

# PIPE JACKING

Pipe jacking is a trenchless method used for the installation of pipelines underground. The specialized process involves the use of a hydraulic jack to push a prefabricated pipe through the ground, creating a tunnel as the pipe is installed. **The process of pipe jacking typically involves the following steps:**

**SITE PREPARATION:** A launch pit and a reception pit are excavated at opposite ends of the pipeline route. The launch pit is used to start the jacking process, while the reception pit is used to receive the pipe as it is pushed through the ground.

**TUNNELLING:** The excavation for the new service is constructed either by man-entry or mechanical means. Typically a shield is used to protect the face of the excavation and prevent collapse or subsidence occurring at ground level.

**PIPE INSTALLATION:** The prefabricated pipe sections are assembled at the launch pit and pushed into the tunnel using a hydraulic jack. As the pipe is pushed forward, additional sections are added to the rear until the entire length of the pipeline has been installed.

**GROUTING:** Once the pipe has been installed, a grout mixture is injected into the annular space between the pipe and the surrounding ground to provide additional support and prevent groundwater from entering the tunnel.

**SITE RESTORATION:** Once the pipeline is installed and tested, the launch and reception pits are backfilled and the surface of the ground is restored.

Pipe jacking is commonly used for the installation of pipelines in urban areas, where disruption to traffic and other infrastructure is a concern. It is also commonly used for the installation of pipelines in difficult ground conditions, such as rock or soils that are prone to collapse.

<b>Requirement</b>	New Underground Service Installation
<b>Specialist Service Offering</b>	Pipe Jacking
<b>Miscellaneous Civil Works</b>	
<b>Foul Sewer / Stormwater / Sleeve</b>	✓
<b>Water / Gas</b>	✓
<b>Size Limitations</b>	900mm - 2400mm

