

Application to DHCD Submitted through CAMS

County of Louisa

AcelaNet, LLC/SCS VATI project

Application ID: 59812072018092452
Application Status: In Progress - DHCD
Program Name: Virginia Telecommunications Initiative 2019
Organization Name: County of Louisa
Organization Address: 1 Woolfolk Avenue
Louisa, VA 23093
Profile Manager Name: Bob Hardy
Profile Manager Phone: (540) 967-4599
Profile Manager Email: bhardy@louisa.org

Project Name: AcelaNet, LLC/SCS VATI project
Project Contact Name: Wanda Colvin
Project Contact Phone: (540) 967-3413
Project Contact Email: wcolvin@louisa.org
Project Location: Multiple locations in Louisa County, VA
Louisa, VA 23093-0000
Project Service Area: Louisa County

Total Requested Amount: \$293,520.00

Required Annual Audit Status: No Current Audits Found

Application to DHCD Submitted through CAMS

County of Louisa

AcelaNet, LLC/SCS VATI project

Budget Information:

Cost/Activity Category	DHCD Request	Other Funding	Total
Telecommunications	\$293,520.00	\$151,500.00	\$445,020.00
Construction	\$212,510.00	\$0.00	\$212,510.00
Construction Related Soft Costs	\$81,010.00	\$151,500.00	\$232,510.00
Total:	\$293,520.00	\$151,500.00	\$445,020.00

Budget Narrative:

SCS Broadband will cover 12% in matching funds for this project. The County of Louisa has a preexisting contract with SCS Broadband which has reduced lease fees for all 3 county towers in this grant request. DHCD permits these discounts to be used as in-kind contributions to this grant request, which totals 22% of the grant. SCS Broadband will invest \$52,500 in cash contributions of the project's total cost of \$445,020. The remaining 66% is the leftover total of the funding requested by this grant proposal, or \$293,520.

Questions and Responses:

1. Project Area

Provide a map and description of the proposed geographic area including specific boundaries of the project area e.g.; street names, local and regional boundaries, etc. Explain why and how the project area(s) was selected. Attach a copy of your map(s).

Answer:

Louisa County and its private partner SCS Broadband have developed a plan to expand broadband service significantly in the county. SCS Broadband has a partnership to lease up to nine new County Towers, three of which are built and close to completion, along with nine more commercial towers which are part of the SCS Broadband active network. In addition, SCS Broadband is in the process of leasing two additional commercial towers. It is from these 20 towers which we have selected five towers which qualify for the DHCD/VATI grant criteria. This grant request is for installing broadband service equipment on these five towers. The five towers were selected based on service requests received in these areas, along with meeting the DHCD rules for unserved and non-CAFII funded areas. Three of the towers selected are county towers and two of the towers are SCS Broadband commercial towers.

The grant funding requested here is to significantly expedite the expansion of SCS Broadband's existing system into Louisa. SCS Broadband will also be able to add their high-speed LTE equipment and VOIP phone product to the new network extensions as a result of this funding. Louisa County and SCS Broadband are requesting VATI funding to labor and materials costs for mounting telecom broadcasting equipment to the towers that SCS Broadband will lease. In addition, the funding will cover wireless backhaul as needed for each tower. Comsearch will be contracted to perform all required FCC engineering and licensing processes for all licensed backhaul 1Gbps 11Ghz radios. SCS Broadband has already obtained and paid for all the approval processes for the licenses for 3.65Ghz LTE systems. The project area will include the following regions:

Application to DHCD Submitted through CAMS

County of Louisa

AcelaNet, LLC/SCS VATI project

- Bumpass
- Plum Tree Cove
- Jerdone
- Chopping
- Mineral
- Jouett
- Jackson
- Turner's Creek
- Castle Park
- Chisholm's Point

This project area was also selected based on the census blocks and groups that were not awarded CAFII funding, whereas some of the county was awarded a CAFII through Central Virginia Electric Cooperative (CVEC). The actual project map presented by CVEC was used to determine that SCS Broadband's funding request would not overlap more than 10 percent as required by DHCD rules. None of the towers selected are sending service into the CAFFII, CVEC area.

Please see the file named "Figure 1.1 - Maps of Project Area" for the location of these towers. The maps show the complete coverage area that would receive broadband wireless services. Another map shows the broadband service propagation map. The statistics of population, homes, businesses and square miles are presented there since they were used in the decision to select the area for this grant proposal.

2.

Describe your outreach efforts to identify existing providers in the selected project area. Provide a map and list of all existing providers (fixed and wireless), and speeds offered within the project area. Provide a detailed explanation of how this information was compiled and the source(s).

Answer:

The project area chosen for this VATI grant submission currently does not have any provider that offers high-speed service as set out by DHCD at <10 Mbps/1Mbps. The area selected and tailored with specific sectorization from the towers do have CAFII or have areas which overlap more than 20% of any competitor with actual speeds greater than 10Mbps. Although some DSL providers advertise speeds greater than 10Mbps, BroadbandNow.com runs a continuous service which captures the actual statistics supplied by speed tests of citizens which documents otherwise.

There are no other ISPs in the project area that meet the speed requirements of 10Mbps or greater in advertised speeds. The attachment, "Figure 2.1 - Existing ISP and CAFII Funding Map", depicts the areas for funding, as well as the existing unqualified ISP and CAFII funding areas

3. Project Need/Description

To be eligible for VATI, applicants must demonstrate that the proposed project area(s) is unserved. An unserved area is defined as an area with speeds of

Application to DHCD Submitted through CAMS

County of Louisa

AcelaNet, LLC/SCS VATI project

10 Mbps/1 Mbps or less, and with less than 10% service overlap within the project area. Describe the anticipated service overlap with current providers within the project area.

Answer:

There are no Wireless ISPs with 10Mbps or greater other than SCS Broadband in other areas of the county. Those areas according to BroadbandNow.com's citizen speed checking program only provide speeds less than 10Mbps. These areas are also less than 10% of any tower coverage presented. This was confirmed as of 12/12/2018 and the results are included in this application.

Sources used to determine what Internet Service Providers used were:

1. Louisa County Administration
2. Public Surveys
3. Web searches
 - a. Broadbandnow.com
 - b. Broadbandsearch.net
4. FCC ISP Registration Database for Form 477

None of these sources listed a wireline or wireless ISP with 10Mbps or more speed.

4. Describe population both in terms of absolute numbers within the project area and the eligible users that will be served by the proposed project. Describe the basis for these projections.

Answer:

The proposed project area is made up of rural homes and communities. If the VATI grant is obtained, the number of citizens that can be served is 9,400. This number was determined using the U.S. Postal mailing routes which fell into the project area. See attachment "Figure 4.1 – U.S. Postal Routes Statistics of Area to be Served". This a snapshot of the online tool provided by the EDDM service of the U. S. Postal Service. This tool lists a total of 3,838 addresses, 1,726 of which are serviceable by radio signal. This leaves a total estimate of 2,112 addresses, with 90 of these addresses being businesses and 1,636 being homes. The breakdown of the U. S. Postal Service mapping was accomplished using the SCS Propagation Mapping tool which shows the number of people served in the proposed service area.

In summary, 2,112 homes and 90 businesses can be served in the area to be funded. This equates to a population estimate of 5,280 citizens.

5. Indicate the numbers of businesses and community anchor institutions the proposed project will pass in the project area.

Answer:

As indicated in the previous section, there are 2,112 households and 90 businesses that can be served in the project area. In addition to these 90 businesses, there are non-profits and government institutions which also can be serviced by this funding. These include the various government departments and agencies such as Post Offices, Volunteer Fire Departments, and social clubs such as 4H, Rotary Club, and others.

Although not all-inclusive, these are some other businesses and non-profits which have been analyzed to be in the service area of these towers:

Application to DHCD Submitted through CAMS

County of Louisa

AcelaNet, LLC/SCS VATI project

1. Bees and Beetles
2. Woods and Waters Publishing
3. UltraTouch Landscaping
4. RTW Construction Corp.
5. Planet Protection Services
6. Bowlers Tree Service
7. Local Landscapers
8. JO Contractors
9. Affordable Backhoe Contractors
10. Clear Water Drilling Company

In addition, the following non-profits would be eligible for SCS Broadband's Non-Profit Program, with services from \$17.50 per month:

1. 17 Churches
2. Mineral Historic Foundation
3. Friendly Oaks Clubhouse

6. Provide the anticipated take rate for the proposed service within one year of project completion and describe the basis for the estimate. Also provide all actions to be implemented to reach the identified potential customers within the project area.

Answer:

There is a possibility of 2,112 installations based on the previous analysis if SCS achieved a 100% take rate. From SCS's experience, the estimated take rate is a maximum of 1,689 installations or 80% of those who can receive the service signal in the territorial environment of this county. This considers foliage, as topography varies greatly from county to county. The difference is also due to several factors:

1. Elderly people who do not use the Internet
2. Extreme low-income people who cannot afford the Internet
3. Abandoned houses and business locations
4. People on long-term contracts with other providers such as satellite
5. People satisfied with less than 10Mbps service due to low Internet demands

Using 1,689 as an estimated number for take rate, all would be able to be installed within 18 months. This is based on the installations to be handled by the SCS Broadband Central Virginia Regional installation teams over the course of 2019-2020. These two teams must average six installs a day. There are 260 weekdays in a year which we subtract out these numbers:

1. Holidays
2. Sick Leave
3. Vacation Leave

Application to DHCD Submitted through CAMS

County of Louisa

AcelaNet, LLC/SCS VATI project

4. Poor Weather

SCS Broadband estimates 160 weekday installation days a year, plus another 48 Saturdays, giving us 208 installation days a year. This would leave a total of up to 1,191 installations a year for the installation teams, or approximately 1 1/2 years to reach the installation of all 1,689 estimated take rate. This may be shortened with additional personnel once the number of installs reaches a certain percentage creating the cash flow for an additional team.

The process to obtain this take rate will be through SCS Broadband established marketing procedures and policies. Marketing is accomplished by these means:

1. Paid Social Media Advertising (Facebook & Instagram)
2. Paid Search Engine Google
3. Google AdWords
4. Yard Signs
5. Local Online News Media
6. Local Printed News Media
7. Customer Recommendation Programs
8. Phone Calling
9. SCS Broadband Website Promoting

Figure 6.1 – “Sample Marketing Results”, depicts actual results of a counties’ continual marketing results. All service requests are automatically placed onto a map, and all service signal statistics and installation information are sent to SCS Broadband’s Service and Installation management.

7. A statement whether the proposed project is targeting the “last mile,” “middle mile,” or “backbone” portion of the broadband infrastructure.

Answer:

VATI funding for this project would provide an important enhancement of the existing partnership between SCS Broadband and Louisa County. This project is a last-mile only project using LTE wireless technology at broadband speeds up to 50Mbps. Included are several licensed 1Gbps wireless backhaul links.

8. For wireless projects only: Please explain the ownership of the proposed wireless infrastructure. Will the wireless co-applicant own or lease the radio mast, tower, or other raised structure onto which the wireless infrastructure will be installed?

Answer:

Application to DHCD Submitted through CAMS

County of Louisa

AcelaNet, LLC/SCS VATI project

Three of Louisa County towers for this grant request are owned by the County, two others are owned by National Communication Towers. SCS Broadband will own and maintain all the equipment to be loaded onto these towers. The company has three certified tower crews and contracts out tower climbing subcontracts when required to meet project deadlines. This tower is part of a complete county-wide wireless network being extended in 2019-2020. Attachment, "Figure 8.1 - Louisa County Wireless Network Plan", depicts the entire network's goal.

9. Provide a description of the broadband service to be provided, including estimated download and upload speeds, whether that speed is based on dedicated or shared bandwidth, and the technology that will be used. This description can be illustrated by a map or schematic diagram, as appropriate.

Answer:

The system will be a last-mile deployment to homes and businesses, using LTE and WIFI technology with a speed range between 10Mbps and 50Mbps with pricing starting at \$35. The system uses a proprietary shared polling software system, which keeps an effective service level while preventing overloading on the base stations. Each LTE base station can handle up to 96 last mile sessions, and the new WIFI base stations can handle 60 last mile sessions each. There are four base stations per tower for LTE and four WIFI base stations allowing for a total of 624 sessions, or connections to homes for the tower. This is twice the number expected, reducing the load by 50% of the maximum stated by the manufacturers. All plans are set to burst up to 10% higher than plan speed, used when the system detects the availability of backhaul bandwidth. Dedicated services will be offered in the business plan product line up to 500Mbps. Upload speeds will be open to availability by location, with a minimum of 8Mbps. All plans have uncapped, unlimited data. This is possible due to the bandwidth of the wireless and fiber backhauls.

VOIP phone service will be available for an additional \$15 a month for unlimited U.S. calling. The phone service can be used at home through any type of phone, landline or cellular, and can be used away from home with smartphones connected to WIFI anywhere in the continental United States.

10. Provide a description of the network system design used to deliver broadband service from the network's primary Internet point(s) of presence to end users, including the network components that already exist and the ones that would be added by the proposed project. Also describe specific advantages of using this technology. Provide a detailed explanation on how this information was compiled and source(s). For wireless projects, provide a propagation map including the proposed project.

Answer:

The funds from this grant will be used to add on to an existing SCS Broadband/Louisa County network. The current network has been in operation for up to 12 years, with continuous growth and tower additions. With the new county towers, and additional commercial towers, Louisa County will have the most encompassing wireless network in the Commonwealth of Virginia. Two towers, one in Ferncliff and one in Louisa, have fiber backhaul to SCS Broadband's Richmond Exchange servers and routers. These are two different fiber companies, giving redundancy backhaul support to our Exchange Services and to our Ashburn dedicated Internet connection. The Exchange Service also has a redundant fiber backhaul to New York City, if there is an issue with the fiber going to Ashburn, adding additional redundancy to the SCS Broadband networks. This routing is in place for many counties in Virginia by SCS Broadband which leads to the best performance for high bandwidth usage applications. Some of these applications on the SCS Broadband network as examples are Netflix, Apple TV, DropBox and Facebook...

Application to DHCD Submitted through CAMS

County of Louisa

AcelaNet, LLC/SCS VATI project

among the 40+ applications.

This funding request to DHCD/VATI is for loading five new towers for the network. This is a critical network build-out due to the population and businesses that will be affected which do not have speeds above 10Mbps. Below is a detailed description of the existing network and what the funding would be used for in adding to this existing network.

This project is for tower equipment and labor for loading on five existing towers, and six new 1Gbps 11Ghz licensed backhubs. Presented earlier in Project Description, is a map, "Figure 1.1 - Maps of Project Area", which includes the propagation of service signal (presented in green) which the new towers will cover. This propagation comes from an automated propagation tool which SCS Broadband uses for determining a tower's service area. The tool is directly connected to marketing through the company's website and allows every submission for service from citizens to be automatically mapped and sent to main office staff for processing.

11. Project Readiness

What is the current state of project development (i.e. planning, preliminary engineering, final design, etc.)? Prepare a detailed project timeline or construction schedule, which identifies specific tasks, staff, contractor responsible(s), collection of data, etc., and estimated start and completion dates. The timeline should include all activities being completed within 12 months of contract execution with DHCD.

Answer:

Louisa County and SCS Broadband have already cooperated to provision up to nine commercial towers in the county with broadband Internet equipment. The county is also in a partnership with SCS Broadband, where the county will own towers and lease to SCS Broadband. Two of the towers in this grant are completed and the third is expected to be completed well within timeframe constraints of the DHCD rules. The other two towers are existing commercial towers that SCS Broadband has committed to lease for the project.

This VATI request for five towers will allow deep extensions into new territory or territory with less than <10Mbps. The next step is to submit a lease request and pay for engineering analysis to add the SCS Broadband equipment on the tower. Although VATI allows for a year to complete a funded project, this project is scheduled to be completed within one year of start date for loading the towers and having them operational. This is shown in the attachment "Project Management Plan".

12. Matching funds: Provide a description of the matching funds the applicant and co-applicant will invest in the proposed project, (VATI funding cannot exceed 80% of total project cost). The Funding Sources Table should be completed.

i. For each element of matching funds in the description, indicate the type of match (cash, salary expense, or in-kind contribution).

ii. Identify whether the applicant or co-applicant is responsible for providing each element of the proposed matching funds.

iii. Include copies of vendor quotes or documented cost estimates supporting the proposed budget.

Answer:

SCS Broadband will cover 12% in matching funds for this project. The County of Louisa has a preexisting contract

Application to DHCD Submitted through CAMS

County of Louisa

AcelaNet, LLC/SCS VATI project

with SCS Broadband which has reduced lease fees for all 3 county towers in this grant request. DHCD permits these discounts to be used as in-kind contributions to this grant request, which totals 22% of the grant. SCS Broadband will invest \$52,500 in cash contributions of the project's total cost of \$445,020. The remaining 66% is the leftover total of the funding requested by this grant proposal, or \$293,520.

The attachment “Figure 12.3 - VATI Funding Sources,” shows the breakdown of these funds and the details of the budget with documentation per line item.

13. Identify key individuals, including name and title, who will be responsible for the management of the project. Describe their role and responsibilities for the project. Present this information in table format.

Answer:

The Louisa County and SCS Broadband key personnel for this project will be the following:

LOUISA COUNTY STAFF		
Name	Title	Grant Role
Wanda Colvin	Finance Director Louisa County Finance Department	Will act as grant coordinator for Louisa County
SCS BROADBAND STAFF (internet provider)		
Lon Welchel	CEO, SCS Broadband	Overseeing entire SCS Broadband side of the project
Clay Stewart	COO, SCS Broadband	Will work with the Louisa grant coordinator to implement broadband services in the Louisa project area
Gerri Stewart, CPA	CFO, SCS Broadband	Will provide oversight of the financial aspect of the project on SCS Broadband’s side
Kelly Stewart	Northern Operations Manager, SCS Broadband	Day-to-day management of project construction

14. Applicant and Co-Applicant: A description of the public-private partnership involved in the project. Detail the local government assistance: Local government co-applicants should demonstrate assistance to project that will lower overall cost and further assist in the timely completion of construction, including assistance with permits,

Application to DHCD Submitted through CAMS

County of Louisa

AcelaNet, LLC/SCS VATI project

rights of way, easement and other issues that may hinder or delay timely construction and increase cost.

- i. If the partnership is formalized in a written agreement provide a copy of that agreement.
- ii. If the partnership has not been formalized, provide a short description of the project management role, financial commitment, or other contribution to the project for the applicant and co-applicant and any additional partners.

Answer:

The SCS Broadband and County of Louisa broadband project was launched in 2018 with a partnership where county towers are to be built by the county and SCS Broadband is to lease commercial towers to extend the current SCS Broadband network which already has nine commercial towers. The county is providing all the towers at a nominal monthly fee for five years as assistance to the partnership. This partnership is documented in a Lease Agreement attachment, "Applicant Coapplicant Relationship".

Louisa County Administration supports this grant request partnership and posted the proper public notice. SCS Broadband will be responsible for at least 20% of the required matching funds which includes the leasing required for all the four commercial towers. The County will be responsible for monitoring of the project to completion. Completion will be the day all the towers have started provisioning broadband after tower has been completed.

15. Project Budget and Cost Appropriateness

Applicants shall provide a detailed budget as to how the grant funds will be utilized, including an itemization of equipment and construction costs and a justification of proposed expenses. Expenses should be substantiated by clear cost estimates.

Answer:

This project's itemization of equipment and construction costs is presented in the attachment, "Figure 12.1 Derivative of Costs", which contains web links to pricing for all material, and a list of all construction costs such as labor and leasing fees.

16. The cost benefit index is comprised of three factors: (i) state share for the total project cost, (ii) state cost per unit passed, and (iii) the internet speed. From these statistics, individual cost benefit scores are calculated. Finally, the three component scores are averaged together and converted to a 30 point scale to form a composite score.

Answer:

The DHCD share for the cost of this project will be 66% of the total project cost of \$445,020 or \$293,520. The estimated take rate is 1,689 homes including 90 businesses. Dividing this into the total cost of the project gives the figure of \$263 as the "cost per unit passed". That includes both SCS Broadband and Louisa County lower lease fees contributions and the funding from DHCD.

Citizens and businesses will be able to choose one of 5 plans, switching for free at the 1st of any month, up or down. The speeds of each tier are 10Mbps, 20Mbps, 30Mbps, 40Mbps, and 50Mbps down. The upload speed for each plan will be 8Mbps or greater.

17. A description of applicant and co-applicant's history or experience with managing grants and constructing broadband communications facilities in the Commonwealth of Virginia and elsewhere.

Answer:

Application to DHCD Submitted through CAMS

County of Louisa

AcelaNet, LLC/SCS VATI project

SCS Broadband is a premier Internet Service Provider (ISP), specializing in offering service in rural communities for over 13 years. In 2005, SCS Broadband began building a wireless network using both commercial towers and private structures, water towers and light poles throughout Nelson, Amherst and Buckingham counties of Virginia. In 2016, SCS Broadband created a five-year plan to deploy throughout Central Virginia in rural counties. SCS Broadband has expanded to these counties, many in partnerships of PPEA and other agreements:

- Nelson
- Amherst
- Bedford
- Pittsylvania
- Halifax
- Buckingham
- Albemarle
- Louisa
- Charles City
- Louisa

In addition, SCS broadband has worked with New Kent, Hanover and Goochland counties for future deployments. SCS Broadband leases many commercial and county owned towers, as well as private structures.

In March 2018, SCS Broadband won two Tobacco Region Revitalization Commission (TRRC) in partnerships with Halifax and Pittsylvania Counties. In addition, SCS Broadband has applied for DHCD/VATI grants for three years in a row in partnership with several counties. As a result of the efforts of writing grants, and in performing grant projects, SCS Broadband has become very experienced in working with grantors, such as DHCD.

Louisa County, Virginia is the Applicant for this grant application submittal which includes SCS Broadband, Inc., as the Co-Applicant.

Wanda Colvin, Louisa County Finance Director, has worked for Louisa County for a little over 2 years. Prior to coming to the County, she worked for the Virginia Department of Forestry (VDOT) for 12 years in various roles with her last role serving as Finance Director. During her 12-year tenure at VDOT, she both oversaw and performed grants administration and grants reporting. Wanda was the lead contact with the US Forest Service for application submissions and financial reporting. At the County, the finance department handles all grants reporting and assists with the application process. Wanda oversees grants administration, and is involved on an as needed basis to prepare grant applications and financial reports.

SCS Broadband's CEO Mr. Lon Whelchel has more than twenty years of experience in the areas of technology and leading professional service organizations.

Clay Stewart is the COO for SCS Broadband, and he brings more than 40 years of IT experience. He has served as a system support analyst and designer for corporations such as AT&T, MCI, WorldCom, UUNET, The Harris Corporation and Tyco Electronic communication companies.

Gerri Stewart is the CFO for SCS Broadband and brings more than 18 years as a Virginia Certified Public Accountant having served for the County of Henrico and as CFO for private schools, including the Miller School of Albemarle. Gerri and her staff provide for the effective and efficient financial processing for SCS Broadband.

18. Service

Describe the Internet service offerings to be provided after completion of this project and your price structure for these services. The service offerings should include all relevant tiers.

Answer:

The SCS Broadband network will be built with security, redundancy and future bandwidth requirements as priority

Application to DHCD Submitted through CAMS

County of Louisa

AcelaNet, LLC/SCS VATI project

network functions. Internet service plans will be part of the open market architecture. A simple set of pricing plans will allow anyone, home or business, to choose an uncapped, unlimited, cost-effective plan. Homes and businesses will have many plans to choose from, not being locked into a plan that does not meet future needs. Any subscriber may change plans at any time, effective on the 1st of any month, without charge or penalty. Onsite call maintenance for any equipment is done free of charge as stated on the Terms of Service Contract. Two types of Terms of Service Contracts will be offered. Every subscriber will have the choice of a Month-to-Month Service Contract or a Two-Year Service Contract. Two-year contracts will have additional discounting to the subscriber, and any subscriber can switch to a Two-Year Contract at any time.

Payment for services is to be set up to make it as easy as possible and to meet the different needs of subscribers. They are to be allowed to prepay in advance for a year and receive an additional discount. Payment can be done by mail, phone, or website; or any subscriber can easily set up a secured, automatic ACH account to a credit card or bank account.

SCS Broadband will offer 5 tiers of service for residential customers in the project area:

- 10 Mbps for \$34.95/month
- 20 Mbps for \$54.95/month
- 30 Mbps for \$74.95/month
- 40 Mbps for \$94.95/month
- 50 Mbps for \$114.95/month

These prices will be for a 2-Year contract. SCS will also offer a month-to-month contract option which adds an additional \$5/month onto these listed prices.

SCS Broadband will offer 3 tiers of service for businesses, with a required 2-Year Contract for all business plans (Businesses are defined as businesses working from a county zone defined for a business entity, home businesses are exempt):

- 10-15 Mbps for \$150/month
- 15-20 Mbps for \$200/month
- 20-25 Mbps for \$300/month

VOIP phone service will be offered at \$15 for unlimited continental United States calling. The phone system can be used at home with any type phone, including line or smartphone. It can be used away from home with a smartphone attached to WIFI Internet.

19. Additional Information

Any other equitable factor that the applicant desires to include.

Answer:

These funds will greatly expedite the expansion project for which Louisa County and SCS Broadband have executed a partnership prior to this funding. Well over 4,400 citizens can be affected and have the choice to

Application to DHCD Submitted through CAMS

County of Louisa

AcelaNet, LLC/SCS VATI project

subscribe to broadband speeds from 10Mbps to 50Mbps who currently have less than 10Mbps service or none in wired or wireless. Along with the 126 estimated businesses and non-profits, this set of rural communities and townships will be able to perform any needed function on the Internet. From multiple streaming, telecommuting, education, and health access to home business startups, all known type of Internet usage can be accomplished on this network.

The optional low-cost VOIP phone service is also a major financial help to these citizens. The economic impact for the region will be great based on home value increases and growth in jobs at businesses which rely on Internet communications and access. The logistics of these towers, on the highest mountain ranges in the region, along with our existing network of seven other sites already deploying in nearby areas, is adding Louisa County to the Commonwealth of Virginia's list of rural areas served with broadband Internet.

Attachments:

Derivation of Cost (Project Budget)

Figure121DerivativeofCosts1214201851111.pdf

Project Management Plan

ProjectManagementPlan1214201854310.xlsx

Supporting documentation for costs estimates

Figure122SupportingCostDocumentation1214201851125.pdf

Map(s) of project area, including proposed infrastructure

Figure11MapsofProjectArea1214201833017.pdf

Map(s) or schematic of existing broadband providers (inventory of existing assets)

Figure21ExistingISPandCAFIIFundingMap1214201833253.pdf

Documentation of relationship between applicant and co-applicant (formal or informal)

ApplicantCoapplicantRelationship1214201853201.pdf

Two most recent Form 477 submitted to FCC

Form477s1214201845208.pdf

Application to DHCD Submitted through CAMS

County of Louisa

AcelaNet, LLC/SCS VATI project

Documentation for in-kind contributions, including value(s)

SourceofInKindFunds1214201860311.pdf

Documentation supporting project costs (i.e. vendor quotes)

Figure122SupportingCostDocumentation1214201855655.pdf

Documentation of source of match funding

SourceofMatchingFunds1214201860624.pdf

Documentation that proposed project area is unserved based on VATI criteria

Figure21ExistingISPandCAFIFundingMap1214201860645.pdf

Documentation that proposed project area is not designated for Connect America Funding (CAF)

Figure21ExistingISPandCAFIFundingMap1214201855805.pdf

Funding Sources Table

Figure123VATIFundingSources1214201845058.pdf

(Optional) || Figure 4.1 US Postal Routes Statistics of Area to be Served

Figure41USPostalRoutesStatisticsofAreatobeServed1214201855836.pdf

(Optional) || Figure 6.1 Sample Marketing Results

Figure61SampleMarketingResults1214201850046.pdf

(Optional) || Figure 8.1 County Wireless Network Plan Map

Figure81CountyWirelessNetworkPlanMap1214201850811.pdf



Derivative of Costs

12/14/2018

Louisa County

GRAND Summary for Project, rolled up from five individual towers detailed below:

			Project Total	\$445,020
			Match and In-Kind	\$151,500
SCS Broadband - Match	\$52,500	12%	VATI	\$293,520
County of Louisa - In-Kind	\$99,000	22%	VATI Percentage	66%
			Match Percentage	34%
* Fiber and Tower Lease, and Tower Design				

* Quote/Order Sample Eupen 150' Hybrid Fiber/Power Cable with UVP

** Cost and Source Columns hyperlinks to source of cost website

Louisa HS Tower

* County Tower New to LTE Project

Product								
Equipment	Description	Cost **	Qty	Total	VATI	NON-VATI	Source of Estimate	Date
KP-3DP65S-45	Dual Band Sector 3.65Ghz 65 deg	500	4	2,000	2,000	0	KP Performance	<u>12/10/2018</u>
NOVAR-9302	3Ghz LTE BaiCel Base Station	3,800	4	15,200	15,200	0	Double Radius	<u>12/10/2018</u>
PS-5AC	AIRMAX 5 GHZ AC PRISMSTATION	300	4	1,200	1,200	0	Double Radius	<u>12/10/2018</u>
PRISMAP-5-60	AC ISOLATION ANTENNA HORN	80	4	320	320	0	Double Radius	<u>12/10/2018</u>
AF11Ghz	Air Fiber Licensed 11Ghz PtP Radio	2,800	2	5,600	5,600	0	Amazon.com	<u>12/10/2018</u>
POE inserter/Switch	UBNT EdgePoint 16 Port	530	1	530	530	0	Double Radius	<u>12/10/2018</u>
Cabling/Ends	Cat5 Double Shield Jumper Cables	200	1	200	200	0	Double Radius	<u>12/10/2018</u>
CWT01 SitePro1	Dual Mounting Steel Arms	456	4	1,824	1,824	0	SitePro1	<u>12/10/2018</u>
P2110 SitePro1	2 3/8"x10' Mount Poles	61	4	244	244	0	SitePro1	<u>12/10/2018</u>

Fiber/Power Cable	Fiber/Power/Conduit Package *	3,511	1	3,511	3,511	0	Eupen *	12/1/2018
UVP Lightning Protector	Lightning Protect * See Below	120	10	1,200	1,200	0	Eupen *	12/10/2018
Traco 48VDC PS	Traco Power Supply	248	2	496	496	0	Mouser	12/10/2018
Traco Battery	Traco Battery Switch/Charger	215	2	430	430	0	Mouser	12/10/2018
Tower Battery Backup	12VDC Battery 37AH	280	4	1,120	1,120	0	Mouser	12/10/2018
Voltage Stepup Trans	48 to 54 VDC Stepup Transformer	80	2	160	160	0	SCS Broadband	12/10/2018
Cutoff Switch	AC Master Cutoff Switch	198	1	198	198	0	ElvesSupply.com	12/10/2018
Break Box	100Amp Breaker Box w/Breakers	308	1	308	308	0	ElvesSupply.com	12/10/2018
Surge Protector	AC Surge Protection	170	1	170	170	0	Google Express	12/10/2018
444APC-HV	APC Modular CAT5 Surges	17	12	204	204	0	Amazon.com	12/10/2018
APC Surge	APC Surge Chassis for 444APC-HV	24	1	24	24	0	Amazon.com	12/10/2018
Surge Case	Equipment Outdoor NEMA Box	439	1	439	439	0	Amazon.com	12/10/2018
MER8-P SitePro1	H-Frame Rack Mount Hardware	565	1	565	565	0	SitePro1.com	12/10/2018
ER-PRO-8	Edge Router	399	1	399	399	0	Double Radius	12/10/2018
Permits	Tower Permitting Fee Estimates	200	1	200	200	0	Experience	12/10/2018
PE Structural	Tower Structural Analysis (ATC Standard)	2,900	1	2,900	2,900	0	Griswold Tower Software	12/10/2018
Shipping and Handling	Shipping and Handling Estimate All items	2,500	1	2,500	2,500	0	Estimated all parts	12/10/2018
Total Part Estimate				<u>\$41,942</u>	<u>\$41,942</u>	<u>\$0</u>		
Electrician	Licensed Electrician Estimate			\$2,000	\$2,000	\$0	Experience	
Tower Design	Frequency Application, Analysis and Tower Design			\$1,500	\$0	\$1,500	Experience	
Installers	Tower Equipment Installers			\$12,000	\$12,000	\$0	Experience	
Comsearch Licensing	11Ghz Licensed Link Engineering	1,835	2	\$3,670	\$3,670			
Total Labor Estimate				<u>\$19,170</u>	<u>\$17,670</u>	<u>\$1,500</u>		
	Tower Lease (Five Year Contract)			\$25,000	\$0	\$25,000	American Tower Corp	12/12/2018
Total Leases				<u>\$25,000</u>	<u>\$0</u>	<u>\$25,000</u>		
Total Estimate Tower				\$86,112	\$59,612	\$26,500		\$86,112

High Peak Tower Summary

SCS Broadband \$1,500 2%
County of Louisa \$25,000 29%

Project Total	\$86,112
Match and In-Kind	\$26,500
VATI	\$59,612
VATI Percentage	69%
Match Percentage	31%
* Fiber and Tower Lease, and Tower Design	

* Quote/Order Sample Eupen 150' Hybrid Fiber/Power Cable with UVP

** Cost and Source Columns hyperlinks to source of cost website

Derivative of Costs

12/14/2018

Buckner Tower

* County Tower New to LTE Project

Product								
Equipment	Description	Cost **	Qty	Total	VATI	NON-VATI	Source of Estimate	Date
KP-3DP65S-45	Dual Band Sector 3.65Ghz 65 deg	500	4	2,000	2,000	0	KP Performance	<u>12/10/2018</u>
NOVAR-9302	3Ghz LTE BaiCel Base Station	3,800	4	15,200	15,200	0	Double Radius	<u>12/10/2018</u>
PS-5AC	AIRMAX 5 GHZ AC PRISMSTATION	300	4	1,200	1,200	0	Double Radius	<u>12/10/2018</u>
PRISMAP-5-60	AC ISOLATION ANTENNA HORN	80	4	320	320	0	Double Radius	<u>12/10/2018</u>
AF11Ghz	Air Fiber Licensed 11Ghz PtP Radio	2,800	2	5,600	5,600	0	Amazon.com	<u>12/10/2018</u>
POE inserter/Switch	UBNT EdgePoint 16 Port	530	1	530	530	0	Double Radius	<u>12/10/2018</u>
Cabling/Ends	Cat5 Double Shield Jumper Cables	200	1	200	200	0	Double Radius	<u>12/10/2018</u>
CWT01 SitePro1	Dual Mounting Steel Arms	456	4	1,824	1,824	0	SitePro1	<u>12/10/2018</u>
P2110 SitePro1	2 3/8"x10' Mount Poles	61	4	244	244	0	SitePro1	<u>12/10/2018</u>
Fiber/Power Cable	Fiber/Power/Conduit Package *	3,511	1	3,511	3,511	0	Eupen *	<u>12/1/2018</u>
UVP Lightning Protector	Lightning Protect * See Below	120	10	1,200	1,200	0	Eupen *	<u>12/10/2018</u>
Traco 48VDC PS	Traco Power Supply	248	2	496	496	0	Mouser	<u>12/10/2018</u>
Traco Battery	Traco Battery Switch/Charger	215	2	430	430	0	Mouser	<u>12/10/2018</u>
Tower Battery Backup	12VDC Battery 37AH	280	4	1,120	1,120	0	Mouser	<u>12/10/2018</u>
Voltage Stepup Trans	48 to 54 VDC Stepup Transformer	80	2	160	160	0	SCS Broadband	<u>12/10/2018</u>
Cutoff Switch	AC Master Cutoff Switch	198	1	198	198	0	ElvesSupply.com	<u>12/10/2018</u>
Break Box	100Amp Breaker Box w/Breakers	308	1	308	308	0	ElvesSupply.com	<u>12/10/2018</u>

Surge Protector	AC Surge Protection	170	1	170	170	0	Google Express	12/10/2018
444APC-HV	APC Modular CAT5 Surges	17	12	204	204	0	Amazon.com	12/10/2018
APC Surge	APC Surge Chassis for 444APC-HV	24	1	24	24	0	Amazon.com	12/10/2018
Surge Case	Equipment Outdoor NEMA Box	439	1	439	439	0	Amazon.com	12/10/2018
MER8-P SitePro1	H-Frame Rack Mount Hardware	565	1	565	565	0	SitePro1.com	12/10/2018
ER-PRO-8	Edge Router	399	1	399	399	0	Double Radius	12/10/2018
Permits	Tower Permitting Fee Estimates	200	1	200	200	0	Experience	12/10/2018
PE Structural	Tower Structural Analysis (ATC Standard)	2,900	1	2,900	2,900	0	Griswold Tower Software	12/10/2018
Shipping and Handling	Shipping and Handling Estimate All items	2,500	1	2,500	2,500	0	Estimated all parts	12/10/2018
Total Part Estimate				\$41,942	\$41,942	\$0		
Electrician	Licensed Electrician Estimate			\$2,000	\$2,000	\$0	Experience	
Tower Design	Frequency Application, Analysis and Tower Design			\$1,500	\$0	\$1,500	Experience	
Installers	Tower Equipment Installers			\$12,000	\$12,000	\$0	Experience	
Comsearch Licensing	11Ghz Licensed Link Engineering	1,835	1	\$1,835	\$1,835			
Total Labor Estimate				\$17,335	\$15,835	\$1,500		
	Tower Lease (Five Year Contract)			\$25,000	\$0	\$25,000	SBA Towers	12/12/2018
Total Leases				\$25,000	\$0	\$25,000		
Total Estimate Tower				\$84,277	\$57,777	\$26,500		\$84,277

High Peak Tower Summary

SCS Broadband	\$1,500	2%
County of Louisa	\$25,000	30%

Project Total	\$84,277
Match and In-Kind	\$26,500
VATI	\$57,777
VATI Percentage	69%
Match Percentage	31%
* Fiber and Tower Lease, and Tower Design	

* Quote/Order Sample Eupen 150' Hybrid Fiber/Power Cable with UVP

** Cost and Source Columns hyperlinks to source of cost website

Derivative of Costs

12/14/2018

Jouette Tower

* County Tower New to LTE Project

Product		Cost **	Qty	Total	VATI	NON-VATI	Source of Estimate	Date
Equipment	Description							
KP-3DP65S-45	Dual Band Sector 3.65Ghz 65 deg	500	4	2,000	2,000	0	KP Performance	<u>12/10/2018</u>
NOVAR-9302	3Ghz LTE BaiCel Base Station	3,800	4	15,200	15,200	0	Double Radius	<u>12/10/2018</u>
PS-5AC	AIRMAX 5 GHZ AC PRISMSTATION	300	4	1,200	1,200	0	Double Radius	<u>12/10/2018</u>
PRISMAP-5-60	AC ISOLATION ANTENNA HORN	80	4	320	320	0	Double Radius	<u>12/10/2018</u>
AF11Ghz	Air Fiber Licensed 11Ghz PtP Radio	2,800	2	5,600	5,600	0	Amazon.com	<u>12/10/2018</u>
POE inserter/Switch	UBNT EdgePoint 16 Port	530	1	530	530	0	Double Radius	<u>12/10/2018</u>
Cabling/Ends	Cat5 Double Shield Jumper Cables	200	1	200	200	0	Double Radius	<u>12/10/2018</u>
CWT01 SitePro1	Dual Mounting Steel Arms	456	4	1,824	1,824	0	SitePro1	<u>12/10/2018</u>
P2110 SitePro1	2 3/8"x10' Mount Poles	61	4	244	244	0	SitePro1	<u>12/10/2018</u>
Fiber/Power Cable	Fiber/Power/Conduit Package *	3,511	1	3,511	3,511	0	Eupen *	<u>12/1/2018</u>
UVP Lightning Protector	Lightning Protect * See Below	120	10	1,200	1,200	0	Eupen *	<u>12/10/2018</u>
Traco 48VDC PS	Traco Power Supply	248	2	496	496	0	Mouser	<u>12/10/2018</u>
Traco Battery	Traco Battery Switch/Charger	215	2	430	430	0	Mouser	<u>12/10/2018</u>
Tower Battery Backup	12VDC Battery 37AH	280	4	1,120	1,120	0	Mouser	<u>12/10/2018</u>
Voltage Stepup Trans	48 to 54 VDC Stepup Transformer	80	2	160	160	0	SCS Broadband	<u>12/10/2018</u>
Cutoff Switch	AC Master Cutoff Switch	198	1	198	198	0	ElvesSupply.com	<u>12/10/2018</u>
Break Box	100Amp Breaker Box w/Breakers	308	1	308	308	0	ElvesSupply.com	<u>12/10/2018</u>
Surge Protector	AC Surge Protection	170	1	170	170	0	Google Express	<u>12/10/2018</u>
444APC-HV	APC Modular CAT5 Surges	17	12	204	204	0	Amazon.com	<u>12/10/2018</u>

APC Surge	APC Surge Chassis for 444APC-HV	24	1	24	24	0	Amazon.com	<u>12/10/2018</u>
Surge Case	Equipment Outdoor NEMA Box	439	1	439	439	0	Amazon.com	<u>12/10/2018</u>
MER8-P SitePro1	H-Frame Rack Mount Hardware	565	1	565	565	0	SitePro1.com	<u>12/10/2018</u>
ER-PRO-8	Edge Router	399	1	399	399	0	Double Radius	<u>12/10/2018</u>
Permits	Tower Permitting Fee Estimates	200	1	200	200	0	Experience	<u>12/10/2018</u>
PE Structural	Tower Structural Analysis (ATC Standard)	2,900	1	2,900	2,900	0	Griswold Tower Software	<u>12/10/2018</u>
Shipping and Handling	Shipping and Handling Estimate All items	2,500	1	2,500	2,500	0	Estimated all parts	<u>12/10/2018</u>
Total Part Estimate				<u>\$41,942</u>	<u>\$41,942</u>	<u>\$0</u>		
Electrician	Licensed Electrician Estimate			\$2,000	\$2,000	\$0	Experience	
Tower Design	Frequency Application, Analysis and Tower Design			\$1,500	\$0	\$1,500	Experience	
Installers	Tower Equipment Installers			\$12,000	\$12,000	\$0	Experience	
Comsearch Licensing	11Ghz Licensed Link Engineering	1,835	1	\$1,835	\$1,835			
Total Labor Estimate				<u>\$17,335</u>	<u>\$15,835</u>	<u>\$1,500</u>		
	Tower Lease (Five Year Contract)			\$25,000	\$0	\$25,000	SBA Towers	<u>12/12/2018</u>
Total Leases				<u>\$25,000</u>	<u>\$0</u>	<u>\$25,000</u>		
Total Estimate Tower				\$84,277	\$57,777	\$26,500		\$84,277

High Peak Tower Summary

SCS Broadband	\$1,500	2%
County of Louisa	\$25,000	30%

Project Total	\$84,277
Match and In-Kind	\$26,500
VATI	\$57,777
VATI Percentage	69%
Match Percentage	31%
* Fiber and Tower Lease, and Tower Design	

* Quote/Order Sample Eupen 150' Hybrid Fiber/Power Cable with UVP

** Cost and Source Columns hyperlinks to source of cost website

Derivative of Costs

12/14/2018

Apple Tower

* Commercial Tower New to LTE Project

Product								
Equipment	Description	Cost **	Qty	Total	VATI	NON-VATI	Source of Estimate	Date
KP-3DP65S-45	Dual Band Sector 3.65Ghz 65 deg	500	4	2,000	2,000	0	KP Performance	12/10/2018
NOVAR-9302	3Ghz LTE BaiCel Base Station	3,800	4	15,200	15,200	0	Double Radius	12/10/2018
PS-5AC	AIRMAX 5 GHZ AC PRISMSTATION	300	4	1,200	1,200	0	Double Radius	12/10/2018
PRISMAP-5-60	AC ISOLATION ANTENNA HORN	80	4	320	320	0	Double Radius	12/10/2018
AF11Ghz	Air Fiber Licensed 11Ghz PtP Radio	2,800	4	11,200	11,200	0	Amazon.com	12/10/2018
POE inserter/Switch	UBNT EdgePoint 16 Port	530	1	530	530	0	Double Radius	12/10/2018
Cabling/Ends	Cat5 Double Shield Jumper Cables	200	1	200	200	0	Double Radius	12/10/2018
CWT01 SitePro1	Dual Mounting Steel Arms	456	4	1,824	1,824	0	SitePro1	12/10/2018
P2110 SitePro1	2 3/8"x10' Mount Poles	61	4	244	244	0	SitePro1	12/10/2018
Fiber/Power Cable	Fiber/Power/Conduit Package *	3,511	1	3,511	3,511	0	Eupen *	12/1/2018
UVP Lightning Protector	Lightning Protect * See Below	120	10	1,200	1,200	0	Eupen *	12/10/2018
Traco 48VDC PS	Traco Power Supply	248	2	496	496	0	Mouser	12/10/2018
Traco Battery	Traco Battery Switch/Charger	215	2	430	430	0	Mouser	12/10/2018
Tower Battery Backup	12VDC Battery 37AH	280	4	1,120	1,120	0	Mouser	12/10/2018
Voltage Stepup Trans	48 to 54 VDC Stepup Transformer	80	2	160	160	0	SCS Broadband	12/10/2018
Cutoff Switch	AC Master Cutoff Switch	198	1	198	198	0	ElvesSupply.com	12/10/2018
Break Box	100Amp Breaker Box w/Breakers	308	1	308	308	0	ElvesSupply.com	12/10/2018
Surge Protector	AC Surge Protection	170	1	170	170	0	Google Express	12/10/2018
444APC-HV	APC Modular CAT5 Surges	17	12	204	204	0	Amazon.com	12/10/2018
APC Surge	APC Surge Chassis for 444APC-HV	24	1	24	24	0	Amazon.com	12/10/2018
Surge Case	Equipment Outdoor NEMA Box	439	1	439	439	0	Amazon.com	12/10/2018

MER8-P SitePro1	H-Frame Rack Mount Hardware	565	1	565	565	0	SitePro1.com	<u>12/10/2018</u>
ER-PRO-8	Edge Router	399	1	399	399	0	Double Radius	<u>12/10/2018</u>
Permits	Tower Permitting Fee Estimates	200	1	200	200	0	Experience	<u>12/10/2018</u>
PE Structural	Tower Structural Analysis (ATC Standar	2,900	1	2,900	2,900	0	Griswold Tower Software	<u>12/10/2018</u>
Shipping and Handling	Shipping and Handling Estimate All item	2,500	1	2,500	2,500	0	Estimated all parts	<u>12/10/2018</u>
Total Part Estimate				<u>\$47,542</u>	<u>\$47,542</u>	<u>\$0</u>		
Electrician	Licensed Electrician Estimate			\$2,000	\$2,000	\$0	Experience	
Tower Design	Frequency Application, Analysis and Tower Design			\$1,500	\$0	\$1,500	Experience	
Installers	Tower Equipment Installers			\$12,000	\$12,000	\$0	Experience	
Comsearch Licensing	11Ghz Licensed Link Engineering	1,835	2	\$3,670	\$3,670			
Total Labor Estimate				<u>\$19,170</u>	<u>\$17,670</u>	<u>\$1,500</u>		
	Tower Lease (Five Year Contract)			\$45,000	\$0	\$45,000	American Tower Corp	<u>12/12/2018</u>
Total Leases				<u>\$45,000</u>	<u>\$0</u>	<u>\$45,000</u>		
Total Estimate Tower				\$111,712	\$65,212	\$46,500		\$111,712

High Peak Tower Summary

SCS Broadband	\$46,500	42%
County of Louisa	\$0	0%

Project Total	\$111,712
Match and In-Kind	\$46,500
VATI	\$65,212
VATI Percentage	58%
Match Percentage	42%
* Fiber and Tower Lease, and Tower Design	

* Quote/Order Sample Eupen 150' Hybrid Fiber/Power Cable with UVP

** Cost and Source Columns hyperlinks to source of cost website

Derivative of Costs

12/14/2018

Plum Tower

* Commercial Tower New to LTE Project

Product								
Equipment	Description	Cost **	Qty	Total	VATI	NON-VATI	Source of Estimate	Date
KP-3DP65S-45	Dual Band Sector 3.65Ghz 65 deg	500	4	2,000	2,000	0	KP Performance	12/10/2018
NOVAR-9302	3Ghz LTE BaiCel Base Station	3,800	4	15,200	15,200	0	Double Radius	12/10/2018
PS-5AC	AIRMAX 5 GHZ AC PRISMSTATION	300	4	1,200	1,200	0	Double Radius	12/10/2018
PRISMAP-5-60	AC ISOLATION ANTENNA HORN	80	4	320	320	0	Double Radius	12/10/2018
AF11Ghz	Air Fiber Licensed 11Ghz PtP Radio	2,800	1	2,800	2,800	0	Amazon.com	12/10/2018
POE inserter/Switch	UBNT EdgePoint 16 Port	530	1	530	530	0	Double Radius	12/10/2018
Cabling/Ends	Cat5 Double Shield Jumper Cables	200	1	200	200	0	Double Radius	12/10/2018
CWT01 SitePro1	Dual Mounting Steel Arms	456	4	1,824	1,824	0	SitePro1	12/10/2018
P2110 SitePro1	2 3/8"x10' Mount Poles	61	4	244	244	0	SitePro1	12/10/2018
Fiber/Power Cable	Fiber/Power/Conduit Package *	3,511	1	3,511	3,511	0	Eupen *	12/1/2018
UVP Lightning Protector	Lightning Protect * See Below	120	10	1,200	1,200	0	Eupen *	12/10/2018
Traco 48VDC PS	Traco Power Supply	248	2	496	496	0	Mouser	12/10/2018
Traco Battery	Traco Battery Switch/Charger	215	2	430	430	0	Mouser	12/10/2018
Tower Battery Backup	12VDC Battery 37AH	280	4	1,120	1,120	0	Mouser	12/10/2018
Voltage Stepup Trans	48 to 54 VDC Stepup Transformer	80	2	160	160	0	SCS Broadband	12/10/2018
Cutoff Switch	AC Master Cutoff Switch	198	1	198	198	0	ElvesSupply.com	12/10/2018
Break Box	100Amp Breaker Box w/Breakers	308	1	308	308	0	ElvesSupply.com	12/10/2018
Surge Protector	AC Surge Protection	170	1	170	170	0	Google Express	12/10/2018
444APC-HV	APC Modular CAT5 Surges	17	12	204	204	0	Amazon.com	12/10/2018
APC Surge	APC Surge Chassis for 444APC-HV	24	1	24	24	0	Amazon.com	12/10/2018
Surge Case	Equipment Outdoor NEMA Box	439	1	439	439	0	Amazon.com	12/10/2018
MER8-P SitePro1	H-Frame Rack Mount Hardware	565	1	565	565	0	SitePro1.com	12/10/2018
ER-PRO-8	Edge Router	399	1	399	399	0	Double Radius	12/10/2018

Permits	Tower Permitting Fee Estimates	200	1	200	200	0 Experience	<u>12/10/2018</u>
PE Structural	Tower Structural Analysis (ATC Standard)	2,900	1	2,900	2,900	0 Griswold Tower Software	<u>12/10/2018</u>
Shipping and Handling	Shipping and Handling Estimate All items	2,500	1	2,500	2,500	0 Estimated all parts	<u>12/10/2018</u>
Total Part Estimate				\$39,142	\$39,142	\$0	
Electrician	Licensed Electrician Estimate			\$2,000	\$2,000	\$0 Experience	
Tower Design	Frequency Application, Analysis and Tower Design			\$1,500	\$0	\$1,500 Experience	
Installers	Tower Equipment Installers			\$12,000	\$12,000	\$0 Experience	
Comsearch Licensing	11Ghz Licensed Link Engineering	1,835	0	\$0	\$0		
Total Labor Estimate				\$15,500	\$14,000	\$1,500	
	Tower Lease (Five Year Contract)			\$24,000	\$0	\$24,000 County of Louisa	<u>12/12/2018</u>
Total Leases				\$24,000	\$0	\$24,000	
Total Estimate Tower				\$78,642	\$53,142	\$25,500	\$78,642

High Peak Tower Summary

SCS Broadband	\$1,500	2%
County of Louisa	\$24,000	31%

Project Total	\$78,642
Match and In-Kind	\$25,500
VATI	\$53,142
VATI Percentage	68%
Match Percentage	32%
* Fiber and Tower Lease, and Tower Design	

* Quote/Order Sample Eupen 150' Hybrid Fiber/Power Cable with UVP

** Cost and Source Columns hyperlinks to source of cost website

Quote



Eupen Cable, Inc.
 5181 110th Ave N
 Unit D
 Clearwater, FL 33760
 Phone: (800) 419-5100
 Fax: (727) 528-0751

Order Number: 0121708
 Order Date: 12/01/2018
 Expiration Date: 1/01/2019
 Salesperson: SE
 Customer Number: 10-CREDIT
 Warehouse: MTX

Sold To:
 SCS Broadband
 604 Thomas Nelson Hwy

Ship To:
 SCS Broadband
 604 Thomas Nelson Hwy

Arrington, VA 22922

Arrington, VA 22922

Confirm To:

Contact:

Customer P.O.		Ship VIA	Freight Terms	Payment Terms		
Quote	BEST WAY	PREPAY AND ADD	Credit Card			
Line	Item Code	Unit	Ordered	Price	Amount	
1	H51206S08C200 Hybrid Cable 7/8", (6) pairs of 6 mm ² power cables and (4) pairs of single mode fibers, 200 foot length with both ends terminated with LC connectors	EACH	1	1,938.42	1,938.42	
2	REKDC9234PF48 Junction Box with (3) OVPs and (3) discrete circuits for (1) 1-1/4" or (2) 7/8" hybrid feeder cables, (6) 11 mm power cables and (9) 6 mm fiber jumpers	EACH	1	1,164.00	1,164.00	
3	HF2S914LCLC-A/B Fiber jumper, with 2 single mode fibers, 30 foot, with duplexed LC to LC connectors, outdoor rated jacket, clipped A/B and B/A	EACH	3	50.29	150.87	
4	HP16/2C Power cable (2) 16 AWG copper conductors	FT	150	0.69	103.50	
5	HG-78 Hoisting Grip, Lace-up, 7/8"	EA	1	15.75	15.75	
6	SH-S78 Snap Hanger, Stackable, for 7/8" corrugated coax	K010	7	13.89	97.23	
7	GK-C78T Ground Kit, Clip on, Tinned, for 7/8" corrugated coax	EA	3	11.20	33.60	
8	VT-50 Cable ties, Velcro 3/4" x 8" black, kit of 10	K010	1	8.00	8.00	
Lead Time: 3 Weeks to Ship						
				Net Order:	3,511.37	
				Less Discount:	0.00	
				Freight:	0.00	
				Sales Tax:	0.00	
				Order Total	3,511.37	



Supporting Cost Documentation

12/14/2018

Louisa County

* Quote/Order Sample Eupen 150' Hybrid Fiber/Power Cable with UVP

** Cost and Source Columns hyperlinks to source of cost website

Louisa HS Tower

* County Tower New to LTE Project

Product								
Equipment	Description	Cost **	Qty	Total	VATI	NON-VATI	Source of Estimate	Date
KP-3DP65S-45	Dual Band Sector 3.65Ghz 65 deg	500	4	2,000	2,000	0	KP Performance	<u>12/10/2018</u>
NOVAR-9302	3Ghz LTE BaiCel Base Station	3,800	4	15,200	15,200	0	Double Radius	<u>12/10/2018</u>
PS-5AC	AIRMAX 5 GHZ AC PRISMSTATION	300	4	1,200	1,200	0	Double Radius	<u>12/10/2018</u>
PRISMAP-5-60	AC ISOLATION ANTENNA HORN	80	4	320	320	0	Double Radius	<u>12/10/2018</u>
AF11Ghz	Air Fiber Licensed 11Ghz PtP Radio	2,800	2	5,600	5,600	0	Amazon.com	<u>12/10/2018</u>
POE inserter/Switch	UBNT EdgePoint 16 Port	530	1	530	530	0	Double Radius	<u>12/10/2018</u>
Cabling/Ends	Cat5 Double Shield Jumper Cables	200	1	200	200	0	Double Radius	<u>12/10/2018</u>
CWT01 SitePro1	Dual Mounting Steel Arms	456	4	1,824	1,824	0	SitePro1	<u>12/10/2018</u>
P2110 SitePro1	2 3/8"x10' Mount Poles	61	4	244	244	0	SitePro1	<u>12/10/2018</u>
Fiber/Power Cable	Fiber/Power/Conduit Package *	3,511	1	3,511	3,511	0	Eupen *	<u>12/1/2018</u>
UVP Lightning Protector	Lightning Protect * See Below	120	10	1,200	1,200	0	Eupen *	<u>12/10/2018</u>
Traco 48VDC PS	Traco Power Supply	248	2	496	496	0	Mouser	<u>12/10/2018</u>
Traco Battery	Traco Battery Switch/Charger	215	2	430	430	0	Mouser	<u>12/10/2018</u>
Tower Battery Backup	12VDC Battery 37AH	280	4	1,120	1,120	0	Mouser	<u>12/10/2018</u>
Voltage Stepup Trans	48 to 54 VDC Stepup Transformer	80	2	160	160	0	SCS Broadband	<u>12/10/2018</u>
Cutoff Switch	AC Master Cutoff Switch	198	1	198	198	0	ElvesSupply.com	<u>12/10/2018</u>
Break Box	100Amp Breaker Box w/Breakers	308	1	308	308	0	ElvesSupply.com	<u>12/10/2018</u>

Surge Protector	AC Surge Protection	170	1	170	170	0	Google Express	<u>12/10/2018</u>
444APC-HV	APC Modular CAT5 Surges	17	12	204	204	0	Amazon.com	<u>12/10/2018</u>
APC Surge	APC Surge Chassis for 444APC-HV	24	1	24	24	0	Amazon.com	<u>12/10/2018</u>
Surge Case	Equipment Outdoor NEMA Box	439	1	439	439	0	Amazon.com	<u>12/10/2018</u>
MER8-P SitePro1	H-Frame Rack Mount Hardware	565	1	565	565	0	SitePro1.com	<u>12/10/2018</u>
ER-PRO-8	Edge Router	399	1	399	399	0	Double Radius	<u>12/10/2018</u>
Permits	Tower Permitting Fee Estimates	200	1	200	200	0	Experience	<u>12/10/2018</u>
PE Structural	Tower Structural Analysis (ATC Standard)	2,900	1	2,900	2,900	0	Griswold Tower Software	<u>12/10/2018</u>
Shipping and Handling	Shipping and Handling Estimate All items	2,500	1	2,500	2,500	0	Estimated all parts	<u>12/10/2018</u>
Total Part Estimate				<u>\$41,942</u>	<u>\$41,942</u>	<u>\$0</u>		
Electrician	Licensed Electrician Estimate			\$2,000	\$2,000	\$0	Experience	
Tower Design	Frequency Application, Analysis and Tower Design			\$1,500	\$0	\$1,500	Experience	
Installers	Tower Equipment Installers			\$12,000	\$12,000	\$0	Experience	
Comsearch Licensing	11Ghz Licensed Link Engineering	1,835	2	\$3,670	\$3,670			
Total Labor Estimate				<u>\$19,170</u>	<u>\$17,670</u>	<u>\$1,500</u>		
	Tower Lease (Five Year Contract)			\$25,000	\$0	\$25,000	American Tower Corp	<u>12/12/2018</u>
Total Leases				<u>\$25,000</u>	<u>\$0</u>	<u>\$25,000</u>		
Total Estimate Tower				\$86,112	\$59,612	\$26,500		\$86,112

* Quote/Order Sample Eupen 150' Hybrid Fiber/Power Cable with UVP

** Cost and Source Columns hyperlinks to source of cost website

Buckner Tower

* County Tower New to LTE Project

Product								
Equipment	Description	Cost **	Qty	Total	VATI	NON-VATI	Source of Estimate	Date
KP-3DP65S-45	Dual Band Sector 3.65Ghz 65 deg	500	4	2,000	2,000	0	KP Performance	12/10/2018
NOVAR-9302	3Ghz LTE BaiCel Base Station	3,800	4	15,200	15,200	0	Double Radius	12/10/2018
PS-5AC	AIRMAX 5 GHZ AC PRISMSTATION	300	4	1,200	1,200	0	Double Radius	12/10/2018
PRISMAP-5-60	AC ISOLATION ANTENNA HORN	80	4	320	320	0	Double Radius	12/10/2018
AF11Ghz	Air Fiber Licensed 11Ghz PtP Radio	2,800	2	5,600	5,600	0	Amazon.com	12/10/2018
POE inserter/Switch	UBNT EdgePoint 16 Port	530	1	530	530	0	Double Radius	12/10/2018
Cabling/Ends	Cat5 Double Shield Jumper Cables	200	1	200	200	0	Double Radius	12/10/2018
CWT01 SitePro1	Dual Mounting Steel Arms	456	4	1,824	1,824	0	SitePro1	12/10/2018
P2110 SitePro1	2 3/8"x10' Mount Poles	61	4	244	244	0	SitePro1	12/10/2018
Fiber/Power Cable	Fiber/Power/Conduit Package *	3,511	1	3,511	3,511	0	Eupen *	12/1/2018
UVP Lightning Protector	Lightning Protect * See Below	120	10	1,200	1,200	0	Eupen *	12/10/2018
Traco 48VDC PS	Traco Power Supply	248	2	496	496	0	Mouser	12/10/2018
Traco Battery	Traco Battery Switch/Charger	215	2	430	430	0	Mouser	12/10/2018
Tower Battery Backup	12VDC Battery 37AH	280	4	1,120	1,120	0	Mouser	12/10/2018
Voltage Stepup Trans	48 to 54 VDC Stepup Transformer	80	2	160	160	0	SCS Broadband	12/10/2018
Cutoff Switch	AC Master Cutoff Switch	198	1	198	198	0	ElvesSupply.com	12/10/2018
Break Box	100Amp Breaker Box w/Breakers	308	1	308	308	0	ElvesSupply.com	12/10/2018
Surge Protector	AC Surge Protection	170	1	170	170	0	Google Express	12/10/2018
444APC-HV	APC Modular CAT5 Surges	17	12	204	204	0	Amazon.com	12/10/2018
APC Surge	APC Surge Chassis for 444APC-HV	24	1	24	24	0	Amazon.com	12/10/2018

Surge Case	Equipment Outdoor NEMA Box	439	1	439	439	0	Amazon.com	12/10/2018
MER8-P SitePro1	H-Frame Rack Mount Hardware	565	1	565	565	0	SitePro1.com	12/10/2018
ER-PRO-8	Edge Router	399	1	399	399	0	Double Radius	12/10/2018
Permits	Tower Permitting Fee Estimates	200	1	200	200	0	Experience	12/10/2018
PE Structural	Tower Structural Analysis (ATC Standar	2,900	1	2,900	2,900	0	Griswold Tower Software	12/10/2018
Shipping and Handling	Shipping and Handling Estimate All item	2,500	1	2,500	2,500	0	Estimated all parts	12/10/2018
Total Part Estimate				<u>\$41,942</u>	<u>\$41,942</u>	<u>\$0</u>		
Electrician	Licensed Electrician Estimate			\$2,000	\$2,000	\$0	Experience	
Tower Design	Frequency Application, Analysis and Tower Design			\$1,500	\$0	\$1,500	Experience	
Installers	Tower Equipment Installers			\$12,000	\$12,000	\$0	Experience	
Comsearch Licensing	11Ghz Licensed Link Engineering	1,835	1	\$1,835	\$1,835			
Total Labor Estimate				<u>\$17,335</u>	<u>\$15,835</u>	<u>\$1,500</u>		
	Tower Lease (Five Year Contract)			\$25,000	\$0	\$25,000	SBA Towers	12/12/2018
Total Leases				<u>\$25,000</u>	<u>\$0</u>	<u>\$25,000</u>		
Total Estimate Tower				\$84,277	\$57,777	\$26,500		\$84,277

* Quote/Order Sample Eupen 150' Hybrid Fiber/Power Cable with UVP

** Cost and Source Columns hyperlinks to source of cost website

Jouette Tower

* County Tower New to LTE Project

Product								
Equipment	Description	Cost **	Qty	Total	VATI	NON-VATI	Source of Estimate	Date
KP-3DP65S-45	Dual Band Sector 3.65Ghz 65 deg	500	4	2,000	2,000	0	KP Performance	12/10/2018
NOVAR-9302	3Ghz LTE BaiCel Base Station	3,800	4	15,200	15,200	0	Double Radius	12/10/2018
PS-5AC	AIRMAX 5 GHZ AC PRISMSTATION	300	4	1,200	1,200	0	Double Radius	12/10/2018
PRISMAP-5-60	AC ISOLATION ANTENNA HORN	80	4	320	320	0	Double Radius	12/10/2018
AF11Ghz	Air Fiber Licensed 11Ghz PtP Radio	2,800	2	5,600	5,600	0	Amazon.com	12/10/2018

POE inserter/Switch	UBNT EdgePoint 16 Port	530	1	530	530	0	Double Radius	12/10/2018
Cabling/Ends	Cat5 Double Shield Jumper Cables	200	1	200	200	0	Double Radius	12/10/2018
CWT01 SitePro1	Dual Mounting Steel Arms	456	4	1,824	1,824	0	SitePro1	12/10/2018
P2110 SitePro1	2 3/8"x10' Mount Poles	61	4	244	244	0	SitePro1	12/10/2018
Fiber/Power Cable	Fiber/Power/Conduit Package *	3,511	1	3,511	3,511	0	Eupen *	12/1/2018
UVP Lightning Protector	Lightning Protect * See Below	120	10	1,200	1,200	0	Eupen *	12/10/2018
Traco 48VDC PS	Traco Power Supply	248	2	496	496	0	Mouser	12/10/2018
Traco Battery	Traco Battery Switch/Charger	215	2	430	430	0	Mouser	12/10/2018
Tower Battery Backup	12VDC Battery 37AH	280	4	1,120	1,120	0	Mouser	12/10/2018
Voltage Stepup Trans	48 to 54 VDC Stepup Transformer	80	2	160	160	0	SCS Broadband	12/10/2018
Cutoff Switch	AC Master Cutoff Switch	198	1	198	198	0	ElvesSupply.com	12/10/2018
Break Box	100Amp Breaker Box w/Breakers	308	1	308	308	0	ElvesSupply.com	12/10/2018
Surge Protector	AC Surge Protection	170	1	170	170	0	Google Express	12/10/2018
444APC-HV	APC Modular CAT5 Surges	17	12	204	204	0	Amazon.com	12/10/2018
APC Surge	APC Surge Chassis for 444APC-HV	24	1	24	24	0	Amazon.com	12/10/2018
Surge Case	Equipment Outdoor NEMA Box	439	1	439	439	0	Amazon.com	12/10/2018
MER8-P SitePro1	H-Frame Rack Mount Hardware	565	1	565	565	0	SitePro1.com	12/10/2018
ER-PRO-8	Edge Router	399	1	399	399	0	Double Radius	12/10/2018
Permits	Tower Permitting Fee Estimates	200	1	200	200	0	Experience	12/10/2018
PE Structural	Tower Structural Analysis (ATC Standar	2,900	1	2,900	2,900	0	Griswold Tower Software	12/10/2018
Shipping and Handling	Shipping and Handling Estimate All item	2,500	1	2,500	2,500	0	Estimated all parts	12/10/2018
Total Part Estimate				<u>\$41,942</u>	<u>\$41,942</u>	<u>\$0</u>		
Electrician	Licensed Electrician Estimate			\$2,000	\$2,000	\$0	Experience	
Tower Design	Frequency Application, Analysis and Tower Design			\$1,500	\$0	\$1,500	Experience	
Installers	Tower Equipment Installers			\$12,000	\$12,000	\$0	Experience	
Comsearch Licensing	11Ghz Licensed Link Engineering	1,835	1	\$1,835	\$1,835			

Total Labor Estimate	<u>\$17,335</u>	<u>\$15,835</u>	<u>\$1,500</u>	
Tower Lease (Five Year Contract)	\$25,000	\$0	\$25,000	SBA Towers <u>12/12/2018</u>
Total Leases	<u>\$25,000</u>	<u>\$0</u>	<u>\$25,000</u>	
Total Estimate Tower	\$84,277	\$57,777	\$26,500	\$84,277

* Quote/Order Sample Eupen 150' Hybrid Fiber/Power Cable with UVP

** Cost and Source Columns hyperlinks to source of cost website

Apple Tower

* Commercial Tower New to LTE Project

Product		Cost **	Qty	Total	VATI	NON-VATI	Source of Estimate	Date
Equipment	Description							
KP-3DP65S-45	Dual Band Sector 3.65Ghz 65 deg	500	4	2,000	2,000	0	KP Performance	<u>12/10/2018</u>
NOVAR-9302	3Ghz LTE BaiCel Base Station	3,800	4	15,200	15,200	0	Double Radius	<u>12/10/2018</u>
PS-5AC	AIRMAX 5 GHZ AC PRISMSTATION	300	4	1,200	1,200	0	Double Radius	<u>12/10/2018</u>
PRISMAP-5-60	AC ISOLATION ANTENNA HORN	80	4	320	320	0	Double Radius	<u>12/10/2018</u>
AF11Ghz	Air Fiber Licensed 11Ghz PtP Radio	2,800	4	11,200	11,200	0	Amazon.com	<u>12/10/2018</u>
POE inserter/Switch	UBNT EdgePoint 16 Port	530	1	530	530	0	Double Radius	<u>12/10/2018</u>
Cabling/Ends	Cat5 Double Shield Jumper Cables	200	1	200	200	0	Double Radius	<u>12/10/2018</u>
CWT01 SitePro1	Dual Mounting Steel Arms	456	4	1,824	1,824	0	SitePro1	<u>12/10/2018</u>
P2110 SitePro1	2 3/8"x10' Mount Poles	61	4	244	244	0	SitePro1	<u>12/10/2018</u>
Fiber/Power Cable	Fiber/Power/Conduit Package *	3,511	1	3,511	3,511	0	Eupen *	<u>12/1/2018</u>
UVP Lightning Protector	Lightning Protect * See Below	120	10	1,200	1,200	0	Eupen *	<u>12/10/2018</u>
Traco 48VDC PS	Traco Power Supply	248	2	496	496	0	Mouser	<u>12/10/2018</u>
Traco Battery	Traco Battery Switch/Charger	215	2	430	430	0	Mouser	<u>12/10/2018</u>
Tower Battery Backup	12VDC Battery 37AH	280	4	1,120	1,120	0	Mouser	<u>12/10/2018</u>
Voltage Stepup Trans	48 to 54 VDC Stepup Transformer	80	2	160	160	0	SCS Broadband	<u>12/10/2018</u>

Cutoff Switch	AC Master Cutoff Switch	198	1	198	198	0	ElvesSupply.com	12/10/2018
Break Box	100Amp Breaker Box w/Breakers	308	1	308	308	0	ElvesSupply.com	12/10/2018
Surge Protector	AC Surge Protection	170	1	170	170	0	Google Express	12/10/2018
444APC-HV	APC Modular CAT5 Surges	17	12	204	204	0	Amazon.com	12/10/2018
APC Surge	APC Surge Chassis for 444APC-HV	24	1	24	24	0	Amazon.com	12/10/2018
Surge Case	Equipment Outdoor NEMA Box	439	1	439	439	0	Amazon.com	12/10/2018
MER8-P SitePro1	H-Frame Rack Mount Hardware	565	1	565	565	0	SitePro1.com	12/10/2018
ER-PRO-8	Edge Router	399	1	399	399	0	Double Radius	12/10/2018
Permits	Tower Permitting Fee Estimates	200	1	200	200	0	Experience	12/10/2018
PE Structural	Tower Structural Analysis (ATC Standard)	2,900	1	2,900	2,900	0	Griswold Tower Software	12/10/2018
Shipping and Handling	Shipping and Handling Estimate All items	2,500	1	2,500	2,500	0	Estimated all parts	12/10/2018
Total Part Estimate				\$47,542	\$47,542	\$0		
Electrician	Licensed Electrician Estimate			\$2,000	\$2,000	\$0	Experience	
Tower Design	Frequency Application, Analysis and Tower Design			\$1,500	\$0	\$1,500	Experience	
Installers	Tower Equipment Installers			\$12,000	\$12,000	\$0	Experience	
Comsearch Licensing	11Ghz Licensed Link Engineering	1,835	2	\$3,670	\$3,670			
Total Labor Estimate				\$19,170	\$17,670	\$1,500		
	Tower Lease (Five Year Contract)			\$45,000	\$0	\$45,000	American Tower Corp	12/12/2018
Total Leases				\$45,000	\$0	\$45,000		
Total Estimate Tower				\$111,712	\$65,212	\$46,500		\$111,712

* Quote/Order Sample Eupen 150' Hybrid Fiber/Power Cable with UVP

** Cost and Source Columns hyperlinks to source of cost website

Plum Tower

* Commercial Tower New to LTE Project

Product

Equipment	Description	Cost **	Qty	Total	VATI	NON-VATI	Source of Estimate	Date
KP-3DP65S-45	Dual Band Sector 3.65Ghz 65 deg	500	4	2,000	2,000	0	KP Performance	12/10/2018
NOVAR-9302	3Ghz LTE BaiCel Base Station	3,800	4	15,200	15,200	0	Double Radius	12/10/2018
PS-5AC	AIRMAX 5 GHZ AC PRISMSTATION	300	4	1,200	1,200	0	Double Radius	12/10/2018
PRISMAP-5-60	AC ISOLATION ANTENNA HORN	80	4	320	320	0	Double Radius	12/10/2018
AF11Ghz	Air Fiber Licensed 11Ghz PtP Radio	2,800	1	2,800	2,800	0	Amazon.com	12/10/2018
POE inserter/Switch	UBNT EdgePoint 16 Port	530	1	530	530	0	Double Radius	12/10/2018
Cabling/Ends	Cat5 Double Shield Jumper Cables	200	1	200	200	0	Double Radius	12/10/2018
CWT01 SitePro1	Dual Mounting Steel Arms	456	4	1,824	1,824	0	SitePro1	12/10/2018
P2110 SitePro1	2 3/8"x10' Mount Poles	61	4	244	244	0	SitePro1	12/10/2018
Fiber/Power Cable	Fiber/Power/Conduit Package *	3,511	1	3,511	3,511	0	Eupen *	12/1/2018
UVP Lightning Protector	Lightning Protect * See Below	120	10	1,200	1,200	0	Eupen *	12/10/2018
Traco 48VDC PS	Traco Power Supply	248	2	496	496	0	Mouser	12/10/2018
Traco Battery	Traco Battery Switch/Charger	215	2	430	430	0	Mouser	12/10/2018
Tower Battery Backup	12VDC Battery 37AH	280	4	1,120	1,120	0	Mouser	12/10/2018
Voltage Stepup Trans	48 to 54 VDC Stepup Transformer	80	2	160	160	0	SCS Broadband	12/10/2018
Cutoff Switch	AC Master Cutoff Switch	198	1	198	198	0	ElvesSupply.com	12/10/2018
Break Box	100Amp Breaker Box w/Breakers	308	1	308	308	0	ElvesSupply.com	12/10/2018
Surge Protector	AC Surge Protection	170	1	170	170	0	Google Express	12/10/2018
444APC-HV	APC Modular CAT5 Surges	17	12	204	204	0	Amazon.com	12/10/2018
APC Surge	APC Surge Chassis for 444APC-HV	24	1	24	24	0	Amazon.com	12/10/2018
Surge Case	Equipment Outdoor NEMA Box	439	1	439	439	0	Amazon.com	12/10/2018
MER8-P SitePro1	H-Frame Rack Mount Hardware	565	1	565	565	0	SitePro1.com	12/10/2018
ER-PRO-8	Edge Router	399	1	399	399	0	Double Radius	12/10/2018
Permits	Tower Permitting Fee Estimates	200	1	200	200	0	Experience	12/10/2018
PE Structural	Tower Structural Analysis (ATC Standar	2,900	1	2,900	2,900	0	Griswold Tower Software	12/10/2018

Shipping and Handling	Shipping and Handling Estimate All item	2,500	1	2,500	2,500	0	Estimated all parts	<u>12/10/2018</u>
Total Part Estimate				<u>\$39,142</u>	<u>\$39,142</u>	<u>\$0</u>		
Electrician	Licensed Electrician Estimate			\$2,000	\$2,000	\$0	Experience	
Tower Design	Frequency Application, Analysis and Tower Design			\$1,500	\$0	\$1,500	Experience	
Installers	Tower Equipment Installers			\$12,000	\$12,000	\$0	Experience	
Comsearch Licensing	11Ghz Licensed Link Engineering	1,835	0	\$0	\$0			
Total Labor Estimate				<u>\$15,500</u>	<u>\$14,000</u>	<u>\$1,500</u>		
	Tower Lease (Five Year Contract)			\$24,000	\$0	\$24,000	County of Louisa	<u>12/12/2018</u>
Total Leases				<u>\$24,000</u>	<u>\$0</u>	<u>\$24,000</u>		
Total Estimate Tower				\$78,642	\$53,142	\$25,500		\$78,642

* Quote/Order Sample Eupen 150' Hybrid Fiber/Power Cable with UVP

** Cost and Source Columns hyperlinks to source of cost website

Quote

Page: 1



Eupen Cable, Inc.
 5181 110th Ave N
 Unit D
 Clearwater, FL 33760
 Phone: (800) 419-5100
 Fax: (727) 528-0751

Order Number: 0121708
 Order Date: 12/01/2018
 Expiration Date: 1/01/2019
 Salesperson: SE
 Customer Number: 10-CREDIT
 Warehouse: MTX

Sold To: SCS Broadband 604 Thomas Nelson Hwy Arrington, VA 22922	Ship To: SCS Broadband 604 Thomas Nelson Hwy Arrington, VA 22922
Confirm To:	Contact:

Customer P.O.	Ship VIA	Freight Terms	Payment Terms
Quote	BEST WAY	PREPAY AND ADD	Credit Card

Line	Item Code	Unit	Ordered	Price	Amount
1	H51206S08C200 Hybrid Cable 7/8", (6) pairs of 6 mm ² power cables and (4) pairs of single mode fibers, 200 foot length with both ends terminated with LC connectors	EACH	1	1,938.42	1,938.42
2	REKDC9234PF48 Junction Box with (3) OVPs and (3) discrete circuits for (1) 1-1/4" or (2) 7/8" hybrid feeder cables, (6) 11 mm power cables and (9) 6 mm fiber jumpers	EACH	1	1,164.00	1,164.00
3	HF2S914LCLC-A/B Fiber jumper, with 2 single mode fibers, 30 foot, with duplexed LC to LC connectors, outdoor rated jacket, clipped A/B and B/A	EACH	3	50.29	150.87
4	HP16/2C Power cable (2) 16 AWG copper conductors	FT	150	0.69	103.50
5	HG-78 Hoisting Grip, Lace-up, 7/8"	EA	1	15.75	15.75
6	SH-S78 Snap Hanger, Stapleable, for 7/8" compressed...	K010	7	13.89	97.23

Snap Hanger, Stackable, for 7/8" corrugated coax					
7	GK-C78T Ground Kit, Clip on, Tinned, for 7/8" corrugated coax	EA	3	11.20	33.60
8	VT-50 Cable ties, Velcro 3/4" x 8" black, kit of 10	K010	1	8.00	8.00
Lead Time: 3 Weeks to Ship					

Net Order:	3,511.37
Less Discount:	0.00
Freight:	0.00
Sales Tax:	0.00
Order Total	3,511.37

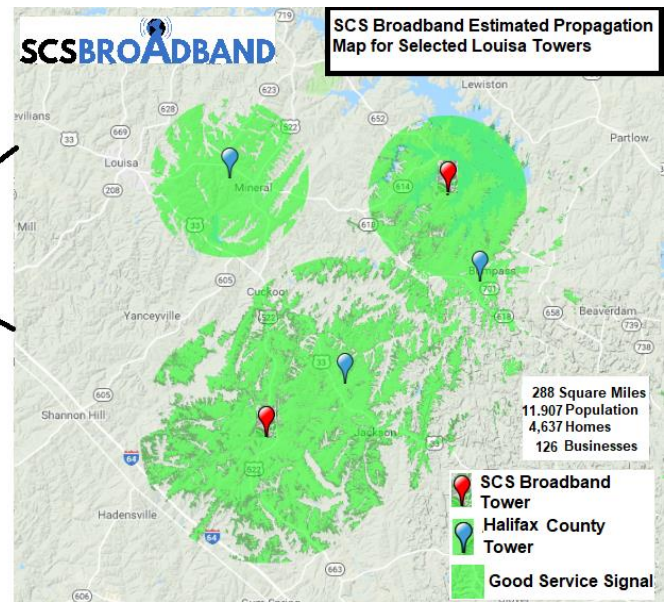
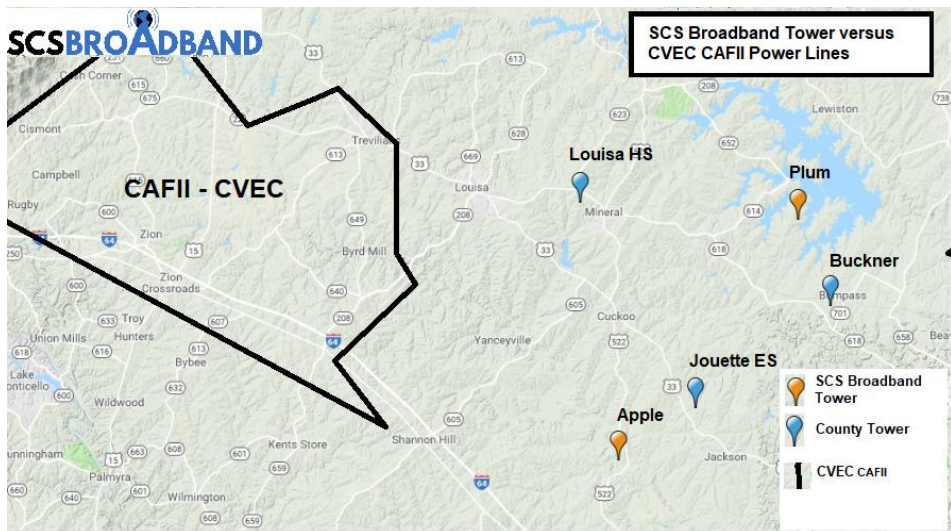


Figure 1.1 - Maps of Project Area

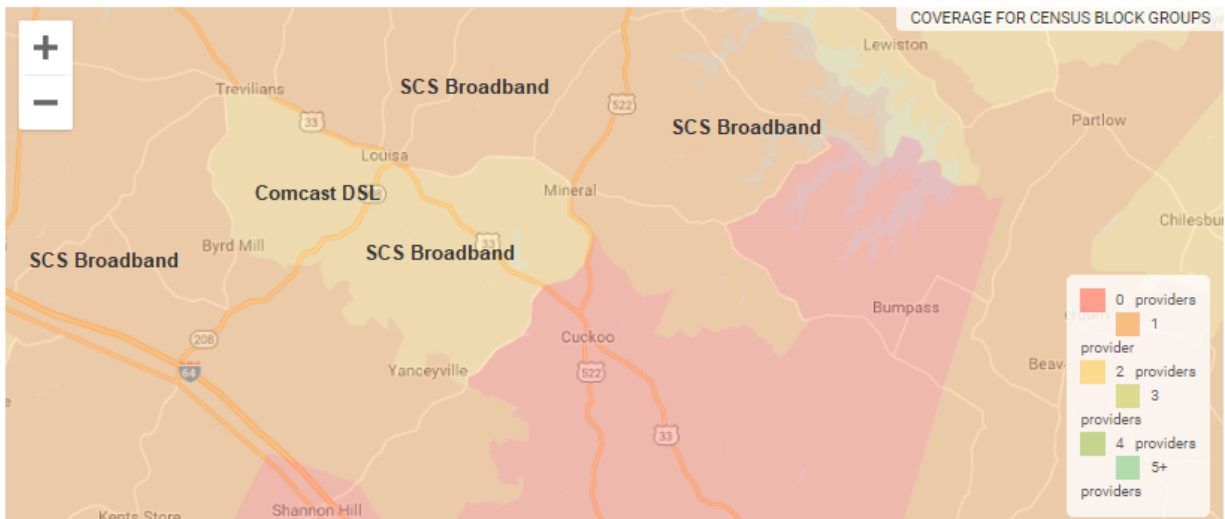
Last Updated on 12/11/2018.

Competition Map

© 2014 - 2018 BROADBANDNOW

BroadbandNow is a registered trademark of Centerfield BBN LLC

INTERNET PROVIDER COMPETITION MAP



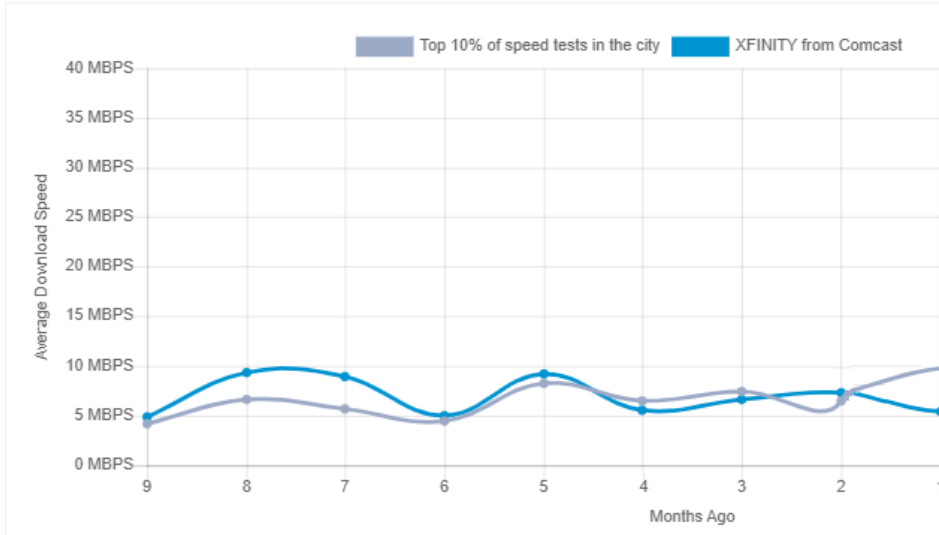
Last Updated on 12/11/2018.

Download Speeds

© 2014 - 2018 BROADBANDNOW

BroadbandNow is a registered trademark of Centerfield BBN LLC

DOWN LOAD SPEEDS SELECTED AREAS



This analysis is based on 11,378 speed tests from IP verified users who took speed tests from an IP address in Mineral between December 2017 and November 2018. National statistics are calculated across 314,082,195 over the same time range.

Memorandum of Understanding

1. The parties to this Memorandum of Understanding (MOU) are Louisa County and AcelaNet, LLC (SCSBroadband).
2. The purpose of the MOU is to establish the commitment of each party to participate in the development of a grant proposal in 2018 for the Virginia Telecommunications Initiative (VATI) program established by the Virginia Department of Housing and Community Development (DHCD). The MOU will also outline in general format the responsibilities of each party.
3. Louisa County has recognized the critical need to expand access to rural broadband communications in its jurisdictions. We are committed to pursuing options to overcome the digital divide that separates the rural countryside from the more urban areas of the state.
4. AcelaNet, LLC has evaluated locations in Louisa County that are underserved and with grant funding would be able to expedite existing projects through using grant funding solely for tower capital investments. The grant funds would be used to purchase and load equipment on four existing towers, two of which are owned by Louisa County, in order to bring high speed broadband access to help overcome the lack of broadband availability in its service areas.
5. The parties intend to work together to develop a grant proposal to add equipment to the Louisa High School tower site, Jouett Elementary School tower site, Plum Tree SCS tower site, and Apple Grove SCS tower site. The Louisa High School tower would cover a population of approximately 1,777 covering 37 square miles. Jouett Elementary School tower would cover a population of approximately 2,122 covering 62 square miles. The Apple Grove SCS site would cover a population of approximately 2,640 covering 85 square miles and Plum Tree SCS site would cover a population of approximately 1,781 covering 46 square miles.
6. The parties will enter a grant application for the project area. Louisa County will be the lead applicant. Louisa will establish the project in the online grant portal and give access, if possible, to AcelaNet, LLC to allow for uploading of portions of the grant application. AcelaNet, LLC will be responsible for the majority of the application including budget, network description, timeline, etc.
7. AcelaNet, LLC will be responsible for all equipment costs and matching funds required for the project.
8. The parties agree to work jointly to coordinate a complete application, making decisions on roles and responsibilities where necessary to facilitate a timely and effective submission of necessary information.

Memorandum of Understanding Signature Page

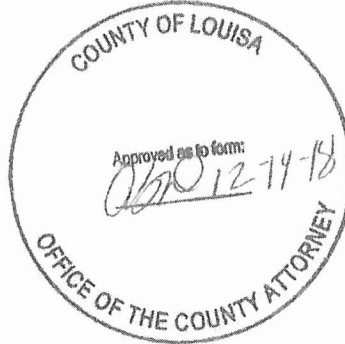
Louisa County

[Signature]
Signature

12/14/18
Date

CHRISTOPHER GOODWIN
Printed Name

County Administrator
Title



AcelaNet, LLC

[Signature]
Signature

12/17/18
Date

CLAYTON STEWART
Printed Name

COO
Title

**BOARD OF SUPERVISORS
COUNTY OF LOUISA
RESOLUTION**

At a regular meeting of the Board of Supervisors of the County of Louisa held in the Louisa County Public Meeting Room at 5:00 PM on the 3rd day of December 2018, at which the following members were present, the following resolution was adopted by a majority of all members of the Board of Supervisors, the vote being recorded in the minutes of the meeting as shown below:

RESULT:	ADOPTED BY CONSENT VOTE [UNANIMOUS]
MOVER:	Fitzgerald A. Barnes, Patrick Henry District Supervisor
SECONDER:	Bob F. Babyok, Green Springs District Supervisors
AYES:	Barlow, Barnes, Gentry Jr., Wade, Williams, Adams, Babyok

**A RESOLUTION TO AUTHORIZE ACELANET, LLC TO APPLY FOR VIRGINIA
TELECOMMUNICATIONS INITIATIVE GRANT (DHCD) FUNDING THROUGH THE
COUNTY OF LOUISA**

WHEREAS, AcelaNet, LLC has expressed interest in applying for funding through the Virginia Telecommunication Initiative Program through the Virginia Department of Housing and Community Development (DHCD) in order to purchase and load all equipment for four (4) towers, two of which are County towers, in order to bring high speed broadband access for four underserved areas within Louisa County; and


WHEREAS, the Virginia Telecommunication Initiative (VATI) Program requires that applications be submitted by the locality with a private sector provider(s) as a co-applicant; and

WHEREAS, eligible projects will be owned and operated by the private sector co-applicant; and

WHEREAS, AcelaNet, LLC anticipates that costs associated with the equipment will total about \$200,000 and the VATI grant will fund these costs with no local match required from the locality and a twenty (20) percent match required from AcelaNet, LLC.

NOW, THEREFORE, BE IT RESOLVED, on this 3rd day of December 2018, that the Louisa County Board of Supervisors hereby supports AcelaNet, LLC's request to apply for funding through the Virginia Telecommunication Initiative Program through the Virginia Department of Housing and Community Development with no local match required.

A Copy, teste:


 Christian R. Goodwin, Clerk
 Board of Supervisors
 Louisa County, Virginia



Louisa Owner Broadband Authority
1 Woolfolk Avenue
Louisa, Virginia 23093

SYSTEM WIDE LEASE AGREEMENT

between

Owner & Acelenet dba SCS Broadband

THIS LEASE AGREEMENT ("Agreement") is made and entered into this August , 2018 by and between Louisa County, Virginia (the "Owner"), a political subdivision of the Commonwealth of Virginia and Acelenet dba SCS Broadband (the "Company") a business in Arrington, Virginia.

WITNESSETH

WHEREAS, the Owner owns multiple wireless towers, water towers, buildings, other vertical assets, and a licensed wireless point to point radio system, and;

WHEREAS, Owner wishes to lease space to the Company to install, operate and maintain communications equipment and accessories on its towers or other vertical assets listed in the appendices, together with a non-exclusive right of access for the purposes described in this Agreement (collectively, the "Leased Premises");

NOW, THEREFORE, in consideration of the rent and in reliance on the representations and warranties contained in this Agreement, the parties hereto hereby agree as follows:

1. LEASED PREMISES, RIGHTS GRANTED, AND CERTAIN COMPANY OBLIGATIONS:

- 1.1. Subject to the terms of this Agreement, the Owner leases the Leased Premises to the Company solely for the purposes of installation, operation, maintenance and removal of the Company's antennae, equipment, and any improvements on the Leased Premises (collectively, the "Improvements"), as specified in the appendices. The Company shall have the right to go upon or cause its employees and agents to go upon the Leased Premises seven (7) days a week, twenty-four (24) hours a day, for the stated purposes. All uses and access whenever mentioned in this Agreement shall be in compliance with this Agreement, any applicable ground lease, with applicable requirements of the Federal Communications Commission ("FCC") and all other governmental agencies, whether federal, state or local and whether legislative, judicial or executive (collectively "Governmental Authorities), and

shall be subject to the restrictions of in this document. Upon written reasonable request the Company shall provide the Owner with copies of all permits or other evidence of compliance.

2. Company warrants that it understands the imminent dangers (INCLUDING SERIOUS BODILY INJURY OR DEATH) inherent in the work necessary to make installations on communication towers by Company's employees, servants, agents, contractors or subcontractors, and accepts as its duty and sole responsibility to notify and inform Company's employees, servants, agents, contractors or subcontractors of such dangers, and to keep them informed regarding same.

3. Assumption of Risk. Company agrees to use Leased Premises at Company's sole risk. Company expressly assumes responsibility for determining the condition of the communication tower to be climbed by its suppliers, contractors, subcontractors, agents, employees, officers, directors, licensees, or invitees. Owner shall not be obligated or liable to Company and Company shall indemnify Owner for any loss, obligation or liability attributable to Company's suppliers, contractors, subcontractors, agents, employees, officers, directors, licensees, or invitees, in any manner whatsoever, except for those losses, obligations & liability that arise from Owner's gross negligence or willful misconduct. Company assumes all risks related to the construction, operation, and maintenance of its Improvements, except as to those that may be caused by the gross negligence or willful misconduct of Owner.

4. TERM:

4.1. This Agreement shall be effective _____ (the "Effective Date"), and shall continue for a period of five calendar years from that date (the "Initial Term") unless renewed or earlier terminated in accordance with provisions of this Agreement.

4.2. Provided that neither party is then in default of any provisions of this Agreement beyond any applicable grace periods, this Agreement may be renewed for up to ten additional one-year terms (individually, a "Renewal Term"), each of which shall begin on the anniversary of the Effective Date. Both parties may decline renewal by giving the other written notice of its intention not less than sixty days prior to the expiration of the then current term. All terms, covenants, and conditions of this Agreement shall remain in full force and effect during all Renewal Terms.

5. INSTALLATION, OPERATION AND MAINTENANCE OF IMPROVEMENTS:

5.1. Construction and Installation. The Company shall be responsible for the cost and installation of its Improvements on the Leased Premises. All use of the Leased Premises, construction, installations, and alterations, including maintenance, repair, removal or relocation shall be consistent with good engineering practices, in compliance with the specifications set forth in the Exhibits, in conformance with the Construction Drawings or amendments approved in writing by the Owner and in compliance with applicable requirements of Governmental Authorities. Installation of the Company's equipment and facilities shall be coordinated with the Owner so that all reasonable efforts are exerted to avoid Interference (as defined in "INTERFERENCE") with and/or interruption of transmission by other Lessees on the Structure and the Owner, and to avoid obstruction or interruption of Owner operations of any kind.

5.2. Prior Approval of the Owner. All construction, installations, and alterations, including maintenance, repair, removal or relocation, except routine and/or emergency repairs and maintenance of any of the Company's Improvements on the Leased Premises shall require submission of plans with detail required by the Owner and the prior written approval of the Owner and shall be in compliance with any Owner specifications and with the plans approved by the Owner. In the event emergency repairs or routine maintenance is needed, plans shall be submitted as soon as practical following the end of the emergency or maintenance; provided that any such repairs or maintenance which is consistent with the Construction Drawings shall not require any submittals. The Owner reserves the right, consistent with good engineering practices, to reasonably and within a reasonable time period

approve or disapprove the plans and the actual changes or Improvements. In the event the changes or Improvements are not in accordance with the approved plans or do not meet the requirements of this Agreement, the Owner shall provide written notice to Company of such non-compliance. In the event Company has not corrected such non-compliance within sixty (60) days following written notice, Owner may remove the Improvements or otherwise take the necessary action to restore the Leased Premises at the expense of the Company.

5.3. As-built Plans. Within thirty (30) days after substantial completion of construction, installation, or alteration of any of the Improvements, the Company shall provide the Owner with "as-built" plans for the Improvements.

5.4. Maintenance.

5.4.1. The Company shall provide all necessary maintenance and repair to the Company's Improvements located on the Leased Premises. Maintenance shall be conducted by the Company in accordance with generally accepted engineering and industry standards for similar facilities to assure that at all times the Company's equipment is in conformance with the requirements of those standards and of Governmental Authorities.

5.4.2. The Owner has the right, but not the obligation, to maintain the Structure and associated Owner facilities at the Site but not the Company's Improvements or those of other lessees.

5.4.3. The Company may perform maintenance and make improvements to the Structure provided any such work is first approved in writing by the Owner. In this connection, the Company, upon request and prior to performing any work, shall provide the Owner with written plans detailing the proposed work and any other documentation described in the preceding subsections as might be requested. Approval of the proposed work shall be in the sole discretion of the Owner.

5.5. Repair in the Event of Damage. The Company shall, at its own expense, promptly repair damage to the Leased Premises or to property of other lessees caused by the Company, its employees, contractors or subcontractors, in accordance with Owner specifications. If the Company does not complete such repairs within a reasonable period of time following notice of the need for such repairs by the Owner, the Owner may do so and the Company shall pay all costs within thirty (30) days of the date of invoice.

5.6. Acceptance of Structure Condition. The Company has had the opportunity to inspect and evaluate the Structure and the Site, accepts the Structure and Site in an "as is" condition subject to all faults whether disclosed or undisclosed and acknowledges the Owner's disclaimer of all warranties as set forth in "DISCLAIMER OF WARRANTIES".

6. TESTING:

6.1. Before the Company's Improvements may be placed in operation, (i) the Company shall test (the "Initial Test") the Company's Improvements to ensure that the actual operation thereof will not cause Interference as defined in this Agreement and shall provide the Owner with an intermodulation study and, if requested, certification of lack of Interference by a licensed professional engineer ("Test Notice"), and (ii) the Owner must approve in writing the Company's installation and Initial Test of its Improvements and verify that there is no Interference from the Company's operation. If the Company receives written notification stating that the Owner has disapproved the Initial Test, then the Company shall have the right to make any necessary adjustments to its Improvements and to resend the Test Notice to the Owner. The Owner shall have twenty (20) days after the Company's submission of the Test Notice to notify the Company in writing whether the Initial Test and any subsequent test, if necessary, is approved or disapproved. If the Owner should determine that there is Interference that cannot be resolved within a reasonable period of time this Agreement shall be terminated and neither party shall have any liability to the other.

7. CONSIDERATION:

- 7.1. Monthly Rental Fee. On the Effective Date and on the first date of each calendar month during the Term the Company shall pay to the Owner a monthly rental fee in the amount described in attached leased premise fee calculation. Any rental fee or other amounts payable by the Company in addition to the Monthly Rental Fee shall be referred to as "Additional Rental Fee." Each Monthly Rental Fee payment shall be paid in advance to the Owner at the address provided below or as otherwise directed by the Owner. For any month in which the lease is for a partial month, the Monthly Rental Fee shall be prorated.
- 7.2. The monthly rental fee may be changed due to the addition or removal of leased premises during the term of the lease. Changes to the monthly rental fee shall be agreed to by both parties in writing on the attached form "Leased Premises Fee Calculation". If Leased Premises are added during the lease term the most recent "Leased Premises Fee Calculation" form shall apply to the Monthly Rental Fee and shall override all previous Monthly Rental Fee calculations.

8. PERMITS:

- 8.1. The Company shall obtain and maintain, at its own expense, all authorizations or permits which may be required for the conduct of its business and operations as contemplated in this Agreement, including installation and operation, and shall comply with the requirements and conditions of any permits.

9. THE COMPANY'S ACCESS RIGHTS:

- 9.1. The Company shall give reasonable advance notice to the Owner when the Company needs access to the Site and the Owner shall provide a timeframe for access, as soon as practical and in the interest of security, but within 24 hours of the request, except in case of emergency. In the event of emergency the Company shall give prior notice to the Owner if possible, or within a reasonable time thereafter. Only those employees, representatives, contractors and subcontractors of the Company of which the Owner has been informed in writing shall be allowed access to the Site. The Owner shall be given the option of assigning a representative to be present at all times when the Company is present at the Site. The Owner may establish additional or more or less stringent access requirements by written notification to the Company. However, in no event shall Company be unreasonably denied access to the Site.

10. THE OWNER'S ACCESS AND INSPECTION RIGHTS:

- 10.1. The Owner and the Owner's employees, representatives, and agents shall have the right to inspect and have access to the Company's Improvements located on the Leased Premises at any time and for all such purposes as may be deemed necessary in the Owner's sole discretion. To the extent practical, the Owner shall provide the Company with twenty-four (24) hours advance notice. In the event of emergency as determined by the Owner, the Owner, its employees and agents may enter for any purpose whatsoever with prior notice, if practical.

11. REMOVAL/RELOCATION OF THE COMPANY'S IMPROVEMENTS:

- 11.1. In the event that the Owner needs to perform painting or maintenance work on the Structure, which requires the temporary relocation of the Company's Improvements the parties agree to relocation, provided that: (i) the Owner shall provide the Company with one hundred eighty (180) days prior written notice of such temporary relocation; (ii) the Company shall obtain all necessary approvals and permits from all Governmental Authorities; (iii) the Company shall relocate the Improvements to another location on the Site mutually agreeable to the parties, in such manner as to minimize any Interference with the operations of either party; or the Company shall use a device that allows temporary relocation of the Improvements. In the event the Company chooses not to relocate its equipment, the Company may terminate the Agreement.

12. INSURANCE:

- 12.1. Company will carry during the Term the following insurance:
- (i) "All Risk" property insurance for its property's replacement cost; (ii) commercial general liability insurance with a minimum limit of liability of Two Million Dollars (\$2,000,000) combined single limit for bodily injury or death/property damage arising out of any one occurrence; (iii) Workers' Compensation and Employer's Liability Insurance as required by law, and (iv) automobile liability with Two Million Dollars (\$2,000,000) combined single limit.
- 12.2. The Owner and its officers, employees, agents, assigns, and volunteers shall be added as an additional insured to the general liability and automobile coverages of any such policies and such policies shall be primary and noncontributory to any insurance or self-insurance such additional insureds may have. The policies shall contain an endorsement waiving subrogation. The Company shall immediately notify the Owner in writing of any changes or terminations of any of the coverages required in this Agreement. If requested to do so by the Owner, the Company shall provide the Owner with an Accord certificate of insurance which shall include in the description of operations section a statement confirming the status of the additional insureds and have attached thereto the appropriate endorsement, coverage form, or binder.
13. OWNERSHIP OF THE COMPANY'S PROPERTY:
- 13.1. The Improvements constructed and installed by the Company shall be and remain the sole property of the Company even if attached to the real estate.
14. INTERFERENCE:
- 14.1. Without written amendments to this agreement the Company shall not operate unlicensed equipment outside of the following frequency bands:
- 14.1.1. 900 Mhz
 - 14.1.2. 2.4 Ghz
 - 14.1.3. 5.8 Ghz
- 14.2. The term Interference shall mean: (1) a condition which constitutes interference within the meaning of the regulations of the FCC, (2) a measurable, significant impairment, in accordance with generally accepted engineering standards, of the quality of signals from the Leased Premises, (3) a condition caused directly or indirectly by the Company degrading or interfering with Owner's other licensees' existing equipment, facilities, or quality of signals from the Leased Premises, provided that such licensees' mode of operation predates that of the Company's Improvements, or resulting in the inability of any FCC licensed entity operating at this site before the date of this Agreement to conform to its FCC licensed parameters in accordance generally accepted engineering standards, or (4) a condition degrading, or interfering with the Owner's communications system, all as determined by the Owner, in accordance with generally accepted engineering standards.
- 14.3. The Company agrees to operate and maintain its Improvements in such a manner as will not result in Interference. With regard to other lessees, the Company agrees that it will not modify the equipment initially installed, or install any additional equipment, or alter its operations in any manner which would result in Interference. The Owner shall take reasonable measures to assure that all other lessees operate and maintain their facilities and equipment located on the Site so as to avoid Interference with the operations of the Company. Any lease of the Site or nearby sites owned by the Owner shall contain restrictions substantially similar to those contained in this paragraph.
- 14.4. Following completion of the Initial Test described in "TESTING" and during the Initial Term and all Renewal Terms, if any Interference is caused by the Company's signal or its equipment or facilities or by the manner

of operation thereof, the parties shall cooperate and exercise their best efforts to eliminate such Interference. Upon notice to the Company from the Owner of any such Interference, the parties shall (1) promptly investigate the problem; (2) take all steps reasonably necessary to identify the nature of the problem; and (3) exercise their commercially reasonable efforts to resolve the problem. If such Interference is being caused by the Company's signal or the Company's antennae, equipment or facilities or by the manner of operation and is not attenuated to limits reasonably acceptable to the Owner within forty-eight (48) hours after receipt by the Company of written notice of a claim of Interference, the Company shall, at its option, either: (1) reduce transmitter power to such level as is necessary to eliminate the Interference pending completion and testing of supplemental measures to remove the Interference at the authorized power, or (2) terminate operation until the Interference is resolved to the satisfaction of the Owner. In the event of termination of operations the Company may place temporary equipment at the Site, if specifications and location are approved by the Owner.

- 14.5. In the event of the need to correct or cure on an emergency basis, as determined by the Owner, any Interference, the Owner shall provide telephonic notice to the Company and the Company shall correct or cure the breach within twenty four (24) hours of the telephonic notice or within such additional period as may be approved by the Owner.
- 14.6. The definition of "unlicensed frequencies" for this Agreement shall adhere to the FCC's current and future definitions of unlicensed frequencies.
- 14.7. In spectrum that is designated as "unlicensed" or "licensed-exempt," users can operate without an FCC license but must use certified radio equipment and must comply with the technical requirements, including power limits, of the FCC's Part 15 Rules.
- 14.8. The Company has the exclusive use unlicensed frequencies where it is the first to establish the use of that frequency at the site. If the Company intends to utilize unlicensed frequencies at the site that are already in use the Company must obtain written permission from the Owner. The Owner or other tenants may use unlicensed frequencies not in use by the Company after the Company has installed its equipment on site. If the Owner or another tenant intends to use an unlicensed frequency already in use by the Company it may only do so with the Companies written permission. Any agreement between parties regarding the use of unlicensed frequencies shall include details on the frequency and equipment being used, and shall include a term or expiration that is in accordance with the terms and renewals for this agreement.

15. PERFORMANCE:

- 15.1. Company shall make reasonable efforts to extend service to any business or resident in the Owner that requests it.
- 15.2. Company shall provide to the Owner a monthly report describing the customer base in Louisa County and demonstrating that broadband availability is being expanded into the County. Items to be reported on the status report shall include:
 - 15.2.1. Overview of coverage areas and areas needing coverage
 - 15.2.2. Available services and published rates
 - 15.2.3. New buildout activities
 - 15.2.4. Representation of customer base including customer counts and service areas- specific customer lists, tiers, etc., are not expected in this report.
 - 15.2.5. If a request is made by a residence or business where coverage is not available or service cannot be delivered, that location should be reported on a monthly status report.
- 15.3. Pricing and Services available to businesses and residents shall be published.

- 15.4. Upon receiving notice to proceed stating that a tower site is available for Company to begin installing equipment, Company shall have 60 days to install and configure equipment and begin offering services.
- 15.5. DAMAGE TO PREMISES:
- 15.6. In the event the Structure is destroyed or substantially damaged by natural events or by other casualty, either party may, within ninety (90) days from the date of the damage or destruction, terminate this Agreement by written notice to the other. If this Agreement is not terminated within that time period, the Owner may, in its sole discretion, reconstruct or repair the Structure as soon as reasonably possible. The Company shall be entitled to a pro rata refund of the Monthly Rental Fee for the time the Structure is not being used by Company. The Company agrees that the Owner shall have no liability for any claims or losses due to business interruption or any other circumstances. If the Owner does not reconstruct or repair the Structure or if such reconstruction or repair is not accomplished so that the Company can resume the normal operations of the Company's station and/or other activities within ninety (90) days from the date its operations are interrupted, the Company may terminate this Agreement upon thirty (30) days prior written notice to the Owner. The Company shall be solely responsible for repairing, restoring or replacing its own equipment and facilities.
16. SALES, LEASES, ASSIGNMENTS AND SUBLETTING:
- 16.1. The Owner's Right to Sell or Lease.
- 16.1.1. Nothing in this Agreement shall be construed as in any way limiting the Owner's right to use the Site and Structure or to lease, sell or grant rights for the use of the Site and Structure to any other party, so long as such use, lease, sale or grant is subject to the Company's rights under this Agreement
- 16.1.2. In the event the Owner sells the Leased Premises, and if the purchaser expressly assumes all of the covenants, agreements, liabilities and obligations of the Owner, then the Owner shall be automatically discharged and released, from and after the date of such sale, of all obligations on the part of the Owner contained in this Agreement.
- 16.1.3. If the Owner sells the Site or grants an interest in the Site to another party, such sale or grant shall be subject to this Agreement and any such purchaser or transferee shall recognize the Company's rights under the terms of this Agreement.
- 16.2. Assignment or Sublet by the Company.
- 16.2.1. The Company shall not assign this Agreement in whole or in part at any time without the prior written permission of the Owner; provided however that the Company may assign this lease without permission to any affiliate, subsidiary, successor legal entity, or any entity acquiring all of the assets of the Company or its subsidiaries or affiliates provided that the Company shall give notice to the Owner within thirty (30) days after such assignment. The Company shall not enter into any arrangement or agreement with a third party for subletting, or in any way using any of the Leased Premises or equipment or facilities.
- 16.2.2. Additionally, the Company may, upon notice to the Owner, mortgage or grant a security interest in this Agreement and the Improvements, and may assign this Agreement and the Improvements to any mortgagees or holders of security interests, including their successors or assigns (hereinafter collectively referred to as "Mortgagees"), provided such Mortgagees agree to be bound by the terms and provisions of this Agreement. In such event, the Owner shall execute a consent to leasehold financing in form reasonably acceptable to the parties. The Owner agrees to notify the Company and the Company's Mortgagees simultaneously of any default by the Company and to give Mortgagees the same right to cure any default as the Company or to remove any property of the Company or Mortgagee located on the Premises, except that the cure period for any Mortgagee shall not be less than thirty (30) days after

receipt of the default notice, as provided in Section 19, except for emergencies requiring the Owner to act before such period in order to provide adequate and safe public utility services to its residents. All such notices to Mortgagees shall be sent to Mortgagee at the address specified by the Company. Failure by the Owner to give Mortgagee such notice shall not diminish the Owner's rights against the Company, but shall preserve all rights of Mortgagee to cure any default and to remove any property of the Company or Mortgagee located on the Premises, as provided in this Agreement.

17. EMINENT DOMAIN:

17.1. In the event of any taking of or damage to all or any portion of the Leased Premises by reason of exercise of the power of eminent domain, whether by a condemnation proceeding or otherwise or any transfer in avoidance of the power of eminent domain (collectively "Appropriation") during the term of this Agreement or any extension or renewal thereof, rights and obligations of the Owner and the Company with respect to such Appropriation shall be as provided in this Paragraph:

17.1.1. In the event of an Appropriation which includes the entire Structure or which renders the Structure structurally unsound, this Agreement shall terminate as of the date of the Appropriation.

17.1.2. In the event of an Appropriation of a portion of the Leased Premises which does not include the entire Structure or render it structurally unsound, this Agreement shall continue in force. Provided, however, that in such event the Owner or the Company shall have the right (by written notice to the other party within forty-five (45) days after the Appropriation) to terminate this Agreement if, in its reasonable judgment, the continued use of the remaining portion of the Leased Premises would be impractical.

17.1.3. All damages and proceeds payable on account of an Appropriation which results in termination of this Agreement, except those directly related to the Company's equipment and/or the Company's operation at the Site, shall belong to the Owner.

17.1.4. In the event of an Appropriation which does not result in a termination of this Agreement, the damages and proceeds payable on account of the Appropriation shall belong to the Owner. Following any such Appropriation, the Company shall be responsible for obtaining any portion of such Appropriation which may pertain to its equipment and/or operation at the Site, and replacing all facilities and equipment taken or rendered unusable as a result of the Appropriation, and shall bear all removal and relocation costs with respect to its facilities and equipment. All other alterations and repairs which are reasonably required as a result of the Appropriation shall be the responsibility of, and shall be made as promptly as reasonably possible by the Owner.

18. DEFAULT:

18.1. Events of Default. The occurrence of any of the following events shall constitute an "Event of Default":

18.1.1. The failure by the Company to pay any rent or fees or other sum or expense required to be paid to the Owner by the Company within thirty (30) business days after written notice from the Owner, or to perform any other of its obligations under this Agreement within thirty (30) days after written notice from the Owner, provided the Company shall have such extended period as may be required beyond the thirty (30) days if the nature of the cure is such that it reasonably requires more than thirty (30) days and the Company commences the cure within the thirty (30) day period and thereafter continuously and diligently pursues the cure to completion in accordance with a schedule and plan acceptable to the Owner;

18.1.2. The failure by the Company to cure conditions of material non-compliance with any requirement of any Governmental Authorities within the time frame prescribed by the Governmental Authority. In that event the Owner may terminate this Agreement immediately upon written notice to the Company.

- 18.1.3. The levying on or against the property of the Company on the Leased Premises of a writ of execution, lien, or attachment which is not released or discharged within thirty (30) days;
- 18.1.4. The doing or permitting to be done by the Company of any act which creates a mechanic's lien or claim against all or any portion of the Leased Premises which is not released or otherwise provided for by indemnification satisfactory to the Owner within thirty (30) days;
- 18.1.5. The filing by the Company of a voluntary petition in bankruptcy or voluntary petition or answer seeking reorganization, arrangement, readjustment of its debts, or any other relief under the Federal Bankruptcy Act or under any other insolvency act or law; the making by the Company of a general assignment for the benefit of creditors; or the admission in writing by the Company of its inability to pay its debts as they mature; or
- 18.1.6. The filing of an involuntary petition against the Company in bankruptcy or seeking the Company reorganization, arrangement, readjustment of its debts or for any other relief under the Federal Bankruptcy Act or any other insolvency act or law, or the involuntary appointment of a receiver or trustee of the Company, and the continuance of any such events for a period of ninety (90) days not dismissed, bonded, or stayed.
- 18.1.7. Any use of the Site which hampers or impedes Owner operations at the Site or use of the Structure.
- 18.1.8. The Company's failure to correct an operational condition jeopardizing the public health, safety or welfare and the elapse of a reasonable period of time to correct such condition following written notice from the Owner.
- 18.2. The Owner's Rights upon Default. Upon the occurrence of any Event of Default the Owner, at its option, may terminate this Agreement as of the date of the expiration of any applicable cure period following an Event of Default upon written notice of the Owner's election given to the Company.
19. OPTIONAL TERMINATION:
 - 19.1. This Agreement may be terminated by the Company following sixty (60) days prior written notice to the Owner if it is unable to obtain or maintain any license, permit, or other governmental approval necessary for the construction and/or operation of the Improvements or Company's business, or if the Leased Premises is no longer technically compatible for the Company's business use.
 - 19.2. This Agreement may be terminated by the Owner in its sole discretion upon 60 days prior written notice or if it determines, in its sole discretion, that the Structure is structurally unsound, including but not limited to consideration of age of the structure, damage or destruction of all or part of the Structure from any source, or factors relating to the condition of the Structure and substantiated by a structural analysis performed by a licensed architect or engineer, the results of which are provided to Company prior to termination.
 - 19.3. LOSS OF DISCOUNTS: Any discounts, as noted on Leased Premises Fee Calculation, applied to the lease may be terminated by the Owner following sixty (60) days prior written notice to the Company if it determines, in its sole discretion, that requirements in the PERFORMANCE section are not being met.
 - 19.4. If the Owner determines, in its sole discretion, that requirements in the PERFORMANCE section are not being met, and removes discounts as described in the paragraph above, and after 120 days determines that the Company still is not meeting its performance requirements - the Owner may terminate the agreement following 60 days prior written notice.
20. TERMINATION:
 - 20.1. Surrender of Premises. Upon the expiration or termination of this Agreement, the Company's rights with respect to possession and use of the Leased Premises shall terminate.
 - 20.2. Removal of Improvements. The Company shall, upon expiration or termination of this Agreement pursuant to its terms, have sixty (60) days to remove all of its Improvements from the Leased Premises. Removal shall

not result in any material damage to the Structure or any other equipment or property of the Owner or other Lessees or Licensees located on the Leased Premises and the Leased Premises shall be restored to their original condition, ordinary wear and tear excepted, at the Company's sole expense. In the event removal and restoration are not completed in accordance with this Paragraph the Owner may take all actions necessary for completion and the Company shall pay all related necessary costs within thirty days of the date of written invoice.

21. ENVIRONMENTAL AND RELATED REQUIREMENTS:

- 21.1. The Company's Responsibility. The Company agrees that its equipment, facilities and supplies located on or about the Leased Premises and activities within the Leased Premises will, at all times during the Company's occupancy and use of the Leased Premises, be kept and maintained in compliance with requirements of all Governmental Authorities including environmental laws regulating petroleum products, asbestos or other toxic, radioactive or hazardous wastes or materials or the clean-up or removal of damage caused by any of the foregoing (collectively, the "Environmental Laws").
- 21.2. The Owner's Responsibility. The Owner agrees that its equipment, facilities and supplies will, at all times during the Owner's occupancy and use of the Site, be kept and maintained in compliance with all Environmental Laws. The Owner makes neither representations nor warranties regarding existing conditions on the Leased Premises.
- 21.3. Inspections by the Owner. The Owner and its engineers, technicians, and consultants (collectively, the "Auditors") may, from time to time as the Owner deems appropriate, conduct periodic tests and examinations ("Audits") of the Leased Premises, excluding access to the Company's Improvements, to confirm and monitor the Company's compliance with the requirements of this Paragraph; provided that the Auditors and any and all Owner employees, representatives, and/or agents shall be accompanied by an employee, representative or agent of the Company during the Audits. The costs of such Audits shall be paid by the Owner unless Audit shall disclose a material failure of the Company to comply with this Paragraph, in which case the cost of such Audit and the cost of all subsequent Audits until compliance has been restored shall be paid by the Company.

22. INDEMNITY:

- 22.1. The Company, its employees, contractors, or agents, agrees to release, indemnify, save harmless, and defend the Owner, its officials, employees, contractors, and agents, and, Owner, its directors, officials, employees, contractors, and agents, from and against any and all losses, liabilities, judgments, damages, suits, actions, claims (whether made, asserted or threatened), and costs and expenses, including without limitation reasonable attorneys' fees, consultants' fees and experts' fees arising from or in connection with (i) the interruption of the Company, its subscribers, or sub-licensee service, or (ii) because of any interference with communication reception of such services or the services of others, or (iii) out of injuries to persons, including disease or death, or (iv) from damage to any property, sustained by any person or entity, including the Company, or in any other way attributable to or arising out of the operations of the Company or of Company's employees, contractors, agents, or visitors, upon the Leased Premises or the Fortunes Cove Preserve owned by Owner, including, but not limited to access to the Leased Premises, or the installation, use, maintenance, or removal, of the Improvements or any condition associated with the Leased Premises. This indemnity obligation shall survive the expiration or earlier termination of this Agreement.

23. REMEDIES:

- 23.1. Waiver. The failure of the Owner or the Company to insist on strict performance of any of the terms and conditions of this Agreement shall not be deemed a waiver of the rights or remedies that the Owner or the

Company may have regarding that specific instance nor shall it be deemed a waiver of any subsequent breach or default of the same of any other term or condition hereof.

- 23.2. Cumulative Nature. All rights and remedies of the parties herein enumerated shall be cumulative and none shall exclude any other right or remedy allowed at law or equity which the non-defaulting party may have by reason of an Event of Default, and rights and remedies may be exercised and enforced concurrently and whenever and as often as occasion arises; provided, however, that the Parties shall use reasonable efforts to mitigate their respective damages in connection with an Event of Default by the other party.
24. LIMITATION OF LIABILITY. NOTWITHSTANDING ANY OTHER PROVISION HEREOF, THE Owner SHALL NOT BE LIABLE FOR ANY INDIRECT, INCIDENTAL, SPECIAL, CONSEQUENTIAL, EXEMPLARY, OR PUNITIVE DAMAGES (INCLUDING BUT NOT LIMITED TO DAMAGES FOR LOST PROFITS, LOST REVENUES, OR THE COST OF PURCHASING REPLACEMENT SERVICES) ARISING OUT OF THE PERFORMANCE OR FAILURE TO PERFORM UNDER THIS AGREEMENT.
25. DISCLAIMER OF WARRANTIES. THE Owner MAKES NO WARRANTIES OR REPRESENTATIONS, EXPRESS OR IMPLIED, EITHER IN FACT OR BY OPERATION OF LAW, STATUTORY OR OTHERWISE, INCLUDING WARRANTIES OF MERCHANTABILITY OR FITNESS FOR A PARTICULAR USE.
26. NOTICES:
- 26.1. Whenever any notices are required or permitted to be given pursuant to this Agreement, the same shall be in writing and shall be deemed given when deposited in the United States registered or certified mail, postage prepaid and return receipt requested, or other receipted mail or delivery, addressed as follows:
- If to the Owner: Louisa County
c/o County Administrator
PO Box 160
Louisa, VA 23093
- If to the Company: Acelenet dba SCS Broadband
604 Thomas Nelson Hwy
Arrington, VA 22922
- Either party may change the above information during the term of this Agreement by written notice to the other party. With respect to the notices of Interference, such notice shall be made orally or in writing to any one of the people designated by the Company or the Owner for such purpose.
27. SUCCESSORS:
- 27.1. This Agreement shall be binding upon and inure to the benefit of the parties and their successors and assigns subject to any provisions of this Agreement to the contrary.
28. ENTIRE AGREEMENT:
- 28.1. This Agreement contains the entire agreement between the parties and cannot be changed or terminated except by a written instrument subsequently executed by the parties hereto. In the event any provision of the Agreement is found to be invalid or unenforceable, such finding shall not affect the validity and enforceability of the remaining provisions of this Agreement.
29. GOVERNING LAW:

29.1. This Agreement shall be construed in accordance with and governed by the laws of the Commonwealth of Virginia, and Federal Law. Any legal actions pertaining to or arising out of this Agreement shall be filed and maintained in the County of Louisa, VA General District or Circuit Court.

30. DESCRIPTIVE HEADINGS:

30.1. The descriptive headings and numbering of the several Paragraphs of this Agreement are inserted for convenience only and shall not be deemed to affect the meaning or construction of any of the provisions.

31. PLANS AND EXHIBITS:

31.1. Plans, schedules and exhibits are incorporated into this Agreement only to the extent that they meet requirements of Governmental Authorities, and provide for Improvements which do not create Interference with any Owner communications. In the event it is determined by the Owner that plans and exhibits do not comply with requirements, or describe Improvements creating Interference, the Owner may request that they be amended. In that event, if there are no amendments within a reasonable time period, all as determined by the Owner, the Owner may elect to terminate this Agreement.

32. RECORDING:

32.1. At the request of the Owner, the Company shall execute a Memorandum of Lease which the Owner shall record in the Owner Circuit Court Clerk's Office.

IN WITNESS WHEREOF, the parties hereto have executed this Agreement as of the date first-above written.

_____, Virginia

By:

Its:

By:

Its:

LEASED PREMISES FEE CALCULATION

Description	Site Start Date *anticipated	Initial 6 Months (per month)	Second 6 Months (per month)	Remaining Term (per month)
LCHS - Attachments Between 110' and 120'	Aug '18	\$0 (discounted from \$500)	\$100 (discounted from \$500)	\$250 (discounted from \$500)
MNES - Attachments Between 170' and 180'	Sep '18	\$0 (discounted from \$500)	\$100 (discounted from \$500)	\$250 (discounted from \$500)
Jouett - Attachments Between 170' and 180'	Aug '18	\$0 (discounted from \$500)	\$100 (discounted from \$500)	\$250 (discounted from \$500)
Trevillians - Attachments Between 170' and 180'	Dec '18	\$0 (discounted from \$500)	\$100 (discounted from \$500)	\$250 (discounted from \$500)
Red Hill Area Co-location * County Owned * Proposed	Dec '18	\$0 (discounted from \$500)	\$100 (discounted from \$500)	\$250 (discounted from \$500)
Zion Crossroads Co-location * County Owned * Proposed	Dec '18	\$0 (discounted from \$500)	\$100 (discounted from \$500)	\$250 (discounted from \$500)
Orchid Area * Proposed	Mar '19	\$0 (discounted from \$500)	\$100 (discounted from \$500)	\$250 (discounted from \$500)
Buckner Bypass Park * 3rd Party Colocation * Proposed	Mar '19	Per Tower Vendor	Per tower Vendor	Per Tower Vendor
Licensed Wireless Backbone Access	Per month	\$35/tower \$350/month Max	\$35/tower \$350/month Max	\$35/tower \$350/month Max
Fiber Backbone Access	- availability undetermined -			

IN WITNESS WHEREOF, the undersigned parties have agreed to the calculated lease rates above, which shall apply to the lease signed _____, until further leased premises or rates are identified at which time a new fee will be calculated.

For the Owner:

For the Company:

_____ Date _____

_____ Date _____



(RETAIN FOR YOUR RECORDS)Form 477 Filing Summary

FRN:

0016948093

Data as of:

Jun 30, 2018

Operations:

Non-ILEC

Submission Status:

Original - Submitted

Last Updated:

Sep 4, 2018 23:27:00

Filer Identification

Section	Question	Response
Filer Information	Provider Name	Acelanet LLC
	Holding Company Name	Acelanet LLC
	SAC ID	

Section	Question	Response
	499 ID	
Data Contact Information	Data Contact Name	Clay Stewart
	Data Contact Phone Number	(434) 942-6510
	Data Contact E-mail	cstewart@scsbroadband.com
Emergency Operations Contact Information	Emergency Operations Name	Clay Stewart
	Emergency Operations Phone Number	(434) 942-6510
	Emergency Operations E-mail	cstewart@scsbroadband.com
Certifying Official Contact Information	Certifying Official Name	Clay Stewart
	Certifying Official Phone Number	(434) 942-6510
	Certifying Official E-mail	cstewart@scsbroadband.com

Data Submitted

Form Section	File Name	Date & Time	Number of Rows
Fixed Broadband Deployment	AllCensusBlocksCSV.csv	Sep 4, 2018 23:24:57	5283
Fixed Broadband Subscription	Interactive data entry		106

Fixed Broadband Deployment

Census Block Counts by State, DBA Name and Technology

State	DBA Name	Technology	Blocks
Virginia	SCS Broadband	Terrestrial Fixed Wireless	5283
Total			5283

Fixed Broadband Subscription

Fixed Broadband Subscriptions by State, Technology and End-user Type

State	Technology	Census Tracts	Subscriptions		
			Consumer	Business / Govt	Total
Virginia	Optical Carrier/Fiber to the End User	6	225	21	246
	Terrestrial Fixed Wireless	100	1297	16	1313
Total		106	1522	37	1559



(RETAIN FOR YOUR RECORDS) Form 477 Filing Summary

FRN:

0016948093

Data as of:

Dec 31, 2017

Operations:

Non-ILEC

Submission Status:

Original - Submitted

Last Updated:

Mar 1, 2018 22:51:17

Filer Identification

Section	Question	Response
Filer Information	Provider Name	Acelanet LLC
	Holding Company Name	Acelanet LLC
	SAC ID	
	499 ID	

Section	Question	Response
Data Contact Information	Data Contact Name	Clay Stewart
	Data Contact Phone Number	(434) 942-6510
	Data Contact E-mail	cstewart@scsbroadband.com
Emergency Operations Contact Information	Emergency Operations Name	Clay Stewart
	Emergency Operations Phone Number	(434) 942-6510
	Emergency Operations E-mail	cstewart@scsbroadband.com
Certifying Official Contact Information	Certifying Official Name	Clay Stewart
	Certifying Official Phone Number	(434) 942-6510
	Certifying Official E-mail	cstewart@scsbroadband.com

Data Submitted

Form Section	File Name	Date & Time	Number of Rows
Fixed Broadband Deployment	NelsonCensusBlockCSVFinal.csv	Mar 1, 2018 22:26:44	4013
	CharlesCityCensusBlockCSVFinal.csv	Mar 1, 2018 22:26:43	635
	LouisaCensusBlockCSVFinal.csv	Mar 1, 2018 22:26:43	635
Fixed Broadband Subscription	Interactive data entry		95

Fixed Broadband Deployment

Census Block Counts by State, DBA Name and Technology

State	DBA Name	Technology	Blocks
Virginia	SCS Broadband	Terrestrial Fixed Wireless	5283
Total			5283

Fixed Broadband Subscription

Fixed Broadband Subscriptions by State, Technology and End-user Type

State	Technology	Census Tracts	Subscriptions		
			Consumer	Business / Govt	Total
Virginia	Optical Carrier/Fiber to the End User	5	73	3	76
	Terrestrial Fixed Wireless	90	1351	20	1371
Total		95	1424	23	1447

The In-Kind funds are:

1. \$99,000 from Louisa County for reducing lease obligations for five years on one tower designated for this grant is considered In-Kind as discussed with the DHCD. This is an existing contract between SCS Broadband and the Count of Louisa which has the tower loading process in 2019. This is calculated from 60 months at \$400 a month for 3 tower.

This amount is the In-Kind reduction to the project by Louisa County.



Supporting Cost Documentation

12/14/2018

Louisa County

* Quote/Order Sample Eupen 150' Hybrid Fiber/Power Cable with UVP

** Cost and Source Columns hyperlinks to source of cost website

Louisa HS Tower

* County Tower New to LTE Project

Product								
Equipment	Description	Cost **	Qty	Total	VATI	NON-VATI	Source of Estimate	Date
KP-3DP65S-45	Dual Band Sector 3.65Ghz 65 deg	500	4	2,000	2,000	0	KP Performance	<u>12/10/2018</u>
NOVAR-9302	3Ghz LTE BaiCel Base Station	3,800	4	15,200	15,200	0	Double Radius	<u>12/10/2018</u>
PS-5AC	AIRMAX 5 GHZ AC PRISMSTATION	300	4	1,200	1,200	0	Double Radius	<u>12/10/2018</u>
PRISMAP-5-60	AC ISOLATION ANTENNA HORN	80	4	320	320	0	Double Radius	<u>12/10/2018</u>
AF11Ghz	Air Fiber Licensed 11Ghz PtP Radio	2,800	2	5,600	5,600	0	Amazon.com	<u>12/10/2018</u>
POE inserter/Switch	UBNT EdgePoint 16 Port	530	1	530	530	0	Double Radius	<u>12/10/2018</u>
Cabling/Ends	Cat5 Double Shield Jumper Cables	200	1	200	200	0	Double Radius	<u>12/10/2018</u>
CWT01 SitePro1	Dual Mounting Steel Arms	456	4	1,824	1,824	0	SitePro1	<u>12/10/2018</u>
P2110 SitePro1	2 3/8"x10' Mount Poles	61	4	244	244	0	SitePro1	<u>12/10/2018</u>
Fiber/Power Cable	Fiber/Power/Conduit Package *	3,511	1	3,511	3,511	0	Eupen *	<u>12/1/2018</u>
UVP Lightning Protector	Lightning Protect * See Below	120	10	1,200	1,200	0	Eupen *	<u>12/10/2018</u>
Traco 48VDC PS	Traco Power Supply	248	2	496	496	0	Mouser	<u>12/10/2018</u>
Traco Battery	Traco Battery Switch/Charger	215	2	430	430	0	Mouser	<u>12/10/2018</u>
Tower Battery Backup	12VDC Battery 37AH	280	4	1,120	1,120	0	Mouser	<u>12/10/2018</u>
Voltage Stepup Trans	48 to 54 VDC Stepup Transformer	80	2	160	160	0	SCS Broadband	<u>12/10/2018</u>
Cutoff Switch	AC Master Cutoff Switch	198	1	198	198	0	ElvesSupply.com	<u>12/10/2018</u>
Break Box	100Amp Breaker Box w/Breakers	308	1	308	308	0	ElvesSupply.com	<u>12/10/2018</u>

Surge Protector	AC Surge Protection	170	1	170	170	0	Google Express	<u>12/10/2018</u>
444APC-HV	APC Modular CAT5 Surges	17	12	204	204	0	Amazon.com	<u>12/10/2018</u>
APC Surge	APC Surge Chassis for 444APC-HV	24	1	24	24	0	Amazon.com	<u>12/10/2018</u>
Surge Case	Equipment Outdoor NEMA Box	439	1	439	439	0	Amazon.com	<u>12/10/2018</u>
MER8-P SitePro1	H-Frame Rack Mount Hardware	565	1	565	565	0	SitePro1.com	<u>12/10/2018</u>
ER-PRO-8	Edge Router	399	1	399	399	0	Double Radius	<u>12/10/2018</u>
Permits	Tower Permitting Fee Estimates	200	1	200	200	0	Experience	<u>12/10/2018</u>
PE Structural	Tower Structural Analysis (ATC Standard)	2,900	1	2,900	2,900	0	Griswold Tower Software	<u>12/10/2018</u>
Shipping and Handling	Shipping and Handling Estimate All items	2,500	1	2,500	2,500	0	Estimated all parts	<u>12/10/2018</u>
Total Part Estimate				<u>\$41,942</u>	<u>\$41,942</u>	<u>\$0</u>		
Electrician	Licensed Electrician Estimate			\$2,000	\$2,000	\$0	Experience	
Tower Design	Frequency Application, Analysis and Tower Design			\$1,500	\$0	\$1,500	Experience	
Installers	Tower Equipment Installers			\$12,000	\$12,000	\$0	Experience	
Comsearch Licensing	11Ghz Licensed Link Engineering	1,835	2	\$3,670	\$3,670			
Total Labor Estimate				<u>\$19,170</u>	<u>\$17,670</u>	<u>\$1,500</u>		
	Tower Lease (Five Year Contract)			\$25,000	\$0	\$25,000	American Tower Corp	<u>12/12/2018</u>
Total Leases				<u>\$25,000</u>	<u>\$0</u>	<u>\$25,000</u>		
Total Estimate Tower				\$86,112	\$59,612	\$26,500		\$86,112

* Quote/Order Sample Eupen 150' Hybrid Fiber/Power Cable with UVP

** Cost and Source Columns hyperlinks to source of cost website

Buckner Tower

* County Tower New to LTE Project

Product								
Equipment	Description	Cost **	Qty	Total	VATI	NON-VATI	Source of Estimate	Date
KP-3DP65S-45	Dual Band Sector 3.65Ghz 65 deg	500	4	2,000	2,000	0	KP Performance	12/10/2018
NOVAR-9302	3Ghz LTE BaiCel Base Station	3,800	4	15,200	15,200	0	Double Radius	12/10/2018
PS-5AC	AIRMAX 5 GHZ AC PRISMSTATION	300	4	1,200	1,200	0	Double Radius	12/10/2018
PRISMAP-5-60	AC ISOLATION ANTENNA HORN	80	4	320	320	0	Double Radius	12/10/2018
AF11Ghz	Air Fiber Licensed 11Ghz PtP Radio	2,800	2	5,600	5,600	0	Amazon.com	12/10/2018
POE inserter/Switch	UBNT EdgePoint 16 Port	530	1	530	530	0	Double Radius	12/10/2018
Cabling/Ends	Cat5 Double Shield Jumper Cables	200	1	200	200	0	Double Radius	12/10/2018
CWT01 SitePro1	Dual Mounting Steel Arms	456	4	1,824	1,824	0	SitePro1	12/10/2018
P2110 SitePro1	2 3/8"x10' Mount Poles	61	4	244	244	0	SitePro1	12/10/2018
Fiber/Power Cable	Fiber/Power/Conduit Package *	3,511	1	3,511	3,511	0	Eupen *	12/1/2018
UVP Lightning Protector	Lightning Protect * See Below	120	10	1,200	1,200	0	Eupen *	12/10/2018
Traco 48VDC PS	Traco Power Supply	248	2	496	496	0	Mouser	12/10/2018
Traco Battery	Traco Battery Switch/Charger	215	2	430	430	0	Mouser	12/10/2018
Tower Battery Backup	12VDC Battery 37AH	280	4	1,120	1,120	0	Mouser	12/10/2018
Voltage Stepup Trans	48 to 54 VDC Stepup Transformer	80	2	160	160	0	SCS Broadband	12/10/2018
Cutoff Switch	AC Master Cutoff Switch	198	1	198	198	0	ElvesSupply.com	12/10/2018
Break Box	100Amp Breaker Box w/Breakers	308	1	308	308	0	ElvesSupply.com	12/10/2018
Surge Protector	AC Surge Protection	170	1	170	170	0	Google Express	12/10/2018
444APC-HV	APC Modular CAT5 Surges	17	12	204	204	0	Amazon.com	12/10/2018
APC Surge	APC Surge Chassis for 444APC-HV	24	1	24	24	0	Amazon.com	12/10/2018

Surge Case	Equipment Outdoor NEMA Box	439	1	439	439	0	Amazon.com	<u>12/10/2018</u>
MER8-P SitePro1	H-Frame Rack Mount Hardware	565	1	565	565	0	SitePro1.com	<u>12/10/2018</u>
ER-PRO-8	Edge Router	399	1	399	399	0	Double Radius	<u>12/10/2018</u>
Permits	Tower Permitting Fee Estimates	200	1	200	200	0	Experience	<u>12/10/2018</u>
PE Structural	Tower Structural Analysis (ATC Standar	2,900	1	2,900	2,900	0	Griswold Tower Software	<u>12/10/2018</u>
Shipping and Handling	Shipping and Handling Estimate All item	2,500	1	2,500	2,500	0	Estimated all parts	<u>12/10/2018</u>
Total Part Estimate				<u>\$41,942</u>	<u>\$41,942</u>	<u>\$0</u>		
Electrician	Licensed Electrician Estimate			\$2,000	\$2,000	\$0	Experience	
Tower Design	Frequency Application, Analysis and Tower Design			\$1,500	\$0	\$1,500	Experience	
Installers	Tower Equipment Installers			\$12,000	\$12,000	\$0	Experience	
Comsearch Licensing	11Ghz Licensed Link Engineering	1,835	1	\$1,835	\$1,835			
Total Labor Estimate				<u>\$17,335</u>	<u>\$15,835</u>	<u>\$1,500</u>		
	Tower Lease (Five Year Contract)			\$25,000	\$0	\$25,000	SBA Towers	<u>12/12/2018</u>
Total Leases				<u>\$25,000</u>	<u>\$0</u>	<u>\$25,000</u>		
Total Estimate Tower				\$84,277	\$57,777	\$26,500		\$84,277

* Quote/Order Sample Eupen 150' Hybrid Fiber/Power Cable with UVP

** Cost and Source Columns hyperlinks to source of cost website

Jouette Tower

* County Tower New to LTE Project

Product								
Equipment	Description	Cost **	Qty	Total	VATI	NON-VATI	Source of Estimate	Date
KP-3DP65S-45	Dual Band Sector 3.65Ghz 65 deg	500	4	2,000	2,000	0	KP Performance	<u>12/10/2018</u>
NOVAR-9302	3Ghz LTE BaiCel Base Station	3,800	4	15,200	15,200	0	Double Radius	<u>12/10/2018</u>
PS-5AC	AIRMAX 5 GHZ AC PRISMSTATION	300	4	1,200	1,200	0	Double Radius	<u>12/10/2018</u>
PRISMAP-5-60	AC ISOLATION ANTENNA HORN	80	4	320	320	0	Double Radius	<u>12/10/2018</u>
AF11Ghz	Air Fiber Licensed 11Ghz PtP Radio	2,800	2	5,600	5,600	0	Amazon.com	<u>12/10/2018</u>

POE inserter/Switch	UBNT EdgePoint 16 Port	530	1	530	530	0	Double Radius	12/10/2018
Cabling/Ends	Cat5 Double Shield Jumper Cables	200	1	200	200	0	Double Radius	12/10/2018
CWT01 SitePro1	Dual Mounting Steel Arms	456	4	1,824	1,824	0	SitePro1	12/10/2018
P2110 SitePro1	2 3/8"x10' Mount Poles	61	4	244	244	0	SitePro1	12/10/2018
Fiber/Power Cable	Fiber/Power/Conduit Package *	3,511	1	3,511	3,511	0	Eupen *	12/1/2018
UVP Lightning Protector	Lightning Protect * See Below	120	10	1,200	1,200	0	Eupen *	12/10/2018
Traco 48VDC PS	Traco Power Supply	248	2	496	496	0	Mouser	12/10/2018
Traco Battery	Traco Battery Switch/Charger	215	2	430	430	0	Mouser	12/10/2018
Tower Battery Backup	12VDC Battery 37AH	280	4	1,120	1,120	0	Mouser	12/10/2018
Voltage Stepup Trans	48 to 54 VDC Stepup Transformer	80	2	160	160	0	SCS Broadband	12/10/2018
Cutoff Switch	AC Master Cutoff Switch	198	1	198	198	0	ElvesSupply.com	12/10/2018
Break Box	100Amp Breaker Box w/Breakers	308	1	308	308	0	ElvesSupply.com	12/10/2018
Surge Protector	AC Surge Protection	170	1	170	170	0	Google Express	12/10/2018
444APC-HV	APC Modular CAT5 Surges	17	12	204	204	0	Amazon.com	12/10/2018
APC Surge	APC Surge Chassis for 444APC-HV	24	1	24	24	0	Amazon.com	12/10/2018
Surge Case	Equipment Outdoor NEMA Box	439	1	439	439	0	Amazon.com	12/10/2018
MER8-P SitePro1	H-Frame Rack Mount Hardware	565	1	565	565	0	SitePro1.com	12/10/2018
ER-PRO-8	Edge Router	399	1	399	399	0	Double Radius	12/10/2018
Permits	Tower Permitting Fee Estimates	200	1	200	200	0	Experience	12/10/2018
PE Structural	Tower Structural Analysis (ATC Standar	2,900	1	2,900	2,900	0	Griswold Tower Software	12/10/2018
Shipping and Handling	Shipping and Handling Estimate All item	2,500	1	2,500	2,500	0	Estimated all parts	12/10/2018
Total Part Estimate				<u>\$41,942</u>	<u>\$41,942</u>	<u>\$0</u>		
Electrician	Licensed Electrician Estimate			\$2,000	\$2,000	\$0	Experience	
Tower Design	Frequency Application, Analysis and Tower Design			\$1,500	\$0	\$1,500	Experience	
Installers	Tower Equipment Installers			\$12,000	\$12,000	\$0	Experience	
Comsearch Licensing	11Ghz Licensed Link Engineering	1,835	1	\$1,835	\$1,835			

Total Labor Estimate	<u>\$17,335</u>	<u>\$15,835</u>	<u>\$1,500</u>	
Tower Lease (Five Year Contract)	\$25,000	\$0	\$25,000	SBA Towers <u>12/12/2018</u>
Total Leases	<u>\$25,000</u>	<u>\$0</u>	<u>\$25,000</u>	
Total Estimate Tower	\$84,277	\$57,777	\$26,500	\$84,277

* Quote/Order Sample Eupen 150' Hybrid Fiber/Power Cable with UVP

** Cost and Source Columns hyperlinks to source of cost website

Apple Tower

* Commercial Tower New to LTE Project

Product		Cost **	Qty	Total	VATI	NON-VATI	Source of Estimate	Date
Equipment	Description							
KP-3DP65S-45	Dual Band Sector 3.65Ghz 65 deg	500	4	2,000	2,000	0	KP Performance	<u>12/10/2018</u>
NOVAR-9302	3Ghz LTE BaiCel Base Station	3,800	4	15,200	15,200	0	Double Radius	<u>12/10/2018</u>
PS-5AC	AIRMAX 5 GHZ AC PRISMSTATION	300	4	1,200	1,200	0	Double Radius	<u>12/10/2018</u>
PRISMAP-5-60	AC ISOLATION ANTENNA HORN	80	4	320	320	0	Double Radius	<u>12/10/2018</u>
AF11Ghz	Air Fiber Licensed 11Ghz PtP Radio	2,800	4	11,200	11,200	0	Amazon.com	<u>12/10/2018</u>
POE inserter/Switch	UBNT EdgePoint 16 Port	530	1	530	530	0	Double Radius	<u>12/10/2018</u>
Cabling/Ends	Cat5 Double Shield Jumper Cables	200	1	200	200	0	Double Radius	<u>12/10/2018</u>
CWT01 SitePro1	Dual Mounting Steel Arms	456	4	1,824	1,824	0	SitePro1	<u>12/10/2018</u>
P2110 SitePro1	2 3/8"x10' Mount Poles	61	4	244	244	0	SitePro1	<u>12/10/2018</u>
Fiber/Power Cable	Fiber/Power/Conduit Package *	3,511	1	3,511	3,511	0	Eupen *	<u>12/1/2018</u>
UVP Lightning Protector	Lightning Protect * See Below	120	10	1,200	1,200	0	Eupen *	<u>12/10/2018</u>
Traco 48VDC PS	Traco Power Supply	248	2	496	496	0	Mouser	<u>12/10/2018</u>
Traco Battery	Traco Battery Switch/Charger	215	2	430	430	0	Mouser	<u>12/10/2018</u>
Tower Battery Backup	12VDC Battery 37AH	280	4	1,120	1,120	0	Mouser	<u>12/10/2018</u>
Voltage Stepup Trans	48 to 54 VDC Stepup Transformer	80	2	160	160	0	SCS Broadband	<u>12/10/2018</u>

Cutoff Switch	AC Master Cutoff Switch	198	1	198	198	0	ElvesSupply.com	12/10/2018
Break Box	100Amp Breaker Box w/Breakers	308	1	308	308	0	ElvesSupply.com	12/10/2018
Surge Protector	AC Surge Protection	170	1	170	170	0	Google Express	12/10/2018
444APC-HV	APC Modular CAT5 Surges	17	12	204	204	0	Amazon.com	12/10/2018
APC Surge	APC Surge Chassis for 444APC-HV	24	1	24	24	0	Amazon.com	12/10/2018
Surge Case	Equipment Outdoor NEMA Box	439	1	439	439	0	Amazon.com	12/10/2018
MER8-P SitePro1	H-Frame Rack Mount Hardware	565	1	565	565	0	SitePro1.com	12/10/2018
ER-PRO-8	Edge Router	399	1	399	399	0	Double Radius	12/10/2018
Permits	Tower Permitting Fee Estimates	200	1	200	200	0	Experience	12/10/2018
PE Structural	Tower Structural Analysis (ATC Standard)	2,900	1	2,900	2,900	0	Griswold Tower Software	12/10/2018
Shipping and Handling	Shipping and Handling Estimate All items	2,500	1	2,500	2,500	0	Estimated all parts	12/10/2018
Total Part Estimate				\$47,542	\$47,542	\$0		
Electrician	Licensed Electrician Estimate			\$2,000	\$2,000	\$0	Experience	
Tower Design	Frequency Application, Analysis and Tower Design			\$1,500	\$0	\$1,500	Experience	
Installers	Tower Equipment Installers			\$12,000	\$12,000	\$0	Experience	
Comsearch Licensing	11Ghz Licensed Link Engineering	1,835	2	\$3,670	\$3,670			
Total Labor Estimate				\$19,170	\$17,670	\$1,500		
	Tower Lease (Five Year Contract)			\$45,000	\$0	\$45,000	American Tower Corp	12/12/2018
Total Leases				\$45,000	\$0	\$45,000		
Total Estimate Tower				\$111,712	\$65,212	\$46,500		\$111,712

* Quote/Order Sample Eupen 150' Hybrid Fiber/Power Cable with UVP

** Cost and Source Columns hyperlinks to source of cost website

Plum Tower

* Commercial Tower New to LTE Project

Product

Equipment	Description	Cost **	Qty	Total	VATI	NON-VATI	Source of Estimate	Date
KP-3DP65S-45	Dual Band Sector 3.65Ghz 65 deg	500	4	2,000	2,000	0	KP Performance	12/10/2018
NOVAR-9302	3Ghz LTE BaiCel Base Station	3,800	4	15,200	15,200	0	Double Radius	12/10/2018
PS-5AC	AIRMAX 5 GHZ AC PRISMSTATION	300	4	1,200	1,200	0	Double Radius	12/10/2018
PRISMAP-5-60	AC ISOLATION ANTENNA HORN	80	4	320	320	0	Double Radius	12/10/2018
AF11Ghz	Air Fiber Licensed 11Ghz PtP Radio	2,800	1	2,800	2,800	0	Amazon.com	12/10/2018
POE inserter/Switch	UBNT EdgePoint 16 Port	530	1	530	530	0	Double Radius	12/10/2018
Cabling/Ends	Cat5 Double Shield Jumper Cables	200	1	200	200	0	Double Radius	12/10/2018
CWT01 SitePro1	Dual Mounting Steel Arms	456	4	1,824	1,824	0	SitePro1	12/10/2018
P2110 SitePro1	2 3/8"x10' Mount Poles	61	4	244	244	0	SitePro1	12/10/2018
Fiber/Power Cable	Fiber/Power/Conduit Package *	3,511	1	3,511	3,511	0	Eupen *	12/1/2018
UVP Lightning Protector	Lightning Protect * See Below	120	10	1,200	1,200	0	Eupen *	12/10/2018
Traco 48VDC PS	Traco Power Supply	248	2	496	496	0	Mouser	12/10/2018
Traco Battery	Traco Battery Switch/Charger	215	2	430	430	0	Mouser	12/10/2018
Tower Battery Backup	12VDC Battery 37AH	280	4	1,120	1,120	0	Mouser	12/10/2018
Voltage Stepup Trans	48 to 54 VDC Stepup Transformer	80	2	160	160	0	SCS Broadband	12/10/2018
Cutoff Switch	AC Master Cutoff Switch	198	1	198	198	0	ElvesSupply.com	12/10/2018
Break Box	100Amp Breaker Box w/Breakers	308	1	308	308	0	ElvesSupply.com	12/10/2018
Surge Protector	AC Surge Protection	170	1	170	170	0	Google Express	12/10/2018
444APC-HV	APC Modular CAT5 Surges	17	12	204	204	0	Amazon.com	12/10/2018
APC Surge	APC Surge Chassis for 444APC-HV	24	1	24	24	0	Amazon.com	12/10/2018
Surge Case	Equipment Outdoor NEMA Box	439	1	439	439	0	Amazon.com	12/10/2018
MER8-P SitePro1	H-Frame Rack Mount Hardware	565	1	565	565	0	SitePro1.com	12/10/2018
ER-PRO-8	Edge Router	399	1	399	399	0	Double Radius	12/10/2018
Permits	Tower Permitting Fee Estimates	200	1	200	200	0	Experience	12/10/2018
PE Structural	Tower Structural Analysis (ATC Standar	2,900	1	2,900	2,900	0	Griswold Tower Software	12/10/2018

Shipping and Handling	Shipping and Handling Estimate All item	2,500	1	2,500	2,500	0	Estimated all parts	<u>12/10/2018</u>
Total Part Estimate				\$39,142	\$39,142	\$0		
Electrician	Licensed Electrician Estimate			\$2,000	\$2,000	\$0	Experience	
Tower Design	Frequency Application, Analysis and Tower Design			\$1,500	\$0	\$1,500	Experience	
Installers	Tower Equipment Installers			\$12,000	\$12,000	\$0	Experience	
Comsearch Licensing	11Ghz Licensed Link Engineering	1,835	0	\$0	\$0			
Total Labor Estimate				\$15,500	\$14,000	\$1,500		
	Tower Lease (Five Year Contract)			\$24,000	\$0	\$24,000	County of Louisa	<u>12/12/2018</u>
Total Leases				\$24,000	\$0	\$24,000		
Total Estimate Tower				\$78,642	\$53,142	\$25,500		\$78,642

* Quote/Order Sample Eupen 150' Hybrid Fiber/Power Cable with UVP

** Cost and Source Columns hyperlinks to source of cost website

Quote

Page: 1



Eupen Cable, Inc.
 5181 110th Ave N
 Unit D
 Clearwater, FL 33760
 Phone: (800) 419-5100
 Fax: (727) 528-0751

Order Number: 0121708
 Order Date: 12/01/2018
 Expiration Date: 1/01/2019
 Salesperson: SE
 Customer Number: 10-CREDIT
 Warehouse: MTX

Sold To:	Ship To:
SCS Broadband 604 Thomas Nelson Hwy Arrington, VA 22922	SCS Broadband 604 Thomas Nelson Hwy Arrington, VA 22922
Confirm To:	Contact:

Customer P.O.	Ship VIA	Freight Terms	Payment Terms
Quote	BEST WAY	PREPAY AND ADD	Credit Card

Line	Item Code	Unit	Ordered	Price	Amount
1	H51206S08C200 Hybrid Cable 7/8", (6) pairs of 6 mm ² power cables and (4) pairs of single mode fibers, 200 foot length with both ends terminated with LC connectors	EACH	1	1,938.42	1,938.42
2	REKDC9234PF48 Junction Box with (3) OVPs and (3) discrete circuits for (1) 1-1/4" or (2) 7/8" hybrid feeder cables, (6) 11 mm power cables and (9) 6 mm fiber jumpers	EACH	1	1,164.00	1,164.00
3	HF2S914LCLC-A/B Fiber jumper, with 2 single mode fibers, 30 foot, with duplexed LC to LC connectors, outdoor rated jacket, clipped A/B and B/A	EACH	3	50.29	150.87
4	HP16/2C Power cable (2) 16 AWG copper conductors	FT	150	0.69	103.50
5	HG-78 Hoisting Grip, Lace-up, 7/8"	EA	1	15.75	15.75
6	SH-S78 Snap Hanger, Stapleable, for 7/8" compressed...	K010	7	13.89	97.23

Snap Hanger, Stackable, for 7/8" corrugated coax					
7	GK-C78T Ground Kit, Clip on, Tinned, for 7/8" corrugated coax	EA	3	11.20	33.60
8	VT-50 Cable ties, Velcro 3/4" x 8" black, kit of 10	K010	1	8.00	8.00
Lead Time: 3 Weeks to Ship					

Net Order:	3,511.37
Less Discount:	0.00
Freight:	0.00
Sales Tax:	0.00
Order Total	3,511.37

The matching funds are:

1. \$7,500 from SCS Broadband for Tower Analysis, Load Design, Frequency Analysis which is calculate as 138 hours for a Sr. Tower Engineer at \$65 per hour.
2. \$45,000 from SCS Broadband for 60 Month tower leases to American Tower Corp and SBA Corp for a total of four towers.

These amounts are to be paid by SCS broadband as considered as matching funds.

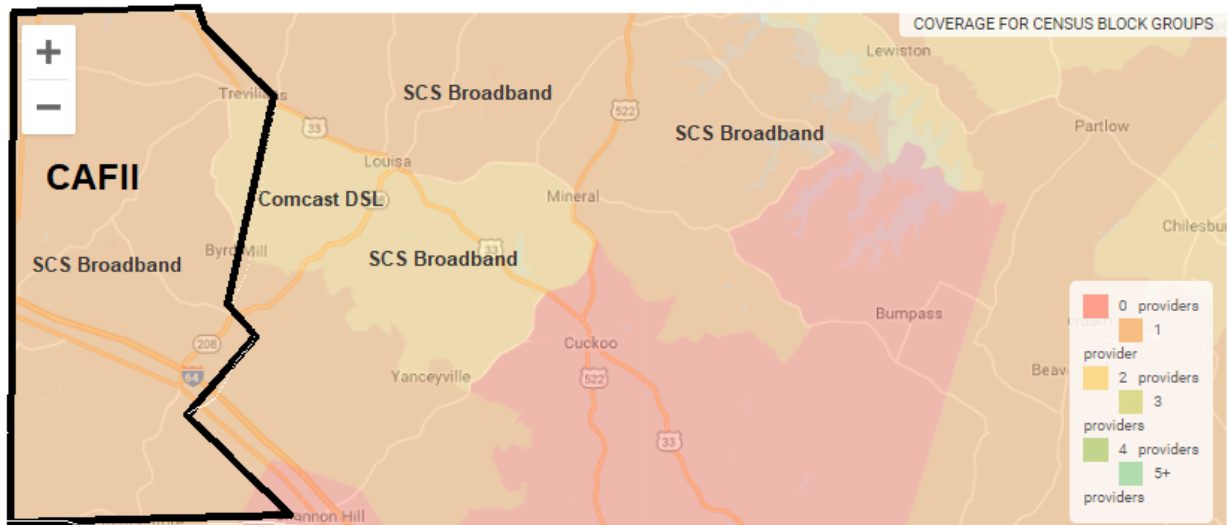
Last Updated on 12/11/2018.

Competition Map

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INTERNET PROVIDER COMPETITION MAP WITH CAFII



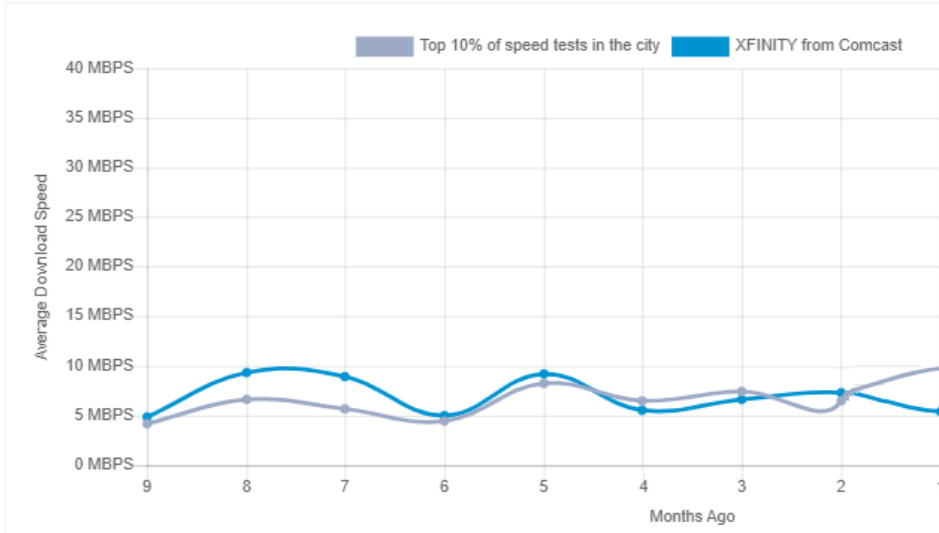
Last Updated on 12/11/2018.

Download Speeds

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DOWN LOAD SPEEDS SELECTED AREAS



This analysis is based on 11,378 speed tests from IP verified users who took speed tests from an IP address in Mineral between December 2017 and November 2018. National statistics are calculated across 314,082,195 over the same time range.

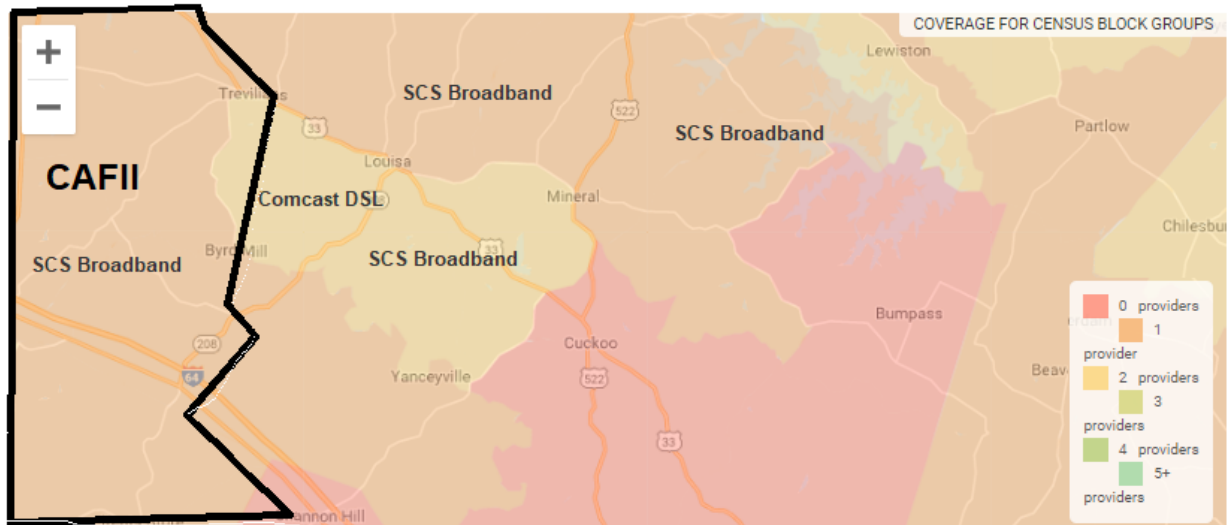
Last Updated on 12/11/2018.

Competition Map

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INTERNET PROVIDER COMPETITION MAP WITH CAFII



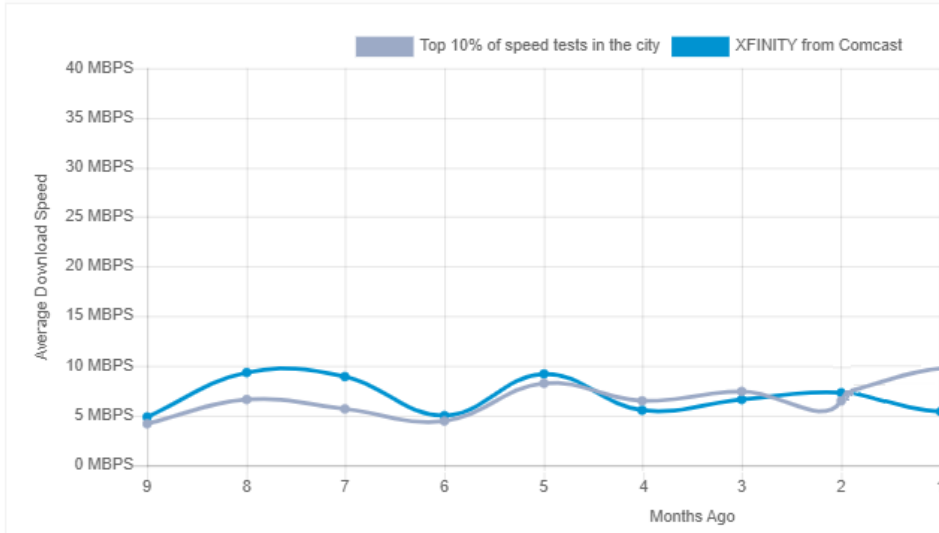
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DOWN LOAD SPEEDS SELECTED AREAS



This analysis is based on 11,378 speed tests from IP verified users who took speed tests from an IP address in Mineral between December 2017 and November 2018. National statistics are calculated across 314,082,195 over the same time range.

VATI FUNDING SOURCES TABLE

Please fill in the chart below with a description of the project funding source (local, federal, state, private, other), the amount from that source, the percentage of total project funding that source represents, and a description of the current status of the funds (pending, secured, etc.).

Source	Amount	%	Status
REQUESTED VATI	\$ 293,520	66	Pending
Louisa COUNTY	\$99,000	22	Pending
SCS BROADBAND	\$ 52,500	12	Pending
	\$		
	\$		
	\$		
	\$		
TOTAL	\$ 445,020	100 %	

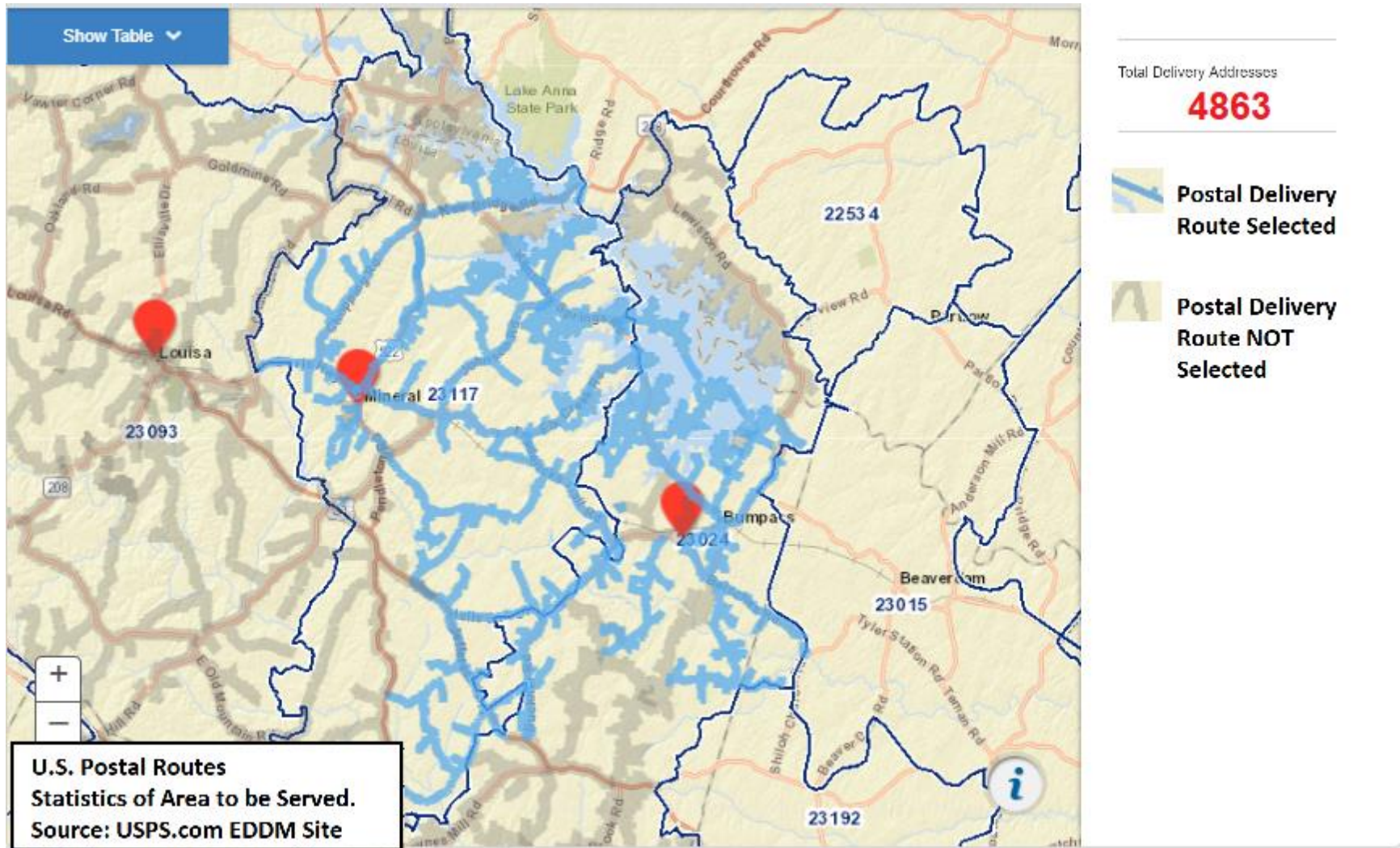


Figure 4.1 – U.S. Postal Routes Statistics of Area to be Served



Sample Marketing Results SCS Automatic Marketing Results Map

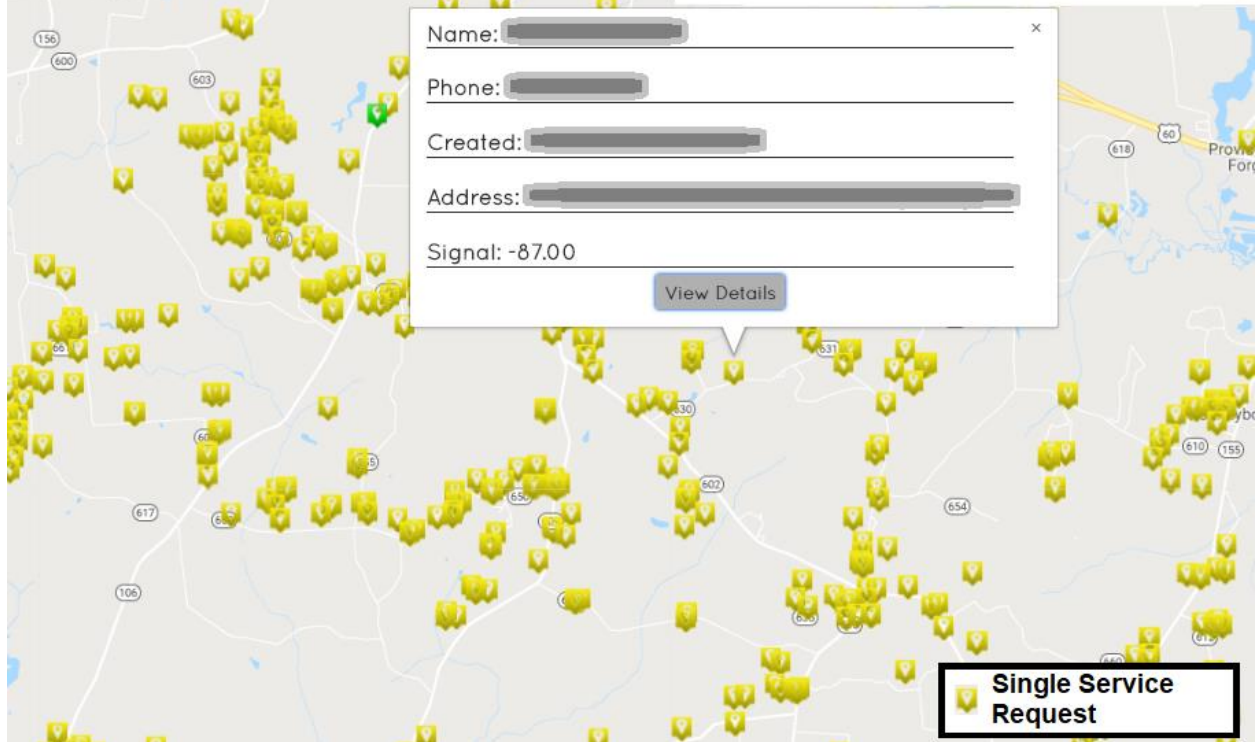


Figure 1- Sample Service Requests Map

Figure 8.1 - Louisa County Wireless Network Plan Map

