



City of Mesquite, Texas

Request for Proposal

ASSET MANAGEMENT SOFTWARE

RFP #2018-008

Proposal Issue Date: October 19, 2017

Proposal Due Date: November 16, at 2:00 PM

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REQUEST FOR PROPOSALS

RFP No. 2018-008

Sealed responses as set forth and required in the request for proposal (either of which shall hereinafter be referred to as the “RFP”) addressed to the Mayor and City Council of the City of Mesquite, Texas will be received at the office of Ryan Williams, Manager of Purchasing at the Municipal Center, 1515 N. Galloway Ave., Mesquite, Texas 75149 until

2:00 p.m. on Thursday, November 16, 2017, for the following: **Asset Management Software**

As set forth in the RFP the City intends to select an asset management software capable of helping move the City towards being a data driven and high performance organization. The successful software will include a computerized maintenance management system component that will integrate seamlessly with our GIS system to track and forecast City assets.

A pre-submittal conference will be held at 10:00 a.m. on Wednesday, November 8, 2017, at the City of Mesquite Arts Center located at 1527 N. Galloway Avenue, Mesquite, Texas 75149 in the Rehearsal Hall.

Submissions must include the following on the exterior of the package:
Response to Request for Proposals No. 2018-008, Asset Management Software
Due: 2:00 p.m., Thursday, November 16, 2017

Inquiries regarding this Request for Qualifications must be submitted by email to Christina Hickey, PE, Infrastructure Asset Manager, to the following: chickey@cityofmesquite.com. Emailed requests must include the following reference on the email subject line: RFP for Asset Management Software.

The right is reserved by the City of Mesquite to reject any and all submittals.

CITY OF MESQUITE, TEXAS

Sonja Land
City Secretary

CITY CONTRACT: 2018-008

Publish: October 19, 2017

October 26, 2017

1 INTRODUCTION AND GENERAL INFORMATION

The purpose of this Request for Proposal (RFP) is to solicit proposals from software suppliers, systems integrators and/or implementation partners who can demonstrate that they possess the organizational, functional and technical capabilities to provide an Asset Management Software (AMS) with a Computerized Maintenance Management System (CMMS) component that meets the city's needs and is tightly integrated with ESRI ArcGIS.

The objective of this project is to implement an asset management software system and its related installation, configuration, data conversion/migration, implementation, and training services to manage and maintain the City's aging assets, to better forecast the performance of the City's assets, increase staff productivity and efficiency and to provide better management information to the organization's leadership. It is City of Mesquite's preference to enter into an agreement with a single software solution provider that functions as a primary contact in providing the complete range of required functionality and related services.

The City of Mesquite is a suburb located east of Dallas, Texas. It is situated in Dallas and Kaufman counties, with the current city limits covering a combined area of 46 square miles of land and 0.15 square miles of water. The city's population was estimated at over 144,788 making it the twentieth most populous city in the state of Texas in 2015. The City is responsible for the maintenance of over

- 792 miles of pavement (street + alley)
- 600 miles of waterline
- 485 mile of wastewater lines
- 75 number of parks
- 204 miles of storm sewer

In addition, the City is responsible for the maintenance and operation of all other facilities and appurtenances associated with these systems. The City is looking to select an asset management software capable of helping move the City towards being a data driven and high performance organization. The successful software will integrate seamlessly with our GIS system to track and forecast City assets within the following systems:

- Water System – Assets include waterlines, valves, pumps, water towers, fire hydrants
- Wastewater System – Assets include wastewater lines, manholes, pump stations, cleanouts
- Stormwater System – Assets include storm sewer, manholes, channels, inlets
- Pavement System – Assets include streets, alleys, sidewalk, curb ramps, screening walls
- Traffic System – Assets include signs, signals, pavement marking, fiber optic
- Parks System – Assets include parks, playgrounds, mowing areas, park amenities, trees, swimming pools, golf course, ponds, fences

The above list of assets is not all-inclusive list but is intended to give the vendor an idea of the types of assets looking to be tracked.

The AMS system will also need to be able to handle general inquiries and work orders for a variety of tasks for a variety of divisions. The following divisions are expected to be using the new asset management software for work requests:

- Utilities Division
- Streets Division
- Traffic Division
- Solid Waste Division
- Parks and Recreation Department

It is the desire of the City to reduce redundant data entry and to provide a seamless process to track work and assets. The following is a list of software the City currently uses that if integrated, could increase usability and efficiency:

- Vehicle data: FASTER
- Payroll/accounting: Tyler Munis
- Warehouse: Tyler Munis
- Streets condition and work history: PAVER
- Sewer Condition: CUES Granite Net
- Asset Inventory: ESRI ArcGIS Server 10.4.1, ArcMap 10.4.1

2 MINIMUM TECHNICAL REQUIREMENTS

2.1 GENERAL

Software solution vendors submitting in response to this RFP must meet the following requirements:

- An easy to use product for users as well as information technology staff support
- Successful experience implementing the proposed software
- Meet all functional and technical requirements stated within this RFP using commercially available, robust, off-the-shelf-turn-key-solution software that requires minimal customization to implement and maintain, and operates with ease for both internal staff and external customers
- Includes real-time integration with GIS (Geographic Information Systems) ESRI software
- A highly intuitive system from a user perspective that can position City of Mesquite to take advantage of technology to improve departmental performance and efficiency
- Easy access to the data for robust report and query generation without the need for a programming specialist
- Support for user-friendly mobile technology that allows access to essential work management functionality
- Asset tracking for specific assets, including the ability to track attributes, work and maintenance history, cost of maintaining the asset, and asset lifecycle management and to issue work orders and track resulting costs against individual assets

The selected vendor shall be responsible for the installation, implementation, and commissioning of the software including development of user acceptance testing, system integration, and connectivity to existing resources.

2.2 KEY FUNCTIONAL OBJECTIVES

2.2.1 REQUEST MANAGEMENT

- Intake requests from internal staff and external customers
- Provide multiple ways to take requests and associate duplicate request calls to the same request.
- Convert requests to work orders with link between request and work order

2.2.2 WORK MANAGEMENT

- Create and complete work on both assets and non-assets
- Easily create, assign, and complete work activities
- Roll-up of work activities for project level costing and tracking
- Create repetitive work orders

2.2.3 RESOURCE MANAGEMENT

- Ability to track labor, equipment, and materials costs by asset
- Allow for multiple labor rates
- Ability to expense equipment in either time or miles

2.2.4 ASSET MANAGEMENT

- Ability to create/modify asset inventories and track asset attributes
- Assets contain performance curves to track asset condition and useful life
- Document inspection results which impact asset condition
- Add and view attachments to both asset records and inspection records
- Set up preventative maintenance schedules on assets and trigger work based on asset condition, time, and usage

2.2.5 FIELD ACCESS/MOBILE

- IOS, Android and Windows based mobile application to perform work and track inventory assets
- Mobile application must be able to complete work, enter resources, create new assets, and edit existing assets and attributes

A detailed list of functional objectives and priorities is provided in Appendix B. Vendor shall fill out Functional Requirements Matrix detailing capabilities of proposed software solution.

3 PROPOSAL SUBMITTAL REQUIREMENTS

3.1 PROPOSAL FORMAT

The proposal **MUST** contain all of the following sections:

1. **Proposal Response Form** (see Appendix A)
2. **Function Requirements Matrix** (see Appendix B)
3. **Qualifications of Responding Company (maximum 10 pages)** - The responding Company shall provide written pertinent information about the company. Section should include:
 - a. Current workload and projected workload for the next year

- b. Resources available that the firm would be able to allocate to the project
- c. Describe your Quality Assurance/Quality Control processes, including your tracking system(s) that will be used to monitor budget, schedule, and scope. Resumes of proposed project staff
- d. A minimum of 3 reference cities including contact name and number. It is preferable that at least one reference is a city located in the North Texas area.
- e. Financial Statement (the financial statement is not included in the allowed maximum pages)

4. Proposed Implementation Process (maximum 3 pages)

- a. Include training plan and options

5. After Implementation Support (maximum 3 pages)

6. Examples of Integrations (maximum 10 pages) – The responding company may submit examples of integrations with other software that their software solution has done. Of particular interest to the City is integration with MUNIS Accounting, Payroll and Warehousing, CUES Granite Net, Paver and FASTER

7. Additional Information (maximum 5 pages) – The responding company may include additional information in this section that the City should consider when selecting asset management software.

8. Hardware Requirements

9. Cost - Provide cost summary in following general format. Additional line items can be added to further detail costs and line items below can be further detailed also:

One-Time Startup Costs	
Implementation	\$
Software License	\$
Training	\$
Optional Modules License Cost	\$
TOTAL INITIAL COST	\$
Annual Reoccurring Costs	
Software Maintenance (incl. Customer Service)	\$
Other	\$
Optional Modules Maintenance	\$
TOTAL ANNUAL COST	\$

If costs are based on a per user basis, use 100 users and indicate as such.

10. Video - We encourage but do not require each proposal to include a video (maximum 30 minutes) demonstrating software functionality.

The proposer has the option of providing a paper copy or electronic copy of their proposal.

- *Paper Submittal:* Submit three copies of the proposal in a sealed envelope
- *Electronic Submittal:* All documents must be on one device which can be either CD, DVD or external drive. Electronic device shall be submitted inside an envelope and submitted per instructions in Section 3.3.

3.2 PRE-SUBMITTAL QUESTIONS

Vendors are encouraged to attend the pre-submittal meeting. Vendor inquiries are to be directed to Christina Hickey, Manager of Infrastructure Asset Management, at chickey@cityofmesquite.com. Questions will be accepted until 5:00 PM on November 9, 2017.

3.3 INSTRUCTIONS FOR SUBMITTAL OF PROPOSAL

Proposals must be submitted no later than 2:00 PM on November 16, 2017 to the following address:

City of Mesquite
Attn: Mayor and City Council
c/o Ryan Williams
1515 N. Galloway
Mesquite, Texas 75149

Submissions must include the following on the exterior of the package:

Response to Request for Proposals No. 2018-008 for Asset Management Software

Due: 2:00 p.m., Thursday, November 16, 2017

It is up to the proposers to deliver the proposal in accordance with these instructions and to confirm receipt of delivery.

3.4 STIPULATIONS:

In order to ensure fair and objective evaluation, all questions related to this RFP should be addressed only to the person(s) so named in this RFP. Contact with any other City employees is expressly prohibited without prior consent of the person(s) so named herein. Vendors directly contacting other City employees will risk elimination of their proposal from further consideration.

All materials provided to the City by vendors are subject to City and State public disclosure laws. Any proprietary information contained in the vendor's proposal must be clearly designated and shall be labeled "Proprietary Information." Marking the entire proposal or any one or more major sections as proprietary will not be accepted.

By submission of your letter of interest and qualification statements in response to this announcement, you are certifying that neither your firm nor any of its principals are presently debarred, suspended, proposed for debarment, declared ineligible, or excluded from participation in this procurement process by any Federal department or State agency, or other governing body. Further, if such a debarment or suspension occurs during the course of the procurement, you shall so inform the City of Mesquite.

No submitting firm shall, directly or indirectly, engage in any conduct (other than the submission of the Proposal or other prescribed submissions and/or presentations before the Selection Committee) to influence any employee or elected official of the City of Mesquite concerning award of a contract as a result of this solicitation. Violation of this prohibition may result in disqualification of the firm from further participation in the solicitation for services or goods sought herein, or from participation in future City of Mesquite solicitations or contracts.

4 SELECTION PROCESS OVERVIEW

The selection matrix, indicating scoring categories and criteria, to be used by the selection committee when evaluating Proposals is included in Appendix C for reference. Selection will be based on demonstrated experience and technical capabilities.

It is the intent to invite the top two to three proposals for in-person interviews/demonstrations. The City will notify top proposals and work to schedule interviews. More specific information regarding the interview/demonstrations will be given at the time of invitation. Depending on location of other entities using same software solution, staff may elect to perform site visits to municipalities using software and include findings in selection process.

Based on the proposals, site visits and interviews/demonstrations, the Selection Committee will rank the respondents and select the top respondent to negotiate contract and final price.

If a mutually agreeable cost/price proposal cannot be negotiated, the City of Mesquite will formally end the negotiation and may proceed to select and negotiate with the next firm.

The following is a tentative schedule and is subject to change.

ITEM	DATE
Advertise Request for Proposal	October 19, 2017 October 26, 2017
Pre-Submittal Meeting	November 7, 2017
Vendor Questions Due	5:00pm November 9, 2017
PROPOSALS DUE	2:00pm November 16, 2017
Invitation for On-Site Demonstration sent to top proposals	December 1, 2017
Onsite Demonstrations and Staff Visit to view Reference Cities	December 4, 2017 – January 5, 2018
Staff Evaluation Complete	January 12, 2018
Start Contract Negotiation with Selected Company	January 15, 2018

The City reserves the right to request clarification on any proposal or to ask respondents to supply any additional material deemed necessary to assist in the evaluation of the proposal.

The City reserves the right to reject any or all proposals or portions of a proposal. The City also reserves the right to waive minor technicalities in the proposal. The City reserves the right of evaluation and the right to determine the methodology for evaluation of the proposals to determine which proposal is best. In addition, to accept the proposal (or proposals) deemed to be in the best interest of the City, the most qualified proposal, will not necessarily be the proposal with the lowest cost. Further, the City reserves the right to accept a proposal (or proposals) for any or all items separately or together.

APPENDIX

Appendix A: Proposal Response Form

Appendix B: Functional Requirements Matrix

Appendix C: Selection Matrix

Appendix A
Proposal Response Form

Proposal Response Form

Asset Management Software, RFP #2018-008



Company Name: _____

Name of Person(s) authorized to represent the company in any negotiations and sign any contract(s) that may result:

Name Title

Provide contact information should the City have any questions or updates regarding this proposal:

Name: _____

Title: _____

Phone: _____

Email: _____

Answer following Questions:

Name of Software Solution:	
Company Responsible for Implementation:	
Version of ESRI supported:	
Required ESRI Licensing for Each User – Specify if different requirements for different roles:	
Additional ESRI Licensing Required:	
Is software solution cloud based or local server based? If local server based, does vendor have capability to host?	
Database (i.e. Oracle, SQL Server, etc.) and Version:	
Operating System Required:	

Appendix B
Functional Requirements Matrix



Functional Requirements for Asset Management Software

VENDOR INFORMATION	
Software Solution Name	
Vendor Submitting Solution Name	

The respondent must complete the Vendor information requested plus the 12 subcategories in this workbook. For each requirement, select a value from the options provided. Blank responses will be considered '*Not Provided*'. Use the notes field as requested by the requirement and it should be concise and complete.

Req. ID	Each requirement will have an unique ID which should be used for all references to the requirement
Requirement Category	Subtype of requirement within each tab.
Requirement Importance	H - High (Required) M - Medium (Highly desirable) L - Low (Optional)
Requirement	Description of the requirement
Vendor Response	PA - Provided as-is CR- Configuration reqd. AS - Addtl. Services NP- Not Provided
Comments	Comments should further provide information on the response, particularly if its CR or AS. Should be to the point and City of Mesquite reserved the right to request additional information at its discretion.

Abbreviations			
Asset Management Software	AMS	Material Safety Data Sheet	MSDS
City of Mesquite	City	Enterprise Resource Planning	ERP
Service Request	SR	Capital Improvement Project	CIP
Work Order	WO	Preventative Maintenance	PM

1. General System Functions					
Req. ID	Requirement Category	Importance	Requirement	Vendor Response	Comments
1.001	Notifications and Alerts	H	Ability to provide notifications using multiple media (e.g., text alerts, phone call, email to a designated user).		
1.002	User Interface	H	Ability to validate data entry using, for example, lists of pre-defined values or validation rules that are active in the form.		
1.003		M	Ability to enter unlimited notes or text fields.		
1.004		M	Ability to validate, as a group, multiple fields on a single form.		
1.005		M	Ability for users to save incomplete business functions (e.g. submission of a SR) and resume at a later time.		
1.006		M	Ability to clone existing entities/objects (e.g., WO's, assets, maintenance schedules) for use on similar entities/objects.		
1.007		H	Ability to pre-populate/auto-populate defined fields based on stored data (e.g. requestor names, location, etc.).		
1.008		M	Ability to automatically spell check text entry, indicate unrecognized words, and to add customizable entries to the dictionary.		
1.009		H	Ability to allow users to concurrently open multiple object types (i.e. WO's, asset list, reports).		
1.010		H	Ability to manage concurrency issues in a multiple-user environment where the same record is accessed and updated by multiple users at the same time.		
1.011		H	Ability to perform operations on multiple records at the same time. For example, updating the same field in every record or for a specified group of records.		
1.012		L	Ability for system administrator to localize the system look and feel for City of Mesquite (e.g., City logo, favorites, queries, etc.). Specify features that can be localized.		
1.013		M	Ability for end user to personalize user experience (e.g., favorites menu, queries, quick reports, etc.). Specify features that can be personalized in the comments section.		
1.014		H	Ability to have a split screen (e.g.: one side of screen has map, the other has a WO form.).		
1.015		H	Ability to clearly alert all users for system-wide events including, for example, allowing users to save their work.		
1.016		H	Ability for the system to provide user-friendly keyboard equivalents for primary commands.		
1.017	M	Ability to print a 'what you see is what you get' in .pdf format			
1.018	M	Ability to launch hyperlinks from tabular views			
1.019	User Help	H	Ability to provide context-sensitive help within the user interface. Describe capabilities delivered without additional cost to City of Mesquite.		
1.020		M	Ability to customize on line help to incorporate configurations and modifications that have been made to the system to meet City of Mesquite requirements.		
1.021	Document Management	H	Ability to associate digital files (e.g., photos, videos, and documents) to system objects (e.g., Asset, SR, and WO records). Identify the file types that are supported within the application. Please describe how this capability is implemented (e.g., embedded or linked files, number of associated files allowed per record, and digital file types).		
1.022		L	Ability to provide electronic document management features within the System.		
1.023		L	Ability to integrate with a 3rd party document management application. Specify supported systems in the comments section.		
1.024		L	Ability to utilize Computer-Aided Drawing files. Describe in the comments section.		
1.025		L	Ability to utilize Building Information Model files. Describe in the comments section.		

1. General System Functions					
Req. ID	Requirement Category	Importance	Requirement	Vendor Response	Comments
1.026	Workflow	H	Ability to use workflows to facilitate collaboration to assign, track, perform, review, and closeout tasks performed with the System.		
1.027		H	Ability to provide automatic notifications on screen to users based on their role or other business rules.		
1.028		M	Ability to provide automatic notifications via email to stakeholders based on their role or other business rules.		
1.029		H	Ability to modify existing workflows and create new workflows.		
1.030		H	Ability to use a graphical user interface that enables the development of workflows and notifications.		
1.031		M	Ability to define a completion time threshold for a given step in a workflow and to automatically route events to 'exception workflows' (e.g., if a workflow has exceeded the defined thresholds).		
1.032		H	Ability to include an approval capability at many levels.		
1.033	Accounts	H	Ability to interface with the City's main address database to check street address information and assist in determining resident vs. non-resident status? Please explain options in the comments section.		
1.034	Mobile	M	Ability to integrate/be compatible with GPS technology in field vehicles.		
1.035	Customer Support	M	Ability to provide online training for software solution		
1.036		M	Ability to respond within a 15 min. window on a M-F 8-5 schedule, for any system related questions.		
1.037		H	Ability to furnish operational support documentation for end users and support staff.		
1.038		H	Ability to initiate a support request/incident for questions regarding software		

2. Work Management					
Req. ID	Requirement Category	Importance	Requirement	Vendor Response	Comments
2.001	Public Facing Web Portal	H	Ability to provide a web-based portal for the public (External) to submit online SR.		
2.002		H	Ability for system to require an external customer to provide predefined information (Name, Phone number, Email address) on new customer inquiries/SR.		
2.003		H	Ability to implement, if desired, a QA/QC step before an entry from the public portal becomes a SR		
2.004		H	Ability to prevent the creation of duplicate accounts.		
2.005		H	Ability for user of public portal to track status of request		
2.006	Request	H	Ability to provide a Service Request (SR) form to collect essential information about a new request.		
2.007		H	Ability to trace original SR ID throughout a work management lifecycle.		
2.008		H	Ability to assign a unique ID to each SR.		
2.009		H	Ability to determine and fill out specific information about the employee entering the request (e.g., Name, Organization, Location) from their secure Login ID.		
2.010		H	Ability to include at least the following validated data fields in the SR form: Requestor, Requested for, Location, Asset(s), Date Requested, Safety Issue, Request Type, Description (memo), Notes		
2.011		H	Ability to include additional contact information for individuals wishing to be notified of request status		
2.012		H	Ability to select a problem/incident type from a customizable drop-down list.		
2.013		H	Ability to group problems/incident types into categories for easier search capabilities		
2.014		H	Ability to require that certain fields on SR form be completed before form can be submitted.		
2.015		H	Ability to request a service on a specific asset.		
2.016		H	Ability to use a predefined rules-based workflow to route SR.		
2.017		M	Ability to determine priority based on fields in SR form.		
2.018		H	Ability to associate digital files (e.g., photos, videos, and documents) with a SR.		
2.019		M	Ability to autocomplete contact information based on previous requestors data and other database (i.e. parcel owner database)		
2.020		M	Ability for system to automatically identify duplicate contacts and suggest proper selection to eliminate duplicate information.		
2.021		H	Ability to allow SRs to be created and closed without assets tied to them.		
2.022		H	Ability to request a service on multiple assets with a single SR.		
2.023		H	Ability to associate multiple request types with one SR		
2.024		H	Ability to escalate requests based on assigned SR priority.		
2.025		H	Ability for a responsible party to approve a SR to create a WO.		
2.026		H	Ability to refer SR back to requestor with a status and/or comment requesting additional information.		
2.027		H	Ability to group multiple SR for same inquiry/event		
2.028		H	Ability for system to provide a method to route customer SR to a predefined group based on the request types.		
2.029		M	Ability for system to automatically use business rules to identify and assist with management of duplicate requests.		
2.030		H	Ability to reassign SR to another supervisor/field crew.		

2. Work Management

Req. ID	Requirement Category	Importance	Requirement	Vendor Response	Comments	
2.031	Work Order	H	Ability to allow WOs to be created and closed without assets tied to them.			
2.032		H	Ability to modify a WO type.			
2.033		H	Ability to assign a due date to a WO			
2.034		H	Ability to group WOs into a "PROJECT."			
2.035		H	Ability to generate a WO that includes multiple tasks or activities.			
2.036		H	Ability to generate multiple WO's from one SR			
2.037		H	Ability to enter labor hours, materials, and equipment usage by task, for each assigned resource, for each task, per day.			
2.038		H	Ability to add additional resource(s) to a WO.			
2.039		H	Ability to update asset data while performing the WO task.			
2.040		H	Ability to allow assets without any fixed locations to be added to WOs (e.g.: Right of way mowing).			
2.041		H	Ability to create standard pick lists of employees, materials, equipment for assignment to WOs for resources not pulling from other data sources			
2.042		H	Ability to automatically assign WO to employees based on geographical areas and work type and ability to override automatic assignment and manually assign work			
2.043		H	Ability to reassign WO to another supervisor/field crew.			
2.044		H	Ability to notify staff that a WO is being assigned to them.			
2.045		H	Ability to assign a flat labor rate against hours charged on a WO, where applicable.			
2.046		H	Ability to track materials issued to a WO: interfacing with the inventory, and making automated adjustments to inventory levels.			
2.047		Scheduling	H	Ability to generate a daily work list for a staff person based on their assignments including the estimated time to complete the work.		
2.048			H	Ability to escalate WO based on assigned WO priority and due date.		
2.049	H		Ability to schedule future events (e.g., follow up work activities, condition assessments, etc.) based on the outcome(s) of the current activity.			
2.050	H		Ability to manually schedule different tasks in a WO.			
2.051	H		Ability to connect follow-up or subordinate WO(s) to a primary or original WO (e.g., a follow-up WO for landscaping repair linked to an irrigation repair WO).			
2.052	M		Ability to define rule-based escalation procedures.			
2.053	H		Ability to work orders be automatically generated based on applicable data from a SCADA system			
2.054	Completion	H	Ability to automatically close request if associated work orders have been closed			
2.055		H	Ability to send automatic notification to requestor of work completed through email or text message			
2.056		H	Ability to send automatic notification to additional interested individuals of work completed through email or text message			
2.057		H	Ability to remove closed WO's from user's list of active work			
2.058	Miscellaneous	H	Ability to convert/import/attach or otherwise archive and make accessible historical SR/WO data from other systems/databases not through individual data entry.			
2.059		H	Ability to assign review/approval workflow for SR and WO's based on request/work type			
2.060	Analytics	M	Ability to provide the ability to generate kit part lists associated with a job plan.			
2.061	Analytics	H	Ability to provide the ability to generate a historical record for each asset/component based on an equal division of costs, when a single WO work order for a single activity is completed on multiple assets/components.			

3. Asset Management					
Req. ID	Requirement Category	Importance	Requirement	Vendor Response	Comments
3.001	Asset Inventory	M	Ability to store attribute information (add & update) on assets		
3.002		M	Ability to store CIP project information related to asset		
3.003		M	Ability to capture dimensional attributes of an asset and its components (e.g.: shape of an underground pipe, location of the valves and fittings).		
3.004		M	Ability for a user with appropriate credentials to create, modify, archive, and retire an active asset record including relevant attributes.		
3.005		M	Ability to allow each asset record to have up to 50 user-defined fields.		
3.006		M	Ability to define an asset in the system using an asset hierarchy. In the comments section, please describe the way in which the asset hierarchy is implemented.		
3.007		M	Ability to create asset categories and assign categories to assets.		
3.008		H	Ability to search for asset records using the user-defined fields.		
3.009		H	Ability to add and adjust asset information (e.g., expected life of asset, historic designation, etc.).		
3.010		H	Ability to store condition, inspection and work history data for the life of an asset, including preservation of historic data even after the asset is decommissioned.		
3.011		H	Ability to provide asset parent-child relationships as well as the ability to attach components to an asset (example: traffic sign on a traffic signal pole).		
3.012		L	Ability to supply a link to a vendor (or a 3rd party) website for parts and manuals.		
3.013		L	Ability for field technicians to access a parts manual from their field/mobile devices.		
3.014	Asset Management	H	Ability to track the life of an asset and provide visibility into the replacement of an asset and accessibility to all history related to an asset		
3.015		M	Ability to summarize asset condition by heat maps within GIS.		
3.016		L	Ability to assign a permanent future use or status to an asset, to indicate for example, that an asset will be replaced in a future capital project.		
3.017		H	Ability to group assets within a category and area in GIS format to help schedule and coordinate preventative maintenance activities.		
3.018		M	Ability to support asset management by geographically overlaying the locations of proposed capital projects and the AMS assets, to highlight those assets that will be impacted by the proposed project.		
3.019		H	Working from within the GIS environment, select a GIS feature that represents an asset or user defined geographic area, and view all capital project data related to that asset or area, including work order history.		
3.020		H	Ability to access asset planned replacement schedules while planning repair or maintenance of the asset.		
3.021		H	Ability to help managers to prioritize asset maintenance and repair (e.g., based on assessed condition, repair history, repair vs. replacement cost, and useful life, etc.).		

3. Asset Management					
Req. ID	Requirement Category	Importance	Requirement	Vendor Response	Comments
3.022	Assessments	H	Ability to tailor inspection/assessment based on asset type.		
3.023		H	Ability for system to provide a central repository of condition information. The module should be closely integrated with the SR's/Work Management, and Asset Management modules.		
3.024		H	Ability to provide a flexible and open methodology with ability to link to a 3rd party software or additional module for asset condition modelling, depreciation and valuation.		
3.025		H	Ability to use industry standards to identify assets (e.g. Uniformity, Master Format, etc.), condition/deficiency codes, repair codes, severity codes, priority codes, etc.		
3.026		H	Ability to incorporate other information (e.g. photos, drawings, and other data) with Condition Assessment records.		
3.027	Analysis	H	Ability to do predictive analysis for an asset's useful life and lifecycle maintenance with an ability to manually add historic data.		
3.028		H	Ability to do a visual comparison side-by-side of an asset from one inspection vs. another (E.g.: visual comparison of a segment of pipe inspected and photographed in 2017 vs. inspected and photographed in 2015).		
3.029		H	Ability to use statistical analysis tools available within the system to produce data related to asset prioritization and ranking, using asset history, maintenance history and activities, condition assessments, and other standards and data. Please describe the capability.		
3.030		H	Ability to display life-cycle cost		
3.031		H	Ability to capture and maintain (track) life-cycle ratio (percent of life-cycle used)		
3.032	Maintenance	H	Ability to maintain (calculate, maintain, document and report on) the remaining useful life for an asset		
3.033		H	Ability to maintain (enter and report on) the equipment criticality for an asset		
3.034		H	Ability to maintain (enter and report on) the potential risk for an asset		

4. Preventive Maintenance					
Req. ID	Requirement Category	Importance	Requirement	Vendor Response	Comments
4.001	Scheduling	H	Ability to be able to schedule PM and generate work orders on schedules defined by authorized users.		
4.002		H	Ability to include a sequencing tool for ordering the PM work.		
4.003		H	Ability to have functionality to schedule maintenance by asset by location.		
4.004		H	Ability to have functionality to schedule maintenance by asset by maintenance type.		
4.005		H	Ability to be able to accommodate the development of job plans for association with work orders.		
4.006		H	Ability to be able to accommodate the development of job plans for association with work orders that include multiple steps.		
4.007		M	Ability to provide the ability to duplicate job plans for modification and use as templates.		
4.008		H	Ability to accommodate PM schedule recurrence by a floating method such as a number of days from the last PM close date.		
4.009		H	Ability to accommodate PM schedule recurrence by a fixed method such as some duration of time regardless of when the last was completed.		
4.010		H	PM schedules will be able to be set and flow down from the parent asset, or be set individually by child asset.		
4.011		H	Ability to track modifications to PM scheduled tasks.		
4.012		H	Ability to control the authorization of users to apply modifications to PM scheduled tasks.		
4.013		H	Ability to schedule PM tasks by standardized frequency types of days, weeks, calendar months, calendar years (including leap years).		
4.014		H	Ability to schedule PM tasks by specified events		
4.015		H	Ability to schedule PM tasks by asset attributes		
4.016		H	Ability to schedule inspections and condition assessment of assets as repeating events.		
4.017		H	Ability to schedule inspections and condition assessment of assets based on asset attributes		
4.018	H	Ability to maintain, calculate and determine the next inspection date based on user-defined thresholds and combinations of the percentage of remaining life, equipment criticality, and potential risk for an asset.			
4.019	Work Management	H	Ability to access and display documents at PM creation.		
4.020		H	Ability to assign an individual asset or multiple assets to a specific PM template.		
4.021		H	Ability to automatically generate a follow-up work order if an inspection generates a result outside the desired value		
4.022		H	Ability to generate unscheduled work orders from PM templates		

4. Preventive Maintenance					
Req. ID	Requirement Category	Importance	Requirement	Vendor Response	Comments
4.023	Inspection	L	Ability to import CCTV inspection results from video inspection software.		
4.024		H	Ability to store typical and user-defined inspection information related to parks systems including playgrounds		
4.025		H	Ability to store typical and user-defined inspection information related to wastewater, water, stormwater, traffic assets		
4.026		H	Ability to automatically update current and historical asset inventory data based on information collected in an inspection record. This will prevent the need for duplicate data entry on both the inventory and inspection records.		
4.027		M	Ability to add multiple observation records to an inspection form		
4.028		H	Ability to attach or link a photo directly to an observation		
4.029		M	Ability to summarize condition ratings for a selected group of individual assets for comparison purposes to other groups of individual assets.		
4.030		H	Ability to allow for multiple inspections per asset and store inspection results including date and inspector information for each inspection.		
4.031		H	Ability to store a link to, and view, a checklist or specific instructions for any type of inspections conducted at a location where the parcel would be the asset		
4.032		H	Ability to create PM templates for any asset or equipment.		
4.033		H	Ability to create a PM template directly from an asset record		
4.034		H	Ability to attach any type of documents such as, but not limited to checklists, specific instructions, safety procedures, specialized maintenance information or repair procedures to a PM template.		
4.035		H	Ability to automatically populate the overflow information in a sanitary sewer overflow record - eliminating data entry.		
4.036		H	Ability to view any type of documents such as, but not limited to checklists, specific instructions, safety procedures, specialized maintenance information or repair procedures via a PM template.		
4.037		PM Tracking	H	Ability to prevent multiple work orders from being generated to perform PM tasks on a given asset/equipment around the same time of the released PM	
4.038	H		Ability to view and track PM schedules by asset/equipment		
4.039	H		Ability to view and track PM schedules by work task		
4.040	H		Ability to notify personnel including but not limited to supervisors, assigned crews or employees of upcoming PM work orders		
4.041	H		Ability to have the ability for the authorized user to de-select ("uncheck") tasks on a PM template that do not apply to a specific PM work order.		

5. GIS						
Req. ID	Requirement Category	Importance	Requirement	Vendor Response	Comments	
5.001	Integration	H	Ability to consume and interact with major Geographic Information System (GIS) platforms, e.g., ESRI web services, Google Maps, Bing Maps, etc. within the AMS application. Please indicate which are supported and the number of web services available in the client.			
5.002		H	Ability to display on a map the location and status of a selected WO(s); examples of selection sets, all work orders for today, since a certain date, of a certain type or types, etc.			
5.003		H	Ability to create and close a WO from a selected map feature(s) and a service request from a location(s).			
5.004		H	Ability to associate many WO's to one GIS feature.			
5.005		H	Ability to provide a way for any WO activity to be linked to any GIS feature. (property, address point, building, etc.)			
5.006				Ability for authorized users (by role) to update point, line, or polygon data representing the location of a work order activity		
5.007		H		Ability to consume a variety of geospatial services , for example geoprocessing services, heat maps, etc.		
5.008		L		Ability to provide a variety of geospatial services , for example geoprocessing services, heat maps, etc.		
5.009		H		Ability to display user-configurable map views; i.e., the ability to have different map layers visible based on preference, display scale, and/or work role.		
5.010		H		Ability to have tools in map view for performing basic geographic related tasks. E.g.: calculating length, area between assets, determining relationships between assets, WO's, SRs to other GIS features . Provide list of tools, widgets, etc. available in map views.		
5.011		H		Ability to provide full integration for accessing AMS information, via a selection of a data record(s), and to display asset information in map.		
5.012		H		Ability to display selected assets, activities or any table in database related to geographic information in a map		
5.013		M		Ability to symbolize data in maps, as charts/graphs, or color codes based on database or geospatial values, including custom objects and fields.		
5.014		M		Ability to control display of text size and other graphics based on scale of map presentation.		
5.015		H		Ability to interactively select an asset(s) from a map as part of submitting a SR and creating WO		
5.016		H		Ability to interactively select an asset(s) from geospatial tools (i.e. select by location, multi-selection tools, etc.) from a map as part of submitting a SR and creating WO		
5.017		H		Ability to create an optimized route for list of work orders assigned to a staff member		
5.018		H		Ability to consume a network routing service to provide an optimized route for list of work orders assigned to a staff member		
5.019		M		Ability to select an asset(s) in map view, and view AMS data related to that asset, including, for example, manuals, work order history, inspection data, cost data, capital project data, summary reports, record management system drawings, as- built drawings, etc. Please describe the selection methods available, record selection limitations, filters, etc. for asset selection.		
5.020				Ability to update asset information without creating a WO that will result in a change on the GIS database. Explain process		
5.021				Ability to update asset data on versioned data directly or through a web service		
5.022	Exporting	L	Ability to export of assets/records in open industry standards such as Geography Markup Language (GML), Keyhole Markup Language (KML), shapefile, XML.			
5.023		M	Ability to display aerial imagery from various formats (.sid, geotif, jpeg2000, etc.)			
5.024		H	Ability to print and export (e.g.: in a PDF) a map with a legend, bar scale, coordinates and notes displaying the WO or Asset location.			

6. Mobile					
Req. ID	Requirement Category	Importance	Requirement	Vendor Response	Comments
6.001	Mobile	M	Ability to provide support for tablet or smartphone platforms, including but not limited to: Windows 10 mobile or later, Google Android OS, or Apple iOS. Please specify.		
6.002		H	Ability to access WOs from a mobile device using wireless communications.		
6.003		H	Ability to update WOs from a mobile device using wireless communications.		
6.004		H	Ability to allow creation of a new asset from a smartphone and/or tablet		
6.005		H	Ability to automatically track service time via clock start/stop on mobile device.		
6.006		H	Ability to have the mobile platform customized to the user role and in-field crews have minimal number of WO steps to complete updates and check-ins.		
6.007		H	Ability to support remote display of GIS maps on a mobile device with adequate performance and capacity.		
6.008		M	Ability to support remote display of documents and drawings (.DWG/.DWF format) accessed through AMS on a mobile device with adequate performance and capacity. Describe what formats are supported for viewing on mobile devices, in the comments section.		
6.009		H	Ability to take and attach pictures to work orders from a mobile device (smartphones and tablets)		
6.010		H	Ability to designate map service, base map service, feature service, etc. in mobile application. Specify number of services mobile application can consume.		

7. IT					
Req. ID	Requirement Category	Importance	Requirement	Vendor Response	Comments
7.001	Architecture	H	Ability to allow internal and external users to use a fully web-based environment to allow access via current versions of Internet Standard browsers or two versions earlier than current. Internet Explorer, Edge, Chrome, Firefox, and Safari)		
7.002		M	Ability to configure the application without limits on length of table, column, or field names. Describe if any limits exist.		
7.003		H	Ability to use standard network connectivity protocols (e.g., TCP/IP). Specify which relevant industry standards are supported.		
7.004		H	Ability to deliver all public-facing web content using adaptive or responsive page design so that it is readable and usable on a variety of mobile devices with mobile web browsers. If your application uses or requires a specific app indicate that in the comments.		
7.005		M	Ability to support reuse of code, processes, or templates to implement business rules and logic. Describe in comments how this is done in the comments section.		
7.006		M	Ability to support additional non-production environments for development, test/staging, and training. Describe licensing and the process/schedule for setting up and maintaining multiple environments.		
7.007		M	Ability to easily populate non-production environments with data from the production environment.		
7.008		H	Ability to support a high availability redundant infrastructure. Describe the disaster recovery process.		
7.009		H	Ability to fully support/compliant with Service Oriented Architecture (SOA).		
7.010		H	Ability to provide standard procedural documentation Including, but not limited to server configuration, central data storage configuration (SAN), and network configuration.		
7.011		H	For on premise solutions, ability for all servers to be virtualized on VMWare (or HyperV) hosts. If some servers require physical servers please provide specifications.		
7.012		H	For on premise solutions, ability to support implementation of only one primary function per server. For example, web server and database server to be implemented on separate servers.		
7.013		H	For on premise solutions, ability for City of Mesquite to support using SQL Server DBMS, minimum version 2012. Describe comparable alternative.		
7.014		H	Ability for on premise solutions to be supported by City of Mesquite, server operating system must be MS Windows 2012 R2 or higher.		
7.015	Configuration	H	Ability to scale up/expand capacity rapidly in the event of unexpected growth / activity for both internal and external users.		
7.016		H	Ability for the system to implement a database architecture incorporating industry best practices for indexing and database normalization.		
7.017		H	Ability to add new tables or objects and incorporate the data information reports and queries.		
7.018		H	Ability to add custom fields (attributes) to any object within the system and to use and report on these fields in forms, system workflows. Describe any limitations on this feature.		
7.019		H	Ability for users to subscribe to alerts for system events or reports.		
7.020		H	Ability to sustain, without additional work, the configurations and modifications that have been made to the system for City of Mesquite. Please describe any special considerations required.		

7. IT					
Req. ID	Requirement Category	Importance	Requirement	Vendor Response	Comments
7.021	Performance	M	Ability to support up to 500 concurrent users without visible impact on performance. Specify any particulars of this capacity. .		
7.022		H	Ability to manage concurrency issues in a multiple user environment where the same record is accessed and updated by multiple users at the same time.		
7.023		L	Ability to support stress testing and other automated testing of the system. Describe how system provides for this.		
7.024		H	Ability to access, download, or print work order data from field should take no longer than typical commercial applications (e.g., email) given a reliable data connection.		
7.025		H	Ability for the system to provide a way for an administrator to notify all system users in the event of a downtime.		
7.026		H	Ability for Software as a Service (SaaS) solution to maintain a 99% availability rate during normal City of Mesquite business hours (6 AM - 10 PM weekdays, 7 AM - 5 PM weekends CST), including planned system maintenance.		
7.027	Integration	H	Ability to use industry-standard Application Programming Interfaces (API) or similar integration tools to facilitate data exchange.		
7.028		H	Ability for bi-directional APIs		
7.029		H	Ability to integrate with Pavement software, PAVER		
7.030		H	Ability to integrate with the City's ERP platform, MUNIS		
7.031		H	Ability to integrate with CUES, the City's sanitary sewer inspection module.		
7.032		H	Ability to integrate with document sharing platform, SHAREPOINT		
7.033		L	Ability to query AMS data from other databases as part of a workflow, to assist in integration with other systems that do not provide APIs.		
7.034		L	Ability to provide entity relationship diagram of the database entities		
7.035		L	Ability to adhere to open standards		
7.036		L	Ability to read and interpret barcodes , QR codes, or RFID to support work execution.		
7.037	H	Ability to manually and automatically generate outgoing emails with attached documents, or links to documents, from within the system.			

7. IT					
Req. ID	Requirement Category	Importance	Requirement	Vendor Response	Comments
7.038	Security	H	Ability to support system administration for end-user management to assign role based security access rights (e.g., add, delete, change, modify access levels and groups). Ability to provide application level security, including user or group security access configuration and enforcement for the following areas, including but not limited to: <ul style="list-style-type: none"> ● Row/field level on data elements in databases. ● Access to system modules or functionality. ● Access to specific fields, work flow, screens or reports in the user interfaces. ● Mandatory data fields based on specified/defined workflow or information. Users can belong to more than one group.		
7.039		H	Ability to secure access to system via password. Describe (in comments) your password management policy and software capabilities.		
7.040		H	Ability to cancel inactive accounts with pre-set expiration days or on employee termination dates.		
7.041		H	Ability to support automated logout of users based on specified inactivity and idle timeout periods. Describe configuration options.		
7.042		H	Ability to view users by department, section, groups, and other privileges.		
7.043		H	Ability to invoke a configurable audit trail to track changes including user, date and time of change, and before and after data at a defined level of granularity.		
7.044		H	Ability to generate alerts for security and auditing events.		
7.045		H	Ability to protect audit trail files from unauthorized alteration by system users.		
7.046		H	Ability to have security features to restrict changes to records based on defined criteria (e.g., stage in workflow) with override capabilities.		
7.047		H	Ability to prevent users from permanently deleting records and instead make them inactive or hidden, e.g., this allows the removal of records created in error, the ability to undo deletions, and maintains an audit trail.		
7.048		M	Ability to store all or selected data in an encrypted format.		
7.049		M	Ability for City of Mesquite IT Helpdesk staff to decrypt data as need.		
7.050		H	Ability to provide different levels of online access to the public based upon user ID and role.		
7.051		H	Ability for online and web-based interfaces to perform input validation and follow industry best practices such as OWASP for web application security.		
7.052		H	Ability to use encrypted communication (e.g., HTTPS, SSL) for all application functions, including traffic between application tiers. Indicate what encryption protocols you use.		
7.053		M	Ability to manage access to data located on remote devices in the event the device is lost or stolen. Please describe how this would be achieved.		
7.054		H	Ability to disable auto login and password saving features.		
7.055	H	Ability to integrate with Single Sign On (SSO) and directory service systems (e.g., MS Active Directory or Azure Active Directory).			

7. IT					
Req. ID	Requirement Category	Importance	Requirement	Vendor Response	Comments
7.056	Security	M	Ability to provide some functions to the public without requiring a username and password, such as online work requests or certain reports.		
7.057		M	Ability to log out an user due to inactivity after a specified period of time.		
7.058		M	Ability to present the user with a 1 minute warning before logging out due to inactivity.		
7.059		M	Ability for the system to ensure the user's privacy in accordance with City and State regulations		

8. Finance

Req. ID	Requirement Category	Importance	Requirement	Vendor Response	Comments
8.001	Finance	H	Ability for real-time billing integration including multi-department access to billing data		
8.002		H	Ability to interface with the Tyler Cashiering software system. Please detail.		
8.003		H	Ability for general Ledger data export. Please detail.		
8.004		M	Ability to initiate refund checks in Financial system. Please detail.		
8.005		H	Ability to generate an alert to identify WO(s) that have been flagged as billable		
8.006		M	Ability to change WO status based on payment		
8.007		H	Ability to interface with in-house Accounts Receivable platform for invoice creation and distribution		
8.008		H	Ability from one WO to allocate labor and material costs to separate departments for shared projects, cross billing, chargebacks and facilities.		

9. Reporting					
Req. ID	Requirement Category	Importance	Requirement	Vendor Response	Comments
9.001	Reporting	H	Ability to export the results of a report document to a structured data format. (e.g., .xls, .csv, etc.). List supported formats.		
9.002		H	Ability to utilize a 'Save-As' command to save a copy of an existing report for modifications in the following formats: Text, XLS, PDF, HTML, RTF, TIFF		
9.003		H	Ability to track expense and Labor for each capital asset (i.e. year to date cost)		
9.004		H	Ability to create reports based on a date range and combinations of other parameters.		
9.005		H	Ability to create pre-packaged custom reports		
9.006		H	Ability to create ad-hoc reports within AMS		
9.007		H	Ability to quickly export any search results to Microsoft Excel		
9.008		H	Ability to support mixed data and/or graphics embedded in reports.		
9.009		H	Ability to include dynamically-generated map representations in reports.		
9.010		H	Ability to search on comment fields.		
9.011		H	Ability to email distribution of reports, approval requests, notifications of scheduled WO's from within the system.		
9.012		M	Ability to access AMS data through commercially available report writers. Please indicate what report writers are supported. Please indicate any limitations on accessing AMS data.		
9.013		H	Ability to create reports where results are driven by user-supplied parameters.		
9.014		H	Ability to create location-based reports (geo-reports) of assets or WO's based on geographic region or user defined areas and subjects.		
9.015	Dashboard	H	Ability to provide configurable dashboard-style reporting for key performance indicators (KPI)		
9.016		H	Ability to control visibility on dashboards based on user role and security model.		
9.017		H	Ability to use the dashboard to communicate status of AMS data. (e.g., WO status, asset condition, key performance indicators, etc.)		
9.018		H	Ability to view data in map view on dashboards		
9.019	Query	L	Ability for a user to make queries they developed available for use by others.		
9.020		H	Ability for a user to create, save, and edit their own ad hoc queries for later use.		

Appendix C
Selection Matrix

Selection Matrix

Asset Management Software, RFP #2018-008



Reviewer:

Date:

Vendor being Reviewed:

Criteria	Weight	Score (1-10)
Proposal Review		
Ease of Use <ul style="list-style-type: none">• Service Request to Work Order flow• Reporting• Data Entry	20%	
Price	10%	
Customer Support	15%	
Public/Upper Management Interface <ul style="list-style-type: none">• Ability to report issue and track response• Ability to view data easily by upper management	15%	
Product's ability to meet City's functional objectives and requirements as well as future needs through enhancements and upgrades <ul style="list-style-type: none">• Proven success for other entities• Ability to meet functional objectives	40%	