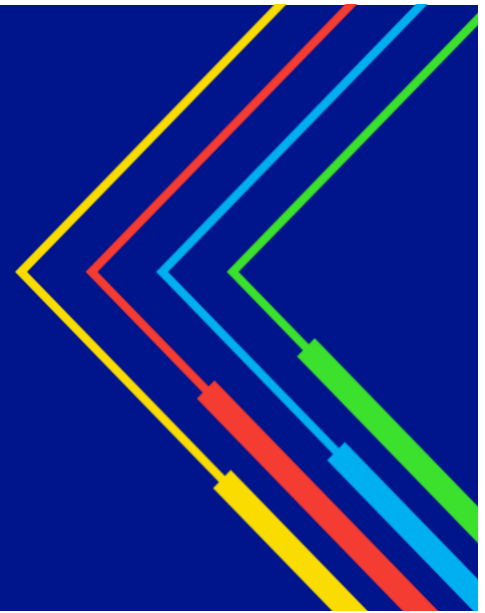


# North Quincy Cable Project

## HDD Fact Sheet



### What is Horizontal Directional Drilling?

Horizontal directional drilling (HDD) is a steerable and controllable technique for installing underground conduits using a special drill rig, steerable drill bit and guidance equipment. Directional drilling is a three-stage process:

- **PILOT HOLE:** The first stage consists of drilling a small diameter pilot hole. Drilling fluid is pumped through the drill pipe to the drill bit where high-pressure jets and the bit will grind the soils ahead of the drill stem. The drilling fluid will also carry the cuttings back to the entrance pit at the drill rig. Upon reaching the exit point, the drill bit is detached and replaced with a reamer.
- **PRE-REAMING:** The second step is to pre-ream the pilot hole and enlarge it to a size sufficient to safely install the product lines. A reamer is pulled back and rotated while pumping drilling fluid to cut and remove solids to enlarge the hole.
- **PIPE PULLBACK:** The final step is the pullback of the pipe within the pre-reamed hole. As the conduit is pulled into the drill hole, drilling fluid is pumped downhole to provide lubrication to the product pipe.

### Why are we using the HDD Construction Method?

The HDD construction method is a costly undertaking and is typically utilized only when other, more traditional construction methods have been ruled out. In North Quincy, due to the complexity of underground construction driven by the density of existing underground utilities between West Squantum Street and 100 Newport Avenue Extension, HDD clearly presented itself as the best, most constructable method.

The HDD construction method comes with an additional benefit. By using this method, we can avoid a longer construction timeline for this section of the route and complete conduit installation before local traffic is expected to return to normal levels later this year.

### How can I learn more?

Our Project team is committed to ensuring that community members in Quincy are kept up to date with the latest Project information. We have established a dedicated project website and community members can contact Project staff directly through our toll-free hotline number or email. In addition, you can sign up to receive email updates and newsletters, which will provide information on the Project's progress and, when construction begins, updates on potential traffic disruptions, parking, and other important news.