Heath Broadband Drop Service Policy

Revision: January 23, 2024

The Town of Heath, through the Heath Municipal Light Plant (MLP), constructed a fiber-optic broadband network to provide Internet and digital phone service options to Heath residents. The network passes by and includes a connection point for 99% of eligible premises in town. This Policy is established to provide general information and guidance and describes the conditions necessary to provide internet and/or phone service to Heath premises through the Heath broadband fiber network.

Definitions

A glossary of technical terms and abbreviations is provided at the end of this document.

Getting Heath Broadband Service to Your Property

Heath is a member of the WiredWest Cooperative. Our current Internet Service Provider is Whip City Fiber. Refer to the Town of Heath website https://townofheath.org for Heath-specific information and to subscribe to service.

Eligible Premises

In order for Heath premises to be eligible for Heath broadband fiber, all of the following criteria must be met:

- the premises must have electric service; service to off-grid dwellings will be negotiated separately outside of this policy, and,
    - Electric service may not be provided by extension cord from another property owner's premises,
    - Multi-family dwellings can receive a separate drop to each apartment if criteria in policy section on "Second Service Drop to the Same E-911 address" are met.

- The premises must have a structure acceptable for network equipment to be installed and protected from the elements.

- The premises must have the assigned E-911 street address properly posted in accordance with Town Bylaw.

Drop Service Installations

A Drop Service Installation consists of a Drop Fiber cable connection from a designated MST on the Distribution Network to a NID on the exterior of the customer premises, plus the interior installation of an ONT and Wi-Fi router. The installation of digital phone equipment is optional.

All electronic components and the Drop Fiber cable provided by Heath MLP, or its subcontractors will remain the property of Heath MLP or WiredWest or Whip City Fiber.

The homeowner or a representative of the homeowner must be present for interior and exterior installations.

Interior Installations

The Standard Interior Installation includes:

- installation and set-up of an ONT in a basement or other interior location, including an optical jumper cable from the NID, up to 50 feet.
- installation of a Cat6 Ethernet cable from the ONT to a first- floor location, up to 100 feet, and installation of a Cat6 wall-plate, as necessary.
- installation and set-up of a Wi-Fi router (provided by WW).
    - Note: customers may choose to use their own router. WiredWest technical support will not be able to support problems associated with customer-supplied equipment.

The customer is responsible for providing 110V AC electrical outlets at the ONT and Router locations.

Custom installation services may also be arranged, for example, a non-standard ONT location, non-standard router installation, or additional Ethernet wiring and outlets. Customers will be responsible for all interior installation costs in excess of the Standard Interior Installation. Customers should notify Customer Service at the time of scheduling the installation if they would like a non-standard installation.

Customers are responsible for paying all installation costs.

Customers who are not the owner of the premises will be required to provide proof of prior approval for the installation from the property owner.

Exterior Drop Fiber Installations

The total cost of the exterior Drop Fiber Installation will depend upon several factors, including:

- the total distance from the MST to the premises.
- whether the fiber drop travels overhead or underground or some combination.
- in the case of overhead, whether additional utility poles are involved or not.
- in the case of underground, whether existing suitable conduit already exists, or new micro duct cable needs to be installed.

The Drop Fiber Installation typically follows the pathway of existing utility services to the home. Exceptions can be made if circumstances warrant. The Heath MLP Manager and the installation subcontractor will work with the customer to identify the most cost-effective method to provide a Drop Fiber connection.

The customer is responsible for any and all costs of the installation. A reasonably complete estimate for installation costs will be provided to the customer prior to any work.

Self-Installation Note:

- In underground installations, if a customer wishes to reduce costs by burying micro duct conduit themselves, they must first contact the MLP Manager in advance to agree on specific plans that follow the "*Fiber To The Home (FTTH) Micro duct Installation Guidelines for Homeowners*" provided by the MLP (Appendix A). The guidelines include requirements for notifying Dig Safe and coordinating with the MLP Manager and the installing company that must pull the fiber through the micro duct to be sure of proper installation and protection of the fiber.

Make-Ready and Pole Licenses

New customers may be responsible for paying any initial pole license application fees and make-ready costs. (see “Future Construction”).

Network Extensions

A Network Extension occurs where the Distribution Network extends off the public way and on to private property. This is necessary where service poles on private property are more than 170 feet apart and a typical Drop Fiber cannot be sustained. In this case, the Distribution Network’s stranded steel support cable and MST must be extended on to these private poles.

The presence of a Network Extension does not oblige the homeowner to take service.

The customer may be responsible for the full cost of any Network Extension that is required in order to provide an MST connection, in addition to the Drop Service Installation costs.

Suspending/Reconnecting Service

Heath is a member of the WiredWest Cooperative, and, as such, follows the WiredWest policy for suspending\disconnecting\reconnecting of subscriptions.

1. Customers may cancel their internet service at any time by contacting customer service at 1-833-991-9378.
2. Customers will be charged for the full calendar month in which they cancel service.
3. Customers who have VoIP phone service and cancel their internet service will be charged the stand-alone phone rate of $49/month plus fees, if they choose to keep phone service.
4. Customers who cancel their VoIP phone service will be able to port their number to a new service prior to cancellation of the VoIP service or will lose their phone number for future use.
5. Customers who reinstate their internet service within twelve months from the month of cancellation will not be charged an activation fee.
6. Customers who reinstate their internet service after twelve calendar months from the time of cancellation will be charged a $99 activation fee.
7. Customers who reinstate their internet service will be charged for the full calendar month when reinstatement occurs and for the following month.

Phone-only Service Installation

Since Phone-only service will be delivered via the same fiber-optic infrastructure as Internet service, the same Drop Service Installation components are required. Additional wiring and equipment for phone extensions within the home will be an extra charge. 9-1-1 service on Ooma phones are programmed to the physical address. Seasonal Subscribers should ask for customer service to reprogram the phone if it is temporarily taken with the subscriber to a different location.

Future Construction

Customers requesting service for new homes may be responsible for the full cost of any Network Expansion that is required to provide an MST connection, in addition to the Drop Service Installation costs.

Homebuilders and developers are encouraged to contact the Heath MLP Manager to discuss future home construction to accommodate these connection costs into their building plans. Refer to Appendix A to this Policy for guidance on micro duct installation.

How to Request a Service Drop

To request a service drop, go to the Town of Heath website https://townofheath.org for Heath-specific information and to subscribe to service. Applicants must be a Heath homeowner or renter or builder. The property owner must grant Heath MLP or its representative's permission to access the property to survey existing conditions and install the service drop, and to verify the interests of the customer.

Second Service Drop to the Same E-911 Address

A second or additional drop to the same E-911 address requires the customer to have a second/separate subscription for service for that drop and is subject to the availability of a spare tap at the nearest MST.

Second Service Drop for the Same Customer to a Different E-911 Address

A second or additional drop requested by a property owner for a separate E911 address is treated as a new/different subscription. Additional drops for the same customer requires that the dwelling meet all requirements as eligible premises as per this Policy and requires the customer to have a second/additional subscription for service.

Glossary of Technical Terms

Cat6 = Category 6 Ethernet wiring, used to connect the ONT to the Router. Cat6 Ethernet supports network connections up to 10Gbps, providing the ability for future network speed enhancements.

Distribution Network = the fiber-optic cables and associated components, including MSTs, that transmit the broadband service from the Hub throughout the Town and past each premise.

Drop = a fiber-optic cable that extends from the Distribution Network to the premise. The Drop Fiber connects an MST to the ONT.

Gbps = Gigabits Per Second, a measure of the amount of data that can be transferred through a network connection in one second, used to express network speed. 1Gbps is equal to 1000 Mbps (Megabits Per Second). The FCC defines "broadband" as a minimum of 25 Mbps download and 3 Mbps upload.

Hub = the central telecommunications shelter at South Rd. Heath, MA, where all of the Town's fiber-optic cables originate and which houses the electronic components that connect the network to the Internet.

MST = Multi-port Service Terminal, the network component that allows Drop Fibers to be plugged into the Distribution Network.

Network Expansion = any expansion of the Distribution Network which becomes necessary after the completion of the initial network construction in order to provide an MST for future home construction.

Network Extension = an extension of the Distribution Network where the MST continues from the road on to private property. This is required where poles on private property are more than 170 feet apart. It involves spanning the poles with a stranded steel support cable and lashing the MST to this support.

NID = Network Interface Device, the drop service component mounted on the exterior of a premise that receives the exterior Drop Fiber and connects it to an Optical Jumper cable to the interior ONT.

ONT = Optical Network Terminal, the drop service component installed inside the premise that translates between the optical (light) connection on the fiber network and the electronic network connection needed by routers and computer devices. The ONT is typically installed in the same general vicinity as the main electrical panel, although alternate arrangements may be made in consultation with the installation technician.

Optical Jumper = a ruggedized fiber-optic cable that connects from a NID to an ONT.

Router = an electronic component located inside the premise that allows multiple computers and devices to be connected to the network, via both wired (Ethernet) and wireless ("Wi-Fi") connections.

Appendix A

Fiber to the Home (FTTH) Micro duct Installation Guidelines for Homeowners

Note: The homeowner is responsible for complying with Massachusetts laws regarding Dig Safe. The homeowner is also responsible for meeting any necessary Conservation Commission requirements regarding work in wetland buffer zones.

• Contact Dig Safe by dialing 811 at least 72 hours before beginning any trenching. You will need to mark out the proposed pathway with white paint or white flags. You can familiarize yourself with the Dig Safe process by going to their website: *digsafe.com.*

• Consult with the Heath MLP Manager in advance to make sure that you are connecting to the correct utility pole per our network design and to a suitable location at your house for the eventual fiber installation.

The micro duct conduit can be laid in an open trench, or plowed in. Since it's a rolled, continuous conduit, unlike stick sections of PVC, there are no elbows or sweeps that need to be glued thus making the installation easier. If the conduit is placed correctly, technicians can air-jet the fiber drop cable up to 500 ft without the need for mid- assist pull boxes.

➤ Preferred depth is 12-18".

➤ Any bends should not be tighter than 16" radius.

➤ Care needs to be taken to avoid "kinking" or deforming the conduit itself. In the event that occurs, a splice and coupler will need to be installed to clear the cable path. Contact the MLP Manager.

➤ FTTH Micro duct should rise from below ground tight to the premise foundation wall and extend at minimum 4 ft. and be capped. The location at the home should be pre- determined as suitable for future installation of the Network Interface Device (NID) and penetration of the building for the service cable. Micro duct will be plumbed into NID at time of fiber cable installation.

➤ An additional 25 ft of Micro duct should be coiled at the pole and capped. This will be secured to pole at time of cable installation to provide a protective riser up to the cable attachment height.

Disclaimer: While the MLP Manager will strive to always give the best advice and guidance, the Town of Heath, WiredWest, and their installation partners cannot be responsible for Micro duct installations undertaken by the homeowner and are not liable for any damages due to homeowner installations.