



### **Contents**

This booklet provides advice on what to do if you require a water supply for your new development. The information is suitable for developers/ house builders and explains what you need to do to apply for a water connection as well as important information on how to lay water pipes.

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### **Video Guides**

We have produced a series of videos to give you more information about the services we offer and what is involved from start to finish. Choose from the list below to find the one that's relevant to your project.



How to get a new water connection



How to lay your pipework



What to expect when we make your connection







### We understand how important it is to get the water supply at the right time in your development.

It's important to let us know when you need your water connection as we can plan this in advance and issue you with a project plan to help keep you on track.

Here is an example below of what you may need to do before your connection. Your case manager will discuss these with you once you accept your quotation.

### 1:

Quote and signed acceptance



#### Action:

Please sign the acceptance on your quote and return it to us.



### 2:

Postal billing/ address



#### Action:

Send your postal confirmation by: (Date)

### 2:

Pipe inspection/ site ready



ACTION REQUIRED

#### Action:

As your connection is 63mm or above one of our inspectors will need to pass this off.

Please get in touch before the below date to arrange this.

#### Deadline: (Date)

Based on your connection date, this is the latest date you must have your pipe inspection completed by.

### 4:

Pressure test and chlorination



ACTION REQUIRED

#### Action:

IMPORTANT – your pressure test and chlorination is only valid for 30 days so you will need to make sure this is booked in no later than a week before your connection date

#### Deadline: (Date)

Based on your connection date, this is the latest date you must have your pressure test chlorination completed by.

### 5:

Your connection date



Subject to Highways approval

#### Action:

Watch this video which explain's what happens on the day of the connection.

### How long can a water connection take?

#### Timescales for connection

On the right there are some examples of common timescales for a water connection - but it's really important that you complete some key tasks before we can plan your connection in.

This booklet also includes a more detailed guide on how to lay your pipework and advice on ensuring your internal fixtures and fittings are correct.





### **Application**

Apply for your new water connection by phone, video or application form. We will then carry out a survey on site, send you a quotation and offer a visit from one of our inspectors to give you some on-site expert advice.



#### Accept your auotation

Once we issue your quote, please check that everything is correct and return your signed acceptance as soon as possible.



### 3 Lay your pipework

Before we can connect your water supply you'll need to complete all work required on site. Please reference your specification drawings and quote report when carrying out these works.



### 21 days

Once we've received all of the information outlined in your quote report, we'll make the connection and install the meters. We aim to do this within 21 calendar days. subject to any traffic management restrictions which will be detailed in vour auote.



#### 16 weeks

We may need to close the road



Closing the road allows us

to safely dig to reach our water main. We need to provide the local highway authority notice of our work and be granted a permit to close the road, which can take up to 16 weeks.

It is important that you let us know as soon as possible when you will need your connection by, so we can start advanced planning with the highways authority to prevent any delays to your development.

### Laying your pipework

Some important information when laying your pipework

### Quick tip!

Please make sure you refer to your spec drawings and quote before laying your pipework.

#### Laying your pipework



Lay a continuous length of unjointed PE/barrier pipe to the boundary with the public highway, ensuring there is a sufficient length (see your quote for details) of pipe to allow for a connection to the host main.

#### Surrounding areas



Please make sure you refer to your quote to ensure you are bringing the pipework out to the correct point of connection. You also need to make sure that the pipework is at least 2 metres from street furniture e.g. lamp posts, utility poles, pillar boxes, BT boxes etc and also any trees or obstructions.

#### **Trenches**



Minimum depth from top of the service pipe to finished ground is 750mm or 2ft 6in.

Maximum depth from top of the service pipe to finished ground level is 1350mm or 4ft 6in.

Where service pipes cannot be installed within these parameters, please seek guidance from your local inspector.

#### **Trenches**



ideally sand bedded, free from debris that may damage the pipe and wide enough to accommodate the pipework it is hosting, along with any other utility services sharing the same trench.

#### Backfilling your trench



The trench should be free from domestic or commercial waste, and lined and filled with fine granular backfill, generally sand, or selected soft earth, not rubble. The trench should be left open for inspection unless otherwise agreed with your inspector.

### Laying your pipework continued

Some important information when laying your pipework

# Quick tip! All service pipe installations must be flushed and free from debris before the meter is installed.

#### Tracing mesh



The detectable tracing mesh, incorporating tracer wire, must be visible on site at inspection, and needs to be installed approximately 350mm below finished floor level

Note: Tracing mesh and blue pipe ID tape are two different products used for different purposes. Please ensure tracing tape/mesh is used.

### Labelling your pipework



The service pipe must be clearly labelled at the boundary with the correct plot number/property number. This is necessary in order to ensure correct billing information.

Water supply pipes to terminate 350mm apart at the boundary.

### **End of pipework**



The supply pipe must be sealed with a mechanical watertight stop end to prevent the ingress of debris.

Important: Tape, bungs or plastic bags should be avoided due to risk of contamination.



#### **Ducting and insulating**



Pipework must be ducted and suitably insulated (where applicable) as it enters the property. Pipes entering buildings at the approved depth should be passed through a duct and the ends of the duct sealed, to prevent the ingress of gas, fluids, insects or vermin into the building. There is more information about this on the next page.

### **Ducting and insulating your pipework**

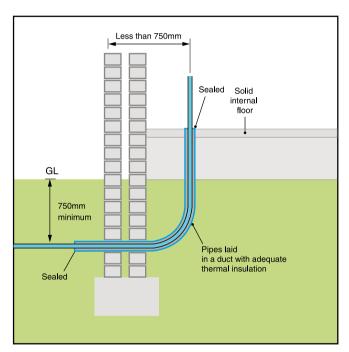
## There may be scenarios where you need to insulate your pipework before you duct it.

It is essential that pipes entering buildings below ground level are sealed against the entry of gas, fluids, insects or vermin, as shown in diagrams 1, 2 and 3.

Where the incoming pipe enters the building:

#### **Ducts (usually solid plastic)**

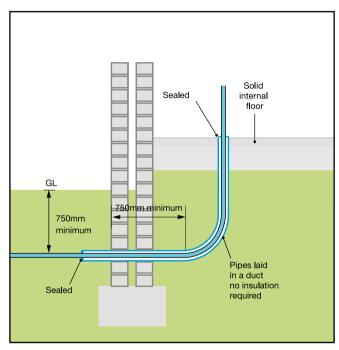
- Pipes entering buildings at the approved depth should be passed through a solid duct (usually a solid plastic duct, blue flexi duct or a pre-insulated duct but not land drainage) and the ends of the duct sealed, to prevent the ingress of gas, fluids, insects or vermin into the building.
- Ducting should be sized to accommodate the service pipe with insulation. If the duct is extended away from the footings of the building it should either be blue or identified with blue pipe ID tape, to be spiral wrapped around the duct for the length of the installation.
- Joints/fittings cannot be used on the supply pipe when inside a duct.
- The duct can be sealed with plastic caps or any readily removable sealant that is not oil based.
- 25mm and 32mm insulated supply pipes can ordinarily fit into a 100mm (4 inch) duct. 63mm can ordinarily fit into a 150mm (6 inch duct) with a slow radius bend. If no bend is required, i.e. cellar/basement, then a 100mm duct should be sufficient.
- Ducts should be sized to allow pipes to be readily removable for maintenance and repair.
- Requirements may vary due to differing wall designs and construction methods.



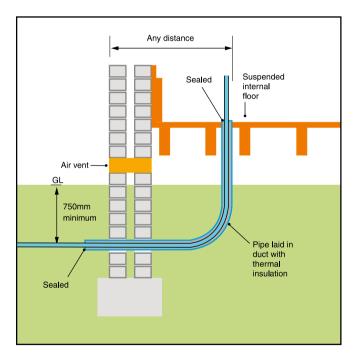
#### Diagram 1:

Vertical pipe in duct less than 750mm from external face of wall. Insulation is required.

### Ducting and insulating your pipework continued



**Diagram 2:**Vertical pipe in duct greater than 750mm from external face of wall.



#### Diagram 3:

Vertical pipe in duct any distance from the external face of wall where entry to building is through a suspended floor with air void below (insulation is always required).

### **Ducting sizing**

- Installation of 25mm service pipes to the buildings 100mm duct with slow radius bend or flexi duct
- Installation of 32mm service pipes to the buildings 100mm duct with slow radius bend



Scan here for more information on insulation requirements and sizes

### **Ducting examples**

#### Pre insulated duct



Flexi duct with stop ends







### Mechanical stop ends

The end of the water supply pipe(s) should be fitted with a mechanical water tight stop end to prevent the ingress of debris and contaminants.

**Important:** Tape, bungs and plastic bags are not an acceptable seal due to the risk of contamination.







### Water meters

Whenever we need to fit a new meter or replace an old one, we use versions called Automated Meter Readers (AMR).

#### How it works

As the name suggests, these new and improved meters can be read by us remotely and automatically without the need for us to disturb you in your home. Our AMR meters transmit data using radio frequencies which are picked up by our meter reading devices as they drive past your home.

Since 1990, every newly-built property has had a water meter installed.

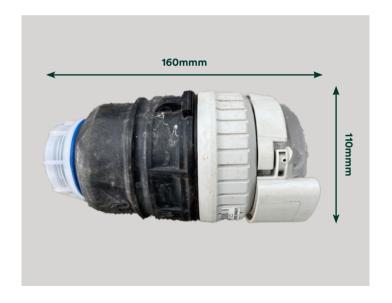
From 1 April 2010, it is United Utilities Water policy that all new standard connections will have meters that are capable of being remotely read. This means access to the property is not needed to obtain a meter reading, meaning that we can install meters in locations that are more accessible to customers and avoid issues usually associated with traditional meter installations in the footpath or boundary.

Internal meter installations must therefore be accessible at all times, as this will enable customers to monitor their consumption and check for leaks. It is also a requirement for maintenance, meter reading audits and the exchange/repair of the meter/meter carrier.

### Some important information regarding the meter for your development:

- Please ensure you refer to your quote and report as to where your meter will be fitted.
- Don't fit your own meter.

- Our concentric AMR meters are 160mm in length. Please ensure the meter location can accommodate the meters prior to installing meter provision.
- It is really important that before your connection the manifold is in place ready for the water meter to be installed.
- Once we have fitted the meter, please do not remove it.
- All water meters used on new connections will be sourced and installed by United Utilities.



### Water meter provision

Meeting the water meter provision requirements for all standard 25mm supplies with 15mm meters internal concentric meter fits can be achieved in one of two ways:

- The installation of a meter housing unit, incorporating a stop tap, meter housing, blanking plug and drain off
- The installation of separate meter housing for a class D meter and blanking plug, installed in between the incoming stop tap and drain off **Note:** For single supply domestic dwellings there is no requirement to install a backflow preventer.

### Domestic meter provision examples for 25mm supplies x 15mm meters



Meter housing unit incorporating all the required fittings



Separate meter housing together with individual BS1010 stop tap and drain off

### Commercial meter provision examples for 25mm supplies and 15mm meters, including backflow provision



Meter housing assembly incorporating all the required fittings



Separate meter housing together with blanking plug, BS1010 stop tap, in-line double check valve and drain off

### Commercial meter provision for 32mm supplies with 20/25mm in-line meters



**Note:** Meter provision differs between 20mm and 25mm meters.

#### Guide:

20mm in-line meter = 750mm x 22mm straight length of securely fixed unjointed copper directly after the incoming stop tap and pipe clipped 100mm away from the wall.

25mm in-line meter = 1000mm x 28mm straight length of securely fixed unjointed copper directly after the incoming stop and pipe clipped 150mm away from the wall.

Note: The photographs in this booklet are examples and should be used for guidance only. There are many brands and products available that are Reg 4 compliant, accepted and used by all the other water companies.

### Here is a list of a number of installations to assist you.

Just scan the QR code and this will bring up the specification relevant to your development and some guidance to help get this right. If your are viewing this on your computer, click on the mouse icon to take you to the relevant form.



### **Domestic Meter Installations**



Internal meter installation



External meter installation – wall-mounted box



Temporary to permanent connection.



External Meter installation – Boundary box for properties 50 meters and beyond from the water main



# Domestic & Commercial Meter Installations for fronting on to the public highway





32mm commercial basement supply fronting on to the public highway with provision for a 20mm-25mm internal in-line meter



25mm commercial basement supply fronting on to the public highway with provision for a 15mm screw-in meter





25mm domestic basement supply fronting onto the public highway with provision for a 15mm screw in meter



Multi occupancy premises – 32mm connection fronting on to the public highway

### Multi occupancy meter provisions



Meters on a manifold in a communal area for a 32mm connection



Meters for each individual flats / apartments for a 63mm connection



Basement installation (63mm and above) fronting on to the adopted highway



63mm and above connection fronting on to the public highway



### **Commercial meter provisions**







63mm commercial connection with 25/40mm in-line meter



32mm commercial supply with provisions for a 20/25mm in-line meter.



Standard 25mm commercial supply with provision for a 15mm internal AMR meter



50mm and above in-line meter

### Troughs, temporary supplies, and shallow point of entry guidance



**Shallow entry point Installation** 



Agricultural/animal drinking water trough



Allotments with single or multiple watering points



Temporary building supplies and standpipes







### Fire supplies, rainwater harvesting, irrigation supplies







**Domestic Fire-Fighting Supplies** 



Commercial fire-fighting supplies



Rainwater harvesting systems



Irrigation supply

### **Contaminated land**

### Domestic/commercial

If the site has shown to be contaminated, you are required to lay services to protect the water supplies from ingress of any contaminants.

All pipework, fittings (including boundary/meter boxes) and materials must be suitably approved for the circumstances in which they are being used.

#### Barrier pipe installation guidance:

There is a varied range of suitably approved type A barrier pipes available but installers must be mindful that barrier pipe manufacturers have their own jointing and wrapping requirements that will determine regulatory compliance and the validity of the barrier pipe system warranty. Please refer to the relevant manufacturer's instructions prior to the installation of any barrier pipe system.

#### Standards:

BS EN 12201 and BS 8588:2017 (Superseded the Water Industry Specification - WIS 4-32-19 in 2017) and both define performance criteria for polyethylene barrier pipe and associated fittings.



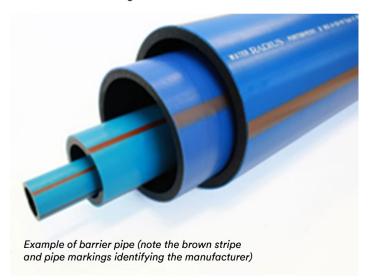
BS 6920 A four part document detailing the suitability of nonmetallic materials and products that come into contact with water for public consumption

WIS 4-32-08 Specification for fusion jointing.

WIS 4-32-11 Specification for mechanical and compression fittings made from thermoplastics for use on polyethylene pipe with or without an aluminium lining

**Note:** As a water company, we reserve the right to accept any third party fittings that have been suitably approved and tested within the respective barrier pipe system in which they are to be installed.

Installers are advised to check with **United Utilities Developer Services** before starting work.



### What information do we need from you?

#### Postal address

### Why do we need you to provide us with local authority confirmation of new postal address?

This is to ensure we can set up new billing accounts accurately and efficiently.

Details requesting postal addresses for your development should be made by way of application to your local authority.

Your developments local authority can be found at www.gov.uk/find-local-council

Once received, your development's postal confirmation will be on a letterheaded document with your local authority displayed at the header of the page.

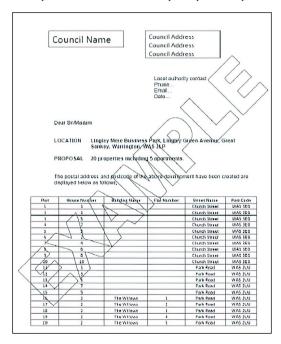
This document should be sent to Developer Services before your water connection is carried out.

If you have more than one plot it would be really helpful if you could send us the site layout, including plot numbers, to make sure that we allocate the right meter details to the right address.

#### When DON'T we need a postal address?

We don't need a postal if it's not a property/business that is receiving post, such as a trough, or irrigation supply for allotments, for example.

#### Example of what we can accept as proof of postal address:



### Inspecting your pipework

#### For pipes 32mm and below

If you use a non-WIAPS (Water Industry Approved Plumber Scheme) certified plumber we'll need to inspect all of the pipes you've laid on your site.

If you do use a WIAPS certified plumber then you will need to supply a certificate for the pipework on your site, which should state the depth, material, pipe diameter and location of the pipe.

#### For pipes 63mm and above

We must inspect all pipework even if you've used a WIAPS approved plumber to do the work.

#### Non-WIAPS

Our inspector will check that your pipework and meter provision is laid to the spec on your quote report. On the right are examples of things we will inspect on the day. Note – depending on your connection type there may be a few more requirements that will need passing off but this can be discussed with your local inspector.

- Have you laid the correct size pipework?
- Is the pipework the correct material for the ground conditions?
- Number of supplies
- Is the pipework laid at the right depth?
- Has the pipework been brought out to the correct point of connection?
- Is there sufficient pipework coiled up at the boundary and is it capped off with a mechanical stop end?
- Is the meter manifold installed (internal at point of entry or wall mounted box)?
- Is the external control box installed?

### Quick tip!

If you have used a WIAPS plumber for pipes 32mm and below, this is an example of the certificate we will require before the connection is carried out.



### We also offer self serve inspections now

### Submit a video report of your pipework installation to speed things along

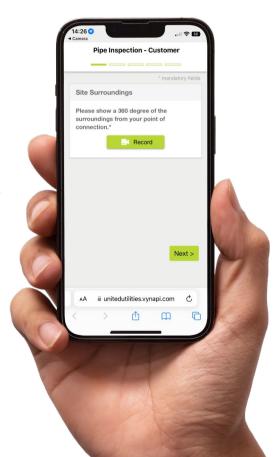
It is really easy to use and can be done from your mobile device or tablet.

Just scan the QR code below to get started. It will take approximately 3 mins total to complete.

Simply send us a video of your installation and one of our inspectors will review this within 1 working day.

Please note vou will need a good internet connection and a camera and microphone to show us what you have done.









### Pressure testing your pipework

### Hydraulic pressure test

### Why do you need to carry out a pressure test on pipework 63mm and above?

A hydraulic pressure test is required to evidence that the newly installed system is secure and there is no risk of leakage when we connect your new supply.

This is required on the larger size connections because of the risk element due to the size and pressure.

This is to protect your development in case anything isn't secured or connected as it should be.

### When do you need to pressure test?

This needs to be completed before we carry out the connection and before you chlorinate the pipework.

### What is required?

Testing of the new incoming service up to the first internal stop tap.

Prior to the commencement of any test the pipework shall be charged with wholesome water and all air removed.

All testing methods should to an industry recognised standard and completed in a manner that will not permit the contamination of the public water main with pressurised water.

For systems that do NOT contain any plastic materials (that is rigid materials such as ductile iron or stainless steel) the requirement shall be satisfactory if, the whole of the system, under examination, is pressurised to the required value (10 bar) by pumping, after which it is then isolated for the period of one hour, and the pressure does not fall below that of the test pressure.

Pressure test results returned should say ok to connect to public water supply.



Scan here or click below for the latest industry recognised guidance in detail.

### Chlorinating your pipework

### Connections 63mm and above

A certificate of disinfection is required for all supply pipe connections that are 63mm and above.

For connections above 63mm we also require a sample to be sent to a UKAS accredited laboratory for microbiological analysis.

### When is this required?

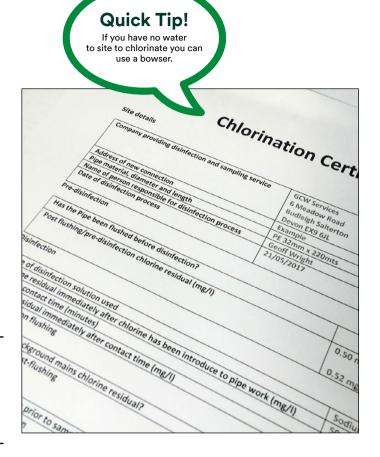
Chlorination should only be arranged once in receipt of your connection date; ideally, 10 days prior to connection; Chlorination certificates are valid for 30 days from the date of disinfection. Use the QR code for access to the latest industry recognised chlorination guidance.

#### An example of what information is required

We will need you to provide us with a UKAS accredited lab sample pass certificate prior to connection to the mains network.



Scan here or click below for the latest industry recognised guidance in detail.



### When are you ready for connection?

An important checklist that you will need to complete before you are ready for your water connection

- Is each service pipe labelled to show the plot that it serves?
- Has the postal address been confirmed with the local authority?
- Have you supplied a WIAPS certificate for the pipework or is it with United Utilities to inspect the pipework?
- Are the site and service pipe accessible with no scaffolding or skips in the vicinity?
- If there is a wall around the outside perimeter of the property, has this been tunnelled under to allow the connection pipe to be fed through? (Only if applicable.)
- Is your meter provision in place as per your quotation and spec.?
- Have you provided the contact name, email address and phone number of the site representative who we will liaise with?

### **FAQs**

### Frequently asked questions



### What is service pipe labelling?

Where new connections are made to the main, all service pipes must be clearly labelled with the relevant plot/property number. Labelling is also required for internal pipework where multiple internal water meters are to be fitted. This is necessary in order to ensure correct billing information.

### When will my water meter be fitted?

For 25mm standard connections, your water meter will be fitted at the same time as the connection is made. On multi-occupancy premises, your meters will be fitted after the connection is made.

### What is traffic management?

The Traffic Management Act was introduced in 2004 to tackle congestion and disruption on the road network. The Act places a duty on local traffic authorities to keep traffic flowing on their road network by giving them additional tools to better manage parking policies, moving traffic enforcement and the coordination of street works.

Should you wish to find out more information on the Traffic Management Act, please visit www.dft.gov.uk

# Who is responsible for the maintenance of the service pipe from the property to the water main in the footpath?

UUW will not adopt the service pipe. It is UUW policy that the customer/developer is responsible for the service pipe up to the boundary of the property and UUW is responsible from the boundary to the water main. The location of the water meter does not define the boundary of responsibility, and never has. After a reasonable period of time, UUW will assume responsibility for the maintenance of the external control and meter carrier.

#### Where do I source materials from?

We recommend any local, national or web-based plumbing merchants.

### What are contestable and non-contestable charges?

Contestable work is work or services that either the relevant undertaker or persons other than the relevant undertaker may do or provide.

Non-contestable work – work which may only be undertaken by United Utilities.

This is to ensure health and safety regulations are met and to ensure work is done correctly to meet compliance standards.

### **FAQs**

### Frequently asked questions



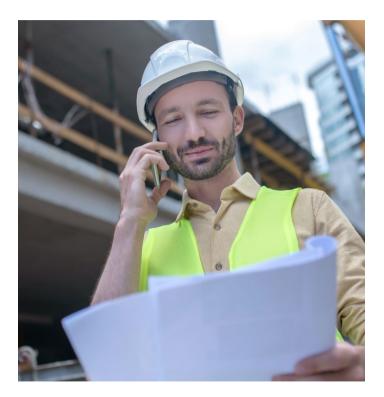
### What are infrastructure charges?

This charge is payable to United Utilities when a property becomes connected to the water and sewerage systems for the first time for domestic use. This means any use of water for individual personal needs and for household purposes, such as drinking, bathing, heating, cooking, non-commercial gardening, and sanitation. It is because every new connection imposes an additional demand on the capacity of the water and wastewater network, which may need to be upsized as a result. These fixed charges represent a contribution towards the capital expenditure in meeting that new demand and are shown in our charges scheme.

#### What is income offset?

Income offset is a payment made by us to a customer who is building a property or applying for a new connection where clean water infrastructure is charged. This is recognition of the future income that we will receive from billing the property.

This is for new water connections for domestic purposes (including water used for domestic purposes at non-household premises). Where clean water infrastructure is charged in this instance, income offset is applicable.



### **FAQs**

### Frequently asked questions



#### What will my water pressure be?

The mains water pressure in the United Utilities area varies due to elevation, and daily and seasonal fluctuations, but is generally between approximately 15m (1.5 bar) and 60m (6.0 bar). This is static pressure and will be reduced inside the building depending on the length and size of the service pipe and the rate of flow. A standard 25mm outside diameter service pipe will normally provide 15-20 litres per minute.

Mains pressure of 1.5 Bar is deemed adequate for all normal domestic situations but developers should satisfy themselves that it is sufficient for their purposes, particularly in buildings above two storeys. Most domestic water-using appliances will have the manufacturer's design and operating instructions. Developers must consider the minimum and maximum pressure requirements, and additional protection to avoid possible damage to fittings and appliances. Some appliances, notably combination boilers, may not perform well at pressures below 1.5 bar.

The Water Industry Act 1991 Section 65 (2) states "Nothing shall require a water undertaker to provide a supply of water at a height greater than that to which it will flow by gravitation through its mains from the service reservoir or tank from which that supply is taken", therefore, if you feel that the elevation of your property from the connection point may affect your supply, you may need to install a pump and tank system at your expense. We would advise you to obtain advice from a plumber for this.

The network pressure/flow is designed to cater for non-fire-fighting purposes.



### We're here if you need us...

**Developer Services contact details** 

Website: www.unitedutilities.com/builders-developers

Call us: 0345 072 6067

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Send us an email at: DeveloperServicesWater@uuplc.co.uk

### Other useful contact numbers

Water or wastewater query

#### 0345 672 3723

- Got a burst pipe, blocked drain or sewer?
- Worried about the colour of your tap water or water pressure?
- Our team can help, 24 hours a day

I don't have a water meter

#### 0345 672 2888

If you don't have a water meter and need help with your bill or water account.

I have a water meter

#### 0345 672 2999

If you have a water meter and need help with your bill or water account.

Ringing from abroad?

+44 207 197 0197

If you're ringing from abroad.



Thank you for doing business with us

