REQUEST FOR LEGISLATIVE ACTION

Completed by County Counselor's Office: Res/Ord No.: 20014

Date:

Sponsor(s): Greg Grounds October 15, 2018

SUBJECT	Action Requested Resolution Ordinance							
	Project/Title: Awarding a Twenty-Four Month Term and Supply Contract, with Two Twelve Month Options to Extend for the furnishing of Professional Survey Services for the Public Works Department to Bartlett and West of Lee's Summit, Missouri under the terms and conditions of Request for Qualifications No. 42-18.							
BUDGET	ST EGG S SAIMING TYRISSON	T direct the terms an	d conditions of Request 1	or Quantications is	0. 42-18.			
INFORMATION	Amount authorized by th	is legislation this fis	cal vear					
To be completed	Amount previously author							
By Requesting	Total amount authorized							
Department and	Amount budgeted for thi							
Finance	Source of funding (name							
	* If account includes additional to OTHER FINANCIAL IN	funds for other expenses, FORMATION:	total budgeted in the account is:	S				
	☐ No budget impact (no fiscal note required)							
	Term and Supply Contract (funds approved in the annual budget); estimated value and use of contract: Department: Public Works Department Estimated Use: \$50,000.00							
	Requesting approval by the Legislature of the Term and Supply Contract; the funds were already appropriated through the annual budget adoption. Estimated figures are for informational purposes only.							
	Dulon Van Dudont (10	to all tox						
	Prior Year Budget (if appl Prior Year Actual Amount		Av.					
PRIOR	Prior ordinances and (date).					
LEGISLATION	Prior resolutions and (date		1					
CONTACT								
INFORMATION	RLA drafted by (name, title, & phone): Barbara Casamento, Purchasing Administrator, 881-3253							
REQUEST	REA dialted by (name, title, & phone): Barbara Casamento, Purchasing Administrator, 881-3253							
SUMMARY	The Public Works Department requires a Term and Supply Contract for Professional Survey Services. The Purchasing Department issued Request for Qualifications No. 42-18 in response to those requirements.							
	A total of forty notifications were distributed and six responses were received and evaluated as follows:							
	Vendor and Location Responsiveness Qualifications and References Total 100 Points 5 Points Experience 60 Points 35 Points							
	Wilson and Company	_						
	Kansas City, MO	5	55	32	92			
	Olsson and Associates	_						
	N. Kansas City, MO	5	55	35	95			
	Bartlett and West Lee's Summit, MO	_	67	25				
	Powel CWM	5	57	35	97			
-	Independence, MO	5	50	20	0.5			
	BH Rhodes			30	85			
	Kansas City, KS	5	45	25	75			
	Pars Consulting		13	23	75			
	Overland Park, KS	5	40	15	60			
	Pursuant to Section 1054.6 of the Jackson County Code, the Director of Finance and Purchasing recommends to Award of a Twenty-Four Month Term and Supply Contract, with Two Twelve Month Options to Extend for the							

	furnishing of Professional Survey Services for the Public Works Department to Bartlet Summit, Missouri as the best proposal received under the terms and conditions of Requ 42-18. The Public Works Department has negotiated the pricing for these services and attached.	uest for Qualifications No.
	This award is made on an "as needed" basis and does not obligate Jackson County, Mis amount. The availability of funds for specific purchases is subject to annual appropriate	ssouri to pay any specific tion.
CLEARANCE	 ☐ Tax Clearance Completed (Purchasing & Department) ☐ Business License Verified (Purchasing & Department) ☐ Chapter 6 Compliance - Affirmative Action/Prevailing Wage (County Auditor's O 	ffice)
COMPLIANCE	 ☐ MBE Goals ☐ WBE Goals ☐ VBE Goals No goals for this Request for Qualifications ☐ VBE Goals 	
ATTACHMENTS	Abstract of Proposals Received, a Recommendation Award Letter from Brian Gaddie, and the pertinent pages of Bartlett and Wests' proposal documents and the Schedule of	Director of Public Works Rates
REVIEW	Department Director:	Date: 16.6.18
	Finance (Budget Approval): If applicable	Date:
	Division Manager:	Date:
	County Counselor's Office:	Date:

 This expenditure was included in the	annual budget.		
Funds for this were encumbered from	n the	Fund in	
There is a balance otherwise unencur is chargeable and there is a cash bala payment is to be made each sufficien	ince otherwise unencumbere	ppropriation to which the expenditure and in the treasury to the credit of the fund from the herein authorized.	which
Funds sufficient for this expenditure	will be/were appropriated b	y Ordinance #	
Funds sufficient for this appropriation	on are available from the sou	rce indicated below.	
Account Number:	Account Title:	Amount Not to Exceed:	
This award is made on a need basis a funds for specific purchases will, of	and does not obligate Jacksonecessity, be determined as	n County to pay any specific amount. The average using agency places its order.	ailability

	Bid No: 44-18 Date: 8/14/18 COMMODITY: Professional Survey Services	Wilson and Company	Olsson Associates	Bartlett & West, Inc.	Powell	Pars Consulting Engineers	BHC
2	DESCRIPTION	AMOUNT	AMOUNT	AMOUNT	AMOUNT	AMOUNT	AMOUNT
1.0	1.0 Professional Survey Services	Seebia	Seebid	Seebid	Seebid	Seebid	Seebion
	CERTIFICATION OF BID OPENING BIDS WERE PUBLICLY						
	ON: Que, 114, 3018 BY						
	CLERK OF THE LEGISLATURE						
	Late Durte PURCHASING						

ABSTRACT OF



JACKSON COUNTY **Public Works Department**

Jackson County Technology Center 303 West Walnut Street Independence, Missouri 64050 jacksongov.org

(816) 881-4530 Fax: (816) 881-4448

Memorandum

To:

Barbara Casamento, Purchasing Supervisor

From: Brian Gaddie P.E., Director of Public Works

Date: September 24, 2018

Re:

RFP 42-18 Professional Survey Services

Committee Evaluation and Recommendation

On August 14, 2018, Jackson County Finance and Purchasing Department received six qualified responses to the Request for Proposals 42-18 for Professional Survey Services for the Public Works and other departments. The selection committee has reviewed the submittals and based on responsiveness, experience, qualifications, and references has selected Bartlett and West as the best submittal.

Attached for your use is Bartlett and Wests Fee Schedule for this proposal, along with our scoring sheet.

Let me know if you have any questions.

STATEMENT OF QUALIFICATIONS NO. 42-18 SURVEYING SERVICES SELECTION SUMMARY SHEET

COMPOSITE RANKING DATE: SEPTEMBER 5, 2018

COMMITTEE SCORING FOR EACH FIRM

FIRM NAME	Responsiveness to RFQ	Experience and Qualifications	References	SCORE
	5 points max	60 points max	35 points max	100 points max
BCH RHOADS	5	45	25	75
PARS CONSULTING	S	40	15	09
POWELL	5	50	30	85
OLSSON	5	55	35	95
BARTLETT AND WEST	S.	57	35	97
WILSON AND CO	5	55	32	92

BARTLETT & WEST, INC.

SCHEDULE OF REIMBURSABLE COSTS/CHARGES

EFFECTIVE JANUARY 1, 2018

DESCRIPTION

CHARGE AMOUNT UNIT EXP CODE

* Represents a new charge type added			
REPRODUCTION			
Blackline Prints			
Bond, Full Size - 24x36	\$ 1.00	Each	PBOND1
Bond, Half Size Reduction - 11x17	\$ 0.70	Each	PBOND 1/2
Vellum, Full Size - 24x36	\$ 6.00	Each	PVELLUM
Mylar, Full Size - 24x36	\$ 12.00	Each	PMYLAR
Photocopies			
Black & White - up to 11x17	\$ 0.15	Each	COPIES
Small Size Color Copies , 8.5x 11	\$ 0.90	Each	CCOPY
Large Size Color Copies, > 8.5x 11	\$ 1.50	Each	CCOPYLG
Scan			
Small Scan – 8.5 x 11 (Black/Color)	\$ 0.12	Each	PGSCAN
Full Size Scan - 24x36 -(Black)	\$ 2.00	Each	SCAN
Full Size Scan - 24x36 - (Color)	\$ 5.00	Each	CSCAN
Inkjet Plotters - 24x36			
Bond (Black)	\$ 1.50	Lin. Ft.	PLOT
Bond (Color)	\$ 2.50	Lin. Ft.	PLOTC
Vellum (Black/Color)	\$ 3.00	Lin. Ft.	PLOTV
Mylar (Black/Color)	\$ 6.00	Lin. Ft.	PLOTM
SYSTEMS & SOFTWARE CHARGES			
CADD Software Charges (AutoCAD, Civil 3D, LDD, GEOPAC etc.)	\$ 7.00	Hour	CADD
GIS Software Charges (ArcView,ArcInfo, ArcEditor)	\$ 7.00	Hour	GIS
FIELD EQUIPMENT & MATERIALS			
Nuclear Density Testing Equipment	\$ 30.00	Hour	NUCLEAR
Survey Equipment			
Survey Equipment One-Man Crew	\$ 50.00	Hour	SEQ1
Survey Equipment Two-Man Crew	\$ 25.00	Hour	SEQ2

BARTLETT & WEST, INC.

SCHEDULE OF REIMBURSABLE COSTS/CHARGES

EFFECTIVE JANUARY 1, 2018

DESCRIPTION

CHARGE AMOUNT UNIT EXP CODE

FIELD EQUIPMENT & MATERIALS (cont.)			
LiDAR Equipment			
LiDAR Equipment Charges (Static)	\$ 1500.00	Day	LIDAR
LiDAR Equipment Charges (Mobile)	Minimum \$5000/day up to 5 miles per day. Add'l miles per day are \$1000/mile after 5 mile minimum is reached.	Day/Mile	LIDAR_MOB_ M
Staking Materials			
Lath & Flats (16")	\$ 0.45	Each	LATH/FLAT
Lath & Flats (48")*	\$ 0.70	Each	LATH48
Wooden Hubs	\$ 0.40	Each	HUBS
Iron Pins	\$ 1.55	Each	IRONPIN
VEHICLES			
Trucks, Cars, SUV's - all vehicles	\$ 0.545 to \$ 0.63	Mile	varies
ATV (All Terrain Vehicle)	\$ 50.00	Day	ATV
ATV (All Terrain Vehicle) incl. Trailer	\$ 75.00	Day	ATVT
UTV (Utility Terrain Vehicle) incl. Trailer	\$ 130.00	Day	UTVT
MISCELLANEOUS			
Per Diem	Per established Per Diem	Day	

Schedule of Hourly Charges for Jackson County, MO On-Call Professional Services for 2018-2022

		Right-of-Way Technician VI	\$123.00
Engineer/Arch/Landscape Arch XI	\$240.00	Right-of-Way Technician V	114.00
Engineer/Arch/Landscape Arch X	228.00	Right-of-Way Technician IV	103.00
Engineer/Arch/Landscape Arch IX	215.00	Right-of-Way Technician III	94.00
Engineer/Arch/Landscape Arch VIII	198.00	Right-of-Way Technician II	83.00
Engineer/Arch/Landscape Arch VII	182.00	Right-of-Way Technician I	68.00
Engineer/Arch/Landscape Arch VI	165.00	• • • • • • • • • • • • • • • • • • • •	
Engineer/Arch/Landscape Arch V	153.00	GIS Coordinator IX	\$234.00
Engineer/Arch/Landscape Arch IV	141.00	GIS Coordinator VIII	217.00
Engineer/Arch/Landscape Arch III	129.00	GIS Coordinator VII	206.00
Engineer/Arch/Landscape Arch II	117.00	GIS Coordinator VI	192.00
Engineer/Arch/Landscape Arch I	105.00	GIS Coordinator V	181.00
•		GIS Coordinator IV	165.00
Facinossia - Tabalaia - VI	+400.00	GIS Coordinator III	151.00
Engineering Technician XI	\$192.00	GIS Coordinator II	136.00
Engineering Technician X	168.00	GIS Coordinator I	125.00
Engineering Technician IX	150.00		123.00
Engineering Technician VIII	130.00		
Engineering Technician VII	117.00	GIS Developer/DBA V	\$167.00
Engineering Technician VI	108.00	GIS Developer/DBA IV	156.00
Engineering Technician V	98.00	GIS Developer/DBA III	146.00
Engineering Technician IV	90.00	GIS Developer/DBA II	136.00
Engineering Technician III	80.00	GIS Developer/DBA I	126.00
Engineering Technician II	72.00	GIS Analyst V	\$136.00
Engineering Technician I	66.00	GIS Analyst IV	125.00
		GIS Analyst III	115.00
Surveyor X	\$193.00	GIS Analyst II	104.00
Surveyor IX	177.00	GIS Analyst I	94.00
Surveyor VIII	160.00	GIS / Waly St 1	54.00
Surveyor VII	150.00		
Surveyor VI	139.00	GIS Technician IV	\$94.00
Surveyor V	124.00	GIS Technician III	84.00
Surveyor IV	114.00	GIS Technician II	73.00
Surveyor III	100.00	GIS Technician I	63.00
Surveyor II	88.00		
Surveyor I	76.00	Project Coordinator VII	\$216.00
		Project Coordinator VI	188.00
Survey Technician VIII	\$128.00	Project Coordinator V	172.00
Survey Technician VII	114.00	Project Coordinator IV	146.00
Survey Technician VI	99.00	Project Coordinator III	130.00
Survey Technician V	89.00	Project Coordinator II	120.00
Survey Technician IV	78.00	Project Coordinator I	108.00
Survey Technician III	68.00		
Survey Technician II	61.00	Systems Analyst	\$167.00
Survey Technician I	55.12	Systems Administrator	125.00
· · · · · · · · · · · · · · · · · · ·	55.22	Systems Technician	84.00
Construction Eng. Tech IX	\$162.00	Administrator VI	\$130.00
Construction Eng. Tech VIII	151.00	Administrator V	115.00
Construction Eng. Tech VII	136.00	Administrator IV	101.00
Construction Eng. Tech VI	123.00	Administrator III	86.00
Construction Eng. Tech V	113.00	Administrator II	77.00
Construction Eng. Tech IV	103.00	Administrator I	69.00
Construction Eng. Tech III	91.00	· • • • • • • • • • • • • • • • • • • •	\$3.00
Construction Eng. Tech II	81.00		
Construction Eng. Tech I	71.00	Administrative Technician V	\$79.00
3 ·		Administrative Technician IV	71.00
Right-of-Way Specialist IV	\$216.00	Administrative Technician III	64.00
Right-of-Way Specialist III	180.00	Administrative Technician II	59.00
Right-of-Way Specialist II	156.00	Administrative Technician I	51.00
Right-of-Way Specialist I	139.00		
• •			

ADHERENCE TO SCOPE OF SERVICES



1.0 INTRODUCTION

We understand this term and supply contract for Professional Survey Services to the Jackson County, Missouri Department of Public Works is for a 24-month term with two, 12-month extension options. We also understand the County estimates it will spend \$50,000 annually on these services.

2.0 SCOPE OF SERVICES

2.1 LEGAL, DESIGN AND CONSTRUCTION SURVEY SERVICES

Bartlett & West is equipped, competent and able to undertake all types of legal, design and construction surveys and related services including, but not limited to the following sections:

2.1.1 Land Surveying Services

Bartlett & west can provide land survey services using terrestrial, mobile scanning, photogrammetry, horizontal, vertical and aerial control, topography, cross-sections, profiles, utility locates, benchmarks, establishment of section lines and corners, staking of right-of-way lines and as-built drawings, land features and structures.

Our team of experts offer the full range of survey services. Our survey crew is led by our survey manager

Dustin Kaiser, PLS. Dustin employs the latest surveying technology to efficiently gather our mapping data including a robotic total station and a GPS unit that utilizes MoDOT's RTK network. This technology allows him to efficiently and accurately gather data that will become the basis for our design.

Bartlett & West also owns static and mobile terrestrial Light Detection and Ranging (LiDAR) units that can be utilized to quickly gather data on a complex project in an urban environment. On each project, we evaluate the best form of data collection for the site and the intent of the design. We have utilized both LiDAR and more conventional methods on recent MoDOT projects.

During the past few years, Bartlett & West has made significant investments in our surveying technology to provide our clients with the most accurate and user-friendly deliverables possible.

Bartlett & West was among the first firms to adopt LiDAR technology as it became readily available. Bartlett & West can fully assemble two static LiDAR crews using the Riegl Vz-400 units and one mobile LiDAR crew using the Riegl VMX-450 unit.

To date, we have found our environment to be more than adequate for the data processing required for our projects. We have SAN storage and no issue with our capability to manage these large datasets. The TopoDOT software that

ADHERENCE TO SCOPE OF SERVICES





we use to process the data helps our computers filter out data, making it less impactful on the hardware and the functionality of the software.

We also have a dedicated network drive, and we are able to load and unload data across our internal network with the same functionality as if the data was local. These things together help U.S. maintain an efficient workflow process. Below are some examples.

Mobile

In 2016, MoDOT asked U.S. to scan several areas on Route 58 in Cass County with our mobile unit as a demonstration project. The purpose of this was not only to check the aerial LiDAR for accuracy, but also to pilot a project for vertical clearance on I-49 where Route 58 crossed over the interstate, since aerial scans cannot see under bridges.

Another demonstration area on the Cass 58 project was to check the use of mobile LiDAR to check cross slopes on existing sidewalk for compliance with ADA guidelines.

Static

Bartlett & West has been MoDOT's go-to on-call LiDAR consultant for unusual or difficult surveys. The Central District needed precise mapping and topography for a sidewalk project through downtown Lebanon that had a very busy multi-lane street.

Obtaining survey data conventionally during daylight hours would disrupt traffic, put surveyors in danger and be time consuming. Bartlett & West was called upon to provide a LiDAR solution under these conditions in a compressed schedule. Taking advantage of the technology, the best

time to survey was at night when the streets were relatively empty.

A static LiDAR unit mounted on the bed of a pickup truck using successive setups in the middle of the street was a great solution for gathering the LiDAR data. Another technique employed on this job was to put engineers on the ground after the initial topo map was printed for a quality check as well as field crews providing underground storm sewer flowlines. The details of wall decorations through the windows of lighted buildings were even visible. The project won first place in the survey category competition with American Council of Engineering Companies-Missouri.

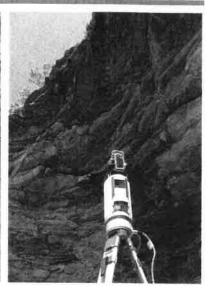
Two additional examples of MoDOT calling on Bartlett & West with unusual survey conditions occurred on the same day. MoDOT's Historic Preservation Office contacted MoDOT's photogrammetry manager to inquire about using LiDAR to scan prehistoric cave drawings called petroglyphs. MoDOT's photogrammetry manager called on Bartlett & West. The project required setting up our static LiDAR on an uneven earthen ledge on a telescoping tripod mounted about six feet from the cave floor that was located in a rocky bluff high above the highway. However, on that same day, the Central District needed a solution on a weathered vertical rock face along a multi-lane highway in Jefferson City.

Our LiDAR crews obtained the petroglyph data in southwest Missouri and then rushed to Jefferson City. In the late evening hours, the rock face was scanned with static LiDAR setups at a high point on the opposite bank to avoid traffic. Both of these projects required Bartlett &

ADHERENCE TO SCOPE OF SERVICES







West to come up with creative solutions to fulfill MoDOT's needs. With the petroglyphs, obtaining the data was only the first phase of the solution.

The issue was that the underlying ancient carvings were visible, but had modern graffiti carvings covering them on the soft rock of the cave floor. The processing technique Bartlett & West used was to extract the ancient carvings on a different layer from the modern carvings, thereby electronically separating them.

The deliverable contained 13 separate petroglyphs in a 3D PDF that could be rotated and viewed or even flown-through electronically. The viewable PDF was a way of preserving the petroglyphs to be studied and freezing them in time against the ravages of weathering. Scanning the rock face in Jefferson City required Bartlett & West to employ another unique processing method. This involved rotating the vertical topographic map 90 degrees and mapping the undulating surface as if it were horizontal. This mapping technique re-oriented the data on the vertical face and merged the mapping into the existing surface so the designer could determine a precise interception point for a retaining wall with the uneven rock face. Both of these projects, again, won first place in the survey category with American Council of Engineering Companies-Missouri in the following years.

2.1.2 Field Survey Data

Bartlett & West will provide field survey data on reproducible media and in electronic file format compatible with AutoCAD 2018 or the current version of software used by the County.

Our team has the ability to create basemaps containing baseline, stationing, cross-sections, right-of-way lines, contours and topographic features. We can also submit basemaps and existing ground profiles formatted into layout form using AutoCAD paper space. For an example, see Exhibit A on page 39.

2.1.3 Field Notes

Our field crews understand the importance of taking accurate and complete notes during a project. As seen in the example Exhibit B on page 40, we take pride in capturing the details of a project in a clear, concise and legible manner—ultimately saving time and money. We commit to you that we will deliver high-quality notes on your projects.

2.1.4 Legal Boundary Surveys

The Bartlett & West team has performed legal boundary surveys throughout Missouri for individuals, municipalities and state agencies. From a homeowner needing wanting to build a fence to establishing right-of-way for 17 miles of the Rock Island Rail Corridor, we have done it. Our team is adept at finding and reviewing GLO notes, GLO plats, surveys, deeds, easements, railroad plans, as well as highway and road plans We also work with local agencies, title companies, Land Survey State Repository and state agencies.

ADHERENCE TO SCOPE OF SERVICES





For examples of boundary, corners and monuments, see Exhibits C-F on pages 41-44, Exhbit H on page 46 and Exhbits N-O on pages 52-53.

2.1.5 Construction Staking

Construction staking is an important part of the survey process because it helps identify everything—utilities, corners, land grades and structures.

Our experienced team understands the significance of this step in the process and has performed this tasks hundreds of times with accuracy and precision. We will do the same for the County. For an example of construction staking see Exhibit F on pages 44.

2.1.6 Legal Descriptions and Exhibits

Our staff routinely drafts legal descriptions and exhbitis for property, right-of-way and easements for acquisition. We will prepare the same documents for the County in your preferred format. For examples, see Exhibits G-M on pages 44-51.

2.1.7 Miscellaneous Survey Services

During the past four years, we have worked on a variety of surveys for Jackson County—Parks and Recreation Department, the Rock Island Railroad and Miller and Helmig roads.

Survey work has included boundary, design, utility locates, topographic features, storm and sanitary sewer manholes (size, depth and type), O and E reports, plotting existing

easements, right-of-way information and easement descriptions/

We have worked with Jackson County on encroachment surveys on nine parcels along the Rock Island Corridor and prepared a centerline survey of the Rock Island Railroad tying the existing centerline to section and quarter section lines so that years down the road the centerline could be reestablished. For examples, see Exhibits N-O on pages 52-53.

2.1.8 Potholing/vacuum excavation

Partnering with Cantex, we completed a vacuum excavation of numerous citical utility locations for a stormwater project in Kirksville, Missouri. The survey crews staked the excavation location, obtain a horizontal and vertical utility location and provide the information to the engineers designing the project.

2.1.9 Other Services

Please see Other Services section starting on page 64.

2.2 MISSOURI REGISTERED LAND SURVEYOR

The two land surveyors included in this proposal are Dustin Kaiser (MO 002729) and Steve Marino (MO 2010000245). In addition, Bartlett & West is licensed in Missouri to perform surveying services (MO 2005013257).

ADHERENCE TO SCOPE OF SERVICES





2.3 ACCURACY

Bartlett & West shall be responsible for the accuracy of the work and shall promptly make necessary revisions or corrections resulting from errors and omissions on the part of the company without additional compensation.

Our survey crew leaders and engineering technicians are cross-trained and understand both the field and office sides of data collection and mapping development. When the field crew knows how to produce the deliverable as well as collect the data, the right data is obtained and displayed efficiently and with high accuracy.

Our cross-trained technicians are experienced in GIS and CADD software and are used during various stages of projects depending upon the level of accuracy required.

2.4 FINAL DOCUMENTS

2.4.1 Project Information

Bartlett & West understands that all final drawings, plans, specifications and/or other documents submitted to the County shall bear the project name, county project number, date of submittal and the name and seal of the Missouri Registered Land Surveyor responsible for the work.

2.4.2 Jackson County Property

Bartlett & West understands that all final drawings, plans, specifications and/or other documents submitted to the County becomes the property of the Jackson County, Missouri Department of Public Works.