CITY OF COFFEYVILLE
BOARD OF COMMISSIONERS AGENDA ITEM

MEETING DATE	10/27/2015	
RESOLUTION OR ORDINANCE NUMBER	R-15-147	
AGENDA TITLE	Approval to enter into contract with Montgomery County as a subcontractor for pictometry aerial imagery and GIS base layers.	
REQUESTING DEPARTMENT	Engineering	
PRESENTER	Thomas Osborn, Superintendent of Engineering	
FISCAL INFORMATION	**COST AS RECOMMENDED:**	$9,218.00 Payable in 3 equal payments of $3,072.67 yearly
	BUDGET LINE ITEM:	N/A
	BALANCE AVAILABLE:	N/A
	NEW APPROPRIATION REQUIRED:	[x] Yes [] No
PURPOSE	To discuss a proposed agreement between Montgomery County and the City of Coffeyville for aerial imaging and base layer data for GIS mapping.	

BACKGROUND	In 2011 the City of Coffeyville launched its Geographic Information Systems (GIS) mapping system. When creating the base map of the city, the 2010 pictomerty orthogonal imagery from Montgomery County was used as a nearly current back drop for the system. We then paired the image data with centerline and parcel data, again provided by the county, to form the base mapping layers that all the GIS maps for utilities and public service are created on.
	
	When utility layers are overlaid users can get a better sense for where utilities are located in comparison to the street, sidewalk, trees, fences, fire hydrants etc… public service can see where pavement is in disrepair or alleyways are overgrown at the time of the fly over. The use of aerial imagery in our maps was stated to be a great move back in 2011 when the commission first got to see maps on which the location was easily discernable. The planning and zoning commission is now able to not only see what the zoning of properties surrounding a case are but also what is located on the adjacent properties.
	
	All of these advantages are dependent upon no change to objects on the maps. Any street realignments, structures removed, fire hydrants moved, structures added, fire hydrants added, new streets & alleys, etc. results in our imagery becoming dated and inaccurate, which in turn has an impact on the accuracy of the overall GIS system. For these same reasons Montgomery County is now looking to update their imagery and are requesting help with funding to not only re-fly the whole county but in cities like Independence, Caney, Cherryvale, and Coffeyville to have higher resolution image data that the City will be able to use in our system. This will improve the quality of the background imagery, thus increasing accuracy and usability of the City's existing GIS system.
	
	With this agreement the city would have logins for web viewing the oblique imagery to view all sides of a building or measure heights of structures or utility poles.
	
	This just scratches the surface of the benefits the City will receive.
	
	The county is agreeing that they will provide quarterly updates to their base layers. That means:
	
	• Updated parcel information
	  o last time it was 18 months
	• They will provide ownership data
	  o Not previously provided
	  o Have been requesting this for 4 years
	• Center lines
	  o Last update 4 years ago

BACKGROUND CONT.	A small sampling of the many possible uses of the imagery by department includes:
	
	Electric
	
	❖ Line clearances
	❖ Planning for tree trimming
	❖ Look at structures
	  ➢ Street lights
	  ➢ Signals
	  ➢ Sub stations
	❖ Accurate latitude/longitude coordinates
	
	Economic Development
	
	❖ Marketing for retail & new employers
	  ➢ Vacant buildings
	  ➢ Lots ready for construction
	  ➢ Higher resolution, up to date maps, which means higher quality presentations, proposals, brochures, etc.
	❖ Utility locations on site
	❖ RFP images
	  ➢ Higher quality and current/not outdated
	
	Stormwater
	
	❖ Planning for clearing drainage ways
	❖ Assess how drainage ways have wandered
	
	Coffeyville Connection
	
	❖ Measure heights for antennas
	❖ Visually see what is encompassed in an access point's range
	❖ Visually see what businesses are along fiber routes for marketing
	❖ Infrastructure expansion planning
	
	Water/Wastewater
	
	❖ Quickly locate buried valves for repairs
	❖ Find manholes under debris
	❖ Visualize right of ways
	
	Code Enforcement
	
	❖ Can visualize their location when in the field
	❖ Utilize parcel information on a daily basis
	  ➢ Ownership
	  ➢ Property boundaries

BACKGROUND CONT.	Engineering ❖ Presentation documents ➢ Grant applications ➢ Public information ❖ Map requests ➢ Confirm zoning ➢ Visualize flood zone locations ➢ Transportation planning ❖ Improved ability to identify objects on the map ➢ With straight down orthographic imagery it is not always easy to identify what an object on the map is. But with oblique imagery you can view the object from all four sides, quickly and accurately determining what the object is, avoiding wasted time identifying the object in the field. ➢ The higher resolution will also make identifying objects more quick and accurate. These are just a few of the direct uses for the pictometry and base layers that are involved with this agreement. When paired with the layers generated by the City of Coffeyville, the possible impact of accurate imagery is incalculable.
SPECIAL NOTES	We propose to evenly split the costs between 7 departments. $438.95 per department per year from the following funds: ✓ Water Utility ✓ Wastewater Utility ✓ Stormwater Utility ✓ Electric Utility ✓ Coffeyville Connection ✓ General Fund ✓ Economic Development. While there is no way to calculate a ROI with the use of our GIS mapping System (including the aerial base imagery) the city applies for and has received several grants ranging from $200,000 to $1,000,000. These grants are highly competitive and being able to have accurate high resolution figures in the application to catch the reviewers eyes could be a difference between us receiving the grant or another entity. The same can be stated with marketing materials for new industries looking to relocate.
ANALYSIS	

PUBLIC INFORMATION PROCESS	N/A
BOARD OR COMMISSION RECOMMENDATION	N/A
STAFF RECOMMENDATION	Staff overwhelmingly recommends entering into the agreement with Montgomery County for Pictometry.
REFERENCE DOCUMENTS ATTACHED	• Department support letters.pdf, • MG County Agreement.pdf

RESOLUTION NO. R-15-147

A RESOLUTION TO AUTHORIZE THE EXECUTION OF AN AGREEMENT BETWEEN THE BOARD OF COUNTY COMMISSIONERS OF MONTGOMERY COUNTY AND THE CITY OF COFFEYVILLE TO SHARE IN THE COST OF UPDATING PICTOMETRY AERIAL IMAGERY.

BE IT RESOLVED by the Board of Commissioners of the City of Coffeyville, Kansas that the Mayor and City Clerk be and are hereby authorized and directed to execute an agreement with the Montgomery County Board of Commissioners to share in the cost of updating the Pictometry aerial imagery at a total cost of $9,218. Three equal annual installments of $3,072.67 will be paid on or before March 1, 2016, on or before March 1, 2017, and on or before March 1, 2018.

ADOPTED THIS 24th DAY OF NOVEMBER 2015.

_____
Christopher V. Williams, Mayor

ATTEST:

_____
Cindy Price, City Clerk

APPROVED AS TO FORM AND LEGALITY:

_____
Paul Kritz, City Attorney

AGREEMENT

THIS AGREEMENT is entered into by and between the Board of County Commissioners of Montgomery County, Kansas, hereafter County, and the City of Coffeyville, Kansas, hereafter City, effective 2015.

WHEREAS, County is in the process of updating aerial imagery at a significant cost to it.

AND WHEREAS, City is desirous of obtaining access to the aerial imagery as it pertains to the City and agrees to share in the cost of obtaining the same.

NOW THEREFORE, in consideration of the mutual covenants and agreements hereinafter contained, the parties agree to the following:

1. Services to be provided by County: County will provide City Pictometry imagery; parcel layers to include property lines, center lines, city limits, streets, property ownership information, property values and parcel dimensions; assistance with one layer annually (thereafter a small charge may apply); reasonable plotter usage consisting of up to four large aerial maps annually (thereafter a small map charge will apply); and data layer updates quarterly.

2. Compensation: The cost of the services is broken down into the following categories and amounts:

3-inch oblique & ortho imagery (includes tiles and mosaic) - 18 sectors (covers the City of Coffeyville)	$7,479.00
9-inch tiles and area wide mosaic (includes tiles and mosaic) - 18 sectors (covers the City of Coffeyville)	$1,314.00

Pictometry connect and media drive capacity	$ 425.00
TOTAL	$9,218.00

3. Installment Payments: For the above described services, City agrees to pay County the total sum of $9,218.00 in three equal annual installments of $3,072.67 on or before March 1, 2016, on or before March 1, 2017, and on or before March 1, 2018. Should City fail to make a timely payment, and after ten (10) days' written notice to City, the City's password will be disabled and all data requested by the City thereafter will be at cost, and the cost will vary depending on the complexity of the request.

BOARD OF COUNTY COMMISSIONERS,
MONTGOMERY COUNTY, KANSAS

By:
Fred Brown, Chairman

ATTEST:

Charlotte Scott Schmidt, County Clerk

CITY OF COFFEYVILLE, KANSAS

By:
Chris Williams, Mayor

ATTEST:

Cindy Price, City Clerk

Coffeyville
Municpal Light & Power

616 Spring St. • P.O. Box 1629 • (620) 252-6180
Coffeyville, Kansas 67337-0949
www.coffeyville.com

October 22, 2015

Subject: Pictometry

The Electric Department uses our GIS system on a regular basis and would like the City to incorporate Pictometry into our system.

We would like to take advantage of the high resolution details and oblique angles to look at pole structures, street lights and substations and in addition to distances be able to look at heights, clearances, and accurate latitude/longitude coordinates.

We can also use the information to assist us in prioritizing our tree trimming program.

Gene Ratzlaff

Coffeyville
IT Department

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Coffeyville, Kansas 67337-0949
www.coffeyville.com

October 22, 2015

Re: Pictometry

Both the Internet Utility and IT Department use the GIS system heavily. This is how we map out fiber routes and locations for access points.

It is very important for us that we continue to have the latest images available so that we have a real understanding of the terrain and layout of properties and such.

Chris Felix
IT Manager
City of Coffeyville

Coffeyville
City Manager

102 W. 7th St. • P.O. Box 1629 • (620) 252-6163
Coffeyville, Kansas 67337-0949
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October 22, 2015

Mayor and Commissioners,

Updated aerial imagery and parcel data is a key component to the economic development process. From parcel data to utility locations and availability, we are constantly pulling GIS data for potential and current businesses in Coffeyville. The current system is not integrated, and frequently is unavailable altogether. Considering that most State proposals only allow us to respond in a 48 hour time window, delays due to technology could potentially cost us precious hours to successfully respond to a business's RFP.

I believe this new Pictometry system can help our economic development responses, both to existing and new businesses we are recruiting to our community. Please consider the investment into this system as one that will add to our economic development toolbox.

Sincerely,

Trisha Purdon

Trisha Purdon
Assistant to the City Manager

Coffeyville
Public Works

102 W. 7th St. • P.O. Box 1629 • (620) 252-6100
Coffeyville, Kansas 67337-0949
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October 22, 2015

Re: Pictometry

The Water Utility, Wastewater Utility, Stormwater Utility, and Public Service Department all support the proposal to update and improve the aerial photography imagery, which will be used as the background mapping for our GIS System.

As the foundation for the GIS mapping, accuracy of the imagery is very important. The higher resolution being offered will improve the usability and accuracy of the maps. It will also provide higher quality images when needed for presentations, grant applications, brochures, etc.

I believe that the oblique angle photography being offered will also provide many benefits not available from two-dimensional orthographic imagery. Examples include measuring heights, identifying whether an object is the roof of a structure or just a concrete slab, and many other benefits, including some we may not even realize yet.

Chuck Shively
Director of Public Works
City of Coffeyville