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## Header 1

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## General Information

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Procurement Folder: 1637261

Procurement Type: Central Master Agreement

Vendor ID: 

Legal Name: BECK &amp; CO ENGINEERING INC

Alias/DBA:

Total Bid: \$481,900.00

Response Date:  

Response Time: 

Responded By User ID:  

First Name: 

Last Name: 

Email: 

Phone: 

SO Doc Code: CRFQ

SO Dept: 0803

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Department of Administration  
Purchasing Division  
2019 Washington Street East  
Post Office Box 50130  
Charleston, WV 25305-0130

State of West Virginia  
Solicitation Response

<b>Proc Folder:</b> 1637261		
<b>Solicitation Description:</b> MOBILE RETROREFELCTIVITY TETING FOR PAVEMENT MARKINGS		
<b>Proc Type:</b> Central Master Agreement		
<b>Solicitation Closes</b>	<b>Solicitation Response</b>	<b>Version</b>
2025-04-15 13:30	SR 0803 ESR04142500000006199	1

<b>VENDOR</b>
VS0000048662 BECK & CO ENGINEERING INC

<b>Solicitation Number:</b>	CRFQ 0803 DOT2500000047		
<b>Total Bid:</b>	481900	<b>Response Date:</b>	2025-04-15
		<b>Response Time:</b>	08:44:22
<b>Comments:</b>			

<b>FOR INFORMATION CONTACT THE BUYER</b> John W Estep 304-558-2566 john.w.estep@wv.gov		
<b>Vendor Signature X</b>	<b>FEIN#</b>	<b>DATE</b>

All offers subject to all terms and conditions contained in this solicitation

Line	Comm Ln Desc	Qty	Unit Issue	Unit Price	Ln Total Or Contract Amount
1	Mobilization, Per Release Order	5.00000	EA	3500.000000	17500.00

Comm Code	Manufacturer	Specification	Model #
78141600			

**Commodity Line Comments:** Prices are good for length of contract

**Extended Description:**  
Mobilization, Per Release Order

Line	Comm Ln Desc	Qty	Unit Issue	Unit Price	Ln Total Or Contract Amount
2	Pavement Marking Mobile Retro Testing Expressway, Line Miles	6000.0000	MILE	23.500000	141000.00

Comm Code	Manufacturer	Specification	Model #
78141600			

**Commodity Line Comments:** Prices are good for length of contract

**Extended Description:**  
Pavement Marking Mobile Retro Testing Expressway, Line Miles

Line	Comm Ln Desc	Qty	Unit Issue	Unit Price	Ln Total Or Contract Amount
3	Pavement Marking Mobile Retro Testing Secondary, Line Miles	13200.000	MILE	24.500000	323400.00

Comm Code	Manufacturer	Specification	Model #
78141600			

**Commodity Line Comments:** Prices are good for length of contract

**Extended Description:**  
Pavement Marking Mobile Retro Testing Secondary, Line Miles



## **I. Company Information**

Beck & Co. Engineering, Inc. is proud to offer 30-meter geometry data collection services utilizing our state of the art mobile data acquisition technology, software, and hand-held units. It is with great pleasure that we have this opportunity to submit to the ***Centralized Request for Quote (CRFQ) CRFQ-0803-DOT2500000047-2 – Mobile Retroreflectivity Testing for Pavement Markings in the State of West Virginia***

### ***Business Organization***

<u>Company Name</u>	Beck & Co. Engineering, Inc.
<u>Company Mailing Address</u>	8727 Pheasant Run Circle Woodbury, MN 55125
<u>Physical Address</u>	285 Hardman Court So. St. Paul, MN 55075
<u>Contact Person</u>	Richard A. Beck, P.E. President, CEO
<u>Phone Number</u>	612-805-1637
<u>Fax Number</u>	651-501-0015
<u>E-Mail Address</u>	rick.bcengineering@gmail.com
<u>Federal Tax ID</u>	45-3601009
<u>Vendor Code WV Oasis</u>	VS0000048662

Beck & Co. Engineering, Inc. operates as a privately-owned corporation, and was incorporated in the State of Minnesota in October of 2011 under and pursuant to the provisions of Chapter 302A, Minnesota Statutes. Beck & Co. Engineering uses National Registered Agents, Inc. (NARI) as our Local Representative in states where it is required.

If the state of West Virginia selects Beck & Co. Engineering's CRFQ, I hereby certify that:

If the contents of this proposal become contractual obligation, the proposal will remain valid for a period equal to the length of the contract.

*Richard A. Beck, P.E.*

Richard A. Beck, P.E.  
President



## II. Qualifications/Experience

### Understanding the Scope and Department Needs

The mission at Beck & Co. Engineering, Inc. is to provide the highest quality data collection services while ensuring safety, accuracy and reliability. We specialize in ascertaining highly accurate data pertaining to the retro-reflective properties of pavement markings with our state of the art equipment, software, and expertly trained data collection crews. Our trained professionals work hard to guarantee our clients get the most accurate, reliable, and repeatable readings every time.

Beck & Co. Engineering (BCE) specializes in pavement marking retroreflectivity surveying. We offer the very highest level of practical experience, state-of-the-art equipment, and confidentiality. Our clients know that working with BCE is a more professional, less risky way to develop innovative approaches to solving and ultimately managing pavement-marking problems. BCE is a recognized and respected proponent of the traffic engineering industry. The relationship of this CRFQ is directly related to the core competencies with respect to consulting services and lines of business that BCE offers.

BCE has more collective experience than any other firm with respect to pavement marking surveying, quality assurance, and management. Members of our group have been surveying pavement markings with mobile units longer than anyone in the industry. Key members of our organization have been continually helping the industry establish and develop mobile retroreflectivity technology. Our experience dates back well over 25 years in the mobile pavement marking retroreflectivity measurement industry. ***Other companies will claim to have 20 years of “mobile experience” however, their “mobile” experience is not in collecting 20 years of mobile retroreflectivity of pavement markings.***

BCE has a fleet of 20 MRU's utilizing a BECK V-7 30-meter geometry 10 Hand Held 30-meter geometry units from Delta Light and Optics (LTL-X) as well as the Road Vista Stripemasters and MX-30 units to choose from for this project. BCE also owns Road Vista G7 mobile units should the WVDOT require only that unit. However, BCE prefers to use the more reliable Beck V-7 mobile units.

Should BCE be the successful low bid for this project we will work with WVDOT to ensure their comfort level with the BECK -7 units as are the 25 other states they are used in. We have passed both the FLDOT and TTI certification courses in the past. By choosing a company like BCE that possesses the necessary experience, equipment, and support systems already in place, WVDOT will see immediate results with no interruptions or delays to the data collection process, which could be caused by a lack of knowledge, equipment or certified operators.

BCE has the experience, knowledge, fleet size, and expertise that goes unmatched in the pavement marking testing industry. Collecting network wide retroreflectivity data from year to year over the same network has its challenges. Some of which include:



- Quality of the data collected
- Quantity of data collected
- QA/QC controls of data collected
- Maintenance of the Equipment used for data collection
- Experience of the data collection crew
- Route Planning
- Adjusting for weather delays
- Documentation of all aspects for the data collection

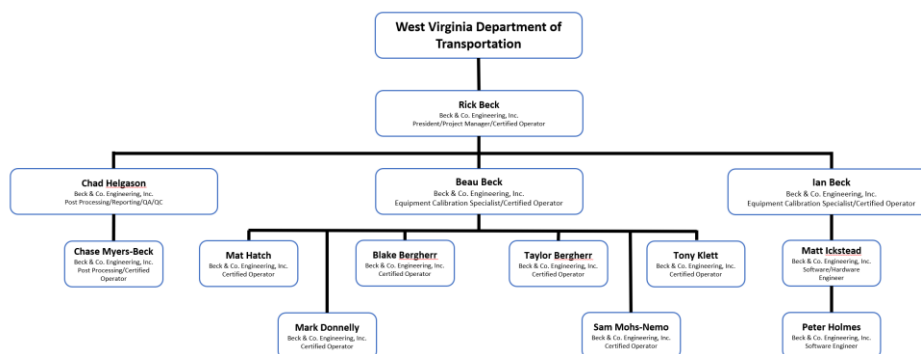
The following pages will layout our qualifications, vast experience, contract contacts and breakdown how BCE has been able to manage many of these concerns from our experience in conducting numerous network wide surveys across the nation.

Beck & Co. Engineering, Inc. is an Equal Opportunity Employer and a drug free company that has been conducting work in the State of West Virginia since 2016 with our contract through a private material manufacture on the WV Turnpike (I-77) warranty project. BCE continues to measure the WV Turnpike each year through a consultant contract with the WV Turnpike. BCE has completed all the requirements necessary to conduct business in the State of West Virginia with our WVOasis Vendor Code VS0000048662 .

BCE was originally established for this purpose by a Minnesota Department of Transportation civil engineer, Richard Beck, who used his extensive knowledge to create and develop innovative technologies and implement effective management processes that continue to afford our clients with the highest level of service possible. Mr. Beck will again lead this project as the project manager should BCE be selected for this CRFQ.

BCE warrants that all employees which appear in the key personnel portion, including non-essential employees not listed, are qualified to perform the work requested in this CRFQ. BCE prides itself on being an independent consulting firm that maintains the highest level of professional integrity with no conflicts of interest, perceived or real, surrounding the work to be performed under this CRFQ. The following organization chart is specific for the State of West Virginia “Pavement Marking Analysis” CRFQ.

**Beck & Co. Engineering Inc. and West Virginia Department of Transportation Management Plan**

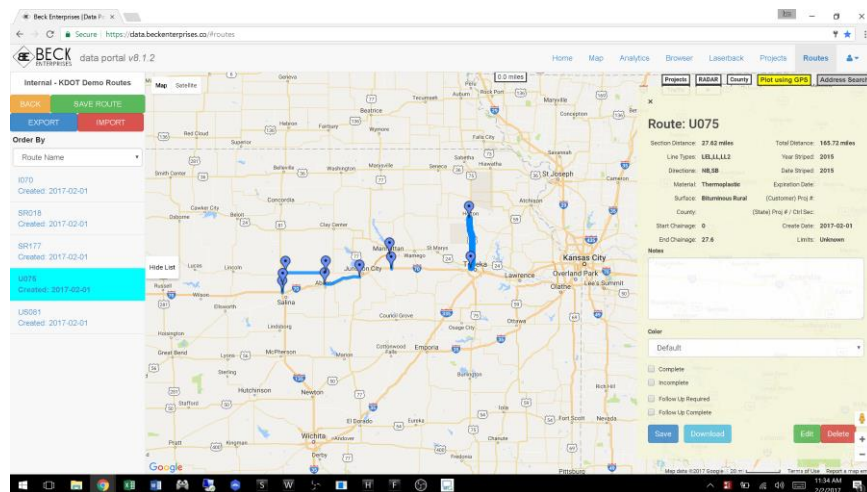




### III. Timeline

It is the plan of Beck & Co. Engineering that once a request for testing arrives, within a time period of no more than one week, a map will be created on the 'Routes' tab of our Data Portal, an example is shown below. Once a map has been created, WVDOT employees will be notified. Pending WVDOT approval, mobile retro testing will begin within one week.

Due to the location of our headquarters, as well as our equipment around the county BCE crews are no more than a day's mobilization to any part of West Virginia to begin data collection. With proper route planning, a single mobile unit is



capable of collecting approximately 200-250 miles per day for rural driving conditions and 150-200 miles per day in the higher density urban areas. At this rate any release order of 2,000 miles would take less than two weeks to complete in perfect conditions with one MRU and one week with two MRU's. Accounting for inclement weather, BCE is confident that a 2,000 mile release order would be completed in no more than two to three weeks or less after the initial request.

BCE has dedicated 4 MRU's to this project and has a large enough fleet of MRU's that we can send 6-8 MRU's to West Virginia if necessary. Therefore, should WVDOT require network wide data collection BCE has the ability to deliver the data collection in a 1–2-month time frame depending on weather.

### IV. Methodology

#### Administration and Management

##### Personnel

Beck & Co. Engineering's personnel will utilize a team of individuals from our current roster of employees. These individuals have been carefully selected with the express purpose of fulfilling the needs and requirements of the CRFQ, both personnel and equipment. This team will consist of a group of highly qualified project managers, technicians, and engineers that have extensive experience and the necessary tools to timely deliver an exceptional service product that meets and exceeds the requirements in this CRFQ from both a data collection and data handling perspective. The team will also have the complete and engaged support from our home office and its resources in South St. Paul, MN. BCE will employ management techniques that are





similar to other successful projects that we've been a part of with states such as Alaska, New Jersey, Missouri, Kentucky, Florida, California, Nevada, Minnesota, North Carolina and other States.

A major key to the success of this project is getting headed in the right direction with knowledgeable personnel and accurate data collection. Beck & Co. Engineering is the best option available to WVDOT for this service, as this team has for the past 15 years become acclimated to operations within large scale systemwide mobile data collection contracts with agency's similar to WVDOT.

The organizational structure of Beck & Co. Engineering is relatively simple. From very early on we've learned that in taking our past successes and failures into account, having and employing a 'flat' organizational structure has proven overtime to be the most successful means in achieving our goals as an organization. A flat organizational structure allows our employees to independently take an active role in many of the day-to-day operations including but not limited to: data collection, in-house service, and product development. Given the nature of our organization's operations, many of the problem solving decisions and/or troubleshooting needs to occur in real-time during field operations. This helps keep costs down by decreasing the amount of time it takes to make these respective decisions. It also fosters a very active management style.

The communication between WVDOT's project manager and individuals from Beck & Co. Engineering's crews as well as home office will be a critical aspect in determining the level of success this project will achieve. At the very least, Beck & Co. Engineering would like to include a monthly conference call with WVDOT to discuss production progress, issues, concerns, solutions, and goals for the upcoming month. This will help our team stay ahead of any potential problems to further limit costs.

Route planning makes a big difference in how well costs are controlled and how quickly data can be turned around. Having all the measurement needs of a particular district before a crew makes their measurement decisions is important in creating the most efficient plan of execution. However, we understand that will not always be the case. BCE's project manager and the technicians will plan out a given route plan and go over that route plan with the WVDOT project manager on a weekly basis when appropriate. All scheduling will be approved by the WVDOT project manager before any data collection begins.

### **Equipment**

As mentioned, BCE has 20 fully equipped retroreflectivity units used for data collection. It is the plan of Beck & Co. Engineering, Inc. to provide four MRU's with exclusive use for collecting the miles for this service contract. Each MRU is built to strict specifications in order to easily and safely mount the retroreflectometers on either side or both sides of the vehicle while maintaining repeatability and reproducibility across all vehicles and retroreflectometers.



Beck & Co. Engineering employs a variety of tools and mechanisms for its data collection. Most importantly, a BECK CEN-30 V7 Mobile Retroreflectometer. By custom building these CEN-30 V7 retroreflectometers in house we can eliminate the old out dated technology and continuously upgrade the units as the technology expands. Each MRU is equipped with two laser-based optics systems meeting ASTM E 1710 specifications alongside our unique data acquisition system. The equipment employed by BCE has been designed, manufactured, assembled, tested, and calibrated at our facility in South St. Paul, MN. Due to the proprietary nature of our software and equipment all of the details cannot be disseminated. A minimum of one terabyte bite of storage is installed in each laptop and data is automatically uploaded to BCE's cloud-based Data Portal Installed on these computers is our custom-built software, also proprietary. The software allows us to uniquely adapt to customer needs or specifications. As mentioned, we also have RoadVista G7 units to utilize if the WVDOT will only use those. However, getting our BECK CEN-30 V7 Mobile Retroreflectometer approved will be the preferable option. Please see the attached product brochures from Beck Enterprises on the BECK CEN-30 V7 Mobile Retroreflectometer.

Laptop mounts, securely fastened to the front passenger seat frame, with a high-definition laptop screen makes it easy for technicians to be in the passenger seat for the best view of both the roadway on which they are testing, and the screen they are viewing. Also, included as part of the data collection is a handheld retroreflectometer. These units are used in the field for quality control spot checking. Other minor mechanisms include at least 2 HD cameras, mobile WIFI device for daily data uploads, and high-resolution GPS devices. Wet testing equipment will be loaded into every MRU as well.

As a continual checkup on all of our lasers, we run each of them through Beck & Co.'s Calibration Process both before and after every project. Over the last several years, we have shown the ability to complete comparison tests with our mobile operation crews versus handhelds taken at specific locations. Additionally, we have regularly shown to accurately fulfill the expectations of the DOT's on DMI tests. With the recent upgrades to our GPS units, we are even more accurate than the minimum requirements in this area.

### **Quality Control Technical Plan**

Beck & Co. Engineering has an extensive process to ensure the quality and accuracy of the data collected by the technicians and equipment. This process begins in our lab in Minnesota where each MRU is maintained, aligned and calibrated using several different panels and/or ceramic blocks. The results of this maintenance and calibration process are documented and are available upon request for any MRU involved in the project.

### **Quality Assurance Log**

File #	Date	Panel Average	Block Average	Mobile Average	% Diff	Cal Wht/Yel	Comments or Recommendations	Action Req'd.



In addition, the crews and technicians have been trained to verify their calibration and setup 2-3 times daily, these results are also recorded within each MRU. Technicians are also trained to take handheld readings throughout the day on calibration panels, ceramic blocks, and/or in place markings. These results would all be documented. In addition, BCE now has an internal self-calibration check which occurs during data collection and operators can monitor the results to ensure data is accurate and equipment is functioning at optimum performance. If during those self-calibration monitoring checks, the MRU is not performing up to BCE expectations, that MRU is taken out of service and sent back to the lab for further analysis.

### **Quality Control Log**

File #	Date	Beg Mile Point	End Mile Point	Mobile Average	Line Type	Comments or Recommendations	Handheld Avg. Value

It should be noted that Beck & Co. Engineering's in-house systems engineering have made great strides in removing a lot of the negative aspects that have plagued other MRU's in the past. Some of these include aim floatation, steadiness, alignment and internal temperature control of the sensor filters calibration to name a few.

Measuring pavement markings is considered by many not to be an exact science or as easy as strapping equipment to the side of any car and driving down the road. However, we feel that thought illustrates the lack of understanding by these individuals. For instance, taking handheld measurements versus MRU's; In order to compare them you first have to understand that although they both are 30-meter geometry and measure the return light, they are illuminating and averaging different areas of the same marking. This figure displays those major differences:

<b>Coverage Differences</b>			
<b>R<sub>i</sub> Area (in<sup>2</sup>) - 1 Laser Scan/1 HH Reading</b>			
Width of Line	Laser Area (in <sup>2</sup> )	MX-30 Area (in <sup>2</sup> )	LTL-X Area (in <sup>2</sup> )
4 inch	72.00 in <sup>2</sup>	12.50 in <sup>2</sup>	13.95 in <sup>2</sup>
6 inch	108.00 in <sup>2</sup>	12.50 in <sup>2</sup>	13.95 in <sup>2</sup>
8 inch	144.00 in <sup>2</sup>	12.50 in <sup>2</sup>	13.95 in <sup>2</sup>
<b>Equivalent Number of R<sub>i</sub> readings to match area of 1 Laser Scan</b>			
Width of Line	Laser	MX-30	LTL-X
4 inch	1	5.76	5.16
6 inch	1	8.64	7.74
8 inch	1	11.52	10.32
<b>Equivalent Number of R<sub>i</sub> readings to match area of 1/10<sup>th</sup> mile Laser</b>			
Width of Line	Laser	MX-30	LTL-X
4 inch	72	414.72	371.61
6 inch	72	933.12	836.13
8 inch	72	1,658.88	1,486.45

It is very evident that handhelds are a tool in the whole measurement process (every MRU in Beck & Co. Engineering's fleet is equipped with one 30-meter handheld unit). Agencies utilize portable units as a QC/QA check on markings and MRU's. However, because they measure lines very differently, they are not always the most accurate measure of how a line is built. MRU's take continuous readings and measure the whole width of the line. This results in the data becoming more normalized and therefore gives a better representative sample of the line build. This method equates to what the driver actually sees for brightness when driving at night.



Beck & Co. Engineering's staff has developed proprietary technology to maintain temperature and relative humidity that is occurring inside the laser unit. We can also access the ambient temperature and relative humidity outside the box. This is accomplished using a USB interface temperature/humidity sensor, and proprietary software. The data collection and reporting system has added that information to each interval of data collection per the specification. Unlike other systems on the market the Beck CEN-30 V7 does not use software correction tools or other behind the scene data manipulation. It also doesn't use inferior laser diodes that are susceptible to temperature and voltage drops and thus the data is much more robust.

The final stage is a post process quality check on all data collected in the field which includes comparisons to older data, inspection into areas of the data that may have been flagged by the technicians in the field, and a check for any anomalies or errors that may have been committed by the technicians. If WV DOT wishes to review our training manual for operator certification, we will make that available. However, due to data privacy we will not make that part of this document.

#### ***Mobile Retroreflectivity Operator Certification***

BCE will provide our mobile retroreflectivity operator certification process upon request by West Virginia procurement or the transportation department.

Before a mobile retroreflectivity operator is certified, under Beck & Co. Engineering, they first have to spend time in the field working side by side with an experienced operator. Every person's rate of retention is different and therefore some learn faster than others. This on-the-job training involves not only the day-to-day operations of a mobile retroreflectivity crew but also gives them hands on training for trouble shooting and fixing issues that can arise in the field with any scientific equipment.

We at Beck & Co. Engineering feel that our equipment calibration and maintenance process along with our operator training, custom software and upgraded hardware give us a competitive advantage over any company in the industry. It is our goal to continue to improve our repeatability and reproducibility from both the personnel and equipment aspect in order to provide our customers with the best quality of service.

Please note that only certified MRU operators with 3-5 years of experience, at a minimum, will be utilized for data collection on this project.



### **Calibration Process**

Since 2015 Beck Enterprises, LLC has been designing and manufacturing Laser based light source CEN-30 Meter V7 mobile retro reflectometers. Upon request BCE will provide our mobile retroreflectivity calibration process document to West Virginia procurement or the transportation department.

Beck & Co. Engineering (BCE) owns and operates a fully equipped testing laboratory at our facility in South St. Paul, Minnesota. Our facility is set up with office space, fabrication space and a full-spectrum CEN 30 mobile retro unit testing facility and equipment. Including, but not limited to: Electromagnetic analytics, stand-alone designed testing/distribution enclosures, laser alignment tools, laser calibration equipment, computer networks, fabrication tools, wet testing devices, parts inventory, etc.

Calibration testing in the field is checked throughout the day using on board systems, panels, ceramic calibration blocks and/or in place markings with handheld retroreflectometers.

### **The Data Portal**

Beck & Co. Engineering has been utilizing a cloud-based web application called the Data Portal. The system provides a single location where clients can securely access, analyze, download, upload, view, manage and geospatially visualize all of the data that has been collected. Data is not limited to retroreflectivity data, but also can include any related video or pictures taken while on the project and other relevant information such as crash data, ADT, etc.

Our software team updates and adds features to the Data Portal on a continuous basis; with a simple refresh of the page, the user is able to access these updates as they are implemented. Our organization assigns an exceptionally high priority on security. Maintaining the security of personal information as well as any and all data collection results is a top priority.

It allows WVDOT to track roadways as they are being surveyed, update roadway meta data (such as material type, pavement type, and other factors), and track data collection vehicles in real time using AVL (automatic vehicle location).

As data is collected in the field it is securely uploaded to the Data Portal after each roadway is surveyed, which allows for instant backups along with expedited turnaround time to WVDOT. After a QC process, data is then available to be mapped and analyzed on the Data Portal. The average turnaround time from data collected on the road to viewable on a map on the Data Portal varies depending on the scope of the project. In cases where a customer has requested urgent or emergency readings, the data can be available to them on the Data Portal within hours of the final data collection. But in most cases the data will be available within 1-2 business days dependent on the entirety of a roadway or project being completed.

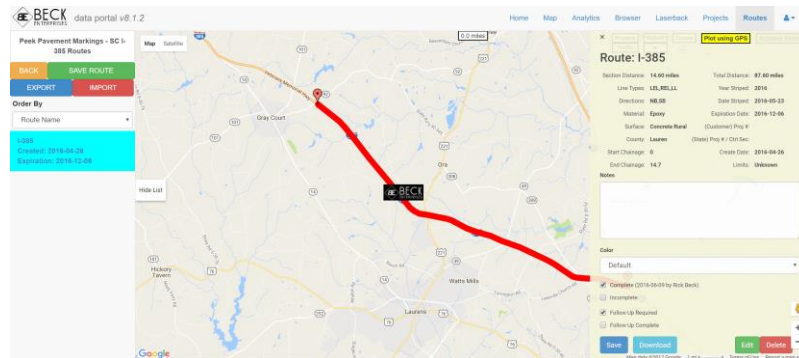
To provide 24/7 high speed secure access, the Data Portal uses state of the art hardware and network connectivity. Development and operations teams, based in the US, are constantly updating and monitoring the systems that make up the Data Portal. Backups of all data are



stored in multiple secure locations along with a full operational standby system ready to take over if any issues arise in the main system.

## Routes Tab

The 'Routes' tab is where all of the roadways for a project are mapped and saved so they can be viewed all together as a project or individually if desired. Once a roadway to be surveyed has been mapped, the information related to that road is entered. The data



entered includes: the roadway name, the direction/s it is to be surveyed, the line types to be tested, the starting and ending point, total distance, and the ability to add any notes or memos if needed. Upon the completion of data collection on a roadway, the operators will mark it as complete by simply checking a box. This can be visually confirmed by the color of the marked route on the map, if the roadway is colored blue it has not been completed and if it is gray then the roadway has been completed.

Additionally, operators and WVDOT employees have the capability of adding to or editing the map at any time. Since this is web based, any changes are nearly instantly available to the crews in the field so there is little to no time lost back tracking to survey missed roads. Along these same lines, the 'Routes' tab allows WVDOT employees to see where the Beck & Co. Engineering crews are when working on their project. This is beneficial because now not only can the WVDOT employees track the progress of the crews, but also if they notice a vehicle in an area of interest, they can quickly add additional routes without slowing down production.

## Key Personnel

The personnel of Beck & Co. Engineering, Inc. employ a very specific skill set to efficiently achieve success through each particular project. This unique skill set is the result of years of intense training and experience in the pavement marking and retro-testing industry. We feel that our equipment calibration and maintenance process along with our operator training, custom software and upgraded hardware give us a competitive advantage over any company in the industry. It is our goal to continue to improve our repeatability and reproducibility from both the personnel and equipment aspect in order to provide our customers with the best quality of service.

The following chart includes the names and positions of our team members that will be involved in the WVDOT contract assuming networkwide assessments. These individuals have been thoroughly vetted and trained by Beck & Co Engineering and have played a crucial role in a large portion of our organization's previous and current projects. However, this list is not definitive; there are other individuals that have been trained by Beck & Co Engineering to



**West Virginia Department of Transportation**  
**Mobile Retro Testing of Pavement Marking – CFRQ-0803-DOT2500000047-2**



operate our mobile-retroreflectometer systems who are available if needed. If more information on the key personnel is needed, please contact the project manager.

<b><i>Personnel Assigned</i></b>	<b><i>Role</i></b>	<b><i>Responsibility</i></b>	<b><i>Role %</i></b>
<i>Richard A. Beck, P.E.</i>	<i>Engineer</i>	<i>BCE Project Manager/ Cert. Operator</i>	<i>50%/As Needed</i>
<i>Chad Helgason, F.E.</i>	<i>Engineer</i>	<i>Post Processing/Reporting</i>	<i>25%/As Needed</i>
<i>Chase Myers-Beck</i>	<i>Technician</i>	<i>Post Processing/Reporting/Cert. Operator</i>	<i>25%/As Needed</i>
<i>Beau Beck</i>	<i>Technician</i>	<i>Equip/Calibration/Operations Specialist/Cert. Operator</i>	<i>50%</i>
<i>Ian Beck</i>	<i>Technician</i>	<i>Equip/Operations Specialist/ Cert. Operator</i>	<i>50%</i>
<i>Blake Bergherr</i>	<i>Technician</i>	<i>Cert. Operator/Inspector</i>	<i>100%</i>
<i>Taylor Bergherr</i>	<i>Technician</i>	<i>Cert. Operator/Inspector</i>	<i>100%</i>
<i>Mat Hatch</i>	<i>Technician</i>	<i>Cert. Operator/Inspector</i>	<i>100%</i>
<i>Mark Donnelly</i>	<i>Technician</i>	<i>Cert. Operator/Inspector</i>	<i>100%</i>
<i>Tony Klett</i>	<i>Technician</i>	<i>Cert. Operator/Inspector</i>	<i>25%/As Needed</i>
<i>Sam Mohs-Neno</i>	<i>Technician</i>	<i>Cert. Operator/Inspector</i>	<i>25%/As Needed</i>
<i>Brendan Dieleman</i>	<i>Technician</i>	<i>Cert. Operator/Inspector</i>	<i>25%/As Needed</i>
<i>Mathew Ickstadt</i>	<i>Software Engineer</i>	<i>Software/Systems Specialist</i>	<i>25%/As Needed</i>

*Note: Resumes for all Key individuals listed are located in the Appendix*



Richard Beck will be the Project Manager for this contract. He will be in charge of overseeing all operations including but not limited to: developing a detailed project plan to monitor and track progress, ensuring resource availability and allocation, and managing the relationship between the West Virginia Department of Transportation and Beck & Co Engineering. He will also act as an operator should the need arise.

Chad Helgason and Chase Myers-Beck will be primarily focused on handling and organizing the data after our crews have completed the data collection process. This team's responsibilities will include analyzing the data that has been collected, as well as scheduling and route planning. They will also be responsible for tracking progress and communicating with Beck & Co technicians along with WVDOT.

Beau Beck will be a consultant for the technicians in the field throughout the contract. He will also be in charge of performing bi-monthly preventative maintenance on the equipment used for this contract and any infield maintenance that is needed. Ian Beck will assist with equipment maintenance. Both Beau and Ian will serve as MRU technicians each with an excess of 20 years of experience in our mobile Retroreflectivity data collection process. Their responsibilities will include but are not limited to operating and maintaining the MRU as well as communicating with other teams both in the field and at our office on a daily basis.

Blake Bergherr, Taylor Bergherr, Mark Donnellhy, and Mat Hatch will serve as an MRU Technicians each with over 10 years of experience in our mobile Retroreflectivity data collection process. Their responsibilities will include but are not limited to operating and maintaining the MRU as well as communicating with our teams both in the field and at our office on a daily basis. The remaining key individuals have over 5-7 years of experience as MRU Technicians and will fill in if more capacity is needed for networkwide assessments.

## **Relevant Experience**

### ***Beck & Co. Engineering Experience***

On September 30, 2011 B.C. traffic engineering, inc. founders proceeded to shut down the organization. Subsequently Beck & Co. Engineering, Inc. was started by the original founder of B.C. traffic engineering, inc.

Beck & Co. Engineering, Inc. remains the industry leader in mobile performance measurement of pavement markings. Beck & Co. Engineering is headed by formal Minnesota Department of Transportation Traffic Research Engineering who early on saw the value of mobile reflectivity measurement of pavement markings. With their own technical staff, Beck & Co. Engineering continues to work to improve and develop the state of the art hardware and software to enable the Laserlux System to deliver precision beyond what the system manufacturer can claim.

From 1996 through 2011 members of Beck & Co. Engineering (under B.C. traffic engineering) conducted measurement and reporting of reflectivity for projects located throughout most of the lower 48 states and Provinces in Canada. This experience with mobile retro technology





dating back to early in 1990's has earned the founders of Beck & Co. Engineering a reputation of innovation and integrity in this industry.

## **V. References**

### **Consultant Qualifications (Experience/Past Performance)**

The following pages give an in depth view on the expertise and experience of the key personnel of Beck & Co. Engineering have gained. This expertise and experience has been handed down to everyone in the organization. Measurement crews (operators) for Beck & Co. are fortunate to have spent a minimum of two years training before becoming qualified operators for Beck & Co. Engineering.

Located in the appendix of this document are several contact information from various former and current Beck & Co. Engineering customers. We have attempted to cross reference those contacts with the experience detailed in the following pages. It should be noted that some of the prior experience contacts are for contracts held by B. C. Traffic Engineering while that company was still conducting mobile measurements.

Since 1996 members of Beck & Co. Engineering have performed consultant services in over 35 States and Provinces throughout the United States and Canada with Federal, State and Local Agencies as well as organizations in the Private Sector. Collectively, our staff has more experience in the area of pavement marking quality assurance and mobile retroreflectivity surveying than most companies in the country. Since this information could become public through "Freedom of Information Act" not all of our customers are listed, only those pertaining to the work related to this sub-contract. Some of the services performed have included but are not limited to the following list:

- Mobile surveying of pavement markings for performance-based pavement markings contracts (***well over 2,000,000-line miles***). This includes working for the following State Agencies:
  - ***California – Caltrans*** – 2020 to Present - Beck & Co. Engineering members have conducted network wide MRU surveying and data portal housing for 83,000 miles of data each year. Using the Data portal to develop yearly striping plans for Caltrans Districts. The contract allows for 12 months to collect the data and BCE has dedicated 2 MRU's with an additional 2 MRU's to facilitate collecting the data in a 9–10-month period. *See attached experience contact information for Camille Abou-Fadel, P.E.*
  - ***Kansas DOT*** – 2017- to Present - Beck & Co. Engineering members have conducted network wide MRU surveying and data portal housing for 45,000 miles of data each year. The contract requires BCE to collect the data on an as needed basis. BCE has dedicated 4 MRU's with an additional 4 MRU's to facilitate collecting the data in a timely manner. There have been years



when KDOT requested 2–3-month period to collect their data. Also, BCE crews have conducted wet testing for construction projects in the state of Kansas since 2019. These third-party testing includes wet testing for adherence to specifications. *See attached experience contact information for Jonny Madrid*

- **State DOT** – 2018 to Present - Beck & Co. Engineering members have conducted network wide MRU surveying and data portal housing for 75,000 miles of data each year. Using the Data portal to develop yearly striping plans for the States Regions. The contract requires BCE to collect the data over 3-6 months on an as needed basis. BCE has dedicated 4 MRU's to facilitate collecting the data in a timely manner. Since this will be a public document, please contact us for the *experience contact information for this state agency*.
- **State DOT** – 2020 to Present - Beck & Co. Engineering members have conducted network wide MRU surveying and data portal housing for 50,000 miles of data each year. Using the Data portal to develop yearly striping plans for the States Districts. The contract requires BCE to collect the data over 3-6 months on an as needed basis. BCE has dedicated 4 MRU's to facilitate collecting the data in a timely manner. Since this will be a public document, please contact us for the *experience contact information for this state agency*.
- **Several County Highway Departments** – 2018 to Present - Beck & Co. Engineering members have conducted network wide MRU surveying and data portal housing for 10,000 miles of data each year. Using the Data portal to develop yearly striping plans for the Counties Pavement Marking Contract Program. The contracts require BCE to collect the data over 1 month period. BCE has dedicated 1 MRU's to facilitate collecting the data in a timely manner. Since this will be a public document, please contact us for the *experience contact information for this state agency*.
- **Minnesota DOT** – In 2008, 2009, and 2011 members of Beck & Co. Engineering conducted both dry and wet testing on several routes. 2014 to present, BCE has conducted 100% of the DOT's independent third-party testing for construction projects with pavement marking performance requirements. These third-party testing includes dry and wet testing for adherence to specifications. *See attached experience contact information for Ethan Pederson, P.E.*
- **North Carolina DOT** – 2015- Present - Beck & Co. Engineering members have conducted network wide MRU surveying in North Carolina for both DOT and Contractors. *See attached experience contact information for Matt Springer P.E.*
- **Pennsylvania Turnpike** – 2013- Present - Beck & Co. Engineering members have conducted network wide MRU surveying on the PA Turnpike for both the Turnpike Authority and Contractors. These third-party testing includes



- dry and wet testing for adherence to specifications. *See attached experience contact information for Stephen McGinley, P.E.*
- **Michigan DOT** - since 1999 Beck & Co. Engineering members have conducted approximately 75% of surveying line miles in Michigan for both DOT and Contractors. In 2010 Beck & Co. Engineering members conducted 100% of MIDOT's R<sub>L</sub> surveying.
  - **Kentucky Transportation Cabinet** - from 1999 to 2003 and 2015 to Present Beck & Co. Engineering members had conducted 100% of surveying line miles in Kentucky for the Transportation Cabinet. *See attached experience contact information for Brandi Mitchell*
  - **Missouri DOT** – from 1998 to July 2008 and 2009 to January 2012, and from January 2013 to present: Beck & Co. Engineering members have conducted 100% of the surveying line miles in Missouri for both DOT and Contractors. *See attached experience contact information for Thomas Honich P.E.*
  - **Applied Research Associates - ARA**: 2010-2017 - Beck & Co. Engineering has used our staff and MRU's for conducting 100% of their mobile retroreflectivity and presence data collection on 1,200.00 line miles on the Illinois Tollway System. BCE customized our software data recording and reporting to help ARA develop their in-house pavement marking index (PMI). *See attached experience contact information for Carmine Dwyer, P.E.*
  - **Florida DOT** – 2013- 2016 - Beck & Co. Engineering members have conducted network wide MRU surveying on 25,000 miles/year or FL roadways for development of a PM management system. *See attached experience contact information for Charles Holzschuher, P.E.*
  - **South Dakota DOT** - Since 1998 and 2015 to present Beck & Co. Engineering members have conducted approximately 80% of mobile surveying line miles in South Dakota for the DOT. These third party testing includes dry and wet testing for adherence to specifications.
  - Numerous other State DOT's through contracts with private contractors. *See attached experience contact information for Mark Sergeant with Traffic Lines of New Jersey*
- Mobile surveying of pavement markings for life cycle analysis (well over 200,000 line miles).
    - Kentucky Transportation Cabinet
    - Missouri Department of Transportation
    - Nebraska Department of Transportation
    - Montana Department of Transportation
    - North Dakota Department of Transportation
    - North Carolina Department of Transportation
    - South Dakota Department of Transportation
    - Pennsylvania Department of Transportation



- Development of pavement marking management systems (saving agencies \$100,000's per season each).
- Evaluating new materials, equipment, and procedures with respect to pavement markings and their applications.
- Training striping crews for proper application, and equipment setups and conducting before and after analysis for measuring the effectiveness of the training (both public-Missouri DOT and private sector applicators).

Examples of Beck & Co. Engineering's previous work will be available at any time the state of West Virginia requests. We encourage customers to contact our clients for information regarding quality of work and/or dedication of our work teams. In fact, we hope that checking all the consultants past performance is a prerequisite for this type of work.

## **VI. Procurement Card (P-Card)**

At this point in time Beck & Co. Engineering, Inc. is not set up to accept Visa or any other credit card payments. We have indicated on the Event Details document that we do not accept Procurement Cards for payment.

## **VII. Political Subdivisions**

Beck & Co. Engineering, Inc. has in the past on other contracts with State Agencies accepted the Political Subdivision clause to allow local agencies to buy off the states contract. BCE understands that we will be required to deal directly with those political subdivisions. We have indicated on the Event Details document that we will accept the conditions of this contract to any and all political subdivisions as long as they adhere to the 2,000 line mile guarantee.



**Appendix A**

Consultant Experience/Qualifications-Contacts

CRFQ Signature Sheet – Terms and Conditions

CRFQ Verification of Equipment

Addendum #1

Exhibit A Pricing Sheet

Resumes

Accompany documents



## **Consultant Experience/Qualifications-Contacts**

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*Camille Abou-Fadel, P.E. – Caltrans: 858-518-3194 [camill.aboufadel@dot.ca.gov](mailto:camill.aboufadel@dot.ca.gov)*

*Jonny Madrid – KDOT: 785-817-1374 [jonny.madrid@ks.gov](mailto:jonny.madrid@ks.gov)*

*Ethan Peterson, P.E. – MnDOT: 763-355-4502 [ethan.peterson@state.mn.us](mailto:ethan.peterson@state.mn.us)*

*Thomas Honich P.E. – MoDOT: 573-526-0122 [Thomas.honich@modot.mo.gov](mailto:Thomas.honich@modot.mo.gov)*

*Matt Springer, P.E. – NCDOT: 919-814-5025 [mspringer@ncdot.gov](mailto:mspringer@ncdot.gov)*

*Carmine E. Dwyer, P.E. – Applied Research Associates: 217-356-4500 [cdwyer@ara.com](mailto:cdwyer@ara.com)*

*Mark Sergeant, President – Traffic Lines: 732-919-3100 [trafficl原因@gmail.com](mailto:trafficl原因@gmail.com)*

*Stephen McGinley, P.E. – PTC: 717-831-7116 [smcginle@paturnpike.com](mailto:smcginle@paturnpike.com)*

*Brandi Mitchell – KYTC: 502-564-3160 [brandi.mitchell@ky.gov](mailto:brandi.mitchell@ky.gov)*

*Charles Holzschuher, P.E. – FLDOT: 352-995-6341 [Charles.Holzschuher@dot.state.fl.us](mailto:Charles.Holzschuher@dot.state.fl.us)*

*State Agency, Call for contract info on these two Agencies.*

## **GENERAL TERMS AND CONDITIONS:**

**1. CONTRACTUAL AGREEMENT:** Issuance of an Award Document signed by the Purchasing Division Director, or his designee, and approved as to form by the Attorney General's office constitutes acceptance by the State of this Contract made by and between the State of West Virginia and the Vendor. Vendor's signature on its bid, or on the Contract if the Contract is not the result of a bid solicitation, signifies Vendor's agreement to be bound by and accept the terms and conditions contained in this Contract.

**2. DEFINITIONS:** As used in this Solicitation/Contract, the following terms shall have the meanings attributed to them below. Additional definitions may be found in the specifications included with this Solicitation/Contract.

**2.1. "Agency" or "Agencies"** means the agency, board, commission, or other entity of the State of West Virginia that is identified on the first page of the Solicitation or any other public entity seeking to procure goods or services under this Contract.

**2.2. "Bid" or "Proposal"** means the vendors submitted response to this solicitation.

**2.3. "Contract"** means the binding agreement that is entered into between the State and the Vendor to provide the goods or services requested in the Solicitation.

**2.4. "Director"** means the Director of the West Virginia Department of Administration, Purchasing Division.

**2.5. "Purchasing Division"** means the West Virginia Department of Administration, Purchasing Division.

**2.6. "Award Document"** means the document signed by the Agency and the Purchasing Division, and approved as to form by the Attorney General, that identifies the Vendor as the contract holder.

**2.7. "Solicitation"** means the official notice of an opportunity to supply the State with goods or services that is published by the Purchasing Division.

**2.8. "State"** means the State of West Virginia and/or any of its agencies, commissions, boards, etc. as context requires.

**2.9. "Vendor" or "Vendors"** means any entity submitting a bid in response to the Solicitation, the entity that has been selected as the lowest responsible bidder, or the entity that has been awarded the Contract as context requires.

**3. CONTRACT TERM; RENEWAL; EXTENSION:** The term of this Contract shall be determined in accordance with the category that has been identified as applicable to this Contract below:

☒ **Term Contract**

**Initial Contract Term:** The Initial Contract Term will be for a period of ONE (1) \_\_\_\_\_. The Initial Contract Term becomes effective on the effective start date listed on the first page of this Contract, identified as the State of West Virginia contract cover page containing the signatures of the Purchasing Division, Attorney General, and Encumbrance clerk (or another page identified as THREE (3) \_\_\_\_\_), and the Initial Contract Term ends on the effective end date also shown on the first page of this Contract.

**Renewal Term:** This Contract may be renewed upon the mutual written consent of the Agency, and the Vendor, with approval of the Purchasing Division and the Attorney General's office (Attorney General approval is as to form only). Any request for renewal should be delivered to the Agency and then submitted to the Purchasing Division thirty (30) days prior to the expiration date of the initial contract term or appropriate renewal term. A Contract renewal shall be in accordance with the terms and conditions of the original contract. Unless otherwise specified below, renewal of this Contract is limited to \_\_\_\_\_ successive one (1) year periods or multiple renewal periods of less than one year, provided that the multiple renewal periods do not exceed the total number of months available in all renewal years combined. Automatic renewal of this Contract is prohibited. Renewals must be approved by the Vendor, Agency, Purchasing Division and Attorney General's office (Attorney General approval is as to form only)

☐ **Alternate Renewal Term** – This contract may be renewed for \_\_\_\_\_ successive \_\_\_\_\_ year periods or shorter periods provided that they do not exceed the total number of months contained in all available renewals. Automatic renewal of this Contract is prohibited. Renewals must be approved by the Vendor, Agency, Purchasing Division and Attorney General's office (Attorney General approval is as to form only)

**Delivery Order Limitations:** In the event that this contract permits delivery orders, a delivery order may only be issued during the time this Contract is in effect. Any delivery order issued within one year of the expiration of this Contract shall be effective for one year from the date the delivery order is issued. No delivery order may be extended beyond one year after this Contract has expired.

☐ **Fixed Period Contract:** This Contract becomes effective upon Vendor's receipt of the notice to proceed and must be completed within \_\_\_\_\_ days.



☐ **Fixed Period Contract with Renewals:** This Contract becomes effective upon Vendor's receipt of the notice to proceed and part of the Contract more fully described in the attached specifications must be completed within \_\_\_\_\_ days. Upon completion of the work covered by the preceding sentence, the vendor agrees that:

☐ the contract will continue for \_\_\_\_\_ years;

☐ the contract may be renewed for \_\_\_\_\_ successive \_\_\_\_\_ year periods or shorter periods provided that they do not exceed the total number of months contained in all available renewals. Automatic renewal of this Contract is prohibited. Renewals must be approved by the Vendor, Agency, Purchasing Division and Attorney General's Office (Attorney General approval is as to form only).

☐ **One-Time Purchase:** The term of this Contract shall run from the issuance of the Award Document until all of the goods contracted for have been delivered, but in no event will this Contract extend for more than one fiscal year.

☐ **Construction/Project Oversight:** This Contract becomes effective on the effective start date listed on the first page of this Contract, identified as the State of West Virginia contract cover page containing the signatures of the Purchasing Division, Attorney General, and Encumbrance clerk (or another page identified as \_\_\_\_\_), and continues until the project for which the vendor is providing oversight is complete.

☐ **Other:** Contract Term specified in \_\_\_\_\_

**4. AUTHORITY TO PROCEED:** Vendor is authorized to begin performance of this contract on the date of encumbrance listed on the front page of the Award Document unless either the box for "Fixed Period Contract" or "Fixed Period Contract with Renewals" has been checked in Section 3 above. If either "Fixed Period Contract" or "Fixed Period Contract with Renewals" has been checked, Vendor must not begin work until it receives a separate notice to proceed from the State. The notice to proceed will then be incorporated into the Contract via change order to memorialize the official date that work commenced.

**5. QUANTITIES:** The quantities required under this Contract shall be determined in accordance with the category that has been identified as applicable to this Contract below.

☒ **Open End Contract:** Quantities listed in this Solicitation/Award Document are approximations only, based on estimates supplied by the Agency. It is understood and agreed that the Contract shall cover the quantities actually ordered for delivery during the term of the Contract, whether more or less than the quantities shown.

☒ **Service:** The scope of the service to be provided will be more clearly defined in the specifications included herewith.

☐ **Combined Service and Goods:** The scope of the service and deliverable goods to be provided will be more clearly defined in the specifications included herewith.

☐ **One-Time Purchase:** This Contract is for the purchase of a set quantity of goods that are identified in the specifications included herewith. Once those items have been delivered, no additional goods may be procured under this Contract without an appropriate change order approved by the Vendor, Agency, Purchasing Division, and Attorney General's office.

☐ **Construction:** This Contract is for construction activity more fully defined in the specifications.

**6. EMERGENCY PURCHASES:** The Purchasing Division Director may authorize the Agency to purchase goods or services in the open market that Vendor would otherwise provide under this Contract if those goods or services are for immediate or expedited delivery in an emergency. Emergencies shall include, but are not limited to, delays in transportation or an unanticipated increase in the volume of work. An emergency purchase in the open market, approved by the Purchasing Division Director, shall not constitute a breach of this Contract and shall not entitle the Vendor to any form of compensation or damages. This provision does not excuse the State from fulfilling its obligations under a One-Time Purchase contract.

**7. REQUIRED DOCUMENTS:** All of the items checked in this section must be provided to the Purchasing Division by the Vendor as specified:

☐ **LICENSE(S) / CERTIFICATIONS / PERMITS:** In addition to anything required under the Section of the General Terms and Conditions entitled Licensing, the apparent successful Vendor shall furnish proof of the following licenses, certifications, and/or permits upon request and in a form acceptable to the State. The request may be prior to or after contract award at the State's sole discretion.

☐☐☐☐

The apparent successful Vendor shall also furnish proof of any additional licenses or certifications contained in the specifications regardless of whether or not that requirement is listed above.

**8. INSURANCE:** The apparent successful Vendor shall furnish proof of the insurance identified by a checkmark below prior to Contract award. The insurance coverages identified below must be maintained throughout the life of this contract. Thirty (30) days prior to the expiration of the insurance policies, Vendor shall provide the Agency with proof that the insurance mandated herein has been continued. Vendor must also provide Agency with immediate notice of any changes in its insurance policies, including but not limited to, policy cancelation, policy reduction, or change in insurers. The apparent successful Vendor shall also furnish proof of any additional insurance requirements contained in the specifications prior to Contract award regardless of whether that insurance requirement is listed in this section.

Vendor must maintain:

☒ **Commercial General Liability Insurance** in at least an amount of: \$1,000,000.00 per occurrence.

☒ **Automobile Liability Insurance** in at least an amount of: \$1,000,000.00 per occurrence.

☐ **Professional/Malpractice/Errors and Omission Insurance** in at least an amount of: \_\_\_\_\_ per occurrence. Notwithstanding the forgoing, Vendor's are not required to list the State as an additional insured for this type of policy.

☐ **Commercial Crime and Third Party Fidelity Insurance** in an amount of: \_\_\_\_\_ per occurrence.

☐ **Cyber Liability Insurance** in an amount of: \_\_\_\_\_ per occurrence.

☐ **Builders Risk Insurance** in an amount equal to 100% of the amount of the Contract.

☐ **Pollution Insurance** in an amount of: \_\_\_\_\_ per occurrence.

☐ **Aircraft Liability** in an amount of: \_\_\_\_\_ per occurrence.

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**9. WORKERS' COMPENSATION INSURANCE:** Vendor shall comply with laws relating to workers compensation, shall maintain workers' compensation insurance when required, and shall furnish proof of workers' compensation insurance upon request.

**10. VENUE:** All legal actions for damages brought by Vendor against the State shall be brought in the West Virginia Claims Commission. Other causes of action must be brought in the West Virginia court authorized by statute to exercise jurisdiction over it.

**11. LIQUIDATED DAMAGES:** This clause shall in no way be considered exclusive and shall not limit the State or Agency's right to pursue any other available remedy. Vendor shall pay liquidated damages in the amount specified below or as described in the specifications:

☐ \_\_\_\_\_ for \_\_\_\_\_.

☐ Liquidated Damages Contained in the Specifications.

☐ Liquidated Damages Are Not Included in this Contract.

**12. ACCEPTANCE:** Vendor's signature on its bid, or on the certification and signature page, constitutes an offer to the State that cannot be unilaterally withdrawn, signifies that the product or service proposed by vendor meets the mandatory requirements contained in the Solicitation for that product or service, unless otherwise indicated, and signifies acceptance of the terms and conditions contained in the Solicitation unless otherwise indicated.

**13. PRICING:** The pricing set forth herein is firm for the life of the Contract, unless specified elsewhere within this Solicitation/Contract by the State. A Vendor's inclusion of price adjustment provisions in its bid, without an express authorization from the State in the Solicitation to do so, may result in bid disqualification. Notwithstanding the foregoing, Vendor must extend any publicly advertised sale price to the State and invoice at the lower of the contract price or the publicly advertised sale price.

**14. PAYMENT IN ARREARS:** Payments for goods/services will be made in arrears only upon receipt of a proper invoice, detailing the goods/services provided or receipt of the goods/services, whichever is later. Notwithstanding the foregoing, payments for software maintenance, licenses, or subscriptions may be paid annually in advance.

**15. PAYMENT METHODS:** Vendor must accept payment by electronic funds transfer and P-Card. (The State of West Virginia's Purchasing Card program, administered under contract by a banking institution, processes payment for goods and services through state designated credit cards.)

**16. TAXES:** The Vendor shall pay any applicable sales, use, personal property or any other taxes arising out of this Contract and the transactions contemplated thereby. The State of West Virginia is exempt from federal and state taxes and will not pay or reimburse such taxes.

**17. ADDITIONAL FEES:** Vendor is not permitted to charge additional fees or assess additional charges that were not either expressly provided for in the solicitation published by the State of West Virginia, included in the Contract, or included in the unit price or lump sum bid amount that Vendor is required by the solicitation to provide. Including such fees or charges as notes to the solicitation may result in rejection of vendor's bid. Requesting such fees or charges be paid after the contract has been awarded may result in cancellation of the contract.

**18. FUNDING:** This Contract shall continue for the term stated herein, contingent upon funds being appropriated by the Legislature or otherwise being made available. In the event funds are not appropriated or otherwise made available, this Contract becomes void and of no effect beginning on July 1 of the fiscal year for which funding has not been appropriated or otherwise made available. If that occurs, the State may notify the Vendor that an alternative source of funding has been obtained and thereby avoid the automatic termination. Non-appropriation or non-funding shall not be considered an event of default.

**19. CANCELLATION:** The Purchasing Division Director reserves the right to cancel this Contract immediately upon written notice to the vendor if the materials or workmanship supplied do not conform to the specifications contained in the Contract. The Purchasing Division Director may also cancel any purchase or Contract upon 30 days written notice to the Vendor in accordance with West Virginia Code of State Rules § 148-1-5.2.b.

**20. TIME:** Time is of the essence regarding all matters of time and performance in this Contract.

**21. APPLICABLE LAW:** This Contract is governed by and interpreted under West Virginia law without giving effect to its choice of law principles. Any information provided in specification manuals, or any other source, verbal or written, which contradicts or violates the West Virginia Constitution, West Virginia Code, or West Virginia Code of State Rules is void and of no effect.

**22. COMPLIANCE WITH LAWS:** Vendor shall comply with all applicable federal, state, and local laws, regulations and ordinances. By submitting a bid, Vendor acknowledges that it has reviewed, understands, and will comply with all applicable laws, regulations, and ordinances.

**SUBCONTRACTOR COMPLIANCE:** Vendor shall notify all subcontractors providing commodities or services related to this Contract that as subcontractors, they too are required to comply with all applicable laws, regulations, and ordinances. Notification under this provision must occur prior to the performance of any work under the contract by the subcontractor.

**23. ARBITRATION:** Any references made to arbitration contained in this Contract, Vendor's bid, or in any American Institute of Architects documents pertaining to this Contract are hereby deleted, void, and of no effect.

**24. MODIFICATIONS:** This writing is the parties' final expression of intent. Notwithstanding anything contained in this Contract to the contrary no modification of this Contract shall be binding without mutual written consent of the Agency, and the Vendor, with approval of the Purchasing Division and the Attorney General's office (Attorney General approval is as to form only). Any change to existing contracts that adds work or changes contract cost, and were not included in the original contract, must be approved by the Purchasing Division and the Attorney General's Office (as to form) prior to the implementation of the change or commencement of work affected by the change.

**25. WAIVER:** The failure of either party to insist upon a strict performance of any of the terms or provision of this Contract, or to exercise any option, right, or remedy herein contained, shall not be construed as a waiver or a relinquishment for the future of such term, provision, option, right, or remedy, but the same shall continue in full force and effect. Any waiver must be expressly stated in writing and signed by the waiving party.

**26. SUBSEQUENT FORMS:** The terms and conditions contained in this Contract shall supersede any and all subsequent terms and conditions which may appear on any form documents submitted by Vendor to the Agency or Purchasing Division such as price lists, order forms, invoices, sales agreements, or maintenance agreements, and includes internet websites or other electronic documents. Acceptance or use of Vendor's forms does not constitute acceptance of the terms and conditions contained thereon.

**27. ASSIGNMENT:** Neither this Contract nor any monies due, or to become due hereunder, may be assigned by the Vendor without the express written consent of the Agency, the Purchasing Division, the Attorney General's office (as to form only), and any other government agency or office that may be required to approve such assignments.

**28. WARRANTY:** The Vendor expressly warrants that the goods and/or services covered by this Contract will: (a) conform to the specifications, drawings, samples, or other description furnished or specified by the Agency; (b) be merchantable and fit for the purpose intended; and (c) be free from defect in material and workmanship.

**29. STATE EMPLOYEES:** State employees are not permitted to utilize this Contract for personal use and the Vendor is prohibited from permitting or facilitating the same.

**30. PRIVACY, SECURITY, AND CONFIDENTIALITY:** The Vendor agrees that it will not disclose to anyone, directly or indirectly, any such personally identifiable information or other confidential information gained from the Agency, unless the individual who is the subject of the information consents to the disclosure in writing or the disclosure is made pursuant to the Agency's policies, procedures, and rules. Vendor further agrees to comply with the Confidentiality Policies and Information Security Accountability Requirements, set forth in [www.state.wv.us/admin/purchase/privacy](http://www.state.wv.us/admin/purchase/privacy).

**31. YOUR SUBMISSION IS A PUBLIC DOCUMENT:** Vendor's entire response to the Solicitation and the resulting Contract are public documents. As public documents, they will be disclosed to the public following the bid/proposal opening or award of the contract, as required by the competitive bidding laws of West Virginia Code §§ 5A-3-1 et seq., 5-22-1 et seq., and 5G-1-1 et seq. and the Freedom of Information Act West Virginia Code §§ 29B-1-1 et seq.

**DO NOT SUBMIT MATERIAL YOU CONSIDER TO BE CONFIDENTIAL, A TRADE SECRET, OR OTHERWISE NOT SUBJECT TO PUBLIC DISCLOSURE.**

Submission of any bid, proposal, or other document to the Purchasing Division constitutes your explicit consent to the subsequent public disclosure of the bid, proposal, or document. The Purchasing Division will disclose any document labeled "confidential," "proprietary," "trade secret," "private," or labeled with any other claim against public disclosure of the documents, to include any "trade secrets" as defined by West Virginia Code § 47-22-1 et seq. All submissions are subject to public disclosure without notice.

**32. LICENSING:** In accordance with West Virginia Code of State Rules § 148-1-6.1.e, Vendor must be licensed and in good standing in accordance with any and all state and local laws and requirements by any state or local agency of West Virginia, including, but not limited to, the West Virginia Secretary of State's Office, the West Virginia Tax Department, West Virginia Insurance Commission, or any other state agency or political subdivision. Obligations related to political subdivisions may include, but are not limited to, business licensing, business and occupation taxes, inspection compliance, permitting, etc. Upon request, the Vendor must provide all necessary releases to obtain information to enable the Purchasing Division Director or the Agency to verify that the Vendor is licensed and in good standing with the above entities.

**SUBCONTRACTOR COMPLIANCE:** Vendor shall notify all subcontractors providing commodities or services related to this Contract that as subcontractors, they too are required to be licensed, in good standing, and up-to-date on all state and local obligations as described in this section. Obligations related to political subdivisions may include, but are not limited to, business licensing, business and occupation taxes, inspection compliance, permitting, etc. Notification under this provision must occur prior to the performance of any work under the contract by the subcontractor.

**33. ANTITRUST:** In submitting a bid to, signing a contract with, or accepting a Award Document from any agency of the State of West Virginia, the Vendor agrees to convey, sell, assign, or transfer to the State of West Virginia all rights, title, and interest in and to all causes of action it may now or hereafter acquire under the antitrust laws of the United States and the State of West Virginia for price fixing and/or unreasonable restraints of trade relating to the particular commodities or services purchased or acquired by the State of West Virginia. Such assignment shall be made and become effective at the time the purchasing agency tenders the initial payment to Vendor.

**34. VENDOR NON-CONFLICT:** Neither Vendor nor its representatives are permitted to have any interest, nor shall they acquire any interest, direct or indirect, which would compromise the performance of its services hereunder. Any such interests shall be promptly presented in detail to the Agency.

**35. VENDOR RELATIONSHIP:** The relationship of the Vendor to the State shall be that of an independent contractor and no principal-agent relationship or employer-employee relationship is contemplated or created by this Contract. The Vendor as an independent contractor is solely liable for the acts and omissions of its employees and agents. Vendor shall be responsible for selecting, supervising, and compensating any and all individuals employed pursuant to the terms of this Solicitation and resulting contract. Neither the Vendor, nor any employees or subcontractors of the Vendor, shall be deemed to be employees of the State for any purpose whatsoever. Vendor shall be exclusively responsible for payment of employees and contractors for all wages and salaries, taxes, withholding payments, penalties, fees, fringe benefits, professional liability insurance premiums, contributions to insurance and pension, or other deferred compensation plans, including but not limited to, Workers' Compensation and Social Security obligations, licensing fees, etc. and the filing of all necessary documents, forms, and returns pertinent to all of the foregoing.

Vendor shall hold harmless the State, and shall provide the State and Agency with a defense against any and all claims including, but not limited to, the foregoing payments, withholdings, contributions, taxes, Social Security taxes, and employer income tax returns.

**36. INDEMNIFICATION:** The Vendor agrees to indemnify, defend, and hold harmless the State and the Agency, their officers, and employees from and against: (1) Any claims or losses for services rendered by any subcontractor, person, or firm performing or supplying services, materials, or supplies in connection with the performance of the Contract; (2) Any claims or losses resulting to any person or entity injured or damaged by the Vendor, its officers, employees, or subcontractors by the publication, translation, reproduction, delivery, performance, use, or disposition of any data used under the Contract in a manner not authorized by the Contract, or by Federal or State statutes or regulations; and (3) Any failure of the Vendor, its officers, employees, or subcontractors to observe State and Federal laws including, but not limited to, labor and wage and hour laws.

**37. NO DEBT CERTIFICATION:** In accordance with West Virginia Code §§ 5A-3-10a and 5-22-1(i), the State is prohibited from awarding a contract to any bidder that owes a debt to the State or a political subdivision of the State. By submitting a bid, or entering into a contract with the State, Vendor is affirming that (1) for construction contracts, the Vendor is not in default on any monetary obligation owed to the state or a political subdivision of the state, and (2) for all other contracts, neither the Vendor nor any related party owe a debt as defined above, and neither the Vendor nor any related party are in employer default as defined in the statute cited above unless the debt or employer default is permitted under the statute.

**38. CONFLICT OF INTEREST:** Vendor, its officers or members or employees, shall not presently have or acquire an interest, direct or indirect, which would conflict with or compromise the performance of its obligations hereunder. Vendor shall periodically inquire of its officers, members and employees to ensure that a conflict of interest does not arise. Any conflict of interest discovered shall be promptly presented in detail to the Agency.



**39. REPORTS:** Vendor shall provide the Agency and/or the Purchasing Division with the following reports identified by a checked box below:

☐ Such reports as the Agency and/or the Purchasing Division may request. Requested reports may include, but are not limited to, quantities purchased, agencies utilizing the contract, total contract expenditures by agency, etc.

☐ Quarterly reports detailing the total quantity of purchases in units and dollars, along with a listing of purchases by agency. Quarterly reports should be delivered to the Purchasing Division via email at [purchasing.division@wv.gov](mailto:purchasing.division@wv.gov).

**40. BACKGROUND CHECK:** In accordance with W. Va. Code § 15-2D-3, the State reserves the right to prohibit a service provider's employees from accessing sensitive or critical information or to be present at the Capitol complex based upon results addressed from a criminal background check. Service providers should contact the West Virginia Division of Protective Services by phone at (304) 558-9911 for more information.

**41. PREFERENCE FOR USE OF DOMESTIC STEEL PRODUCTS:** Except when authorized by the Director of the Purchasing Division pursuant to W. Va. Code § 5A-3-56, no contractor may use or supply steel products for a State Contract Project other than those steel products made in the United States. A contractor who uses steel products in violation of this section may be subject to civil penalties pursuant to W. Va. Code § 5A-3-56. As used in this section:

- a. "State Contract Project" means any erection or construction of, or any addition to, alteration of or other improvement to any building or structure, including, but not limited to, roads or highways, or the installation of any heating or cooling or ventilating plants or other equipment, or the supply of and materials for such projects, pursuant to a contract with the State of West Virginia for which bids were solicited on or after June 6, 2001.
- b. "Steel Products" means products rolled, formed, shaped, drawn, extruded, forged, cast, fabricated or otherwise similarly processed, or processed by a combination of two or more or such operations, from steel made by the open hearth, basic oxygen, electric furnace, Bessemer or other steel making process.
- c. The Purchasing Division Director may, in writing, authorize the use of foreign steel products if:
  1. The cost for each contract item used does not exceed one tenth of one percent (.1%) of the total contract cost or two thousand five hundred dollars (\$2,500.00), whichever is greater. For the purposes of this section, the cost is the value of the steel product as delivered to the project; or
  2. The Director of the Purchasing Division determines that specified steel materials are not produced in the United States in sufficient quantity or otherwise are not reasonably available to meet contract requirements.

**42. PREFERENCE FOR USE OF DOMESTIC ALUMINUM, GLASS, AND STEEL:** In Accordance with W. Va. Code § 5-19-1 et seq., and W. Va. CSR § 148-10-1 et seq., for every contract or subcontract, subject to the limitations contained herein, for the construction, reconstruction, alteration, repair, improvement or maintenance of public works or for the purchase of any item of machinery or equipment to be used at sites of public works, only domestic aluminum, glass or steel products shall be supplied unless the spending officer determines, in writing, after the receipt of offers or bids, (1) that the cost of domestic aluminum, glass or steel products is unreasonable or inconsistent with the public interest of the State of West Virginia, (2) that domestic aluminum, glass or steel products are not produced in sufficient quantities to meet the contract requirements, or (3) the available domestic aluminum, glass, or steel do not meet the contract specifications. This provision only applies to public works contracts awarded in an amount more than fifty thousand dollars (\$50,000) or public works contracts that require more than ten thousand pounds of steel products.

The cost of domestic aluminum, glass, or steel products may be unreasonable if the cost is more than twenty percent (20%) of the bid or offered price for foreign made aluminum, glass, or steel products. If the domestic aluminum, glass or steel products to be supplied or produced in a “substantial labor surplus area”, as defined by the United States Department of Labor, the cost of domestic aluminum, glass, or steel products may be unreasonable if the cost is more than thirty percent (30%) of the bid or offered price for foreign made aluminum, glass, or steel products. This preference shall be applied to an item of machinery or equipment, as indicated above, when the item is a single unit of equipment or machinery manufactured primarily of aluminum, glass or steel, is part of a public works contract and has the sole purpose or of being a permanent part of a single public works project. This provision does not apply to equipment or machinery purchased by a spending unit for use by that spending unit and not as part of a single public works project.

All bids and offers including domestic aluminum, glass or steel products that exceed bid or offer prices including foreign aluminum, glass or steel products after application of the preferences provided in this provision may be reduced to a price equal to or lower than the lowest bid or offer price for foreign aluminum, glass or steel products plus the applicable preference. If the reduced bid or offer prices are made in writing and supersede the prior bid or offer prices, all bids or offers, including the reduced bid or offer prices, will be reevaluated in accordance with this rule.

**43. INTERESTED PARTY SUPPLEMENTAL DISCLOSURE:** W. Va. Code § 6D-1-2 requires that for contracts with an actual or estimated value of at least \$1 million, the Vendor must submit to the Agency a disclosure of interested parties prior to beginning work under this Contract. Additionally, the Vendor must submit a supplemental disclosure of interested parties reflecting any new or differing interested parties to the contract, which were not included in the original pre-work interested party disclosure, within 30 days following the completion or termination of the contract. A copy of that form is included with this solicitation or can be obtained from the WV Ethics Commission. This requirement does not apply to publicly traded companies listed on a national or international stock exchange. A more detailed definition of interested parties can be obtained from the form referenced above.

**44. PROHIBITION AGAINST USED OR REFURBISHED:** Unless expressly permitted in the solicitation published by the State, Vendor must provide new, unused commodities, and is prohibited from supplying used or refurbished commodities, in fulfilling its responsibilities under this Contract.

**45. VOID CONTRACT CLAUSES:** This Contract is subject to the provisions of West Virginia Code § 5A-3-62, which automatically voids certain contract clauses that violate State law.


**46. ISRAEL BOYCOTT:** Bidder understands and agrees that, pursuant to W. Va. Code § 5A-3-63, it is prohibited from engaging in a boycott of Israel during the term of this contract.


**DESIGNATED CONTACT:** Vendor appoints the individual identified in this Section as the Contract Administrator and the initial point of contact for matters relating to this Contract.

(Printed Name and Title) Ricahrd A Beck, P.E. President/CEO  
(Address) 8727 Pheasant Run Circle, Woodbury, MN 55125  
(Phone Number) / (Fax Number) 612-805-1637  
(email address) rick.bcengineering@gmail.com

**CERTIFICATION AND SIGNATURE:** By signing below, or submitting documentation through wvOASIS, I certify that: I have reviewed this Solicitation/Contract in its entirety; that I understand the requirements, terms and conditions, and other information contained herein; that this bid, offer or proposal constitutes an offer to the State that cannot be unilaterally withdrawn; that the product or service proposed meets the mandatory requirements contained in the Solicitation/Contract for that product or service, unless otherwise stated herein; that the Vendor accepts the terms and conditions contained in the Solicitation, unless otherwise stated herein; that I am submitting this bid, offer or proposal for review and consideration; that this bid or offer was made without prior understanding, agreement, or connection with any entity submitting a bid or offer for the same material, supplies, equipment or services; that this bid or offer is in all respects fair and without collusion or fraud; that this Contract is accepted or entered into without any prior understanding, agreement, or connection to any other entity that could be considered a violation of law; that I am authorized by the Vendor to execute and submit this bid, offer, or proposal, or any documents related thereto on Vendor's behalf; that I am authorized to bind the vendor in a contractual relationship; and that to the best of my knowledge, the vendor has properly registered with any State agency that may require registration.

By signing below, I further certify that I understand this Contract is subject to the provisions of West Virginia Code § 5A-3-62, which automatically voids certain contract clauses that violate State law; and that pursuant to W. Va. Code 5A-3-63, the entity entering into this contract is prohibited from engaging in a boycott against Israel.

Beck & Co. Engineering, Inc  
(Company)   
(Signature of Authorized Representative) Richard A. Beck, P.E. President 4/14/2025  
(Printed Name and Title of Authorized Representative) (Date)  
612-805-1637 651-501-0015  
(Phone Number) (Fax Number)  
rick.bcengineering@gmail.com  
(Email Address)



# ***Beck & Co. Engineering, Inc.***

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## **CEN-30 V7 MOBILE RETROREFLECTOMETER MEETS ASTM E1710/E3320**



### **BECK CEN-30 V7 Standard Features**

- HeNe Laser based optical system for laboratory quality and accuracy
- Meets ASTM E1710 – 30 Meter Geometry
- Meets ASTM E3320 – Mobile Retro Unit
- Entrance Angle: 88.76° (per ASTM E1710)
- Observation Angle: 1.05° (per ASTM E1710)
- Measuring aspect of the total angular spread does not exceed 0.33°
- Operating Temperature Range: 0°F to 120°F
- Reflectivity Range: 0 mcd/m<sup>2</sup>/lux to 2000 mcd/m<sup>2</sup>/lux
- > 400 Measurements per Second in legacy version
- Provides individual outputs for double lines
- Device also Measures Line Width, Contrast Ratio, Pavement Reflections, etc.
- Measures white and yellow flat and profiled road markings of any type on flat and rough, dry surfaces
- Day or night operation capable – eliminates RPM's
- Fully secure USB connection and data storage
- Full HD 1080p video with data stream overlay - for condition assessment individual frame by frame with GPS and MP location every 28 feet with tagged spreadsheet for quick access to trouble locations.
- Retroreflectometer can be mounted on either side of the vehicle or both sides
- GPS accuracy < 1m and 8 significant figures
- DMI Accuracy <1.0 ft per mile
- Real-Time programable event codes and condition assessment ratings outputted at each interval
- Windows-based OS with a sampling rate of 1M S/s (1 million samples per second)
- Real-Time Display of the Retroreflective Profile
- Wet Testing capable (static/dynamic) ASTM E-2177 Wet Recovery/ASTM E-2832 Wet Continuous
- Color ASTM E-1347 – Chromaticity Readings
- NIST Certified calibration panels with simple calibration process;
- Proprietary internal self-check calibration.

***Beck & Co. Engineering, Inc. - 285 Hardman Court  
So St Paul, MN 55075 - Phone: (612) 805-1637 Fax: (651) 501-0015***



Department of Administration  
Purchasing Division  
2019 Washington Street East  
Post Office Box 50130  
Charleston, WV 25305-0130

State of West Virginia  
Centralized Request for Quote  
Highways

Proc Folder: 1637261

Doc Description: MOBILE RETROREFELCTIVITY TETING FOR PAVEMENT MARKINGS

Reason for Modification:

Addendum No\_1  
To Correct error on the Pricing  
Page and the Quantity of Comm  
Line 3

Proc Type: Central Master Agreement

Date Issued	Solicitation Closes	Solicitation No	Version
2025-03-27	2025-04-15 13:30	CRFQ 0803 DOT2500000047	2

**BID RECEIVING LOCATION**

BID CLERK  
DEPARTMENT OF ADMINISTRATION  
PURCHASING DIVISION  
2019 WASHINGTON ST E  
CHARLESTON WV 25305  
US

**VENDOR**

Vendor Customer Code: VS0000048662

Vendor Name : Beck & Co. Engineering, Inc

Address : 8727 Pheasant Run Circle

Street :

City : Woodbury

State : MN

Country : United States

Zip : 55125

Principal Contact : Richard A. Beck, P.E. President

Vendor Contact Phone: 612-805-1637

Extension:

**FOR INFORMATION CONTACT THE BUYER**

John W Estep  
304-558-2566  
john.w.estep@wv.gov

Vendor  
Signature X



FEIN# 45-3601009

DATE 4/14/2025

All offers subject to all terms and conditions contained in this solicitation

**ADDITIONAL INFORMATION****ADDENDUM NO\_1**

Addendum No\_1 issued to publish and distribute the attached information to the Vendor Community.

**REQUEST FOR QUOTATION:**

The West Virginia Purchasing Division is soliciting bids on behalf of the West Virginia Department of Transportation, Division of Highways to establish a contract for mobile testing of the retroreflectivity of pavement markings. Per the Bid Requirements, specifications, Terms and Conditions attached to this solicitation.

INVOICE TO			SHIP TO		
DIVISION OF HIGHWAYS TRAFFIC ENGINEERING DIVISION 1900 KANAWHA BLVD E, BLDG 5 RM A550 CHARLESTON WV US			DIVISION OF HIGHWAYS TRAFFIC ENGINEERING DIVISION 1900 KANAWHA BLVD E, BLDG 5 RM A550 CHARLESTON WV US		

Line	Comm Ln Desc	Qty	Unit Issue	Unit Price	Total Price
1	Mobilization, Per Release Order	5.00000	EA		

Comm Code	Manufacturer	Specification	Model #
78141600			

**Extended Description:**  
Mobilization, Per Release Order

INVOICE TO			SHIP TO		
DIVISION OF HIGHWAYS TRAFFIC ENGINEERING DIVISION 1900 KANAWHA BLVD E, BLDG 5 RM A550 CHARLESTON WV US			DIVISION OF HIGHWAYS TRAFFIC ENGINEERING DIVISION 1900 KANAWHA BLVD E, BLDG 5 RM A550 CHARLESTON WV US		

Line	Comm Ln Desc	Qty	Unit Issue	Unit Price	Total Price
2	Pavement Marking Mobile Retro Testing Expressway, Line Miles	6000.00000	MILE		

Comm Code	Manufacturer	Specification	Model #
78141600			

**Extended Description:**  
Pavement Marking Mobile Retro Testing Expressway, Line Miles

INVOICE TO			SHIP TO		
DIVISION OF HIGHWAYS			DIVISION OF HIGHWAYS		
TRAFFIC ENGINEERING			TRAFFIC ENGINEERING		
DIVISION			DIVISION		
1900 KANAWHA BLVD E,			1900 KANAWHA BLVD E,		
BLDG 5 RM A550			BLDG 5 RM A550		
CHARLESTON		WV	CHARLESTON		WV
US			US		

Line	Comm Ln Desc	Qty	Unit Issue	Unit Price	Total Price
3	Pavement Marking Mobile Retro Testing Secondary, Line Miles	13200.00000	MILE		

Comm Code	Manufacturer	Specification	Model #
78141600			

**Extended Description:**  
Pavement Marking Mobile Retro Testing Secondary, Line Miles

**SCHEDULE OF EVENTS**

<u>Line</u>	<u>Event</u>	<u>Event Date</u>
1	Tech Questions due by 10:00am	2025-04-02



# **SOLICITATION NUMBER: CRFQ DOT2500000047**

## **Addendum Number: 1**

The purpose of this addendum is to modify the solicitation identified as CRFQ DOT2500000047 ("Solicitation") to reflect the change(s) identified and described below.

### **Applicable Addendum Category:**

- ☐ Modify bid opening date and time
- ☐ Modify specifications of product or service being sought
- ☐ Attachment of vendor questions and responses
- ☐ Attachment of pre-bid sign-in sheet
- ☒ Correction of error
- ☐ Other

### **Additional Documentation:**

To Correct Typo on the Exhibit A Pricing Page and Commodity Line 3

Bid Opening remains 04/15/2025 at 1:30pm

### **Terms and Conditions:**

1. All provisions of the Solicitation and other addenda not modified herein shall remain in full force and effect.
2. Vendor should acknowledge receipt of all addenda issued for this Solicitation by completing an Addendum Acknowledgment, a copy of which is included herewith. Failure to acknowledge addenda may result in bid disqualification. The addendum acknowledgement should be submitted with the bid to expedite document processing.

**EXHIBIT A - PRICING PAGES**

Quantities listed are approximations only, based on estimates supplied by the Agency. It is understood and agreed that the Contract shall cover the quantities actually performed and measured during the term of the Contract as defined in the Contract Specifications, whether more or less than the quantities shown.

ITEM NUMBER	ESTIMATED QUANTITY	DESCRIPTION	Commodity Code	UNIT COST	EXTENDED TOTAL AMOUNT
1	6,000	Pavement Marking Mobile Retro Testing-Expressway, Line Miles	78141600	\$23.50	\$141,000.00
2	13,200	Pavement Marking Mobile Retro Testing-Secondary, Line Miles	78141600	\$24.50	\$323,400.00
3	5	Mobilization, Per Release Order, Each	78141600	\$3,500.00	\$17,500.00

**ADDENDUM ACKNOWLEDGEMENT FORM**  
**SOLICITATION NO.: CRFQ DOT2500000047**

**Instructions:** Please acknowledge receipt of all addenda issued with this solicitation by completing this addendum acknowledgment form. Check the box next to each addendum received and sign below. Failure to acknowledge addenda may result in bid disqualification.

**Acknowledgment:** I hereby acknowledge receipt of the following addenda and have made the necessary revisions to my proposal, plans and/or specification, etc.

**Addendum Numbers Received:**

(Check the box next to each addendum received)

<input checked="" type="checkbox"/> Addendum No. 1	<input type="checkbox"/> Addendum No. 6
<input type="checkbox"/> Addendum No. 2	<input type="checkbox"/> Addendum No. 7
<input type="checkbox"/> Addendum No. 3	<input type="checkbox"/> Addendum No. 8
<input type="checkbox"/> Addendum No. 4	<input type="checkbox"/> Addendum No. 9
<input type="checkbox"/> Addendum No. 5	<input type="checkbox"/> Addendum No. 10

I understand that failure to confirm the receipt of addenda may be cause for rejection of this bid. I further understand that that any verbal representation made or assumed to be made during any oral discussion held between Vendor's representatives and any state personnel is not binding. Only the information issued in writing and added to the specifications by an official addendum is binding.

Beck & Co. Engineering, Inc

Company

*Richard A. Biale*



Authorized Signature

4/14/2025

Date

**NOTE:** This addendum acknowledgement should be submitted with the bid to expedite document processing.

# Richard A. Beck, P.E.



8727 Pheasant Run Circle • Woodbury, MN 55125 • Phone: 612-805-1637 • E-Mail: rick.bcengineering@gmail.com

## Objective

Provide the very highest level of practical experience, know-how, and confidentiality to our clients. So our clients know that working with BCE is a more professional, less risky way to develop innovative approaches to solving and ultimately managing pavement-marking problems. To be a recognized and respected proponent of the traffic engineering industry.

## Experience

Beck & Co. Engineering, Inc.

October 2011 - Present

- President/CEO

BC Traffic Engineering, Inc.

August 1996 - 2011

- President/CEO

Minnesota Department of Transportation

May 1988 - August 1996

- Principle Engineer - Traffic Research Engineer
- Senior Engineer - Maintenance Operations Support Engineer

## Education

University of North Dakota

September 1984 - May 1988

Bachelor of Science: Civil Engineering

University of Minnesota

September 1993 - May 1995

Master's Degree: MBA Carlson School of Management

## Awards

Transportation Research Board - D. Grant Mickle Award    January 2000

- Public Perception of Pavement-Marking Brightness

## Skills

- Fluent in Microsoft Excel/Word/PowerPt
- Advertising & Marketing
- Problem Solving
- Operations Management
- Professional Leadership
- Team Player
- Creative Thinker
- Certified CEN V-7 Operator

## Volunteer

- Woodbury H.S. Booster Club - President; Woodbury Youth Hockey Club - Vice-President Hockey Development

# Chad Helgason



8860 Glacier Rd • Woodbury, MN 55125 • Phone: 651-238-8971 • E-Mail: chad.bcengineering@gmail.com

## Accomplishments

- Lean Six Sigma Greenbelt Certified, *University of St. Thomas, Minneapolis MN - March 2012*
- Dean's List 9 semesters.
- Certified- Fundamentals of Engineering (FE) Exam

## Experience

Beck & Co. Engineering – Operator

May 2012 - Present

- General formatting and analysis of raw data files using Microsoft Excel.
- Create Macros using Visual Basic coding in Excel to improve analysis and formatting efficiency.
- Supervisors: Rick Beck – Beck & Co. Engineering Inc.

## Education

University of Oklahoma

September 2006 – May 2011

**Bachelor of Science in Industrial Engineering – 3.28 GPA**

## Skills

- ◆ Capable user of Solid Works software for mechanical design and three dimensional (3D) modeling.
- ◆ Simulated a variety of scenarios including inventory control and process flow using Awesim software.
- ◆ Used ergonomic principles to analyze safety hazards in a machine shop.
- ◆ Applied knowledge of engineering drawings to machine parts using a mill machine and lathe.
- ◆ Extensive experience with group and team work from a variety of projects.
- ◆ Significant time on research for solution ideas on various projects.
- ◆ Experienced in statistical analysis in Minitab, Statistical Analysis Software (SAS) and Excel to gather and display data for both proposed and implemented process improvements.
- ◆ Successfully built graphical user interfaces (GUI) and Macros in Excel using Visual Basic programming.
- ◆ Effectively provided project status, research, data, and conclusions through both written reports using Microsoft Word and presentations using PowerPoint.
- ◆ Experienced in group and project leadership.

# Matthew J. Ickstadt



3750 Smithfield Curve • Woodbury, MN 55125 • Phone: 651-262-7747 • E-Mail: matt@beckenterprises.com

## Objective

To design hardware and software systems which provide the highest quality data. Making continual improvements to ensure reliability.

## Experience

Beck & Co. Engineering, Inc.

June 2015 - Present

- Software Engineer May 2020 to Present
- Software Intern (June 2015-May 2020)
- Computer Engineer

## Education

University of Minnesota

September 2015 – May 2020

Bachelor's Degree, Information Technology Infrastructure

## Skills

- Systems design
- Mechanical intuition
- Problem Solving
- Team Player
- Creative Thinker
- Broad interests

## Awards

- Eagle Scout, 2014

# Beau Myers Beck



2125 Eleanor Ave • St. Paul, MN 55116 • Phone: 651-295-0822 • E-Mail: beau.bcengineering@gmail.com

## Objective

Obtain a position where I can maximize my management skills, quality assurance, and training experience.

## Experience

Beck & Co. Engineering - Lead Operator

August 2009 - Present

- Collected and analyzed data for 40+ private and public entities across the United States.
- Compiled daily retro-reflectivity results and created numerous reports using Microsoft Excel.
- Successfully trained and managed 8 new employees.

Beck & Co. Engineering - Operator

May 2002 - August 2009

- Drove work vehicles and managed retro-reflectivity equipment for 12-30 projects per year.
- Developed problem-solving skills needed to overcome technical obstacles.
- Successfully trained and managed 2 new employees.

## Education

Century College - White Bear Lake, MN

January 2007 - May 2011

Associates Degree in Liberal Arts

## Skills

- |  |                               |
|--|-------------------------------|
| ◆ Fluent in Microsoft<br>Excel/Word/PowerPoint | ◆ Operations Management       |
| ◆ Advertising & Marketing                      | ◆ Professional Leadership     |
| ◆ Problem Solving                              | ◆ Certified CEN30-V7 Operator |
|  | ◆ Creative Thinker            |

## Volunteer

- Coached when needed for Woodbury area Youth Hockey team ages 6-10 from 2006 - 2009.
- Volunteered during holiday season for the Food Shelf at Woodbury Lutheran church from 2002 - 2007.



# Ian M. Beck

10315 Waterfront Dr. ♦ Woodbury, MN 55129 ♦ (651) 755-8753 ♦ [ian@beckenterprises.co](mailto:ian@beckenterprises.co)

## Objective

Goal oriented, performance driven Financial Analyst with an established ability to effectively manage, analyze, and achieve excellent results under immense levels of stress and high pressure environments. Excellent professional leadership and relationship building skills attained through innumerable rigors within several diverse industries. Comprehensive knowledge regarding economic and financial theory including their multifaceted applications.

## Skills Summary

- ♦ Operations Management
- ♦ Public Speaking
- ♦ Professionalism
- ♦ Financial Management
- ♦ Team Player
- ♦ Sales & Marketing
- ♦ Professional Leadership
- ♦ Accounting/Bookkeeping
- ♦ Professional Presentations
- ♦ Certified CEN V-7 Operator

## Employment History

BECK & CO. ENGINEERING, INC. – South Saint Paul, MN  
**Operations & Asset Management, 2002 to Present**

- ❖ Conducted Asset & Operations Management for the up-and-coming engineering firm. Operations consist of national and international quality assurance and quality control of complex pavement marking installations and respective systems, mobile data collections and analysis, as well as other quantitative and qualitative management processes. Also aided in the development of many innovations that effectively streamlined the company's operations while maximizing the return on assets. Most recently has lead the company into an Independant Asset Management, Software Development, and Consulting firm and is the developer of the Data Portal Software.

## Education

MINNESOTA SCHOOL OF BUSINESS  
**Business Management & Finance, 2010**

GPA: 3.90/4.0 – Dean's List

CENTURY COMMUNITY COLLEGE – WHITEBEAR LAKE, MN  
**General Education, Liberal Arts, 2007**

GPA: 3.5

DELTA EPSILON CHI (D.E.X.)  
**Career Development Conference – Mankato, MN**

- ❖ Participated in the state Career Development Conference. Finishing 4<sup>th</sup> place in the Ethics category and a finalist in the Sales Manager Meeting. Qualified to compete in Louisville, KY for the International Career Development Conference in April.

# Blake Bergherr



8717 Pheasant Run Circle • Woodbury, MN 55125 • Phone: 651-356-1516 • E-Mail: blake.bcengineering@gmail.com

## Objective

Obtain a position where I can maximize my management skills, quality assurance, and training experience.

## Experience

Beck & Co. Engineering - Operator

June 2013 - Present

- Collected and analyzed data for 20+ private and public entities across the United States.
- Compiled daily retro-reflectivity results
- Drove work vehicles and managed retro-reflectivity equipment for 20-25 projects per year.
- Developed problem-solving skills needed to overcome technical obstacles.
- Lead Trainer for Beck & Co. Engineering, Inc. CEN V-7 Mobile Retroreflectometer Units

## Education

Minnesota State University Mankato

January 2011 - May 2013

Associates Degree in Liberal Arts

## Skills

- ◆ Fluent in Microsoft Excel/Word/PowerPoint
- ◆ Problem Solving
- ◆ Professional Leadership
- ◆ Certified CEN30-V7 Operator
- ◆ Creative Thinker

# Mat Hatch



W18739 Oriole Rd • Eland, WI 54427 • Phone: 651-500-6590 • E-Mail: mat.beckengineering@gmail.com

## Objective

Obtain a position where I can maximize my management skills, quality assurance, and training experience.

## Experience

Beck & Co. Engineering – Certified Operator June 2014 - Present

- Collected and analyzed data for 20+ private and public entities across the United States.
- Compiled daily retro-reflectivity results
- Drove work vehicles and managed retro-reflectivity equipment for 20-25 projects per year.
- Developed problem-solving skills needed to overcome technical obstacles.

## Education

University of Wisconsin River Falls January 2011 – May 2013

Associates Degree in Liberal Arts

## Skills

- ◆ Fluent in Microsoft Excel/Word/PowerPoint
- ◆ Problem Solving
- ◆ Professional Leadership
- ◆ Certified Laserlux Operator
- ◆ Creative Thinker

# Chase Myers-Beck



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## Objective

Obtain a position where I can maximize my climatology skills, quality assurance, and training experience.

## Experience

Beck & Co. Engineering - Operator System Mapping Coordinator June 2016 - Present

- Collected and analyzed data for 20+ private and public entities across the United States.
- Compiled daily retro-reflectivity results
- Drove work vehicles and managed retro-reflectivity equipment for 20-25 projects per year.
- Developed problem-solving skills needed to overcome technical obstacles.
- Lead Technical on global mapping for data portal

## Education

University of Wisconsin-River Falls

September 2012 - May 2016

Bachelor of Science Degree in Biology Minor in Climatology

## Skills

- |                       |                               |
|-----------------------|-------------------------------|
| ◆ Fluent in Microsoft | ◆ Professional Leadership     |
| Excel/Word/PowerPoint | ◆ Certified CEN30-V7 Operator |
| ◆ Problem Solving     | ◆ Creative Thinker            |

# Taylor Bergherr



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## Objective

Obtain a position where I can maximize my management skills, quality assurance, and training experience.

## Experience

Beck & Co. Engineering - Certified CEN V-7 Operator      June 2015 - Present

- Collected and analyzed data for 20+ private and public entities across the United States.
- Compiled daily retro-reflectivity results
- Drove work vehicles and managed retro-reflectivity equipment for 20-25 projects per year.
- Developed problem-solving skills needed to overcome technical obstacles.

## Education

Woodbury High School

May 2009

## Skills

- |                       |                               |
|-----------------------|-------------------------------|
| ◆ Fluent in Microsoft | ◆ Professional Leadership     |
| Excel/Word/PowerPoint | ◆ Certified CEN30-V7 Operator |
| ◆ Problem Solving     | ◆ Creative Thinker            |

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Mobile Retroreflectivity Testing

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**SPECIFICATIONS**

1. **PURPOSE AND SCOPE:** The West Virginia Purchasing Division is soliciting bids on behalf of the West Virginia Department of Transportation, Division of Highways (herein after referred to as “Agency”) to establish a contract for mobile testing of the retroreflectivity of pavement markings.
2. **DEFINITIONS:** The terms listed below shall have the meanings assigned to them below. Additional definitions can be found in section 2 of the General Terms and Conditions.
  - 2.1 **“Contract Services”** means mobile testing of the retroreflectivity of pavement markings as more fully described in these specifications and the Pricing Pages. Descriptions of the bid items associated with this Contract are provided in Section 7.
  - 2.2 **“Pricing Page”** means the pages, contained wvOASIS or attached hereto as Exhibit A, upon which Vendor should list its proposed price for the Contract Services.
  - 2.3 **“Solicitation”** means the official notice of an opportunity to supply the State with goods or services that is published by the Purchasing Division.
  - 2.4 **“WVDOH”** means West Virginia Division of Highways
  - 2.5 **“ASTM”** means American Standards and Testing Methods.
  - 2.6 **“AASHTO”** means American Association of State and Highway Transportation Officials
  - 2.7 **“RL”** means average retroreflectivity.
  - 2.8 **“Expressway”** means any roadway that includes two or more thru lanes in the direction being surveyed.
  - 2.9 **“Secondary Route”** means any roadway that has only one thru lane in the direction being surveyed.
  - 2.10 **“Thru Lane”** means a continuous lane for traffic traveling on a route. Mandatory turn lanes less than 1-mile in length, two-way left turn lanes, left/right turn bays, and truck climbing lanes are not considered to be thru lanes.
  - 2.11 **“Direction being surveyed”** means the direction being driven on a route also corresponding with the intended direction of travel for the lane being driven in.

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**3. QUALIFICATIONS: VENDOR,** or Vendor's staff if requirements are inherently limited to individuals rather than corporate entities and testing instruments shall have the following minimum qualifications. Prior to award of this Contract, the Vendor shall provide information demonstrating its' experience and expertise in providing pavement marking mobile retroreflectivity testing services. This Contract shall not be awarded prior to receipt and review of this information. As a minimum this shall include information, including resumes for the anticipated Contract Manager and mobile unit lead technicians, as well as the testing instrument(s) to be used in completing this Contract, sufficient to demonstrate to the Agency that the requirements specified below are met.

**3.1.** The Vendor shall have a minimum of five (5) years' experience collecting and post processing pavement marking mobile retroreflectivity data.

**3.2.** Within the five (5) years preceding the advertisement date of this Contract, the Vendor shall have performed work collecting and post processing pavement marking mobile retroreflectivity data on a minimum of three (3) Contracts of at least half the scale of this Contract in terms of line miles to be tested, either as the prime Contractor/Consultant or as a sub-Contractor/Consultant.

**3.3.** The Contract Manager shall have served as the Contract Manager for a minimum of two (2) Contracts meeting the requirements of Section 3.2.

**3.4.** The lead technician for each assigned mobile unit shall have been assigned to a mobile unit performing collection for a minimum of two (2) Contracts meeting the requirements of Section 3.2.

**3.5.** The data collection instruments used for this Contract shall be capable and proven to provide reliable pavement marking retroreflectivity measurements in accordance with the geometry prescribed in ASTM Standard E1710. The instruments shall also have the capability to collect video, have the capability to collect reliable data at normal highway speeds, and shall have the capability to collect and report data such that Release Order Reports meeting the requirements specified herein can be generated and provided to the Agency. If applicable, all instruments in use as part of this Contract shall have a non-expired manufacture factory calibration certificate associated with them. Copies of these certificates should be provided by the Vendor upon starting work on each Release Order.

Due to the Agency's successful past experience with the following instruments, additional documentation demonstrating the instrument's suitability shall not be required:

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- Roadvista LaserLux G7

If the Vendor proposes to utilize alternative instruments for this Contract, documentation supporting the suitability of the instruments shall be provided. Determination of the suitability of such documentation, including documentation which varies from the example documentation provided herein, and final acceptance of the instruments proposed for use shall be at the discretion of the Agency.

Suitable documentation would include, for example, a test report of the instrument prepared by an independent third-party testing facility that includes the following:

**3.5.1.** Examination of the relative reliability of the instrument under different settings and parameters such as the following. The amount of error, as specified herein, shall be considered to be relative to a portable handheld pavement marking retroreflectivity device widely used and recognized by industry to provide reliable and repeatable measurements, such as a Delta LTL 3500:

**3.5.1.1.** Laboratory, closed course, and open course settings

**3.5.1.2.** Pavement marking materials of a wide range of retroreflectivity performance levels

**3.5.1.3.** Different line types such as solid and broken lines

**3.5.1.4.** Different road surface types, including asphalt and concrete

**3.5.1.5.** Different data collection speeds

**3.5.1.6.** Different reading distances

**3.5.1.7.** Different instrument height and tilt relative to the roadway surface

**3.5.1.8.** Roadways with and without the presence of supplemental raised pavement markers



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**3.5.1.9.** Roadways with and without the presence of ambient light sources

**3.5.1.10.** Different positions of the marking relative to lateral measurement window provided by the instrument

**3.5.2.** The results of the instrument testing under the different settings and parameters described in 3.5.1 should indicate the following:

**3.5.2.1.** Retroreflectivity reading accuracy: Average error in closed and open course readings of 10% or less for all line types

**3.5.2.2.** Measurement repeatability: Less than 5% difference between mean values between repeated daytime runs and between daytime and nighttime runs

**3.5.2.3.** Roadway surfaces: Effect of asphalt and concrete surface roadways on readings shall be negligible

**3.5.2.4.** Collection Speed: Difference in average readings at various speeds between 30 and 70 mph shall be less than 1%

**3.5.2.5.** Measurement window: Less than 5 % difference for measurements at the edge of the measurement window compared to measurements at the center.

**3.5.2.6.** Height and Tilt: If applicable, the testing shall demonstrate that reasonable deviations of the height and tilt of the instrument relative to the roadway surface relative to those prescribed by the manufacturer result in nominal variances in the readings obtained.

**3.5.2.7.** Raised Pavement Markers: Less than 5 % difference in average measurements along a roadway with and without the presence of raised pavement markers.

**3.5.2.8.** Ambient Lighting: Reading errors shall be less than 10% under sunny (including high, low, and midday sun), cloudy, and night conditions

**4. MANDATORY REQUIREMENTS:**

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**4.1 Mandatory Contract Services Requirements and Deliverables:** Contract Services must meet or exceed the mandatory requirements listed below. All costs associated with meeting the requirements specified within this Contract shall be included in the Vendor's bid prices.

**4.1.1 Data Collection:** The Vendor shall collect the required pavement marking retroreflectivity data in a manner that is in compliance with all applicable laws and in conformance with the recommendations of the measuring instrument manufacturer.

The Vendor shall be responsible for providing all vehicles, instruments, associated hardware and materials, and personnel required to do so.

All collection instruments shall be field calibrated in a manner and frequency recommended by the instrument manufacturer. Records of these calibrations shall be maintained by the Vendor and provided to the Agency upon request.

One Release Order will typically be issued to the Vendor for each testing season and will be for all roadways in the state to be tested. The Agency will provide the Vendor with tabular format listings of the roadways to be tested as well as marked-up county maps.

The Vendor shall be responsible for coordinating their work closely with the designated Agency Contract Manager. Individual striping Contracts are issued for each of the ten (10) Agency Districts on an annual basis. Typically, late completion of the striping Contracts in one or more Districts necessitates the scheduling of retroreflectivity testing with this taken into account. Testing of old roadway striping due to the Vendor's failure to properly coordinate their scheduling with the Agency shall not be considered to meet the requirements of this Contract, shall not entitle the Vendor to payment for such testing, and may result in the Vendor being required to repeat such testing. The Vendor shall not be entitled to any additional payment on the basis of scheduling adjustments or retesting necessitated for the reasons described herein.

Unless circumstances necessitate otherwise, the Vendor shall schedule their work such that for secondary roads, all data is collected in a given District once

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collection is started in that District, and prior to mobilizing all collection units out of that District. For expressway roads, the Vendor shall collect all data for a given expressway once it is started, and prior to mobilizing all collection units to another expressway.

- 4.1.2 Release Order Test Reports:** Various reports of the results of the testing performed for the Release Order and documentation videos shall be provided to the Agency.

The reports and videos shall be in conformance with the minimum requirements specified in Exhibit B and will typically contain multiple different files.

The cost of creating and providing Release Order Test Reports, including any electronic media devices provided to the Agency, shall be included in the Vendor's pricing for the Bid Items provided herein.

All reports shall be provided in electronic format, and with the exception of videos, shall not be provided on electronic media. The Vendor shall be responsible for setting up and maintaining a system for uploading report files to and for the Agency to retrieve said files such as an FTP site, Dropbox, etc. and shall notify the Agency when the files are available for download.

The Vendor is expected to compile and post-process collected data, and to prepare reports concurrently with collecting the data. The Vendor shall provide all reports for individual Districts and individual expressways in a timely manner once data collection is completed for individual Districts and expressways, while collection of data for other Districts and expressways continues.

- 4.1.3 Completion of Data Collection and Reports:** All data collection shall be completed, and reports provided to the Agency within a time frame that will allow the Agency to review the reports and provide notice to the Districts in advance of the end of the striping Contractor's required warranty period.

The Release Order, route listings, and maps will typically be provided to the Vendor by July 1<sup>st</sup> of each year. Data collection shall be completed, and reports provided to the Agency in accordance to the following:

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- Even Calendar years:
  - Expressway routes: All reports should be completed and provided back to the Agency by August 1<sup>st</sup> of the same Calendar year.
  - Secondary routes: All reports should be completed and provided back to the Agency by September 15th of the same Calendar year.
- Odd Calendar years:
  - Expressway routes: All reports should be completed and provided back to the Agency by September 30th of the same Calendar year.
  - Secondary routes: All reports should be completed and provided back to the Agency by September 15th of the same Calendar year.

If the Agency fails to provide the Vendor with the Release Order and associated materials by July 1<sup>st</sup>, additional Calendar Days shall automatically be added to the above specified deadline dates in accordance with the number of Calendar Days delay caused by the Agency. No other extensions shall be given automatically for any other delays such as late completion by striping Contractors or weather.

A priority shall be placed by the Vendor on completing and providing the Failure Summary Report described in Exhibit B by the specified deadlines. The Failure Summary Report is the primary source that the Agency uses to determine roadway sections required to be re-striped. It is requested that the Vendor provide periodic updated versions of this report as Districts and expressways are completed, and while data collection and post processing for other Districts and expressways are ongoing. At the Agency Project Manager's discretion, reasonable delays may be permitted for delivery of the other reports described and the videos. In the event that unforeseen, uncommon delays are encountered that are expected to affect the Vendor's completion of the Contract requirements in the time frames specified, it shall be the responsibility of the Vendor to communicate and discuss this with the Agency Contract Manager. **Unless agreed to in writing by the Agency Contract Manager, the Agency reserves the right to refuse payment to the Vendor for the collection of any data that is not represented on the Failure Summary Report delivered to the Agency by the previously specified, or otherwise agreed to, date.**

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**5. CONTRACT AWARD:**

**5.1 Contract Award:** The Contract is intended to provide Agency with a purchase price for the Contract Services. The Contract shall be awarded to the Vendor that provides the Contract Services meeting the required specifications for the lowest overall total cost as shown on the Pricing Pages.

**5.2 Pricing Page:** Vendor should complete the Pricing Page by providing a unit price for all bid items. Vendor should complete the Pricing Page in full as failure to complete the Pricing Page in its entirety may result in Vendor's bid being disqualified.

Vendors should type or electronically enter the information into the Pricing Pages through wvOASIS, if available, or as an electronic document. In most cases, the Vendor can request an electronic copy of the Pricing Pages for bid purposes by sending an email request to the following address: john.w.estep@wv.gov

**6. PERFORMANCE:** Vendor and Agency shall agree upon a schedule for performance of Contract Services and Contract Services Deliverables, unless such a schedule is already included herein by Agency. In the event that this Contract is designated as an open-end contract, Vendor shall perform in accordance with the release orders that may be issued against this Contract.

**7. PAYMENT:** Agency shall pay in accordance with the terms and bid items described herein, as shown on the Pricing Pages, for all Contract Services performed and accepted under this Contract. Vendor shall accept payment in accordance with the payment procedures of the State of West Virginia. The Agency shall not pay progress invoices on Release Orders. The Vendor shall be entitled to submit one invoice per Release Order, after all work associated with the Release Order has been completed and accepted by the Agency. Items to be utilized for bidding and payment under this Contract are as follows:

**7.1. Item #1 – Pavement Marking Mobile Retro Testing-Expressway:** This item shall be used as payment for the collection of data, and other associated costs as described herein, on expressway roadways as defined in Section 2. Unit of measurement shall be per line mile tested. Only mileage that is driven while the data collection unit is turned on and collecting data shall be included in the invoiced quantity for this item. When collecting data on dashed lines, mileage may be calculated continuously. This bid item should include the Vendor's price associated with collecting the data (mileage, labor, etc.) and preparing the reports described for expressway roadways.

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**7.2. Item #2 – Pavement Marking Mobile Retro Testing-Secondary:** This item shall be used as payment for the collection of data, and other associated costs as described herein, on secondary roadways as defined in Section 2. The unit of measurement shall be per line mile tested. Only mileage that is driven while the data collection unit is turned on and collecting data shall be included in the invoiced quantity for this item. When collecting data on dashed lines, mileage may be calculated continuously. This bid item should include the Vendor's price associated with collecting the data (mileage, labor, etc.) and preparing the reports described for secondary roadways.

**7.3. Item #3 - Mobilization, Per Release Order –** The Vendor shall be entitled to one unit payment of this item per each Release Order issued, per each mobile testing unit mobilized by the Vendor to complete the assigned work on the Release Order. This bid item should include the Vendor's price for all costs incurred which are not included in the Vendor's pricing for items #1 and #2, such as but not limited to mileage incurred while not collecting data, labor down time, per diem expenses, etc.

**8. TRAVEL:**

Vendor shall be responsible for all mileage and travel costs, including travel time, associated with performance of this Contract. Any anticipated mileage or travel costs incurred separate from when the data collection unit is turned on and collecting data may be included in Item #3 listed on Vendor's bid. Such costs will not be paid by the Agency separately. Mileage and travel costs incurred while collecting data should be included in the Vendor's bid price for Items 1 and 2, as applicable.

**9. FACILITIES ACCESS: Performance** of Contract Services may require access cards and/or keys to gain entrance to Agency's facilities. In the event that access cards and/or keys are required:

**9.1.** Vendor must identify principal service personnel which will be issued access cards and/or keys to perform service.

**9.2.** Vendor will be responsible for controlling cards and keys and will pay replacement fee, if the cards or keys become lost or stolen.

**9.3.** Vendor shall notify Agency immediately of any lost, stolen, or missing card or key.

**9.4.** Anyone performing under this Contract will be subject to Agency's security protocol and procedures.

**9.5.** Vendor shall inform all staff of Agency's security protocol and procedures.

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**10. VENDOR DEFAULT:**

**10.1.** The following shall be considered a vendor default under this Contract.

**10.1.1.** Failure to perform Contract Services in accordance with the requirements contained herein.

**10.1.2.** Failure to comply with other specifications and requirements contained herein.

**10.1.3.** Failure to comply with any laws, rules, and ordinances applicable to the Contract Services provided under this Contract.

**10.1.4.** Failure to remedy deficient performance upon request.

**10.2.** The following remedies shall be available to the Agency upon default.

**10.2.1.** Immediate cancellation of the Contract.

**10.2.2.** Immediate cancellation of one or more release orders issued under this Contract.

**10.2.3.** Any other remedies available in law or equity.

**11. MISCELLANEOUS:**

**11.1. Contract Manager:** During its performance of this Contract, Vendor must designate and maintain a primary contract manager responsible for overseeing Vendor's responsibilities under this Contract. The Contract manager must be available during normal business hours to address any customer service or other issues related to this Contract. Vendor should list its Contract manager and his or her contact information below.

**Contract Manager:** Richard A. Beck, P.E.  
**Telephone Number:** 612-805-1637  
**Fax Number:** 651-501-0015  
**Email Address:** rick.bcengineering@gmail.com

**11.2. Non-Applicable Terms and Conditions:** Note for clarification purposes, Sections 14, 15A, and 15 of the Instructions to Vendors Submitting Bids document is not applicable to this Contract due to the service being

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provided under this Contract not being under the scope of Contract types covered by these provisions. In addition, because no applicable commodities are being supplied under this Contract, Section 42 of the General Terms and Conditions document are not applicable to this Contract. All other Sections of the Instructions to Vendors Submitting Bids and the General Terms and Conditions documents apply to this Contract unless stated otherwise.