TOWN OF PLAINFIELD
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Detailed Residential Service Drop and Installation Policy (As of February 1, 2019, subject to change)

Note: This policy is subject to change based on several financial, schedule, and other factors))

The Plainfield Light and Telecommunications Department, a Municipal Light Plant and a department of the Town of Plainfield, is constructing a fiber optic network in order to provide Internet and telephone service under the name Plainfield Broadband. In order to maximize the opportunity for townspeople to take service, Plainfield Broadband anticipates offering subsidies for installation costs, including connecting to the exterior of the home and installing wiring and equipment inside the home. See the images on the next page for examples of the equipment.

NOTE: This policy is predicated on the Town of Plainfield securing sufficient local, state and/or federal resources to complete the entire $2.147M project as designed. As of 2/1/2019 we have a capital gap of approximately $400,000 related to the distribution network construction (the part passing every premise) which is impacting our ability to implement this drop policy as envisioned by connecting every premise. See our website for more information and important 2019 town meeting dates.

Definitions

See definitions at end of document.

Deadlines

Deadline Description	**Deadline Date**
Network extension notification deadline	2/15/2019
Network extension request deadline	4/15/2019
Service drop request deadline	6/30/2019
Internet service request deadline	6/30/2019

Policy Details

1. In most cases, a service drop will consist of a single fiber cable connected at one end to a Multiport Service Terminal (MST) located along the aerial distribution fiber and connected at the other end to a Network Interface Device (NID), normally attached to the outside wall of the premise. The service facilities will continue inside the premise by means of an optical jumper cable that connects the NID to an Optical Network Terminal (ONT) device, normally located in the basement of the premise. The ONT will typically be connected to a router located on the first floor of the premise. The router will be supplied either by the subscriber or the Internet Service Provider (ISP), Whip City Fiber (WCF), an operating affiliate of Westfield Gas + Electric, a

municipal utility. Plainfield Broadband recommends use of the router provided by the ISP as this will enable the ISP to remotely troubleshoot the service and to resolve most service issues without a costly visit to the home.

2. To request a residential service drop, a Plainfield homeowner must submit a signed Property Access Form granting Plainfield Broadband or its representatives permission to come onto the homeowner's property to survey existing conditions and install the service drop. Service drops may only be connected to existing structures such as houses or studio/offices.

3. Plainfield Broadband will pay for amounts charged by utility companies to make poles ready on private property, where such poles have been deemed by Plainfield Broadband during the network design process to provide the most cost-effective path to the premise.

4. Network Extensions: Plainfield Broadband has identified 41 premises that will require network extensions onto private property, and will attempt to contact these property owners by telephone and certified mail **by the network extension notification deadline**. For homeowners served by such network extensions who submit a Property Access Form **by the network extension request deadline,** Plainfield Broadband will include the network extension in its network build plans and pay the costs of constructing the network extensions, including installation of steel support cable and brackets, distribution fiber cable, and a multi-port service terminal (MST). Customers requiring network extensions who do not meet this deadline ***will not be included*** in the 2019 Plainfield Broadband network build out. If any such homeowners decide at a later date to request service, they will be be responsible for 100% of the construction costs of bringing fiber from the public way to their premise, and such work will have to be approved and scheduled by Plainfield Broadband as part of a future distribution network expansion

5. Exterior Drop Costs: For homeowners who submit a Property Access Form **by the service drop request deadline,** Plainfield Broadband will pay for the first **$2,500** of exterior service drop costs per residential-occupied tax parcel for the least expensive path from the nearest MST to the premise(s), including installation of fiber optic drop cable and attachment of a network interface device (NID) on the exterior of each requested premise. Homeowners will be responsible for any drop costs in excess of this per-parcel amount. Homeowners will also be responsible for any incremental costs incurred by requesting a more expensive path or a path other than that recommended by Plainfield Broadband (e.g., underground path where aerial service is possible and would be less expensive). Homeowners requesting use of existing underground conduit are responsible for verifying suitability of existing conduit. A $300 service fee will be billed to the homeowner for a failed attempt at installing fiber-optical cable in an unusable existing conduit. Homeowners requesting service after the service request deadline will be responsible for all drop costs from the MST to the NID.

6. Interior Installation Cost: For customers who formally sign up for Internet service with a deposit of $85 (to be applied to the first month's service bill) **by the Internet service request deadline,**

Plainfield Broadband will pay for the first **$375** per residential premise of basic installation costs from the NID through the router for the least expensive path and location. Customers who are not the owners of the premise must receive prior approval from the homeowner. Customers will be responsible for any costs in excess of this amount and will be responsible for any incremental costs for installations other than a basic installation. Customers requesting service after this date will be responsible for all interior installation costs. Basic installation includes:

a. Installation of optical jumper from NID to ONT in basement, up to 50 feet in length.

b. Installation of CAT6 wire from ONT to first floor, up to 50 feet in length.

c. Installation of CAT6 wall-plate.

d. Installation of router and WiFi setup (provided by WCF).

e. Customer to provide 110VAC electrical outlets at ONT and Router locations.

f. Customer to provide any desired battery backup (UPS) at ONT and Router locations.

g. Customer responsible for any additional wiring and for interface with other devices.

The total cost to be included in the broadband build capital budget for interior installations, if all 363 existing occupied premises sign up for service, is estimated to be $136,000.

7. New Construction: Customers requesting service to new premises constructed after the above dates will be responsible for all applicable costs, including the portion of any pole make-ready and network extensions on private property and the full amount of any drops and interior installations. Customers will also be responsible for paying any administrative costs for overseeing pole applications with utility pole owners and/or to provide cost estimates for the exterior or interior work. Plainfield broadband advises home builders to include costs to connect to Plainfield's broadband network in their home building plans

8. Customers who request interior installation service under this drop policy shall maintain service for at least 12 months. Customers who cancel service within 12 months will be billed for the actual amount of the subsidy provided to them for the interior installation costs.

9. All equipment exterior to the premise, including the NID, remain the property and responsibility of Plainfield Broadband.

10. Interior customer premises wiring (fiber, CAT6 wire, and CAT6 wall-plate) becomes the property and responsibility of the customer.

11. Interior customer premises equipment provided by Plainfield Broadband or the ISP (ONT and Router, respectively) remain the property and responsibility of Plainfield Broadband or the ISP.

Examples:

1. Single-family home is the only premise on a tax parcel, and is within 180' of road. Home has a basement, and customer wants router on first floor. Customer requests a drop and internet service by the service drop and internet service request deadlines. All drop and installation costs will be covered by Plainfield Broadband, and customer will not have to pay any connection costs.

2. Home with three living units (main home and two apartments) is within 180' of road. Home has a basement, and customer wants router on first floor. Homeowner provides property access form for all three units, but only commits to service on the main home. The cost for each drop is estimated at $223. The total of $669 is less than the $2,500 per-parcel allowance. All drop costs would be covered by Plainfield Broadband, and the interior install cost for the main home would be covered by the $375 per-premise allowance. If customer later requests service for the apartments they did not sign up to receive service by the deadlines above, the customer will be responsible for paying the interior installation costs.

3. Home with very long driveway requiring a network extension to within 180' of the home, then underground to home. One pole on driveway requires extensive make-ready. Customer submits a property access form by the network extension request deadline. Plainfield Broadband pays cost of pole make-ready and network extension. Because customer requests underground service from final pole to house instead of an aerial drop cable, customer pays approximately $640 difference between underground cost and aerial cost. Basic interior installation is covered by Plainfield Broadband, provided the customer signs up for service by the Internet service request deadline.

Important definitions:

Plainfield Broadband = Internet access provided by the Plainfield Light and Telecommunications Department, in conjunction with Whip City Fiber and Westfield Gas + Electric.

Plainfield Broadband Network = fiber optic network and hub connecting premises to the Internet.

Hub = central telecommunications shelter at 44 North Central Street, which brings together all of the town's fiber optic cables and houses electronics to connect them back to the Internet.

Distribution Network = fiber from the hub past every premise in town.

Network Extension = an extension of the distribution network from the curb onto private property. This is required if poles on private property are more than 180 feet apart. It involves spanning the poles with a stranded steel support cable and attaching network distribution fiber cables to the support cable.

Customer Connect = connection from the distribution network at the “curb” through the inside installation of the premise. Includes drops and interior installation.

Service Drop or Drop = fiber optic cable from the distribution network at the “curb” to the outside of the premise.

Standard Drop = drop cable from the distribution network (MST) to the premise (NID) along the least-expensive path, up to a maximum allowed cost.

Interior Installation = fiber from the outside to the inside of the premise, interior wiring, installation and configuration of customer premises equipment.

MST = Multi-port Service Terminal. Device at the “curb” that allows drop fibers to be plugged into the distribution network.

NID = Network Interface Device. Device on exterior of premise that connects exterior drop fiber to an optical jumper.

Optical Jumper = interior fiber connecting from the NID to the ONT.

ONT = Optical Network Terminal. Optical/electronic device inside premise that translates between the optical (light) connection on the fiber network and the electronic network connection needed by computers.

CAT6 = Category 6 ethernet wiring connecting ONT to Router. CAT6 supports network connections up to 10Gbps within a premise, providing the ability for future network speed enhancements beyond 1Gbps.

Router = electronic device inside premise that allows multiple wired (“Ethernet”) and wireless (“WiFi”) computers and devices to be connected to the network.

Gbps = gigabits per second. A measure of the amount of data that can be transferred through a network connection in one second. 1Gbps is approximately 40 times faster than the fastest satellite Internet available in Plainfield, 100 times faster than 4G wireless, 300-500 times faster than the Verizon DSL connections some Plainfield residents have, and 20,000 times faster than a typical dial-up connection.