

## **UNDERGROUND CONDUIT GUIDE**

Homes or Buildings with underground or mixed (aerial and underground) drops will require usable conduits to be verified by the owner prior to installation. In the following pages, you will find essential information on verifying, installing, and preparing your conduits for installation.

For underground or mixed drops:

1. We cannot use conduit that carries electrical service. We can use existing conduit that carries a telephone line, but it must be sufficiently large, Schedule 40 Electrical type material, clear of breaks in the conduit, and with a usable pull string.
2. For drops that require new conduit, the conduit must be prepared and ready for use before your installation can be scheduled.
3. If you intend to install new conduit yourself, or by hiring a local contractor, please be sure to call DIG SAFE (811) before beginning any underground work.

For more information, including a list of local contractors please contact the Petersham MLP

**[petershambroadband@gmail.com](mailto:petershambroadband@gmail.com)**



## NEW CONDUIT INSTALLATION GUIDE

Please review this information with your hired contractor.

1. Call DIGSAFE (811) before doing any digging. They will mark phone/electric paths for free.
2. Conduit should go from your utility feeding pole to the place on your house where telephone and power enter. If you are unsure which is your feed pole please contact the Petersham Broadband MLP: [petershambroadband@gmail.com](mailto:petershambroadband@gmail.com)
3. Conduits should be buried at a depth in accordance with the local building codes (generally 12"-24" deep). Be careful to avoid septic/well/ledge/sprinkler lines, etc.
4. Conduit material should be "schedule 40 electrical" or "SDR 13.5 HDPE"
5. Conduits should be at least 2" diameter
6. Conduits should be installed with a 210 lb. tensile strength pull string.
7. Any bends/turns along the conduit route should use sweeps instead of elbows
8. Extremely long runs should be separated by pull stations every 500 ft.
9. If it is necessary to connect two sections of conduit take extra care to avoid gluing the pull string to the interior walls of the conduit.
10. Allow 2 feet of conduit projecting out of the ground at the utility pole and at the location where you want us to install our enclosure (similar to a telephone box) on the outside of the building.
11. Tie the pull string around the exterior of the conduit and place a cap (or tape) over the ends of the conduit to prevent water from entering the conduits.



## EXISTING CONDUIT PREPARATION GUIDE

An open and prepared conduit is key to making the cabling process as quick as possible. There are a few measures you can take to ensure the conduits on your property are clear and ready for installation.

### 1. Check your conduits to make sure they are unobstructed

- Use a leaf blower and/or a shop vacuum to move air and loose debris through the conduits. There may also be water present in the conduits.

### 2. Pull a string through the conduits.

- Installed pull strings must meet a minimum of 210 lb of tensile strength. They are available at Home Depot, Lowes, ACE, and other major hardware retailers.
- Using a shop vacuum, you can pull a string tied to a plastic bag through an open conduit. Once the string is through to the other end, tie it off to a sturdy object to ensure that it does not get pulled back into the conduit accidentally.
- Some conduits may already have a pull string in them. If you do find a string within the conduit, take a moment to pull from both ends to make sure it can move freely. Ensure that the string is tied to secured on both ends before pulling, so that you do not pull the string into the conduit.

