treat for nutritional deficiencies, existing weeds or plant disease are guaranteed and to be included in the PEST CONTROL PLAN. The quality of the submitted PEST CONTROL PLAN will be evaluated for the ability of the products used to produce lawns, shrubs, trees, palms, including seasonal color beds free of disease and nutritional deficiencies.

## 3. WEED, INSECT AND DISEASE CONTROL

All application shall be made only to areas unoccupied at the time of application and shall remain unoccupied until the treated areas have dried, or longer if the label specifies a longer reentry time. The Contractor and COR will determine, on a case-by-case basis, if any prenotification is needed. The Contractor shall obtain the approval of the COR prior to any widespread application of pesticide. The Contractor shall take all necessary precautions to ensure occupant and employee safety, and all necessary steps to ensure the containment of the pesticide to the site of application. No applications shall be made while persons other than those employed by the Contractor are present in the area to be treated.

#### 4. PROGRAM EVALUATION

The CLIENT reserves the right to evaluate the progress of this contract in terms of effectiveness and safety, and to require such changes as necessary. The Contractor shall take prompt action to correct all identified deficiencies.

## 5. QUALITY CONTROL PROGRAM

The Contractor shall establish a complete quality control program to assure the requirements of the contract are provided as specified. Within five (5) working days prior to the starting date of the contract, the Contractor shall submit a copy of their program to the COR. The program shall include, but not be limited to the following:

- 1. An inspection system covering all the services stated in this contract. A checklist used in inspecting contract performance during regularly scheduled or unscheduled inspections. The name (s) of the individuals (s) who will perform the inspections;
- 2. The checklist shall include every area of the operation serviced by the Contractor as well as every task required to be performed;
- 3. A system for identifying and correcting deficiencies in the quality of services before the level of performance becomes unacceptable;
- 4. A file of all inspections conducted by the Contractor and the corrective actions taken. This documentation shall be maintained locally and made available upon request.
- 5. A prescription program for all Medjool date palms.

## 6. PERFORMANCE - LESS THAN SATISFACTORY RATING

A. The contractor, upon receiving two "less than satisfactory" ratings of the same nature in the same treatment area, must document all procedures done, to date, and establish the extent of the pest level. If the pest levels are outside the predetermined tolerance thresholds (if thresholds exist for the given pest), the Contractor shall have five (5) days to submit to the COR an

acceptable recommendation to alleviate the unsatisfactory situation.

B. Any treatment area receiving three consecutive "less than satisfactory" ratings of the same nature may result in the filing of a formal complaint from the COR to the Contracting Agent with intent to terminate the contract. The Contractor will not be terminated if the "less than satisfactory" rating is a result of circumstances outside of the Contractor's control, such as failure of the COR to make operational changes that would facilitate the pest control effort.

#### 7. SAFETY AND HEALTH

A. All work shall comply with all applicable state and federal safety and health requirements. Where there is a conflict between applicable regulations, the most stringent will apply.

B. Contractor shall assume full responsibility and liability for compliance with all applicable regulations pertaining to the health and safety of personnel during the execution of work.

#### 8. SITE MAPS AND PROPERTY BOUNDARIES

Overview of all NSU Campus Contracted Locations

