#### RESOLUTION 68-2017 RESOLUTION AUTHORIZING AGREEMENT WITH NETCARRIER TELECOM, INC.

**WHEREAS,** the Borough has heretofore invited and received Proposals for Telephone and Data Services for a portion of its Telephone and Data transmission needs; and

**WHEREAS**, the Purchasing Agent has recommended the acceptance of a Proposal from NETCARRIER TELECOM, INC., for such services as more particularly described within their quotation dated June 30, 2017; and

**WHEREAS**, the Borough deems it in the best interest to accept the aforesaid Proposal which is at a rate less than the other Proposals received;

**NOW THEREFORE, BE IT RESOLVED**, by the Borough Council of the Borough of Woodbury Heights, with the Mayor concurring, that the Proposal from NETCARRIER TELECOM, INC., for the provision of certain Telephone and Data Transmission Services as more particularly set forth in their Quotation dated June 30, 2017, is hereby accepted and authorized;

**BET IT FURTHER RESOLVED**, that the Mayor and Clerk are hereby authorized to endorse an Agreement for the aforesaid services upon terms consistent with the Quotation dated June 30, 2017.

BOROUGH OF WOODBURY HEIGTHS

BY: //

ROBBIÉ J. CONLEY, MAYOR

ATTEST:

JANET PIZZI, BOROUĞH CLERK

The foregoing Resolution was duly adopted by the Borough Council of the Borough of Woodbury Heights at a regular meeting held on the 19<sup>th</sup> day of July, 2017.

JANET PIZŽI, BOROUGH CLERK

#### **CERTIFICATION OF AVAILABILITY OF FUNDS**

I, Victoria Holmstrom, being the Chief Financial Officer of the Borough of Woodbury Heights, do hereby certify, pursuant to the rules of the Local Finance Board of the State of New Jersey and in accordance with N.J.S.A. 40A:4-57, that there are available adequate funds for the proposed contract between the Mayor and Borough Council of the Borough of Woodbury Heights and Complete Control Services, Inc.

The money necessary to fund said contract is in the maximum amount of \$ 18,000 and upon approval of the contact, all funds expended shall be charged to the following:

(2017 funds prorated for 24 month contract)

7-01-31-440-000-303	\$1,724.00
7-01-31-440-000-304	\$ 875.00
7-09-55-502-000-373	\$2,836.00
6-01-41-745-000-334	\$ 190.00
7-01-31-440-000-308	\$ 250.00

These funds are not being certified as being available for more than the contract.

Victoria Holmstrom, CFO

Date: July 12, 2017

Twenty-Four (24) month contract: \$23,500

14 of Contract: \$5,875.00



#### NETCARRIER ORDER FORM GENERAL INFORMATION

In the interest of providing you with superior service, the completion of this questionaire is vital. Your NetCarrier Representative(s) can assist you and/or your technical personnel in completing this form. This CIQ will stay on record with NetCarrier to be utilized when you desire to add services with NetCarrier.

Section 1	CUSTOMER ADDR	ESS INFORMATION	
Type of Order:		Date	2017-06-15
Customer Moving?:		Expected Service	Delivery Date:
			n receipt by NetCarrier unless otherwise noted.
Customer Name	[0t(3/4), III	**Service Delivery Date is no	
Install Address:	Borough of Woodbury Heights 1 Grandview Ave	Philiting Addings	Borough of Woodbury Heights
Floor/Suite #:	1 Grandview Ave	Billing Address Floor/ Suite #	
	Woodbury Heights, NJ 08097	City, State, Zip	
Main Number:		Agent/Consultant	
Fax Number:		Phone #	
Section 2	CUSTOMER CONTA	<u> </u>	0000010000
			FF
Administrator: Title:	Vikki Holmstrom	Billing:	7011 (aredovia
Phone #:	(856) 848-2832	Title:	Account Clerk
Email:	VIKKI a bwhn; com	Phone #: Email:	(CO34) 616 -174
Cell:	VICKI & DWITTS COIT	Cell:	THE CONTRACT
		2011,	
PBX Vendor:		Data:	
Contact:		Title:	
Phone #:		Phone #:	
Email:		Email:	
Cell:		Cell:	
Nature of C	ustomer's Business:		
Cur	rent Telco Provider:		
	rent Voice Services:		
Си	rrent Data Services:	,	
Port Existing Numb	pers?:		
-			
Union Build	ling?:		
Building	Туре:		
Location of Phone C	loset:	DMARC Location:	
Location of PBX/CSU/	DSU:	Extension Needed?:	



Company Name: Borough of Woodbury Heights

Street Address: 500 Elm Ave

Suite Number:

City, State: Woodbury Heights, NJ

Zip Code: 08097

Contact Phone: (756) 848-2832

Contact E-Mail: VIK

VIKKI a) buhnj · com

Sales Executive Information

Sales Executive: Tim Jennings

Phone: 8563846000

E-Mail: tjennings@telecorpinc.com

Quote Date: 2017-06-15

Quote Valid Through: 2017-07-15

Contract Term (months): 24

Order Totals	Monthly	\$508.89	One-Time	\$0.00
Exhibit A				
500 Elm Ave, Woodbury Heights, NJ 08097				
Voice Services		QTY	Unit Price	Monthly
Analog Handoff		1	\$0.00	\$0.00
Up to 23 Lines		1	\$339.00	\$339.00
Caller ID Name (Included)		1	\$0.00	\$0.00
Direct Outward Dial Number		1	\$0.00	\$0.00
1,000 LD Minutes Included		1	\$0.00	\$0.00
Data Services		QTY	Unit Price	Monthly
5 Static IPs		1	\$0.00	\$0.00
Dedicated Access 1.54Mb Loop		1	\$175.00	\$175.00
Dedicated Access 1.54Mb Port		1	\$25.00	\$25.00
Customer Loyalty Discount		1	\$-289.00	\$-289.00
Calling Rates		QTY	Unit Price	Rate/Min
Local Calling Rate		1	\$0.0000	\$0.0000
LD Overage Calling Rate		1	\$0.0280	\$0.0280
Site Total	Monthly	\$250.00	One-Time	\$0.00



500 Elm Ave, Woodbury Heights, NJ 08097			
Voice Services	QTY	Unit Price	Monthly
Copper POTS Line/s	2	\$22.19	\$44.38
Non-Published Telephone Number	1	\$3.70	\$3.70
Calling Rates	QTY	Unit Price	Rate/Min
Metered Local Calling Rate	1	\$0.0200	\$0.0200
Metered LD Calling Rate	1	\$0.0390	\$0.0390



703 Chestnut Ave, Woodbury Heights, NJ 08097			
Voice Services	QTY	Unit Price	Monthly
Copper POTS Line/s	1	\$22.19	\$22.19
Non-Published Telephone Number	1	\$3.70	\$3.70
Calling Rates	QTY	Unit Price	Rate/Min
	QTY 1	Unit Price \$0.0200	
Calling Rates  Metered Local Calling Rate  Metered LD Calling Rate	1 1		Rate/Min \$0.0200 \$0.0390

NetCarrier:

Customer: Wilder Hall Hard Table 1



832 Mantua Pike, Woodbury Heights, NJ 08097 Voice Services	QTY	Unit Price	Monthly
Copper POTS Line/s	1	\$22.19	
Calling Rates	QTY	Unit Price	Rate/Min
Metered Local Calling Rate	1	\$0.0200	\$0.0200
Metered LD Calling Rate	1	\$0.0390	\$0.0390
Site Total Monthly	\$22.19	One-Time	\$0.00

NetCarrier:

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168 Central Ave, Woodbury Heights, NJ 08097 Voice Services	QTY	Unit Price	Monthly
Copper POTS Line/s	1	\$22.19	\$22.19
Calling Rates	QTY	Unit Price	Rate/Min
Metered Local Calling Rate	1	\$0.0200	\$0.0200
Metered LD Calling Rate	1	\$0.0390	\$0.0390
Site Total Monthly	\$22,19	One-Time	\$0.00



1 Helen , Woodbury Heights , nj 08097			
Voice Services	QTY	Unit Price	Monthly
Copper POTS Line/s	1	\$22.19	\$22.19
Non-Published Telephone Number	1	\$3.70	\$3.70
Calling Rates	QTY	Unit Price	Rate/Min
	QTY 1	Unit Price \$0.0200	
Calling Rates  Metered Local Calling Rate  Metered LD Calling Rate	QTY 1 1	-	Rate/Min \$0.0200 \$0.0390



500 Elm Ave, Woodbury Heights, NJ 08097 (End of Helen Av) Voice Services	QTY	Unit Price	Monthly
Copper POTS Line/s	1	\$22.19	\$22.19
Calling Rates	QTY	Unit Price	Rate/Min
Metered Local Calling Rate	1	\$0.0200	\$0.0200
Metered LD Calling Rate	1	\$0.0390	\$0.0390
Site Total.	\$22.19	One-Time	\$0.00

NetCarrier:

Customer: 1419 Africa Halling A

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172 Candidus, Woodbury Heights, nj 08097 Voice Services	QΤΥ	Unit Price	Monthly
Copper POTS Line/s	1	\$22.19	
Calling Rates	QTY	Unit Price	Rate/Min
Metered Local Calling Rate	1	\$0.0200	\$0.0200
Metered LD Calling Rate	1	\$0.0390	\$0.0390
Site Total Monthly	\$22.19	One-Time	\$0.00

NetCarrier:

Customer: 14 to 18 to 18

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1 Grandview Ave, Woodbury Heights, NJ 08097 Voice Services	QTY	Unit Price	Monthly
Copper POTS Line/s	1	\$22.19	\$22.19
Calling Rates	QTY	Unit Price	Rate/Min
Metered Local Calling Rate	1	\$0.0200	\$0.0200
Metered LD Calling Rate	1	\$0.0390	\$0.0390
Site Total Monthly	\$22.19	One-Time	\$0.00



741 Helen Ave, Woodbury Heights, NJ 08097 Voice Services	QTY	Unit Price	Monthly
Copper POTS Line/s	1	\$22.19	\$22.19
Calling Rates	QTY	Unit Price	Rate/Min
Metered Local Calling Rate	1	\$0.0200	\$0.0200
Metered LD Calling Rate	1	\$0.0390	\$0.0390
Site Total Monthly	\$22.19	One-Time	\$0.00



299 Glenwood Ave, Woodbury Heights, NJ 08097			
Voice Services	QTY	Unit Price	Monthly
Copper POTS Line/s	1	\$22.19	\$22.19
Non-Published Telephone Number	1	\$3.70	\$3.70
Calling Rates	QTY	Unit Price	Rate/Min
	1	\$0.0200	
Metered LD Calling Rate  Metered LD Calling Rate	<u>1</u>		\$0.0200



Customer Information	Sales Executive Infor	mation
Company Name: Borough of Woodbury Heights	Sales Executive:	Tim Jennings
Street Address: 500 Elm Ave	Phone:	8563846000
Suite Number:	E-Mail:	tjennings@telecorpinc.com
City, State: Woodbury Heights, NJ		
Zip Code: 08097	Quote Date:	2017-06-15
Contact Name: VIKKI HOLMSTYOM	Quote Valid Through:	2017-07-15
Contact Phone: (SK) 849 2832 Contact E-Mail: VIKKI a) bubni, Com	Contract Term (months):	24

Site Total Monthly	\$0.00	One Time	\$0.00
Managed Router	1	\$0.00	\$0.00
Managed Equipment	QTY	Unit Price	Monthly
500 Elm Ave, Woodbury Heights, NJ 08097			
Exhibit B			

#### **TERMS**

For and in consideration of the premises and for other good and valuable consideration, the receipt and sufficiency of which are hereby acknowledged, you agree to the following terms and conditions with respect to the Services.

1) SERVICES PROVIDED. In this Agreement, "you" and "your" mean the customer of NetCarrier Telecom, Inc. or NetCarrier's affiliated companies (collectively "NetCarrier"). Subject to the terms and conditions of this Master Services Agreement, your Voice and Data Service Agreement, attached hereto as Exhibit A, and applicable product information including prices, terms and conditions of service, and General Terms and Conditions of Service, available on NetCarrier's website (www.netcarrier.com) (together, the "Agreement"), NetCarrier will provide interstate telecommunications services to you.

This Agreement governs state-to-state long distance services, interexchange services, intraLATA services, interLATA services and Internet access services provided to you by NetCarrier ("Service" or "Services"), and does not apply to calls made by dialing a 10-10-XXX number or cable television. You agree not to resell the Services; the Services are provided by NetCarrier solely for end user use. As used herein the term "Services" includes all work performed and goods or services provided by NetCarrier to or for the Customer. All Services are provided subject to the availability of necessary and suitable facilities. BY ENROLLING IN, USING, OR PAYING FOR NETCARRIER'S SERVICES, YOU AGREE TO THE PRICES, CHARGES, TERMS AND CONDITIONS IN THIS AGREEMENT.

2) CHARGES FOR SERVICES. You agree to pay NetCarrier for the Services NetCarrier provides at the prices set forth in Exhibit A. NetCarrier may change prices at any time provided it is required to cover NetCarrier's costs associated with changes in government taxation and tariff programs (such as the Universal Service Fund). NetCarrier reserves the right to adjust MRC rates if there is a significant drop in anticipated minute usage. NetCarrier will invoice you for Services one (1) month in arrears for usage and installation fees and one (1) month in advance for line charges. Invoices are due and payable upon receipt. Any invoices not paid within thirty (30) days following the date of the invoice shall be deemed past due and assessed a finance charge in the amount of one and one-half percent (1.5%) of the outstanding balance per month or such lesser maximum charge as permitted by applicable law.

You agree to pay NetCarrier any and all costs and expenses (including reasonable attorneys' fees) associated with the collection of any amounts due. NetCarrier reserves the rights (subject to applicable state law): (a) to charge you return check charges, and (b) to charge you a fee to reactivate Service where Service was interrupted due to your actions or failure to make required payment. You may terminate Service at any time, with a sixty (60) day notice to NetCarrier, but shall remain liable for charges incurred before termination and any other early termination fees that may have been agreed upon; such. NetCarrier accepts payment in the form of a check, money order, or wire transfer only.

Billing shall commence upon Service Activation by NetCarrier, or at the period following thirty (30) days from installation of NetCarrier equipment on Customer premise providing that Services are not yet activated. Service Activation shall be defined as the ability to generate or receive voice and/or data traffic from Customer location. Billing shall commence upon Service Activation OR at the period following sixty (60) days from execution of this Agreement. If Customer has modern devices (fax, credit card machine, modem, etc.) which are deemed incompatible with NetCarrier's technology, NetCarrier will provide a custom solution using additional CPE(s) or copper POTS lines. Customer will incur additional monthly fees based on the nature of the solution.

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Customer: A Advantage



International calls made to mobile numbers are not part of any special pricing agreements. Should Customers' account become delinquent (is in excess of 60 days from date of invoice) NetCarrier reserves the right to suspend service. Customer will continue to be billed for the MRC and any applicable taxes during the suspension. One (1) hour will be provided during installation, at Customers' site, for LNP purposes. Customer will be billed \$62.50 per 30 minute increments for delays not caused by NetCarrier.

**EQUIPMENT PURCHASES (If Applicable):** Customers that purchase equipment from NetCarrier in conjunction with the Service provided in Exhibit A shall be billed in the following manner: Seventy five percent (75%) of total equipment charges will be billed the first of the month following contract signature. The remaining twenty five (25%) will be billed with the invoice of service activation. NetCarrier will not proceed with Customer installation until payment is remitted for the initial 75%.

**BROADBAND CUSTOMERS:** Broadband Access providers may increase or decrease charges at any time. These changes may be passed on to Customer without prior notice while Customer is in term with NetCarrier.

3) SERVICE DISCONNECTION; AGREEMENT TERMINATION. NetCarrier reserves the right to disconnect Service immediately without incurring liability in the following instances: (i) for non-payment for any sum due NetCarrier for more than thirty (30) days after the issuance of a valid invoice; (ii) for violations of this Agreement or applicable law; (iii) where required by reason of any order or a court, public service commission or federal regulatory body; (iv) when necessitated by conditions beyond NetCarrier's reasonable control; (v) where reasonably necessary to prevent harm or interference to NetCarrier's network; or (vi) temporarily for routine maintenance.

NetCarrier may terminate this Agreement immediately upon any breach of this Agreement by you. All Services shall be discontinued upon the effective date of any termination of this Agreement by NetCarrier. You shall not be entitled to any refund for prepaid Services in the event of rightful termination of this Agreement by NetCarrier. In the event of a termination of this Agreement by NetCarrier shall be entitled to accelerate and demand immediate payment of all amounts owing by you hereunder for the balance of the then current term of this Agreement. In the event of termination by either NetCarrier or Customer, NetCarrier may require the immediate return of all NetCarrier supplied equipment.

NetCarrier shall also have all other rights and remedies available under applicable laws; (vii) if a Customer termination occurs after contract signature but prior to LNP, Customer shall pay to NetCarrier 100% of contracted charges stated in Exhibit A for the length of the contract term; (viii) if a Customer termination occurs after LNP but prior to the end of the contract term, Customer shall be responsible for one hundred percent (100%) of the monthly service charge for the remainder of the term. If Customer termination occurs after the initial term, and is in a period of automatic renewal, as stated in Paragraph 5, then Customer shall pay to NetCarrier fifty (50%) percent of the monthly service charge for the remainder of the term, or one month's service charge, whichever is greater.

Customer terminations, as outlined above in lines vii and viii, are to be paid to NetCarrier in one payment, representing the remaining term, within thirty (30) days of termination. In addition, any favorable discount rate proffered to Customer in connection with any other service agreement between Customer and NetCarrier shall be invalidated, null and void. In the event Customer's acts or omissions which form the basis of a termination by NetCarrier hereunder also violate any law or industry standard, Customer shall also indemnify NetCarrier for any fine or penalty or other damages assessed against or incurred by NetCarrier as a result thereof. Customer may terminate this Agreement without incurring early termination fees if NetCarrier is in material breach of this Agreement if Customer provides written notice of such material breach to NetCarrier; NetCarrier's material breach is directly attributable to causes directly within NetCarrier's control; NetCarrier cannot reasonably cure the breach within 15 business days of receiving Customer's written notice of material breach; and Customer's account with NetCarrier is current (no balance older than 30 days).

If NetCarrier, in its sole discretion, deems Customer to be an abuser of the unlimited local or unlimited domestic calling plans (examples of which include but are not limited to: Use of unlimited products for automated or predictive dialers, call center environments, or any electronic device that promotes heavy, short-duration call traffic), NetCarrier may impose a surcharge of \$0.02/minute on inbound/outbound calls or may disconnect service with ten (10) days written notice to Customer. Customer shall be liable for any applicable early termination charges.

- 4) CUSTOMER MOVES. In the event that a customer moves within NetCarrier's service area, a fee per circuit will be charged to cover administrative costs and circuit installation fees for customers' new facility. If NetCarrier incurs any charges from its circuit vendor because of the disconnection of the original circuit, including but not limited to early termination fees, NetCarrier reserves the right to invoice customer to re-coup those expenses. If customer moves to a location outside NetCarrier's service area, NetCarrier will view that as a customer cancellation and will apply charges per paragraph 3.
- 5) TERMS OF AGREEMENT; RENEWAL. This Agreement shall commence upon signature execution by both parties. Term length as stated in Exhibit A begins on the date of Service activation by NetCarrier. This Agreement shall be automatically renewed on each anniversary of the date of installation, for a period of twelve (12) months, unless either party give the other at least sixty (60) days written notice of cancellation prior to an anniversary date. In the event that this Agreement ever goes to a month to month state, any negotiated product discounts shall be lost and Customer shall pay NetCarrier the standard Tarriff rates for products listed in Exhibit A.

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6) CREDIT CHECK/DEPOSIT. NetCarrier reserves the right to verify your credit as a condition of provisioning Service. NetCarrier reserves the right to collect a deposit from you, not to exceed three (3) months services or place a credit limit on your account. Any such deposits shall be returned upon termination of Service and satisfaction of all outstanding invoices or after one (1) year if you have not been delinquent on any payment due during that time

#### 7) MISCELLANEOUS.

- a) Exhibits and Schedules. Any exhibits and schedules attached to this Agreement are an integral part hereof and are hereby incorporated and included in the term "this Agreement."
- b) Headings. Headings in this Agreement are included herein for convenience of reference only, shall not constitute a part of this Agreement for any other purposes and shall not be deemed to affect the meaning or construction of any of the provisions hereof.
- c) Entire Agreement; Successors and Assigns; Time of the Essence. This Agreement contains the entire terms of the Agreement with respect to the Services, and no representations, inducements, promises or agreements between the parties not set forth herein shall be of any force or effect. This Agreement shall be binding upon and shall inure to the benefit of you and NetCarrier and NetCarrier's successors and assigns, whether so expressed or not. Time is of the essence under this Agreement.
- d) Cancellation of Contract. For any reason, Customer has the ability to cancel this contract by sending written notice to NetCarrier no later than three (3) days from the date of this agreement.
- e) Voice products require that NetCarrier provides at least twenty (20%) percent of "Customer's" local phone traffic.
- g) NetCarrier recommends that all alarm lines utilize Copper Advantage lines.
- 8) DEMARK EXTENSION. Customer should be aware that before Service can be initiated a "Demark Extension" may be required. A Demark Extension refers to the cabling required from the termination point designated by the local exchange carrier (Verizon, for example) for connection to its network and the Customer's equipment. NetCarrier has no control over whether a Demark Extension is required. Unfortunately, whether a Demark Extension is required cannot be determined in advance of installation by NetCarrier. If it is, a separate fee will be charged. If NetCarrier provides the Demark Extension it will charge you \$185.00 for the first hour (or portion thereof) and \$62.50 for each thirty minute period (or portion thereof) thereafter, plus required materials. This charge is in addition to those set forth in Exhibits A and/or B (if applicable). If it is necessary for NetCarrier to subcontract for the Demark Extension, NetCarrier will bill Customer at its costs.

Customer Acceptance	NetCarrier Acceptance
Name: Robbie J. Conley	Name:
Title: Mayor	Title:
The Mark	
Authorized Signature Date: 7-19-2017	Authorized Signature  Date:

#### VOIP Services Addendum



In addition to the terms and conditions contained in the service agreement ("Agreement") between NetCarrier Communications, Inc. ("NetCarrier") and ("Customer") and all other schedules thereto, the following terms and conditions apply. These Additional Terms shall take precedence over any conflicting provisions contained in the Standard Terms and Conditions ("Standard Terms") or any other Agreement schedule.

- 1) Quality of Service. NetCarrier shall make no warranties for voice quality using a third party bandwidth provider. It is the sole responsibility of the Customer to ensure that sufficient bandwidth (measured instantaneously), QoS (Quality of Service), low latency (<75ms), and Jitter is available at all times for VoIP based services (SIP, MGCP, etc). If the integrity of such voice traffic becomes compromised outside of NetCarrier's core network, NetCarrier shall not be responsible, and any contractual obligations in this Agreement shall not be waived. These limitations are not applicable to NetCarrier's VoIP engineered bandwidth products.
- 2) E-911. Service may be limited or unavailable under the following circumstances, including but not limited to: Physical location change or relocation of CPE, During an Internet service outage, Use of a non-native or non-registered telephone number, or If the registered location has been changed but the 911 database update has not yet completed. Emergency calls are routed to the PSAP for your designated emergency response location. If your physical location or out-pulsed TN differs from your designated location or TN required, emergency service may be delayed or unavailable. You agree to notify all of your users of the VOIP 911 limitations and to place warning labels (available from us) on or near your phones. Please see our terms and conditions for more information about our 911 service.
- a) 911 Mobility. It is the Customer's responsibility to ensure that end users have access to 911 services. NetCarrier's VOIP product DOES NOT support E-911 mobility. It is Customer's responsibility to notify NetCarrier of any registered address changes for end users on your PBX.
- 3) Power over Ethernet. NetCarrier recommends the use of Power-over-Ethernet (PoE) switches to power the IP Phones. PoE switches are capable of supplying power to the IP Phones directly over the Ethernet cabling and eliminate the need for separate AC Power Adapters at each IP Phone location. Also PoE switches simplify the task of providing an Uninterruptible Power Supply (UPS) to the IP Phones by centralizing the UPS functionality.
- 4) LAN Requirements. It is Customer's responsibility to ensure that wiring for Customer's LAN shall be CAT5 cable or better throughout the network. This includes any uplinks from the Ethernet switches or from a firewall to the NetCarrier supplied CPE. All terminated ends of the cables, whether RJ-45 or punch down, must be checked by Customer to ensure there are no loose or frayed connections. Roundtrip latency is a measure of the roundtrip time elapsed between the sending of a message to a remote point and the return of that message from that remote point.

Customer must ensure that Customer's LAN shall contribute no greater than 15 ms to the total roundtrip latency between any given IP Phone on the customer's LAN and NetCarrier. Network Jitter is a measure of the variability in the roundtrip latency across a series of measurements. The customer's LAN shall contribute no greater than 15 ms to the total network jitter between any given IP Phone on the customer LAN and NetCarrier. Packet loss is a measure of the percentage of IP packets lost in a data transaction. The customer's LAN shall lose no greater than 0.25% of all packets transmitted.

- 5) Ethernet. The customer's LAN and network elements must operate in accordance with IEEE Ethernet Specification 802.3u (100Base-T, Full Duplex). Ethernet switches and routers shall operate with spanning tree disabled. Edge switches shall be cascaded directly to a core switch (no daisy-chaining of switches) or connect via a high speed Gigabit uplink.
- 6) NAT/PAT. Internal LAN addresses shall be non-routable (private) and shall use a single level of Network Address Translation (NAT) protocol to map public IP addresses to the private IP addresses. If the customer is already using NAT protocol, their NAT protocol translation device shall be able to do Port Address Translation (PAT) in conjunction with NAT. If the customer does not currently have a NAT translation device, or if their current device does not support PAT, then the NetCarrier supplied CPE can perform the NAT/PAT functions for the customer. Multiple levels of NAT shall not be supported.

Signature:	Borough of Woodbury Heights
Name:	
Title:	Tobbig J. Conley
_	Maybr
Date:	7-19-2017