



# Board of County Commissioners Agenda Request

**2U**  
Agenda Item #

**Requested Meeting Date:** November 8, 2022

**Title of Item:** Accept Engineering Firm- CDBG McGrath Broadband Project

<input type="checkbox"/> REGULAR AGENDA <input checked="" type="checkbox"/> CONSENT AGENDA <input type="checkbox"/> INFORMATION ONLY	<b>Action Requested:</b> <input type="checkbox"/> Approve/Deny Motion <input checked="" type="checkbox"/> Adopt Resolution (attach draft) <i>*provide copy of hearing notice that was published</i>	<input type="checkbox"/> Direction Requested <input type="checkbox"/> Discussion Item <input type="checkbox"/> Hold Public Hearing*
<b>Submitted by:</b> Mark Jeffers	<b>Department:</b> Administration	
<b>Presenter (Name and Title):</b> Mark Jeffers, Economic Development Coordinator		<b>Estimated Time Needed:</b>
<b>Summary of Issue:</b> Mille Lacs Energy Cooperative, Broadband partner for the McGrath Project (CDBG-CV Broadband Grant CARE-21-0011-O-FY21) have retained the services of Vantage Point for all engineering responsibilities of the project.  A requirement of the grant process is for Aitkin County, as grant administrator, to acknowledge that Vantage Point is the Engineering firm on the project.  Economic Development staff has reviewed the documents and recommends acceptance of Vantage Point as the Engineering Firm leading the McGrath project.		
<b>Alternatives, Options, Effects on Others/Comments:</b>		
<b>Recommended Action/Motion:</b> Approve resolution to accept Vantage Point as the Engineering Firm for the CDBG McGrath Broadband Project.		
<b>Financial Impact:</b> <i>Is there a cost associated with this request?</i> <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No <i>What is the total cost, with tax and shipping? \$</i> <i>Is this budgeted?</i> <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No <i>Please Explain:</i>		

Legally binding agreements must have County Attorney approval prior to submission.

**ACCEPT ENGINEERING FIRM FOR CDBG-CV MCGRATH BROADBAND PROJECT**

**WHEREAS**, Mille Lacs Energy Cooperative, Broadband partner for the McGrath Project (CDBG-CV Broadband Grant CARE-21-0011-O-FY21) have retained the services of Vantage Point for all engineering responsibilities of the project. AND

**WHEREAS**, Economic Development staff has reviewed the documents and agrees that Vantage Point should be the Engineering Firm leading the project.

**NOW, THEREFORE, BE IT RESOLVED**, that Aitkin County accepts Vantage Point as the Engineering Firm for the CDBG-CV McGrath Broadband Project.

Commissioner XXXXX moved for adoption of the resolution and it was declared adopted upon the following vote

FIVE MEMBERS PRESENT

All Members Voting

STATE OF MINNESOTA}  
COUNTY OF AITKIN}

I, Jessica Seibert, County Administrator, Aitkin County, Minnesota do hereby certify that I have compared the foregoing with the original resolution filed in the Administration Office of Aitkin County in Aitkin, Minnesota as stated in the minutes of the proceedings of said Board on the 8th day of November, 2022 and that the same is a true and correct copy of the whole thereof.

Witness my hand and seal this 8th day of November, 2022

---

Jessica Seibert  
County Administrator

## OSP Engineering:

MILLE LACS ENERGY COOPERATIVE



*Prepared by:*  
**Chad Glanzer, PE**  
President  
605-995-1741  
Chad.Glanzer@vantagepnt.com



**Quentin Flippin, PE**  
Director of Engineering  
605-999-9843  
Quentin.Flippin@vantagepnt.com



*Customer Relations Representative:*  
**Karl Hochmuth**  
Director of Customer Relations  
303-319-5136  
Karl.Hochmuth@vantagepnt.com

## Professional Solutions With Integrity

As a future broadband provider, you will be faced with many decisions when implementing a broadband network that maximizes quality and functionality while minimizing costs. Each cooperative is unique in its infrastructure, member density, terrain, and goals. What works well for one deployment, may not be the best fit for the next. **There is no single model, no “cookie-cutter” solution, that works for every situation.**

For many of the decisions that must be made, you will likely rely on the advice and expertise of third-party consultants and engineers such as Vantage Point Solutions (VPS). You – and your members – deserve professional, ethical guidance; as such, it is imperative to select an experienced qualified partner that has **no bias or hidden agenda** that may taint their recommendations to your cooperative.

VPS has been implementing rural broadband FTTP networks for decades and has the experience and knowledge to help guide you in implementing the unique solution that works best for you. **We have built our company on a strong moral and ethical foundation by always doing what is best for our client’s long-term best interests.** Our established, long-standing client list, built largely by referral, is a testament to this commitment.

Unlike others that may claim to be engineering firms, **VPS is a true engineering firm:** Our team includes ten licensed Professional Engineers that are registered as such in every state we do business. As a true engineering firm with state registered Professional Engineers, not only do we meet the stringent educational and technical standards of this licensure, we are also bound by a code of ethics defined by the laws of the states in which we work. Further, **ethical business is simply our way of work.** We do right by our clients, and we are not bringing hidden agendas to our business relationships.

### ◆ ————— WE PROMISE YOU ————— ◆

- **0% of Vantage Point is owned by any broadband contractor, vendor, supplier, or service provider. We are an employee owned company.**
- **VPS does not have ownership of any broadband contractor, vendor, supplier, or service provider.**
- **VPS and our staff do not take kick-backs or finders fees from vendors or contractors. Never have, never will.** Our only compensation is what our client pays us for the project. Our recommendations to you will be based only on the best solution for your Co-op, not lining our pockets through back door agreements.
- **VPS does not use vendors or manufacturers to perform engineering tasks or designs in exchange for VPS specifying the use of their products. At VPS, all engineering and consulting is performed in house.**
- **We do not have a cookie cutter approach to design. We believe your cooperative has unique characteristics that need to be taken into design consideration. Unlike other firms that will only use a network of suppliers, contractors and vendors that they have pre-negotiated arrangements with, VPS will always be looking for the best solutions to your cooperative.**
- **VPS believes that our success is based on the long-term success of our clients.**

If you are seeking an experienced, qualified, ethical engineering firm, then we look forward to working with you. Thank you for considering VPS in your broadband deployment.



**Larry D. Thompson, PE**  
CEO, Vantage Point Solutions

# Table of Contents

Professional Solutions With Integrity.....	2
Transmittal Letter.....	4
Vantage Point Profile.....	5
Solution.....	7
Summary of Solution.....	8
1. Planning.....	8
2. Project Meetings.....	8
3. Field Data Collection Services and Mapping.....	9
4. ROW Permitting and Coordination.....	9
5. Plans and Specifications Preparation.....	9
6. OSP Quality Control Services.....	9
7. As-Built Records.....	10
8. OSP Contract Closeout.....	10
Optional VPS Services.....	11
Customer Geocoding.....	11
GPS Facilities.....	11
Customer Contacts.....	11
FTTP/ FMDf Engineering & Installation.....	11
Investment Considerations.....	13
Project Pricing.....	14
Appendices.....	15
Employee Biographies.....	15
Hourly Rate Sheet.....	19

Stacy Cluff  
Technology & Energy Services Manager  
Mille Lacs Energy Cooperative (MLEC)

Dear Stacy,

Thank you for the opportunity to present the Vantage Point Solutions proposal for OSP engineering services for the Mille Lacs Energy Cooperative – Aitkin County project. Our commitment to accuracy, efficiency and timeliness will help ensure that your project is completed right the first time. At VPS we put people first – both our clients and our employees. We are employee-owned and foster a positive, creative work environment that keeps our team happily dedicated to you.

VPS is unique to the industry, having both engineering and consulting teams under the same roof from the very beginning – not just an afterthought. This tight integration between engineering and consulting allows us to help position you for the future from both a financial and technical perspective. We have experts in nearly every area of telecom. Having access to these experts will be invaluable as your project moves forward. Other reasons why we feel VPS is the right company for your project:

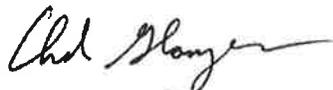
VPS has engineered over \$2B in FTTP networks and manages the construction of approximately 10,000 miles of fiber each year. We can draw from the best practices we have learned while building hundreds of FTTP networks when building your network.

VPS has over 400 employees, ten Professional Engineers, a proven management team, and has been well established for many years. You can rest assured that VPS will be here to see your project to completion.

We are confident that you will find us to be an excellent value. We assign on-site residents to manage the local crews and have senior staff that oversees the project as part of our quality control. We pass through our living expenses without any markup.

We can provide Mille Lacs Energy Cooperative with an excellent quality network at the lowest overall cost. VPS was built on a foundation of honesty and integrity. VPS is large enough to tackle your project, yet small enough to give you the personal attention you deserve. We will tailor our services to match your unique needs. We will make sure that our approach is consistent with your goals and timelines. We look forward to an opportunity to further discuss the information contained in this response as well as our qualifications to complete the project. Please feel free to contact me if you have any questions.

Sincerely,



Chad Glanzer, PE  
President

## Vantage Point Profile

Vantage Point Solutions, Inc. (VPS) is a premier broadband engineering and consulting firm providing a full range of services focused on the unique business challenges faced by broadband operators.

Our primary goal is ensuring that our clients' long-term interests are met. We integrate state-of-the-art technical solutions to balance emerging technology with regulatory effects. VPS uniquely offers solutions for engineering, consulting, and outside plant under one roof.



We build networks – but we're part of them, too. We belong to communities bigger than ourselves, and believe in giving back. In fact, VPS has donated hundreds of thousands of dollars in time and investment towards industry committees, associations, and testimony. This advocacy directly benefits our clients by moving the needle with regulators to ensure good technology recommendations, mitigating negative consequences for regulatory reform, and sensible approaches to the economic and technology decisions that impact our clients.

**At Vantage Point, we believe:**

 <p>In putting employees &amp; clients <b>FIRST</b></p>	<p>Better broadband means <b>better lives</b></p> 	<p>We are building networks for applications that don't even exist yet</p> 	 <p>In <b>GIVING BACK</b> to our local, industry &amp; global communities</p>
--	---	--	---

Our employee owners are committed to client satisfaction because client success is their success. As an employee-owned company, our staff is rewarded when our company excels. We hire employees who understand this culture of commitment, leading to a positive work environment and a high satisfaction level for our clients. Want to talk to an owner? Talk to any of us!

VPS Staff are more than employees  
**- they are owners.**



Employees benefit when clients succeed.  
 We are dedicated to your success.

In addition to our executive leadership, we have hundreds of telecom experts ready to meet and exceed your needs. As a client you will have a point of contact with management regardless of your project.

**SENIOR LEADERSHIP**

	<b>LARRY THOMPSON, PE</b> CEO		<b>CHAD GLANZER, PE</b> PRESIDENT	
				
<b>NATHAN WEBER, PE</b> VP OF ENGINEERING	<b>JULIE CHARRINGTON</b> VP OF CONSULTING	<b>DOUG EIBANK, JD</b> VP OF REGULATORY & LEGAL	<b>JEFF SMITH</b> VP OF PUBLIC POLICY & ADVOCACY	<b>TODD SAPP</b> VP OF OUTSIDE PLANT

We have the tools necessary to help you successfully complete your project. With professional engineers and regulatory experts under the same roof, we are able to understand the big picture for your cooperative. We offer a level of experience and expertise that will give you peace of mind throughout the entire project. Team members help you make smart decisions in the most timely, cost-effective manner possible.

More than anything we care about your success and are available to serve you from the beginning to the end of every project. You will experience a level of customer service that goes above and beyond your expectations. At VPS we don't stop at good enough. That's simply your Vantage Point advantage.

## Solution

VPS offers comprehensive Professional Engineering services to our clients like MLEC. The services contained within this proposal focus on our OSP engineering expertise and the following sections detail our typical approach. Our services can be tailored to meet MLEC's specific needs, and every project comes with a commitment to excellence.

This proposal is based on MLEC's planned project for a fiber deployment covering approximately a 99-mile route segment in Aitkin County.



You can expect:

**Your project will be done right.** We don't cut corners, and we don't slack off. Excellent service and workmanship is part of our commitment to putting clients first.

**Your project will be delivered on time and on budget.** We have the experience and expertise to manage your project proactively and successfully through completion.

**You will have regular communication with project leaders.** You'll never wonder where a project stands or be kept in the dark about an unexpected development.

**Internal accountability measures** keep your costs down. From GPS-enabled mileage tracking to cent-by-cent expense monitoring, staff hold each other responsible for adhering to expectations.

**Expert staff will be dedicated to your project.** Our depth of staff makes VPS large enough to meet our client's needs, but small enough to customize our services to provide personal service. Every single project is tied to a senior leader, so you'll always know who to call.

**Vantage Point's broad experience** is at your service. While every project is unique, we've seen almost everything at least once. Our breadth of experience and expertise allow us to anticipate, identify, and resolve issues before they impact your project.

## Summary of Solution

1	Planning
2	Field Data Collection Services and Mapping
3	ROW Permitting and Coordination
4	Plans & Specifications Preparation
5	Quality Control Services
6	As-Built Records & Mapping
7	OSP Contract Closeout

VPS will assign a Project Manager, located at the VPS office, who is responsible for ensuring that your project is done correctly and on schedule. The PM will set up periodic update calls with MLEC to provide project updates. In addition, the PM serves as a single point of contact for any of MLEC’s needs. The PM will connect MLEC with the required VPS experts to assist with any question or challenges that may arise. During the construction process, VPS will also have an onsite resident OSP staff member who will oversee the inspection / construction management activities and will serve as an additional point of contact for these activities.

### 1. Planning

Planning will include the following steps:

#### Review of Requirements and FTTP Design Layout

VPS will develop a FTTP layout design of the proposed project. This layout is effectively a map-level design and does not involve conducting any on-site engineering work. VPS has assumed that MLEC will provide the location data of the subscribers to be served. Once the FTTP design is completed, it will be reviewed with MLEC.

#### Location Verification / Route Review

Once FTTP design layouts are completed, locations must be verified. VPS will deploy staff to confirm accuracy of locations of the FTTP layout.

### 2. Project Meetings

#### Field Data Collection Kick-off Meeting

Once the FTTP Layouts are completed, the next step is to embark on the field data collection process. VPS proposes to begin with an onsite kick-off meeting. VPS will discuss the various aspects of the project such as the specifics of the cable routing, how the serving areas are connected, the configuration of field electronics, the type of OSP materials to be utilized, and OSP construction methods that MLEC would like to utilize. The decisions made in this meeting will determine how this project is planned. After the conclusion of the meeting, VPS will deliver a document that summarizes the meeting and any decisions that were made. VPS proposes the kick-off meeting to be held at MLEC’s office.

### Pre-Bid Conference

During the bid process, VPS will conduct a pre-bid conference. VPS will conduct an on-site pre-bid conference with the approved OSP contractors. This process ensures that the contractors understand the upcoming project and helps ensure better pricing due to the contractors' comfort level with the project.

### Pre-Construction Conference

Following the contractor award, VPS will conduct a pre-construction conference prior to commencement of construction. The attendees to this meeting would be MLEC, VPS, OSP contractor, ROW entities, and city/county officials. This sets the groundwork of how communication will occur during construction.

## 3. Field Data Collection Services and Mapping

Immediately following the kick-off meeting, VPS will begin the process of conducting the field data collection of the FTTP areas. All VPS OSP engineering staff members are equipped with computers and all design sheets are digitally produced. Collecting the field data completely digital allows us to be able to provide our services quickly and accurately. VPS has assumed that MLEC will provide the location information for the subscribers that are to be served by the project. Upon completion of the field data collection, VPS will deliver OSP digital design sheets for the proposed routes to MLEC for review and approval. In addition, our OSP resident will drive the routes with MLEC staff to review the sheets and to identify any requested changes to the design.

After the field data collection is complete, VPS will prepare design maps for the Plans and Specifications and will size the fiber for the project based on the MLEC standard fiber sizes. In addition, the subscriber count will be placed on the fiber and labeled appropriately. The design maps will be provided to MLEC for review and will be utilized in the OSP bid process.

## 4. ROW Permitting and Coordination

VPS will prepare and submit all required permits for the proposed project. VPS has experienced staff in this area and will accomplish these tasks in the most efficient way possible.

## 5. Plans and Specifications Preparation

VPS can prepare Plans and Specifications for the OSP cable construction. These deliverables typically include the development of Plans and Specifications based on the units determined during the field data collection process described previously. The Plans and Specifications, along with an industry standard OSP Contract, would be used with MLEC's OSP contractor.

## 6. OSP Quality Control Services

VPS staff will maintain the records, manage the project, coordinate work with city, county, state or federal officials, and provide the level of quality control (QC) desired by MLEC. VPS will have a member of the OSP senior management visit the job site during construction in order to review the project and ensure MLEC's complete satisfaction.

The projected quantity of QC staff is based on balancing between being cost efficient and providing the client with a quality end product. We can discuss these quantities more with MLEC once the contractor specifics are known.

Also, the amount of time our QC staff are on the project is directly related to the outside plant contractor's ability to complete the project in a timely manner. That is why it is important to limit the bidders list to contractors that are solid and proven.

VPS staff will conduct OSP inventory and testing verification on the project. The inventory includes the complete as-built inventory of the FTTP network plant facilities associated with this project. This verifies that the splicing has been completed in an accurate manner and that the network is ready for customer cutover.

## 7. As-Built Records

At the conclusion of the project, VPS will provide updated as-built sheets and construction maps for MLEC's long-term records. Any changes to the design that are made during the construction phase of the project will be noted by the VPS QC staff and incorporated into the as-built records. In addition, VPS will review the splicing report from the OSP construction and will utilize this information to update the fiber count assignments to the respective locations.

VPS will also utilize the as-built sheets and maps to generate the final unit tabulation for the OSP construction project. These unit tabulations will be used to reconcile the final construction cost for the project.

## 8. OSP Contract Closeout

Once the project is complete, VPS will coordinate the closeout of the contract between MLEC and the OSP contractor. As part of this process, VPS will use the unit tabulation generated in the As-Built Records and Mapping phase of the project and will work with the contractor to reconcile final inventory for the OSP construction project. This final inventory is used to determine the final cost for the work performed by the OSP contractor.

VPS will prepare all final documents and contract closeout forms for the project and coordinate the execution of the forms with the vendor and MLEC. These closeout forms include a variety of items such as the Contract Closeout Certification, the Certificate of Contractor, and Certificate of Completion that accompanies the final inventory. In addition, VPS will work with the contractor to obtain the Waiver and Release of Lien documents from the contractor, material suppliers, and subcontractors for the project.

## Optional VPS Services

If MLEC desires, VPS can also provide pricing for optional OSP services. We will review these optional services at our field data collection kick-off meeting to determine which ones may be needed. The following is a description of VPS's approach to these optional items.

### Customer Geocoding

VPS staff can collect geoaccurate data information for subscriber locations.

### GPS Facilities

VPS can collect GPS data pertaining to the new OSP fiber facilities that are constructed. The GPS coordinate data can be collected for key objects such as handholes, pedestals, ONTs, poles, etc. In addition, VPS can collect GPS data for the running line of the fiber optic cable. Once the data is collected, VPS staff will process the GPS information to improve the data accuracy, as well as to put it into a useful form for MLEC.

### Customer Contacts

During the field data collection, VPS staff can perform customer contacts to the subscribers in the serving area. These site visits are done to determine the specifics of the customer drop and also to determine the entry point of the facilities inside the customer's house. It is our experience that this process makes the drop construction and installation of the FTTP equipment go much smoother.

### FTTP/ FMDF Engineering & Installation

VPS is also capable of providing engineering and installation services for the FTTP and Fiber Main Distribution Frame (FMDF) equipment. We have the qualified staff to prepare RFP for vendor's and will work to engineer the best configuration at the best price. Our service can be tailored to the customer's specific needs for their deployment.

## Project / Client Experience

With over 650 clients in 45 states, VPS has the experience necessary to understand the best solutions for our clients. VPS has engineered over \$2B in FTTH networks and we design, and project manage approximately 10,000 miles of fiber optic cable construction each year. Our experience spans all geographies and terrains.

The following reference projects can verify VPS's experience and ability to manage projects proactively and to maintain timelines and budgets. Our OSP and Engineering teams brought value to these projects by utilizing our vast experience in the upfront design and planning of these projects. Additionally, our project management and quality control staff verified that the projects were completed according to the design specifications and resolved any issues that came up during the construction. VPS's innovative use of digital tools also sped the transmission of collected data.

Also, working together, VPS's team of engineers and consultants brought value to these projects by ensuring that technical, financial, and regulatory aspects were all considered.

<b>Customer Name:</b>	<b>BARC Electric Cooperative (Millboro, VA)</b>
<b>Project Description:</b>	BARC engaged VPS to take over engineering of their multi-year FTTP network that was started with another consulting firm. The deployment covers their cooperative service area as well as some areas beyond their territory.
<b>Completion Date:</b>	In process, multi-year project.
<b>Type of Project:</b>	Project management; professional engineering; OSP engineering; quality control; regulatory reporting
<b>Primary POC:</b>	Michael Keyser, CEO
<b>Contact Number:</b>	800-846-2272 / mkeyser@barcelectric.com

<b>Customer Name:</b>	<b>Appalachian Electric Cooperative (New Market, TN)</b>
<b>Project Description:</b>	AEC serves approximately 46,000 members throughout its service territory in Tennessee. AEC engaged VPS in evaluating solutions to provide adequate broadband services to its members.
<b>Completion Date:</b>	In process, multi-year project
<b>Type of Project:</b>	Business model evaluation; feasibility studies; partnership evaluations; partnership agreement negotiation; project management; professional engineering; outside plant engineering services; project management; field data collection; mapping; contract bid documents; quality control; review of funding sources
<b>Primary POC:</b>	Greg Williams, PE, General Manager / Executive Vice President
<b>Contact Number:</b>	865-475-2032 x 1201 / gwilliams@aecoop.org

<b>Customer Name:</b>	<b>Tri-County Rural Electric Cooperative, Inc. (Mansfield, PA)</b>
<b>Project Description:</b>	Tri-County selected VPS to perform all of their FTTP engineering of their 3,000-mile deployment after evaluating several other firms.
<b>Completion Date:</b>	In process, multi-year project.
<b>Type of Project:</b>	Project management; professional engineering; OSP engineering; FTTP OSP design; construction management; quality control; and CAF II assistance.
<b>Primary POC:</b>	Aaron Young, COO
<b>Contact Number:</b>	570-662-2175 / aarony@ctenterprises.org

## Investment Considerations

There are many things to consider when evaluating different proposals; but given our experience with projects like this one, below are some thoughts we'd like to share:

### Broad View

VPS serves over 650 clients in 45 states and the Caribbean. We work for large clients and small, and this footprint gives us more than a regional view – it gives us an industry view. And that broader perspective allows us to know what methods and products will work best for your application.

### Engineering & Consulting Under One Roof

Projects can be complex. Having the knowledge of engineering and regulatory under one roof allows for constant communication and the ability adapt quickly.

### Fiber Field Planning: We do it Right

You don't want the cheapest field planning option. More time spent planning in the field eliminates waste and builds a better network. The more detail and clarity on the design sheets, the more comfortable OSP contractors feel with the project – giving you the lowest construction costs.

### Quality Control

Experience and field knowledge is critical during the QC process. Inexperienced QC staff may not know what to watch for in the overall process. Our staff's experience and job knowledge can protect your investment as it is being constructed.

### Not a "One Man Shop"

We have a diverse team of experts. In fact, we have Professional Engineers specialized in all aspects of telecom.

### Customer Service

We value your trust and prioritize your success. Our dedicated Customer Service staff are available to address any of your concerns throughout the project.

### Employee Ownership

Do you want to talk to an owner? Talk to any of us at VPS. We are an employee owned company – which increases our commitment level to our clients.

# Project Pricing

The following pricing is based on MLEC's planned project for FTTP deployment in Aitkin County. This has been estimated to include a 99-mile route segment of construction.

Our commitment and dedication to your project will ensure that the timeline is managed effectively and ensure that the quality meets or exceeds your Cooperative's expectations. At VPS, we believe that a client and engineering/consulting firm relationship should be a long-term partnership.

Description	Pricing	Billing Method	Estimate
<b>Planning</b>			
- Review of Req. and FTTP Design Layout			
- Location Verification / Route Review	T & E	T & E	T & E
<b>Project Meetings</b>			
- Field Data Collection Kickoff Meeting	\$3,500		
- Pre-Bid Conference	\$3,500	T & E	\$ 10,500
- Pre-Construction Conference	\$3,500		
<b>Field Data Collection Services and Mapping <sup>1</sup></b>			
- Includes living expenses	99 Miles Rural - \$0.30/ft	Billed per ft	\$ 157,000
<b>ROW Permitting and Coordination <sup>2</sup></b>	T & E	T & E	T & E
<b>Plans and Specifications Preparation</b>	\$ 9,500	Flat Fee	\$ 9,500
<b>OSP Quality Control Services <sup>3</sup></b>	QC Resident: \$66/hr \$5,700 per/week QC Inspector L2: \$61/hr \$5,300 per/week QC Inspector L1: \$56/hr \$5,000 per/week	T & E	T & E
- 5 workdays per week; 11-hour workdays			
<b>As-Built Records</b>	T & E	T & E	T & E
<b>OSP Contract Closeout</b>	\$ 9,500	Flat Fee	\$ 9,500

Notes:

VPS Reference: 21-408

- (1) Pricing is based on VPS standard fielding sheets formats and software. Alternative formats and software may result in increased costs. This per foot charge is based on mainline fiber only with no cost for fiber drop or dual cable footage.
- (2) ROW Permitting and Coordination costs may vary based on actual effort required. Items such as private easements may result in higher permitting costs. Estimate does not include traffic control, any other specialty permits, environmental or civil surveying requirements.
- (3) Estimated living expenses are included in the weekly cost estimates. Actual expenses will be passed through as incurred with no markup. (Hourly rate is labor only)
- (4) The following additional items would be performed on a time and expense basis:
  - a. Project management, Initial Routing

Agreed and Accepted:

**Mille Lacs Energy Cooperative**

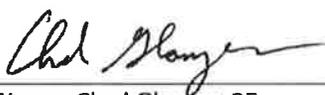
36559 US-169  
Aitkin, MN 56431

  
Name: Stacy Cluff  
Title: Technology & Energy Services Manager

1/4/22  
Date

**Vantage Point Solutions, Inc.**

2211 N. Minnesota Street  
Mitchell, SD 57301-1056

  
Name: Chad Glanzer, PE  
Title: President

12/2021  
Date

# Appendices

## Employee Biographies



**LARRY  
THOMPSON, PE**

**CEO**

Larry is a licensed professional engineer and has been designing satellite, wireless, and wireline broadband networks for more than 30 years. Prior to founding Vantage Point Solutions in 2002, Larry held several engineering and management positions with TRW's Space and Defense Sector, CyberLink Corporation, and Martin Group. Over the years he has helped his clients successfully manage technical, regulatory, and financial challenges when deploying wireless and wireline networks. Larry is a frequent speaker at state and national conferences and a frequent expert witness at utility commission and legal proceedings relating to telecommunication technology and regulatory matters. He is also a member of the FCC's Broadband Deployment Advisory Committee.

"WE'RE BUILDING NETWORKS FOR APPLICATIONS THAT HAVEN'T EVEN BEEN INVENTED YET."

### EDUCATION

Bachelor of Arts in Physics from William Jewell College.

Bachelor of Science in Electrical Engineering and Master of Science in Electrical & Computer Engineering from University of Kansas

LICENSED PROFESSIONAL ENGINEER



**CHAD  
GLANZER, PE**

**PRESIDENT**

Chad Glanzer has more than 30 years of industry experience. At VPS he works extensively with clients, developing long range plans and assisting in the strategic implementation of them. He is an expert strategic planner and understands the necessity of research when developing a business plan. He serves as a vital resource in all aspects of CLEC implementations, including feasibility studies based upon site specific cost estimates. He is also a key player in the development of local, regional and statewide network architecture designs that deploy broadband technology for video, voice and data applications.

"OUR PEOPLE, SEEING THEM GROW PERSONALLY AND THEIR COMMITMENT TO OUR CLIENTS' PROJECTS, TO ME, THAT'S VANTAGE POINT."

### EDUCATION

Bachelor of Science in Engineering from South Dakota School of Mines and Technology

LICENSED PROFESSIONAL ENGINEER



**TODD  
SAPP**

**VP OF OUTSIDE PLANT**

Todd Sapp has been working in outside plant operations for 30 years, first as an inspector, working his way to resident and on to director and currently vice president. He is a hands-on leader, dealing directly with clients from the beginning to the end of each project. He personally attends pre-staking, pre-bid, and pre-construction meetings, ensuring that each project exceeds client expectations. He thoroughly understands how to design and deploy fiber networks. Some of the architectures he is familiar with include VDSL, FITL, and FTTH. At VPS he oversees both the OSP and CAD departments, consisting of over 100 staff, and more than 8,000 miles of construction per year.

"DETAILS MATTER -  
BUILD THINGS RIGHT  
THE FIRST TIME."

**TRAINING**

Various OSP Symposiums

**CLIENT REFERENCES**

South Slope - Iowa  
Shawnee - IL  
Westex - TX



**CULLEN  
SCHIMKE**

**DIRECTOR OF  
OUTSIDE PLANT**

Cullen Schimke has been working in outside plant services since 2001. He began his career as an inspector and has earned his way to Director of Outside Plant. Having experience in every stage of OSP services makes him an invaluable asset to the division. He helps manage over 100 Outside Plant staff and helps oversee more than 8,000 miles of construction every year. He is readily involved in the development of OSP plans and specifications. Additionally, Cullen attends vendor pre-bid and pre-construction conferences with clients as well as manages OSP field engineering and quality assurance services.

"WE TAKE OWNERSHIP  
IN WHAT WE DO FOR  
OUR CLIENTS. DON'T  
FORGET WHO YOU ARE  
WORKING FOR, AND  
BUILD THE BEST  
NETWORK POSSIBLE  
WITH THE CLIENT'S  
GOALS IN MIND."

**EDUCATION**

Associate of Applied Science in  
Telecommunications from  
Mitchell Technical Institute

**CLIENT REFERENCES**

Farmers Mutual Telephone - ID  
State Telephone - NY



**NATHAN  
WEBER, PE**

**VP OF ENGINEERING**

Nathan Weber has been active in the industry since 2000. His primary focus is on the technical and regulatory aspects of broadband service providers. From the development of feasibility studies based on site-specific cost estimates to the design and project management of several state-wide telecom network deployments, he is involved. He has designed and implemented voice, data, and video networks as well as Packet Optical Transport, Carrier Ethernet Transport, Dense Wavelength Division Multiplexing (DWDM), Synchronous Optical Networking (SONET), Multiprotocol Label Switching (MPLS), Fiber to the Premises (FTTP), Digital Loop Carrier (DLC), and wireless networks.

"IT'S A NOBLE CHALLENGE. WHAT BIGGER DIFFERENCE CAN YOU MAKE THAN BUILDING NETWORKS THAT CONNECT PEOPLE?"

**EDUCATION**

Bachelor of Science degree in Electrical Engineering from South Dakota State University

**LICENSED PROFESSIONAL ENGINEER**



**QUENTIN  
FLIPPIN, PE**

**DIRECTOR OF ENGINEERING**

Quentin Flippin has been active in the telecommunications industry for over 20 years. He plays a key role in the research, network architecture design, economic analysis, and implementation of existing and emerging technologies unique to broadband networks. He has been involved with the implementation of essentially every aspect of telecommunication networks including Digital Loop Carrier (DLC), FITL, FTTH, SONET, Carrier Ethernet, standby power, data network backbones, xDSL, and switched digital video. In these deployments he has been responsible for the technical research, development of plans and specifications, vendor evaluation, project management and final inspection.

"I REALLY ENJOY THE VARIETY OF PEOPLE FROM ALL OVER THE U.S. I AM ABLE TO MEET AND HELP."

**EDUCATION**

Bachelor of Science in Electrical Engineering from South Dakota State University

**LICENSED PROFESSIONAL ENGINEER**



**CARMEN  
O'NEILL, PE**

**DIRECTOR OF  
ENGINEERING**

A Licensed Professional Engineer and one of the broadband industry's premier project managers, Carmen O'Neill is active in the planning, funding, design, and project management of state-of-the-art network architectures. She is a renowned expert on broadband grant and loan funding mechanisms and requirements and the associated network builds, and is especially adept at networks with unique or complex requirements or funding conditions. A hands-on leader, she has assisted many companies in start-to-finish broadband deployments from strategic network and business planning, to design and engineering, through to deployment and migration. Carmen is a passionate learner, fascinated by leading edge technology and it's implications for end users; she is well-known for connecting technical expertise to end-user experiences and answering the question, "What's coming next?" She has been active in the engineering field since 1995 and working in telecommunications since 2002.

"THE BEST PROJECTS ARE ONES YOU LEARN FROM. PROJECTS WHERE YOU CAN USE YOUR PAST EXPERIENCE, DRAW FROM IT TO RESOLVE THE ISSUE, AND STILL WALK AWAY WITH A NEW SOLUTION IN YOUR ARSENAL."

**EDUCATION**

Bachelor of Science in Engineering from South Dakota School of Mines and Technology

**LICENSED PROFESSIONAL ENGINEER**



**BRIAN  
ENGA, PE**

**SR. TECHNOLOGY LEADER**

Brian Enga is a licensed Professional Engineer and part of the Senior Technology Leadership team at Vantage Point Solutions. He has been working in the telecommunications industry for more than 15 years and has project managed multimillion dollar broadband network deployments. He is experienced in providing engineering, technical research, plans and specifications development, vendor evaluation, project management, and final inspection services. Brian has engineered a variety of broadband networks technologies and has been a pioneer in deploying IP video networks.

"IT TAKES A LOT OF MOVING PARTS TO HELP OUR CLIENTS REACH THEIR GOALS. OUR TEAM WORKS TOGETHER TO MAKE SURE IT HAPPENS."

**EDUCATION**

Bachelor of Science degrees in Electrical Engineering and Engineering Physics from South Dakota State University

**LICENSED PROFESSIONAL ENGINEER**

## Hourly Rate Sheet

Professional	Rate
<b>Executive</b>	
SME / Executive Level 3	\$190-\$210
SME / Executive Level 2	\$170-\$190
SME / Executive Level 1	\$150-\$170
<b>Engineering</b>	
Senior Engineer / SME	\$150-\$170
Senior Engineering Staff Level 2	\$140-\$150
Senior Engineering Staff Level 1	\$130-\$140
Engineering Staff Level 3	\$120-\$130
Engineering Staff Level 2	\$100-\$120
Engineering Staff Level 1	\$75-\$95
Integration Service Technician Level 3	\$130-\$160
Integration Service Technician Level 2	\$100-\$130
Integration Service Technician Level 1	\$80-\$100
<b>Outside Plant</b>	
Senior OSP / SME	\$110-\$130
OSP Staff Level 6	\$75-\$80
OSP Staff Level 5	\$70-\$75
OSP Staff Level 4	\$65-\$70
OSP Staff Level 3	\$60-\$65
OSP Staff Level 2	\$55-\$60
OSP Staff Level 1	\$50-\$55
Permitting / Environmental Specialist Level 2	\$70-\$80
Permitting / Environmental Specialist Level 1	\$65-\$70
<b>Consulting</b>	
Senior Consultant / SME	\$245-\$260
Senior Analyst Level 3	\$250-\$260
Senior Analyst Level 2	\$240-\$260
Analyst Level 1	\$230-\$240
Analyst Assistant	\$110-\$120
<b>CAD Operations</b>	
Senior CAD / SME	\$70-\$75
CAD Specialist Level 3	\$65-\$70
CAD Specialist Level 2	\$60-\$65
CAD Specialist Level 1	\$50-\$55
Fiber Planners	\$80-\$90
<b>Other</b>	
Contracts Administrator	\$65-\$70
Administrative Assistant	\$40-\$45

Issue: October 2021

**\*\*\*All maintenance window and RF Engineering time will be billed at \$100 above listed rates.**

**\*\*\*Regulatory legal support and testimony will be at 1.5 times the rate.**

**\*\*\*Rates subject to change and some test equipment charges may apply.**