

**Special Town Council Agenda  
December 17, 2021  
1:00 p.m.  
Zoom**

Join Zoom Meeting

<https://us06web.zoom.us/j/89878812694?pwd=NEJmejFkOGZPQ0ExNUI5TVBGQ2J3QT09>

Meeting ID: 898 7881 2694

Passcode: 003573

One tap mobile

+13017158592,,89878812694#,,,,\*003573# US (Washington DC)

+13126266799,,89878812694#,,,,\*003573# US (Chicago)

Dial by your location

+1 301 715 8592 US (Washington DC)

+1 312 626 6799 US (Chicago)

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+1 669 900 6833 US (San Jose)

+1 253 215 8782 US (Tacoma)

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Meeting ID: 898 7881 2694

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1. Call to Order
2. Public Comment
3. Demonstration City Grant Application for Tree Inventory and Maintenance Program
4. Adjourn

## DEMONSTRATION CITY GRANT APPLICATION

### GENERAL INFORMATION SECTION

Applicant: Corporation of Shepherdstown, WV  
Federal Employment Identification Number (FEIN): 55-6000249  
104 King Street  
Shepherdstown, West Virginia 25443

Project location: Within Shepherdstown Corporation limits.

#### **Contact Information for individual responsible for completion of project**

Frank Welch, Public Works Director  
Shepherdstown Public Works  
409 E. High St.  
PO Box 248  
Shepherdstown, WV 25443-0248  
Email: [fwelch@shepherdstown.us](mailto:fwelch@shepherdstown.us)  
Phone: 304-876-3322

#### **Please review and check the following**

- |  |   |
|--|---|
| <input checked="checked" type="checkbox"/> | Acknowledgment that the project will be completed and that paid invoices will be submitted no later than one month after the end date on the agreement  |
| <input checked="checked" type="checkbox"/> | Acknowledgment that you are a vendor of the state of WV or have applied to become a vendor  |
| <input checked="checked" type="checkbox"/> | Acknowledgment that no portion of the grant will be used for administrative costs, staff salaries of any type, construction, equipment, and purchasing land or land charges   |
| <input checked="checked" type="checkbox"/> | Acknowledgement that the applicant will comply with Section 889 of the 2019 National Defense Authorization Act which prohibits grant recipients from procuring or using certain "covered telecommunication equipment or services" <a href="https://www.ndia.org/policy/section-889">https://www.ndia.org/policy/section-889</a>             |
| <input checked="checked" type="checkbox"/> | Acknowledgement that the applicant will comply with the Trafficking Victims Protection Reauthorization Act and the National Security Presidential Directive (NSPD) 22 which provides "zero tolerance policy" regarding trafficking in persons <a href="https://www.acquisition.gov/far/22.1703">https://www.acquisition.gov/far/22.1703</a> |

#### **Submit Application to:**

Robert Hannah  
West Virginia Division of Forestry  
P.O. Box 40  
Farmington, WV 26571

or

[robert.l.hannah@wv.gov](mailto:robert.l.hannah@wv.gov)

## TECHNICAL PROPOSAL

### **Proposal:**

The Corporation of Shepherdstown, a **Tree City**, proposes to contract with Bartlett Tree Experts to conduct an inventory of up to 500 trees on public property within the town limits and to develop a three-year urban forestry tree planting and maintenance plan for the town.

### **Need for the Project:**

In 2004, working with Davey Research Group, Shepherdstown conducted an inventory identifying 417 sites, noting the species, size, value, and condition of 393 trees and identifying 24 stumps. Davey recommended removal of 30 diseased trees and priority pruning of 38 other trees. The company developed a management plan that set out a schedule for routine pruning of 163 trees and training prune of 162 others as well as stump removal. The plan called for a routine maintenance cycle to ensure the pruning of all trees every five years. It set the goal of alleviating all potentially hazardous conditions by 2006; that goal was met.

As 15 years have passed since then, Shepherdstown now seeks a Demonstration City Grant to conduct a new inventory and develop an updated management plan. Since 2006, the tree population has been subject to various stresses, including storm damage; new trees have been planted; some trees are now reaching the end of their lifespans. It is time to take a fresh look at the tree population in Shepherdstown to determine the general health of the trees, identify potentially dangerous trees, set a schedule for prioritized remediation or removal and develop a plan for new plantings to improve the tree canopy.

### **Selection of Vendor:**

The Town received and considered proposals from three vendors. Bartlett was selected for several reasons: One of the leading tree care companies in the world, with more than 100 offices around the world, Bartlett performs most of the town's tree maintenance work. It is also the closest in proximity to Shepherdstown and its software program was the most reasonably priced.

### **Goals of the Project:**

The inventory and management plan will allow Shepherdstown to better manage its urban forest and maintain a healthy canopy by:

1. Identifying trees in need of remediation or removal.
2. Assessing the canopy cover and setting targets for the canopy cover and impervious surface percentages.
3. Improving the town's comprehensive municipal tree care program through the use of a computer application that tracks the inventory of trees and records

work recommendations and work history for each tree in the inventory.

### **Scope and Method of Work**

The Shepherdstown Tree Commission has approved a contract with Bartlett Tree Experts of Chambersburg, Pa., to provide the following services:

1. A tree inventory and management plan, at a cost of \$8914.00.
2. An environmental benefits assessment for specific trees designated by Shepherdstown, at a cost of \$1,200.
3. A three-year license for the use of Bartlett's tree management application, ArborScope™, at a cost of \$1,500.

The total proposed cost for the project is \$11,614.00. The Corporation of Shepherdstown is seeking a grant of \$5807.00 and will fund the balance itself.

In conducting the tree inventory, Bartlett will use Bartlett ArborScope™, a tree management application that maintains an electronic record of the location and health of the trees. Bartlett ArborScope™ uses Google Mapping to site the trees. Its electronic data management, record keeping, and querying features display data in tabular or geographical map views and will allow the Town to record work recommendations, work history, and document and display dedicated trees for memorial, fundraising, or educational purposes.

Bartlett will collect such information as the need for: more in-depth evaluation, a structural inspection of the tree trunk, a further inspection of the roots/root flare, an ariel inspection of the tree, pruning, installation of structural support systems, installation of lightning protection systems, soil management, pest management, or the need for tree removal.

The basic assessment will focus on identifying trees or tree parts that are probable or imminent candidates for failure and that endanger specific targets identified by the Town and/or after a site review by the Regional Inventory. Trees will be visually assessed following the International Society of Arboriculture's (ISA) Best Management Practices for Tree Risk Assessment and/or applicable industry standards. The likelihood of failure categorization, likelihood of impacting a target estimation, and consequences of failure categorization will occur in the field so the overall risk rating can be determined. The overall risk rating assigned to the inventoried tree will correspond to the highest risk rating associated with the inventoried tree. This rating scale will serve to help the Town to prioritize and schedule remedial treatments.

### **Management Plan: Public Tree Planting and Maintenance**

The final deliverables will include a Public Tree Planting and Maintenance Plan that incorporates information collected through the inventory and an electronic map that locates the sites of all trees on public lands and identifies sites for new plantings.

The Public Tree Planting and Maintenance Plan will establish:

1. a prioritized list of prunings and removals
2. a prioritized list of recommendations for new plantings
3. recommendations for species to be planted.
4. an estimated yearly budget for completion of these tasks.

The following information from the tree inventory will be included in the Public Tree Planting and Maintenance Plan:

1. Written summary of procedures used in the tree management service
2. Map or detailed description of tree locations
3. Attributes for each tree, as follows:
  - Tree ID Number
  - Tree Botanical Name and Common Name
  - DBH (Diameter at Breast Height = 4.5 feet/1.4 meters)
  - Condition Class (Good, Fair, Poor or Dead)
  - Age Class (New planting, Young, Semi-mature, Mature, Over-mature)
  - Height Class (Large, Medium, Small)
  - Estimated Canopy Radius (+/-5 ft./1 m.)
  - Root Zone Infringement (75%)
  - Soil Care (Root Invigoration™, Soil Rx®)
  - Tree and Shrub Work:
    - Recommendations for each tree, such as: Tree pruning, Tree removal, Cabling or brace rod installation, and/or lightning protection system installation
4. Phase (ASAP, 1, 2, 3, 4, or 5)
5. Category (Risk mitigation, Maintenance, Developmental, Ornamental, Specialized)
6. Observed Tree Defects
7. Observed Pests/Diseases
8. Plant Health Care Recommendations
9. Estimated Tree Asset Value
10. Level 2 Basic assessment for Tree Risk:
  - Date of inspection
  - High value targets within the target zone of the tree(s)
  - Description of tree part(s) and associated observed defect(s)
  - Likelihood of failure within three years, likelihood of impact, and consequences
  - Overall risk rating for the subject tree(s)
  - Risk mitigation recommendations and/or options
  - Recommendations for Level 3 Advanced assessment.

## COST PROPOSAL WORKSHEET 1 – EXPENDITURE OF GRANT FUNDS

**Table A: Cost of trees and planting materials**

Description	Material Provider	Quantity	Unit Price (\$)	Total Price (\$)
<b>Total Cost of Materials (\$)</b>				

**Table B: Cost of professional/contractual services**

Description	Service Provider	Quantity	Unit Price (\$)	Total Price (\$)
Tree Inventory Survey & Management Plan	Bartlett Tree Experts		\$4,457	\$4,457
Three-year ArborScope License	Bartlett Tree Experts		\$750	\$750
Environmental Benefits Assessment	Bartlett Tree Experts		\$600	\$600
<b>Total Cost of Services (\$)</b>				<b>\$5807</b>

**Table C: Additional costs**

Description	Source	Quantity	Unit Price (\$)	Total Price (\$)
<b>Total Additional Costs (\$)</b>				

**Total Grant Funds Requested (Table A + Table B + Table C) = \$5807**



## COST PROPOSAL WORKSHEET 2 – MATCHING FUNDS

**Table D: Cash match**

Description	Material Provider	Quantity	Unit Price (\$)	Total Price (\$)
<b>Total Cost of Materials (\$)</b>				

**Table E: In-kind match (paid labor and equipment provided by applicant)**

Description	Service Provider	Quantity	Unit Price (\$)	Total Price (\$)
Tree Inventory Survey & Management Plan	Bartlett Tree Experts		\$4,457	\$4,457
Three-year ArborScope License	Bartlett Tree Experts		\$750	\$750
Environmental Benefits Assessment	Bartlett Tree Experts		\$600	\$600
<b>Total Cost of Services (\$)</b>				<b>\$5807</b>

**Table F: Volunteer and donation match (donated labor and equipment)**

Description	Source	Quantity	Unit Price (\$)	Total Price (\$)
<b>Total Additional Donations (\$)</b>				

**Total Matching Funds Provided (Table D + Table E + Table F) = \$5807**

**Community or Organization:** Corporation of Shepherdstown

**Signature:** \_\_\_\_\_

**Print Name:** \_\_\_\_\_

**Job Title:** \_\_\_\_\_

**Date:** \_\_\_\_\_



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Printed on: 12/9/2021

Created on: 11/22/2021

Shepherdstown St Tree Comm  
Frank Welch  
P O Box 248  
Shepherdstown, WV 25443

Bartlett Tree Experts  
Derek Furry - Representative  
951 Progress Road  
Chambersburg, PA 17201

E-Mail Address: fwelch@shepherdstown.us  
Mobile Phone: 304-876-3322 Frank Welch

Business: Waynesboro 717-765-0370  
Business: Hagerstown 301-733-0595  
Business: Shepherdstown 304-876-8167  
E-Mail Address: dfurry@bartlett.com  
Mobile Phone: 717-729-7914

### Proposal For Tree Care Services

104 S King Street, Shepherdstown, WV 25443

#### NOTICE TO CLIENT:

Bartlett Tree Experts has entered this property for the specific purpose of writing this proposal, pursuant to the owner's request. Bartlett Tree Experts makes no warranties and accepts no responsibility regarding the potential risks involving any trees on this property. Bartlett Tree Experts recommends having a qualified arborist inspect your property periodically to assist you in identifying potential risks or hazardous conditions related to your trees and shrubs. THIS IS NOT AN INVOICE.

Thank you for selecting the Bartlett Tree Expert Company to provide you with scientific tree and shrub care. This proposal is based on my knowledge and inspection of your trees and shrubs.

Your decision to employ Bartlett, as the contractor for this work will ensure that certified tree experts and arborists are available to consult with you on all phases of protecting and maintaining the trees and shrubs on your property.

#### Specific Scope of Work:

Perform a tree inventory with Level 2 Basic assessment of tree risk for the designated trees per the size listed above and located within the public rights-of-way specified by the Borough. Inventory trees in identified areas up to, but not exceeding, a quantity of 500 trees or completion of the specified area. Exceptions include specific areas where groups of trees will be considered as one. Inventoried trees will be physically tagged with a corresponding number that will be referenced within the final deliverable(s).

A deliverable in the form of a Management plan will be provided upon completion of the service. In addition to the tree and planting space data that will be collected in the field as described more fully below, the management plan will include recommended species for replanting and budget estimates.

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Bartlett Tree Expert's service will conclude upon delivery of the Management plan.

\*Any trees in excess of the 500 not to exceed tree count will be charged at a rate of \$15.00 per each additional tree.

In Proposal Item Detail Click on Work Type Details:

- a. Assessment: select trees
- b. Diameter: enter the minimum diameter tree that will be inventoried: 2"
- c. Mgmt Plan Copies: LEAVE BLANK
- d. Tree Tags: LEAVE BLANK

Specific Scope of Work (continued):

The tree inventory will include the use of a GPS device to record field information about trees identified during the tree inventory.

The tree inventory will include the recording of such information as the need for; a more in-depth evaluation, a structural inspection of the tree trunk, a further inspection of roots/root flare, an aerial inspection of the tree, pruning, the installation of structural support systems, the installation of lightning protection systems, soil management, pest management, or the need for tree removal.

The information from the tree inventory that will be included within the final deliverable(s) will include:

- Written summary of procedures used in the tree management service

- Map or detailed description of tree locations

- Attributes collected for each tree will be as follows:

- \*Tree ID Number

- \*Tree Botanical Name and Common Name

- \*DBH (Diameter at Breast Height = 4.5 feet/1.4 meters)

- \*Condition Class (Good, Fair, Poor or Dead)

- \*Age Class (New planting, Young, Semi-mature, Mature, Over-mature)

- \*Height Class (Large, Medium, Small)

- \*Estimated Canopy Radius (+/-5 ft./1 m.)

- \*Root Zone Infringement (<25%, 25-50%, 51-75%, >75%)

- \*Soil Care (Root Invigoration™, Soil Rx®)

- \*Tree and Shrub Work:

- Recommendations such as: Tree pruning, Tree removal, Cabling or brace rod installation, and/or Lightning protection system installation

- Phase (ASAP, 1, 2, 3, 4, or 5)

- Category (Risk mitigation, Maintenance, Developmental, Ornamental, Specialized)

- \*Observed Tree Defects

- \*Observed Pests/Diseases

- \*Plant Health Care Recommendations

**\*Estimated Tree Asset Value**

**\*Level 2 Basic assessment for Tree Risk:**

- Date of inspection
- High value targets within the target zone of the tree(s)
- Description of tree part(s) and associated observed defect(s)
- Likelihood of failure, likelihood of impact, and consequences
- Overall risk rating for the subject tree(s)
- Risk mitigation recommendations and/or options
- Recommendations for Level 3 Advanced assessment.

-Potential planting spaces within the specified public rights-of-way will also be collected. Attributes collected for each planting space will be as follows:

- \*Location (GPS Coordinates)
- \*Planting Space ID Number
- \*Planting Opportunity Type (Small, Medium, Large)

If estimated tree asset value has been selected as a desired attribute, Bartlett will use an average per square inch nursery price, size (DBH), species factor, condition factor, and location factor to estimate the tree asset value. This is not intended to replace a tree appraisal.

The tree inventory includes a Level 2 Basic assessment, as defined in the International Society of Arboriculture's (ISA) Best Management Practices for Tree Risk Assessment and ANSI A300 Tree Risk Assessment Standard:

The Level 2 Basic assessment will be conducted from the ground. The Level 2 Basic assessment will be conducted for the target(s), and estimated occupancy rates, determined after consultation with the Owner and/or after site review by the Regional Inventory Arborist, and mutually agreeable to the parties.

The Level 2 Basic assessment will focus on identifying tree(s) or tree part(s) with a probable or imminent likelihood of failure, that are adjacent to the specific target(s) identified after consultation with the Owner and/or after site review by the Regional Inventory Arborist and could impact the target(s).

Trees will be visually assessed following the International Society of Arboriculture's (ISA) Best Management Practices for Tree Risk Assessment and/or applicable industry standards. The likelihood of failure categorization, likelihood of impacting a target estimation, and consequences of failure categorization will occur in the field so the overall risk rating can be determined. The overall risk rating assigned to the inventoried tree will correspond to the highest risk rating associated with the inventoried tree. This rating scale will serve to help the Owner or tree manager prioritize and schedule remedial treatments.

The time frame to be considered for the assessment services described above will be 3 years. This means that the specified time

frame is used by the assessor in the risk assessment process to help determine the overall risk rating of the assessed tree. It does not mean that the overall risk rating will stay the same over the specified time frame. In accordance with industry standards, the Owner should not consider the specified time frame a "guarantee period" for the risk assessment. Risk assessment information is to be considered valid and current at time and date of inspection. Tree risk assessment definitions have been provided in the Tree Risk Assessment Definition document provided with this proposal.

For some trees, failure potential and risk cannot always be assessed by visual inspection from the ground during Level 2 Basic assessments without additional work being performed, such as; the removal of soil or mulch covering a root flare, a root collar excavation, or a climbing inspection. Any separate services necessary to perform the Level 2 Basic assessments will be recommended as needed, and a cost estimate to perform these services will be provided separate from this estimate and the resulting report or deliverable(s).

For some trees, more detailed Level 3 Advanced assessments may be required before further analysis and assessment of observed decay or defects can take place, which may be conducted using one or more of the following; decay detection with a drill, decay detection with a resistance-recording drill, decay detection with sonic tomography, decay detection with a decay detection device, soil excavation around the root collar/roots, root decay detection through drilling, root collar decay detection through drilling, aerial inspection with a tree climber, aerial inspection with an aerial lift device, aerial inspection with a drone device, installation of a device to measure change in trunk angle, load testing by putting a rope in the tree to apply force and monitor tree movement.

If a Level 2 Basic or Level 3 Advanced assessment is recommended by the assessor, or requested by the Owner, a cost estimate to perform these services will be provided separate from this resulting report or deliverable(s).

Recommendations for preventative and remedial actions as outlined in the International Society of Arboriculture's (ISA) Best Management Practices for Tree Risk Assessment and applicable industry standards, will be provided for each tree designated with an overall risk rating above low to mitigate risk to acceptable levels, or for other treatment needs, as determined by the Owner. Treatment considerations can include, but are not limited to: Pruning, Installation of supplemental structural supports, Installation of lightning protection systems, Regulate tree growth, Improve tree health with soil treatments, Improve tree health with pest management, Root collar excavation, Remove stem girdling, Remove tree, Move target, Restrict access for target, Reduce irrigation, Retain and monitor, Modify site, The need for follow-up inspections and analyses.

The specific tree(s) described in the Specific Scope of Work will be the only tree(s) on the property visually assessed and included with these assessment services.

Bartlett Tree Experts can inventory trees that have ropes courses, zip lines, swings, tree houses, or any other life support system attached for several different attributes; however, Bartlett Tree Experts is unable to provide tree risk assessment information on such trees, nor is Bartlett Tree Experts able to determine whether the correct hardware has been used, the systems are attached to the trees correctly, or whether the trees can withstand the additional forces that are placed on the tree or trees from such systems or

structures. Bartlett Tree Experts does not recommend that any hardware or structures, other than those recommended by and installed by qualified arborists to aid the tree in structural support or protections from lightning, be installed in or attached to any tree(s). Bartlett Tree Experts recommends removing, or discontinuing the use of, any such system or recreational structure until the Client hires or consults with an engineer/specialist that deals specifically with ropes courses, zip lines, swings, tree houses, or any other life support systems and how they attach to and impact trees to determine if the trees can handle the forces being placed on them.

In the event that Bartlett Tree Experts has observed an immediate safety issue with a tree with any such device attached, such as the presence of a dead, dying, or broken limb that could fall and injure a person or damage property, Bartlett Tree Experts may make a recommendation to remove or prune such a limb or otherwise mitigate the obvious safety issue. However, the Client should not infer that following such a recommendation and mitigating the immediate safety issue makes the tree in question safe for the use of the attached device or feature.

Visual inspections will be performed and recommendations will be developed by ISA Certified Arborists who have had specific training in tree risk assessment.

By signing this proposal, the Client (and/or Owner) is confirming that they own the property, or have been given permission by the Owner to make management decisions concerning the trees on the said property, in which case, confirmation of this permission will be provided to Bartlett Tree Experts. If the Client does not own the property, it will be the responsibility of the Client to inform the Owner of any risks, safety hazards, conditions, or defects as they relate to trees identified in the final deliverables provided by Bartlett Tree Experts, and a copy of the final deliverables will be provided to the Owner.

A separate proposal will be submitted for all recommended work.

#### Need for Future Inspections:

It shall be the responsibility of the Owner to insure that future tree risk assessment inspections are conducted, by a qualified arborist, annually, or after any major weather event, in order to monitor and evaluate any changes in the condition of the risk associated with the trees on the aforementioned property.

AMENDMENT 1 - ornamental, planted trees located in tree planting zones and/or located between the street and sidewalk shall be included in the inventory regardless of stem diameter.

### Consulting:

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#### Tree Inventory/Survey

Perform a visual assessment and inventory of all trees that are larger than 2 inches in stem diameter (DBH) in order to provide information to assess value and to develop a comprehensive landscape management program. Bartlett Tree Experts will coordinate all job planning and scheduling, equipment requirements, and work crew staffing and management pertaining to safe and professional execution of this assessment and inventory service. Data collection and inspection will generally occur within 30-60 days

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of receiving this signed proposal.

Once the signed acceptance of this proposal is received a representative from the Bartlett Inventory Solutions Team will contact you to schedule and finalize specific information required to begin.

Amount: \$8,914.00

### ArborScopeT License

Bartlett ArborScope™ is a tree management application that uses Google Mapping for clients that want to share and/or manage their tree inventories dynamically. This secure application will provide robust data management, record keeping, and querying features that will display data in tabular or geographical map views. This application will have the ability to record work recommendations, work history, and document and display dedicated trees for memorial, fundraising, or educational purposes.

Subject to the acceptance of, and terms and conditions of, this full proposal, Bartlett Tree Experts grants Shepherdstown St Tree Comm (Licensee) a non-exclusive, non transferable license to use the ArborScope™ web-based data application in an executable format for the Licensee's own use for a three year period beginning upon delivery of the tree inventory, basic management plan, and mapping data. The Licensee may not, however, transfer or sublicense the ArborScope™ web-based data application to any third party, in whole or in part, in any form, whether modified or unmodified. The use of the ArborScope™ web-based data application is licensed, not sold.

This license allows the Licensee to utilize ArborScope™ to interface with Google Mapping features to assist in managing the inventory information dynamically by displaying the data in tabular or geographic map views, keeping records, and documenting and displaying dedicated trees for organizational purposes. The Licensee must have and maintain a live internet connection, separately from this agreement, and utilize a recommended web browser to ensure optimum performance.

By accepting this agreement, the Licensee acknowledges that Bartlett Tree Experts retains the right to modify, change, or alter the ArborScope™ web-based data application, and to provide continual upgrades to the program. All such modifications, changes, alterations, and upgrades, during the initial three year licensing period specified, shall be at no additional charge to the Licensee. At the end of the initial three year licensing period specified, the Licensee will have the option to renew the licensing agreement for a cost of \$1,500.00 for a subsequent three year period, and then \$1,500.00 for each additional three year period thereafter for as long as the ArborScope™ web-based data application remains functional. If renewed, all subsequent modifications, changes, alterations and upgrades during each renewal period shall be provided at no additional cost to the Licensee.

The Licensee understands and agrees that Bartlett Tree Experts will provide the ArborScope™ web-based data application on an "as is" basis without warranty of any kind, expressed or implied. The Licensee also understands and agrees the Bartlett Tree Experts cannot guarantee the accuracy of the data (both geographic and attributes) nor can it be held responsible for inaccuracies or omissions in the data.



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The Licensee further understands and agrees that any damages based on the functionality of the ArborScope™ web-based data application will be limited solely and exclusively to the prorated licensing cost of the ArborScope™ web-based data application listed on this proposal. The ArborScope™ web-based data application function is separate and distinct from the scope and cost of the inventory service, management plan, and mapping data listed above.

- AMENDMENT 2 - trees that have been inventoried and later removed can be removed from the database by either SSTC or BTE. For trees taken down by Bartlett Tree Experts or otherwise brought to the attention of Derek Furry, removal of the trees on the ArborScope database shall be facilitated by Derek Furry.

Amount: \$1,500.00

## Environmental Benefits Assessment

### SCOPE OF WORK

Bartlett Tree Experts will provide arboricultural consulting services in the form of an Environmental Benefits Assessment for trees designated by the client located at 104 S King Street, Shepherdstown, WV 25443.

Bartlett Tree Expert's service will conclude upon delivery of the agreed upon final work product.

Amount: \$1,200.00

Specific Scope of Work (continued):

The tree inventory will include the use of a GPS device to record field information about trees identified during the tree inventory.

The tree inventory will include the recording of such information as the need for; a more in-depth evaluation, a structural inspection of the tree trunk, a further inspection of roots/root flare, an aerial inspection of the tree, pruning, the installation of structural support systems, the installation of lightning protection systems, soil management, pest management, or the need for tree removal. The information from the tree inventory that will be included within the final deliverable(s) will include:

- Written summary of procedures used in the tree management service
- Map or detailed description of tree locations
- Attributes collected for each tree will be as follows:
  - \*Tree ID Number
  - \*Tree Botanical Name and Common Name
  - \*DBH (Diameter at Breast Height = 4.5 feet/1.4 meters)
  - \*Condition Class (Good, Fair, Poor or Dead)
  - \*Age Class (New planting, Young, Semi-mature, Mature, Over-mature)
  - \*Height Class (Large, Medium, Small)
  - \*Estimated Canopy Radius (+/-5 ft./1 m.)
  - \*Root Zone Infringement (<25%, 25-50%, 51-75%, >75%)
  - \*Soil Care (Root Invigoration™, Soil Rx®)
  - \*Tree and Shrub Work:
    - Recommendations such as: Tree pruning, Tree removal, Cabling or brace rod installation, and/or Lightning protection system installation
- Phase (ASAP, 1, 2, 3, 4, or 5)
- Category (Risk mitigation, Maintenance, Developmental, Ornamental, Specialized)
- \*Observed Tree Defects
- \*Observed Pests/Diseases
- \*Plant Health Care Recommendations
- \*Estimated Tree Asset Value
- \*Level 2 Basic assessment for Tree Risk:
  - Date of inspection
  - High value targets within the target zone of the tree(s)
  - Description of tree part(s) and associated observed defect(s)
  - Likelihood of failure, likelihood of impact, and consequences
  - Overall risk rating for the subject tree(s)
  - Risk mitigation recommendations and/or options
  - Recommendations for Level 3 Advanced assessment.

If estimated tree asset value has been selected as a desired attribute, Bartlett will use an average per square inch nursery price, size (DBH), species factor, condition factor, and location factor to estimate the tree asset value. This is not intended to replace a tree appraisal.

The tree inventory includes a Level 2 Basic assessment, as defined in the International Society of Arboriculture's (ISA) Best Management Practices for Tree Risk Assessment and ANSI A300 Tree Risk Assessment Standard:

The Level 2 Basic assessment will be conducted from the ground. The Level 2 Basic assessment will be conducted for the target(s), and estimated occupancy rates, determined after consultation with the Owner and/or after site review by the Regional Inventory Arborist, and mutually agreeable to the parties.

The Level 2 Basic assessment will focus on identifying tree(s) or tree part(s) with a probable or imminent likelihood of failure, that are adjacent to the specific target(s) identified after consultation with the Owner and/or after site review by the Regional Inventory Arborist and could impact the target(s).

Trees will be visually assessed following the International Society of Arboriculture's (ISA) Best Management Practices for Tree Risk Assessment and/or applicable industry standards. The likelihood of failure categorization, likelihood of impacting a target estimation, and consequences of failure categorization will occur in the field so the overall risk rating can be determined. The overall risk rating assigned to the inventoried tree will correspond to the highest risk rating associated with the inventoried tree. This rating scale will serve to help the Owner or tree manager prioritize and schedule remedial treatments.

The time frame to be considered for the assessment services described above will be 3 years. This means that the specified time frame is used by the assessor in the risk assessment process to help determine the overall risk rating of the assessed tree. It does not mean that the overall risk rating will stay the same over the specified time frame. In accordance with industry standards, the Owner should not consider the specified time frame a "guarantee period" for the risk assessment. Risk assessment information is to be considered valid and current at time and date of inspection. Tree risk assessment definitions have been provided in the Tree Risk Assessment Definition document provided with this proposal.

For some trees, failure potential and risk cannot always be assessed by visual inspection from the ground during Level 2 Basic assessments without additional work being performed, such as; the removal of soil or mulch covering a root flare, a root collar excavation, or a climbing inspection. Any separate services necessary to perform the Level 2 Basic assessments will be recommended as needed, and a cost estimate to perform these services will be provided separate from this estimate and the resulting report or deliverable(s).

For some trees, more detailed Level 3 Advanced assessments may be required before further analysis and assessment of observed decay or defects can take place, which may be conducted using one or more of the following; decay detection with a drill, decay

detection with a resistance-recording drill, decay detection with sonic tomography, decay detection with a decay detection device, soil excavation around the root collar/roots, root decay detection through drilling, root collar decay detection through drilling, aerial inspection with a tree climber, aerial inspection with an aerial lift device, aerial inspection with a drone device, installation of a device to measure change in trunk angle, load testing by putting a rope in the tree to apply force and monitor tree movement.

If a Level 2 Basic or Level 3 Advanced assessment is recommended by the assessor, or requested by the Owner, a cost estimate to perform these services will be provided separate from this resulting report or deliverable(s).

Recommendations for preventative and remedial actions as outlined in the International Society of Arboriculture's (ISA) Best Management Practices for Tree Risk Assessment and applicable industry standards, will be provided for each tree designated with an overall risk rating above low to mitigate risk to acceptable levels, or for other treatment needs, as determined by the Owner. Treatment considerations can include, but are not limited to: Pruning, Installation of supplemental structural supports, Installation of lightning protection systems, Regulate tree growth, Improve tree health with soil treatments, Improve tree health with pest management, Root collar excavation, Remove stem girdling, Remove tree, Move target, Restrict access for target, Reduce irrigation, Retain and monitor, Modify site, The need for follow-up inspections and analyses.

The specific tree(s) described in the Specific Scope of Work will be the only tree(s) on the property visually assessed and included with these assessment services.

Bartlett Tree Experts can inventory trees that have ropes courses, zip lines, swings, tree houses, or any other life support system attached for several different attributes; however, Bartlett Tree Experts is unable to provide tree risk assessment information on such trees, nor is Bartlett Tree Experts able to determine whether the correct hardware has been used, the systems are attached to the trees correctly, or whether the trees can withstand the additional forces that are placed on the tree or trees from such systems or structures. Bartlett Tree Experts does not recommend that any hardware or structures, other than those recommended by and installed by qualified arborists to aid the tree in structural support or protections from lightning, be installed in or attached to any tree(s). Bartlett Tree Experts recommends removing, or discontinuing the use of, any such system or recreational structure until the Client hires or consults with an engineer/specialist that deals specifically with ropes courses, zip lines, swings, tree houses, or any other life support systems and how they attach to and impact trees to determine if the trees can handle the forces being placed on them.

In the event that Bartlett Tree Experts has observed an immediate safety issue with a tree with any such device attached, such as the presence of a dead, dying, or broken limb that could fall and injure a person or damage property, Bartlett Tree Experts may make a recommendation to remove or prune such a limb or otherwise mitigate the obvious safety issue. However, the Client should not infer that following such a recommendation and mitigating the immediate safety issue makes the tree in question safe for the use of the attached device or feature.

Visual inspections will be performed and recommendations will be developed by ISA Certified Arborists who have had specific training in tree risk assessment.

Client: 4122832

Printed on: 12/9/2021

Created on: 11/22/2021

By signing this proposal, the Client (and/or Owner) is confirming that they own the property, or have been given permission by the Owner to make management decisions concerning the trees on the said property, in which case, confirmation of this permission will be provided to Bartlett Tree Experts. If the Client does not own the property, it will be the responsibility of the Client to inform the Owner of any risks, safety hazards, conditions, or defects as they relate to trees identified in the final deliverables provided by Bartlett Tree Experts, and a copy of the final deliverables will be provided to the Owner.

A separate proposal will be submitted for all recommended work.

**Need for Future Inspections:**

It shall be the responsibility of the Owner to insure that future tree risk assessment inspections are conducted, by a qualified arborist, annually, or after any major weather event, in order to monitor and evaluate any changes in the condition of the risk associated with the trees on the aforementioned property.

Thank you for the confidence you place in the Bartlett Tree Expert Company. If you have any questions about my recommendations, please feel free to contact me.

Please sign below to approve the items listed in the proposal and send or fax a copy to our office. If not all items are selected at this time, please designate the portions you have selected and I will schedule the treatments accordingly.

Thank you,

Derek Furry  
Arborist Representative  
Board Certified Master Arborist NE-6954B  
TRAQ Qualified  
Penn State Mont Alto, Forestry

**CONDITION OF PROPOSAL:**

Prior to conducting the visual inspections, the owner must recognize that evaluating the potential for tree risk and failure is not an exact science. While many factors will be considered during such an inspection including the extent of any defects, the species of tree, the tree characteristics, and environmental conditions, the owner must understand that all trees inherently pose a certain degree of hazard and risk from breakage, failure or other causes and conditions. The purpose of this inspection is to help the owner understand which trees appear to possess a higher degree of likelihood or potential for failure based on accepted industry practices; it is not meant to declare any tree to be "safe" or unlikely to be hazardous. As such, the Owner should not infer that any tree not identified as having a high or moderate degree of potential for failure is "safe" or will not fail in any manner.

Client: 4122832

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All recommendations made by Bartlett Tree Experts will be based on the defects which are present and detectable at the time of the inspection, and the commonly accepted industry practices for reducing or minimizing the risks associated with the trees. Bartlett Tree Experts can make no guarantees or warranties of any kind that all defects will be detected, nor can Bartlett Tree Experts accept any liability in any manner whatsoever for any damage caused by any tree on this property, whether the tree was inspected or not. Therefore, to the fullest extent permitted by law, the Owner agrees to indemnify and hold harmless Bartlett Tree Experts, its agents or employees, from and against all claims, damages, losses, and expenses, including reasonable attorney's fees, arising out of or resulting from the performance of the inspection, evaluation, inventory, and the performance of any recommended work. Such obligation shall not be construed to negate, abridge, or otherwise reduce any other right or obligation of indemnity which would otherwise exist as to any party or person described in this paragraph.

The Client must inform Bartlett Tree Experts of any additional requirements, including all insurance requirements, such as requests for Certificates of Insurance, or specific terms and conditions, which may affect the pricing of this proposal and the work. In the event that additional requirements do affect the costs associated with performance, Bartlett Tree Experts reserves the right to reissue a new proposal with revised pricing for acceptance.

This proposal shall remain in effect for a period of 45 d

#### SCHEDULE OF WORK PROPOSED:

Once accepted and scheduled, Bartlett Tree Experts will coordinate all job planning and scheduling; equipment requirements, and work crew staffing and direction pertaining to safe, professional execution of the service or services offered.

Upon acceptance of this proposal, this work can be scheduled to take place during the week/weeks of 12/11/2000 and should be completed by 12/11/2000.

#### SCHEDULE OF PAYMENT:

Bartlett Tree Experts offers to perform the work specifications at the work location listed above at the following rates:

Owner agrees to pay a total price of: \$11,614.00

#### NOTICE OF RIGHT TO CANCEL:

You, the client, may cancel this transaction, without penalty or obligation, at any time prior to midnight of the third business day after the date of the acceptance of this proposal. To cancel your acceptance of this proposal within this time, you may notify Bartlett Tree Experts, in writing of your intent to do so, referencing the work location and project.



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**ADDITIONAL TERMS AND CONDITIONS:**

After reviewing the terms and conditions attached, which become part of this agreement, please sign the enclosed copy and return in the enclosed envelope. In the event that the client should issue additional work authorization terms, if agreed upon, such terms will be incorporated into this agreement. In the event that such terms conflict with this agreement, then the terms of this agreement shall govern over any conflicting language. The original document should be retained for your reference. Should you have any questions or need further information, please contact me directly at 717-729-7914.

**OFFER:**

Bartlett Tree Experts will perform the above referenced service in a safe, professional manner, in accordance with all laws, rules, regulations, and industry standards governing tree care.

Bartlett Representative Signature:

\_\_\_\_\_

Date:

\_\_\_\_\_

Printed Name:

Derek Furry

\_\_\_\_\_

**AUTHORIZATION TO PROCEED:**

I hereby authorize Bartlett Tree Experts to perform the above services. Unless otherwise agreed upon in writing by Bartlett Tree Experts, I agree to make total payment of the estimated costs and all authorized additional costs upon completion of the work.

Client's Signature:

\_\_\_\_\_

Date:

\_\_\_\_\_

Printed Name:

\_\_\_\_\_