

REQUEST FOR PROPOSALS

Item Description: STREET TREE PLANTING SPRING 2022

Date to be opened: JANUARY 31, 2022

Issuing Department: PARKS DEPARTMENT

QUESTIONS

- Please direct questions relative to the bidding process, how to fill out forms, and how to submit a bid (Pages 1-8) to Purchasing Agent Patti Jordan.
 - o Phone: (401) 680-5264
 - o Email: pjordan@providenceri.gov
 - Please use the subject line "RFP Question"
- Please direct questions relative to the Minority and Women's Business Enterprise Program and the corresponding forms (Pages 9-13) to the MBE/WBE Outreach Director for the City of Providence, Grace Diaz
 - o Phone: (401) 680-5766
 - o Email: gdiaz@providenceri.gov
 - Please use subject line "MBE WBE Forms"
- Please direct questions relative to the specifications outlined (beginning on page 14) to the issuing department's subject matter expert:
 - o DOUGLAS STILL, CITY FORESTER
 - o 401-680-7270
 - o DSTILL@PROVIDENCERI.GOV

Pre-bid Conference

NO PRE-BID CONFERENCE



INSTRUCTIONS FOR SUBMISSION

Bids may be submitted up to **2:15 P.M.** on the above meeting date at the **Department of the City Clerk. Room 311, City Hall. 25 Dorrance Street, Providence.** At 2:15 P.M. all bids will be publicly opened and read at the Board of Contract Meeting in the City Council Chambers, on the 3rd floor of City Hall.

- Bidders must submit 3 copies of their bid in sealed envelopes or packages labeled with the captioned Item Description and the City Department to which the RFP and bid are related and must include the company name and address on the envelope as well. (On page 1).
- If required by the Department, please keep the original bid bond and check in only one of the envelopes.
- Communications to the Board of Contract and Supply that are not competitive sealed bids (i.e. product information/samples) should have "**NOT A BID**" written on the envelope or wrapper.
- Only use form versions and templates included in this RFP. If you have an old version of a form <u>do not</u> recycle it for use in this bid.
- The bid envelope and information relative to the bid must be addressed to:

Board of Contract and Supply Department of the City Clerk – City Hall, Room 311 25 Dorrance Street Providence, RI 02903

**<u>PLEASE NOTE</u>: This bid may include details regarding information that you will need to provide (such as proof of licenses) to the issuing department before the formalization of an award.

This information is NOT requested to be provided in your initial bid by design.

All bids submitted to the City Clerk become public record. Failure to follow instructions could result in information considered private being posted to the city's Open Meetings Portal and made available as a public record. The City has made a conscious effort to avoid the posting of sensitive information on the City's Open Meetings Portal, by requesting that such sensitive information be submitted to the issuing department only at their request.



BID PACKAGE CHECKLIST

Digital forms are available in the City of Providence Purchasing Department Office or online at http://www.providenceri.gov/purchasing/how-to-submit-a-bid/

The bid package **MUST** include the following, in this order:

- Bid Form 1: Bidder's Blank as the cover page/ 1st page (see page 6 of this document)
- Bid Form 2: Certification of Bidder as 2nd page (see page 7 of this document)
- Bid Form 3: Certificate Regarding Public Records (see page 8 of this document)
- Forms from the Minority and Women Business Enterprise Program: Based on Bidder Category. See forms and instructions enclosed (pages 9-13) or on: https://www.providenceri.gov/purchasing/minority-women-owned-business-mbewbe-procurement-program/

*Please note: MBE/WBE forms must be completed for EVERY bid submitted and must be inclusive of ALL required signatures. Forms without all required signatures will be considered incomplete.

- Bidder's Proposal/Packet: Formal response to the specifications outlined in this RFP, including pricing information and details related to the good(s) or service(s) being provided. Please be mindful of formatting responses as requested to ensure clarity.
- Financial Assurance, <u>if requested</u> (as indicated on page 5 of this document under "Bid Terms")

All of the above listed documents are REQUIRED. (With the exception of financial assurances, which are only required if specified on page 5.)

***Failure to meet specified deadlines, follow specific submission instructions, or enclose all required documents with all applicable signatures will result in disqualification, or in an inability to appropriately evaluate bids.



NOTICE TO VENDORS

- 1. The Board of Contract and Supply will make the award to the lowest qualified and responsible bidder.
- 2. In determining the lowest responsible bidder, cash discounts based on preferable payment terms will not be considered.
- 3. Where prices are the same, the Board of Contract and Supply reserves the right to award to one bidder, or to split the award.
- 4. No proposal will be accepted if the bid is made in collusion with any other bidder.
- 5. Bids may be submitted on an "equal in quality" basis. The City reserves the right to decide equality. Bidders must indicate brand or the make being offered and submit detailed specifications if other than brand requested.
- 6. A bidder who is an out-of-state corporation shall qualify or register to transact business in this State, in accordance with the Rhode Island Business Corporation Act, RIGL Sec. 7-1.2-1401, et seq.
- 7. The Board of Contract and Supply reserves the right to reject any and all bids.
- 8. Competing bids may be viewed in person at the Department of the City Clerk, City Hall, Providence, immediately upon the conclusion of the formal Board of Contract and Supply meeting during which the bids were unsealed/opened. Bids may also be accessed electronically on the internet via the City's Open Meetings Portal.
- 9. As the City of Providence is exempt from the payment of Federal Excise Taxes and Rhode Island Sales Tax, prices quoted are not to include these taxes.
- 10. In case of error in the extension of prices quoted, the unit price will govern.
- 11. The contractor will **NOT** be permitted to: a) assign or underlet the contract, or b) assign either legally or equitably any monies or any claim thereto without the previous written consent of the City Purchasing Director.
- 12. Delivery dates must be shown in the bid. If no delivery date is specified, it will be assumed that an immediate delivery from stock will be made.
- 13. A certificate of insurance will normally be required of a successful vendor.
- 14. For many contracts involving construction, alteration and/or repair work, State law provisions concerning payment of prevailing wage rates apply (RIGL Sec. 37-13-1 et seq.)
- 15. No goods should be delivered or work started without a Purchase Order.
- 16. Submit 3 copies of the bid to the City Clerk, unless the specification section of this document indicates otherwise.
- 17. Bidder must certify that it does not unlawfully discriminate on the basis of race, color, national origin, gender, gender identity or expression, sexual orientation and/or religion in its business and hiring practices and that all of its employees are lawfully employed under all applicable federal, state and local laws, rules and regulations. (See Bid Form 2.)



BID TERMS

Financial assurances may be required in order to be a successful bidder for Commodity or Construction
and Service contracts. <u>If either of the first two checkboxes below is checked, the specified assurance</u>
<u>must accompany</u> a bid, or the bid will not be considered by the Board of Contract and <u>Supply</u>. The
third checkbox indicates the lowest responsible bidder will be contacted and required to post a bond to
be awarded the contract.

	\mathbf{X} A certified check for \$500 must be deposited with the City Clerk as a guarantee that the Contract will be signed and delivered by the bidder.
a)	A bid bond in the amount of per centum (%) of the proposed total price, must be deposited with the City Clerk as a guarantee that the contract will be signed and delivered by the bidder; and the amount of such bid bond shall be retained for the use of the City as liquidated damages in case of default.
b)	☐ A performance and payment bond with a satisfactory surety company will be posted by the bidder in a sum equal to one hundred per centum (100%) of the awarded contract.
c)	☐ No financial assurance is necessary for this item.
A۱	wards will be made within sixty (60) days of bid opening. All bid prices will be considered firm,

- 2. Awards will be made within **sixty (60) days of bid opening**. All bid prices will be considered firm, unless qualified otherwise. Requests for price increases will not be honored.
- 3. Failure to deliver within the time quoted or failure to meet specifications may result in default in accordance with the general specifications. It is agreed that deliveries and/or completion are subject to strikes, lockouts, accidents and Acts of God.

The following entry applies only for COMMODITY BID TERMS:

4. Payment for partial delivery will not be allowed except when provided for in blanket or term contracts. The following entries apply only for CONSTRUCTION AND SERVICE BID TERMS:

- 5. Only one shipping charge will be applied in the event of partial deliveries for blanket or term contracts.
- 6. Prior to commencing performance under the contract, the successful bidder shall attest to compliance with the provisions of the Rhode Island Worker's Compensation Act, RIGL 28-29-1, et seq. If exempt from compliance, the successful bidder shall submit a sworn Affidavit by a corporate officer to that effect, which shall accompany the signed contract.
- 7. Prior to commencing performance under the contract, the successful bidder shall, submit a certificate of insurance, in a form and in an amount satisfactory to the City.



BID FORM 1: Bidders Blank

- 1. Bids must meet the attached specifications. Any exceptions or modifications must be noted and fully explained.
- 2. Bidder's responses must be in ink or typewritten, and all blanks on the bid form should be completed.
- 3. The price or prices proposed should be stated both in **WRITING** and in **FIGURES**, and any proposal not so stated may be rejected. **Contracts exceeding twelve months must specify annual costs for each year.**
- 4. Bids **SHOULD BE TOTALED** so that the final cost is clearly stated (unless submitting a unit price bid), however **each item should be priced individually**. Do not group items. Awards may be made on the basis of *total* bid or by *individual items*.
- 5. All bids MUST BE SIGNED IN INK.

Name of Bidder (Firm or Individual):	
Contact Name:	
Business Address:	
Business Phone #:	
Contact Email Address:	
Agrees to bid on (Write the "Item Description" here):	
If the bidder's company is based in a state other than Rhode Island, list nat	me and contact information for a local agent for service of
process that is located within Rhode Island	
Delivery Date (if applicable):	
Name of Surety Company (if applicable):	
Total Amount in Writing*:	
Total Amount in Figures*:	
* If you are submitting a unit price bid, please insert "Unit Price Bid"	
Use additional pages if necessary for additional bidding details.	
	Signature of Representation

Title



BID FORM 2: Certification of Bidder

(Non-Discrimination/Hiring)

Upon behalf of		(Firm or Individual Bidding),					
Ι,		(Name of Person Making Certification),					
I,being its 1. Bidder does not unlawfully discriminate on the basis of orientation and/or religion in its business and hiring practice.		(Title or "Self"), hereby certify that:					
1.	•	on the basis of race, color, national origin, gender, sexual and hiring practices.					
2.							
I at	ffirm by signing below that I am duly auth	orized on behalf of Bidder, on					
thi	sday of	20					
		Signature of Representation					
		Printed Name					



BID FORM 3: Certificate Regarding Public Records

Upon behalf of				_ (Firm or Individual Bidding),	
I,			(Name of	Person Making Certification),	
being	its		(Tit	le or "Self"), hereby certify an	
unders	standing that:				
1.	(RFQ's), documents contained record upon receipt by the Cand Supply (BOCS) meeting	ed within, and the detail ity Clerk's office and op and the issuing departmer e/personal information	ls outlined or pening at the ent for this R be submitted	•	
3.	The requested supplemental such details may result in dis				
4.	If sensitive information that I defined supplemental inform	has not been requested in ation prior to the issuin the City of Providence I	is enclosed on g department has no obliga	or if a bidder opts to enclose the at's request in the bidding packet ation to redact those details and	
5.	The City of Providence obserthe bidding packet may not be	rves a public and transpose submitted directly to er information, such as	parent biddin the issuing d	ag process. Information required in department at the discretion of the as, from becoming public. Bidders	
I affir	m by signing below that I am c	luly authorized on beha	lf of Bidder,	on	
this	day of	20			
				Signature of Repres	entatior
				C I	

Printed Name



WBE/MBE Form Instructions

The City of Providence actively seeks Minority and Women business enterprises to participate in bids to meet the City's procurement needs. Pursuant to the City of Providence Code of Ordinances, Chapter 21, Article II, Sec. 21-52 (Minority and Women's Business Enterprise) and Rhode Island General Laws (as amended), Chapter 31-14, et seq. (Minority Business Enterprise), Minority Business Enterprise (MBE) and Women's Business Enterprise (WBE) participation goals apply to contracts.

The goal for Minority Business Enterprise (MBE) participation is 10% of the total bid value. The goal for Women's Business Enterprise (WBE) participation is 10% of the total bid value. The goal for combined MBE/WBE participation is 20% of the total bid value.

Only businesses certified with the State of Rhode Island as minority and/or women business enterprises are counted towards the City's goals. Eligible minority or women-owned businesses are encouraged to seek certification from the State of Rhode Island Minority Business Enterprise Compliance Office at: http://odeo.ri.gov/offices/mbeco/

Note: MBE certification with the State of Rhode Island on the basis of Portuguese heritage is not currently recognized by the City of Providence's MBE program.

Bid Requirements:

All Bidders: All bidders must complete and submit the MBE/WBE Participation Affidavit indicating whether or not they are a state-certified MBE/WBE and acknowledging the City's participation goals. Submission of this form is required with every bid. Your bid will not be accepted without an affidavit.

Bidders who will be subcontracting: Bidders who will be subcontracting must submit the **Subcontractor Disclosure Form** as part of their bid submission. All subcontractors, regardless of MBE/WBE status, must be listed on this form. Business NAICS codes can be found at https://www.naics.com/search/. Awarded bidders are required to submit **Subcontractor Utilization and Payment Reports** with each invoice.

Waiver Requests:

If the percentage of the total amount of the bid being awarded to MBE or WBE vendors is less than 20% (Box F on the Subcontractor Disclosure Form) and the prime contractor is not a Rhode Island State-certified MBE or WBE, the Bidder must complete the *MBE/WBE Waiver Request Form* for review. Waivers will be considered on a case by case basis.

No waiver will be granted unless the waiver request includes documentation that demonstrates that the Bidder has made good faith efforts to achieve the City's stated participation goals. Waivers must be reviewed and signed by the City of Providence's MBE/WBE Outreach Director, Grace Diaz, or her designee. Department Directors cannot recommend a bidder for award if this form is applicable and absent. If the bid does not meet the participation goals of the City of Providence and a waiver is not filed with the signature of the MBE/WBE Outreach Director or her designee, the bid will not be accepted.

Verifying MBE/WBE Certification

It is the responsibility of the bidder to confirm that every MBE/WBE named in a proposal and included in a contract is certified by the Rhode Island Minority Business Enterprise Compliance office. The current MBE/WBE directory is available at the State of RI MBE Office, One Capitol Hill, 2nd Floor, Providence, RI, or online at http://odeo.ri.gov/offices/mbeco/mbe-wbe.php. You can also call (401) 574-8670 to verify certification, expiration dates, and services that the MBE/WBE is certified to provide. Note: MBE certification with the State of Rhode Island on the basis of Portuguese heritage is not currently recognized by the City of Providence's MBE program.

Form Instructions:

Access all bid forms from http://www.providenceri.gov/oeo/ or http://www.providenceri.gov/purchasing/minority-women-owned-business-mbewbe-procurement-program/. **Download** the forms as blank PDFs. Once saved on your computer, fill them out using the Adobe program. The fillable PDFs must be completed in Adobe in order to be saved property. Google Chrome and similar



platforms do not allow for the forms to be saved as filled PDFs. Therefore, please download the blank forms to your computer, then fill them out and save.

Assistance with Form Requirements

Examples of completed forms can be found on the City of Providence website at http://www.providenceri.gov/oeo/ or http://www.providenceri.gov/oeo/ or http://www.providenceri.gov/oeo/ or http://www.providenceri.gov/purchasing/minority-women-owned-business-mbewbe-procurement-program/.

Contract Requirements:

Prime contractors engaging subcontractors must submit the *Subcontractor Utilization and Payment Report* to the City Department's Fiscal Agent with every invoice and with request for final payment. This form is not submitted as a part of the initial bid package.

For contracts with duration of less than 3 months, this form must be submitted along with the contractor's request for final payment. The form must include all subcontractors utilized on the contract, both MBE/WBE and non- MBE/WBE, the total amount paid to each subcontractor for the given period and to date. During the term of the contract, any unjustified failure to comply with the MBE/WBE participation requirements is a material breach of contract.

Questions?

For more information or for assistance with MBE/WBE Forms, contact the City of Providence MBE/WBE Outreach Director, Grace Diaz, at mbe-wbe@providenceri.com or (401) 680-5766.



MBE/WBE PARTICIPATION AFFIDAVIT

Item Discussion (as seen on RFP):			
Prime Bidder:Prime Bidder (Company) Phone Number:			
Which one of the following describes your busine certification with the State of Rhode Island?			
representative of contractor, I make this Affid	avit:		t in my capacity as the contractor or an authorized
have the maximum opportunity to participate in p	procurements a	and projects as pr	Es) and women business enterprises (WBEs) should rime contractors and vendors. Pursuant to Sec. 21-52 sland General Laws (as amended), MBE and WBE
The goal for Women's Busin	ness Enterprise	e (WBE) particip	ation is 10% of the total bid value. ation is 10% of the total bid value. 20% of the total bid value.
Providence (MBE/WBE Office), copies of all exegoals and other requirements of the RI General L	npany must sub ecuted agreem	bmit to the Mino ents with the sub	tified businesses. Initial prity and Women's Business Coordinator at the City of peontractor(s) being utilized to achieve the participation and documents must be submitted prior to the issuance
of a notice to proceed. Initial I understand that, if awarded the contract, my required by the MBE/WBE Office on a quarte contract. Initial			
	WBE firm(s) t	o meet the partic	or(s) identified in my Statement of Intent, I understand in the sipation goals. I understand that I may not make a office.
If awarded this contract, I understand that au records and files of my firm from time to time	, to the extent	that such mate	ne City of Providence may examine the books, rial is relevant to a determination of whether my
firm is complying with the City's MBE/WBE I Initial I do solemnly declare and affirm under the pe to the best of my knowledge, information and	nalty of perju	_	tents of the foregoing Affidavit are true and correct
Signature of Bidder	_	Printed Name	
Company Name		Date	



BOARD OF CONTRACT AND SUPPLY

CITY OF PROVIDENCE, RHODE ISLAND

SUBCONTRACTOR DISCLOSURE FORM		
Fill out this form only if you WILL SURCONTRACT with	h other parties. If you will not subcontract any partien of	the

rime Bidder:			_ Primary NAI	CS	
Code:					
em Description (as seen on RFP):_					
lease list all Subcontractors below the dollar amount to be subcontracted ertified MBE/WBE firms is located ttps://www.naics.com/search/	d. Please check	off MBE a	and WBE where	e applicable. The dire	
Proposed Subcontractor	MBE	WBE	Primary NAICS Code	Date of Mobilization	\$ Value of Subcontract
					\$
					\$
					\$
					\$
					\$
					\$
A. MBE SUBCONTRACTED A	MOUNT:	•		•	\$
B. WBE SUBCONTRACTED A	AMOUNT:				\$
C. NON MBE WBE SUBCONT	RACTED AMO	OUNT:			\$
D. DOLLAR AMOUNT OF WO	\$				
E. TOTAL AMOUNT OF BID (SUM OF A, B, C, & D):					\$
F. PERCENTAGE OF BID SUI (Divide the sum of A and B by I				Es.	
lease read and initial the following warded to MBE or WBE vendors is VBE, you must fill out the MBE/V outreach Director. Initial	less than 20% (Box F) and	the prime cor	ntractor is NOT a Rho	de Island State-certified MBE or



MBE/WBE Waiver Request Form

Signature of City of Providence

MBE/WBE Outreach Director

Fill out this form only if you are subcontracting and did not meet the 20% MBE/WBE participation goal. State-certified MBE or WBE Prime Bidders are NOT REQUIRED to fill out this form.

Submit this form to the City of Providence MBE/WBE Outreach Director, Grace Diaz, at mbe-wbe@providenceri.gov, for review prior to bid submission. This waiver applies only to the current bid which you are submitting to the City of Providence and does not apply to other bids your company may submit in the future. Prime Bidder: Company Trade: ___ Item Discussion (as seen on RFP): To receive a waiver, you must list the certified MBE and/or WBE companies you contacted, the name of the primary individual with whom you interacted, and the reason the MBE/WBE company could not participate on this project. MBE/WBE Company Individual's Name **Company Trade** Why did you choose not to work with this company? Name I acknowledge the City of Providence's goal of a combined MBE/WBE participation is 20% of the total bid value. I am requesting a waiver of ______ % MBE/WBE (20% minus the value of **Box F** on the Subcontractor Disclosure Form). If an opportunity is identified to subcontract any task associated with the fulfillment of this contract, a good faith effort will be made to select MBE/WBE certified businesses as partners. Signature of Prime Contractor Printed Name Date Signed

Printed Name of City of Providence

MBE/WBE Outreach Director

Date Signed



SUPPLEMENTAL INFORMATION

If the issuing department for this RFP determines that your firm's bid is best suited to accommodate their need, you will be asked to provide proof of the following prior to formalizing an award.

An inability to provide the outlined items at the request of the department may lead to the disqualification of your bid.

This information is <u>NOT</u> requested to be provided in your initial bid that you will submit to the City Clerk's office by the "date to be opened" noted on page 1. This list only serves as a list of items that your firm should be ready to provide on request.

<u>All bids submitted to the City Clerk become public record</u>. Failure to follow instructions could result in information considered private being posted to the city's Open Meetings Portal and made available as a public record.

You must be able to provide:

- Business Tax ID will be requested after an award is approved by the Board of Contract and Supply.
- PROOF OF INSURANCE



BID PACKAGE SPECIFICATIONS

1.0 Invitation to Bid

1.1 Background

The Department of Parks and the Board of Contract and Supply seek qualified bidders to submit bids for Street Tree Planting, Spring 2022.

1.2 Project Scope

The scope of work involves sawcutting pavement for new tree pits; preparing planting holes; furnishing and installing balled and burlapped trees; restoring abandoned tree pits; and any other incidental work to plant trees in Providence.

1.3 Project Schedule

The successful bidder shall agree to commence work within two weeks of notification of bid award. The successful bidder will be given a notice to proceed on or about March 14, 2022. The work will be for spring planting season only, at the discretion of the City Forester.

Sites scheduled for the **Providence Neighborhood Planting Program (PNPP)** group awards (estimated 260 sites) **will not** include trees to be furnished and installed. The contractor will only prep these sites for planting, which are time sensitive. **PNPP site work shall commence first**, upon award.

Additional funds for tree planting (Item #3, Furnish and Install Balled and Burlapped Trees) may be awarded if they become available. Original unit price bids will be used for any later awarded work.

The successful bidder shall agree to complete all assigned work by May 15, 2022.

2.0 Prevailing Wage Rates

All State (R.I.G.L. 37-16-6 and 37-13-7) and Federal (Davis-Bacon Wage Act) prevailing wage rate laws apply to this contract. The contractor will be asked to supply signed payroll sheets with each invoice to demonstrate compliance with prevailing wage rate laws.

3.0 Method of Award

- 3.1 The City has a fixed sum available for the proposed work. The quantity of work for each bid item is based on this available sum. The contract will be awarded based on the lowest total bid. The City reserves the right to award the contract with quantities that are equal to or less than the fixed sum available.
- 3.2 The City reserves the right to reject bids if sufficient funds are not available, if bidding irregularities occur, or if the City deems the bidder unqualified.
- 3.3 The City reserves the right to reject the bid of any bidder who has previously failed to perform properly, to complete on time contracts of a similar nature, or has habitually and without just cause neglected the payment of bills or otherwise disregarded his obligations to subcontractors, material, or employees.
- 3.4 In determining the lowest responsible bidder, the following elements will be considered in addition to those mentioned above, as well as the qualifications outlined in section 7.



- Maintains a permanent place of business.
- Has adequate equipment and facilities available to do the work properly and expeditiously.
- Has suitable financial resources to meet obligations incidental to the work.
- Has appropriate technical experience in the scope of work called for in this project.
- 3.5 The Contractor is allowed to subcontract up to 35% of the job with prior written approval of the City Forester. The terms and conditions of the contract apply to the subcontractor. All required notices, work orders, and directives will be directed to the Contractor.

4.0 Project Coordination, Contractor Cooperation, and Safety

- 4.1 <u>Responsibility</u>: The contractor is responsible for all personnel involved in the work, including employees, subcontractors and suppliers of materials and equipment and/or labor. The Owner and/or the Owner's representative (i.e. City Forester) shall recognize only the selected contractor as party to this contract.
- 4.2 <u>Scheduling and Work Progress</u>: The Contractor and subcontractors shall cooperate to expedite the work. The selected Contractor shall be responsible for the progress of the work and shall schedule, and follow up, the work of all trades so as to avoid delays of any kind.
- 4.3 Working Hours: All work shall be performed during the five day, forty hour week, from Monday to Friday inclusive, between the hours of 7:00 am and 4:00 pm, except for legal holidays or unless otherwise directed by the City Forester. In the event that work is performed on a Saturday, Sunday, or Holiday, the City shall not be required to pay additional costs associated with payroll for overtime. No work shall be performed on streets adjacent to schools prior to 9:00 am or after 2:00 pm, when school is in session.
- 4.4 <u>Traffic Control</u>: The contractor shall be solely responsible for pedestrian and vehicular safety and control within the work site and shall provide the necessary warning devices, barricades, and ground personnel to give safety, protection, and warnings to persons and vehicular traffic within the work area. Blocking of streets shall not be permitted unless prior arrangements have been made with the City of Providence Traffic Engineer and is coordinated with other city departments. Traffic control is the responsibility of the contractor and shall be accomplished in conference with local, state and federal highway safety codes. As directed by the City Forester, some busy streets may require police detail, payable under the contract "contingency" item.
- 4.5 <u>Communication</u>: The Contractor shall maintain daily communication with the City Forester during the course of the contract. At the time of the pre-construction meeting the Contractor shall furnish twenty-four (24) hour telephone and cellular numbers of a responsible employee or members of his/her firm who can be reached in connection with the work performed under this contract.
- 4.6 <u>Safety</u>: All work must conform to the latest revision of the **American National Standards Institute standard for Arboricultural Operations Safety Requirements (ANSI Z133.1)**.
- 4.7 <u>Damages</u>: Damage committed by the Contractor to any person or property, public or private, are the total responsibility of the Contractor and shall be repaired or compensated for by the Contractor to the satisfaction of both the injured party and the City of Providence.
- 4.8 <u>Inspections</u>: The City Forester (or representative) inspects work at his discretion. Immediate corrections to any work not done to specifications will be communicated to the Contractor and shall be performed by the Contractor at no additional expense.

5.0 Payments

Partial payment invoices may be submitted monthly, and may only include trees/sites that have been inspected and approved by the City Forester (or representative).



5.2 The quantity paid for all items shall be a **unit price**, except for the contingency item. The **unit price** bid shall include all labor and items of cost to perform and complete the tasks as specified below, including required paper-work, travel, signage, overhead, profit, and all incidental work in accordance with the specifications to the satisfaction of the City Forester.

6.0 Experience

- 6.1 Upon request, the Contractor must provide documentation certifying that the company's work for the past three (3) years has been engaged with the performance of tree and landscape work.
- 6.2 Upon request, the Contractor must provide references from previous clients proving that the company has performed work on contracts of comparable size.

7.0 Quality Assurance

- 7.1 Work shall be undertaken by a professional landscape/arboricultural contractor, in possession of a valid Rhode Island Arborist License issued by the Rhode Island Department of Environmental Management (RI-DEM) under Rules and Regulations Title 2, Chapter 19, General Laws of Rhode Island, as amended, entitled "Licensing and Registration of Arborists."
- 7.2 Failure to be in compliance with the above requirements shall be grounds for immediate suspension and/or termination of the contract
- 7.3 All work shall be performed in accordance with the most current revisions of the following professional standards, unless otherwise specified in this contract:
 - American National Standards for Tree Care Operations: Tree, Shrub, and other Woody Plant Maintenance and Standard Practices A-300, published by the American National Standards Institute (ANSI).
 - American National Standards for Arboricultural Operations: Pruning, Repairing, Maintaining, and Removing Trees, and Cutting Brush Safety Requirements Z-133.1 (ANSI).
 - Occupational Health and Safety Institute (OSHA)

8.0 Equipment

- All bidders must have in their possession or available to them by formal agreement at the time of bidding the following materials and equipment to perform the work: a low bed trailer, a dump truck of 10-20 yards capacity, a backhoe large enough to remove concrete and debris from tree pits, a sawcutter, a truck watering container or other equipment for watering newly planted trees, hand tools, and other equipment and supplies required to perform the work specified for this contract.
- 8.2 All equipment shall be in good working condition. The Contractor shall remove and replace any equipment in unsatisfactory condition or unsuitable for the required work as deemed by the City. Unacceptable equipment or lack of equipment shall be grounds for disqualification of the Contractor.
- 8.3 The Contractor shall furnish a list of proposed vehicles and equipment to be used under this contract.

9.0 Utilities

- 9.1 The Contractor must take precautions against any injury to people and damage to property. Work operations may be conducted in areas where overhead electric, telephone and cable television facilities exist. Protect all overhead utilities from damage. The appropriate utility company shall be immediately contacted if damage should occur.
- 9.2 Excavation and work operations may be conducted where underground electric, water, sewer, gas, cable or other utility services exist. It is the Contractor's responsibility to detect and protect existing utilities (to remain) from damage during construction. Prior to start of construction the Contractor is required to notify:



Dig Safe System, Inc. 331 Montvale Avenue Woburn, MA 01801 1-888-DIGSAFE (344-7233) www.digsafe.com

- 9.3 The State of Rhode Island Code §39-1.2 mandates that the Contractor notify all underground utility operators in the area not less than forty-eight (48) hours and not more than thirty (30) business days before the start of excavation to ensure that utility service lines are properly marked prior to excavation. No physical alteration of public property shall take place unless the results of an inspection conducted by utility representatives contacted by Dig Safe Systems indicates the proposed construction site is clear of any and all underground utility lines.
- 9.4 The Contractor shall exercise reasonable care when working in close proximity to the underground public utility facilities of any public utility. If a utility is inadvertently damaged, the public utility shall be notified immediately by the Contractor prior to back filling the excavation. Upon the receipt of the notice, the public utility shall immediately dispatch personnel to the subject location to effect temporary or permanent repair of the damage. Under no circumstances shall the Contractor back fill or conceal the damaged area until the public utility arrives at the subject location. Upon the occurrence of a serious electrical short, or the escape of dangerous fluids or gases from a broken line, the Contractor shall evacuate the immediate area while awaiting the arrival of the public utility personnel.

10.0 Work Items

Item #1 Sawcut Pavement for Tree Pits

<u>Work:</u> Under this item the Contractor shall sawcut pavement for sidewalk tree pits, including existing concrete, asphalt, brick, or other impervious surface, in accordance with the plans, specifications and directions of the City Forester.

<u>Method:</u> The contractor shall sawcut with a masonry saw or equal, cutting a line as straight as possible without producing further sidewalk cracking outside of the cutting line. Cuts shall be made perpendicular to each other, forming a rectangular cutout. Tree pit dimensions will be determined by the City Forester or representative and marked with orange spray paint. A program goal is to make tree pits as large as possible where space allows, with a desired *minimum* area of 24 square feet. Remaining sidewalk clearance must measure at least 3 feet, in compliance with the Americans with Disabilities Act (ADA).

In the interest of preserving city sidewalks, the stabilizer legs of the Contractor's backhoe, tractor or other heavy machinery to be used on sidewalks must have padded feet. If not, the Contractor must place wooden planking beneath the feet of the machine to protect the sidewalk.

No sawcut work shall commence prior to receiving utility company reports and sidewalk markings. All work locations must have a white "T" marked by the City Forester or representative. Where subsurface obstructions are encountered during sawcutting or excavation, the Contractor shall restore the disturbed area to its original condition. A new planting location shall be designated by the City Forester, if conditions permit. Restoration of the pavement of abandoned street tree pits shall be paid for under Item #5 in this contract.

<u>Disposal:</u> The contractor shall remove and dispose of the rectangular sidewalk piece and associated debris that remains after the masonry cuts are completed. All excavated planting pits shall be backfilled and level with the grade of surrounding sidewalk at the end of each work day to ensure the area is secure and safe. This may be satisfied by performing Item #2.

<u>Measurement and Payment:</u> The quantity paid for under this item shall be the number of linear feet of sawcutting, in accordance with the specifications of the City Forester.

The price bid shall be a unit price per **linear foot** of sawcut, and shall include all labor, materials, and equipment necessary for saw cutting pavement, removing the rectangular sidewalk piece and associated debris, disposing of the pavement debris, placing backfill material for safety purposes (furnishing and installing topsoil for planting will be paid for under Item #2), and all incidental work in accordance with the specifications to the satisfaction of the City Forester.



Item #2 Prepare Planting Holes

<u>Work:</u> Under this item the Contractor shall provide all labor and materials necessary to prepare sidewalk pits or tree lawns for tree planting, including removing existing soil or fill, removing existing bricks or block pavement (where sawcutting is not required), removing stumps less than 8 inches in diameter, furnishing and installing topsoil, and all incidental work in accordance with the specifications of the City Forester.

<u>Method:</u> No excavation work shall commence prior to receiving utility company reports and sidewalk markings. All work locations must have an orange "T" marked by the City Forester or representative. Where subsurface obstructions are encountered during excavation, the Contractor shall restore the disturbed area to its original condition. A new planting location shall be designated by the City Forester, if conditions permit.

The dimension of planting holes will be indicated on the list of planting locations provided to the Contractor. The Contractor shall remove all material from the planting area for the full length and width designated on the location list. Full excavation of planting pits is critical to the success of new trees; the Contractor will not be paid for locations not excavated to specified dimensions. Planting holes shall be excavated to a depth of twenty inches. Care should be taken not to excavate deeper than required.

Holes should be prepared using a backhoe or similar machinery. In the interest of preserving city sidewalks, the stabilizer legs of the Contractor's backhoe, tractor or other heavy machinery to be used on sidewalks must have padded feet. If not, the Contractor must place wooden planking beneath the feet of the machine to protect the sidewalk.

Stumps less than 8 inches in diameter will be included in the hole preparation costs and not paid for separately. Bricks and paving blocks shall be removed as part of hole preparation and not paid for separately. Bricks and paving blocks may be salvageable and returned to the property owner or the City as directed by the City Forester or representative, otherwise paving material shall be disposed of off site.

<u>Topsoil:</u> Material shall consist of agricultural loam with the addition of humus only, and no other soil type, such as a sand or clay soil type, shall be accepted. Topsoil shall be of uniform quality, free from hard clods, stiff clay, hardpan, sods, partially disintegrated stone, coal lime, cement ashes, slag, concrete, tar residues, tarred paper, boards, chips, sticks or any other undesirable material. If a truck load of topsoil is considered by the City Forester to contain too much undesirable material to be corrected on the site, the entire truck load shall be rejected. No topsoil shall be delivered in a frozen or muddy condition.

Topsoil shall comply with the following requirements:

CHEMICAL AND PHYSICAL COMPOSITION:

a. Organic Matter--must be between five (5) and ten (10) percent by weight, as determined by the Dry Combustion Method for Total Carbon and Organic Carbon (using a multiplying factor of 2) as described in Methods of Soil Analysis, Part #9, Part 2, 2nd ed. published by the American Society of Agronomy. The organic matter shall not exceed twelve percent (12%).

pH range--shall be 6.0 to 7.0 inclusive.

Sieve analysis – by Wash Test, ASTM Designation C-117.

Passing 2" sieve 100% Passing 1" sieve 95% to

Passing 1" sieve 95% to 100% Passing #4 sieve 90% to 100% Passing #100 sieve 30% to 60%

d. Clay--the test method to measure the clay content of the soil shall be ASTM D 422.

The City Forester reserves the right to reject topsoil in which more than 60% of the material passing the No. 100 U.S.S. Mesh sieve consists of clay as determined by the Buoyoucous Hydrometer or by the decantation method. All percentages are to be based on dry weight of sample.

<u>Site Condition After Backfilling:</u> Enough topsoil shall be added and tamped in courses so its final position is level with the ground surface surrounding the planting hole. The Contractor shall rake over the planting area and leave it in an orderly



condition. The surrounding sidewalk and street shall be broom swept of all soil and debris. Topsoil should remain level with the surrounding grade until final inspection; the Contractor may be asked to add soil if sinking occurs, for the purpose of public safety.

<u>Debris Disposal:</u> The Contractor shall remove from the site all debris generated from excavation by the end of that day's work. All material, unless salvageable by the City, shall become the property of the Contractor for proper disposal off site.

<u>Measurement and Payment:</u> The amount paid for this item shall be the number of square feet of planting holes prepared, in accordance with the specifications and to the satisfaction of the City Forester.

The price bid shall be a unit price per **square foot** of planting holes prepared, including all labor, materials, and equipment necessary for removing existing soil or fill, removing existing bricks or block pavement (where sawcutting is not required), removing stumps less than 8 inches in diameter, furnishing and installing topsoil, and all incidental work in accordance with the specifications of the City Forester.

Item #3 Furnish and Install Balled and Burlapped Trees 2 to 2½ Inch Caliper

<u>Work:</u> Under this item the Contractor shall do all work necessary to furnish and install balled and burlapped trees (2 to 2 ½ inch caliper), including planting, staking, mulching, watering, maintaining, and replacing trees within a one-year guarantee period, in accordance with the plans and specifications of the City Forester. Sawcutting shall be paid for under Item #1, and hole preparation shall be paid for under Item #2.

Plant Material:

Names: Plant names shall agree with the nomenclature of "Standardized Plant Names" as adopted by the American Joint Committee on Horticultural Nomenclature 1942 edition. Size and grading standards shall conform to those of the American Association of Nurserymen American Standards for Nursery Stock, latest Edition, unless otherwise specified. No substitutions shall be permitted except by written permission of the City Forester. All tree cultivars, patented or otherwise, must be certified by the supplying nursery. All nurseries shall certify that plant material is free from injurious insect and plant diseases.

Quality and Inspection: All trees shall be typical of their species or variety. They shall have normal well-developed branches and a vigorous fibrous root system. They shall be free of anatomical wounds, disease and insect damage, and other physical defects, and shall meet or exceed American Association of Nurserymen standards for top grade product. In general, trees shall possess a single, straight trunk, without multiple leaders, V-crotches, included wood, or indications of topping or heading back. Trees shall have a minimum ground to first limb clearance of 5½ feet. All trees, including replacement trees, shall be inspected and tagged at the nursery prior to digging by the City Forester or his representative. All trees shall be nursery grown and shall have been growing under the same climatic conditions as those occurring in Providence for at least two (2) years prior to date of the contract. Unless approved by the City Forester, the nursery shall be no more than two hundred miles in distance from the City of Providence. Trees held in storage shall be rejected if they show signs of growth during storage. Cost of inspection shall be included in the price bid per tree.

Dimensions: Each tree shall be measured as it stands in its natural position. Trees shall be 2 to 2 ½ inches in caliper (measured 6 inches above the ground). Stock furnished shall be a fair average of the minimum and maximum size specified.

Preparation of Trees: All trees under this item shall be balled and burlapped trees. All precautions customary in good trade practice shall be taken in preparing trees for moving, and workmanship that fails to meet the highest standards will be rejected. All trees shall be dug immediately before moving unless otherwise specified. All trees shall be dug to retain as many fibrous roots as possible. Trees shall have a solid ball of earth of the minimum size specified by the American Association of Nurserymen. Root balls shall be securely held in place by untreated burlap and stout rope (nylon rope is NOT acceptable). Oversize or exceptionally heavy trees are acceptable if the size of the ball or spread of roots is proportionally increased, to the satisfaction of the City Forester. Loose, broken, or manufactured balls will be rejected.



Delivery: Trees shall be packed, transported and handled with the utmost care to insure adequate protection against injury. When transported in closed vehicles, plants shall receive adequate ventilation to prevent sweating. When transported in open vehicles, plants shall be protected by tarpaulins or other suitable cover material. Balled and burlapped trees shall be set on the ground and balls covered with soil or mulch. Until planted, all materials shall be properly maintained and kept adequately moist, to the satisfaction of the City Forester.

On-Site Inspection: No plant material shall be planted by the Contractor until inspected by the City Forester or representative at the site of the work. If a load of trees is delivered to the site in an opened vehicle and the trees were uncovered during transit, the entire load of trees may be rejected. Plant material will be rejected if delivered to the site in an unacceptable condition, or if damaged on site by rough handling. All rejected material shall be marked by the City Forester and must be removed from the site and replaced with acceptable material at no additional cost. Final inspection shall be made upon completion of the contract.

Hole Preparation

Follow specifications set forth in Item #2. Cost for hole preparation shall be paid for under Item #2.

Planting:

Planting under the contract shall begin as directed by the City Forester on or about March 15 in the spring planting season and on or about October 15 in the fall planting season.

The City Forester is to be notified in writing not less than two (2) working days in advance before any removal, excavation of a tree pit, or tree planting. The Contractor shall provide a routing sheet of the work to be performed on a daily basis.

The contractor shall carefully place the tree in the prepared planting hole by lifting and carrying it by the rootball so that the ball will not be loosened. Do not lift trees by the trunk. The tree shall be positioned straight and in the center of the pit or tree lawn. A uniform distance shall be maintained from the center of the tree to the outside of the curb, or as directed by the City Forester. All trees shall set, after settlement, so that the base of the trunk just above the roots known as the "trunk flare" is visible and at grade with the surrounding soil. If the top of the rootball is not consistent with this area, soil will be added or removed to make it so, and the depth of the planting site adjusted accordingly. Bud graft union swellings should also be above grade. Care shall be exercised in setting the trees plumb.

Cut and remove rope, burlap and wire from the top fifty percent (50%) of the rootball. Remaining lateral wires must be cut to prevent future root interference. Wire must not be galvanized or aluminum wire. All ropes, stones, etc. shall be removed from the planting site before backfilling. Backfilling mixture shall be loose and friable, and not frozen. Soil shall be firmed at six (6) to eight (8) inch intervals and thoroughly settled with water.

<u>Water Retention Additives:</u> Water Retention Additives shall be a granular polyacrylamide polymer of a potassium base and not a sodium base that slowly releases moisture into the root zone such as Terra Sorb, as manufactured by Plant Health Care, Inc., Pittsburgh, Pa., or approved equal. It shall be applied at the time of planting. Each tree shall receive 3 ounces or the amount specified by product instructions. Half should be added at a depth of 8-10 inches and the other half just below the finished surface.

<u>Finishing Surface After Backfilling:</u> The Contractor shall cultivate and rake over finished planting areas and shall leave them in an orderly condition. On level ground or slight slopes, a shallow basin slightly larger than the diameter of the tree ball shall be left around each tree, as shown on the sketches, or as directed by the City Forester. At no time should topsoil be mounded to cover the trunk of the tree. Final soil level, except for the shallow basin, shall be flush with the surrounding sidewalk grade to prevent potential tripping hazard. The surrounding sidewalk and street shall be broom swept of all soil and debris.

<u>Staking:</u> All staking shall be done during the planting operation, unless otherwise directed by the City Forester, and shall be maintained throughout the one year guarantee period.

Stakes shall be of sound material. Trees shall be supported by two (2) stakes. Stakes shall be a minimum of 2 x 3 inches diameter, eight (8) feet long, and pointed at one end. Stakes shall be placed a minimum distance of one (1) foot away from



the trunk of the tree, taking care to stay clear of the roots, driven thirty (30) inches into the ground, and shall be fastened to the tree with a suitable length of ¾" wide, flat, woven polypropylene material, such as ArborTie™ or approved equal, that is knotted and secured to the stakes. The staking material shall still allow the tree to have some sway movement, and shall not constrict the trunk from unhindered diameter growth.

<u>Pruning:</u> Only crossing, broken or badly bruised branches shall be removed. These shall be pruned with a clean cut just to the outside of the branch collar, at such a point and angle that neither the branch collar nor the bark of the stem is damaged, and that no branch stub extends from the collar. Crowns of young trees shall <u>not</u> be cut back to compensate for root loss. No leaders shall be cut.

<u>Mulching:</u> The Contractor shall furnish and place shredded bark mulch for each tree planted. All mulching shall be done during planting operation.

Shredded bark mulch shall be natural forest product of ninety eight percent (98%) bark containing less than two percent (2%) wood or other debris, not exceeding three (3") inches in length and one (1") inch in width. It shall be of White or Red Fir and/or Pine bark and/or Cedar of a uniform grade with no additives or any other treatment. The pH factor should range from 5.8 to 7.0. The City Forester reserves the right to reject any materials which do not meet these specifications.

Shredded bark mulch shall be applied as a ground cover to the surface of all tree pits after the expansion and backfilling is completed. Mulch shall be applied to a uniform depth of three inches (3") over the entire tree bed area and shall be so distributed as to create a smooth, level cover over the exposed soil. A gap of approximately 2" should be left between the mulch and the trunk of the tree to avoid mounding above the trunk flare.

<u>Watering:</u> At the time of planting, the soil around each tree shall be thoroughly saturated with at least twenty (20) gallons of water. Water shall be free from oil, have a pH not less than 6.0 nor greater than 8.0 and shall be free from impurities.

Watering shall also take place throughout the guarantee period, at least 20 gallons per tree at approximately two week intervals from June 1 to November 1. The City Forester may order less watering based on weather conditions, resulting soil water content or other factors. If drought conditions warrant, the City Forester may order more frequent watering than scheduled or during non-scheduled periods. A watering schedule shall be submitted to the City Forester each week.

<u>Maintenance</u>: The Contractor shall maintain all planted trees for one (1) year after the final acceptance of the contract work. The cost of maintenance shall be included in the price bid.

Maintenance shall include weeding, cultivating, edging, control of insects, fungus, and other diseases by means of spraying with an approved insecticide or fungicide, pruning, adjustment and repair of staking, repair of minor washouts, soil replacement and other horticultural operations necessary for the proper growth of all trees, and for keeping the entire area within the contract limits neat in appearance. At the expiration of the guarantee period the Contractor shall leave the area around the tree cultivated and weed free.

Guarantee and Replacement: The Contractor shall replace, in accordance with the contract plans and specifications, any planted tree that is dead or, in the opinion of the City Forester, is in an unhealthy or unsightly condition. There shall be a one (1) year guarantee on trees commencing after the final acceptance and the completion of the contract work. When instructed by the City Forester, the Contractor shall replace trees that have died after final acceptance in the next appropriate planting season even when the next planting season falls outside the one year period. The topsoil in the tree pit shall be changed when any replacement tree is planted. Trees that have died as a result of vandalism shall be removed and not replaced. The cost of replacement(s) shall be included in the unit price bid for the various furnished items of the contract.

Measurement and Payment: The quantity to be paid for under this item shall be the number of balled and burlapped trees (2 to 2 ½ inch caliper) of all species supplied, planted, and maintained in accordance with the specifications of the City Forester.

The price bid shall be a unit price for **each** tree planted, and shall include the cost of furnishing, planting, pruning, staking, watering, mulching, maintaining, and replacing all trees, and all other work incidental thereto, in accordance with the specifications, to the satisfaction of the City Forester.

Sawcutting shall be paid for under Item #1. Planting hole preparation shall be paid for under Item #2.



Item #5 Restoration of Abandoned Tree Pits

<u>Work:</u> Under this item the Contractor shall furnish and place cement concrete pavements and do all other work necessary to restore tree pits in paved areas that are abandoned due to subsurface obstructions, all in accordance with the specifications of the City Forester.

Concrete pavement shall consist of a single course with a thickness of 4" or as directed by the City Forester.

<u>Materials</u>: Portland cement concrete will be used under this item. Concrete shall consist of a homogeneous mixture of Portland cement, coarse aggregate, fine aggregate, air entrainment, water, admixtures and pozzolan (when used), mixed in proportions specified by Class XX(AE) (4,000 psi) for sidewalks, equal to a minimum cement content of 658 lbs/cy. Concrete shall conform to the requirements set forth in the R.I. Department of Transportation Standard Specifications for Road and Bridge Construction.

Excavation: Excavation shall be made to the required depth and to a width that will permit the installation and bracing of the forms, providing a finished sidewalk conforming to the limits shown on RI Standard Detail 43.1, or as directed by the City. The foundation shall be shaped and compacted to a firm even surface, and all material within the limits of the excavation shall be replaced with gravel borrow if not previously in place.

<u>Pigmenting</u>: Every effort shall be made to match the color of the existing concrete surrounding the work site. Color admixture shall be thoroughly and uniformly mixed into the concrete. All batching, placing, finishing, and caulking shall be in accordance with Scofield's Tech-Data Bulletin A-304, or Manufacturer's Instructions. All coloring admixtures shall conform to the requirements of the Standard Specification for "Pigments for Integrally Colored Concrete" of A.S.T.M. Designation: C 979.

<u>Forms</u>: Forms (when needed) shall be wood or metal and shall extend for the full depth of the concrete. All forms shall be straight, free from warp and of sufficient strength to resist the pressure of concrete without springing. Bracing and staking forms shall be such that the forms remain in both horizontal and vertical alignment until removal.

<u>Construction</u>: The foundation shall be thoroughly moistened immediately prior to the placing of the concrete. The proportioning, mixing and placing of the concrete shall be in accordance with the requirements for Class XX(AE). The surface shall be floated then followed by a broom finish. No plastering of the surface will be permitted. All outside edges of the slab and all joints shall be edged with a $\frac{1}{4}$ -inch radius edging tool.

Construction joints shall be formed around all appurtenances such as manholes, utility poles, sign posts, etc., extending into and through the sidewalk. Remolded expansion joint filler of the thickness indicated shall be installed between concrete sidewalks and any fixed structure such as a building or bridge. This expansion joint material shall extend for the full depth of the walk.

<u>Protection and Curing:</u> Concrete shall be cured for at least 72 hours. Curing shall be by means of moist burlap mats or by other approved methods. During the curing period all traffic, both pedestrian and vehicular, shall be excluded.

<u>Measurement and Payment:</u> The quantity to be paid for under this item shall be the number of square feet of cement concrete pavement placed in abandoned street tree pits which are restored in accordance with the specifications to the satisfaction of the City Forester.

The price bid shall be a unit price per **square foot** of cement concrete pavement placed in abandoned street tree pits in paved areas which has been restored, including necessary excavation or compacted gravel borrow and all incidental work in accordance with the specifications to the satisfaction of the City Forester./



Plant Schedule

All trees shall be 2" to 2 1/2 " caliper, and branched at least 5 ½ feet from the ground. Trees with excurrent form shall possess a central leader with subordinated lateral branching making up the overall canopy. Trees with decurrent form shall possess scaffold branching with proper spacing between each limb to avoid development of included wood and v-shaped crotches. No tree shall have any limb cuts over 3/4" which have not completely calloused over.

All B&B trees and rootballs must conform to the standards set by the American Association of Nurseryment in the *American Standard for Nursery Stock*, latest edition. Minimum rootball size must be 24" for 2" caliper trees, and 28" for 2 ½" caliper trees. All trees shall be dug with firm root balls free of noxious weeds. There should be no excess soil on top of the root ball or around the trunk. Loose, broken, or manufactured balls will be rejected. A well-branched top and fibrous root system are essential. Species selection will be made from the following list, at the discretion of the City Forester.

Acer campestre Acer ginnala Acer rubrum "October Glory" Acer rubrum "Armstrong" Amelanchier canadensis Carpinus betulus Carpinus caroliniana Celtis occidentalis Cercidiphyllum japonicum Cercis canadensis Cladrastis kentukea (lutea) Corylus Colurna Crataegus crus-galli inermis Eucommia ulmoides Ginkgo biloba Gleditsia triacanthos inermis Gymnocladus dioicus Halesia carolina

Koelreuteria paniculata Liquidambar styraciflua

Liriodendron tulipifera

Malus spp.

Metasequoia glyptostroboides

Nyssa sylvatica

Ostrya virginiana

Platanus X acerifolia

Prunus cerasifera

Prunus serrulata "Kwanzan"

Prunus virginiana "Shubert"

Pyrus calleryana, "Capital", "Cleveland Select", "Aristocrat", "Autumn Blaze"

Quercus acutissima

Quercus bicolor

Ouercus imbricaria

Quercus macrocarpa

Quercus palustris

Quercus phellos

Quercus robur

Quercus rubra Sorbus alnifolia



Styphnolobium japonicum
Styrax japonicus
Syringa reticulata "Ivory Silk", "Summer Snow"
Taxodium distichum
Tilia americana "Redmond"
Tilia cordata "Greenspire"
Tilia x euchlora
Tilia tomentosa
Ulmus ("Homestead", "Princeton", 'Pioneer", "Delaware")
Ulmus parvifolia
Zelkova serrata



Street Tree Planting, Spring 2022 Bid Blank - Unit Prices

Item	ITEM	UNIT	QTY	UNIT COST	TOTAL
1	Sawcut Pavement for Tree Pits	LF	1,960		
2	Prepare Planting Holes	SF	6,360		
3	Furnish and Install Balled and Burlapped Trees 2 to 2 ½ Inch Caliper	EA	15		
5	Restoration of Abandoned Tree Pits	SF	24		
	Owner's Contingency			\$1,000	\$1,000