**Invitation for Bid**

<table>
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<tr>
<th>File No. 8437A</th>
<th>If, at the time of the scheduled bid opening, City Hall is closed due to uncontrolled events such as fire, snow, ice, wind, or building evacuation, the bid opening will be postponed to the same time on the next normal business day. Bids will be accepted until that date and time.</th>
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<tr>
<td>COMMODITY: Landscape Maintenance Program for Cambridge Water Department</td>
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<tr>
<td>NAME OF BIDDER:</td>
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<td>BIDDER'S FED. ID.</td>
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TO: Elizabeth Unger, Purchasing Agent
795 Massachusetts Avenue, Room 303
Cambridge, MA 02139

PH: (617) 349-4310

The undersigned submits this sealed bid to provide the commodity or services identified above, described in the specifications herein and advertised in the CAMBRIDGE CHRONICLE on Thursday, February 28, 2019 which will be opened and publicly read at the Office of the Purchasing Agent, City Hall, 795 Mass. Ave., Room 303, Cambridge, MA at 11:00 a.m. on Thursday, March 14, 2019. Parking is limited at this location. It is strongly recommended that bids are mailed or delivered in advance of the due date and time. Late proposals will not be accepted. This bid may be downloaded from the City's web site, [www.Cambridgema.gov](http://www.Cambridgema.gov), Online Services, Current Bid List, Invitation for Bid, File No. 8437A.

The undersigned certifies that this bid is made without collusion with any other person, firm or corporation making any other bid or who otherwise would make a bid. The undersigned agrees to furnish the commodity or services in strict accordance with the bid documents, which consist of this Invitation for Bid and all attachments hereto. The submitted bid must be without conditions, exceptions or modifications to the bid document.

The envelope containing the bid must be labeled: "This envelope contains a bid for Landscape Maintenance Program for Cambridge Water Department opened at 11:00 a.m. on Thursday, March 14, 2019". The bid and all documents submitted with it are public records. This bid process and the award of the contract are made in conformity with M.G.L. c. 30B, unless otherwise stated. See other side of this form for General Terms and Conditions that shall become part of any Contract awarded through this Invitation for Bid.

This bid includes addenda numbered: ______________________________________________________________________

SIGNATURE OF BIDDER: ______________________________________________________________________

TITLE OF SIGNATORY ______________________________________________________________________

ADDRESS OF BIDDER ______________________________________________________________________

TELEPHONE NUMBER ______________ FAX NUMBER: __________________

Please check one of the following and insert the requested information:

( ) Corporation, incorporated in the State of: ______________________________________________________________________

( ) Partnership. Names of partners: ______________________________________________________________________

( ) Individual: ______________________________________________________________________

Name of Bidder: ______________________________________________________________________
GENERAL TERMS AND CONDITIONS

LAWS:
All deliveries shall conform in every respect with all applicable laws of the Federal government, Commonwealth of Massachusetts and City of Cambridge.

EQUAL OPPORTUNITY:
The Vendor in the performance of the contract shall not discriminate on the grounds of race, color, religious creed, national origin or ancestry, age, disability, sexual orientation, marital status, family status, military status, source of income, or sex in employment practices or in the selection or retention of subcontractors, and in the procurement of materials or rental of equipment. The City may cancel, terminate or suspend the contract in whole or in part for any violation of this paragraph.

TAXES:
Purchases made by the City are exempt from the payment of Federal excise tax and the payment of Commonwealth of Massachusetts sales tax (except for gasoline) and any such taxes must not be included in the bid prices.

QUANTITIES:
Unless otherwise stated, the quantities set forth herein are ESTIMATES ONLY. The City reserves the right to purchase the commodity(ies) specified in any amount less than the estimated amount.

BID PRICES:
Bid prices shall include transportation and delivery charges fully prepaid to the City of Cambridge destination. Where the unit price and the total price are at variance, the unit price will prevail.

DELIVERY AND PACKAGING:
Deliveries must be made in such quantities as called for in the purchase order and in the manufacturer's original packages. All deliveries must be “inside” delivery with no assistance from City personnel. Tailgate deliveries will not be accepted. Rejected material will be returned to the vendor at the vendor's expense.

MODIFICATION OF BIDS:
Prior to bid opening, a bidder may correct, modify or withdraw its bid by making the request in writing prior to the time and date for the bid opening. All corrections and modifications must be delivered to the Purchasing Department in a sealed envelope indicating that it contains a modification or correction of the original bid submitted for the particular commodity and indicating the time and date of the bid opening.

REJECTION OF BIDS:
The City reserves the right to reject any and all bids if it is in best interest of the City to do so.

AWARD OF CONTRACT:
Contract(s) will be awarded within forty-five days of the bid opening unless award date is extended by consent of all parties concerned.

INDEMNITY:
Unless otherwise provided by law, the Vendor will indemnify and hold harmless the City against any and all liability, loss, damages, costs or expenses for personal injury or damage to real or tangible personal property which the City may sustain, incur or be required to pay, arising out of or in connection with the performance of the Contract by reason of any negligent action/inaction or willful misconduct by the Contractor, its agents, servants or employees.

TERMINATION OF CONTRACT:
Except as otherwise provided in the Articles of Agreement, the City may terminate the contract upon seven days’ notice.

ASSIGNABILITY:
The Vendor shall not assign, sell, subcontract or otherwise transfer any interest in this contract without the prior written consent of the City.

MATERIAL SAFETY DATA SHEETS:
Pursuant to M.G.L. c. 111F, ss. 8, 9, and 10, any vendor who receives a contract resulting from this invitation agrees to submit a Material Safety Data Sheet for each toxic or hazardous substance or mixture containing such substance when deliveries are made. The vendor agrees to comply with all requirements set forth in the pertinent laws above.
Elizabeth Unger, Purchasing Agent

The undersigned hereby proposes to furnish and deliver all materials and to provide Landscape Maintenance Program for Cambridge Water Department all in accordance with the attached specifications and following proposal schedule.

The contract period is for three years. The contract start date will be March 28, 2019 or soon after as determined by the City. One award will be made as a result of this Invitation for Bid. A contract will be awarded to the responsive and responsible bidder offering the lowest total price Appendix A and Appendix B listed in the price proposal section. The payment and performance obligation for each succeeding year of the multiyear contract will be subject to the appropriation and availability of funds.

All prices must remain FIRM during the entire contract period.

Contract will be awarded within forty-five days of the bid opening unless award date is extended by written consent of all parties concerned.

Prior to bid opening, a bidder may correct, modify, or withdraw his/her bid by making the request in writing prior to the time and date for the bid opening. All corrections and modifications must be delivered to the Purchasing Department in a sealed envelope with a notation on the envelope indicating that it contains a modification or correction of the original bid submitted for the particular commodity and indicating the date and time of the bid opening.

A sample contract is attached hereto. The bidder must be willing to sign the City’s contract. The City will not accept a bidder’s terms & conditions.

Bidder’s questions concerning this Invitation for Bid, including any exceptions to the specifications must be submitted in writing and either emailed to purchasing@cambridgema.gov or delivered to the Office of the Purchasing Agent, Elizabeth Unger by Thursday, March 7, 2019 by 2:00pm. An addendum will be posted to the website to notify all bidders of questions and answers. Bidders will not be notified individually of Addendums.

An addendum will be posted to the Purchasing website notifying bidders of the questions and answers. Please check the website for Addenda before submitting your bid to the City.

Bidders will not be notified individually of Addenda.

Bid Results
The tab sheet and the contract award information will not be mailed to the bidders individually. A tab sheet with the bid results will be posted to the website soon after the bid opening. The tab sheet will include the “contract award” information as soon as it is determined.

Living Wage Requirements
The City of Cambridge has a Living Wage Requirement that establishes minimum hourly rates for all personnel that work on any City contract. The City of Cambridge's Living Wage as of March 1, 2019 is $16.15 per hour. The Living Wage Requirements are attached.

Confidentiality and Public Record Law
All bids or other materials submitted by the vendor in response to this Invitation for Bid will be open for inspection by any person and in accordance with the Massachusetts Public Records Law.

Pre-bid Conference
There will be a pre-bid conference on Tuesday, March 5, 2019 at 10:00 AM at the Walter J Sullivan Water Treatment Facility (Cambridge Water Department), 250 Fresh Pond Parkway, Cambridge MA. A site visit may be arranged for each area following the pre-bid conference. Attendance at the Pre-bid conference is strongly recommended.

Wage Theft Prevention Certification
In Executive Order 2016-1, the City of Cambridge established requirements for City contracts in an effort to prevent wage theft. Prospective vendors must provide certifications or disclosures with their bids/proposals. Failure to provide the certifications or disclosures shall result in rejection of the bid/proposal. Please see the Wage Theft Prevention Certification form attached.
Information and Instructions to Bidders

1. Air and Noise Pollution Control
The Contractor shall conduct its operations so as not to violate any state and local ordinances pertaining to air or noise pollution. Reduced decibel, and reduced emission landscape maintenance equipment will be used whenever possible, and in sensitive areas when directed.

2. Fresh pond Reservation Green Landscape Equipment pilot program
The contractor shall participate in the Fresh Pond Reservation green equipment pilot program. The purpose of this program is to pilot green landscape machinery to reduce CO2 emissions and lower noise levels during landscape operations. All Reservation turf areas are to be cut with the 52” Mean Green Lawnmower (supplied by CWD) whenever possible. Propane powered lawn mower can be used with approval. Contractor shall use electric string trimmers, electric lawnmowers and leaf blowers in noise-sensitive areas as directed. The Cambridge Water Department will provide the 52” electric mower (only) with the contractor responsible for basic maintenance including, but not necessarily limited to, sharpening and replacing mower blades, flat tire repair, and daily cleaning and inspection of mower. The 52” electric mower will only be used on Fresh Pond Reservation grounds, excluding the DCR rotaries. Contractor will be responsible for any damage to CWD mower caused by operator error or gross negligence. Green equipment will be composed of the following:

- Electric utility vehicle with electric dump body
- Rechargeable string trimmer
- Rechargeable leaf blowers
- Rechargeable 21” push mower
- Propane powered lawn mower
- Rechargeable 52” zero turn mower (supplied by the CWD)

CWD garage space will be provided for the storage and recharging of green power equipment.

3. Fueling of Equipment
All equipment must be refueled on a paved area at least fifty feet from the reservoir’s edge. There are no exceptions to this rule. At Payson Park Reservoir, all equipment/vehicles must be fueled offsite on the town of Belmont streets.

4. Storage of Equipment
Contractor will be provided one parking space in the employee parking area for the positioning of a roll off container or enclosed landscape trailer for the storage of all landscape equipment needed for day to day operations. Container should house all mowers, blowers, hand tools, trash bags, fuel etc. Electric utility vehicle, electric zero turn 21” rechargeable mower and rechargeable tools will be stored and recharged in the CWD vehicle garage.

5. Dust Control
The Contractor is placed on notice that blowing dust from un-stabilized earth areas of the work will be considered a nuisance under its control. The Contractor shall, by spraying with water or other approved means, dampen the soil to hold down the dust during working hours.

Contractor is responsible for tree wells, sidewalks, and debris along curb lines bordering the perimeter areas. At no time shall any Contractor sweep or in any way place debris in and along curb line and street (gutter).

6. Sub-Contracting
Contractors awarded the bid will not be allowed to sub-contract any work pertaining to Grounds Maintenance other than the following:

1. Plant Healthcare Program
2. Flail mowing services
All sub-contractors must meet the qualifications that are outlined in this Invitation for Bid and perform all work as specified. **All sub-contractors must be approved by the City prior to performing any work under this contract.**

The Contractor is responsible for all work performed or damages caused by sub-contractor.

7. **Location, Boundaries and Features**

**Mayor Walter J. Sullivan Water Treatment Facility**
Address: 250 Fresh Pond Parkway
Boundaries: Edge of Fresh Pond Parkway to the Reservoir’s edge including all sidewalk areas, tree wells, and turf areas. If there is a fence between the curb edge and adjacent building, the park extends to the curb line or building.
Features: Drinking water reservoir, Water Treatment Plant, parking lots, walking trails, paved walks, irrigation systems, fountains, wetlands, and passive recreational areas.

**Fresh Pond Golf Course Pro Shop**
Address: 691 Huron Avenue
Boundaries: Planting beds around building, parking lot, and entrance at Huron Avenue
Features: Seven planting areas, fence line along Huron Avenue, Blanchard Road, porous patio, bioretention basin, infiltration trench

**Maher Park**
Address: 650 Concord Avenue
Boundaries: Maintained grounds from Concord Avenue to Reservation wood line.
Features: Soccer field, community garden, water fountain, irrigation systems, natural meadows, paved surfaces, hiking trails, and fence line along Concord Avenue

**Payson Park Reservoir**
Address: Payson Park Road, Belmont MA
Boundaries: Top of covered reservoir to beginning of Belmont town roads
Features: Covered Reservoir with fencing, buildings, stairs, paved surfaces, swales, and very steep slopes.

**Hobbs Brook Reservoir**
Address: 1 Winter Street, Waltham MA
Boundaries: Between Sylvan Road and Gatehouse Drive; above water line to toe of dam slope.
Features: Steep dam slope, stone riprap

**Trapelo Road Dam**
Address: Trapelo Road, Lincoln at the intersection of Trapelo Road and Old County road
Boundaries: Entire length and both sides of dam from top of road to water’s edge.
Features: Steep rip rap slope and road abutting reservoir.

**Stony Brook Reservoir**
Address: 1 Gate House Lane, Weston MA
Boundaries: Entire length of dam between top of water and toe of dam slope.
Features: Steep slope, and riprap

**Harrington Property**
Address: Route 117 Weston: A 16-acre Cambridge-owned conservation property composed of woodlands, wetlands and two mill ponds.
Any questions about location, boundaries must be submitted in writing to the purchasing agent seven days before bid deadline.

8. **Special Requirement**
All landscape maintenance shall include facility sites and all adjoining sidewalks including all tree wells to face of curb, and gutter line as indicated on the attached site maps. (Appendices A, B)

9. Work Hours
The Contractor will start work at 7:00 am. All work in the reservation must be completed before 3:00 p.m. each day. There will be no contract work performed in the parks on holidays or weekends without the approval of the Reservoir System Manager. The Contractor must submit a request five (5) days in advance to obtain such approval.

10. Weekly Reports and Walk through
The contractor will perform site walks and supply written reports bi-weekly. Reports will be delivered by hand or fax (617) 349-6616 to the Reservoir System Manager no later than 1:00 p.m. on Thursday of each month.

The report must include information about work performed that week and the week prior.

The weekly report should include an itinerary and work schedule for the coming week.

An example of the required report can be found in Appendix F.

Scope of Services
The Landscape Maintenance Contract will be under the direction of the Watershed Manager through the Reservoir System Manager or other representative. The Reservoir System Manager will make any changes or instruct the Contractor if he/she sees any improprieties or deviations during the landscape maintenance contract period.

All landscape maintenance will be done with care, safety and professionalism. The turf, trees, shrubs and perennials are living species and will not withstand improper handling.

Description of Work
1. Care and Protection of Property
The contractor must be aware that Fresh Pond Reservation as well as Hobbs Brook, Stony Brook and Payson Park Reservoirs are water supply protection areas. Any maintenance activities performed in these areas must be performed with the utmost care.

The Contractor shall be responsible for the preservation of all public and private property and shall use every precaution necessary to prevent damage thereto. If any direct or indirect damage is done to public or private property by or on account of any act, omission, neglect, or misconduct in the execution of the work on the part of the Contractor, the property shall be restored to a condition equal to that existing before the damage occurred, at the Contractor's expense. The contractor will immediately notify the Site Supervisor and report all accidents or damages to persons or public or private property.

2. Safety Standards
All work shall be done in a safe and professional manner, in compliance with the rules and regulations of the Division of Occupational Safety, and all other City, State and Federal agencies and authorities having jurisdiction of the types of work included in this Contract.

3. Professional Standards
This landscape maintenance contract will be under the supervision of a Massachusetts Certified Landscape Professional (MCLP) currently employed by the bidder. The MCLP listed must have current certification and be a member in good standing.

All fertilizer or pesticide applications must be done by a Massachusetts Licensed Pesticide Applicator. Applicator must have current license with the appropriate category for the product being applied.
All plant health care work must be performed by either a Massachusetts Certified Arborist (MCA) or International Society of Arboriculture (ISA) certified arborist.

4. Warning Devices
The Contractor shall mark off, post and restrict work area access as necessary from the public by providing, erecting and maintaining all barricade-warning signs, guards or other protection as required and in the MUTCD or the safe execution of this Contract, and shall remove them upon completion of the work. When working on or alongside any public way or street employees must wear yellow or orange safety vests.

5. Access
The Contractor shall maintain safe access to adjacent buildings and property throughout the landscape maintenance period.

6. Time Table
Contract shall commence upon March 28, 2019 or soon after as determined by the City.

Spring cleanup and preparations shall commence as soon as weather permits and be completed by the last week of April.

Weekly mowing and maintenance tasks shall commence as soon as weather permits and be completed last week of November for a period of thirty-one (31) weeks.

Fall clean up shall commence November 1 and be completed December 31.

All maintenance-particularly weekly mowing—shall be completed so as not to interfere with scheduled events. The Reservoir System Manager shall notify the contractor in advance of all such scheduled events.

Weekly mowing will occur on day set by Reservoir System Manager.

The Reservoir System Manager may adjust this timetable with written notification as weather dictates or other circumstances warrant with supplemental Unit Pricing governing any additions or deletions.

All Time and materials, and subcontracted work, must be scheduled within five workdays from the time of request. All Snow removal equipment and personnel must be made available and be on site within 12 hours of request no matter what time of day.

7. Seasonal Limitations
Planting or slice seeding shall only be done during spring planting season (April–June) or fall planting season (September–November) as directed by Reservoir System Manager.

No work will be performed when the ground is saturated to field capacity, frosted or frozen.

8. Personnel
Contractor shall employ only personnel familiar and competent with at least one year of landscape maintenance and landscape installation experience.

A two-person landscape maintenance crew consisting of a foreman and skilled laborer will be assigned to Fresh Pond during the length of the contract. This crew will perform day to day landscape maintenance such as weeding, mowing, pruning, sweeping, vacuuming, litter pick up, etc. Contractor should be aware that supplemental work crews will be needed to assist core staff throughout the maintenance season.
Foreman must be proficient in English and be able to communicate clearly with CWD staff and the general public.

At no time while engaged in work as part of this contract shall any employee of the contractor use profane language.

At no time while engaged in work as part of this contract shall any employee of the contractor address any person they encounter at any park or other municipal area in any manner other than complete politeness. Any question or direction received by any person in any park by a contractor’s employee shall politely refer them to the Reservoir System Manager.

Contractor shall provide and guarantee usage of proper protective safety equipment including but not limited to ear protection, eye protection, steel tipped boots, hard hats and safety vests.

If is determined by the Reservoir System Manager or his representative that an individual is performing work that appears to be un-safe, incompetent, disorderly or otherwise unsatisfactory, that person shall be removed from the work site and shall not again be assigned to work in Cambridge under the contract except with the consent of the Reservoir System Manager.

9. Uniforms

Contractors are required to ensure that their employees are neat and tidy and outfitted in a standard matching uniform with the contractor’s name on it.

A standard uniform will consist of all employees on site have matching shirts and pants.

According to Cambridge Water Department Policy, shirts and boots must be worn at all times and shorts, tank tops and sneakers are not acceptable forms of clothing to be worn during landscape maintenance activities.

10. Communications

The Contractor will provide to the Water Department two (2) mobile Android OS smart phones with 4G coverage and unlimited data to be used for communication during the entire length of the contract.

The Contractor shall respond to the Reservoir System Manager within sixty (60) minutes of being called or otherwise contacted.

The Contractor will return the Water Department phone calls no more than 1 hour after the Cambridge Water Department has initiated contact.

The Contractor, his representative, or office must have “Field Communications” with radios or phones with each crew they have working in the city at all times.

The Contractor shall assign a foreman that shall supervise all work crews. The foreman is required to communicate clearly and in a professional manner to the Reservoir System Manager and to the general public.

Materials (1-7)

1. Substitutions

Substitutions will not be permitted. If, however, proof is submitted that specified material is not obtainable or does not meet requirements of Specification, use of closest variety will be considered. Substitutions other than specified may be used at no increase in cost to the City. Proposed substitutions must receive the written approval of Reservoir System Manager. When sources for materials or plants are located by the Reservoir System Manager, there will be no substitutions and those sources will be used.
2. Fertilizers

All weekly mowed areas (except Payson Park Reservoir, Stony Brook Dam and Winter Street Dam) will be fertilized (see Appendix C for areas to be fertilized)

The City will provide all fertilizer material.

The application of all fertilizers shall be by a Massachusetts Licensed Applicator in compliance with the City of Cambridge’s Chemical and Pesticide Policy and/or all requirements of the State of Massachusetts.

All “Posting” required by State and City regulation will be performed in a timely manner by the contractor.

Turf fertilizer will be applied using a rotary-type spreader.

After application of material, all empty bags used on site will be given to the Reservoir System Manager.

Requested fertilizer applications will be paid under time and materials rates.

3. Lime

The City will provide all lime.

All weekly mowed areas (except Payson Park Reservoir, Stony Brook Dam and Winter Street Dam) will be limed (see Appendix C)

Ground dolomitic agricultural limestone will contain not less than eighty-five percent (85%) total carbonates with less than ninety-five percent passing a 100-mesh screen.

Empty bags used on site will be returned to the Reservoir System Manager.

Without the availability of a soil test, lime will be applied once in the fall at a rate of fifty (50) pounds per 1000 square feet.

Requested lime applications will be paid under time and materials rates.

4. Mulch

At Lusitania Meadow, only defined beds will be mulched. All currently mulched tree wells and defined planting beds at the following sites will be mulched:

- Water Treatment Plant
- Kingsley Park
- Maher Park (includes bed behind Alzheimer’s garden)
- Blacks Nook (Concord Avenue entrance)
- Lusitania Meadow (Concord Avenue entrance)
- Golf Course Pro Shop planting beds
- Pro Shop patio planting beds
- Olga’s Bench planting bed
- DCR Parkway planting areas
- Parkway Community Garden planting beds
- Perimeter Road water fountain planting bed
- Guzetti memorial planting bed
- Payson Park Reservoir planting beds

Name of Bidder: _____________________________________________________
Mulch for plant beds shall be an aged bark and compost blend such as Ipswich/black Forest 50-50 (or equivalent) produced by Agresource Compost of Amesbury, MA (see Appendix I for specifications).

Compost shall be derived from organic wastes including clean ground wood leaf, yard residues, and bark. The product will be well composted using specialized windrow turning equipment such that the compost is free of viable weed seeds.

A two-pound (2lb) mulch sample along with lab analysis will be provided to the Reservoir System Manager for approval two weeks prior to installation.

FIBAR® Wood Surfacing for Kingsley Park Forest Playscape
A. Material shall consist only of recently harvested North American hardwoods including oak, ash, poplar, hickory, beech, birch, and locust. All wood shall have been debarked and shall be free of soil, leaves, twig material and contaminates which hasten decomposition.
B. The moisture content shall be between twenty-five percent (25%) and fifty-five percent (55%) by weight.
C. No chemical treatment or additives are allowed.
D. Positively no recycled wood from pallets or waste wood is permitted due to the possibility of contamination and risk or poor surface stability.
E. FIBAR wood surfacing shall be FIBAR engineered wood fiber as distributed by Landscape Depot Framingham, MA, 1-508-620-2988 or equivalent.

5. Seed
The City will provide all seed.

6. Loam
The contractor will provide loam for the filling of any holes, divots or plow damage that has occurred before or during the length of the contract.

The soil texture shall be sandy loam based on the USDA Textural Classification System. The soil shall contain 70% sand by weight. No more than 3% of the soil medium shall be gravel greater than 2 mm in diameter. Soil shall have acidity with a pH range of 5.8 to 7.0.

The soil shall contain no more than 10% or less than 4% organic matter by weight determined by loss or ignition method.

The soil shall contain less than 10% clay by weight.

7. Plant Material and Plant Material Replacement
The contractor shall complete plant material replacements with plants purchased by the city. All trees and shrubs are to be planted and staked according to industry standards. Work will be billed according to the established Time and materials rates.

Maintenance Methods
Personnel familiar with planting procedures shall perform all landscape maintenance.

Work Items required for Maintenance of Shrubs, Ground Cover and Perennial Planting: The Contractor will be responsible for furnishing all labor and materials necessary to provide complete and continuous maintenance of shrubs, ground cover, and perennial plantings in order to keep them in healthy growing condition as specified herein. The scope of work shall include the properties as indicated on the enclosed site plans.

The following is a list of work items in which the contractor will be required to carry out:

• Initial site visit and report

Name of Bidder: _____________________________________________________
- Providing a seasonal schedule of work.
- Providing reports every two weeks.
- Reservation Plant Health Care Program
- Meetings with Reservoir System Manager
- Documenting certain tasks with Cartegraph work order system
- Spring Cleanups
- Repairing plow damage
- Fall Cleanups
- Weekly weeding of facility grounds
- Weekly weeding of reservation planting beds
- Weekly weeding of Maher Park
- Weekly weeding of Lusitania Meadow entrance
- Weekly weeding of Blacks Nook entrance
- Weekly weeding of Bikeway planting areas
- Weekly Litter pick-up and disposal
- Weekly removal of community garden waste and disposal at Golf Course compost bin
- Weekly emptying and lining of trash cans at Fresh Pond Reservation and Payson Park
- Consolidating and/or removing all unwanted plant material or debris to an offsite location
- Pruning as required or directed in formal areas
- Mowing, trimming and edging on a weekly basis at specified heights.
- Irrigation system turn on and blow down
- Aeration
- Slice seeding
- Performing all work by required dates as outlined.
- Maintenance of herbaceous plants
- Landscape maintenance of Payson Park Reservoir
- Landscape maintenance of Stony Brook Dam
- Landscape maintenance of Winter Street Dam
- Twice-yearly flail mowing at Winter Street Dam, Stony Brook Dam, and Trapelo Road Dam
- Twice yearly manual spillway, detention basin & drainage channel brush cutting & clearing
- Landscape maintenance at golf course pro shop
- Installing plant material as needed
- Installation of mulch on reservation grounds
- Installation of mulch on bikeway planting areas
- Weekly sweeping of all concrete, paved and aggregate paths and sidewalks
- Yearly flushing of Flexi®-Pave porous surfaces
- Monthly power vacuuming of sidewalks & Flexi®-Pave surfaces (to be scheduled)
- Furnish and install Fibar® engineered wood fiber at Kingsley forest playscape
- Trimming fence lines at required areas
- Brush cutting of fire roads at required areas as needed

**Site Familiarization**

The Contractor shall fully inform him or herself of existing site conditions before submitting his or her bid and shall be responsible for carrying out all work required to properly execute the Contract, regardless of the conditions encountered in the actual work. No claim for extra compensation or extension of time will be allowed on account of actual conditions inconsistent with those assumed.

The Contractor shall closely inspect the plant materials on the site and become familiar with plant types and locations.

Name of Bidder: _____________________________________________________
Qualifications and Staffing
It is required that the Contractor's crew assigned to the Reservation remains constant throughout the maintenance period. In submitting a bid, the Contractor shall indicate the personnel he/she is intending to use and other requested information using the forms provided in the bid proposal section.

Contractor shall own and maintain all equipment needed to perform landscape maintenance to standards outlined in these maintenance specifications.

Initial Site Visit and Report
At the initiation of the maintenance program, the contractor awarded the contract and the Reservoir System Manager shall meet and walk the site to determine the condition of all plant materials and of any other related items covered under this Section of the Specifications. There shall be a mandatory two-hour orientation meeting for the contract representative and the two-person grounds maintenance crew before regular maintenance starts.

The Contractor shall submit a written report to the Reservoir System Manager describing observations and conclusions made during the site walk. This report should include any recommendations for any additional work or modifications to the work as outlined in these. This report shall also include any costs associated with these recommendations. Based on the contractor's report, or any special conditions that may arise, this Schedule may be modified by the Reservoir System Manager or his/her representative.

Site visits with Reservoir System Manager
The contract supervisor shall schedule a walk-through of the site with the Reservoir System Manager every two weeks to inspect the quality of the work being performed, to discuss any issues, and discuss any changes to the current maintenance practices that may be required. The site visit will be summarized in a field report by the contract supervisor and submitted to the Reservoir System Manager. The Contractor under the direction of the Reservoir System Manager shall carry out any changes in current practices described and approved by the Reservoir System Manager.

Reports and Scheduling
The Contractor shall be responsible for providing to the Reservoir System Manager weekly summary and a schedule for the following week. These reports shall be delivered or faxed (617) 349-6616 to the Watershed Division office by 1:00 PM on Thursday of each week.

Weekly reports shall include the following information:
- The title, name of person making report, time period covered in the report, and the date of submission on the cover.
- Weekly work sheets showing labor-hours, materials, supplies and machinery that were used in the Reservation.
- Documentation of the performance of all routine tasks as described in this section of the specifications i.e. soil testing, re-mulching, watering, weeding and edging, pruning, maintenance of herbaceous plants, etc.
- Description of any conditions that may be affecting the intended visual quality of the plant materials i.e. death, damage or decline in any plant growth, disease or pest problems, effects of excess or lack of adequate water.
- Any situation identified as requiring monitoring by the Reservoir System Manager shall be documented.
- Recommendations for additional maintenance procedures that may be required, the associated costs, or changes to the current procedures being performed.
- Conditions of Reservation equipment and systems.
- The Contractor shall document when Reservation equipment and systems need maintenance, vandalism has occurred, or any hazardous condition that may exist.
**Work Hours**
All work shall be performed on weekdays only. Weekend work must have prior approval of the Reservoir System Manager (with the exception of emergency work).

Work will not be performed during any City holiday without the permission of the Reservoir System Manager (with the exception of emergency work).

Work shall begin at the hour of **7:00 a.m. and finish by 3:00 p.m.** Variations in work hours and days must be approved by the Reservoir System Manager (with the exception of emergency work).

The work of the Landscape Maintenance Contractor shall not interfere with the use of the Reservation at any time unless with approval of the Reservoir System Manager.

**Vehicular Access to the Site**
Under no circumstances shall contractor’s trucks enter the Reservation pathways without the approval of the Reservoir System Manager.

Under no circumstances shall any vehicle or equipment drive on the surface of Payson Park Reservoir without a weight check and approval by the Reservoir System Manager. If it is found that a contractor’s truck has driven on any turf grass area or stabilized aggregate path, the contractor will be held accountable for all damages.

**Emergency Site Visits**
In the event that any aspect of the maintenance contract requires immediate attention, the Contractor shall be available to respond to a call from the Reservoir System Manager. During the week within 12 hours.

**Irrigation Monitoring and Watering**
In the event that the irrigation system is providing inadequate or excessive water coverage, the Contractor shall notify the Reservoir System Manager.

**Irrigation Start up, Winterization**
The contractor is responsible for the start-up and winterization of six separate irrigation systems on the Reservation. Work will include installation and removal of three backflow devices as well as the winterization of one outdoor booster pump, three outdoor garden spigots, one water fountain at Maher Park, and one water fountain, and two outdoor spigots at the Parkway Community Garden.

Spring startup will be completed as soon as weather permits.

The **Water Treatment Plant** is watered by a TORO/Hunter irrigation system that consists of an indoor Weather Trak ET pro clock, booster pump, 45 zones, drip irrigation system and approximately 18 quick connect valves.

**Maher Park** is watered by a Hunter irrigation system that consists of an outdoor Weather Trak ET pro clock, fourteen zones, three back flow devices, booster pump, drinking water fountain, 4 quick connect valves, and three outdoor garden spigots.

**Neville Place Garden** is watered by a Hunter drip irrigation system that consists of an outdoor battery powered clock.

**Mayor Russell Bridge** has a Hunter drip irrigation system that consists of an indoor clock, meter and a backflow device.
DCR Parkway Rotaries consist of a rainbird clock with two zones, one backflow device, and meter.

Parkway Community Garden consists of one backflow and meter, two outdoor water spigots, and one drinking water fountain

Weeding and Edging
All planting beds, tree wells and mulched areas at the following locations shall be neat in appearance and maintained to defined boundaries. Weeds shall be removed manually by pulling or digging up by the roots. No synthetic chemical means or machinery shall be used unless approved by the Reservoir System Manager. Weeding and edging will be done in the following areas:
- Water Treatment Plant
- Kingsley Park
- Maher Park (includes bed behind Alzheimer’s garden)
- Blacks Nook (Concord Avenue entrance)
- Lusitania Meadow (Concord Avenue entrance)
- Golf Course Pro Shop planting beds
- Pro Shop Patio planting beds
- Olga’s Bench planting bed
- Parkway Community Garden planting beds
- Perimeter Road water fountain planting bed
- Guzetti Memorial planting bed
- Payson Park Reservoir planting beds

All plant beds, tree wells and mulched areas at and shall be kept weed free on a weekly basis except at Payson Park Reservoir. Payson Park Reservoir will be weeded when the grass is mowed. Contractor must be aware that an extensive number of native shrubs, plants and ornamental grasses were planted on Reservation grounds. Only people with excellent plant identification skills will be used for weeding.

Contractor will be held responsible for plants damaged or removed during weeding.

The Contractor will dispose of clippings and debris from weeding and edging.

Contractor shall not use the public trash receptacles located throughout the site for disposal of materials or debris generated by maintenance activities.

Creating and maintaining mulch beds with a string trimmer is not acceptable.

Beds will be edged by hand or mechanical means.

Mulching Trees and Shrub Beds
All defined tree wells and defined planting beds in the following areas will be mulched:
- Water Treatment Plant
- Kingsley Park
- Maher Park (includes bed behind Alzheimer’s Garden)
- Blacks Nook (Concord Avenue entrance)
- Lusitania Meadow (Concord Avenue entrance)
- Golf Course Pro Shop planting beds
- Golf Course Pro Shop parking lot planting beds
- Pro Shop patio planting beds
- Olga’s Bench planting bed
- DCR Parkway planting areas
- Parkway Community Garden planting beds
- Perimeter Road water fountain planting bed
Guzetti Memorial planting bed
Payson Park Reservoir planting beds

Mulch material placed around trees and in planting beds shall be maintained at a depth of 2-3” in planting saucers. Mulch shall be replaced or added to during the spring as necessary to maintain required mulch levels. Throughout the growing season and especially during the period of leaf removal, the mulch shall be replenished as often as necessary to maintain it at the required depth. The spring application of mulch will be applied with a direct-delivery bark mulch blower system.

Spring mulching will be 100% completed by the third week of April.

In order to provide uniform mulch cover and visual consistency throughout the site, the following procedures shall be employed with regard to mulching work at trees, shrubs perennials and groundcovers:

On or around April 15, the Contractor will cultivate the top 1” of the existing mulch at all tree, shrub, perennial and groundcover locations taking care not to damage surface roots. Additional mulch will be added as required to provide a uniform 2-3 inches maximum mulch depth. The additional mulch shall not be any deeper than one and one-half inches (1.5”).

Following the cultivation and addition of mulch at each plant bed, the resultant mulch surface shall be level with the adjacent lawn surface.

The Contractor shall remove all particles of mulch from adjacent paved surfaces, lawn and foliage of plants. Care shall be taken not to mound mulch up around the basal stems of the plant. No mulch shall be located within 6” of the base of any tree trunk or shrub.

Once a month from May 1 to November 1, or as often as necessary, the upper surface of the mulch shall be lightly raked to bring bark particles to the surface and to break up any crust forming on the surface.

**Pruning of Shrubs and Small Trees in formal areas**

All planted shrubs and small trees shall be hand pruned three (3) times a year in accordance with the American Nurserymen’s Association standards and under the direction of the Reservoir System Manager.

Pruning of shrubs and small trees will take place at the following locations:

- Blacks Nook (Concord Avenue entrance)
- Olga’s Bench planting area
- Guzetti Memorial planting bed
- Parkway Community Garden planting beds
- Perimeter Road water fountain planting area
- Maher Park
- Golf Course Pro Shop
- Golf Course Pro Shop Flexi®-Pave patio area
- Payson Park Reservoir
- Water Treatment Plant
- Kingsley Park seating area

Pruning shall be done in a manner that promotes the shrub or vine to grow in a form characteristic of its species. In addition, pruning shall foster the formation of shrub masses rather than separate shrubs individually.
Pruning of small trees consists of low hanging branches that interfere with mowing or pedestrians, and any crossing, rubbing, and dead or diseased, branches that can be reached with an orchard ladder.

Under no circumstances shall shrubs be sheared unless a formal appearance is desired and is approved by the Reservoir System Manager.

Cuts shall always be made just above an outward facing bud, shoot or opposite buds so that the resulting shoots will be well placed in relation to other new growth on the plant.

All cut material shall be disposed off-site by the Planting Maintenance Contractor. All dead and broken branches or branches that are discolored and detract from the visual quality of the plant shall be correctly removed immediately without waiting for approval from Reservoir System Manager.

All non-desirable brush, thorns, brambles, vines and weeds, etc. growing on, through or around shrubs shall be removed as directed by the Reservoir System Manager.

The contractor shall notify the reservoir systems manager three days prior to commencing any pruning. The reservoir systems manager shall meet with the Planting Maintenance Contractor to review the pruning that is to be done. **No pruning shall commence without approval of the Reservoir System Manager.** At Payson Park Reservoir, pruning will include shrubs and small trees with a pole pruner.

**Spring Clean Up**
Spring cleanup will occur at the following locations:
- Water Treatment Facility
- Maher Park
- Golf Course Pro Shop
- Golf Course Pro Shop Flexi®-Pave patio area
- Golf Course Pro Shop parking lot planting beds
- Payson Park
- Parkway Community Garden planting beds
- Blanchard Road sidewalk
- Concord Avenue West sidewalk (Reservation side)
- Concord Avenue East sidewalk (Industrial side)
- Concord Avenue Turf (in front of Sancta Maria hospital)
- Huron Avenue sidewalk/Huron Avenue curb line
- Blacks Nook restoration area (Concord Avenue entrance)
- Blacks Nook outdoor classroom turf area
- Olga’s Bench planting area
- Perimeter Road fountain planting area
- Department of Conservation & Recreation Rotaries
- Fresh Pond Reservoir perimeter road
- Lusitania Meadow (Concord Avenue entrance)
- Lusitania Meadow service road
- Blacks Nook service road
- Kingsley Park seating area
- Kingsley Park Flexi®-Pave path
- Kingsley Park Overlooks
- Stony Brook Barn, Dam, and gatehouse parking area
- Hobbs Brook Reservoir Dam

The facility grounds, Kingsley Park, Huron Avenue, Maher Park, Golf Course pro shop, Payson Park, DCR rotaries shall be cleaned and prepared as early as weather permits and completed by the third week in April. (Appendix C, D, E).
On Department of Conservation & Recreation land the spring cleanup is the turf area from the Concord Avenue Rotary to Huron Avenue from the Parkway curb to the wood edge of the Reservation.

The Department of Conservation & Recreation Rotaries includes all of the turf within the Concord Avenue and Sozio Rotaries, also included are the small turf triangles abutting each rotary

Spring cleanup shall include the following:

- The pickup, removal, and disposal offsite of all trash and litter including but not limited to; leaves, sticks, sand, branches, stones, paper, cans, animal feces, litter, trash, etc.
- All fence lines should be string cut and all saplings within fence lines shall be removed.
- The sweeping or vacuuming of all hard surfaces including but not limited to; walks, stone dust areas, Flexi®-Pave patio, driveways, sidewalks, adjacent gutters, etc. at or directly adjacent to every sited area.
- The Fresh Pond perimeter road will be swept by street sweeper operated by another contractor, landscape contractor responsible for blowing and raking leaves along edge of road and blowing leaves and debris from Glacken Slope cobble swale in preparation for sweeping in spring.
- The filling of all depressions, ruts, holes in all turf areas to include the fields and active and passive areas to safe and proper existing matching grades with rolled or tamped loam and then seeded. This includes any plow damage done during the previous winter.
- The City will provide seed.
- The Contractor will provide loam.
- Raking out debris from stabilized aggregate surface in stone overlooks and raking, grading and tamping any depressions or holes in aggregate surface
- Initial mowing of the entire grounds at Payson Park Reservoir.
- At Stony Brook Barn, clean up includes all turf near barn and Gatehouse parking area as well as raking /regrading two gravel parking areas one at Barn and one at Gatehouse
- The Contractor shall report vandalism immediately to the Reservoir System Manager.
- Under no circumstances shall debris be blown or raked onto porous asphalt or porous Flexi®-Pave surfaces. Contractor will be responsible for flushing and vacuuming any porous surfaces clogged by the improper storage or disposal of debris.

Removing of Winterkill
In mid-April or as directed by Reservoir System Manager, the Contractor shall remove all dead and damaged growth on all trees and shrubs. Once the work has been started, it should be completed within the week.

The Contractor shall remove any broken branches caused by storms immediately and report this damage to the Reservoir System Manager.

FURNISH AND INSTALL Kingsley Park Forest Playscape Fibar® WOOD SURFACING
A. Two times per year in early spring and fall, in the forest playscape area, rake existing surface to level throughout the play area and top dress with a minimum two (2) inch layer of new fiber wood surfacing across the entire play area so that after settlement area is flush with adjoining Flexi®-Pave pathways

B. Rake and level resilient wood surfacing across the entire play area 2 times per month or as needed.

C. Remove any litter leaves or branches across the entire play area 2 times per month
D. trim within area any grasses or other herbaceous material growing along edge of playscape two times per month

**Turf Grass Mowing**
The Contractor is responsible for mowing all turf grass areas to include: lawns, fields, slopes, swales and any other grasses. The Treatment Facility, Kingsley Park, Alewife Brook Parkway, DCR Rotaries, and Maher Park will be mowed weekly. Payson Park Reservoir, Stony Brook Reservoir, and Hobbs Brook Reservoir will be mowed according to schedule. Mowed areas are as follows:

**Treatment Facility turf areas as shown (Appendix C)**  
**Kingsley Park /Huron Avenue turf areas as shown (Appendix C)**  
**Parkway turf areas as shown (Appendix C)**  
**Maher Park turf areas as shown (Appendix C)**  
**Concord Avenue turf areas as shown (Appendix C)**  
**Blacks Nook outdoor classroom turf area**  
**Payson Park grass as shown (Appendix D)**  
**Stony Brook Dam turf areas as shown (Appendix G)**  
**Winter Street Dam turf areas as shown (Appendix H)**

- Department of Conservation & Recreation land from the Concord Avenue Rotary to Huron Avenue from the Parkway curb to the wood edge of the Reservation.
- Department of Conservation & Recreation rotaries are at the intersection of Alewife brook parkway and Concord Avenue (Concord Avenue Rotary), and at the intersection of Alewife brook parkway and New Street (Sozio Rotary).

1. Before the first mowing in the spring, all debris, leaves, paper, and trash that have accumulated over the winter shall be picked up and legally disposed of off the property. This shall include complete trash and litter cleanup of all fences, paved, lawn, naturalized and planting areas, within the Limit of Work Line. Picked up items shall be legally disposed of off the site by the Contractor. This work shall be considered part of spring cleanup.

2. Before all mowing, Contractor shall familiarize him/herself with location of all in ground irrigation heads to eliminate potential for damage to possible exposed irrigation heads. Any damage to irrigation heads caused by Contractor's operations shall be repaired immediately at Contractor's expense.

3. The Contractor shall submit a mowing schedule for the season for approval by the Reservoir systems manager. All mowing will be scheduled for Wednesdays. In the event mowing is changed to another day of the week, the mowing schedule will revert back to Wednesday of the following week. Avoid mowing when the grass is wet. The Contractor must notify the reservoir systems manager in advance of any changes in the approved schedule.

4. Mowing and trimming at Fresh Pond Reservation shall be performed not less than once per week, or when the grass is of sufficient length to produce clippings that are a maximum of one (1) inch long. Mowing intervals shall be spaced so that not more than one (1) inch of leaf blade is removed at any one time. At the time of cutting, keep mower blades adjusted for a finished cut height of two and one half (2 ½) inches to three (3) inches depending on weather conditions and direction from the reservoir systems manager.

5. Areas around trees, shrub beds and other obstacles, and along fence lines at top of slopes shall be hand trimmed at the time of each mowing and neat lawn edges shall be maintained.

6. Mowing direction shall be varied with successive mowing's to encourage upright growth of shoots.

7. Care shall be taken not to damage Flexi®-Pave paths, hilltop stabilize aggregate paths, tree trunks, walls, curbs, benches, or other site improvements, when mowing and trimming. If any of
these are damaged, the Contractor shall repair the damage or replace the plant or improvement at no cost to the City in a manner approved by the City. All damage shall be reported to the reservoir System manager, regardless of cause on the Weekly Work Schedule.

8. Clipping removal
   a. Clippings from mowing of sports fields and other weekly mowed areas, need not be removed as long as they do not remain as objectionable clumps or layers on turf surfaces as determined by the Reservoir System Manager. Cut clippings shall fall into the turf without reducing turf grass quality or create smothering or shading of existing turf. If clippings are determined by the Reservoir System Manager to be objectionable, Contractor will be required to bag/remove and legally dispose of all clippings after each mowing at no additional cost to the City.
   b. Contractor shall remove and legally dispose of all clippings after each mowing in areas as follows:
      1) All clippings are to be raked from play areas, planting areas and pavements and be removed from the site.
      2) Clippings shall be removed from concrete and bituminous walks, Flexi®-Pave paths, porous asphalt roads stabilized aggregate paths, Fibar® wood fiber curbs and from all manholes and catch basins after each mowing by sweeping or blowing.
      3) At no time shall cuttings be allowed to discharge into reservoir.
      Weather permitting, weekly mowing is to be completed on the same day each and every week. The Reservoir System Manager will determine the best day of week for mowing.

All litter, including but not limited to sticks, branches, stones, paper, cans, litter, feces, balls, etc. on, at, in, around, adjacent to and under or over as the case may be, is to be picked up, bagged and removed prior to all mowing and maintenance.

Under no circumstances will litter be mowed.

When mowing near Flexi®-Pave paths or porous asphalt road grass clippings will be discharged away from the surface any clippings tracked on porous surface will be removed immediately to prevent clogging of material

Mowing shall be completed in a manner so as to avoid skips, clumping, scalping or other damage to turf grass, trees, shrubs or other park features.

Turf grass areas will not be cut when frost is present, the ground is muddy or frozen, or it is raining.

Contractors will ensure that machine blades are sharpened once a week.

Mowing of all large areas (excluding dams and Payson Park Reservoir) will be done by electric lawnmower (Mean Green CXR – 52/60, Mean Green NXR 48/52, or approved equivalent).

Electric string trimmers and leaf blowers will be used in noise-sensitive areas as directed. Electric 21” push mower will be used as directed.

Mowing of each DCR rotary includes the three turf triangles in close proximity to each rotary. *Electric 52” mower will not be used in DCR rotaries.*

When dams are mowed all ruts, holes and animal burrows will be filled with loam and seeded with material supplied by contractor

**Biannual Dam Flail Mowing**
Contractor or subcontractor shall own or lease a boom style flail mower mounted on a four-wheel, drive excavator. Boom shall be able to reach up to 25’. Boom cutting head shall be capable of cutting up to a 5” branch.
The contractor is responsible for cutting brush growing from rip rap at the top and at the base of the following Dams.

- Stony Brook Dam; top of dam, base of dam and access road
- Winter Street Dam; North side of Winter Street; starting from 475 Winter Street (Reservoir plaza) and ending at 830 Winter Street (Waltham woods office complex) from top of dam to water's edge. South side of Winter Street; starting at Sylvan Road seepage stream, west to Astra Zeneca excluding grassed dam slope (Appendix H).
- Trapelo Road dam; brush will be cut on either side of road down to the water's edge. Brush will be cut to a height of 4"-5".

The Cambridge Water Department will provide a police detail for road work if needed.

- Flail mowing will occur twice each year **Once in June and once in October** (to be scheduled by the CWD)

**Biannual spillway, detention basins and drainage channels brush cutting**

Contractor shall manually cut all brush and vines growing on, in, out, or above the following structures:

- Stony Brook Dam emergency spillway: all brush and vines growing on the bottom and sides will be cut and removed. All logs, litter and other debris will also be removed and disposed of offsite.
- Stony Brook Dam weather station: all brush and vines on chain link fabric and instrumentation to be removed and grass within cage cut.
- Stony Brook Dam boat ramp all brush and vines growing on or directly abutting wooden ramp will be cut and removed.
- Hobbs Brook Dam emergency spillway: all brush and vines growing on the bottom and sides of stone spillway will be cut and removed. All logs, litter and other debris will also be removed and disposed of offsite. All vines growing on aluminum safety railings are to be cut and removed.
- Hobbs Brook Dam fenced in weather station and gauging station: all brush and vines growing on chain link fabric and instrumentation to be removed and grass within cage cut. All brush around gauging station to be cut to ground level.
- Winter Street Detention basin: All brush and vines around and in detention basin, and basin channel will be cut and removed. All logs, litter and other debris will also be removed and disposed of offsite. (**Appendix J**)
- Trapelo Road detention basins (3): All brush and vines around and in detention basins, and basin channels will be cut and removed. All logs, litter and other debris will also be removed and disposed of offsite. (**Appendix J**)
- Winter Street grass swale (Between Gatehouse Drive and 830 Winter Street): All brush and vines around and in swale will be cut and removed. All logs, litter and other debris will also be removed and disposed of offsite. (**Appendix J**)
- Brush cutting will occur twice each year **once in June and once in October** (to be scheduled by the CWD)
- Stream C drainage channel (Fresh Pond Reservation): all brush and herbaceous material growing on either side of channel to be cut and removed, channel to be hand raked out and cleared of all obstructions to allow free flow of water.

**Supplemental Fertilization and Liming**

Name of Bidder: _____________________________________________________
Weekly mown turf grass areas including the DCR rotaries will be fertilized **in-house** three (3) and limed one (1) times during the maintenance contract. The Reservoir System Manager may schedule supplemental applications to be performed by the contractor or request support staff from the contractor at time and materials rates.

Spring fertilizer applications will occur the end of April.  
Summer fertilizer applications will occur the third week of July.  
Fall fertilizer applications will occur the second week of September.  
Lime applications will occur during the last two weeks of November.

**The City will provide all fertilizer and lime.**

**Trimming and String Cutting**

Trimming and string cutting shall be done weekly on the same day mowing occurs, in order to attain a clean and neat appearance. Rechargeable string trimmers will be used in noise sensitive areas as directed.

All areas on, in, at, around, adjacent to, under, or overhead as the case may be, to include: fence lines, benches, barrel holders, gates, posts, buildings, beds, walls, walks, curbing, signage, trees, play equipment, fixed objects, embankments swales, hatches, tree wells or any other areas where weeds and tall grasses exist shall be trimmed.  
Extreme care shall be exercised not to scalp lawn or other area and not to girdle or damage the stems of trees, shrubs and flowers.

**Power Sweeping and Vacuuming of Sidewalks/Concrete Platforms**

The following sidewalks or Flexi®-Pave surfaces will be power vacuumed six times per year (to be scheduled). Contractor shall use walk behind or self-propelled power vacuum to remove all debris and legally dispose of offsite

- **Concord Avenue Sidewalk & Bike Path (Industrial side)**
- **Concord Avenue Sidewalk & Bike Path (Reservation side)**
- **DCR Bike Path (Huron to Concord Ave)**
- **Blanchard Road sidewalk**
- **Blacks Nook Flexi®-Pave path**
- **Little fresh Pond Flexi®-Pave access point**
- **Kingsley Park Flexi®-Pave paths**
- **Kingsley Park sidewalks and seating area**
- **Kingsley Park handicap ramp area**
- **Treatment Plant sidewalks and entrance**
- **Treatment Plant and vehicle garage concrete pads**
- **Dumpster and recycling bin storage area**
- **Concrete transformer pad**
- **Oxygen tank concrete pad (broom sweep only)**

Vacuuming will be scheduled by the water systems manager

All other hard surfaces, including but not limited to: walks, stone dust areas, driveways, bike paths, sidewalks, Flexi®-Pave paths, Flexi®-Pave patios, and Flexi®-Pave landings, etc. at or directly adjacent to every site are to be swept or blown down once a week when mowing is performed. **Payson Park clippings will be removed from paved areas when the grass is mowed.** Rechargeable leaf blowers will be used in certain areas as directed.

Due to the large volume of material that is present in city sewer pipes, under no circumstances shall any debris be blown onto the street, towards or down catch basins or on any porous surface.

**Flushing of Flexi®-Pave Surfaces**
Once a year (to be scheduled) all Flexi®-Pave patios, landings and paths the day after a scheduled vacuuming, will be flushed clean with water sprayed from a powered water tank. Flexi®-Pave surfaces are located at Golf Course Pro Shop, Little Fresh Pond, Blacks Nook and Kingsley Park. Contractor is responsible for supplying water if no source available.

**Trash and Litter Pick-Up and Disposal**
Litter is defined as debris, both organic and inorganic that is on, in, at, around, adjacent to, under, or overhead as the case may be in the reservation and requires collection and disposal.

Trash is defined as litter that has been collected in barrels, bags, baskets, etc. or other containers in a certain area with the intent of further disposal off site.

Litter and trash collection and disposal will begin upon initiation of Contract and continue throughout the year. During the winter season all visible litter will be picked up on trash removal days Monday, Wednesday and Friday.

During winter months of heavy snow pack only visible litter in parking lots, sidewalks, along street curbs, catch basins, bike paths, planting beds, bus stops will be picked up.

All litter will be removed manually or with a walk behind vacuum, under no circumstances shall litter be mowed and bagged or blown into wooded areas.

All litter within twenty feet of the wood edge along Huron Avenue, and DCR parkway turf will be removed when the grass is cut

All litter within twenty feet of the Concord Avenue West sidewalk (reservation side will be removed when the sidewalk is swept

All litter on and within five feet of the Concord Avenue East Sidewalk (Industrial side) will be removed when the sidewalk is swept

Litter will be removed from all mulched beds, tree wells, or mown turf areas weekly when mowing occurs. At Maher Park, litter shall be removed from the whole length of Concord Avenue sidewalk starting from Blanchard Road and ending at the Concord Avenue Rotary.

When weeding at the Golf Course Pro Shop, litter will be removed from planting beds and along Blanchard Road. At Payson Park Reservoir, litter will be removed from the entire grounds when the trash cans are emptied.

**Emptying and lining of trash cans/recycling bins, and green waste bins:**
Contractor is responsible for emptying and lining of all trash cans and recycling bins at Fresh Pond Reservation (approximately 32 cans, two recycling bins, and four Big Belly trash/recycling units), Trash cans and recycling bins at Maher Park (approximately 5), Trash cans along Concord Avenue sidewalk (approximately 5) and trash cans at Payson Park Reservoir (approximately 4). Cans will be emptied, securely lined with a plastic liner (supplied by the Water Department) and disposed of in a dumpster at the Water Treatment Facility. Recyclable material will be collected and deposited in a recycling tote located at the Water Department. While the trash cans are being emptied the landscape, worker shall refill the mutt mitt dispensers (approximately 9) located around the reservation. Contractor shall use a utility vehicle to perform all trash disposal work while at Fresh Pond. The trash cans will be emptied according to the schedule listed below. If a scheduled trash day falls on a City holiday the cans will be emptied either the day before or the day after the holiday.

To prevent rodents, all green waste deposited at the Maher Park Community Garden bin, and green waste deposited outside the Parkway Community Garden compost bins will be removed.

Name of Bidder: _____________________________________________________
and brought to the CWD composting bin located at the Fresh Pond Municipal golf course on the
days the trash cans are being emptied.

Note: during the winter months December-early March contractor may use heated gasoline
powered utility vehicle or small pickup truck (Toyota Tacoma, Chevrolet Colorado, or
similar size class) to perform task.

Fresh Pond Reservation:
Monday, Wednesday, and Friday throughout the year

Payson Park Reservoir:
Monday, Wednesday, and Friday throughout the year

Reservation Fence Line Cutting
Fence lines at the following locations will be trimmed four times per year. (To be scheduled by
CWD)
- Huron Avenue fence line from Golf Course Pro shop to Blanchard Road, from Blanchard
road to Concord Avenue, along Concord Avenue ending at Alewife Brook Parkway.
- All fence lines within Maher Park including Maher park community garden fence,
- Fence line surrounding Parkway Community Garden
- Fence line surrounding Parkway Community Garden bio-swale
- Fence line at Fresh Pond golf course fifth fairway
- Fence line at Little Fresh Pond, and Stream C restoration areas

Trimming includes the following. Shearing vegetation to fence line and removal of any trees,
shrubs or vines Growing through chain link fabric, as well as any vegetation hanging below seven
feet (7’). At Maher park community garden trimming involves cutting a 1-2’ swath around
perimeter fence and removing any climbing vines or weeds

Fresh Pond Shoreline Cutting
Once a year starting approximately in December (depending on snow cover) all small brush and
herbaceous plant material less than 1/8”-2” in diameter, but no greater than 2” growing on land
within the Fresh Pond Reservoir perimeter fence will be cut manually using loppers, chainsaws
and gas-powered brush saws. All material will be cut up and left on the shoreline. All vines,
branches, and saplings growing on or through the chain link fabric on gates or on signs will be cut
When brush cutting is complete contractor will attach approximately 300’ feet of snow fence
directly to perimeter fence as directed (materials to be provided by CWD). Any litter or other
debris found while shoreline is being cut shall be picked up and disposed of.

All power equipment used for brush cutting shall be refueled on the perimeter road.

Slice Seeding
The City will provide all seed.

All turf areas, both passive and active, will be slice seeded, except Payson Park Reservoir,
Stony Brook Reservoir, and Hobbs Brook Reservoir (See Appendix C for areas to be slice
seeded). Dependent upon turf conditions both DCR Rotaries may be slice seeded.

All sprinkler heads will be marked with flags by the city prior to slice seeding operations. If the
contractor, during slice seeding operations damages a marked head, it is the responsibility of the
contractor to repair or replace the damaged irrigation head.

All turf areas will be slice seeded twice, once during the last week of April and once during last
week of September.

Name of Bidder: _____________________________________________________
The blades on the slice seeder will be sharp and penetrate to a depth in the ground a minimum of ½".

Slice seeding will be done in two directions, with one pass being in direction 90 degrees opposite from the first pass.

A tractor mounted slice seeder will be required for slice seeding on large turf areas.

Reservoir System Manager may modify the slice-seeding schedule at his/her discretion.

Contractor must exercise caution while slice seeding near Flexi®-Pave paths at Kingsley Park and will be held responsible for any damage that occurs during slice seeding operations.

**Aeration and Dragging**

All turf grass areas will be aerated, except at Payson Park Reservoir, Stony Brook Reservoir, and Hobbs Brook Reservoir. (See Appendix C for turf areas to be aerated).

All large turf areas on reservation will be aerated by CWD staff; contractor is responsible for all small turf areas and around trees and planting beds not accessible by tractor.

The City prior to aeration operations will mark all sprinkler heads with paint or flags. If the contractor during aeration operations damages a marked head, it is the responsibility of the contractor to repair or replace the damaged irrigation head.

Turf area to be aerated should be wet-following rain or irrigation-to favor deeper penetration of tines.

Aeration of all turf grass areas will be performed twice, once in the second week of April and once in the second week of September.

The tines will be new and sharp with a minimum working depth of 3-4".

Aeration will be done in two directions, with one pass being in direction 90 degrees opposite from the first pass.

A walk behind drum style core aerator will be required for aeration on small turf areas. Cores should be allowed to dry before being dragged to encourage better break-up of cores.

All Turf grass areas will be dragged enough to completely break up all cores.

Reservoir System Manager will approve the dimensions of tines.

**Fall Clean Up**

Fall clean up shall begin by the third week of November and continue on a weekly basis to be completed by the last week of December or as early as weather permits. All mown areas, mulched areas, and the inner courtyard adjacent to the vehicle garage will be included in the fall clean up. Department of Conservation and Recreation land extends from the parkway curb to the wood edge of the Reservation. All sidewalk leaf removal starts at the gutter line and ends at abutting chain link fence. Department of Conservation & Recreation rotaries are at the intersection of Alewife Brook Parkway and Concord Avenue (Concord Avenue Rotary), and at the intersection of Alewife Brook Parkway and New Street (Sozio Rotary). Fresh pond perimeter road consists of a 2.25-mile-long service road that encircles Fresh Pond Reservoir. All leaf removal starts at the pond fence and ends at the abutting woodlands or meadows.

All leaves should be collected and removed off site with a power leaf vacuum loader. All trash and litter should be bagged and disposed of site. **Due to site constraints, a leaf vacuum is...**
required onsite at a minimum five (5) times during fall cleanup, though more visits may be needed. When leaf vacuum on site the cobble swale below Glacken Field will be vacuumeed out.

All hard areas, including but not limited to walks, grass mats, driveways, sidewalks, adjacent gutters, concrete pads etc. at or directly adjacent to every sited, are to be swept or vacuumed clean.

All depressions, ruts, holes in all turf areas to include the fields and active and passive areas are to be filled to safe and proper existing matching grades with rolled or tamped loam and then seeded.

The City will provide seed, and the contractor will provide loam. Report any graffiti to the Reservoir System Manager immediately.

Fall cleanup at Golf course pro shop will include hand raking of swale, rain garden and cutting and removal of all dead herbaceous matter present in said structures as well as removal of herbaceous material growing in gravel infiltration trench

Cleanup on the Fresh Pond Reservoir perimeter road will consist of blowing or raking leaves into wooded areas as directed and removal by leaf vacuum when directed. **Due to site constraints, a leaf vacuum is required onsite at a minimum five (5) times during fall cleanup, though more visits may be needed.**

Reduced decibel leaf blowers will be used at all times

Electric leaf blowers will be used in noise-sensitive areas

Fall cleanup will occur at the following sites:

**Water Treatment Facility**
**Kingsley Park**
**Kingsley Park Overlooks and Flexi®-Pave paths**
**Kingsley Park Forest Playscape**
**Maher Park**
**Blacks Nook outdoor classroom turf area**
**Golf Course Pro Shop**
**Golf Course Pro Shop patio area**
**Golf course Pro Shop swale/raingarden and infiltration trench**
**Payson Park**
**Bikeway Community Garden planting beds**
**Blanchard Road sidewalk**
**Concord Avenue west sidewalk (Reservation side)**
**Concord Avenue east sidewalk (Industrial side)**
**Concord Avenue turf (in front of Sancta Maria Hospital)**
**Huron Avenue sidewalk/Huron Avenue curb line**
**Blacks Nook restoration area (Concord Avenue entrance)**
**Olga’s Bench planting area**
**Cobble swale below Glacken Field**
**Perimeter Road fountain planting area**
**Department of Conservation & Recreation Rotaries**
**Fresh Pond Reservoir perimeter road**
**Lusitania Meadow (Concord Avenue entrance)**
**Lusitania Meadow service road**
**Blacks Nook service road**
**Kingsley Park service road**
**Kingsley Park Overlooks**
**Department of Conservation & Recreation Rotaries**
Stony Brook Reservoir Dam, barn, and gatehouse parking area
Hobbs Brook Reservoir Dam

Reservation Plant Healthcare Program
Contractor or Subcontractor must perform plant health care as part or primary source of business. Contractor or subcontractor must own or lease all required equipment. Equipment must be painted with company name and logo. Contractor must have performed plant health care for at least three years.

Work will consist of the following:

- Two yearly dormant oil sprays of all hemlocks (to be scheduled) located in Kingsley Park, Water Treatment Plant, and the Northeast Sector (note vehicle access restricted to pickup truck and will use alternan mats to access site in order to prevent turf damage)
- One DED Tree injection of all planted elms at the Reservation
- One trunk injection of Lepitect infusible to approximately 56-67 Hemlocks in Kingsley park
- Two trunk injections of ArborMectin to approximately 35 white paper birch of approximately 4”-7” DBH to control bronze birch borer.
- Recording work in Reservation Cartagraph work order system when plant health care task is completed

Once per three-year contract cycle approximately 35 planted elms at Fresh Pond Reservation of approximately 13-15” DBH are to be macro injected with ArborTec20-S at a rate sufficient to provide three years protection. Refer to label for injection rate and method in contract addendum for best results, injections shall be made after the tree is fully leafed and the seeds have dropped, through late summer or early fall. Contractor is responsible for accurate tree count and DBH measurement for all Elm trees to be injected.

Once at the beginning of the Contract cycle (2019) and then in year two or (2021) of the contract approximately 35 white birch of approximately 4”-7” DBH are to be trunk injected with ArborMectin to control Bronze Birch Borer. Injections shall be made in the spring after the trees have leafed out. Refer to label for injection rate in the addendum. Contractor is responsible for accurate tree count and DBH measurement for all Birch trees to be injected.

Once at beginning of contract cycle around second week of May, approximately 56-67 Hemlocks of approximately 10”-18” DBH are to be trunk injected with Lepitect infusible to control Hemlock wooly adelgid and elongate scale. Refer to label for injection rate in addendum. Contractor is responsible for accurate tree count and DBH measurement for all Hemlocks to be injected

- Plant Health care technician must be a licensed applicator with a commercial (woody ornamentals category 36 license) and at least three years’ experience. Technician must be certified in macro tree injections Technician must come fully equipped with the following:
  - Truck mounted sprayer with 200-400-gallon tank, 8-20hp motor, with pump capable of 35gpm and 500-700 psi. Sprayer must be able to reach trees up to 80’ in height
  - Assorted spray nozzles, deep root feeder needle, horticultural oils, soaps, and antidesiccants.
  - Macro injection equipment
  - All additional recommended plant health care work will be billed under the time and materials unit prices with approval.
  - Due to heavy visitation at Fresh Pond, plant health care sprays will have to be scheduled for 5:30am
The Plant Health Care Program will cover all plants, trees, and shrubs located in the following areas:

- Weir Meadow bioswale
- Bikeway berm planting areas
- Stream C restoration area
- Little Fresh Pond restoration area
- Blacks Nook Restoration area
- Blacks Nook (Concord Avenue entrance)
- Olga’s Bench planting area
- Guzetti Memorial planting bed
- Parkway Community Garden planting beds
- Perimeter Road Water Fountain planting area
- Maher Park
- Lusitania Meadow
- Butterfly Meadow
- Golf Course Pro Shop
- Golf course Pro Shop Flexi®-Pave patio area
- Water Treatment Plant
- Kingsley Park

Name of Bidder: _____________________________________________________
CONTRACTOR’S INSURANCE OBLIGATIONS - NON-CONSTRUCTION INSURANCE REQUIREMENTS

A. The contractor agrees to indemnify and save the City of Cambridge, harmless against any and all damages, costs and expenses which it may suffer or pay out of reason of any claims, actions, rights of action, in law or equity, arising out of performance of the work and resulting from injuries or damage occurring to, or caused in whole or in part by the contractor mover and any of his/her officers, employees or representatives or firm directly or indirectly engaged in moving by the contractor.

B. The contractor shall provide the City of Cambridge with insurance policies as stated below at the expense of the Contractor. The insurance certificate must be written in the name of the City of Cambridge and its Engineer (CDM) as an Additional Named Insured in order to protect the interest of the City and it’s Engineer from any liability which might be incurred against it as the result of any operation of the contractor, its subcontractors, or their employees.

C. The insurance required shall include all major divisions of coverage, and shall be on a comprehensive general basis including Premises and Operations, and Owned, Non-owned, and Hired Motor Vehicles. Such insurance shall be written for not less than any limits of liability required by law or the following limits, whichever are greater.

D. Certificates must be presented to the City at the time the contract is signed by the Contractor.

E. The Contractor and all subcontractors waive subrogation rights against the City of Cambridge for all losses.

F. EACH POLICY SHALL CONTAIN A 30-DAY NOTICE OF CANCELLATION, CHANGE OR NON-RENEWAL.

G. NOTICE OF OCCURRENCE is to be given to the City Manager, City of Cambridge, 795 Massachusetts Avenue, Cambridge, Ma. 02139-3219.

H. INSURANCE POLICIES MUST COVER THE ENTIRE CONTRACT PERIOD

1. Owner’s Protective Liability
   Each Occurrence $1,000,000
   Aggregate $1,000,000

Name of Bidder: _____________________________________________________
2. Commercial General Liability
   General Aggregate $1,000,000
   Products Completed Operations Aggregate $1,000,000
   Personal Injury and Advertising Limit
   Each Occurrence $1,000,000

3. Automotive For all owned, non-owned, hired and Leased Vehicles
   Each Occurrence Combined Single Limit $1,000,000
   - Or-
   Bodily Injury - each person $1,000,000
      - each accident $1,000,000
   Property damage- each occurrence $500,000

4. Umbrella
   Combined single limit $1,000,000
   General Aggregate $1,000,000

5. Worker’s Compensation
   Coverage A STATUTORY
   Coverage B Each Accident $100,000
   Disease- Policy Limit $500,000
   Disease- Employee $100,000

6. Full Replacement Valuation for Damaged
   or Missing Items No depreciation shall apply. $50,000

I. The Contractor may purchase and maintain excess liability insurance in the umbrella
   form in order to satisfy the limits of liability required for the insurance to be purchased and
   maintained in accordance with the requirements set forth above (in addition to the
   umbrella limits required). Evidence of such excess liability shall be delivered to the City of
   Cambridge in the form of a certificate indicating the policy numbers and limits of liability of
   all underlying insurance. The City of Cambridge must be an additional insured on any
   such umbrella policy. The City of Cambridge reserves the right, at its sole discretion, to
   amend the insurance requirements set forth above.

J. Failure of the contractor to provide and continue in force such insurance shall be deemed
   a material breach of contract and shall operate as an immediate termination thereof.
Mandatory Equipment List

Brand Name or Equal-equipment where applicable the City has specified a brand name of equipment the City will consider or equal equipment. If requested by the Water Department it shall be the responsibility of the bidder to show variations, even minor from the herein specified. It shall be the Water Departments sole discretion to determine if the bidder’s equipment is equal.

A “NO” response, a failure to respond, to each of piece of equipment listed will result in a rejection of your bid.

Answer Yes or No

Do you own or lease the following equipment and is the equipment five years old or less?

Please check yes or no next to each piece of equipment listed in the Mandatory Equipment List followed on the next pages.

### Mandatory Equipment List

<table>
<thead>
<tr>
<th>Amount</th>
<th>Equipment Description</th>
<th>YES</th>
<th>NO</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>All required personal safety equipment required and approved by the city, the state, or OSHA.</td>
<td></td>
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<tr>
<td></td>
<td>All required signs, traffic and pedestrian control devices as indicated in the Manual of Uniform Traffic Control Devices (MUTCD).</td>
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<tr>
<td>2</td>
<td>60” inch or larger Hydrostatic rotary ride on mowers</td>
<td></td>
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<tr>
<td>3</td>
<td>48” Hydrostatic rotary ride on mowers with mulching and discharge decks</td>
<td></td>
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<tr>
<td>1</td>
<td>21” electric powered self-propelled electric lawnmower Green Works or equivalent</td>
<td></td>
<td></td>
</tr>
<tr>
<td>1</td>
<td>48” propane powered hydrostatic riding mower with mulching and discharge deck</td>
<td></td>
<td></td>
</tr>
<tr>
<td>3</td>
<td>48”-inch Hydrostatic walk-behind rotary mowers with mulching and discharge decks.</td>
<td></td>
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<tr>
<td>4</td>
<td>21” Inch rotary push mowers with mulching decks less than three years old</td>
<td></td>
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<tr>
<td>4</td>
<td>Gas powered string trimmers 25 cc minimum</td>
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<tr>
<td>4</td>
<td>Gas powered pruning shears 25 cc minimum</td>
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<tr>
<td>1</td>
<td>Gas powered brush saw 40 cc minimum</td>
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<tr>
<td>1</td>
<td>Chain saw with 18” bar</td>
<td></td>
<td></td>
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<tr>
<td>Amount</td>
<td>Equipment Description</td>
<td>YES</td>
<td>NO</td>
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<tr>
<td>2</td>
<td>Stihl FS 85 or equivalent rechargeable electric string trimmers with four batteries</td>
<td></td>
<td></td>
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<tr>
<td>2</td>
<td>Stihl BGA85 or equivalent rechargeable hand held electric blowers with four batteries</td>
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<tr>
<td>1</td>
<td>Stihl quick charger</td>
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<tr>
<td>1</td>
<td>1-2 gallon hand spray tank for stump applications</td>
<td></td>
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<tr>
<td>1</td>
<td>3-5 gallon back pack sprayer for foliar applications</td>
<td></td>
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<tr>
<td>1</td>
<td>Truck mounted Water tank 300 gallons or greater with a 5-8hp motor capable of 12.5gpm, 560psi and a 400’ hose reel.</td>
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<tr>
<td>3</td>
<td>Tail gate mount leaf loader minimum 11 hp</td>
<td></td>
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<tr>
<td>1</td>
<td>Tow behind leaf loader, minimum 25 HP</td>
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<tr>
<td>1</td>
<td>Riding power turf sweeper</td>
<td></td>
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<tr>
<td>2</td>
<td>Billy goat F 9 reduced decibel Push blower, minimum 9 HP</td>
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<tr>
<td>4</td>
<td>Backpack blowers (Stihl BR 500 reduced decibel) or equivalent</td>
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<tr>
<td>1</td>
<td>Walk behind slice seeder.</td>
<td></td>
<td></td>
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<tr>
<td>1</td>
<td>Walk behind aerator</td>
<td></td>
<td></td>
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<tr>
<td>3</td>
<td>½ ton pickup trucks less than five years old and painted with contractor’s name</td>
<td></td>
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<tr>
<td>1</td>
<td>40,000 GVW dump truck less than five years old and painted with contractor’s name</td>
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<tr>
<td>3</td>
<td>One-ton rack body dump trucks less than five years old and painted with contractor’s name</td>
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<td></td>
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<tr>
<td>3</td>
<td>Trailers of sufficient size to accommodate required equipment.</td>
<td></td>
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<tr>
<td>1</td>
<td>Truck or trailer mounted Bark Mulch Blower (with 4.5 cubic yard) or greater hopper capacity. Blower must be capable of applying compost/mulch blend.</td>
<td></td>
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<tr>
<td>1</td>
<td>Truck or trailer mounted Hydro seeder</td>
<td></td>
<td></td>
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<tr>
<td>1</td>
<td>Turf tractor, minimum 40-45 H.P. with a 20hp rear PTO, and hydraulics</td>
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<tr>
<td>Amount</td>
<td>Equipment Description</td>
<td>YES</td>
<td>NO</td>
</tr>
<tr>
<td>--------</td>
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</tr>
<tr>
<td>1</td>
<td>Tractor mounted PTO driven aerator with a working core aeration depth of 3”-4” and a width of no less than 60”</td>
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<tr>
<td>1</td>
<td>utility vehicle mounted topdresser</td>
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<tr>
<td>1</td>
<td>Tractor mounted slice seeder with a working area of no less than 48”</td>
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<tr>
<td>1</td>
<td>Tractor mounted mowing deck with a 60” minimum cutting width</td>
<td></td>
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<tr>
<td>1</td>
<td>Tractor mounted large capacity rotary spreader</td>
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<tr>
<td>1</td>
<td>Truck mounted tree sprayer 200-gallon tank 8hp or greater 500-700psi</td>
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<td></td>
<td>Assorted plant health care equipment, spray gun, deep root feeder needle, micro injection supplies.</td>
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<tr>
<td>1</td>
<td>Motorized turf sprayer with 15’ boom</td>
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<tr>
<td>1</td>
<td>Ride on motorized fertilizer spreader with 150lb-200lb hopper capable of liquid and granular applications</td>
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<tr>
<td>3</td>
<td>80lb capacity rotary spreaders</td>
<td></td>
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<tr>
<td>1</td>
<td>walk-behind sod cutter minimum 18” width</td>
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<tr>
<td>1</td>
<td>Billy goat QV quiet vac self-propelled industrial duty vacuum with sulky</td>
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<tr>
<td>1</td>
<td>Tractor or skid steer mounted hydraulic earth auger with up to a 36” bit</td>
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<tr>
<td>2</td>
<td>skid steer loaders</td>
<td></td>
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<tr>
<td>1</td>
<td>Toro Dingo (or equivalent) with attachments</td>
<td></td>
<td></td>
</tr>
<tr>
<td>1</td>
<td>Walk behind brush cutter with 12hp engine and 27” deck</td>
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<tr>
<td>1</td>
<td>Walk behind 8hp rototiller</td>
<td></td>
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<tr>
<td>1</td>
<td>8hp two stage snow blower</td>
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<tr>
<td>1</td>
<td>two stage hydraulic snow blower, 48” in width, for skid steer loader</td>
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<td></td>
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<tr>
<td>1</td>
<td>snow plow for skid steer loader</td>
<td></td>
<td></td>
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<tr>
<td>1</td>
<td>utility vehicle with hydraulic dump body and heated cab for winter maintenance (may substitute small pickup)</td>
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<td></td>
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<tr>
<td>Amount</td>
<td>Equipment Description</td>
<td>YES</td>
<td>NO</td>
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</tr>
<tr>
<td>1</td>
<td>Toro workman or John Deere gator Electric Utility vehicle with electric dump body (to be stationed on site)</td>
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<tr>
<td>1</td>
<td>Compressor minimum 185cfm</td>
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<td></td>
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<tr>
<td>1</td>
<td>One power washer gasoline engine with a wide PSI range and interchangeable nozzles</td>
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<td></td>
</tr>
<tr>
<td>1</td>
<td>Greens trailer for transportation of mowers and vacuum</td>
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</tr>
</tbody>
</table>

**End of Mandatory Equipment List**

**Payments**
The Contractor will bill the Cambridge Water Department, Watershed Division, Attn: Vincent Falcione at 250 Fresh Pond Parkway, Cambridge, MA 02138 on a monthly basis for work outlined in the specifications and other work completed and authorized by the Site Supervisor in the previous month.

Only work outlined in the specification or with prior approval by the Water Systems Manager will be billed.

Work outlined in the specifications that is not performed by the required date will not be submitted for payment.
QUALITY REQUIREMENTS

A “NO” response, a failure to respond, or a failure to meet to any of the following Quality Requirements will result in a rejection of your bid (1-6).

Circle Yes or No for each of the following requirements

1. The Bidder is able to be on site within one hour of request from the Cambridge Water Department.
   Yes    No

2. Bidder has a minimum of ten years' experience in the area of grounds maintenance including turf grass, both passive sites, athletic fields, and proper maintenance of shrubs.
   Yes    No

3. Bidder has performed grounds maintenance at a municipality, institution or facility within the past five years with an annual contract value of at least $100,000.00.
   Yes    No

4. Bidder employs at least one Massachusetts Certified Landscape Professional who will oversee the contract.
   Yes    No

5. Bidder employs at least one certified Arborist or certified horticulturist who will perform the Cambridge Water Department Plant Health Care program.
   Yes    No

6. Bidder employs at least one plant health care technician who has a Category 36 Commercial applicators license.
   Yes    No

Submit this form with your bid.

Name of Bidder: _____________________________________________________
**Bid Submission Requirements**

1. The bidder shall submit with their bid references including telephone number and contact names from at least three **municipality, Institution or facility with an annual contract value of at least $100,000.00** for whom bidder has provided landscaping services within the past five years of a similar scope. In addition, the City reserves the right to use itself as a reference. A bid maybe rejected on the basis of one or more references reporting less than excellent past performance by the bidder and or that experience does not meet the Quality Requirements. Each reference must include contact value and description of work performed, with contact information for individual having contract management responsibility. In addition, the City reserves the right to use itself as a reference.

<table>
<thead>
<tr>
<th>Reference # 1</th>
</tr>
</thead>
<tbody>
<tr>
<td>NAME</td>
</tr>
<tr>
<td>Description of services provided</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Reference # 2</th>
</tr>
</thead>
<tbody>
<tr>
<td>NAME</td>
</tr>
<tr>
<td>Description of services provided</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Reference # 3</th>
</tr>
</thead>
<tbody>
<tr>
<td>NAME</td>
</tr>
<tr>
<td>Description of services provided</td>
</tr>
</tbody>
</table>

BID SUBMISSIONS CONTINUED ON NEXT PAGE
2. Please submit the **requested information and resume** for each of the following individuals who will be assigned to the City of Cambridge Landscape Maintenance Program for the Water Department.

**Massachusetts Certified Landscape Professional:**

<table>
<thead>
<tr>
<th>Name</th>
<th>MCLP number</th>
<th>Contact phone number</th>
</tr>
</thead>
</table>

**Certified Arborist or Certified Horticulturist for Plant Health Care Operations**

<table>
<thead>
<tr>
<th>Name</th>
<th>Certification number</th>
<th>Contact phone number</th>
</tr>
</thead>
</table>

**Pesticide Applicator**

<table>
<thead>
<tr>
<th>Name</th>
<th>Pesticide license category and number</th>
<th>Contact phone number</th>
</tr>
</thead>
</table>

**Plant Health Care Technician**

<table>
<thead>
<tr>
<th>Name</th>
<th>Pesticide License category and License Number</th>
<th>MCA or MCH certification number</th>
</tr>
</thead>
</table>

Submit this form and the bid submissions with your bid.
Price Proposal

The price shall be in accordance with the plans and specifications, including all labor and materials. The prices shall remain firm for the contract period, subject to additions and deductions according to the terms of the specifications.

The pricing shall remain firm for the contract period.

In addition to submitting the Price Proposal all bidders must fill out and complete in it's entirely the Appendix A Schedule of Values and Appendix B Supplemental Unit Prices. Incomplete price proposals will not be considered.

Appendix A price summary

Annual Price for Maintenance Year 2019 $____________________
Annual Price for Maintenance Year 2020 $____________________
Annual Price for Maintenance Year 2021 $____________________
Appendix B, total labor prices per year $______________ X 3 years= $___________

Total Bid Submitted Appendix A & Appendix B $____________________
Total Bid Submitted for Appendix A & Appendix B in words: ____________________________________________________________
Signature of Bidder: ____________________________________________________
Name of Bidder: _______________________________________________________
Email address: _________________________________________________________

Submit this form with your bid
## Appendix A - Schedule of Values – Bidders must submit a price on all items (Items 1-77)

<table>
<thead>
<tr>
<th>Item</th>
<th>Description</th>
<th>Annual Price Year 2019</th>
<th>Annual Price Year 2020</th>
<th>Annual Price Year 2021</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>Perform aeration and dragging of turf areas.</td>
<td>Complete job</td>
<td>$</td>
<td>$</td>
</tr>
<tr>
<td>2</td>
<td>Slice seeding all turf areas (seed provided by City)</td>
<td>Complete job</td>
<td>$</td>
<td>$</td>
</tr>
<tr>
<td>3</td>
<td>Weekly mowing and trimming</td>
<td>Complete job (31 cuts)</td>
<td>$</td>
<td>$</td>
</tr>
<tr>
<td>4</td>
<td>Furnish and install Fibar® wood surfacing</td>
<td>Complete job</td>
<td>$</td>
<td>$</td>
</tr>
<tr>
<td>5</td>
<td>Bi weekly maintenance of forest playscape area</td>
<td>Complete job</td>
<td>$</td>
<td>$</td>
</tr>
<tr>
<td>6</td>
<td>Provide and install reservation compost/mulch according to specifications</td>
<td>Complete job</td>
<td>$</td>
<td>$</td>
</tr>
<tr>
<td>7</td>
<td>Weekly litter pick-up and trash removal (turf areas, mulched areas, sidewalks, parking lots)</td>
<td>Complete job whole year</td>
<td>$</td>
<td>$</td>
</tr>
<tr>
<td>8</td>
<td>Maintenance reports and site walkthrough (every two weeks)</td>
<td>Per report</td>
<td>$</td>
<td>$</td>
</tr>
<tr>
<td>9</td>
<td>Spring clean up</td>
<td>Complete job</td>
<td>$</td>
<td>$</td>
</tr>
<tr>
<td>10</td>
<td>Repairing of plow damage</td>
<td>Complete job</td>
<td>$</td>
<td>$</td>
</tr>
<tr>
<td>11</td>
<td>Fall clean up</td>
<td>Complete job</td>
<td>$</td>
<td>$</td>
</tr>
<tr>
<td>12</td>
<td>Reservation irrigation start up and winterization per contract specifications</td>
<td>Complete job</td>
<td>$</td>
<td>$</td>
</tr>
<tr>
<td>13</td>
<td>Weekly weeding of all beds and tree wells at reservation according to specifications</td>
<td>Complete job (31 visits)</td>
<td>$</td>
<td>$</td>
</tr>
<tr>
<td>14</td>
<td>Weekly sweeping of all sidewalks, paths, and concrete aprons. (Parking lots not included)</td>
<td>Complete job (31 visits)</td>
<td>$</td>
<td>$</td>
</tr>
<tr>
<td>15</td>
<td>Scheduled power sweeping and vacuuming of sidewalks, concrete platforms, and Flexi®-Pave surfaces (according to specifications, paid per visit)</td>
<td>Complete job (6 visits)</td>
<td>$</td>
<td>$</td>
</tr>
<tr>
<td>Item</td>
<td>Description</td>
<td>Annual Price Year 2019</td>
<td>Annual Price Year 2020</td>
<td>Annual Price Year 2021</td>
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<td>------------------------</td>
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</tr>
<tr>
<td>16</td>
<td>Spring clean up Complete job $</td>
<td>$</td>
<td>$</td>
<td></td>
</tr>
<tr>
<td>17</td>
<td>Repairing of plow damage Complete job $</td>
<td>$</td>
<td>$</td>
<td></td>
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<tr>
<td>18</td>
<td>Fall clean up Complete job $</td>
<td>$</td>
<td>$</td>
<td></td>
</tr>
<tr>
<td>19</td>
<td>Perform aeration and dragging of turf areas Complete job $</td>
<td>$</td>
<td>$</td>
<td></td>
</tr>
<tr>
<td>20</td>
<td>Slice seeding of all turf areas (seed provided by City) Complete job $</td>
<td>$</td>
<td>$</td>
<td></td>
</tr>
<tr>
<td>21</td>
<td>Weekly sweeping/raking of sidewalks and paths at Maher Park, Lusitania Meadow, and Butterfly Meadow Complete job (31 visits) $</td>
<td>$</td>
<td>$</td>
<td></td>
</tr>
<tr>
<td>22</td>
<td>Weekly mowing and trimming of Maher Park Complete job (31 visits) $</td>
<td>$</td>
<td>$</td>
<td></td>
</tr>
<tr>
<td>23</td>
<td>Fresh Pond Shoreline cutting Complete job $</td>
<td>$</td>
<td>$</td>
<td></td>
</tr>
<tr>
<td>24</td>
<td>Flushing of Flexi®-Pave surfaces Complete job $</td>
<td>$</td>
<td>$</td>
<td></td>
</tr>
<tr>
<td>25</td>
<td>Weekly litter pick up &amp; trash removal at Maher Park, Community Garden, Butterfly Meadow, Lusitania Meadow, and Concord Avenue sidewalks. Complete job whole year $</td>
<td>$</td>
<td>$</td>
<td></td>
</tr>
<tr>
<td>26</td>
<td>Reservation small tree and shrub pruning in formal areas according to specifications Complete job (three visits) $</td>
<td>$</td>
<td>$</td>
<td></td>
</tr>
<tr>
<td>27</td>
<td>Spring cut (May) Complete job $</td>
<td>$</td>
<td>$</td>
<td></td>
</tr>
<tr>
<td>28</td>
<td>Summer cut (July) Complete job $</td>
<td>$</td>
<td>$</td>
<td></td>
</tr>
<tr>
<td>29</td>
<td>Fall cut (August-September) Complete job $</td>
<td>$</td>
<td>$</td>
<td></td>
</tr>
<tr>
<td>30</td>
<td>Winter cut (October-November) Complete job $</td>
<td>$</td>
<td>$</td>
<td></td>
</tr>
<tr>
<td>31</td>
<td>Reservation dormant oil sprays Complete job $</td>
<td>$</td>
<td>$</td>
<td></td>
</tr>
<tr>
<td>32</td>
<td>Reservation Lepitetc Infusible injection (2019 Only) Complete job $</td>
<td>XXXX</td>
<td>XXXX</td>
<td></td>
</tr>
<tr>
<td>Item</td>
<td>Description</td>
<td>Annual Price Year 2019</td>
<td>Annual Price Year 2020</td>
<td>Annual Price Year 2021</td>
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<tr>
<td>------</td>
<td>------------------------------------------------------------------------------</td>
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<td>------------------------</td>
</tr>
<tr>
<td>33</td>
<td>Reservation ArborMectin Injection (2019 &amp; 2021)</td>
<td>Complete job</td>
<td>$</td>
<td>XXXX</td>
</tr>
<tr>
<td>34</td>
<td>Reservation DED Macro injections with Arbortect 20-S</td>
<td>Complete job</td>
<td>$</td>
<td>XXXX</td>
</tr>
<tr>
<td>35</td>
<td>Weekly emptying and lining of trash cans at Fresh Pond Reservation/Maher Park</td>
<td>Complete job whole year</td>
<td>$</td>
<td>$</td>
</tr>
<tr>
<td></td>
<td><strong>Payson Park Reservoir Maintenance</strong></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>36</td>
<td>Spring clean up</td>
<td>Complete job</td>
<td>$</td>
<td>$</td>
</tr>
<tr>
<td>37</td>
<td>Provide and install compost/mulch according to specifications</td>
<td>Complete job</td>
<td>$</td>
<td>$</td>
</tr>
<tr>
<td>38</td>
<td>Fall clean up</td>
<td>Complete job</td>
<td>$</td>
<td>$</td>
</tr>
<tr>
<td>39</td>
<td>Small tree/shrub pruning according to specifications</td>
<td>Complete job</td>
<td>$</td>
<td>$</td>
</tr>
<tr>
<td>40</td>
<td>Mowing/litter pick up <strong>outside</strong> fence</td>
<td>Complete job (14 times per year)</td>
<td>$</td>
<td>$</td>
</tr>
<tr>
<td>41</td>
<td>Mowing/litter pick up <strong>inside</strong> fence</td>
<td>Complete job (7 times per year)</td>
<td>$</td>
<td>$</td>
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<tr>
<td>42</td>
<td>Weekly trash removal on turf, planting beds&amp; parking lot</td>
<td>Complete job whole year</td>
<td>$</td>
<td>$</td>
</tr>
<tr>
<td>43</td>
<td>Weekly emptying of and lining of trash cans at Payson Park Reservoir</td>
<td>Complete job whole year</td>
<td>$</td>
<td>$</td>
</tr>
<tr>
<td></td>
<td><strong>Fresh Pond Golf Course Landscape Maintenance</strong></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>44</td>
<td>Spring clean up</td>
<td>Complete job</td>
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<td>$</td>
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<tr>
<td>45</td>
<td>Fall clean up</td>
<td>Complete job</td>
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<td>$</td>
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<tr>
<td>46</td>
<td>Weekly weeding of all golf course beds&amp; planting areas</td>
<td>Complete job</td>
<td>$</td>
<td>$</td>
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<tr>
<td>47</td>
<td>Provide and install compost/mulch according to specifications</td>
<td>Complete job</td>
<td>$</td>
<td>$</td>
</tr>
<tr>
<td>48</td>
<td>Golf course Small tree and shrub pruning according to specifications</td>
<td>Complete job</td>
<td>$</td>
<td>$</td>
</tr>
<tr>
<td>49</td>
<td>Weekly trash removal on Huron Avenue, Blanchard Road</td>
<td>Complete job</td>
<td>$</td>
<td>$</td>
</tr>
<tr>
<td>Item</td>
<td>Description</td>
<td>Annual Price Year 2019</td>
<td>Annual Price Year 2020</td>
<td>Annual Price Year 2021</td>
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<td>------</td>
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<td>------------------------</td>
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</tr>
<tr>
<td>50</td>
<td>Trapelo Road Dam flail mowing June Cut</td>
<td>$</td>
<td>$</td>
<td>$</td>
</tr>
<tr>
<td>51</td>
<td>Trapelo Road Dam flail mowing October Cut</td>
<td>$</td>
<td>$</td>
<td>$</td>
</tr>
<tr>
<td></td>
<td><strong>Hobbs Brook Dam Maintenance</strong></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>52</td>
<td>Spring mowing (May) Complete Job</td>
<td>$</td>
<td>$</td>
<td>$</td>
</tr>
<tr>
<td>53</td>
<td>Filling of divots and animal burrows (May)</td>
<td>$</td>
<td>$</td>
<td>$</td>
</tr>
<tr>
<td>54</td>
<td>Summer Mowing (July) Complete Job</td>
<td>$</td>
<td>$</td>
<td>$</td>
</tr>
<tr>
<td>55</td>
<td>Filling of divots and animal burrows (July)</td>
<td>$</td>
<td>$</td>
<td>$</td>
</tr>
<tr>
<td>56</td>
<td>Fall Mowing (August – September) Complete Job</td>
<td>$</td>
<td>$</td>
<td>$</td>
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<tr>
<td>57</td>
<td>Filling of divots and animal burrows (August – September) Complete Job</td>
<td>$</td>
<td>$</td>
<td>$</td>
</tr>
<tr>
<td>58</td>
<td>Winter Mowing (October- November) Complete Job</td>
<td>$</td>
<td>$</td>
<td>$</td>
</tr>
<tr>
<td>59</td>
<td>Filling of divots and animal burrows (October- November) Complete Job</td>
<td>$</td>
<td>$</td>
<td>$</td>
</tr>
<tr>
<td>60</td>
<td>Hobbs Brook Dam Flail mowing June Cut</td>
<td>$</td>
<td>$</td>
<td>$</td>
</tr>
<tr>
<td>61</td>
<td>Hobbs Brook Dam Flail mowing October Cut</td>
<td>$</td>
<td>$</td>
<td>$</td>
</tr>
<tr>
<td></td>
<td><strong>Stony Brook Dam Maintenance</strong></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>62</td>
<td>Twice yearly spillway, swale, and detention basin cutting June cut</td>
<td>$</td>
<td>$</td>
<td>$</td>
</tr>
<tr>
<td>63</td>
<td>Twice yearly spillway, swale, and detention basin cutting October cut</td>
<td>$</td>
<td>$</td>
<td>$</td>
</tr>
<tr>
<td>64</td>
<td>Spring Mowing (May) Complete Job</td>
<td>$</td>
<td>$</td>
<td>$</td>
</tr>
<tr>
<td>65</td>
<td>Filling of divots and animal burrows (May)</td>
<td>$</td>
<td>$</td>
<td>$</td>
</tr>
<tr>
<td>66</td>
<td>Summer Mowing (July) Complete Job</td>
<td>$</td>
<td>$</td>
<td>$</td>
</tr>
<tr>
<td>67</td>
<td>Filling of divots and animal burrows (July)</td>
<td>$</td>
<td>$</td>
<td>$</td>
</tr>
<tr>
<td>Item</td>
<td>Description</td>
<td>Annual Price Year 2019</td>
<td>Annual Price Year 2020</td>
<td>Annual Price Year 2021</td>
</tr>
<tr>
<td>------</td>
<td>----------------------------------------------------------</td>
<td>------------------------</td>
<td>------------------------</td>
<td>------------------------</td>
</tr>
<tr>
<td>68</td>
<td>Fall Mowing (August- September)</td>
<td>Complete Job</td>
<td>$</td>
<td>$</td>
</tr>
<tr>
<td>69</td>
<td>Filling of divots and animal burrows (August- September)</td>
<td>Complete Job</td>
<td>$</td>
<td>$</td>
</tr>
<tr>
<td>70</td>
<td>Winter Mowing (October- November)</td>
<td>Complete Job</td>
<td>$</td>
<td>$</td>
</tr>
<tr>
<td>71</td>
<td>Filling of divots and animal burrows (October- November)</td>
<td>Complete Job</td>
<td>$</td>
<td>$</td>
</tr>
<tr>
<td>72</td>
<td>Stony Brook Dam Flail mowing</td>
<td>June Cut</td>
<td>$</td>
<td>$</td>
</tr>
<tr>
<td>73</td>
<td>Stony Brook Dam Flail mowing</td>
<td>October Cut</td>
<td>$</td>
<td>$</td>
</tr>
<tr>
<td></td>
<td><strong>Stony Brook Barn Maintenance</strong></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>74</td>
<td>Spring Clean up</td>
<td>Complete job</td>
<td>$</td>
<td>$</td>
</tr>
<tr>
<td>75</td>
<td>Regrading of gravel driveways</td>
<td>Complete job</td>
<td>$</td>
<td>$</td>
</tr>
<tr>
<td>76</td>
<td>Fall Clean up</td>
<td>Complete job</td>
<td>$</td>
<td>$</td>
</tr>
<tr>
<td>77</td>
<td>Barn Mowing</td>
<td>Complete job (14 times)</td>
<td>$</td>
<td>$</td>
</tr>
<tr>
<td></td>
<td><strong>Total Annual Price for Maintenance Year (Items 1-77)</strong></td>
<td></td>
<td>$</td>
<td>$</td>
</tr>
</tbody>
</table>

Submit this form, (Appendix A) with your bid
Appendix B: Additional Labor Prices

Should certain additional work be requested, required, or should the quantities of certain classes of work be increased or from the totals on which the Contract Sum is based, by order of approval of the Owner, the undersigned agrees that the following unit prices may be used as the basis of payment to him/her or credit to the Owner of such addition, increase, or in the work as determined solely by the Owner.

Additional labor prices shall cover all costs, complete and in place and the prices given shall represent the exact amount per unit to be paid to the Maintenance Contractor (in the case of Additions or increases. No additional adjustments will be allowed for overhead, profit, insurance, bond performance, or other direct or indirect expenses of the Maintenance Contractor or Subcontractor beyond the prices as listed.

For additions and the unit price should be determined by the total areas of the site according to the specifications attached in the contract. Prices shall be per square foot, square yard, 1000 square feet, per job, per visit, per hour, per day or per plant. A written quote listing crew hours, materials and total price will be provided for any supplemental unit work.

All work requested requires a written quote with crew hours/rates, square footage and materials to be used. Invoices will state date and location of work performed.

All invoiced work will be based on work performed on site, the CWD does not pay travel time. Work must be scheduled within one week of contact by the CWD Completion time must be acceptable to the CWD.

Reservation Snow Shoveling – Appendix B- Items 1-4

At the request of Reservoir Systems Manager, the Contractor is responsible for clearing snow off on or around the following site furnishings and structures as listed. Snow will be cleared the day after any snow storm of accumulating snow. If a snow storm falls on a Saturday or Sunday snow will be cleared the following Monday. All clearing is to be done by hand shoveling, or with the use of a snow blower.

Trash cans
Mutt Mitt dispensers
Recycling bins
Bike racks
Kingsley Park Bridge sidewalk
Lusitania meadow pipe gate
Blacks Nook bulletin board
Concord Avenue bus stops
Concord Avenue trash cans
Blanchard Road Sidewalk
Kingsley park sidewalks
Kingsley park bulletin board
Treatment plant parking lot sidewalks
Maher park sidewalks
Ranger station entrance and sidewalks
Treatment plant entrance and sidewalks
Payson Park gatehouse stairs and trash cans

Contractor will apply sand or ice melt as directed

Contractor will use own vehicle and hand equipment for snow removal

CWD will supply all sand and ice melt if needed

Name of Bidder: _____________________________________________________
All snow/Ice control equipment and personal must be made available within 12 hours of request.

Graffiti Control – Appendix B- Items 5-6
Contractor will be responsible for removing or painting over graffiti and removing tape or stickers on the following site furnishings and structures as listed, and when directed.

Fresh Pond Reservation:
- Trash cans & lids,
- Recycling bins,
- Water fountains
- Mutt mitt dispensers’ signs and posts,
- Bulletin boards posts and bulletin board case (approximately three)
- Informational signage,
- Regulatory signage,
- Wooden guard rails,
- Wooden benches, Stone benches, and plastic benches.
- Huron avenue gatehouse walls,
- Huron avenue gate house door & windows,
- Weir meadow vault door.
- Bike racks

Payson Park Reservoir:
- Trash cans and lids,
- Payson park gatehouse doors (three gatehouses)
- Payson park vent tubes

Graffiti will be controlled in the following manner. Graffiti on signage will be removed using a spray on, wipe off chemical graffiti remover, Graffiti on trash barrels and lids will be painted over. Graffiti on doors or painted brick walls will be painted over. Graffiti on wooden structures such as guard rails, benches, and wooden signs will be sanded.

Contractor will supply labor and safety equipment, such as gloves, safety glasses and masks. CWD will be responsible for supplying matching paints, rollers, brushes and graffiti removal sprays. If sanding is required CWD will supply necessary generator and electric sander.

Graffiti removal will commence within 48 hours of notification by the Fresh Pond Reservoir System Manager.

Offensive graffiti will be removed immediately

Contractor is responsible for cleaning and returning any brushes rollers or pans used in graffiti removal or painting.

Installation of perennials, ground covers, and small shrubs- Appendix B- Items 7-15
Contractor will provide a two person crew fully trained and equipped to install the following to American Nurseryman standards.

Perennial Bulbs
1-2 gallon flower, perennial or shrub
3-6 gallon flower, perennial or shrub

Installation of sod including sub grade
Installation of contract specified mulch
Division and transplantation of perennials

CWD will supply all plant material except sod
Landscape Gardener shall be experienced, a licensed pesticide applicator and either a MCLP or MCH.

**Brush Cutting/Right of Way Clearing Items 16-19 Appendix B**
Contractor will supply a two person crew fully trained and equipped to manually cut and remove brush, briar and other herbaceous material growing along watershed property fire roads, boundaries, and easements. Crew must be able to work independently in rough terrain. Crew must come with own four wheel drive vehicle, and be able to interpret property plans and maps. And be equipped with the following: brush saws, chain saws pole saws, and walk behind brush cutter.

**Sign Post Installation Items 20-21 Appendix B**
Contractor will supply a two person crew fully trained in the installation of wood and metal sign posts. Crew must come with vehicle and all hand tools needed to install wood sign posts up to 5” in diameter and hand drive metal stakes and sign posts as directed.

All sign post holes will either be hand dug with a post hole digger or with the use of a gas powered earth auger with a 4”-6” bit.

The Water Department will supply all sign posts and any material needed for backfill.
Crew must come with own vehicle and be cable of working independently

**Additional Plant Health Care/Fertilizer Application, General Support & Equipment Items 22-31 Appendix B**
Should any additional plant health care work, or additional chemical applications be needed the contractor will be provide a technician at the following rates.

**Submit this form with your bid**
Please note that the Contractor shall use the invoice format included in this package for submitting monthly pay requests to the City. A copy of the template in Microsoft Excel format is available from the Cambridge Water Department and is included in **Appendix F** of this document.
Appendix B: Schedule of Values. Bidders must submit value on all items

<table>
<thead>
<tr>
<th>ITEM</th>
<th>DESCRIPTION</th>
<th>Estimated Annual Man Hours</th>
<th>UNITS</th>
<th>UNIT RATE</th>
<th>TOTAL VALUE</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td><strong>Landscape Personnel and Equipment</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>1</td>
<td>Two (2) person snow shoveling/blowing crew with equipment</td>
<td>80</td>
<td>Per hour</td>
<td>$</td>
<td>$</td>
</tr>
<tr>
<td>2</td>
<td>Operator with ¾ ton four wheel drive truck equipped with eight foot plow &amp; truck mounted deicing pellet spreader</td>
<td>4</td>
<td>Per hour</td>
<td>$</td>
<td>$</td>
</tr>
<tr>
<td>3</td>
<td>Operator with one-ton four-wheel-drive truck equipped with snow plow &amp; sander</td>
<td>4</td>
<td>Per hour</td>
<td>$</td>
<td>$</td>
</tr>
<tr>
<td>4</td>
<td>Operator with skid steer loader-equipped with hydraulically powered snow blower &amp; snow plow</td>
<td>4</td>
<td>Per hour</td>
<td>$</td>
<td>$</td>
</tr>
<tr>
<td>5</td>
<td>Two-person graffiti removal crew with vehicle</td>
<td>4</td>
<td>Per hour</td>
<td>$</td>
<td>$</td>
</tr>
<tr>
<td>6</td>
<td>One-person graffiti removal crew with vehicle</td>
<td>4</td>
<td>Per hour</td>
<td>$</td>
<td>$</td>
</tr>
<tr>
<td>7</td>
<td>Landscape Gardener</td>
<td>8</td>
<td>Per hour</td>
<td>$</td>
<td>$</td>
</tr>
<tr>
<td>8</td>
<td>Two-person landscape installation crew with hand equipment</td>
<td>8</td>
<td>Per hour</td>
<td>$</td>
<td>$</td>
</tr>
<tr>
<td>9</td>
<td>Additional landscape laborer</td>
<td>8</td>
<td>Per hour</td>
<td>$</td>
<td>$</td>
</tr>
<tr>
<td></td>
<td><strong>Furnish and install sod including sub grade preparation</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>10</td>
<td>500 SQFT</td>
<td>NA</td>
<td>Per square foot</td>
<td>$</td>
<td></td>
</tr>
<tr>
<td>11</td>
<td>More than 10,000</td>
<td>NA</td>
<td>Per square foot</td>
<td>$</td>
<td></td>
</tr>
<tr>
<td></td>
<td><strong>Provide and install specified compost/mulch</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>12</td>
<td>Less than 10 yards</td>
<td>NA</td>
<td>Per yard</td>
<td>$</td>
<td></td>
</tr>
<tr>
<td>13</td>
<td>10 to 49 yards</td>
<td>NA</td>
<td>Per yard</td>
<td>$</td>
<td></td>
</tr>
<tr>
<td>14</td>
<td>Over 49 yards</td>
<td>NA</td>
<td>Per yard</td>
<td>$</td>
<td></td>
</tr>
<tr>
<td>15</td>
<td>Provide screened loam</td>
<td>NA</td>
<td>Per yard</td>
<td>$</td>
<td></td>
</tr>
<tr>
<td>16</td>
<td>Two-person right of way clearing crew with hand equipment (may include walk behind brush cutter)</td>
<td>8</td>
<td>Per hour</td>
<td>$</td>
<td>$</td>
</tr>
<tr>
<td>17</td>
<td>Tractor mounted mowing deck with a 60&quot; minimum cutting width plus operator</td>
<td>8</td>
<td>Per hour</td>
<td>$</td>
<td>$</td>
</tr>
<tr>
<td>18</td>
<td>Additional landscape laborer</td>
<td>8</td>
<td>Per hour</td>
<td>$</td>
<td>$</td>
</tr>
<tr>
<td>ITEM</td>
<td>DESCRIPTION</td>
<td>Estimated Annual Man Hours</td>
<td>UNITS</td>
<td>UNIT RATE</td>
<td>TOTAL VALUE</td>
</tr>
<tr>
<td>------</td>
<td>------------------------------------------------------------------------------</td>
<td>----------------------------</td>
<td>-------</td>
<td>-----------</td>
<td>-------------</td>
</tr>
<tr>
<td>19</td>
<td>Boom mounted flail mower with operator (price includes pick up and drop off)</td>
<td>8</td>
<td>Per hour</td>
<td>$</td>
<td>$</td>
</tr>
<tr>
<td>20</td>
<td>Two person sign post installation crew with hand equipment</td>
<td>8</td>
<td>Per hour</td>
<td>$</td>
<td>$</td>
</tr>
<tr>
<td>21</td>
<td>Additional landscape laborer</td>
<td>8</td>
<td>Per hour</td>
<td>$</td>
<td>$</td>
</tr>
<tr>
<td></td>
<td><strong>Plant Specialists</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>22</td>
<td>Plant health Care Technician with equipment (category 36 license)</td>
<td>4</td>
<td>Per hour</td>
<td>$</td>
<td>$</td>
</tr>
<tr>
<td>23</td>
<td>Licensed pesticide applicator</td>
<td>4</td>
<td>Per hour</td>
<td>$</td>
<td>$</td>
</tr>
<tr>
<td>24</td>
<td>Massachusetts Certified Arborist</td>
<td>8</td>
<td>Per hour</td>
<td>$</td>
<td>$</td>
</tr>
<tr>
<td>25</td>
<td>Motorized turf sprayer with operator (15' boom)</td>
<td>4</td>
<td>Per hour</td>
<td>$</td>
<td>$</td>
</tr>
<tr>
<td>26</td>
<td>Utility vehicle mounted top dresser with operator</td>
<td>4</td>
<td>Per hour</td>
<td>$</td>
<td>$</td>
</tr>
<tr>
<td>27</td>
<td>Supplemental fertilizer applications to facility grounds, Parkway, Kingsley Park, Huron Avenue, Maher Park, and DCR rotaries (fertilizer supplied by City)</td>
<td>NA</td>
<td>Per applicati on</td>
<td>$</td>
<td></td>
</tr>
<tr>
<td>28</td>
<td>Supplemental lime applications to facility grounds, Parkway, Kingsley Park, Huron Avenue, Maher Park, and DCR rotaries (lime supplied by City)</td>
<td>NA</td>
<td>Per applicati on</td>
<td>$</td>
<td></td>
</tr>
<tr>
<td>29</td>
<td>Support laborer for fertilizer applications</td>
<td>4</td>
<td>Per hour</td>
<td>$</td>
<td>$</td>
</tr>
<tr>
<td>30</td>
<td>Support laborer for lime applications</td>
<td>4</td>
<td>Per hour</td>
<td>$</td>
<td>$</td>
</tr>
<tr>
<td>31</td>
<td>Truck mounted water tank with operator</td>
<td>4</td>
<td>Per hour</td>
<td>$</td>
<td>$</td>
</tr>
<tr>
<td></td>
<td><strong>Total Price for Maintenance Year (Items 1 – 31)</strong></td>
<td></td>
<td></td>
<td></td>
<td>$</td>
</tr>
</tbody>
</table>

Submit this form, (Appendix B) with your bid
Appendix C
Fresh Pond Reservation Maintenance Maps
Fresh Pond Reservoir

Legend
- Mulched Bed
- Turf
- Fence Line

Parkway Community Garden
Mulch between fence lines
Planting beds to be weeded and mulched.
Planting beds to be weeded and mulched
Turf areas to be mowed

Planting beds to be weeded and mulched
Appendix D

Payson Park Reservoir Landscape Maintenance

Landscape maintenance at Payson Park Reservoir will consist of the following:

Spring Clean Up
- Initial cutting of entire grounds
- Loaming/seeding any ruts, divots or plow damage
- Edging, weeding, mulching of plant beds
- Pruning of shrubs and small trees
- Sweeping of all paved areas
- Power sweeping of turf areas at street level
- Spring cleanup will adhere to main contract specifications and times.

Mowing
- Mowing outside Reservoir fence a total of fourteen times (to be scheduled by CWD)
- Mowing inside the reservoir fence a total of seven times (times to be scheduled by CWD)
- Contractor must be aware that the slopes at Payson Park Reservoir are severe in places.
- Contractor will be held responsible for any damage done to Reservoir embankment during mowing.
- Mowing will adhere to main contract specifications with the exception of frequency.

Small Tree and Shrub Pruning
- Pruning will adhere to main contract specifications with the addition of small trees.

Fall Clean Up
- All areas outside Reservoir fence including planting beds, stairways, building edge, and all turf abutting the Belmont town roads surrounding the Reservoir.
- Fall clean up will adhere to the main contract specifications and times

Weeding
- Weeding of beds will occur should be scheduled at the same time as any mowing work at the Reservoir.
- Weeding will adhere to the main contract specifications.

Sweeping/Vacuuming of Paved Areas
- Sweeping/vacuuming of paved surfaces, steps, roadways will occur whenever mowing of the Reservoir occurs.
- Sweeping will adhere to the main contract specifications.
Appendix E

Fresh Pond Golf Course Pro Shop Landscape Maintenance

Landscape Maintenance of the Fresh Pond Golf course will consist of the following:

Spring Clean up
- Initial clean up of all planting beds around the pro shop and parking area
- Initial clean up of flexipave patio
- Application of compost/mulch to all planting beds around the pro shop, parking area, flexipave patio, bioretention basin, and swale
- Initial pruning/shearing of all shrubs, small trees and herbaceous material in planting beds
- Initial shearing of fence line
- Initial leaf removal on street sidewalks

Fall Clean up
- Initial clean up of all planting beds around the pro shop and parking area
- Initial clean up of flexipave patio
- Clean up of all planting beds around the pro shop, parking area, flexipave patio, bioretention basin, and swale

Fence Line Cutting
- Cutting will occur at scheduled times and locations

Small tree and shrub pruning
- Pruning will adhere to main contract specifications with the addition of small trees.
- Pruning includes shrubs around flexipave patio, bioretention basin and infiltration swale

Weeding
- Weeding of beds will occur when any mowing of the Water Treatment Facility and Maher Park is done.
- Weeding will adhere to the main contract specifications.

Trash and litter pick-up and disposal
Trash and litter pick-up of Huron Avenue, Blanchard Road and Pro shop planting beds will occur when any mowing at the Water Treatment Facility and Maher Park is done. Otherwise litter pick-up will adhere to the main contract specifications.
Appendix E: Golf Course Pro Shop

NOTES:
1. SEE SHEET 4-2 FOR PLANT SCHEDULE AND DETAILS
2. Final planting plans for Phase 2 and 3 to be submitted to Conservation Commission for approval prior to construction of Phase 2 and 3.
3. Proposed tree locations for Phase 2 and 3 are based on existing conditions, final locations to be shown on planting plans submitted to Conservation Commission prior to construction.
Appendix F
Weekly Maintenance Report for Fresh Pond Reservation
Landscape Work Order
# Weekly Maintenance Report for Fresh Pond Reservation

Contractor: _____________________________________________________

Name of Worksite: _______________________________________________

<table>
<thead>
<tr>
<th>Work performed</th>
<th>Date</th>
<th>Location</th>
<th>Comments</th>
</tr>
</thead>
<tbody>
<tr>
<td>Weekly Report/site visit</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Spring Clean-up</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Litter Pickup</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Mulching</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Plant Pruning</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Fertilization/Liming</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Mowing/Trimming</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Aeration</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Slice Seeding</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Fall Clean-up</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Plant Instalation</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Sweeping</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Watering/Irrigation</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Plant health care visit</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Wetland Maintenance visit</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Time&amp; Materials work</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Other Work Performed:
____________________________________________________________________________________
____________________________________________________________________________________
____________________________________________________________________________________

Conditions Requiring Water Department Action:
____________________________________________________________________________________
____________________________________________________________________________________
____________________________________________________________________________________

Reason for schedule delays from planned and/or scheduled work:
____________________________________________________________________________________
____________________________________________________________________________________
____________________________________________________________________________________

Work Planned For Next Week (include location & date)
____________________________________________________________________________________
____________________________________________________________________________________
____________________________________________________________________________________

I certify that the above work was performed and to the best of my knowledge all items are correct

____________________________________________________________________________________

Contractor Signature              Date
<table>
<thead>
<tr>
<th>Date</th>
<th>Equipment/materials used</th>
<th>Company</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Crew (last name)</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>WORK ACTIVITY</th>
<th>Man hours</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
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<td></td>
<td></td>
</tr>
</tbody>
</table>

Total billable hours
Appendix G

Stony Brook Reservoir Landscape Maintenance

Landscape Maintenance at Stony Brook Reservoir Dam will consist of the following:

**Spring Cleanup**
- Initial clean up around Stony Brook Barn and abutting turf
- Initial mowing of entire dam top, slope and base
- Removal of any debris, sticks, logs, etc from dam spillway
- Cutting all brush/herbaceous material from top of dam down to Reservoir’s edge (approximately 4'-5')
- Cutting all brush around boat ramp
- Filling/seeding all holes, ruts or depressions (to be marked by CWD personnel) on slope of dam
- Fence line trimming
- Regrading gravel driveways at gatehouse and barn
- Trim vines from barn foundation

**Mowing**
- Mowing of dam top, slope, and base will occur four times per year (to be scheduled by CWD)
- Flail mowing of dam rip rap and base will occur twice once in June and once in November (to be scheduled by CWD)
- When dam is mowed all brush/herbaceous material will be re-cut
- Mowing of the Stony Brook barn area will occur fourteen times per year (to be scheduled by CWD)
- All grass will be mowed at 2.5”-3” in height
- All grass clippings will be discharged
- Grass will be trimmed around any fencing, gate, building, stairway, or instrumentation etc.

**Fall Cleanup**
- Initial leaf cleanup around Stony Brook barn and abutting turf
- Final mowing of entire dam including top, slope, and base
- Removal of any debris, sticks logs etc from dam spillway
- Final Cutting of all brush/herbaceous material from top of dam down to Reservoir’s edge (approximately 4'-5')
- Final Cutting of all brush/herbaceous material around boat ramp
- Filling/seeding all holes (to be marked by CWD personnel) on slope of dam
- Fence line trimming
- Regrading gravel driveways at gatehouse and barn
- Trim vines from barn foundation
NOTE:

1. BASE SKETCH FROM "STONY BROOK RESERVOIR, SHEET 2", PREPARED BY CDM, AUGUST 1974.
Appendix H
Hobbs Brook Reservoir Landscape Maintenance

Landscape maintenance at the Winter Street Dam will consist of the following:

**Spring Cleanup**
- Removal of litter along roadway and any debris from spillway
- Cutting of any brush/herbaceous material from road edge to Reservoir edge
- Cutting of any brush along spillway rip rap
- Initial mowing of entire dam including top, slope and base
- Cutting all brush, herbaceous material, vines around instrumentation cage, spillway fence, and railings
- Filling and seeding all holes/ruts or depressions (to be marked by CWD)

**Mowing**
- Mowing of entire dam top, slope and base will occur four times per year (to be scheduled by CWD)
- Flail mowing of dam rip rap and base will occur twice once in June and once in November (to be scheduled by CWD)
- All grass will be mowed at 2.5”-3” in height
- All grass clippings will be discharged
- Grass will be trimmed around any fencing, gate, building, stairway, or instrumentation etc.
- When mowing occurs all litter will be removed along roadway and any debris from spillway
- When mowing occurs all brush/herbaceous material from road edge to Reservoir edge will be re-cut

**Fall Cleanup**
- Removal of litter and any other debris along roadway and any debris from spillway
- Cutting of any brush/herbaceous material from road edge to Reservoir edge
- Cutting of any brush along spillway rip rap
- Final mowing of entire dam including top, slope and base
- Cutting all brush, herbaceous material, vines around instrumentation cage, spillway fence, and railings
- Filling and seeding all holes/ruts or depressions (to be marked by CWD)
Appendix I
Compost/Mulch Specifications
Product Labels
Performance Mulch Specification

DESCRIPTION

This work shall consist of applying an aged bark and compost blend to the soil surface immediately after planting to inhibit weed growth, conserve soil moisture and reduce erosion.

MATERIALS

Compost shall be derived from organic wastes including, clean ground wood, leaf and yard residues, and bark. The product shall be well composted using specialized windrow turning equipment such that the compost is free of viable weed seeds.

Compost shall have the following properties:

<table>
<thead>
<tr>
<th>Parameters</th>
<th>Range</th>
</tr>
</thead>
<tbody>
<tr>
<td>pH</td>
<td>5.5 - 8.0</td>
</tr>
<tr>
<td>Moisture content</td>
<td>35% - 55%</td>
</tr>
<tr>
<td>C:N ratio</td>
<td>15 - 30:1</td>
</tr>
<tr>
<td>Particle Size</td>
<td>&lt; 3 inches</td>
</tr>
<tr>
<td>Soluble Salts</td>
<td>&lt; 4.0 mmhos (dS)</td>
</tr>
<tr>
<td>Bulk Density</td>
<td>&lt; 1200 lbs/cu yd</td>
</tr>
<tr>
<td>Foreign Matter</td>
<td>&lt; 1% by weight</td>
</tr>
</tbody>
</table>

CONSTRUCTION REQUIREMENTS

Performance Mulch shall be uniformly applied to an average depth of 2-3 inches immediately after planting. Water thoroughly after application to stabilize the entire mulch layer. All foreign matter and debris larger than 2 inches shall be removed from the surface of the mulched area.

METHOD OF MEASUREMENT

Mulch will be measured by the cubic yard.

PRODUCT INFORMATION

This specification covers the properties of AGRESOIL COMPOST as distributed by: Agresource, 100 Main Street, Amesbury, MA 01913, telephone 800-313-3320.
ANALYSIS REPORT FOR COMPOST

SOIL AND PLANT TISSUE TESTING LABORATORY
WEST EXPERIMENT STATION
UNIVERSITY OF MASSACHUSETTS
AMHERST, MA 01003

AGRESOURCE, INC. / TIM GOULD
100 MAIN STREET
AMHERST, MA 01913

SAMPLE INFORMATION

SAMPLE ID: IPSWICH/BLACK FOREST 50-50

Moisture As Received: 50.4 %
Moist Bulk Density: 0.69 grams/cm3 (0.58 tons/yd3)
Coarse Fragments: 22.3
pH (v:v): 7.0
Soluble Salts (Elec. Cond.): 3.15 dS/M

Total Nitrogen: 1.50 % (8.7 lbs/yd3)
Nitrate-N: 529 mg/kg (0.31 lbs/yd3)
Ammonium-N: 16 mg/kg (0.01 lbs/yd3)

Organic Matter: 45.4 %
Estimated Organic Carbon: 24.5 %
Carbon/Nitrogen Ratio: 16.3

NUTRIENT RATING

NUTRIENT LEVELS: PPM

<table>
<thead>
<tr>
<th>Phosphorus (P)</th>
<th>Potassium (K)</th>
<th>Calcium (Ca)</th>
<th>Magnesium (Mg)</th>
</tr>
</thead>
<tbody>
<tr>
<td>105</td>
<td>2392</td>
<td>9925</td>
<td>778</td>
</tr>
</tbody>
</table>

EQUIVALENT BASE CATION PERCENTAGES
Ca +79.9 Mg +10.3 K + 9.9

POTENTIAL ACIDITY
0.0 lbs CaCO3/yd3

EXTRACTABLE MICRONUTRIENTS

<table>
<thead>
<tr>
<th>MICRONUTRIENT</th>
<th>mg/kg</th>
<th>COMPOST RANGE</th>
</tr>
</thead>
<tbody>
<tr>
<td>Boron (B)</td>
<td>5.0</td>
<td>0.5-20</td>
</tr>
<tr>
<td>Manganese (Mn)</td>
<td>153.0</td>
<td>5-200</td>
</tr>
<tr>
<td>Zinc (Zn)</td>
<td>12.9</td>
<td>5-50</td>
</tr>
<tr>
<td>Copper (Cu)</td>
<td>1.1</td>
<td>0.5-5</td>
</tr>
<tr>
<td>Iron (Fe)</td>
<td>7.6</td>
<td>5-200</td>
</tr>
</tbody>
</table>

EXTRACTABLE HEAVY METALS

<table>
<thead>
<tr>
<th>METAL</th>
<th>mg/kg</th>
<th>COMPOST RANGE</th>
</tr>
</thead>
<tbody>
<tr>
<td>Lead (Pb)</td>
<td>2.5</td>
<td>0-25</td>
</tr>
<tr>
<td>Cadmium (Cd)</td>
<td>0.1</td>
<td>0-1.0</td>
</tr>
<tr>
<td>Nickel (Ni)</td>
<td>0.1</td>
<td>0-2.5</td>
</tr>
<tr>
<td>Chromium (Cr)</td>
<td>0.2</td>
<td>0-2.5</td>
</tr>
</tbody>
</table>

Consult enclosed interpretation sheet. Questions may be directed to either Frank Mangan (Extension Specialist) at (978) 422-6374 or the UMass Soil Lab at (413) 545-2311.
For Dutch Elm Disease and Sycamore Anthracnose

Active Ingredient:
Thiabendazole Hypophosphite (CAS No. 28558-32-9) ................... 26.6%
(equivalent to 20% Thiabendazole)

Other Ingredients: 73.4%
Total: 100.0%

KEEP OUT OF REACH OF CHILDREN.

CAUTION

See additional precautionary statements and directions for use inside booklet.

EPA Reg. No. 100-892
EPA Est. 39578-TX-1

Product of India
Formulated in the USA

SCP 892A-L1L 0909
304756

1 gallon
Net Contents

Fungicide

Arbotect®

20-S
# FIRST AID

<table>
<thead>
<tr>
<th>If swallowed</th>
</tr>
</thead>
<tbody>
<tr>
<td>• Call a poison control center or doctor immediately for treatment advice.</td>
</tr>
<tr>
<td>• Do not give any liquid to the person.</td>
</tr>
<tr>
<td>• Do not induce vomiting unless told to do so by the poison control center or doctor.</td>
</tr>
<tr>
<td>• Do not give anything by mouth to an unconscious person.</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>If Inhaled</th>
</tr>
</thead>
<tbody>
<tr>
<td>• Move person to fresh air.</td>
</tr>
<tr>
<td>• If person is not breathing, call 911 or an ambulance, then give artificial respiration, preferably mouth to mouth, if possible.</td>
</tr>
<tr>
<td>• Call a poison control center or doctor for further treatment advice.</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>If on skin or clothing</th>
</tr>
</thead>
<tbody>
<tr>
<td>• Take off contaminated clothing.</td>
</tr>
<tr>
<td>• Rinse skin immediately with plenty of water for 15-20 minutes.</td>
</tr>
<tr>
<td>• Call a poison control center or doctor for treatment advice.</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>If in eyes</th>
</tr>
</thead>
<tbody>
<tr>
<td>• Hold eye open and rinse slowly and gently with water for 15-20 minutes.</td>
</tr>
<tr>
<td>• Remove contact lenses, if present, after the first 5 minutes, then continue rinsing eye.</td>
</tr>
<tr>
<td>• Call a poison control center or doctor for treatment advice.</td>
</tr>
</tbody>
</table>

Have the product container or label with you when calling a poison control center or doctor, or going for treatment.

**HOT LINE NUMBER**

For 24 Hour Medical Emergency Assistance (Human or Animal) or Chemical Emergency Assistance (Spill, Leak, Fire, or Accident),

Call

1-800-888-8372
PRECAUTIONARY STATEMENTS

Hazards to Humans and Domestic Animals

CAUTION

Harmful if swallowed. Harmful if inhaled. Avoid breathing spray mist. May irritate skin. Avoid contact with skin or eyes.

Personal Protective Equipment (PPE)

Mixers, loaders, applicators, and other handlers must wear:

- Long-sleeved shirt and long pants
- Shoes plus socks

Follow manufacturer’s instructions for cleaning/maintaining PPE. If no such instructions for washables, use detergent and hot water. Keep and wash PPE separately from other laundry.

User Safety Recommendations

Users should:

- Wash hands before eating, drinking, chewing gum, using tobacco, or using the toilet.
- Remove clothing/PPE immediately if pesticides get inside. Then wash thoroughly and put on clean clothing.
- Remove PPE immediately after handling this product. As soon as possible, wash thoroughly and change into clean clothing.

Environmental Hazards

Do not apply directly to water, or to areas where surface water is present, or to intertidal areas below the mean high water mark. Do not contaminate water by cleaning of equipment or disposal of wastes.

CONDITIONS OF SALE AND LIMITATION OF WARRANTY AND LIABILITY

NOTICE: Read the entire Directions for Use and Conditions of Sale and Limitation of Warranty and Liability before buying or using this product. If the terms are not acceptable, return the product at once, unopened, and the purchase price will be refunded.
The Directions for Use of this product must be followed carefully. It is impossible to eliminate all risks inherently associated with the use of this product. Crop injury, ineffectiveness, or other unintended consequences may result because of such factors as manner of use or application, weather or crop conditions, presence of other materials or other influencing factors in the use of the product, which are beyond the control of SYNGENTA CROP PROTECTION, Inc. or Seller. To the extent permitted by applicable law, Buyer and User agree to hold SYNGENTA and Seller harmless for any claims relating to such factors.

SYNGENTA warrants that this product conforms to the chemical description on the label and is reasonably fit for the purposes stated in the Directions for Use, subject to the inherent risks referred to above, when used in accordance with directions under normal use conditions. To the extent permitted by applicable law: (1) this warranty does not extend to the use of the product contrary to label instructions or under conditions not reasonably foreseeable to or beyond the control of Seller or SYNGENTA, and (2) Buyer and User assume the risk of any such use. To the extent permitted by applicable law, SYNGENTA MAKES NO WARRANTIES OF MERCHANTABILITY OR OF FITNESS FOR A PARTICULAR PURPOSE NOR ANY OTHER EXPRESS OR IMPLIED WARRANTY EXCEPT AS WARRANTED BY THIS LABEL.

To the extent permitted by applicable law, in no event shall SYNGENTA be liable for any incidental, consequential, or special damages resulting from the use or handling of this product. TO THE EXTENT PERMITTED BY APPLICABLE LAW, THE EXCLUSIVE REMEDY OF THE USER OR BUYER, AND THE EXCLUSIVE LIABILITY OF SYNGENTA AND SELLER FOR ANY AND ALL CLAIMS, LOSSES, INJURIES OR DAMAGES (INCLUDING CLAIMS BASED ON BREACH OF WARRANTY, CONTRACT, NEGLIGENCE, TORT, STRICT LIABILITY OR OTHERWISE) RESULTING FROM THE USE OR HANDLING OF THIS PRODUCT, SHALL BE THE RETURN OF THE PURCHASE PRICE OF THE PRODUCT OR, AT THE ELECTION OF SYNGENTA OR SELLER, THE REPLACEMENT OF THE PRODUCT.

SYNGENTA and Seller offer this product, and Buyer and User accept it, subject to the foregoing Conditions of Sale and Limitation of Warranty and Liability, which may not be modified except by written agreement signed by a duly authorized representative of SYNGENTA.

**DIRECTIONS FOR USE**

It is a violation of Federal law to use this product in a manner inconsistent with its labeling.

FAILURE TO FOLLOW THE DIRECTIONS FOR USE AND PRECAUTIONS ON THIS LABEL MAY RESULT IN PLANT INJURY OR POOR DISEASE CONTROL.
Do not apply this product in a way that will contact workers or other persons, either directly or through drift. Only protected handlers may be in the area during application. For any requirements specific to your State or Tribe, consult the agency responsible for pesticide regulation.

**AGRICULTURAL USE REQUIREMENTS**

Use this product only in accordance with its labeling and with the Worker Protection Standard, 40 CFR part 170. This Standard contains requirements for the protection of agricultural workers on farms, forests, nurseries, and greenhouses, and handlers of agricultural pesticides. It contains requirements for training, decontamination, notification, and emergency assistance. It also contains specific instructions and exceptions pertaining to the statements on this label about personal protective equipment (PPE) and restricted-entry interval. The requirements in this box only apply to uses of this product that are covered by the Worker Protection Standard.

The restricted entry interval (REI) is 0 hours.

**NON-AGRICULTURAL USE REQUIREMENTS**

The requirements in this box apply to uses of this product that are NOT within the scope of the Worker Protection Standard for agricultural pesticides (40 CFR Part 170). The WPS applies when this product is used to produce agricultural plants on farms, forests, nurseries, or greenhouses.

The restricted entry interval (REI) is 0 hours.

**GENERAL INFORMATION**

Arbotect 20-S is a systemic fungicide for use as a flare root injection for prevention of Dutch elm disease (*Ophiostoma ulmi* and *O. novo-ulmi*) on elms (*Ulmus* spp.) and treatment of sycamore anthracnose (*Apiognomonia platani*) on sycamores and London plane trees (*Platanus* spp.). It is recommended that Arbotect 20-S be administered by trained arborists or others trained in injection techniques and in the identification of diseases.
Correct Location for Injector Placement

The flare root area is the transitional zone between the trunk and the root system. Uptake and distribution of Arbotect 20-S is more effective when injections are made into the flare roots. In addition, wounds created in the flare root area close more rapidly in comparison to wounds above the flare root area.

Tree Preparation

1. Heavy, thick, or loose outer bark may be carefully shaved to form a smoother injection point and to ensure the operator that the drill hole penetrates through the bark to the xylem.

2. If the flare roots are not clearly exposed, carefully remove enough soil from the base of the tree to uncover the top of the flare roots. Brush away loose soil.

3. Drill holes through the bark, into the sapwood using a clean, sharp, drill bit (high-helix or brad-point bits are recommended). For best results, change drill bits every 5-10 trees. Drill hole diameter should be adequate to allow insertion of injection tees and formation of an airtight contact between active xylem and the delivery point of the injection tees. Generally, the drill hole should not exceed 1/2 inch in diameter.

   Drill hole depth should be adequate to deliver the product into active xylem tissue. Generally, one inch depth is appropriate. Drill perpendicular to the surface of the root flare.

   Place injectors 3-6 inches apart around the base of the tree. Do not drill in the valleys between the flare roots or into cankered areas. Drill above these areas into the trunk, then continue into sound sapwood on the flares.

4. Insert into the drilled holes the injection ports (“tees”), which are connected to the plastic tubing. Insert the tees by hand and lightly tap with a small hammer to set in the hole. Do not push the tees past the current year’s xylem.

5. Do not dilute Arbotect 20-S with highly alkaline water as a precipitate may form. For hard water or water with high pH, use a deionizer tank or pH stabilizer (for example, muriatic acid) to keep Arbotect 20-S in solution.

Tree Measurement

Measure the diameter of the tree using a tree diameter-tape (D-tape) at 4 1/2 feet above the ground. This is the diameter at breast height (DBH). If only a regular tape is available, measure the tree circumference and divide that number by 3.14 to obtain the diameter.
Injection

For best results, use a pressurized system that holds constant pressure at 15-20 psi. Pull out two tees, on opposite sides of the tee, and bleed the air out of the harness. When all air bubbles have been removed, insert the two tees, adjust the pressure to 15-20 psi, and check for leaks. Do not add the Arbotect 20-S until the system is running.

After the injection is complete, remove injection tees and leave drill holes unplugged. A water flush to cleanse the hole may assist with wound closure. Soil should be replaced around the root flares. It is not necessary to treat the drill holes with wound paint or other sealing compounds.

The injection system described is meant as an example; please refer to manufacturer’s instructions when using other types of tree injection systems.

APPLICATION PROCEDURES

Elm Trees – 1-Year Growing Season Treatment – Aids in the Control of Dutch Elm Disease

Preventive Treatment – For each 5 inches of trunk diameter, inject 1 fl. oz. of Arbotect 20-S in 40 fl. oz. (1 1/4 qts.) of water to 2 fl. oz. of Arbotect 20-S in 80 fl. oz. (2 1/2 qts.) of water. Use the higher levels of Arbotect 20-S under high disease pressure situations.

Preventive applications should be made when leaves approach full size, usually in late May or June.

Therapeutic Treatment – For each 5 inches of trunk diameter, inject 2 fl. oz. of Arbotect 20-S in 80 fl. oz. (2 1/2 qts.) of water to 4 fl. oz. of Arbotect 20-S in 160 fl. oz. of water. Use the higher levels of Arbotect 20-S under high disease pressure situations.

Therapeutic applications should be made as soon as the current year infections are seen, usually in late June through August.

For optimum disease control, preventive treatment is recommended. When a tree shows more than 5% crown symptoms, treatment may not be effective. Treatment should be used in conjunction with an insect control and sanitation program (pruning of diseased limbs) in order to obtain best results. Trees that are 5 inches or less in diameter at chest height should not be treated.
Place injection sites as near to ground level as possible at 3 to 10-inch intervals around the trunk with a maximum hole diameter of 1/2 inch using a minimum of 3 or 4 equally spaced injection points per tree.

**Elm Trees – 3-Year Growing Season Treatment – For Preventive Treatment of Dutch Elm Disease**

Inject 12 fl. oz. of Arbotect 20-S for each 5 inches of trunk diameter. Dilute each 2.0 fl. oz. of Arbotect 20-S with 1 gal. of water. Inject into any exposed root flares, below ground, once every three years. Place injection sites into root flares at 3-10 inch intervals around the tree with a maximum hole diameter of 1/4 inch. Where needed, the root flares will need to be exposed through soil excavation. Trees treated into trunk wood will not be as effectively protected. A typical tree will require 1.3 injection sites per diameter inch. For best results, injections should be made after the tree is fully leafed and the seeds have dropped, through late summer or early fall.

- Do not use this treatment if trees are less than 10 inches in diameter.
- If pressure injection is to be used, do not exceed 30 psi.
- Do not dilute Arbotect 20-S with highly alkaline water as a precipitate may form. Pre-test your water source by mixing a small amount of Arbotect 20-S with water. If the solution turns white, use different water.

**Retreatment**

Arbotect 20-S will provide three growing seasons of protection in most situations. However, protection in the third year after treatment will be slightly less than the first two years. In high disease pressure situations and for trees over 30 inches in diameter, retreatment may need to be considered during the third growing season after the tree was initially treated.

**Therapeutic Treatment of Elms**

Before treating a diseased elm with Arbotect 20-S, it is important to first isolate the disease from the tree using tracing techniques or limb removal. Injecting an elm tree that has the Dutch elm disease fungus actively growing will result in the failure of the treatment.

**Sycamore Trees and London Plane Trees – 3-Year Growing Season Treatment – Aids in the Control of Sycamore Anthracnose**

For each 5 inches of trunk diameter, inject 8 fl. oz. of Arbotect 20-S. (One part Arbotect 20-S should be diluted with between 20 and 40 parts of water). For large trees over 30 inches in diameter, inject up to 12 fl. oz. of Arbotect 20-S per 5 inches of trunk diameter.
For best results, injections should be made after the tree is fully leafed (post infection) through late summer or early fall. Treatments will aid in the control of sycamore anthracnose for up to three growing seasons. Trees over 50 inches diameter may need two consecutive treatments one year apart to obtain the desired level of protection.

Place injection sites at 3-10 inch intervals around the root flares. Trees treated into trunk wood will not be as effectively protected. Use a maximum hole diameter of 1/4 inch using a minimum of 3 or 4 equally spaced injection points per tree. A typical tree will require 1.3 injection sites per diameter inch. It is important that injection sites be placed in root flares at or below ground level.

- Trees that are 5 inches or less in diameter at chest height should not be treated.
- If pressure injection is to be used, do not exceed 30 psi.
- Do not dilute Arbotect 20-S with highly alkaline water as a precipitate may form. Pre-test your water source by mixing a small amount of Arbotect 20-S with water. If the solution turns white, use different water.

**STORAGE AND DISPOSAL**

Do not contaminate water, food, or feed by storage or disposal. Open dumping is prohibited.

**Pesticide Storage**
Store in original containers only. Keep container closed when not in use. Do not store near food or feed.

**Pesticide Disposal**
Pesticide, spray mixture, or rinsate that cannot be used according to label instructions must be disposed of according to federal, state, or local procedures under the Resource Conservation and Recovery Act.
Container Handling

Non-refillable container. Do not reuse or refill this container. Offer for recycling if available. Triple rinse container (or equivalent) promptly after emptying. Triple rinse as follows: Empty the remaining contents into application equipment or a mix tank and drain for 10 seconds after the flow begins to drip. Fill the container 1/4 full with water and recap. Shake for 10 seconds. Pour rinsate into application equipment or a mix tank or store rinsate for later use and disposal. Drain for 10 seconds after the flow begins to drip. Repeat this procedure two more times. Then offer for recycling if available or puncture and dispose of in a sanitary landfill, or by incineration, or, if allowed by State and local authorities, by burning. If burned, stay out of smoke.

For minor spills, leaks, etc., follow all precautions indicated on this label and clean up immediately. Take special care to avoid contamination of equipment and facilities during cleanup procedures and disposal of wastes. In the event of a major spill, fire, or other emergency, call 1-800-888-8372, day or night.

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For non-emergency (e.g., current product information), call
Syngenta Crop Protection at 1-800-334-9481.

Manufactured for:
Syngenta Crop Protection, Inc.
P. O. Box 18300
Greensboro, North Carolina  27419-8300

SCP 892A-L1L 0909
304756
Fungicide
For Dutch Elm Disease and Sycamore Anthracnose
Active Ingredient: Thiabendazole Hypophosphite (CAS No. 28558-32-9) . . . . . . . . . . 26.6% (equivalent to 20% Thiabendazole)
Other Ingredients: 73.4%
Total: 100.0%
See additional precautionary statements and directions for use inside booklet.
EPA Reg. No. 100-892
EPA Est. 39578-TX-1
Product of India
Formulated in the USA
Arbotect® and the Syngenta logo are trademarks of a Syngenta Group Company ©2009 Syngenta
Manufactured for:
Syngenta Crop Protection, Inc.
P. O. Box 18300
Greensboro, North Carolina 27419-8300
SCP 892A-L1L 0909 304756

KEEP OUT OF REACH OF CHILDREN.
CAUTION
PRECAUTIONARY STATEMENTS
Hazards to Humans and Domestic Animals
CAUTION
Harmful if swallowed. Harmful if inhaled. Avoid breathing spray mist. May irritate skin. Avoid contact with skin or eyes.
FIRST AID
If swallowed: Call a poison control center or doctor immediately for treatment advice. Do not give any liquid to the person. Do not induce vomiting unless told to do so by the poison control center or doctor. Do not give anything by mouth to an unconscious person.
If inhaled: Move person to fresh air. If person is not breathing, call 911 or an ambulance, then give artificial respiration, preferably mouth to mouth, if possible. Call a poison control center or doctor for further treatment advice.
If on skin or clothing: Take off contaminated clothing. Rinse skin immediately with plenty of water for 15-20 minutes. Call a poison control center or doctor for treatment advice.
If in eyes: Hold eye open and rinse slowly and gently with water for 15-20 minutes. Remove contact lenses, if present, after the first 5 minutes, then continue rinsing eye. Call a poison control center or doctor for treatment advice.

ENVIRONMENTAL HAZARDS:
Do not apply directly to water, or to areas where surface water is present, or to intertidal areas below the mean high water mark. Do not contaminate water by cleaning of equipment or disposal of wastes.

STORAGE AND DISPOSAL
Do not contaminate water, food, or feed by storage or disposal. Open dumping is prohibited.
Pesticide Storage: Store in original containers only. Keep container closed when not in use. Do not store near food or feed.
Pesticide Disposal: Pesticide, spray mixture, or rinse that cannot be used according to label instructions must be disposed of according to federal, state, or local procedures under the Resource Conservation and Recovery Act.
Container Handling: Non-refillable container. Do not reuse or refill this container. Offer for recycling if available. Triple rinse container (or equivalent) promptly after emptying. Triple rinse as follows: Empty the remaining contents into application equipment or a mix tank and drain for 10 seconds after the flow begins to drip. Fill the container 1/4 full with water and recap. Shake for 10 seconds. Pour rinseate into application equipment or a mix tank and store rinseate for later use and disposal. Drain for 10 seconds after the flow begins to drip. Repeat this procedure two more times. Then offer for recycling if available or puncture and dispose of in a sanitary landfill, or by inactivation, or, if allowed by state and local authorities, by burning. If burned, stay out of smoke.
For minor spills, leaks, etc., follow all precautions indicated on this label and clean up immediately. Take special care to avoid contamination of equipment and facilities during cleanup procedures and disposal of wastes. In the event of a major spill, fire, or other emergency, call 1-800-888-8372, day or night.
ArborMectin™

Injected insecticide for two year control of listed insect and mite pests in deciduous, coniferous, and palm trees

NET CONTENTS: 1 QUART (946 mL)

Active Ingredient:
Emamectin Benzoate¹.......................................... 4.0%
Other Ingredients:............................................ 96.0%
Total:................................................................ 100.0%

¹CAS No. 155569-91-8. Contains 0.36 lb. emamectin per gallon.

EPA Reg No. 83100-35-83979  EPA Est. No. 65387-AR-002

KEEP OUT OF REACH OF CHILDREN

CAUTION

Si usted no entiende la etiqueta, busque a alguien para que se la explique a usted en detalle.
(If you do not understand the label, find someone to explain it to you in detail.)
ARBOR-03-N100614-REVA020915

Manufactured For:

ROTAM

ROTAM NORTH AMERICA, INC.
4900 Koger Blvd., Suite #140
Greensboro, NC 27407
1-866-927-6826
Active Ingredient:
Emamectin Benzoate\(^1\) ............................................................ 4.0%
Other Ingredients: ............................................................... 96.0%
Total: .................................................................................... 100.0%
\(^1\)CAS No. 155569-91-8. Contains 0.36 lb. emamectin per gallon.

EPA Reg No. 83100-35-83979       EPA Est. No. 65387-AR-002

KEEP OUT OF REACH OF CHILDREN

CAUTION
Si usted no entiende la etiqueta, busque a alguien para que se la explique a usted en detalle.
(If you do not understand the label, find someone to explain it to you in detail.)

See complete Precautionary Statements and Directions For Use inside booklet.

NET CONTENTS: 1 Quart (946 mL)

Manufactured for:

ROTAM

ROTAM NORTH AMERICA, INC.
4900 Koger Blvd., Suite #140
Greensboro, NC  27407
1-866-927-6826

ARBOR-01-N100614-REVA020915
PRECAUTIONARY STATEMENTS
HAZARDS TO HUMANS AND DOMESTIC ANIMALS

CAUTION: Harmful if swallowed or absorbed through skin. Causes moderate eye irritation. Avoid contact with skin, eyes, or clothing. Wash thoroughly with soap and water after handling and before eating, drinking, chewing gum, using tobacco, or using the toilet. Remove and wash contaminated clothing before reuse.

FIRST AID

IF SWALLOWED:
• Call poison control center or doctor immediately for treatment advice.
• Have person sip glass of water if able to swallow.
• Do not induce vomiting unless told to do so by the poison control center or doctor.
• Do not give anything by mouth to an unconscious person.

IF ON SKIN:
• Take off contaminated clothing.
• Rinse skin immediately with plenty of water for 15-20 minutes.
• Call a poison control center or doctor for treatment advice.

IF IN EYES:
• Hold eye open and rinse slowly and gently with water for 15-20 minutes.
• Remove contact lenses, if present after the first 5 minutes, then continue rinsing eye.
• Call a poison control center or doctor for treatment advice.

NOTE TO PHYSICIAN:
Early signs of intoxication include dilation of pupils, muscular incoordination, and muscular tremors. Vomiting within one-half hour of exposure can minimize toxicity following accidental ingestion of the product; rapidly after exposure (<15 minutes) administer repeatedly medical charcoal in a large quantity of water or ipecac. If toxicity from exposure has progressed to cause severe vomiting, the extent of resultant fluid and electrolyte imbalance should be gauged. Appropriate supportive parenteral fluid replacement therapy should be given, along with other required supportive measures [such as maintenance of blood pressure levels and proper respiratory functionality] as indicated by clinical signs, symptoms, and measurements. In severe cases, observations should continue for at least several days until clinical condition is stable and normal. Since emamectin benzoate is believed to enhance GABA activity in animals, it is probably wise to avoid drugs that enhance GABA activity [barbiturates, benzodiazepines, valproic acid] in patients with potentially toxic emamectin benzoate exposure.
FIRST AID (continued)

Have the product container or label with you when calling a poison control center or doctor, or going for treatment.

HOT LINE NUMBER
For 24-Hour Medical Emergency Assistance (Human or Animal) call 1-800-222-1222.
For Chemical Emergency Assistance (Spill, Leak, Fire or Accident) call CHEMTREC at 1-800-424-9300.

PERSONAL PROTECTIVE EQUIPMENT (PPE)
Applicators and other handlers must wear:
• Long-sleeved shirt and long pants
• Chemical-resistant gloves (Category C) such as barrier laminate; butyl rubber ≥ 14 mils; nitrile rubber ≥ 14 mils; or neoprene rubber ≥ 14 mils
• Shoes and socks
• Protective eyewear

ENVIRONMENTAL HAZARDS
This product is highly toxic to fish, mammals, and aquatic invertebrates. Do not apply directly to water, to areas where surface water is present or to intertidal areas below the mean high water mark. Do not contaminate water when disposing of equipment washwater. This product is highly toxic to bees exposed to direct treatment or residues on blooming trees.

PHYSICAL OR CHEMICAL HAZARDS
Do not use or store near heat or open flame. Do not mix or allow to come into contact with an oxidizing agent. Hazardous chemical reaction may occur.

CONDITIONS OF SALE AND LIMITATION OF WARRANTY AND LIABILITY

NOTICE: Read the entire Directions for Use and Conditions of Sale and Limitation of Warranty and Liability before buying or using this product. If the terms are not acceptable, return the product at once, unopened, and the purchase price will be refunded.

The Directions for Use of this product must be followed carefully. It is impossible to eliminate all risks inherently associated with the use of this product. Crop injury, ineffectiveness or other unintended consequences may result because of such factors as manner of use or application, weather or crop conditions, presence of other materials or other influencing factors in the use of the product, which are beyond the control of ROTAM NORTH AMERICA, INC. or Seller.

To the extent permitted by applicable law, Buyer and User agree to hold ROTAM NORTH AMERICA, INC. and Seller harmless for any claims relating to such factors.
ROTAM NORTH AMERICA, INC. warrants that this product conforms to the chemical description on the label and is reasonably fit for the purposes stated in the Directions for Use, subject to the inherent risks referred to above, when used in accordance with directions under normal use conditions. To the extent permitted by applicable law: (1) this warranty does not extend to the use of the product contrary to label instructions or under conditions not reasonably foreseeable to or beyond the control of Seller or ROTAM NORTH AMERICA, INC., and (2) Buyer and User assume the risk of any such use. TO THE EXTENT PERMITTED BY APPLICABLE LAW, ROTAM NORTH AMERICA, INC. MAKES NO WARRANTIES OF MERCHANTABILITY OR OF FITNESS FOR A PARTICULAR PURPOSE NOR ANY OTHER EXPRESS OR IMPLIED WARRANTY EXCEPT AS WARRANTED BY THIS LABEL.

To the extent permitted by applicable law, in no event shall ROTAM NORTH AMERICA, INC. be liable for any incidental, consequential or special damages resulting from the use or handling of this product.

TO THE EXTENT PERMITTED BY APPLICABLE LAW, THE EXCLUSIVE REMEDY OF THE USER OR BUYER, AND THE EXCLUSIVE LIABILITY OF ROTAM NORTH AMERICA, INC. AND SELLER FOR ANY AND ALL CLAIMS, LOSSES, INJURIES OR DAMAGES (INCLUDING CLAIMS BASED ON BREACH OF WARRANTY, CONTRACT, NEGLIGENCE, TORT, STRICT LIABILITY OR OTHERWISE) RESULTING FROM THE USE OR HANDLING OF THIS PRODUCT, SHALL BE THE RETURN OF THE PURCHASE PRICE OF THE PRODUCT OR, AT THE ELECTION OF ROTAM NORTH AMERICA, INC. OR SELLER, THE REPLACEMENT OF THE PRODUCT.

ROTAM NORTH AMERICA, INC. and Seller offer this product, and Buyer and User accept it, subject to the foregoing Conditions of Sale and Limitation of Warranty and Liability, which may not be modified except by written agreement signed by a duly authorized representative of ROTAM NORTH AMERICA, INC.

DIRECTIONS FOR USE

It is a violation of Federal law to use this product in a manner inconsistent with its labeling.

IMPORTANT: Read entire label before using this product. Failure to follow label instructions may result in poor control or tree injury. Failure to follow label directions may cause injury to people, animals, and environment.

PRODUCT INFORMATION

ArborMectin is for control of mature and immature insect and mite pests of deciduous, coniferous, and palm trees including, but not limited to, those growing in residential and commercial landscapes, parks, plantations, seed orchards, and forested sites (in private, municipal, state, tribal and national areas). ArborMectin contains the active ingredient emamectin benzoate and is formulated to translocate in the tree’s vascular system when injected. This product must be placed into active sapwood and will actively control pests for up to two years.
DIRECTIONS FOR USE

ArborMectin is designed for use with tree injection devices that meet the label and dose requirements for the control of listed pests of trees. Follow manufacturer’s directions for equipment use.

Dosages are based on the Diameter [in inches] of the tree at Breast Height (“DBH”). DBH is the outside bark diameter of the trunk at 4.5 feet (1.37m) above the ground on the uphill side of the tree. For the purposes of determining breast height, the ground includes the duff layer that may be present, but does not include unincorporated woody debris that may rise above the ground line.

The diameter is determined by measuring the circumference of the tree at DBH, and dividing circumference [in inches] by three [3]. To determine DBH for multi-stemmed woody ornamentals, measure the DBH for each stem or branch and add together for the total DBH per tree.

Placement of Application/Injection Sites: Inject at the base of the tree. Inject into the stem within 1/2” of the soil, into the trunk flare or into tree roots exposing them by shallow excavation. Make applications into intact, healthy sapwood. Do not inject into injured areas or areas with decay.

Number of Injection Sites: Work around the tree, spacing injection sites approximately every 4 to 8 inches of tree’s circumference or according to the manufacturer’s recommendation for the application device.

Drill Depth: Drill through the bark then 5/8” to 1-5/8” [hardwoods] or 1-5/8” to 2” [conifers] into the sapwood with the appropriate sized drill bit. Use clean, sharp drill bits. Precautions should be taken to avoid diseased areas and transferring infected tissues to other injection sites.

Resinous Conifers: In resinous conifers, such as pine and spruce, start the injection immediately after drilling into the sapwood. A prolonged delay may reduce uptake on account of resin flow into opening.

WHEN TO TREAT

ArborMectin contains the active ingredient emamectin benzoate which is a glycoside insecticide. It is active against immature and adult stages of arthropods. The primary route of toxicity is through ingestion.

ENVIRONMENTAL CONDITIONS: Uptake of ArborMectin is dependent upon the tree’s transpiration. Transpiration is dependent on a number of abiotic and biotic factors, such as soil moisture, soil and ambient temperature, and time of day. For uptake, apply when soil is moist, soil temperatures are above 45 °F; ambient temperatures are between 40 °F to 90 °F; and during the 24 hour period when transpiration is greatest, typically before 2:00 p.m. Applications to drought or heat stressed trees may result in injury to tree tissue, poor treatment and subsequent control. Avoid treating trees that are moisture stressed or suffering from herbicide damage.
MONITOR TREE HEALTH and PEST INFESTATIONS: Effective injection treatment is favored by a full canopy (i.e., leaves) and healthy vascular system. Once these tissues are compromised by pest damage (larval galleries, defoliation, leaf mining, etc.) an effective and uniform application of ArborMectin may be difficult to achieve and subsequent control may be poor. For optimum results, treat at least 2 to 3 weeks before pests historically infest the host tree. As a result of systemic movement and longevity of ArborMectin in trees, this interval may be extended much earlier to 6 months should tree dormancy, adverse weather, management, asynchronous life cycle of pests, etc., allow earlier application timing.

ArborMectin may also be effective as a remedial treatment against some pests, such as those with slower development or if multiple life stages are susceptible to ArborMectin. Pests that attack the stem and branches such as clearwing borers may disrupt vascular tissue resulting in poor distribution in an infested tree. This includes the initial larval stages of pests, such as flat-headed borers and clearwing borers, that attack the stem and branches, which may disrupt vascular tissue resulting in poor distribution of the product in an infested tree. However, control may be achieved if larvae come into contact or feed on ArborMectin treated tissues.

USE RATES

Use as formulated or dilute with equivalent 1 to 3 volumes of water or more, as necessary.

<table>
<thead>
<tr>
<th>Tree Diameter (DBH) (Inches)</th>
<th>Low (mL product/tree)</th>
<th>Medium (mL product/tree)</th>
<th>Medium-High (mL product/tree)</th>
<th>High (mL product/tree)</th>
</tr>
</thead>
<tbody>
<tr>
<td>4 to 6</td>
<td>15</td>
<td>25</td>
<td>50</td>
<td>-</td>
</tr>
<tr>
<td>7 to 9</td>
<td>20</td>
<td>40</td>
<td>80</td>
<td>-</td>
</tr>
<tr>
<td>10 to 12</td>
<td>30</td>
<td>55</td>
<td>110</td>
<td>165</td>
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(continued)
The use of low, medium, medium-high and high rates are based on the professional judgment of the applicator as to what constitutes a low, medium or high infestation. Higher rates tend to provide longer residual and control of more difficult to control insects. See Target Pest table for additional information in choosing the amount of product to apply.

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<th>USE RATES (continued)</th>
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### ADDITIONAL DIRECTIONS FOR APPLICATION IN TREES

<table>
<thead>
<tr>
<th>Tree Tissue</th>
<th>Target Pest</th>
<th>Application Rate Range¹</th>
<th>Comments</th>
</tr>
</thead>
</table>
| Seed and Cone     | **Cone Beetle**<sup>2</sup> (Conophthora spp.)  
                    **Pine Coneworm** (Dioryctria spp.)  
                    **Pine Cone Seed Bug** (suppression of Leptoglossus and Tetyra spp. in the year of treatment) | Medium to High           | For optimal control apply in the fall for early season pests or at least 30 days before insect attack. |
|                   | **Bud and Leaf**                                                             |                          |                                                                          |
|                   | **Aphid**<sup>2</sup>  
                    **Bagworm**  
                    **Conifer Mites**<sup>2</sup>  
                    **Fall Webworm**  
                    **Japanese Beetle**  
                    **Gypsy Moth**  
                    **Mimosa Webworm**  
                    **Oak Worm**  
                    **Tussock Moth**  
                    **Leafminers** (such as Lepidoptera, Coleoptera, Hymenoptera)  
                    **Honeyplocust Plant Bug**  
                    **Pine Needle Scale**  
                    **Red Palm Mite**  
                    **Sawfly** (such as Elm, Pine) | Low to High               | Apply at least 2-3 weeks before the pest has historically been present. Consult with local extension agent for when this will occur in your area. |
|                   | **Tent Caterpillars** (such as Eastern, Forest, Pacific, and Western)  
                    **Western Spruce Budworm**  
                    **Winter Moth**               | Low to High               |                                                                          |

¹Use medium to high rates for remedial and longer residual control.
²Not registered for use in California.
### ADDITIONAL DIRECTIONS FOR APPLICATION IN TREES (continued)

<table>
<thead>
<tr>
<th>Shoot, Stem Trunk, and Branch</th>
<th>Flatheaded Borers (such as adult and larvae of Bronze Birch Borer(^2), Emerald Ash Borer, and Two-lined Chestnut Borer(^2))</th>
<th>Low to High</th>
<th>For optimal control apply at least 30 days before historical egg hatch or adult flight and to trees whose vascular tissue is not damaged. If vascular tissue is damaged or plugged by insect galleries, nematodes or fungi, uniform treatment and control may not be achieved.</th>
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<tbody>
<tr>
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<td>Clearwing Borers (such as Ash and Sequoia Pine Pitch Tube Moth)</td>
<td>Low to High</td>
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<tr>
<td></td>
<td>Ambrosia Beetles(^2) Roundheaded Borers (excluding Asian longhorn beetles) Cynipid Gall Wasp(^2) Pinewood Nematode</td>
<td>Medium to High</td>
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</table>

1Use medium to high rates for remedial and longer residual control.  
2Not registered for use in California.
COMPATIBILITY
Do not mix ArborMectin before injection with other products such as insecticides, fungicides, plant growth regulators, surfactants, adjuvants, and fertilizers whose labels indicate that it should not be mixed with ArborMectin. If applicator has no prior experience with a particular tank mix, check physical compatibility by making a small clear jar test using correct proportions to be tank mixed.

RESTRICTION
Do not apply to trees that may be harvested for food consumption by humans or used in animal feed.

STORAGE AND DISPOSAL
Do not contaminate water, food, or feed by storage and disposal.

Pesticide Storage: Store in a cool, dry place, away from children and pets. Keep from freezing.

Pesticide Disposal: Waste resulting from the use of this product may be disposed of on site or at an approved waste disposal facility.

Container Disposal: Non-refillable container. Do not reuse or refill this container. Offer for recycling if available. Clean container promptly after emptying. Triple rinse as follows: Empty the remaining contents into application equipment or mix tank and drain for 10 seconds after the flow begins to drip. Fill the container 1/4 full with water and recap. Shake for 10 seconds. Pour rinsate into application equipment or a mix tank or store rinsate for later use or disposal. Drain for 10 seconds after the flow begins to drip. Repeat this procedure two more times. Then offer for recycling if available or puncture and dispose of in a sanitary landfill, or by incineration, if allowed by state and local authorities. Stay out of smoke from burning container.
Injected insecticide for two year control of listed insect and mite pests in deciduous, coniferous, and palm trees

Active Ingredient:
Emamectin Benzoate\(^1\)............................................................ 4.0%

Other Ingredients:.................................................................... 96.0%

Total:.................................................................................... 100.0%

\(^1\)CAS No. 155569-91-8. Contains 0.36 lb. emamectin per gallon.

EPA Reg No. 83100-35-83979         EPA Est. No. 65387-AR-002

KEEP OUT OF REACH OF CHILDREN

CAUTION

Si usted no entiende la etiqueta, busque a alguien para que se la explique a usted en detalle.
(If you do not understand the label, find someone to explain it to you in detail.)

See complete Precautionary Statements and Directions For Use inside booklet.

NET CONTENTS: 1 Quart (946 mL)

Manufactured for:

ROTAM NORTH AMERICA, INC.
4900 Koger Blvd., Suite #140
Greensboro, NC  27407
1-866-927-6826

ARBOR-02-N100614-REVA020915
**KEEP OUT OF REACH OF CHILDREN**

**CAUTION**

Si usted no entiende la etiqueta, busque a alguien para que se la explique a usted en detalle. (If you do not understand the label, find someone to explain it to you in detail.)

See Side/Back Panel for Additional Precautionary Statements, First Aid and Directions for Use

For outdoor use in the control of insect pests of ornamental trees and shrubs in commercial and residential landscapes and plantscapes; nurseries; tree farms, and forests.

---

**Active Ingredient**

Acephate (O,S-Dimethyl acetylphosphoramidothioate)……..97.4%

Other Ingredients… ……………………………………….……2.6%

Total                                                                                 100%

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**Net Contents:**

150 g (0.66 lb) 
(Consists of (20) twenty 7.5g (0.26 oz) foil packets)

---

**FIRST AID:**

Acephate is an organophosphate, cholinesterase inhibitor

**IF SWALLOWED**

• Call poison control center or doctor immediately for treatment advice.
  • Have person sip a glass of water if able to swallow.
  • Do not induce vomiting unless told to do so by the poison control center or doctor.
  • Do not give anything by mouth to an unconscious person.

**IF IN EYES**

• Hold eye open and rinse slowly and gently with water for 15-20 minutes.
  • Remove contact lenses, if present, after the first 5 minutes, then continue rinsing eye.
  • Call poison control center or doctor immediately for treatment advice.

**IF ON SKIN OR CLOTHING**

• Take off contaminated clothing.
  • Rinse skin immediately with plenty of water for 15-20 minutes.
  • Call poison control center or doctor immediately for treatment advice.

**IF INHALED**

• Move person to fresh air
  • If person is not breathing, call 911 or an ambulance, then give artificial respiration, preferably mouth-to-mouth if possible.
  • Call poison control center or doctor immediately for treatment advice.

Have the product container or label with you when calling a poison control center or doctor or going for treatment.

---

**HOT LINE NUMBER**

For 24 hour medical emergency assistance (human or animal), or chemical emergency assistance (spill, leak or accident).

Call CHEMTREC at 1-800-424-9300.

---

**NOTES TO PHYSICIAN**

This material contains a cholinesterase inhibitor. If signs of cholinesterase inhibition appear, atropine sulfate is antidotal. 2-PAM (PROTOPAM) is also antidotal and may be used in conjunction with atropine but should not be used alone.

---

**PRECAUTIONARY STATEMENT**

**HAZARDS TO HUMANS AND DOMESTIC ANIMALS**

**CAUTION:** Harmful if swallowed. Causes eye irritation. Avoid contact with eyes, skin and clothing. Avoid breathing dust or spray mist. Wash hands thoroughly with soap and water after handling. Remove contaminated clothing and wash before reuse.

**PERSONAL PROTECTIVE EQUIPMENT (PPE):**

Some materials that are chemical-resistant to this product are those made of any waterproof material. If you want more options, follow the instruction for category C on an EPA chemical-resistant category selection sheet.

Mixers, loaders, applicators and other handlers must wear:

• Long-sleeved shirt and long pants
• Chemical resistant gloves
• Shoes plus socks
• Protective eyewear

---

**Distributed by:**

Rainbow Treecare Scientific Advancements
11571 K-Tel Dr
Minnetonka, MN  55343
1-877-272-6747
www.treecarescience.com
Follow manufacturer’s instructions for cleaning/maintaining PPE. If no such instructions for washables, use detergent and hot water. Keep and wash PPE separately from other laundry.

USER SAFETY RECOMMENDATIONS:
Users should:
• Wash hands before eating, drinking, chewing gum, using tobacco or using the toilet.
• Remove clothing/PPE immediately if pesticide gets inside. Then wash thoroughly and put on clean clothing.
• Remove PPE immediately after handling this product. Wash the outside of gloves before removing. As soon as possible, wash thoroughly and change into clean clothing.

ENVIRONMENTAL HAZARDS
This pesticide is toxic to birds. Do not apply directly to water, to areas where surface water is present, or to intertidal areas below the mean water high mark. Do not contaminate water when cleaning equipment or disposing of wastes. Cover or soil-incorporate spills.

DIRECTIONS FOR USE
It is a violation of Federal law to use this product in a manner inconsistent with its labeling. Do not apply this product in a way that will contact workers or other persons, either directly or through drift. Only protected handlers may be in the area during application. For any requirements specific to your State or Tribe, consult the agency responsible for pesticide regulation.

READ ENTIRE LABEL. USE STRICTLY IN ACCORDANCE WITH PRECAUTIONARY STATEMENTS AND DIRECTIONS AND WITH APPLICABLE STATE AND FEDERAL REGULATIONS.

AGRICULTURAL USE REQUIREMENTS
Use this product only in accordance with its labeling and with the Worker Protection Standard, 40 CFR part 170. This Standard contains requirements for the protection of agricultural workers on farms, forests, nurseries and greenhouses, and handlers of agricultural pesticides. It contains requirements for training, decontamination, notification and emergency assistance. It also contains specific instructions and exceptions pertaining to the statements on this label about personal protective equipment (PPE) and restricted entry interval. The requirements in this box apply to uses that are covered by the Worker Protection Standard.

No Worker Protection Standard worker re-entry restrictions or worker notification requirements apply when this product is directly injected into agricultural trees.

Do not use this product on food bearing trees or shrubs or on trees or shrubs that will bear food within one year after application.

APPLICATION TO ORNAMENTAL TREES AND SHRUBS
Controls insect pests of ornamental trees and shrubs grown outdoors in residential and commercial landscapes, golf courses, roadsides, airport grounds, cemeteries, parks, playgrounds, and athletic fields. Acephate Infusible Insecticide can also be used in commercial forestry production, nurseries, and in state, federal, county and local recreational forests. Acephate Infusible Insecticide is a systemic product and will be translocated upward into the plant system.

DIRECTIONS
Measure the diameter of the tree at chest height (54” from ground) in inches. If measuring circumference, divide this number by three to determine Diameter Breast Height (DBH). Refer to tables below to determine appropriate application rate.
Best uptake is in trees in full leaf. Conditions that favor transpiration (i.e., warm soil temperatures >45° F, moist conditions) are optimal for injection uptake. In conifers, high humidity and cool temperatures favor transpiration (i.e., early morning, overcast, rainy days) are optimal for injection uptake.

MICRO-INFUSION
Required Equipment:
• Gloves
• Protective eyewear
• Drill
• 15/64” HIGH HELIX drill bit
• M3 Infusers
• M3 mixing bottle with rubber septum
• M3 fill gun
• M3 charger
• DBH measuring tape

MIXING INSTRUCTIONS
1. Use the appropriate number of packets for the tree size you wish to inject. Measure the tree at 4’ 6” above the soil with a DBH tape. Refer to the Tree Diameter table (Table 1) below for mixing quantities.
2. Using the M3 mixing bottle, combine the appropriate amount of water for every 1 package of Acephate Infusible Insecticide. Tear open the packet and empty the contents into the mixing bottle.
3. Seal the M3 mixing bottle with the rubber septum and gently shake the solution until the Acephate Infusible Insecticide has dissolved and the contents are evenly distributed throughout the mixture. Mix only the desired amount of Acephate Infusible Insecticide that will be used for each application and use immediately after adding water.

MICRO-INFUSION PROCEDURE (Low Volume System)
Root flare injections are recommended—Acephate Infusible Insecticide can only be used with M3 refillable tree infusion devices. Directions for Ornamental Trees and Shrubs:

Installation and Application using the Rainbow Treecare Scientific Advancement M3 injector:
1. Examine the tree for the presence of root flares. If flares are not visible, excavate the root collar.
2. Thoroughly brush all soil from the root flares. A dirty root flare will dull the drill bit and increase uptake time.
3. Close the M3 infuser control valves.
4. Attach the mixing bottle to the M3 fill gun. Insert the needle of the M3 fill gun into the M3 infuser duckbill valve and inject 20 ml of the ready-to-use solution. Note: Insert only the tip of the needle to prevent wearing of the valve.
5. Start the infusion. Holding the M3 injector firmly with one hand, turn the control valve to the left (Counter-clockwise) until fluid has entered the tip. If you find that the solution is not emptying, air may be added to increase the internal pressure within the M3 injector. Insert the fill tip of the M3 charger into the duckbill valve and administer the required volume in each M3 infuser. Do not inject more than 10 – 15 cc of air.
6. Check for leaks. If leaks are found close the valve, seat firmly into the tree and re-open the valve. If leaks persist the problem may be too shallow of a hole, close the valve, remove the infuser and re-drill to a deeper depth.
7. Start the infusion. Holding the M3 injector firmly with one hand, turn the control valve to the left (Counter-clockwise) until fluid has entered the tip. If you find that the solution is not emptying, air may be added to increase the internal pressure within the M3 infuser. Insert the fill tip of the M3 charger into the duckbill valve and administer the required volume in each M3 infuser. Do not inject more than 10 – 15 cc of air.
8. Check for leaks. If leaks are found close the valve, seat firmly into the tree and re-open the valve. If leaks persist the problem may be too shallow of a hole, close the valve, remove the infuser and re-drill to a deeper depth.
9. Uptake usually occurs within minutes. Do not leave M3 Infusers unattended during the infusion process. Do not leave used M3 Infusers in the tree. Once the solution has emptied from the M3 infusers, remove the M3 infusers from the tree. At the end of each day's use, flush the M3 infusers with water and infuse into the tree or dispense into a chemical resistant container. Dispose of at an approved waste facility.
10. Store M3 infusers properly for reuse.
Note:
For Resinous Conifers such as pine and spruce, start the injection and/or infusion process immediately following the setting of the infusion device into the sapwood. A prolonged delay may reduce uptake efficacy on account of resin flow.

<table>
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<tr>
<th>DBH</th>
<th>Number of Packets</th>
<th>mls of water required for treatment</th>
<th>Number of M3 infusers per tree</th>
<th>mls of Ready-To-Use solution per M3 infuser</th>
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<td>20.0</td>
</tr>
<tr>
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<td>900</td>
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<td>20.0</td>
</tr>
<tr>
<td>63</td>
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<tr>
<td>64</td>
<td>18</td>
<td>900</td>
<td>45</td>
<td>20.0</td>
</tr>
<tr>
<td>65</td>
<td>20</td>
<td>1000</td>
<td>50</td>
<td>20.0</td>
</tr>
<tr>
<td>66</td>
<td>20</td>
<td>1000</td>
<td>50</td>
<td>20.0</td>
</tr>
<tr>
<td>67</td>
<td>20</td>
<td>1000</td>
<td>50</td>
<td>20.0</td>
</tr>
<tr>
<td>68</td>
<td>20</td>
<td>1000</td>
<td>50</td>
<td>20.0</td>
</tr>
<tr>
<td>69</td>
<td>20</td>
<td>1000</td>
<td>50</td>
<td>20.0</td>
</tr>
<tr>
<td>70</td>
<td>20</td>
<td>1000</td>
<td>50</td>
<td>20.0</td>
</tr>
<tr>
<td>71</td>
<td>20</td>
<td>1000</td>
<td>50</td>
<td>20.0</td>
</tr>
</tbody>
</table>

Table 1: Micro Infusion Dilution Rates, Number of Infusion Sites, and Volume of Ready-to-use Solution Needed Based on Tree Size.
MACRO-INFUSION (High Volume System):
With this product, a hand pump with a 3-5 gallon reservoir is the recommended device along with the Rainbow Treecare Scientific Advancement’s Macro-infusion Tees and Harness Tubing.

Required Equipment:
- Gloves
- Protective eyewear
- Drill
- 15/64” HIGH HELIX drill bit
- Macro infusion pump
- Macro infusion tees
- Harness tubing
- DBH measuring tape

Directions for Ornamental Trees and Shrubs:

Installation, Mixing and Application Instructions:

1. Measure the diameter of the tree at breast height (DBH).
2. Examine the tree for the presence of root flares. If flares are not visible, carefully remove soil from the base of the tree to uncover the top of the flare roots. Brush away loose soil. Very thoroughly – Dirty flares will dull the drill bit and increase uptake time. Make infusion sites 6-8 inches below the top of the root flare.
3. Drill holes through the bark, into sapwood, using a clean, sharp, 15/64 diameter, HIGH HELIX drill bit. Drill perpendicular to the surface of the flare. Drill hole diameter needs to be adequate to allow insertion of infusion tees and formation of airtight contact between active xylem and the delivery point of the infusion tees.

For best tree distribution use 1.5-2 infusion sites for every DBH inch (approximately 1 infusion site every 4-6 inches) evenly spaced around the root-flares.

4. Determine the amount of water and fill solution reservoir with half of the required amount. Refer to Table 2 below. With high volume systems, more water can be utilized without a decrease in product effectiveness.
5. Check each tee to be sure it is not plugged and replace badly damaged tees. Firmly insert tees by hand. Attach tubing from the solution reservoir to feed into the harness in 2 locations, on opposite sides of the tree.
6. Pull out 2 tees on opposite sides of the tree. Prime the pump if it is not self-priming. Turn on the pump and bleed the air out of the line. With all air out of harness, re-insert the 2 tees and check for leaks. Adjust the pressure to 15-30 psi. Lightly tap any leaking tees.
7. Determine the appropriate number of packets for the tree size. Open packets and pour into tank. Refer to the Tree Diameter table (Table 2) below for mixing quantities.
8. Add the remaining amount of water
9. Seal the solution reservoir and gently shake the solution until the Lepitect Infusible Insecticide has dissolved and the contents are evenly distributed throughout the mixture. Mix only the desired amount of Lepitect Infusible Insecticide that will be used for each application and use immediately after adding water.
10. During the infusion, monitor tees for leaks. Maintain pressure at 15-30 psi.
11. Do not leave macro infusion system unattended during the injection process.
12. Do not leave used macro infusion tees in the tree. Turn off the pump when air is drawn into the harness. Remove tees from the tree. Flush holes with water to assist with wound closure. Replace soil and sod around the base of the tree. It is not necessary to treat drill holes with wound paint or other sealing compounds.

Directions for Palms:

Drill a pilot hole into the vascular bundle using a 3/16” diameter bit one third the stem diameter (e.g., if the palm is 12”DBH, then drill a 4” deep pilot hole), then drill a wider, shallow hole to set the injection device and complete the application. Only one application site is required. See table 2 for the number of packets and volume of water required. Avoid wounding the meristematic tissue located within the crown of the plant. In general, make applications to the lower trunk region, typically within 12” of the soil.

Table 2: Macro Infusion Dilution Rates Based on Tree Size. (Use 1.5 – 2 infusion sites per inch of DBH.)

<table>
<thead>
<tr>
<th>Tree Size (DBH)</th>
<th># of Lepitect Infusible Packets</th>
<th>Macro-Infusion L of water (Total Injection volume)</th>
</tr>
</thead>
<tbody>
<tr>
<td>6 – 11”</td>
<td>1-2</td>
<td>1</td>
</tr>
<tr>
<td>12 – 23”</td>
<td>3-4</td>
<td>2</td>
</tr>
<tr>
<td>24 – 35”</td>
<td>6-10</td>
<td>4</td>
</tr>
<tr>
<td>36 – 47”</td>
<td>10-12</td>
<td>6</td>
</tr>
<tr>
<td>48 – 59”</td>
<td>14-16</td>
<td>8</td>
</tr>
<tr>
<td>60 – 71”</td>
<td>18-20</td>
<td>10</td>
</tr>
</tbody>
</table>

APPLICATION:

For outdoor use in residential and commercial landscapes, golf courses, roadsides, airport grounds, cemeteries, parks, playgrounds, and athletic fields. Lepitect Infusible Insecticide can also be used in commercial forestry production, nurseries, and in state, federal, county and local recreational forests.

<table>
<thead>
<tr>
<th>PEST</th>
<th>DBH</th>
<th>RATE</th>
</tr>
</thead>
<tbody>
<tr>
<td>Adelgids (including Hemlock Wooly Adelgid)</td>
<td>6 - 11”</td>
<td>1-2 packet</td>
</tr>
<tr>
<td>Aphis</td>
<td>12 - 23”</td>
<td>3-4 packets</td>
</tr>
<tr>
<td>Bagworms</td>
<td>24 – 35”</td>
<td>6-10 packets</td>
</tr>
<tr>
<td>Birch Leafminer</td>
<td>36 – 47”</td>
<td>10-12 packets</td>
</tr>
<tr>
<td>Boxelder Bug</td>
<td>48 – 59”</td>
<td>14-16 packets</td>
</tr>
<tr>
<td>Browntail moth</td>
<td>60 – 71”</td>
<td>18-20 packets</td>
</tr>
<tr>
<td>Budworms</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Cankerworms (Spring and Fall)</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Carpenterworm</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Casebears</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Clear Wing Borers</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Cone worms</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Cottonwood Twig Borer</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Eastern Oak Looper</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Eastern Tent Caterpillar</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Elm Spanworm</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Fall Cankerworm</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Fall Webworm</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Flatheaded Borers (Including Bronze Birch and Emerald Ash Borers)</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Gall Midges</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Gypsy Moth (larvae)</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Japanese Beetle</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Lace bugs</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Leaf Beetles (larvae) (Including Elm Leaf and Willow Leaf Beetle)</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Leafhoppers</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Leafminers</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Leafrollers</td>
<td></td>
<td></td>
</tr>
<tr>
<td>LindenLooper</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Longhorned Borers (Including Eucalyptus and Red Oak Longhorned Borers)</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Mealybug</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>
APPLICATION (continued):

**Use Site: Ornamental Trees, Shrubs, Evergreens, Conifers, & Palms**

For outdoor use in residential and commercial landscapes, golf courses, roadsides, airport grounds, cemeteries, parks, playgrounds, and athletic fields. Lepitec Infusible Insecticide can also be used in commercial forestry production, nurseries, and in state, federal, county and local recreational forests.

<table>
<thead>
<tr>
<th>PEST</th>
<th>DBH</th>
<th>RATE</th>
</tr>
</thead>
<tbody>
<tr>
<td>Nantucket Pine Tip Moth (larvae)</td>
<td>6 - 11”</td>
<td>1-2 packet</td>
</tr>
<tr>
<td>Oakworms</td>
<td>12 - 23”</td>
<td>3-4 packets</td>
</tr>
<tr>
<td>Pine Cone Worm</td>
<td>24 – 35”</td>
<td>6-10 packets</td>
</tr>
<tr>
<td>Pine Needle Miners</td>
<td>36 – 47”</td>
<td>10-12 packets</td>
</tr>
<tr>
<td>Pine Tip Moth</td>
<td>48 – 59”</td>
<td>14-16 packets</td>
</tr>
<tr>
<td>Plant Bugs</td>
<td>60 – 71”</td>
<td>18-20 packets</td>
</tr>
<tr>
<td>Poplar Tentmaker</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Root Weevil (adults)</td>
<td></td>
<td></td>
</tr>
<tr>
<td>(Including Black Vine Weevil)</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Roundheaded Borers</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Royal Palm Bugs</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Sawfly (larvae)</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Scales (crawlers)</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Spider mites</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Spring Cankerworm</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Tent Caterpillar</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Thrips</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Tussock Moth (larvae)</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Variable Oakleaf Caterpillar</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Walnut Caterpillar</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Webworms</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Winter Moth</td>
<td></td>
<td></td>
</tr>
<tr>
<td>White Flies</td>
<td></td>
<td></td>
</tr>
<tr>
<td>White Pine Weevil</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Whitemarked Tussock Moth</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Yellownecked Caterpillar</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Zimmerman Pine Moths</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>CROP</th>
<th>PEST</th>
<th>DBH</th>
<th>RATE</th>
</tr>
</thead>
<tbody>
<tr>
<td>Albizia, Ash, Birch, Boxelder, Buckeye,</td>
<td>Asian Longhorned Beetle</td>
<td>6 - 11”</td>
<td>1-2 packet</td>
</tr>
<tr>
<td>Elm, European Mountain Ash, Horsechestnut,</td>
<td></td>
<td>12 - 23”</td>
<td>3-4 packets</td>
</tr>
<tr>
<td>London Plane Tree, Maple, Poplar, Sycamore,Willow</td>
<td></td>
<td>24 – 35”</td>
<td>6-10 packets</td>
</tr>
<tr>
<td>Hardwood and Non-bearing Fruit Trees</td>
<td>Citrus Longhorned Beetle</td>
<td>36 – 47”</td>
<td>10-12 packets</td>
</tr>
<tr>
<td></td>
<td></td>
<td>48 – 59”</td>
<td>14-16 packets</td>
</tr>
<tr>
<td></td>
<td></td>
<td>60 – 71”</td>
<td>18-20 packets</td>
</tr>
</tbody>
</table>

**Restrictions**
- Do not use this product on food bearing trees or shrubs or on trees or shrubs that will bear food within one year after application.
- Do not leave injection devices unattended. Do not leave empty injection devices on trees. Do not store unused mix solution.
- Keep away from children.

**Notes**
- Apply only to established plants that are actively growing.
- Make treatments when signs of insects first appear.
- Do not treat trees that are moisture stressed or suffering from herbicide damage.
- Do not inject trees within two weeks of any other spray or chemical treatment.
- Only for use with the tree injection systems specified on the label.

**Storage and Disposal**

Storage: Keep product in original container. Store product in a cool dry place. Do not contaminate food or feedstuffs. Do not store or transport near feed or food. In spill or leak incidents, keep unauthorized people away. You may contact CHEMTREC at 800-424-9300 for decontamination procedures or any other assistance that may be necessary.

Pesticide Disposal: Wastes resulting from the use of this product should be disposed of in accordance with the Directions for Use, i.e., used as directed in the injection equipment.

Container Disposal: Dispose of empty containers in a sanitary landfill or if approved by State and Local authorities.

**Conditions of Sale and Limitation of Warranty and Liability**

Notice: Read the entire Directions for Use and Conditions of Sale and Limitation of Warranty and Liability before buying or using this product. If the terms are not acceptable, return the product at once, unopened, and the purchase price will be refunded.

The Directions for Use of this product must be followed carefully. It is impossible to eliminate all risks inherently associated with the use of this product. Tree injury, ineffectiveness or other unintended consequences may result because of such factors as manner of use or application, weather or tree conditions, presence of other materials or other influencing factors in the use of the product, which are beyond the control of RAINBOW TREECARE SCIENTIFIC ADVANCEMENTS or seller. To the extent consistent with applicable law, all such risks shall be assumed by Buyer and User, and Buyer and User agree to hold RAINBOW TREECARE SCIENTIFIC ADVANCEMENTS and seller harmless for any claims relating to such factors.

RAINBOW TREECARE SCIENTIFIC ADVANCEMENTS warrants that this product conforms to the chemical description on the label and is reasonably fit for the purposes stated in the Directions for Use, subject to the inherent risks referred to above, when used in accordance with directions. This warranty does not extend to the use of the product contrary to label instructions, and Buyer and User assume the risk of any such use. TO THE EXTENT CONSISTENT WITH APPLICABLE LAW, RAINBOW TREECARE MAKES NO WARRANTIES OR MERCHANIBILITY OR OF FITNESS FOR A PARTICULAR PURPOSE NOR ANY OTHER EXPRESS OR IMPLIED WARRANTY EXCEPT AS STATED ABOVE.

To the fullest extent permitted by law, RAINBOW TREECARE SCIENTIFIC ADVANCEMENTS or Seller shall not be liable for any incidental, consequential or special damages resulting from the use or handling of this product. TO THE EXTENT CONSISTENT WITH APPLICABLE LAW, THE EXCLUSIVE REMEDY OF THE USER OR BUYER, INJURIES OR DAMAGES (INCLUDING CLAIMS BASED ON BREACH OF WARRANTY, CONTRACT, NEGLIGENCE, TORT, STRICT LIABILITY OR OTHERWISE) RESULTING FROM USE OR HANDLING OF THIS PRODUCT, SHALL BE THE RETURN OF THE PURCHASE PRICE OF THE PRODUCT OR, AT THE ELECTION OF RAINBOW TREECARE OR SELLER, THE REPLACEMENT OF THE PRODUCT.

RAINBOW TREECARE SCIENTIFIC ADVANCEMENTS and Seller offer this product, subject to the foregoing Conditions of Sale and Limitation of Warranty and Liability, which may not be modified except by written agreement signed by a duly authorized representative of RAINBOW TREECARE SCIENTIFIC ADVANCEMENTS.

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Appendix J

Other Maintenance Areas
WINTER STREET BASIN, DRAINAGE SWALE

**Basin Location**

**CWD Owned Parcels**
Americans with Disabilities Act (42 U.S.C. 12131)
Section 504 of the Rehabilitation Act of 1973
Tax Compliance/Anti-Collusion Statement

The Americans with Disabilities Act (the "Act") applies to all employers of fifteen or more employees. All vendors that are subject to the Act must comply with its provisions. In further compliance with the Act, all Contractors who enter into contracts with the City are prohibited from discrimination against the City's employees, regardless of the size of the Contractor.

The Act protects against discrimination on the basis of "disability", which is defined as a physical or mental impairment that substantially limits at least one "major life activity"; discrimination against a person having a history or record of such impairment; and discrimination against an individual regarded - even if inaccurately - as having such an impairment. The Act also expressly prohibits discrimination that is based on an individual's relationship or association with a disabled person.

The bidder shall not discriminate against any qualified employee or job applicant with a disability and will make the activities, programs and services covered by any contract awarded through this procurement readily accessible to and usable by individuals with disabilities. To be qualified for a job, or to avail oneself of the bidder's services, the individual with the disability must meet the essential eligibility requirements for receipt of the bidder's services or participation in the bidder's programs or activities with or without: 1) reasonable modifications to the bidder's rules, policies and practices; 2) removal of architectural, communication, or transportation barriers; or, 3) provisions of auxiliary aids and services.

By submitting its bid, the bidder certifies to the City of Cambridge that it understands and will comply with all applicable provisions of the Act, including compliance with applicable provisions of Section 504 of the Rehabilitation Act of 1973, if the bidder is receiving federal funds.

The undersigned certifies under penalties of perjury that this bid or proposal has been made and submitted in good faith and without collusion or fraud with any other person. As used in this certification, the "person" shall mean any natural person, business, partnership, corporation, union, committee, club, or other organization, entity, or group of individuals.

As required by M.G.L. c. 62C, §49A, the undersigned certifies under the penalties of perjury that the bidder has complied with all laws of the commonwealth relating to taxes, reporting of employees and contractors, and withholding and remitting child support.

Date: ____________________________________________

(Print Name of person signing bid)

(Signature & Title)

Address

City

State Zip Code

Submit this form with your bid

Name of Bidder: ____________________________________________
WAGE THEFT PREVENTION CERTIFICATION

In Executive Order 2016-1, the City of Cambridge established requirements for City contracts in an effort to prevent wage theft. Prospective vendors must provide the following certifications or disclosures with their bids/proposals. Failure to provide the following shall result in rejection of the bid/proposal.

Instructions for this form:

A prospective vendor must check box 1 or box 2, as applicable, as well as boxes 3-5, and must sign this Form, certifying compliance with the requirements set out in this Form. This Form must be included with the bid or proposal, and for multi-year contracts must be completed annually on the contract anniversary and filed with the Purchasing Agent.

The undersigned certifies under the pains and penalties of perjury that the vendor is in compliance with the provisions of Executive Order 2016-1 as currently in effect.

All vendors must certify that [check either box 1 or box 2, as applicable]:

1. [ ] Neither this firm nor any prospective subcontractor has been subject to a federal or state criminal or civil judgment, administrative citation, final administrative determination, order or debarment resulting from a violation of G.L. c. 149, G.L. c. 151, or 29 U.S.C. 201 et seq. within three (3) years prior to the date of this bid/proposal submission.

   OR

2. [ ] This firm, or a prospective subcontractor of this firm, has been subject to a federal or state criminal or civil judgment, administrative citation, final administrative determination, order or debarment resulting from a violation of G.L. c. 149, G.L. c. 151, or 29 U.S.C. 201 et seq. within three (3) years prior to the date of this bid/proposal submission and such documentation is included in the bid/proposal submission.

In addition, all vendors must certify each of the following:

3. [ ] Any federal or state criminal or civil judgment, administrative citation, final administrative determination, order or debarment resulting from a violation of G.L. c. 149, G.L. c. 151, or 29 U.S.C. 201 et seq. imposed on this firm or on any prospective subcontractor while any bid/proposal to the City is pending and, if awarded a contract, during the term of the contract, will be reported to the Purchasing Agent or other City department within five (5) days of receiving notice.

Name of Bidder: ___________________________________________
4. □ Vendors awarded a contract that have disclosed a federal or state criminal or civil judgment, administrative citation, final administrative determination, or order resulting from a violation of G.L. c. 149, G.L. c. 151, or 29 U.S.C. 201 et seq. within three (3) years prior to the date of this bid/proposal, while the bid/proposal was pending, or during the term of the contract shall, upon request, furnish their monthly certified payrolls for their City contract to the Purchasing Agent for all employees working on such contract and are required to obtain a wage bond or other suitable insurance in an amount equal to the aggregate of one year’s gross wages for all employees. Vendors subject to a state or federal debarment for violation of the above laws or prohibited from contracting with the Commonwealth are prohibited from contracting with the City, and upon a finding or order of debarment or prohibition, the City may terminate the contract.

5. □ Notice provided by the City, informing employees of the protections of Executive Order 2016-1 and applicable local, state, and federal law will be posted by this firm in conspicuous places.

Attested hereto under the pains and penalties of perjury:

________________________________________________________________________  ______________________________
(Typed or printed name of person signing quotation, bid or proposal)  Signature

________________________________________________________________________
(Name of Business)

Pursuant to Executive Order 2016-1, vendors who have been awarded a contract with the City of Cambridge must post the Massachusetts Wage and Hour Laws notice informing employees of the protections of G.L. c. 149, G.L. c. 151, and 21 U.S.C. 201 et seq. in conspicuous places. This notice can be found at http://www.mass.gov/ago/docs/workplace/wage/wagehourposter.pdf
City of Cambridge CORI Policy

1. Where Criminal Offender Record Information (CORI) checks are part of a general background check for employment or volunteer work, the following practices and procedures will generally be followed.

2. CORI checks will only be conducted as authorized by Criminal History Systems Board (CHSB). All applicants will be notified that a CORI check will be conducted. If requested, the applicant will be provided with a copy of the CORI policy.

3. An informed review of a criminal record requires adequate training. Accordingly, all personnel authorized to review CORI in the decision-making process will be thoroughly familiar with the educational materials made available by the CHSB.

4. Prior to initiating a CORI check, the City will review the qualifications of the applicant to determine if the applicant is otherwise qualified for the relevant position. The City will not conduct a CORI check on an applicant that is not otherwise qualified for the relevant position.

5. Unless otherwise provided by law, a criminal record will not automatically disqualify an applicant. Rather, determination of suitability based on CORI checks will be made consistent with this policy and any applicable law or regulations.

6. If a criminal record is received from CHSB, the authorized individual will closely compare the record provided by CHSB with the information on the CORI request form and any other identifying information provided by the applicant, to ensure the record relates to the applicant.

7. If, in receiving a CORI report, the City receives information it is not authorized to receive (e.g. cases with dispositions such as not guilty or dismissal, in circumstances where the City is only authorized to receive convictions or case-pending information), the City will inform the applicant and provide the applicant with a copy of the report and a copy of CHSB’s Information Concerning the Process in Correcting a Criminal Record so that the applicant may pursue correction with the CHSB.

8. If the City of Cambridge is planning to make an adverse decision based on the results of the CORI check, the applicant will be notified immediately. The applicant shall be provided with a copy of the criminal record and the City’s CORI policy, advised of the part(s) of the record that make the individual unsuitable for the position and given an opportunity to dispute the accuracy and relevance of the CORI record.

9. Applicants challenging the accuracy of the criminal record shall be provided a copy of CHSB’s Information Concerning the Process in Correcting a Criminal Record. If the CORI record provided does not exactly match the identification information provided by the applicant, the City of Cambridge will make a determination based on a comparison of the CORI record and documents provided by the applicant. The City of Cambridge may contact CHSB and request a detailed search consistent with CHSB policy.

10. If the City of Cambridge reasonably believes the record belongs to the applicant and is accurate, then the determination of suitability for the position will be made. Unless otherwise provided by law, factors considered in determining suitability may include, but not be limited to the following:

(a) Relevance of the crime to the position sought;
(b) The nature of the work to be performed;
(c) Time since the conviction;
(d) Age of the candidate at the time of offense;
(e) Seriousness and specific circumstances of the offense;
(f) The number of offenses;
(g) Whether the applicant has pending charges;
(h) Any relevant evidence of rehabilitation or lack thereof;
(i) Any other relevant information, including information submitted by the candidate or requested by the City.

11. The Personnel Department will assist affected departments, in assessing the suitability of candidates in accordance with paragraph 10 a through i above, to ensure consistency, fairness, and protection of employment opportunities and the public interest.

12. The City of Cambridge will notify the applicant of the decision and the basis of the decision in a timely manner.

13. CORI information shall not be disseminated or shared with any unauthorized employees or other, but shall be maintained in confidence consistent with the obligations of law.

Revised May 5, 2007
CORI COMPLIANCE FORM

Persons and businesses supplying goods and/or services to the City of Cambridge ("Vendors"), who are required by law to perform CORI checks, are further required by Section 2.112.060 of the Cambridge Municipal Code to employ fair policies, practices and standards relating to the screening and identification of persons with criminal backgrounds through the CORI system. Such Vendors, when entering into contracts with the City of Cambridge, must affirm that their policies, practices and standards regarding CORI information are consistent with the policies, practices and standards employed by the City of Cambridge as set forth in the City of Cambridge CORI Policy ("CORI Policy") attached hereto.

CERTIFICATION

The undersigned certifies under penalties of perjury that the Vendor employs CORI related policies, practices and standards that are consistent with the provisions of the attached CORI Policy. All Vendors must check one of the three lines below.

1. ______ CORI checks are not performed on any Applicants.

2. ______ CORI checks are performed on some or all Applicants. The Vendor, by affixing a signature below, affirms under penalties of perjury that its CORI policies, practices and standards are consistent with the policies, practices and standards set forth in the attached CORI Policy.

3. ______ CORI checks are performed on some or all Applicants. The Vendor’s CORI policies, practices and standards are not consistent with the attached CORI Policy. Please explain on a separate sheet of paper.

____________________________
(Typed or printed name of person signing quotation, bid or Proposal) 
____________________________
Signature

(Name of Business)

NOTE:
The City Manager, in his sole discretion may grant a waiver to any Vendor on a contract by contract basis.

Instructions for Completing CORI Compliance Form:
A Vendor should not check Line 1 unless it performs NO CORI checks on ANY applicant. A Vendor who checks Line 2 certifies that the Vendor’s CORI policy conforms to the policies, practices and standards set forth in the City’s CORI Policy. A Vendor with a CORI policy that does NOT conform to the City’s CORI Policy must check Line 3 and explain the reasons for its nonconformance in writing. Vendors, who check Line 3, will not be permitted to enter into contracts with the City, absent a waiver by the City Manager.

Submit this form with your bid
ORDINANCE NUMBER 1312

Final Publication Number 3155. First Publication in the Chronicle on December 13, 2007.

City of Cambridge

In the Year Two Thousand and Eight

AN ORDINANCE

In amendment to the Ordinance entitled “Municipal Code of the City of Cambridge”

Be it ordained that Cambridge Municipal Code Chapter 2.112 is hereby amended by adding a new Section 2.112.060 entitled “CORI Screening by Vendors of the City of Cambridge” as follows:

Adding after Section 2.112.050 the following new sections:

SECTION 2.112.060

CORI SCREENING BY VENDORS OF THE CITY OF CAMBRIDGE

Sections:

2.112.061 Purpose
2.112.062 Definitions
2.112.063 CORI-Related Standards of the City of Cambridge
2.112.064 Waiver
2.112.065 Applicability

2.112.061 Purpose

These sections are intended to ensure that the persons and businesses supplying goods and/or services to the City of Cambridge deploy fair policies relating to the screening and identification of persons with criminal backgrounds through the CORI system.

2.112.062 Definitions

Unless specifically indicated otherwise, these definitions shall apply and control.

Awarding Authority means the City of Cambridge Purchasing Agent or designee.

Vendor means any vendor, contractor, or supplier of goods and/or services to the City of Cambridge.

2.112.063 CORI-Related Standards of the City of Cambridge

The City of Cambridge employs CORI-related policies, practices and standards that are fair to all persons involved and seeks to do business with vendors that have substantially similar policies, practices and standards. The City of Cambridge will do business only with vendors who, when required by law to perform CORI checks, employ CORI-related policies, practices, and standards that are consistent with policies, practices and standards employed by the City of Cambridge. The awarding authority shall consider any vendor’s deviation from policies, practices and standards employed by the City of Cambridge as grounds for rejection, rescission, revocation, or any other termination of the contract.

Name of Bidder: _____________________________________________________
2.112.064 Waiver

The City Manager may grant a waiver to anyone who or which has submitted a request for waiver if it is objectively reasonable; and the City Manager, or a delegate, shall report promptly in writing to the City Council all action taken with respect to every request for a waiver and the reasons for the decision.

2.112.065 Applicability

If any provision of these sections imposes greater restrictions or obligations than those imposed by any other general law, special law, regulation, rule, ordinance, order, or policy then the provisions of these sections shall control.

In City Council January 28, 2008.
Passed to be ordained by a yea and nay vote:-
Yeas 9; Nays 0; Absent 0.
Attest:- D. Margaret Drury, City Clerk.

A true copy;

ATTEST:-
D. Margaret Drury
City Clerk
Chapter 2.121
LIVING WAGE ORDINANCE

Sections:

2.121.010 Title and Purpose
2.121.020 Definitions
2.121.030 Living Wage
2.121.040 Waivers and Exceptions
2.121.050 Notification Requirements
2.121.060 Duties of covered Employers
2.121.070 Community Advisory Board
2.121.080 Enforcement
2.121.090 Severability
2.121.100 Effective Date

2.121.010 Title and Purpose.

This Chapter shall be known as the "Cambridge Living Wage Ordinance". The purpose of this ordinance is to assure that employees of the City of Cambridge and employees of City contractors, subcontractors and beneficiaries of tax abatements, loans, grants, subsidies and other assistance provided by the City earn an hourly wage that is needed to support a family of four.

2.121.020 Definitions.

For the purposes of this ordinance, the term:

(a) "Applicable Department" means the Personnel Department for employees of the City of Cambridge, the Purchasing Department, with the advice and assistance of the appropriate department which receives the services, for Covered Employers who contract or subcontract with the City of Cambridge, the School Department for employees, contractors and subcontractors of the School Department, and the City Manager’s Office for any other Person who is a Beneficiary of assistance other than a contract or subcontract.

(b) "Assistance" means:

(1) any grant, loan, tax incentive, bond financing, subsidy, or other form of assistance valued at least $10,000 that an employer receives by or through the authority or approval of the City of Cambridge, including, but not limited to, c. 121A tax abatements, industrial development bonds, Community Development Block Grant (CDBG) loans and grants, Enterprise Zone designations awarded after the effective date of this Chapter, and the lease of city owned land or buildings below market value; and

(2) any service contract, as defined herein, of at least $10,000 with the City of Cambridge that is made with an employer to provide services pursuant to G.L.c. 30B or other public procurement laws, awarded, renegotiated or renewed after the effective date of this Chapter.

(3) any service subcontract, as defined herein, of at least $10,000.

(c) "Beneficiary" means:

(1) any person who is a recipient of Assistance;

(2) any company or person that is a tenant or sub-tenant, leaseholder or sub-leaseholder of a recipient of Assistance, provided that said company or person employs at least 25 persons.

Name of Bidder: _____________________________________________________
and occupies property or uses equipment or property that is improved or developed as a result of Assistance, after the effective date of this Chapter; and

(d) "Covered Employer" means the City of Cambridge or a Beneficiary of Assistance.

(e) "Covered Employee" means:
   (1) a person employed by the City of Cambridge except for persons in those positions listed in Section 2.121.040(j) of this ordinance; and
   (2) a person employed by a Covered Employer, or a person employed by an independent contractor doing business with a Covered Employer, who would directly expend any of his or her time on the activities funded by the contract or the activities for which the Beneficiary received the Assistance, except for persons in those positions listed in Section 2.121.040(j) of this ordinance.

(f) "Living Wage" has the meaning stated in Section 2.121.030.

(g) "Person" means one or more of the following or their agents, employees, servants, representatives, and legal representatives: individuals, corporations, partnerships, joint ventures, associations, labor organizations, educational institutions, mutual companies, joint-stock companies, trusts, unincorporated organizations, trustees, trustees in bankruptcy, receivers, fiduciaries, and all other entities recognized at law by the Commonwealth of Massachusetts.

(h) “Service Contract” means a contract let to a contractor by the City of Cambridge for the furnishing of services, to or for the City, except contracts where services are incidental to the delivery of products, equipment or commodities. A contract for the purchase or lease of goods, products, equipment, supplies or other property is not a “service contract” for the purposes of this definition.

(i) “Service Subcontract” means a subcontract primarily for the furnishing of services, to or for a recipient of Assistance, except where services are incidental to the delivery of products, equipment or commodities. A contract for the purchase or lease of goods, products, equipment, supplies or other property is not a “service subcontract” for the purposes of this definition.

2.121.030 Living Wage.

(a) Applicability. Covered Employers shall pay no less than the Living Wage to their employees.

(b) Amount of wage. The Living Wage shall be calculated on an hourly basis and shall be no less than $10.00, subject to adjustment as provided herein. The Living Wage shall be upwardly adjusted each year no later than March first in proportion to the increase at the immediately preceding December 31 over the year earlier level of the Annual Average Consumer Price Index for All Urban Consumers (CPI-U) Boston-Lawrence-Salem, MA - NH, as published by the Bureau of Labor Statistics, United States Department of Labor applied to $10.00.

(c) No reduction in collective bargaining wage rates. Nothing in this Chapter shall be read to require or authorize any beneficiary to reduce wages set by a collective bargaining agreement.

(d) Cuts in non-wage benefits prohibited. No Beneficiary will fund wage increases required by this Chapter, or otherwise respond to the provisions of this Chapter, by reducing the health, insurance, pension, vacation, or other non-wage benefits of any of its employees.

2.121.040 Waivers and Exceptions.

(a) Waivers. A Covered Employer may request that the City Manager grant a partial or whole waiver to the requirements of this Chapter.
**b) General Waivers.** Waivers may be granted where application of this Chapter to a particular form of Assistance is found by the City Solicitor to violate a specific state or federal statutory, regulatory or constitutional provision or provisions, and the City Manager approves the waiver on that basis.

**c) Hardship Waivers for certain not-for-profit employers.** An employer, who has a contract with the City of Cambridge which is not subject to the provisions of G.L. c. 30B, may apply to the City Manager for a specific waiver where payment of the Living Wage by a not-for-profit Covered Employer would cause a substantial hardship to the Covered Employer.

**d) Chapter 30B contract waivers.** Prior to issuing an invitation for bids for a procurement contract subject to the provisions of G.L. c. 30B, any Applicable Department may apply to the City Manager for a waiver of the application of the Living Wage to the contract where payment of the Living Wage by a Covered Employer would make it inordinately expensive for the City to contract for the services or would result in a significant loss of services, because the contracted work cannot be segregated from the other work of the Covered Employer.

**e) General Waiver Request Contents.** All General Waiver requests shall include the following:

1. The nature of the Assistance to which this Chapter applies;
2. The specific or official name of the Assistance and Assistance program, the statutory or regulatory authority for the granting of the Assistance, and a copy of that authority;
3. The conflicting statutory, regulatory, or constitutional provision or provisions that makes compliance with this Chapter unlawful, and a copy of each such provision; and
4. A factual explication and legal analysis of how compliance with this Chapter would violate the cited provision or provisions, and the legal consequences that would attach if the violation were to occur.

**f) Hardship Waiver Request Contents.** All Hardship Waiver requests shall include the following:

1. The nature of the Assistance to which this Chapter applies;
2. A detailed explanation of why payment of the Living Wage would cause a substantial hardship to the Covered Employer; and
3. A statement of proposed wages below the Living Wage.

**g) Chapter 30B Contract Waiver Request Contents.** A Chapter 30B contract waiver request shall include the following:

1. The nature of the Assistance to which this Chapter applies;
2. A detailed explanation of why the contracted work cannot be segregated from the other work of the bidding Covered Employers thereby making the cost of the contract with the payment of the Living Wage inordinately expensive or would result in a significant loss of services;

**h) Community Advisory Board review and recommendation regarding waiver requests.** The Community Advisory Board, as described in Section 2.121.070 of this ordinance, shall consider waiver requests along with their supporting documentation and analysis, and may hold a public hearing to consider the views of the public before making a recommendation to the City Manager regarding the waiver request. For a hardship waiver, the Community Advisory Board shall offer an opportunity to be heard to employees of the Covered Employer. After reviewing the recommendation of the Community Advisory Board, the City Manager may approve and grant or deny all or part of a request. The City Manager may in his or her discretion grant a temporary hardship waiver pending the hearing before the Community Advisory Board. For Chapter 30B contract waivers, the Community Advisory Board shall make its recommendation to the City Manager no more than thirty days after it is notified of the request for a Chapter 30B contract waiver.
(i) Terms of exceptions. If an employer is subject to this Chapter as a result of its receipt of more than one kind of Assistance covered by this Chapter, and if the City Manager grants a waiver with respect to one form of Assistance, the City Manager need not find that this Chapter is inapplicable to the employer with respect to another form of Assistance received by the employer.

(j) Exceptions. The following positions will be excepted from the requirement of the payment of the Living Wage upon certification in an affidavit in a form approved by the Applicable Department and signed by a principal officer of the Covered Employer that the positions are as follows:

1. youth hired pursuant to a city, state, or federally funded program which employs youth as defined by city, state, or federal guidelines, during the summer, or as part of a school to work program, or in other related seasonal or part-time program;
2. work-study or cooperative educational programs;
3. trainees who are given a stipend or wage as part of a job training program that provides the trainees with additional services, which may include, but are not limited to, room and board, case management, or job readiness services.
4. persons working in a recognized supported employment program that provides workers with additional services, which may include, but are not limited to, room and board, case management, counseling, or job coaching;
5. positions where housing is provided by the employer;
6. employees who are exempt from federal or state minimum wage requirements; and
7. individuals employed by the City of Cambridge where the employment of such individuals is intended primarily to provide a benefit or subsidy to such individuals, although the City is compensating them for work performed.

2.121.050 Notification Requirements.

All Applicable Departments shall provide in writing an explanation of the requirements of this ordinance in all requests for bids for service contracts and to all persons applying for Assistance as defined by this ordinance. All persons who have signed a service contract with the City of Cambridge or a contract for Assistance shall forward a copy of such requirements to any person submitting a bid for a subcontract on the Assistance contract.

2.121.060 Duties of Covered Employers.

(a) Notification Requirements. Covered employers shall provide each Covered employee with a fact sheet about this ordinance and shall post a notice about the ordinance in a conspicuous location visible to all employees. The fact sheet and poster shall be provided to the Covered Employer by the Applicable Department and shall include:

1. notice of the Living Wage amount;
2. a summary of the provisions of this ordinance;
3. a description of the enforcement provisions of the ordinance;
4. the name, address, and phone number of a person designated by the Applicable Department to whom complaints of noncompliance with this ordinance should be directed.

(b) Contract for Assistance. At the time of signing a contract for assistance with the City of Cambridge or with a Beneficiary, the contract must include the following:

1. the name of the program or project under which the contract or subcontract is being awarded;
2. a local contact name, address, and phone number for the Beneficiary;
3. a written commitment by the Beneficiary to pay all Covered Employees not less than the Living Wage as subject to adjustment under this ordinance and to comply with the provisions of this ordinance;
4. a list of Covered Employees under the contract with the employees’ job titles;
(5) a list of all subcontracts either awarded or that will be awarded to Beneficiaries with funds from the Assistance. Upon signing any subcontracts, the Covered Employer shall forward a copy of the subcontract to the Applicable Department.

(c) Maintenance of payroll records. Each Covered Employer shall maintain payrolls for all Covered Employees and basic records relating thereto and shall preserve them for a period of three years. The records shall contain the name and address of each employee, the job title and classification, the number of hours worked each day, the gross wages, deductions made, actual wages paid, and copies of social security wage and withholding reports, and evidence of payment thereof and such other data as may be required by the Applicable Department from time to time.

(d) Applicable Department duties. The Applicable Department shall cause investigations to be made as may be necessary to determine whether there has been compliance with this Ordinance. The Applicable Department shall report the findings of all such investigations to the Community Advisory Board.

(e) Covered Employer to cooperate. The Covered Employer shall submit payroll records on request to the Applicable Department. The Covered Employer shall permit City representatives to observe work being performed upon the work site, to interview employees and to examine the books and records relating to the payrolls being investigated to determine payment of wages.

(f) City Assistance Reports. Each Applicable Department shall file a City Assistance Report with the City Manager and the Community Advisory Board by July 31 of each year. The report shall include, for each Assistance package or contract approved during the preceding fiscal year:

1. the name of the Applicable Department (awarding agency), the name of the specific program under which the Assistance was awarded, and the origin of funds for Assistance;
2. a description of the purpose or project for which the Assistance was awarded;
3. the name, address, and phone number of a local contact person for the Covered Employer;
4. the total cost to the City of Assistance provided to each Beneficiary, including both face-value of Assistance, as well as revenue not collected as a result of the Assistance.

2.121.070 Community Advisory Board.

(a) Purpose. The purpose of the Community Advisory Board shall be to review the effectiveness of this Ordinance at creating and retaining Living Wage jobs, to make recommendations to the City Manager regarding the granting of Waivers to Covered Employers, to review the implementation and enforcement of this ordinance, and to make recommendations from time to time in connection therewith.

(b) Composition. The Community Advisory Board shall be composed of nine members and shall include representatives of labor unions, community organizations and the business community. All members will be appointed by the City Manager. Members of the Board shall serve a three-year term. Whenever a vacancy shall occur the City Manager shall appoint a replacement within thirty days of said vacancy.

(c) Meetings. The Community Advisory Board shall meet quarterly and in special session as required. All meetings of the Board shall be open to the public and will allow for public testimony on the uses of the City Assistance generally, and on specific instances of Assistance or proposed Assistance as received or sought by individual enterprises.

(d) Conflict of Interest. No member of the Community Advisory Board shall participate in any proceeding concerning a Beneficiary, a Covered Employer or a Covered Employee, or applicant for waiver or exemption, if the member or any member of his or her immediate family has a direct or indirect financial interest in the outcome of said proceeding.

Name of Bidder: _____________________________________________________
2.121.080 Enforcement.

(a) Enforcement powers. In order to enforce this Chapter, the Applicable Department may, with the approval and assistance of the City Solicitor, issue subpoenas, compel the attendance and testimony of witnesses and production of books, papers, records, and documents relating to payroll records necessary for hearing, investigations, and proceedings. In case of failure to comply with a subpoena, the City may apply to a court of appropriate jurisdiction for an order requiring the attendance and testimony of witnesses and the productions of books, papers, records, and documents. Said court, in the case of a refusal to comply with any such subpoena, after notice to the person subpoenaed, and upon finding that the attendance or testimony of such witnesses or the production of such books, papers, records, and documents, as the case may be, is relevant or necessary for such hearings, investigation, or proceedings, may issue an order requiring the attendance or testimony of such witnesses or the production of such documents and any violation of the court's order may be punishable by the court as contempt thereof.

(b) Complaint procedures. An employee who believes that he or she is a Covered Employee or an applicant for a position to be filled by a Covered Employee who believes that his or her employer is not complying with requirements of this Chapter applicable to the employer may file a complaint with the Applicable Department or with the Community Advisory Board. Complaints of alleged violations may also be filed by concerned citizens or by the City Council. Complaints of alleged violations may be made at any time, but in no event more than three years after the last date of alleged violation, and shall be investigated promptly by the Applicable Department. Statements written or oral, made by an employee, shall be treated as confidential and shall not be disclosed to the Covered Employer without the consent of the employee.

(c) Investigations and hearings. The Applicable Department shall investigate the complaint, and may, in conjunction with the City Solicitor, and in accordance with the powers herein granted, require the production by the employer of such evidence as required to determine compliance. Prior to ordering any penalty the applicable Department shall give notice to the employer and conduct a hearing. If at any time during these proceedings, the employer voluntarily makes restitution of the wages not paid to the employee making the complaint and to any similarly situated employees, by paying all back wages owed plus interest at the average prior year Massachusetts passbook savings bank rate, or otherwise remedies the violation alleged if the violation involves matters other than wages, then the Applicable Department shall thereafter dismiss the complaint against the employer.

(d) Remedies. In the event that the Applicable Department, after notice and hearing, determines that any Covered Employer has failed to pay the Living Wage rate or has otherwise violated the provisions of this Chapter, the Applicable Department may order any or all of the following penalties and relief:

1. Fines up to the amount of $300 for each Covered Employee for each day that the Covered Employer is in violation of this Ordinance, except if the violation was not knowing and willful, then the total fine shall not exceed the amount of back wages plus interest owed;

2. Suspension of ongoing contract and subcontract payments;

3. Ineligibility for future City Assistance for up to three years beginning when all penalties and restitution have been paid in full. In addition, all Covered Employers having any principal officers who were principal officers of a barred beneficiary shall be ineligible under this section; and

4. Any other action deemed appropriate and within the discretion and authority of the city.

Remedies in this section shall also apply to the party or parties aiding and abetting in any violation of this chapter.

(e) Private right of action. Any Covered Employee, or any person who was formerly employed by a Beneficiary, may bring an action to enforce the provisions of this Chapter to recover back
pay and benefits, attorneys fees and costs, by filing suit against a Beneficiary in any court of competent jurisdiction.

(f) Remedies herein non-exclusive. No remedy set forth in this Chapter is intended to be exclusive or a prerequisite for asserting a claim for relief to enforce the right granted under this Chapter in a court of law. This Chapter shall not be construed to limit an employee’s right to bring a common law cause of action for wrongful termination.

(g) Retaliation and discrimination barred. A Covered Employer shall not discharge, reduce the compensation or otherwise retaliate against any employee for making a complaint to the City, otherwise asserting his or her rights under this Chapter, participating in any of its proceedings or using any civil remedies to enforce his or her rights under the Chapter. The City shall investigate allegations of retaliation or discrimination and shall, if found to be true, after notice and a hearing, order appropriate relief as set out in paragraphs (c) and (d) herein.

2.121.090 Severability.

In the event any provision of this ordinance shall be held invalid or unenforceable by any court of competent jurisdiction, such holding shall not invalidate or render unenforceable any other provisions hereof.

2.121.100 Effective Date.

This law shall be effective sixty (60) after final passage.
The Living Wage Ordinance (2.121) provides, at 1.121.030(b) that the wage shall be upwardly adjusted each year no later than March 1st in proportion to the increase in the Annual Average Consumer Price Index for the prior calendar year for All Urban Consumers (CPI-U) in the Boston area, as published by the federal Bureau of Labor Statistics.

For calendar year 1999, the CPI-U increased by 2.5%. Therefore, the new living wage, as of March 1, 2000 is $10.25.

For calendar year 2000, the CPI-U increased by 4.3%. Therefore, the new living wage, as of March 1, 2001 is $10.68.

For calendar year 2001, the CPI-U increased by 4.3%. Therefore, the new living wage, as of March 1, 2002 is $11.11.

For calendar year 2002, the CPI-U increased by 2.6%. Therefore, the new living wage, as of March 1, 2003 is $11.37.

The City Council has voted to amend the section of the Living Wage Ordinance (1.121.030 (b) that provides the method for calculating cost of living increases each year. As a result of this change, the living wage as of March 30, 2003 is $11.44.

For calendar year 2003, the CPI-U increased by 3.76%. Therefore the new living wage, as of March 1, 2004 is $11.87.

For calendar year 2004, the CPI-U increased by 2.7%. Therefore the new living wage, as of March 1, 2005 is $12.19.

For calendar year 2005, the CPI-U increased by 3.3%. Therefore the new living wage, as of March 1, 2006 is $12.59.

For calendar year 2006 the CPI-U increased by 3.1 %. Therefore the new living wage, as of March 1, 2007 is $12.98.

For calendar year 2007 the CPI-U increased by 1.9 %. Therefore the new living wage, as of March 1, 2008 is $13.23.

For calendar year 2008 the CPI-U increased by 3.5 %. Therefore the new living wage, as of March 1, 2009 is $13.69.

For calendar year 2009 the CPI-U decreased by .67 %. Therefore the new living wage, as of March 1, 2010 will remain at $13.69.

For calendar year 2010 the CPI-U increased by 1.57%. Therefore the new living wage, as of March 1, 2011 is $13.90.

For calendar year 2011 the CPI-U increased by 2.71%. Therefore the new living wage, as of March 1, 2012 is $14.28.

For calendar year 2012 the CPI-U increased by 1.58%. Therefore the new living wage, as of March 1, 2013 is $14.51.

For calendar year 2013 the CPI-U increased by 1.37%.Therefore the new living wage, as of March 1, 2014 is $14.71.

For calendar year 2014 the CPI-U increased by 1.61% Therefore the new living wage, as of March 1, 2015 is $14.95.

Name of Bidder: _____________________________________________________
For calendar year 2015 the CPI-U increased by .06% Therefore the new living wage, as of March 1, 2016 is $15.04.

For calendar year 2016 the CPI-U increased by .147% Therefore the new living wage, as of March 1, 2017 is $15.26.

For calendar year 2017 the CPI-U increased by .251% Therefore the new living wage, as of March 1, 2018 is $15.64.

For calendar year 2018 the CPI-U increased by 3.29% Therefore the new living wage, as of March 1, 2019 is $16.15.
City of Cambridge
Articles of Agreement
SAMPLE SAMPLE SAMPLE

Commodity:
File Number:

This agreement is made and entered into this xx/xx/xx by and between the City Of Cambridge ("the CITY"), a municipal corporation organized and existing under the laws of the Commonwealth of Massachusetts, and xxxxxxxxx, a corporation duly organized and existing under the laws of the xxxxxxxxx ("the Contractor").

Address:
Telephone:

Article I. Definition. "This Contract" as used herein shall mean these Articles of Agreement and "the bid documents," which include, but are not limited to, the instructions to bidders, the Contractor's bid or proposal, the specifications, the general conditions, the requirements, the applicable addenda, and all documents and forms submitted with the Contractor's bid or proposal that were accepted by the City.

Article II. Duration. The Contractor shall commence the performance of this contract for the period beginning on xx/xx/xx and ending on xx/xx/xx.

Article III. Terms. The Contractor agrees to provide the services all in accordance with the bid documents of xx/xx/xx.

Contract Value:

Article IV. Payment. The City agrees to pay to Contractor the sum set forth in the Contractor's bid or proposal. Contractor shall invoice the department to which it provided the service, not the Purchasing Department.

Article V. Termination. The following shall constitute events of default under this Contract requiring immediate termination: a) any material misrepresentation made by the Contractor, b) any failure by the Contractor to perform any of its obligations under this Contract including, but not limited to, the following: (i) failure to commence performance of this Contract at the time specified in this Contract due to a reason or circumstance within the Contractor's reasonable control, (ii) failure to perform this Contract with sufficient personnel and equipment or with sufficient material to ensure the completion of this Contract within the specified time due to a reason or circumstance within the Contractor's reasonable control, (iii) failure to perform this Contract in a manner reasonably satisfactory to the City, (iv) failure to promptly re-perform within reasonable time the services that were rejected by the City as erroneous or unsatisfactory, (v) discontinuance of the services for reasons not beyond the Contractor's reasonable control, (vi) failure to comply with a material term of this Contract, including, but not limited to, the provision of insurance and nondiscrimination, and (vii) any other acts specifically and expressly stated in this Contract as constituting a basis for termination of this Contract.

Except as otherwise provided in the Articles of Agreement, the City may terminate the contract upon seven days notice.

Article VI. Damages. From any sums due to the Contractor for services, the City may keep for its own the whole or any part of the amount for expenses, losses and damages as directed by the
Purchasing Agent, incurred by the City as a consequence of procuring services as a result of any failure, omission or mistake of the Contractor in providing services as provided in this Contract.

**Article VII. Conflict.** In the event there is a conflict between these Articles and the bid documents, the bid documents shall supersede these articles.

**Article VIII. Governing laws and ordinances.** This Contract is made subject to all the laws of the Commonwealth and the Ordinances of the City and if any such clause thereof does not conform to such laws or ordinances, such clause shall be void (the remainder of the Contract shall not be affected) and the laws or ordinances shall be operative in lieu thereof.

**Article IX. Performance Security.** Upon execution of this Contract by the Contractor, the Contractor shall furnish to the City security for the faithful performance of this Contract in the amount of 0% of the value of the bid in the form of a performance bond issued by a surety satisfactory to the city or in the form of a certified check.

**Article X. Equal Opportunity.** The Contractor in the performance of all work under this contract will not discriminate on the grounds of race, color, sex, age, religious creed, disability, national origin or ancestry, sexual orientation, marital status, family status, military status, or source of income in the employment practices or in the selection or retention of subcontractors, and in the procurement of materials and rental of equipment. The city may cancel, terminate or suspend the contract in whole or in part for any violation of this article.

**Article XI. Assignability.** The Contractor shall not assign, sell, subcontract or transfer any interest in this contract without prior written consent of the city.

In witness whereof the parties have hereto and to three other identical instruments set their hands the day and year first above written.

**The City:**

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<thead>
<tr>
<th>Louis DePasquale</th>
<th>Signature and Title</th>
</tr>
</thead>
<tbody>
<tr>
<td>City Manager</td>
<td></td>
</tr>
</tbody>
</table>

**The Contractor:**

<table>
<thead>
<tr>
<th>Elizabeth Unger</th>
</tr>
</thead>
<tbody>
<tr>
<td>Purchasing Agent</td>
</tr>
</tbody>
</table>

Approved as to Form:

**Nancy E. Glowa**
City Solicitor