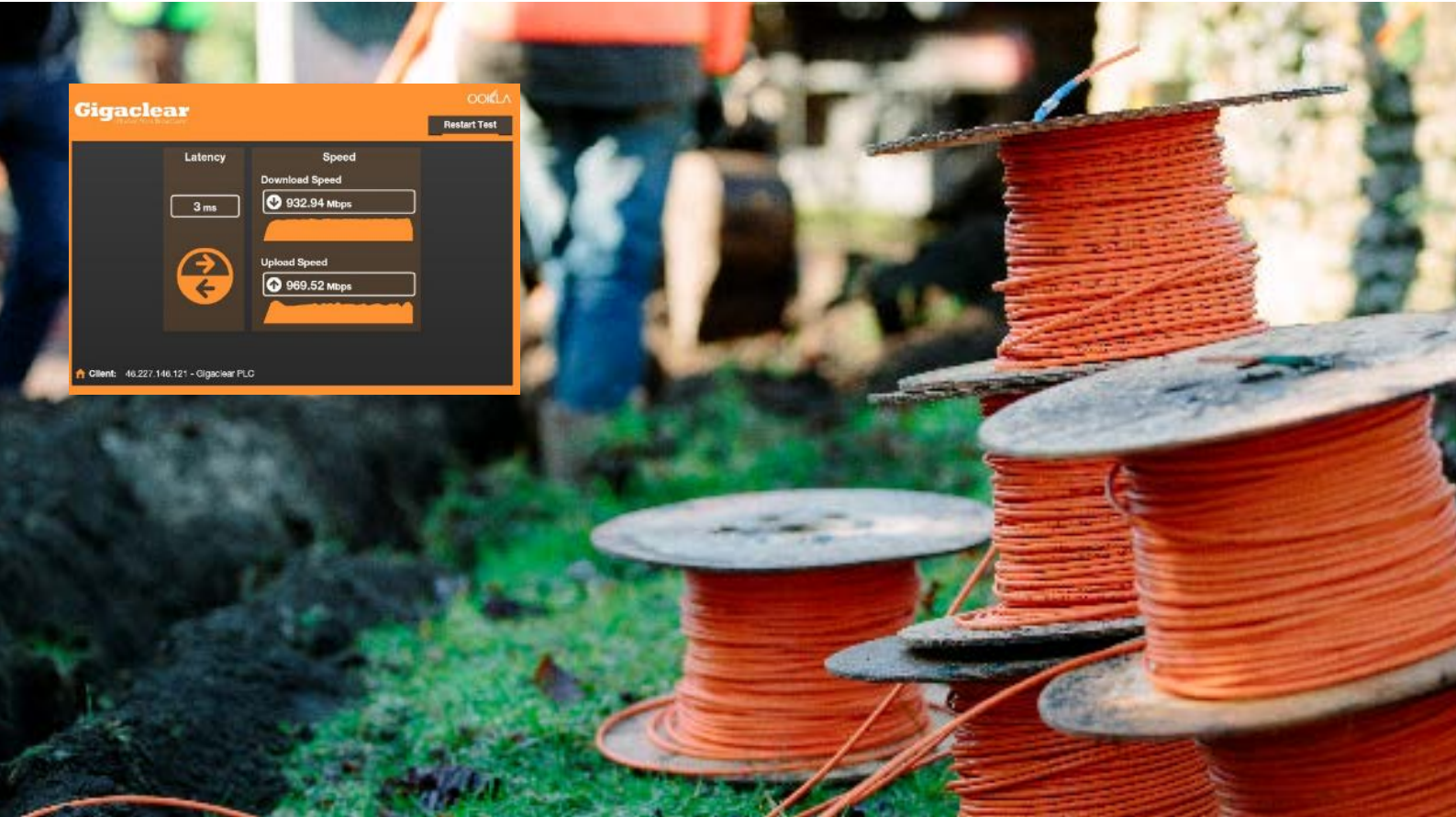


# Gigaclear

Ultrafast Fibre Broadband



## Gigaclear Street Infrastructure

[www.gigaclear.com](http://www.gigaclear.com)

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## Introduction

Gigaclear builds new, full fibre network infrastructure in rural areas of the UK. This network provides business and residential customers ultrafast broadband at up to 1Gbps symmetrically. The Gigaclear full fibre network and the back-office systems are all designed for fully open access, allowing any wholesale service provider to sell products and services over the Gigaclear fibre network.

If you are planning any property development, driveway or land drainage work in rural areas, where we are present, you are potentially going to find our infrastructure.

If you are a retail service provider or carrier looking to make use of some of the Gigaclear fibre assets, you will need to know what to look for.

This guide is intended to help identify and locate our equipment. All fibre cables and ducts are buried, the only visible infrastructure are the street access cabinets, the fibre drop cabinets and the fibre 'pots' installed along property boundaries.

If, after following this guide, you are unsure as to whether our infrastructure is present before you start any civils works underground, please call us first on 01865 591131.

## More information

Gigaclear infrastructure location can be found in two places online, bear in mind whilst new networks are in construction the details will not be available in linesearch. Please check these resources before you contact us and before you start civils works in our networked areas.

As built information:



Gigaclear network map and postcode checker:



## Gigaclear Network Infrastructure

The Gigaclear network is a point to point, buried fibre infrastructure. Every property passed has a buried [Fibre Pot](#) installed at the property boundary. This [Fibre Pot](#) is connected either directly to a local [Access Cabinet and Fibre jointing chambers](#) via one or more buried 'fibre jointing chambers' when the fibre is directly buried (early build method), or is connected to a local [Drop Cabinet](#) via a 'micro duct' when the fibre network is fully ducted (current build method). The [Access Cabinets](#) are linked together using trunk cable connections via a number of 'fibre jointing chambers' either using directly buried fibre or using directly buried 'multi ducts'. In some areas the access cabinets link together via 'gateway cabinets'.

The following images help identify the type of infrastructure Gigaclear deploys. Note, that all buried fibres and ducts have green marker tape installed on top of the cable to warn of its presence.

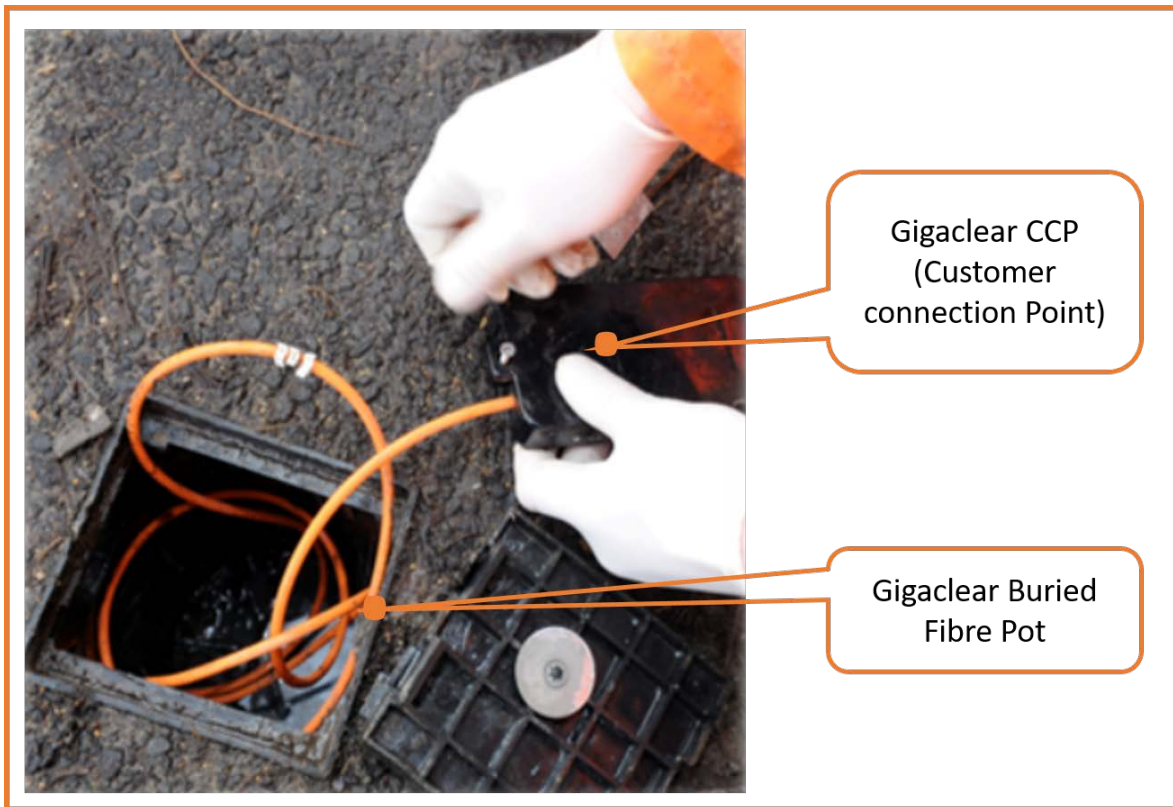


## Fibre Pot



Gigaclear  
Microduct

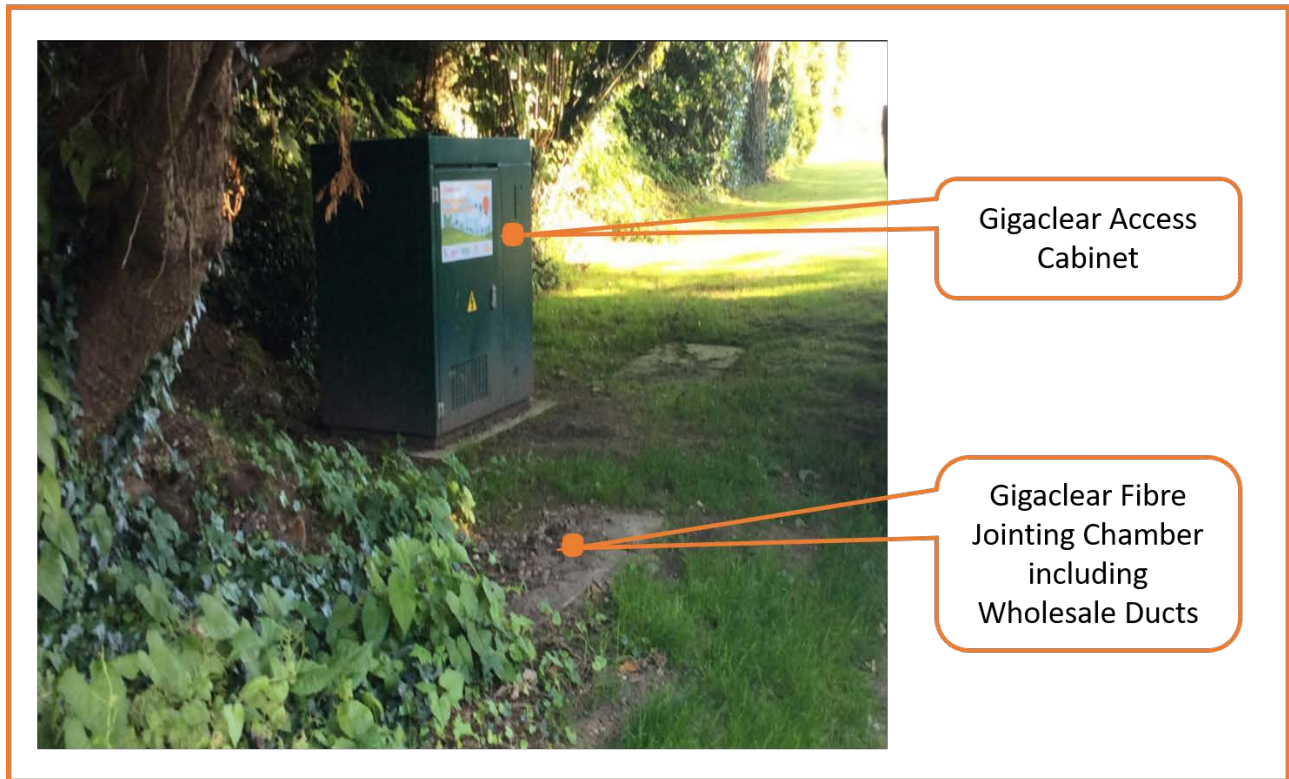
Gigaclear Buried  
Fibre Pot



The 'pots' are installed at the property boundary and for pre December 2017 will contain a customer connection point (CCP) which is a connectorised fibre termination unit allowing the drop fibre to the property to be plugged in.

From the end of 2017 Gigaclear started using a new build method installing micro ducts to the fibre 'pots' to allow more fibres to be delivered to each property as desired, rather than the single pair that traditionally was directly buried. When the customer at the property places an order, the duct is extended into the property and the requisite number of fibres are blown through from the property to the local drop cabinet.

## Access Cabinet and Fibre Jointing Chamber



Gigaclear access cabinets house the Gigabit Ethernet Active equipment, power supplies, backup batteries and the access fibre patch panel. When a wholesale active Ethernet order is placed at a property connected to this cabinet, a Gigaclear Engineer will patch the property specific fibre to the configured Gigabit Ethernet port on the switch in the cabinet.

Adjacent to the cabinet are the buried fibre jointing chambers. In these chambers all the trunk and access fibres converge and are then connected via pigtail cables into the cabinet.

When a service provider requests access to a dark fibre tail, this tail will be presented at one of the wholesale duct ports inside this chamber. The wholesale partner will have to dig to this chamber and either patch into this fibre, or may install their own fibre cabinet depending on the volume and type of services required.



## Drop Cabinet

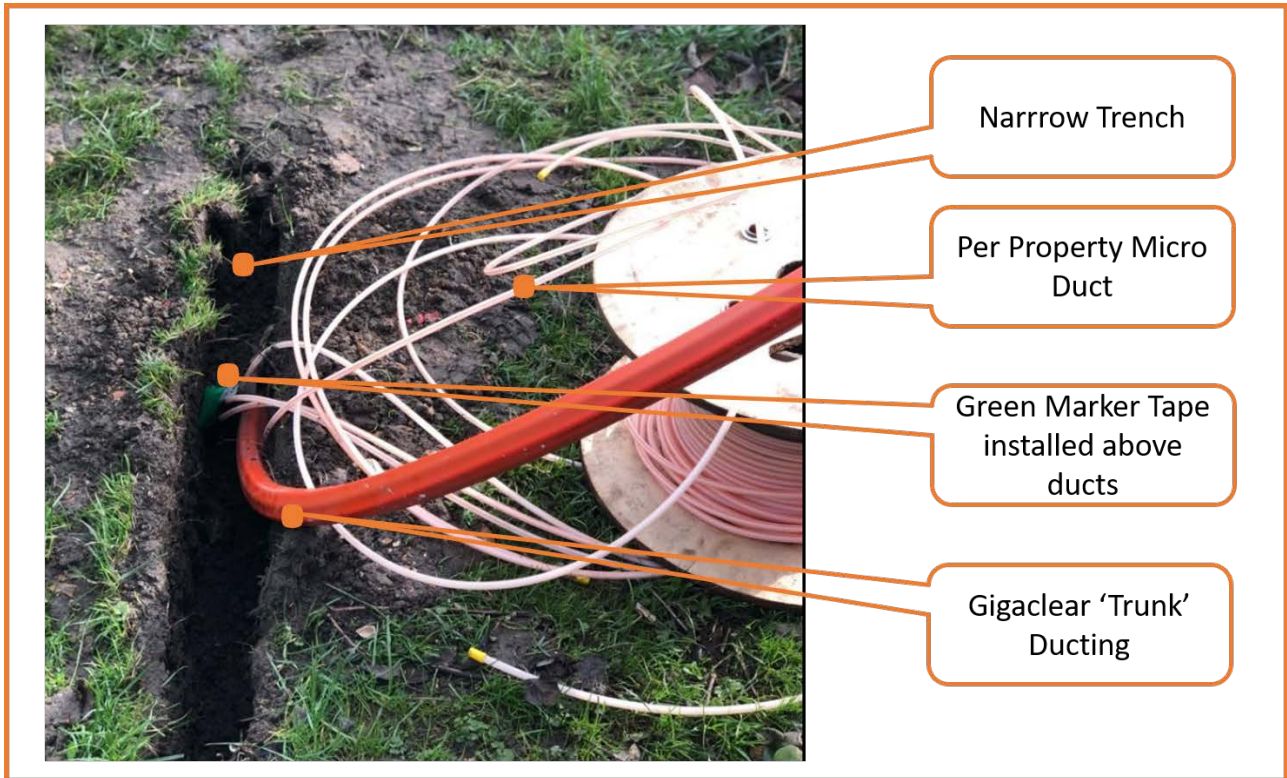


The drop cabinet is the local 'street' fibre patch cabinet and is now installed to support the new microduct based delivery (it was not required when Gigaclear used to direct bury the access fibres). It is a passive cabinet and typically holds up to 48 property specific micro ducts, allowing the fibres inside to be patched into the local access cabinet.

Wholesale active Ethernet services are provided over the end to end fibre patched from the customer property, through this cabinet, to the local access cabinet. Wholesale partners do not need access to this infrastructure as these services are presented as a Gigabit Ethernet RJ45 connector inside the customer property.

Wholesale passive, or dark fibre services are accessed at the fibre pot at the property end, and at the access cabinet fibre jointing chamber when access dark fibre service is required. Trunk dark fibres or ducts are accessed at the access cabinet or intermediate fibre jointing chambers .

## Trunking



Recent Gigaclear network builds use buried duct infrastructure rather than direct buried cable. At the customer premise the micro duct is terminated in the 'fibre pot' installed at the boundary of the property (may be white, clear or orange microduct). The trunk connections are a bright orange sheathed multiduct. At installation time green marker tape is installed above the ducts to indicate cables below.