

## Water Developer Guidelines



# pivotal

Gas, Electricity, Water, Renewables

In case of emergency, scan or click Pg. 4 - Introduction the QR code below to find your local water company: Pg. 5 - NJUG Guidelines & Water Main Proximity Pg. 6 - Mains Pg. 7 - Testing & Chlorination Process Pg. 8 - Temporary Building Supplies (TBS) If any damage is caused to a live water main or service, or there is a water leak, you <u>must</u> report it immediately to your local water company found by scanning the QR code above. Pg. 9 - Services A network approved design will be provided to you. It is important that the exact specification on the design and these developer guidelines are adhered to. If not, it could result in your project being delayed and/or additional costs being applied, which both parties would like to avoid. Pg. 12 - Manifolds, Valves & Fire Hydrants By following the above, this will ensure that your contractors on site are aware of the location of all water mains and services which will help safeguard all site personnel and the installed apparatus. It is the developer's responsibility to ensure apparatus is not damaged following installation. Pg. 13 - Responsibilities If any damage has been caused to any pipework that has not yet been commissioned, please report it to Pivotal immediately.

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#### Introduction

These guidelines have been produced to advise developers, builders and ground workers who are excavating and backfilling trenches for the installation of water mains and services.

The Self-Lay Agreement must be signed by the developer, the host water network and Pivotal Energy Limited, this is a legal agreement which must be in place prior to any mains being installed on site. It is important that all parties are aware of their responsibilities within this agreement, including but not limited to, the use of WIAPS gualified plumbers, the guality of the internal plumbing and that all fittings comply with the local water company's regulations.

Please be aware that water companies now conduct a final walk-through before approving the mains and services. Any defects such as depth of services and mains, missing surface boxes, filled in SV/Hydrant chambers, missing hydrant markers etc. will result in remedial works being required to put it right, this will be at the developers cost.

These guidelines also cover installation instructions along with other general site information.

Don't forget, Pivotal also offer Gas and Electricity installations along with disconnections, diversions & meter removals.











#### NJUG Guidelines & Water Main Proximity

#### Recommended positioning of utility apparatus in a two-metre footway

Note - the same positioning should apply in the carriageway/ service strip (if safe and practical to do so) where a development has no footway(s) available for services and/or the boundary of the property is on the carriageway (please refer to minimum depths in carriageways). For further advice please contact Pivotal by calling 01455 244556.

As each of the 29 water networks has different regulations, it is essential that a minimum separation of 350mm is maintained between all utility apparatus to avoid any issues. This includes such things as BT ducting, joint boxes and drainage pipes and any apparatus subsequently laid after our installation. Any costs involved to remove apparatus, pipes, ducts or cables not maintaining this separation will be paid directly by the developer.

If scaffolding is erected there should be a 4m distance from the service or main trench



#### **Mains Excavations**



The developer must excavate trenches to achieve depth of cover of 900mm.

The width of excavation will vary depending on the size of pipe needing to be installed. Again, please refer to your approved water design for pipe sizes and see the below chart.

#### Minimum Excavation Width

Pipe Size	63mm	90mm	125mm	180mm
Minimum Trench Width	400mm	450mm	500mm	550mm

No other utilities are to be positioned directly above the water main.

For the avoidance of doubt, water mains can't be ducted other than where a water main crosses a road. These ducts should be supplied and laid by the developer. It <u>must</u> be compliant with BS5422. Ducts <u>must</u> remain clear of debris and be accessible at either end. Please refer to your approved water design for duct sizes and position.

The developer must backfill all trenches prior to any pressure testing and chlorination.



Water mains must be a minimum of 350mm from all other utilities.

hardcore in the trench.



Pivotal is responsible for laying all mains in pre-excavated trenches. Water mains cannot be laid by the developer.

### **Testing & Chlorination Process**



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## **Temporary Building Supplies (TBS)**

**Developer responsiblities:** 

- Securely attach standpipe to a fixed postal structure
- Ensure standpipe is stored within a lockable waterproof enclosure
- Ensure pipework is insulated
- Install a double check valve when serving a hose union tap
- Install a drain-tap immediately down-stream of the double check valve

Once the TBS has been installed please contact Pivotal on 01455 244556 and we can arrange the connection.







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#### Services - Mains to Meter



The developer should excavate service trenches in accordance with the diagram shown.

An excavation pit of 1m<sup>2</sup> must be provided to allow the service connections to be completed at both the main and the boundary box position (a total of 2 x excavation pits per connection).

Pipework must be 3 metres away from street furniture such as lamp posts, bins, utility poles etc.

All water services must be laid at a depth of 750mm - 900mm, from the top of water pipework to finished surface level.

For the avoidance of doubt, water services can't be ducted other than where a water service crosses a road. These ducts should be supplied and laid by the developer. It must be compliant with BS5422. Ducts must remain clear of debris and be accessible at either end. Please refer to your approved water design for duct sizes and position.



Water services must be a minimum of 300mm from all other utilities.

Materials used for bedding shall conform to WIS 4-08-02 which is the specification for bedding and side fill materials for buried pipes.



#### **Services - Developer Supply Pipe**



All service pipe wherever possible <u>must</u> follow the most practical and the shortest route.

Acceptable service routes are shown on the diagram to the right.

If your site is deemed to be contaminated barrier pipework is required along with specialist fittings, if unsure don't hesitate to contact us.



The service pipework laid between the property and the water meter are the responsibility of the developer and <u>must</u> be certified once laid by a WIAPS qualified plumber.

Services <u>must</u> be a continuous length of 25mm or 32mm pipe, if you are unsure on what pipe size to use please contact us to confirm.

The WIAPS plumber will need to issue an installation certificate for each service to enable Pivotal to certify that the work has been carried out in accordance with the relevant regulations prior to any service connection being completed.

Lay the water service directly into the ground. Please seek advice if you wish to install ducting as not all networks allow this, if you are unsure please contact Pivotal on 01455 244556.



#### Services



The water service pipe should be laid from the termination point within the property, up to the meter location/property boundary. Each service will need an additional 2 metres of supply pipe to extend past the boundary to enable the connection to the boundary box/meter location.

Where services are laid in close proximity, the service pipe <u>must</u> be clearly labelled with the correct plot/ property number to ensure no pipes are cross connected and incorrectly metered.

In order to prevent contamination a mechanical cap <u>must</u> be installed at the end of the supply pipe (externally) and internally a stop tap should be installed (BS1010 approved) If the service crosses the road, the developer <u>must</u> install ducting, ducts <u>must</u> be clear and free of debris.

Avoid installing boundary boxes in driveways or crossover areas where vehicles may drive over them.

Water companies have varying specifications for water meters and boundary box locations, please refer to your approved design.



## Manifolds, Valves and Fire Hydrants



Manifolds can be designed with a 2, 4 and 6 service port depending on the number of properties in close proximity. This brings a group of services to one position without having to separate them.

Manifold Size	Service Pipe	Manifold Excavation Pit	Connection Excavation Pit	Depths
2-port	25mm & 32mm	1.5m²	1m2 surrouding main	750mm - 900mm
4-port	63mm	1.5m²	1m2 surrounding main	750mm - 900mm
6-port	63mm	2m²	1m2 surrouding main	750mm - 900mm

For far side connections, the 32mm and 63mm service pipes can be ducted and each manifold must be installed within 300mm of the shared drive boundary.

You must ensure the service pipes are labelled correctly with the corresponding plot numbers often found at the boundary of private drives.

#### Sluice Valve



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## Responsibilities



Please see the below table which outlines who is responsible for the various actions required for the installation of water mains and services on your site. The below may vary slightly therefore please refer to your accepted proposal for clarification or call a member of the Pivotal Team on 01455 244556 who will be happy to advise.

Action	Developer	Pivotal
Excavation & Reinstatement	Onsite	Offsite (local water network)
Supply, Installation of fine fill sand & detectable warning marker tape		
Supply & Installation of ducting		
Supply & Installation of water main pipe and fittings		
Supply & Installation of water service communications pipe	From the property to the meter/ property boundary	From the water main to the meter/ property boundary
Supply & Installation of water boundary boxes		
Lines and levels		
Welfare Facilities		
Storage of all pipework and materials off the ground on a level, stoned surface, away from potential sources of contamination.	<b>S</b>	
Safe Locations for Parking of Vehicles and Access		
Safe Working Zone		

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#### **Developer Checklist**

#### It's important that the following actions are followed to enable us to meet your build programme. If you are unable to complete any of these tasks then please contact us at 01455 244556.

Have I referred to the approved water design to ensure any trenches, ducting and meter positions have been adhered to?
Are my trenches the right size with adequate fine fill sand?
Have I provided the required proximity clearance from other utility apparatus?
If applicable, have I used the approved blue ducting compliant with BS5422?
Have I taken photos of the service pipe (showing depth) and had the installation verified by an approved plumber?
Have I installed mechanical cap ends and/or a stop tap to my service pipe?
Do I have detectable water marker tape ready to install when I backfill?
Is enough fine fill sand available on site to cover the mains and services once they are installed?
Have I left an adequate excavation pit open at either end of the service (see page 9 and page 12)?
Have I ensured that all scaffolding has been removed where Pivotal will be working? (see page 5)
Have I marked out the lines and levels for the installation of the boundary boxes?
Are my premises watertight and lockable prior to service connections?
Do I know how many Pivotal site visits are remaining to complete my development?



#### **General Information**





01455 244556 contactus@pivotalenergy.co.uk www.pivotalenergy.co.uk

Pivotal Energy are serious about health and safety and treat the legislation and regulations that protect us all with the utmost importance. We provide all our clients and the members of our team with the tools and knowledge to ensure that we're both complying with the relevant CDM regulations and requirements for the scope of works that we will be undertaking. Unless otherwise explicitly confirmed, we will be working under the clients Principal Contractor.



This document details the technical standards, practical steps, arrangements, installation criteria and quality control

process for the installation of Water Mains or Services in line with Water Industry Regulations.



Scan the QR Code to view our Terms & Conditions



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### Thank you for choosing Pivotal.



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