



Greater New Haven Water Pollution Control Authority

260 East Street New Haven, CT 06511
203.466.5280 p 203 772.1564 f www.gnhwpca.com

REGULAR MEETING OF THE
GREATER NEW HAVEN WATER POLLUTION CONTROL AUTHORITY
BOARD OF DIRECTORS
WEDNESDAY, JUNE 9, 2021 6:00 P.M.
260 EAST STREET
NEW HAVEN, CONNECTICUT

****In accordance with Section 2.10 of the Authority's Bylaws and Governor Lamont's Executive Orders concerning "Stay Safe, Stay Home" and the conduct of public meetings remotely, the meeting will be conducted via teleconference of the Board of Directors.*

NO IN-PERSON PUBLIC ATTENDANCE WILL BE PERMITTED.

*A recording or transcript of the meeting will be accessible to the public online after the meeting at the GNHWPCA website at gnhwpca.com. ****

CALL-IN INFORMATION:

Dial: (929) 205-6099

Enter meeting ID number 885 5247 7629 and press #

Enter passcode 979415 and press #


AGENDA

1. Approval of minutes of May 12, 2021 – Regular Meeting.
2. Public participation relating to agenda items.
3. Consideration and approval of a resolution authorizing the write-off of \$39,773.00 of accounts receivable as uncollectable.
4. Consideration and approval of a resolution approving a change order to the agreement with Cerilli Construction LLC, for the sanitary sewer manhole cover raising extending the term of such agreement to June 30, 2022.
5. Consideration and approval of a resolution approving a change order to the agreement with Frontier Communications of America, Inc., for the fiber line data networking service extending the term for an additional 36 months for \$1,480 per month.
6. Executive summary and department updates and presentations.

7. Consideration and approval, as necessary, of any other new business of the Authority.
8. Call to the public.
9. Adjournment.



WRITE-OFFS
FY 2020-2021

|  | | | | | | | | | |
|---|-------------------------------|-------------------|----------|-------------|------------|-------------|-------------|---|-------------------|
| ACCOUNT # | ADDRESS | DEBTOR | LIEN | INTEREST | MISC | PRINCIPAL | TOTAL | COMMENT | NEW OWNER |
| 0144534-00301872 | 28 Stevens St, New Haven | Carnell Pugh | \$196.00 | \$1,790.21 | \$13.04 | \$2,577.34 | \$4,576.59 | Tax Foreclosure (By Sale) - City of New Haven No proceeds from sale | Poindexter FS LLC |
| 0044898-00316962 | 37 Stevens St, Hamden | Laura Chesmar | \$328.00 | \$15,050.47 | \$6,894.48 | \$7,849.11 | \$30,122.06 | Tax Foreclosure (By Sale) - Town of Hamden No proceeds from sale | Andres Pastuzano |
| 0146022-00248674 | 47 White St, New Haven | Douglas Hall | \$70.00 | \$809.85 | \$121.43 | \$609.65 | \$1,610.93 | Tax Foreclosure (By Sale) - City of New Haven No proceeds from sale | Abdias Rodriguez |
| 0036987-00212329 | 922 Winchester Ave, New Haven | Margaret Mitchner | \$28.00 | \$529.32 | \$19.56 | \$456.53 | \$1,033.41 | Tax Foreclosure (Strick) - City of New Haven | City of New Haven |
| 0122871-00240957 | 572 Winthrop Ave, New Haven | David McNaughton | \$112.00 | \$600.79 | \$92.87 | \$1,624.35 | \$2,430.01 | Tax Foreclosure (Strick) - City of New Haven | City of New Haven |
| | | | | | | | | | |
| | | | | | | | | | |
| | | | | | | | | | |
| | | | | | | | | | |
| TOTALS | | | | | | | | | |
| | | | \$734.00 | \$18,780.64 | \$7,141.38 | \$13,116.98 | \$39,773.00 | | |



WRITE-OFF

ACCOUNT# 0144534-00301872
SERVICE ADDRESS: 28 STEVENS ST, NEW HAVEN
NAME: CARNELL PUGH

FISCAL YEAR: 2020-2021

| | |
|------------------|------------------------|
| LIEN | \$ 196.00 |
| INTEREST | 1,790.21 |
| MISC | 13.04 |
| PRINCIPAL | <u>2,577.34</u> |
| TOTAL | \$ 4,576.59 |

EXPLANATION:

**CITY OF NEW HAVEN COMMENCED FORECLOSURE ACTION FOR UNPAID TAXES. PROPERTY WAS SOLD TO POINDEXTER FS LLC, FREE AND CLEAR OF ALL ENCUMBRANCES SUBSEQUENT IN RIGHT. NO PROCEEDS WERE LEFT FROM THE SALE. GNHWPCA LIENS AND DEBT ARE EXTINGUISHED.
V1010 P232 12/31/20**

**BATCH #
RELEASE LIENS
REMOVED FROM COLLECTION**

Approved by the GNHWPCA Board of Directors _____

**Gabe Varca
Director of Finance & Administration**



WRITE-OFF

ACCOUNT# 0044898-00316962
SERVICE ADDRESS: 37 STEVENS ST, HAMDEN
NAME: LAURA CHESMAR

FISCAL YEAR: 2020-2021

| | |
|------------------|------------------------|
| LIEN | \$ 328.00 |
| INTEREST | 15,050.47 |
| MISC | 6,894.48 |
| PRINCIPAL | <u>7,849.11</u> |
| TOTAL | \$30,122.06 |

EXPLANATION:

TOWN OF HAMDEN COMMENCED FORECLOSURE ACTION FOR UNPAID TAXES. PROPERTY WAS SOLD TO ANDRES PASTUZANO, FREE AND CLEAR OF ALL ENCUMBRANCES SUBSEQUENT IN RIGHT. NO PROCEEDS WERE LEFT FROM THE SALE. GNHWPCA LIENS AND DEBT ARE EXTINGUISHED.
V4782 P328 01/12/21

BATCH #
RELEASE LIENS
REMOVED FROM COLLECTION

Approved by the GNHWPCA Board of Directors _____

Gabe Varca
Director of Finance & Administration



WRITE-OFF

ACCOUNT# 0146022-00248674
SERVICE ADDRESS: 47 WHITE ST, NEW HAVEN
NAME: DOUGLAS HALL

FISCAL YEAR: 2020-2021

| | |
|------------------|----------------------|
| LIEN | \$ 70.00 |
| INTEREST | 809.85 |
| MISC | 121.43 |
| PRINCIPAL | <u>609.65</u> |

TOTAL \$ 1,610.93

EXPLANATION:

CITY OF NEW HAVEN COMMENCED FORECLOSURE ACTION FOR UNPAID TAXES. PROPERTY WAS SOLD TO ABDIAS RODRIGUEZ, FREE AND CLEAR OF ALL ENCUMBRANCES SUBSEQUENT IN RIGHT. NO PROCEEDS WERE LEFT FROM THE SALE. GNHWPCA LIENS AND DEBT ARE EXTINGUISHED.
V9987 P45 03/25/20

BATCH #
RELEASE LIENS
REMOVED FROM COLLECTION

Approved by the GNHWPCA Board of Directors _____

Gabe Varca
Director of Finance & Administration



WRITE-OFF

ACCOUNT# 0036987-00212329
SERVICE ADDRESS: 922 WINCHESTER AVE, NEW HAVEN/HAMDEN
NAME: MARGARET MITCHNER

FISCAL YEAR: 2020-2021

| | |
|------------------|----------------------|
| LIEN | \$ 28.00 |
| INTEREST | 529.32 |
| MISC | 19.56 |
| PRINCIPAL | <u>456.53</u> |

TOTAL \$ 1,033.41

EXPLANATION:

CITY OF NEW HAVEN & TOWN OF HAMDEN BOTH COMMENCED FORECLOSURE ACTION FOR UNPAID TAXES. PROPERTY WAS CONVEYED TO THE CITY OF NEW HAVEN, FREE AND CLEAR OF ALL ENCUMBRANCES SUBSEQUENT IN RIGHT. GNHWPCA LIENS AND DEBT ARE EXTINGUISHED.
V10156 P327 04/20/21

BATCH #
RELEASE LIENS
REMOVED FROM COLLECTION

Approved by the GNHWPCA Board of Directors _____

Gabe Varca
Director of Finance & Administration



WRITE-OFF

ACCOUNT# 0122871-00240957
SERVICE ADDRESS: 572 WINTHROP AVE, NEW HAVEN
NAME: DAVID MCNAUGHTON

FISCAL YEAR: 2020-2021

| | |
|------------------|------------------------|
| LIEN | \$ 112.00 |
| INTEREST | 600.79 |
| MISC | 92.87 |
| PRINCIPAL | <u>1,624.35</u> |
| TOTAL | \$ 2,430.01 |

EXPLANATION:

**CITY OF NEW HAVEN COMMENCED FORECLOSURE ACTION FOR UNPAID TAXES. PROPERTY WAS CONVEYED TO THE CITY OF NEW HAVEN, FREE AND CLEAR OF ALL ENCUMBRANCES SUBSEQUENT IN RIGHT. GNHWPCA LIENS AND DEBT ARE EXTINGUISHED.
V9986 P135 03/24/20**

BATCH #
RELEASE LIENS
REMOVED FROM COLLECTION

Approved by the GNHWPCA Board of Directors _____

Gabe Varca
Director of Finance & Administration



Greater New Haven
Water Pollution Control Authority
260 East Street
New Haven, CT 06511

Project: Sanitary Sewer Manhole Cover Raising
Project Number: SSR 2017-08
Date: May 5, 2021

To Whom It May Concern,

Cerilli Construction is in agreement to extend our contract with GNHWPCA for one additional year holding to our current pricing sheet until June 30, 2022. It has been a pleasure working with the staff and we look forward to continuing our business relationship.

If any additional information is needed please let us know.

Robert J Cerilli- Member

www.cerilliconstructionct.com

Email: cerilliconstruction@gmail.com

Tel: 203.234.2275
Fax: 203.239.1150

83 N Hill Rd. North Haven, CT 06473



Greater New Haven Water Pollution Control Authority

260 East Street New Haven, CT 06511
203.466.5280 p 203 772.1564 f www.gnhwpca.com

MEMORANDUM

DATE: May 24, 2021
TO: Sidney J. Holbrook, Executive Director
FROM: Gary Zrelak, Director of Operations
RE: **Project SSR 2017-08 Contract Extension**
Sanitary Sewer Manhole Cover Raising
Cerilli Construction LLC

Sid:

I request that the above-mentioned recommendation be added to the June 9, 2021 Board Meeting Agenda for resolution.

The Operations Department requests to extend the sanitary sewer manhole cover raising contract with Cerilli Construction LLC until June 30, 2022. The contractor has agreed to maintain the unit prices submitted under the original contract. The Authority budgets for 250 manhole covers and frames to be raised annually within the collection system. The contractor performance has been excellent and will maintain the existing pricing to June of 2022 to align with the fiscal year.



Gary Zrelak
Director of Operations

e-copy: Gabe Varca, Director of Finance & Administration
Lou Criscuolo, Deputy Director of Finance & Administration
Thomas Sgroi, Director of Engineering
Rick Hurlburt, Superintendent of Sewers
Joe Megale, Deputy Director of Operations



Greater New Haven Water Pollution Control Authority

260 East Street New Haven, CT 06511
203.466.5280 p 203 772.1564 f www.gnhwpca.com

MEMORANDUM

DATE: June 1, 2021

TO: Sidney J. Holbrook, Executive Director

FROM: Ernie Williams, IT Project Manager

RE: **Extension of 36 Month Fiber Rental Recommendation to Board**
Frontier Communications

Sid:

I request that the above-mentioned recommendation be added to the June ⁹10, 2021 Board Meeting Agenda for resolution.

The IT staff requests the approval to continue with the lease of a Fiber Line service from Frontier. The recommendation is an extension of the initial 36 month Agreement for an additional 36 months. The pricing terms remain the same as the initial 36 month period. The monthly recurring would remain at \$1,480 for the term.

This fiber service connects 260 East St to ESWPAF and to the following four Pump Stations: East St, The Boulevard, Morris Cove, and State & Union. The fiber is used for security camera surveillance and communications to the PLC's at the four Pump Stations.

This project remains (& is planned to remain) in the annual budgets' Operating Fund.

Ernie Williams
IT Project Manager

e-copy: Gabe Varca, Director of Finance & Administration
Lou Criscuolo, Deputy Director of Finance & Administration
Gary Zrelak, Director of Operations
Thomas Sgroi, Director of Engineering



E-LINE SCHEDULE
ETHERNET VIRTUAL PRIVATE LINE (EVPL)
ETHERNET PRIVATE LINE (EPL)

Frontier Confidential

This is Schedule Number S-0000265111 to the Frontier Services Agreement dated December 21, 2017 ("FSA") by and between Greater New Haven Water Pollution Control Authority ("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: 260 East Street, New Haven CT 06511
 Schedule Type/Purpose: Renew existing Services (this Schedule supersedes)

Schedule Date: May 7, 2021
 Service Term: 36 months

| Service | NRC | MRC |
|---|----------------|-------------------|
| Ethernet Virtual Private Line (EVPL) | \$ | \$ |
| Ethernet Virtual Private Line (EVPL) – Private Network for Frontier Managed SD WAN (details in Table 2) | \$ | \$ |
| Ethernet Private Line (EPL) | \$ 0.00 | \$ 1260.00 |
| Ethernet Virtual Circuit(s) – EVC (details in Table 3) | \$ 0.00 | \$ 220.00 |
| Ethernet Internet Access (EIA) Internet Port and Silver EVC (details in Table 4) | \$ | \$ |
| Special Construction | \$ | \$ |
| Total: | \$ 0.00 | \$ 1480.00 |

Interstate / Intrastate Pricing Certification: "interstate in nature" means that the traffic transported by the Service originates in one state and terminates in another state or outside the United States, regardless of how it is routed. Designation may impact taxes and surcharges applicable to the Service. Customer certifies that its traffic over such Services will be: ☐ more than 10% interstate in nature (subject to federal jurisdiction/fees) ☒ 10% or less interstate in nature (subject to state jurisdiction/fees)

Table 1: E-LINE

| Service Location | Service Address, and NPA NXX: | Service | Charges | |
|-------------------|---|---------------------------------------|----------------|-------------------|
| | | | NRC | MRC |
| A renew | BDT 20210318002384 For hub site Access and 4 site renewal. 260 East Street, New Haven, CT, 06511, | Access CIR (Mbps) 40 MbpsMbps | \$ 0.00 \$ | \$ 360.00 \$ |
| B renew | 1 State Street, New Have, CT, 06511, | Access CIR (Mbps) 10 Mbps Mbps | \$ 0.00 \$ | \$ 225.00 \$ |
| C renew | 17 Sea Street, New Haven, CT, 06519, | Access CIR (Mbps) 10 Mbps Mbps | \$ 0.00 \$ | \$ 225.00 \$ |
| D renew | 1 East Street, New Haven, CT, 06511, | Access CIR (Mbps) 10 MbpsMbps | \$ 0.00 \$ | \$ 225.00 \$ |
| E renew | 49 Morris Causeway, New Haven, CT , 06511, | Access CIR (Mbps) 10 Mbps Mbps | \$ 0.00 \$ | \$ 225.00 \$ |
| Subtotal: | | | \$ 0.00 | \$ 1260.00 |

Table 2: SD WAN Private Network

| Service Level (Silver, Gold, Platinum) | Select Mbps | Service Location from Table 1 | MRC |
|--|-------------|-------------------------------|-----------|
| Select | Select Mbps | Select | \$ |
| Select | SelectMbps | Select | \$ |
| Select | SelectMbps | Select | \$ |
| Select | SelectMbps | Select | \$ |
| Select | Select Mbps | Select | \$ |
| Subtotal: | | | \$ |

Table 3: ETHERNET VIRTUAL CIRCUIT(S)

| Type of EVC (Silver, Gold, Platinum) | EVC CIR (Mbps) | Originating Access Service Location from Table 1 | Terminating Access Service Location from Table 1 | MRC |
|--------------------------------------|----------------|--|--|-----------|
| Silver renew | 10Mbps | A | B | \$ 55.00 |
| Silver renew | 10Mbps | A | C | \$ 55.00 |
| Silver renew | 10Mbps | A | D | \$ 55.00 |
| Silver renew | 10Mbps | A | E | \$ 55.00 |
| Select | Mbps | Select | Select | \$ |
| Subtotal: | | | | \$ 220.00 |

Table 4: Internet Access

| Internet Service added to LAN Solution | Internet Elements | Originating Access Location | Termination on the Internet | MRC |
|--|-------------------|-----------------------------|-----------------------------|-----|
| EIA Internet Port and Silver EVC | Mbps | Select | Internet Port | \$ |
| EIA Internet Port and Silver EVC | Mbps | Select | Internet Port | \$ |
| EIA Internet Port and Silver EVC | Mbps | Select | Internet Port | \$ |
| EIA Internet Port and Silver EVC | Mbps | Select | Internet Port | \$ |
| Subtotal: | | | | \$ |

1. Service Description:

a. Ethernet Virtual Private Line (EVPL) is a data transport configuration providing point-to-point or point-to-multipoint Ethernet connections between a pair of User Network Interfaces (UNIs). EVPL as a point-to-point configuration can be used to support delivery of eligible Frontier services to a designated Customer. Location (e.g. Frontier Connect—Cloud). EVPL is a carrier grade data networking service featuring Quality of Service (QoS) and the following progressively higher Class of Service (CoS) levels: Silver Service, Gold Service (Priority Data), or Platinum Service (Real Time). Frontier provides EVPL Silver Service on a standard best efforts' basis and subject to unspecified variable bit rate, latency, and packet loss with dependencies on current traffic load(s) within Frontier's Shared Infrastructure. EVPL will be designed, provisioned and implemented according to standard switched Ethernet components consisting of service multiplexed capability over UNIs and Ethernet Virtual Connections (EVCs) through the use of Virtual Local Area Networks (VLANs) in order to secure traffic separation, privacy and security between Customer's Service Locations over Frontier's shared switch and backbone infrastructure. Ethernet Virtual Private Line will accept and carry untagged and or tagged traffic as described per IEEE 802.1Q networking standards specific to Frontier's Ordering Guidelines for this Service. Physical termination shall conform to applicable rules and regulations with respect to Minimum point of entry (MPOE) and demarcation point. If Customer requests extensions beyond the MPOE, such extension (s) shall be subject to Frontier's cabling service policies and Frontier's charges related thereto per separate Frontier Cabling Service and Fee Schedule.

b. Ethernet Private Line (EPL) is a data transport configuration providing point-to-point or point to multipoint switched Ethernet connections between a pair of User Network Interfaces (UNIs). EPL is a carrier grade data networking service featuring Quality of Service (QoS) with the following Class of Service (CoS) levels: Silver Service, Gold Service (Priority Data), or Platinum Service (Real Time). Frontier provides EPL Silver Service on a standard best efforts basis and subject to unspecified variable bit rate, latency, and packet loss with dependencies on current traffic load(s) within Frontier's Shared Infrastructure. EPL will be designed, provisioned and implemented according to standard switched Ethernet components consisting of an all to one bundled, port based, non-service multiplexed Ethernet Virtual Circuit (EVC) and User Network Interface (UNI).

c. SD WAN Private Network is a data transport configuration providing multipoint-to-multipoint connections to each Customer User Network Interface (UNI). SD WAN Private Network consists of two (2) or more locations, providing full mesh connectivity for all locations. SD WAN Private Network requires Customer subscribe to Frontier SD WAN service and an EVPL (Table 1) access

2. 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 Frontier determines, in its reasonable discretion, that the costs of provisioning Service to any service location are materially higher than normal, Frontier will notify Customer of the additional costs associated with provision of the Services and request Customer's acceptance of such costs as a condition to proceeding ("Special Construction"). Upon notification that Special Construction is required, Customer will have ten (10) business days to notify Frontier of its acceptance. 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. If the Customer agrees to the Special Construction, Frontier and Customer will execute a replacement Schedule.

3. 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



E-LINE Schedule
ETHERNET VIRTUAL PRIVATE LINE (EVPL)
ETHERNET PRIVATE LINE (EPL)

Frontier Confidential

the terms, conditions and restrictions contained in any applicable agreements (including software or other intellectual property license agreements) between Frontier and Frontier's vendors. Customer is responsible to ensure appropriate processes and protocols are in place for rate shaping to the amount of throughput ordered. Customer acknowledges that failure to comply with this responsibility may negatively impact Service performance, and the ability to collect service credits as defined in Exhibit 1.

4. After Hours/Holiday Labor Hours. If Customer desires coordinated turn up services ("After Hours") during non-business hours, defined below, then the After Hours services shall be provided at the rate of \$175.00 per hour. Non-business hours include: (1) weeknights between the hours of 5:00 p.m. and 7:59 a.m. local time; (2) weekends, including Saturday and/or Sunday and (3) the Frontier designated holidays (New Year's Day, Martin Luther King Day, President's Day, Memorial Day, Independence Day, Labor Day, Veteran's Day, Thanksgiving Day and Christmas Day).

Such After Hours services may be subject to change, based upon Frontier's reasonable determination of increases in actual costs to provide such After Hours services, determined in accordance with generally accepted commercial accounting practices, and consistent with After Hours service charges for projects comparable to the project outlined in this Schedule.

5. 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. Customer will defend and indemnify Frontier and its affiliates with respect to claims arising from Customer's or third parties' usage of Frontier Internet access through Customer's hardware or software.

6. Service Level Agreement. The E-Line Service Level Agreement for the described Ethernet Services is attached hereto and incorporated herein as Exhibit 1.

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.

Greater New Haven Water Pollution Control Authority

Signature: _____
Printed Name: _____
Title: _____
Date: _____

Signature: _____
Printed Name: _____
Title: _____
Date: _____

EXHIBIT 1

E-LINE SERVICE LEVEL AGREEMENT

This **E-LINE Service Level Agreement ("SLA")** applies to Ethernet Services ordered pursuant to an E-LINE Ethernet Virtual Private Line (EVPL), Ethernet Private Line (EPL) Schedule executed by and between **Greater New Haven Water Pollution Control Authority ("Customer")** and **Frontier Communications of America, Inc. ("Frontier")**. The terms of this SLA apply exclusively to the Ethernet network elements directly within Frontier's management responsibility and control ("E- E-LINE Service").

1. Operational Objectives

- A. **Availability:** Circuit Availability is the ability to exchange data packets with the nearest Frontier Internet Point of Presence or E-LINE Customer egress port (Z location) via the ingress port (A location). "Service Outage" occurs when packet transport is unavailable or when the output signal is outside the limits of this service guarantee. Availability is measured by the number of minutes during a calendar month that the E-LINE Service is operational, divided by the total minutes in that calendar month. Calculation is based on the stop-clock method beginning at the date and time of the Customer-initiated trouble ticket and ends when Frontier restores SLA-compliant circuit operation. Frontier's E-LINE Service Availability commitment and applicable Service credit are outlined in **Table 1A**, subject to Sections 3 and 4 below.

| Table 1A: E-LINE | | |
|----------------------|--------|-------------------------------------|
| Circuit Availability | | MRC Service Credit |
| Availability | 99.99% | Below 99.99% Service Credit 30% MRC |

- B. **Mean Time to Repair (MTTR):** MTTR is a monthly calculation of the average duration of time between Trouble Ticket initiation (in accordance with Section 2B) and Frontier's reinstatement of the E-LINE Service to meet the Availability performance objective. The MTTR objectives, and credits applicable to a failure to meet such objectives, are outlined in **Table 1B**, subject to Sections 3 and 4 below.

| Table 1B: E-LINE | | |
|---------------------|---------|----------------------|
| Mean Time To Repair | | MRC Service Credit |
| MTTR | 4 Hours | 25 % MRC above 4 hrs |
| | | 50% MRC above 6 hrs. |

2. Performance Objectives

- A. **Packet Delivery:** The Frame Loss Ratio (FLR) is a round trip measurement between ingress and egress ports (NIDs) at the Customer's A and Z locations of packet delivery efficiency. FLR is the ratio of packets lost, round trip, vs. packets sent. Packet delivery statistics are collected for one calendar month. Credits will be based on Frontier's verification of packet delivery performance between NIDs at Customer's Service Location. The packet delivery SLA applies to CIR-compliant packets on Ethernet LAN / WAN circuits only. This packet delivery guarantee does not apply to Ethernet Internet services. Frontier offers three FLR Quality of Service (QoS) levels for Ethernet Data Service. The applicable SLA is based on the QoS level, as outlined in **Table 1C**. Ethernet Gold and Platinum are premium level services designed to support commercial customers' mission-critical and real time applications.
- Silver QoS** service is Frontier's basic business class data service with improved performance across all standard performance parameters. Ethernet Silver SLA, termed Standard Data (SD) Service, is Frontier's upgraded replacement of *Best Effort* Ethernet designed specifically for the commercial customer.
 - Gold QoS** service is a premium business data service featuring enhanced performance parameters with packet forwarding priority set to *Priority Data*.
 - Platinum QoS** service carries Frontier's highest QoS performance parameters and includes voice grade packet forwarding priority set to *Real Time*.

If packet delivery performance falls below the applicable packet delivery percentage, Customer will be entitled to a Service credit as outlined in **Table 1C**, subject to Sections 3 and 4 below.

| Table 1C: E-LINE Frame Loss Ratio (FLR) | | | | |
|--|-----------------------------|------------------------------|------------------------------------|--------------------|
| Packet Loss QoS Level | Frame Loss Ratio (FLR) CITY | Frame Loss Ratio (FLR) STATE | Frame Loss Ratio (FLR) Inter-STATE | MRC Service Credit |
| Silver [Standard Data Service] | 0.10% | 0.10% | 0.10% | 10% |
| Gold [Priority Data Service] | 0.01% | 0.01% | 0.025% | 15% |
| Platinum [Real Time Data Service] | 0.01% | 0.01% | 0.025% | 20% |

- B. **Latency:** Latency, Frame Transfer Delay (FTD), is the maximum packet delivery time measured round-trip between Customer's A and Z locations at the Committed Information Rate (CIR). Latency is measured across On-Net Service paths between ingress and egress NIDs. Measurements are taken at one-hour intervals over a one month period. Credits are based on round-trip latency of 95th percentile packet. Customer must meet the following criteria to qualify for Service credits on the E-LINE Latency SLA outlined in **Table 1D**:
- Access loops at Customer locations A and Z may be fiber or copper connectivity from the Serving Wire Center to the NIDs at each premise to qualify for the circuit SLA.
 - Each SLA guarantee is associated with ONLY one QoS Level. Frontier will honor the Service credit associated with the QoS level ordered for On-Net Services. Customer will be entitled to Service credits if the Service fails to meet applicable Performance Objective as outlined in **Table 1D** subject to Sections 3 and 4 below

| Table 1D: E-LINE Frame Transfer Delay (FTD): | | | | |
|---|------------------------------|-------------------------------|-------------------------------------|---------------------------|
| Latency QoS Level | Round Trip Delay CITY | Round Trip Delay STATE | Round Trip Delay Inter-STATE | MRC Service Credit |
| Silver [Standard Data Service] | ≤ 56 ms | ≤ 100 ms | ≤ 250 ms | 10% |
| Gold [Priority Data Service] | ≤ 26 ms | ≤ 60 ms | ≤ 160 ms | 15% |
| Platinum [Real Time Data Service] | ≤ 14 ms | ≤ 36 ms | ≤ 140 ms | 20% |

- C. **Jitter:** Packet Jitter, Frame Delay Variance (FDV), is the difference in end-to-end one way delay between selected packets in a data stream with any lost packets being ignored. Frontier guarantees average FDV (inter-packet differential) performance on E-LINE Service transmissions will meet performance parameters outlined in the table below. Credits are based on the monthly average Frame Delay Variance. Customer must meet the following criteria to qualify for Service credits on the E-LINE Jitter SLA:
- Access loops at Customer Service Locations A and Z may be fiber or copper connectivity from the Serving Wire Center to the NIDs at each Service Location to qualify for Fiber Loop FDV SLA.
 - Each SLA guarantee is associated with ONLY one QoS Level. Frontier will honor the Service credit associated with the QoS level ordered for E-LINE Services, as outlined in the applicable Ethernet Service Schedule. Customer will be entitled to the credit as outlined in **Table 1E** if E-LINE Services fail to meet applicable service level objectives, subject to Sections 3 and 4 below.

| Table 1E: E-LINE Frame Delay Variance (FDV): | | | | |
|---|-------------------------------------|--------------------------------------|--|---------------------------|
| Jitter QoS Level | Average Jitter Per Site CITY | Average Jitter Per Site STATE | Average Jitter Per Site Inter-STATE | MRC Service Credit |
| Silver [Standard Data Service] | n/s | n/s | n/s | 10% |
| Gold [Priority Data Service] | ≤ 8 ms | ≤ 40 ms | ≤ 40 ms | 15% |
| Platinum [Real Time Data Service] | ≤ 3 ms | ≤ 8 ms | ≤ 10 ms | 20% |

3. Service Outage Reporting Procedure.

- A. Frontier will maintain a point-of-contact for Customer to report a Service Outage, twenty-four (24) hours a day, seven (7) days a week.
- B. When E-LINE Service is suffering from a Service Outage, Customer must contact Frontier's commercial customer support center (also known as the "NOC") at 1-(888) 637-9620 to identify the Service Outage 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 Outage, Frontier and Customer will cooperate to restore the Service. If the cause of a Service Outage 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 Outage begins when a Trouble Ticket is initiated and ends when the affected E-LINE Service is Available; 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 Outage subject to these terms.
- D. If Frontier dispatches a field technician to perform diagnostic troubleshooting and 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.

4. Credit Request and Eligibility.

- A. In the event of a Service Outage, Customer may be entitled to a credit against the applicable On-Net Service MRC if (i) Customer initiated a Trouble Ticket; (ii) the Service Outage was caused by a failure of Frontier's equipment, facilities or personnel; (iii) the Service Outage 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 Outage occurred.
- B. Credits do not apply to Service Outages 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; (vi) Emergency Maintenance or (vii) interruptions resulting from Force Majeure events as defined in Customer's FSA. In addition, Customer will not be issued credits for a Service Outage 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 Outage 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 50% of the MRC for the impacted E-LINE Service, per month. For cascading failures, only the primary or causal failure is used in determining Service Outage 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. This SLA guarantees service performance of Frontier's Ethernet data services only. This SLA does not cover TDM services [DS1, NxDS1, or DS3 services] or other voice or data services provided by Frontier. This SLA does not apply to services provided over third party non-partner facilities, through a carrier hotel, or over Frontier facilities which terminate through a meet point circuit with a third party non-partner carrier.
- E. 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.
- F. 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 Outages.

5. **Chronic Outage:** An individual E-LINE Service qualifies for "Chronic Outage" status if such service fails to meet the Availability objectives, and one or more of the following: (a) a single Trouble Ticket extends for longer than 24 hours, (b) more than 3 Trouble Tickets extend for more than 8 hours, during a rolling 6 month period, or (c) 15 separate Trouble Tickets of any duration within a calendar month. If an E-LINE Service reaches Chronic Outage status, then Customer may terminate the affected E-LINE Service without penalty; provided that Customer must exercise such right within ten (10) days of the E-LINE Service reaching Chronic Outage status and provide a minimum of 15 days prior written notice to Frontier of the intent to exercise such termination right.