# Fiber-To-The-Home Installation Guidelines 

Approved by select board 3/3/21

## Underground Drops

## Rigid Conduit (stick, typical 10' sections)

Should be no less than 1.5"ID, schedule 40.
Mid-assist pull boxes every $400^{\prime}$.
No sharp bends, gradual sweeps (elbows $12^{\prime \prime}$ radius, 90 degree) should be used in the vertical rises. If the pathway needs to make a right angle turn a pull box is needed.

Pull cord should be installed.

## Conduit riser lengths from grade at pole and house for all underground drops

The location should be predetermined as suitable for future Fiber Optic NID installation and building penetration of service cable, normally in proximity of the electrical and telephone services. At premise, PVC conduits should rise from below ground tight to the premise foundation wall and extend at minimum 4' and be capped. If the NID will be located on siding that projects out from the foundation, the PVC should be flush with it.

At pole, PVC conduit should rise a minimum 4'; at premise a minimum of 18 ".
Location on pole should be on back quarter or field side of pole-what is location?
Both ends of conduit should be capped and pull cords taped to the outside.

## Microduct

Material may be purchased from Town at cost plus sales tax.
Can be installed in open trench or plowed in at a depth of 12-18".
Material is flexible but important to avoid any kinks; if they occur a splice and coupler will be needed and drop installation could be delayed and will be more expensive.

Mid-assist pull boxes every 600'.
Microduct riser lengths from grade at pole and house for all underground drops
At premise, microduct should rise from below ground to the premise foundation wall and extend at minimum 2' and be capped. The location should be predetermined as suitable for future Fiber Optic NID installation and building penetration of service cable.

At pole, there should be $20^{\prime}$ microduct, coiled and capped.

## Aerial drops

Poles must be no more than 170' apart.
The poles should be class 4 and the minimum height $30^{\prime}$.
Need tree clearance: $20^{\prime}$ on either side and above.

