



Staff Report

File #: 17-796D, **Version:** 1 **Agenda Date:** 9/30/2017
Approved by the County Administrator on 9/15/2017

Subject:

Change order no. 1 with Frontier Communications of America, Inc for 9-1-1 Network services.

Recommended Action:

Approval and execution by the County Administrator of change order no. 1 with Frontier Communications of America, Inc (Frontier) for 9-1-1 Network services.

Contract no. 167-0161-Q (RG); increase in amount of \$822,600.00, for a revised contract value of \$1,189,320.00 with an annual amount of \$237,864.00 effective through February 5, 2022.

Strategic Plan:

Deliver First Class Services to the Public and Our Customers

5.2 Be responsible stewards of the public's resources

5.3 Ensure effective and efficient delivery of county services and support

5.4 Strive to exceed customer expectations

Summary:

Change order no. 1 modifies the network connection configurations originally approved and executed on February 6, 2017. Changes in the original configuration and specifications were recommended by Airbus DS, 911's equipment provider. All original schedules are replaced with the exception of the Frontier Services Agreement.

Network connections will now be between the Public Safety Campus (PSC), Clearwater Police (CPD), Largo Police (LPD), Pinellas Park Police (PPPD), St. Petersburg Police (SPPD) and Tarpon Springs Police (TSPD) departments. New documents for execution include new schedules and a new IP VPN agreement as listed under the attachment section.

Background/Explanation:

This contract provides a redundant network with the intent of correcting emergency 911 network failures with Level 3 Communications (the network provider) between the PSC and the remote Public Safety Answering Points (PSAPs).

The initial configuration drafted by Frontier specified a point to point type connection known as (layer 2). While reviewing the configuration being proposed for SPPD & CPD, staff realized the configuration contained on the original contract needed to be revised. According to Airbus DS, the remote PSAPs must have a routable network connection (which is known as a layer 3 network). This type of network is more expensive and resulted in a 66% increase over the original contract. Monthly recurring costs increased from \$6,112 to \$10,148. This network is part of the 911 wide area network (WAN) and is indirectly related to NG911.

In addition to the changes above, this change order adds a redundant point to point circuit between SPPD and the PSC which is directly related to NG911. The monthly recurring costs for this circuit is \$1,476. A redundant connection will use county owned fiber providing a cost savings for the county of \$1,476 a month.

Additional redundant circuits between the PSC & CPD and SPPD & CPD will be installed and monthly recurring costs will be \$8,198. County owned fiber cannot be used for these connections.

Installation of a network usually varies between 3 to 6 months depending on other variables such as fiber installation and equipment configuration. At this point, the installation of 911 equipment at SPPD & CPD is contingent on the completion of this network. This network is also required for the county to move forward with Text-to-911. Frontier Communications has agreed to expedite the installation of this network. No charges will be incurred until the network is complete.

This contract was originally approved by the Purchasing Director on February 6, 2017. Due to the increase the contract now requires County Administration approval.

Fiscal Impact:

Original approved sixty (60) month expenditure: \$366,720.00
Change order no. 1 increase not to exceed: \$822,600.00
Revised sixty (60) month expenditure not to exceed: \$1,189,320.00
Revised estimated annual expenditure not to exceed: \$237,864.00
Funding is derived from E9-1-1 Service Fund fees.

Delegated Authority:

Authority for the County Administrator to approve change order no. 1 is granted under Code Section 2-62(a)(1).

Staff Member Responsible:

Chuck Freeman, Director, Regional 9-1-1 Division
Joe Lauro, Director, Purchasing Department

Partners:

Clearwater Police Department
Largo Police Department
Pinellas Park Police Department
St. Pete Police Department
Tarpon Springs Police Department

Attachments:

Schedule Number S-0000162593 E-LAN
Schedule Number S-0000162547 IP VPN

Schedule Number S-0000163630 IP VPN
IP VPN Service Level Agreement



ETHERNET LOCAL AREA NETWORK (E-LAN) SCHEDULE
With Managed Router

This is Schedule Number S-0000162593 to the Frontier Services Agreement dated February 6, 2017 ("FSA") by and between PINELLAS COUNTY ("Customer") and Frontier Communications of America Inc. on behalf of itself and its affiliates ("Frontier").

Primary Service Location: 10750 Ulmerton Rd, Largo, Florida, 33778
Schedule Version: NEW [X] REPLACEMENT []

Schedule Date: 08/10/2017
Service Term: 60

A detailed description of the Services, by location, is provided in Tables 1 and 2, on page 2 of this Schedule.

Table with 3 columns: Service, NRC, MRC. Rows include Ethernet Access Circuit(s), Ethernet Virtual Circuit - EVC, Internet Port and EVPL Silver EVC, Static IP Select Size block, Special Construction, Managed Router, and a Total row.

Interstate / Intrastate Pricing Certification: The term "Interstate in nature" means that the traffic originates in one state and terminates in another state or outside the United States, regardless of how it is routed. Customer certifies that its dedicated point-to-point traffic over such Services will be: [] more than 10% interstate in nature, or [X] less than 10% interstate in nature.

1. SERVICE DESCRIPTION. Ethernet Local Area Network (E-LAN) is a data service providing multipoint-to-multipoint Ethernet connections to each Customer User Network Interface (UNI). E-LAN will be designed, provisioned and implemented with standard switched Ethernet components.

Managed Router Service: Frontier will configure the Router based on documented customer requirements. Customer shall permit Frontier to access the Router's Simple Network Management Protocol (SNMP) variables, and Customer shall, at Frontier's request, permit one or more Frontier network management systems to be the recipient of SNMP trap messages.

Special Construction: All Services are subject to availability and Frontier Network limitations. The rates identified in this Schedule are estimated based on standard installation costs and Services may not be available at all service locations at the rates identified.

If the Customer does not agree to the Special construction within ten (10) business days, the Customer shall be deemed to have cancelled the Service Schedule without further liability.

2. OBLIGATIONS OF CUSTOMER. Customer shall properly use any equipment or software, and all pass codes, personal identification numbers ("PINs") or other access capability obtained from Frontier or an affiliate or vendor of Frontier and shall surrender the equipment and software in good working order to Frontier at a place specified by Frontier and terminate all use of any access capability upon termination or expiration of this Schedule.

3. EQUIPMENT OR SOFTWARE NOT PROVIDED BY FRONTIER. Upon notice from Frontier that the facilities, services, equipment or software not provided or approved by Frontier is causing or is likely to cause hazard, interference or service obstruction, Customer shall immediately eliminate the likelihood of hazard, interference or service obstruction.

4. INTERNET ACCEPTABLE USE POLICY AND SECURITY. For Customers ordering Internet integration into the network initially or during the Service Term, Customer shall comply, and shall cause all Service users to comply, with Frontier's Acceptable Use Policy ("AUP"), which Frontier may modify at any time. The current AUP is available for review at the following address, subject to change: http://www.frontier.com/policies/commercial_aup/.



**ETHERNET LOCAL AREA NETWORK (E-LAN) SCHEDULE
With Managed Router**

Table 2: Internet Access

Internet Service added to LAN Solution	Internet Elements	Originating Access Location	Termination on the Internet	MRC
Internet Port and EVC (Silver ONLY)	Mbps		Internet Port	\$
Static IP Block: CIDR	Usable Addresses	IP Version	NRC	MRC
			\$	\$

Table 2: Ethernet Access Circuits

Service Location	Service Address, and NPA NXX:	Service		Charges	
				NRC	MRC
A	10750 Ulmerton Rd, Largo, FL 3, 33778, 727 464	Access CIR (Mbps) Managed Router	30 Mbps 1	\$ 0.00 \$ 0.00	\$ 639.00 \$ 99.00
B	1300 1 st Ave N St, St. Pete, FL, 33705, 727 893	Access CIR (Mbps) Managed Router	30 Mbps 1	\$ 0.00 \$ 0.00	\$ 639.00 \$ 99.00
C	street, city, state, zip, NPA NXX	Access CIR (Mbps) Managed Router	Mbps	\$ \$	\$ \$
D	street, city, state, zip, NPA NXX	Access CIR (Mbps) Managed Router	Mbps	\$ \$	\$ \$
E	street, city, state, zip, NPA NXX	Access CIR (Mbps) Managed Router	Mbps	\$ \$	\$ \$
F	street, city, state, zip, NPA NXX	Access CIR (Mbps) Managed Router	Mbps	\$ \$	\$ \$
G	street, city, state, zip, NPA NXX	Access CIR (Mbps) Managed Router	Mbps	\$ \$	\$ \$
H	street, city, state, zip, NPA NXX	Access CIR (Mbps) Managed Router	Mbps	\$ \$	\$ \$
I	street, city, state, zip, NPA NXX	Access CIR (Mbps) Managed Router	Mbps	\$ \$	\$ \$
J	street, city, state, zip, NPA NXX	Access CIR (Mbps) Managed Router	Mbps	\$ \$	\$ \$
K	street, city, state, zip, NPA NXX	Access CIR (Mbps) Managed Router	Mbps	\$ \$	\$ \$
L	street, city, state, zip, NPA NXX	Access CIR (Mbps) Managed Router	Mbps	\$ \$	\$ \$
M	street, city, state, zip, NPA NXX	Access CIR (Mbps) Managed Router	Mbps	\$ \$	\$ \$
N	street, city, state, zip, NPA NXX	Access CIR (Mbps) Managed Router	Mbps	\$ \$	\$ \$
Subtotal:				\$ 0.00	\$ 1,476.00

This Schedule is not effective and pricing, dates and terms are subject to change until signed by both parties, and may not be effective until approved by the FCC and/or applicable State Commission. This Schedule and any of the provisions hereof may not be modified in any manner except by mutual written agreement. The above rates do not include any taxes, fees or surcharges applicable to the Service. This Schedule, and all terms and conditions of the FSA, is the entire agreement between the parties with respect to the Services described herein, and supersedes any and all prior or contemporaneous agreements, representations, statements, negotiations, and undertakings written or oral with respect to the subject matter hereof.

Frontier Communications of America, Inc.	PINELLAS COUNTY
<i>Frontier's Signature:</i> 	<i>Customer's Signature:</i>
Printed Name: Robert M. Fox	Printed Name: Mark S. Woodard
Title: Regional Sales Manager	Title: County Administrator
Date: 8-24-17	Date: September 15, 2017

APPROVED AS TO FORM
By:
Office of the County Attorney



This is Schedule Number S-0000162547 to the Frontier Services Agreement dated February 6, 2017 ("FSA") by and between PINELLAS COUNTY ("Customer") and Frontier Communications of America, Inc. on behalf of itself and its affiliates ("Frontier"). Customer orders and Frontier agrees to provide the Services and Equipment identified in the Schedule below.

Primary Service Location:

Street Address: 10750 Ulmerton Rd
 City, State, Zip: Largo, Florida, 33778

Schedule Date: 08/10/2017

Service Term: 60

A detailed description of the Services, by location, is provided in Attachment 1 to this Schedule, incorporated herein by this reference.

Service	Charges	
	NRC	MRC
Access Circuit	\$ 0.00	\$ 7,604.00
IP VPN EVC	\$ 0.00	\$
Internet EVC/Port	\$ 0.00	\$
IP VPN Port CoS Scheme: Select One	\$ 0.00	\$
Interstate / Intrastate Pricing Certification: Customer certifies that its dedicated point-to-point traffic over such Services: <input checked="" type="checkbox"/> will be more than 10% interstate in nature; OR <input type="checkbox"/> will be 10% or less interstate in nature. The term "interstate in nature" means that the traffic originates in one state and terminates in another state or outside the United States, regardless of how it is routed.		
Managed Service	NRC	MRC
Router(s): see selections on Attachment 1	\$ 0	\$ 594.00

- Managed Router Service Description.** Frontier will configure the Router based on documented customer requirements. Customer shall permit Frontier to access the Router's Simple Network Management Protocol (SNMP) variables, and Customer shall, at Frontier's request, permit one or more Frontier network management systems to be the recipient of SNMP trap messages. Frontier will perform monitoring based on standard SNMP traps received from the Router. Frontier will work to isolate and determine the source and severity of the problems. If a problem is caused by either the network transport or the Router, Frontier and Customer will cooperate to restore the Router to operational condition. If the source of the problem is within the Router, Frontier will be responsible for the repair or replacement of the Router, in Frontier's sole discretion. If the source of the problem is not the Router, at Customer's request Frontier will cooperate with Customer to conduct testing and repair activities, subject to Frontier's standard technician rates. Frontier has no responsibility with respect to: (i) electrical work external to the Router, including but not limited to power or back-up power to or from the Router; (ii) Router failures caused by factors not related to the Router or outside Frontier's control, including but not limited to failure of the Service Location or any of Customer's other network equipment or facilities to conform with Frontier's specifications; (iii) use of the Router for any purpose other than as intended by the manufacturer; (iv) damage caused by anyone other than an Frontier employee or representative; (v) Router supplies, accessories, painting, or refurbishing; and (vi) any activity related to anything not furnished by Frontier, or use of Router which fails to conform to manufacturer or Frontier specifications.
- Obligations of Customer.** Customer shall properly use any equipment or software, and all pass codes, personal identification numbers ("PINs") or other access capability obtained from Frontier or an affiliate or vendor of Frontier and shall surrender the equipment and software in good working order to Frontier at a place specified by Frontier and terminate all use of any access capability upon termination or expiration of this Schedule. Customer shall be responsible for all

uses of PINs, pass codes or other access capability during or after the term hereof. Customer agrees that the Equipment and Service provided by Frontier hereunder are subject to the terms, conditions and restrictions contained in any applicable agreements (including software or other intellectual property license agreements) between Frontier and Frontier's vendors.

- Equipment or Software Not Provided by Frontier.** Upon notice from Frontier that the facilities, services, equipment or software not provided or approved by Frontier is causing or is likely to cause hazard, interference or service obstruction, Customer shall immediately eliminate the likelihood of hazard, interference or service obstruction. If Customer requests Frontier to troubleshoot difficulties caused by the equipment or software not provided by Frontier, and Frontier agrees to do so, Customer shall pay Frontier at its then current rates.

- Internet Acceptable Use Policy and Security.** Customer shall comply, and shall cause all Service users to comply, with Frontier's Acceptable Use Policy ("AUP"), which Frontier may modify at any time. The current AUP is available for review at the following address, subject to change: http://www.frontier.com/policies/commercial_aup/. Customer is responsible for maintaining awareness of the current AUP and adhering to the AUP as it may be amended from time to time. Failure to comply with the AUP is grounds for immediate suspension or termination of Frontier Internet Service, notwithstanding any notice requirement provisions of the FSA. Customer is responsible for the security of its own networks, equipment, hardware, software and software applications. Abuse that occurs as a result of Customer's systems or account being compromised or as a result of activities of third parties permitted by Customer may result in suspension of Customer's accounts or Internet access by Frontier. Each party agrees to be responsible for its own negligence and that of its employees and agents.

This Schedule is not effective and pricing, dates and terms are subject to change until signed by both parties, and may not be effective until approved by the FCC and/or applicable State Commission. This Schedule and any of the provisions hereof may not be modified in any manner except by mutual written agreement. The above rates do not include any taxes, fees or surcharges applicable to the Service. This Schedule, and all terms and conditions of the FSA, is the entire agreement between the parties with respect to the Services described herein, and supersedes any and all prior or contemporaneous agreements, representations, statements, negotiations, and undertakings written or oral with respect to the subject matter hereof.

Frontier Communications of America, Inc.	PINELLAS COUNTY
Frontier's Signature:	Customer's Signature:
Printed Name: Robert M. Fox	Printed Name: Mark S. Woodard
Title: Regional Sales Manager	Title: County Administrator
Date: 8-24-17	Date: September 15, 2017

**ATTACHMENT 1
SERVICE DESCRIPTION BY LOCATION**

Service Location	Service Address: (street, city, state)	Service	Bandwidth / Type	Charges	
				NRC	MRC
Primary	10750 Ulmerton Rd. Larago, FL, 33778	Access Circuit	30 Mbps	\$ 0.00	\$ 1510.00
		IP VPN EVC: (Platinum)	Mbps	\$	\$
		Internet EVC/Port (Silver)	Mbps	\$	\$
		IP VPN Port	Mbps	\$	\$
		Managed Router	1M - 50Mbps w/SEC Option	\$ 0.00	\$ 99.00
2	10750 Ulmerton Rdt Largo, FL, 33778	Access Circuit	30 Mbps	\$ 0.00	\$ 1510.0
		IP VPN EVC: (Platinum)	Mbps	\$	\$
		Internet EVC/Port (Silver)	Mbps	\$	\$
		IP VPN Port	Mbps	\$	\$
		Managed Router	1M - 50Mbps w/SEC Option	\$ 0.00	\$ 99.00
3	645 Pierce St Clearwater, FL, 33768	Access Circuit	20 Mbps	\$ 0.00	\$ 1,259.00
		IP VPN EVC: (Platinum)	Mbps	\$	\$
		Internet EVC/Port (Silver)	Mbps	\$	\$
		IP VPN Port	Mbps	\$	\$
		Managed Router	1M - 50Mbps w/SEC Option	\$ 0.00	\$ 99.00
4	645 Pierce St Clearwater, FL, 33768	Access Circuit	20 Mbps	\$ 0.00	\$ 1,259.00
		IP VPN EVC: (Platinum)	Mbps	\$	\$
		Internet EVC/Port (Silver)	Mbps	\$	\$
		IP VPN Port	Mbps	\$	\$
		Managed Router	1M - 50Mbps w/SEC Option	\$ 0.00	\$ 99.00
5	1300 1 st Ave N. St St Pete, FL, 33706	Access Circuit	15 Mbps	\$ 0.00	\$ 1,033
		IP VPN EVC: (Platinum)	Mbps	\$	\$
		Internet EVC/Port (Silver)	Mbps	\$	\$
		IP VPN Port	Mbps	\$	\$
		Managed Router	1M - 50Mbps w/SEC Option	\$ 0.00	\$ 99.00
6	1300 1 st Ave N St St Pete, FL, 33705	Access Circuit	15 Mbps	\$ 0.00	\$ 1,033
		IP VPN EVC: (Platinum)	Mbps	\$	\$
		Internet EVC/Port (Silver)	Mbps	\$	\$
		IP VPN Port	Mbps	\$	\$
		Managed Router	1M - 50Mbps w/SEC Option	\$ 0.00	\$ 99.00
7	street city, state, zip	Access Circuit	Mbps	\$	\$
		IP VPN EVC: (Platinum)	Mbps	\$	\$
		Internet EVC/Port (Silver)	Mbps	\$	\$
		IP VPN Port	Mbps	\$	\$
		Managed Router	Select	\$	\$
8	street city, state, zip	Access Circuit	Mbps	\$	\$
		IP VPN EVC: (Platinum)	Mbps	\$	\$
		Internet EVC/Port (Silver)	Mbps	\$	\$
		IP VPN Port	Mbps	\$	\$
		Managed Router	Select	\$	\$
9	street city, state, zip	Access Circuit	Mbps	\$	\$
		IP VPN EVC: (Platinum)	Mbps	\$	\$
		Internet EVC/Port (Silver)	Mbps	\$	\$
		IP VPN Port	Mbps	\$	\$
		Managed Router	Select	\$	\$
10	street city, state, zip	Access Circuit	Mbps	\$	\$
		IP VPN EVC: (Platinum)	Mbps	\$	\$
		Internet EVC/Port (Silver)	Mbps	\$	\$
		IP VPN Port	Mbps	\$	\$
		Managed Router	Select	\$	\$

This is Schedule Number S-0000163630 to the Frontier Services Agreement February 6, 2017 ("FSA") by and between PINELLAS COUNTY ("Customer") and Frontier Communications of America, Inc. on behalf of itself and its affiliates ("Frontier"). Customer orders and Frontier agrees to provide the Services and Equipment identified in the Schedule below.

Primary Service Location:

Street Address: 10750 Ulmerton Rd
 City, State, Zip: Largo, Florida, 33778

Schedule Date: 08/23/2017

Service Term: 60

A detailed description of the Services, by location, is provided in Attachment 1 to this Schedule, incorporated herein by this reference.

Service	Charges	
	NRC	MRC
Access Circuit	\$ 0.00	\$ 9,158.00
IP VPN EVC	\$ 0.00	\$ 0.00
Internet EVC/Port	\$ 0.00	\$ 0.00
IP VPN Port CoS Scheme: Select One	\$ 0.00	\$ 0.00
Interstate / Intrastate Pricing Certification: Customer certifies that its dedicated point-to-point traffic over such Services: <input checked="" type="checkbox"/> will be more than 10% interstate in nature; OR <input type="checkbox"/> will be 10% or less interstate in nature. The term "interstate in nature" means that the traffic originates in one state and terminates in another state or outside the United States, regardless of how it is routed.		
Managed Service	NRC	MRC
Router(s): see selections on Attachment 1	\$ 0.00	\$ 980.00

- Managed Router Service Description.** Frontier will configure the Router based on documented customer requirements. Customer shall permit Frontier to access the Router's Simple Network Management Protocol (SNMP) variables, and Customer shall, at Frontier's request, permit one or more Frontier network management systems to be the recipient of SNMP trap messages. Frontier will perform monitoring based on standard SNMP traps received from the Router. Frontier will work to isolate and determine the source and severity of the problems. If a problem is caused by either the network transport or the Router, Frontier and Customer will cooperate to restore the Router to operational condition. If the source of the problem is within the Router, Frontier will be responsible for the repair or replacement of the Router, in Frontier's sole discretion. If the source of the problem is not the Router, at Customer's request Frontier will cooperate with Customer to conduct testing and repair activities, subject to Frontier's standard technician rates. Frontier has no responsibility with respect to: (i) electrical work external to the Router, including but not limited to power or back-up power to or from the Router; (ii) Router failures caused by factors not related to the Router or outside Frontier's control, including but not limited to failure of the Service Location or any of Customer's other network equipment or facilities to conform with Frontier's specifications; (iii) use of the Router for any purpose other than as intended by the manufacturer; (iv) damage caused by anyone other than a Frontier employee or representative; (v) Router supplies, accessories, painting, or refurbishing; and (vi) any activity related to anything not furnished by Frontier, or use of Router which fails to conform to manufacturer or Frontier specifications.
- Obligations of Customer.** Customer shall properly use any equipment or software, and all pass codes, personal identification numbers ("PINs") or other access capability obtained from Frontier or an affiliate or vendor of Frontier and shall surrender the equipment and software in good working order to Frontier at a place specified by Frontier and terminate all use of any access capability upon termination or expiration of this Schedule. Customer shall be responsible for all

uses of PINs, pass codes or other access capability during or after the term hereof. Customer agrees that the Equipment and Service provided by Frontier hereunder are subject to the terms, conditions and restrictions contained in any applicable agreements (including software or other intellectual property license agreements) between Frontier and Frontier's vendors.

3. Equipment or Software Not Provided by Frontier. Upon notice from Frontier that the facilities, services, equipment or software not provided or approved by Frontier is causing or is likely to cause hazard, interference or service obstruction, Customer shall immediately eliminate the likelihood of hazard, interference or service obstruction. If Customer requests Frontier to troubleshoot difficulties caused by the equipment or software not provided by Frontier, and Frontier agrees to do so, Customer shall pay Frontier at its then current rates.

4. Internet Acceptable Use Policy and Security. Customer shall comply, and shall cause all Service users to comply, with Frontier's Acceptable Use Policy ("AUP"), which Frontier may modify at any time. The current AUP is available for review at the following address, subject to change: http://www.frontier.com/policies/commercial_aup/. Customer is responsible for maintaining awareness of the current AUP and adhering to the AUP as it may be amended from time to time. Failure to comply with the AUP is grounds for immediate suspension or termination of Frontier Internet Service, notwithstanding any notice requirement provisions of the FSA. Customer is responsible for the security of its own networks, equipment, hardware, software and software applications. Abuse that occurs as a result of Customer's systems or account being compromised or as a result of activities of third parties permitted by Customer may result in suspension of Customer's accounts or internet access by Frontier. Each party agrees to be responsible for its own negligence and that of its employees and agents.

This Schedule is not effective and pricing, dates and terms are subject to change until signed by both parties, and may not be effective until approved by the FCC and/or applicable State Commission. This Schedule and any of the provisions hereof may not be modified in any manner except by mutual written agreement. The above rates do not include any taxes, fees or surcharges applicable to the Service. This Schedule, and all terms and conditions of the FSA, is the entire agreement between the parties with respect to the Services described herein, and supersedes any and all prior or contemporaneous agreements, representations, statements, negotiations, and undertakings written or oral with respect to the subject matter hereof.

Frontier Communications of America, Inc.	PINELLAS COUNTY
Frontier's Signature: 	Customer's Signature:
Printed Name: Robert M. Fox	Printed Name: Mark S. Woodard
Title: Regional Sales Manager	Title: County Administrator
Date: 8-24-17	Date: September 15, 2017

**ATTACHMENT 1
 SERVICE DESCRIPTION BY LOCATION**

Service Location	Service Address: (street, city, state)	Service	Bandwidth / Type	Charges	
				NRC	MRC
Primary	10750 Ulmerton Rd. Largo, FL, 33778	Access Circuit	15 Mbps	\$ 0.00	\$ 1,022.00
		IP VPN EVC: (Platinum)	Mbps	\$	\$
		Internet EVC/Port (Silver)	Mbps	\$	\$
		IP VPN Port	Mbps	\$	\$
		Managed Router	1M - 50Mbps w/SEC Option	\$ 0.00	\$ 99.00
2	10750 Ulmerton Rd. Largo, FL, 33778	Access Circuit	15 Mbps	\$ 0.00	\$ 1,022.00
		IP VPN EVC: (Platinum)	Mbps	\$	\$
		Internet EVC/Port (Silver)	Mbps	\$	\$
		IP VPN Port	Mbps	\$	\$
		Managed Router	1M - 50Mbps w/SEC Option	\$ 0.00	\$ 99.00
3	22211 US 19 N Clearwater, FL, 33765	Access Circuit	15 Mbps	\$ 0.00	\$ 1,022.00
		IP VPN EVC: (Platinum)	Mbps	\$	\$
		Internet EVC/Port (Silver)	Mbps	\$	\$
		IP VPN Port	Mbps	\$	\$
		Managed Router	1M - 50Mbps w/SEC Option	\$ 0.00	\$ 99.00
4	22211 US 19 N Clearwater, FL, 33765	Access Circuit	15 Mbps	\$ 0.00	\$ 1,022.00
		IP VPN EVC: (Platinum)	Mbps	\$	\$
		Internet EVC/Port (Silver)	Mbps	\$	\$
		IP VPN Port	Mbps	\$	\$
		Managed Router	1M - 50Mbps w/SEC Option	\$ 0.00	\$ 99.00
5	201 Highland Avenue NE Largo, FL, 33770	Access Circuit	10 Mbps	\$ p.p.p	\$ 845.00
		IP VPN EVC: (Platinum)	Mbps	\$	\$
		Internet EVC/Port (Silver)	Mbps	\$	\$
		IP VPN Port	Mbps	\$	\$
		Managed Router	1M - 50Mbps w/SEC Option	\$ 0.00	\$ 99.00
6	201 Highland Ave NE Largo, FL, 33770	Access Circuit	10 Mbps	\$ 0.00	\$ 845.00
		IP VPN EVC: (Platinum)	Mbps	\$	\$
		Internet EVC/Port (Silver)	Mbps	\$	\$
		IP VPN Port	Mbps	\$	\$
		Managed Router	1M - 50Mbps w/SEC Option	\$ 0.00	\$ 99.00
7	440 S Huey Ave Tarpon Springs, FL, 34689	Access Circuit	10 Mbps	\$ 0.00	\$ 845.00
		IP VPN EVC: (Platinum)	Mbps	\$	\$
		Internet EVC/Port (Silver)	Mbps	\$	\$
		IP VPN Port	Mbps	\$	\$
		Managed Router	1M - 50Mbps w/SEC Option	\$ 0.00	\$ 99.00
8	440 S Huey Ave Tarpon Springs, FL, 34689	Access Circuit	10 Mbps	\$ 0.00	\$ 845.00
		IP VPN EVC: (Platinum)	Mbps	\$	\$
		Internet EVC/Port (Silver)	Mbps	\$	\$
		IP VPN Port	Mbps	\$	\$
		Managed Router	1M - 50Mbps w/SEC Option	\$ 0.00	\$ 99.00
9	7700 59 th Street N Pinellas Park, FL, 33781	Access Circuit	10 Mbps	\$ 0.00	\$ 845.00
		IP VPN EVC: (Platinum)	Mbps	\$	\$
		Internet EVC/Port (Silver)	Mbps	\$	\$
		IP VPN Port	Mbps	\$	\$
		Managed Router	1M - 50Mbps w/SEC Option	\$ 0.00	\$ 99.00
10	770 59 th Street N Pinellas Park, FL, 33781	Access Circuit	10 Mbps	\$ 0.00	\$ 845.00
		IP VPN EVC: (Platinum)	Mbps	\$	\$
		Internet EVC/Port (Silver)	Mbps	\$	\$
		IP VPN Port	Mbps	\$	\$
		Managed Router	1M - 50Mbps w/SEC Option	\$ 0.00	\$ 99.00

The terms and conditions within this IP VPN Service Level Attachment ("SLA") are hereby incorporated into the IP VPN Schedule(s) executed by and between Pinellas County ("Customer") and Frontier Communications of America, Inc. ("Frontier"). The terms this SLA apply exclusively to the IP VPN network elements directly within Frontier's management responsibility and control ("On-Net Service").

1. Operational Service Performance Objectives.

- A. **Availability:** On-Net Service availability is coupled with the underlying transport availability. "Availability" is defined as the ability to exchange IP packets with the IP VPN configuration via the On-Net Service IP VPN port(s). Availability is measured by the number of minutes during a calendar month that the On-Net Service is operational, divided by the total minutes in that month's billing cycle. Calculation is based on the stop-clock method referenced by date-time of the Customer-reported Service Outage, and ends when Frontier re-establishes compliant port operation. Frontier's On-Net Service Availability Target is 99.99%. A "Service Outage" occurs when On-Net Service is completely unavailable.

In the event of a Service Outage of greater than a total of 4 minutes and 35 seconds in one calendar month, subject to the terms of this SLA, Customer will be eligible for a credit as follows:

- i. **Credits:** For the initial 2 hour period (or part) of Service Outage, Frontier will credit Customer 10% of the applicable MRC for the applicable month, for all affected On-Net Service ports. For each successive 1 hour period of Service Outage, Frontier will credit Customer 5% of the applicable MRC for the applicable month for all affected On-Net Service port.
- ii. **Chronic Outage:** If an Individual circuit experiences either (i) a single Service Outage of greater than twenty-four (24) hours in any calendar month, (ii) 3 or more Service Outages 8 hours or more during a rolling 6 month period, or (iii) 15 separate Service Outages (any duration) within a calendar month, then Customer may terminate the affected circuit without penalty (written notice to Frontier required within 15 days of the event triggering the termination right).
If Customer terminates more than 25% of the Services as a result of Chronic Outage, or the aggregate MRCs of the terminated circuits is greater than 50% of the MRCs for all Frontier-provisioned IP VPN circuits, then Customer may terminate all of its Frontier IP VPN circuits with 30 days written notice, with no further liability other than payment to Frontier for Services rendered prior to the effective date of the termination.

- B. **IP VPN Performance Metrics:** The following metrics and targets are used as an operational overview of IP VPN network quality. For clarification, this relates only to the Frontier network up to the point of demarcation. These metrics are reported on a monthly basis. A "Service Degradation" occurs if the On-Net Service fails to perform in compliance with the following targets, measured as an average over the previous billing month.

- i. **Packet Delivery:** Frontier guarantees average, monthly, successful packet delivery based on CoS between any 2 Provider Edge routers (PEs) on the Frontier IP VPN network. The Packet Delivery rate is the percentage of packets successfully transported between any two PE router ports on the Frontier IP VPN network that transit the Frontier IP-over-MPLS network.

CoS Level	Packet Delivery % per Site Pair
Basic and Basic Plus	≥ 99.9%
Enhanced and Enhanced Plus	≥ 99.99%
Premium and Premium Plus	≥ 99.999%

- **Credits:** If the actual, monthly, average Packet Delivery level on Frontier's IP network falls to meet these performance objectives, Frontier will credit Customer 10% of the applicable MRC for the applicable month for the affected On-Net Service ports.
- **Excessive Service Degradation:** If Customer experiences Packet Delivery performance of less than 99.9% for Premium CoS, or 99.0% for Enhanced CoS, for a period of 2 or more hours, the duration of the Service degradation will be considered a Service Outage providing Customer with the SLA credit outlined in Section 1(A) in lieu of the standard Packet Delivery credit. This provision does not apply to (i) Basic CoS, (ii) service provisioned on third party networks, or (iii) when the lower packet delivery rate results from Customer sending more Premium CoS traffic than allocated in total (Committed plus Reserved) on a given port.

- ii. **Latency:** Frontier guarantees an average (in a calendar month) roundtrip latency between the Provider Edge routers (PEs) on the Frontier IP VPN network within Customer's VPN of no more than 95 ms.
 - Latency is measured between ingress and egress ports on the Frontier network (PE routers) and does not apply to local access circuits. Latency is measured by, and SLA credits are based on, Frontier's network management system measurements.
 - **Credits:** If the actual, average, monthly, roundtrip latency exceeds these parameters, Frontier will credit Customer 10% of the applicable MRC for the month for the affected customer ports.
 - **Excessive Service Degradation:** If Customer experiences Latency performance more than 3 times the guaranteed performance level for a period of 2 or more hours, this time also will be considered a Service Outage, providing Customer with the SLA credit outlined in Section 1(A) in lieu of the standard Latency credit.

- iii. **Packet Jitter:** Frontier guarantees average (in a calendar month) Jitter (inter-packet differential) performance on transmissions between any 2 Provider Edge routers (PEs) on the Frontier IP VPN network within Customer's VPN based on the following table:

CoS Level	Average Jitter per Site Pair
Basic and Basic Plus	≤ 30 ms
Enhanced and Enhanced Plus	≤ 15 ms
Premium and Premium Plus	≤ 5 ms

- **Credits:** If the actual, monthly, average Jitter on Frontier's IP network fails to meet these performance guarantees, Frontier will credit Customer 10% of the applicable MRC for the applicable month for the affected On-Net Service ports.
 - **Excessive Service Degradation:** If Customer experiences Jitter performance degradation of more than 3 times the applicable threshold (above) for a sustained period of 2 or more hours, this time period also will be considered a Service Outage providing Customer with the SLA credit outlined in Section 1(A) in lieu of the standard Packet Delivery credit. This provision does not apply to Basic CoS, to IP VPN service provisioned on third party networks.
- C. **Mean Time to Repair & Resolution:** Frontier commits to restore IP VPN Service within an average of four (4) hours with respect to Service Outages in any month. MTTR is calculated by referencing the reported Trouble Ticket of the Service Outage. MTTR is calculated as follows:
- MTTR formula = The total duration of the Service Outage, excluding Customer delays (in hours) for all Trouble Tickets in a month / total number of Trouble Tickets.
- **Credits:** If MTTR exceeds 4 hours in a given month, Frontier will credit Customer 10% of the applicable MRC for the month for the affected On-Net Service ports, identified in Frontier logged Trouble Tickets for that month.

2. Service Impairment Reporting Procedure.

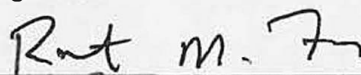

- A. A "Service Impairment" means either a Service Outage or a Service Degradation. Frontier will maintain a point-of-contact for Customer to report a Service Impairment, twenty-four (24) hours a day, seven (7) days a week.
- B. When Customer believes that a Service Impairment has occurred, Customer must contact Frontier's Network Operations Center ("NOC") at 1-(800) 608-8029 to identify the Service Impairment and initiate an investigation of the cause ("Trouble Ticket"). Responsibility for Trouble Ticket initiation rests solely with Customer. Once the Trouble Ticket has been opened, the appropriate Frontier departments will initiate diagnostic testing and isolation activities to determine the source. In the event of a Service Impairment, Frontier and Customer will cooperate to restore the Service. If the cause of a Service Impairment is a failure of Frontier's equipment or facilities, Frontier will be responsible for the repair. If the degradation is caused by a factor outside the control of Frontier, Frontier will cooperate with Customer to conduct testing and repair activities at Customer's cost and at Frontier's standard technician rates.
- C. A Service Impairment begins when a Trouble Ticket is initiated and ends when the affected On-Net Service is operating in accordance with the performance metrics outlined in Section 1B; provided that if the Customer reports a problem with a Service but declines to allow Frontier access for testing and repair, the Service will be considered to be impaired, but will not be deemed a Service Impairment subject to these terms.


- D. If Frontier dispatches a field technician to perform diagnostic troubleshooting and (i) the source of the problem is the Customer's equipment or facilities, or (ii) the reported problem cannot be replicated ("No Trouble Found"), or (iii) the failure was caused by the acts or omissions of Customer or its employees, affiliates, contractors, agents, representatives or invitees; then Customer will pay Frontier for all related time and material costs at Frontier's standard rates. **Dispatch of a field technician will be subject to the County's prior approval.**

3. Credit Request and Eligibility.

- A. In the event of a Service Impairment, Customer may be entitled to a credit against the applicable On-Net Service MRC if (i) Customer initiated a Trouble Ticket; (ii) the Service Impairment was caused by a failure of Frontier's equipment, facilities or personnel; (iii) the Service Impairment warrants a credit based on the terms of Section 1; and (iv) Customer requests the credit within thirty (30) days of last day of the calendar month in which the Service Impairment occurred.
- B. Credits do not apply to Service Impairments caused, in whole or in part, by one or more of the following: (i) the acts or omissions of Customer or its employees, affiliates, contractors, agents, representatives or invitees; (ii) failure of power; (iii) the failure or malfunction of non-Frontier equipment or systems; (iv) circumstances or causes beyond the control of Frontier or its representatives; (v) a Planned Service Interruption; or (vi) Emergency Maintenance. In addition, Customer will not be issued credits for a Service Impairment during any period in which Frontier is not provided with access to the Service location or any Frontier network element, or while Customer is testing and/or verifying that the problem has been resolved. "Planned Service Interruption" means any Service Impairment caused by scheduled maintenance, planned enhancements or upgrades to the Frontier network; provided that Frontier will endeavor to provide at least five (5) business days' notice prior to any such activity if it will impact the Services provided to Customer. "Emergency Maintenance" means maintenance which, if not performed promptly, could result in a serious degradation or loss of service over the Frontier network.
- C. Notwithstanding anything to the contrary, all credit allowances will be limited to maximum of 25% of the MRC for the impacted On-Net Service, per month. For cascading failures, only the primary or causal failure is used in determining Service Impairment and associated consequences. Only one service level component metric can be used for determining Service credits. In the event of the failure of the Service to meet multiple metrics in a one-month period, the highest Service credit will apply, not the sum of multiple Service credits.
- D. The final determination of whether Frontier has or has not met SLA metrics will be based on Frontier's methodology for assessment of compliant performance. Service Outage credits are calculated based on the duration of the Service Outage, regardless of whether such Service Outage is the result of failure of the Service to meet one or more performance metric.
- E. Credit allowances, if any, will be deducted from the charges payable by Customer hereunder and will be expressly indicated on a subsequent bill to Customer. Credits provided pursuant to this SLA shall be Customer's sole remedy with regard to Service Impairments.

This SLA constitutes the entire agreement between the parties pertaining to the subject matter herein and supersedes all prior oral and written proposals, correspondence and memoranda with respect thereto, and may not be modified in any manner except by mutual written agreement.

<Insert Frontier's Name from FSA>	<Insert Customer's Name>
Frontier's Signature: 	Customer's Signature: 
Printed Name: Robert M. Fox	Printed Name: Mark S. Woodard
Title: Regional Sales Manager	Title: County Administrator
Date: 8-23-17	Date: September 15, 2017

APPROVED AS TO FORM
By: 
Office of the County Attorney