CITY
OF
JOPLIN, M 0



REQUEST FOR PROPOSAL PACKAGE

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JOPLIN, MISSOURI

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2016-RFP-3

For

City of Joplin Tree Inventory

JOPLIN PARKS & RECREATION DEPARTMENT
3010 W 1ST STREET
JOPLIN, MO 64801

(417) 624-6937

REQUEST FOR PROPOSALS

The City of Joplin, Missouri will accept sealed proposals until 10:00 A.M., Wednesday, December 23rd at the Joplin PARKS & RECREATION Department located at 3010 W 1ST Street, Joplin, Missouri, 64801 for the following:

City of Joplin Tree Inventory

Specifications are available from Mike McDaniel, Parks Dept. by calling 417-624-6937, writing to the address indicated above or email to mmcdanie@joplinmo.org. Any bids received after the specified deadline will be returned to the vendor.

The City reserves the right to evaluate all proposals, to reject any or all proposals and solicit again at a later date. The City may waive any irregularities in the proposal or negotiate variances from specifications, and make awards that are in the best interests of the City. The City will have final decision in all matters regarding acceptance of proposals and issuance of awards.

The City encourages minority and female owned businesses to submit proposals on all City purchases.

Leslie Haase, CPA
Finance Director
Publication Date: **Tuesday, December 8, 2015**

General Description and Specifications

. The City of Joplin is seeking proposals from individuals and firms interested in providing a tree inventory, tree management plan, and tree inventory data management software. The intent of

the City is to award a contract to conduct a tree inventory which will include approximately 6250 trees on public grounds.

The intent of these specifications is to outline the minimum acceptable requirements for a comprehensive citywide street tree inventory for the City of Joplin. One consulting firm must perform all tasks required for the inventory projects; no sub-contracted consulting firms shall be permitted.

Proposals must include the performance of a complete, computerized parks and street tree inventory of approximately 6250 trees located on various public properties. The inventory must locate, identify and assess each tree and provide maintenance and planting data in an electronic format.

The inventory must be performed using GPS equipment or other GIS-compatible data collection hardware.

The proposals shall include the installation of tree management software. The tree management software program shall provide inventory data, management, work history tracking and analysis, maintenance and planting cost analysis, tree replacement value based on present size and standardized methods used in The Guide for Plant Appraisal, 9th Edition, authored by the Council of Tree and Landscape Appraisers (CTLA) and a mapping component and visual representation of the inventory data.

Comprehensive training on the use of all software shall be provided to city staff to include but not limited to; city arborist, superintendents, engineering and technical support personnel.

All tree inventory data shall be delivered in i-tree Streets, Microsoft Excel, Access and ESRI shapefile format as well incorporated into the tree management software program.

All geospatial data shall be delivered in an ESRI-compatible Shapefile or file geodatabase in the Missouri West Stateplane Coordinate System. Photography shall be delivered in the JPEG and PDF format

The contractor shall provide a full metadata reference for all delivered data. All accompanying metadata shall be compiled to the current standard endorsed by the Federal Geographic Data Committee (FGDC).

Consulting firm is to obtain the Right-of-Way Work Permit, supplying all detailed information and minimum insurance requirements as outlined in the Right-of-Way Permit Application. All permit fees will be waived.

MINIMUM QUALIFICATIONS OF CONSULTING FIRM

1) The consulting firm must have completed a minimum of six (6) tree inventory projects similar in scope in the last three (3) years. Firm will provide references for the six (6) inventory projects and one (1) sample of these projects.

2) Each person employed to collect tree data shall have the necessary qualifications for completing tree inventory data collection. These qualifications include, but is not limited to, International Society of Arboriculture (ISA) arborist certification. It is required that the successful consulting firm have no less than three (3) Certified Arborists as designated by the International Society of Arboriculture on staff, and that these professionals have been employed for the company at least one year.

3) Preference will be given to consulting firms with staff having a four (4) year degree in urban forestry or a related field of study.

4) Consulting firm must be able to perform the inventory services without delay from other projects and commitments, and be able to complete the tree inventory scope of work based on the timeline outlined and agreed upon in the contract. Work must completed by April 10, 2016 unless otherwise agreed upon.

SCOPE OF WORK

Task 1: Tree Inventory
Consulting firm shall inventory various trees located on the public rights-of-way and other public properties in the designated section(s) of the City.

At a minimum, the information collected for each tree shall include:
1) Location - Identify the location of each tree and/or site. All street tree locations should be organized by sequential tree site number and road name, block side, corner location and GPS coordinates. The Coordinate System shall be U.S. State Plane 1983, Missouri East, NAD 83 (CONUS) unless otherwise directed by the City.

2) Species - Trees are identified by genus and species using both botanical and common names and by cultivars where appropriate.

3) Trunk Diameter - Diameter is measured to the nearest inch in one-inch increments at 4-1/2 feet above the ground, or diameter-breast-height (DBH). Record as a single value, ranges will not be accepted.

4) Stems - Number of stems on trunks that are forked less than one foot above ground level is recorded.

5) Condition - The general condition of each tree is rated according to the following categories adapted from the International Society of Arboriculture's rating system:

- Excellent 100%
- Good 80%
- Fair 60%
- Poor 40%
- Critical 20%
- Dead 0%

6) Assessed Value - Each tree inventoried to have an assessed value based on The Guide for Plant Appraisal, 9th Edition, authored by the Council of Tree and Landscape Appraisers (CTLA) rating standards on location, species, overall condition, etc. The software program to include the capability of tabulating, sorting and combining the assessed value of each tree by; street, subdivision, park, species, etc.

7) Primary Maintenance Need. The following primary maintenance needs will be determined based on ANSI A300 standard specifications:

- Removal. Trees designated for removal have defects that cannot be cost-effectively or practically treated. The majority of the trees in this category have a significantly large percentage of dead crown, trees that are low risk, but will never become valuable assets (severely sunscalded or mower damaged trees), trees with safety risks that could be seen as potential threats to persons or property and seen as potential liabilities to the City would be in this category. This includes large dead and dying trees that are high liability risks as well as those that pose minimal liability to persons or property (such as trees in poor locations or undesirable species) will be identified in this category.
- Tree Clean. These trees require selective removal of dead, dying, broken, sprawling live limbs and/or diseased wood to minimize potential risk. Priority of work should be

dependent upon the Risk associated with the individual trees. Trees in this category are large enough to require bucket truck access or manual climbing.

- Young Tree Train. Young trees must be pruned to correct or eliminate weak, interfering, or objectionable branches in order to improve structure and minimize future maintenance issues. These 20-foot or less trees can be maintained by a groundsperson.
- Stump Removal. This category indicates a stump that should be removed. Any stump in the public right-of-way or park over 2 inches from ground level to be specified for removal.

8) Risk Assessment. A Level 2 Qualitative risk assessment will be performed based on ANSI A300 (Part 9) standards, along with the companion publication Best Management Practices: Tree Risk Assessment, published by the International Society of Arboriculture (2011). During the inventory, each tree will be assigned a risk rating. The failure mode with the greatest risk will serve as the overall tree risk rating. The specified time period for the risk assessment is one year. Risk is assessed based on the degree to which trees are susceptible to failure. Ratings are determined by the following measurements:

- Likelihood of Failure. The chance of a tree failure occurring within the specified time frame (one year).

- Likelihood of Impacting a Target**.** The chance of a tree failure impacting a target during the specified time frame.

- Categorizing Likelihood of Tree Failure Impacting a Target**.** The chance of a tree failure occurring and impacting a target within the specified time frame.

Likelihood of Failure	**Likelihood of Impacting Target**			
	Very Low	*Low*	*Medium*	*High*
Imminent	Unlikely	Somewhat likely	Likely	Very likely
Probable	Unlikely	Unlikely	Somewhat likely	Likely
Possible	Unlikely	Unlikely	Unlikely	Somewhat likely
Improbable	Unlikely	Unlikely	Unlikely	Unlikely

- Consequence of Failure. Personal injury, property damage, or disruption of activities due to the failure of a tree or tree part

9) Risk Rating. The tree's risk rating is determined based on combining the likelihood of tree failure impacting a target and the consequence of failure in the matrix below.

Likelihood of Failure	**Consequences**			
	Negligible	*Minor*	*Significant*	*Severe*
Very likely	Low	Moderate	High	Extreme
Likely	Low	Moderate	High	High
Somewhat likely	Low	Low	Moderate	Moderate
Unlikely	Low	Low	Low	Low

Tree risk assessors will identify the tree failure mode having the greatest risk, and report that as the tree risk rating. The following risk ratings will be assigned:

- None. Used for planting and stump sites only.

- Low. The Low Risk category applies when consequences are “negligible” and likelihood is “unlikely”; or consequences are “minor” and likelihood is “somewhat likely”. Some trees with this level of risk may benefit from mitigation or maintenance measures, but immediate action is not usually required.

- Moderate. The Moderate Risk category applies when consequences are “minor” and likelihood is “very likely” or “likely”; or likelihood is “somewhat likely” and consequences are “significant” or “severe.” In populations of trees, Moderate Risk trees represent a lower priority than High or Extreme Risk trees.

- High. The High Risk category applies when consequences are “significant” and likelihood is “very likely” or “likely”, or consequences are “severe” and likelihood is “likely”. In population of trees, the priority of High Risk trees is second only to Extreme Risk trees.

- Extreme. The Extreme Risk category applies in situations where tree failure is imminent and there is a high likelihood of impacting the target, and the consequences of the failure are “severe”. In some cases, this may mean immediate restriction of access to the target zone area to avoid injury to people.

10) Observations - General observations warranting recognition include, but are not limited to, the following:

Cavity/Decay
Grate/Guard
Improperly Installed
Improperly Mulched
Improperly Pruned
Mechanical Damage (and location of damage)
Memorial Tree
Nutrient Deficiency
Proximity to Infrastructure and Hardscape
Pest/Disease Problem
Poor Root System
Small Tree Pruning/Cleaning
Poor Structure
Remove Hardware
Serious Decline
Signs of Stress
Hazard Abatement Recommendations

11) Further Inspection - Trees in this category require an annual inspection for several years.

12) Above ground Utilities - The inventory indicates the presence of overhead utilities at the tree site.

13) Growing Space Type – Island, median, open/unrestricted, planter, etc.

14) Growing Space – Measure the distance in feet from the base of the tree to the closest growth obstruction recording as a single value in one of the following ranges: under 5 feet, 5-10 feet, 10-25 feet, 25-40 feet or 40+feet. State whether the tree is visibly interfering with the hardscape

15) Location Rating – Assign a rating based on the functional and aesthetic contributions of the tree to the site and the long term sustainability of the particular species in the chosen location. Categories include: Excellent, good, fair and poor.

16) Additional Notes - Additional information of possible importance is noted here; visible at ground level utility equipment, hardscape materials and others as the City directs.

17) Date of survey and name of inspector

Task 2: Urban Forestry and Planting Plan

Create an Urban Forestry & Planting Plan. The Plan will present a brief overview of inventory findings. It will discuss major trends identified in the inventory, including species composition and tree conditions. A detail of definitions, information, and data collection methods used to conduct the inventory will be documented. Tree population characteristics that affect management,

especially species diversity, urban forest condition, and maintenance requirements, additional specific trends, observations, and concerns noted during data collection will be discussed. An estimated multi-year budget (based on local costs) will also be provided for the activities that will constitute a comprehensive urban forest management program.

Appendices will be provided that include:

- A complete set of important references for the future; pruning guidelines; recommended tree species.
- A sample comprehensive tree ordinance.
- A sample tree preservation ordinance
- A sample specifications for contracting tree work
- A source of additional information in urban forestry and arboriculture.
- A total tree site listing: an alphabetized street address and site number printout of all trees.
- A tree inventory workbook that includes the recommendation for priority removal, pruning or training.
- Trees located under overhead primary utility lines.
- Trees recommended for further inspection and monitoring.

Task 3: Tree Inventory Software

A Tree Inventory Data Management Software program will be provided. The software program required by the City will be a web based software package, accessible by Microsoft Internet Explorer 8 or higher. The inventory software will be capable of supporting a tree inventory that has ESRI Geographic Information Systems (GIS) data associated with it, as well as supporting a Tree Inventory that does not have GIS data associated with it.

The software program will be specifically designed for ease of use, and consist of an administration center, query system that supports any combination of available data fields, a calls module, a work order and work history module, and a reporting system which includes customizable reports that can be saved. With available GIS data, a mapping window will be used to display and manage the geographically referenced tree inventory data, and to track tree work and maintenance history.

On the primary map page, points representing the individual trees contained within the inventory database will be displayed, along with various basemap layers. The map page must provide the user with the basic functions of GIS: zoom, pan, label, and identify. The data must be able to be manipulated directly on the map - add, delete, move, edit tree points. The software program must provide the user with a visual representation of the tree inventory.

The map window must utilize the ESRI File Geodatabase or shapefile format and/or .tif image files. Tree attributes should exportable for use in spreadsheets or other database software and the tree shapefile should be exportable for use in other ESRI products now or in the future.

QUALITY CONTROL

- The consultant firm's personnel conducting and completing the inventory must be college-educated and professional certified arborists. All managing inventory arborists must be Certified Arborists through the International Society of Arboriculture; no students or temporary employees will be allowed.

- In addition to computerized quality checks and control, a senior inventory arborist must be on-site regularly to field-check the data collected by other staff to assure adherence to City work specifications and national industry standards.
- The City may further test the accuracy of the contractor's GPS and GIS equipment and mapping capabilities of staff by requiring the consulting firm to collect location data on known reference points in the City.
- The consulting firm must assure the City that if any errant tree site location is detected, that is due to operator error or equipment malfunctions, the correction responsibility belongs to the consulting firm and will be promptly remedied.

PROPOSAL EVALUATION PROCESS

Proposals, which the City determines in its sole discretion, that are deemed responsive to this RFP, will be reviewed and evaluated by the City. Proposals will be evaluated, in part, according to whether the Contractor meets the minimum qualification and submits a proposal complying with all of the requirements of this RFP.

Evaluation of vendor proposals will be based on the following criteria:

- 30% Methodology - that the vendor will use to conduct work outlined in RFP and evidence of ability to perform the work described herein.
- 25% Experience – previous experience performing related projects of complex nature, including, but not limited to, similar size and type of organization.
- 15% References – will be based on references submitted as part of RFP, but can include clients not submitted.
- 25% Cost of proposal – must contain a cost for each project/process recommended as well as a "not to exceed" amount.
- 5% Staff - capability and availability of professional staff to serve the City of Joplin in a competent and timely manner.

The City of Joplin reserves the right to reject any qualification and/or modify the requested qualifications as it sees fit.

In applying these criteria specifically to this RFP, firms will be evaluated based upon the following:
1) The specialized experience and technical competence of the firm with respect to tree inventory and management services;

2) The firm's reference list of previous street and park tree inventories.

3) The capacity and capability of the firm to perform the work in question, including specialized services, within the time limitations;

4) The past record of performance of the firm with respect to such factors as control of costs, quality of work, and ability to meet schedules;

5) The firm's familiarity with the area in which the project is located;

6) The firm's ability to deliver high quality data in a variety of formats as desired by the City including but not limited to i-Tree, CityWorks, Excel, shapefile, geodatabase, etc.

7) The firm's ability to demonstrate the use of the web based and hosted software information by means of a power point or webinar presentation.

8) The firm's ability to host all software information and be able to supply 24/7 information access and technical support.

INFORMATION / ASSISTANCE TO BE PROVIDED BY THE CITY

1) Street maps of the areas to be inventoried.

2) Right-of-way width or other information that will enable the contractor to determine if trees are located on public property.

3) GIS data layers and digital ortho-photographs of the City.

4) Have daily contact with city arborist and/or supervisory personnel.

Please contact me at (417) 624-6937 or mmcdaniel@joplinmo.org if you have any questions concerning this RFP.

Sincerely,

CITY OF JOPLIN

BID FORM

Description: City of Joplin Tree Inventory

Company: _____

Address: _____

_____

_____

Telephone: _____

Signature: _____

Mark bid envelopes: City of Joplin Tree Inventory

Unauthorized Aliens Workers Act

The successful bidder will have to sign an agreement that they are enrolled and participating a Federal Work Authorization Program ("FWAP") that ensures that all of its employees or agents or subcontractors have the legal right to work in the United States, as defined in 8 U.S.C. 1324a(h)(3) and RSMo § 285.525-285.555, and that it will maintain this compliance for the entire duration of its contract with the City of Joplin, and will provide an Affidavit of Compliance to the City stating the same.

AFFIDAVIT OF COMPLIANCE
(Missouri Unauthorized Alien Workers Act)

My name is _____ (name) _____ and I am the _____ (Title) _____ of _____ (Company Name) _____. I hereby represent, affirm and certify to the City of Joplin that my company does not knowingly employ any person who is an unauthorized alien in connection with contracted services with the City. I further affirm that my company is actively enrolled and participating in a federal work authorization program with respect to all employees working in connection with the contract services provided to the City.

_____

_____

Affiant